F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	1	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

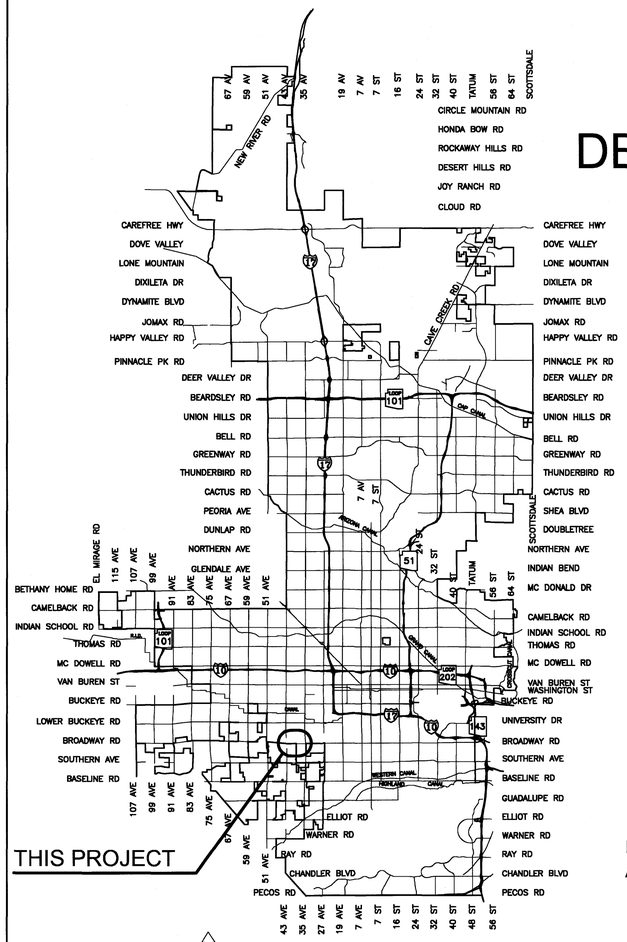
DES	MVL	DR:	JG	CK:	SM	DATE:	11/16

Registered Professional Engineer
CERTIFICATE NO.
34580
MARK V. LEE
State Engineer
Arizona, U.S.A.
EXPIRES 3-31-18

CITY OF PHOENIX
STREET TRANSPORTATION DEPARTMENT
DESIGN & CONSTRUCTION MANAGEMENT DIVISION
PAVING AND STORM DRAIN
AVENIDA RIO SALADO, PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

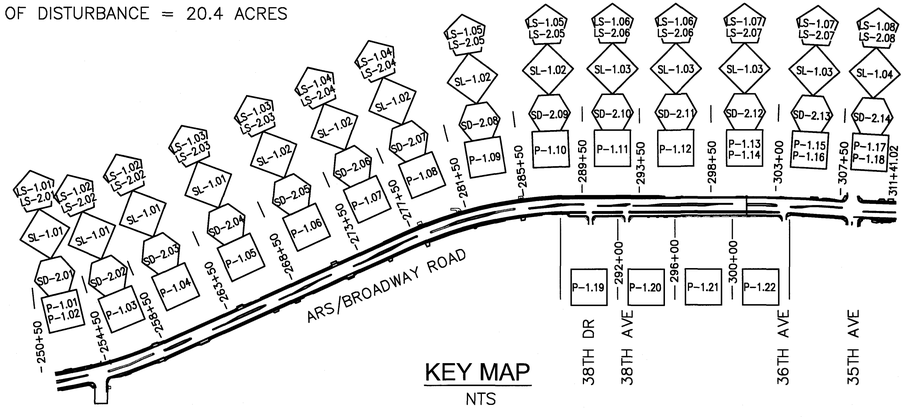
2016

LENGTH OF PROJECT = 6,053 LF = 1.15 MILES
AREA OF DISTURBANCE = 20.4 ACRES



City of Phoenix
N

VICINITY MAP
NTS



KEY MAP
NTS

City of Phoenix
N

- PAVING PLAN/PROFILE SHEETS
- STORM DRAIN PLAN/PROFILE SHEETS
- STREET LIGHT PLAN SHEETS
- LANDSCAPE/IRRIGATION PLAN SHEETS

COP INSPECTION STAMP

CITY PROJECT MANAGER _____

CITY INSPECTOR _____

CONTRACTOR _____

DATE OF FINAL COMPLETION _____

APPROVED _____ 12-2-16
for ASSISTANT STREET TRANSPORTATION DIRECTOR — DATE

APPROVED _____ 12-2-16
DEPUTY STREET TRANSPORTATION DIRECTOR — DATE

MAYOR
GREG STANTON

CITY MANAGER
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 GALLEGO

INDEX OF SHEETS

SHEET NO.	DWG. SERIES NO.	SHEET TITLE
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2 – 3	G-1.02 – G-1.03	LEGEND AND NOTES SHEET
4 – 6	G-2.01 – G-2.03	ROADWAY SUMMARY SHEETS
7	G-2.04	STORM DRAIN SUMMARY
8	G-2.05	ROADWAY LIGHTING SUMMARY
9 – 10	G-3.01 – G-3.02	TYPICAL SECTIONS
11 – 13	G-4.01 – G-4.03	MEDIAN ISLAND GEOMETRIC SHEETS
14	G-5.01	SURVEY CONTROL SHEETS
15 – 16	G-6.01 – G-6.02	INTERSECTION WORKSHEETS
17 – 34	P-1.01 – P-1.18	PAVING PLAN & PROFILE SHEETS – ARS/BROADWAY RD
35 – 38	P-1.19 – P-1.22	PAVING PLAN & PROFILE – FRONTAGE RD
39 – 42	DT-1.01 – DT-1.04	SPECIAL DETAILS – PAVING
43 – 44	DT-2.01 – DT-2.02	MEDIAN ISLAND DETAIL SHEETS
45 – 49	DT-3.01 – DT-3.05	DRIVEWAY CROSS SECTION SHEETS
50 – 62	DT-4.01 – DT-4.13	ROADWAY CROSS SECTIONS
63	SD-1.01	STORM DRAIN HYDRAULIC GRADE LINE PROFILE
64	DS-1.01	STORM DRAIN DESIGN SUMMARY SHEET
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68 – 81	SD-2.01 – SD-2.14	STORM DRAIN PLAN & PROFILE
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96	AP-1.01	ALTERNATE PIPE CHART
97	DD-1.01	SPECIAL DETAILS (STORM DRAIN)
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103 – 110	LS-1.01 – LS-1.08	LANDSCAPE PLANS
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119	SC-1.01	STREET LIGHT COVER SHEET
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125 – 131	TS-1.01 – TS-1.07	TRAFFIC SIGNAL PLANS
132 – 153		SHEETS NOT USED
154 – 155	WD-1.01 – WD-1.02	WATER LINE RELOCATION SHEETS
156 – 161	SP-1.01 – SP-1.06	SANITARY SEWER PLANS
162 – 164	SRPP-1.01 – SRPP-1.03	SRP ELECTRICAL PLANS

CITY BENCHMARKS:

MARICOPA COUNTY BRASS CAP IN HANDHOLE AT INTERSECTION OF BROADWAY ROAD AND 31ST AVENUE. ELEV 1037.44 (COP DATUM)

MARICOPA COUNTY BRASS CAP FLUSH AT WIER AVENUE AND 43RD AVENUE ELEV 1025.92 (COP DATUM)

CALL TWO WORKING DAYS BEFORE YOU DIG
CALL FOR THE BLUE STAKES
602-263-1100
1-800-STAKE-IT
OUTSIDE MARICOPA COUNTY

"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."

ST85100371(004): Q.S. 4-19, 4-20, 4-21, 5-20, 5-21: AVENIDA RIO SALADO, PHASE II/ BROADWAY ROAD (ARS): 43RD AVENUE TO 35TH AVENUE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

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REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

LEGEND

- BENCHMARK
- NEW SURVEY MONUMENT – M.A.G. DETAIL 120–1 TYPE "B"
- EXISTING SURVEY MONUMENT – M.A.G. DETAIL 120–1 TYPE "B"
- NEW SURVEY MONUMENT – M.A.G. DETAIL 120–1 TYPE "A"
- EXISTING SURVEY MONUMENT – M.A.G. DETAIL 120–1 TYPE "A"
- NEW COMBINED CURB & GUTTER – M.A.G. DETAIL 220 TYPE "A"
- EXISTING COMBINED CURB & GUTTER
- NEW CONCRETE SIDEWALK – STD. DETAIL P1230
- EXISTING CONCRETE SIDEWALK
- NEW CONCRETE DRIVEWAY OR ALLEY ENT. PER DETAIL NO. ON PLANS
- EXISTING CONCRETE DRIVEWAY OR ALLEY ENT.
- NEW CONCRETE SIDEWALK RAMP PER DETAIL ON PLANS
- EXISTING CONCRETE SIDEWALK RAMP
- NEW SLOPE EASEMENT
- EXISTING SLOPE EASEMENT
- NEW TCE
- EXISTING EASEMENT LINE
- NEW R/W LINE
- EXISTING R/W LINE
- NEW PAVEMENT CENTER LINE OR MONUMENT LINE
- EXISTING PAVEMENT CENTER LINE OR MONUMENT LINE
- NEW DECORATIVE PAVEMENT
- EXISTING DECORATIVE PAVEMENT
- C — NEW CUT LINE
- F — NEW FILL LINE
- NEW BLOCK WALL
- EXISTING BLOCK FENCE
- X — NEW WIRE FENCE
- — X — EXISTING WIRE FENCE
- NEW CHAIN LINK FENCE
- RTW — NEW RETAINING WALL
- EXISTING AC PAVEMENT
- AVERAGE GROUND ELEVATION AT R/W LINE (SHOW IN PROFILE)
- NEW MAIL BOX
- EXISTING MAIL BOX
- 3/4" W — NEW WATER SERVICE W/SIZE AND WATER METER BOX
- 3/4" W — EXISTING WATER SERVICE W/SIZE AND WATER METER BOX
- 12" DIP W — NEW UTILITY LINE W/SIZE & TYPE (12" AND SMALLER)
- 12" DIP W — EXISTING UTILITY LINE W/SIZE & TYPE (12" AND SMALLER)
- 36" DIP W — NEW UTILITY LINE W/SIZE & TYPE (GREATER THAN 12")
- 36" DIP W — EXISTING UTILITY LINE W/SIZE & TYPE (GREATER THAN 12")
- NEW MANHOLE (UTILITY DESIGNATION IN CENTER)
- EXISTING MANHOLE (UTILITY DESIGNATION IN CENTER)
- NEW STORM SEWER (GREATER THAN 12")
- EXISTING STORM SEWER OR NEW STORM SEWER SHOWN ON SEPARATE PLANS (GREATER THAN 12")
- NEW CATCH BASIN, GUTTER INLET (LENGTH TO SCALE)
- EXISTING CATCH BASIN, GUTTER INLET
- NEW CATCH BASIN, CURB INLET (LENGTH TO SCALE)
- EXISTING CATCH BASIN, CURB INLET
- NEW CATCH BASIN, CURB & GUTTER INLET (LENGTH TO SCALE)
- EXISTING CATCH BASIN, CURB & GUTTER INLET
- NEW IRRIGATION STANDPIPE – M.A.G. DETAIL 503
- EXISTING IRRIGATION STANDPIPE
- NEW OR RELOCATED FIRE HYDRANT BY CONTRACTOR
- EXISTING FIRE HYDRANT
- NEW OR RELOCATED UTILITY VALVE BY CONTRACTOR
- EXISTING UTILITY VALVE
- NEW OR RELOCATED IRRIGATION BOX BY CONTRACTOR
- EXISTING IRRIGATION BOX

- ADJUST EXIST. WATER VALVE BOX – C.O.P. DETAIL P1391
- T.N.=___ EXISTING WATER VALVE W/TOP OF OPERATING NUT ELEVATION
- NEW STREET OR TRAFFIC SIGN
- EXISTING STREET OR TRAFFIC SIGN
- NEW TRAFFIC SIGNAL POLE W/MAST ARM & SIGNAL INDICATIONS
- EXISTING TRAFFIC SIGNAL POLE W/MAST ARM & SIGNAL INDICATIONS
- NEW OR RELOCATED UTILITY POLE W/LINE INDICATING WIRE DIRECTION
- EXISTING UTILITY POLE W/LINE INDICATING WIRE DIRECTION
- NEW OR RELOCATED POWER POLE DOWN GUY ANCHOR
- EXISTING POWER POLE DOWN GUY ANCHOR
- NEW STREET LIGHT & POLE
- EXISTING STREET LIGHT & POLE
- NEW STREET LIGHT
- EXISTING STREET LIGHT
- EXISTING TREE OR STUMP TO BE REMOVED (GREATER THAN 12" DIA.)
- EXISTING TREE OR STUMP TO BE REMOVED 12" DIA. OR LESS (NPI)
- EXISTING TREE TO BE TRANSPLANTED BY CONTRACTOR
- EXISTING TREE TO REMAIN (GREATER THAN 12" DIA.)
- EXISTING TREE TO REMAIN (12" DIA. AND SMALLER)
- EXISTING PINE TREE
- EXISTING PALM TREE
- EXISTING LARGE SHRUB
- EXISTING SMALL SHRUB
- EXISTING BUSH
- S — SAWCUT & MATCH EXISTING
- M — MATCH EXISTING
- 3231 — PROPERTY ADDRESS NUMBER

STRUCTURAL NOTES

"CLEAR" DIMENSIONS FOR DEPTH OF REINFORCING STEEL ARE FROM FACE OF CONCRETE TO FACE OF BARS.

ALL EXPOSED EDGES OF CONCRETE SHALL BE BEVELED OR ROUNDED.

ALL EXPOSED CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ARIZONA DEPT. OF TRANSPORTATION STANDARD SPECIFICATION 601–3.05 – FINISHING CONCRETE, UNLESS OTHERWISE SPECIFIED.

NOTES

ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH CONTRACT SPECIFICATIONS; PLANS; CITY OF PHOENIX SUPPLEMENTS TO MAG STANDARD SPECIFICATIONS AND DETAILS; AND MAG STANDARD SPECIFICATIONS AND DETAILS, IN THAT ORDER OF PRECEDENCE, AT THE TIME OF CONSTRUCTION BID.

ALL STORM SEWER 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', CENTER TO CENTER.

PIPE CONNECTIONS TO NEW PRECAST CONCRETE PIPE MAINS, SHALL BE MADE WITH 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 C.O.P. DETAIL 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°. THE BEND SHALL BE COLLARED ACCORDING TO C.O.P. DETAIL P1505. ANY ANGLE BENDS GREATER THAN 22–1/2° SHALL BE PREFABRICATED.

CONNECTOR PIPES SHALL CONNECT TO CATCH BASIN WALLS AT AN ANGLE NOT TO EXCEED 22–1/2° FROM PERPENDICULAR.

FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL VERTICAL AND HORIZONTAL CONTROLS, ARE LOCATED ONLY APPROXIMATELY AND TO THE BEST AVAILABLE INFORMATION PROVIDED BY VARIOUS OWNERS OF THE FACILITIES, 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.

AT LEAST TWO WORKING DAYS BEFORE CONSTRUCTION, THE CONTRACTOR SHALL CONTACT BLUESTAKE TO FIND AND FLAG UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT OTHER APPROPRIATE UTILITIES DIRECTLY IF THEY ARE NOT ON BLUESTAKE SYSTEM.

VERTICAL CONTROL IS BASED ON NATIONAL GEODETIC SURVEY.

UNLESS OTHERWISE NOTED, STATIONS SHOWN ON PIPE PROFILES ARE ALONG CENTERLINE OF PIPE.

ABBREVIATIONS

AC	ALUMINUM CAP
ALIGN	ALIGNMENT
AP	ANGLE POINT
APN	ASSESSORS PARCEL NUMBER
APRN	APRON – CONCRETE
ARS	AVENIDA RIO SALADO
B	BEGIN
BAR	BARRICADE
BC	BRASS CAP
BCF	BRASS CAP FLUSH
B/C	BACK OF CURB
BFP	BACK FLOW PREVENTER
BLDG	BUILDING
BLOIWL	BLOCK/ORNAMENTAL IRON WALL
BLWL	BLOCK WALL
BM	BENCHMARK
BOL	BOLLARD OR GUARD POST
BOU	BOTTOM OF UTILITY
C	CONCRETE
CLF	CHAIN LINK FENCE
CMU	CONCRETE MASONRY UNIT
COP	CITY OF PHOENIX
COR	CORNER
CPLR	CONCRETE PILLAR
CRB	CURB
CST	CONSTRUCTION
DE	DRAINAGE EASEMENT
DELIN	DELINEATOR
DNGY	DOWN GUY
DTL / DET	DETAIL
E	END OR EAST
EC	ELECTRICAL CABINET
EE	ELECTRICAL EASEMENT
EGL	ENERGY GRADE LINE
ELEC	ELECTRIC OR ELECTRICAL
EM	ELECTRICAL METER
EMH	ELECTRICAL MANHOLE
ENT	ENTRANCE
EP	EDGE OF PAVEMENT
EPB	ELECTRICAL PULL BOX
EPNG	EL PASO NATURAL GAS
F/C	FACE OF CURB
FG	FINISHED GRADE
FL	FLOW LINE OR FIRE LINE
FNC	FENCE
FO	FIBER OPTIC
G	GUTTER
GM	GAS METER
GRATE	STORM DRAIN GRATE
GV	GAS VALVE
HDG	HEDGE
HDRL	HANDRAIL
HGL	HYDRAULIC GRADE LINE
HH	HANDHOLE
IBX	IRRIGATION CONTROL BOX
L	LIP OF GUTTER
LP	LIGHT POLE
MB	MAILBOX
MCDOT	MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
MCHD	MARICOPA COUNTY HIGHWAY DEPARTMENT
MFNC	METAL FENCE
MSAG	METAL SAGUARO CACTUS SCULPTURE
NOM	NOMINAL
P	PAVEMENT
POE	POINT OF ENDING
RCBC	REINFORCED CONCRETE BOX CULVERT
SAG	SAGUARO
SCPR	SCUPPER
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SE	SLOPE EASEMENT
SHT	SHEET
SIM	SIMILAR
SRP	SALT RIVER PROJECT
SSMH	SANITARY SEWER MANHOLE
STLT	STREET LIGHT
S/W	SIDEWALK
SWE	SIDEWALK EASEMENT
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TFBRL	TRAFFIC BARREL
TMH	TELEPHONE MANHOLE
TN	TOP OF NUT
TNF	TIN FENCE
TOU	TOP OF UTILITY
TPED	TELEPHONE PEDESTAL
TSP	TRAFFIC SIGNAL POLE
TSC	TRAFFIC SIGNAL CABINET
TSPB	TRAFFIC SIGNAL PULL BOX
TVPB	TV PULL BOX
UBOX	UTILITY BOX
VEG	VEGETATION
VG	VALLEY GUTTER
W/	WITH
WDPST	WOOD POST
WM	WATER METER
WMH	WATER MANHOLE
WS	WATER SERVICE
WV	WATER VALVE
XMER	TRANSFORMER

Registered Professional Engineer (Civil) CERTIFICATE NO. 34866 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	2	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

NOTES (CONTINUED)

UNLESS OTHERWISE NOTED, PIPE SHALL BE BEDDED IN ACCORDANCE WITH CITY OF PHOENIX DETAIL P1200.

CATCH BASINS ARE STATIONED PERPENDICULAR TO THE CENTERLINE OF THE STREET AT THE CENTERLINE OF THE MAINTENANCE BASIN.

SANITARY SEWER MAINS AND TAPS CROSSING OVER STORM DRAIN MAINS SHALL BE SUPPORTED PER M.A.G. DETAIL 403–1, 403–2, OR 403–3.

ALL EXISTING PRECAST CONCRETE SAFETY CURBS AND ALL EXISTING WOODEN PARKING CURBS, WHICH ARE INSIDE THE RIGHT OF WAY AND APPROXIMATELY PARALLEL TO THE NEW CURB LINE, SHALL BE RESET ON THE RIGHT OF WAY DIRECTLY OPPOSITE THEIR EXISTING LOCATION, WITH THE BACK EDGE ON THE RIGHT OF WAY LINE. ALL OTHER PRECAST CONCRETE SAFETY CURBS INSIDE THE STREET RIGHT OF WAY SHALL BE SALVAGED AND STOCK PILED FOR THE OWNER AT THE RIGHT OF WAY LINE.

