

TRACE
CONSULTING
SEGMENTS 1 and 3

eec
SEGMENT 2



Grand Canalscape

PROJECT NO. ST87600114

CITY OF PHOENIX STREET TRANSPORTATION DEPARTMENT



DESIGN & CONSTRUCTION MANAGEMENT DIVISION

PHASE 2

MAY 2017

CITY OF PHOENIX

STREET TRANSPORTATION DEPARTMENT

DESIGN & CONSTRUCTION MANAGEMENT DIVISION

GRAND CANALScape PHASE II

SEGMENT 1: I-17 TO 15TH AVE

ST87600114

MAYOR
 GREG STANTON

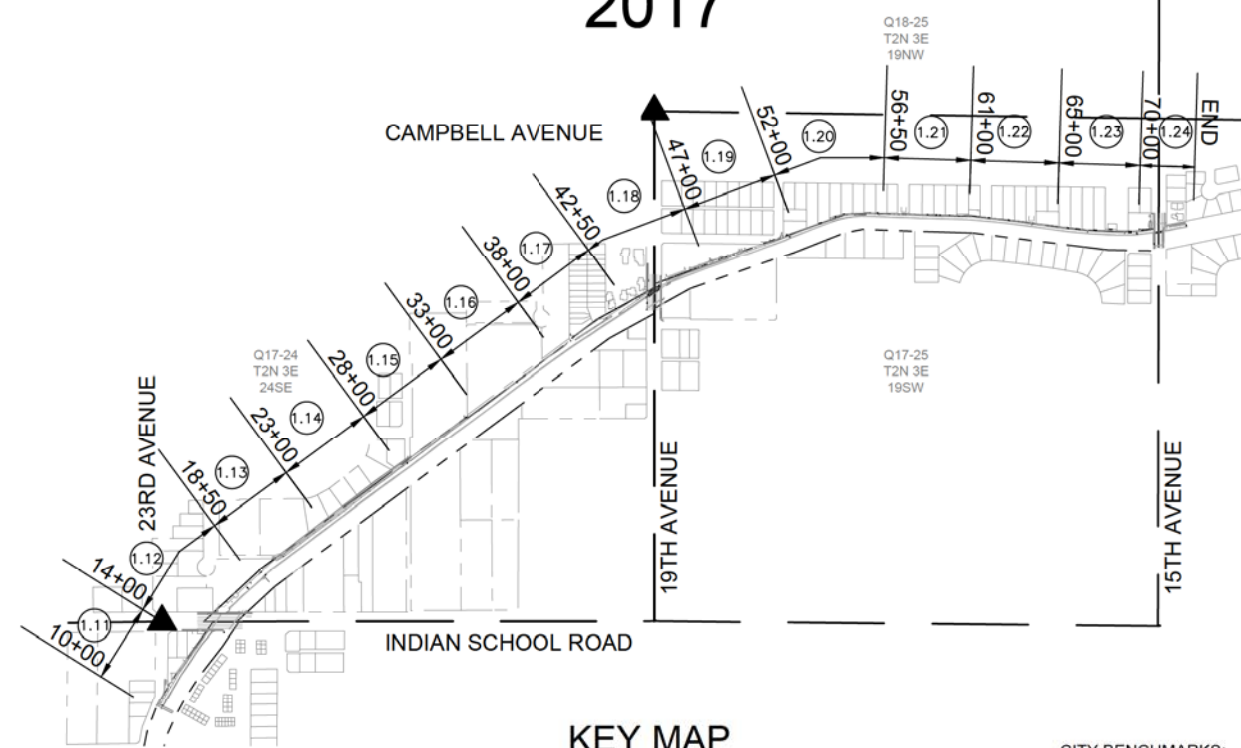
CITY MANAGER
 ED ZUERCHER

CITY COUNCIL

- | | |
|----------------|--------------------|
| DISTRICT NO 1. | THELDA WILLIAMS |
| DISTRICT NO 2. | JIM WARING |
| DISTRICT NO 3. | DEBRA STARK |
| DISTRICT NO 4. | LAURA PASTOR |
| DISTRICT NO 5. | DANIEL VALENZUELA |
| DISTRICT NO 6. | SAL DICICCIO |
| DISTRICT NO 7. | MICHAEL NOWAKOWSKI |
| DISTRICT NO 8. | KATE GALLEG0 |



2017



KEY MAP
 NTS

○ PLAN & PROFILE SHEETS

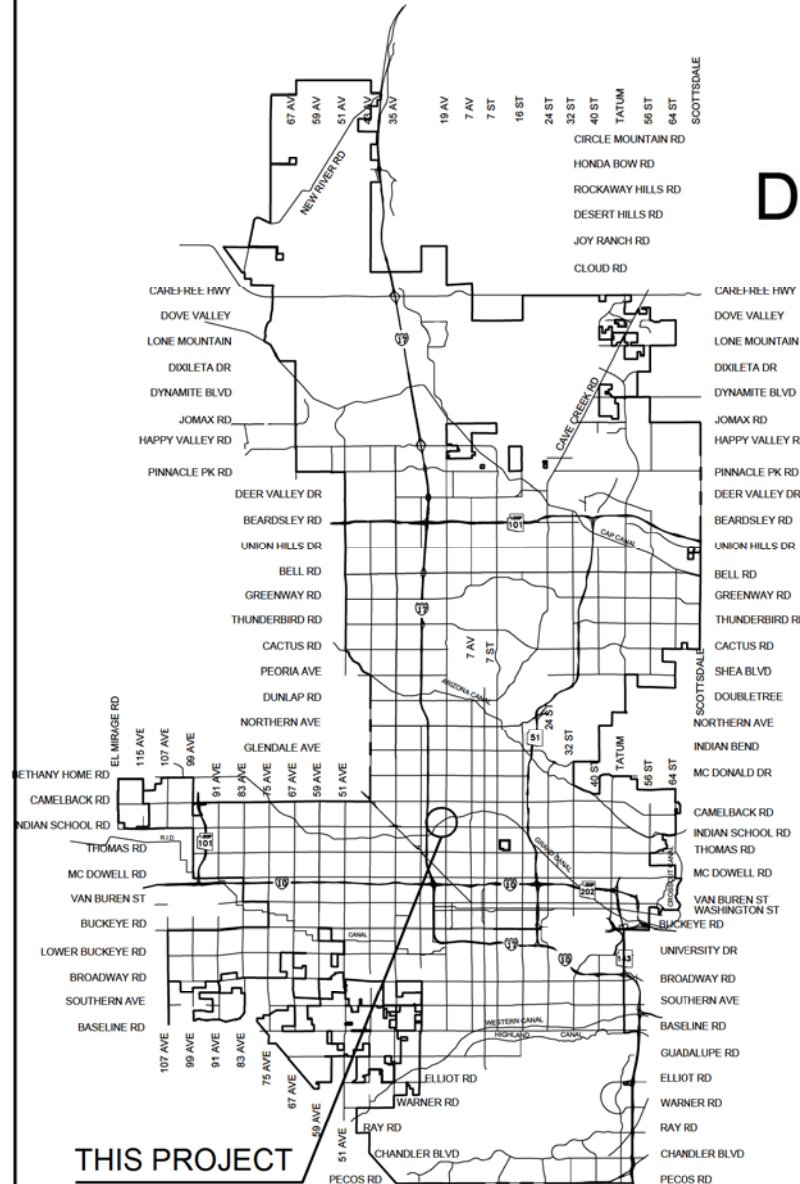
LENGTH OF PROJECT = 6,081 LF = 1.15 MILES
 AREA OF DISTURBANCE = 2.42 ACRES

- CITY BENCHMARKS:**
- ▲ FOUND COP BC IN HAND HOLE INTERSECTION OF 23RD AVENUE AND INDIAN SCHOOL ROAD (S.), HAVING AN ELEVATION 1115.47' NGVD29.
 - ▲ FOUND COP BC IN HAND HOLE INTERSECTION OF 19TH AVENUE AND CAMPBELL AVENUE, HAVING AN ELEVATION 1121.38' NGVD29.

SHEET INDEX

- | | |
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| 1.02 | LEGEND AND NOTES |
| 1.03 | SURVEY CONTROL PLAN |
| 1.04 | QUANTITY SUMMARY |
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| 1.10 | APPROACH SLAB DETAIL |
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| 1.49-1.51 | IRRIGATION DETAILS |
| 1.52-1.55 | TRAFFIC SIGNAL PLANS |
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| 1.62 | TYPICAL LIGHT SPACING EXHIBIT |

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."



VICINITY MAP
 NTS

APPROVED _____	DATE _____
ASSISTANT STREET TRANSPORTATION DIRECTOR	
APPROVED _____	DATE _____
DEPUTY STREET TRANSPORTATION DIRECTOR	

ST87600114: GRAND CANALScape PHASE II SEGMENT 1: ISSUED FOR BID

GRAND CANALSCAPE PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.04	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

APPROXIMATE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26
1	ART FEATURE (SANDBLAST STREET NAME)	EA	10	1	3					1	3					1	1		
2	SAWCUT, REMOVE AND REPLACE A.C. PAVEMENT, MAG DET#200, TYPE "A"	SY	30	5	10						8						7		
3	CONCRETE SIDEWALK, STD. DETAIL P-1230	SF	666	173	283						153						57		
4	CONCRETE SIDEWALK, STD DETAIL P-1230, 7" THICK, CLASS 'AA'	SF	56,414	3,684	3,484	4,541	5,001	5,000	5,000	4,526	3,684	4,518	3,235	4,071	4,537	4,428	705		
5	TRUNCATED DOMES FOR SIDEWALK RAMPS	SF	160		64						64						32		
6	REINFORCED CONCRETE SLAB ON GRADE	SF	257	257															
7	CONCRETE DRIVEWAY ENTRANCE, STD DETAIL P-1244 MODIFIED PER DETAILS	SF	1,410		560						570						280		
8	COMBINED CONCRETE CURB AND GUTTER, STD DETAIL 220, TYPE "A", H=6"	LF	240	20	101						81						38		
9	ADJUST EXISTING MANHOLE FRAME AND COVER, MAG STD DETAIL 422 AND COP DETAIL P1430	EA	0		2								1	1	2	2			
10	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB; CURB AND GUTTER; HEADER CURB OR EMBANKMENT CURB	LF	240	20	101						81						38		
11	REMOVE CONCRETE SIDEWALK	SF	1,017		501						365						151		
12	REMOVE REINFORCED CONCRETE SLAB	SY	30	30															
13	REMOVE ASPHALT CONCRETE PAVEMENT	SY	182		2					54	126								
14	REMOVE EXISTING GATE	EA	3		1							1				1			
15	REGULATION SIGN PANELS	SF	128														64	64	
16	WARNING SIGN PANELS	SF	48														24	24	
17	PAVEMENT MARKING (WHITE THERMOPLASTIC) (0.060") 4"	LF	6,107														3,497	2,610	
18	REMOVE EXISTING BOLLARD	EA	8		4							2				2			



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QUANTITY SUMMARY

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

DR:	DES:	GRS:	CK:	CSJ:	SHEET NO:	TOTAL SHEETS
BRR	GRS	GRS	CSJ	CSJ	1.04	1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17	DATE: 07/17	DATE: 07/17		

SCALE: NTS

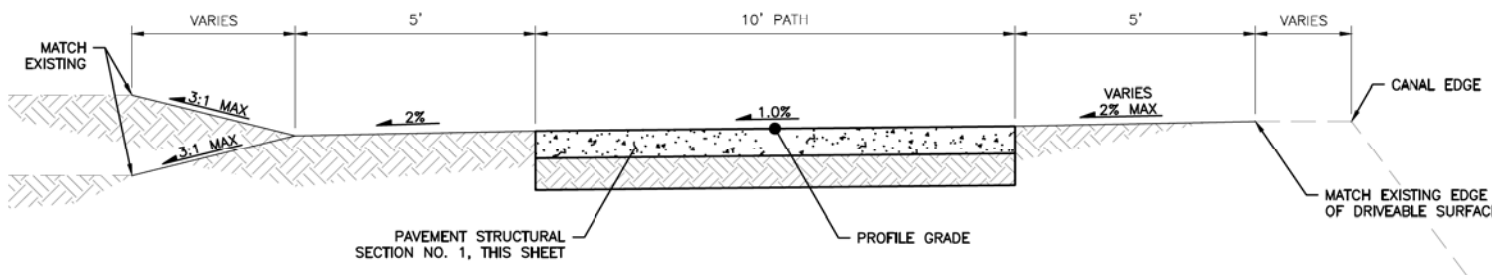
GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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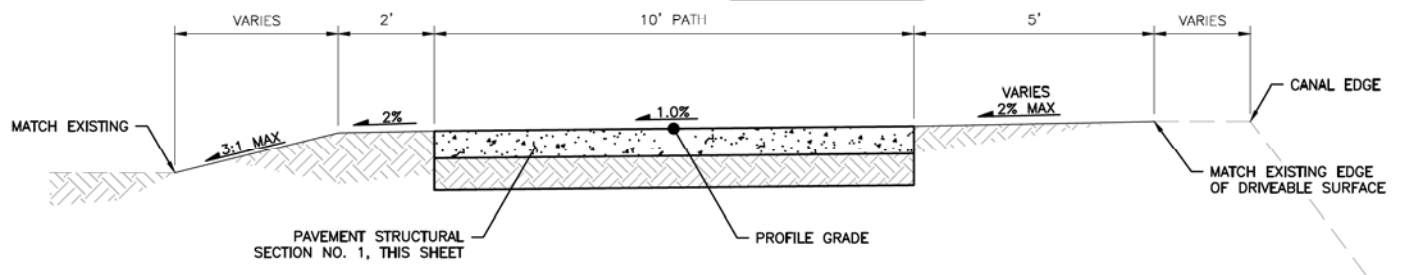
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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE



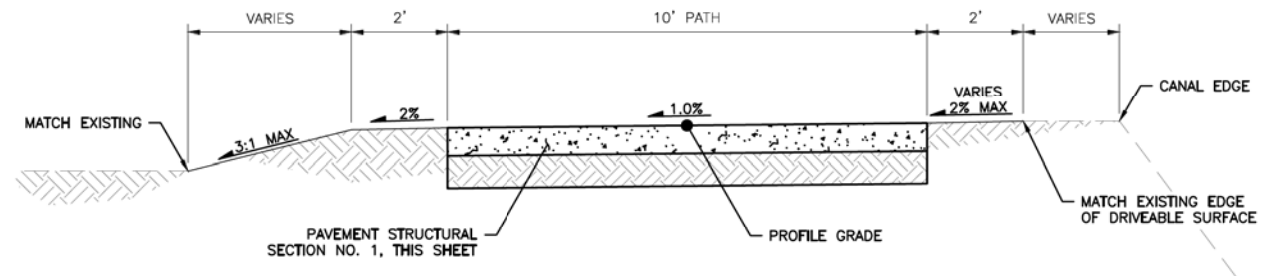
TYPICAL SECTION NO. 1
NTS

STA 100+00 TO STA 101+75
STA 109+50 TO STA 113+00
STA 117+50 TO STA 132+25



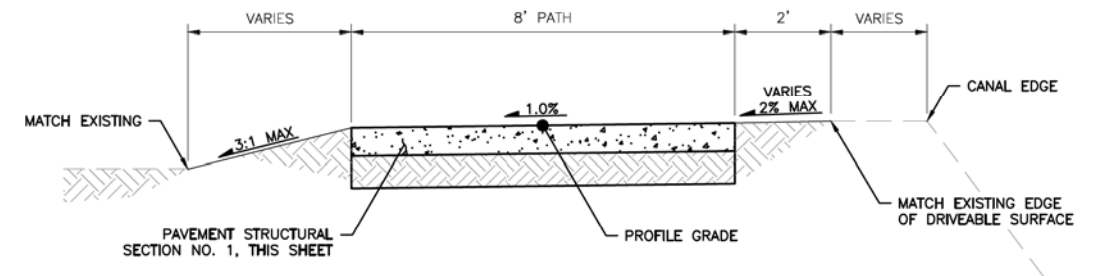
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STA 106+18 TO STA 109+00



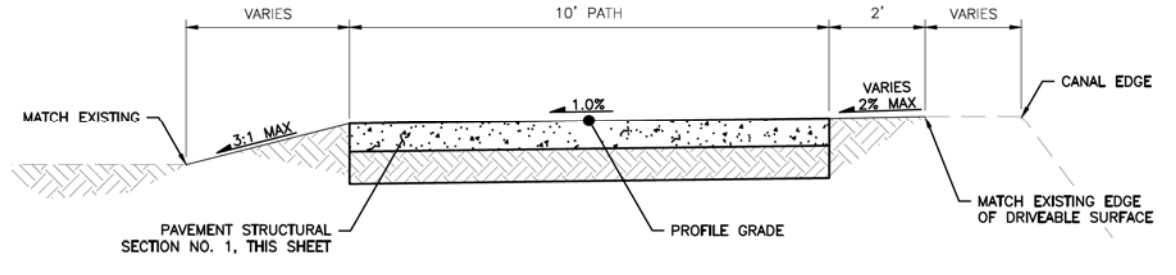
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STA 134+57 TO STA 139+25
STA 148+00 TO STA 151+75



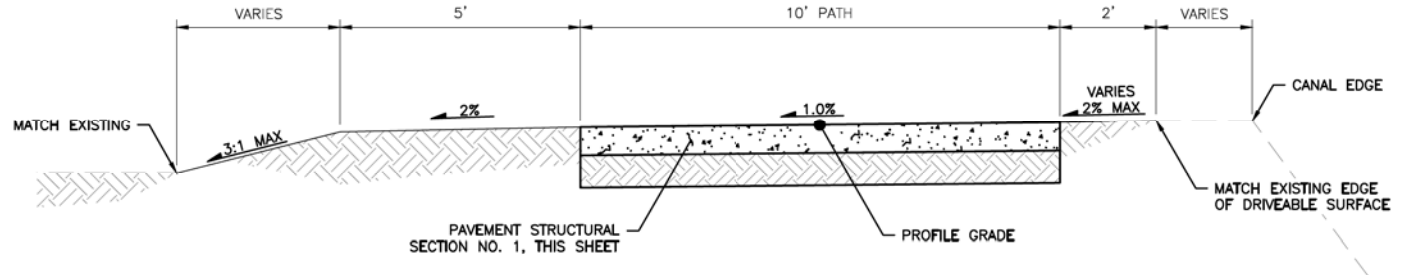
TYPICAL SECTION NO. 4
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STA 140+00 TO STA 144+00



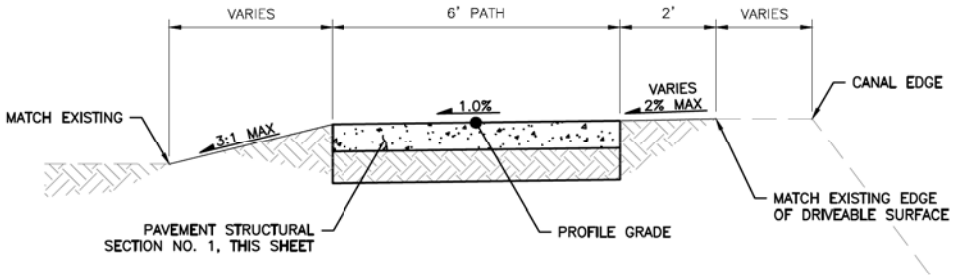
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NTS

STA 152+50 TO STA 160+40



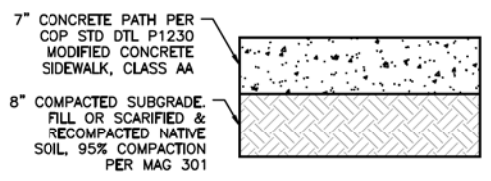
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STA 113+50 TO STA 116+75



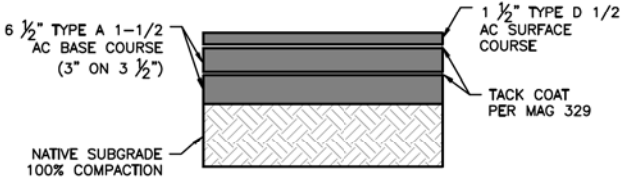
TYPICAL SECTION NO. 7
NTS

STA 144+50 TO STA 147+25



NOTE:
PAVEMENT STRUCTURAL SECTION PER GEOTECHNICAL REPORT PROVIDED BY CITY OF PHOENIX AND PREPARED BY ACS SERVICES LLC, DATED DECEMBER 16, 2016. SEE REPORT FOR DETAILED RECOMMENDATIONS.

PAVEMENT STRUCTURAL SECTION NO. 1
NTS



PERMANENT PAVEMENT REPLACEMENT PER MAG 336 AND CITY SUPPLEMENTS

PAVEMENT STRUCTURAL SECTION NO. 2
NTS



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL SECTIONS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO.:	1.05	TOTAL SHEETS:	1.62
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE:	NTS		

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



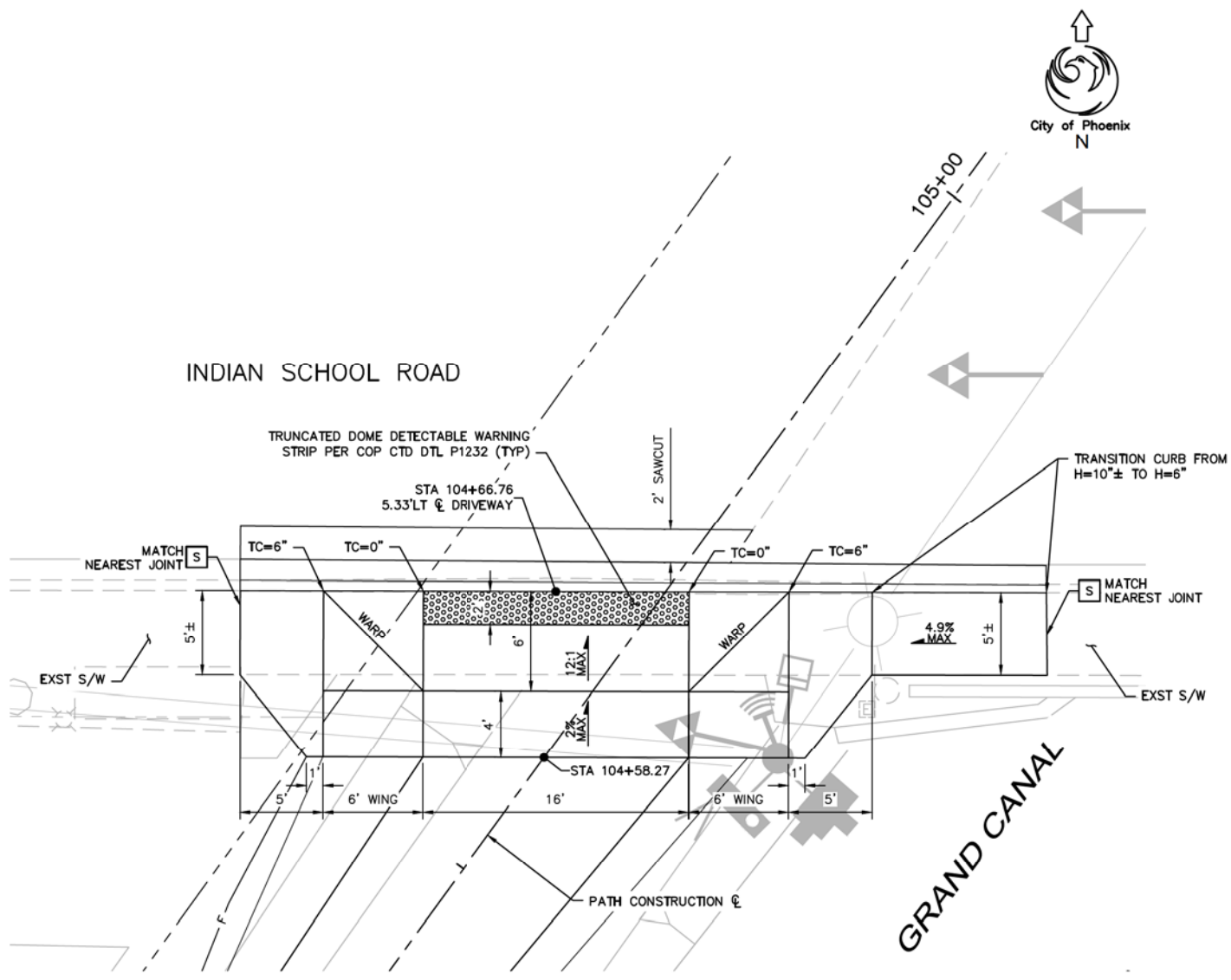
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.06	1.62

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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

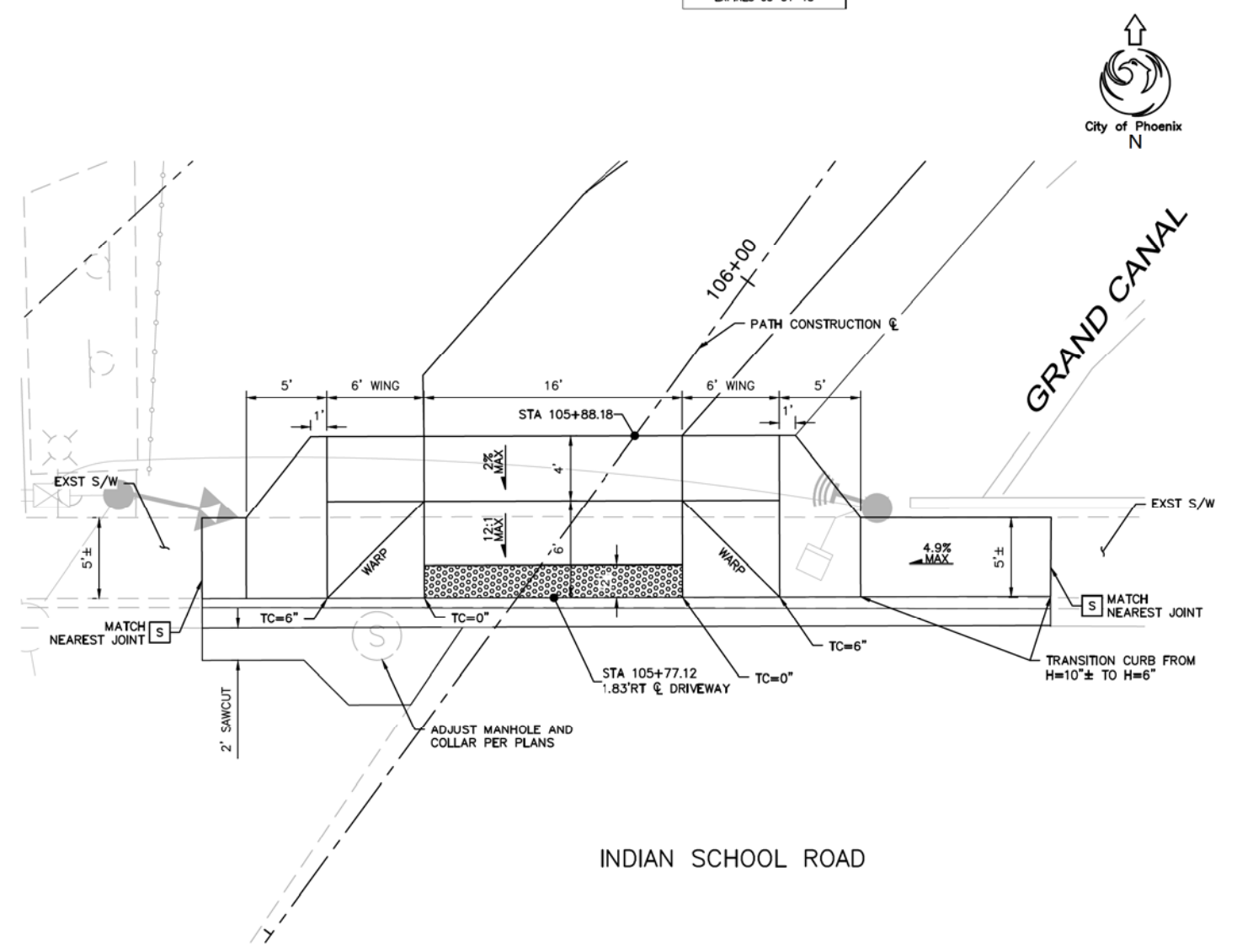
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MODIFIED P1244 DETAIL
INDIAN SCHOOL ROAD (SOUTH)



MODIFIED P1244 DETAIL
INDIAN SCHOOL ROAD (NORTH)

- NOTES**
- SEE COP STD DTL P1244 FOR ADDITIONAL NOTES.
 - DRIVEWAYS AND CURB AND GUTTER SHALL BE 9" THICK MAG CLASS 'A' CONCRETE.
 - SEE TRAFFIC SIGNAL PLANS FOR SIGNAL INFORMATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

DRIVEWAY DETAILS - INDIAN SCHOOL ROAD
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

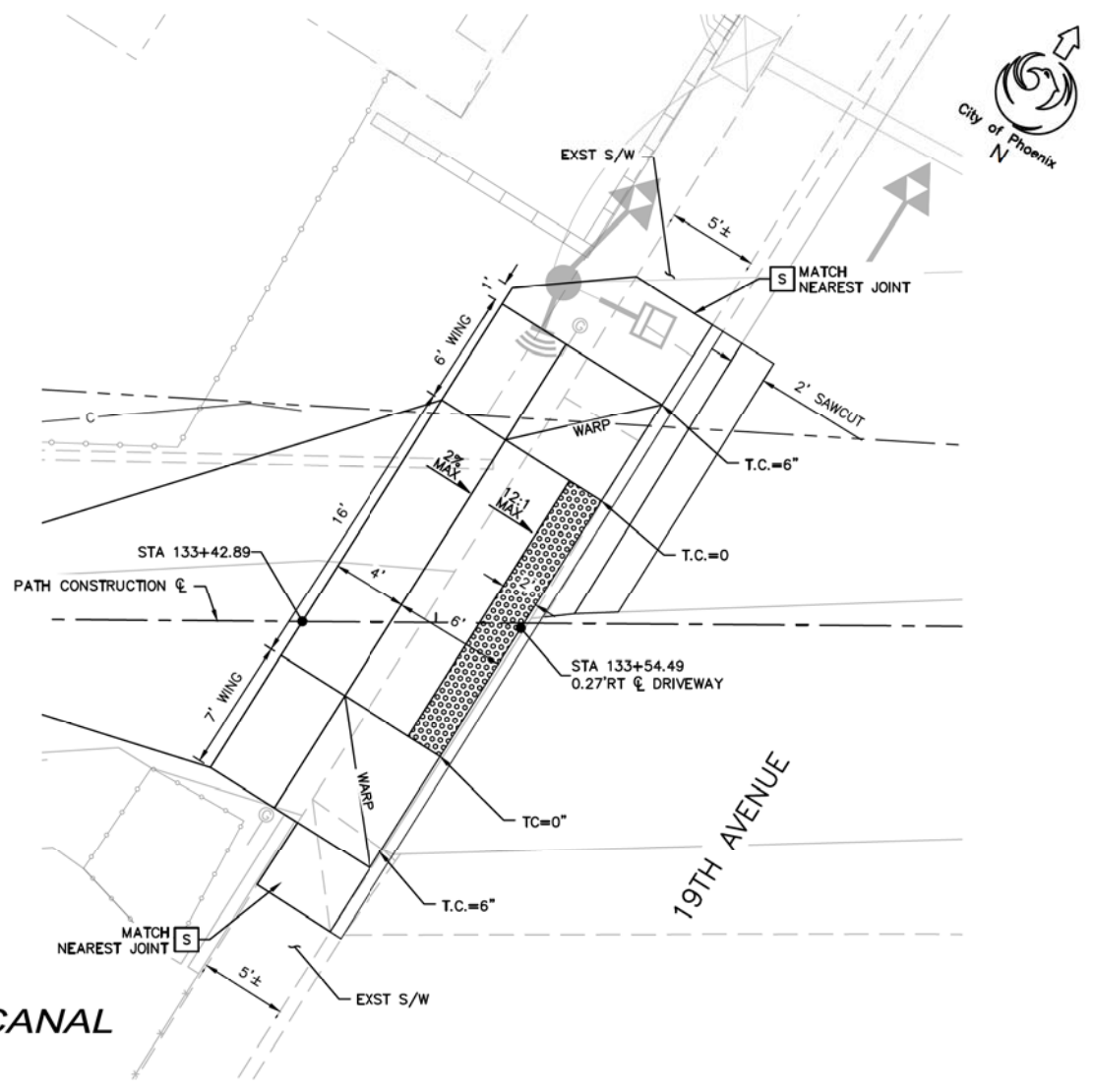
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	1.06

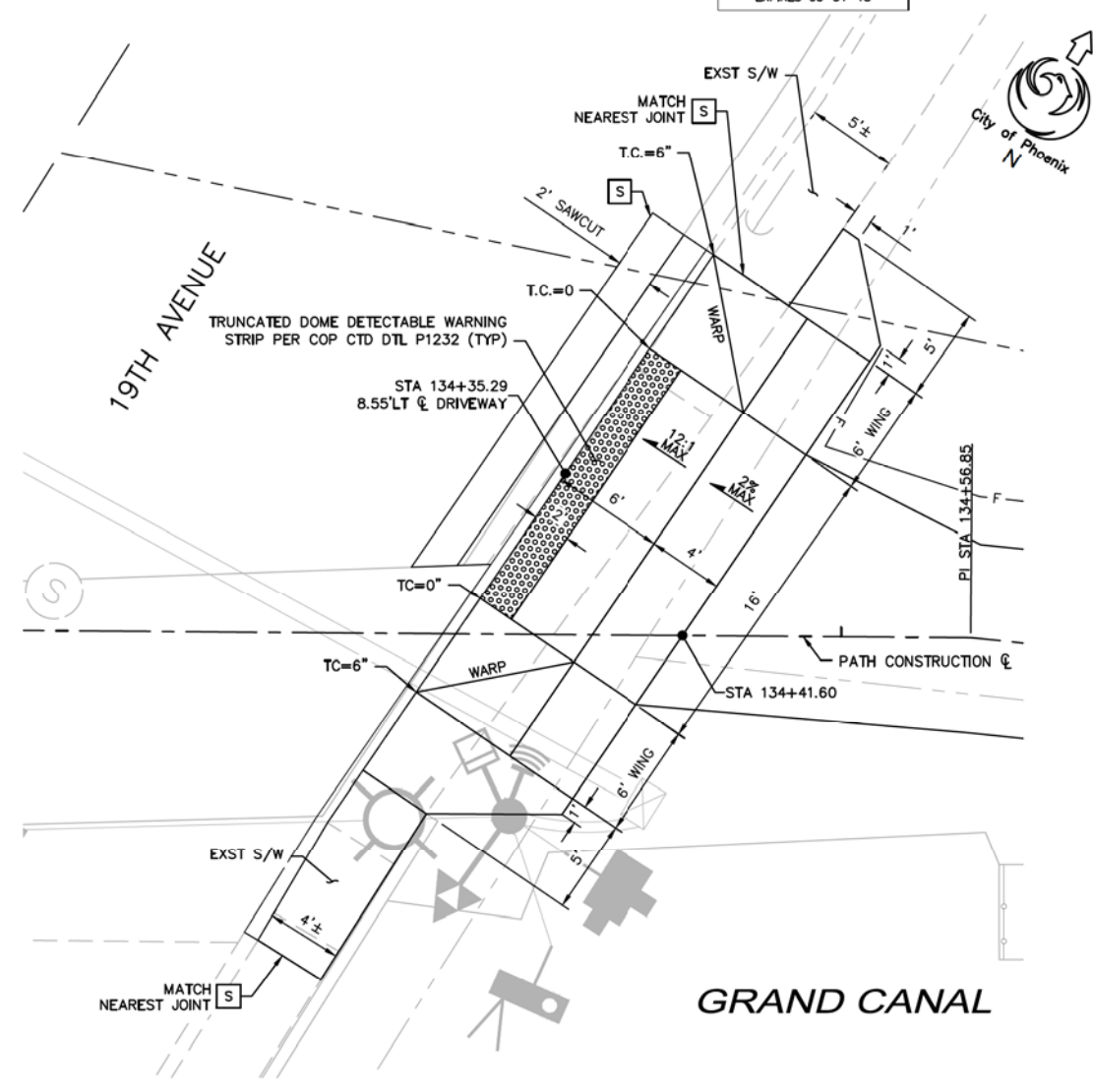
SCALE: NTS



REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			



MODIFIED P1244 DETAIL
 19TH AVENUE (WEST)



MODIFIED P1244 DETAIL
 19TH AVENUE (EAST)

- NOTES**
- SEE COP STD DTL P1244 FOR ADDITIONAL NOTES.
 - DRIVEWAYS AND CURB AND GUTTER SHALL BE 9" THICK MAG CLASS 'A' CONCRETE.
 - SEE TRAFFIC SIGNAL PLANS FOR SIGNAL INFORMATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

DRIVEWAY DETAILS - 19TH AVENUE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.07	TOTAL SHEETS: 1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: NTS				

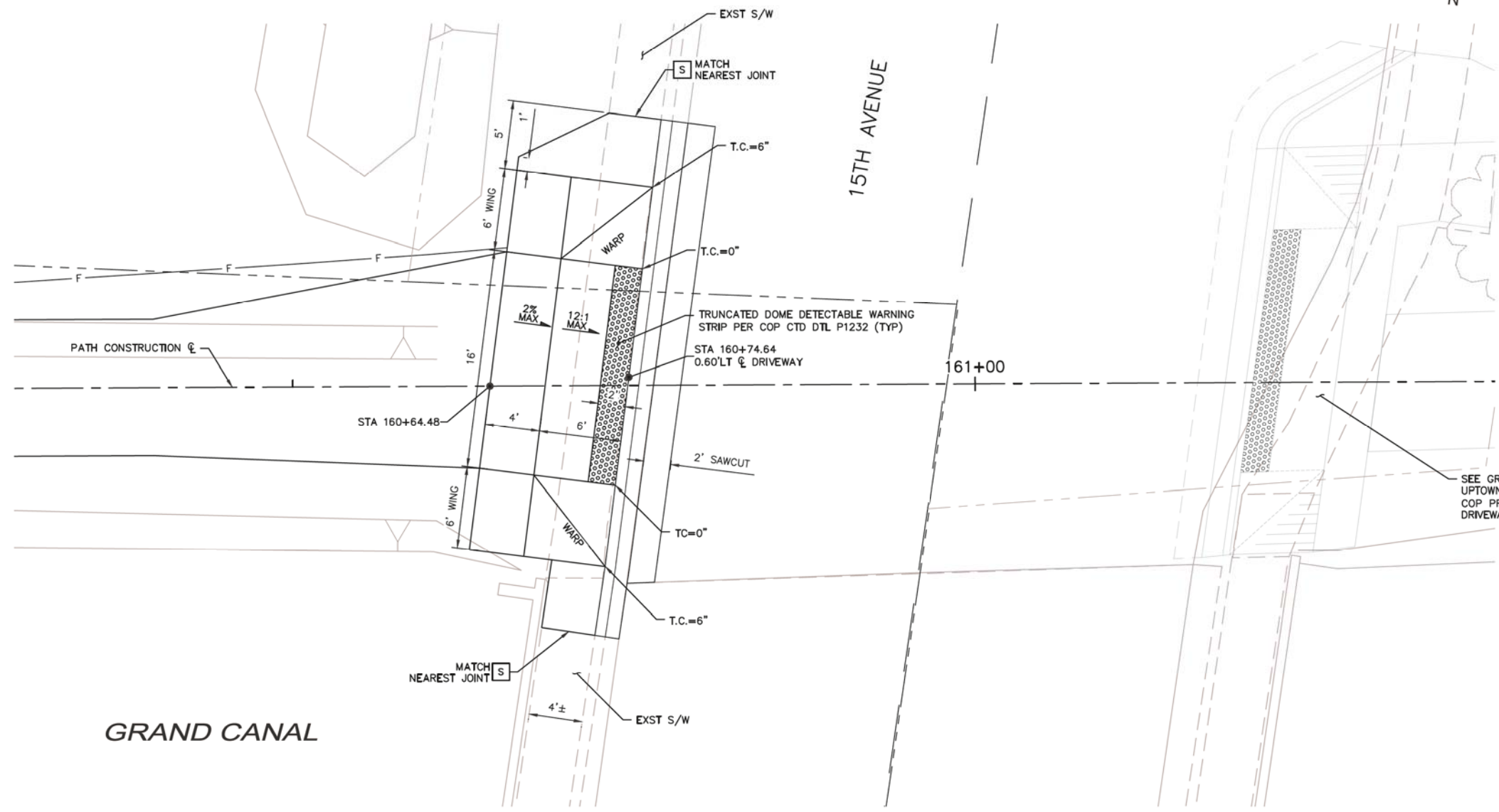
GRAND CANALSCAPE PHASE II
SEGMENT 1
1-17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.08	1.62

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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



SEE GRAND CANALSCAPE PHASE 1 UPTOWN AND GATEWAY NORTH COP PROJECT# ST87600074 FOR EAST DRIVEWAY AND CROSSWALK

GRAND CANAL

MODIFIED P1244 DETAIL
15TH AVENUE



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

DRIVEWAY DETAIL - 15TH AVENUE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

- NOTES**
- SEE COP STD DTL P1244 FOR ADDITIONAL NOTES.
 - DRIVEWAYS AND CURB AND GUTTER SHALL BE 9" THICK MAG CLASS 'A' CONCRETE.
 - SEE TRAFFIC SIGNAL PLANS FOR SIGNAL INFORMATION.

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 1.08	1.62

SCALE: NTS

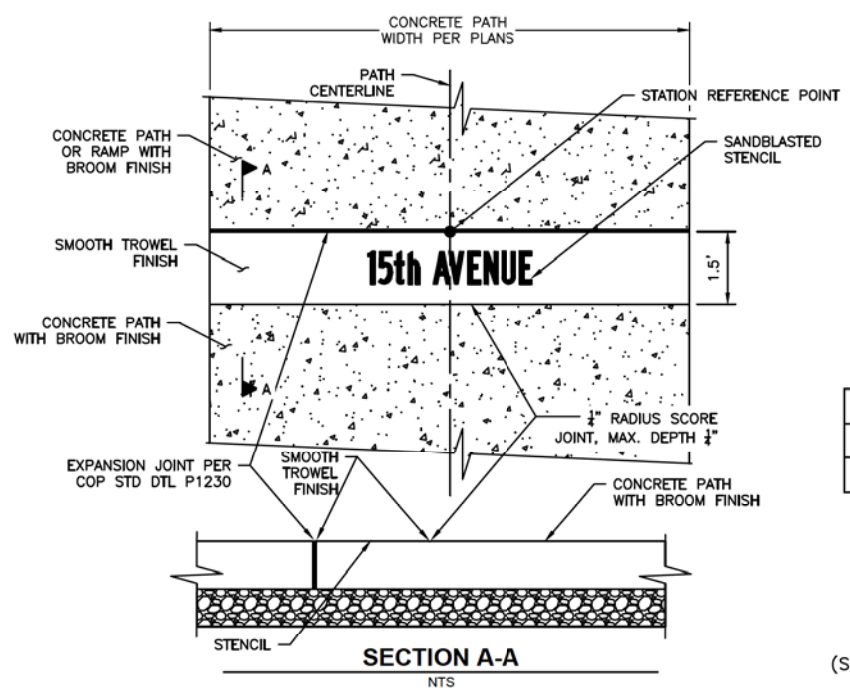
GRAND CANALScape PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.09	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

Professional Engineer
 ASPE
 CHRISTIAN S. JAVIER
 License No. 071017
 ARIZONA, U.S.A.
 EXPIRES 03-31-18

NO.	DESCRIPTION	REV BY	CHK BY	DATE



STREET NAME COPY

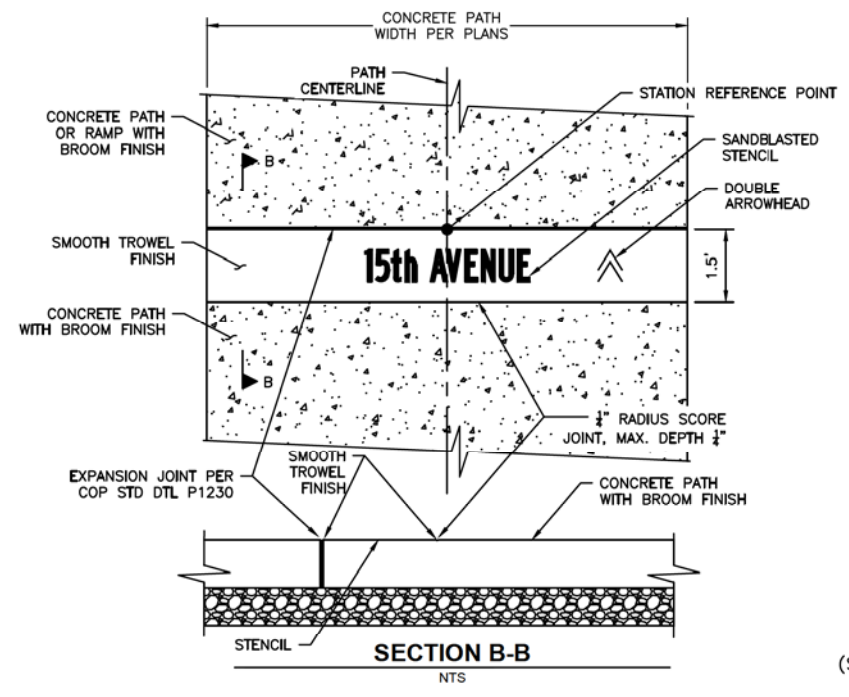
INDIAN SCHOOL ROAD
19TH AVENUE
15TH AVENUE

(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

SANDBLAST STENCIL NOTES

1. SANDBLAST LETTERS TO 1/8" DEEP.
2. FONT: FEDERAL STANDARD ALPHABET SERIES B.
3. LETTER HEIGHT = 8 INCHES.
4. CENTER TEXT COPY HORIZONTALLY WITHIN CONCRETE PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND.
5. STENCIL SHALL BE A PREMIUM RUBBER STENCIL PRODUCT.
6. INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS.

STREET NAME STENCIL - DETAIL A
 NTS



STREET NAME COPY

INDIAN SCHOOL ROAD
19TH AVENUE
15TH AVENUE

(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

SANDBLAST STENCIL NOTES

1. SANDBLAST LETTERS TO 1/8" DEEP.
2. FONT: FEDERAL STANDARD ALPHABET SERIES B.
3. LETTER HEIGHT = 8 INCHES.
4. CENTER TEXT COPY HORIZONTALLY WITHIN CONCRETE PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND.
5. STENCIL SHALL BE A PREMIUM RUBBER STENCIL PRODUCT.
6. INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS.

STREET NAME STENCIL (ADVANCED WARNING) - DETAIL B
 NTS

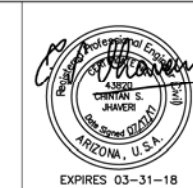


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SANDBLAST STENCIL DETAILS
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	1.09	1.62

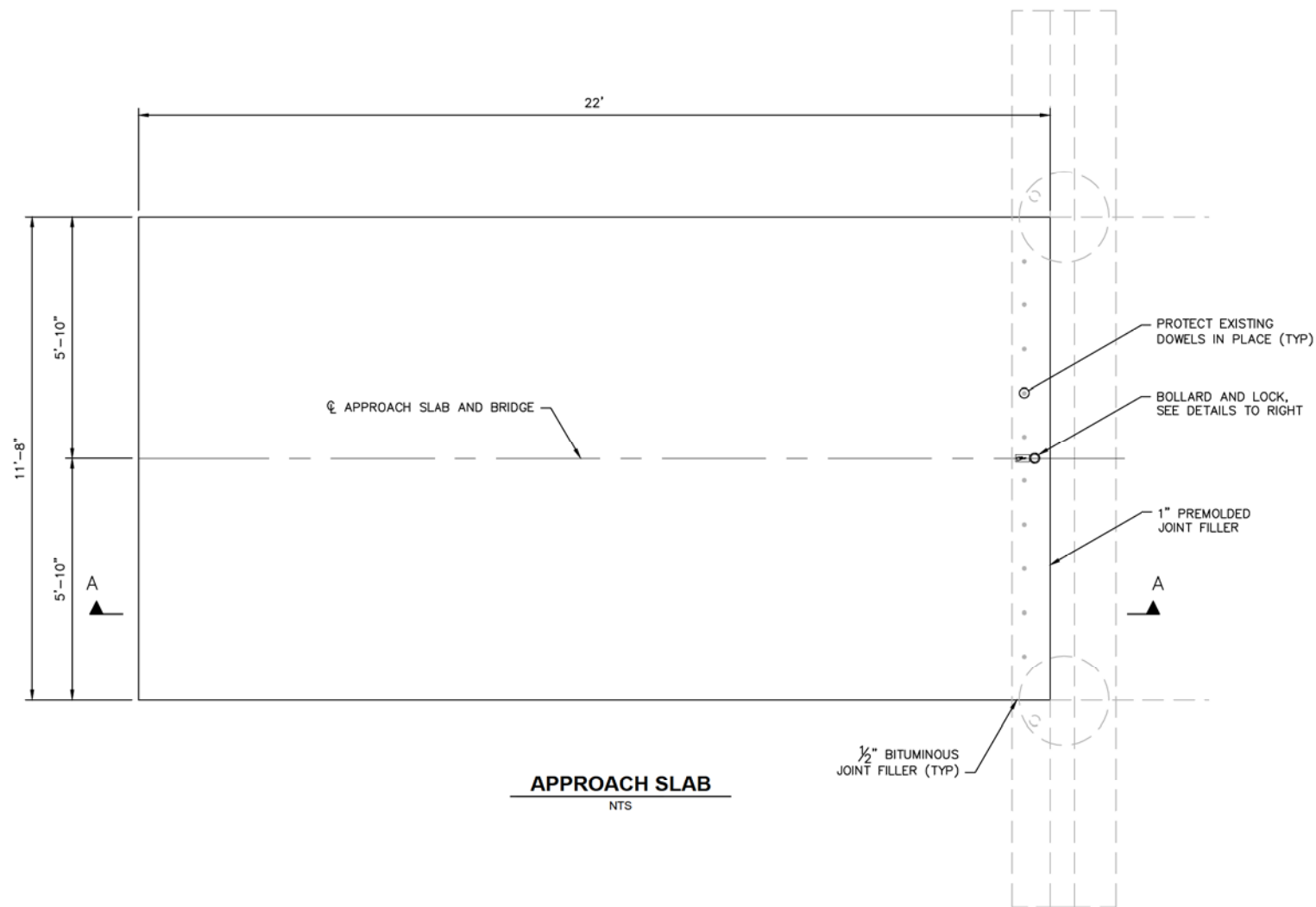
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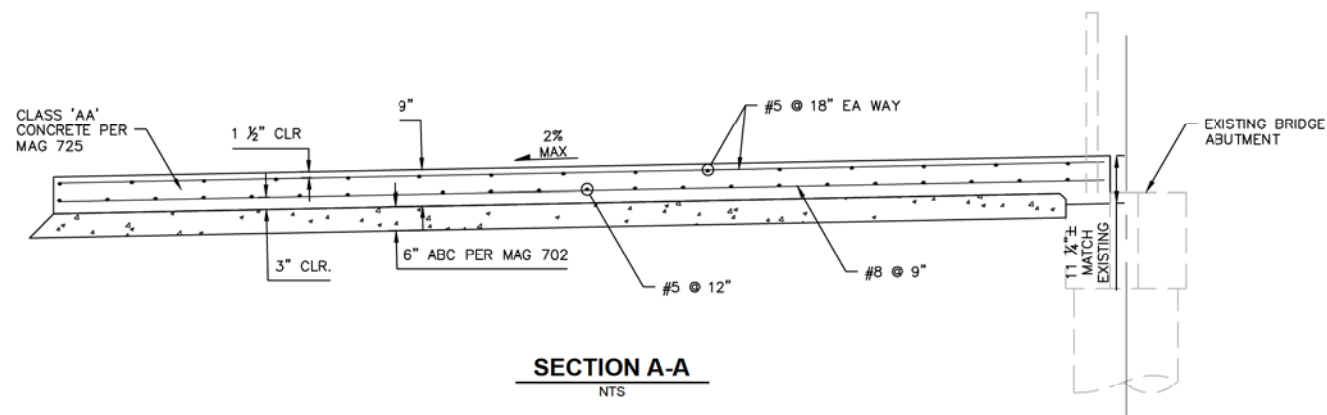
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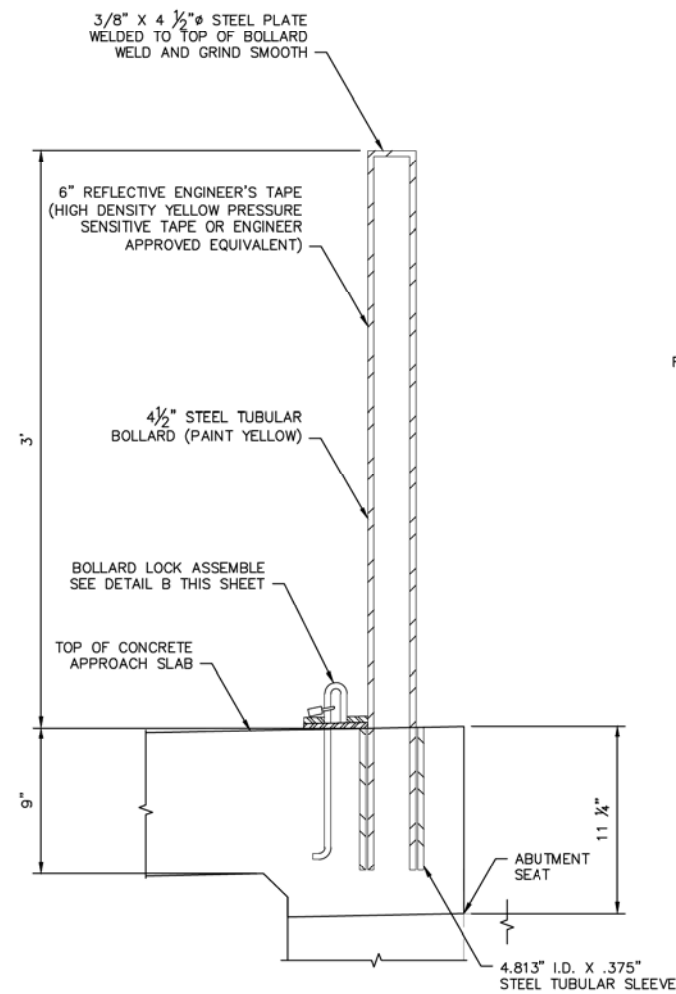
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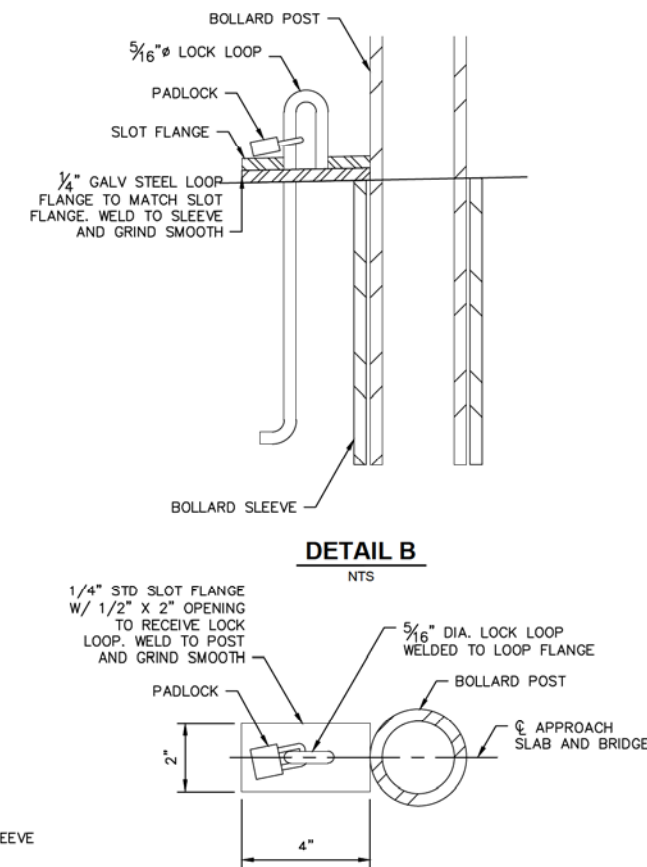
APPROACH SLAB
NTS



SECTION A-A
NTS



REMOVABLE BOLLARD DETAIL
NTS



BOLLARD LOCK DETAIL
NTS



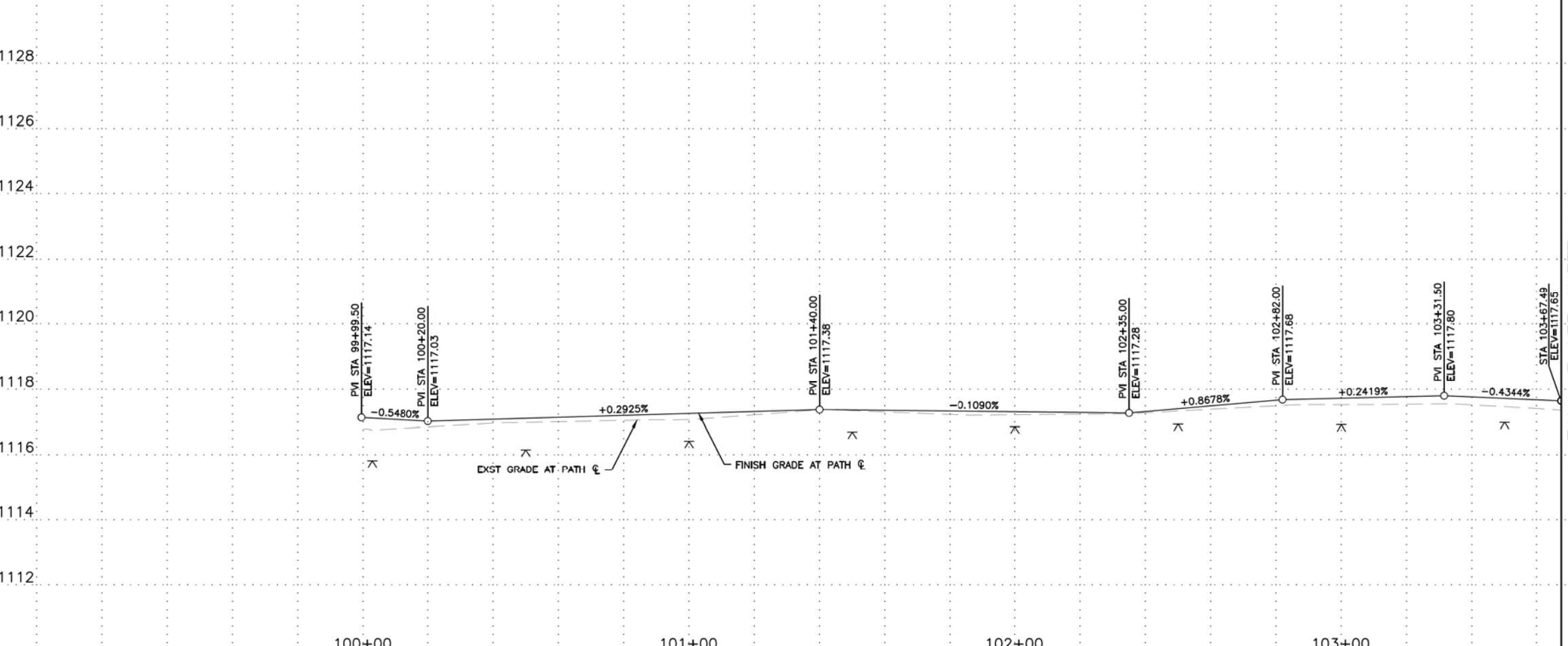
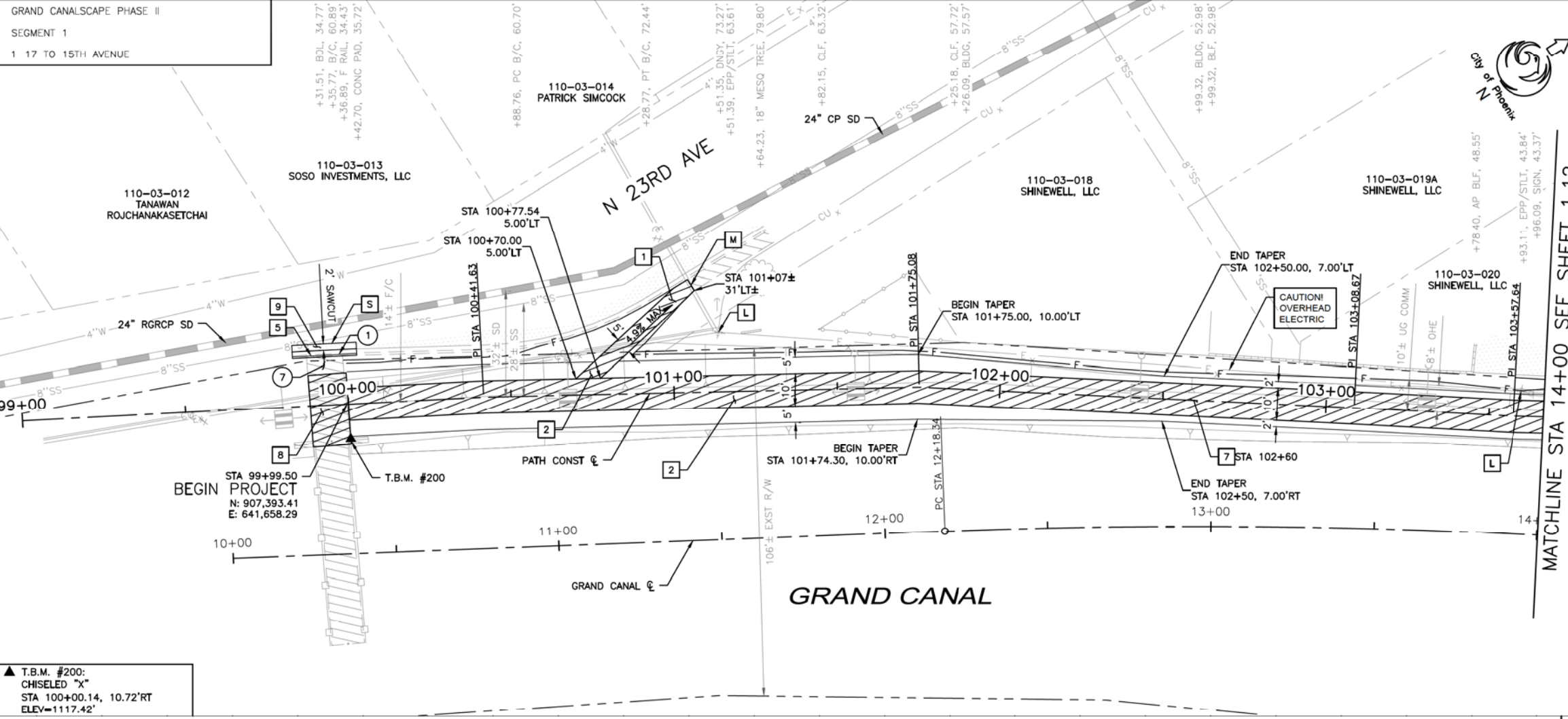
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APPROACH SLAB DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS	
DATE:	07/17	DATE:	07/17	DATE:	07/17	1.10	1.62	
SCALE:	N.T.S.						1.10	1.62

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE

NO.	DESCRIPTION	REV BY/CHK BY DATE
NO.	DESCRIPTION	REV BY/CHK BY DATE
NO.	DESCRIPTION	REV BY/CHK BY DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.11	1.62

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES			
NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	20
7	REMOVE EXISTING REINFORCED CONCRETE PEDESTRIAN BRIDGE APPROACH SLAB	SY	30

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230	SF	173
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS "AA" CONCRETE	SF	3,684
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE "A", H=6"	LF	20
7	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 1.09	EA	1
8	CONSTRUCT NEW REINFORCED CONCRETE APPROACH SLAB PER DETAILS, SHEET 1.10	SF	257
9	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 1.05	SY	5

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE

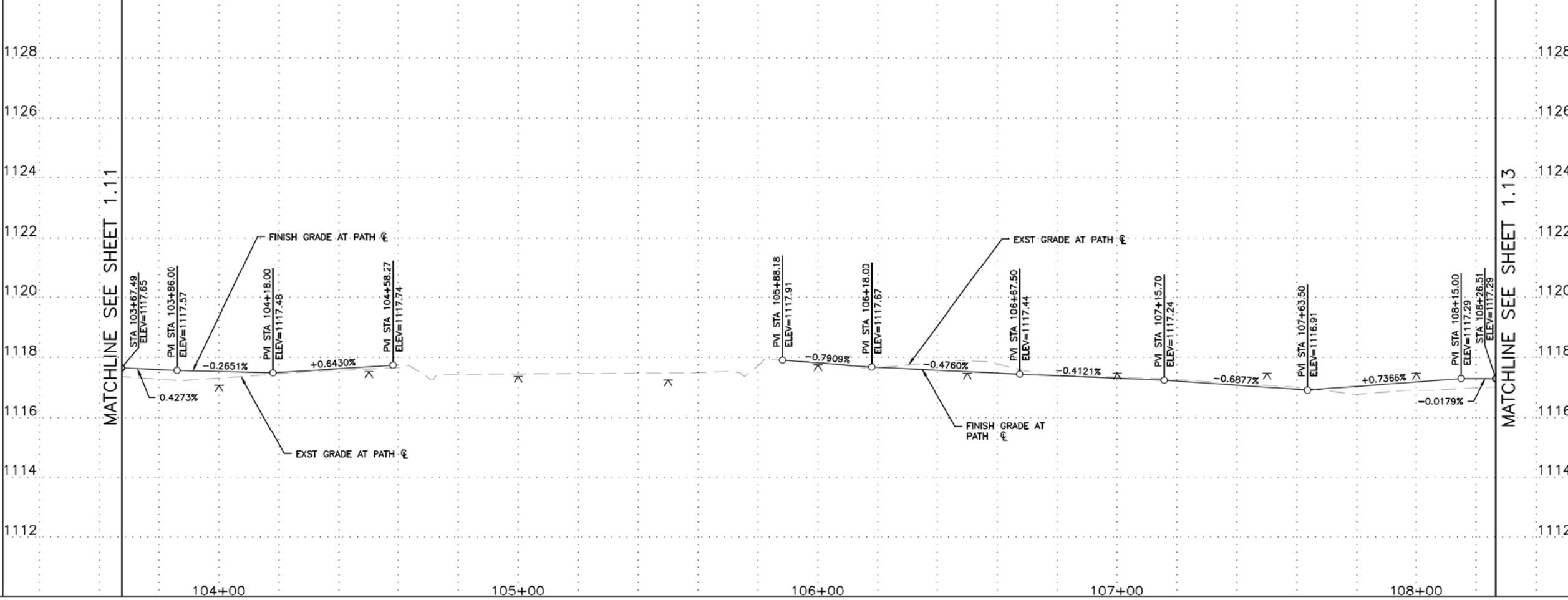
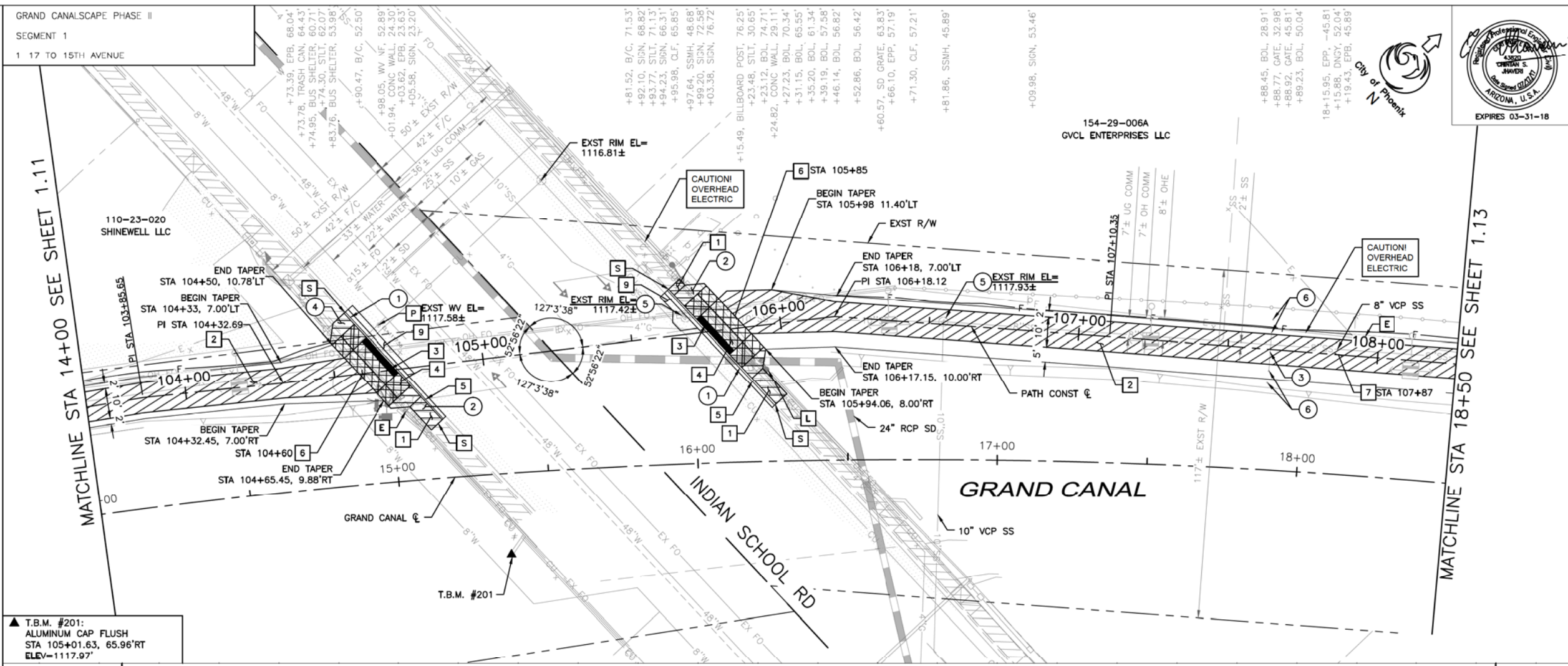
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:						1.11	1.62

SCALE: 1"=20'H
1"=2' V

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY DATE
NO.		
NO.		
NO.		
NO.		



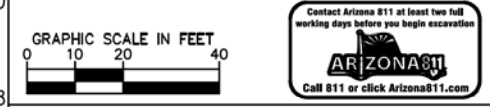
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.12	1.62

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	101
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	501
3	REMOVE EXISTING CONCRETE PAVEMENT	EA	1
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	2
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	2
6	REMOVE EXISTING BOLLARD	EA	4

NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	283
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS "AA" CONCRETE	SF	3,484
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	64
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244, MODIFIED (SEE DETAIL SHEET 3.09)	SF	560
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	101
6	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD DTL 222, TYPE 'A', H=6"	EA	2
7	CONSTRUCT ASPHALT CONCRETE PAVEMENT SECTION TO MATCH EXISTING SECTION	EA	1
9	INSTALL 6' CHAIN LINK FENCE PER ADOT STD DTL C-12.20, TYPE 1	SY	10

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

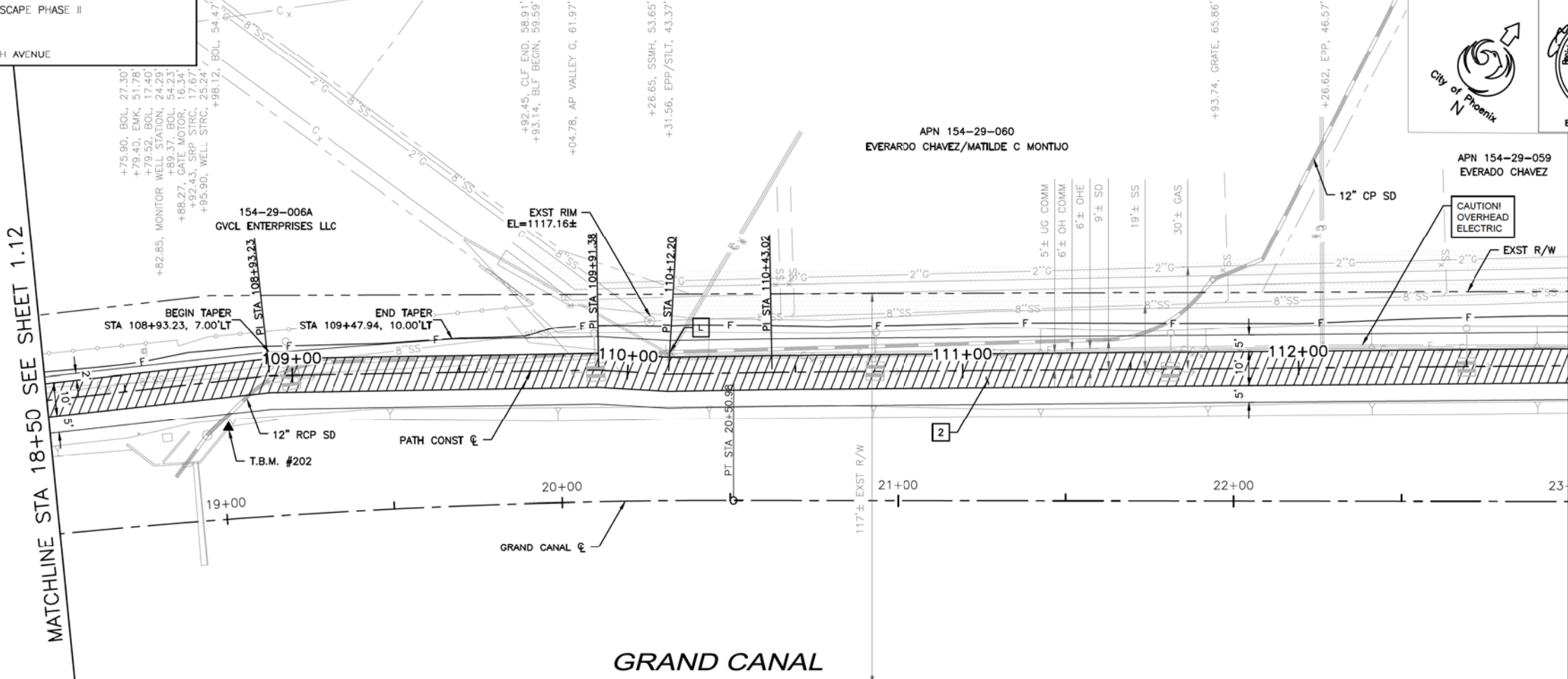
PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.12	TOTAL SHEETS: 1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2' V				

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE

MATCHLINE STA 18+50 SEE SHEET 1.12

MATCHLINE STA 23+00 SEE SHEET 1.14



GRAND CANAL

▲ T.B.M. #202:
CHISELED "X"
STA 108+79.34, 14.12'RT
ELEV=1119.18'

154-29-036A
JANICE PURDY FORREST

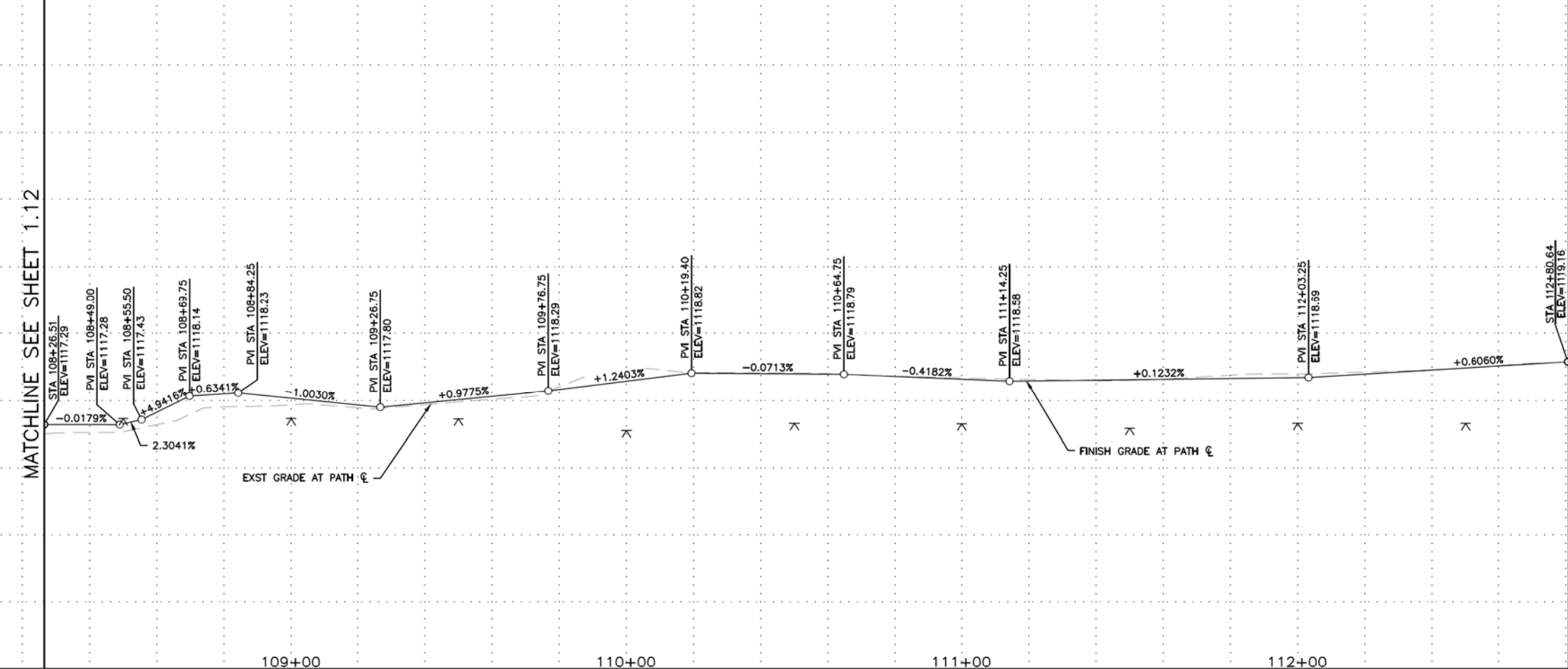
154-29-037
LEVY PROPERTIES LLC
MIDTOWN

154-29-038
NORTHWEST GROUP
INVESTMENTS LLC

1128
1126
1124
1122
1120
1118
1116
1114
1112

MATCHLINE SEE SHEET 1.12

MATCHLINE SEE SHEET 1.14

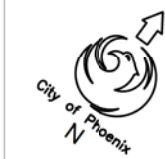


109+00

110+00

111+00

112+00



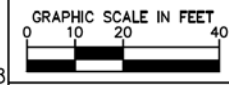
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.13	1.62

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF		4,541

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



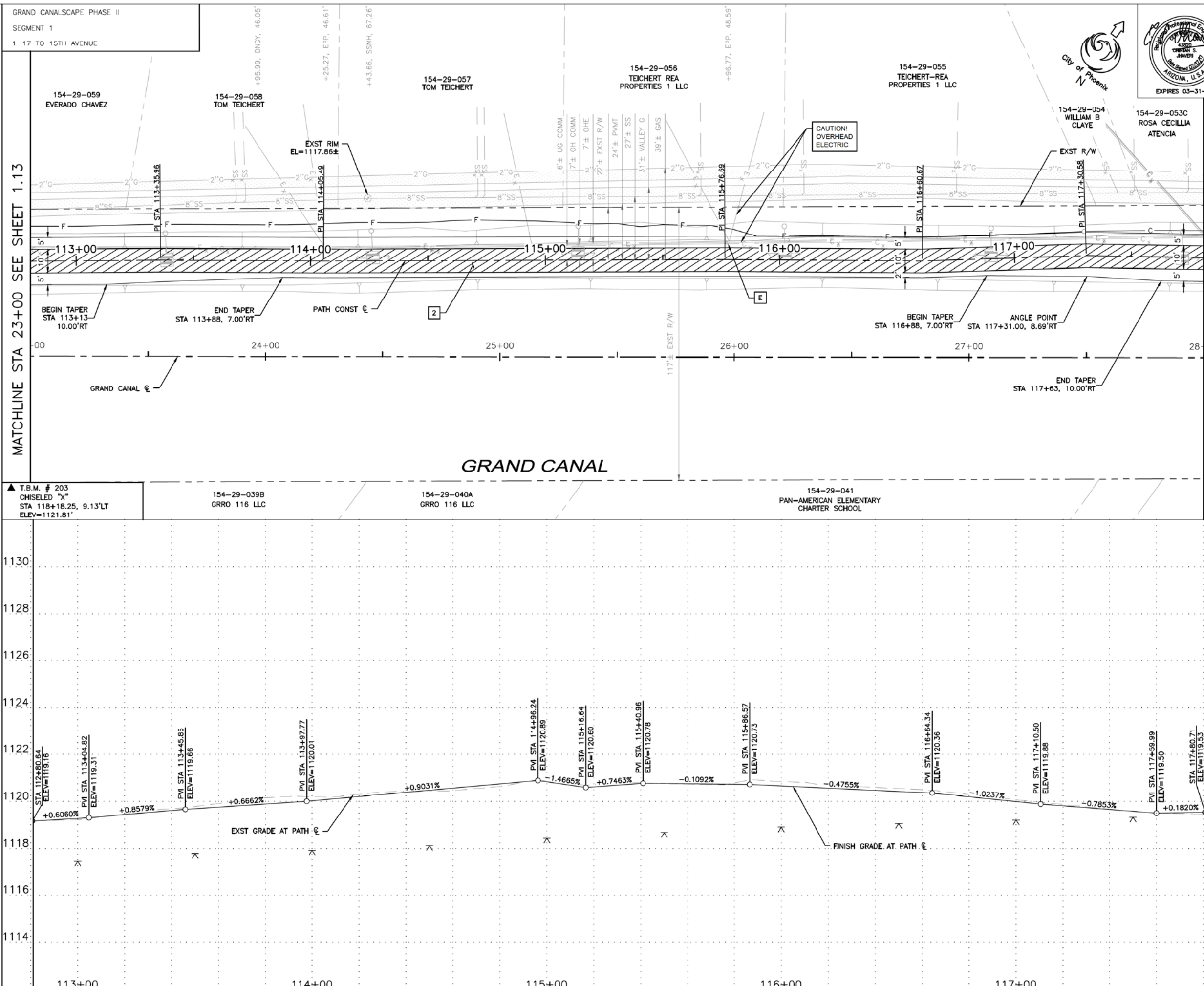
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	1"=20'H 1"=2' V						1.13 1.62

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



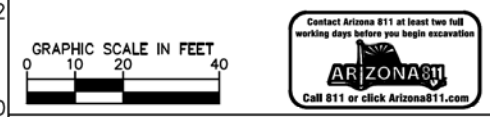
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.14	1.62

TRACE CONSULTING
1201 E. Jefferson St. Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES			
NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	5001

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	1"=20'H					1.14	1.62
	1"=2' V						

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.15	1.62

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

REVISION BY CITY OF PHOENIX

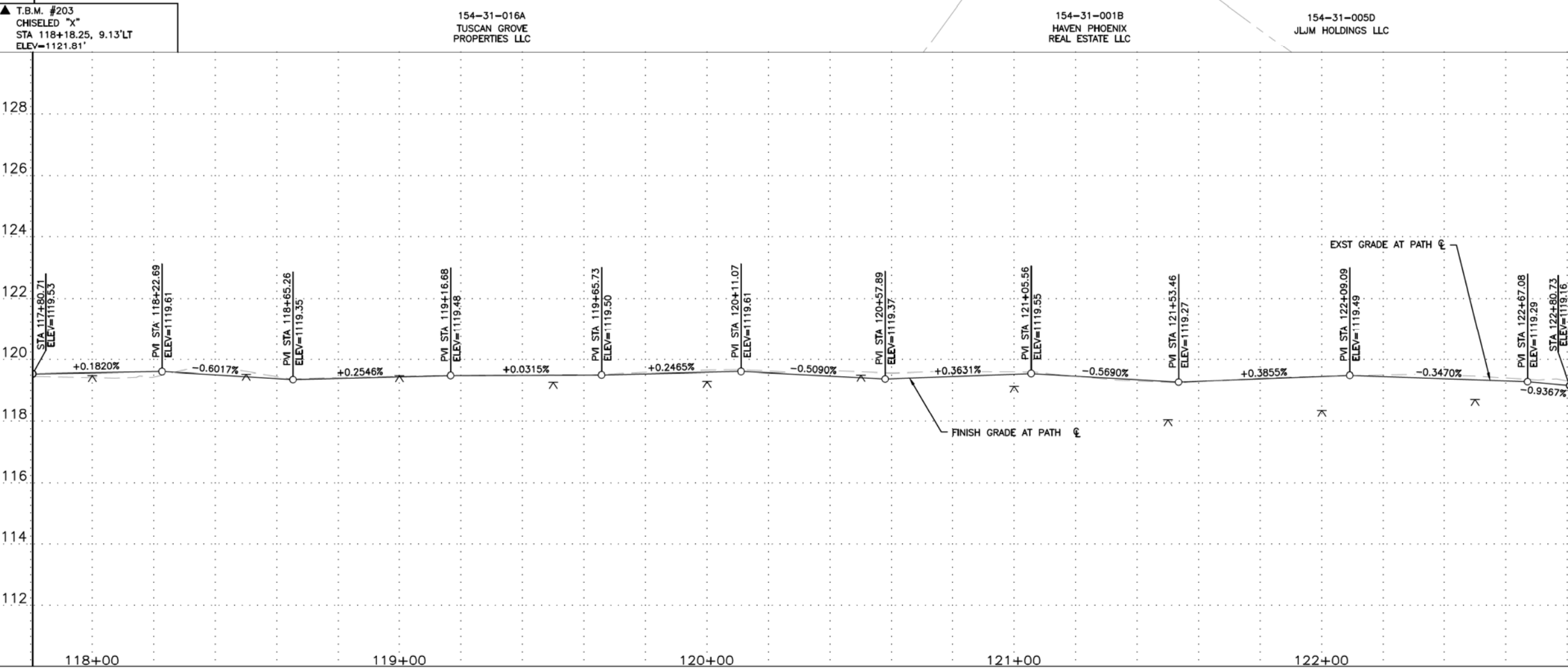
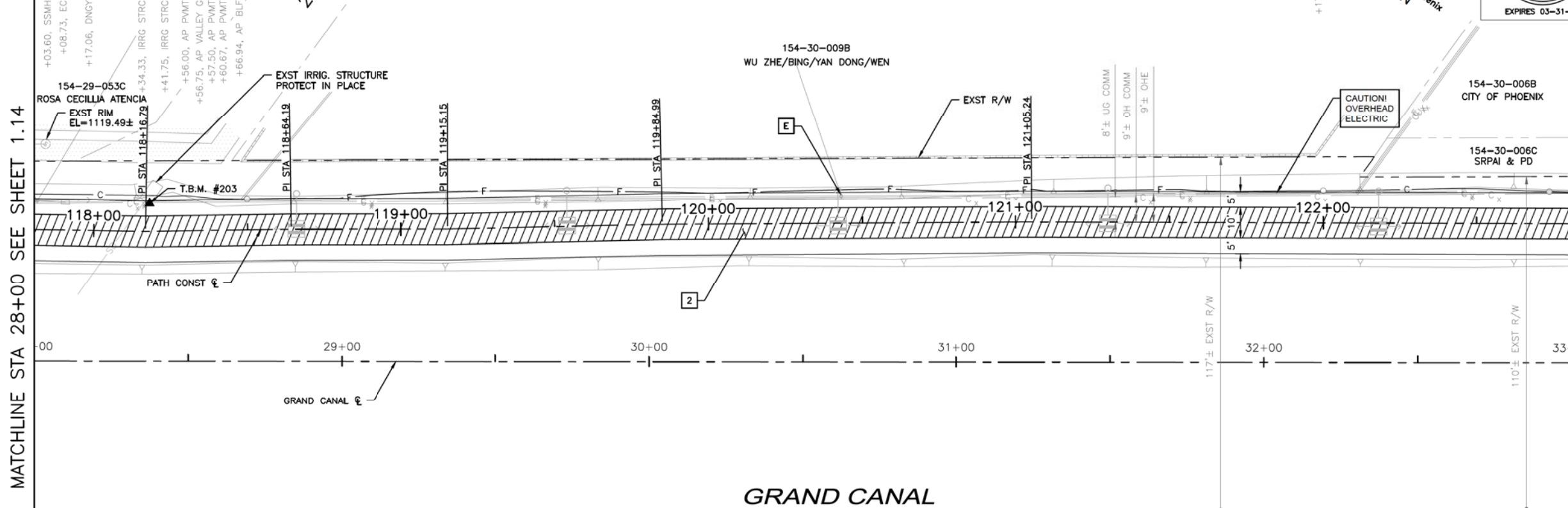
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

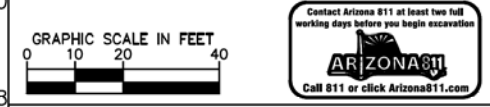


NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	5,000

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.15	TOTAL SHEETS: 1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	

SCALE: 1"=20' H
1"=2' V

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.16	1.62

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

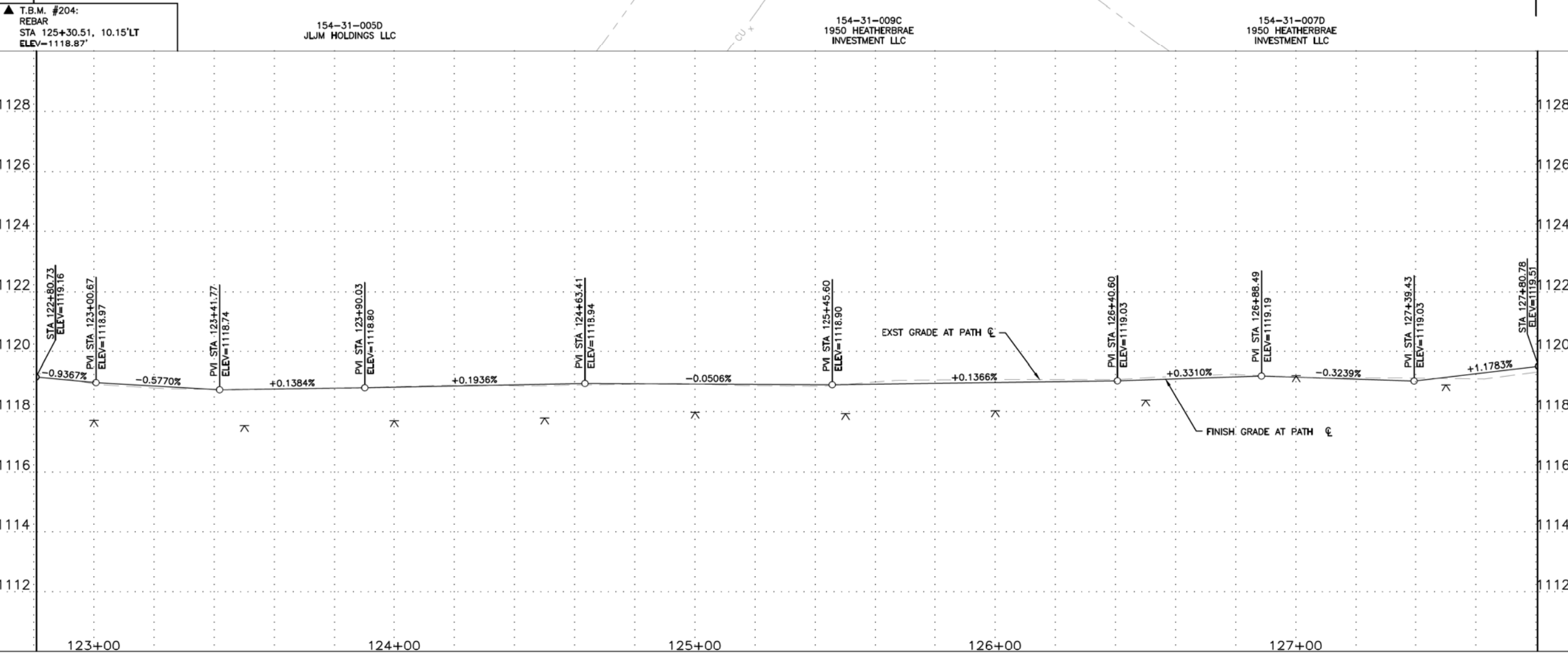
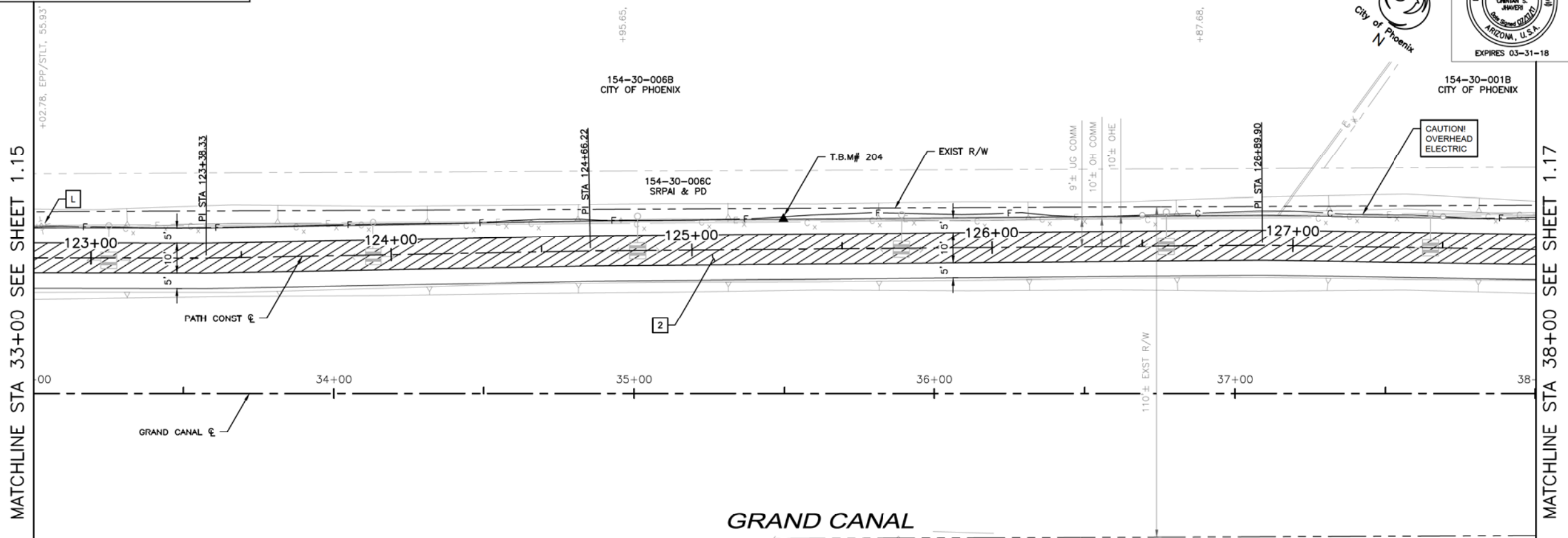
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 33+00 SEE SHEET 1.15

MATCHLINE STA 38+00 SEE SHEET 1.17

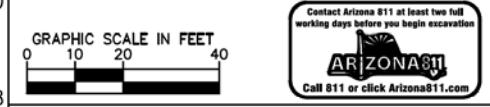


NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	5,000

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

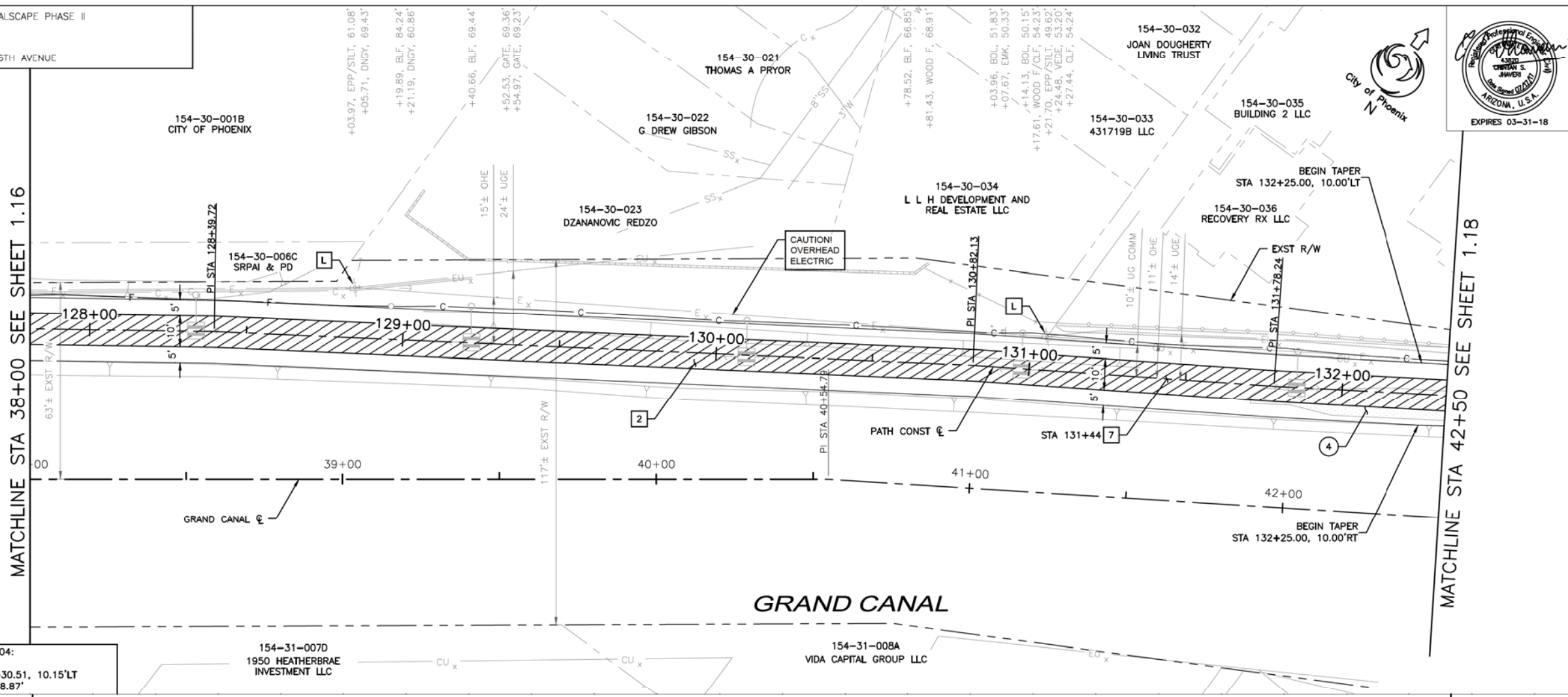
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DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE

F.H.W.A. REGION 9	STATE ARIZ.	PROJ. NO. ST87600114	NO. 1.17	TOTAL 1.62
TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034				
REMOVAL/RELOCATION NOTES				

MATCHLINE STA 38+00 SEE SHEET 1.16

MATCHLINE STA 42+50 SEE SHEET 1.18



NO	DESCRIPTION	UNIT	QTY
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	54

CONSTRUCTION NOTES			
NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,526
7	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 1.09	EA	1

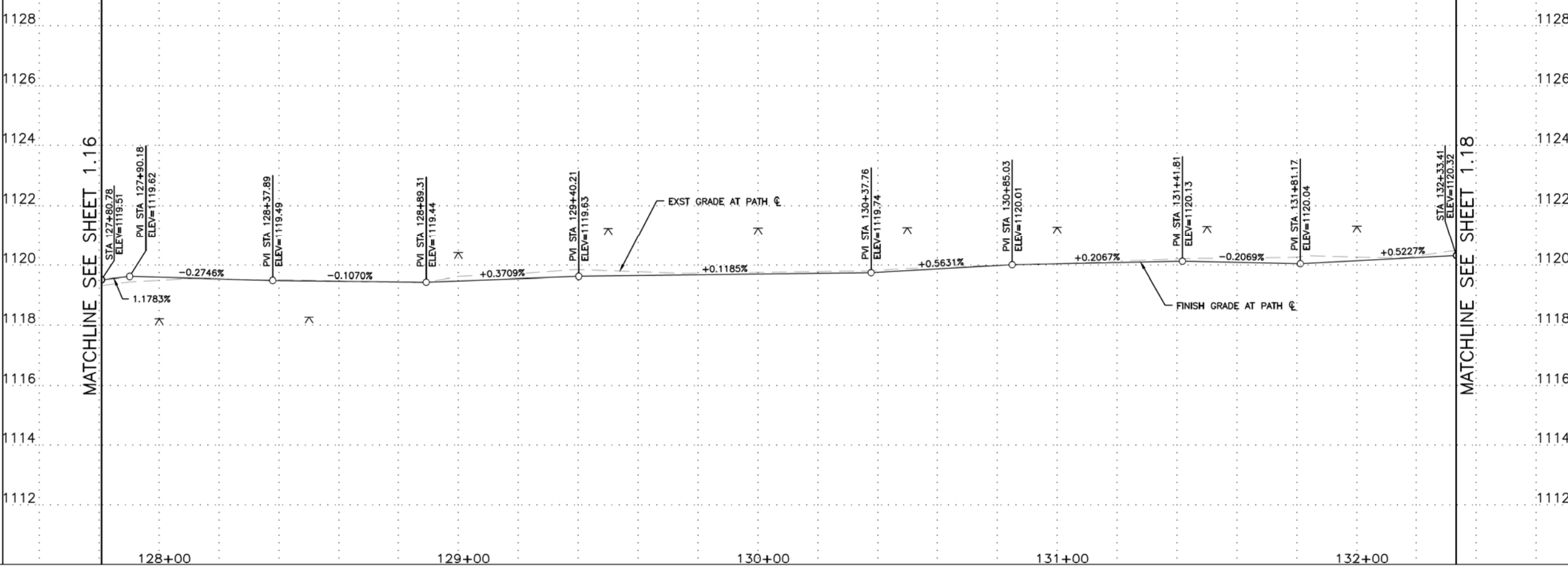
NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

▲ T.B.M. #204:
REBAR
STA 125+30.51, 10.15'LT
ELEV=1118.87'



MATCHLINE SEE SHEET 1.16

MATCHLINE SEE SHEET 1.18

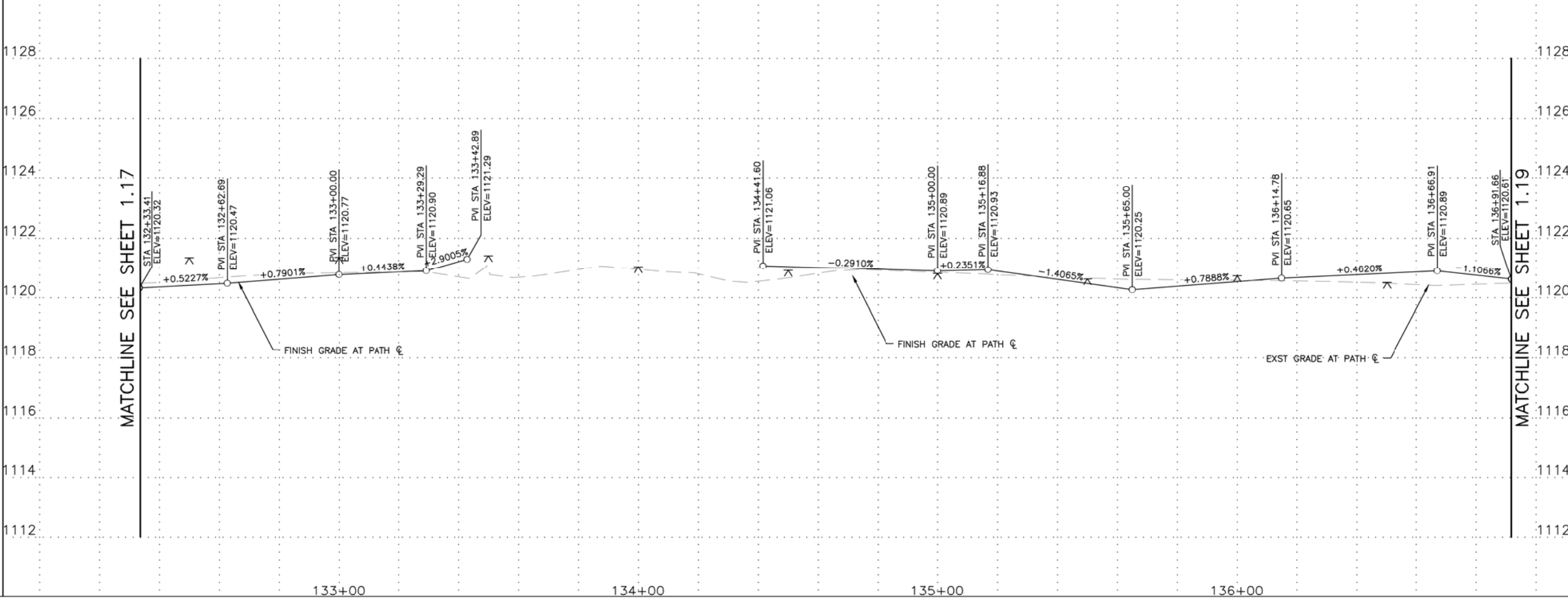
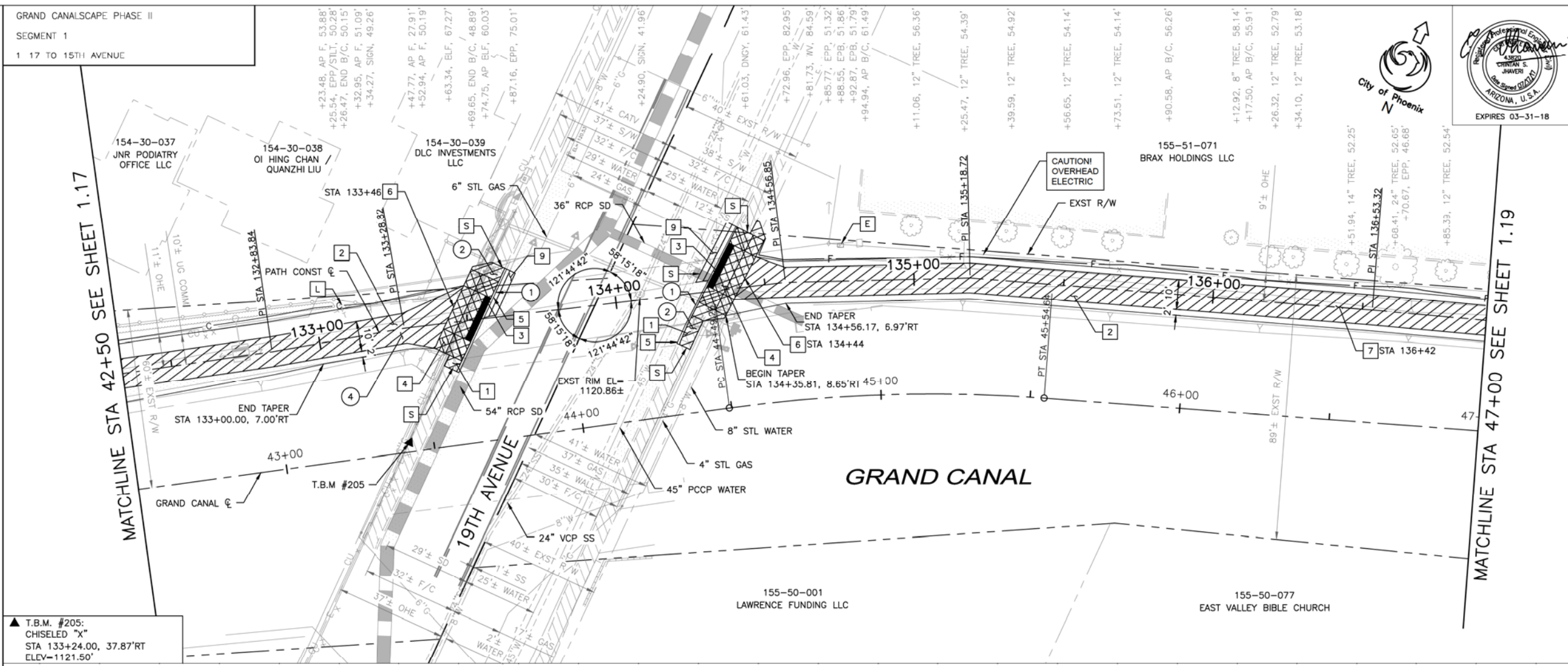
GRAPHIC SCALE IN FEET
0 10 20 40

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE					
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT					
GRAND CANALScape PHASE II SEGMENT 1: I-17 TO 15TH AVE ST87600114					
DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.17	TOTAL SHEETS: 1.62	DATE: 07/17
SCALE: 1"=20'H 1"=2' V					

NO.	DESCRIPTION	REV BY	CHK BY	DATE



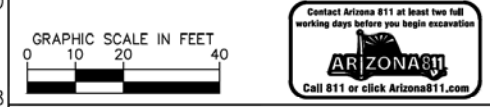
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.18	1.62

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	81
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	365
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	126

NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230	SF	153
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS "AA" CONCRETE	SF	3,684
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	64
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244, MODIFIED (SEE DETAIL SHEETS 1.06-1.08)	SF	570
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE "A", H=6"	LF	81
6	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 1.09	EA	2
7	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 1.09	EA	1
9	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 1.05	SY	8

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

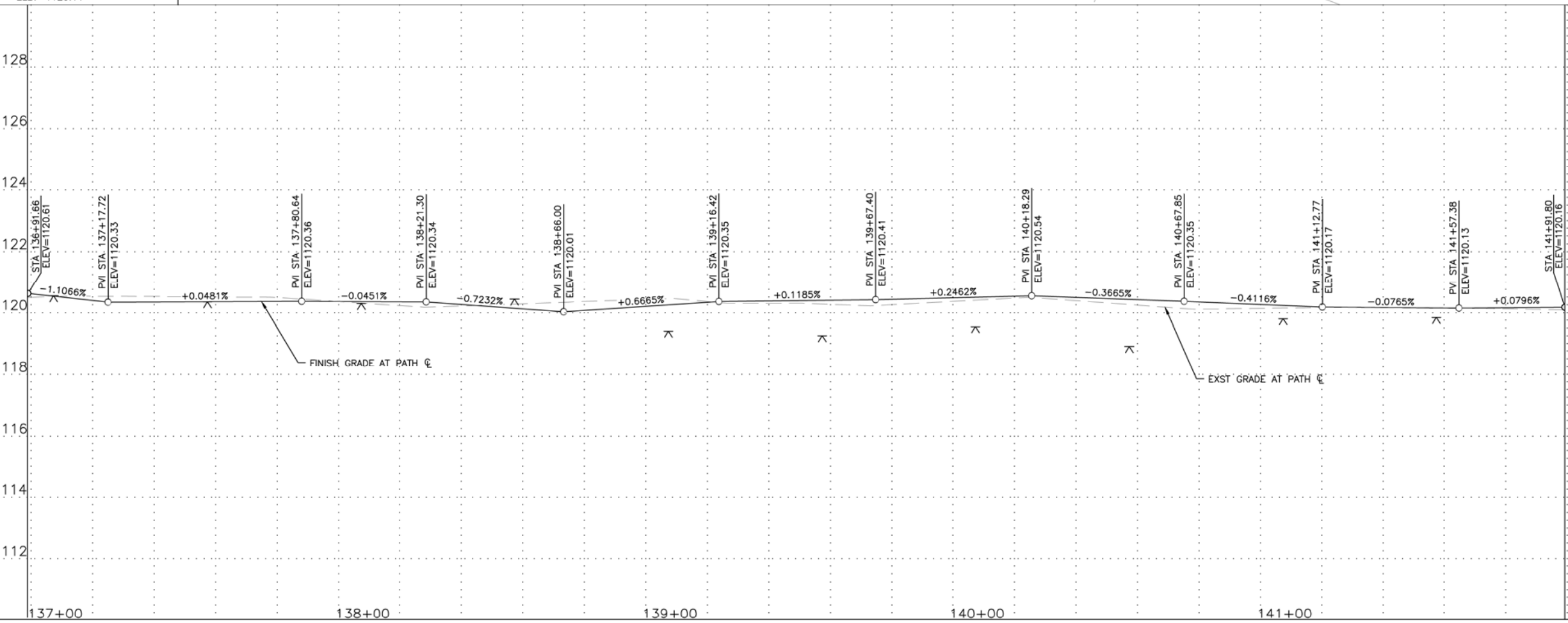
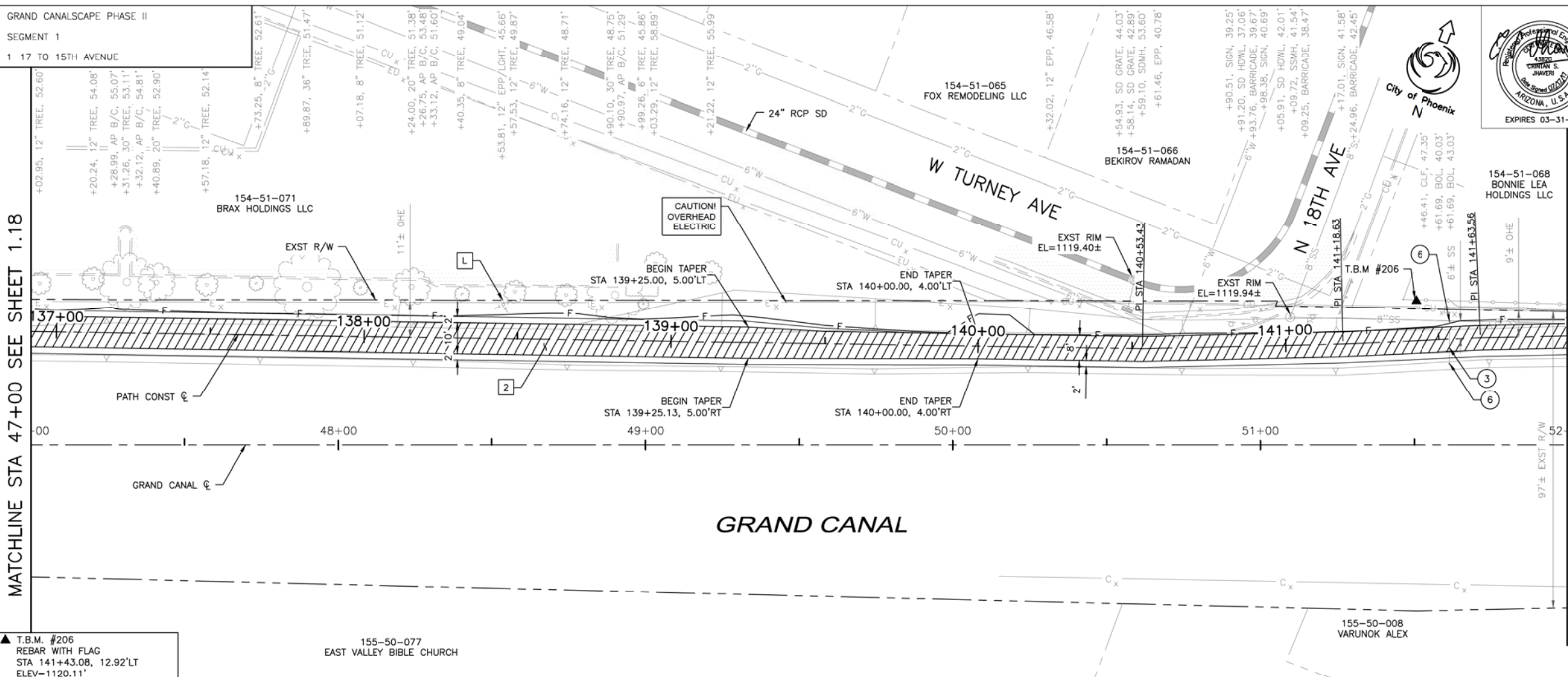


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	1"=20'H					1.18	1.62
	1"=2' V						

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.19	1.62

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	
3	REMOVE EXISTING GATE	EA	1	
6	REMOVE EXISTING BOLLARD	EA	2	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,518	

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

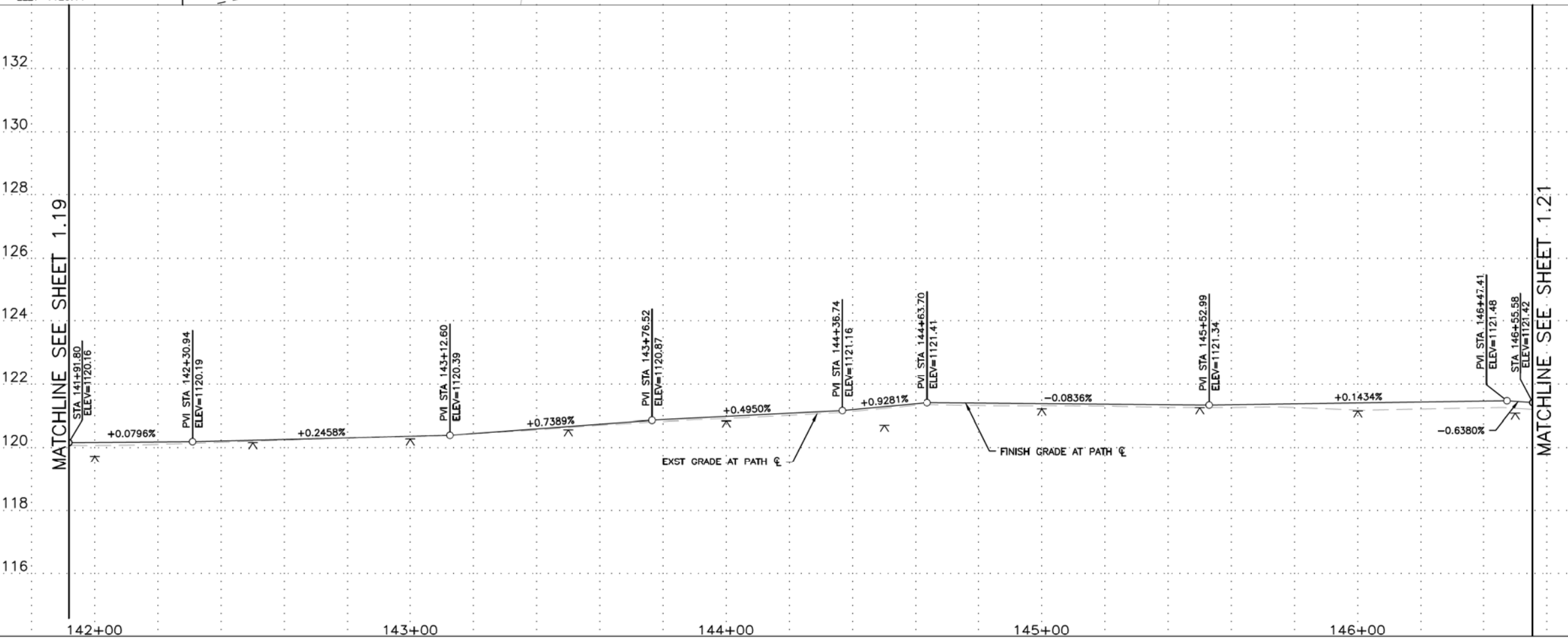
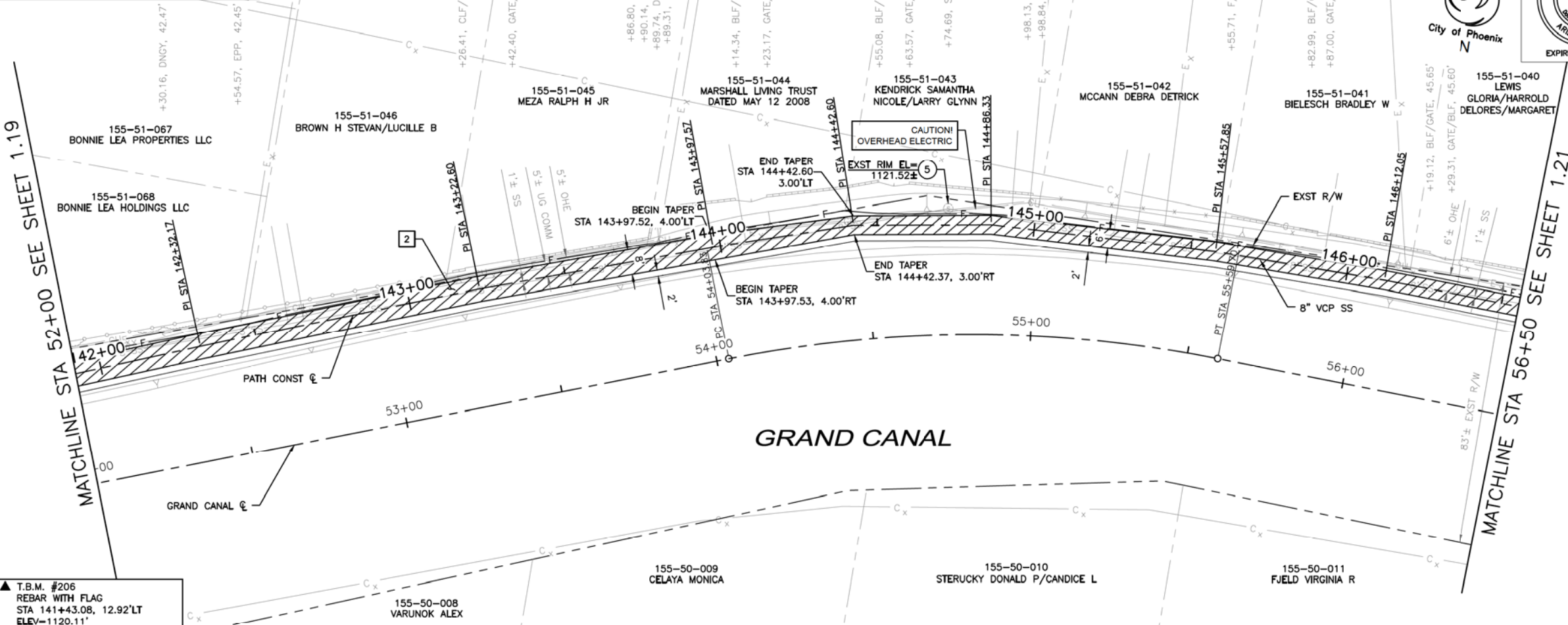
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PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.19	TOTAL SHEETS: 1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

NO.	DESCRIPTION	REV. BY/CHK. BY	DATE

GRAND CANALScape PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE



F.H.W.A. REGION 9 STATE ARIZ. PROJ. NO. ST87600114 NO. 1.20 TOTAL 1.62
TRACE CONSULTING
 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

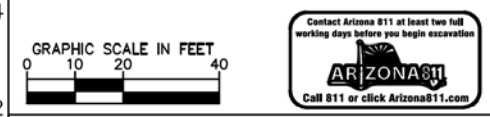
REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	3,235

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



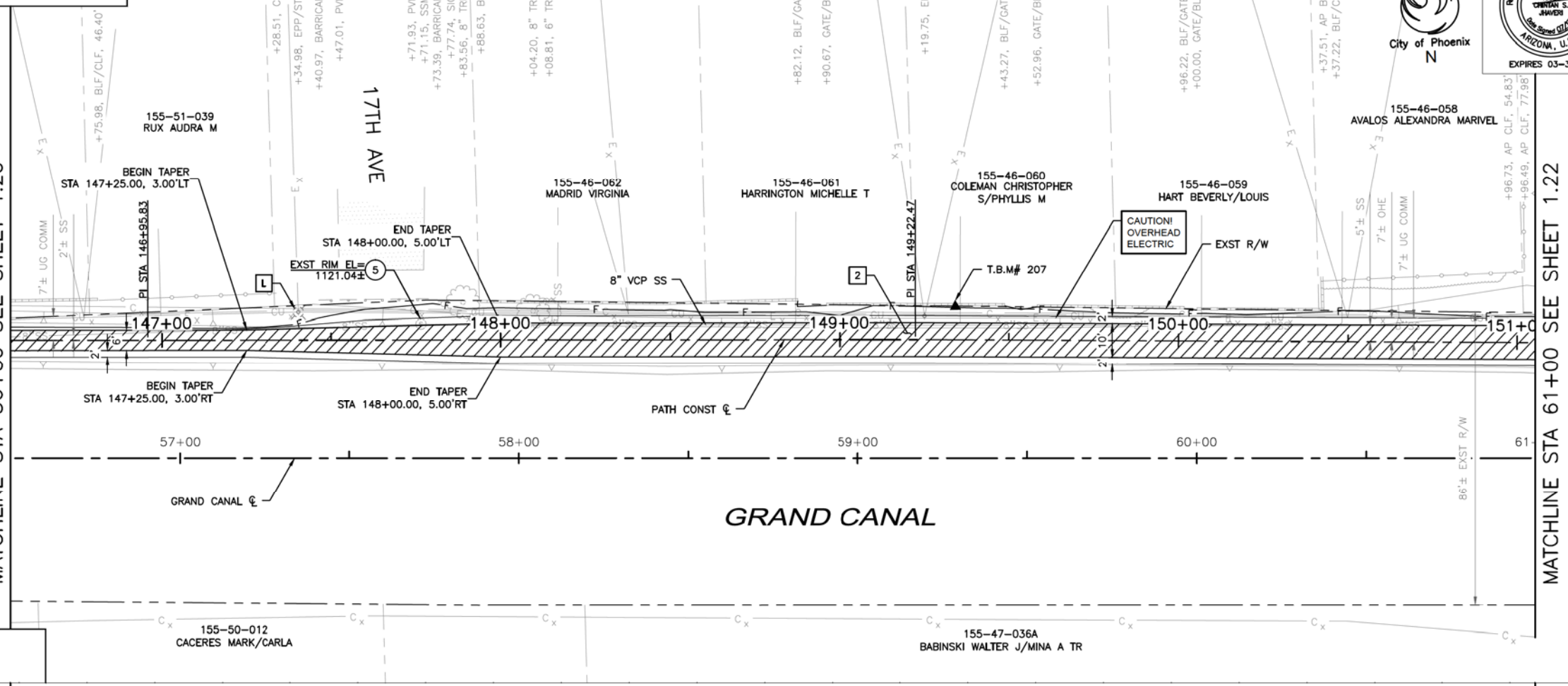
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

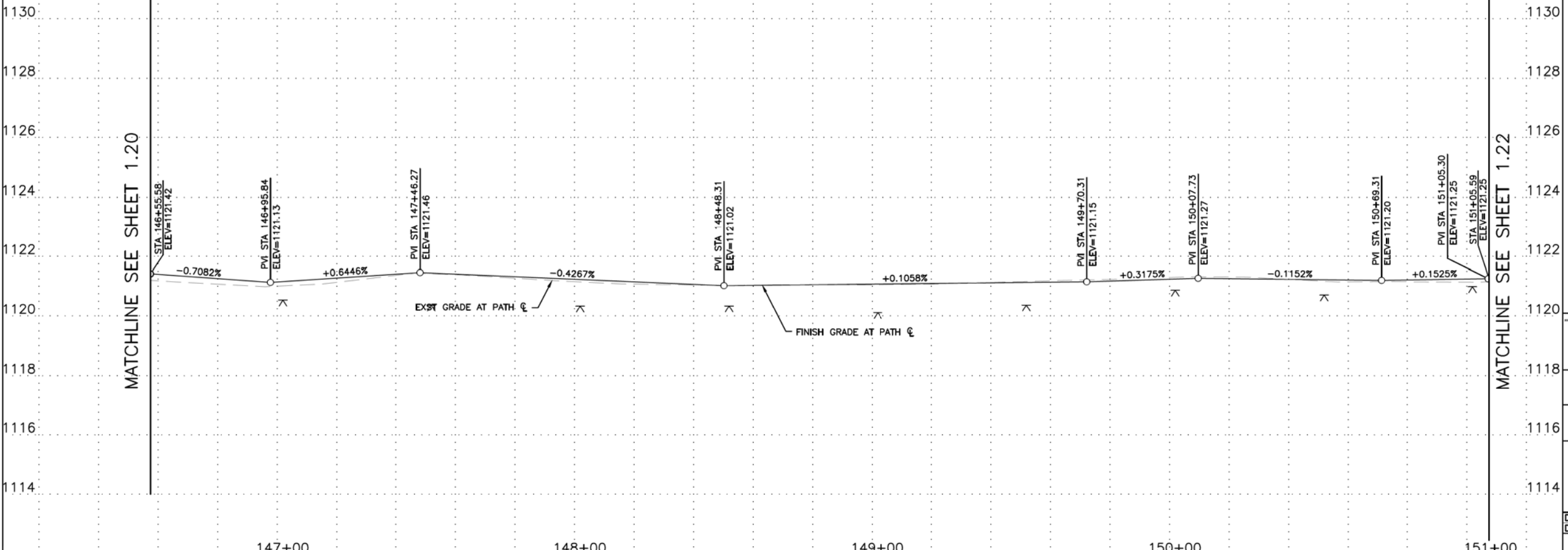
DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 1.20	TOTAL SHEETS: 1.62
DATE: 07/17	DATE: 07/17	DATE: 07/17	SCALE: 1"=20'H 1"-2' V	

GRAND CANALSCAPE PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE

MATCHLINE STA 56+50 SEE SHEET 1.20



MATCHLINE SEE SHEET 1.20



MATCHLINE SEE SHEET 1.22

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.21	1.62

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,071

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

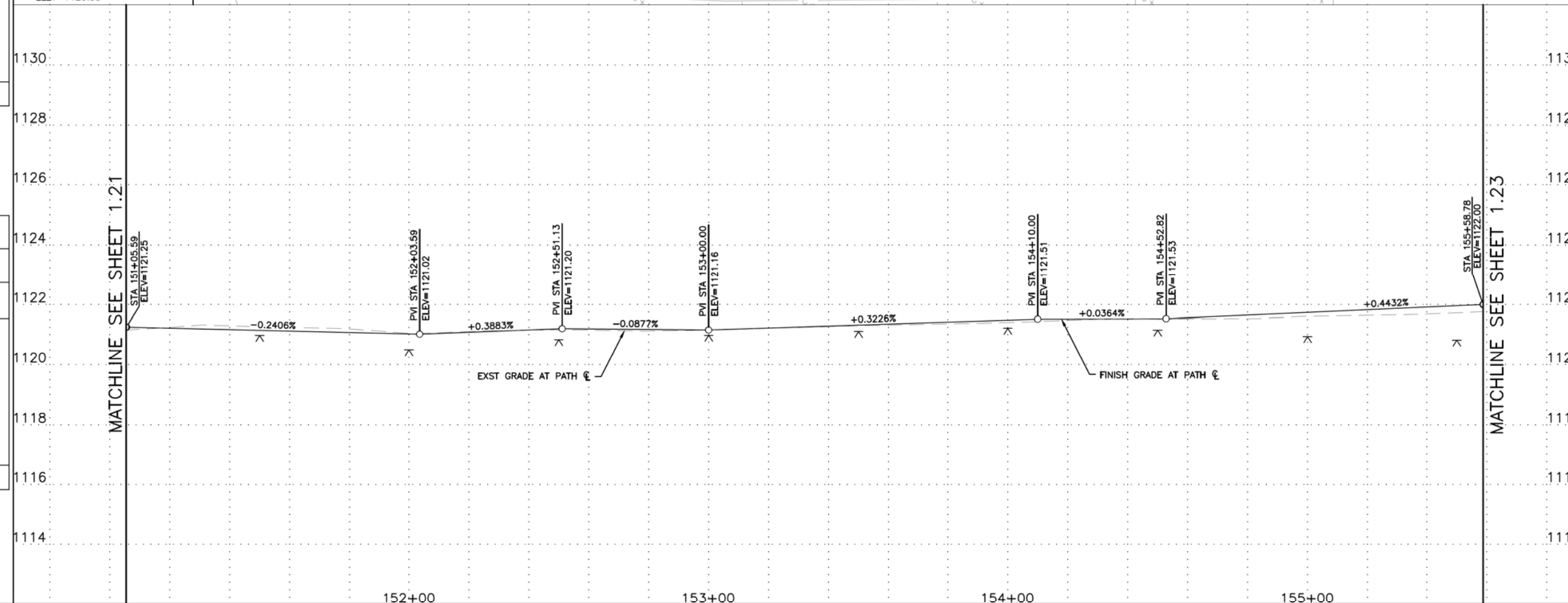
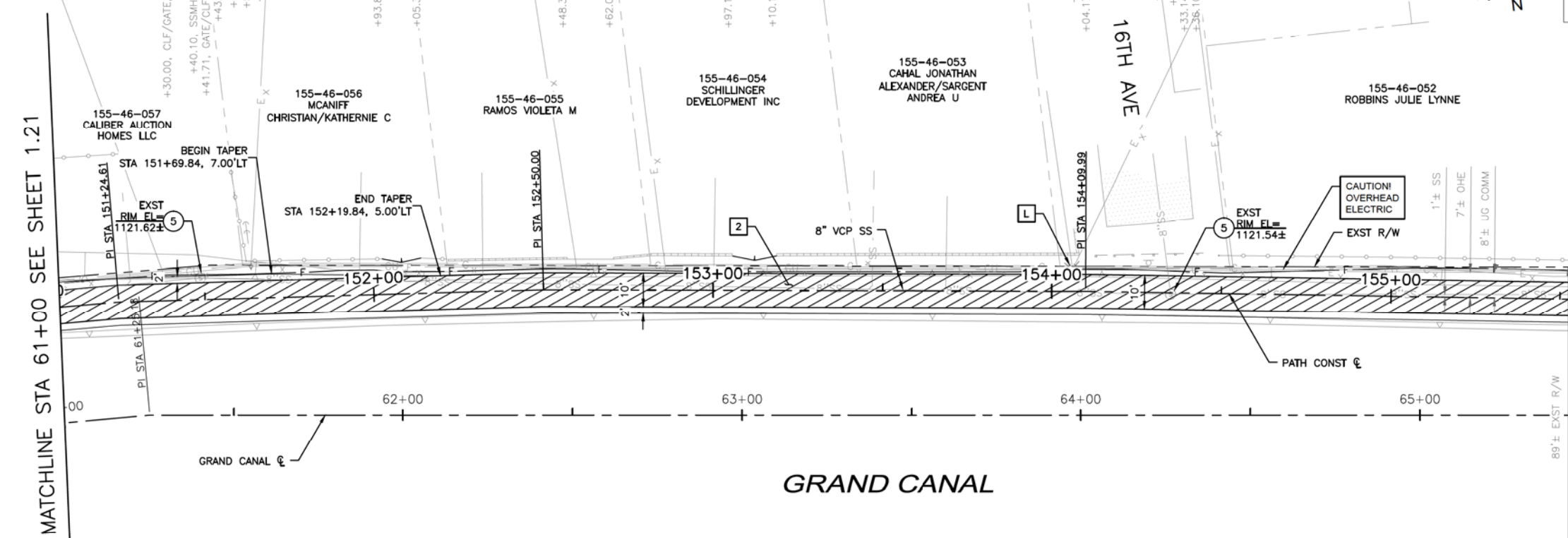
PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	1.21	TOTAL SHEETS:	1.62
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE:	1"=20'H 1"=2' V		

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.22	1.62

1201 E. Jefferson St., Suite 3, Phoenix, AZ 85034

TRACE CONSULTING

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	2

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,537

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE

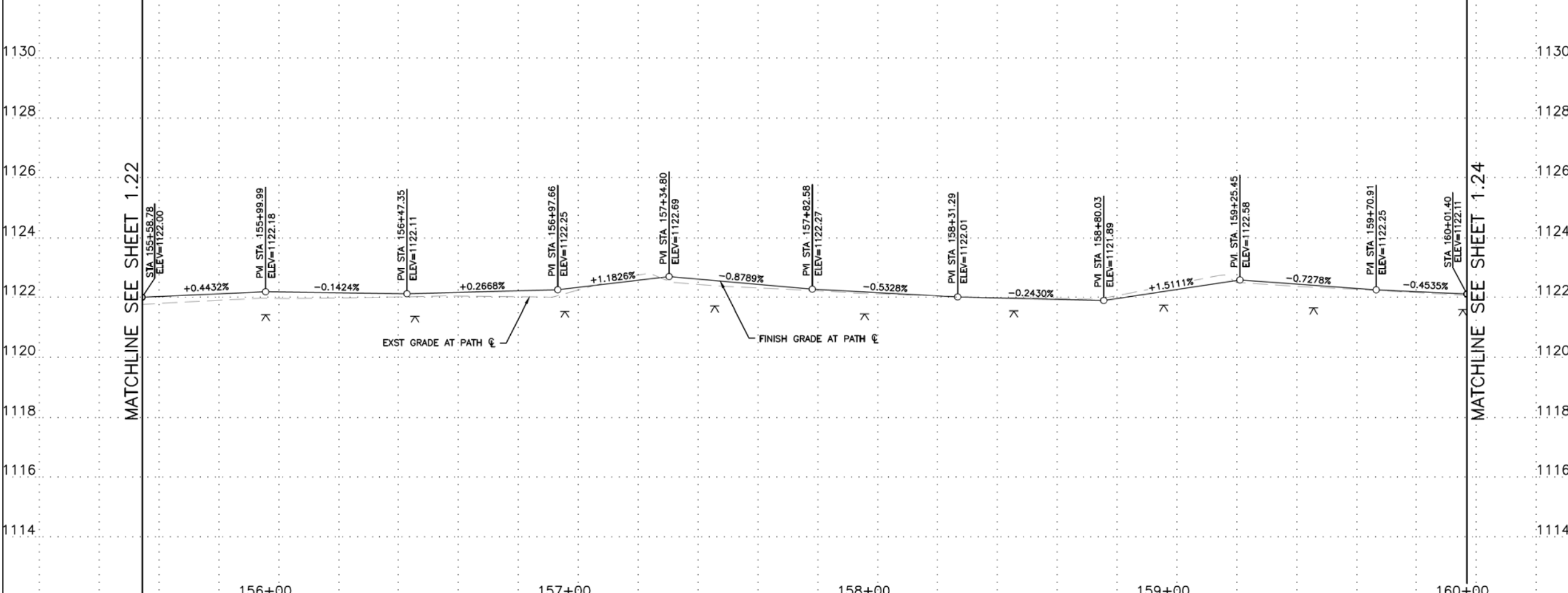
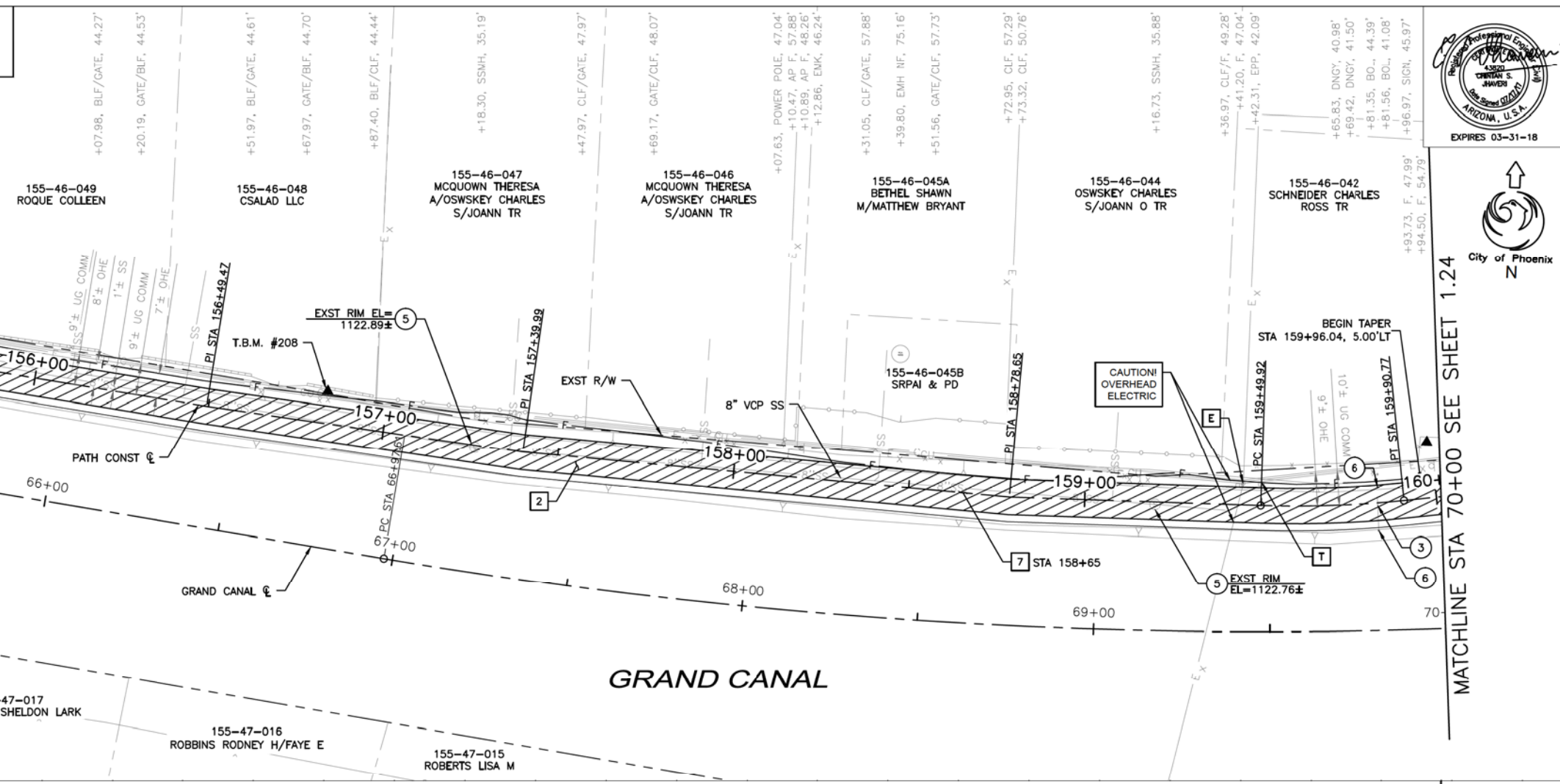
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	1.22	TOTAL SHEETS:	1.62
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE: 1"=20'H 1"-2' V			

REVISION BY CITY OF PHOENIX		NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.23	1.62

TRACE CONSULTING
 1201 E. Jefferson St. Suite 3
 Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	
3	REMOVE EXISTING GATE	EA	1	
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	2	
6	REMOVE EXISTING BOLLARD	EA	2	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,428	
7	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 1.09	EA	1	

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

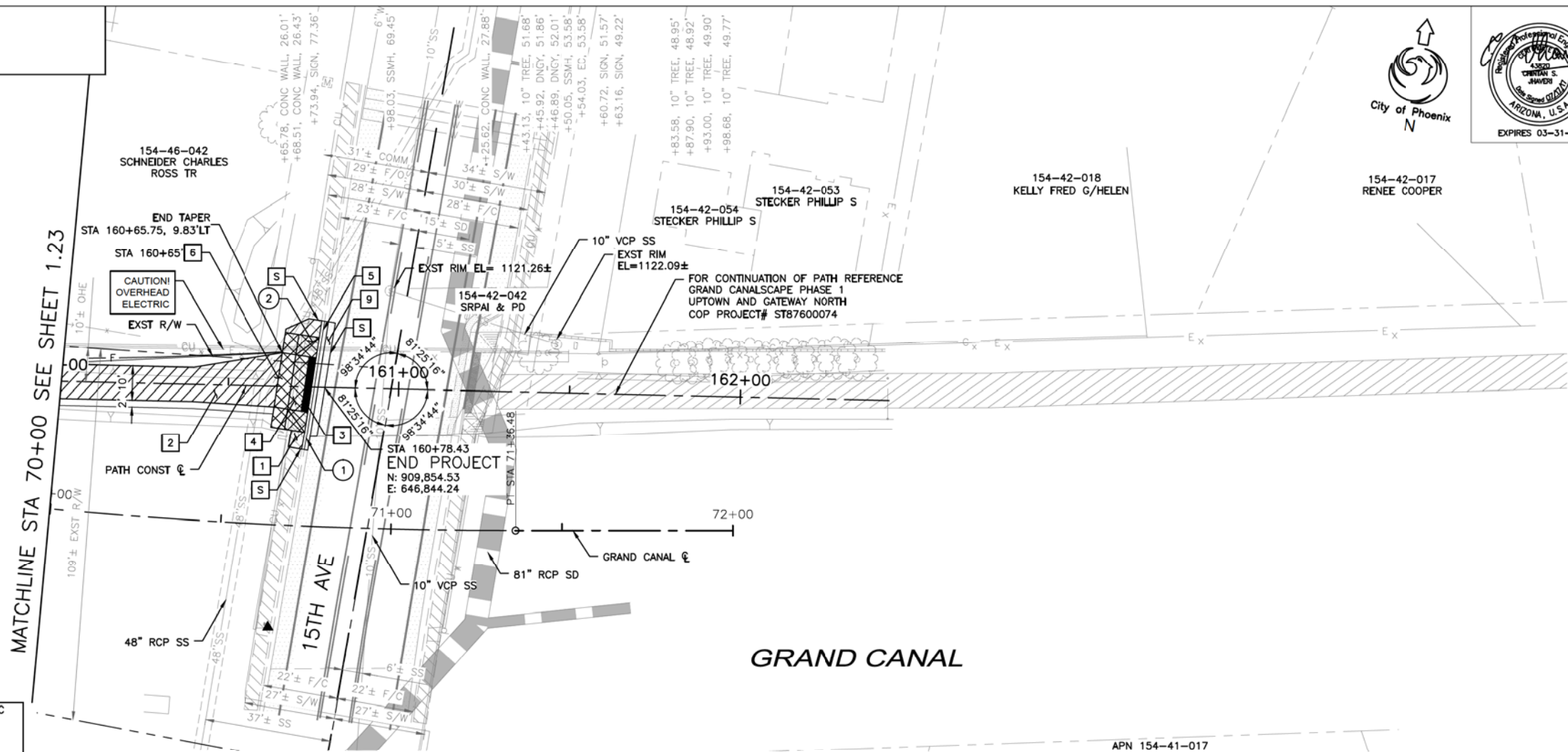
PATH PLAN & PROFILE						
CITY OF PHOENIX, ARIZONA						
STREET TRANSPORTATION DEPARTMENT						
GRAND CANALScape PHASE II						
SEGMENT 1: I-17 TO 15TH AVE						
ST87600114						
DR:	BRR	DES:	GRS	CK:	CSJ	SHEET
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:
SCALE:	1"=20'H					1.23
	1"=2' V					1.62

GRAND CANALScape PHASE II
SEGMENT 1
1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.24	1.62
TRACE CONSULTING		1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034		
REMOVAL/RELOCATION NOTES				

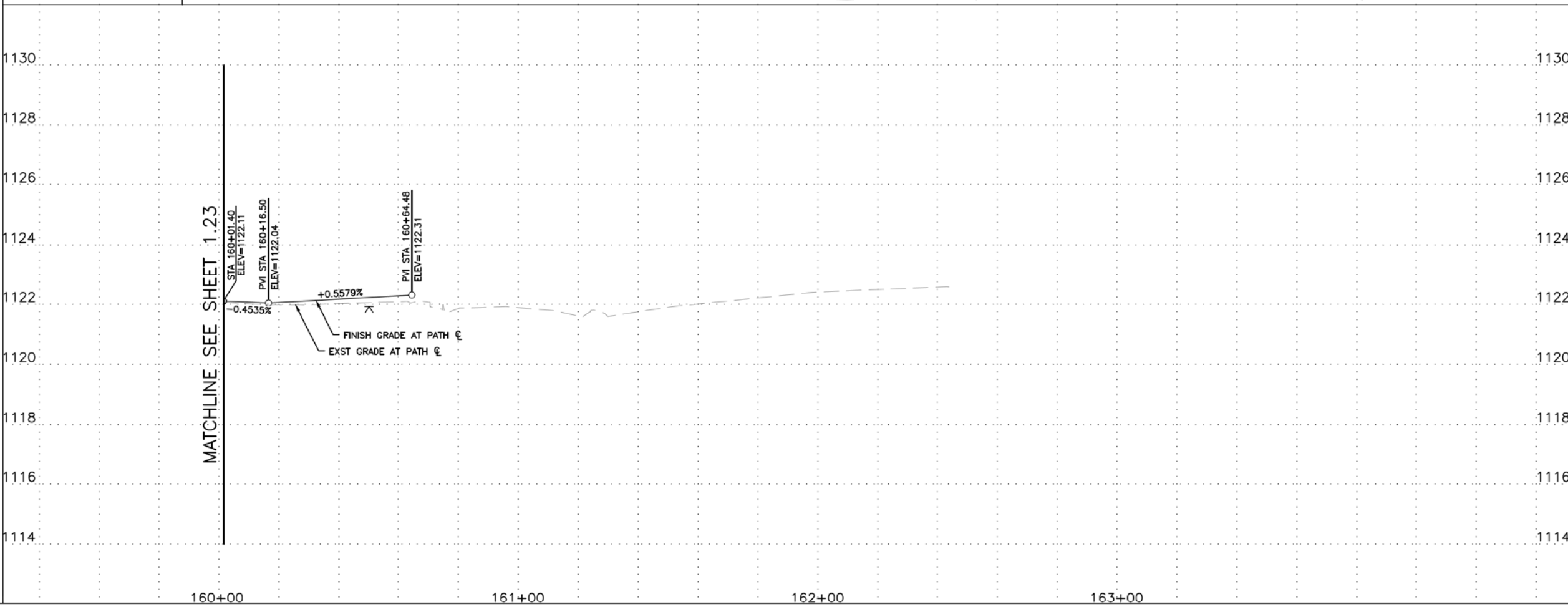
NO.	DESCRIPTION	REV BY	CHK BY	DATE



NO.	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	38
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	151

CONSTRUCTION NOTES			
NO.	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230	SF	57
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	705
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	32
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244, MODIFIED (SEE DETAIL SHEETS 1.06-1.08)	SF	280
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	38
6	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 1.09	EA	1
9	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 1.05	SY	7

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



GRAPHIC SCALE IN FEET: 0, 10, 20, 40

ARIZONA811 logo with text: "Contact Arizona 811 at least two full working days before you begin excavation. Call 811 or click Arizona811.com"

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE						
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT						
GRAND CANALScape PHASE II SEGMENT 1: I-17 TO 15TH AVE ST87600114						
DR:	BRR	DES:	GRS	CK:	CSJ	SHEET
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:
SCALE:	1"=20'H					1.24
	1"=2' V					1.62

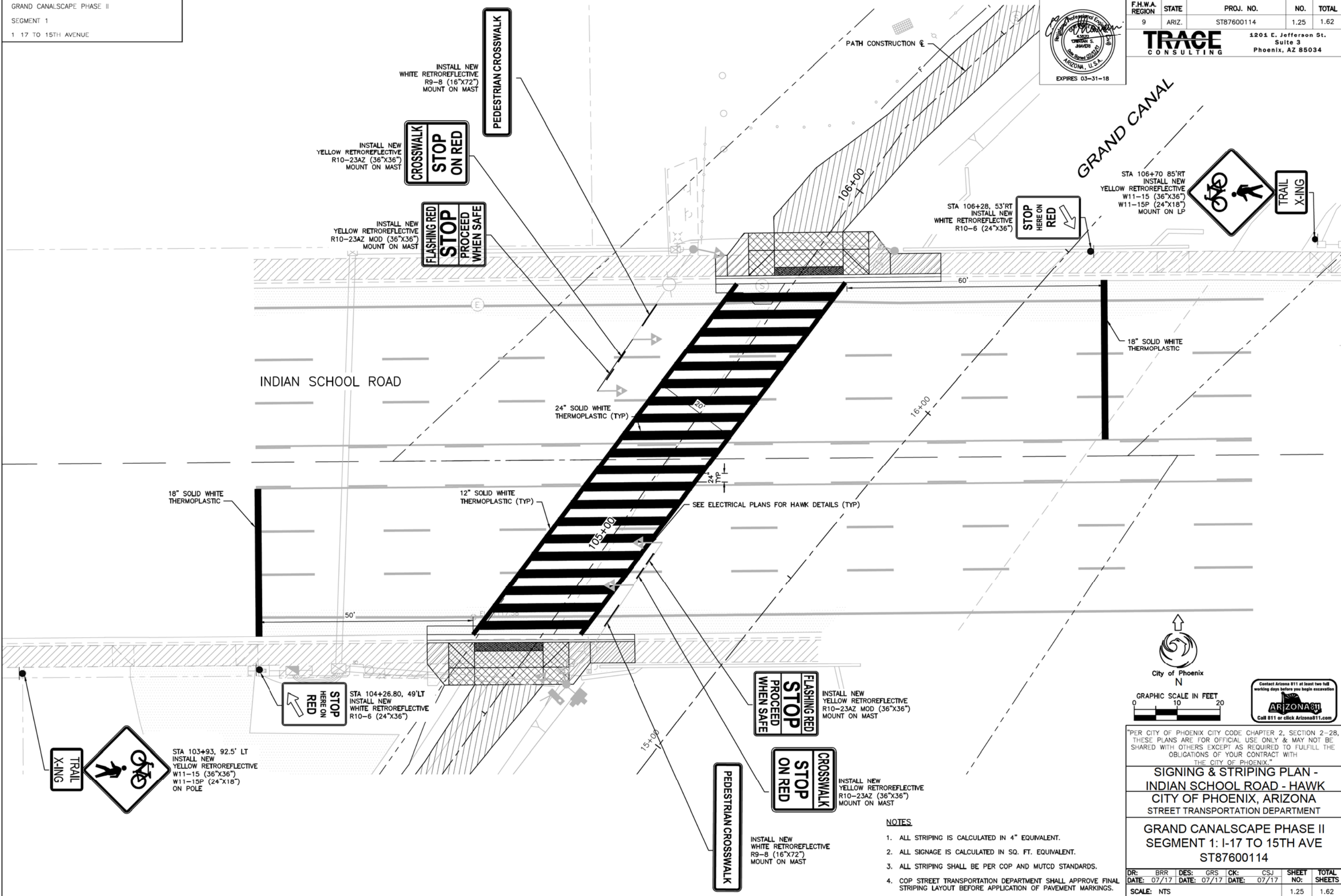
GRAND CANALScape PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.25	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



City of Phoenix
 N
 GRAPHIC SCALE IN FEET
 0 10 20

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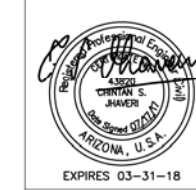
SIGNING & STRIPING PLAN - INDIAN SCHOOL ROAD - HAWK
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

- NOTES**
- ALL STRIPING IS CALCULATED IN 4" EQUIVALENT.
 - ALL SIGNAGE IS CALCULATED IN SQ. FT. EQUIVALENT.
 - ALL STRIPING SHALL BE PER COP AND MUTCD STANDARDS.
 - COP STREET TRANSPORTATION DEPARTMENT SHALL APPROVE FINAL STRIPING LAYOUT BEFORE APPLICATION OF PAVEMENT MARKINGS.

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	1.25	TOTAL SHEETS:	1.62
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE:	NTS		

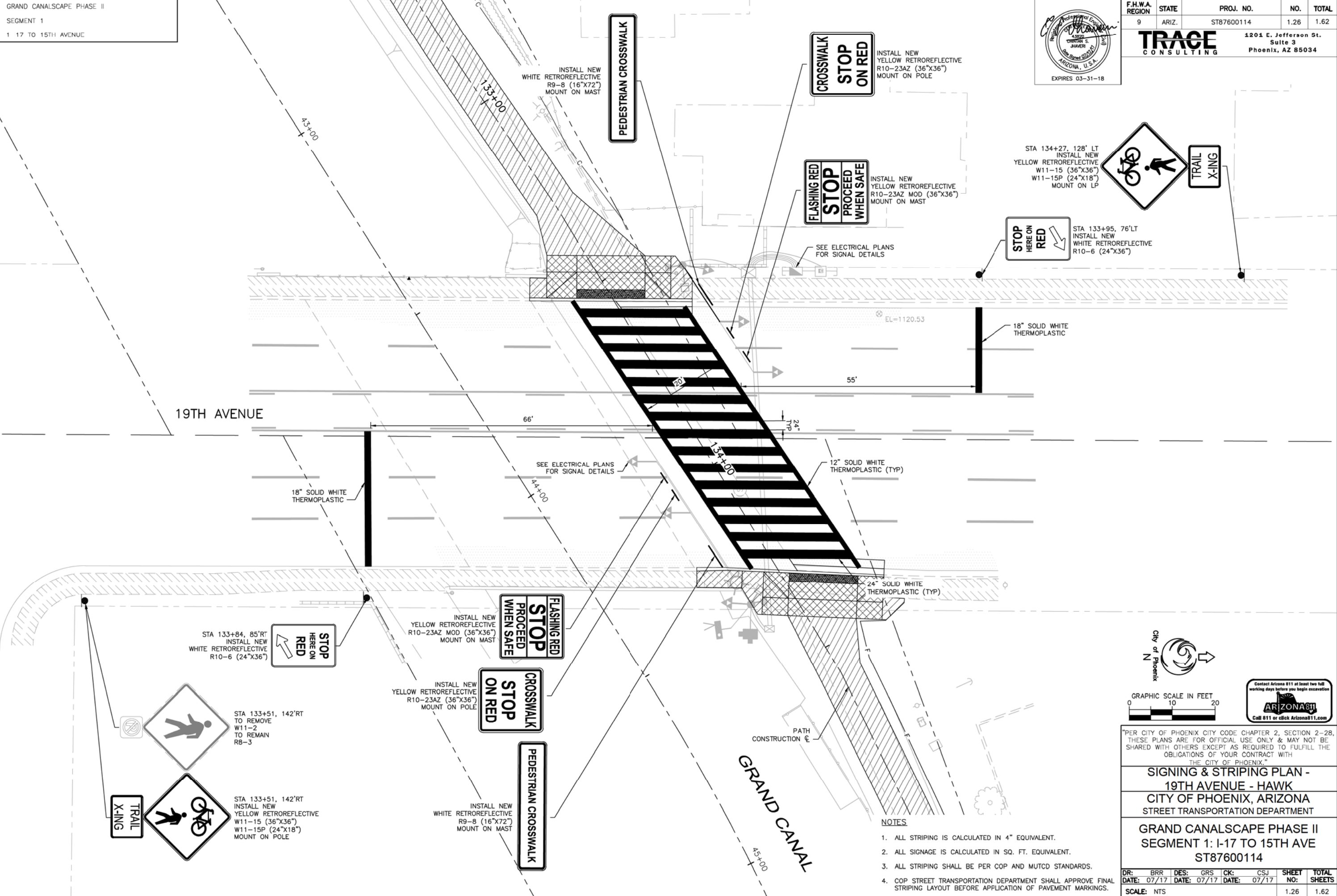
GRAND CANALScape PHASE II
 SEGMENT 1
 1 17 TO 15TH AVENUE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.26	1.62

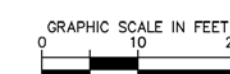
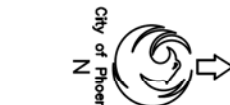
TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY/CHK BY	DATE



STA 134+27, 128' LT
 INSTALL NEW
 YELLOW RETROREFLECTIVE
 W11-15 (36"x36")
 W11-15P (24"x18")
 MOUNT ON LP

STOP
 HERE ON
 RED



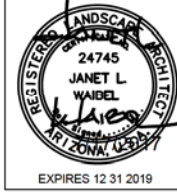
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28,
 THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE
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 THE CITY OF PHOENIX.

**SIGNING & STRIPING PLAN -
 19TH AVENUE - HAWK
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT**

**GRAND CANALScape PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114**

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	NTS					1.26	1.62

- NOTES**
- ALL STRIPING IS CALCULATED IN 4" EQUIVALENT.
 - ALL SIGNAGE IS CALCULATED IN SQ. FT. EQUIVALENT.
 - ALL STRIPING SHALL BE PER COP AND MUTCD STANDARDS.
 - COP STREET TRANSPORTATION DEPARTMENT SHALL APPROVE FINAL STRIPING LAYOUT BEFORE APPLICATION OF PAVEMENT MARKINGS.

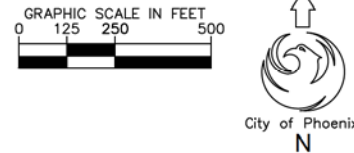
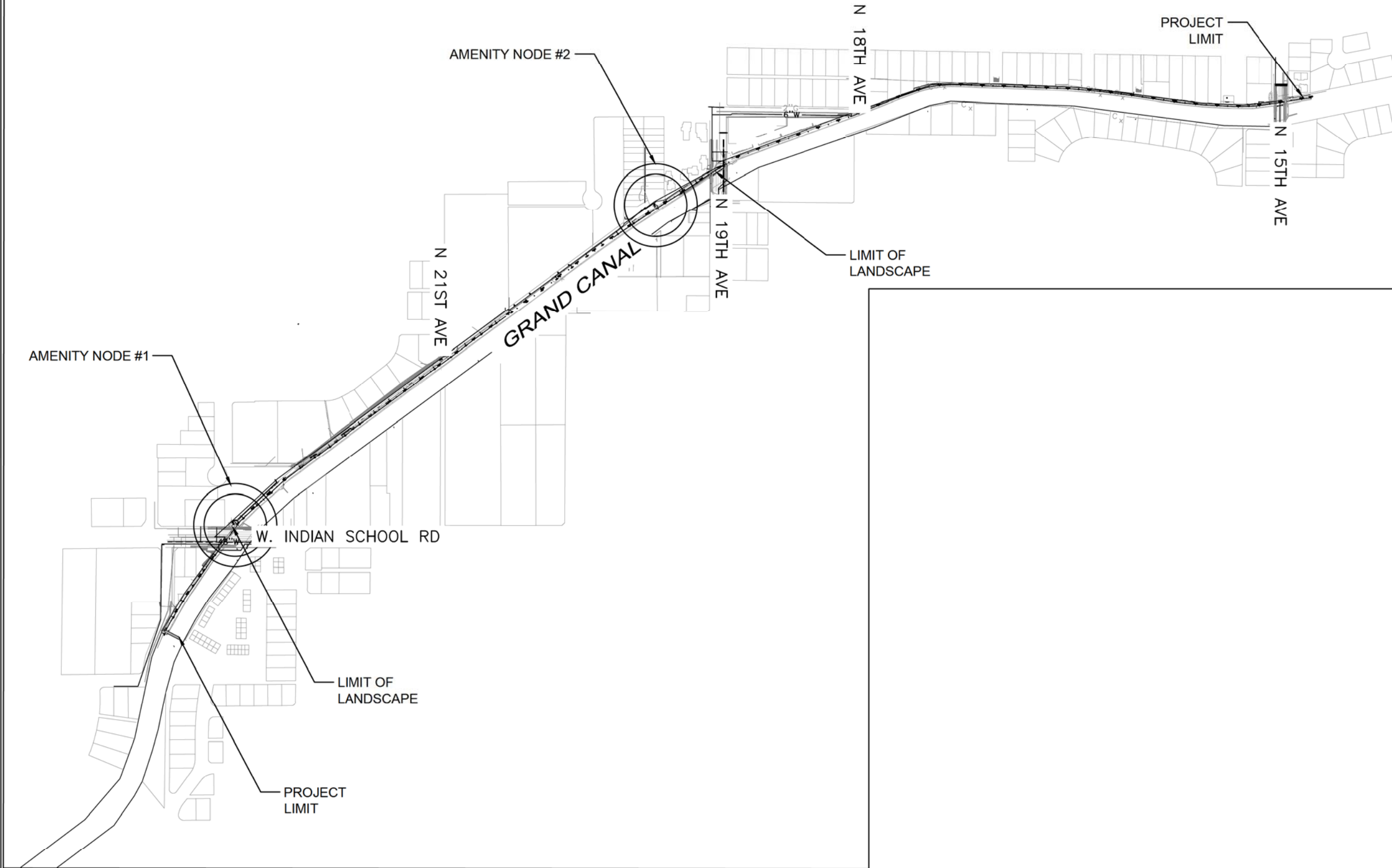


NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

AMENITY OVERVIEW:



Waibel & Associates Landscape Architecture
 Phone: 480.955.5849 Fax: 480.955.5846
 4611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: janet@waibel.com

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ARIZONA 811
 Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

AMENITY OVERVIEW

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

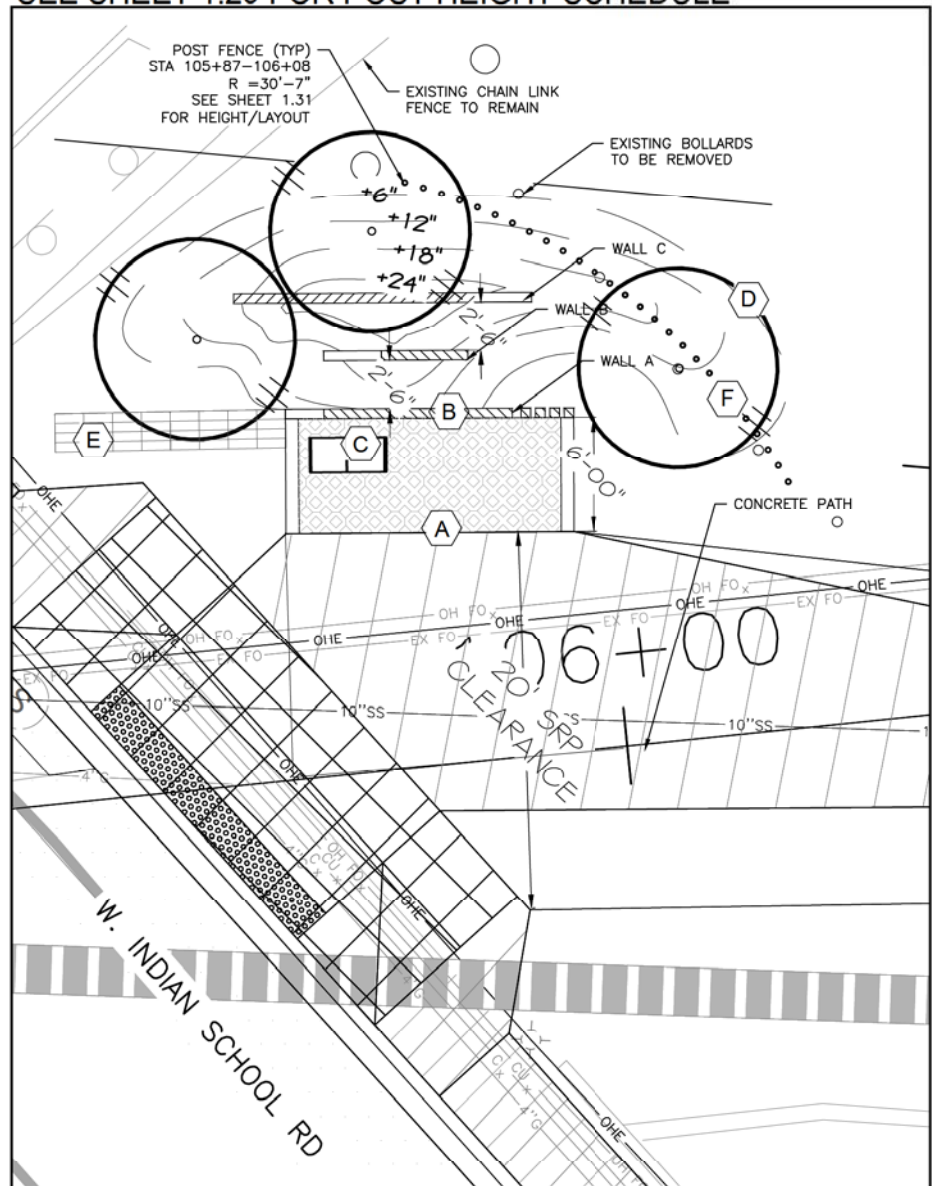
GRAND CANALSCAPE PHASE II
 SEGMENT 1: 1-17 TO 15TH AVE
 ST87600114

DR.	RS.	DES.	RM.	CK.	JW.	SHEET NO.	TOTAL SHEETS
						1.27	1.62

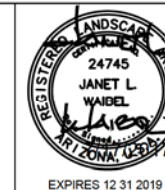
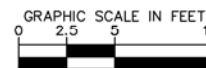
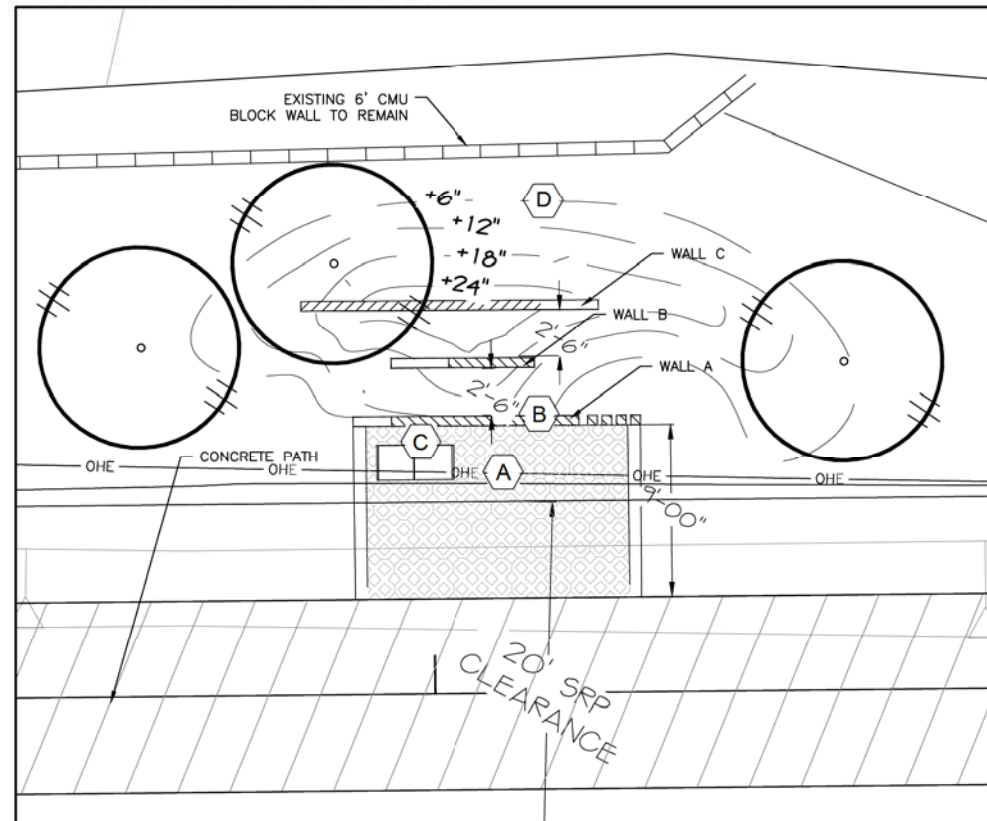
SCALE: 1" = 250'

\\D:\PHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 1\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM

NODE 1: SHEET 1.32 STA105+73
SEE SHEET 1.29 FOR POST HEIGHT SCHEDULE



NODE 2: SHEET 1.35 STA 130+83



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.28	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

KEYNOTES

Symbol	Item/Manuf.
(A)	Concrete Block Pavers
(B)	Board Formed Concrete Wall w/Integrated Bike Stand
(C)	Post Mounted Bench
(D)	Fill Dirt for Berming
(E)	Gabion Basket
(F)	Steel Posts w/ Galvanized Steel Colorant

- NOTES**
1. NODES ARE OUTSIDE POLE AND WIRE SETUP.
 2. CONTRACTOR TO PROVIDE CLEAN FILL FOR BERMING AND COMPLETE ALL FINE GRADING TO TRANSITION TO EXISTING GRADES.
 3. REFER TO LANDSCAPE PLANS FOR TREE AND SHRUB TYPES.
 4. PROVIDE SUBMITTALS AND SAMPLES FOR ALL MATERIALS.

Phone: 480.955.3649 Fax: 480.955.3646
 4611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: janet@waibel.com

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AMENITY NODES
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
		7/17			7/17	1.28	1.62

SCALE: 1" = 5'

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

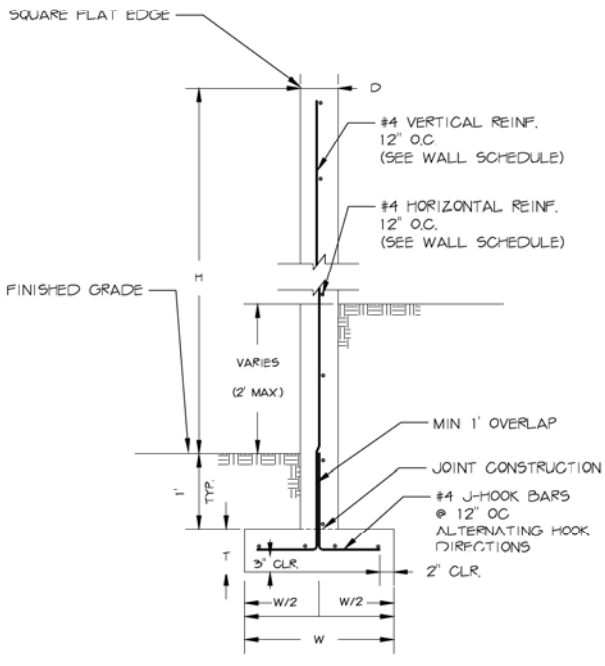
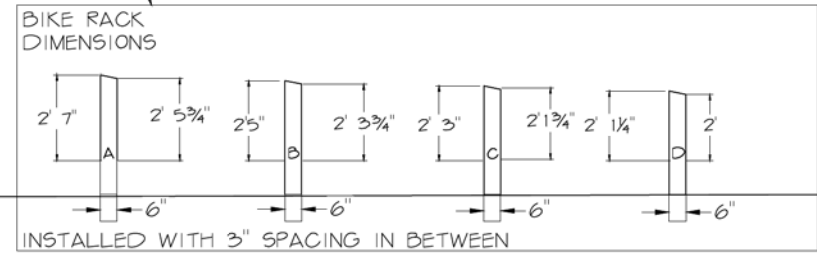
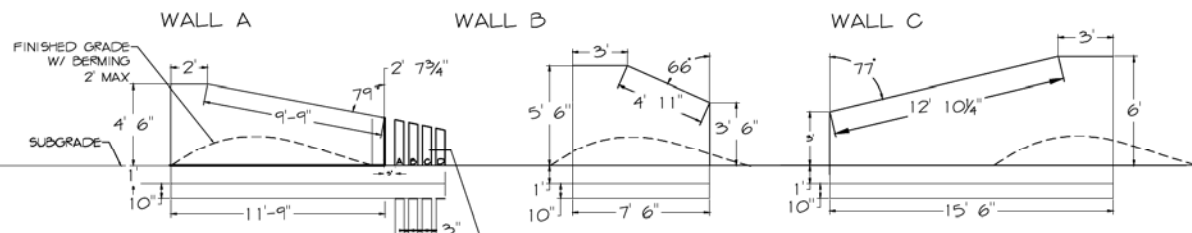
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NODE WALLS



WALL NOTES:

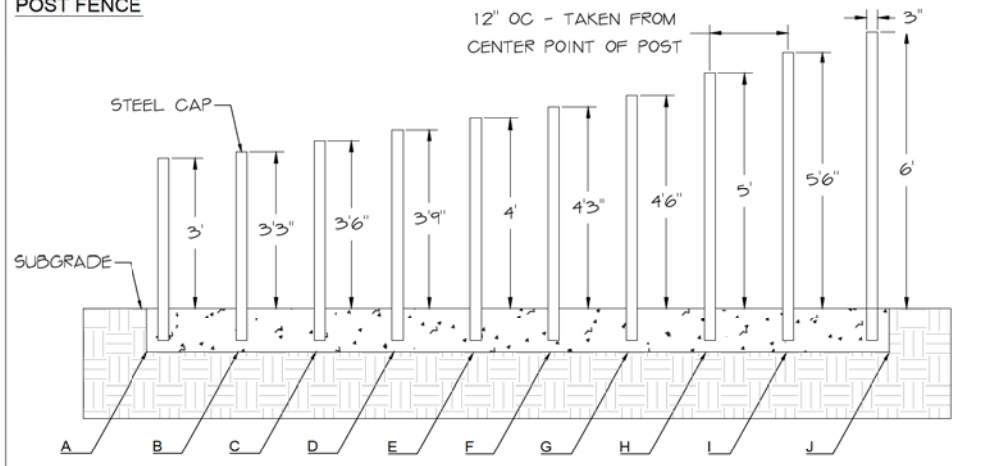
- ALL CONCRETE SHALL BE CLASS 'S' (F' C= 3000 PSI)
- ALL WALL FACES ARE POURED IN PLACE, IN FORMS MADE FROM ORIENTED STRAND PLYWOOD IN 12" HORIZONTAL SECTIONS SO PLYWOOD LEAVES THE RELIEF TEXTURE OF THE BOARD ON THE FACE OF THE CONCRETE WALLS.
- ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS OTHERWISE NOTED.
- COMPACT BACKFILL FOR FOOTING AND WALL BASE MINIMUM 95% OF ASTM D698 MAXIMUM DRY DENSITY.
- SEE PROJECT PLANS FOR WALL LAYOUT, FINISHED GRADE ELEVATIONS.
- DIMENSIONS SHALL NOT BE SCALED FROM DRAWING.

WALL SCHEDULE

WALL TYPE	WALL THICK. (D)	WALL HEIGHT* (H)	FTG. DEPTH (T)	FTG. WIDTH (W)	REBAR REINFORCEMENT		FACTORED AVERAGE SOIL BEARING PRESSURE (PSF)
					WALL VERT. & HORIZ.	FOOTING BOTTOM LONG.	
A	8"	4'-6"	10"	2'	#4 @ 12"	4-#4	1200
B	8"	5'-6"	10"	2'	#4 @ 12"	4-#4	1200
C	8"	6'	10"	2'-6"	#4 @ 12"	4-#4	1300

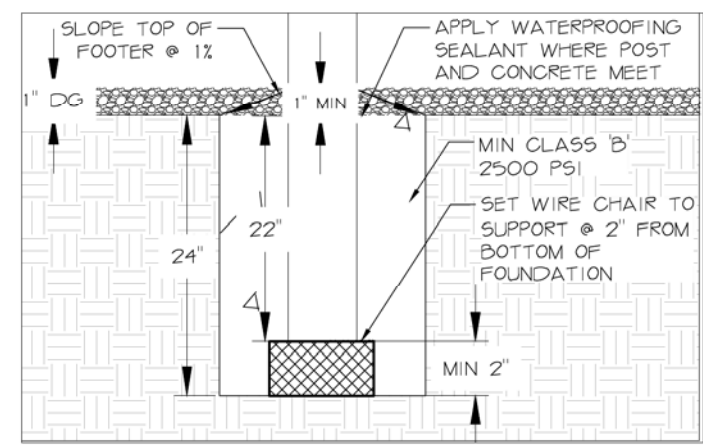
* WALL HEIGHT MEASURED FROM FINISHED GRADE EXCLUSIVE OF VARYING MOUND HEIGHTS AROUND WALLS

POST FENCE



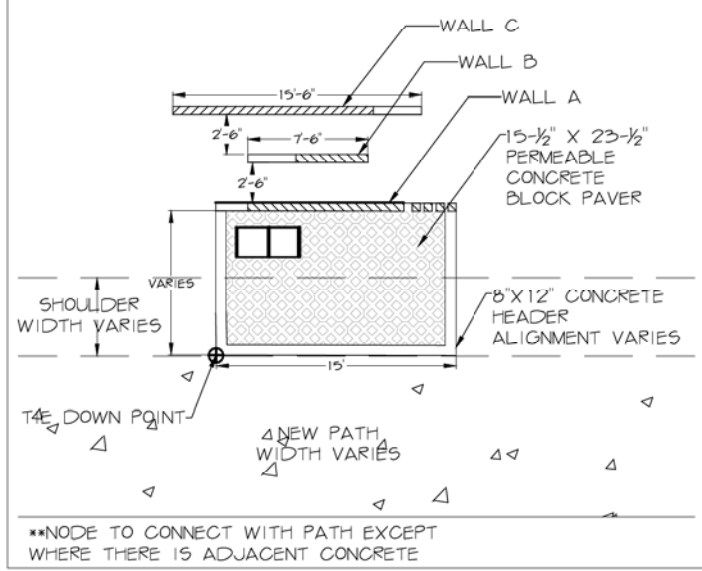
NOTES:

- ALL POSTS ARE 3" GALVANIZED STEEL, LENGTH VARIES: SEE ABOVE
- HEIGHT REPRESENTS POST DIMENSION ABOVE SUBGRADE
- ALL GALVANIZED POSTS TO BE TREATED WITH NATINA PRODUCT PRIOR TO INSTALLATION
- SPACING BETWEEN ALL POSTS IS 12" O.C. AND TO BE SET INTO ONE CONTINUOUS FOOTING FOR EACH LENGTH OF FENCING
- POST FENCES ALL SET IN ONE CONTINUOUS FOOTING FOR EACH RUN.
- EACH POST TO BE CAPPED WITH STEEL DRIVE-ON DISK END CAP FOR 3" PIPE AND SEALED TO PREVENT WATER INFILTRATION.

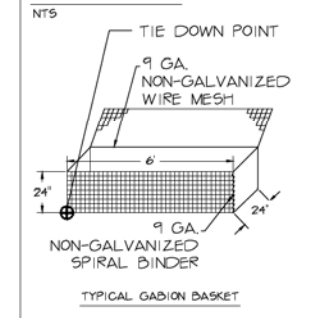


LAYOUT TYP. ALL NODES

POST SCHEDULE		
POST TYPE	POST HEIGHT FROM SUBGRADE	QTY
A	3'	11
B	3'-3"	20
C	3'-6"	28
D	3'-9"	33
E	4'	40
F	4'-3"	42
G	4'-6"	37
H	5'	32
I	5'-6"	35
J	6'	19

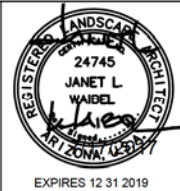


GABION BASKET



NOTES:

- ALL GABION BASKETS TO BE FILLED WITH 4'-8" RIVER ROCK, ARRANGED WITH FLAT EDGE OF ROCK FACING OUT OF BASKET.
- PRE-FORMED STIFFENERS SHALL BE USED TO PRODUCE A FLAT, SMOOTH EXTERNAL SURFACE. STIFFENERS SHALL BE INSTALLED PRIOR TO ROCK PLACEMENT.
- WHEN FILLING BASKETS, ROCK SHALL BE PLACED IN THREE 8-INCH LAYERS.
- THE LAST LAYER OF ROCK SHALL SLIGHTLY OVERFILL THE GABIONS SUCH THAT THE LID WILL REST ON ROCK WHEN IT IS CLOSED.



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Phoenix, AZ 85034

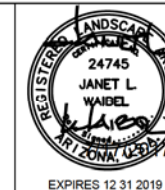
Waibel & Associates Landscape Architecture
Phone: 480.955.3849 Fax: 480.955.3846
4611 South Priest Drive, Suite 101
Tempe, AZ 85281
e-mail: janet@waibel-a.com

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ARIZONA 911
Call 911 or click Arizona911.com

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AMENITY NODE DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	NTS					1.29	1.62

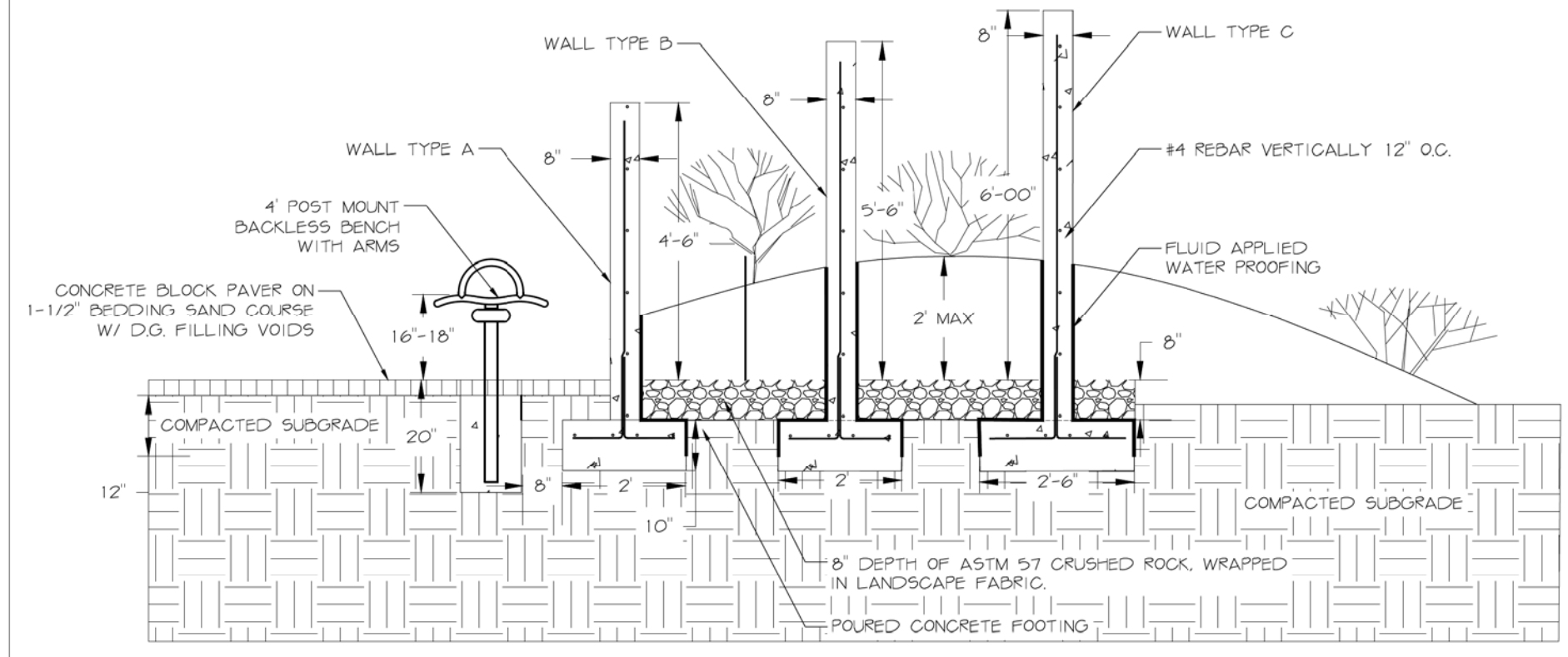


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.30	1.62

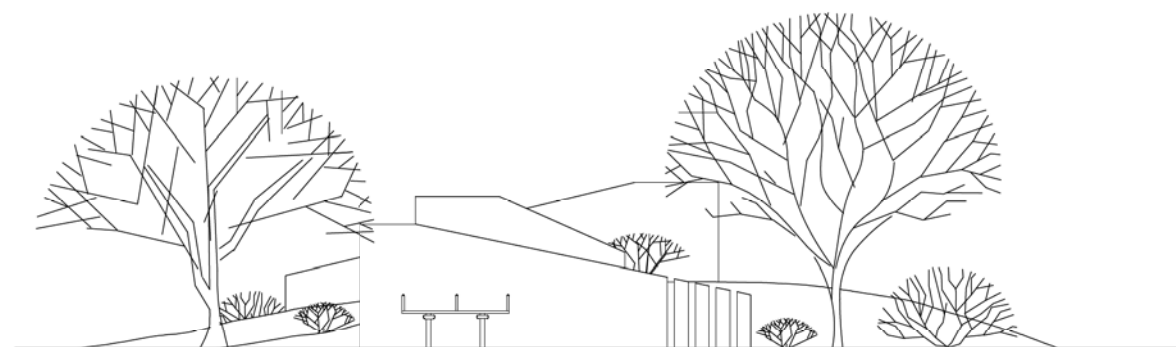
TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NODE SECTION (TYP)

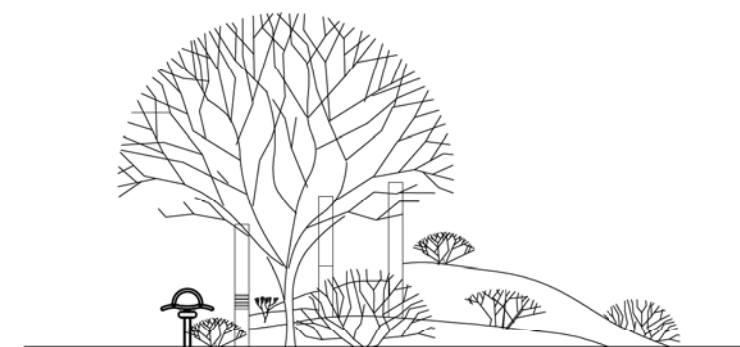
NOTE: POURED FORM CONCRETE WALLS TO BE 8" THICK, HEIGHTS VARY, REINFORCED WITH HORIZONTAL #4 REBAR 12" O.C. USE ORIENTED STRAND BOARD FOR FORMS.



NODE ELEVATIONS (TYP)



NORTH ELEVATION



WEST ELEVATION

Waibel & Associates
Landscape Architecture
 Phone: 480.955.3649 Fax: 480.955.3646
 4611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 email: janet@waibel-a.com

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"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

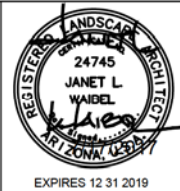
AMENITY NODE DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS	
SCALE:	NTS						1.30	1.62

GRAND CANALSCAPE PHASE II
SEGMENT 1
1-17 TO 15TH AVENUE



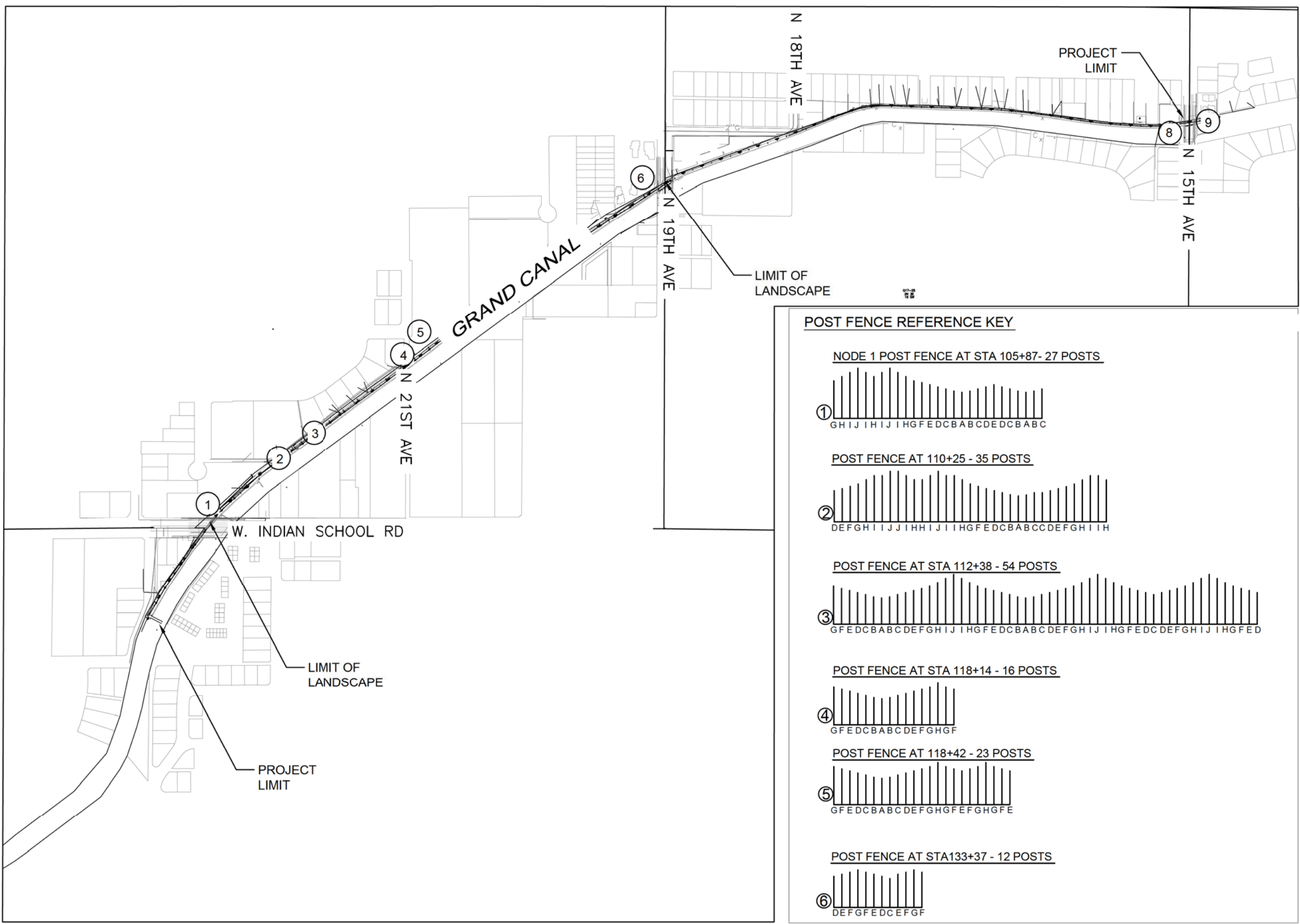
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.31	1.62

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



POST FENCE REFERENCE KEY

NODE 1 POST FENCE AT STA 105+87 - 27 POSTS

① G H I J I H I J I H G F E D C B A B C D E D C B A B C

POST FENCE AT 110+25 - 35 POSTS

② D E F G H I J J I H H I J I I H G F E D C B A B C C D E F G H I I H

POST FENCE AT STA 112+38 - 54 POSTS

③ G F E D C B A B C D E F G H I J I H G F E D C B A B C D E F G H I J I H G F E D C D E F G H I J I H G F E D

POST FENCE AT STA 118+14 - 16 POSTS

④ G F E D C B A B C D E F G H G F

POST FENCE AT 118+42 - 23 POSTS

⑤ G F E D C B A B C D E F G H G F E F G H G F E

POST FENCE AT STA 133+37 - 12 POSTS

⑥ D E F G F E D C E F G F

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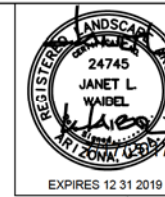
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ARIZONA 811
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POST FENCE REFERENCE SHEET
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
**GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114**

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
						1.31	1.62

SCALE: 1" = 250'



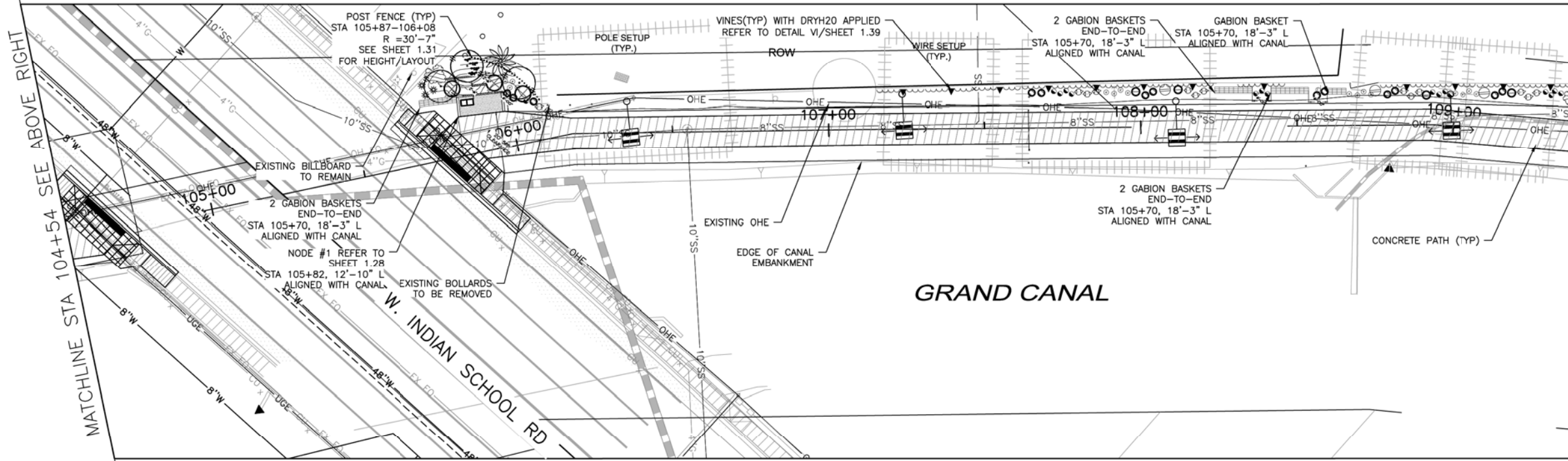
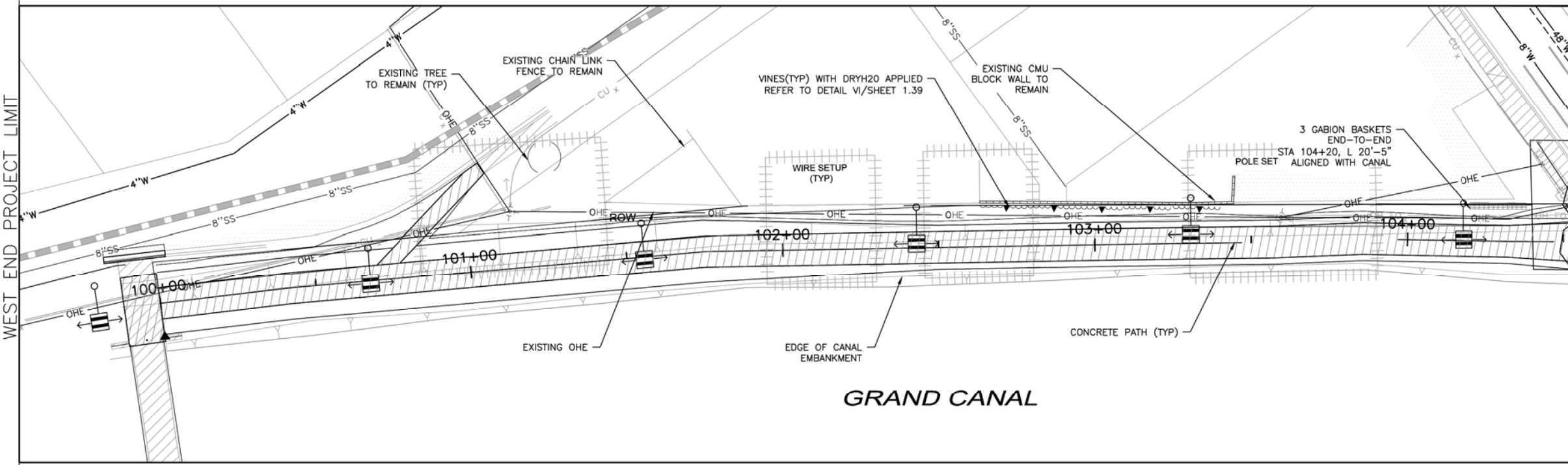
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.32	1.62

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CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
○	Existing Tree To Remain	X
⊗	Existing Oleander Stumps TO BE REMOVED	
○	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
○	Teocoma stans var. angustata** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition'** BLUE GRAMA	5 Gallon
○	Aristida purpurea** PURPLE THREE AWN	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata** DESERT MARI GOLD	1 Gallon
○	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
○	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
~	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
○	Fouquieria splendens COTILLO	Bareroot - 6' Planted
○	Carnegiea gigantea SAGUARO	7 Cane Minimum 6' Planted
□	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
□	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
■	Gabion Basket	2' x 2' x 6'
⊕	Tie Down Point for Dimension - Measured from CL of new path	

**SRP ROW Compliant Plant Material



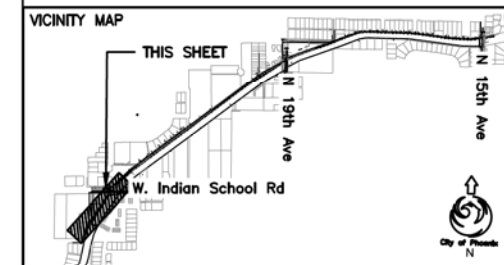
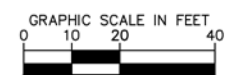
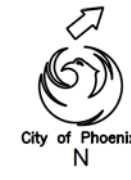
MATCHLINE STA 104+54 SEE SHEET BELOW

MATCHLINE STA 109+46 SEE SHEET 1.33

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS	
SCALE:	1" = 20'						1.32	1.62

\\DLP\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\CANAL Segment 1\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.33	1.62

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Phoenix, AZ 85034

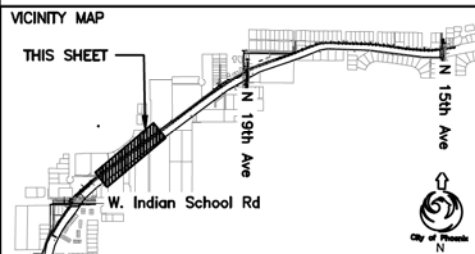
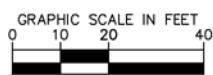
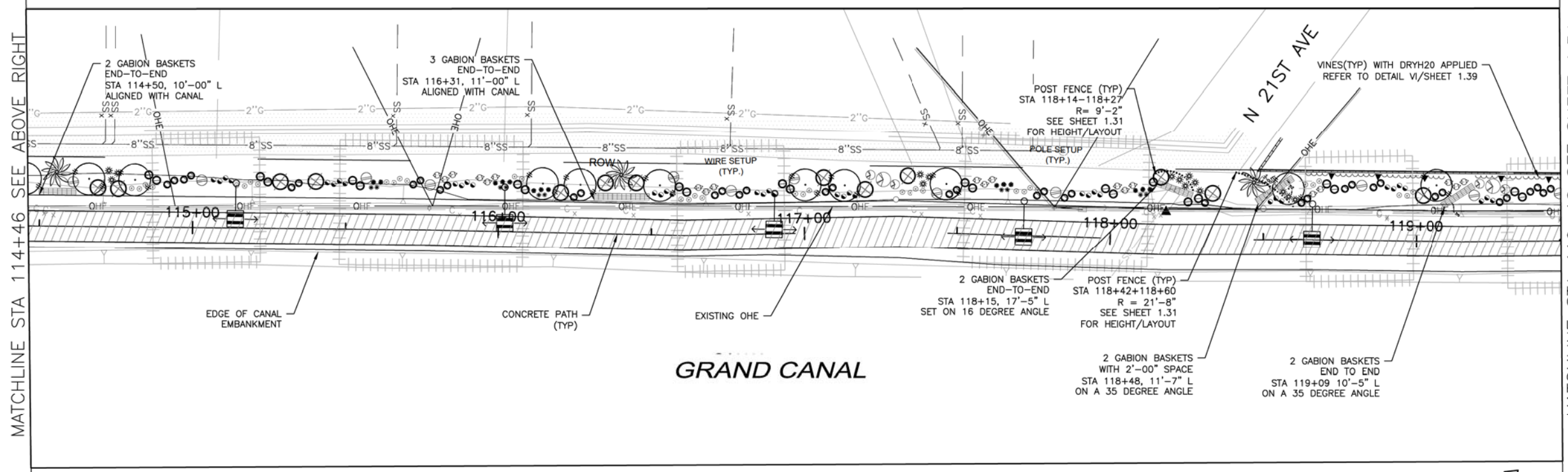
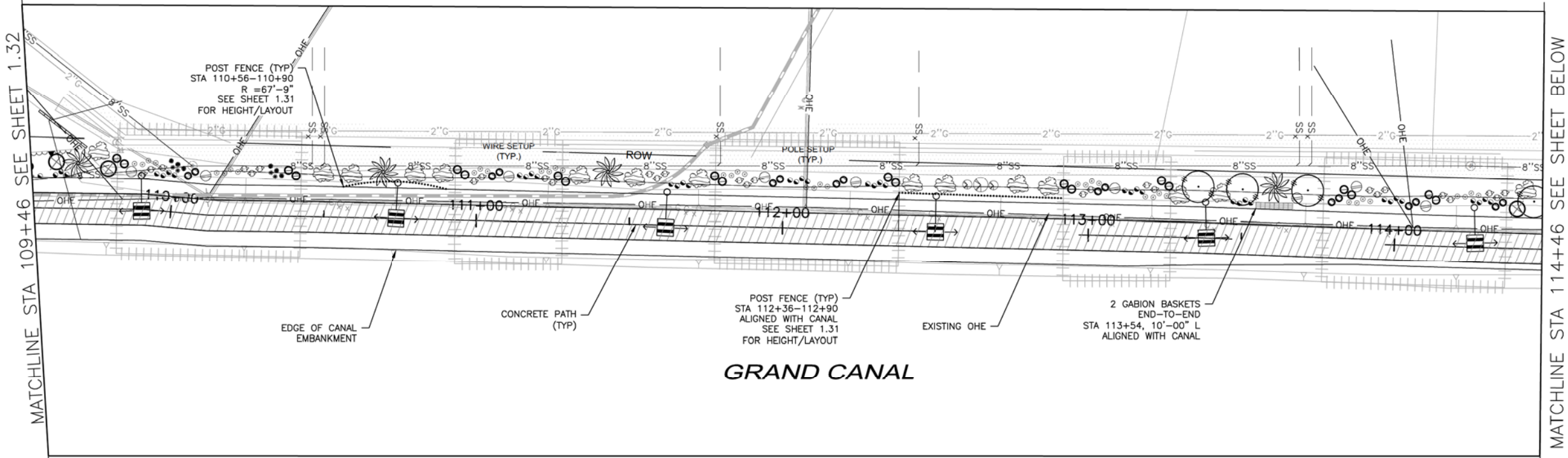
LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	X
(Circle with cross)	Existing Oleander Stumps TO BE REMOVED	
(Circle with diagonal lines)	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
(Circle with horizontal lines)	Teocoma stans var. angustata** ARIZONA YELLOW BELLS	16 Gallon
(Circle with vertical lines)	Encelia farinosa** BRITTLEBUSH	5 Gallon
(Circle with starburst)	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
(Circle with dots)	Bouteloua gracilis 'Blonde Ambition'** BLUE GRAMA	5 Gallon
(Circle with horizontal lines)	Aristida purpurea** PURPLE THREE AWN	5 Gallon
(Circle with vertical lines)	Justicia californica CHUPAROSA	5 Gallon
(Circle with diagonal lines)	Baileya multiradiata** DESERT MARIGOLD	1 Gallon
(Circle with horizontal lines)	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
(Circle with vertical lines)	Pallostrophe cooperii** PAPER FLOWER	1 Gallon
(Circle with dots)	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
(Wavy line)	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
(Starburst)	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
(Starburst)	Fouquieria splendens COCTILLO	Bareroot -6' Planted
(Starburst)	Carnegiea gigantea SAGUARO	6' Planted
(Dotted pattern)	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Stippled pattern)	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
(Square with diagonal lines)	Gabion Basket	2' x 2' x 6'
(Circle with cross)	Tie Down Point for Dimension - Measured from CL of new path	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



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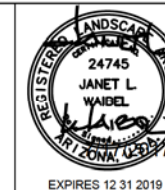
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS:
DATE: 7/17	DATE: 7/17	DATE: 7/17	1.33	1.62

SCALE: 1" = 20'

\\DLP\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 1\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.34	1.62

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Phoenix, AZ 85034

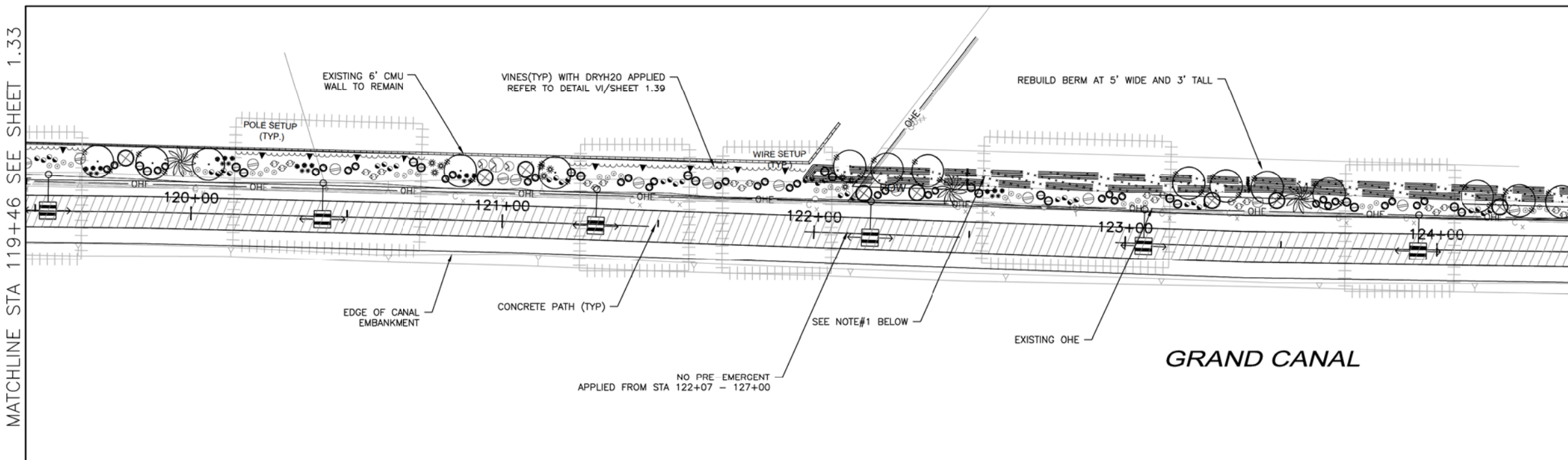
LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
○	Existing Tree To Remain	X
⊗	Existing Oleander Stumps TO BE REMOVED	
○	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
○	Teocoma stans var. angustata** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition'** BLUE GRAMA	5 Gallon
○	Aristida purpurea** PURPLE THREE AWN	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
○	Pallostrophe cooperii** PAPER FLOWER	1 Gallon
○	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
~	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
○	Fouquieria splendens COCOTILLO	Bareroot - 6' Planted
○	Carnegiea gigantea SAGUARO	6' Planted
□	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
□	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
⊕	Gabion Basket	2' x 2' x 6'
⊕	Tie Down Point for Dimension - Measured from CL of new path	

**SRP ROW Compliant Plant Material

MATCHLINE STA 119+46 SEE SHEET 1.33

MATCHLINE STA 124+45 SEE BELOW LEFT

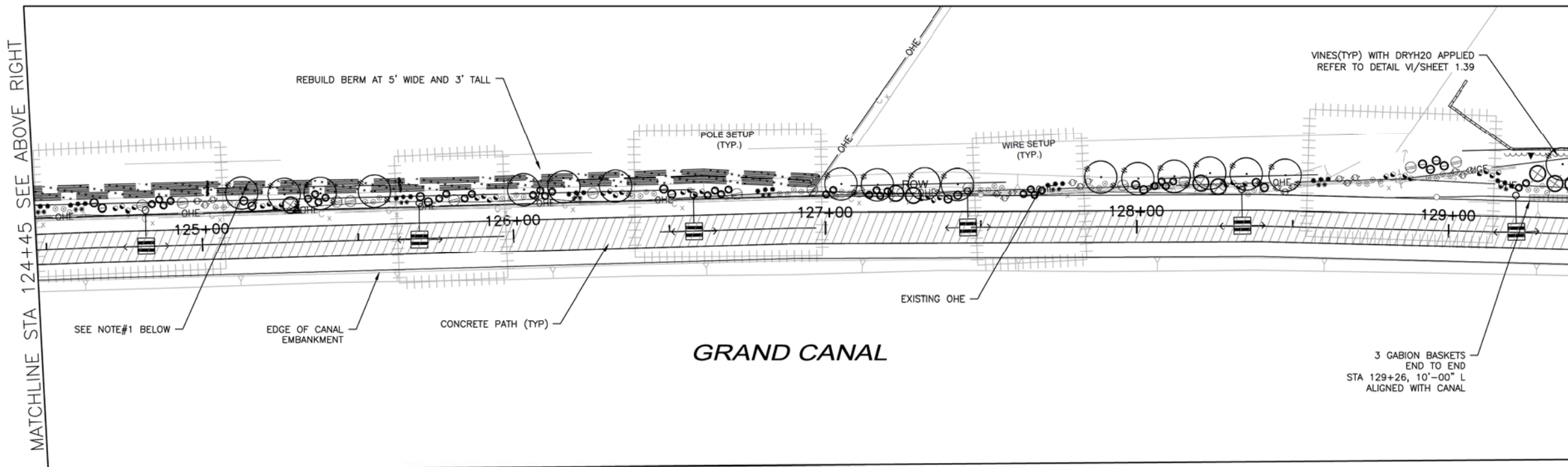


NOTES:

- EXISTING AGGREGATE MATERIAL PILES ALONG FRONTAGE TO BE SORTED TO RETAIN PIECES IN EXCESS OF 6" +/- AND REDISTRIBUTED FROM APPROXIMATELY STA106+00 TO STA 133+00. EXACT LOCATION AND DISTANCE OF DISTRIBUTION TO BE DETERMINED.
- EXISTING BOULDERS IN EXCESS OF 2.5' +/- TO BE SELECTED AND DISTRIBUTED ALONG THE FRONTAGE FROM APPROXIMATELY STA106+00 TO STA 133+00. EXACT LOCATION AND DISTANCE OF DISTRIBUTION TO BE DETERMINED.
- AGGREGATE MATERIAL TO BE MIXED WITH NATIVE SEED FOR AN APPROXIMATE 50/50 DISTRIBUTION OF HYDRO SEED AND ROCK.
- EXISTING 6" CMU WALL TO REMAIN AND REPAINTED WITH AN ANTI-GRAFFITI COATING APPLIED.
- NO PRE-EMERGENT TO BE APPLIED FROM STA 122+07 THROUGH STA 127+00.
- REBUILD BERM USING A MIXTURE OF IMPORTED FILL AND EXCESS MATERIAL FROM EXISTING AGGREGATE PILES.

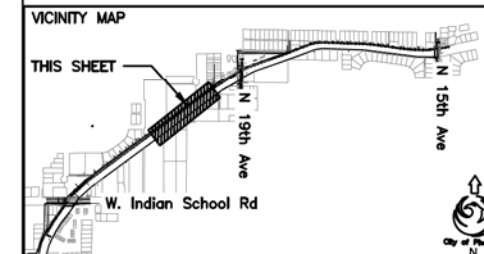
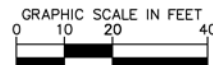
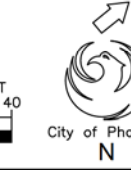
MATCHLINE STA 124+45 SEE ABOVE RIGHT

MATCHLINE STA 129+44 SEE SHEET 1.35



NOTES:

- EXISTING AGGREGATE MATERIAL PILES ALONG FRONTAGE TO BE SORTED TO RETAIN PIECES IN EXCESS OF 6" +/- AND REDISTRIBUTED FROM APPROXIMATELY STA106+00 TO STA 133+00. EXACT LOCATION AND DISTANCE OF DISTRIBUTION TO BE DETERMINED.
- EXISTING BOULDERS IN EXCESS OF 2.5' +/- TO BE SELECTED AND DISTRIBUTED ALONG THE FRONTAGE FROM APPROXIMATELY STA106+00 TO STA 133+00. EXACT LOCATION AND DISTANCE OF DISTRIBUTION TO BE DETERMINED.
- AGGREGATE MATERIAL TO BE MIXED WITH NATIVE SEED FOR AN APPROXIMATE 50/50 DISTRIBUTION OF HYDRO SEED AND ROCK.
- EXISTING 6" CMU WALL TO REMAIN AND REPAINTED WITH AN ANTI-GRAFFITI COATING APPLIED.
- NO PRE-EMERGENT TO BE APPLIED FROM STA 122+07 THROUGH STA 127+00.
- REBUILD BERM USING A MIXTURE OF IMPORTED FILL AND EXCESS MATERIAL FROM EXISTING AGGREGATE PILES.



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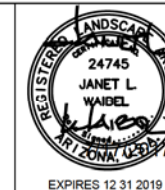
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1" = 20'						1.34	1.62

NO.	DESCRIPTION	REV BY	CHK BY	DATE

D:\P\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\CANAL\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM



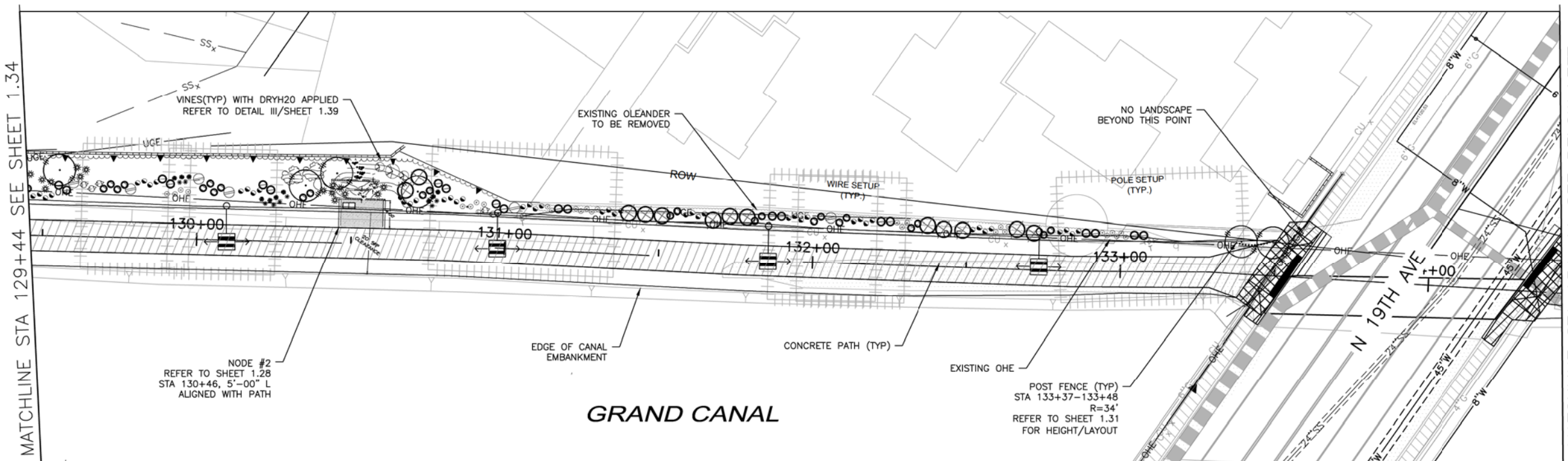
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.35	1.62

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 Suite 3
 Phoenix, AZ 85034

LANDSCAPE LEGEND

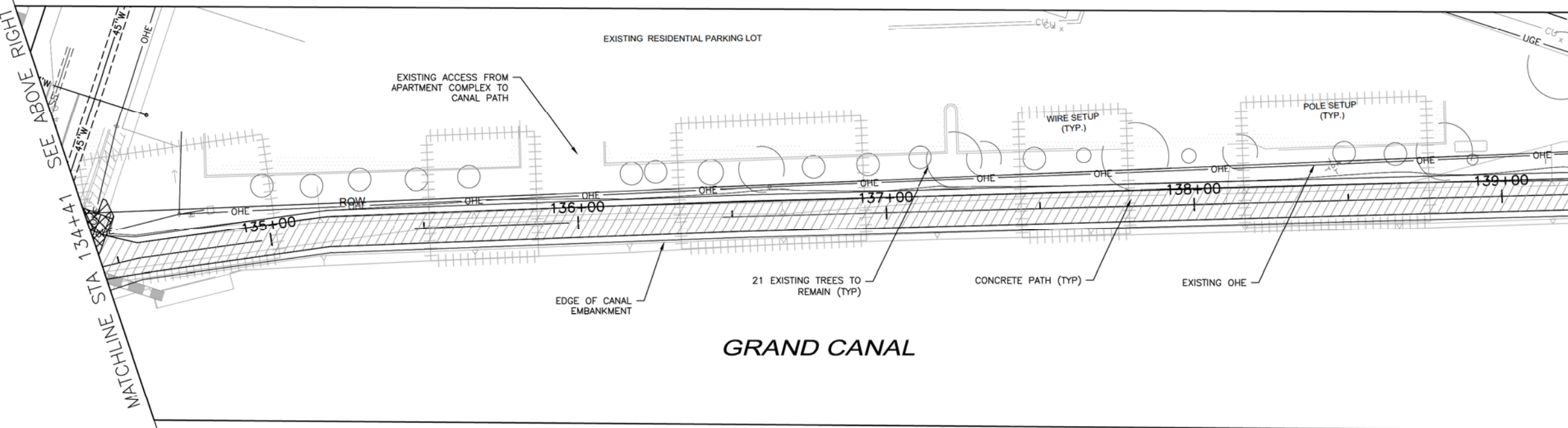
SYMBOL	NAME	SIZE
○	Existing Tree To Remain	X
⊗	Existing Oleander Stumps TO BE REMOVED	
○	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
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○	Encelia farinosa** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition'** BLUE GRAMA	5 Gallon
○	Aristida purpurea** PURPLE THREE AWN	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata** DESERT MARI GOLD	1 Gallon
○	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
○	Palafoxia cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
○	Fouquieria splendens COCOTILLO	Bareroot - 6' Planted
○	Carnegiea gigantea SAGUARO	6' Planted
○	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket	2' x 2' x 6'
○	Tie Down Point for Dimension - Measured from CL of new path	

**SRP ROW Compliant Plant Material



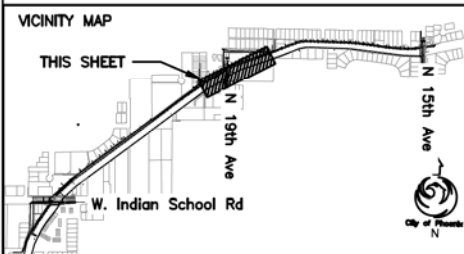
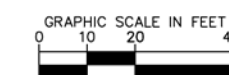
- NOTES**
- CROSSING CONDITIONS TO BE ADDRESSED AT 19TH AVENUE CANAL CONNECTION.
 - EXISTING FENCE CURRENTLY ENCRoACHING ON SRP R.O.W
 - EXISTING DEBRIS TO BE REMOVED
 - EXISTING OLEANDER STUMPS TO BE REMOVED (QTY 58)

NO LANDSCAPE BEYOND THIS POINT



- NOTES**
- CROSSING CONDITIONS TO BE ADDRESSED AT 19TH AVENUE CANAL CONNECTION.
 - EXISTING FENCE CURRENTLY ENCRoACHING ON SRP R.O.W
 - EXISTING DEBRIS TO BE REMOVED
 - EXISTING OLEANDER STUMPS TO BE REMOVED (QTY 58)

NO LANDSCAPE BEYOND THIS POINT



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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 20'					1.35	1.62

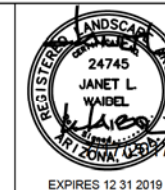
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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\\DLP\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\CANAL\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM

NO LANDSCAPE THIS SHEET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.36	1.62

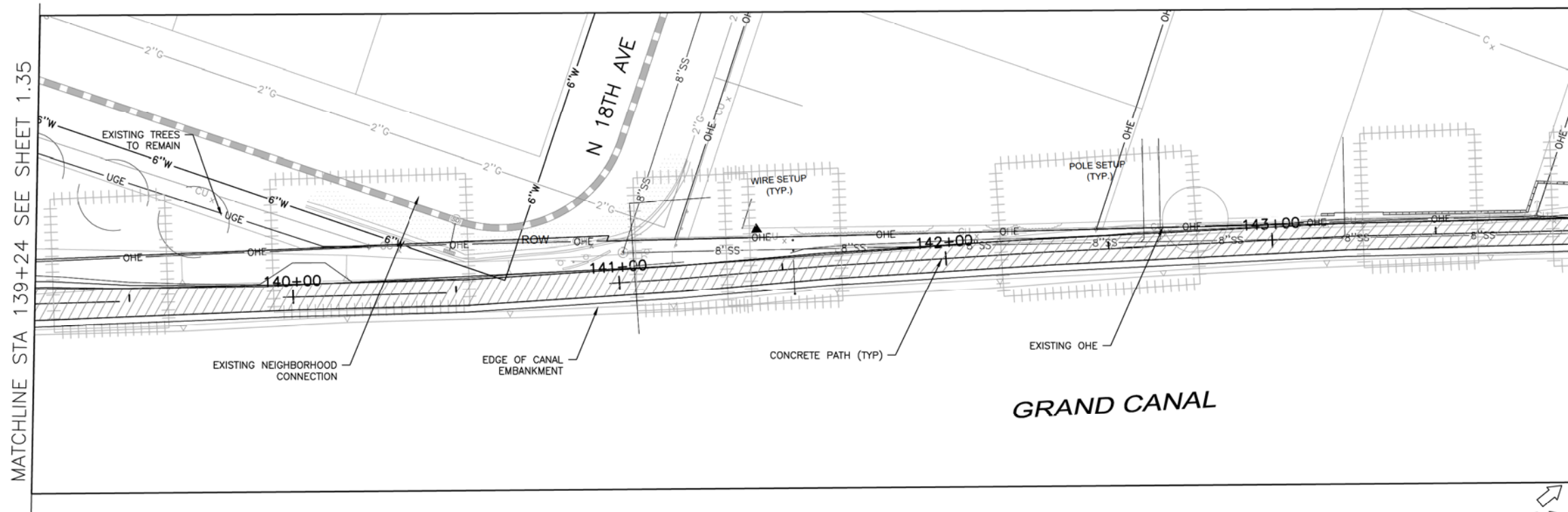
TRACE CONSULTING
1201 E. Jefferson St. Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
○	Existing Tree To Remain	X
⊗	Existing Oleander Stumps TO BE REMOVED	
○	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
○	Teocoma stans var. angustata** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition'** BLUE GRAMA	5 Gallon
○	Aristida purpurea** PURPLE THREE AWN	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
○	Palisotrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
○	Fouquieria splendens COCTILLO	Bareroot - 6' Planted
○	Carnegiea gigantea SAGUARO	7 Cane Minimum 6' Planted
○	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket	2' x 2' x 6'
○	Tie Down Point for Dimension - Measured from CL of new path	

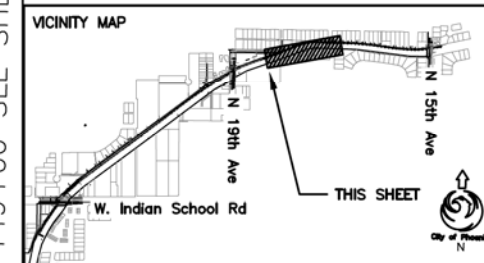
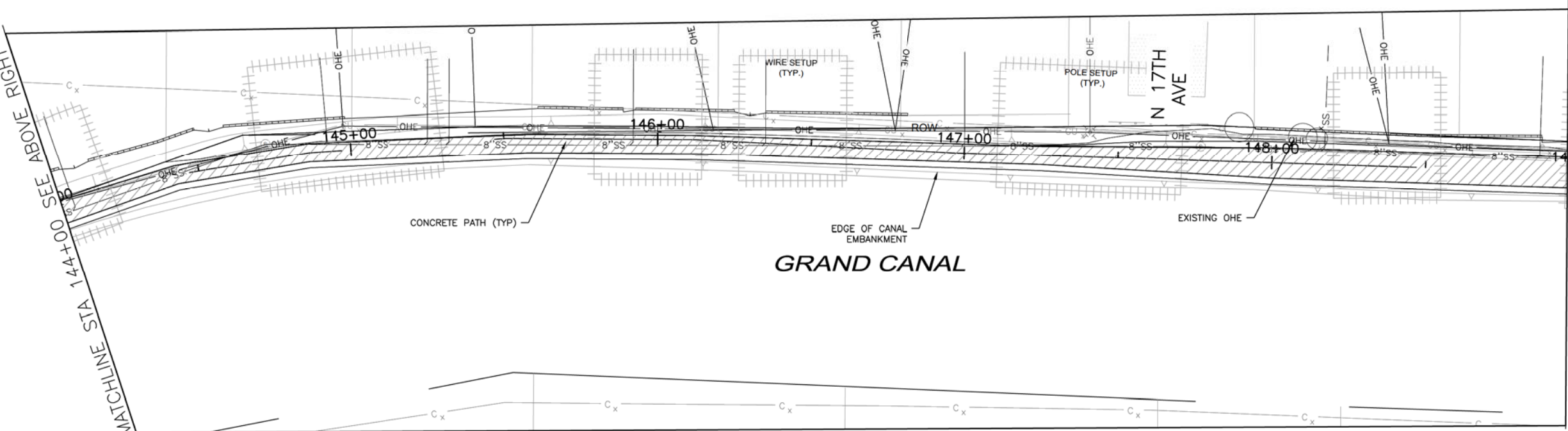
MATCHLINE STA 139+24 SEE SHEET 1.35

MATCHLINE STA 144+00 SEE BELOW LEFT



MATCHLINE STA 144+00 SEE ABOVE RIGHT

MATCHLINE STA 149+00 SEE SHEET 1.37



Waibel & Associates Landscape Architecture
Phone: 480.955.3649 Fax: 480.955.3646
4611 South Priest Drive, Suite 101
Tempe, AZ 85284
email: jwaibel@waibel.com

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ARIZONA 811
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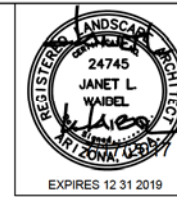
LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
		7/17	7/17	7/17	7/17	1.36	1.62

SCALE: 1" = 20'

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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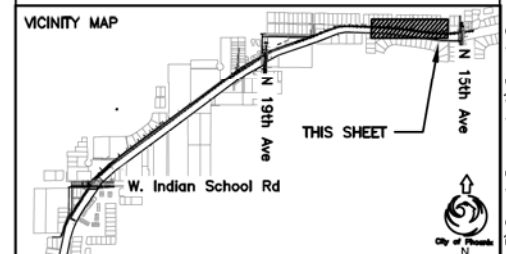
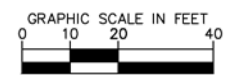
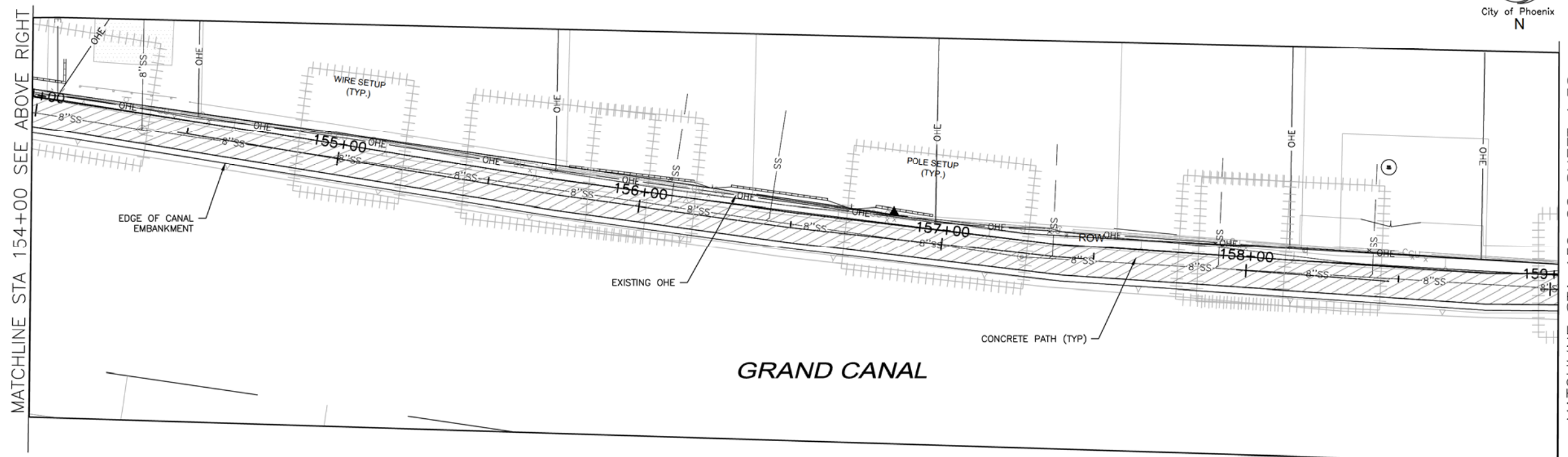
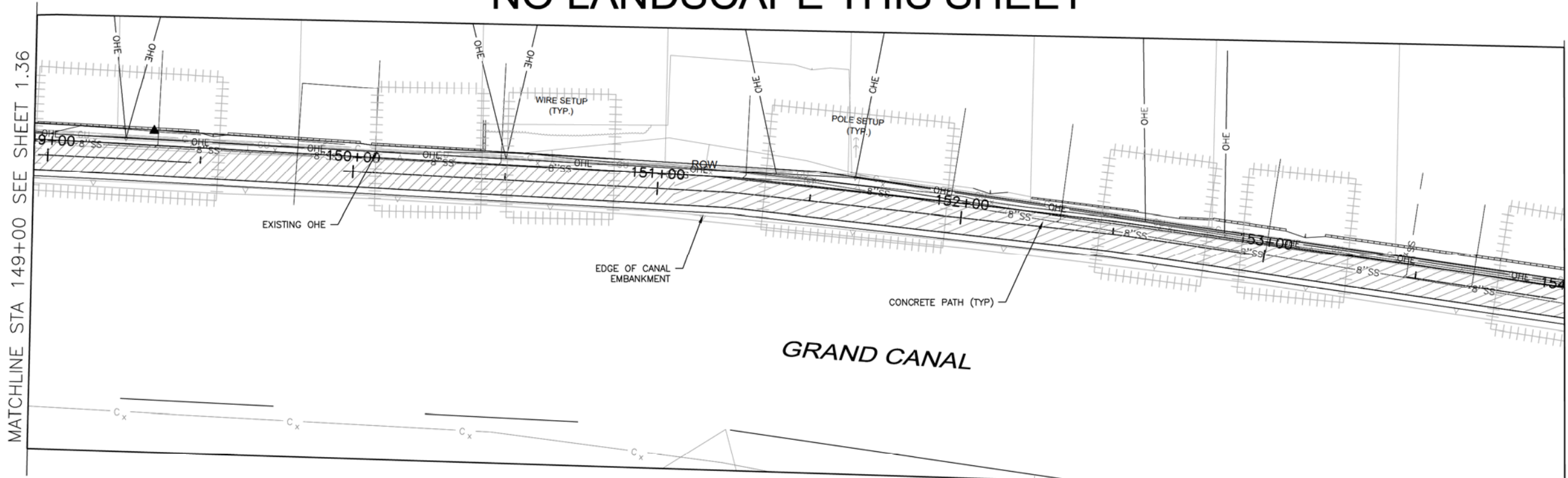
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TRACE
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Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
	Existing Tree To Remain	X
	Existing Oleander Stumps TO BE REMOVED	
	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
	Teocoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
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	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
	Justicia californica CHUPAROSA	5 Gallon
	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
	Pallostrophe cooperi** PAPER FLOWER	1 Gallon
	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
	Fouquieria splendens COTILLO	Bareroot -6' Planted
	Carnegiea gigantea SAGUARO	7 Cane Minimum 6' Planted
	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
	Gabion Basket	2' x 2' x 6'
	Tie Down Point for Dimension - Measured from CL of new path	

NO LANDSCAPE THIS SHEET



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e-mail: janet@waibel.com

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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:	
DATE:	7/17	DATE:	7/17	DATE:	7/17	1.37	1.62	
SCALE: 1" = 20'							1.37	1.62

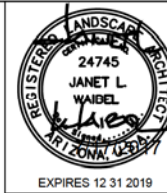
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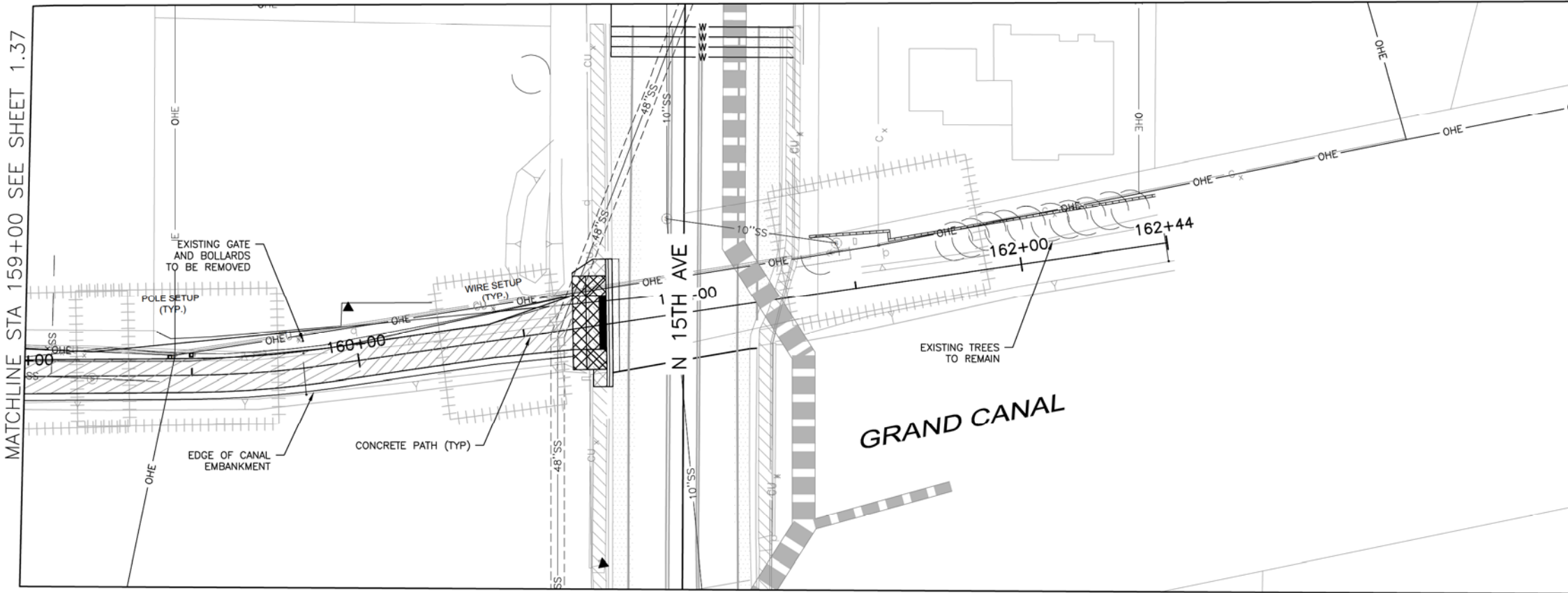
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.38	1.62

TRACE CONSULTING
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 Suite 3
 Phoenix, AZ 85034

LANDSCAPE LEGEND

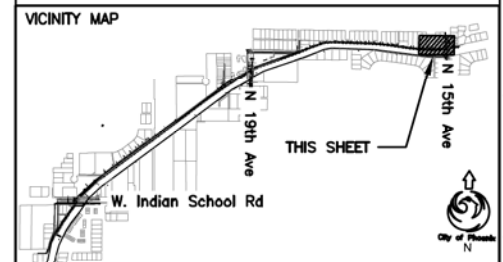
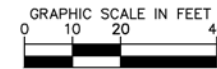
SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	X
(Circle with cross)	Existing Oleander Stumps TO BE REMOVED	
(Circle with X)	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon
(Circle with dot and cross)	Teocoma stans var. angustata** ARIZONA YELLOW BELLS	15 Gallon
(Circle with diagonal lines)	Encelia farinosa** BRITTLEBUSH	5 Gallon
(Circle with horizontal lines)	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
(Circle with vertical lines)	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
(Circle with star)	Aristida purpurea** PURPLE THREE AWN	5 Gallon
(Circle with circle inside)	Justicia californica CHUPAROSA	5 Gallon
(Circle with horizontal lines)	Baileya multiradiata** DESERT MARIGOLD	1 Gallon
(Circle with vertical lines)	Sphaeralcea ambigua** DESERT GLOBEMALLOW	1 Gallon
(Circle with diagonal lines)	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
(Circle with cross)	Penstemon parryi** PARRY'S PENSTEMON	1 Gallon
(Wavy line)	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
(Star)	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon
(Star)	Fouquieria splendens COCTILLO	Bareroot -6' Planted
(Star)	Carnegiea gigantea SAGUARO	6' Planted
(Dotted pattern)	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Solid grey)	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
(Grid pattern)	Gabion Basket	2' x 2' x 6'
(Circle with dot)	Tie Down Point for Dimension - Measured from CL of new path	

**SRP ROW Compliant Plant Material



MATCHLINE STA 159+00 SEE SHEET 1.37

EAST END PROJECT LIMIT



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 8611 South Priest Drive, Suite 101
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 e-mail: jwaibel@waibel.com

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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

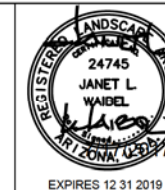
GRAND CANALScape PHASE II
 SEGMENT 1: 1-17 TO 15TH AVE
 ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
		7/17			7/17	1.38	1.62

SCALE: 1" = 20'

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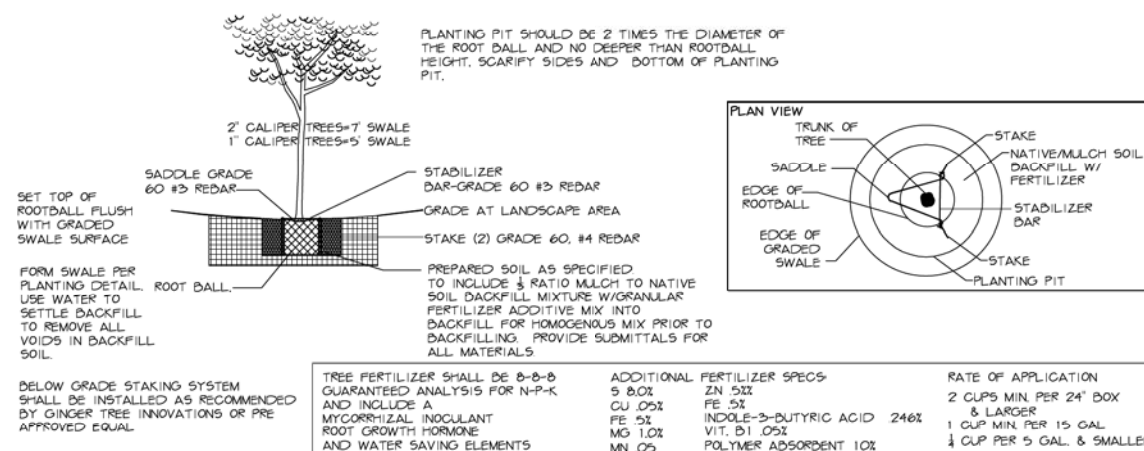
GENERAL NOTES:
DECOMPOSED GRANITE - AS PER NOTED ON PLANS AND SPECIFICATIONS. SUBMIT SAMPLE FOR LANDSCAPE ARCHITECTS APPROVAL.

M.A.G. NOTE:
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

LANDSCAPE NOTES:
1. ALL LANDSCAPE AREAS SHALL BE TREATED WITH PRE-EMERGENT HERBICIDE, EXCEPT WHERE OTHERWISE NOTED.
2. ALL PLANTED AREAS SHALL BE COVERED WITH 2" LAYER OF DECOMPOSED GRANITE.
3. ALL PLANTINGS SHALL BE KEPT A MINIMUM OF 5' FROM FIRE HYDRANTS.

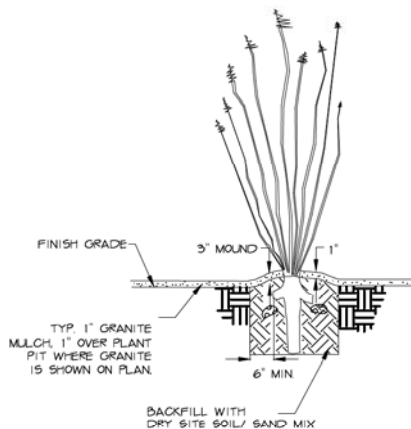
I. TREE PLANTING AND STAKING

NTS



II. OCOTILLO PLANTING

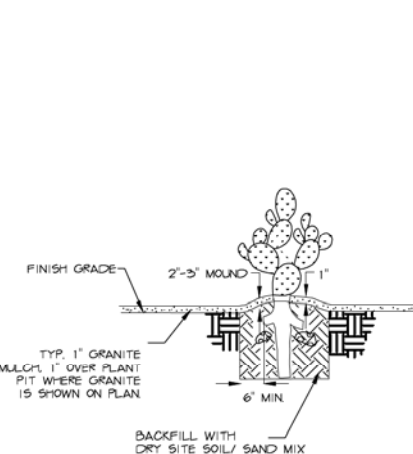
NTS



1. ROOT PRUNE ALL SHREDDED OR DAMAGED ROOTS
2. ENSURE ALL WOUNDS TO THE ROOT SYSTEM ARE CLEAN CUT BEFORE PLANTING. APPLY DUSTING SULFUR TO ALL AREAS BELOW GRADE.
3. PLANT PIT SHALL BE 3 TIMES THE DIAMETER OF ROOTS AND NO DEEPER THAN THE EXTENSION OF THE ROOTS
4. BACKFILL PIT WITH 6" LAYERS OF RODDED, COMPACTED 1/3 GOLF SAND AND 2/3 DRY SITE SOIL MIX.
5. USE 3"-4" ROCKS TO ANCHOR ROOTS.
6. PLANTING DEPTH SHALL BE THE DEPTH AT WHICH PLANT WAS GROWN OR DEEPER BUT THE TAPERING OF THE ROOT COLLAR MUST BE VISIBLE.
7. ENSURE SURFACE WATER CAN NOT STAND AGAINST THE ROOT COLLAR.
8. ALL OCOTILLO PLACEMENT SHALL MATCH ORIGINAL ORIENTATION W/ORIGINAL NORTH SIDE FACING NORTH.
9. DO NOT WATER FOR THREE WEEKS FOLLOWING PLANTING
10. WATER WEEKLY THROUGHOUT THE SUMMER AFTER INITIAL 3 WEEK ESTABLISHMENT PERIOD.

III. CACTUS PLANTING

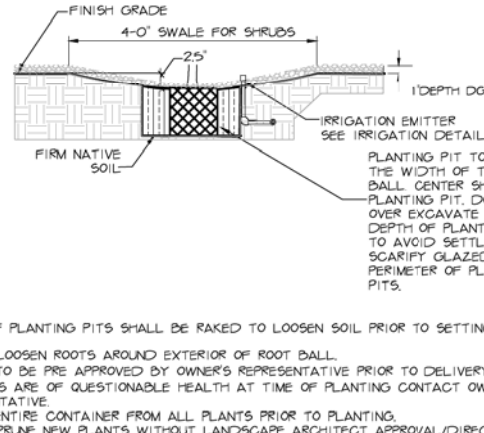
NTS



1. ROOT PRUNE ALL SHREDDED OR DAMAGED ROOTS.
2. ENSURE ALL WOUNDS TO THE ROOT SYSTEM ARE CLEAN CUT BEFORE PLANTING. APPLY DUSTING SULFUR TO ALL AREAS BELOW GRADE.
3. PLANT PIT SHALL BE 3 TIMES THE DIAMETER OF ROOTS AND NO DEEPER THAN THE EXTENSION OF THE ROOTS
4. BACKFILL PIT WITH 6" LAYERS OF RODDED, COMPACTED 1/3 GOLF SAND AND 2/3 DRY SITE SOIL MIX.
5. USE 3"-4" ROCKS/RIP RAP TO ANCHOR ROOTS.
6. PLANTING DEPTH SHALL BE THE DEPTH AT WHICH PLANT WAS GROWN OR DEEPER BUT THE TAPERING OF THE ROOT COLLAR MUST BE VISIBLE.
7. ENSURE SURFACE WATER CAN NOT STAND AGAINST THE ROOT COLLAR. SLOPE GRADE AWAY FROM BASE OF CACTUS.
8. ALL OCOTILLO PLACEMENT SHALL MATCH ORIGINAL ORIENTATION W/ORIGINAL NORTH SIDE FACING NORTH.
9. DO NOT WATER FOR THREE WEEKS FOLLOWING PLANTING.
10. WATER WEEKLY THROUGHOUT THE SUMMER MAINTAIN ORIGINAL GROWING ORIENTATION

IV. SHRUB PLANTING

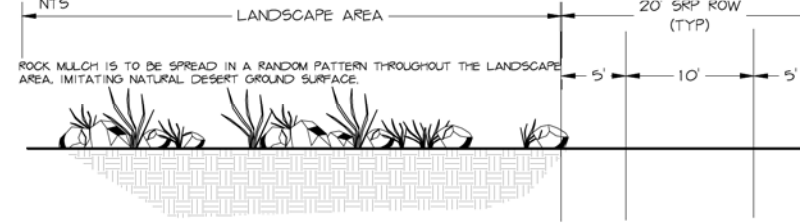
NTS



- NOTES
1. SIDES OF PLANTING PITS SHALL BE RAKED TO LOOSEN SOIL PRIOR TO SETTING SHRUB IN PIT.
 2. GENTLY LOOSEN ROOTS AROUND EXTERIOR OF ROOT BALL.
 3. PLANTS TO BE PRE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO DELIVERY TO SITE. IF PLANTS ARE OF QUESTIONABLE HEALTH AT TIME OF PLANTING CONTACT OWNER'S REPRESENTATIVE.
 4. REMOVE ENTIRE CONTAINER FROM ALL PLANTS PRIOR TO PLANTING.
 5. DO NOT PRUNE NEW PLANTS WITHOUT LANDSCAPE ARCHITECT APPROVAL/DIRECTION. TEST PLANT PITS FOR DRAINAGE.

V. 50/50 HYDROSEED ROCK MIXTURE

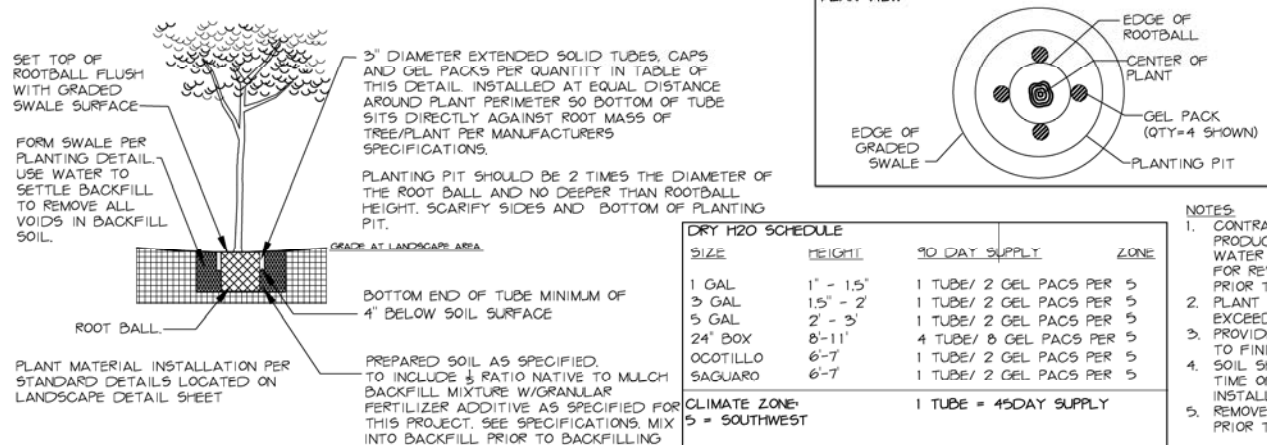
NTS



- NOTES
- THE ROCK MULCH MATERIAL SHALL BE ANGULAR AND 3"-6" IN SIZE. FOR COLOR SELECTION REFER TO LANDSCAPE LEGEND.
- ROCK MULCH IS TO BE INSTALLED PRIOR TO SEEDING
- THE ROCK MULCH WILL NOT BE PLACED UNTIL SUB-GRADES HAVE BEEN APPROVED AND AFTER IRRIGATION WORK IS COMPLETED.
- NO PRE-EMERGENT HERBICIDE SHALL BE APPLIED.
- LANDSCAPE ARCHITECT SHALL BE CONTACTED TO BE AVAILABLE FOR FINAL APPROVAL OF ROCK SPREAD.
- OBTAIN ROCKS WHICH HAVE BEEN SCREENED TO REMOVE ROCK SMALLER THAN 3" AND LARGER THAN 6". THE CONTRACTOR WILL SUBMIT A 1.0 CUBIC FOOT SAMPLE OF ROCK MULCH PRIOR TO DELIVERY OR INSTALLATION ON THE PROJECT SITE.

VI. DRYH2O INSTALLATION

NTS - PLACE WHERE INDICATED ON PLAN AND WHERE PERMANENT IRRIGATION SYSTEM IS NOT INSTALLED.

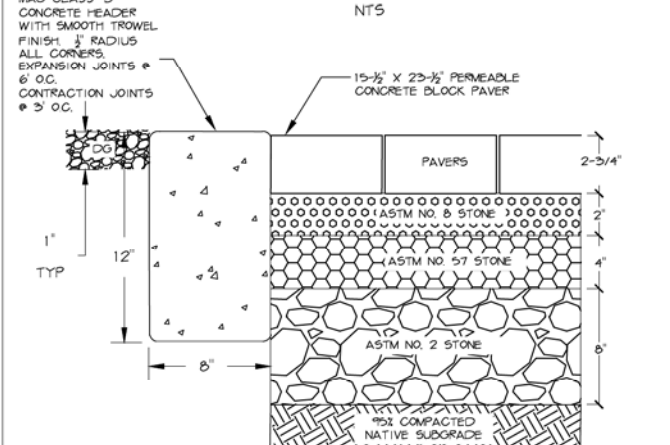


- FILL EACH TUBE WITH REQUIRED # GEL PACKS ONCE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

- NOTES
1. CONTRACTOR SHALL SUBMIT A PRODUCT SUBMITTAL FOR WATER GEL PACS AND TUBES FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
 2. PLANT PIT BASINS CANNOT EXCEED A 2:1 SLOPE TO FINISH GRADE.
 3. SOIL SHOULD BE WATERED AT TIME OF INITIAL TUBE INSTALLATION.
 4. REMOVE GEL FROM PACKAGE PRIOR TO PLACEMENT IN TUBES.

VII. PERMEABLE CONCRETE BLOCK PAVER WITH CONCRETE HEADER

NTS



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LANDSCAPE DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
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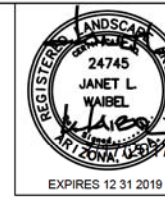
DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	NTS					1.39	1.62

REVISION BY CITY OF PHOENIX

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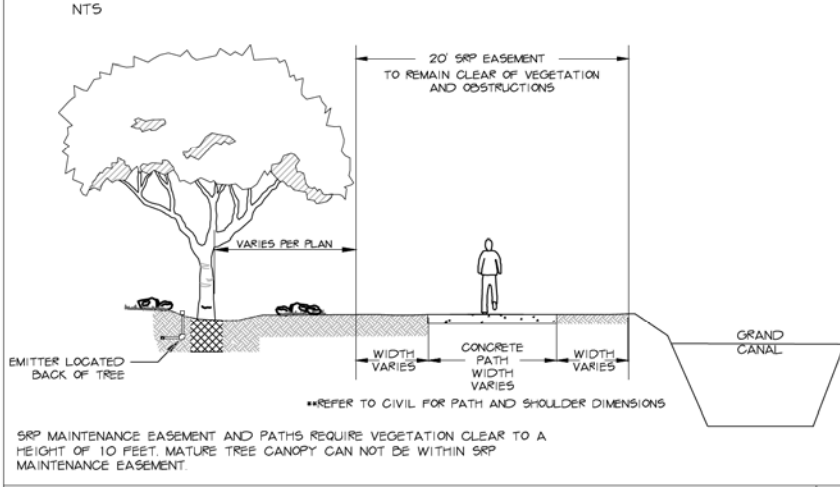
TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

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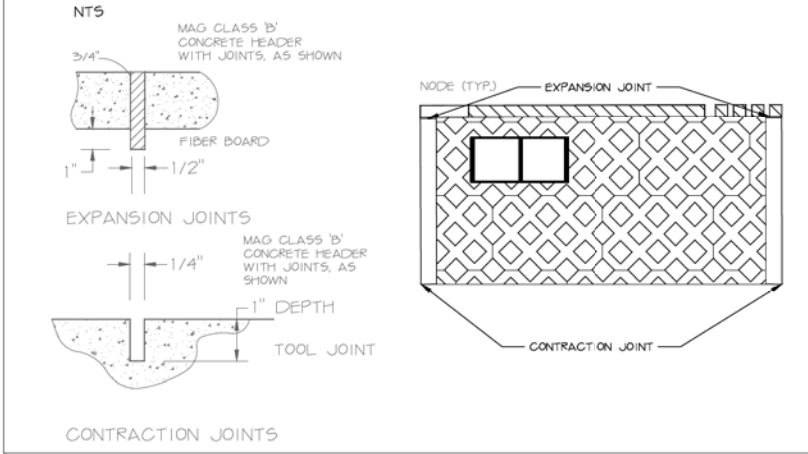
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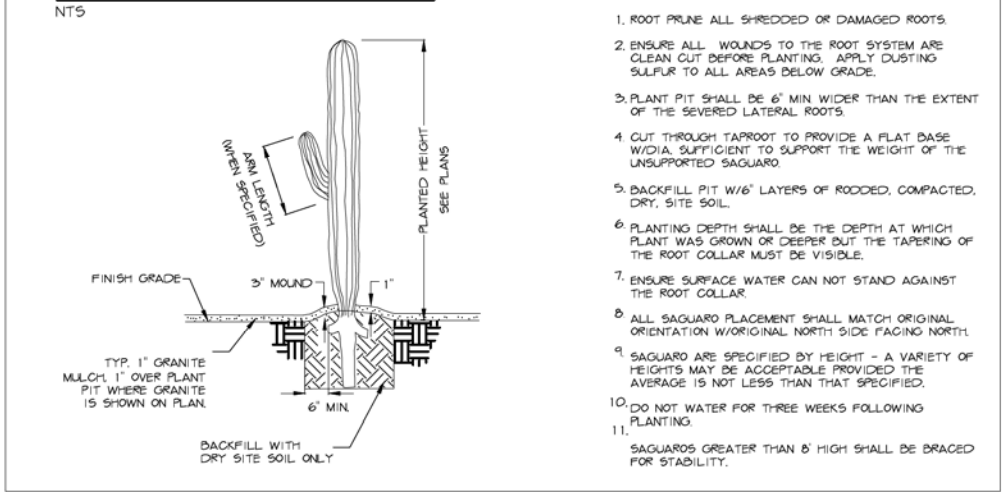
VIII. CONCRETE PATH CLEARANCE



IX. EXPANSION AND CONTRACTION JOINTS FOR CONCRETE HEADER



X. SAGUARO PLANTING DETAIL



LANDSCAPE NOTES:

- LANDSCAPE AREAS ARE DEFINED AS ALL NON PAVED AREAS DISTURBED BY CONSTRUCTION. SLIGHT VARIATIONS MAY EXIST BETWEEN ACTUAL SITE CONDITIONS AND DRAWINGS. CONTRACTOR SHALL ADJUST PLANTING LAYOUT AS REQUIRED TO MAINTAIN PLANT QUANTITIES AND DESIGN INTENT. FOR AREAS OVER 100 S.F. CONTACT LANDSCAPE ARCHITECT FOR REVISION TO PLANT LAYOUT.
- NO PLANT SUBSTITUTIONS, TYPE, SIZE, OR QUANTITY, OR DEVIATIONS FROM THE APPROVED LANDSCAPE OR IRRIGATION PLANS, ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE CITY OF PHOENIX
- COORDINATE ALL NECESSARY EXCAVATION AREAS WITH OWNER'S REPRESENTATIVE.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE SLEEVING. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. VERIFY ANY EXISTING SLEEVES INSTALLED BY OTHER CONTRACTORS.
- IRRIGATION AND ELECTRICAL SLEEVES TO BE Schedule 40 PVC. ALL SLEEVES TO EXTEND 6" BEYOND CONCRETE STRUCTURES. ALLOW AT LEAST 4" - 6" FROM END OF SLEEVES TO FIRST FITTING ON IRRIGATION LINES. ALL SLEEVES TO BE 24" BELOW GRADE AND/OR AS PER PROJECT DETAILS.
- COMMON SLEEVES MAY BE USED FOR LATERAL LINES AND MAINLINES. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE SIZE SLEEVE SO ALL PIPES MOVE FREELY WITHIN THE SLEEVE. CONTRACTOR TO 'AS BUILT' ALL SLEEVE SIZES AND LOCATIONS.
- MARK BACK OF CURBS AT SLEEVE LOCATIONS BY NOTCHING THE CONCRETE WITH 1/2" "V" NOTCH OR VERTICALLY PLACED #4 REBAR AS BUILT.
- FINISHED GRADE(S) NOTED ON THE LANDSCAPE PLAN TO BE FIELD VERIFIED/APPROVED AND MODIFIED AS PER ARCHITECTURAL CIVIL DRAWINGS.
- REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON DRAWINGS.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CARE AND HANDLING OF TREES AND PLANTS FOR DELIVERY AND PLACEMENT IN PLANTING PIT. TREES THAT ARE DROPPED FROM TRUCKS OR DROPPED INTO PITS SHALL BE REJECTED FOR REPLACEMENT BY THE LANDSCAPE CONTRACTOR. IF ROOTBALLS FALL APART DURING THE PLANTING OPERATION THE PLANT SHALL NOT BE PLANTED. NEW PLANT MATERIALS SHALL BE PROVIDED TO REPLACE THOSE THAT ROOTBALLS FALL APART.
- PLANT CONTAINERS SHALL BE CUT TO REMOVE ROOTBALLS THAT ARE TIGHT IN THE CONTAINER. THE CONTRACTOR SHALL NOT REMOVE THE PLANT FROM THE CONTAINER BY THE TRUNK.
- THE LANDSCAPE CONTRACTOR SHALL WARRANT THE TREES AND SHRUBS FOR ONE YEAR FROM THE DATE OF FINAL PROJECT ACCEPTANCE, BY THE CITY OR SUBSTANTIAL PROJECT COMPLETION.
- THE CITY OF PHOENIX GENERAL NOTES ARE THE ONLY NOTES APPROVED ON THIS PLAN. ADDITIONAL GENERAL NOTES GENERATED BY THE SEALANT AND PLACED ON THE PLANS ARE NOT APPROVED AS PART OF THIS PLAN AND ARE NOTED AS SUCH ON THE PLANS.
- THE DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES.
- CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.
- ALL PLANT MATERIAL AND SPECIFICATIONS SHALL CONFORM TO THE ARIZONA NURSERY ASSOCIATION STANDARDS.
- ALL RIGHT-OF-WAY AND CITY REQUIRED (PERIMETER, RETENTION, AND PARKING) PLANT MATERIAL SHALL BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES LOW WATER USE PLANT LIST.
- ALL EXISTING TREES AND SHRUBS IN RIGHT-OF-WAY DESIGNATED TO REMAIN BUT ARE DAMAGED OR DESTROYED WILL BE REPLACED IN LIKE SIZE AND KIND BY THE CONTRACTOR.
- TREES ADJACENT TO PEDESTRIAN WALKWAYS SHOULD HAVE A MINIMUM CANOPY CLEARANCE OF SIX FEET EIGHT INCHES (6'8") PER SECTION 507 TAB A.II.A.3.1.10 OF THE CITY OF PHOENIX ZONING ORDINANCE.
- PLANT QUANTITIES AND CALIPER SIZES PROVIDED IN THE LEGEND ON THE APPROVED PLANS ARE REQUIRED TO BE INSTALLED IN THE FIELD, ANY DEVIATIONS FROM THE PLAN WILL REQUIRE A SUBMITTAL OF A PROPOSED SUBSTITUTION FOR COP APPROVAL PRIOR TO INSTALLATION.
- STAKE OR MARK ALL NODES, IRRIGATION EQUIPMENT, SIGN LOCATIONS AND ELECTRICAL EQUIPMENT FOR COP APPROVAL PRIOR TO CONSTRUCTION.

SONORAN DESERT WILDFLOWER SEED MIX			
WILDFLOWER MIX	COMMON NAME	BOTANICAL NAME	PLS lbs/acre
ANNUALS **all SRP approved	Mexican Poppy	<i>Eschscholzia californica ssp. mexicana</i>	2
	Arizona Poppy	<i>Kallstroemia grandiflora</i>	2
	Desert Lupine	<i>Lupinus sparsiflorus</i>	2
PERENNIALS **all SRP approved	Arizona Lupine	<i>Lupinus arizonicus</i>	2
	Paper Flower	<i>Psilostrophe cooperi</i>	1
	Evening Primrose	<i>Oenothera caespitosa</i>	1
	Desert Marigold	<i>Baileya multiradiata</i>	1
	Rock Penstemon	<i>Penstemon baccarifolius</i>	2
	Coral Penstemon	<i>Penstemon superbus</i>	2
	Desert Ageratum	<i>Ageratum corymbosum</i>	2
	Daminiata daisy	<i>Chrysactinia mexicana</i>	1

LANDSCAPE LEGEND				
SYMBOL	NAME	SIZE	QTY.	NOTES
TREES	Existing Tree To Remain	X	X	X
SHRUBS	Existing Oleander Stumps TO BE REMOVED			
	Caesalpinia x Sierra Sun** HYBRID EVERGREEN BIRD	25 Gallon	56	X
	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon	20	X
	Encelia farinosa ** BRITTLEBUSH	5 Gallon	58	X
	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon	109	X
	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon	48	X
	Aristida purpurea ** PURPLE THREE AWN	5 Gallon	69	X
	Justicia californica CHUPAROSA	5 Gallon	48	X
	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon	218	X
	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon	168	X
VINE	Psilostrophe cooperi** PAPER FLOWER	1 Gallon	111	X
	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon	207	X
MACFADYENA UNGUIS-CATI CAT CLAW VINE	15 Gallon	46	To be staked and Dry H2O to be applied	
ACCENTS	Yucca rupicola** TWISTED LEAF YUCCA**	15 Gallon	45	X
	Fouquieria splendens OCOTILLO	Bareroot -6' Planted	12	X
	Carnegiea gigantea SAGUARO	7 Cane Minimum 6' Planted	5	X
SEED MIX	Native Seed Mix (Do not treat w/Herbicide) SONORAN WILDFLOWER SEED MIX <i>The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.</i>		.25 Acres = 4 Pounds	See Native Seeding Special Provisions
	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN		52,215 SF = 161 CY	
	Gabion Basket	2' x 2' x 6'	26	
	Tie Down Point for Dimension - Measured from CL of new path			
**SRP ROW Compliant Plant Material				

Waibel & Associates Landscape Architecture
Phone: 480.935.3649 Fax: 480.935.3646
8011 South Pinal Drive, Suite 101
Tucson, AZ 85746
www.waibel.com
Call 811 or click Arizona811.com

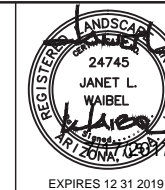
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LANDSCAPE DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS	
SCALE:	NTS						1.40	1.62

NO.	DESCRIPTION	REV	BY	CHK	DATE

\\DLP\HM22\Public\Drawings\CANAL\Grand Canal Segment 1 and 3\CANAL Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.41	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

GENERAL NOTES:
 VALVE NOTES—
 1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
 2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
 3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
 4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
 5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES—
 1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
 2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-3/4", USE 3" SLEEVE, FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
 3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
 4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

M.A.G. NOTE—
 SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

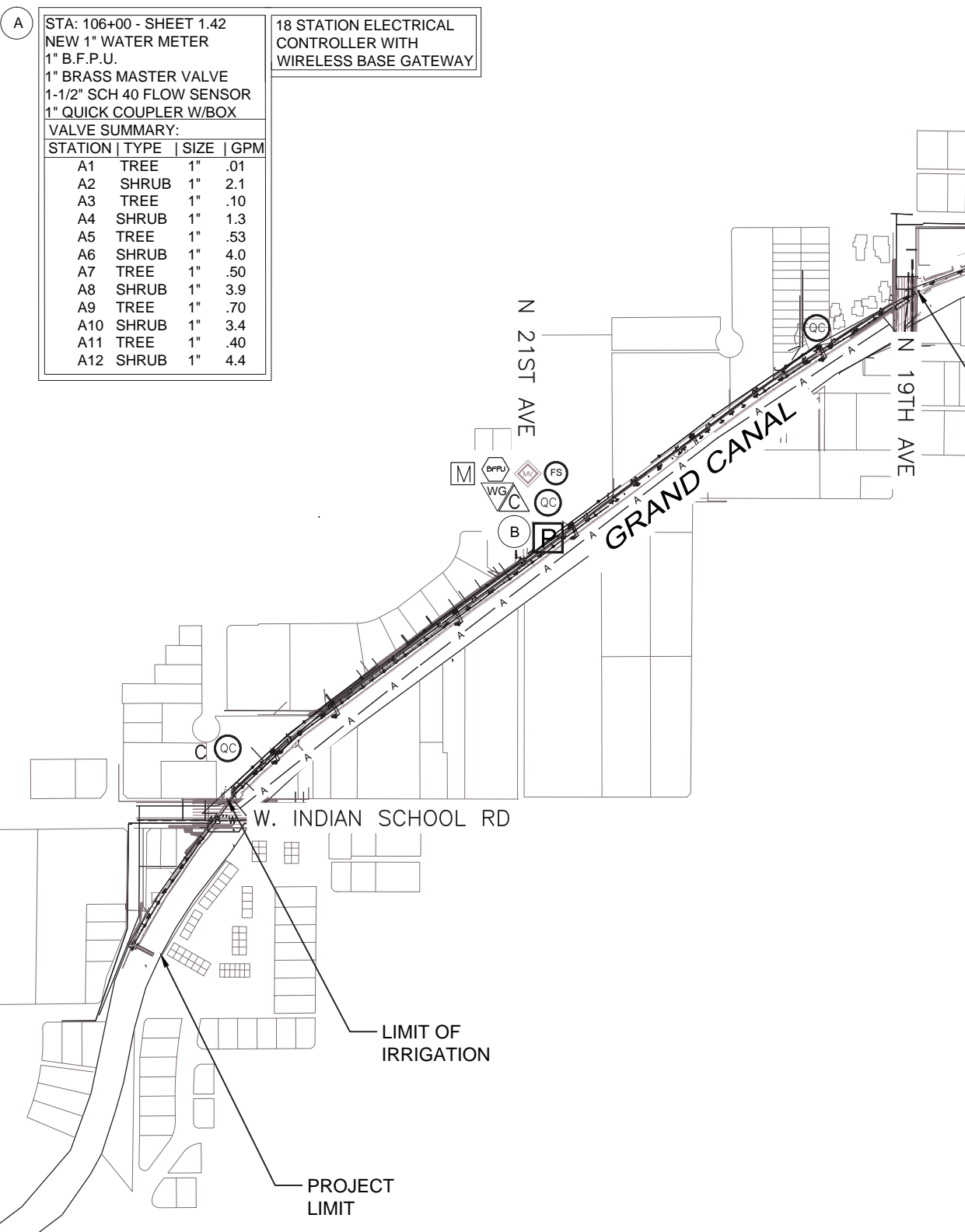
IRRIGATION NOTE:
 1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS-OF-WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
 2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

IRRIGATION CONTROLLER ZONES



P ELECTRICAL PANEL M: STA 118+65

IRRIGATION OVERVIEW:



A STA: 106+00 - SHEET 1.42
 NEW 1" WATER METER
 1" B.F.P.U.
 1" BRASS MASTER VALVE
 1-1/2" SCH 40 FLOW SENSOR
 1" QUICK COUPLER W/BOX

18 STATION ELECTRICAL CONTROLLER WITH WIRELESS BASE GATEWAY

VALVE SUMMARY:

STATION	TYPE	SIZE	GPM
A1	TREE	1"	.01
A2	SHRUB	1"	2.1
A3	TREE	1"	.10
A4	SHRUB	1"	1.3
A5	TREE	1"	.53
A6	SHRUB	1"	4.0
A7	TREE	1"	.50
A8	SHRUB	1"	3.9
A9	TREE	1"	.70
A10	SHRUB	1"	3.4
A11	TREE	1"	.40
A12	SHRUB	1"	4.4

IRRIGATION LEGEND

Symbol	Description	Listed Model	Approved Alternate #1	Approved Alternate #2
	New Water Meter - See plans for locations			
	Electrical Power Pedestal			
	Controller	Rain Master Eagle-RME18EGI-SPED-T	Tucor RKW+	Toro CC-M12-PED
	Base Wireless Gateway	Tucor Nexus BWR-400-G6	N/A	N/A
	Backflow Prevention Unit with Enclosure	Febco 825-YA 1"	Wilkins 975XL2SE	Watts 909AGC
	Master Valve	Griswold #2160 Open	Buckner Superior 3100-100	Bermad 910D
	Flow Sensor	Irritrol FS-B100	Rain Bird FS100B	Hunter Flow-Sync
	1" Remote Control Valve Pressure Regulator Wye Strainer (not shown on plan)	Rain Bird 100-EFB-CP Watts LFX65B 1" Watts LF77S 1"	Hunter IBV-101G-FS Apollo PR1PRLF Apollo YB1LF	Buckner Superior 3200-100 Wilkins 500XLYSBR 1" Wilkins 500XLYSBR 1"
	Wireless DC Latching Receiver	Tucor BWR-400 WVR-VB12	N/A	N/A
	Mainline Gate Valve (not shown on plan, place at midpoint of mainline between valves)	NIBCO T-113 1"	Apollo 101S1	Watts WGV-X 1"
	Ball Valve	NIBCO T-FP-600A	Watts FBV-4 1"	MATCO 757T05
	Quick Coupler	Rainbird 44-LRC	Hunter HQ-44LRC	Toro 470-100-2SLVC
	Emitter Irrigation Line for Trees	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
	Emitter Irrigation Line for Shrubs	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)	Bowsmith ML 210	Rainbird XBT-10-6	Salco Products SLV-PS-6-1
	Single-port Emitter- As Needed (not shown on plan)	Bowsmith SL 210	Rainbird XB-10PC	Salco Products SLV-PS-1
	Flush Cap, Typical end of all lateral lines	Rainbird MDCFCAP	Orbit 67468	Jain Power Loc w/ 3/4" FHT Threaded Cap



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 e-mail: janet@waib-la.com

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 Call 811 or click Arizona811.com

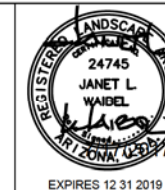
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IRRIGATION OVERVIEW
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1" = 250'						1.41	1.62

NO.	DESCRIPTION	REV BY	CHK BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.42	1.62

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	Mainline Gate Valve
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
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	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter - As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

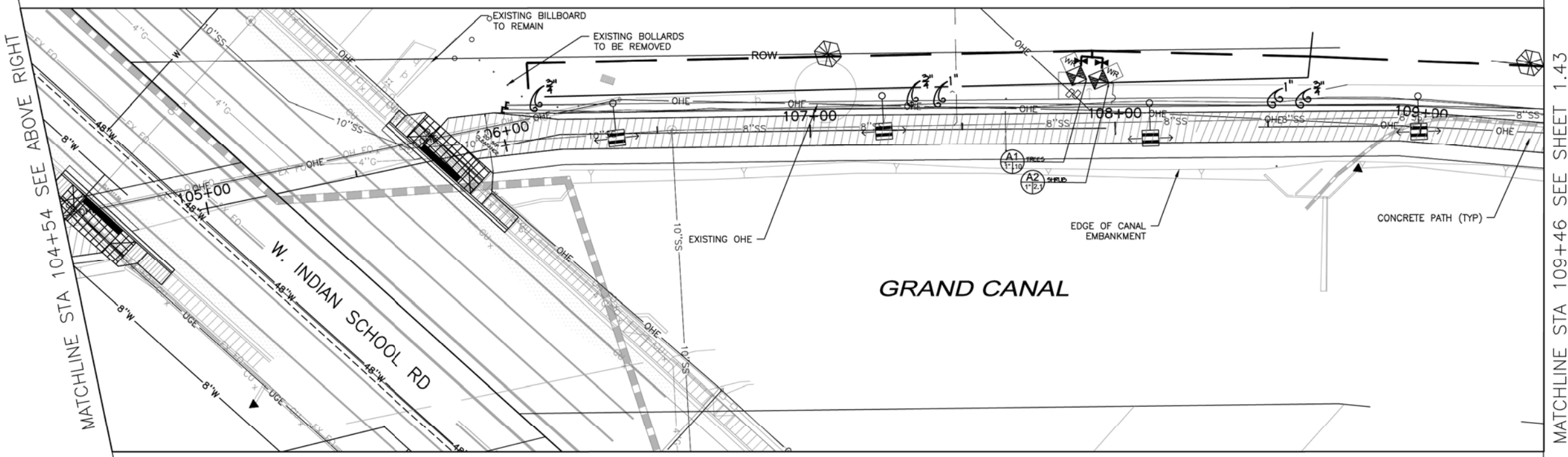
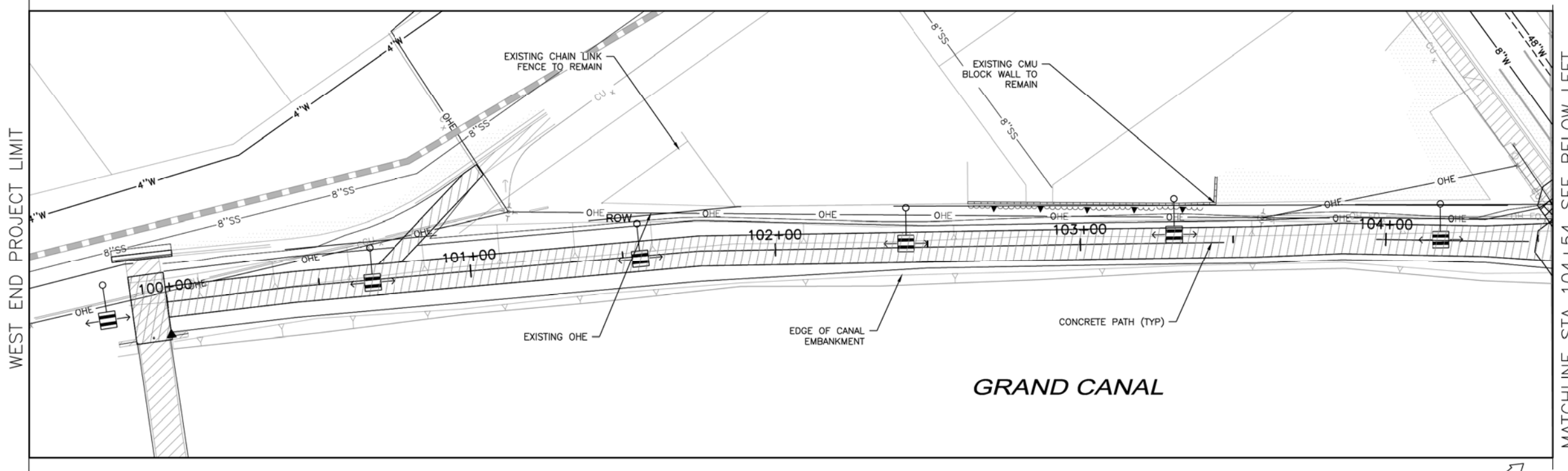
Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

NO.	DESCRIPTION	REV BY	CHK BY	DATE

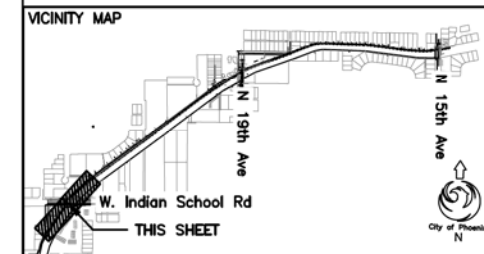
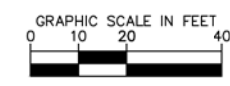
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NOTES:

- IRRIGATION EQUIPMENT DRAWN OUTSIDE OF R.O.W FOR VISUAL CLARITY. LANDSCAPE CONTRACTOR TO INSTALL ALL IRRIGATION EQUIPMENT AND PIPE WITHIN R.O.W AND PLANTING AREAS.
- EQUIPMENT IS NOT DRAWN TO SCALE FOR IMPROVED VISUAL CLARITY.