EXISTING PRECAST CONCRETE SAFETY CURBS OUTSIDE THE RIGHT OF WAY, WHICH ARE DISTURBED BY NEW CONSTRUCTION SHALL BE RESET IN THEIR ORIGINAL POSITION BY THE CONTRACTOR.

ALL EXISTING DRIVEWAYS AND ALL EXISTING ALLEYS SHALL BE GRADED TO MATCH THE NEW WORK IN ACCORDANCE WITH STD. DETAIL P1164, UNLESS OTHERWISE SPECIFIED. EXISTING SURFACING SHALL BE REMOVED AND REPLACED AS NECESSARY.

UNLESS OTHERWISE PROVIDED ON THE PLANS:

THE SPACE BETWEEN THE BACK OF NEW DRIVEWAY ENTRANCES AND EXISTING A.C. DRIVEWAYS SHALL BE FILLED WITH A MINIMUM OF 3" A.C.S.C. ON 100% COMPACTED NATIVE SOIL. WHERE EXISTING PAVEMENT AND BASE THICKNESS EXCEED THE MINIMUMS, MATCH THE EXISTING.

THE SPACE BETWEEN THE BACK OF NEW SIDEWALKS AND EXISTING PRIVATE SIDEWALKS, AND THE SPACE BETWEEN THE BACK OF NEW DRIVEWAY ENTRANCES AND EXISTING P.C.C. DRIVEWAYS SHALL BE FILLED WITH P.C.C.. THE THICKNESS AND CLASS SHALL MATCH THAT OF THE NEW SIDEWALK OR DRIVEWAY ENTRANCE.

THE SPACE BETWEEN THE BACK OF THE NEW SIDEWALKS, AND EXISTING A.C. PARKING LOTS, WHICH FALL WITHIN OR ABUT THE R/W SHALL BE FILLED WITH 2" A.C.S.C. ON 100% COMPACTED NATIVE SOIL.

EXISTING IRRIGATION BERMS DISTURBED BY NEW CONSTRUCTION SHALL BE RECONSTRUCTED AS SHOWN ON PLANS.

CATCH BASIN ACCESS FRAME AND COVERS SHALL BE CONSTRUCTED PER C.O.P. DETAIL P1561.

"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."

LEGEND AND NOTES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			G–1.02

ST85100371 G–1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX					
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UTILITY COMPANY EMERGENCY CONTACT INFORMATION

COMPANY	NAME	E–MAIL	EMERGENCY NUMBER
CENTURY LINK	KAREN BROWN	karen.brown1@centurylink.com	480–768–4398
CITY OF PHOENIX STREET LIGHTS DEPARTMENT	JASON FERNANDEZ	jason.fernandez@phoenix.gov	602–256–4168
CITY OF PHOENIX STREET TRANSPORTATION UTILITY COORDINATION	CATHERINE ROGERS UTILITY COORDINATOR	catherine.rogers@phoenix.gov	602–262–4972
CITY OF PHOENIX WATER SERVICES DEPARTMENT (WSD)	JAMI ERICKSON	jami.erickson@phoenix.gov	602–261–8229
COX COAXIAL CABLE	BEN BAICH	benjamin.baich@cox.com	623–328–3538
COX FIBER OPTIC CABLE	RANDY SIMS	randy.sims@cox.com	623–328–4058
KINDER MORGAN ENERGY/NATURAL GAS PIPELINE (FORMERLY EPNG)	NICKEY LOWDER	nickey_lowder@kindermorgan.com	602–438–4429
SOUTHWEST GAS (SWG)	VALERIE GALLARDO–WELLER	valerie.gallardo–weller@swgas.com	602–484–5342
SRP ELECTRIC (SRPP)/DISTRIBUTION	KEITH FAULKNER	keith.faulkner@srpnet.com	602–653–1387
SRP ELECTRIC (SRPP)/TRANSMISSION	BEN COX	ben.cox@srpnet.com	602–236–3725
SRP IRRIGATION (SRPI)	GARY BRUNO	gary.bruno@srpnet.com	602–236–5182

Registered Professional Engineer
CERTIFICATE NO.
34868
MARK V.
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
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Phone: (602) 906-1901
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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."

UTILITY CONTACTS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			G–1.03

ST85100371 G–1_03.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

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NO.	DESCRIPTION	REV BY	CKD BY	DATE

ROADWAY SUMMARY

X	ITEM No.	DESCRIPTION	UNIT	SHEET NUMBERS P-1.01	P-1.03	P-1.04	P-1.05	P-1.06	P-1.07	P-1.08	P-1.09	P-1.10	P-1.11	P-1.12	P-1.13	P-1.15	P-1.17	P-1.19	P-1.20	P-1.21	P-1.22	TOTAL QTY
		(DESCRIPTION)	(UNIT)																			(TOTAL QTY)
1 2	M3010001	SUBGRADE PREPARATION	SY	5426	3856	4696	4624	4807	3629	3723	3653	3738	3860	4417	4185	4753	5301	788	996	893	926	64,271
2 27 48	M3100000	AGGREGATE BASE COURSE	TON	29	21	10	10	14	14	60	10	19	12	7	10	15	16	344	434	388	404	1,817
33	M3210100	ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2 FOR DRIVEWAY, SIDEWALK AND PARKING LOT CONNECTIONS	TON		4	6	24	20	9	13	16			1	1	8	42					144
1	M3210120	ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2, 2" THICK	TON	611	434	529	521	541	409	419	411	421	435	497	471	535	597					6,831
27	M3210125	ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2, 2–1/2" THICK	TON	7	14	7	7	9	10	7	7	13	8	5	7	10	11					122
2	M3210230	ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4, 3" THICK	TON															133	168	151	156	608
1	M3210355	ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2, 5–1/2" THICK	TON	1679	1193	1453	1431	1488	1123	1152	1131	1157	1195	1367	1295	1471	1640					18,775
47	M3241063	CONCRETE AREA DRAIN APRON DETAIL PER DETAIL	EACH		1											1	1					3
1	M3290100	EMULSIFIED ASPHALT FOR TACK COAT, TYPE SS–1H	TON	5	4	4	4	4	3	3	3	3	4	4	4	4	5					54
26	M3400000	CONCRETE MEDIAN NOSE	SF	75	79	93	107	89		61	31	30	198		45	161	133					1,102
49	M3400405	DECORATIVE CONCRETE SIDEWALK STD DETAIL P–1230 MODIFIED, 6" THICK	SF					300	300			600										1,200
10 16 34 11 17 15 18	M3400406	CONCRETE SIDEWALK, STD. DETAIL P1230, MODIFIED, 6" THICK, CLASS "A" CONCRETE	SF	3639	4004	4745	4092	4714	3850	3297	3552	2769	2263	2317	2028	3409	1926	1700	2122	1739	1728	53,894
13 14	M3400409	CONCRETE SIDEWALK, STD. DETAIL P1230, MODIFIED, 9" THICK, CLASS "A" CONCRETE	SF	1131												448	2594					4,173
12	M3400415	TRUNCATED DOMES FOR SIDEWALK RAMPS	SF	60									10			20	80	30	20		10	230
19	M3400543	CONCRETE DRIVEWAY ENTRANCE, STD DET P1243	SF		1616	1239	804	1782														5,441
21	M3400566	CONCRETE DRIVEWAY ENTRANCE, STD. DETAIL P1255–2, 9" THICK	SF			600	1800		470	1880	1409					472	992					7,623
23	M3400657	CONCRETE BUS BAY PAVEMENT, STD. DETAIL P1256–1, 9" THICK, CLASS "A" CONCRETE, MODIFIED	SF	122	1652																	1,774
20	M3400664	CONCRETE DRIVEWAY ENTRANCE, STD. DETAIL P1255–1, 9" THICK	SF	438										352	400	336	835					2,361
22	M3401256	CONCRETE BUS BAY PAVEMENT, STD. DETAIL P1256–1, 9" THICK, CLASS "A" CONCRETE	SF	1782												729	1835					4,346
25 50	M3401260	CONCRETE BUS SHELTER / ACCESSORY PAD, STD. DETAIL P1260	SF	320	321		346	346				686					307					2,326
42	M3401261	CONCRETE BUS SHELTER / ACCESSORY PAD, STD. DETAIL P1261	SF													373						373
3	M3402201	COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE "A", H=6"	LF	555	669	930	919	828	800	732	744	789	605	1000	900	724	340	329	362	400	327	11,953
36	M3402202	COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE "A", H=4"	LF															63	63		32	158
6 43	M3402203	CONCRETE ROLL CURB AND GUTTER, STD. DETAIL 220, TYPE "C"	LF													19						19
5	M3402204	CONCRETE ROLL CURB AND GUTTER, STD. DETAIL 220, TYPE "D"	LF															287	340	400	332	1,359
4	M3402215	COMBINED CONCRETE CURB AND GUTTER, STD. DET. 220, TYPE "A" MODIFIED, REVERSE PAN	LF	224	173	170			232	407	407	406	133									2,152
38	M3402220	COMBINED CONCRETE CURB AND GUTTER, STD. DETAIL 220, TYPE "A", H=6" MODIFIED. 9" GUTTER PAN	LF	109	225	138	113	234									231					1050
7 9	M3402221	CONCRETE SINGLE CURB, STD. DET. 222, TYPE "A"	LF	218	290	453	755	624	599	313	315	349	458	1000	689	668	439					7,170
51	M3402222	CONCRETE SINGLE CURB, STD. DET. 222, TYPE "B"	LF	18	10	16	16	12	11	12	9	15	20	6	9	18	6					178
8	M3402223	CONCRETE SINGLE CURB, STD. DETAIL 222, TYPE "A" MODIFIED FOR BUS BAYS	LF	219	156											142	220					737
27	M3420000	STAMPED ASPHALT PAVEMENT PER DETAIL	SF	424	880	397	397	568	599	423	394	788	487	307	397	638	658					7,357
39	M3450021	ADJUST MANHOLE FRAME & COVER, MAG DET 422	EA	6	2	1		2	1		1	1	1	1	4	2	6					28
(A)	M3453001	ADJUST TYPE 'A' WATER VALVE, STD DET P1391 & P1391–1	EA	1	2												5	2	2	2	4	18
28	M4051201	SURVEY MARKER, MAG STD DET. 120–1, TYPE "A"	EA	1																		1

Registered Professional Engineer
CERTIFICATE NO.
34889
MARK VAN LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003710(004)	4	164	

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ROADWAY SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			G–2.01

ST85100371 G-2_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ROADWAY SUMMARY

X	ITEM No.	DESCRIPTION	UNIT	SHEET NUMBERS																											TOTAL QTY
		(DESCRIPTION)	(UNIT)	P-1.01	P-1.03	P-1.04	P-1.05	P-1.06	P-1.07	P-1.08	P-1.09	P-1.10	P-1.11	P-1.12	P-1.13	P-1.15	P-1.17	P-1.19	P-1.20	P-1.21	P-1.22				SP-1.01	SP-1.03	SP-1.05				(TOTAL QTY)
29	M4051202	SURVEY MARKER, MAG STD DET. 120–1, TYPE "B"	EA		1				1		1	1			1	2	2														9
52	M4154001	SAFETY POST/BOLLARD	EA	2																											2
32	M4200005	6–FOOT CHAIN LINK FENCE (GALV.)	LF						212	361	385	408	400	174																	1,940
40	M4200011	SWING GATE PER PLANS	EA							2	1						2														5
37	M5100060	CONCRETE BLOCK MASONRY WALL PER PLANS	SF														522														522
35	M5100066	CONCRETE BLOCK MASONRY RETAINING WALL PER PLANS	LF													127	166														293
41	M6104006	6" DUCTILE IRON WATER PIPE AND FITTINGS, RESTRAINED, FURNISH AND INSTALL	LF	28											131		120	19	19	11	15										343
41	M6108006	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX, INSTALL	EA	1											1		2	1	1	1	1										8
	M6154008	8" SANITARY SEWER PIPE	LF																						495	798	465				1758
44	M6180427	PIPE PLUG, MAG STD DTL 427	EA	2										1			6									1	1				11
	M6255021	4' DIA SANITARY SEWER MANHOLE, MAG 420 OR 421 & 424	EA																						6	2	2				10
53	M6257900	DROP SEWER CONNECTION, COP DET S512D AND MAG STD. DET. 426	EA																						2						2
41	M6303006	6" VALVE, BOX AND COVER, FURNISH AND INSTALL, MAG STD DET 391–1 AND COP STD DET P1391	EA	1											1		2	1	1	1	1										8

Registered Professional Engineer
CERTIFICATE NO.
34880
MARK V. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003 71(004)	5	164	

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ROADWAY SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			G–2.02

ST85100371 G–2_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REMOVAL SUMMARY

	ITEM No.	DESCRIPTION	UNIT	SHEET NUMBERS																												TOTAL QTY
		(DESCRIPTION)	(UNIT)	P-1.01	P-1.03	P-1.04	P-1.05	P-1.06	P-1.07	P-1.08	P-1.09	P-1.10	P-1.11	P-1.12	P-1.13	P-1.15	P-1.17	P-1.19	P-1.20	P-1.21	P-1.22		SL-1.01	SL-1.02	SL-1.03	SL-1.04							(TOTAL QTY)
(14)	M3500005	REMOVE MANHOLE, BACKFILL AND COMPACT	EA		3	2	3								1																	9
(2)	M3500010	REMOVE PORTLAND CEMENT CONCRETE SINGLE CURB, CURB & GUTTER, HEADER CURB & EMBANKMENT CURB	LF						289	127		84	304	824	900	1217	825	664	76	800	452												6,562
(1)	M3500020	REMOVE PORTLAND CEMENT CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER AND SLAB	SF						250	556	586	376	561	2099	2787	7078	8553	200	716	418	819												24,999
(5)	M3500036	REMOVE CATCH BASIN, BACKFILL AND COMPACT	EA	1	2	2	1						1	3	1	4	5		1	2												23
(4)	M3500040	REMOVE PIPE, BACKFILL AND COMPACT	LF	21	913	1287	960	500	329	69	108	8	71	485	197	220	179		45	58												5,450
(3)	M3500060	REMOVE ASPHALT CONCRETE PAVEMENT	SY	5325	4675	5597	5631	5481	3887	3056	2640	2414	2614	3475	3197	3778	4250	804	957	893	926												59,600
(7)	M3500300	MISCELLANEOUS REMOVAL AND OTHER WORK																														
		TRAFFIC SIGN, REMOVE & SALVAGE	LS																													
		TRAFFIC BARREL, REMOVE & SALVAGE	LS																													
		BOLLARD, REMOVE	JOB																													
		MAILBOX, RELOCATE	EA				5		1		1				1				3	7	1											19
		WOOD POST, REMOVE	JOB																													
		FENCE, REMOVE	LF	533					226	709	722	405	400	196																		3,191
		BLOCK WALL, REMOVE	LF													86	309															395
		RIP RAP, REMOVE	SY	175	358	554	570	712	740	1053	163	52																				4,377
		HEADWALL, REMOVE	EA						1																								1
		MANHOLE CONE, ROTATE PER DETAIL	EA										1	1	1																		3
		HANDRAIL, REMOVE	LF																													
		LANDSCAPE IRRIGATION SYSTEM, REMOVE	LS																													
(8)	M3515045	REMOVE EXISTING LIGHT POLES, PULL BOXES, AND TERMINATE EXISTING CONDUIT PER PLAN	EA																				19	1								20
(10)	M6101801	RELOCATE WATER METER, BOX AND COVER PER COP SUPP. 610.11 AND COP DET P-1363	EA		1											4																5
(9)	M6108007	FIRE HYDRANT, SALVAGE AND DELIVER TO THE CITY OF PHOENIX	EA	1											1	2	1	1	1	1												8
(13)	M6108015	RELOCATE WATER VALVE	EA													1																1
(11)	M6108053	BACKFLOW PREVENTER, RELOCATE	EA											1	1																	2

Registered Professional Engineer
CERTIFICATE NO.
34880
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	6	164	

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ROADWAY SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			G-2.03

ST85100371 G-2_03.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

FOR MAINLINE & CONNECTOR PIPES SEE ALTERNATE PIPE CHART (DWG AP-1.01)

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	7	164	

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PROJECT ENGINEERING CONSULTANTS
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Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer – CERTIFICATE NO. 25972 – MICHAEL V. HEATON – Date Signed – ARIZONA, U.S.A.
EXPIRES 3-31-19

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

STORM DRAIN SUMMARY

	ITEM No.	DESCRIPTION (DESCRIPTION)	UNIT	SHEET NUMBERS SD-2.01	SD-2.02	SD-2.03	SD-2.04	SD-2.05	SD-2.06	SD-2.07	SD-2.08	SD-2.09	SD-2.10	SD-2.11	SD-2.12	SD-2.13	SD-2.14	TOTAL QTY (TOTAL QTY)
	M5051530	CONCRETE CATCH BASIN, TYPE M–1, L=3' PHX. SUPP. DET. P1569–1	EACH													1		1
	M5051531	CONCRETE CATCH BASIN, TYPE M–1, L=3' PHX. SUPP. DET. P1569–2	EACH			3										1		4
	M5051532	CONCRETE CATCH BASIN, TYPE M–2, L=3', PHX. SUPP. DET P1569–1	EACH										2				1	3
	M5051535	CONCRETE CATCH BASIN, TYPE M–1, L=6', PHX. SUPP. DET P1569–1	EACH														1	1
	M5051536	CONCRETE CATCH BASIN, TYPE M–1, L=6' PHX. SUPP. DET. P1569–2	EACH			1	1					1				1	1	5
	M5051540	CONCRETE CATCH BASIN, TYPE M–1, L=10', PHX. SUPP. DET P1569–1	EACH											1				1
	M5051541	CONCRETE CATCH BASIN, TYPE M–1, L=10' PHX. SUPP. DET. P1569–2	EACH		1					2								3
	M5051545	CONCRETE CATCH BASIN, TYPE M–1, L=17', PHX. SUPP. DET P1569–1	EACH										2					2
	M5051546	CONCRETE CATCH BASIN, TYPE M–1, L=17' PHX. SUPP. DET. P1569–2	EACH						2	1	1							4
	M5051550	CONCRETE CATCH BASIN, TYPE M–2, L=6', PHX. SUPP. DET. P1569–1	EACH													1		1
	M5051551	CONCRETE CATCH BASIN, TYPE M–2, L=6' PHX. SUPP. DET. P1569–2	EACH						1				1					2
	M5051556	CONCRETE CATCH BASIN, TYPE M–2, L=10' PHX. SUPP. DET. P1569–2	EACH			1			1							1	2	5
	M5051561	CONCRETE CATCH BASIN, TYPE M–2, L=17' PHX. SUPP. DET. P1569–2	EACH				1											1
	M5051566	CONCRETE CATCH BASIN, TYPE N, SINGLE PHX. SUPP. DET. P1570 WITH CONCRETE APRON PER DETAIL	EACH		1											1	1	3
	M5051580	CONCRETE CATCH BASIN, TYPE P, SINGLE PHX. SUPP. DET. P1571	EACH	1								3	4	1	1			10
	M5051588	CONCRETE CATCH BASIN, TYPE R, PHX. SUPP. DET. P1573	EACH		2					1		1						4
	M5051590	SLOTTED VANE DRAIN INLET PER DETAIL	L.F.		18					6		9						33
45	M6103706	WATERLINE REALIGNMENT, 6" AND 8", CONTINGENT ITEM	EACH										3	1	2	3		9
46	M6103710	WATERLINE REALIGNMENT, 10" AND 12", CONTINGENT ITEM	EACH	1	1													2
	M6180018	18" STORM DRAIN PIPE	L.F.	31	158	223	153		209	128	41	105	123	94	28	191	203	1687
	M6180024	24" STORM DRAIN PIPE	L.F.									28	242	500	350	411	55	1586
	M6180030	30" STORM DRAIN PIPE	L.F.										120					120
	M6180036	36" STORM DRAIN PIPE	L.F.										263					263
	M6180048	48" STORM DRAIN PIPE	L.F.	39	429	500	500	500	400	401	399	479	10					3657
	M6181578	STORM DRAIN LATERAL PIPE CONNECTION, PHX SPECIAL DET P1578	EACH	1													6	7
	M6186010	24"x 24"x 18" PREFAB TEE	EACH										1	2		3		6
	M6186032	36"x 36"x 18" PREFAB TEE	EACH										2					2
	M6186141	48"x 48"x 18" PREFAB TEE	EACH		3	3	2		2			4						14
	M6250005	STORM SEWER MANHOLE, MAG STD DET.522, COP SUPP STD DET. P–1520	EACH	2	1	2	2	1	2	2	1	1	2	1	2	2		21

GENERAL NOTES

1. ALL STORM SEWER MANHOLES ARE TO BE CONSTRUCTED WITHOUT STEPS.
2. CORRUGATED METAL PIPE SHALL BE BEDDED WITH SELECT MATERIAL, TYPE "B" PER SECTION 702 IN ACCORDANCE WITH M.A.G. DETAIL 510 ON NON F.H.W.A. PROJECTS, AND IN ACCORDANCE WITH SPECIAL DETAIL 233A ON F.H.W.A. PROJECTS.
3. PIPE CONNECTIONS TO EXISTING CONC PIPE MAINS SHALL BE MADE IN ACCORDANCE WITH DETAILS CALLED OUT ON THE PLANS. CONNECTION TO MAINS SHALL NOT BE CLOSER THAN 5', CENTER TO CENTER.
4. PIPE CONNECTIONS TO NEW AND/OR EXISTING CORRUGATED PIPE MAINS SHALL BE MADE IN ACCORDANCE WITH M.A.G. DETAIL 510.
5. PIPE CONNECTIONS TO NEW PRECAST CONC PIPE MAINS, SHALL BE MADE WITH 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 CONC PIPE MAINS SHALL BE MADE PER C.O.P. DETAIL P–1576.
6. 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°. THE BEND SHALL BE MADE ACCORDING TO M.A.G. DETAIL 505.
7. CONNECTOR PIPES SHALL CONNECT TO CATCH BASIN WALLS AT AN ANGLE NOT TO EXCEED 22–1/2° FROM PERPENDICULAR.
8. FACILITIES WHICH ARE NOT SPECIFICALLY LOCATED WITH ACTUAL VERTICAL AND HORIZONTAL CONTROLS, ARE LOCATED ONLY APPROXIMATELY AND TO THE BEST AVAILABLE INFORMATION PROVIDED BY VARIOUS OWNERS OF THE FACILITIES, 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.
9. DURING CONSTRUCTION, THE CONTRACTOR SHALL CONTACT BLUESTAKE TO FIND AND FLAG UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CONTACT OTHER APPROPRIATE UTILITIES DIRECTLY IF THEY ARE NOT ON BLUESTAKE SYSTEM.
10. VERTICAL CONTROL IS BASED ON NATIONAL GEODETIC SURVEY.
11. REINFORCED AND NON–REINFORCED CONC PIPE SHALL BE BEDDED IN ACCORDANCE WITH DETAIL SHOWN ON THESE PLANS, OR M.A.G. SPECIFICATIONS, WHICHEVER APPLIES.
12. ASBESTOS CEMENT PIPE SHALL BE BEDDED IN ACCORDANCE WITH DETAIL SHOWN ON THESE PLANS OR M.A.G. STANDARD SPECIFICATION WHICHEVER APPLIES.
13. STATIONING OF CATCH BASINS ARE FROM THE CENTERLINE OF THE STREET TO THE CENTERLINE OF THE CATCH BASIN, UNLESS OTHERWISE SPECIFIED.
14. ELEVATIONS SHOWN FOR CATCH BASINS ARE AT TOP OF THE PROPOSED CURB AT THE CENTERLINE OF THE CATCH BASIN, UNLESS OTHERWISE SPECIFIED.
15. SANITARY SEWER MAINS AND TAPS CROSSING OVER STORM DRAIN SHALL BE SUPPORTED PER M.A.G. DETAIL 403–1 OR 403–2. OTHER UTILITIES SHALL BE SUPPORTED PER M.A.G. DETAIL 403–1, 403–2 OR 403–3 AS NOTED ON THE PLANS OR AS REQUIRED BY THE ENGINEER.
16. CATCH BASIN ACCESS FRAME AND COVERS SHALL BE CONSTRUCTED PER C.O.P. DETAIL P–1561 OR P–1577.

"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."

STORM DRAIN SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			G–2.04

ST85100371 G–2_04.DWG

AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

	ITEM No.	D E S C R I P T I O N	UNIT	SHEET NUMBERS																								TOTAL QTY
(X)		(DESCRIPTION)	(UNIT)	SL-1.01	SL-1.02	SL-1.03	SL-1.04																					(TOTAL QTY)
(1)	M3515085	FURNISH AND INSTALL 113 WATT LED STREET LIGHT PER COP STREET LIGHTING PROCEDURES, STANDARDS, AND SPECIFICATIONS MANUAL, LATEST EDITION	EA	18	20	18	2																					58
(2)	M3515075	FURNISH AND INSTALL 60 WATT LED STREET LIGHT PER COP STREET LIGHTING PROCEDURES, STANDARDS, AND SPECIFICATIONS MANUAL, LATEST EDITION	EA	0	0	7	0																					7
(3)	M6014900	TRENCHING FOR STREET LIGHT CIRCUIT	LF	3,615	4,030	5,420	650																					13,715
(4)	M3513140	4" PVC ELECTRICAL CONDUIT	LF	1,780	1,985	1,850	280																					5,895
		FURNISH AND INSTALL HOUSE SIDE SHIELD ON LUMINAIRE	EA	0	0	1	0																					1

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
44464
SHANTHI M. KRISHNAN
Date Signed 7/31/18
ARIZONA, U.S.A.
EXPIRES: 6/30/18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	8	164

CONSULTING ENGINEER

DES	SMT	DR:	SMT	CK:	SMK	DATE:	07/16

JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003

Two working days before you dig.
CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center
CALL COLLECT

"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."

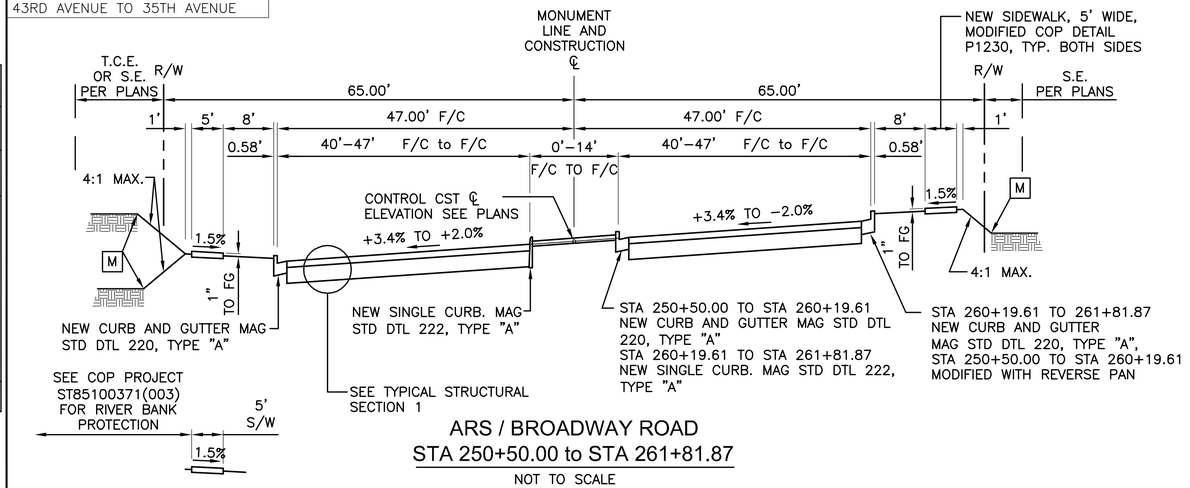
STREET LIGHTING SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

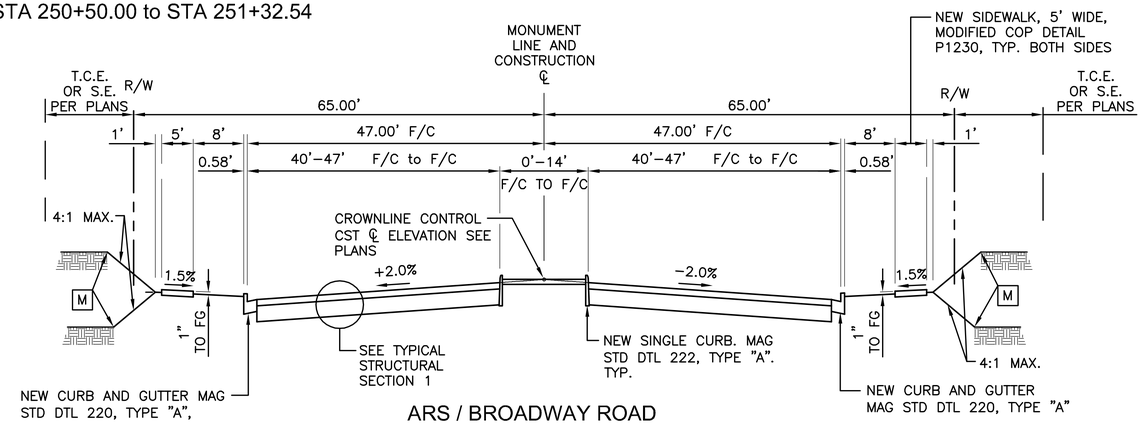
DR: SMT	DES: SMT	CK: SMK	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: N/A			G-2.05

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

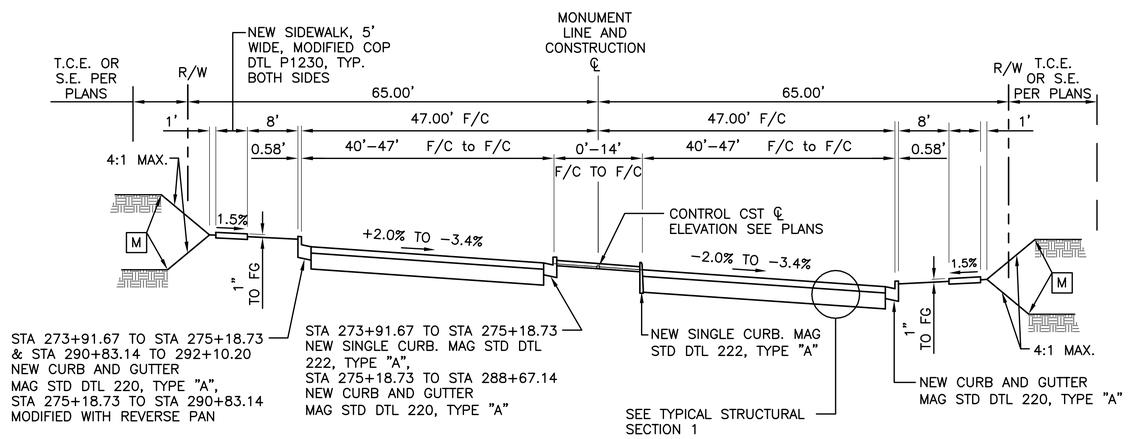


ARS / BROADWAY ROAD
STA 250+50.00 to STA 261+81.87
NOT TO SCALE

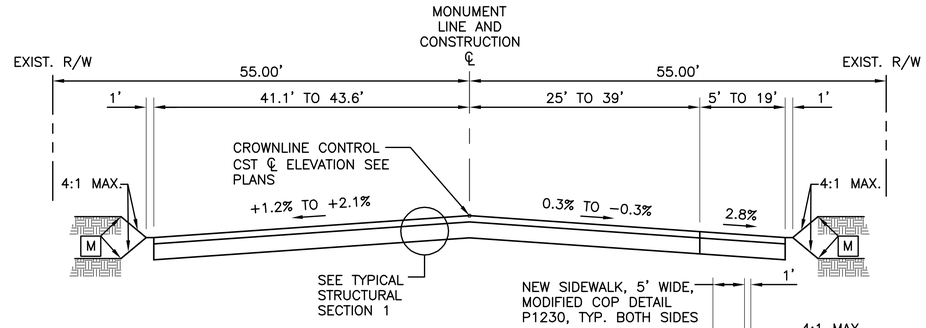
STA 250+50.00 to STA 251+32.54



ARS / BROADWAY ROAD
STA 261+81.87 to STA 273+91.67
NOT TO SCALE

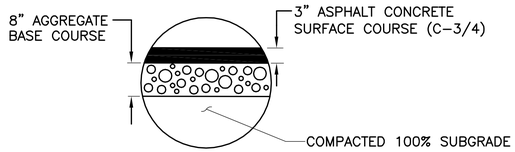


ARS / BROADWAY ROAD
STA 273+91.67 to STA 288+67.14
NOT TO SCALE

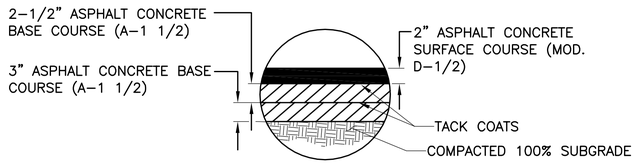


43RD AVENUE
STA 17+85.00 to STA 20+00.00
NOT TO SCALE

STA 18+66.46 to STA 19+35.29



TYPICAL STRUCTURAL SECTION 2
NOT TO SCALE



TYPICAL STRUCTURAL SECTION 1
NOT TO SCALE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer — CERTIFICATE NO. 34880 — MARK LEE — Date Signed — ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	9	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			G–3.01

ST85100371 G–3_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

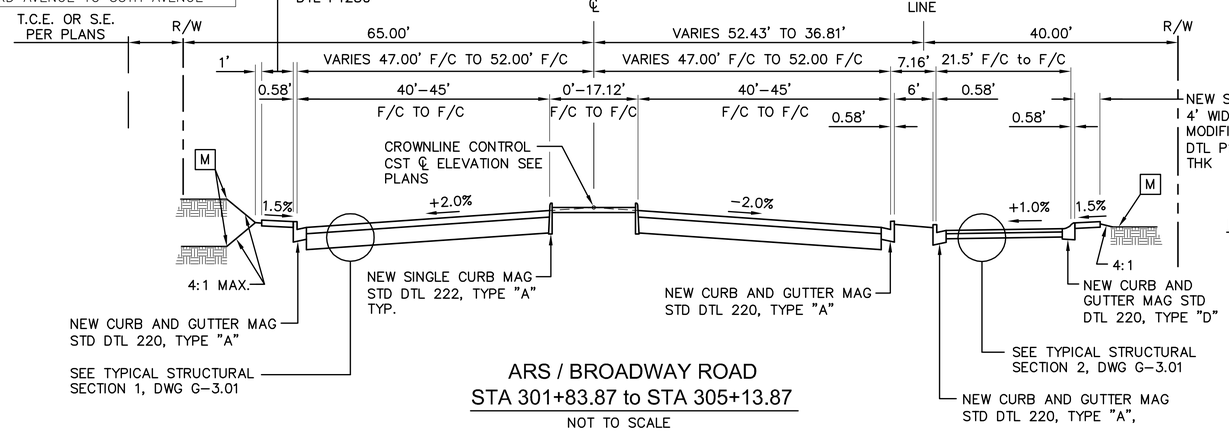
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	10	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

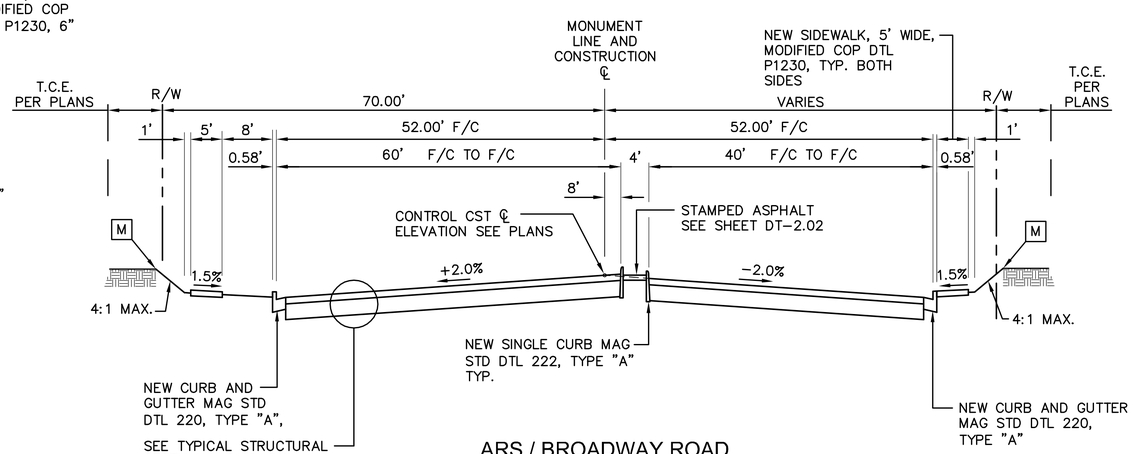
Registered Professional Engineer CERTIFICATE NO. 34880 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



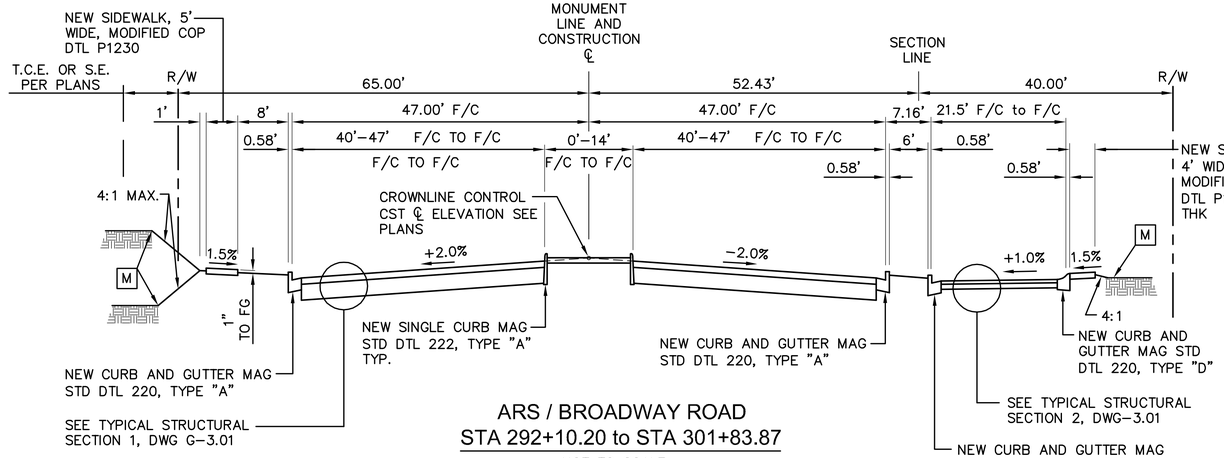
ARS / BROADWAY ROAD
STA 301+83.87 to STA 305+13.87
NOT TO SCALE



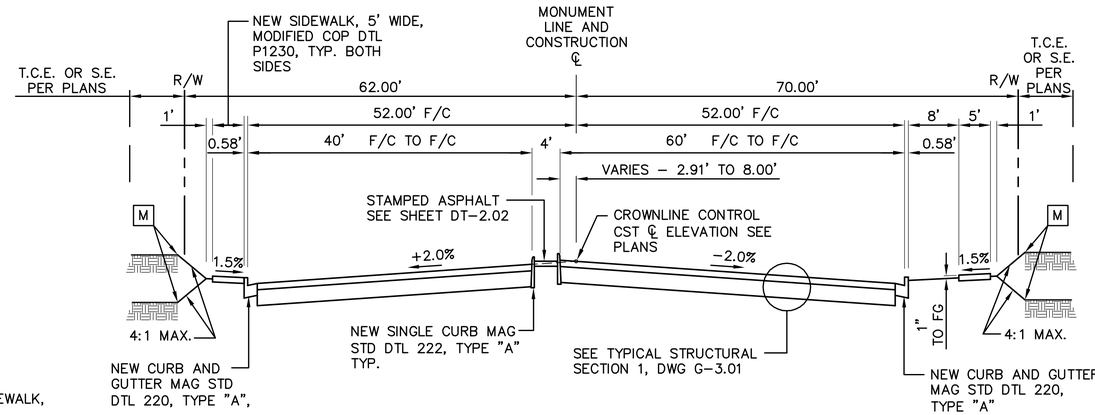
ARS / BROADWAY ROAD
STA 309+18.55 to STA 311+41.02
NOT TO SCALE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