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4811 South Priest Drive, Suite 101
Tucson, AZ 85714
Phone: 480.939.3649 Fax: 480.939.3646
Email: janet@waibel.com

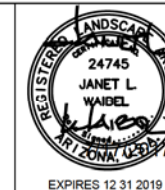
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IRRIGATION PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 20'					1.42	1.62

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.43	1.62

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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

IRRIGATION LEGEND

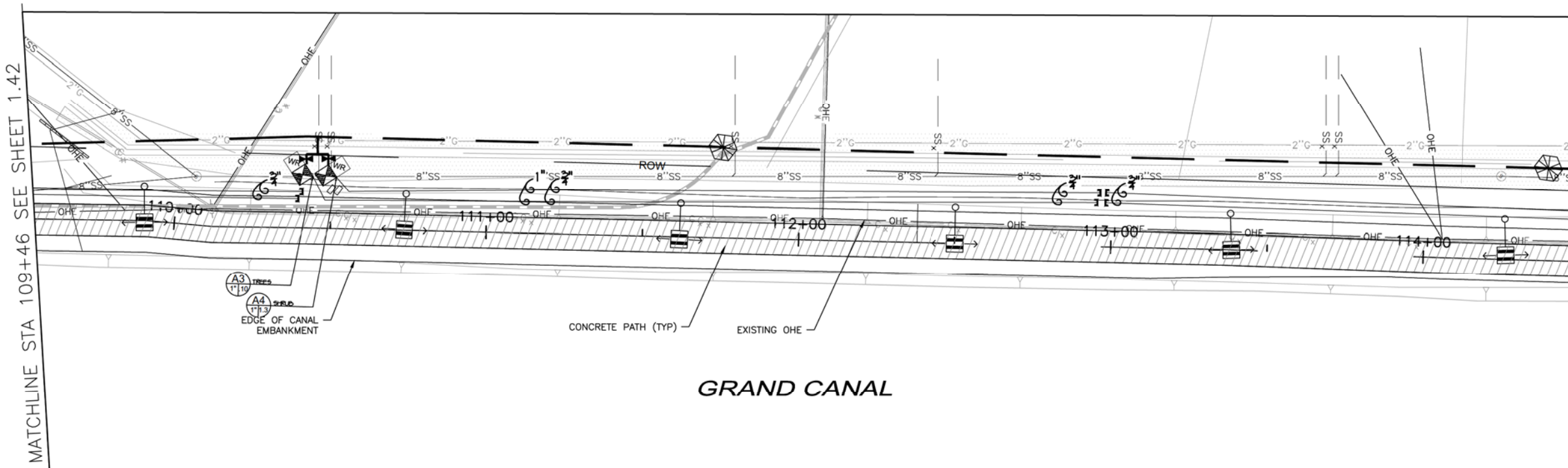
Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	Mainline Gate Valve
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
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	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
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	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

MATCHLINE STA 109+46 SEE SHEET 1.42

MATCHLINE STA 114+46 SEE BELOW LEFT



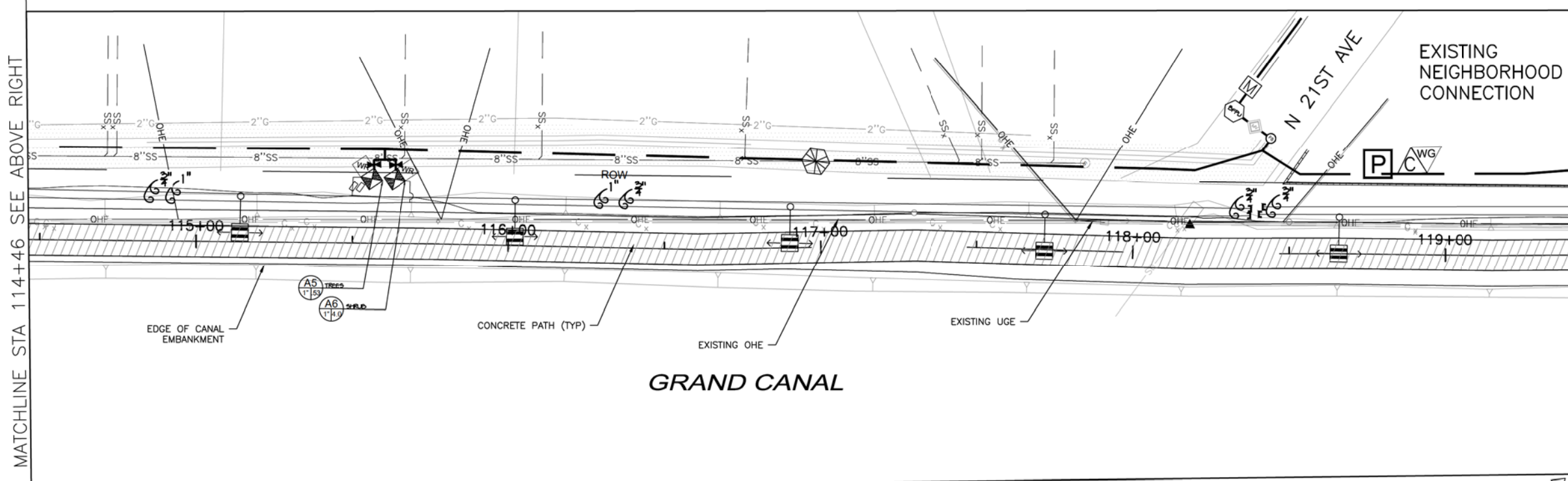
NOTES:

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- EQUIPMENT IS NOT DRAWN TO SCALE FOR IMPROVED VISUAL CLARITY.
- NEW METER TO TIE INTO EXISTING WATER LINE OUTSIDE OF ROW ON 21ST AVENUE



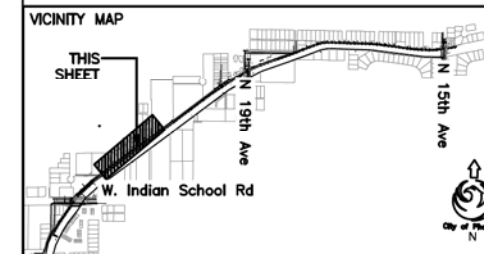
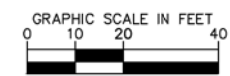
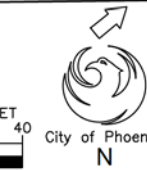
MATCHLINE STA 114+46 SEE ABOVE RIGHT

MATCHLINE STA 119+46 SEE SHEET 1.44



NOTES:

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ARIZONA 811
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IRRIGATION PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 20'					1.43	1.62

REVISION BY CITY OF PHOENIX

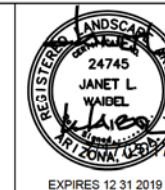
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REVISION BY CITY OF PHOENIX

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.44	1.62

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

IRRIGATION LEGEND

Symbol	Description
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Valve Key

Station Number	Valve Size	GPM
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REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

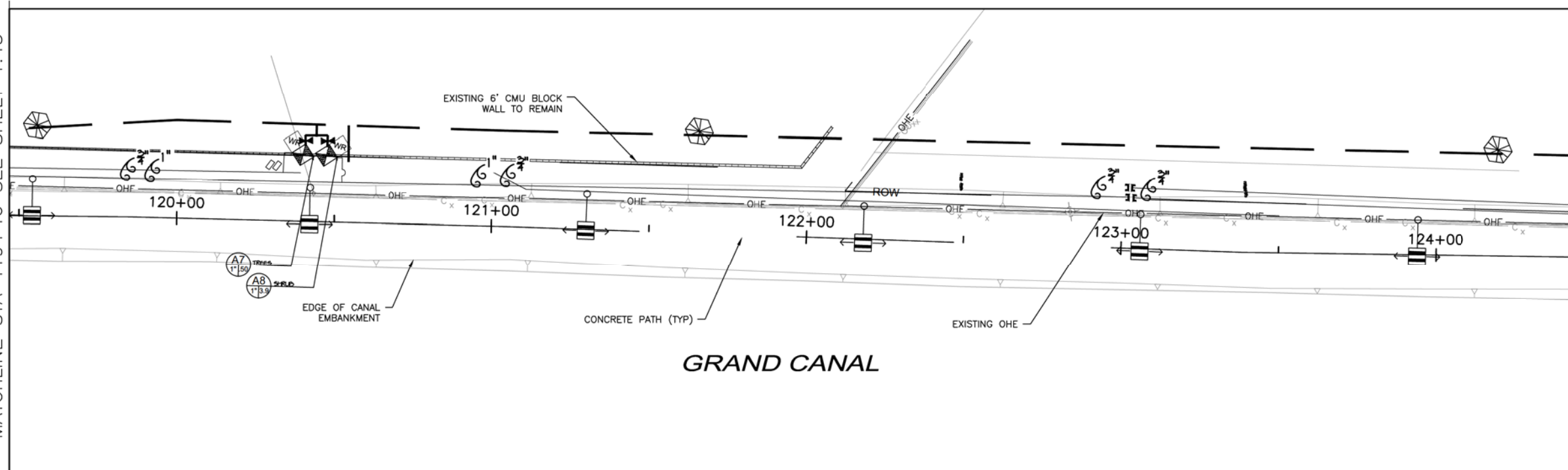
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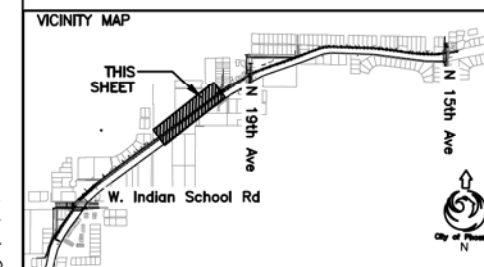
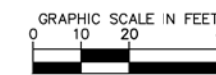
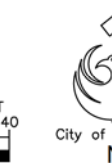
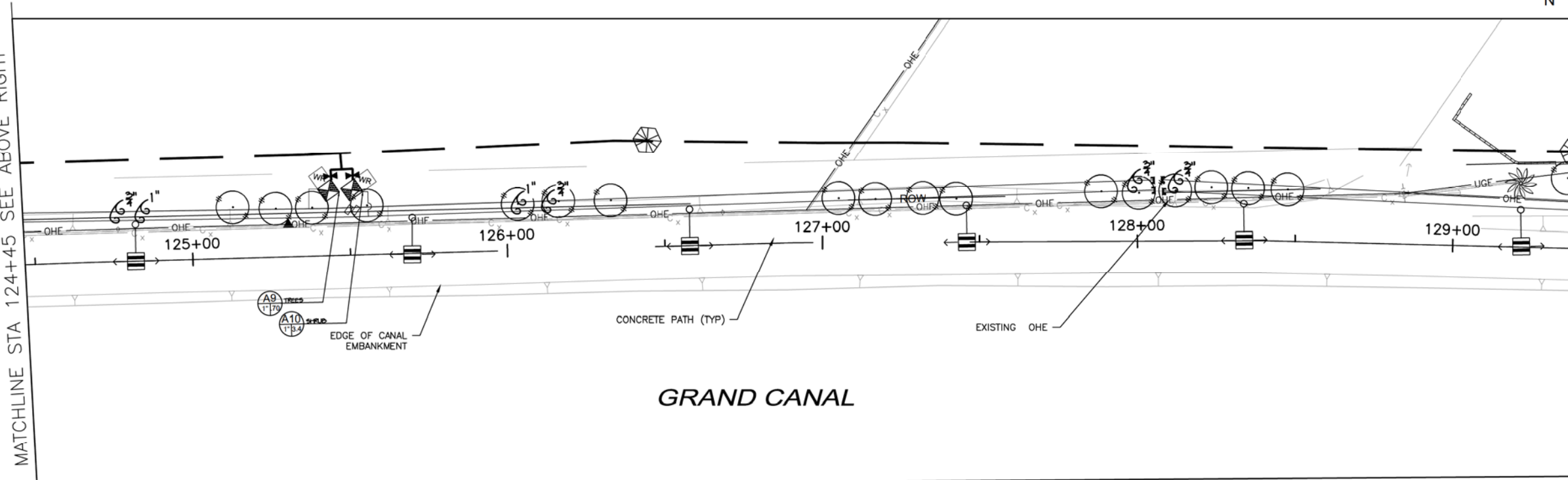
MATCHLINE STA 119+46 SEE SHEET 1.43

MATCHLINE STA 124+45 SEE BELOW LEFT



MATCHLINE STA 124+45 SEE ABOVE RIGHT

MATCHLINE STA 129+44 SEE SHEET 1.45



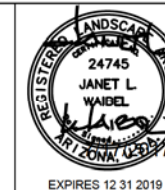
Waibel & Associates
Landscape Architecture
Phone: 480.955.3649 Fax: 480.955.3646
4611 South Priest Drive, Suite 101
Tempe, AZ 85284
email: janet@waibel.com

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ARIZONA 811
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IRRIGATION PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 20'					1.44	1.62



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.45	1.62

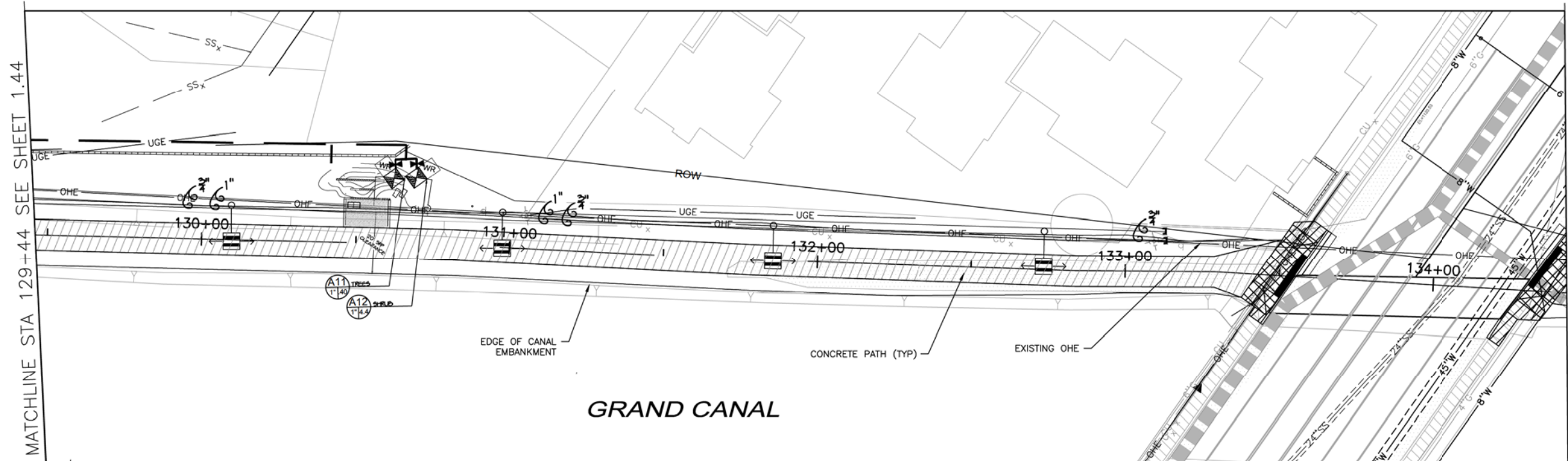
TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	Mainline Gate Valve
	1' Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter - As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2' Schedule 40 PVC

Valve Key

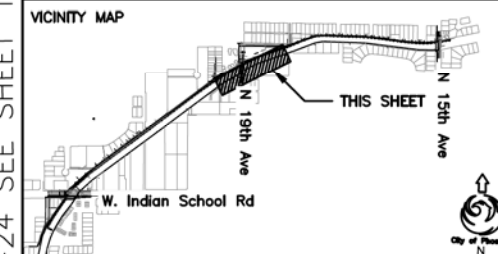
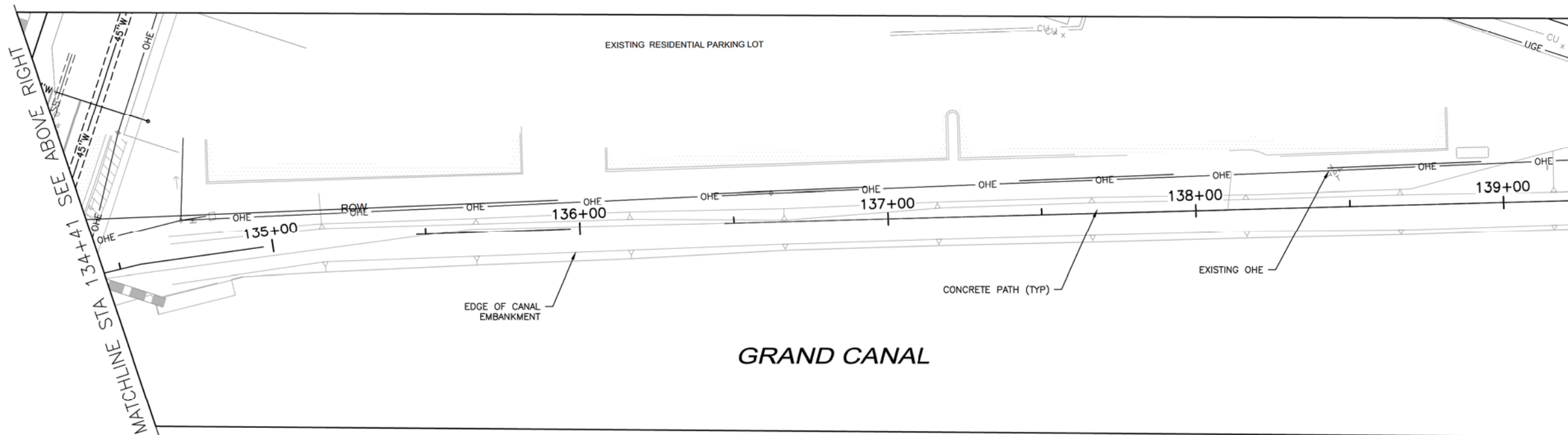
Station Number	Valve Size	GPM
A1	1 1/2"	



NOTES:

- IRRIGATION EQUIPMENT DRAWN OUTSIDE OF R.O.W FOR VISUAL CLARITY. LANDSCAPE CONTRACTOR TO INSTALL ALL IRRIGATION EQUIPMENT AND PIPE WITHIN R.O.W AND PLANTING AREAS.

NO IRRIGATION STA 134+41 - 139+24



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 4611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 email: jwaibel@waibel-a.com

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ARIZONA 811
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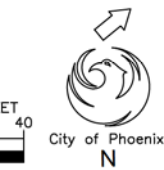
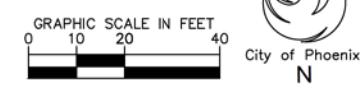
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IRRIGATION PLAN
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 1: 1-17 TO 15TH AVE
 ST87600114

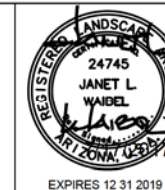
DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
DATE:	7/17	DATE:	7/17	DATE:	7/17	1.45	1.62

SCALE: 1" = 20'

NO.	DESCRIPTION	REV BY	CHK BY	DATE



\\D:\P\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\CANAL\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.46	1.62

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO IRRIGATION STA 139+27 - 149+00

IRRIGATION LEGEND

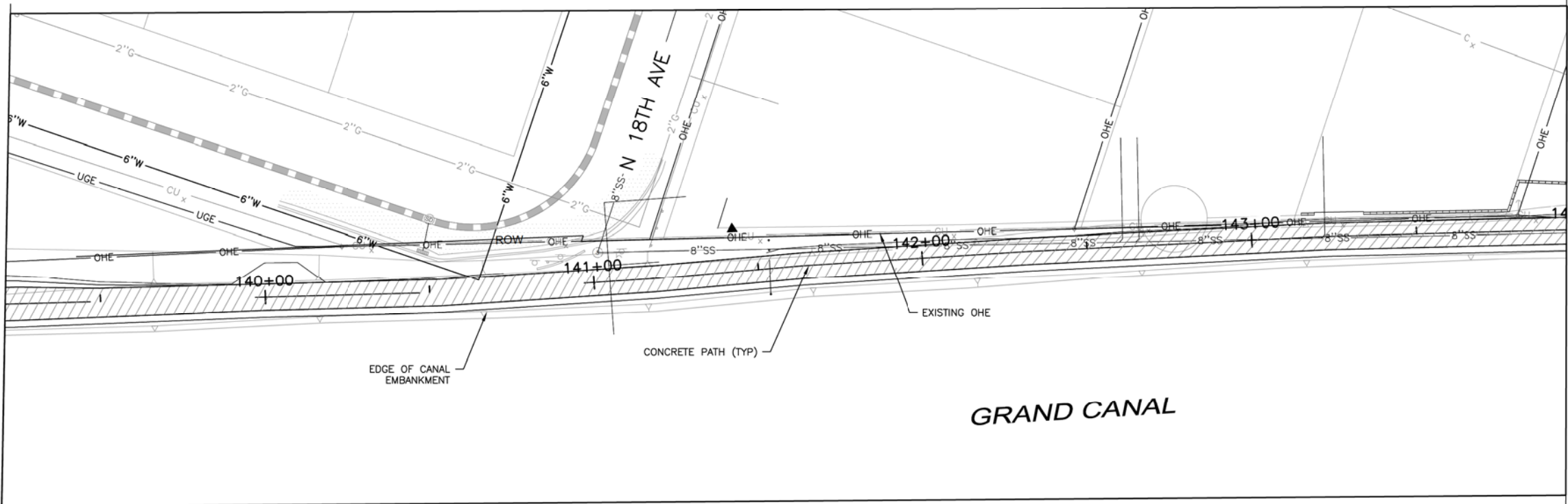
Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
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	Flush Cap, Typical end of all lateral lines
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	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	

MATCHLINE STA 139+24 SEE SHEET 1.45

MATCHLINE STA 144+00 SEE BELOW LEFT



REVISION BY CITY OF PHOENIX

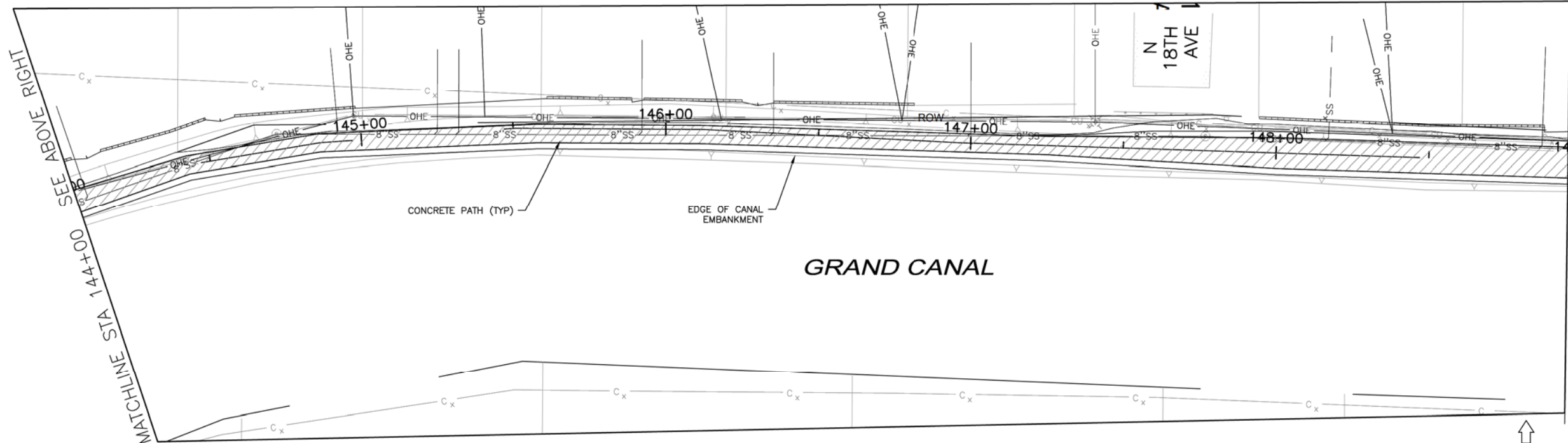
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

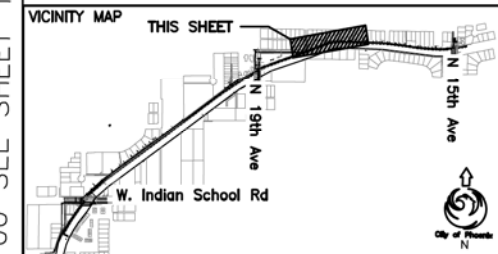
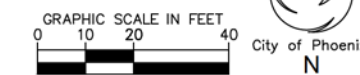
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 144+00 SEE ABOVE RIGHT

MATCHLINE STA 149+00 SEE SHEET 1.47



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Landscape Architecture

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ARIZONA 811
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Phone: 480.955.3849 Fax: 480.955.3846
4611 South Priest Drive, Suite 101
Tucson, AZ 85714
e-mail: janet@waibel.com

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IRRIGATION PLAN

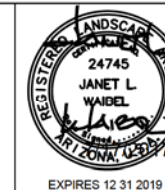
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1" = 20'						1.46	1.62

\\DLP\HM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 1\Grand Canal Segment 1 - 6 28 2017.dwg 8/17/2016 12:53 PM

NO IRRIGATION STA 149+00 - 159+00



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.47	1.62

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
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	Master Valve
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Valve Key

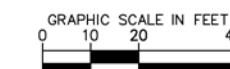
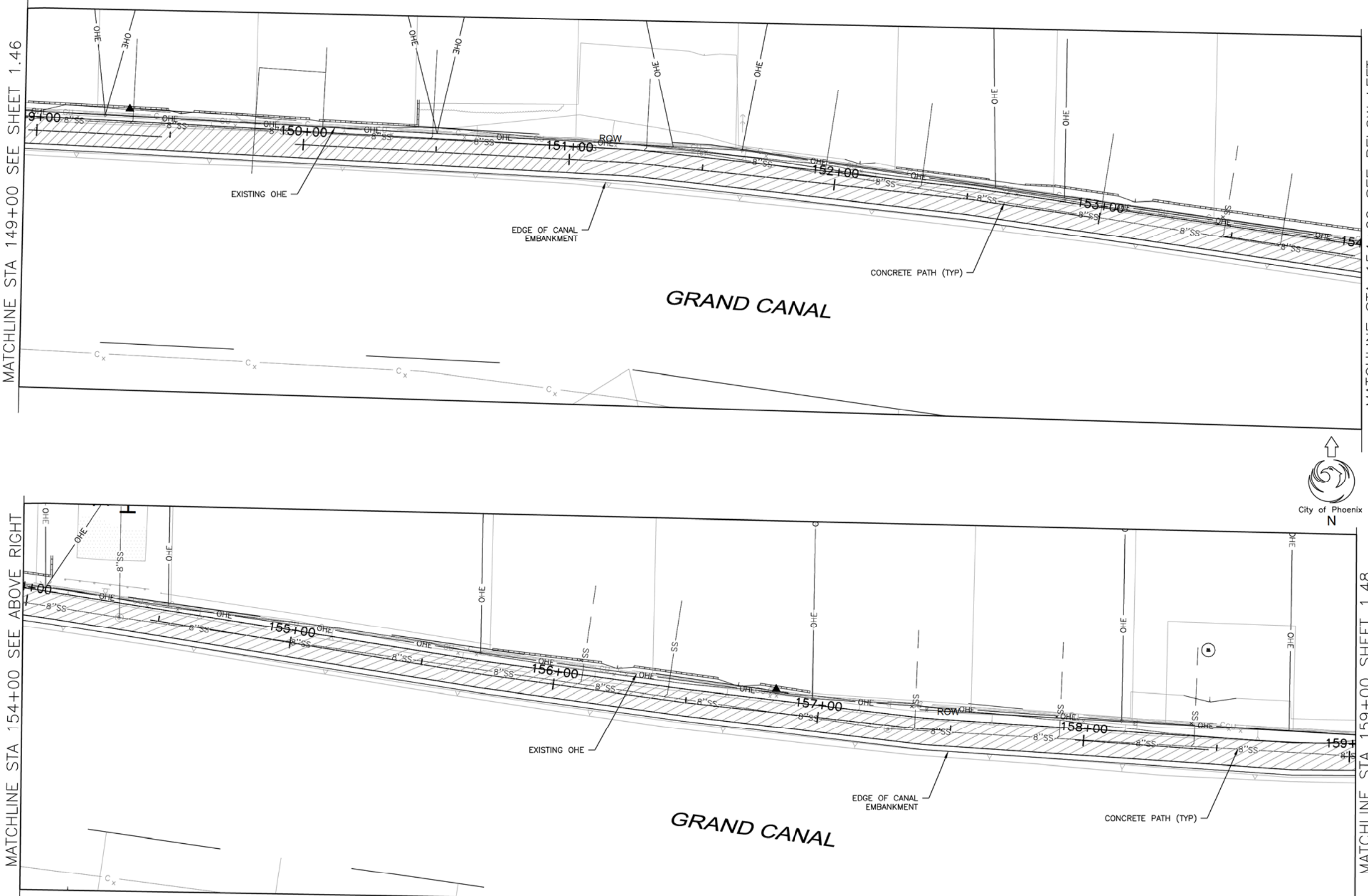
Station Number	Valve Size	GPM
A1	1 1/2"	150

MATCHLINE STA 149+00 SEE SHEET 1.46

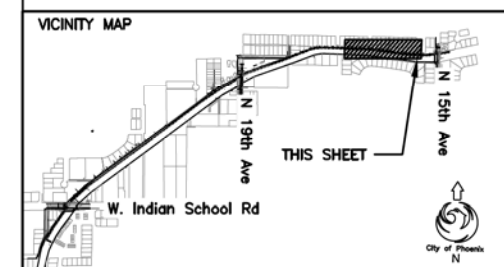
MATCHLINE STA 154+00 SEE BELOW LEFT

MATCHLINE STA 154+00 SEE ABOVE RIGHT

MATCHLINE STA 159+00 SHEET 1.48



NO.	DESCRIPTION	REV BY	CHK BY	DATE



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 Phone: 480.955.3649 Fax: 480.955.3646
 4611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: janet@waibel.com

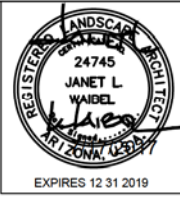
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IRRIGATION PLAN
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 1: 1-17 TO 15TH AVE
 ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 20'					1.47	1.62

NO IRRIGATION STA 159+00 - 161+00



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.48	1.62

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

IRRIGATION LEGEND

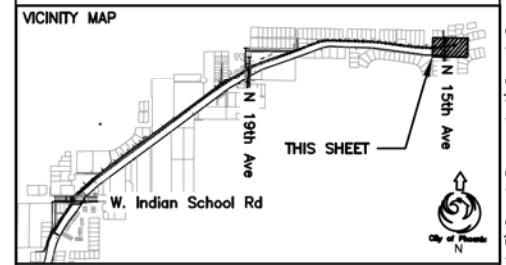
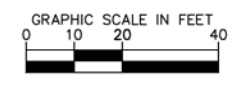
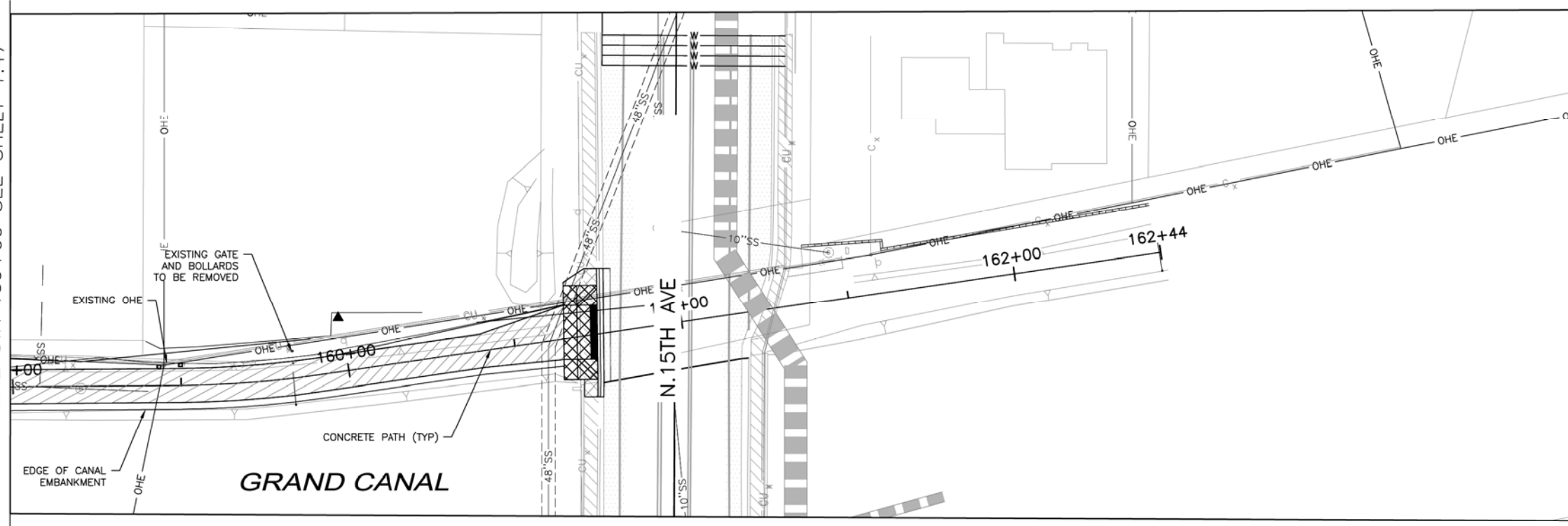
Symbol	Description
	New Water Meter - See plans for locations
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	Controller
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	Backflow Prevention Unit with Enclosure
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Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

MATCHLINE STA 159+00 SEE SHEET 1.47

EAST END PROJECT LIMITS



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4611 South Priest Drive, Suite 101
Tempe, AZ 85284
email: janet@waibel-a.com

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IRRIGATION PLAN

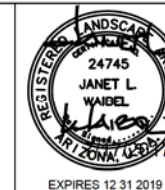
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS:
		7/17			7/17	1.48	1.62

SCALE: 1" = 20'

NO.	DESCRIPTION	REV BY	CHK BY	DATE

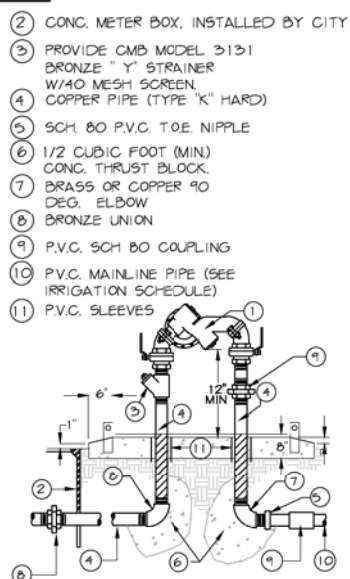


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.49	1.62

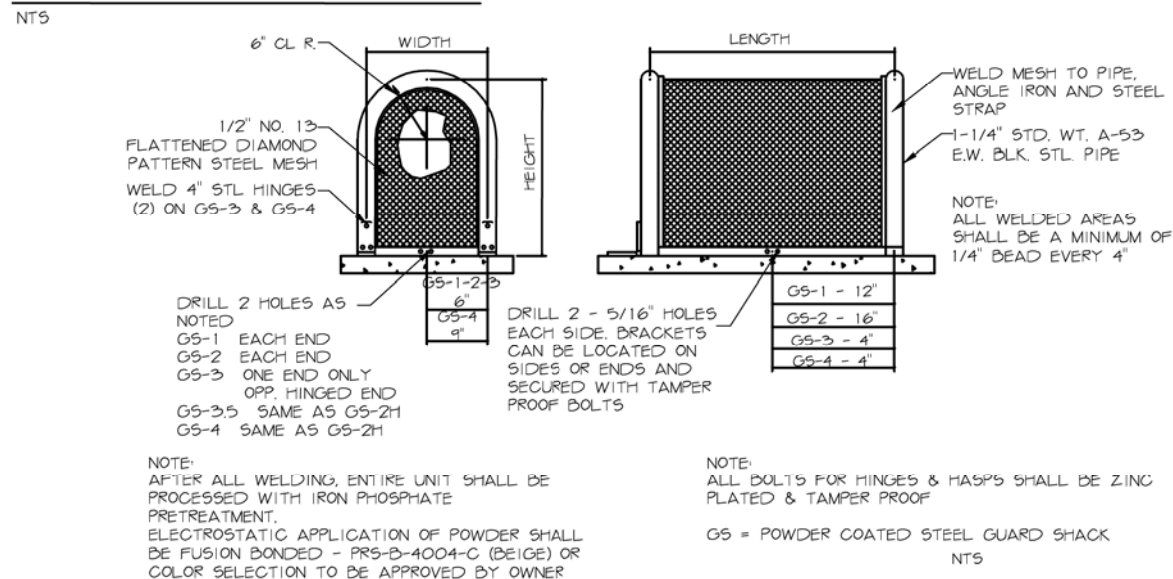
TRACE CONSULTING
1201 E. Jefferson St. Suite 3
Phoenix, AZ 85034

I. REDUCED PRESSURE BACKFLOW

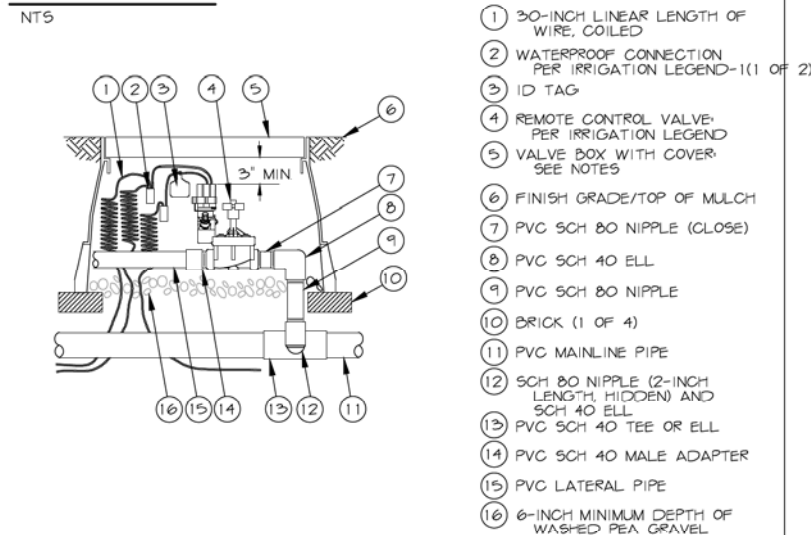
- NT5
- ALL PIPE/FITTINGS TO BE TYPE "L" COPPER
 - ASSEMBLY SHALL BE APPROVED BY U.S.C. FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH
 - INSTALL BACKFLOW PREVENTION ASSEMBLY WITH RELIEF PORT FACING TOWARD THE GROUND
 - BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MIN. OF 12" FROM RELIEF PORT TO GRADE.
 - TEST COCKS, (4) SHALL BE FITTED WITH BRASS PLUGS AND INST. W/ TEFLON TAPE SHUTOFF VALVES TO BE RESILIENT BALL TYPE W/ REMOVABLE HANDLES. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
 - STAKE LOCATION OF ASSEMBLY FOR APPROVAL BY THE ENGINEER BEFORE INSTALLATION BEGINS.
 - A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
 - PROVIDE TEST CERTIFICATION FROM CITY APPROVED TESTING COMPANY PRIOR TO APPROVAL.
 - COPPER FITTINGS SHALL BE INSTALLED W/ LEAD FREE SOLDER JOINTS.
 - SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



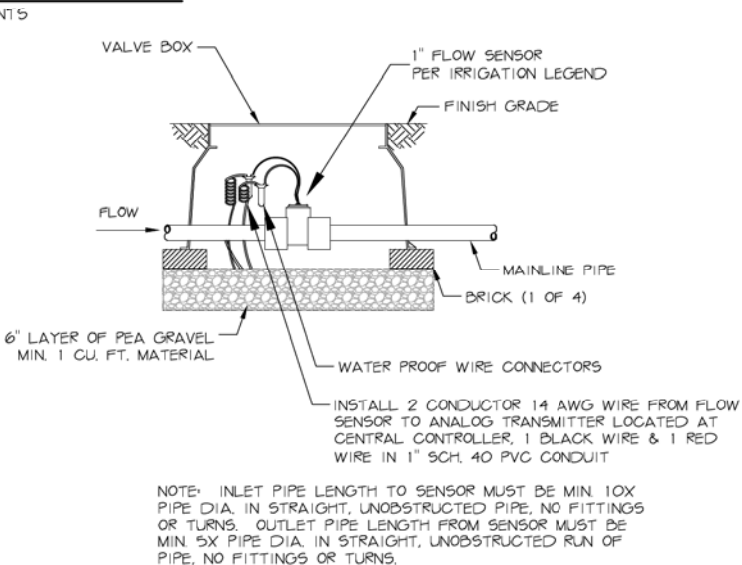
II. BACKFLOW SECURITY ENCLOSURE



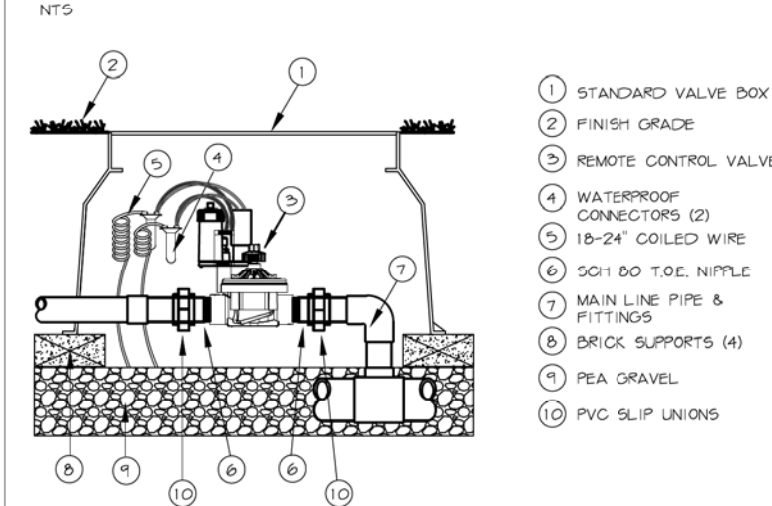
III. MASTER VALVE



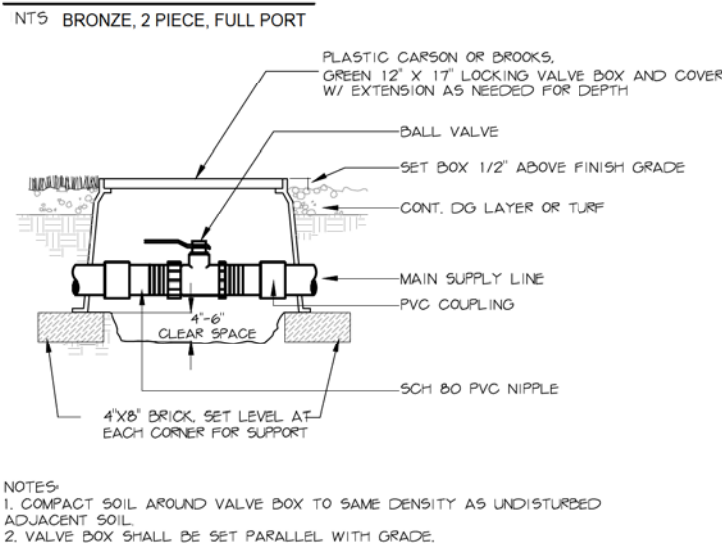
IV. FLOW SENSOR



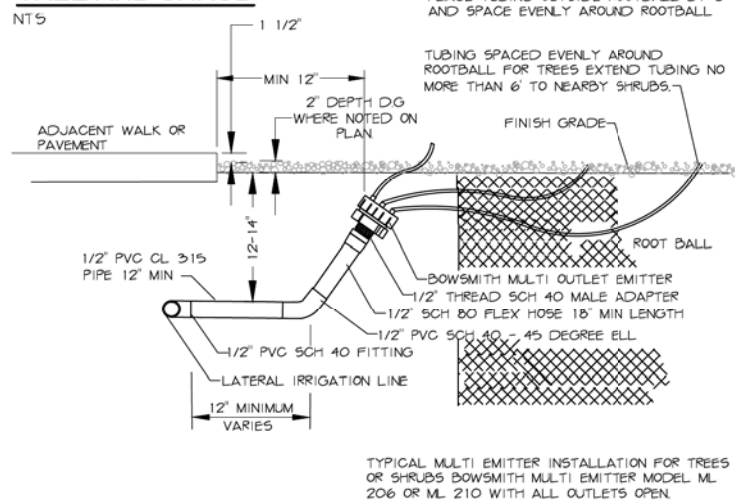
V. EMITTER VALVE ASSEMBLY



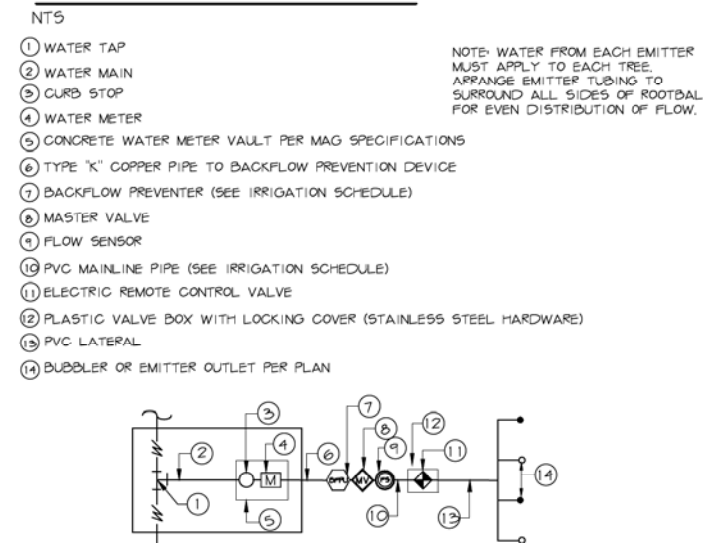
VI. ISOLATION BALL VALVE



VII. MULTI-EMITTER FOR TREE AND SHRUB



VIII. WATER SYSTEM SCHEMATIC



Waibel & Associates
Landscape Architecture
4811 South Priest Drive, Suite 101
Tempe, AZ 85284
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IRRIGATION DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	1.62	
SCALE:	NTS						1.49	1.62



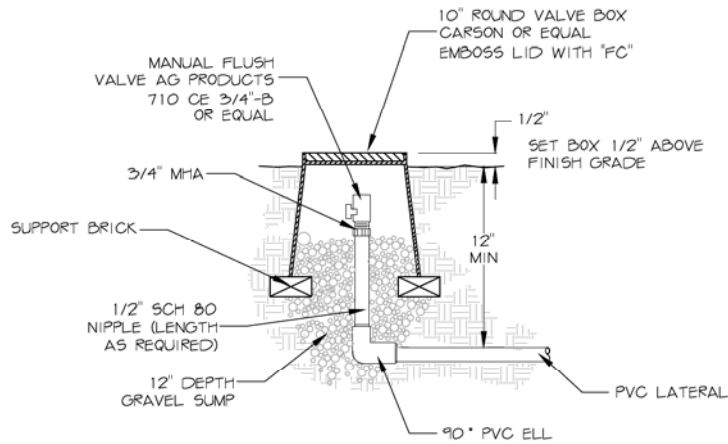
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.50	1.62

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 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

IX. MANUAL FLUSH VALVE

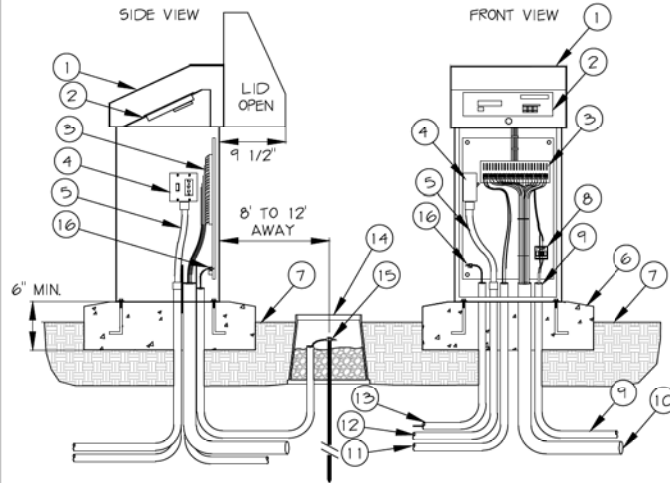
NTS



X. STAINLESS STEEL CONTROLLER PEDESTAL

NTS

FOR RAINMASTER EAGLE PLUS-I TWO-WIRE CONTROLLER: SA6-RM2-TW



- 1 STRONGBOX STAINLESS STEEL NEMA 3R RAINPROOF ENCLOSURE (UL LISTED).
- 2 SATELLITE ASSEMBLY (OPTIONAL) ASSEMBLED IN ENCLOSURE BY JOHN DEERE GREEN TECH. TERMINAL STRIP FOR VALVE WIRES.
- 3 POWER SWITCH / GFCI RECEPTACLE.
- 4 ELECTRICAL FLEX CONDUIT FOR POWER.
- 5 6" MIN THICK CONCRETE PAD WITH ANCHOR BOLTS PER MANUFACTURER RECOMMENDATIONS.
- 6 FINISHED GRADE.
- 7 FLOW SENSOR TERMINAL BOARD.
- 8 CONDUIT AND SWEEP ELL WITH FLOW SENSOR CABLE.
- 9 CONDUIT AND SWEEP ELL FOR LEAD WIRES.
- 10 CONDUIT AND SWEEP ELL FOR MASTER VALVE WIRES.
- 11 CONDUIT AND SWEEP ELL FOR 110 VAC POWER LINE.
- 12 CONDUIT AND SWEEP ELL FOR GROUND WIRE.
- 13 10" ROUND VALVE BOX AROUND GROUND ROD. FILL WITH 3/4" CRUSHED ROCK.
- 14 5/8" X 8' GROUND ROD WITH #6 GROUND WIRE AND CLAMP. LOCATE 8-12" FROM ENCLOSURE.
- 15 #6 GROUND WIRE SECURED TO BACKBOARD GROUNDING TERMINAL.

NOTES:
 1. CONTRACTOR TO CONFIRM WIRING CONFIGURATION PER THIS PROJECT AND PROVIDE ADEQUATE CONDUIT FOR WIRES TO MOVE FREELY WITHIN CONDUIT FOR COMPLETE AND CLEAN INSTALLATION INTO CABINET. BUNDLE WIRE WITH PLASTIC WIRE TIE TO PROVIDE NEAT AND ORGANIZED INSTALL.
 2. CABINET DIMENSIONS: 16"W X 38"H X 15.5"D

GENERAL NOTES:
 VALVE NOTES—
 1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
 2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
 3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
 4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
 5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES—
 1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
 2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOVED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-3/4", USE 3" SLEEVE, FOR PIPES 1-3/4" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
 3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
 4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

M.A.G. NOTE—
 SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

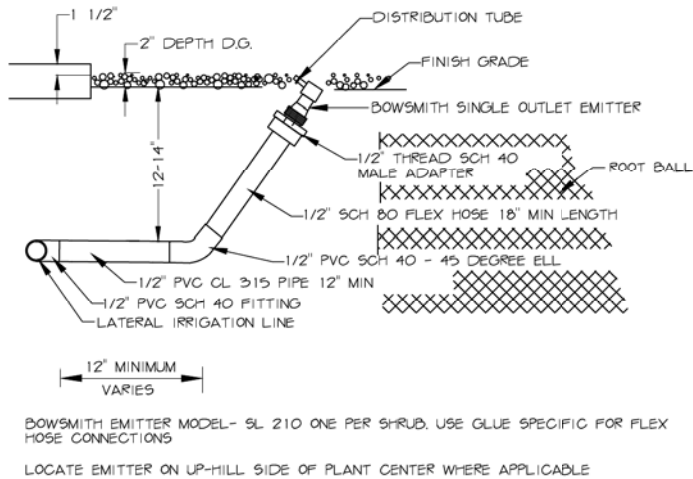
IRRIGATION NOTE:
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 2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

XI. EMITTER SINGLE OUTLET

NTS

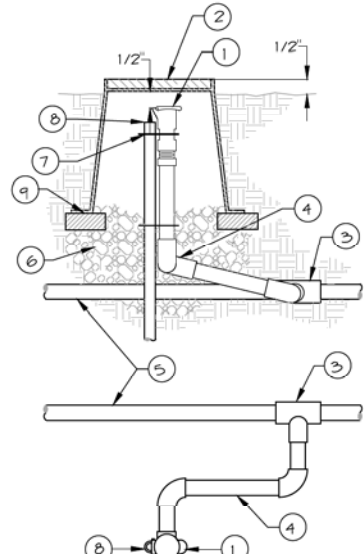
PLACE EMITTER AT UPHILL SIDE OF PLANT AND OUTSIDE ROOTBALL BY 6"



BOWSMITH EMITTER MODEL- SL 210 ONE PER SHRUB. USE GLUE SPECIFIC FOR FLEX HOSE CONNECTIONS
 LOCATE EMITTER ON UP-HILL SIDE OF PLANT CENTER WHERE APPLICABLE

XII. QUICK COUPLER ASSEMBLY

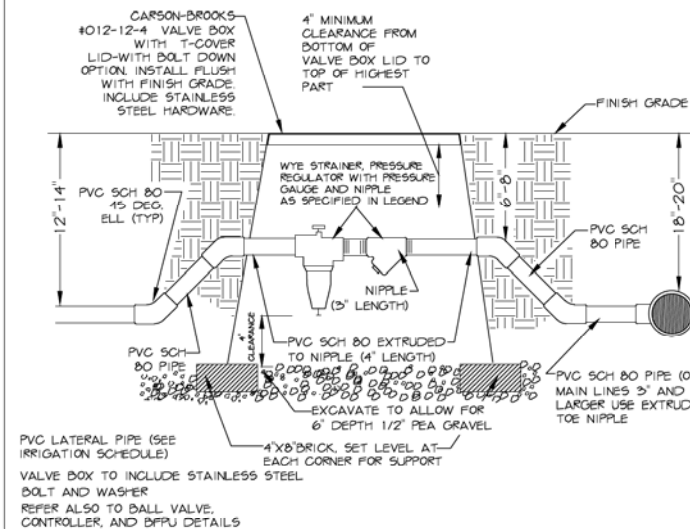
NTS



- 1 BRASS QUICK COUPLER VALVE.
- 2 VALVE BOX COVER SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE.
- 3 PVC SCH 40 SLIP TEE
- 4 LASCO UNITIZED SWING JOINT W/STABILIZED BRASS NIPPLE (#8 175-218)
- 5 PVC MAINLINE PIPE (SEE SCHEDULE)
- 6 6" LAYER 1/2" PEA GRAVEL. MIN 1 CF. EXTEND BEYOND BOX ALL EDGES 6"
- 7 STAINLESS STEEL STRAP (2)
- 8 #4 MIN. REBAR 36" LONG
- 9 4" X 8" STANDARD BRICK

NOTES:
 1. VALVE BOX SHALL INCLUDE STAINLESS STEEL BOLT AND WASHER
 2. EMBOSS COVER WITH "QC" OR AS OTHERWISE DIRECTED
 3. PROVIDE 4" X 8" BRICKS TO SUPPORT VALVE BOX SECURELY ON GRAVEL

XIII. PRESSURE REGULATOR AND WYE STRAINER

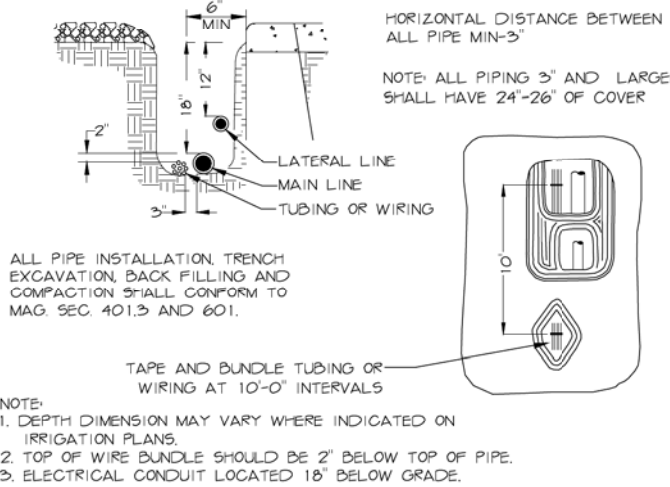


4" MINIMUM CLEARANCE FROM BOTTOM OF VALVE BOX LID TO TOP OF HIGHEST PART
 FINISH GRADE
 PVC SCH 40 PIPE (ON MAIN LINES 2" AND LARGER USE EXTRUDED TOE NIPPLE)
 4"X8" BRICK. SET LEVEL AT EACH CORNER FOR SUPPORT
 VALVE BOX TO INCLUDE STAINLESS STEEL BOLT AND WASHER
 REFER ALSO TO BALL VALVE, CONTROLLER, AND BFRU DETAILS

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

XIV. TRENCHING DETAIL

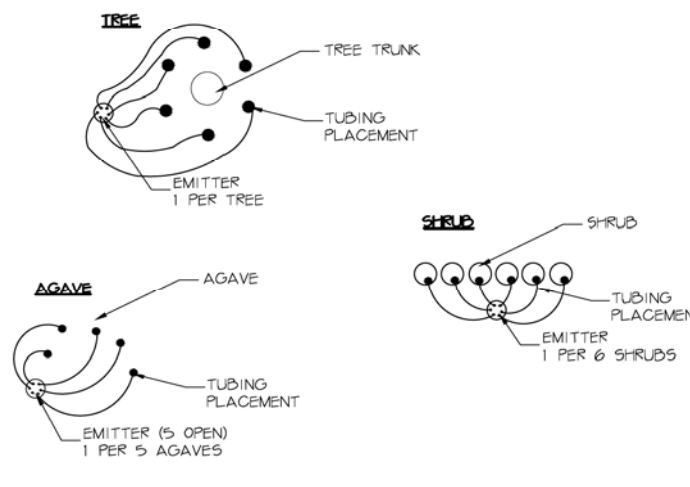
NTS



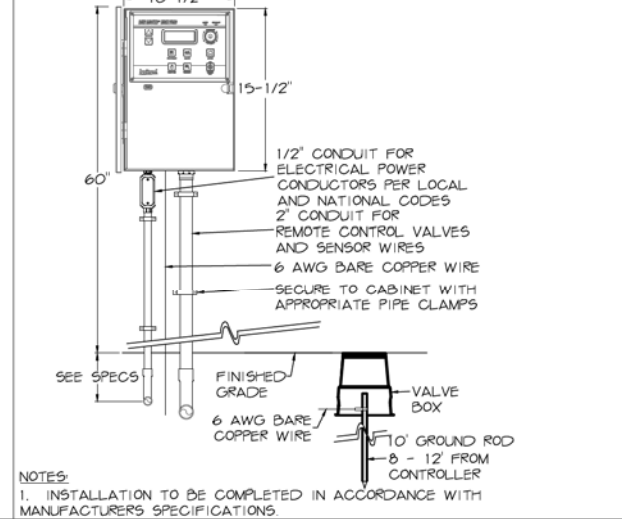
HORIZONTAL DISTANCE BETWEEN ALL PIPE MIN-3'
 NOTE: ALL PIPING 3" AND LARGER SHALL HAVE 24"-26" OF COVER
 ALL PIPE INSTALLATION, TRENCH EXCAVATION, BACK FILLING AND COMPACTION SHALL CONFORM TO MAG. SEC. 401.3 AND 601.
 TAPE AND BUNDLE TUBING OR WIRING AT 10'-0" INTERVALS
 NOTE:
 1. DEPTH DIMENSION MAY VARY WHERE INDICATED ON IRRIGATION PLANS.
 2. TOP OF WIRE BUNDLE SHOULD BE 2" BELOW TOP OF PIPE.
 3. ELECTRICAL CONDUIT LOCATED 18" BELOW GRADE.

XV. EMITTER PLACEMENT

NTS



XVI. IRRIGATION CONTROLLER



10-1/2"
 15-1/2"
 1/2" CONDUIT FOR ELECTRICAL POWER CONDUCTORS PER LOCAL AND NATIONAL CODES
 2" CONDUIT FOR REMOTE CONTROL VALVES AND SENSOR WIRES
 6 AWG BARE COPPER WIRE
 SECURE TO CABINET WITH APPROPRIATE PIPE CLAMPS
 60"
 FINISHED GRADE
 VALVE BOX
 6 AWG BARE COPPER WIRE
 10" GROUND ROD
 8-12" FROM CONTROLLER
 NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

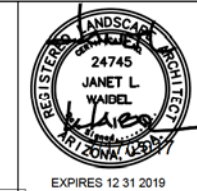
Waibel & Associates
 Landscape Architecture
 Phone: 480.953.3849 Fax: 480.953.3848
 8611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: jwaibel@waibel-az.com

Contact Arizona 811 at least two full working days before you begin excavation
 ARIZONA 811
 Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION DETAILS
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	1.62	
SCALE:	NTS						1.50	1.62



XVII. IRRIGATION PIPE SCHEDULE

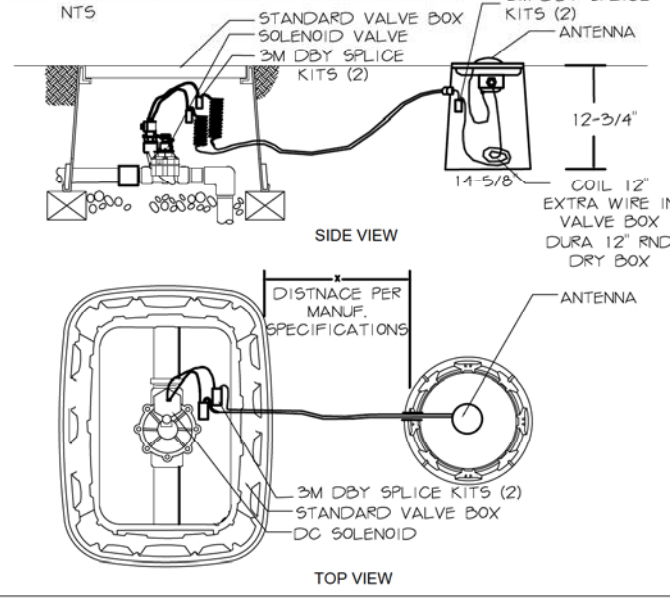
PIPE SCHEDULE

PIPE SIZE	GPM TO EMITTER RISERS ONLY
1/2"	6-10
3/4"	11-15
1"	16-25
1-1/4"	26-35

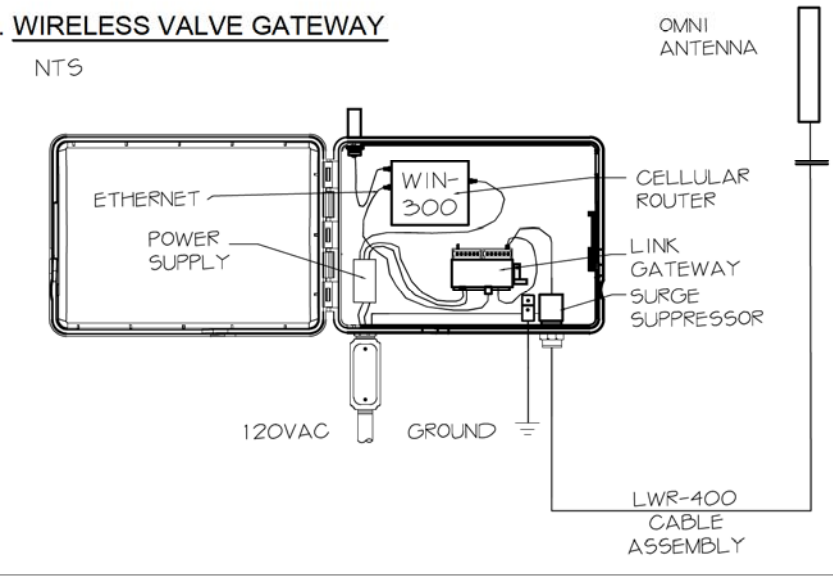
SLEEVE SCHEDULE

PIPE SIZE	SLEEVE SIZE
1/2" - 3/4"	3"
1" - 2"	4"

XVIII. WIRELESS VALVE ASSEMBLY



XIX. WIRELESS VALVE GATEWAY



IRRIGATION NOTES:

- IRRIGATION SYSTEM HAS BEEN DESIGNED FOR A STATIC WATER PRESSURE OF 60 P.S.I. CONTRACTOR TO FIELD VERIFY PRESSURE PRIOR TO STARTING IRRIGATION INSTALLATION. NOTIFY CONSULTANT OF ANY DIFFERENCE FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT HE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF A FULLY AUTOMATED IRRIGATION SYSTEM PRIOR TO STARTING PLANTING. IF INSTALLATION OR OPERATION OF THE IRRIGATION SYSTEM IS INTERRUPTED FOR ANY REASON, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUE MANUAL WATERING OF ALL PLANT MATERIAL UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER SERVICE CONNECTIONS TO THE WATER METER. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONNECTIONS DOWN STREAM OF THE WATER METER AND EXTEND TAP SIZE TYPE "K" HARD COPPER FROM WATER METER THROUGH BACKFLOW PREVENTER. REFER TO GENERAL CONSTRUCTION NOTES FOR ADDITIONAL CONSIDERATIONS THAT RELATE TO SCOPE OF WORK WITHIN THIS SECTION.
- ALL IRRIGATION EQUIPMENT TO BE LOCATED IN DECOMPOSED GRANITE LANDSCAPE AREAS WITHIN PROPERTY BOUNDARIES OF THE PROJECT. SPECIFIC WRITTEN PERMISSION SHALL BE OBTAINED TO LOCATE VALVES OR IRRIGATION EQUIPMENT IN TURF AREAS. ALL LINES AND EQUIPMENT ARE SCHEMATIC AND ARE SOMETIMES SHOWN IN ROADWAYS, SIDEWALKS, OR OUTSIDE PROPERTY LINES. THIS IS DONE FOR CLARITY PURPOSES ONLY. LOCATE VALVES AND BACKFLOW PREVENTION UNITS WITHIN AREAS SO THAT THEY ARE AS VISUALLY UNOBSERVABLE AS POSSIBLE.
- DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING PLANS. SUCH OBSTRUCTIONS OR CONFLICTS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISION NECESSARY.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 35 P.S.I. AND A MAXIMUM FLOW DEMAND OF 25 GPM. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE LANDSCAPE DESIGNER IMMEDIATELY.
- ALL MATERIAL USED SHALL BE INSTALLED AS DETAILED. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REPRESENTATIVE AND /OR LANDSCAPE ARCHITECT.
- THE OWNER'S REPRESENTATIVE MAY, AT ANY TIME, TAKE AND ANALYZE SAMPLES OF MATERIALS AND EQUIPMENT FOR CONFORMITY TO SPECIFICATIONS. THE CONTRACTOR SHALL MAKE SUCH SAMPLES AVAILABLE UPON REQUEST. REJECTED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- INSTALL BACKFLOW PREVENTION UNITS PIPING BETWEEN THE POINT OF CONNECTION AND THE BFPU PER LOCAL CODES. THE FINAL LOCATION OF THE BACKFLOW PREVENTION UNIT SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 120 VOLT SERVICE TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR POWER CONNECTION TO CONTROLLER. UNLESS IT IS PROVIDED BY PROJECT PLANS. CONTRACTOR SHALL INCLUDE BID PRICING FOR APPLICATION PERMIT FEES AND ALL COSTS PERTAINING TO PROVISION OF POWER FOR IRRIGATION OR LIGHTING FOR PROJECT. COORDINATE CONNECTIONS, LOCATIONS, EQUIPMENT NEEDS WITH ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING MATERIALS AND LABOR TO PROVIDE SPECIFIED ELECTRICAL SERVICE TO ALL CONTROLLER LOCATIONS. ALL ELECTRICAL WORK TO BE AS PER MANUFACTURER'S SPECIFICATIONS AND AS PER LOCAL CODE.
- LEVEL OF PEA GRAVEL IN IRRIGATION BOXES SHALL BE A MINIMUM OR 2" BELOW THE BOTTOM OF THE VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. ALL PEA GRAVEL IN THE VALVE BOX TO BE CLEANED FROM TOP OF VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. THE LIP OF THE VALVE BOX IS ALSO TO BE FREE OF DEBRIS.
- 24 VOLT WIRE SHALL BE 600V, UF US APPROVED, #14 GAUGE, SINGLE STRAND, PLASTIC, INSULATED COPPER WIRE. COMMON WIRES TO BE WHITE. CONTROL WIRES TO BE RED. NO BLACK WIRING IS TO BE USED. TAPE AND BUNDLE WIRE EVERY 10' AND LAY BESIDE MAINLINE IN TRENCH. SPLICE IN VALVE BOXES ONLY. USING FLASTOMFRIC SILICONE CONNECTIONS. PROVIDE 18" SLACK AT EACH FLOW IN MAINLINE TRENCH AND AT EACH REMOTE CONTROL VALVE. PULL ONE ADDITIONAL SPARE CONTROL WIRE TO EACH VALVE BOX LOCATION FOR POTENTIAL FUTURE USE. COLOR OF EXTRA CABLE SHALL BE YELLOW.
- ONE VALVE PER BOX. LOCATE PRESSURE REGULATOR AND "Y" STRAINER IN A SEPARATE VALVE BOX. JUMBO VALVE BOX MAY BE USED IN LIEU OF TWO SEPARATE BOXES FOR ONE VALVE/PRESSURE REGULATOR/WYE ASSEMBLY.
- ALL DRIP SYSTEMS TO BE FLUSHED THROUGH FLUSH CAPS. FLUSH CAPS TO BE LOCATED IN 10" ROUND TAN COLOR ECONOMY VALVE BOXES WITH LIDS. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTION OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTION OF LARGER SIZES MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
- BACKFILL SHALL BE PLACED IN TWO OR MORE COMPACTED LIFTS. SETTLING OF TRENCHES BY MORE THAN AN INCH SHALL BE BROUGHT TO FINISH GRADE AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTS REQUIRING MORE THAN ONE DRIP EMITTER SHALL HAVE EMITTERS DISTRIBUTED EVENLY AROUND PERIMETER OF THE PLANTING WELL. EMISSION POINTS AT THE ROOTBALLS SHALL BE LOCATED ON THE UPHILL SIDE. POSITION EMITTER PER DETAILS.
- MAINTAIN A 3' CLEARANCE FOR ALL PLANTING AND IRRIGATION AROUND FIRE HYDRANTS.
- PRIOR TO OWNER'S APPROVAL, AN IRRIGATION TUNE UP MUST BE PERFORMED AS FOLLOWS:
 - ALL IRRIGATION EQUIPMENT (INCLUDING ALL PIPE LINES AND AND SLEEVES) TO BE DOCUMENTED FROM TWO STATIONARY POINTS.
 - ALL DRIP SYSTEMS TO BE FLUSHED BEGINNING WITH "Y" STRAINER, WORKING AWAY FROM THE PRESSURE REGULATOR.
 - ALL IRRIGATION SPRINKLER HEADS TO BE FLUSHED OF DEBRIS AND FLOW CONTROLS. ADJUSTED TO ACHIEVE 100% COVERAGE FOR TURF AREAS AS APPLICABLE. AVOID OVERSPRAY ON ALL STREETS, CURBS, WALKS AND STRUCTURES.
 - ALL IRRIGATION HEADS TO BE FIELD AND MANUALLY ADJUSTED TO THE PROPER HEIGHT.
- SETBACK ALL SPRAY AND STREAM TYPE IRRIGATION HEADS 8" FROM BACK OF CURB, SIDEWALK, AND/OR DRIVEWAYS TO REDUCE OVER SPRAY. ALTERNATIVES TO ACHIEVE SIMILAR RESULTS SHALL BE APPROVED BY LA OR OWNER'S REPRESENTATIVE.
- PLANS ARE DRAWN FOR CLARITY TO INDICATE COVERAGE AREAS FOR THE SYSTEM. IRRIGATION LATERALS MAY BE PLACED IN COMMON TRENCHES TO AVOID EXTENSIVE RUNS UNDER PAVEMENT, WHERE APPROPRIATE.
- LANDSCAPE CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS THAT ARE COMPLETELY LEGIBLE AND ACCURATE FOR THE ACTUAL INSTALLATION THAT WAS DONE BY THE LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR HIRED TO DO THE INSTALLATION SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE AS BUILT DRAWINGS.

Symbol	Description	Manufacturer	Model #
	New Water Meter - See plans for locations		
	Electrical Power Pedestal		
	Controller	Rain Master Eagle	18 Station w/ Stainless steel pedestal on Conc. Base, Surge Protection, SIM Card, Dome Antenna & Handheld remote (1 per controller)
	Base Wireless Gateway	Tucor	Nexus BWR-400-G6
	Backflow Prevention Unit with Enclosure	Febco - 1" 825-YA	825Y 1" w/Guardshack Enclosure Painted Green
	Master Valve	Griswold	#2160 - Normally Open
	Flow Sensor	Irritrol	FS-B100 Flow Sensor Cable: EV-CAB-SEN (in conduit)
	Mainline Gate Valve	NIBCO	T113 - 1" Bronze
	1" Remote Control Valve	Rain Bird	Rain Bird 100-EFB-CP
	Pressure Regulator and Wye Strainer (not shown on plan)		Pressure Regulator: Rain Bird 44 LRC Wye Strainer: RBY-100-200MX
	Wireless DC Latching Receiver	Tucor	Tucor BWR-400 WVR-VB12
	Ball Valve	NIBCO	SFP 250
	Quick Coupler	Rainbird	44-LRC 1" with Locking Rubber Cover
	Emitter Irrigation Line for Trees	Cresline or equal	1" & 3/4" SCH 40
	Emitter Irrigation Line for Shrubs	Cresline or equal	1" & 3/4" SCH 40
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)	Bowsmith	ML 210 Multi-Port Emitter 1.0 gph per port- install with all ports open
	Single-port Emitter- As Needed (not shown on plan)	Bowsmith	SL 210 Single-Port Emitter 1.0 gph
	Flush Cap, Typical end of all lateral lines	Rainbird	700-CF-21
	Sch 40 PVC Sleeving under all pavement		
	Mainline - 1 1/2" Schedule 40 PVC		

Valve Key Station Number GPM

- GENERAL NOTES:
- ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
 - PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
 - STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
 - EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
 - CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.
- SLEEVE NOTES-
- SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
 - USE SCHEDULE 40 PIPE. SIZES AS FOLLOVED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-3/4", USE 3" SLEEVE, FOR PIPES 1-3/4" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
 - ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
 - ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.
- M.A.G. NOTE-
- SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

Waibel & Associates
Landscape Architecture
3011 South Priest Drive, Suite 101
Tucson, AZ 85724
Phone: 480.939.8049 Fax: 480.939.3366
email: jw@waibel.com

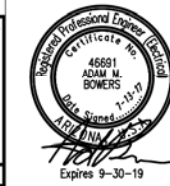
Contact Arizona 911 at least two full working days before you begin excavation.
ARIZONA 911
Call 911 or click Arizona911.com

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IRRIGATION DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

**GRAND CANALSCAPE PHASE II
SEGMENT 1: 1-17 TO 15TH AVE
ST87600114**

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: NTS						1.51	1.62



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.52	1.62

TRACE CONSULTING 1201 E. Jefferson St., Suite 3, Phoenix, AZ 85034

SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
 - 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details #10164 on site at all times during signal construction activities. City of Phoenix standard details #10164 available at <https://www.phoenix.gov/financesite/SolicitationAttachments/15087SectionVI%20Group%20A.pdf>
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M _{OF} 19th Ave	FROM M _{OF} Canal Pathway
1	CONT	48.8 ft. South	42.4 ft. West
2	PSP	48.8 ft. South	47.7 ft. West
3	SR	48.9 ft. North	23.7 ft. East
4	SR	52.4 ft. South	11.4 ft. West
5	A	58.2 ft. North	14.7 ft. East

NOTE: Distance is perpendicular to roadway center line

NO.	TYPE	FROM M _{OF} 19th Ave	FROM M _{OF} Canal
6	#7	48.4 ft. South	33.9 ft. West
7	#5	48.8 ft. North	88.2 ft. West
8	#5	49.0 ft. North	19.9 ft. West

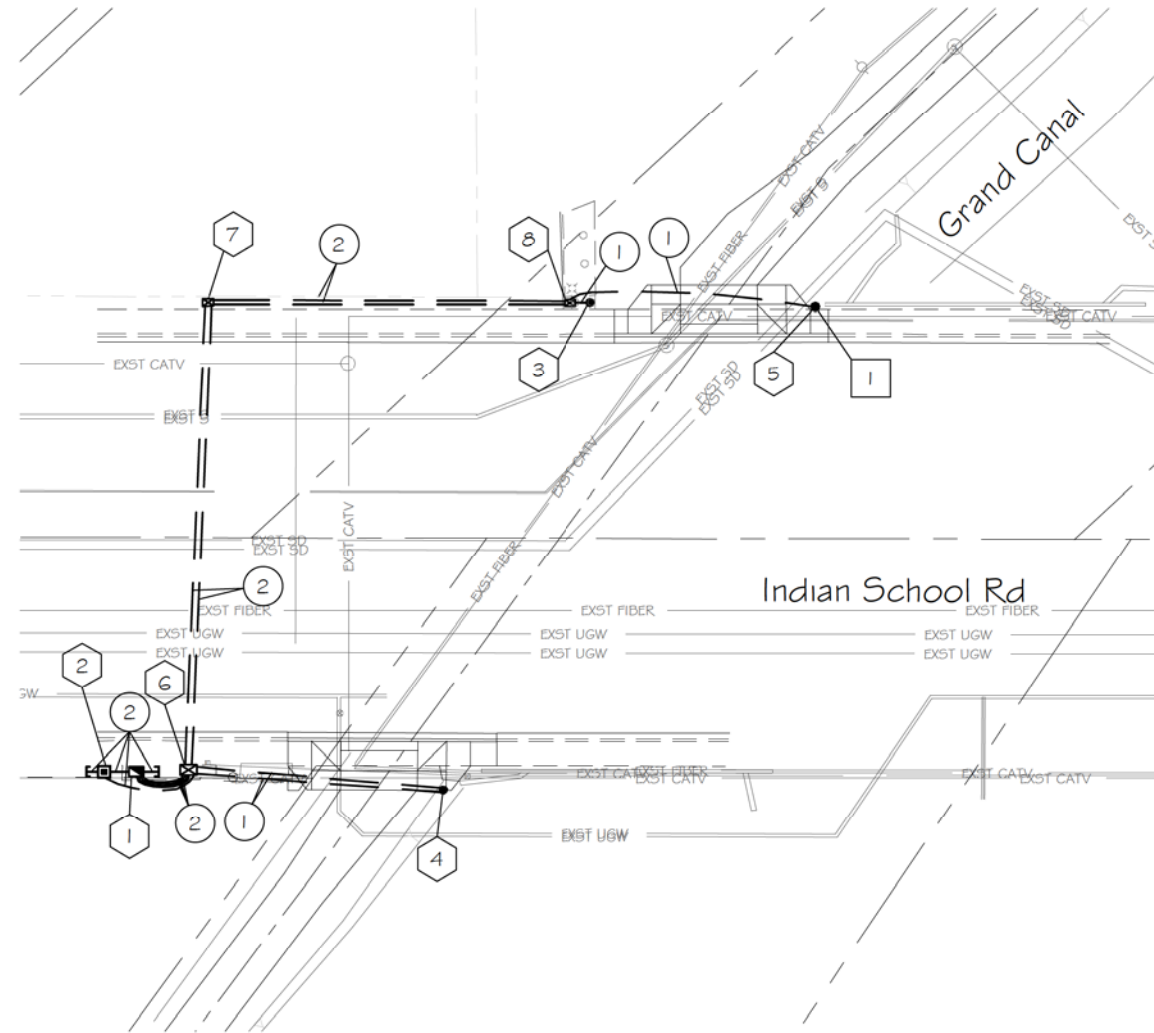
NOTE: Distance is perpendicular to roadway center line

INSTALL

- 1 thru 5 See Foundation Schedule
- 6 thru 8 See Junction Box Schedule
- 1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

REMOVE

- 1 Street light pole. Coordinate with SRP to disconnect power feed. - 1 Each



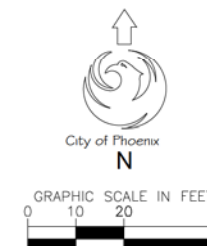
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HAWK - INDIAN SCHOOL FOUNDATION

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

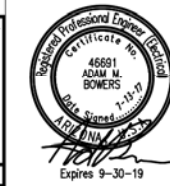
GRAND CANALScape PHASE II
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DR:	WTB	DES:	WTB	CK:	AMB	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS	
SCALE:	TS1.1						1.52	1.62



GRAND CANALScape PHASE II
 SEGMENT 1
 1-17 TO 15TH AVENUE

WRIGHT
 engineering corporation
 ELECTRICAL ENGINEERING AND DESIGN
 165 EAST HILTON DRIVE
 CHANDLER, ARIZONA 85225
 PHONE: 480.497.5829
 FAX: 480.497.5807
 www.wrightengineering.us
 Wright Project # 16033



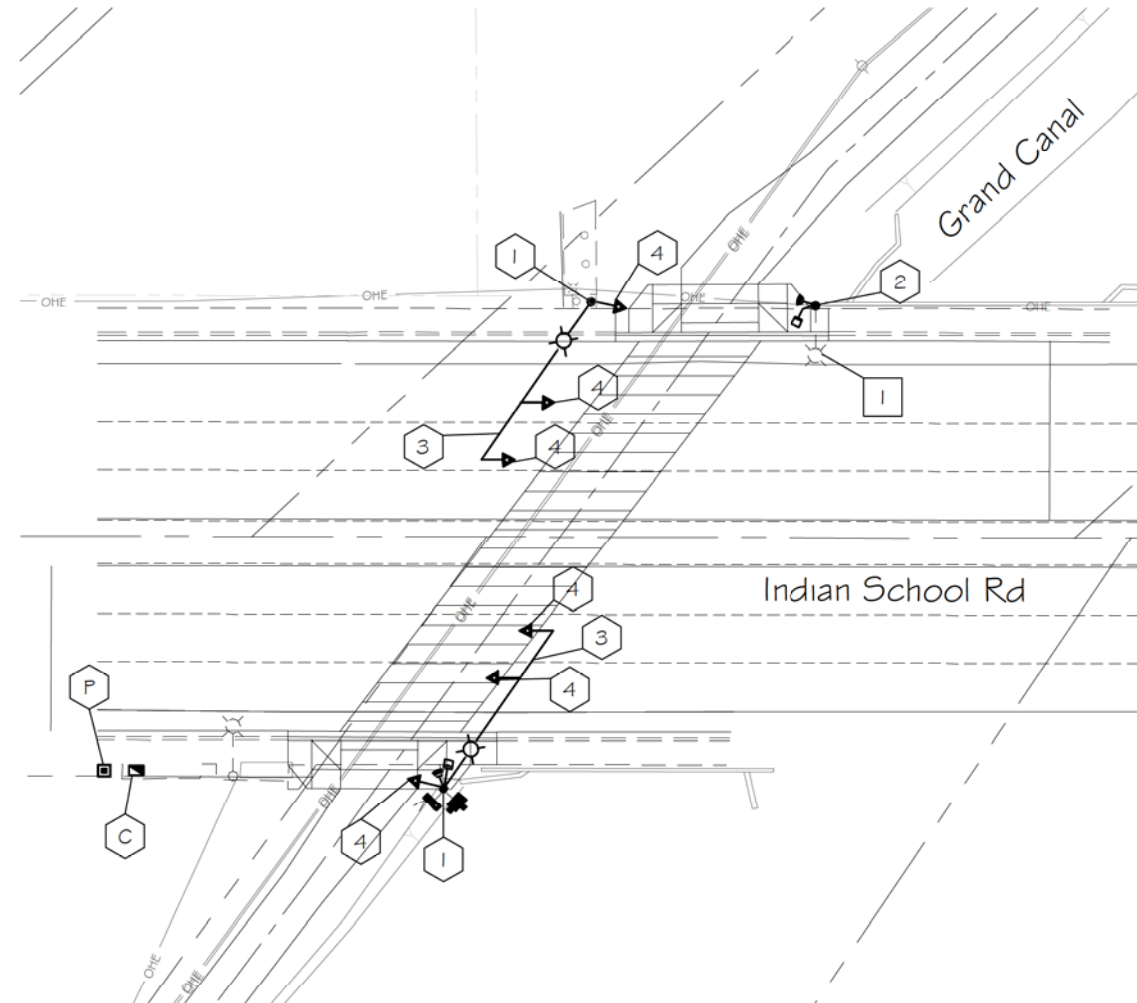
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TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK EQUIPMENT NOTES

- C** 3 Phase Controller Cabinet - 1 New
- P** Power Service Pedestal - 1 New
- 1** Traffic Signal Pole Type "SR" - 2 New
- 2** Traffic Signal Pole Type "A" - 1 New
- 3** 40' Signal Mast Arm - 2 New
- 4** 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- ⊗** LED Luminaire - 2 New
- ▣** Countdown Pedestrian Head - 2 New
- ⊣** AP5 Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- ⊠** Wireless Radio - 1 New
- ⊞** CCTV Camera - 1 New

REMOVE

- I** Remove Existing Street light - 1



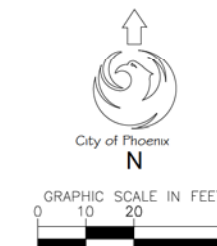
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

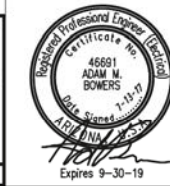
HAWK - INDIAN SCHOOL EQUIPMENT

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	WTB	DES:	WTB	CK:	AMB	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	TS1.2					1.53	1.62





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.54	1.62

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
 - 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

PROPOSED FOUNDATION SCHEDULE			
NO.	TYPE	FROM M.O.F 19th Ave	FROM M.O.F Canal Pathway
1	PSP	39.0 ft. West	44.8 ft. North
2	CONT	39.0 ft. West	39.9 ft. North
3	ADOT J	40.3 ft. West	18.1 ft. North
4	ADOT Q	38.8 ft. East	9.6 ft. South

NOTE: Distance is perpendicular to roadway center line

PROPOSED JUNCTION BOX SCHEDULE			
NO.	TYPE	FROM M.O.F 19th Ave	FROM M.O.F Canal Pathway
5	#7	38.6 ft. West	30.3 ft. North
6	#5	38.8 ft. East	8.9 ft. South

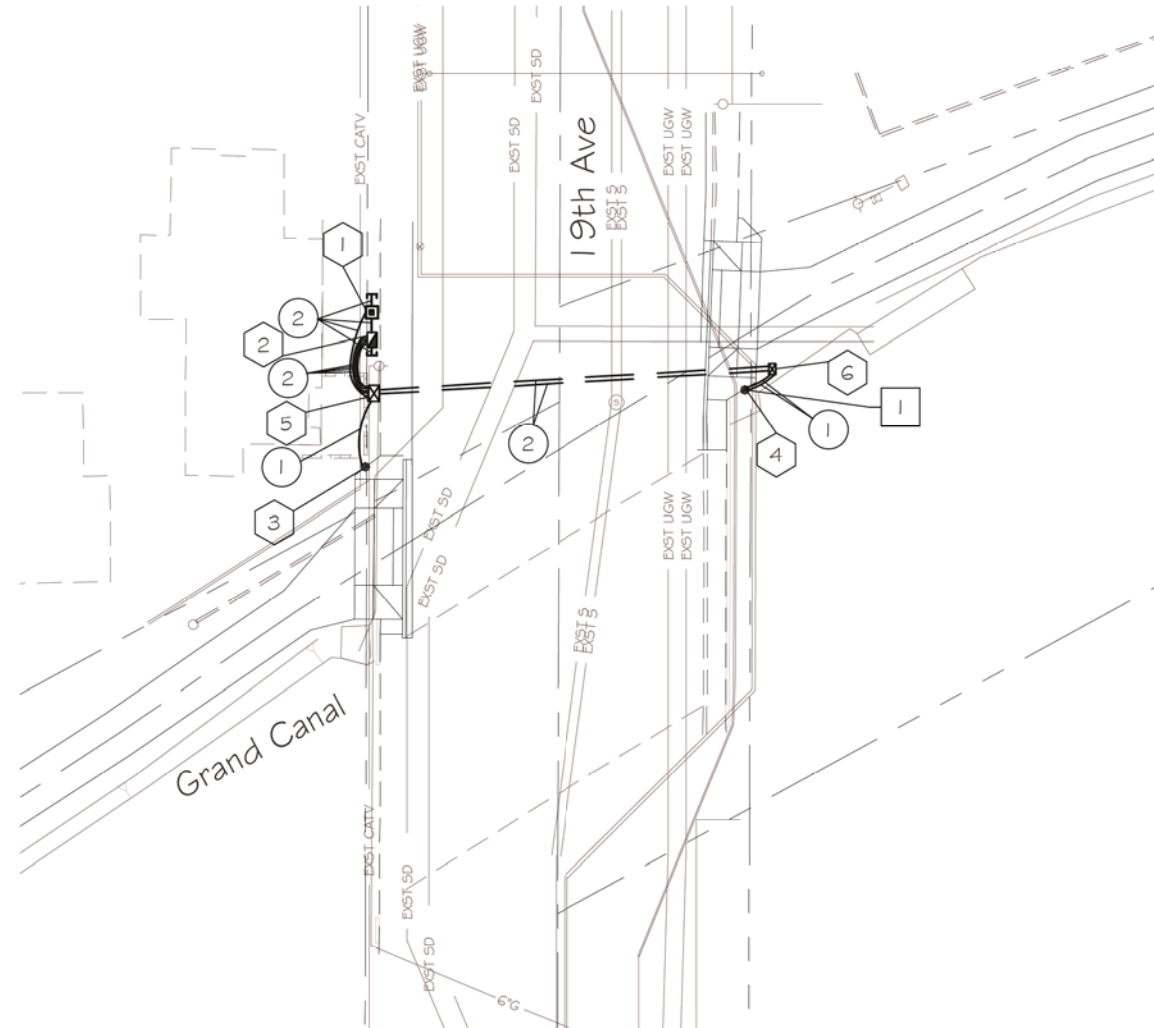
NOTE: Distance is perpendicular to roadway center line

INSTALL

- 1 thru 4 See Foundation Schedule
- 5 thru 6 See Junction Box Schedule
- 1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

REMOVE

- 1 Remove street light pole. Coordinate with SRP to disconnect power feed. - 1 Each



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HAWK - 19TH AVE FOUNDATION

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

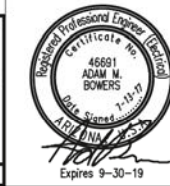
GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	WTB	DES:	WTB	CK:	AMB	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:				TS2.1	1.54	1.62	



GRAND CANALSCAPE PHASE II
SEGMENT 1
1-17 TO 15TH AVENUE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16033



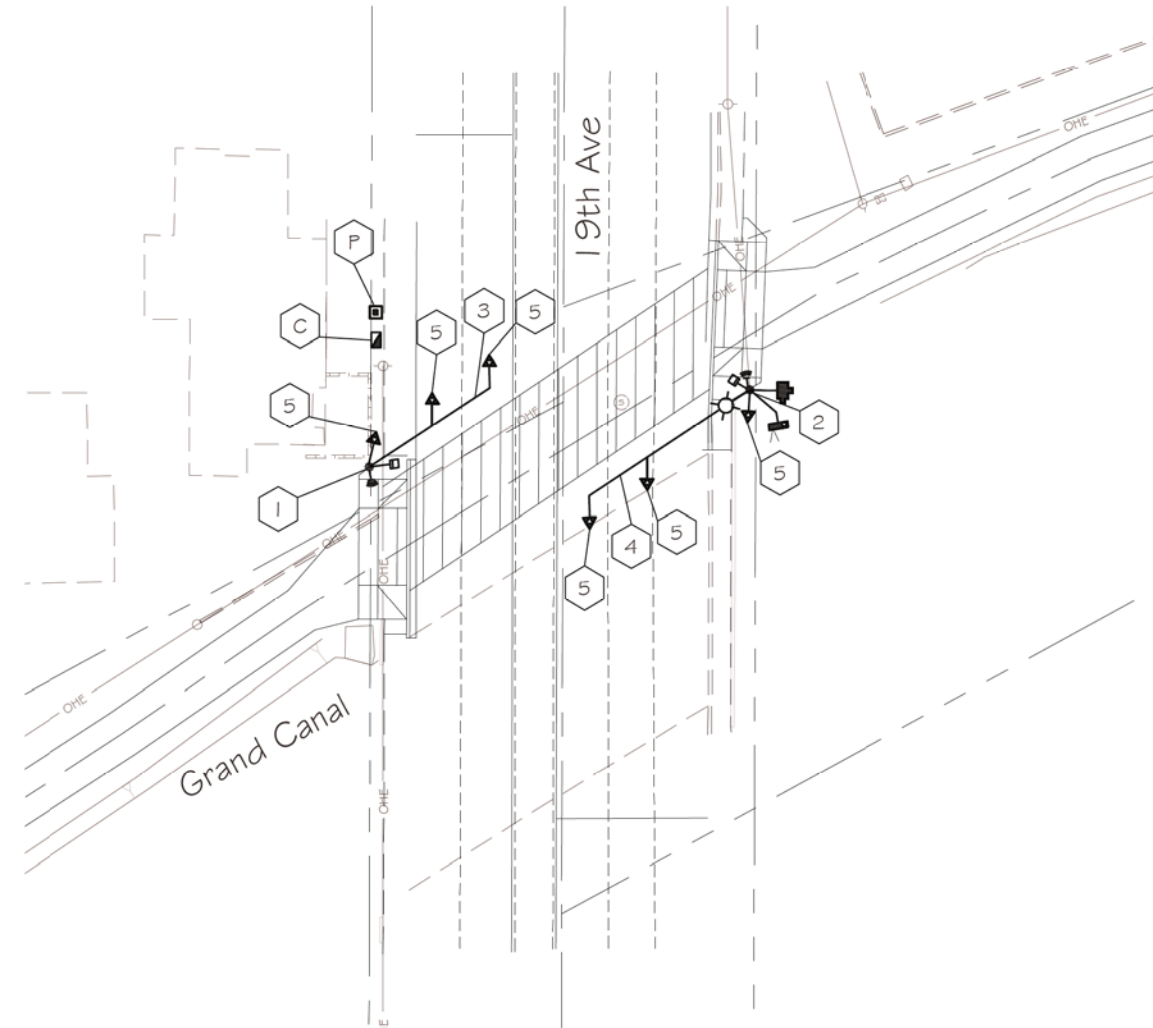
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.55	1.62

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK EQUIPMENT NOTES

- C 8 Phase Controller Cabinet - 1 New
- P Power Service Pedestal - 1 New
- I Traffic Signal Pole Type "ADOT J" - 1 New
- 2 Traffic Signal Pole Type "ADOT Q" - 1 New
- 3 30' Signal Mast Arm - 1 New
- 4 40' Signal Mast Arm - 1 New
- 5 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- ☉ LED Luminaire - 2 New
- ▣ Countdown Pedestrian Head - 2 New
- ➔ AP5 Pedestrian Push Button - 2 New
w/RIO-25 Pedestrian Push Button Sign
- 📻 Wireless Radio - 1 New
- 📷 CCTV Camera - 1 New



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HAWK - 19TH AVE EQUIPMENT
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114



DR:	WTB	DES:	WTB	CK:	AMB	SHEET NO:	TOTAL SHEETS
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	1.55

SCALE: **TS2.2** 1.55 1.62

GRAND CANALScape PHASE II
SEGMENT 1
I-17 TO 15TH AVE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16033

Professional Engineer License
57159
CLIFFORD M. TOLMAN
Arizona
Expires 3-31-20

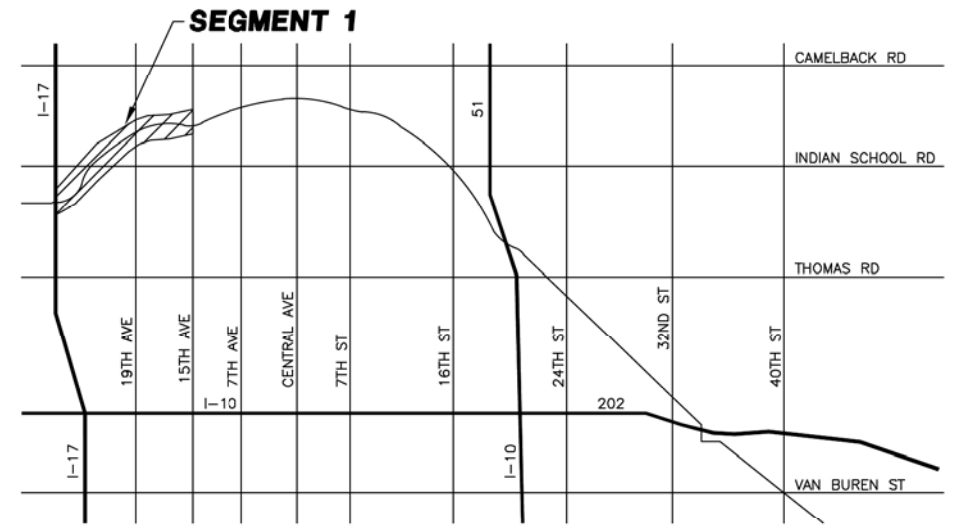
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.56	1.62

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

GENERAL ELECTRICAL NOTES

- 1. ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), FEDERAL, STATE AND LOCAL JURISDICTION CODES.
- 2. ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- 3. VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
- 4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES CAUSED AS A RESULT OF HIS WORK. CALL (602) 263-1100 FOR BLUE STAKES. IRRIGATION LINES LESS THAN 2" WILL NOT BE MARKED AND SHALL BE REPAIRED IN KIND BY THE CONTRACTOR.
- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- 6. PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
- 7. ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
- 8. CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
- 9. PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
- 10. LEAVE THE SITE CLEAN. REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
- 11. IT IS THE OBLIGATION OF THE CONTRACTOR TO ORGANIZE HIS WORK SO THAT A COMPLETE ELECTRICAL, INSTRUMENTATION, AND/OR CONTROL SYSTEM FOR THE FACILITY WILL BE PROVIDED AND SUPPORTED BY ACCURATE SHOP AND RECORD DRAWINGS, AND ALL O & M MANUALS.
- 12. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- 13. PROVIDE EMT INDOOR AND GRS OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30.
- 14. MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- 15. ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE XHHW (75 DEGREE C) FOR BELOW GRADE INSTALLATIONS (AND CONDUIT RISERS) AND THHN/THWN (75 DEGREE C) FOR ABOVE GRADE INSTALLATIONS. MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT. PER MARICOPA COUNTY AMENDMENT TO NEC ARTICLE 334.10 AND 334.12. MARICOPA COUNTY DOES NOT PERMIT TYPES NM, NMC, NMS (ROMEX) CABLES IN COMMERCIAL APPLICATIONS.
- 16. A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY PER NEC CODE.
- 17. WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDED CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
- 18. BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
- 19. CONTRACTOR SHALL PLAN AND INSTALL WORK IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.
- 20. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
- 21. CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
- 22. ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
- 23. ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
- 24. WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT PATHS. ASPHALT WALKS SHALL BE REPLACED IN KIND.
- 25. CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXPECTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.
- 26. CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32-INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4-INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF-TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
- 27. ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
- 28. CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDERS AND BRANCH CIRCUIT WIRING. INSURE LOW IMPEDANCE GROUND PATH SYSTEM. PERFORM HIPOT TESTING WHEN REQUIRED BY LOCAL JURISDICTION.

- 29. ALL CONDUIT AND J-BOXES SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT AND J-BOXES MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- 30. CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
- 31. ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURERS RECOMMENDATIONS AND U.L. APPROVAL.
- 32. ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
- 33. FULL LOAD AMPS (FLA) SIZES, AS NOTED IN THESE DRAWINGS, ARE BASED ON SPECIFIED EQUIPMENT DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIPMENT SUPPLIED AND COORDINATE ACCORDINGLY PER EQUIPMENT SUPPLIERS RECOMMENDATIONS.
- 34. ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R OR NEMA-4 ENCLOSURES.
- 35. CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A Pliable SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
- 36. CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
- 37. ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR INLINE FUSING, PROVIDE 5A FUSING IN FUSEHOLDER.
- 38. PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
- 39. MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
- 40. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER-RESISTANT TYPE. ALL WEATHERPROOF WHILE IN-USE RECEPTACLE COVERS SHALL BE METAL.
- 41. SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: 1) LIGHT FIXTURES, 2) POLES, 3) POLE BASES, 4) SERVICE ENTRANCE SECTION, 5) ELECTRICAL EQUIPMENT, 6) DISCONNECT SWITCHES, 7) TIME CLOCKS AND OTHER CONTROLS, 8) LIGHTING CONTACTORS AND 9) PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- 42. THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.



LEGEND

- ⊞ 100 AMP 120/240V 1ϕ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- ⬇ LED PATHWAY LIGHT. 12' MOUNTING HEIGHT
- ⊕ EXISTING STREET/AREA LIGHT
- ⊕ EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- △ IRRIGATION CONTROLLER
- M(##) CIRCUIT NUMBERS

CONSTRUCTION NOTES:

- ① 100 AMP, 120/240V, 1ϕ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.2.
- ④ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑤ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.

SHEET INDEX

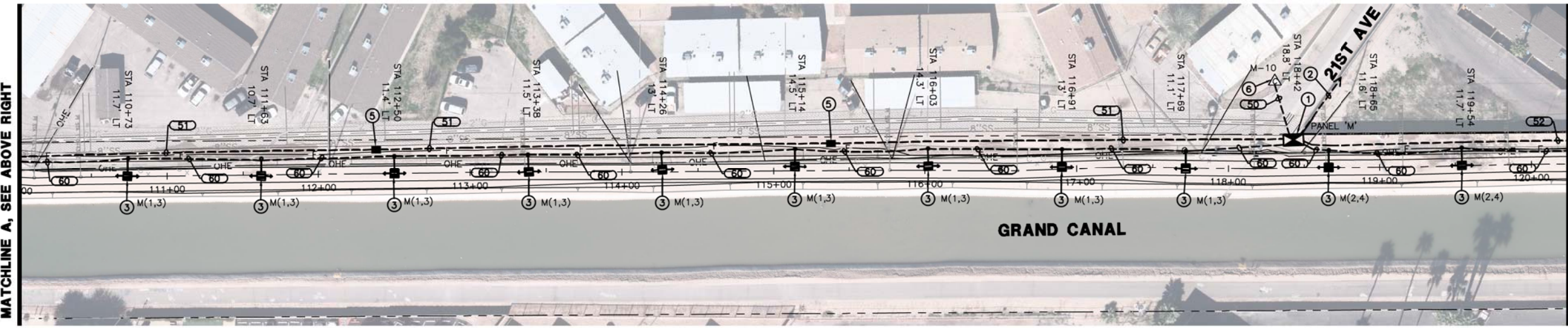
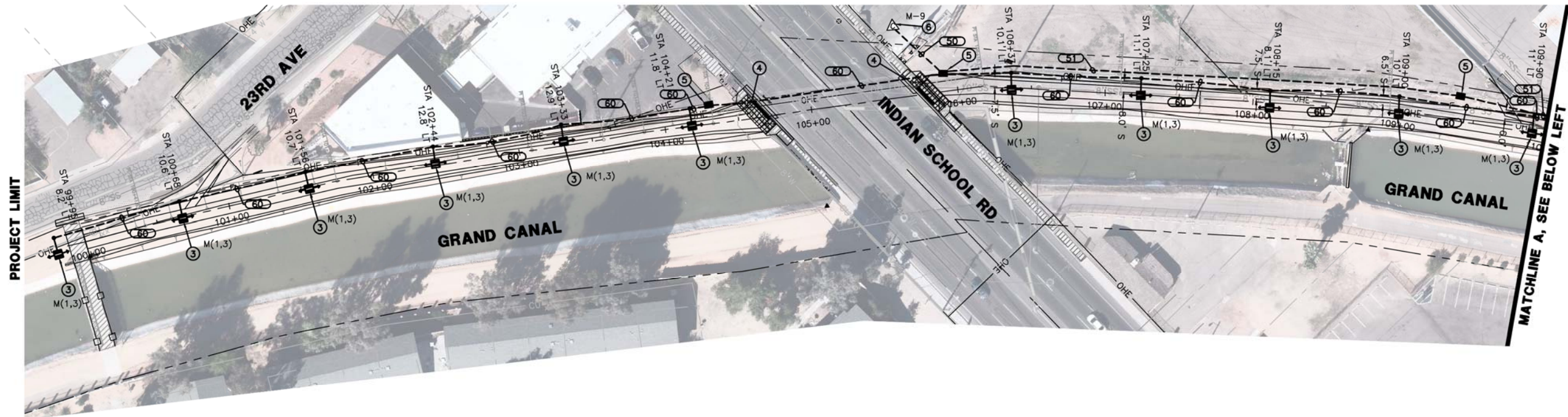
- SE1.1 ELECTRICAL COVER SHEET
- SE2.1 ELECTRICAL SITE PLAN
- SE2.2 ELECTRICAL SITE PLAN
- SE2.3 ELECTRICAL SITE PLAN
- SE3.1 ELECTRICAL DETAILS
- SE3.2 ELECTRICAL DETAILS
- SE4.1 TYPICAL LIGHT SPACING EXHIBIT

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2-B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL COVER SHEET
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE1.1						1.56	1.62



LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- IRRIGATION CONTROLLER
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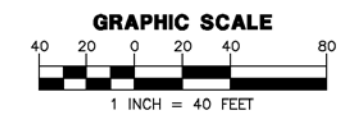
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- 1 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
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- 6 IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.

WIRE & CONDUIT TABLE

NO.	SIZE	POWER	GROUND	TYPE*	REMARKS
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#8	1-#8	CU	TYP.
52	1"	2-#6	1-#6	CU	TYP.
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.



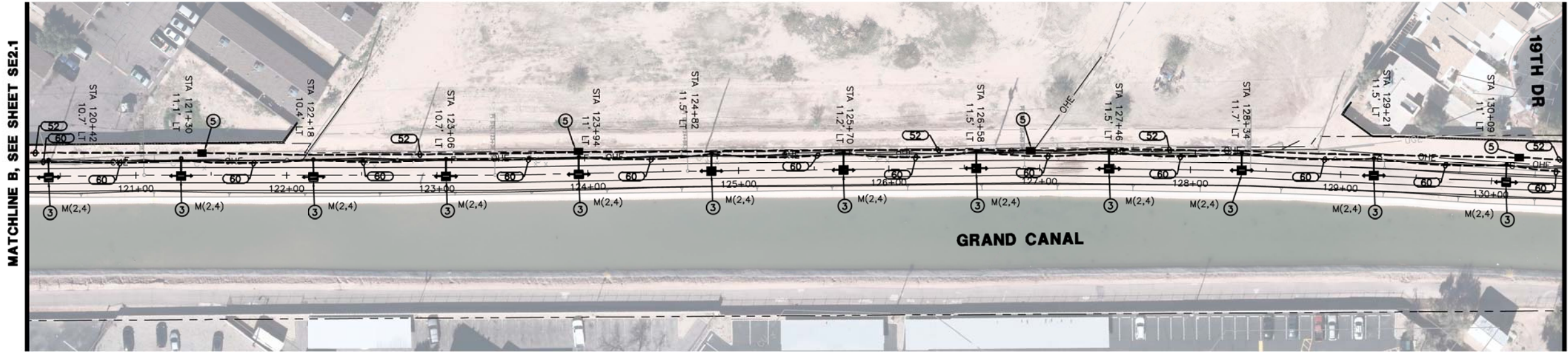
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS
SCALE:	SE2.1					1.57	1.62

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



NO ELECTRICAL WORK EAST OF 19TH AVENUE

LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- IRRIGATION CONTROLLER
- CIRCUIT NUMBERS

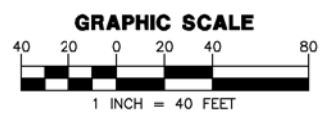
CONSTRUCTION NOTES:

- ① 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.2.
- ④ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑤ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.

WIRE & CONDUIT TABLE

CONDUIT NO.	CONDUIT SIZE	POWER	WIRE		REMARKS
			GROUND	TYPE* (CKT #)	
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#8	1-#8	CU	TYP.
52	1"	2-#6	1-#6	CU	TYP.
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
				AL	LOW LIGHT LEVEL

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET NO:	TOTAL SHEETS
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	1.58
SCALE:	SE2.2						1.62



GRAND CANALScape PHASE II
SEGMENT 1
I-17 TO 15TH AVE

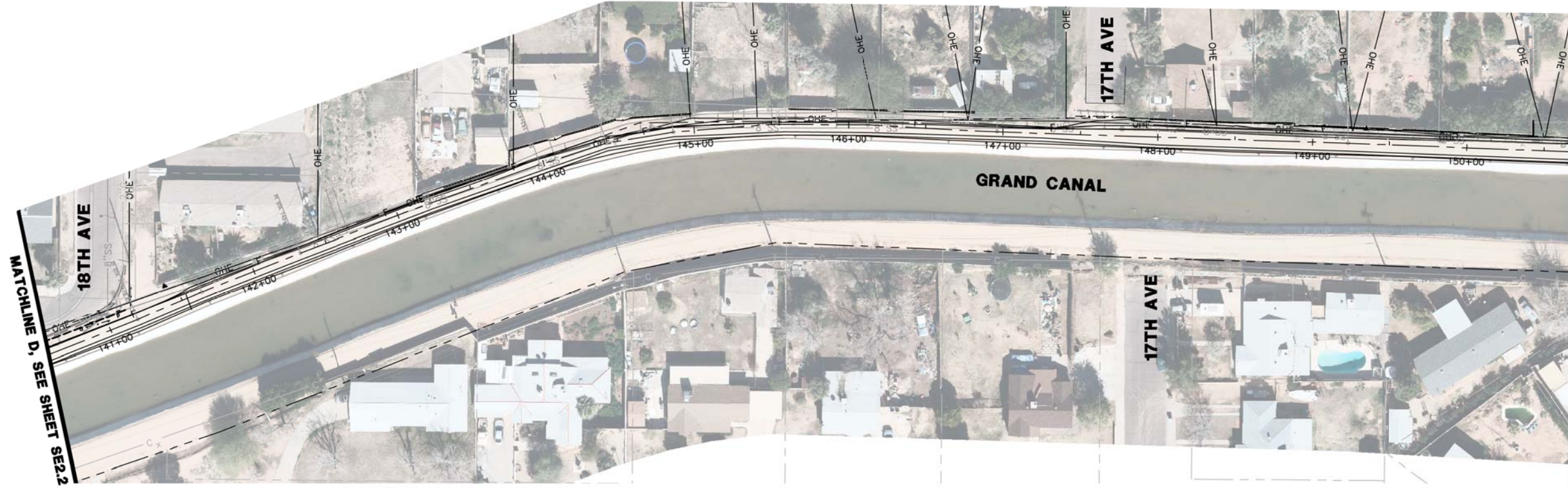
WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16033



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.59	1.62

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE



LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- IRRIGATION CONTROLLER
- CIRCUIT NUMBERS

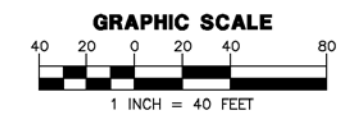
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WIRE & CONDUIT TABLE

NO.	SIZE	WIRE		TYPE* (CKT #)	REMARKS
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* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

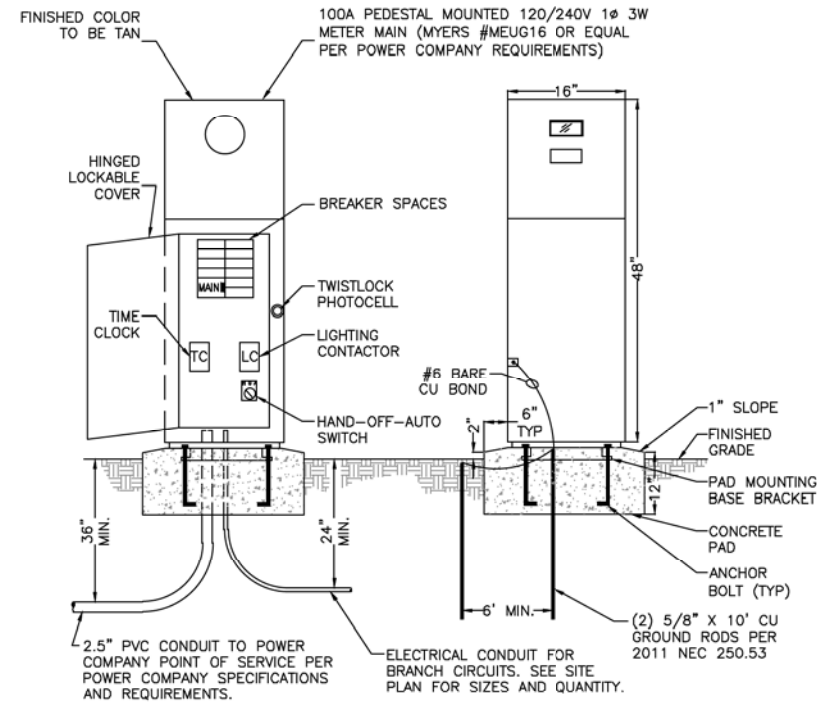


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS
SCALE:	SE2.3					1.59	1.62

NO.	DESCRIPTION	REVISION BY	CITY OF PHOENIX	DATE

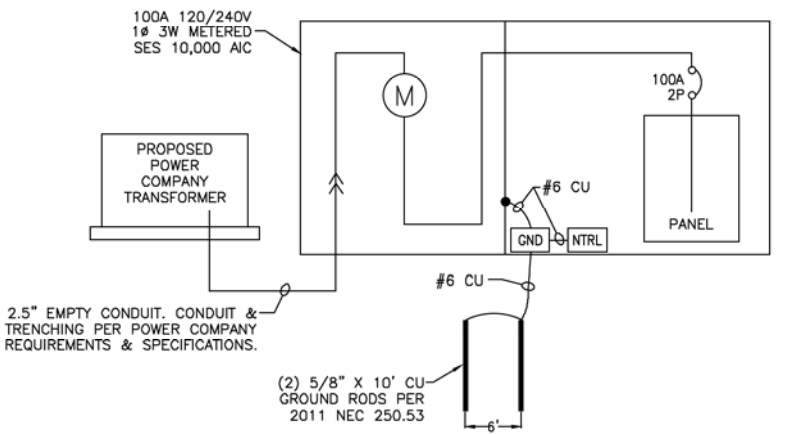


PEDESTAL NOTES

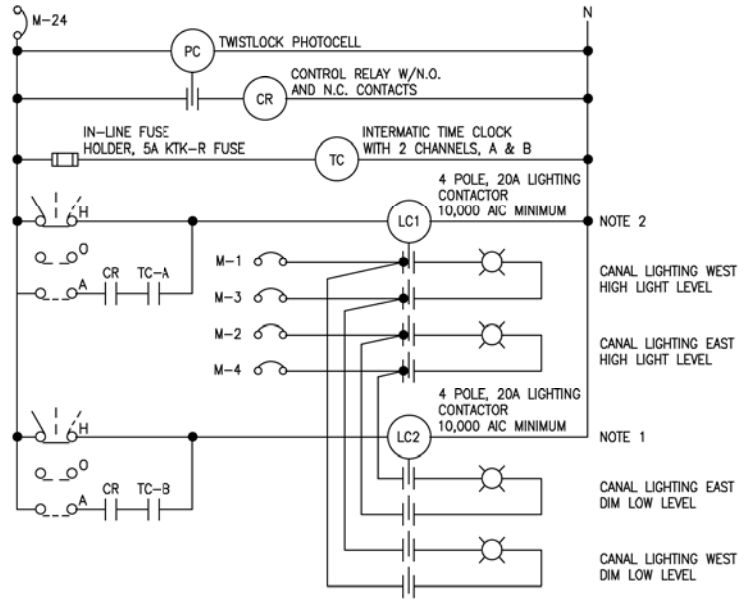
- APPROVED EQUAL MANUFACTURERS: MYERS, MILBANK, PACIFIC UTILITY PRODUCTS
- SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
- PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
- ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
- ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
- PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
- PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

PANEL NAME: M		120/240V, 1φ, 3W				100A MAIN BKR			
LOCATION: STA 118+50		TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	Aφ	Bφ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/	* CANAL LIGHTING WEST	476	918		442	* CANAL LIGHTING EAST	20/	2
3	/2		476		918	442		/2	4
5	20/1	SPARE	0	0		0	SPARE	20/1	6
7	/2		0		0	0		/2	8
9	20/1	IRRIGATION CONTROLLER WEST	200	400		200	IRRIGATION CONTROLLER CENTRAL	20/1	10
11	20/1	IRRIGATION CONTROLLER EAST	200		200	0	SPARE	20/1	12
13	20/1	SPARE	0	0		0	SPARE	20/1	14
15	20/1	SPARE	0		0	0	SPARE	20/1	16
17	20/1	SPARE	0	0		0	SPARE	20/1	18
19	20/1	SPARE	0		0	0	SPARE	20/1	20
21	20/1	SPARE	0	0		0	SPARE	20/1	22
23	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1	24
CODE TOTAL VA/φ			1318	1318	*INDICATES LOAD @ 125%				
CODE TOTAL AMPS/φ			11.0	11.0	10,000 AIC BREAKERS				

1 100A PEDESTAL MOUNTED SERVICE (TYP)
NO SCALE 120/240V 1φ 3W



2 100A SINGLE LINE DIAGRAM (TYP)
NO SCALE 120/240V 1φ 3W



CONTROL SCHEM. LEGEND

- CIRCUIT BREAKER
- N.O. CONTACT
- PHOTOCELL RELAY
- CONTROL RELAY
- TIME CLOCK
- LIGHTING CONTACTOR
- HAND-OFF-AUTO SWITCH

CONTROLLER NOTES

- THIS CIRCUIT TO BE ACTIVATED FROM DUSK TO DAWN.
- THIS CIRCUIT TO BE ACTIVATED AT DUSK AND SHUT OFF AT 10:30 PM.

LIGHTING CONTROL SCHEMATIC (PANEL M)

NO SCALE 120V



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 1: I-17 TO 15TH AVE
ST87600114

DR: DVG	DES: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 7/13	DATE: 7/13	DATE: 7/13	NO:	
SCALE:			SE3.1	1.60 1.62

GRAND CANALSCAPE PHASE II
 SEGMENT 1
 I-17 TO 15TH AVE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	1.62	1.62

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

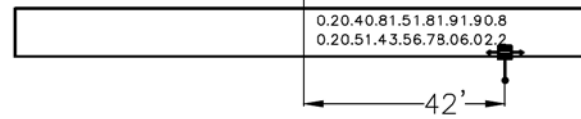
NO.	DESCRIPTION	REV BY	CHK BY	DATE

PHOTOMETRIC ANALYSIS

TYPICAL RESULTS FOR 12' MOUNTING HEIGHT

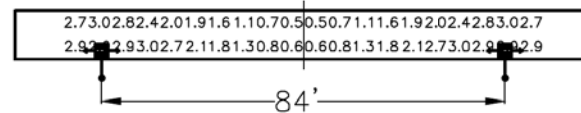
VERTICAL FC RESULTS:

MAXIMUM FOOT-CANDLE 8.0
 MINIMUM FOOT-CANDLE 0.2
 AVERAGE FOOT-CANDLE 2.4



HORIZONTAL FC RESULTS:

MAXIMUM FOOT-CANDLE 3.0
 MINIMUM FOOT-CANDLE 0.5
 AVERAGE FOOT-CANDLE 2.0
 UNIFORMITY OF LIGHT LEVELS (AVG/MIN) 3.9



- LEGEND:**
- LED POLE MOUNTED LIGHT FIXTURE
 - 2700K, TYPE II DISTRIBUTION
 - 12' MOUNTING HEIGHT
 - 5' BACK OF PATH (TYPICAL, SOME LOCATIONS VARY SLIGHTLY)

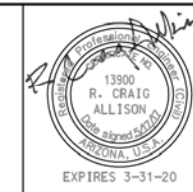


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL LIGHT SPACING EXHIBIT
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 SEGMENT 1: I-17 TO 15TH AVE
 ST87600114

DR: DVG	DES: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 7/13	DATE: 7/13	DATE: 7/13	NO:	1.62

SCALE: **SE4.1** 1.62 1.62



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.001	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

CITY OF PHOENIX STREET TRANSPORTATION DEPARTMENT DESIGN & CONSTRUCTION MANAGEMENT DIVISION GRAND CANALScape 16th STREET TO 36th STREET PROJECT NO. ST87600114 FINAL SUBMITTAL

MAYOR
GREG STANTON
CITY MANAGER
ED ZUERCHER

CITY COUNCIL

- | | |
|----------------|--------------------|
| DISTRICT NO 1. | THELDA WILLIAMS |
| DISTRICT NO 2. | JIM WARING |
| DISTRICT NO 3. | DEBRA STARK |
| DISTRICT NO 4. | LAURA PASTOR |
| DISTRICT NO 5. | DANIEL VALENZUELA |
| DISTRICT NO 6. | SAL DICICCO |
| DISTRICT NO 7. | MICHAEL NOWAKOWSKI |
| DISTRICT NO 8. | KATE GALLEGO |



2017

CITY BENCHMARK:

16TH ST/INDIAN SCHOOL
COP BC IN WEST HH
ELEV= 1129.067

20TH ST/OSBORN RD
COP BC IN HH
ELEV= 1133.789

24TH ST/THOMAS RD
COP BC IN HH
ELEV= 1135.477

24TH ST/OAK ST
SRVWUA BC ON NW SIDE OF
IRRIGATION BOX ON SW
CORNER OF INTERSECTION
ELEV= 1129.104

32ND ST/MCDOWELL RD
COP BC IN HH
ELEV= 1138.766

32ND ST/ROOSEVELT ST
COP BC IN HH
ELEV= 1127.896

40TH ST/VAN BUREN
US RECLAMATION SERVICE BC
IN HH JUST EAST OF TWO
COP BC FLUSH IN THE
INTERSECTION
ELEV= 1141.768

INDEX OF SHEETS

- | | |
|-------------|-----------------------------|
| 2.001 | PHASE II COVER SHEET |
| 2.002 | LEGEND, NOTES, & CONTACTS |
| 2.003-2.004 | QUANTITY SUMMARY |
| 2.005-2.007 | TYPICAL SECTIONS |
| 2.008-2.011 | SURVEY CONTROL |
| 2.012-2.052 | PATHWAY PLAN & PROFILE |
| 2.053-2.067 | BASIN/PIPE PLAN AND PROFILE |
| 2.068-2.072 | DRAINAGE DETAILS |
| 2.073-2.093 | ROADWAY DETAILS |
| 2.094-2.099 | BRIDGE PLANS |
| 2.100-2.151 | LANDSCAPE PLANS |
| 2.152-2.165 | SIGNAL & MARKING PLANS |
| 2.166-2.182 | LIGHTING PLANS |

LENGTH OF PROJECT = 18,950 LF = 3.59 MILES

BASIS OF COORDINATES:

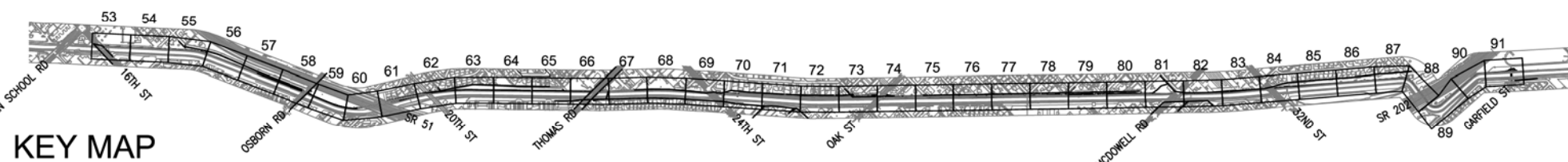
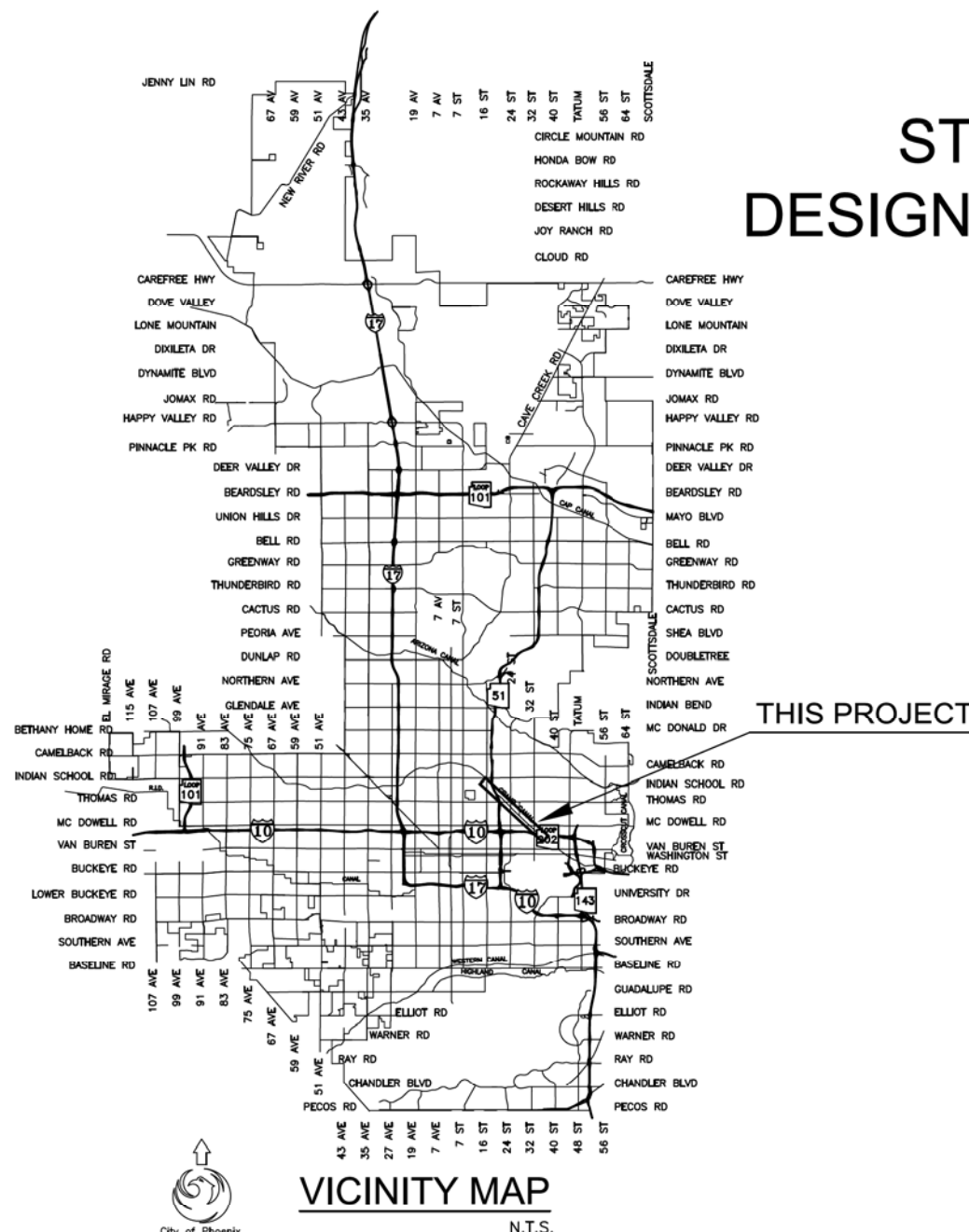
BASED ON NAD 83 ARIZONA CENTRAL ZONE
STATE PLANE COORDINATES CENTERED ON A MCDOT
MONUMENT (3561) AT THE INTERSECTION OF THOMAS
ROAD AND 24TH STREET.

BASIS OF ELEVATIONS:

BASED ON NGVD 27 DATUM USING THE PUBLISHED
VALUE OF THE MCDOT CENTERLINE MONUMENT AT THE
INTERSECTION OF THOMAS ROAD AND 24TH STREET,
ELEVATION BEING 1135.48.

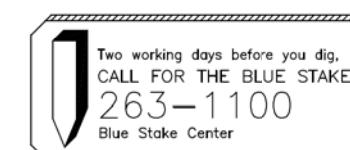
BASIS OF BEARING:

BEGINNING AT THE MCDOT MONUMENT FOUND AT
THE INTERSECTION OF THOMAS ROAD AND 24TH
STREET BEARING WEST TO THE NEXT MCDOT
MONUMENT AT THE INTERSECTION OF THOMAS
ROAD AND THE WEST ON/OFF RAMP TO SR 51,
STATE PLANE BEARING BEING N 89°42'25" E.



APPROVED _____
ASSISTANT STREET TRANSPORTATION DIRECTOR DATE _____

APPROVED _____
DEPUTY STREET TRANSPORTATION DIRECTOR DATE _____



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PROJECT NUMBER: ST87600114 - FINAL SUBMITTAL

ST87600114, GRAND CANALScape, 16TH STREET TO 36TH STREET, PHASE II, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.004	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

ITEM NO	DESCRIPTION	UNIT	TOTAL	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65	2.66	2.67
BASIN IMPROVEMENTS																		
M2001005	Earthwork for Basin, Includes Clearing & Grubbing, Excavation, Grade & Shape	Cu.Yd.	3928	126	875	1140	1349	126	37	36	53	48	54	75	9			
M2150035	Shotcrete Channel	Sq.Yd.	3045					103	1010	957	765	210						
M3404600	Vehicular Maintenance Access Ramp Per Plans	Each	4	1			1	2										
M3450026	Adjust Grade at Utility As Detailed On Plans	Each	7							1	1		2	3				
M4200011	Swing Gate Per Plans	Each	4	1			1	2										
M5052065	Concrete Scupper As Detailed On Plans	Each	2										1	1				
M5056018	Headwall for 18" Pipe, SRP Standard Headwall	Each	1										1					
M5056024	Headwall for 24 Pipe, SRP Standard Headwall	Each	13	1			2	2	2	2	2					2		
M5057082	Junction Structure As Detailed On Plans	Each	1	1														
M6185018	18" Rubber Gasket Reinforced Concrete Pipe, Class V (Private Irrigation)	Lin.Ft.	25															25
M6185024	24" Rubber Gasket Reinforced Concrete Pipe, Class V (Private Irrigation)	Lin.Ft.	338	6			16	200	16	16	16					68		
M6185030	30" Rubber Gasket Reinforced Concrete Pipe, Class V (Private Irrigation)	Lin.Ft.	38															38
REMOVALS																		
M3500031	Remove & Replace Headwall Per Pipe Plan & Profile	Each	5	1				2								2		
M3500036	Remove Catch Basin, Backfill & Compact	Each	1										1					
M3500040	Remove Pipe, Backfill & Compact	Lin.Ft.	30										30					
M3500621	Cut & Plug Existing Storm Drain Pipe	Each	4	1				1			2							



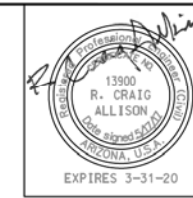
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

**DRAINAGE
QUANTITY SUMMARY**
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.004	2.182

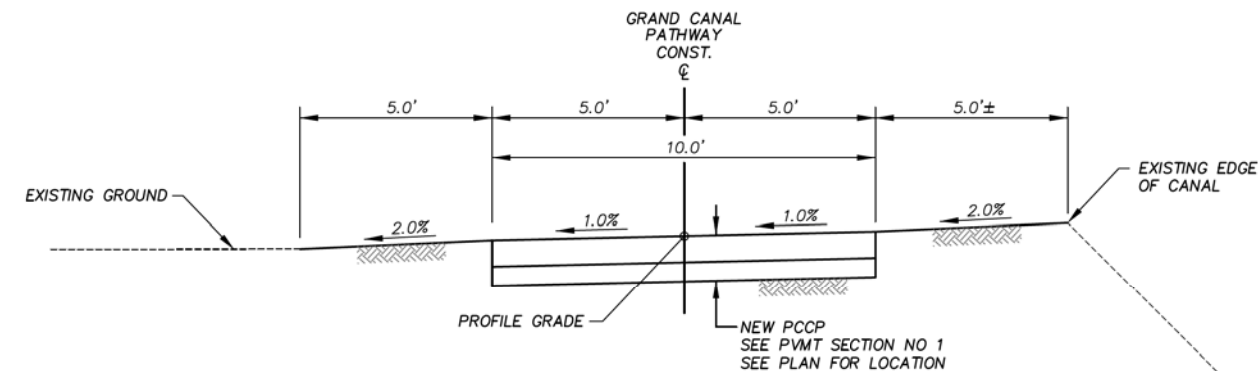
SCALE: _____

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



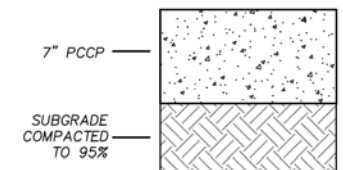
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.005	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



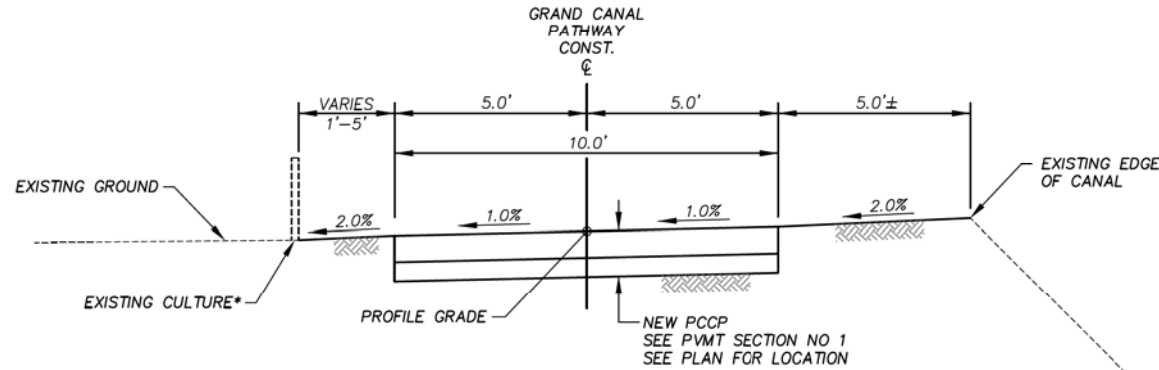
TYPICAL SECTION

- STA 10+00 TO STA 17+65
- STA 18+84 TO STA 77+31
- STA 131+60 TO STA 134+80
- STA 136+50 TO STA 153+86
- STA 154+26 TO STA 155+80
- STA 161+82 TO STA 182+30
- STA 195+30 TO STA 197+90
- STA 198+85 TO STA 199+16



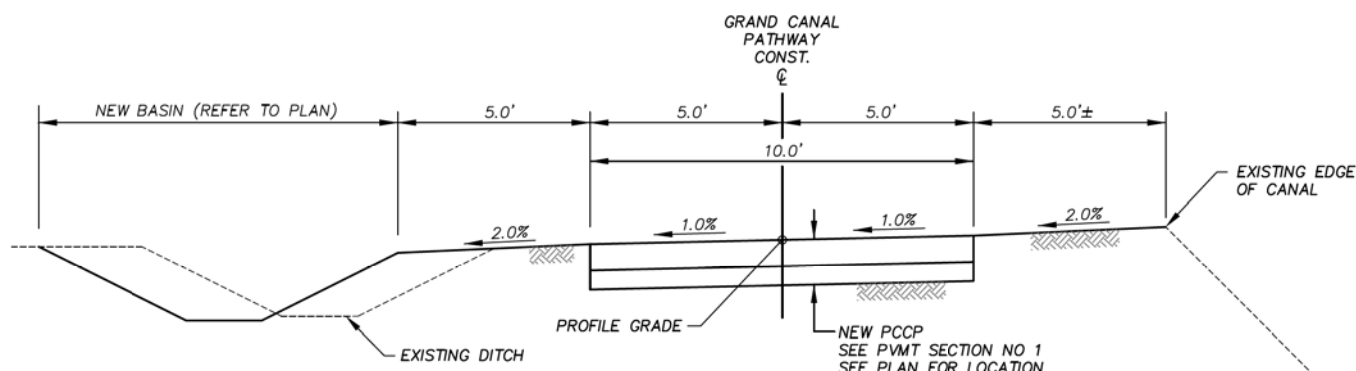
PAVEMENT STRUCTURAL SECTION NO. 1
PATHWAY
NOT TO SCALE

STATION	OFFSET (FT)	*EXISTING CULTURE
17+65 TO 18+84	LT 6 TO 10+	FENCE
77+31 TO 80+85	LT 8 TO 10+	CONCRETE CURB
80+85 TO 87+00	LT 8 TO 10+	FENCE
87+00 TO 89+45	LT 7 TO 10+	BLOCK WALL-BUILDING
89+45 TO 90+10	LT 7 TO 10+	CONCRETE SLAB-CURB
91+60 TO 92+05	LT 7 TO 10+	BLOCK WALL
93+60 TO 94+55	LT 7 TO 10+	PAVED PARKING
134+80 TO 136+50	LT 8 TO 10+	FENCE
155+80 TO 161+82	LT 6 TO 10+	FENCE
182+30 TO 195+30	LT 8 TO 10+	FENCE



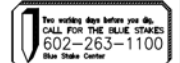
TYPICAL SECTION

- STA 17+65 TO STA 18+84
- STA 77+31 TO STA 94+55
- STA 134+80 TO STA 136+50
- STA 155+80 TO STA 161+82
- STA 182+30 TO STA 195+30



TYPICAL SECTION

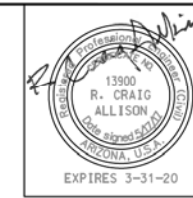
- STA 94+55 TO STA 131+60



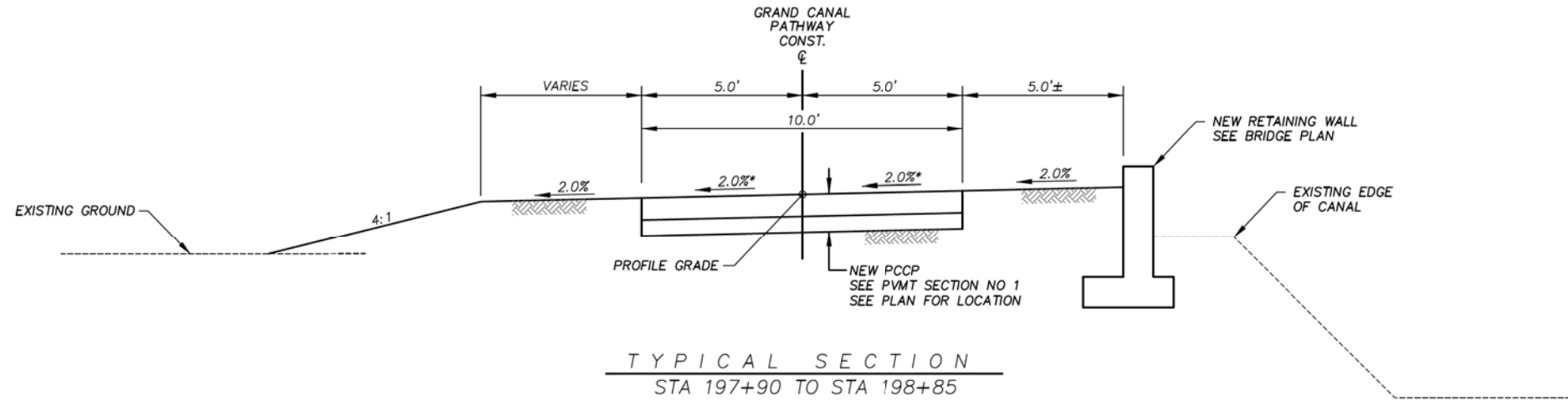
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL SECTIONS				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.005	2.182
SCALE:				

ST87600114 GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

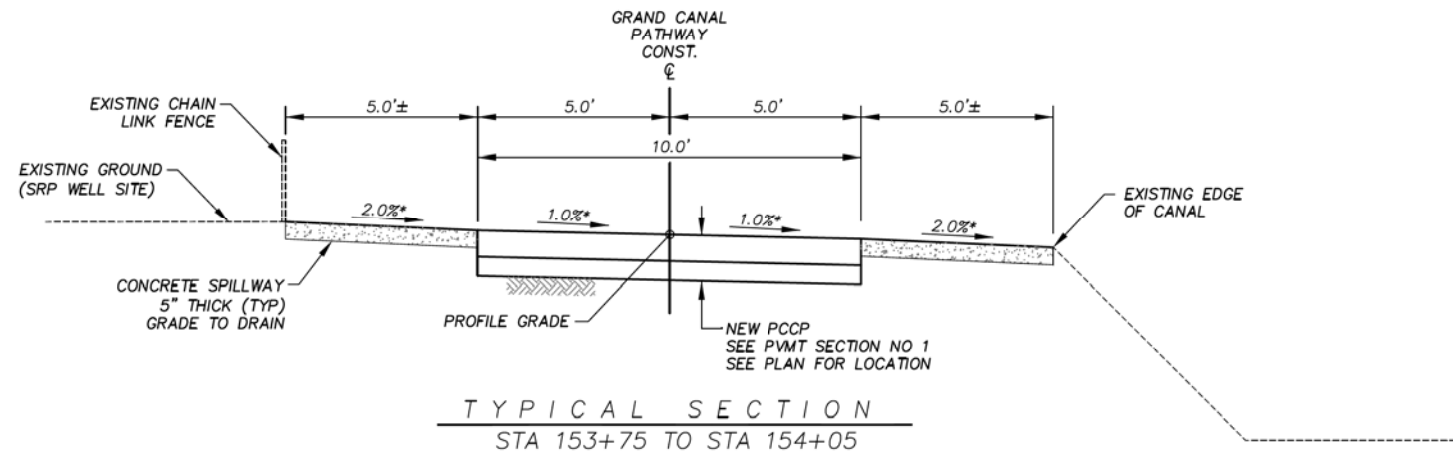
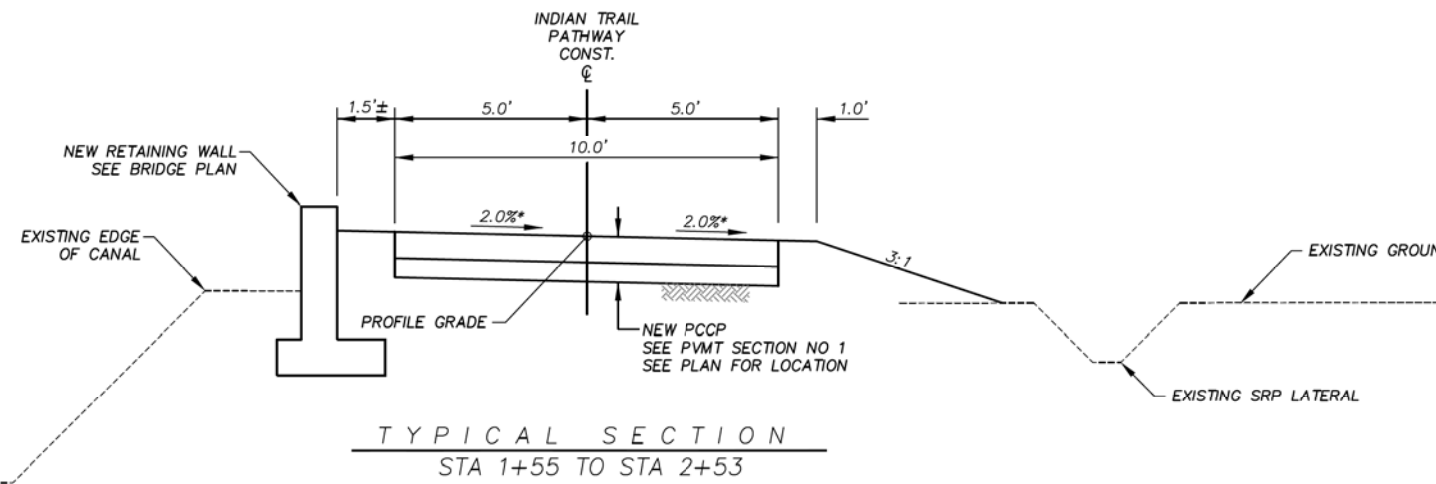


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.006	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



* STA 197+79 TO STA 197+84
TRANSITION FROM 1% TO 2%
MATCH BRIDGE APPROACH SLAB

STA 198+94 TO STA 198+99
TRANSITION FROM 2% TO 1%
MATCH BRIDGE APPROACH SLAB



* STA 153+75 TO STA 153+85
TRANSITION FROM 1% LEFT TO 1% RIGHT

STA 153+95 TO STA 154+05
TRANSITION FROM 1% RIGHT TO 1% LEFT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL SECTIONS				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.006	2.182
SCALE:				

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

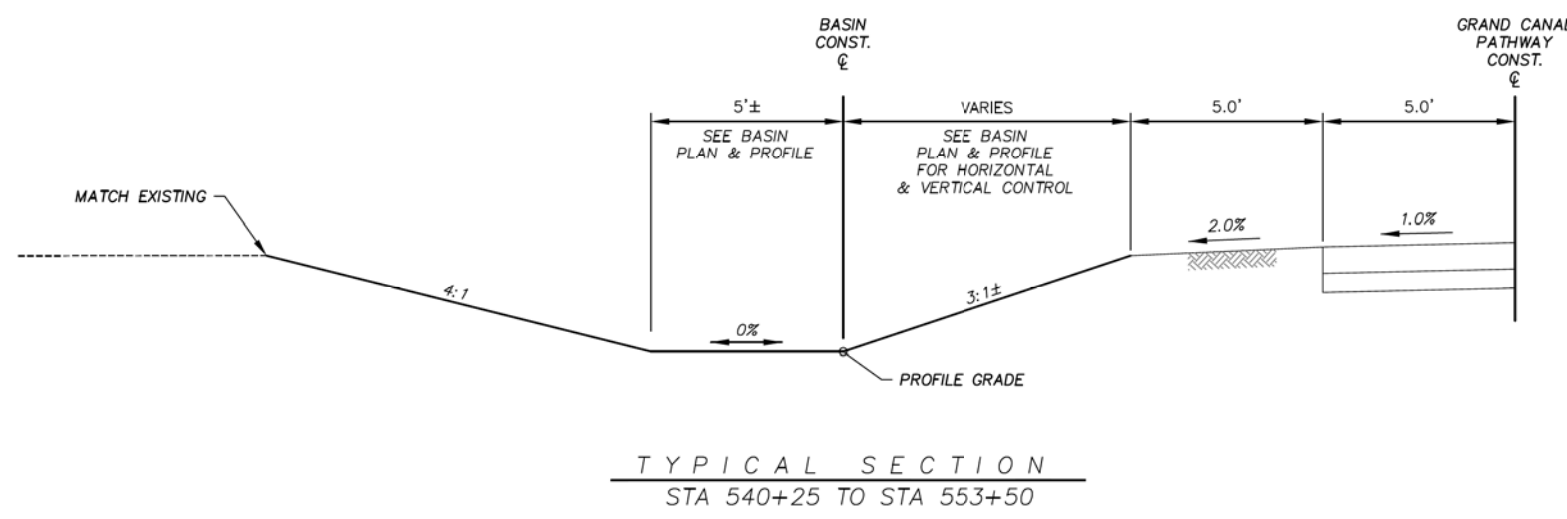
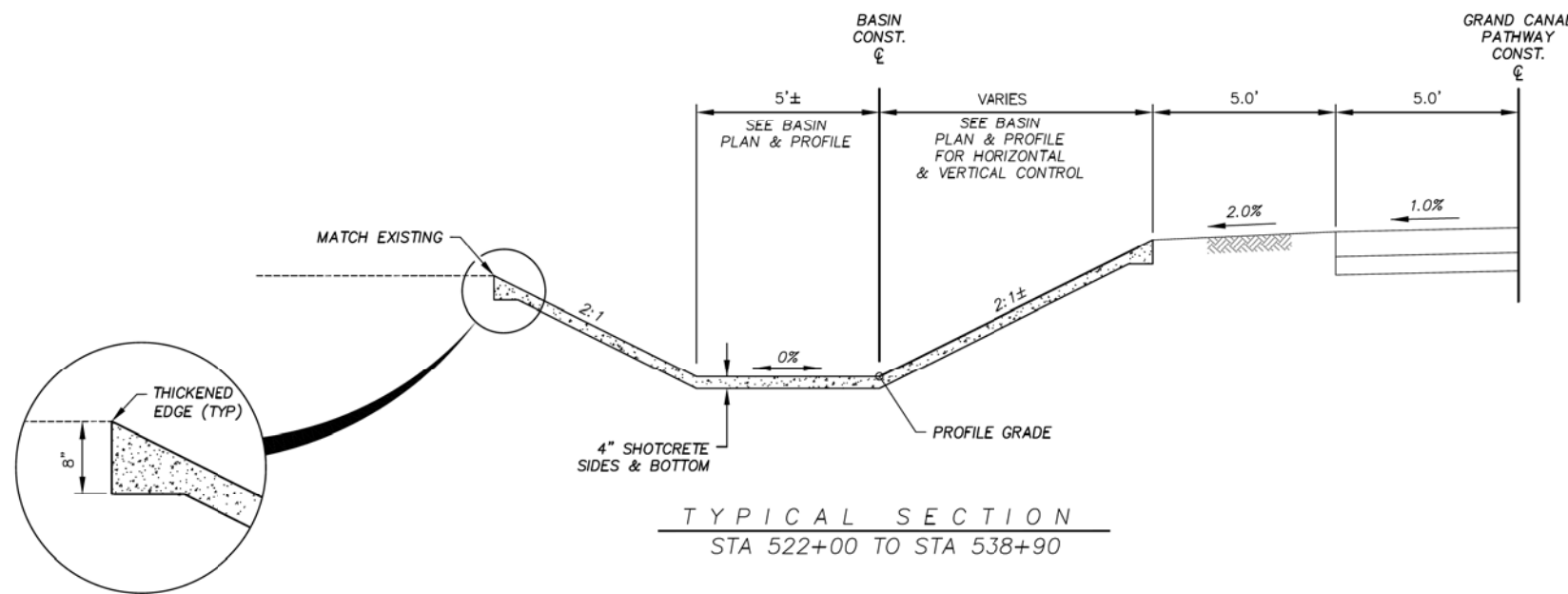
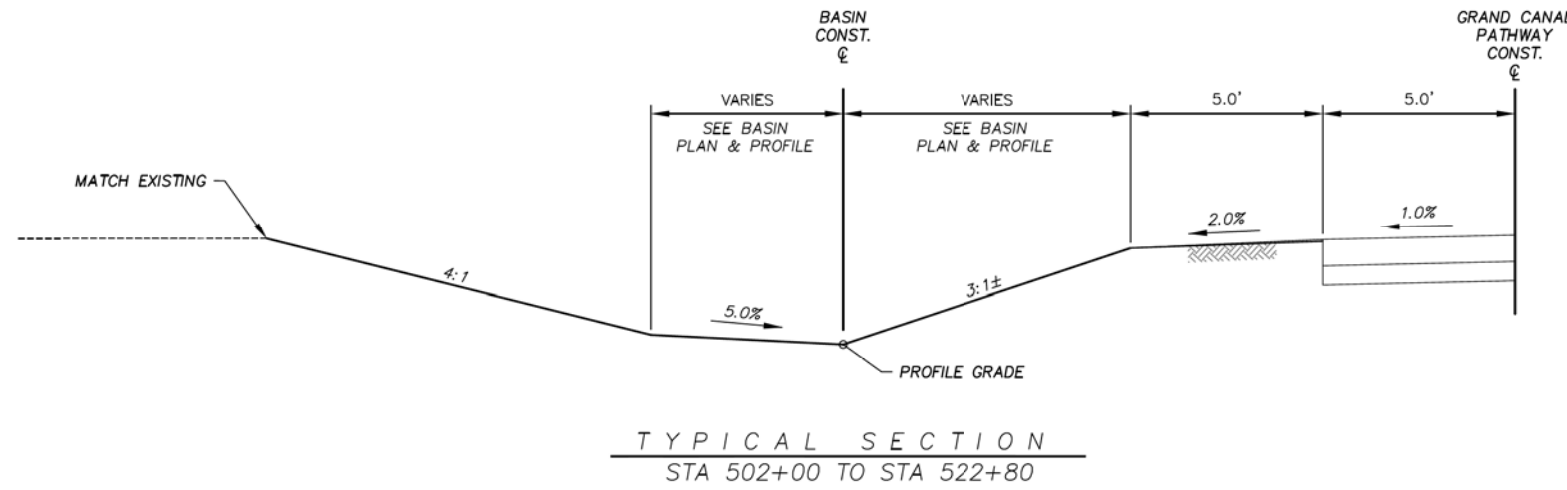


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.007	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- NOTES:
1. ALL STATIONING FOR BASIN TYPICAL SECTIONS IS FROM BASIN CONST. ϵ
 2. SEE DETAIL D1 (BASIN PLAN & PROFILE SHEETS) FOR BASIN DESIGN.





"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

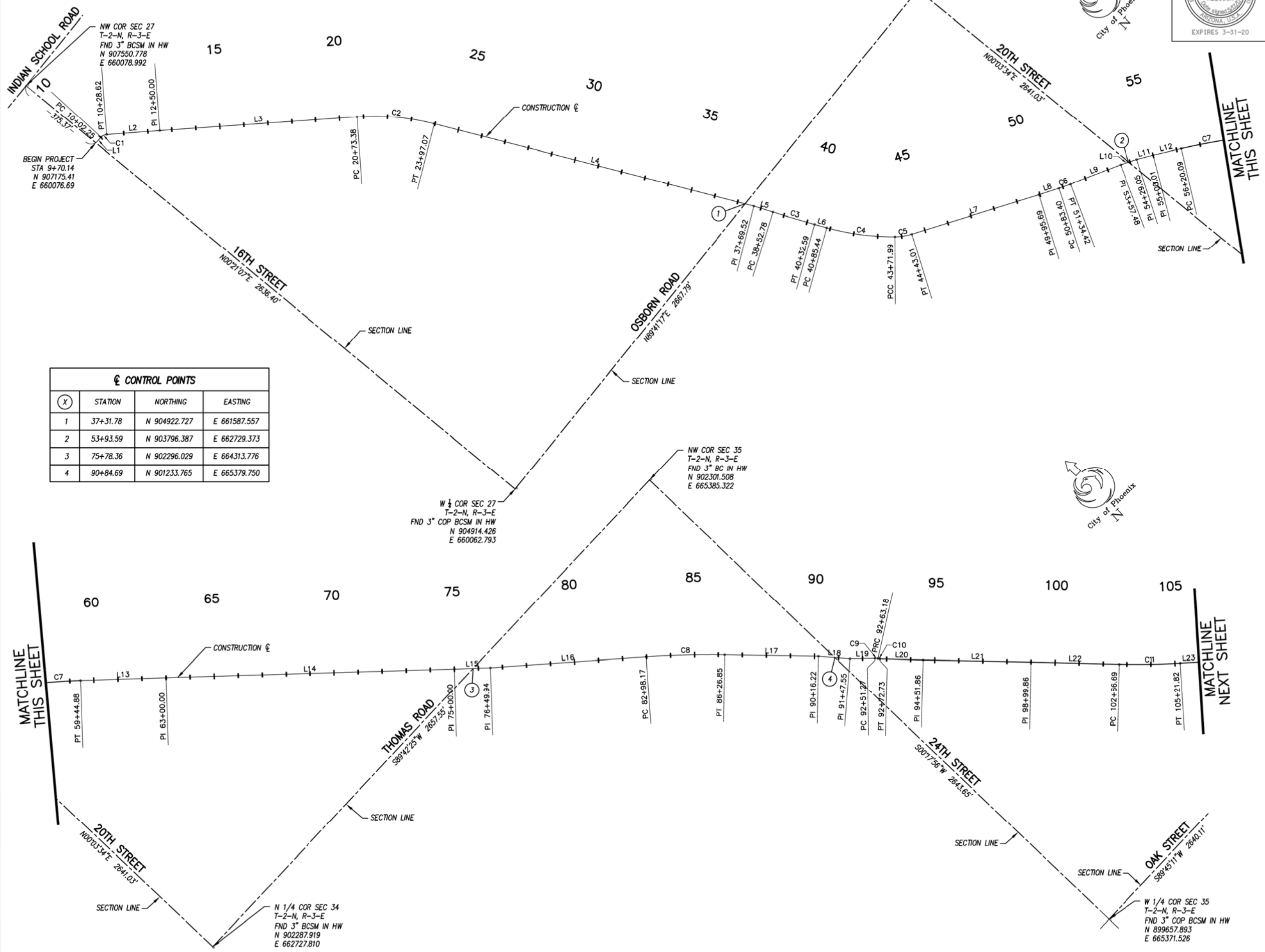
TYPICAL SECTIONS				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.007	2.182
SCALE:				

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.008	2.182
				
				
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE




☉ CONTROL POINTS			
☉	STATION	NORTHING	EASTING
1	37+31.78	N 904922.727	E 661587.557
2	53+93.59	N 903796.387	E 662729.373
3	75+78.36	N 902296.029	E 664313.776
4	90+84.69	N 901233.765	E 665379.750

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SURVEY CONTROL				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1" = 200'			2.008	2.182

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

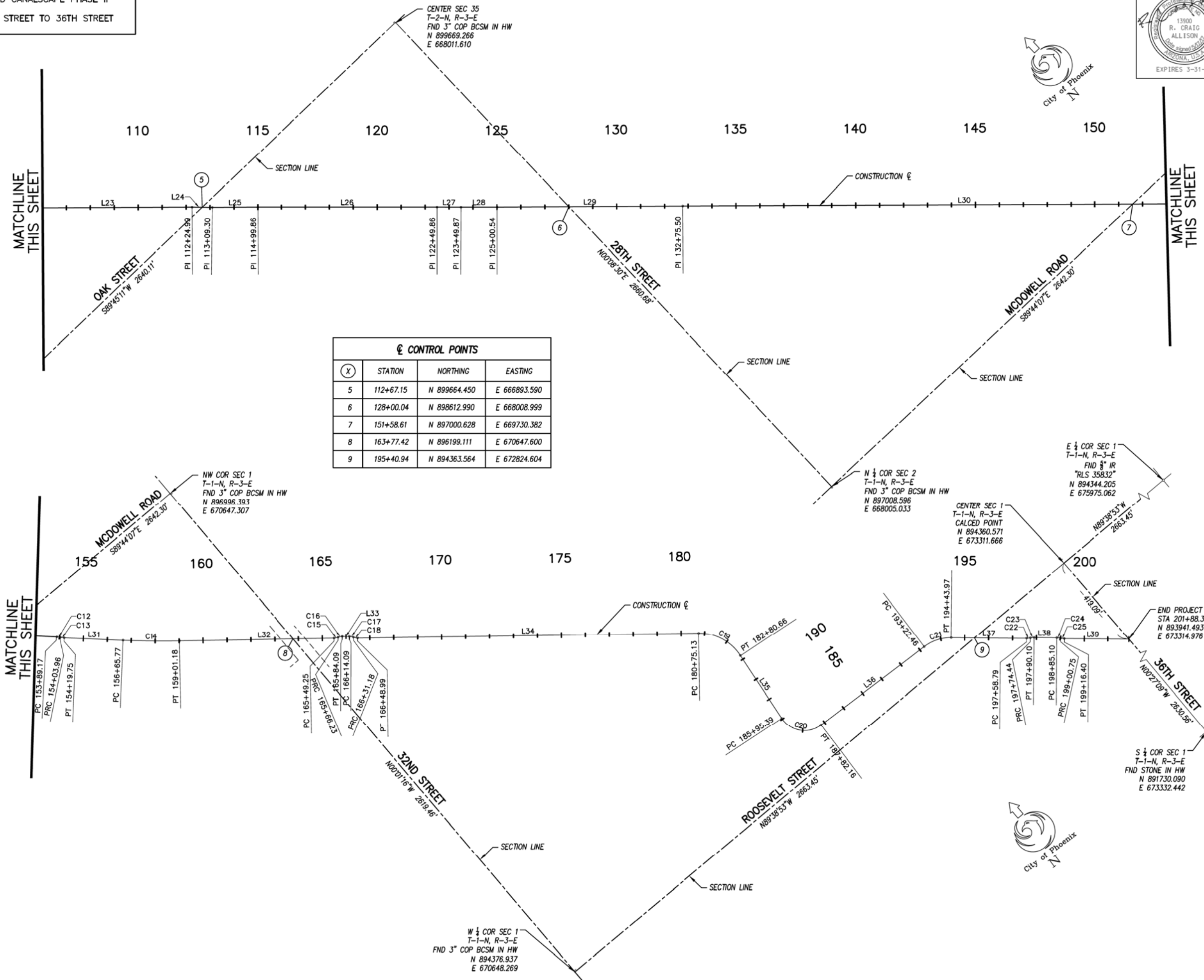
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.009	2.182
				
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE


NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



(X)	STATION	NORTHING	EASTING
5	112+67.15	N 899664.450	E 666893.590
6	128+00.04	N 898612.990	E 668008.999
7	151+58.61	N 897000.628	E 669730.382
8	163+77.42	N 896199.111	E 670647.600
9	195+40.94	N 894363.564	E 672824.604

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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SURVEY CONTROL				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.009	2.182
SCALE: 1" = 200'				

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

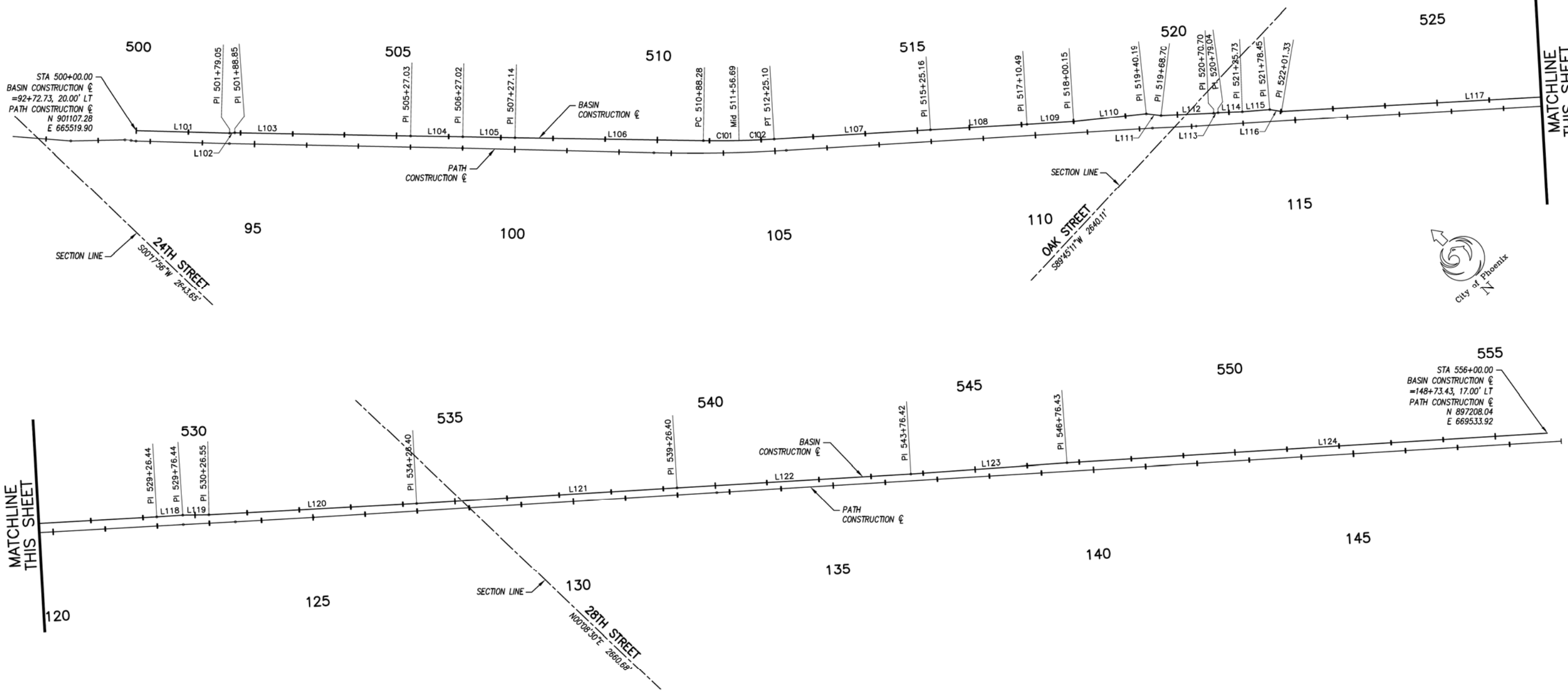
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

Curve Table: Alignments					
Curve #	Radius	Length	Delta	Start Point	End Point
C101	1835.97'	136.83'	4°16'12"	N 900303.52, E 666253.53	N 900206.23, E 666349.69
C102	1835.97'	136.83'	4°16'12"	N 900303.52, E 666253.53	N 900206.23, E 666349.69



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.011	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE



Line Table: Alignments				
Line #	Length	Bearing	Start Point	End Point
L101	179.05'	S41°50'41"E	N 901107.28, E 665519.90	N 900973.90, E 665639.35
L102	9.79'	S47°26'42"E	N 900973.90, E 665639.35	N 900967.27, E 665646.57
L103	338.18'	S42°21'39"E	N 900967.27, E 665646.57	N 900717.39, E 665874.43
L104	100.00'	S42°34'37"E	N 900717.39, E 665874.43	N 900643.75, E 665942.09
L105	100.11'	S42°15'20"E	N 900643.75, E 665942.09	N 900569.65, E 666009.41
L106	361.14'	S42°31'48"E	N 900569.65, E 666009.41	N 900303.52, E 666253.53
L107	300.05'	S46°48'00"E	N 900206.23, E 666349.69	N 900000.83, E 666568.42
L108	185.34'	S46°39'09"E	N 900000.83, E 666568.42	N 899873.61, E 666703.20

Line Table: Alignments				
Line #	Length	Bearing	Start Point	End Point
L109	89.66'	S46°57'33"E	N 899873.61, E 666703.20	N 899812.42, E 666768.73
L110	140.04'	S49°26'52"E	N 899812.42, E 666768.73	N 899721.37, E 666875.13
L111	28.51'	S36°47'21"E	N 899721.37, E 666875.13	N 899698.54, E 666892.20
L112	102.00'	S45°53'00"E	N 899698.54, E 666892.20	N 899627.53, E 666965.44
L113	8.34'	S50°56'59"E	N 899627.53, E 666965.44	N 899622.28, E 666971.91
L114	46.69'	S45°31'59"E	N 899622.28, E 666971.91	N 899589.57, E 667005.23
L115	52.72'	S48°03'38"E	N 899589.57, E 667005.23	N 899554.34, E 667044.45
L116	22.88'	S34°01'39"E	N 899554.34, E 667044.45	N 899535.38, E 667057.25

Line Table: Alignments				
Line #	Length	Bearing	Start Point	End Point
L117	725.11'	S46°34'49"E	N 899535.38, E 667057.25	N 899036.99, E 667583.92
L118	50.00'	S47°10'28"E	N 899036.99, E 667583.92	N 899003.00, E 667620.59
L119	50.11'	S44°16'30"E	N 899003.00, E 667620.59	N 898967.12, E 667655.58
L120	399.85'	S46°29'50"E	N 898967.12, E 667655.58	N 898691.87, E 667945.61
L121	500.00'	S46°51'49"E	N 898691.87, E 667945.61	N 898350.00, E 668310.47
L122	450.02'	S46°46'45"E	N 898350.00, E 668310.47	N 898041.82, E 668638.41
L123	300.01'	S47°25'50"E	N 898041.82, E 668638.41	N 897838.86, E 668859.35
L124	923.56'	S46°55'10"E	N 897838.86, E 668859.35	N 897208.04, E 669533.92

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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BASIN SURVEY CONTROL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1" = 200'			2.011	2.182

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

10+02.36 23.4' POWER POLE
10+04.28 4.64' CURB PI
10+07.57 9.50' BILLBOARD
10+07.82 13.59' EDGE CONC
10+28.49 19.26' BILLBOARD



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.012	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GENERAL NOTES

- M** SAWCUT AND MATCH EXISTING CONCRETE
- P** PROTECT IN PLACE
- S** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	263	S.F.
2	REMOVE ASPHALT CONCRETE	8	S.Y.
3	REMOVE EXISTING CURB & GUTTER	34	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	3390	S.F.
2	SUBGRADE PREPARATION.	377	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	8	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	26	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL A	317	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	34	L.F.
50	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	2	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



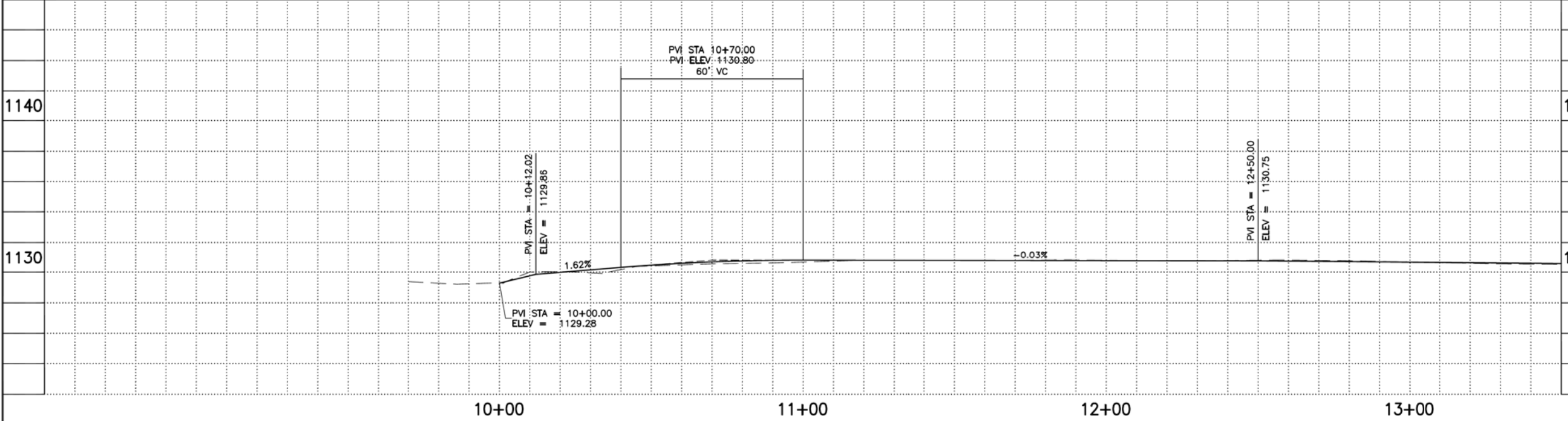
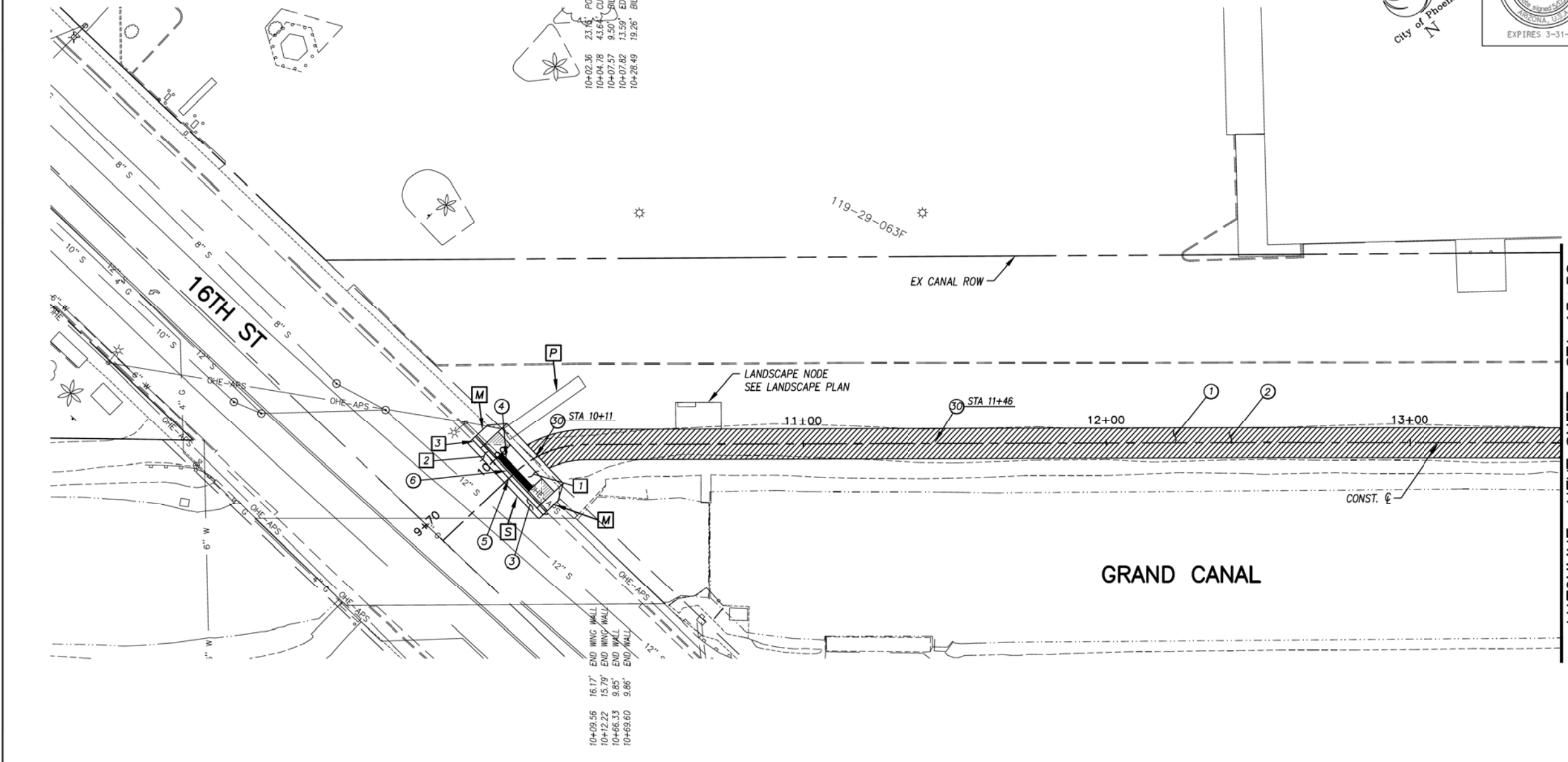
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.012	2.182

SCALE: 1" = 20' 0" 20'



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

13+66.45 28.63' LIGHT STANDARD

27.46' END CURB
16+52.82 36.68' END WALL
17+00.26 27.63' ASPHALT PI
17+20.93 23.93' ASPHALT PI
17+53.77 12.89' FENCE CORNER
17+67.29 35.42' FENCE CORNER
17+97.48 6.40' END FENCE
18+23.59 6.30' BEGIN FENCE

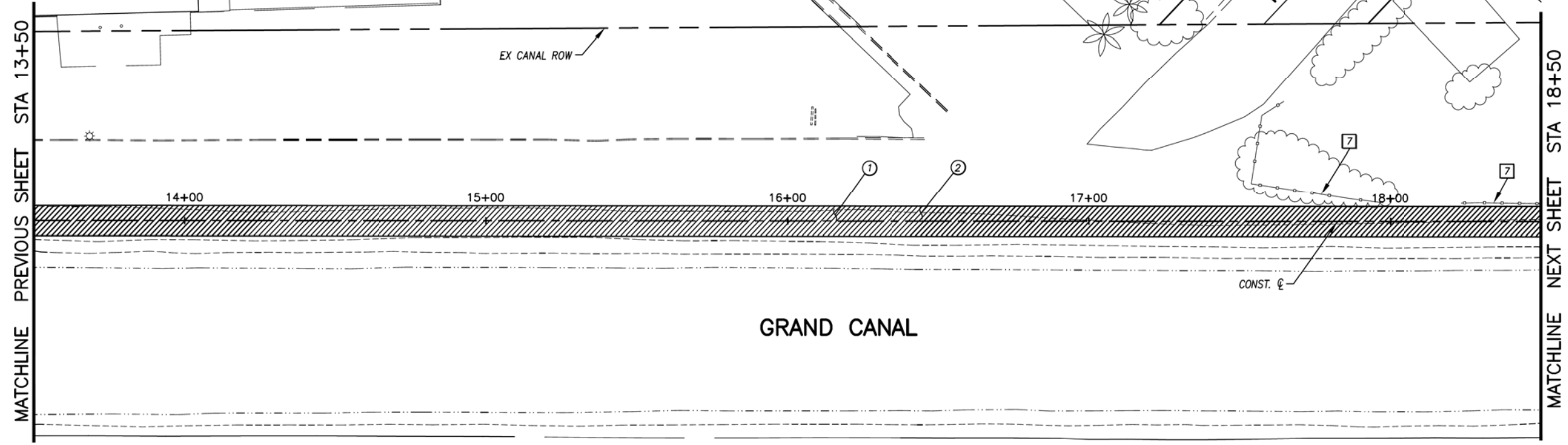


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.013	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY.	UNIT
7	REMOVE EXISTING FENCE	102	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

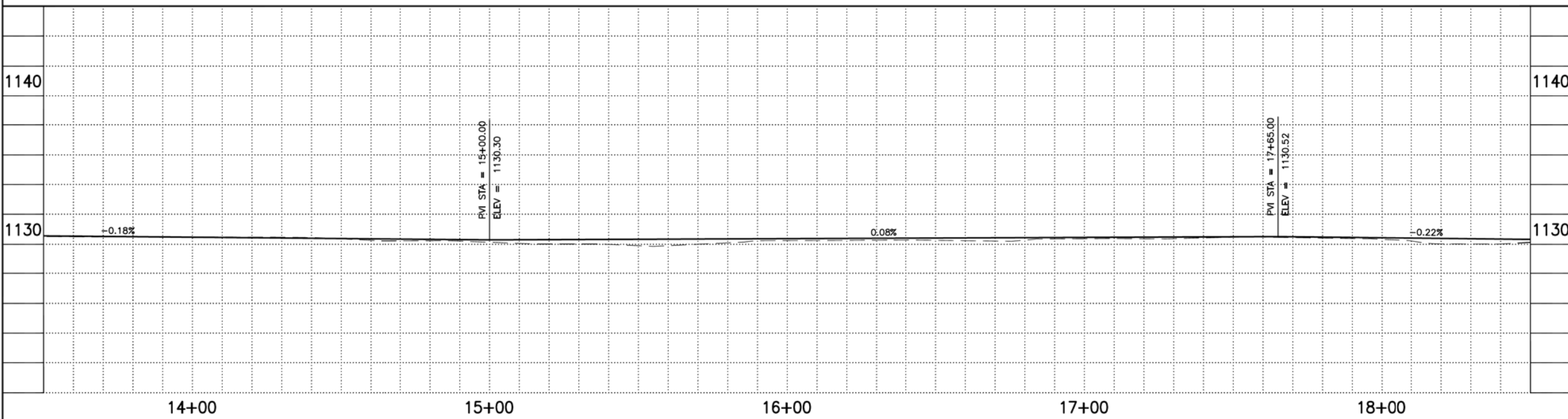
NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.013	2.182

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET

16.51' BUILDING CORNER
18.79' BUILDING CORNER
6.13' FENCE CORNER
48.22' BUILDING CORNER
51.83' CURB FI
9.94' SIGN
55.54' SEWER MH
40.98' EDGE CONC
37.89' POWER POLE
27.19' POWER POLE

29+91.23 33.04' POWER POLE
23+24.96 54.47' FND 3" BCSM



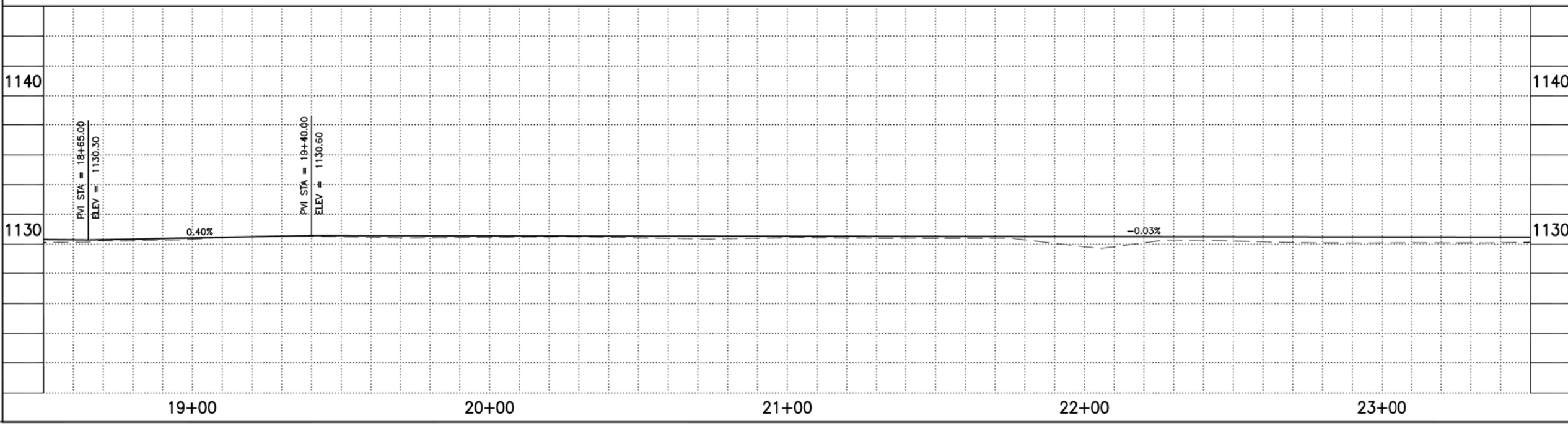
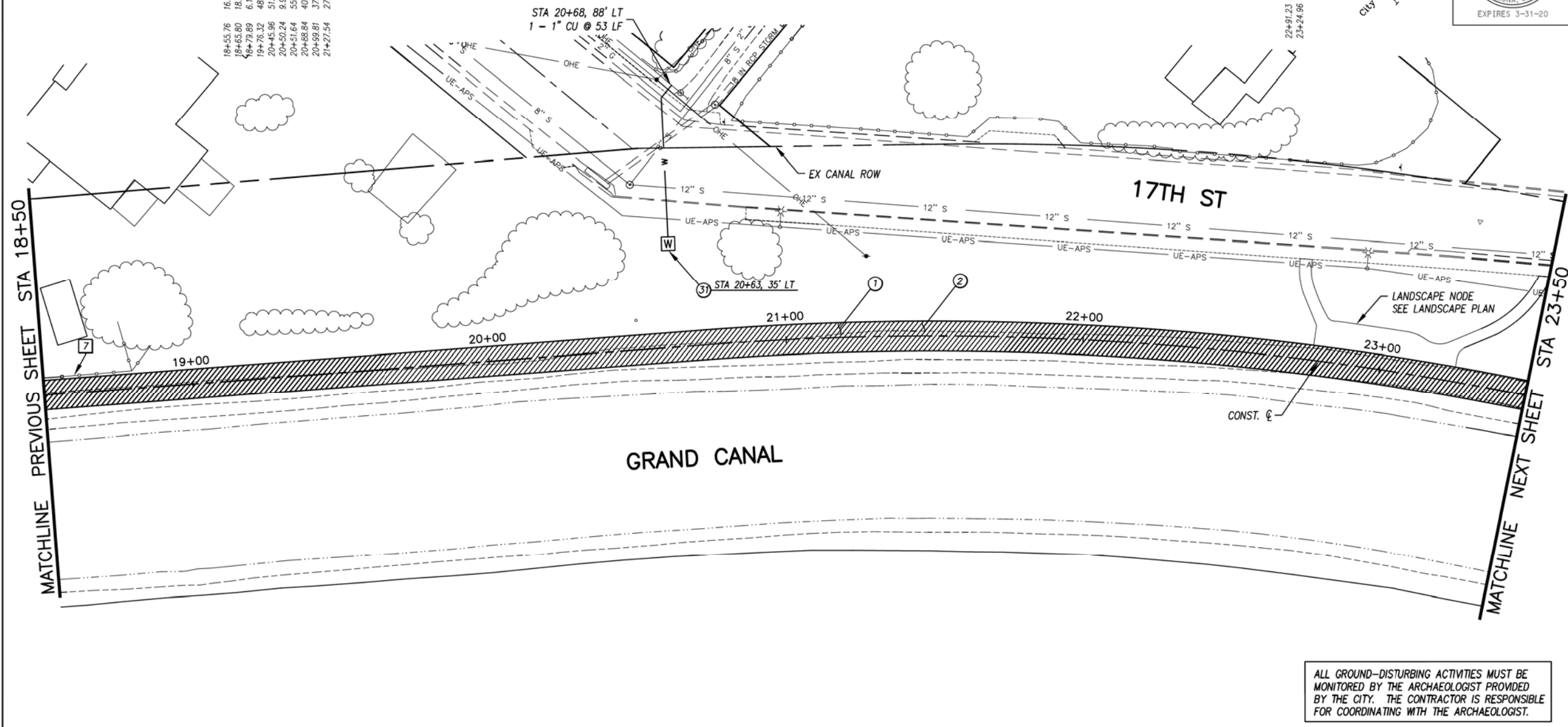
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,014	2,182

ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

DES: J.L.	DR: J.K.A.	CK: R.C.A.	DATE: 07/17/17
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REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY.	UNIT
7	REMOVE EXISTING FENCE	47	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION	556	S.Y.
31	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.			
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.			

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,014	2,182

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

50.99' SEWER MH
23+71.04
48.52' POWER POLE
24+89.26
65.66' FND 3" BCSM
25+27.42

26+86.67 41.07' POWER POLE

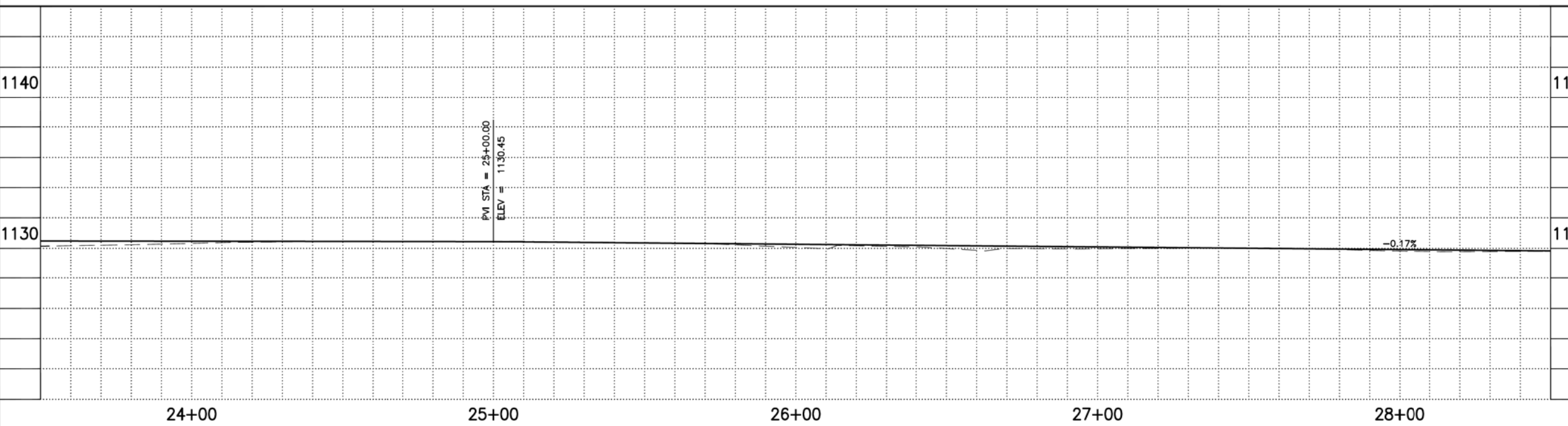
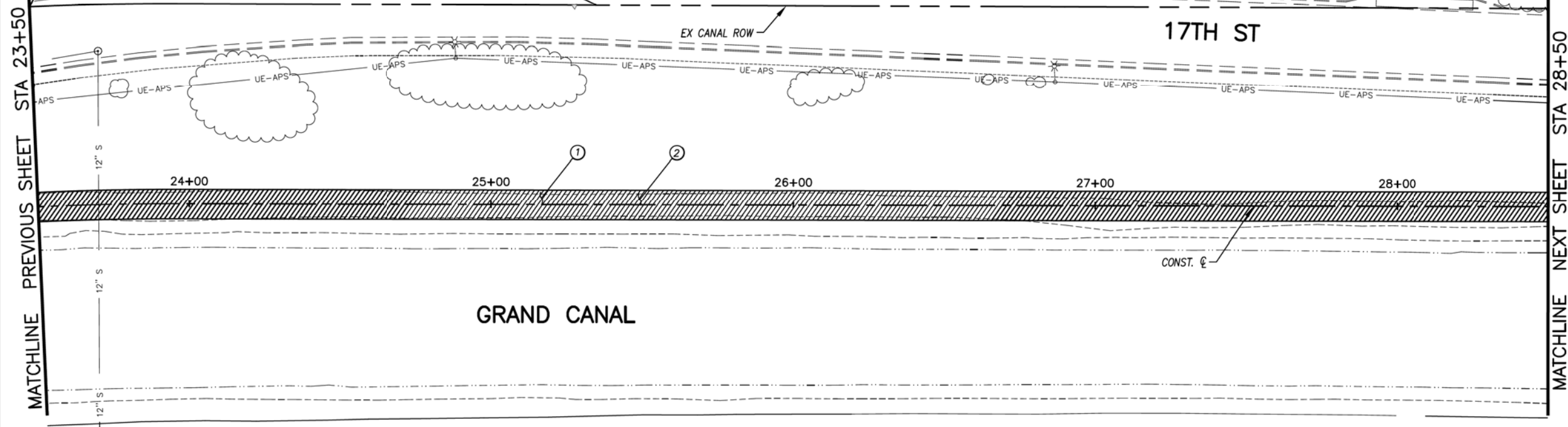


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.015	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT
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ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

Two weeks before you dig, CALL FOR THE BLUE STAKES 602-263-1100 Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.015	2.182

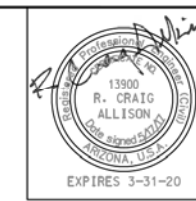
SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

28+85.15 32.91' POWER POLE
30+50.87 44.52' FND 3" BC5M
30+85.47 25.09' POWER POLE

31+84.60 31.60' WATER MH
31+88.51 28.04' WATER VALVE
32+09.09 41.22' FND 3" BC5M
32+88.34 23.65' POWER POLE

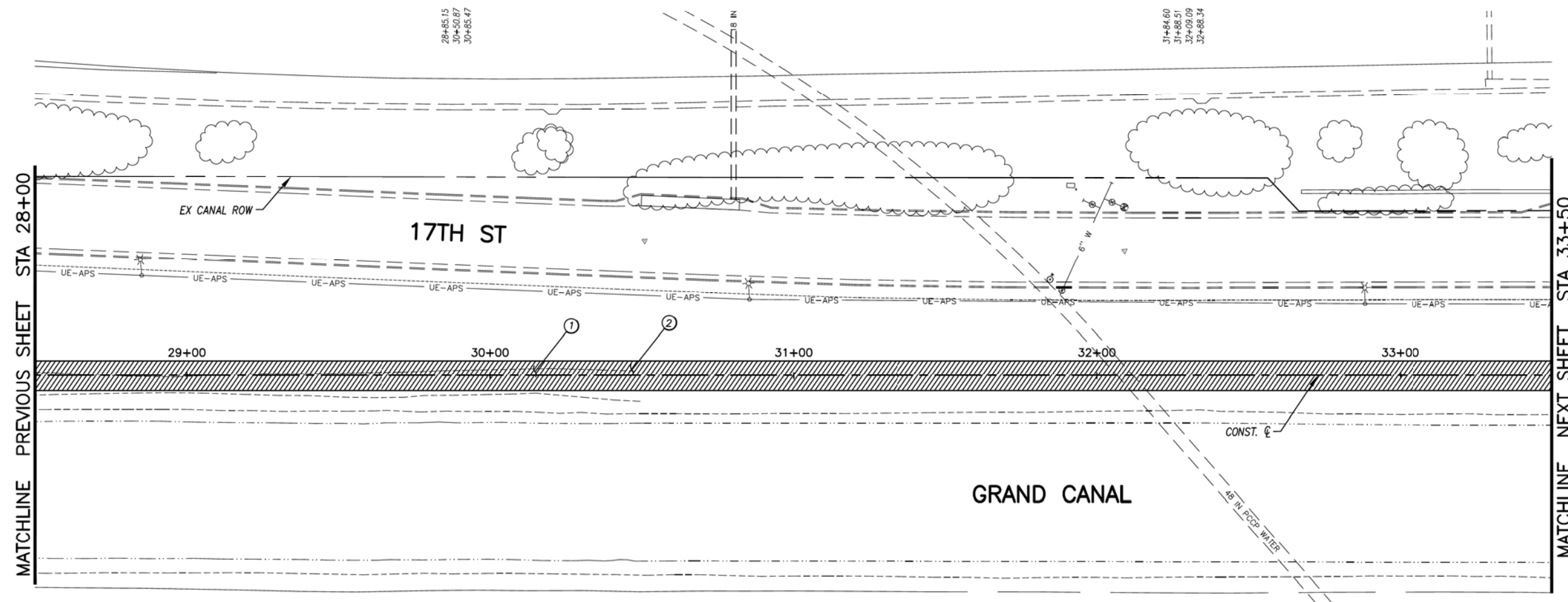


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.016	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
-----	-------------	-----	------

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

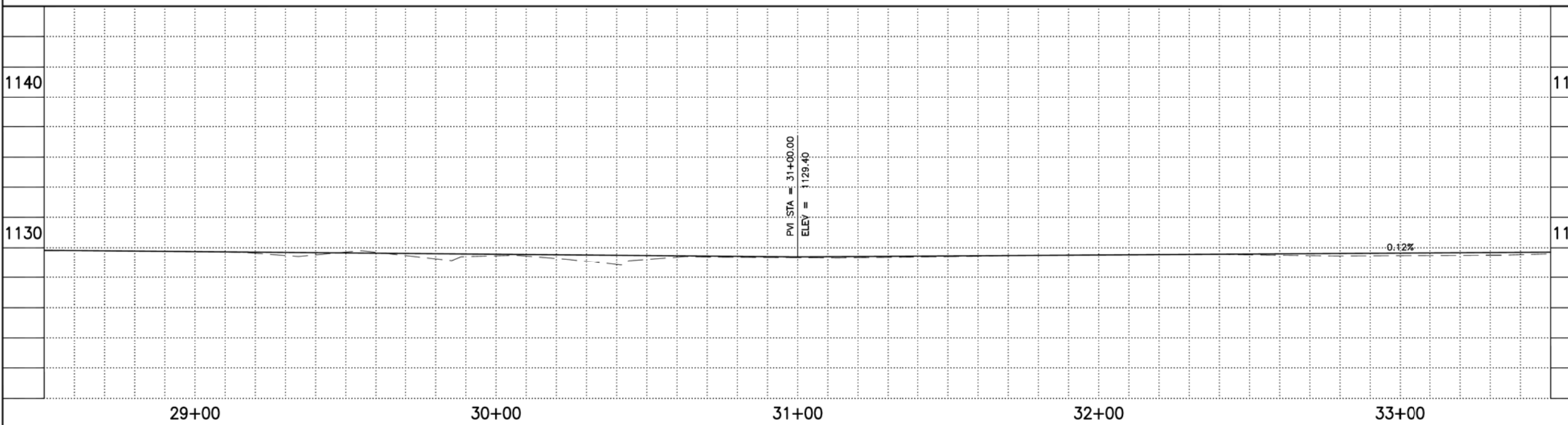
NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.016	2.182
SCALE: 1" = 20'			20'	

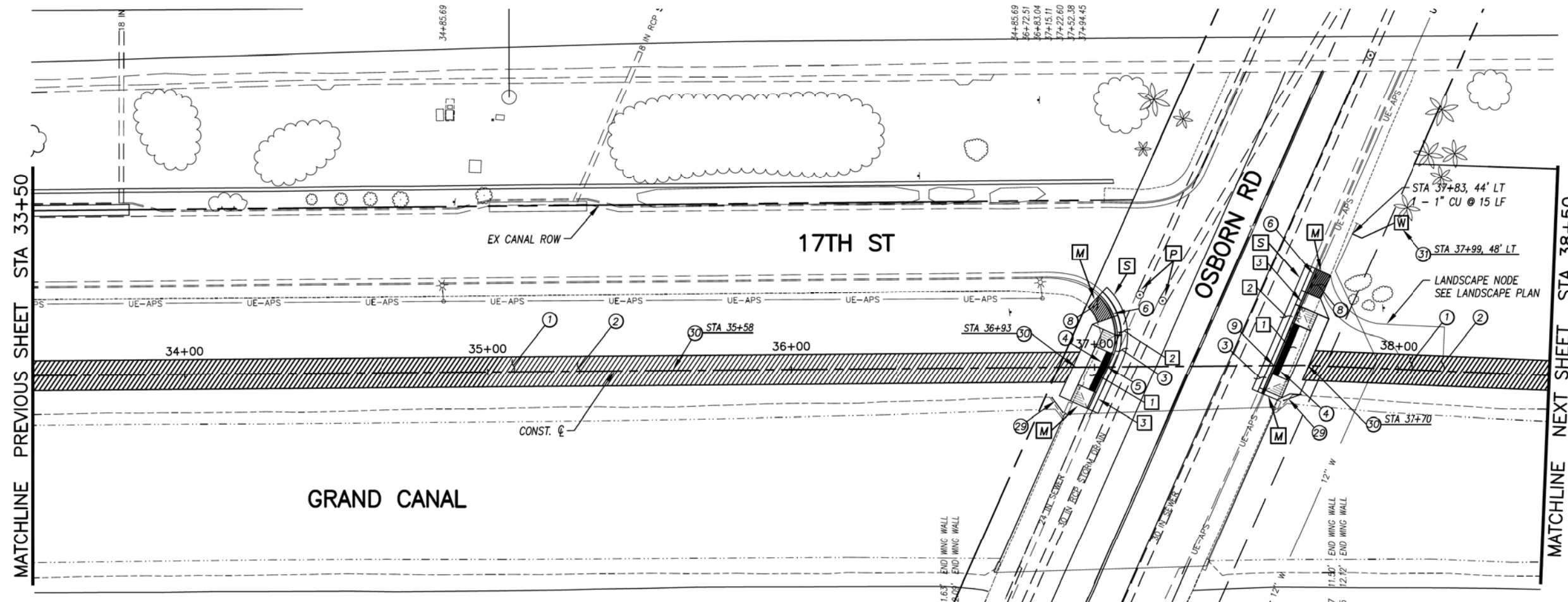
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.017	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



34+85.69 23.35' POWER POLE
36+22.51 18.25' SIGN
36+83.04 22.68' POWER POLE
37+15.11 23.57' SEWER MH
37+22.60 21.55' SD MH
37+52.38 45.65' FND 3" BCSM
37+94.45 19.91' SIGN



GENERAL NOTES

- M** SAWCUT AND MATCH EXISTING CONCRETE
- P** PROTECT IN PLACE
- S** SAWCUT 2' AND MATCH EXISTING

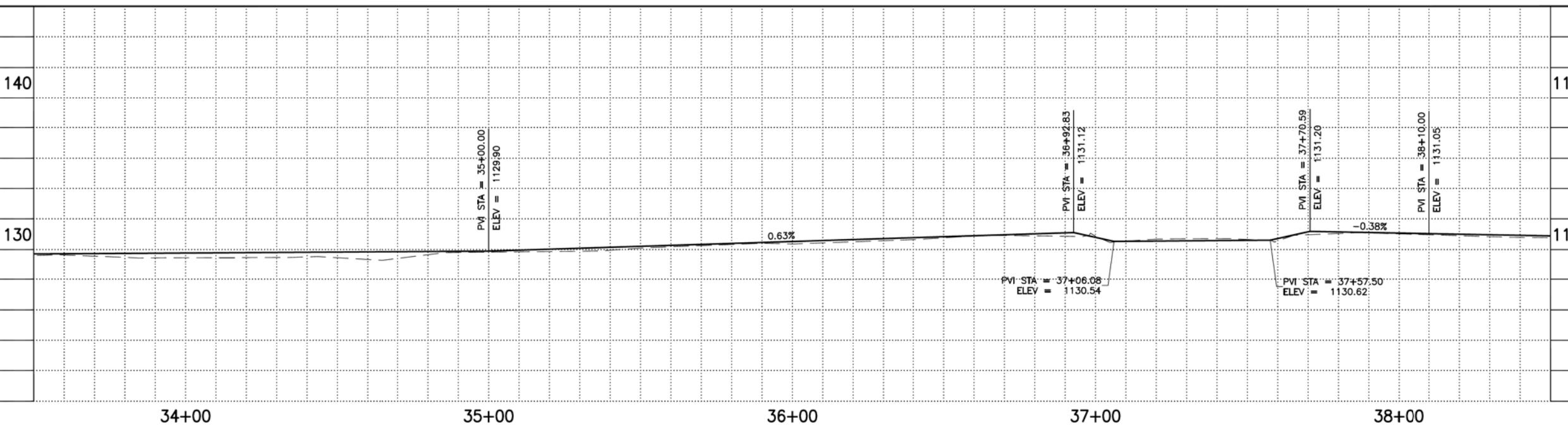
REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	408	S.F.
2	REMOVE ASPHALT CONCRETE	20	S.Y.
3	REMOVE EXISTING CURB & GUTTER	87	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	4243	S.F.
2	SUBGRADE PREPARATION.	471	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	20	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	64	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL B	279	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	87	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	99	S.F.
9	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL C	337	S.F.
29	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	12	L.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.
31	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.		
2	PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.		

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

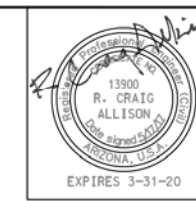
PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.017	2.182
SCALE: 1" = 20'				

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

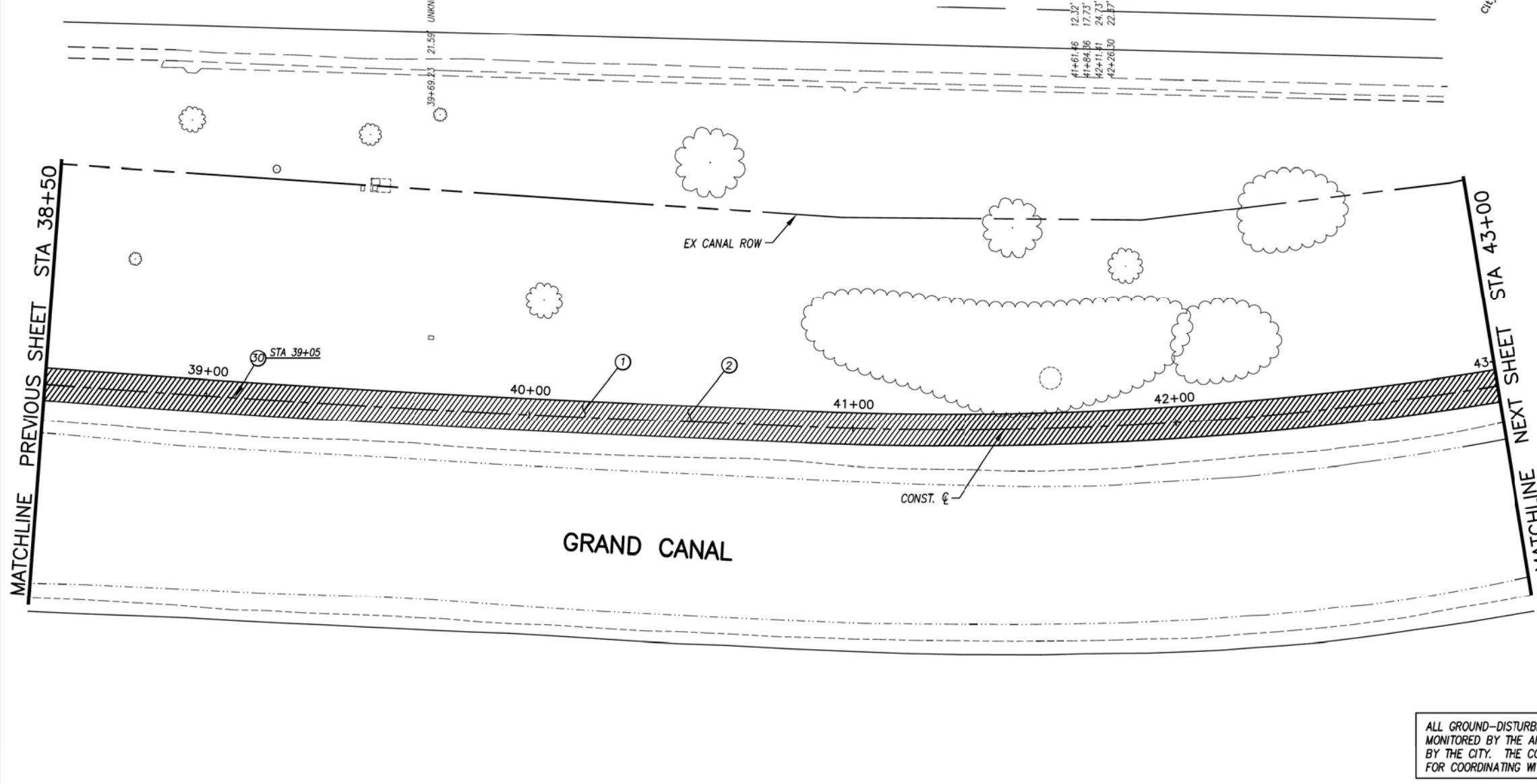


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.018	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- GENERAL NOTES**
- M** SAWCUT AND MATCH EXISTING CONCRETE
 - P** PROTECT IN PLACE
 - S** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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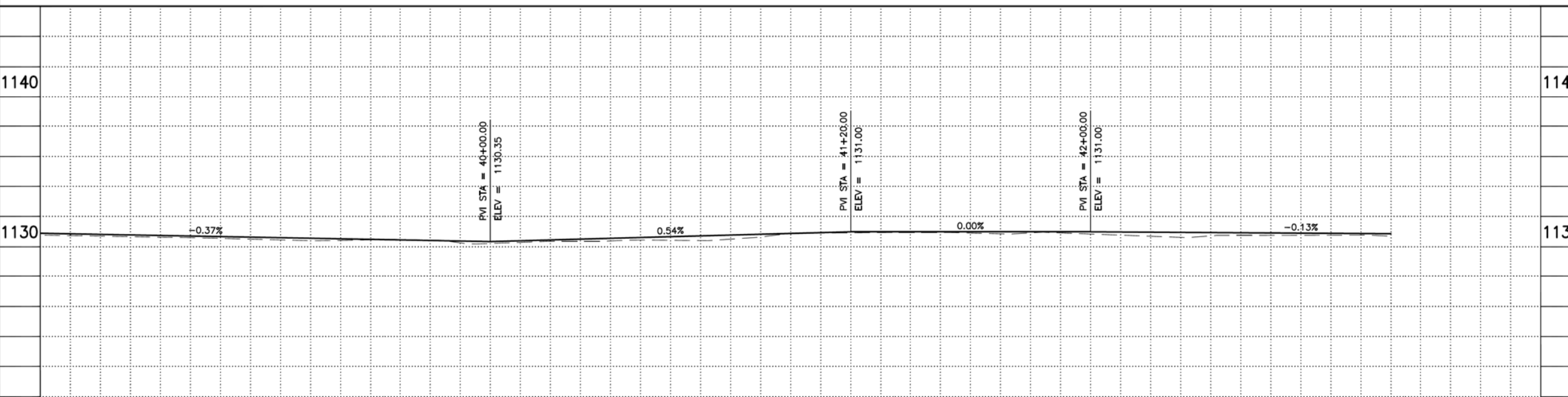
CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	4500	S.F.
②	SUBGRADE PREPARATION.	500	S.Y.
⑤0	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

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ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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Two working days before you dig, CALL FOR THE BLUE STAKES 602-263-1100 Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.018	2.182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

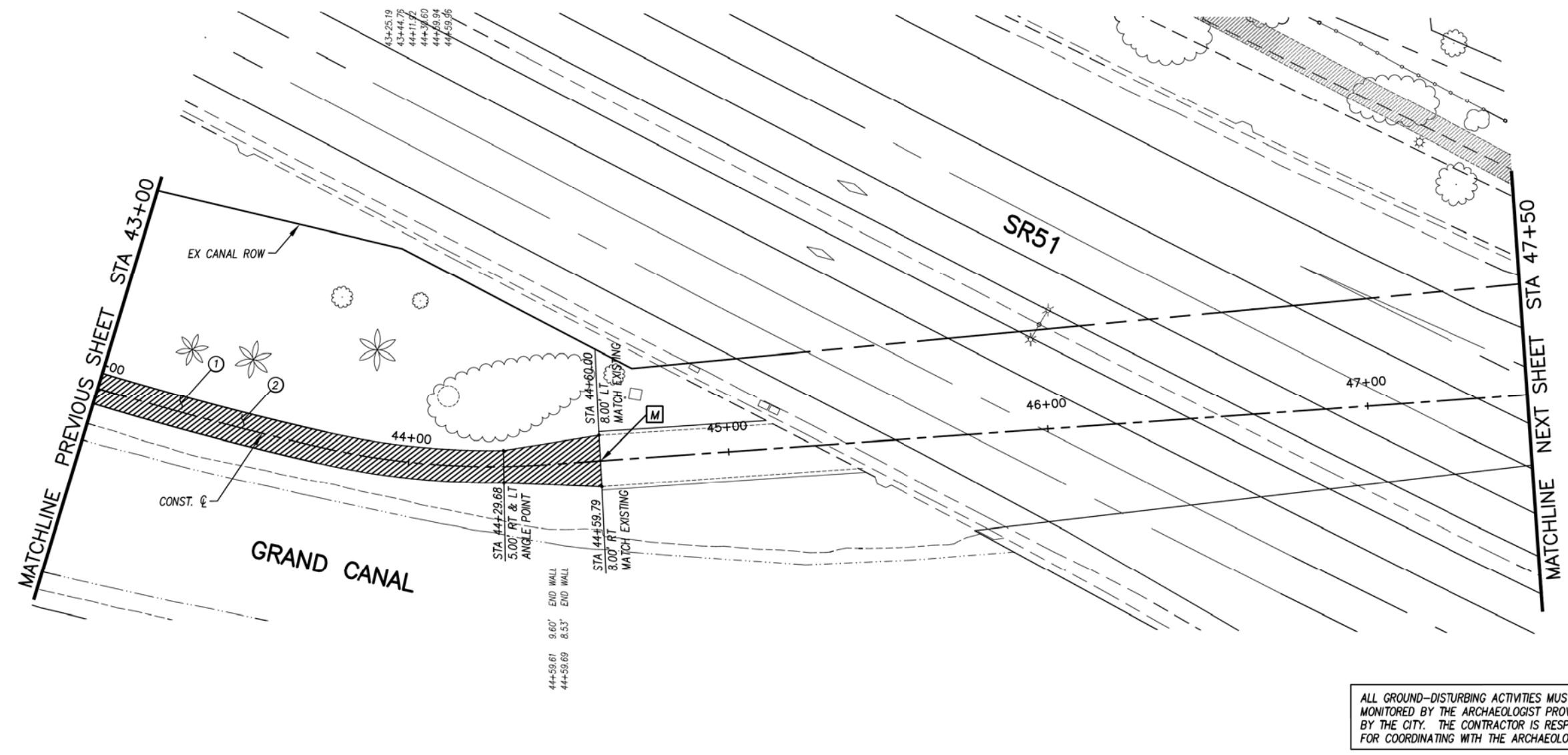


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.019	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES
M SAWCUT AND MATCH EXISTING CONCRETE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	1689	S.F.
②	SUBGRADE PREPARATION.	188	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

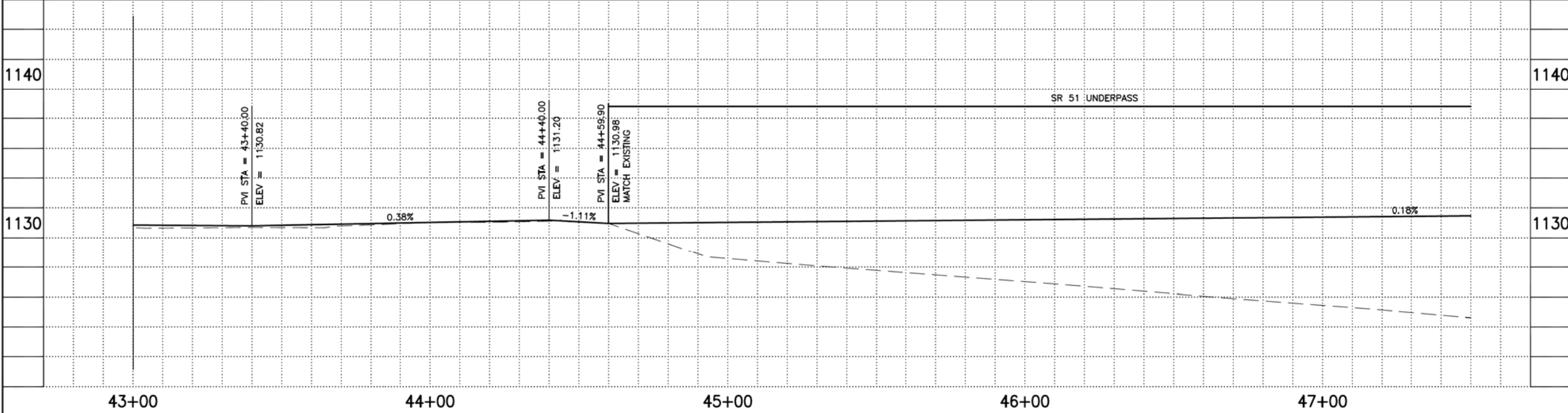
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
 "PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.019	2.182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

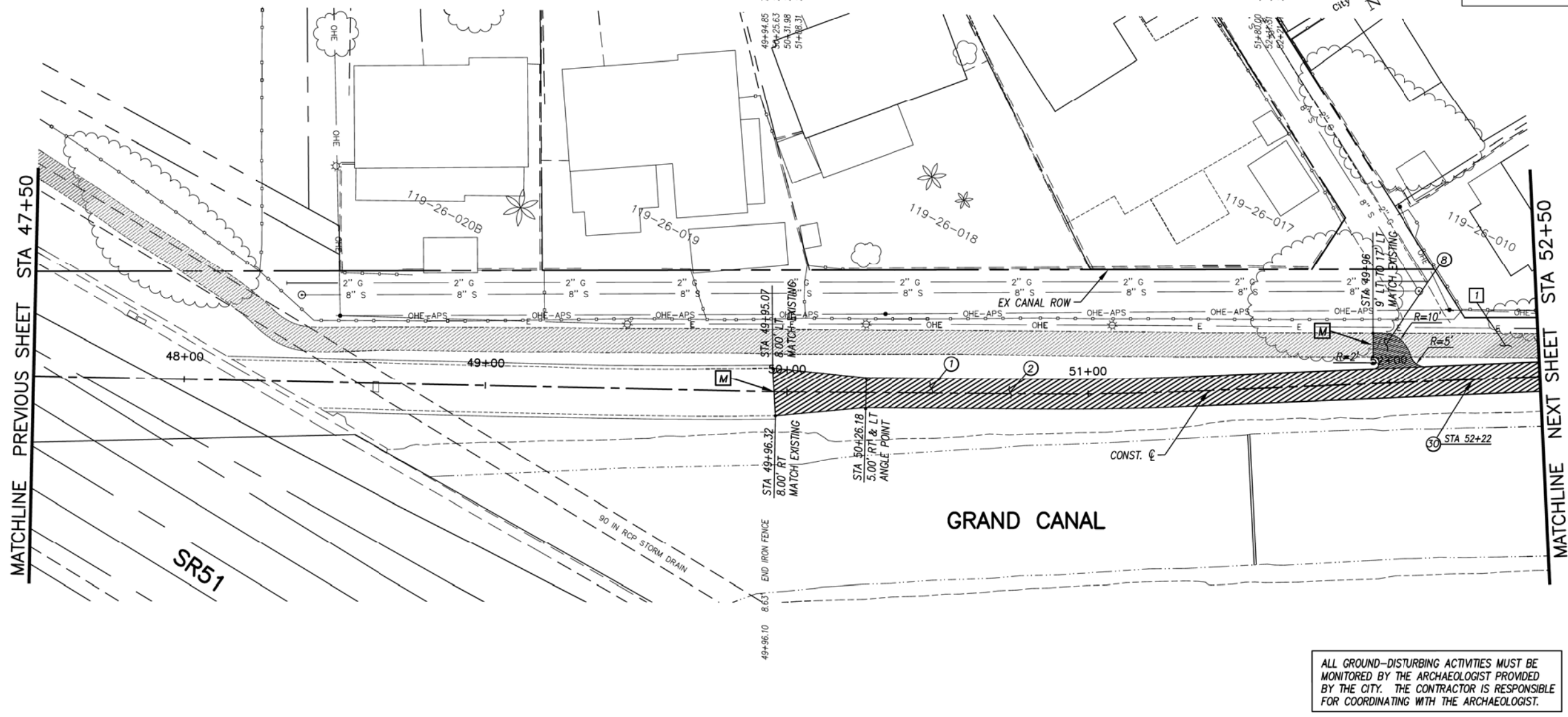


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.020	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES
M SAWCUT AND MATCH EXISTING CONCRETE

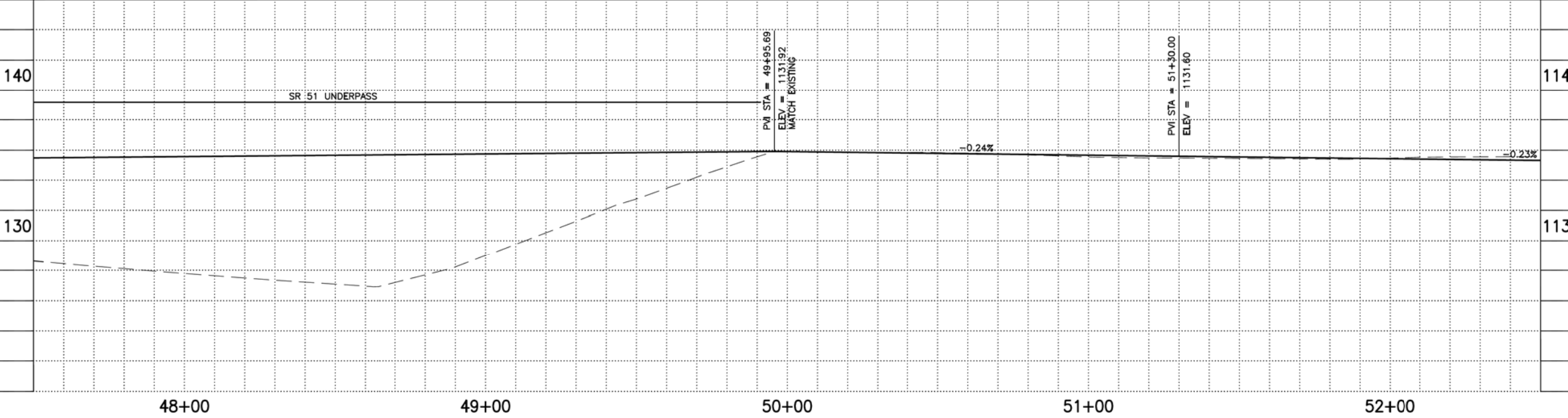
REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	428	S.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	2635	S.F.
2	SUBGRADE PREPARATION.	307	S.Y.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	126	S.F.
50	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
 PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

PATHWAY PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.020	2.182

SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCOPE PHASE II
16TH STREET TO 36TH STREET

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.021	2.182



DESIGNER	DRAWN	CHECKED	DATE
JL	JKA	RCA	07/17/17

REVISION BY CITY OF PHOENIX

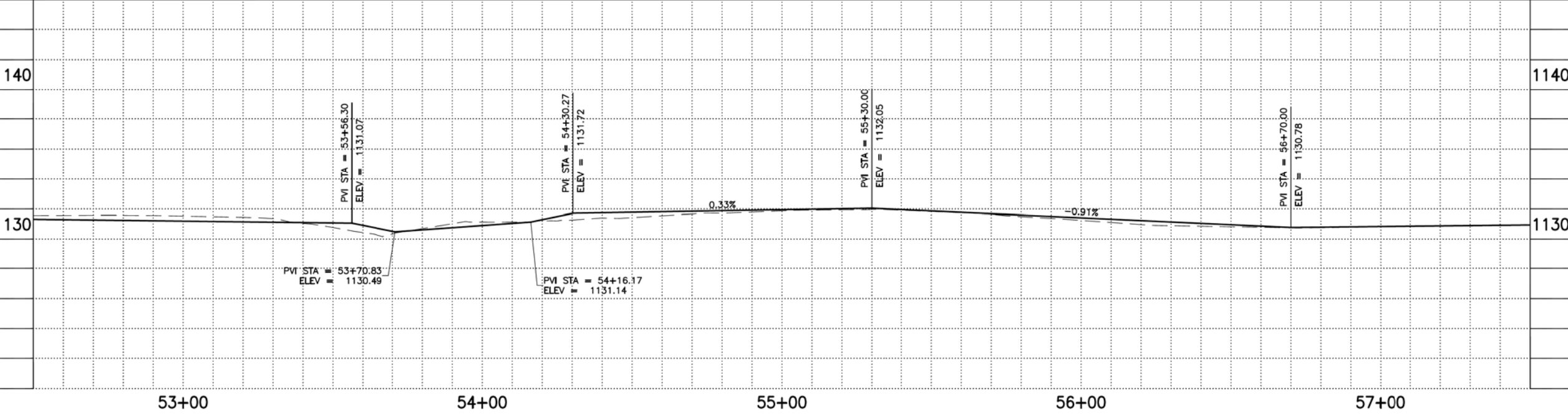
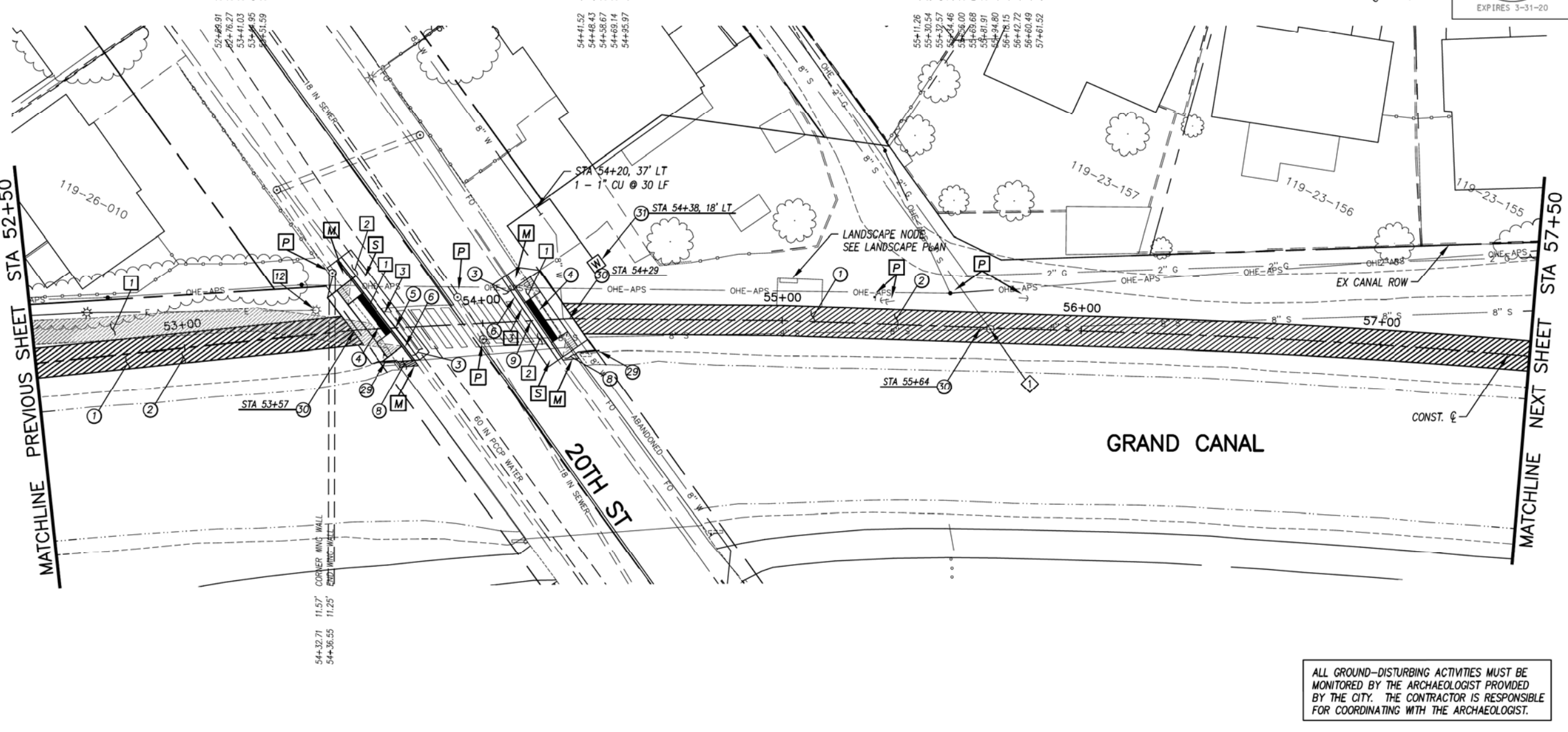
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

- [M] SAWCUT AND MATCH EXISTING CONCRETE
- [P] PROTECT IN PLACE
- [S] SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY.	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	1203	S.F.
2	REMOVE ASPHALT CONCRETE	33	S.Y.
3	REMOVE EXISTING CURB & GUTTER	69	L.F.
8	REMOVE EXISTING SIGN	1	EA.
12	REMOVE EXISTING LIGHT POLE	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	4283	S.F.
2	SUBGRADE PREPARATION.	476	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	33	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	64	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL D	337	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	73	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	19	S.F.
9	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL E	316	S.F.
29	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	12	L.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.
31	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	ADJUST UTILITY MANHOLE RIM TO NEW GRADE PER MAG 422	1	EA.

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCOPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DESIGNER: JL	DRAWN: JKA	CHECKED: RCA	SHEET NO: 2.021	TOTAL SHEETS: 2.182
DATE: 07/17	DATE: 07/17	DATE: 07/17		

SCALE: 1" = 20' 0' 20'

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

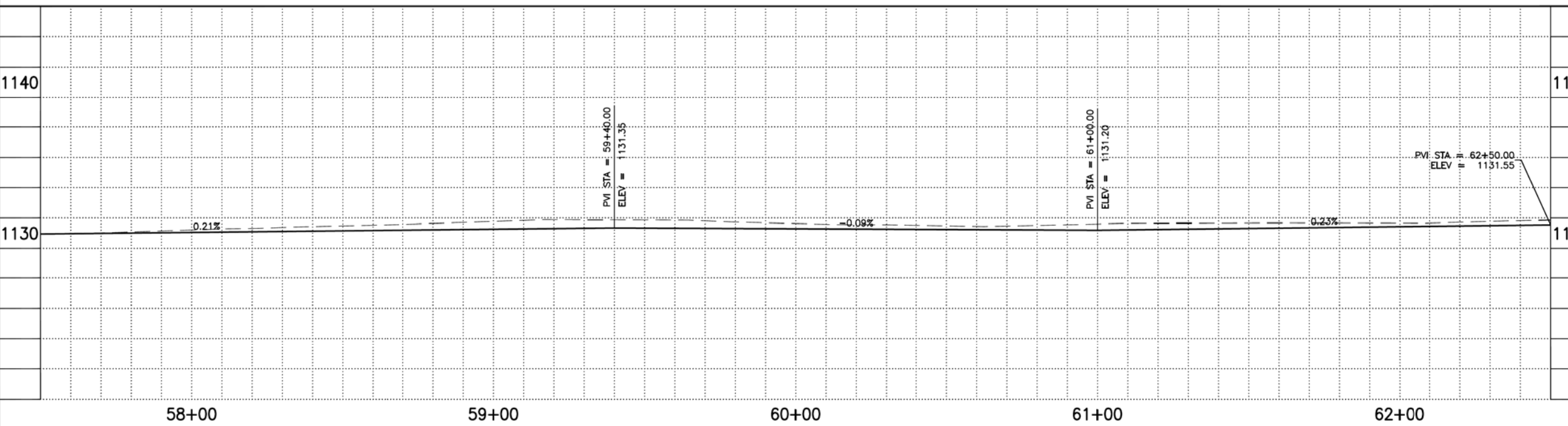
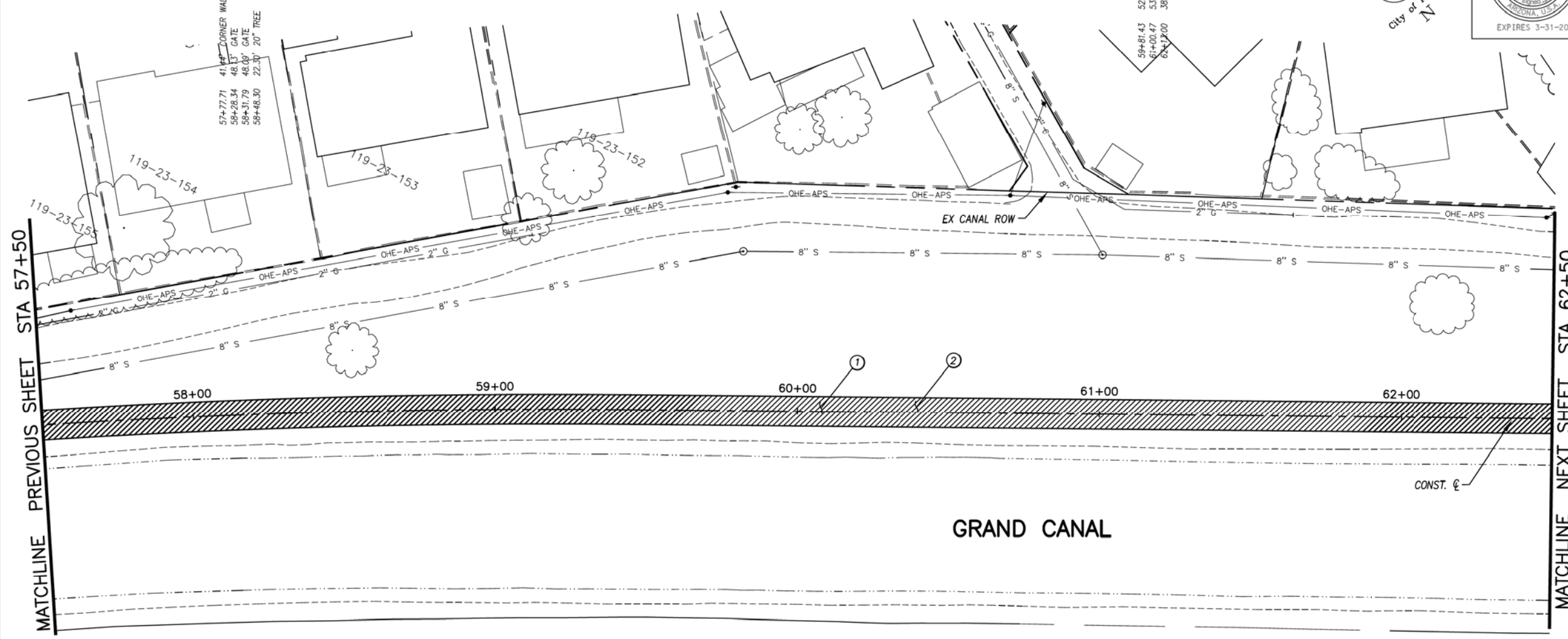
ST87600114, GRAND CANALSCOPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

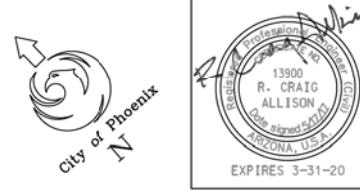
NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.022	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.022	2.182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

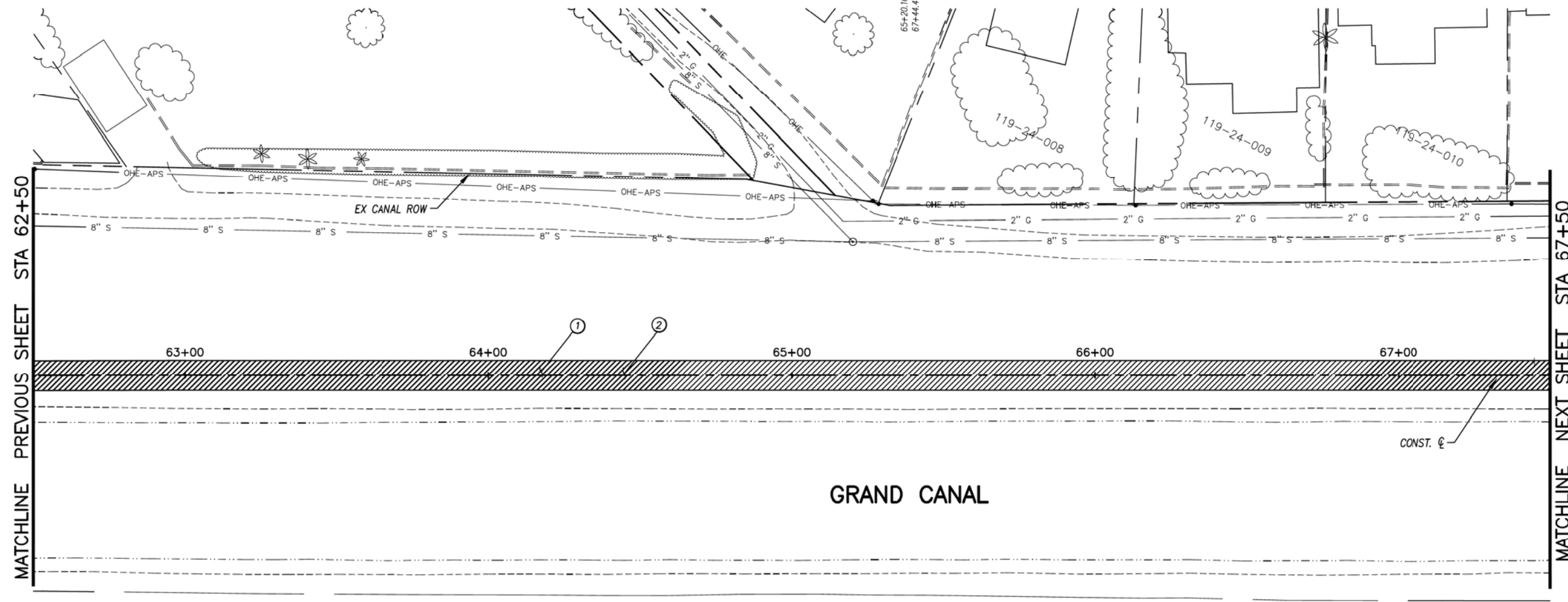


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.023	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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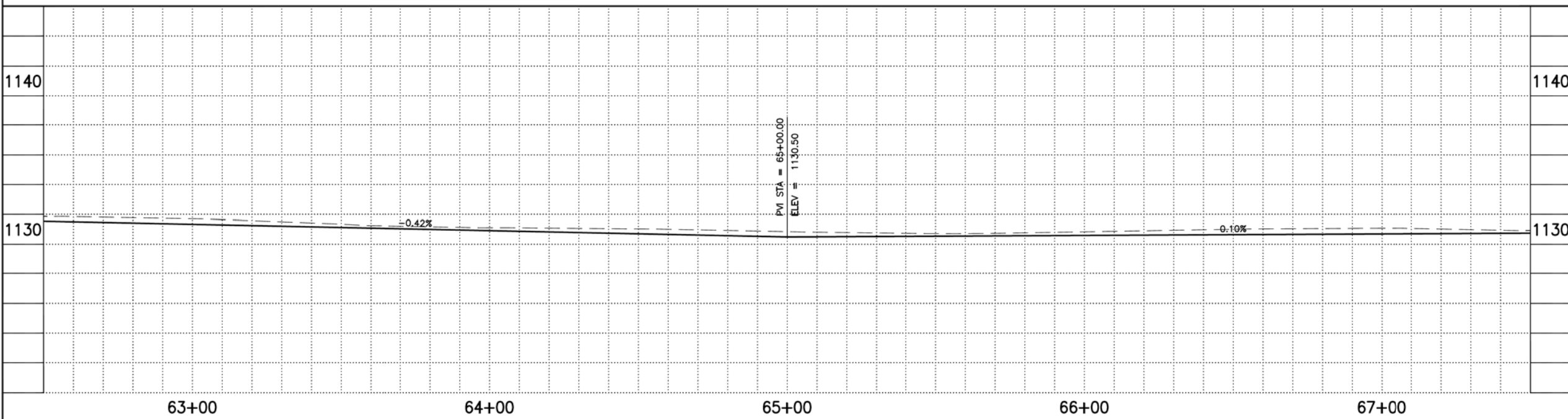
CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
-----	-------------	------	------

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.023	2.182

SCALE: 1" = 20'

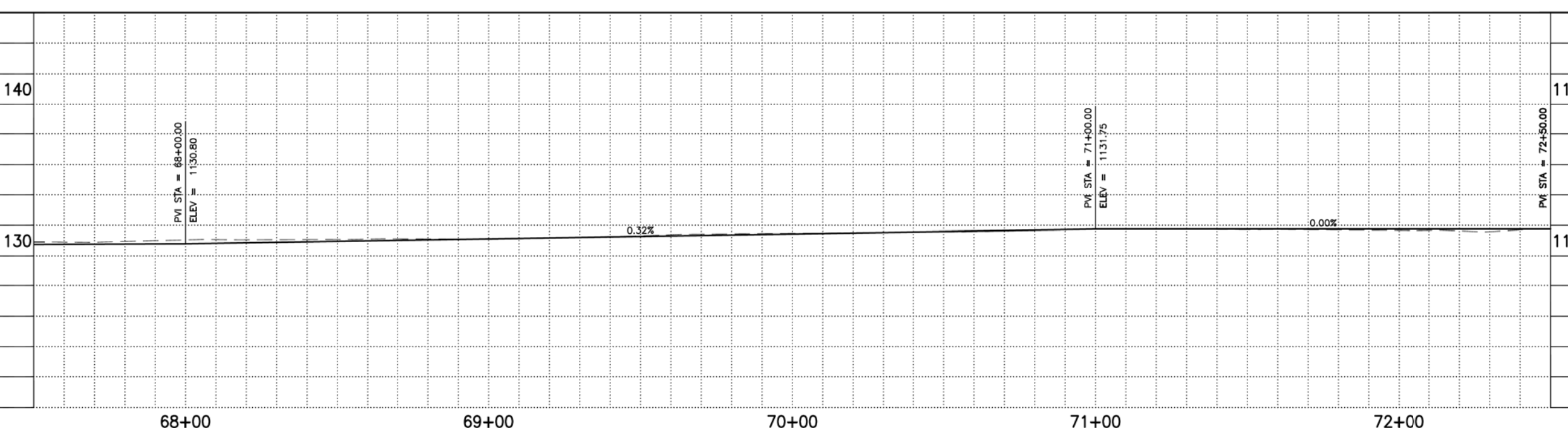
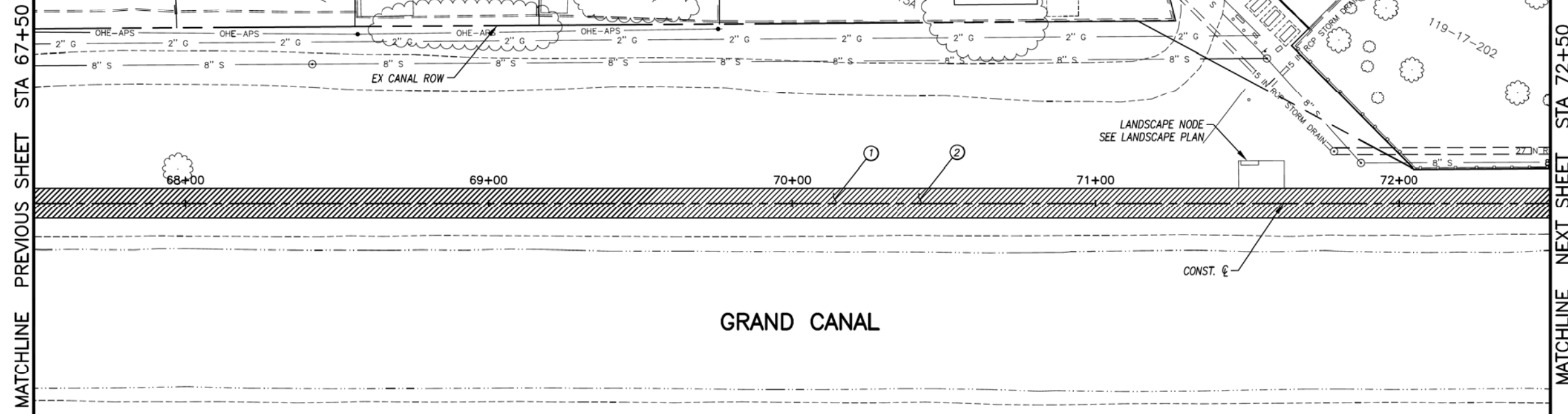
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- 20.12' END BARRICADE
- 38.81' END BARRICADE
- 51.18' SIGN
- 48.70' SEWER MH
- 51.33' TELE PEDESTAL
- 52.02' FENCE CORNER
- 18.04' SMH
- 14.20' SEWER MH
- 12.46' FENCE CORNER



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,024	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,024	2,182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

74+13.30 SIGN
74+65.34 SEWER MH
75+25.94 END FENCE
75+31.89 POWER POLE

22.79' END BALBOARD
14.92' END BALBOARD
8.94' SIGN
11.34' END BALBOARD
2.16' GATE POST
9.02' END CURB
8.58' TELE PEDESTAL
10.11' TRANSFORMER
17.84' CURB PI
21.49.08 TRANSFORMER
17.28.05 CURB PI

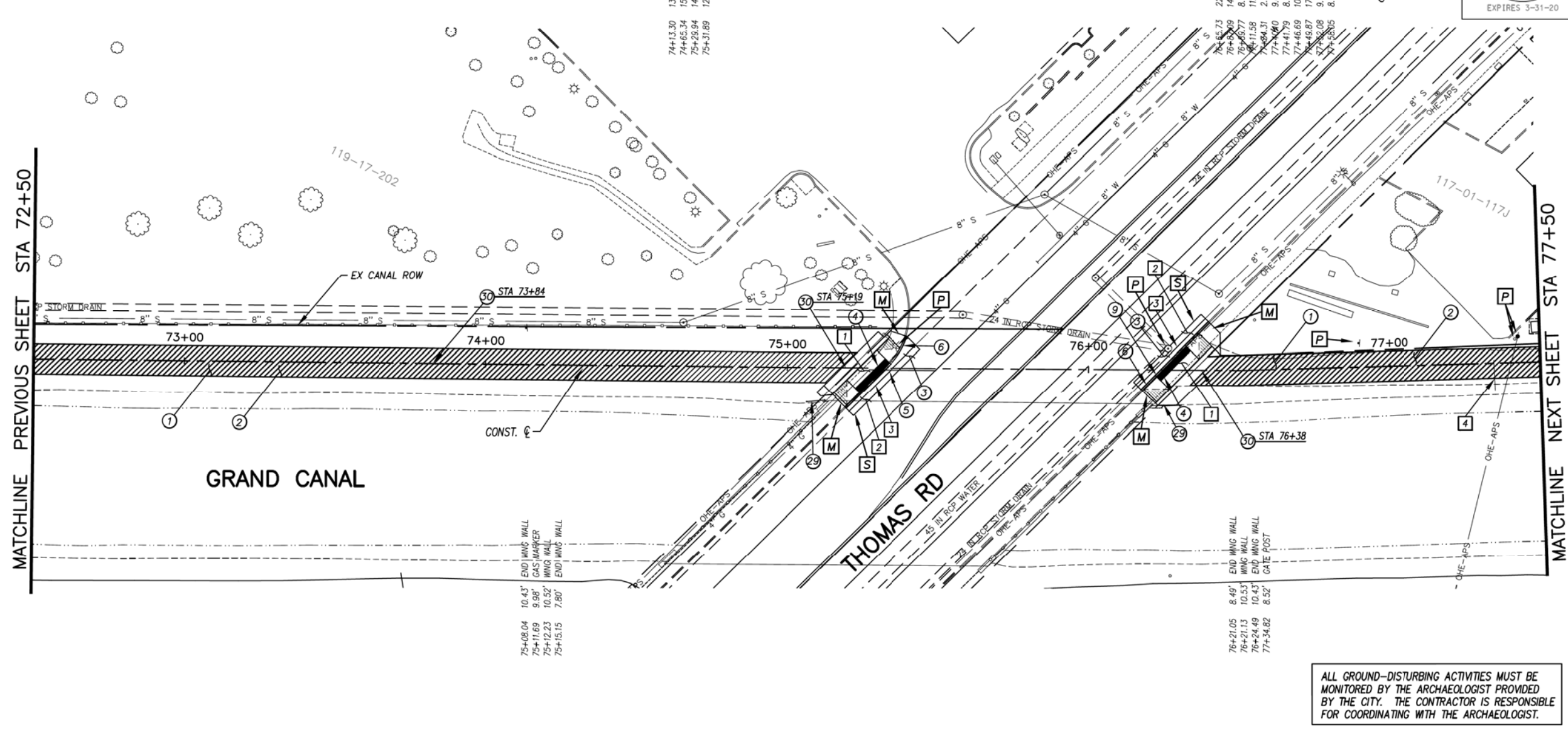


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.025	2.182
E.C.C. ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

- [P] PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	301	S.F.
2	REMOVE ASPHALT CONCRETE	14	S.Y.
3	REMOVE EXISTING CURB & GUTTER	63	L.F.
4	REMOVE AND REPLACE EXISTING GATE	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	3828	S.F.
2	SLURGRADE PREPARATION	425	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	14	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	56	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL F	278	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	64	L.F.
9	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL G	300	S.F.
29	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	12	L.F.
50	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

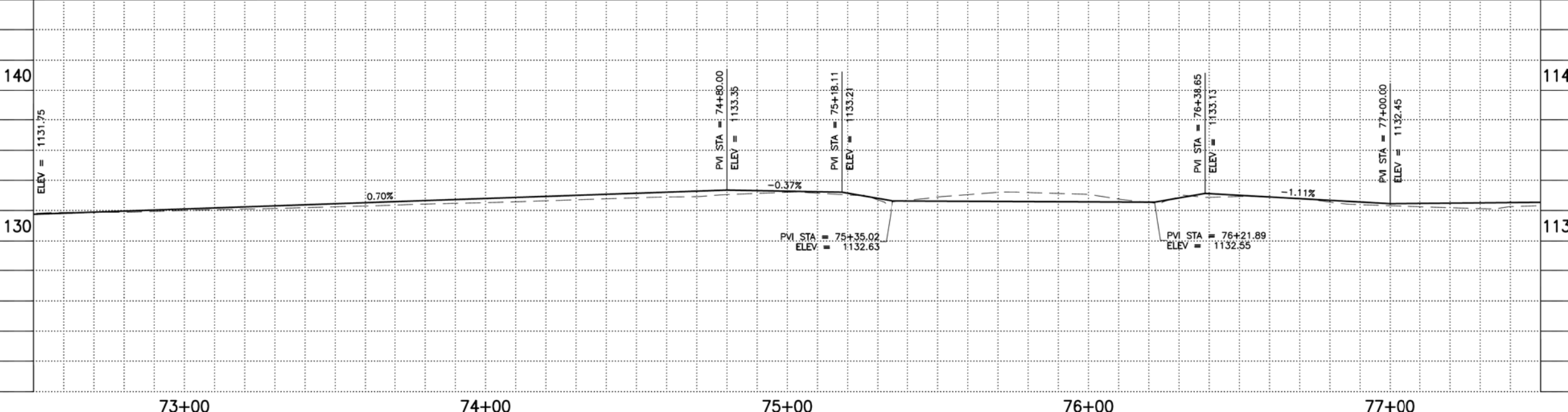
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.025	2.182

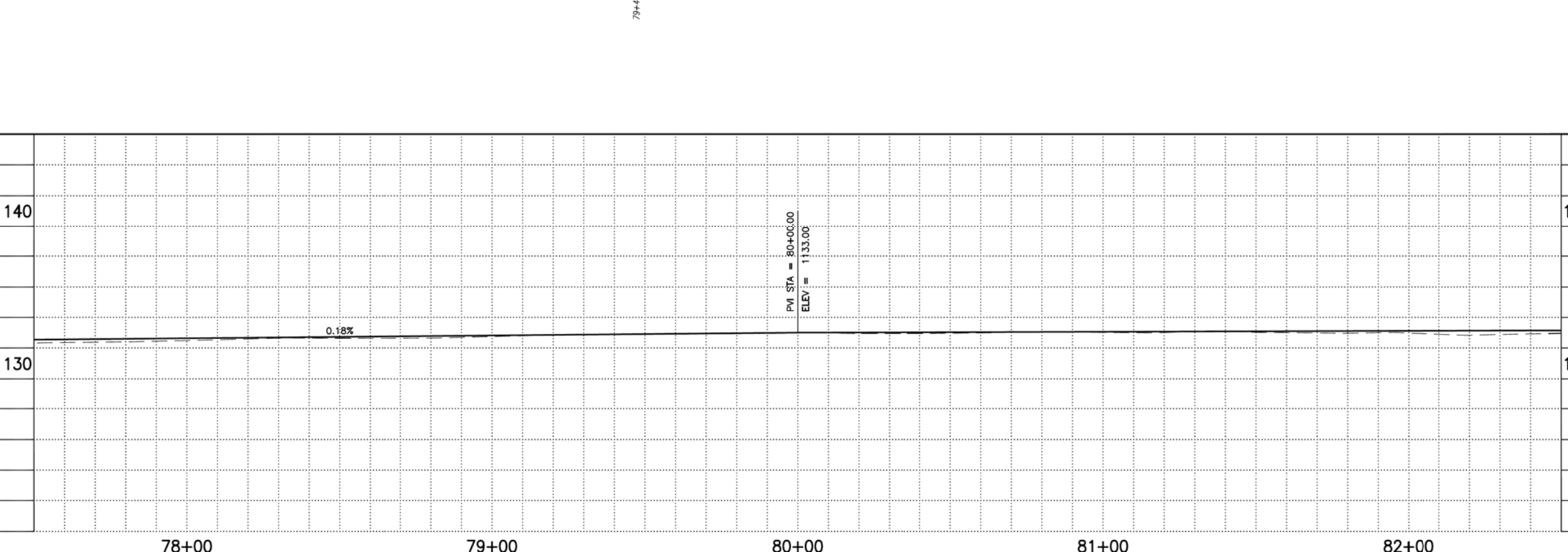
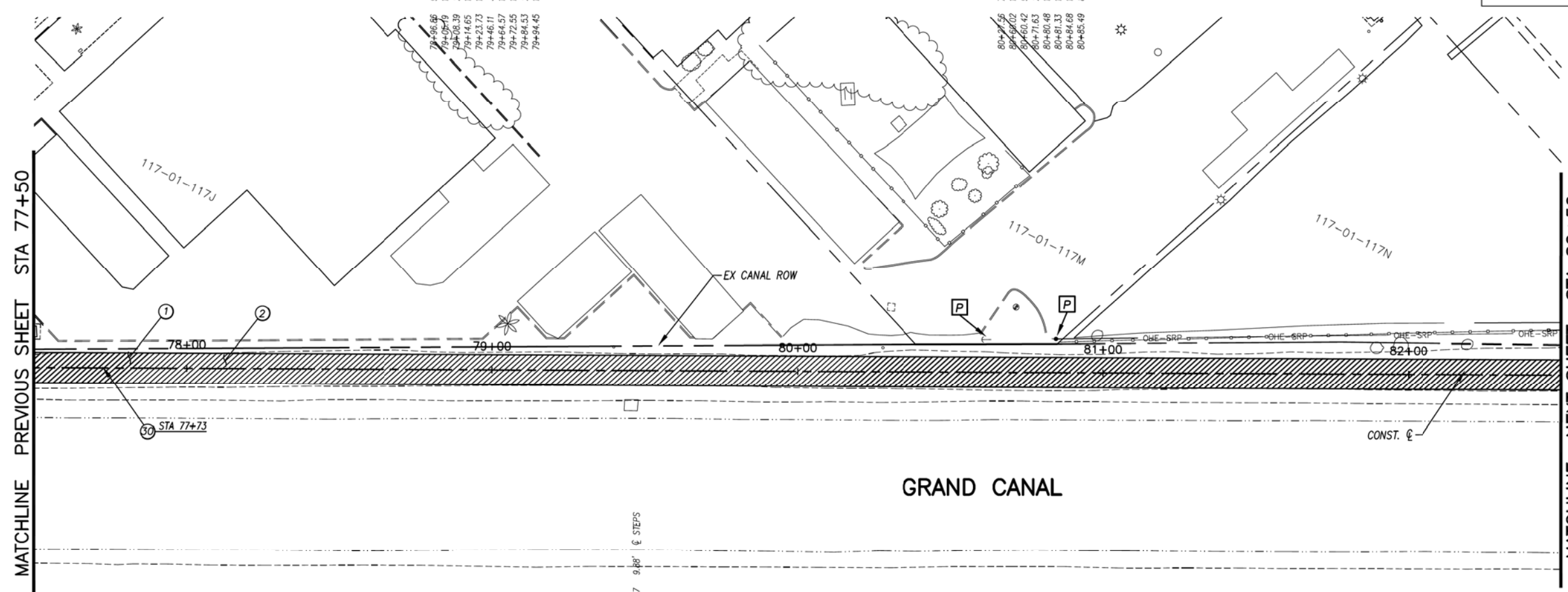
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.026	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

- (P) PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.
③	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
 "PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.026	2.182

SCALE: 1" = 20' 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

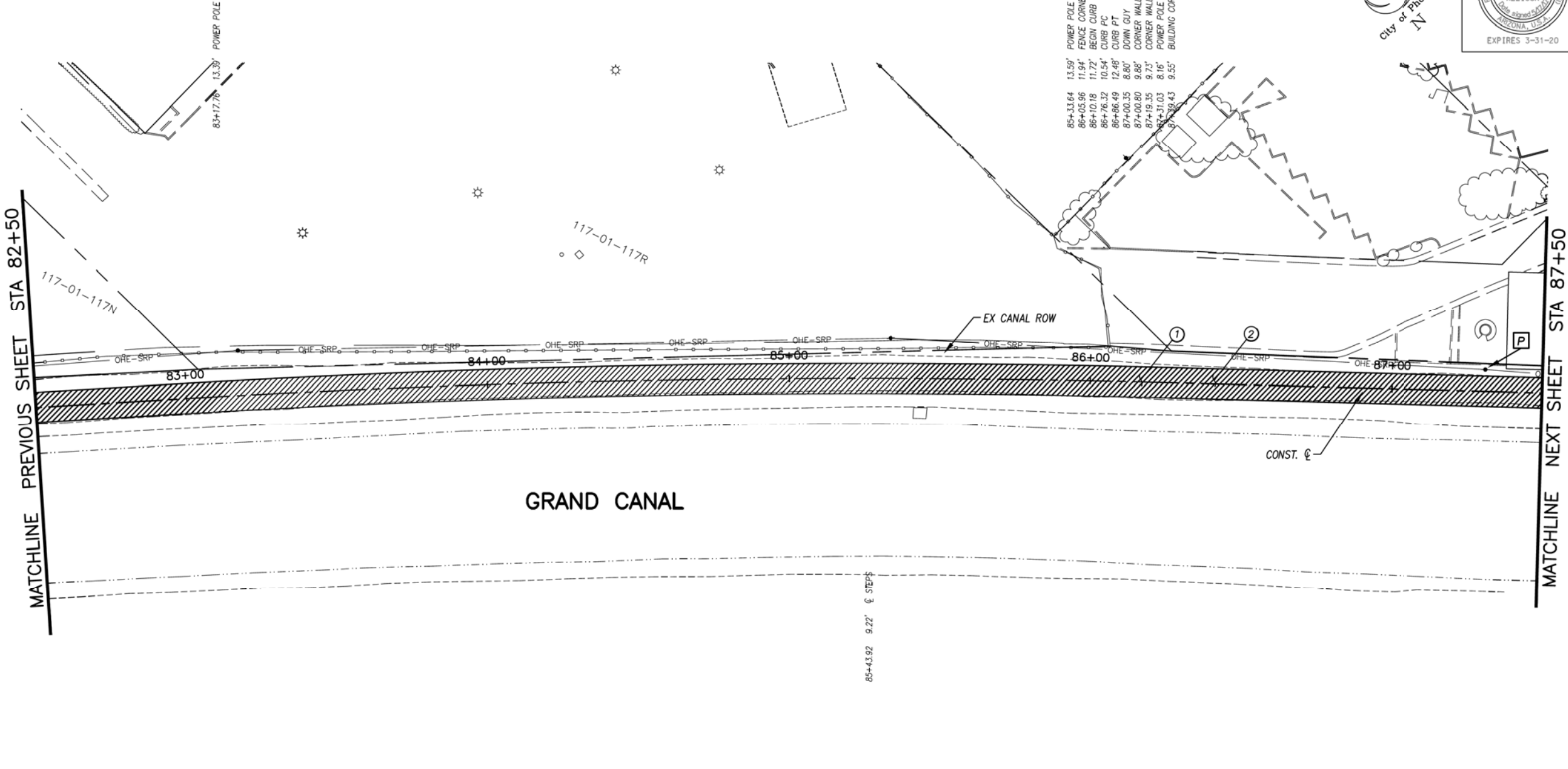


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.027	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- 85+33.64 POWER POLE
- 86+05.96 FENCE CORNER
- 86+10.18 BEGIN CURB
- 86+76.32 CURB FC
- 86+86.49 DOWN GUY
- 87+00.35 CORNER WALL
- 87+00.80 CORNER WALL/BEGIN CURB
- 87+19.35 POWER POLE
- 87+31.03 BUILDING CORNER
- 87+39.43 BUILDING CORNER

GENERAL NOTES

- P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

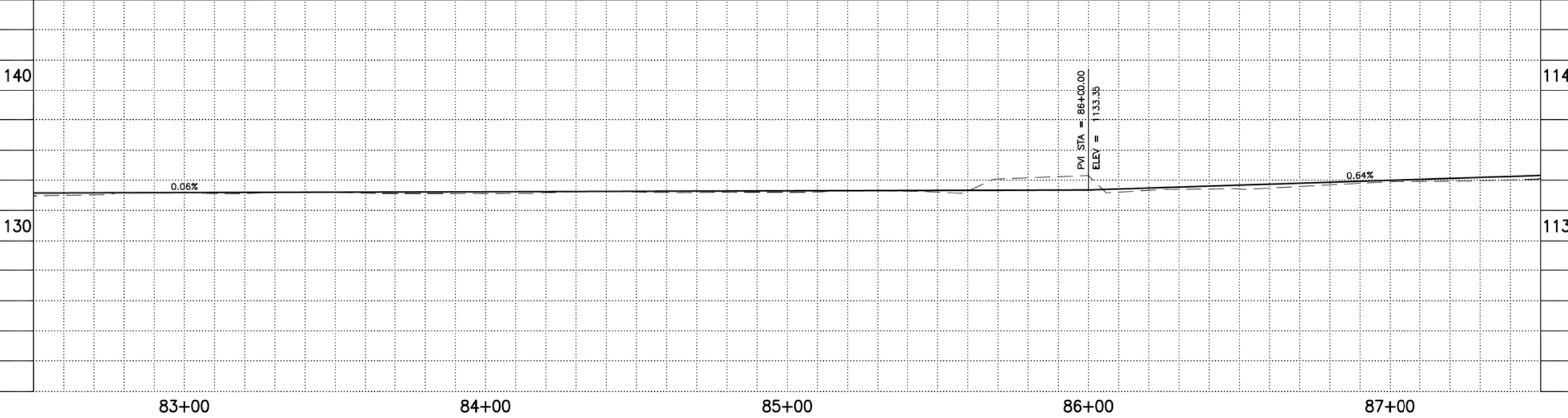
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.027	2.182

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET

- 87+78.13 9.21' BUILDING CORNER
- 88+56.59 10.72' BUILDING CORNER
- 88+57.36 7.94' END CURB
- 89+74.62 3.68' GATE P/ST
- 89+74.68 7.39' BUILDING CORNER
- 89+86.50 8.61' TELE PEDESTAL
- 89+88.63 10.11' TRANSFORMER
- 89+93.40 9.85' TRANSFORMER
- 89+99.46 13.26' CORNER WALL
- 90+00.74 9.43' END WALL
- 90+12.74 8.42' GAS MARKER

- 91+42.39 12.16' CORNER WALL
- 91+84.74 8.76' GATE
- 91+89.16 8.39' GATE
- 92+04.77 6.94' CORNER WALL
- 92+10.91 8.70' POWER POLE
- 92+13.26 8.01' PULL BOX
- 92+53.32 44.18' SEWER V/



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,028	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

- M** SAWCUT AND MATCH EXISTING CONCRETE
- P** PROTECT IN PLACE
- S** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	371	S.F.
2	REMOVE ASPHALT CONCRETE	18	S.Y.
3	REMOVE EXISTING CURB & GUTTER	74	L.F.
4	REMOVE AND REPLACE EXISTING GATE	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	3687	S.F.
2	SUBGRADE PREPARATION.	411	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	18	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	64	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL H	310	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	78	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	37	S.F.
9	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL I	355	S.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
<p>CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.</p> <p>PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.</p>			

PATHWAY PLAN & PROFILE

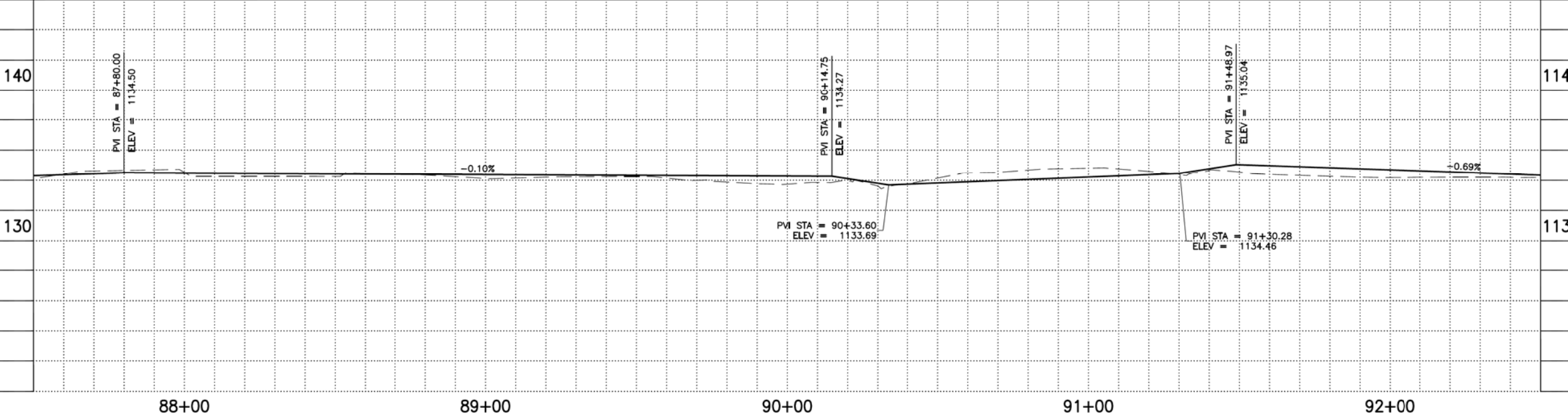
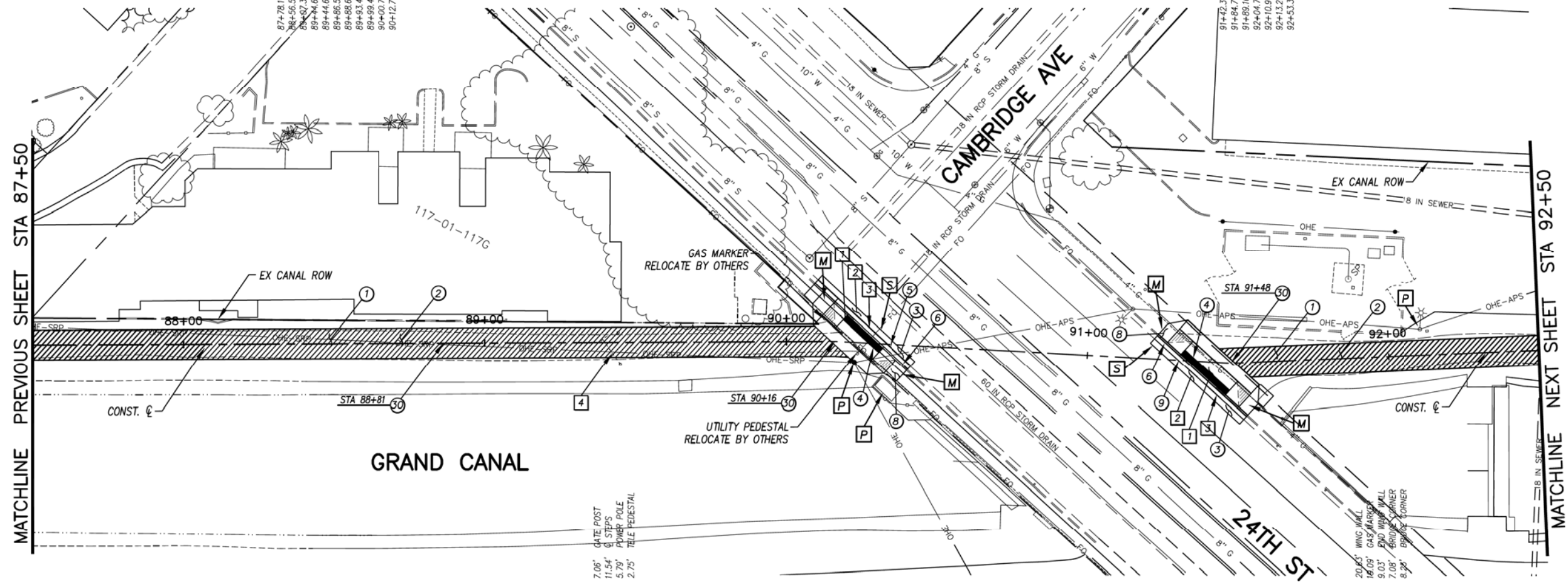
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,028	2,182

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

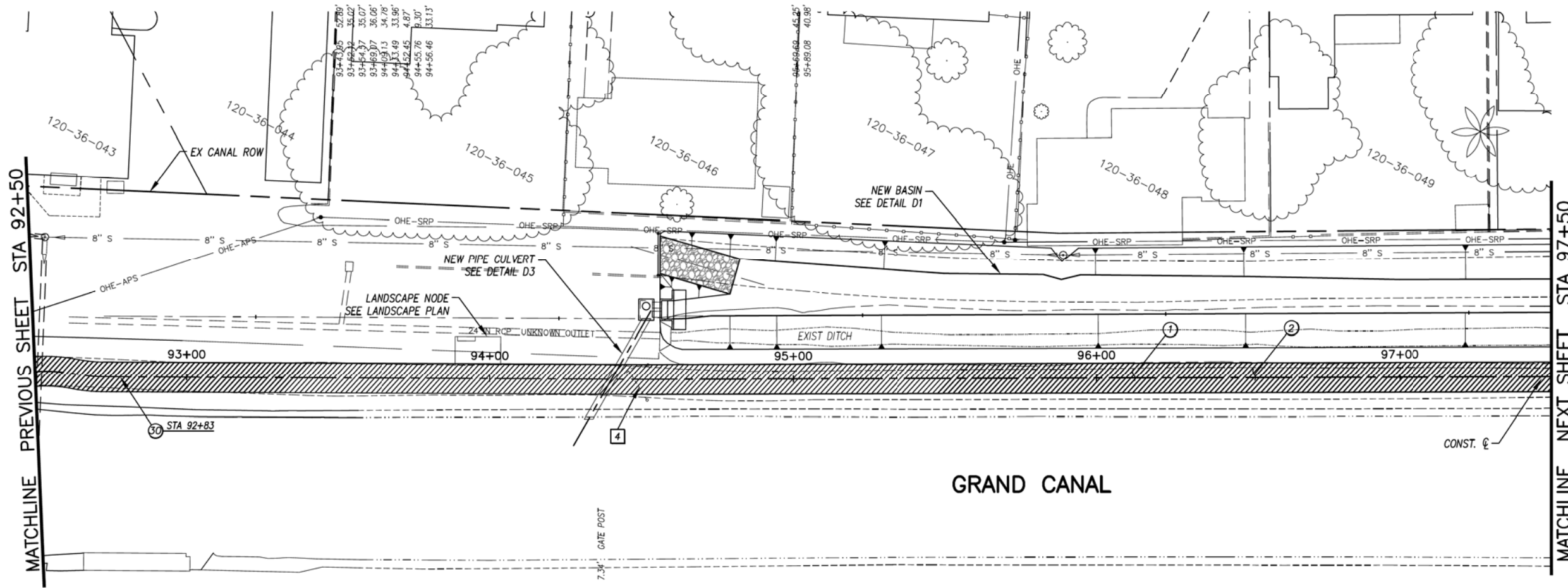


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,029	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
4	REMOVE AND REPLACE EXISTING GATE	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

ADJUSTMENT NOTES

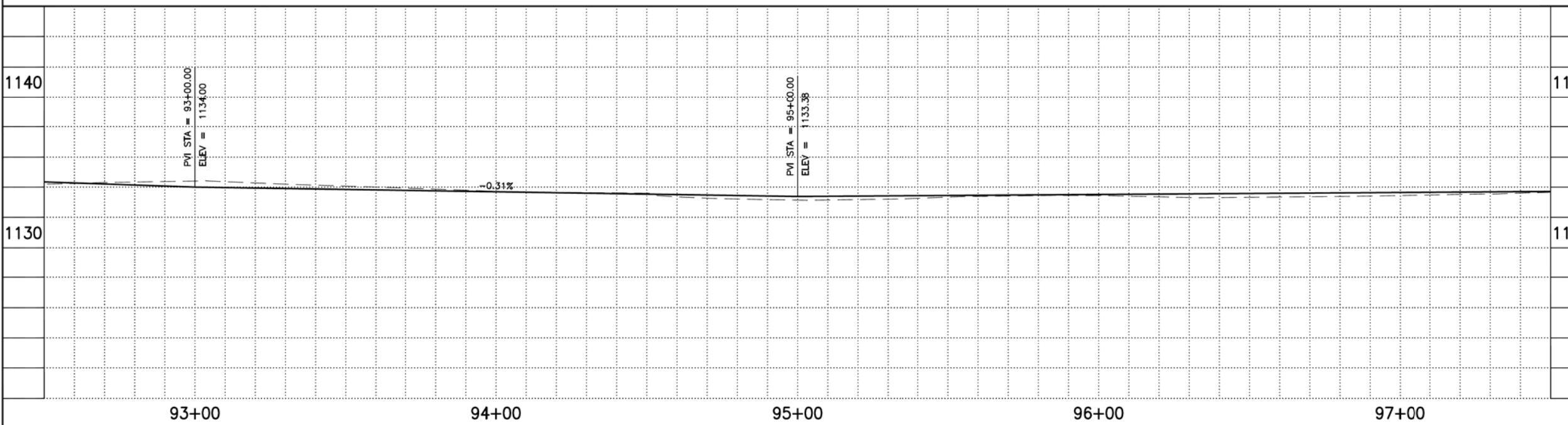
NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

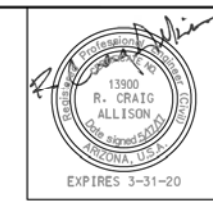
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,029	2,182
SCALE: 1" = 20'			0' 20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

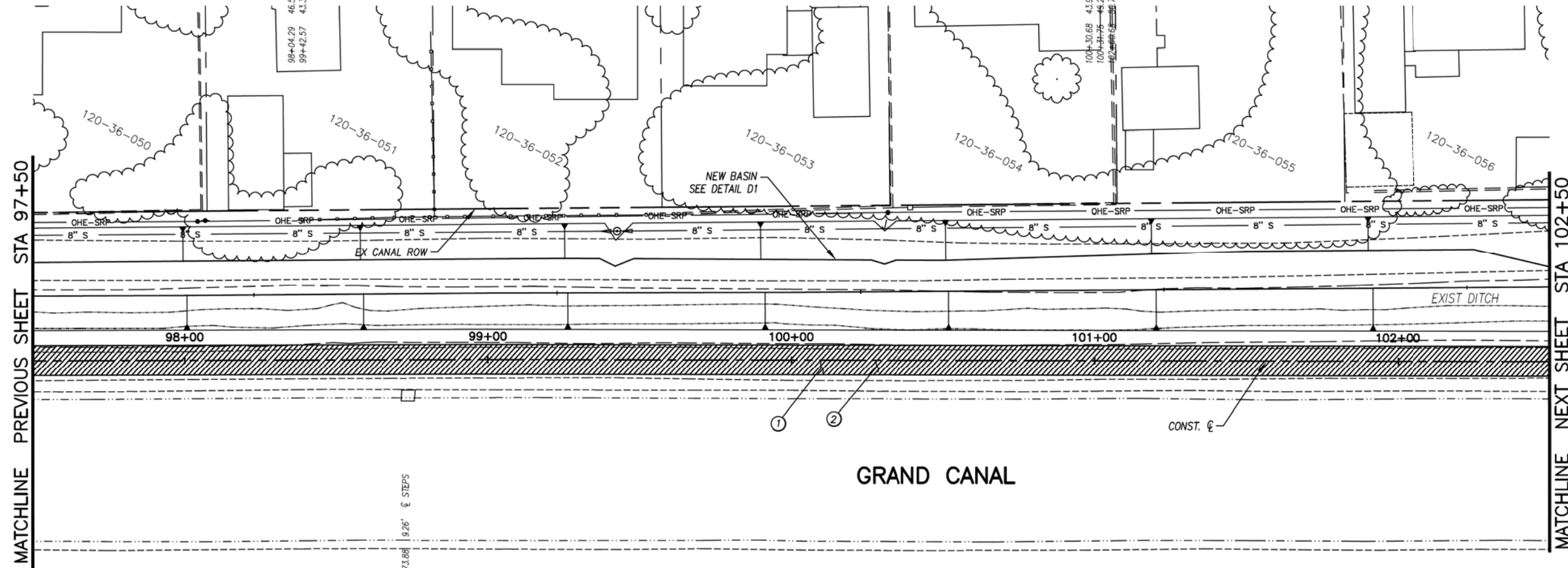


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,030	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



1140		1140
1130	0.13%	1130
98+00	99+00	100+00
		101+00
		102+00

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,030	2,182

SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

102+60.68 50.78' POWER POLE
102+96.88 45.90' SEWER MH
104+98.13 55.62' POWER POLE

106+02.23 52.48' SEWER MH
106+96.71 55.47' SIGN
107+15.69 53.71' POWER POLE

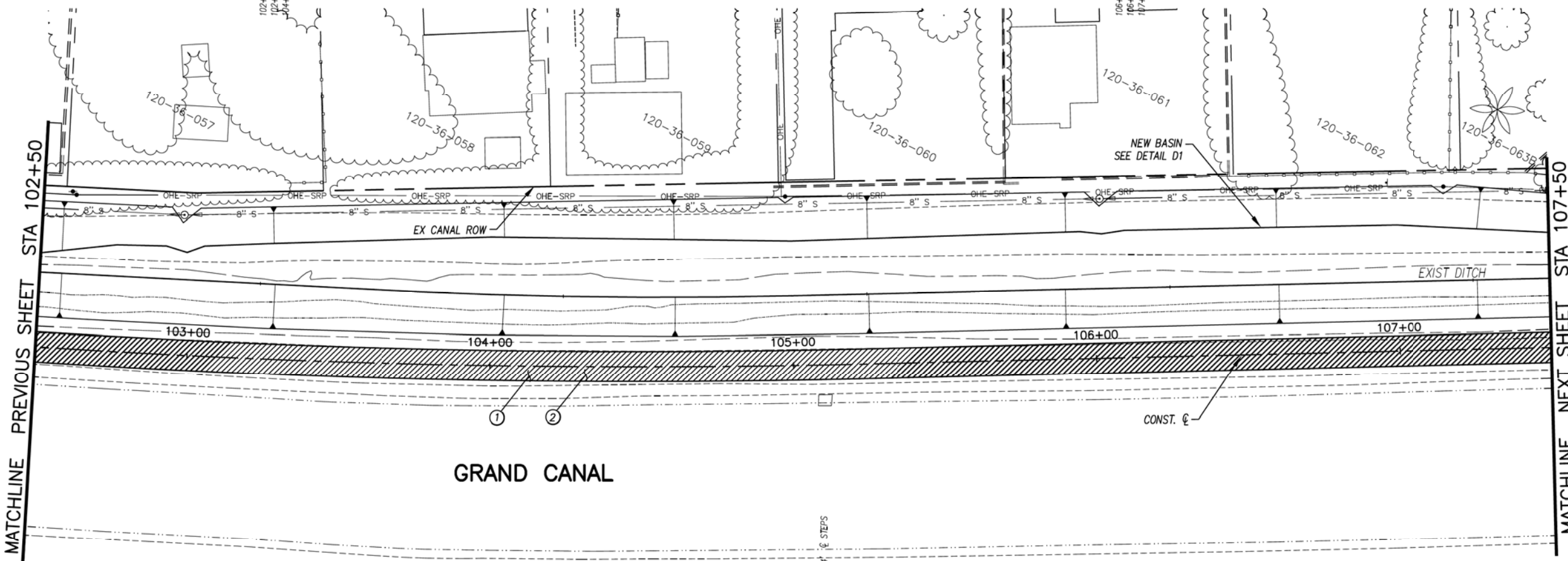


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.031	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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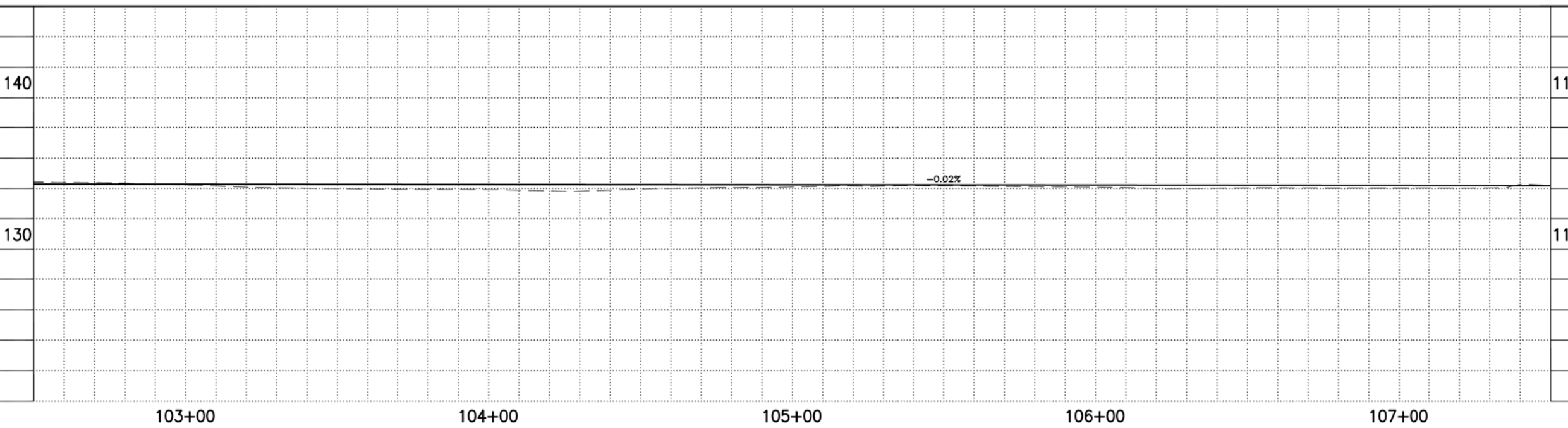


"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.031	2.182



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

- 107+91.13 POWER POLE
- 108+40.69 CORNER WALL
- 108+58.39 CORNER WALL
- 108+76.67 CORNER WALL
- 108+94.14 DOWN GUY
- 109+14.45 SEWER MA
- 109+26.64 POWER POLE
- 109+33.20 SIGN
- 109+37.04 POST
- 109+44.89 DOWN GUY
- 109+55.26 DOWN GUY
- 109+75.88 DOWN GUY
- 109+98.68 POWER POLE

- 110+15.55 CONCRETE PAD
- 110+34.28 CONCRETE PAD
- 111+63.49 GATE POST
- 111+66.73 POWER POLE
- 112+37.06 END WING WALL
- 124+37.09 END WING WALL
- 124+39.97 BOLLARD
- 124+40.76 WING WALL
- 124+43.62 WING WALL
- 124+47.16 BOLLARD



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.032	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

- M** SAWCUT AND MATCH EXISTING CONCRETE
- P** PROTECT IN PLACE
- S** SAWCUT 2' AND MATCH EXISTING

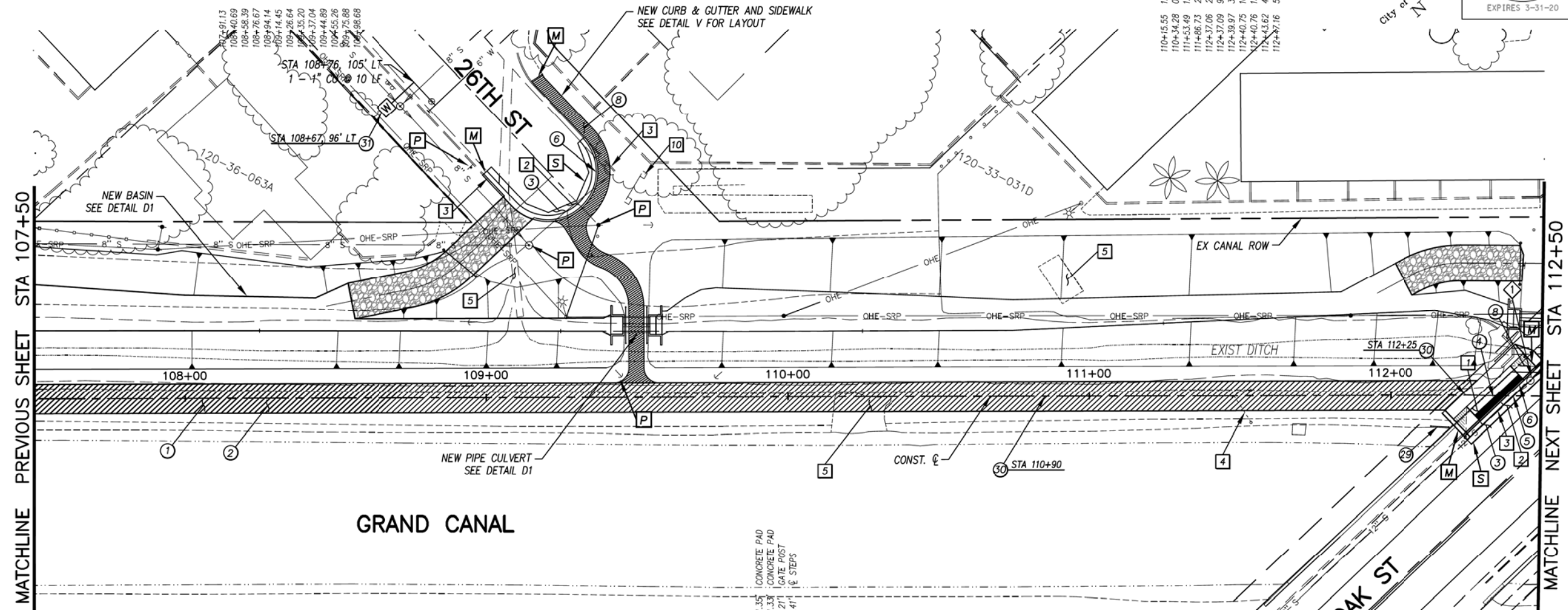
REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	138	S.F.
2	REMOVE ASPHALT CONCRETE	25	S.Y.
3	REMOVE EXISTING CURB & GUTTER	60	L.F.
4	REMOVE AND REPLACE EXISTING GATE	1	EA.
5	REMOVE EXISTING MISC. CONCRETE	40	S.Y.
10	REMOVE EXISTING BARRICADE	12	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	4751	S.F.
2	SUBGRADE PREPARATION.	528	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	18	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	32	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL J	310	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	93	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	578	S.F.
29	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	6	L.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	2	EA.
31	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA.