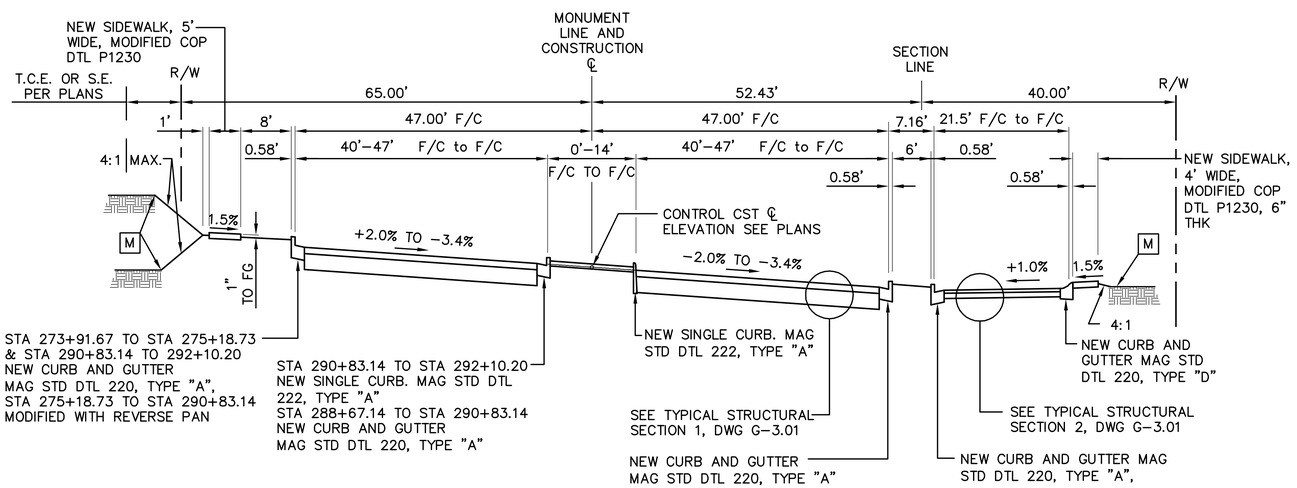
ARS / BROADWAY ROAD
STA 292+10.20 to STA 301+83.87
NOT TO SCALE



ARS / BROADWAY ROAD
STA 305+13.87 to STA 307+63.94
NOT TO SCALE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



ARS / BROADWAY ROAD
STA 288+67.14 to STA 292+10.20
NOT TO SCALE

"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

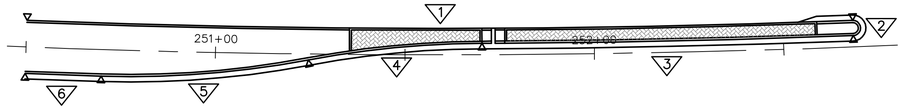
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			G–3.02

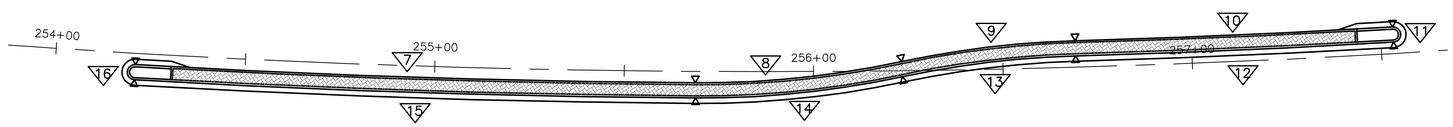
ST851003371 G–3_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



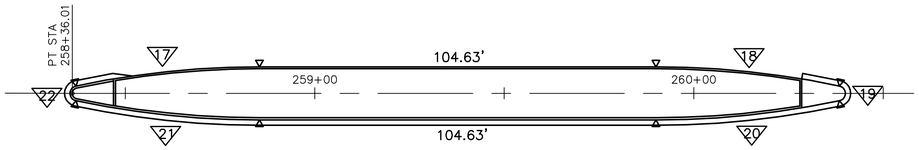
CURVE DATA

CURVE	1	2	3	4	5	6
△	04°22'09"	180°00'00"	01°57'45"	10°27'41"	12°28'04"	00°24'03"
RADIUS	2857.79'	2.00'	2861.79'	252.50'	252.50'	2871.79'
TANGENT	109.02'	–	49.01'	23.12'	27.58'	10.04'
LENGTH	217.93'	6.28'	98.02'	46.10'	54.94'	20.08'



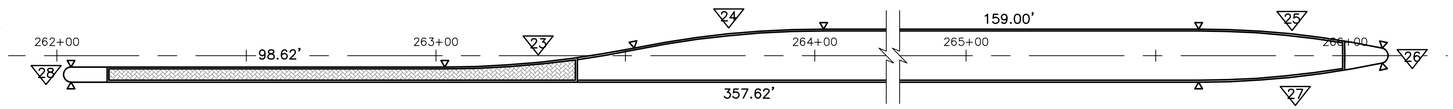
CURVE DATA

CURVE	7	8	9	10	11	12	13	14	15	16
△	2°57'17"	12°28'09"	10°27'37"	1°40'55"	180°00'00"	1°40'55"	10°27'41"	12°28'04"	2°57'27"	180°00'00"
RADIUS	2867.79'	252.50'	252.50'	2857.79'	2.00'	2861.79'	252.50'	252.50'	2871.79'	2.00'
TANGENT	73.96'	27.58'	23.11'	41.95'	–	42.00'	23.12'	27.58'	74.14'	–
LENGTH	147.89'	54.95'	46.10'	83.89'	6.28'	84.00'	46.10'	54.94'	148.24'	6.28'



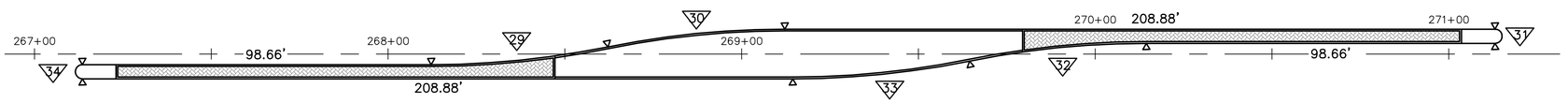
CURVE DATA

CURVE	17	18	19	20	21	22
△	11°53'37"	11°53'37"	156°12'45"	11°53'37"	11°53'37"	156°12'45"
RADIUS	234.90'	234.90'	2.00'	234.90'	234.90'	2.00'
TANGENT	24.47'	24.47'	9.50'	24.47'	24.47'	9.50'
LENGTH	48.76'	48.76'	5.45'	48.76'	48.76'	5.45'



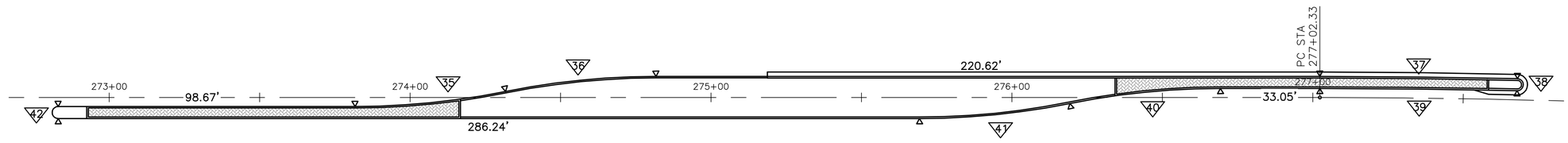
CURVE DATA

CURVE	23	24	25	26	27	28
△	11°25'16"	11°25'16"	11°53'37"	156°12'45"	11°53'37"	180°00'00"
RADIUS	252.50'	252.50'	234.90'	2.00'	234.90'	2.00'
TANGENT	25.25'	25.25'	24.47'	9.50'	24.47'	–
LENGTH	50.33'	50.33'	48.76'	5.45'	48.76'	6.28'



CURVE DATA

CURVE	29	30	31	32	33	34
△	11°25'16"	11°25'16"	180°00'00"	11°25'16"	11°25'16"	180°00'00"
RADIUS	252.50'	252.50'	2.00'	252.50'	252.50'	2.00'
TANGENT	25.25'	25.25'	–	25.25'	25.25'	–
LENGTH	50.33'	50.33'	6.28'	50.33'	50.33'	6.28'



CURVE DATA

CURVE	35	36	37	38	39	40	41	42
△	11°25'16"	11°25'16"	1°18'36"	180°00'00"	01°18'36"	11°25'16"	11°25'16"	180°00'00"
RADIUS	252.50'	252.50'	2871.79'	2.00'	2867.79'	252.50'	252.50'	2.00'
TANGENT	25.25'	25.25'	32.83'	INFINITE	32.79'	25.25'	25.25'	INFINITE
LENGTH	50.33'	50.33'	65.66'	6.28'	65.57'	50.33'	50.33'	6.28'

Registered Professional Engineer
CERTIFICATE NO.
34880
MARK V. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	11	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS

"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."

MEDIAN ISLAND GEOMETRIC SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			G-4.01

ST85100371 G-4_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

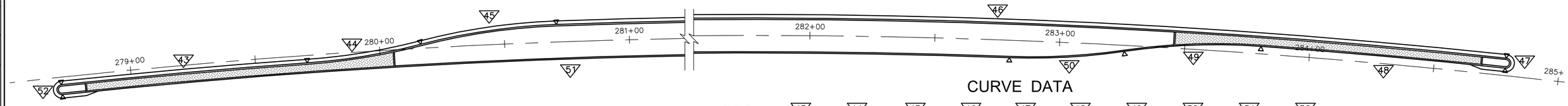
Registered Professional Engineer
CERTIFICATE NO.
34880
MARK V. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003 71(004)	12	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

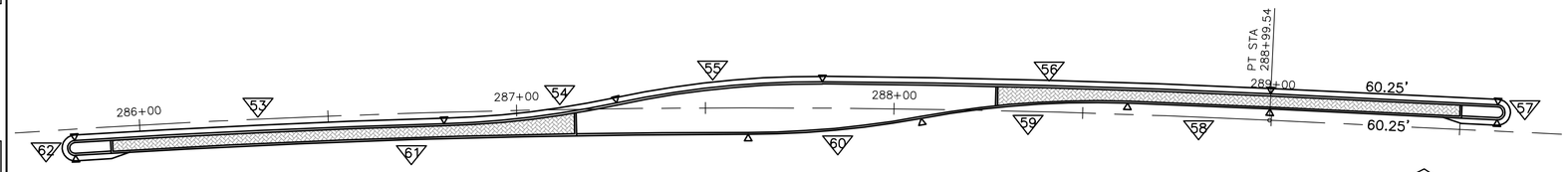
NO.	DESCRIPTION	REV BY	CKD BY	DATE



CURVE DATA

CURVE	43	44	45	46	47	48	49	50	51	52
△	01°58'38"	10°27'41"	12°28'04"	08°09'01"	180°00'00"	01°57'39"	12°27'47"	10°27'18"	08°09'54"	180°00'00"
RADIUS	2861.79'	252.50'	252.50'	2871.79'	2.00'	2867.87'	252.50'	252.50'	2857.79'	2.00'
TANGENT	49.39'	23.12'	27.58'	204.60'	–	49.08'	27.57'	23.10'	203.97'	–
LENGTH	98.76'	46.10'	54.94'	408.52'	6.28'	98.15'	54.92'	46.07'	407.25'	6.28'

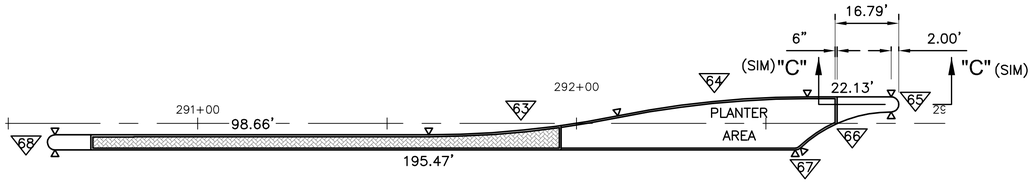
N



CURVE DATA

CURVE	53	54	55	56	57	58	59	60	61	62
△	01°57'45"	10°27'41"	12°28'03"	02°22'16"	180°00'00"	00°45'18"	12°28'09"	10°27'37"	03°34'34"	180°00'00"
RADIUS	2861.87'	252.50'	252.50'	2871.79'	2.00'	2867.79'	252.50'	252.50'	2857.79'	2.00'
TANGENT	49.02'	23.12'	27.58'	59.43'	–	18.89'	27.58'	23.11'	89.21'	–
LENGTH	98.03'	46.10'	54.94'	118.84'	6.28'	37.78'	54.95'	46.10'	178.37'	6.28'

N



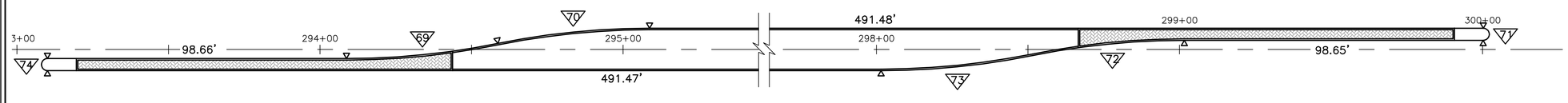
CURVE DATA

CURVE	63	64	65	66	67	68
△	11°25'16"	11°25'16"	179°57'06"	43°07'21"	43°08'11"	180°14'52"
RADIUS	252.50'	252.50'	2.00'	35.00'	2.00'	2.00'
TANGENT	25.25'	25.25'	INFINITE	13.83'	0.79'	INFINITE
LENGTH	50.33'	50.33'	6.28'	26.34'	1.51'	6.29'

N

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



CURVE DATA

CURVE	69	70	71	72	73	74
△	11°25'16"	11°25'16"	180°00'00"	11°25'16"	11°25'16"	180°00'00"
RADIUS	252.50'	252.50'	2.00'	252.50'	252.50'	2.00'
TANGENT	25.25'	25.25'	–	25.25'	25.25'	–
LENGTH	50.33'	50.33'	6.28'	50.33'	50.33'	6.28'

N

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS

"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."

MEDIAN ISLAND GEOMETRIC SHEET

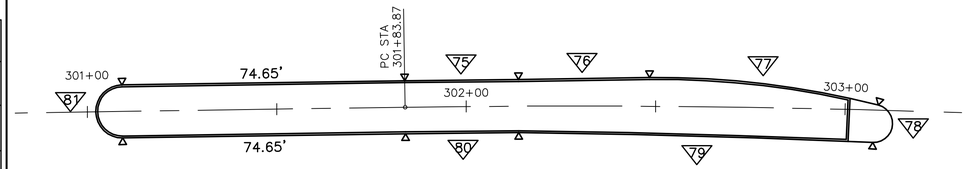
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			G–4.02

ST85100371 G-4_02.DWG

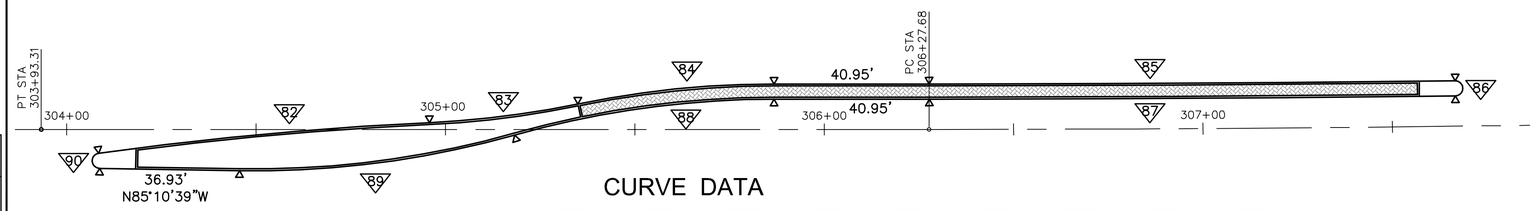
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

CURVE	75	76	77	78	79	80	81
△	0°34'19"	00°39'31"	14°52'34"	168°09'54"	1°47'26"	0°34'19"	180°00'00"
RADIUS	3007.00'	3008.04'	234.90'	5.00'	2991.13'	2993.00'	7.00'
TANGENT	15.01'	17.29'	30.67'	48.24'	46.74'	14.94'	INFINITE
LENGTH	30.02'	34.58'	60.99'	14.66'	93.48'	29.88'	21.99'

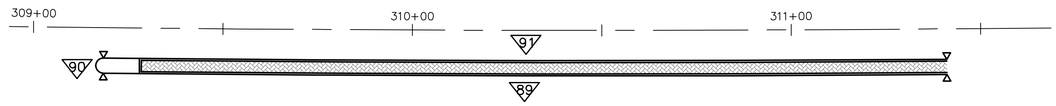
N



CURVE DATA

CURVE	82	83	84	85	86	87	88	89	90
△	05°12'33"	08°57'53"	11°38'24"	00°41'42"	180°00'00"	00°41'42"	15°43'23"	16°40'51"	171°09'28"
RADIUS	964.90'	252.50'	256.50'	11447.16'	2.00'	11451.16'	252.50'	252.50'	2.00'
TANGENT	43.89'	19.79'	26.14'	69.44'	–	69.47'	34.86'	37.02'	25.87'
LENGTH	87.72'	39.51'	52.11'	138.88'	6.28'	138.93'	69.29'	73.51'	5.97'

N



CURVE DATA

CURVE	89	90	91
△	01°06'45"	180°00'00"	01°06'45"
RADIUS	11471.16'	2.00'	11467.16'
TANGENT	111.36'	–	111.32'
LENGTH	222.71'	6.28'	222.63'

N

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS

"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."

MEDIAN ISLAND GEOMETRIC SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			G–4.03

ST85100371 G-4_03.DWG

Registered Professional Engineer CERTIFICATE NO. 34880 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	13	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	14	164	

Registered Professional Engineer – CERTIFICATE NO. 34989 – MARK V. LEE – Date Signed – ARIZONA, U.S.A. – EXPIRES 3-31-18

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REVISION BY CITY OF PHOENIX

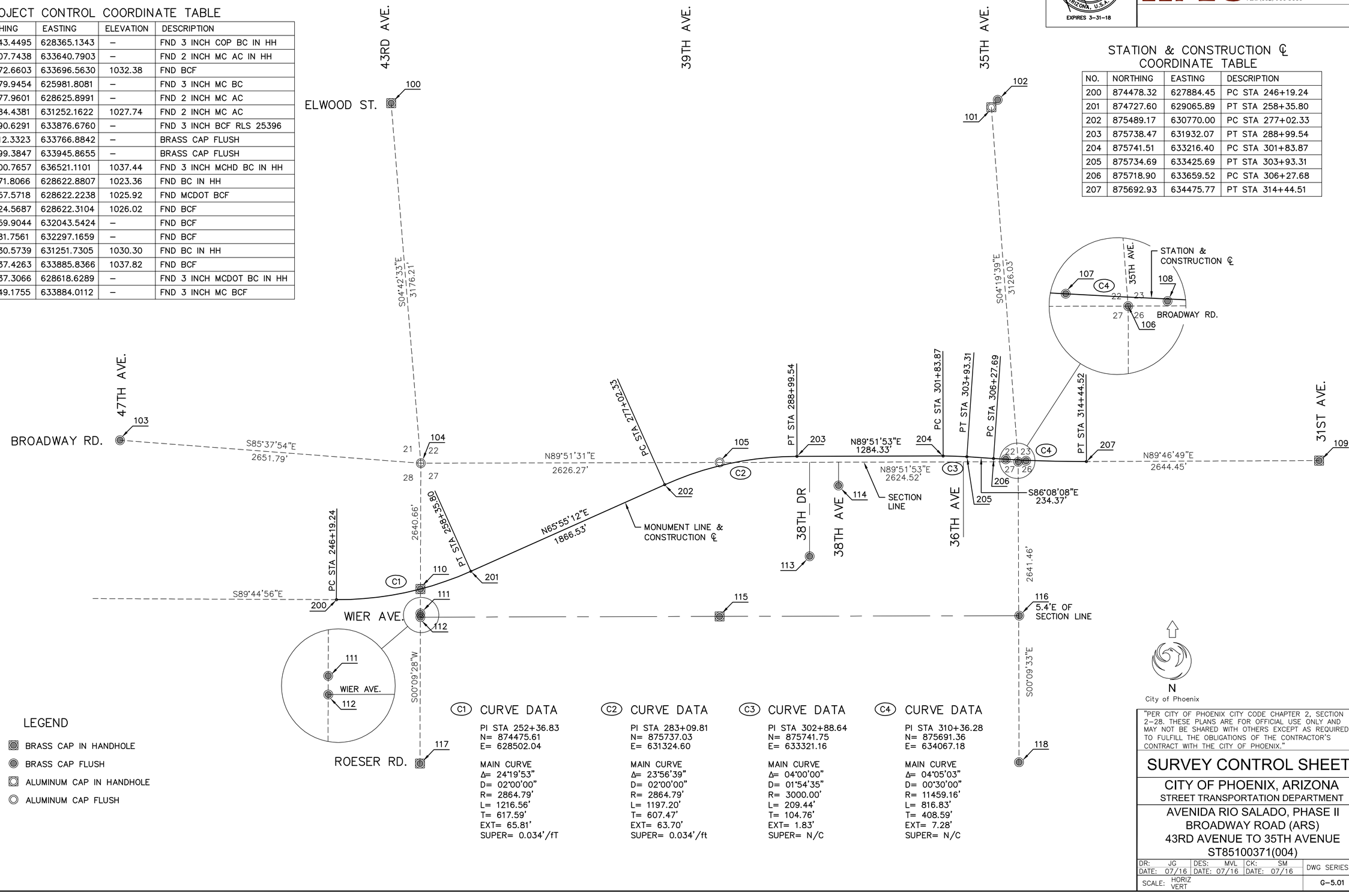
NO.	DESCRIPTION	REV. BY	CKD. BY	DATE

PROJECT CONTROL COORDINATE TABLE

NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
100	878843.4495	628365.1343	–	FND 3 INCH COP BC IN HH
101	878807.7438	633640.7903	–	FND 2 INCH MC AC IN HH
102	878872.6603	633696.5630	1032.38	FND BCF
103	875879.9454	625981.8081	–	FND 3 INCH MC BC
104	875677.9601	628625.8991	–	FND 2 INCH MC AC
105	875684.4381	631252.1622	1027.74	FND 2 INCH MC AC
106	875690.6291	633876.6760	–	FND 3 INCH BCF RLS 25396
107	875712.3323	633766.8842	–	BRASS CAP FLUSH
108	875699.3847	633945.8655	–	BRASS CAP FLUSH
109	875700.7657	636521.1101	1037.44	FND 3 INCH MCHD BC IN HH
110	874571.8066	628622.8807	1023.36	FND BC IN HH
111	874357.5718	628622.2238	1025.92	FND MCDOT BCF
112	874324.5687	628622.3104	1026.02	FND BCF
113	874859.9044	632043.5424	–	FND BCF
114	875481.7561	632297.1659	–	FND BCF
115	874330.5739	631251.7305	1030.30	FND BC IN HH
116	874337.4263	633885.8366	1037.82	FND BCF
117	873037.3066	628618.6289	–	FND 3 INCH MCDOT BC IN HH
118	873049.1755	633884.0112	–	FND 3 INCH MC BCF