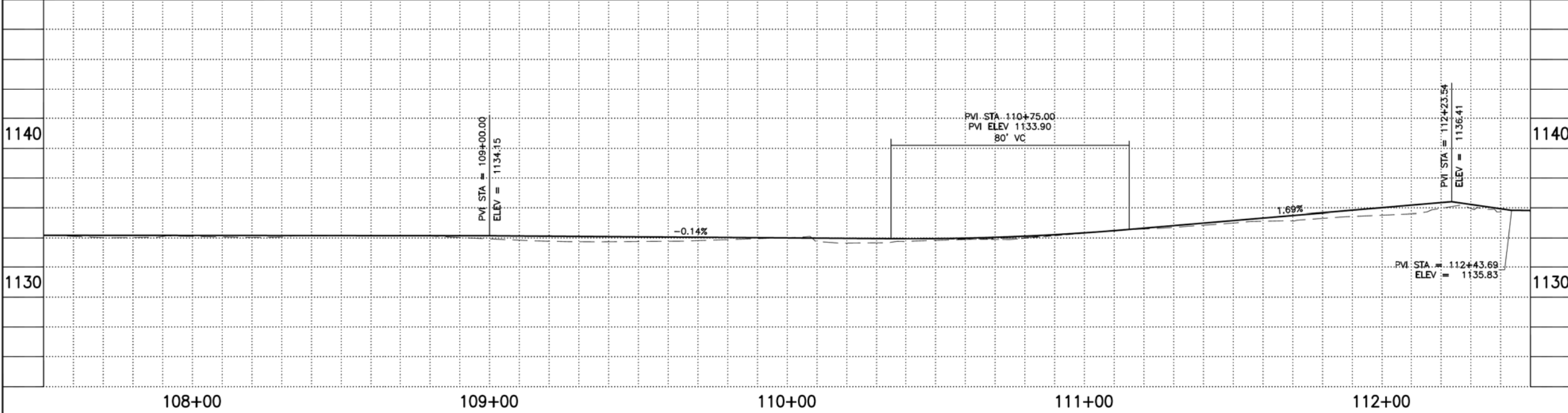
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	ADJUST MANHOLE RIM TO NEW GRADE	1	EA.



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.032	2.182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

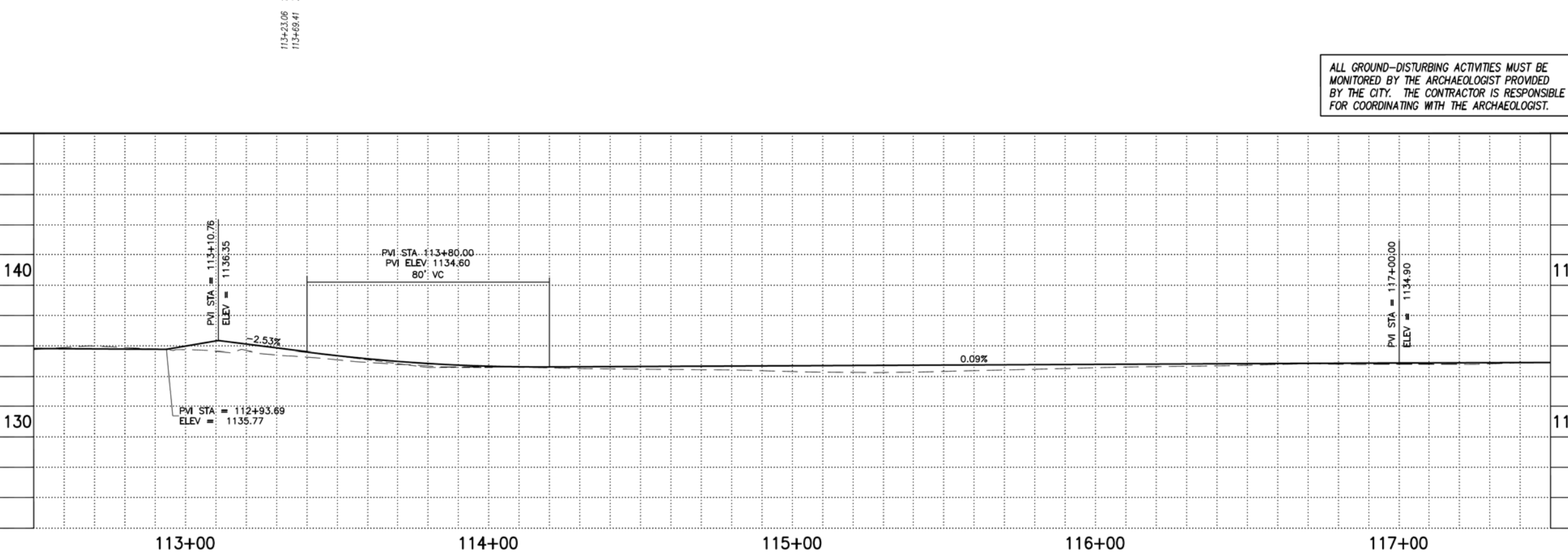
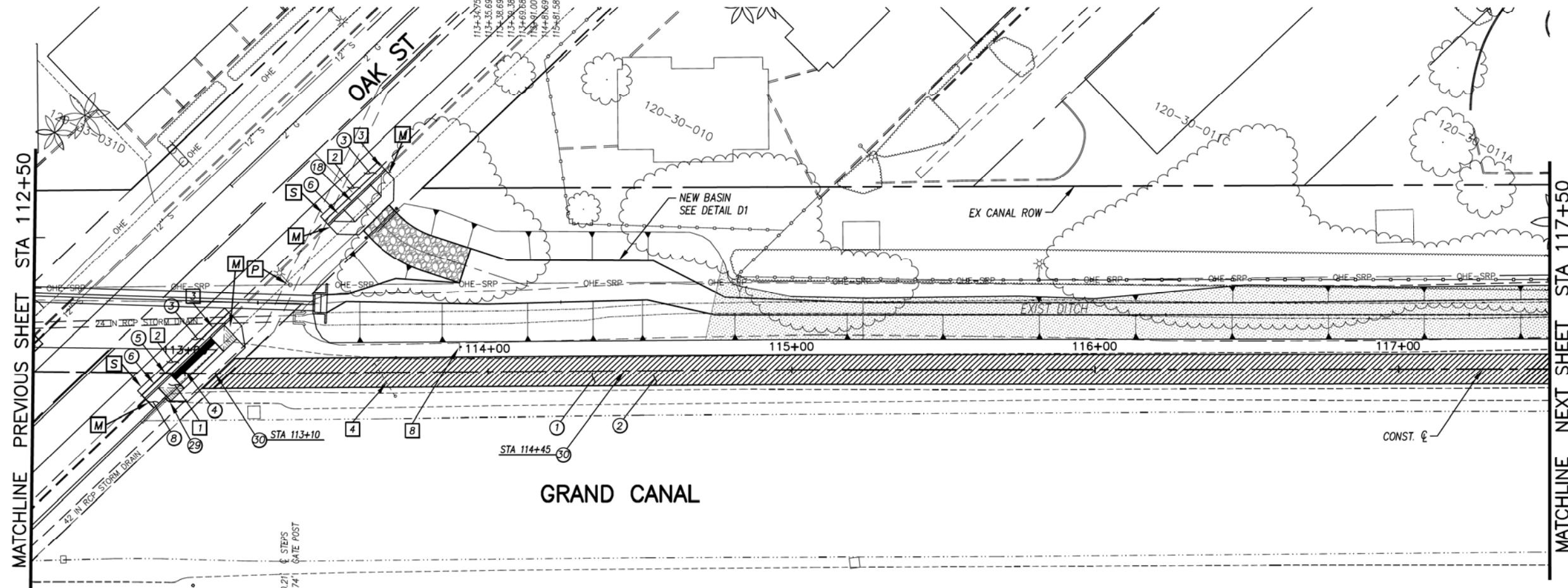


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.033	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- GENERAL NOTES**
- [M] SAWCUT AT JOINT AND MATCH EXISTING CONCRETE
 - [P] PROTECT IN PLACE
 - [S] SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	244	S.F.
2	REMOVE ASPHALT CONCRETE	13	S.Y.
3	REMOVE EXISTING CURB & GUTTER	64	L.F.
4	REMOVE AND REPLACE EXISTING GATE	1	EA.
8	REMOVE EXISTING SIGN	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	4406	S.F.
2	SUBGRADE PREPARATION.	490	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	14	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	32	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL K	310	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	65	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	19	S.F.
18	CONCRETE DRIVEWAY APRON SEE DETAIL U	262	S.F.
29	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	6	L.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	2	EA.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.033	2.182

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

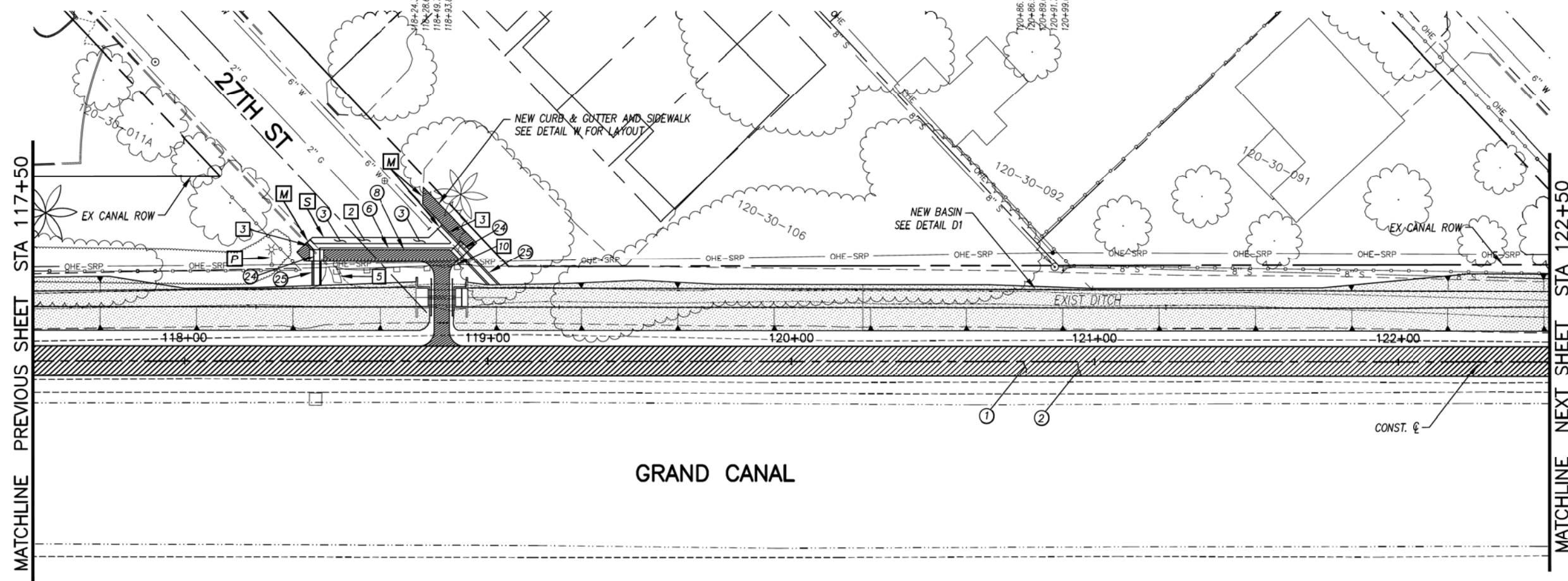


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.034	2.182
E.C.C. ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



- GENERAL NOTES**
- [M] SAWCUT AND MATCH EXISTING CONCRETE
 - [P] PROTECT IN PLACE
 - [S] SAWCUT 2' AND MATCH EXISTING

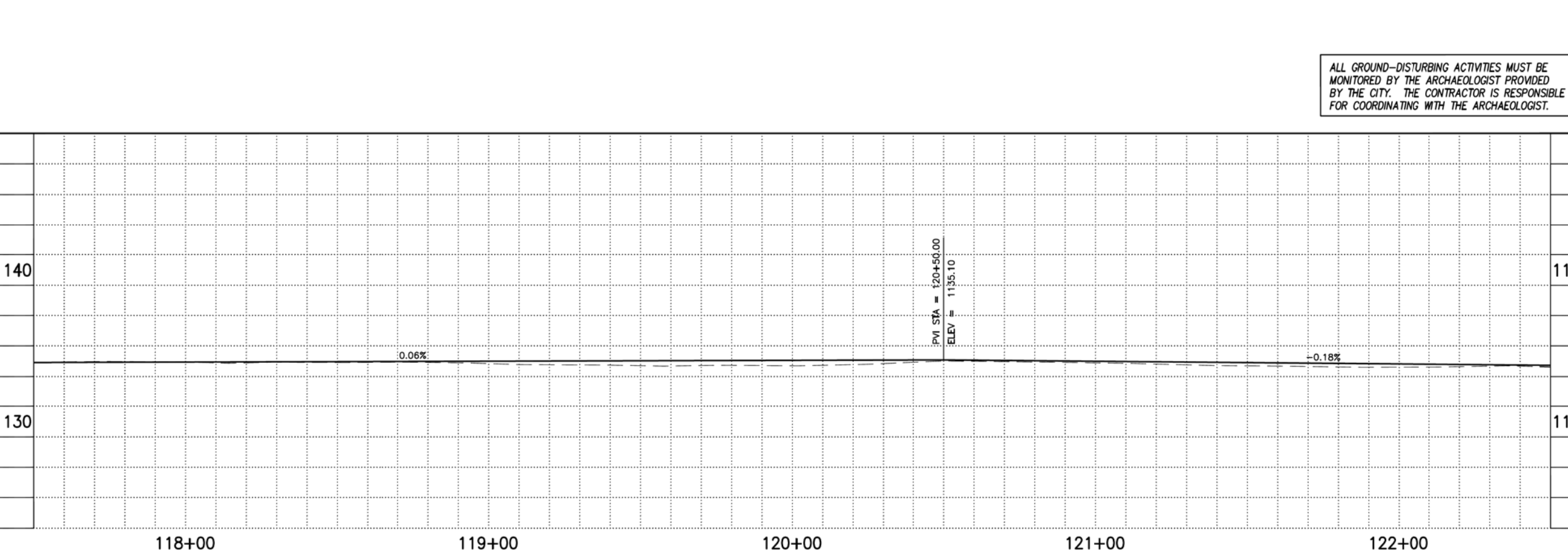
REMOVALS

NO.	DESCRIPTION	QTY	UNIT
[2]	REMOVE ASPHALT CONCRETE	40	S.Y.
[3]	REMOVE EXISTING CURB & GUTTER	25	L.F.
[5]	REMOVE EXISTING MISC. CONCRETE	2	S.Y.
[10]	REMOVE EXISTING BARRICADE	44	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
[1]	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
[2]	SUBGRADE PREPARATION.	556	S.Y.
[3]	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	11	S.Y.
[6]	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	55	L.F.
[8]	CONCRETE S/W PER C.O.P. STD. DET. P1230. 4" THICK	438	S.F.
[24]	SCUPPER PER MAG STD. DET. 203 2' BOTTOM WIDTH	2	EA.
[25]	SHOTCRETE SPILLWAY, 2' BOTTOM WIDTH 2:1 SIDE SLOPE TO MATCH EXISTING FORM TO DRAIN TO CHANNEL	9	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.034	2.182

SCALE: 1" = 20' 0" = 20'

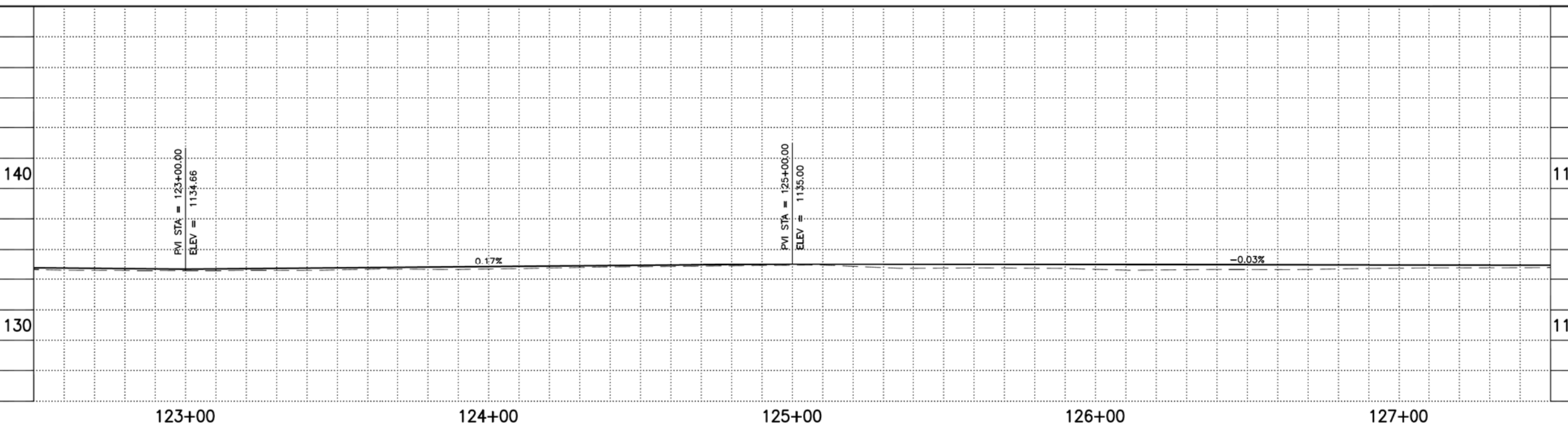
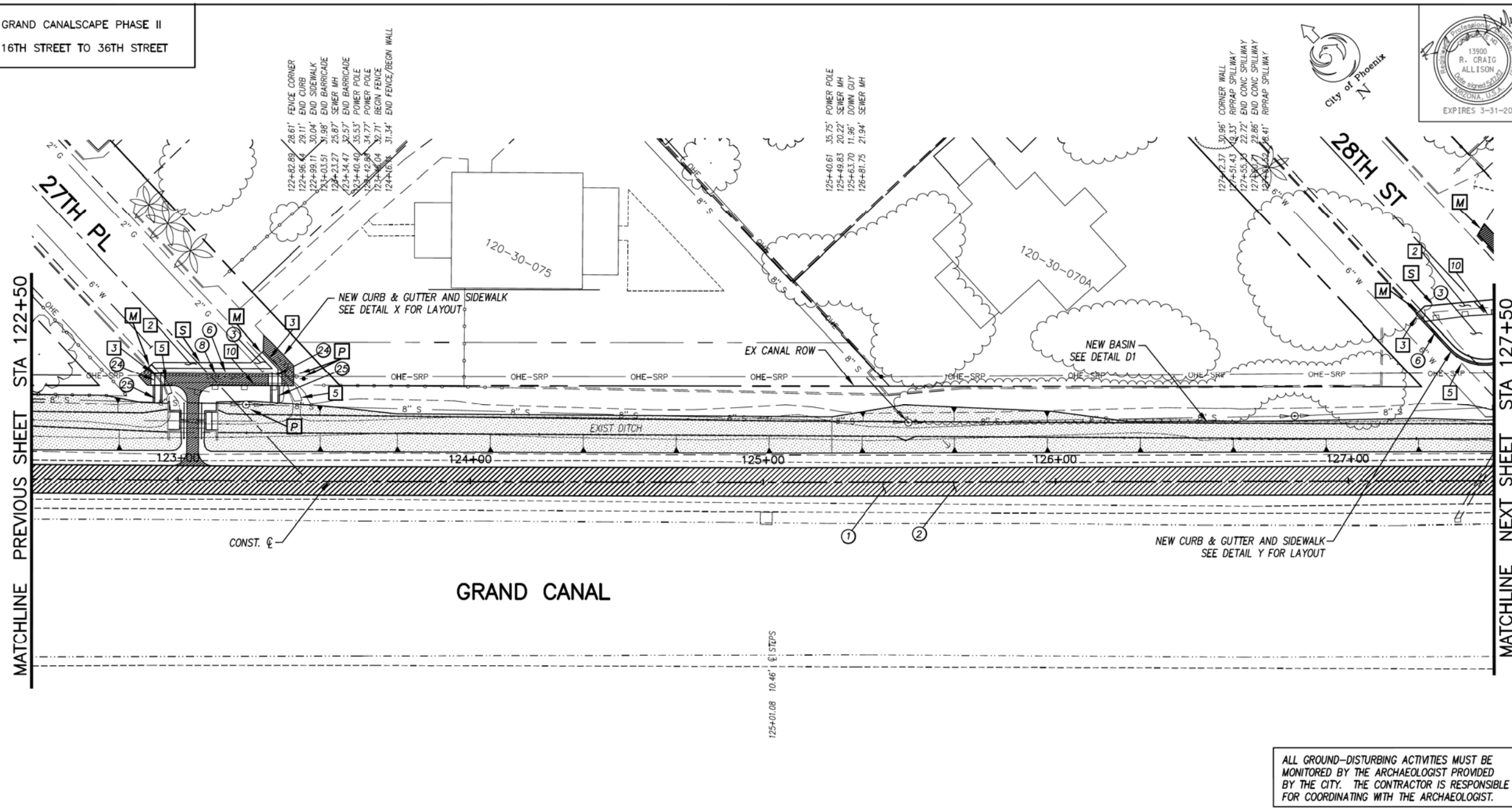
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.035	2.182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17
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- GENERAL NOTES**
- [M] SAWCUT AND MATCH EXISTING CONCRETE
 - [P] PROTECT IN PLACE
 - [S] SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
[2]	REMOVE ASPHALT CONCRETE	41	S.Y.
[3]	REMOVE EXISTING CURB & GUTTER	28	L.F.
[5]	REMOVE EXISTING MISC. CONCRETE	25	S.Y.
[10]	REMOVE EXISTING BARRICADE	63	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
[1]	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
[2]	SUBGRADE PREPARATION.	556	S.Y.
[3]	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	48	S.Y.
[6]	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	83	L.F.
[8]	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	360	S.F.
[24]	SCUPPER PER MAG STD. DET. 203 2' BOTTOM WIDTH	2	EA.
[25]	SHOTCRETE SPILLWAY, 2' BOTTOM WIDTH 2:1 SIDE SLOPE TO MATCH EXISTING FORM TO DRAIN TO CHANNEL	5	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

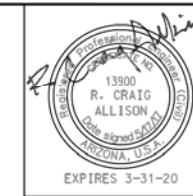
PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1" = 20'	0" = 20'	0" = 20'	2.035	2.182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

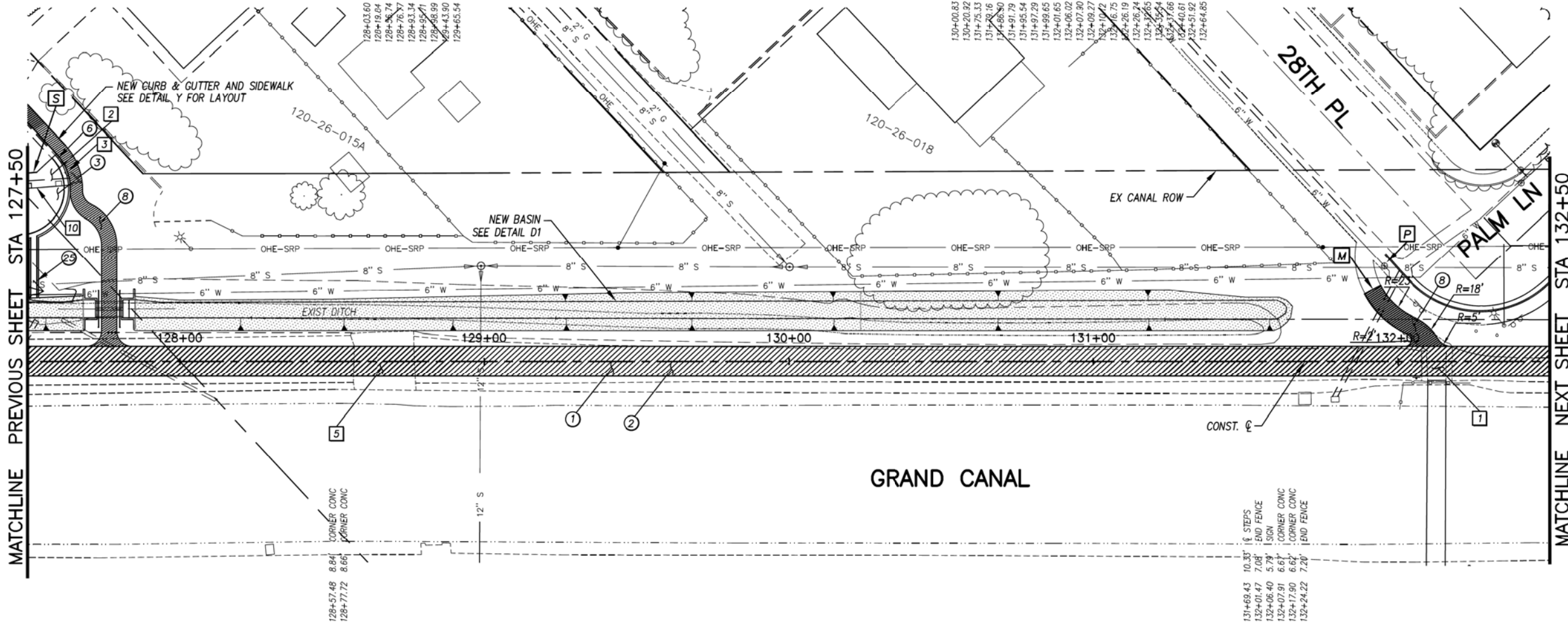


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.036	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



- 130+00.83 SEWER MH
- 130+20.92 26.93' FENCE CORNER
- 131+75.13 37.50' POWER POLE
- 131+75.16 31.24' FENCE CORNER
- 131+66.90 38.57' CORNER CONC
- 131+91.29 32.92' CORNER CONC
- 131+95.54 31.15' WATER VALVE
- 131+97.29 12.34' EDGE CONC
- 131+99.65 31.19' INLET GRATE
- 132+01.65 29.04' INLET GRATE
- 132+06.02 18.71' SIGN
- 132+07.90 3.30' CORNER CONC
- 132+09.27 15.93' SIGN
- 132+10.72 3.18' CORNER CONC
- 132+16.75 6.12' CORNER CONC
- 132+26.24 25.98' SIGN
- 132+26.24 25.98' FD MONUMENT
- 132+27.65 8.70' SIGN
- 132+29.54 11.80' POWER POLE
- 132+37.66 11.36' SIGN
- 132+40.61 13.80' SIGN
- 132+51.92 21.86' EDGE CONC
- 132+64.85 30.42' SEWER MH

- GENERAL NOTES**
- M** SAWCUT AT JOINT AND MATCH EXISTING CONCRETE
 - P** PROTECT IN PLACE
 - S** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	204	S.F.
2	REMOVE ASPHALT CONCRETE	6	S.Y.
3	REMOVE EXISTING CURB & GUTTER	13	L.F.
5	REMOVE EXISTING MISC. CONCRETE	30	S.Y.
10	REMOVE EXISTING BARRICADE	16	L.F.

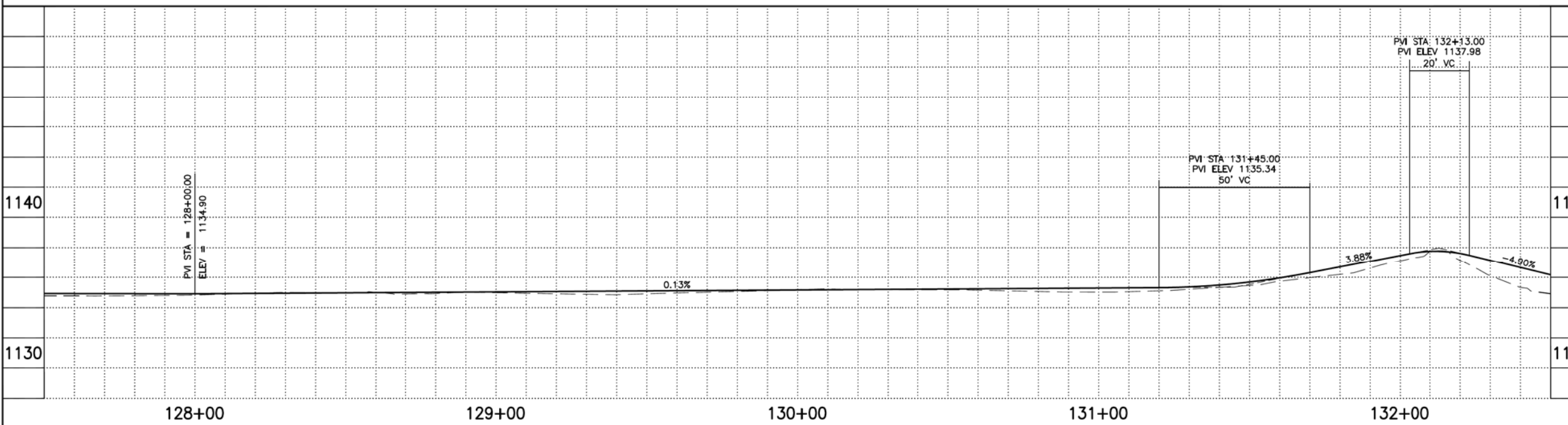
CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	25	S.Y.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	35	L.F.
6	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK, 6' WIDTH, MAX 5%	603	S.F.
25	SHOTCRETE SPILLWAY, 2' BOTTOM WIDTH 2:1 SIDE SLOPE TO MATCH EXISTING FORM TO DRAIN TO CHANNEL	8	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT



CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.036	2.182
SCALE: 1" = 20'			DATE: 07/17	

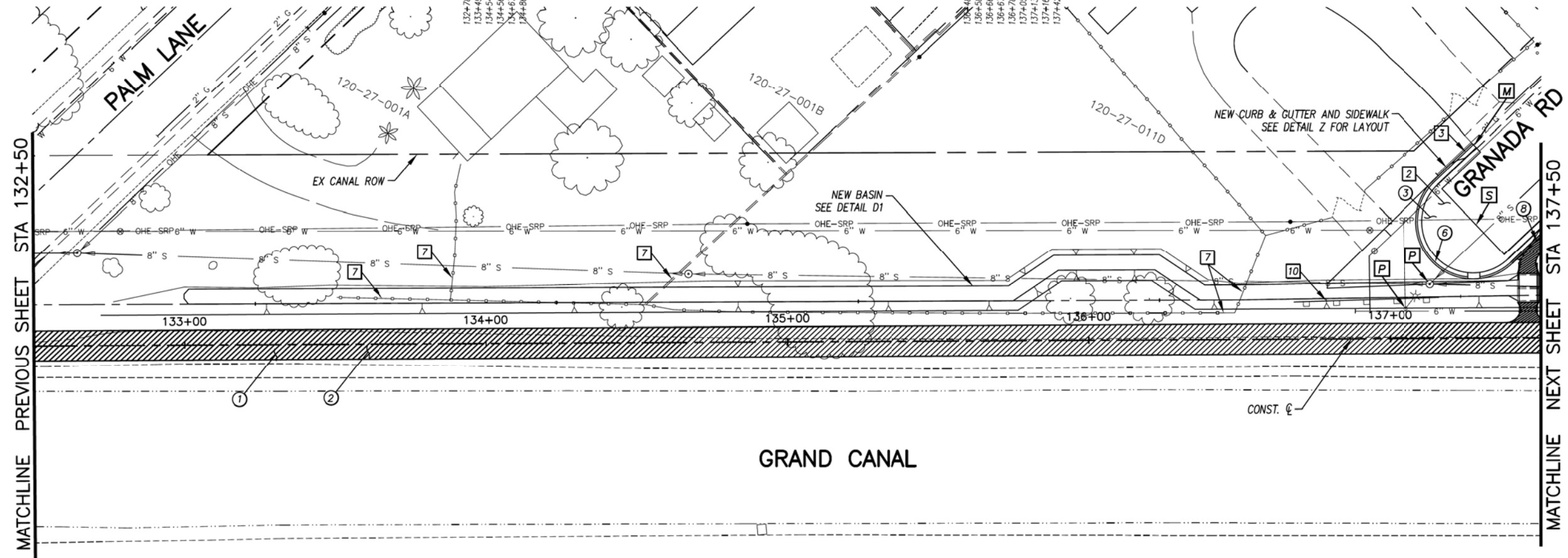
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.037	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				
NO.				
NO.				
NO.				



- GENERAL NOTES**
- [M] SAWCUT AND MATCH EXISTING CONCRETE
 - [P] PROTECT IN PLACE
 - [S] SAWCUT PER PLAN AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY.	UNIT
[2]	REMOVE ASPHALT CONCRETE	142	S.Y.
[3]	REMOVE EXISTING CURB & GUTTER	7	L.F.
[7]	REMOVE EXISTING FENCE	343	L.F.
[10]	REMOVE EXISTING BARRICADE	50	L.F.

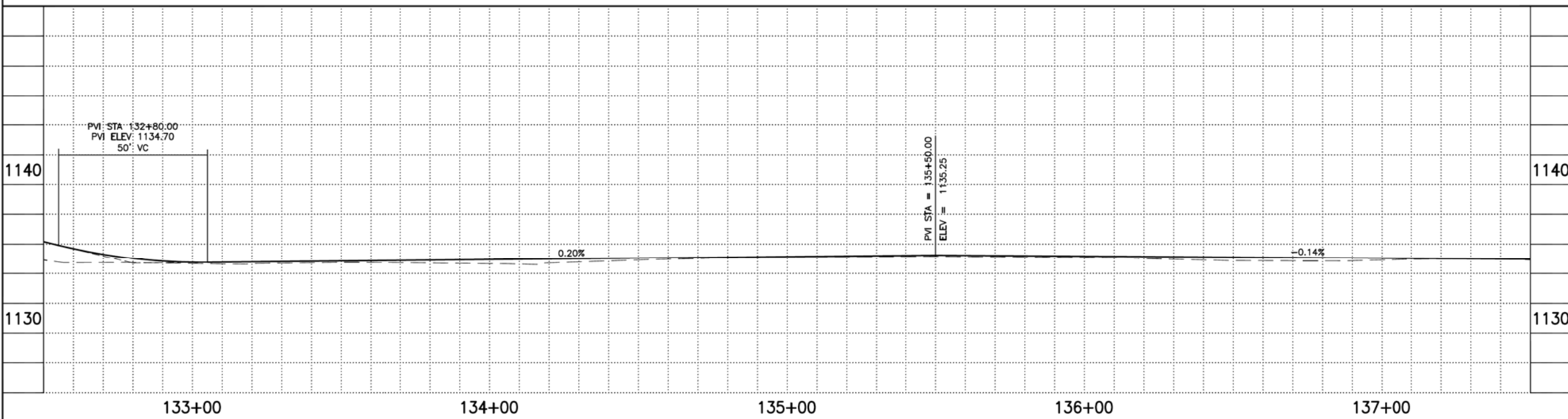
CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
[1]	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
[2]	SUBGRADE PREPARATION.	556	S.Y.
[3]	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	142	S.Y.
[6]	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	90	L.F.
[8]	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK, 6' WIDTH, MAX 5%	101	S.F.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.037	2.182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET

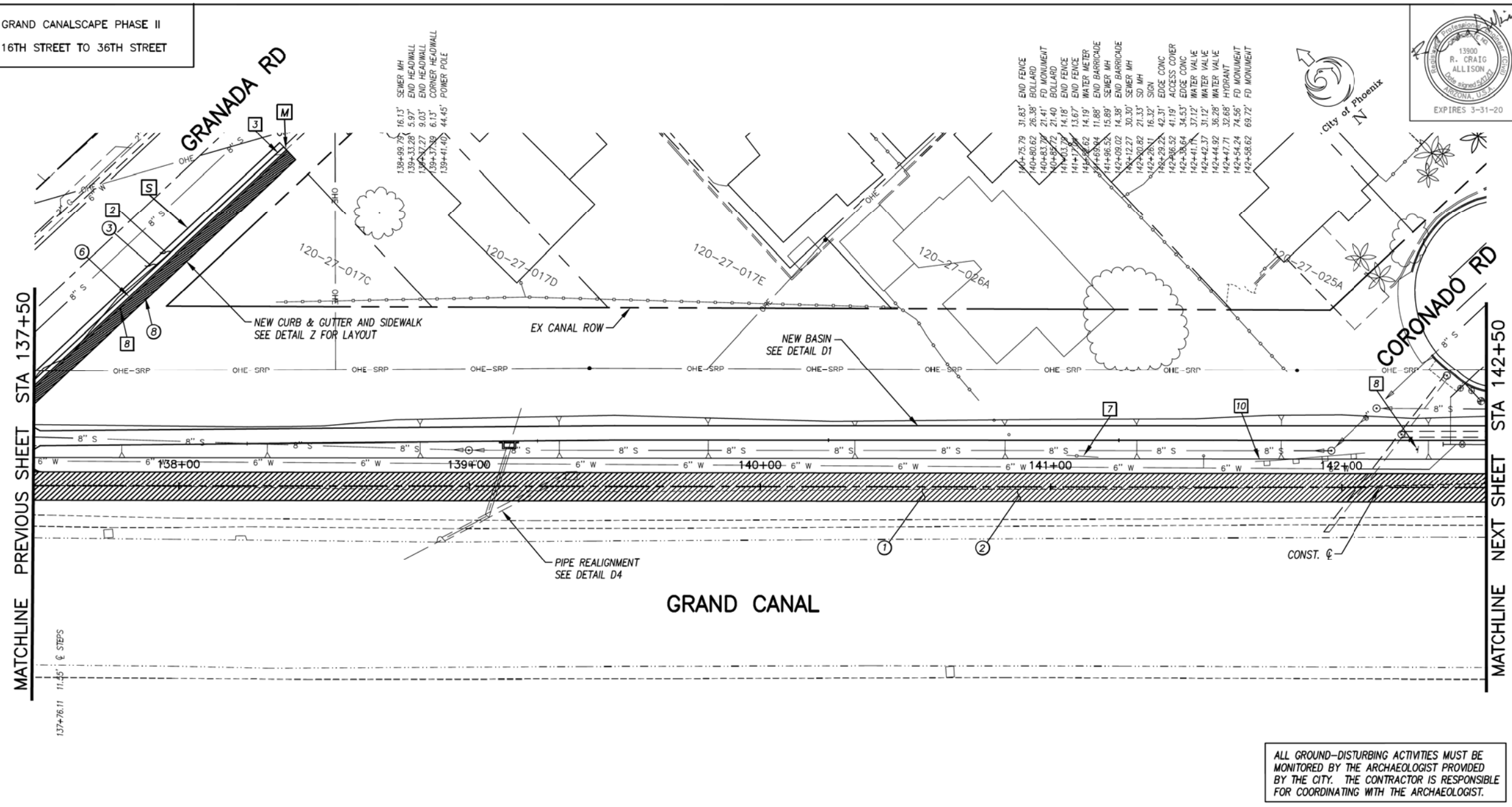


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,038	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

- M** SAWCUT AND MATCH EXISTING CONCRETE
- S** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
2	REMOVE ASPHALT CONCRETE	230	S.Y.
3	REMOVE EXISTING CURB & GUTTER	4	L.F.
7	REMOVE EXISTING FENCE	11	L.F.
8	REMOVE EXISTING SIGN	2	EA.
10	REMOVE EXISTING BARRICADE	38	L.F.

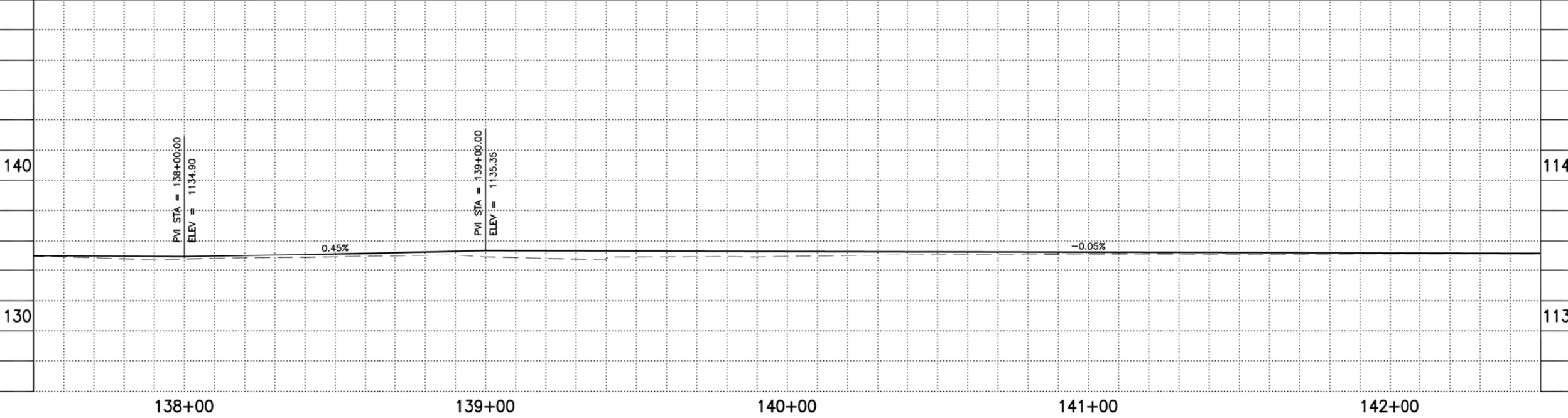
CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	26	S.Y.
6	CONCRETE VERTICAL CURB & CUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	120	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK, 6' WIDTH, MAX 5%	486	S.F.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,038	2,182

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

142+71.58 67.42' WATER VALVE
143+50.61 26.14' EDGE PAVEMENT
143+64.40 27.61' CORNER WALL
144+78.69 43.97' POWER POLE
144+80.81 21.50' SD MH
144+60.65 43.81' CORNER WALL
144+82.19 28.02' SEWER MH

146+31.10 43.27' POWER POLE
146+32.77 43.42' POWER POLE
146+52.02 24.76' DOWN GUY
146+65.76 43.94' DOWN GUY
146+68.07 7.84' POWER POLE
146+72.94 43.64' POWER POLE
146+82.94 21.21' SD MH
146+87.91 32.97' SIGN
146+88.12 34.24' EDGE CONC
146+91.16 28.94' SIGN
146+91.59 22.31' SIGN
146+93.78 32.96' ACCESS COVER
146+94.30 24.93' SIGN
146+94.57 26.32' EDGE CONC
146+98.01 25.86' SEWER MH
147+19.38 49.92' FD MONUMENT
147+50.20 49.13' POWER POLE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.039	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

GENERAL NOTES

- [M]** SAWCUT AND MATCH EXISTING CONCRETE
- [P]** PROTECT IN PLACE
- [S]** SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
2	REMOVE ASPHALT CONCRETE	4	S.Y.
3	REMOVE EXISTING CURB & GUTTER	22	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	4	S.Y.
6	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK, 6' WIDTH, MAX 5%	167	S.F.
26	CONCRETE CURB RAMP COP STD. DETAIL P-1241-2 (INCLUDES CURB & GUTTER)	96	S.F.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

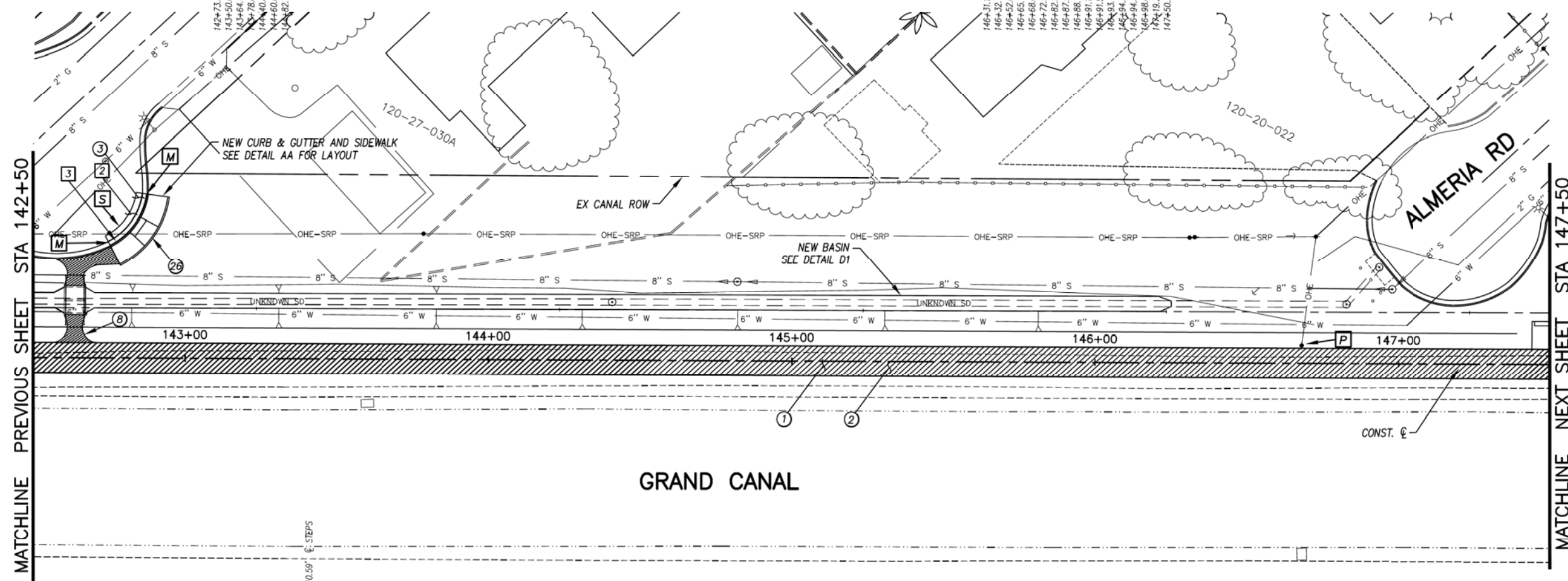
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.039	2.182

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



143+00	144+00	145+00	146+00	147+00
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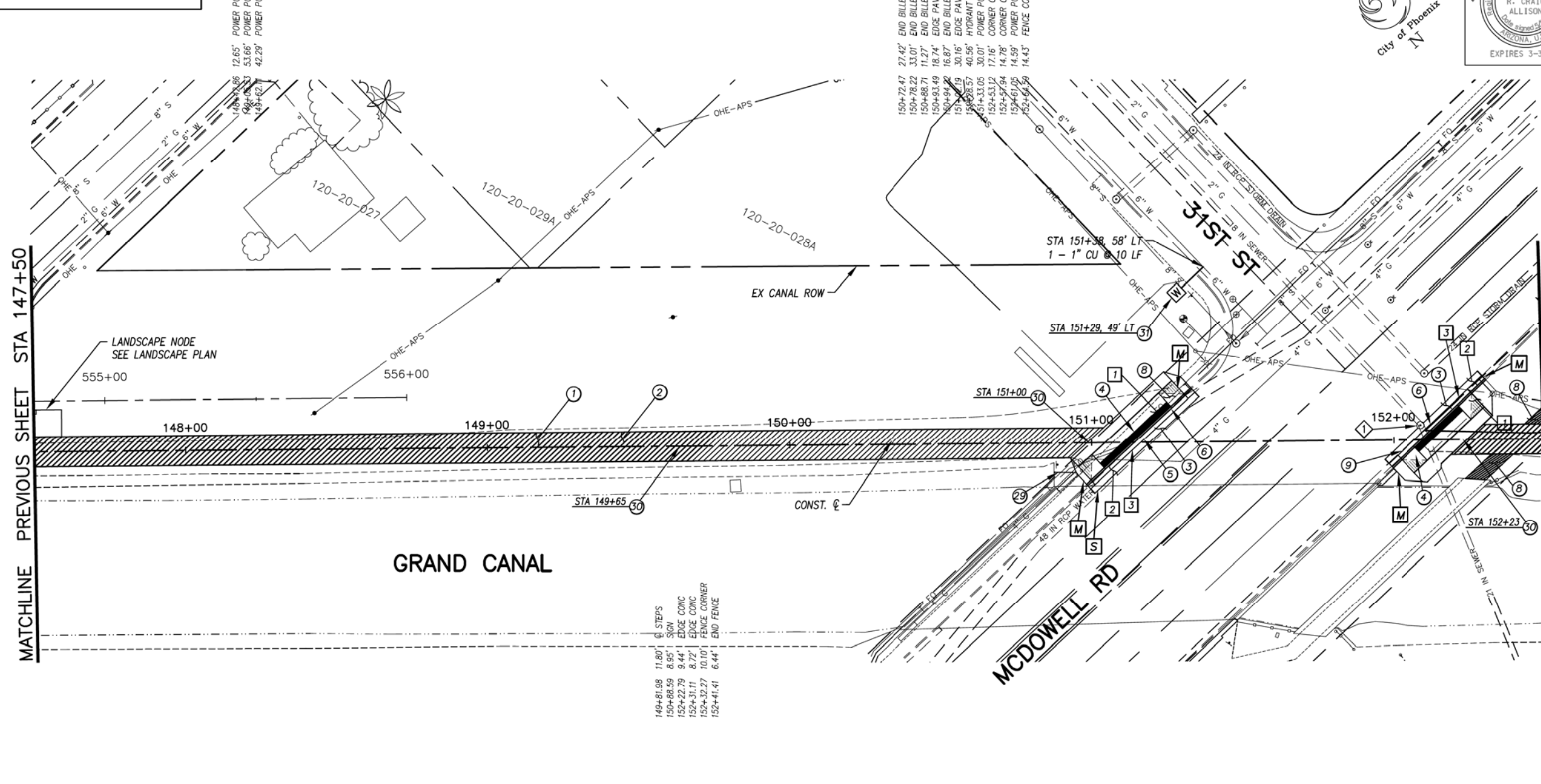
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE PREVIOUS SHEET STA 147+50

MATCHLINE NEXT SHEET STA 152+50



- 149+81.98 11.80' @ STEPS
- 150+88.59 8.95' SIGN
- 152+22.79 9.44' EDGE CONC
- 152+31.11 8.77' EDGE CONC
- 152+32.27 10.10' FENCE CORNER
- 152+41.41 6.44' END FENCE

- 150+72.47 27.42' END BILLBOARD
- 150+78.22 33.01' END BILLBOARD
- 150+88.71 11.27' END BILLBOARD
- 150+93.49 18.74' EDGE PAVEMENT
- 150+94.72 16.87' END BILLBOARD
- 151+04.09 30.16' EDGE PAVEMENT
- 151+08.57 40.36' HYDRANT
- 151+14.33 30.01' POWER POLE
- 152+53.12 17.16' CORNER CONC
- 152+57.84 14.78' CORNER CONC
- 152+61.05 14.59' POWER POLE
- 152+66.56 14.43' FENCE CORNER



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.040	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: J.L.	DR: J.K.A.	CK: R.C.A.	DATE: 07/17/17	

- GENERAL NOTES**
- [M] SAWCUT AND MATCH EXISTING CONCRETE
 - [P] PROTECT IN PLACE
 - [S] SAWCUT 2' AND MATCH EXISTING

REMOVALS

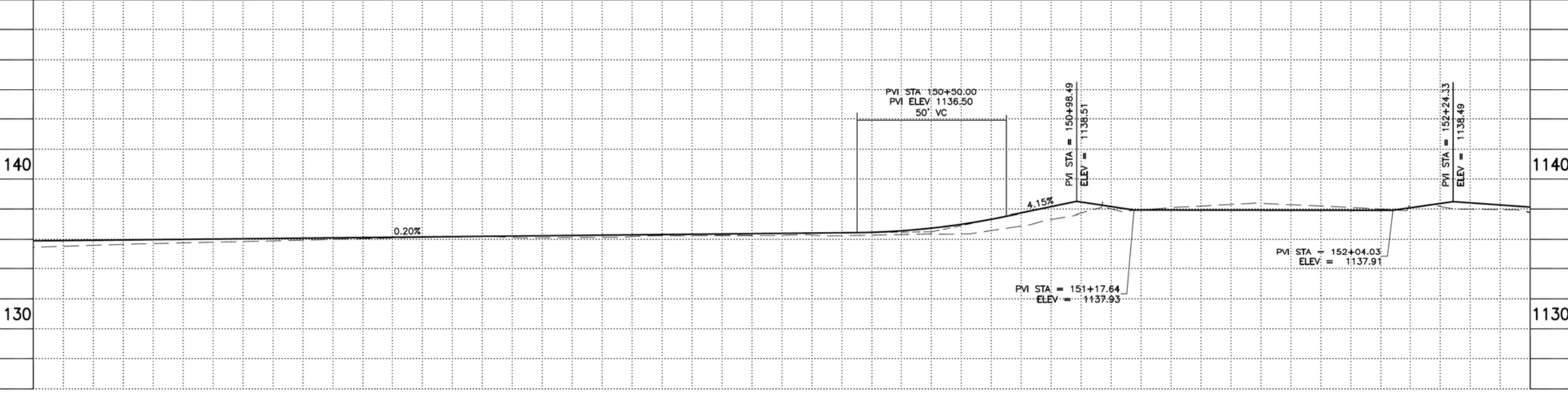
NO.	DESCRIPTION	QTY.	UNIT
[1]	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	483	S.F.
[2]	REMOVE ASPHALT CONCRETE	20	S.Y.
[3]	REMOVE EXISTING CURB & GUTTER	87	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
[1]	CONCRETE S/W, 7" THICK, 10' WIDTH	3769	S.F.
[2]	SUBGRADE PREPARATION.	426	S.Y.
[3]	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	20	S.Y.
[4]	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	72	S.F.
[5]	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL L	372	S.F.
[6]	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	88	L.F.
[8]	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	102	S.F.
[9]	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL M	368	S.F.
[29]	SAFETY RAIL, MAG STD DET 145 TYPE 4 INSTALLATION	6	L.F.
[30]	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.
[31]	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
[1]	ADJUST MANHOLE RIM TO NEW GRADE	1	EA.



ADJUSTMENT NOTES

[1] ADJUST MANHOLE RIM TO NEW GRADE

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA. PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO.	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.040	2.182
SCALE: 1" = 20'				

ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

153+23.97 11.02' EDGE CONC
153+90.15 10.78' FENCE CORNER
153+90.77 10.84' FENCE CORNER
153+95.64 7.03' EDGE CONC
154+07.04 8.72' POWER POLE

155+59.95 9.74' DOWN GUY
155+77.85 11.00' POWER POLE
155+79.01 12.77' FENCE CORNER
155+92.04 6.34' FENCE CORNER
156+51.18 6.99' FENCE CORNER
156+52.61 8.08' FENCE CORNER
156+58.16 9.67' BUILDING CORNER
157+29.16 14.09' BUILDING CORNER
157+32.71 16.74' POWER POLE
157+39.66 18.16' BUILDING CORNER

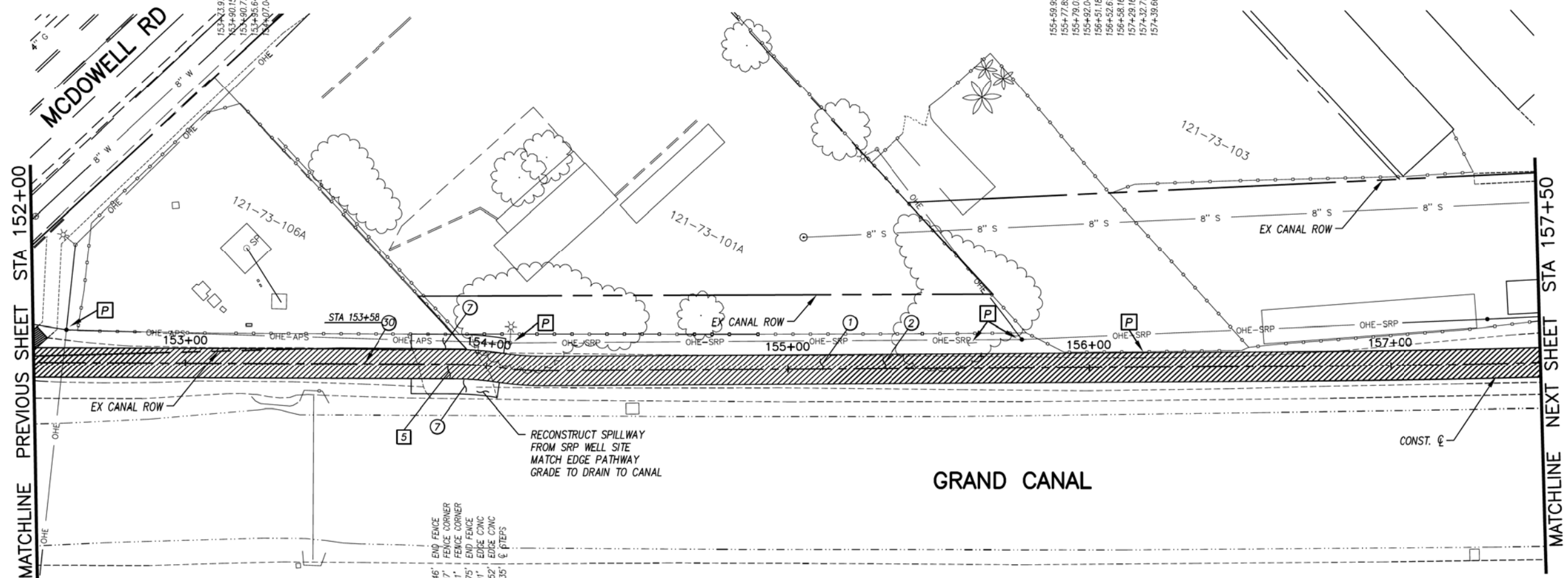


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.041	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

- [P] PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY.	UNIT
5	REMOVE EXISTING MISC. CONCRETE	53	S.Y.

CONSTRUCTION NOTES

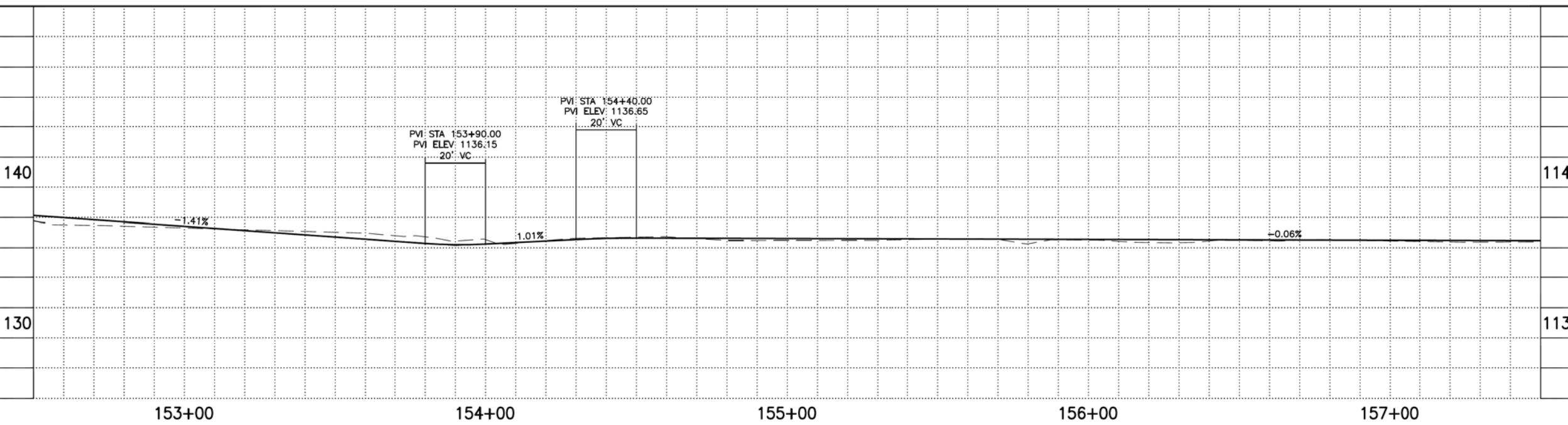
NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION	556	S.Y.
7	CONCRETE SPILLWAY, 5" THICK	300	S.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."



PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.041	2.182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

- 158+16.72' SEWER MH
- 158+39.55' POWER POLE
- 159+41.09' BUILDING CORNER
- 159+39.72' EDGE PAVEMENT
- 159+74.28' UTILITY VAULT
- 159+78.50' UTILITY VAULT

- 160+14.43' POWER POLE
- 160+25.79' BUILDING CORNER
- 160+64.07' BUILDING CORNER
- 160+69.79' BUILDING CORNER
- 161+05.97' BUILDING CORNER
- 161+27.92' POWER POLE
- 161+62.42' POWER POLE
- 161+83.71' FENCE CORNER
- 161+97.99' POWER POLE
- 162+27.17' POWER POLE
- 162+61.02' SEWER MH
- 162+61.02' END BILLBOARD
- 162+62.13' END BILLBOARD

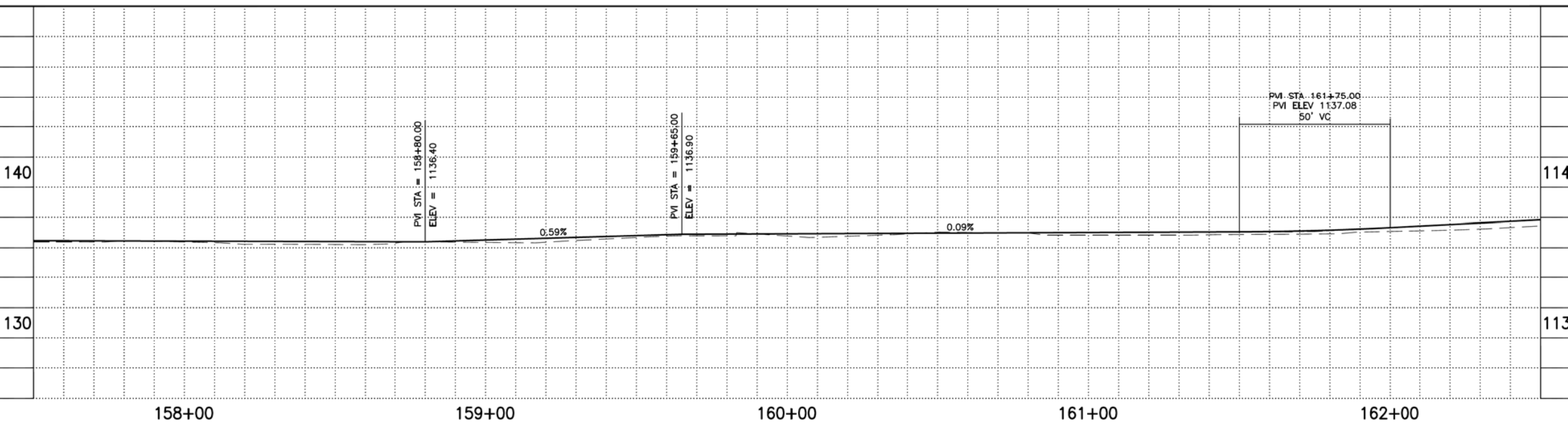
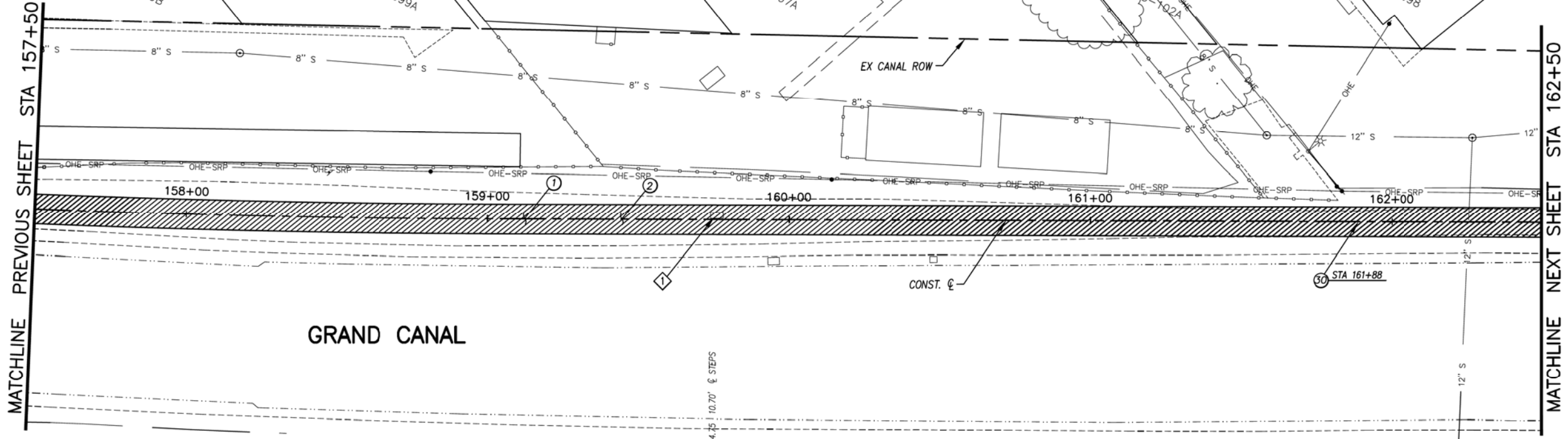


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.042	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
2	SUBGRADE PREPARATION.	556	S.Y.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	1	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT
1	ADJUST UTILITY VAULT TO NEW GRADE	1	EA.



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.042	2.182

SCALE: 1" = 20' 0" 20'

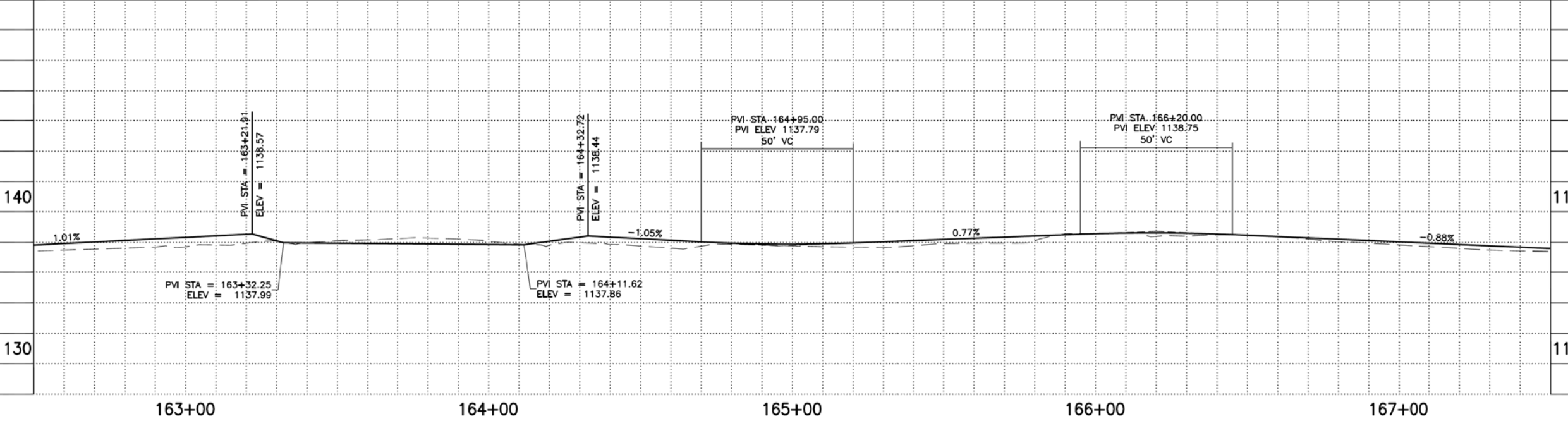
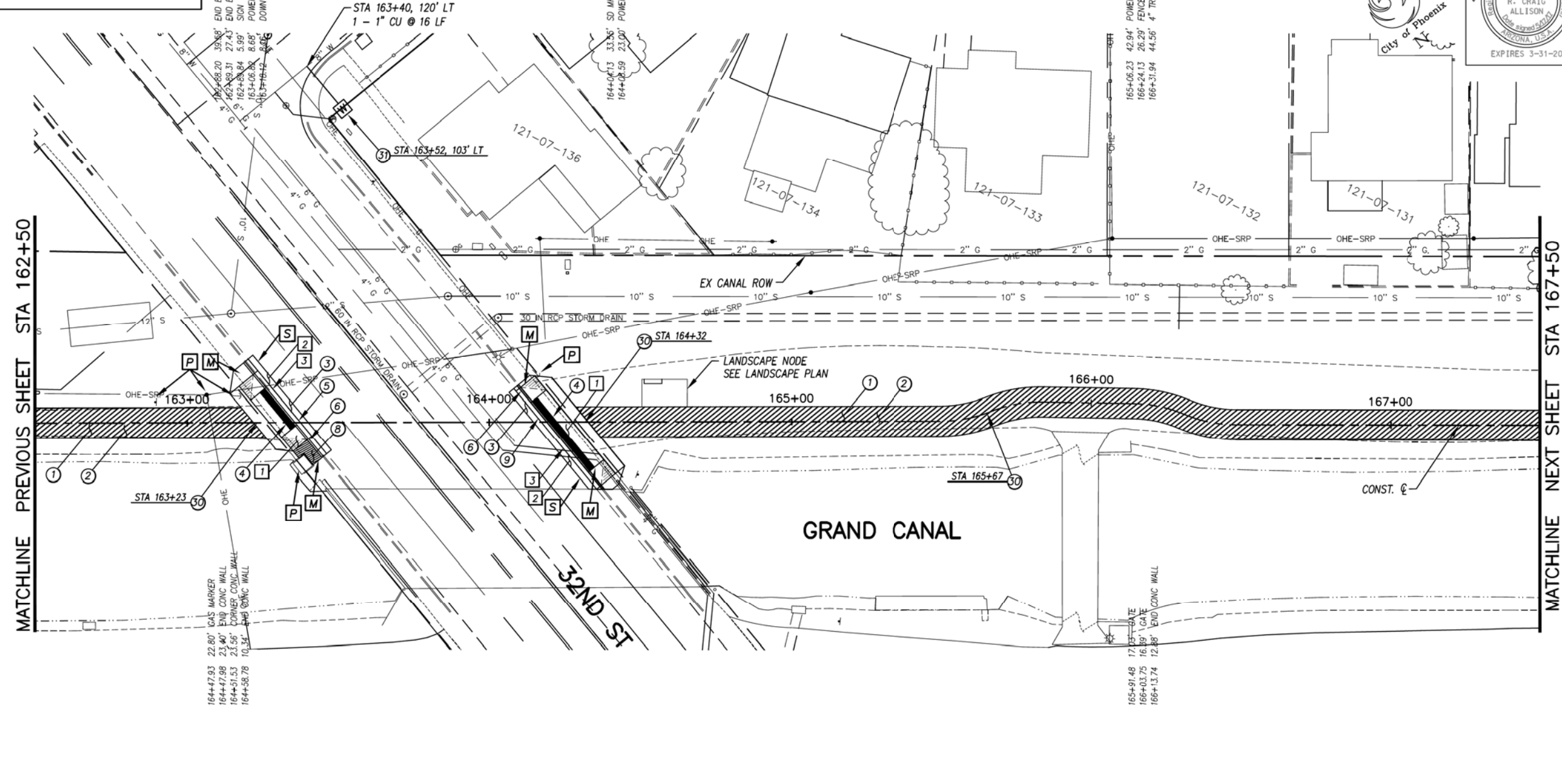
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.043	2.182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER
DES: J.L. DR: J.K.A. CK: R.C.A. DATE: 07/17/17

GENERAL NOTES

- M SAWCUT AND MATCH EXISTING CONCRETE
- P PROTECT IN PLACE
- S SAWCUT 2' AND MATCH EXISTING

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	365	S.F.
2	REMOVE ASPHALT CONCRETE	18	S.Y.
3	REMOVE EXISTING CURB & GUTTER	75	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	3917	S.F.
2	SUBGRADE PREPARATION.	436	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	18	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	64	S.F.
5	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL N	310	S.F.
6	CONCRETE VERTICAL CURB & GUTTER PER MAG STD. DET. 220-1 (TYPE A) (INCLUDES DEPRESSION AND TRANSITION)	79	L.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK	36	S.F.
9	DRIVEWAY-SIDEWALK RAMP COMBINATION PER C.O.P. STD. DET. P1244, MODIFIED PER DETAIL O	352	S.F.
30	SANDBLAST STREET NAME STENCIL PER DETAIL BB (SANDBLAST STENCIL DETAIL)	3	EA.
31	WATER SERVICE CONNECTION WITH BFP COP STD. DET. P1342	1	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
1140	CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA. PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.		

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.043	2.182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

168+22.55 36.30' SD MH
168+49.35 42.25' SEWER MH
169+00.06 43.76' TREE

170+87.42 32.06' SD MH
171+42.19 15.54' MONITOR WELL

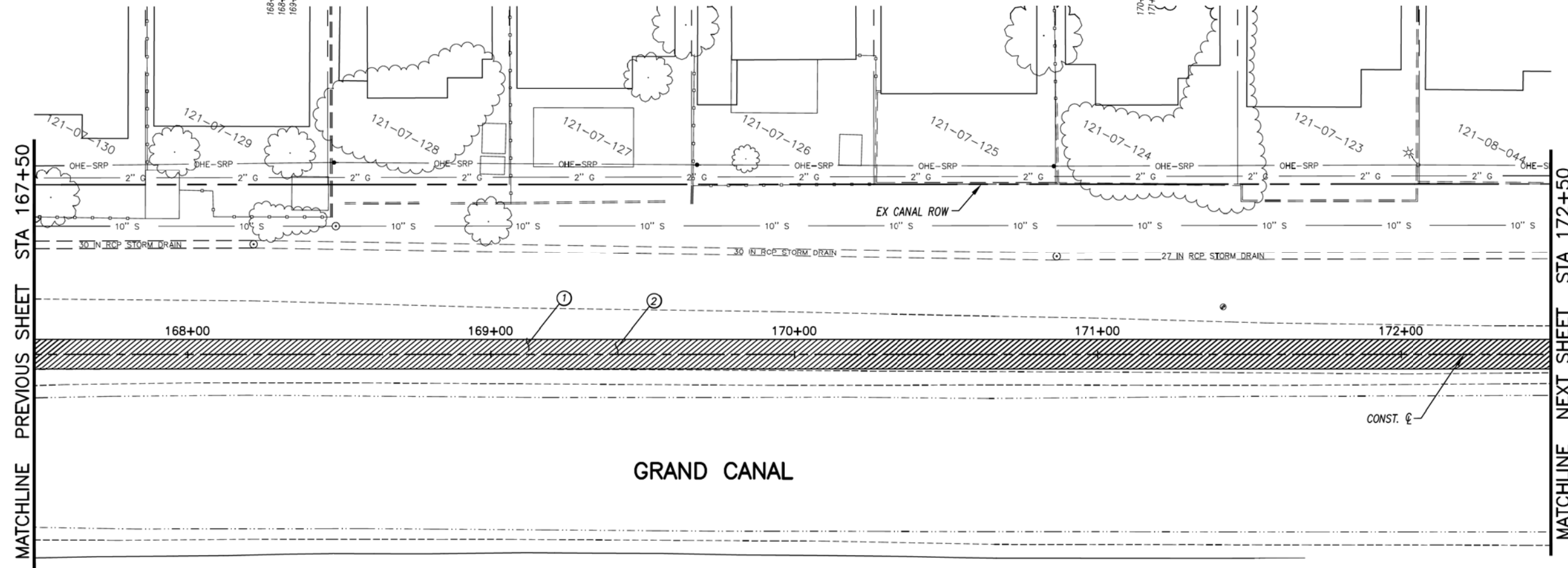


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,044	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

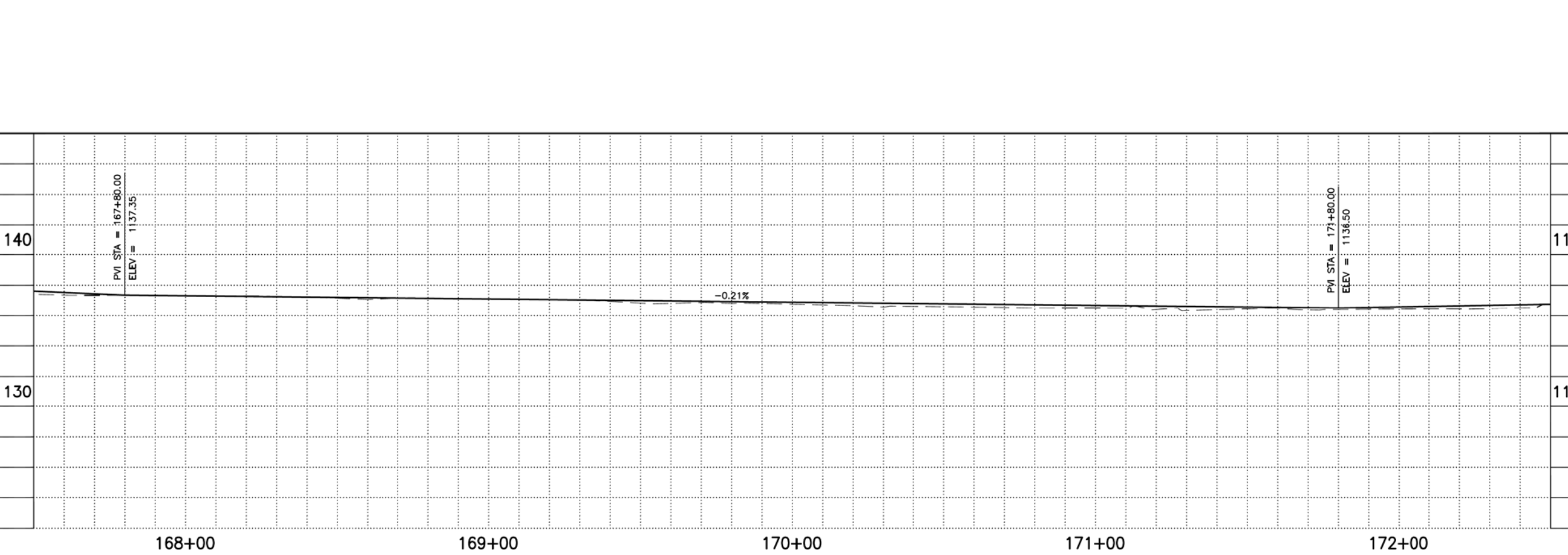
NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
-----	-------------	------	------



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,044	2,182

SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

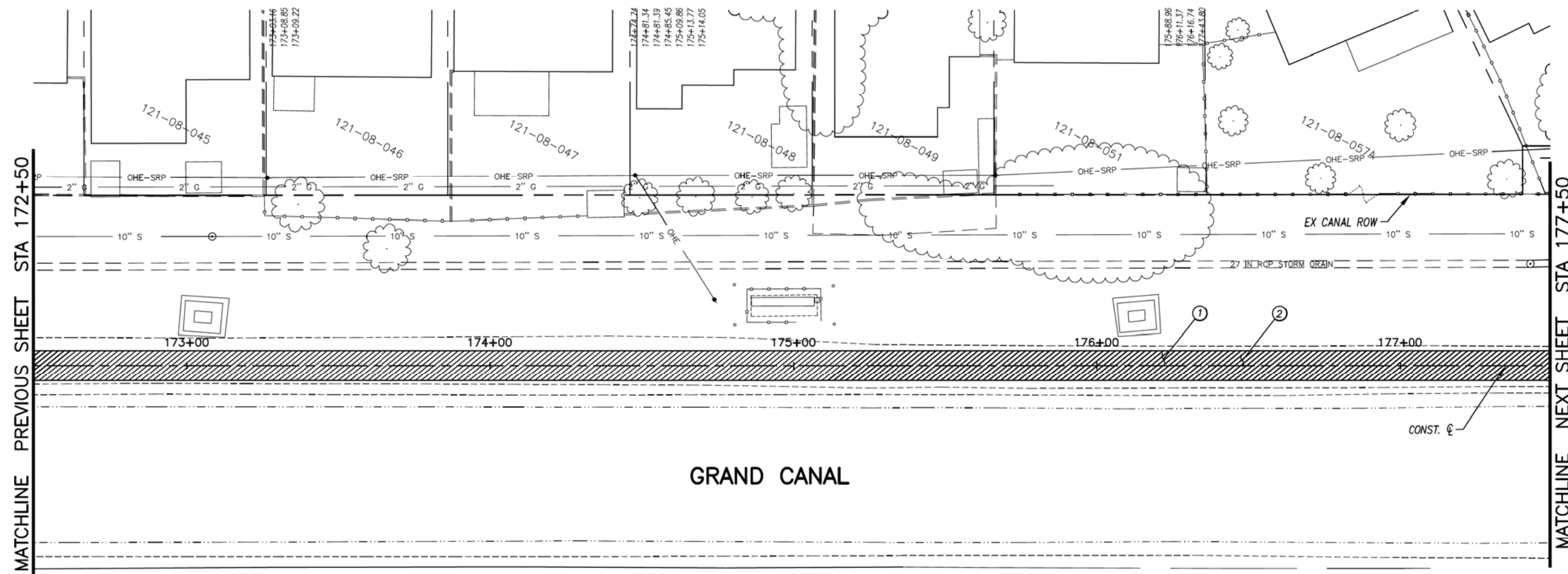


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,045	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

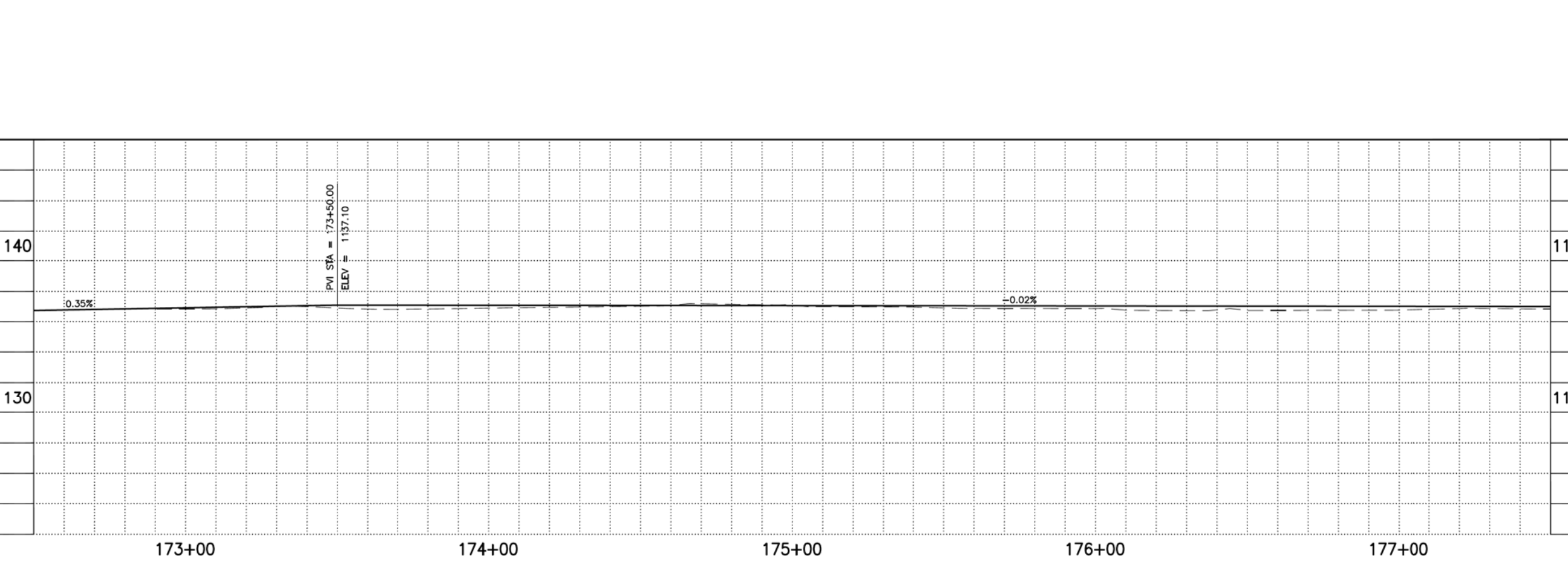
NO.	DESCRIPTION	QTY.	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,045	2,182

SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

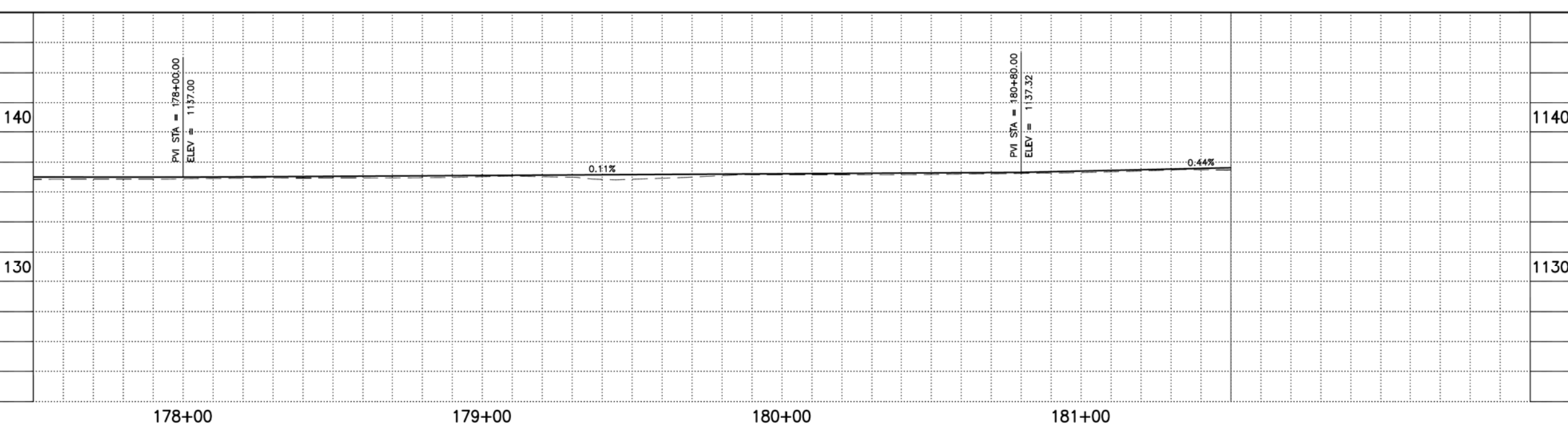
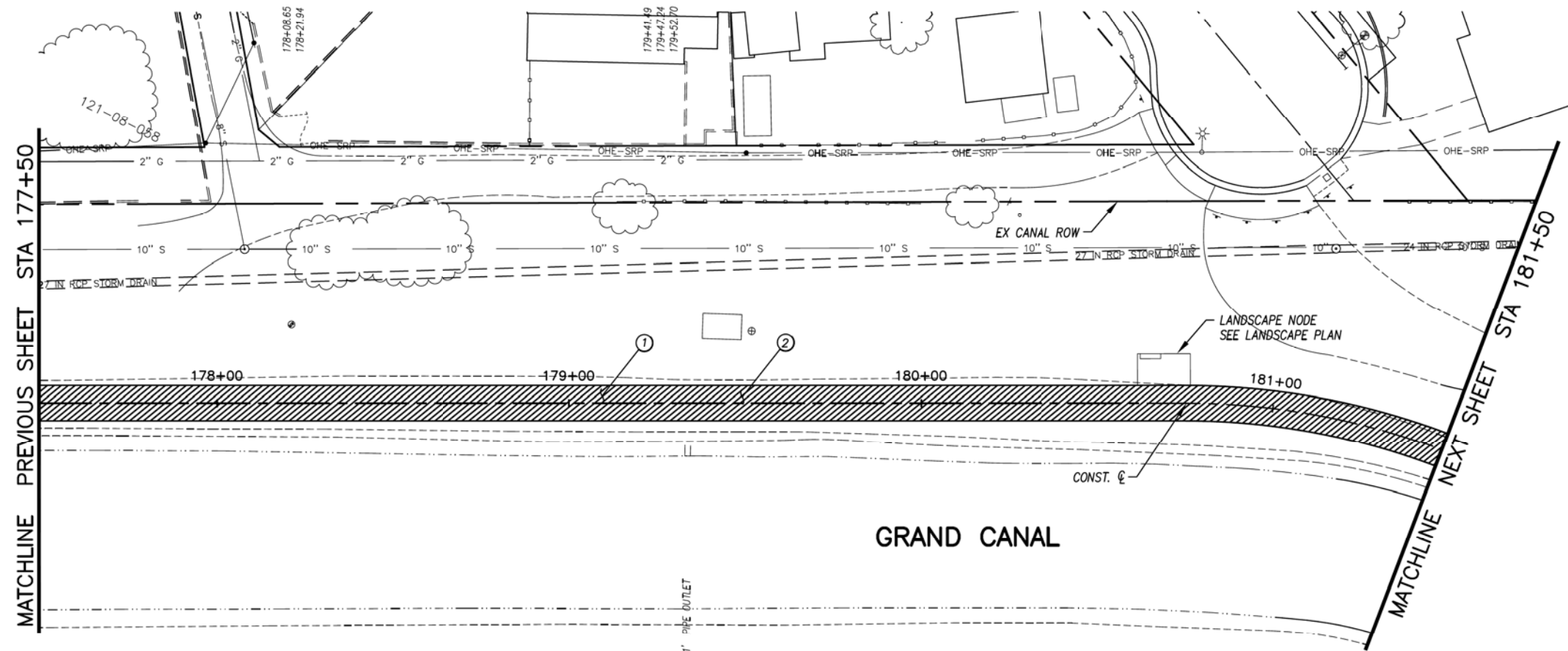


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,046	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
-----	-------------	-----	------

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	4000	S.F.
②	SUBGRADE PREPARATION.	444	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

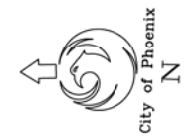
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,046	2,182

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

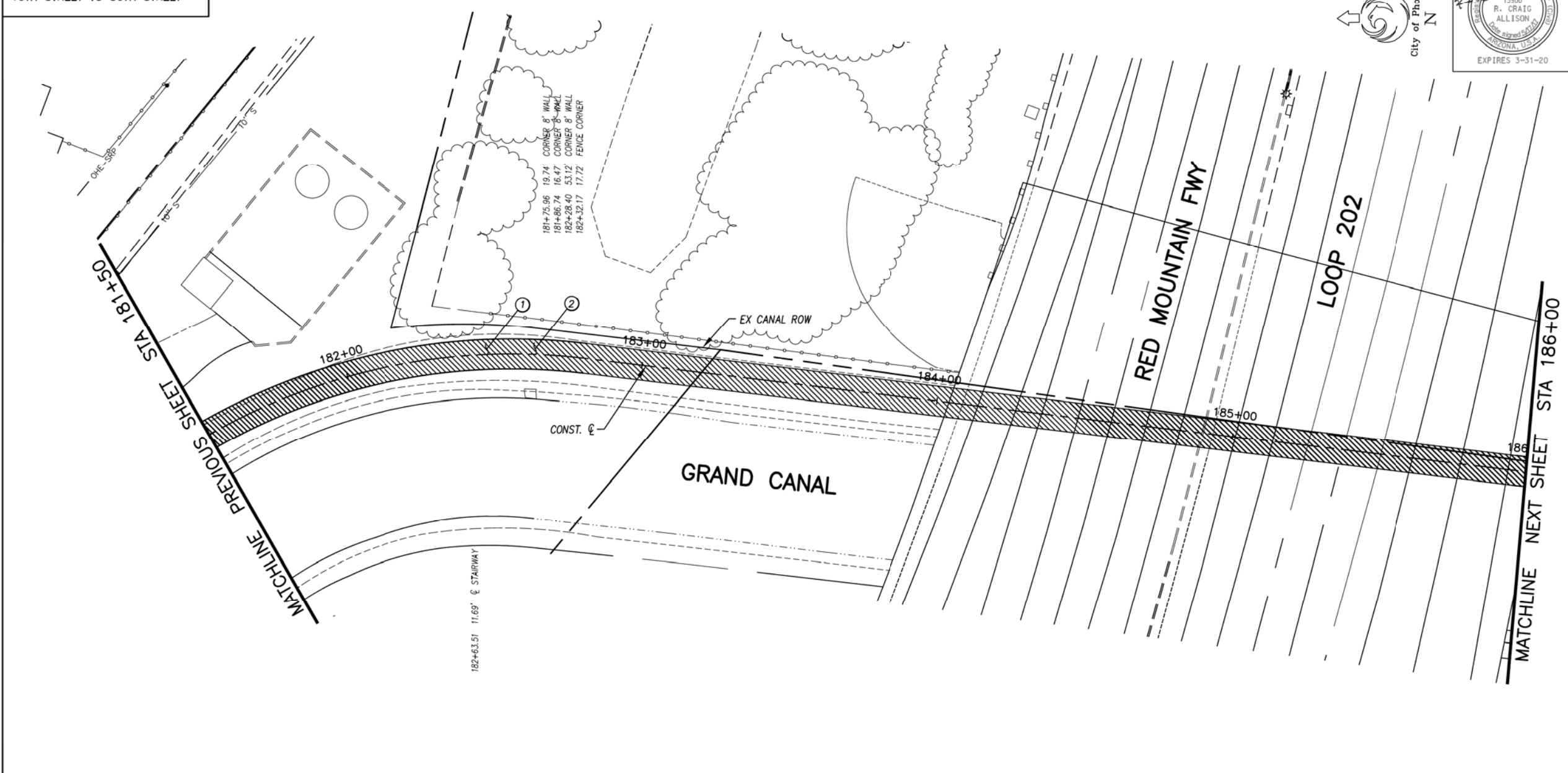
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.047	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	4500	S.F.
②	SUBGRADE PREPARATION.	500	S.Y.

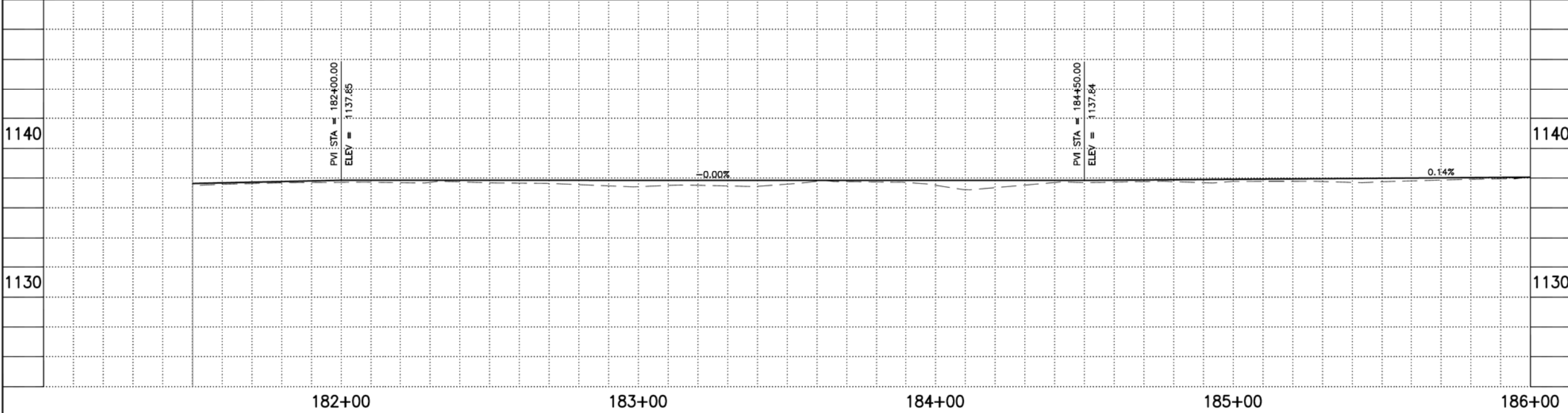
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.047	2.182

SCALE: 1" = 20' 0' 20'

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

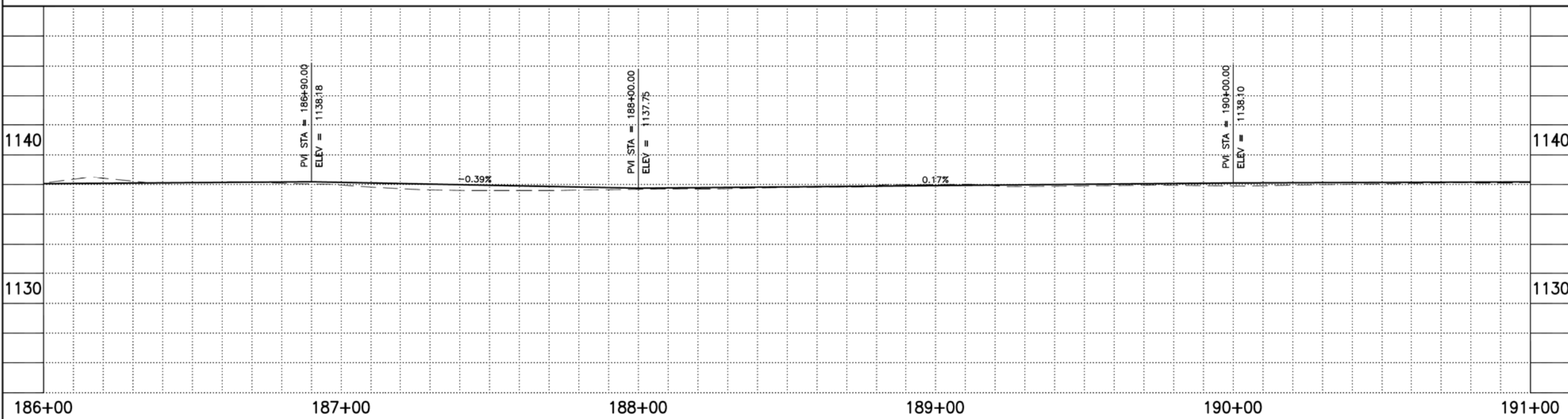
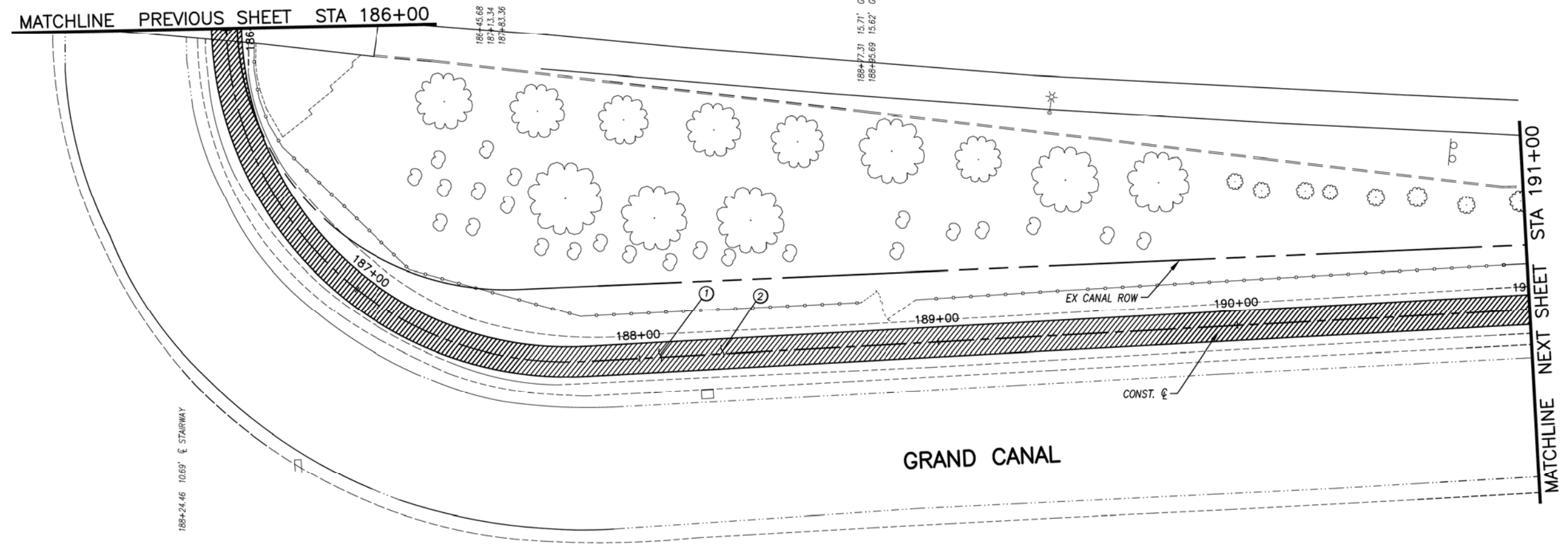


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.048	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	5000	S.F.
②	SUBGRADE PREPARATION.	556	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.048	2.182

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

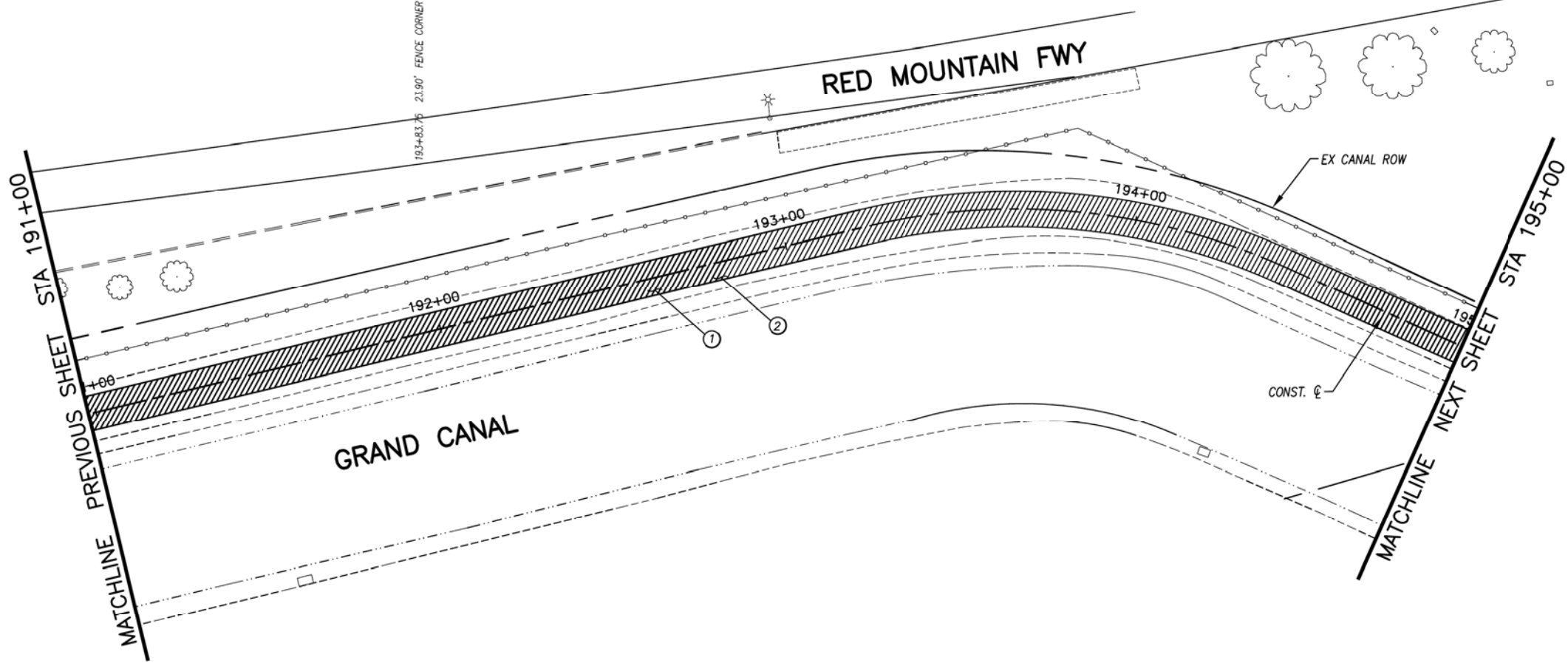


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.049	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
①	CONCRETE S/W, 7" THICK, 10' WIDTH	4009	S.F.
②	SUBGRADE PREPARATION.	444	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT
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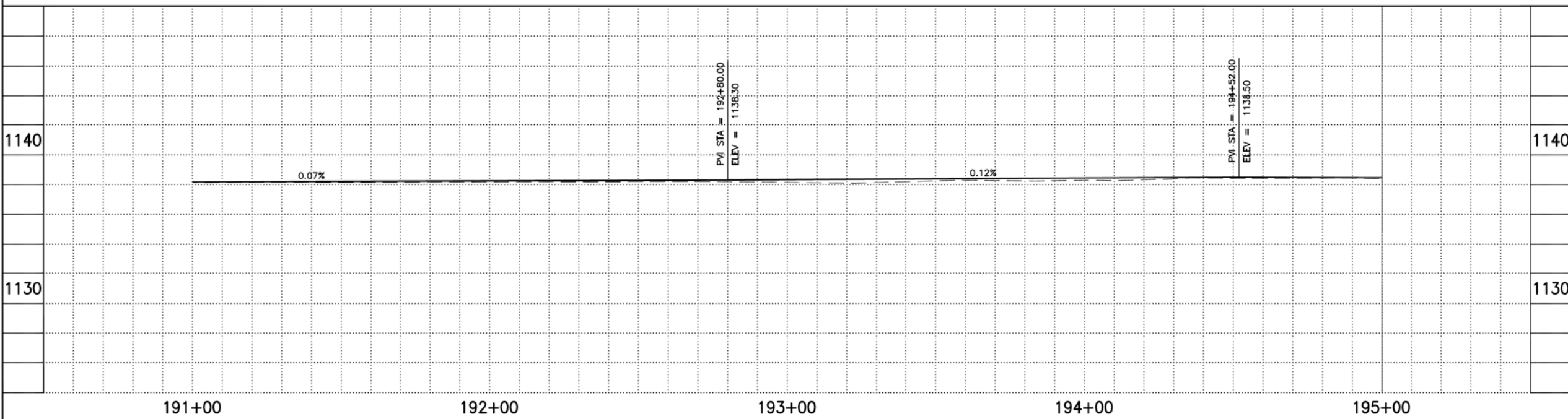


"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

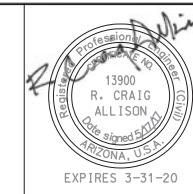
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.049	2.182



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET



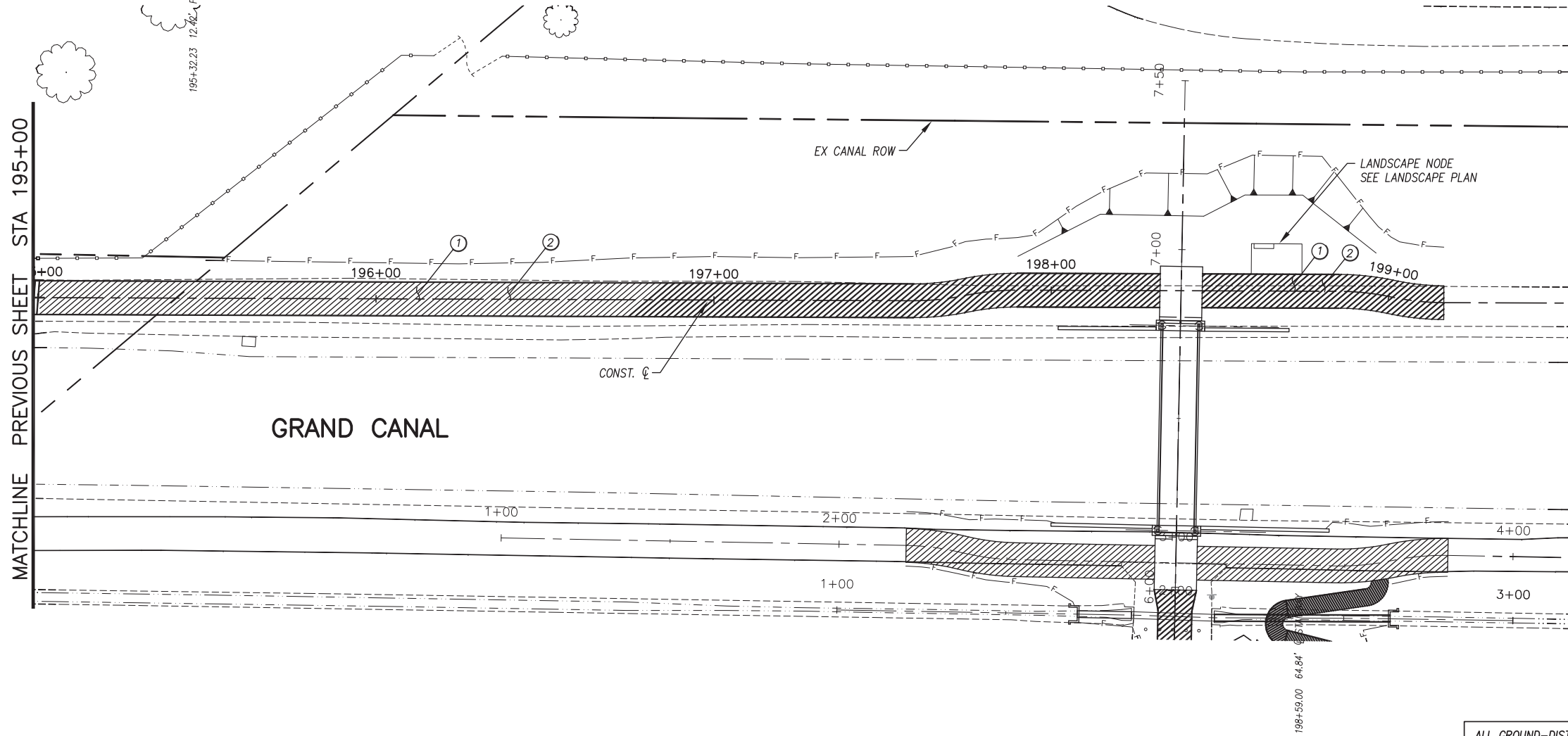
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,050	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE PREVIOUS SHEET STA 195+00



ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES

REMOVALS

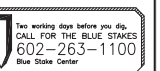
NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	4034	S.F.
2	SUBGRADE PREPARATION.	448	S.Y.

ADJUSTMENT NOTES

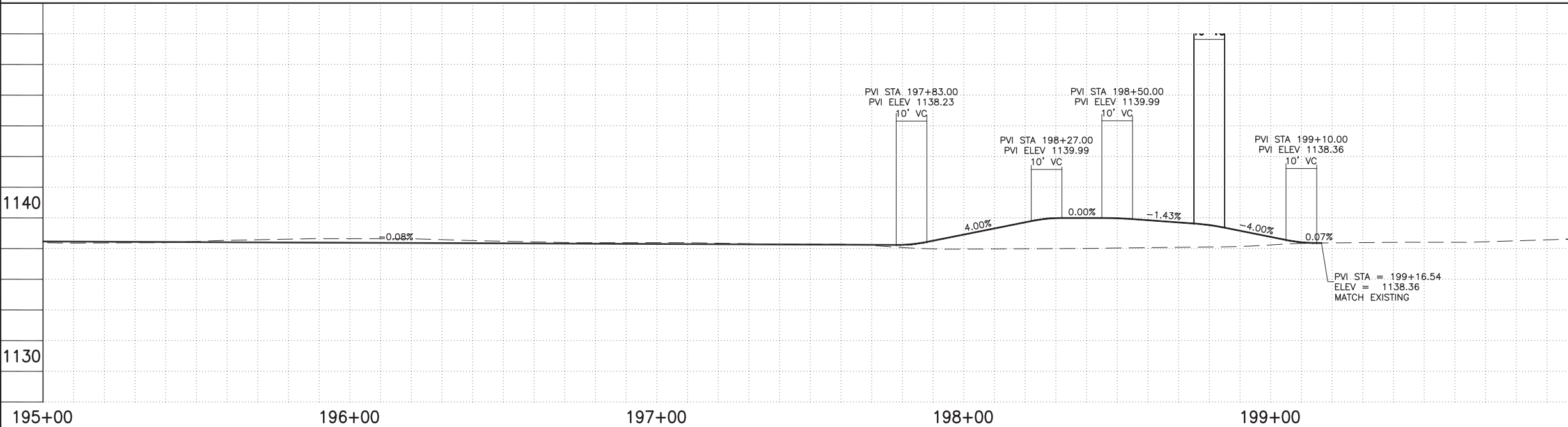
NO.	DESCRIPTION	QTY	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114



DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,050	2,182

SCALE: 1" = 20'

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

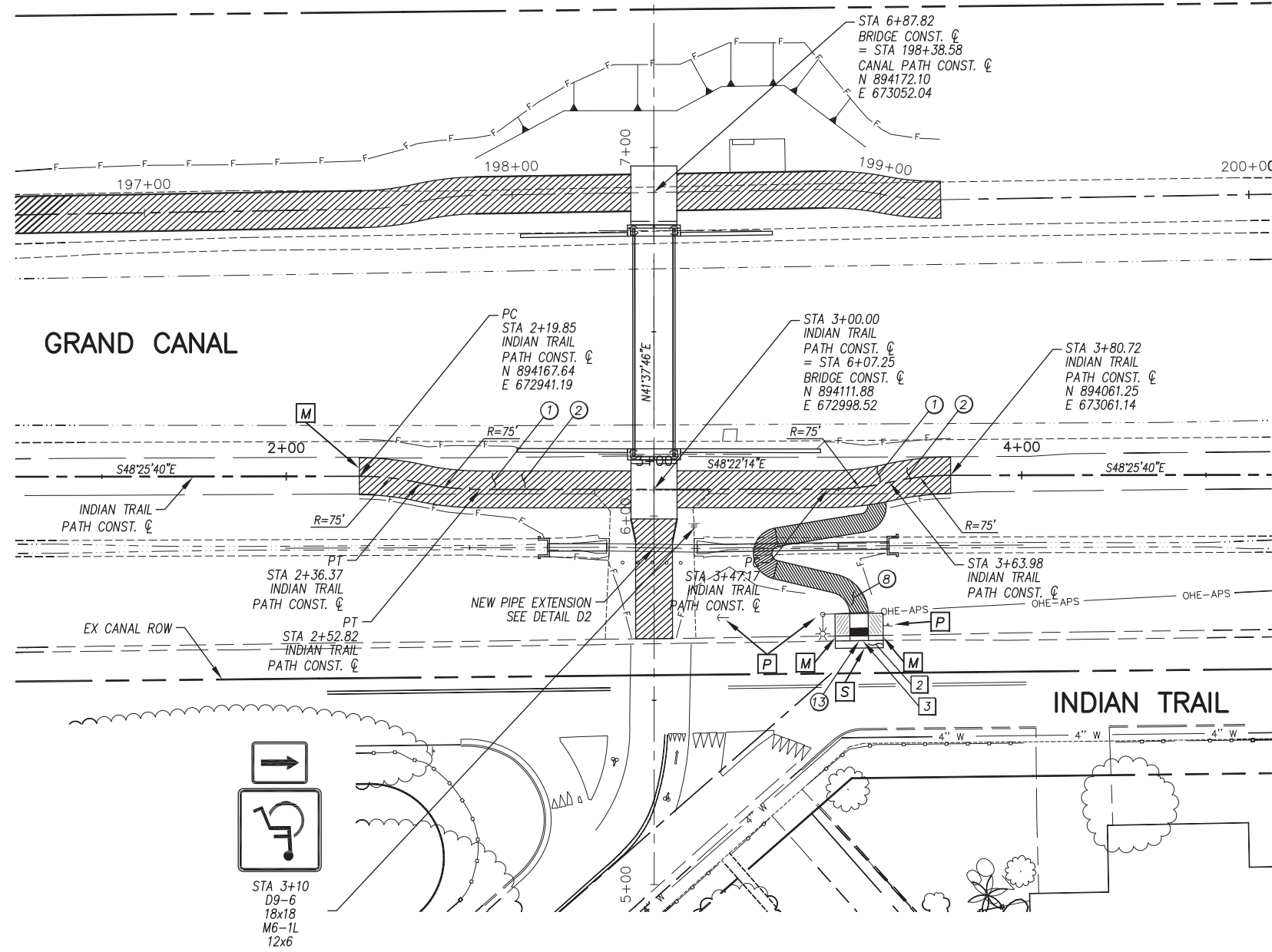


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.051	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



STA 3+10
D9-6
18x18
M6-1L
12x6

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

- GENERAL NOTES**
- M SAWCUT AND MATCH EXISTING
 - P PROTECT IN PLACE
 - S SAWCUT 2' AND MATCH EXISTING

REMOVALS

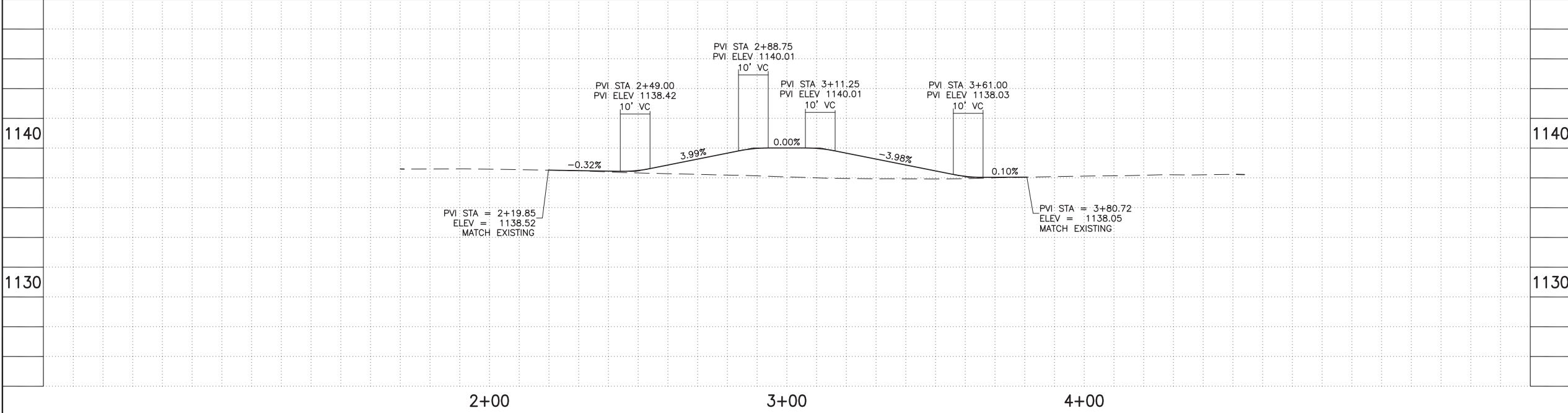
NO.	DESCRIPTION	QTY	UNIT
2	REMOVE ASPHALT CONCRETE	3	S.Y.
3	REMOVE EXISTING ROLL CURB	13	L.F.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	1484	S.F.
2	SUBGRADE PREPARATION.	165	S.Y.
3	ASPHALT CONCRETE FOR ARTERIAL STREETS (TYPE C-34, 7" THICK)	3	S.Y.
4	TRUNCATED DOMES PER C.O.P. STD. DET. P1232	10	S.F.
8	CONCRETE S/W PER C.O.P. STD. DET. P1230, 4" THICK, SEE DETAIL P	355	S.F.
13	NEW CURB RAMP, M.A.G. STD. 235-4 SEE DETAIL P	96	S.F.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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10 working days before you dig. CALL FOR THE BLUE STAKES 602-263-1100 Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PATHWAY PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

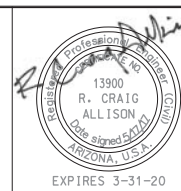
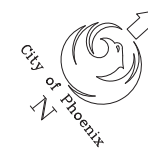
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.051	2.182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

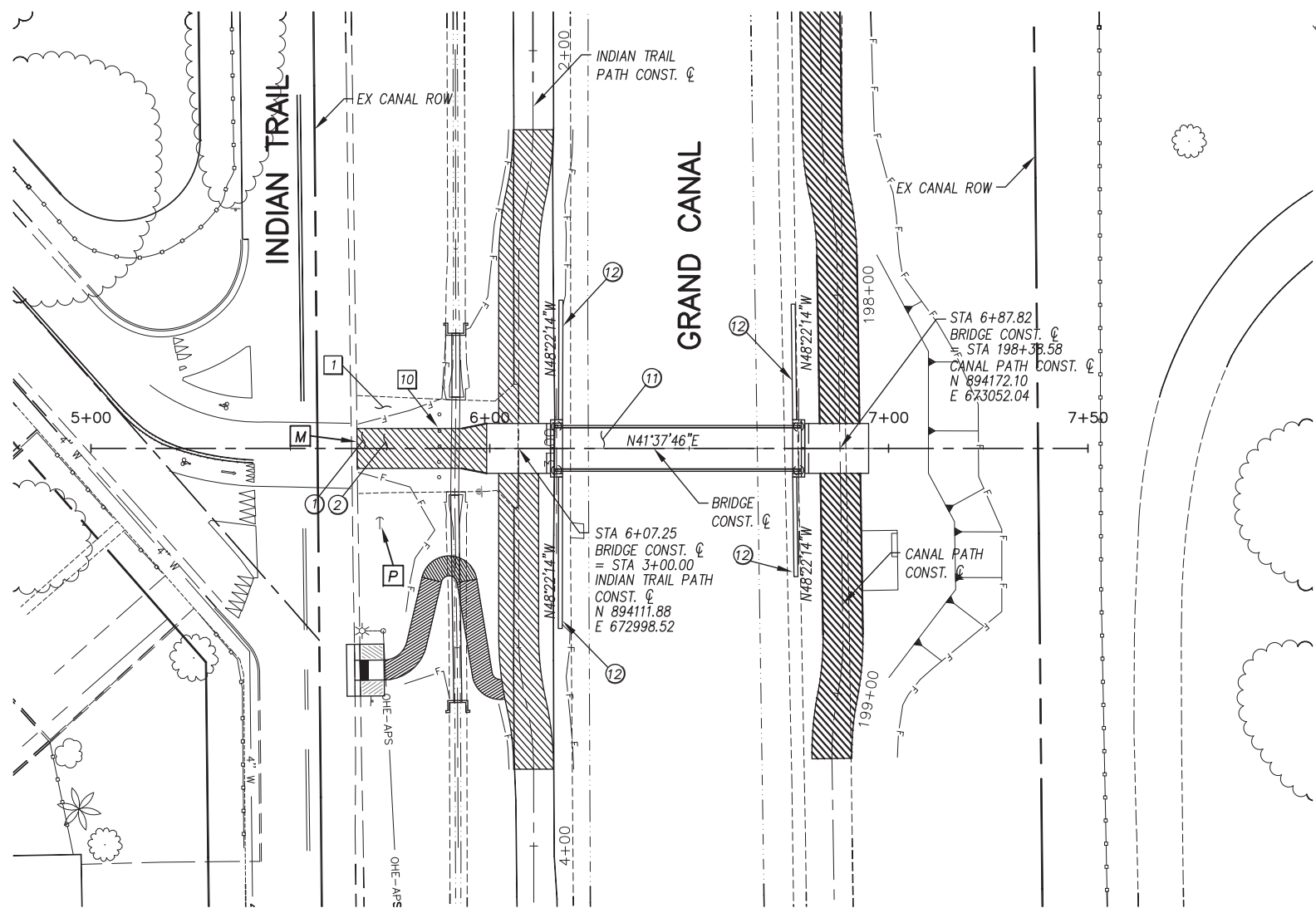


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,052	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: J.L.	DR: J.K.A.	CK: R.C.A.	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES

- [M] SAWCUT AND MATCH EXISTING
- [P] PROTECT IN PLACE

REMOVALS

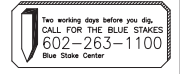
NO.	DESCRIPTION	QTY	UNIT
1	REMOVE PCC SIDEWALK, STEPS, RAMPS, APRONS, AND DRIVEWAY.	964	S.F.
10	REMOVE EXISTING BARRICADE	5	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY	UNIT
1	CONCRETE S/W, 7" THICK, 10' WIDTH	333	S.F.
2	SUBGRADE PREPARATION.	37	S.Y.
11	NEW BRIDGE, SEE BRIDGE PLANS	1	EA.
12	NEW RETAINING WALL, SEE SHEET XX	160	L.F.

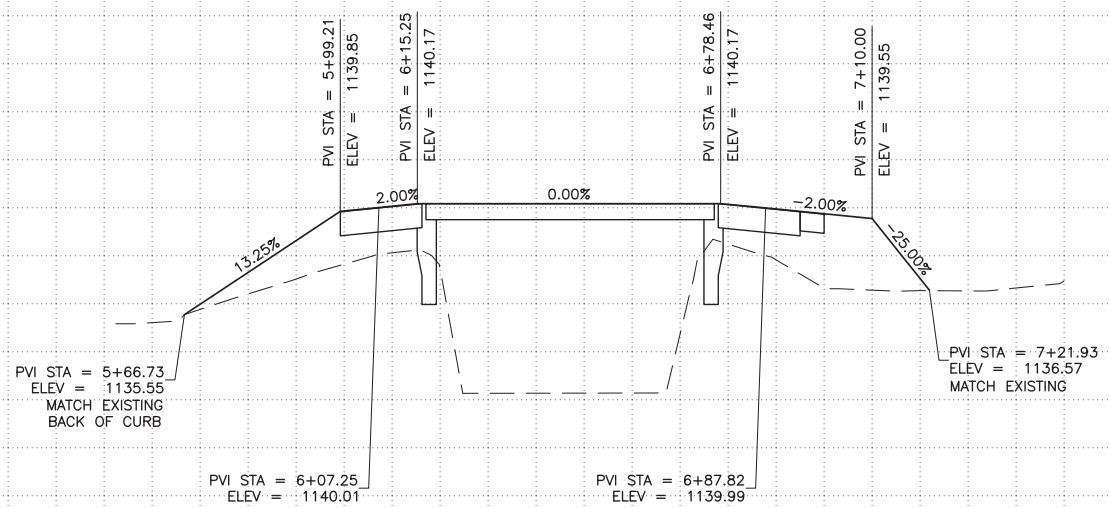
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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PATHWAY PLAN & PROFILE



1140

1130

1140

1130

5+00

6+00

7+00

8+00

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,052	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

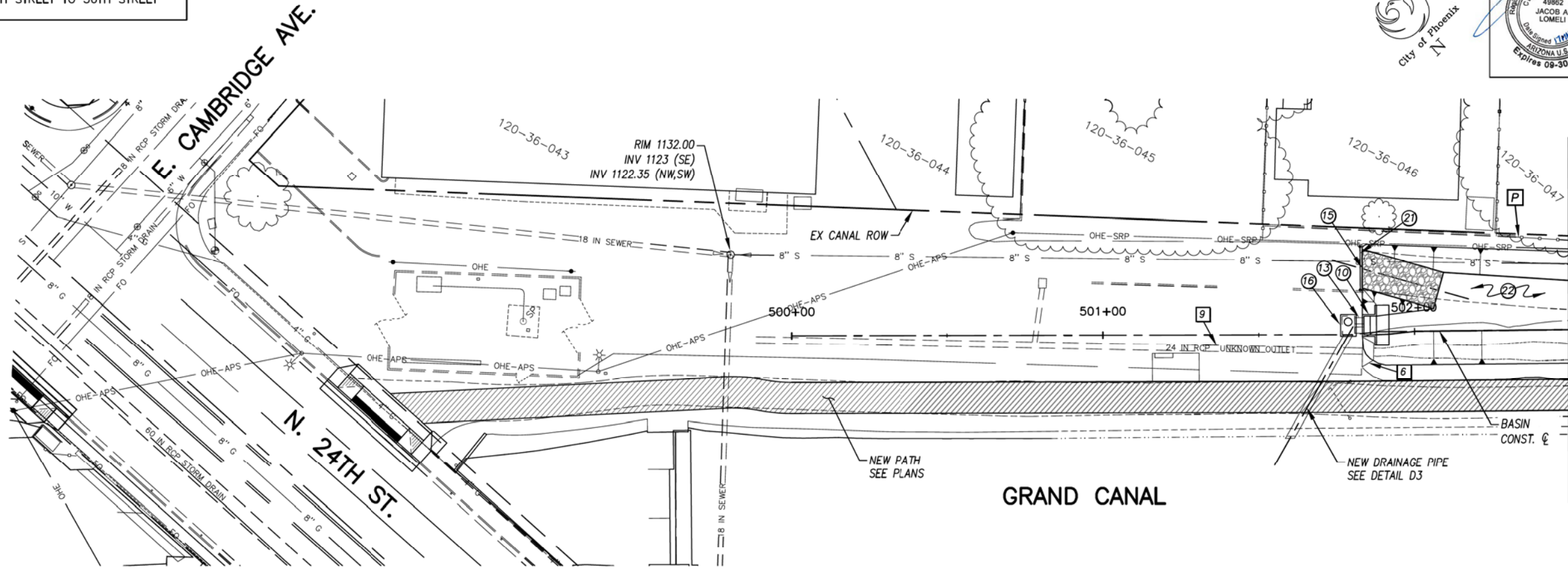


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,053	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE NEXT SHEET STA 502+50

D1 BASIN PLAN AND PROFILE

GENERAL NOTES

P PROTECT IN PLACE

REMOVALS

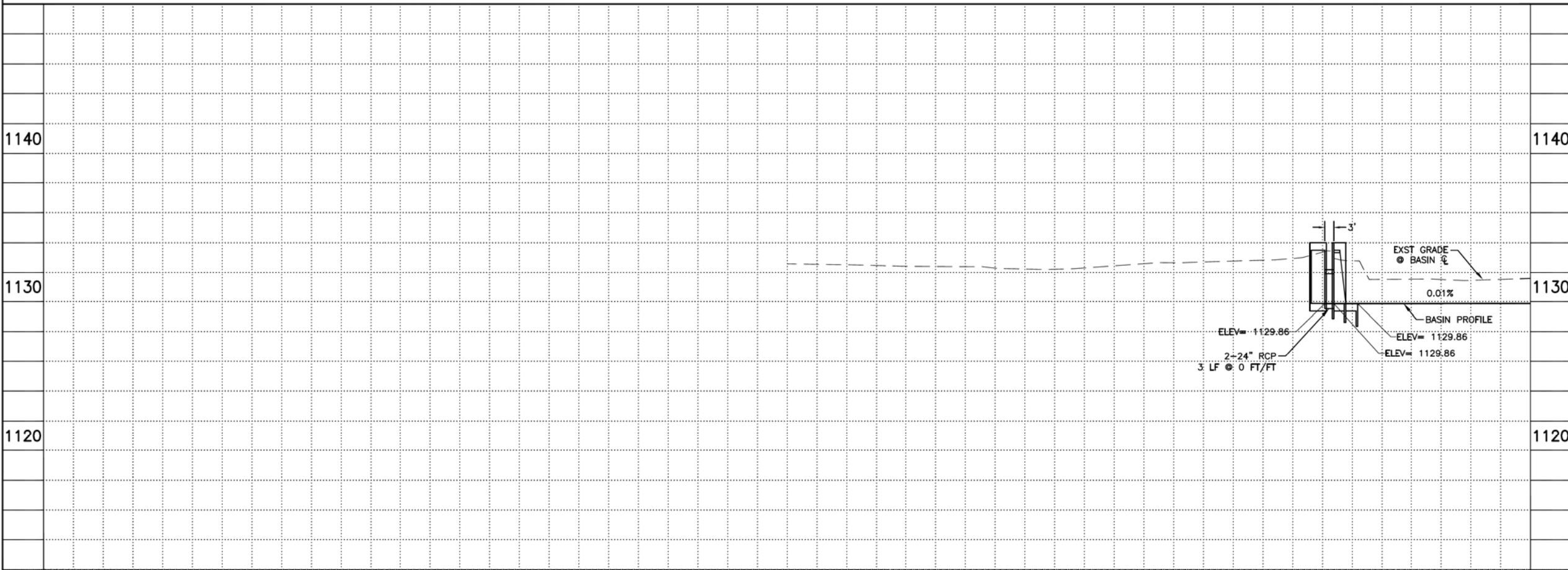
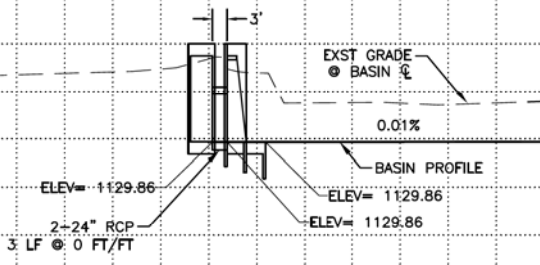
NO.	DESCRIPTION	QTY	UNIT
6	REMOVE EXISTING HEADWALL	1	EA.
9	CUT AND REMOVE A PORTION OF EXISTING PIPE, PLUG END	1	EA

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	1	EA
13	24" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	6	L.F.
15	SPILLWAY/MAINTENANCE ACCESS RAMP SEE DETAIL Q	1	EA
16	CONCRETE JUNCTION BOX SEE DETAIL DD	1	EA
21	14' VEHICULAR ACCESS SWING GATE SEE DETAIL DF	1	EA
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	126	C.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,053	2,182

SCALE: 1" = 20'

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

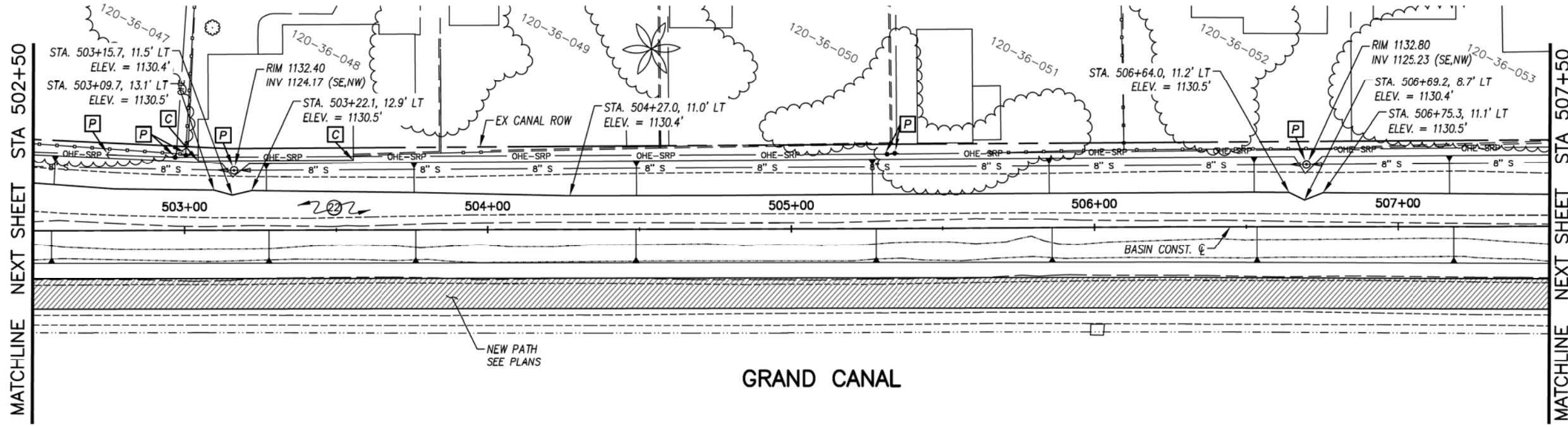


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,054	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

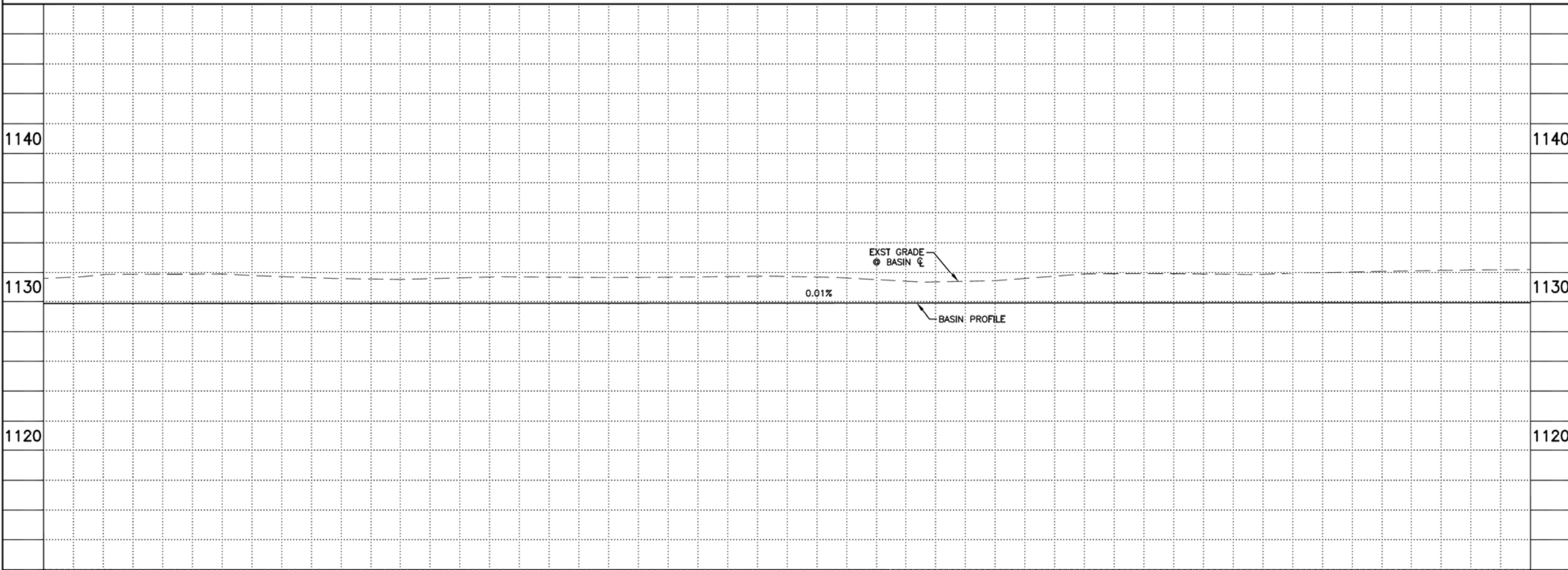
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

(D1) BASIN PLAN AND PROFILE



GENERAL NOTES

[C] CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR EXIST. BUILDING

[P] PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
23	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	875	C.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

BASIN PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,054	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

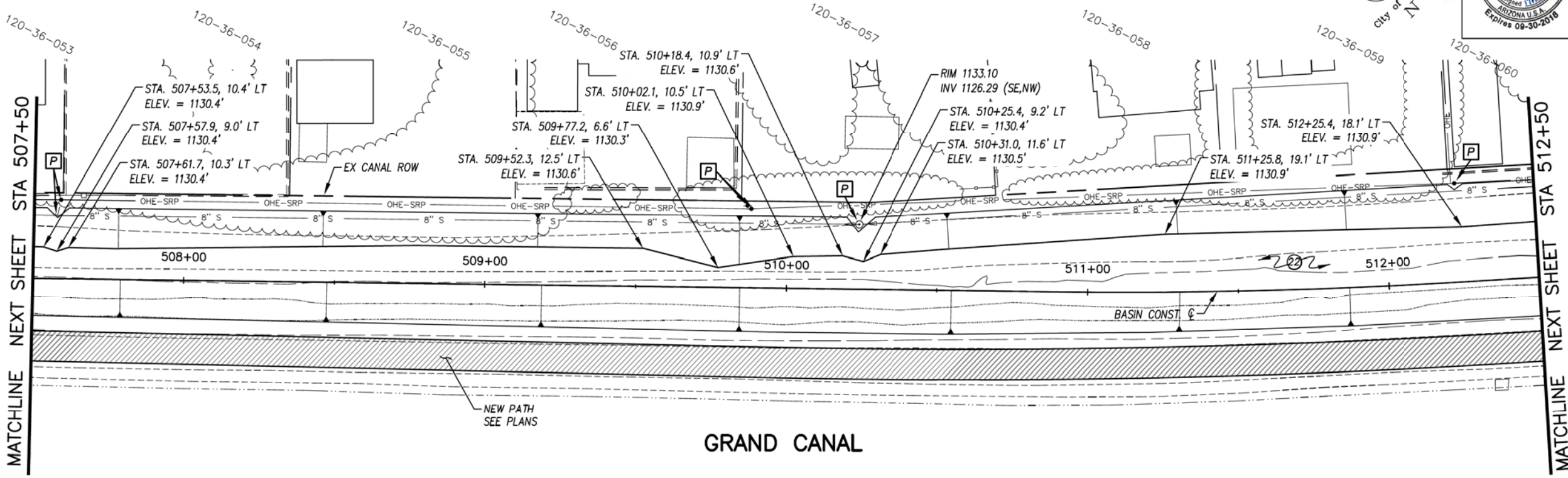


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,055	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

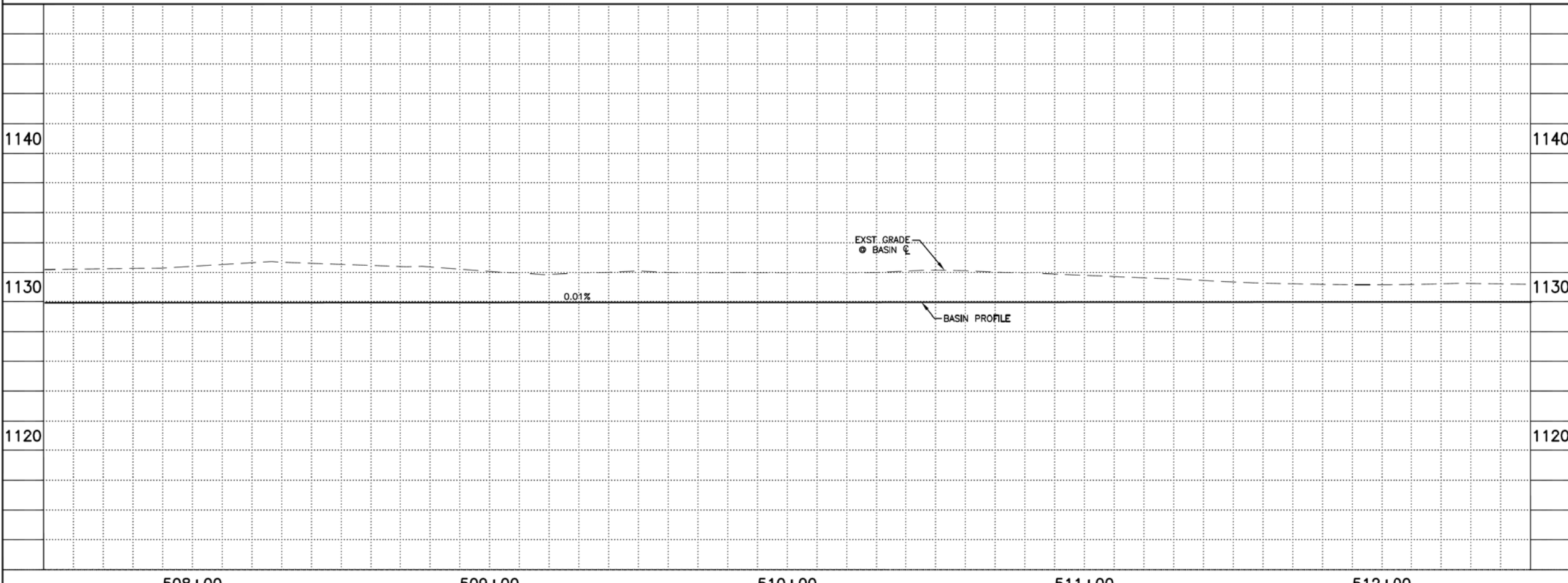
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL
D1 BASIN PLAN AND PROFILE



GENERAL NOTES
P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
23	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	1140	C.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,055	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

N. 26TH ST.

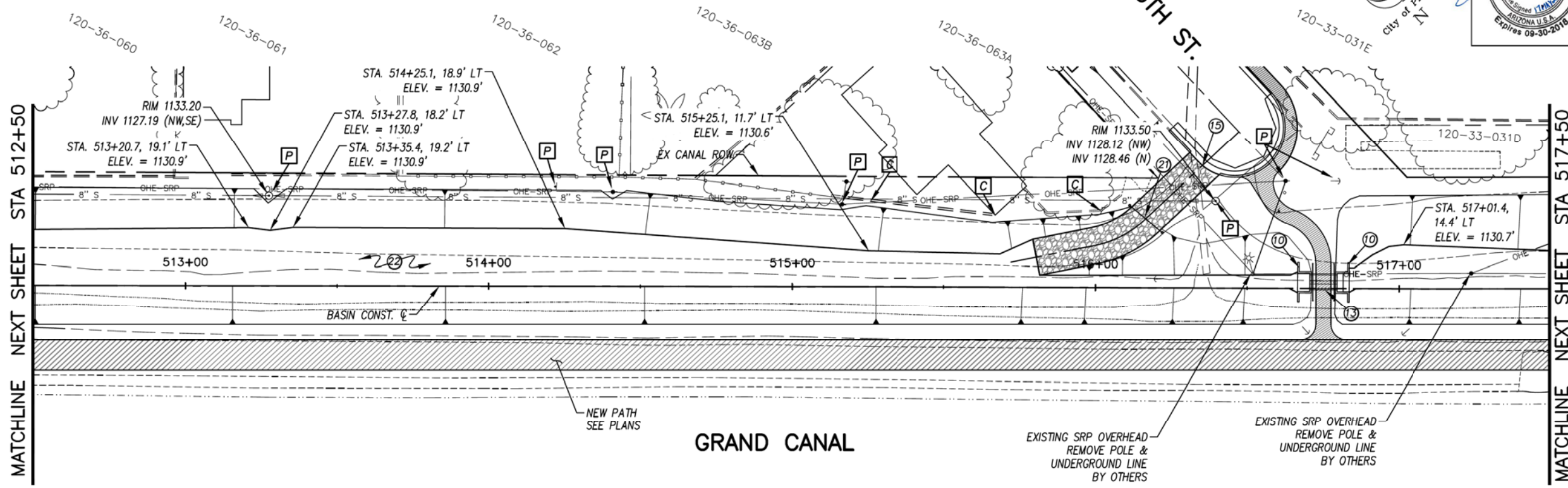


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,056	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

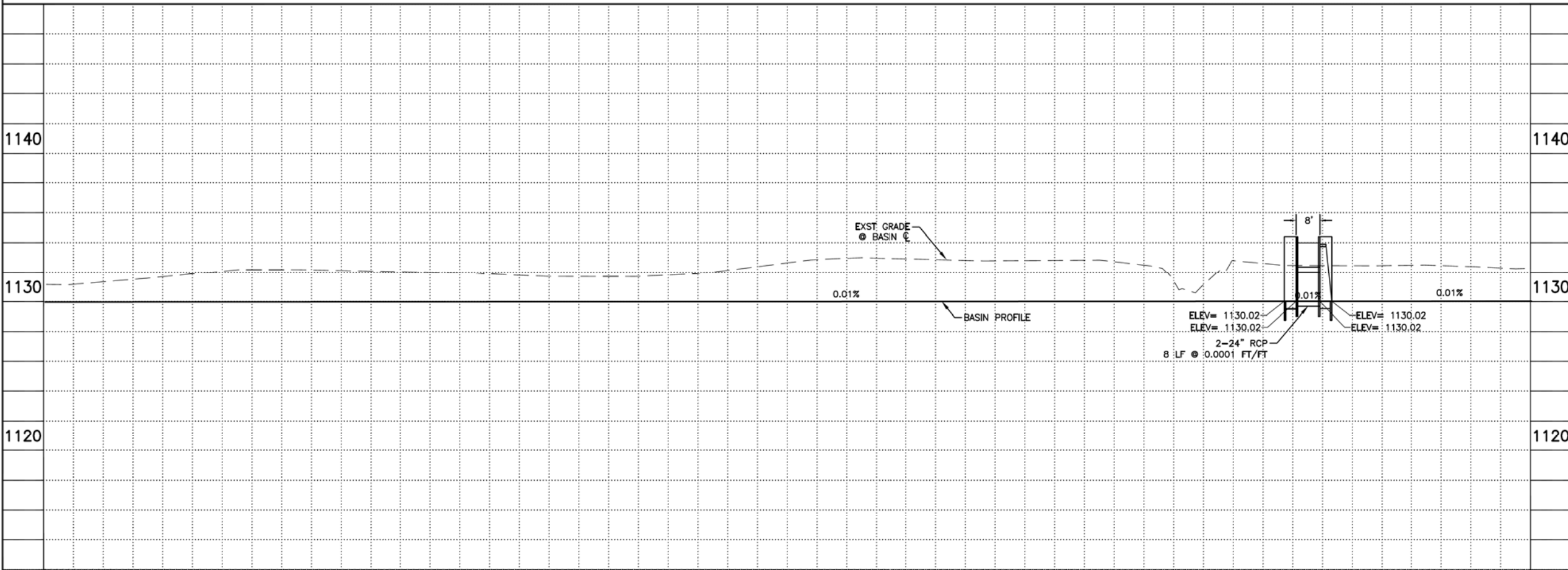
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



D1 BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



GENERAL NOTES

C CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR EXIST. STRUCTURE

P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	EA
13	24" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	16	L.F.
15	SPILLWAY/MAINTENANCE ACCESS RAMP, SEE DETAIL R	1	EA
21	14' VEHICULAR ACCESS SWING GATE SEE DETAIL DF	1	EA
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	1349	C.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."

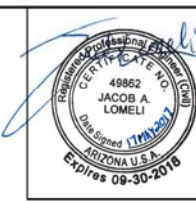
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

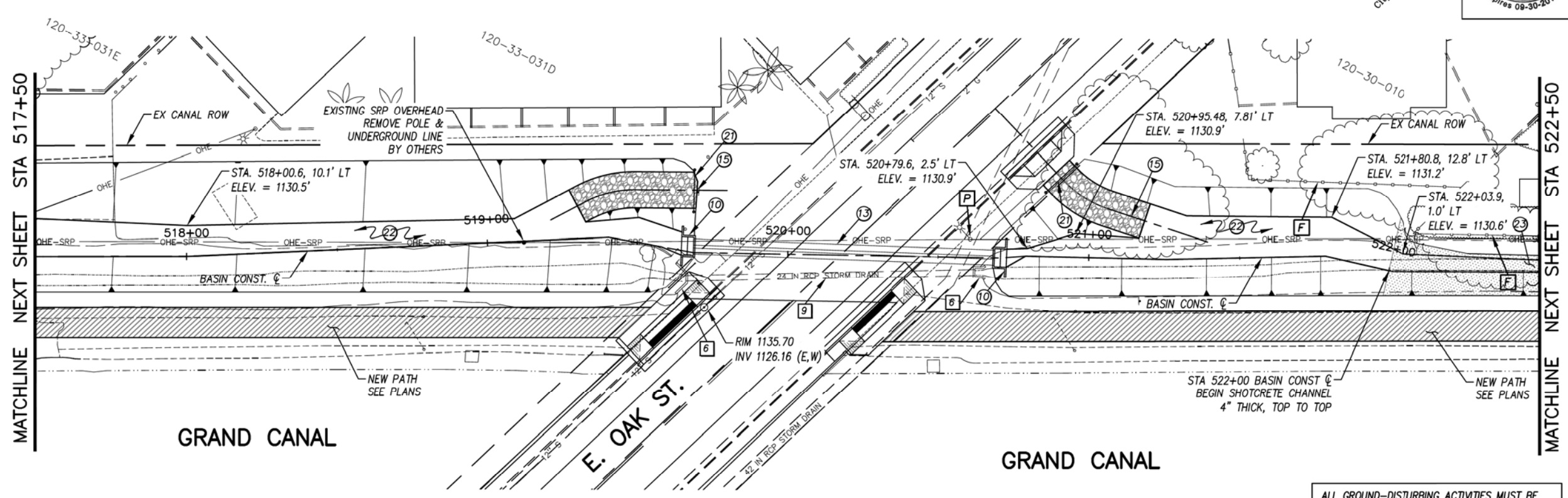
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,056	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,057	2,182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE



D1 BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

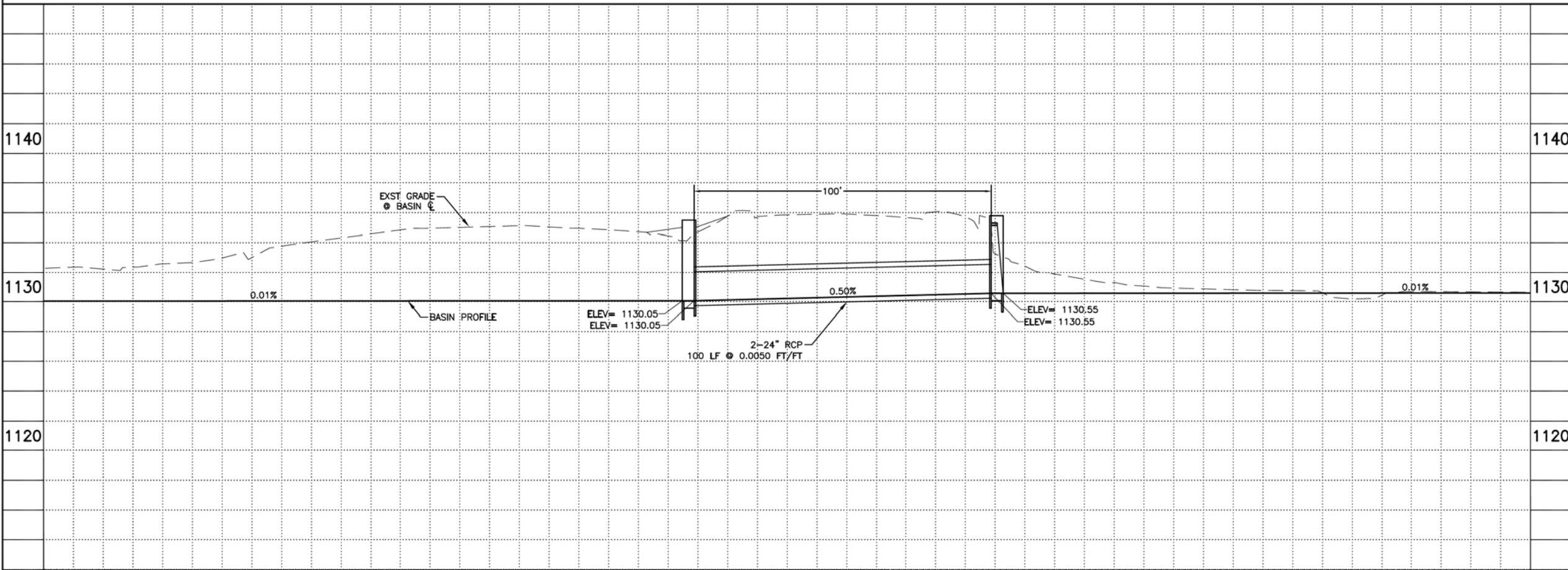
GENERAL NOTES
F CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR EXIST. FENCE
P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
6	REMOVE EXISTING HEADWALL	2	EA.
9	CUT AND REMOVE A PORTION OF EXISTING PIPE, PLUG BOTH ENDS	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	S.F.
13	24" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	200	S.F.
15	SPILLWAY/MAINTENANCE ACCESS RAMP, SEE DETAILS S & T	2	EA
21	14' VEHICULAR ACCESS SWING GATE SEE DETAIL DF	2	EA
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	126	C.Y.
23	SHOTCRETE CHANNEL, 4" THICK TOP TO TOP	103	S.Y.



ADJUSTMENT NOTES

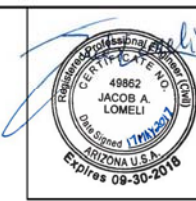
NO.	DESCRIPTION	QTY.	UNIT

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
 PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

BASIN PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,057	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

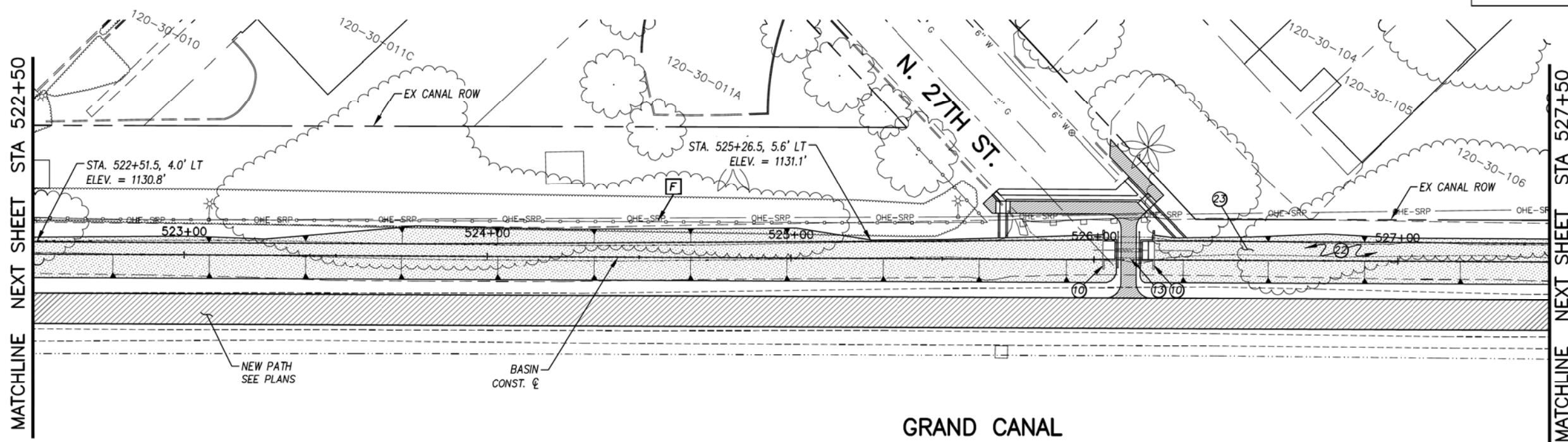


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,058	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

(D1) BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES
F CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR EXIST. FENCE

REMOVALS

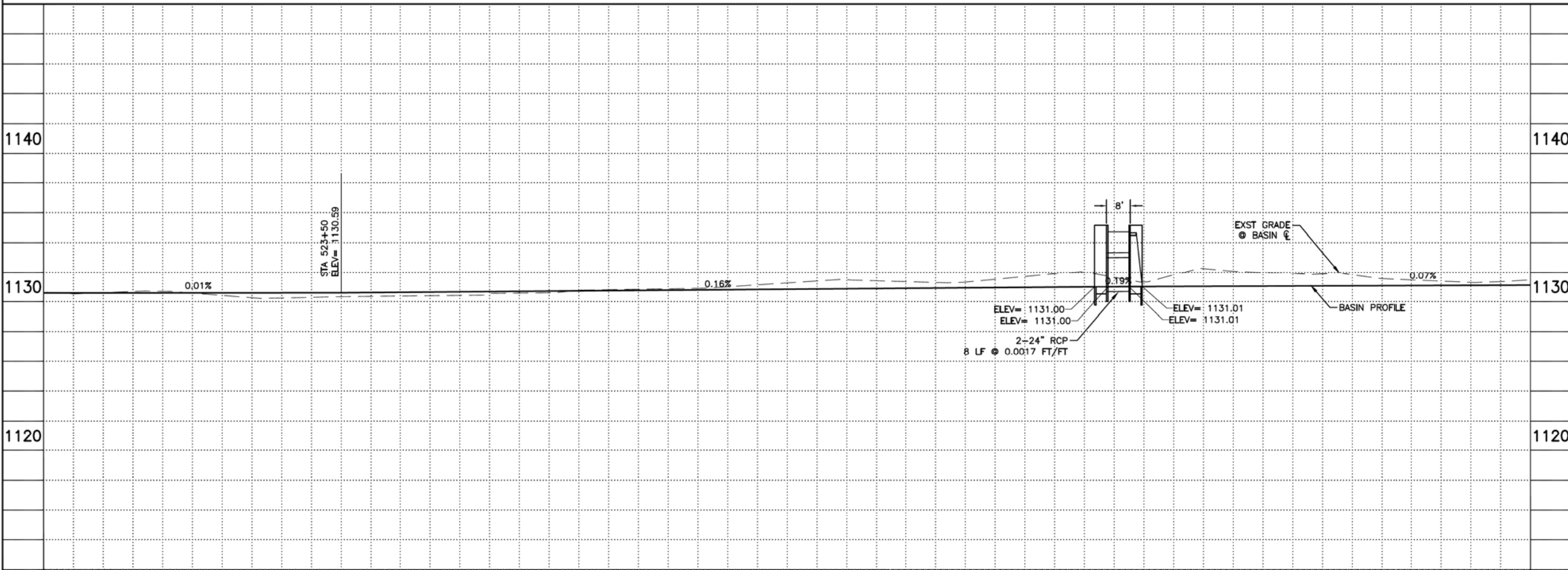
NO.	DESCRIPTION	QTY.	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
(10)	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	EA.
(13)	24" RUBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	16	L.F.
(22)	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	37	C.Y.
(23)	SHOTCRETE CHANNEL, 4" THICK TOP TO TOP	1010	S.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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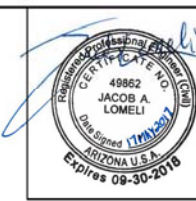
CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
 PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

BASIN PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

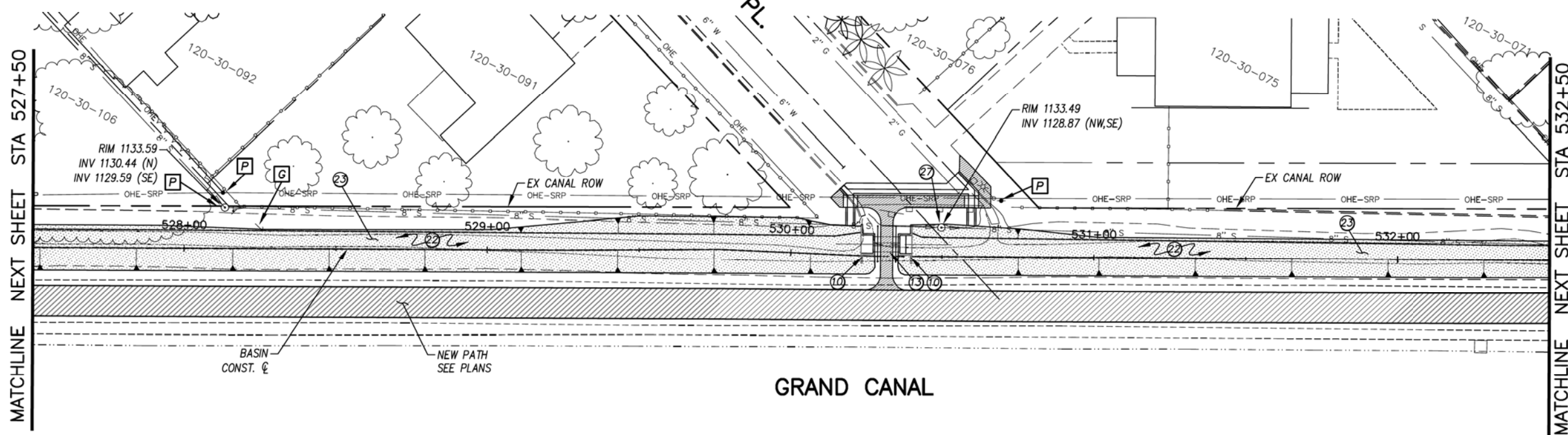
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,058	2,182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,059	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



GRAND CANAL

D1 BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES

- G EXIST GUYMIRE, RESET ANCHOR
- P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	EA.
13	24" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	16	L.F.
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	36	C.Y.
23	SHOTCRETE CHANNEL, 4" THICK TOP TO TOP	957	S.Y.
27	EXISTING MANHOLE, PROTECT IN PLACE, SEE DETAIL DE	1	EA

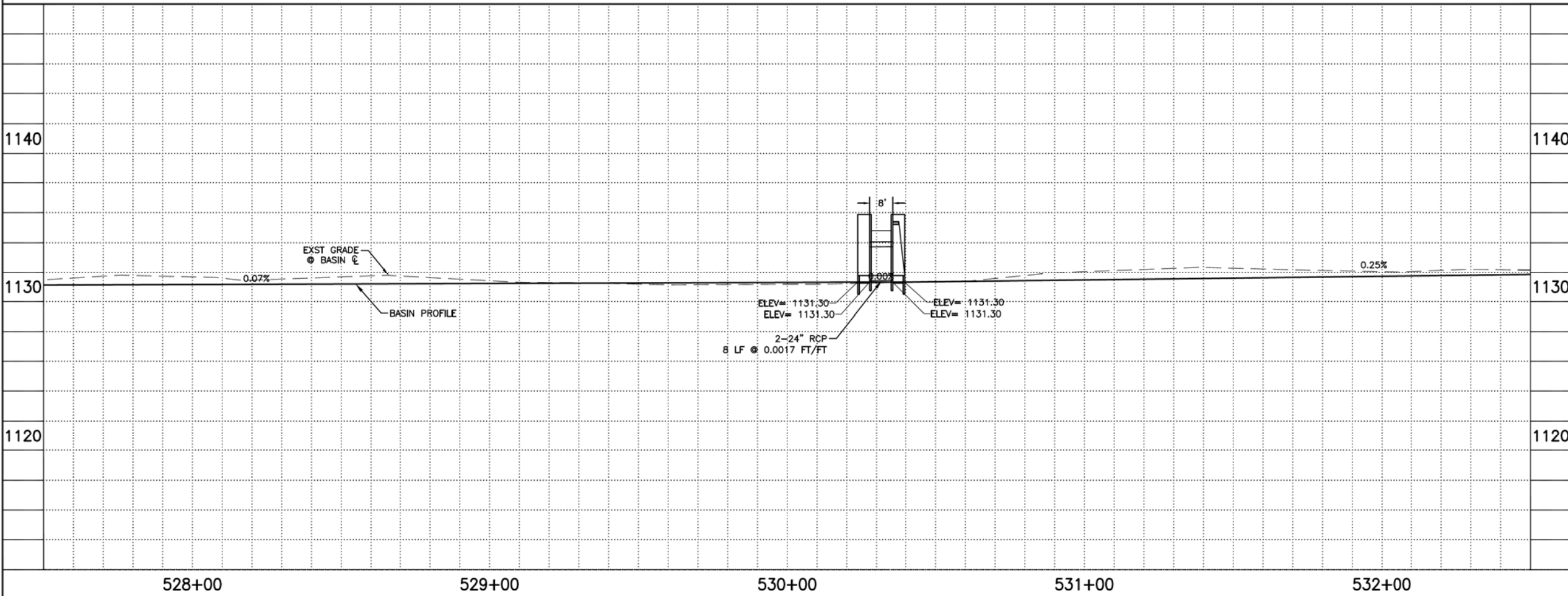
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



NO.	DESCRIPTION	REV BY	CHK BY	DATE
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NO.	DESCRIPTION	REV BY	CHK BY	DATE
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NO.	DESCRIPTION	REV BY	CHK BY	DATE
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DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,059	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

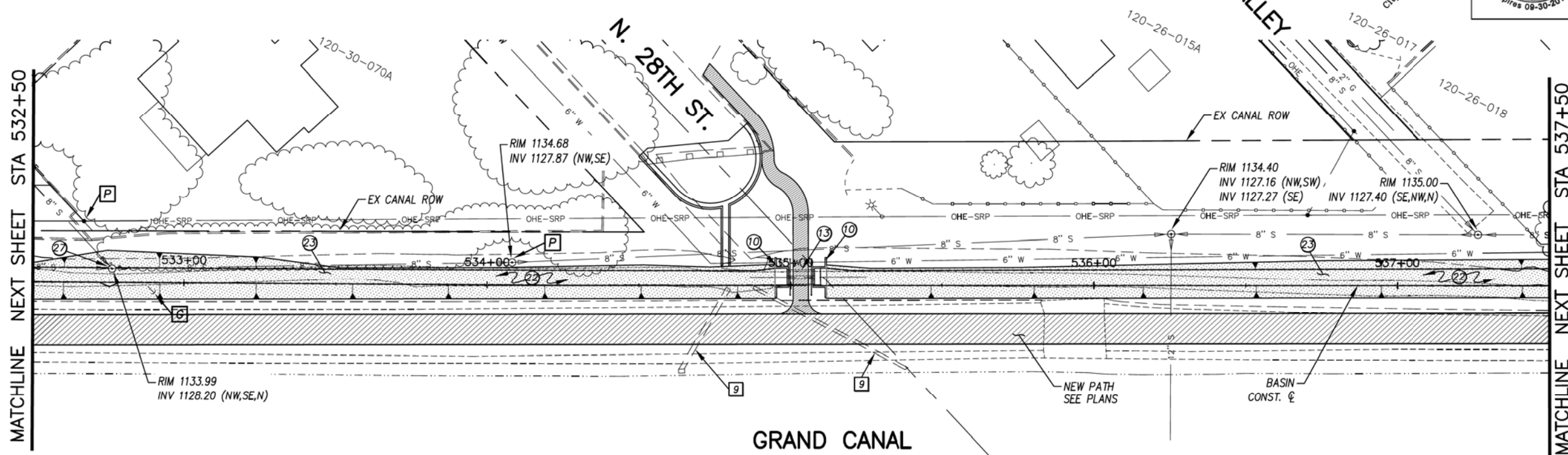


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,060	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



D1 BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

GENERAL NOTES

- G** EXIST GUYMIRE, RESET ANCHOR
- P** PROTECT IN PLACE

REMOVALS

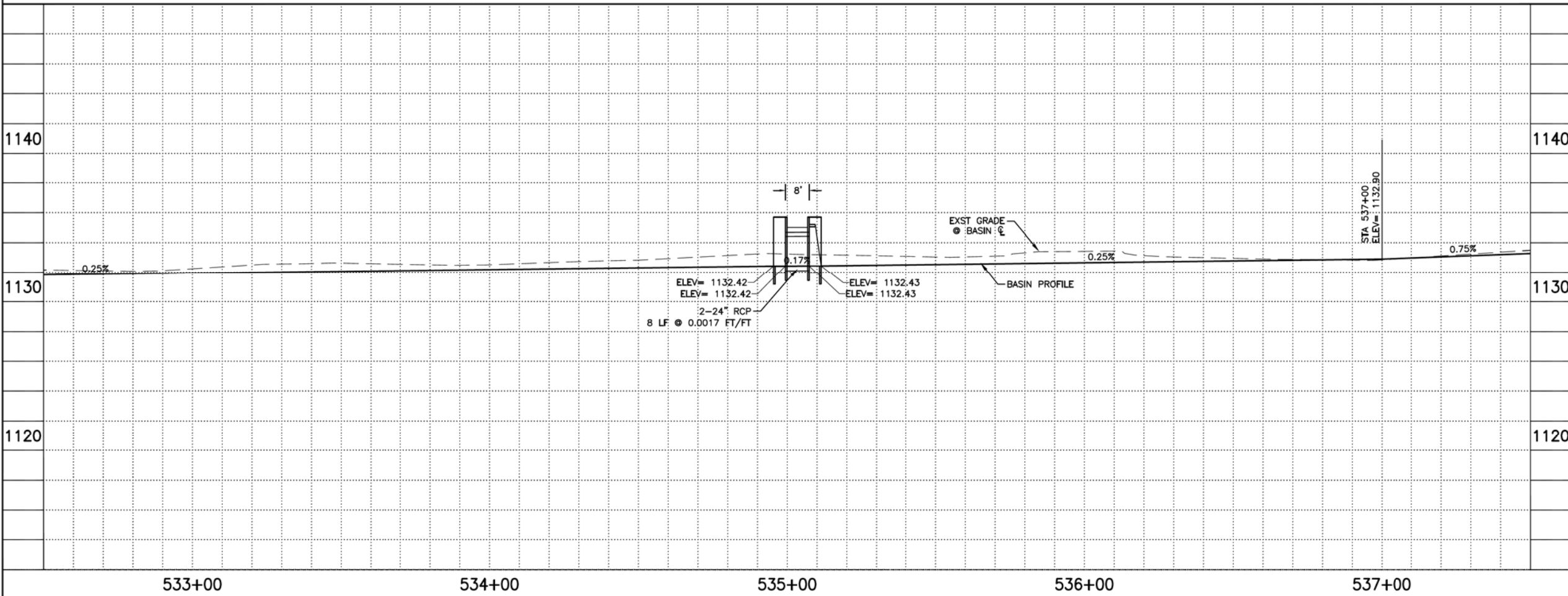
NO.	DESCRIPTION	QTY	UNIT
9	CUT AND REMOVE A PORTION OF EXISTING PIPE, PLUG END	2	EA

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	EA.
13	24" RUBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	16	L.F.
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	53	C.Y.
23	SHOTCRETE CHANNEL, 4" THICK TOP TO TOP	765	S.Y.
27	EXISTING MANHOLE, PROTECT IN PLACE, SEE DETAIL DE	1	EA

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

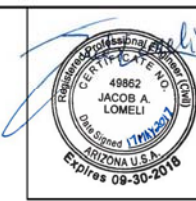


CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,060	2,182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

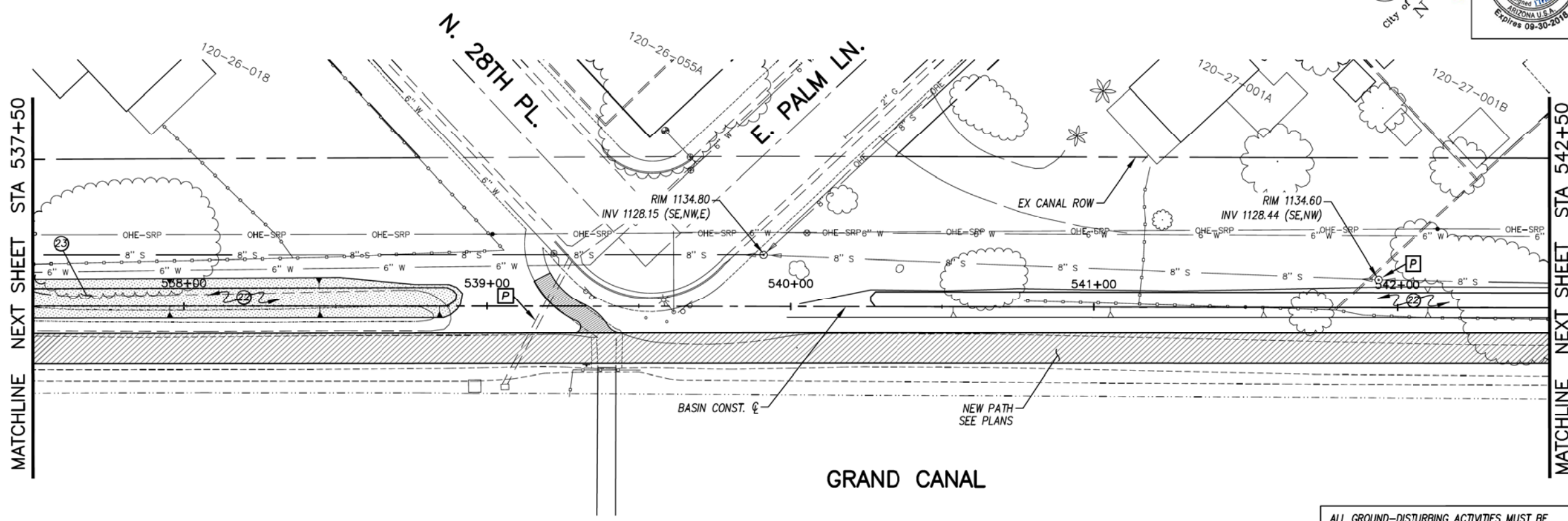


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.061	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

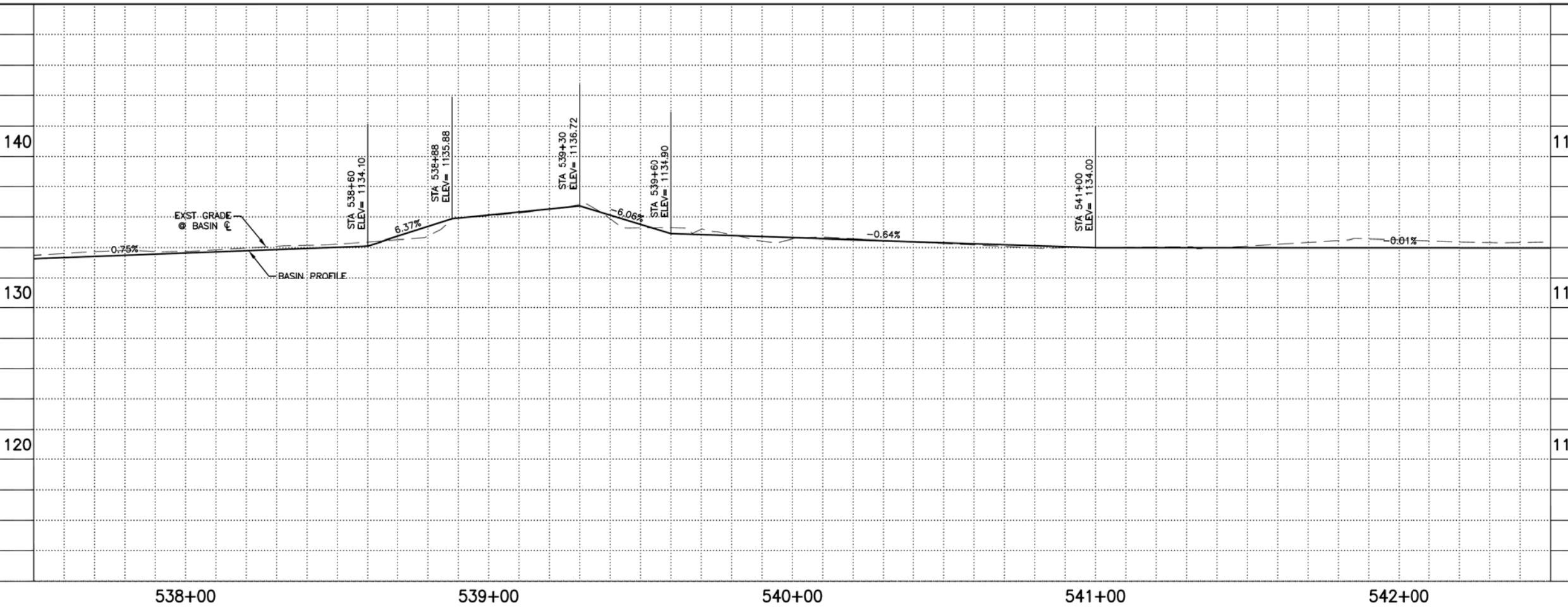
NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



D1 BASIN PLAN AND PROFILE



GENERAL NOTES

- P** PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	48	C.Y.
23	SHOTCRETE CHANNEL, 4" THICK TOP TO TOP	210	S.Y.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT

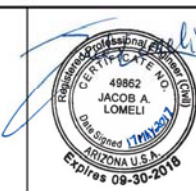
Two weeks before you dig, CALL FOR THE BLUE STAKES 602-263-1100 Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.061	2.182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

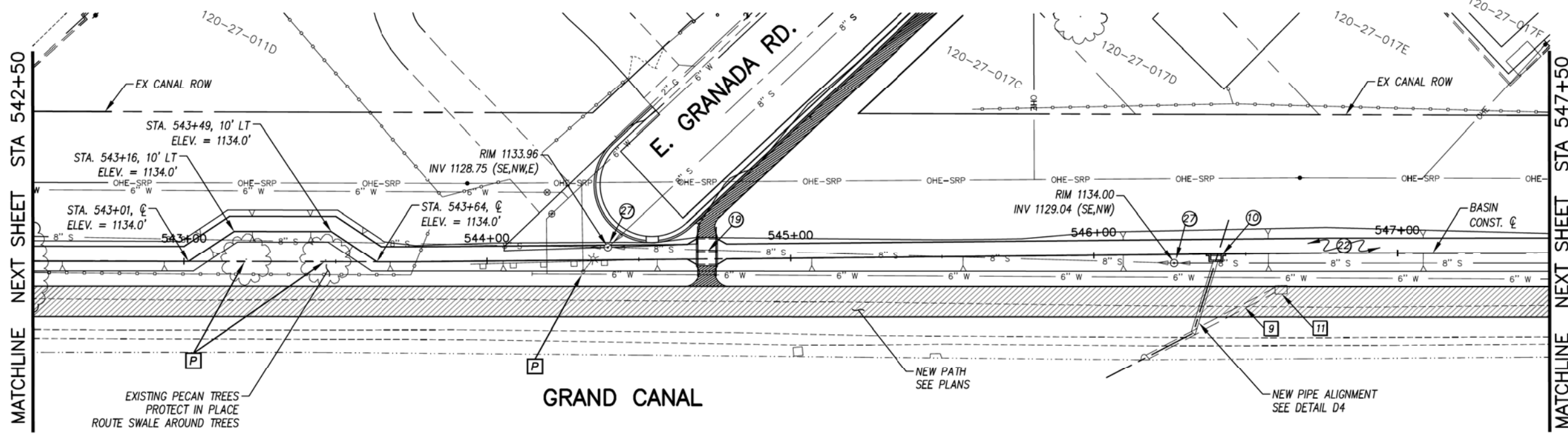


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.062	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

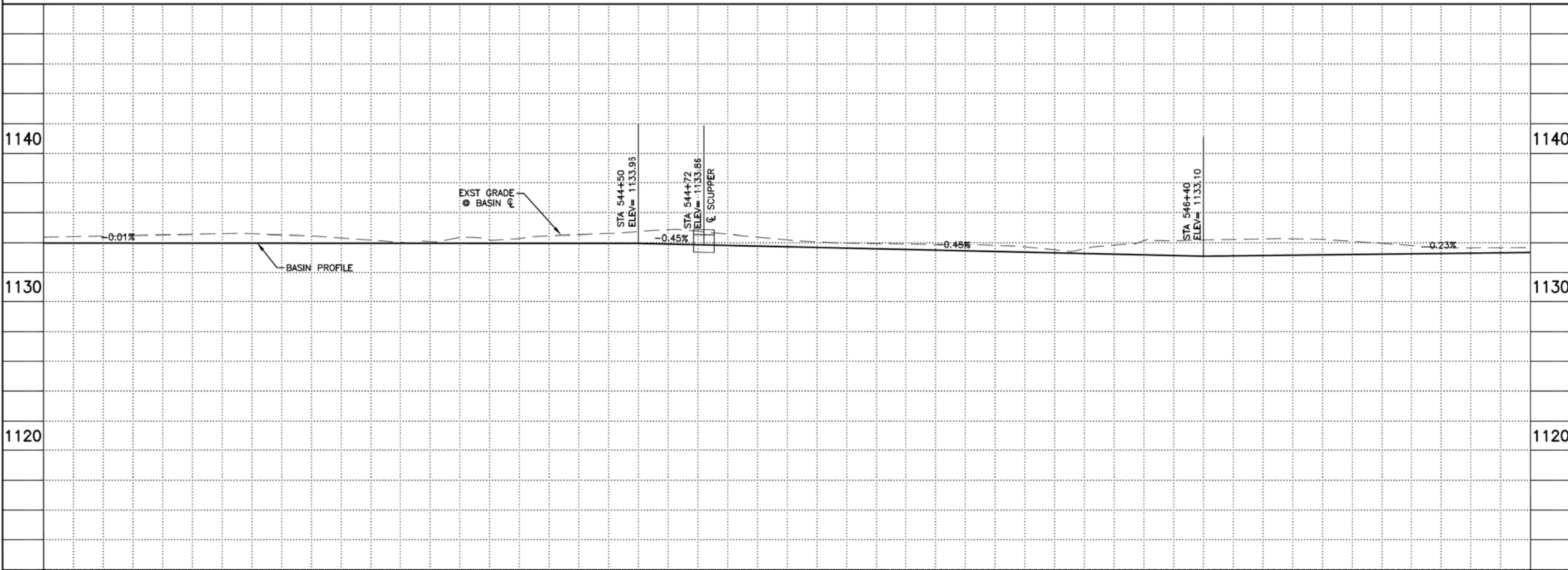
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



D1 BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



GENERAL NOTES

- P** PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
9	CUT AND REMOVE A PORTION OF EXISTING 18" STORM DRAIN	30	L.F.
11	REMOVE EXISTING CATCH BASIN	1	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 18" PIPE SEE DETAIL DA	1	EA.
19	CONCRETE SIDEWALK SCUPPER SEE DETAIL DC	1	EA.
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	54	C.Y.
27	EXISTING MANHOLE, PROTECT IN PLACE, SEE DETAIL DE	2	EA.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.062	2.182

SCALE: 1" = 20' 0" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

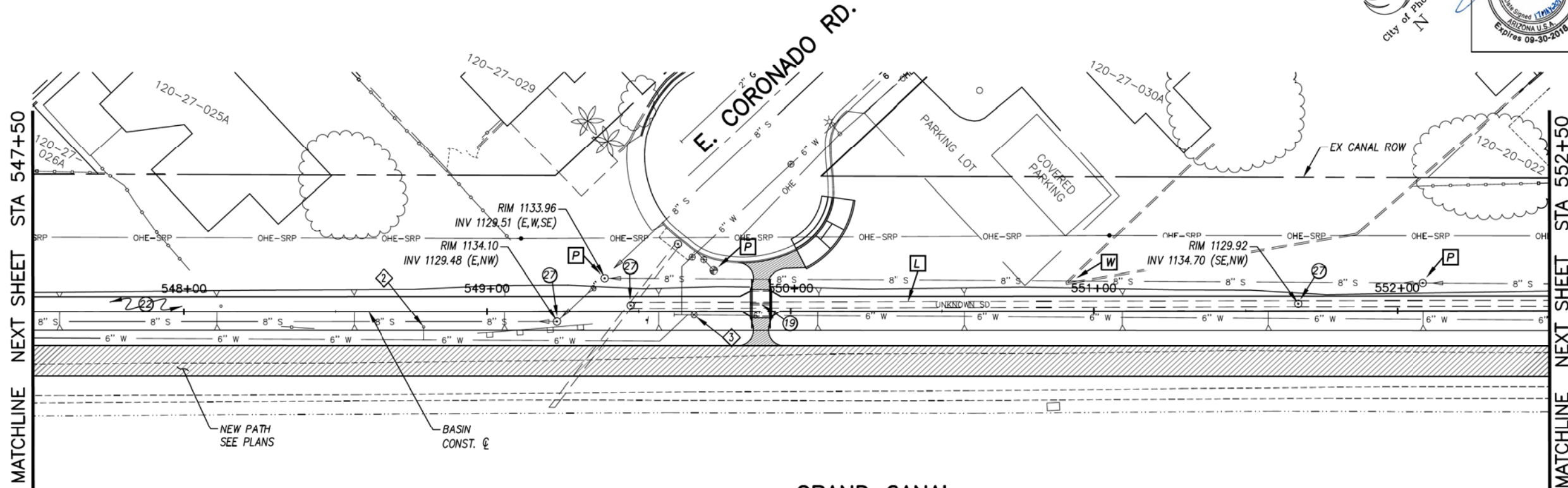


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.063	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

(D1) BASIN PLAN AND PROFILE

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

- GENERAL NOTES**
- [L] CONTRACTOR TO VERIFY LOCATION & DEPTH OF EXIST. STORM DRAIN PIPE, PROTECT IN PLACE
 - [P] PROTECT IN PLACE
 - [W] CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR EXIST. WALL

REMOVALS

NO.	DESCRIPTION	QTY	UNIT

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
19	CONCRETE SIDEWALK SCUPPER SEE DETAIL DC	1	EA.
22	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	75	C.Y.
27	EXISTING MANHOLE, PROTECT IN PLACE, SEE DETAIL DE	3	EA.

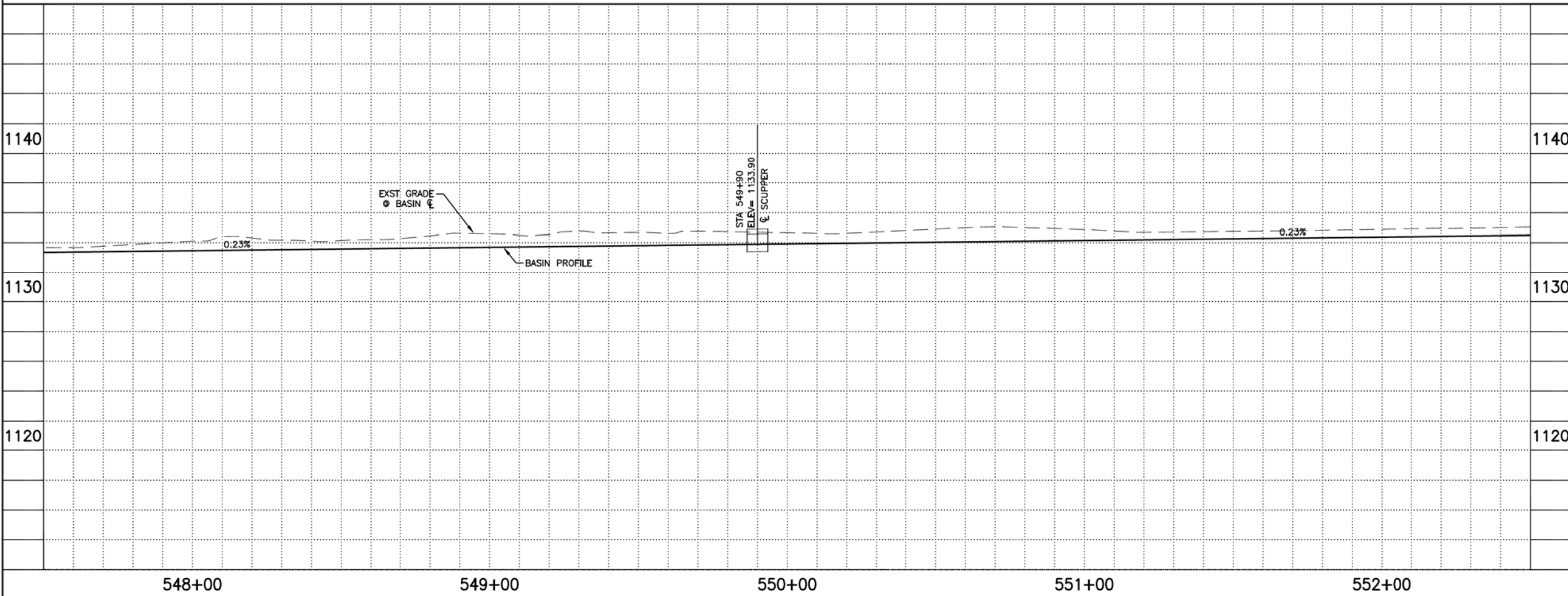
ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
2	ADJUST WATER METER BOX & COVER	1	EA.
3	ADJUST WATER VALVE BOX & COVER	1	EA.



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

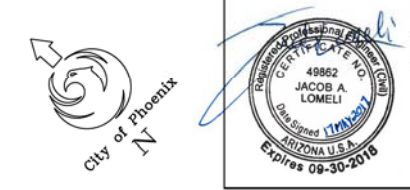


DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.063	2.182

SCALE: 1" = 20' 0" 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

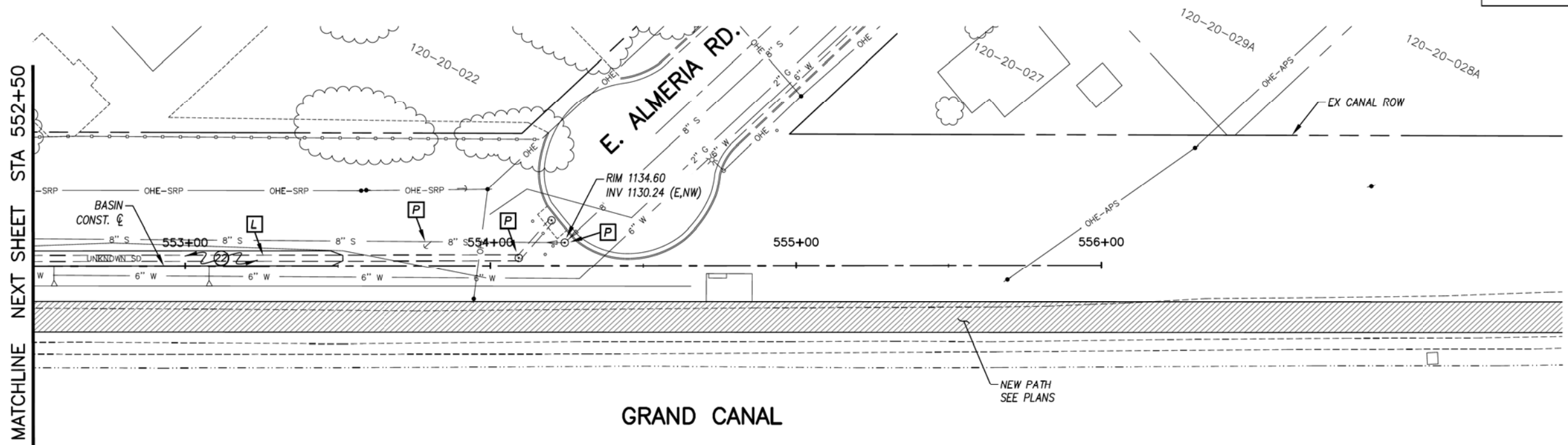


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,064	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

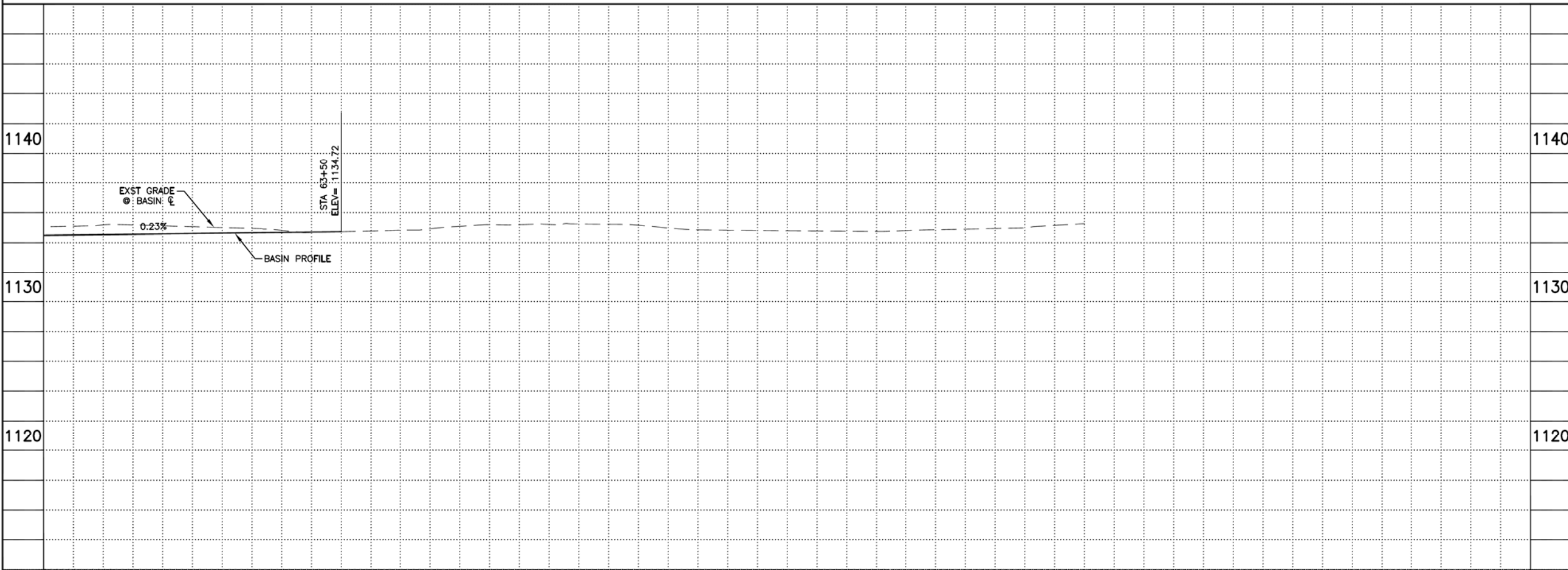
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

D1 BASIN PLAN AND PROFILE



GENERAL NOTES

L CONTRACTOR TO VERIFY LOCATION & DEPTH OF EXIST. STORM DRAIN PIPE, PROTECT IN PLACE

P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
-----	-------------	-----	------

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
23	EARTHWORK FOR BASIN INCLUDES CLEARING AND GRUBBING	9	C.Y.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
-----	-------------	------	------



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

BASIN PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,064	2,182
SCALE: 1" = 20'			20'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET

GRAND CANAL

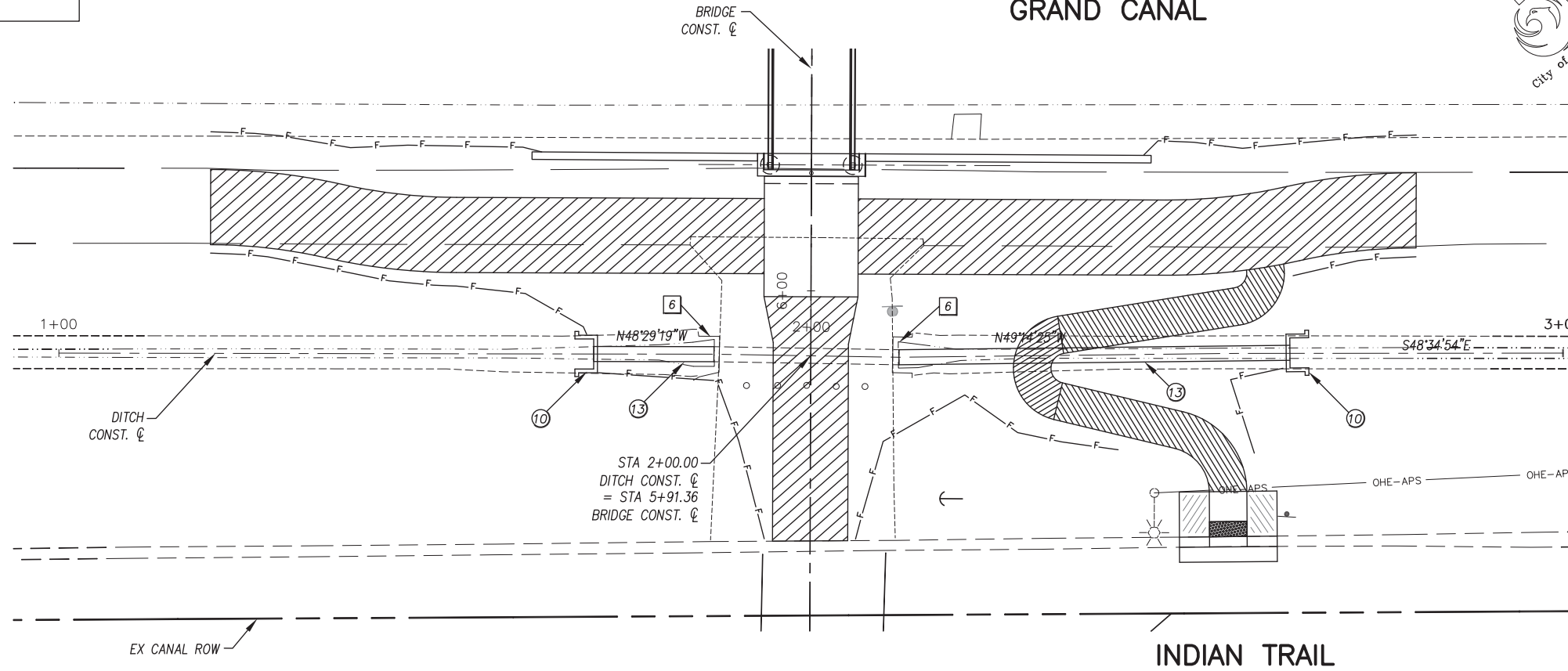


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.065	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GENERAL NOTES

REMOVALS

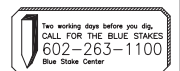
NO.	DESCRIPTION	QTY	UNIT
6	REMOVE EXISTING HEADWALL	2	EA.

CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
10	SRP STANDARD HEADWALL FOR 24" PIPE SEE DETAIL DA	2	EA.
13	24" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	68	L.F.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT



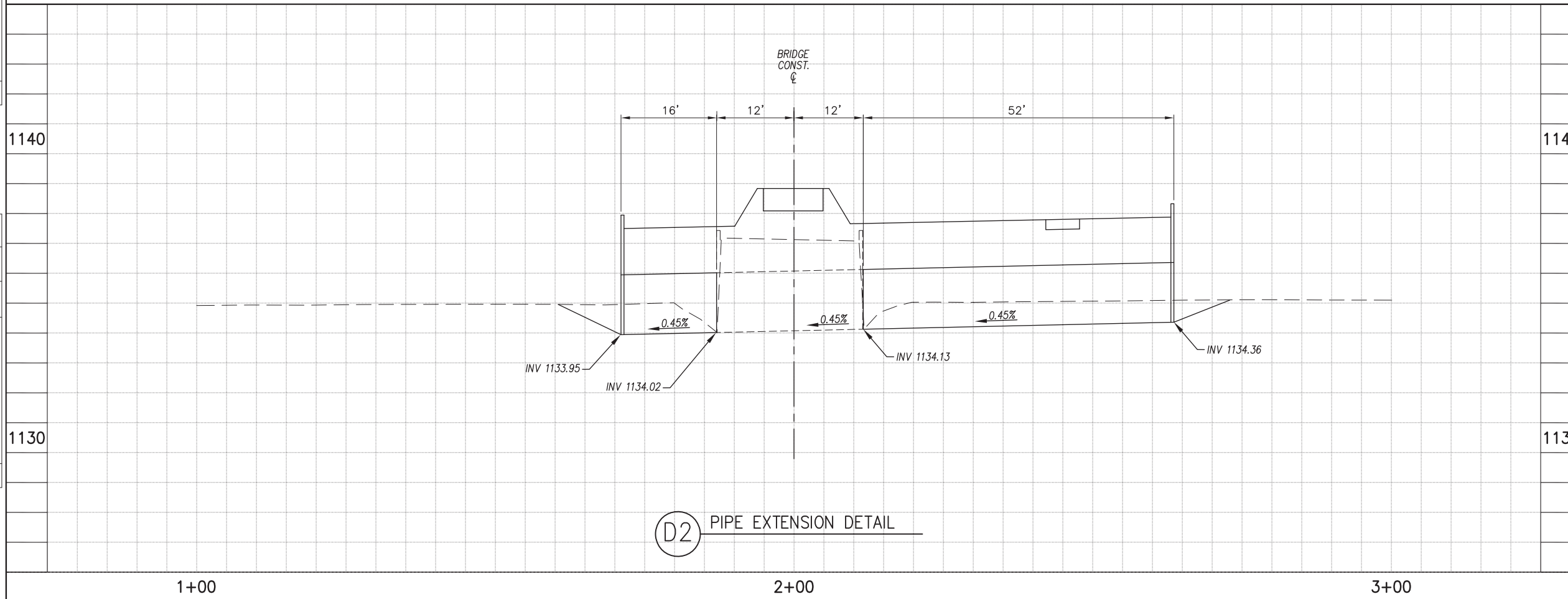
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PIPE PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.065	2.182

SCALE: 1" = 10'

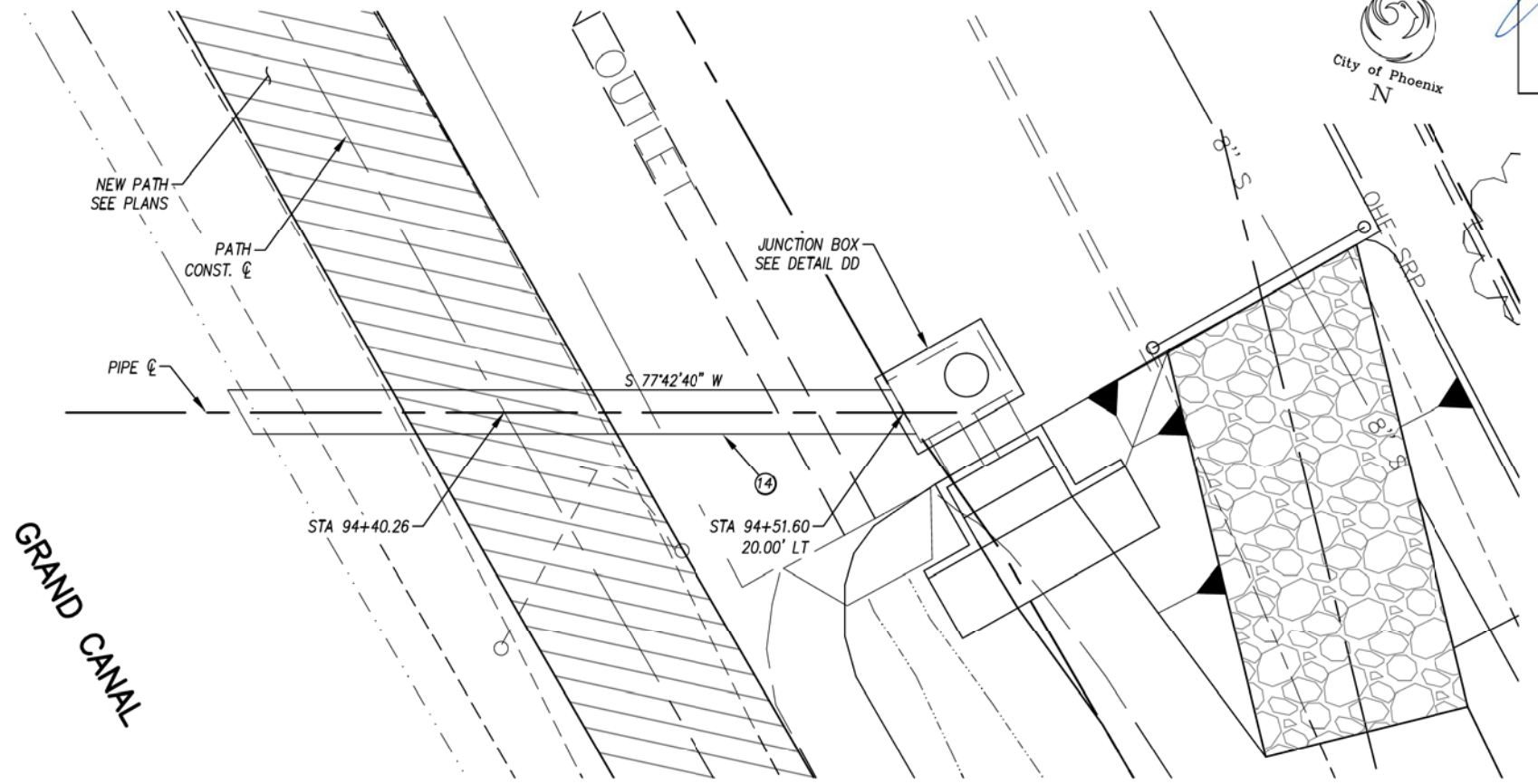


ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,066	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



D3 NEW PIPE DETAIL

GENERAL NOTES

P PROTECT IN PLACE

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
14	30" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	38	L.F.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PIPE PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

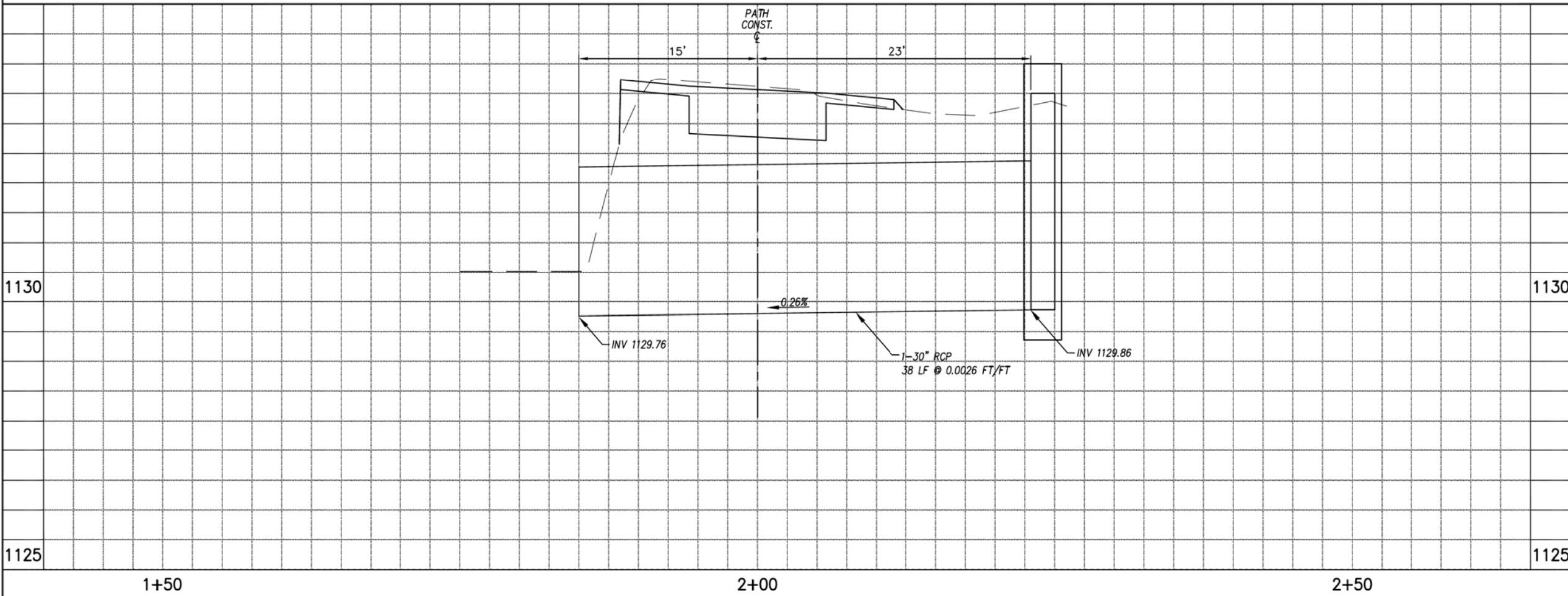
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,066	2,182

SCALE: 1" = 20'

NO.	DESCRIPTION	REV BY	CHK BY	DATE
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NO.	DESCRIPTION	REV BY	CHK BY	DATE
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NO.	DESCRIPTION	REV BY	CHK BY	DATE
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ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

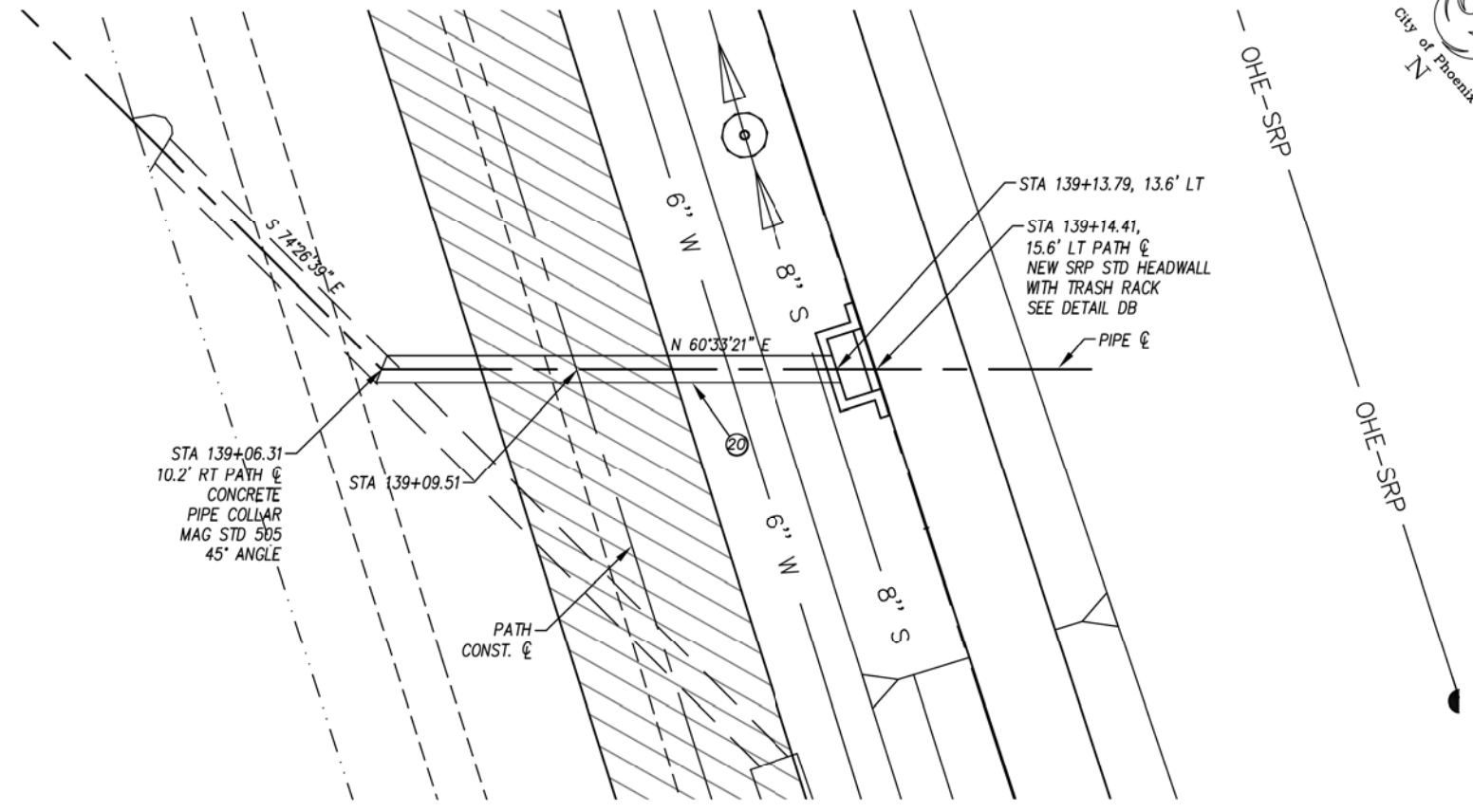


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,067	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



D4 PIPE EXTENSION DETAIL

GENERAL NOTES

REMOVALS

NO.	DESCRIPTION	QTY	UNIT
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CONSTRUCTION NOTES

NO.	DESCRIPTION	QTY.	UNIT
20	18" RUBBER GASKET REINFORCED CONCRETE PIPE, CLASS V (PRIVATE IRRIGATION)	25	L.F.

ADJUSTMENT NOTES

NO.	DESCRIPTION	QTY.	UNIT
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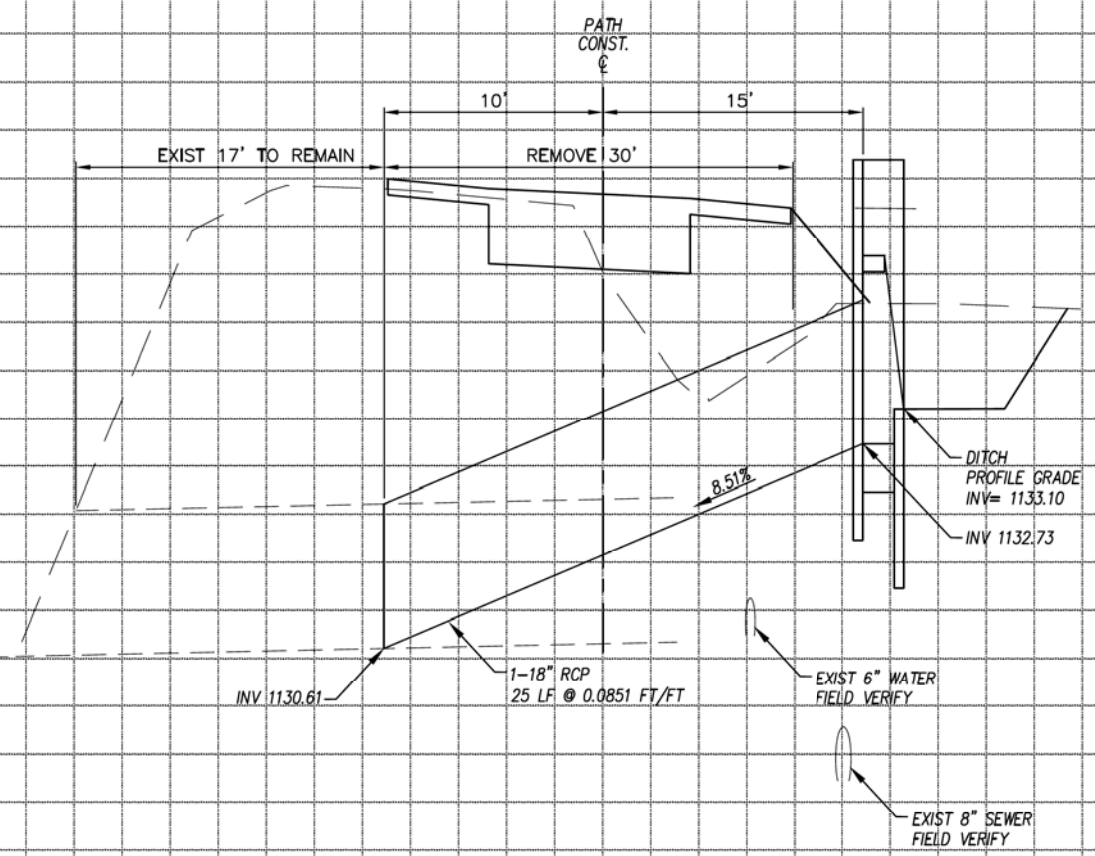


"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

DRAINAGE PIPE PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,067	2,182



1+50

2+00

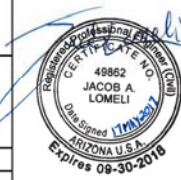
2+50

SCALE: 1" = 20'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

CONSTRUCTION DATA FOR HEADWALL WITH TRASHRACK AND CATWALK

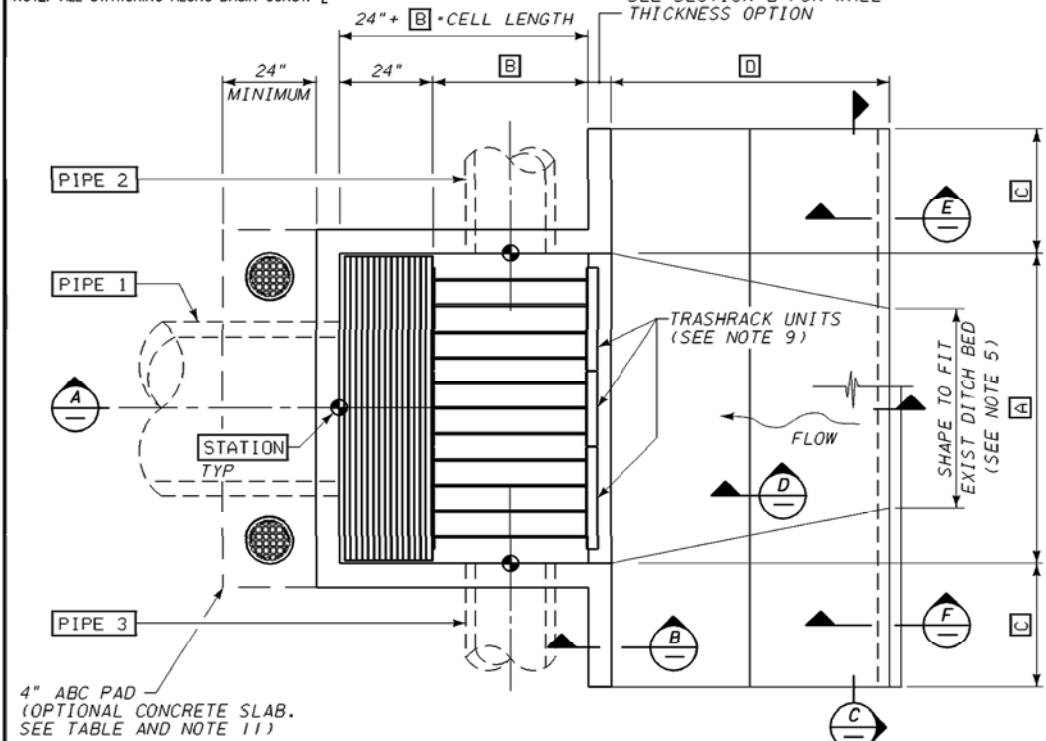
SEE NOTE 12



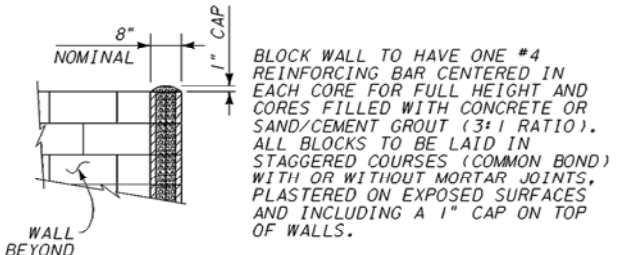
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.068	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

HDWL No.	STATION	PLAN/PROFILE REF DWG	PIPE 1		PIPE 2		PIPE 3		EL. 2	EL. 3	EL. 4	EL. 5	A	B	C	D	E	F	G	ABC PAD	CONC SLAB	DRAIN REQ'D		TRASH RACK
			TYPE	EL. 1	TYPE	EL. 1	TYPE	EL. 1														LEFT	RIGHT	
1	501+84.0, 3L	DETAIL D1	2-24" RCP	1129.86					1134.00	--	1131.00	1133.00	72"	24"	42"	48"	62"	15"	44"	--	--	--	--	YES
2	516+71.0, 2L	DETAIL D1	2-24" RCP	1130.02					1134.00	--	--	1133.00	72"	24"	42"	--	65"	15"	36"	--	--	--	--	NO
3	516+79.0, 2L	DETAIL D1	2-24" RCP	1130.02					1134.00	--	--	1133.00	72"	24"	42"	--	65"	15"	36"	--	--	--	--	YES
4	519+68.4, 2L	DETAIL D1	2-24" RCP	1130.05					1135.00	--	--	1134.00	72"	24"	42"	--	78"	15"	47"	--	--	--	--	NO
5	520+68.7, 4	DETAIL D1	2-24" RCP	1130.55					1135.80	--	--	1134.80	72"	24"	42"	--	75"	15"	47"	--	--	--	--	YES
6	526+07.4, 3L	DETAIL D1	2-24" RCP	1131.00					1135.20	--	--	1134.20	72"	24"	42"	--	62"	15"	39"	--	--	--	--	NO
7	526+15.4, 3L	DETAIL D1	2-24" RCP	1131.01					1135.20	--	--	1134.20	72"	24"	42"	--	62"	15"	38"	--	--	--	--	YES
8	530+27.6, 4L	DETAIL D1	2-24" RCP	1131.30					1135.90	--	--	1134.90	72"	24"	42"	--	62"	15"	43"	--	--	--	--	NO
9	530+35.6, 4L	DETAIL D1	2-24" RCP	1131.30					1135.90	--	--	1134.90	72"	24"	42"	--	62"	15"	43"	--	--	--	--	YES
10	534+99.4, 3L	DETAIL D1	2-24" RCP	1132.42					1135.70	--	--	1134.70	72"	24"	42"	--	52"	15"	28"	--	--	--	--	NO

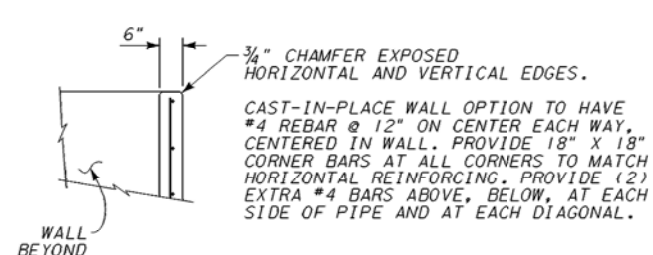
NOTE: ALL STATIONING ALONG BASIN CONST. 6



PLAN VIEW

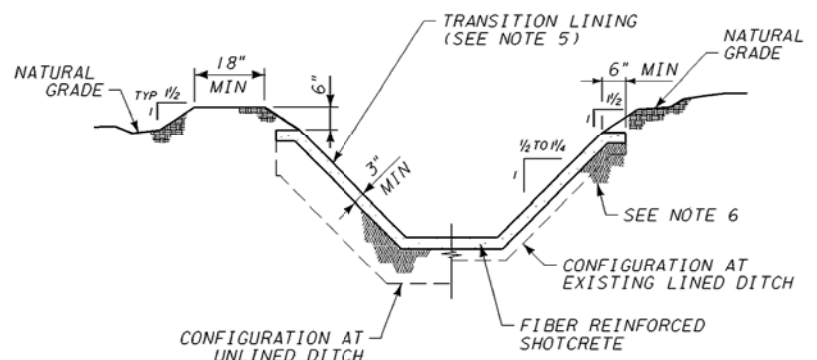


BLOCK WALL OPTION

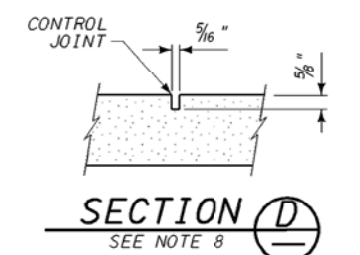


CAST-IN-PLACE WALL OPTION

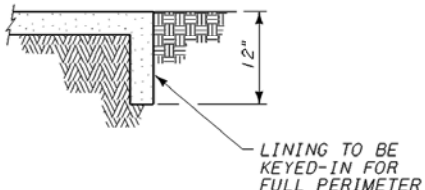
SECTION B



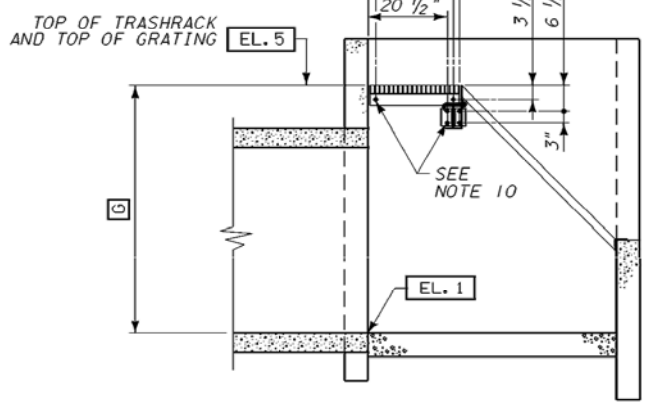
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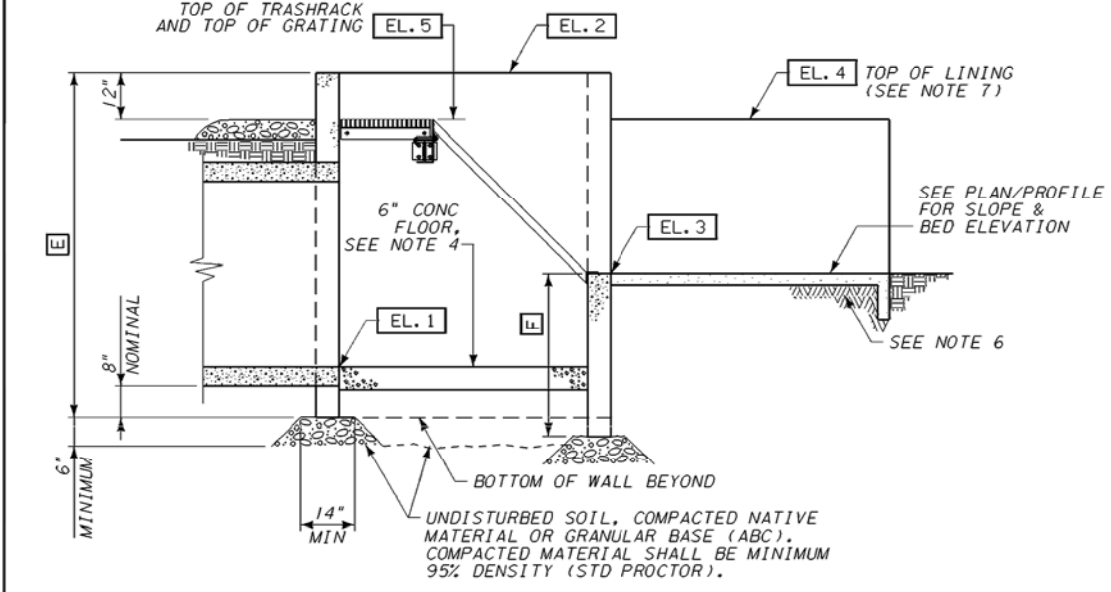
SECTION D



SECTION E



SECTION F



SECTION A

TRASHRACK/CATWALK SUPPORT ANCHOR BOLT LOCATION DETAIL

NOTE: TRASHRACK/CATWALK TO BE INSTALLED AT PIPE INLET HEADWALLS SEE DETAIL DB

NOTES

- SEE PLAN/PROFILE DRAWING(S) FOR ORIENTATION OF HEADWALL(S).
- UNLESS OTHERWISE NOTED, CONCRETE SHALL BE 3000 PSI (MAG A), SPRAY CONCRETE WITH WHITE CURING COMPOUND.
- REINFORCING STEEL TO BE ASTM A615 GRADE 60.
- TOP OF CONCRETE FLOOR TO MATCH THE LOWEST PIPE INVERT (EL. 1).
- MATCH WIDTH, ELEVATION, AND SLOPE OF EXISTING DITCH, OR AS DIRECTED BY SRP ENGINEERING.
- SHAPE AND COMPACT TRANSITION LINING SUBGRADE FROM HEADWALL TO 36" PAST UNDISTURBED UNLINED DITCH, OR TO UPSTREAM END OF TRANSITION, WHICHEVER IS GREATER.
- EXTEND TRANSITION LINING FROM FACE (EL. 4) OF WINGWALLS TO EXISTING DITCH OR CONCRETE LINING BY LENGTH (D), AND MATCH FINISH WITH EXISTING SLIPFORM LINING (IF APPLICABLE).
- IF TRANSITION LENGTH (D) EXCEEDS 120", TRANSVERSE CONTROL JOINTS ARE REQUIRED AT EQUAL SPACING NOT TO EXCEED 120".
- TRASHRACKS MAY BE INSTALLED IN ANY SEQUENCE OR ORDER, MAINTAINING THE 6" SPACING BETWEEN BARS OF ADJACENT UNITS AND EQUAL DISTANCE FROM EACH SIDE OF THE HEADWALL. SEE TRASHRACK REFERENCE DRAWING.
- INSTALL TRASHRACK/CATWALK SUPPORTS WITH 1/2" DIAMETER x 6" EXPANSION ANCHORS, USING THE SLOTTED HOLES AS A TEMPLATE.
- OPTIONAL CONCRETE SLAB - 4" THICK, MINIMUM 24" WIDE, LENGTH TO MATCH HEADWALL, BROOM FINISH, SLOPE SLAB TO DRAIN AWAY FROM HEADWALL. TOP OF SLAB TO BE LEVEL WITH ADJACENT FINISH GRADE.
- INSTALL SLAB DRAIN PER STANDARD DRAWING WES-SLABDRAIN.

CONTRACTOR NOTE

TRASHRACK(S) AND CATWALK(S) MUST BE MANUFACTURED PRIOR TO REQUESTING AN IRRIGATION OUTAGE FOR THIS JOB.
TRASHRACK(S), CATWALK(S) AND ASSOCIATED HARDWARE CAN BE SUPPLIED BY SRP UPON REQUEST. PLEASE CALL THE MECHANICAL CONSTRUCTION & MAINTENANCE DIVISION OF SRP FOR PRICE QUOTES: (602) 236-4154

SRP HEADWALL DETAIL

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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SRP HEADWALL DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

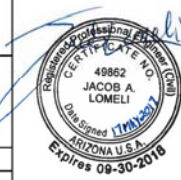
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.068	2.182
SCALE:				

REVISION BY	DESCRIPTION	DATE

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

CONSTRUCTION DATA FOR HEADWALL WITH TRASHRACK AND CATWALK

SEE NOTE 12

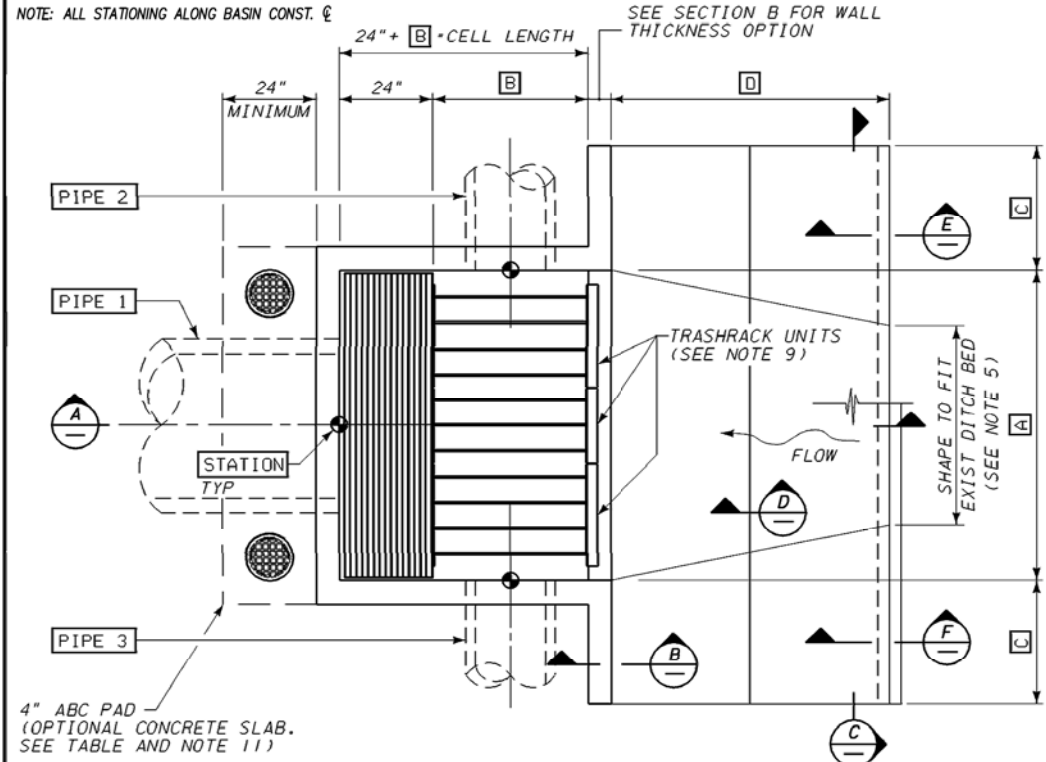


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.069	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

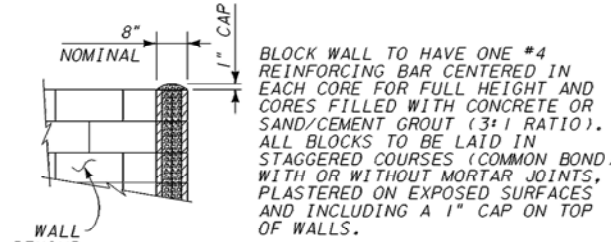
HDWL No.	STATION	PLAN/PROFILE REF DWG	PIPE 1		PIPE 2		PIPE 3		EL. 2	EL. 3	EL. 4	EL. 5	[A]	[B]	[C]	[D]	[E]	[F]	[G]	ABC PAD	CONC SLAB	DRAIN REQ'D		TRASH RACK
			TYPE	EL. 1	TYPE	EL. 1	TYPE	EL. 1														LEFT	RIGHT	
11	535+07.4, 3'L	DETAIL D1	2-24" RCP	1132.43					1135.70	--	--	1134.70	72"	24"	42"	--	52"	15"	28"	--	--	--	--	YES
12	546+40.0, 3'R	DETAIL D2	1-18" RCP	1132.73					1135.70	1133.10	--	1134.70	42"	12"	18"	--	48"	23"	24"	--	--	--	--	YES

NOTES

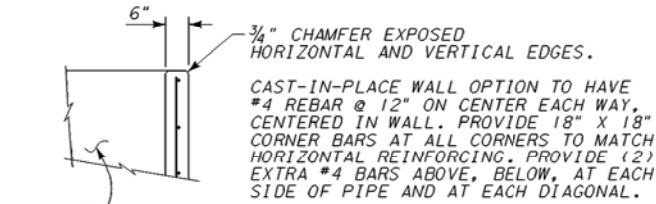
- SEE PLAN/PROFILE DRAWING(S) FOR ORIENTATION OF HEADWALL(S).
- UNLESS OTHERWISE NOTED, CONCRETE SHALL BE 3000 PSI (MAG A), SPRAY CONCRETE WITH WHITE CURING COMPOUND.
- REINFORCING STEEL TO BE ASTM A615 GRADE 60.
- TOP OF CONCRETE FLOOR TO MATCH THE LOWEST PIPE INVERT (EL. 1).
- MATCH WIDTH, ELEVATION, AND SLOPE OF EXISTING DITCH, OR AS DIRECTED BY SRP ENGINEERING.
- SHAPE AND COMPACT TRANSITION LINING SUBGRADE FROM HEADWALL TO 36" PAST UNDISTURBED UNLINED DITCH, OR TO UPSTREAM END OF TRANSITION, WHICHEVER IS GREATER.
- EXTEND TRANSITION LINING FROM FACE (EL. 4) OF WINGWALLS TO EXISTING DITCH OR CONCRETE LINING BY LENGTH (D), AND MATCH FINISH WITH EXISTING SLIPFORM LINING (IF APPLICABLE).
- IF TRANSITION LENGTH (D) EXCEEDS 120", TRANSVERSE CONTROL JOINTS ARE REQUIRED AT EQUAL SPACING NOT TO EXCEED 120".
- TRASHRACKS MAY BE INSTALLED IN ANY SEQUENCE OR ORDER, MAINTAINING THE 6 3/8" SPACING BETWEEN BARS OF ADJACENT UNITS AND EQUAL DISTANCE FROM EACH SIDE OF THE HEADWALL. SEE TRASHRACK REFERENCE DRAWING.
- INSTALL TRASHRACK/CATWALK SUPPORTS WITH 1/2" DIAMETER x 6" EXPANSION ANCHORS, USING THE SLOTTED HOLES AS A TEMPLATE.
- OPTIONAL CONCRETE SLAB - 4" THICK, MINIMUM 24" WIDE, LENGTH TO MATCH HEADWALL, BROOM FINISH, SLOPE SLAB TO DRAIN AWAY FROM HEADWALL. TOP OF SLAB TO BE LEVEL WITH ADJACENT FINISH GRADE.
- INSTALL SLAB DRAIN PER STANDARD DRAWING WES-SLABDRAIN.



PLAN VIEW

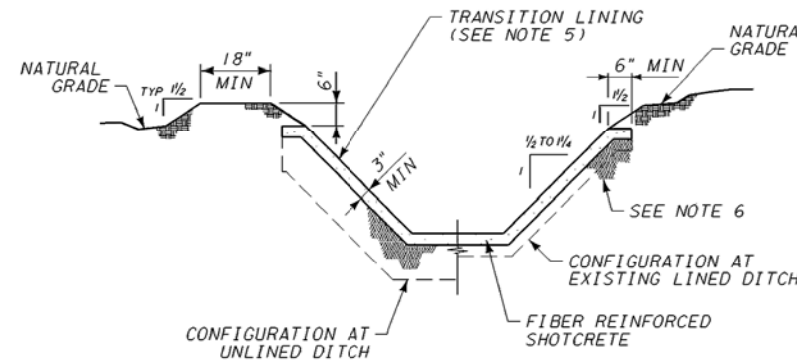


BLOCK WALL OPTION

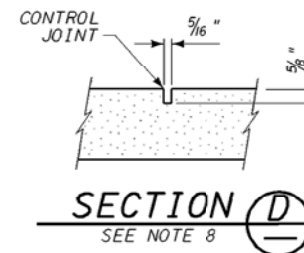


CAST-IN-PLACE WALL OPTION

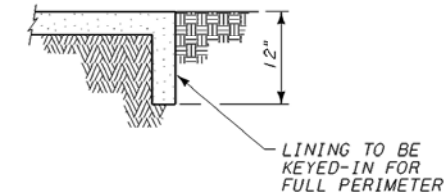
SECTION (B)



SECTION (C)

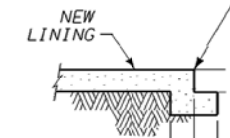


SECTION (D)
SEE NOTE 8

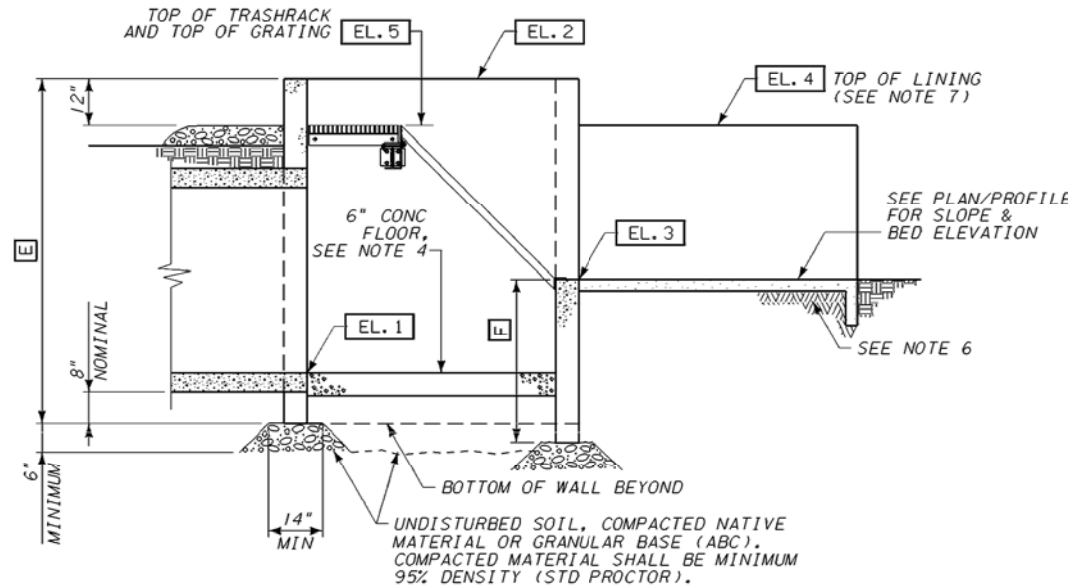


SECTION (E)
CONNECTION TO UNLINED DITCH

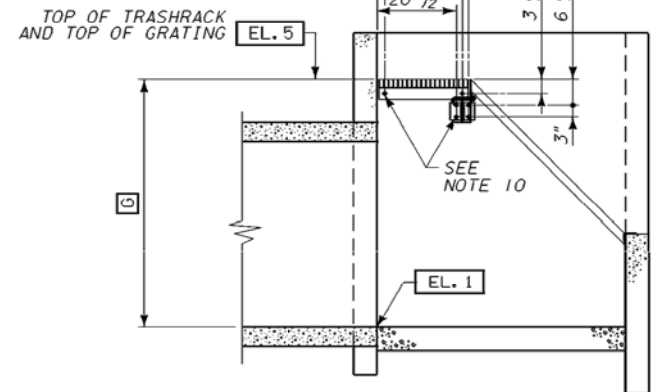
EXISTING LINING; CUT OR BREAK TO NEAT VERTICAL EDGE AND PROPERLY BOND TO NEW



SECTION (F)
CONNECTION TO EXISTING LINED DITCH



SECTION (A)



TRASHRACK/CATWALK SUPPORT ANCHOR BOLT LOCATION DETAIL

NOTE: TRASHRACK/CATWALK TO BE INSTALLED AT PIPE INLET HEADWALLS
SEE DETAIL DB

CONTRACTOR NOTE

TRASHRACK(S) AND CATWALK(S) MUST BE MANUFACTURED PRIOR TO REQUESTING AN IRRIGATION OUTAGE FOR THIS JOB.
TRASHRACK(S), CATWALK(S) AND ASSOCIATED HARDWARE CAN BE SUPPLIED BY SRP UPON REQUEST. PLEASE CALL THE MECHANICAL CONSTRUCTION & MAINTENANCE DIVISION OF SRP FOR PRICE QUOTES: (602) 236-4154

SRP HEADWALL DETAIL

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

SRP HEADWALL DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.069	2.182
SCALE:				

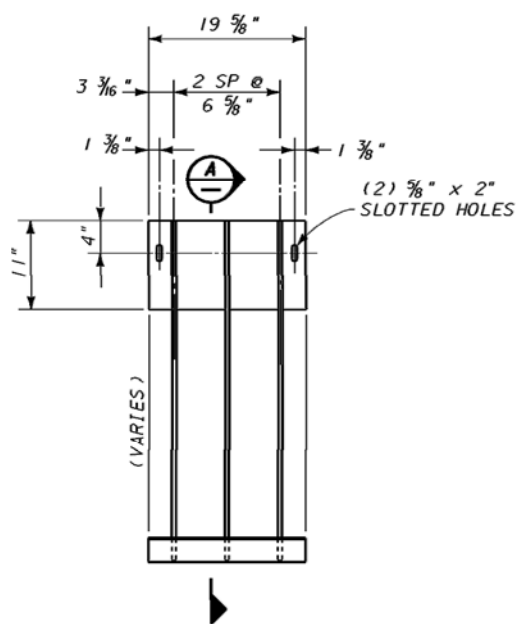
REVISION BY	DESCRIPTION	DATE

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

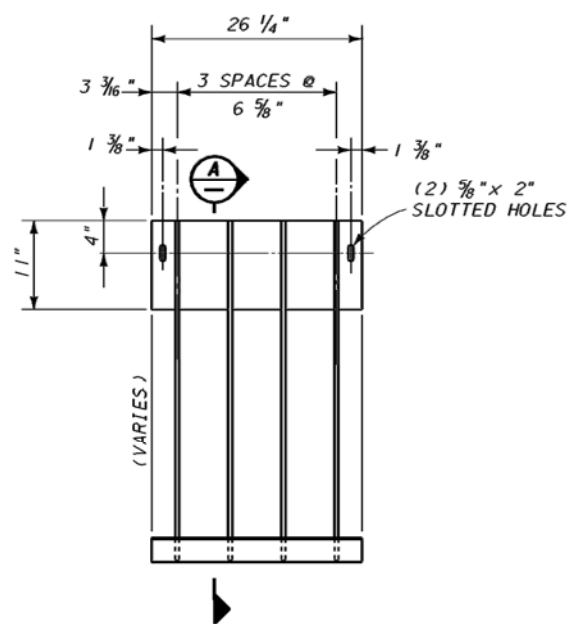


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.070	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

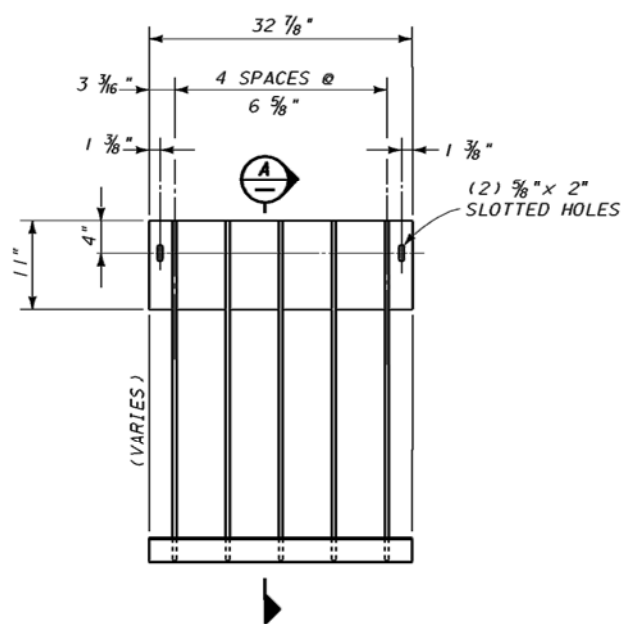
REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE



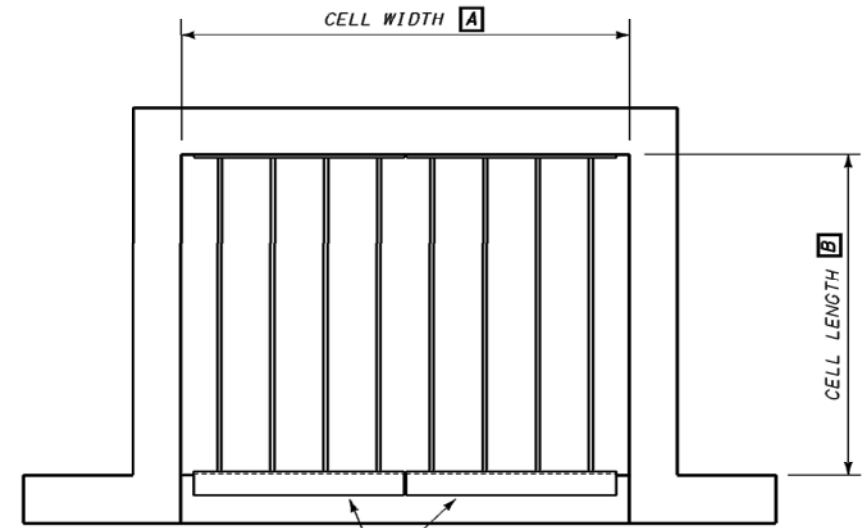
TRASHRACK-TYPE I



TRASHRACK-TYPE II



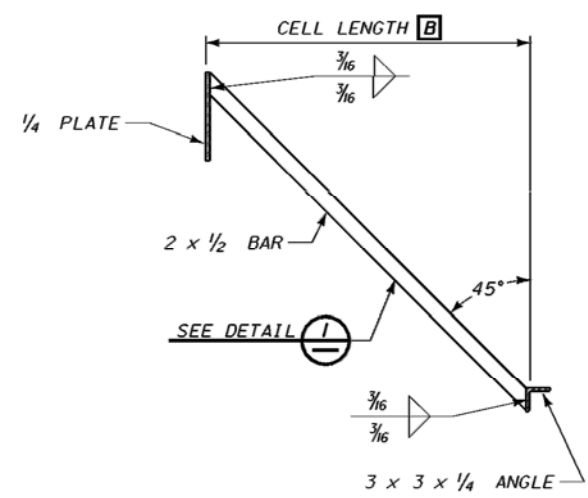
TRASHRACK-TYPE III



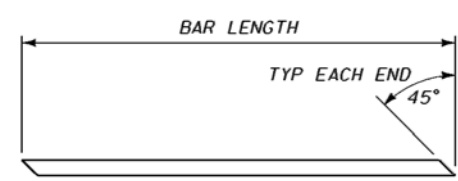
SEE TRASHRACK SCHEDULE FOR NUMBERS AND TYPES OF TRASHRACKS REQUIRED FOR VARYING CELL WIDTHS

HEADWALL KEY PLAN

TRASHRACK SCHEDULE				
HEADWALL CELL WIDTH [A]	NUMBER OF PANELS REQUIRED			
	TYPE I	TYPE II	TYPE III	
32"	-	1	-	
40"	-	-	1	
48"	1	1	-	
56"	-	2	-	
64"	-	1	1	
72"	-	-	2	
80"	1	2	-	
88"	-	2	1	
96"	-	1	2	
108"	2	-	2	
120"	-	2	2	
132"	-	1	3	
144"	2	-	3	
156"	1	-	4	
168"	-	-	5	
180"	1	1	4	
192"	1	-	5	



SECTION A-A



DETAIL I

TRASHRACK BAR LENGTH SCHEDULE	
HEADWALL CELL LENGTH [B]	BAR LENGTH
16"	23 5/16"
24"	35 1/4"
32"	46 5/16"
40"	57 7/8"
48"	69 3/16"
56"	80 1/2"

CONTRACTOR NOTE:
TRASHRACK(S) MUST BE MANUFACTURED PRIOR TO REQUESTING AN IRRIGATION OUTAGE FOR THIS JOB.
TRASHRACKS AND ASSOCIATED HARDWARE CAN BE SUPPLIED BY SALT RIVER PROJECT UPON REQUEST. PLEASE CALL THE MECHANICAL CONSTRUCTION & MAINTENANCE DIVISION OF SRP FOR PRICE QUOTES: (602)236-4154.

NOTE: TRASHRACK/CATWALK TO BE INSTALLED AT PIPE INLET HEADWALLS

- NOTES:**
- UNLESS OTHERWISE SPECIFIED, TOLERANCE DIMENSIONS SHALL BE +/- 1/32".
 - ALL STEEL SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.
 - SANDBLAST TO NEAR WHITE AND ZINC METAL SPRAY OR HOT DIP GALVANIZE 5-7 MILS AFTER FABRICATION.

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

SRP TRASHRACK DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.070	2.182

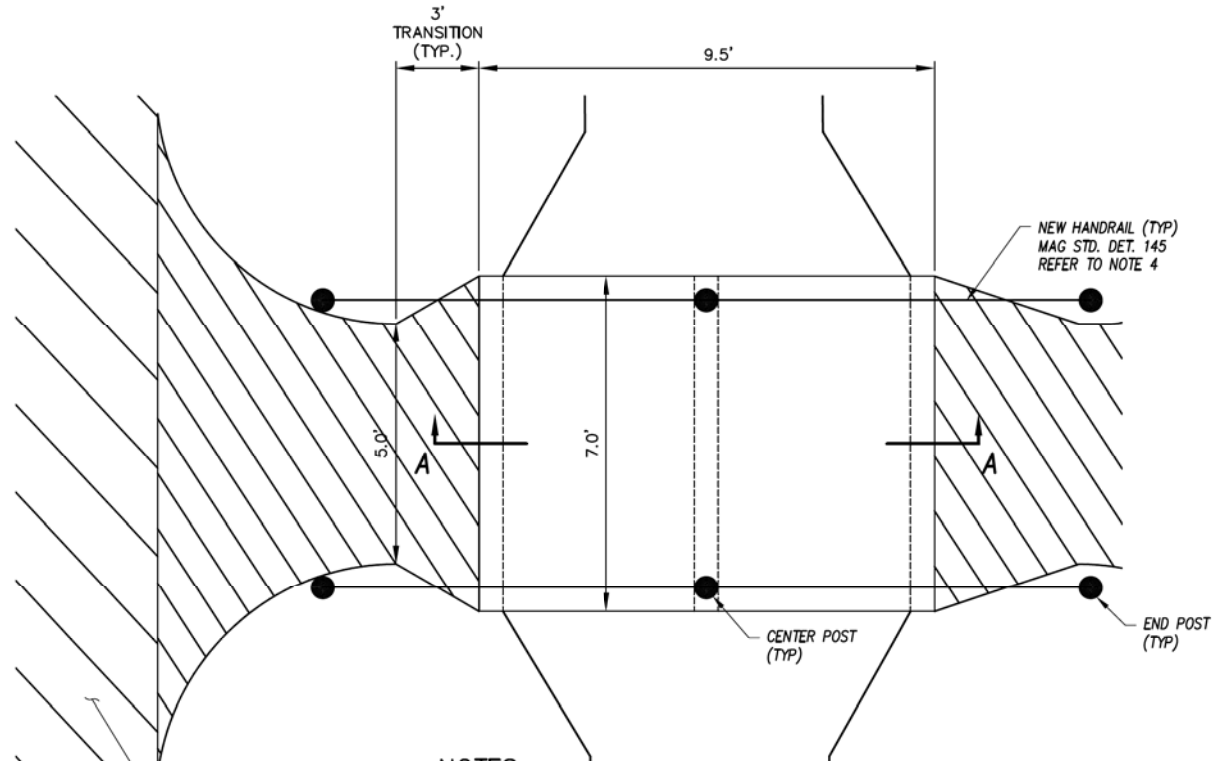
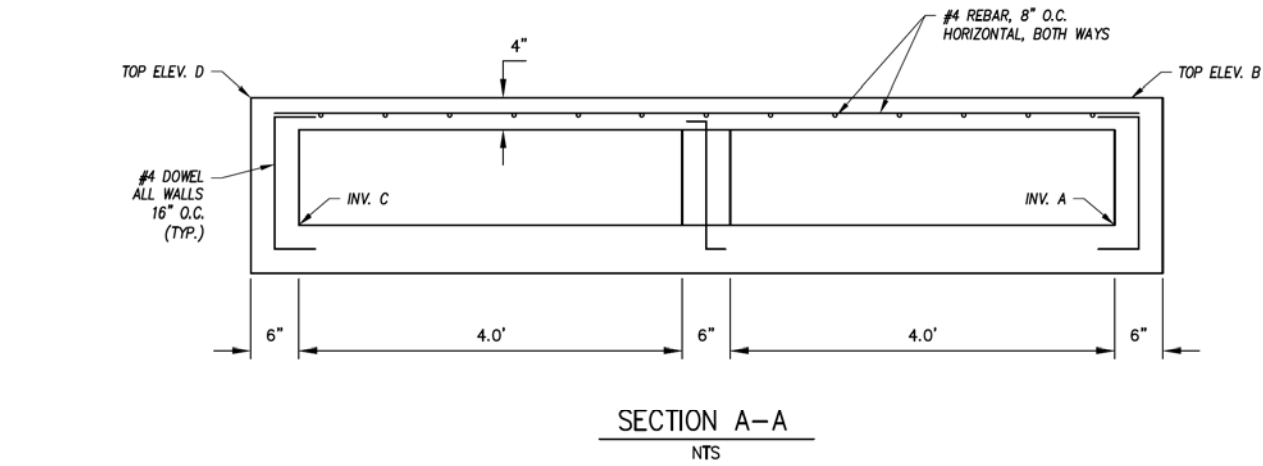
(DB) SRP TRASHRACK DETAIL

ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

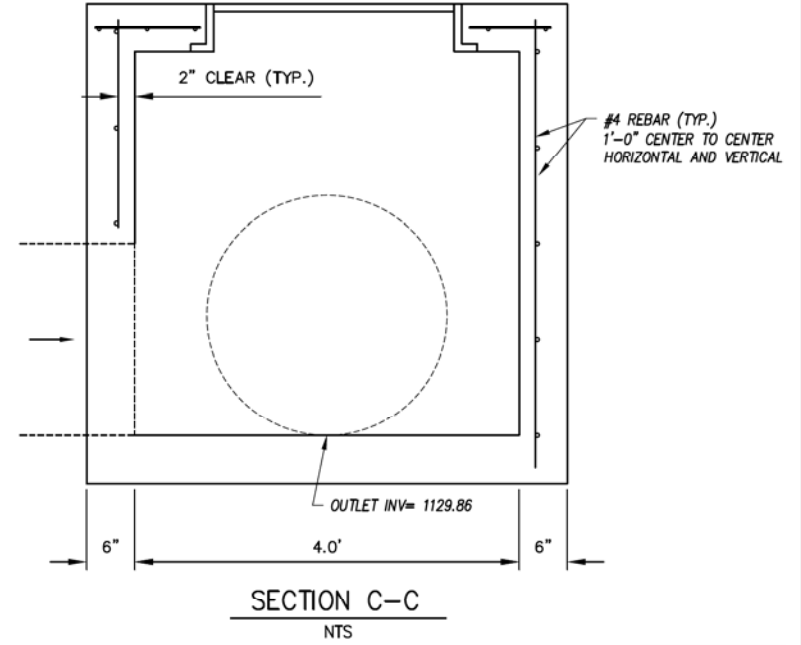
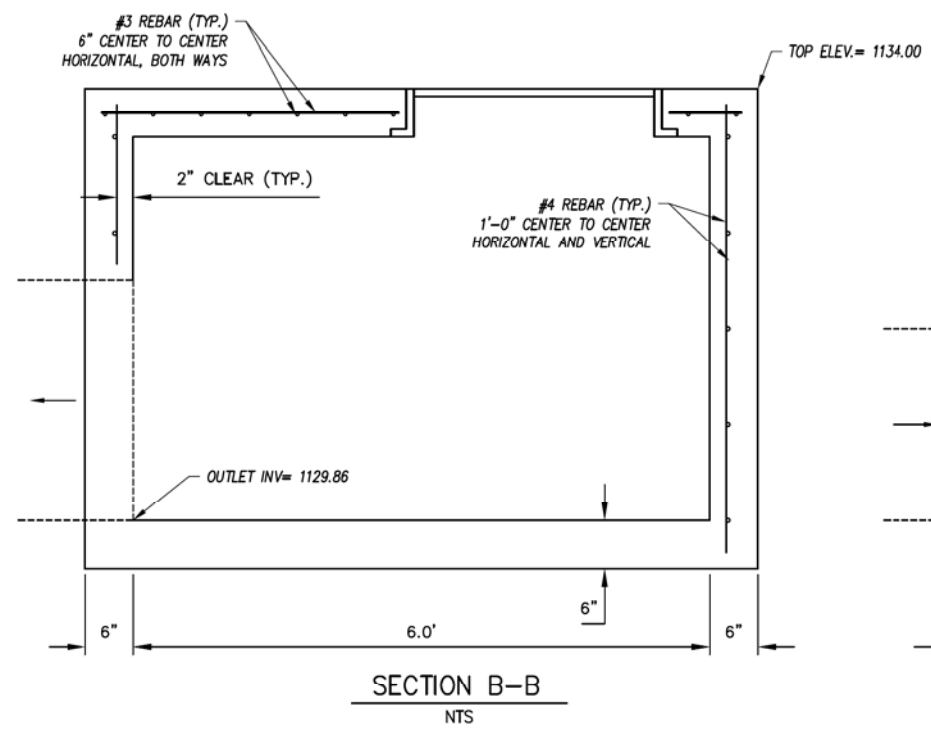
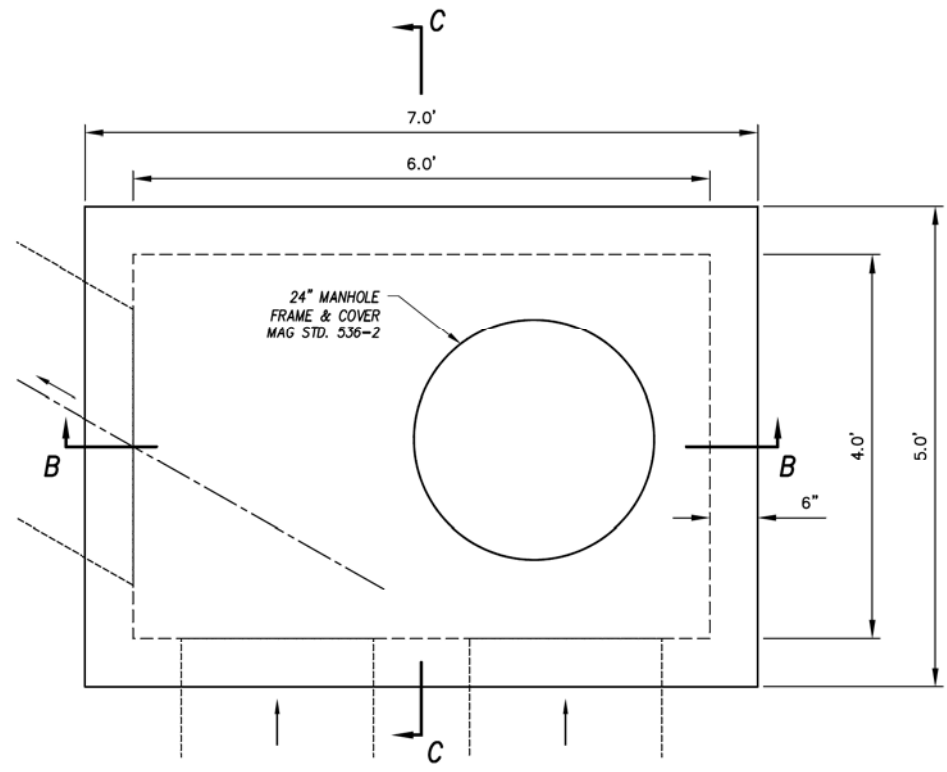
NO.	DESCRIPTION	REV BY	CHK BY	DATE



- NOTES:**
1. ALL CONCRETE SHALL BE MAG CLASS 'A' PER SECTION 725.
 2. FLOOR SHALL BE A WOOD TROWELED FINISH.
 3. ALL REBAR SHALL BE ASTM A36.
 4. HANDRAIL IS INCIDENTAL TO SCUPPER. TYPE 1 INSTALLATION AT CENTER POST. TYPE 4 INSTALLATION AT END POSTS.

STATION	INV. A	TOP ELEV. B	INV. C	TOP ELEV. D
544+72 DITCH @	1133.50	1134.80	1133.50	1134.90
549+90 DITCH @	1133.90	1134.90	1133.80	1135.00

DC SIDEWALK SCUPPER DETAIL
1"=2' H



- NOTES:**
1. ALL CONCRETE SHALL BE MAG CLASS 'A' PER SECTION 725.
 2. FLOOR SHALL BE A WOOD TROWELED FINISH.
 3. ALL REBAR SHALL BE ASTM A36.
 4. ALL WELDING SHALL BE IN ACCORDANCE WITH STANDARD WELDING SPECIFICATIONS.

DD JUNCTION BOX
1"=1' H



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.071	2.182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER
DES: JL DR: JKA CK: RCA DATE: 07/17/17

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

SIDEWALK SCUPPER AND JUNCTION BOX DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.071	2.182

SCALE: AS SHOWN 0' 10'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

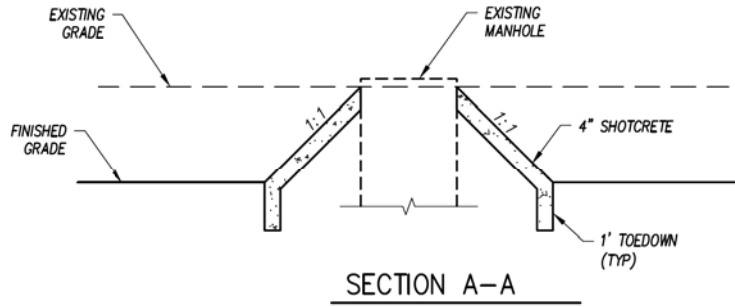
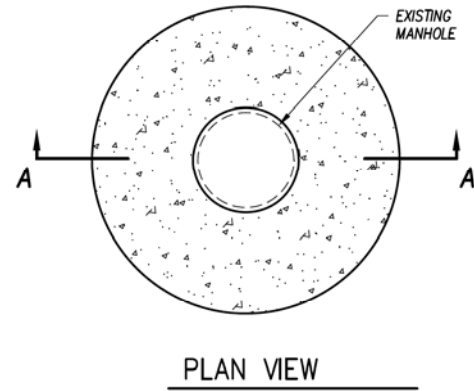


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.072	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

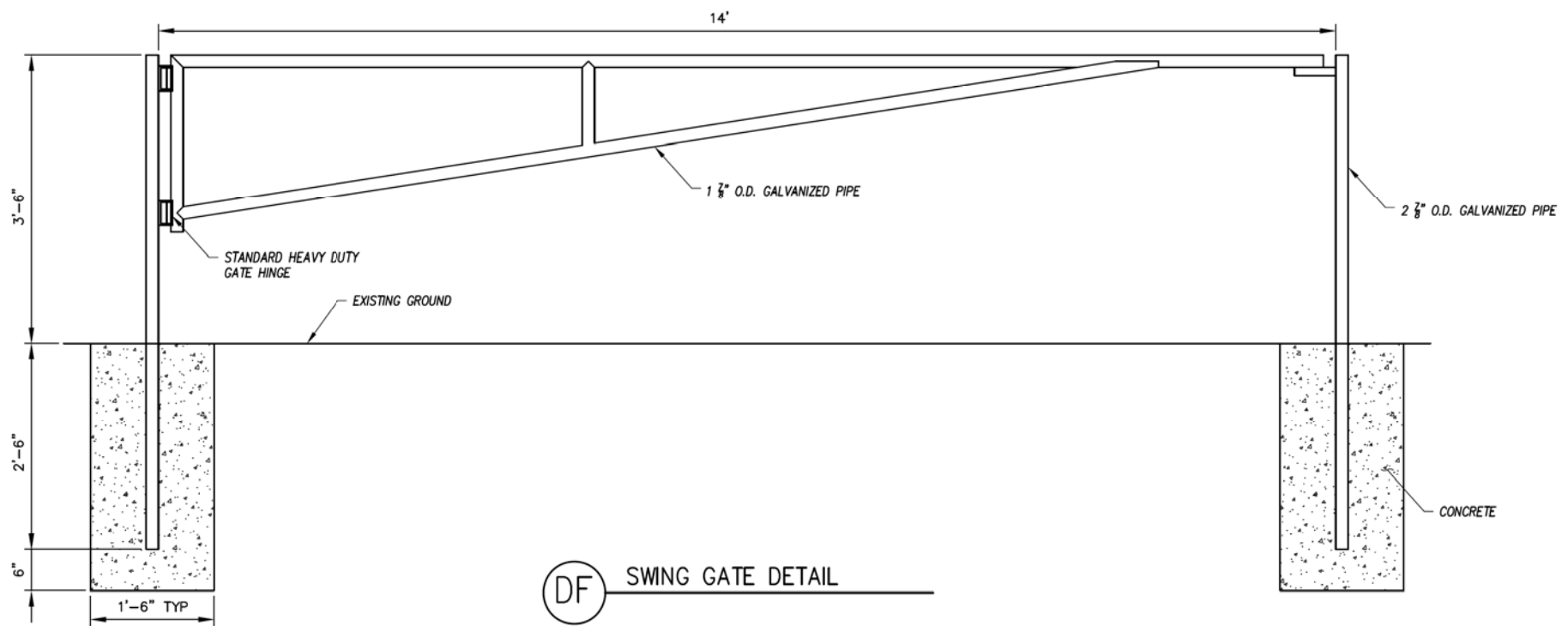


NOTE:
IF MANHOLE IS LOCATE IN BOTTOM OF BASIN, GRADE TO PROVIDE POSITIVE DRAINAGE AROUND THE MANHOLE PROTECTION.

DE MANHOLE PROTECTION

UTILITY PROTECTION LOCATION		
UTILITY	STATION DITCH C/L	DETAIL
SEWER MH	530+49.79 9.65' LT	DE
SEWER MH	532+76.37 4.74' LT	DE
SEWER MH	544+39.88, 4.27' LT	DE
SEWER MH	546+26.45, 2.87' RT	DE
SEWER MH	549+23.09, 3.42' RT,	DE
STORMDRAIN MH	549+47.38, 2.05 LT	DE
SEWER MH	551+67.37, 2.50' LT	DE

ALL STATIONING FROM BASIN CONSTRUCTION CENTERLINE.

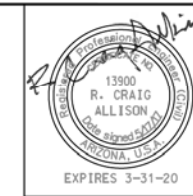


"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

UTILITY PROTECTION DETAILS
SWING GATE DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.072	2.182
SCALE: AS SHOWN			0' 10'	

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

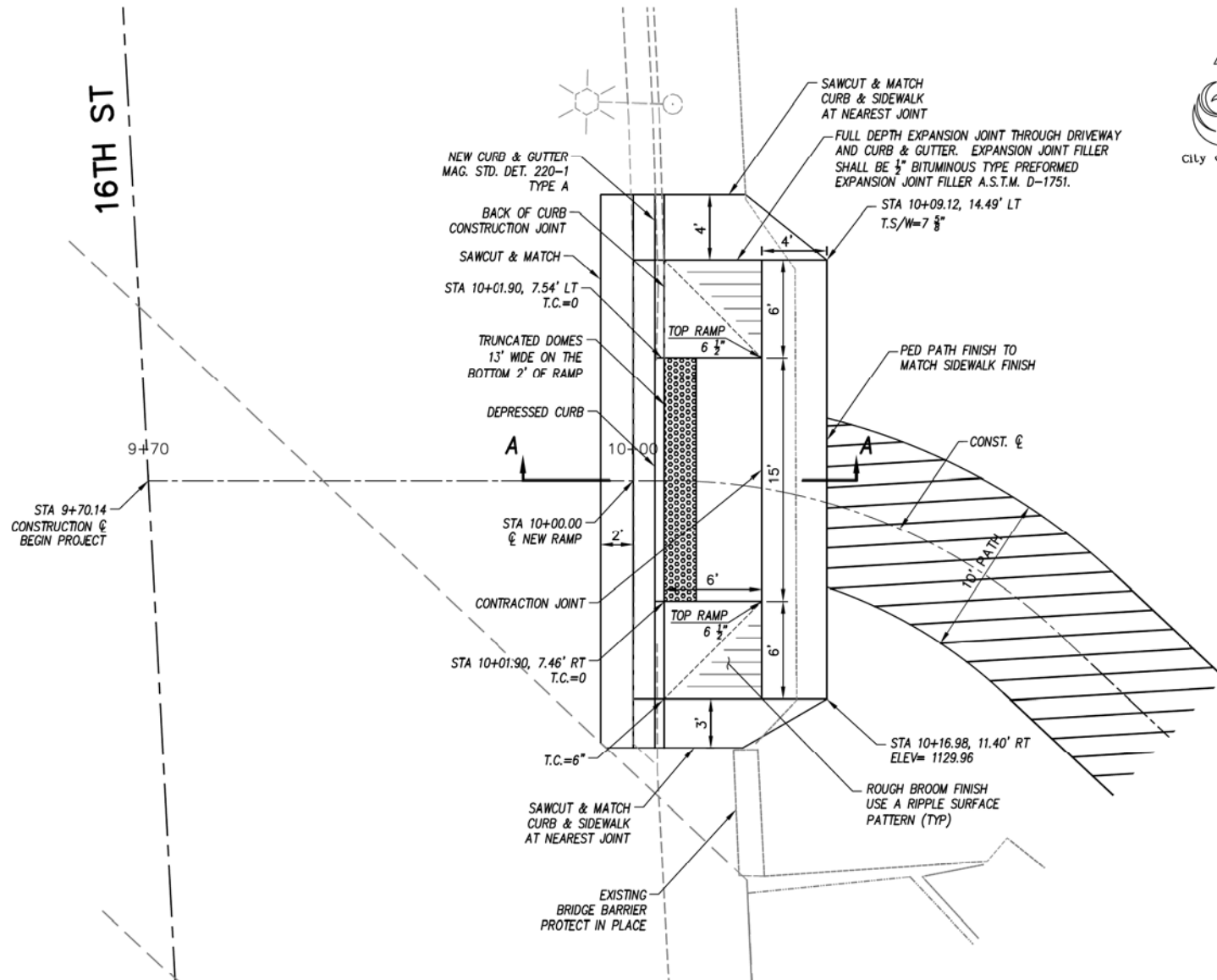


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.073	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				

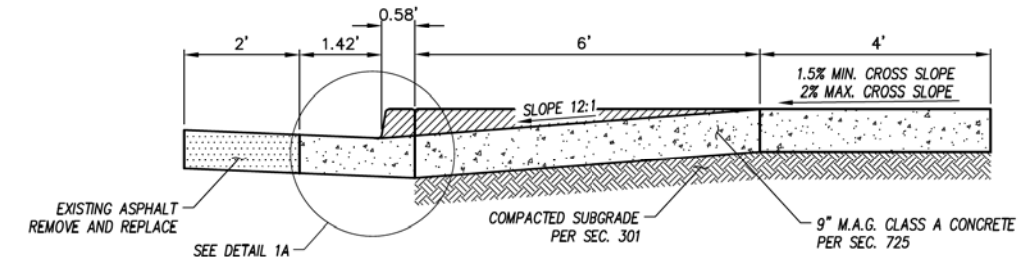
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				

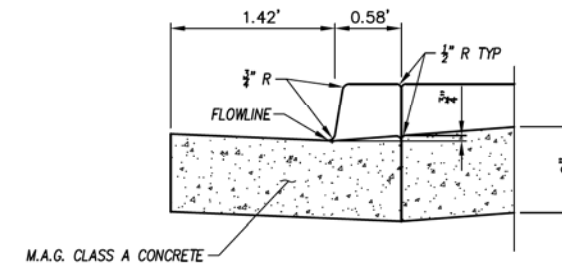


NOTES:

- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
- CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
- CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
- EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
- ALL CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER. GUTTER ELEVATION = 0, UNLESS NOTED OTHERWISE.
- TRUNCATED DOMES SHALL BE INSTALLED AT THE BACK OF CURB IN A 2 FOOT DEEP BY 10 FOOT WIDE AREA. TRUNCATED DOMES TO BE IN ACCORDANCE WITH DETAIL P1232.
- PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).

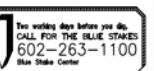


SECTION A-A



DETAIL 1A

A 16TH STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
16TH STREET AT NORTH SIDE GRAND CANAL
1"=5' H



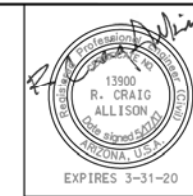
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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CURB RAMP DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

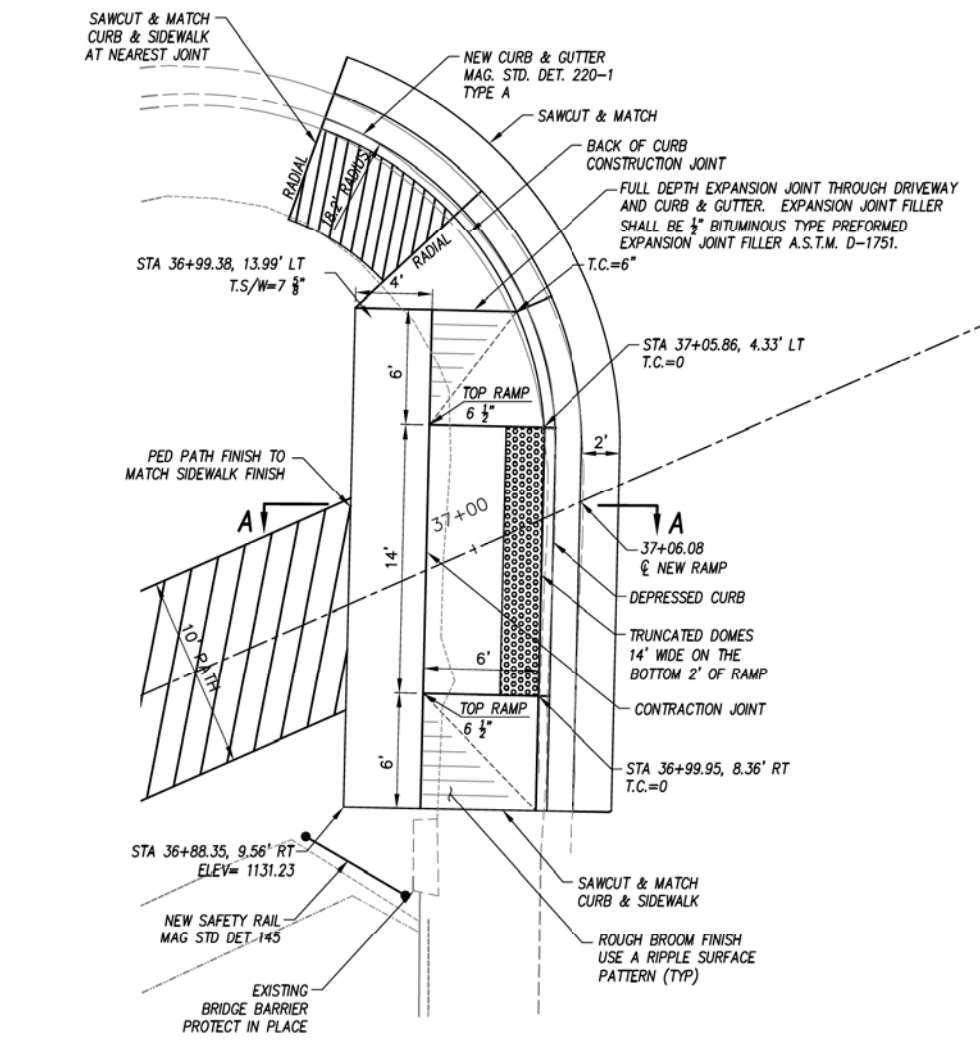
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1" = 10'			2.073	2.182



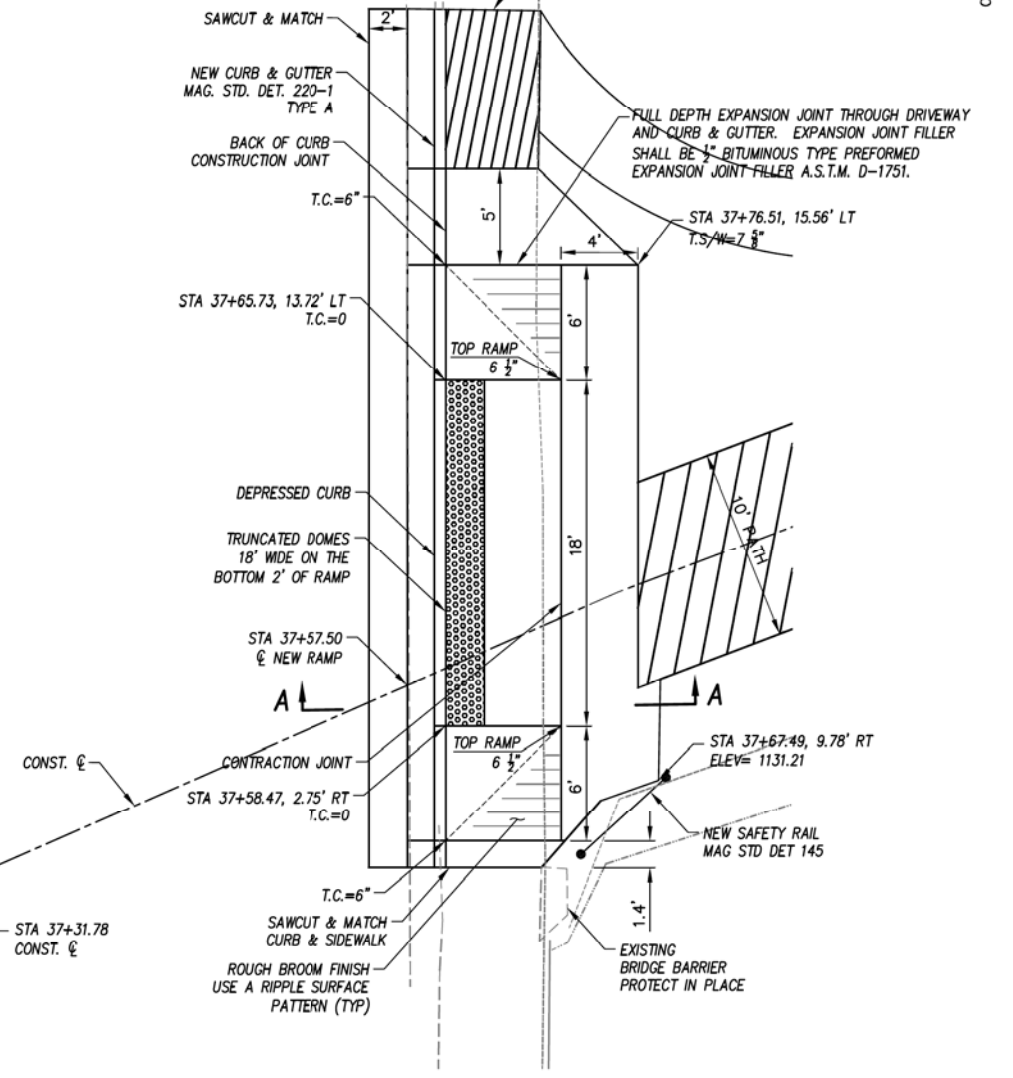
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.074	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



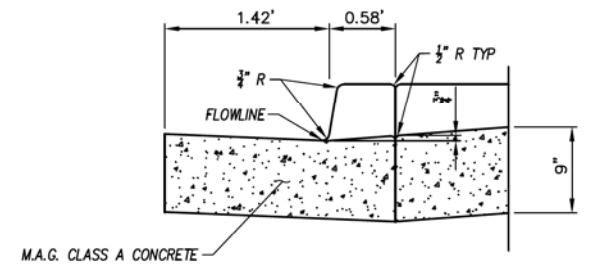
B OSBORN ROAD DRIVEWAY – PEDESTRIAN RAMP COMBINATION DETAIL
OSBORN ROAD AT NORTH SIDE OF GRAND CANAL 1"=5' H

OSBORN ROAD

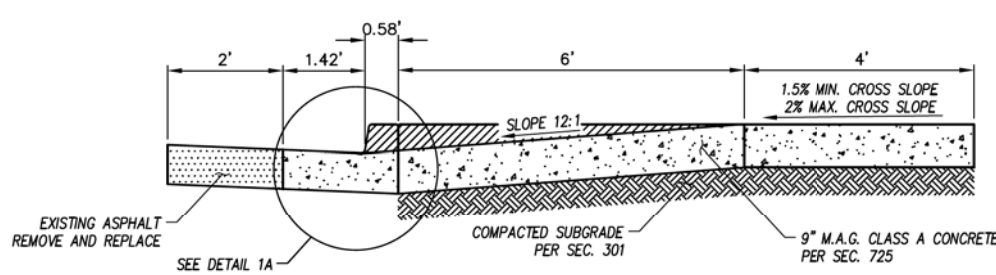


C OSBORN ROAD DRIVEWAY – PEDESTRIAN RAMP COMBINATION DETAIL
OSBORN ROAD AT NORTH SIDE OF GRAND CANAL 1"=5' H

- NOTES:**
- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
 - CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
 - CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
 - EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
 - ALL CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER. GUTTER ELEVATION = 0, UNLESS NOTED OTHERWISE.
 - TRUNCATED DOMES SHALL BE INSTALLED AT THE BACK OF CURB IN A 2 FOOT DEEP BY 10 FOOT WIDE AREA. TRUNCATED DOMES TO BE IN ACCORDANCE WITH DETAIL P1232.
 - PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).



DETAIL 1A



SECTION A-A

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

CURB RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.074	2.182

SCALE: 1"= 10' 0" 10'

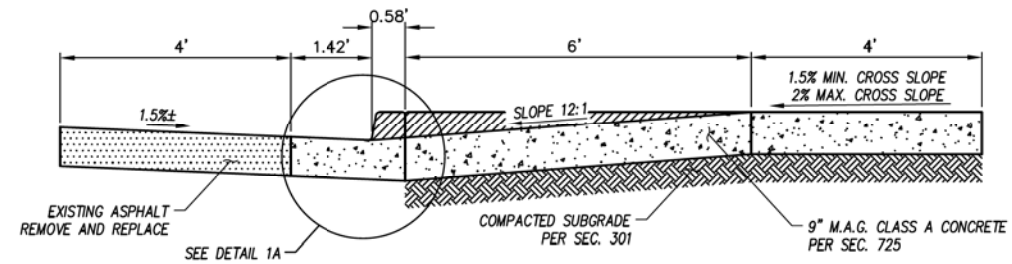
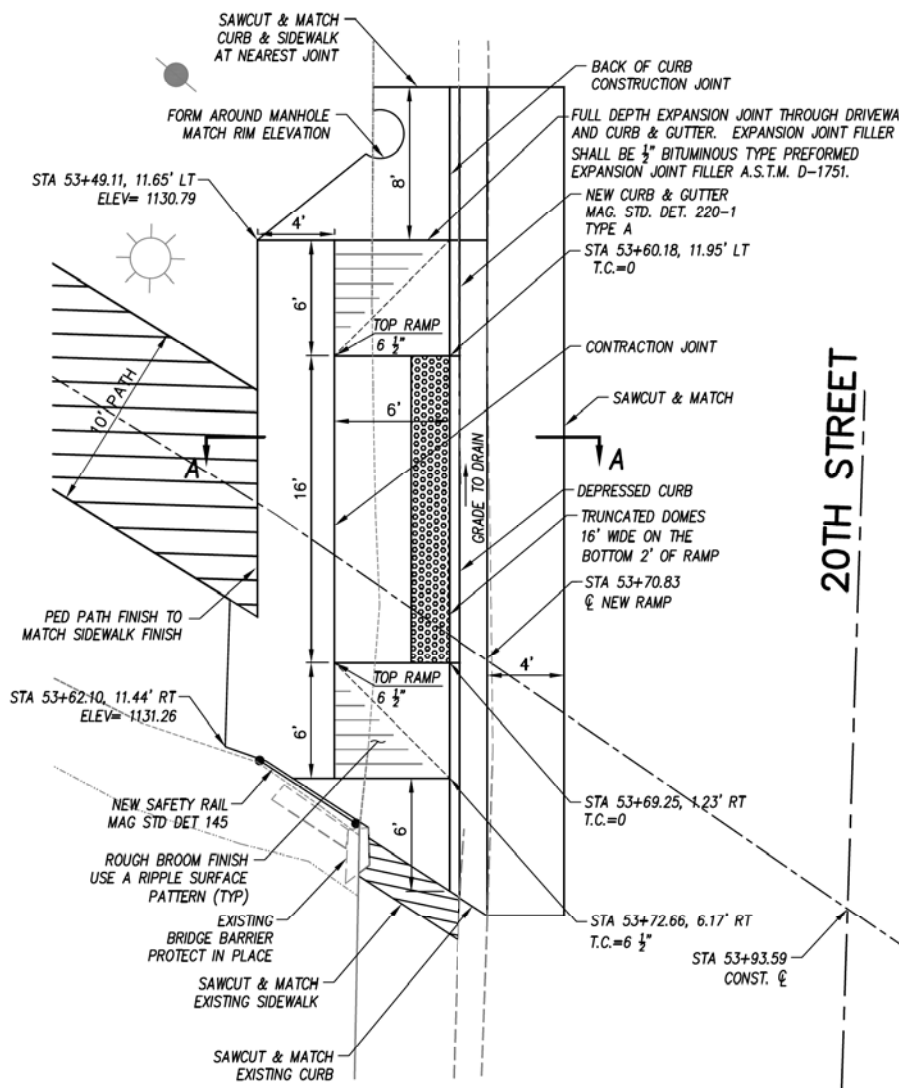
ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



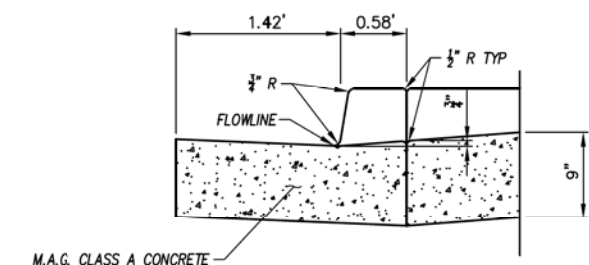
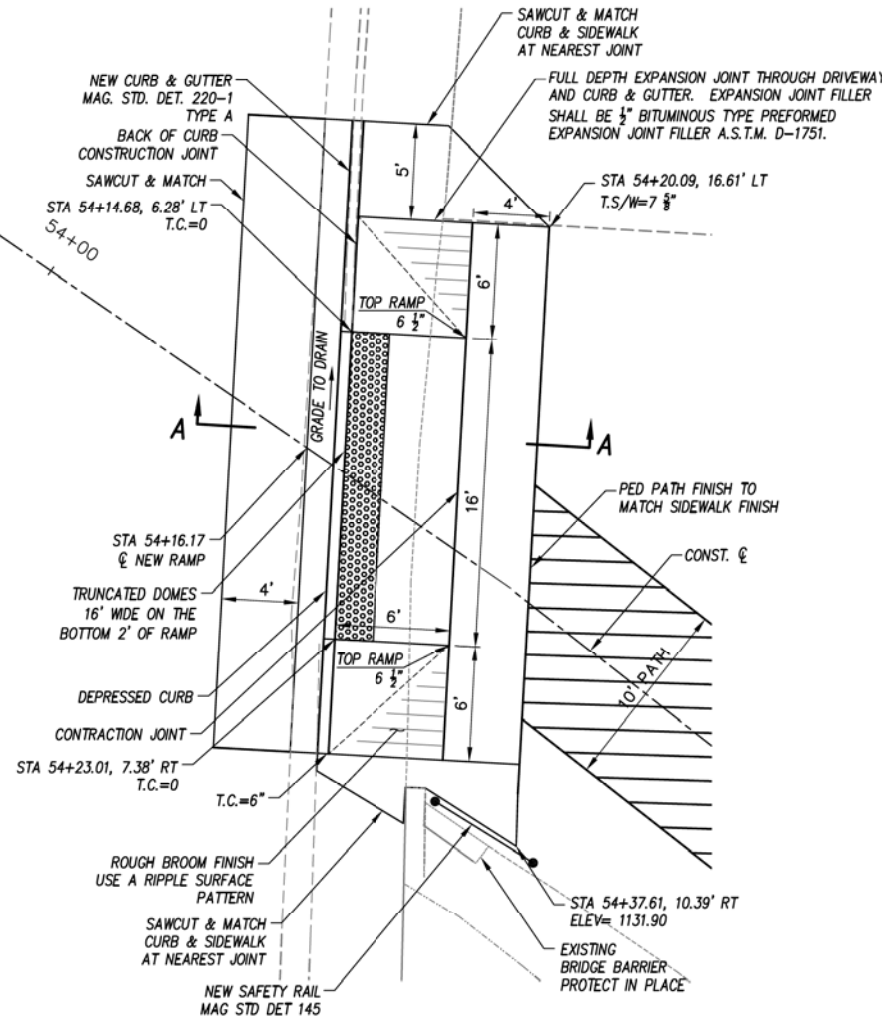
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.075	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

- NOTES:**
- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
 - CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
 - CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
 - EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
 - ALL CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER. GUTTER ELEVATION = 0, UNLESS NOTED OTHERWISE.
 - TRUNCATED DOMES SHALL BE INSTALLED AT THE BACK OF CURB IN A 2 FOOT DEEP BY 10 FOOT WIDE AREA. TRUNCATED DOMES TO BE IN ACCORDANCE WITH DETAIL P1232.
 - PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).



SECTION A-A



DETAIL 1A

D 20TH STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
20TH STREET AT NORTH SIDE OF GRAND CANAL
1"=5' H

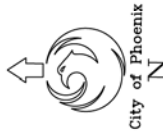
E 20TH STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
20TH STREET AT NORTH SIDE OF GRAND CANAL
1"=5' H

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

CURB RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

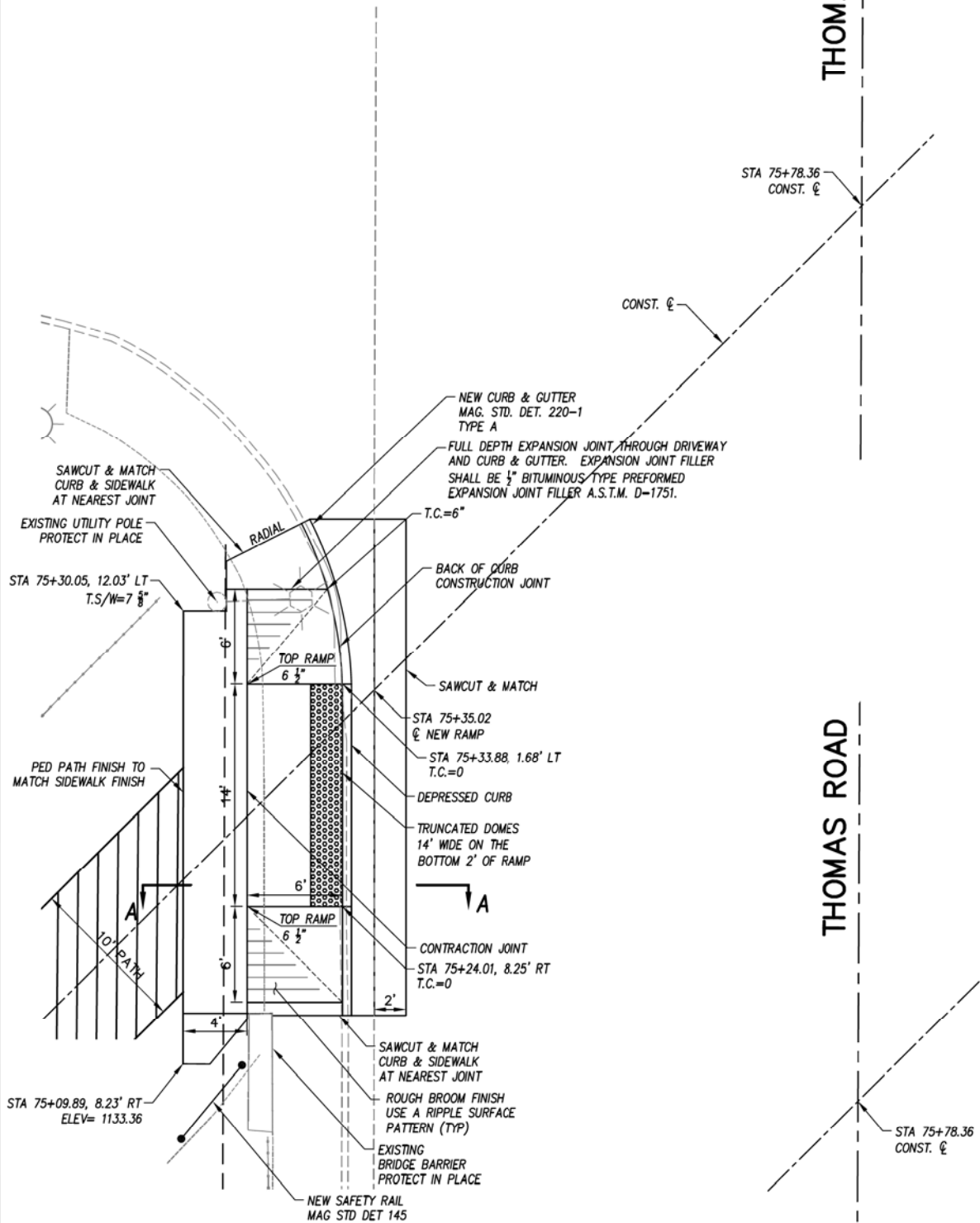
DES: JL	DR: JKA	CK: RCA	SHEET NO.	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.075	2.182
SCALE: 1" = 10'			10'	

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

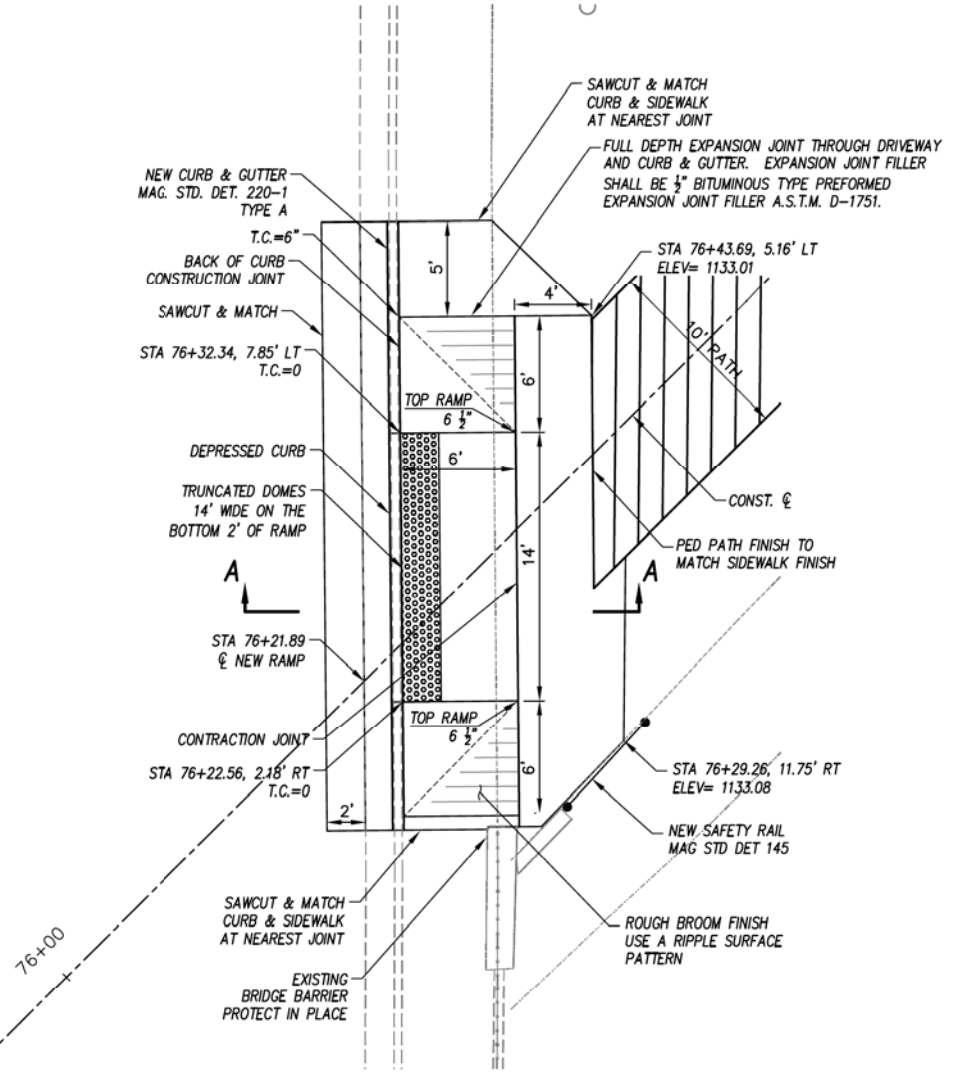


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.076	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

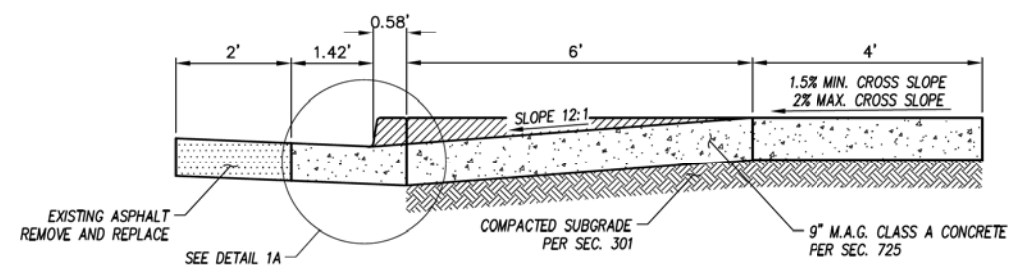
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



F THOMAS ROAD DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
THOMAS ROAD AT NORTH SIDE OF GRAND CANAL 1"=5' H

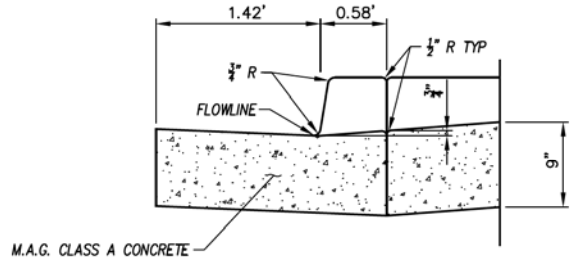


G THOMAS ROAD DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
THOMAS ROAD AT NORTH SIDE OF GRAND CANAL 1"=5' H



SECTION A-A

- NOTES:**
- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
 - CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
 - CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
 - EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
 - ALL CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER. GUTTER ELEVATION = 0, UNLESS NOTED OTHERWISE.
 - TRUNCATED DOMES SHALL BE INSTALLED AT THE BACK OF CURB IN A 2 FOOT DEEP BY 10 FOOT WIDE AREA. TRUNCATED DOMES TO BE IN ACCORDANCE WITH DETAIL P1232.
 - PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).



DETAIL 1A

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

CURB RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.076	2.182

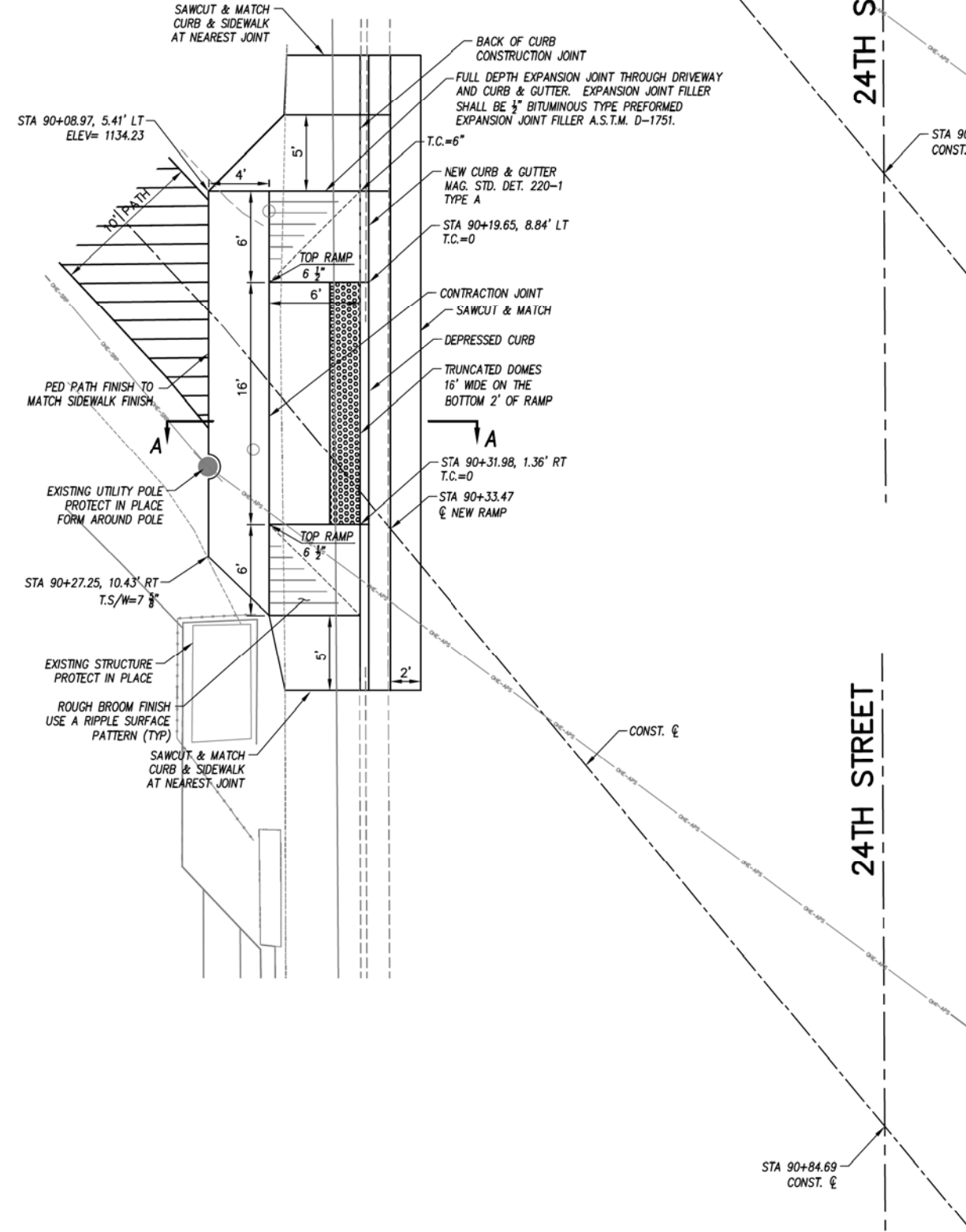
SCALE: 1"= 10' 0" 10'

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

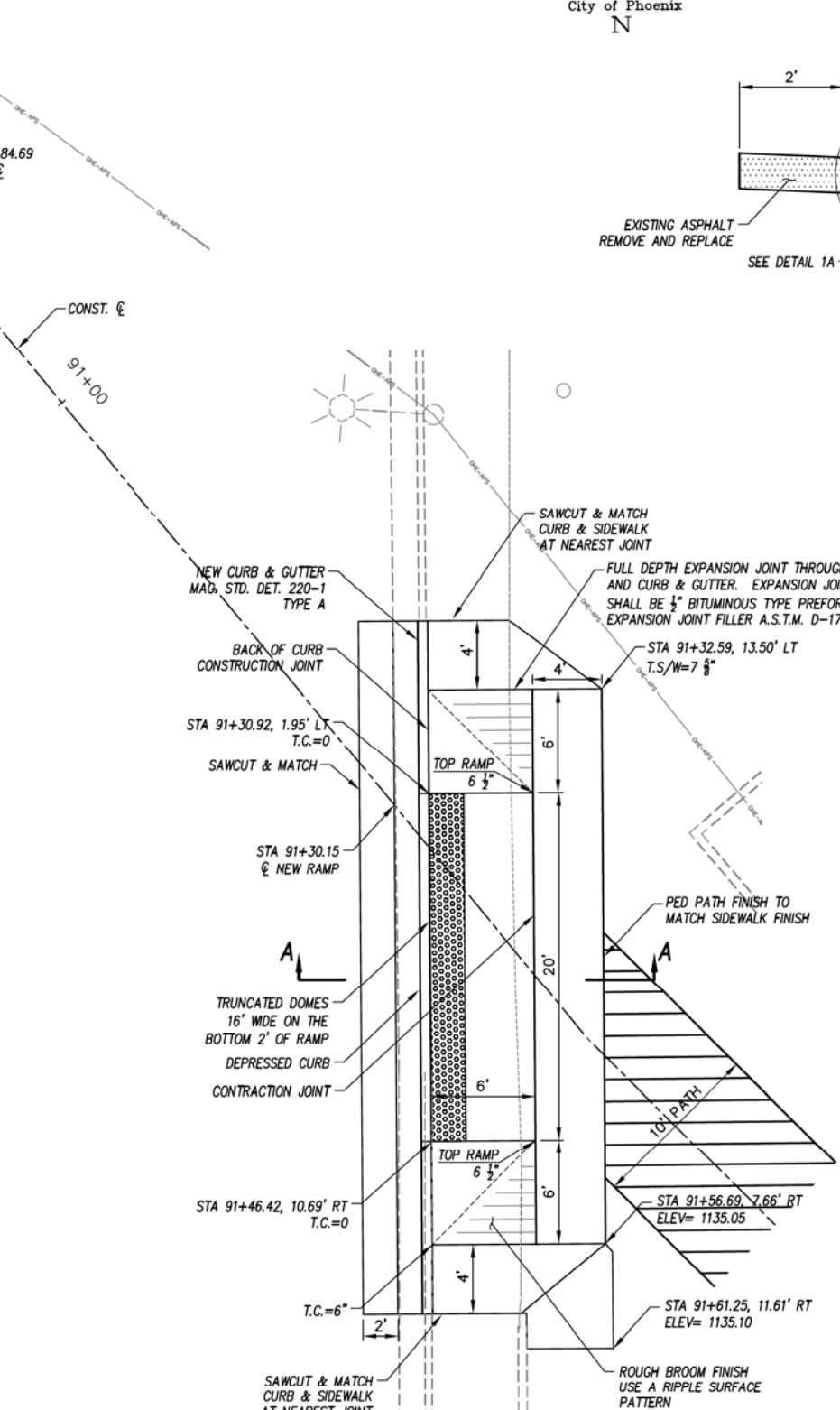


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.077	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

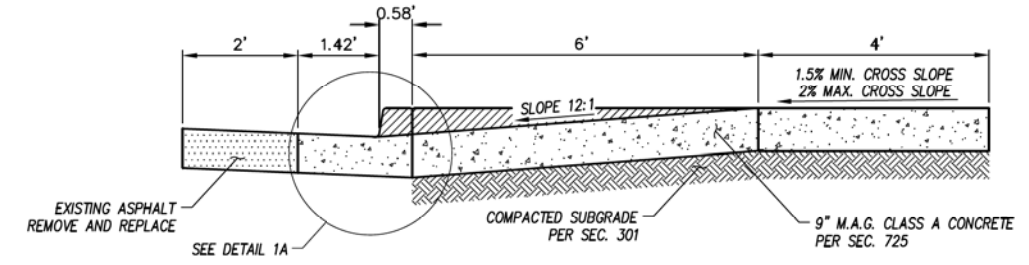
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE



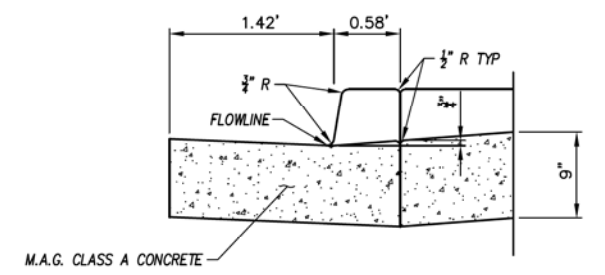
H 24TH STREET DRIVEWAY – PEDESTRIAN RAMP COMBINATION DETAIL
24TH STREET AT NORTH SIDE OF GRAND CANAL 1"=5' H



I 24TH STREET DRIVEWAY – PEDESTRIAN RAMP COMBINATION DETAIL
24TH STREET AT NORTH SIDE OF GRAND CANAL 1"=5' H



SECTION A-A



DETAIL 1A

- NOTES:**
1. EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
 2. CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
 3. CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
 4. EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
 5. ALL CONTROL ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER. GUTTER ELEVATION = 0, UNLESS NOTED OTHERWISE.
 6. TRUNCATED DOMES SHALL BE INSTALLED AT THE BACK OF CURB IN A 2 FOOT DEEP BY 10 FOOT WIDE AREA. TRUNCATED DOMES TO BE IN ACCORDANCE WITH DETAIL P1232.
 7. PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).

Two weeks before you dig,
CALL FOR THE BLUE STAKES
602-263-1100
Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

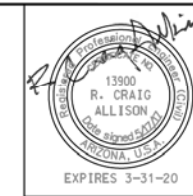
CURB RAMP DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.077	2.182

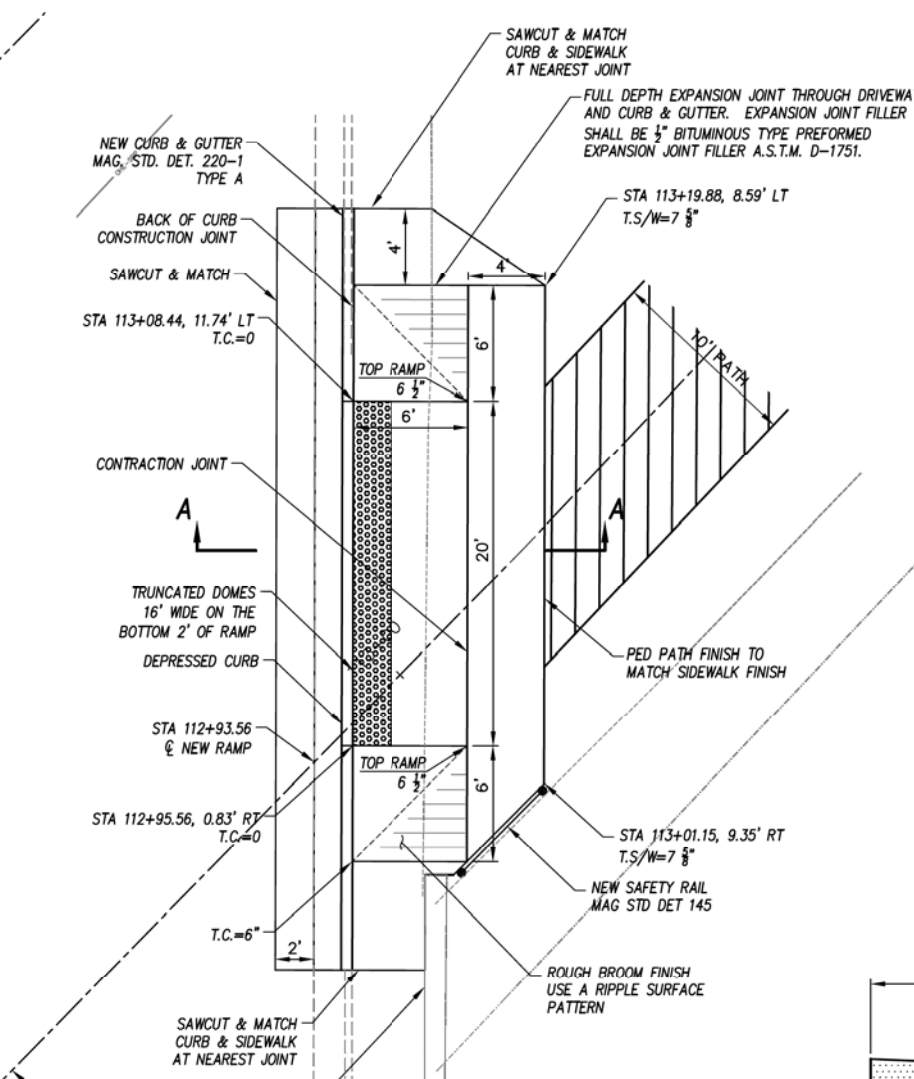
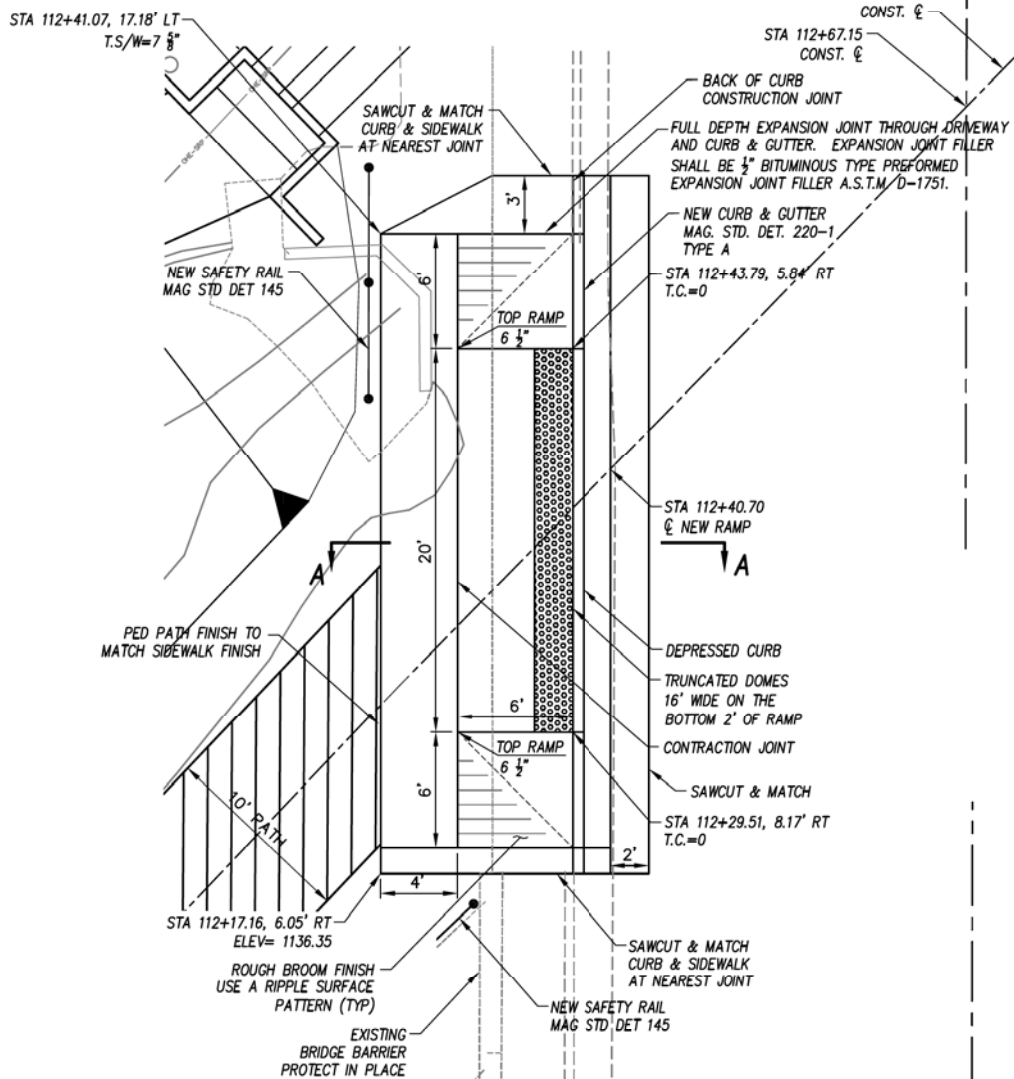
SCALE: 1" = 10' 0" 10'

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

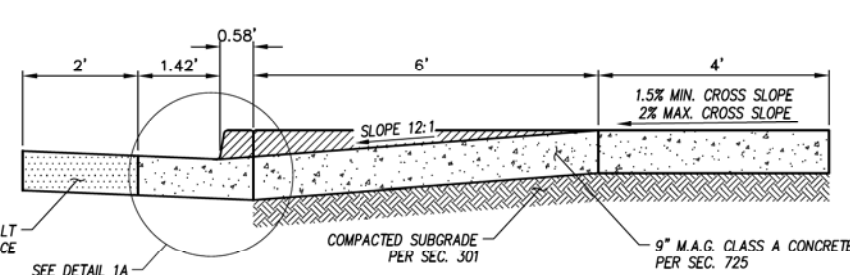
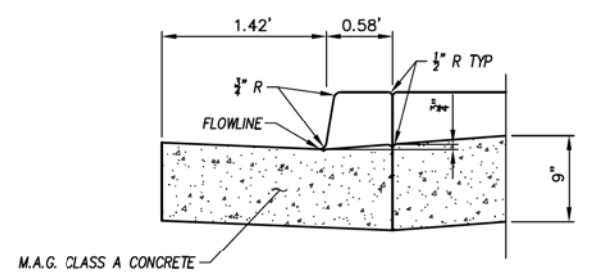


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.078	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



- NOTES:
1. EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
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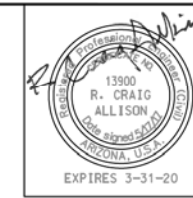
J OAK STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
OAK STREET AT NORTH SIDE OF GRAND CANAL 1"=5' H

K OAK STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
OAK STREET AT NORTH SIDE OF GRAND CANAL 1"=5' H

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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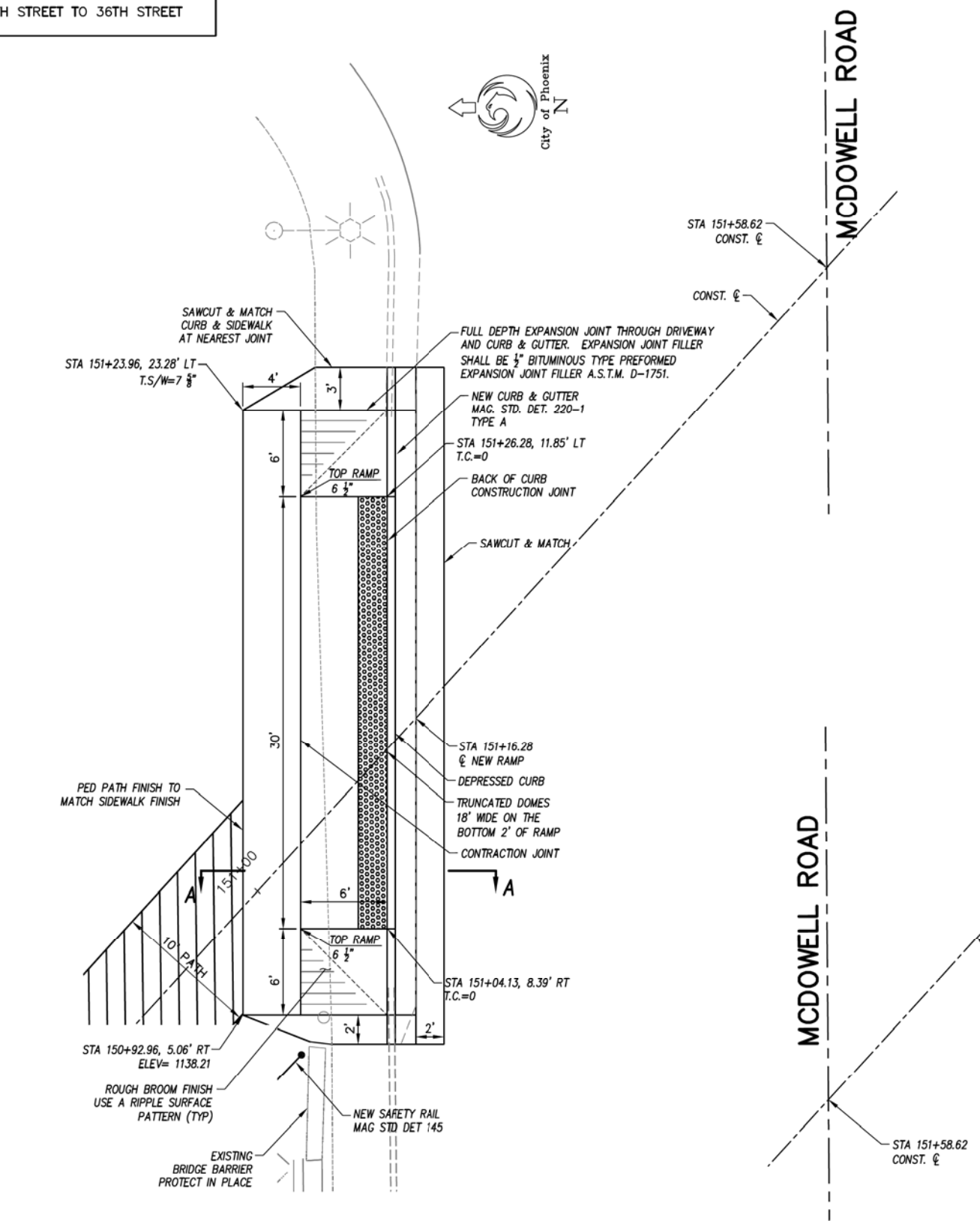
CURB RAMP DETAIL				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.078	2.182
SCALE: 1" = 10'			10'	

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

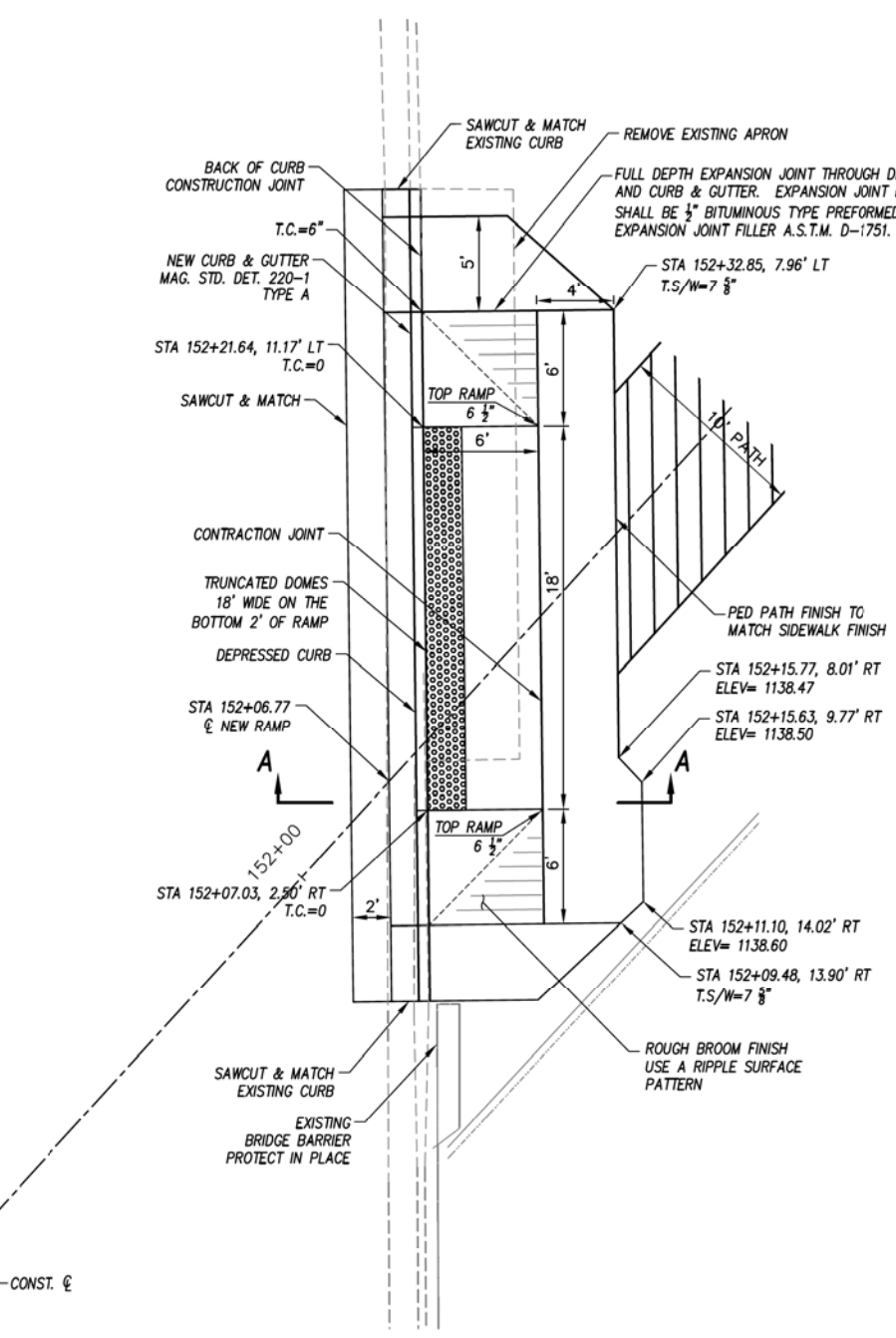


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.079	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

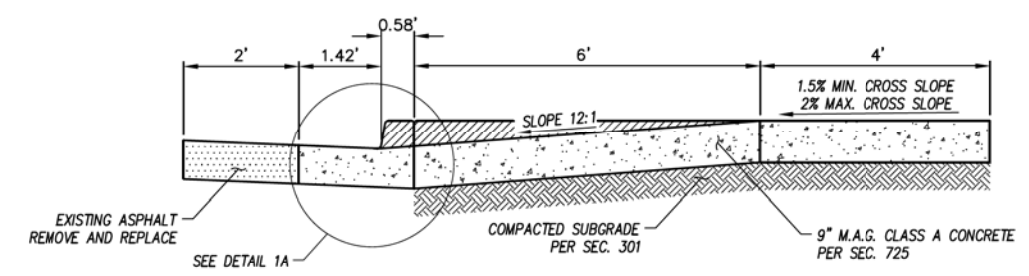
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NO.				
NO.				
NO.				



L MCDOWELL ROAD DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
MCDOWELL ROAD AT NORTH SIDE OF GRAND CANAL
1"=5' H

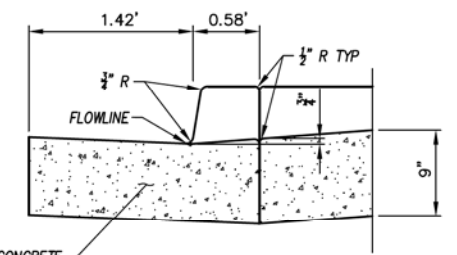


M MCDOWELL ROAD DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
MCDOWELL ROAD AT NORTH SIDE OF GRAND CANAL
1"=5' H



SECTION A-A

- NOTES:**
1. EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
 2. CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
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DETAIL 1A

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

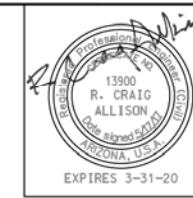
CURB RAMP DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 2.079	2.182
SCALE: 1"= 10'			0' 10'	

ST87600114 GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

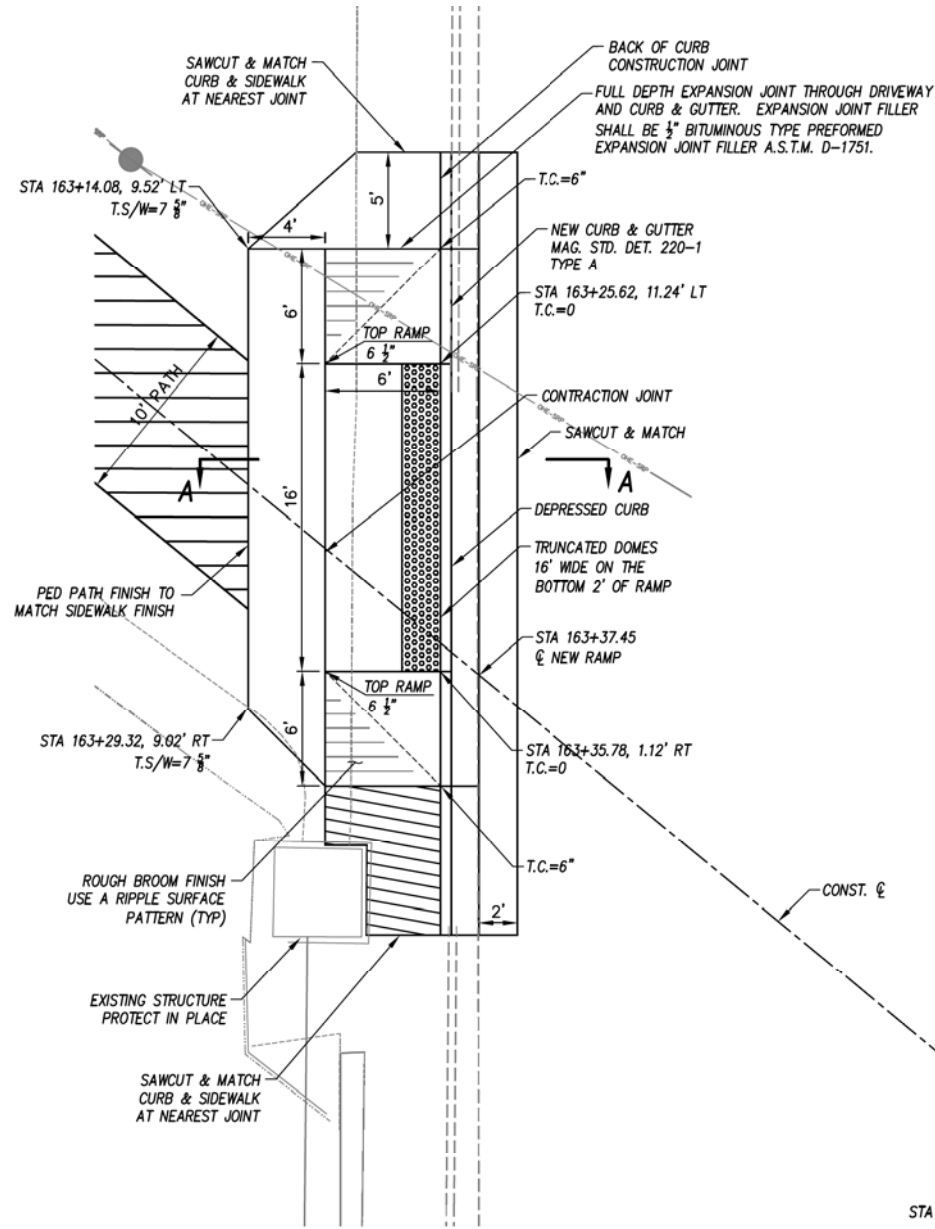


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.080	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

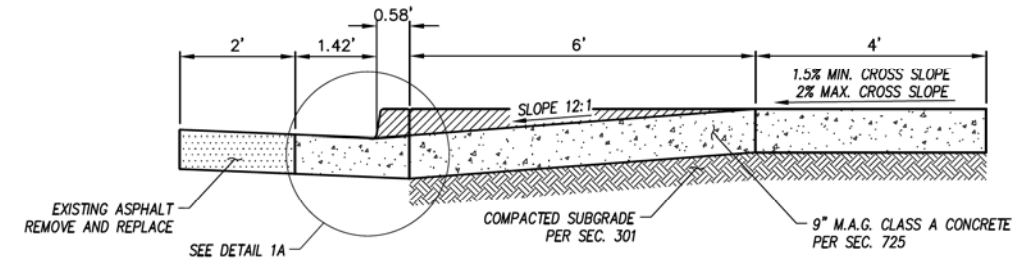
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				

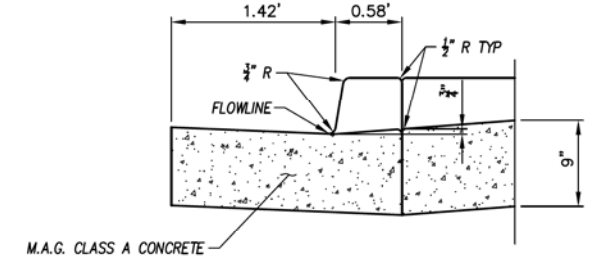
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				



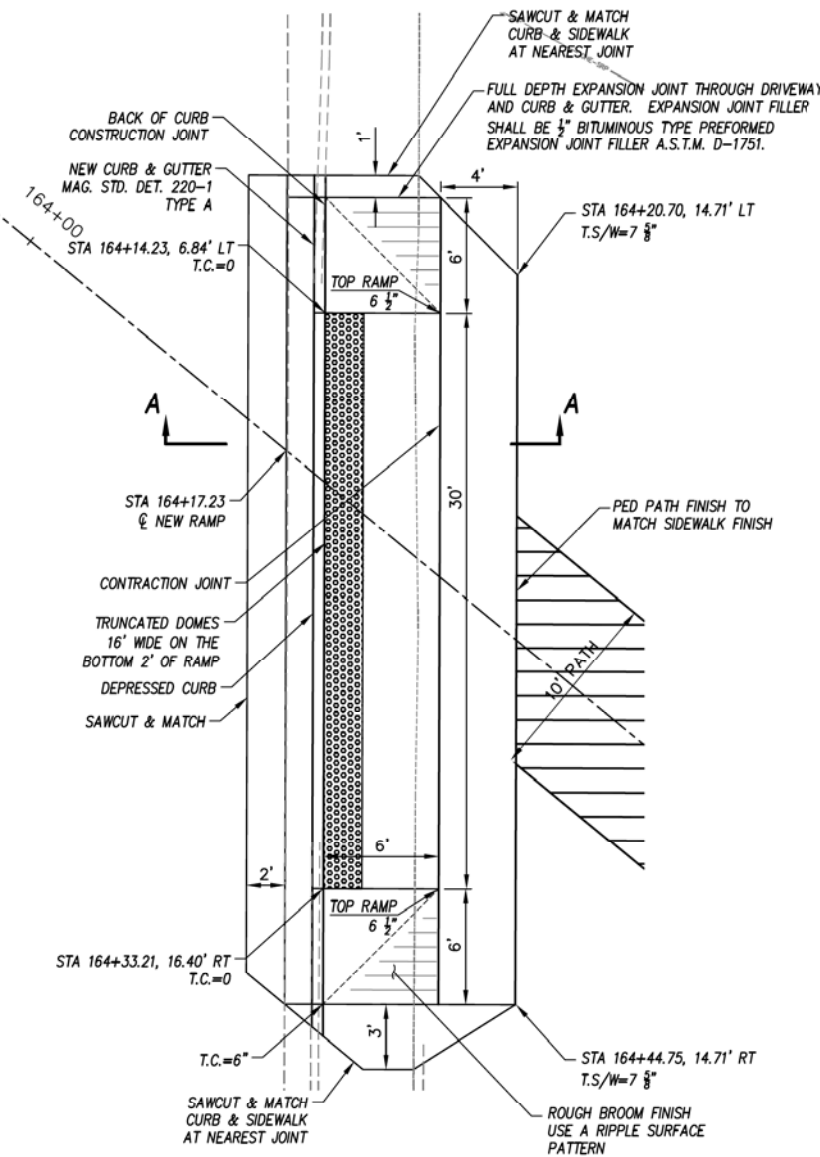
32ND STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
32ND STREET AT NORTH SIDE OF GRAND CANAL
1"=5' H



SECTION A-A



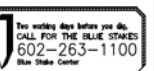
DETAIL 1A



32ND STREET DRIVEWAY - PEDESTRIAN RAMP COMBINATION DETAIL
32ND STREET AT NORTH SIDE OF GRAND CANAL
1"=5' H

NOTES:

- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
- CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
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"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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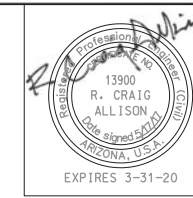
CURB RAMP DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1"= 10'			2.080	2.182

ST87600114 GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.081	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

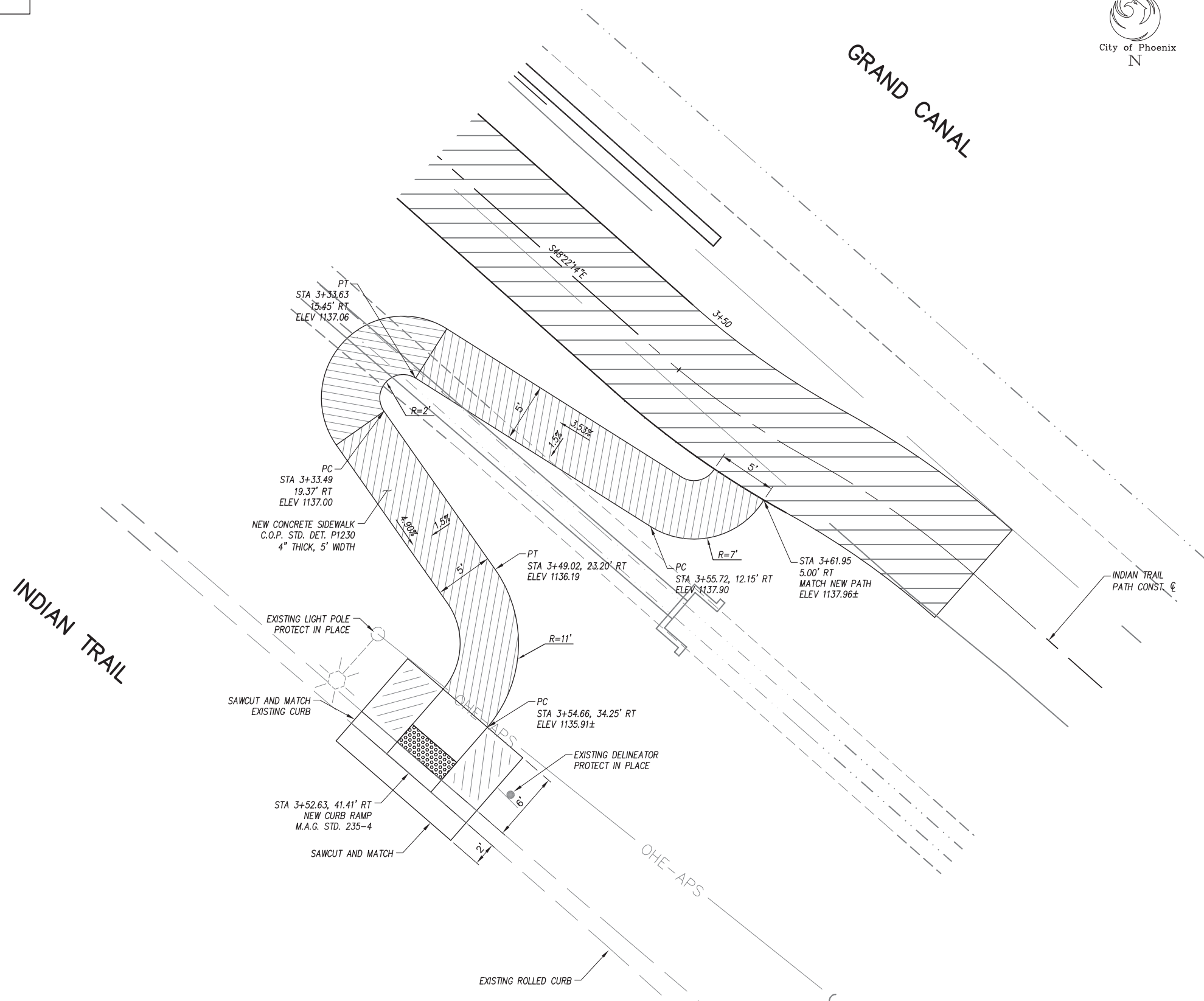
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NOTES:

- ALL STATIONING THIS SHEET IS FROM INDIAN TRAIL PATH CONSTRUCTION CENTERLINE.
- DEPRESSED ROLL CURB AND CURB TRANSITIONS TO BE PAID FOR AS PART OF NEW CONCRETE CURB RAMP (ITEM M3400481).



(P) INDIAN TRAIL PEDESTRIAN ACCESS DETAIL
1"=5' H



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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CURB RAMP & SIDEWALK DETAIL	
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT	
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114	
DES: JL DATE: 07/17	DR: JKA DATE: 07/17
CK: RCA DATE: 07/17	SHEET NO: 2.081
TOTAL SHEETS: 2.182	

SCALE: 1" = 10'	0'	10'
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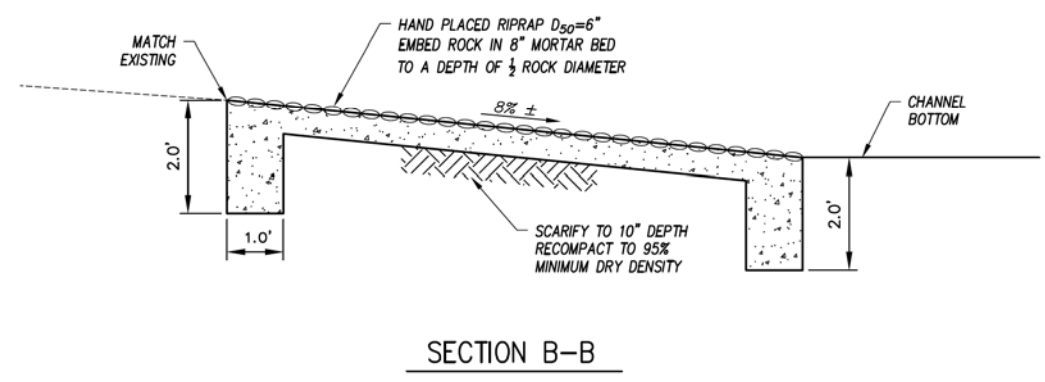
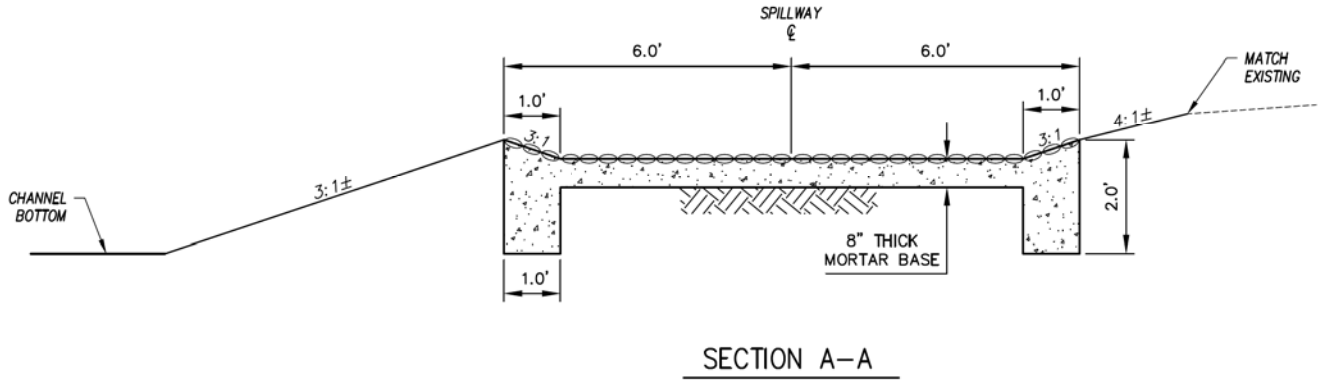
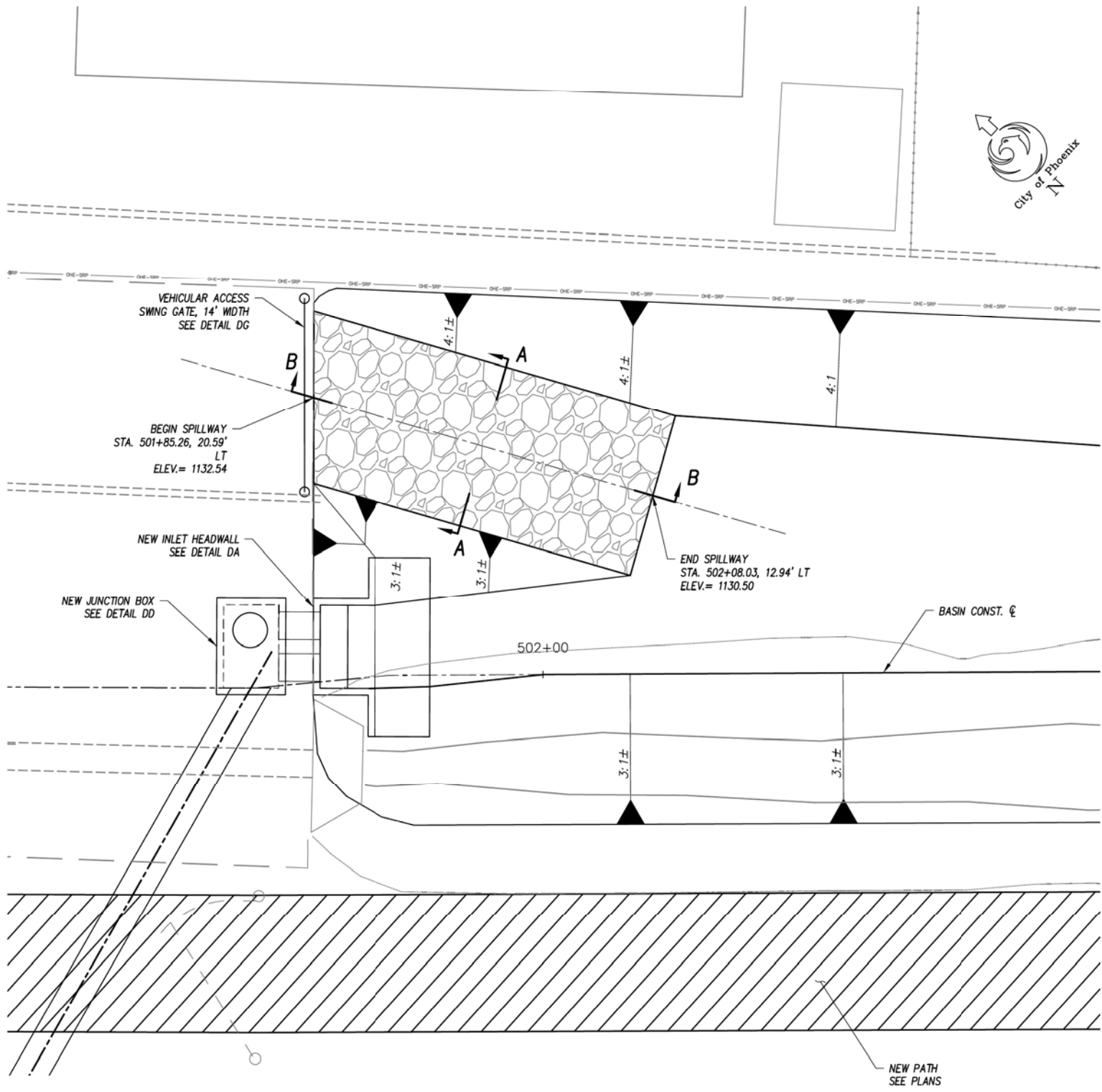
ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.082	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE

- NOTES:**
- ALL STATIONING FROM BASIN CONSTRUCTION CENTERLINE.
 - RIPRAP TO BE HAND PLACED WITH NO EXPOSED SHARP EDGES SUCH THAT IT WILL BE TRAVERSABLE BY MAINTENANCE VEHICLES.



GRAND CANAL

Q SPILLWAY/MAINTENANCE ACCESS RAMP
1"=5' H

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

SPILLWAY/MAINTENANCE ACCESS RAMP DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.082	2.182

SCALE: 1" = 10' 0" = 10'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

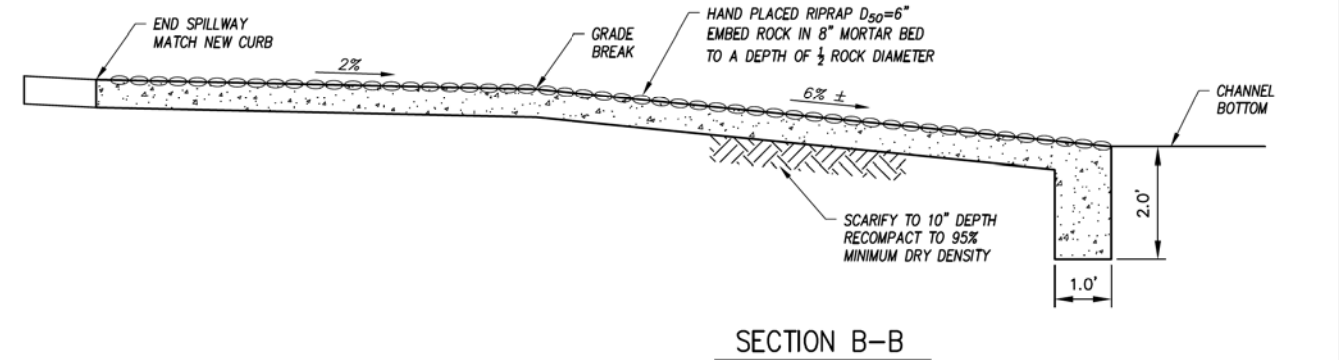
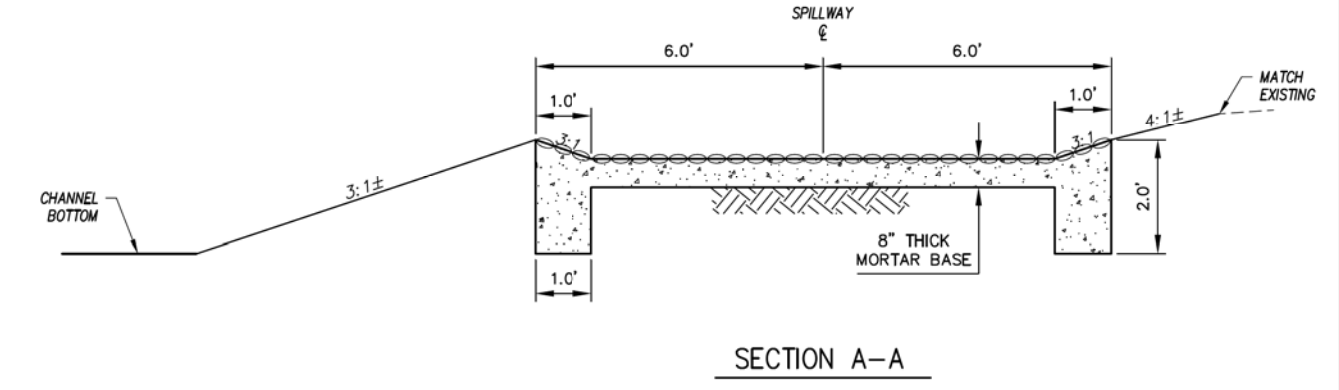
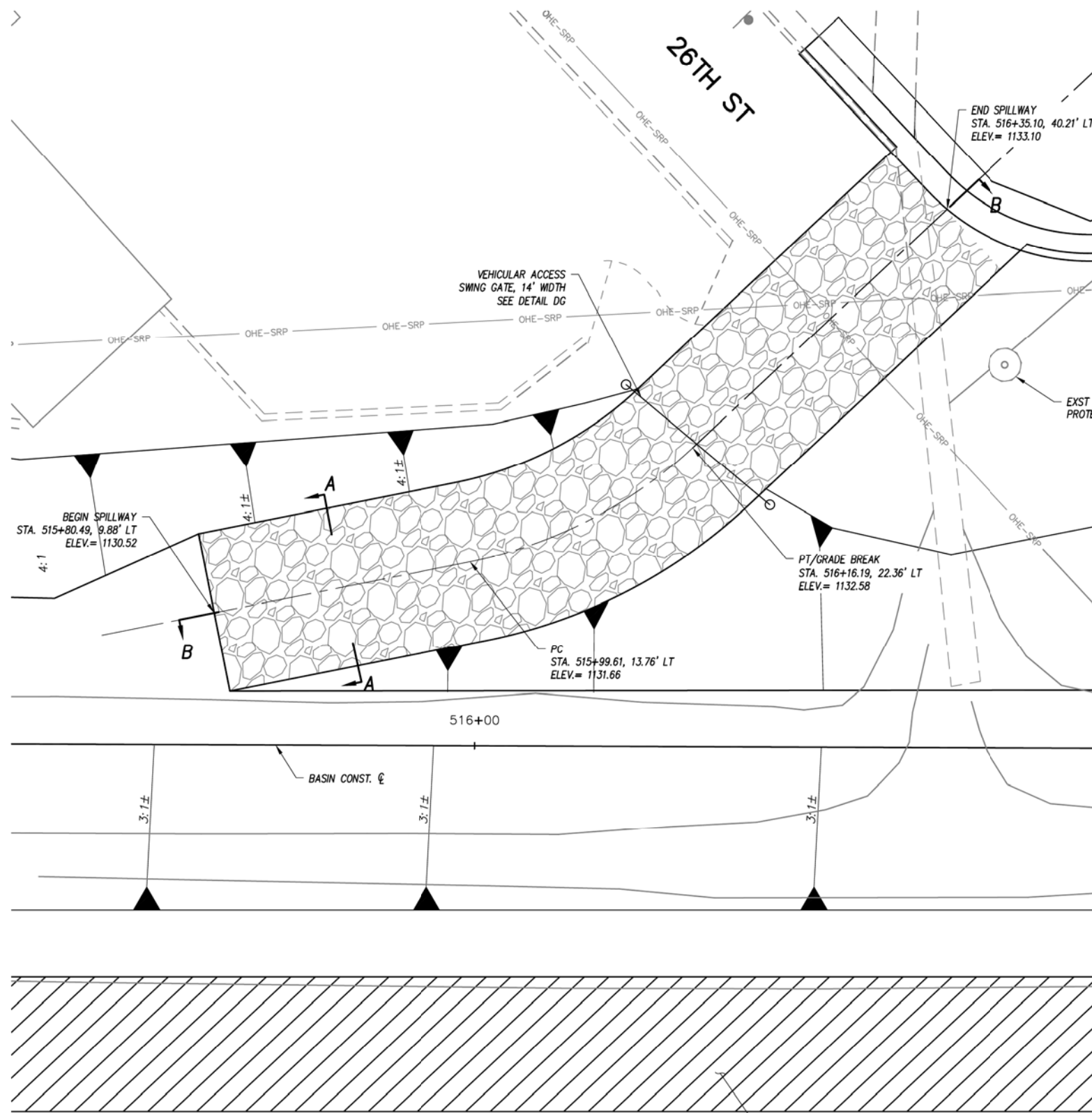


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.083	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



NOTES:

1. ALL STATIONING FROM BASIN CONSTRUCTION CENTERLINE.
2. RIPRAP TO BE HAND PLACED WITH NO EXPOSED SHARP EDGES SUCH THAT IT WILL BE TRAVERSABLE BY MAINTENANCE VEHICLES.



GRAND CANAL

(R) SPILLWAY/MAINTENANCE ACCESS RAMP
1"=5' H

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV. BY	CHK. BY	DATE

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SPILLWAY/MAINTENANCE ACCESS RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.083	2.182

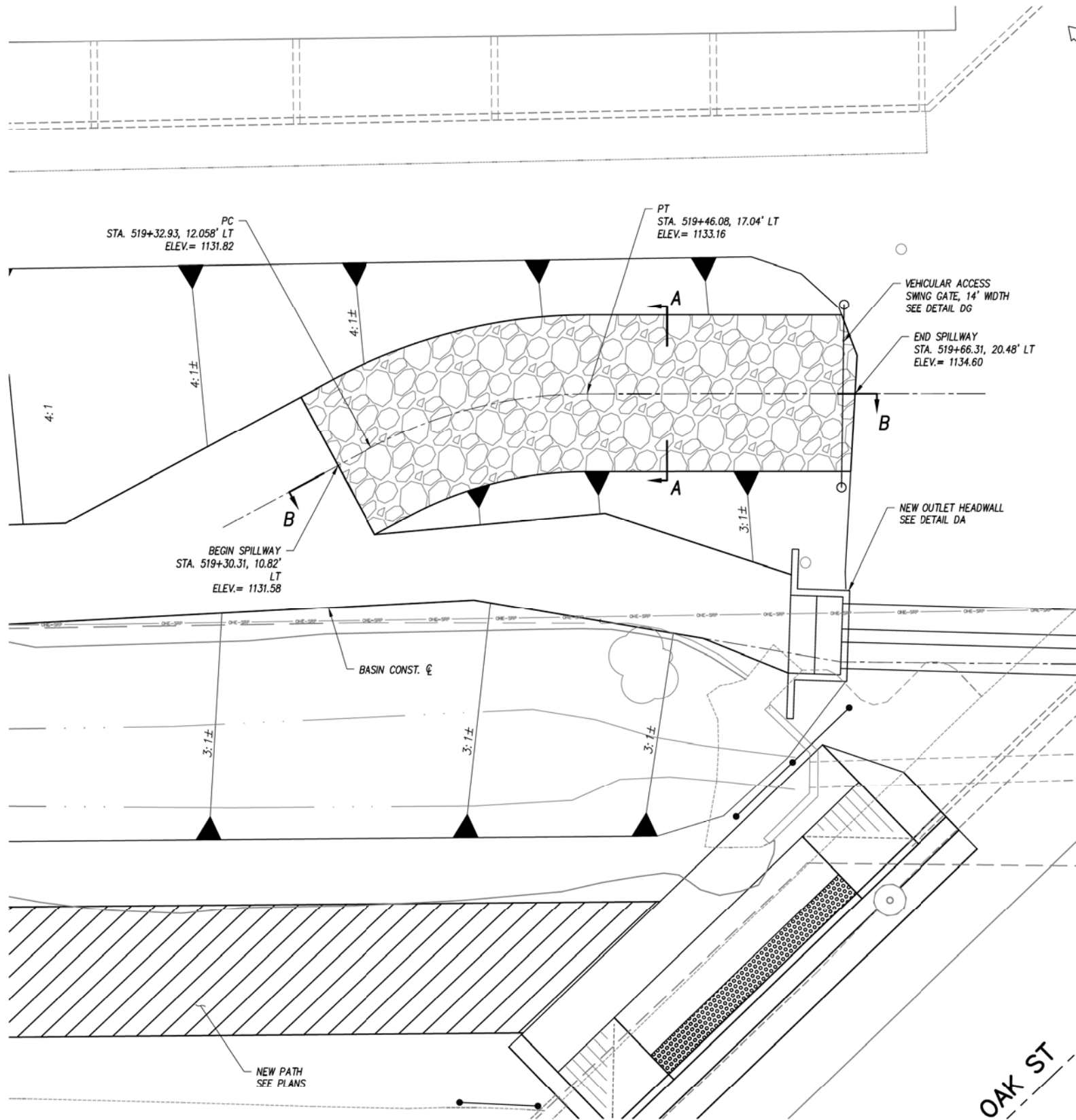
SCALE: 1" = 10' 0" 10'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

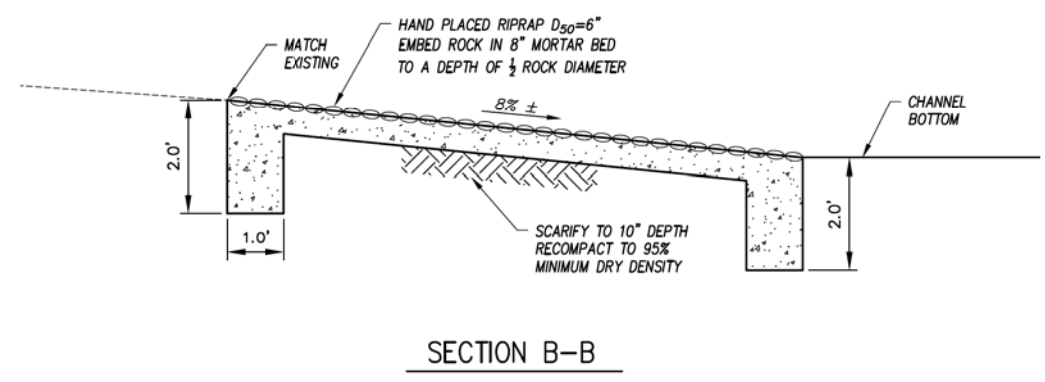
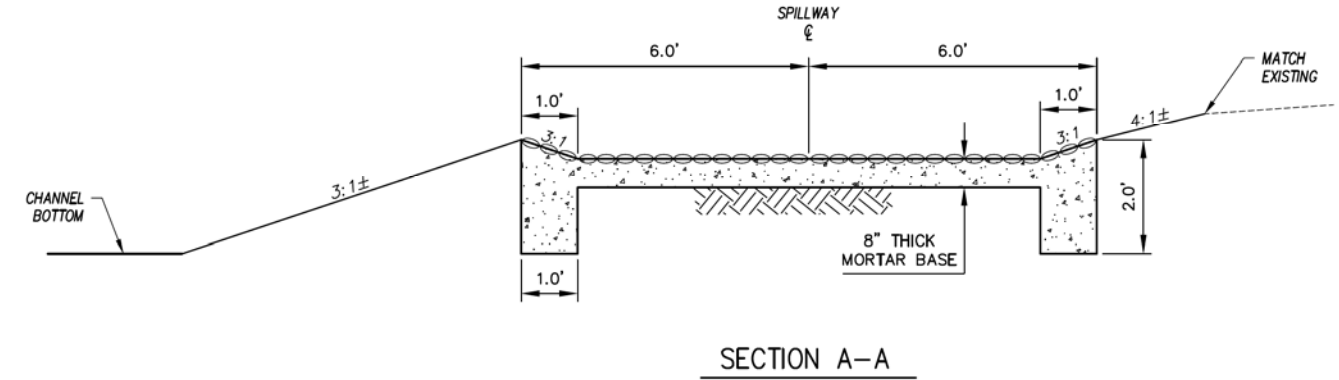


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.084	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NO.				
NO.				
NO.				



- NOTES:**
- ALL STATIONING FROM BASIN CONSTRUCTION CENTERLINE.
 - RIPRAP TO BE HAND PLACED WITH NO EXPOSED SHARP EDGES SUCH THAT IT WILL BE TRAVERSABLE BY MAINTENANCE VEHICLES.



S SPILLWAY/MAINTENANCE ACCESS RAMP
1"=5' H

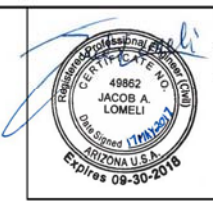
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SPILLWAY/MAINTENANCE ACCESS RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.084	2.182

SCALE: 1" = 10' 0" 10'

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

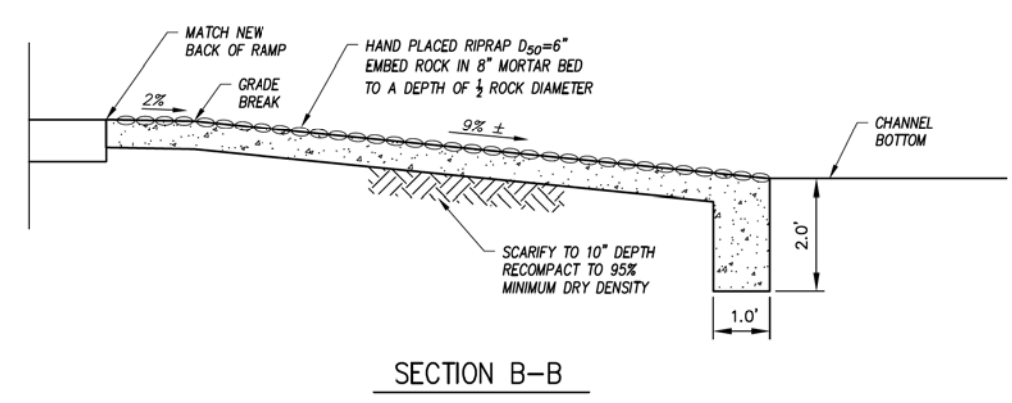
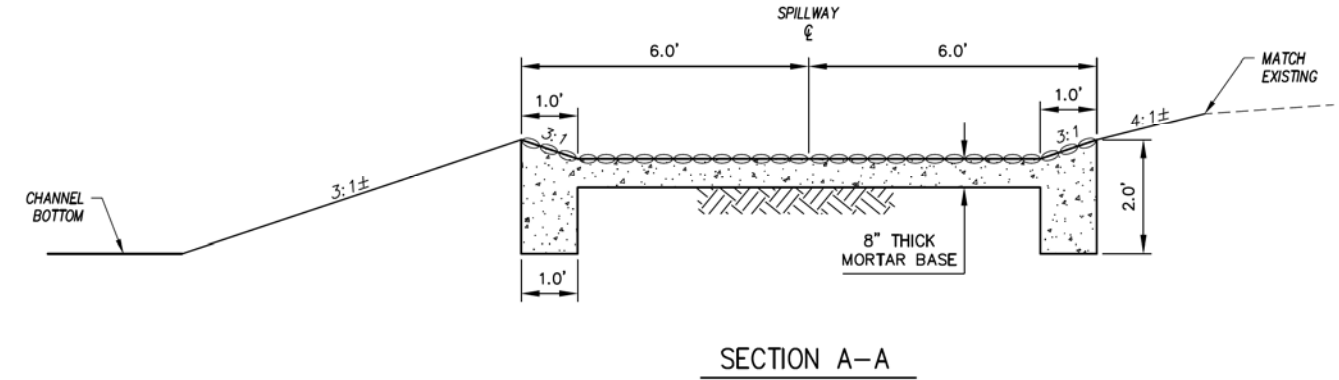
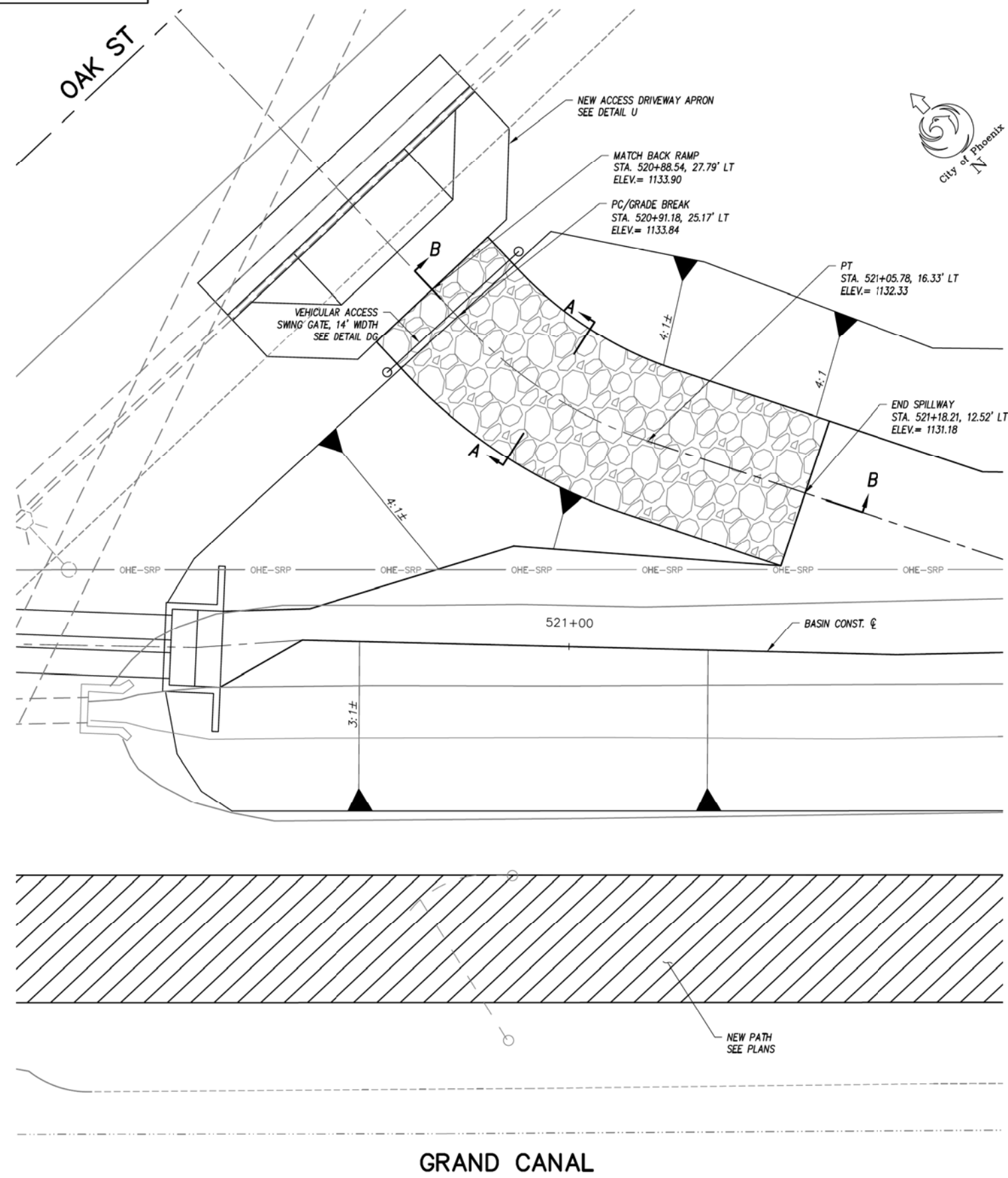


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.085	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				
NO.				
NO.				
NO.				

NOTES:

1. ALL STATIONING FROM BASIN CONSTRUCTION CENTERLINE.
2. RIPRAP TO BE HAND PLACED WITH NO EXPOSED SHARP EDGES SUCH THAT IT WILL BE TRAVERSABLE BY MAINTENANCE VEHICLES.



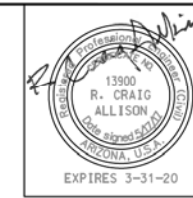
T SPILLWAY/MAINTENANCE ACCESS RAMP
1"=5' H

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SPILLWAY/MAINTENANCE ACCESS RAMP DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	SHEETS
SCALE: 1"=10'	0'	10'	2.085	2.182

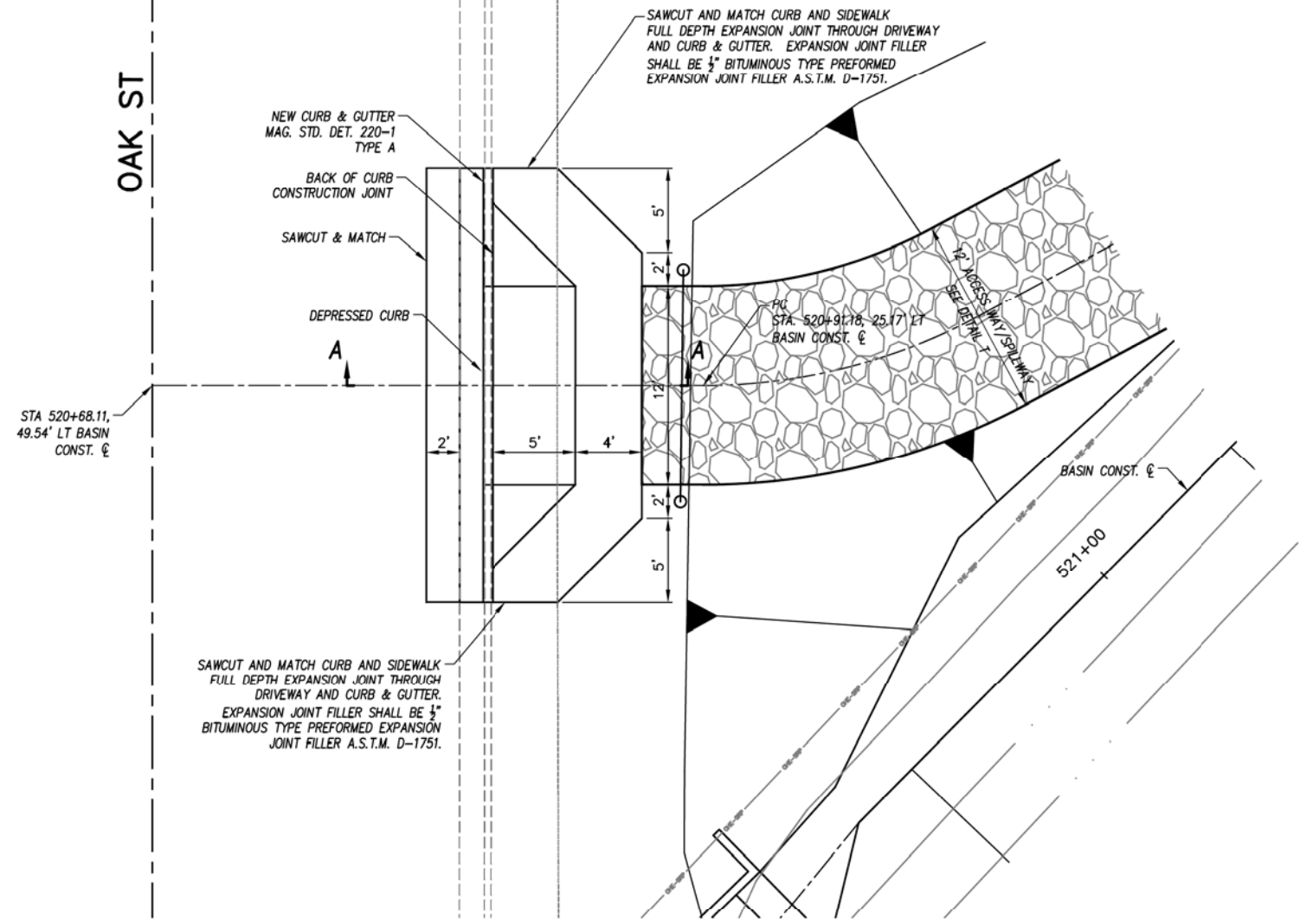
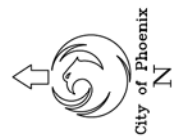
ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.086	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

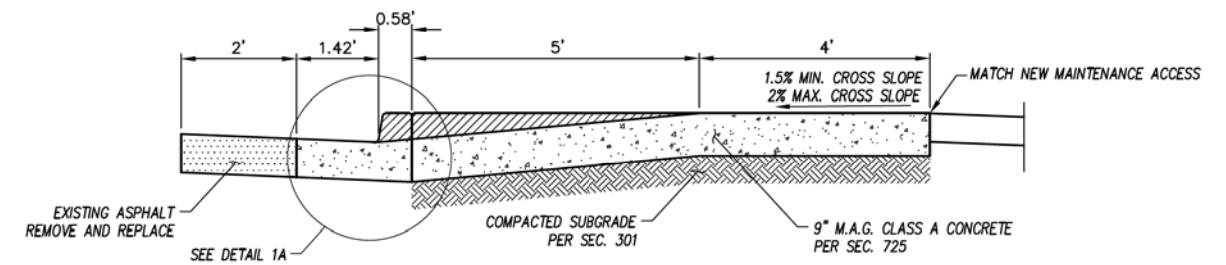
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE

OAK ST

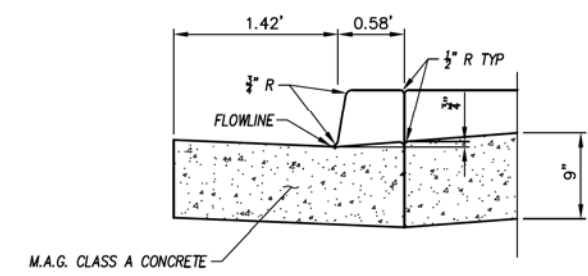


NOTES:

- EXPANSION JOINTS SHALL BE PLACED ALONG ALL CONNECTING TO EXISTING CONCRETE.
- CURB, DEPRESSED CURB, AND CURB TRANSITIONS SHALL BE PAID FOR AS COMBINED CURB AND GUTTER (NOT INCLUDED IN RAMP QUANTITIES).
- CONCRETE CURB AND GUTTER SHALL BE M.A.G. CLASS A, TOP OF WING TO TOP OF WING.
- EXPANSION JOINT MATERIAL SHALL BE SECURED IN PLACE PRIOR TO POURING CONCRETE AND SHALL COMPLETELY SEPARATE THE DRIVEWAY SLAB FROM THE SIDEWALK, EXTENDING FROM THE SURFACE TO THE SUBGRADE.
- PROVIDE CONSTRUCTION JOINTS TO MATCH CURB JOINTS (10' SPACING).
- SUBGRADE PREPARATION PER SECTION 301.
- ROUGH BROOM FINISH FULL WIDTH OF RAMP AND WINGS.
- TROWEL AND USE LIGHT HAIR BROOM FINISH FOR WALKWAY AREA.
- ELEVATION AT TOP OF DRIVEWAY RAMP SHALL BE EQUAL TO OR HIGHER THAN NORMAL CURB ELEVATION.



SECTION A-A



DETAIL 1A

U OAK STREET ACCESS DRIVEWAY DETAIL
1"=5' H

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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ACCESS DRIVEWAY APRON
DETAIL

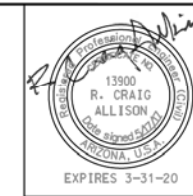
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.086	2.182

SCALE: 1"= 10' 0" 10'

ST87600114 GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

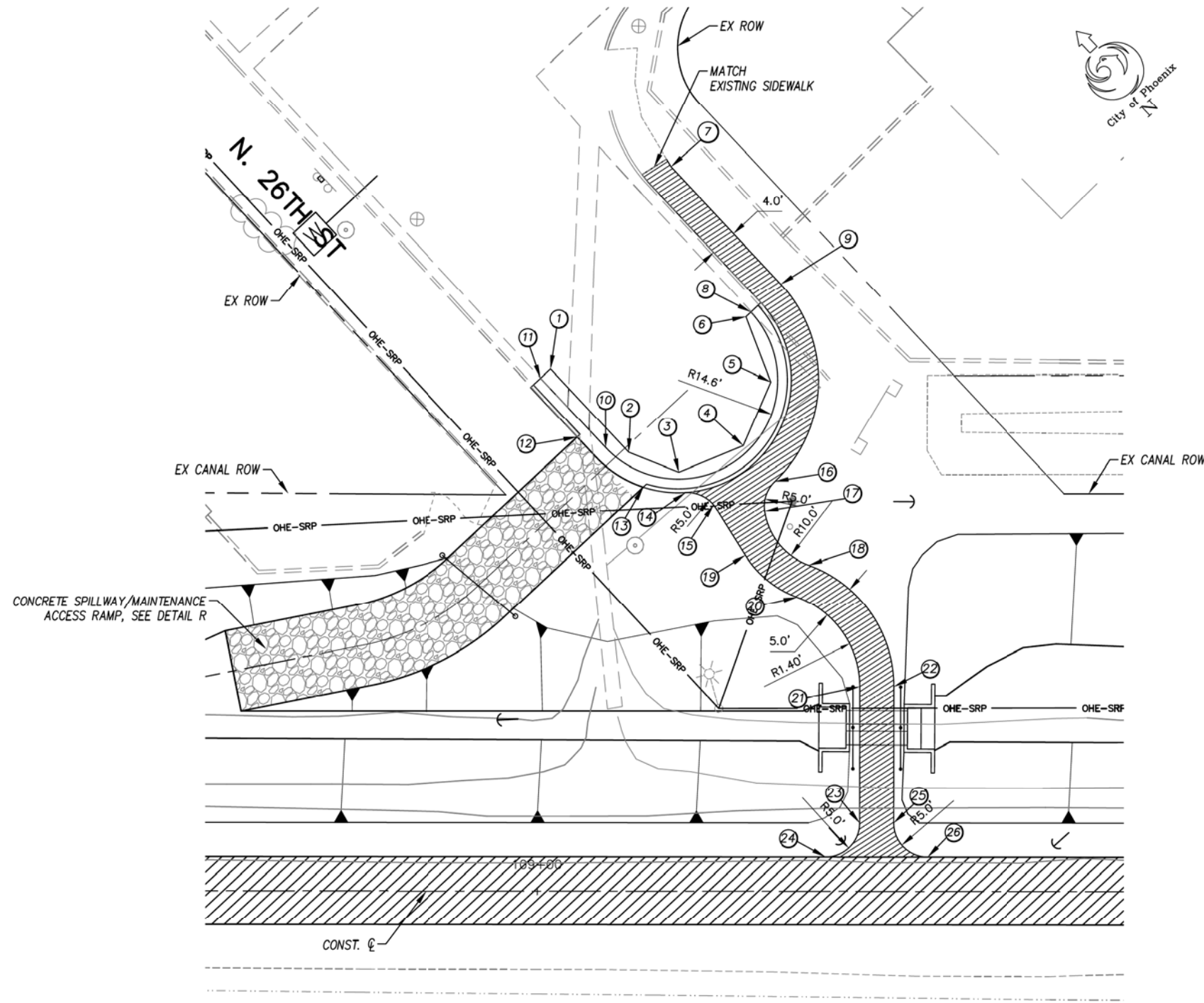


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.087	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAND CANAL

V CURB & GUTTER AND SIDEWALK LAYOUT
1"=10' H

KEYNOTES

NO.	DESCRIPTION
1	STA. 109+02.01, 76.66' LT PI, SAWCUT
2	STA. 109+13.49, 64.39' LT PI, SAWCUT
3	STA. 109+20.85, 61.46' LT PI, SAWCUT
4	STA. 109+30.30, 65.37' LT PI, SAWCUT
5	STA. 109+34.34, 74.77' LT PI, SAWCUT
6	STA. 109+30.67, 84.32' LT PI, SAWCUT
7	STA. 109+19.67, 106.31' LT PI, NEW SIDEWALK
8	STA. 109+31.40, 85.00' LT PC, BEGIN NEW GUTTER, TIE-IN TO EXIST. GUTTER
9	STA. 109+35.78, 89.10' LT PC, NEW SIDEWALK
10	STA. 109+10.12, 65.07' LT PT, NEW GUTTER
11	STA. 109+00.55, 75.29' LT END NEW GUTTER, TIE-IN TO EXIST. GUTTER
12	STA. 109+05.92, 66.62' LT NEW CURB, NEW SPILLWAY/MAINTENANCE ACCESS RAMP END TRANSITION
13	STA. 109+15.63, 59.27' LT NEW CURB, NEW SPILLWAY/MAINTENANCE ACCESS RAMP BEGIN TRANSITION
14	STA. 109+21.79, 58.49' LT PC, BEGIN NEW SIDEWALK, TIE-IN TO NEW TOP BACK OF CURB
15	STA. 109+26.34, 56.15' LT PT, NEW SIDEWALK

NO.	DESCRIPTION
16	STA. 109+34.95, 60.13' LT PRC, NEW SIDEWALK
17	STA. 109+33.45, 55.77' LT PCC, NEW SIDEWALK
18	STA. 109+39.92, 47.85' LT PRC, NEW SIDEWALK
19	STA. 109+30.63, 49.30' LT PC, NEW SIDEWALK
20	STA. 109+38.21, 43.16' LT PRC, NEW SIDEWALK
21	STA. 109+47.43, 30.00' LT PT, NEW SIDEWALK
22	STA. 109+52.43, 30.00' LT PT, NEW SIDEWALK
23	STA. 109+47.43, 10.00' LT PT, NEW SIDEWALK
24	STA. 109+42.43, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
25	STA. 109+52.43, 10.00' LT PT, NEW SIDEWALK
26	STA. 109+57.43, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH

NOTE:

- ALL STATIONING FROM PATH CONST. ☒

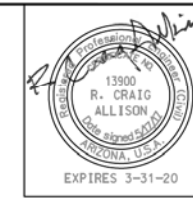


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CURB & GUTTER AND SIDEWALK LAYOUT DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

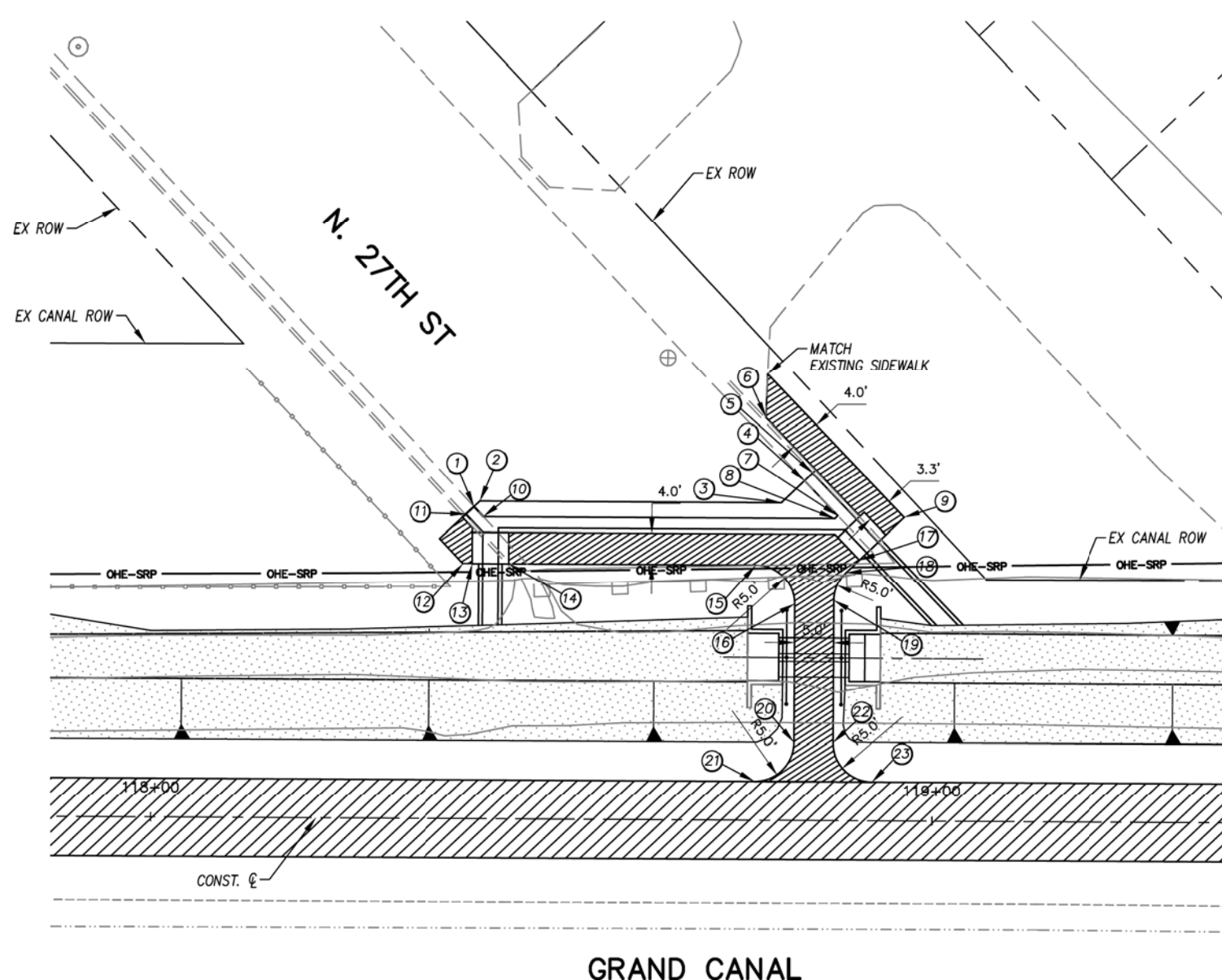
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.087	2.182
SCALE: 1"=10'				

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.088	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



KEYNOTES

NO.	DESCRIPTION	NO.	DESCRIPTION
1	STA. 118+41.36, 39.99' LT PI, SAWCUT	16	STA. 118+82.44, 27.70' LT PC, NEW SIDEWALK
2	STA. 118+42.12, 40.70' LT PI, SAWCUT	17	STA. 118+90.68, 33.42' LT PI, NEW SIDEWALK
3	STA. 118+80.66, 40.70' LT PI, SAWCUT	18	STA. 118+88.97, 31.79' LT PT, NEW SIDEWALK
4	STA. 118+83.60, 43.53' LT PI, SAWCUT	19	STA. 118+87.44, 28.18' LT PC, NEW SIDEWALK
5	STA. 118+84.64, 44.50' LT PI, BEGIN NEW GUTTER, TIE-IN TO EXIST. GUTTER	20	STA. 118+82.44, 10.00' LT PT, NEW SIDEWALK
6	STA. 118+78.64, 78.64' LT PI, BEGIN NEW SIDEWALK, TIE-IN TO EXIST. SIDEWALK	21	STA. 118+77.44, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
7	STA. 118+87.89, 39.07' LT PI, NEW GUTTER	22	STA. 118+87.44, 10.00' LT PT, NEW SIDEWALK
8	STA. 118+87.51, 38.70' LT PI, NEW GUTTER	23	STA. 118+92.44, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
9	STA. 118+96.38, 38.91' LT PI, END NEW SIDEWALK		
10	STA. 118+42.57, 38.70' LT PI, NEW GUTTER		
11	STA. 118+40.32, 39.02' LT PI, NEW GUTTER		
12	STA. 118+39.97, 32.70' LT PI, NEW SIDEWALK		
13	STA. 118+41.17, 32.70' LT PI, NEW SIDEWALK		
14	STA. 118+45.83, 32.70' LT PI, NEW SIDEWALK		
15	STA. 118+77.44, 32.70' LT PT, NEW SIDEWALK		

NOTE:
1. ALL STATIONING FROM PATH CONST. CL

W CURB & GUTTER AND SIDEWALK LAYOUT
1"=10' H

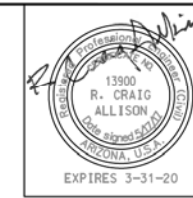


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CURB & GUTTER AND SIDEWALK LAYOUT DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

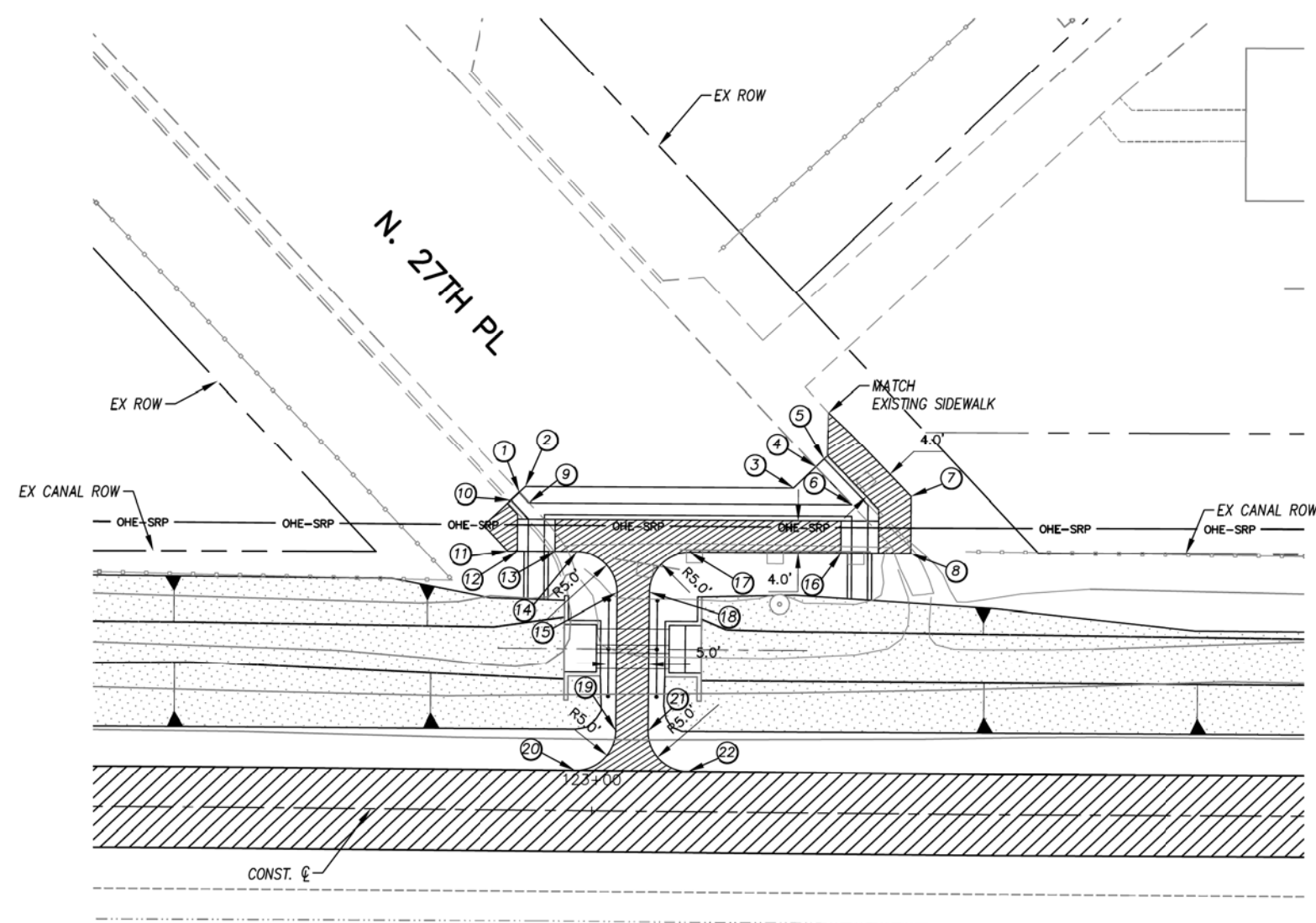
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DATE: 07/17	DATE: 07/17	DATE: 07/17	2.088	2.182
SCALE: 1"= 10'				

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.089	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



KEYNOTES

NO.	DESCRIPTION
1	STA. 122+90.77, 39.40' LT PI, SAWCUT
2	STA. 122+91.53, 40.12' LT PI, SAWCUT
3	STA. 123+24.74, 40.26' LT PI, SAWCUT
4	STA. 123+27.48, 42.93' LT PI, SAWCUT
5	STA. 123+28.50, 43.92' LT PI, BEGIN NEW GUTTER, TIE-IN TO EXIST. GUTTER
6	STA. 123+31.99, 38.29' LT PI, NEW GUTTER
7	STA. 123+39.31, 39.37' LT PI, NEW SIDEWALK
8	STA. 123+39.34, 32.33' LT PI, NEW SIDEWALK
9	STA. 122+91.99, 38.12' LT PI, NEW GUTTER
10	STA. 122+89.74, 38.42' LT PI, NEW SIDEWALK
11	STA. 122+89.42, 32.11' LT PI, NEW SIDEWALK
12	STA. 122+90.62, 32.11' LT PI, NEW SIDEWALK
13	STA. 122+95.27, 32.14' LT PI, NEW SIDEWALK
14	STA. 122+97.99, 32.15' LT PT, NEW SIDEWALK
15	STA. 123+03.01, 27.15' LT PC, NEW SIDEWALK

NO.	DESCRIPTION
16	STA. 123+30.68, 32.29' LT PI, NEW SIDEWALK
17	STA. 123+11.99, 32.21' LT PT, NEW SIDEWALK
18	STA. 123+07.01, 27.21' LT PC, NEW SIDEWALK
19	STA. 123+03.01, 10.00' LT PT, NEW SIDEWALK
20	STA. 122+98.01, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
21	STA. 123+07.01, 10.00' LT PT, NEW SIDEWALK
22	STA. 123+12.01, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH

GRAND CANAL

NOTE:
1. ALL STATIONING FROM PATH CONST. ϵ



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CURB & GUTTER AND SIDEWALK LAYOUT DETAIL

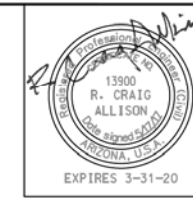
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
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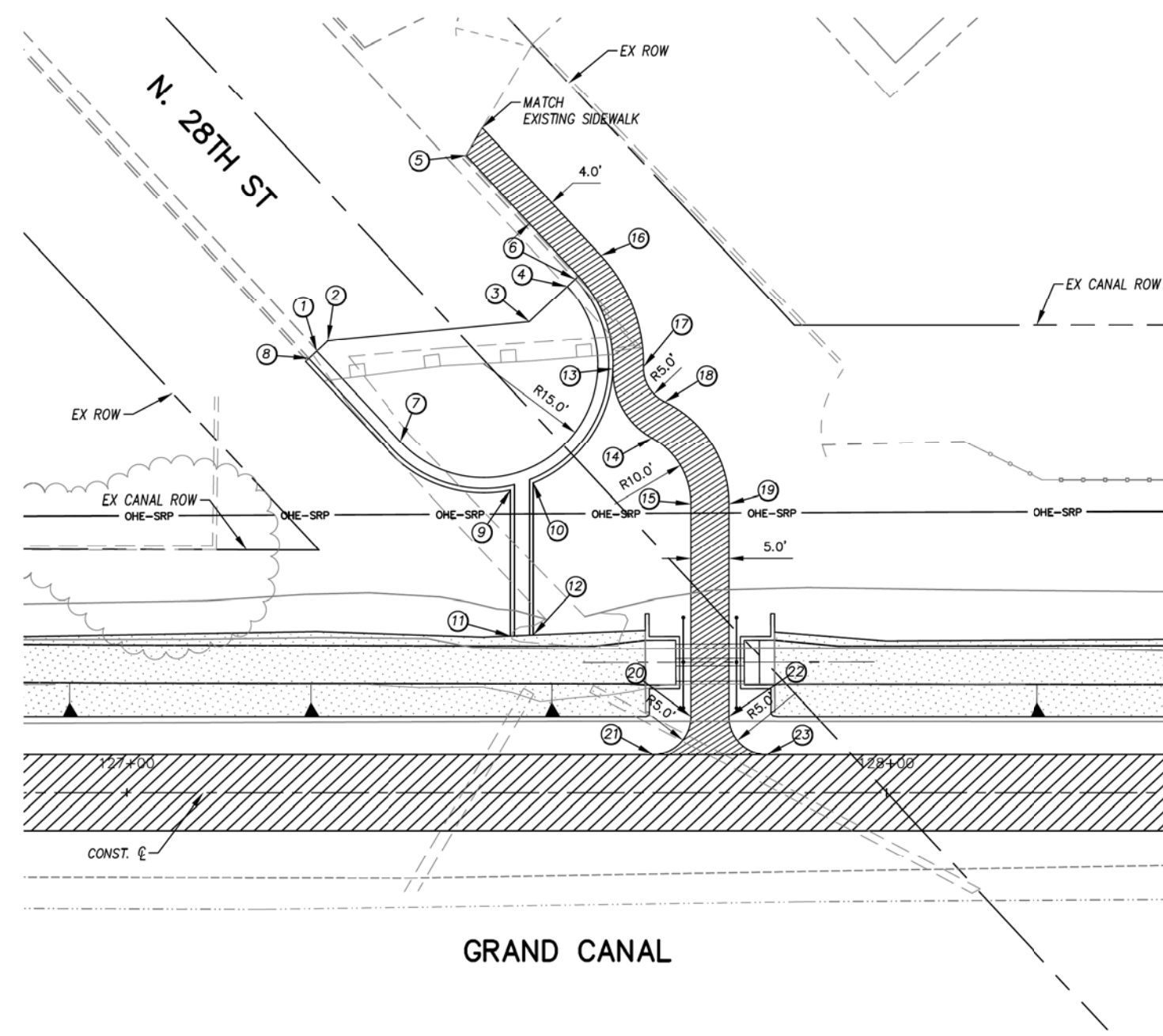
X CURB & GUTTER AND SIDEWALK LAYOUT
1"=10' H

ST87600114 GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.090	2.182
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DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NO.				
NO.				
NO.				



KEYNOTES

NO.	DESCRIPTION
1	STA. 127+25.08, 58.17' LT PI, SAWCUT
2	STA. 127+26.55, 59.53' LT PI, SAWCUT
3	STA. 127+53.134, 62.02' LT PI, SAWCUT
4	STA. 127+58.14, 66.68' LT PI, SAWCUT
5	STA. 127+44.84, 83.92' LT PI, BEGIN NEW SIDEWALK, TIE-IN TO EXIST. SIDEWALK
6	STA. 127+59.18, 67.65' LT PT, NEW GUTTER
7	STA. 127+36.17, 46.25' LT PC, NEW GUTTER
8	STA. 127+24.04, 57.21' LT PI, END NEW GUTTER, TIE-IN TO EXIST. GUTTER
9	STA. 127+50.67, 39.83' LT PI, NEW TOP BACK OF CURB
10	STA. 127+74.39, 38.02' LT PI, NEW TOP BACK OF CURB
11	STA. 127+50.67, 20.68' LT PI, END NEW TOP BACK OF CURB AT TOP OF NEW BASIN
12	STA. 127+53.67, 20.83' LT PI, END NEW TOP BACK OF CURB AT TOP OF NEW BASIN
13	STA. 127+64.15, 55.85' LT PT, NEW SIDEWALK
14	STA. 127+69.27, 46.75' LT PRC, NEW SIDEWALK
15	STA. 127+74.39, 38.02' LT PC, NEW SIDEWALK

NO.	DESCRIPTION
16	STA. 127+62.54, 70.77' LT PT, NEW SIDEWALK
17	STA. 127+68.15, 56.09' LT PRC, NEW SIDEWALK
18	STA. 127+70.96, 51.50' LT PCC, NEW SIDEWALK
19	STA. 127+79.39, 38.02' LT PC, NEW SIDEWALK
20	STA. 127+74.39, 10.00' LT PT, NEW SIDEWALK
21	STA. 127+69.39, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
22	STA. 127+79.39, 10.00' LT PT, NEW SIDEWALK
23	STA. 127+84.39, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH

NOTE:
1. ALL STATIONING FROM PATH CONST. CL



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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CURB & GUTTER AND SIDEWALK LAYOUT DETAIL

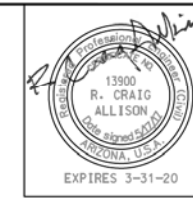
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.090	2.182
SCALE: 1" = 10'				

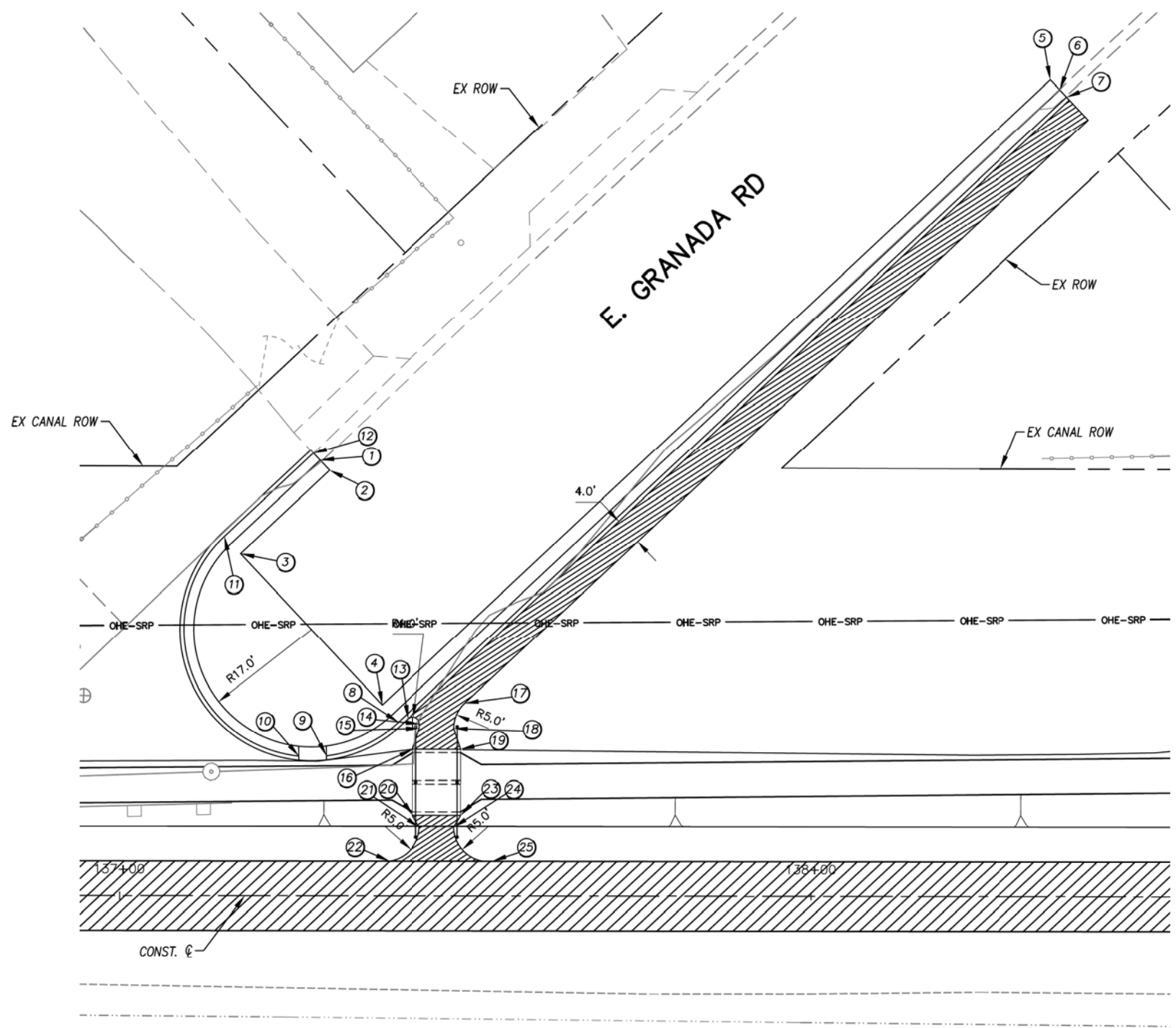
(Y) CURB & GUTTER AND SIDEWALK LAYOUT
1"=10' H

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.091	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				
NO.				
NO.				
NO.				



KEYNOTES

NO.	DESCRIPTION
1	STA. 137+29.02, 62.95' LT PI, SAWCUT
2	STA. 137+30.39, 61.49' LT PI, SAWCUT
3	STA. 137+17.54, 49.44' LT PI, SAWCUT
4	STA. 137+38.06, 27.56' LT PI, SAWCUT
5	STA. 138+34.64, 118.13' LT PI, SAWCUT
6	STA. 138+36.01, 116.67' LT PI, SAWCUT
7	STA. 138+36.98, 115.64' LT PI, NEW GUTTER, TIE-IN TO EXIST. GUTTER
8	STA. 137+40.40, 25.06' LT PT, NEW GUTTER
9	STA. 137+29.98, 20.21' LT PC, NEW GUTTER
10	STA. 137+25.98, 20.17' LT PT, NEW GUTTER
11	STA. 137+15.20, 51.94' LT PC, NEW GUTTER
12	STA. 137+28.05, 63.99' LT PI, NEW GUTTER, TIE-IN TO EXIST. GUTTER
13	STA. 137+41.79, 25.57' LT PT, NEW SIDEWALK
14	STA. 137+43.47, 24.84' LT PC, NEW SIDEWALK
15	STA. 137+43.47, 24.19' LT PI, NEW SIDEWALK

NO.	DESCRIPTION
16	STA. 137+42.47, 21.19' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
17	STA. 137+50.05, 27.84' LT PT, NEW SIDEWALK
18	STA. 137+48.47, 24.19' LT PC, NEW SIDEWALK
19	STA. 137+49.47, 21.19' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
20	STA. 137+42.47, 11.69' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
21	STA. 137+43.47, 9.96' LT PT, NEW SIDEWALK
22	STA. 137+39.12, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
23	STA. 137+49.47, 11.69' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
24	STA. 137+48.47, 9.96' LT PT, NEW SIDEWALK
25	STA. 137+52.83, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH

NOTE:
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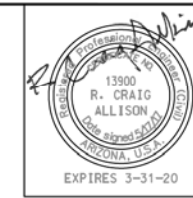
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CURB & GUTTER AND SIDEWALK LAYOUT DETAIL
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
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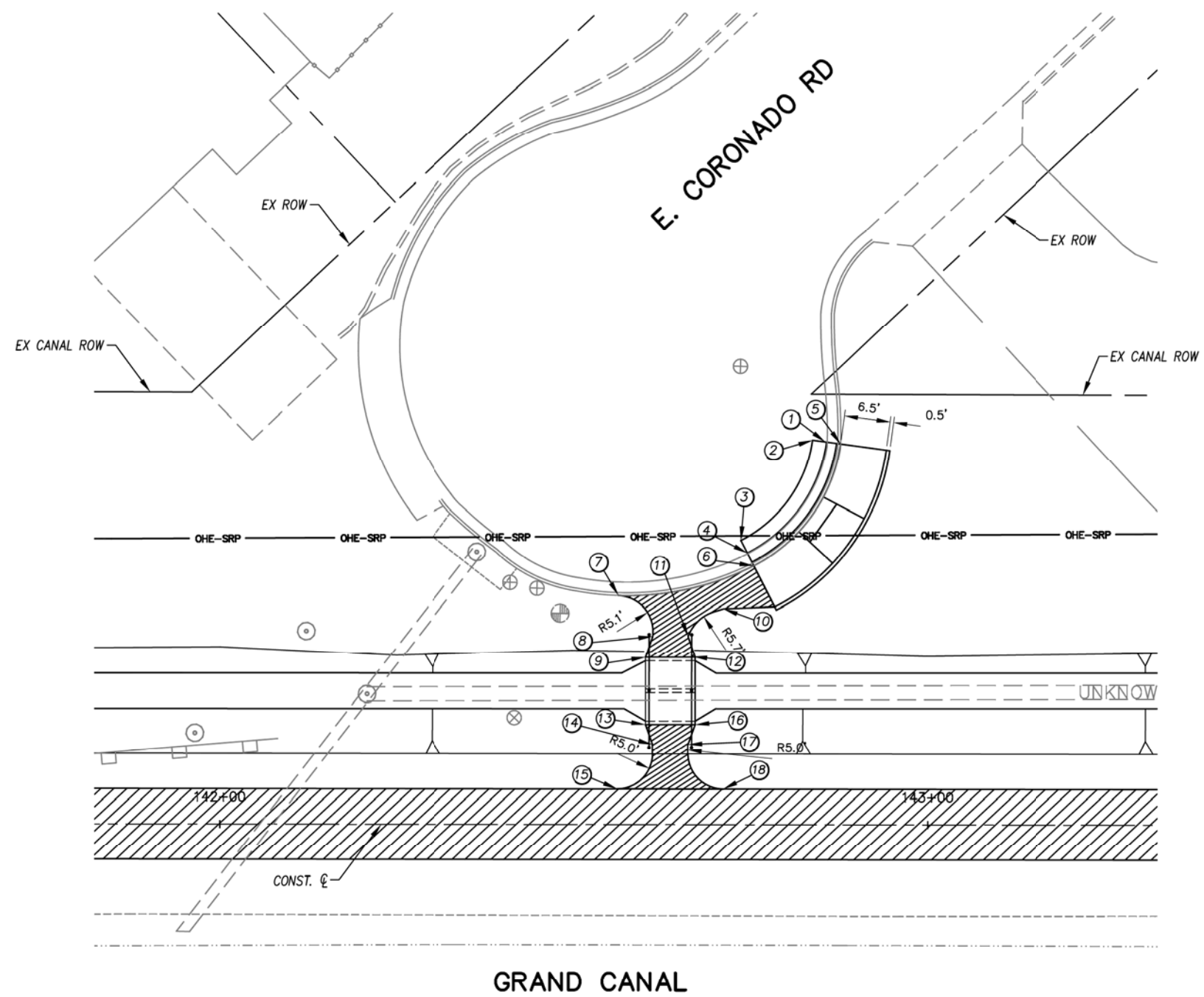
Z
 CURB & GUTTER AND SIDEWALK LAYOUT
 1"=10' H

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV. BY	CHK. BY	DATE



KEYNOTES	
NO.	DESCRIPTION
①	STA. 142+85.78, 54.09' LT PI, SAWCUT
②	STA. 142+83.80, 54.36' LT PI, SAWCUT
③	STA. 142+73.71, 40.12' LT PI, SAWCUT
④	STA. 142+74.62, 38.34' LT PI, SAWCUT
⑤	STA. 142+87.76, 53.82' LT PT, NEW CURB, TIE-IN TO EXIST. CURB
⑥	STA. 142+75.53, 36.55' LT PC, NEW CURB
⑦	STA. 142+56.43, 32.34' LT PT, NEW SIDEWALK
⑧	STA. 142+61.28, 26.59' LT PC, NEW SIDEWALK
⑨	STA. 142+60.28, 23.59' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
⑩	STA. 142+71.28, 30.49' LT PT, NEW SIDEWALK
⑪	STA. 142+66.28, 26.59' LT PC, NEW SIDEWALK
⑫	STA. 142+67.28, 23.59' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
⑬	STA. 142+60.28, 14.09' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
⑭	STA. 142+61.28, 11.26' LT PT, NEW SIDEWALK
⑮	STA. 142+56.28, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH
⑯	STA. 142+67.28, 14.09' LT PI, NEW SIDEWALK, TIE-IN TO NEW SCUPPER
⑰	STA. 142+66.28, 11.27' LT PT, NEW SIDEWALK
⑱	STA. 142+71.28, 5.00' LT PC, NEW SIDEWALK, TIE-IN TO NEW PATH

NOTE:
1. ALL STATIONING FROM PATH CONST. ☒

AA CURB & GUTTER AND SIDEWALK LAYOUT
1"=10' H

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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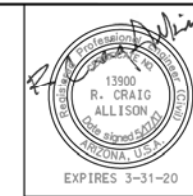
CURB & GUTTER AND SIDEWALK LAYOUT DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

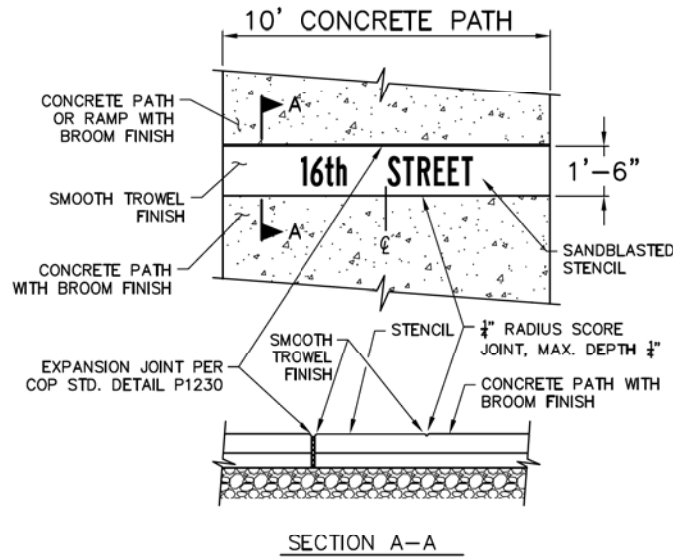
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DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 2.092	2.182
SCALE: 1"=10'				

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY	CHK. BY	DATE
NO.				
NO.				
NO.				
NO.				



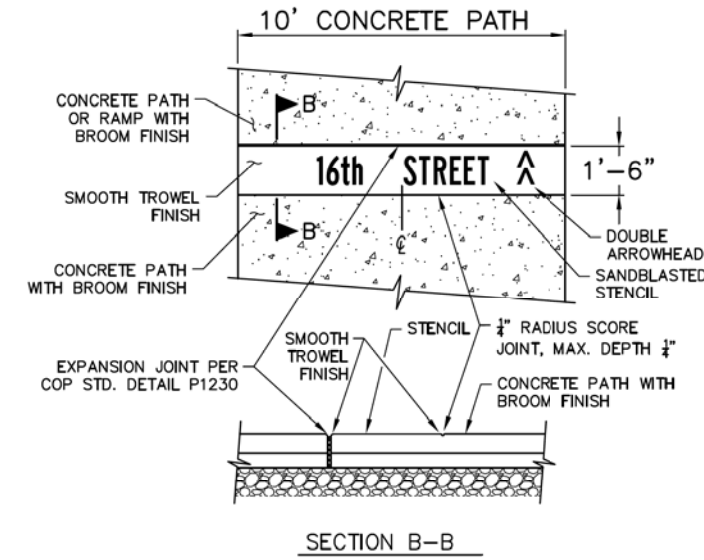
STREET NAME COPY	NUMBER OF OCCURRENCES
16th STREET	x 1
OSBORN ROAD	x 2
20th STREET	x 2
THOMAS ROAD	x 2
24th STREET	x 2
OAK STREET	x 2
MCDOWELL ROAD	x 2
32nd STREET	x 2
10'	
CONCRETE PATH	

(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

SANDBLAST STENCIL NOTES

1. SANDBLAST LETTERS TO 1/8" DEPTH
2. FONT: FEDERAL STANDARD ALPHABET SERIES B
3. LETTER HEIGHT = 8 INCHES
4. CENTER TEXT COPY HORIZONTALLY WITHIN PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND
5. STENCIL SHALL BE A 3M PREMIUM SERIES RUBBER STENCIL PRODUCT OR APPROVED EQUAL
6. INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS

STREET NAME STENCIL AT RAMP



STREET NAME COPY	NUMBER OF OCCURRENCES
16th STREET	x 1
OSBORN ROAD	x 2
20th STREET	x 2
THOMAS ROAD	x 2
24th STREET	x 2
OAK STREET	x 2
MCDOWELL ROAD	x 2
32nd STREET	x 2
10'	
CONCRETE PATH	

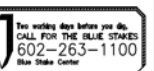
(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

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1. SANDBLAST LETTERS TO 1/8" DEPTH
2. FONT: FEDERAL STANDARD ALPHABET SERIES B
3. LETTER HEIGHT = 8 INCHES
4. CENTER TEXT COPY HORIZONTALLY WITHIN PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND
5. STENCIL SHALL BE A 3M PREMIUM SERIES RUBBER STENCIL PRODUCT OR APPROVED EQUAL
6. INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS

STREET NAME STENCIL AT APPROACH

BB SANDBLAST STENCIL DETAIL NTS



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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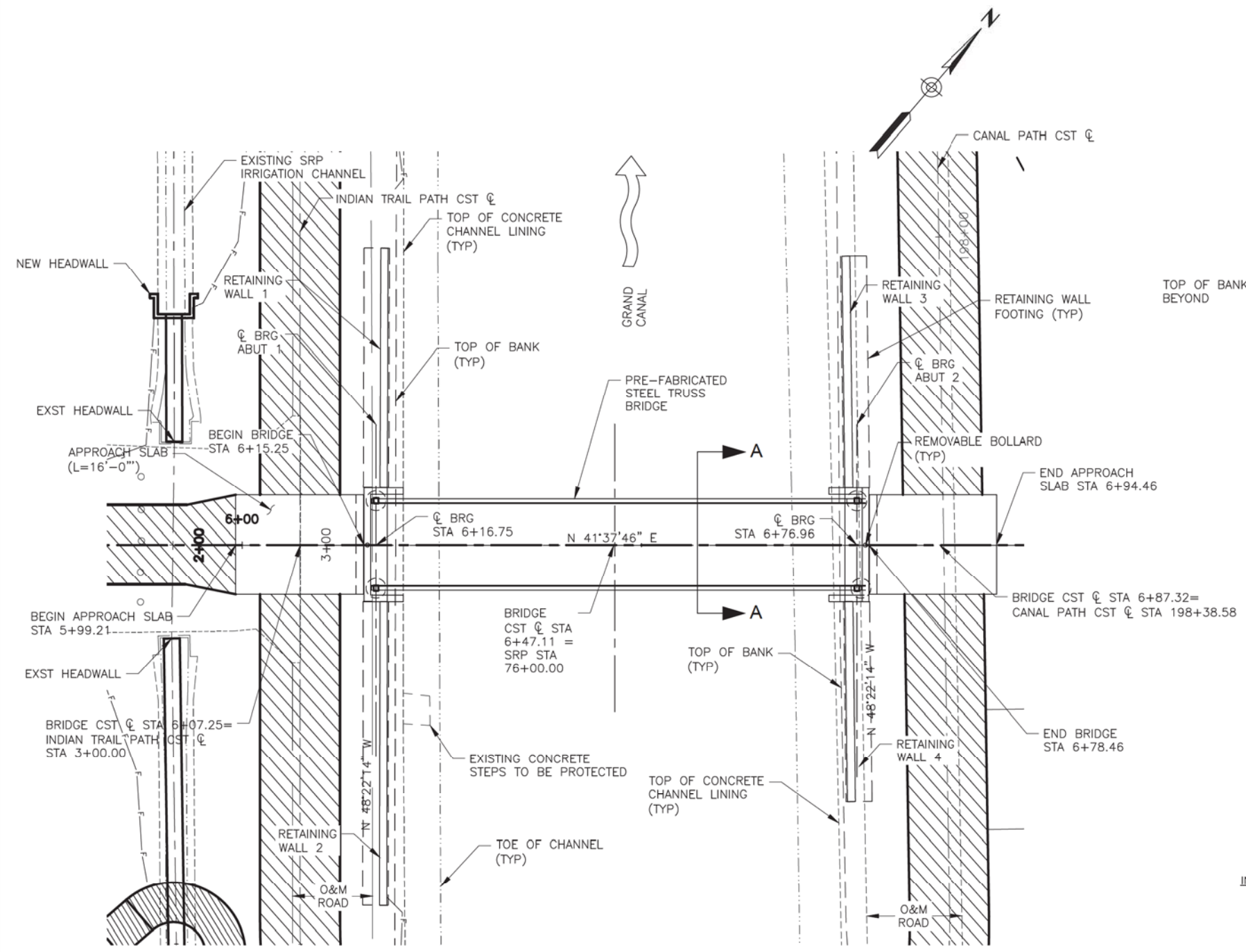
SANDBLAST STENCIL DETAIL CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.093	2.182
SCALE: 1" = 10'				

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

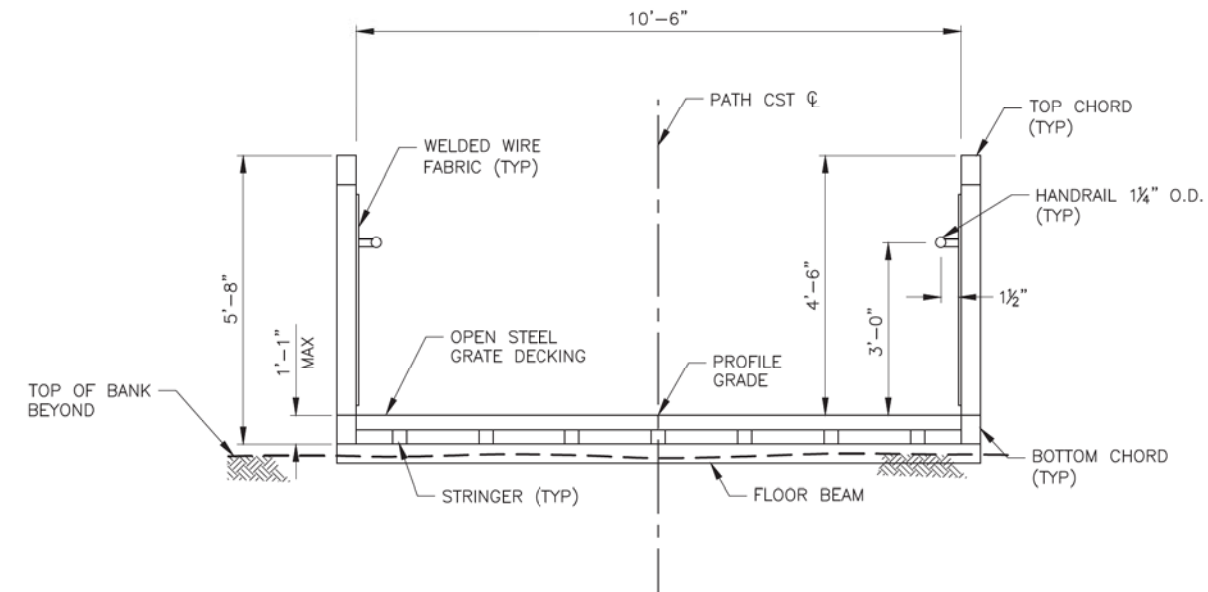


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.094	2.182
ethos ENGINEERING, INC.				
DES: SEO	DR: JRR	CK: AGG	DATE: 07/17/17	

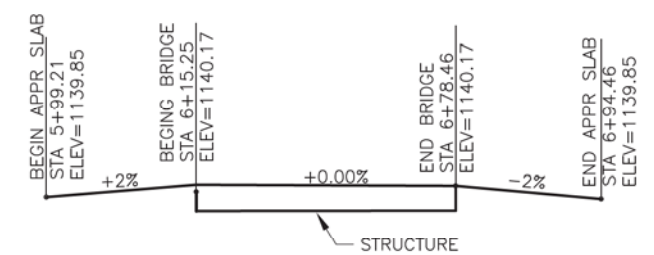
REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE
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REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



PLAN
SCALE: 1" = 100'
NEW 1 SPAN STEEL TRUSS BRIDGE
NO SKEW



TYPICAL SECTION A-A
SCALE: 1" = 20'



PROFILE GRADE AT BRIDGE CST

INDEX OF DRAWINGS

SHEET NO	DWG NO	DRAWING TITLE
2.094	S-1.01	PLAN & TYPICAL SECTION
2.095	S-1.02	ELEVATION & GENERAL NOTES
2.096	S-1.03	FOUNDATION PLAN AND DETAILS
2.097	S-1.04	ABUTMENT PLAN AND ELEVATION
2.098	S-1.05	MISCELLANEOUS DETAILS
2.099	S-1.06	RETAINING WALL DETAILS

- NOTES:**
- ALL ELEVATIONS ARE BASED ON NGVD - 29
 - SRP STATIONING IS PROVIDED FOR INFORMATION PURPOSES ONLY. ALL WORK SHALL BE CONSTRUCTED BASED ON PATH CST.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-25, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

S-1.01
PLAN & TYPICAL SECTION
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: SEO	DR: JRR	CK: AGG	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.094	2.182
SCALE:				

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 07/14/17



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,095	2,182
ethos ENGINEERING, INC.				
DES: SEO	DR: JRR	CK: AGG	DATE: 07/17/17	

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:
MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS, LATEST EDITION.
CITY OF PHOENIX SUPPLEMENT TO MAG UNIFORM STANDARD SPECIFICATIONS, LATEST EDITION.
ARIZONA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2008 EDITION. APPLICABLE WHEN REFERENCED IN THESE PLANS, IN THE SPECIAL PROVISIONS, AND FOR AREAS NOT COVERED BY THE MAG SPECIFICATION.
DESIGN GUIDELINES AND SPECIFICATIONS FOR BRIDGE CROSSINGS OF SALT RIVER PROJECT CANALS, LATEST EDITION.

DESIGN SPECIFICATIONS:
AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LATEST EDITION AND REVISIONS TO DATE).

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL THE SUPERSTRUCTURE DIMENSIONS AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

BRIDGE SUPERSTRUCTURE IS CONCEPTUAL ONLY. FINAL ADJUSTMENTS TO THE ABUTMENT SEATS WILL BE MADE AFTER SHOP DETAILS FOR SUPERSTRUCTURE ARE RECEIVED. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INDICATING BRIDGE DEPTH AND PROFILE ADJUSTMENTS OR TRANSITIONS (IF ANY).

LIVE LOAD:
90 PSF PEDESTRIAN LIVE LOAD WITHOUT DYNAMIC LOAD ALLOWANCE.
AASHTO H5-44 MAINTENANCE VEHICLE WITHOUT DYNAMIC LOAD ALLOWANCE

SEISMIC PERFORMANCE –
SEISMIC PERFORMANCE ZONE 1 (SITE CLASS D) WITH PEAK GROUND ACCELERATION (PGA) = 0.13g; S_s=0.115g, S₁= 0.039g

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615 EXCEPT WHERE ASTM A706 IS SPECIFIED FOR WELDABILITY. ALL REINFORCING SHALL BE FURNISHED AS GRADE 60.

ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO 8.23.
ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL HAVE 2" CLEAR COVER UNLESS NOTED OTHERWISE.

STRESSES:
ABUTMENTS, RETAINING WALLS CLASS S.....f'c= 3,000 psi
DRILLED SHAFTS, CLASS S.....f'c= 3,500 psi

CHAMFER ALL EXPOSED CORNERS 3/4" UNLESS NOTED OTHERWISE.

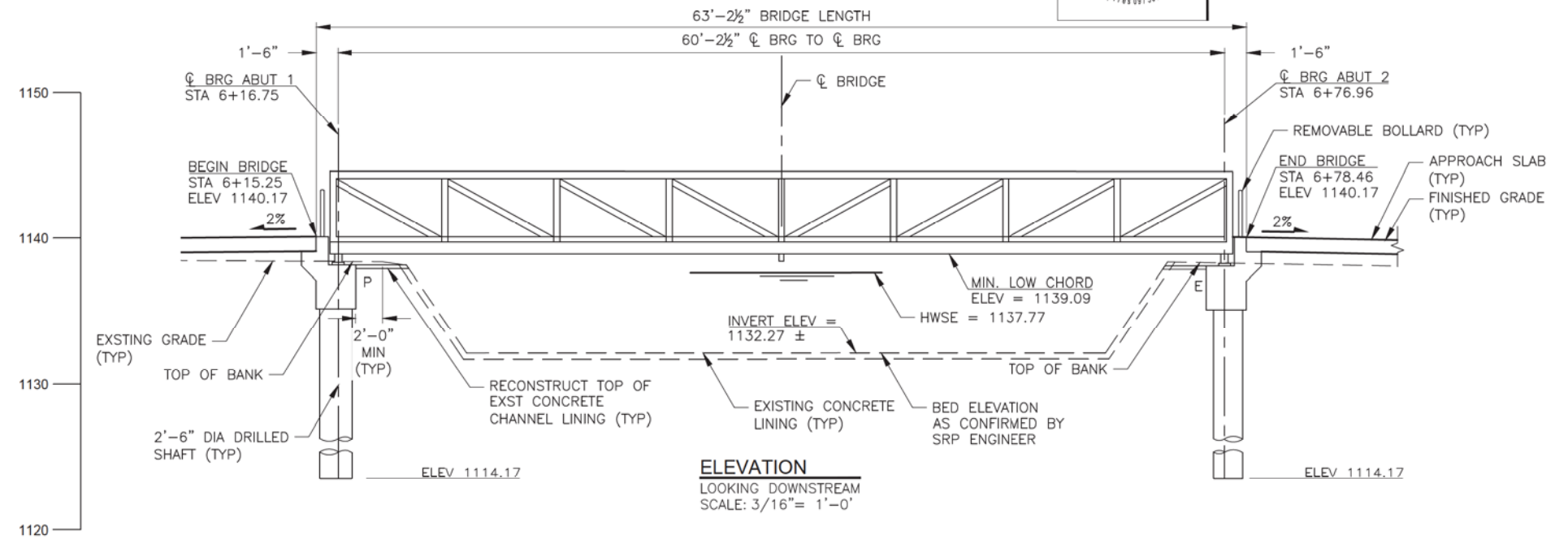
DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.

THE WIDTH OF STRUCTURE EXCAVATION PRISM USED IN THE COMPUTATION OF APPROXIMATE QUANTITIES IS AS FOLLOWS:

1. ABUTMENT: STRUCTURAL THICKNESS OF MEMBER PLUS THREE FEET.

THE STRUCTURE BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISIONS. THREE FEET OF BACKFILL MATERIAL SHALL BE PLACED AGAINST THE ABUTMENT CAP AND RETAINING WALLS.

A LOAD POSTING SIGN SHALL BE INSTALLED AT EACH END OF THE BRIDGE INDICATING A 5 TON WEIGHT LIMIT. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.



CORNER	SRP STATION	CANAL				BRIDGE		
		INVERT	EXISTING TOP LINING	EXISTING TOP BANK	OPERATIONAL HIGH WATER	DESIGNED TOP LINING	LOW CHORD	TOP OF DECK
SW	76+00	1132.27	1138.09	1138.47	1137.77	1138.00	1139.00	1140.17
SE	76+00	1132.27	1137.92	1138.17	1137.77	1138.00	1139.00	1140.17
NW	76+00	1132.27	1137.89	1138.54	1137.77	1138.00	1139.00	1140.17
NE	76+00	1132.27	1137.91	1138.72	1137.77	1138.00	1139.00	1140.17

ITEM DESCRIPTION	STRUCTURE EXCAVATION * (CY)	STRUCTURE BACKFILL * (CY)	STRUCTURAL CONCRETE CLASS S F'C=3000 PSI (CY)	STEEL REINFORCEMENT (LB)	DRILLED SHAFTS 2'-6" DIA (LF)	PRE-FABRICATED STEEL BRIDGE (EA)	CONCRETE CHANNEL LINING (SY)
ABUTMENT 1	72	47	20	1650	44		11
ABUTMENT 2	63	40	16	1440	44		11
SUPERSTRUCTURE						1	
TOTAL	135	87	36	3090	88	1	22
AS-BUILT							

APPROACH SLABS..... 400 SF
STEEL BOLLARDS..... 2 EA
ELASTOMERIC BEARING PADS..... 4 EA

* QUANTITIES SHOWN ARE APPROXIMATE AND ARE FOR INFORMATION PURPOSES ONLY. STRUCTURE EXCAVATION AND STRUCTURE BACKFILL SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE BRIDGE.

THE CONSTRUCTION OF THE CONCRETE LINING SHALL CONFORM TO THE REQUIREMENTS OF THE SRP STANDARD SPECIFICATIONS. ANY EXISTING CANAL LINING DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



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**S-1.02
ELEVATION & GENERAL NOTES**

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: SEO	DR: JRR	CK: AGG	SHEET NO:	TOTAL SHEETS
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SCALE:				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
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ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 07/14/17

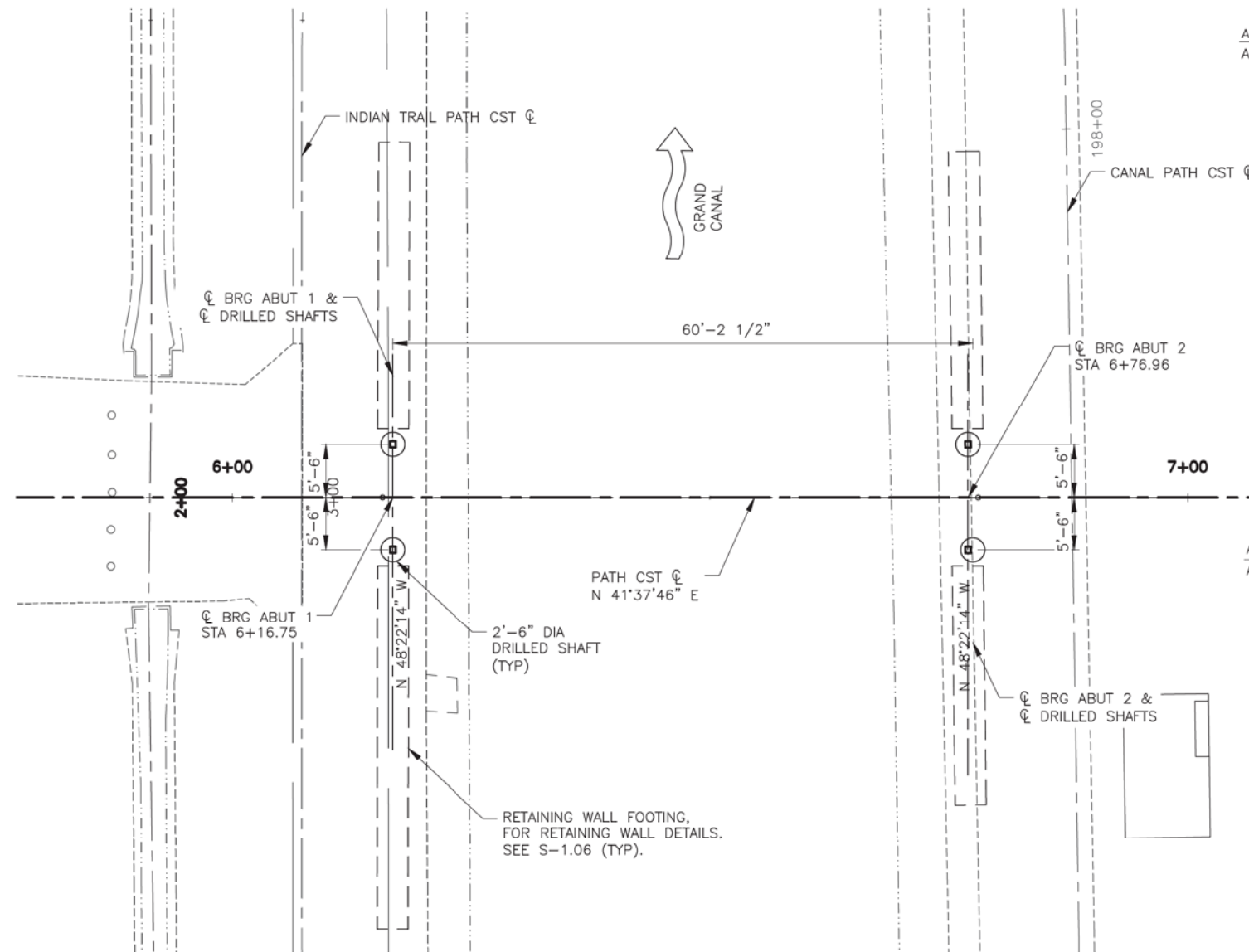


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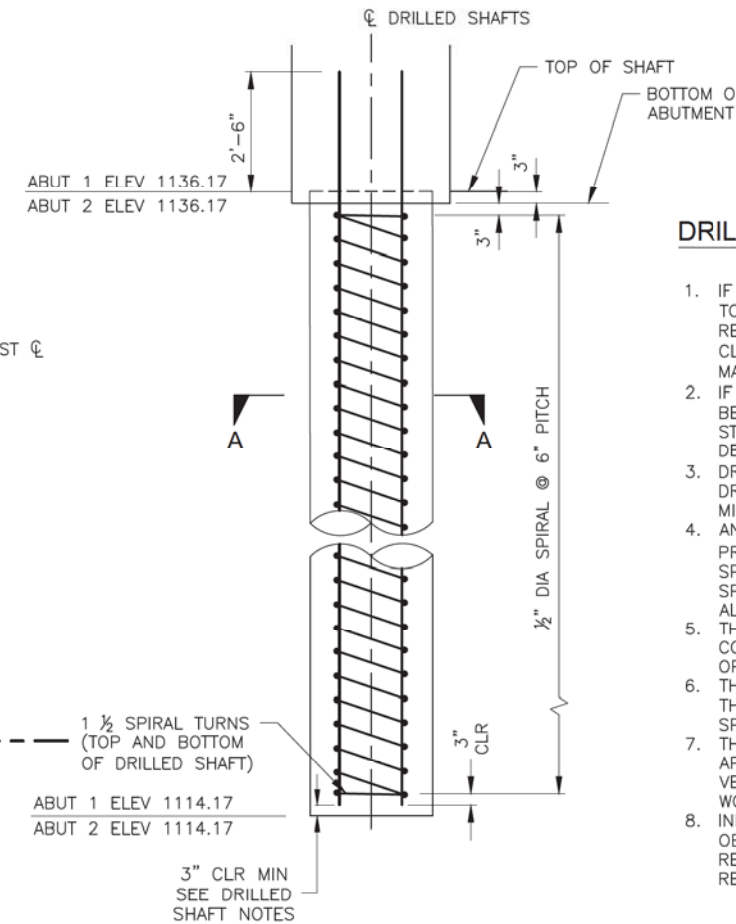
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

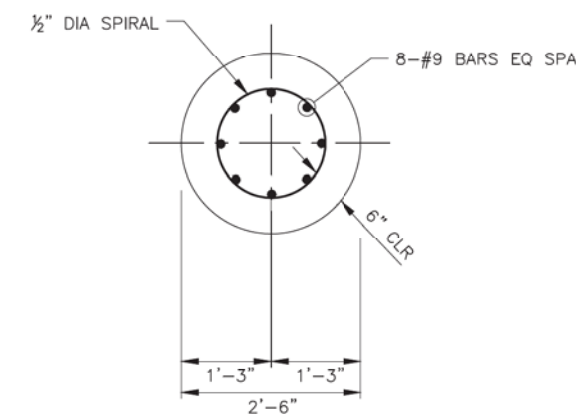
NO.	DESCRIPTION	REV BY	CHK BY	DATE



FOUNDATION PLAN
SCALE: 1" = 100'-0"



DRILLED SHAFT ELEVATION
SCALE: 1/2" = 1'-0"



SECTION A-A
NTS

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

DRILLED SHAFT NOTES:

- IF THE TIP OF THE DRILLED SHAFT IS EXTENDED LESS THAN OR EQUAL TO 3'-0" BELOW THE ELEVATION SHOWN ON THE PLANS, THE REINFORCING STEEL CAGE NEED NOT BE MODIFIED AND THE RESULTING CLEARANCE TO THE TIP OF THE DRILLED SHAFT SHALL BE 3'-3" MAXIMUM.
- IF THE TIP OF THE DRILLED SHAFT IS EXTENDED MORE THAN 3'-0" BELOW THE ELEVATION THE PLANS, A MODIFICATION TO THE REINFORCING STEEL CAGE MAY BE REQUIRED. THE ENGINEER SHALL BE NOTIFIED TO DETERMINE THE EXTENT OF THE MODIFICATIONS, IF ANY.
- DRILLED SHAFT SPIRAL REINFORCEMENT SHALL BE 1/2" DIAMETER COLD DRAWN STEEL WIRE CONFORMING TO AASHTO M-32 EXCEPT THAT THE MINIMUM TENSILE STRENGTH SHALL BE 60,000 PSI.
- ANCHORAGE OF THE SPIRAL REINFORCEMENT SHALL BE ACHIEVED BY PROVIDING 1 1/2 EXTRA TURNS OF THE SPIRAL AT EACH END OF THE SPIRAL UNIT. SPLICES IN SPIRAL REINFORCEMENT SHALL BE LAP SPLICES 48 BAR DIAMETERS BUT NOT LESS THAN 12 INCHES. ALTERNATELY, THE SPLICES MAY BE WELDED.
- THE DRILLED SHAFT REINFORCEMENT MAY BE SPLICED IF REQUIRED FOR CONSTRUCTION CLEARANCE FROM THE OVERHEAD POWER LINES. SEE OPTIONAL SHAFT LAP SPLICE DETAIL.
- THE CONTRACTOR MAY SELECT ANY ONE OF THE DRILLED SHAFTS AS THE REQUIRED CONFIRMATION SHAFT. SEE ADOT STANDARD SPECIFICATION SECTION 609-3.02 FOR ADDITIONAL INFORMATION.
- THE LOCATION OF THE EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.
- INFORMATION PERTAINING TO THE GEOTECHNICAL CONDITIONS CAN BE OBTAINED FROM THE GEOTECHNICAL REPORT BY RAMM ENGINEERING. THE REPORT IS INCLUDED WITH THE SPECIAL PROVISIONS. IT IS THE RESPONSIBILITY OF THE PROSPECTIVE BIDDERS TO REVIEW THIS REPORT.



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX, CITY CODE CHAPTER 2, SECTION 2-25. THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

S-1.03
FOUNDATION PLAN AND DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: SEO	DR: JRR	CK: AGG	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.096	2.182

SCALE:

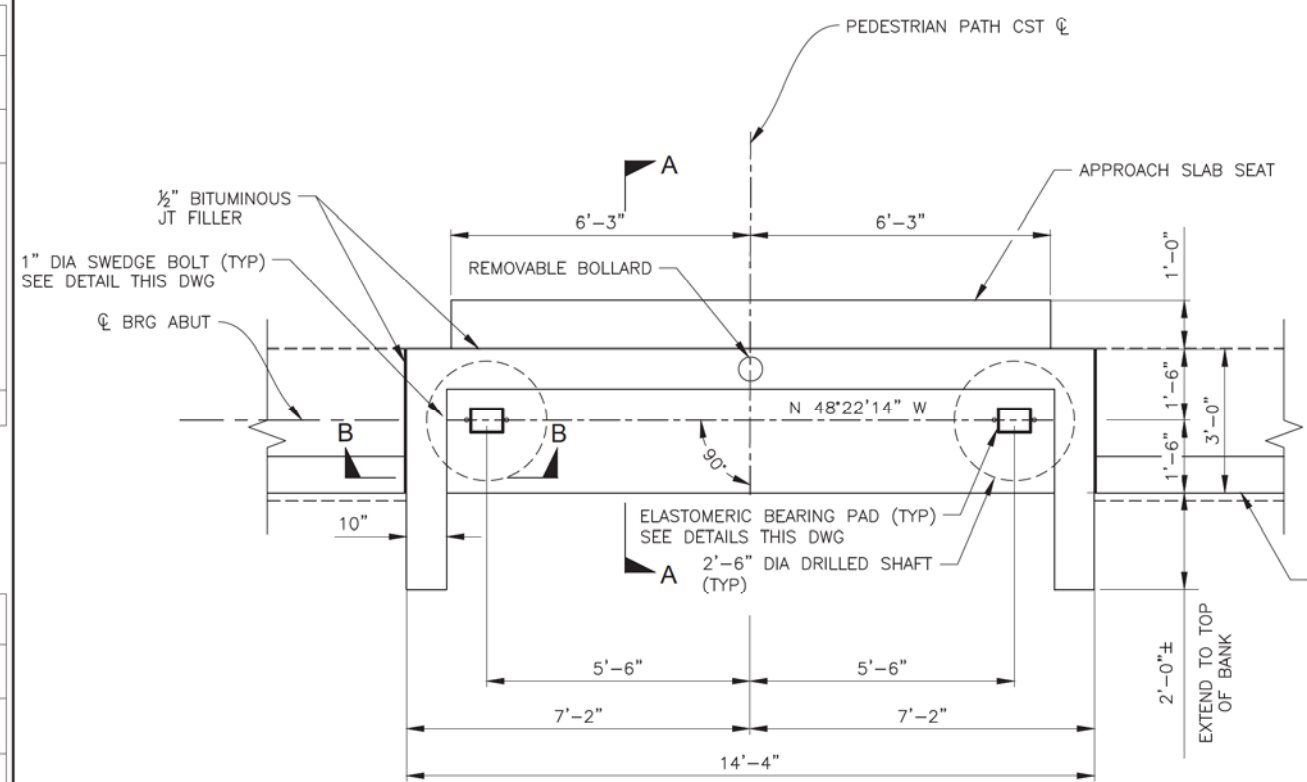


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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ethos ENGINEERING, INC.				
DES: SEO	DR: JRR	CK: AGG	DATE: 07/17/17	

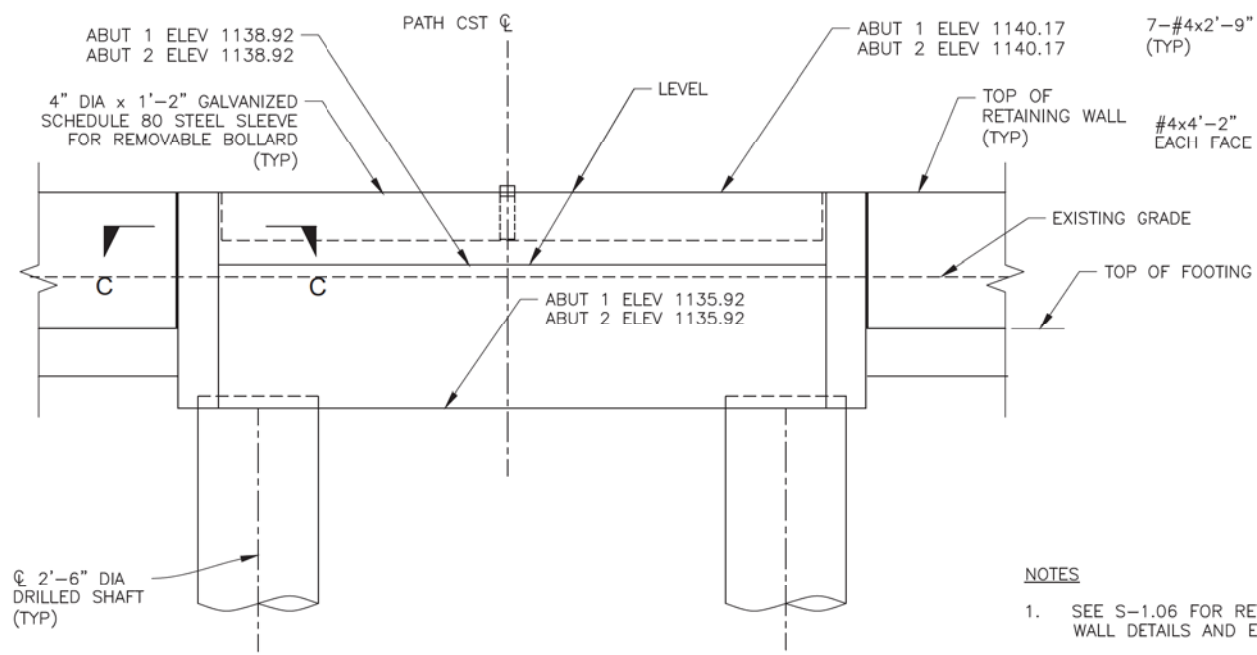
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



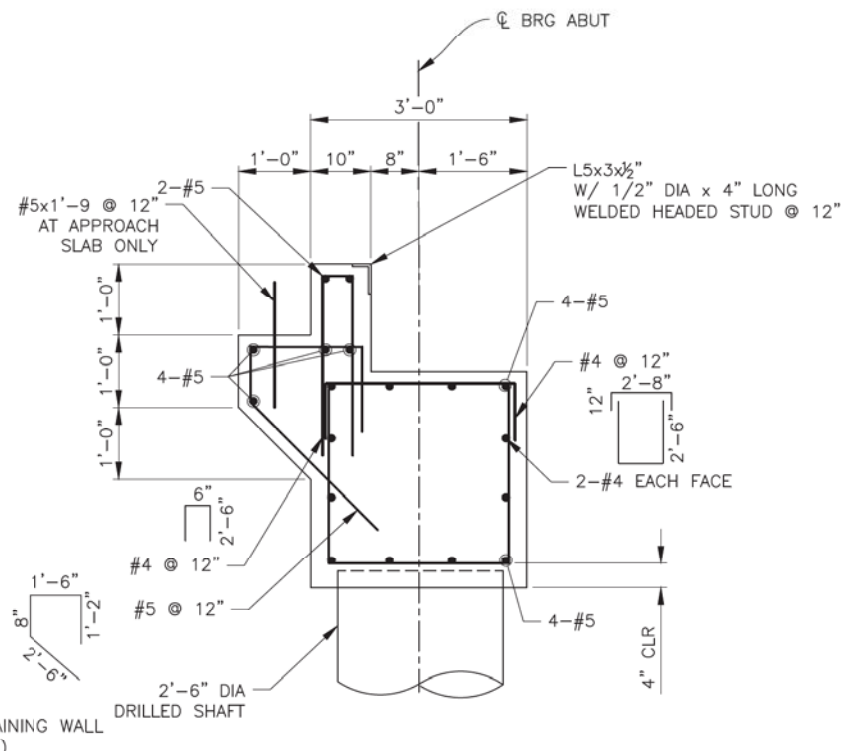
ABUTMENT PLAN
SCALE: 1" = 1'-0"



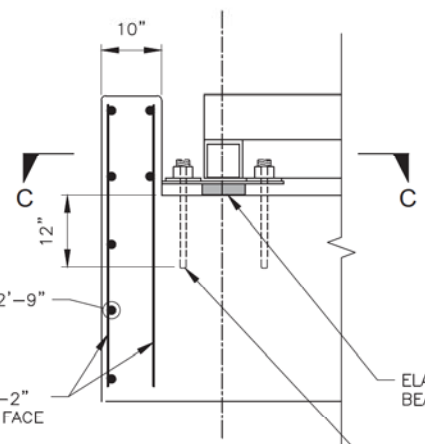
ABUTMENT ELEVATION
SCALE: 1/2" = 1'-0"

- NOTES**
- SEE S-1.06 FOR RETAINING WALL DETAILS AND ELEVATIONS.

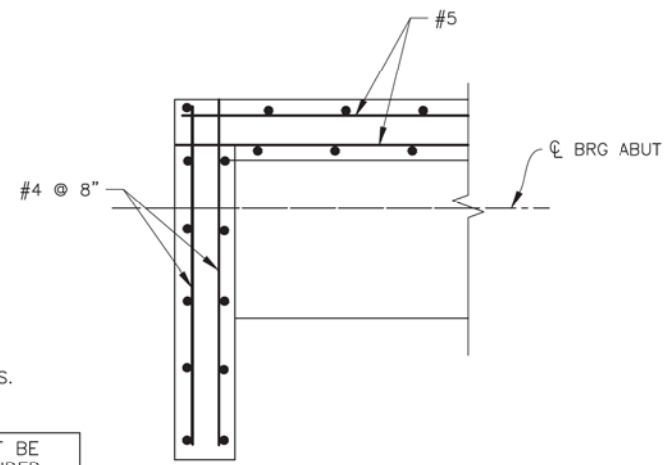
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



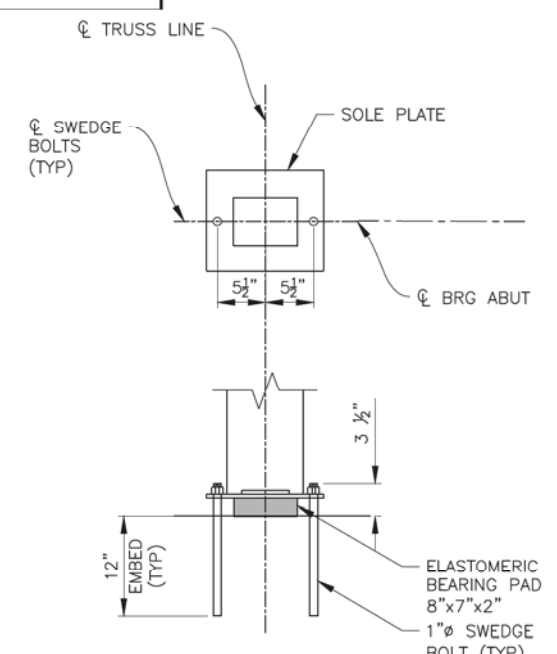
SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"

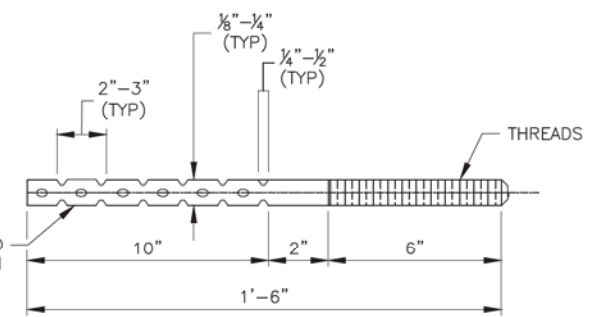


SECTION C-C
SCALE: 3/4" = 1'-0"



BEARING DETAILS
SCALE: 1" = 1'-0"

ELASTOMERIC BEARING PAD NOTES:
DESIGN METHOD A (AASHTO).
LOW TEMPERATURE ZONE A.
ELASTOMER GRADE 0.
SHEAR MODULUS G=130 PSI.
DUROMETER HARDNESS 55.
DESIGN LOADS 32 KIPS.
STEEL REINFORCED (14 GAUGE).



1" DIA SWEDGE BOLT DETAIL
SCALE: NTS

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX, CITY CODE CHAPTER 2, SECTION 2-28. THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

S-1.04
ABUTMENT PLAN AND ELEVATION
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: SEO	DR: JRR	CK: AGG	SHEET NO.	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.097	2.182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 07/14/17

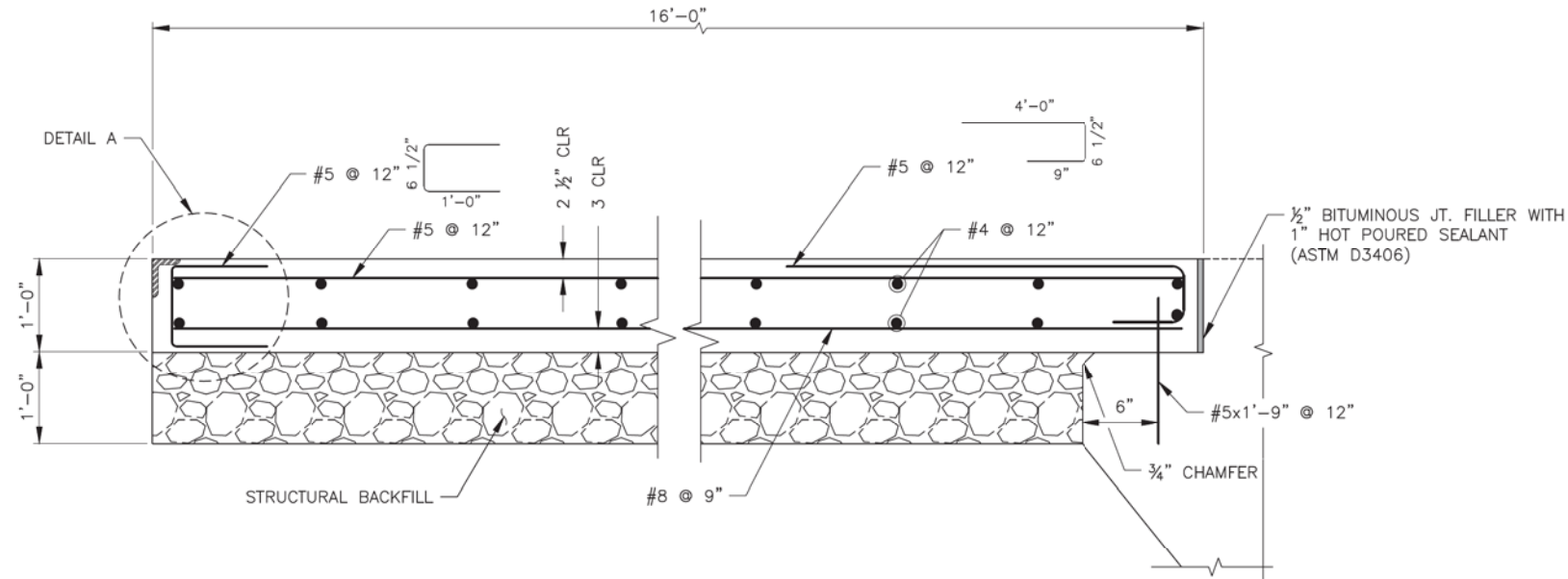


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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ethos ENGINEERING, INC.				
DES: SEO	DR: JRR	CK: AGG	DATE: 07/17/17	

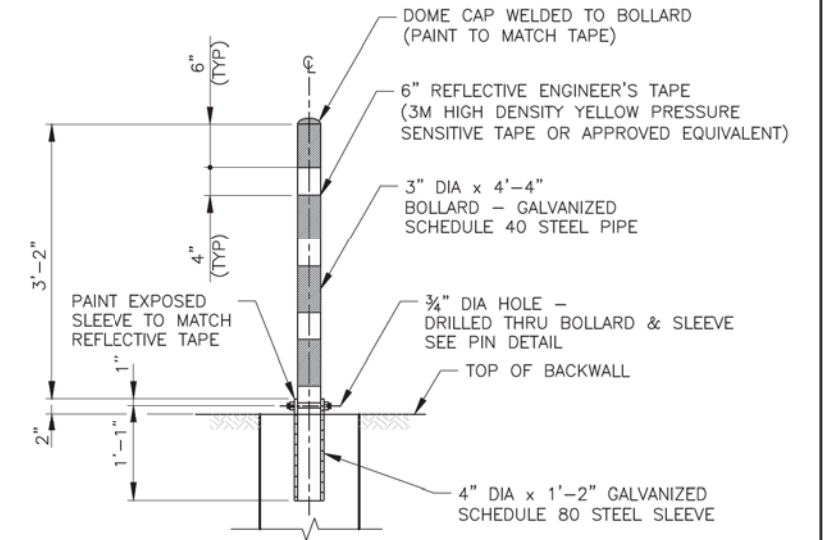
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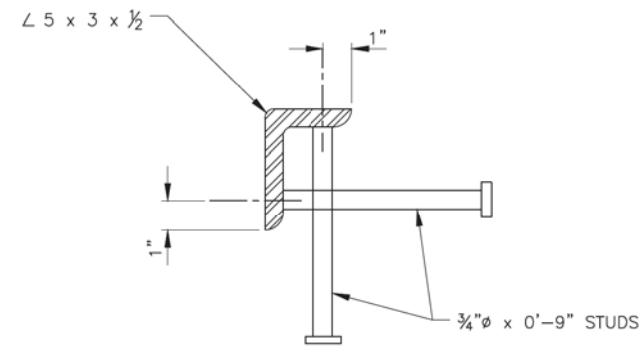
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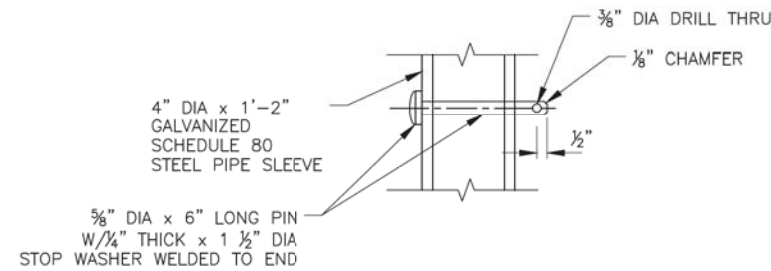
APPROACH SLAB SECTION
SCALE: 1" = 1'-0"



REMOVABLE BOLLARD DETAIL



DETAIL A
SCALE: 3/4" = 1'-0"



PIN DETAIL
NTS

NOTE:
ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY BRIDGE WELDING CODE, D1 5-88 LATEST EDITION

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

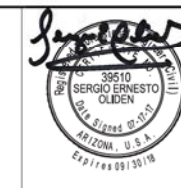


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S-1.05				
MISCELLANEOUS DETAILS				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: SEO	DR: JRR	CK: AGG	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,098	2,182
SCALE:				

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 07/14/17

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



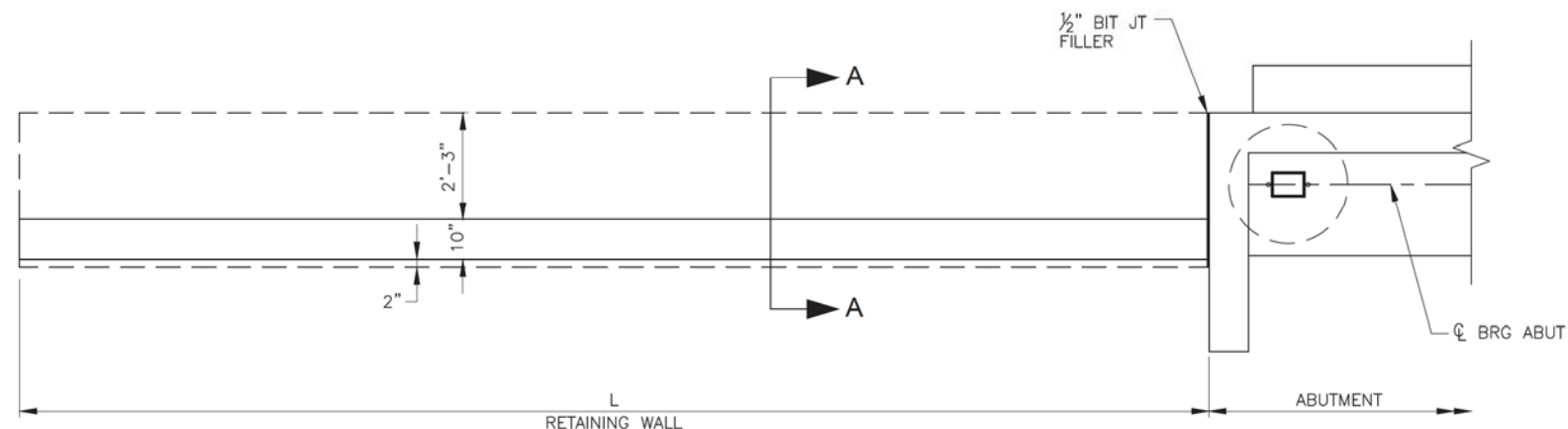
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,099	2,182

DES: SEO DR: JRR CK: AGG DATE: 07/17/17

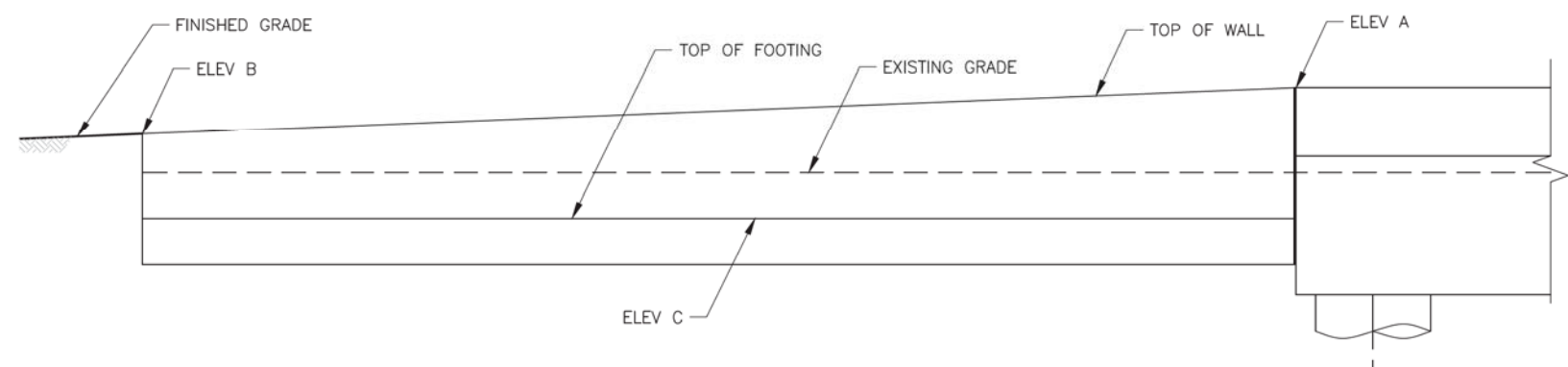
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



PLAN
SCALE: 1/2" = 1'-0"

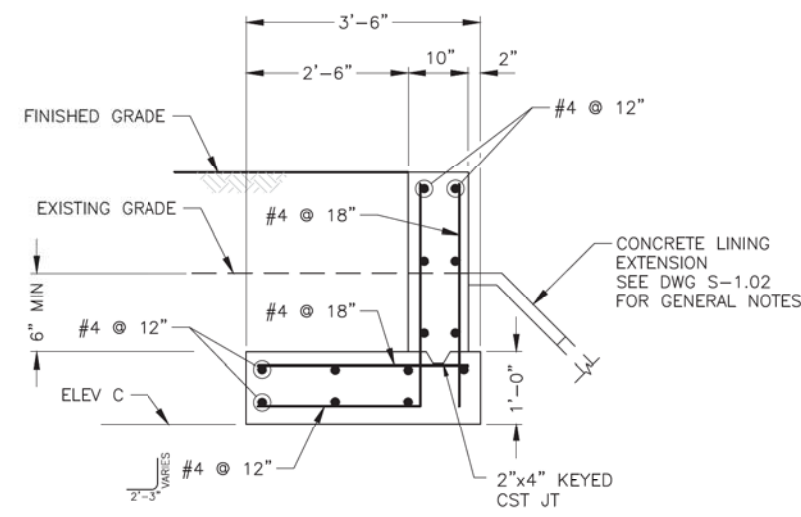


ELEVATION
SCALE: 1/2" = 1'-0"

RETAINING WALL SCHEDULE					
LOCATION	RETAINING WALL	L	ELEV A	ELEV B	ELEV C
ABUT 1	1	30'-0"	1140.17	1138.97	1136.97
ABUT 1	2	38'-0"	1140.17	1138.67	1136.67
ABUT 2	3	29'-0"	1140.17	1139.04	1137.04
ABUT 2	4	25'-0"	1140.17	1139.22	1137.22

NOTES:

- THE BOTTOM OF THE FOUNDATION EXCAVATION MUST BE HAND-TAMPED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698A TO A DEPTH OF 6 INCHES.



SECTION A-A
SCALE: 3/4" = 1'-0"



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S-1.06
RETAINING WALL DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

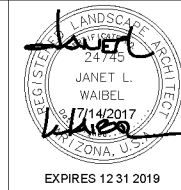
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

DES: SEO	DR: JRR	CK: AGG	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2,099	2,182

SCALE:

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 07/14/17

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



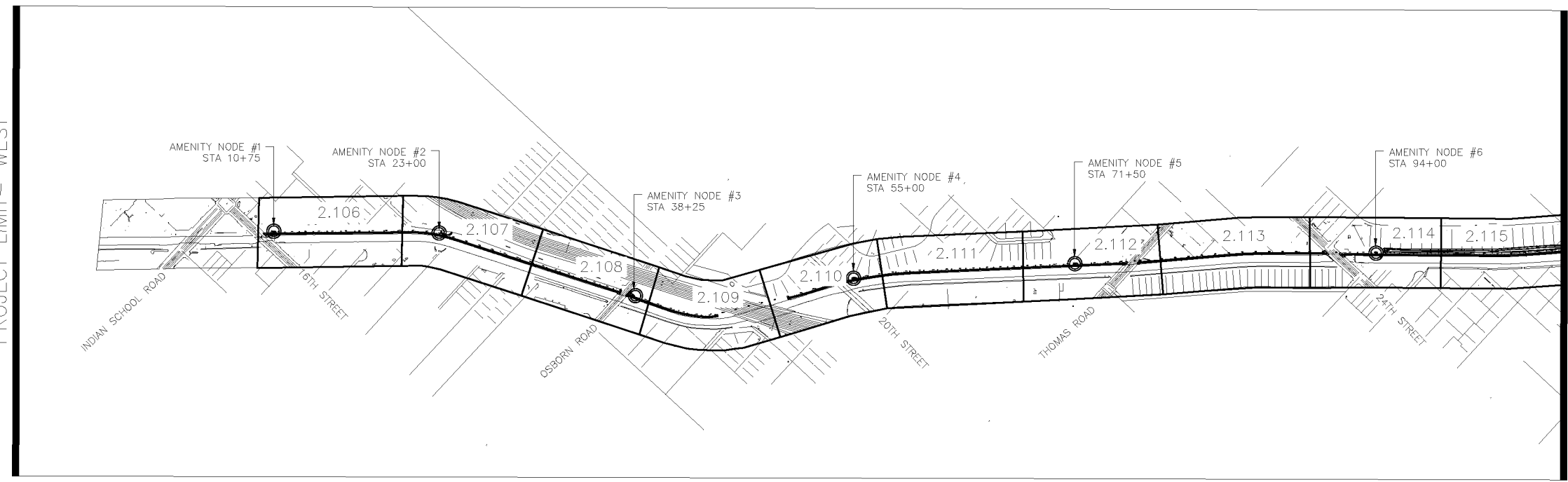
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.100	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	
Note: Amenity node details on sheet 2.101				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

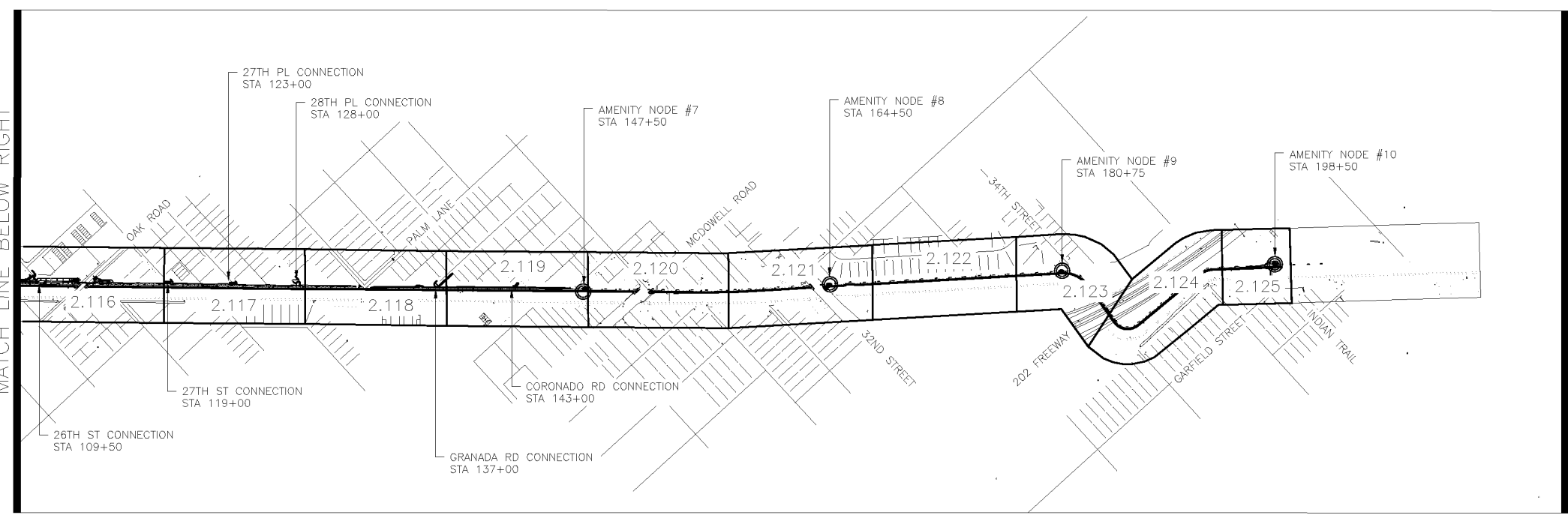
NO.	DESCRIPTION	REV BY	CHK BY	DATE

PROJECT LIMIT - WEST

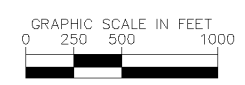


MATCH LINE BELOW LEFT

MATCH LINE BELOW RIGHT



PROJECT LIMIT - EAST



Waibel & Associates
Landscape Architecture

master planning gardens & consulting urban design

Phone 480.893.3849 Fax 480.893.3846
8611 South Priest Drive, Suite 101
Tempe AZ 85284
e-mail: janet@waibel-la.com

Two working days before you dig. CALL FOR THE BLUE STAKES 602-263-1100 (Blue Stakes Center)

CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

AMENITY NODE AND NEIGHBORHOOD CONNECTION OVERVIEW

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

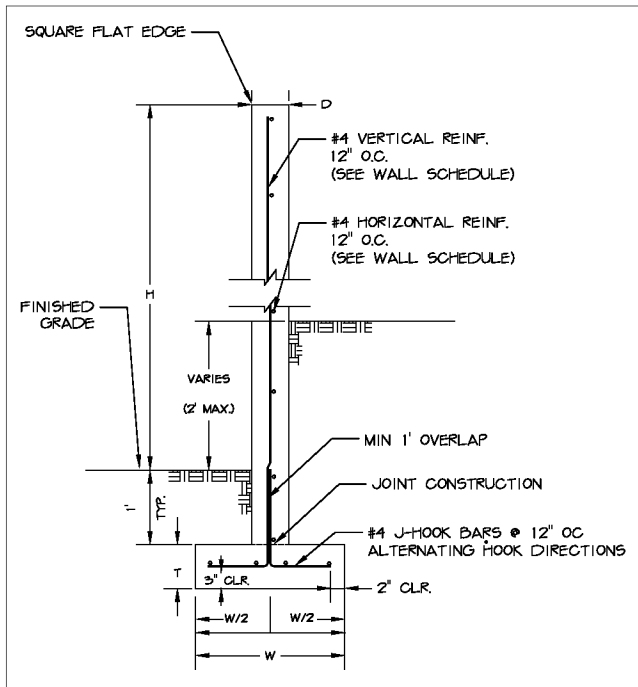
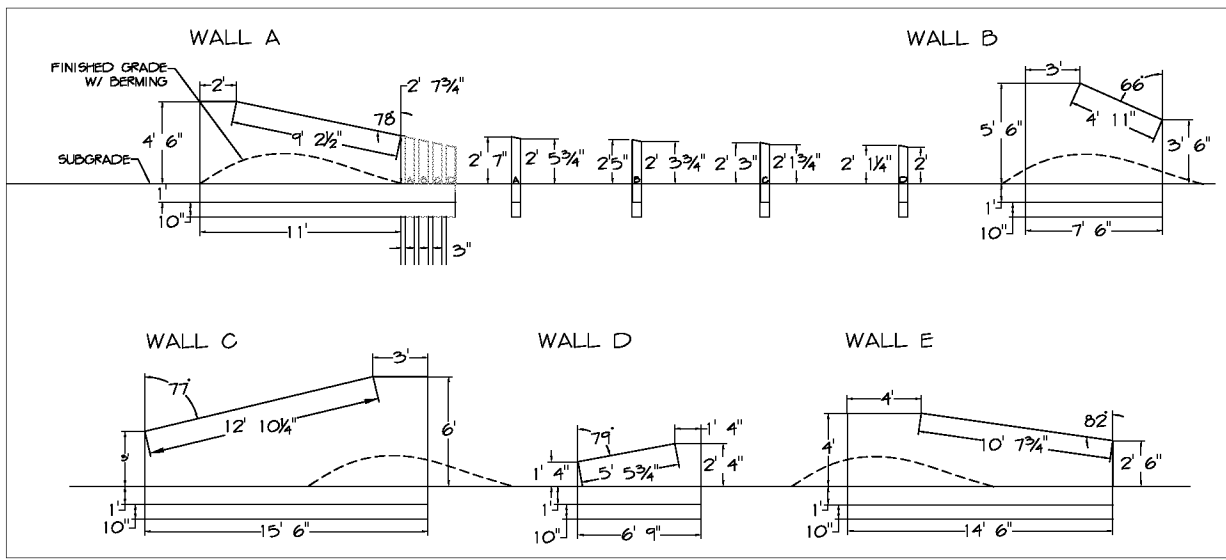
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.100	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.101	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY	CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE

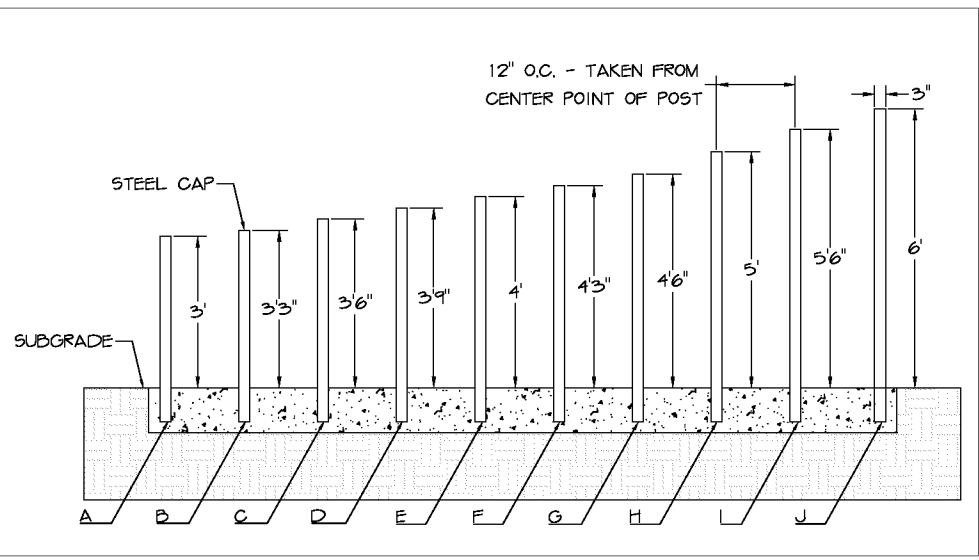
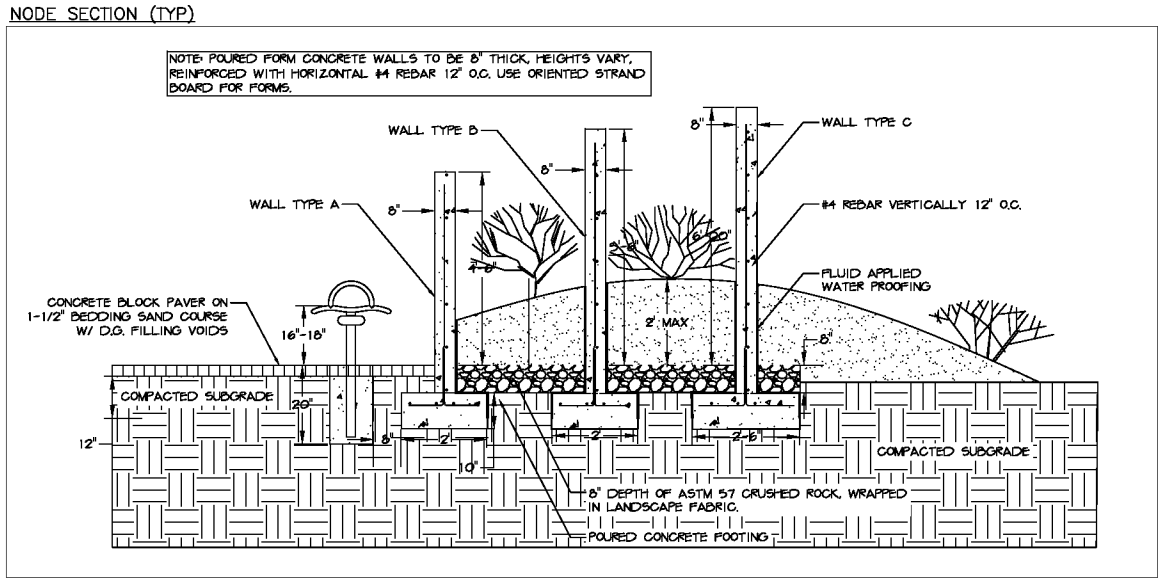


WALL NOTES:

- ALL CONCRETE SHALL BE CLASS 'S' (F' C= 3000 PSI)
- ALL WALL FACES ARE POURED IN PLACE, IN FORMS MADE FROM ORIENTED STRAND PLYWOOD IN 12" HORIZONTAL SECTIONS SO PLYWOOD LEAVES THE RELIEF TEXTURE OF THE BOARD ON THE FACE OF THE CONCRETE WALLS.
- ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS OTHERWISE NOTED.
- COMPACT BACKFILL FOR FOOTING AND WALL BASE MINIMUM 95% OF ASTM D698 MAXIMUM DRY DENSITY.
- SEE PROJECT PLANS FOR WALL LAYOUT, FINISHED GRADE ELEVATIONS.
- DIMENSIONS SHALL NOT BE SCALED FROM DRAWING.

WALL SCHEDULE								
WALL TYPE	WALL THICK (D)	WALL HEIGHT (H)	FTG. DEPTH (T)	FTG. WIDTH (W)	REBAR REINFORCEMENT			FACTORED AVERAGE SOIL BEARING PRESSURE (PSF)
					WALL VERT.	FOOTING BOTTOM TRANS.	FOOTING BOTTOM LONG.	
A	8"	4'-6"	10"	2'	#4 @ 12"	#4 @ 12"	2-#4	1200
B	8"	5'-6"	10"	2'	#4 @ 12"	#4 @ 12"	2-#4	1200
C	8"	6'	10"	2'-6"	#4 @ 12"	#4 @ 12"	4-#4	1300
D	8"	2'-4"	10"	1'-6"	#4 @ 12"	#4 @ 12"	2-#4	1000
E	8"	4'	10"	2'	#4 @ 12"	#4 @ 12"	2-#4	1200

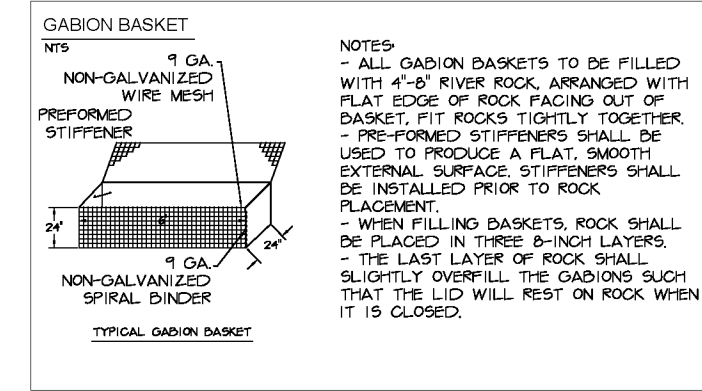
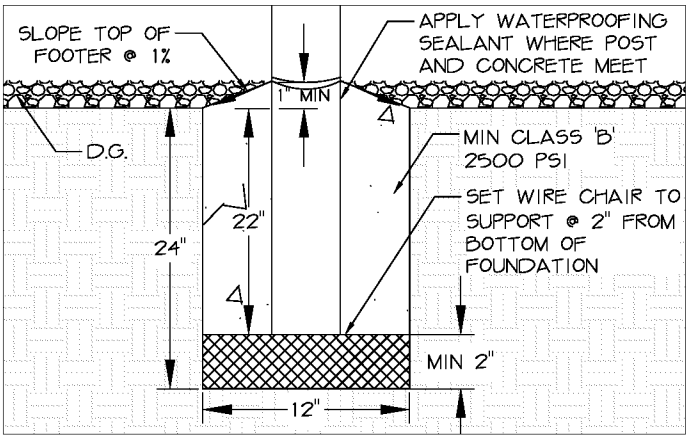
* WALL HEIGHT MEASURED FROM FINISHED GRADE EXCLUSIVE OF VARYING MOUND HEIGHTS AROUND WALLS



POST SCHEDULE		
POST TYPE	POST HEIGHT FROM SUBGRADE	QTY
A	3'	19
B	3'-3"	39
C	3'-6"	42
D	3'-9"	52
E	4'	57
F	4'-3"	63
G	4'-6"	51
H	5'	40
I	5'-6"	42
J	6'	23

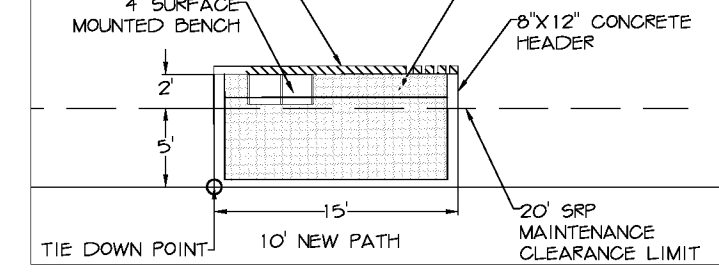
NOTES:

- ALL POSTS ARE 3" GALVANIZED STEEL, LENGTH VARIES; SEE ABOVE
- HEIGHT REPRESENTS POST DIMENSION ABOVE SUBGRADE
- ALL GALVANIZED POSTS TO BE TREATED WITH GALVANIZED STEEL COLORANT OR APPROVED EQUAL PRIOR TO INSTALLATION.
- SPACING BETWEEN ALL POSTS IS 12" O.C. TAKEN FROM CENTER POINT OF POST)
- POST FENCES ALL SET IN ONE CONTINUOUS FOOTING FOR EACH LENGTH OF FENCING
- POSTS TO BE SET PLUMB & TEMPORARILY SUPPORTED UNTIL CONCRETE FOOTING IS SET.



NOTES:

- ALL GABION BASKETS TO BE FILLED WITH 4"-8" RIVER ROCK, ARRANGED WITH FLAT EDGE OF ROCK FACING OUT OF BASKET, FIT ROCKS TIGHTLY TOGETHER.
- PRE-FORMED STIFFENERS SHALL BE USED TO PRODUCE A FLAT, SMOOTH EXTERNAL SURFACE. STIFFENERS SHALL BE INSTALLED PRIOR TO ROCK PLACEMENT.
- WHEN FILLING BASKETS, ROCK SHALL BE PLACED IN THREE 8-INCH LAYERS.
- THE LAST LAYER OF ROCK SHALL SLIGHTLY OVERFILL THE GABIONS SUCH THAT THE LID WILL REST ON ROCK WHEN IT IS CLOSED.



Waibel & Associates
Landscape Architecture

Phone 480.893.3849 Fax 480.893.3846
8611 South Priest Drive, Suite 101
Tempe, AZ 85284
e-mail: janet@waibel-la.com

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AMENITY NODE DETAILS

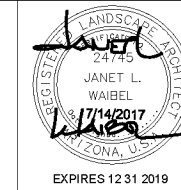
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.101	2.182

SCALE

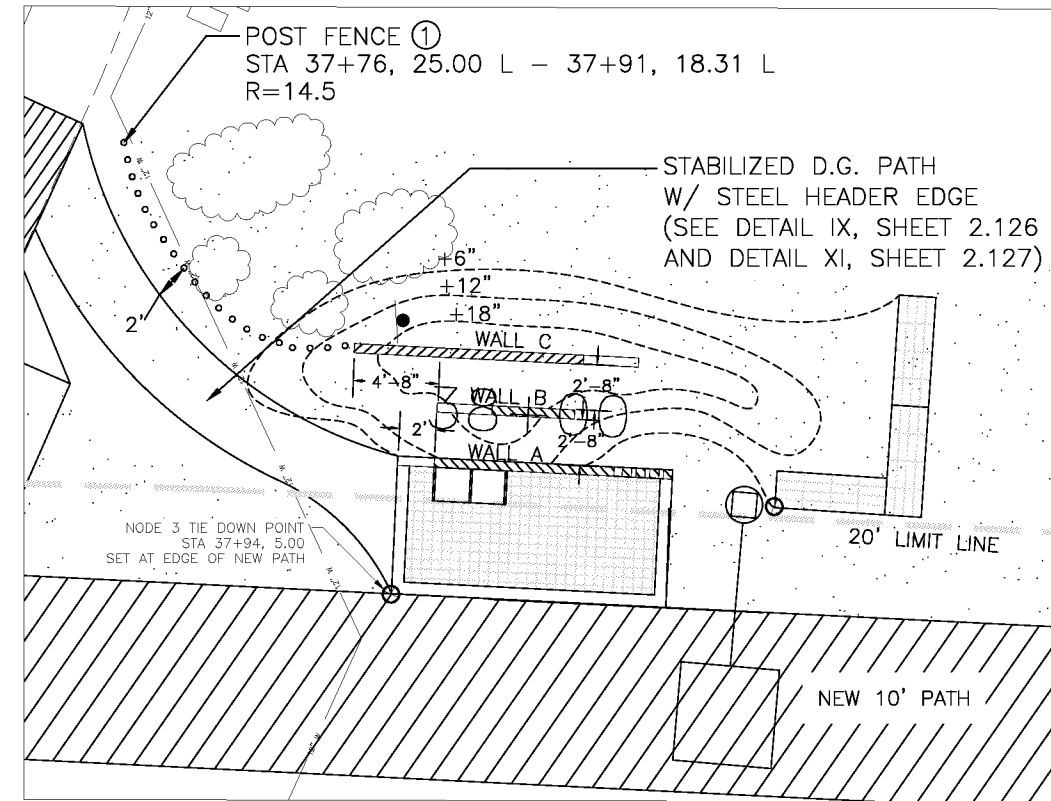
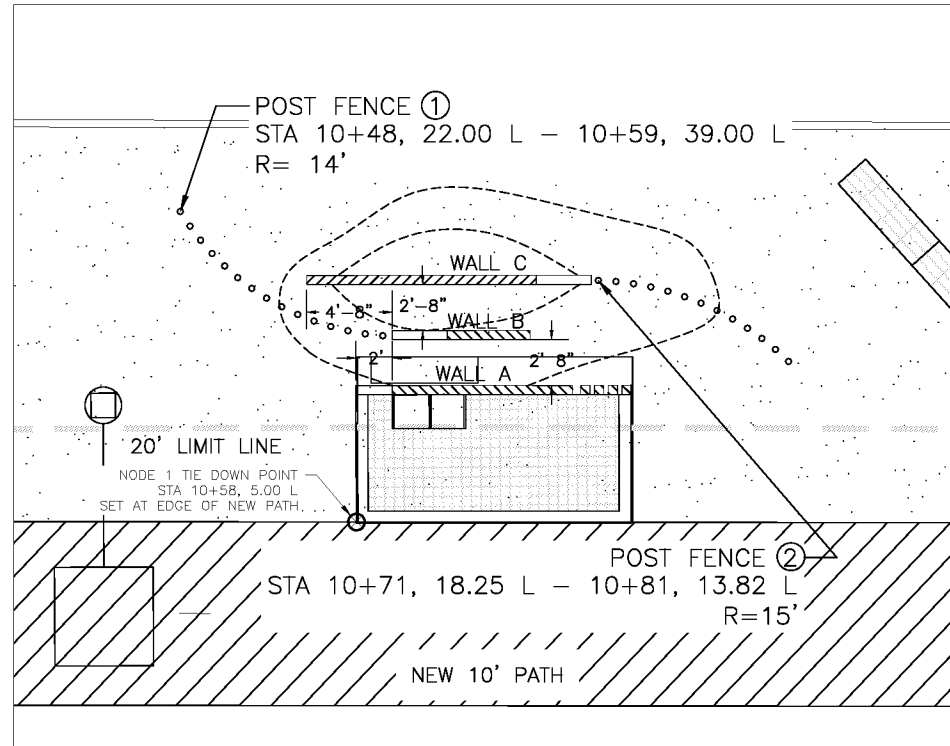
ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



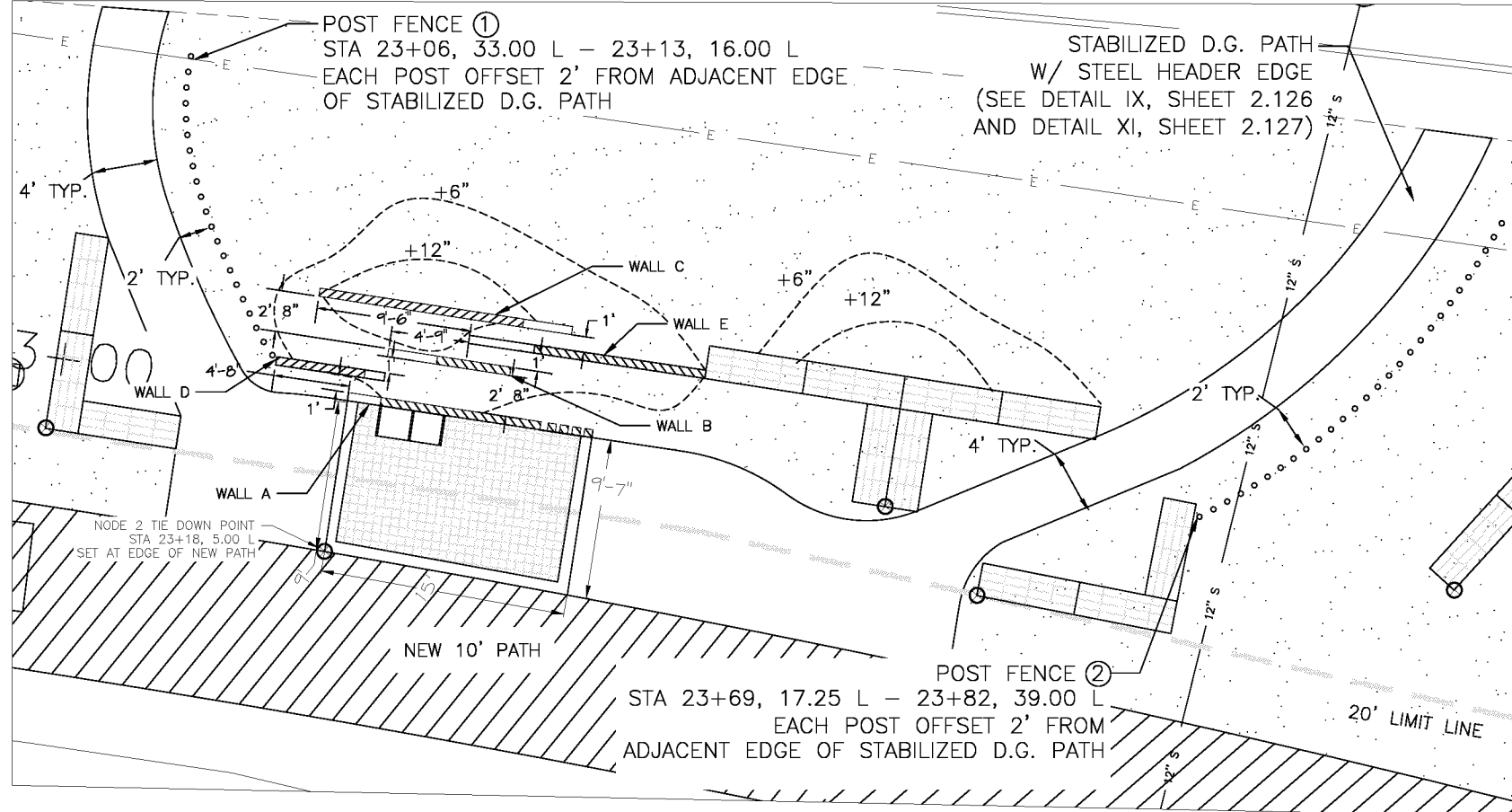
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.102	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

- Notes
- Nodes are outside pole and wire setup.
 - Contractor to provide clean fill for berming and complete all fine grading to transition to existing grades.
 - Refer to Landscape Plans for tree and shrub types.
 - Provide submittals and samples for all materials.
 - Refer to civil and electrical plans.
 - Coordinate all sleeves, electrical work and concrete pours to ensure inclusion of all elements and prevent conflicts.
 - All tie down points are dimensioned from the center line of the new concrete path.

Node 1: Sheet 2.106



Node 2: Sheet 2.107



Post Fence Schedule: See Sheet 2.101 for Post Sizes

NODE 1 POST FENCES	
①	B A B C D E F G H I J I H G
②	J I H G F G F E D E D C B
NODE 2 POST FENCES	
①	G H I J I H I J I H G F E D C B A B C D E
②	A B C C D E F G H I J J I H H I J I I H G F E D C B
NODE 3 POST FENCE	
①	E F G H I J I H G F E D C B A B C D E F

Waibel & Associates Landscape Architecture
 master planning gardens & consulting urban design
 Phone 480.893.3849 Fax 480.893.3846
 8611 South Priest Drive, Suite 101
 Tempe AZ 85284
 e-mail: janet@waibel-la.com

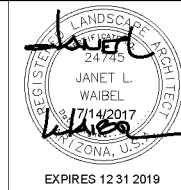
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
 "PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

AMENITY NODES
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.102	2.182

REVISION BY	DESCRIPTION	DATE
NO.		
NO.		
NO.		
NO.		

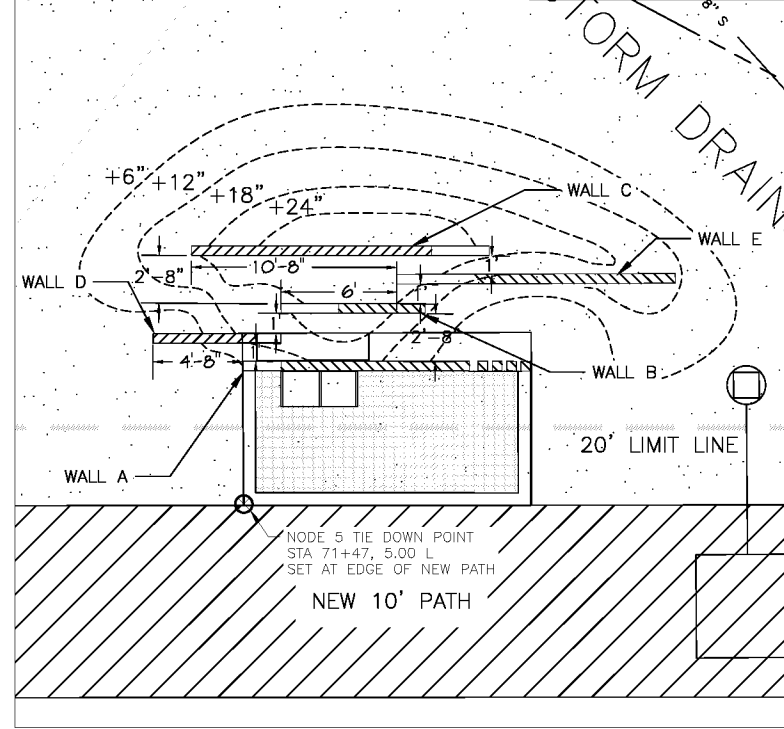
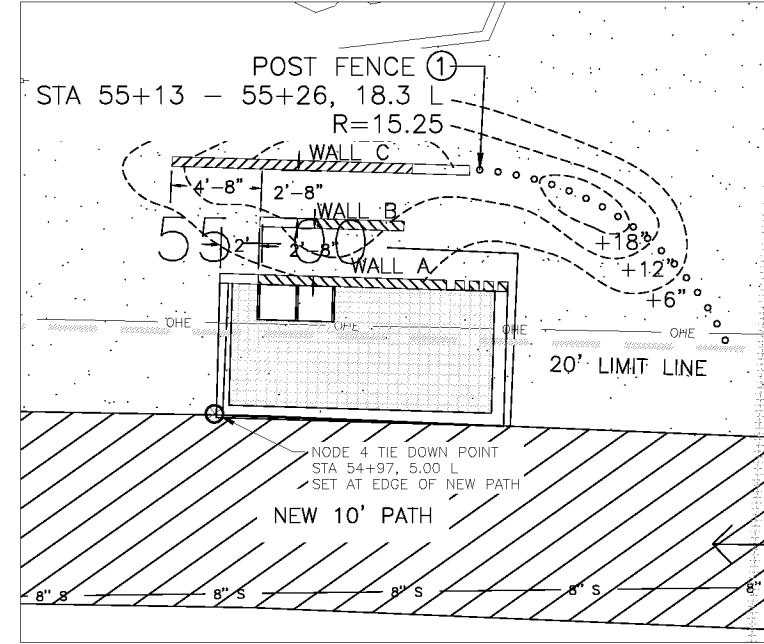
ST87600114 - GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL



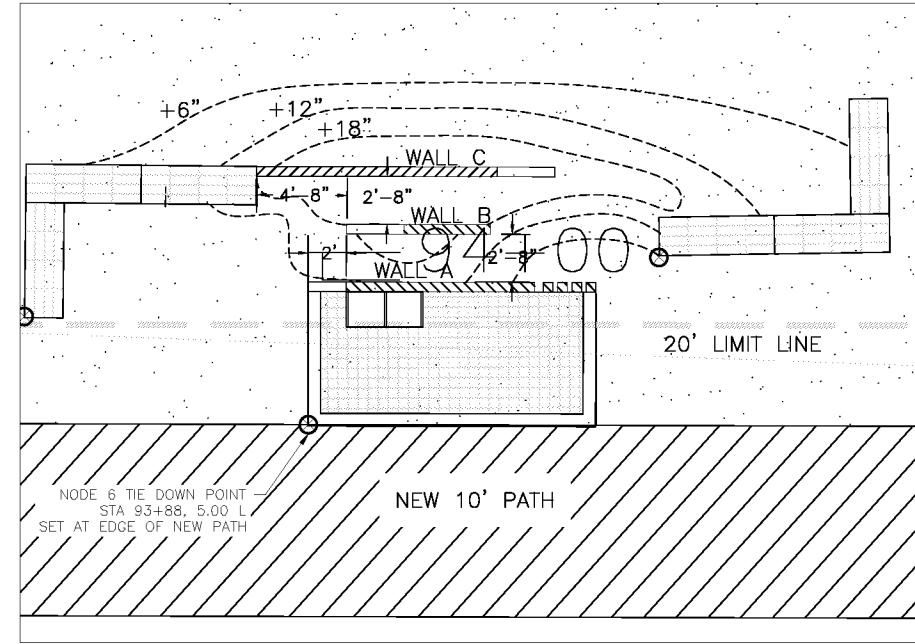
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.103	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

Node 5: Sheet 2.112

Node 4: Sheet 2.110

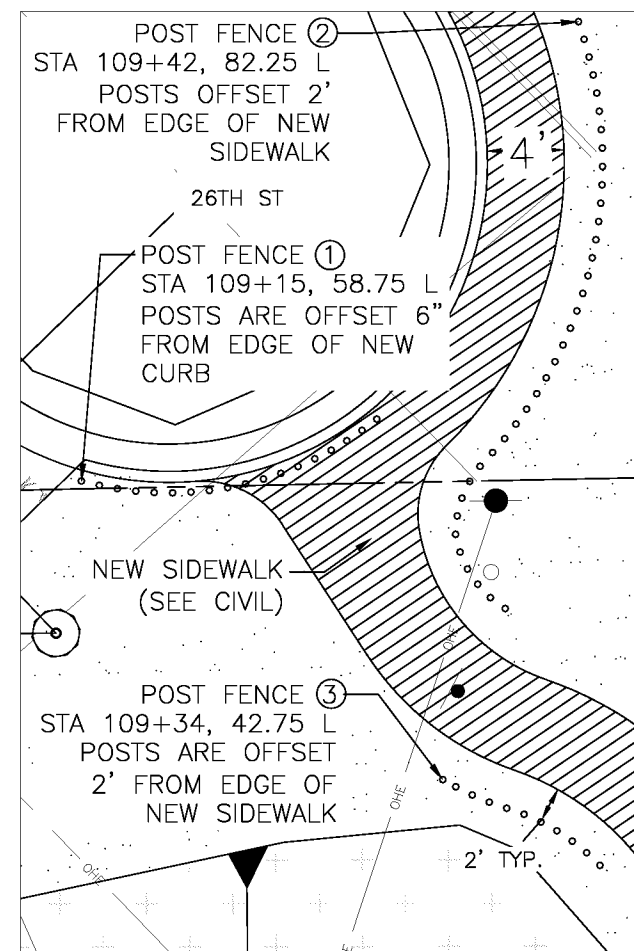


Node 6: Sheet 2.114

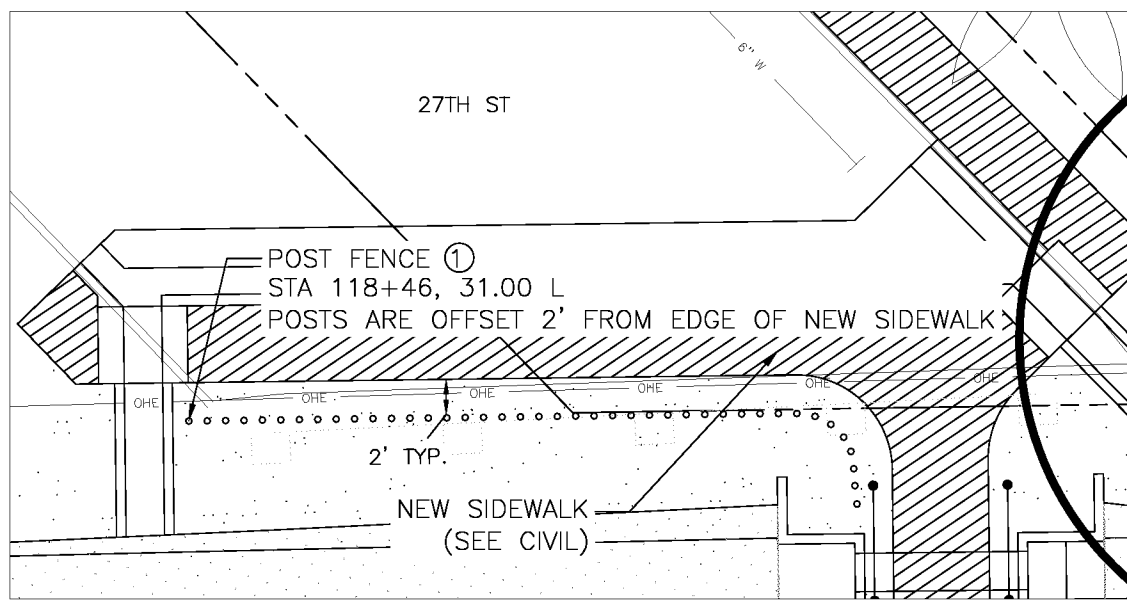


- Notes
- Nodes are outside pole and wire setup.
 - Contractor to provide clean fill for berming and complete all fine grading to transition to existing grades.
 - Refer to Landscape Plans for tree and shrub types.
 - Provide submittals and samples for all materials.
 - Refer to civil and electrical plans.
 - Coordinate all sleeves, electrical work and concrete pours to ensure inclusion of all elements and prevent conflicts.
 - All tie down points are dimensioned from the center line of the new concrete path.

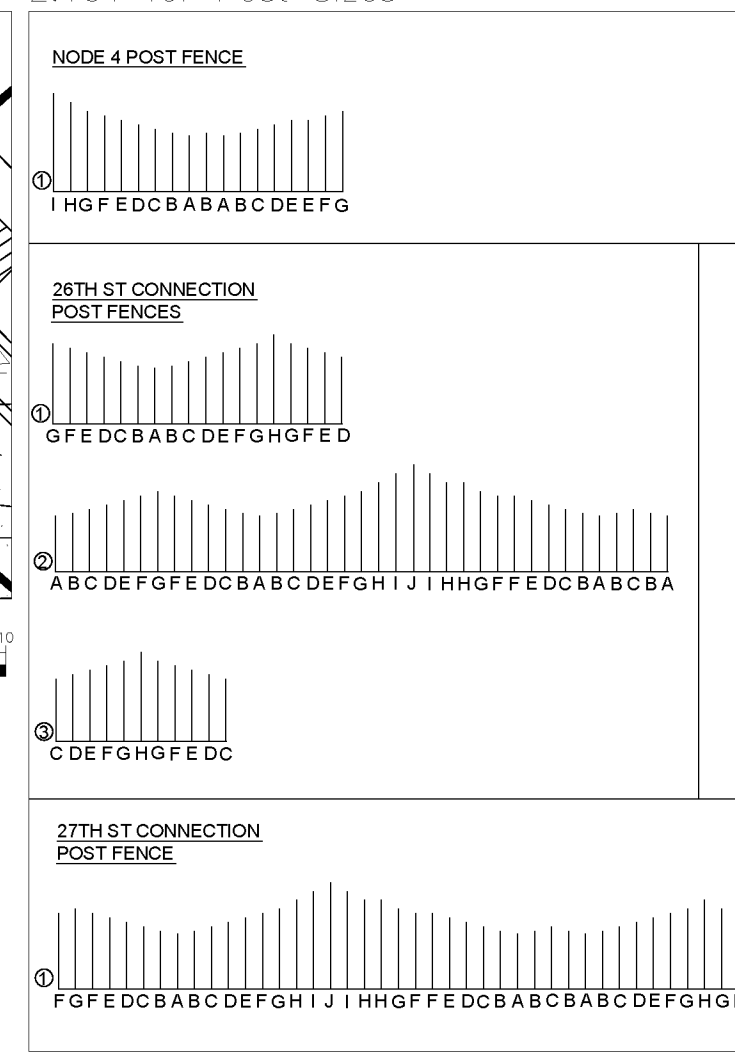
26th Street Neighborhood Connection: Sheet 2.116



27th Street Neighborhood Connection: Sheet 2.117



Post Fence Schedule: See Sheet 2.101 for Post Sizes



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AMENITY NODES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.103	2.182

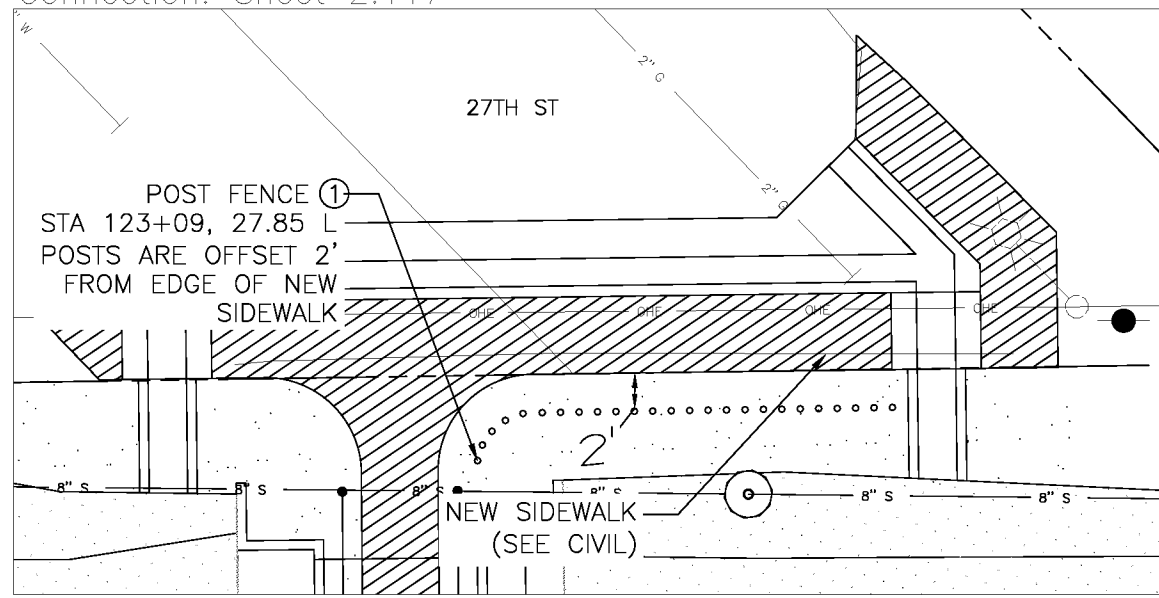
SCALE

REVISION BY	DESCRIPTION	DATE

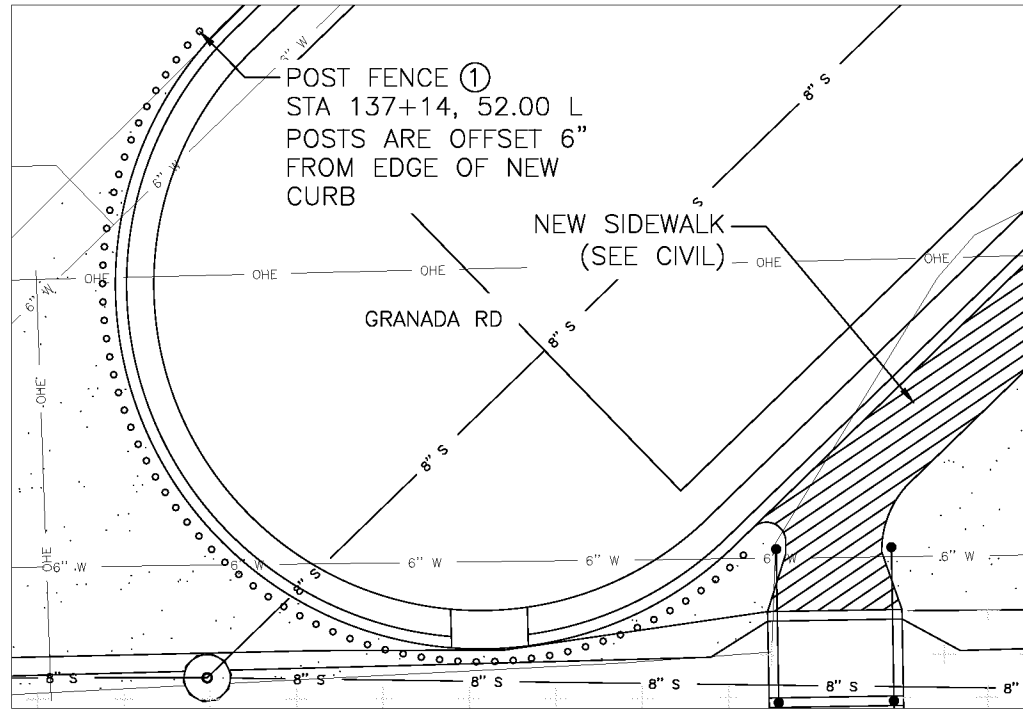
ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

27th Place Neighborhood
Connection: Sheet 2.117



Granada Ave Neighborhood Connection: Sheet 2.118



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.104	2.182

Waibel & Associates
ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

DES: JL DR: JKA CK: RCA DATE: 09/16/16

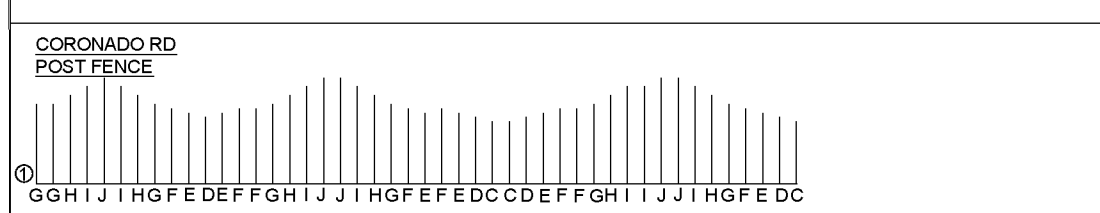
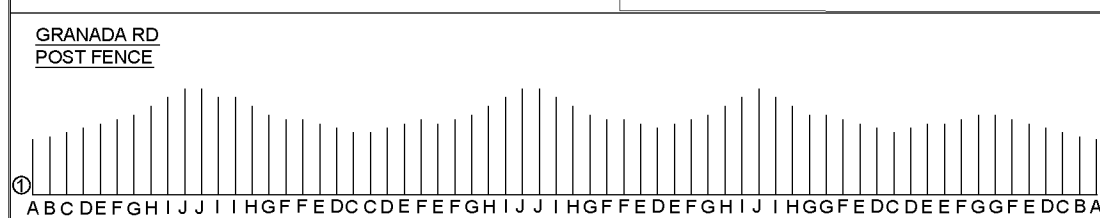
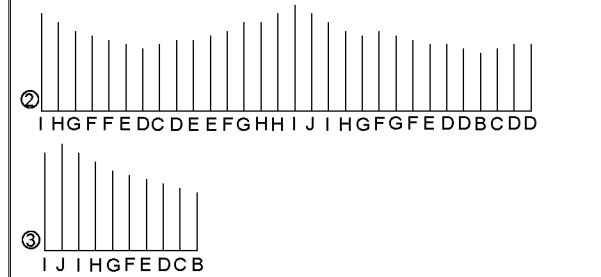
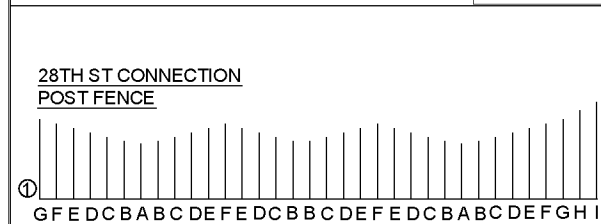
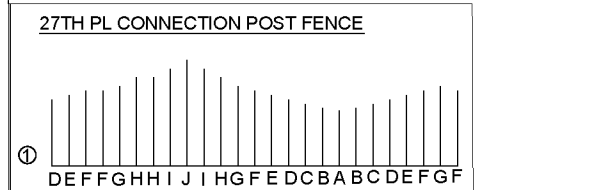
- Notes
- Nodes are outside pole and wire setup.
 - Contractor to provide clean fill for berming and complete all fine grading to transition to existing grades.
 - Refer to Landscape Plans for tree and shrub types.
 - Provide submittals and samples for all materials.
 - Refer to civil and electrical plans.
 - Coordinate all sleeves, electrical work and concrete pours to ensure inclusion of all elements and prevent conflicts.

NO.	DESCRIPTION	REV BY	CHK BY	DATE

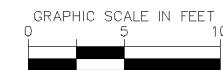
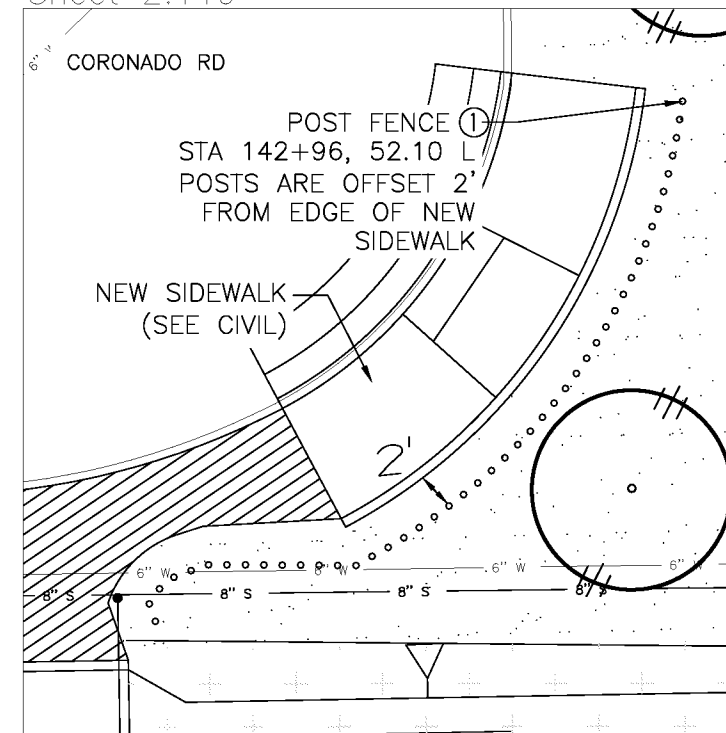
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

Post Fence Schedule: See Sheet 2.101 for Post Schedule



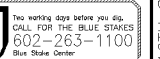
Coronado Ave Neighborhood Connection:
Sheet 2.119



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AMENITY NODES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.104	2.182

SCALE

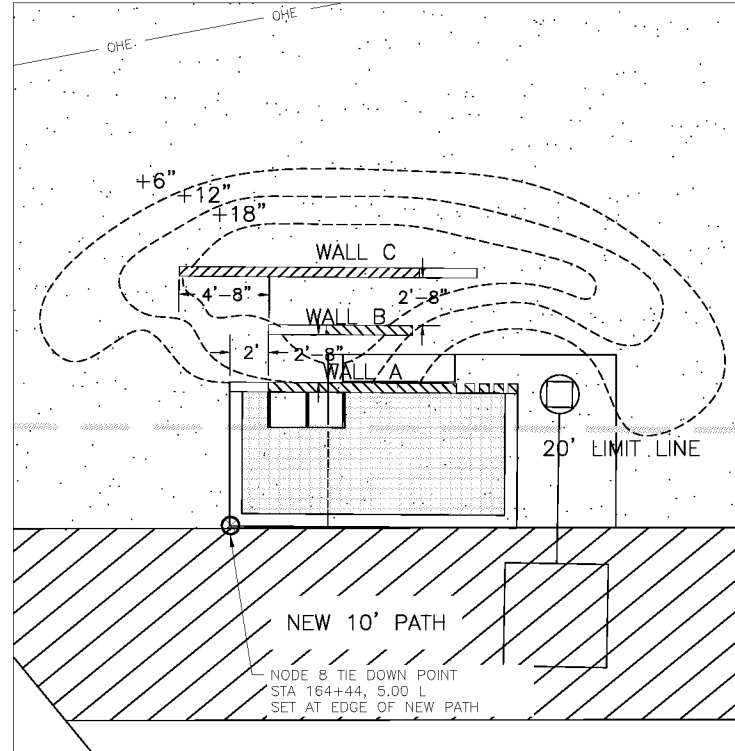
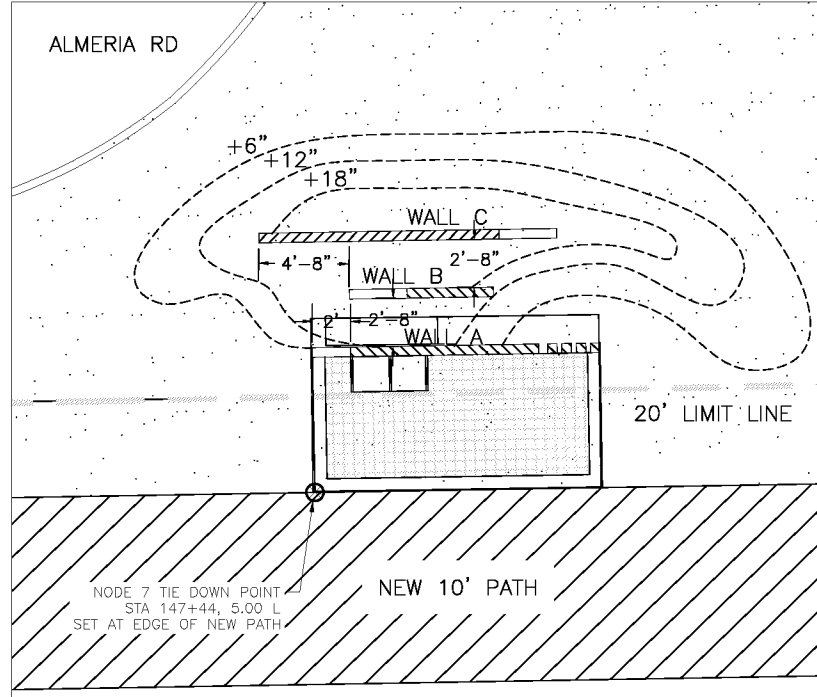
ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



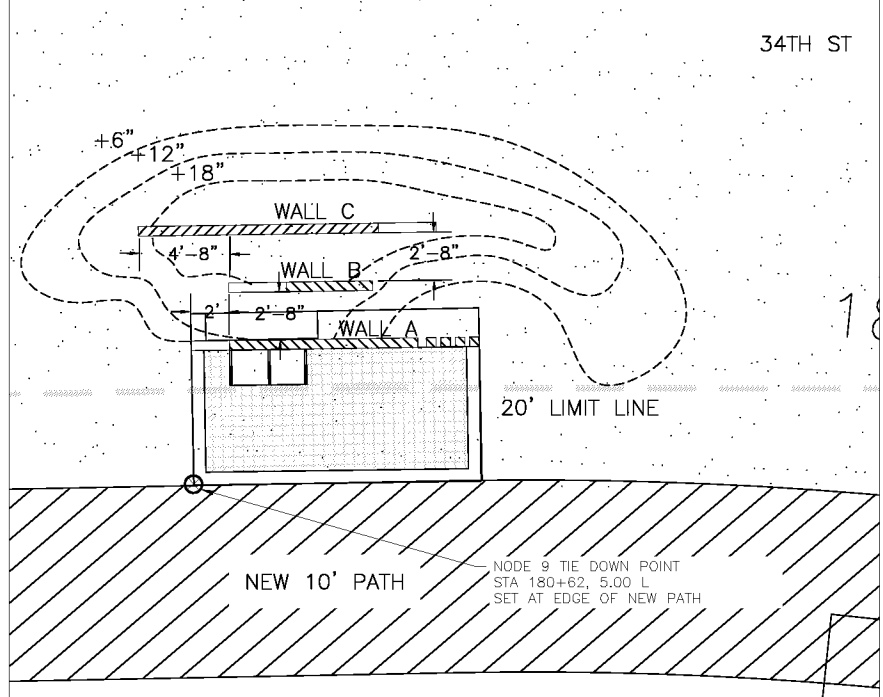
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.105	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

Node 8: Sheet 2.121

Note 7: Sheet 2.119

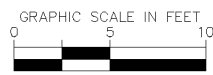
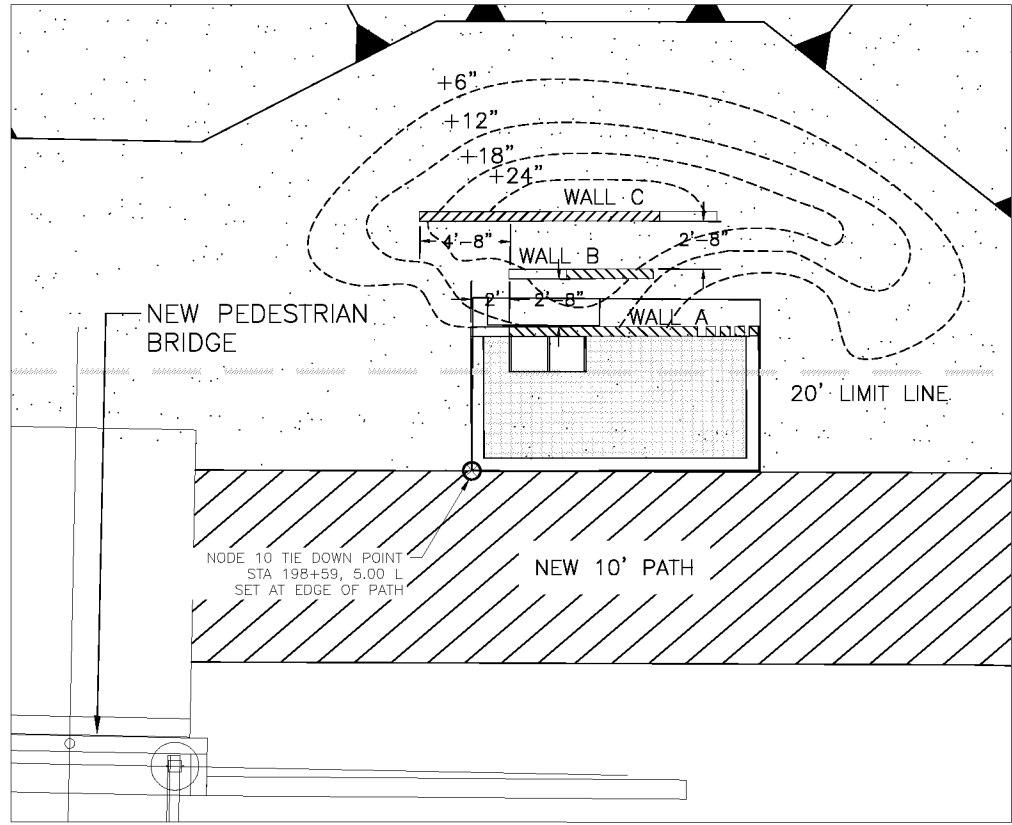


Node 9: Sheet 2.123



- Notes
- Nodes are outside pole and wire setup.
 - Contractor to provide clean fill for berming and complete all fine grading to transition to existing grades.
 - Refer to Landscape Plans for tree and shrub types.
 - Provide submittals and samples for all materials.
 - Refer to civil and electrical plans.
 - Coordinate all sleeves, electrical work and concrete pours to ensure inclusion of all elements and prevent conflicts.
 - All tie down points are dimensioned from the center line of the new concrete path.