STATION & CONSTRUCTION ℄ COORDINATE TABLE

NO.	NORTHING	EASTING	DESCRIPTION
200	874478.32	627884.45	PC STA 246+19.24
201	874727.60	629065.89	PT STA 258+35.80
202	875489.17	630770.00	PC STA 277+02.33
203	875738.47	631932.07	PT STA 288+99.54
204	875741.51	633216.40	PC STA 301+83.87
205	875734.69	633425.69	PT STA 303+93.31
206	875718.90	633659.52	PC STA 306+27.68
207	875692.93	634475.77	PT STA 314+44.51



LEGEND

- BRASS CAP IN HANDHOLE
- BRASS CAP FLUSH
- ALUMINUM CAP IN HANDHOLE
- ALUMINUM CAP FLUSH

C1 CURVE DATA
PI STA 252+36.83
N= 874475.61
E= 628502.04

MAIN CURVE
Δ= 24°19'53"
D= 02°00'00"
R= 2864.79'
L= 1216.56'
T= 617.59'
EXT= 65.81'
SUPER= 0.034'/ft

C2 CURVE DATA
PI STA 283+09.81
N= 875737.03
E= 631324.60

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft

C3 CURVE DATA
PI STA 302+88.64
N= 875741.75
E= 633321.16

MAIN CURVE
Δ= 04°00'00"
D= 01°54'35"
R= 3000.00'
L= 209.44'
T= 104.76'
EXT= 1.83'
SUPER= N/C

C4 CURVE DATA
PI STA 310+36.28
N= 875691.36
E= 634067.18

MAIN CURVE
Δ= 04°05'03"
D= 00°30'00"
R= 11459.16'
L= 816.83'
T= 408.59'
EXT= 7.28'
SUPER= N/C

N
City of Phoenix

"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."

SURVEY CONTROL SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

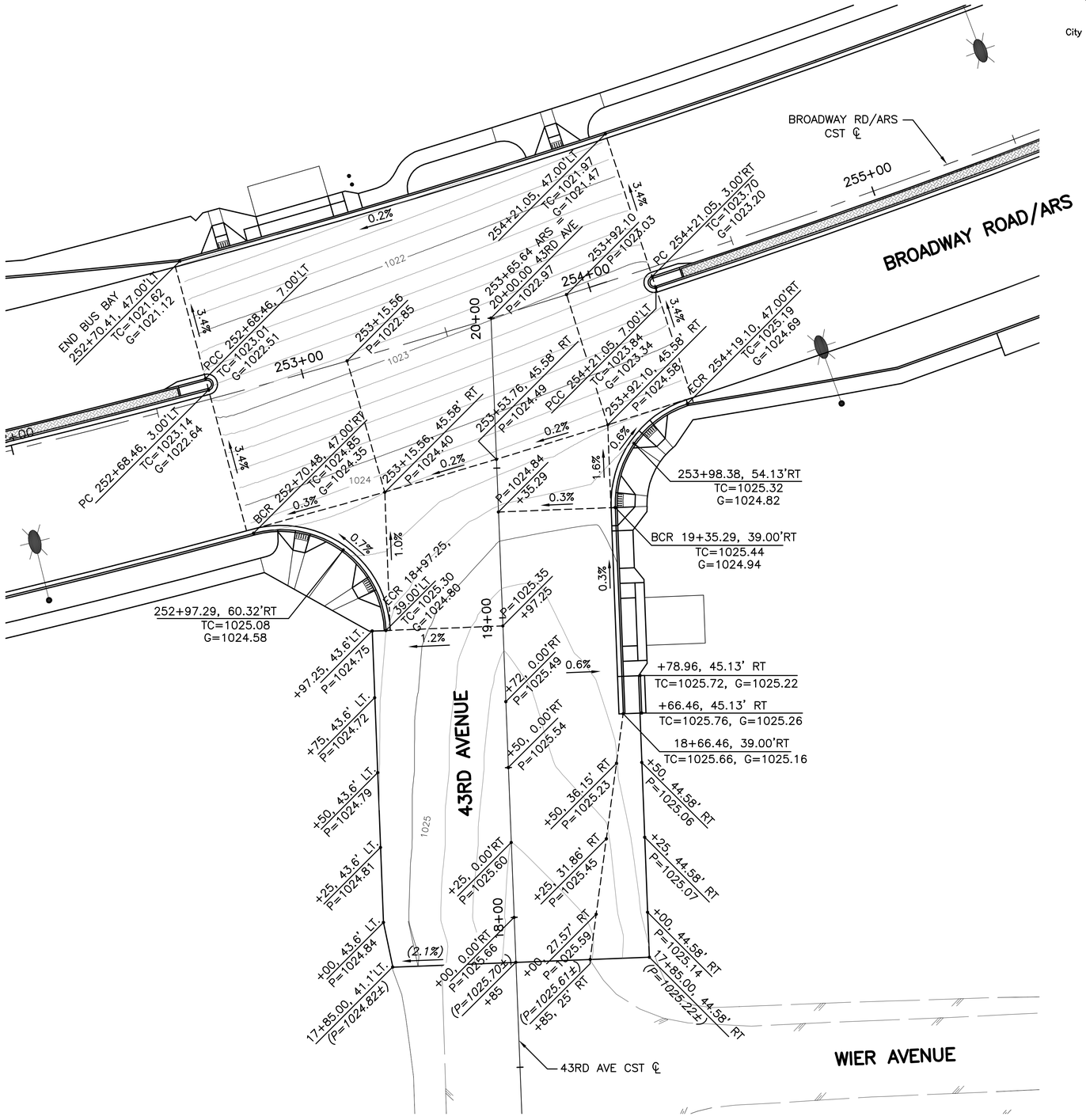
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ / VERT			G-5.01

ST85100371 G-5_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

N
City of Phoenix



(P=1035.58) EXISTING SURFACE ELEVATION

P=1035.64 NEW SURFACE ELEVATION

(0.76%) EXISTING SLOPE

0.7% NEW SLOPE

SHEET REFERENCES

1. SEE SHEET P–1.01 FOR PAVING PLAN

"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."

INTERSECTION WORKSHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			G–6.01

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed 11-17-16 ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	15	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

ST85100371 G–6_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

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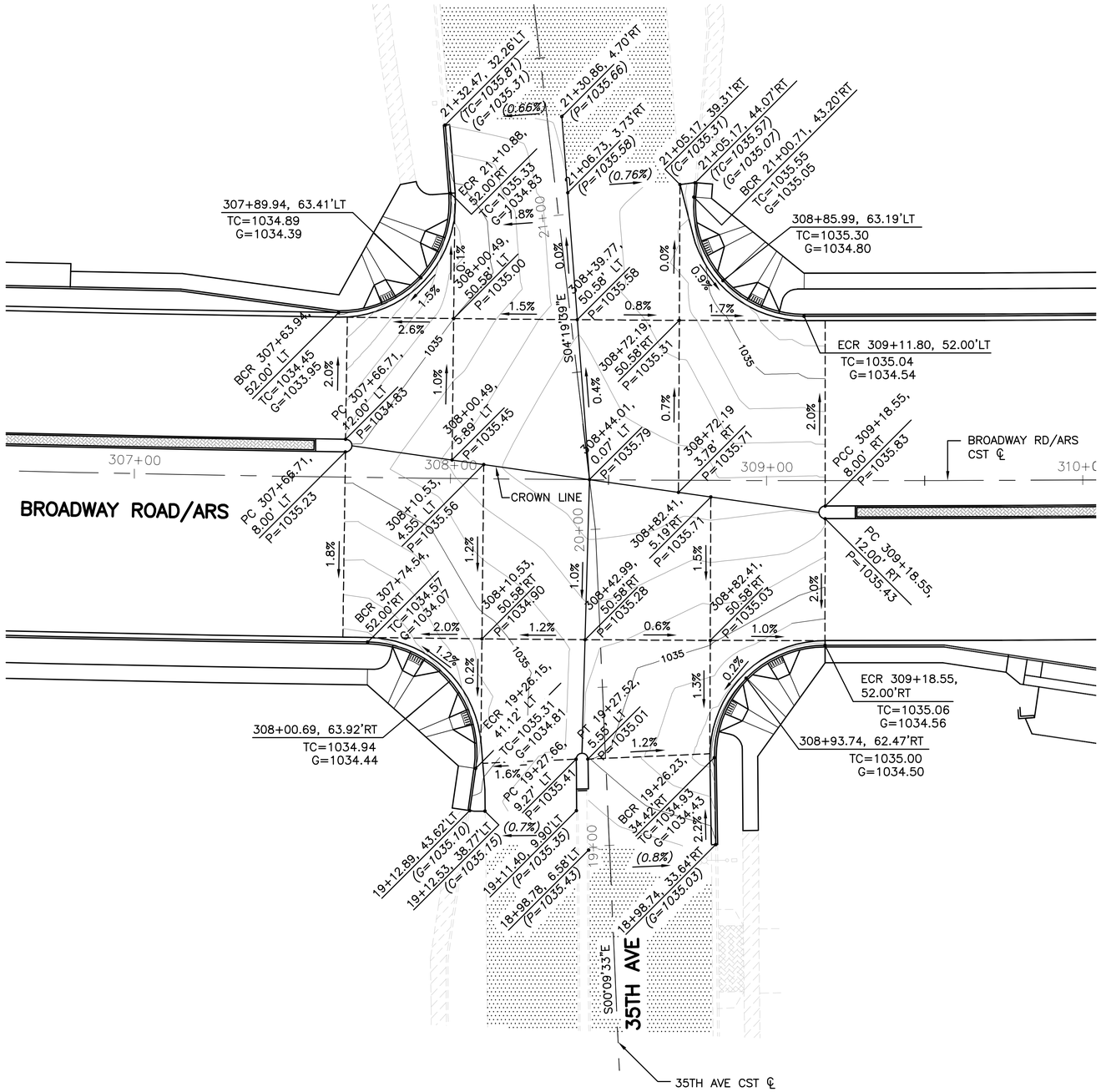
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



N
City of Phoenix

(P=1035.58) EXISTING SURFACE ELEVATION

P=1035.64 NEW SURFACE ELEVATION

(0.76%) EXISTING SLOPE

0.7% NEW SLOPE

SHEET REFERENCES

1. SEE SHEET P–1.17 FOR PAVING PLAN

"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."

INTERSECTION WORKSHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			G–6.02

ST85100371 G–6_02.DWG

Registered Professional Engineer (Civil) CERTIFICATE NO. 34560 MARK V. LEE I hereby certify that this item was prepared by me or under my direct supervision. ARIZONA, U.S.A. EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	16	164	

PEC PROJECT ENGINEERING CONSULTANTS
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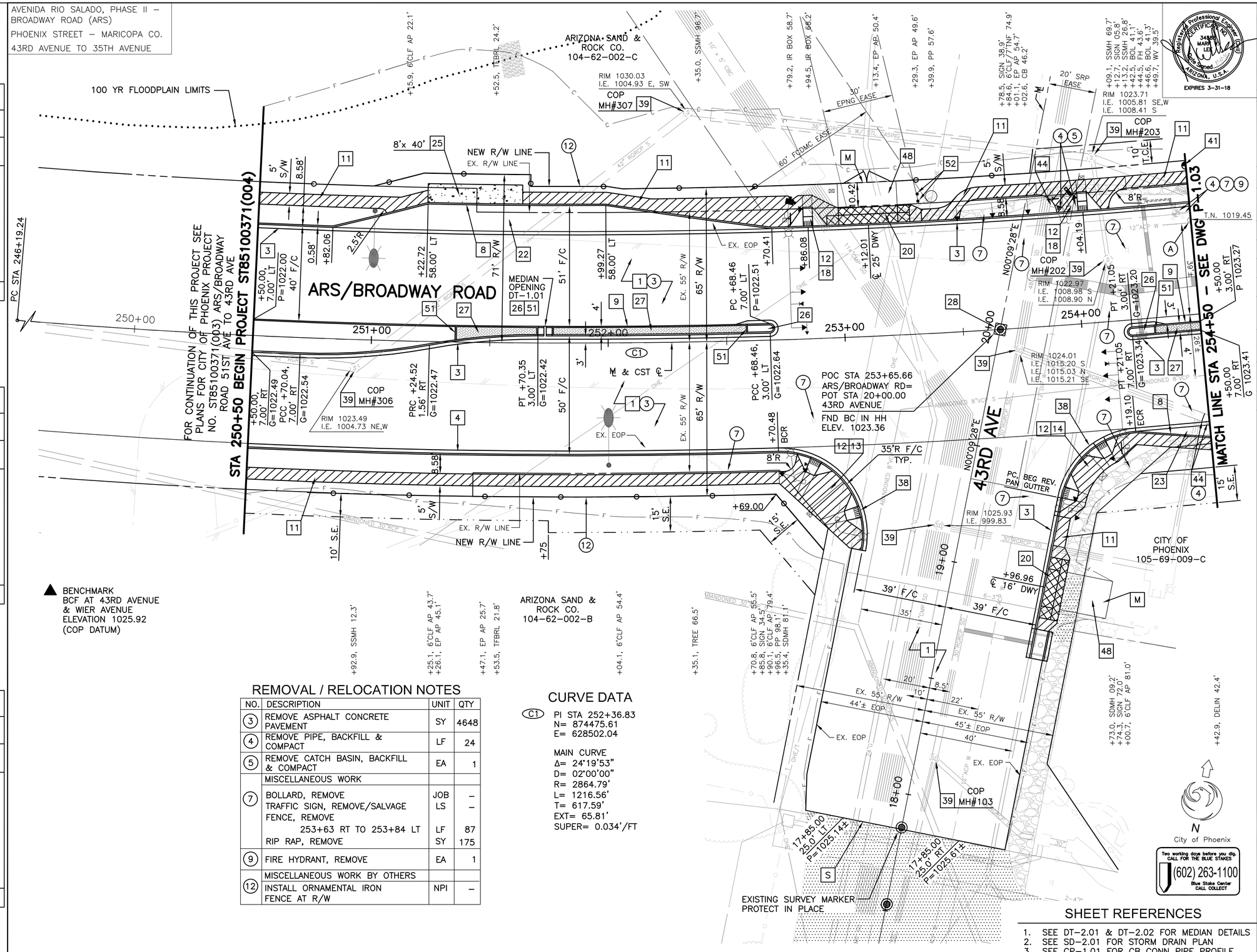
Fax: (602) 906-3080

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



▲ BENCHMARK
BCF AT 43RD AVENUE & WIER AVENUE
ELEVATION 1025.92
(COP DATUM)

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
(3)	REMOVE ASPHALT CONCRETE PAVEMENT	SY	4648
(4)	REMOVE PIPE, BACKFILL & COMPACT	LF	24
(5)	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	1
(7)	MISCELLANEOUS WORK		
	BOLLARD, REMOVE	JOB	–
	TRAFFIC SIGN, REMOVE/SALVAGE	LS	–
	FENCE, REMOVE 253+63 RT TO 253+84 LT	LF	87
	RIP RAP, REMOVE	SY	175
(9)	FIRE HYDRANT, REMOVE	EA	1
(12)	MISCELLANEOUS WORK BY OTHERS		
	INSTALL ORNAMENTAL IRON FENCE AT R/W	NPI	–

CURVE DATA

(C1) PI STA 252+36.83
N= 874475.61
E= 628502.04

MAIN CURVE
Δ= 24°19'53"
D= 02°00'00"
R= 2864.79'
L= 1216.56'
T= 617.59'
EXT= 65.81'
SUPER= 0.034'/FT

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.01 FOR STORM DRAIN PLAN
3. SEE CP-1.01 FOR CB CONN PIPE PROFILE
4. SEE P-1.02 FOR PAVING PROFILE
5. SEE G-6.01 FOR INTERSECTION WORKSHEET
6. SEE DT-3.01 FOR DRIVEWAY PROFILES
7. SEE SL-1.01 FOR STREET LIGHT PLANS

N
City of Phoenix

Two working days before you dig CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	17	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	5426
	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	611
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1679
	TACK COAT	TON	5
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	555
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	224
8	SINGLE CURB, MAG STD DET 222, TYPE 'A', MODIFIED FOR BUS BAY	LF	219
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	218
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	2936
12	TRUNCATED DOMES, COP STD DET P1232	SF	60
13	CONC SIDEWALK, 9" THICK	SF	706
	CURB RAMP, 35' RADII, COP STD DET P1235		
14	CONC SIDEWALK, 9" THICK	SF	425
	CURB RAMP, 35' RADII, COP STD DET P1236		
18	CURB RAMP, MID BLOCK WITH DETACHED SIDEWALK, COP STD DET P1241-2	SF	703
20	DRIVEWAY ENTRANCE – TYPE 1, COP STD DETAIL P1255-1, 9" THICK	SF	438
22	CONCRETE PAVEMENT, 9" THICK	SF	1782
	BUS BAY, TYPE I, COP STD DETAIL P1256-1		
23	CONCRETE PAVEMENT, 9" THICK	SF	122
	BUS BAY, TYPE I, COP STD DET P1256-1, MOD. WITH NO FLOWLINE DEPRESSION		
25	BUS SHELTER / ACCESSORY PAD, COP STANDARD DETAIL P1260	SF	320
26	CONCRETE MEDIAN NOSE	SF	75
27	STAMPED ASPHALT PAVEMENT	SF	424
	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
28	SURVEY MARKER, MAG STD DETAIL 120-1, TYPE 'A'	EA	1
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6". 9" THICK	LF	109
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD. DET. P1422	EA	6
	6" D.I.P., RESTRAINED	LF	28
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
44	PIPE PLUG, MAG STD DET 427	EA	2
48	AGGREGATE BASE CONN. (6" THK)	TON	19
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	18
52	BOLLARD, SEE DETAIL 8 ON SHEET DT-1.04	EA	2
(A)	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391-1	EA	1

"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."