Node 10: Sheet 2.125



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AMENITY NODES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.105	2.182

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

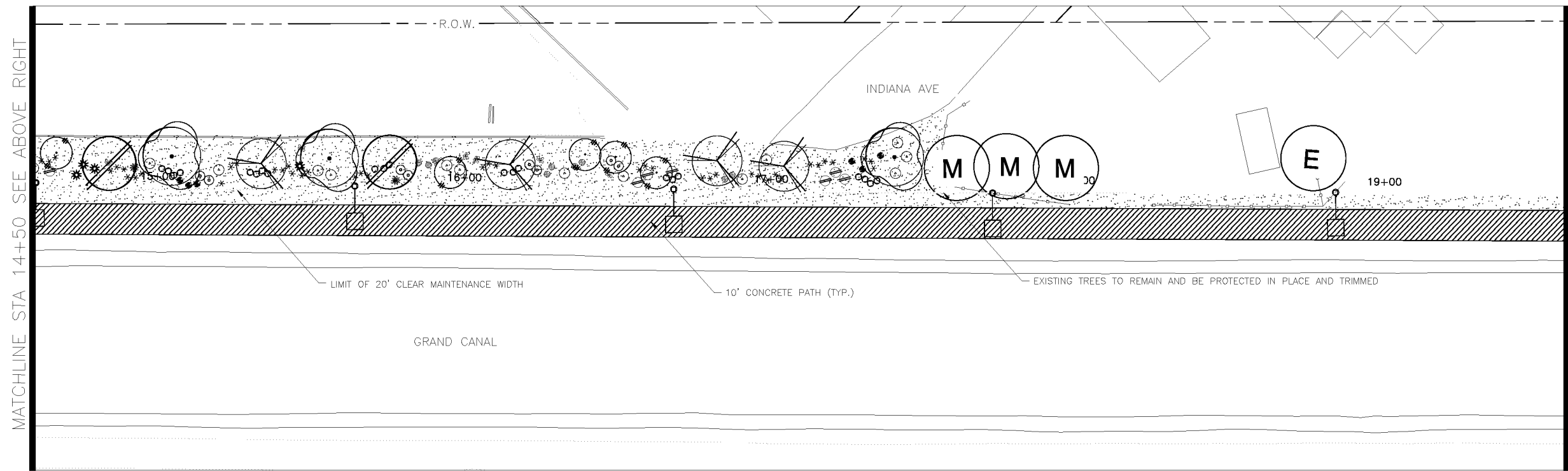
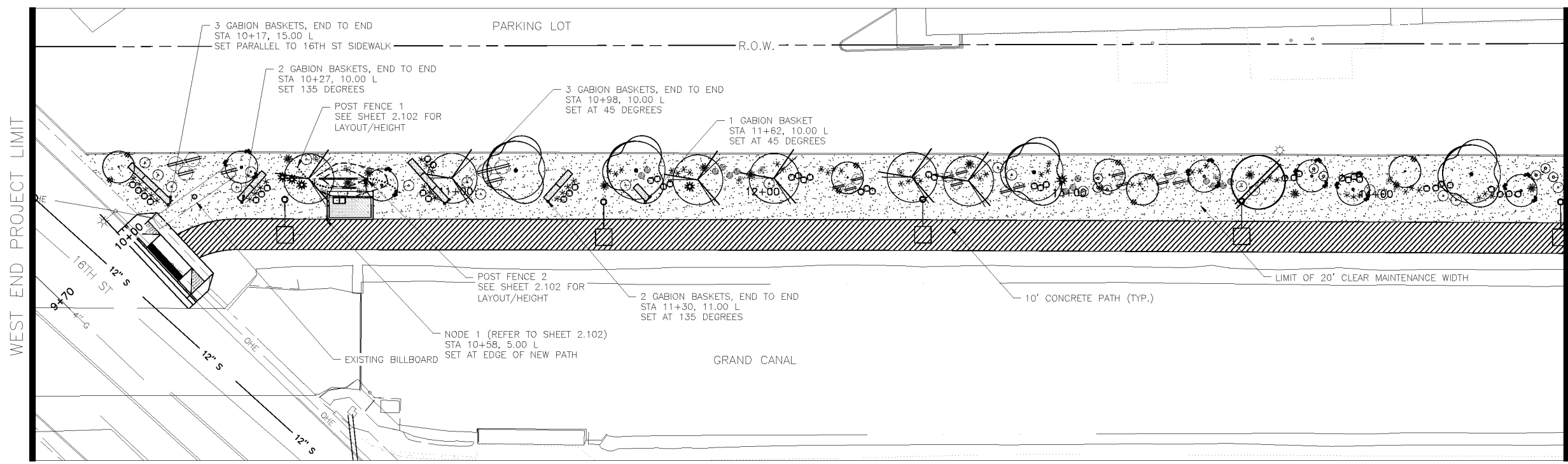
NO.	DESCRIPTION	REV BY	CHK BY	DATE

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.106	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE
REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE
REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Olneya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thomberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria laricifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysoactinia mexicana * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'
	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path

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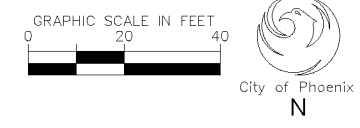
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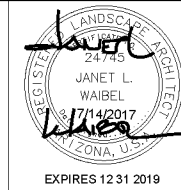
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CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.106	2.182
SCALE				

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

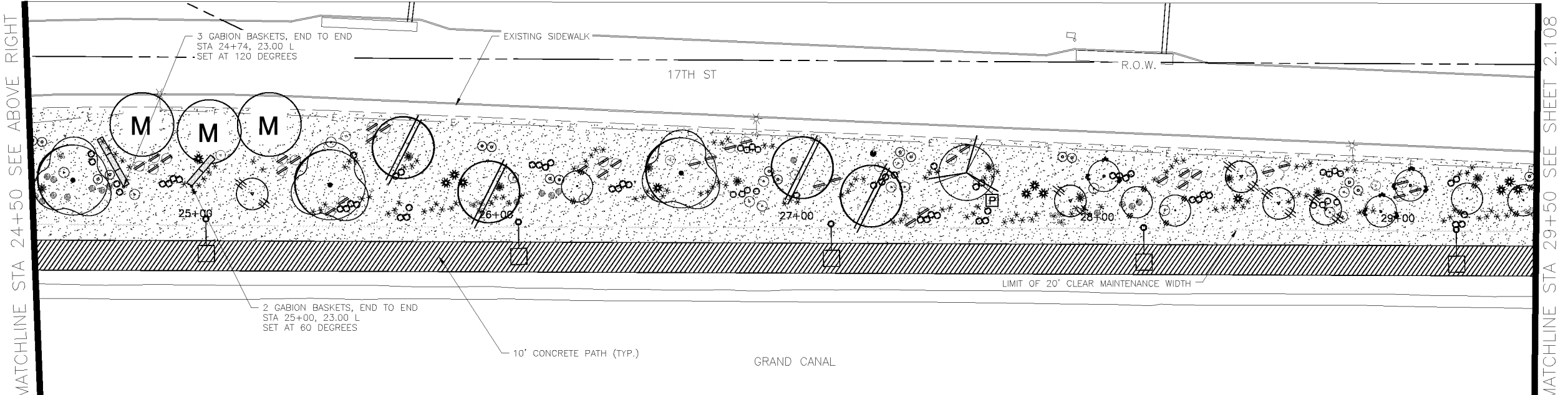
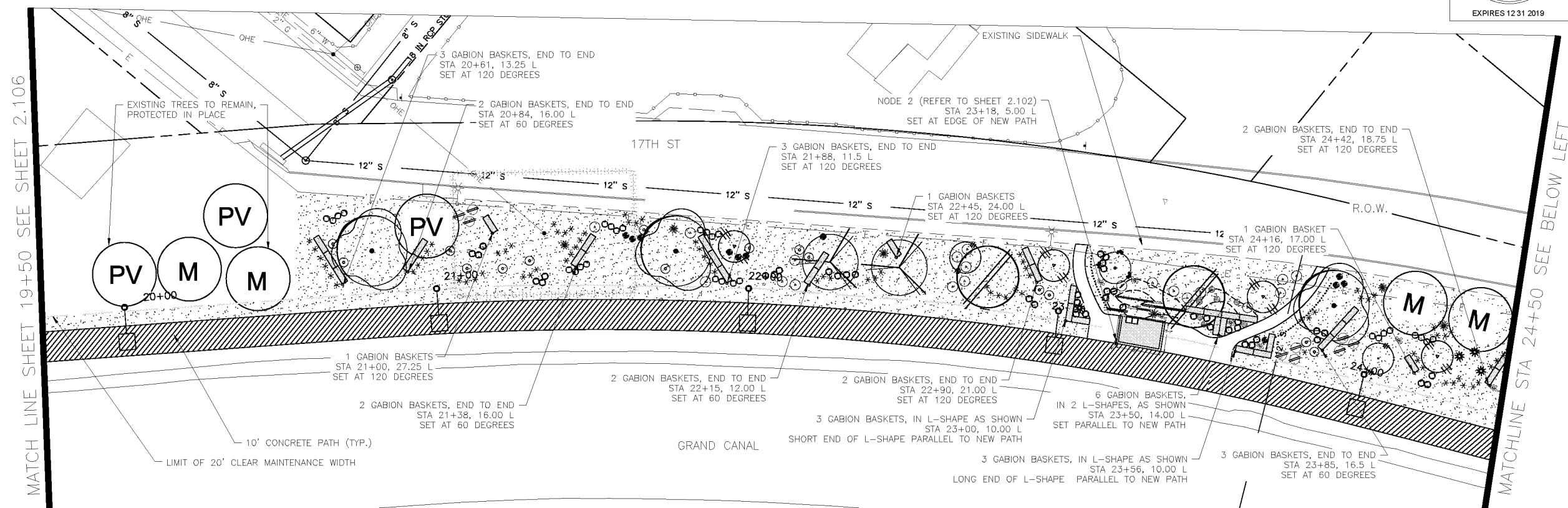


ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

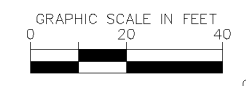


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.107	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Olneya tesota IRONWOOD TREE	8' H x 8' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thornberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
* SRP Compliant Tree		
SHRUBS	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Erica menziesii TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysanthemum mexicanum * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	ACCENTS	Opuntia violacea santa rita PURPLE PRICKLY PEAR
Fouquieria splendens OCOTILLO		6'-7' HEIGHT
Yucca rupicola TWISTED LEAF YUCCA		15 GAL
MATERIALS	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.
Gabion Basket		2' x 2' x 6"
Tie Down Point for Gabion Baskets and Nodes		Offset dimension measured from center line of new path



NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.107	2.182

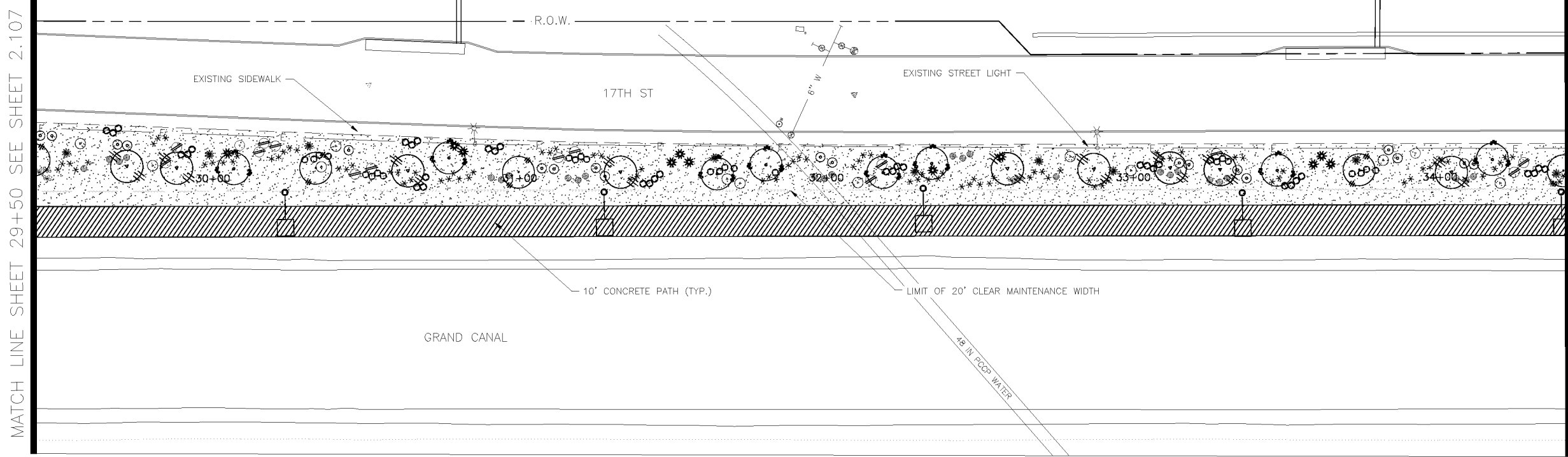
ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

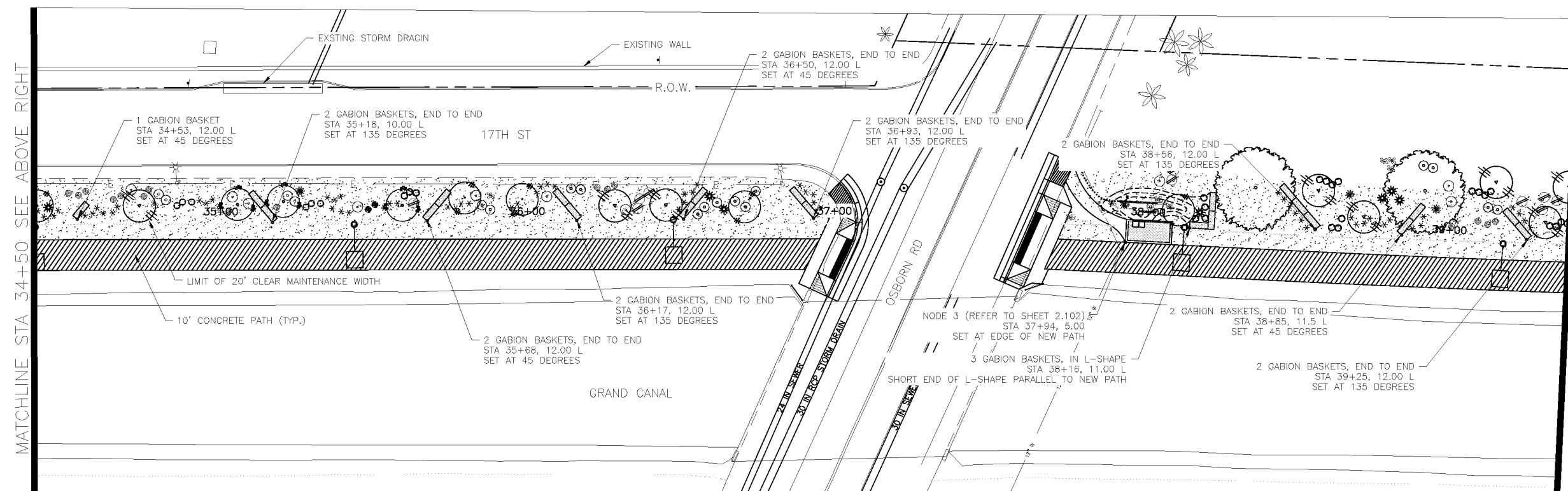


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.108	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



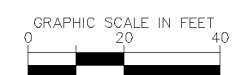
MATCHLINE STA 34+50 SEE BELOW LEFT



MATCHLINE STA 39+50 SEE SHEET 2.109

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Olneya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thornberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUA SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria laricifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	COCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	SONORAN WILDFLOWER SEED MIX	
	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'
	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path

NOTE:
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Landscape Architecture

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.108	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET



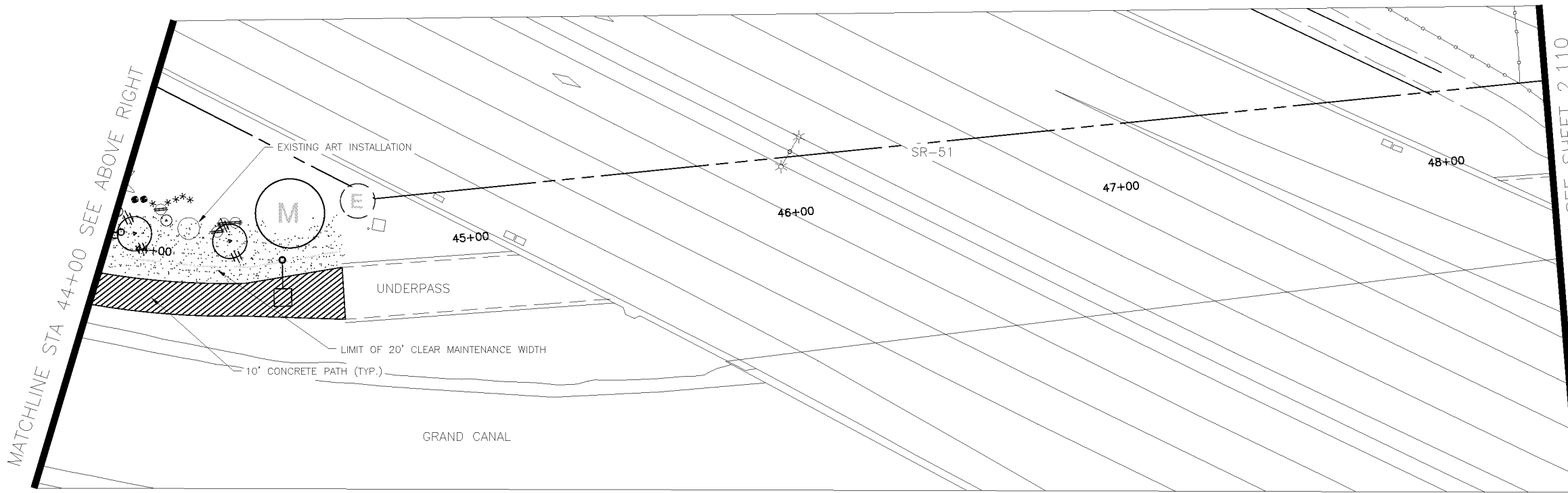
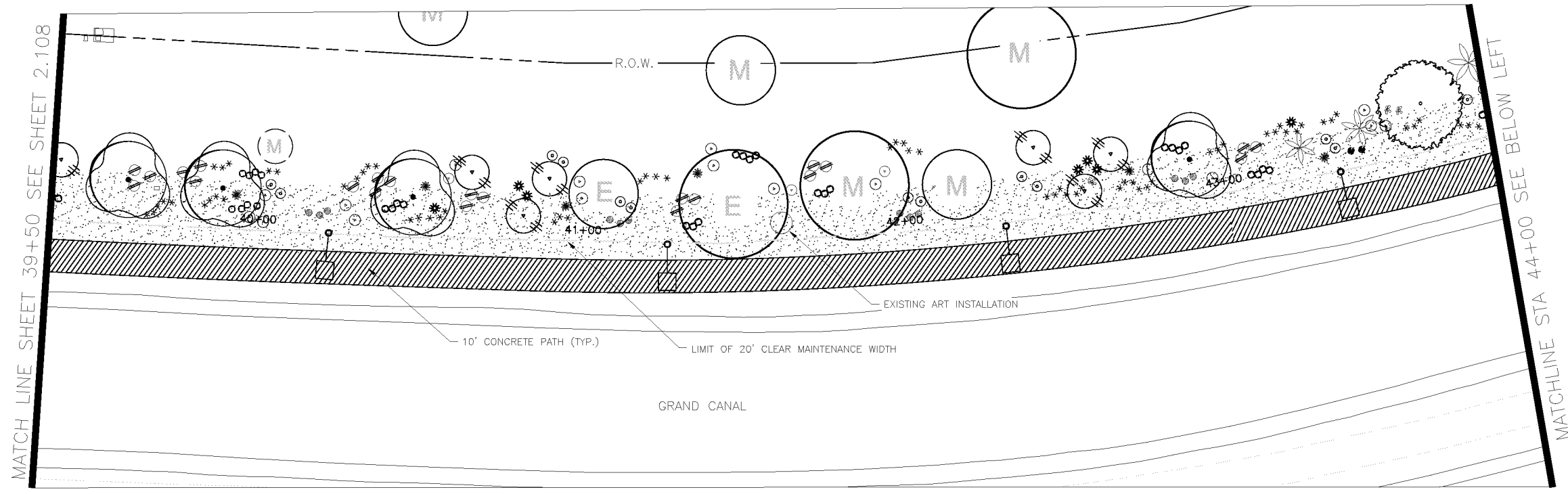
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.109	2.182

EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS
 CONSULTING ENGINEER

DES: JLA DR: JKA CK: RCA DATE: 09/16/16

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Oleaya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thornberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	8' H x 4' W 2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria lanifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysactinia mexicana * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7" HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'



MATCHLINE STA 48+25 SEE SHEET 2.110

MATCHLINE SHEET 39+50 SEE SHEET 2.108

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

NOTE:
 ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



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CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
ST87600114

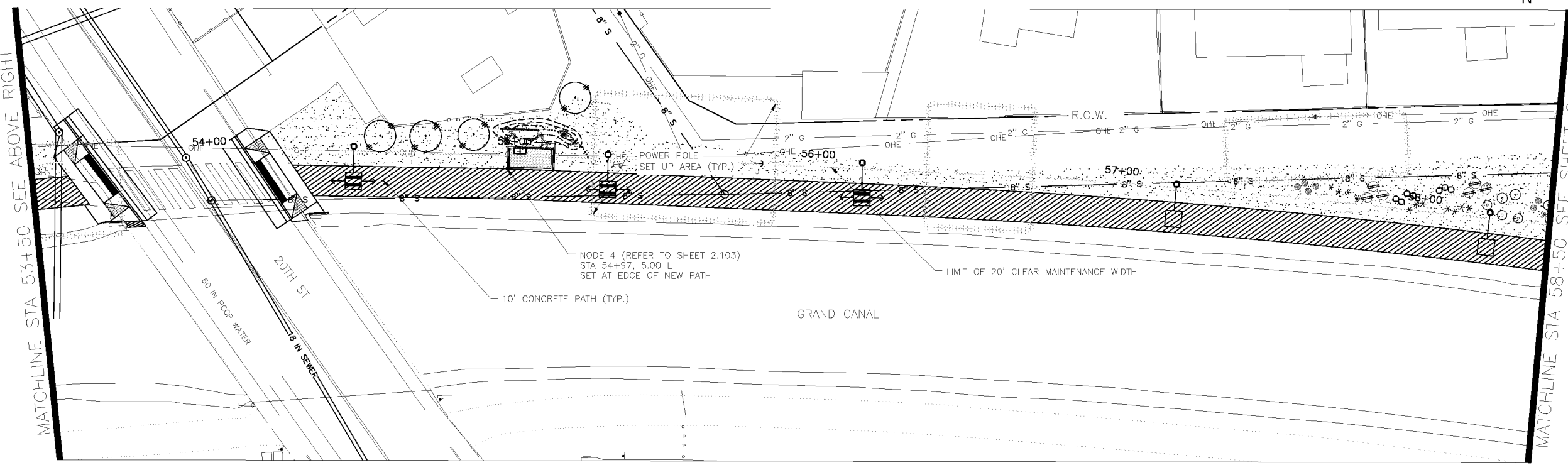
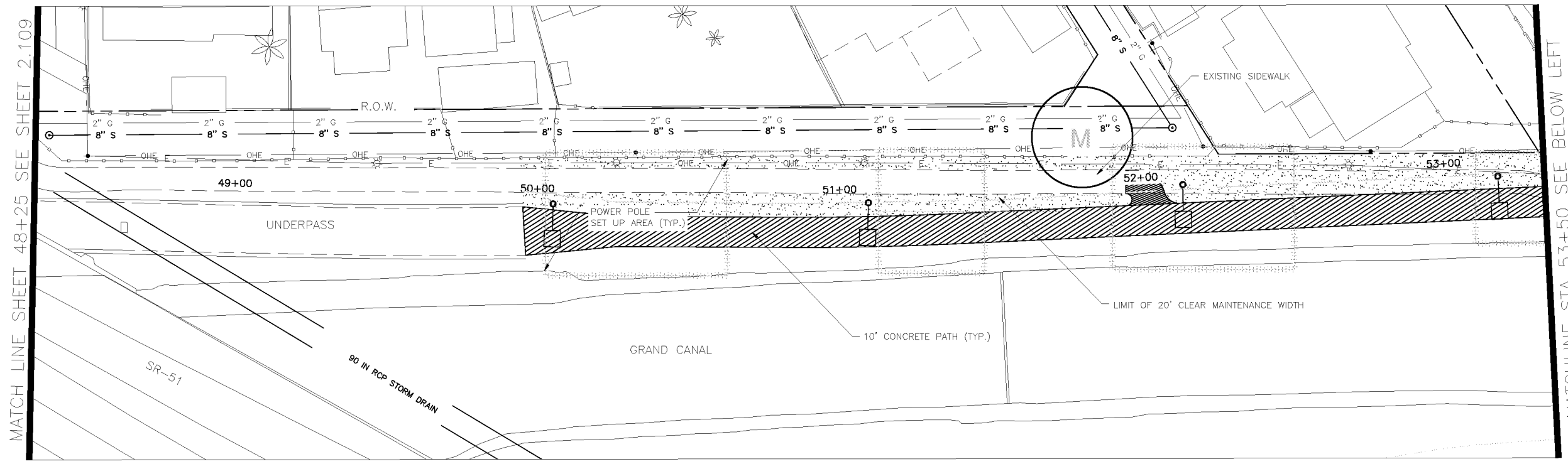
DES: JLA	DR: JKA	CK: RCA	SHEET NO: 2.109	TOTAL SHEETS: 2.182
DATE: 09/16	DATE: 09/16	DATE: 09/16		
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



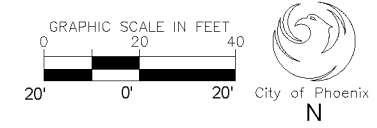
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.110	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Oleaya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thornberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
	* SRP Compliant Tree	
	SHRUBS	Existing Oleander to Remain
Caesalpinia mexicana * SIERRA SUN CACALACO		65 GAL
Leucophyllum laevigatum CHIHUAHUA SAGE		5 GAL
Ephedra viridis MORMON TEA		5 GAL
Stipa tenuissima MEXICAN THREAD GRASS		5 GAL
Ericameria lanicifolia TURPENTINE BUSH		5 GAL
Encelia farinosa * BRITTLEBUSH		5 GAL
Chrysactinia mexicana * DAMIANITA		5 GAL
* SRP Compliant Plant		
ACCENTS		Opuntia violacea santa rita PURPLE PRICKLY PEAR
	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
	Yuca rupicola TWISTED LEAF YUCCA	15 GAL
MATERIALS	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	Sonoran Wildflower Seed Mix	
The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.		
Gabion Basket	2' x 2' x 6'	
Tie Down Point for Gabion Baskets and Nodes		Offset dimension measured from center line of new path

NOTE:
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

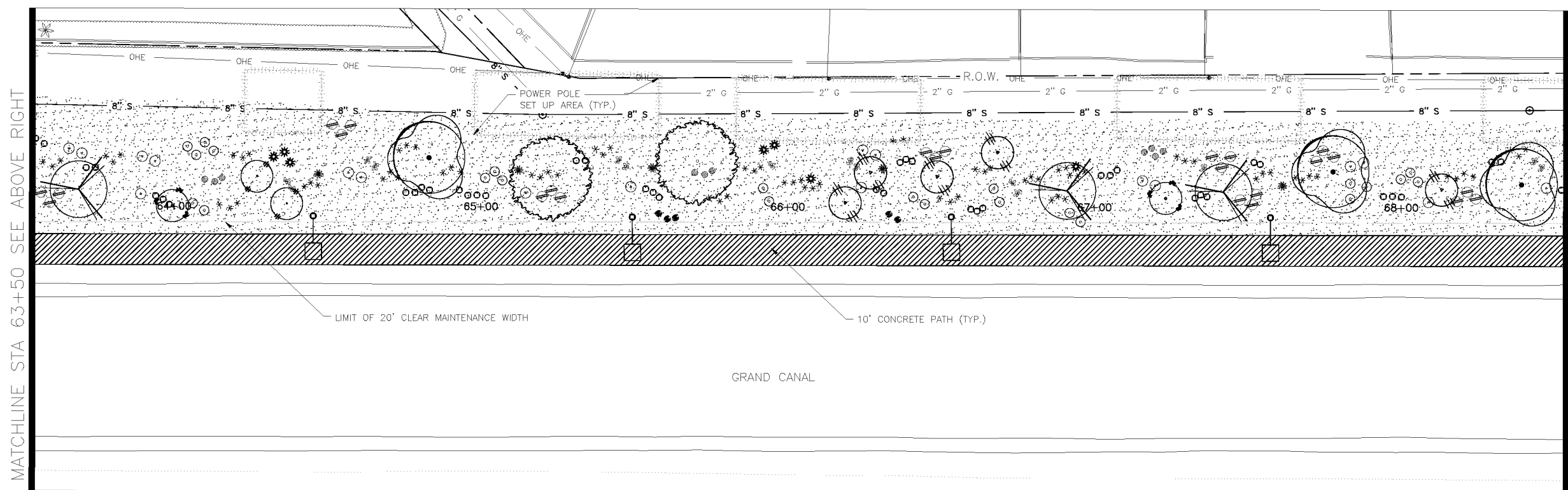
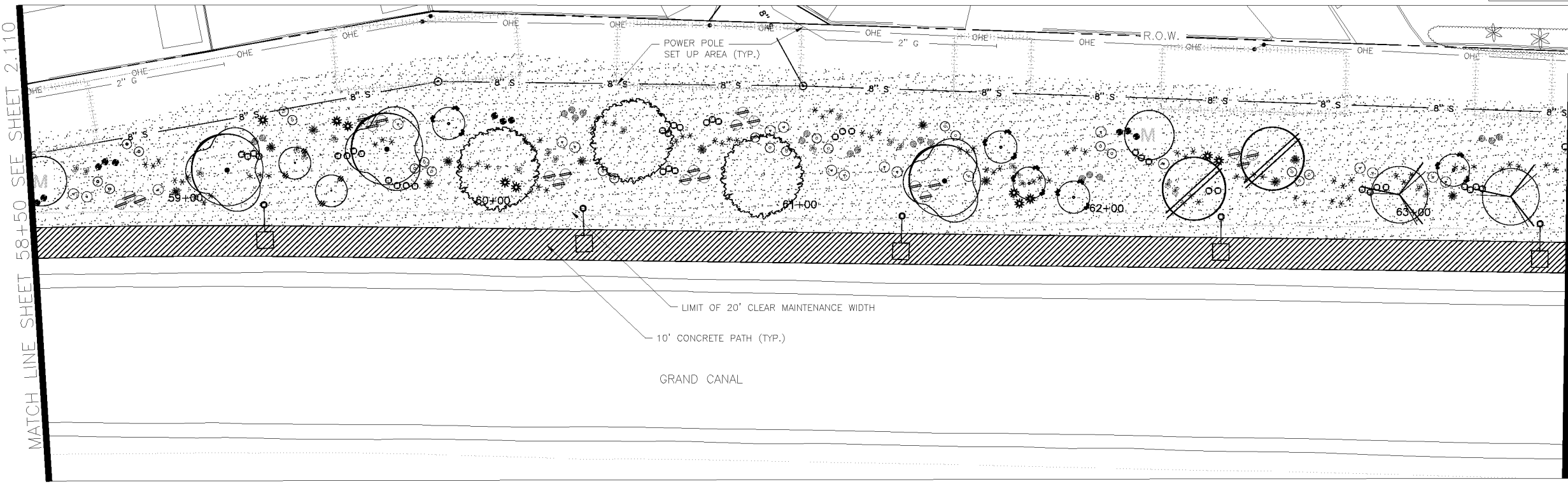
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.110	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



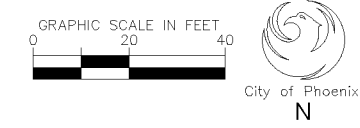
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.111	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Olneya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thomberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
	Existing Cleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUAN SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria laricifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
	Decomposed Granite	1/2" SCREENED
	1" DEPTH, MOUNTAIN VISTA BROWN	
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	SONORAN WILDFLOWER SEED MIX	
	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'

NOTE:
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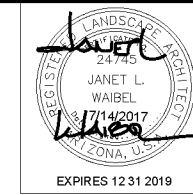
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

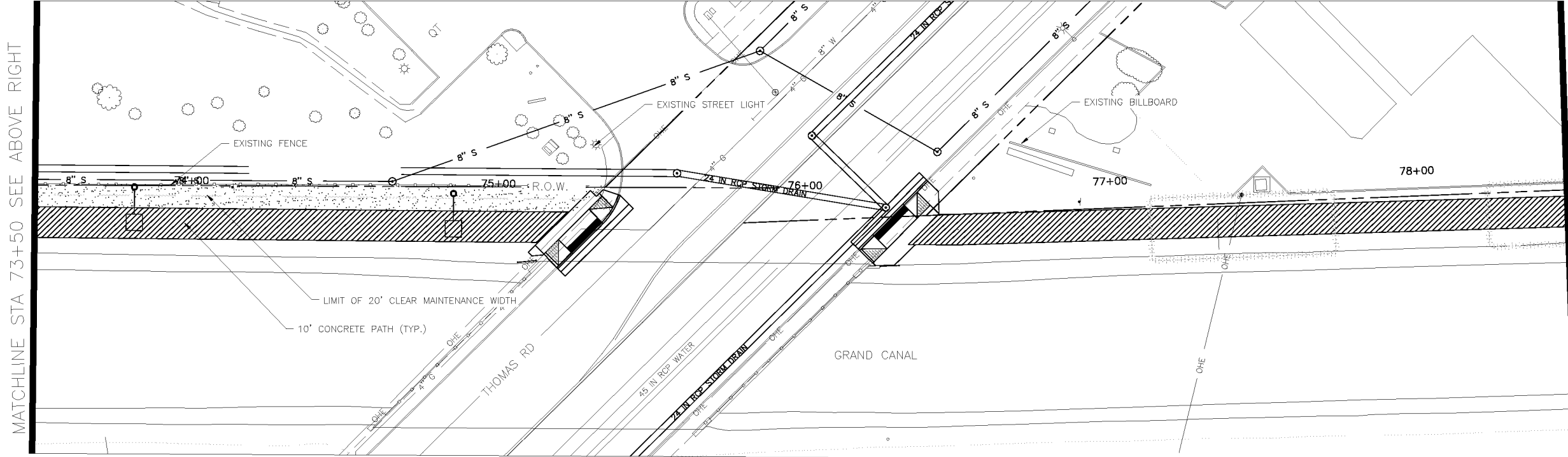
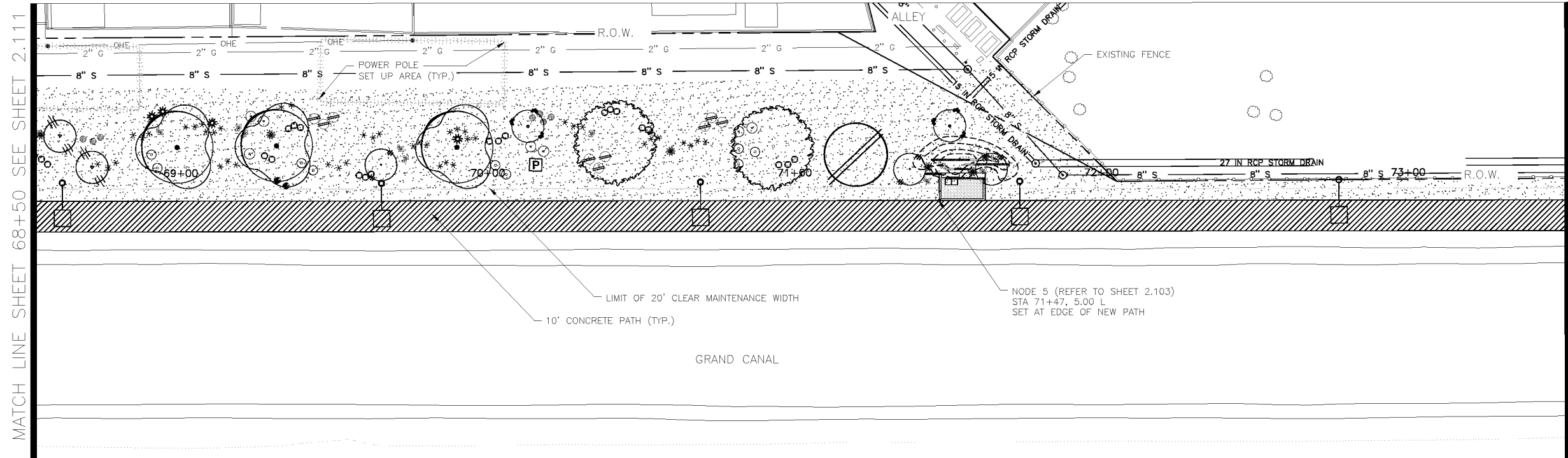
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.111	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.112	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: J.L.	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY	DESCRIPTION	NO.	DATE
CITY OF PHOENIX			
CITY OF PHOENIX			
CITY OF PHOENIX			



SYMBOL	NAME	SIZE
[Symbol]	Existing Mesquite Tree to Remain	
[Symbol]	Existing Palo Verde Tree to Remain	
[Symbol]	Existing Eucalyptus Tree to Remain	
[Symbol]	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
[Symbol]	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
[Symbol]	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
[Symbol]	Oleaya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
[Symbol]	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
[Symbol]	Lysiloma thomberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
[Symbol]	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
[Symbol]	* SRP Compliant Tree	

SYMBOL	NAME	SIZE
[Symbol]	Existing Oleander to Remain	
[Symbol]	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
[Symbol]	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
[Symbol]	Ephedra viridis MORMON TEA	5 GAL
[Symbol]	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
[Symbol]	Ericameria laricifolia TURPENTINE BUSH	5 GAL
[Symbol]	Encelia farinosa * BRITTLEBUSH	5 GAL
[Symbol]	Chrysactinia mexicana * DAMIANITA	5 GAL
[Symbol]	* SRP Compliant Plant	

SYMBOL	NAME	SIZE
[Symbol]	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
[Symbol]	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
[Symbol]	Yucca rupicola TWISTED LEAF YUCCA	15 GAL

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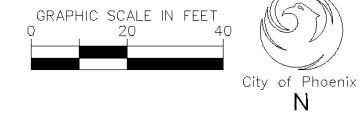
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Blue Stake Center

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.112	2,182

NOTE:
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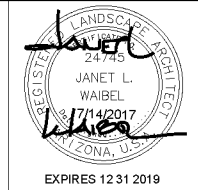
MATCHLINE STA 68+50 SEE SHEET 2.111

MATCHLINE STA 73+50 SEE BELOW LEFT

MATCHLINE STA 73+50 SEE ABOVE RIGHT

MATCHLINE STA 78+50 SEE SHEET 2.113

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.113	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: J.L.	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX

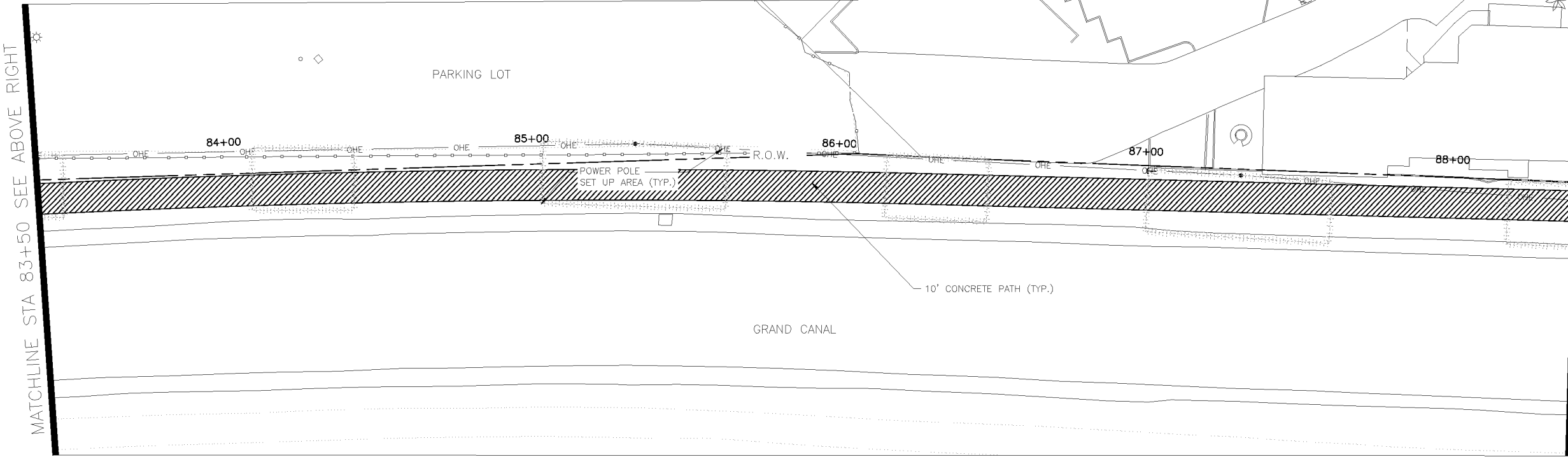
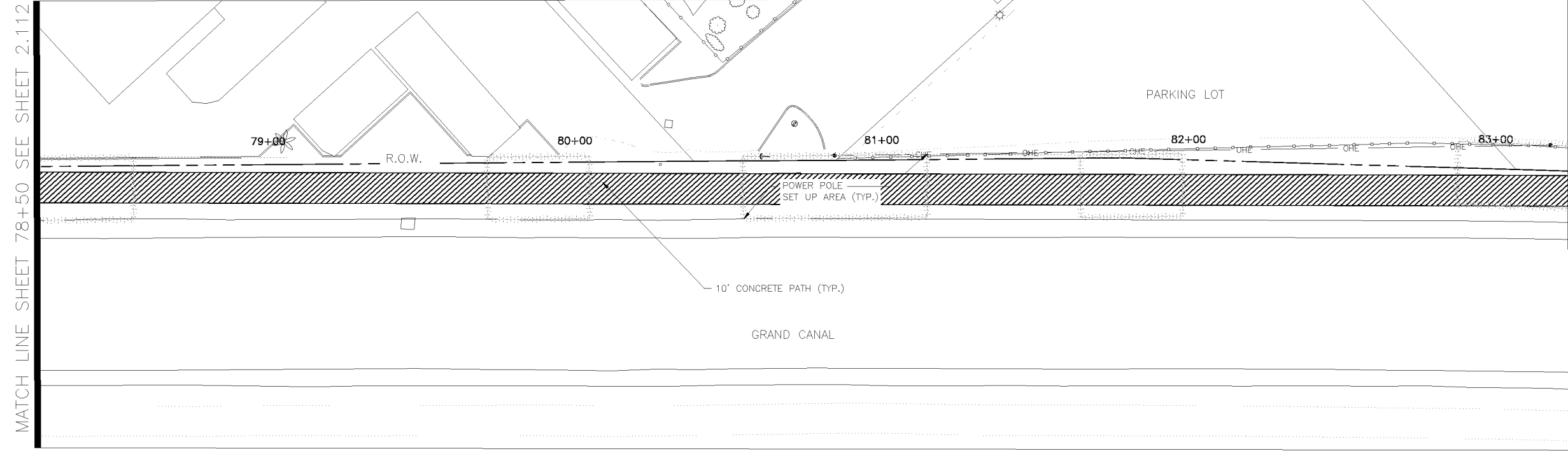
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE



NO LANDSCAPING ON THIS SHEET

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES		
(Circle with dot)	Existing Mesquite Tree to Remain	
(Circle with cross)	Existing Palo Verde Tree to Remain	
(Circle with vertical lines)	Existing Eucalyptus Tree to Remain	
(Circle with horizontal lines)	Prosopis Hybrid Thornless	10' H x 8' W
(Circle with diagonal lines)	MESQUITE HYBRID THORNLESS	3" CALIPER
(Circle with wavy lines)	Acacia aneura *	9' H x 6' W
(Circle with dots)	MULGA TREE	2" CALIPER
(Circle with star)	Parkinsonia praecox	9' H x 7' W
(Circle with horizontal lines)	PALO BREA	3" CALIPER
(Circle with vertical lines)	Oleaya tesota	8' H x 6' W
(Circle with diagonal lines)	IRONWOOD TREE	3" CALIPER
(Circle with wavy lines)	Chilopsis linearis *	9' H x 7' W
(Circle with dots)	DESERT WILLOW	3" CALIPER
(Circle with star)	Lysiloma thornberi *	6' H x 4' W
(Circle with vertical lines)	FERN OF THE DESERT	2" CALIPER
(Circle with horizontal lines)	Acacia craspedocarpa *	6' H x 4' W
(Circle with dots)	LEATHER-LEAF ACACIA	2" CALIPER
(Circle with star)	* SRP Compliant Tree	
SHRUBS		
(Circle with dot)	Existing Oleander to Remain	
(Circle with cross)	Caesalpinia mexicana *	65 GAL
(Circle with vertical lines)	SIERRA SUN CACALACO	
(Circle with horizontal lines)	Leucophyllum laevigatum	5 GAL
(Circle with diagonal lines)	CHIHUAHUA SAGE	
(Circle with wavy lines)	Ephedra viridis	5 GAL
(Circle with dots)	MORMON TEA	
(Circle with star)	Stipa tenuissima	5 GAL
(Circle with vertical lines)	MEXICAN THREAD GRASS	
(Circle with horizontal lines)	Erica cernua	5 GAL
(Circle with diagonal lines)	TURPENTINE BUSH	
(Circle with wavy lines)	Encelia farinosa *	5 GAL
(Circle with dots)	BRITTLEBUSH	
(Circle with star)	Chrysactinia mexicana *	5 GAL
(Circle with vertical lines)	DAMIANITA	
(Circle with horizontal lines)	* SRP Compliant Plant	
ACCENTS		
(Circle with dot)	Opuntia violacea santa rita	15 GAL
(Circle with cross)	PURPLE PRICKLY PEAR	
(Circle with vertical lines)	Fouquieria splendens	6'-7' HEIGHT
(Circle with horizontal lines)	COCOTILLO	
(Circle with diagonal lines)	Yuca ruppicola	15 GAL
(Circle with wavy lines)	TWISTED LEAF YUCCA	
MATERIALS		
(Hatched pattern)	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
(Dotted pattern)	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	SONORAN WILDFLOWER SEED MIX
(Dotted pattern)	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
(Hatched pattern)	Gabion Basket	2' x 2' x 6'

Waibel & Associates

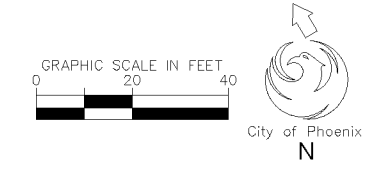
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CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET ST87600114				
DES: J.L.	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.113	2.182
SCALE				

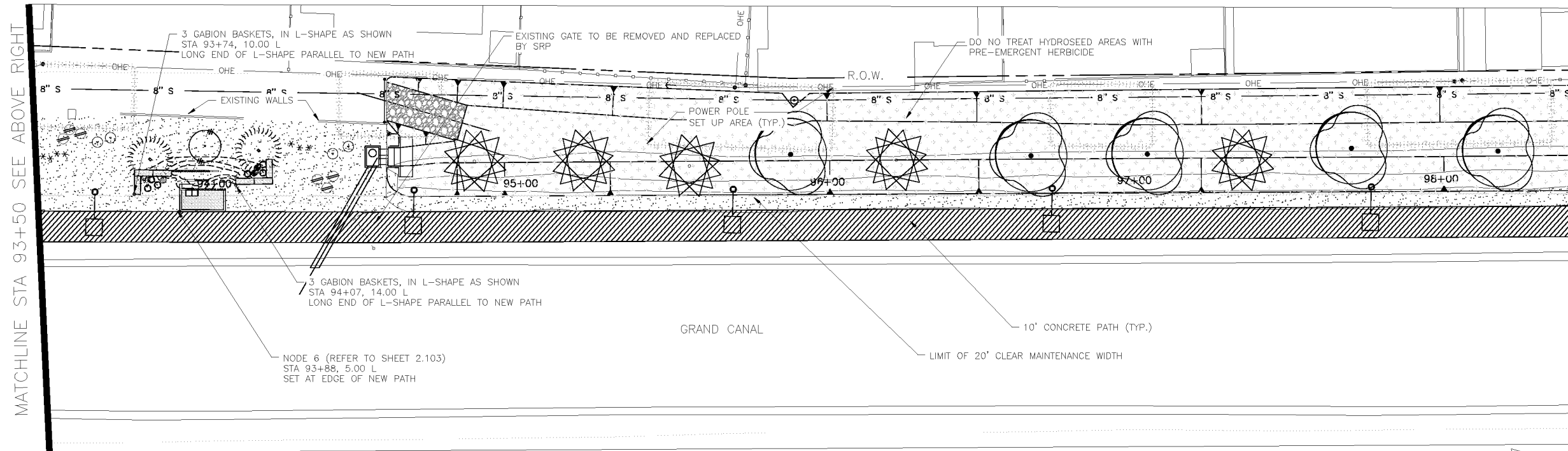
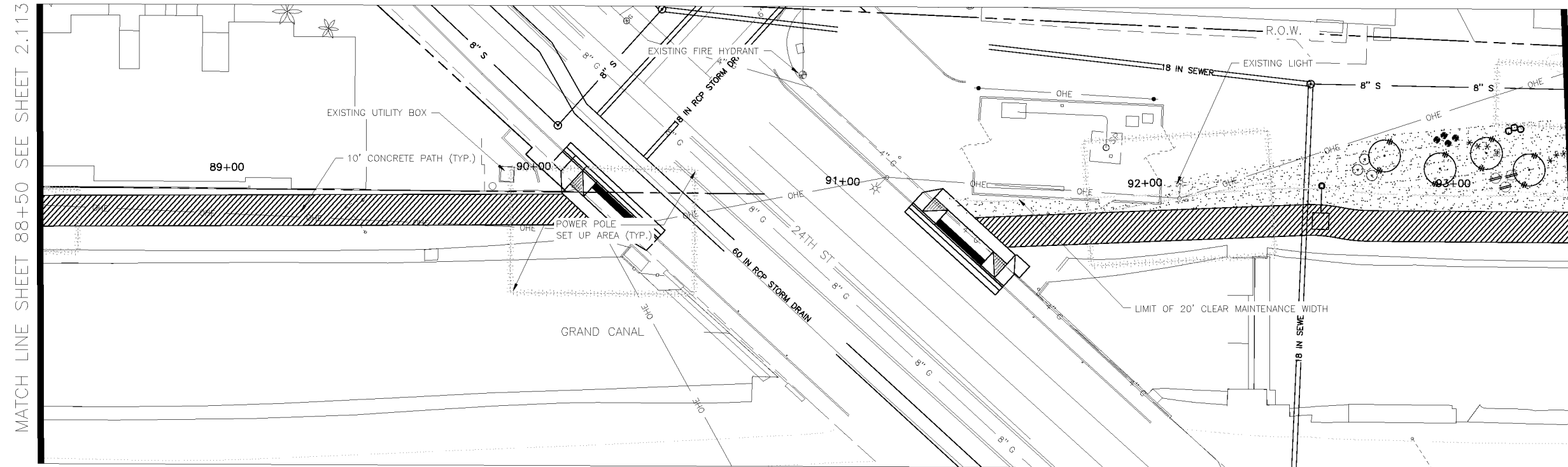
ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



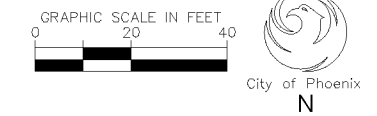
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.114	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Symbol)	Existing Mesquite Tree to Remain	
(Symbol)	Existing Palo Verde Tree to Remain	
(Symbol)	Existing Eucalyptus Tree to Remain	
(Symbol)	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
(Symbol)	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
(Symbol)	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
(Symbol)	Olneya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
(Symbol)	Chilopsis linearis * DESERT TALLOW	9' H x 7' W 3" CALIPER
(Symbol)	Lysiloma thornberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
(Symbol)	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
(Symbol)	* SRP Compliant Tree	
(Symbol)	Existing Oleander to Remain	
(Symbol)	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
(Symbol)	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
(Symbol)	Ephedra viridis MORMON TEA	5 GAL
(Symbol)	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
(Symbol)	Ericameria laricifolia TURPENTINE BUSH	5 GAL
(Symbol)	Encelia farinosa * BRITTLEBUSH	5 GAL
(Symbol)	Chrysactinia mexicana * DAMIANITA	5 GAL
(Symbol)	* SRP Compliant Plant	
(Symbol)	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
(Symbol)	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
(Symbol)	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
(Symbol)	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
(Symbol)	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
(Symbol)	Gabion Basket	2' x 2' x 6'
(Symbol)	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path



NO.	DESCRIPTION	REV BY	CHK BY	DATE



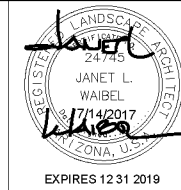
**Waibel & Associates
Landscape Architecture**
master planning gardens & consulting urban design
Phone 480.893.3849 Fax 480.893.3846
8611 South Priest Drive, Suite 101
Tempe AZ 85284
e-mail: janet@waibel-la.com

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**CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT**
**GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114**

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.114	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

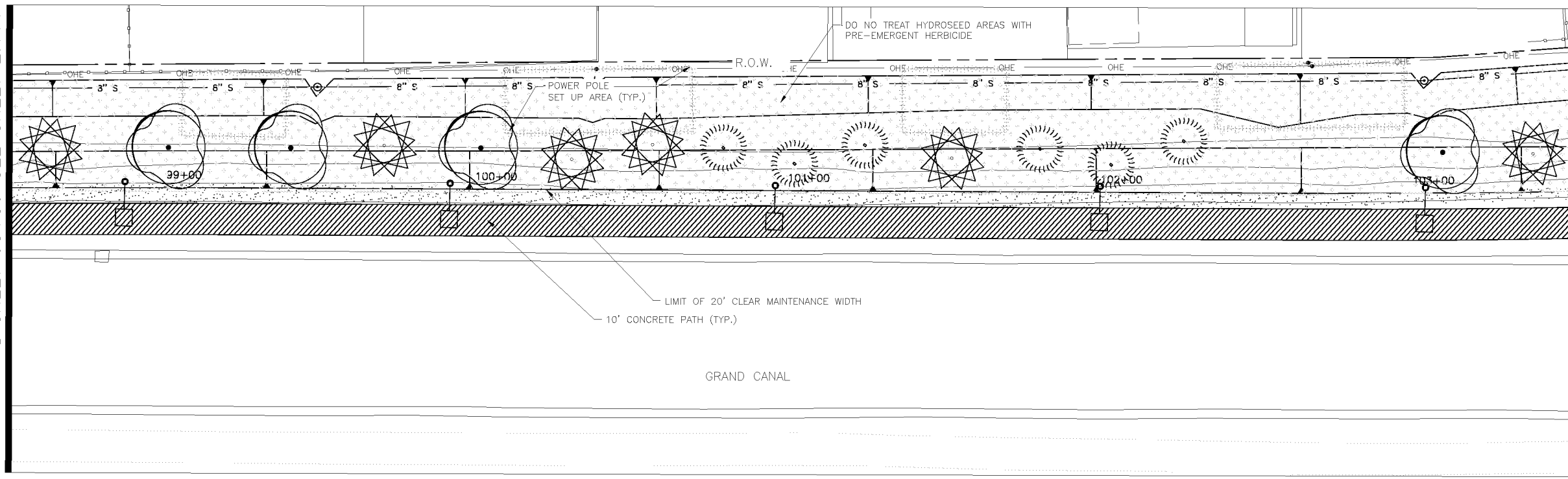


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.115	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

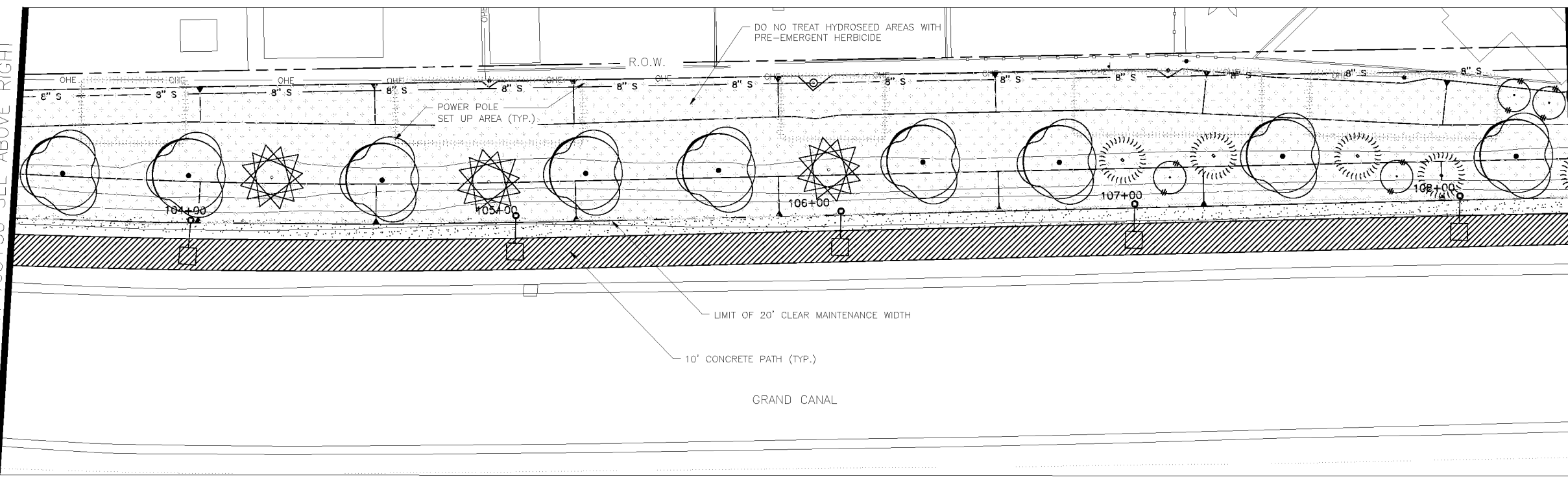
MATCH LINE SHEET 98+50 SEE SHEET 2.114

MATCHLINE STA 103+50 SEE BELOW LEFT



MATCHLINE STA 103+50 SEE ABOVE RIGHT

MATCHLINE STA 108+50 SEE SHEET 2.116



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Olneya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thornberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria laricifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysactinia mexicana * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX <i>The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.</i>	
	Gabion Basket	2' x 2' x 6'

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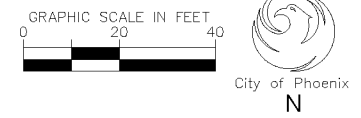
Phone 480.893.3849 Fax 480.893.3846
8611 South Priest Drive, Suite 101
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e-mail: janet@waibel-la.com

No working days before you call. CALL FOR THE BLUE STAKES! 602-263-1100 Blue Stake Center

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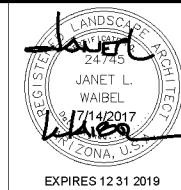
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114



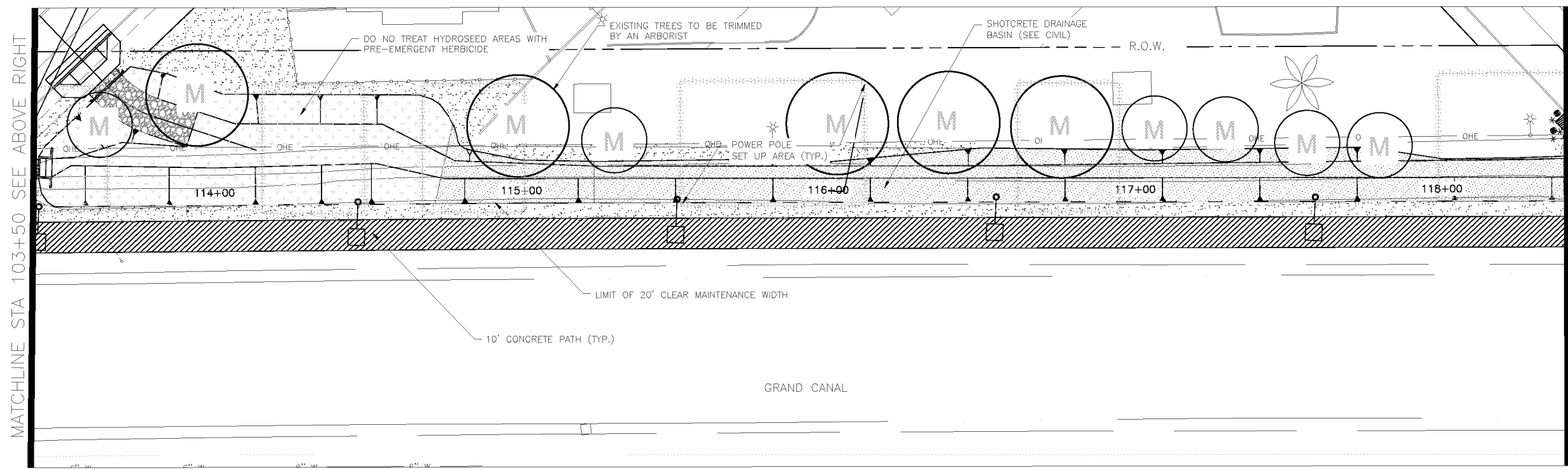
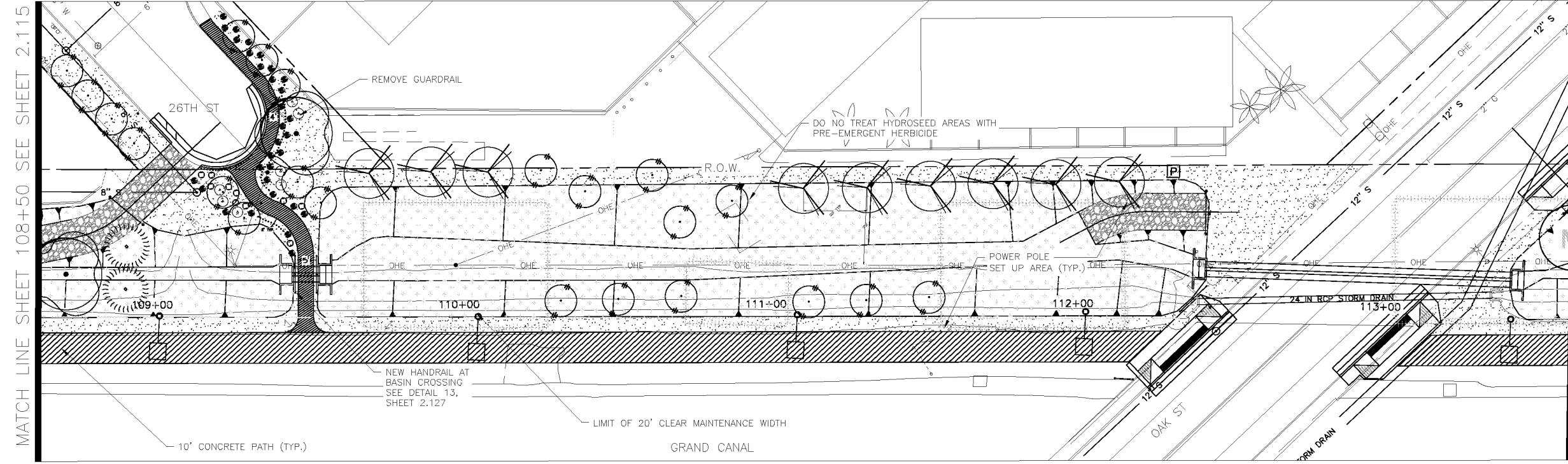
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.115	2.182
SCALE				

ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.116	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: J.L.	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Oleaya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thomberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUA SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria lanicifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysanthia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	SONORAN WILDFLOWER SEED MIX	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.
	Gabion Basket	2' x 2' x 6'

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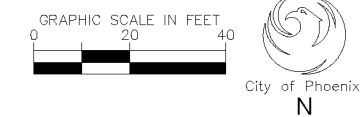
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.116	2.182
SCALE				



NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

MATCH LINE SHEET 108+50 SEE SHEET 2.115

MATCHLINE STA 103+50 SEE ABOVE RIGHT

MATCHLINE STA 113+50 SEE BELOW LEFT

MATCHLINE STA 118+50 SEE SHEET 2.117

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET



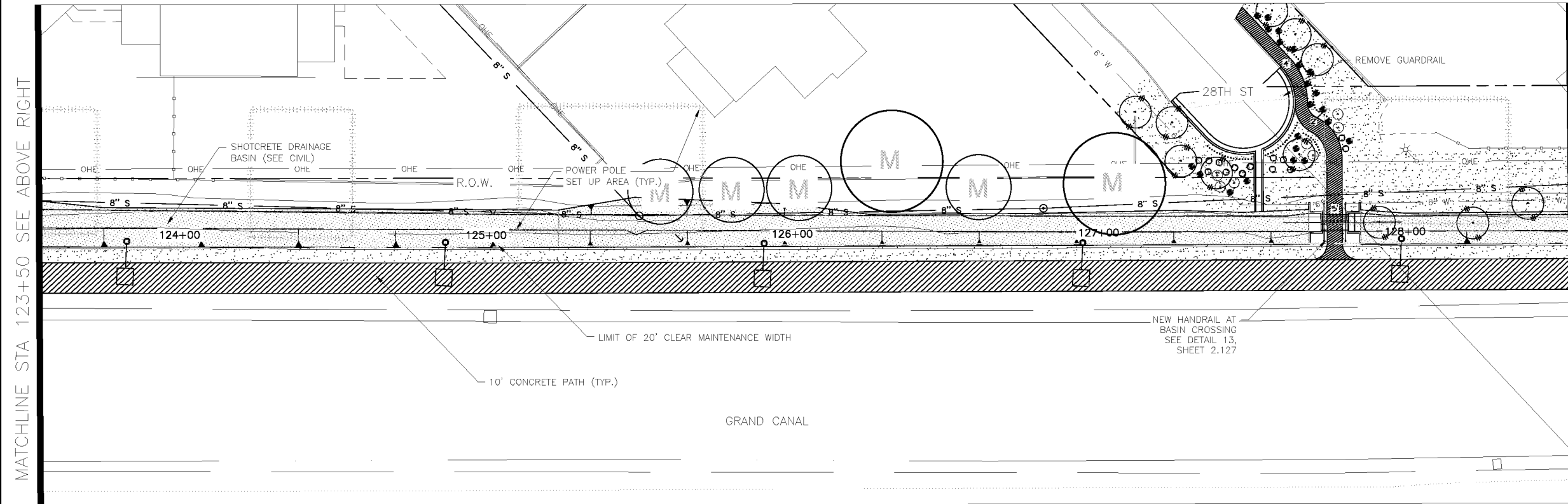
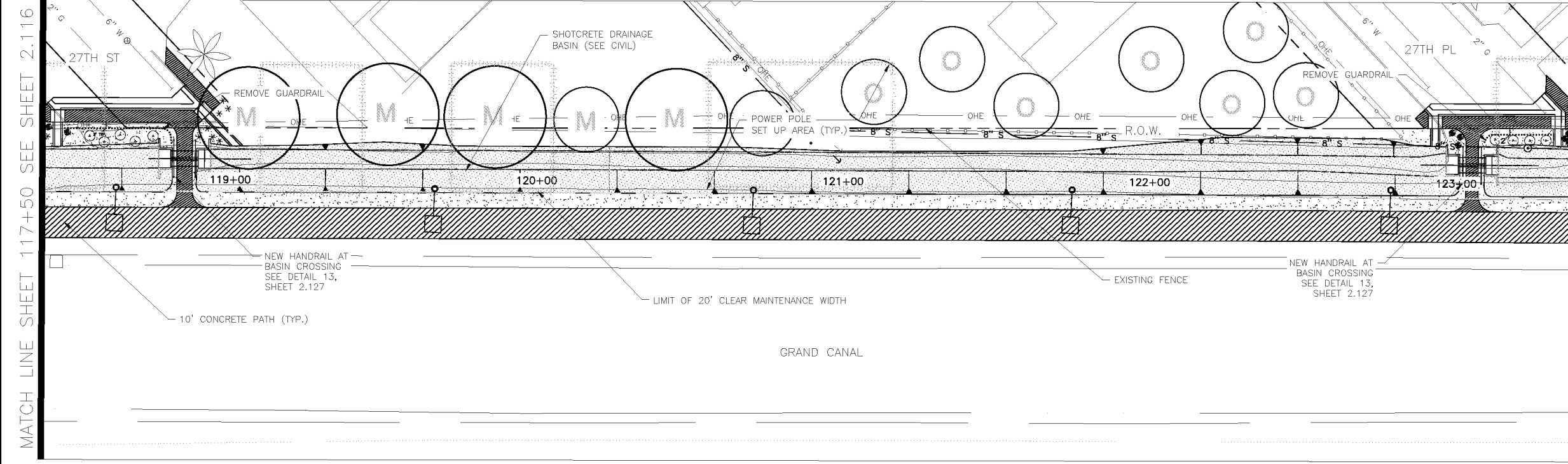
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,117	2,182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

DES: JL DR: JKA CK: RCA DATE: 09/16/16

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Olneya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thomberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUAN SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria lanifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysactinia mexicana * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED	
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX <i>The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.</i>	
	Gabion Basket	2' x 2' x 6'



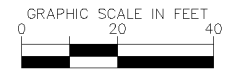
MATCH LINE SHEET 117+50 SEE SHEET 2.116

MATCHLINE STA 122+50 SEE BELOW LEFT

MATCHLINE STA 123+50 SEE ABOVE RIGHT

MATCHLINE STA 128+50 SEE SHEET 2.118

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2,117	2,182

SCALE 2,117 2,182

ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

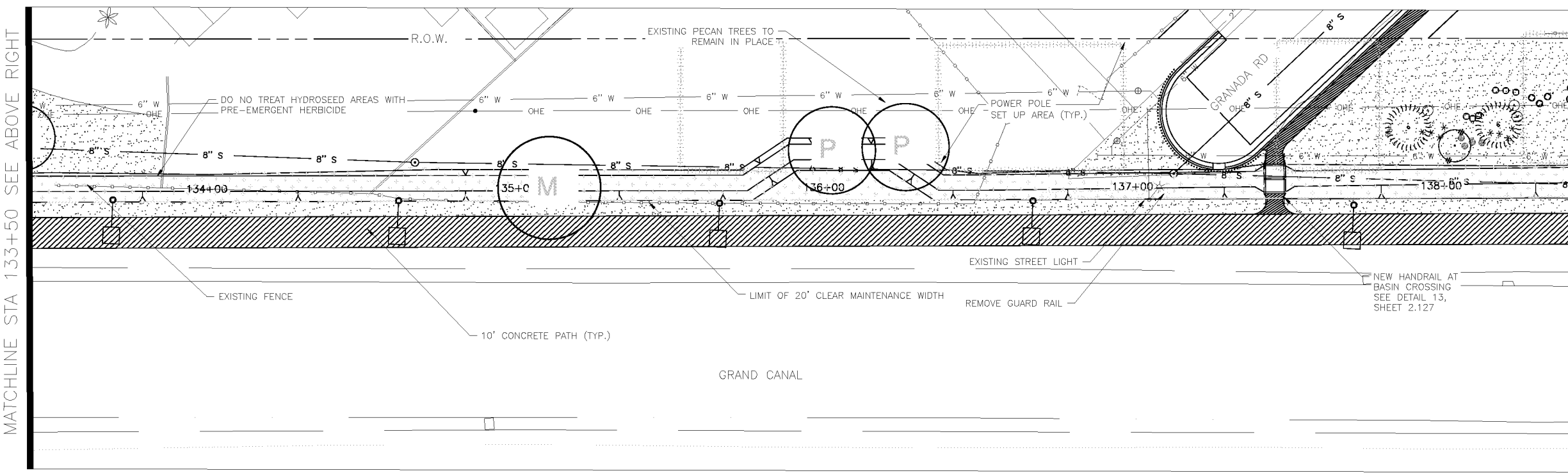
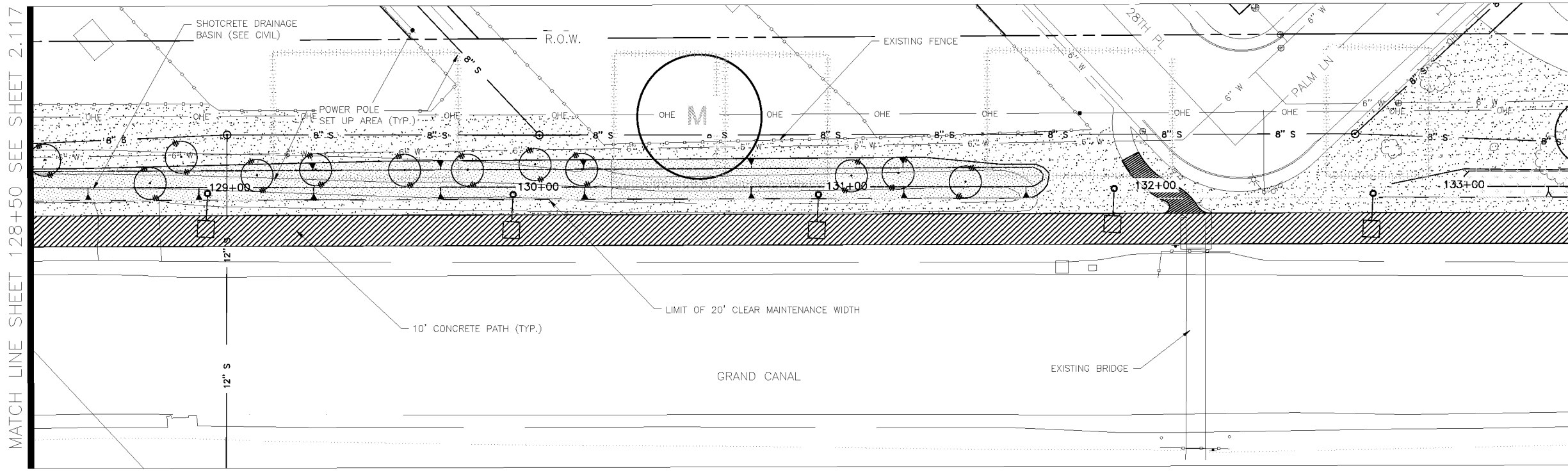


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.118	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JKL	DR: JKA	CK: RCA	DATE: 09/16/16	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

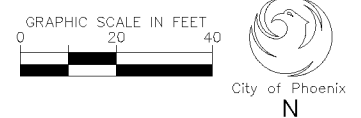
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
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	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Olneya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thornberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
	Existing Cleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUAN SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria lanifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
	Decomposed Granite	1/2" SCREENED
	1" DEPTH, MOUNTAIN VISTA BROWN	
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	SONORAN WILDFLOWER SEED MIX	
	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'

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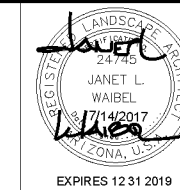
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JKL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.118	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.119	2.182
		ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER		
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

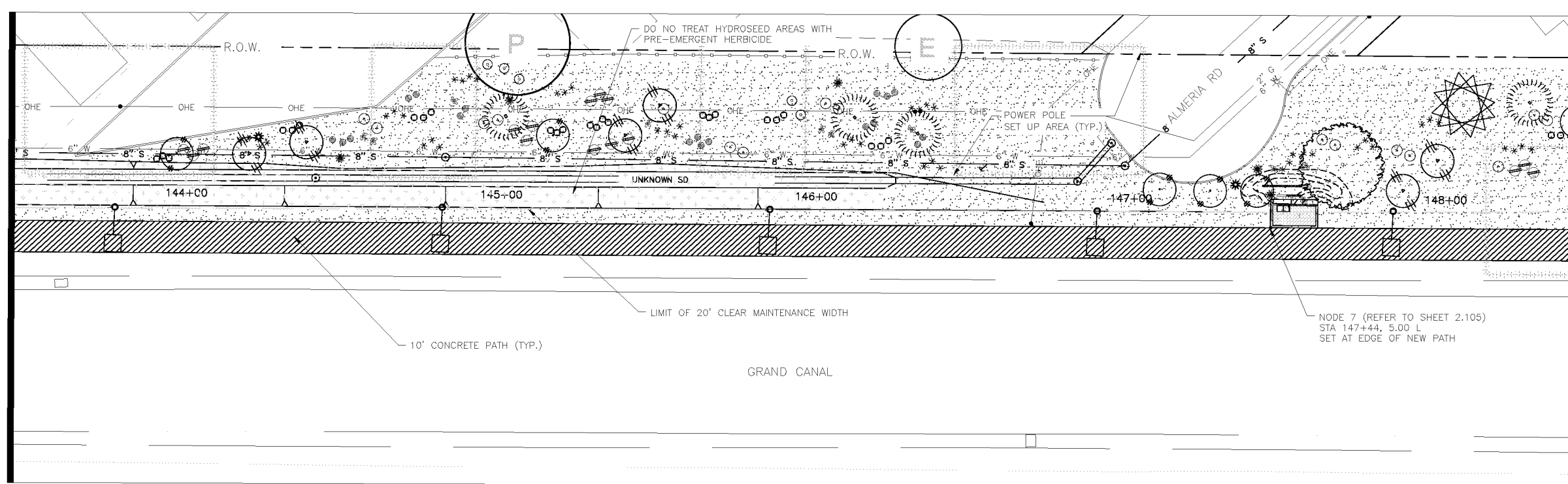
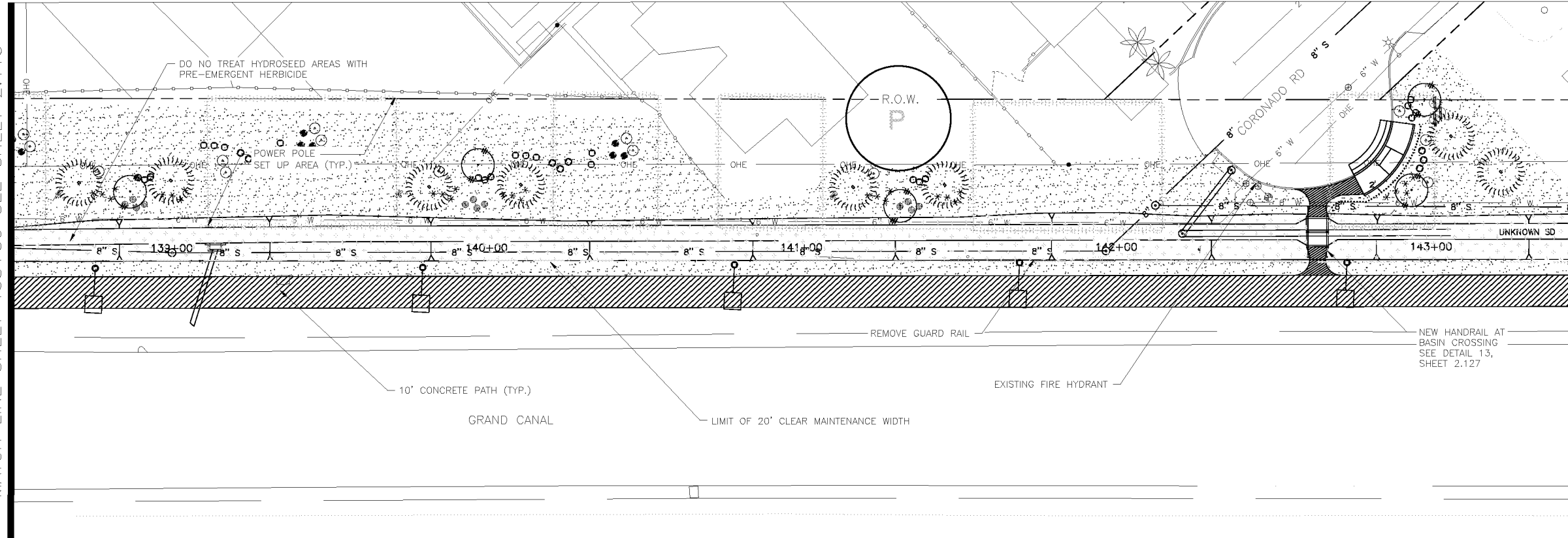
NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCH LINE SHEET 138+50 SEE SHEET 2.118

MATCHLINE STA 143+50 SEE ABOVE RIGHT

MATCHLINE STA 143+50 SEE BELOW LEFT

MATCHLINE STA 148+50 SEE SHEET 2.120



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
(Tree Symbol)	Existing Mesquite Tree to Remain	
(Tree Symbol)	Existing Palo Verde Tree to Remain	
(Tree Symbol)	Existing Eucalyptus Tree to Remain	
(Tree Symbol)	Prosopis Hybrid Thornless	10' H x 8' W
(Tree Symbol)	MESQUITE HYBRID THORNLESS	3" CALIPER
(Tree Symbol)	Acacia aneura *	9' H x 6' W
(Tree Symbol)	MULGA TREE	2" CALIPER
(Tree Symbol)	Parkinsonia praecox	9' H x 7' W
(Tree Symbol)	PALO BREA	3" CALIPER
(Tree Symbol)	Olneya tesota	8' H x 6' W
(Tree Symbol)	IRONWOOD TREE	3" CALIPER
(Tree Symbol)	Chilopsis linearis *	9' H x 7' W
(Tree Symbol)	DESERT WILLOW	3" CALIPER
(Tree Symbol)	Lysiloma thornberi *	6' H x 4' W
(Tree Symbol)	FERN OF THE DESERT	2" CALIPER
(Tree Symbol)	Acacia craspedocarpa *	6' H x 4' W
(Tree Symbol)	LEATHER-LEAF ACACIA	2" CALIPER
(Tree Symbol)	* SRP Compliant Tree	
(Shrub Symbol)	Existing Oleanther to Remain	
(Shrub Symbol)	Caesalpinia mexicana *	65 GAL
(Shrub Symbol)	SIERRA SUN CACALACO	
(Shrub Symbol)	Leucophyllum laevigatum	5 GAL
(Shrub Symbol)	CHIHUAHUAN SAGE	
(Shrub Symbol)	Ephedra viridis	5 GAL
(Shrub Symbol)	MORMON TEA	
(Shrub Symbol)	Stipa tenuissima	5 GAL
(Shrub Symbol)	MEXICAN THREAD GRASS	
(Shrub Symbol)	Ericameria laricifolia	5 GAL
(Shrub Symbol)	TURPENTINE BUSH	
(Shrub Symbol)	Encelia farinosa *	5 GAL
(Shrub Symbol)	BRITTLEBUSH	
(Shrub Symbol)	Chrysoactinia mexicana *	5 GAL
(Shrub Symbol)	DAMIANITA	
(Shrub Symbol)	* SRP Compliant Plant	
(Accent Symbol)	Opuntia violacea santa rita	15 GAL
(Accent Symbol)	PURPLE PRICKLY PEAR	
(Accent Symbol)	Fouquieria splendens	6'-7' HEIGHT
(Accent Symbol)	OCOTILLO	
(Accent Symbol)	Yucca rupicola	15 GAL
(Accent Symbol)	TWISTED LEAF YUCCA	
(Material Symbol)	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
(Material Symbol)	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
(Material Symbol)	SONORAN WILDFLOWER SEED MIX	
(Material Symbol)	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
(Material Symbol)	Gabion Basket	2' x 2' x 6'
(Symbol)	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



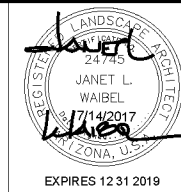
Waibel & Associates Landscape Architecture
 master planning | gardens & consulting | urban design
 Phone 480.893.3849 Fax 480.893.3846
 8611 South Priest Drive, Suite 101
 Tempe AZ 85284
 e-mail: janet@waibel-la.com

*CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
 PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.119	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.120	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

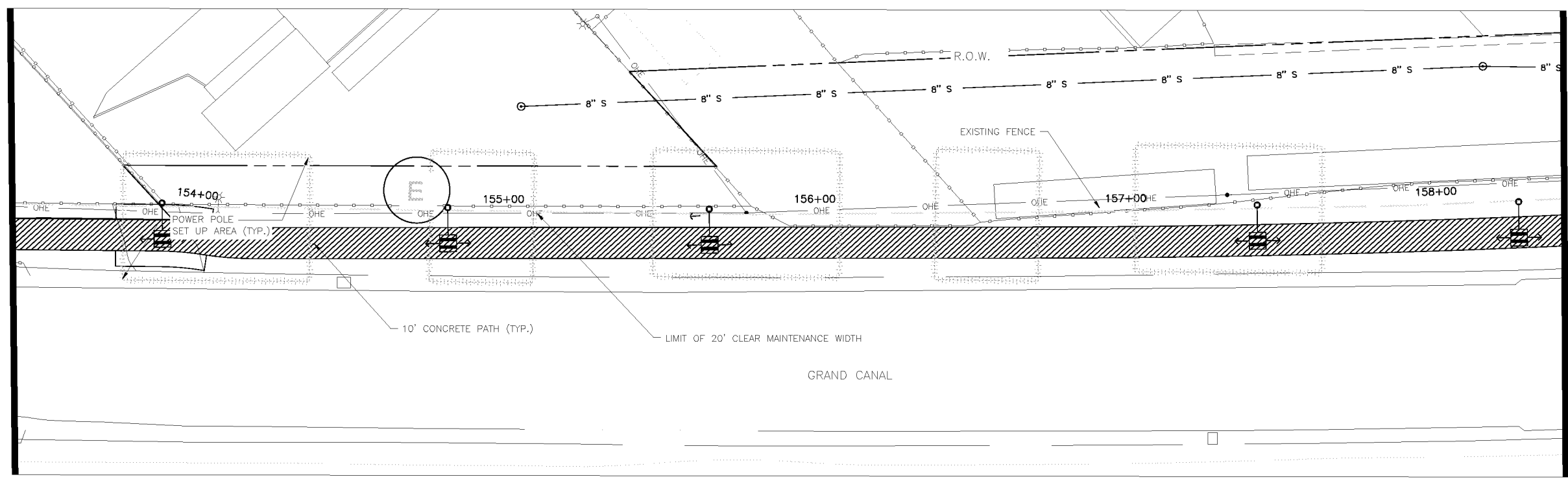
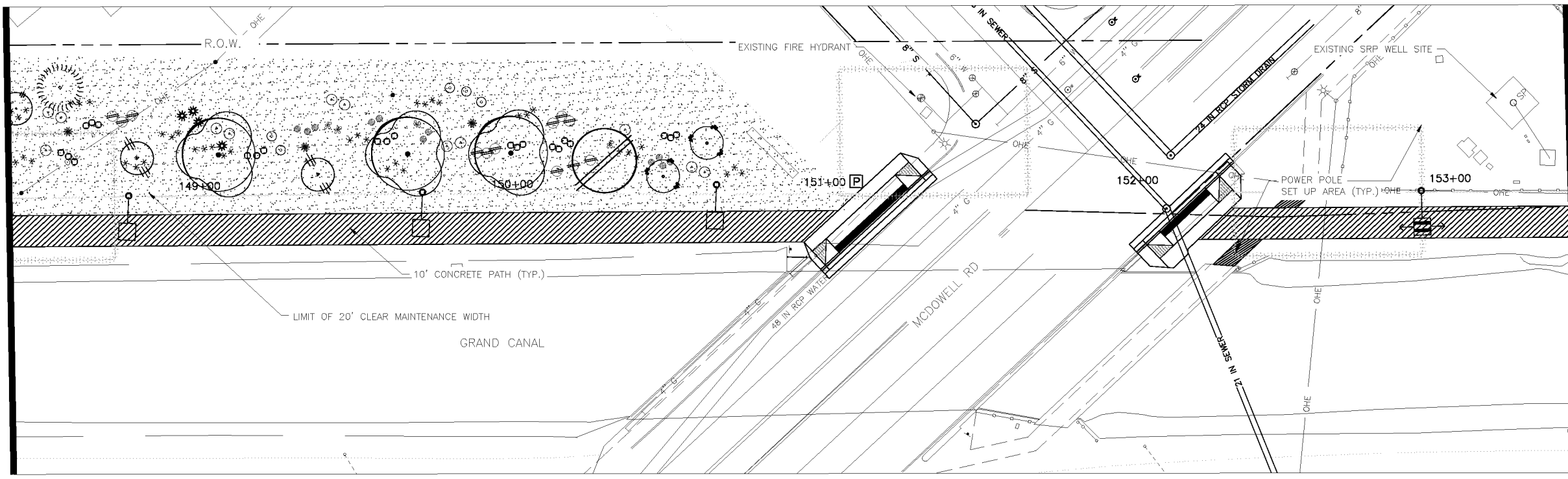
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

MATCH LINE SHEET 148+50 SEE SHEET 2.119

MATCHLINE STA 153+50 SEE ABOVE RIGHT

MATCHLINE STA 153+50 SEE BELOW LEFT

MATCHLINE STA 158+50 SEE SHEET 2.121

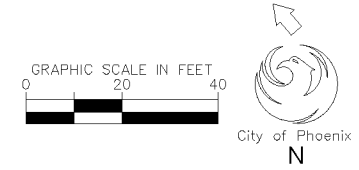


LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3\"/>

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 e-mail: janet@waibel-la.com

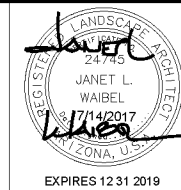
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.120	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



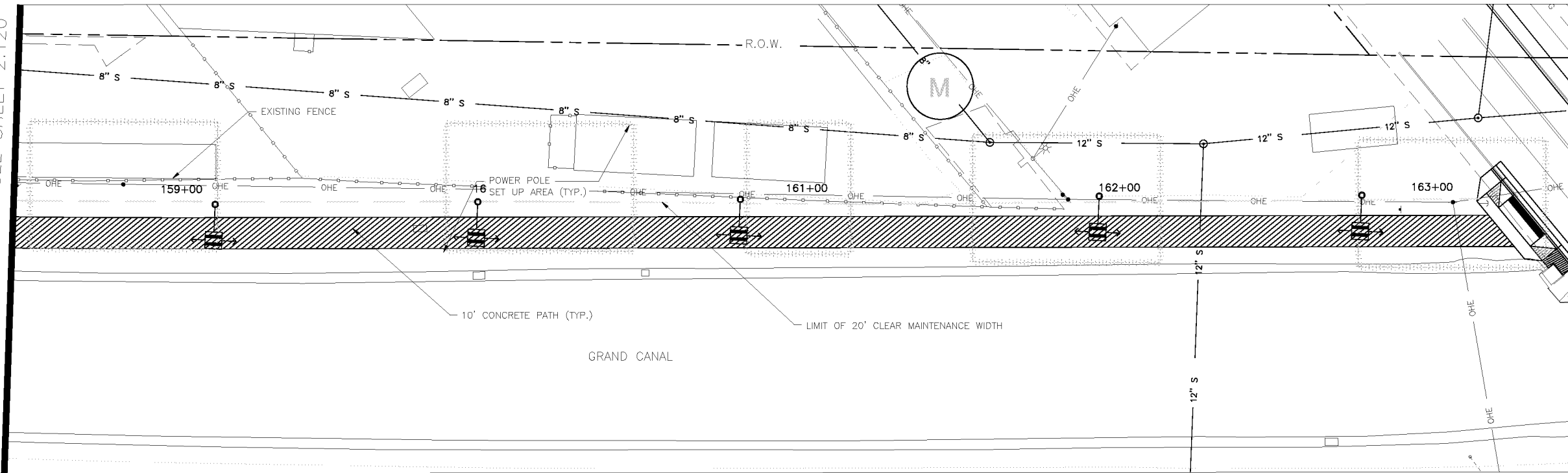
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.121	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JKL	DR: JKA	CK: RCA	DATE: 09/16/16	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

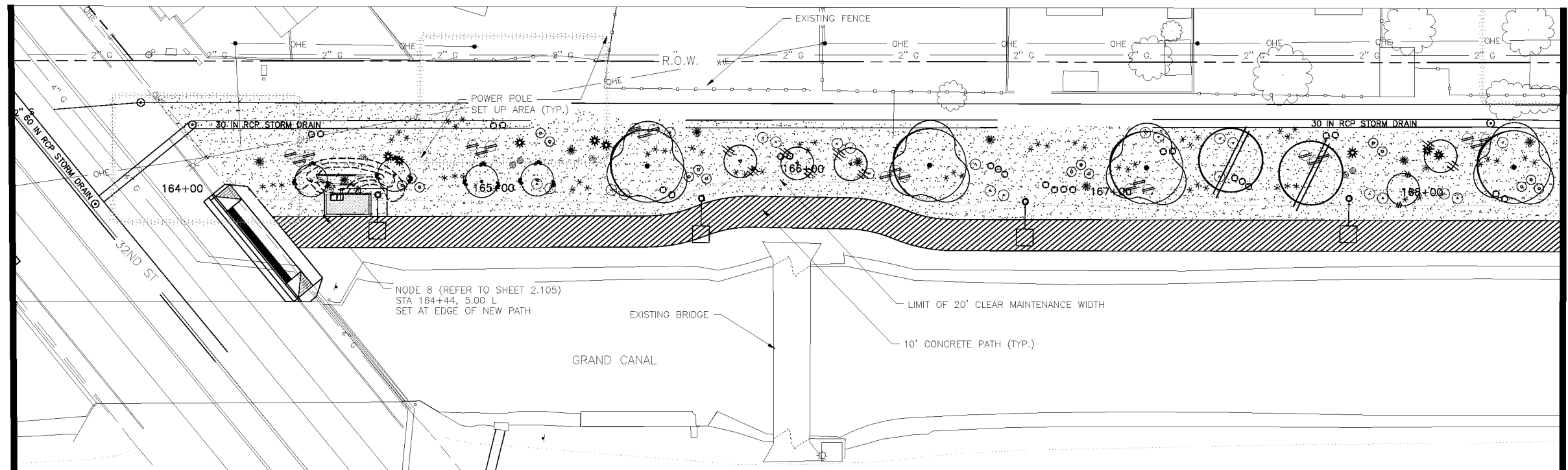
MATCH LINE SHEET 158+50 SEE SHEET 2.120



MATCHLINE STA 163+50 SEE BELOW LEFT

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W
	Acacia aneura * MULGA TREE	9' H x 6' W
	Parkinsonia praecox PALO BREA	9' H x 7' W
	Olneya tesota IRONWOOD TREE	3" CALIPER
	Chilopsis linearis * DESERT WILLOW	8' H x 6' W
	Lysiloma thornberi * FERN OF THE DESERT	9' H x 7' W
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	3" CALIPER
	* SRP Compliant Tree	6' H x 4' W
	Existing Oleander to Remain	2" CALIPER
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria laricifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysactinia mexicana * DAMIANITA	5 GAL
	* SRP Compliant Plant	
	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7' HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.
	Gabion Basket	2' x 2' x 6'

MATCHLINE STA 163+50 SEE ABOVE RIGHT



MATCHLINE STA 168+50 SEE SHEET 2.122

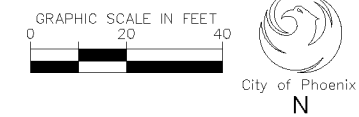
Waibel & Associates
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master planning gardens & consulting urban design

Phone 480.893.3849 Fax 480.893.3846
861 South Priest Drive, Suite 101
Tempe, AZ 85283
www.waibel.com

JANET L. WAIBEL
7/14/2017
EXPIRES 12 31 2019

Call for the Blue Stakes 602-263-1100 Blue Stakes Center



CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA.
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JKL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.121	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.122	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

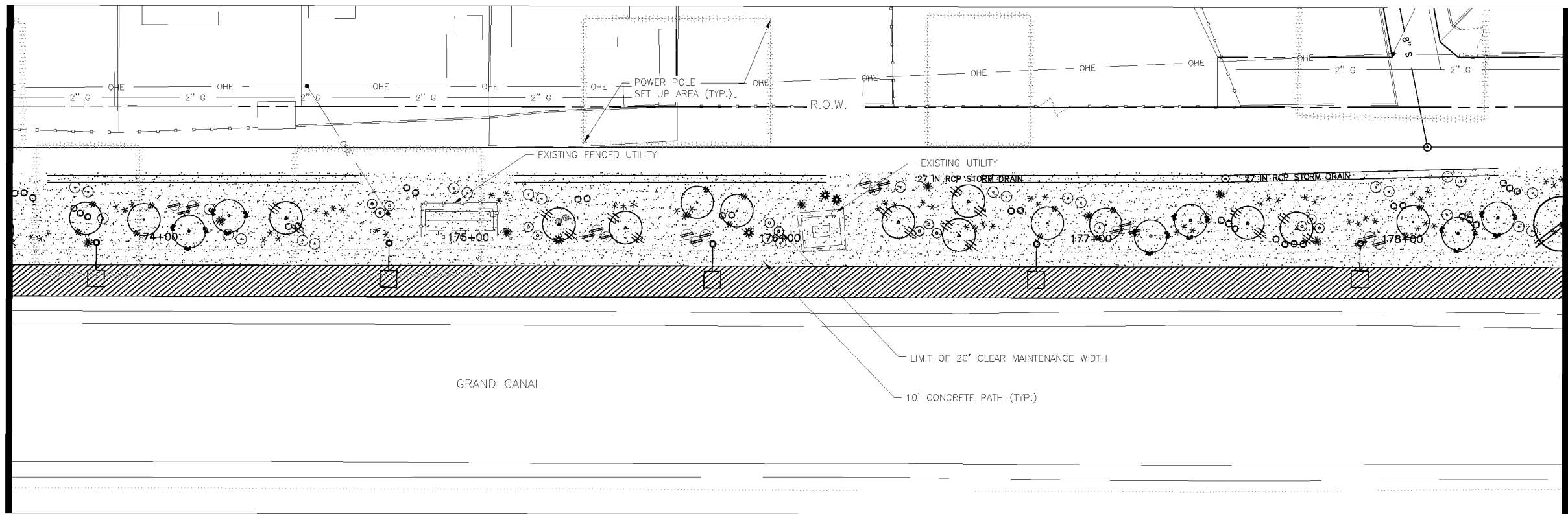
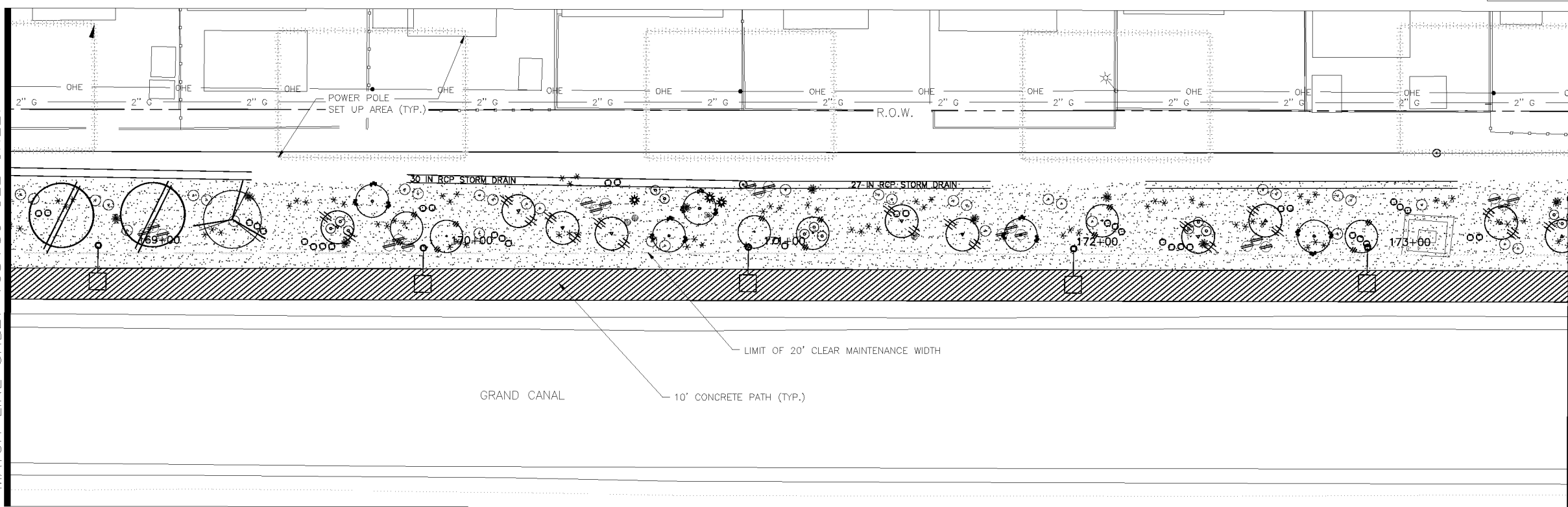
REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCH LINE SHEET 168+50 SEE SHEET 2.121

MATCHLINE STA 173+50 SEE ABOVE RIGHT

MATCHLINE STA 173+50 SEE BELOW LEFT

MATCHLINE STA 178+50 SEE SHEET 2.123



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Oleaya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thornberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
	Existing Oleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUA SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria laricifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysoactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
	Decomposed Granite	1/2" SCREENED
	1" DEPTH, MOUNTAIN VISTA BROWN	
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	
	SONORAN WILDFLOWER SEED MIX	
	The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.	
	Gabion Basket	2' x 2' x 6'

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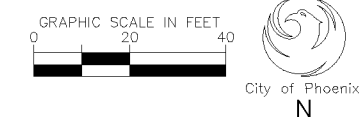
Call for the blue stakes 602-263-1100 Blue Stake Center

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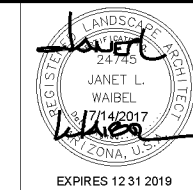
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.122	2.182



ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.123	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES		
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Olneya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thomberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
SHRUBS		
	Existing Oleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUAN SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Ericameria lanifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysoactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
ACCENTS		
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7" HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
MATERIALS		
	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.
	Gabion Basket	2' x 2' x 6'
	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path

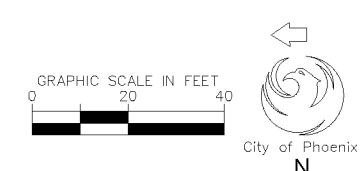
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e-mail: janet@waibel-la.com

No markings apply before you call. CALL FOR THE BLUE STAKES 602-263-1100 Blue Stake Center

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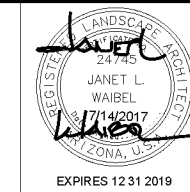


CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.123	2.182
SCALE				

ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

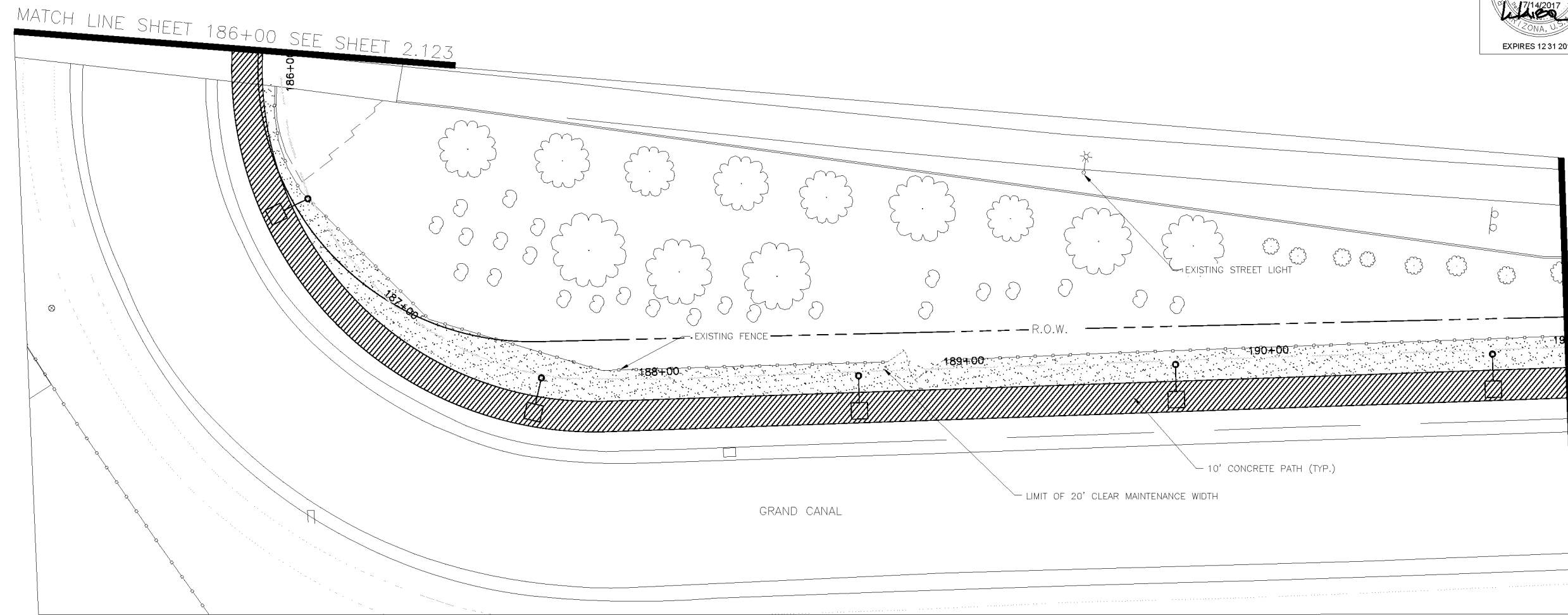


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.124	2,182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

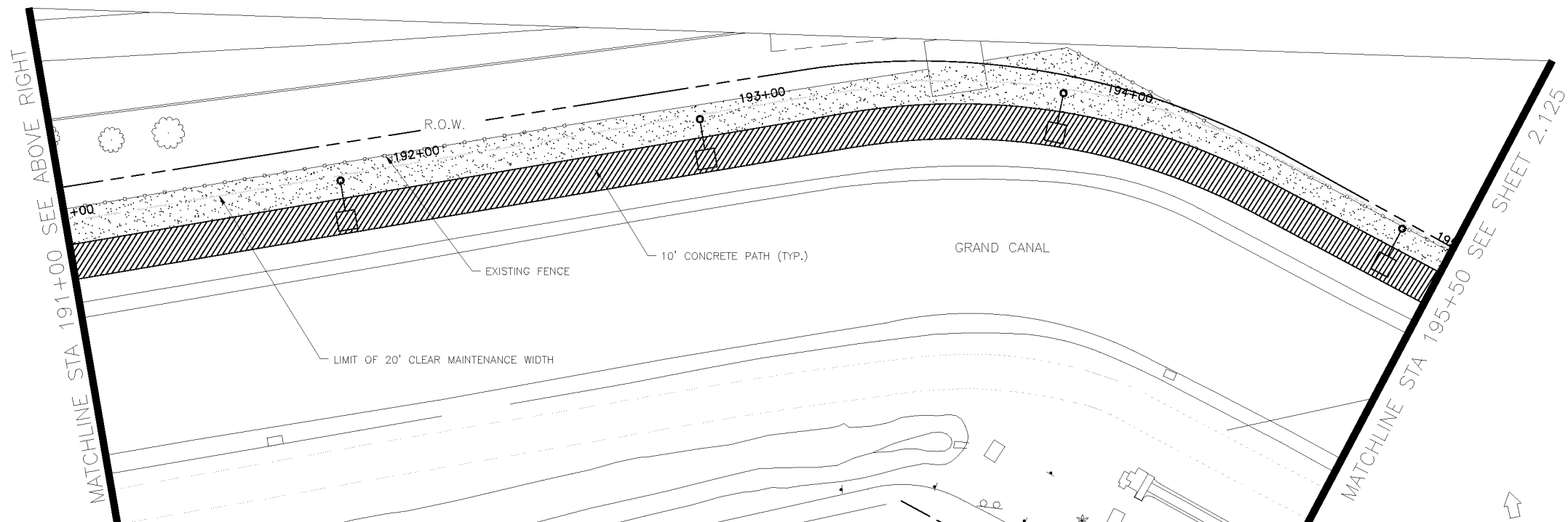
DES: JL DR: JKA CK: RCA DATE: 09/16/16

NO.	DESCRIPTION	REV BY	CHK BY	DATE

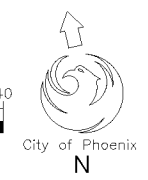


LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES		
	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless	10' H x 8' W
	MESQUITE HYBRID THORNLESS	3" CALIPER
	Acacia aneura *	9' H x 6' W
	MULGA TREE	2" CALIPER
	Parkinsonia praecox	9' H x 7' W
	PALO BREA	3" CALIPER
	Olneya tesota	8' H x 6' W
	IRONWOOD TREE	3" CALIPER
	Chilopsis linearis *	9' H x 7' W
	DESERT WILLOW	3" CALIPER
	Lysiloma thomberi *	6' H x 4' W
	FERN OF THE DESERT	2" CALIPER
	Acacia craspedocarpa *	6' H x 4' W
	LEATHER-LEAF ACACIA	2" CALIPER
	* SRP Compliant Tree	
SHRUBS		
	Existing Oleander to Remain	
	Caesalpinia mexicana *	65 GAL
	SIERRA SUN CACALACO	
	Leucophyllum laevigatum	5 GAL
	CHIHUAHUAN SAGE	
	Ephedra viridis	5 GAL
	MORMON TEA	
	Stipa tenuissima	5 GAL
	MEXICAN THREAD GRASS	
	Encarnia lanifolia	5 GAL
	TURPENTINE BUSH	
	Encelia farinosa *	5 GAL
	BRITTLEBUSH	
	Chrysoactinia mexicana *	5 GAL
	DAMIANITA	
	* SRP Compliant Plant	
ACCENTS		
	Opuntia violacea santa rita	15 GAL
	PURPLE PRICKLY PEAR	
	Fouquieria splendens	6'-7' HEIGHT
	OCOTILLO	
	Yucca rupicola	15 GAL
	TWISTED LEAF YUCCA	
MATERIALS		
	Decomposed Granite	1" DEPTH, MOUNTAIN VISTA BROWN 1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE)	SONORAN WILDFLOWER SEED MIX
	Hydroseed Rock installation per recommended procedures.	The native seed mix will go down as part of a 50/50
	Gation Basket	2' x 2' x 6'

NO LANDSCAPING ON THIS SHEET



NOTE:
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Waibel & Associates
Landscape Architecture

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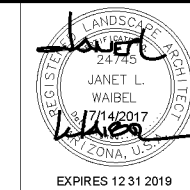
Call for the Blue Stakes 602-263-1100
Blue Stakes Center

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

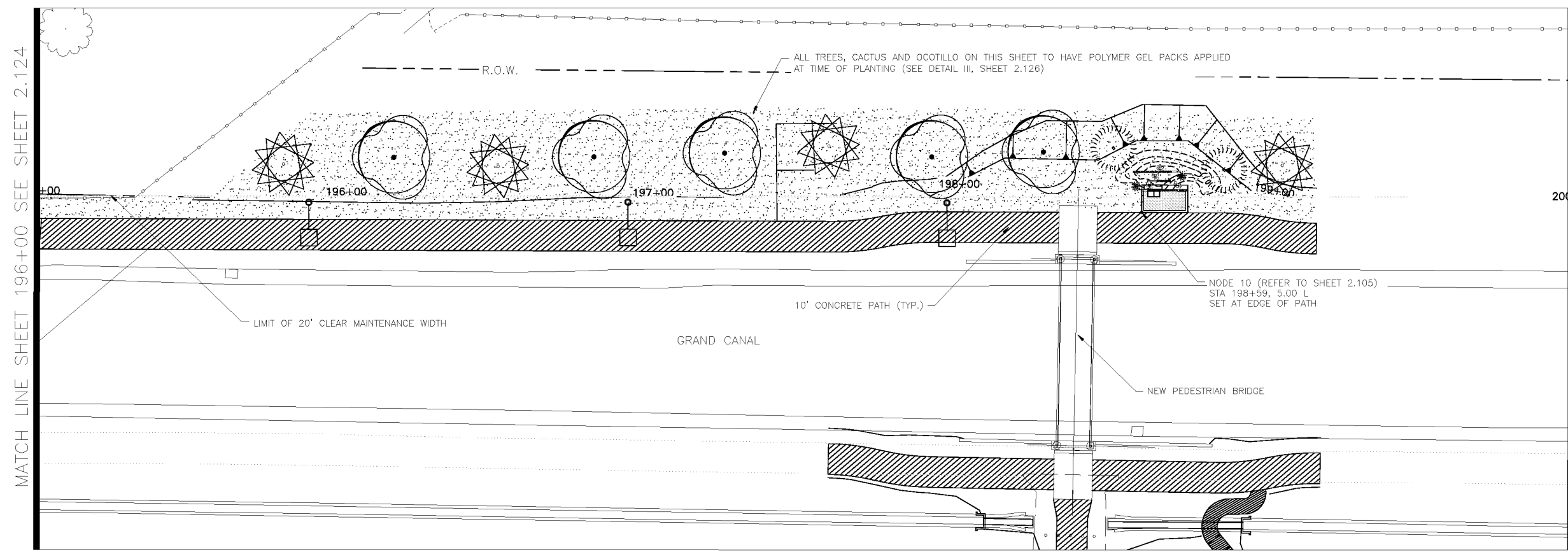
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.124	2,182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.125	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

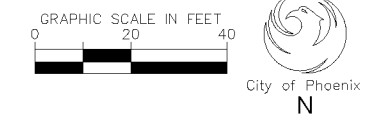


LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
TREES	Existing Mesquite Tree to Remain	
	Existing Palo Verde Tree to Remain	
	Existing Eucalyptus Tree to Remain	
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3" CALIPER
	Acacia aneura * MULGA TREE	9' H x 6' W 2" CALIPER
	Parkinsonia praecox PALO BREA	9' H x 7' W 3" CALIPER
	Oleaya tesota IRONWOOD TREE	8' H x 6' W 3" CALIPER
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3" CALIPER
	Lysiloma thomberi * FERN OF THE DESERT	6' H x 4' W 2" CALIPER
	Acacia craspedocarpa * LEATHER-LEAF ACACIA * SRP Compliant Tree	6' H x 4' W 2" CALIPER
SHRUBS	Existing Oleander to Remain	
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL
	Leucophyllum laevigatum CHIHUAHUAN SAGE	5 GAL
	Ephedra viridis MORMON TEA	5 GAL
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL
	Ericameria lanifolia TURPENTINE BUSH	5 GAL
	Encelia farinosa * BRITTLEBUSH	5 GAL
	Chrysoactinia mexicana * DAMIANITA * SRP Compliant Plant	5 GAL
ACCENTS	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL
	Fouquieria splendens OCOTILLO	6'-7" HEIGHT
	Yucca rupicola TWISTED LEAF YUCCA	15 GAL
MATERIALS	Decomposed Granite 1" DEPTH, MOUNTAIN VISTA BROWN	1/2" SCREENED
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX <i>The native seed mix will go down as part of a 50/50 Hydroseed Rock installation per recommended procedures. The irrigation system will be available until plantings are well established or until the City decides it is no longer needed.</i>	
	Gabion Basket	2' x 2' x 6'
	Tie Down Point for Gabion Baskets and Nodes	Offset dimension measured from center line of new path

MATCH LINE SHEET 196+00 SEE SHEET 2.124

END OF PROJECT LIMITS STA 200+00

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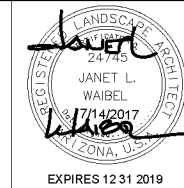
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

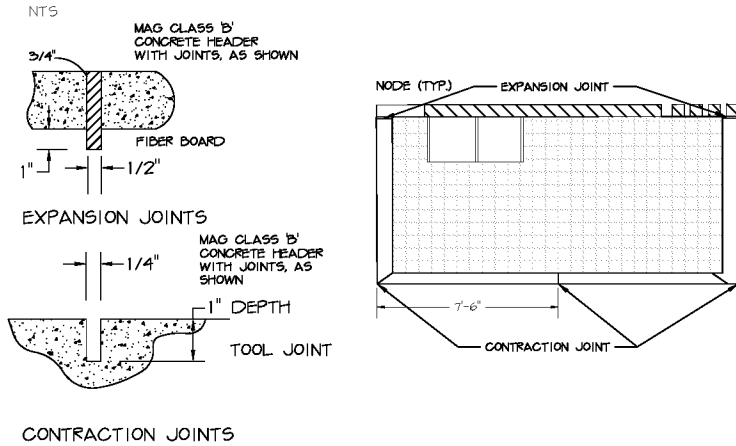
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DATE: 09/16	DATE: 09/16	DATE: 09/16	2.125	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

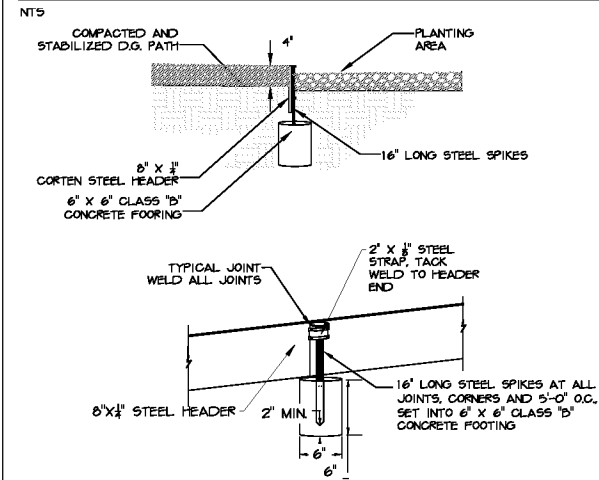


F.H.W.A. REGION 9	STATE ARIZ.	PROJ. NO. ST87600114	NO. 2.127	TOTAL 2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER		DES: JLN	DR: JKA	CK: RCA
DATE: 09/16/16				

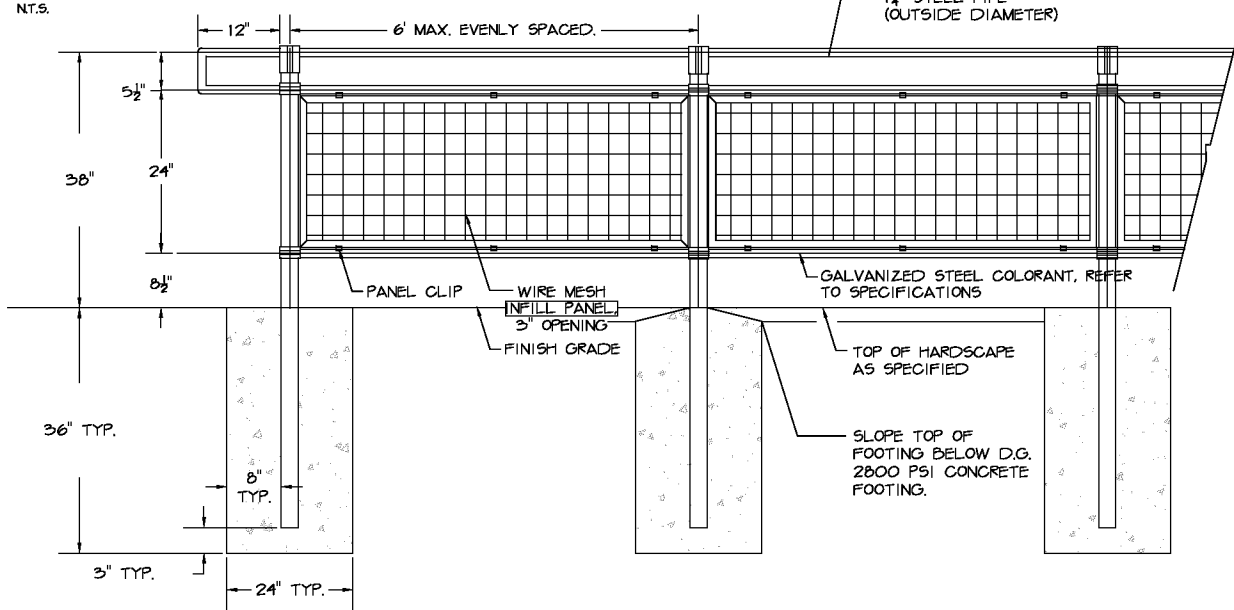
XI. EXPANSION AND CONTRACTION JOINTS FOR CONCRETE HEADER



XII. STEEL HEADER FOR STABILIZED D.G. PATHS

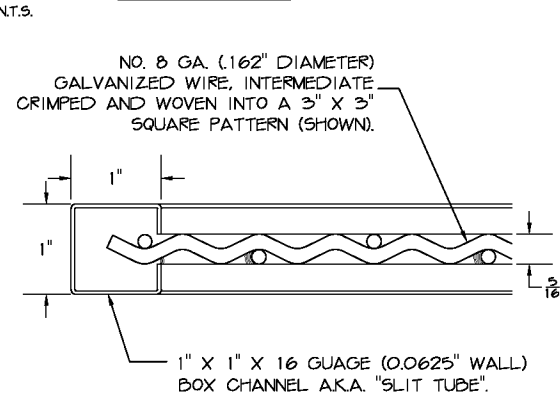


XIII. STEEL HANDRAIL WITH 3\"/>



- NOTES:**
1. PROVIDE ELASTOMERIC EXPANSION JOINT FOR CONCRETE ADJACENT TO VERTICAL SUPPORTS. SET COMPLETELY FLUSH TO CONCRETE AND REMOVE EXCESS FROM ADJACENT MATERIALS AND SURFACES.
 2. SLOPE TOP OF FOOTING TO DRAIN, BELOW 2\"/>

XIV. WIRE MESH FRAME



SONORAN DESERT WILDFLOWER SEED MIX			
WILDFLOWER MIX	COMMON NAME	BOTANICAL NAME	PLS lbs/acre
ANNUALS **all SRP approved	Mexican Poppy	<i>Eschscholzia californica ssp. mexicana</i>	2
	Arizona Poppy	<i>Kallstroemia grandiflora</i>	2
	Desert Lupine	<i>Lupinus sparsiflorus</i>	2
	Arizona Lupine	<i>Lupinus arizonicus</i>	2
PERENNIALS **all SRP approved	Paper Flower	<i>Psilostrophe cooperi</i>	1
	Evening Primrose	<i>Oenothera caespitosa</i>	1
	Desert Marigold	<i>Baileya multiradiata</i>	1
	Rock Penstemon	<i>Penstemon baccarifolius</i>	2
	Coral Penstemon	<i>Penstemon superbus</i>	2
	Desert Ageratum	<i>Ageratum corymbosum</i>	2
	Daminiata daisy	<i>Chrysactinia mexicana</i>	1

LANDSCAPE NOTES:

1. LANDSCAPE AREAS ARE DEFINED AS ALL NON PAVED AREAS DISTURBED BY CONSTRUCTION. SLIGHT VARIATIONS MAY EXIST BETWEEN ACTUAL SITE CONDITIONS AND DRAWINGS. CONTRACTOR SHALL ADJUST PLANTING LAYOUT AS REQUIRED TO MAINTAIN PLANT QUANTITIES AND DESIGN INTENT. FOR AREAS OVER 100 S.F. CONTACT LANDSCAPE ARCHITECT FOR REVISION TO PLANT LAYOUT.
2. NO PLANT SUBSTITUTIONS, TYPE, SIZE, OR QUANTITY, OR DEVIATIONS FROM THE APPROVED LANDSCAPE OR IRRIGATION PLANS, ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE CITY OF PHOENIX.
3. COORDINATE ALL NECESSARY EXCAVATION AREAS WITH OWNER'S REPRESENTATIVE.
4. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE SLEEVING. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. VERIFY ANY EXISTING SLEEVES INSTALLED BY OTHER CONTRACTORS.
5. IRRIGATION AND ELECTRICAL SLEEVES TO BE SCHEDULE 40 PVC. ALL SLEEVES TO EXTEND 6\"/>

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE	QTY.	NOTES
TREES	Existing Mesquite Tree to Remain			
	Existing Palo Verde Tree to Remain			
	Existing Eucalyptus Tree to Remain			
	Prosopis Hybrid Thornless MESQUITE HYBRID THORNLESS	10' H x 8' W 3\"/>	62	MULTI-TRUNK
	Acacia aneura * MULGA TREE	9' H x 6' W 2\"/>	30	STANDARD TRUNK
	Parkinsonia praecox PALO BREA	9' H x 7' W 3\"/>	11	MULTI-TRUNK
	Oleaya tesota IRONWOOD TREE	8' H x 6' W 3\"/>	19	MULTI-TRUNK
	Chilopsis linearis * DESERT WILLOW	9' H x 7' W 3\"/>	21	MULTI-TRUNK
	Lysiloma thornbert * FERN OF THE DESERT	6' H x 4' W 2\"/>	32	MULTI-TRUNK
	Acacia craspedocarpa * LEATHER-LEAF ACACIA	6' H x 4' W 2\"/>	49	STANDARD TRUNK
	* SRP Compliant Tree			
SHRUBS	Existing Oleander to Remain			
	Caesalpinia mexicana * SIERRA SUN CACALACO	65 GAL	117	MULTI-TRUNK
	Leucophyllum laevigatum CHIHUAHUA SAGE	5 GAL	344	X
	Ephedra viridis MORMON TEA	5 GAL	220	X
	Stipa tenuissima MEXICAN THREAD GRASS	5 GAL	1141	X
	Encameria laticifolia TURPENTINE BUSH	5 GAL	322	X
	Encelia farinosa * BRITTLEBUSH	5 GAL	296	X
	Chrysactinia mexicana * DAMIANITA	5 GAL	678	X
	* SRP Compliant Plant			
ACCENTS	Opuntia violacea santa rita PURPLE PRICKLY PEAR	15 GAL	139	X
	Fouquieria splendens OCOTILLO	6-7' HEIGHT	117	X
	Yucca nupicola TWISTED LEAF YUCCA	15 GAL	95	X
MATERIALS	Decomposed Granite 1\"/>	1/2\"/>	1025 C.Y. 1538 TONS	X
	Native Seed Mix (DO NOT TREAT THESE AREAS WITH PRE-EMERGENT HERBICIDE) SONORAN WILDFLOWER SEED MIX		2.3 Acres	See Native Seeding Special Provisions and Sheet 2.127 for seed mix
	Gabion Basket	2' x 2' x 6'	79	

GENERAL NOTES:
DECOMPOSED GRANITE— AS PER NOTED ON PLANS AND SPECIFICATIONS. SUBMIT SAMPLE FOR LANDSCAPE ARCHITECT'S APPROVAL.

M.A.G. NOTE— SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

- LANDSCAPE NOTES:
1. ALL LANDSCAPE AREAS SHALL BE TREATED WITH PRE-EMERGENT HERBICIDE EXCEPT FOR HYDROSEED AREAS.
 2. ALL PLANTED AREAS SHALL BE COVERED WITH 2\"/>

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LANDSCAPE DETAILS II

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JLN	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.127	2.182

SCALE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

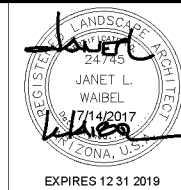
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ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

IRRIGATION OVERVIEW:

NOTES:
1. EQUIPMENT LOCATIONS ARE APPROXIMATE,
SUBJECT TO APPROVAL BY C.O.P.



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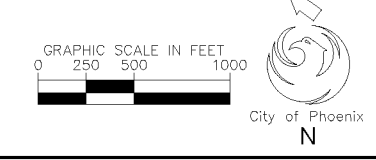
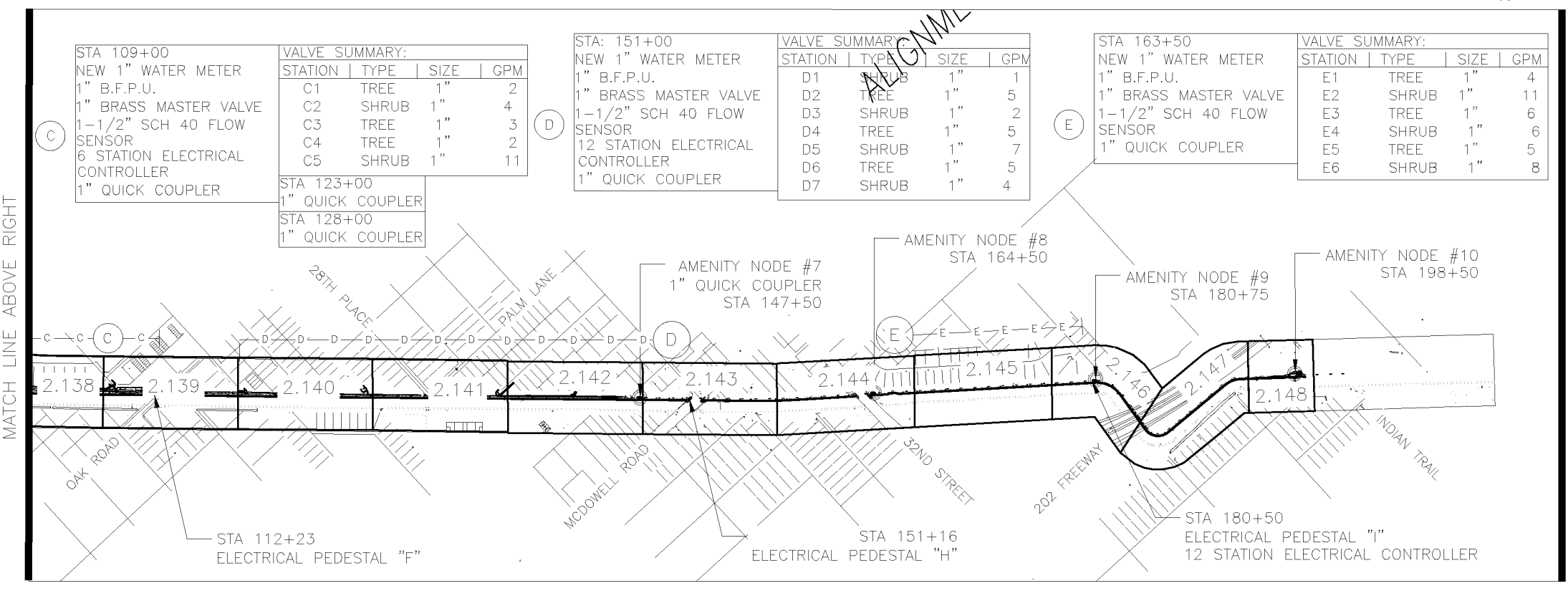
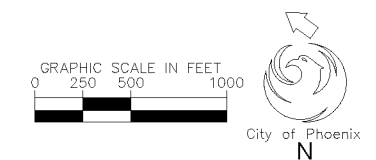
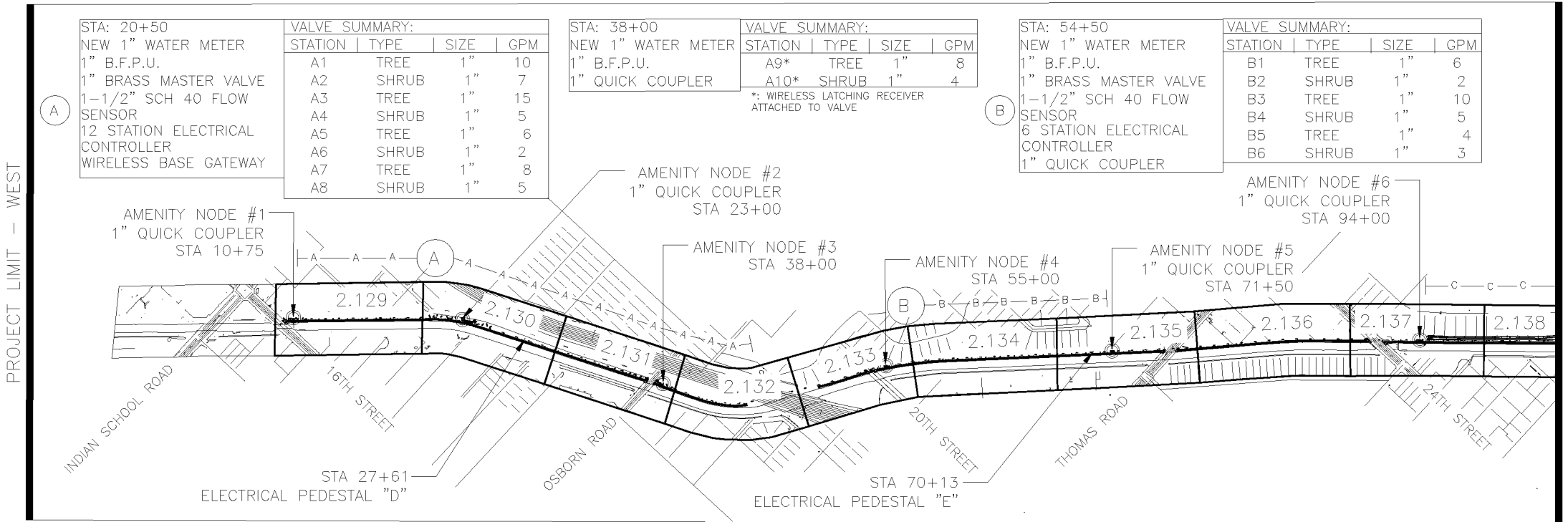
NO.	DESCRIPTION	REV BY	CHK BY	DATE

GENERAL NOTES:
VALVE NOTES—
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES—
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/4", USE 3" SLEEVE, FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULL BOX.

M.A.G. NOTE—
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS-OF-WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.



IRRIGATION CONTROLLER ZONES

—A—A—	STA 10+25	—	44+50
—B—B—	STA 55+00	—	71+50
—C—C—	STA 94+00	—	112+25
—D—D—	STA 118+50	—	151+15
—E—E—	STA 164+50	—	181+50

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IRRIGATION OVERVIEW
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.128	2.182
SCALE				

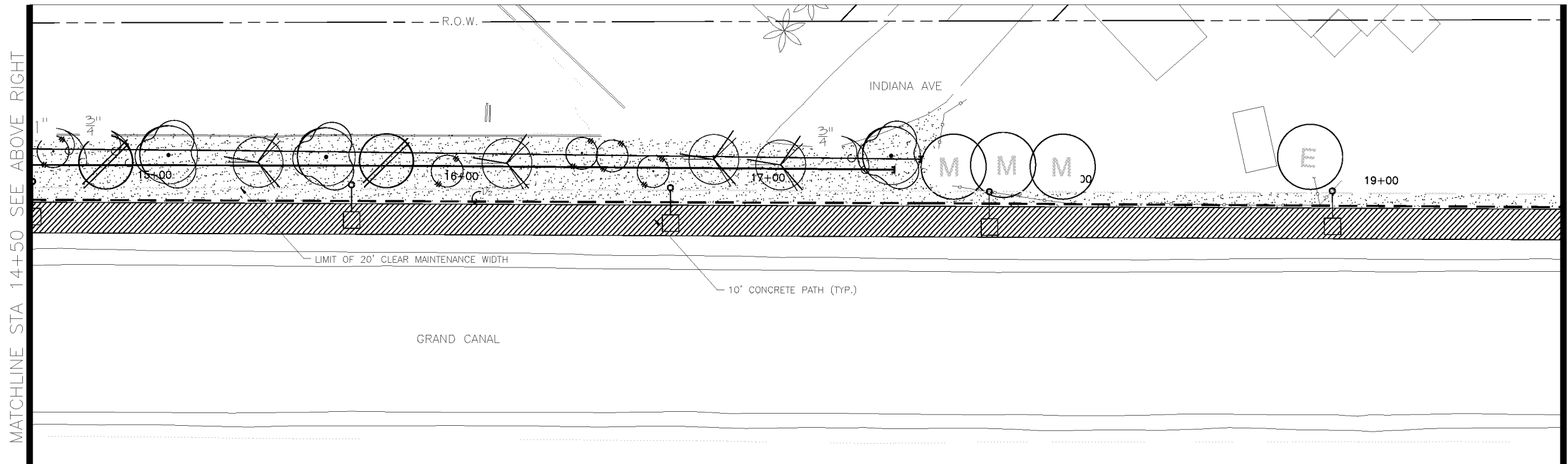
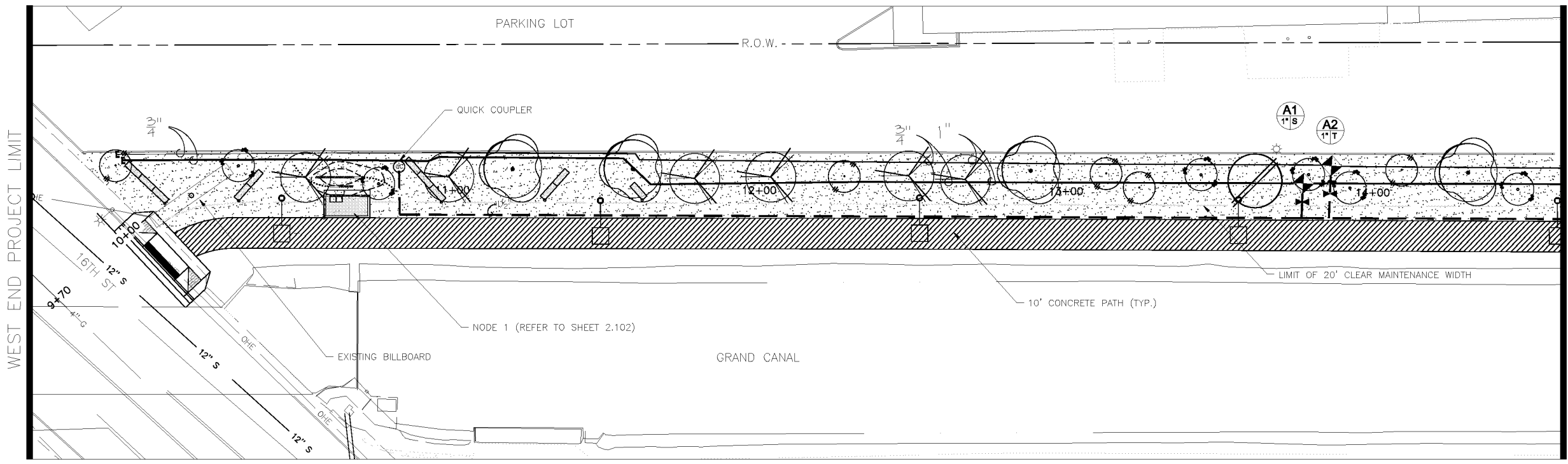
ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.



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DES: JKL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number **A1** Valve Size **1" X** GPM

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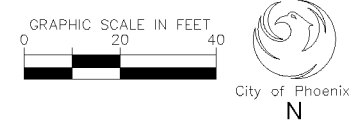
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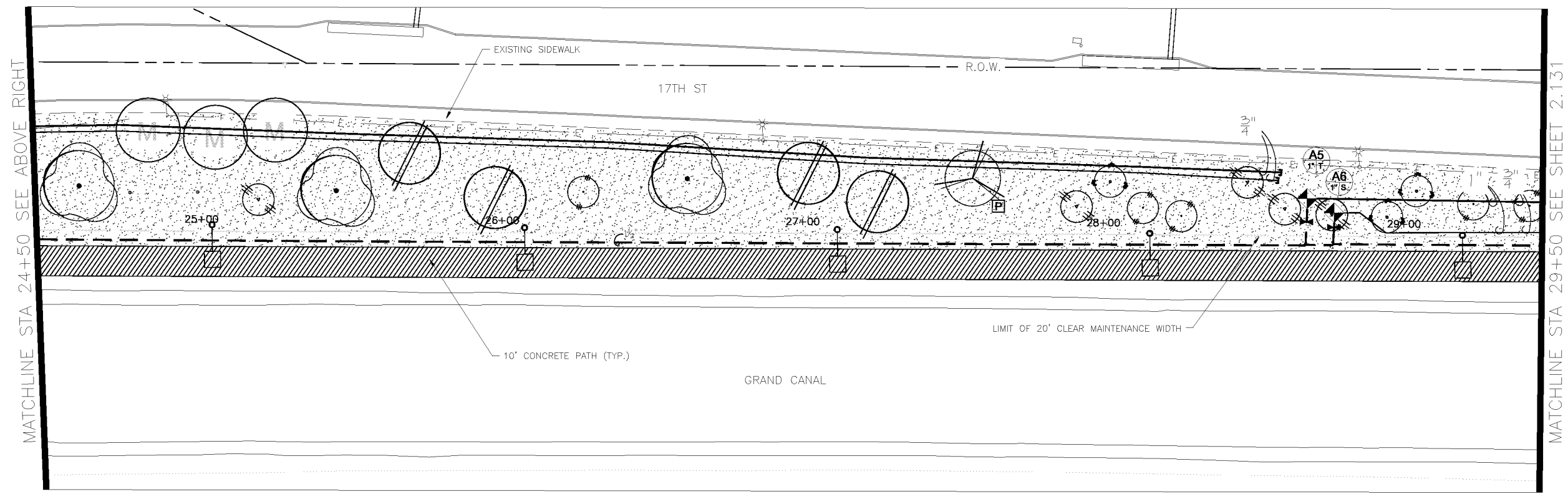
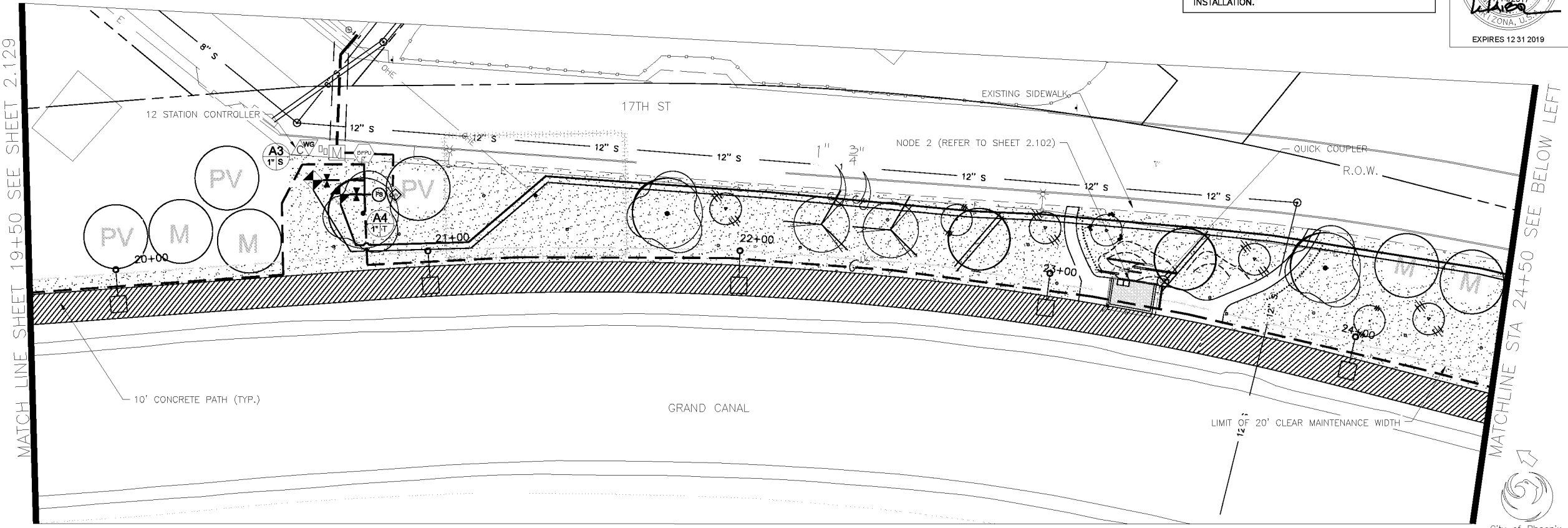
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IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all laterals lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number

Valve Size 1" X GPM

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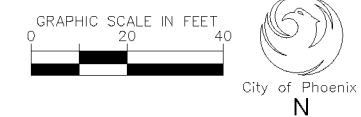
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ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.130	2.182

NOTE:
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ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.131	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: J.L.	DR: J.K.A.	CK: R.C.A.	DATE: 09/16/16	

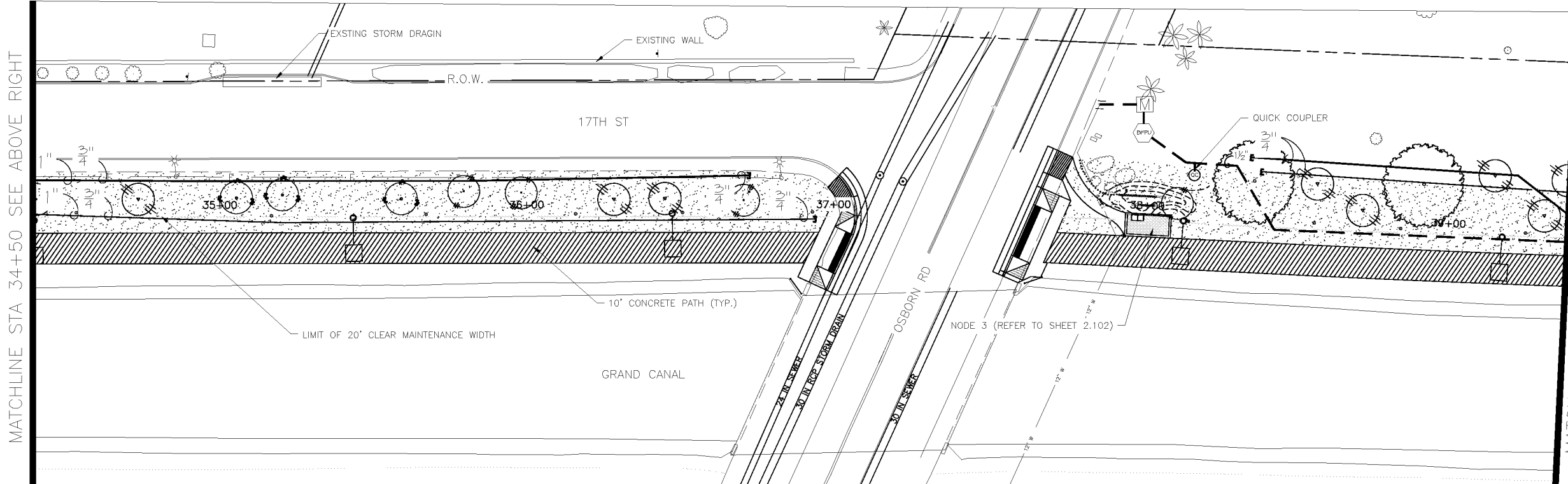
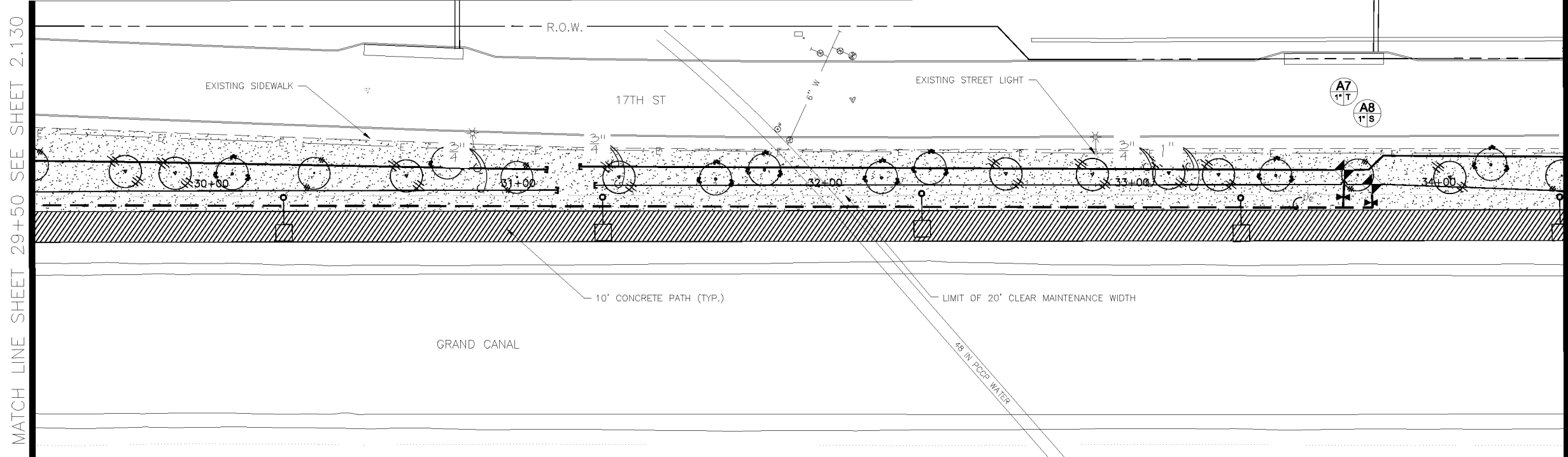
REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE

IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	A1	GPM
Valve Size	1" X	



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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.131	2.182

SCALE 2.131 2.182

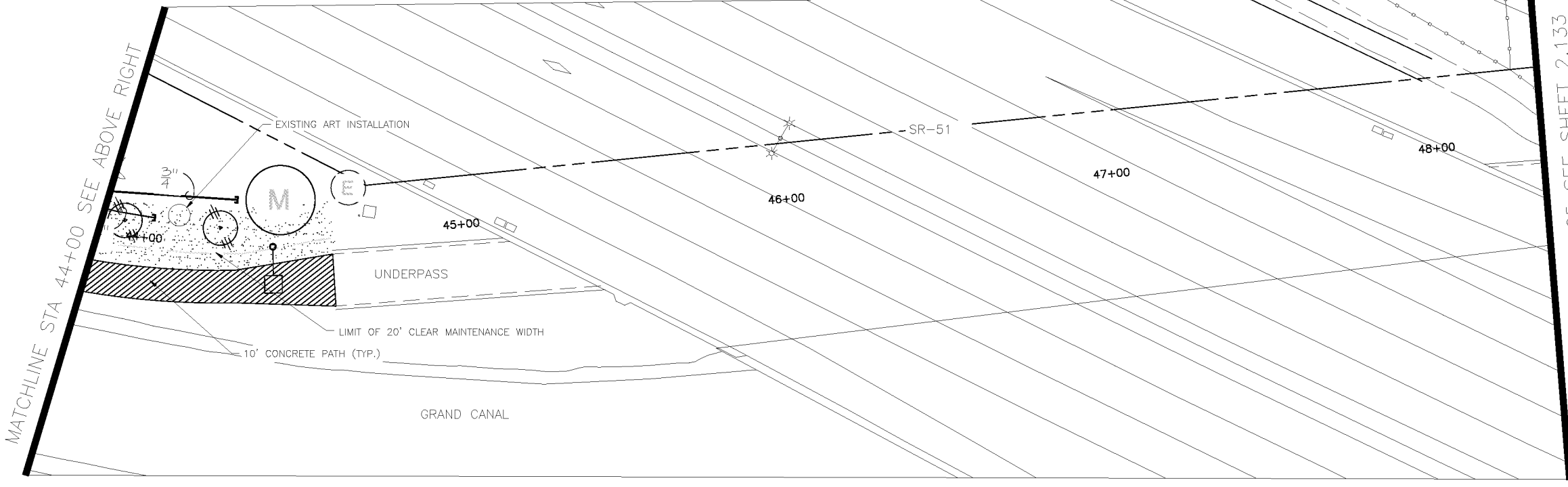
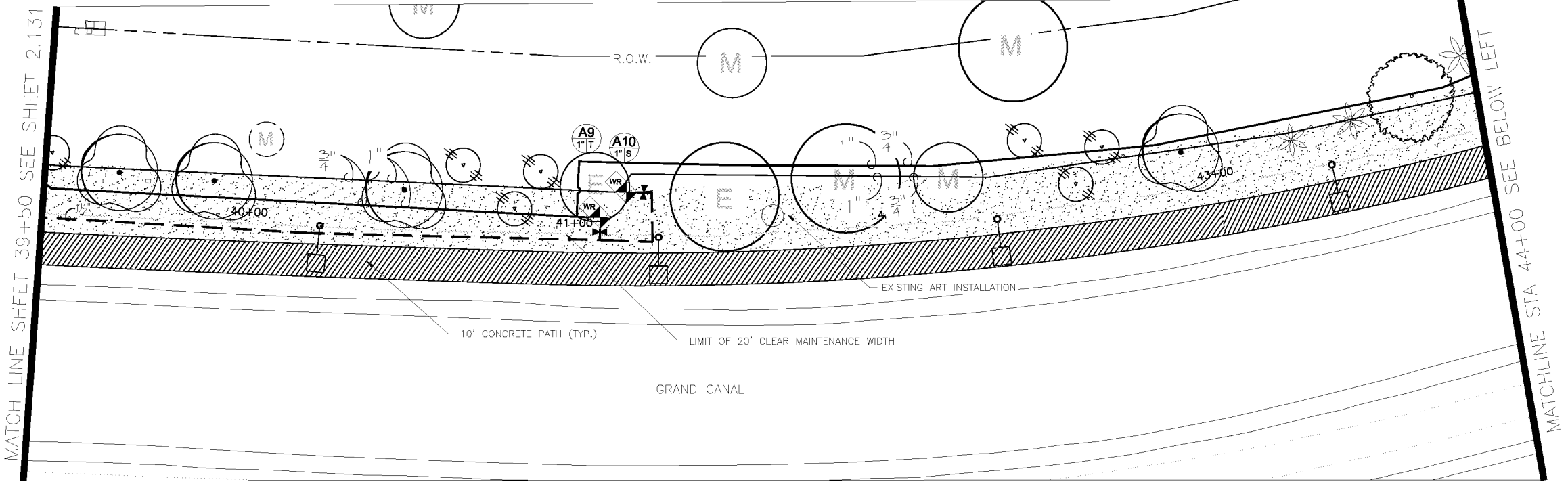
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REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

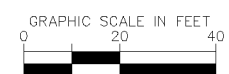


IRRIGATION LEGEND

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	Master Valve
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Valve Key

Station Number	A1	GPM
Valve Size	1" X	



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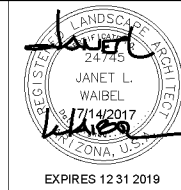
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.132	2.182

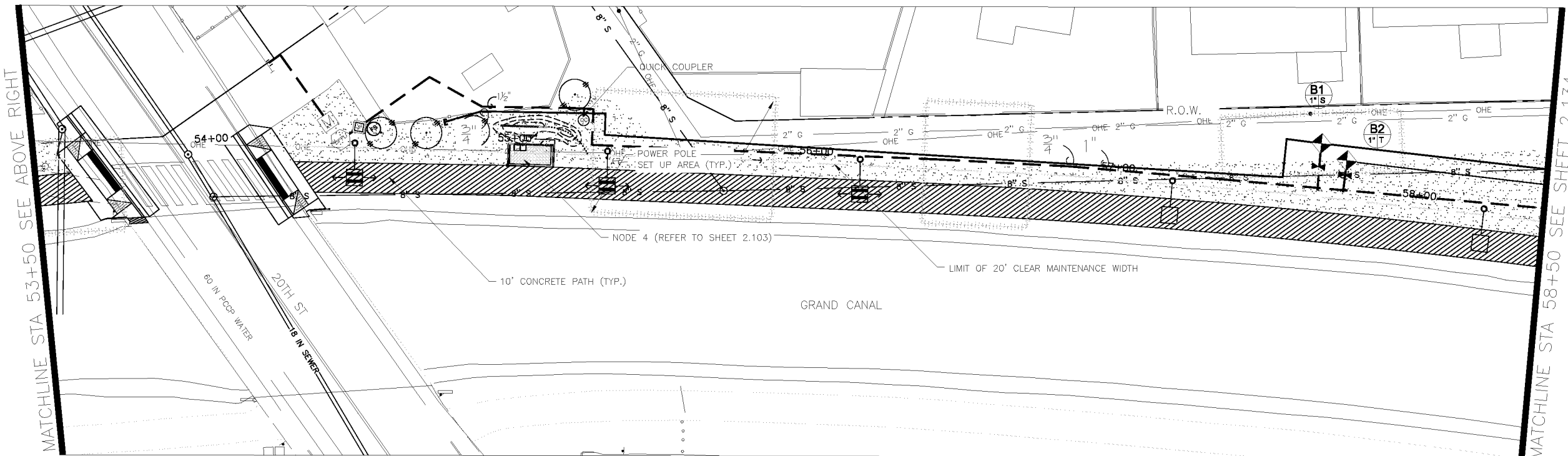
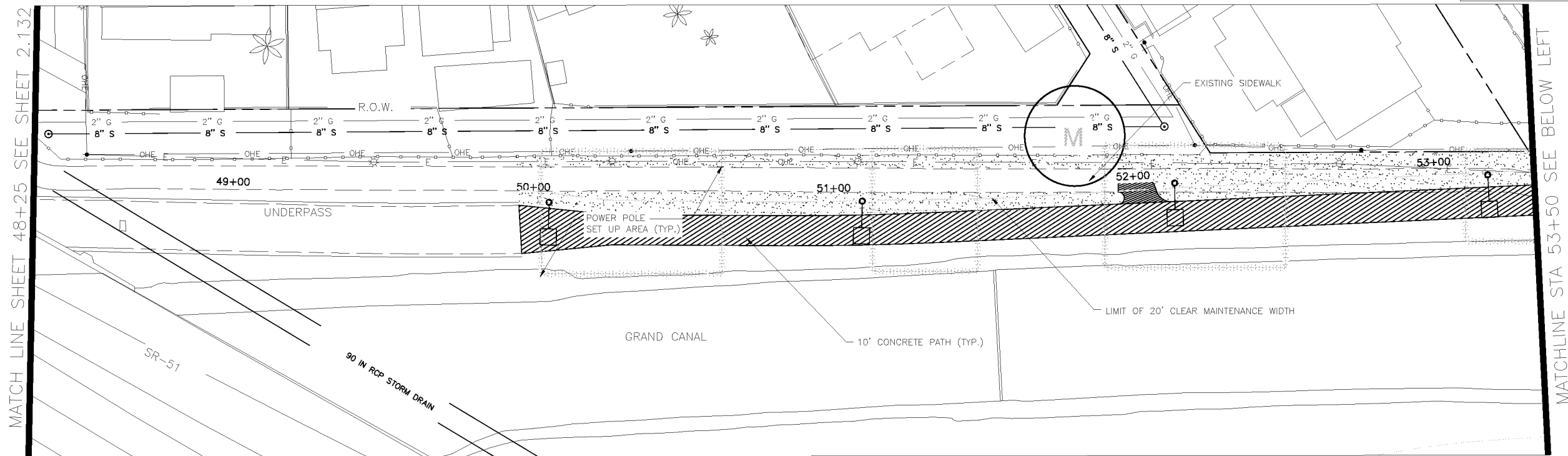
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IRRIGATION LEGEND

Symbol	Description
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Valve Key

Station Number **A1** Valve Size **1" X** GPM

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e-mail: janet@waibel-la.com

602-263-1100
Blue Stakes Center

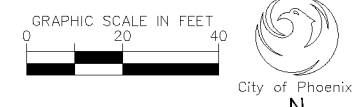
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

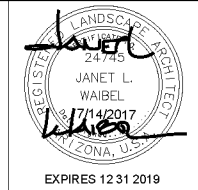
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.133	2.182
SCALE			2.133	2.182

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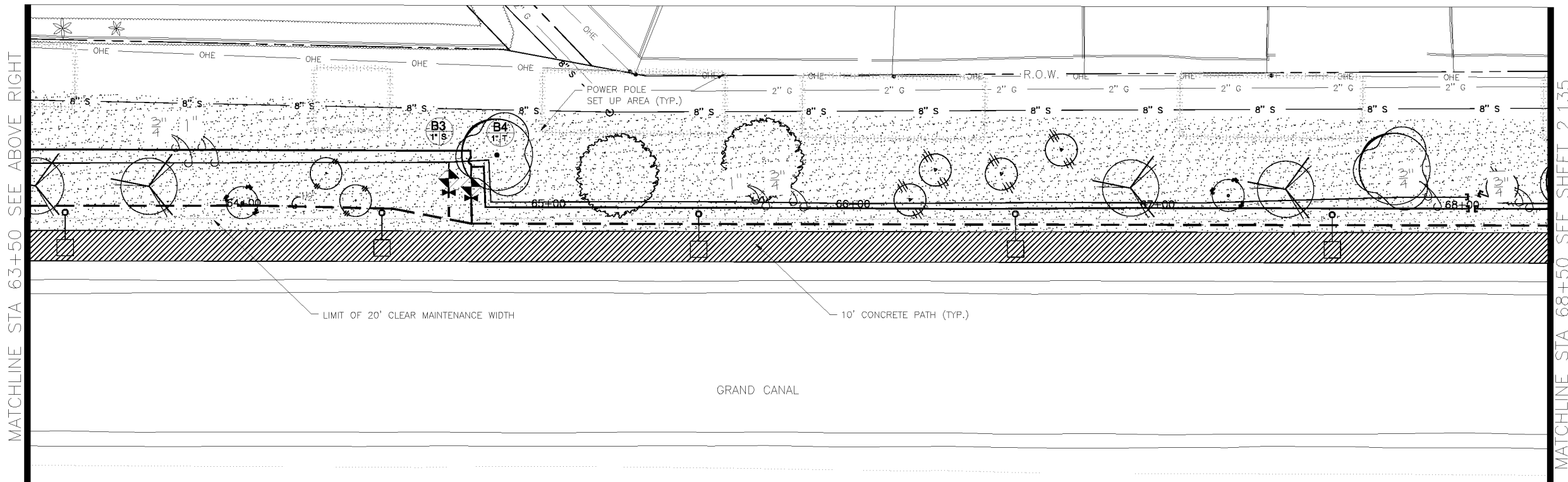
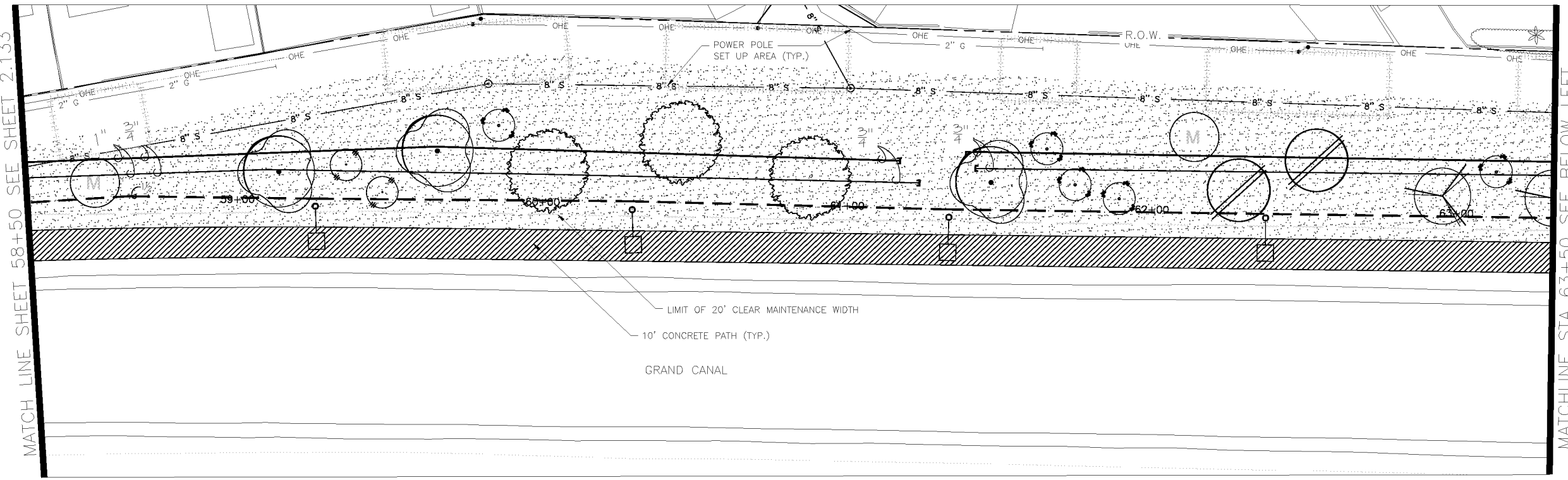
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IRRIGATION LEGEND

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Valve Key

Station Number **A1** GPM

Valve Size **1" X**

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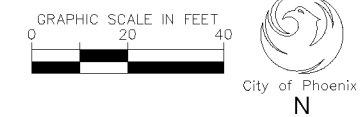
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GRAND CANALScape PHASE II
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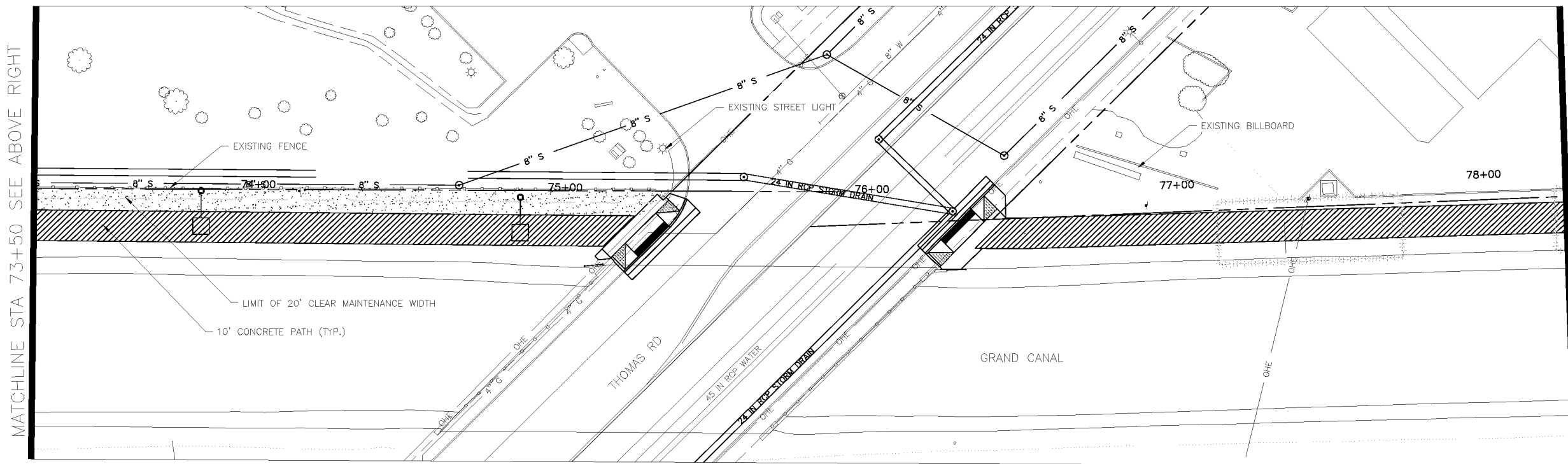
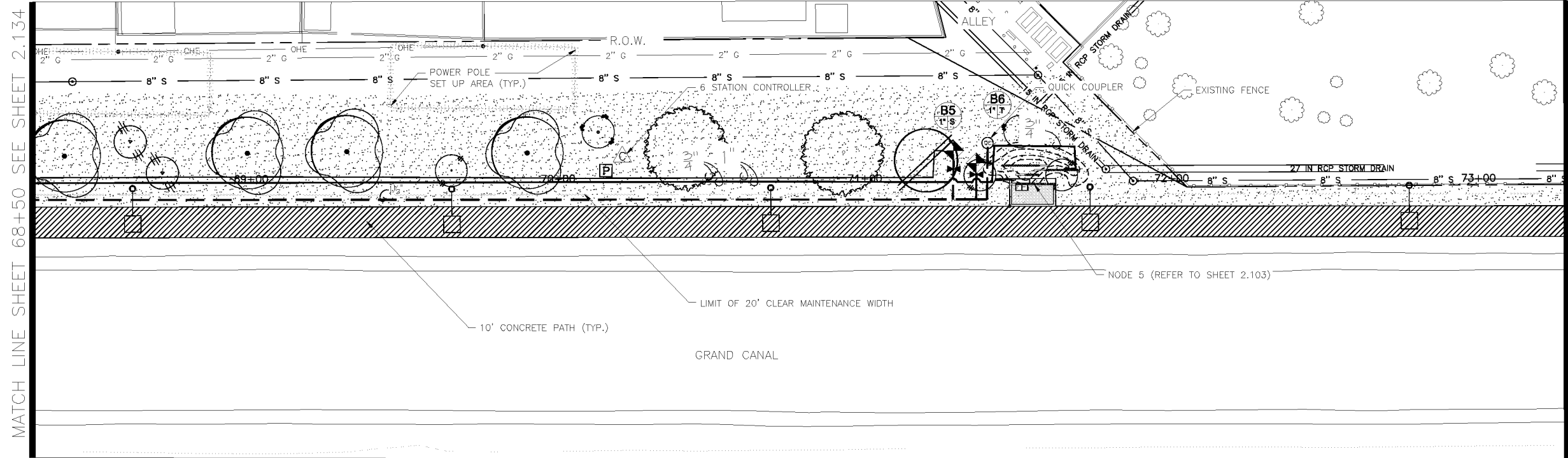
IRRIGATION LEGEND

- | Symbol | Description |
|--------|------------------------------------------------------------------------------------------|
| | New Water Meter - See plans for locations |
| | Electrical Power Pedestal |
| | Controller |
| | Base Wireless Gateway |
| | Backflow Prevention Unit with Enclosure |
| | Master Valve |
| | Flow Sensor |
| | 1" Remote Control Valve |
| | Pressure Regulator and Wye Strainer (not shown on plan) |
| | Wireless DC Latching Receiver |
| | Ball Valve |
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| | Emitter Irrigation Line for Trees |
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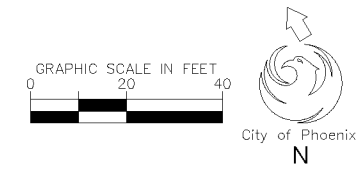
Valve Key

Station Number **A1**

Valve Size **1" X** GPM



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STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
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SCALE 2.135 2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

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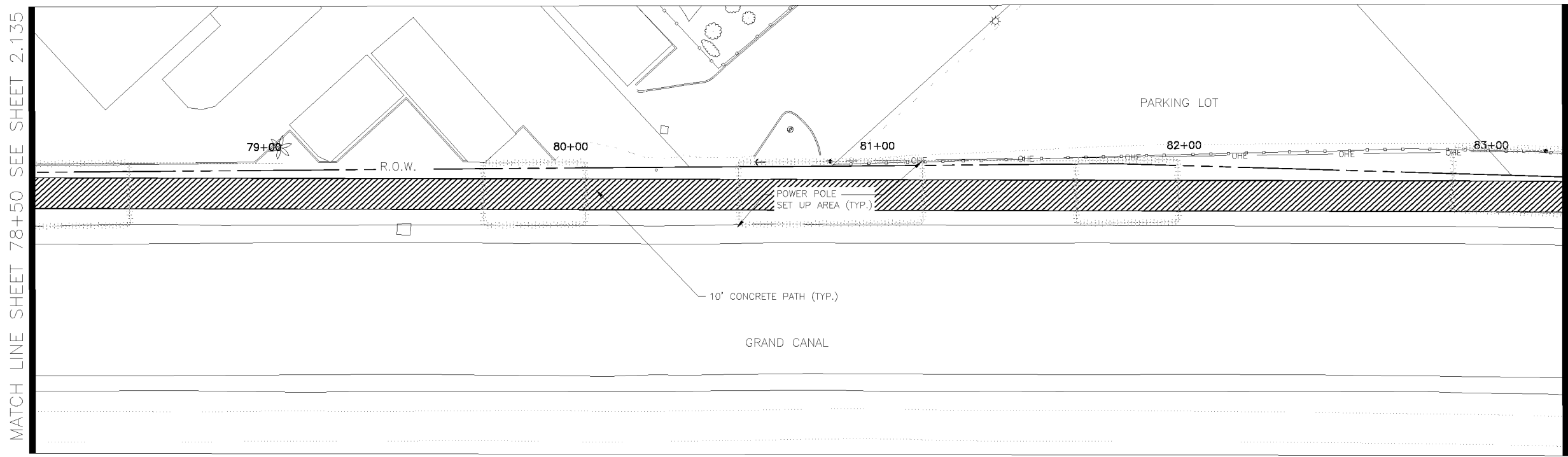
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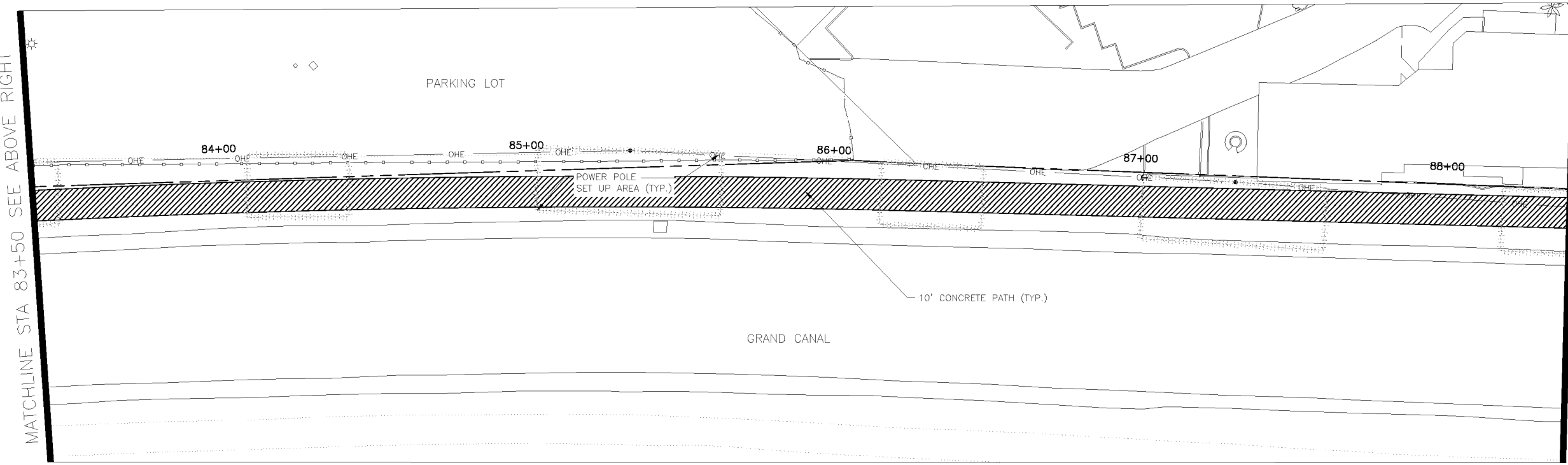
MATCHLINE STA 83+50 SEE BELOW LEFT

MATCHLINE STA 83+50 SEE ABOVE RIGHT

MATCHLINE STA 88+50 SEE SHEET 2.137



NO LANDSCAPING ON THIS SHEET



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
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Station Number **A1** Valve Size **1" X** GPM

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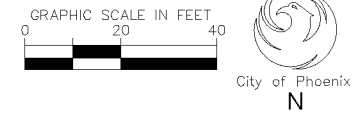
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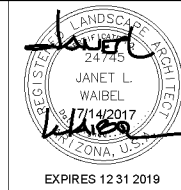
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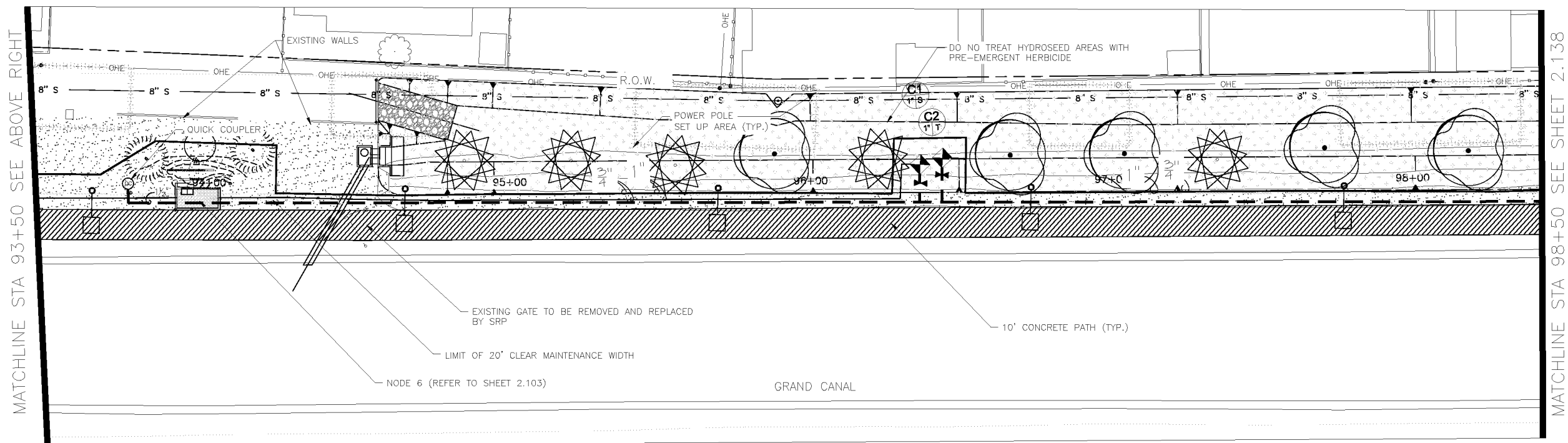
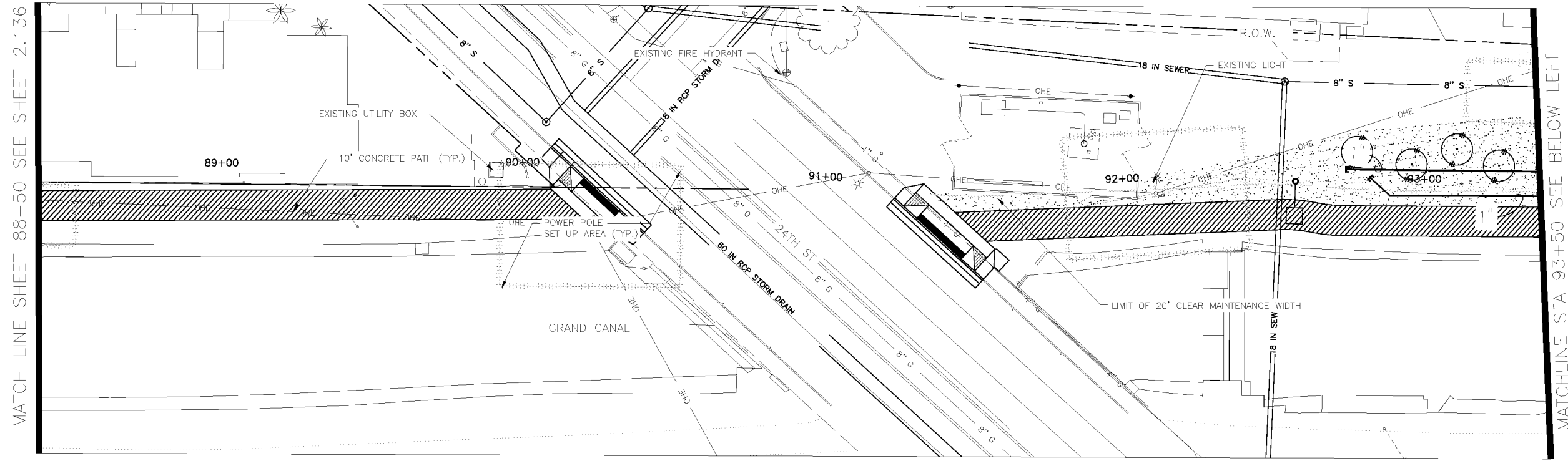
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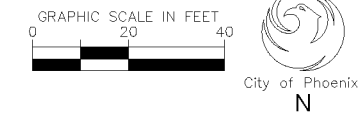
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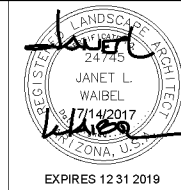
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.138	2.182

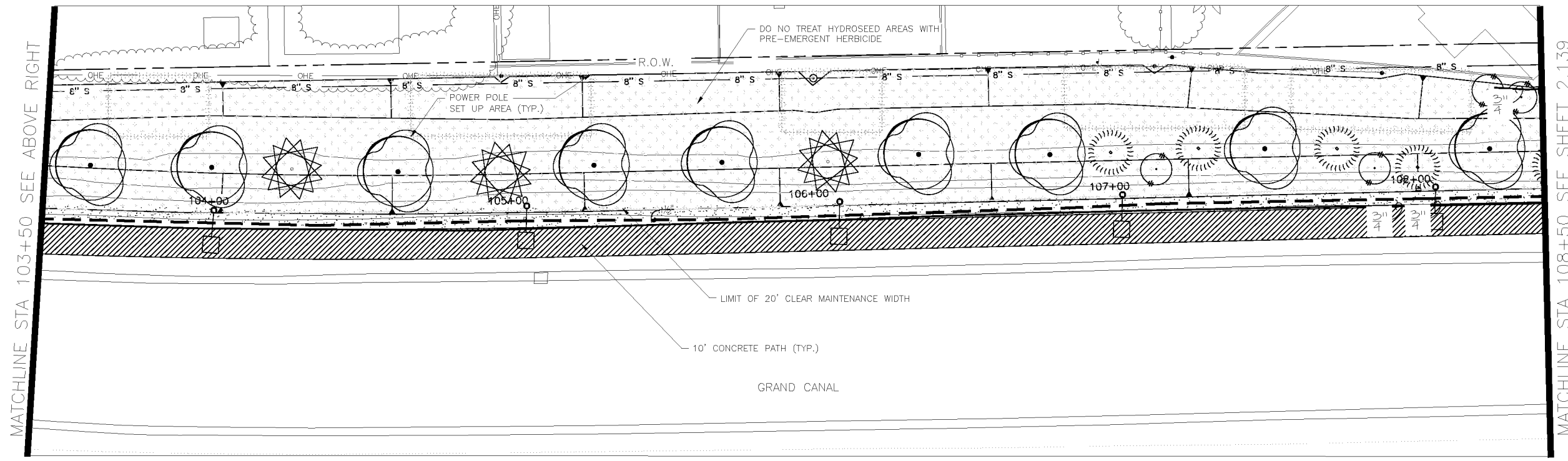
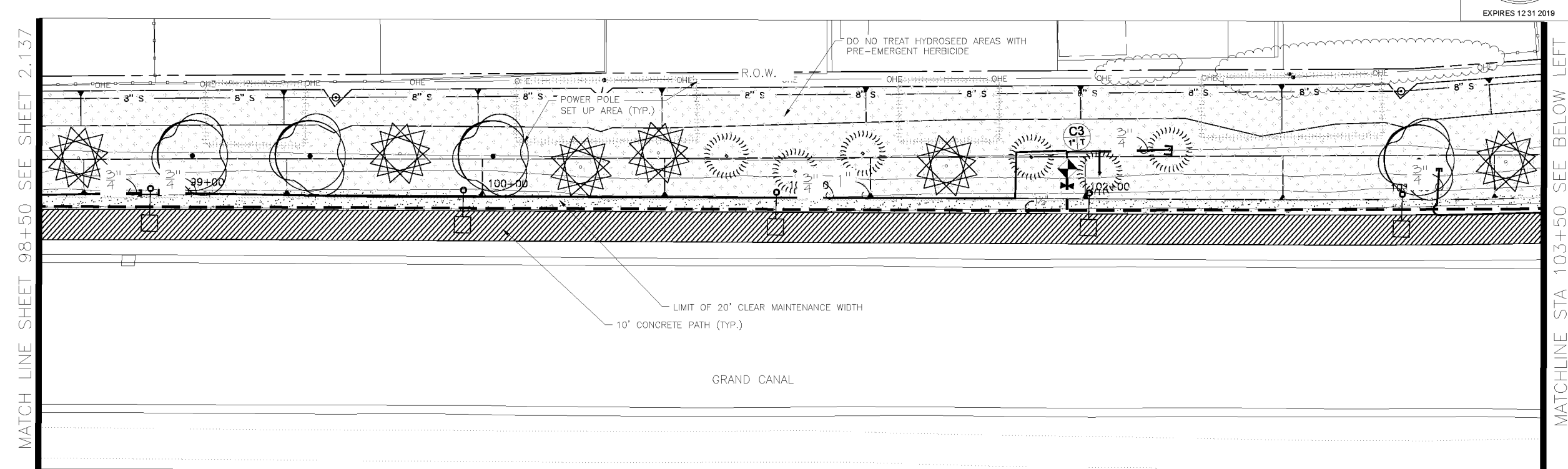
DES: JKL DR: JKA CK: RCA DATE: 09/16/16

IRRIGATION LEGEND

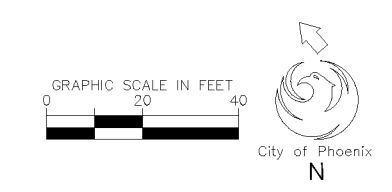
Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	A1	GPM
Valve Size	1" X	



NO.	DESCRIPTION	REV BY	CHK BY	DATE



CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JKL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.138	2.182

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.139	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: J.L.	DR: J.K.A.	CK: R.C.A.	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

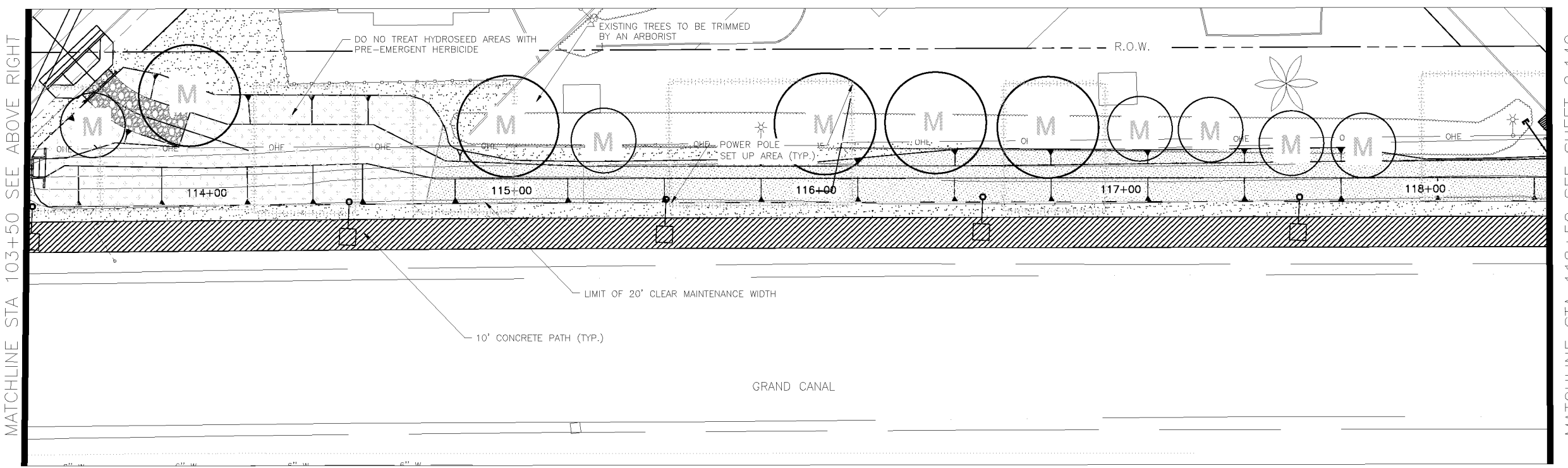
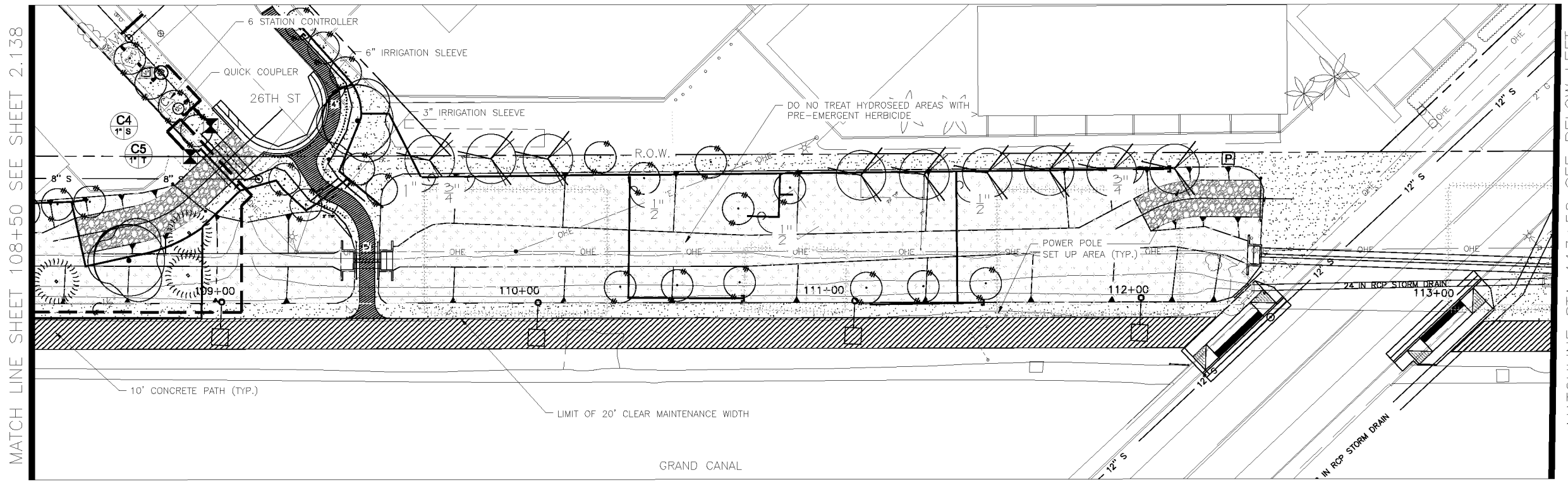
IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

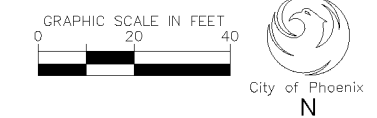
Valve Key

Station Number **A1** GPM

Valve Size **1" X**



NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



Waibel & Associates Landscape Architecture
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Call for the blue stakes 602-263-1100 Blue Stakes Center

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: J.L.	DR: J.K.A.	CK: R.C.A.	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.139	2.182

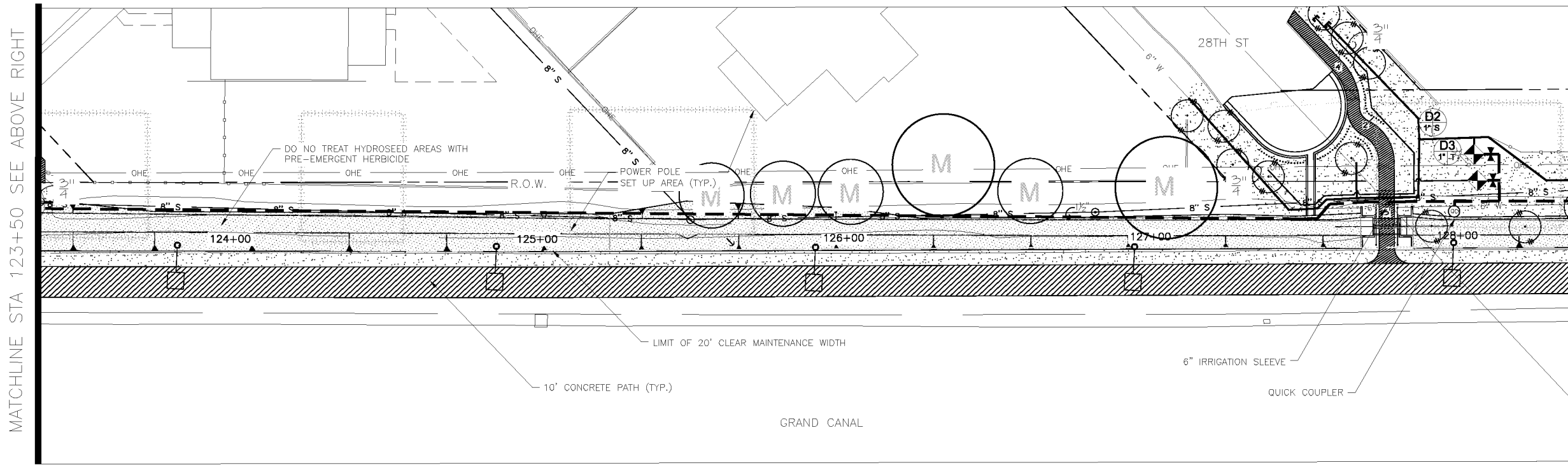
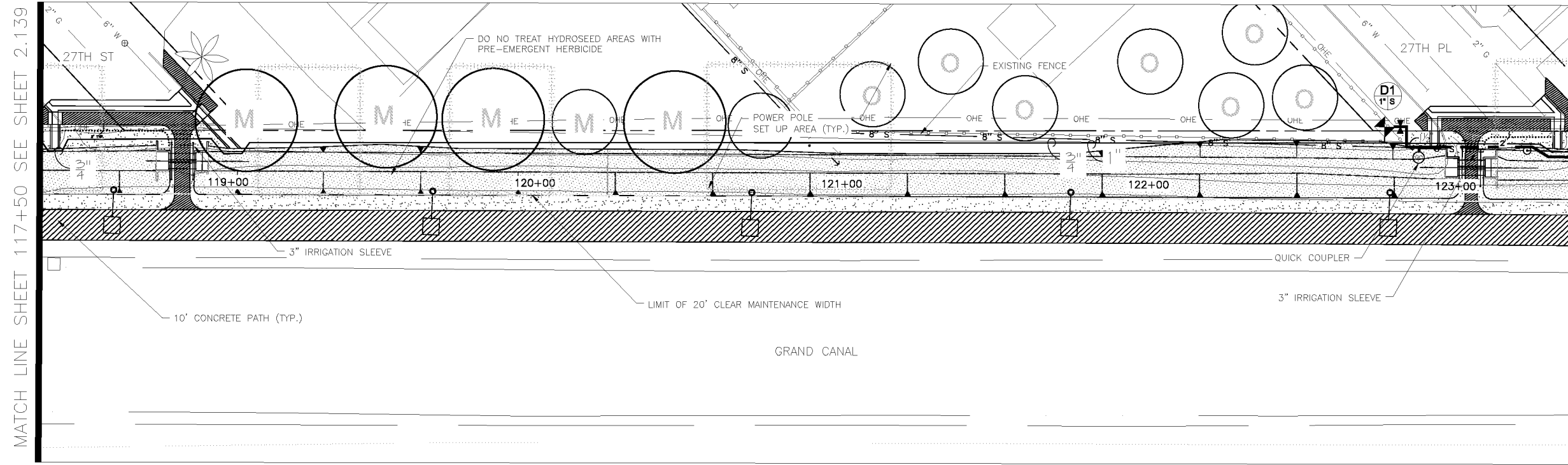
ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.140	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter - As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number **A1** Valve Size **1" X** GPM

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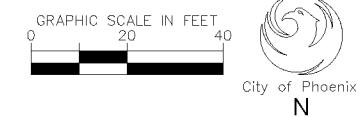
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.140	2.182

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



MATCH LINE SHEET 117+50 SEE SHEET 2.139

MATCHLINE STA 123+50 SEE ABOVE RIGHT

MATCHLINE STA 122+50 SEE BELOW LEFT

MATCHLINE STA 128+50 SEE SHEET 2.141

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.141	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

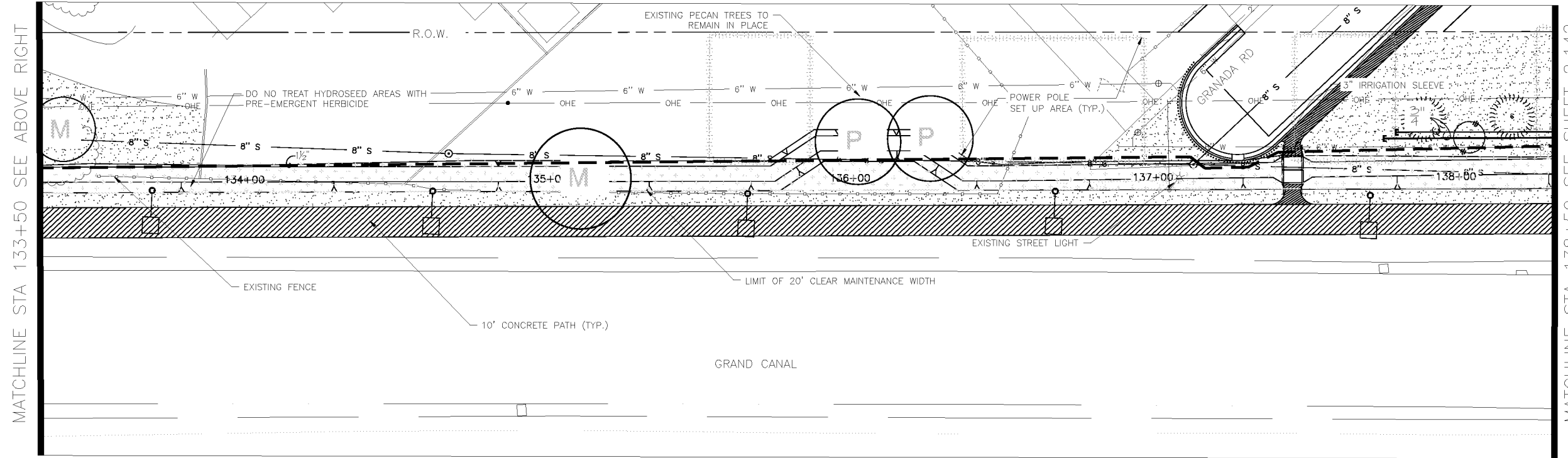
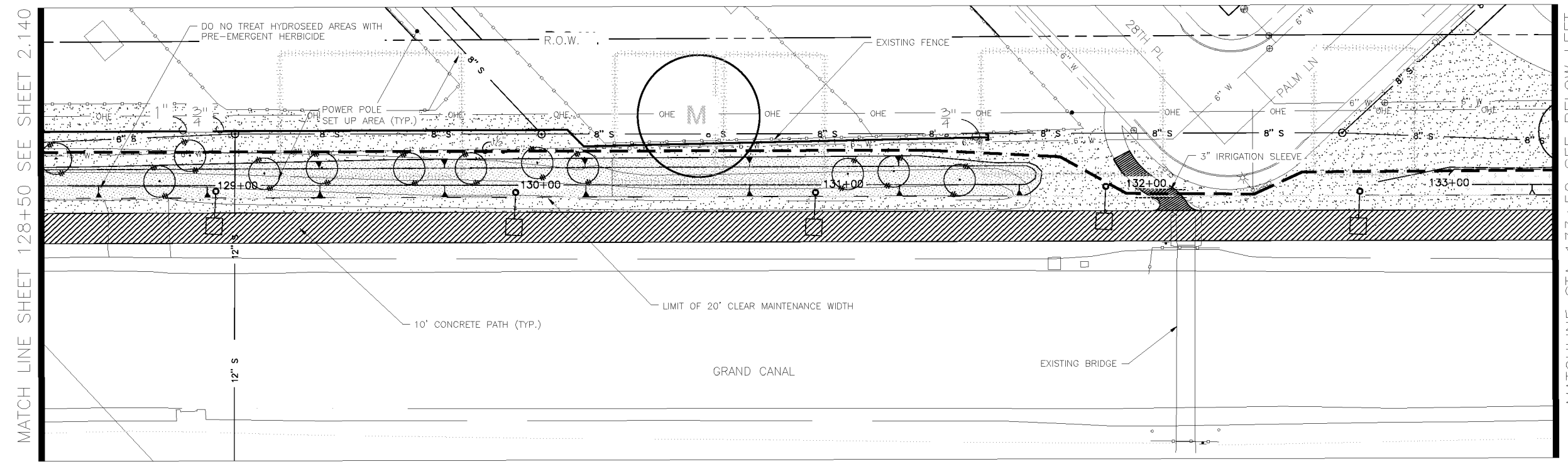
IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number **A1** GPM

Valve Size **1" X**



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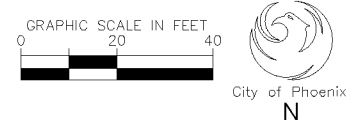
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.141	2.182

SCALE



NOTE:
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MATCH LINE SHEET 128+50 SEE SHEET 2.140

MATCHLINE STA 133+50 SEE BELOW LEFT

MATCHLINE STA 133+50 SEE ABOVE RIGHT

MATCHLINE STA 138+50 SEE SHEET 2.142

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.142	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

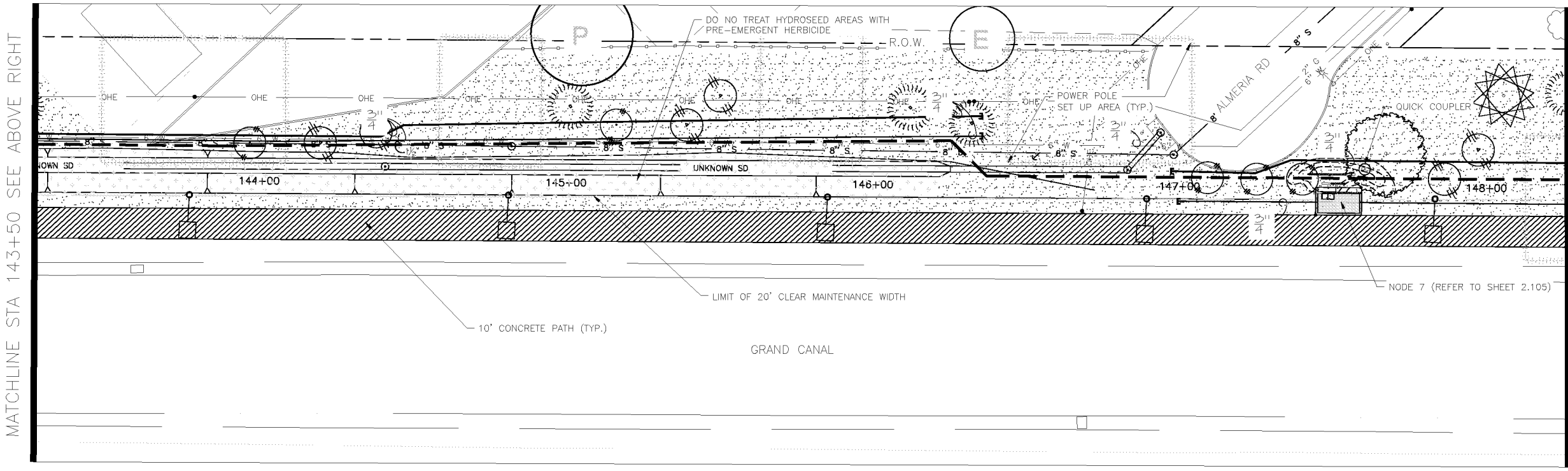
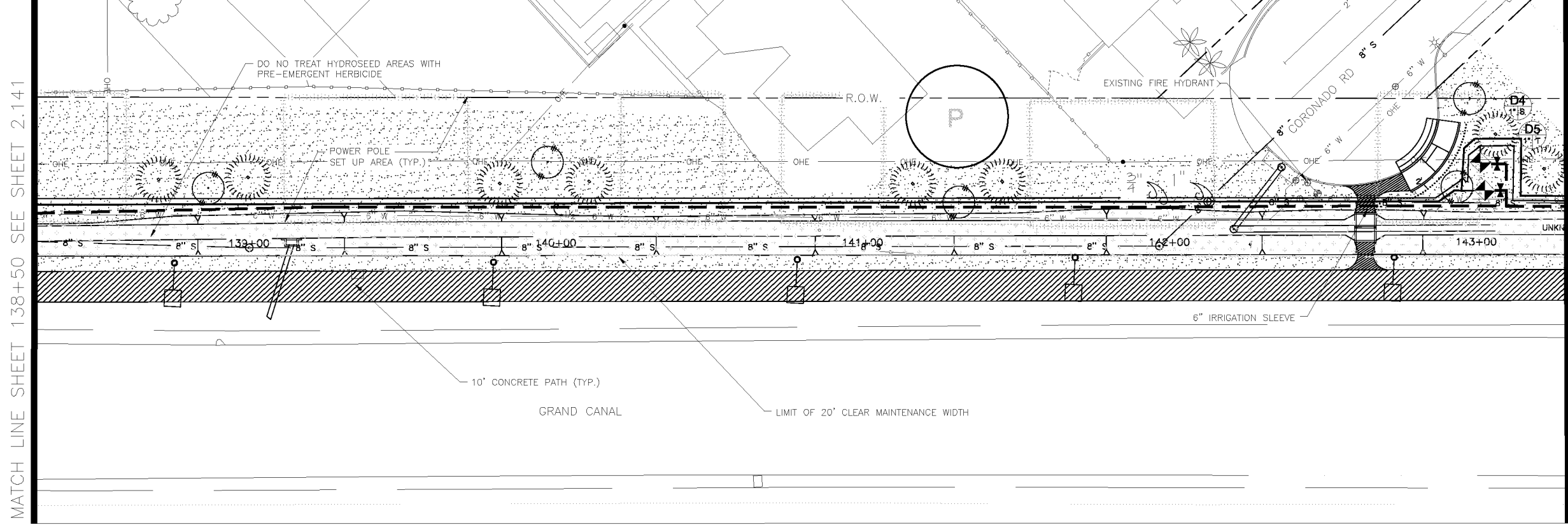
IRRIGATION LEGEND

- | Symbol | Description |
|--------|------------------------------------------------------------------------------------------|
| | New Water Meter - See plans for locations |
| | Electrical Power Pedestal |
| | Controller |
| | Base Wireless Gateway |
| | Backflow Prevention Unit with Enclosure |
| | Master Valve |
| | Flow Sensor |
| | 1" Remote Control Valve |
| | Pressure Regulator and Wye Strainer (not shown on plan) |
| | Wireless DC Latching Receiver |
| | Ball Valve |
| | Quick Coupler |
| | Emitter Irrigation Line for Trees |
| | Emitter Irrigation Line for Shrubs |
| | Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan) |
| | Single-port Emitter- As Needed (not shown on plan) |
| | Flush Cap, Typical end of all lateral lines |
| | Sch 40 PVC Sleeving under all pavement |
| | Mainline - 1 1/2" Schedule 40 PVC |

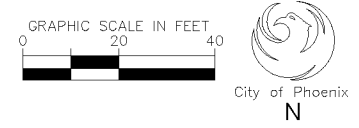
Valve Key

Station Number **A1** GPM

Valve Size **1" X**



NOTE:
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.142	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.

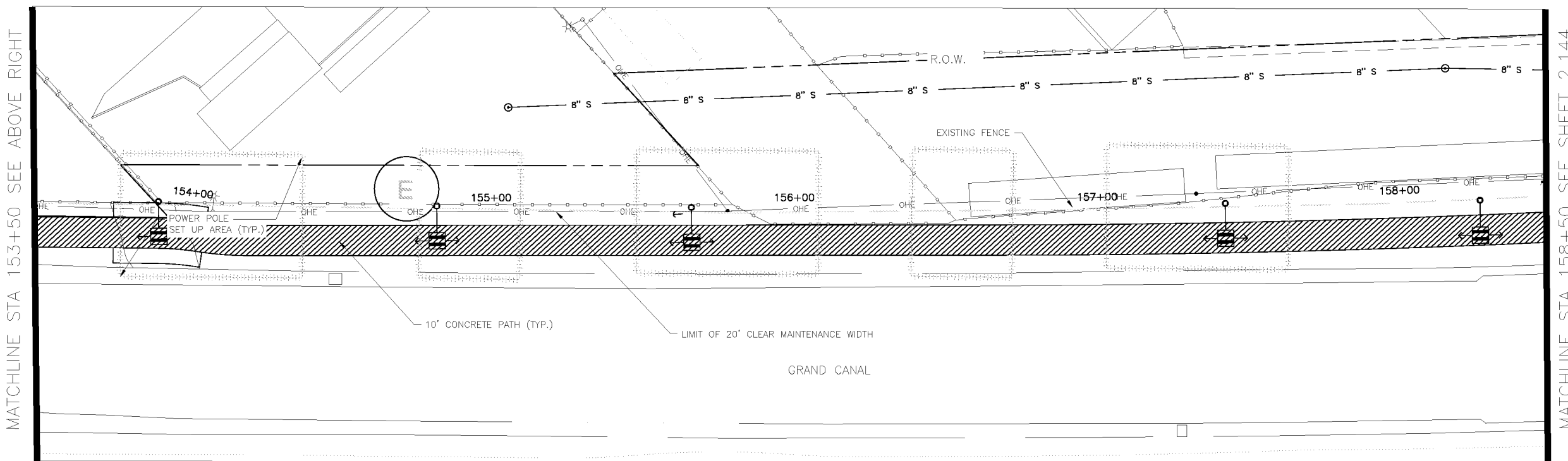
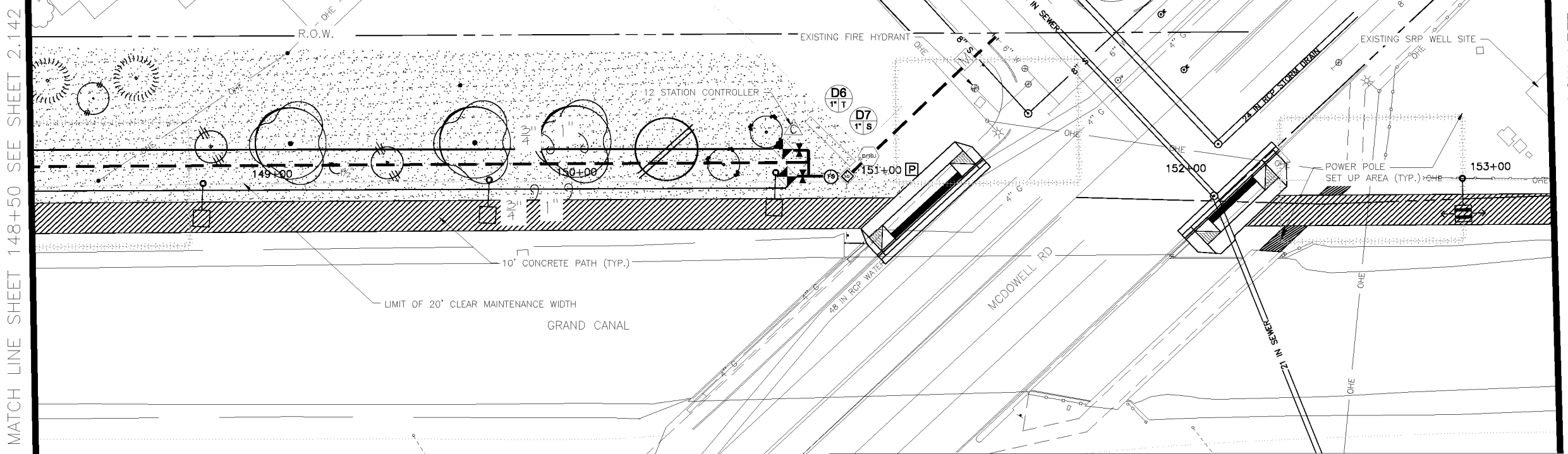


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.143	2.182
ECC ENGINEERING & ENVIRONMENTAL CONSULTANTS		CONSULTING ENGINEER		
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number

Valve Size **A1** 1" X GPM

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e-mail: janet@waibel-la.com

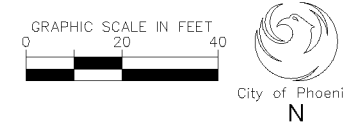
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.143	2.182



MATCH LINE SHEET 148+50 SEE SHEET 2.142

MATCHLINE STA 153+50 SEE BELOW LEFT

MATCHLINE STA 153+50 SEE ABOVE RIGHT

MATCHLINE STA 158+50 SEE SHEET 2.144

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.

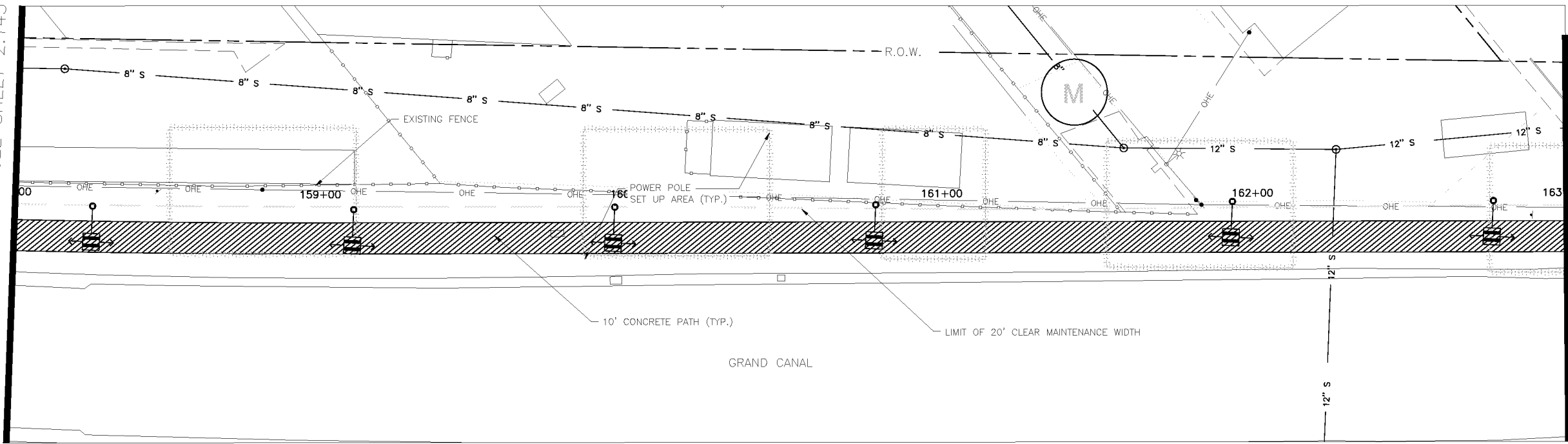


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.144	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

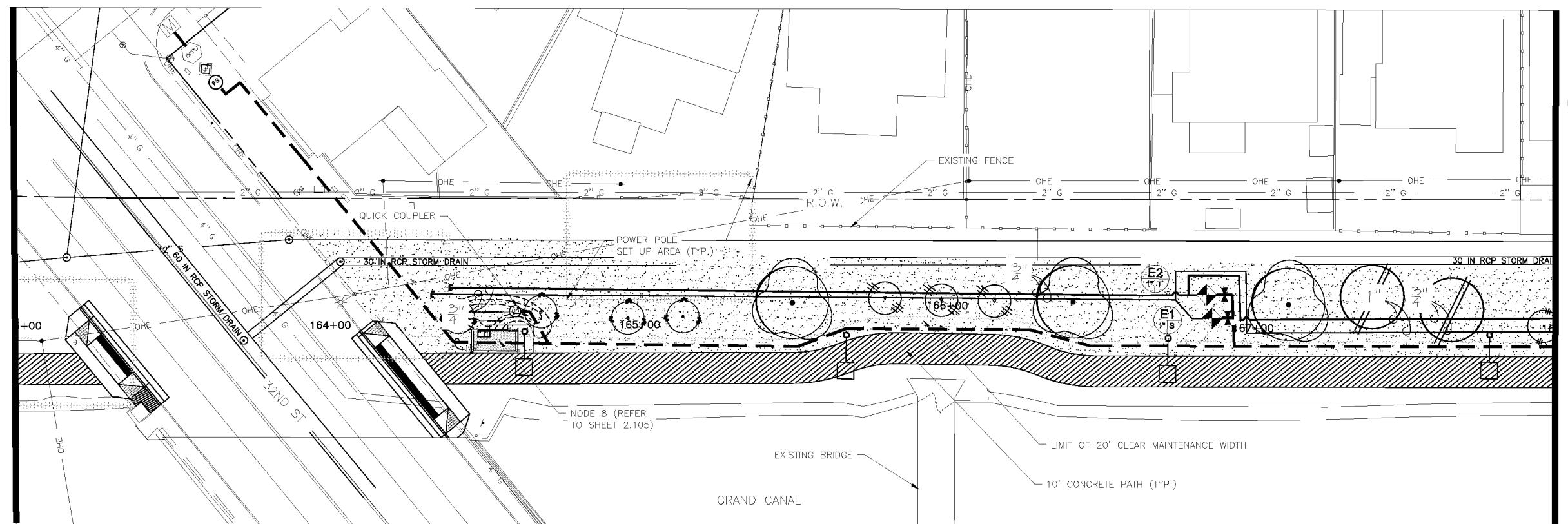
MATCH LINE SHEET 158+00 SEE SHEET 2.143

MATCHLINE STA 163+00 SEE BELOW LEFT



MATCHLINE STA 163+00 SEE ABOVE RIGHT

MATCHLINE STA 168+00 SEE SHEET 2.145



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number

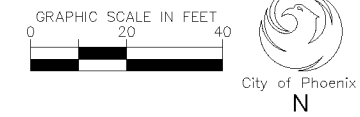
Valve Size **A1** 1" X GPM

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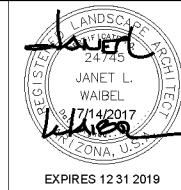
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
 16TH STREET TO 36TH STREET
 ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.144	2.182



ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
INSTALLATION.

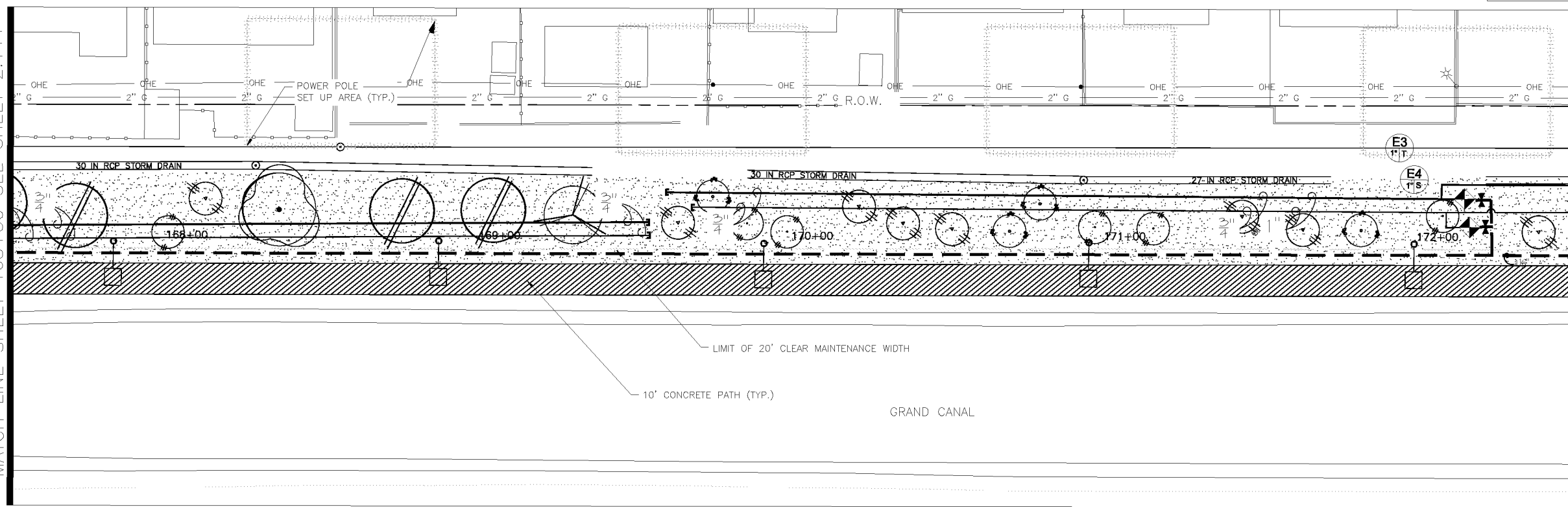


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.145	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

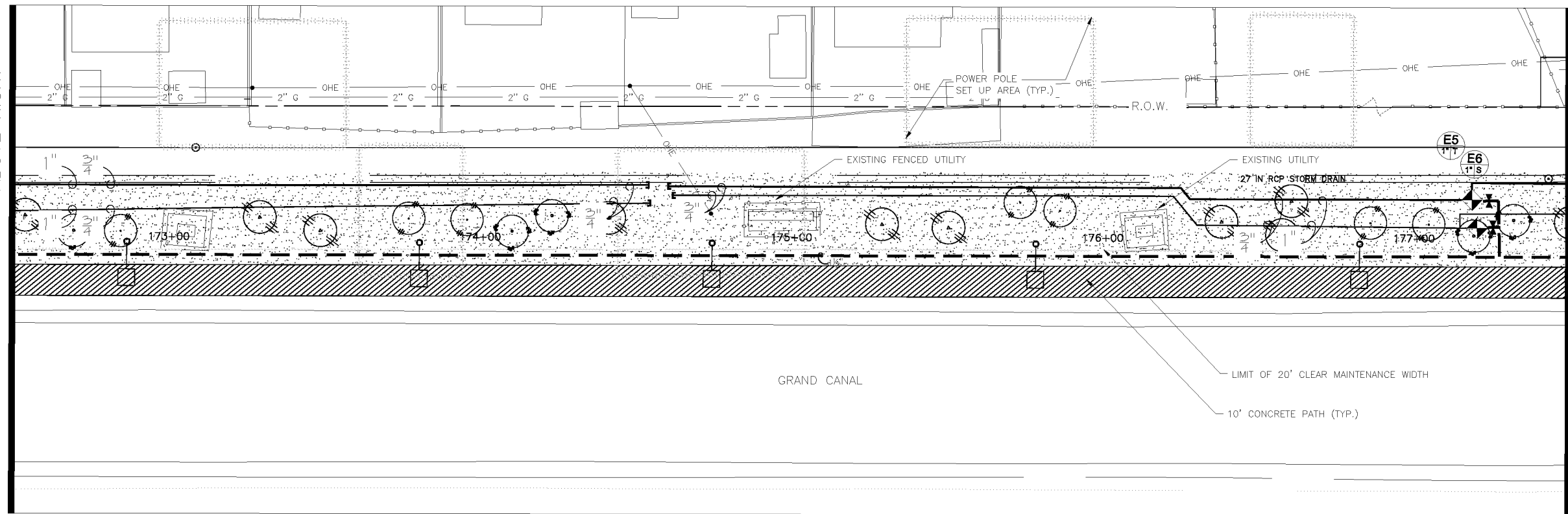
MATCH LINE SHEET 168+50 SEE SHEET 2.144

MATCHLINE STA 172+50 SEE BELOW LEFT



MATCHLINE STA 172+50 SEE ABOVE RIGHT

MATCHLINE STA 177+50 SEE SHEET 2.146



IRRIGATION LEGEND

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
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	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

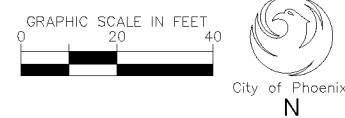
Station Number **A1** Valve Size **1" X** GPM

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 master planning gardens & consulting urban design
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 Tempe AZ 85284
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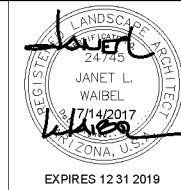
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.145	2.182



ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

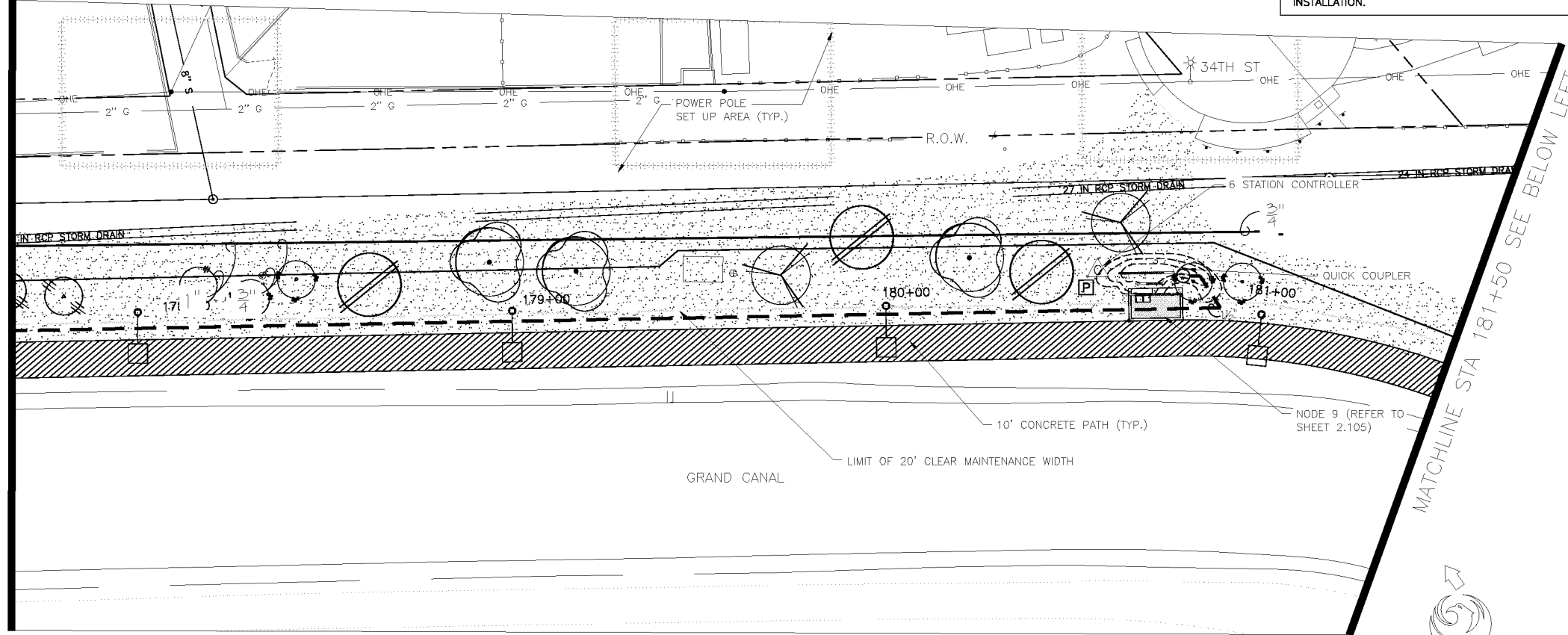
CONTRACTOR TO FLAG ALL EQUIPMENT LOCATIONS
IN THE FIELD FOR APPROVAL BY C.O.P. PRIOR TO
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.146	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE

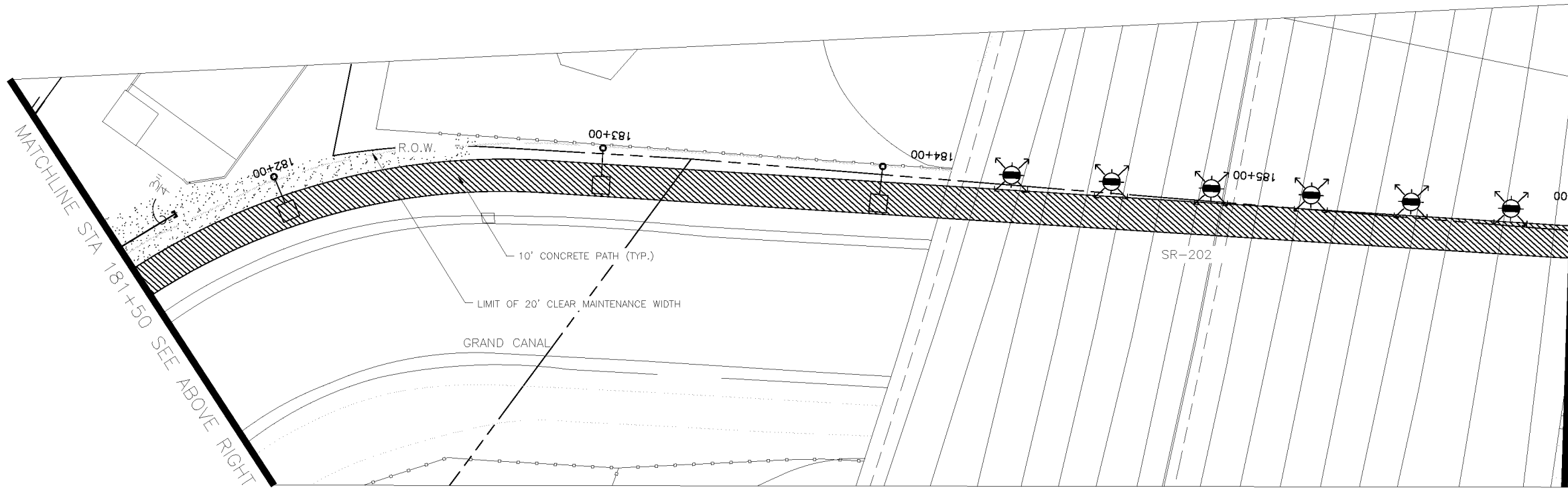
MATCH LINE SHEET 177+50 SEE SHEET 2.145



MATCHLINE STA 181+50 SEE BELOW LEFT

Symbol	Description
	New Water Meter - See plans for locations
	Electrical Power Pedestal
	Controller
	Base Wireless Gateway
	Backflow Prevention Unit with Enclosure
	Master Valve
	Flow Sensor
	1" Remote Control Valve
	Pressure Regulator and Wye Strainer (not shown on plan)
	Wireless DC Latching Receiver
	Ball Valve
	Quick Coupler
	Emitter Irrigation Line for Trees
	Emitter Irrigation Line for Shrubs
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
	Single-port Emitter- As Needed (not shown on plan)
	Flush Cap, Typical end of all lateral lines
	Sch 40 PVC Sleeving under all pavement
	Mainline - 1 1/2" Schedule 40 PVC

Valve Key	
Station Number	Valve Size
A1	1" X GPM



MATCHLINE STA 181+50 SEE ABOVE RIGHT

MATCHLINE STA 168+00 SEE SHEET 2.147



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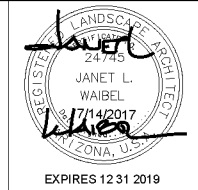
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.146	2.182
SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

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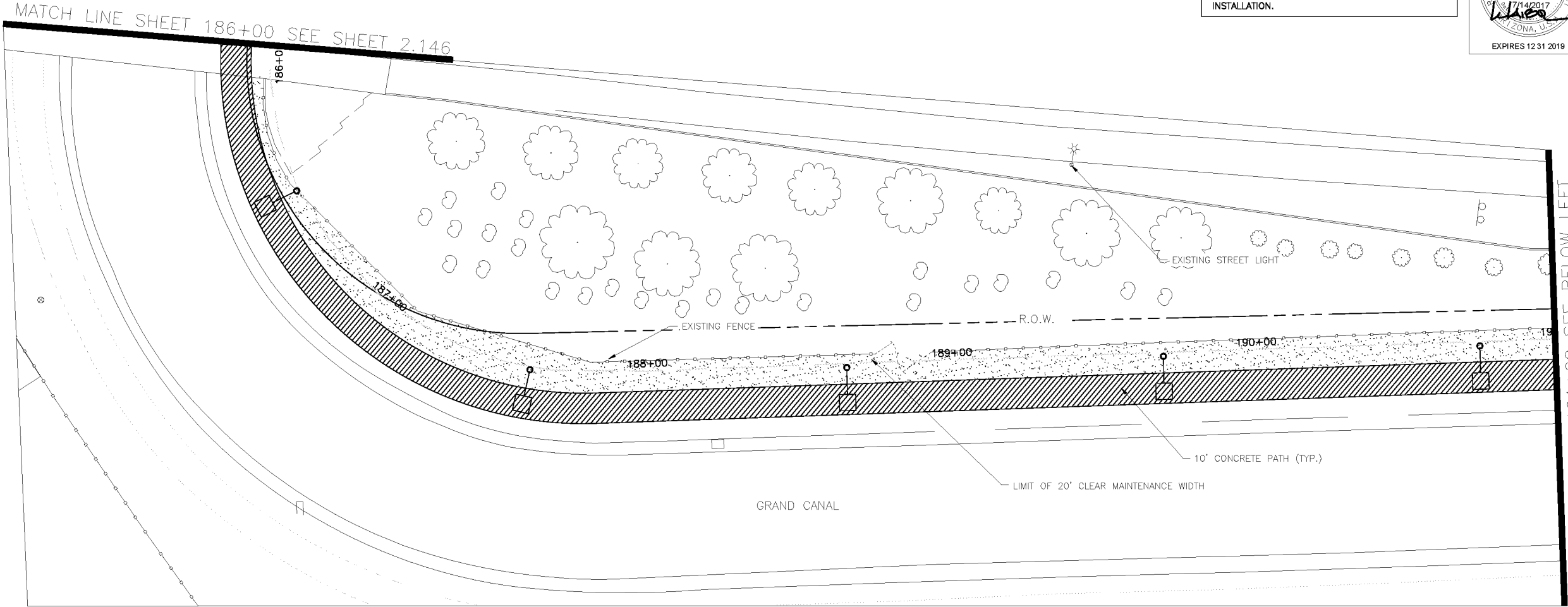


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.147	2.182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

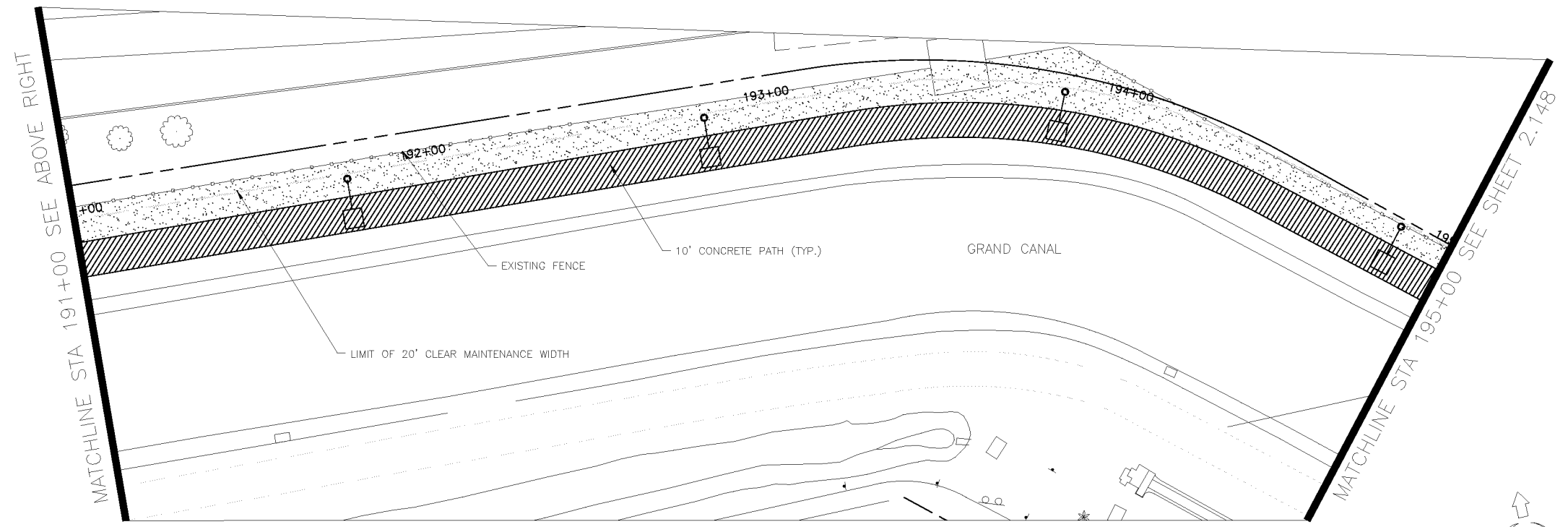
DES: JL DR: JKA CK: RCA DATE: 09/16/16

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE STA 191+00 SEE BELOW LEFT

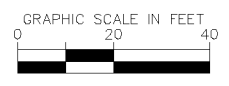
NO IRRIGATION ON THIS SHEET



MATCHLINE STA 191+00 SEE ABOVE RIGHT

MATCHLINE STA 195+00 SEE SHEET 2.148

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE
MONITORED BY THE ARCHAEOLOGIST PROVIDED
BY THE CITY. THE CONTRACTOR IS RESPONSIBLE
FOR COORDINATING WITH THE ARCHAEOLOGIST.



IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
[WG]	Base Wireless Gateway
[BPPU]	Backflow Prevention Unit with Enclosure
[MV]	Master Valve
[FS]	Flow Sensor
[RV]	1" Remote Control Valve
[PRWS]	Pressure Regulator and Wye Strainer (not shown on plan)
[WR]	Wireless DC Latching Receiver
[BV]	Ball Valve
[QC]	Quick Coupler
[EIT]	Emitter Irrigation Line for Trees
[EIS]	Emitter Irrigation Line for Shrubs
[MPE]	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
[SPE]	Single-port Emitter- As Needed (not shown on plan)
[FC]	Flush Cap, Typical end of all lateral lines
[S40PVC]	Sch 40 PVC Sleeving under all pavement
[M40PVC]	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	A1	GPM
Valve Size	1" X	

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CITY OF PHOENIX, ARIZONA
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GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.147	2.182

SCALE: [Scale bar]

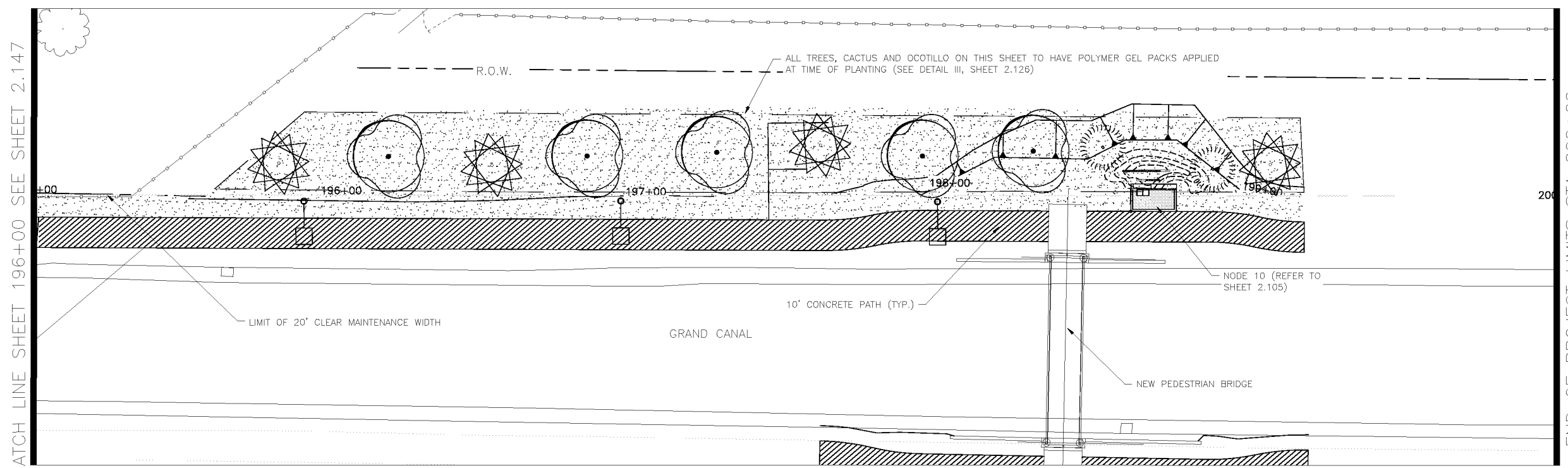
ST87600114, GRAND CANALScape PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL

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Valve Key	
Station Number	Valve Size
A1	1" X GPM

Waibel & Associates
Landscape Architecture

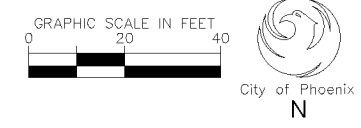
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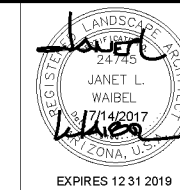
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114



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SCALE				

ST87600114, GRAND CANALSCAPE PHASE II, 16TH STREET TO 36TH STREET, 100% SUBMITTAL



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ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
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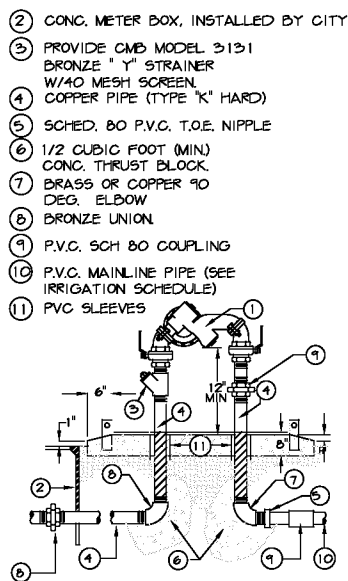
NO.	DESCRIPTION	REV BY	CHK BY	DATE

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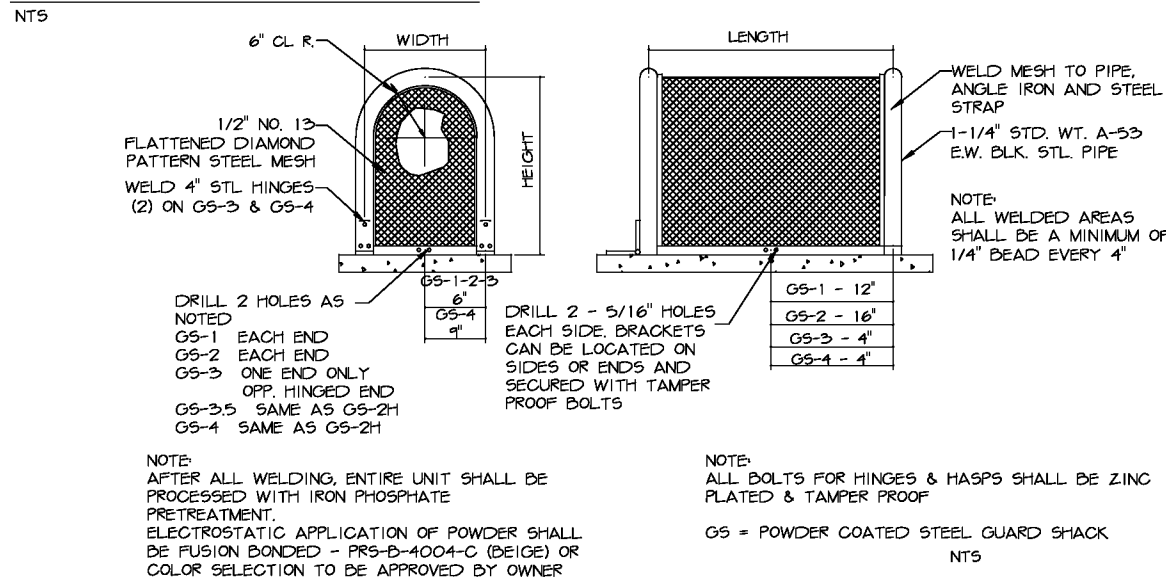
NO.	DESCRIPTION	REV BY	CHK BY	DATE

I. REDUCED PRESSURE BACKFLOW

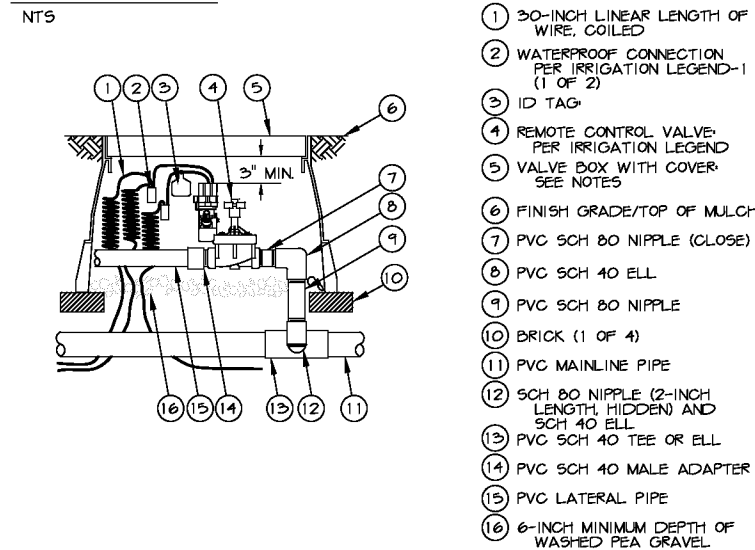
- NTS
- ALL PIPE/FITTINGS TO BE TYPE "L" COPPER
 - ASSEMBLY SHALL BE APPROVED BY U.S.C. FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH
 - INSTALL BACKFLOW PREVENTION ASSEMBLY WITH RELIEF PORT FACING TOWARD THE GROUND
 - BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MIN. OF 12" FROM RELIEF PORT TO GRADE
 - TEST COCKS, (4) SHALL BE FITTED WITH BRASS PLUGS AND INST. W/ TEFLON TAPE. SHUTOFF VALVES TO BE RESILIENT BALL TYPE W/ REMOVABLE HANDLES. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
 - STAKE LOCATION OF ASSEMBLY FOR APPROVAL BY THE ENGINEER BEFORE INSTALLATION BEGINS.
 - A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
 - PROVIDE TEST CERTIFICATION FROM CITY APPROVED TESTING COMPANY PRIOR TO APPROVAL.
 - COPPER FITTINGS SHALL BE INSTALLED W/ LEAD FREE SOLDER JOINTS.
 - SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



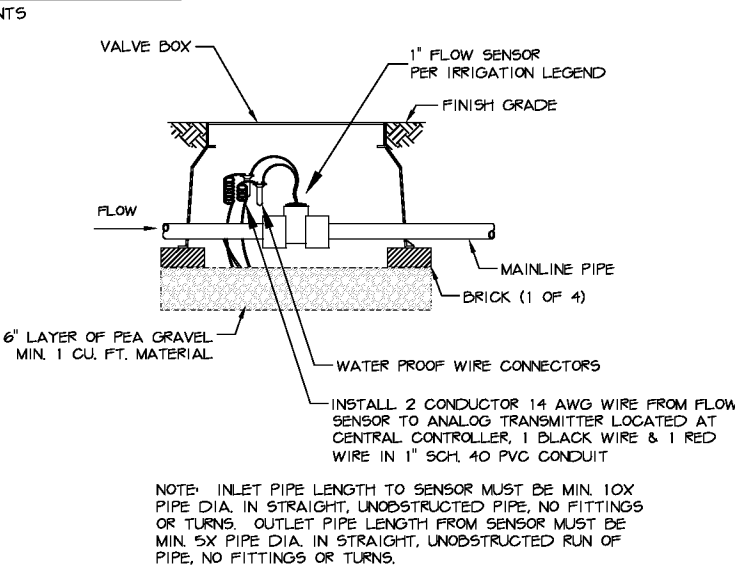
II. BACKFLOW SECURITY ENCLOSURE



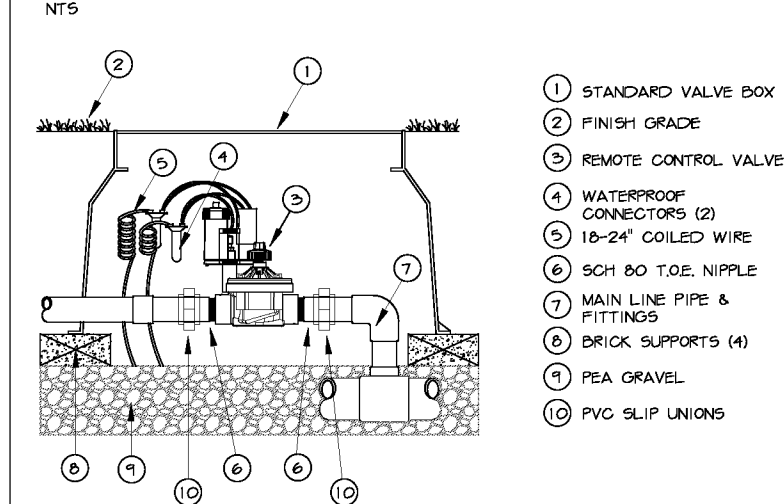
III. MASTER VALVE



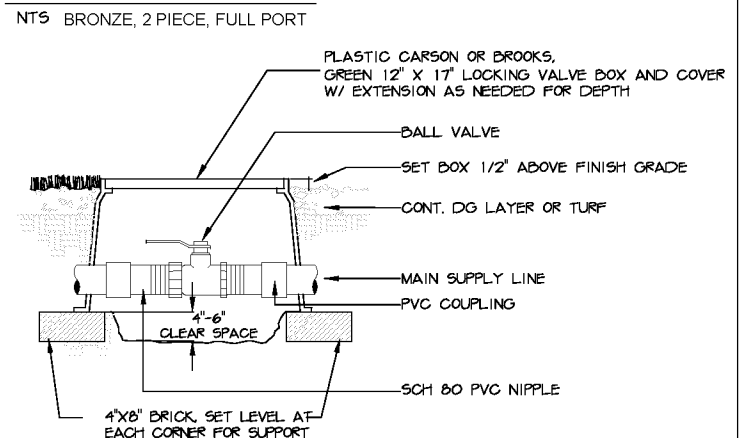
IV. FLOW SENSOR



V. EMITTER VALVE ASSEMBLY

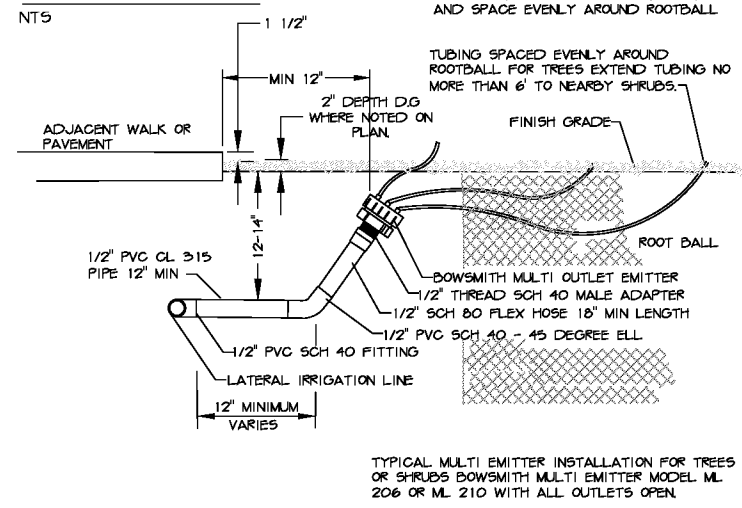


VI. ISOLATION BALL VALVE

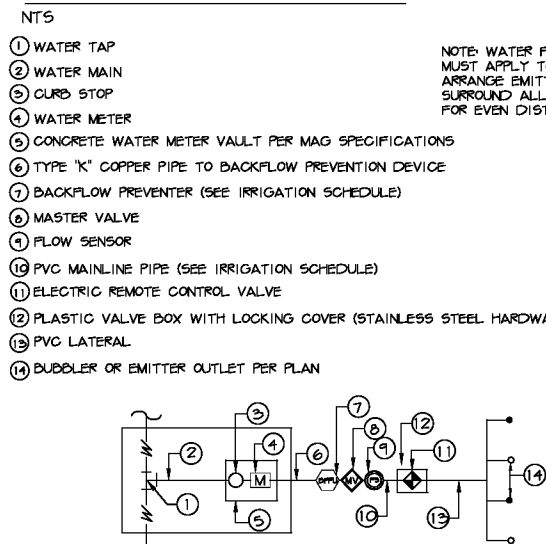


- NOTES:
- COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.
 - VALVE BOX SHALL BE SET PARALLEL WITH GRADE.

VII. MULTI-EMITTER FOR TREE AND SHRUB



VIII. WATER SYSTEM SCHEMATIC



M.A.G. NOTE—
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
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2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

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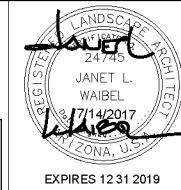
IRRIGATION DETAILS I

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS:
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.149	2.182
SCALE				

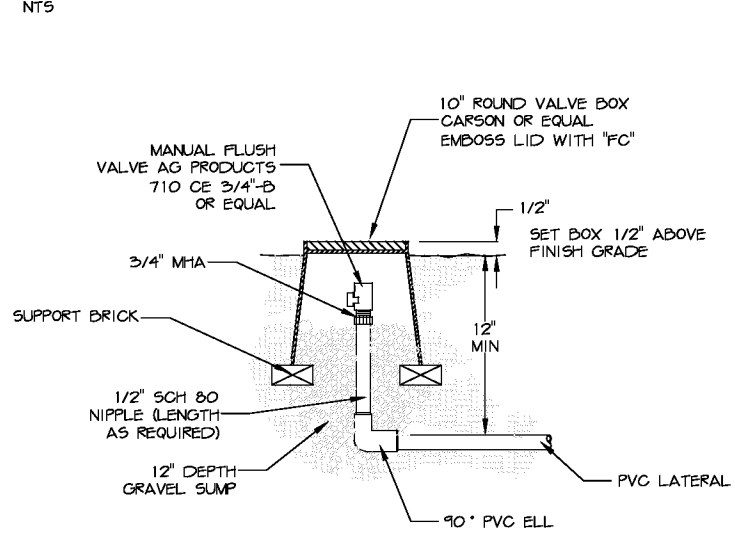
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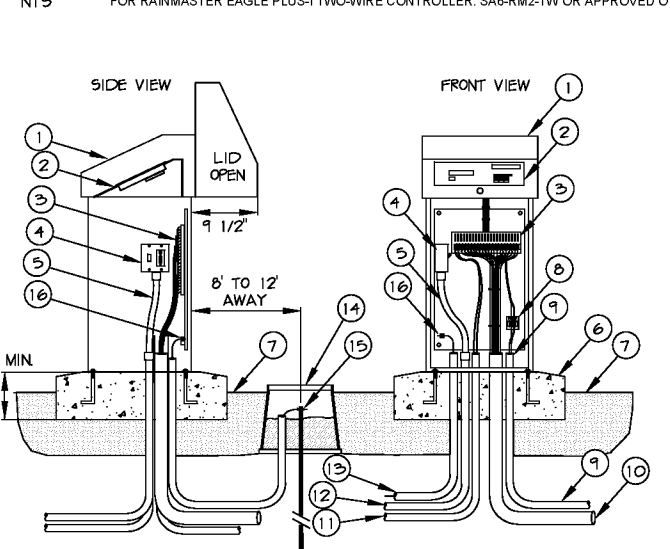
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 09/16/16	

REVISION BY	DESCRIPTION	REV BY	CHK BY	DATE

IX. MANUAL FLUSH VALVE



IX. STAINLESS STEEL CONTROLLER PEDESTAL



- 1 STRONGBOX STAINLESS STEEL NEMA 3R RAINPROOF ENCLOSURE (UL LISTED).
- 2 SATELLITE ASSEMBLY (OPTIONAL) ASSEMBLED IN ENCLOSURE BY JOHN DEERE GREEN TECH.
- 3 TERMINAL STRIP FOR VALVE WIRES.
- 4 POWER SWITCH / GFCI RECEPTACLE.
- 5 ELECTRICAL FLEX CONDUIT FOR POWER.
- 6 6" MIN THICK CONCRETE PAD WITH ANCHOR BOLTS PER MANUFACTURER RECOMMENDATIONS.
- 7 FINISHED GRADE.
- 8 FLOW SENSOR TERMINAL BOARD.
- 9 CONDUIT AND SWEEP ELL WITH FLOW SENSOR CABLE.
- 10 CONDUIT AND SWEEP ELL FOR LEAD WIRES.
- 11 CONDUIT AND SWEEP ELL FOR MASTER VALVE WIRES.
- 12 CONDUIT AND SWEEP ELL FOR 110 VAC POWER LINE.
- 13 CONDUIT AND SWEEP ELL FOR GROUND WIRE.
- 14 10" ROUND VALVE BOX AROUND GROUND ROD. FILL WITH 3/4" CRUSHED ROCK.
- 15 5/8" X 8' GROUND ROD WITH #6 GROUND WIRE AND CLAMP. LOCATE 8'-12' FROM ENCLOSURE.
- 16 #6 GROUND WIRE SECURED TO BACKBOARD GROUNDING TERMINAL.

NOTES:
1. CONTRACTOR TO CONFIRM WIRING CONFIGURATION PER THIS PROJECT AND PROVIDE ADEQUATE CONDUIT FOR WIRES TO MOVE FREELY WITHIN CONDUIT FOR COMPLETE AND CLEAN INSTALLATION INTO CABINET. BUNDLE WIRE WITH PLASTIC WIRE TIE TO PROVIDE NEAT AND ORGANIZED INSTALL.
2. CABINET DIMENSIONS 16" W X 38" H X 15.5" D

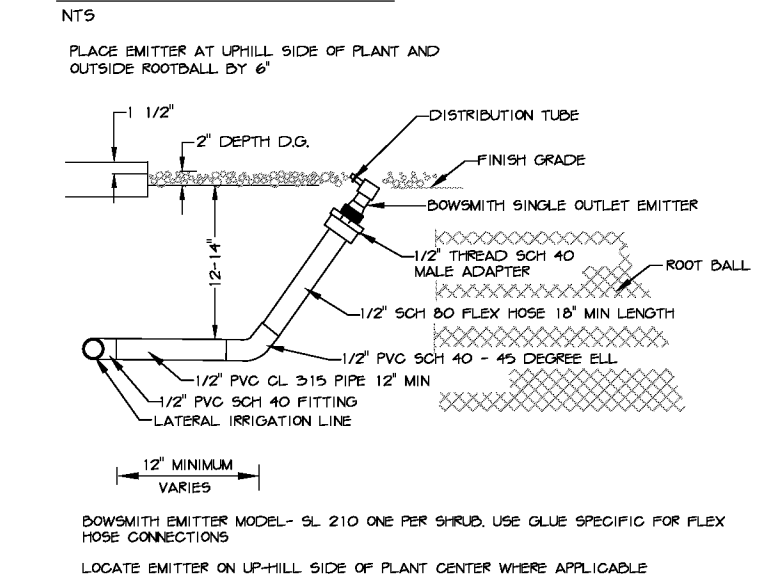
- GENERAL NOTES:
VALVE NOTES—
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
 2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
 3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
 4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
 5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

- SLEEVE NOTES—
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
 2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/4", USE 3" SLEEVE, FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
 3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
 4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULL BOX.

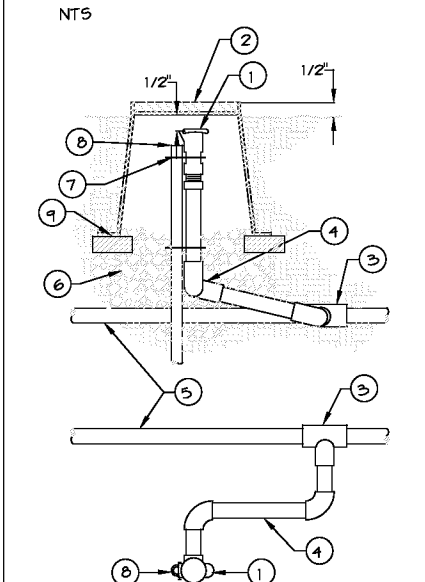
M.A.G. NOTE—
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XI. EMITTER SINGLE OUTLET



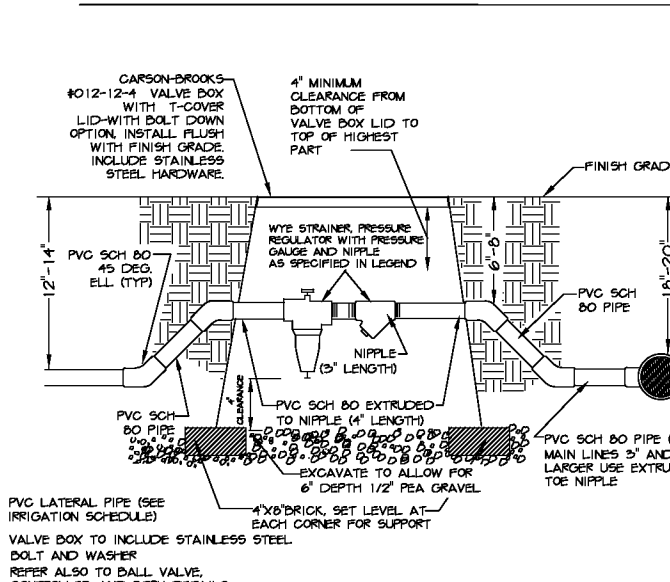
XII. QUICK COUPLER ASSEMBLY



- 1 BRASS QUICK COUPLER VALVE.
- 2 VALVE BOX COVER SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE.
- 3 PVC SCH 40 SLIP TEE
- 4 LASCO UNITIZED SWING JOINT W/STABILIZED BRASS NIPPLE (#G 175-218)
- 5 PVC MAINLINE PIPE (SEE SCHEDULE)
- 6 6" LAYER 1/2" PEA GRAVEL MIN 1 CF. EXTEND BEYOND BOX ALL EDGES 6"
- 7 STAINLESS STEEL STRAP (2)
- 8 #4 MIN REDBAR 36" LONG
- 9 4" X 8" STANDARD BRICK

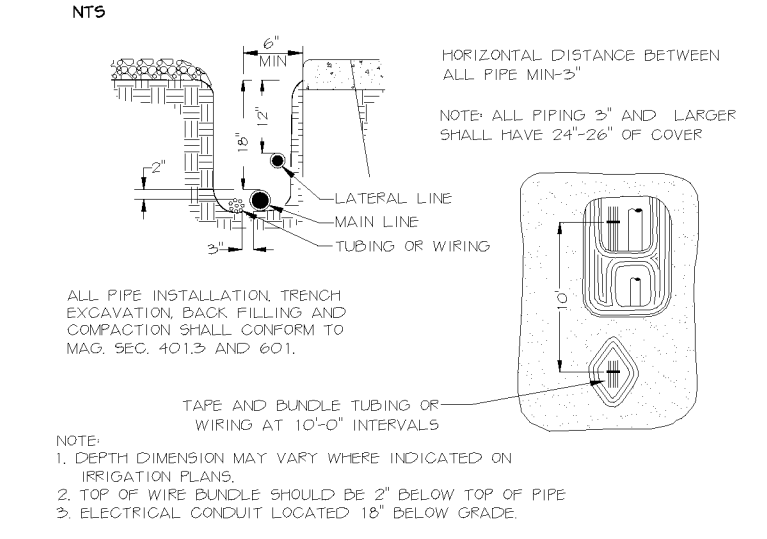
NOTES:
1. VALVE BOX SHALL INCLUDE STAINLESS STEEL BOLT AND WASHER
2. EMBOSS COVER WITH "QC" OR AS OTHERWISE DIRECTED
3. PROVIDE 4" X 8" BRICKS TO SUPPORT VALVE BOX SECURELY ON GRAVEL

XIII. PRESSURE REGULATOR AND WYE STRAINER



NOTES:
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XIV. TRENCHING DETAIL

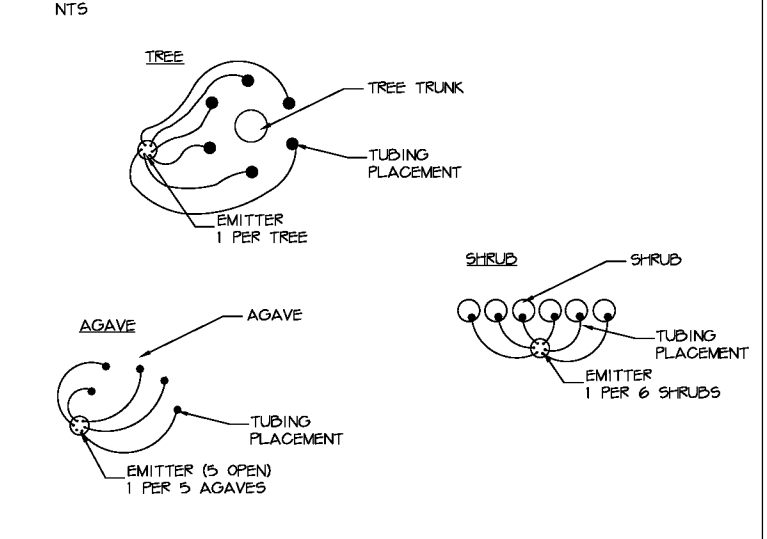


HORIZONTAL DISTANCE BETWEEN ALL PIPE MIN-3"
NOTE: ALL PIPING 3" AND LARGER SHALL HAVE 24"-26" OF COVER

ALL PIPE INSTALLATION TRENCH EXCAVATION, BACK FILLING AND COMPACTION SHALL CONFORM TO MAG. SEC. 401.3 AND 601.

NOTE:
1. DEPTH DIMENSION MAY VARY WHERE INDICATED ON IRRIGATION PLANS.
2. TOP OF WIRE BUNDLE SHOULD BE 2" BELOW TOP OF PIPE
3. ELECTRICAL CONDUIT LOCATED 18" BELOW GRADE.

XV. EMITTER PLACEMENT



XVI. IRRIGATION PIPE SCHEDULE

PIPE SIZE	GPM TO EMITTER RISERS ONLY
1/2"	6-10
3/4"	11-15
1"	16-25
1-1/4"	26-35
1-1/2"	

PIPE SIZE	SLEEVE SIZE
1/2" - 3/4"	3"
1" - 2"	4"

Waibel & Associates
Landscape Architecture

Phone 480.893.3849 Fax 480.893.3846
8611 South Priest Drive, Suite 101
Tempe AZ 85284
e-mail: janet@waibel-la.com

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION DETAILS 2

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

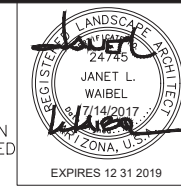
DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 09/16	DATE: 09/16	DATE: 09/16	2.150	2.182

SUBMITTAL 100% 36TH STREET TO 16TH STREET, GRAND CANALScape PHASE II

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

IRRIGATION NOTES:

- IRRIGATION SYSTEM HAS BEEN DESIGNED FOR A STATIC WATER PRESSURE OF 60 P.S.I.. CONTRACTOR TO FIELD VERIFY PRESSURE PRIOR TO STARTING IRRIGATION INSTALLATION. NOTIFY CONSULTANT OF ANY DIFFERENCE FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT THE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF A FULLY AUTOMATED IRRIGATION SYSTEM PRIOR TO STARTING PLANTING. IF INSTALLATION OR OPERATION OF THE IRRIGATION SYSTEM IS INTERRUPTED FOR ANY REASON, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUE MANUAL WATERING OF ALL PLANT MATERIAL UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER SERVICE CONNECTIONS TO THE WATER METER. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONNECTIONS DOWN STREAM OF THE WATER METER AND EXTEND TAP SIZE TYPE "K" HARD COPPER FROM WATER METER THROUGH BACKFLOW PREVENTER.
- REFER TO GENERAL CONSTRUCTION NOTES FOR ADDITIONAL CONSIDERATIONS THAT RELATE TO SCOPE OF WORK WITHIN THIS SECTION.
- ALL IRRIGATION EQUIPMENT TO BE LOCATED IN DECOMPOSED GRANITE LANDSCAPE AREAS WITHIN PROPERTY BOUNDARIES OF THE PROJECT. SPECIFIC WRITTEN PERMISSION SHALL BE OBTAINED TO LOCATE VALVES OR IRRIGATION EQUIPMENT IN TURF AREAS. ALL LINES AND EQUIPMENT ARE SCHEMATIC AND ARE SOMETIMES SHOWN IN ROADWAYS, SIDEWALKS, OR OUTSIDE PROPERTY LINES. THIS IS DONE FOR CLARITY PURPOSES ONLY. LOCATE VALVES AND BACKFLOW PREVENTION UNITS WITHIN AREAS SO THAT THEY ARE AS VISUALLY UNOBTRUSIVE AS POSSIBLE.
- DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING PLANS. SUCH OBSTRUCTIONS OR CONFLICTS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISION NECESSARY.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 35 P.S.I AND A MAXIMUM FLOW DEMAND OF 25 GPM. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE LANDSCAPE DESIGNER IMMEDIATELY.
- ALL MATERIAL USED SHALL BE INSTALLED AS DETAILED. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REPRESENTATIVE AND /OR LANDSCAPE ARCHITECT.
- THE OWNER'S REPRESENTATIVE MAY, AT ANY TIME, TAKE AND ANALYZE SAMPLES OF MATERIALS AND EQUIPMENT FOR CONFORMITY TO SPECIFICATIONS. THE CONTRACTOR SHALL MAKE SUCH SAMPLES AVAILABLE UPON REQUEST. REJECTED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- INSTALL BACKFLOW PREVENTION UNITS PIPING BETWEEN THE POINT OF CONNECTION AND THE BFPU PER LOCAL CODES. THE FINAL LOCATION OF THE BACKFLOW PREVENTION UNIT SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 120 VOLT SERVICE TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR POWER CONNECTION TO CONTROLLER. UNLESS IT IS PROVIDED BY PROJECT PLANS. CONTRACTOR SHALL INCLUDE BID PRICING FOR APPLICATION PERMIT FEES AND ALL COSTS PERTAINING TO PROVISION OF POWER FOR IRRIGATION OR LIGHTING FOR PROJECT. COORDINATE CONNECTIONS, LOCATIONS, EQUIPMENT NEEDS WITH ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING MATERIALS AND LABOR TO PROVIDE SPECIFIED ELECTRICAL SERVICE TO ALL CONTROLLER LOCATIONS. ALL ELECTRICAL WORK TO BE AS PER MANUFACTURER'S SPECIFICATIONS AND AS PER LOCAL CODE.
- LEVEL OF PEA GRAVEL IN IRRIGATION BOXES SHALL BE A MINIMUM OR 2" BELOW THE BOTTOM OF THE VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. ALL PEA GRAVEL IN THE VALVE BOX TO BE CLEANED FROM TOP OF VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. THE LIP OF THE VALVE BOX IS ALSO TO BE FREE OF DEBRIS.
- 24 VOLT WIRE SHALL BE 600V, UF US APPROVED, #14 GAUGE, SINGLE STRAND, PLASTIC, INSULATED COPPER WIRE. COMMON WIRES TO BE WHITE. CONTROL WIRES TO BE RED. NO BLACK WIRING IS TO BE USED. TAPE AND BUNDLE WIRE EVERY 10" AND LAY BESIDE MAINLINE IN TRENCH. SPLICE IN VALVE BOXES ONLY, USING ELASTOMERIC SILICONE CONNECTIONS. PROVIDE 18" SLACK AT EACH ELBOW IN MAINLINE TRENCH AND AT EACH REMOTE CONTROL VALVE. PULL ONE ADDITIONAL SPARE CONTROL WIRE TO EACH VALVE BOX LOCATION FOR POTENTIAL FUTURE USE. COLOR OF EXTRA CABLE SHALL BE YELLOW.
- ONE VALVE PER BOX. LOCATE PRESSURE REGULATOR AND 'Y' STRAINER IN A SEPARATE VALVE BOX JUMBO VALVE BOX MAY BE USED IN LIEU OF TWO SEPARATE BOXES FOR ONE VALVE/PRESSURE REGULATOR/WYE ASSEMBLY.
- ALL DRIP SYSTEMS TO BE FLUSHED THROUGH FLUSH CAPS. FLUSH CAPS TO BE LOCATED IN 10" ROUND TAN COLOR ECONOMY VALVE BOXES WITH LIDS.
- PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTION OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
- BACKFILL SHALL BE PLACED IN TWO OR MORE COMPACTED LIFTS. SETTILING OF TRENCHES BY MORE THAN AN INCH SHALL BE BROUGHT TO FINISH GRADE AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTS REQUIRING MORE THAN ONE DRIP EMITTER SHALL HAVE EMITTERS DISTRIBUTED EVENLY AROUND PERIMETER OF THE PLANTING WELL. EMISSION POINTS AT THE ROOTBALLS SHALL BE LOCATED ON THE UPHILL SIDE. POSITION EMITTER PER DETAILS.
- MAINTAIN A 3' CLEARANCE FOR ALL PLANTING AND IRRIGATION AROUND FIRE HYDRANTS.
- PRIOR TO OWNER'S APPROVAL, AN IRRIGATION TUNE UP MUST BE PERFORMED AS FOLLOWS:
 - ALL IRRIGATION EQUIPMENT (INCLUDING ALL PIPE LINES AND SLEEVES) TO BE DOCUMENTED FROM TWO STATIONARY POINTS.
 - ALL DRIP SYSTEMS TO BE FLUSHED BEGINNING WITH 'Y' STRAINER, WORKING AWAY FROM THE PRESSURE REGULATOR.
 - ALL IRRIGATION SPRINKLER HEADS TO BE FLUSHED OF DEBRIS AND FLOW CONTROLS. ADJUSTED TO ACHIEVE 100% COVERAGE FOR TURF AREAS AS APPLICABLE. AVOID OVERSPRAY ON ALL STREETS, CURBS, WALKS AND STRUCTURES.
 - ALL IRRIGATION HEADS TO BE FIELD AND MANUALLY ADJUSTED TO THE PROPER HEIGHT.
- SETBACK ALL SPRAY AND STREAM TYPE IRRIGATION HEADS 8" FROM BACK OF CURB, SIDEWALK, AND/OR DRIVEWAYS TO REDUCE OVER SPRAY. ALTERNATIVES TO ACHIEVE SIMILAR RESULTS SHALL BE APPROVED BY LA OR OWNER'S REPRESENTATIVE.
- PLANS ARE DRAWN FOR CLARITY TO INDICATE COVERAGE AREAS FOR THE SYSTEM. IRRIGATION LATERALS MAY BE PLACED IN COMMON TRENCHES TO AVOID EXTENSIVE RUNS UNDER PAVEMENT, WHERE APPROPRIATE.
- LANDSCAPE CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS THAT ARE COMPLETELY LEGIBLE AND ACCURATE FOR THE ACTUAL INSTALLATION THAT WAS DONE BY THE LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR HIRED TO DO THE INSTALLATION SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE AS BUILT DRAWINGS.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.151	2.182

ENGINEERING & ENVIRONMENTAL CONSULTANTS
CONSULTING ENGINEER

DES: JL DR: JKA CK: RCA DATE: 09/16/16

GENERAL NOTES:
VALVE NOTES—
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND ½" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH ½" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES—
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE ½" TO 1-¼", USE 3" SLEEVE, FOR PIPES 1-½" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULL BOX.

M.A.G. NOTE—
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS—OF—WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

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Landscape Architecture

master planning gardens & consulting urban design

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Tempe AZ 85284
e-mail: janet@waibel-la.com

Two working days before you file.
CALL FOR THE BLUE STAKES
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Blue State Center

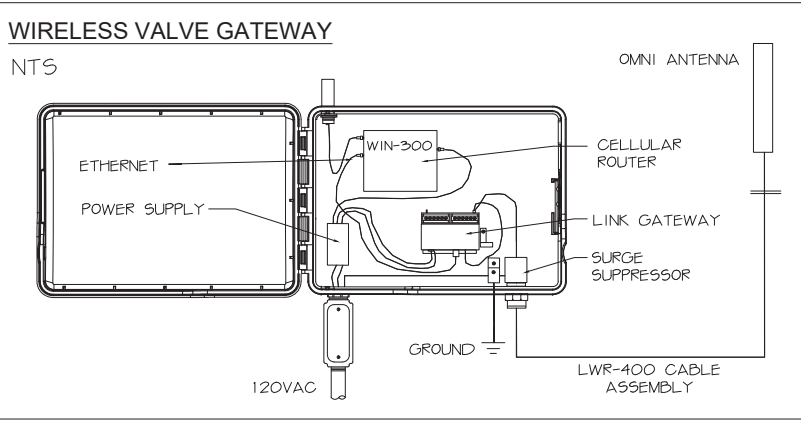
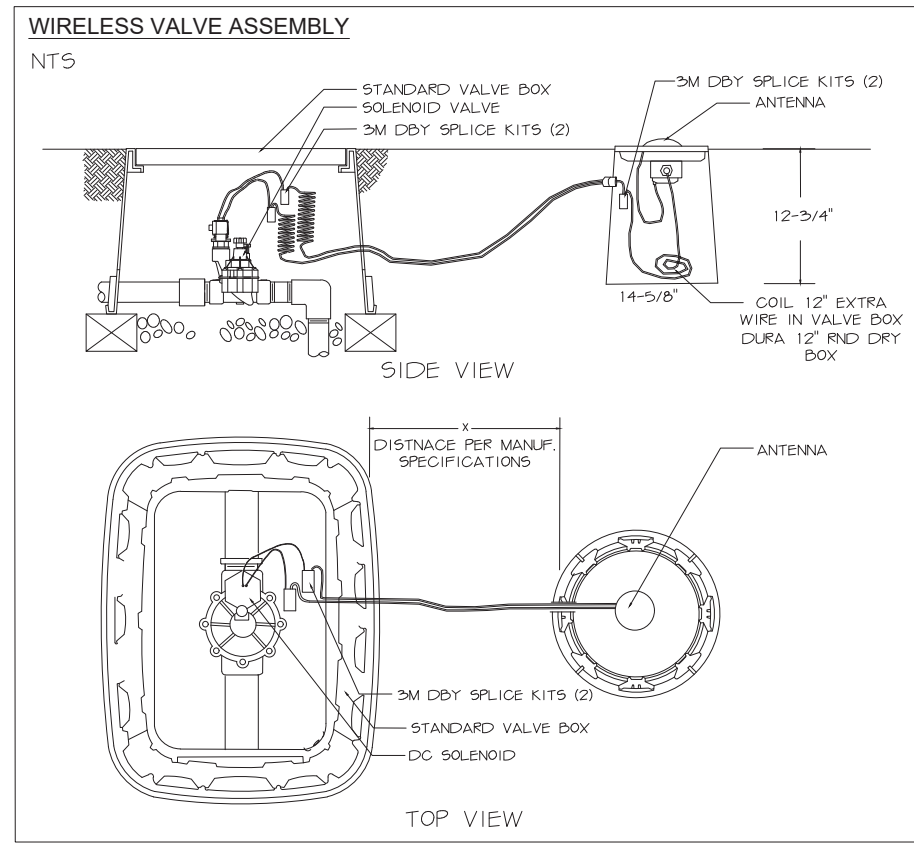
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PRIOR CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-29, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION DETAILS 3

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET	TOTAL
DATE: 09/16	DATE: 09/16	DATE: 09/16	NO:	SHEETS
SCALE			2.151	2.182

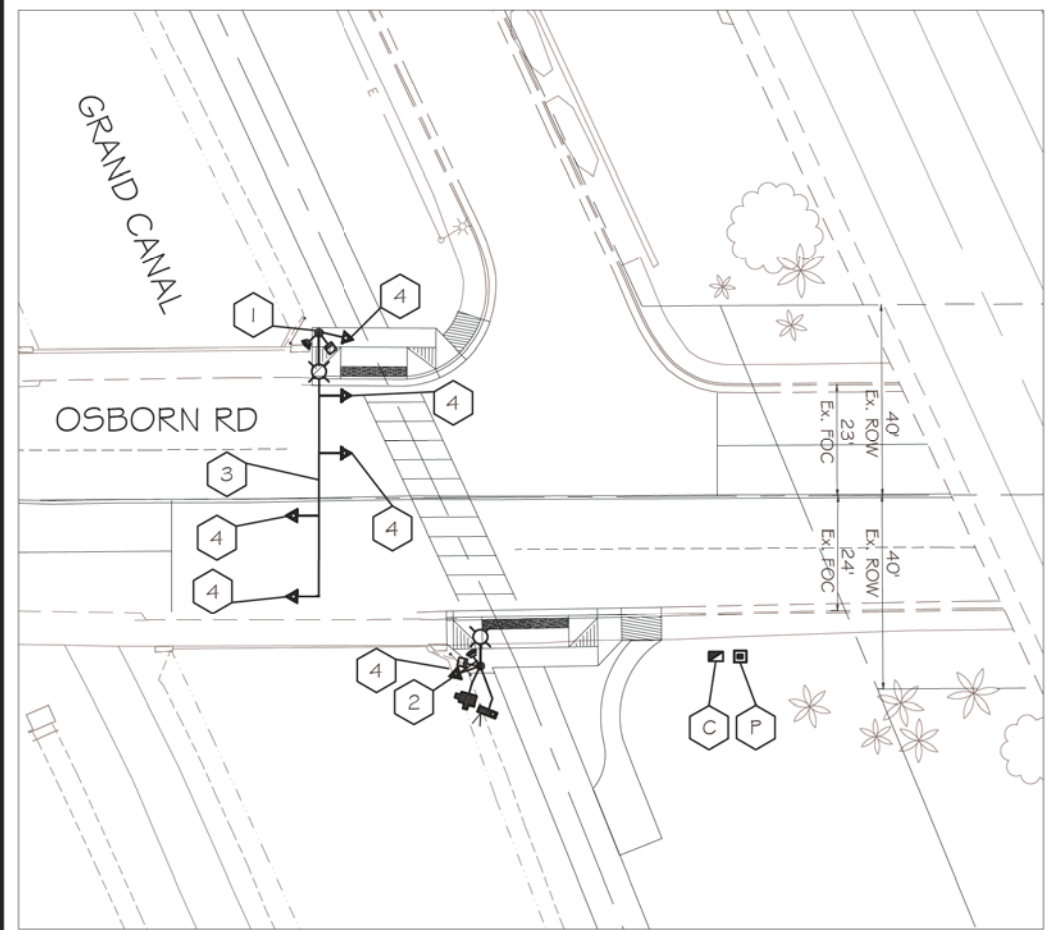
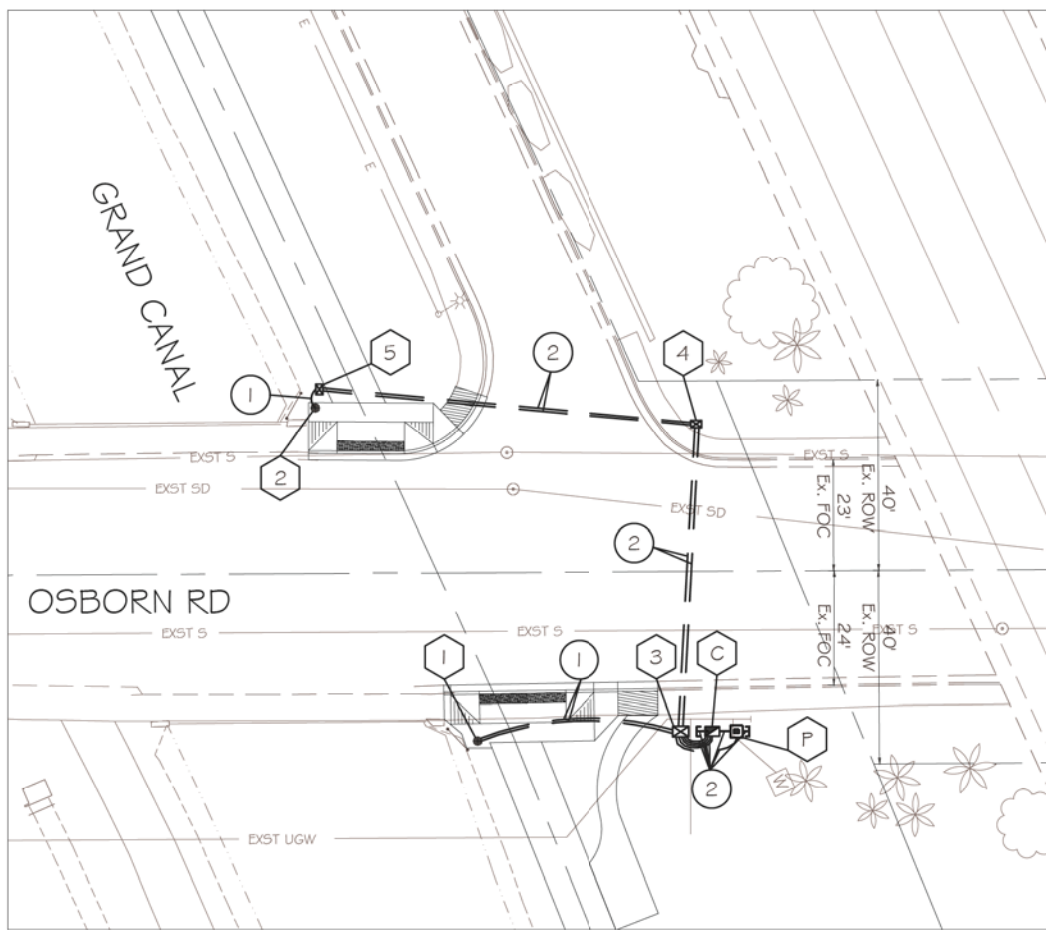
Symbol	Description	Listed Model	Approved Alternate #1	Approved Alternate #2
M	New Water Meter - See plans for locations			
P	Electrical Power Pedestal			
C	Controller	Rain Master Eagle-RME18EGI-SPED-T	Tucor RKW+	Toro CC-M12-PED
WG	Base Wireless Gateway	Tucor Nexus BWR-400-G6	N/A	N/A
BFPU	Backflow Prevention Unit with Enclosure	Febco 825-YA 1"	Wilkins 975XL2SE	Watts 909AGC
WV	Master Valve	Griswold #2160 Open	Buckner Superior 3100-100	Bermad 910D
FS	Flow Sensor	Irritrol FS-B100	Rain Bird FS100B	Hunter Flow-Sync
RV	1" Remote Control Valve Pressure Regulator Wye Strainer (not shown on plan)	Rain Bird 100-EFB-CP Watts LFX65B 1" Watts LF77S 1"	Hunter IBV-101G-FS Apollo PR1PRLF Apollo YB1LF	Buckner Superior 3200-100 Wilkins 500XLYSBR 1" Wilkins 500XLYSBR 1"
WR	Wireless DC Latching Receiver	Tucor BWR-400 WVR-VB12	N/A	N/A
MGV	Mainline Gate Valve (not shown on plan, place at midpoint of mainline between valves)	NIBCO T-113 1"	Apollo 101S1	Watts WGV-X 1"
BV	Ball Valve	NIBCO T-FP-600A	Watts FBV-4 1"	MATCO 757T05
QC	Quick Coupler	Rainbird 44-LRC	Hunter HQ-44LRC	Toro 470-100-2SLVC
ELT	Emitter Irrigation Line for Trees	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
ELS	Emitter Irrigation Line for Shrubs	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
ME	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)	Bowsmith ML 210	Rainbird XBT-10-6	Salco Products SLV-PS-1
SE	Single-port Emitter- As Needed (not shown on plan)	Bowsmith SL 210	Rainbird XB-10PC	Salco Products SLV-PS-1
FC	Flush Cap, Typical end of all lateral lines	Rainbird MDCFCAP	Orbit 67468	Jain Power Loc w/ 3/8" FHT Threaded Cap



REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV. BY	CHK BY	DATE

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

NO.	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
- 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
- Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M.O.F OSBORN ROAD	FROM M.O.F CANAL PATHWAY
C	CONT	33.4 ft. SOUTH	39.0 ft. EAST
P	PSP	33.4 ft. SOUTH	43.6 ft. EAST
1	LM	35.1 ft. SOUTH	7.1 ft. EAST
2	SQ	34.5 ft. NORTH	8.7 ft. WEST

NOTE: Distance is perpendicular to roadway center line as shown on plans

NO.	TYPE	FROM M.O.F OSBORN ROAD	FROM M.O.F CANAL PATHWAY
3	#7	33.4 ft. SOUTH	32.9 ft. WEST
4	#5	30.6 ft. NORTH	62.0 ft. EAST
5	#5	38.3 ft. NORTH	15.4 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

- ① thru ② See Foundation Schedule
- ③ thru ⑤ See Junction Box Schedule
- ① 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- ② 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

HAWK EQUIPMENT NOTES

- ⓐ 8 Phase Controller Cabinet - 1 New
- ⓑ Power Service Pedestal - 1 New
- ⓐ Traffic Signal Pole Type "SQ"- 1 New
- ⓑ Traffic Signal Pole Type LM With 20' Riser - 1 New
- ⓐ 55' Signal Mast Arm - 1 New
- ⓑ 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- ⓐ LED Luminaire - 2 New
- ⓑ Countdown Pedestrian Head - 2 New
- ⓐ APS Pedestrian Push Button - 2 New
w/RIO-25 Pedestrian Push Button Sign
- ⓑ Wireless Radio - 1 New
- ⓐ CCTV Camera - 1 New

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

**OSBORN ROAD & CANAL
HAWK SIGNAL**

**CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT**

**GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114**

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.152	2.182



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



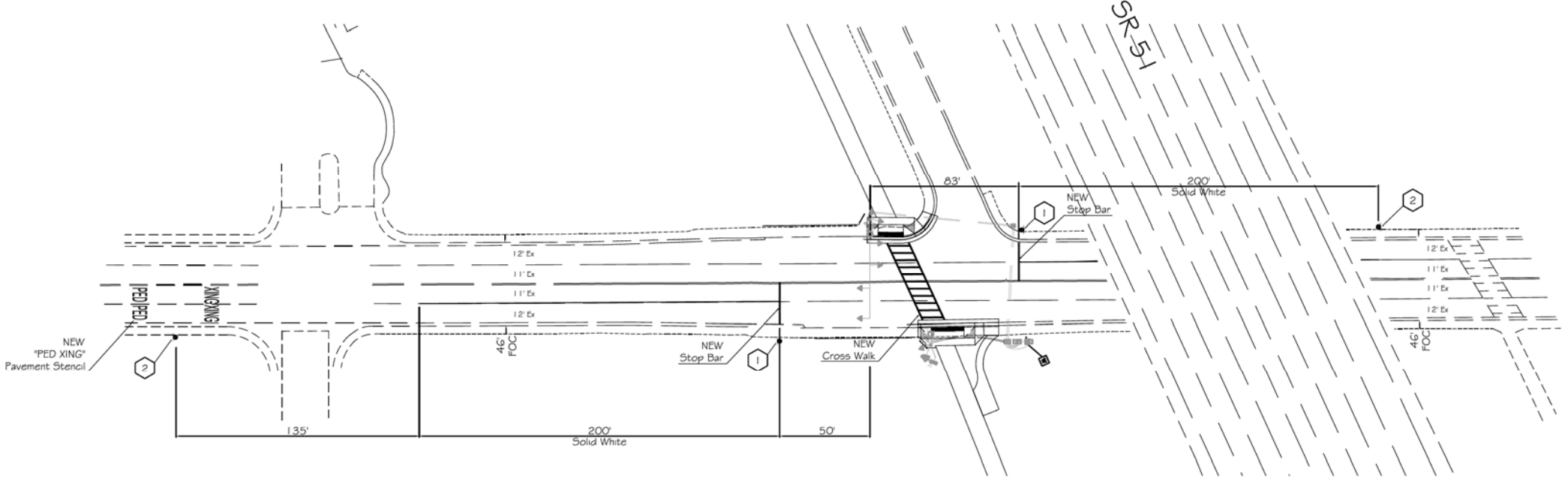
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.153	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



- HAWK SIGN NOTES**
- 1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36
 - 2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



OSBORN ROAD



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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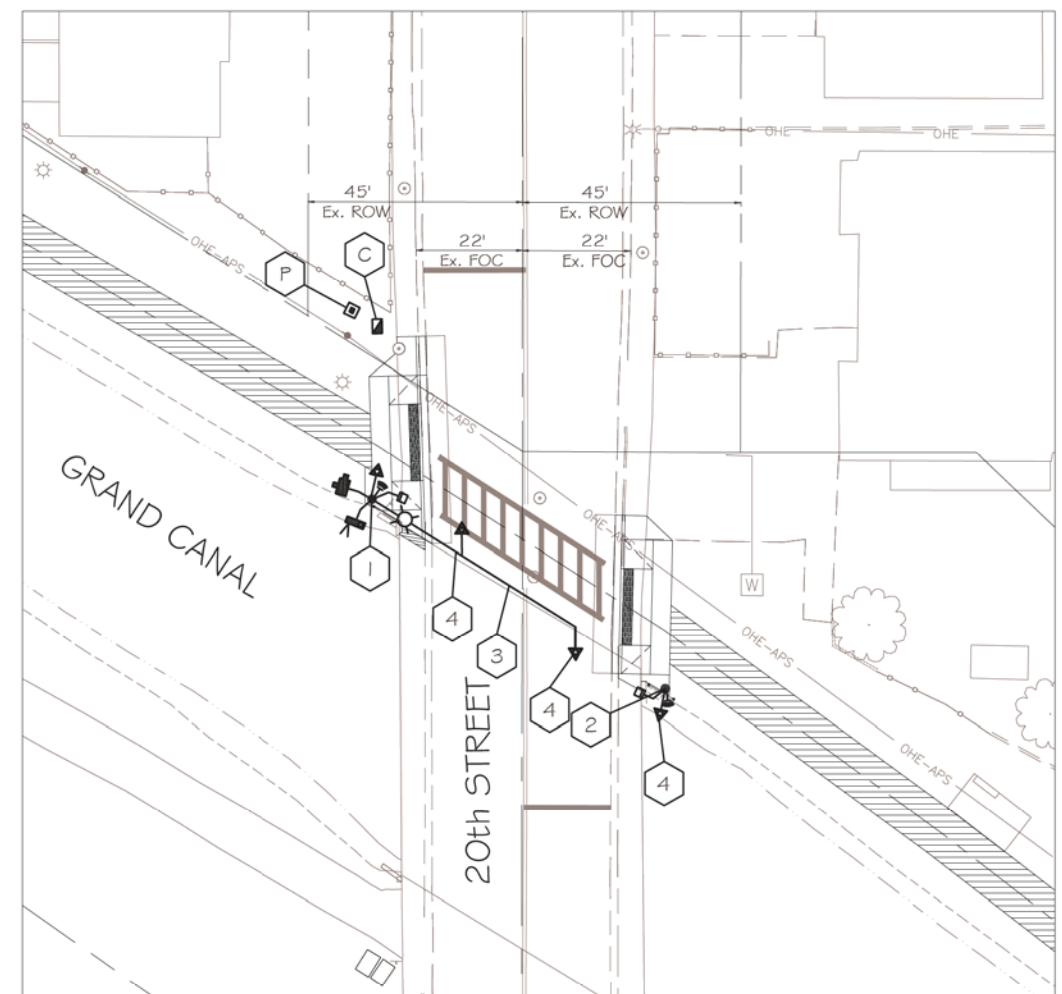
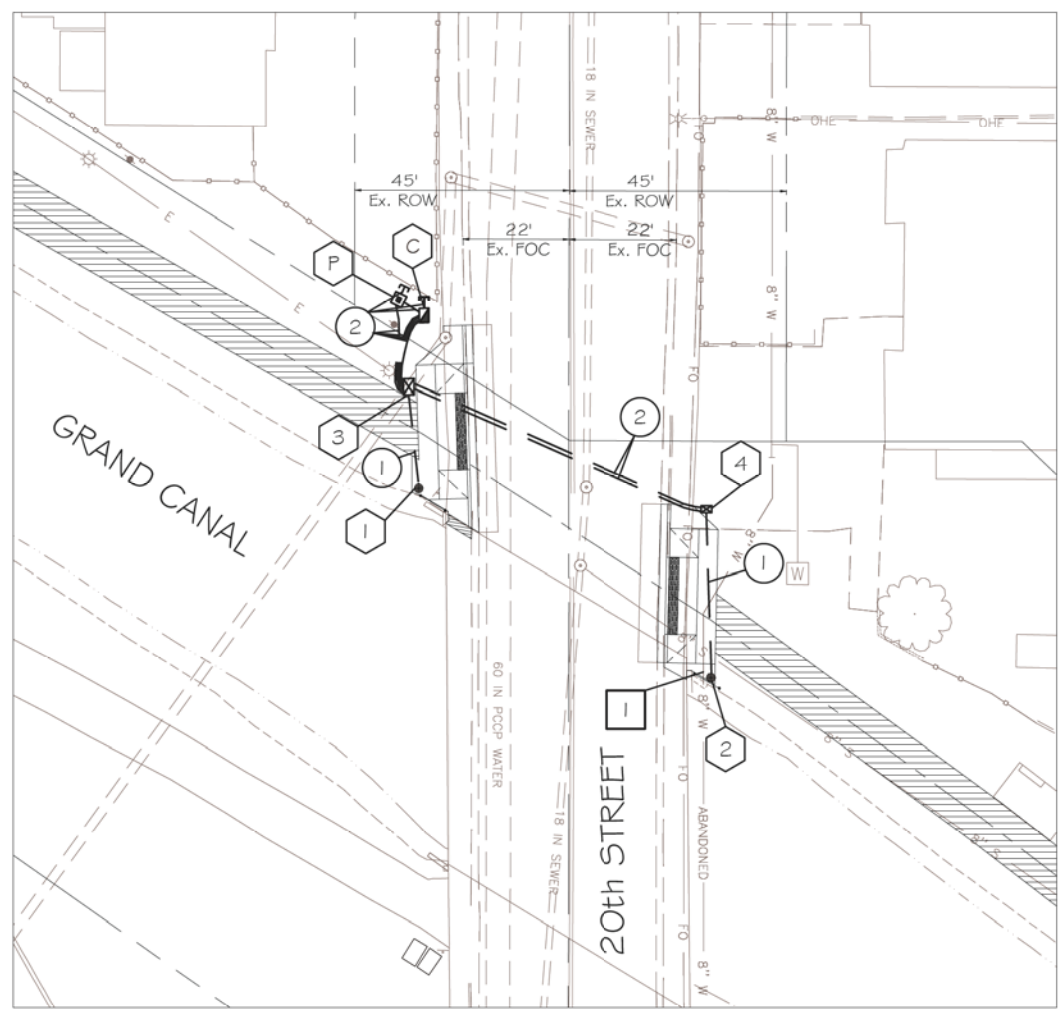
PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.153	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



SIGNAL PLAN SHEET NOTES

- GENERAL NOTES:
 - The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - Foundation elevations must be within 1/4" of finished sidewalk grade.
 - The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
- WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M ₀ OF CANAL PATHWAY	FROM M ₀ OF 20TH STREET
C	CONT	21.5 ft. NORTH	30.2 ft. WEST
P	PSP	16.1 ft. NORTH	30.1 ft. WEST
1	SQ	10.0 ft. SOUTH	31.3 ft. WEST
2	A	9.7 ft. NORTH	29.8 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

NO.	TYPE	FROM M ₀ OF CANAL PATHWAY	FROM M ₀ OF 20TH STREET
3	#7	7.3 ft. NORTH	32.3 ft. WEST
4	#5	18.9 ft. NORTH	28.8 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

- 1 thru 2 See Foundation Schedule
- 3 thru 4 See Junction Box Schedule
- 1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 1 Remove Abandoned Water Line as Necessary

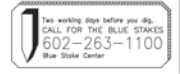
HAWK EQUIPMENT NOTES

- C 8 Phase Controller Cabinet - 1 New
- P Power Service Pedestal - 1 New
- 1 Traffic Signal Pole Type "SQ" - 1 New
- 2 Traffic Signal Pole Type 'A' - 1 New
- 3 60' Signal Mast Arm - 1 New
- 4 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- LED Luminaire - 1 New
- Countdown Pedestrian Head - 2 New
- APS Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

20TH STREET & CANAL
HAWK SIGNAL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.154	2.182



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

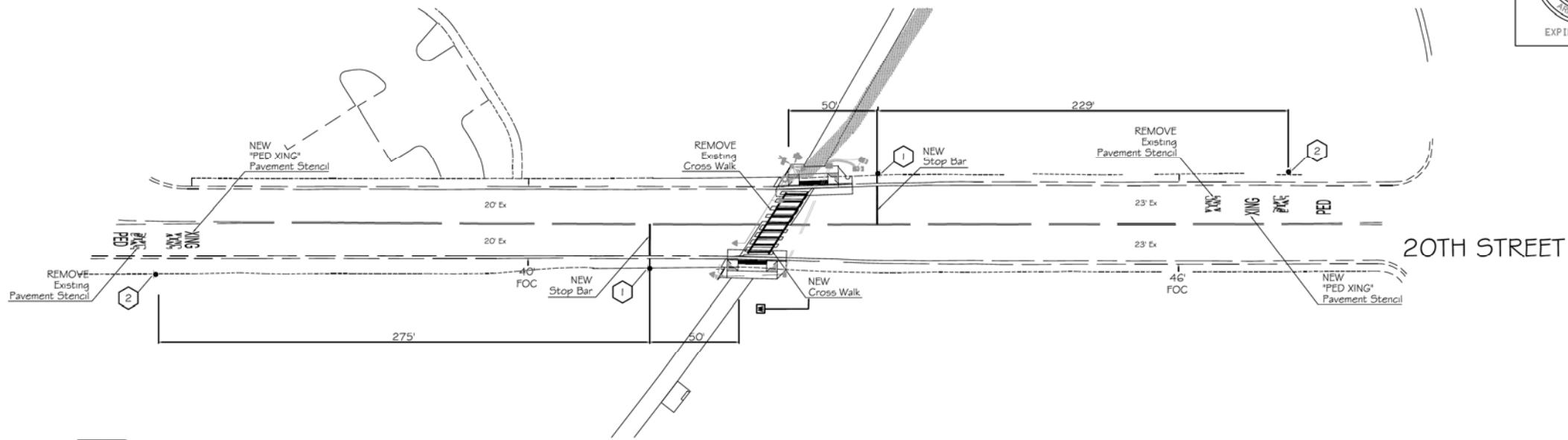


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.155	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK SIGN NOTES

1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36



2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.155	2.182

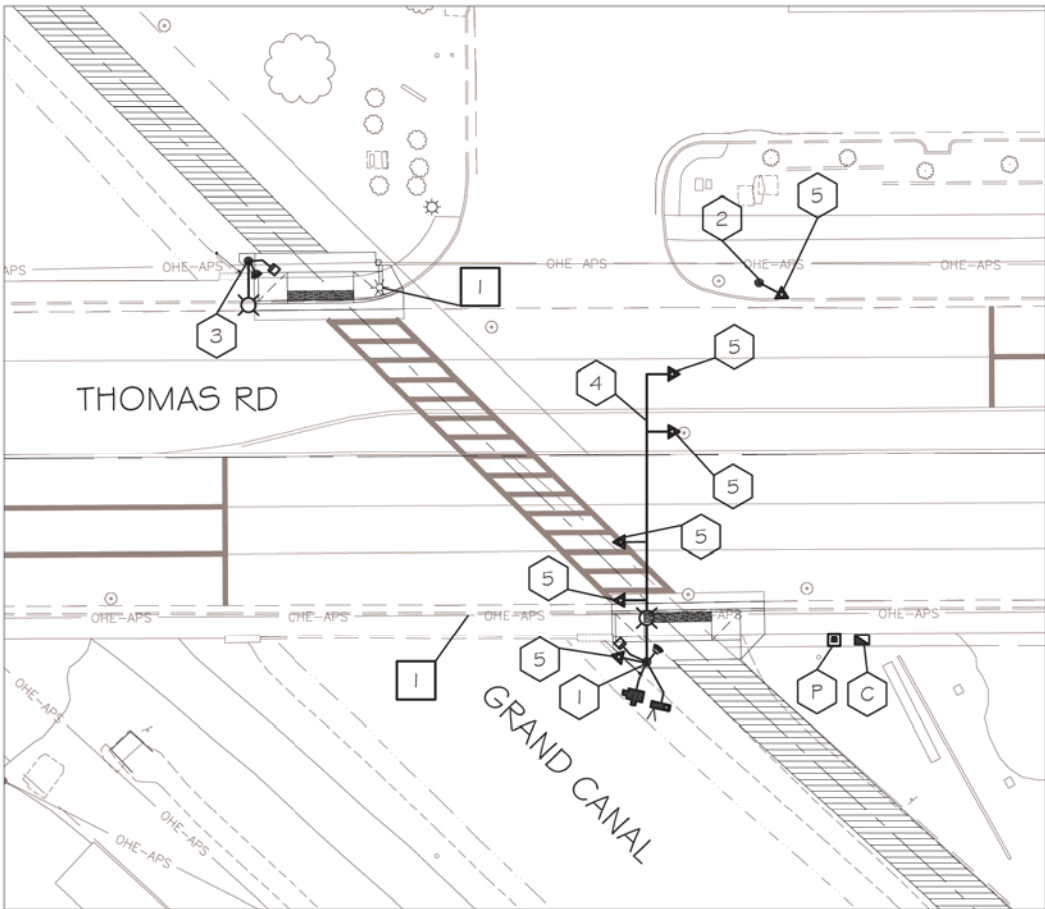
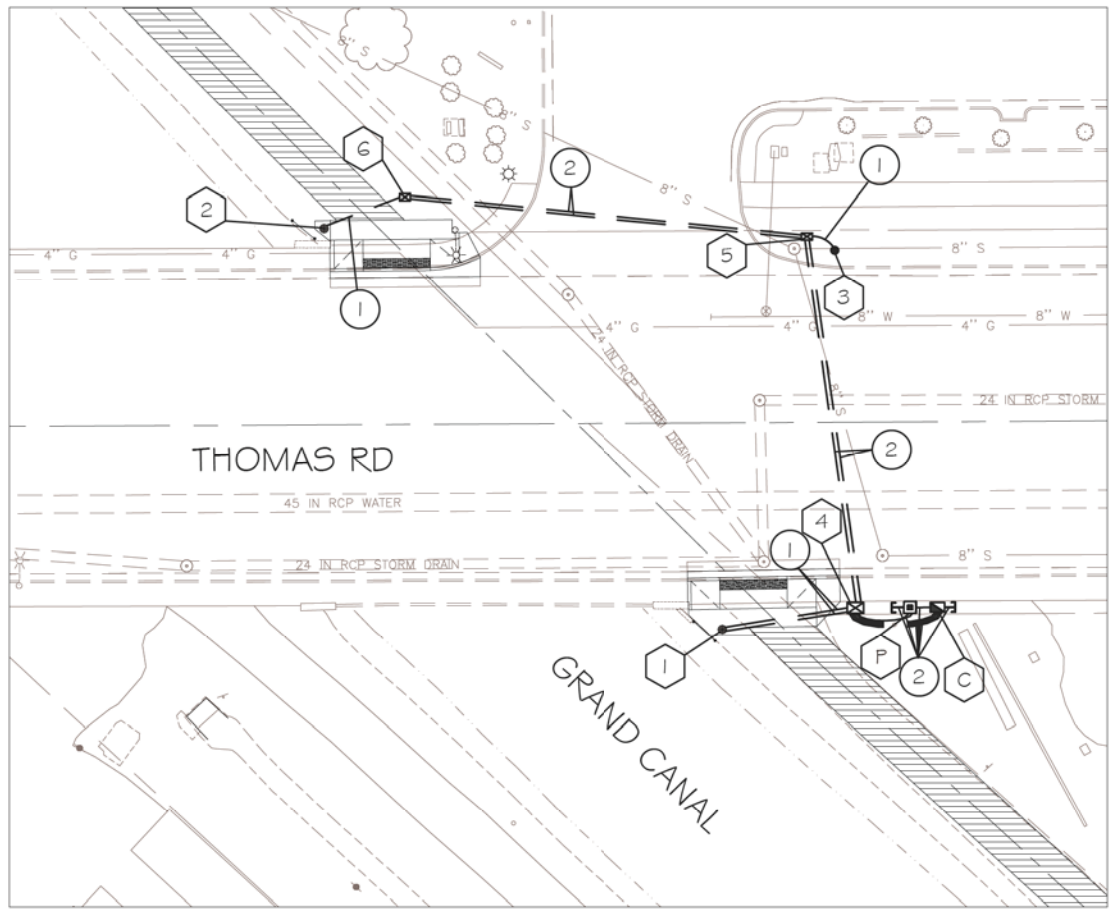
SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

- GENERAL NOTES:
 - The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - Foundation elevations must be within 1/4" of finished sidewalk grade.
 - The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
- WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M ₀ OF THOMAS ROAD	FROM M ₀ OF CANAL PATHWAY
C	CONT	38.6 ft. SOUTH	25.3 ft. EAST
P	PSP	38.6 ft. SOUTH	21.4 ft. EAST
1	ADOT W	43.0 ft. SOUTH	9.1 ft. WEST
2	G	42.4 ft. NORTH	6.5 ft. EAST
3	A	35.8 ft. NORTH	63.6 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

NO.	TYPE	FROM M ₀ OF THOMAS ROAD	FROM M ₀ OF CANAL PATHWAY
3	#7	38.6 ft. SOUTH	13.6 ft. EAST
4	#5	38.7 ft. NORTH	61.5 ft. EAST
5	#5	47.3 ft. NORTH	8.4 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

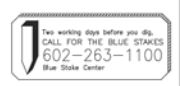
- 1 thru 2 See Foundation Schedule
- 3 thru 5 See Junction Box Schedule
- 1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

HAWK EQUIPMENT NOTES

- C 8 Phase Controller Cabinet - 1 New
- P Power Service Pedestal - 1 New
- 1 Traffic Signal Pole Type ADOT "W"- 1 New
- 2 Traffic Signal Pole Type A - 1 New
- 3 Traffic Signal Pole Type G - 1 New
- 4 60' Signal Mast Arm - 1 New
- 5 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- Countdown Pedestrian Head - 2 New
- APS Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- Wireless Radio - 1 New
- CCTV Camera - 1 New

REMOVE

- 1 Remove Existing Street light From Power Pole - 1
- 2 OHE for Street Light to be Removed by APS



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." "PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

**THOMAS ROAD & CANAL
HAWK SIGNAL**
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

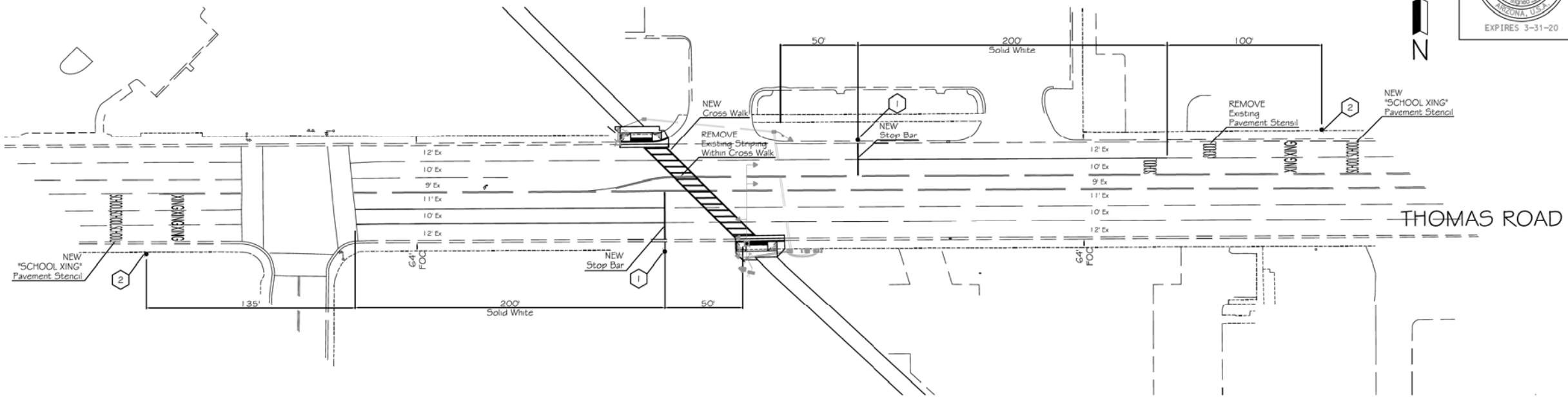
DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.156	2.182

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.157	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



HAWK SIGN NOTES

- 1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36
- 2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

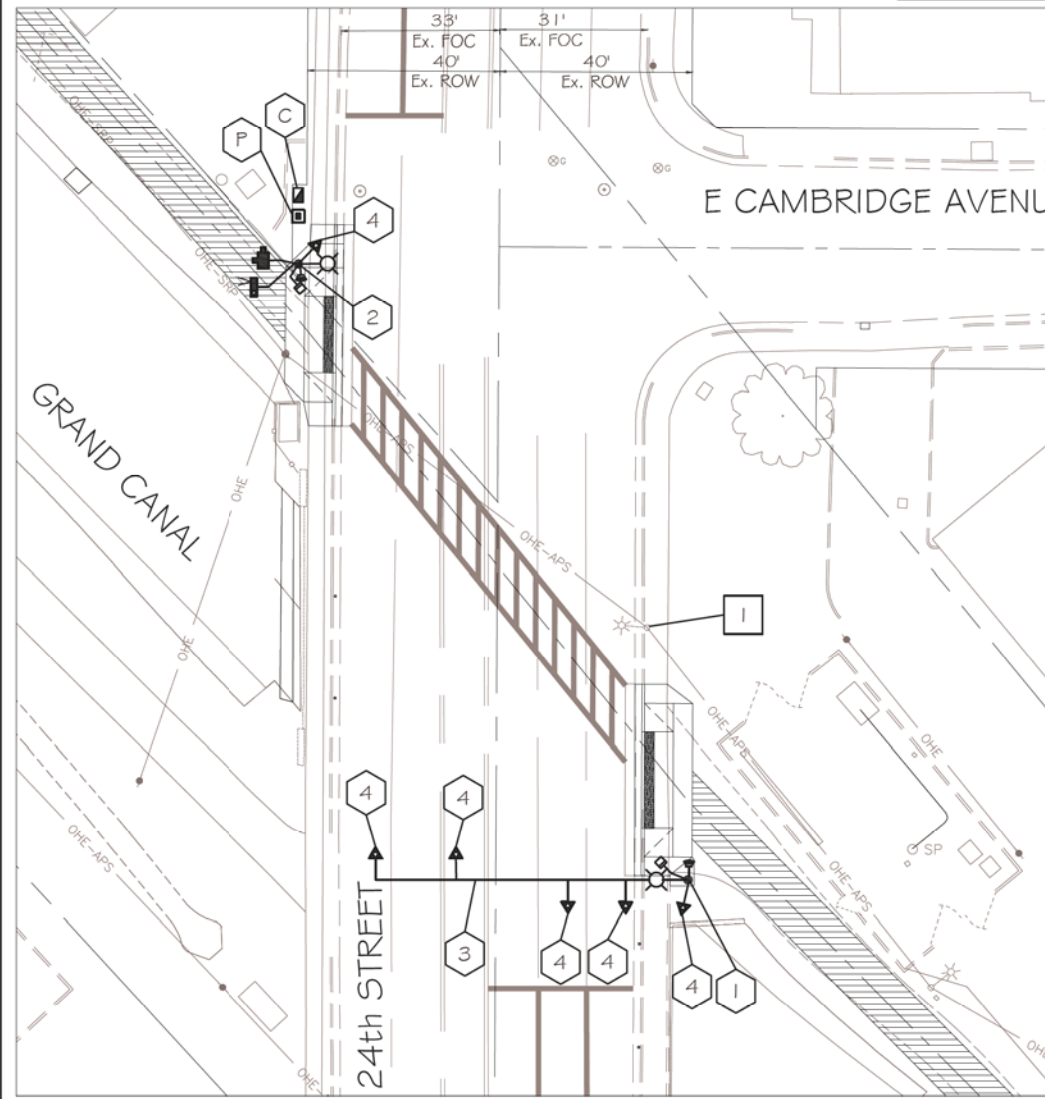
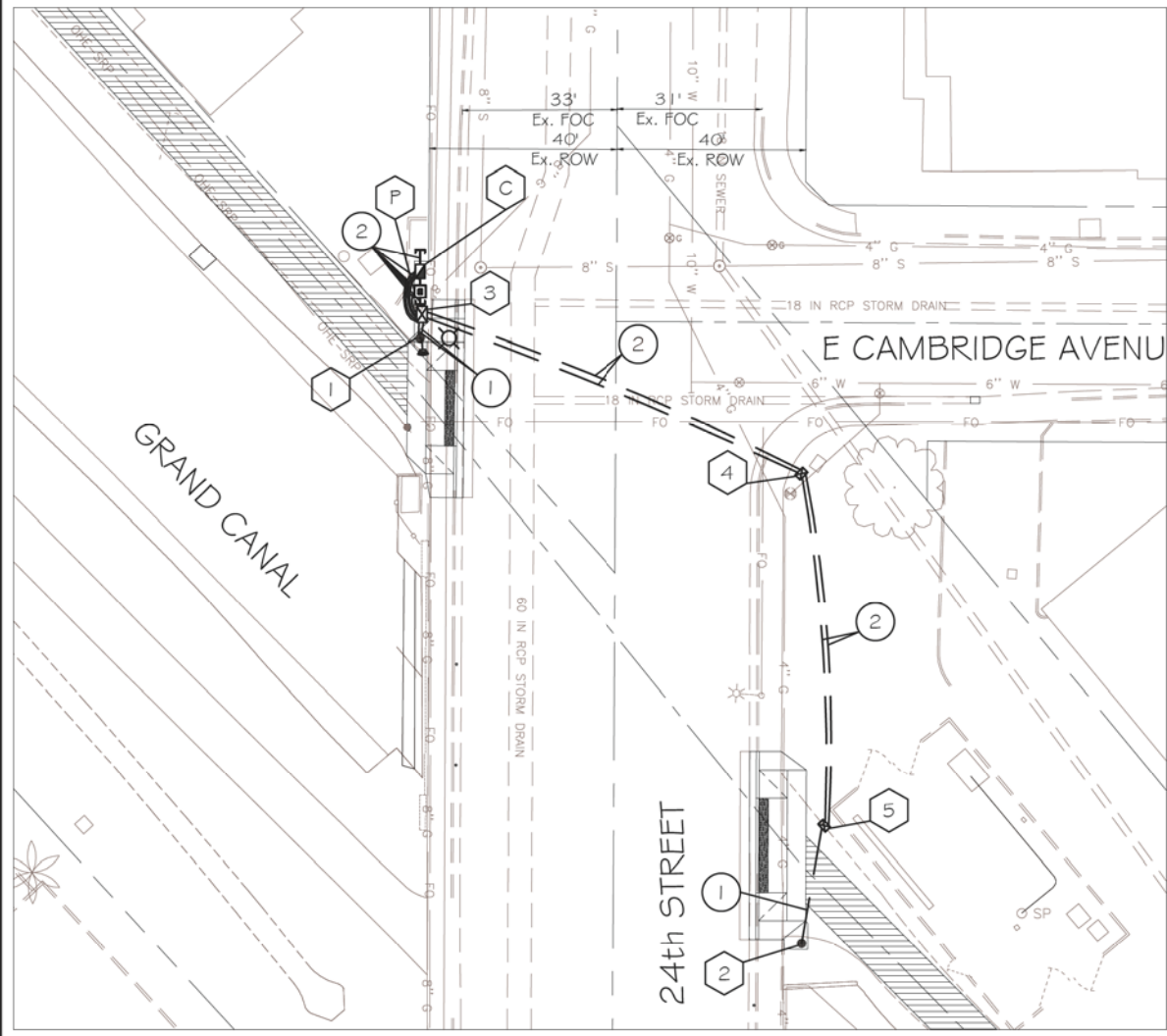
PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.157	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NO.				
NO.				
NO.				



SIGNAL PLAN SHEET NOTES

- GENERAL NOTES:
 - The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - Foundation elevations must be within 1/4" of finished sidewalk grade.
 - The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
- WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

HAWK EQUIPMENT NOTES

- 8 Phase Controller Cabinet - 1 New
- Power Service Pedestal - 1 New
- Traffic Signal Pole Type ADOT "W" - 1 New
- Traffic Signal Pole Type LM With 20' Riser - 1 New
- 65' ADOT Signal Mast Arm - 1 New
- 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- LED Luminaire - 2 New
- Countdown Pedestrian Head - 2 New
- APS Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- Wireless Radio - 1 New
- CCTV Camera - 1 New

PROPOSED FOUNDATION SCHEDULE			
NO.	TYPE	FROM M.O.F CANAL PATHWAY	FROM M.O.F 24TH STREET
C	CONT	17.3 ft. NORTH	41.8 ft. WEST
P	PSP	14.4 ft. NORTH	41.8 ft. WEST
1	ADOT W	7.8 ft. NORTH	41.8 ft. WEST
2	LM	7.8 ft. NORTH	41.1 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

PROPOSED JUNCTION BOX SCHEDULE			
NO.	TYPE	FROM M.O.F CANAL PATHWAY	FROM M.O.F 24TH STREET
3	#7	11.5 ft. NORTH	41.4 ft. WEST
4	#5	52.3 ft. NORTH	39.4 ft. EAST
5	#5	9.0 ft. NORTH	44.7 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

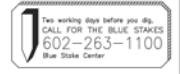
INSTALL

- thru See Foundation Schedule
- thru See Junction Box Schedule
- 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

**4TH STREET & CANAL
HAWK SIGNAL**
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.158	2.182



ST87600114, GRAND CANALScape PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

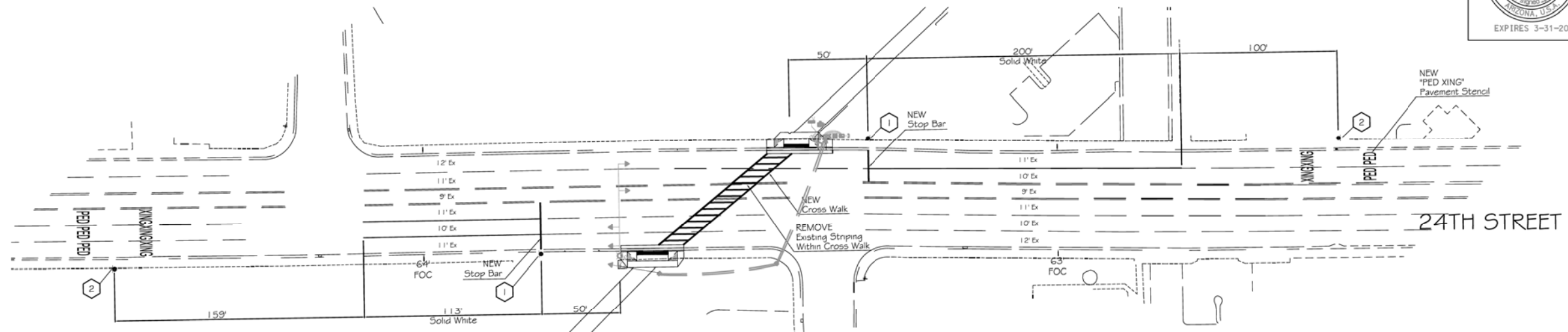


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.159	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK SIGN NOTES

1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36



2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

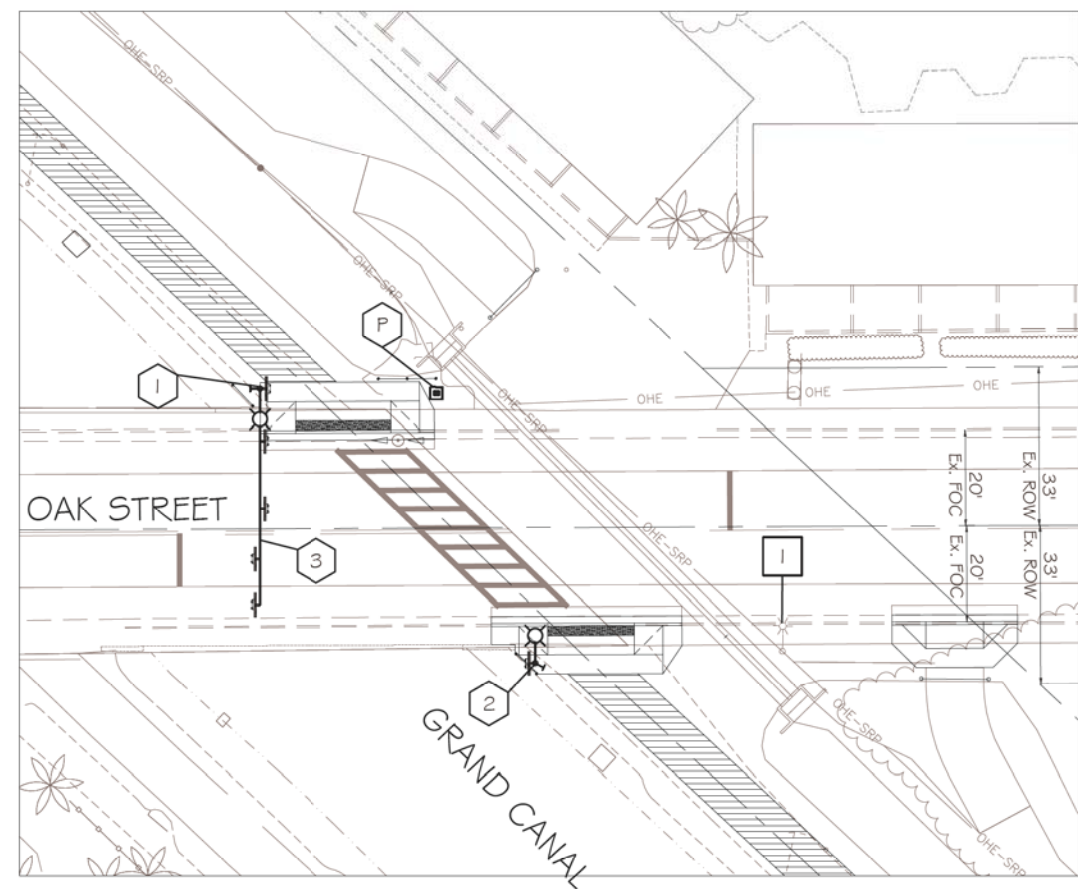
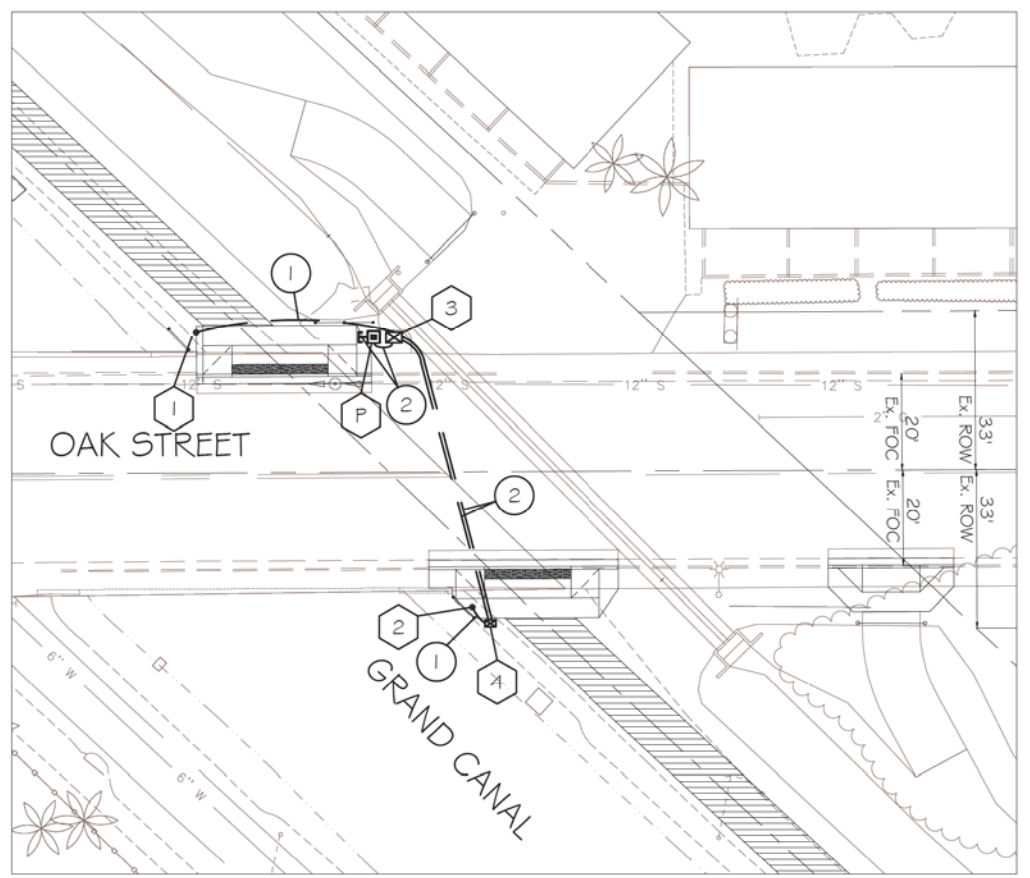
PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.159	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

NO.	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
- 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
- Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M _{OF} OAK STREET	FROM M _{OF} CANAL PATH
P	PSP	28.1 ft. NORTH	17.9 ft. EAST
1	SR	29.2 ft. NORTH	7.0 ft. EAST
2	LM	28.2 ft. SOUTH	8.2 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

NO.	TYPE	FROM M _{OF} OAK STREET	FROM M _{OF} CANAL PATH
3	#7	28.0 ft. NORTH	20.8 ft. EAST
4	#5	31.6 ft. SOUTH	8.0 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

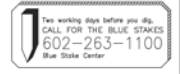
- ① thru ② See Foundation Schedule
- ③ thru ④ See Junction Box Schedule
- ① 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- ② 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

INSTALL (BY CONTRACTOR)

- ⓐ 8 Phase Controller Cabinet - 1 New
- ⓑ Power Service Pedestal - 1 New
- ⓒ Traffic Signal Pole Type "SR" - 1 New
- ⓓ Traffic Signal Pole Type LM With 20' Riser - 1 New
- ⓔ 45' Signal Mast Arm - 1 New
- ⓕ Rectangular Rapid Flash Beacon (RRFB) - 6 New
- ⓖ Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- ⓗ W1 1-2 Pedestrian Crossing Sign
36" x 36" Mast Arm Mount - 4 New
36" x 36" Signal Pole Mount - 2 New
w/Supplemental W1 6-7 Sign

REMOVE

- ⓓ Remove Existing Street light arm and Luminaire from Existing Power Pole - 1



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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OAK STREET & CANAL
RRF

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.160	2.182

SCALE:

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET



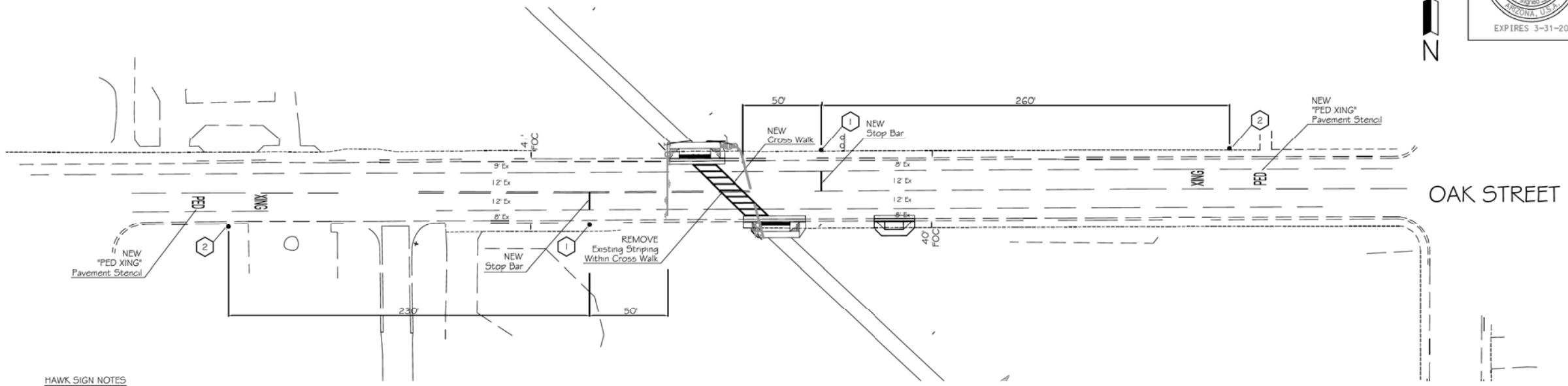
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.161	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK SIGN NOTES

1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36

2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

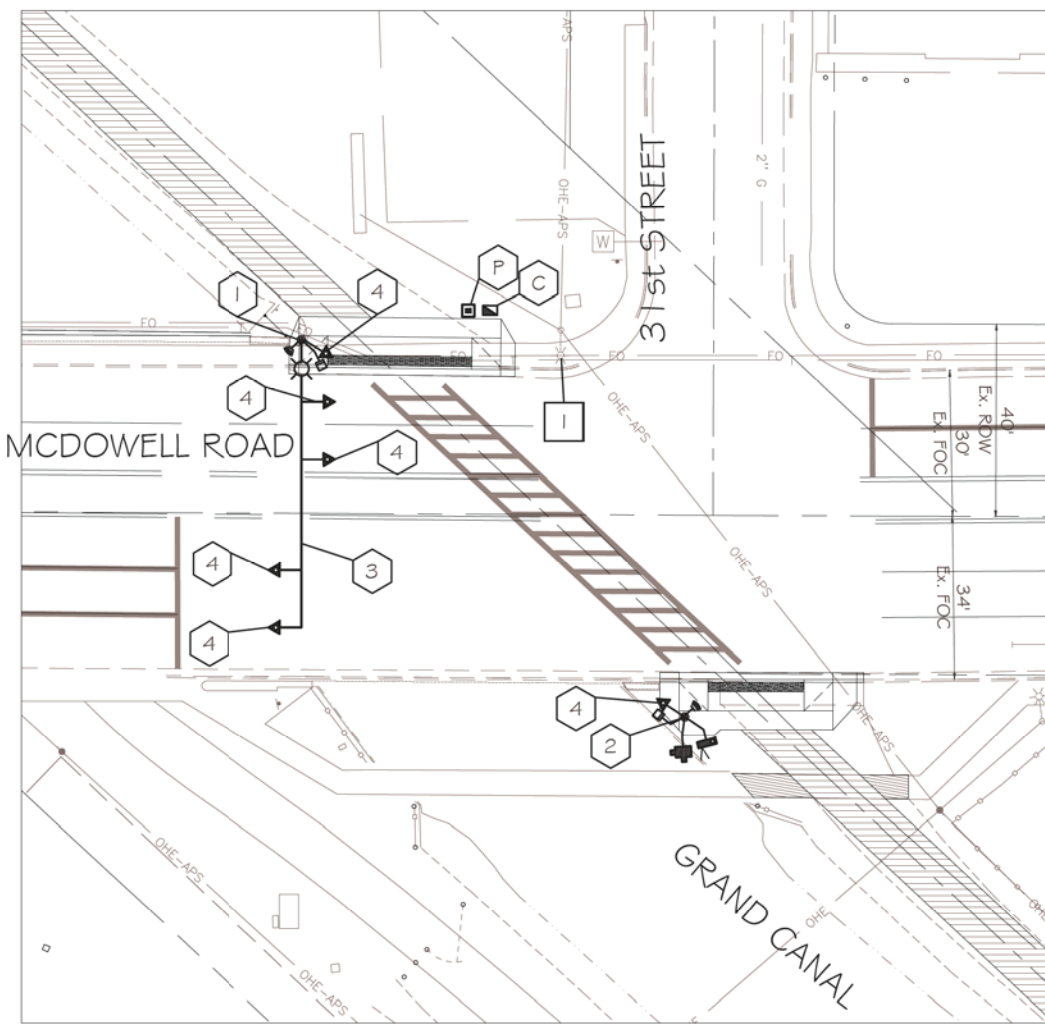
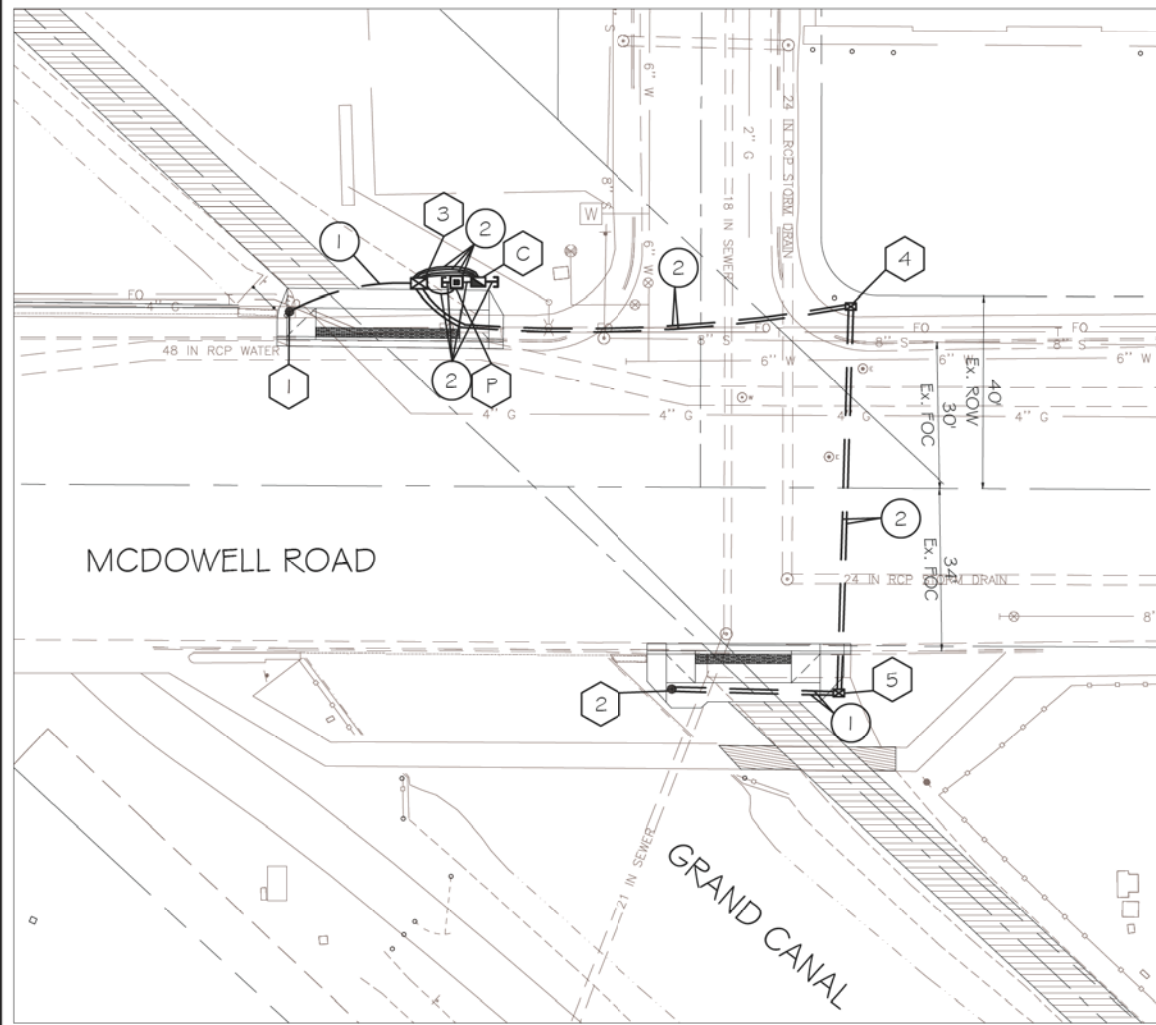
PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.161	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



SIGNAL PLAN SHEET NOTES

- GENERAL NOTES:
 - The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
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 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

PROPOSED FOUNDATION SCHEDULE			
NO.	TYPE	FROM M _C OF MCDOWELL ROAD	FROM M _C OF CANAL PATHWAY
C	CONT	37.5 ft. NORTH	19.5 ft. EAST
P	PSP	37.5 ft. NORTH	16.3 ft. EAST
1	SQ	36.1 ft. NORTH	8.3 ft. WEST
2	LM	42.1 ft. SOUTH	11.1 ft. WEST

NOTE: Distance is perpendicular to roadway center line as shown on plans

PROPOSED JUNCTION BOX SCHEDULE			
NO.	TYPE	FROM M _C OF MCDOWELL ROAD	FROM M _C OF CANAL PATHWAY
3	#7	40.9 ft. NORTH	13.6 ft. EAST
4	#5	37.8 ft. NORTH	72.5 ft. EAST
5	#5	42.7 ft. SOUTH	12.1 ft. EAST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

- 1 thru 2 See Foundation Schedule
- 3 thru 5 See Junction Box Schedule
- 1 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

HAWK EQUIPMENT NOTES

- C 8 Phase Controller Cabinet - 1 New
- P Power Service Pedestal - 1 New
- 1 Traffic Signal Pole Type "SQ" - 1 New
- 2 Traffic Signal Pole Type "LM" With 20' Riser - 1 New
- 3 60' Signal Mast Arm - 1 New
- 4 1 2" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
- LED Luminaire - 1 New
- Countdown Pedestrian Head - 2 New
- APS Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- Wireless Radio - 1 New
- CCTV Camera - 1 New

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

**McDOWELL ROAD & CANAL
HAWK SIGNAL**

**CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT**

**GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114**

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.162	2.182

SCALE:

ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET

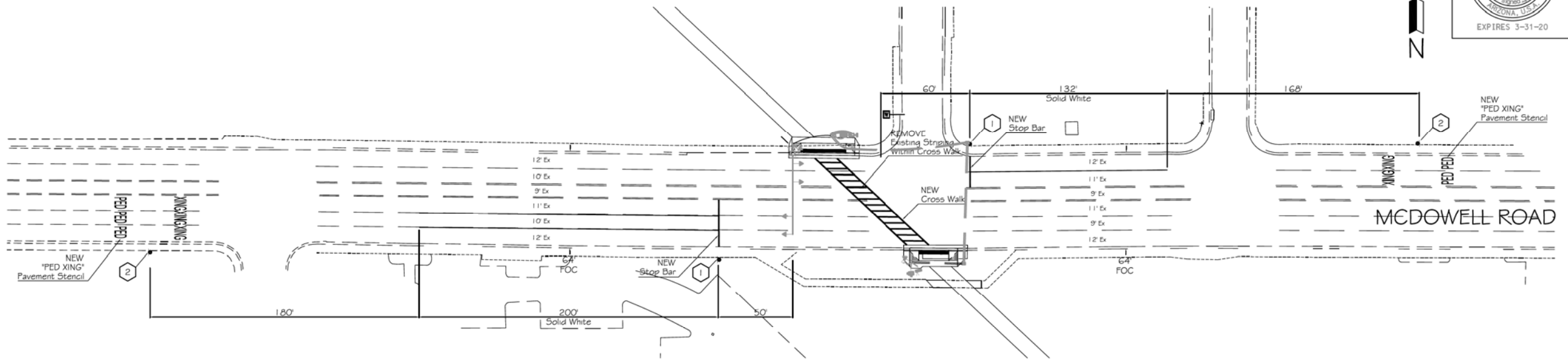


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.163	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



HAWK SIGN NOTES

- 1 R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36
- 2 W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

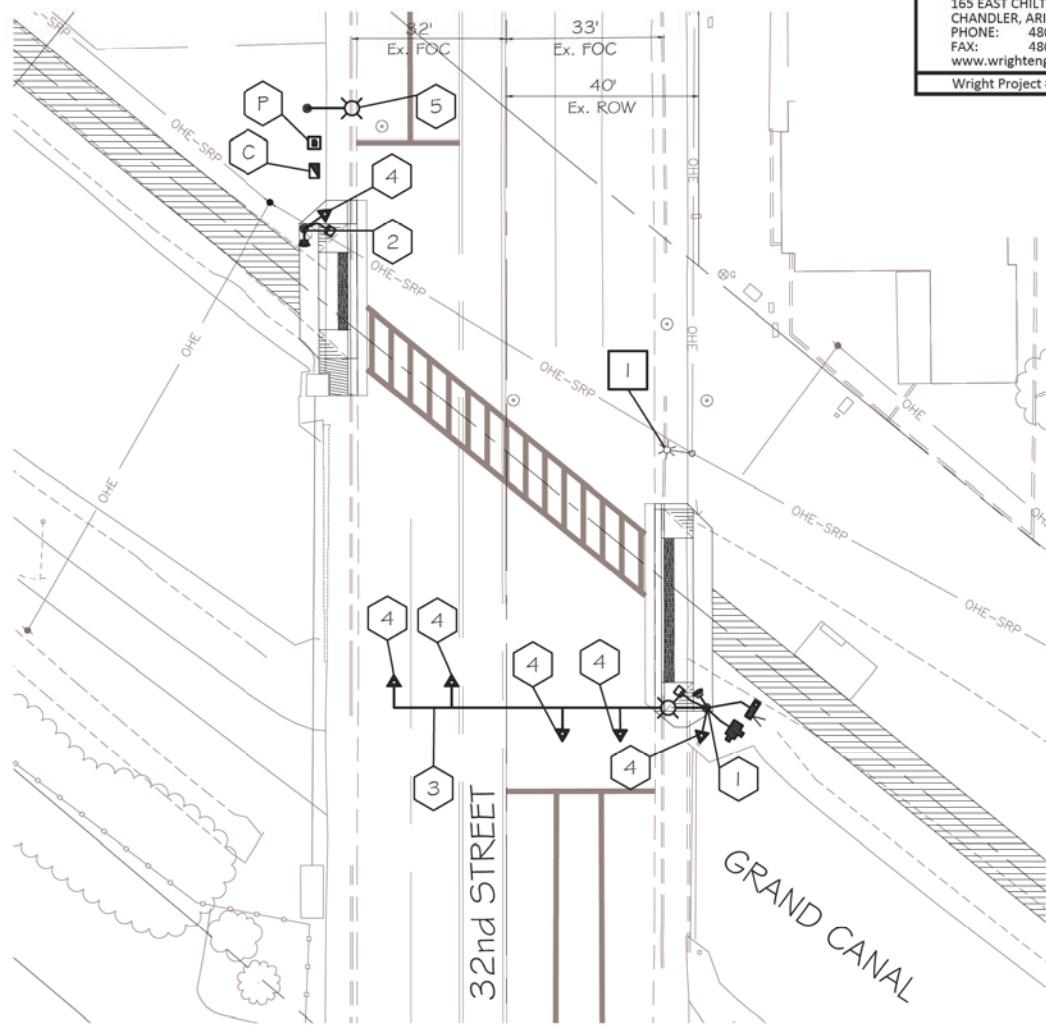
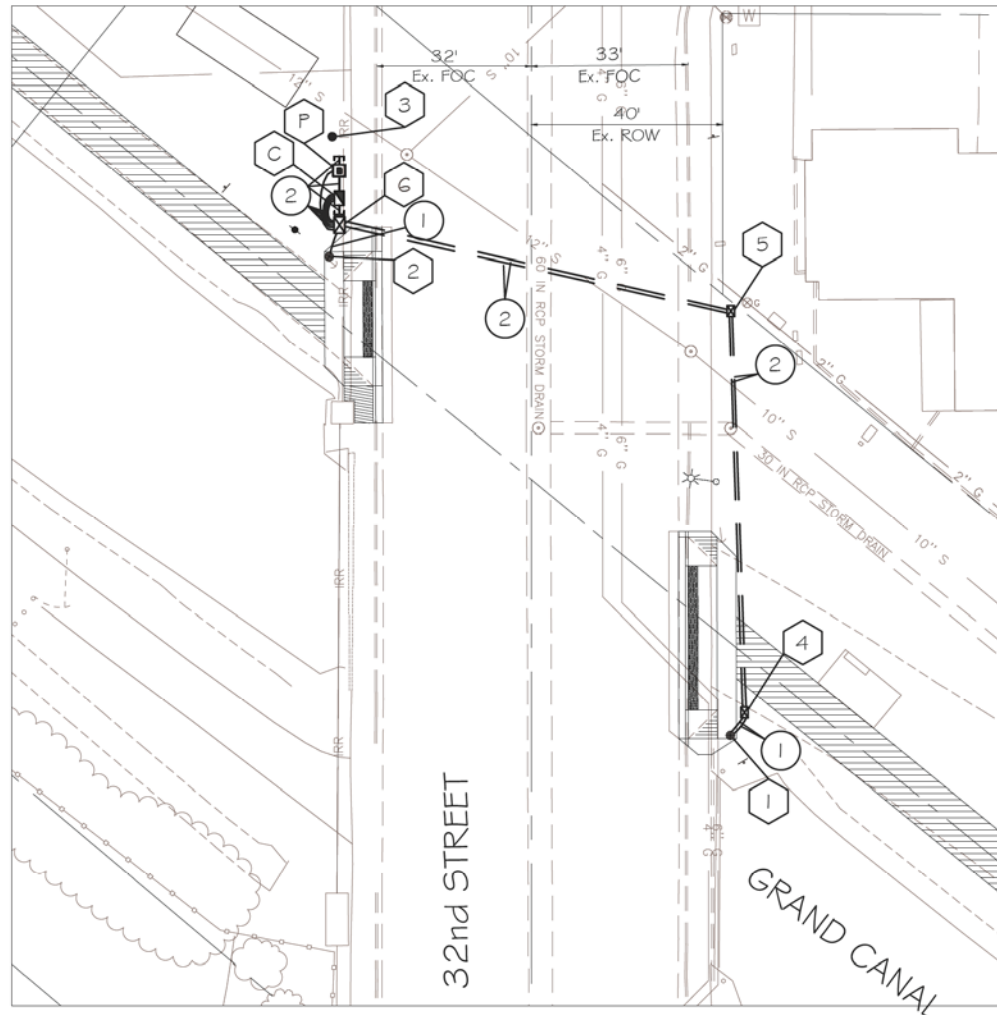
PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.163	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

- GENERAL NOTES:
 - The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - Foundation elevations must be within 1/4" of finished sidewalk grade.
 - The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
- WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Prep contractor furnished controller cabinets and all internal equipment
 - Transport controller cabinet to intersection(s)
 - Terminate, test and activate all field wiring into controller cabinet(s)

HAWK EQUIPMENT NOTES

- 8 Phase Controller Cabinet - 1 New
 - Power Service Pedestal - 1 New
 - ADOT Type W Pole- 1 New
 - Traffic Signal Pole Type LM With 20' Riser - 1 New
 - 65' ADOT Signal Mast Arm - 1 New
 - 12" HAWK Signal Head - 6 New
Mast Arm Mount - 4
Pole Mount - 2
 - Install New 10,000 Lumin LED Street Light with a 32'-11" Mounting Height per COP Standards - 1 New
 - LED Luminaire - 2 New
 - Countdown Pedestrian Head - 2 New
 - APS Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
 - Wireless Radio - 1 New
 - CCTV Camera - 1 New
- REMOVE
- Remove Existing Street light arm and Luminaire from Existing Power Pole - 1

NO.	TYPE	FROM M.O.F CANAL PATHWAY	FROM M.O.F 32ND STREET
C	CONT	20.1 ft. NORTH	40.0 ft. WEST
P	PSP	24.6 ft. NORTH	40.0 ft. WEST
1	SG	15.0 ft. SOUTH	41.6 ft. EAST
2	LM	9.4 ft. NORTH	42.1 ft. WEST
3	LIGHT	29.2 ft. SOUTH	41.2 ft. WEST

NOTE: Distance is perpendicular to roadway center line as shown on plans

NO.	TYPE	FROM M.O.F CANAL PATHWAY	FROM M.O.F 32ND STREET
4	#7	9.4 ft. SOUTH	44.5 ft. EAST
5	#5	53.6 ft. NORTH	41.7 ft. EAST
6	#5	15.8 ft. NORTH	39.9 ft. WEST

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

- thru See Foundation Schedule
- thru See Junction Box Schedule
- 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- 2 1/2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

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**32ND STREET & CANAL
HAWK SIGNAL**
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: WTB	DR: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS
DATE: 07/17			2.164	2.182



ST87600114, GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, 100% SUBMITTAL

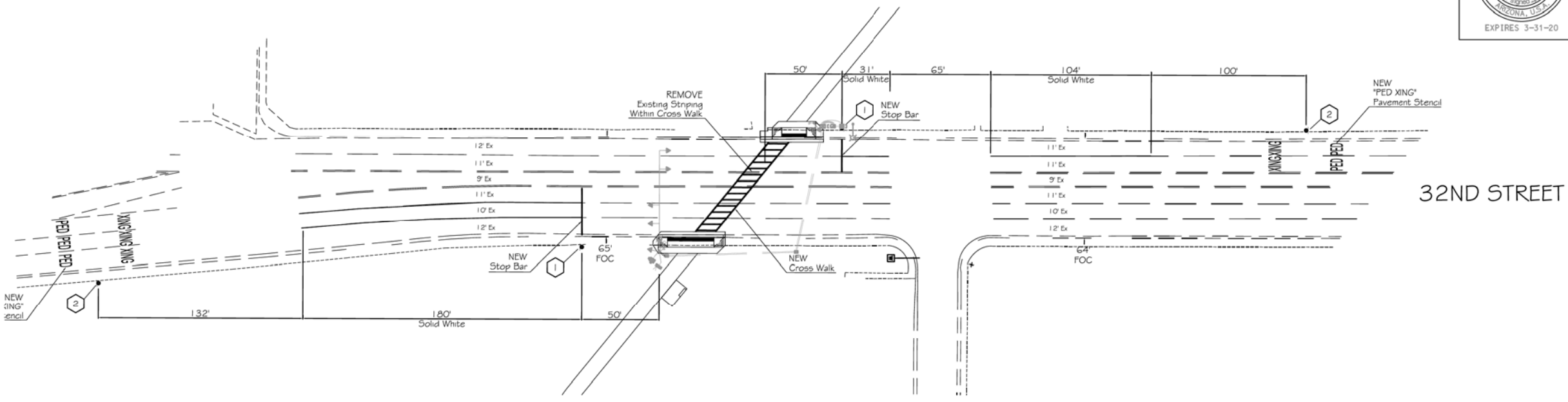


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.165	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: JL	DR: JKA	CK: RCA	DATE: 07/17/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



HAWK SIGN NOTES

- ① R10-6 "STOP HERE ON RED"
Sign Post Mount
24x36
- ② W11-2 "PEDESTRIAN CROSSING"
Sign Pole Mount
36x36



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PAVEMENT MARKING PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
16TH STREET TO 36TH STREET
ST87600114

DES: JL	DR: JKA	CK: RCA	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.165	2.182

SCALE:

ST87600114 GRAND CANALSCAPE PHASE II 16TH STREET TO 36TH STREET, FINAL SUBMITTAL

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.167	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

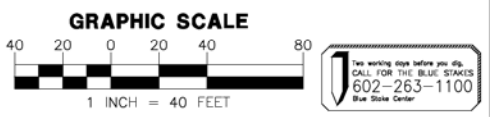
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- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ⑤ LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- ⑦ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	WIRE GROUND	TYPE* (CKT #)	REMARKS
50	1"	2-#12	1-#12	CU TYP.	
51	1"	2-#10	1-#10	CU TYP.	
52	1"	2-#8	1-#8	CU TYP.	
53	1"	2-#6	1-#6	CU TYP.	
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CKD BY	DATE
NO.				
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NO.				



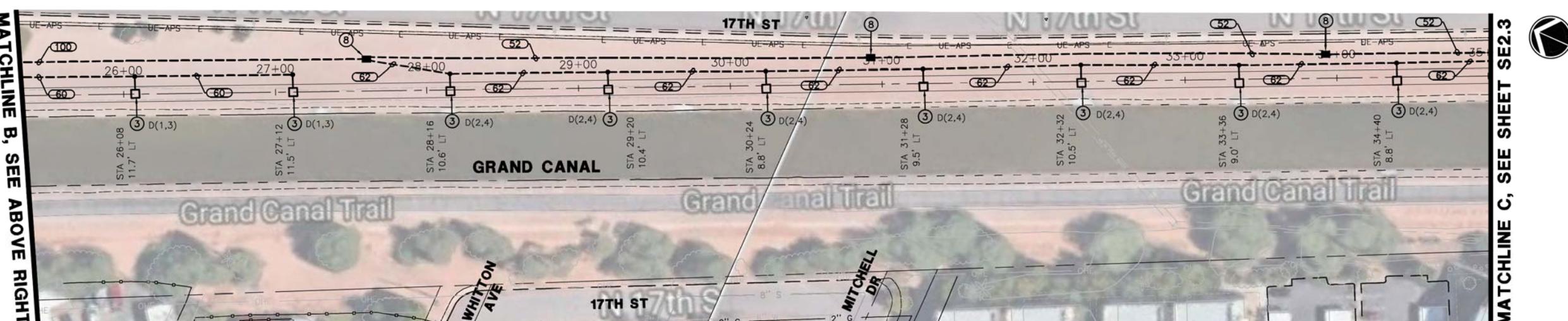
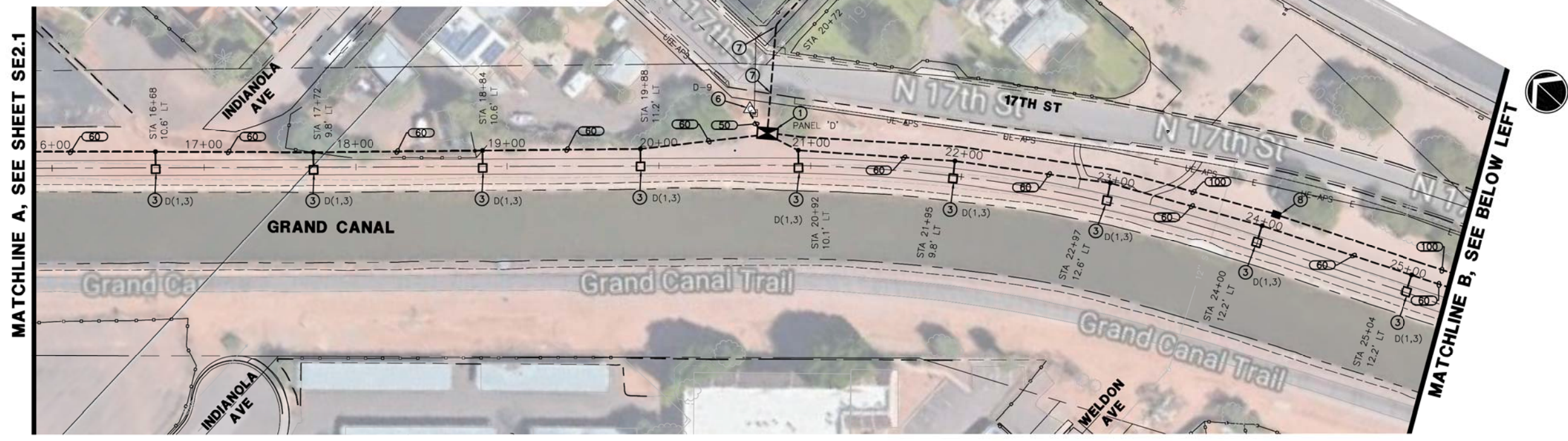
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT □ 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	
SCALE:			SE2.1	2.167 2.182



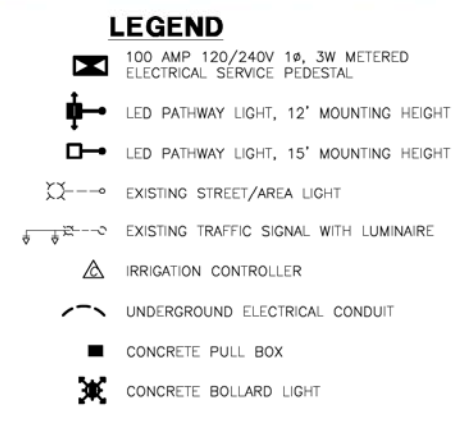
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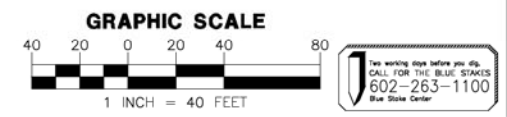
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- CONSTRUCTION NOTES:**
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027

Professional Engineer
57159
CLIFFORD M. TOLMAN
Date Stamp 7-17-17
Exp. 3-31-20

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,169	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W, METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
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- IRRIGATION CONTROLLER
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- CONCRETE PULL BOX
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CONSTRUCTION NOTES:

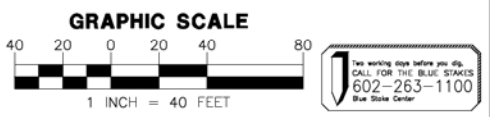
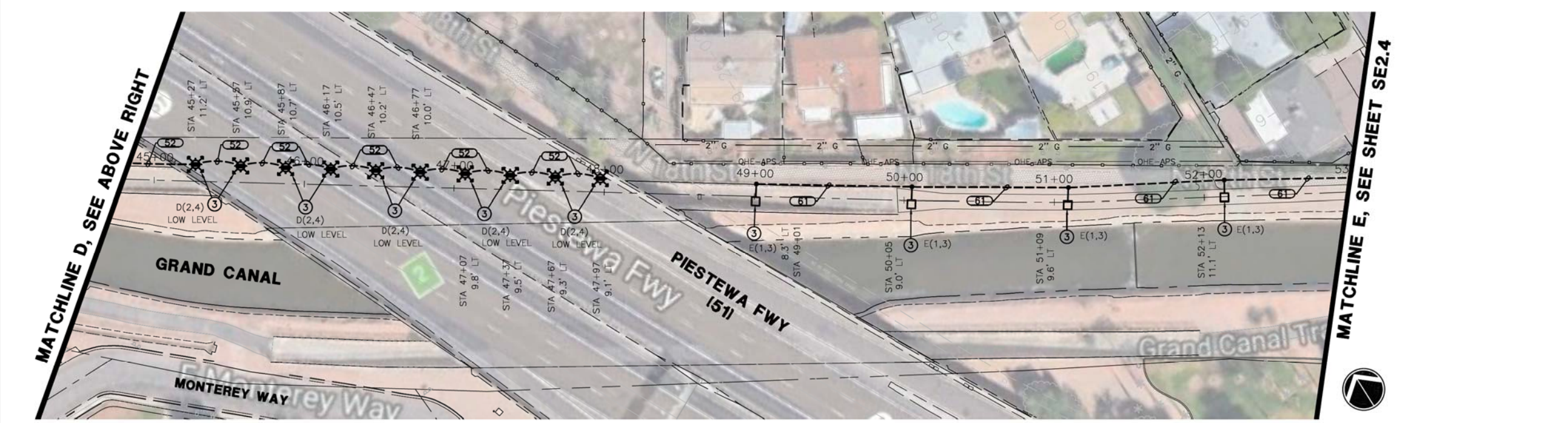
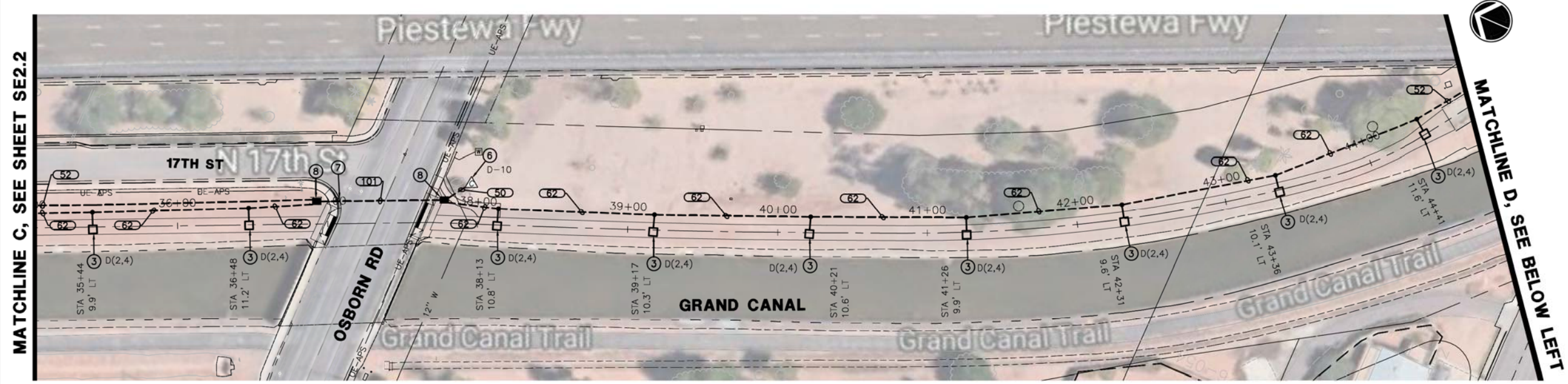
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WIRE & CONDUIT TABLE

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51	1"	2-#10	1-#10	CU TYP.	LOW LIGHT LEVEL
52	1"	2-#8	1-#8	CU TYP.	HIGH LIGHT LEVEL
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101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

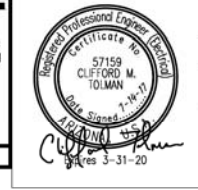


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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
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SCALE:			SE2.3	2,169 2,182

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,170	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

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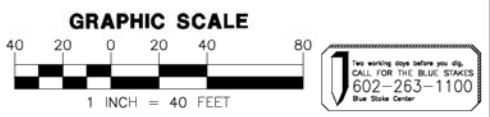
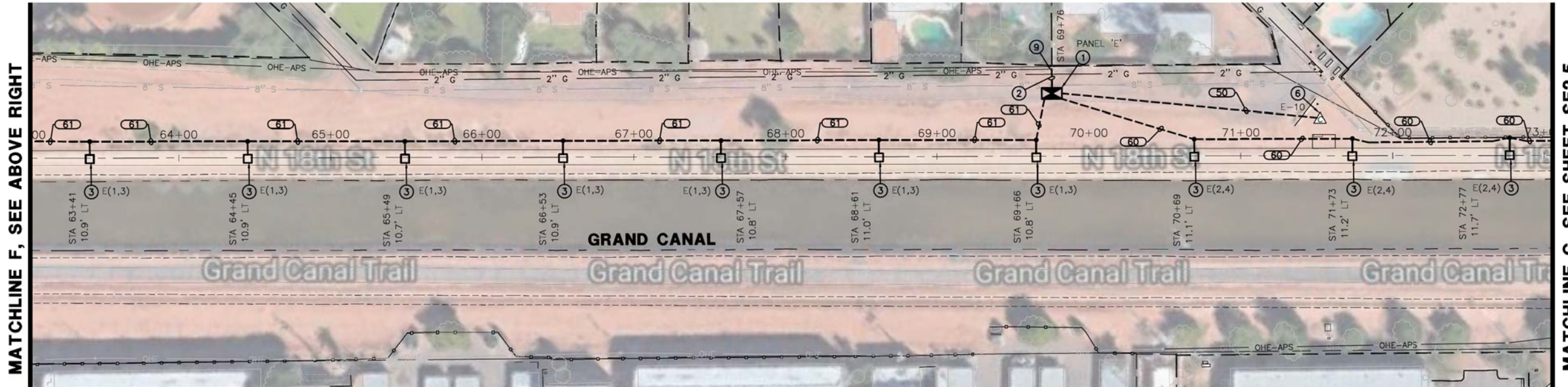
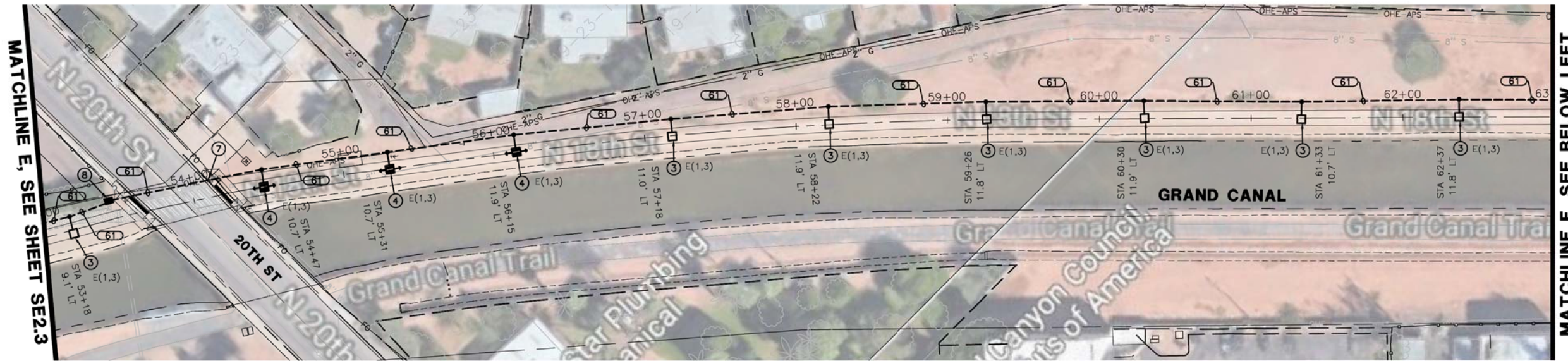
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LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

- ① 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ⑤ LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- ⑦ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.



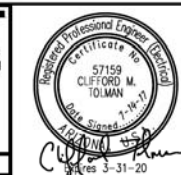
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: SE2.4	2,170 2,182

REVISION BY	DESCRIPTION	DATE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.171	2.182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W, METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

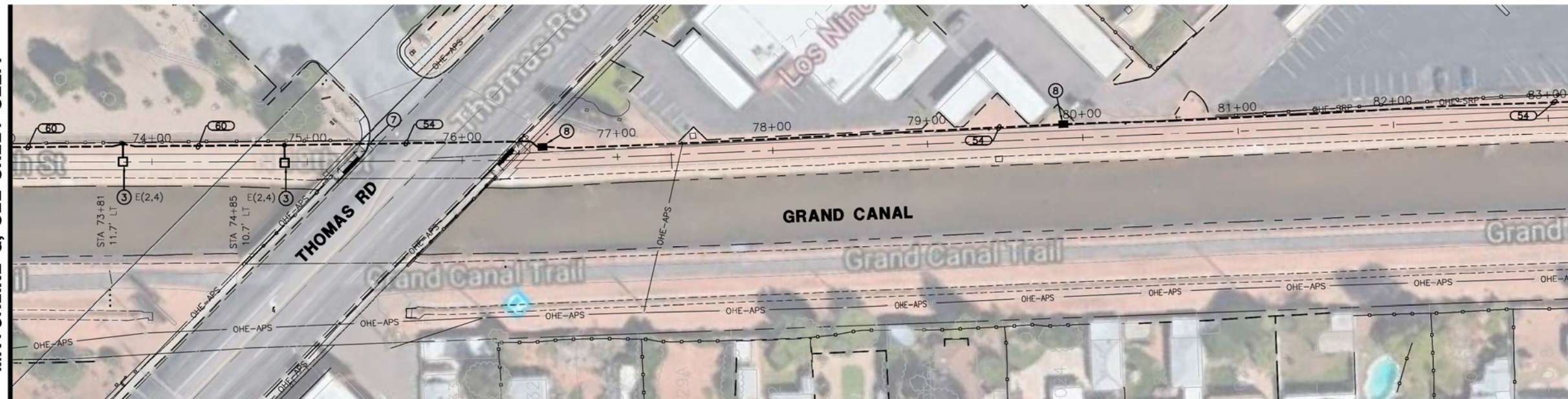
- 1 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 5 LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- 6 IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- 7 CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	WIRE GROUND	TYPE* (CKT #)	REMARKS
50	1"	2-#12	1-#12	CU TYP.	
51	1"	2-#10	1-#10	CU TYP.	
52	1"	2-#8	1-#8	CU TYP.	
53	1"	2-#6	1-#6	CU TYP.	
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

MATCHLINE G, SEE SHEET SE2.4

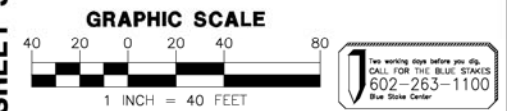


MATCHLINE H, SEE BELOW LEFT

MATCHLINE H, SEE ABOVE RIGHT



MATCHLINE I, SEE SHEET SE2.6



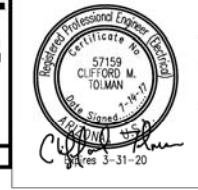
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	
SCALE:			SE2.5	2.171 2.182

REVISION BY	DESCRIPTION	NO.	REV BY	CHK BY	DATE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,172	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

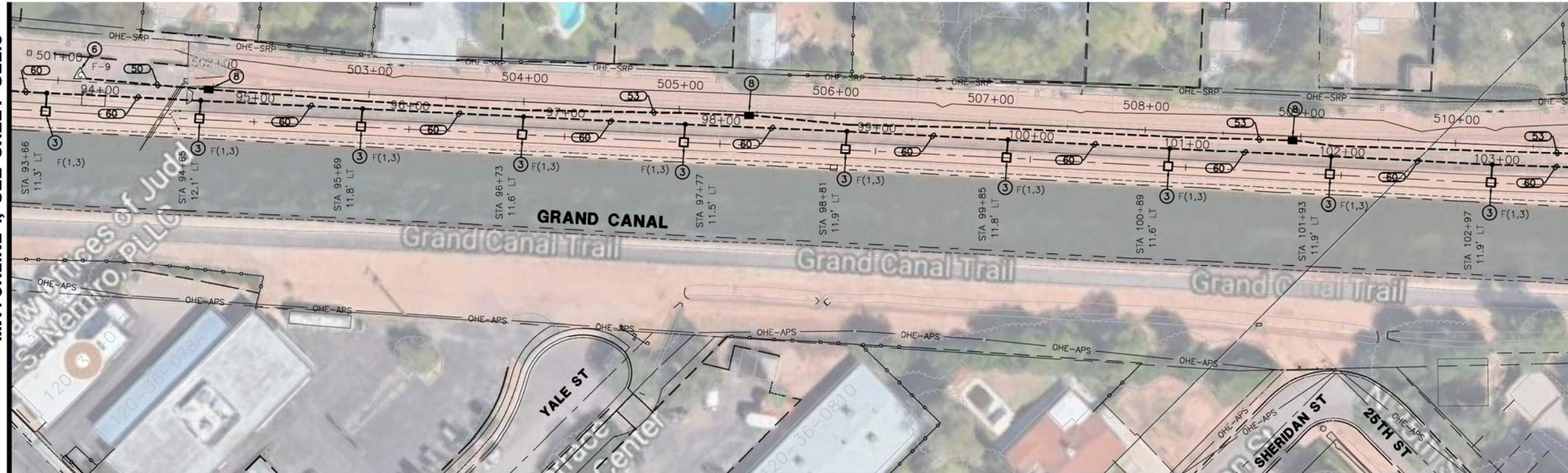
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- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 5 LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
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- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	GROUND	WIRE TYPE*	REMARKS (CKT #)
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#10	1-#10	CU	TYP.
52	1"	2-#8	1-#8	CU	TYP.
53	1"	2-#6	1-#6	CU	TYP.
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

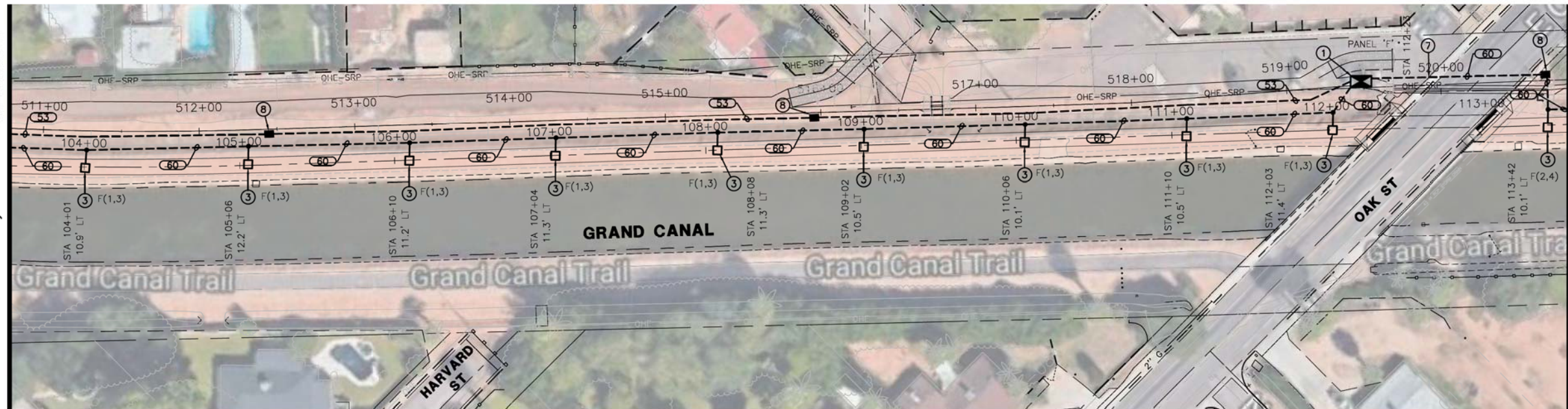
* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

MATCHLINE I, SEE SHEET SE2.5

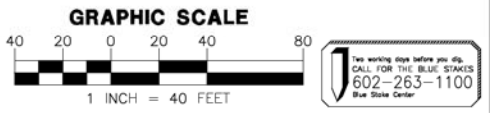


MATCHLINE J, SEE BELOW LEFT

MATCHLINE J, SEE ABOVE RIGHT



MATCHLINE K, SEE SHEET SE2.7



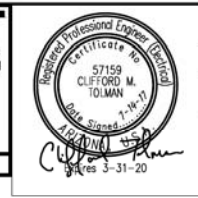
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 2,172	2,182
SCALE:			SE2.6	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,173	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

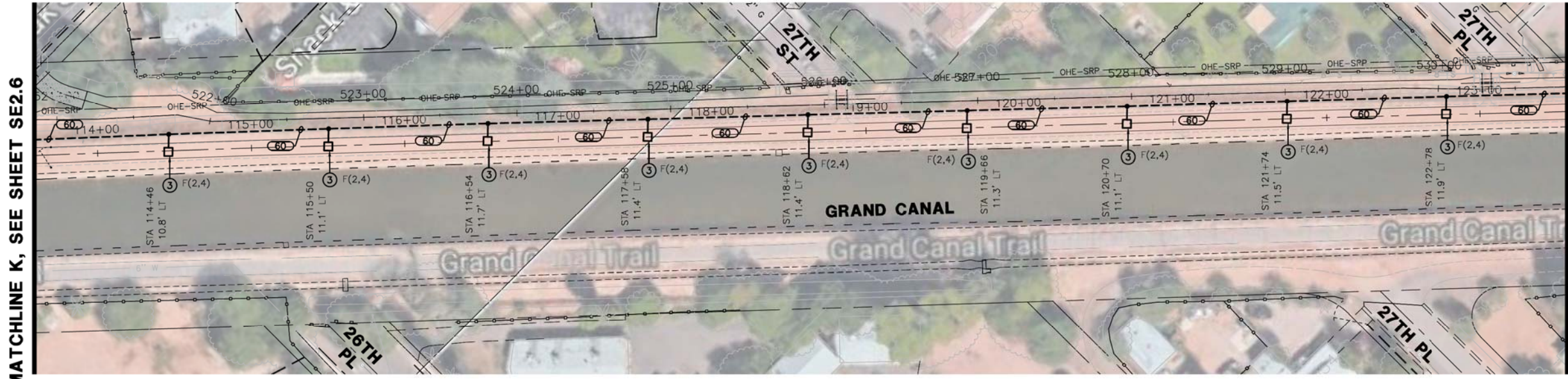
- 1 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
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WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	WIRE GROUND	TYPE* (CKT #)	REMARKS
50	1"	2-#12	1-#12	CU TYP.	
51	1"	2-#10	1-#10	CU TYP.	
52	1"	2-#8	1-#8	CU TYP.	
53	1"	2-#6	1-#6	CU TYP.	
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
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62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

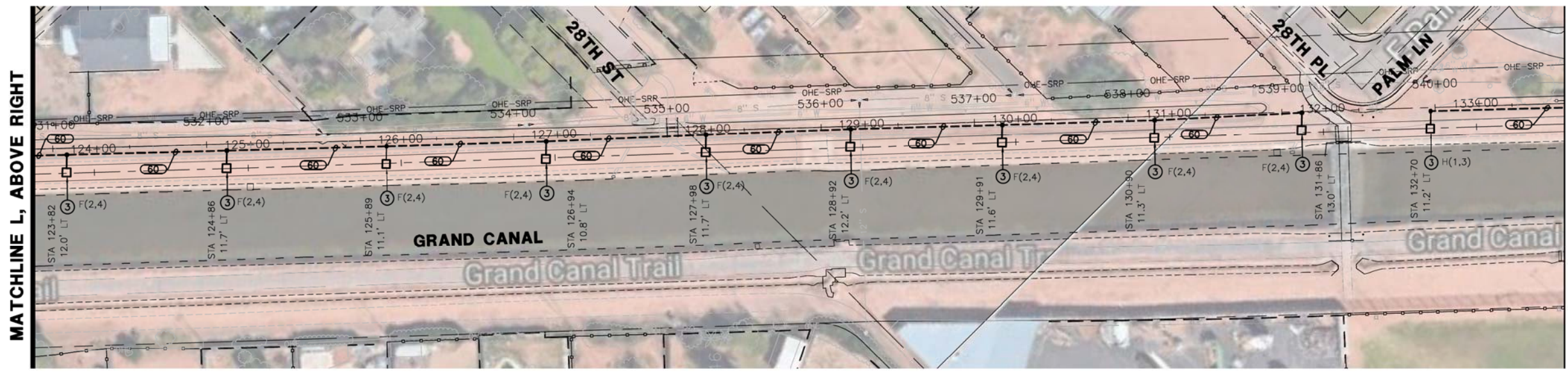
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REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CKD BY	DATE
NO.				
NO.				
NO.				
NO.				



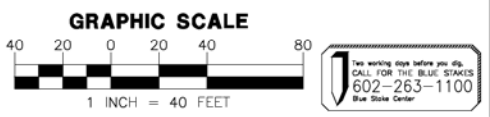
MATCHLINE K, SEE SHEET SE2.6

MATCHLINE L, BELOW LEFT



MATCHLINE L, ABOVE RIGHT

MATCHLINE M, SEE SHEET SE2.8



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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: SE2.7	2,173 2,182



WRIGHT
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PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027

Professional Engineer
57159
CLIFFORD M.
TOLMAN
Exp. Expires 7-31-17
3-31-20

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,174	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

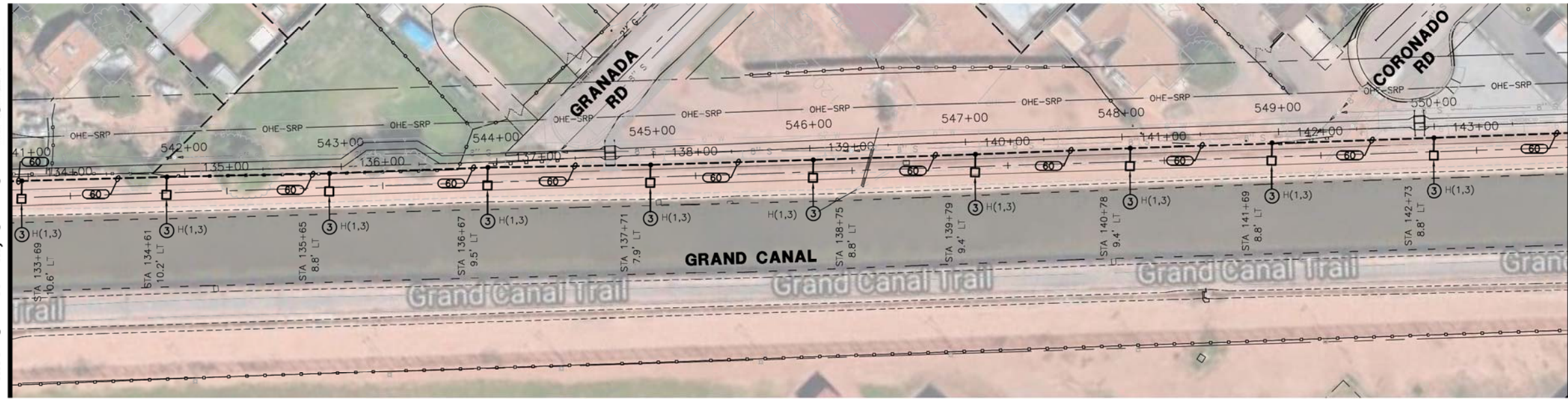
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- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 5 LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- 6 IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
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- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	GROUND	WIRE TYPE*	REMARKS (CKT #)
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#10	1-#10	CU	TYP.
52	1"	2-#8	1-#8	CU	TYP.
53	1"	2-#6	1-#6	CU	TYP.
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
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61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
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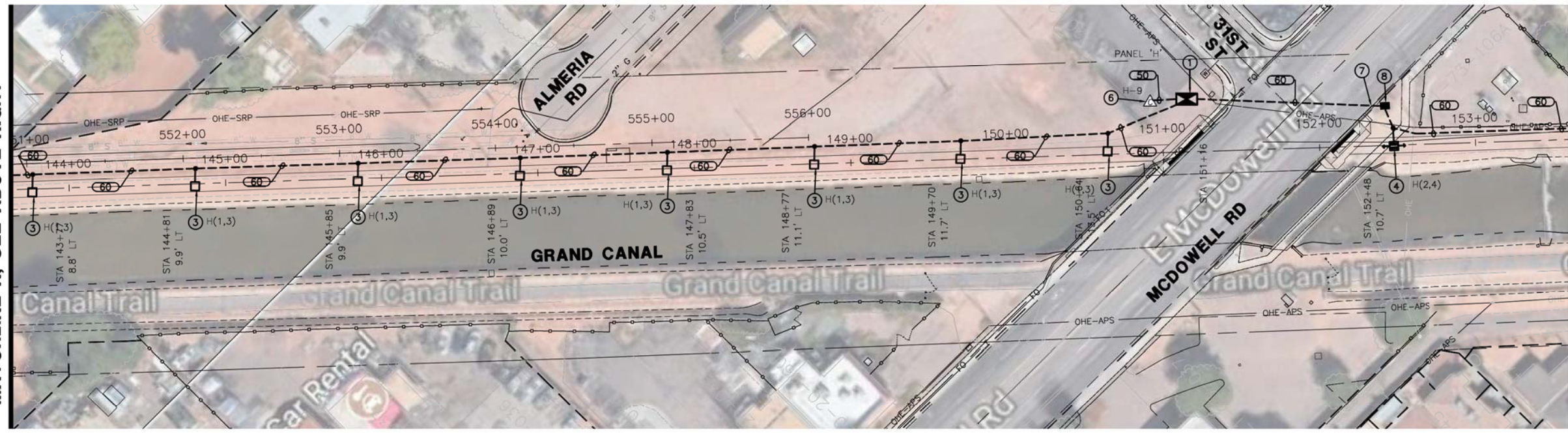
* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

MATCHLINE M, SEE SHEET SE2.7

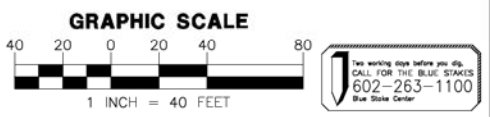


MATCHLINE N, SEE BELOW LEFT

MATCHLINE N, SEE ABOVE RIGHT



MATCHLINE O, SEE SHEET SE2.9



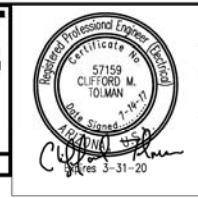
"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: SE2.8	2,174 2,182
SCALE:				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,175	2,182
EEC ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

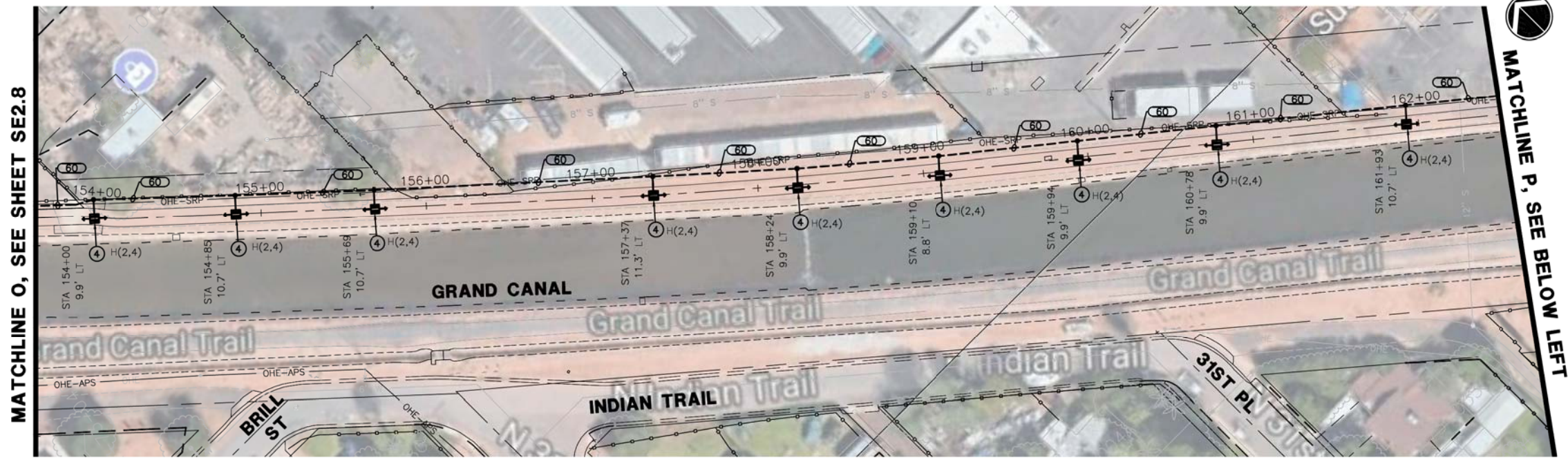
- 1 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 5 LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- 6 IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- 7 CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	GROUND	WIRE TYPE*	REMARKS
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#10	1-#10	CU	TYP.
52	1"	2-#8	1-#8	CU	TYP.
53	1"	2-#6	1-#6	CU	TYP.
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

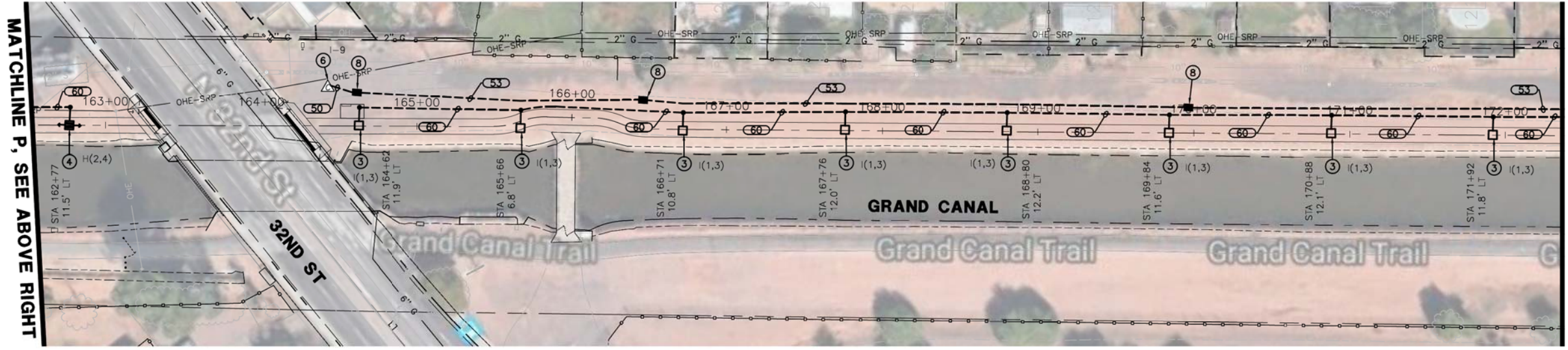
* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



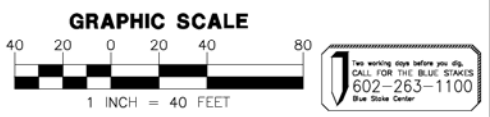
MATCHLINE O, SEE SHEET SE2.8

MATCHLINE P, SEE BELOW LEFT



MATCHLINE P, SEE ABOVE RIGHT

MATCHLINE Q, SEE SHEET SE2.10

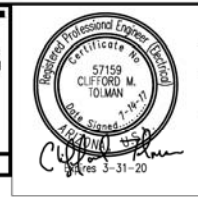


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STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
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SCALE:			SE2.9	2,175 2,182

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,176	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

CONSTRUCTION NOTES:

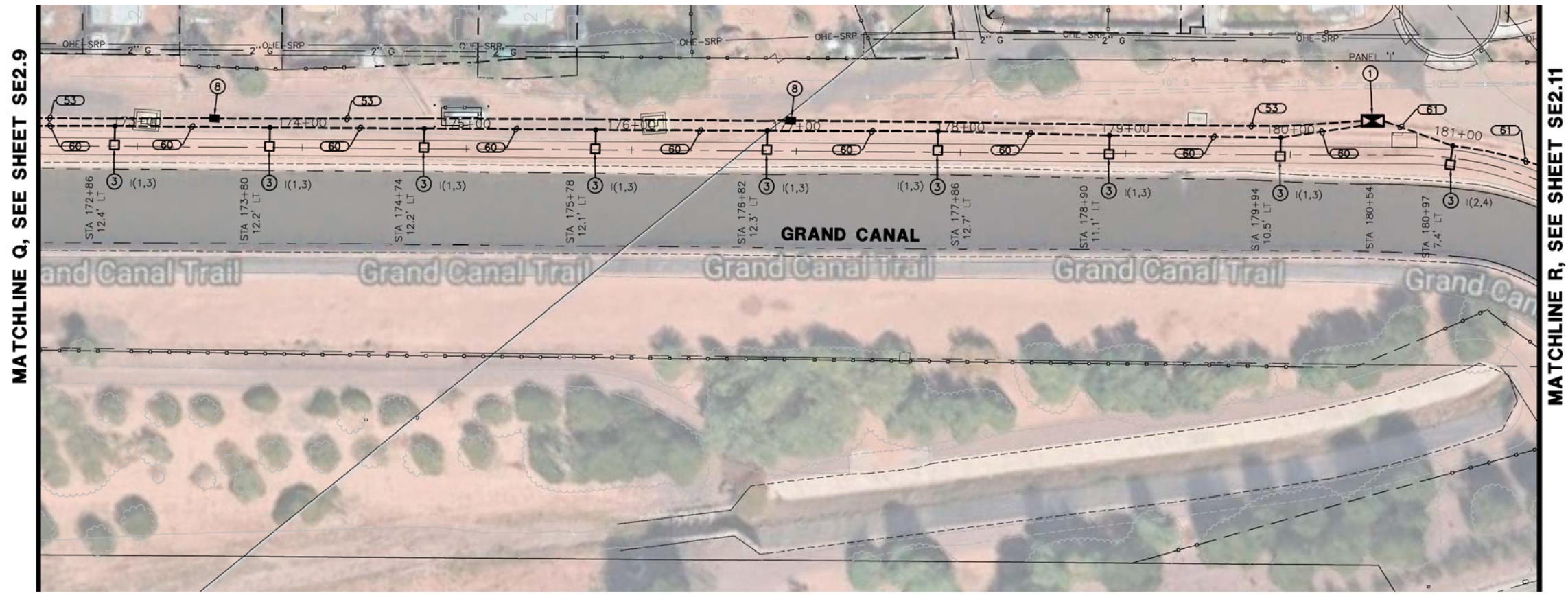
- ① 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
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- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

NO.	CONDUIT	POWER	WIRE	GROUND	TYPE*	REMARKS
50	1"	2-#12	1-#12	CU	TYP.	
51	1"	2-#10	1-#10	CU	TYP.	
52	1"	2-#8	1-#8	CU	TYP.	
53	1"	2-#6	1-#6	CU	TYP.	
54	1.5"	PULL	ROPE		SPARE	
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL	
		2-#12		CU	LOW LIGHT LEVEL	
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL	
		2-#10		CU	LOW LIGHT LEVEL	
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL	
		2-#8		CU	LOW LIGHT LEVEL	
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL	
		2-#2		CU	D(2,4) LOW LEVEL	
		2-#10		CU	D-10	
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL	
		2-#8		CU	D(2,4) LOW LEVEL	
		2-#10		CU	D-10	

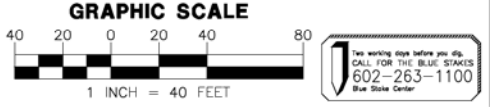
* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE Q, SEE SHEET SE2.9

MATCHLINE R, SEE SHEET SE2.11



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA."
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT □ 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 2,176	2,182

SCALE: **SE2.10**

WIRE & CONDUIT TABLE

CONDUIT NO.	SIZE	POWER	WIRE GROUND	TYPE* (CKT #)	REMARKS
50	1"	2-#12	1-#12	CU TYP.	
51	1"	2-#10	1-#10	CU TYP.	
52	1"	2-#8	1-#8	CU TYP.	
53	1"	2-#6	1-#6	CU TYP.	
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
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		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
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		2-#2		CU	D(2,4) LOW LEVEL
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		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

LEGEND

- 100 AMP 120/240V 1φ, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT

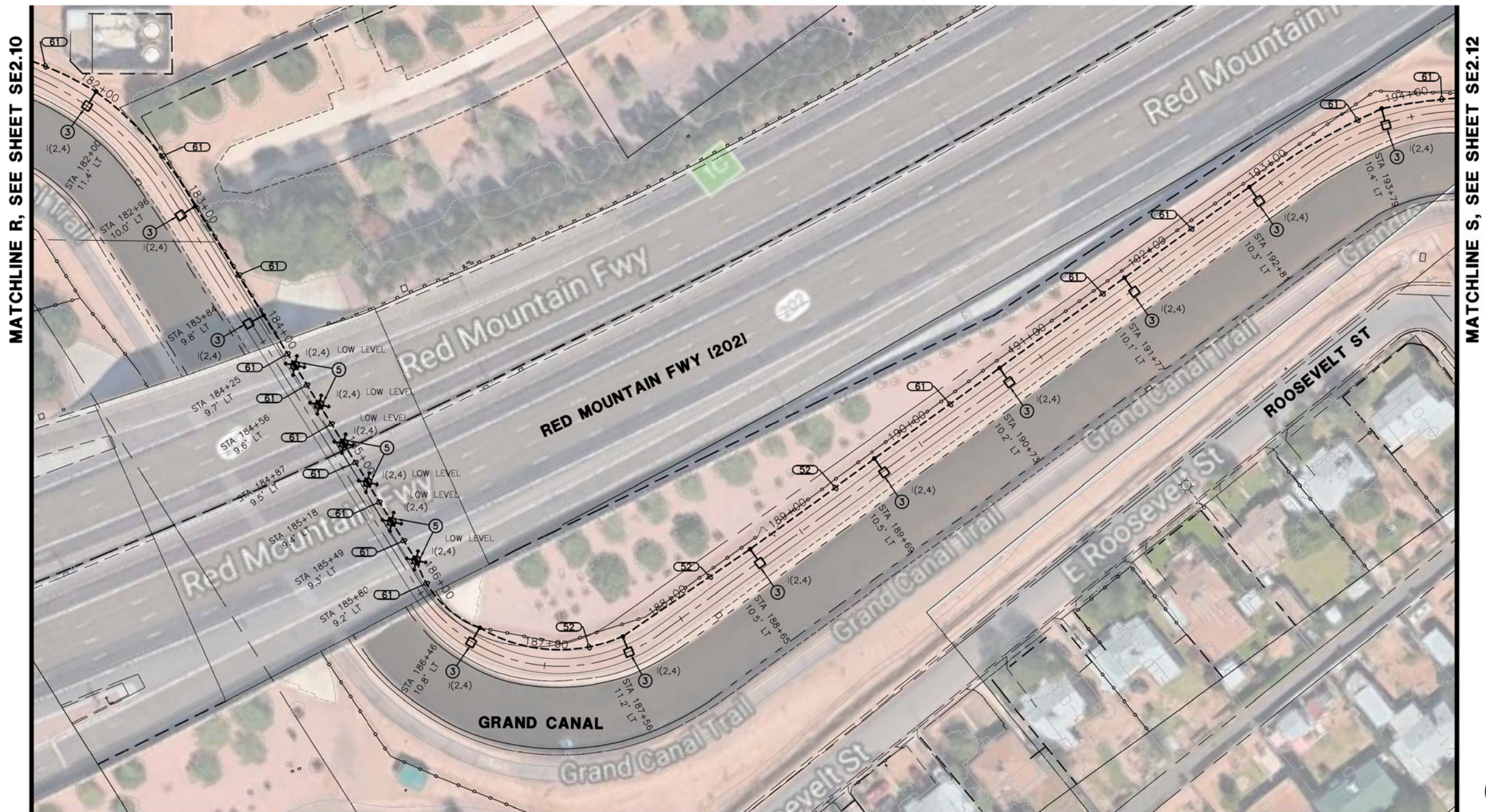
CONSTRUCTION NOTES:

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- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
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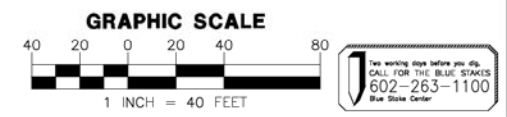
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE R, SEE SHEET SE2.10

MATCHLINE S, SEE SHEET SE2.12

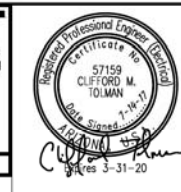


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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO: 2.177	2.182
SCALE:			SE2.11	





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2,178	2,182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

LEGEND

- 100 AMP 120/240V 1φ, 3W, METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
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CONSTRUCTION NOTES:

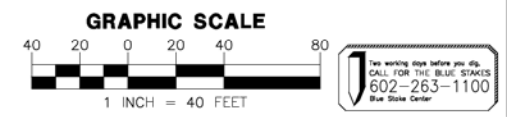
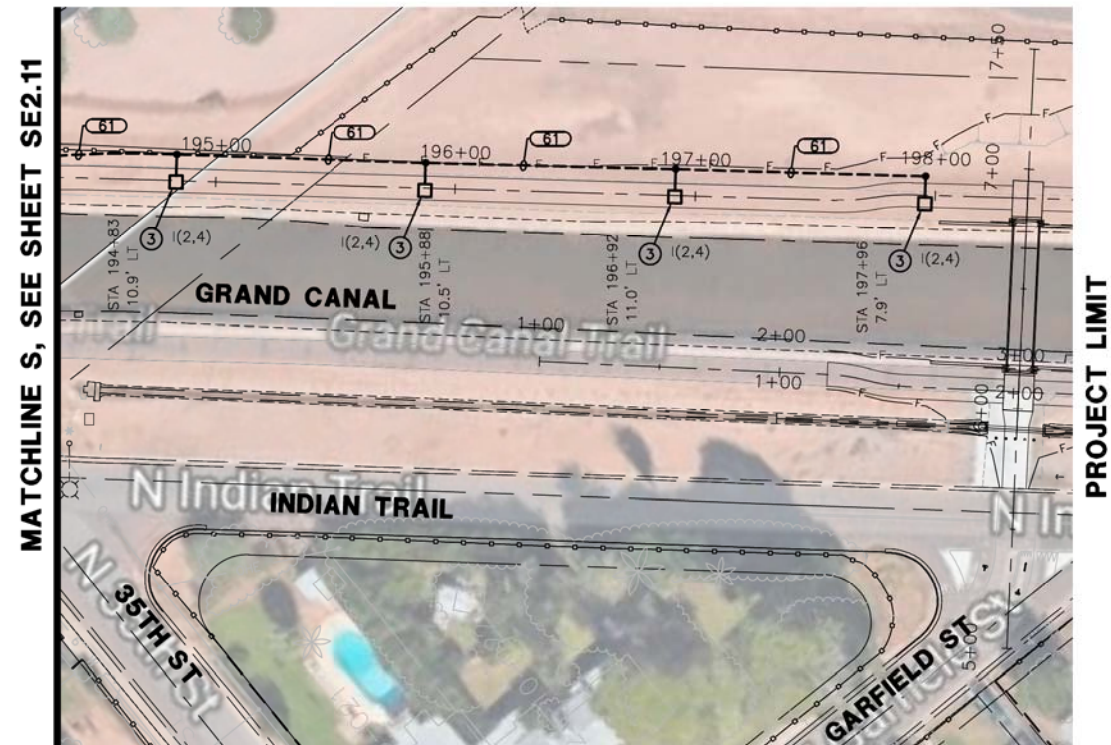
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- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
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- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WIRE & CONDUIT TABLE

CONDUIT NO.	CONDUIT SIZE	POWER	WIRE GROUND	WIRE TYPE*	REMARKS (CKT #)
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#10	1-#10	CU	TYP.
52	1"	2-#8	1-#8	CU	TYP.
53	1"	2-#6	1-#6	CU	TYP.
54	1.5"	PULL	ROPE		SPARE
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#10	1-#10	CU	HIGH LIGHT LEVEL
		2-#10		CU	LOW LIGHT LEVEL
62	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	2"	2-#2	1-#2	CU	D(2,4) HIGH LEVEL
		2-#2		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10
101	1.25"	2-#8	1-#8	CU	D(2,4) HIGH LEVEL
		2-#8		CU	D(2,4) LOW LEVEL
		2-#10		CU	D-10

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

REVISION BY CITY OF PHOENIX		NO.	DESCRIPTION	REV BY	CHK BY	DATE
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT □ 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	2,178
SCALE:			SE2.12	2,182



NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

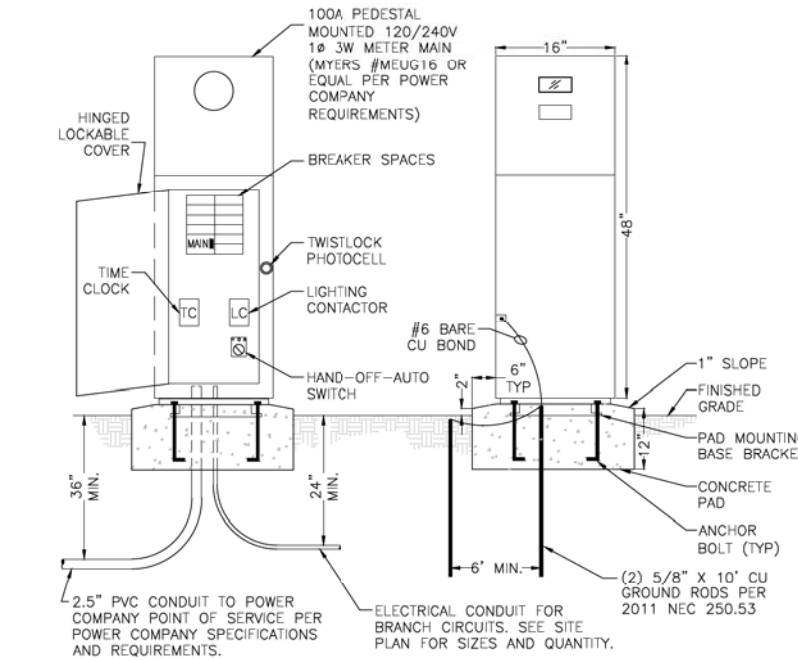
NO.	DESCRIPTION	REV BY	CHK BY	DATE

PANEL NAME: D				120/240V, 1Ø, 3W				100A MAIN BKR			
LOCATION: STA 20+72				TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.		
1	20/	* CANAL LIGHTING NORTH	404	1034	630		* CANAL LIGHTING SOUTH	20/	2		
3	/2		404		1034	630		/2	4		
5	20/1	SPARE	0	0	0	0	SPARE	20/1	6		
7	20/1		0		0	0		20/1	8		
9	20/1	IRRIGATION CONTROLLER WEST	200	400	200		IRRIGATION CONTROLLER EAST	20/1	10		
11	20/1	SPARE	0	0	0	0	SPARE	20/1	12		
13	20/1	SPARE	0	0	0	0	SPARE	20/1	14		
15	20/1	SPARE	0	0	0	0	SPARE	20/1	16		
17	20/1	SPARE	0	0	0	0	SPARE	20/1	18		
19	20/1	SPARE	0	0	0	0	SPARE	20/1	20		
21	20/1	SPARE	0	0	0	0	SPARE	20/1	22		
23	20/1	SPARE	0	0	200	200	LIGHTING CONTROL	20/1	24		
CODE TOTAL VA/Ø			1434	1234	*INDICATES LOAD @ 125%						
CODE TOTAL AMPS/Ø			12.0	10.3	10,000 AIC BREAKERS						

PANEL NAME: E				120/240V, 1Ø, 3W				100A MAIN BKR			
LOCATION: STA 69+76				TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.		
1	20/	* CANAL LIGHTING NORTH	500	904	404		* CANAL LIGHTING SOUTH	20/	2		
3	/2		500		904	404		/2	4		
5	20/	* SPARE	0	0	0	0	SPARE	20/	6		
7	/2		0		0	0		/2	8		
9	20/1	SPARE	0	200	200		IRRIGATION CONTROLLER EAST	20/1	10		
11	20/1	SPARE	0	0	0	0	SPARE	20/1	12		
13	20/1	SPARE	0	0	0	0	SPARE	20/1	14		
15	20/1	SPARE	0	0	0	0	SPARE	20/1	16		
17	20/1	SPARE	0	0	0	0	SPARE	20/1	18		
19	20/1	SPARE	0	0	0	0	SPARE	20/1	20		
21	20/1	SPARE	0	0	0	0	SPARE	20/1	22		
23	20/1	SPARE	0	0	200	200	LIGHTING CONTROL	20/1	24		
CODE TOTAL VA/Ø			1104	1104	*INDICATES LOAD @ 125%						
CODE TOTAL AMPS/Ø			9.2	9.2	10,000 AIC BREAKERS						

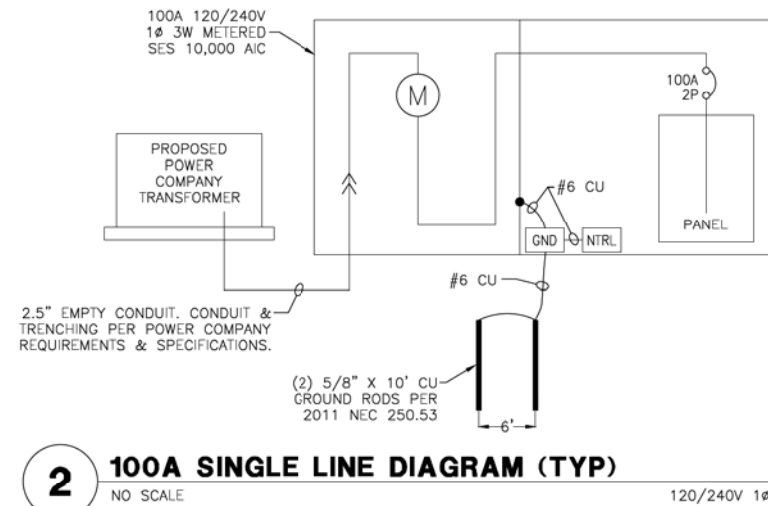
PANEL NAME: F				120/240V, 1Ø, 3W				100A MAIN BKR			
LOCATION: STA 112+23				TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.		
1	20/	* CANAL LIGHTING NORTH	475	927	452		* CANAL LIGHTING SOUTH	20/	2		
3	/2		475		927	452		/2	4		
5	20/	SPARE	0	0	0	0	SPARE	20/	6		
7	/2		0		0	0		/2	8		
9	20/1	IRRIGATION CONTROLLER WEST	200	200	0		SPARE	20/1	10		
11	20/1	SPARE	0	0	0	0	SPARE	20/1	12		
13	20/1	SPARE	0	0	0	0	SPARE	20/1	14		
15	20/1	SPARE	0	0	0	0	SPARE	20/1	16		
17	20/1	SPARE	0	0	0	0	SPARE	20/1	18		
19	20/1	SPARE	0	0	0	0	SPARE	20/1	20		
21	20/1	SPARE	0	0	0	0	SPARE	20/1	22		
23	20/1	SPARE	0	0	200	200	LIGHTING CONTROL	20/1	24		
CODE TOTAL VA/Ø			1127	1127	*INDICATES LOAD @ 125%						
CODE TOTAL AMPS/Ø			9.4	9.4	10,000 AIC BREAKERS						

PANEL NAME: H				120/240V, 1Ø, 3W				100A MAIN BKR			
LOCATION: STA 151+16				TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.		
1	20/	* CANAL LIGHTING NORTH	452	714	262		* CANAL LIGHTING SOUTH	20/	2		
3	/2		452		714	262		/2	4		
5	20/	SPARE	0	0	0	0	SPARE	20/	6		
7	/2		0		0	0		/2	8		
9	20/1	IRRIGATION CONTROLLER WEST	200	200	0		SPARE	20/1	10		
11	20/1	SPARE	0	0	0	0	SPARE	20/1	12		
13	20/1	SPARE	0	0	0	0	SPARE	20/1	14		
15	20/1	SPARE	0	0	0	0	SPARE	20/1	16		
17	20/1	SPARE	0	0	0	0	SPARE	20/1	18		
19	20/1	SPARE	0	0	0	0	SPARE	20/1	20		
21	20/1	SPARE	0	0	0	0	SPARE	20/1	22		
23	20/1	SPARE	0	0	200	200	LIGHTING CONTROL	20/1	24		
CODE TOTAL VA/Ø			914	914	*INDICATES LOAD @ 125%						
CODE TOTAL AMPS/Ø			7.6	7.6	10,000 AIC BREAKERS						



1 100A PEDESTAL MOUNTED SERVICE (TYP)
NO SCALE

120/240V 1Ø 3W



2 100A SINGLE LINE DIAGRAM (TYP)
NO SCALE

120/240V 1Ø 3W

PANEL NAME: I				120/240V, 1Ø, 3W				100A MAIN BKR			
LOCATION: STA 180+54				TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	AØ	BØ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.		
1	20/	* CANAL LIGHTING NORTH	380	929	549		* CANAL LIGHTING SOUTH	20/	2		
3	/2		380		929	549		/2	4		
5	20/	SPARE	0	0	0	0	SPARE	20/	6		
7	/2		0		0	0		/2	8		
9	20/1	IRRIGATION CONTROLLER WEST	200	200	0		SPARE	20/1	10		
11	20/1	SPARE	0	0	0	0	SPARE	20/1	12		
13	20/1	SPARE	0	0	0	0	SPARE	20/1	14		
15	20/1	SPARE	0	0	0	0	SPARE	20/1	16		
17	20/1	SPARE	0	0	0	0	SPARE	20/1	18		
19	20/1	SPARE	0	0	0	0	SPARE	20/1	20		
21	20/1	SPARE	0	0	0	0	SPARE	20/1	22		
23	20/1	SPARE	0	0	200	200	LIGHTING CONTROL	20/1	24		
CODE TOTAL VA/Ø			1129	1129	*INDICATES LOAD @ 125%						
CODE TOTAL AMPS/Ø			9.4	9.4	10,000 AIC BREAKERS						

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16027

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.179	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS				
CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

PEDESTAL NOTES

- APPROVED EQUAL MANUFACTURERS: MILBANK, PACIFIC UTILITY PRODUCTS.
- SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
- PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
- ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
- ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
- PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
- PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

Two working days before you dig.
CALL FOR THE BLUE STAKES
602-263-1100
Blue Stake Center

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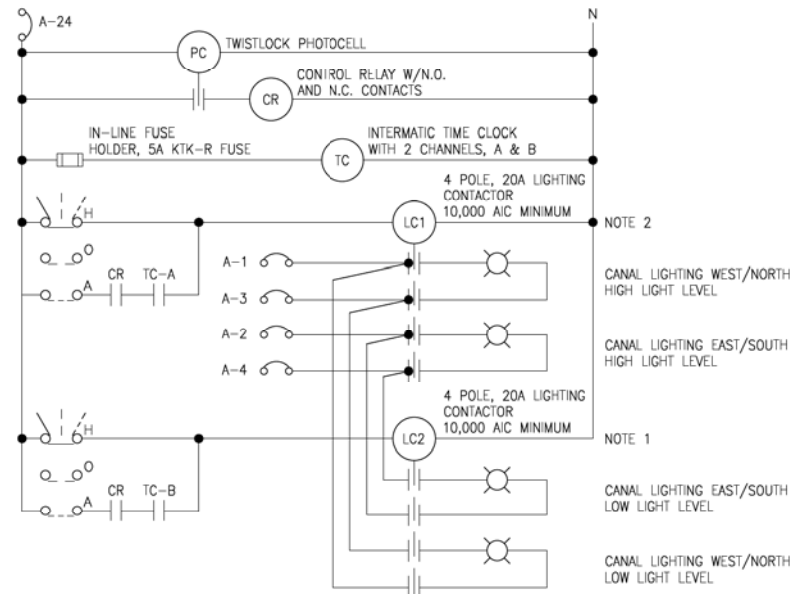
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT □ 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	2.179 2.182
SCALE:			SE3.1	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



CONTROL SCHEM. LEGEND

- HAND-OFF-AUTO SWITCH
- PHOTOCELL RELAY
- CONTROL RELAY
- TIME CLOCK
- LIGHTING CONTACTOR
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- CIRCUIT BREAKER

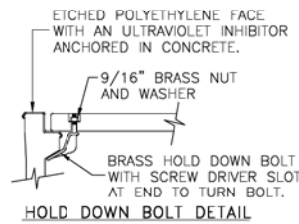
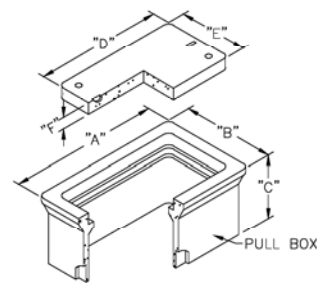
CONTROLLER NOTES

- THIS CIRCUIT TO BE ACTIVATED FROM DUSK TO DAWN.
- THIS CIRCUIT TO BE ACTIVATED AT DUSK AND SHUT OFF AT 10:30 PM.

LIGHTING CONTROL SCHEMATIC (TYP.)

NO SCALE

120V

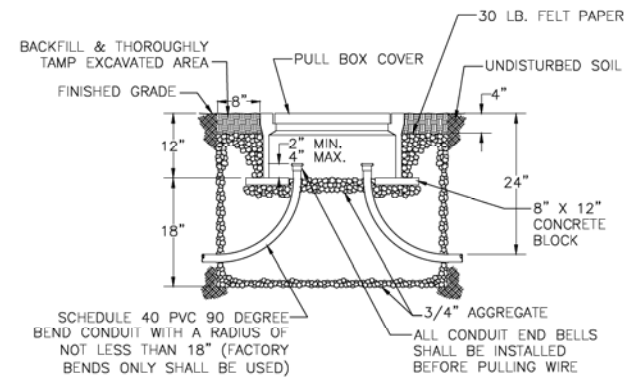


LID 'A' REINFORCED CONCRETE W/HOLD DOWN BOLTS

PULLBOX TYPE	DATA TABLE					
	PULLBOX LENGTH	PULLBOX WIDTH	PULLBOX HEIGHT	LID LENGTH	LID WIDTH	LID HEIGHT
#3 1/2	19-3/4"	14-1/4"	12"	15-1/4"	10"	1-3/4"
#5	25-1/4"	15-3/4"	12"	20-5/8"	10-1/2"	2"
#7	34-3/4"	21-3/4"	12"	30-1/8"	17-5/8"	2"

3 PULL BOX INSTALLATION

NO SCALE



GENERAL NOTES:

- THE PULL BOX SHALL BE MADE OF A HIGH DENSITY REINFORCED CONCRETE MATERIAL WITH END & SIDE KNOCKOUTS, & NONSETTLING SHOULDERS TO MAINTAIN GRADE, MANUFACTURED WITH APPROXIMATE DIMENSIONS AS SHOWN.
- STEEL REINFORCEMENT SHALL BE AS REGULARLY USED IN STANDARD PRODUCTS OF THE RESPECTIVE MANUFACTURER.
- COVER LETTERING SHALL BE 1" LETTERS CAST IN STANDARD MARKINGS: "ELECTRIC" OR "HIGH VOLTAGE", AS REQUIRED.
- THE PULL BOX SHALL HAVE AN ETCHED POLYETHYLENE FACE WITH AN ULTRAVIOLET INHIBITOR ANCHORED IN CONCRETE.
- ALL CABLE & CONDUCTOR SPLICES SHALL BE CONNECTED WITH TYCO ELECTRONICS GELCAP-SL, NSI INDUSTRIES ESSLK-2/0, OR COPPER COMPRESSION H-TAP CONNECTOR OR APPROVED EQUAL & INSULATED WITH 3M SCOTCHCAST SPLICE KIT 85 SERIES, TYCO ELECTRONICS GELCAP SL, NSI INDUSTRIES GSS SERIES OR APPROVED EQUAL.

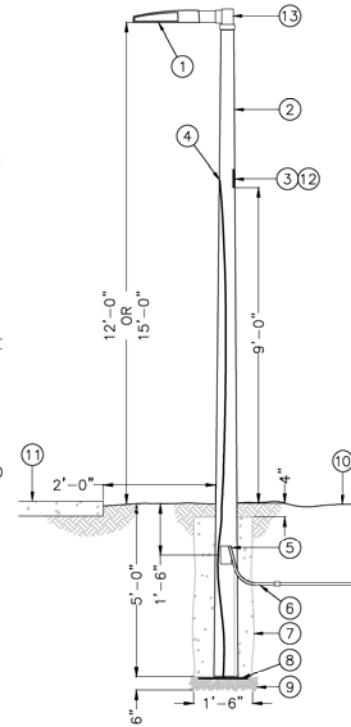


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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

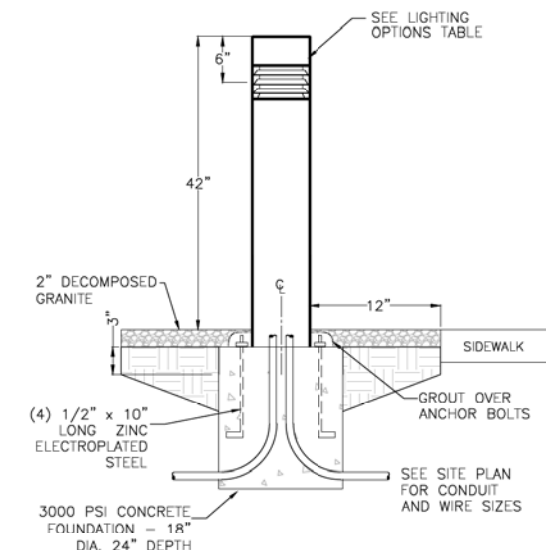
REVISION BY CITY OF PHOENIX	DESCRIPTION	NO.	REV BY	CHK BY	DATE

- ① LED LIGHT FIXTURE WITH IES PHOTOMETRIC DISTRIBUTION PER PLANS. ALL FIXTURES ARE TO BE PROVIDED FROM THE SAME MANUFACTURER. SEE LIGHTING OPTIONS TABLE THIS SHEET.
- ② DIRECT-BURIED, TAPERED, SQUARE, PRE-STRESSED, REINFORCED, SPUN CONCRETE POLE. POLES SHALL HAVE CHARCOAL COLOR, EXPOSED AGGREGATE FINISH WITH ANTI-GRAFFITI SEALER (PROVIDE SAMPLES WITH SUBMITTALS FOR COLOR APPROVAL). ALL POLES ARE TO BE PROVIDED FROM THE SAME MANUFACTURER. SEE LIGHTING OPTIONS TABLE THIS SHEET.
- ③ FLUSH MOUNTED HANDHOLE WITH FLUSH, TAMPERPROOF, STAINLESS STEEL SECURITY SCREWS (BUTTON TORX WITH CENTER PIN). POLE MANUFACTURER TO PLACE HANDHOLE SO THAT IT WILL BE LOCATED ABOVE FINISHED GRADE AT HEIGHT NOTED IN DETAIL TO CENTER OF HANDHOLE AFTER INSTALLATION. INSTALL POLE WITH HANDHOLE FACING AWAY FROM PATH/SIDEWALK, WHERE POSSIBLE. WHERE POLE IS INSTALLED AGAINST WALL, HANDHOLE TO FACE PATH/SIDEWALK.
- ④ POLE MANUFACTURER TO PROVIDE A FACTORY INSTALLED GROUND WIRE WHICH IS CONNECTED TO THE STEEL REINFORCING IN THE POLE. CONNECT THE ELECTRICAL SYSTEM GROUND WIRE TO THIS POLE GROUND WIRE.
- ⑤ APERTURE IN POLE BASE FOR UNDERGROUND WIRING. APERTURE SIZED 1-1/2" BY 5" MINIMUM. PROVIDE TWO (2) EACH POLE AT 180 DEGREES FROM EACH OTHER AND 90 DEGREES FROM HANDHOLE. TAPE OPENINGS PRIOR TO BACKFILLING THE DRILLED HOLE.
- ⑥ PVC SCHEDULE 40 CONDUIT INTO POLE BASE FOR ELECTRICAL BRANCH CIRCUIT. SEE LIGHTING SITE PLAN FOR SIZES AND QUANTITIES. CONDUITS ARE TO BE INSTALLED IN POLE TO A POINT 12" ABOVE GRADE MINIMUM.
- ⑦ AFTER POLE HAS BEEN ALIGNED AND IS PLUMB, BLOCK POLE IN PLACE UNDERGROUND, BACKFILL HOLE WITH CEMENTIOUS EARTH BACKFILL TO A POINT 4" BELOW FINISHED GRADE, BACKFILL THE REMAINING 4" WITH SURROUNDING SOIL. CEMENTIOUS EARTH BACKFILL - MIX ONE PART DRY CEMENT POWDER TO FIFTEEN PARTS CLEAN, WASHED SAND.
- ⑧ COIL 20' OF #8 SOLID COPPER BOND. RUN BOND THROUGH POLE TO FACTORY INSTALLED GROUND WIRE IN HAND HOLE.
- ⑨ 1" WASHED RIVER ROCK FOR DRAINAGE, COMPACT BEFORE SETTING POLE.
- ⑩ FINISHED GRADE.
- ⑪ WHERE LIGHTS ARE INSTALLED NEXT TO PATHWAY OR SIDEWALK, MAINTAIN CLEARANCE FROM EDGE TO FACE OF POLE AS SHOWN IN DETAIL.
- ⑫ PROVIDE BUSSMAN #HEB FUSE HOLDER, ON EACH UNGROUNDED CONDUCTOR, WITH 5 AMP FUSES FOR INLINE FUSING. WHERE CIRCUIT IS SPLICED IN HANDHOLE, MAKE ALL SPLICES WITH UL486D WET LISTED WIRE NUTS, EQUAL TO DRYCONN AQUA WATERPROOF CONNECTORS. PROVIDE 18" MINIMUM OF SLACK IN THE CONDUCTORS.
- ⑬ TENON MOUNT SLIPFITTER PROVIDED BY POLE MANUFACTURER, CONTRACTOR TO COORDINATE SIZE OF SLIPFITTER SO THE FIXTURE COVERS ENTIRE TENON DOWN TO THE POLE TOP MOUNTING PLATE. PAINT EXPOSED METAL MOUNTING PLATE ON TENON TO MATCH FIXTURE.



4 SQUARE CONCRETE POLE AREA LIGHT DETAIL
NO SCALE

- POLE MOUNTED LED LIGHT FIXTURE PER PLANS:**
1. 33W, TYPE II DISTRIBUTION EATON, STREETWORKS GALLEON:
CAT# GAN/AF/02/LED/U/T2/CC/8027/400/2L/LCF
 2. 27W, TYPE II DISTRIBUTION BEACON LIGHTING VIPER:
CAT# VPS/24NB-27/27K/12/UNV/2PF/RAL
 3. 35W, TYPE II DISTRIBUTION NLS LIGHTING VUE:
CAT# VUE-1/12/32L/350/27K/UNV/MA/CS
- CONCRETE POLE FOR PATH LIGHTING PER PLANS:**
1. AMERON CONCRETE POLE:
FOR 12' MOUNTING USE: AMERON CAT# SEQ-4
FOR 15' MOUNTING USE: AMERON CAT# SEQ-4.6
 2. UTILITY STRUCTURES CONCRETE POLE:
FOR 12' MOUNTING USE: UTILITY STRUCTURES CAT# OX-175-AL-4-30
FOR 15' MOUNTING USE: UTILITY STRUCTURES CAT# OX-200-AL-4-30
 3. TRADITIONAL CONCRETE POLE:
FOR 12' MOUNTING USE: TRADITIONAL CAT# D512-E-G-T
FOR 15' MOUNTING USE: TRADITIONAL CAT# D515-E-G-T
- CONCRETE LED BOLLARD PER PLANS:**
1. 42W, VISIONAIRE LIGHTING ENDURASCAPE:
CAT# EDS-4A/COG/20LC/7/27K/UNV/AB/CC/HV
 2. 25W, KIM LIGHTING VSB1C:
CAT# VSB1C/20L/27K/UV/CC/CH-C
 3. 27W, H.E. WILLIAMS LIGHTING OSC12S:
CAT# OSC12S-L20/827/LG/PT/CC/RAL/AB/DRV/240V



5 SQUARE BOLLARD LIGHT DETAIL
NO SCALE

LIGHTING OPTIONS TABLE

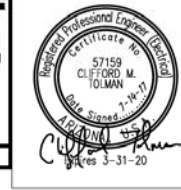


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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	2.181	2.182

SCALE: **SE3.3**



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	2.182	2.182
ENGINEERING & ENVIRONMENTAL CONSULTANTS CONSULTING ENGINEER				
DES: DVG	DR: DVG	CK: CMT	DATE: 07/14/17	

NO.	DESCRIPTION	REV BY	CHK BY	DATE

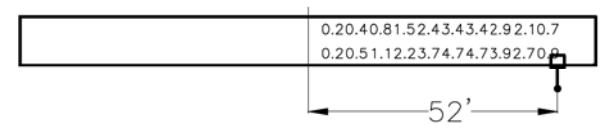
PHOTOMETRIC ANALYSIS

TYPICAL RESULTS FOR 15' MOUNTING HEIGHT

15' MOUNTING HEIGHT TO BE USED AS STANDARD FIXTURE HEIGHT, EXCEPT WHERE OVERHEAD ELECTRICAL IS PRESENT.

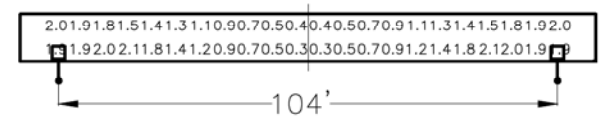
VERTICAL FC RESULTS:

MAXIMUM FOOT-CANDLE	4.7
MINIMUM FOOT-CANDLE	0.2
AVERAGE FOOT-CANDLE	2.1



HORIZONTAL FC RESULTS:

MAXIMUM FOOT-CANDLE	2.1
MINIMUM FOOT-CANDLE	0.3
AVERAGE FOOT-CANDLE	1.3
UNIFORMITY OF LIGHT	4.0
LEVELS (AVG/MIN)	



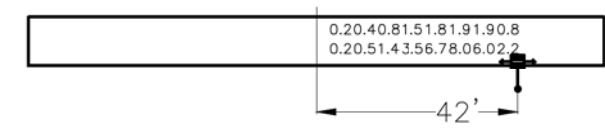
LEGEND:
 LED POLE MOUNTED LIGHT FIXTURE
 2700K, TYPE II DISTRIBUTION
 15' MOUNTING HEIGHT
 5' BACK OF PATH (TYPICAL, SOME LOCATIONS VARY SLIGHTLY)

TYPICAL RESULTS FOR 12' MOUNTING HEIGHT

12' MOUNTING HEIGHT TO BE USED ONLY WHERE OVERHEAD ELECTRICAL IS PRESENT.

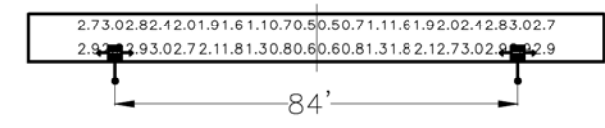
VERTICAL FC RESULTS:

MAXIMUM FOOT-CANDLE	8.0
MINIMUM FOOT-CANDLE	0.2
AVERAGE FOOT-CANDLE	2.4



HORIZONTAL FC RESULTS:

MAXIMUM FOOT-CANDLE	3.0
MINIMUM FOOT-CANDLE	0.5
AVERAGE FOOT-CANDLE	2.0
UNIFORMITY OF LIGHT	3.9
LEVELS (AVG/MIN)	

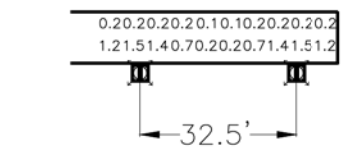


LEGEND:
 LED POLE MOUNTED LIGHT FIXTURE
 2700K, TYPE II DISTRIBUTION
 12' MOUNTING HEIGHT
 5' BACK OF PATH (TYPICAL, SOME LOCATIONS VARY SLIGHTLY)

TYPICAL RESULTS FOR BOLLARD LIGHTS

HORIZONTAL FC RESULTS:

MAXIMUM FOOT-CANDLE	1.5
MINIMUM FOOT-CANDLE	0.1
AVERAGE FOOT-CANDLE	0.6
UNIFORMITY OF LIGHT	5.9
LEVELS (AVG/MIN)	



LEGEND:
 LED BOLLARD LIGHT FIXTURE
 2700K, TYPE II DISTRIBUTION
 3'-6" MOUNTING HEIGHT



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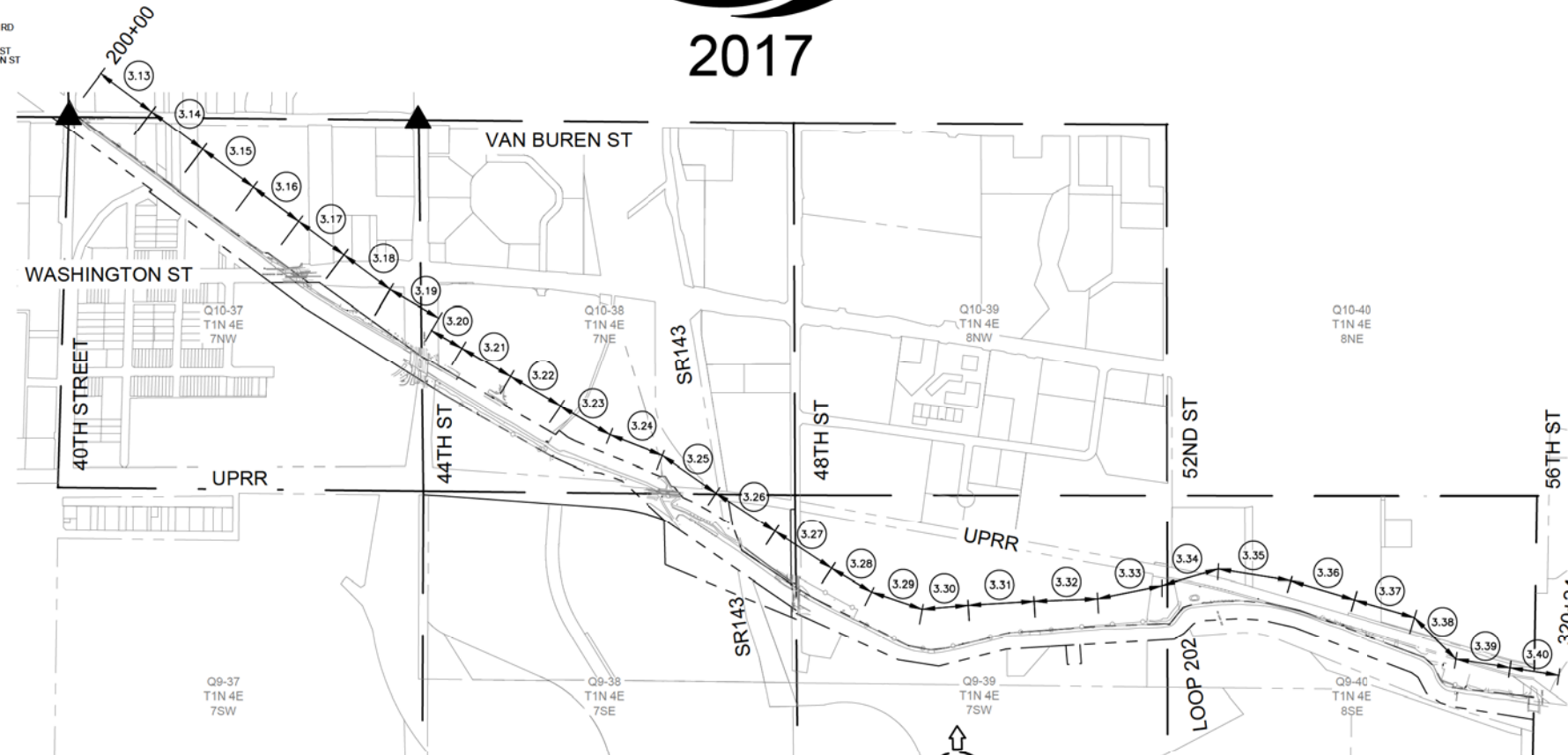
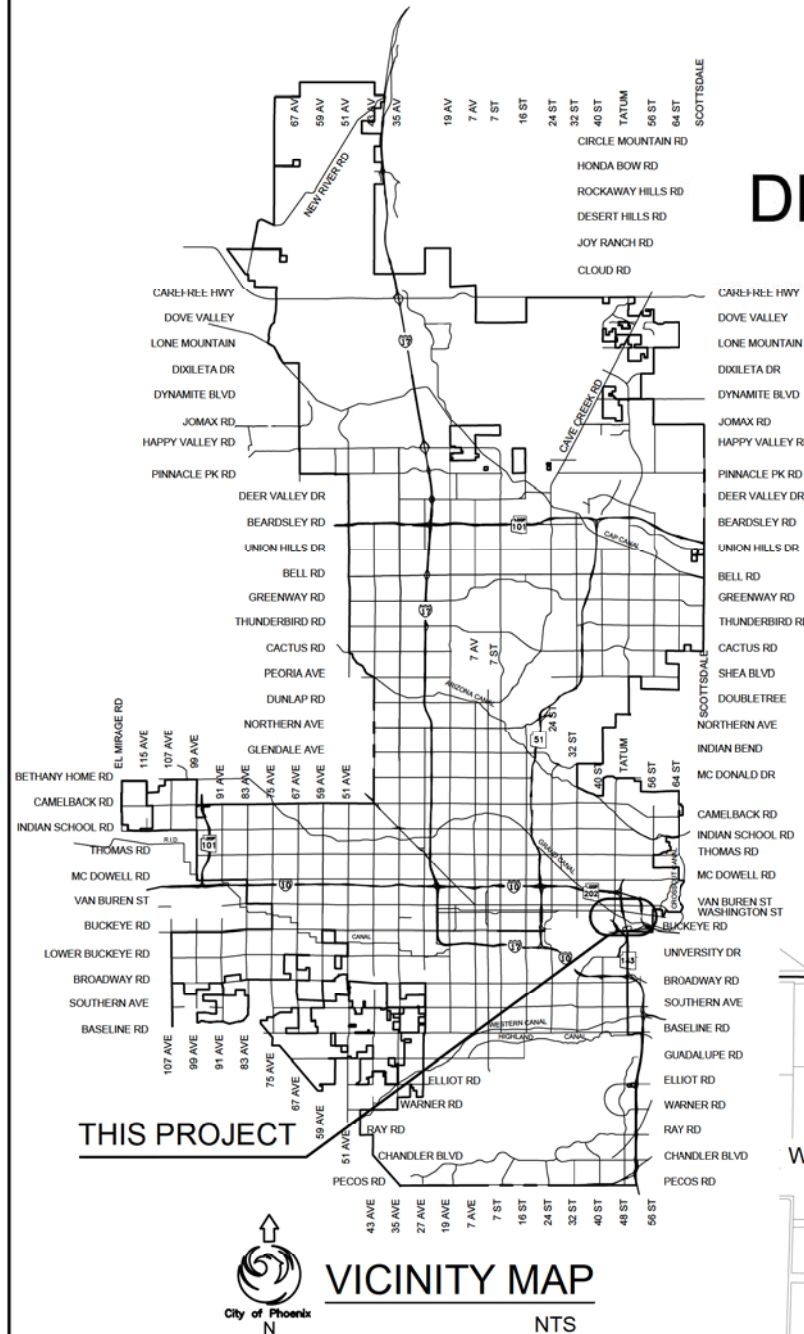
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 16TH ST TO 36TH ST
ST87600114

DES: DVG	DR: DVG	CK: CMT	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	2.182

CITY OF PHOENIX STREET TRANSPORTATION DEPARTMENT DESIGN & CONSTRUCTION MANAGEMENT DIVISION GRAND CANALScape PHASE II SEGMENT 3: 40TH ST TO 56TH ST ALIGNMENT ST87600114



2017



DISTRICT NO 1.	THELDA WILLIAMS
DISTRICT NO 2.	JIM WARING
DISTRICT NO 3.	DEBRA STARK
DISTRICT NO 4.	LAURA PASTOR
DISTRICT NO 5.	DANIEL VALENZUELA
DISTRICT NO 6.	SAL DICICCIO
DISTRICT NO 7.	MICHAEL NOWAKOWSKI
DISTRICT NO 8.	KATE GALLEGO

SHEET INDEX

SHEET NO.	SHEET TITLE
3.01	COVER SHEET
3.02	NOTES AND LEGEND
3.03	SURVEY CONTROL PLAN
3.04	QUANTITY SUMMARY
3.05-3.06	TYPICAL SECTIONS
3.07-3.09	DRIVEWAY AND RAMP DETAILS
3.10	CANAL ROAD DETAIL
3.11	SANDBLAST STENCIL DETAIL
3.12	SPILLWAY DETAIL
3.13-3.40	PATH PLAN & PROFILE
3.41-3.43	SIGNING & STRIPING PLANS
3.44	BRIDGE PLAN AND TYPICAL SECTION
3.45	ELEVATION AND GENERAL NOTES
3.46	FOUNDATION PLAN AND DETAILS
3.47	ABUTMENT PLAN AND ELEVATION
3.48	MISCELLANEOUS DETAILS
3.49	RETAINING WALL DETAILS
3.50	AMENITY OVERVIEW
3.51	AMENITY NODES
3.52-3.53	AMENITY NODE DETAILS
3.54	POST FENCE REFERENCE SHEET
3.55-3.66	LANDSCAPE PLAN
3.67-3.68	LANDSCAPE DETAILS
3.69	IRRIGATION OVERVIEW
3.70-3.81	IRRIGATION PLAN
3.82-3.84	IRRIGATION DETAILS
3.85-3.88	TRAFFIC SIGNAL PLANS
3.89	ELECTRICAL COVER SHEET
3.90-3.95	ELECTRICAL SITE PLAN
3.96-3.98	ELECTRICAL DETAILS
3.99	TYPICAL PATH LIGHT SPACING EXHIBIT

APPROVED _____ DATE _____
ASSISTANT STREET TRANSPORTATION DIRECTOR

APPROVED _____ DATE _____
DEPUTY STREET TRANSPORTATION DIRECTOR

○ PLAN & PROFILE SHEETS

LENGTH OF PROJECT = 11,907 LF = 2.26 MILES
AREA OF DISTURBANCE = 4.78 ACRES

CITY BENCHMARKS:

- ▲ FOUND U.S. RECLAMATION SERVICE BC IN HH JUST EAST OF TWO COP BC FLUSH IN THE INTERSECTION OF 40TH STREET AND VAN BUREN, HAVING AN ELEVATION 1141.77' NGVD29.
- ▲ FOUND S.R.V.W.A. ENG. DEPT. B.C. ON S.E. END OF IRR. BOX, S.W. CORNER OF THE INTERSECTION OF 44TH ST AND VAN BUREN ST, HAVING AN ELEVATION 1153.33' NGVD29.

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

ST87600114: GRAND CANALScape PHASE II SEGMENT 3: ISSUED FOR BID



LEGEND

NOTES

ABBREVIATIONS

NO.	DESCRIPTION	REV BY	CHK BY	DATE

▲ BENCHMARK	NEW STORM SEWER (GREATER THAN 12")
⊙ NEW SURVEY MONUMENT - MAG DETAIL 120-1 TYPE "B"	EXISTING STORM SEWER OR NEW STORM SEWER SHOWN ON SEPARATE PLANS (GREATER THAN 12")
⊙ EXISTING SURVEY MONUMENT - MAG DETAIL 120-1 TYPE "B"	NEW CATCH BASIN, GUTTER INLET (LENGTH TO SCALE)
⊙ NEW SURVEY MONUMENT - MAG DETAIL 120-1 TYPE "A"	EXISTING CATCH BASIN, GUTTER LENGTH
⊙ EXISTING SURVEY MONUMENT - MAG DETAIL 120-1 TYPE "A"	NEW CATCH BASIN, CURB INLET (LENGTH TO SCALE)
NEW COMBINED CURB & GUTTER - MAG DETAIL 220-1 TYPE "A"	EXISTING CATCH BASIN, CURB INLET
EXISTING COMBINED CURB & GUTTER	NEW CATCH BASIN, CURB & GUTTER INLET (LENGTH TO SCALE)
NEW CONCRETE SIDEWALK - COP STD. DETAIL P1230	EXISTING CATCH BASIN, CURB & GUTTER INLET
EXISTING CONCRETE SIDEWALK	EXISTING WATER VALVE W/ TOP OF OPERATING NUT ELEVATION
NEW CONCRETE DRIVEWAY OR ALLEY ENTRANCE PER DETAIL NO. ON PLANS	NEW STREET OR TRAFFIC SIGN
EXISTING CONCRETE DRIVEWAY OR ALLEY ENT.	EXISTING STREET OR TRAFFIC SIGN
NEW CONCRETE SIDEWALK RAMP PER DETAIL ON PLANS	NEW TRAFFIC SIGNAL POLE W/ MAST ARM & SIGNAL INDICATIONS
EXISTING CONCRETE SIDEWALK RAMP	EXISTING TRAFFIC SIGNAL POLE W/ MAST ARM & SIGNAL INDICATIONS
NEW SLOPE EASEMENT	NEW OR RELOCATED UTILITY POLE W/ LINE INDICATING WIRE DIRECTION
EXISTING SLOPE EASEMENT	EXISTING UTILITY POLE W/ LINE INDICATING WIRE DIRECTION
NEW TCE/ACCESS EASEMENT	NEW OR RELOCATED POWER POLE DOWN GUY ANCHOR
EXISTING EASEMENT LINE	EXISTING POWER POLE DOWN GUY ANCHOR
NEW R/W LINE	NEW STREET LIGHT & POLE
EXISTING R/W LINE	EXISTING STREET LIGHT & POLE
EXISTING PROPERTY LINE	NEW STREET LIGHT
NEW PAVEMENT CENTER LINE OR MONUMENT LINE	EXISTING STREET LIGHT
EXISTING PAVEMENT CENTER LINE OR MONUMENT LINE	EXISTING TREE OR STUMP TO BE REMOVED (GREATER THAN 12" DIA.)
NEW DECORATIVE PAVEMENT	EXISTING TREE OR STUMP TO BE REMOVED 12" DIA. OR LESS (NPI)
EXISTING DECORATIVE PAVEMENT	EXISTING TREE TO BE TRANSPLANTED BY CONTRACTOR
C CUT LIMIT	EXISTING TREE TO REMAIN (GREATER THAN 12" DIA.)
F FILL LIMIT	EXISTING TREE TO REMAIN (12" DIA. OR LESS)
NEW BLOCK WALL	EXISTING PINE TREE
EXISTING BLOCK WALL	EXISTING PALM TREE
X NEW WIRE FENCE	EXISTING LARGE SHRUB
EXISTING WOOD FENCE	EXISTING SMALL SHRUB
EXISTING CHAINLINK FENCE	EXISTING BUSH
EXISTING RAIL FENCE	S SAWCUT & MATCH EXISTING
EXISTING PAVEMENT	M MATCH EXISTING
NEW MAILBOX	L EXISTING STREET LIGHT POLE, PROTECT IN PLACE
EXISTING MAILBOX	E EXISTING ELECTRICAL STRUCTURE OR POLE, PROTECT IN PLACE
NEW IRRIGATION STANDPIPE - MAG 503	P EXISTING WATER VALVE, PROTECT IN PLACE
EXISTING IRRIGATION STANDPIPE	T EXISTING TELEPHONE RISER BOX, PROTECT IN PLACE
NEW OR RELOCATED FIRE HYDRANT BY CONTRACTOR	FLOW ARROW
EXISTING FIRE HYDRANT	SS _x EXISTING SEWER UNDER
NEW OR RELOCATED UTILITY VALVE BY CONTRACTOR	C _x EXISTING OVERHEAD CABLE
EXISTING UTILITY VALVE	CU _x EXISTING UNDERGROUND CABLE
NEW OR RELOCATED IRRIGATION BOX BY CONTRACTOR	OH FO _x EXISTING OVERHEAD FIBER OPTIC
EXISTING IRRIGATION BOX	FO _x EXISTING UNDERGROUND FIBER OPTIC
ADJUST EXISTING WATER VALVE BOX - COP STD DETAIL P1391	G _x EXISTING NATURAL GAS
NEW WATER SERVICE W/SIZE AND WATER METER BOX	FXST OHF EXISTING OVERHEAD POWER
EXISTING WATER SERVICE W/SIZE AND WATER METER BOX	UGE EXISTING UNDERGROUND ELECTRIC
NEW UTILITY LINE W/ SIZE & TYPE (12" AND SMALLER)	EXISTING TRAFFIC SIGNAL CONDUIT
EXISTING UTILITY LINE W/ SIZE & TYPE (12" AND SMALLER)	W _x EXISTING WATER
NEW UTILITY LINE W/ SIZE & TYPE (GREATER THAN 12")	
EXISTING UTILITY LINE W/ SIZE & TYPE (GREATER THAN 12")	
NEW MANHOLE (UTILITY DESIGNATION IN CENTER)	
EXISTING MANHOLE (UTILITY DESIGNATION IN CENTER)	

- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ANY ISSUED CONTRACT ADDENDUMS, CONTRACT SPECIAL PROVISIONS AND DETAILS, PLANS, 2017 CITY OF PHOENIX SUPPLEMENTS TO MAG STANDARD SPECIFICATIONS AND DETAILS, AND 2017 MAG STANDARD SPECIFICATIONS AND DETAILS, IN THAT ORDER OF PRECEDENCE.
- ALL MANHOLES ARE TO BE CONSTRUCTED WITHOUT STEPS.
- PIPE CONNECTIONS TO EXISTING CONCRETE PIPE MAINS SHALL BE MADE IN ACCORDANCE WITH DETAILS CALLED OUT ON THE PLANS. CONNECTION TO MAINS SHALL NOT BE CLOSER THAN 5 FEET, CENTER TO CENTER.
- PIPE CONNECTIONS TO NEW PRECAST STORM DRAIN CONCRETE PIPE MAINS SHALL BE FACTORY MADE WYES OR TEES. THE DETAIL OF THE FITTINGS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE.
- PIPE CONNECTIONS TO NEW CAST IN PLACE CONCRETE PIPE MAINS SHALL BE MADE PER COP STD DTL P1576.
- CATCH BASIN CONNECTOR PIPES SHALL BE LAID ON A STRAIGHT ALIGNMENT AND SLOPE UNLESS OTHERWISE SPECIFIED. IF BREAKS IN ALIGNMENT OR SLOPE ARE NECESSARY TO MEET FIELD CONDITIONS, THE MAXIMUM DEFLECTION SHALL BE 22-1/2 DEGREES. THE BEND SHALL BE COLLARED ACCORDING TO COP STD DETAIL P1505. ANY ANGLE BENDS GREATER THAN 22-1/2 DEGREES SHALL BE PREFABRICATED.
- CONTRACTOR SHALL CONFIRM PIPE MATERIAL AT DESIGNATED CONNECTION POINTS PRIOR TO ORDERING FITTINGS.
- CONNECTOR PIPES SHALL CONNECT TO CATCH BASIN WALLS AT AN ANGLE NOT TO EXCEED 22-1/2 DEGREES FROM PERPENDICULAR.
- UTILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL VERTICAL AND HORIZONTAL CONTROLS ARE LOCATED ONLY APPROXIMATELY AND TO THE BEST AVAILABLE INFORMATION PROVIDED BY THE UTILITY OWNERS, AND SUPPLEMENTED BY VISUAL SURFACE INFORMATION WHERE APPROPRIATE. ACCURACY, LOCATION AND COMPLETENESS OF THIS INFORMATION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO INITIATION OF CONSTRUCTION.
- EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.
- AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ARIZONA 811 (FORMERLY BLUESTAKE) TO FIND AND FLAG UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT OTHER APPROPRIATE UTILITIES DIRECTLY AND VERIFY LOCATION INFORMATION IF THEY ARE NOT IN THE ARIZONA 811 SYSTEM OR IF ARIZONA 811 FAILS TO MARK THE UTILITIES.
- UNLESS OTHERWISE NOTED, STATIONS SHOWN ON PIPE PROFILES ARE ALONG CENTERLINE OF PIPE.
- CATCH BASINS ARE STATIONED PERPENDICULAR TO THE CONSTRUCTION CENTERLINE AND AT THE CENTERLINE OF THE CATCH BASIN.
- SANITARY SEWER MAINS AND TAPS CROSSING OVER STORM DRAIN MAINS SHALL BE SUPPORTED PER MAG STD DTL 403-1, 403-2, OR 403-3.
- ANY AREA OR ITEMS ALTERED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION AND LOCATION UNLESS OTHERWISE SPECIFIED.
- ALL EXISTING DRIVEWAYS AND ALL EXISTING ALLEYS SHALL BE GRADED TO MATCH THE NEW WORK IN ACCORDANCE WITH COP STD DTL P1164, UNLESS OTHERWISE SPECIFIED. EXISTING SURFACING SHALL BE REMOVED AND REPLACED AS NECESSARY.
- EXISTING IRRIGATION BERMS DISTURBED BY NEW CONSTRUCTION SHALL BE RECONSTRUCTED AS SHOWN ON PLANS. IN THE EVENT THE PLANS DO NOT CONTAIN RECONSTRUCTION DETAILS, EXISTING IRRIGATION BERMS SHALL BE RESTORED IN THEIR ORIGINAL CONDITION AND LOCATION.
- ALL CONCRETE TO BE REMOVED AND REPLACED SHALL BE SAWCUT TO THE NEAREST JOINT.
- CATCH BASIN ACCESS FRAME AND COVERS SHALL BE CONSTRUCTED PER COP DETAIL P1561.
- CONTRACTOR SHALL USE EXTREME CAUTION WHEN DIGGING NEAR ANY ACP WATER LINE. SHOULD THE LINE BECOME EXPOSED, THE EXPOSED LINE SHALL BE REPLACED WITH NEW DIP FROM JOINT TO JOINT AT THE CONTRACTOR'S EXPENSE.
- WATER METER BOX AND COVER RELOCATIONS SHALL BE PLACED WITHIN THE COP RIGHT OF WAY. CONTRACTOR SHALL PROVIDE AT LEAST SIX (6) INCHES OF SPACE BEHIND THE WATER METER BOX TO THE RIGHT OF WAY LINE.

AC ASPHALTIC CONCRETE	P PAVEMENT ELEVATION
ACP ASBESTOS CEMENT PIPE	PC POINT OF CURVATURE
ACSC AC SURFACE COURSE	PCC PORTLAND CEMENT CONCRETE
AP ANGLE POINT	PCCP PRESTRESSED CONCRETE CYLINDER PIPE
AZ HWY DEPT ARIZONA HIGHWAY DEPARTMENT	POE POINT OF ENDING
BC BRASS CAP	PT POINT OF TANGENCY
B/C BACK OF CURB	PVI POINT OF VERTICAL INTERSECTION
BLF BLOCK FENCE	PVC POINT OF VERTICAL CURVATURE
BOL BOLLARD / GUARD POST	PVMT PAVEMENT
BRWR BRIDGE WALL / RAILING	PVT POINT OF VERTICAL TANGENCY
BW BACK OF SIDEWALK	RCBC REINFORCED CONCRETE BOX CULVERT
CATV CABLE TELEVISION	RCP REINFORCED CONCRETE PIPE
CIP CAST IRON PIPE	RGRCP RUBBER GASKET REINFORCED CONCRETE PIPE
COMM COMMUNICATION	RE ROADWAY EASEMENT
CONST CONSTRUCTION	R/W RIGHT OF WAY
COP CITY OF PHOENIX	SD STORM DRAIN
CP CONCRETE PIPE	SCPR SCUPPER
CLF CHAIN LINK FENCE	SDMH STORM DRAIN MANHOLE
DIA DIAMETER	SGN SIGN
DE DRAINAGE EASEMENT	SLE SLOPE EASEMENT
DIP DUCTILE IRON PIPE	SRP SALT RIVER PROJECT
DNGY DOWN GUY	SRPAI & PD SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT & POWER DISTRICT
DTL DETAIL	SRVWA SALT RIVER VALLEY WATER USERS ASSOCIATIONS
EC ELECTRICAL CABINET	SS SANITARY SEWER
EE ELECTRICAL EASEMENT	SSMH SANITARY SEWER MANHOLE
EL ELEVATION	STD STANDARD
EM ELECTRICAL METER	STL STEEL
EMH ELECTRICAL MANHOLE	STLT STREET LIGHT
EMK ELECTRIC MARKER SIGN	STRC STRUCTURE
EP EDGE OF PAVEMENT	S/W SIDEWALK
EPP ELECTRIC POWER POLE	SWE SIDEWALK EASEMENT
EPB ELECTRIC PULL BOX	T TELEPHONE
EXT EXISTING	T.B.M. TEMPORARY BENCH MARK
F FENCE	TC TOP OF CURB
F/B FACE OF BARRIER	TCE TEMPORARY CONSTRUCTION EASEMENT
F/C FACE OF CURB	TE TELEPHONE EASEMENT
FO FIBER OPTIC	TMH TELEPHONE MANHOLE
G GUTTER	T.N. TOP OF NUT
GM GAS METER	TPED TELEPHONE PEDESTAL
GMK GAS MARKER SIGN	TRFC TRAFFIC SIGNAL
GRATE STORM DRAIN GRATE	TRFP TRAFFIC SIGNAL POLE
GV GAS VALVE	TSC TRAFFIC SIGNAL CABINET
HDWL HEADWALL	TSPB TRAFFIC SIGNAL PULL BOX
HH HANDHOLE	TVPB TV PULL BOX
IBX IRRIGATION CONTROL BOX	UG UNDERGROUND
ICV IRRIGATION CONTROL VALVE	UGE UNDERGROUND ELECTRIC
IRR STRC IRRIGATION STRUCTURE	VCP VITRIFIED CLAY PIPE
L LIP OF GUTTER	VNAE VEHICULAR NON-ACCESS EASEMENT
MAG MARICOPA ASSOCIATION OF GOVERNMENTS	WBOV WATER BLOW-OFF VALVE
MCHD MARICOPA COUNTY HIGHWAY DEPARTMENT	WE WATER EASEMENT
ME MATCH EXISTING	WMS WELL MONITOR STATION
OH OVERHEAD	WM WATER METER
OHE OVERHEAD ELECTRIC	WMH WATER MANHOLE
	WV WATER VALVE



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NOTES AND LEGEND

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

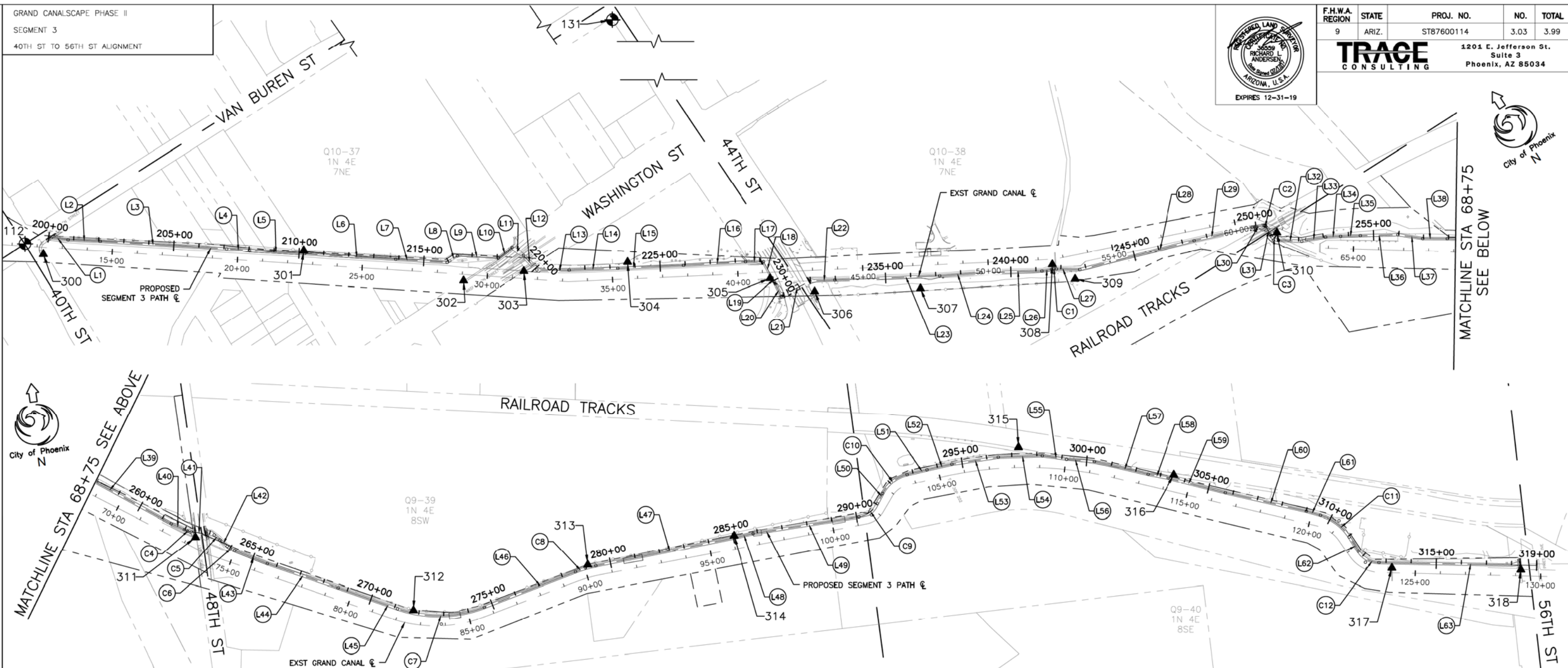
DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.02	3.99
SCALE: NTS				

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.03	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034



SEGMENT 3: CONSTRUCTION CENTERLINE		
LINE #	DISTANCE	BEARING
L1	78.01'	S49° 00' 45"E
L2	128.21'	S54° 05' 41"E
L3	504.76'	S53° 13' 36"E
L4	90.90'	S53° 04' 44"E
L5	220.65'	S53° 30' 05"E
L6	365.73'	S53° 10' 21"E
L7	205.18'	S53° 17' 14"E
L8	48.29'	S89° 00' 41"E
L9	163.51'	S53° 36' 09"E
L10	69.24'	N85° 13' 43"E
L11	55.41'	S21° 20' 04"E
L12	78.71'	S09° 47' 14"E
L13	128.82'	S56° 26' 22"E
L14	193.92'	S58° 48' 32"E
L15	262.00'	S59° 21' 56"E
L16	249.49'	S59° 58' 52"E
L17	71.55'	S57° 08' 16"E
L18	72.91'	S04° 41' 33"W
L19	18.11'	S05° 47' 33"W
L20	64.15'	S07° 03' 22"W
L21	128.83'	S84° 52' 05"E

SEGMENT 3: CONSTRUCTION CENTERLINE		
LINE #	DISTANCE	BEARING
L22	99.67'	S59° 03' 25"E
L23	417.93'	S58° 58' 10"E
L24	166.08'	S61° 05' 10"E
L25	241.95'	S58° 17' 31"E
L26	38.74'	S66° 38' 43"E
L27	93.39'	S55° 28' 35"E
L28	471.93'	S70° 53' 19"E
L29	237.54'	S69° 40' 57"E
L30	48.29'	S63° 50' 22"E
L31	41.55'	S04° 21' 10"W
L32	93.25'	S54° 47' 22"E
L33	96.22'	S66° 27' 56"E
L34	60.03'	S60° 01' 44"E
L35	78.62'	S58° 23' 26"E
L36	149.49'	S58° 14' 22"E
L37	100.63'	S48° 02' 19"E
L38	97.83'	S56° 11' 35"E
L39	345.00'	S53° 41' 01"E
L40	57.63'	S58° 05' 12"E
L41	62.56'	S74° 23' 39"E
L42	38.70'	S40° 52' 43"E

SEGMENT 3: CONSTRUCTION CENTERLINE		
LINE #	DISTANCE	BEARING
L43	141.45'	S60° 34' 41"E
L44	299.89'	S63° 33' 34"E
L45	251.09'	S63° 11' 10"E
L46	389.75'	N76° 18' 51"E
L47	565.23'	N86° 00' 50"E
L48	76.46'	N84° 46' 41"E
L49	427.11'	N88° 40' 30"E
L50	45.38'	N35° 15' 28"E
L51	81.40'	N84° 01' 41"E
L52	102.00'	N84° 56' 23"E
L53	186.58'	N88° 56' 42"E
L54	176.04'	S84° 23' 01"E
L55	97.24'	S73° 56' 58"E
L56	111.54'	S77° 46' 54"E
L57	220.08'	S69° 11' 07"E
L58	82.66'	S71° 32' 39"E
L59	235.64'	S68° 09' 16"E
L60	331.32'	S69° 32' 27"E
L61	58.68'	S66° 30' 01"E
L62	67.67'	S24° 37' 21"E
L63	627.89'	S81° 22' 39"E

SEGMENT 3: CONSTRUCTION CENTERLINE CURVE TABLE				
CURVE #	RADIUS	LENGTH	TANGENT	DELTA
C1	100.00'	19.49'	9.78'	011° 10' 08"
C2	7.00'	8.33'	4.74'	068° 11' 32"
C3	35.00'	36.13'	19.86'	059° 08' 32"
C4	100.00'	28.46'	14.33'	016° 18' 27"
C5	100.00'	58.50'	30.11'	033° 30' 57"
C6	100.00'	34.38'	17.36'	019° 41' 59"
C7	500.00'	353.43'	184.46'	040° 29' 59"
C8	500.00'	84.65'	42.42'	009° 41' 59"
C9	100.00'	93.23'	50.31'	053° 25' 02"
C10	150.00'	127.68'	68.00'	048° 46' 12"
C11	200.00'	146.18'	76.53'	041° 52' 40"
C12	100.00'	99.06'	54.02'	056° 45' 18"

▲ TEMPORARY BENCHMARKS				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
300	CHISELED "X"	891779.21	676154.88	1143.70'
301	SET NAIL	891222.03	677030.50	1141.22'
302	CHISELED "X"	890771.56	677499.22	1144.02'
303	CHISELED "X"	890671.31	677720.40	1145.21'
304	CHISELED "X"	890475.11	678086.22	1143.76'
305	FOUND ALUMINUM CAP FLUSH	890108.09	678527.13	1145.45'
306	CHISELED "X"	889967.06	678646.95	1147.32'
307	SET 1" BAR	889745.68	679006.08	1141.80'
308	SET NAIL	889537.36	679497.89	1144.59'
309	SET NAIL	889439.08	679542.02	1144.91'
310	SET PK NAIL	889151.68	680317.72	1147.89'
311	CHISELED "X"	888486.97	681239.05	1146.35'

▲ TEMPORARY BENCHMARKS				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
312	SET NAIL	888082.68	682063.70	1145.30'
313	SET REBAR	888171.60	682776.19	1147.10'
314	CHISELED "X"	888210.77	683369.89	1149.60'
315	SET REBAR	888410.12	684541.57	1150.96'
316	CHISELED "X"	888220.25	685142.48	1153.62'
317	CHISELED "X"	887736.65	685955.18	1150.77'
318	CHISELED "X"	887661.86	686463.78	1157.84'

RIGHT-OF-WAY DISCLAIMER:

RIGHT-OF-WAY INFORMATION DEPICTED ON THESE PLANS IS FOR REFERENCE ONLY. RIGHT-OF-WAY INFORMATION FOR THE GRAND CANAL AND ADJACENT PARCELS PRESENTED HERE IS BASED ON CITY OF PHOENIX QUARTER SECTION MAPS AND RIGHT-OF-WAY MAPPING PROVIDED BY SRP LAND DEPARTMENT, SURVEY DIVISION. TRACE CONSULTING, LLC HAS NOT PERFORMED AN ARIZONA BOUNDARY SURVEY OR TITLE RESEARCH TO VERIFY THE ACCURACY OF THE RIGHTS-OF-WAY DEPICTED ON THESE PLANS, AND DOES NOT ACCEPT LIABILITY FOR USE OF THIS INFORMATION.

SURVEY CONTROL BENCHMARKS (CITY BENCHMARKS)				
POINT #	DESCRIPTION	NORTHING	EASTING	ELEVATION
112	U.S. RECLAMATION SERVICE B.C. IN H.H. JUST EAST OF TWO C.O.P. B.C. FLUSH IN THE INTERSECTION OF 40TH ST AND VAN BUREN ST	891853.73	676116.41	1141.77'
131	S.R.V.W.U.A. ENG. DEPT. B.C. ON S.E. END OF IRR. BOX, S.W. CORNER OF THE INTERSECTION OF 44TH ST AND VAN BUREN ST	891764.20	678559.53	1153.33'



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SURVEY CONTROL PLAN

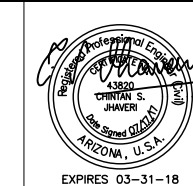
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	3.03	TOTAL SHEETS:	3.99
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE:	1"=200'		

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.04	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

APPROXIMATE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL	3:13	3:14	3:15	3:16	3:17	3:18	3:19	3:20	3:21	3:22	3:23	3:24	3:25	3:26	3:27	3:28	3:29	3:30	3:31	3:32	3:33	3:34	3:35	3:36	3:37	3:38	3:39	3:40	3:41	3:42	3:43		
1	ART FEATURE (SAND LAST STREET NAME)	EA	1					1	1		1	1						3	1																	
	AGGREGATE BASE COURSE	TON	54									54																								
3	SAFETY CUT, REMOVE AND REPLACE ASPHALT PAVEMENT, MAG DETAIL 100, TYPE "A"	SY	116	13								85																								
4	ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, TYPE C 3.4, 7" THICK	SY	47													47																				
5	CONCRETE SIDEWALK, STD DETAIL P1:30	SF	1,107	116				60		118	37																							80		
6	CONCRETE SIDEWALK, STD DETAIL P1:30, 7" THICK, CLASS AA	SF	111,616	3,37	4,43	4,500	3,546	1,815	4,450	3,544	1,750	4,134	3,501	4,617	4,003	4,183	4,505	4,373	4,44	4,44	4,180	4,563	4,500	4,474	4,53	4,543	4,41	4,501	4,476	3,174	1,678					
7	TRUNCATED DOMES FOR SIDEWALK RAMPS	SF	53							35	50					40																		3		
8	CONCRETE CURB RAMP, STD DETAIL P1:41 MODIFIED PER DETAILS	SF	338									68																								
	CONCRETE CURB RAMP, STD DETAIL P1:37 MODIFIED PER PLANS	SF	68									68																								
10	CONCRETE DRIVEWAY ENTRANCE, STD DETAIL P1:44 MODIFIED PER DETAILS	SF	14																															80		
11	CONCRETE DRIVEWAY ENTRANCE, STD DETAIL P1:55:1 MODIFIED PER DETAILS	SF	4	4																																
11	COMBINED CONCRETE CURB AND GUTTER, STD DETAIL 100, TYPE "A", H:6"	LF	15	44								37																						38		
13	CONCRETE ROLL CURB AND GUTTER PER MAG STD DTL 100:1 TYPE "C"	LF	51									3	8																							
14	CONCRETE SINGLE CURB, STD DETAIL 100, TYPE "A", H:6"	LF	103																																	
15	CONSTRUCT SINGLE CURB TERMINATION PER MAG STD DETAIL 100	EA	1																																	
16	ADJUST EXISTING WATER METER BOX AND COVER	EA	1						1																											
17	ADJUST EXISTING MANHOLE FRAME AND COVER, MAG STD DETAIL 400 AND COP DETAIL P1430	EA	7	1	1	1	1					1																								
18	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB	LF	10																																	
18	REMOVE PORTLAND CEMENT CONCRETE CURB AND GUTTER	LF	17	44								3	57																					38		
19	REMOVE CONCRETE SIDEWALK	SF	6,003	1,51		1,11	1,737					35	450																					118		
21	REMOVE PORTLAND CEMENT CONCRETE PAVEMENT	SY	6																																	
22	REMOVE ASPHALT CONCRETE PAVEMENT	SY	816						105																											
23	SIGN REMOVAL	EA	1																																	
24	4 INCH YELLOW THERMOPLASTIC TRAFFIC STRIPE	LF	106																																	
25	PAVEMENT MARKING (PAINT, LEGEND) RAILROAD CROSSING	EA	1																																	
26	REGULATION SIGN PANELS	SF	101																																	
27	WARNING SIGN PANELS	SF	101																																	
28	PAVEMENT MARKING (WHITE THERMOPLASTIC) (0.060") 4"	LF	5,330																																	
29	SAFETY RAIL, MAG DETAIL 145	LF	3																																	
30	MODIFIED 4 SIDE DOUBLE SLIDING CHAIN LINK GATE, 7" HIGH, ADOT DETAIL C1:100	EA	1																																	
31	CHAIN LINK FENCE, ADOT DETAIL C1:100, TYPE 1, H:7"	LF	361																																	
32	ADJUST IRRIGATION CONTROL VALVE	EA	1						1																											
33	REMOVE AND REPLACE EXISTING FENCE AND GATE	LF	100																																	
34	FLEXIBLE DELINEATORS PER ADOT STD DTL M:6	EA	6																																	
35	REMOVE EXISTING POLLARD	EA	1																																	
36	CONSTRUCT 7" CONCRETE FOR SPILLWAY PER PLANS	SF	176																																	

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

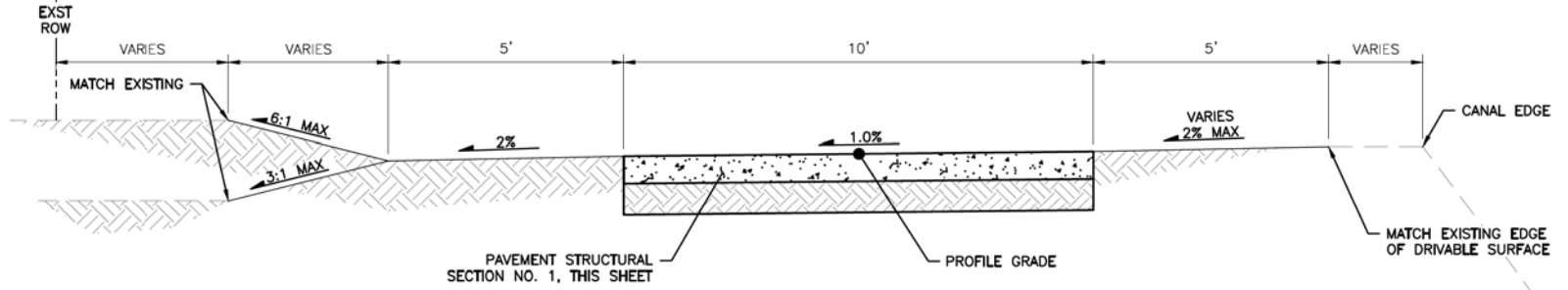


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

QUANTITY SUMMARY						
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT						
GRAND CANALSCAPE PHASE II SEGMENT 3: 40TH ST TO 56TH ST ST87600114						
DR:	BRR	DES:	GRS	CK:	CSJ	SHEET
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:
SCALE: NTS						TOTAL SHEETS: 3.99

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

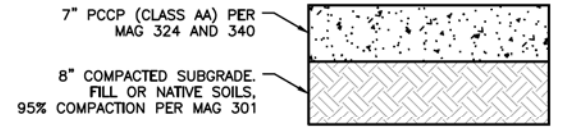


TYPICAL SECTION NO. 1
NTS

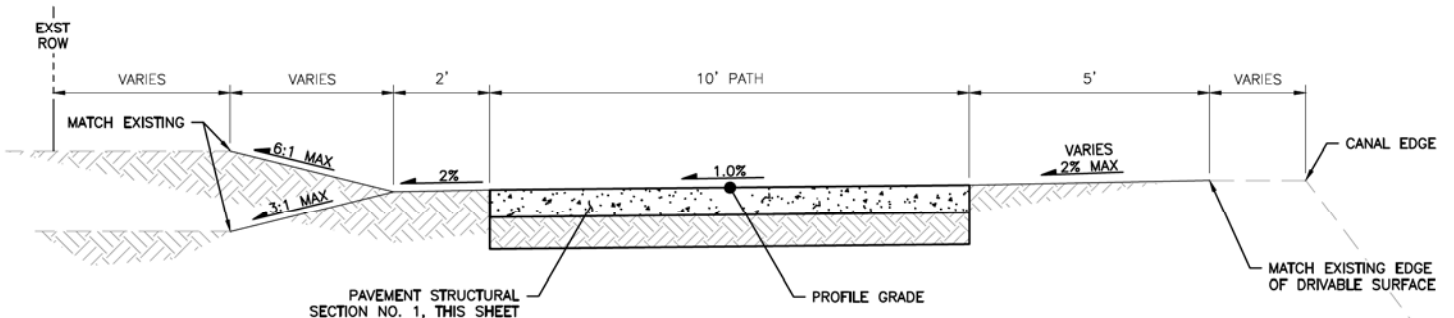
- STA 220+20 TO STA 228+00
- STA 256+25 TO STA 257+25
- STA 259+00 TO STA 260+00
- STA 264+75 TO STA 267+20
- STA 270+75 TO STA 273+20
- STA 275+70 TO STA 275+00
- STA 291+25 TO STA 298+25
- STA 303+25 TO STA 309+35
- STA 314+75 TO STA 318+25

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.05	3.99

TRACE CONSULTING
1201 E. Jefferson St. Suite 3
Phoenix, AZ 85034

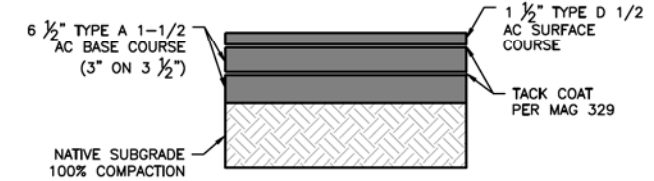


PAVEMENT STRUCTURAL SECTION NO. 1
NTS



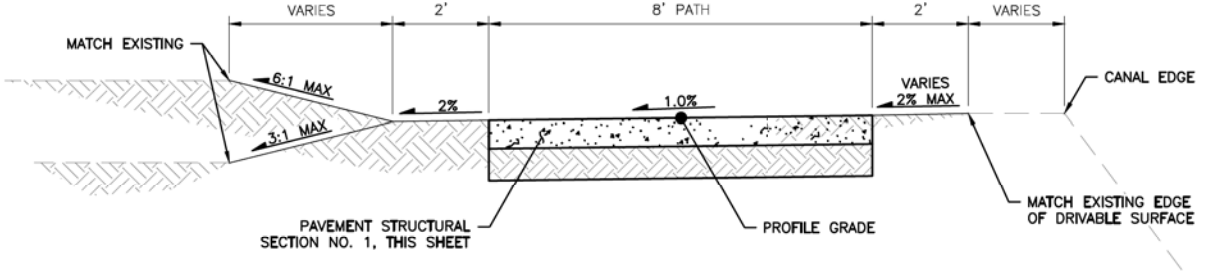
TYPICAL SECTION NO. 2
NTS

- STA 200+00 TO STA 216+10
- STA 228+00 TO STA 228+75
- STA 258+00 TO STA 258+25
- STA 267+20 TO STA 270+00
- STA 275+00 TO STA 289+75
- STA 285+00 TO STA 286+00
- STA 301+25 TO STA 302+50
- STA 310+00 TO STA 314+00



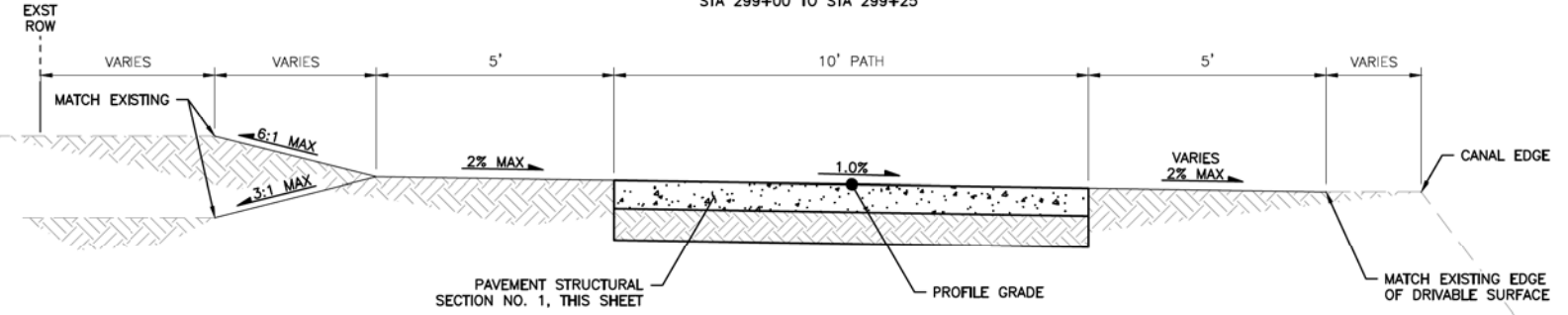
PERMANENT PAVEMENT REPLACEMENT PER MAG 336 AND CITY SUPPLEMENTS

PAVEMENT STRUCTURAL SECTION NO. 2
NTS



TYPICAL SECTION NO. 3
NTS

STA 299+00 TO STA 299+25



TYPICAL SECTION NO. 4
NTS

- STA 262+00 TO STA 263+00
- STA 273+35 TO STA 273+55



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL SECTIONS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

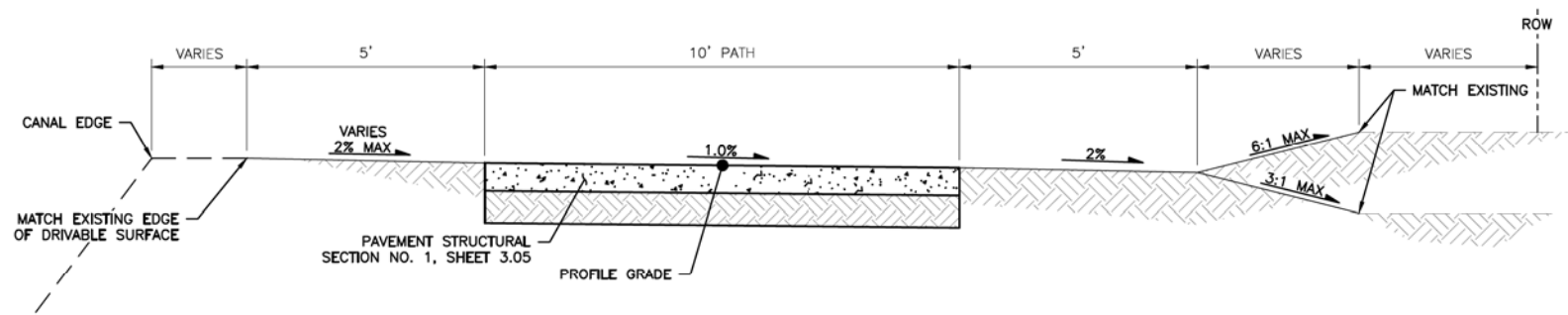
DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.05	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17	SCALE: NTS	



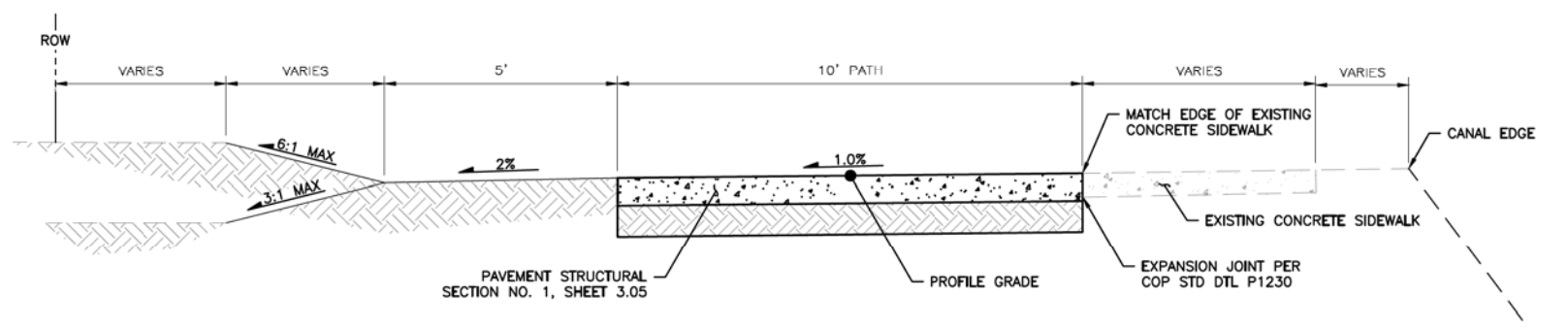
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.06	3.99

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 Suite 3
 Phoenix, AZ 85034

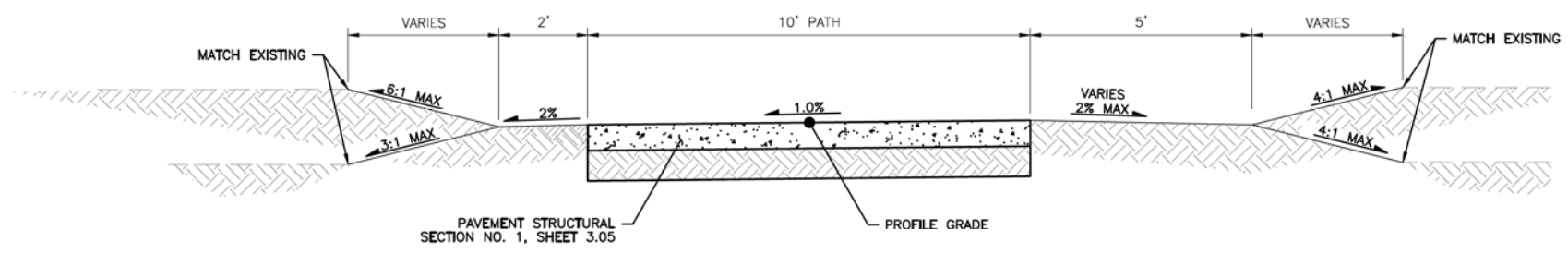
NO.	DESCRIPTION	REV BY	CHK BY	DATE



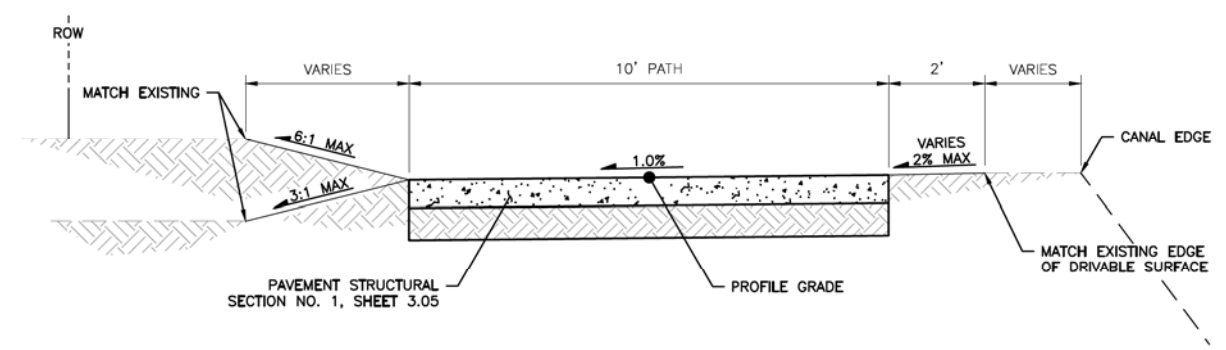
TYPICAL SECTION NO. 5
 NTS
 STA 232+00 TO STA 236+40
 STA 237+15 TO STA 250+25



TYPICAL SECTION NO. 6
 NTS
 STA 253+68.00 TO STA 255+96.00



TYPICAL SECTION NO. 7
 NTS
 STA 251+25 TO STA 250+00



TYPICAL SECTION NO. 8
 NTS
 STA 289+75.00 TO STA 291+00.00



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

TYPICAL SECTIONS
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.06	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17	SCALE: NTS	

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

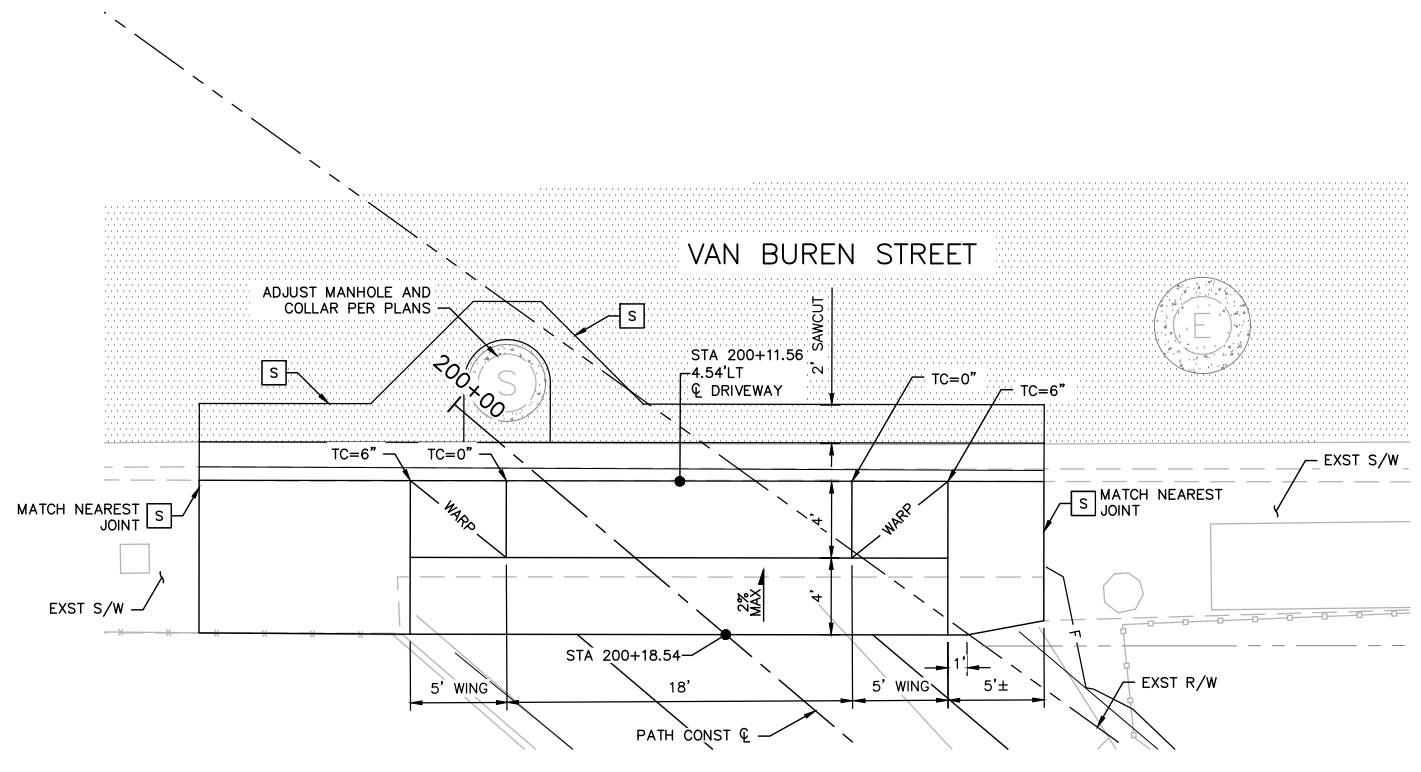
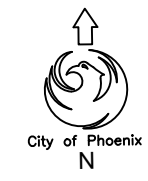
GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.07	3.99

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Phoenix, AZ 85034

EXPIRES 03-31-18



MODIFIED P1551 DETAIL
VAN BUREN ST



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

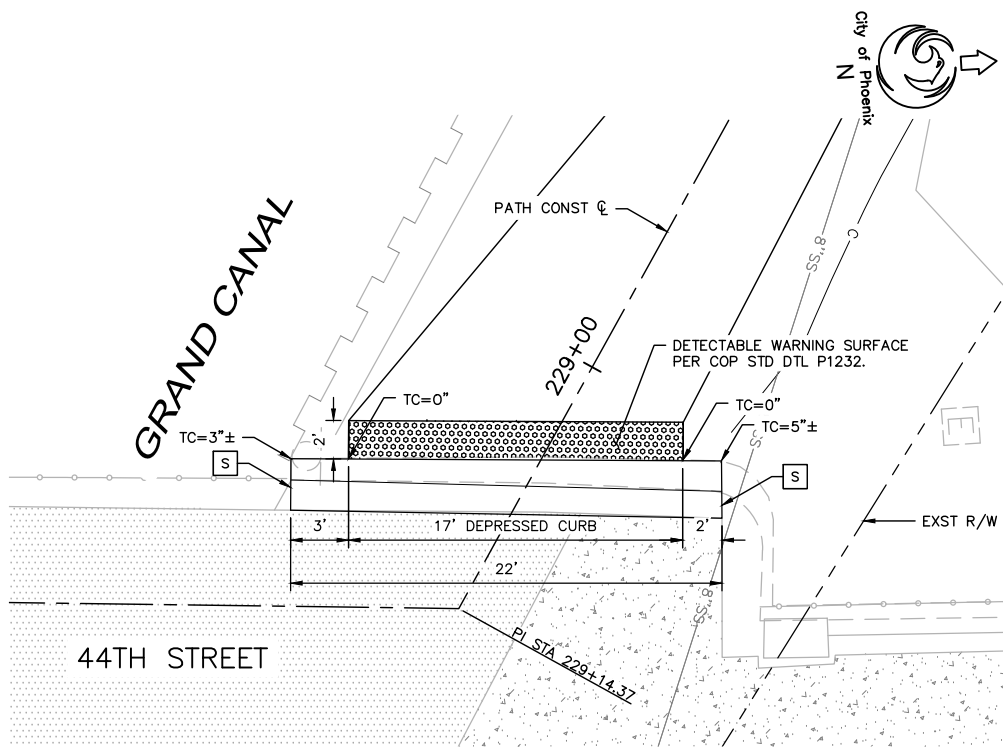
DRIVEWAY DETAIL VAN BUREN ST
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

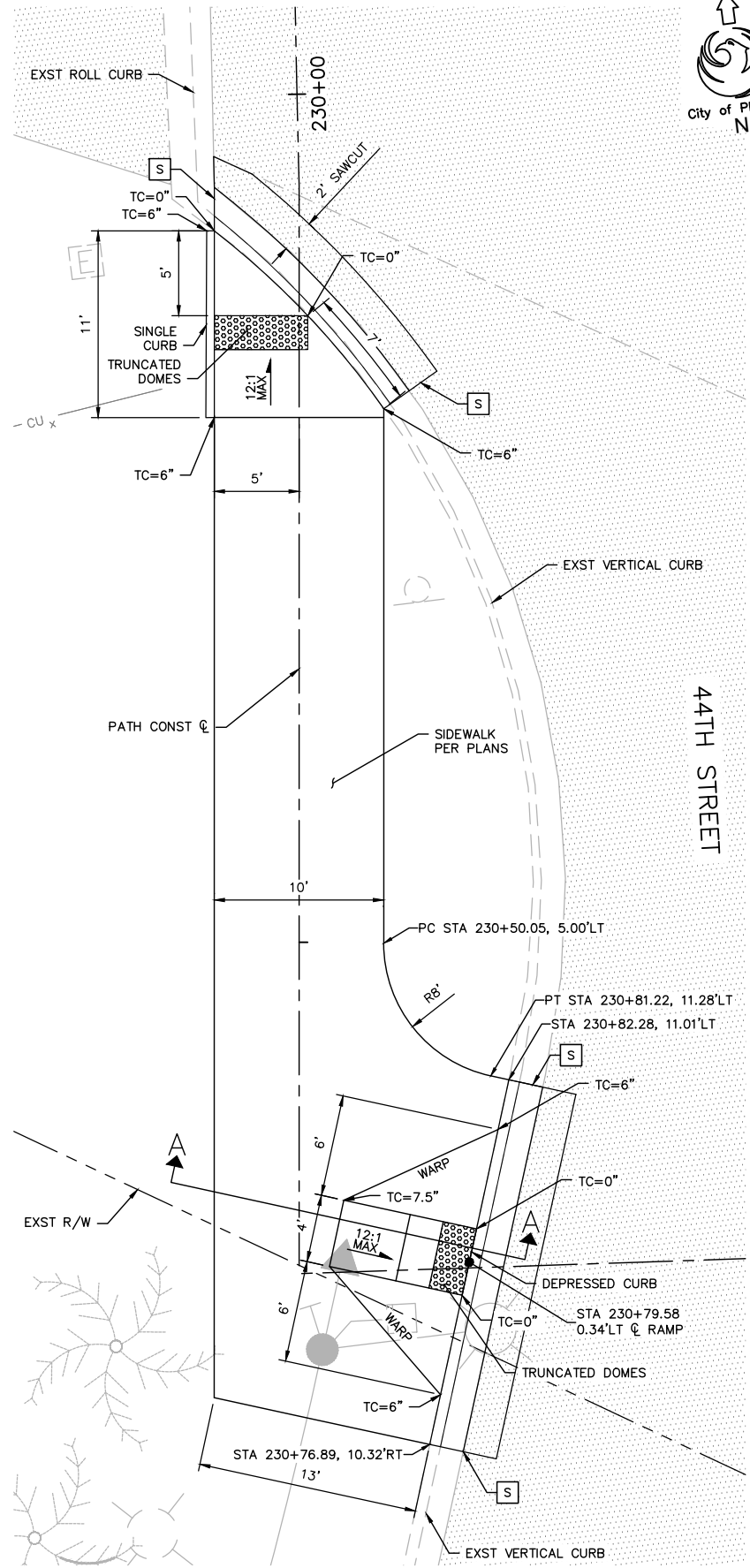
- NOTES**
- SEE COP STD DTL P1255-1 FOR ADDITIONAL NOTES.
 - DRIVEWAYS AND CURB AND GUTTER SHALL BE 9" THICK MAG CLASS 'A' CONCRETE.

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	NTS					3.07	3.99

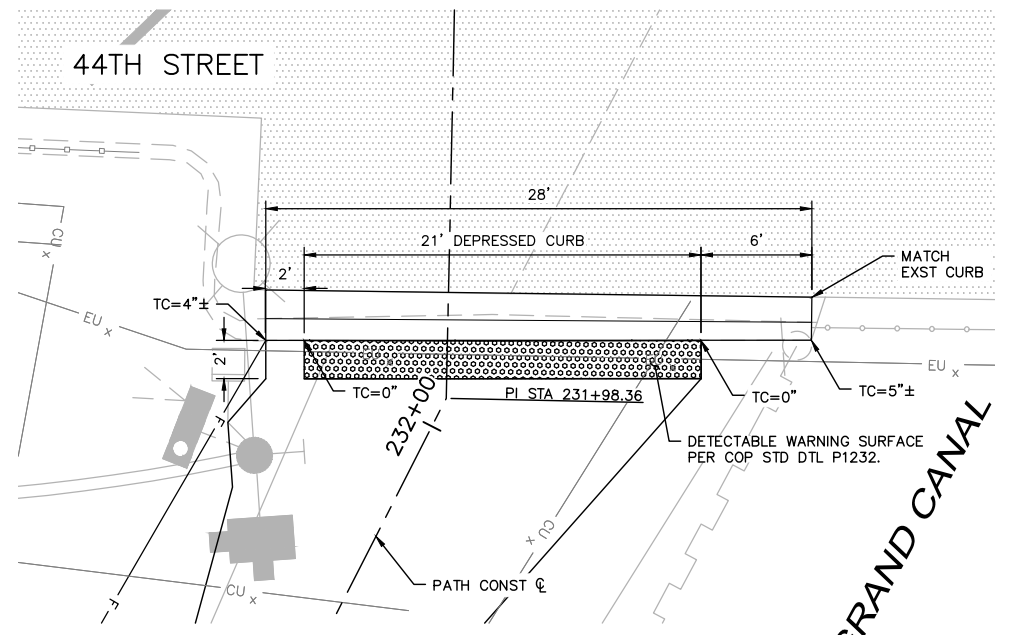
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				
NO.				
NO.				
NO.				



CURB AND PATH DETAIL
 44TH STREET (WEST)

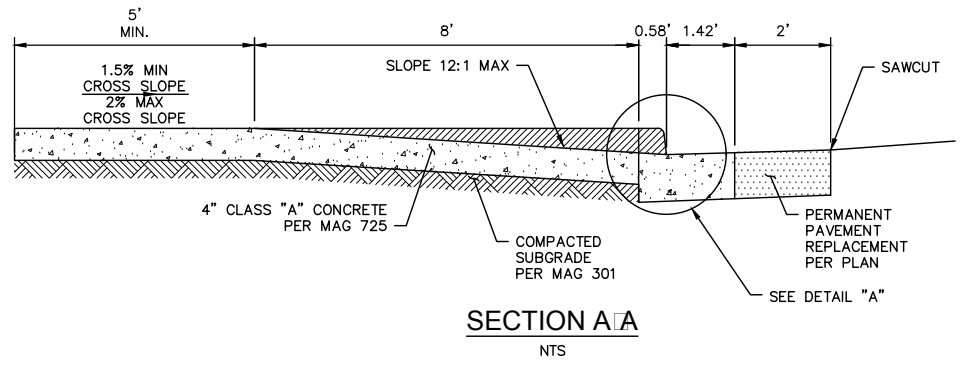
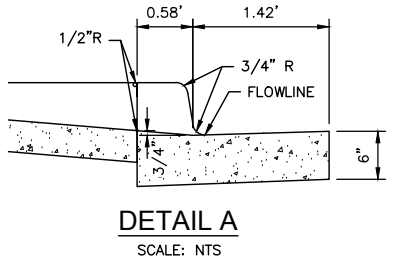


PEDESTRIAN RAMP DETAILS 44TH STREET
 NTS



CURB AND PATH DETAIL
 44TH STREET (EAST)

- NOTES**
- CONTROL ELEVATIONS SHOWN ARE IN RELATION TO GUTTER. GUTTER ELEVATION = 0".
 - TRUNCATED DOMES SHALL BE INSTALLED PER COP STD DTL P1232.
 - STATION OFFSET VALUES PROVIDED REFERENCE PATH CONSTRUCTION ϕ .
 - SEE TRAFFIC SIGNAL PLANS FOR SIGNAL INFORMATION.



DRIVEWAY AND RAMP DETAILS
 44TH STREET
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

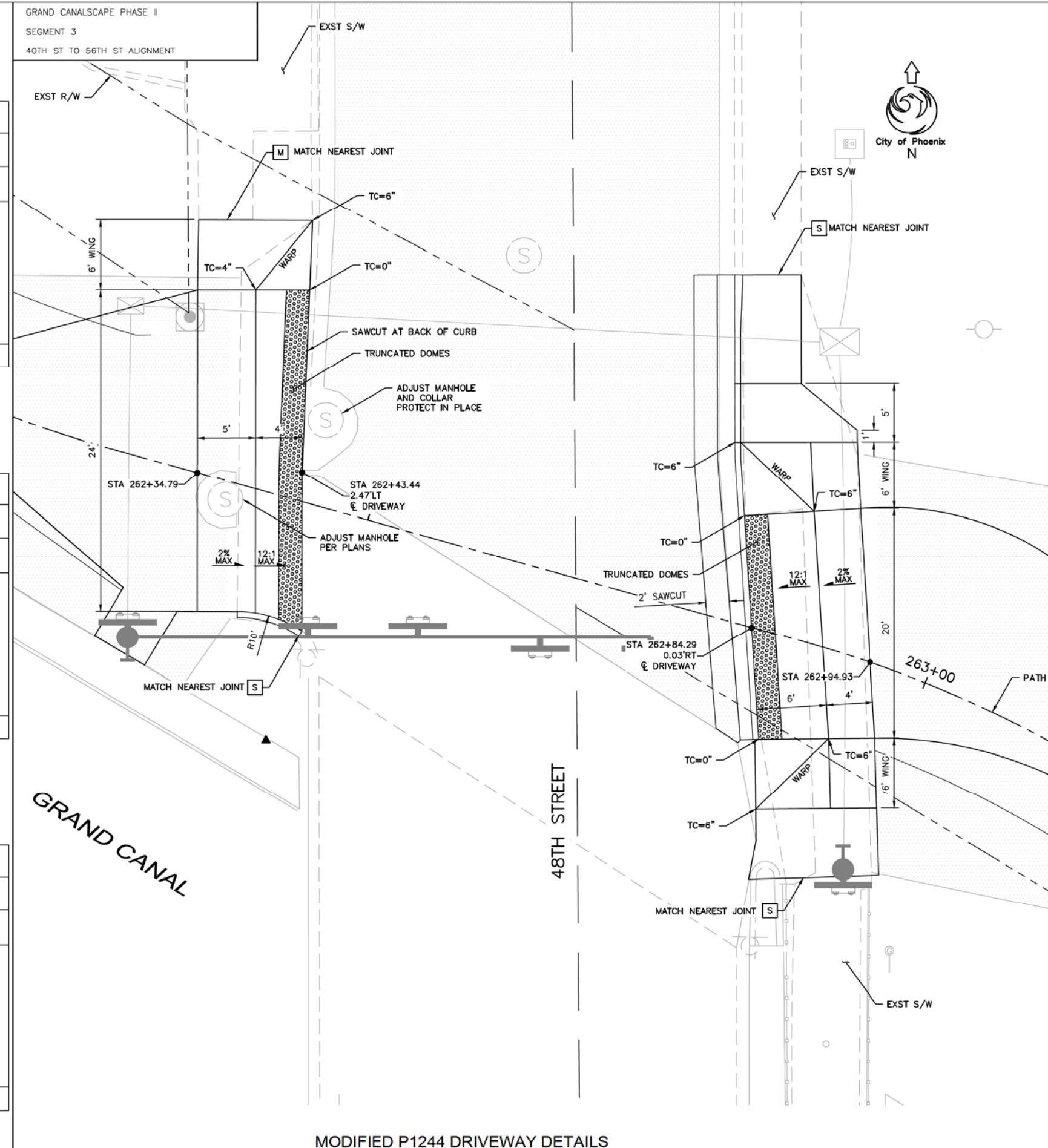
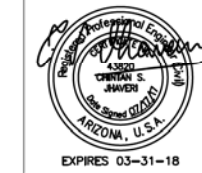
GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.08	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		

SCALE: NTS

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

Contact Arizona 811 at least two full working days before you begin excavation.
 ARIZONA
 Call 811 or click Arizona811.com



REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE

MODIFIED P1244 DRIVEWAY DETAILS
48TH ST
NTS

- NOTES
- 1. SEE COP STD DTL P1244 FOR ADDITIONAL NOTES.
 - 2. DRIVEWAYS AND CURB AND GUTTER SHALL BE 9" THICK MAG CLASS 'A' CONCRETE.
 - 3. SEE TRAFFIC SIGNAL PLANS FOR SIGNAL INFORMATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

DRIVEWAY DETAILS - 48TH STREET
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	BRR	DES:	GRS	CK:	GSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE: NTS						3.09	3.99

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

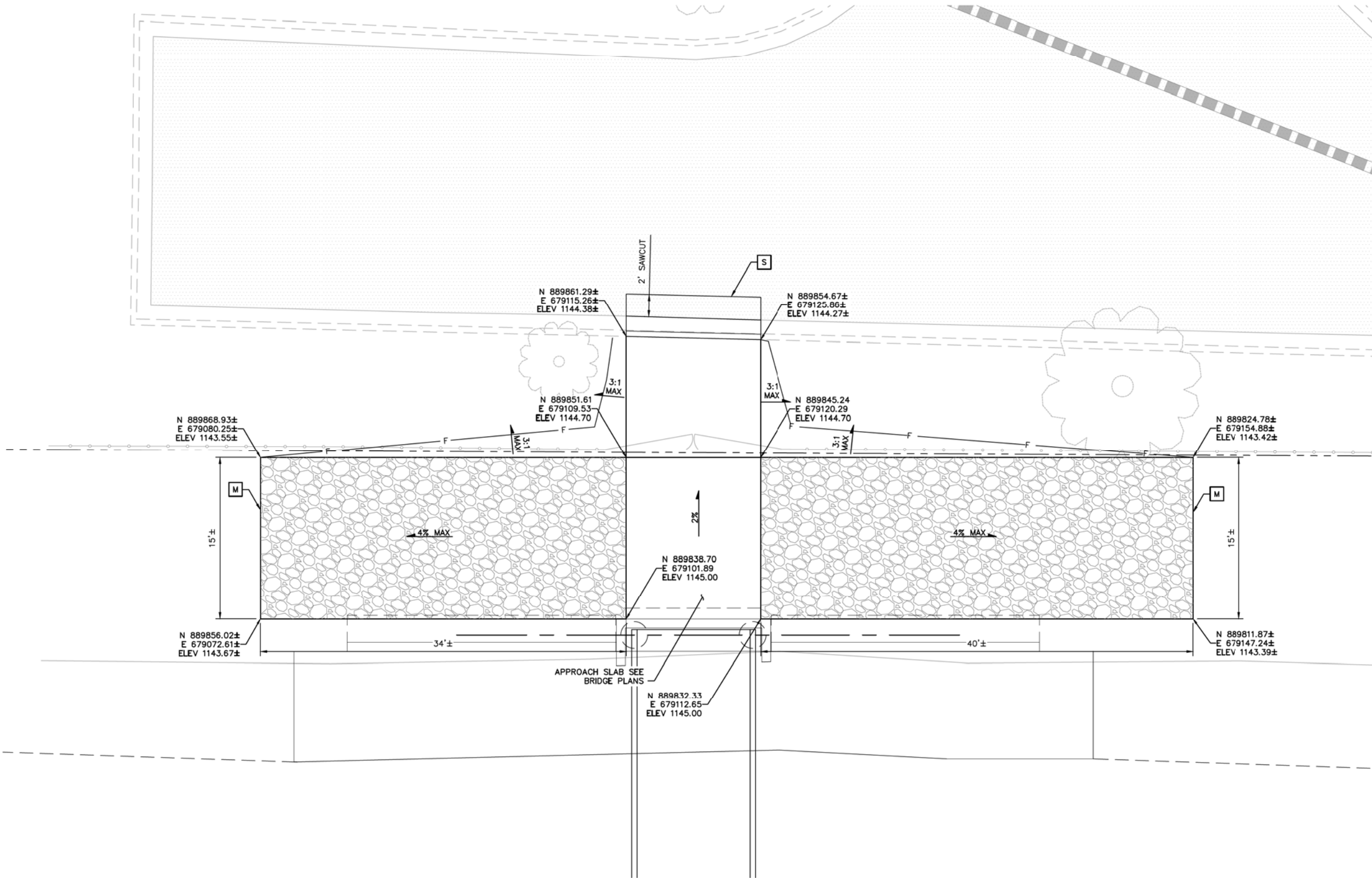


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.10	3.99

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Suite 3
Phoenix, AZ 85034



REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION



CANAL MAINTENANCE ROAD GRADING AT PGM BRIDGE CROSSING
(NTS)



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

CANAL ROAD DETAIL
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	3.10
SCALE: NTS				3.99

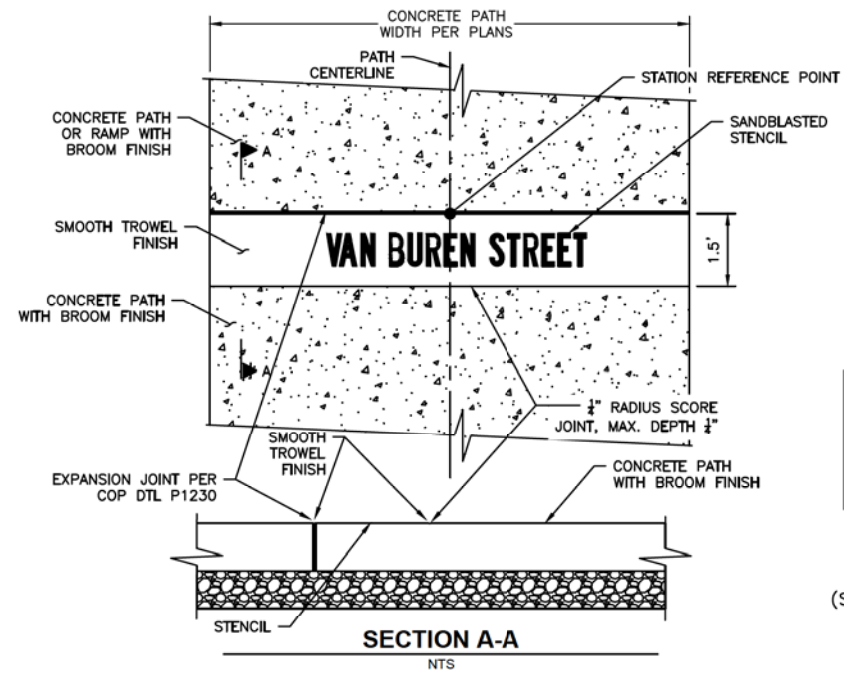


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.11	3.99

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Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE



STREET NAME COPY

VAN BUREN STREET
WASHINGTON STREET
44th STREET
48th STREET

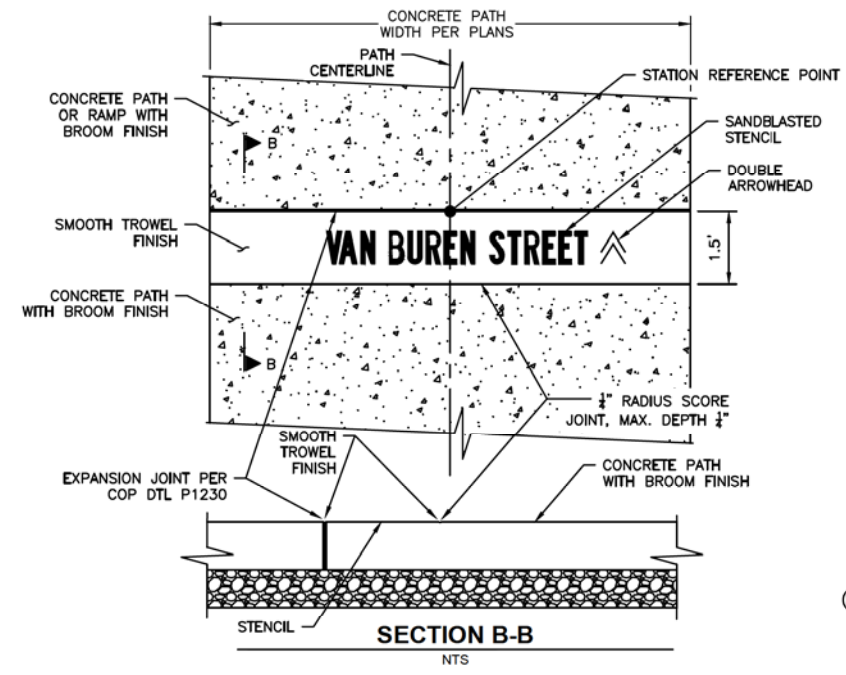
(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

SANDBLAST STENCIL NOTES

- SANDBLAST LETTERS TO 1/8" DEEP.
- FONT: FEDERAL STANDARD ALPHABET SERIES B.
- LETTER HEIGHT = 8 INCHES.
- CENTER TEXT COPY HORIZONTALLY WITHIN CONCRETE PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND.
- STENCIL SHALL BE A PREMIUM RUBBER STENCIL PRODUCT.
- INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS.

STREET NAME STENCIL - DETAIL A
NTS

NO.	DESCRIPTION	REV BY	CHK BY	DATE



STREET NAME COPY

VAN BUREN STREET
WASHINGTON STREET
44th STREET
48th STREET

(SEE PATHWAY PLANS FOR STATION / LOCATIONS)

SANDBLAST STENCIL NOTES

- SANDBLAST LETTERS TO 1/8" DEEP.
- FONT: FEDERAL STANDARD ALPHABET SERIES B.
- LETTER HEIGHT = 8 INCHES.
- CENTER TEXT COPY HORIZONTALLY WITHIN CONCRETE PATH AND VERTICALLY WITHIN SMOOTH TROWELED FINISH BAND.
- STENCIL SHALL BE A PREMIUM RUBBER STENCIL PRODUCT.
- INSTALLER SHALL HAVE EXPERIENCE ON A MINIMUM OF 5 PAST PROJECTS.

STREET NAME STENCIL (ADVANCED WARNING) - DETAIL B
NTS

NO.	DESCRIPTION	REV BY	CHK BY	DATE



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

SANDBLAST STENCIL DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.11	3.99

SCALE: NTS

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



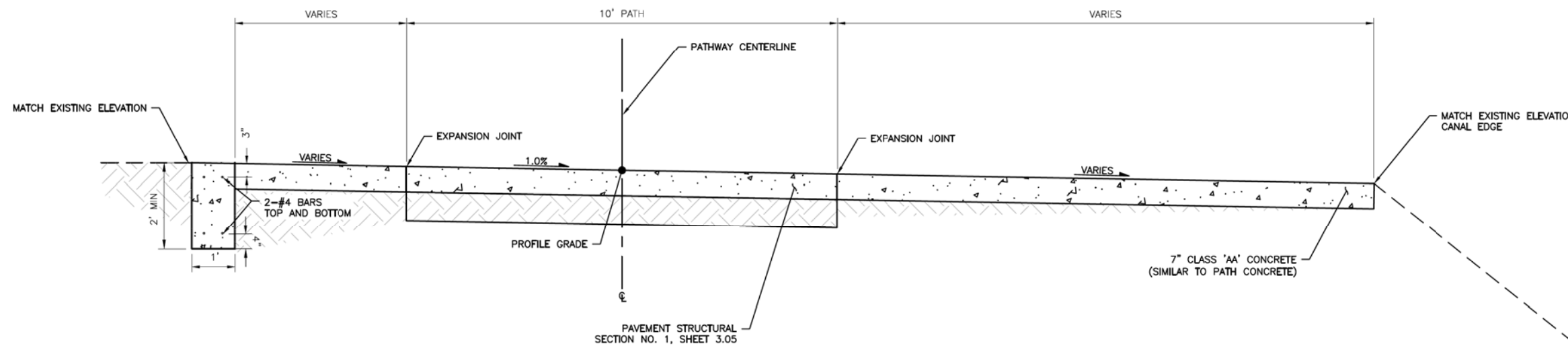
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.12	3.99

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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

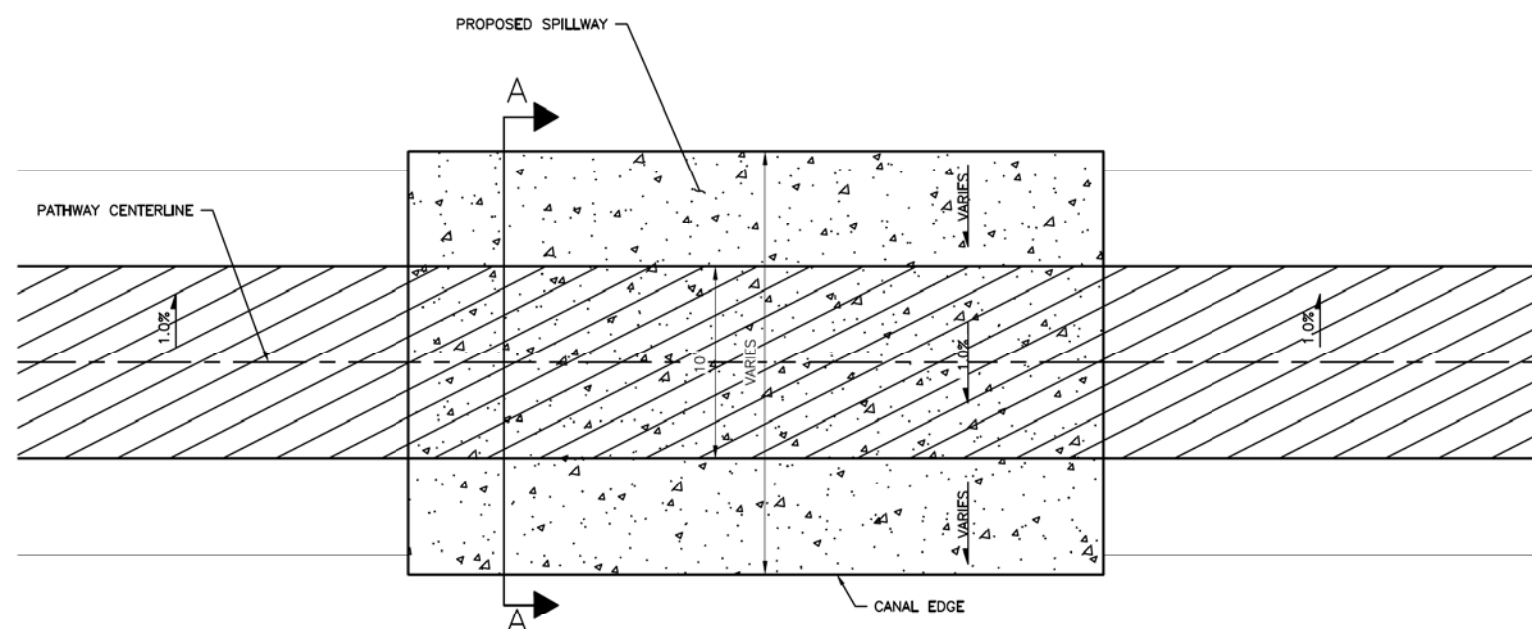
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.				