PAVING PLAN SHEET
STA 250+50 TO STA 254+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.01

ST85100371 P-1_01.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CK'D BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

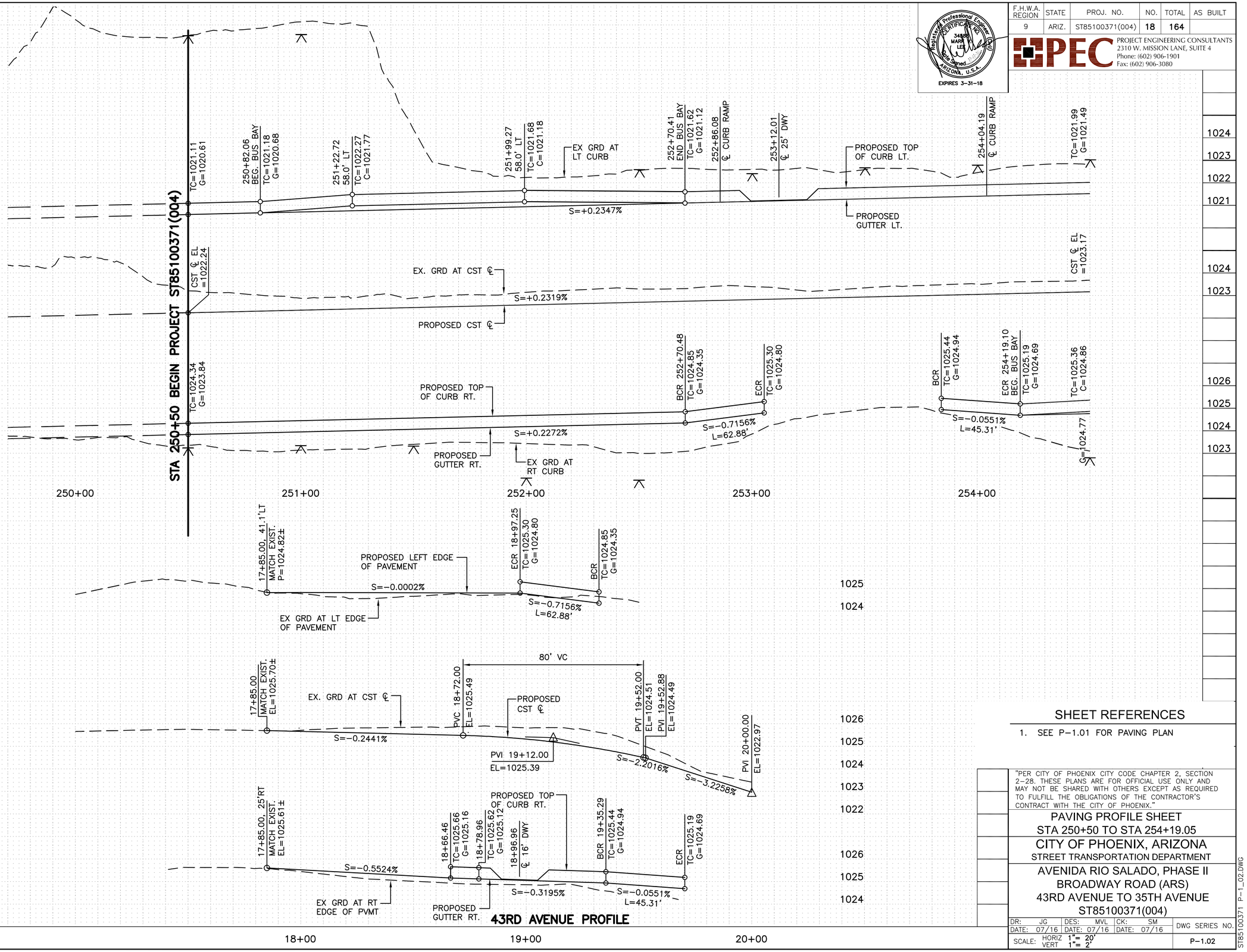
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	18	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080



43RD AVENUE PROFILE

SHEET REFERENCES

1. SEE P-1.01 FOR PAVING PLAN

"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."

PAVING PROFILE SHEET
STA 250+50 TO STA 254+19.05

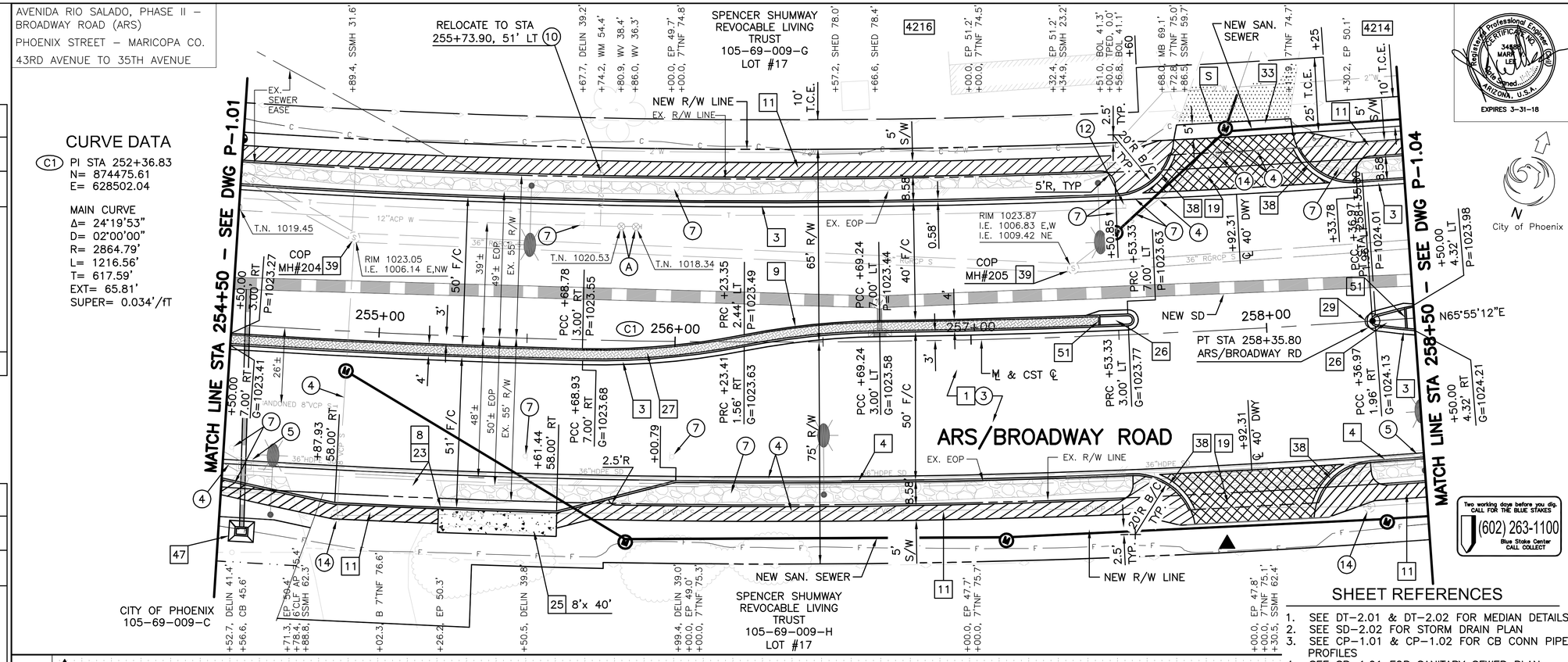
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

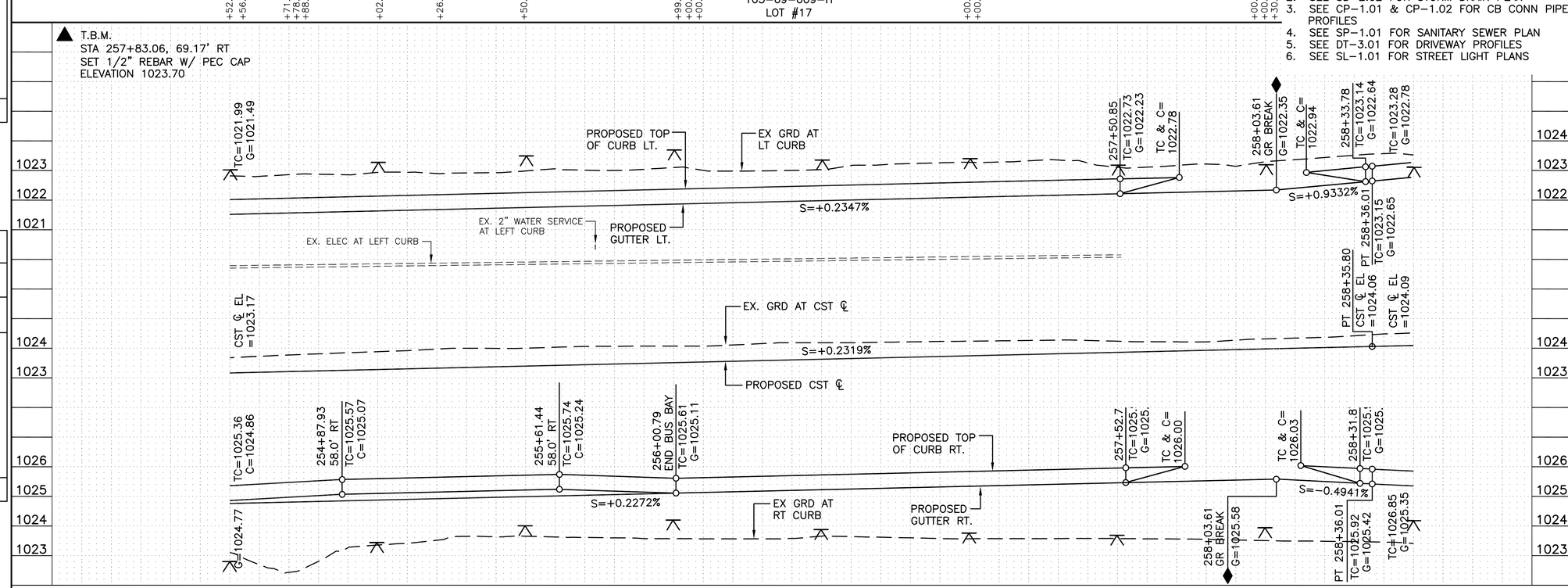
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.02

ST85100371 P-1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.02 FOR STORM DRAIN PLAN
3. SEE CP–1.01 & CP–1.02 FOR CB CONN PIPE PROFILES
4. SEE SP–1.01 FOR SANITARY SEWER PLAN
5. SEE DT–3.01 FOR DRIVEWAY PROFILES
6. SEE SL–1.01 FOR STREET LIGHT PLANS

"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."

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

EXPIRES 3-31-18

City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	19	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	4675
4	REMOVE PIPE, BACKFILL & COMPACT	LF	913
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	2
7	MISCELLANEOUS WORK		
	DELINEATOR, REMOVE	LS	–
	BOLLARD, REMOVE	JOB	–
	RIP RAP, REMOVE	SY	358
10	RELOCATE WATER METER, BOX AND COVER PER COP SUPP. 610.11 AND COP DET P1363	EA	1
12	MISCELLANEOUS WORK BY OTHERS		
	TELEPHONE PEDESTAL, RELOCATE	NPI	–
14	REMOVE MANHOLE, BACKFILL & COMPACT	EA	3

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	3856
	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	434
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1193
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	669
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	173
8	SINGLE CURB, MAG STD DET 222, TYPE 'A', MODIFIED FOR BUS BAY	LF	156
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	290
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	4004
19	RETURN TYPE DRIVEWAY, MODIFIED COP STD DET. P1243, 9" THICK	SF	1616
	CONCRETE PAVEMENT, 9" THICK	SF	1652
23	BUS BAY, TYPE I, COP STD DET P1256–1, MOD. WITH NO FLOWLINE DEPRESSION		
25	BUS SHELTER / ACCESSORY PAD, COP STD DET. P1260	SF	321
26	CONCRETE MEDIAN NOSE	SF	79
	STAMPED ASPHALT PAVEMENT	SF	880
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	14
	AGGREGATE BASE COURSE	TON	21
29	SURVEY MARKER, MAG STD DETAIL 120–1, TYPE 'B'	EA	1
33	DRIVEWAY CONNECTION, ASPHALT	TON	4
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6". 9" THICK	LF	225
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD DET. P1422	EA	2
47	CONCRETE APRON, SEE DET. 1, ON DT–1.01	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	10
A	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391–1	EA	2

PAVING PLAN & PROFILE
STA 254+50 TO STA 258+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

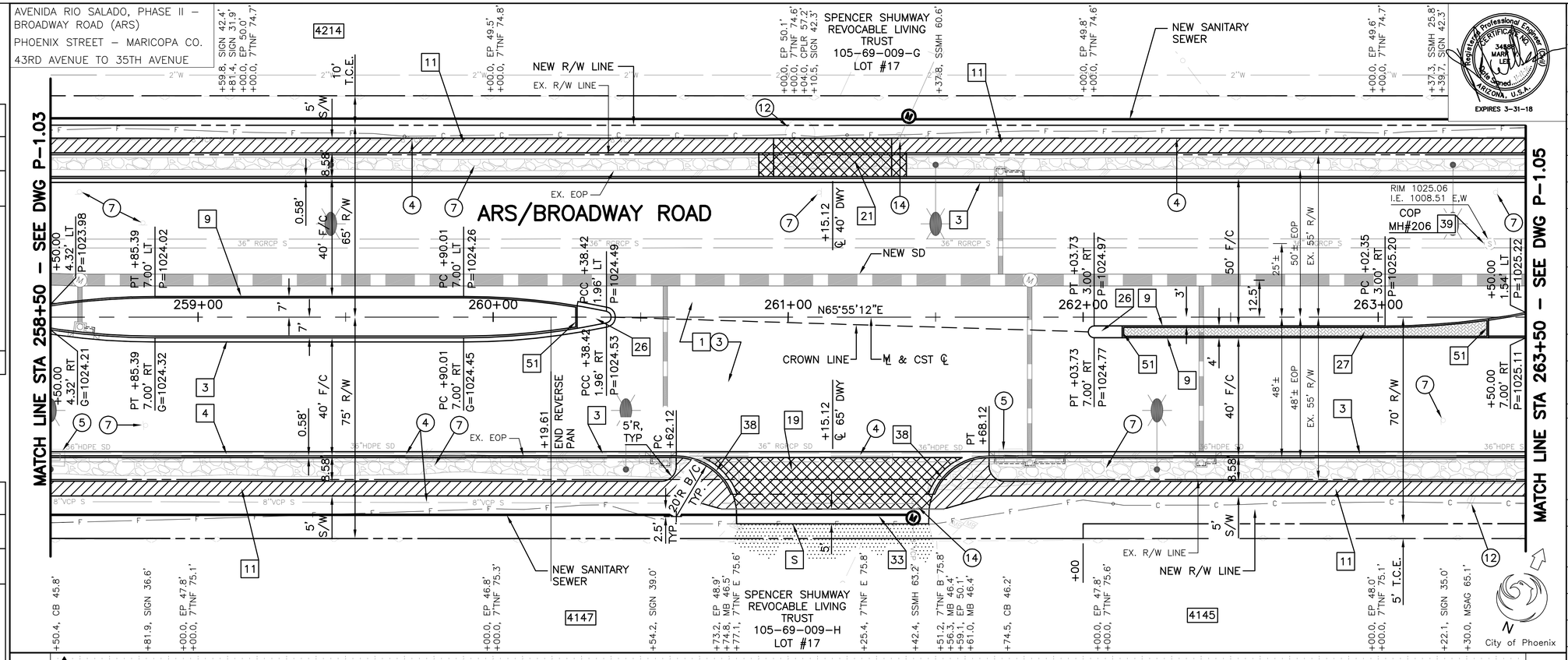
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

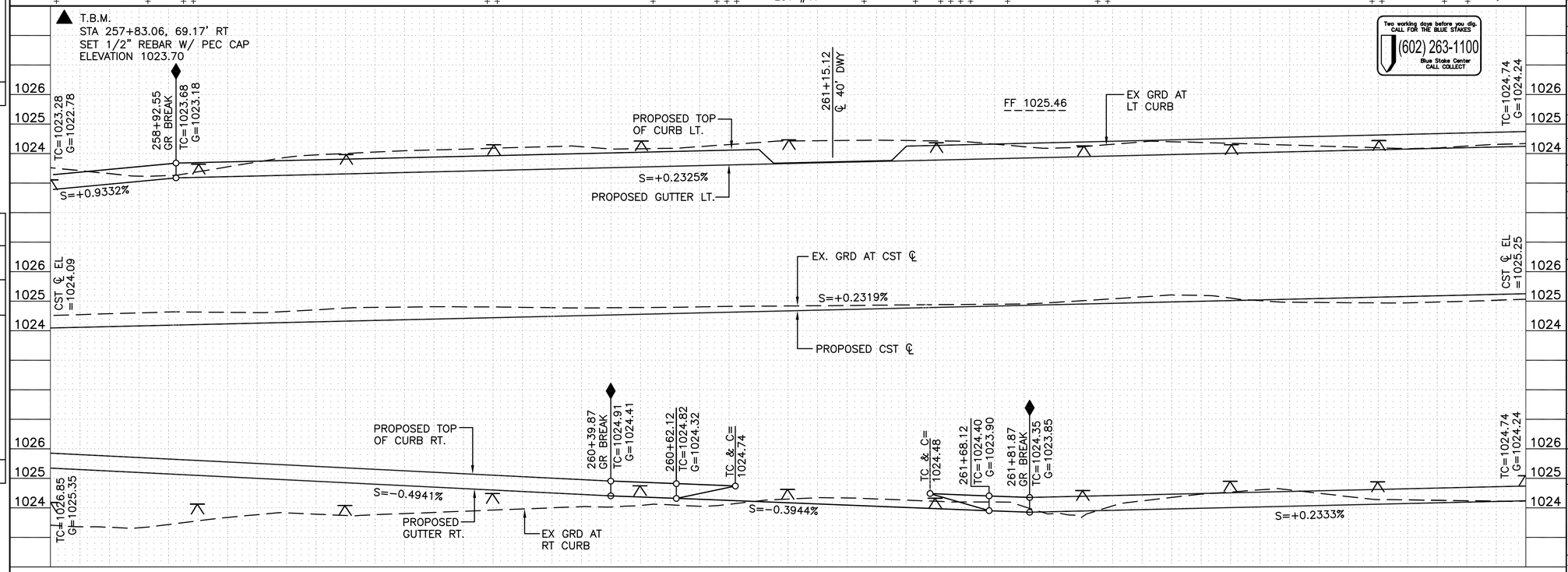
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.03

ST85100371 P–1_03.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	20	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer CERTIFICATE NO. 34580 MARK LEE Date Signed 11/17/17 ARIZONA, U.S.A.
EXPIRES 3–31–18

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	5597
4	REMOVE PIPE, BACKFILL & COMPACT	LF	1287
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	2
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE AND SALVAGE	LS	–
	DELINEATOR, REMOVE	LS	–
	RIP RAP, REMOVE	SY	554
12	MISCELLANEOUS WORK BY OTHERS		
	METAL SAGUARO SCULPTURE, RELOCATED BY OTHERS	NPI	–
	CONC. PIPE LANDSCAPE FEATURE RELOCATED BY OTHERS	NPI	–
14	REMOVE MANHOLE, BACKFILL & COMPACT	EA	2

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	4696
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	529
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1453
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	930
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	170
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	453
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	4745
19	RETURN TYPE DRIVEWAY, MODIFIED COP STD DETAIL P1243, 9" THICK	SF	1239
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255–2, 9" THK	SF	600
26	CONCRETE MEDIAN NOSE	SF	93
27	STAMPED ASPHALT PAVEMENT	SF	397
	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
33	DRIVEWAY CONNECTION, ASPHALT	TON	6
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", 9" THICK	LF	138
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD. DET. P1422	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	16

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.03 FOR STORM DRAIN PLAN
3. SEE CP–1.02, CP–1.03 & CP–1.04 FOR CB CONN PIPE PROFILES
4. SEE SP–1.02 FOR SANITARY SEWER PLAN
5. SEE DT–3.01 FOR DRIVEWAY PROFILES
6. SEE SL–1.01 FOR STREET LIGHT PLANS

"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."