SECTION A-A
NTS

APPROXIMATE LOCATIONS OF SPILLWAYS	
SPILLWAY 1	STA 273+22 TO STA 273+67
SPILLWAY 2	STA 280+52 TO STA 281+29
SPILLWAY 3	STA 285+83 TO STA 286+16
SPILLWAY 4	STA 289+03 TO STA 289+53



PLAN VIEW
NTS

NOTES

1. CONTRACTOR SHALL ENSURE THAT SPILLWAY CONSTRUCTION PROVIDES POSITIVE DRAINAGE TOWARDS THE CANAL.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

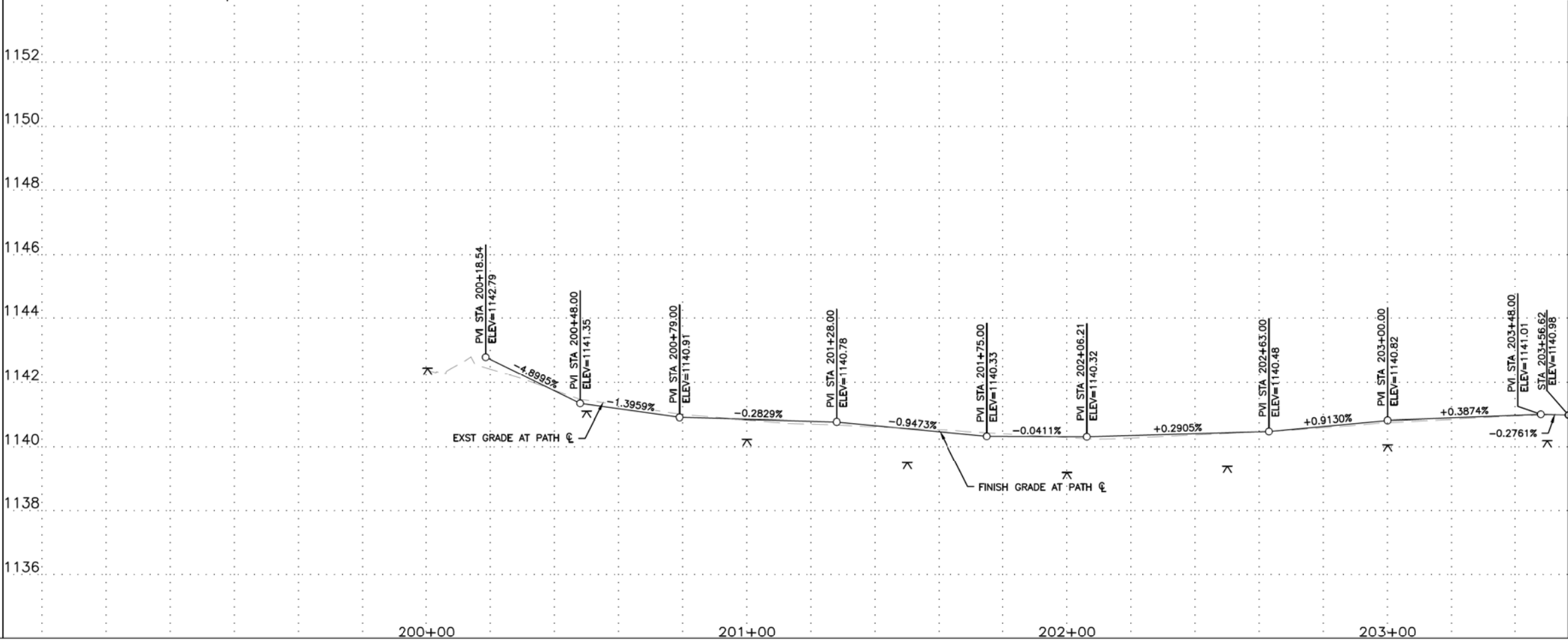
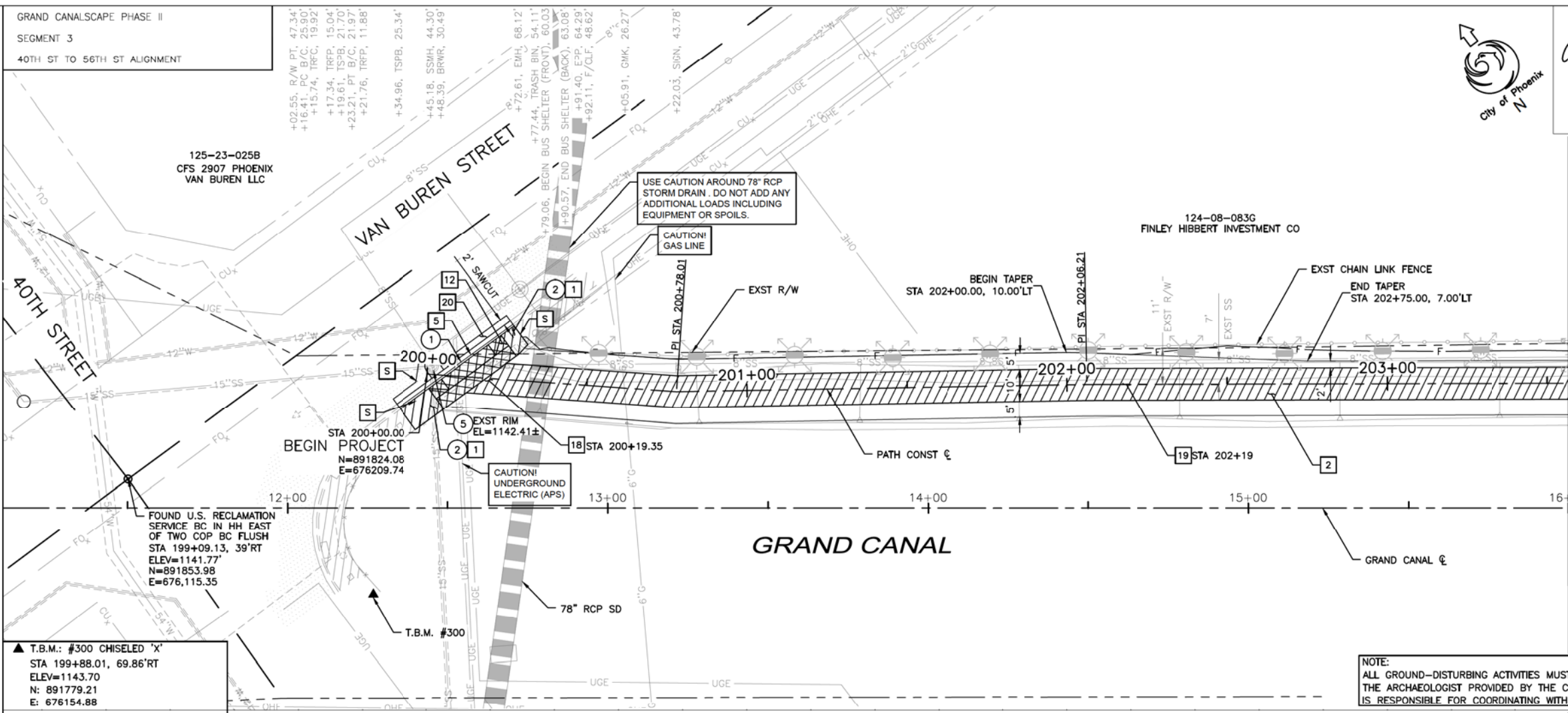
SPILLWAY DETAIL

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	NO:	3.12 3.99
SCALE: NTS				

NO.	DESCRIPTION	REV BY/CHK BY	DATE



GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

125-23-025B
CFS 2907 PHOENIX
VAN BUREN LLC

124-08-083G
FINLEY HIBBERT INVESTMENT CO

City of Phoenix
N

EXPIRES 03-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.13	3.99

TRACE CONSULTING

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Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	44	
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	251	
3	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	126	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	3,379	
3	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	44	
12	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P1255-1 MODIFIED PER DETAIL - SEE SHEET 3.07	SF	224	
18	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 3.11	EA	1	
19	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 3.11	EA	1	
20	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 3.05	SY	13	

MATCHLINE STA 16+00 SEE SHEET 3.14

MATCHLINE SEE SHEET 3.14

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

0 10 20 40

Contact Arizona 811 at least two full working days before you begin excavation.
Call 811 or click Arizona811.com

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.13	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		

SCALE: 1"=20'H
1"=2' V

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.14	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

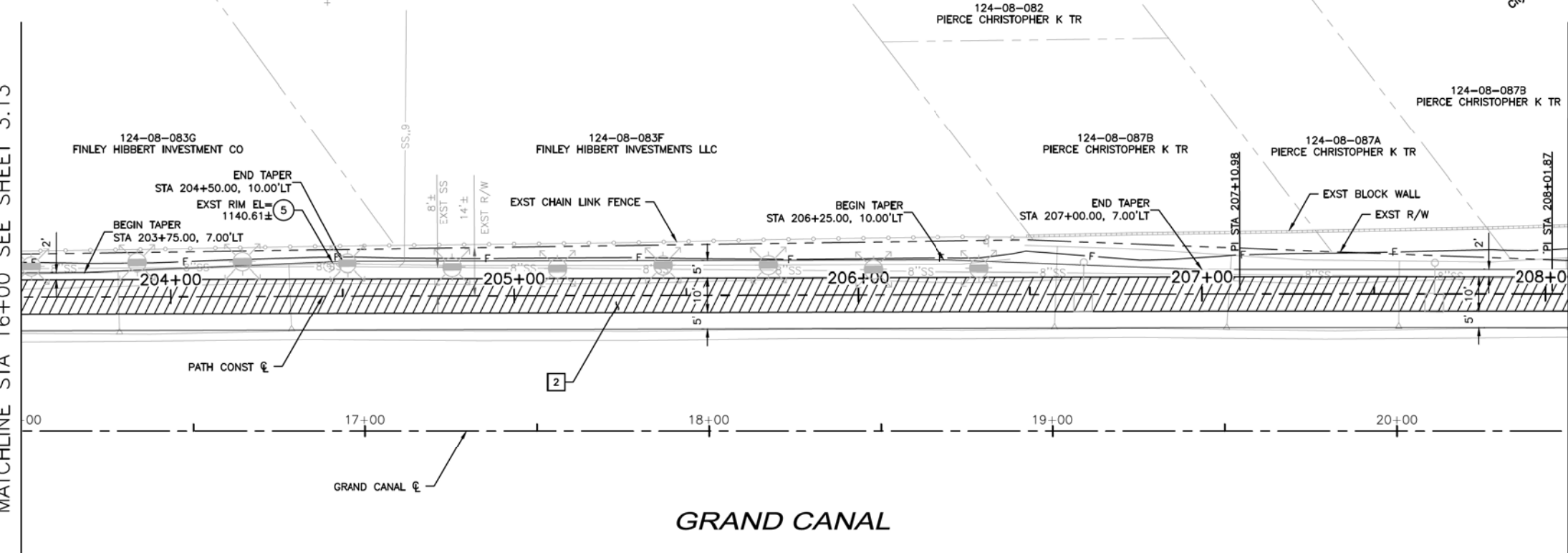
NO	DESCRIPTION	UNIT	QTY
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,493

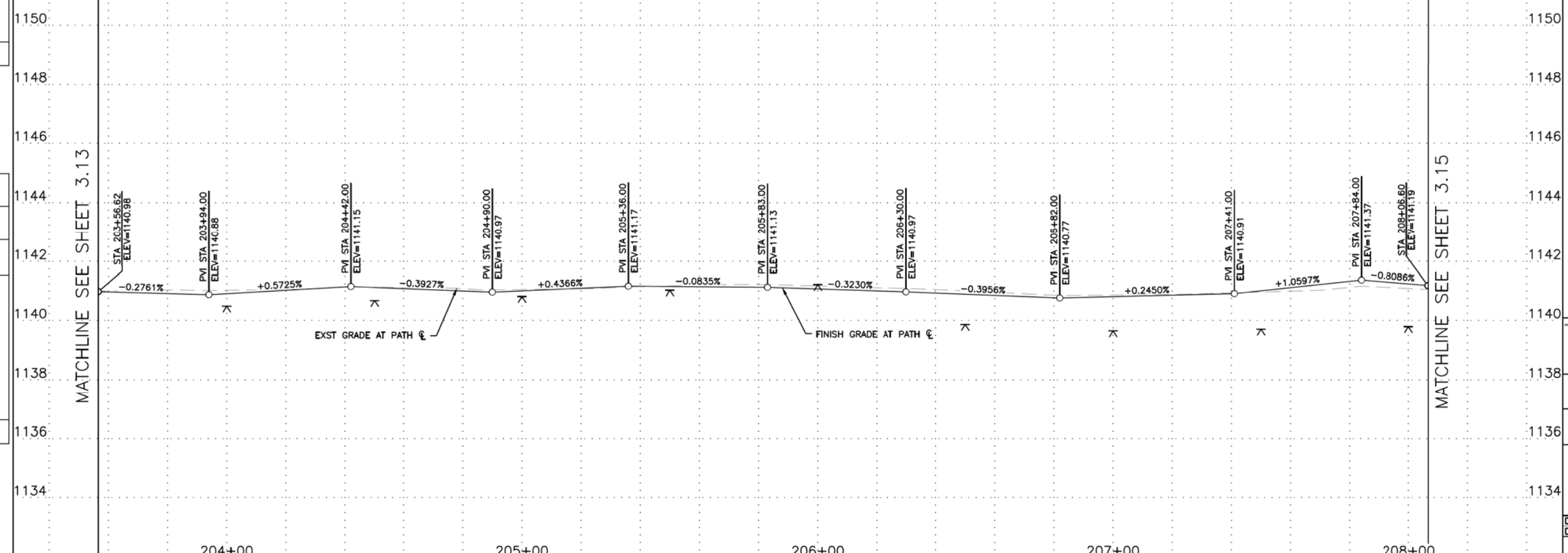
MATCHLINE STA 16+00 SEE SHEET 3.13

MATCHLINE STA 20+50 SEE SHEET 3.15

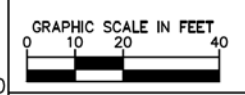


▲ T.B.M.: #301 PK NAIL
STA 210+18.13, 12.09'LT
ELEV=1141.22
N: 891222.03
E: 677030.50

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	3.14	TOTAL SHEETS:	3.99
DATE:	07/17	DATE:	07/17	DATE:	07/17	SCALE:	1"=20'H 1"=2' V		

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

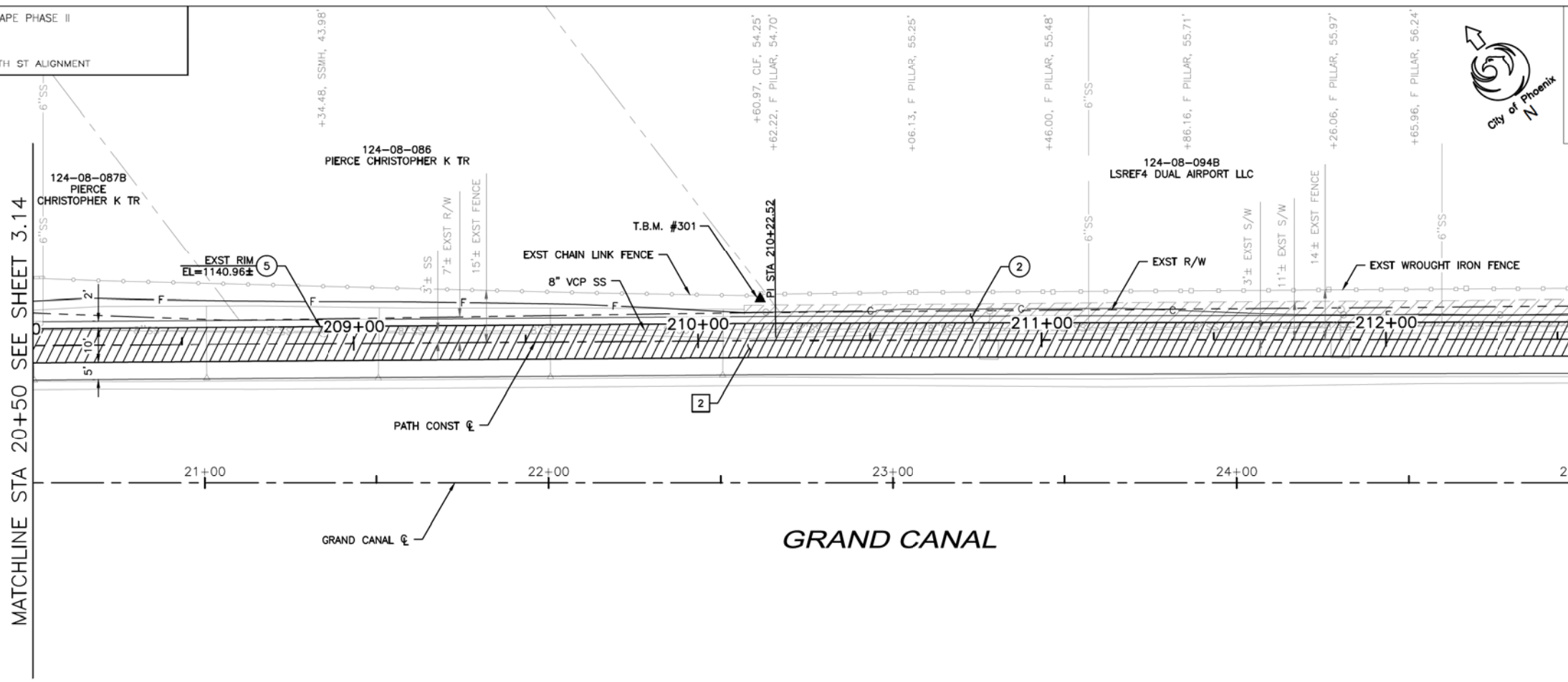
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

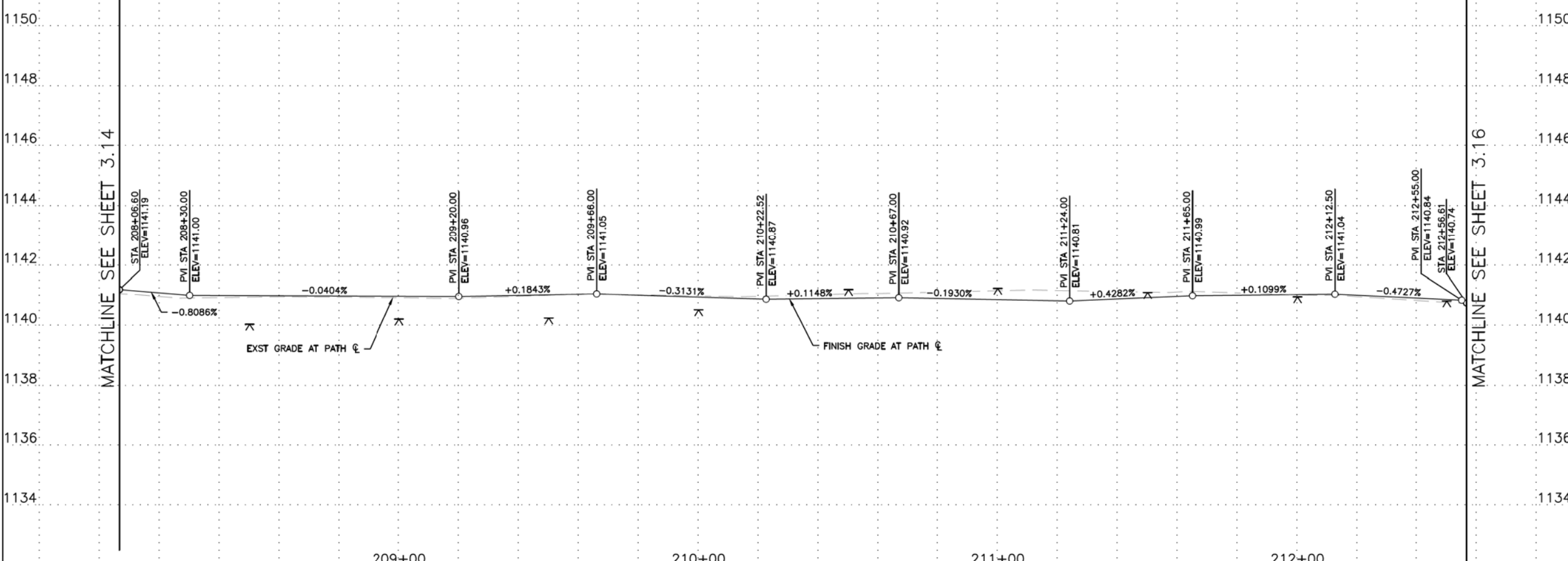
MATCHLINE STA 20+50 SEE SHEET 3.14

MATCHLINE STA 25+00 SEE SHEET 3.16



▲ T.B.M.: #301 PK NAIL
STA 210+18.13, 12.09'LT
ELEV=1141.22
N: 891222.03
E: 677030.50

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



MATCHLINE SEE SHEET 3.14

MATCHLINE SEE SHEET 3.16

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.15	3.99

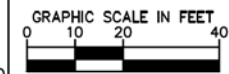
TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

EXPIRES 03-31-18

NO	DESCRIPTION	UNIT	QTY
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	1,912
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,500

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.15	3.99

SCALE: 1"=20'H
1"=2' V

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

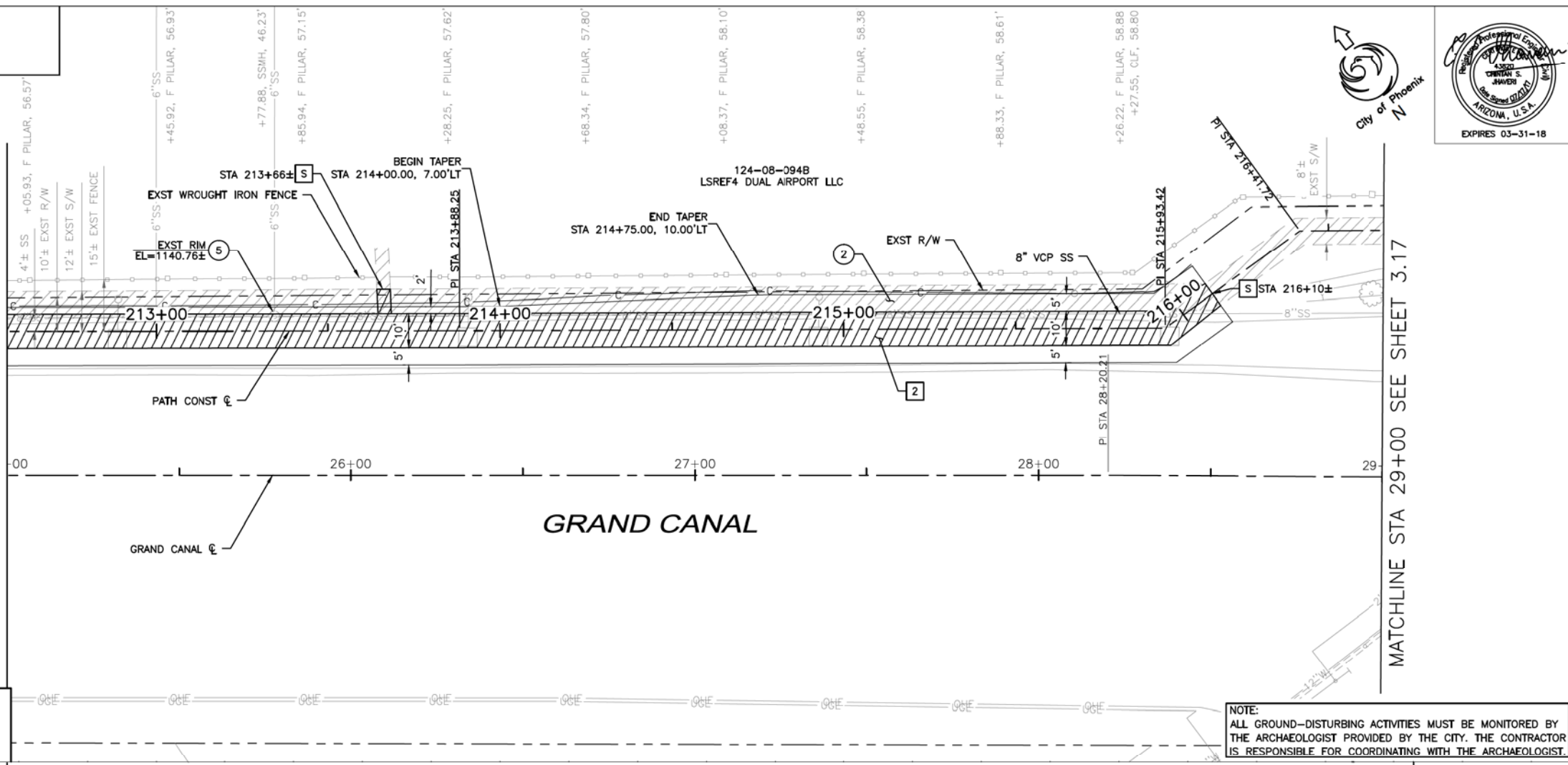
GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

MATCHLINE STA 25+00 SEE SHEET 3.15

MATCHLINE SEE SHEET 3.15

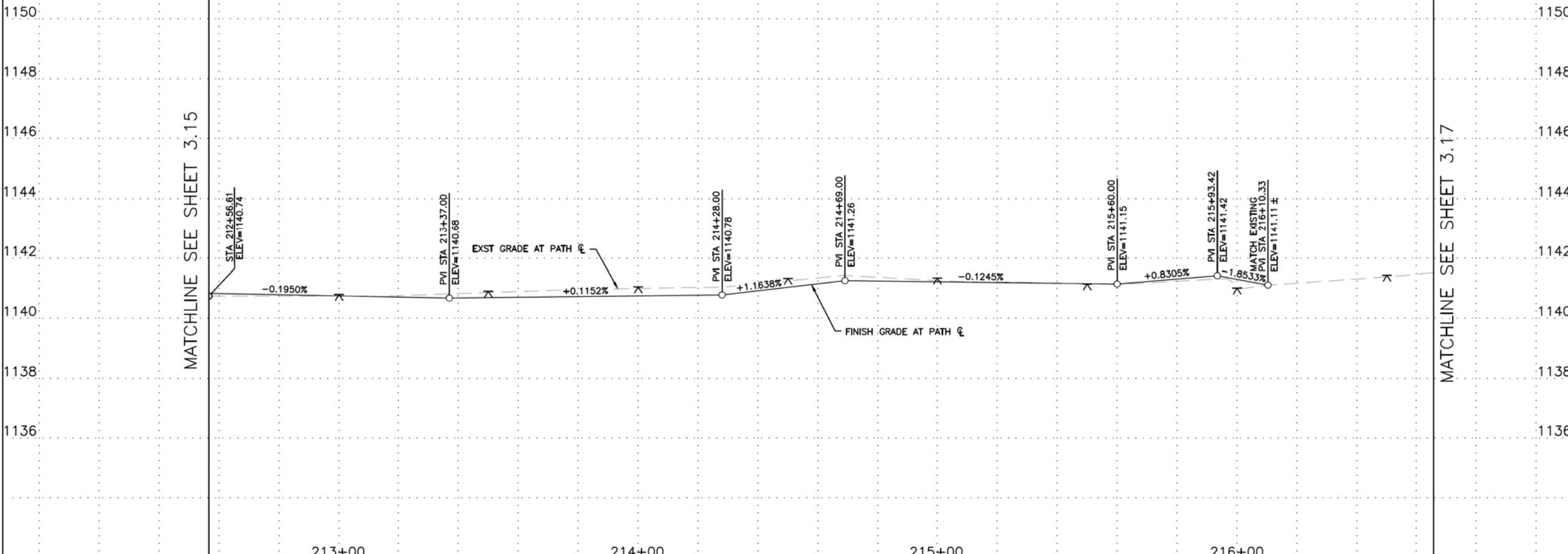
MATCHLINE STA 29+00 SEE SHEET 3.17

MATCHLINE SEE SHEET 3.17



NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

▲ T.B.M.: #302 CHISELED "X"
STA 216+10.25, 95.99'RT
ELEV=1144.02
N: 890771.56
E: 677499.22



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.16	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

Professional Engineer
ARIZONA, U.S.A.
EXPIRES 03-31-18

NO	DESCRIPTION	UNIT	QTY
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	2,737
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	3,546

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.16	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2' V				

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

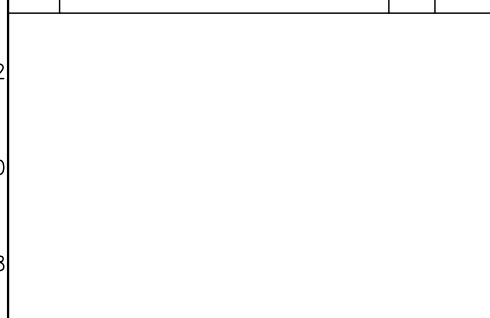
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.18	3.99

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034 REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,450	
19	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 3.11	EA	1	

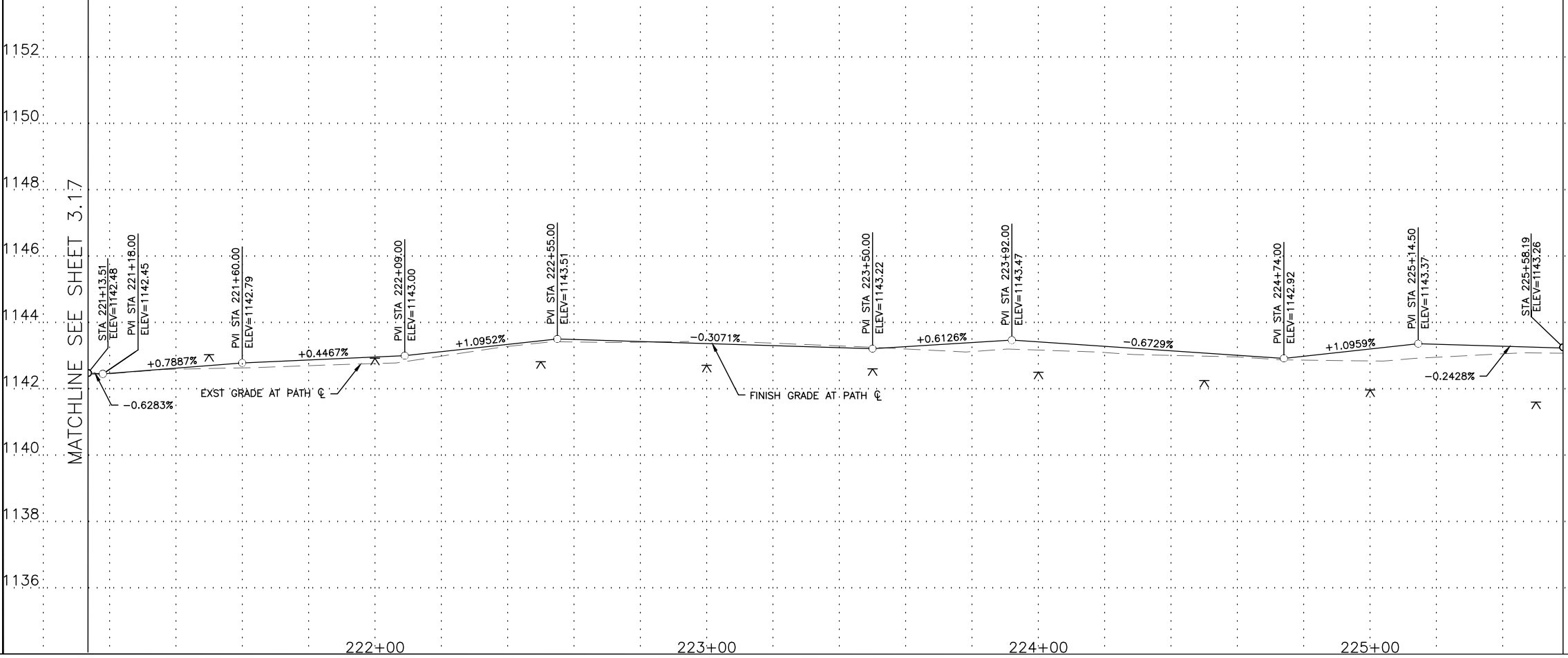
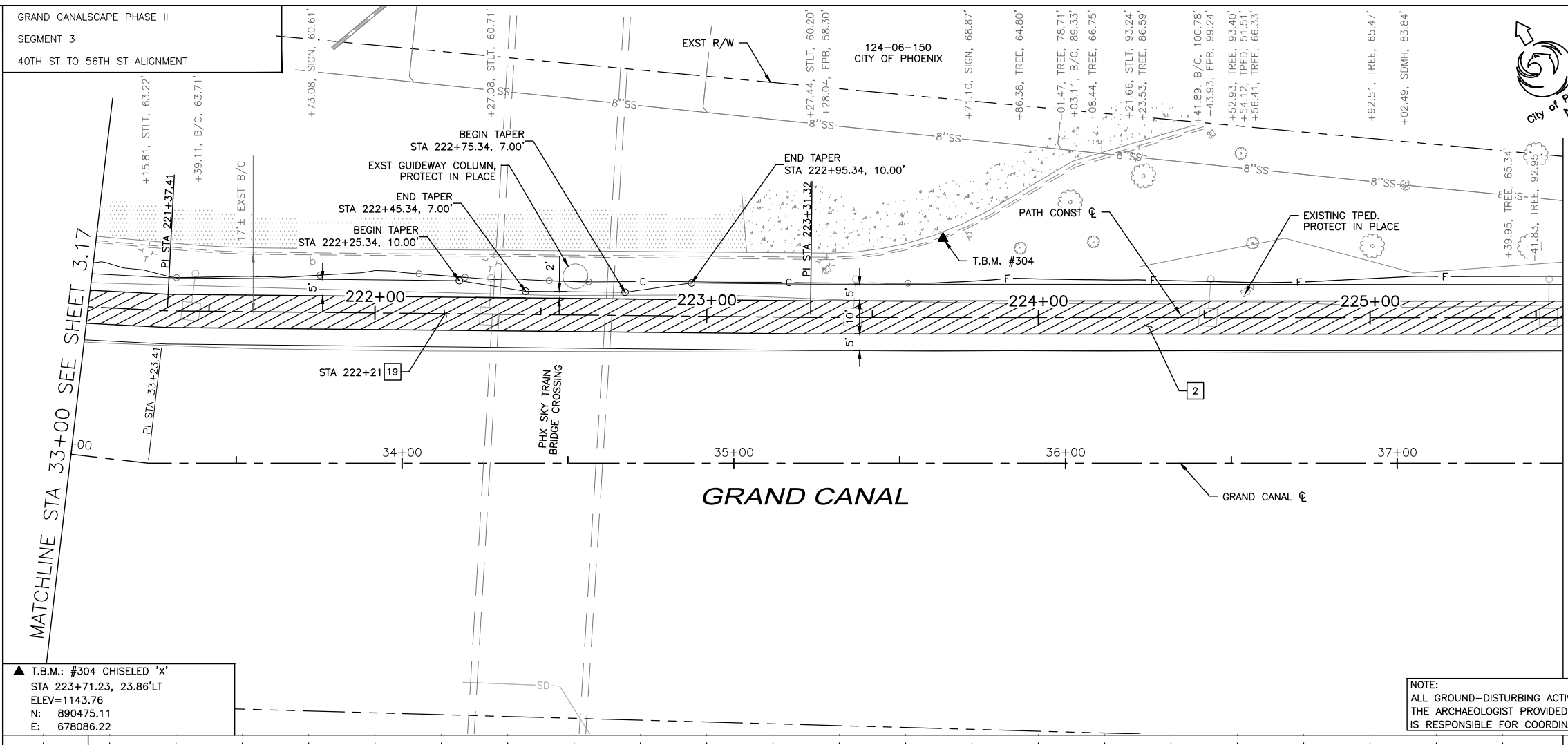
NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.18	3.99
SCALE:	1"=20'H	1"=2' V		



▲ T.B.M.: #304 CHISELED 'X'
 STA 223+71.23, 23.86'LT
 ELEV=1143.76
 N: 890475.11
 E: 678086.22

NOTE:
 ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

NO.	DESCRIPTION	REV BY/CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

City of Phoenix

Professional Engineer
CHITAN S. JHAVERI
No. 30601
ARIZONA, U.S.A.
EXPIRES 03-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.19	3.99

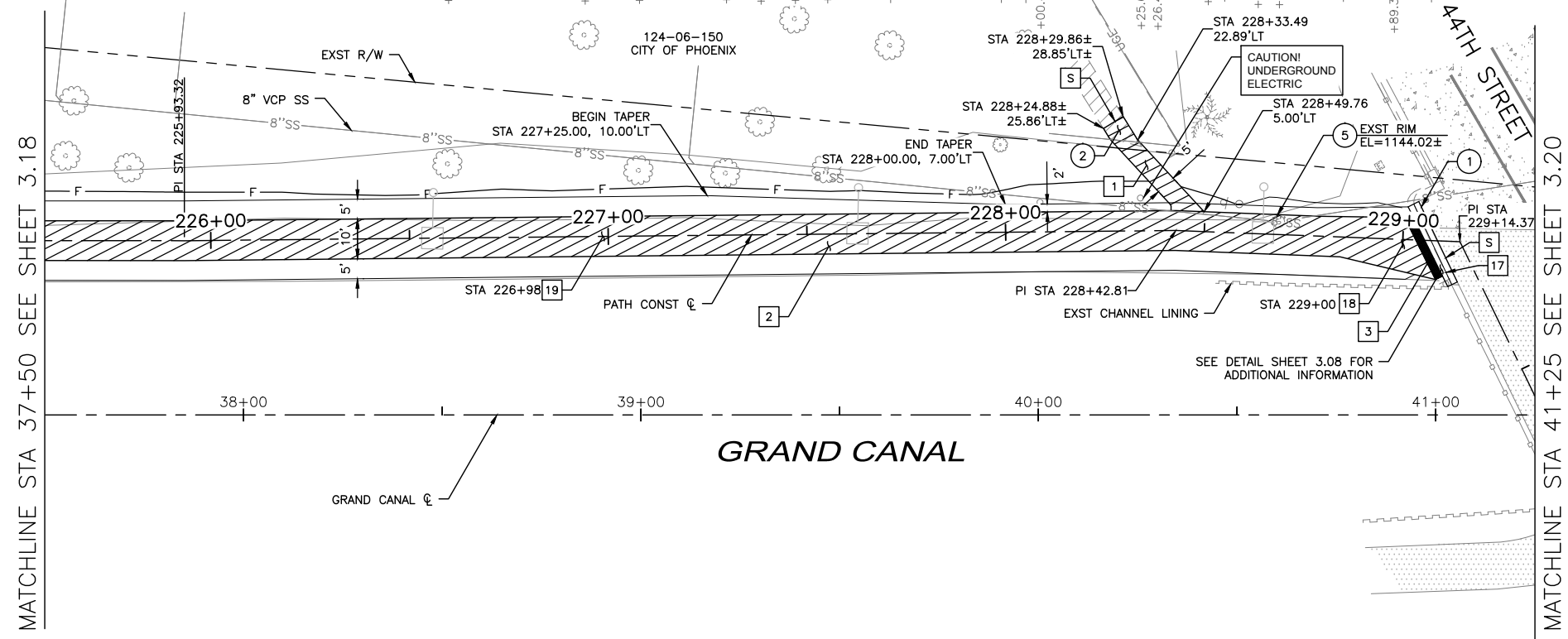
TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	23
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	35
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

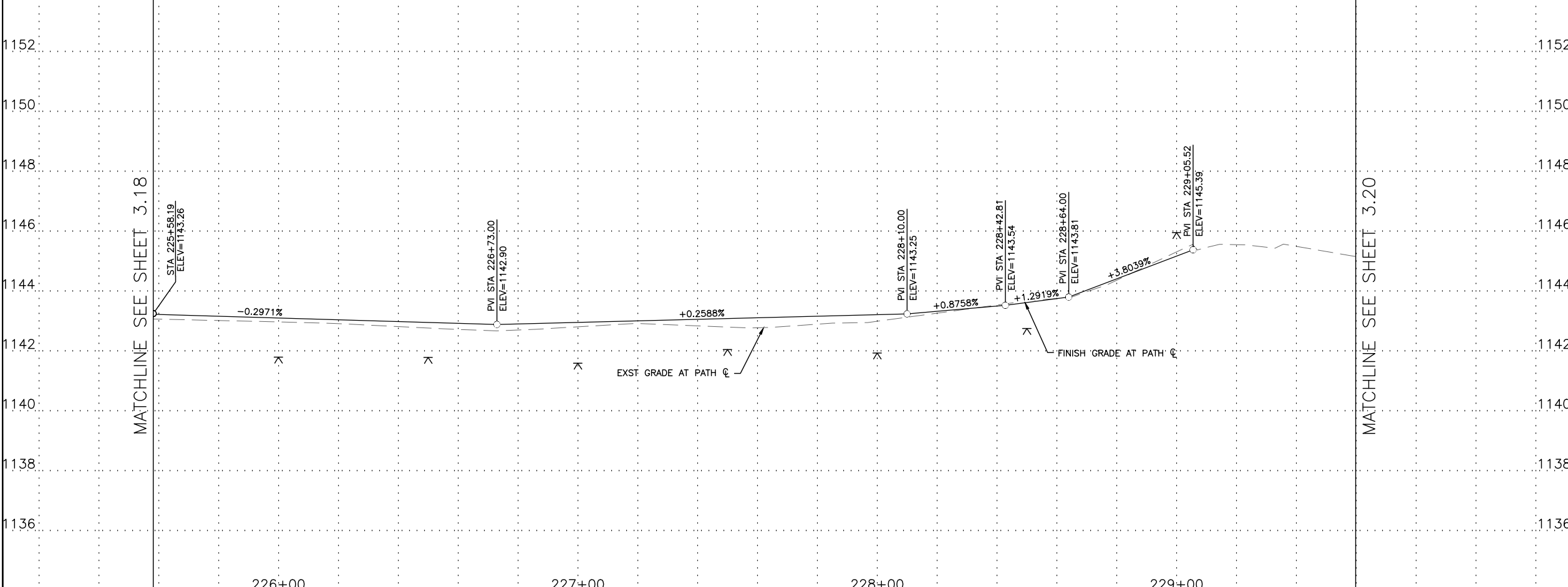
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	118
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	3,544
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	35
17	CONSTRUCT CONCRETE ROLL CURB AND GUTTER PER MAG STD DTL 220-1 TYPE 'C'	LF	23
18	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 3.11	EA	1
19	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 3.11	EA	1



▲ T.B.M.: #305 ACF
STA 229+84.97, 8.41'RT
ELEV=1145.45
N: 890108.09
E: 678527.13

NOTE:
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NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

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Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.19	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

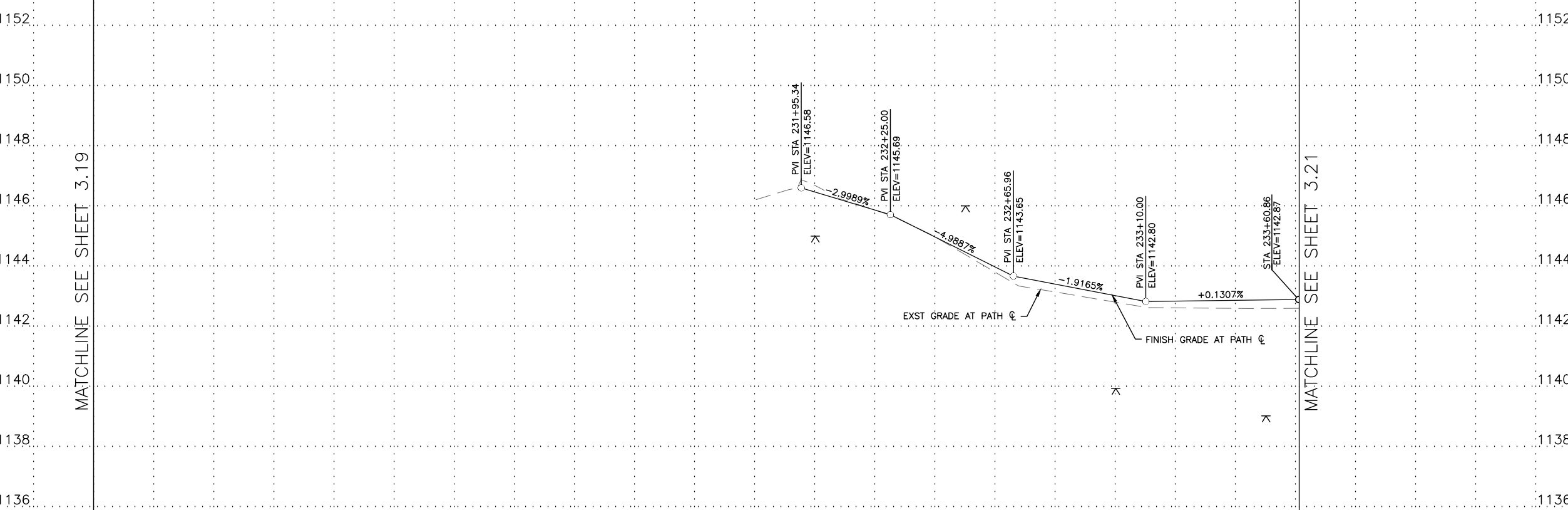
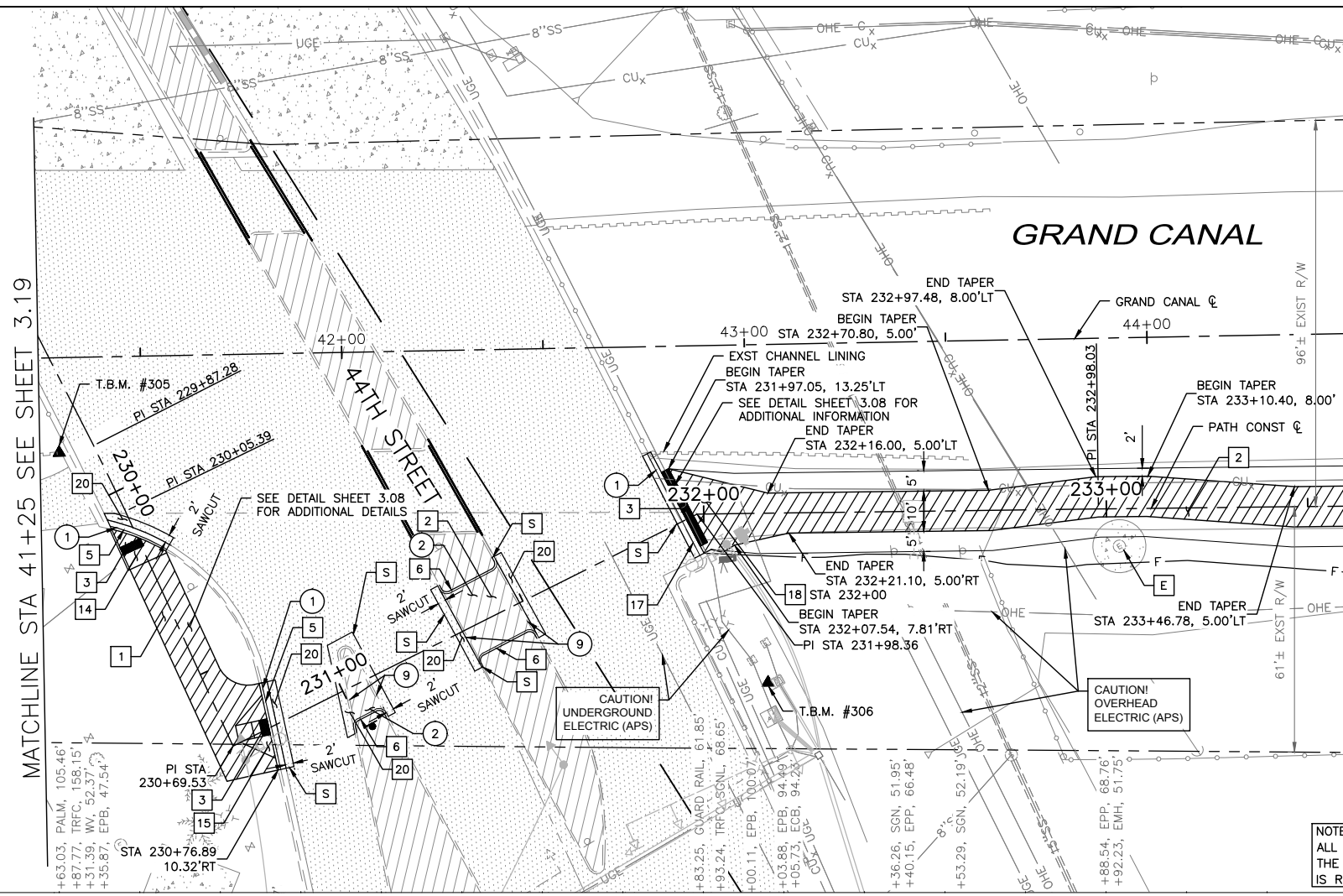
GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

▲ T.B.M.: #306 CHISELED "X"
STA 232+15.43, 42.04'RT
ELEV=1147.32
N: 889967.06
E: 678646.95



▲ T.B.M.: #306 CHISELED "X"
STA 232+15.43, 42.04'RT
ELEV=1147.32
N: 889967.06
E: 678646.95



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.20	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	57	
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	450	
9	REMOVE EXISTING CONCRETE SINGLE CURB	LF	90	

CONSTRUCTION NOTES				
NO	DESCRIPTION	UNIT	QTY	
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	372	
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	1,750	
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	50	
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	37	
6	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD DTL 222, TYPE 'A', H=6"	LF	53	
14	CONCRETE CURB RAMP PER COP STD DTL P1237 MODIFIED PER PLANS - SEE SHEET 3.08	SF	68	
15	CONCRETE MID BLOCK RAMP WITH DETACHED SIDEWALK PER COP STD DTL P1241-2	SF	338	
17	CONSTRUCT CONCRETE ROLL CURB AND GUTTER PER MAG STD DTL 220-1 TYPE 'C'	LF	28	
18	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 3.11	EA	1	
20	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 3.05	SY	85	

NOTE:
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NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DES:	GRS:	CK:	CSJ	SHEET NO:	TOTAL SHEETS
BRR	GRS	CSJ	CSJ	CSJ	3.20	3.99

DATE: 07/17 DATE: 07/17 DATE: 07/17
SCALE: 1"=20'H
1"=2' V

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-10-023F
CITY OF PHOENIX



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.23	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,617

REVISION BY CITY OF PHOENIX

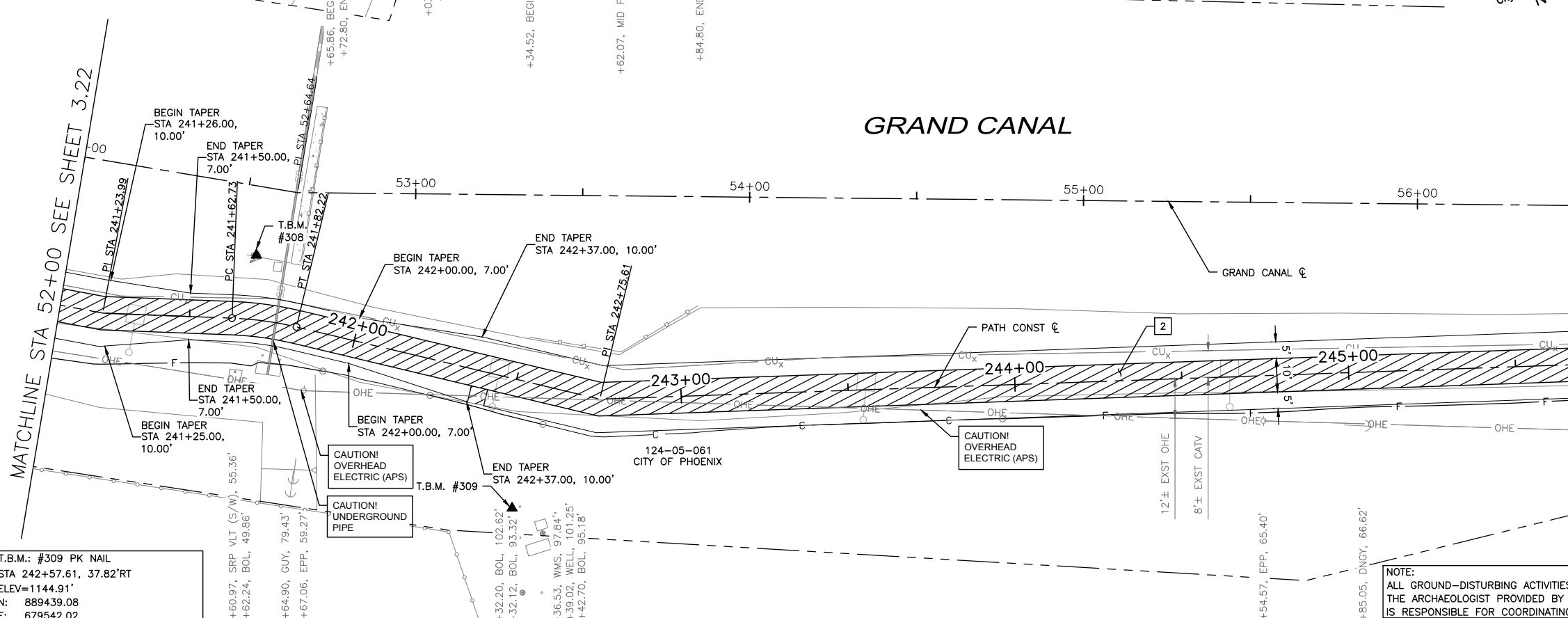
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

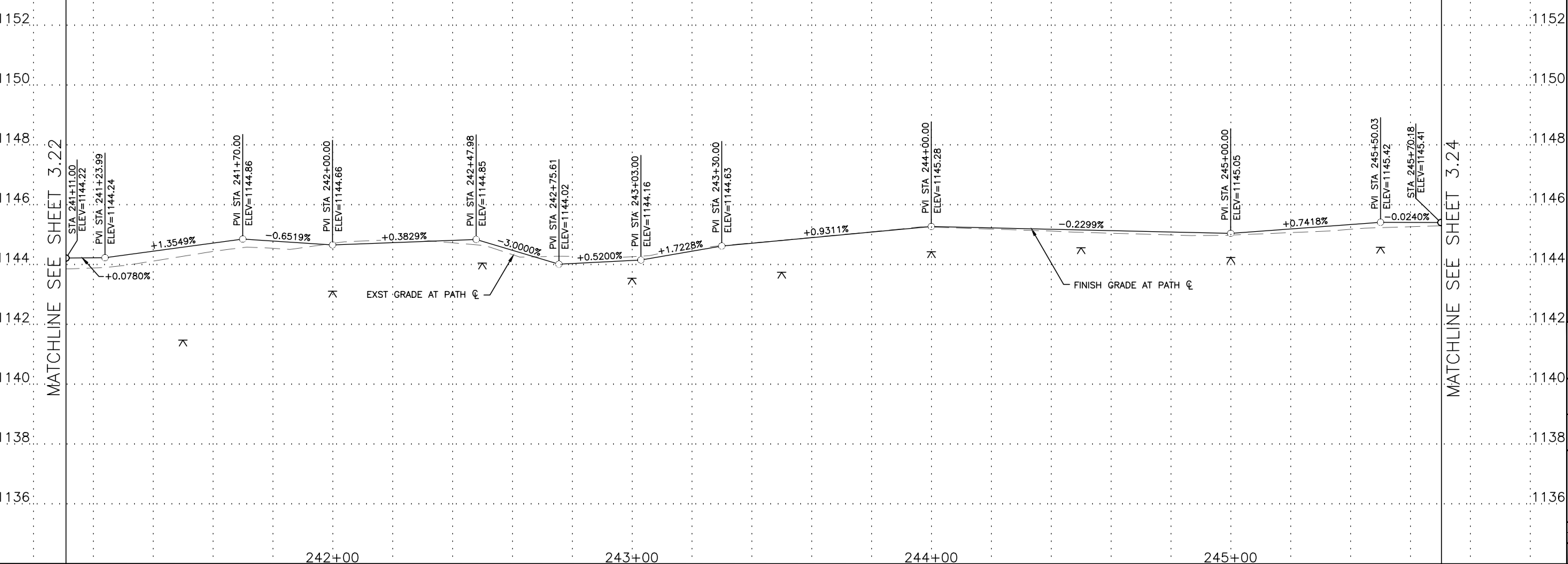
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

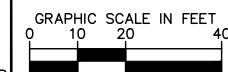
NO.	DESCRIPTION	REV BY	CHK BY	DATE



▲ T.B.M.: #309 PK NAIL
STA 242+57.61, 37.82'RT
ELEV=1144.91'
N: 889439.08
E: 679542.02



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.23	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-10-023F
CITY OF PHOENIX



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.24	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

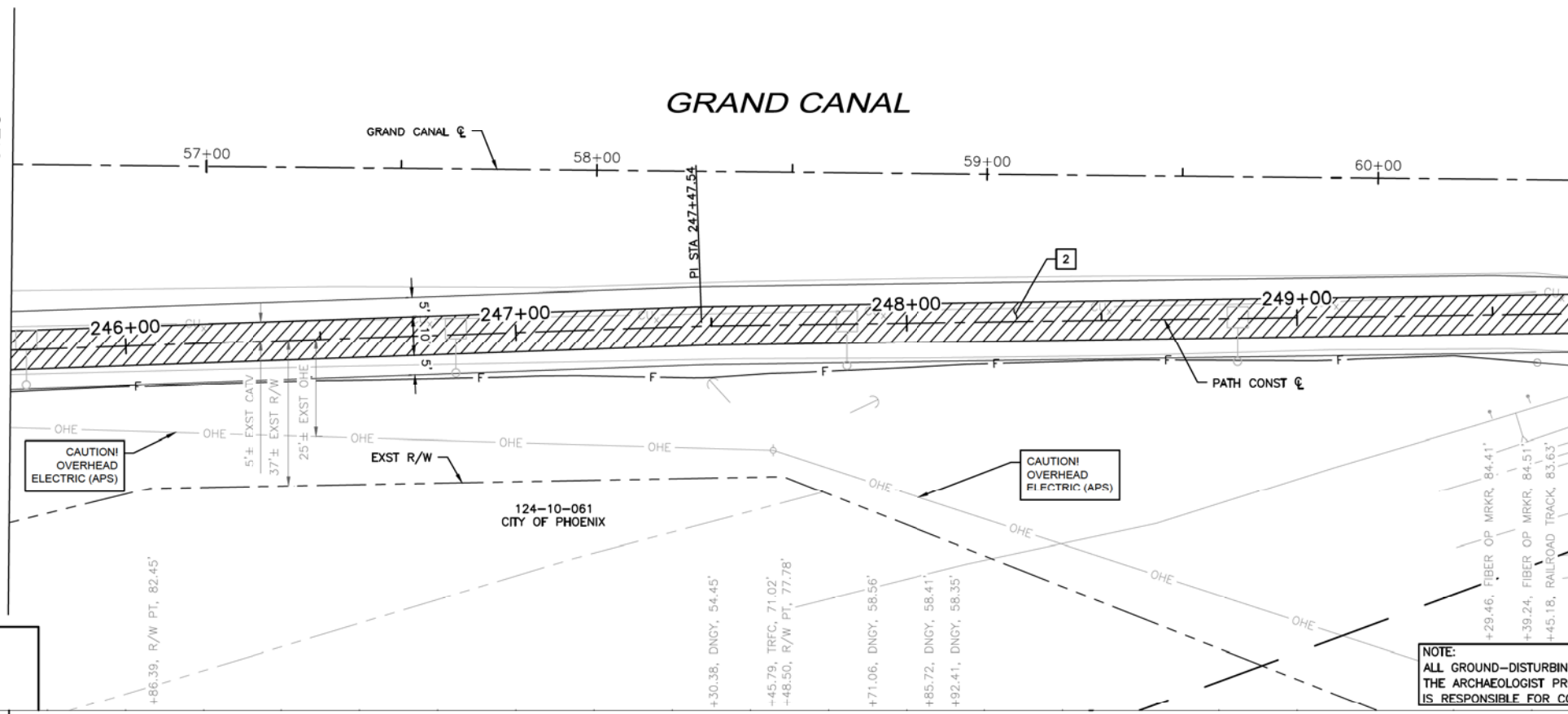
NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,003

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

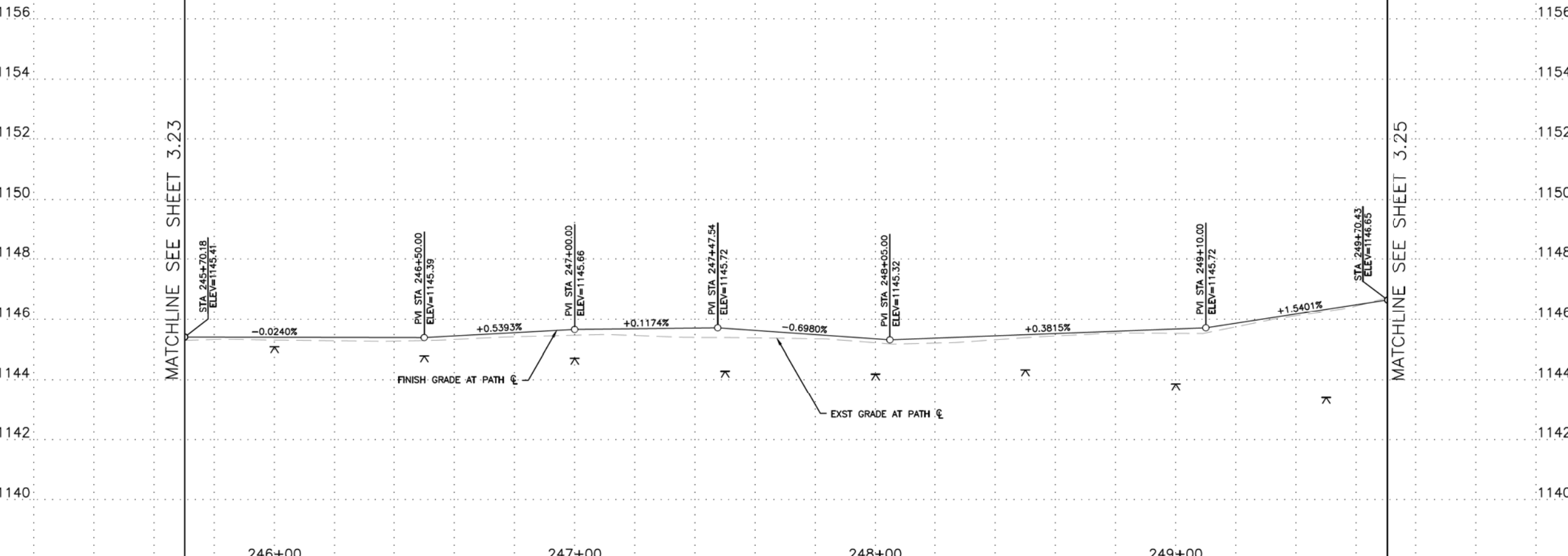
MATCHLINE STA 56+50 SEE SHEET 3.23

MATCHLINE STA 60+50 SEE SHEET 3.25

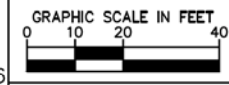


▲ T.B.M.: #310 PK NAIL
STA 250+83.05, 26.74'LT
ELEV=1147.89
N: 889151.68
E: 680317.72

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

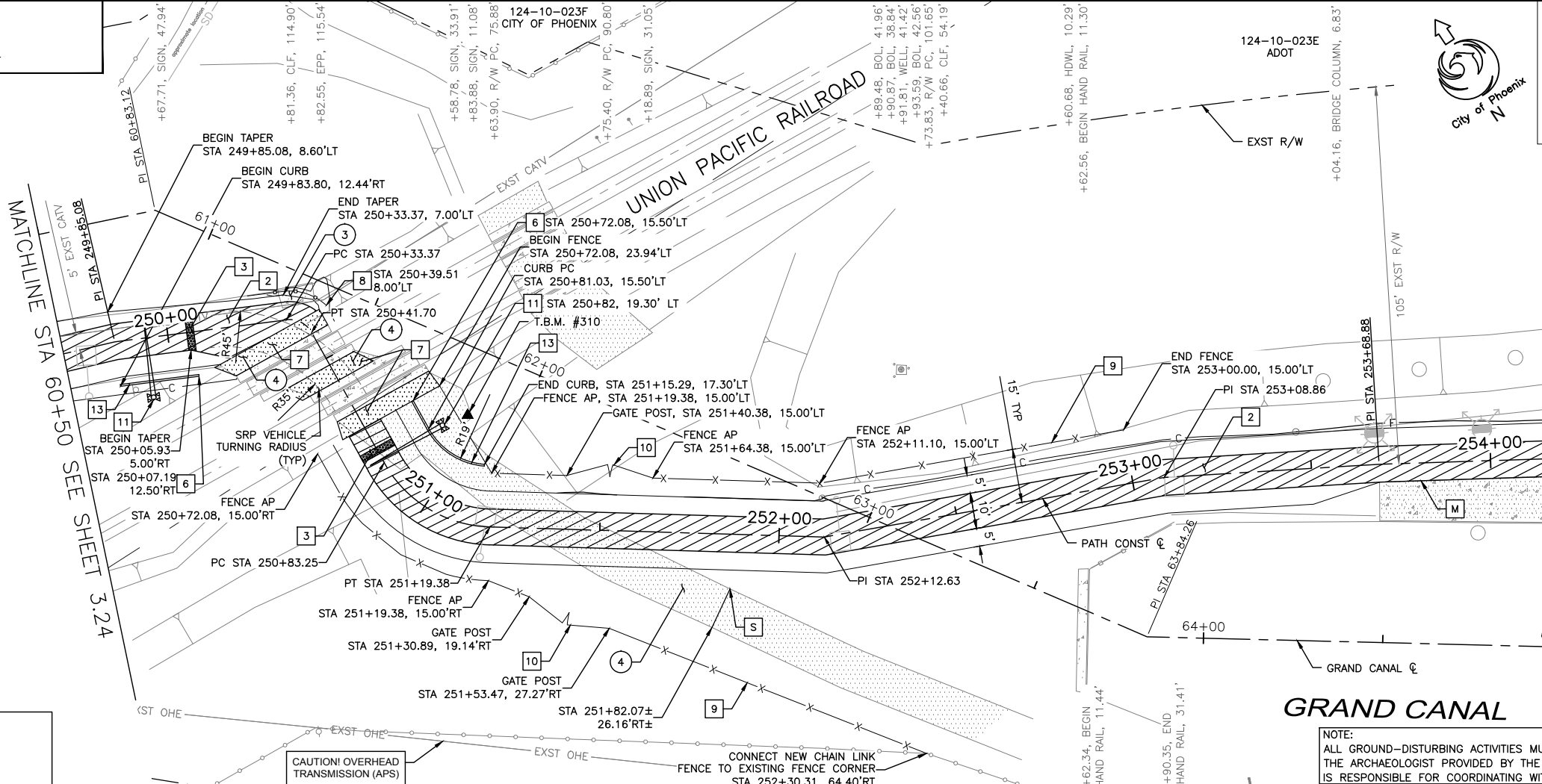


"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.24	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2' V				

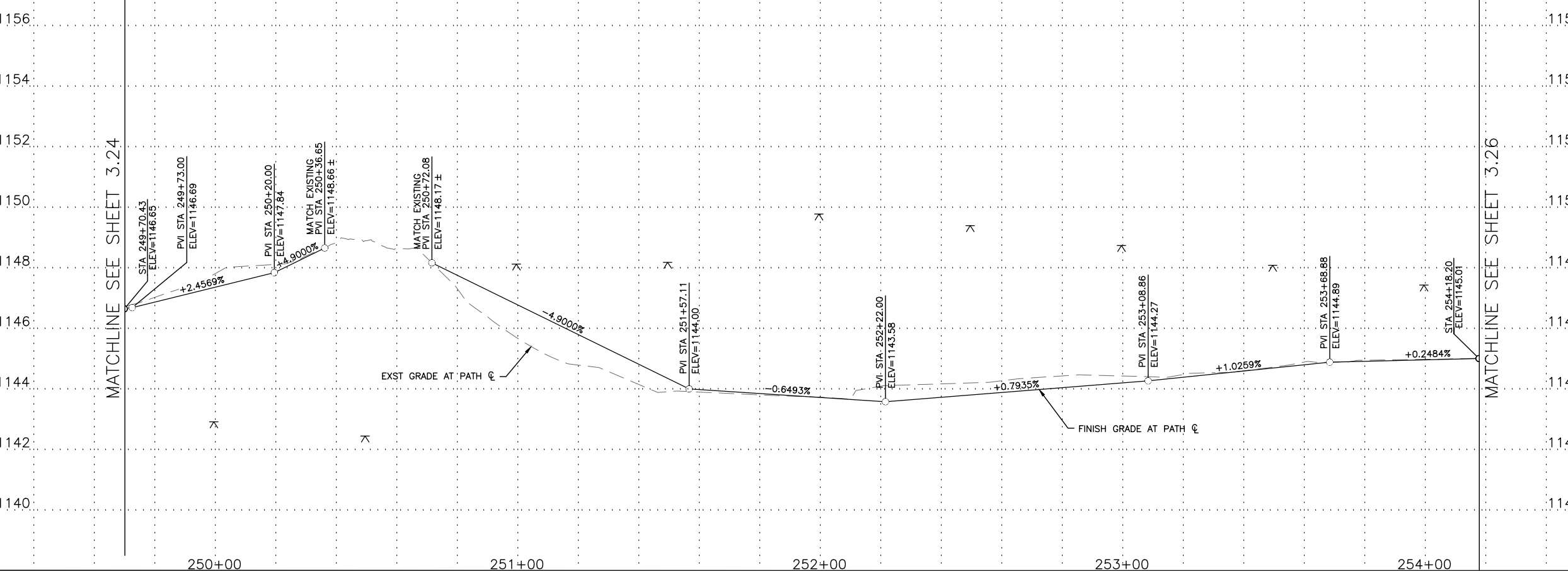
GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



▲ T.B.M.: #310 PK NAIL
STA 250+83.05, 26.74'LT
ELEV=1147.89
N: 889151.68
E: 680317.72

CAUTION! OVERHEAD TRANSMISSION (APS)

CONNECT NEW CHAIN LINK FENCE TO EXISTING FENCE CORNER STA 252+30.31, 64.40'RT



MATCHLINE SEE SHEET 3.24

MATCHLINE SEE SHEET 3.26

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.25	3.99

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
3	REMOVE EXISTING CONCRETE PAVEMENT	SY	6
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	212

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,183
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	40
6	CONSTRUCT CONCRETE SINGLE CURB PER MAG STD DTL 222, TYPE 'A', H=6"	LF	50
7	CONSTRUCT ASPHALT CONCRETE PAVEMENT. PAVEMENT SECTION TO MATCH EXISTING SECTION	SY	47
8	INSTALL 48" REMOVEABLE SAFETY RAIL PER MAG STD DTL 145, TYPE 3	LF	23
9	INSTALL 6' CHAIN LINK FENCE PER ADOT STD DTL C-12.20, TYPE 1	LF	361
10	INSTALL 6' CHAIN LINK FENCE DOUBLE GATE PER ADOT STD DTL C-12.20, (24' WIDE)	EA	2
11	INSTALL RAILROAD CROSSING GATE & SIGNAL ARM (TO BE INSTALLED BY UPRR)	NPI	-
13	CONSTRUCT CURB TERMINATION PER MAG STD DTL 222	EA	2

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.25	3.99
SCALE: 1"=20'H				
1"=2' V				

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY/CHK BY	DATE

REVISION BY CITY OF PHOENIX

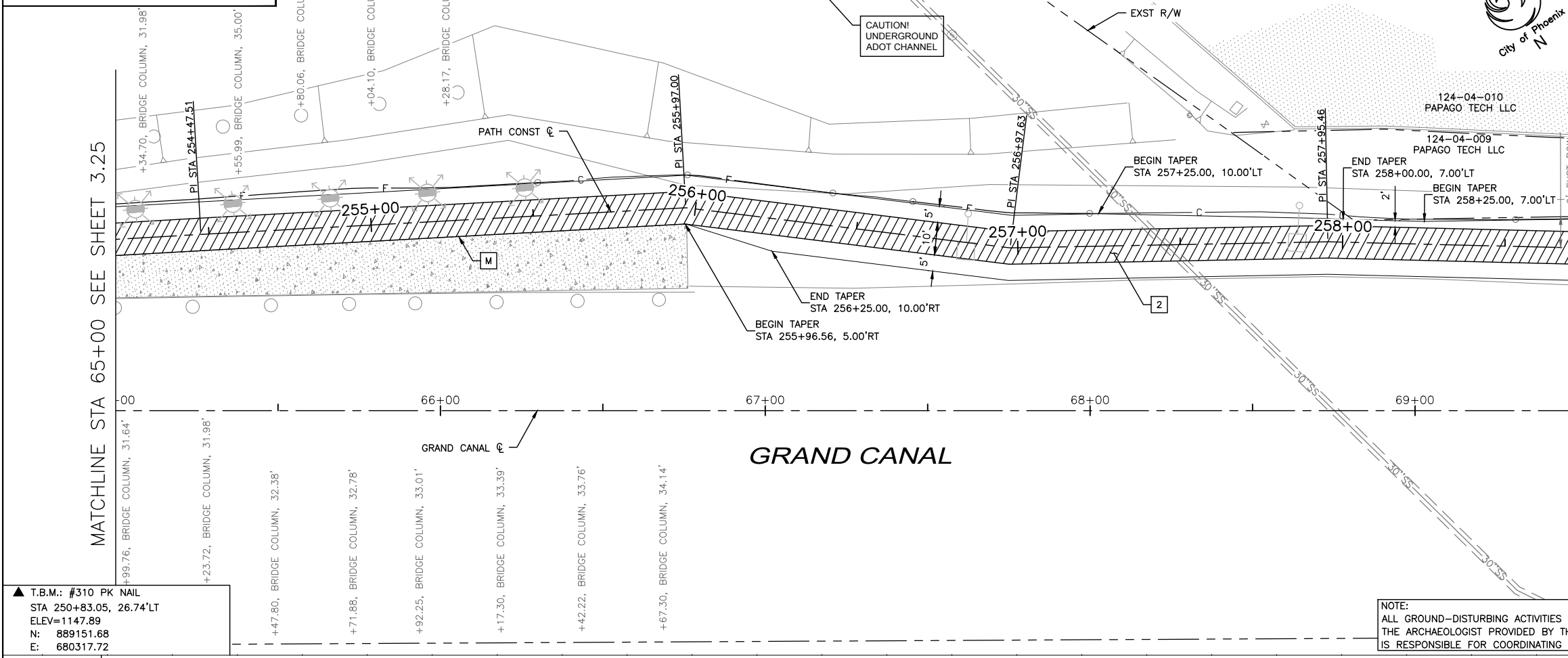
NO.	DESCRIPTION	REV BY/CHK BY	DATE

REVISION BY CITY OF PHOENIX

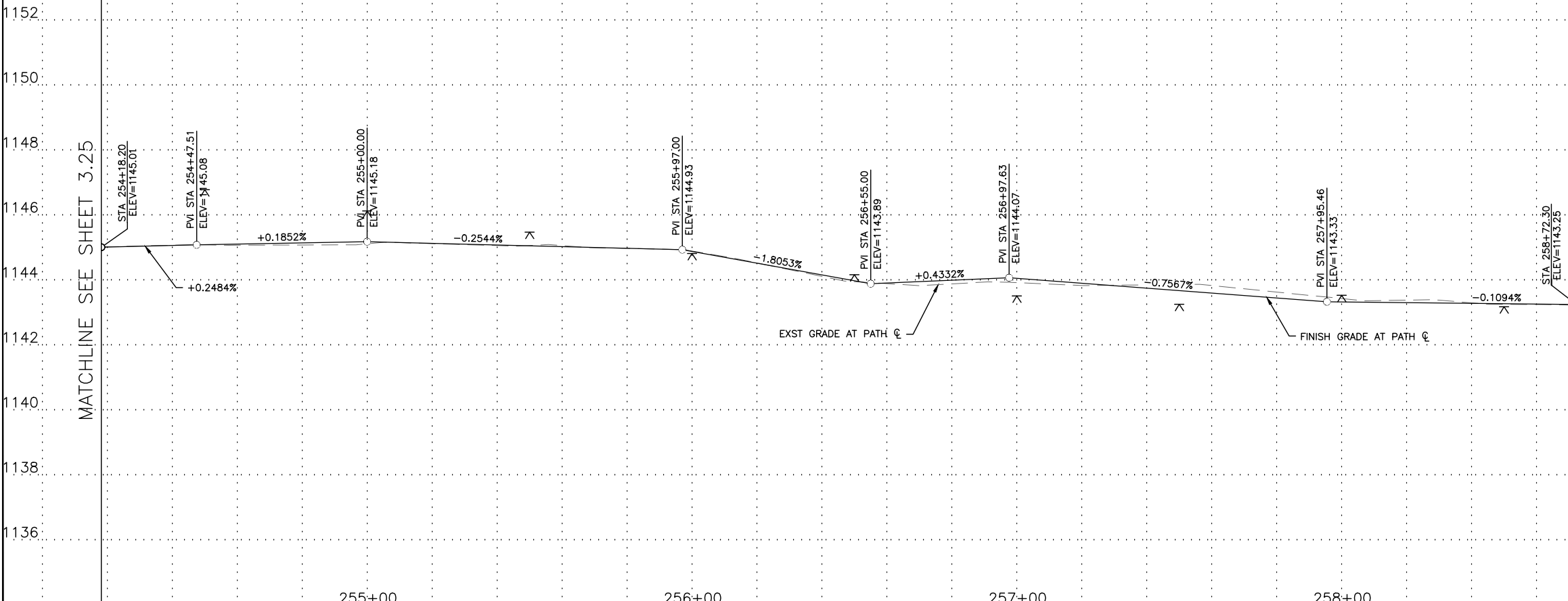
NO.	DESCRIPTION	REV BY/CHK BY	DATE

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



▲ T.B.M.: #310 PK NAIL
STA 250+83.05, 26.74'LT
ELEV=1147.89
N: 889151.68
E: 680317.72



City of Phoenix
Professional Engineer
CHRISTIAN S. JAWAHI
No. 8550
Arizona, U.S.A.
EXPIRES 03-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.26	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,505

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA 811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.26	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.27	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	40
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	620
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	389
5	ADJUST EXISTING MANHOLE FRAME AND COVER PER MAG STD DTL 422	EA	1

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	151
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,373
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	96
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244, MODIFIED (SEE DETAIL SHEET 3.09)	SF	634
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	40
18	SANDBLAST STREET NAME STENCIL PER DETAIL A SHEET 3.11	EA	2
19	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 3.11	EA	1
20	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 3.05	SY	9
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244, MODIFIED (SEE DETAIL SHEET 3.09)	SF	634

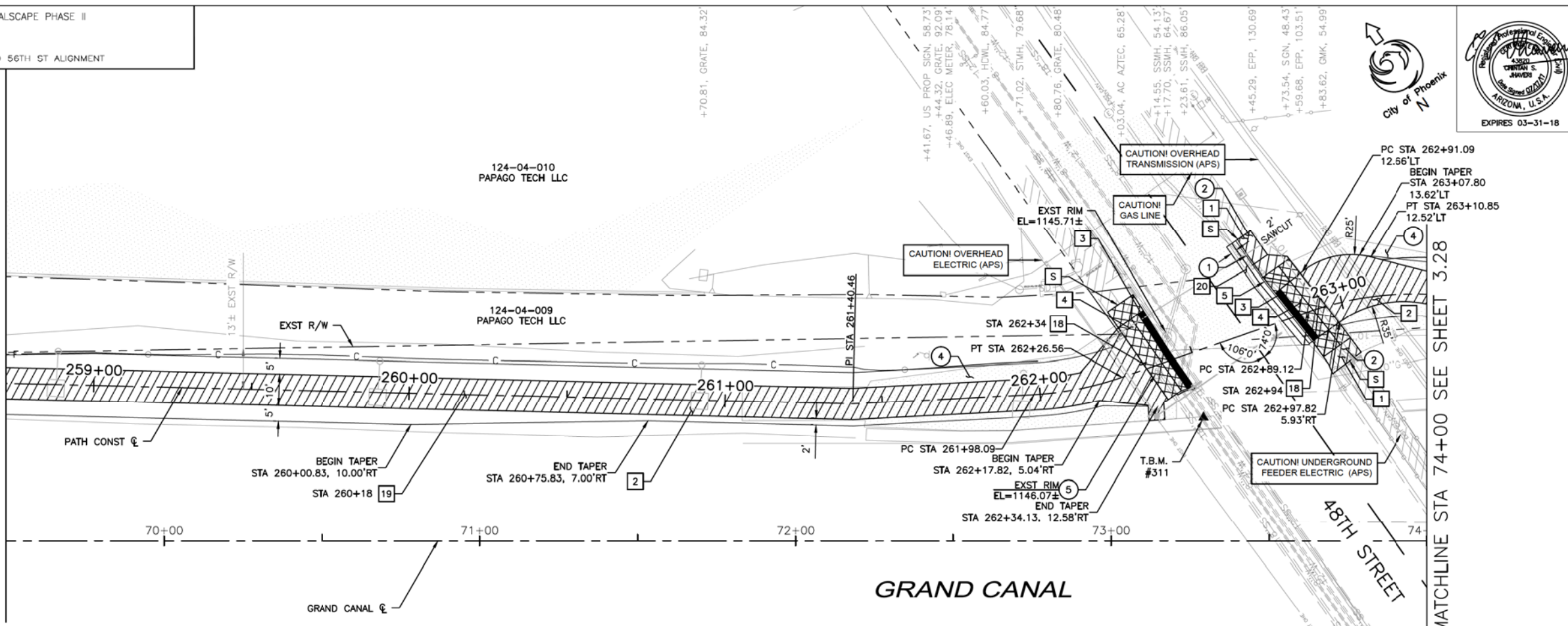
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

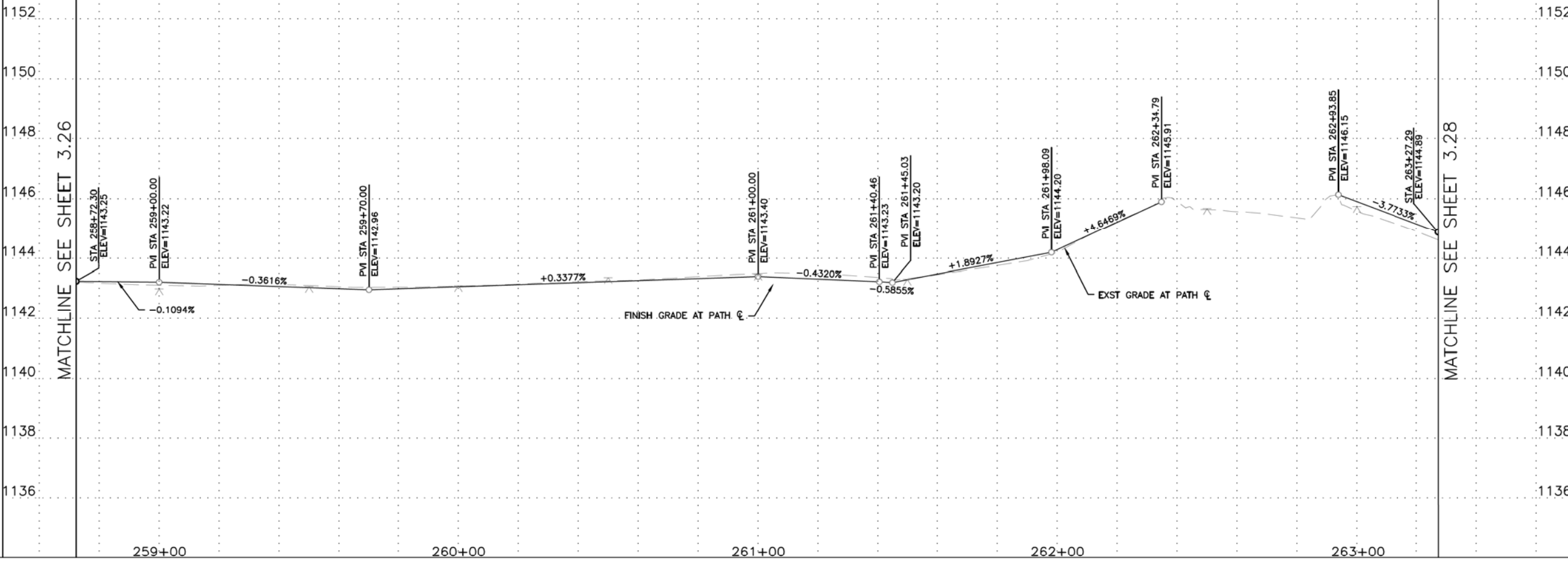
MATCHLINE STA 69+50 SEE SHEET 3.26

MATCHLINE STA 74+00 SEE SHEET 3.28



▲ T.B.M.: #311 CHISELED 'X'
STA 262+46.67, 20.63'RT
ELEV= 1146.35
N: 888486.97
E: 681239.05

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



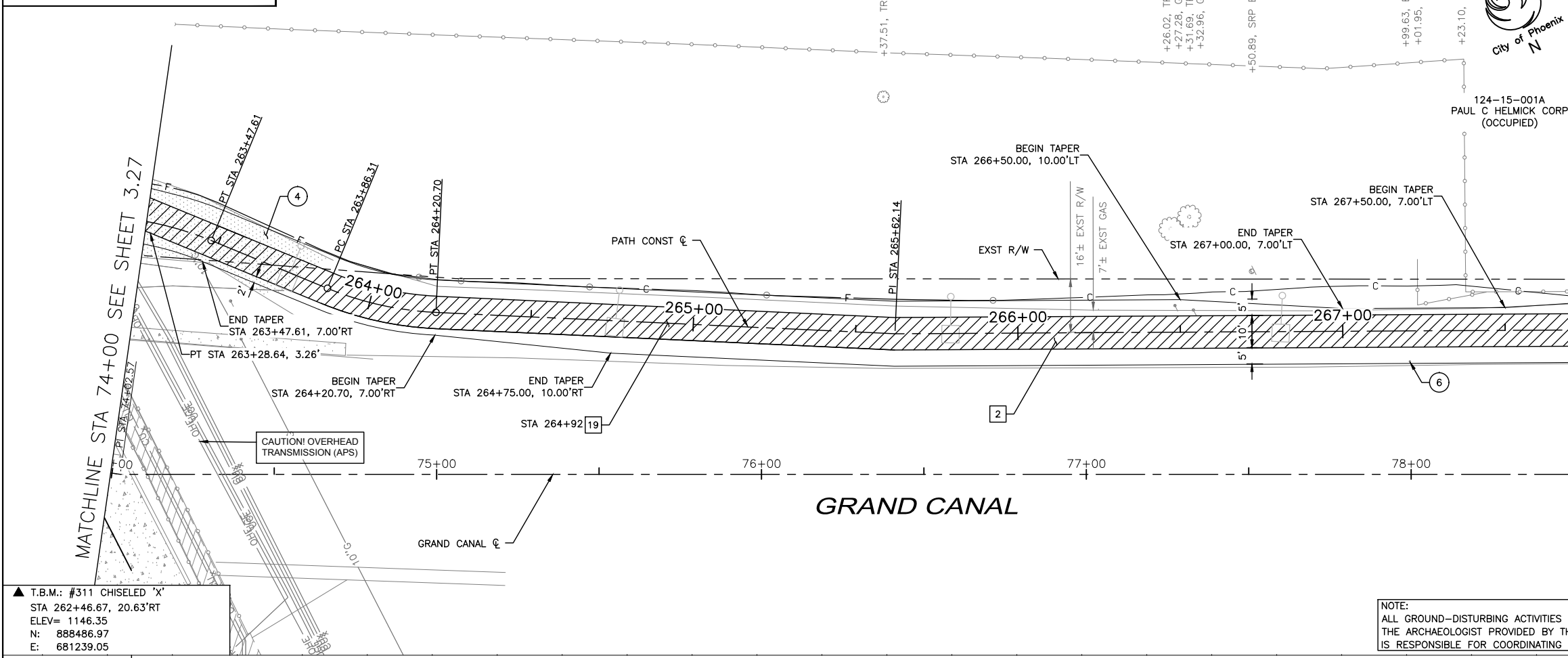
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.27	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2'-V				

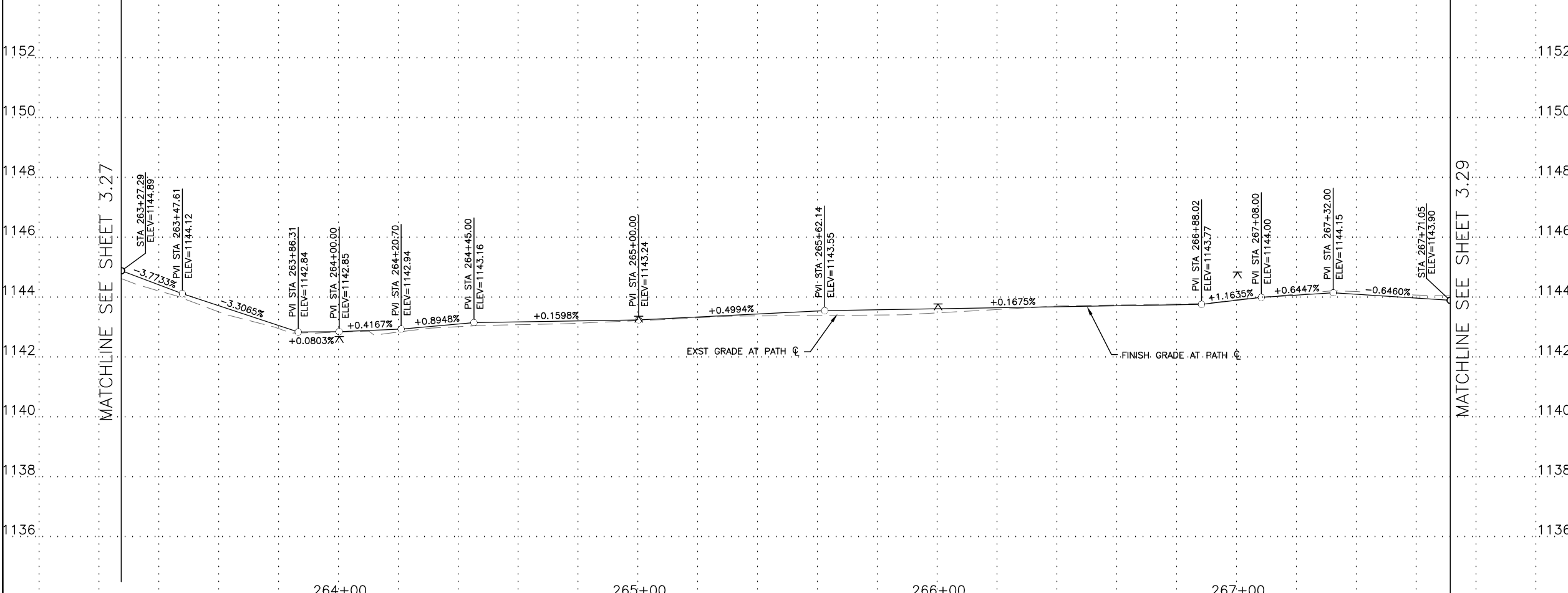
NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



▲ T.B.M.: #311 CHISELED 'X'
STA 262+46.67, 20.63'RT
ELEV= 1146.35
N: 888486.97
E: 681239.05

NOTE:
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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.28	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO	DESCRIPTION	UNIT	QTY
4	REMOVE EXISTING ASPHALT CONCRETE PAVEMENT	SY	110
6	REMOVE EXISTING BOLLARD	EA	1

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,442
19	SANDBLAST STREET NAME STENCIL PER DETAIL B SHEET 3.11	EA	1

CONSTRUCTION NOTES

NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

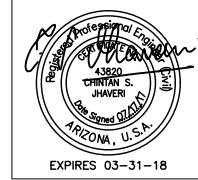
PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

**GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114**

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET	TOTAL
DATE:	07/17	DATE:	07/17	DATE:	07/17	NO:	SHEETS
SCALE:	1"=20'H					3.28	3.99
	1"=2' V						

GRAND CANALSCAPE PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST ALIGNMENT

+56.26, R/W PC, 54.57'
 +56.41, EMK, 53.75'



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.29	3.99

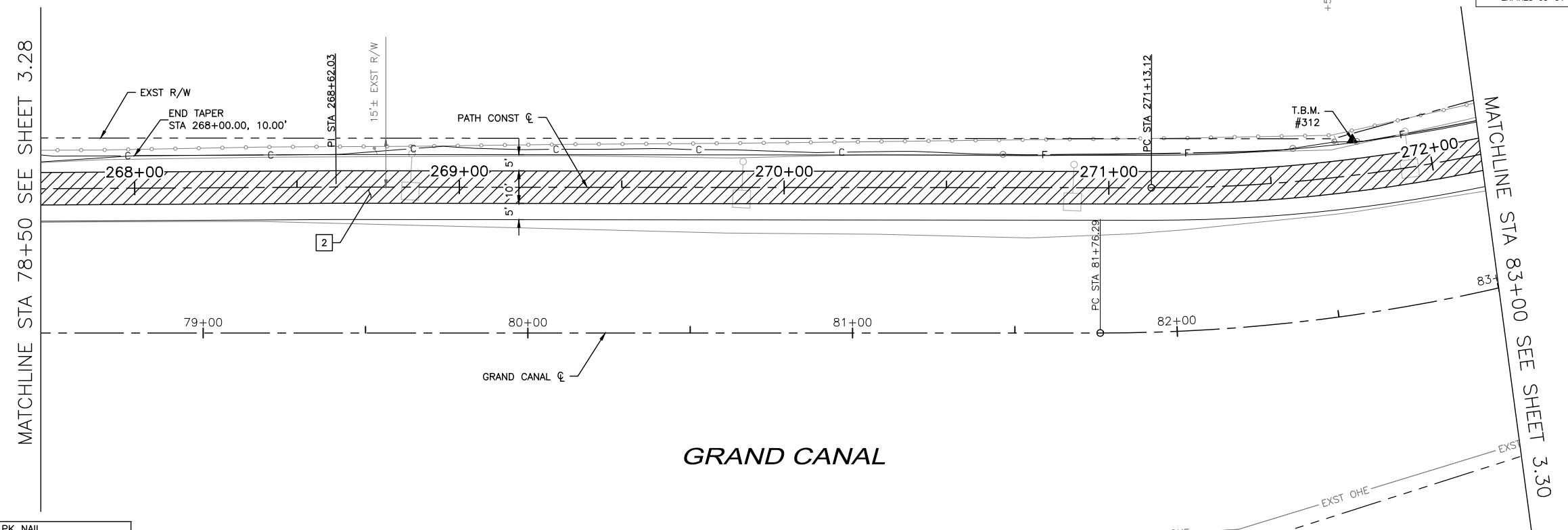
TRACE CONSULTING
 1201 E. Jefferson St., Suite 3
 Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

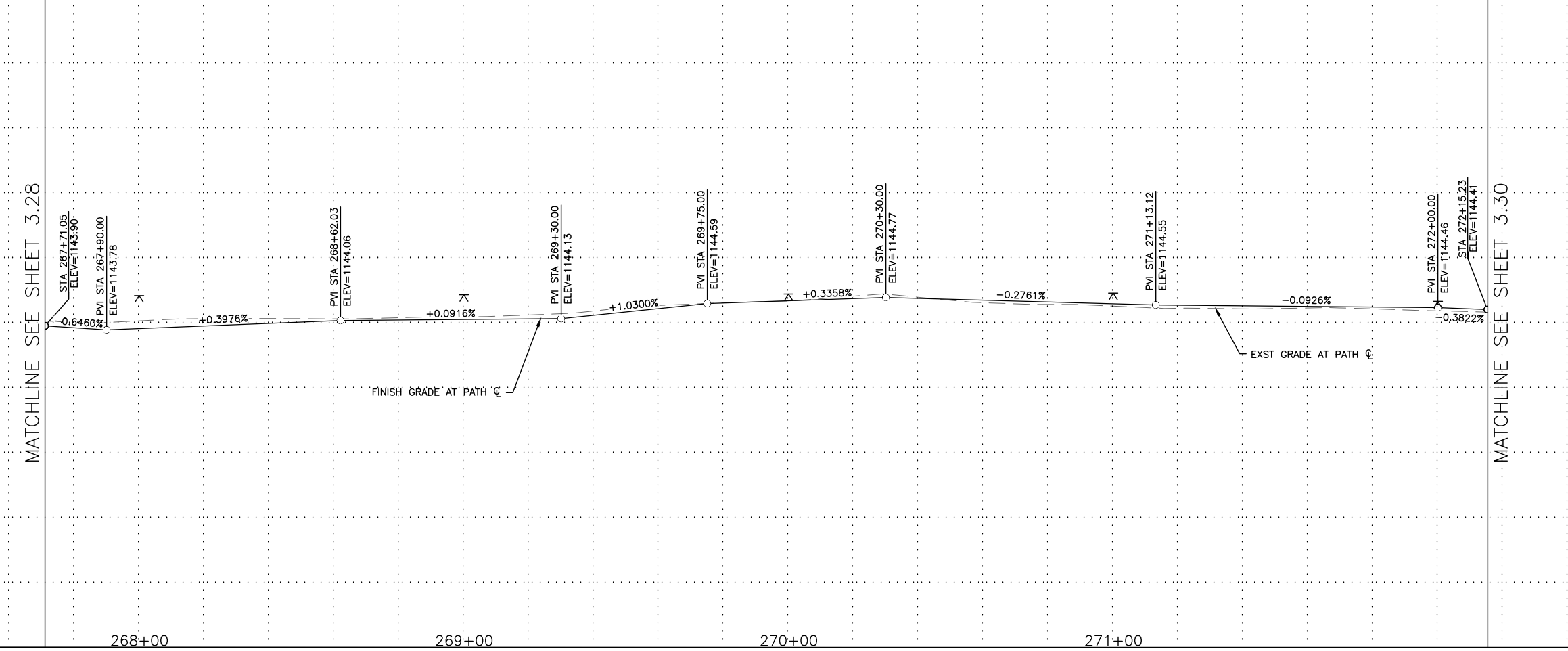
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,442

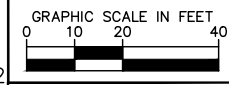


▲ T.B.M.: #312 PK NAIL
 STA 271+76.52, 10.89'LT
 ELEV=1145.30
 N: 888082.68
 E: 682063.70

NOTE:
 ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



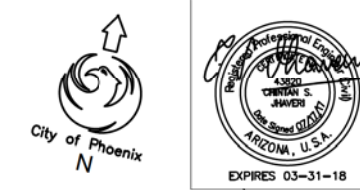
"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.29	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.30	3.99

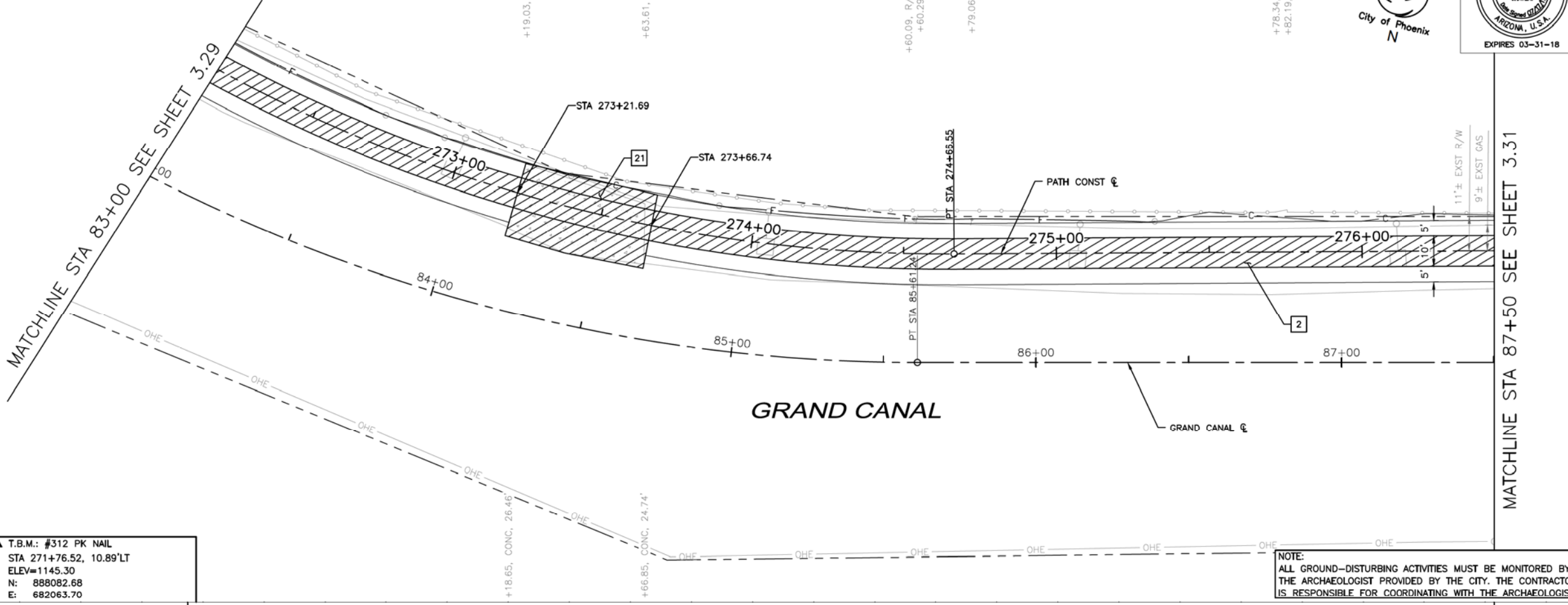
TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

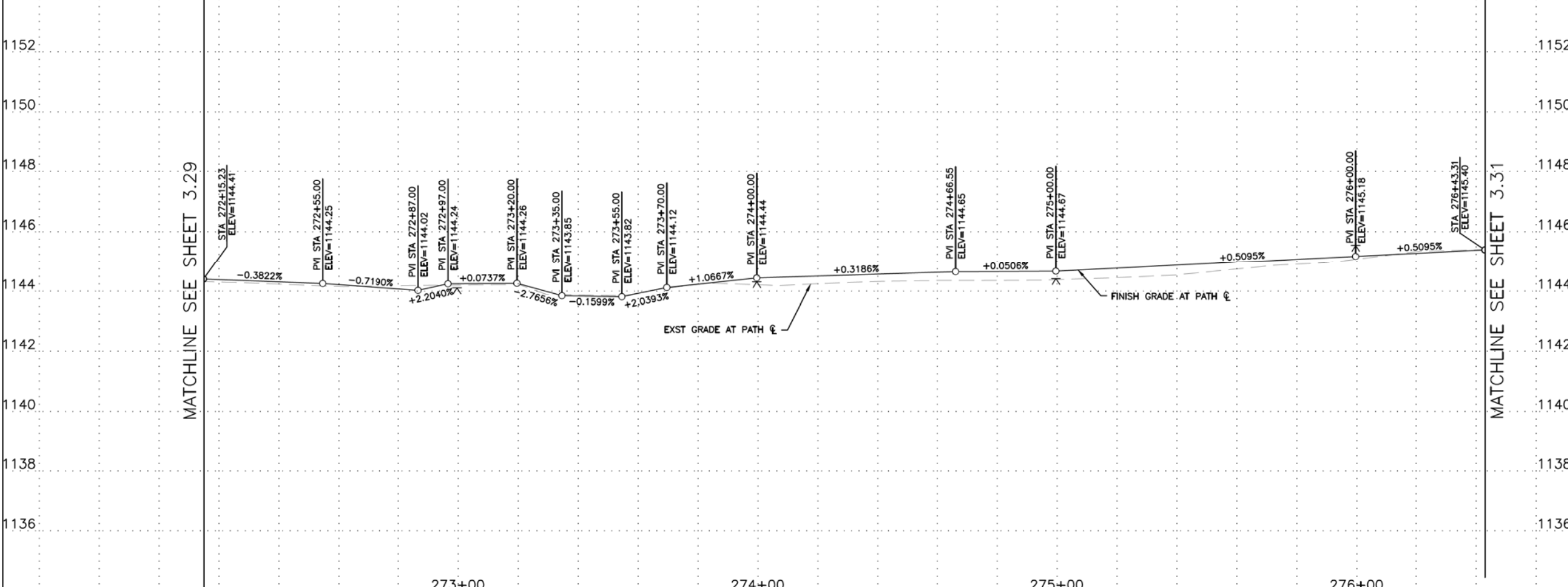
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,280
21	CONSTRUCT CONCRETE SPILLWAY PER DETAIL SHEET 3.12	SF	682

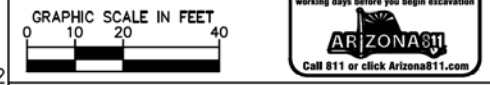


▲ T.B.M.: #312 PK NAIL
STA 271+76.52, 10.89'LT
ELEV=1145.30
N: 888082.68
E: 682063.70

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.30	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.31	3.99

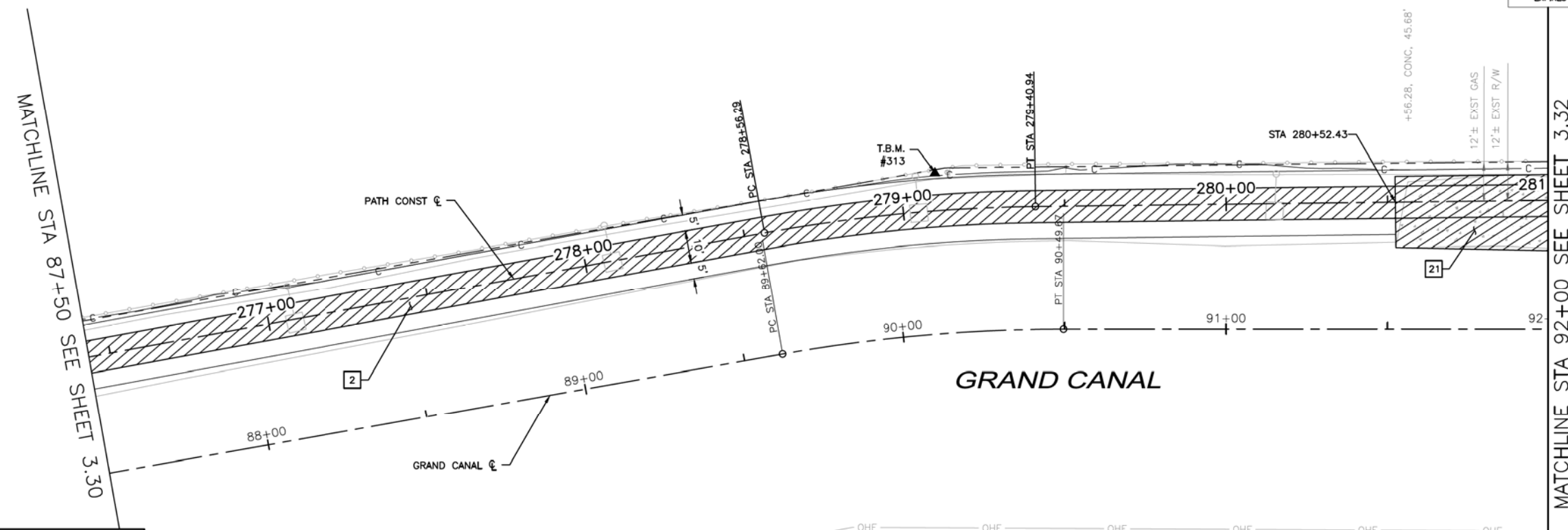
TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

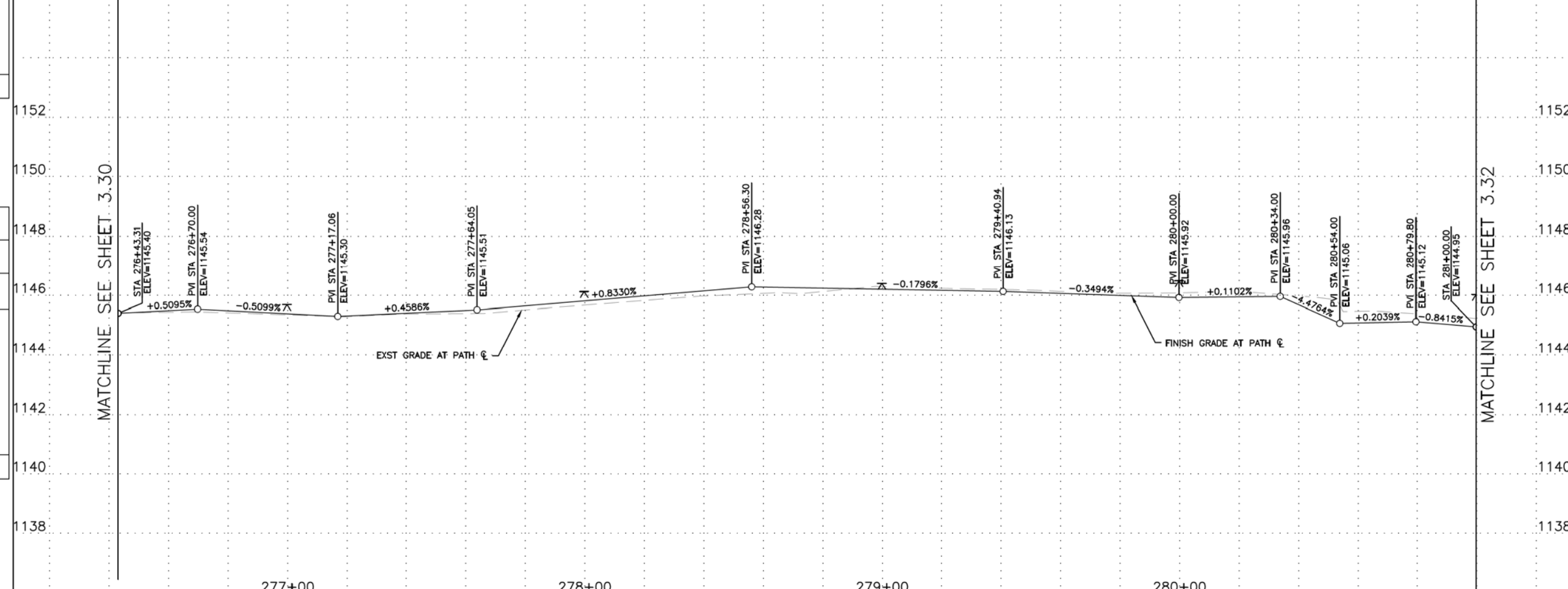
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
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21	CONSTRUCT CONCRETE SPILLWAY PER DETAIL SHEET 3.12	SF	606

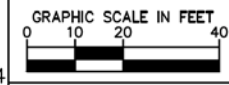


▲ T.B.M.: #313 REBAR
STA 279+10.61, 11.73'LT
ELEV=1147.10
N: 888171.60
E: 682776.19

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.31	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-15-001A
PAUL C HELMICK CORP

124-16-008M
PAUL C HELMICK CORP



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.33	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

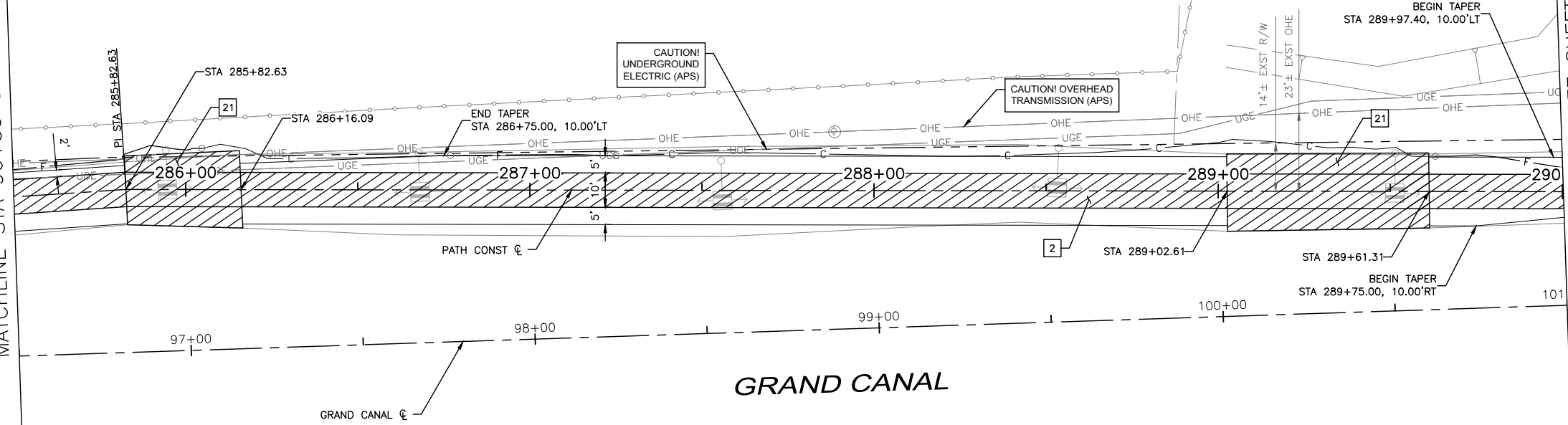
NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
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21	CONSTRUCT CONCRETE SPILLWAY PER DETAIL SHEET 3.12	SF	1,094

MATCHLINE STA 96+50 SEE SHEET 3.32

MATCHLINE STA 101+00 SEE SHEET 3.34

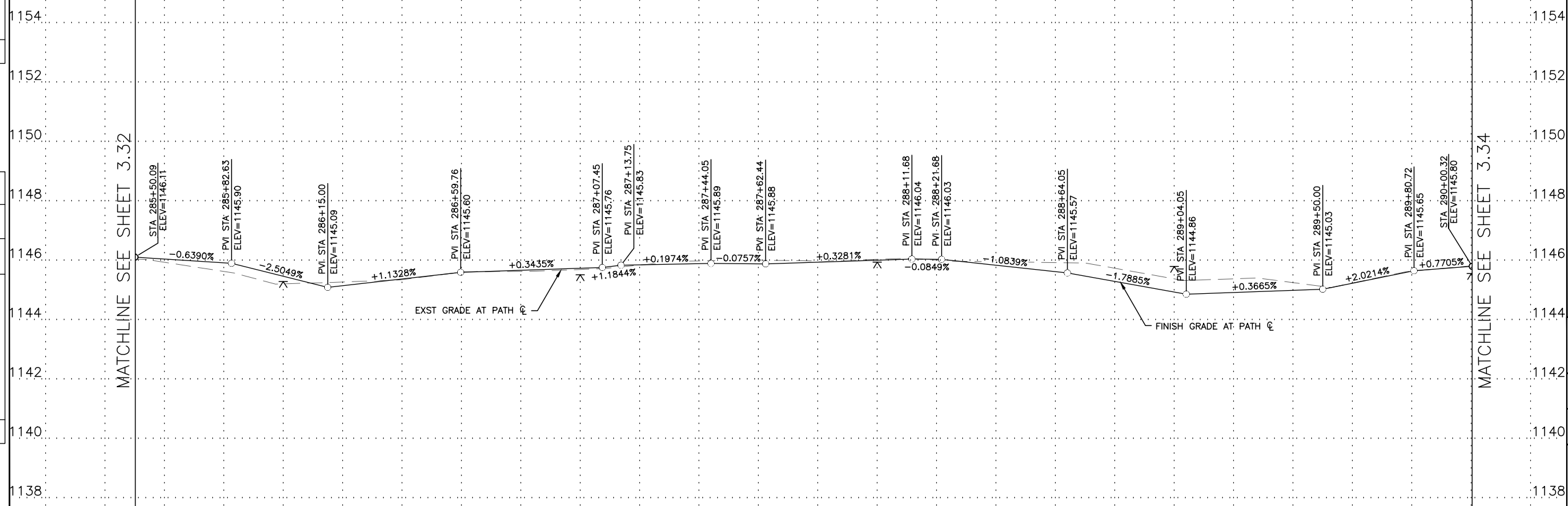


▲ T.B.M.: #314 CHISELED "X"
STA 285+04.90, 8.60'LT
ELEV=1149.60
N: 888210.77
E: 683369.89

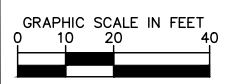
NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

MATCHLINE SEE SHEET 3.32

MATCHLINE SEE SHEET 3.34



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



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PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.33	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-16-008N
ARIZONA STATE DOT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.34	3.99

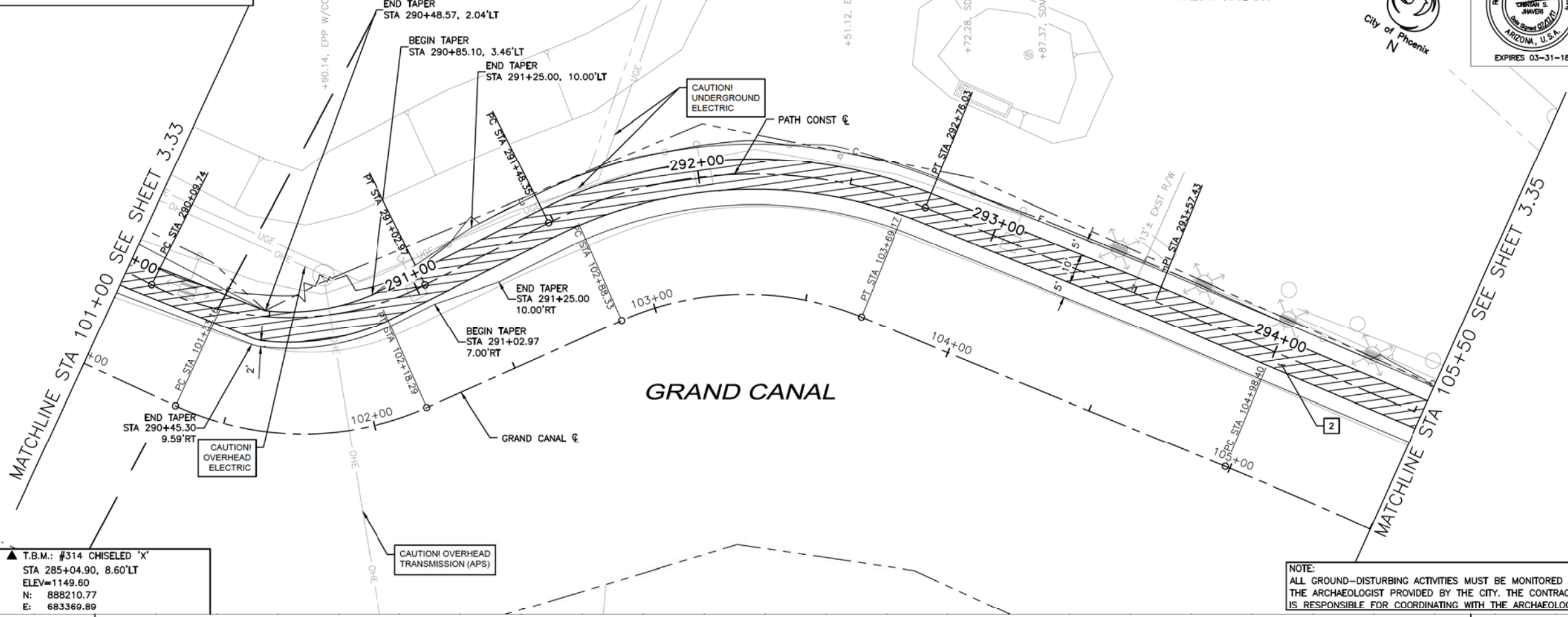
TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

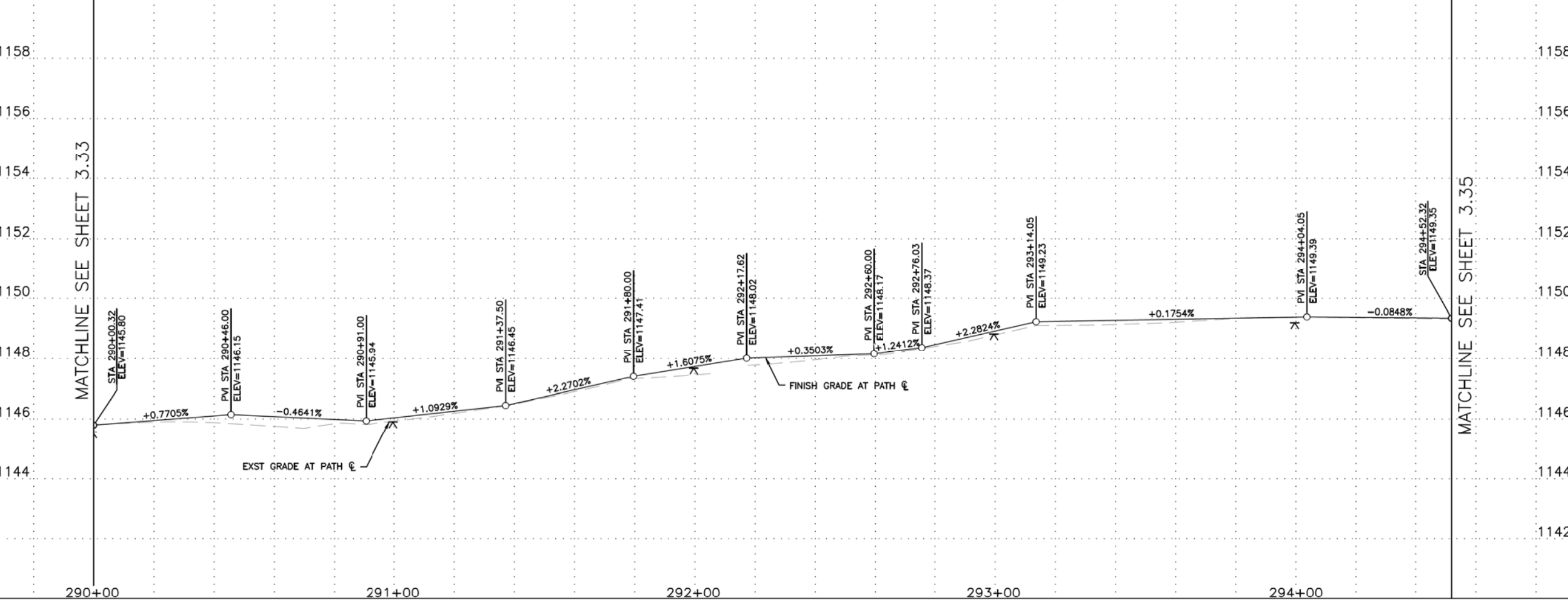
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,539



▲ T.B.M.: #314 CHISELED 'X'
STA 285+04.90, 8.60'LT
ELEV=1149.60
N: 888210.77
E: 683369.89

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.34	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-16-009
UNION PACIFIC RAILROAD COMPANY



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.35	3.99

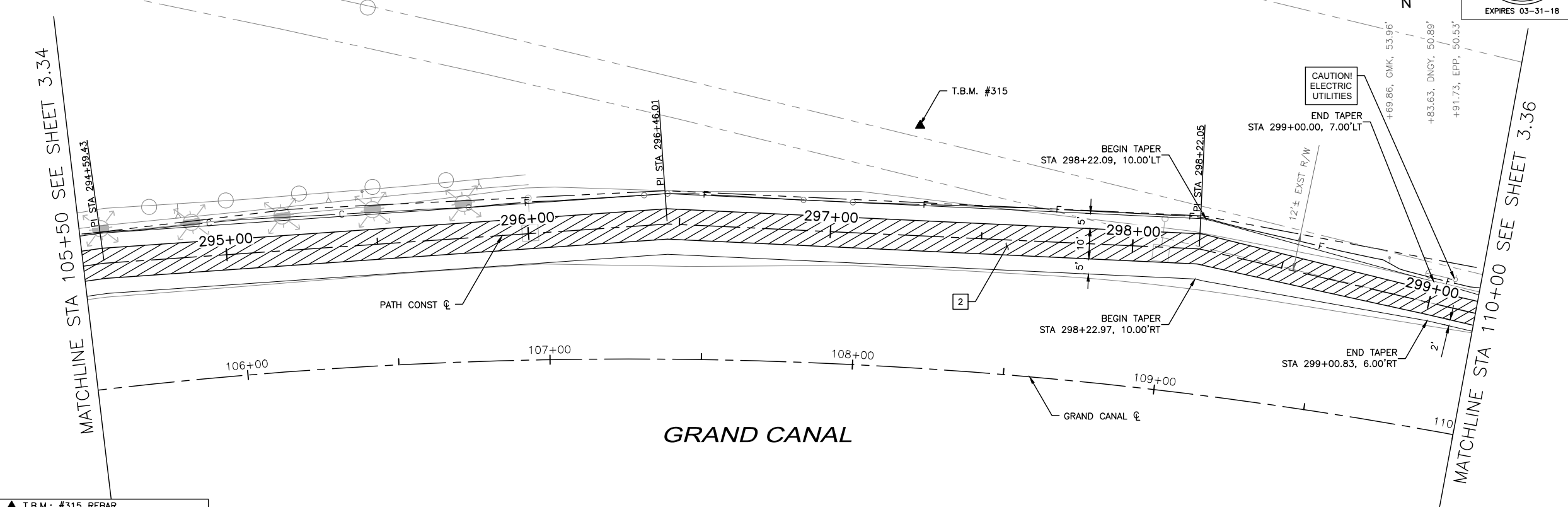
TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

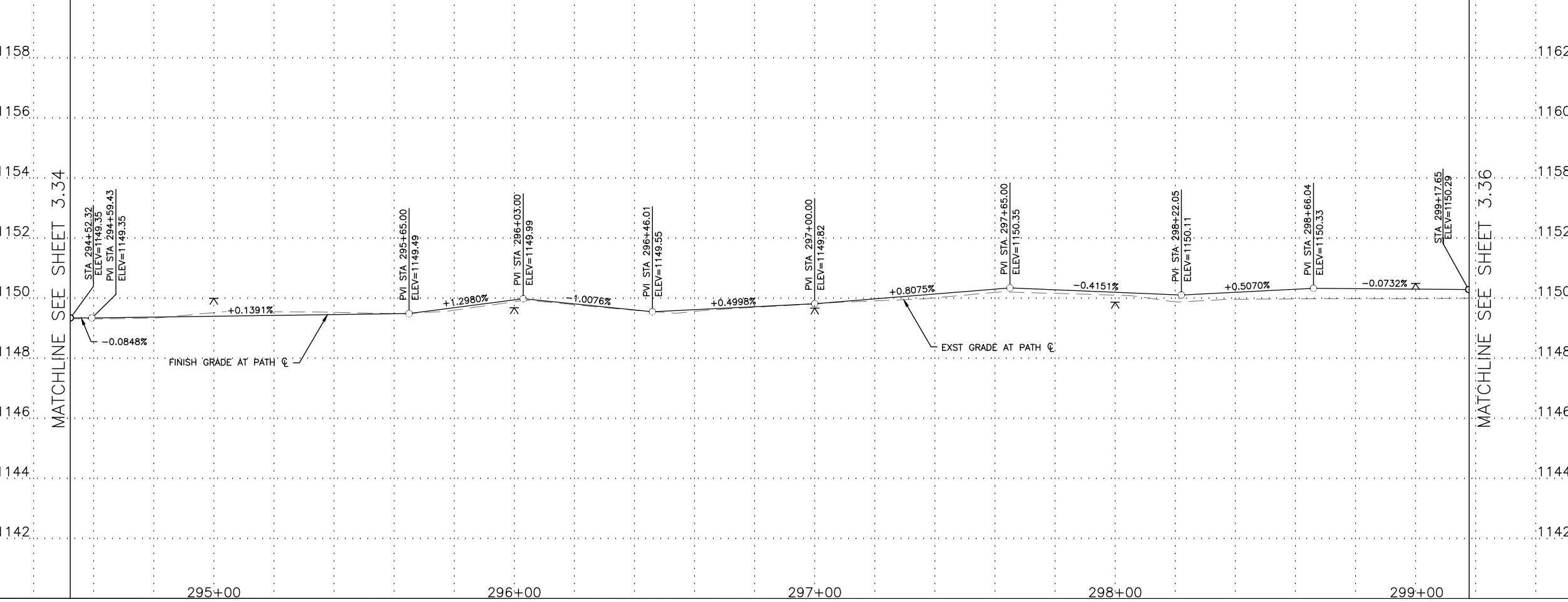
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,543

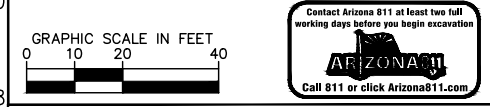


▲ T.B.M.: #315 REBAR
STA 297+27.99, 36.41'LT
ELEV=1150.96
N: 888410.13
E: 684541.57

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.35	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

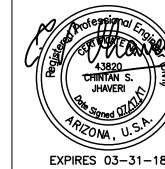
GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-14-018
BARLEY EQUITIES V LLC

124-16-009
UNION PACIFIC RAILROAD COMPANY

EXISTING SRP PIPE & HEADWALL,
PROTECT IN PLACE

124-16-970A
SOUTHERN PACIFIC CO



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.36	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

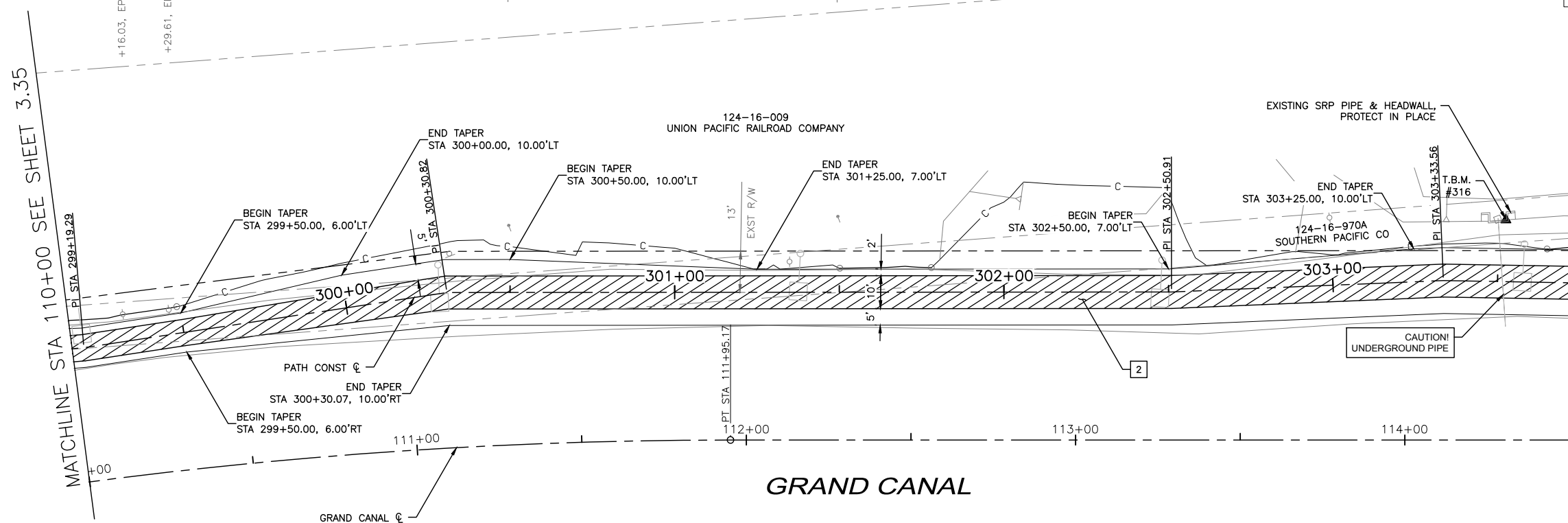
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,412

NO.	DESCRIPTION	REV BY	CHK BY	DATE

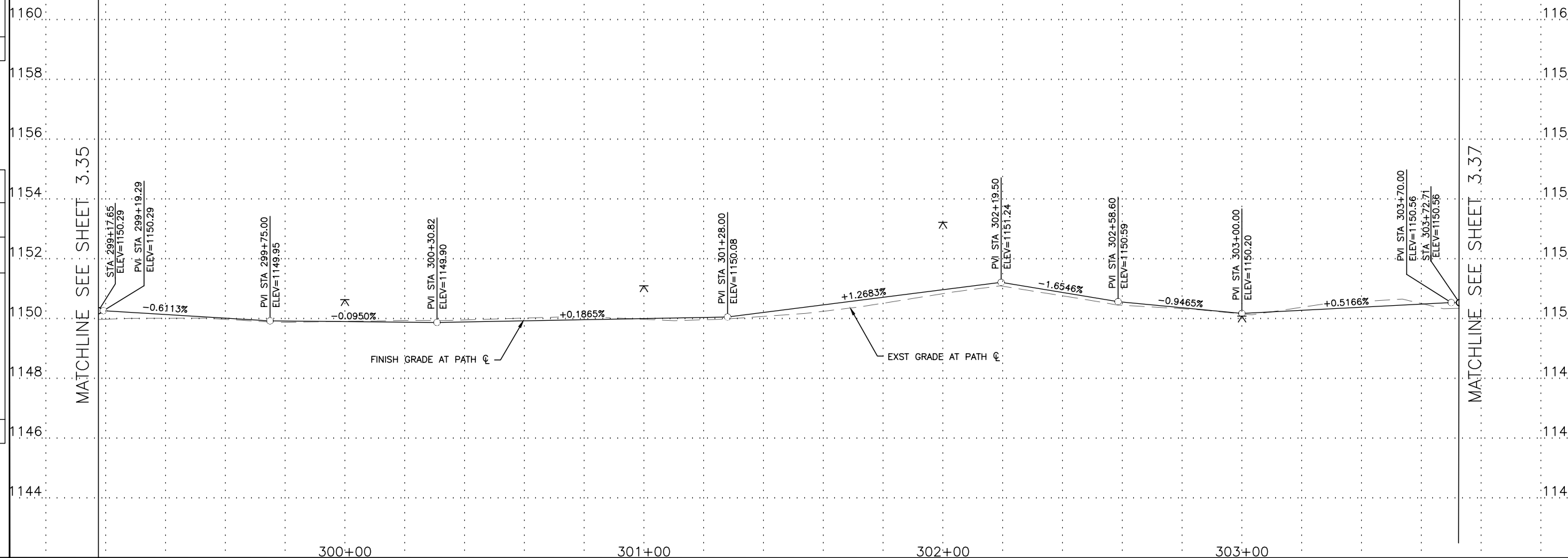
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

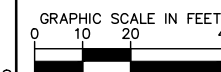


▲ T.B.M.: #316 CHISELED 'X'
STA 303+52.22, 18.71'LT
ELEV=1153.62
N: 888220.25
E: 685142.48

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.36	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H				
1"=2' V				

GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST ALIGNMENT

124-16-014
 JDM III AZ LLC



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.37	3.99

TRACE
 CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,501

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

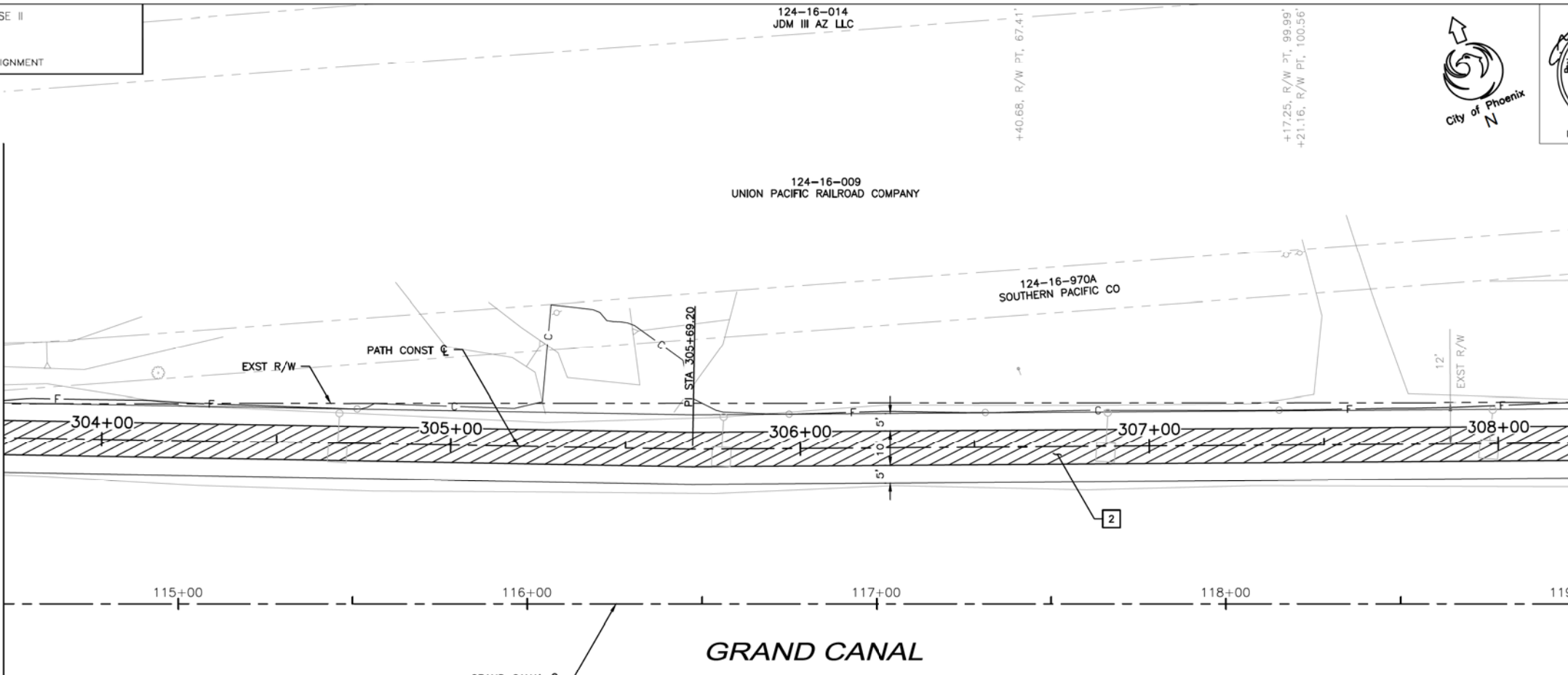
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

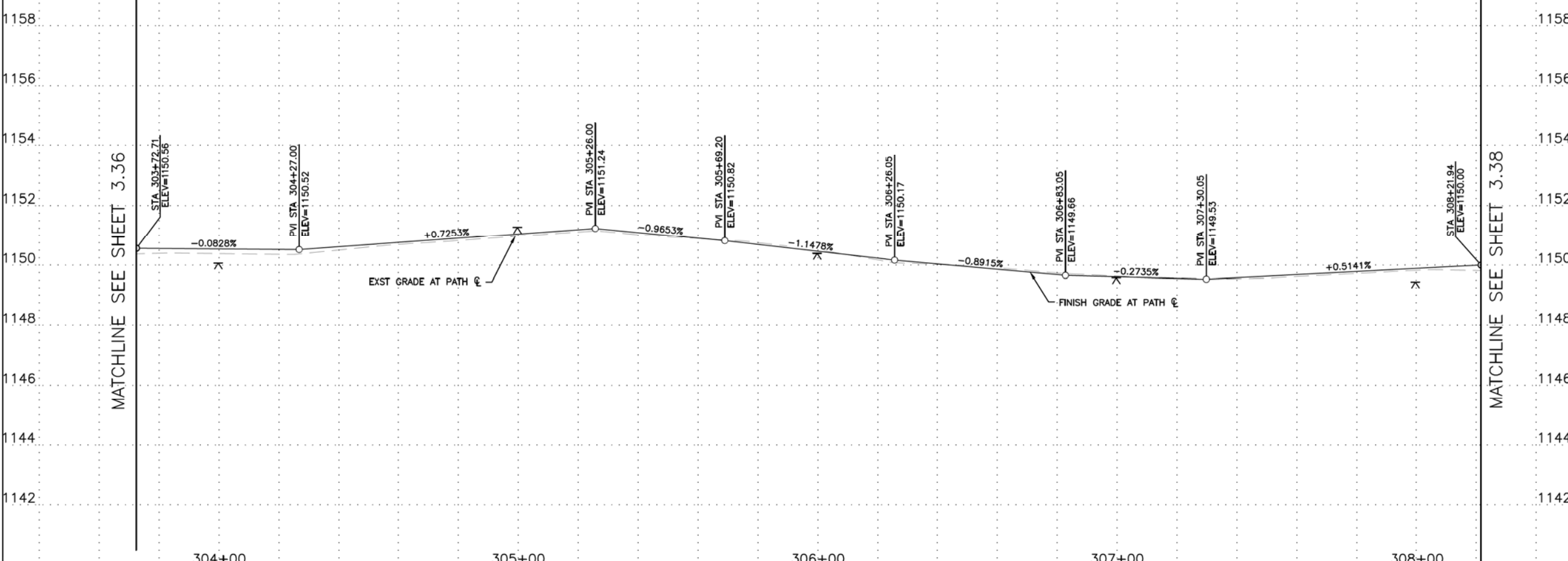
MATCHLINE STA 114+50 SEE SHEET 3.36

MATCHLINE STA 119+00 SEE SHEET 3.38



▲ T.B.M.: #316 CHISELED 'X'
 STA 303+52.22, 18.71'LT
 ELEV=1153.62
 N: 888220.25
 E: 685142.48

NOTE:
 ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

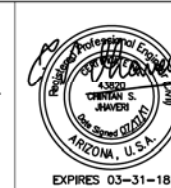
GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.37	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2' V				

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

124-16-009
UNION PACIFIC
RAILROAD COMPANY

124-16-970A
SOUTHERN PACIFIC
CO / OPERATIVE/



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.38	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

CONSTRUCTION NOTES

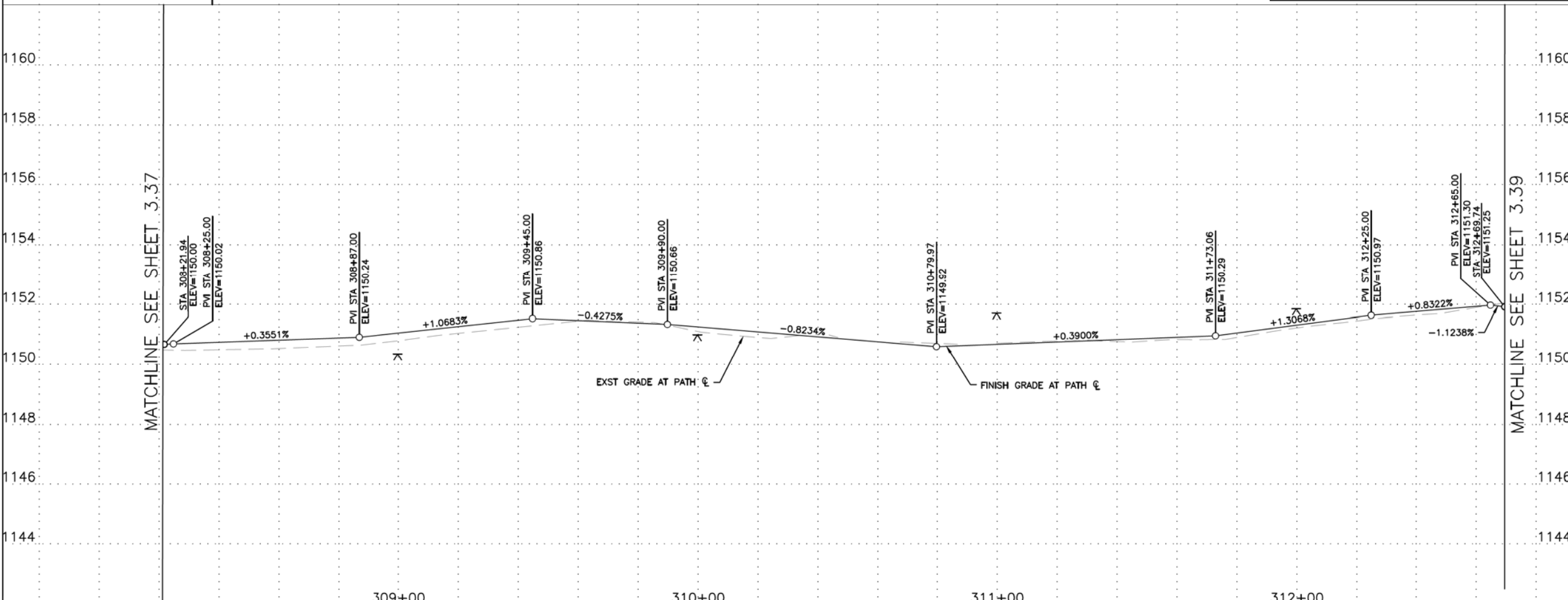
NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	4,476

MATCHLINE STA 119+00 SEE SHEET 3.37

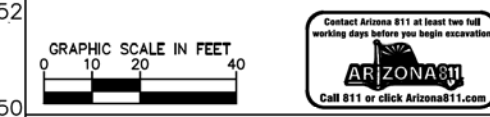
MATCHLINE STA 123+50 SEE SHEET 3.39

▲ TBM: #317 CHISELED "X"
STA 313+23.55, 19.99'RT
ELEV=1150.77'
N: 887736.65
E: 685955.19

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.38	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17	SCALE: 1"=20'H 1"=2' V	

REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION
REVISION BY CITY OF PHOENIX	
NO.	DESCRIPTION

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.39	3.99

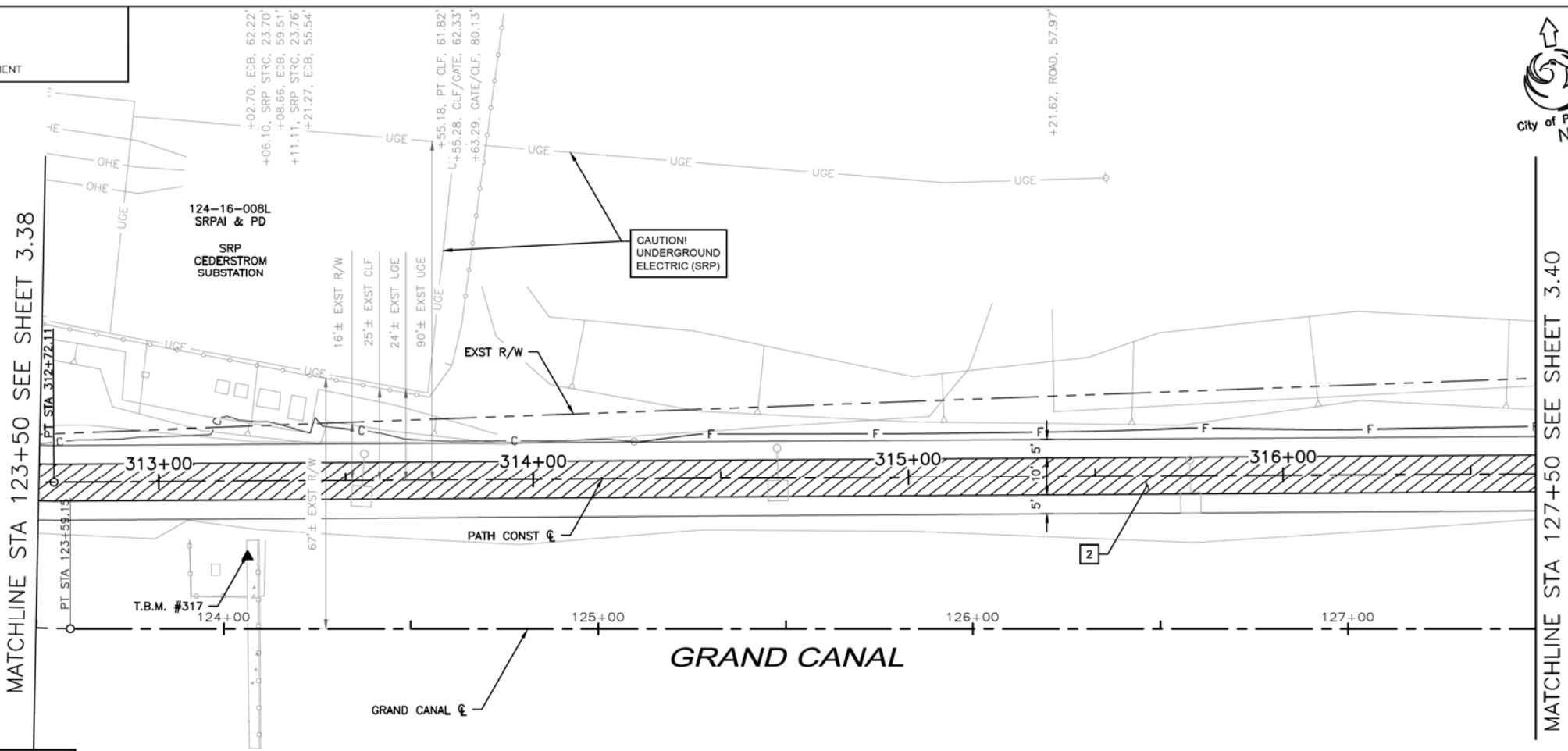
TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY

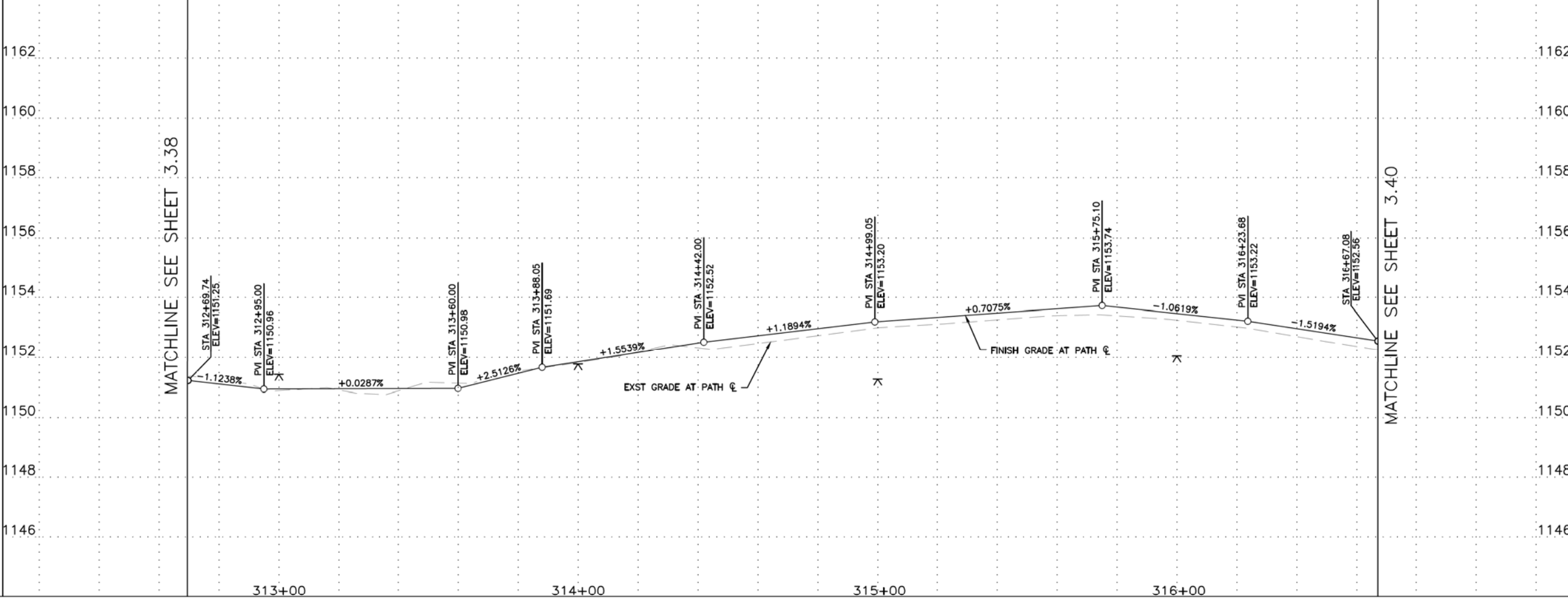
CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	3,974

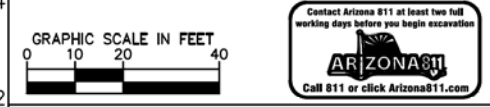


NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

▲ TBM: #317 CHISELED "X"
STA 313+23.55, 19.99'RT
ELEV=1150.77'
N: 887736.65
E: 685955.19



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: BRR	DES: GRS	CK: CSJ	SHEET NO: 3.39	TOTAL SHEETS: 3.99
DATE: 07/17	DATE: 07/17	DATE: 07/17		
SCALE: 1"=20'H 1"=2' V				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST ALIGNMENT

NO.	DESCRIPTION	REV BY	CHK BY	DATE

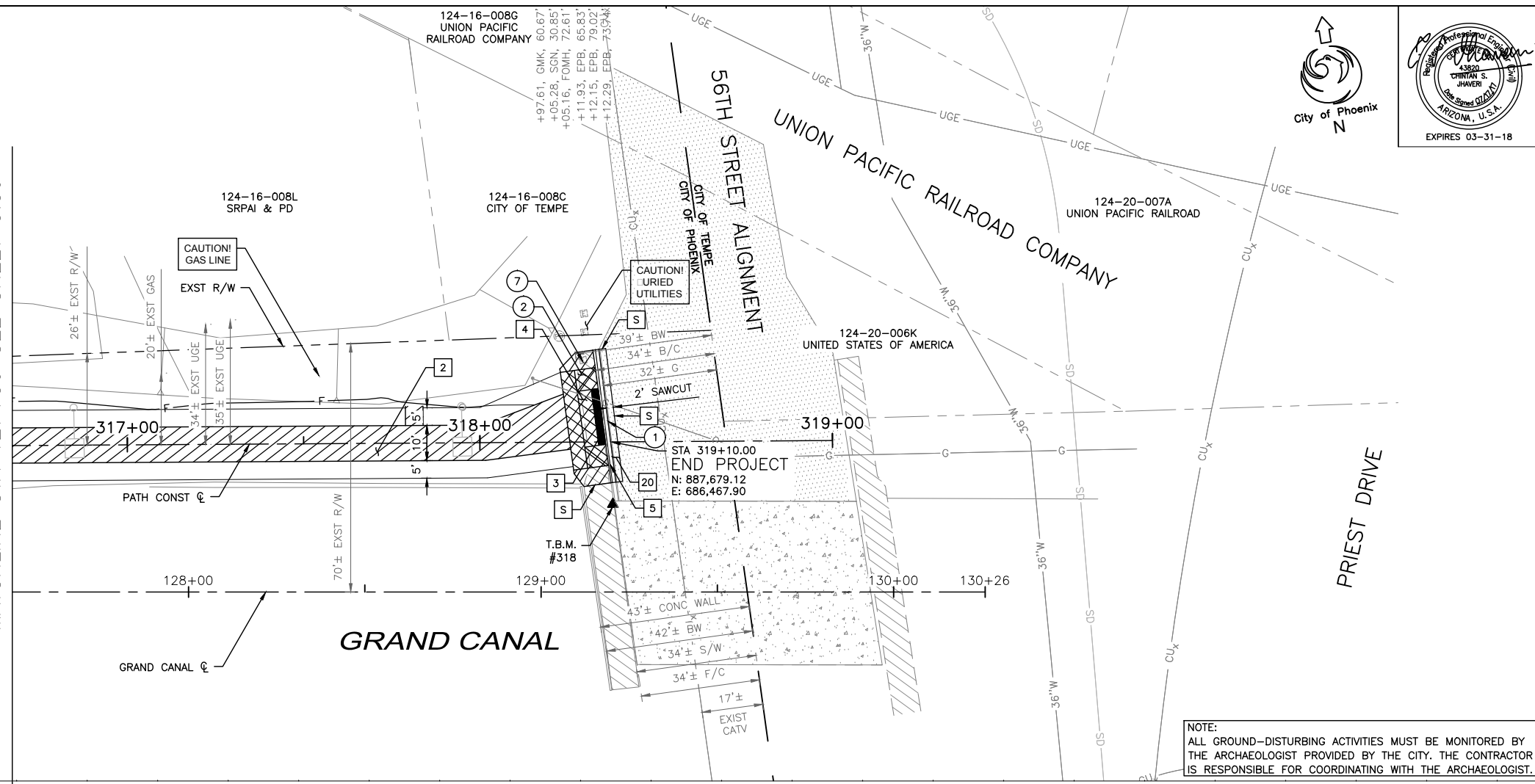
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

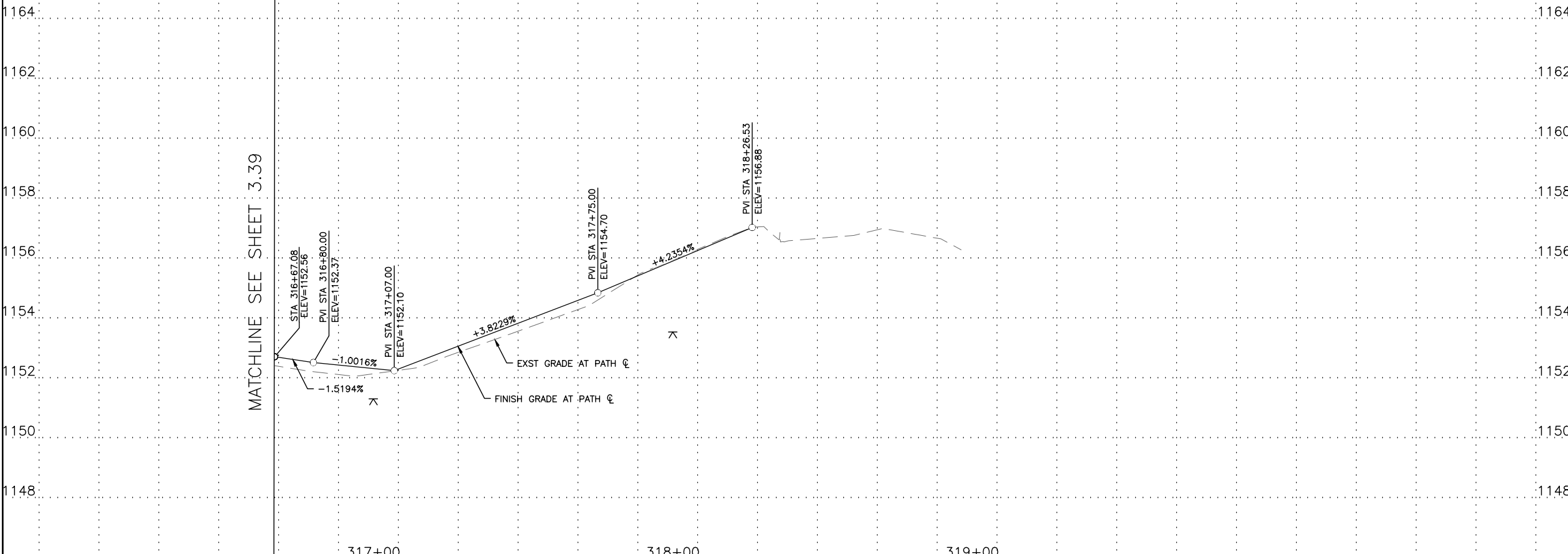
MATCHLINE STA 127+50 SEE SHEET 3.39

MATCHLINE SEE SHEET 3.39



▲ TBM: #318 CHISELED "X"
STA 318+37.62, 17.68'RT
ELEV=1157.84'
N: 887661.86
E: 686463.78

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.40	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

Professional Engineer
4380
CHRISTIAN S. JAWORSKI
Exp. 03-31-18
ARIZONA, U.S.A.

REMOVAL/RELOCATION NOTES

NO	DESCRIPTION	UNIT	QTY
1	REMOVE EXISTING CONCRETE CURB AND GUTTER	LF	38
2	REMOVE EXISTING CONCRETE SIDEWALK	SF	198
7	ADJUST EXISTING WATER METER BOX AND COVER	EA	1

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	CONSTRUCT CONCRETE SIDEWALK PER COP STD DET P1230 (OUTSIDE VEHICLE AREAS)	SF	80
2	CONSTRUCT CONCRETE SIDEWALK PER COP STD DTL P1230 MODIFIED, 7" THICK, CLASS 'AA' CONCRETE	SF	1,678
3	INSTALL TRUNCATED DOMES PER COP STD DTL P1232	SF	32
4	CONSTRUCT CONCRETE DRIVEWAY PER COP STD DTL P-1244	SF	280
5	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG STD DTL 220-1, TYPE 'A', H=6"	LF	38
20	CONSTRUCT ASPHALT CONCRETE FOR PERMANENT PAVEMENT REPLACEMENT, 8" THICK PER PAVEMENT STRUCTURAL SECTION NO. 2, SHEET 3.05	SY	9



NOTE: SEE ELECTRICAL PLANS FOR PATHWAY LIGHTING AND SIGNAL DETAILS. SEE LANDSCAPE SHEETS FOR LANDSCAPE AND IRRIGATION.

GRAPHIC SCALE IN FEET
0 10 20 40

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA 811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

PATH PLAN & PROFILE
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

**GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114**

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.40	3.99
SCALE:	1"=20'H						
	1"=2' V						

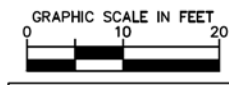
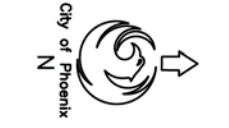
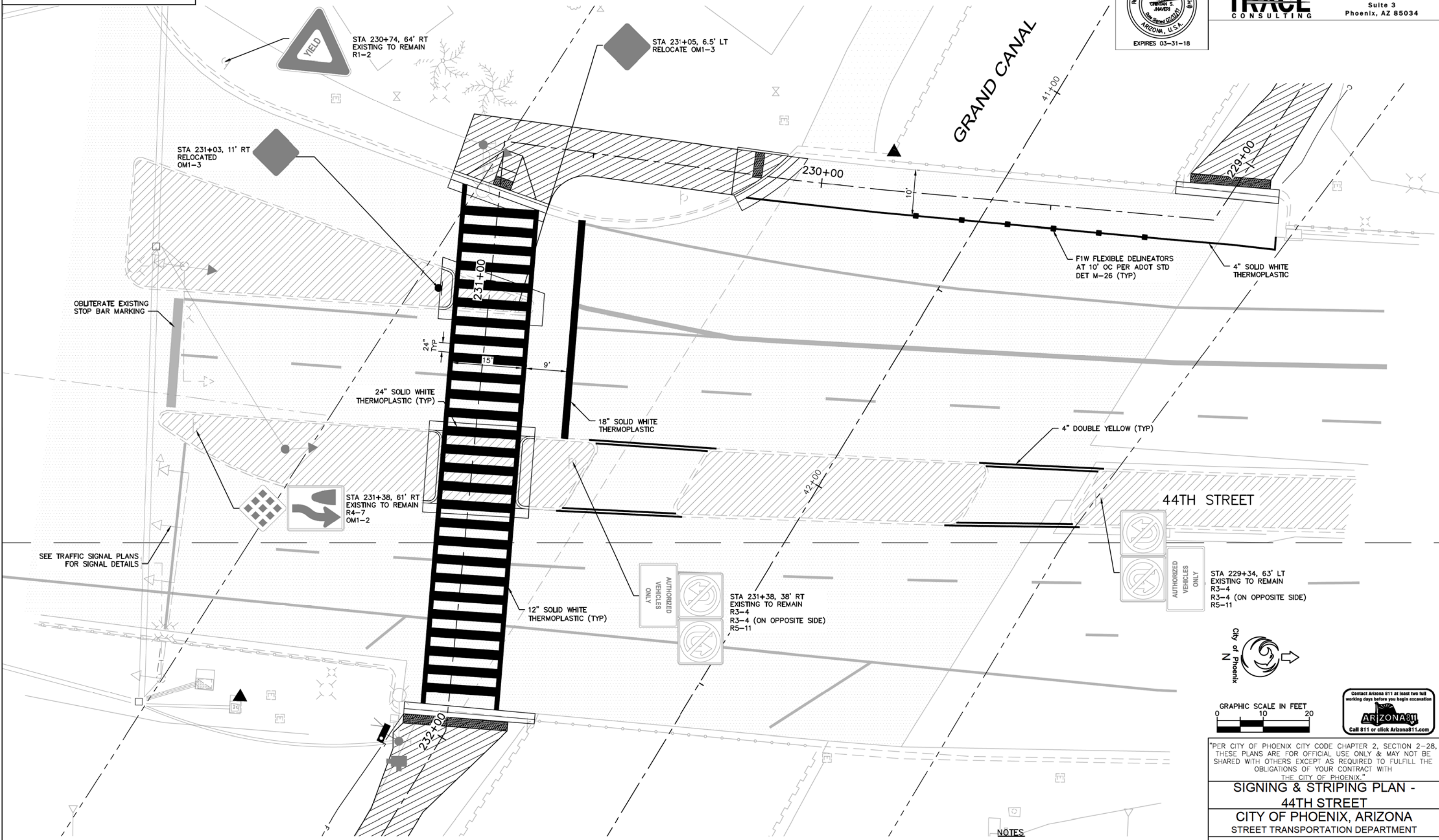
GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST ALIGNMENT



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.41	3.99

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

**SIGNING & STRIPING PLAN -
 44TH STREET
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT**

**GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114**

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.41	3.99

- NOTES**
- ALL STRIPING IS CALCULATED IN 4" EQUIVALENT.
 - ALL SIGNAGE IS CALCULATED IN SQ. FT. EQUIVALENT.
 - ALL STRIPING SHALL BE PER COP AND MUTCD STANDARDS.
 - COP STREET TRANSPORTATION DEPARTMENT SHALL APPROVE FINAL STRIPING LAYOUT BEFORE APPLICATION OF PAVEMENT MARKINGS.

SCALE: 1"=10'

GRAND CANALSCAPE PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST ALIGNMENT

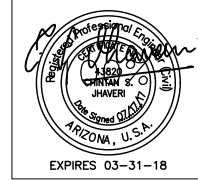
STA 250+00, 76'LT
 INSTALL NEW
 W14-1 (30"x30")
 MOUNT ON FENCE



STA 250+40, 53'LT
 EXISTING TO REMAIN
 R1-1
 CUSTOM
 CUSTOM (ON OPPOSITE SIDE)

STA 250+40, 83'LT
 INSTALL NEW
 CUSTOM (24"x24")

UNION PACIFIC RAILROAD



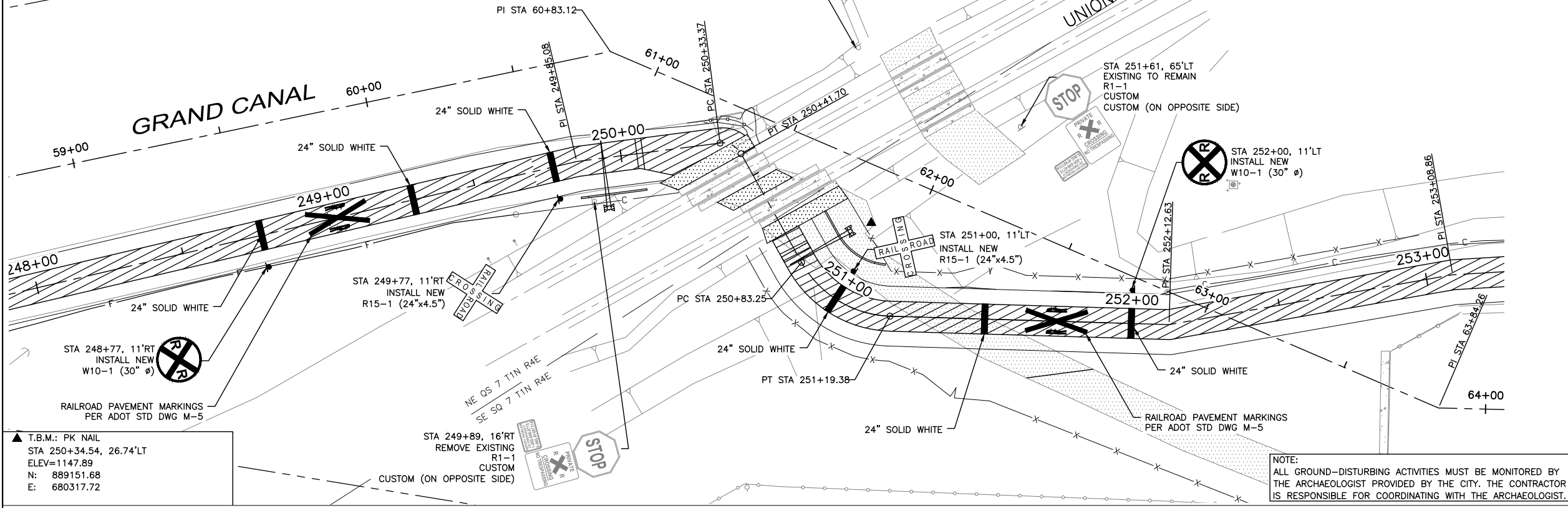
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.42	3.99

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

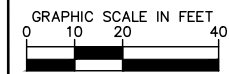
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



NOTE:
 ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

SIGNING & STRIPING PLAN
UPRR CROSSING
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

NOTES

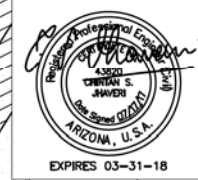
1. ALL STRIPING IS CALCULATED IN 4" EQUIVALENT.
2. ALL SIGNAGE IS CALCULATED IN SQ. FT. EQUIVALENT.
3. ALL STRIPING SHALL BE PER COP AND MUTCD STANDARDS.
4. COP STREET TRANSPORTATION DEPARTMENT SHALL APPROVE FINAL STRIPING LAYOUT BEFORE APPLICATION OF PAVEMENT MARKINGS.

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.42	3.99

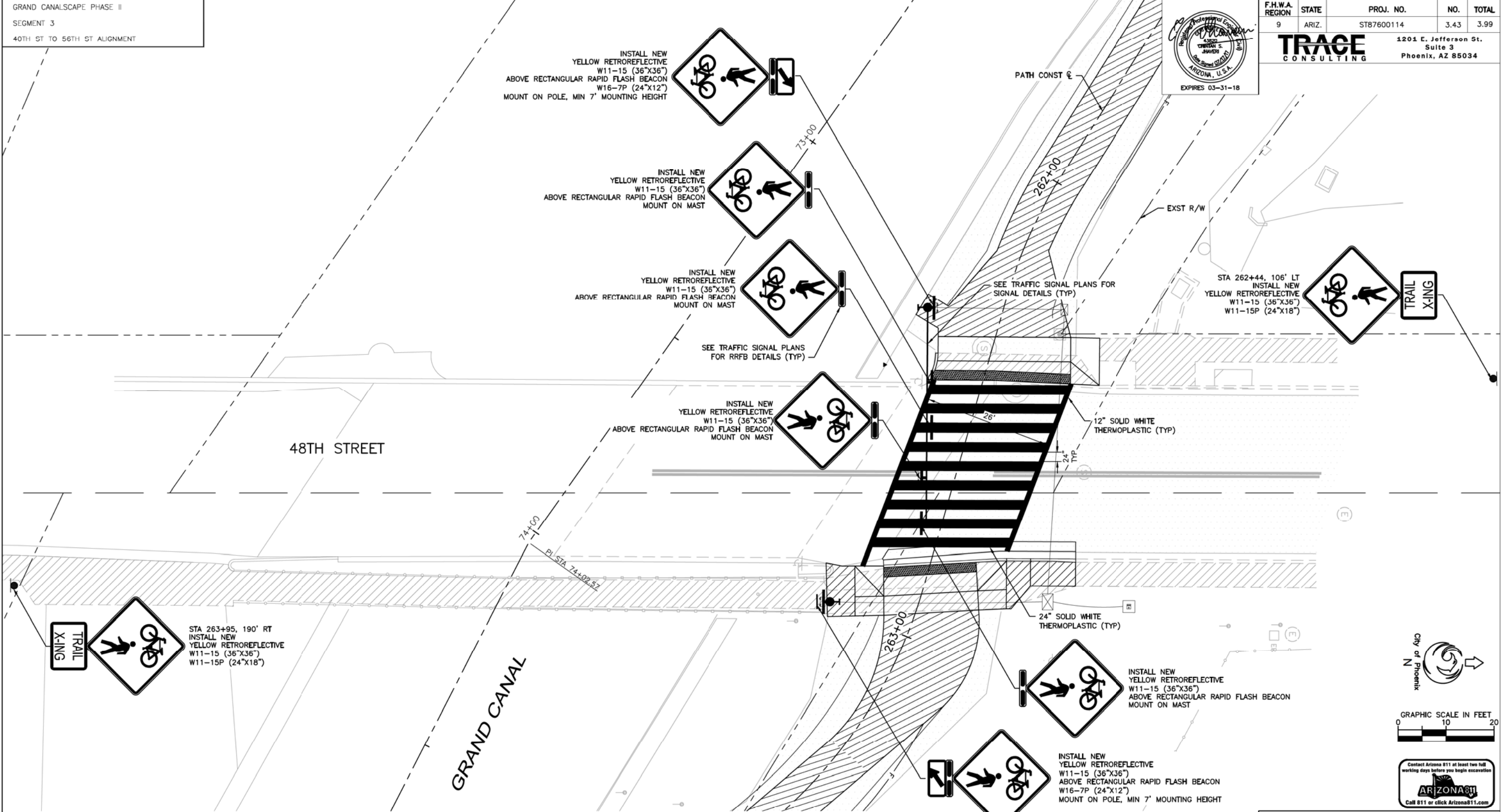
SCALE: 1"=20'

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.43	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034



NO.	DESCRIPTION	REV BY	CHK BY	DATE



GRAPHIC SCALE IN FEET
0 10 20



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

**SIGNING & STRIPING PLAN -
48TH STREET - RRFB
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT**

**GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114**

DR:	BRR	DES:	GRS	CK:	CSJ	SHEET NO:	TOTAL SHEETS
DATE:	07/17	DATE:	07/17	DATE:	07/17	3.43	3.99

- NOTES**
- ALL STRIPING IS CALCULATED IN 4" EQUIVALENT.
 - ALL SIGNAGE IS CALCULATED IN SQ. FT. EQUIVALENT.
 - ALL STRIPING SHALL BE PER COP AND MUTCD STANDARDS.
 - COP STREET TRANSPORTATION DEPARTMENT SHALL APPROVE FINAL STRIPING LAYOUT BEFORE APPLICATION OF PAVEMENT MARKINGS.

SCALE: 1"=10'

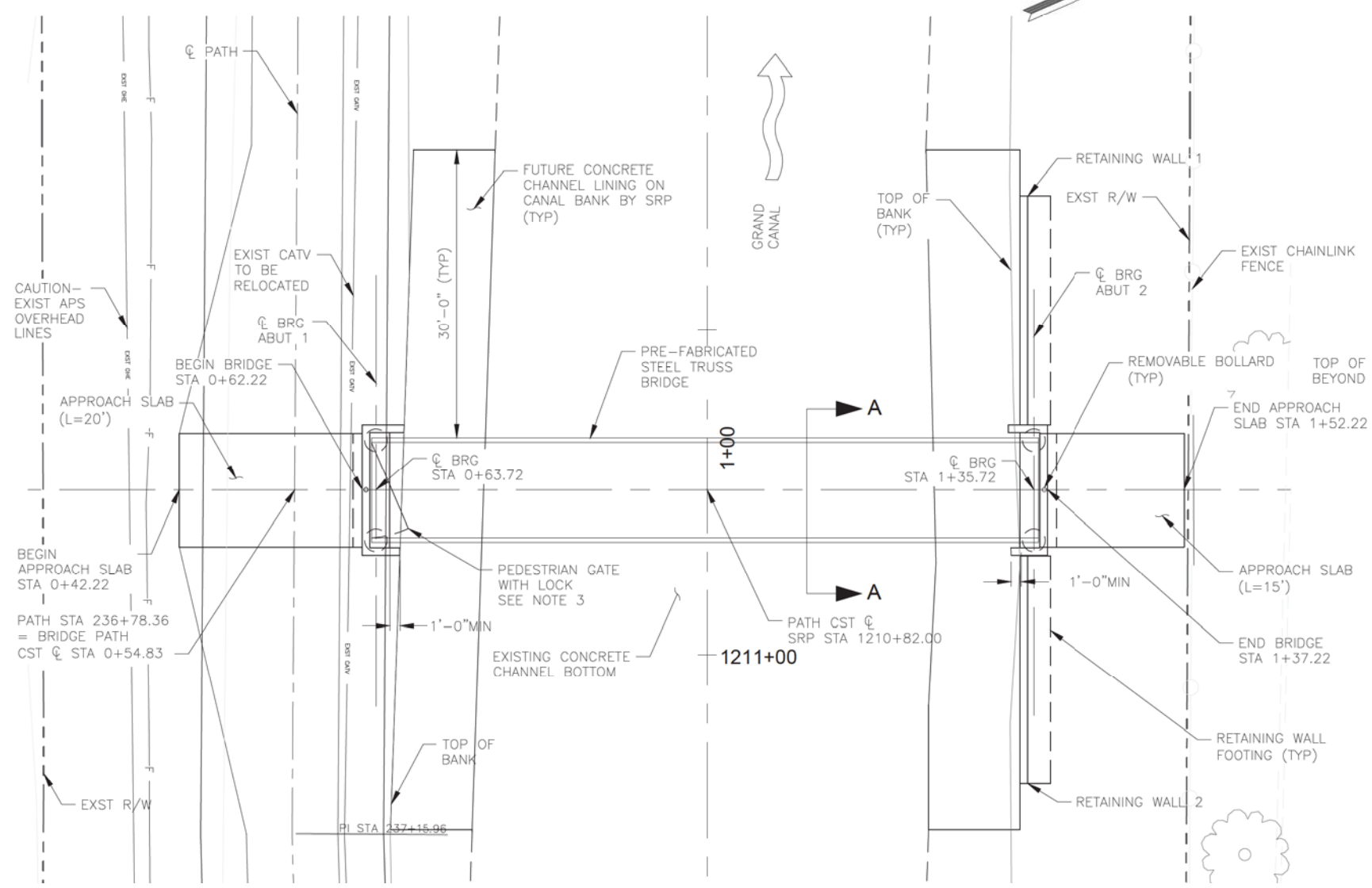


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.44	3.99
ethos				
DES: SEO	DR: NJO	CK: AGG	DATE: 07/17/17	

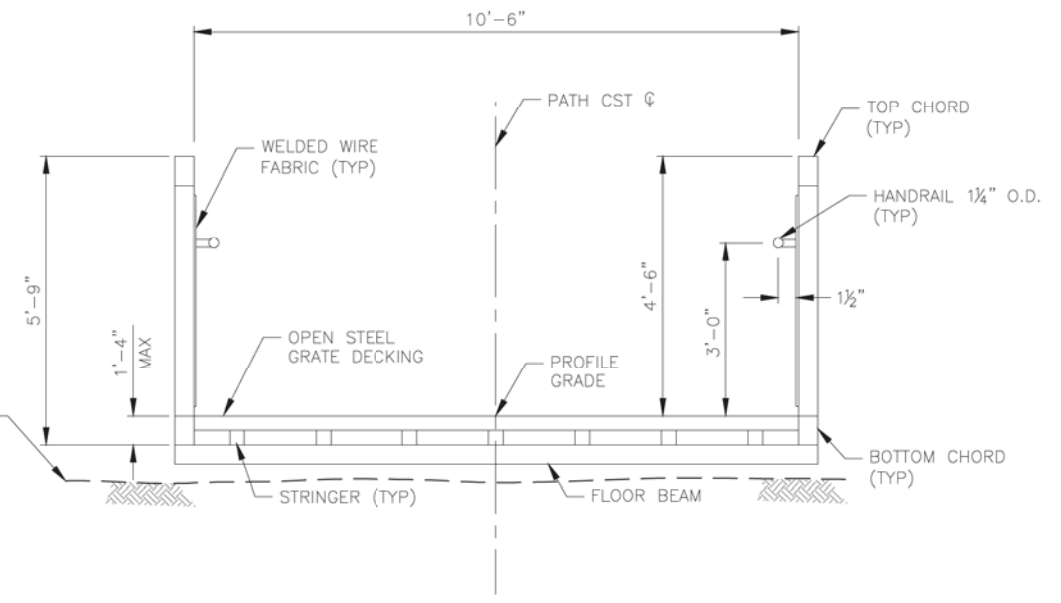
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NO.	DESCRIPTION	REV BY	CHK BY	DATE

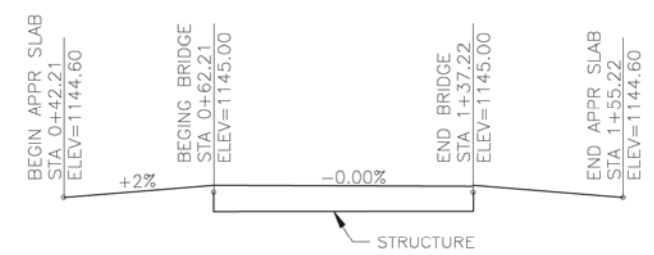
NO.	DESCRIPTION	REV BY	CHK BY	DATE



PLAN
SCALE: 1" = 100'
NEW 1 SPAN STEEL TRUSS BRIDGE
NO SKEW



TYPICAL SECTION A-A
SCALE: 1" = 20'



PROFILE GRADE AT PATH CST CL

INDEX OF DRAWINGS

SHEET NO	DWG NO	DRAWING TITLE
3.44	S-1.01	PLAN & TYPICAL SECTION
3.45	S-1.02	ELEVATION & GENERAL NOTES
3.46	S-1.03	FOUNDATION PLAN AND DETAILS
3.47	S-1.04	ABUTMENT PLAN AND ELEVATION
3.48	S-1.05	MISCELLANEOUS DETAILS
3.49	S-1.06	RETAINING WALL DETAILS

- NOTES:**
- ALL ELEVATIONS ARE BASED ON NGVD - 29
 - SRP STATIONING IS PROVIDED FOR INFORMATION PURPOSES ONLY. ALL WORK SHALL BE CONSTRUCTED BASED ON PATH CST CL.
 - PEDESTRIAN GATE AND LOCK TO BE SUPPLIED BY TRUSS MANUFACTURER AT ABUTMENT 1 (GATE TO MATCH TRUSS MATERIAL).

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

S-1.01
PLAN & TYPICAL SECTION
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALScape PHASE II
ST87600114

DES: SEO	DR: NJO	CK: AGG	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.44	3.99

GRAND CANALSCAPE PHASE II
40TH STREET TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.45	3.99
DES: SEO		DR: NJO	CK: AGG	DATE: 07/17/17

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS:
MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS, LATEST EDITION.
CITY OF PHOENIX SUPPLEMENT TO MAG UNIFORM STANDARD SPECIFICATIONS, LATEST EDITION.
ARIZONA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2008 EDITION. APPLICABLE WHEN REFERENCED IN THESE PLANS, IN THE SPECIAL PROVISIONS, AND FOR AREAS NOT COVERED BY THE MAG SPECIFICATION.
DESIGN GUIDELINES AND SPECIFICATIONS FOR BRIDGE CROSSINGS OF SALT RIVER PROJECT CANALS, LATEST EDITION.

DESIGN SPECIFICATIONS:
AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES (LATEST EDITION AND REVISIONS TO DATE).

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL THE SUPERSTRUCTURE DIMENSIONS AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

BRIDGE SUPERSTRUCTURE IS CONCEPTUAL ONLY. FINAL ADJUSTMENTS TO THE ABUTMENT SEATS WILL BE MADE AFTER SHOP DETAILS FOR SUPERSTRUCTURE ARE RECEIVED. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS INDICATING BRIDGE DEPTH AND PROFILE ADJUSTMENTS OR TRANSITIONS (IF ANY).

LIVE LOAD:
90 PSF PEDESTRIAN LIVE LOAD WITHOUT DYNAMIC LOAD ALLOWANCE.
AASHTO H5-44 MAINTENANCE VEHICLE WITHOUT DYNAMIC LOAD ALLOWANCE

SEISMIC PERFORMANCE –
SEISMIC PERFORMANCE ZONE 1 (SITE CLASS D) WITH PEAK GROUND ACCELERATION (PCA) = 0.13g; S_s=0.115g, S₁= 0.039g

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615 EXCEPT WHERE ASTM A706 IS SPECIFIED FOR WELDABILITY. ALL REINFORCING SHALL BE FURNISHED AS GRADE 60.

ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO 8.23.
ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL HAVE 2" CLEAR COVER UNLESS NOTED OTHERWISE.

STRESSES:
ABUTMENTS, RETAINING WALLS CLASS S.....f'c= 3,000 psi
DRILLED SHAFTS, CLASS S.....f'c= 3,500 psi

CHAMFER ALL EXPOSED CORNERS 3/4" UNLESS NOTED OTHERWISE.

DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.

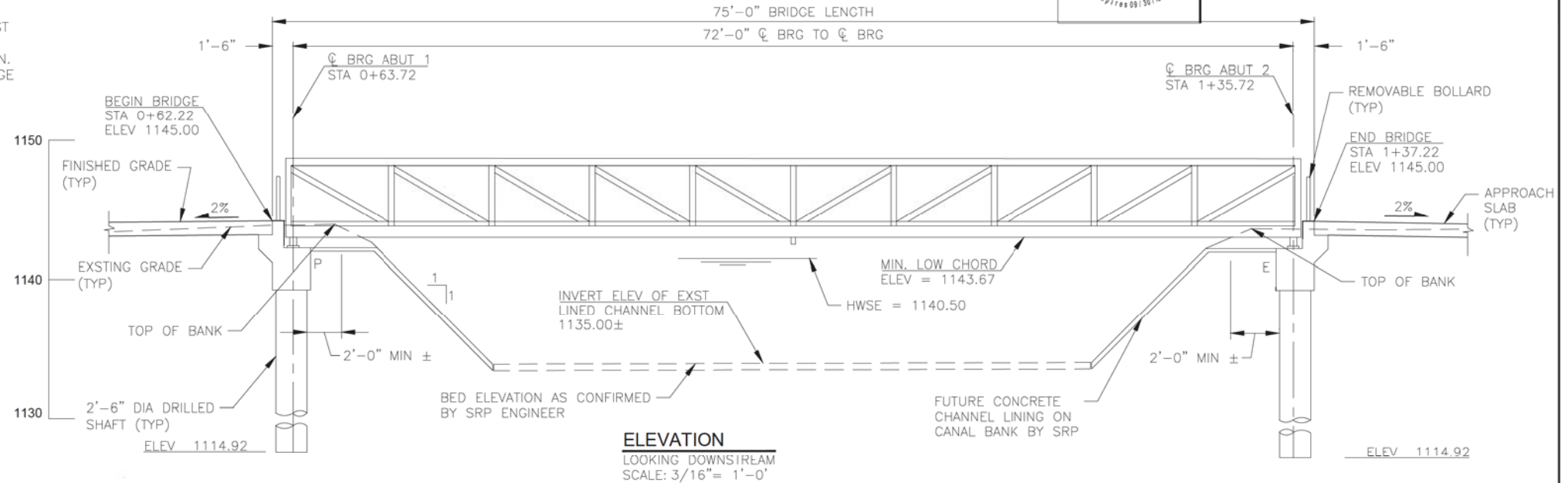
ALL CONCRETE USED IN THE CONSTRUCTION OF THE ABUTMENT CAPS AND RETAINING WALLS SHALL HAVE A DAVIS COLORING AGENT SAN DIEGO BUFF 5237 ADDED TO THE CONCRETE MIX AT THE BATCH PLANT.

THE WIDTH OF STRUCTURE EXCAVATION PRISM USED IN THE COMPUTATION OF APPROXIMATE QUANTITIES IS AS FOLLOWS:

1. ABUTMENT: STRUCTURAL THICKNESS OF MEMBER PLUS THREE FEET.

THE STRUCTURE BACKFILL SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIAL PROVISIONS. THREE FEET OF BACKFILL MATERIAL SHALL BE PLACED AGAINST THE ABUTMENT CAP AND RETAINING WALL.

A LOAD POSTING SIGN SHALL BE INSTALLED AT EACH END OF THE BRIDGE INDICATING A 5 TON WEIGHT LIMIT. SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.



CORNER	SRP STATION	CANAL			BRIDGE		
		INVERT	EXISTING TOP LINING	EXISTING TOP BANK	OPERATIONAL HIGH WATER	LOW CHORD	TOP OF DECK
SW	1210+82	1135.00	N/A	1143.88	1140.50	1143.75	1145.00
SE	1210+82	1135.00	N/A	1143.87	1140.50	1143.75	1145.00
NW	1210+82	1135.00	N/A	1143.67	1140.50	1143.75	1145.00
NE	1210+82	1135.00	N/A	1143.60	1140.50	1143.75	1145.00

ITEM DESCRIPTION	STRUCTURE EXCAVATION (CY)	STRUCTURE BACKFILL (CY)	STRUCTURAL CONCRETE CLASS S F'c=3000 PSI (CY)	STEEL REINFORCEMENT (LB)	DRILLED SHAFTS 2' 6" DIA (LF)	PRE-FABRICATED STEEL BRIDGE (EA)
ABUTMENT 1	32	24	6	600	52	
ABUTMENT 2	59	35	16	1370	52	
SUPERSTRUCTURE						1
TOTAL	91	59	22	1970	104	1
AS-BUILT						

APPROACH SLABS..... 438 SF
STEEL BOLLARDS..... 2 EA
ELASTOMERIC BEARING PADS..... 4 EA

* QUANTITIES SHOWN ARE APPROXIMATE AND ARE FOR INFORMATION PURPOSES ONLY. STRUCTURE EXCAVATION AND STRUCTURE BACKFILL SHALL BE INCIDENTAL TO THE CONSTRUCTION OF THE BRIDGE.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

S-1.02
ELEVATION & GENERAL NOTES
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALSCAPE PHASE II
ST87600114

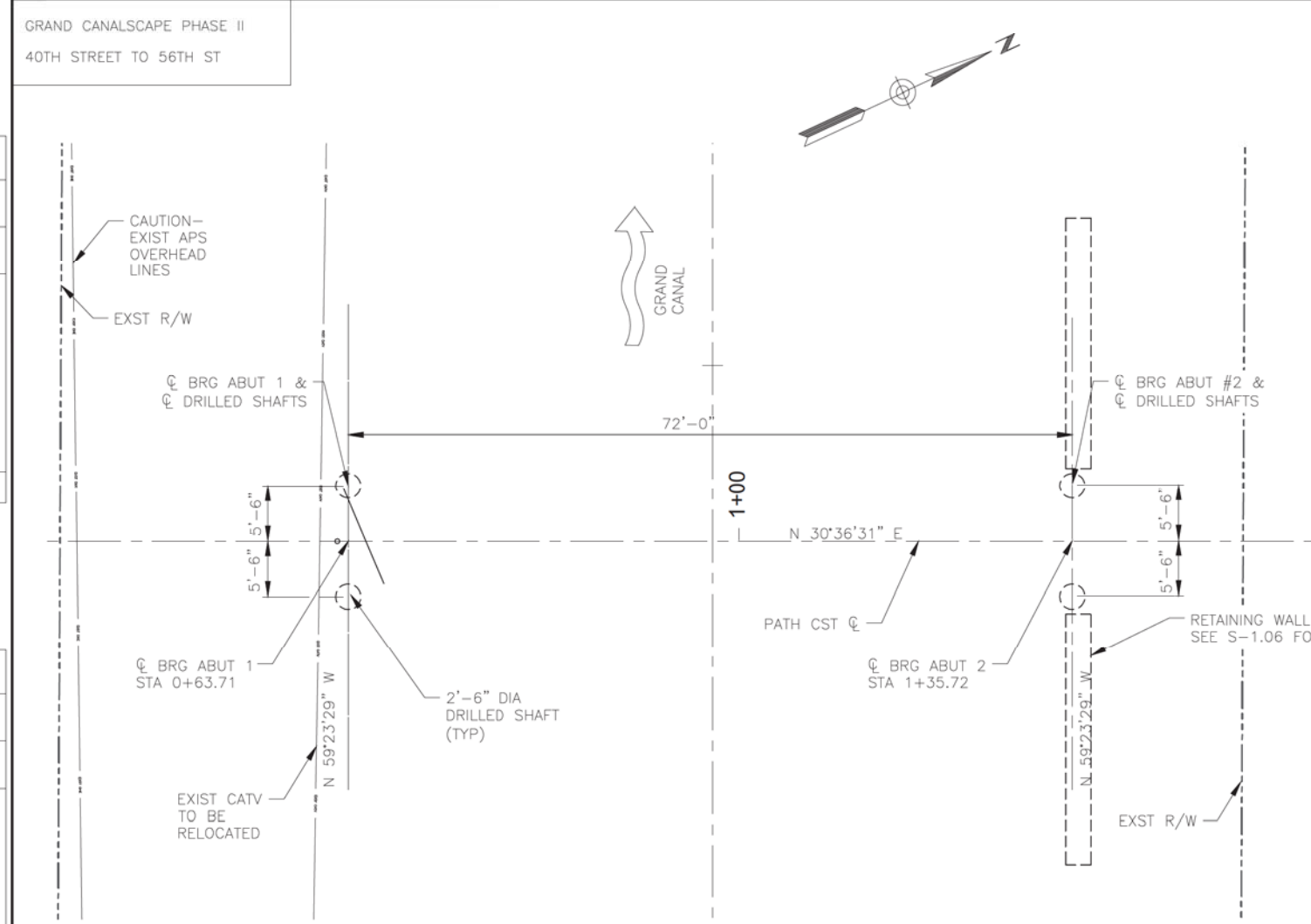
DES: SEO	DR: NJO	CK: AGG	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.45	3.99
SCALE:				

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

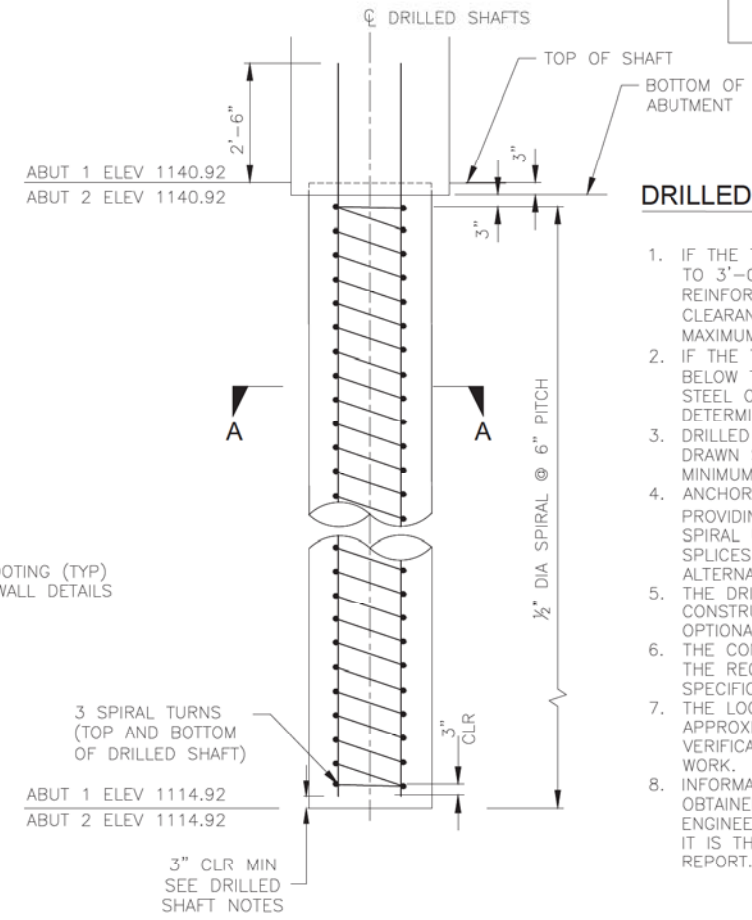


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.46	3.99
DES: SEO		DR: NJO	CK: AGG	DATE: 07/17/17

REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

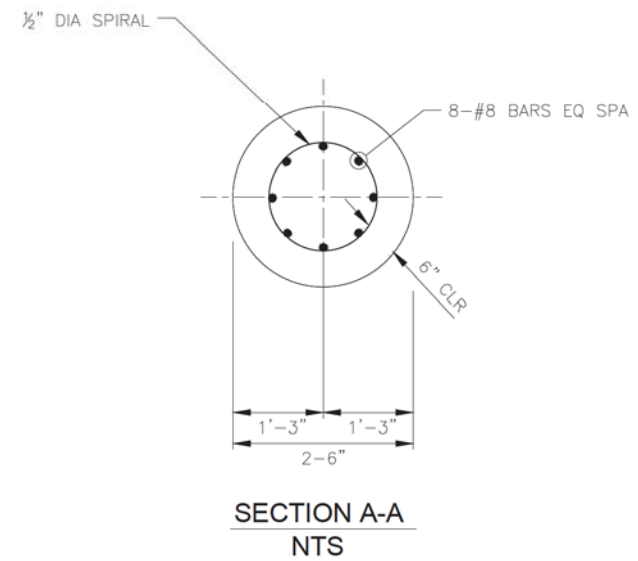


FOUNDATION PLAN
SCALE: 1" = 100'-0"



DRILLED SHAFT ELEVATION
SCALE: 1/2" = 1'-0"

- DRILLED SHAFT NOTES:**
1. IF THE TIP OF THE DRILLED SHAFT IS EXTENDED LESS THAN OR EQUAL TO 3'-0" BELOW THE ELEVATION SHOWN ON THE PLANS, THE REINFORCING STEEL CAGE NEED NOT BE MODIFIED AND THE RESULTING CLEARANCE TO THE TIP OF THE DRILLED SHAFT SHALL BE 3'-3" MAXIMUM.
 2. IF THE TIP OF THE DRILLED SHAFT IS EXTENDED MORE THAN 3'-0" BELOW THE ELEVATION THE PLANS, A MODIFICATION TO THE REINFORCING STEEL CAGE MAY BE REQUIRED. THE ENGINEER SHALL BE NOTIFIED TO DETERMINE THE EXTENT OF THE MODIFICATIONS, IF ANY.
 3. DRILLED SHAFT SPIRAL REINFORCEMENT SHALL BE 1/2" DIAMETER COLD DRAWN STEEL WIRE CONFORMING TO AASHTO M-32 EXCEPT THAT THE MINIMUM TENSILE STRENGTH SHALL BE 60,000 PSI.
 4. ANCHORAGE OF THE SPIRAL REINFORCEMENT SHALL BE ACHIEVED BY PROVIDING 1 1/2 EXTRA TURNS OF THE SPIRAL AT EACH END OF THE SPIRAL UNIT. SPLICES IN SPIRAL REINFORCEMENT SHALL BE LAP SPLICES 48 BAR DIAMETERS BUT NOT LESS THAN 12 INCHES. ALTERNATELY, THE SPLICES MAY BE WELDED.
 5. THE DRILLED SHAFT REINFORCEMENT MAY BE SPLICED IF REQUIRED FOR CONSTRUCTION CLEARANCE FROM THE OVERHEAD POWER LINES. SEE OPTIONAL SHAFT LAP SPLICE DETAIL.
 6. THE CONTRACTOR MAY SELECT ANY ONE OF THE DRILLED SHAFTS AS THE REQUIRED CONFIRMATION SHAFT. SEE ADOT STANDARD SPECIFICATION SECTION 609-3.02 FOR ADDITIONAL INFORMATION.
 7. THE LOCATION OF THE EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE EXISTING UTILITIES PRIOR TO COMMENCEMENT OF WORK.
 8. INFORMATION PERTAINING TO THE GEOTECHNICAL CONDITIONS CAN BE OBTAINED FROM THE GEOTECHNICAL REPORT BY ACS SERVICES ENGINEERING. THE REPORT IS INCLUDED WITH THE SPECIAL PROVISIONS. IT IS THE RESPONSIBILITY OF THE PROSPECTIVE BIDDERS TO REVIEW THIS REPORT.



SECTION A-A
NTS

SRP SAFETY NOTES:
PRIOR TO CONSTRUCTION THE GENERAL CONTRACTOR SHALL CONTACT SRP SAFETY SERVICE TO ARRANGE FOR A SAFETY MEETING REGARDING WORKING UNDER TRANSMISSION LINES. THE CONTACT NUMBER FOR SRP IS 602-236-3782.

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

The writing date before you dig.
CALL FOR THE BLUE STAKES
602-263-1100
Blue Stake Center

"CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING DEPTHS OF ALL UNDERGROUND UTILITIES WITHIN THE PROJECT AREA." PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28. THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

S-1.03
FOUNDATION PLAN AND DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALScape PHASE II
ST87600114

DES: SEO	DR: NJO	CK: AGG	SHEET NO:	TOTAL SHEETS:
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.46	3.99
SCALE:				

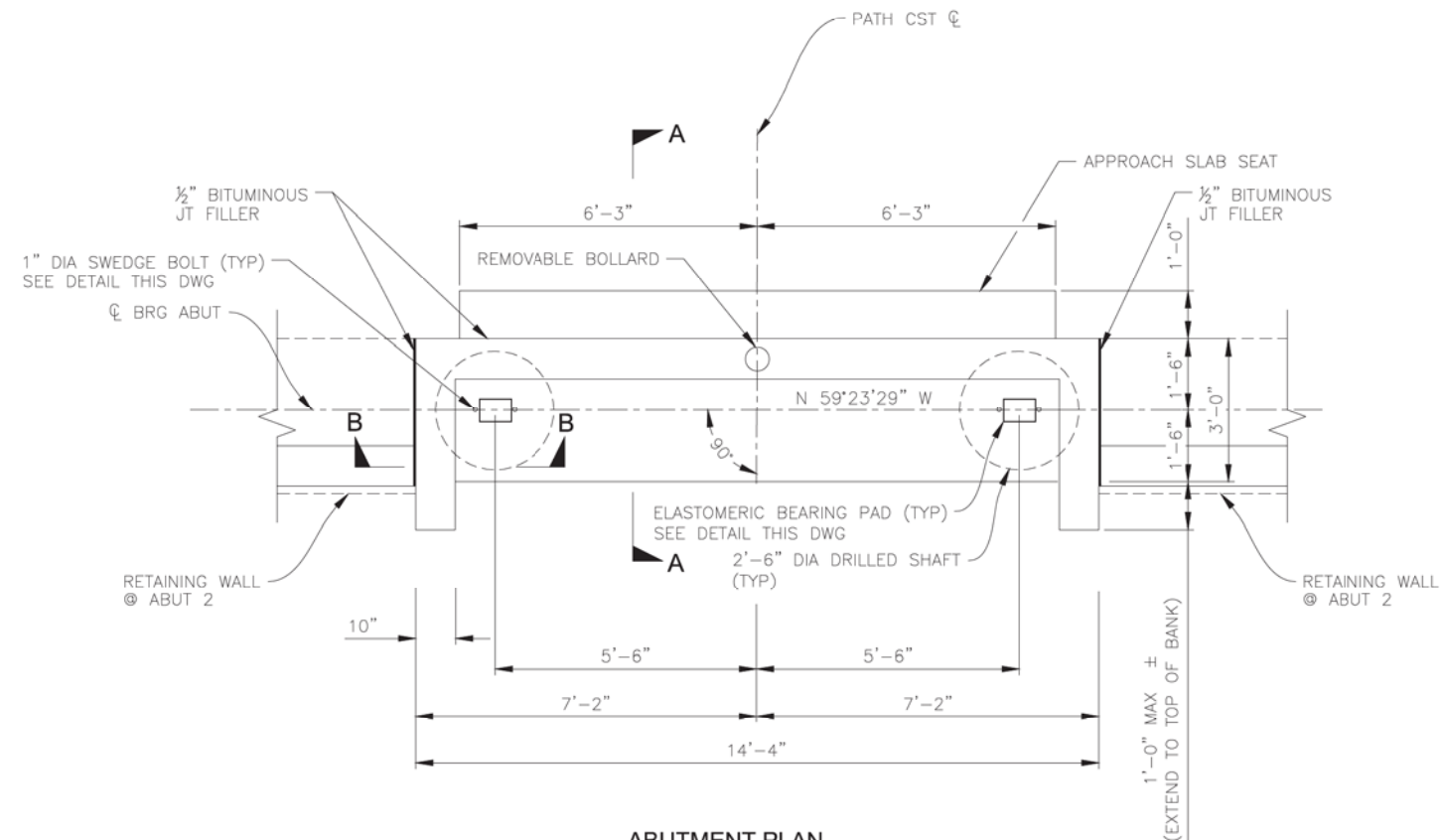


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.47	3.99
DES: SEO		DR: NJO	CK: AGG	DATE: 07/17/17

NO.	DESCRIPTION	REV BY	CHK BY	DATE

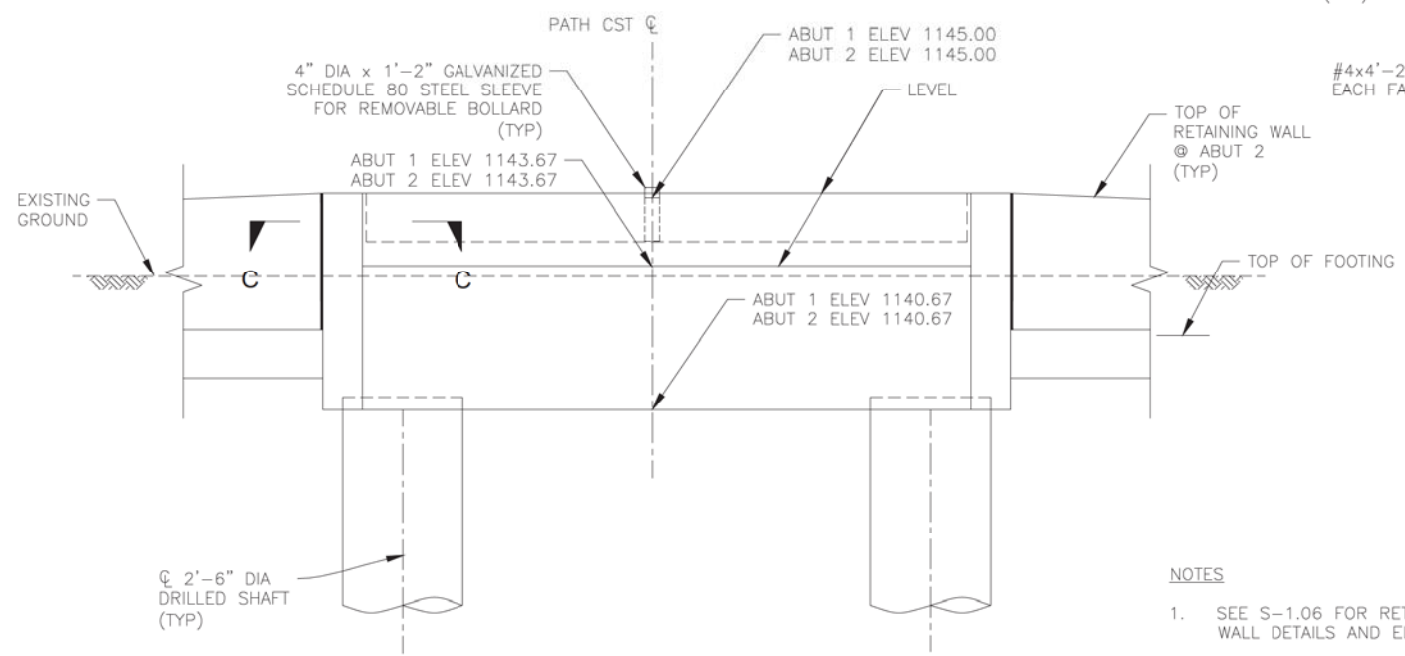
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



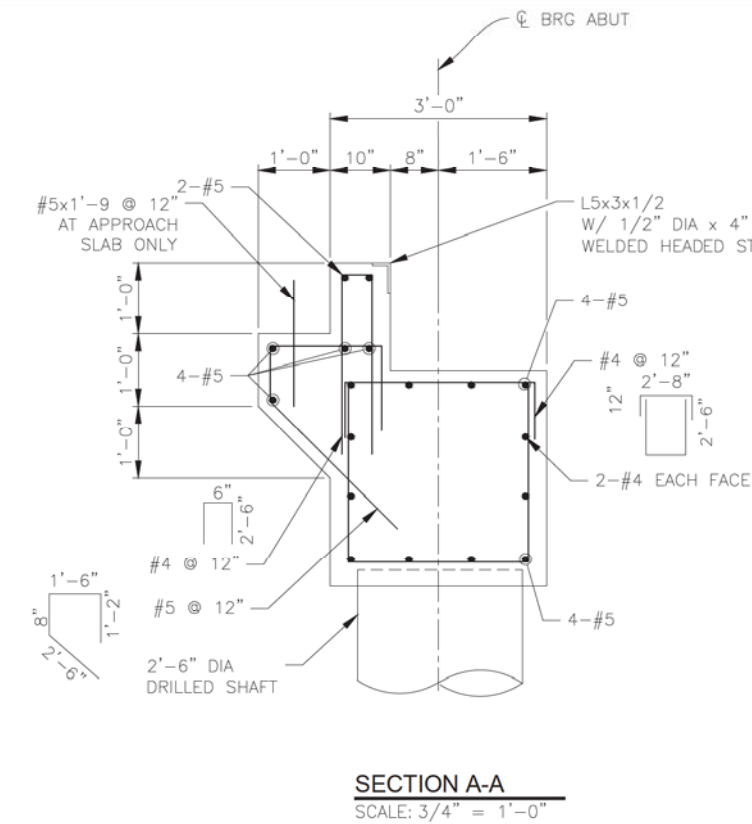
ABUTMENT PLAN
SCALE: 1/2" = 1'-0"

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

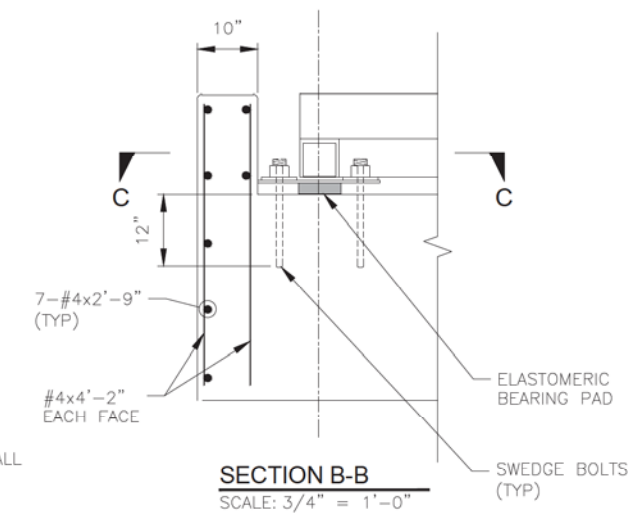


ABUTMENT ELEVATION
SCALE: 1/2" = 1'-0"

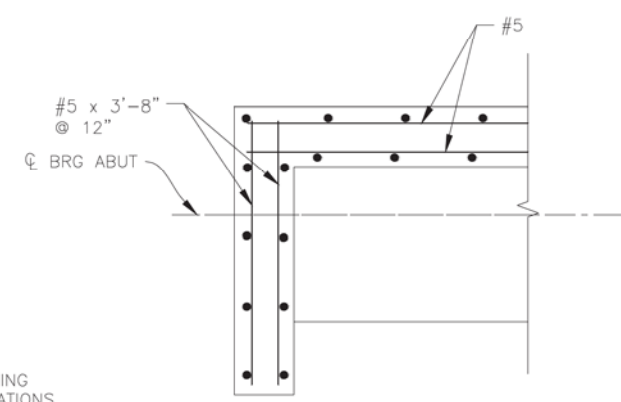
- NOTES**
- SEE S-1.06 FOR RETAINING WALL DETAILS AND ELEVATIONS.



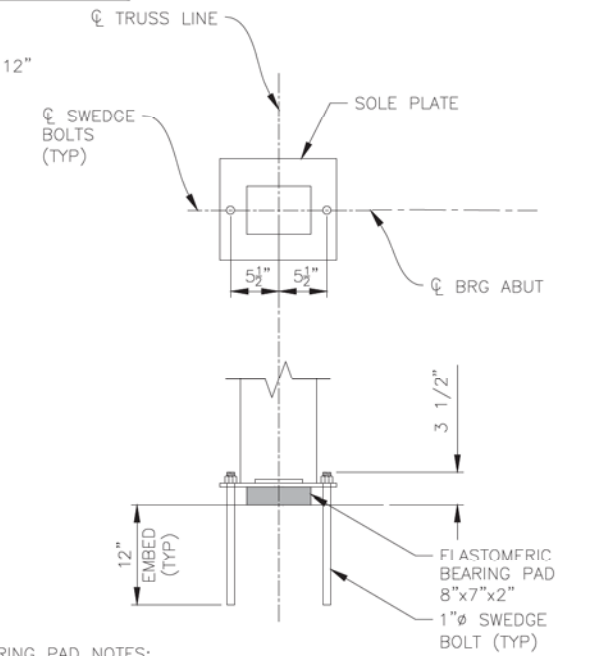
SECTION A-A
SCALE: 3/4" = 1'-0"



SECTION B-B
SCALE: 3/4" = 1'-0"

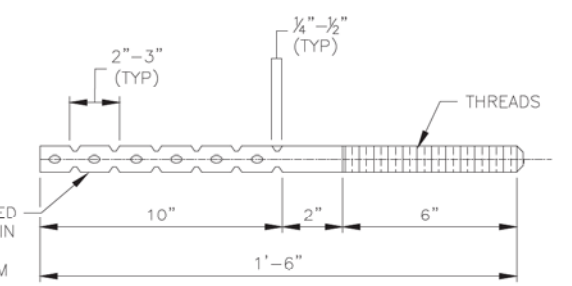


SECTION C-C
SCALE: 3/4" = 1'-0"



BEARING DETAILS
SCALE: 1" = 1'-0"

ELASTOMERIC BEARING PAD NOTES:
DESIGN METHOD A (AASHTO).
LOW TEMPERATURE ZONE A.
ELASTOMER GRADE 0.
SHEAR MODULUS G=130 PSI.
DUROMETER HARDNESS 55.
DESIGN LOADS 32 KIPS.
STEEL REINFORCED (14 GAUGE).



1" DIA SWEDGE BOLT DETAIL
SCALE: NTS

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S-1.04
ABUTMENT PLAN AND ELEVATION
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALSCAPE PHASE II
ST87600114

DES: SEO	DR: NJO	CK: AGG	SHEET NO.	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.47	3.99

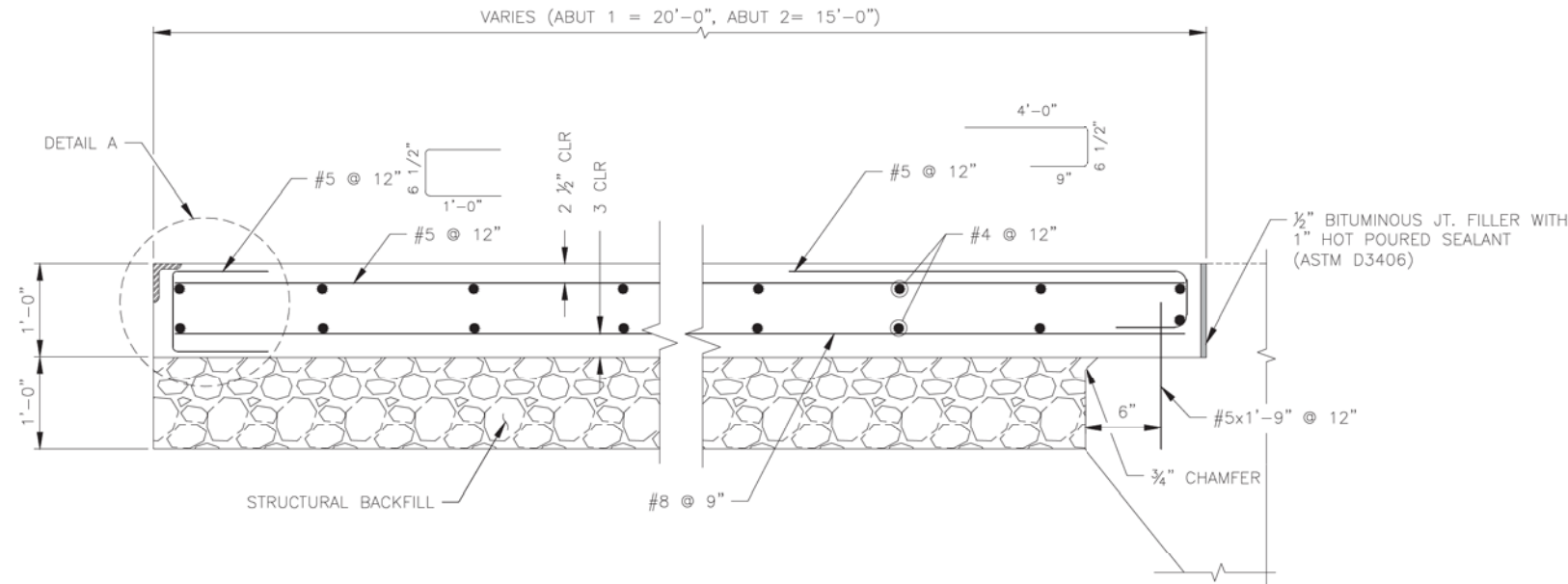


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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DES: SEO		DR: NJO	CK: AGG	DATE: 07/17/17

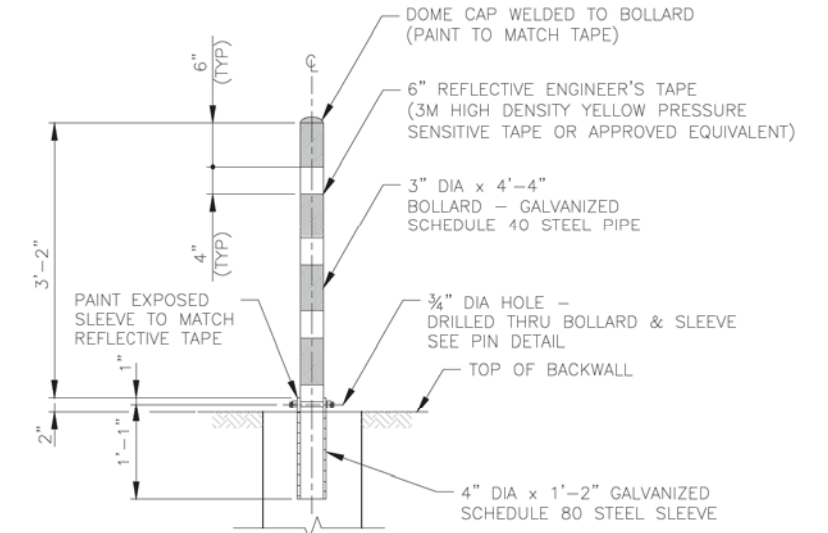
REVISION BY CITY OF PHOENIX	NO.	DESCRIPTION	REV BY	CHK BY	DATE

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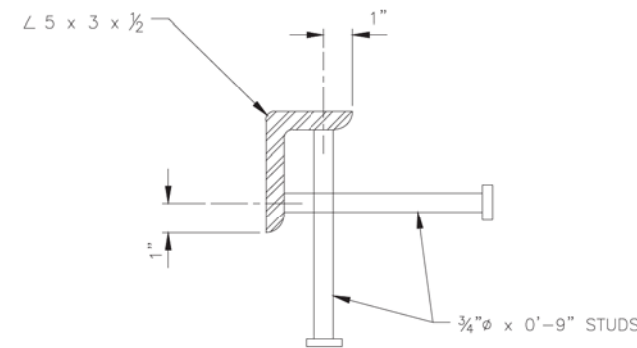
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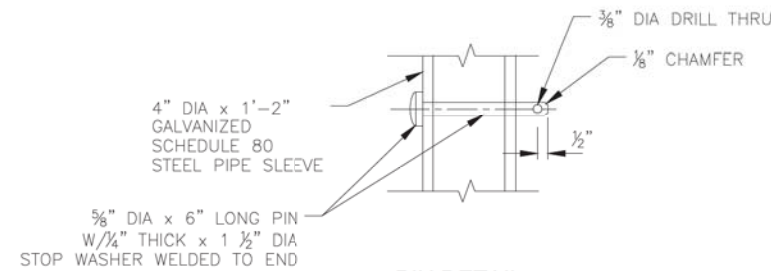
APPROACH SLAB SECTION
SCALE: 1" = 1'-0"



REMOVABLE BOLLARD DETAIL
SCALE: 1" = 20'



DETAIL A
SCALE: 3/4" = 1'-0"



PIN DETAIL
NTS

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

NOTE:
ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY BRIDGE WELDING CODE, D1 5-88 LATEST EDITION



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**S-1.05
MISCELLANEOUS DETAILS**

**CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT**

**SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALSCAPE PHASE II
ST87600114**

DES: SEO	DR: NJO	CK: AGG	SHEET NO.	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.48	3.99

GRAND CANALSCAPE PHASE II
40TH STREET TO 56TH ST

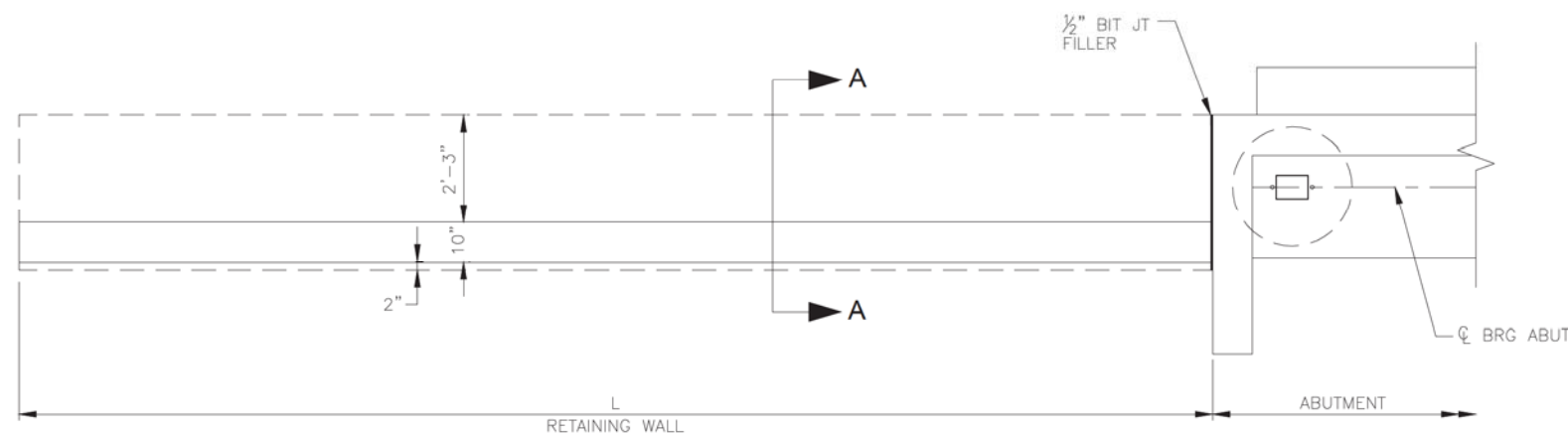


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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ethos ENGINEERS, LLC				
DES: SEO	DR: NJO	CK: AGG	DATE: 07/17/17	

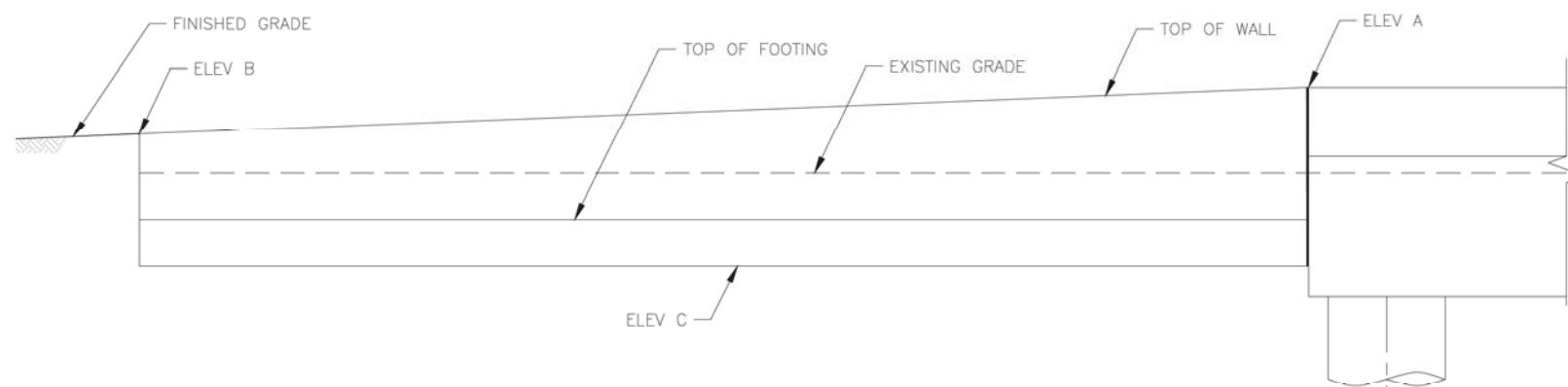
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



PLAN
SCALE: 1/2" = 1'-0"

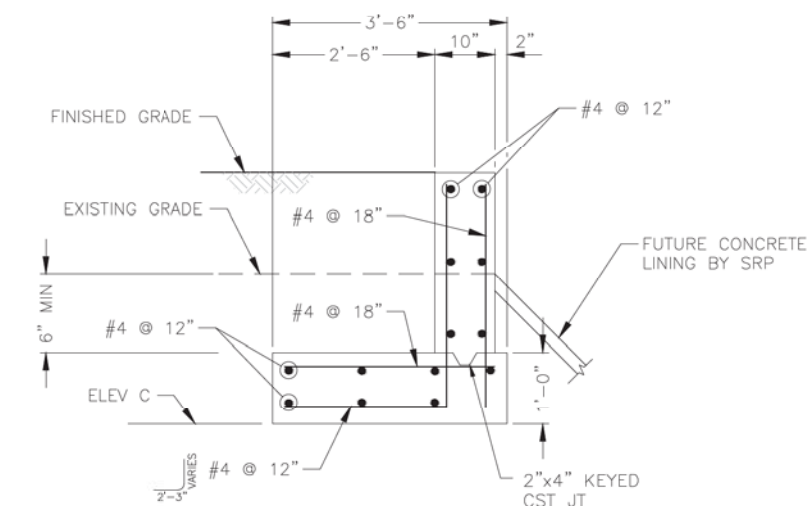


ELEVATION
SCALE: 1/2" = 1'-0"

RETAINING WALL SCHEDULE					
LOCATION	RETAINING WALL	L	ELEV A	ELEV B	ELEV C
ABUT 2	1	25'-0"	1145.00	1144.17	1142.17
ABUT 2	2	25'-0"	1145.00	1144.10	1142.10

NOTES:

- THE BOTTOM OF THE FOUNDATION EXCAVATION MUST BE HAND-TAMPED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D698A TO A DEPTH OF 6 INCHES.



SECTION A-A
SCALE: 3/4" = 1'-0"



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S-1.06
RETAINING WALL DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

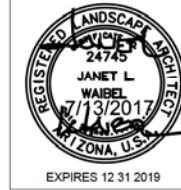
SEGMENT 3: 40TH ST TO 56TH ST
GRAND CANALSCAPE PHASE II
ST87600114

ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.

DES: SEO	DR: NJO	CK: AGG	SHEET NO:	TOTAL SHEETS
DATE: 07/17	DATE: 07/17	DATE: 07/17	3.49	3.99

SCALE:

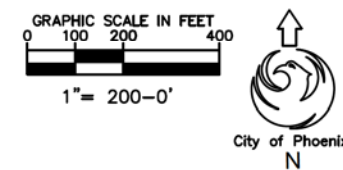
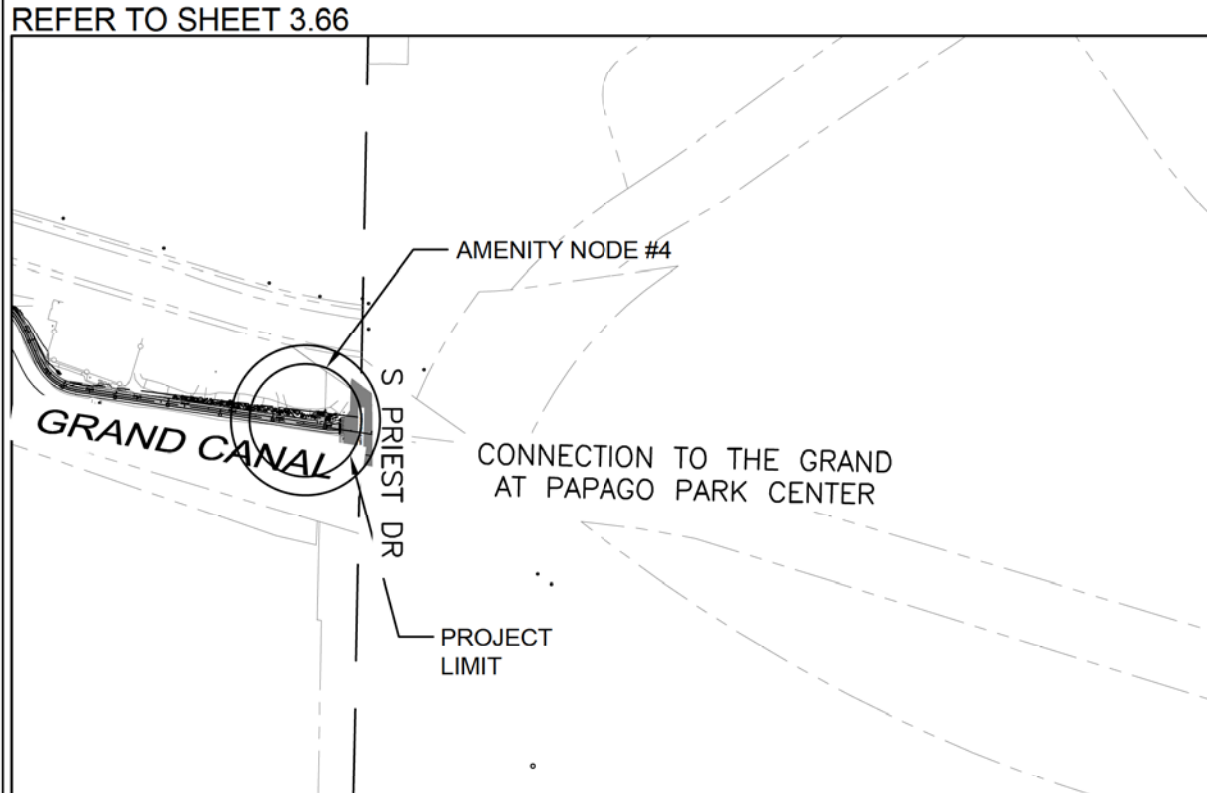
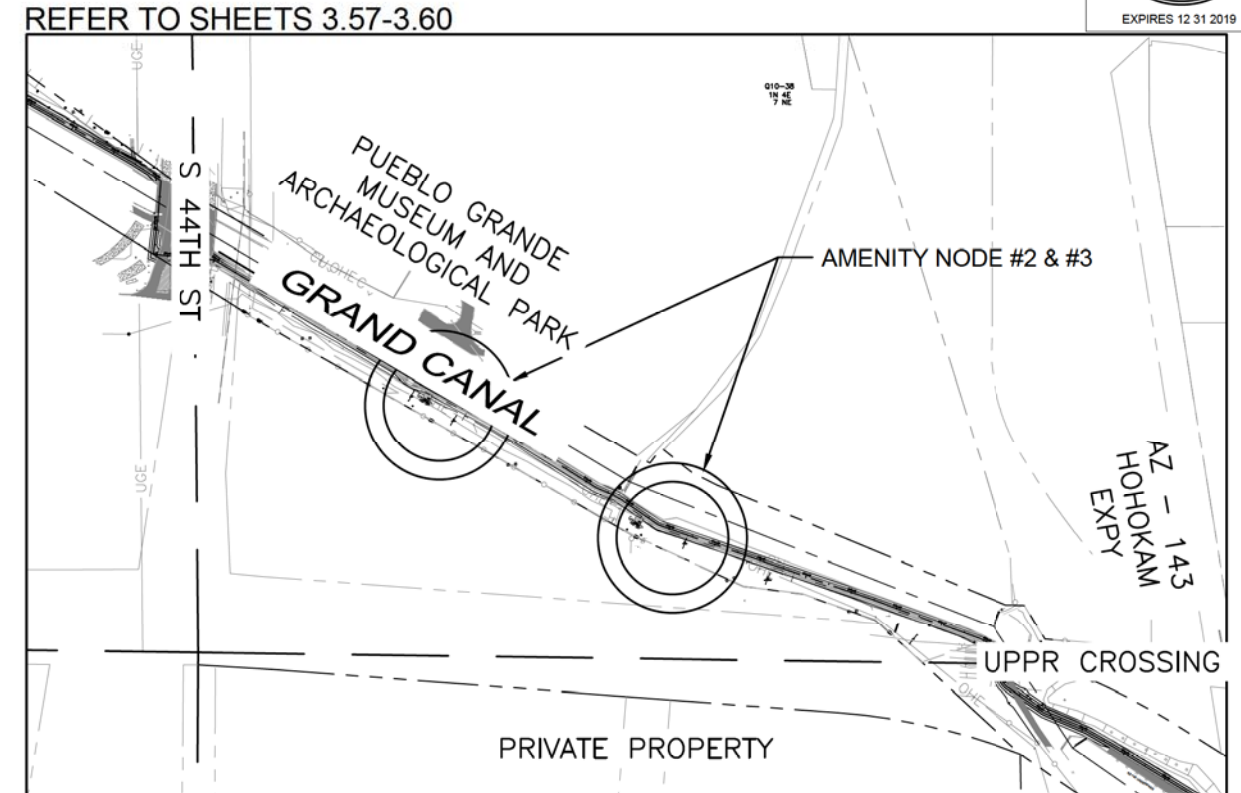
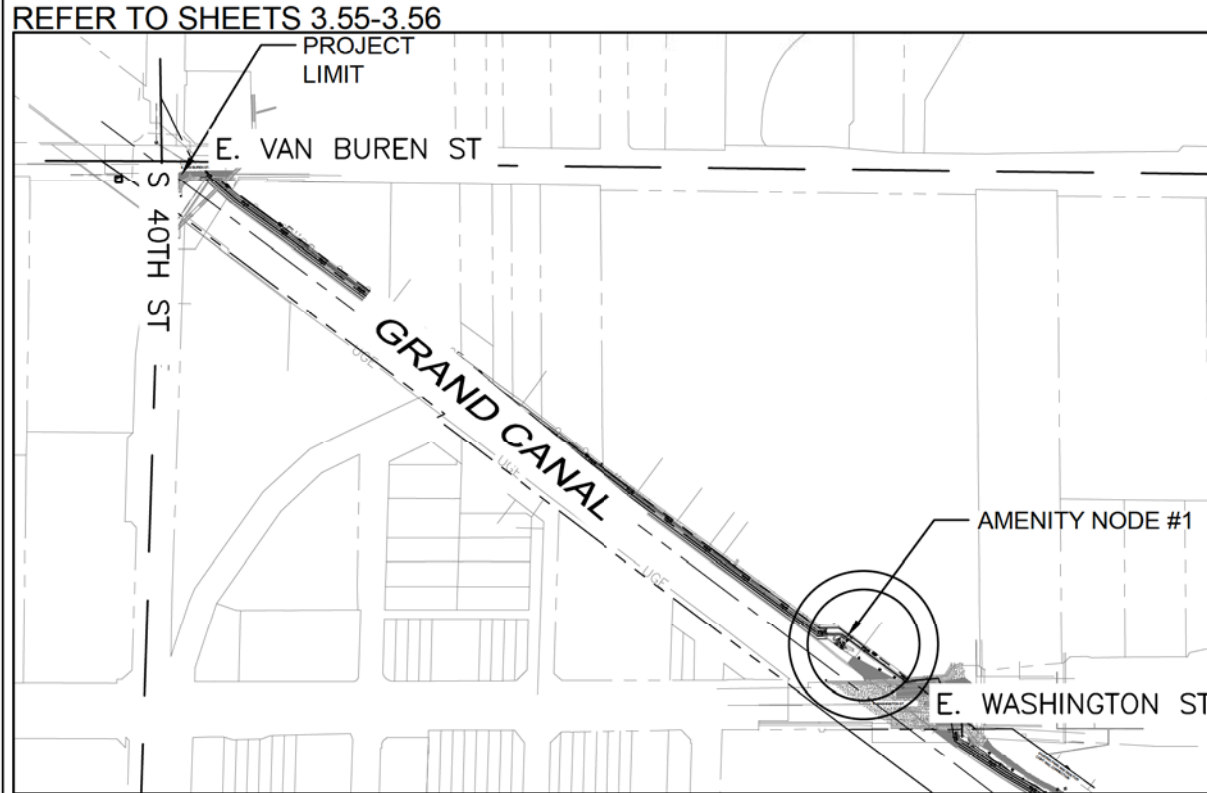
GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.50	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	REVISION BY CITY OF PHOENIX DESCRIPTION	REV BY	CHK BY	DATE



Waibel & Associates
Landscape Architecture
Phone: 480.953.3849 Fax: 480.953.3846
8611 South Priest Drive, Suite 101
Tempe, AZ 85284
e-mail: janet@waibel.com

Contact Arizona 811 at least two full working days before you begin excavation.
ARIZONA 811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

AMENITY OVERVIEW
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17				3.50	3.99

SCALE: 1" = 200'

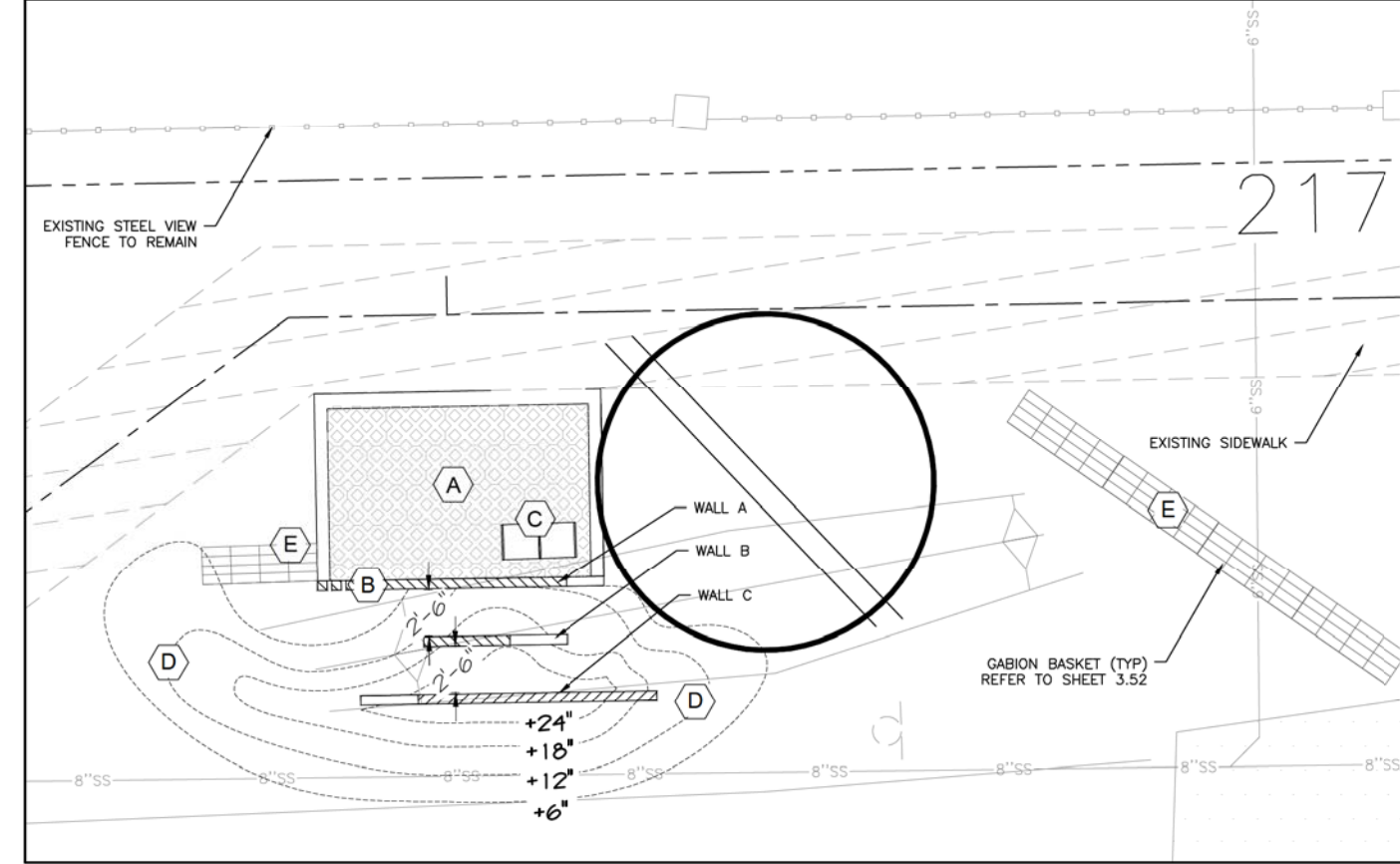
\\DLPHM22\Public\Drawings\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM



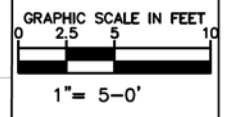
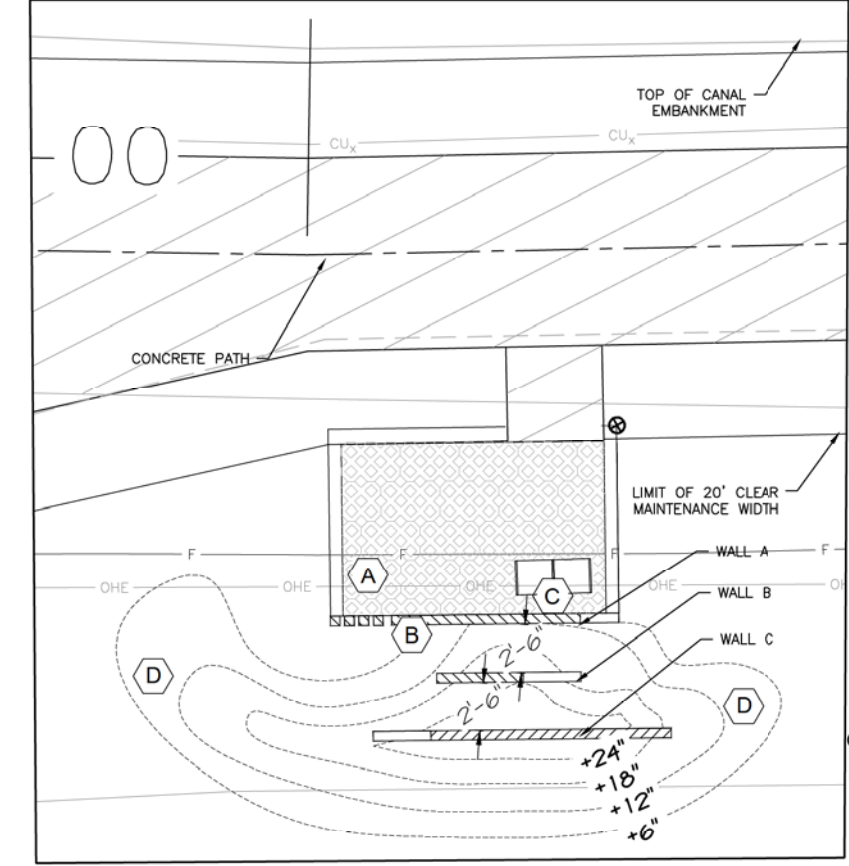
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.51	3.99

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1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NODE 1: SHEET 3.56 STA 216+58
NODE CONNECTION TO WASHINGTON ST, PARK AND RIDE AND LIGHT RAIL STATION LOCATED ON WASHINGTON ST.



NODE 2: SHEET 3.58 STA 237+32
CONNECTION TO NEW BRIDGE TO THE PUEBLO GRAND MUSEUM.

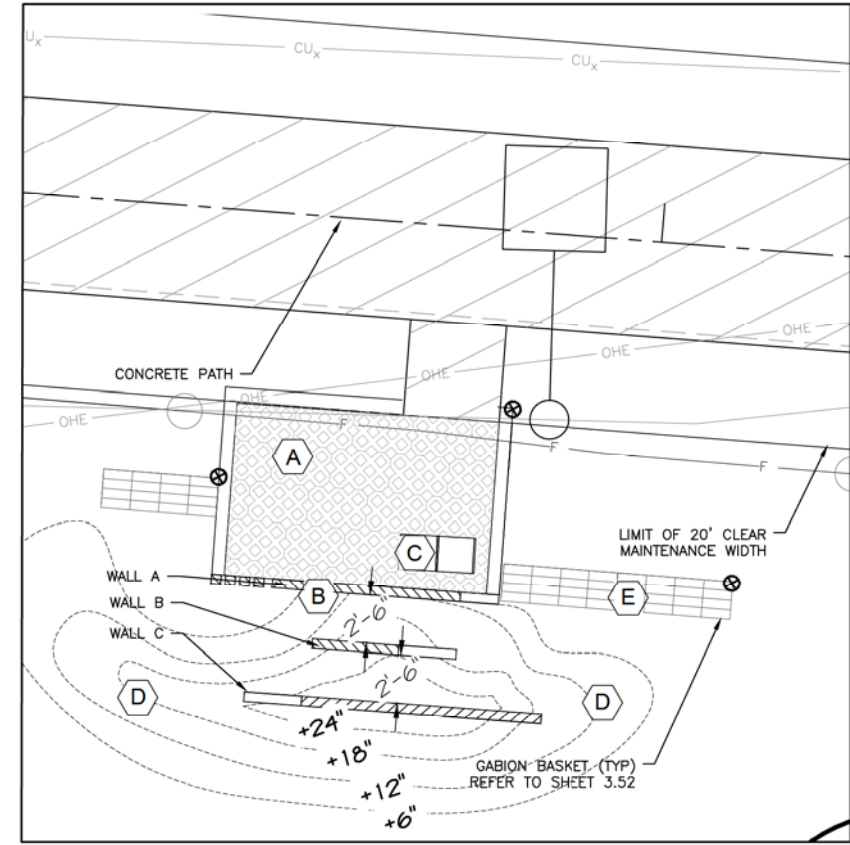


KEYNOTES

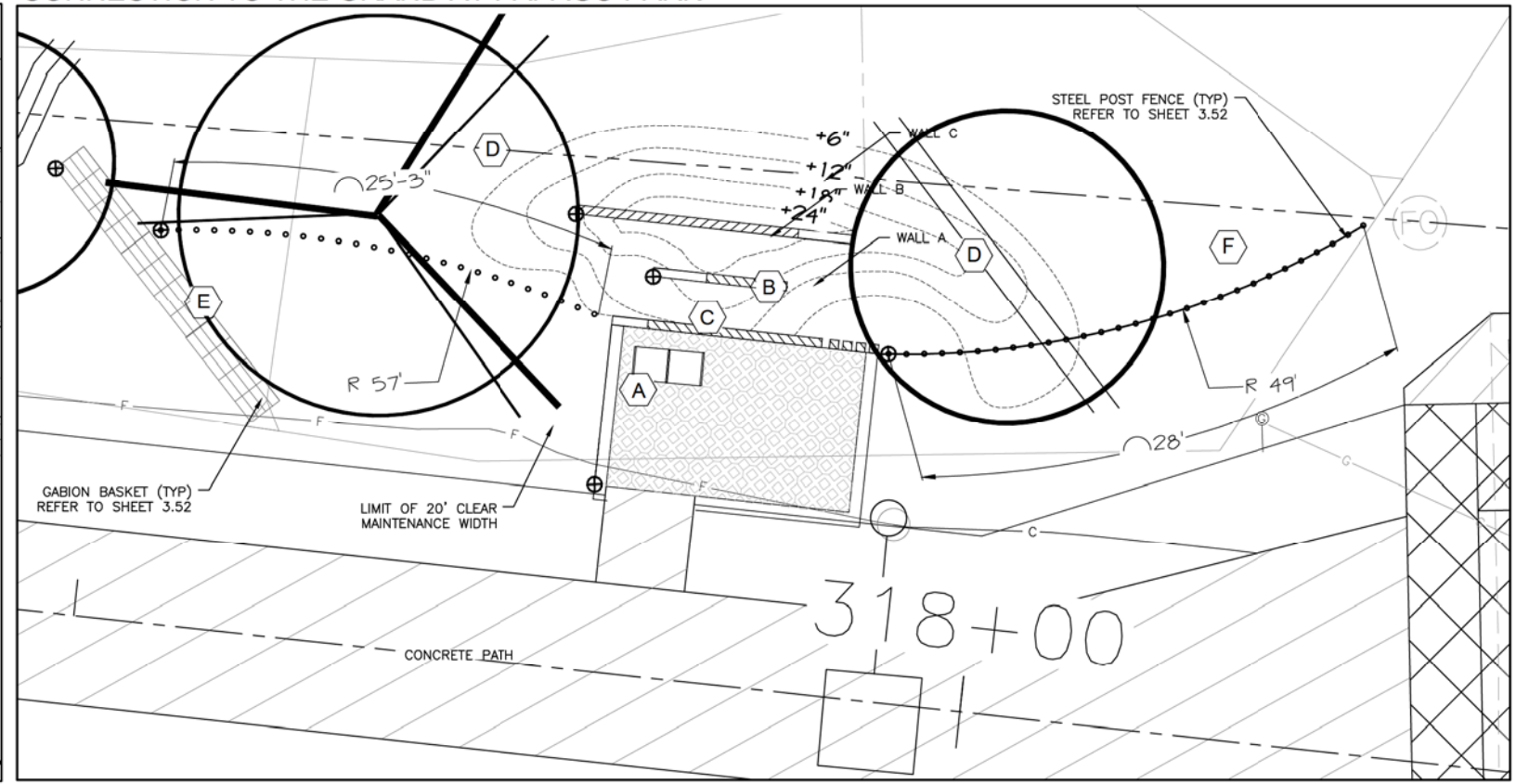
Symbol	Item/Manuf.
(A)	Concrete Block Pavers
(B)	Board Formed Concrete Wall w/Integrated Bike Stand
(C)	Wall Mounted Bench
(D)	Fill Dirt for Berming
(E)	Gabion Basket (Quantity and alignment will vary)
(F)	Steel Posts w/Galvanized Steel Colorant

- NOTES**
1. NODES ARE OUTSIDE POLE AND WIRE SETUP.
 2. CONTRACTOR TO PROVIDE CLEAN FILL FOR BERMING AND COMPLETE ALL FINE GRADING TO TRANSITION TO EXISTING GRADES.
 3. REFER TO LANDSCAPE PLANS FOR TREE AND SHRUB TYPES.
 4. PROVIDE SUBMITTALS AND SAMPLES FOR ALL MATERIALS.

NODE 3: SHEET 3.59 STA 242+43
CONNECTION TO PARK OF FOUR WATERS



NODE 4: SHEET 3.66 STA 317+78
CONNECTION TO THE GRAND AT PAPAGO PARK



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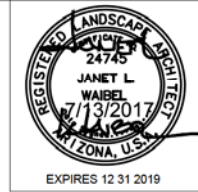
AMENITY NODES
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS:
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.51	3.99

SCALE: 1"=5'

NO.	DESCRIPTION	REV BY/CHK BY	DATE

D:\PHM22\Public\Drawings\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.52	3.99

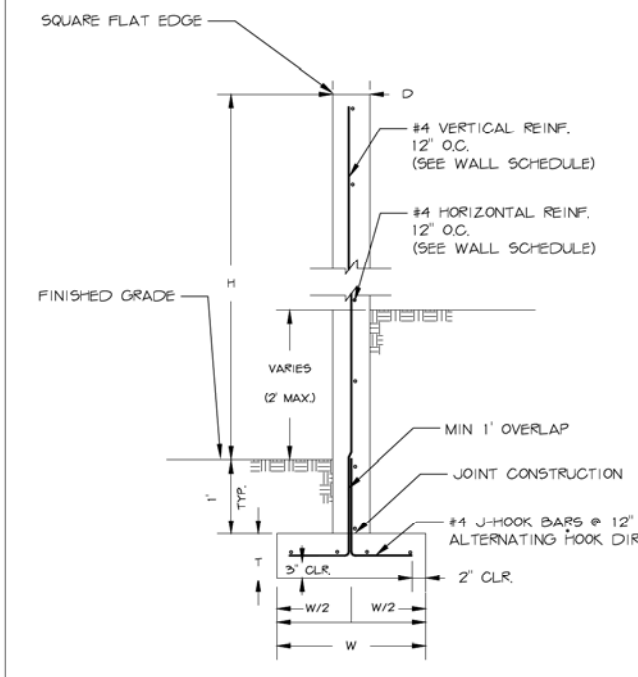
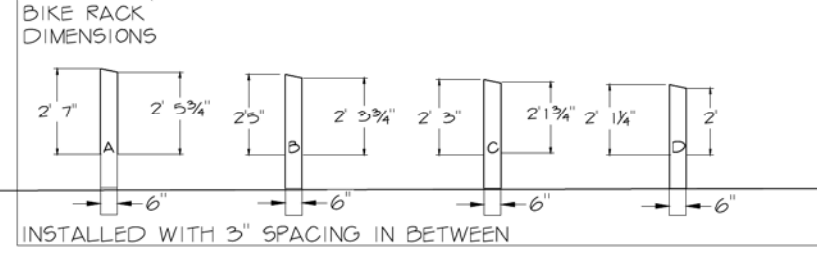
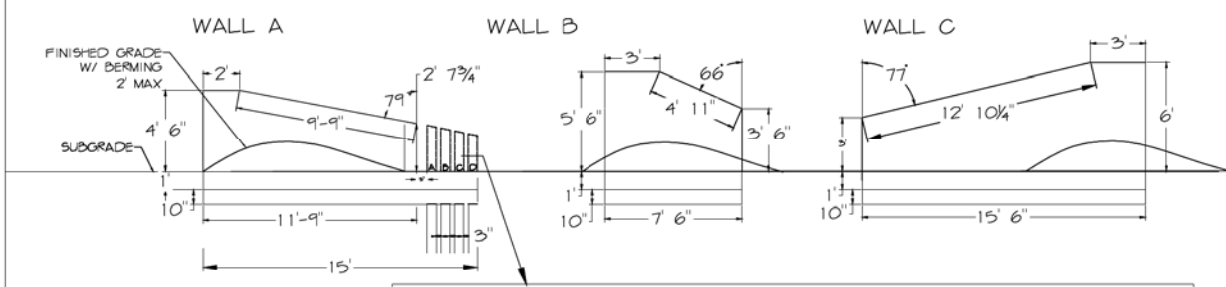
TRACE CONSULTING
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Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE
NO.			

NODE WALLS
NODE WALLS



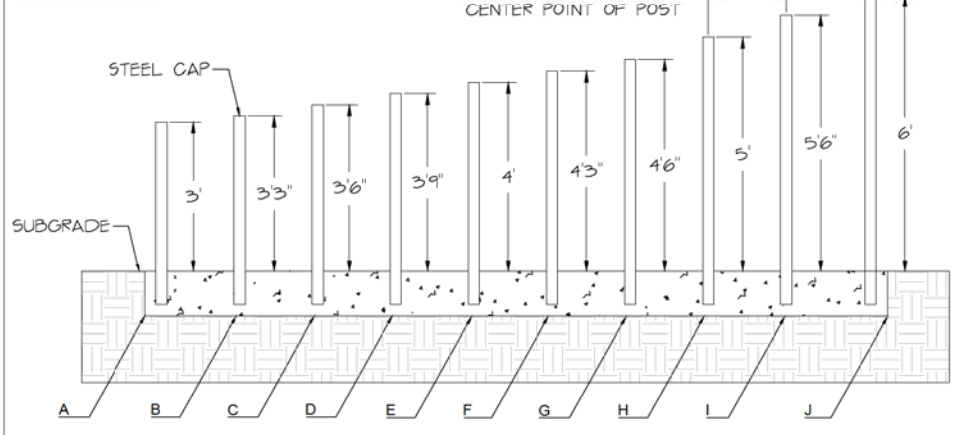
WALL NOTES:
 - ALL CONCRETE SHALL BE CLASS 'S' (F' C= 3000 PSI)
 - ALL WALL FACES ARE Poured IN PLACE, IN FORMS MADE FROM ORIENTED STRAND PLYWOOD IN 12" HORIZONTAL SECTIONS SO PLYWOOD LEAVES THE RELIEF TEXTURE OF THE BOARD ON THE FACE OF THE CONCRETE WALLS.
 - ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS OTHERWISE NOTED.
 - COMPACT BACKFILL FOR FOOTING AND WALL BASE
 MINIMUM 95% OF ASTM D698 MAXIMUM DRY DENSITY.
 - SEE PROJECT PLANS FOR WALL LAYOUT, FINISHED GRADE ELEVATIONS.
 - DIMENSIONS SHALL NOT BE SCALED FROM DRAWING.

WALL SCHEDULE

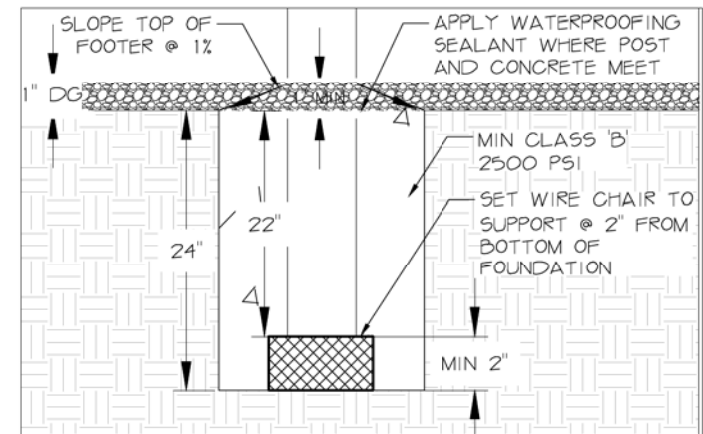
WALL TYPE	WALL THICK. (D)	WALL HEIGHT* (H)	FTG. DEPTH (T)	FTG. WIDTH (W)	WALL VERT. & HORIZ.	FOOTING BOTTOM LONG.	FACTORED AVERAGE SOIL BEARING PRESSURE (PSF)
A	8"	4'-6"	10"	2'	#4 @ 12"	4-#4	1200
B	8"	5'-6"	10"	2'	#4 @ 12"	4-#4	1200
C	8"	6'	10"	2'-6"	#4 @ 12"	4-#4	1300

* WALL HEIGHT MEASURED FROM FINISHED GRADE EXCLUSIVE OF VARYING MOUND HEIGHTS AROUND WALLS

POST FENCE
POST HEIGHT



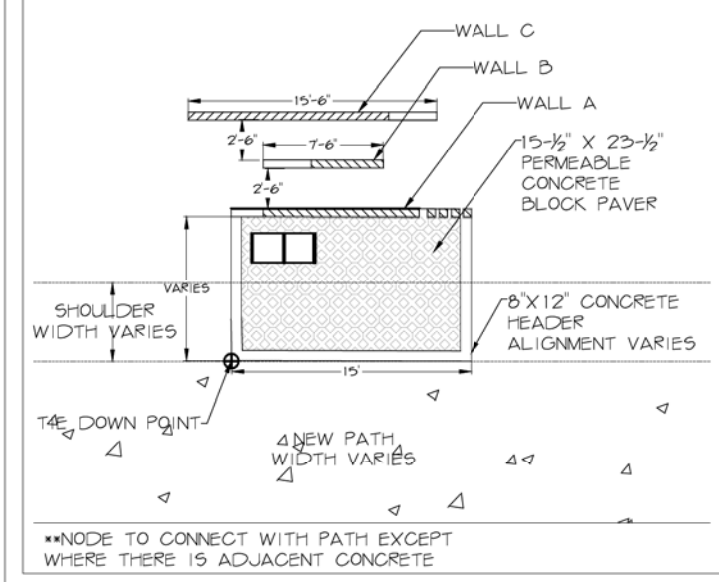
NOTES:
 - ALL POSTS ARE 3" GALVANIZED STEEL, LENGTH VARIES; SEE ABOVE
 - HEIGHT REPRESENTS POST DIMENSION ABOVE SUBGRADE
 - ALL GALVANIZED POSTS TO BE TREATED WITH NATINA PRODUCT PRIOR TO INSTALLATION
 - SPACING BETWEEN ALL POSTS IS 12" O.C. AND TO BE SET INTO ONE CONTINUOUS FOOTING FOR EACH LENGTH OF FENCING
 - POST FENCES ALL SET IN ONE CONTINUOUS FOOTING FOR EACH RUN.
 - EACH POST TO BE CAPPED WITH STEEL DRIVE-ON DISK END CAP FOR 3" PIPE AND SEALED TO PREVENT WATER INFILTRATION.



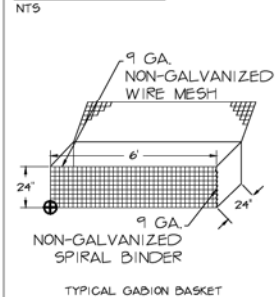
POST SCHEDULE

POST TYPE	POST HEIGHT FROM SUBGRADE	QTY
A	3'	11
B	3'-3"	20
C	3'-6"	28
D	3'-9"	33
E	4'	40
F	4'-3"	42
G	4'-6"	37
H	5'	32
I	5'-6"	35
J	6'	19

LAYOUT TYP. ALL NODES



GABION BASKET



NOTES:
 - ALL GABION BASKETS TO BE FILLED WITH 4"-8" RIVER ROCK, ARRANGED WITH FLAT EDGE OF ROCK FACING OUT OF BASKET.
 - PRE-FORMED STIFFENERS SHALL BE USED TO PRODUCE A FLAT, SMOOTH EXTERNAL SURFACE. STIFFENERS SHALL BE INSTALLED PRIOR TO ROCK PLACEMENT.
 - WHEN FILLING BASKETS, ROCK SHALL BE PLACED IN THREE 8-INCH LAYERS
 - THE LAST LAYER OF ROCK SHALL SLIGHTLY OVERFILL THE GABIONS SUCH THAT THE LID WILL REST ON ROCK WHEN IT IS CLOSED.

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AMENITY NODE DETAILS

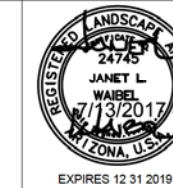
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	NO:	3.99

SCALE: NTS

GRAND CANALSCAPE PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.53	3.99

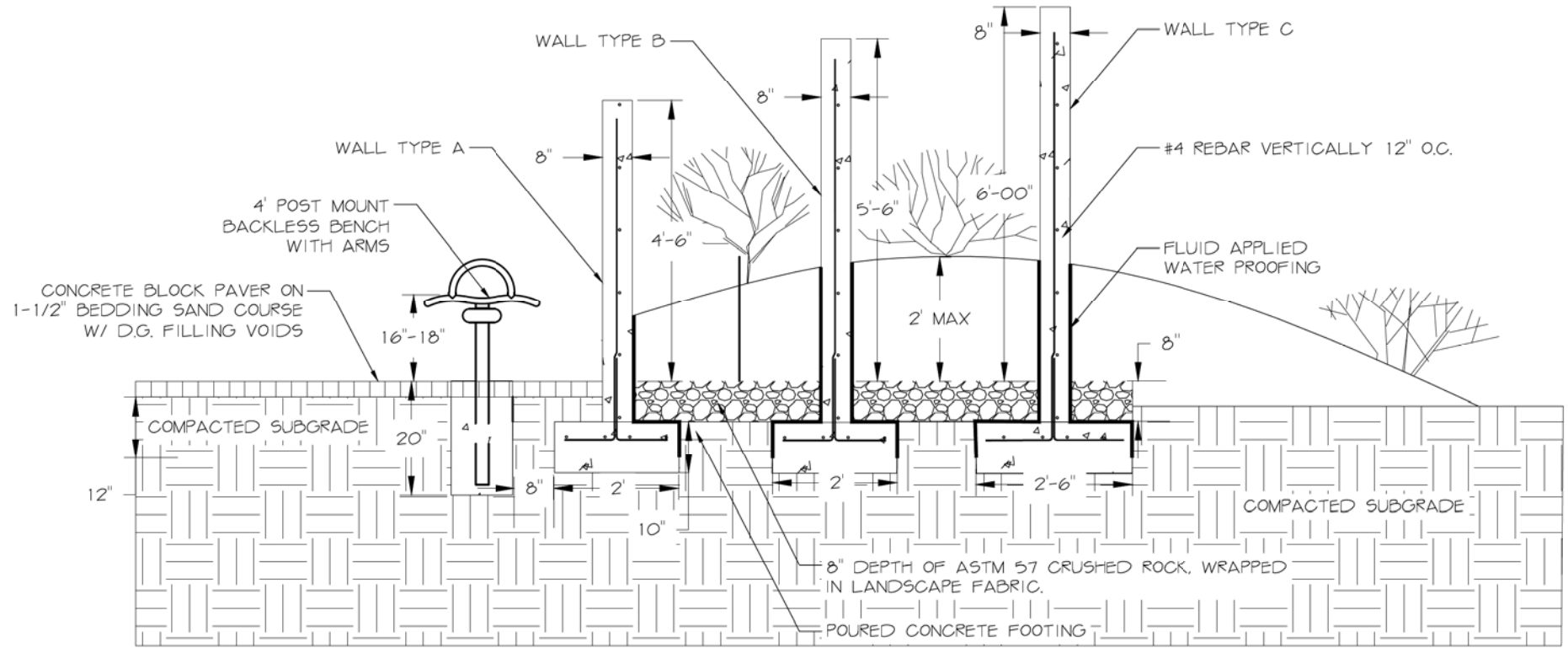
TRACE
CONSULTING

1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

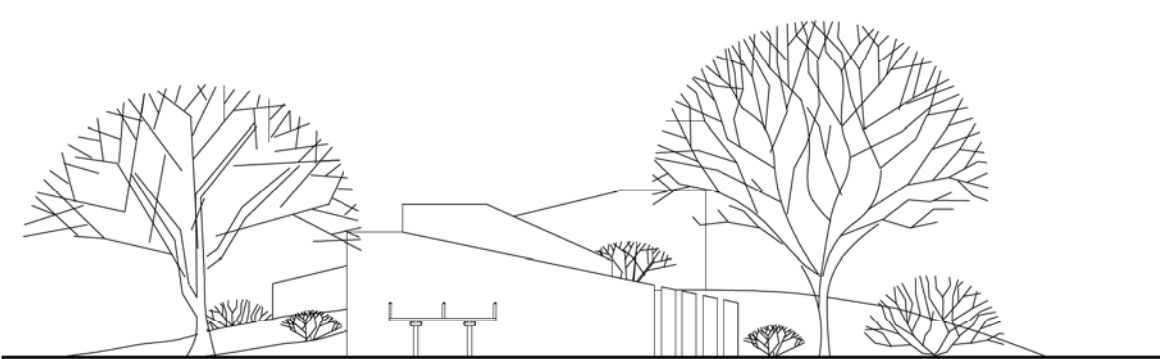
NO.	REVISION BY CITY OF PHOENIX DESCRIPTION	REV BY/CHK BY	DATE

NODE SECTION (TYP)

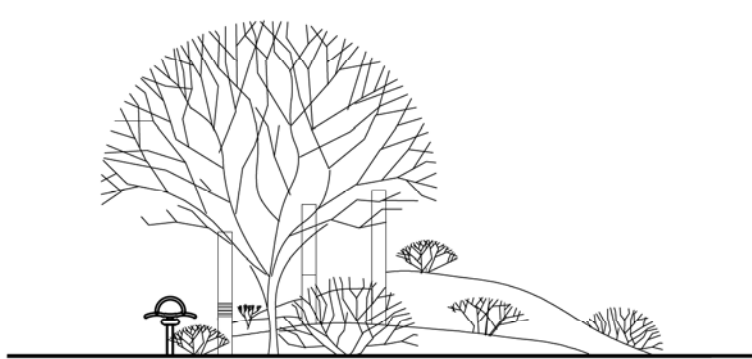
NOTE: POURED FORM CONCRETE WALLS TO BE 8" THICK, HEIGHTS VARY, REINFORCED WITH HORIZONTAL #4 REBAR 12" O.C. USE ORIENTED STRAND BOARD FOR FORMS.



NODE ELEVATIONS (TYP)



NORTH ELEVATION



WEST ELEVATION

Waibel & Associates
Landscape Architecture
 Phone: 480.953.3340 Fax: 480.953.3346
 8611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: janet@waibel.com

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ARIZONA 811
 Call 811 or click Arizona811.com

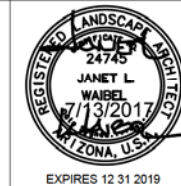
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AMENITY NODE DETAILS
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	NTS					3.53	3.99

GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY DATE
NO.		
NO.		
NO.		

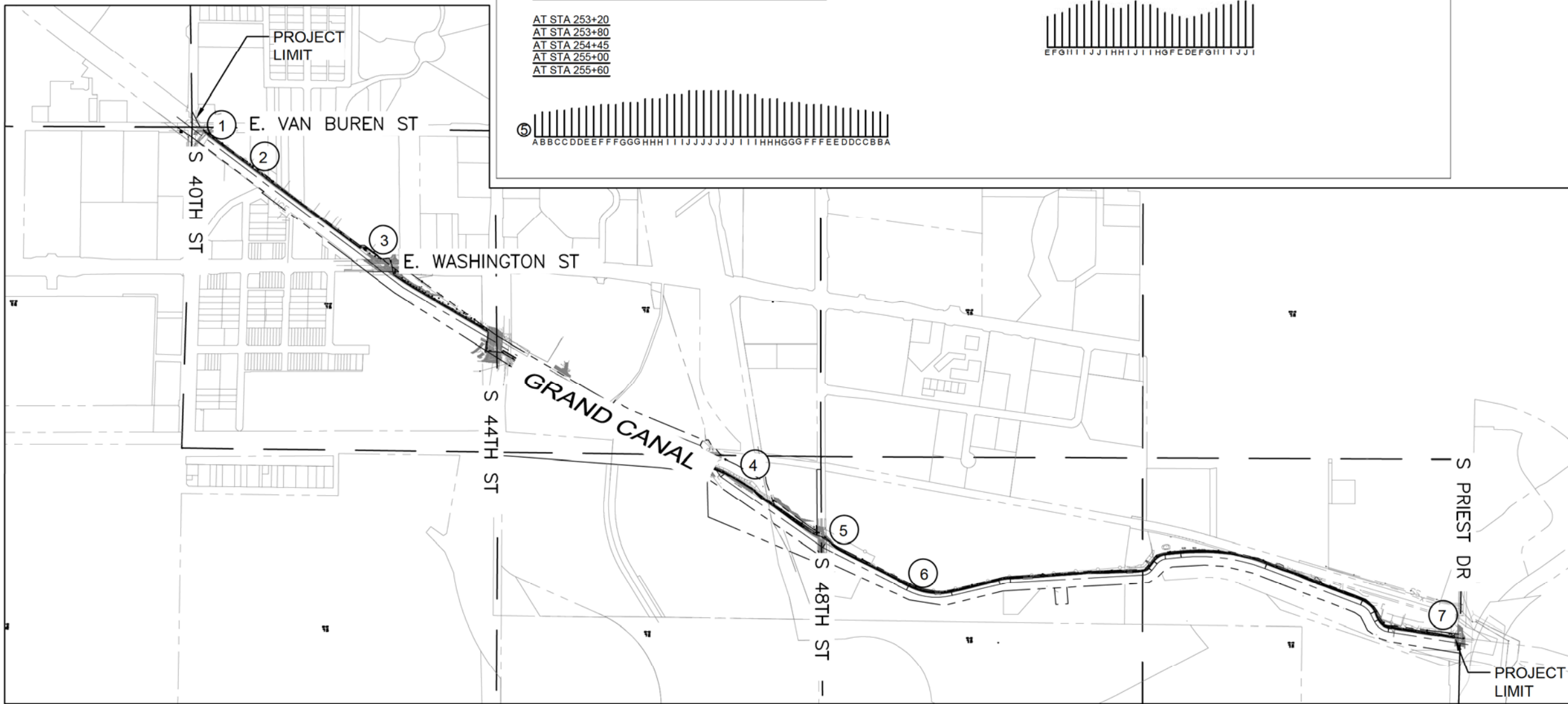
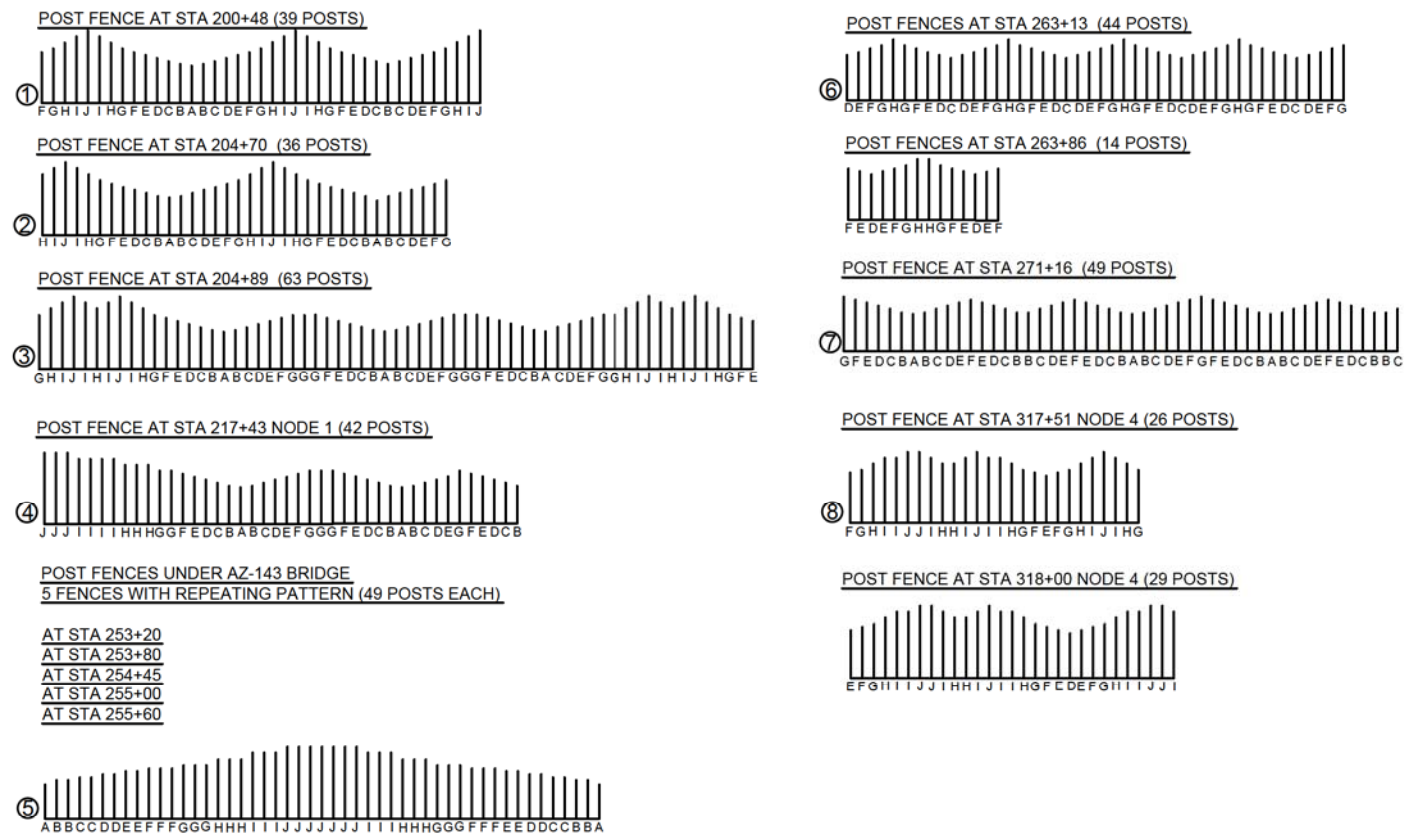


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.54	3.99

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CONSULTING

1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

**POST FENCE REFERENCE KEY:
 REFER TO SHEET 3.52 FOR POST HEIGHT AND FOOTING**



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 Landscape Architecture

8611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 Phone: 480.953.2600 Fax: 480.953.2666
 e-mail: Janet@waibel.com

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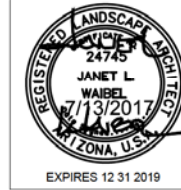
POST FENCE REFERENCE SHEET

CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET	TOTAL
DATE: 7/17	DATE: 7/17	DATE: 7/17				NO:	SHEETS
SCALE: 1" = 200'						3.54	3.99

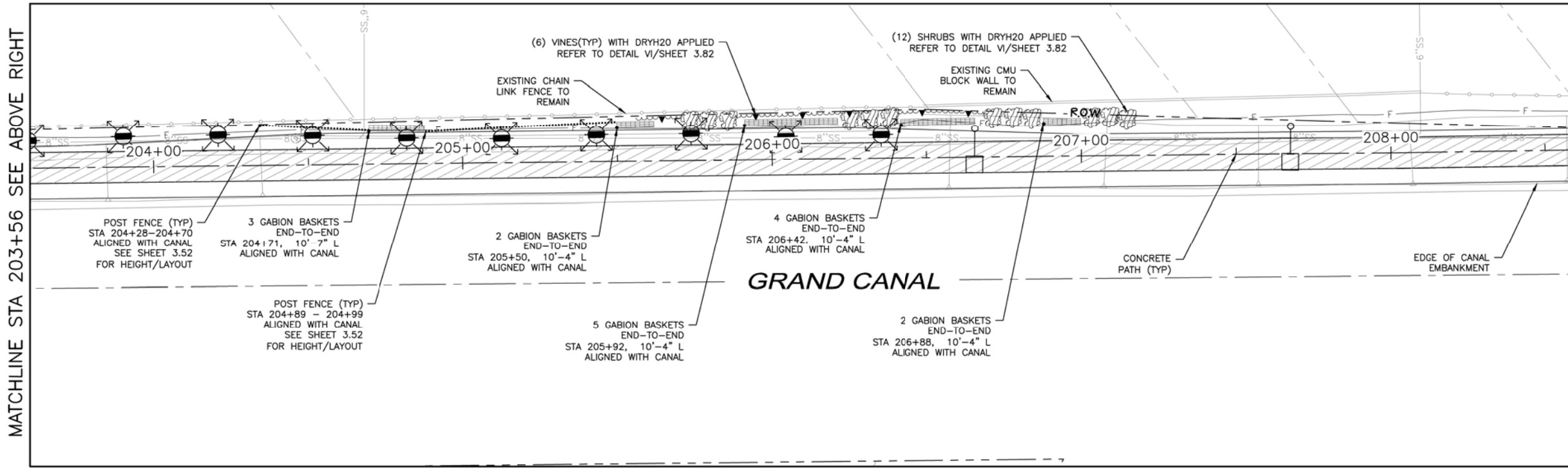
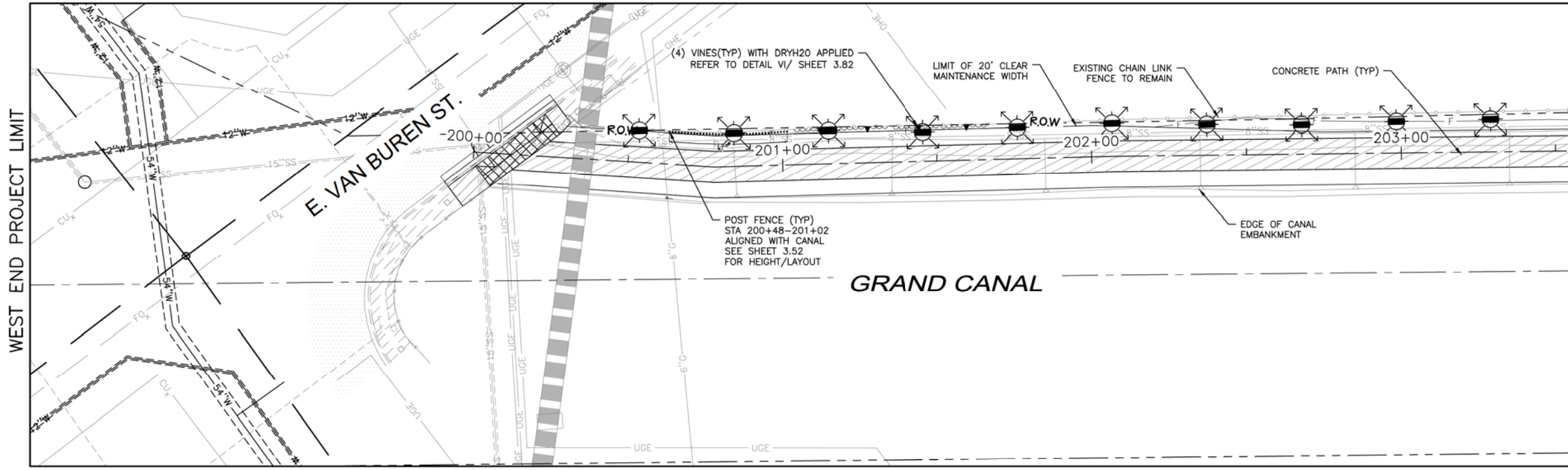
GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



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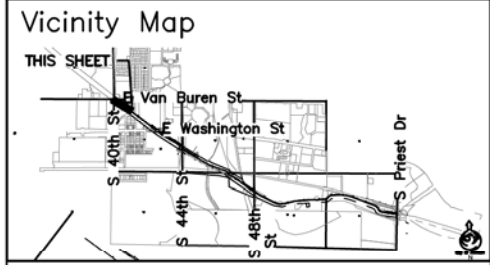
NO.	DESCRIPTION	REV BY/CHK BY	DATE



LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
●	Existing Tree To Remain	
○	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
○	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2' CALIPER
○	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3' CALIPER
○	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
○	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa ** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
○	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
○	Muhlenbergia rigida 'Nashville**' NASHVILLE MUHLY	5 Gallon
○	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
○	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
○	Fouquieria splendens OCOTILLO	Bareroot -6' Planted
○	Carnegiea gigantea SAGUARO CACTUS	7 Cane Minimum 15 Gallon
○	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'

**SRP ROW Compliant Plant Material



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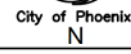
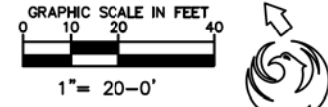
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.55	3.99

SCALE: 1"=20'

NOTE:
ALL GROUND-DISTURBING ACTIVITIES MUST BE MONITORED BY THE ARCHAEOLOGIST PROVIDED BY THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ARCHAEOLOGIST.