PAVING PLAN & PROFILE
STA 258+50 TO STA 263+50

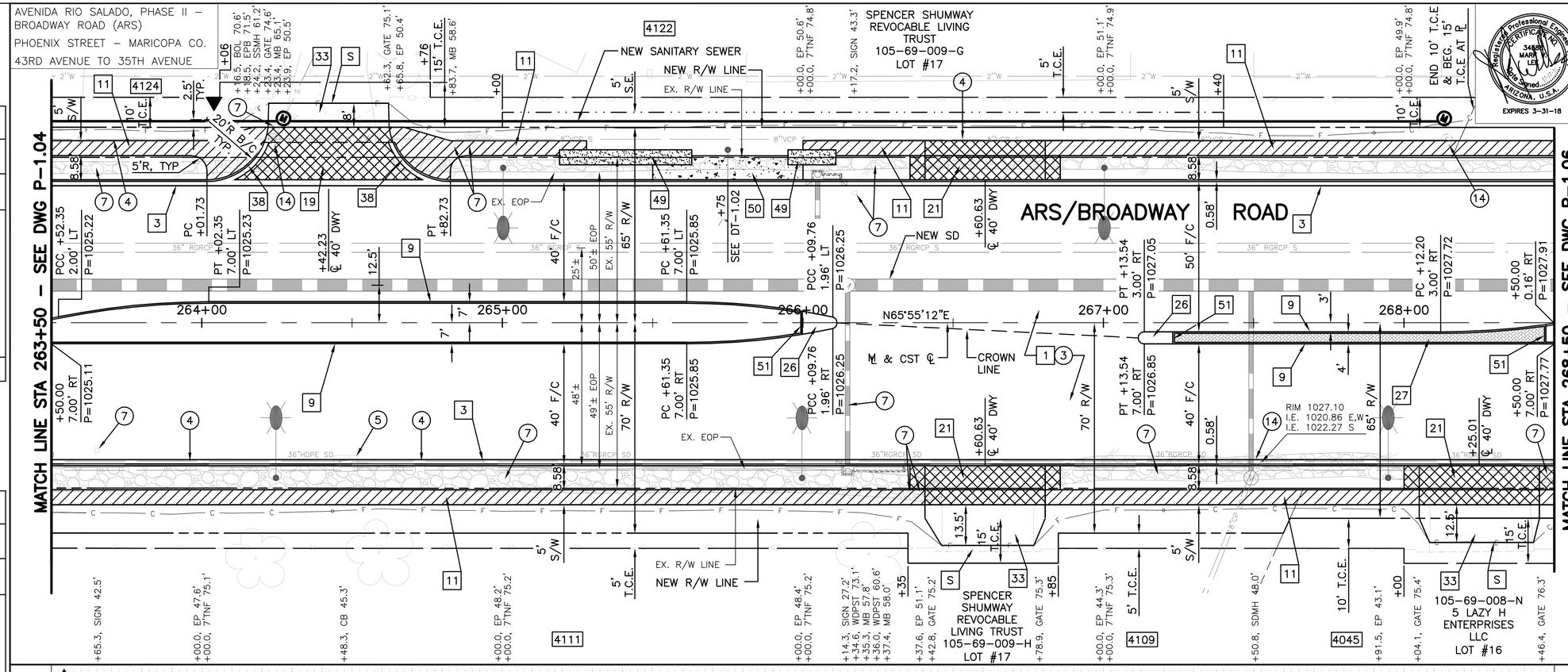
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

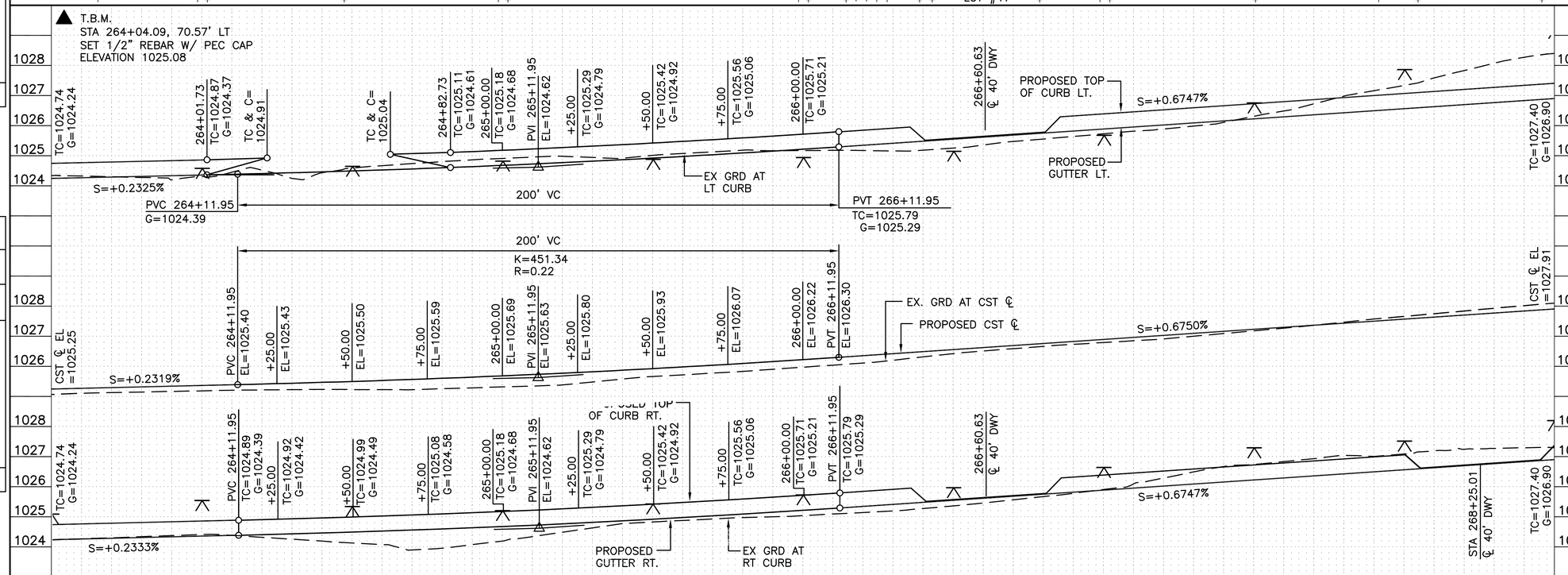
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.04

ST85100371 P–1_04.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	21	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3–31–18

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	5631
4	REMOVE PIPE, BACKFILL & COMPACT	LF	960
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	1
	MISCELLANEOUS WORK		
7	MAILBOX, RELOCATE TRAFFIC SIGN, REMOVE & SALVAGE RIP RAP, REMOVE	EA LS SY	5 1 570
14	REMOVE MANHOLE, BACKFILL & COMPACT	EA	3

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	4624
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	521
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1431
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	919
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	755
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	4092
19	RETURN TYPE DRIVEWAY, MODIFIED COP STD DETAIL P1243, 9" THICK	SF	804
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255–2, 9" THICK	SF	1800
26	CONCRETE MEDIAN NOSE	SF	107
	STAMPED ASPHALT PAVEMENT	SF	397
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
33	DRIVEWAY CONNECTION, ASPHALT	TON	24
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", 9" THICK	LF	113
49	DECORATIVE CONC. SIDEWALK MOD. COP STD DETAIL P–1230, 6" THK	SF	300
50	CONCRETE BUS PAD PAVEMENT PER COP STD DETAIL P–1260	SF	346
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	16

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.04 FOR STORM DRAIN PLAN
3. SEE CP–1.04 FOR CB CONN PIPE PROFILE
4. SEE SP–1.03 FOR SANITARY SEWER PLAN
5. SEE DT–3.01 & DT–3.02 FOR DRIVEWAY PROFILES
6. SEE SL–1.01 FOR STREET LIGHT PLANS

City of Phoenix

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PAVING PLAN & PROFILE
STA 263+50 TO STA 268+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

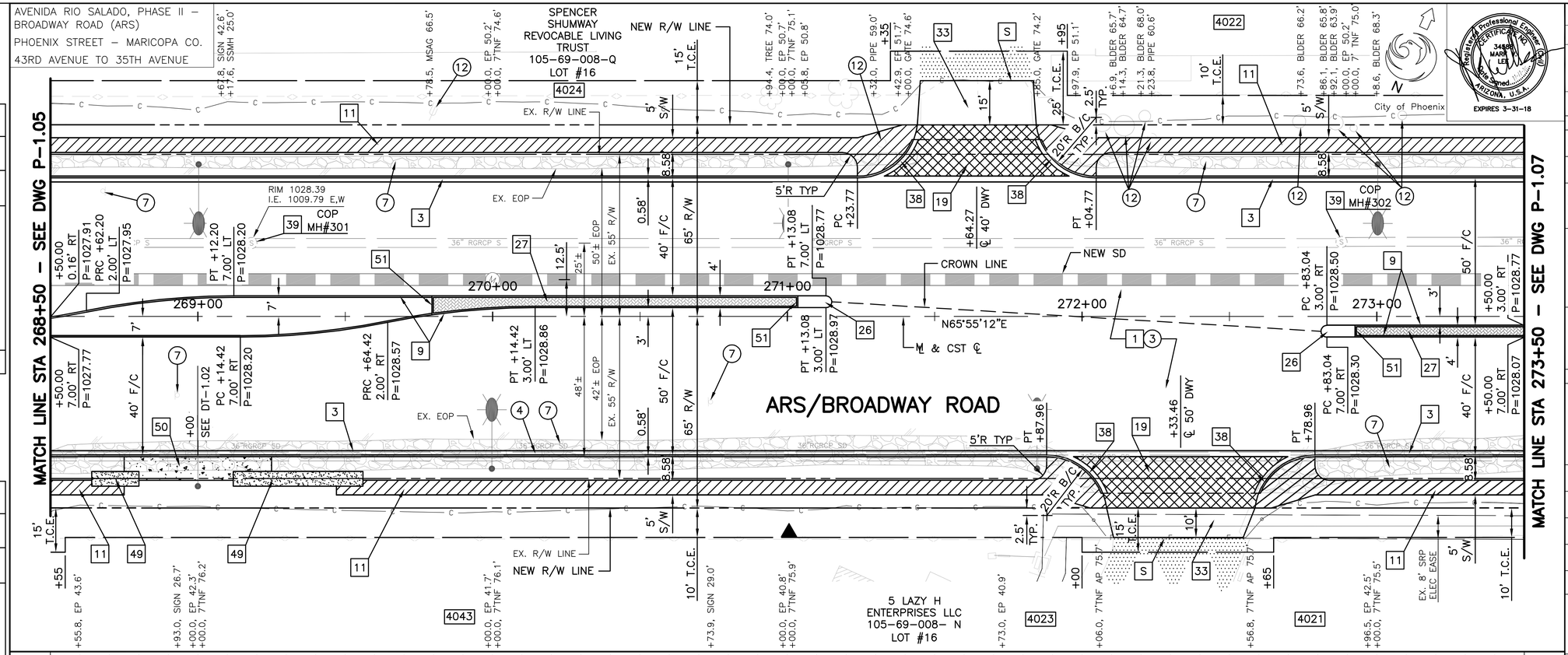
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.05

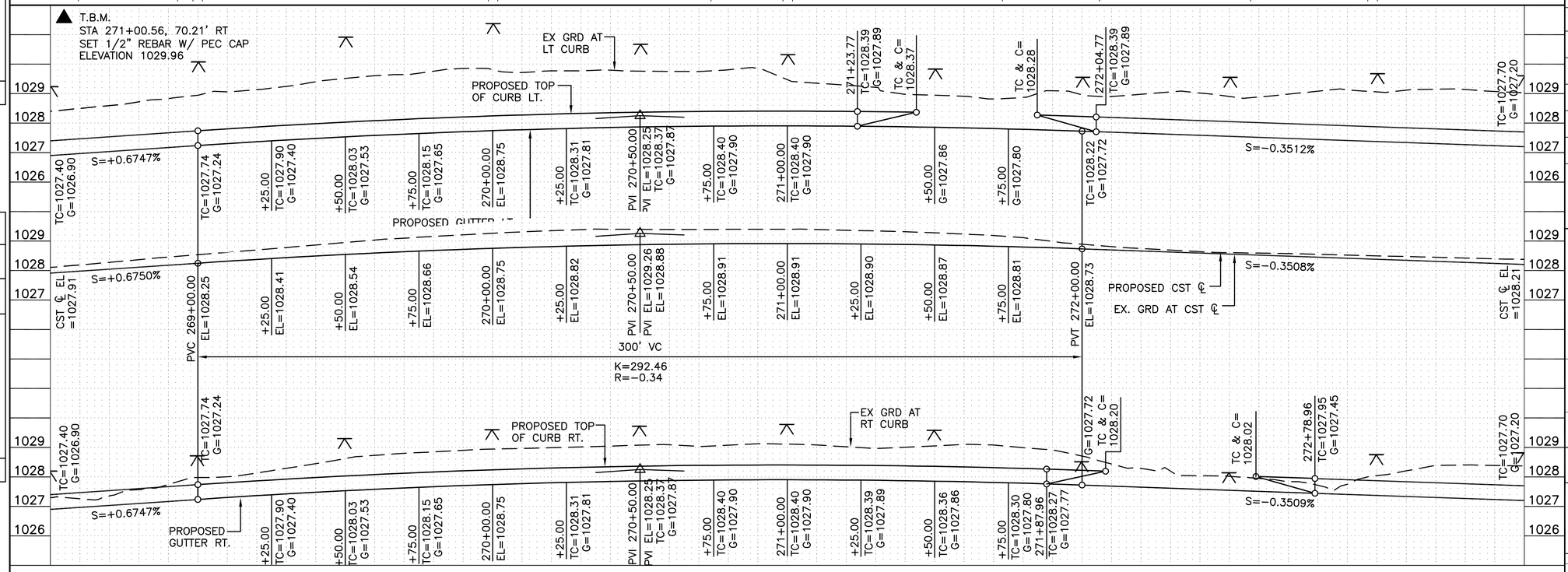
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ST85100371 P–1_05.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	22	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer CERTIFICATE NO. 34868 MARK LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3–31–18

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	5481
4	REMOVE PIPE, BACKFILL & COMPACT	LF	500
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE AND SALVAGE	LS	–
	RIP RAP, REMOVE	SY	712
	MISCELLANEOUS WORK BY OTHERS		
12	METAL SAGUARO SCULPTURE, RELOCATED BY OTHERS	NPI	–
	CONC. PIPE LANDSCAPE FEATURE, RELOCATED BY OTHERS	NPI	–
	BOULDERS, REMOVE	NPI	–

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	4807
	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	541
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1488
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	828
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	624
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	4714
19	RETURN TYPE DRIVEWAY, MODIFIED COP STD DETAIL P1243, 9" THICK	SF	1782
26	CONCRETE MEDIAN NOSE	SF	89
27	STAMPED ASPHALT PAVEMENT	SF	568
	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	9
	AGGREGATE BASE COURSE	TON	14
33	DRIVEWAY CONNECTION, ASPHALT	TON	20
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", 9" THICK	LF	234
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD DET. P1422	EA	2
49	DECORATIVE CONC. SIDEWALK MOD. COP STD DETAIL P–1230, 6" THK	SF	300
50	CONCRETE BUS PAD PAVEMENT PER COP STD DETAIL P–1260	SF	346
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	12

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.05 FOR STORM DRAIN PLAN
3. SEE DT–3.02 FOR DRIVEWAY PROFILES
4. SEE SL–1.02 FOR STREET LIGHT PLANS

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PAVING PLAN & PROFILE
STA 268+50 TO STA 273+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

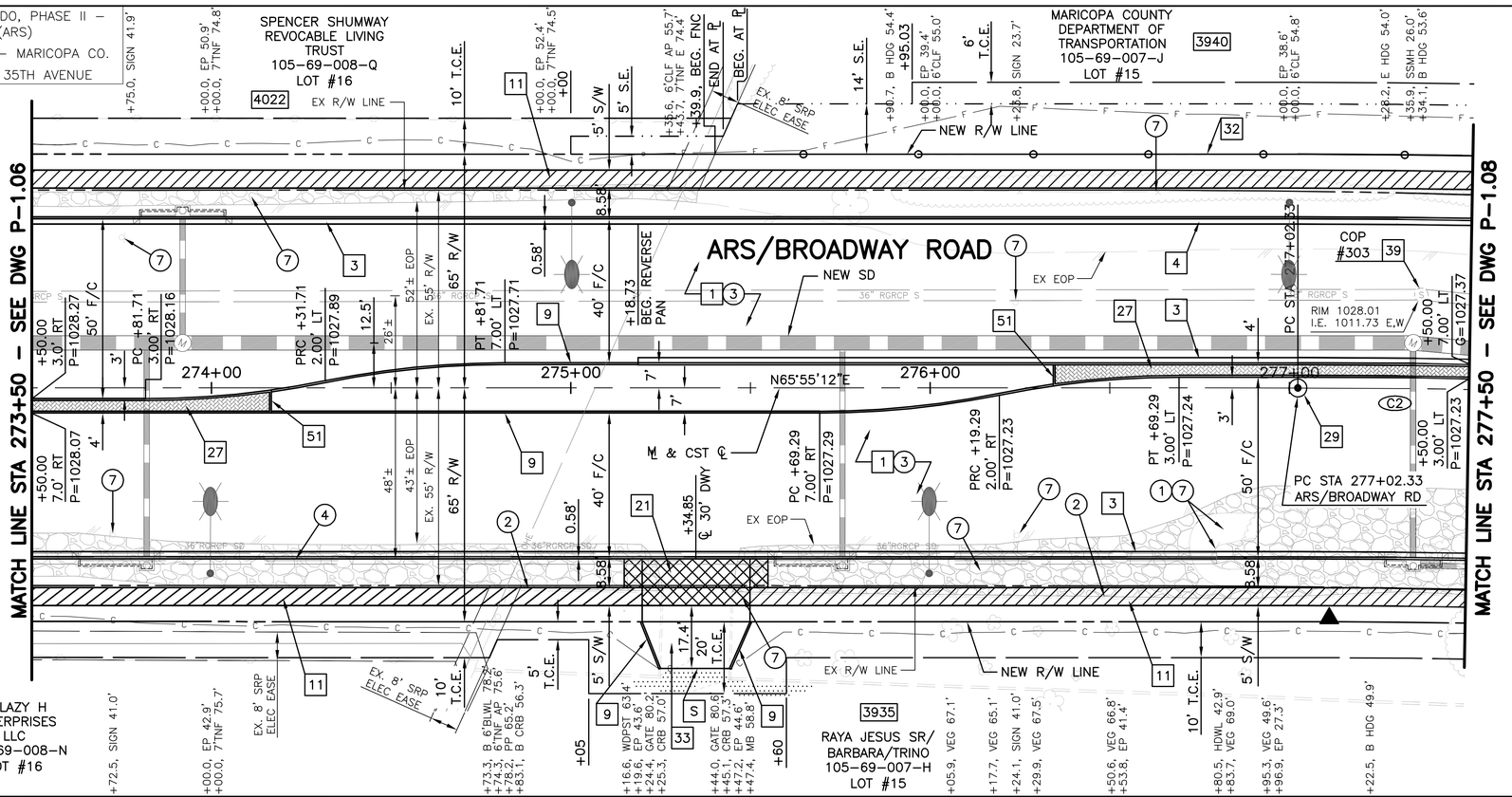
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