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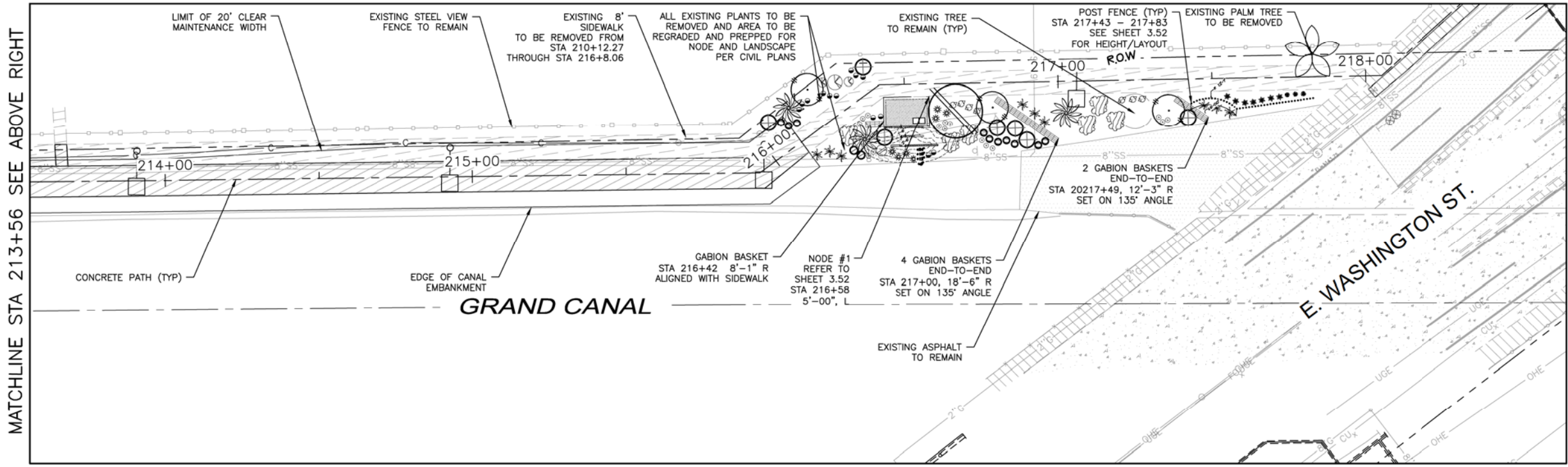
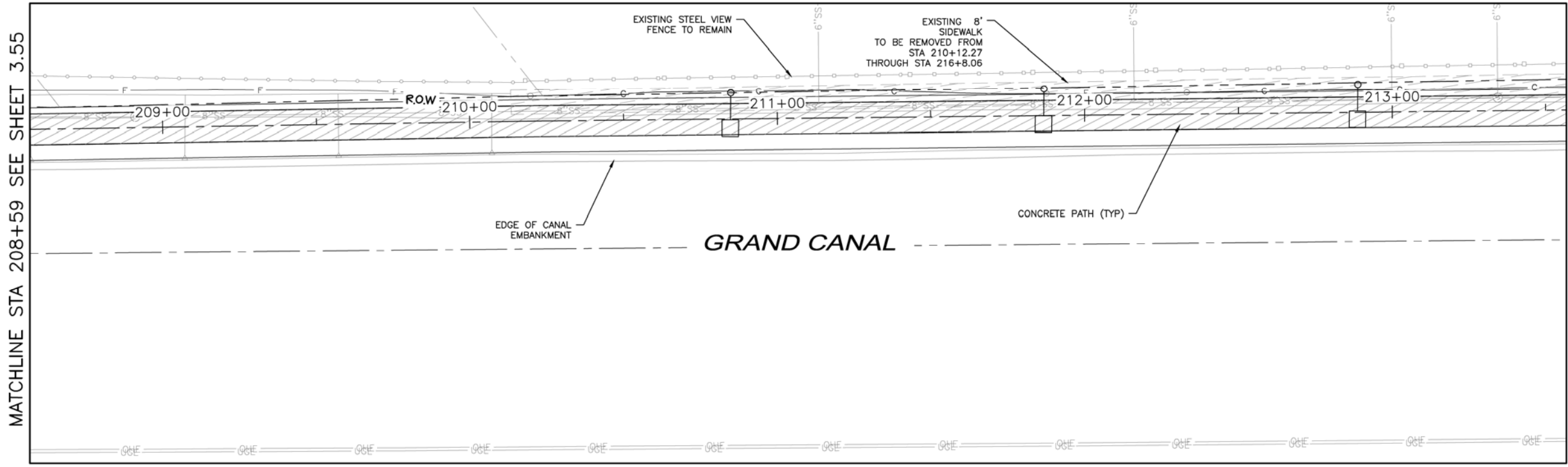
GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



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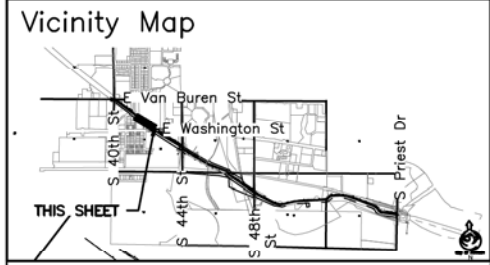
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LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	
(Circle with slash)	Chilopsis linearis **	5' H x 4' W
(Circle with slash)	DESERT WILLOW - MULTI-TRUNK	1-1.5' CALIPER
(Circle with slash)	Lysiloma thomberi **	7' H x 5' H
(Circle with slash)	FERN OF THE DESERT - MULTI-TRUNK	2' CALIPER
(Circle with slash)	Prosopis Hybrid Thornless **	10' H x 8' W
(Circle with slash)	THORNLESS HYBRID MESQUITE MULTI-TRUNK	3' CALIPER
(Circle with dot)	Caesalpinia mexicana Hybrid**	25 Gallon
(Circle with dot)	HYBRID EVERGREEN BIRD	
(Circle with dot)	Tecoma stans var. angustata **	15 Gallon
(Circle with dot)	ARIZONA YELLOW BELLS	
(Circle with dot)	Encelia farinosa **	5 Gallon
(Circle with dot)	BRITTLEBUSH	
(Circle with dot)	Ambrosia deltoidea**	5 Gallon
(Circle with dot)	TRIANGLE LEAF BURSAGE	
(Circle with dot)	Bouteloua gracilis 'Blonde Ambition' **	5 Gallon
(Circle with dot)	BLUE GRAMA	
(Circle with dot)	Aristida purpurea **	5 Gallon
(Circle with dot)	PURPLE THREE AWN	
(Circle with dot)	Muhlenbergia rigida 'Nashville**	5 Gallon
(Circle with dot)	NASHVILLE MUHLY	
(Circle with dot)	Stipa tenuissima**	5 Gallon
(Circle with dot)	MEXICAN THREAD GRASS	
(Circle with dot)	Justicia californica	5 Gallon
(Circle with dot)	CHUPAROSA	
(Circle with dot)	Baileya multiradiata **	1 Gallon
(Circle with dot)	DESERT MARIGOLD	
(Circle with dot)	Sphaeralcea ambigua **	1 Gallon
(Circle with dot)	DESERT GLOBEMALLOW	
(Circle with dot)	Psilostrophe cooperi**	1 Gallon
(Circle with dot)	PAPER FLOWER	
(Circle with dot)	Penstemon parryi **	1 Gallon
(Circle with dot)	PARRY'S PENSTEMON	
(Circle with dot)	Macfadyena unguis-cati	15 Gallon
(Circle with dot)	CAT CLAW VINE	
(Circle with dot)	Yucca rupicola	15 Gallon
(Circle with dot)	TWISTED LEAF YUCCA	
(Circle with dot)	Fouquieria splendens	Bareroot -6' Planted
(Circle with dot)	OCOTILLO	7 Cane Minimum
(Circle with dot)	Carnegiea gigantea	15 Gallon
(Circle with dot)	SAGUARO CACTUS	
(Circle with dot)	Native Seed Mix (Do Not Treat w/Herbicide)	
(Circle with dot)	SONORAN WILDFLOWER SEED MIX	
(Circle with dot)	The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Circle with dot)	1/2" Screened Decomposed Granite	
(Circle with dot)	MOUNTAIN VISTA BROWN	
(Circle with dot)	Gabion Basket	2' x 2' x 6'
(Circle with dot)	Tie Down Point for Dimension (Typ)	

**SRP ROW Compliant Plant Material



Waibel & Associates Landscape Architecture
Phone: 480.953.3640 Fax: 480.953.3646
8611 South Priest Dr., Suite 101
Tempe, AZ 85284
www.waibel.com

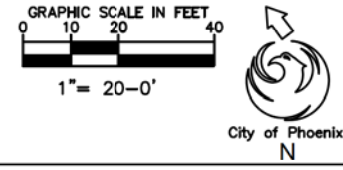
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ARIZONA811
Call 811 or click Arizona811.com

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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.56	3.99

NOTE:
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MATCHLINE STA 208+59 SEE SHEET 3.55

MATCHLINE STA 213+56 SEE BELOW LEFT

MATCHLINE STA 213+56 SEE ABOVE RIGHT

MATCHLINE STA 218+65 SEE SHEET 3.57

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST

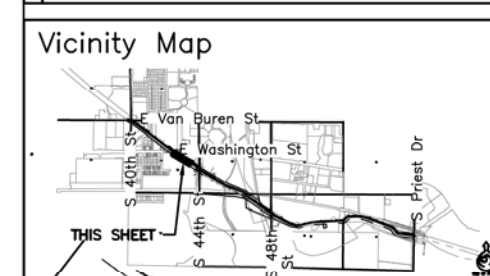


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.57	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	
(Circle with slash)	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5" CALIPER
(Circle with slash)	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER
(Circle with slash)	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3" CALIPER
(Circle with dot)	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
(Circle with dot)	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
(Circle with dot)	Encelia farinosa ** BRITTLEBUSH	5 Gallon
(Circle with dot)	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
(Circle with dot)	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
(Circle with dot)	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
(Circle with dot)	Muhlenbergia rigida 'Nashville'** NASHVILLE MUHLY	5 Gallon
(Circle with dot)	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
(Circle with dot)	Justicia californica CHUPAROSA	5 Gallon
(Circle with dot)	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
(Circle with dot)	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
(Circle with dot)	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
(Circle with dot)	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
(Circle with dot)	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
(Circle with dot)	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
(Circle with dot)	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Cane Minimum
(Circle with dot)	Carnegiea gigantea SAGUARO CACTUS	15 Gallon
(Circle with dot)	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Circle with dot)	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
(Circle with dot)	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
(Circle with dot)	**SRP ROW Compliant Plant Material	



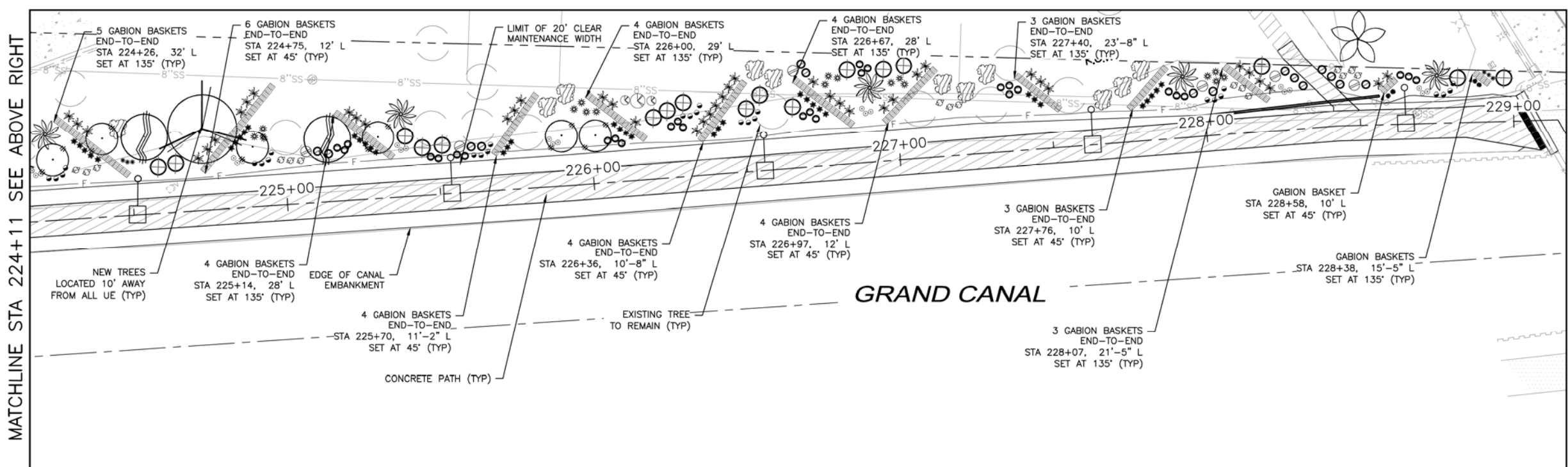
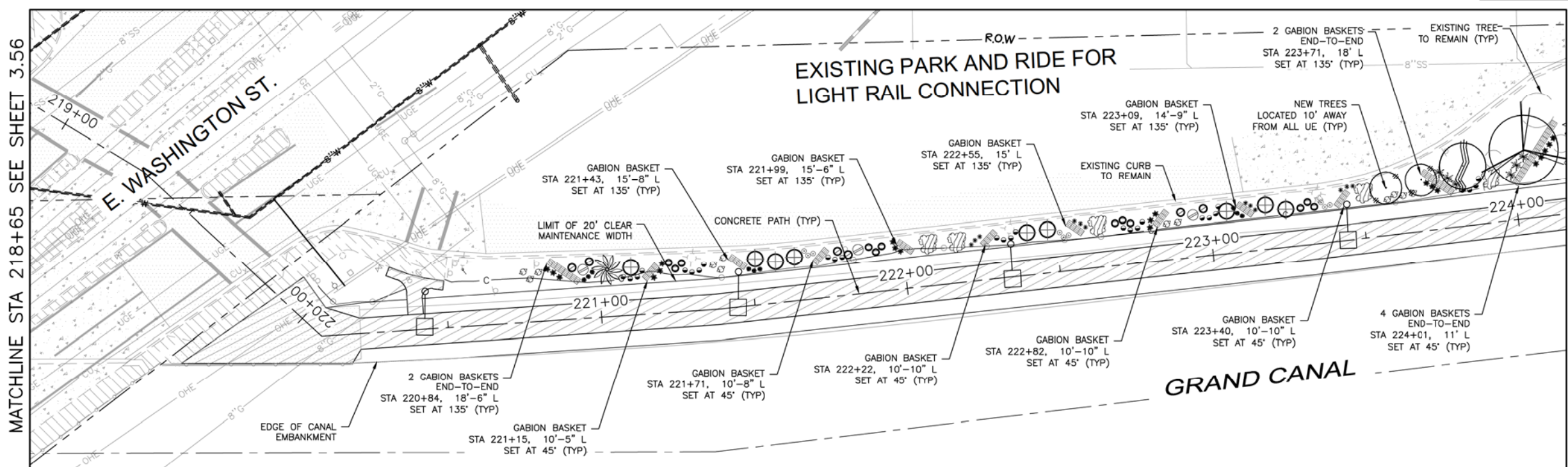
Waibel & Associates
Landscape Architecture
Phone: 480.953.3440 Fax: 480.953.3446
8611 South Priest Dr, Suite 101
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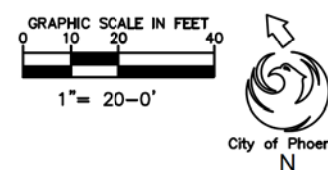
LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.57	3.99
SCALE: 1"=20'				



NOTE:
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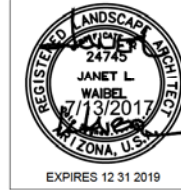


NO.	DESCRIPTION	REV BY/CHK BY DATE

NO.	DESCRIPTION	REV BY/CHK BY DATE

D:\PHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\CANAL\Grand Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST

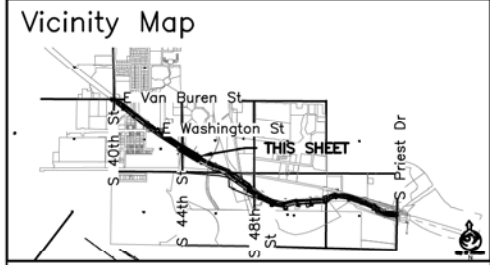
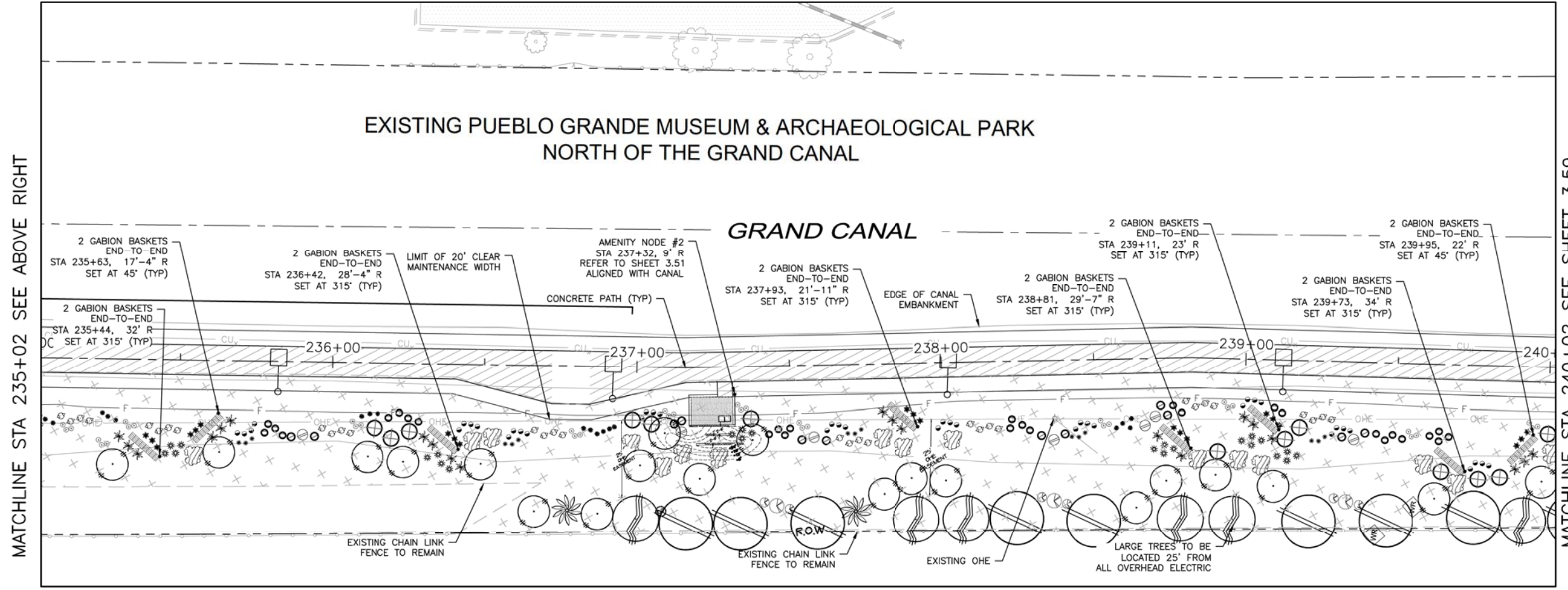
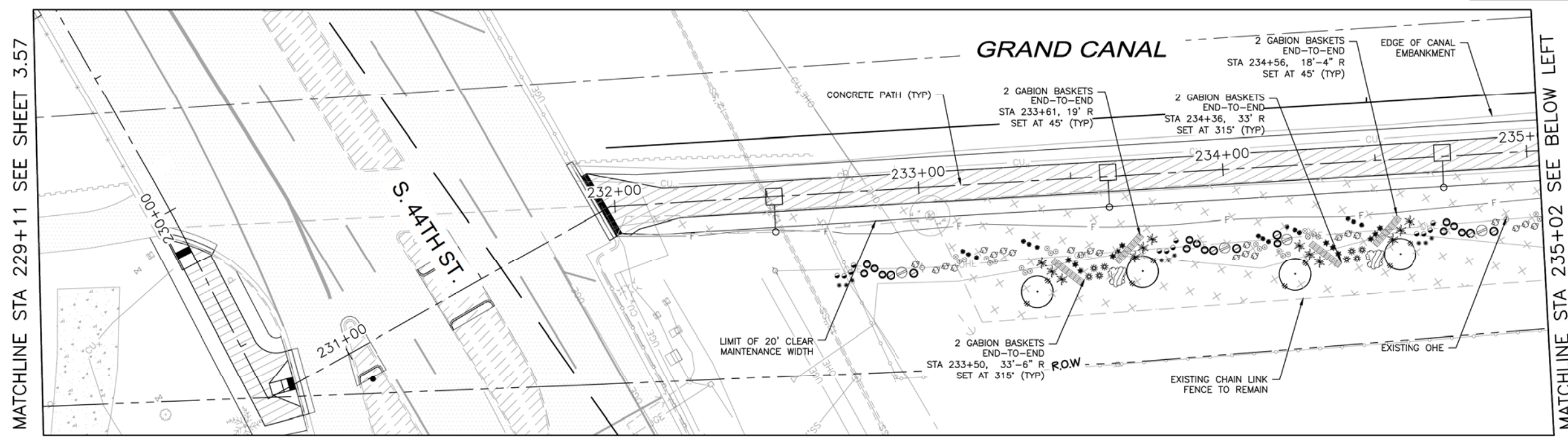


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.58	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
	Existing Tree To Remain	
	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5" CALIPER
	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER
	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3" CALIPER
	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
	Encelia farinosa ** BRITTLEBUSH	5 Gallon
	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
	Muhlenbergia rigida 'Nashville'** NASHVILLE MUHLY	5 Gallon
	Sipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
	Justicia californica CHUPAROSA	5 Gallon
	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
	Fouquieria splendens OCOTILLO	Bareroot -6' Planted
	Carnegiea gigantea SAGUARO CACTUS	7 Cane Minimum 15 Gallon
	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



Waibel & Associates Landscape Architecture
401 E. Washington St., Suite 101
Phoenix, AZ 85004
Phone: 480.953.3849 Fax: 480.953.3846
Toll Free: 877.452.8284
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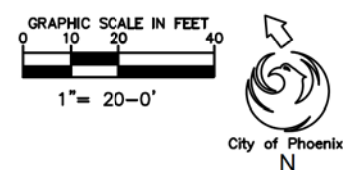
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ARIZONA 811
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1"=20'						3.58	3.99

NOTE:
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MATCHLINE STA 229+11 SEE SHEET 3.57

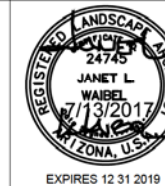
MATCHLINE STA 235+02 SEE ABOVE RIGHT

MATCHLINE STA 235+02 SEE BELOW LEFT

MATCHLINE STA 240+02 SEE SHEET 3.59

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GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST

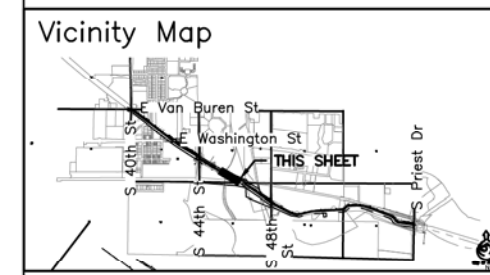
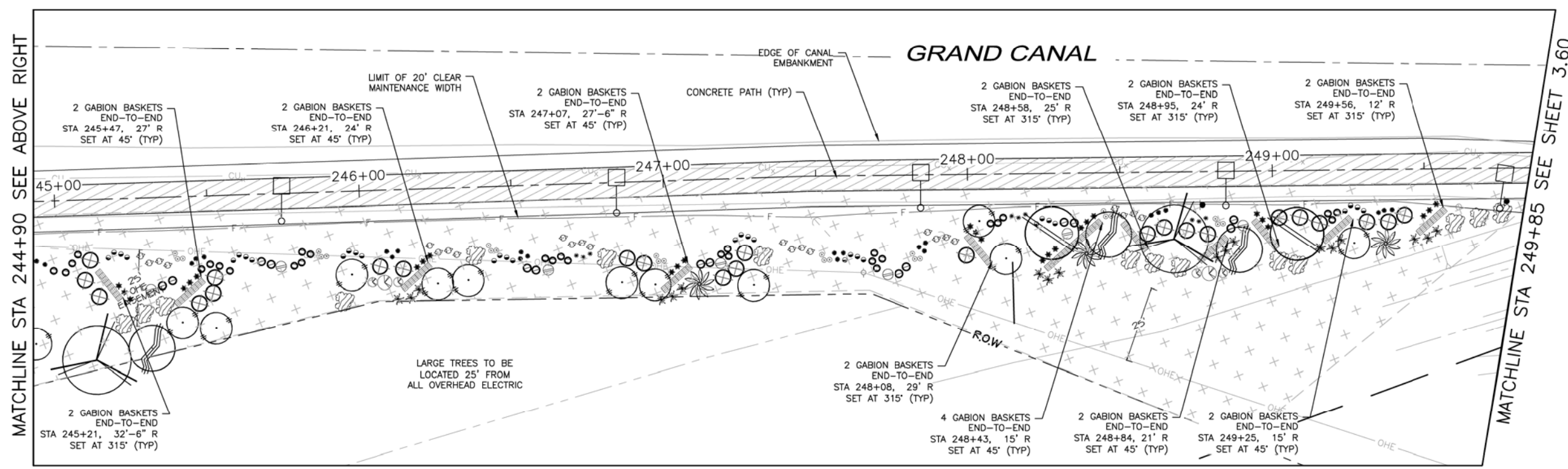
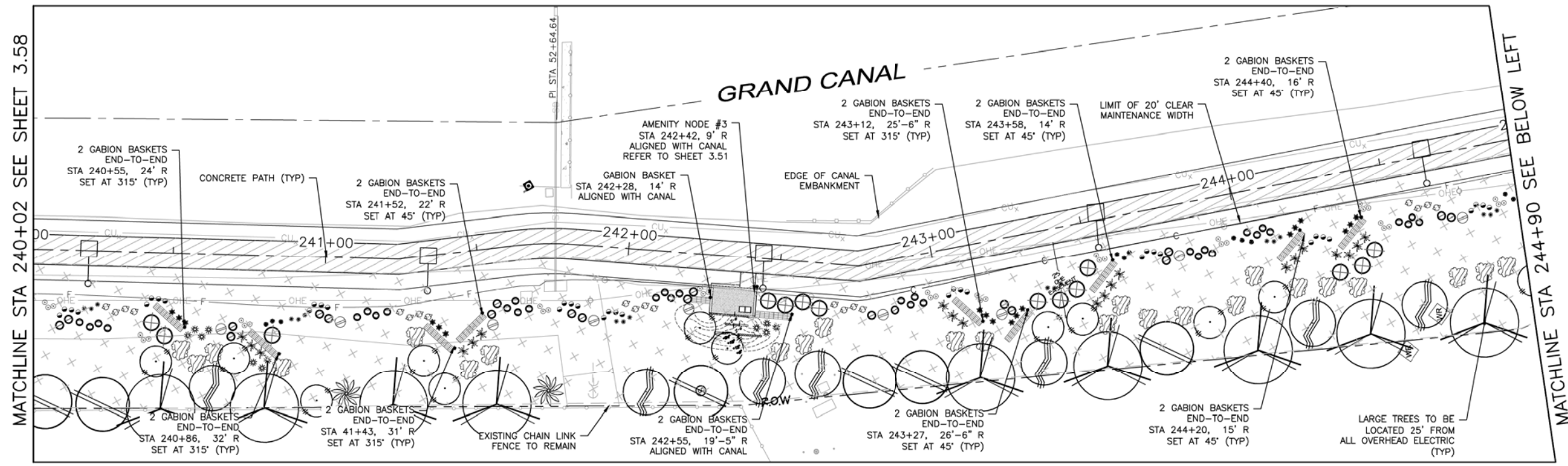


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.59	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	
(Circle with slash)	Chiopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5" CALIPER
(Circle with slash)	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER
(Circle with slash)	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3" CALIPER
(Circle with dot)	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
(Circle with dot)	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
(Circle with dot)	Encelia farinosa ** BRITTLEBUSH	5 Gallon
(Circle with dot)	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
(Circle with dot)	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
(Circle with dot)	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
(Circle with dot)	Muhlenbergia rigida 'Nashville** NASHVILLE MUHLY	5 Gallon
(Circle with dot)	Sipa tenuissim** MEXICAN THREAD GRASS	5 Gallon
(Circle with dot)	Justicia californica CHUPAROSA	5 Gallon
(Circle with dot)	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
(Circle with dot)	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
(Circle with dot)	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
(Circle with dot)	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
(Circle with dot)	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
(Circle with dot)	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
(Circle with dot)	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Canes Minimum
(Circle with dot)	Carnegiea gigantea SAGUARO CACTUS	15 Gallon
(Circle with dot)	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Circle with dot)	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
(Circle with dot)	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
(Circle with dot)	**SRP ROW Compliant Plant Material	



Waibel & Associates
Landscape Architecture
4815 N. 34th St., Suite 101
Phoenix, AZ 85018
Phone: 480.953.3440 Fax: 480.953.3446
Toll-free: 1-877-433-3446
www.waibel.com

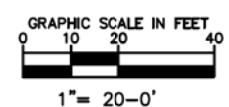
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS:	DES:	RM:	CK:	JW:	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.59	3.99

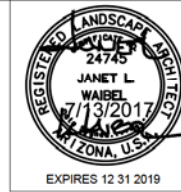
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REVISION BY	DESCRIPTION	NO.	DATE
CITY OF PHOENIX			
CITY OF PHOENIX			
CITY OF PHOENIX			
CITY OF PHOENIX			

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GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST

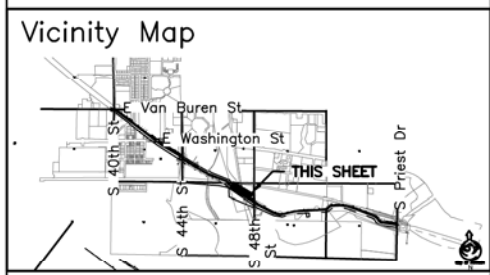
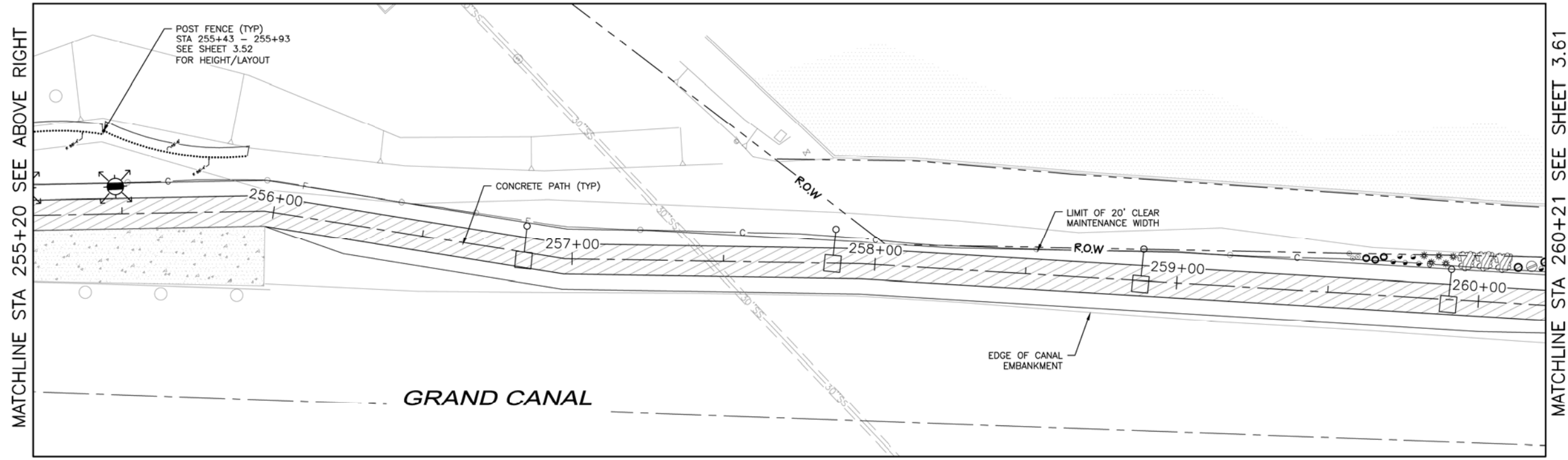
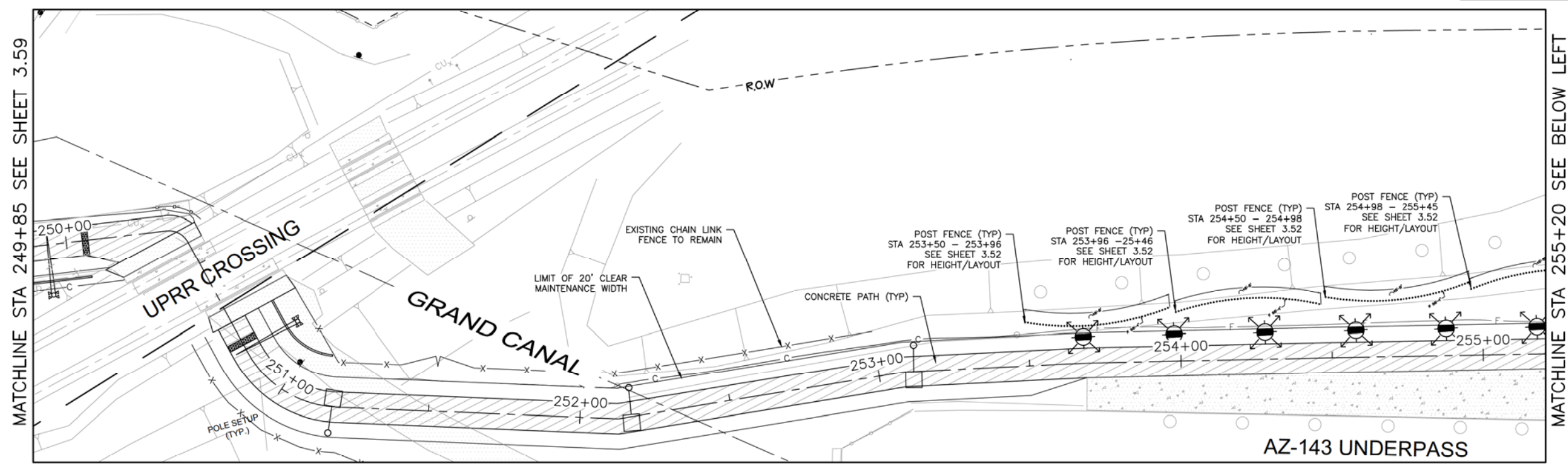


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.60	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
●	Existing Tree To Remain	
○	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
○	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2' CALIPER
○	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE MULTI-TRUNK	10' H x 8' W 3' CALIPER
○	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
○	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa ** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
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○	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



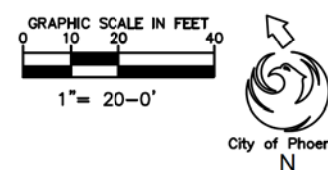
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Landscape Architecture
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1"=20'						3.60	3.99

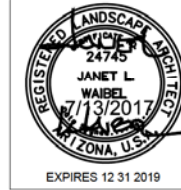
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NO.	DESCRIPTION	REVISION BY	DATE

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GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST

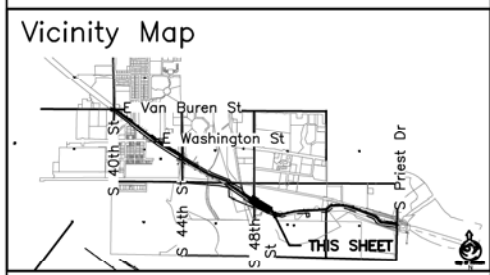


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.61	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Symbol)	Existing Tree To Remain	
(Symbol)	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
(Symbol)	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2' CALIPER
(Symbol)	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE MULTI-TRUNK	10' H x 8' W 3' CALIPER
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(Symbol)	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
(Symbol)	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



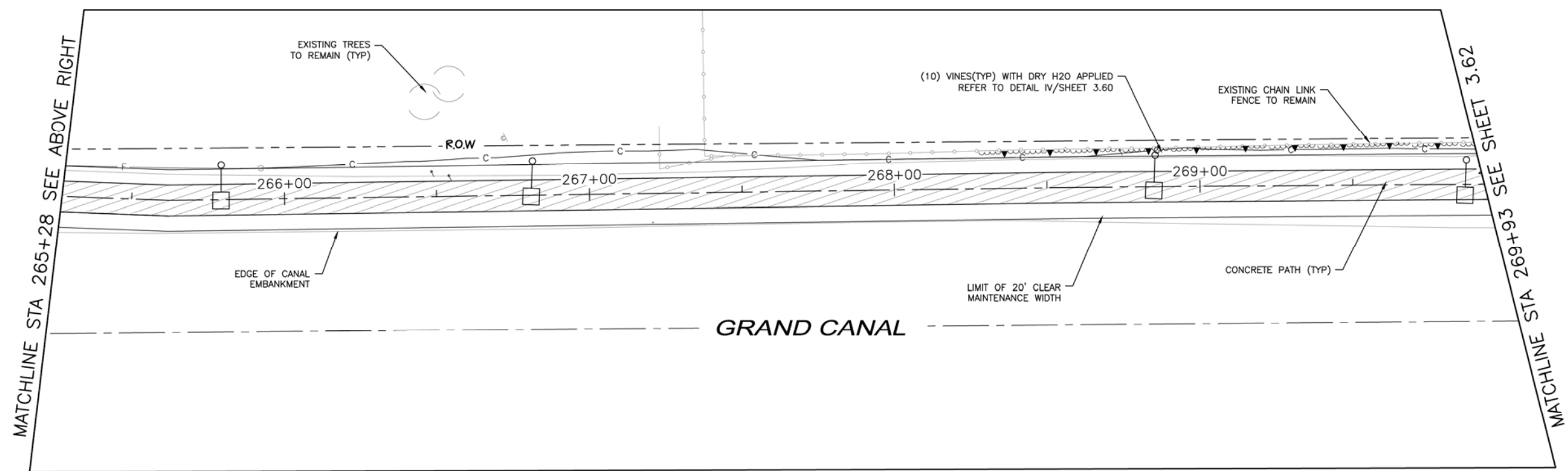
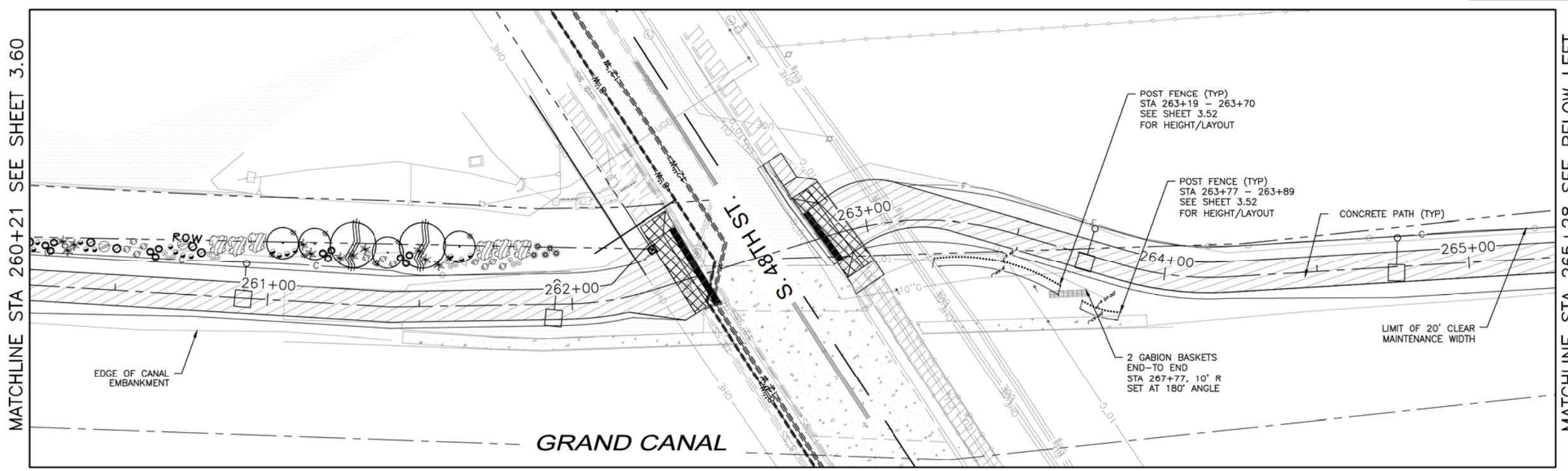
Waibel & Associates
Landscape Architecture
Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.61	3.99

SCALE: 1"=20'



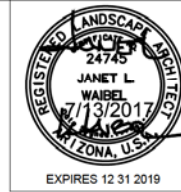
NOTE:
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GRAPHIC SCALE IN FEET
0 10 20 40
1"= 20'-0"
City of Phoenix
N

NO.	DESCRIPTION	REV BY/CHK BY	DATE

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.62	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

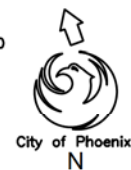
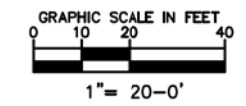
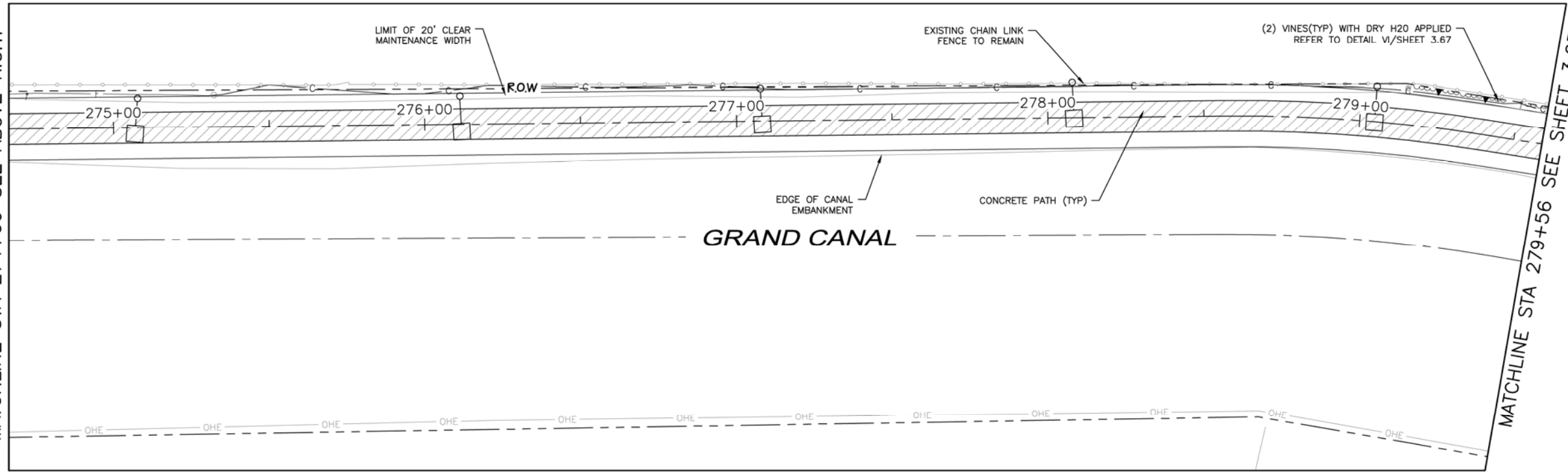
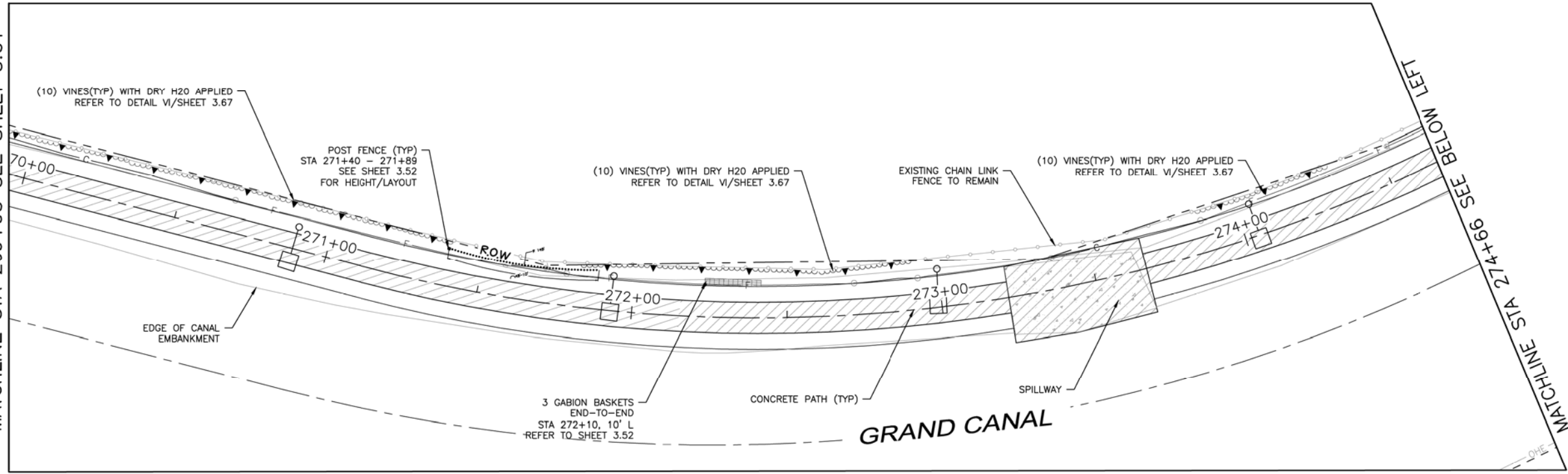
NO.	DESCRIPTION	REV BY	CHK BY	DATE

MATCHLINE STA 269+93 SEE SHEET 3.61

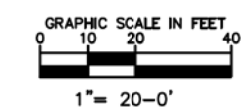
MATCHLINE STA 274+66 SEE ABOVE RIGHT

MATCHLINE STA 274+66 SEE BELOW LEFT

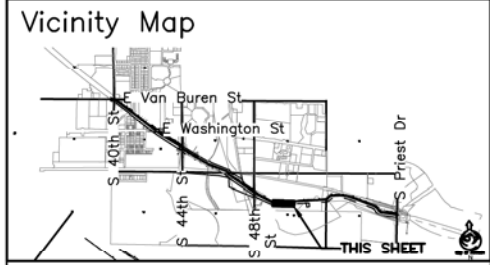
MATCHLINE STA 279+56 SEE SHEET 3.63



NOTE:
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LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
•	Existing Tree To Remain	
○	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
○	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER
○	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3" CALIPER
○	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
○	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa ** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
○	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
○	Muhlenbergia rigida 'Nashville**' NASHVILLE MUHLY	5 Gallon
○	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
○	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
○	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Cane Minimum
○	Carnegiea gigantea SAGUARO CACTUS	15 Gallon
○	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1"=20'						3.62	3.99

D:\PHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST

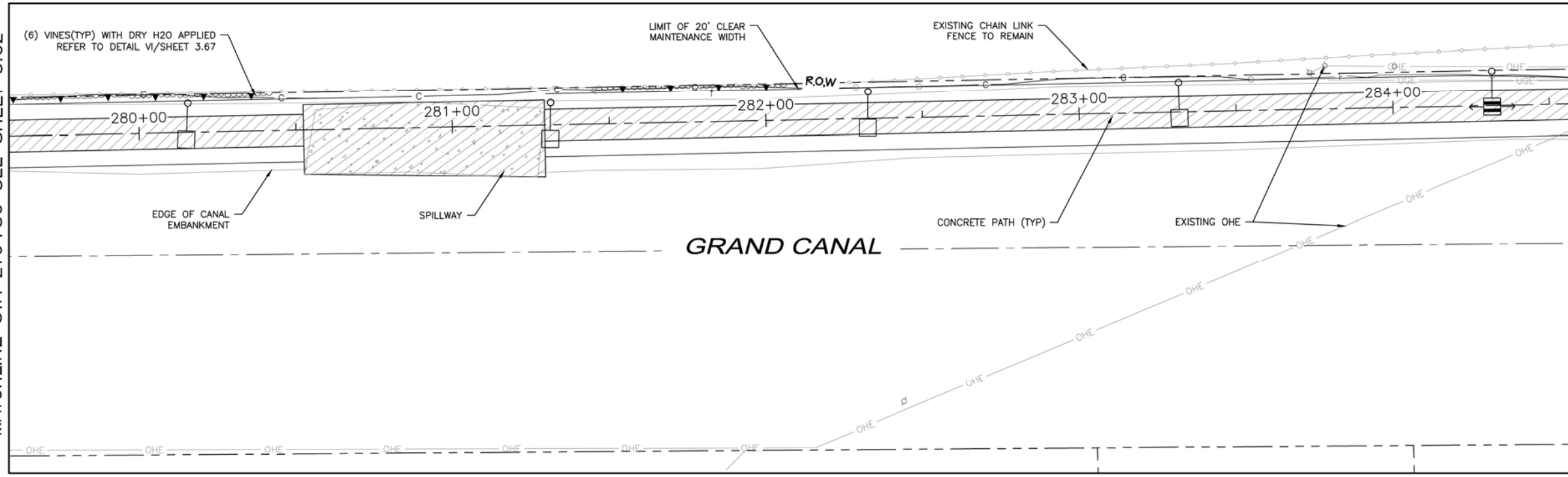


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.63	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

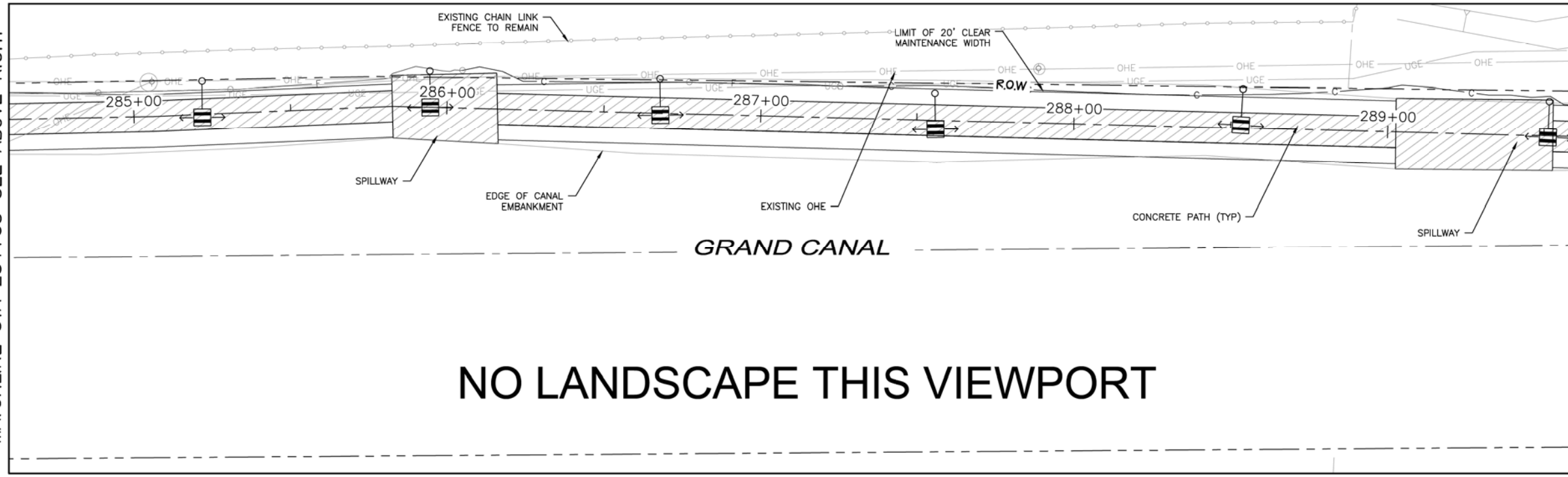
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE

MATCHLINE STA 279+56 SEE SHEET 3.62



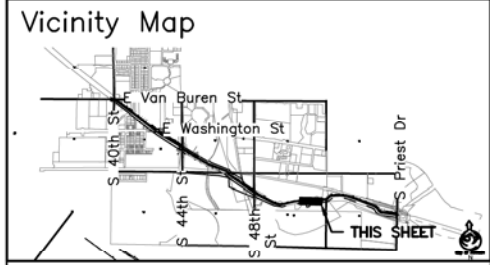
MATCHLINE STA 284+58 SEE BELOW LEFT

MATCHLINE STA 284+58 SEE ABOVE RIGHT



MATCHLINE STA 289+49 SEE SHEET 3.64

LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
●	Existing Tree To Remain	
○	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
○	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2' CALIPER
○	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE MULTI-TRUNK	10' H x 8' W 3' CALIPER
○	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
○	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa ** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
○	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
○	Muhlenbergia rigida 'Nashville** NASHVILLE MUHLY	5 Gallon
○	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
○	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
○	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Cane Minimum
○	Carnegiea gigantea SAGUARO CACTUS	15 Gallon
○	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



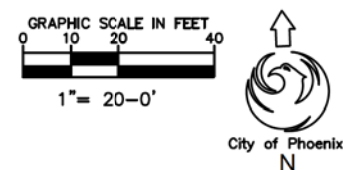
Waibel & Associates Landscape Architecture
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ARIZONA 811
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.63	3.99

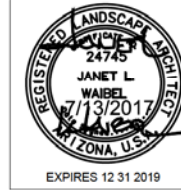
NOTE:
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\\DLPHM22\Public\Drawings\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST

NO LANDSCAPE THIS SHEET

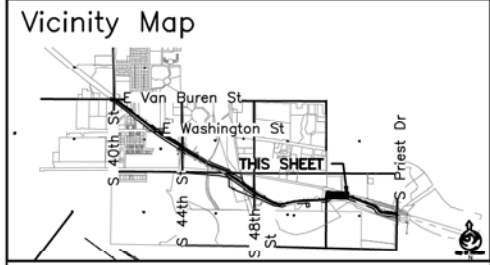


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.64	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
	Existing Tree To Remain	
	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5' CALIPER
	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2' CALIPER
	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE MULTI-TRUNK	10' H x 8' W 3' CALIPER
	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
	Encelia farinosa ** BRITTLEBUSH	5 Gallon
	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
	Muhlenbergia rigida 'Nashville** NASHVILLE MUHLY	5 Gallon
	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
	Justicia californica CHUPAROSA	5 Gallon
	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
	Fouquieria splendens OCOTILLO	Bareroot -6' Planted
	Carnegiea gigantea SAGUARO CACTUS	7 Cane Minimum 15 Gallon
	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		

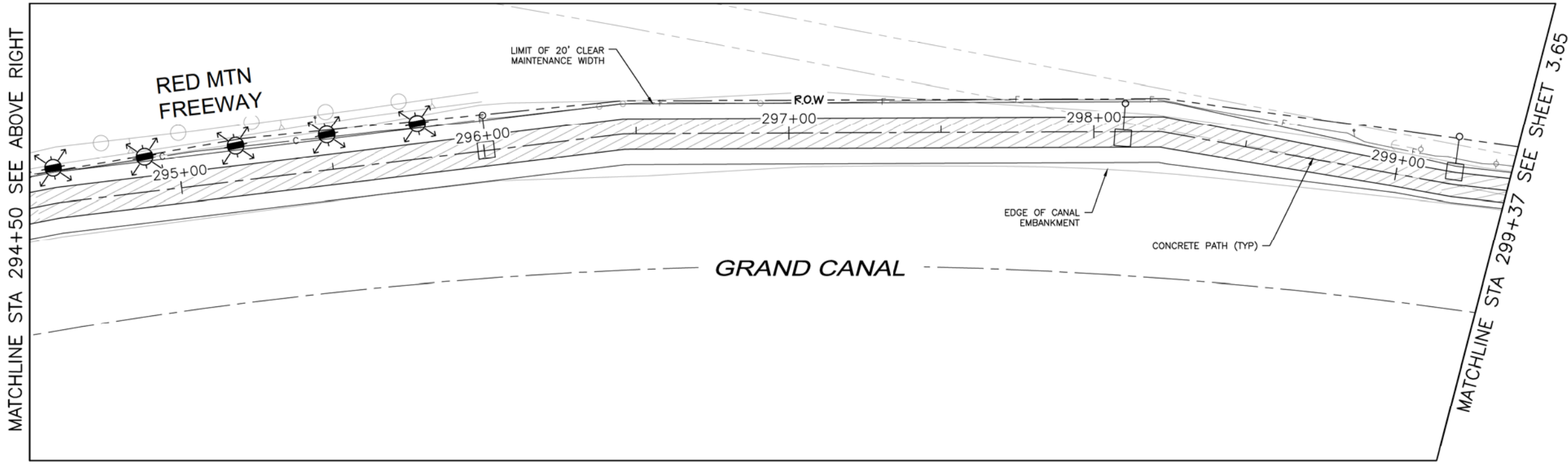
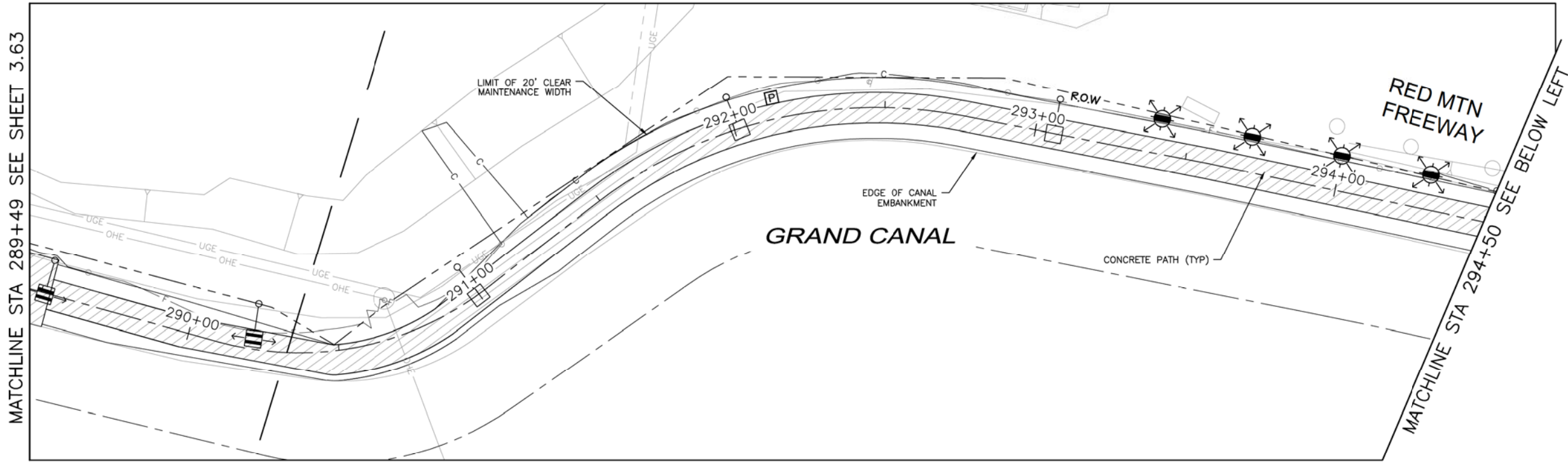


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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.64	3.99
SCALE: 1"=20'				



NOTE:
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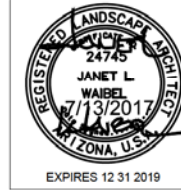
GRAPHIC SCALE IN FEET
0 10 20 40
1" = 20'-0"
City of Phoenix
N

NO.	REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY/CHK BY	DATE

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST

NO LANDSCAPE THIS SHEET

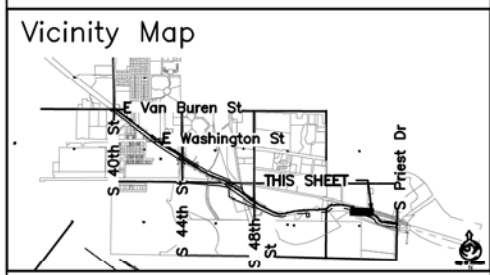


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.65	3.99

TRACE
 CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

LANDSCAPE LEGEND

SYMBOL	NAME	SIZE
(Circle with dot)	Existing Tree To Remain	
(Circle with slash)	Chilopsis linearis **	5' H x 4' W
(Circle with slash)	DESERT WILLOW - MULTI-TRUNK	1-1.5' CALIPER
(Circle with slash)	Lysiloma thomberi **	7' H x 5' H
(Circle with slash)	FERN OF THE DESERT - MULTI-TRUNK	2' CALIPER
(Circle with slash)	Prosopis Hybrid Thornless **	10' H x 8' W
(Circle with slash)	THORNLESS HYBRID MESQUITE MULTI-TRUNK	3' CALIPER
(Circle with dot)	Caesalpinia mexicana Hybrid**	25 Gallon
(Circle with dot)	HYBRID EVERGREEN BIRD	
(Circle with dot)	Tecoma stans var. angustata **	15 Gallon
(Circle with dot)	ARIZONA YELLOW BELLS	
(Circle with dot)	Encelia farinosa **	5 Gallon
(Circle with dot)	BRITTLEBUSH	
(Circle with dot)	Ambrosia deltoidea**	5 Gallon
(Circle with dot)	TRIANGLE LEAF BURSAGE	
(Circle with dot)	Bouteloua gracilis 'Blonde Ambition' **	5 Gallon
(Circle with dot)	BLUE GRAMA	
(Circle with dot)	Aristida purpurea **	5 Gallon
(Circle with dot)	PURPLE THREE AWN	
(Circle with dot)	Muhlenbergia rigida 'Nashville**	5 Gallon
(Circle with dot)	NASHVILLE MUHLY	
(Circle with dot)	Stipa tenuissima**	5 Gallon
(Circle with dot)	MEXICAN THREAD GRASS	
(Circle with dot)	Justicia californica	5 Gallon
(Circle with dot)	CHUPAROSA	
(Circle with dot)	Baileya multiradiata **	1 Gallon
(Circle with dot)	DESERT MARIGOLD	
(Circle with dot)	Sphaeralcea ambigua **	1 Gallon
(Circle with dot)	DESERT GLOBEMALLOW	
(Circle with dot)	Psilostrophe cooperi**	1 Gallon
(Circle with dot)	PAPER FLOWER	
(Circle with dot)	Penstemon parryi **	1 Gallon
(Circle with dot)	PARRY'S PENSTEMON	
(Wavy line)	Macfadyena unguis-cati	15 Gallon
(Wavy line)	CAT CLAW VINE	
(Starburst)	Yucca rupicola	15 Gallon
(Starburst)	TWISTED LEAF YUCCA	
(Starburst)	Fouquieria splendens	Bareroot -6' Planted
(Starburst)	OCTILLO	7 Cane Minimum
(Starburst)	Carnegiea gigantea	15 Gallon
(Starburst)	SAGUARO CACTUS	
(Dotted pattern)	Native Seed Mix (Do Not Treat w/Herbicide)	
(Dotted pattern)	SONORAN WILDFLOWER SEED MIX	
(Dotted pattern)	The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
(Square pattern)	1/2" Screened Decomposed Granite	
(Square pattern)	MOUNTAIN VISTA BROWN	
(Circle with cross)	Gabion Basket	2' x 2' x 6'
(Circle with cross)	Tie Down Point for Dimension (Typ)	
	**SRP ROW Compliant Plant Material	



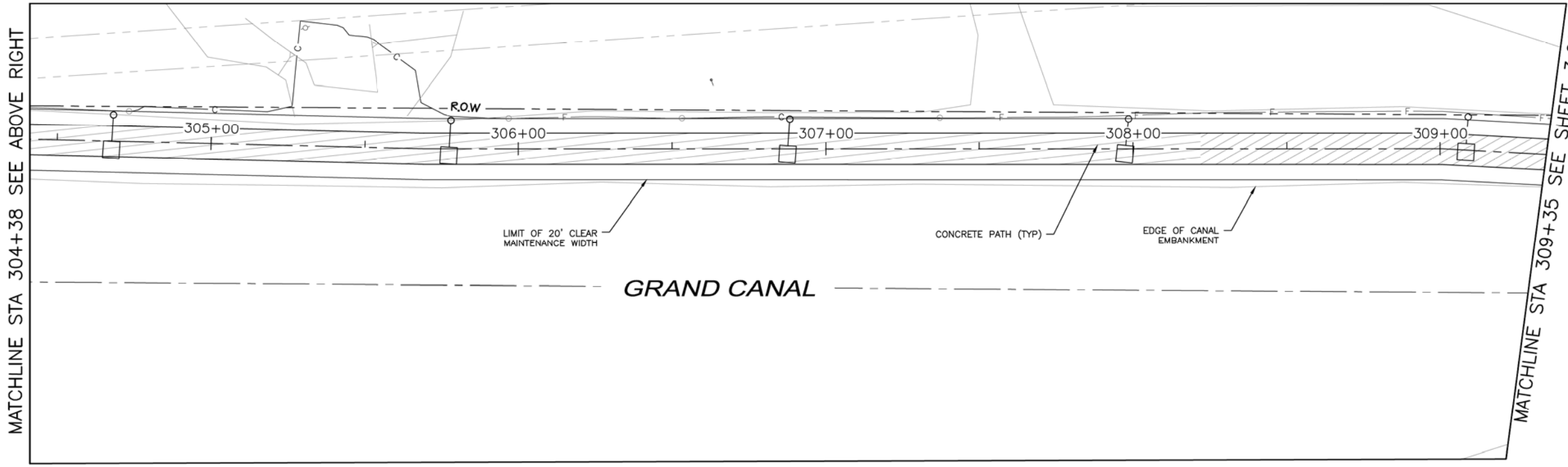
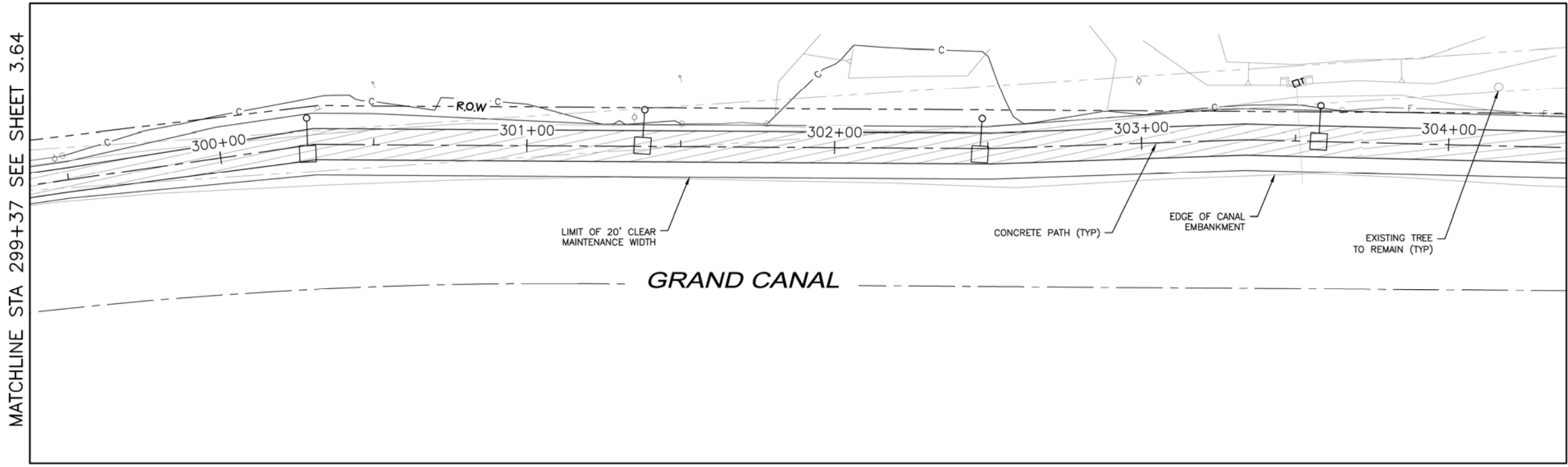
Waibel & Associates
 Landscape Architecture
 8611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 Phone: 480.953.3340 Fax: 480.953.3346
 Email: janet@waibel.com

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ARIZONA 811
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LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.65	3.99



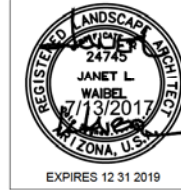
NOTE:
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GRAPHIC SCALE IN FEET
 0 10 20 40
 1" = 20'-0"

NO.	DESCRIPTION	REV BY	CHK BY	DATE

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

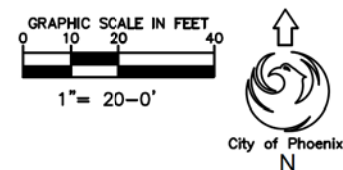
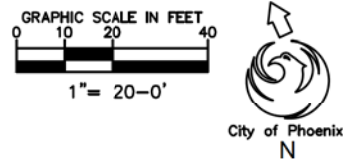
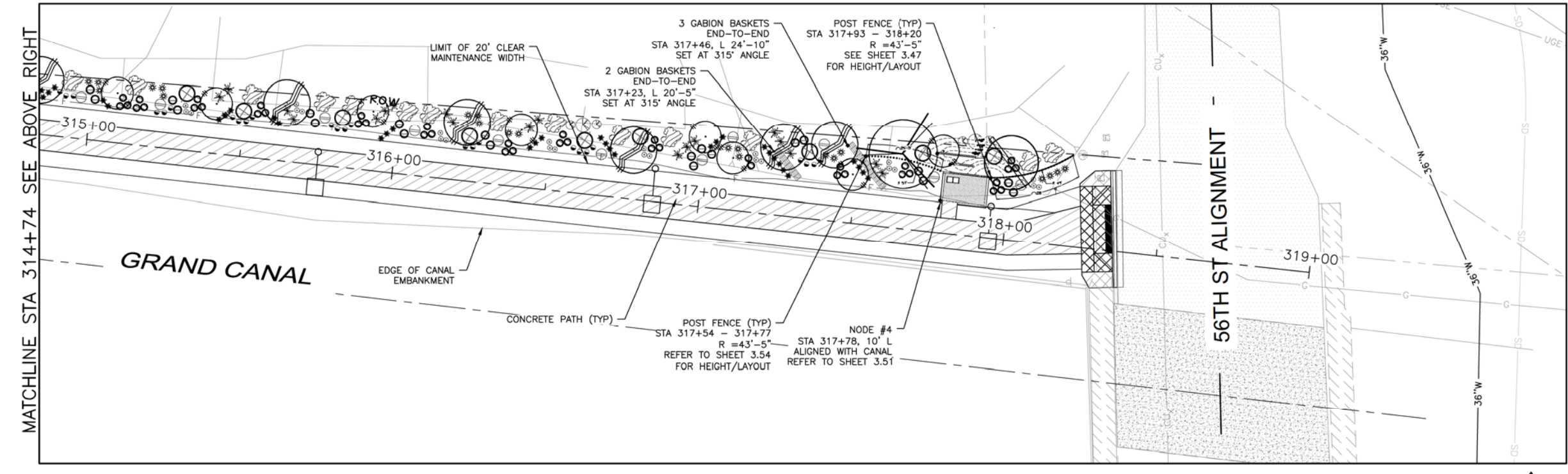
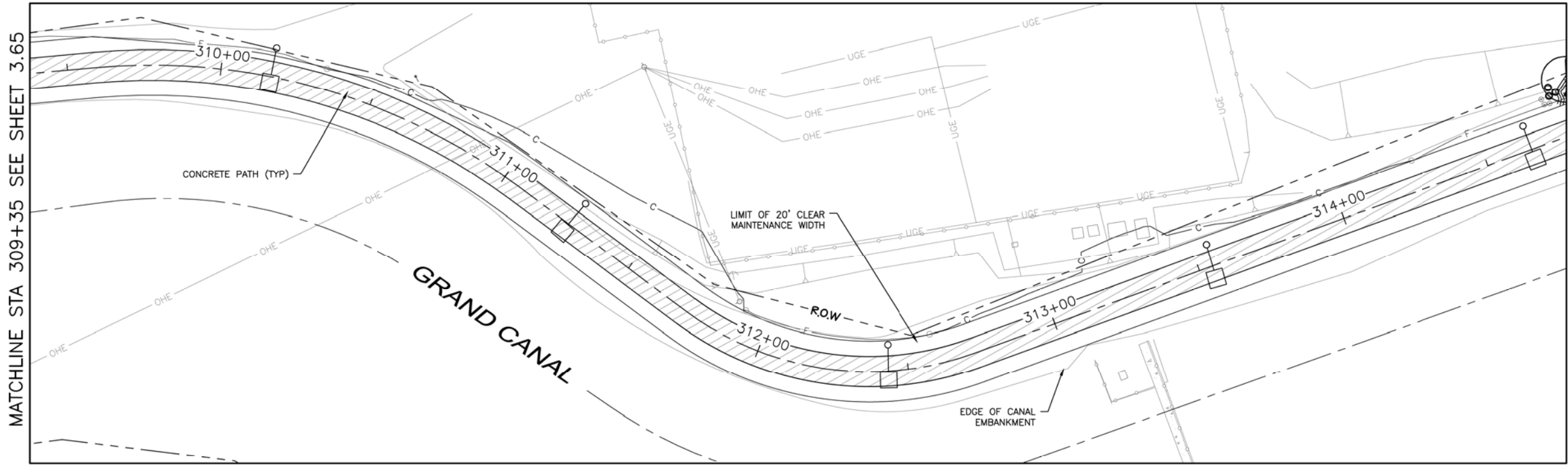
GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



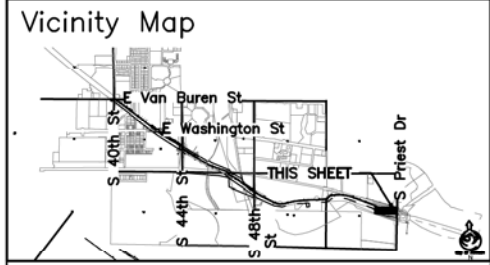
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV. BY/CHK. BY	DATE



LANDSCAPE LEGEND		
SYMBOL	NAME	SIZE
●	Existing Tree To Remain	
○	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5" CALIPER
○	Lysiloma thomberi ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER
○	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE - MULTI-TRUNK	10' H x 8' W 3" CALIPER
○	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon
○	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon
○	Encelia farinosa ** BRITTLEBUSH	5 Gallon
○	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon
○	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon
○	Aristida purpurea ** PURPLE THREE AWN	5 Gallon
○	Muhlenbergia rigida 'Nashville** NASHVILLE MUHLY	5 Gallon
○	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon
○	Justicia californica CHUPAROSA	5 Gallon
○	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon
○	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon
○	Psilostrophe cooperi** PAPER FLOWER	1 Gallon
○	Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon
○	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon
○	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon
○	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Cane Minimum
○	Carnegiea gigantea SAGUARO CACTUS	15 Gallon
○	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.	
○	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN	
○	Gabion Basket Tie Down Point for Dimension (Typ)	2' x 2' x 6'
**SRP ROW Compliant Plant Material		



Waibel & Associates
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Phone: 480.953.3449 Fax: 480.953.3446
Toll-free: 1-800-451-3446
www.waibel.com

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ARIZONA 811
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"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

LANDSCAPE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE: 1"=20'						3.66	3.99

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

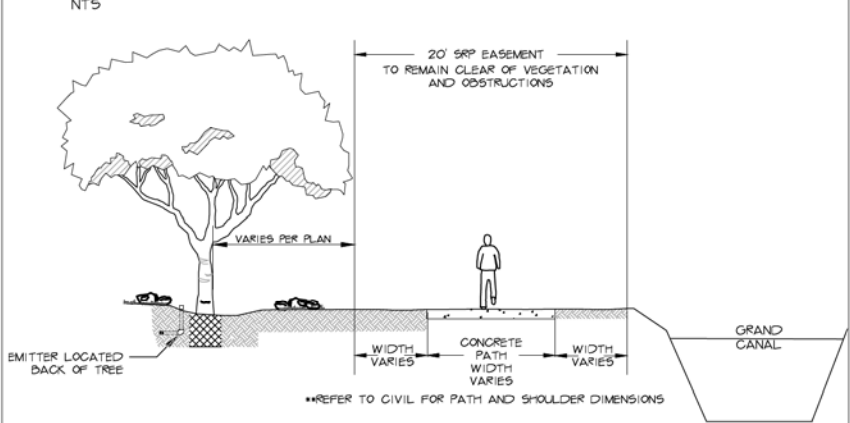


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.68	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

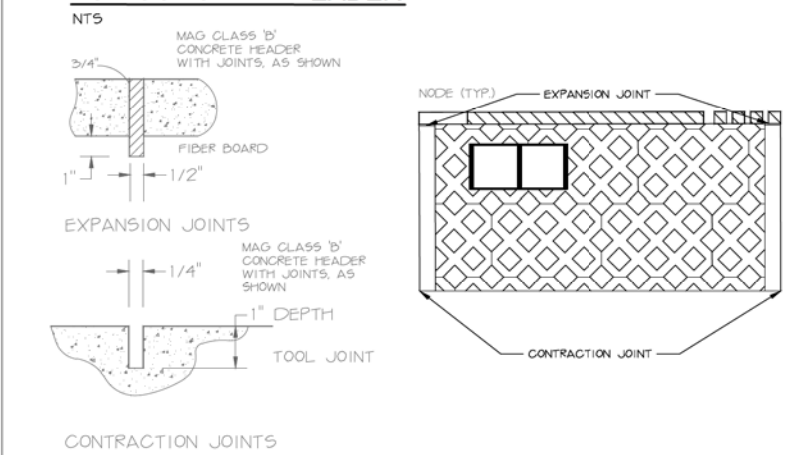
NO.	DESCRIPTION	REV BY/CHK BY	DATE

VIII. CONCRETE PATH CLEARANCE

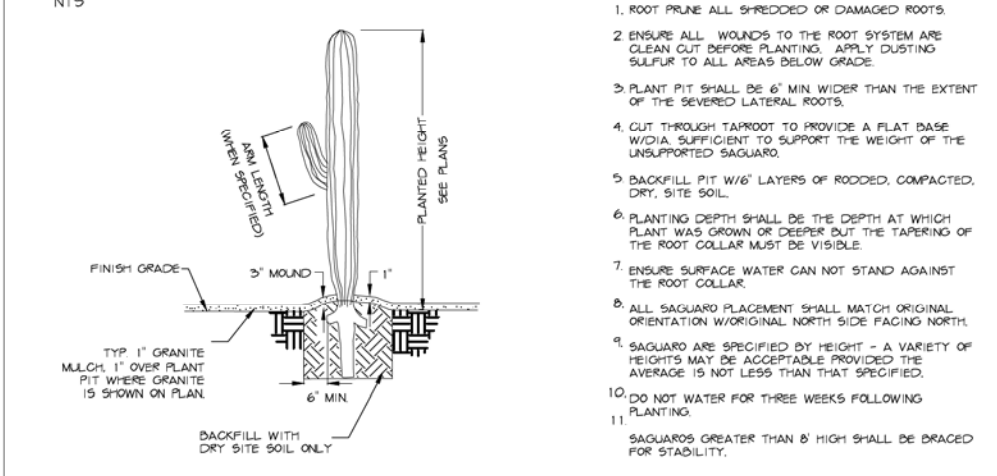


SRP MAINTENANCE EASEMENT AND PATHS REQUIRE VEGETATION CLEAR TO A HEIGHT OF 10 FEET. MATURE TREE CANOPY CAN NOT BE WITHIN SRP MAINTENANCE EASEMENT.

IX. EXPANSION AND CONTRACTION JOINTS FOR CONCRETE HEADER



X. SAGUARO PLANTING DETAIL



1. ROOT PRUNE ALL SHREDDED OR DAMAGED ROOTS.
2. ENSURE ALL WOUNDS TO THE ROOT SYSTEM ARE CLEAN CUT BEFORE PLANTING. APPLY DUSTING SULFUR TO ALL AREAS BELOW GRADE.
3. PLANT PIT SHALL BE 6" MIN WIDER THAN THE EXTENT OF THE SEVERED LATERAL ROOTS.
4. CUT THROUGH TAIRROOT TO PROVIDE A FLAT BASE W/DIA SUFFICIENT TO SUPPORT THE WEIGHT OF THE UNSUPPORTED SAGUARO.
5. BACKFILL PIT W/6" LAYERS OF RODED, COMPACTED, DRY, SITE SOIL.
6. PLANTING DEPTH SHALL BE THE DEPTH AT WHICH PLANT WAS GROWN OR DEEPER BUT THE TAPERING OF THE ROOT COLLAR MUST BE VISIBLE.
7. ENSURE SURFACE WATER CAN NOT STAND AGAINST THE ROOT COLLAR.
8. ALL SAGUARO PLACEMENT SHALL MATCH ORIGINAL ORIENTATION W/ORIGINAL NORTH SIDE FACING NORTH.
9. SAGUARO ARE SPECIFIED BY HEIGHT - A VARIETY OF HEIGHTS MAY BE ACCEPTABLE PROVIDED THE AVERAGE IS NOT LESS THAN THAT SPECIFIED.
10. DO NOT WATER FOR THREE WEEKS FOLLOWING PLANTING.
11. SAGUAROS GREATER THAN 8' HIGH SHALL BE BRACED FOR STABILITY.

LANDSCAPE NOTES:

1. LANDSCAPE AREAS ARE DEFINED AS ALL NON PAVED AREAS DISTURBED BY CONSTRUCTION. SLIGHT VARIATIONS MAY EXIST BETWEEN ACTUAL SITE CONDITIONS AND DRAWINGS. CONTRACTOR SHALL ADJUST PLANTING LAYOUT AS REQUIRED TO MAINTAIN PLANT QUANTITIES AND DESIGN INTENT. FOR AREAS OVER 100 S.F. CONTACT LANDSCAPE ARCHITECT FOR REVISION TO PLANT LAYOUT.
2. NO PLANT SUBSTITUTIONS, TYPE, SIZE, OR QUANTITY, OR DEVIATIONS FROM THE APPROVED LANDSCAPE OR IRRIGATION PLANS, ARE ALLOWED WITHOUT PRIOR APPROVAL FROM THE CITY OF PHOENIX
3. COORDINATE ALL NECESSARY EXCAVATION AREAS WITH OWNER'S REPRESENTATIVE.
4. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE SLEEVING. COORDINATE INSTALLATION WITH GENERAL CONTRACTOR. VERIFY ANY EXISTING SLEEVES INSTALLED BY OTHER CONTRACTORS.
5. IRRIGATION AND ELECTRICAL SLEEVES TO BE Schedule 40 PVC. ALL SLEEVES TO EXTEND 6" BEYOND CONCRETE STRUCTURES. ALLOW AT LEAST 4" - 6" FROM END OF SLEEVES TO FIRST FITTING ON IRRIGATION LINES. ALL SLEEVES TO BE 24" BELOW GRADE AND/OR AS PER PROJECT DETAILS.
6. COMMON SLEEVES MAY BE USED FOR LATERAL LINES AND MAINLINES. CONTRACTOR IS RESPONSIBLE FOR ADEQUATE SIZE SLEEVE SO ALL PIPES MOVE FREELY WITHIN THE SLEEVE. CONTRACTOR TO 'AS BUILT' ALL SLEEVE SIZES AND LOCATIONS.
7. MARK BACK OF CURBS AT SLEEVE LOCATIONS BY NOTCHING THE CONCRETE WITH 1/2" "V" NOTCH OR VERTICALLY PLACED #4 REBAR AS BUILT.
8. FINISHED GRADE(S) NOTED ON THE LANDSCAPE PLAN TO BE FIELD VERIFIED/APPROVED AND MODIFIED AS PER ARCHITECTURAL CIVIL DRAWINGS.
9. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS NOT SHOWN ON DRAWINGS.
10. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER CARE AND HANDLING OF TREES AND PLANTS FOR DELIVERY AND PLACEMENT IN PLANTING PIT. TREES THAT ARE DROPPED FROM TRUCKS OR DROPPED INTO PITS SHALL BE REJECTED FOR REPLACEMENT BY THE LANDSCAPE CONTRACTOR. IF ROOTBALLS FALL APART DURING THE PLANTING OPERATION THE PLANT SHALL NOT BE PLANTED. NEW PLANT MATERIALS SHALL BE PROVIDED TO REPLACE THOSE THAT ROOTBALLS FALL APART.
11. PLANT CONTAINERS SHALL BE CUT TO REMOVE ROOTBALLS THAT ARE TIGHT IN THE CONTAINER. THE CONTRACTOR SHALL NOT REMOVE THE PLANT FROM THE CONTAINER BY THE TRUNK.
12. THE LANDSCAPE CONTRACTOR SHALL WARRANT THE TREES AND SHRUBS FOR ONE YEAR FROM THE DATE OF FINAL PROJECT ACCEPTANCE, BY THE CITY OR SUBSTANTIAL PROJECT COMPLETION.
13. THE CITY OF PHOENIX GENERAL NOTES ARE THE ONLY NOTES APPROVED ON THIS PLAN. ADDITIONAL GENERAL NOTES GENERATED BY THE SEALANT AND PLACED ON THE PLANS ARE NOT APPROVED AS PART OF THIS PLAN AND ARE NOTED AS SUCH ON THE PLANS.
14. THE DESIGN ON THESE PLANS IS ONLY APPROVED BY THE CITY IN SCOPE AND NOT IN DETAIL. CONSTRUCTION QUANTITIES ON THESE PLANS ARE NOT VERIFIED BY THE CITY. APPROVAL OF THESE PLANS ARE FOR PERMIT PURPOSES ONLY AND SHALL NOT PREVENT THE CITY FROM REQUIRING CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW, ORDINANCE, HEALTH, SAFETY, OR OTHER DESIGN ISSUES.
15. CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL CONFORM TO THE LATEST APPLICABLE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS AND THE LATEST CITY OF PHOENIX SUPPLEMENT TO THE MAG UNIFORM STANDARD SPECIFICATIONS AND DETAILS.
16. ALL PLANT MATERIAL AND SPECIFICATIONS SHALL CONFORM TO THE ARIZONA NURSERY ASSOCIATION STANDARDS.
17. ALL RIGHT-OF-WAY AND CITY REQUIRED (PERIMETER, RETENTION, AND PARKING) PLANT MATERIAL SHALL BE IN COMPLIANCE WITH THE DEPARTMENT OF WATER RESOURCES LOW WATER USE PLANT LIST.
18. ALL EXISTING TREES AND SHRUBS IN RIGHT-OF-WAY DESIGNATED TO REMAIN BUT ARE DAMAGED OR DESTROYED WILL BE REPLACED IN LIKE SIZE AND KIND BY THE CONTRACTOR.
19. TREES ADJACENT TO PEDESTRIAN WALKWAYS SHOULD HAVE A MINIMUM CANOPY CLEARANCE OF SIX FEET EIGHT INCHES (6'8") PER SECTION 507 TAB A.II.A.3.1.10 OF THE CITY OF PHOENIX ZONING ORDINANCE.
20. PLANT QUANTITIES AND CALIPER SIZES PROVIDED IN THE LEGEND ON THE APPROVED PLANS ARE REQUIRED TO BE INSTALLED IN THE FIELD, ANY DEVIATIONS FROM THE PLAN WILL REQUIRE A SUBMITTAL OF A PROPOSED SUBSTITUTION FOR COP APPROVAL PRIOR TO INSTALLATION.
21. STAKE OR MARK ALL NODES, IRRIGATION EQUIPMENT, SIGN LOCATIONS AND ELECTRICAL EQUIPMENT FOR COP APPROVAL PRIOR TO CONSTRUCTION.

SONORAN DESERT WILDFLOWER SEED MIX			
WILDFLOWER MIX	COMMON NAME	BOTANICAL NAME	PLS lbs/acre
ANNUALS **all SRP approved	Mexican Poppy	<i>Eschscholzia californica ssp. mexicana</i>	2
	Arizona Poppy	<i>Kallstroemia grandiflora</i>	2
	Desert Lupine	<i>Lupinus sparsiflorus</i>	2
	Arizona Lupine	<i>Lupinus arizonicus</i>	2
	Paper Flower	<i>Psilostrophe cooperi</i>	1
PERENNIALS **all SRP approved	Evening Primrose	<i>Oenothera caespitosa</i>	1
	Desert Marigold	<i>Baileya multiradiata</i>	1
	Rock Penstemon	<i>Penstemon baccarifolius</i>	2
	Coral Penstemon	<i>Penstemon superbus</i>	2
	Desert Ageratum	<i>Ageratum corymbosum</i>	2
Daminiata daisy	<i>Chrysactinia mexicana</i>	1	

LANDSCAPE LEGEND				
SYMBOL	NAME	SIZE	QTY.	NOTES
TREES	Existing Tree To Remain			
	Chilopsis linearis ** DESERT WILLOW - MULTI-TRUNK	5' H x 4' W 1-1.5" CALIPER	18	Mature canopy not to be within 20' of canal edge
	Lysiuma thornber ** FERN OF THE DESERT - MULTI-TRUNK	7' H x 5' H 2" CALIPER	27	Not to be placed within 25' of any overhead electric
	Prosopis Hybrid Thornless ** THORNLESS HYBRID MESQUITE MULTI-TRUNK	10' H x 8' W 3" CALIPER	14	Not to be placed within 25' of any overhead electric
SHRUBS	Caesalpinia mexicana Hybrid** HYBRID EVERGREEN BIRD	25 Gallon	70	X
	Tecoma stans var. angustata ** ARIZONA YELLOW BELLS	15 Gallon	100	Unstaked
	Encelia farinosa ** BRITTLEBUSH	5 Gallon	55	X
	Ambrosia deltoidea** TRIANGLE LEAF BURSAGE	5 Gallon	101	X
	Bouteloua gracilis 'Blonde Ambition' ** BLUE GRAMA	5 Gallon	79	X
	Aristida purpurea ** PURPLE THREE AWN	5 Gallon	88	X
	Muhlenbergia rigida 'Nashville'*** NASHVILLE MUHLY	5 Gallon	160	X
	Stipa tenuissima** MEXICAN THREAD GRASS	5 Gallon	176	X
	Justicia californica CHUPAROSA	5 Gallon	93	X
	Baileya multiradiata ** DESERT MARIGOLD	1 Gallon	245	X
	Sphaeralcea ambigua ** DESERT GLOBEMALLOW	1 Gallon	215	X
	Psilostrophe cooperi** PAPER FLOWER	1 Gallon	148	X
Penstemon parryi ** PARRY'S PENSTEMON	1 Gallon	222	X	
VINE	Macfadyena unguis-cati CAT CLAW VINE	15 Gallon	53	To be staked and Dry H2O to be applied
ACCENTS	Yucca rupicola TWISTED LEAF YUCCA	15 Gallon	98	X
	Fouquieria splendens OCOTILLO	Bareroot -6' Planted 7 Cane Minimum	16	X
	Carnegiea gigantea SAGUARO CACTUS	15 Gallon	10	X
SEED MIX	Native Seed Mix (Do Not Treat w/Herbicide) SONORAN WILDFLOWER SEED MIX The native seed mix will go down as part of a 50/50 Hydroseed/Rock installation per recommended procedures.		1.75 Acres = 28 Pounds	See Native Seeding Special Provisions
	1/2" Screened Decomposed Granite MOUNTAIN VISTA BROWN		143,536 SF = 443 CY	
	Gabion Basket	2' x 2' x 6'	175	
	Tie Down Point for Dimension (Typ)			
	**SRP ROW Compliant Plant Material			

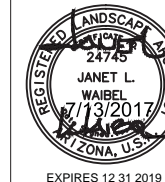
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LANDSCAPE DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	NTS					3.68	3.99

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.69	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

GENERAL NOTES:
VALVE NOTES:
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES:
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/2", USE 3" SLEEVE. FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

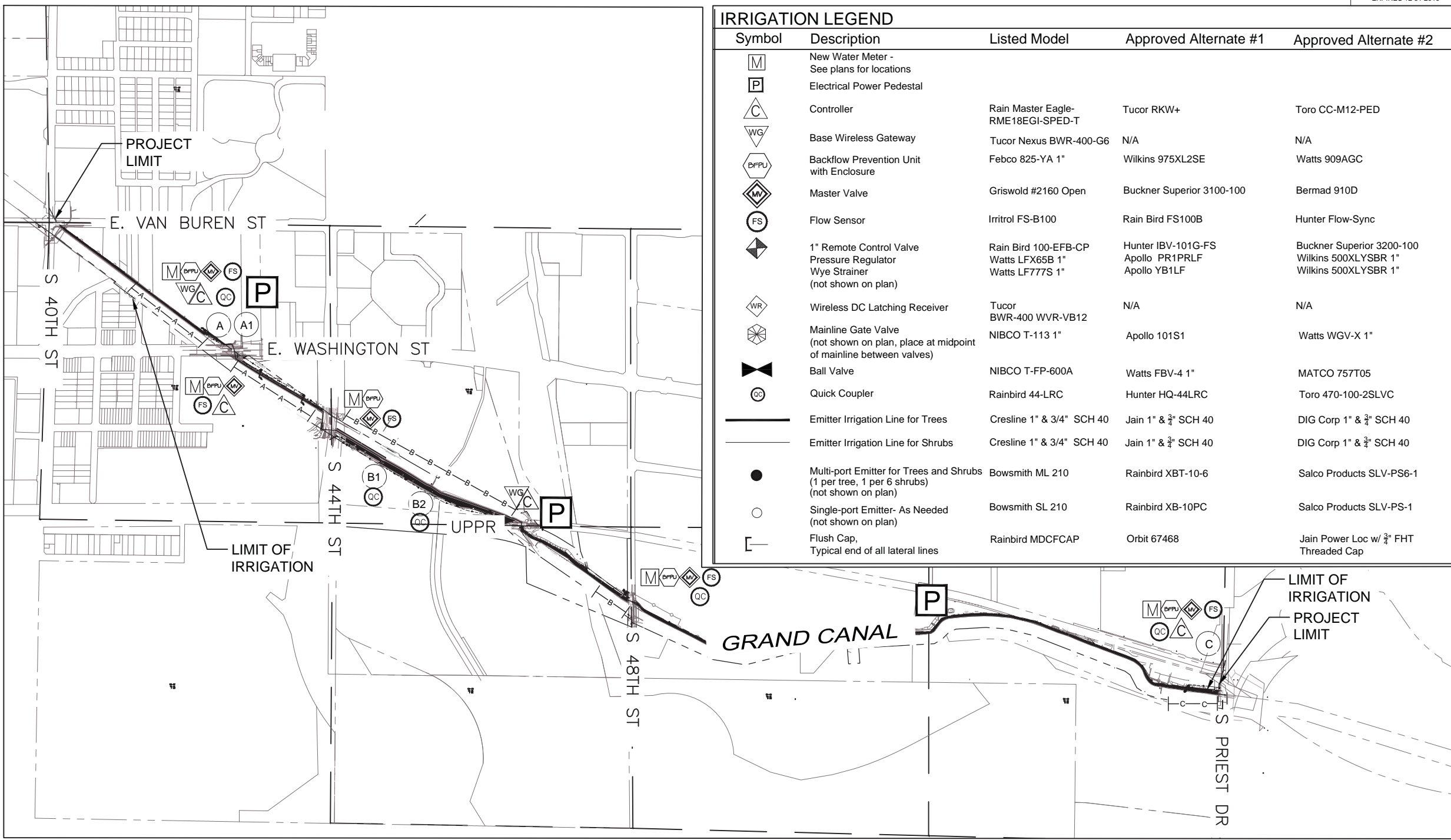
M.A.G. NOTE:
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G., SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION CONTROLLER ZONES
 A—A—A STA 205+25 - 229+00
 B—B—B STA 232+50 - 262+00
 C—C—C STA 314+75 - 318+25

P ELECTRICAL PANEL R: STA 217+60
 ELECTRICAL PANEL S: STA 251+72
 ELECTRICAL PANEL T: STA 292+20

IRRIGATION LEGEND

Symbol	Description	Listed Model	Approved Alternate #1	Approved Alternate #2
M	New Water Meter - See plans for locations			
P	Electrical Power Pedestal			
C	Controller	Rain Master Eagle-RME18EG1-SPED-T	Tucor RKW+	Toro CC-M12-PED
WG	Base Wireless Gateway	Tucor Nexus BWR-400-G6	N/A	N/A
B.F.P.U.	Backflow Prevention Unit with Enclosure	Febco 825-YA 1"	Wilkins 975XL2SE	Watts 909AGC
MV	Master Valve	Griswold #2160 Open	Buckner Superior 3100-100	Bermad 910D
FS	Flow Sensor	Irritrol FS-B100	Rain Bird FS100B	Hunter Flow-Sync
RCV	1" Remote Control Valve	Rain Bird 100-EFB-CP	Hunter IBV-101G-FS	Buckner Superior 3200-100
WS	Pressure Regulator	Watts LFX65B 1"	Apollo PR1PRLF	Wilkins 500XLYSBR 1"
YS	Wye Strainer (not shown on plan)	Watts LF777S 1"	Apollo YB1LF	Wilkins 500XLYSBR 1"
WR	Wireless DC Latching Receiver	Tucor BWR-400 WVR-VB12	N/A	N/A
MGV	Mainline Gate Valve (not shown on plan, place at midpoint of mainline between valves)	NIBCO T-113 1"	Apollo 101S1	Watts WGV-X 1"
BV	Ball Valve	NIBCO T-FP-600A	Watts FBV-4 1"	MATCO 757T05
QC	Quick Coupler	Rainbird 44-LRC	Hunter HQ-44LRC	Toro 470-100-2SLVC
ELT	Emitter Irrigation Line for Trees	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
ELS	Emitter Irrigation Line for Shrubs	Cresline 1" & 3/4" SCH 40	Jain 1" & 3/4" SCH 40	DIG Corp 1" & 3/4" SCH 40
ME	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)	Bowsmith ML 210	Rainbird XBT-10-6	Salco Products SLV-PS6-1
SE	Single-port Emitter- As Needed (not shown on plan)	Bowsmith SL 210	Rainbird XB-10PC	Salco Products SLV-PS-1
FC	Flush Cap, Typical end of all lateral lines	Rainbird MDCFCAP	Orbit 67468	Jain Power Loc w/ 3/4" FHT Threaded Cap



A STA: 218+00 - SHEET 3.64
 NEW 1" WATER METER
 1" B.F.P.U.
 1" BRASS MASTER VALVE
 1-1/2" SCH 40 FLOW SENSOR
 12 STATION ELECTRICAL CONTROLLER WITH WIRELESS BASE GATEWAY
 STA 217+60

VALVE SUMMARY:

STATION	TYPE	SIZE	GPM
A1	TREE	1"	.26
A2	SHRUB	1"	1.5
A3	SHRUB	1"	2.9
A4	TREE	1"	.33
A5	SHRUB	1"	3.0
A6	TREE	1"	.26

B STA: 220+50 - SHEET 3.65
 NEW 1" WATER METER
 1" B.F.P.U.
 1" BRASS MASTER VALVE
 1-1/2" SCH 40 FLOW SENSOR
 12 STATION ELECTRICAL CONTROLLER WITH WIRELESS BASE GATEWAY
 AT STA 251+72

VALVE SUMMARY:

STATION	TYPE	SIZE	GPM
B1	TREE	1"	1.4
B2	SHRUB	1"	4.6
B3	TREE	1"	.85
B4	SHRUB	1"	4.2
B5	TREE	1"	.30
B6	SHRUB	1"	1.95
B7	TREE	1"	.40
B8	SHRUB	1"	2.3
B9	TREE	1"	.20
B10	SHRUB	1"	1.65

C STA: 232+50 - SHEET 3.66
 NEW 1" WATER METER
 1" B.F.P.U.
 1" BRASS MASTER VALVE
 1-1/2" SCH 40 FLOW SENSOR
 6 STATION ELECTRICAL CONTROLLER
 STA 318+00

VALVE SUMMARY:

STATION	TYPE	SIZE	GPM
C1	TREE	1"	.40
C2	SHRUB	1"	3.2

A1 STA: 218+00 - SHEET 3.64
 1" QUICK COUPLER W/BOX

B1 STA: 237+00 - SHEET 3.66
 1" QUICK COUPLER W/BOX

B2 STA: 242+25 - SHEET 3.67
 1" QUICK COUPLER W/BOX

C1 STA: 318+00 - SHEET 3.74
 1" QUICK COUPLER W/BOX

Waibel & Associates
Landscape Architecture
 Phone: 480.953.3849 Fax: 480.953.3846
 9611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 email: janet@waibel.com

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ARIZONA 811
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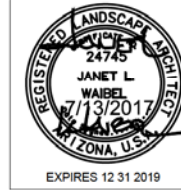
IRRIGATION OVERVIEW
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1" = 500'					3.69	3.99

NO.	DESCRIPTION	REV BY	CHK BY	DATE

P:\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment 3 - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.70	3.99

TRACE CONSULTING
 1201 E. Jefferson St., Suite 3
 Phoenix, AZ 85034

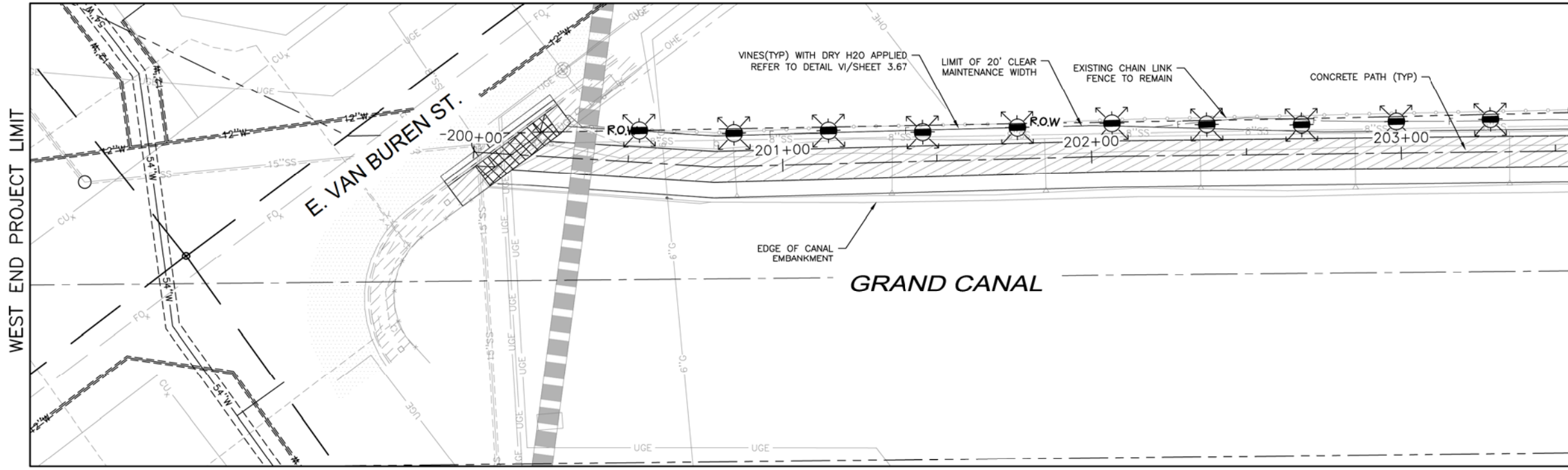
NO.	DESCRIPTION	REV BY/CHK BY	DATE

IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
[WG]	Base Wireless Gateway
[BPU]	Backflow Prevention Unit with Enclosure
[MV]	Master Valve
[FS]	Flow Sensor
[MGV]	Mainline Gate Valve
[1"RCV]	1" Remote Control Valve
[PRWS]	Pressure Regulator and Wye Strainer (not shown on plan)
[WDR]	Wireless DC Latching Receiver
[BV]	Ball Valve
[QC]	Quick Coupler
[EIT]	Emitter Irrigation Line for Trees
[EIS]	Emitter Irrigation Line for Shrubs
[MPE]	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
[SPE]	Single-port Emitter - As Needed (not shown on plan)
[FC]	Flush Cap, Typical end of all lateral lines
[S40PVC]	Sch 40 PVC Sleeving under all pavement
[M112]	Mainline - 1 1/2" Schedule 40 PVC

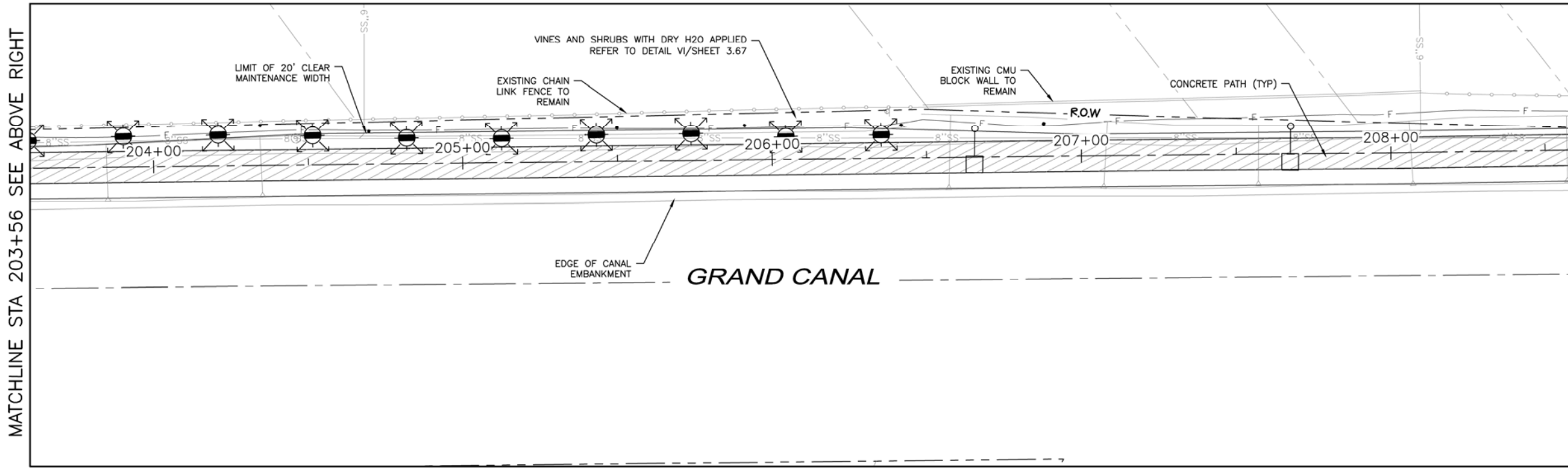
Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

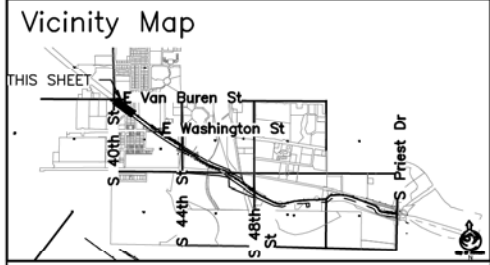
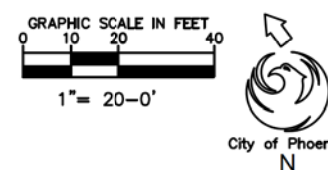


NOTES:

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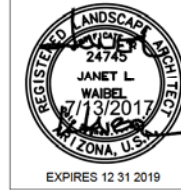
IRRIGATION PLAN
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.70	3.99

SCALE: 1"=20'

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.72	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

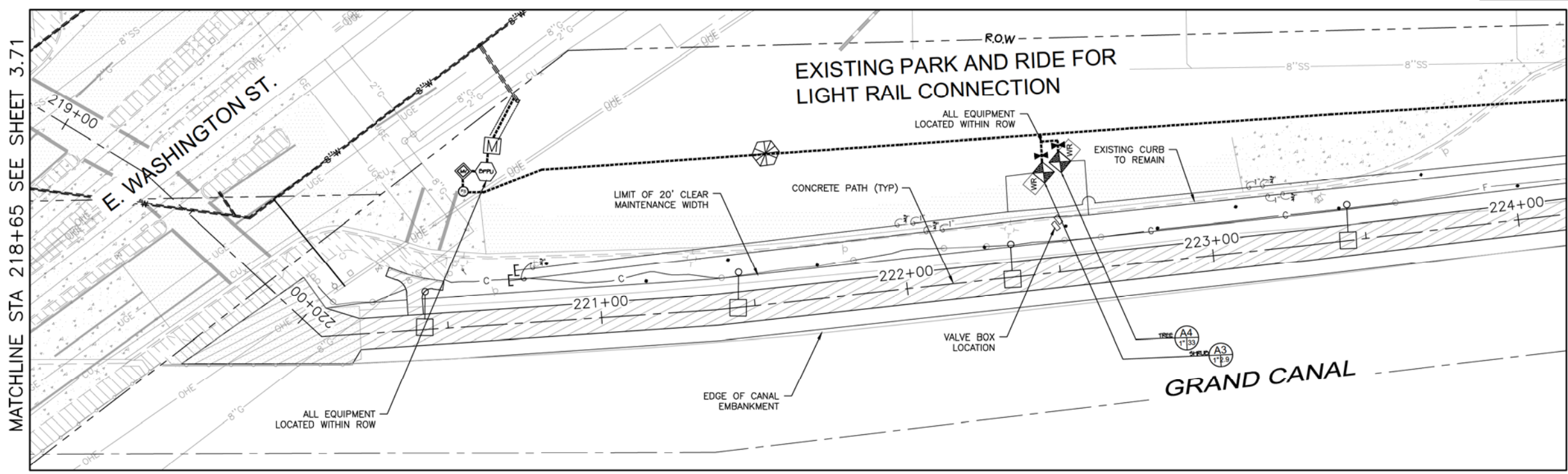
NO.	DESCRIPTION	REV BY	CHK BY	DATE

IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
[WG]	Base Wireless Gateway
[BPU]	Backflow Prevention Unit with Enclosure
[MV]	Master Valve
[FS]	Flow Sensor
[MGV]	Mainline Gate Valve
[RV]	1" Remote Control Valve
[PRWS]	Pressure Regulator and Wye Strainer (not shown on plan)
[WDR]	Wireless DC Latching Receiver
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[QC]	Quick Coupler
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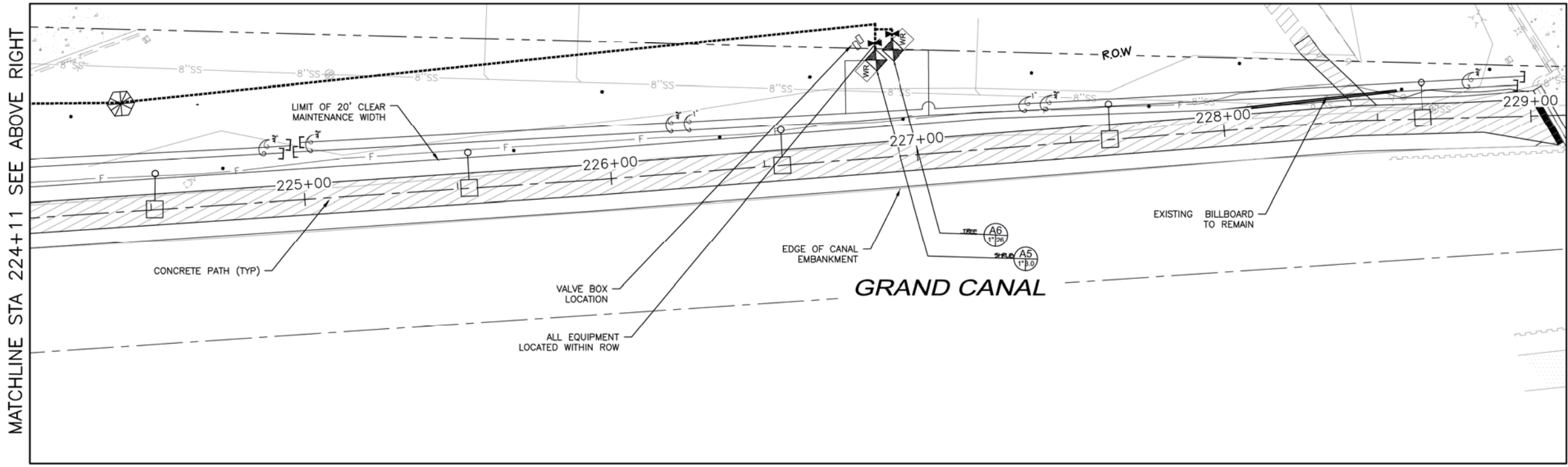
Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150



NOTES:

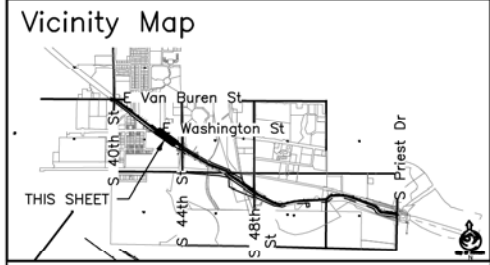
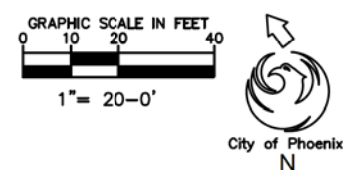
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IRRIGATION PLAN

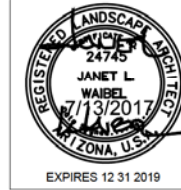
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.72	3.99

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.73	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

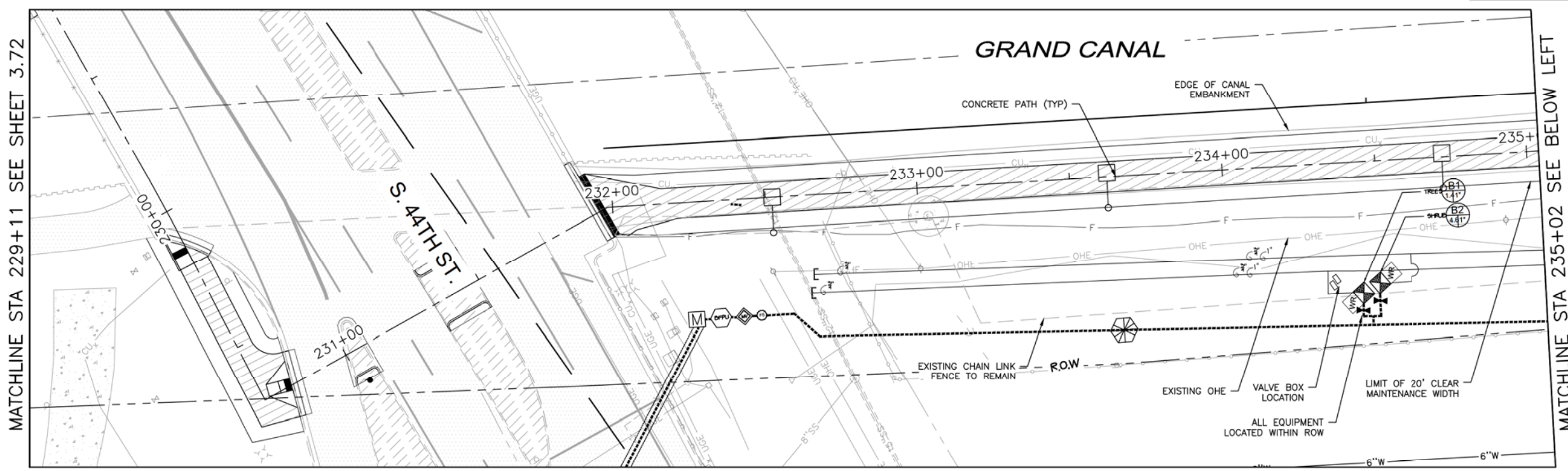
NO.	DESCRIPTION	REV BY	CHK BY	DATE

IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
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[BPU]	Backflow Prevention Unit with Enclosure
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Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

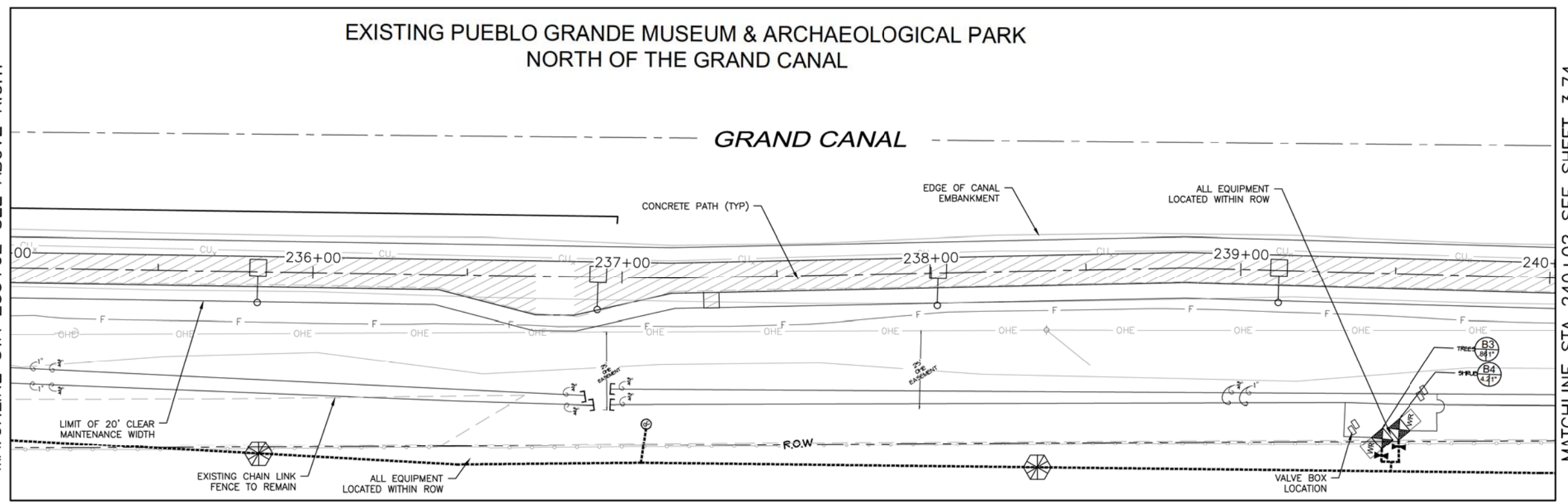


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-

MATCHLINE STA 235+02 SEE ABOVE RIGHT

EXISTING PUEBLO GRANDE MUSEUM & ARCHAEOLOGICAL PARK NORTH OF THE GRAND CANAL

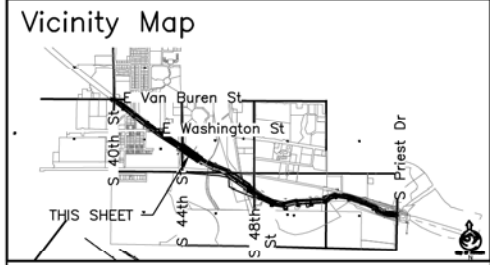
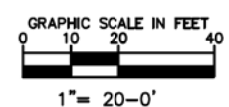


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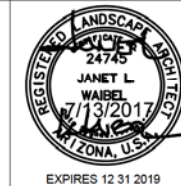
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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.73	3.99

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



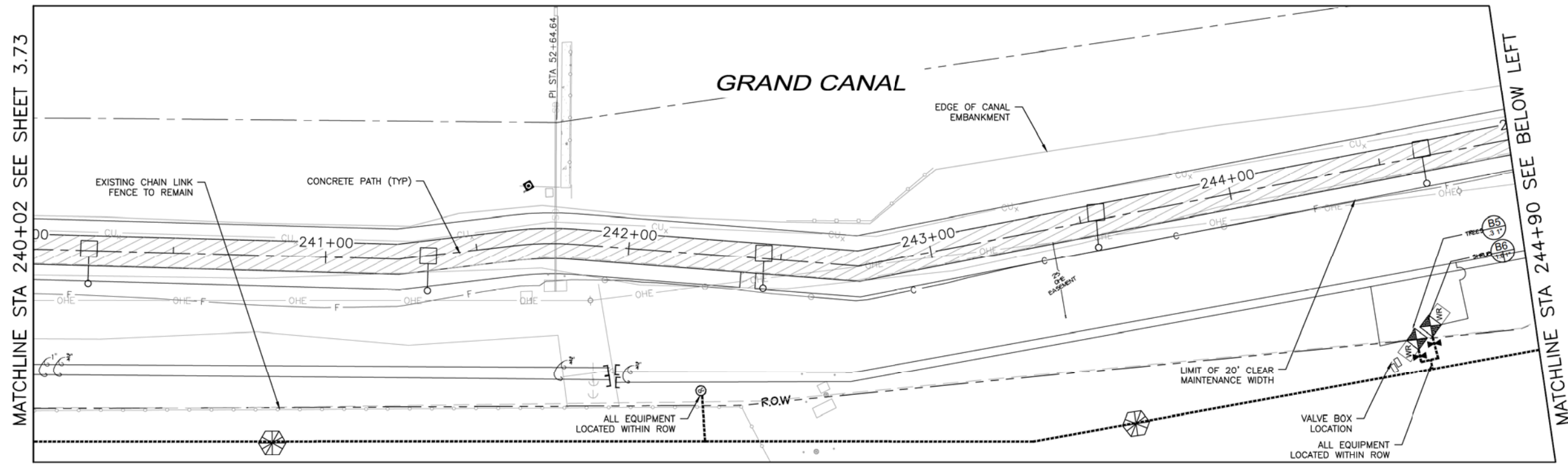
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.74	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

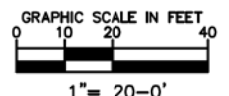
IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
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[M1.5]	Mainline - 1 1/2" Schedule 40 PVC



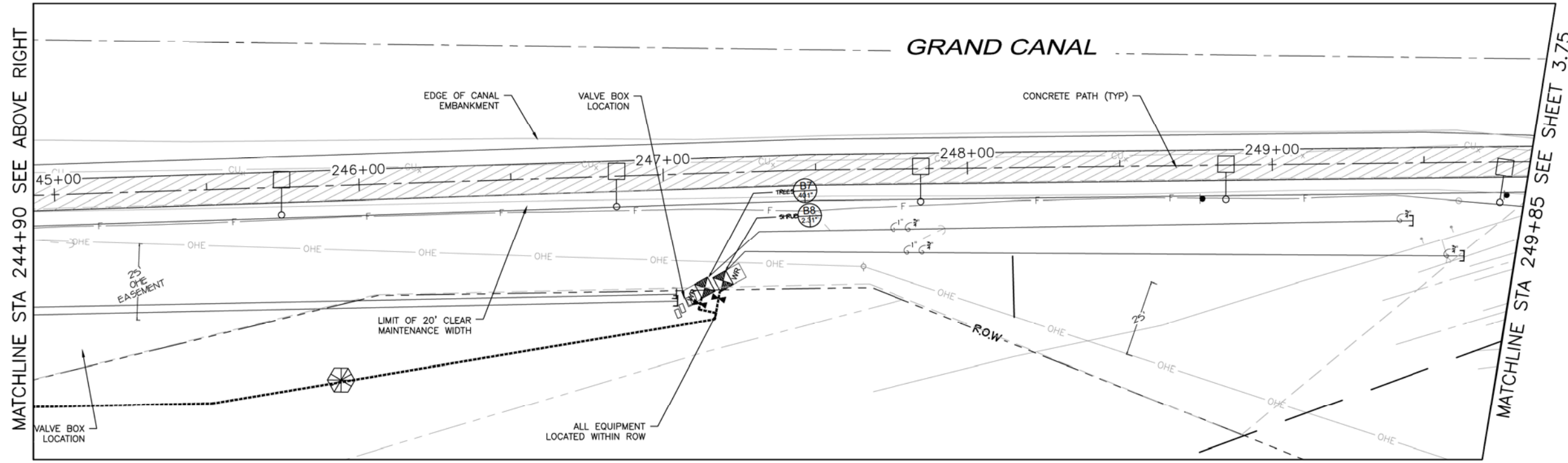
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Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

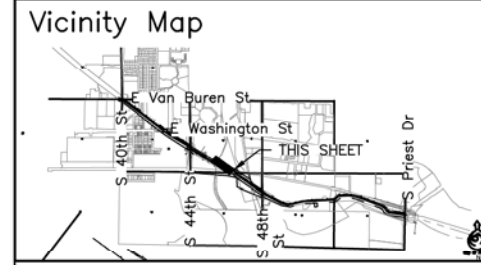
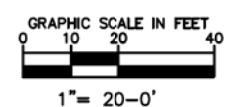


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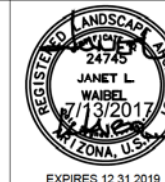
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CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.74	3.99

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.75	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY/CHK BY	DATE

IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
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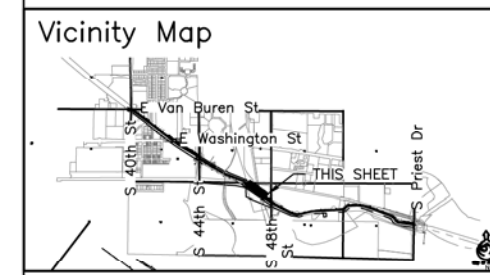
Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

[P]	ELECTRICAL PANEL S: STA 251+72
-----	--------------------------------

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150



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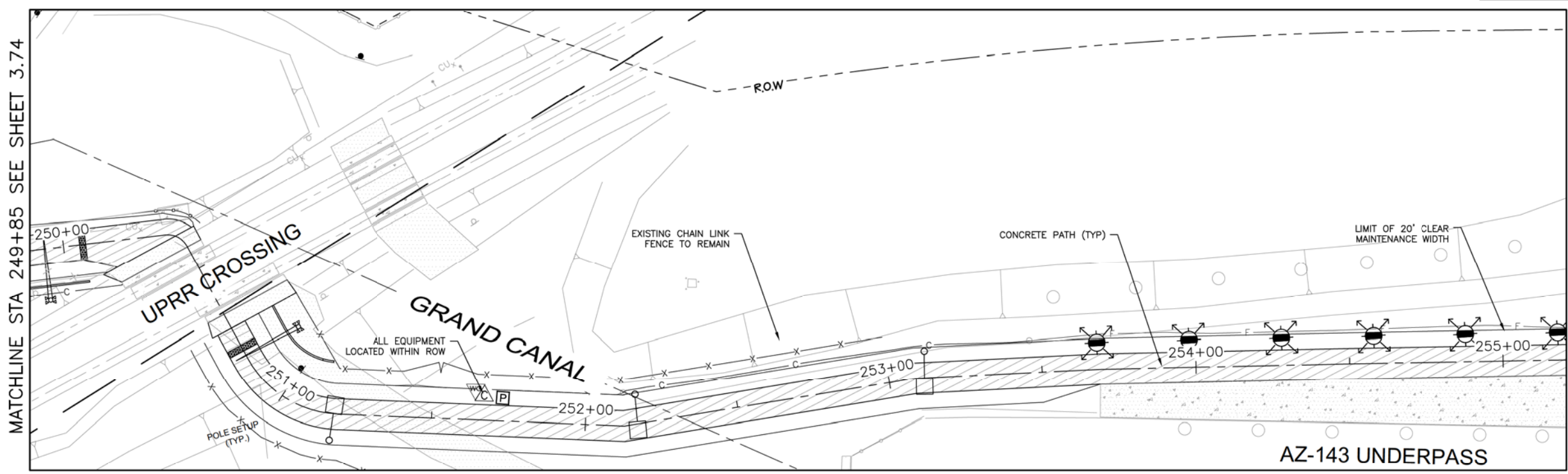
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IRRIGATION PLAN

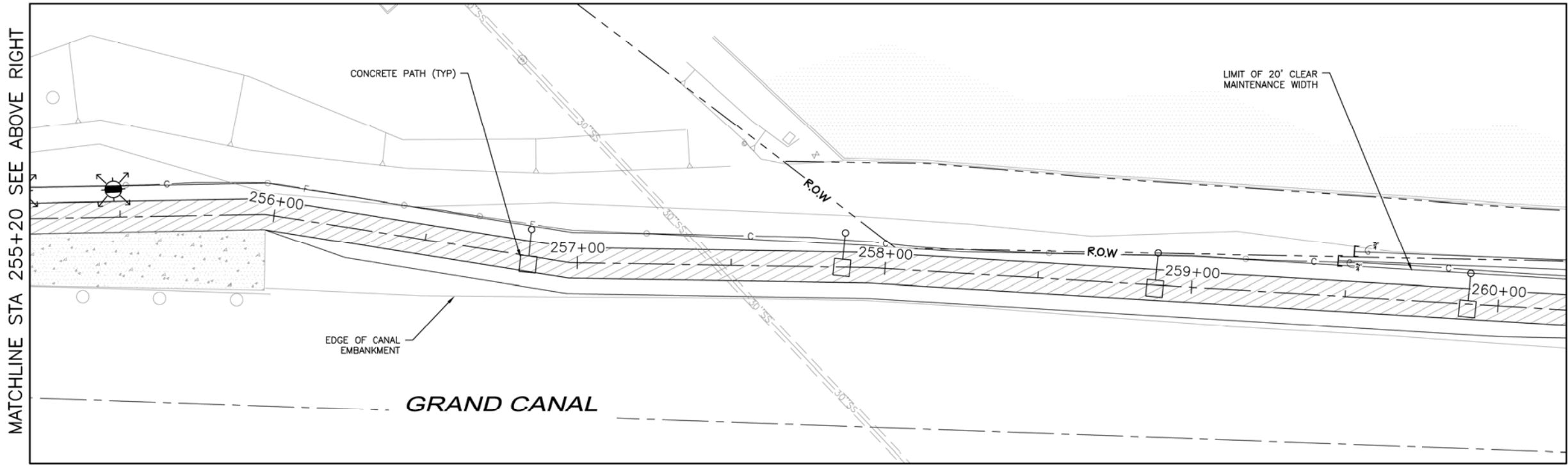
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GRAND CANALScape PHASE II
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DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.75	3.99



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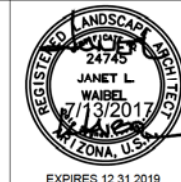
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GRAPHIC SCALE IN FEET
0 10 20 40
1" = 20'-0"

City of Phoenix
N

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

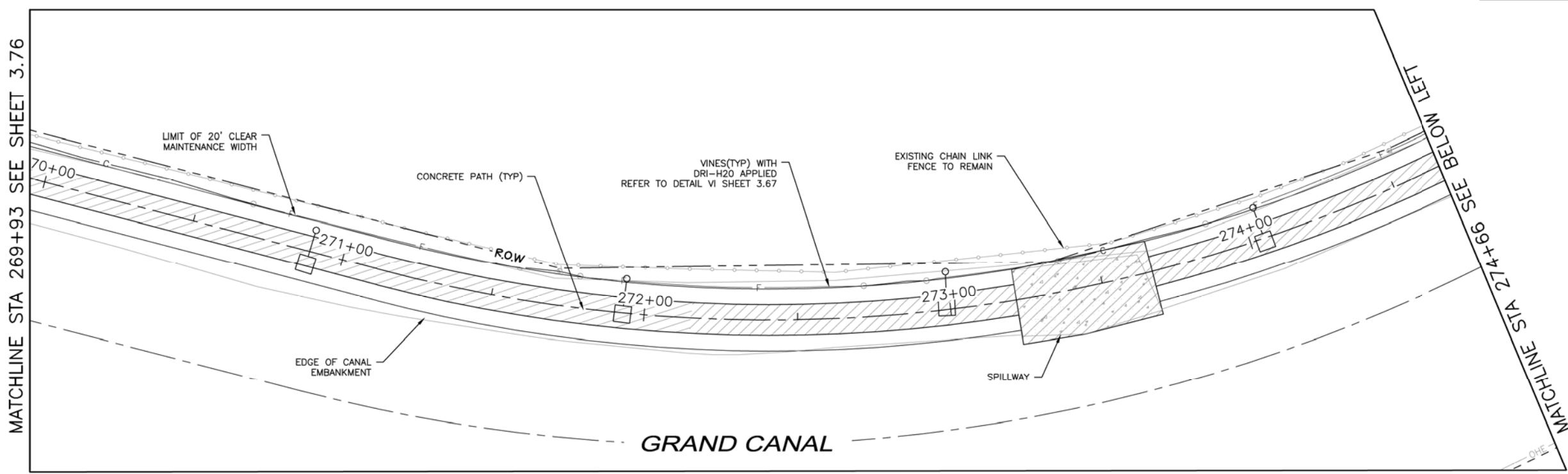
REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

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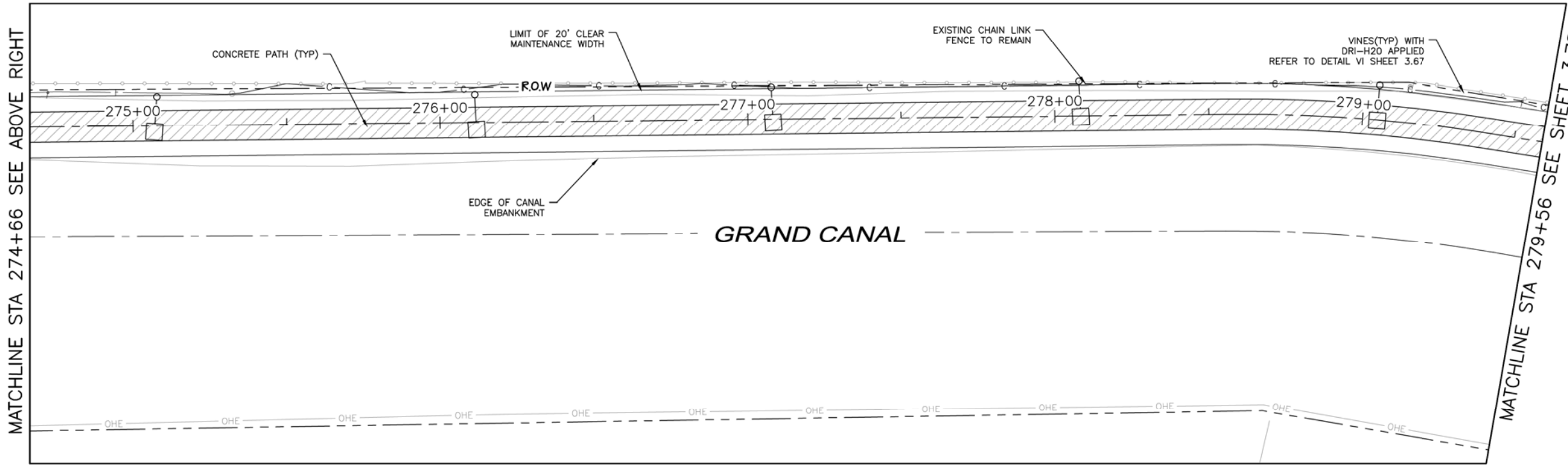
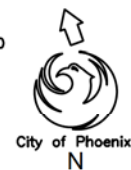
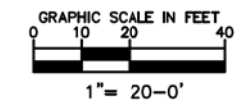
Valve Key

Station Number	Valve Size	GPM
(A1)	(1 1/2")	(100)



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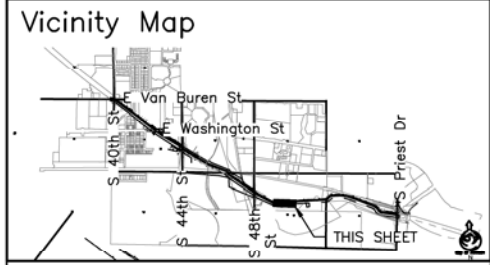
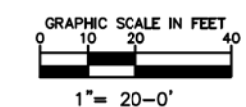


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- IRRIGATION EQUIPMENT DRAWN OUTSIDE OF R.O.W FOR VISUAL CLARITY. LANDSCAPE CONTRACTOR TO INSTALL ALL IRRIGATION EQUIPMENT AND PIPE WITHIN R.O.W AND PLANTING AREAS.
- EQUIPMENT IS NOT DRAWN TO SCALE FOR IMPROVED VISUAL CLARITY.
- DRYH2O TO BE APPLIED AS NOTED IN DETAIL IV SHEET 3.67



Waibel & Associates Landscape Architecture
 Phone: 480.953.3640 Fax: 480.953.3346
 8611 South Priest Drive, Suite 101
 Tempe, AZ 85284
 e-mail: janet@waibel.com

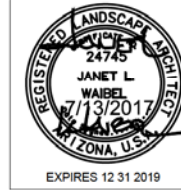
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ARIZONA 811
 Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION PLAN
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.77	3.99

GRAND CANALScape PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.78	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY/CHK BY	DATE

IRRIGATION LEGEND

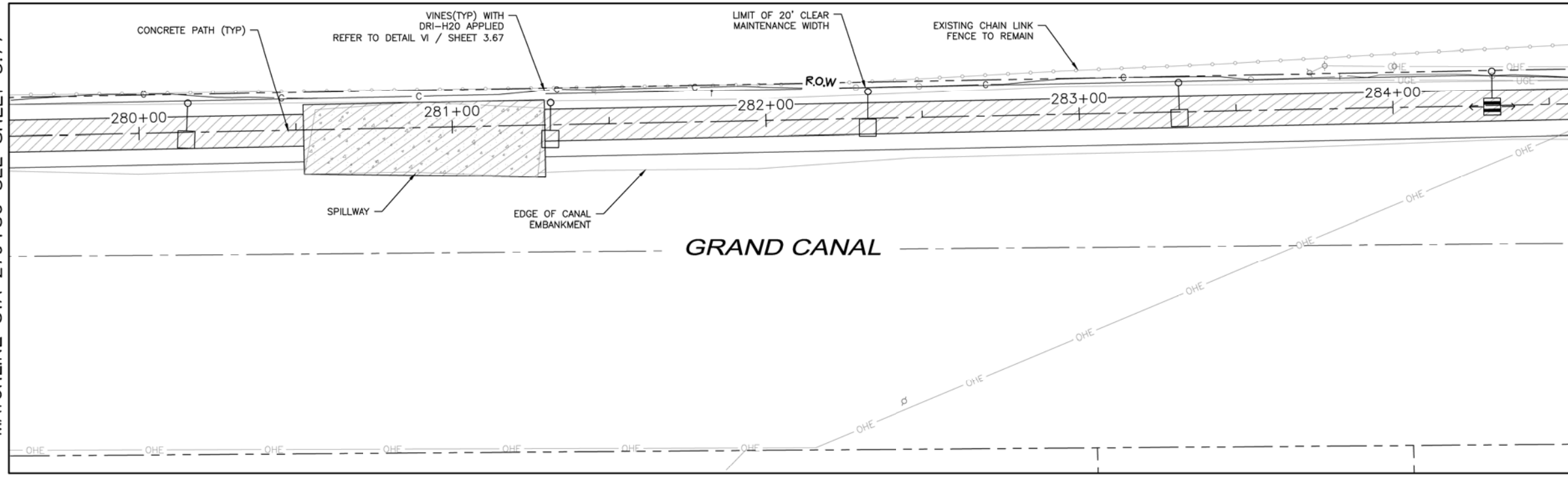
Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
[WG]	Base Wireless Gateway
[BPU]	Backflow Prevention Unit with Enclosure
[MV]	Master Valve
[FS]	Flow Sensor
[MGV]	Mainline Gate Valve
[RCV]	1" Remote Control Valve
[PRS]	Pressure Regulator and Wye Strainer (not shown on plan)
[WDR]	Wireless DC Latching Receiver
[BV]	Ball Valve
[QC]	Quick Coupler
[EIT]	Emitter Irrigation Line for Trees
[EIS]	Emitter Irrigation Line for Shrubs
[ME]	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)
[SE]	Single-port Emitter - As Needed (not shown on plan)
[FC]	Flush Cap, Typical end of all lateral lines
[S40]	Sch 40 PVC Sleeving under all pavement
[M112]	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	150

MATCHLINE STA 279+56 SEE SHEET 3.77

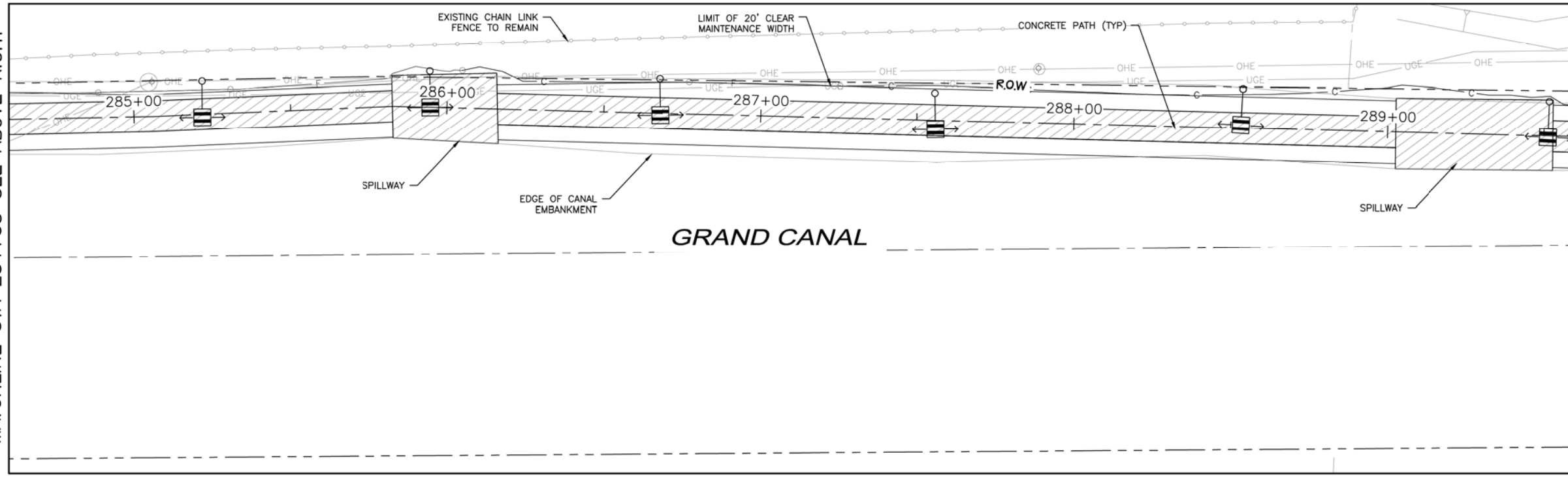
MATCHLINE STA 284+58 SEE BELOW LEFT



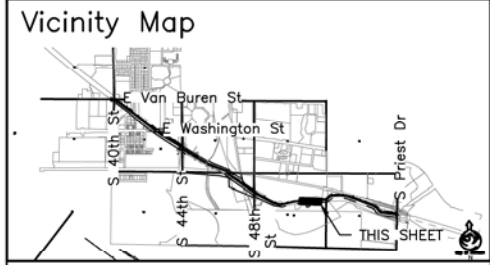
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 - EQUIPMENT IS NOT DRAWN TO SCALE FOR IMPROVED VISUAL CLARITY.
 - DRYH2O TO BE APPLIED AS NOTED IN DETAIL IV SHEET 3.67

MATCHLINE STA 284+58 SEE ABOVE RIGHT

MATCHLINE STA 289+49 SEE SHEET 3.79



- NOTE:**
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- NOTES:**
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www.waibel.com

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ARIZONA 811
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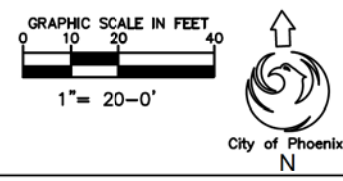
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1"=20'					3.78	3.99



\\DLPHM22\Public\Drawings\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.79	3.99

TRACE CONSULTING
1201 E. Jefferson St., Suite 3
Phoenix, AZ 85034

NO IRRIGATION STA 289+49 - 299+37

IRRIGATION LEGEND

Symbol	Description
[M]	New Water Meter - See plans for locations
[P]	Electrical Power Pedestal
[C]	Controller
[WG]	Base Wireless Gateway
[PPLU]	Backflow Prevention Unit with Enclosure
[MV]	Master Valve
[FS]	Flow Sensor
[MGV]	Mainline Gate Valve
[1"RCV]	1" Remote Control Valve
[PRWS]	Pressure Regulator and Wye Strainer (not shown on plan)
[WDR]	Wireless DC Latching Receiver
[BV]	Ball Valve
[QC]	Quick Coupler
[EIT]	Emitter Irrigation Line for Trees
[EIS]	Emitter Irrigation Line for Shrubs
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[○]	Single-port Emitter - As Needed (not shown on plan)
[FC]	Flush Cap, Typical end of all lateral lines
[S40PVC]	Sch 40 PVC Sleeving under all pavement
[M112]	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	

[P] ELECTRICAL PANEL T: STA 292+20



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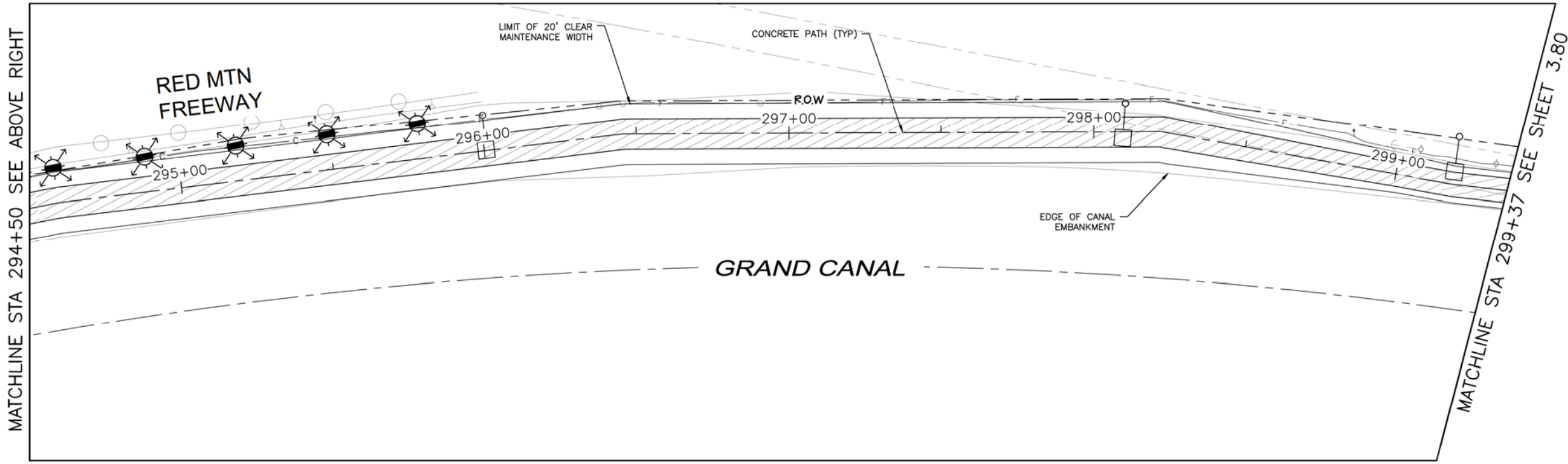
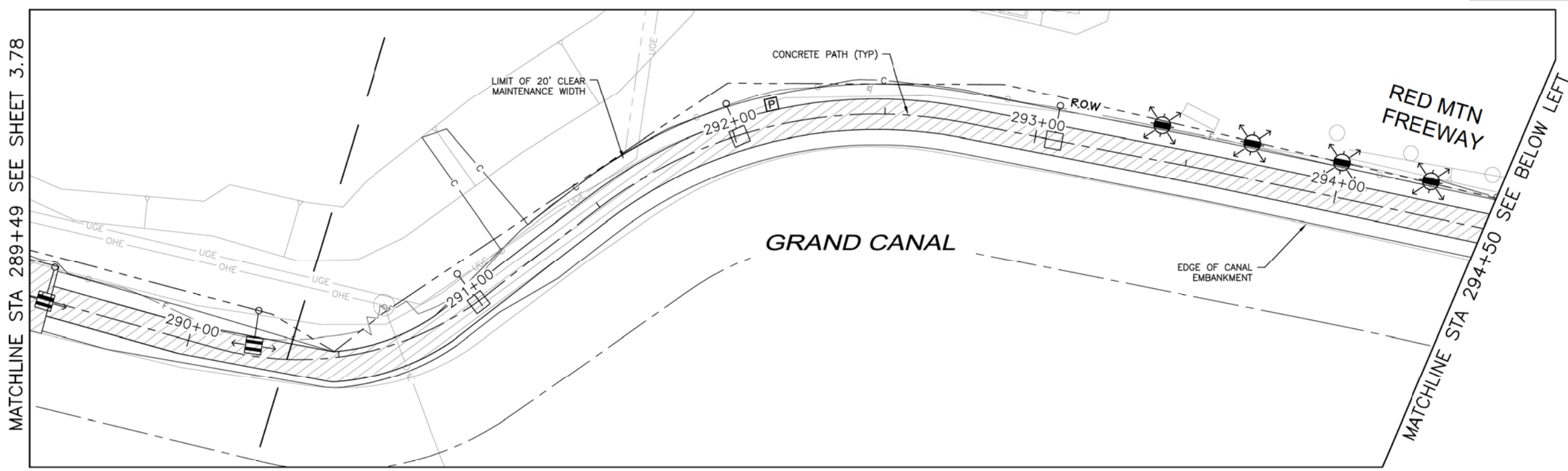
IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.79	3.99

SCALE: 1"=20'

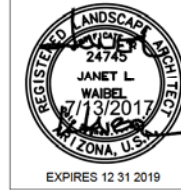


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NO.	DESCRIPTION	REV BY	CHK BY	DATE

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM

GRAND CANALScape PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.80	3.99

TRACE CONSULTING
 1201 E. Jefferson St., Suite 3
 Phoenix, AZ 85034

NO IRRIGATION THIS SHEET STA 299+37 - 309+35

IRRIGATION LEGEND

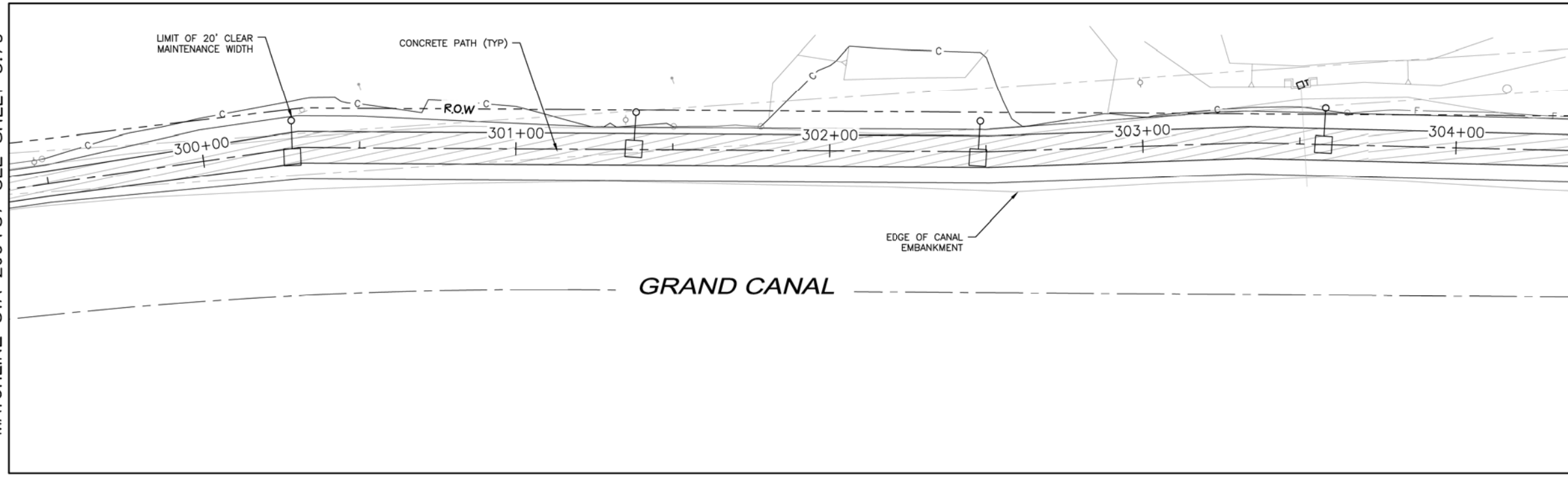
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[SE]	Single-port Emitter - As Needed (not shown on plan)
[FC]	Flush Cap, Typical end of all lateral lines
[S40]	Sch 40 PVC Sleeving under all pavement
[M12]	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
A1	1 1/2"	

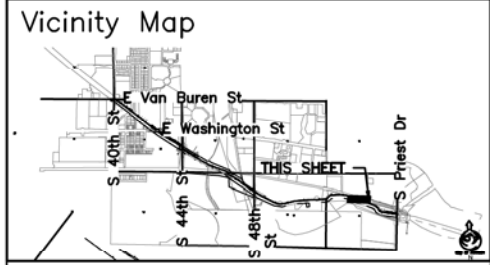
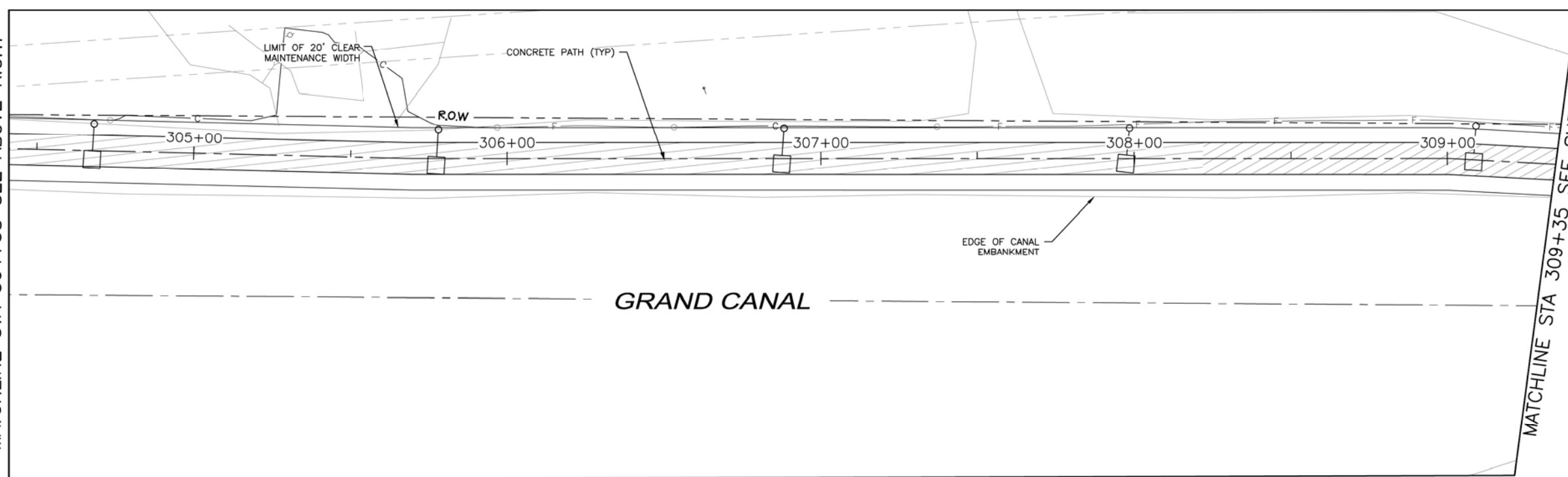
MATCHLINE STA 299+37 SEE SHEET 3.79

MATCHLINE STA 304+38 SEE BELOW LEFT



MATCHLINE STA 304+38 SEE ABOVE RIGHT

MATCHLINE STA 309+35 SEE SHEET 3.81



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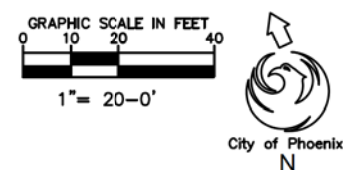
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IRRIGATION PLAN
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.80	3.99

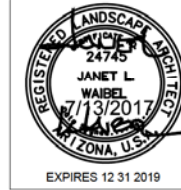
SCALE: 1"=20'

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NO.	DESCRIPTION	REV BY	CHK BY	DATE

\\DLPHM22\Public\DRAWINGS\CANAL\Grand Canal Segment 1 and 3\Canal Segment 3\Grand Canal Segment III - Landscape.dwg 8/17/2016 12:53 PM



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.81	3.99

TRACE CONSULTING
 1201 E. Jefferson St., Suite 3
 Phoenix, AZ 85034

NO IRRIGATION STA 309+35 - 314+74

IRRIGATION LEGEND

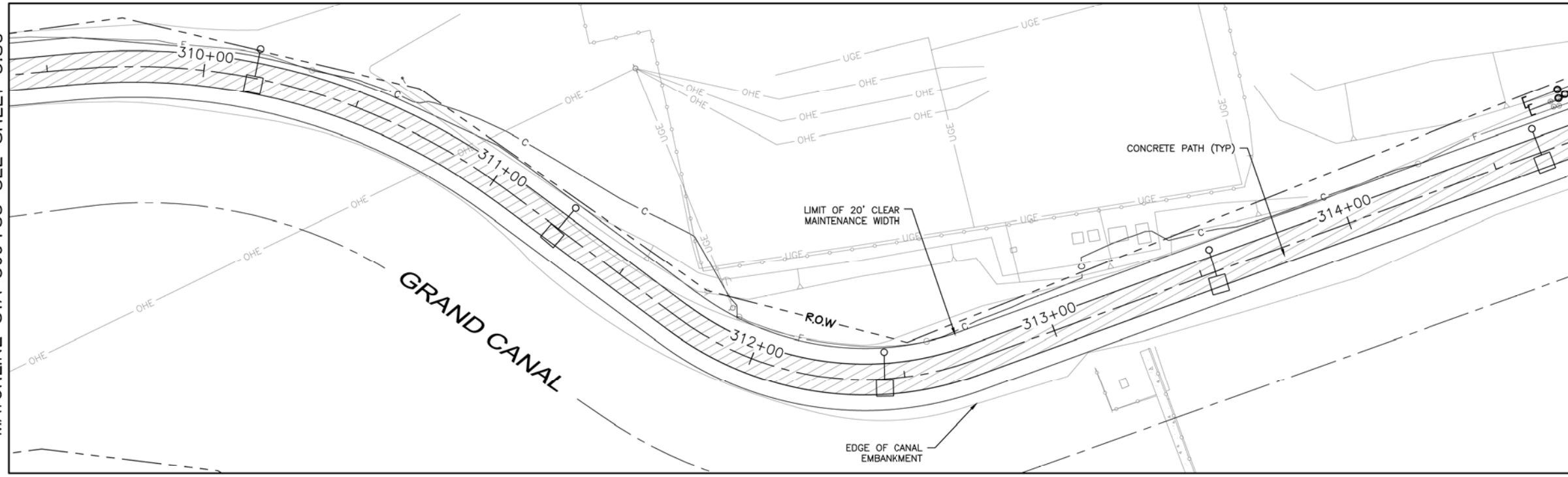
Symbol	Description
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[C]	Controller
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[S40]	Sch 40 PVC Sleeving under all pavement
[M12]	Mainline - 1 1/2" Schedule 40 PVC

Valve Key

Station Number	Valve Size	GPM
(A1)	(1 1/2")	(100)

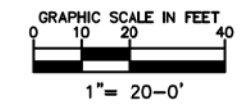
MATCHLINE STA 309+35 SEE SHEET 3.80

MATCHLINE STA 314+74 SEE BELOW LEFT



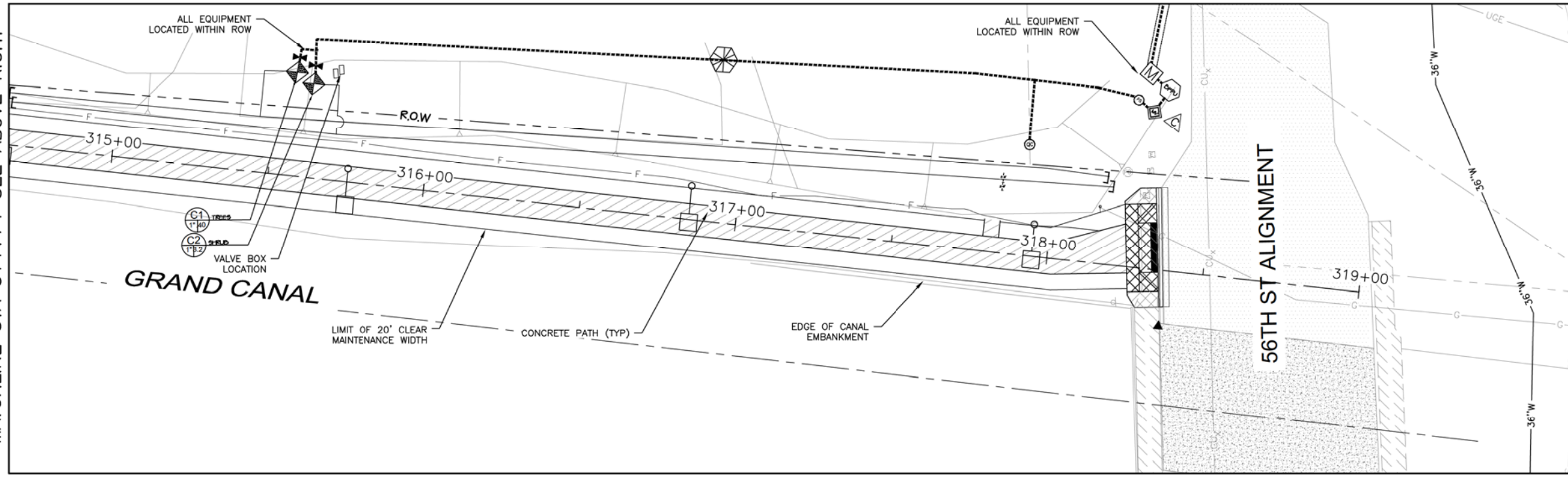
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- DRYH20 TO BE APPLIED AS NOTED IN DETAIL IV SHEET 3.67



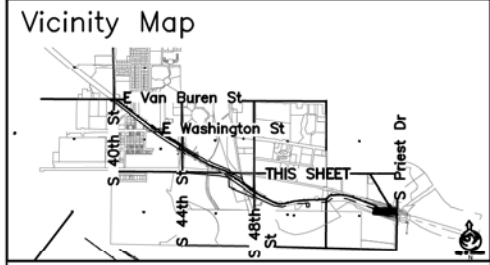
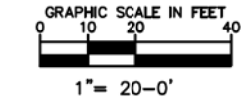
MATCHLINE STA 314+74 SEE ABOVE RIGHT

EAST END PROJECT LIMIT



NOTES:

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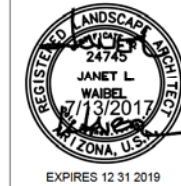
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 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	RS	DES:	RM	CK:	JW	SHEET	TOTAL	
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS	
SCALE: 1"=20'							3.81	3.99

NO.	DESCRIPTION	REV BY/CHK BY	DATE

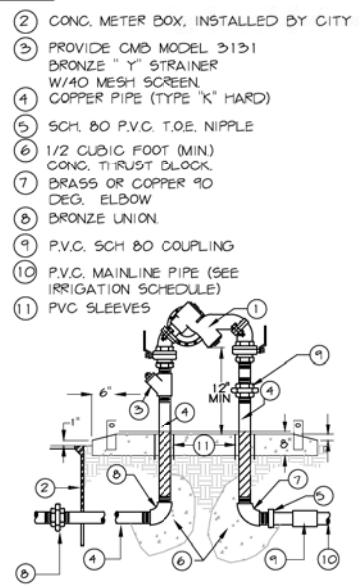


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.82	3.99

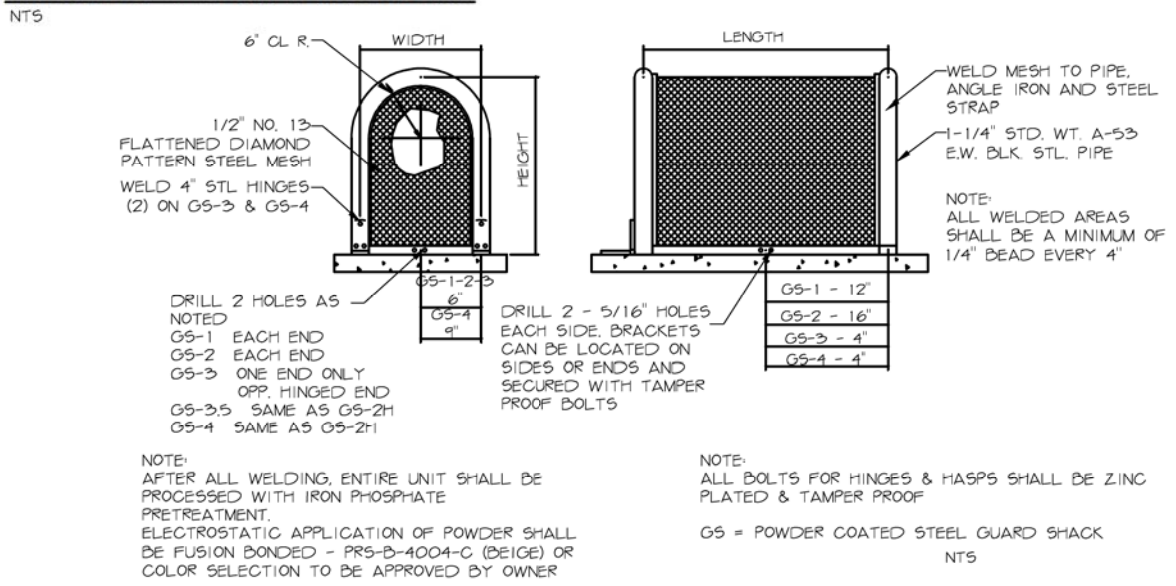
TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

I. REDUCED PRESSURE BACKFLOW

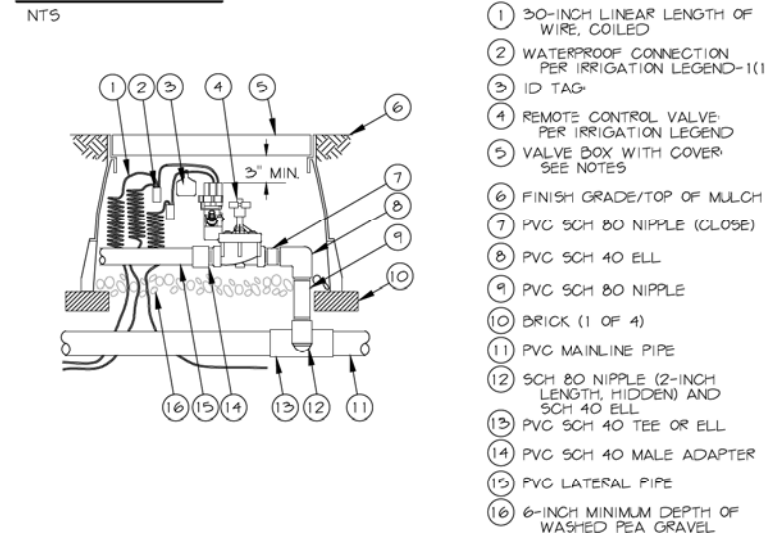
- NTS
- ALL PIPE/FITTINGS TO BE TYPE "L" COPPER
 - ASSEMBLY SHALL BE APPROVED BY U.S.C. FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.
 - INSTALL BACKFLOW PREVENTION ASSEMBLY WITH RELIEF PORT FACING TOWARD THE GROUND.
 - BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MIN OF 12" FROM RELIEF PORT TO GRADE.
 - TEST COCKS, (4) SHALL BE FITTED WITH BRASS PLUGS AND INST. W/ TEFLON TAPE. SHUTOFF VALVES TO BE RESILIENT BALL TYPE W/ REMOVABLE HANDLES. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
 - STAKE LOCATION OF ASSEMBLY FOR APPROVAL BY THE ENGINEER BEFORE INSTALLATION BEGINS.
 - A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
 - PROVIDE TEST CERTIFICATION FROM CITY APPROVED TESTING COMPANY PRIOR TO APPROVAL.
 - COPPER FITTINGS SHALL BE INSTALLED W/ LEAD FREE SOLDER JOINTS.
 - SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



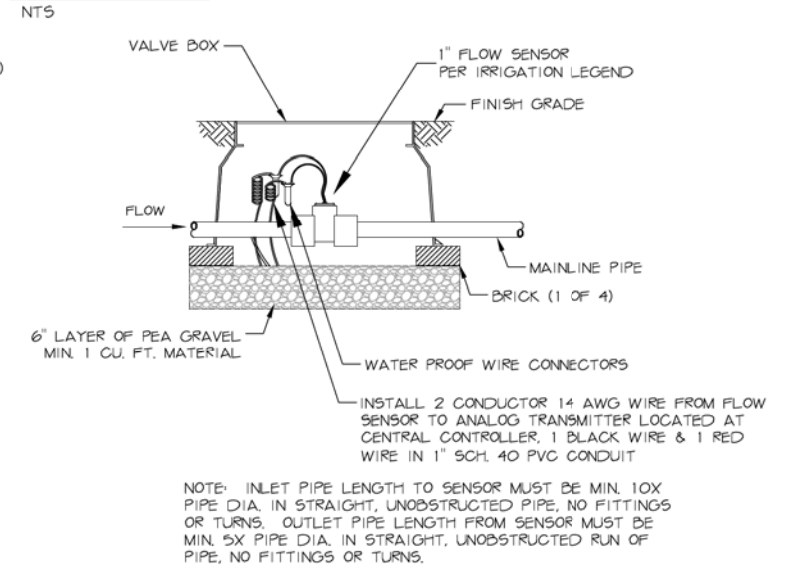
II. BACKFLOW SECURITY ENCLOSURE



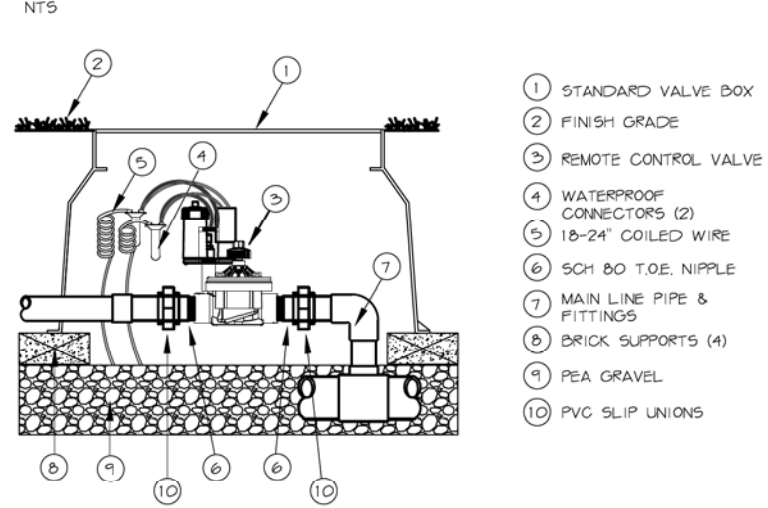
III. MASTER VALVE



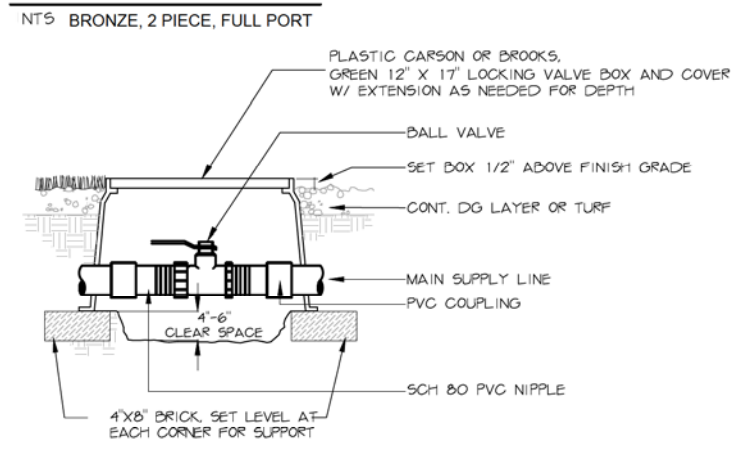
IV. FLOW SENSOR



V. EMITTER VALVE ASSEMBLY

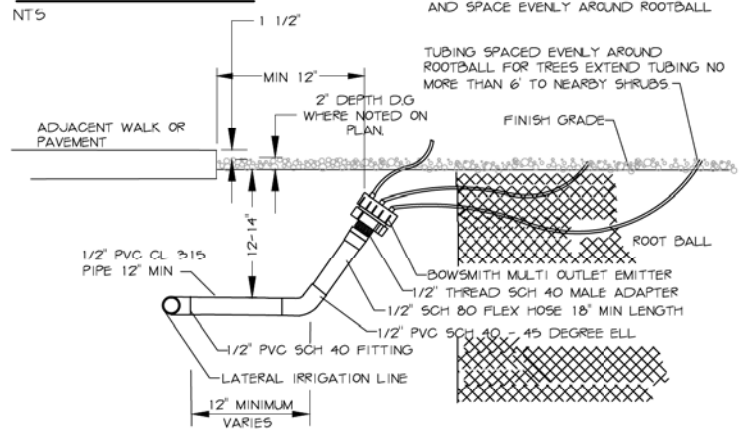


VI. ISOLATION BALL VALVE

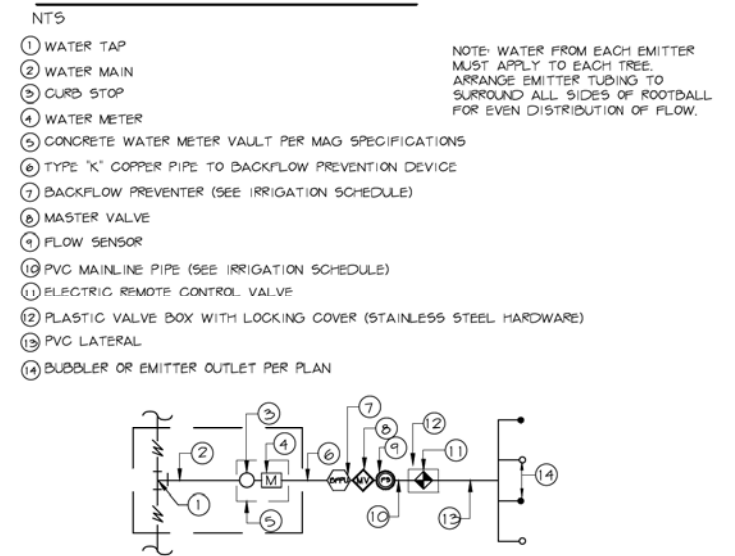


- NOTES:
1. COMPACT SOIL AROUND VALVE BOX TO SAME DENSITY AS UNDISTURBED ADJACENT SOIL.
2. VALVE BOX SHALL BE SET PARALLEL WITH GRADE.

VII. MULTI-EMITTER FOR TREE AND SHRUB



VIII. WATER SYSTEM SCHEMATIC



GENERAL NOTES:
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES:
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/2", USE 3" SLEEVE. FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

M.A.G. NOTE:
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS-OF-WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

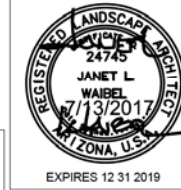
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"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION DETAILS			
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT			
GRAND CANALScape PHASE II SEGMENT 3: 40TH ST TO 56TH ST ST87600114			
DR: RS	DES: RM	CK: JW	SHEET NO: 3.82
DATE: 7/17	DATE: 7/17	DATE: 7/17	TOTAL SHEETS: 3.99
SCALE: NTS			

NO.	DESCRIPTION	REV BY/CHK BY	DATE

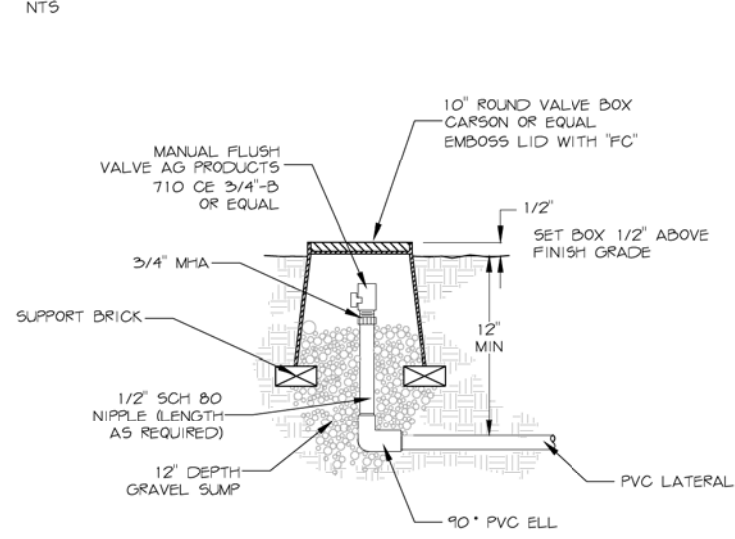
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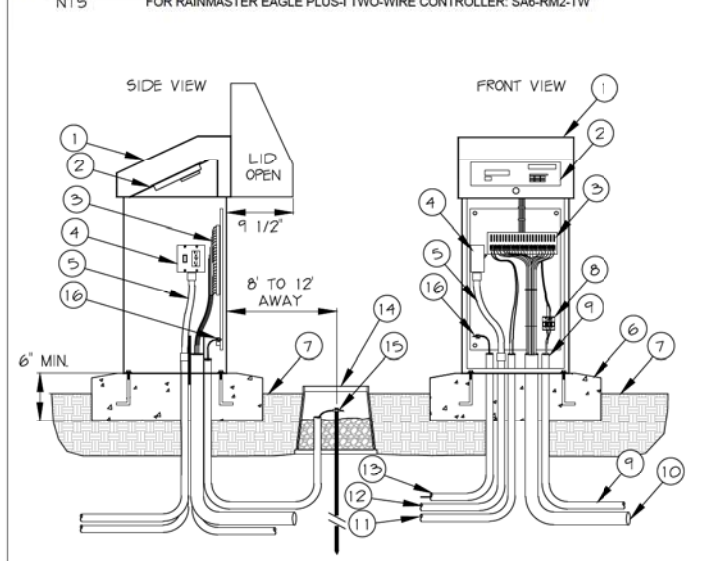
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.83	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

IX. MANUAL FLUSH VALVE



X. STAINLESS STEEL CONTROLLER PEDESTAL



- STRONGBOX STAINLESS STEEL NEMA 3R RAINPROOF ENCLOSURE (UL LISTED).
 - SATELLITE ASSEMBLY (OPTIONAL) ASSEMBLED IN ENCLOSURE BY JOHN DEERE GREEN TECH.
 - TERMINAL STRIP FOR VALVE WIRES.
 - POWER SWITCH / GFCI RECEPTACLE.
 - ELECTRICAL FLEX CONDUIT FOR POWER.
 - 6" MIN THICK CONCRETE PAD WITH ANCHOR BOLTS PER MANUFACTURER RECOMMENDATIONS.
 - FINISHED GRADE.
 - FLOW SENSOR TERMINAL BOARD.
 - CONDUIT AND SWEEP ELL WITH FLOW SENSOR CABLE.
 - CONDUIT AND SWEEP ELL FOR LEAD WIRES.
 - CONDUIT AND SWEEP ELL FOR MASTER VALVE WIRES.
 - CONDUIT AND SWEEP ELL FOR 110 VAC POWER LINE.
 - CONDUIT AND SWEEP ELL FOR GROUND WIRE.
 - 10" ROUND VALVE BOX AROUND GROUND ROD. FILL WITH 3/4" CRUSHED ROCK.
 - 5/8" X 8" GROUND ROD WITH #6 GROUND WIRE AND CLAMP. LOCATE 8"-12" FROM ENCLOSURE.
 - #6 GROUND WIRE SECURED TO BACKBOARD GROUNDING TERMINAL.
- NOTES:
1. CONTRACTOR TO CONFIRM WIRING CONFIGURATION PER THIS PROJECT AND PROVIDE ADEQUATE CONDUIT FOR WIRES TO MOVE FREELY WITHIN CONDUIT FOR COMPLETE AND CLEAN INSTALLATION INTO CABINET. BUNDLE WIRE WITH PLASTIC WIRE TIE TO PROVIDE NEAT AND ORGANIZED INSTALL.
2. CABINET DIMENSIONS: 16" W X 38" H X 15.5" D.

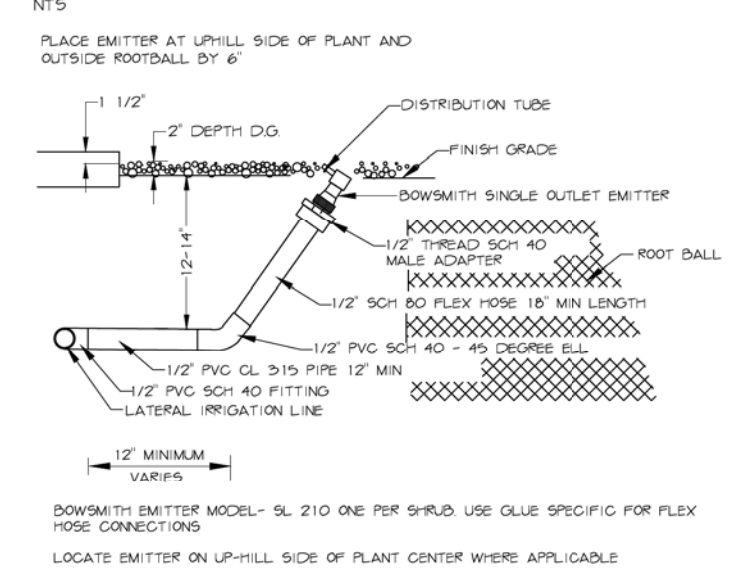
GENERAL NOTES:
VALVE NOTES:
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES:
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/2", USE 3" SLEEVE. FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

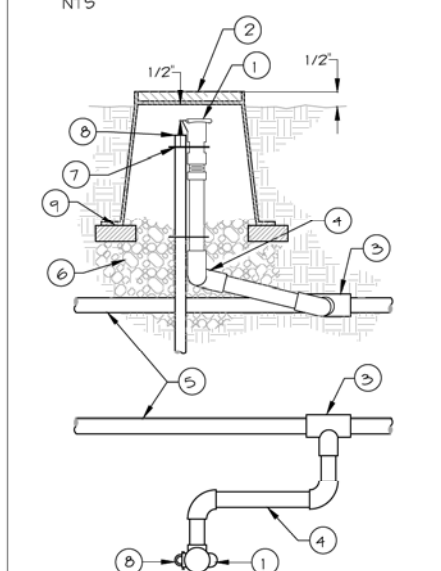
M.A.G. NOTE:
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS-OF-WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

XI. EMITTER SINGLE OUTLET

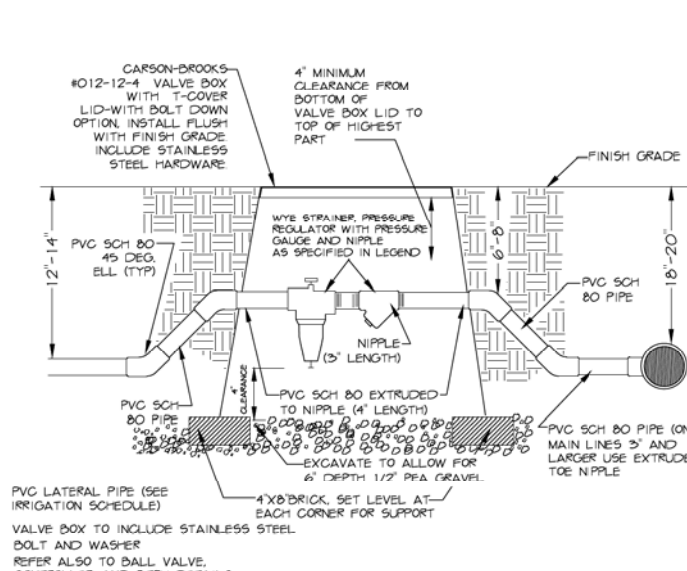


XII. QUICK COUPLER ASSEMBLY

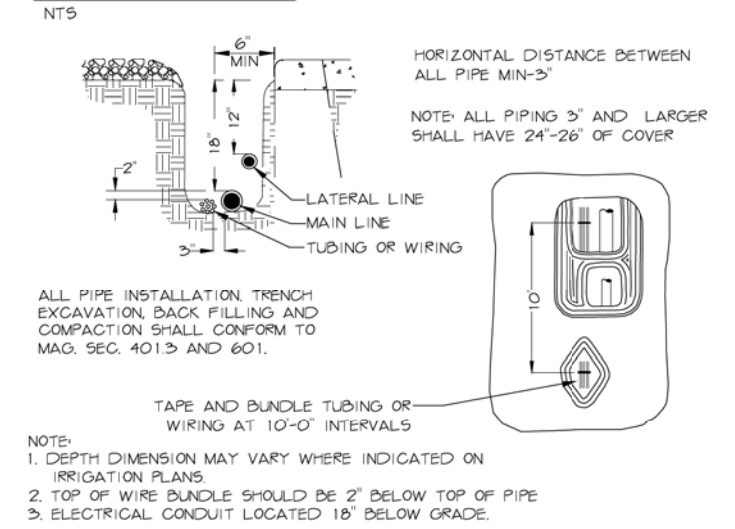


- BRASS QUICK COUPLER VALVE.
 - VALVE BOX COVER SET TOP OF VALVE BOX 1/2" ABOVE FINISHED GRADE.
 - PVC SCH 40 SLIP TEE
 - LASCO UNITIZED SWING JOINT W/STABILIZED BRASS NIPPLE (#G 175-218)
 - PVC MAINLINE PIPE (SEE SCHEDULE)
 - 6" LAYER 1/2" PEA GRAVEL, MIN 1 CF. EXTEND BEYOND BOX ALL EDGES 6"
 - STAINLESS STEEL STRAP (2)
 - #4 MIN REBAR 36" LONG
 - 4" X 8" STANDARD BRICK
- NOTES:
1. VALVE BOX SHALL INCLUDE STAINLESS STEEL BOLT AND WASHER
2. EMBOSS COVER WITH "QC" OR AS OTHERWISE DIRECTED
3. PROVIDE 4" X 8" BRICKS TO SUPPORT VALVE BOX SECURELY ON GRAVEL

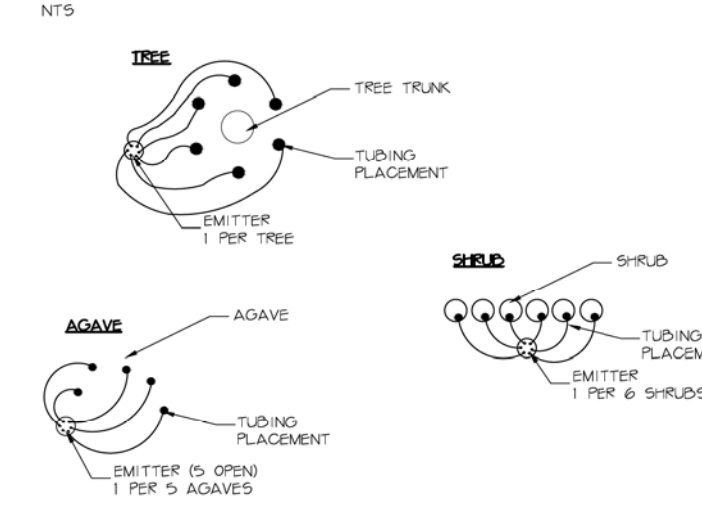
XIII. PRESSURE REGULATOR AND WYE STRAINER



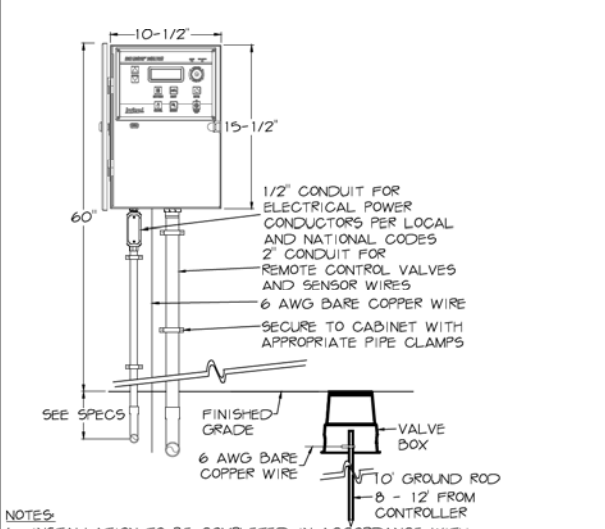
XIV. TRENCHING DETAIL



XV. EMITTER PLACEMENT



XVI. IRRIGATION CONTROLLER



Waibel & Associates
Landscape Architecture
480.953.3640 Fax 480.953.3646
8611 South Priest Drive, Suite 101
Tempe, AZ 85284
e-mail: janet@waibel.com

ARIZONA
Call 811 or click Arizona811.com

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

IRRIGATION DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.83	3.99

SCALE: NTS

REVISION BY	CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.					



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.84	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

GENERAL NOTES:
VALVE NOTES:
1. ONLY ONE VALVE PER VALVE BOX AND ALL HARDWARE TO BE STAINLESS STEEL. ANY BOLTS ON COVER TO HAVE WASHERS.
2. PROVIDE EXPANSION COILS AT EACH WIRE CONNECTION IN VALVE BOX (WRAP AROUND 1/2" PIPE 15-TIMES).
3. STEP-UP VALVE W/ 45 DEG. FITTINGS TO MAINTAIN 6" BETWEEN VALVE AND TOP OF BOX.
4. EMBOSS COVER WITH 1/2" NO. WHICH CORRESPONDS TO VALVE NO. ON IRRIGATION PLANS.
5. CONTRACTOR TO PROVIDE A LIST OF GPS COORDINATE POINTS FOR ALL VALVE BOXES THAT ARE TO BE BURIED.

SLEEVE NOTES:
1. SLEEVE UNDER ALL PAVEMENT AND DRIVEWAY THAT ARE CROSSED WITH IRRIGATION PIPE OR CONTROLLER WIRE.
2. USE SCHEDULE 40 PIPE. SIZES AS FOLLOWED UNLESS OTHERWISE NOTED ON PLANS; FOR PIPE 1/2" TO 1-1/2", USE 3" SLEEVE. FOR PIPES 1-1/2" TO 2", USE 4" SLEEVE AND FOR CONTROLLER WIRE, USE 3" SLEEVE.
3. ALL SLEEVES FOR CONTROLLER WIRE, CROSSING STREET PAVING SHALL HAVE A PULL BOX AT EACH END, ALL WIRE SHALL HAVE PENN-TIE CONNECTORS IN EACH PULL BOX.
4. ALL CONTROLLER WIRE SPLICES SHALL BE CONTAINED WITHIN A PULLBOX.

M.A.G. NOTE:
SEE M.A.G. SPECIFICATIONS, CITY OF PHOENIX SUPPLEMENT TO M.A.G. SPECIAL PROVISIONS AND DETAILS FOR ADDITIONAL REQUIREMENTS

IRRIGATION NOTE:
1. IRRIGATION DESIGN IS SCHEMATIC ONLY. ALL CONSTRUCTION AND INSTALLATION OF IRRIGATION SYSTEM SHALL BE WITHIN CITY RIGHTS-OF-WAY OR EASEMENTS. REFER TO LANDSCAPING SPECS. AND DETAILS FOR ADDITIONAL INFORMATION.
2. IRRIGATION LINE SIZES ARE AS SHOWN. FOR ANY DISCREPANCIES, NOTIFY LANDSCAPE ARCHITECT.

XVII. IRRIGATION PIPE SCHEDULE

PIPE SCHEDULE

PIPE SIZE	GPM
1/2"	TO EMITTER RISERS ONLY
3/4"	6-10
1"	11-15
1-1/4"	16-25
1-1/2"	26-35

SLEEVE SCHEDULE

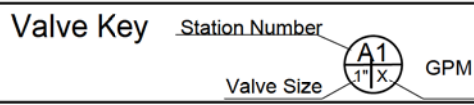
PIPE SIZE	SLEEVE SIZE
1/2" - 3/4"	3"
1" - 2"	4"

IRRIGATION NOTES:

- IRRIGATION SYSTEM HAS BEEN DESIGNED FOR A STATIC WATER PRESSURE OF 60 P.S.I.. CONTRACTOR TO FIELD VERIFY PRESSURE PRIOR TO STARTING IRRIGATION INSTALLATION. NOTIFY CONSULTANT OF ANY DIFFERENCE FROM STATED PRESSURE. IF CONTRACTOR FAILS TO NOTIFY CONSULTANT HE ASSUMES FULL RESPONSIBILITY FOR ANY SYSTEM ALTERATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE INSTALLATION OF A FULLY AUTOMATED IRRIGATION SYSTEM PRIOR TO STARTING PLANTING. IF INSTALLATION OR OPERATION OF THE IRRIGATION SYSTEM IS INTERRUPTED FOR ANY REASON, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTINUE MANUAL WATERING OF ALL PLANT MATERIAL UNTIL THE IRRIGATION SYSTEM IS FULLY OPERATIVE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WATER SERVICE CONNECTIONS TO THE WATER METER. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONNECTIONS DOWN STREAM OF THE WATER METER AND EXTEND TAP SIZE TYPE "K" HARD COPPER FROM WATER METER THROUGH BACKFLOW PREVENTER.
- REFER TO GENERAL CONSTRUCTION NOTES FOR ADDITIONAL CONSIDERATIONS THAT RELATE TO SCOPE OF WORK WITHIN THIS SECTION.
- ALL IRRIGATION EQUIPMENT TO BE LOCATED IN DECOMPOSED GRANITE LANDSCAPE AREAS WITHIN PROPERTY BOUNDARIES OF THE PROJECT. SPECIFIC WRITTEN PERMISSION SHALL BE OBTAINED TO LOCATE VALVES OR IRRIGATION EQUIPMENT IN TURF AREAS. ALL LINES AND EQUIPMENT ARE SCHEMATIC AND ARE SOMETIMES SHOWN IN ROADWAYS, SIDEWALKS, OR OUTSIDE PROPERTY LINES. THIS IS DONE FOR CLARITY PURPOSES ONLY. LOCATE VALVES AND BACKFLOW PREVENTION UNITS WITHIN AREAS SO THAT THEY ARE AS VISUALLY UNOBTUSIVE AS POSSIBLE.
- DO NOT INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS, GRADE DIFFERENCES, OR DIFFERENCES IN AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING PLANS. SUCH OBSTRUCTIONS OR CONFLICTS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISION NECESSARY.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM OPERATING PRESSURE OF 35 P.S.I. AND A MAXIMUM FLOW DEMAND OF 25 GPM. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE LANDSCAPE DESIGNER IMMEDIATELY.
- ALL MATERIAL USED SHALL BE INSTALLED AS DETAILED. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REPRESENTATIVE AND /OR LANDSCAPE ARCHITECT.
- THE OWNER'S REPRESENTATIVE MAY, AT ANY TIME, TAKE AND ANALYZE SAMPLES OF MATERIALS AND EQUIPMENT FOR CONFORMITY TO SPECIFICATIONS. THE CONTRACTOR SHALL MAKE SUCH SAMPLES AVAILABLE UPON REQUEST. REJECTED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- INSTALL BACKFLOW PREVENTION UNITS PIPING BETWEEN THE POINT OF CONNECTION AND THE BFPU PER LOCAL CODES. THE FINAL LOCATION OF THE BACKFLOW PREVENTION UNIT SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- 120 VOLT SERVICE TO BE PROVIDED BY ELECTRICAL CONTRACTOR. THE IRRIGATION CONTRACTOR IS RESPONSIBLE FOR POWER CONNECTION TO CONTROLLER. UNLESS IT IS PROVIDED BY PROJECT PLANS, CONTRACTOR SHALL INCLUDE BID PRICING FOR APPLICATION PERMIT FEES AND ALL COSTS PERTAINING TO PROVISION OF POWER FOR IRRIGATION OR LIGHTING FOR PROJECT. COORDINATE CONNECTIONS, LOCATIONS, EQUIPMENT NEEDS WITH ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING MATERIALS AND LABOR TO PROVIDE SPECIFIED ELECTRICAL SERVICE TO ALL CONTROLLER LOCATIONS. ALL ELECTRICAL WORK TO BE AS PER MANUFACTURER'S SPECIFICATIONS AND AS PER LOCAL CODE.
- LEVEL OF PEA GRAVEL IN IRRIGATION BOXES SHALL BE A MINIMUM OR 2" BELOW THE BOTTOM OF THE VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. ALL PEA GRAVEL IN THE VALVE BOX TO BE CLEANED FROM TOP OF VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. THE LIP OF THE VALVE BOX IS ALSO TO BE FREE OF DEBRIS.
- 24 VOLT WIRE SHALL BE 600V, UF US APPROVED, #14 GAUGE, SINGLE STRAND, PLASTIC, INSULATED COPPER WIRE. COMMON WIRES TO BE WHITE. CONTROL WIRES TO BE RED. NO BLACK WIRING IS TO BE USED. TAPE AND BUNDLE WIRE EVERY 10' AND LAY BESIDE MAINLINE IN TRENCH. SPLICE IN VALVE BOXES ONLY, USING ELASTOMERIC SILICONE CONNECTIONS. PROVIDE 18" SLACK AT EACH ELBOW IN MAINLINE TRENCH AND AT EACH REMOTE CONTROL VALVE. PULL ONE ADDITIONAL SPARE CONTROL WIRE TO EACH VALVE BOX LOCATION FOR POTENTIAL FUTURE USE. COLOR OF EXTRA CABLE SHALL BE YELLOW.
- ONE VALVE PER BOX. LOCATE PRESSURE REGULATOR AND 'Y' STRAINER IN A SEPARATE VALVE BOX JUMBO VALVE BOX MAY BE USED IN LIEU OF TWO SEPARATE BOXES FOR ONE VALVE/PRESSURE REGULATOR/WYE ASSEMBLY.
- ALL DRIP SYSTEMS TO BE FLUSHED THROUGH FLUSH CAPS. FLUSH CAPS TO BE LOCATED IN 10" ROUND TAN COLOR ECONOMY VALVE BOXES WITH LIDS. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS. NO SUBSTITUTION OF SMALLER PIPE SIZES SHALL BE PERMITTED, BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
- BACKFILL SHALL BE PLACED IN TWO OR MORE COMPACTED LIFTS. SETTling OF TRENCHES BY MORE THAN AN INCH SHALL BE BROUGHT TO FINISH GRADE AT NO ADDITIONAL COST TO THE OWNER.
- ALL PLANTS REQUIRING MORE THAN ONE DRIP EMITTER SHALL HAVE EMITTERS DISTRIBUTED EVENLY AROUND PERIMETER OF THE PLANTING WELL. EMISSION POINTS AT THE ROOTBALLS SHALL BE LOCATED ON THE UPHILL SIDE. POSITION EMITTER PER DETAILS.
- MAINTAIN A 3' CLEARANCE FOR ALL PLANTING AND IRRIGATION AROUND FIRE HYDRANTS.
- PRIOR TO OWNER'S APPROVAL, AN IRRIGATION TUNE UP MUST BE PERFORMED AS FOLLOWS:
 - ALL IRRIGATION EQUIPMENT (INCLUDING ALL PIPE LINES AND SLEEVES) TO BE DOCUMENTED FROM TWO STATIONARY POINTS.
 - ALL DRIP SYSTEMS TO BE FLUSHED BEGINNING WITH 'Y' STRAINER, WORKING AWAY FROM THE PRESSURE REGULATOR.
 - ALL IRRIGATION SPRINKLER HEADS TO BE FLUSHED OF DEBRIS AND FLOW CONTROLS. ADJUSTED TO ACHIEVE 100% COVERAGE FOR TURF AREAS AS APPLICABLE. AVOID OVERSPRAY ON ALL STREETS, CURBS, WALKS AND STRUCTURES.
 - ALL IRRIGATION HEADS TO BE FIELD AND MANUALLY ADJUSTED TO THE PROPER HEIGHT.
- SETBACK ALL SPRAY AND STREAM TYPE IRRIGATION HEADS 8" FROM BACK OF CURB, SIDEWALK, AND/OR DRIVEWAYS TO REDUCE OVER SPRAY. ALTERNATIVES TO ACHIEVE SIMILAR RESULTS SHALL BE APPROVED BY LA OR OWNER'S REPRESENTATIVE.
- PLANS ARE DRAWN FOR CLARITY TO INDICATE COVERAGE AREAS FOR THE SYSTEM. IRRIGATION LATERALS MAY BE PLACED IN COMMON TRENCHES TO AVOID EXTENSIVE RUNS UNDER PAVEMENT, WHERE APPROPRIATE.
- LANDSCAPE CONTRACTOR IS FULLY RESPONSIBLE TO PROVIDE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS THAT ARE COMPLETELY LEGIBLE AND ACCURATE FOR THE ACTUAL INSTALLATION THAT WAS DONE BY THE LANDSCAPE CONTRACTOR. LANDSCAPE CONTRACTOR HIRED TO DO THE INSTALLATION SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE AS BUILT DRAWINGS.

IRRIGATION LEGEND

Symbol	Description	Manufacturer	Model #
	New Water Meter - See plans for locations		
	Electrical Power Pedestal		
	Controller	Rain Master Eagle	6-12 Station w/ Stainless steel pedestal on Conc. Base, Surge Protection, SIM Card, Dome Antenna & Handheld remote (1 per controller)
	Base Wireless Gateway	Tucor	Nexus BWR-400-G6
	Backflow Prevention Unit with Enclosure	Febco - 1" 825-YA	825Y 1" w/Guardshack Enclosure Painted Green
	Master Valve	Griswold	#2160 - Normally Open
	Flow Sensor	Irritrol	FS-B100 Flow Sensor Cable: EV-CAB-SEN (in conduit)
	Mainline Gate Valve	NIBCO	T113 - 1" Bronze
	1" Remote Control Valve	Rain Bird	Rain Bird 100-EFB-CP
	Pressure Regulator and Wye Strainer (not shown on plan)		Pressure Regulator: Rain Bird 44 LRC Wye Strainer: RBY-100-200MX
	Wireless DC Latching Receiver	Tucor	Tucor BWR-400 WVR-VB12
	Ball Valve	NIBCO	SFP 250
	Quick Coupler	Rainbird	44-LRC 1" with Locking Rubber Cover
	Emitter Irrigation Line for Trees	Cresline or equal	1" & 3/4" SCH 40
	Emitter Irrigation Line for Shrubs	Cresline or equal	1" & 3/4" SCH 40
	Multi-port Emitter for Trees and Shrubs (1 per tree, 1 per 6 shrubs) (not shown on plan)	Bowsmith	ML 210 Multi-Port Emitter 1.0 gph per port - install with all ports open
	Single-port Emitter - As Needed (not shown on plan)	Bowsmith	SL 210 Single-Port Emitter 1.0 gph
	Flush Cap, Typical end of all lateral lines	Rainbird	700-CF-21
	Sch 40 PVC Sleeving under all pavement		
	Mainline - 1 1/2" Schedule 40 PVC		



Waibel & Associates
Landscape Architecture
4025 N. 19th Ave., Suite 101
Phoenix, AZ 85016
Phone: 480.953.3640 Fax: 480.953.3646
8611 South Priest Drive, Suite 101
Tempe, AZ 85284
e-mail: janet@waibel.com

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA 811
Call 811 or click Arizona811.com

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: RS	DES: RM	CK: JW	SHEET NO:	TOTAL SHEETS:
DATE: 7/17	DATE: 7/17	DATE: 7/17	3.84	3.99
SCALE: NTS				

NO.	DESCRIPTION	REV BY	CHK BY	DATE

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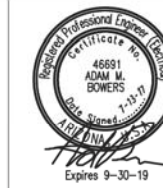
NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
 - 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Terminate, test and activate all field wiring into controller cabinet(s)



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	-----	-----	3.99

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

Existing FOUNDATION SCHEDULE				
NO.	TYPE	FROM M.O.F. 44TH STREET	FROM M.O.F. CANAL PATHWAY	
1	CONT	Existing	Existing	
2	PSH	Existing	Existing	
3	SR	Existing	Existing	
4	LM	Existing	Existing	

PROPOSED FOUNDATION SCHEDULE				
NO.	TYPE	FROM M.O.F. 44TH STREET	FROM M.O.F. CANAL PATHWAY	
5	A	20.4 ft. West	40.8 ft. South	
6	LM	43.1 ft. East	7.6 ft. South	
7	LM	86.6 ft. West	4.5 ft. South	

NOTE: Distance is perpendicular to roadway center line as shown on plans

Existing JUNCTION BOX SCHEDULE				
NO.	TYPE	FROM M.O.F. 44TH STREET	FROM M.O.F. CANAL PATHWAY	
8	7	Existing	Existing	
9	5	Existing	Existing	
10	5	Existing	Existing	

NOTE: Distance is perpendicular to roadway center line as shown on plans

INSTALL

- ① thru ⑦ See Foundation Schedule
- ⑧ thru ⑩ See Junction Box Schedule
- ① 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- ② 2 1/2" Schedule 40 PVC with detectable mule tape

REMOVE

- ① Remove existing street light and return to COP aviation department. - 2 Each
- ② Remove conductors. - 1 Each



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HAWK - 44TH ST FOUNDATION				
CITY OF PHOENIX, ARIZONA STREET TRANSPORTATION DEPARTMENT				
GRAND CANALSCAPE PHASE II SEGMENT 3: 40TH ST TO 56TH ST ST87600114				
DR:	WTB	DES:	WTB	CK:
DATE:	7/17	DATE:	7/17	DATE:
SCALE:	1:20	TS3.1		
SHEET NO:	3.85	TOTAL SHEETS:	3.99	

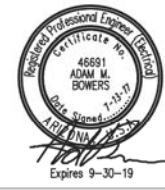
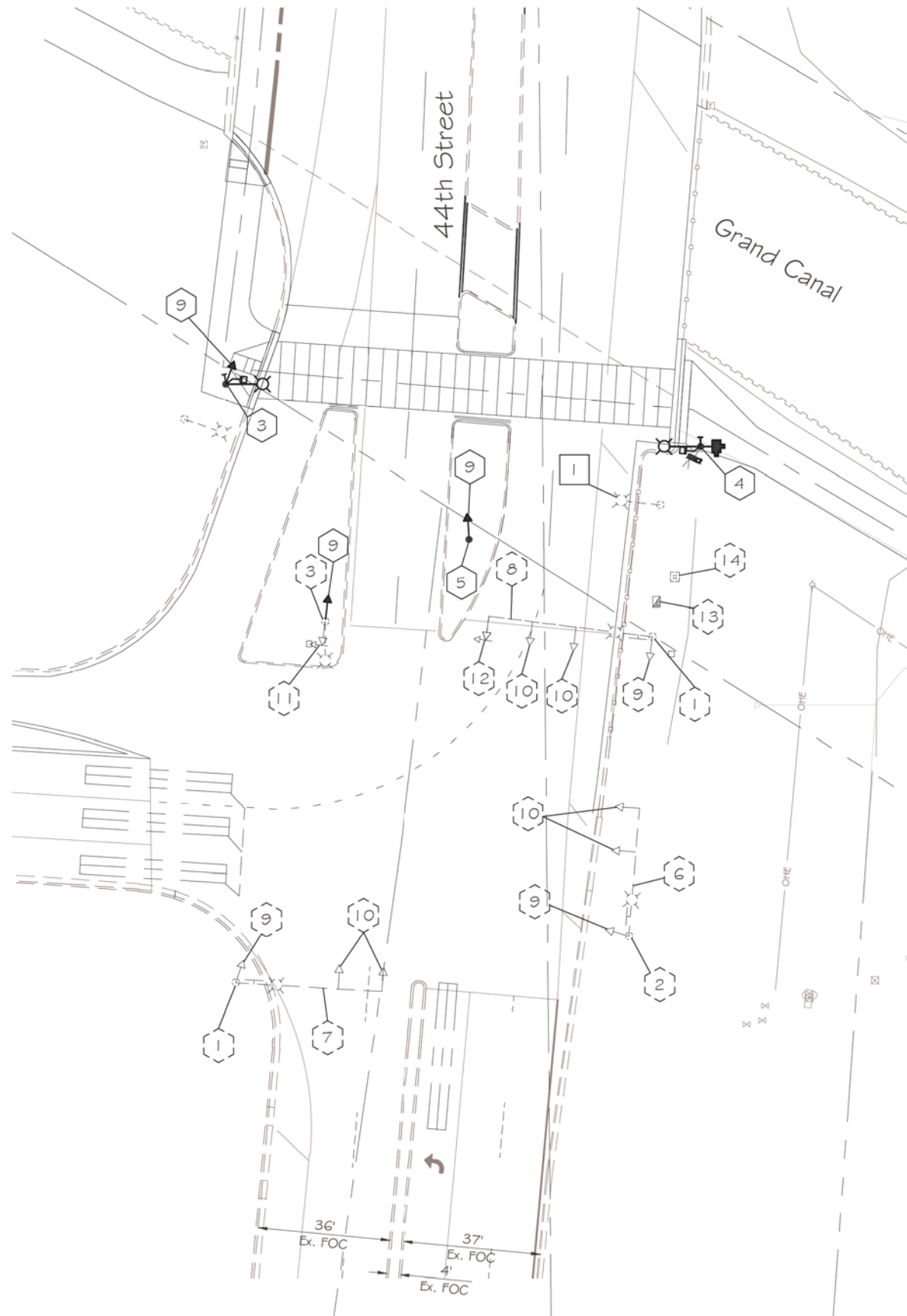


GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	-----	---	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

INSTALL (BY CONTRACTOR)

- 1 Traffic Signal Pole Type "SR" - 2 Existing
- 2 Traffic Signal Pole Type "SM" - 1 Existing
- 3 Traffic Signal Pole Type LM With 5' Riser - 1 New, 1 Existing
- 4 Traffic Signal Pole Type LM With 20' Riser - 1 New
- 5 Traffic Signal Pole Type "A" - 1 New
- 6 35' Signal Mast Arm - 1 Existing
- 7 40' Signal Mast Arm - 1 Existing
- 8 45' Signal Mast Arm - 1 Existing
- 9 Type F 12" Signal Head - 3 New, 3 Existing (Pole Mount)
- 10 Type F1 12" Signal Head - 6 Existing (Mast Arm Mount with Plumbizer)
- 11 Type Q 5 Section 12" Signal Head - 1 Existing (Pole Mount)
- 12 Type Q2 Signal Head - 1 Existing (Mast Arm Mount with Plumbizer)
- 13 8 Phase Controller Cabinet - 1 Existing
- 14 Power Service Pedestal - 1 Existing

- Luminaire
- LED - 2 New
 - HPS - 2 Ex

- Signs at Signal
- Illuminated Street Sign - 1 Existing
 - Pedestrian Head - 2 New
 - Pedestrian Push Button - 2 New
 - CCTV Camera - 1 New
 - Wireless Radio - 1 Relocated

Note:
Adjust all signal head placement as shown on plan.

REMOVE

- 1 Remove Existing Street light - 1



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

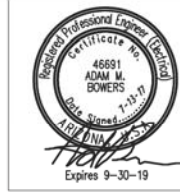
HAWK - 44TH ST EQUIPMENT
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	WTB	DES:	WTB	CK:	AMB	SHEET	TOTAL
DATE:	7/17	DATE:	7/17	DATE:	7/17	NO:	SHEETS
SCALE:	1:20					TS3.2	3.86 3.99



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GRAND CANALSCAPE PHASE II
SEGMENT 3
40TH ST TO 56TH ST



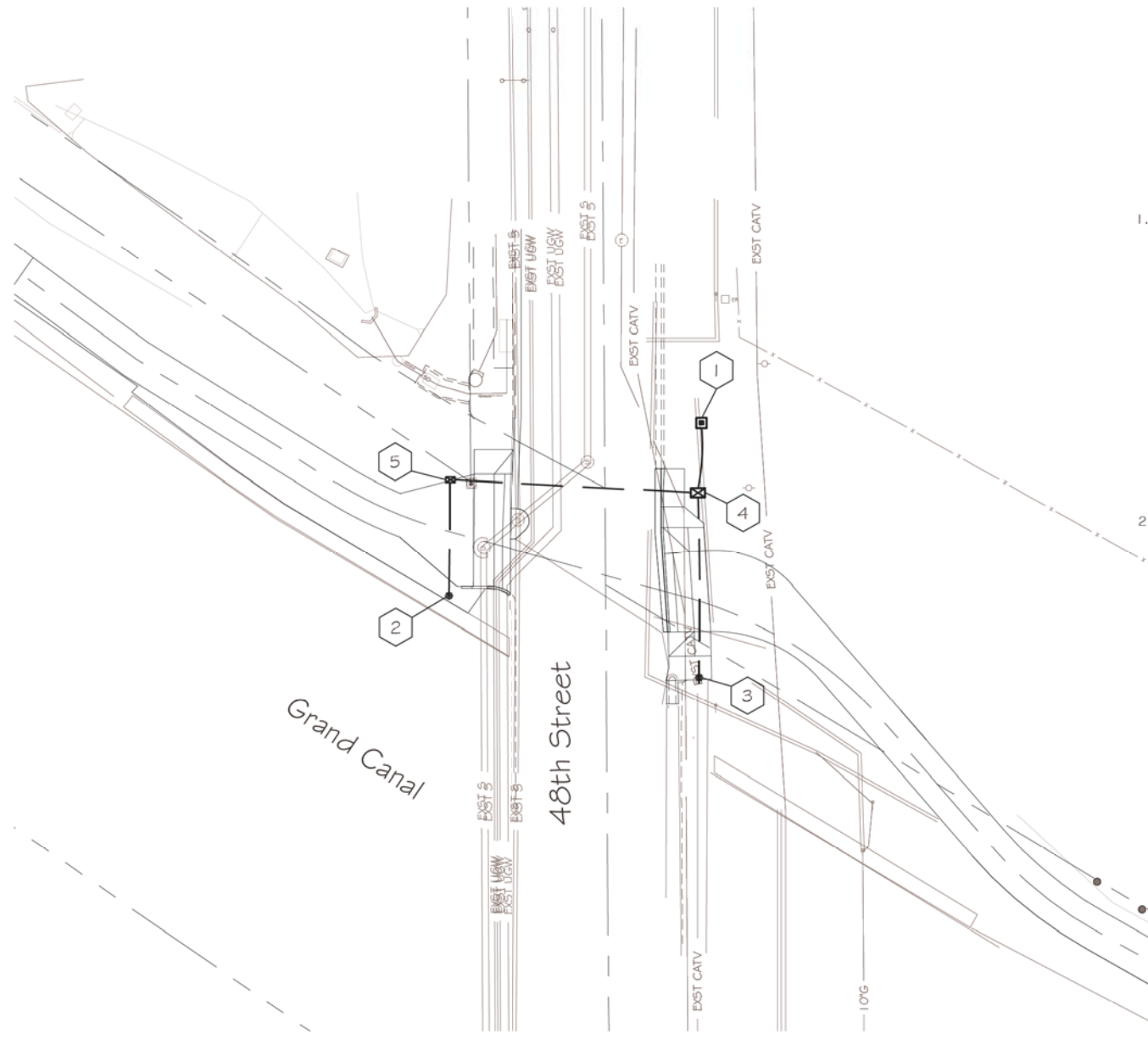
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	-----	---	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



SIGNAL PLAN SHEET NOTES

1. GENERAL NOTES:
 - 1.1 The contractor shall notify the City Of Phoenix Traffic Signal Shop (602-262-6733) a minimum of fourteen (14) calendar days prior to beginning any traffic signal work. Submittals of all equipment shall be furnished to the Signal Shop and approved prior to the ordering of any traffic signal equipment. The contractor shall verify that they have the most current set of drawings prior to start and ordering of any equipment.
 - 1.2 Foundation elevations must be within 1/4" of finished sidewalk grade.
 - 1.3 The Contractor shall layout all ADA ramps, junction boxes and foundation locations for approval by the traffic signal representative prior to any excavation. Contractor shall paint the layout of the ADA ramps in white marking paint to insure the the signal poles are in the correct locations.
 - 1.4 A minimum of four (4) feet of clearance is required between all traffic signal poles and the back edge of sidewalk pedestrian ramps.
 - 1.5 The contractor shall have a complete set of construction drawings including current City of Phoenix standard details on site at all times during signal construction activities.
2. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS:
 - Terminate, test and activate all field wiring into controller cabinet(s)

NO.	TYPE	FROM M.O.F 48TH STREET	FROM M.O.F CANAL PATHWAY
1	PSP	23.8 ft. East	42.4 ft. North
2	SR	38.6 ft. West	15.3 ft. South
3	A	22.8 ft. East	17.5 ft. South

NOTE: Distance is perpendicular to roadway center line

NO.	TYPE	FROM M.O.F 48TH STREET	FROM M.O.F CANAL PATHWAY
4	7	22.8 ft. East	25.7 ft. North
5	5	38.1 ft. West	12.3 ft. North

NOTE: Distance is perpendicular to roadway center line

INSTALL

- 1 thru 3 See Foundation Schedule
- 4 thru 5 See Junction Box Schedule



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

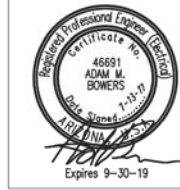
RRFB - 48TH ST FOUNDATION
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: WTB	DES: WTB	CK: AMB	SHEET NO: 3.87	TOTAL SHEETS: 3.99
DATE: 7/17	DATE: 7/17	DATE: 7/17		

SCALE: **TS4.1**



GRAND CANALSCAPE PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST



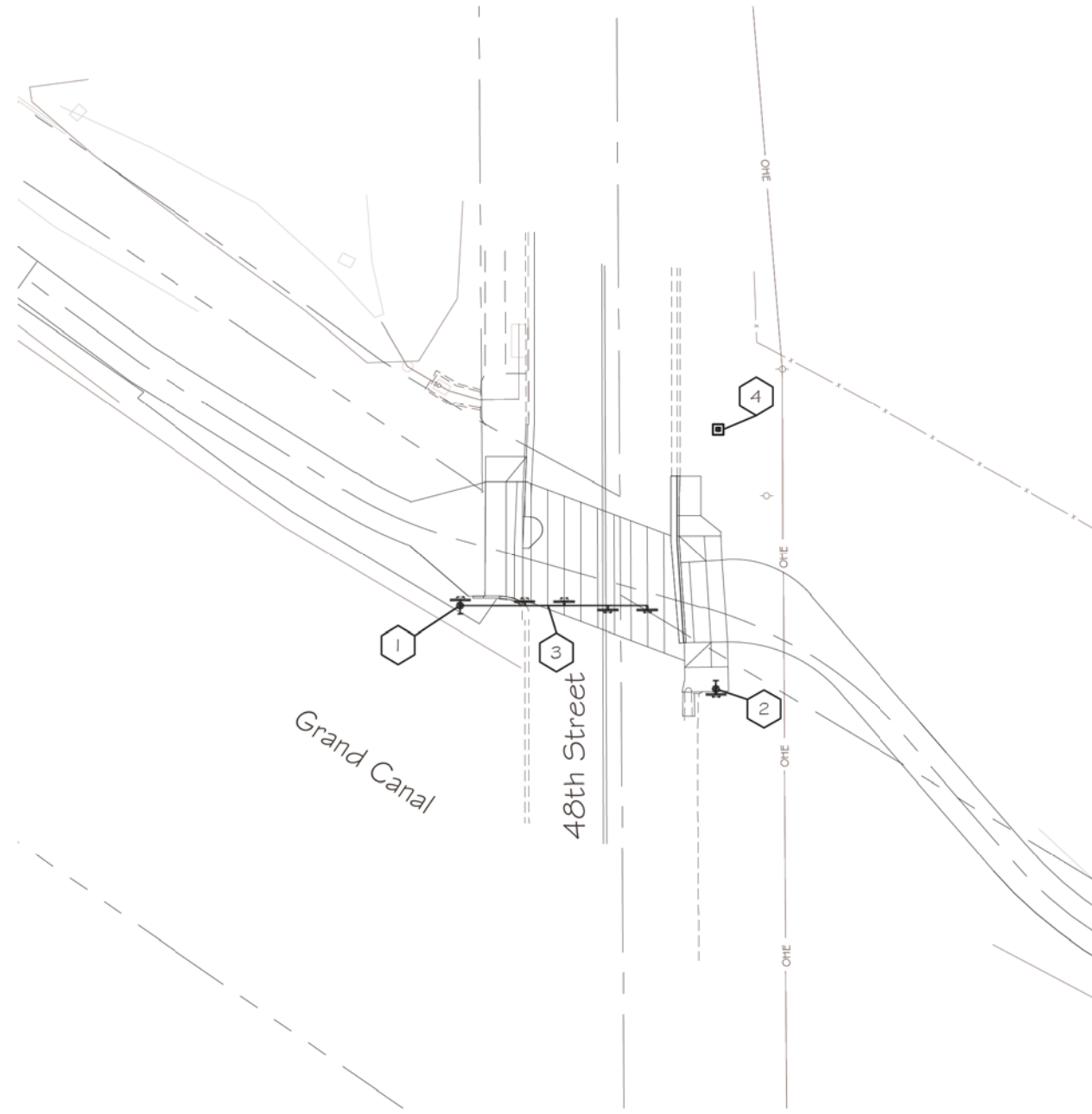
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	-----	-----	3.99

TRACE CONSULTING
 1201 E. Jefferson St.
 Suite 3
 Phoenix, AZ 85034

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE

NO.	DESCRIPTION	REV BY	CHK BY	DATE



INSTALL (BY CONTRACTOR)

- 1 Traffic Signal Pole Type "SR" - 1 New
- 2 Traffic Signal Pole Type "A" - 1 New
- 3 45' Signal Mast Arm - 1 New
- 4 Power Service Pedestal - 1 New
- RRFB Rectangular Rapid Flash Beacon (RRFB) - 6 New
- P Pedestrian Push Button - 2 New
w/R10-25 Pedestrian Push Button Sign
- See Sheet 3.43 for Sign Call-outs



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

RRFB - 48TH ST EQUIPMENT
CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR: WTB	DES: WTB	CK: AMB	SHEET NO:	TOTAL SHEETS:
DATE: 7/17	DATE: 7/17	DATE: 7/17	NO:	3.99

SCALE: 1:20 **TS4.2**



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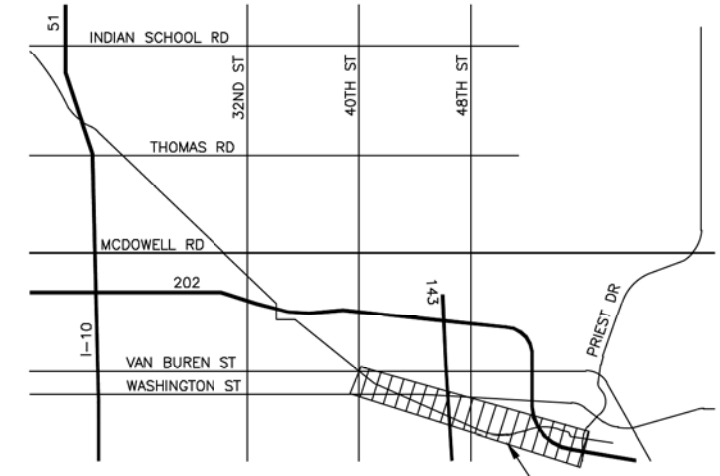
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.89	3.99

TRACE CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034

GENERAL ELECTRICAL NOTES

- ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRIC CODE (LATEST EDITION), FEDERAL, STATE AND LOCAL JURISDICTION CODES.
- ALL WORK SHALL BE DONE IN A NEAT, WORKMANLIKE, FINISHED AND SAFE MANNER, ACCORDING TO THE LATEST PUBLISHED NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION STANDARDS OF INSTALLATION, UNDER COMPETENT SUPERVISION.
- VISIT THE SITE PRIOR TO BIDDING TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND ALL OTHER FACTORS WHICH MAY AFFECT THE EXECUTION OF THIS WORK. INCLUDE ALL RELATED COSTS IN THE INITIAL BID PROPOSAL.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATIONS OF ALL EXISTING UTILITIES AND AVOIDING DAMAGE TO SAME. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES CAUSED AS A RESULT OF HIS WORK. CALL (602) 263-1100 FOR BLUE STAKES. IRRIGATION LINES LESS THAN 2" WILL NOT BE MARKED AND SHALL BE REPAIRED IN KIND BY THE CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING WALKS, WALLS, DRIVES, CURBS, ETC. DAMAGES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
- PROPER PROTECTION OF THE CONSTRUCTION AREA FOR SAFETY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COVER ALL TRENCHES AT THE END OF EACH WORK DAY. BARRICADES SHALL BE INSTALLED AS DIRECTED BY THE OWNER OR THE PROJECT INSPECTOR. THE SITE AND ALL WORK SHALL CONFORM TO OSHA REQUIREMENTS.
- ALL EXISTING LANDSCAPE, HARDSCAPE AND SPRINKLER SYSTEMS DAMAGED OR DISTURBED DURING THE CONSTRUCTION OF THIS PROJECT BY THE CONTRACTOR SHALL BE REPLACED IN KIND.
- CONTRACTOR SHALL PAY FOR PERMITS AND INSPECTIONS AS MAY BE REQUIRED AND PROVIDE A CERTIFICATE OF INSPECTION TO THE OWNER.
- PROTECT ALL MATERIAL AND EQUIPMENT INSTALLED AGAINST DAMAGE BY OTHER TRADES, WEATHER CONDITIONS OR ANY OTHER CAUSES. EQUIPMENT FOUND DAMAGED OR IN OTHER THAN NEW CONDITION WILL BE REJECTED AS DEFECTIVE. ALL COMPONENTS SHALL BE FREE OF DUST, GRIT AND FOREIGN MATERIALS, AND LEFT AS NEW BEFORE FINAL ACCEPTANCE OF WORK.
- LEAVE THE SITE CLEAN. REMOVE ALL DEBRIS, EMPTY CARTONS, TOOLS, CONDUIT, WIRE SCRAPS AND ALL MISCELLANEOUS SPARE EQUIPMENT AND MATERIALS USED IN THE WORK DURING CONSTRUCTION.
- IT IS THE OBLIGATION OF THE CONTRACTOR TO ORGANIZE HIS WORK SO THAT A COMPLETE ELECTRICAL, INSTRUMENTATION, AND/OR CONTROL SYSTEM FOR THE FACILITY WILL BE PROVIDED AND SUPPORTED BY ACCURATE SHOP AND RECORD DRAWINGS, AND ALL O & M MANUALS.
- ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, BURIED 24" MINIMUM BELOW FINISHED GRADE, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- PROVIDE EMT INDOOR AND GRS OUTDOOR FOR ABOVE GROUND CONDUIT. WHERE METALLIC CONDUITS COME IN CONTACT WITH DIRT, THEY SHALL BE HALF LAP WRAPPED WITH SCOTCH 50 TAPE TO 12" AFG. FITTINGS SHALL BE STEEL, THREADED TYPE WITH INSULATED THROATS. SECURELY ATTACH ALL SURFACE MOUNTED CONDUIT EVERY 10 FEET AND WITHIN 3 FEET OF EACH JUNCTION BOX, PER NEC ARTICLE 344.30.
- MINIMUM CONDUIT SIZE SHALL BE 3/4" UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS.
- ALL FEEDERS AND BRANCH CIRCUIT WIRE SHALL BE COPPER TYPE XHHW (75 DEGREE C) FOR BELOW GRADE INSTALLATIONS (AND CONDUIT RISERS) AND THHN/THWN (75 DEGREE C) FOR ABOVE GRADE INSTALLATIONS. MINIMUM SIZE SHALL BE #12 AWG, UNLESS SPECIFICALLY NOTED OTHERWISE ON PLANS OR IN DETAILS. ALL WIRING SHALL BE IN CONDUIT. PER MARICOPA COUNTY AMENDMENT TO NEC ARTICLE 334.10 AND 334.12. MARICOPA COUNTY DOES NOT PERMIT TYPES NM, NMC, NMS (ROMEX) CABLES IN COMMERCIAL APPLICATIONS.
- A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR (BOND) SHALL BE INSTALLED WITHIN EACH RACEWAY PER NEC CODE.
- WHEN A PANEL IS SUPPLIED BY A FEEDER OR BRANCH CIRCUIT, ANY INSTALLED GROUNDED CONDUCTOR SHALL NOT BE CONNECTED TO THE EQUIPMENT GROUNDING CONDUCTOR (GEC) OR TO THE GROUNDING ELECTRODE(S) PER NEC ARTICLE 250.32(B).
- BOND ALL ENCLOSURES PER NEC ARTICLE 250.96.
- CONTRACTOR SHALL PLAN AND INSTALL WORK IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, ETC. NECESSARY FOR A COMPLETE AND WORKABLE ELECTRICAL SYSTEM WHETHER OR NOT THESE ITEMS ARE SPECIFICALLY NOTED ON THESE DRAWINGS. INCIDENTAL ITEMS NOT INDICATED ON THE DRAWINGS, NOR MENTIONED IN SPECIFICATIONS THAT CAN BE LEGITIMATELY AND REASONABLY INFERRED TO BELONG TO THE WORK DESCRIBED OR BE NECESSARY IN GOOD PRACTICE TO PROVIDE A COMPLETE SYSTEM, SHALL BE FURNISHED AND INSTALLED AS THOUGH ITEMIZED HERE IN EVERY DETAIL.
- CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE ALL LABOR, MATERIAL, TRENCHING, CONDUIT, TRANSFORMER PAD AND OTHER REQUIRED EQUIPMENT PER UTILITY COMPANY PLANS AND SPECIFICATIONS NECESSARY FOR A COMPLETE UNDERGROUND CONDUIT SYSTEM FROM THE UTILITY POINT OF SERVICE TO THE UTILITY CO. TRANSFORMER AND FROM THE UTILITY CO. TRANSFORMER TO THE ELECTRICAL SERVICE ENTRANCE SECTION.
- ALL TRENCHING, CONDUITS, ETC. SHALL BE ROUTED AND INSTALLED IN SUCH A MANNER THAT WILL NOT DAMAGE EXISTING FACILITIES. SHOULD DAMAGE OCCUR, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR DAMAGE TO THE SATISFACTION OF THE OWNER OR INSPECTOR.
- ALL CONDUIT RUNS SHOWN ON THIS PLAN ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MAKE SURE THAT ALL CONDUIT, ETC. FALLS WITHIN THE CONSTRUCTION AREA/RIGHT OF WAY. (THIS INCLUDES MAINTAINING ALL REQUIRED CLEARANCES.)
- WHEN CROSSING PATHWAYS OR SIDEWALKS, CONTRACTOR SHALL BORE UNDER EXISTING CONCRETE WALKS AND SAWCUT ASPHALT PATHS. ASPHALT WALKS SHALL BE REPLACED IN KIND.
- CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THE CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP AND MATERIALS, USUAL WEAR EXPECTED, AND SHOULD ANY SUCH DEFECTS DEVELOP WITHIN A PERIOD OF ONE YEAR ACCEPTANCE OF THE PROJECT BY THE OWNER, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS, AT NO EXPENSE WHATSOEVER TO THE OWNER.
- CONTRACTOR SHALL IDENTIFY SERVICE ENTRANCE SECTION MAIN SERVICE DISCONNECT(S) WITH 3/32-INCH THICK LAMINATED PHENOLIC TYPE NAMEPLATES WITH 1/4-INCH MINIMUM HEIGHT LETTERS. NAMEPLATE TO BE BLACK MATTE FINISH SURFACE WITH WHITE LETTER ENGRAVING. ATTACH NAMEPLATE TO THE OUTSIDE PANEL FACE WITH TWO STAINLESS STEEL SELF-TAPPING SCREWS. NAMEPLATE SHALL READ "SERVICE DISCONNECT" PER NEC ARTICLE 230.70(B).
- ALL CIRCUITS SHALL BE LEGIBLY IDENTIFIED AT THE PANEL, JUNCTION BOXES AND AT ALL EQUIPMENT IN A PERMANENT MANNER (I.E. ETCHED PLATES, CONDUCTOR TAG, PERMANENT MARKER, ETC.). THE LABELING SHALL INCLUDE PANEL CIRCUIT NUMBER, "TO" AND "FROM" IDENTIFICATION, AND MARKED "SPARE" WHERE APPLICABLE.
- CONTRACTOR SHALL TEST ELECTRICAL SYSTEM FOR SHORT CIRCUITS AND MEGGER TEST FEEDERS AND BRANCH CIRCUIT WIRING. INSURE LOW IMPEDANCE GROUND PATH SYSTEM. PERFORM HIPOT TESTING WHEN REQUIRED BY LOCAL JURISDICTION.

- ALL CONDUIT AND J-BOXES SHOWN SHALL BE CONCEALED WHEN POSSIBLE. WHEN NOT POSSIBLE, CONDUIT AND J-BOXES MAY BE SURFACE MOUNTED WITH PERMISSION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL COORDINATE ALL EQUIPMENT CONNECTIONS WITH EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN. PROVIDE ADDITIONAL FUSED DISCONNECT SWITCHES AND CONTROLS IF OVERCURRENT PROTECTION OR CONTROLS IS NOT INTEGRAL WITH UNITS.
- ALL EQUIPMENT SHALL BE FUSE SIZED PER MANUFACTURES RECOMMENDATIONS AND U.L. APPROVAL.
- ELECTRICAL DEVICES, DISCONNECT SWITCHES, ETC., SHALL BE SUPPORTED INDEPENDENT OF AND ISOLATED FROM EQUIPMENT VIBRATIONS.
- FULL LOAD AMPS (FLA) SIZES, AS NOTED IN THESE DRAWINGS, ARE BASED ON SPECIFIED EQUIPMENT DATA. CONTRACTOR SHALL VERIFY NAMEPLATE FLA OF EQUIPMENT SUPPLIED AND COORDINATE ACCORDINGLY PER EQUIPMENT SUPPLIERS RECOMMENDATIONS.
- ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R OR NEMA-4 ENCLOSURES.
- CONDUITS OR RACEWAYS ROUTED FROM INDOORS TO OUTDOORS OR AS DESCRIBED IN NEC 300.7(A), SHALL BE SEALED WITH A PLIABLE SEALING COMPOUND AT A CONDUIT BODY OR AT A JUNCTION BOX BEFORE THE CONDUIT ENTERS THE COLDER ENVIRONMENT.
- CONDUITS OR RACEWAYS INSTALLED IN AREAS WHERE ELEVATION CHANGES MAY CAUSE WATER OR MOISTURE TO ENTER THE ELECTRICAL EQUIPMENT THROUGH THE CONDUIT SHALL BE SEALED WITH A HERMETIC CONDUIT SEAL AT BOTH ENDS OF THE CONDUIT OR RACEWAY.
- ALL POLE LIGHTS SHALL BE PROVIDED WITH A TWO POLE FUSE HOLDER BUSSMANN #HEX OR A SINGLE POLE FUSE HOLDER BUSSMANN #HEB OR EQUAL FOR IN LINE FUSING, PROVIDE 5A FUSING IN FUSEHOLDER.
- PRIOR TO POURING THE POLE BASES OR COVERING ANY ELECTRICAL CONDUITS, CONTACT THE INSPECTION DEPARTMENT 24 HOURS IN ADVANCE FOR APPROVAL.
- MATERIALS SHALL BE NEW AND OF THE BEST QUALITY WITH MANUFACTURER'S NAME PRINTED THEREON. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH NEMA, ANSI, UNDERWRITER'S LABORATORY OR OTHER APPLICABLE STANDARDS AND RATED FOR HEAVY DUTY SERVICE.
- ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE. ALL 15 AND 20 AMP, 125 AND 250 VOLT, NONLOCKING RECEPTACLES INSTALLED OUTDOORS SHALL BE LISTED WEATHER-RESISTANT TYPE. ALL WEATHERPROOF WHILE IN-USE RECEPTACLE COVERS SHALL BE METAL.
- SELECTION OF MATERIALS SHALL BE IN STRICT ACCORDANCE WITH THE DRAWINGS AND/OR SPECIFICATIONS. THE USE OF MANUFACTURER'S NAME, MODEL, AND NUMBER IS INTENDED TO ESTABLISH STYLE, QUALITY, APPEARANCE, USEFULNESS AND BID PRICE. CONTRACTOR SHALL SUBMIT TO THE OWNER OR OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL (PRIOR TO ORDERING MATERIALS) COPIES OF EQUIPMENT SHOP DRAWINGS AS FOLLOWS: 1) LIGHT FIXTURES, 2) POLES, 3) POLE BASES, 4) SERVICE ENTRANCE SECTION, 5) ELECTRICAL EQUIPMENT, 6) DISCONNECT SWITCHES, 7) TIME CLOCKS AND OTHER CONTROLS, 8) LIGHTING CONTACTORS AND 9) PULL BOXES. AT THE TIME OF EACH SUBMITTAL, THE CONTRACTOR SHALL DEFINE AND DELINEATE IN WRITING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. THE REVIEW WILL BE ONLY FOR CONFORMANCE WITH THE DESIGN CONCEPT OF THE WORK AND FOR COMPLIANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. THE REVIEW OF A SPECIFIED ITEM, AS SUCH, WILL NOT INDICATE REVIEW OF THE ASSEMBLY IN WHICH THE ITEM FUNCTIONS. REVIEW BY THE OWNER OR OWNER'S REPRESENTATIVE WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS IN THE SUBMITTALS NOR FROM HIS RESPONSIBILITY FOR COMPLYING WITH THE CONTRACT DOCUMENTS.
- THE SUBMITTALS SHALL BE NEATLY GROUPED AND ORGANIZED. PERTINENT INFORMATION SHALL BE HIGHLIGHTED, AND THE SPECIFIC PRODUCT SHALL BE IDENTIFIED. ALL SUBMITTALS SHALL BE COMPLETE, AND PRESENTED IN ONE PACKAGE. THE SUBMITTAL SHALL INCLUDE A COMPLETE LIST OF THE EQUIPMENT AND MATERIALS, INCLUDING THE MANUFACTURER'S NAME, PRODUCT SPECIFICATION, DESCRIPTIVE DATA, TECHNICAL LITERATURE, PERFORMANCE CHARTS, CATALOG CUTS, INSTALLATION INSTRUCTIONS, AND SPARE PART RECOMMENDATIONS FOR EACH DIFFERENT ITEM OF THE EQUIPMENT SPECIFIED.



VICINITY MAP
N.T.S.

SEGMENT 3

SHEET INDEX

SE1.1	ELECTRICAL COVER SHEET
SE2.1	ELECTRICAL SITE PLAN
SE2.2	ELECTRICAL SITE PLAN
SE2.3	ELECTRICAL SITE PLAN
SE2.4	ELECTRICAL SITE PLAN
SE2.5	ELECTRICAL SITE PLAN
SE2.6	ELECTRICAL SITE PLAN
SE3.1	ELECTRICAL DETAILS
SE3.2	ELECTRICAL DETAILS
SE3.3	ELECTRICAL DETAILS
SE4.1	TYPICAL SPACING EXHIBIT

LEGEND

- 100 AMP 120/240V 1φ 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

- 100 AMP, 120/240V, 1φ, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL COVER SHEET
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS
SCALE:					SE1.1	3.89	3.99

GRAND CANALSCAPE PHASE II
 SEGMENT 3
 40TH ST TO 56TH ST

WIRE & CONDUIT TABLE

NO.	SIZE	WIRE		REMARKS
		POWER	GROUND	
50	1"	2-#12	1-#12	CU TYP.
51	1"	2-#8	1-#10	CU TYP.
52	1"	2-#6	1-#6	CU TYP.
53	1"	2-#4	1-#4	CU TYP.
60	1"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU HIGH LIGHT LEVEL
		2-#8		CU LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
		2-#12		CU R-22
101	2"	2-#2	1-#2	CU S(1,3) HIGH LEVEL
		2-#2		CU S(1,3) LOW LEVEL
		2-#10		CU S(2,4) HIGH LEVEL
		2-#10		CU S(2,4) LOW LEVEL
		2-#10		CU S-20
102	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2		CU LOW LIGHT LEVEL
200	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2		CU LOW LIGHT LEVEL
		2-#4		CU T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

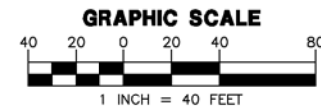
- ① 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ⑤ LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- ⑦ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WRIGHT
 engineering corporation
 ELECTRICAL ENGINEERING AND DESIGN
 165 EAST CHILTON DRIVE
 CHANDLER, ARIZONA 85225
 PHONE: 480.497.5829
 FAX: 480.497.5807
 www.wrightengineering.us
 Wright Project # 16033

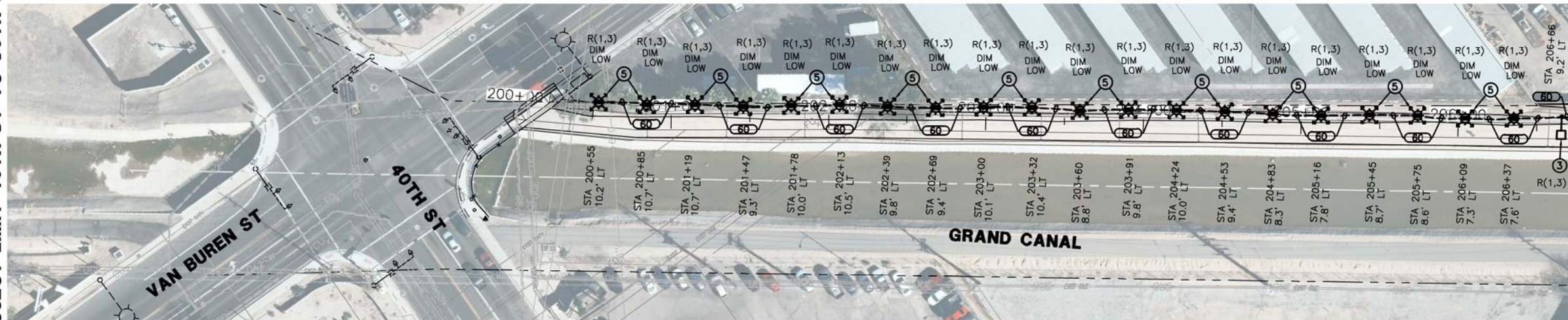
Professional Engineer
 57159
 CLIFFORD M. TOLMAN
 State Expires 1-13-17
 3-31-20

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.90	3.99

TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034

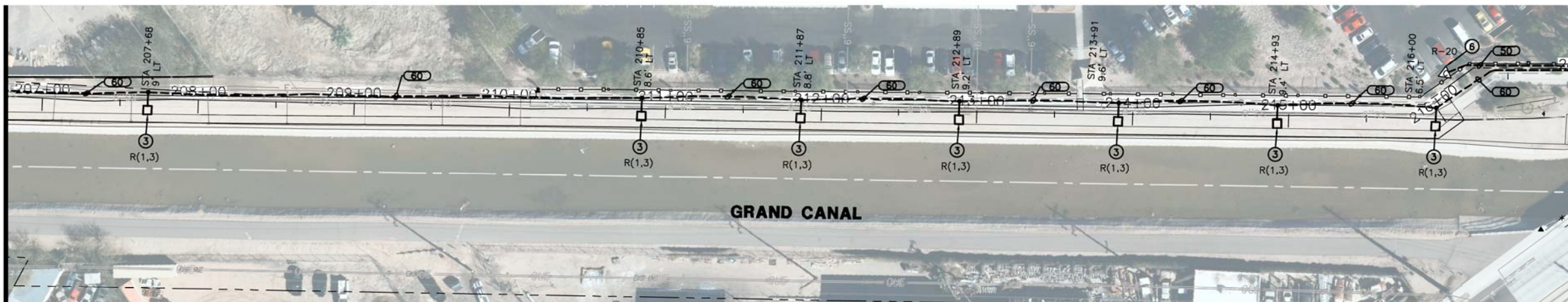


PROJECT LIMIT 40TH ST TO 50TH ST



MATCHLINE A, SEE BELOW LEFT

MATCHLINE A, SEE ABOVE RIGHT



MATCHLINE B, SEE SHEET SE2.2

All ground-disturbing activities must be monitored by the archaeologist provided by the city. The contractor is responsible for coordinating with the archaeologist



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

ELECTRICAL SITE PLAN
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALSCAPE PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE2.1						3.90	3.99

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

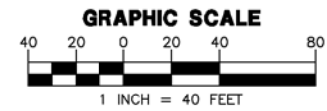
- ① 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ⑤ LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- ⑦ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
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PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16033



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.91	3.99

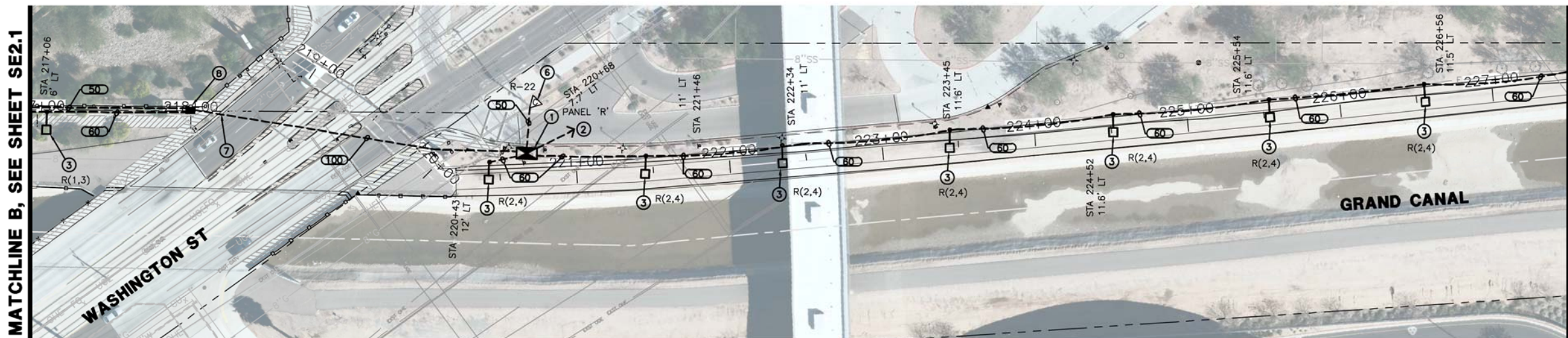
TRACE CONSULTING 1201 E. Jefferson St. Suite 3 Phoenix, AZ 85034



WIRE & CONDUIT TABLE

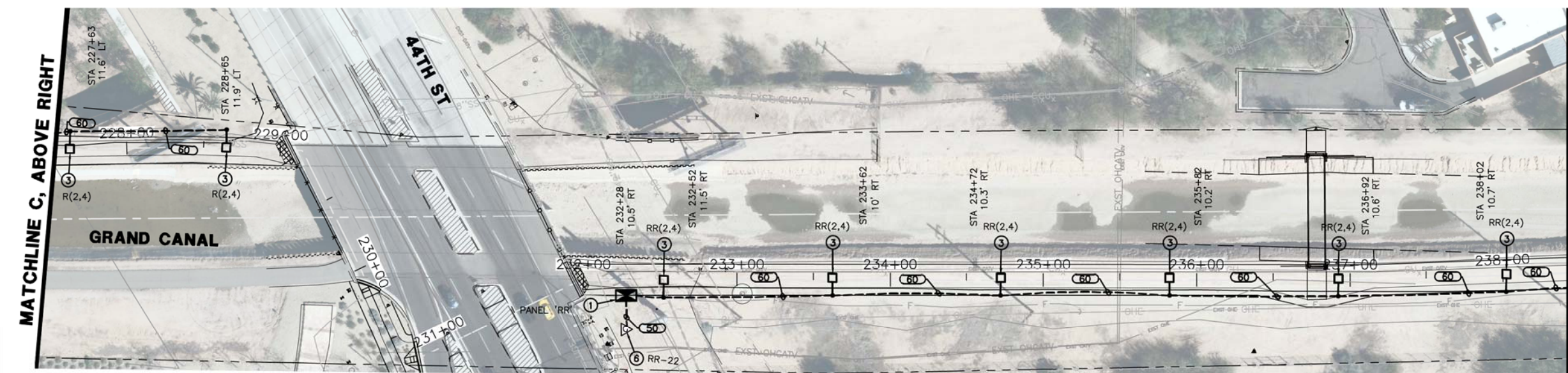
NO.	SIZE	WIRE		REMARKS
		POWER	GROUND	
50	1"	2-#12	1-#12	CU TYP.
51	1"	2-#8	1-#10	CU TYP.
52	1"	2-#6	1-#6	CU TYP.
53	1"	2-#4	1-#4	CU TYP.
60	1"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU HIGH LIGHT LEVEL
		2-#8		CU LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
		2-#12		CU R-22
101	2"	2-#2	1-#2	CU S(1,3) HIGH LEVEL
		2-#2		CU S(1,3) LOW LEVEL
		2-#10		CU S(2,4) HIGH LEVEL
		2-#10		CU S(2,4) LOW LEVEL
		2-#12	1-#12	CU S-20
102	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2		CU LOW LIGHT LEVEL
200	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2		CU LOW LIGHT LEVEL
		2-#4		CU T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.



MATCHLINE B, SEE SHEET SE2.1

MATCHLINE C, BELOW LEFT



MATCHLINE C, ABOVE RIGHT

MATCHLINE D, SEE SHEET SE2.3

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"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS
SCALE:	SE2.2					3.91	3.99

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

WIRE & CONDUIT TABLE

NO.	CONDUIT		WIRE		REMARKS
	SIZE	POWER	GROUND	TYPE* (CKT #)	
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#8	1-#10	CU	TYP.
52	1"	2-#6	1-#6	CU	TYP.
53	1"	2-#4	1-#4	CU	TYP.
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8		CU	LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12		CU	LOW LIGHT LEVEL
		2-#12		CU	R-22
		2-#12		CU	S(1,3) HIGH LEVEL
101	2"	2-#2	1-#2	CU	S(1,3) LOW LEVEL
		2-#10		CU	S(2,4) HIGH LEVEL
		2-#10		CU	S(2,4) LOW LEVEL
		2-#4		CU	S-20
102	2"	2-#2	1-#2	CU	HIGH LIGHT LEVEL
		2-#2		CU	LOW LIGHT LEVEL
200	2"	2-#4		CU	S-22
		2-#2	1-#2	CU	HIGH LIGHT LEVEL
		2-#2		CU	LOW LIGHT LEVEL
		2-#4		CU	T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

LEGEND

- 100 AMP 120/240V 1Ø 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

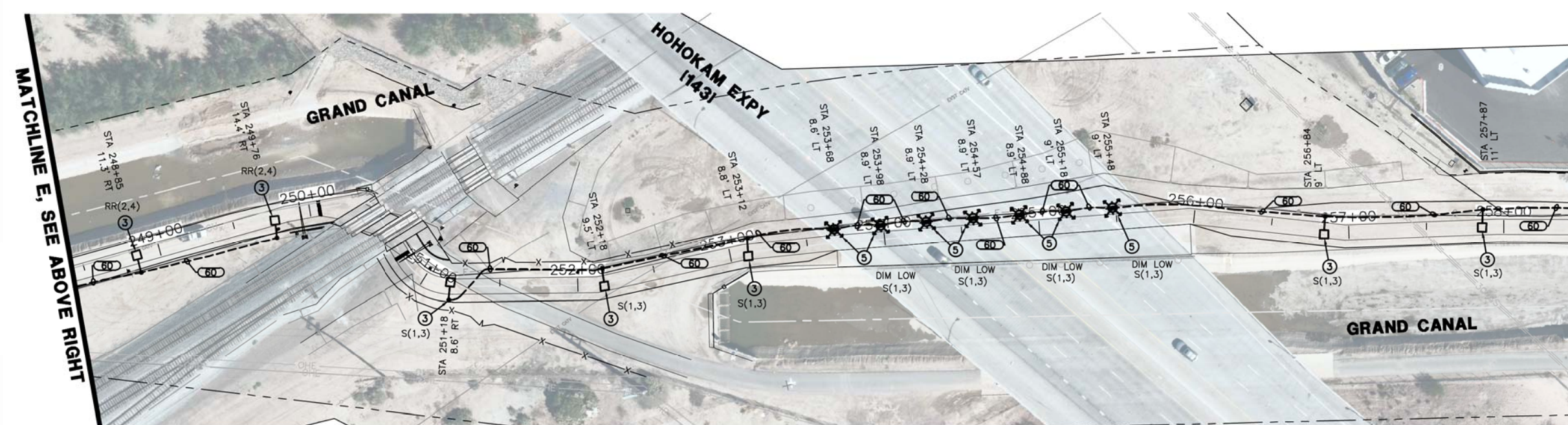
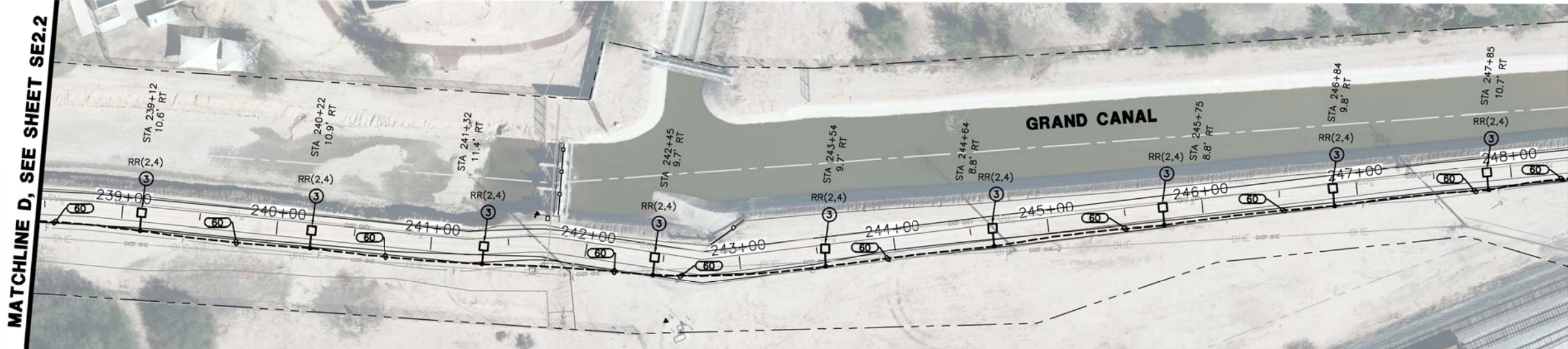
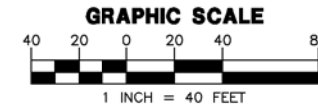
- 1 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
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- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
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CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
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www.wrightengineering.us
Wright Project # 16033

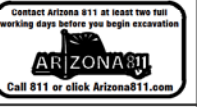


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.92	3.99

TRACE
CONSULTING
1201 E. Jefferson St.
Suite 3
Phoenix, AZ 85034



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ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE2.3						3.92	3.99

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE

WIRE & CONDUIT TABLE

CONDUIT		WIRE		REMARKS
NO.	SIZE	POWER	GROUND	TYPE* (CKT #)
50	1"	2-#12	1-#12	CU TYP.
51	1"	2-#8	1-#10	CU TYP.
52	1"	2-#6	1-#6	CU TYP.
53	1"	2-#4	1-#4	CU TYP.
60	1"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12	1-#12	CU LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU HIGH LIGHT LEVEL
		2-#8	1-#8	CU LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12	1-#12	CU LOW LIGHT LEVEL
		2-#12	1-#12	CU R-22
		2-#12	1-#12	CU S(1,3) HIGH LEVEL
101	2"	2-#2	1-#2	CU S(1,3) LOW LEVEL
		2-#2	1-#2	CU S(2,4) HIGH LEVEL
		2-#10	1-#2	CU S(2,4) LOW LEVEL
		2-#10	1-#2	CU S-20
102	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2	1-#2	CU LOW LIGHT LEVEL
200	2"	2-#2	1-#2	CU S-22
		2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2	1-#2	CU LOW LIGHT LEVEL
		2-#4	1-#2	CU T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

LEGEND

- 100 AMP 120/240V 1Ø 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

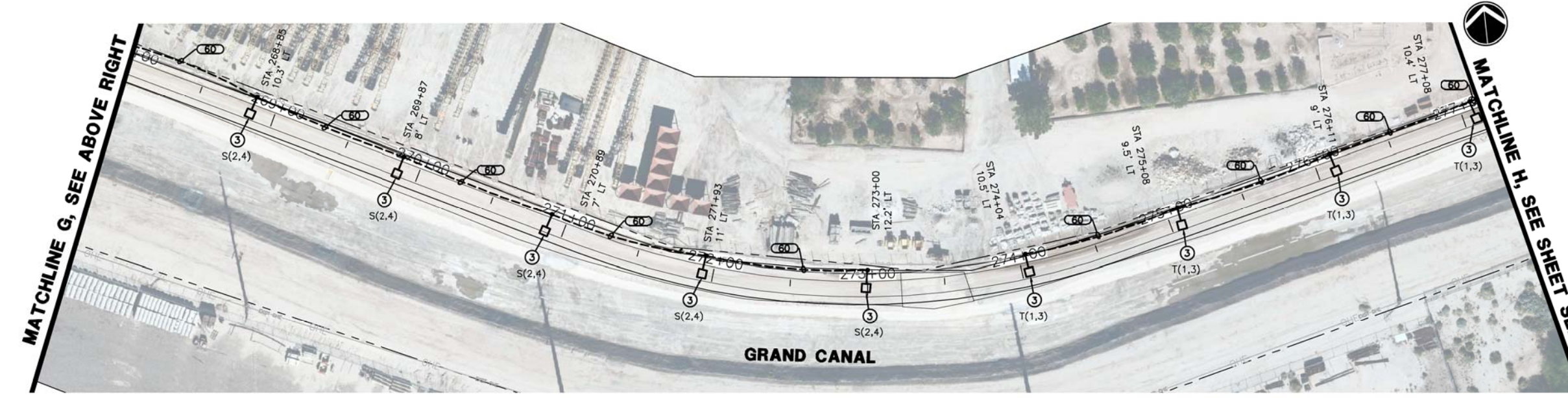
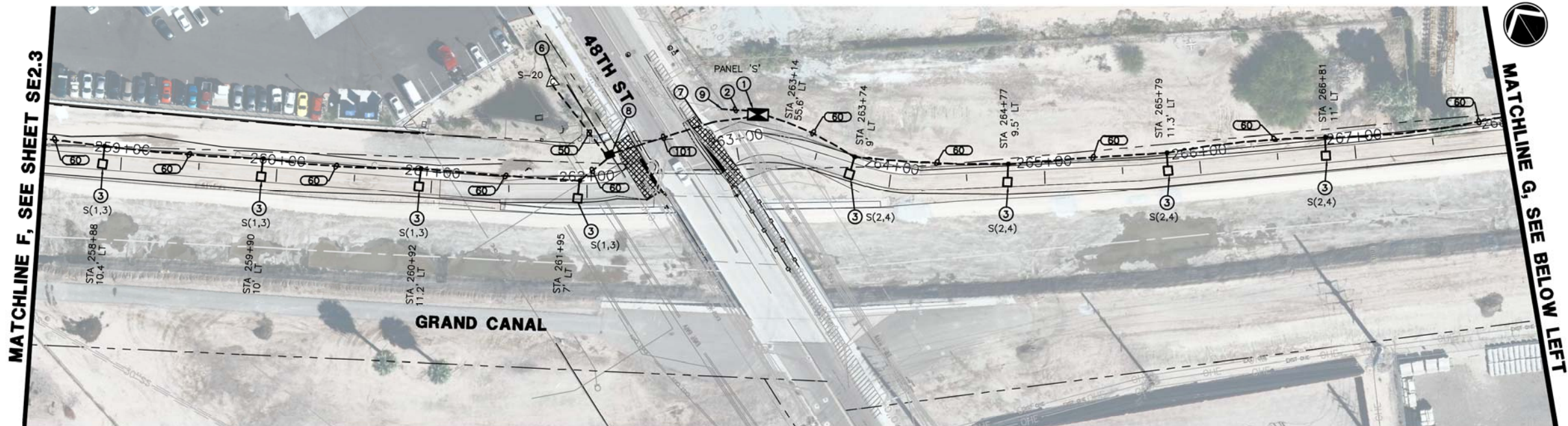
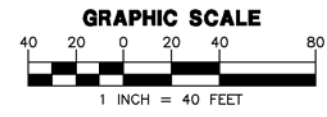
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- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
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Wright Project # 16033



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.93	3.99

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1201 E. Jefferson St.
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Phoenix, AZ 85034



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ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE2.4						3.93	3.99

REVISION BY	CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE
NO.					
NO.					
NO.					

WIRE & CONDUIT TABLE

NO.	SIZE	POWER	GROUND	TYPE*	REMARKS
50	1"	2-#12	1-#12	CU	TYP.
51	1"	2-#8	1-#10	CU	TYP.
52	1"	2-#6	1-#6	CU	TYP.
53	1"	2-#4	1-#4	CU	TYP.
60	1"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12	1-#12	CU	LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8	1-#8	CU	LOW LIGHT LEVEL
		2-#8	1-#8	CU	HIGH LIGHT LEVEL
		2-#8	1-#8	CU	LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU	HIGH LIGHT LEVEL
		2-#12	1-#12	CU	LOW LIGHT LEVEL
		2-#12	1-#12	CU	R-22
		2-#12	1-#12	CU	HIGH LIGHT LEVEL
101	2"	2-#2	1-#2	CU	S(1,3) HIGH LEVEL
		2-#2	1-#2	CU	S(1,3) LOW LEVEL
		2-#10	1-#2	CU	S(2,4) HIGH LEVEL
		2-#10	1-#2	CU	S(2,4) LOW LEVEL
		2-#12	1-#12	CU	S-20
		2-#4	1-#12	CU	S-22
102	2"	2-#2	1-#2	CU	HIGH LIGHT LEVEL
		2-#2	1-#2	CU	LOW LIGHT LEVEL
		2-#4	1-#2	CU	S-22
		2-#4	1-#2	CU	HIGH LIGHT LEVEL
200	2"	2-#2	1-#2	CU	HIGH LIGHT LEVEL
		2-#2	1-#2	CU	LOW LIGHT LEVEL
		2-#4	1-#2	CU	S-22
		2-#4	1-#2	CU	T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.

LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

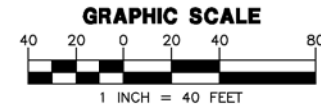
CONSTRUCTION NOTES:

- 1 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- 2 PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- 3 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 4 LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- 5 LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- 6 IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- 7 CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- 8 #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- 9 ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.94	3.99

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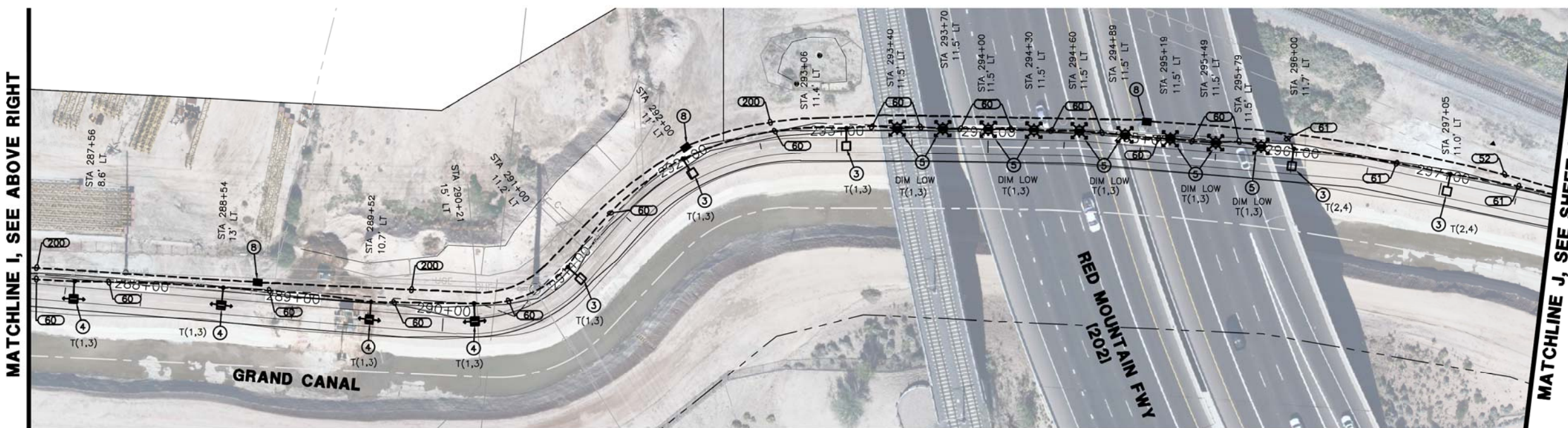
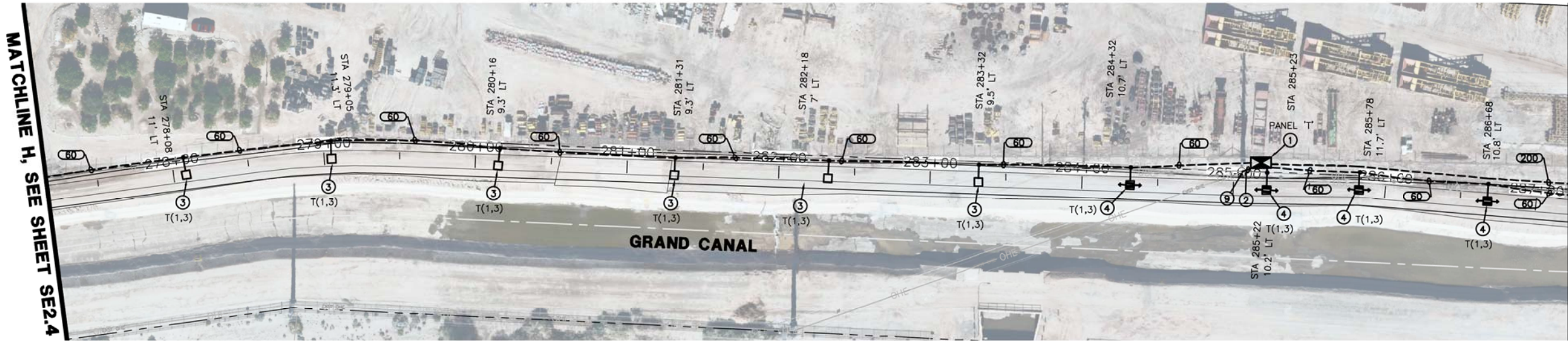
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE I, SEE BELOW LEFT

MATCHLINE J, SEE SHEET SE2.6



All ground-disturbing activities must be monitored by the archaeologist provided by the city. The contractor is responsible for coordinating with the archaeologist



PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALSCAPE PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE2.5						3.94	3.99

LEGEND

- 100 AMP 120/240V 1Ø, 3W METERED ELECTRICAL SERVICE PEDESTAL
- LED PATHWAY LIGHT, 12' MOUNTING HEIGHT
- LED PATHWAY LIGHT, 15' MOUNTING HEIGHT
- EXISTING STREET/AREA LIGHT
- EXISTING TRAFFIC SIGNAL WITH LUMINAIRE
- IRRIGATION CONTROLLER
- UNDERGROUND ELECTRICAL CONDUIT
- CONCRETE PULL BOX
- CONCRETE BOLLARD LIGHT
- A-1 CIRCUIT NUMBER

CONSTRUCTION NOTES:

- ① 100 AMP, 120/240V, 1Ø, 3W, METERED ELECTRICAL PEDESTAL. SEE DETAILS ON SHEET SE3.1.
- ② PROPOSED POWER CO. SECONDARY CONDUIT. INSTALL PER POWER CO. REQUIREMENTS AND SPECIFICATIONS. EXTEND FROM PROPOSED TRANSFORMER LOCATION TO PROPOSED ELECTRICAL SERVICE. LOCATIONS SHOWN FOR CONTRACTOR CONVENIENCE ONLY. POWER CO. PLANS WILL DETERMINE EXACT LOCATION OF CONDUIT AND TAKE PRECEDENCE OVER THESE DRAWINGS.
- ③ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 15'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ④ LED AREA LIGHT FIXTURE WITH TYPE II DISTRIBUTION ON A CONCRETE POLE MOUNTED AT A FIXTURE HEIGHT OF 12'-0" AFG. SEE DETAIL 4 ON SHEET SE3.3.
- ⑤ LED CONCRETE BOLLARD. SEE DETAIL 5 ON SHEET SE3.3.
- ⑥ IRRIGATION CONTROLLER. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ELECTRICAL CONDUIT, CONDUCTORS AND CONNECTIONS BETWEEN CONTROLLER AND ELECTRICAL SERVICE. COORDINATE WITH LANDSCAPE PLANS FOR EXACT LOCATION AND DETAILS.
- ⑦ CONTRACTOR TO HORIZONTAL BORE UNDER EXISTING ROADWAY, CURB, GUTTER, AND SIDEWALK AS NECESSARY. INSTALL 4" PVC SCHEDULE 40 SLEEVE UNDER ROADWAY. INSTALL CONDUIT IN SLEEVE.
- ⑧ #3-1/2 CONCRETE PULL BOX, SEE DETAIL 3 ON SHEET SE3.2.
- ⑨ ROUTE CONDUIT TO EXISTING POWER POLE AND COORDINATE WITH POWER CO. ON THE CONNECTION OF ELECTRICAL SERVICE.

WRIGHT
engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE
CHANDLER, ARIZONA 85225
PHONE: 480.497.5829
FAX: 480.497.5807
www.wrightengineering.us
Wright Project # 16033



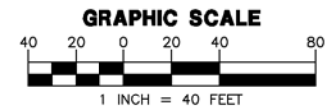
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST87600114	3.95	3.99

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WIRE & CONDUIT TABLE

NO.	CONDUIT SIZE	WIRE		REMARKS
		POWER	GROUND	
50	1"	2-#12	1-#12	CU TYP.
51	1"	2-#8	1-#10	CU TYP.
52	1"	2-#6	1-#6	CU TYP.
53	1"	2-#4	1-#4	CU TYP.
60	1"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
61	1"	2-#8	1-#8	CU HIGH LIGHT LEVEL
		2-#8		CU LOW LIGHT LEVEL
100	1.25"	2-#12	1-#12	CU HIGH LIGHT LEVEL
		2-#12		CU LOW LIGHT LEVEL
		2-#12		CU R-22
101	2"	2-#2	1-#2	CU S(1,3) HIGH LEVEL
		2-#2		CU S(1,3) LOW LEVEL
		2-#10		CU S(2,4) HIGH LEVEL
		2-#10		CU S(2,4) LOW LEVEL
102	2"	2-#12	1-#12	CU S-20
		2-#4		CU S-22
200	2"	2-#2	1-#2	CU HIGH LIGHT LEVEL
		2-#2		CU LOW LIGHT LEVEL
		2-#4		CU S-22
		2-#4		CU T-6

* THIS COLUMN IDENTIFIES THE WIRE MATERIAL TYPE. CU = COPPER, AL = ALUMINUM.



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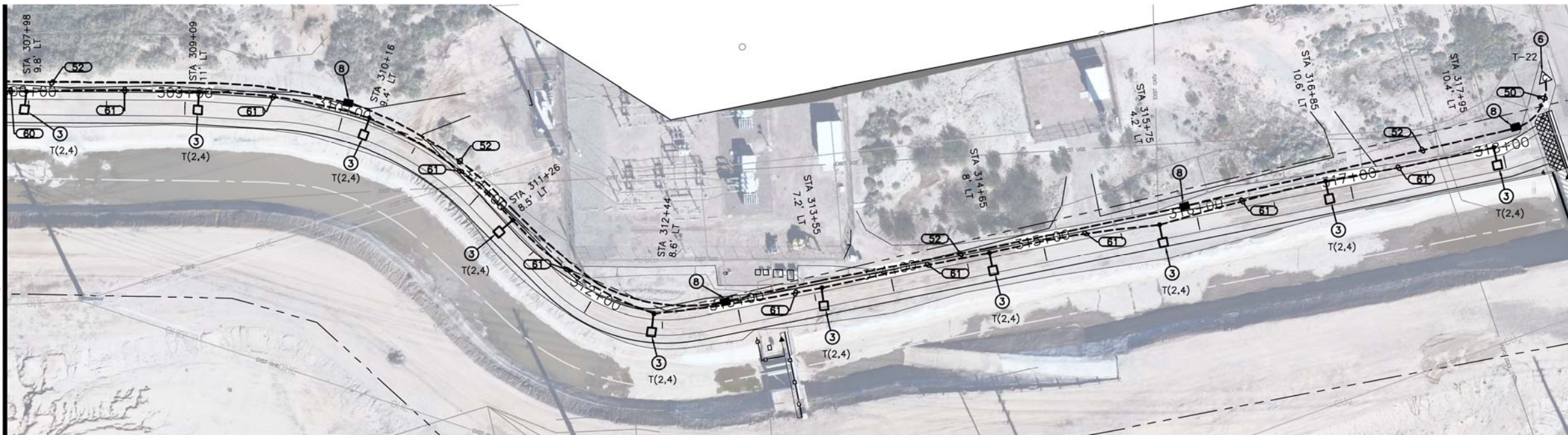
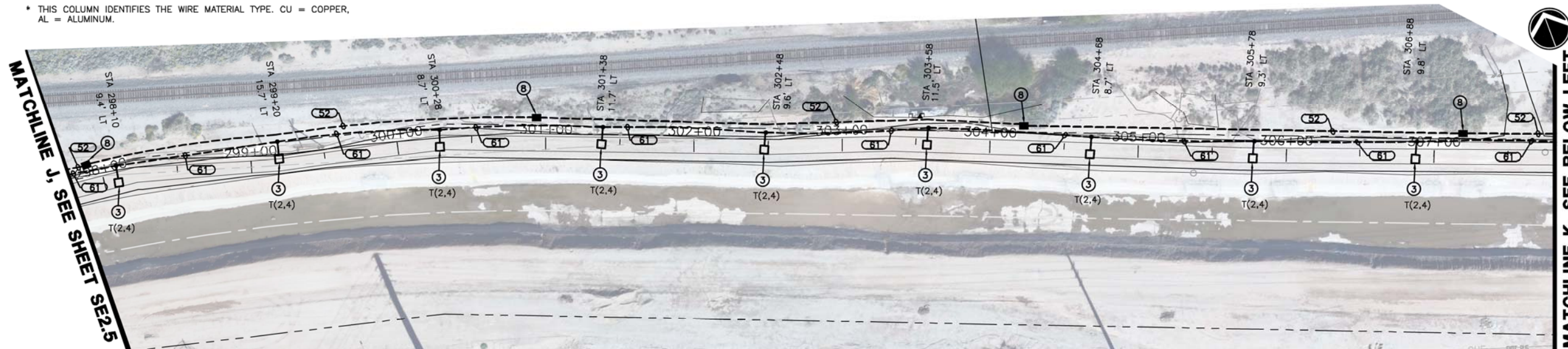
NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CHK BY	DATE



MATCHLINE K, SEE BELOW LEFT

MATCHLINE K, SEE ABOVE RIGHT

END OF PROJECT LIMITS

All ground-disturbing activities must be monitored by the archaeologist provided by the city. The contractor is responsible for coordinating with the archaeologist



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2B, THESE PLANS ARE FOR OFFICIAL USE ONLY & MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX."

ELECTRICAL SITE PLAN
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL	
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS	
SCALE:	SE2.6						3.95	3.99

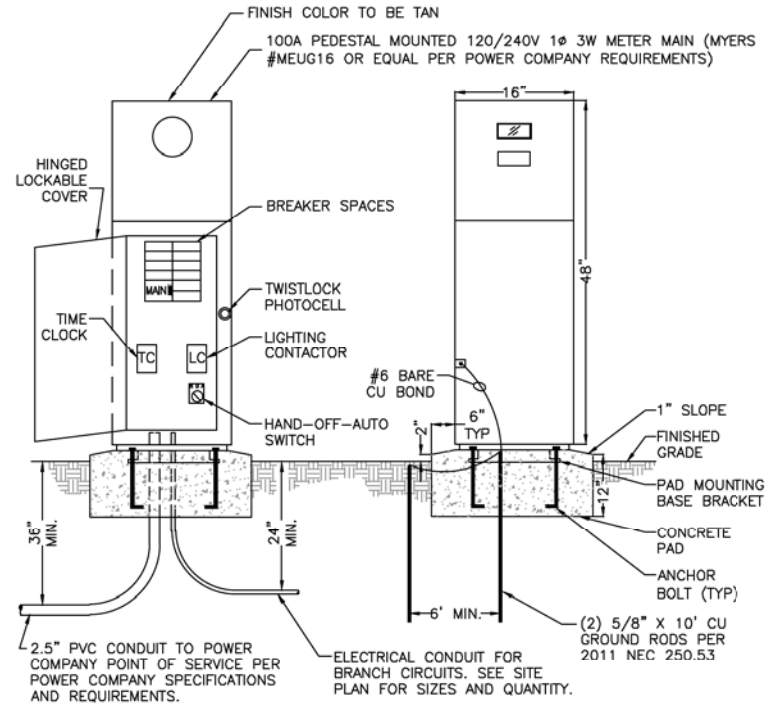


PANEL NAME: R		120/240V, 1 ϕ , 3W				100A MAIN BKR			
LOCATION: STA 220+68		TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	A ϕ	B ϕ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/	* CANAL LIGHTING WEST	725	950		225	* CANAL LIGHTING EAST	20/	2
3	/2		725		950	225		/2	4
5	20/	SPARE	0	0		0	SPARE	20/	6
7	/2		0		0	0		/2	8
9	20/1	SPARE	0	0		0	SPARE	20/1	10
11	20/1	SPARE	0		0	0	SPARE	20/1	12
13	20/1	SPARE	0	0		0	SPARE	20/1	14
15	20/1	SPARE	0		0	0	SPARE	20/1	16
17	20/1	SPARE	0	0		0	SPARE	20/1	18
19	20/1	SPARE	0		200	200	IRRIGATION CONTROLLER WEST	20/1	20
21	20/1	SPARE	0	200		200	IRRIGATION CONTROLLER EAST	20/1	22
23	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1	24
CODE TOTAL VA/ ϕ			1150	1350				*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/ ϕ			9.6	11.3				10,000 AIC BREAKERS	

PANEL NAME: RR		120/240V, 1 ϕ , 3W				100A MAIN BKR			
LOCATION: STA 232+28		TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	A ϕ	B ϕ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/	SPARE	0	525		525	* CANAL LIGHTING EAST	20/	2
3	/2		0		525	525		/2	4
5	20/	SPARE	0	0		0	SPARE	20/	6
7	/2		0		0	0		/2	8
9	20/1	SPARE	0	0		0	SPARE	20/1	10
11	20/1	SPARE	0		0	0	SPARE	20/1	12
13	20/1	SPARE	0	0		0	SPARE	20/1	14
15	20/1	SPARE	0		0	0	SPARE	20/1	16
17	20/1	SPARE	0	0		0	SPARE	20/1	18
19	20/1	SPARE	0		0	0	SPARE	20/1	20
21	20/1	SPARE	0	200		200	IRRIGATION CONTROLLER EAST	20/1	22
23	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1	24
CODE TOTAL VA/ ϕ			725	725				*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/ ϕ			6.0	6.0				10,000 AIC BREAKERS	

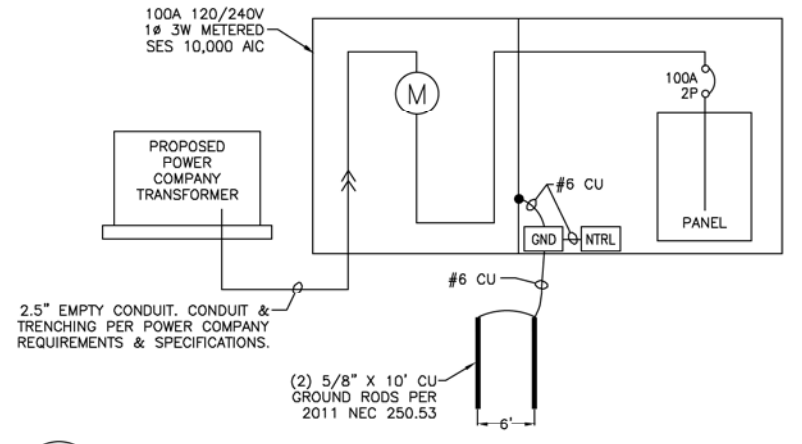
PANEL NAME: S		120/240V, 1 ϕ , 3W				100A MAIN BKR			
LOCATION: STA 263+14		TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	A ϕ	B ϕ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/	* CANAL LIGHTING WEST	422	647		225	* CANAL LIGHTING EAST	20/	2
3	/2		422		647	225		/2	4
5	20/	SPARE	0	0		0	SPARE	20/	6
7	/2		0		0	0		/2	8
9	20/1	SPARE	0	0		0	SPARE	20/1	10
11	20/1	SPARE	0		0	0	SPARE	20/1	12
13	20/1	SPARE	0	0		0	SPARE	20/1	14
15	20/1	SPARE	0		0	0	SPARE	20/1	16
17	20/1	SPARE	0	0		0	SPARE	20/1	18
19	20/1	SPARE	0		200	200	IRRIGATION CONTROLLER EAST	20/1	20
21	20/1	SPARE	0	0		0	SPARE	20/1	22
23	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1	24
CODE TOTAL VA/ ϕ			647	1047				*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/ ϕ			5.4	8.7				10,000 AIC BREAKERS	

PANEL NAME: T		120/240V, 1 ϕ , 3W				100A MAIN BKR			
LOCATION: STA 285+23		TYPE: PLUG IN				PEDESTAL MTD., NEMA 3R			
CKT NO.	BKR SIZE	DESCRIPTION	LOAD	A ϕ	B ϕ	LOAD	DESCRIPTION	BKR SIZE	CKT NO.
1	20/	* CANAL LIGHTING WEST	750	1225		475	* CANAL LIGHTING EAST	20/	2
3	/2		750		1225	475		/2	4
5	20/	SPARE	0	0		0	SPARE	20/	6
7	/2		0		0	0		/2	8
9	20/1	SPARE	0	0		0	SPARE	20/1	10
11	20/1	SPARE	0		0	0	SPARE	20/1	12
13	20/1	SPARE	0	0		0	SPARE	20/1	14
15	20/1	SPARE	0		0	0	SPARE	20/1	16
17	20/1	SPARE	0	0		0	SPARE	20/1	18
19	20/1	SPARE	0		0	0	SPARE	20/1	20
21	20/1	SPARE	0	200		200	IRRIGATION CONTROLLER	20/1	22
23	20/1	SPARE	0		200	200	LIGHTING CONTROL	20/1	24
CODE TOTAL VA/ ϕ			1425	1425				*INDICATES LOAD @ 125%	
CODE TOTAL AMPS/ ϕ			11.9	11.9				10,000 AIC BREAKERS	



- PEDESTAL NOTES**
- APPROVED EQUAL MANUFACTURERS: MILBANK, MEYER, PACIFIC UTILITY PRODUCTS
 - SUBMIT SHOP DRAWINGS TO POWER COMPANY FOR APPROVAL PRIOR TO ORDERING EQUIPMENT.
 - PEDESTAL SHALL BE INSTALLED IN ACCORDANCE WITH ALL NEC CODE AND POWER COMPANY CLEARANCE REQUIREMENTS.
 - ALL WIRING SHALL BE INSTALLED IN AN ORGANIZED AND NEAT MANNER.
 - ALL EQUIPMENT SHALL HAVE LAMICOID NAMEPLATES WITH 1/4" LETTERING.
 - PANEL SCHEDULE SHALL BE NEATLY & ACCURATELY TYPED AND PLACED ON THE INSIDE DOOR ON A LAMINATED SHEET.
 - PEDESTAL SHALL BE COMMERCIAL RATED WITH APPROVED TEST BLOCKS PER POWER COMPANY REQUIREMENTS.

1 100A PEDESTAL MOUNTED SERVICE (TYPICAL)
NO SCALE



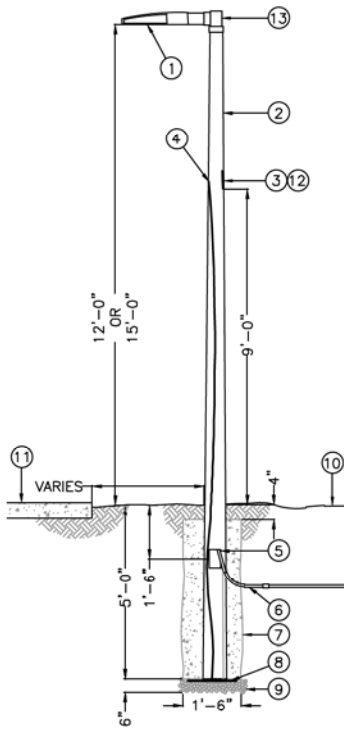
2 100A SINGLE LINE DIAGRAM (TYPICAL)
NO SCALE



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ELECTRICAL DETAILS
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
GRAND CANALScape PHASE II
SEGMENT 3: 40TH ST TO 56TH ST
ST87600114

- ① LED LIGHT FIXTURE WITH IES PHOTOMETRIC DISTRIBUTION PER PLANS. ALL FIXTURES ARE TO BE PROVIDED FROM THE SAME MANUFACTURER. SEE LIGHTING OPTIONS TABLE THIS SHEET.
- ② DIRECT-BURIED, TAPERED, SQUARE, PRE-STRESSED, REINFORCED, SPUN CONCRETE POLE. POLES SHALL HAVE CHARCOAL COLOR, EXPOSED AGGREGATE FINISH WITH ANTI-GRAFFITI SEALER (PROVIDE SAMPLES WITH SUBMITTALS FOR COLOR APPROVAL). ALL POLES ARE TO BE PROVIDED FROM THE SAME MANUFACTURER. SEE LIGHTING OPTIONS TABLE THIS SHEET.
- ③ FLUSH MOUNTED HANDHOLE WITH FLUSH, TAMPERPROOF, STAINLESS STEEL SECURITY SCREWS (BUTTON TORX WITH CENTER PIN). POLE MANUFACTURER TO PLACE HANDHOLE SO THAT IT WILL BE LOCATED ABOVE FINISHED GRADE AT HEIGHT NOTED IN DETAIL TO CENTER OF HANDHOLE AFTER INSTALLATION. INSTALL POLE WITH HANDHOLE FACING AWAY FROM PATH/SIDEWALK, WHERE POSSIBLE. WHERE POLE IS INSTALLED AGAINST WALL, HANDHOLE TO FACE PATH/SIDEWALK.
- ④ POLE MANUFACTURER TO PROVIDE A FACTORY INSTALLED GROUND WIRE WHICH IS CONNECTED TO THE STEEL REINFORCING IN THE POLE. CONNECT THE ELECTRICAL SYSTEM GROUND WIRE TO THIS POLE GROUND WIRE.
- ⑤ APERTURE IN POLE BASE FOR UNDERGROUND WIRING. APERTURE SIZED 1-1/2" BY 5" MINIMUM. PROVIDE TWO (2) EACH POLE AT 180 DEGREES FROM EACH OTHER AND 90 DEGREES FROM HANDHOLE. TAPE OPENINGS PRIOR TO BACKFILLING THE DRILLED HOLE.
- ⑥ PVC SCHEDULE 40 CONDUIT INTO POLE BASE FOR ELECTRICAL BRANCH CIRCUIT. SEE LIGHTING SITE PLAN FOR SIZES AND QUANTITIES. CONDUITS ARE TO BE INSTALLED IN POLE TO A POINT 12" ABOVE GRADE MINIMUM.
- ⑦ AFTER POLE HAS BEEN ALIGNED AND IS PLUMB, BLOCK POLE IN PLACE UNDERGROUND, BACKFILL HOLE WITH CEMENTITIOUS EARTH BACKFILL TO A POINT 4" BELOW FINISHED GRADE, BACKFILL THE REMAINING 4" WITH SURROUNDING SOL. CEMENTITIOUS EARTH BACKFILL - MIX ONE PART DRY CEMENT POWDER TO FIFTEEN PARTS CLEAN, WASHED SAND.
- ⑧ COIL 20' OF #8 SOLID COPPER BOND. RUN BOND THROUGH POLE TO FACTORY INSTALLED GROUND WIRE IN HAND HOLE.
- ⑨ 1" WASHED RIVER ROCK FOR DRAINAGE, COMPACT BEFORE SETTING POLE.
- ⑩ FINISHED GRADE.
- ⑪ WHERE LIGHTS ARE INSTALLED NEXT TO PATHWAY OR SIDEWALK, MAINTAIN CLEARANCE FROM EDGE TO CENTER OF POLE AS SHOWN ON SITE PLAN.
- ⑫ PROVIDE BUSSMAN #HEB FUSE HOLDER, ON EACH UNGROUNDED CONDUCTOR, WITH 5 AMP FUSES FOR INLINE FUSING. WHERE CIRCUIT IS SPLICED IN HANDHOLE, MAKE ALL SPLICES WITH UL486D WET LISTED WIRE NUTS, EQUAL TO DRYCONN AQUA WATERPROOF CONNECTORS. PROVIDE 18" MINIMUM OF SLACK IN THE CONDUCTORS.
- ⑬ TENON MOUNT SLIPFITTER PROVIDED BY POLE MANUFACTURER, CONTRACTOR TO COORDINATE SIZE OF SLIPFITTER SO THE FIXTURE COVERS ENTIRE TENON DOWN TO THE POLE TOP MOUNTING PLATE. PAINT EXPOSED METAL MOUNTING PLATE ON TENON TO MATCH FIXTURE.



4 SQUARE CONCRETE POLE AREA LIGHT DETAIL
 NO SCALE

POLE MOUNTED LED LIGHT FIXTURE PER PLANS:

1. 33W, TYPE II DISTRIBUTION EATON, STREETWORKS GALLEON:
 CAT# GAN/AF/02/LED/U/T2/CC/8027/400/2L/LCF
2. 27W, TYPE II DISTRIBUTION BEACON LIGHTING VIBEER:
 CAT# VPS/24NB-27/27K/T2/UNV/2PF/RAL
3. 35W, TYPE II DISTRIBUTION NLS LIGHTING VUE:
 CAT# VUE-1/T2/32L/350/27K/UNV/MA/CS

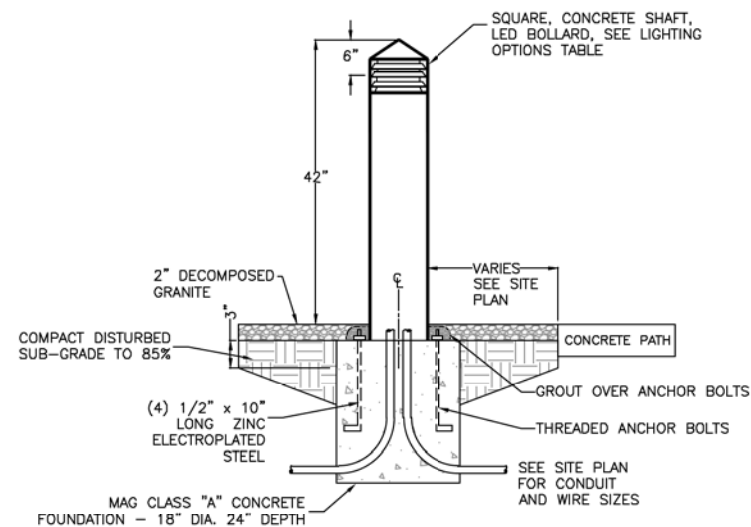
CONCRETE POLE FOR PATH LIGHTING PER PLANS:

1. AMERON CONCRETE POLE:
 FOR 12' MOUNTING USE: AMERON CAT# SEQ-4
 FOR 15' MOUNTING USE: AMERON CAT# SEQ-4.6
2. UTILITY STRUCTURES CONCRETE POLE:
 FOR 12' MOUNTING USE: UTILITY STRUCTURES CAT# OX-175-AL-4-30
 FOR 15' MOUNTING USE: UTILITY STRUCTURES CAT# OX-200-AL-4-30
3. TRADITIONAL CONCRETE POLE:
 FOR 12' MOUNTING USE: TRADITIONAL CAT# D512-E-G-T
 FOR 15' MOUNTING USE: TRADITIONAL CAT# D515-E-G-T

CONCRETE LED BOLLARD PER PLANS:

1. 42W, VISIONAIRE LIGHTING ENDURASCAPE:
 CAT# EDS-4A/COG/20LC/7/27K/UNV/AB/CC/HV
2. 25W, KIM LIGHTING VSB1C:
 CAT# VSB1C/20L/27K/UV/CC/CH-C
3. 27W, H.E. WILLIAMS LIGHTING OSC12S:
 CAT# OSC12S-L20/827/LG/PT/CC/RAL/AB/DRV/240V

LIGHTING OPTIONS TABLE



5 SQUARE BOLLARD LIGHT DETAIL
 NO SCALE

REVISION BY CITY OF PHOENIX	DESCRIPTION	REV BY	CHK BY	DATE



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ELECTRICAL DETAILS
 CITY OF PHOENIX, ARIZONA
 STREET TRANSPORTATION DEPARTMENT
 GRAND CANALScape PHASE II
 SEGMENT 3: 40TH ST TO 56TH ST
 ST87600114

DR:	DVG	DES:	DVG	CK:	CMT	SHEET	TOTAL
DATE:	7/13	DATE:	7/13	DATE:	7/13	NO:	SHEETS
SCALE:						SE3.3	3.98 / 3.99