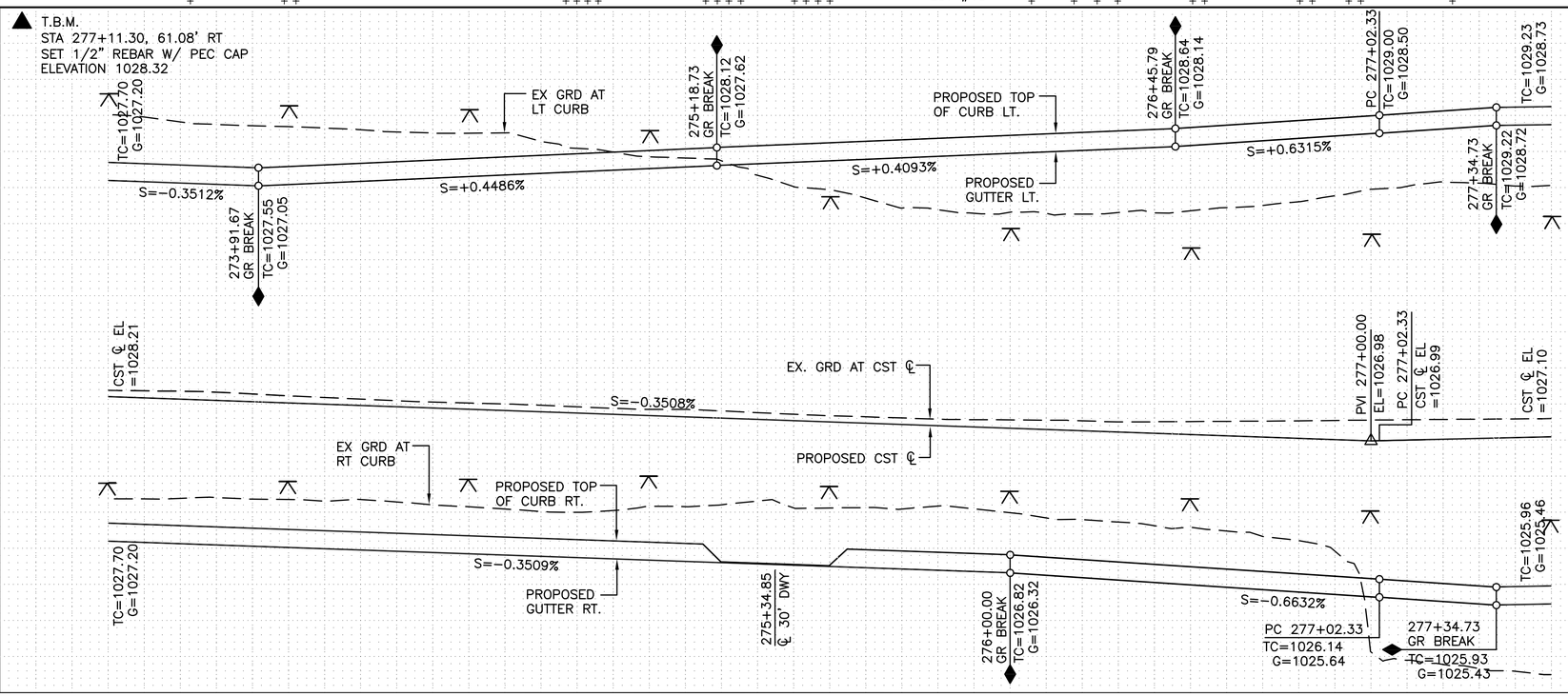
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.06

ST85100371 P–1_06.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





City of Phoenix

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed 11/30/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	23	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB		
	276+71 TO 276+91 RT	SF	250
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	274+83 TO 277+50 RT	LF	289
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3887
4	REMOVE PIPE, BACKFILL & COMPACT	LF	329
7	MISCELLANEOUS WORK		
	MAILBOX, RELOCATE	EA	1
	HEADWALL, REMOVE	EA	1
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	RIP RAP, REMOVE	SY	740
	FENCE, REMOVE 275+40 TO 277+50 LT	LF	226

C2 CURVE DATA

PI STA 283+09.81
N= 875737.03
E= 631324.60

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	3629
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	409
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1123
	TACK COAT	TON	3
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	800
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	232
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	599
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	3850
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255-2, 9" THK	SF	470
	STAMPED ASPHALT PAVEMENT	SF	599
27	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	10
	AGGREGATE BASE COURSE	TON	14
29	SURVEY MARKER, MAG STD DETAIL 120-1, TYPE 'B'	EA	1
32	NEW 6 FOOT CHAIN LINK FENCE	LF	212
33	DRIVEWAY CONNECTION, ASPHALT	TON	9
39	ADJUST EXISTING MANHOLE FRAME & COVER. COP STD DET. P1422	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	11

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.06 FOR STORM DRAIN PLAN
3. SEE CP-1.05 & CP-1.06 FOR CB CONN PIPE PROFILE
4. SEE DT-3.02 FOR DRIVEWAY PROFILES
5. SEE SL-1.02 FOR STREET LIGHT PLAN

"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."

PAVING PLAN & PROFILE
STA 273+50 TO STA 277+50

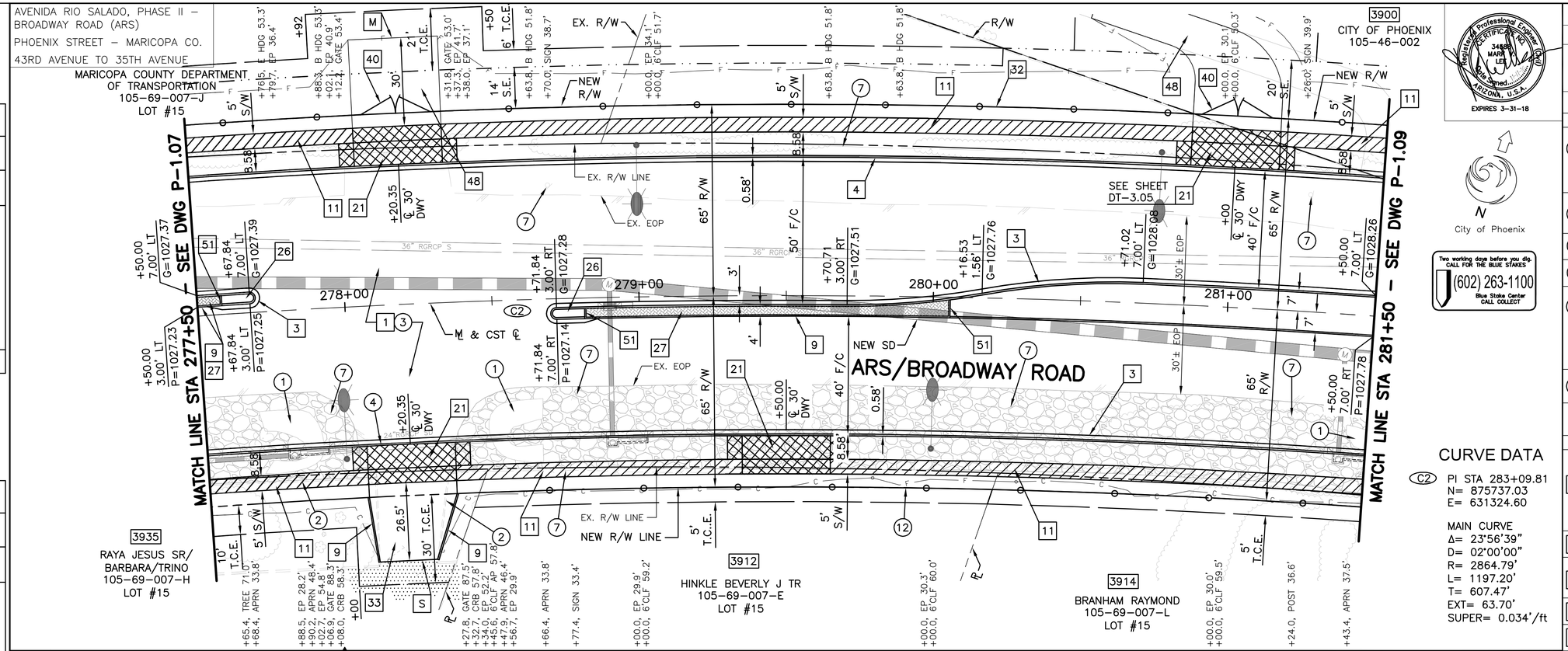
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

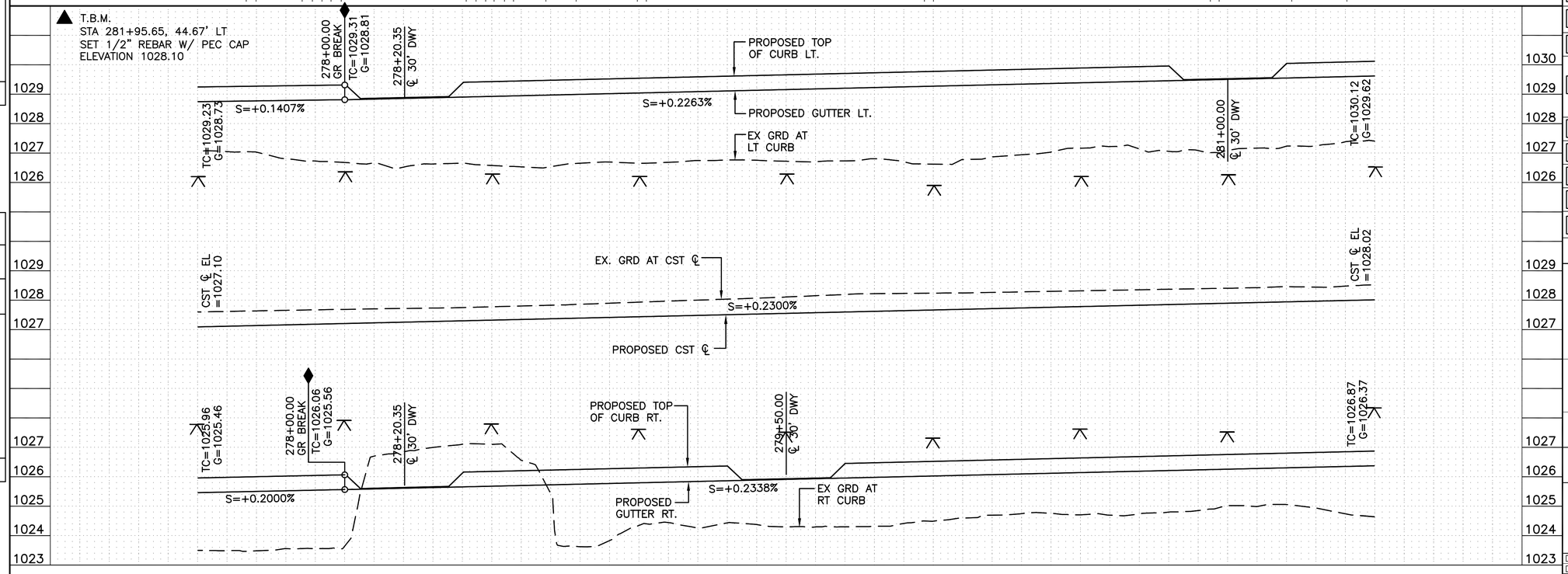
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.07

ST85100371 P-1_07.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





CURVE DATA

C2 PI STA 283+09.81
N= 875737.03
E= 631324.60

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	24	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER & SLAB		
	277+69 TO 277+91 RT	SF	259
	277+47 TO 278+67 RT	SF	256
	281+43 TO 281+50 RT	SF	41
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	277+50 TO 278+46 RT	LF	127
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3056
4	REMOVE PIPE, BACKFILL & COMPACT	LF	69
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	RIP RAP, REMOVE	SY	1053
	FENCE, REMOVE		
	277+50 TO 281+50 RT	LF	409
	278+44 TO 281+50 RT	LF	300
12	MISCELLANEOUS WORK BY OTHERS		
	INSTALL 6' CHAIN LINK FENCE/GATE	NPI	–

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	3723
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	419
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1152
	TACK COAT	TON	3
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	732
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	407
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	313
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	3297
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255-2, 9" THK	SF	1880
26	CONCRETE MEDIAN NOSE	SF	61
	STAMPED ASPHALT PAVEMENT	SF	423
27	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
32	NEW 6 FOOT CHAIN LINK FENCE	LF	361
33	DRIVEWAY CONNECTION, ASPHALT	TON	13
40	DBL GATE,MAG STD 160 (24' WIDE)	EA	2
48	AGGREGATE BASE CONN. (6" THK)	TON	50
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	12

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.07' FOR STORM DRAIN PLAN
3. SEE CP-1.06 & CP1.07 FOR CB CONN PIPE PROFILES
4. SEE DT-3.02 & DT-3.05 FOR DRIVEWAY PROFILES
5. SEE SL-1.02 FOR STREET LIGHT PLAN

"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."

PAVING PLAN & PROFILE
STA 277+50 TO STA 281+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.08

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed ARIZONA, U.S.A. EXPIRES 3-31-18

City of Phoenix

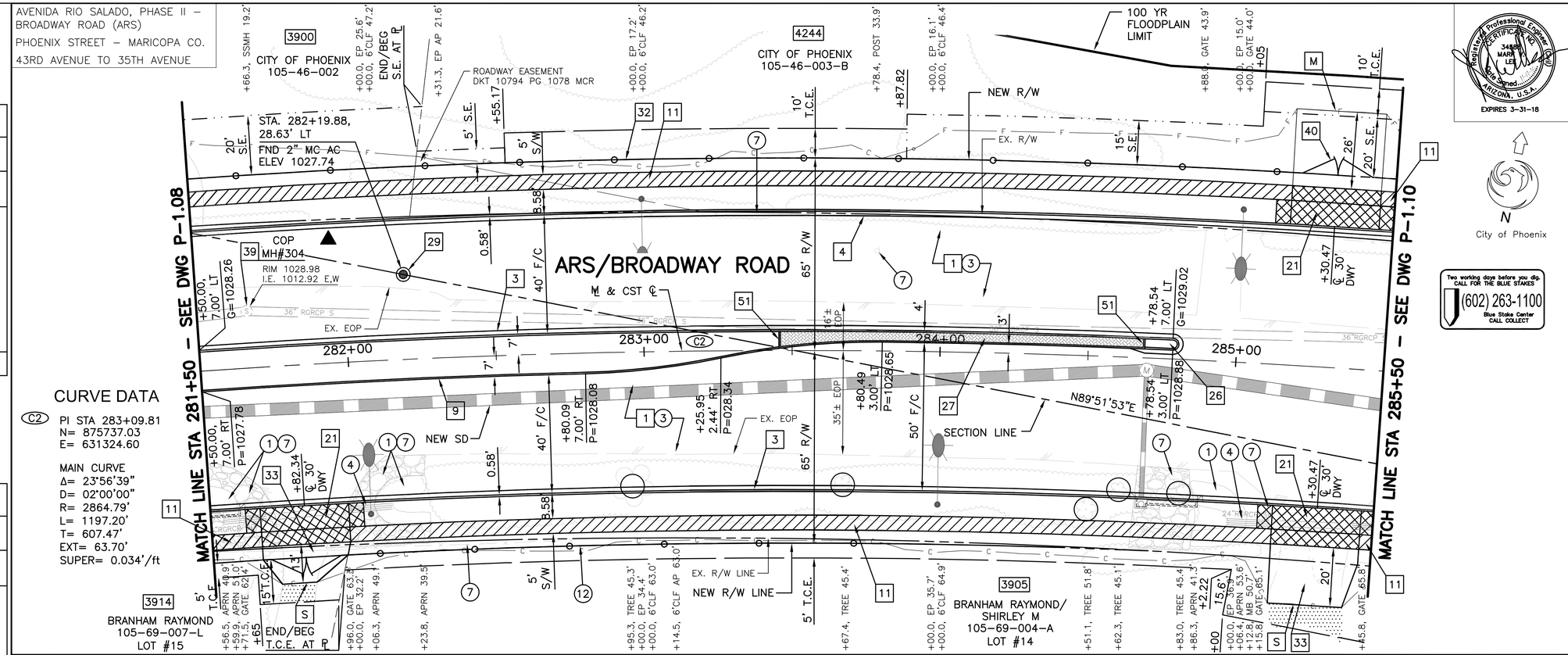
Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

ST85100371 P-1_08.DWG

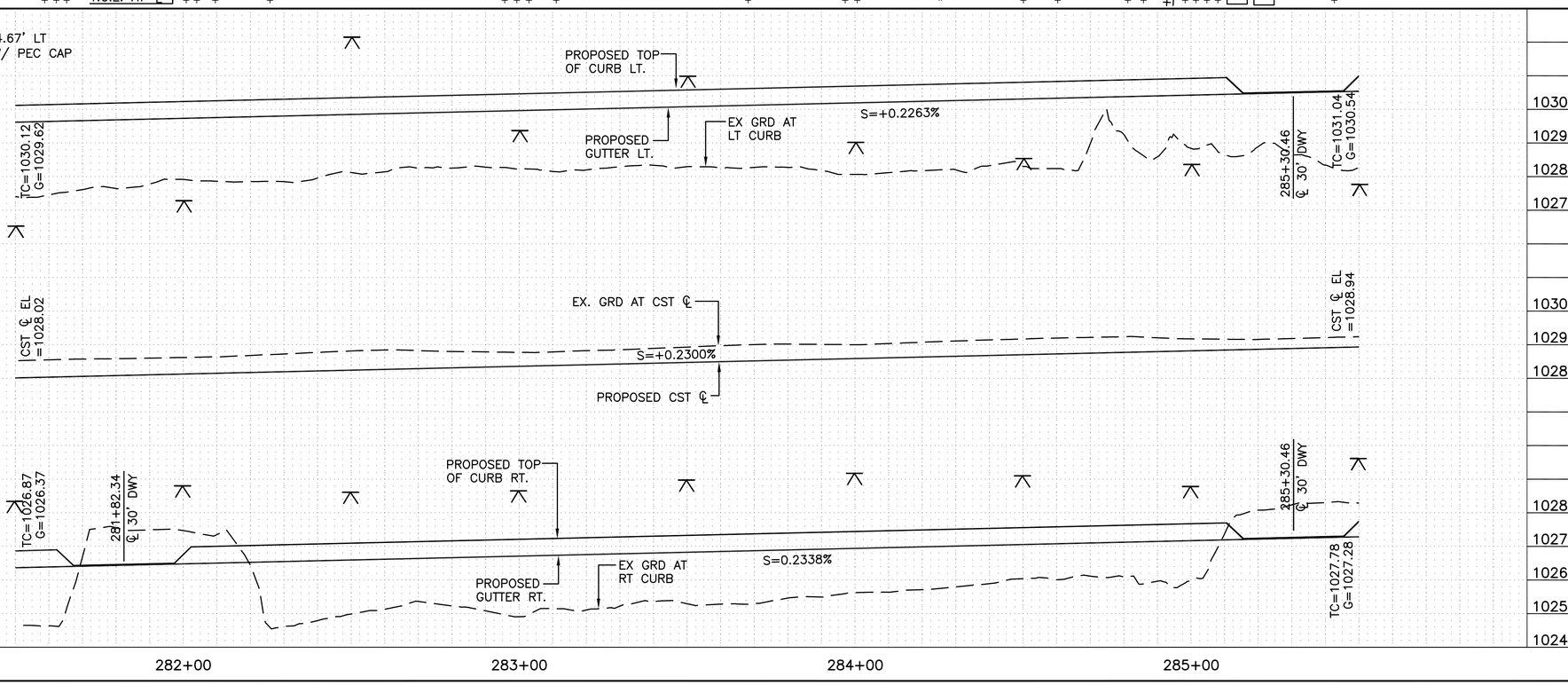
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

C2
PI STA 283+09.81
N= 875737.03
E= 631324.60

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	25	164	

PEC
PROJECT ENGINEERING CONSULTANTS
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Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER , & SLAB		
	281+50 TO 281+60 RT	SF	131
	282+06 TO 282+25 RT	SF	195
	284+86 TO 285+07 RT	SF	260
3	REMOVE ASPHALT CONCRETE PAVEMENT	SF	2640
4	REMOVE PIPE, BACKFILL & COMPACT	LF	108
7	MISCELLANEOUS WORK		
	MAILBOX, RELOCATE	EA	1
	WOOD POST, REMOVE	JOB	–
	RIP RAP, REMOVE	SY	163
	FENCE, REMOVE		
	281+50 TO 285+50 LT	LF	406
	281+50 TO 284+73 RT	LF	316
12	MISCELLANEOUS WORK BY OTHERS		
	NEW 6' CHAIN LINK FENCE/GATE	NPI	–

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	3653
	2" ASPHALT CONCRETE SURFACE COURSE, MOD.TYPE D 1/2	TON	411
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1131
	TACK COAT	TON	3
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	744
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	407
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	315
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	3552
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255-2, 9" THK	SF	1409
26	CONCRETE MEDIAN NOSE	SF	31
	STAMPED ASPHALT PAVEMENT	SF	394
27	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
29	SURVEY MARKER, MAG STD DETAIL 120-1, TYPE 'B'	EA	1
32	NEW 6 FOOT CHAIN LINK FENCE	LF	385
33	DRIVEWAY CONNECTION, ASPHALT	TON	16
39	ADJUST EXISTING MANHOLE FRAME & COVER. COP STD DET P1422	EA	1
40	DBL GATE, MAG STD 160 (24' WIDE)	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	9

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.08 FOR STORM DRAIN PLAN
3. SEE CP-1.07 FOR CB CONN PIPE PROFILE
4. SEE DT-3.03 FOR DRIVEWAY PROFILES
5. SEE SL-1.02 FOR STREET LIGHT PLAN

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PAVING PLAN & PROFILE
STA 281+50 TO STA 285+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

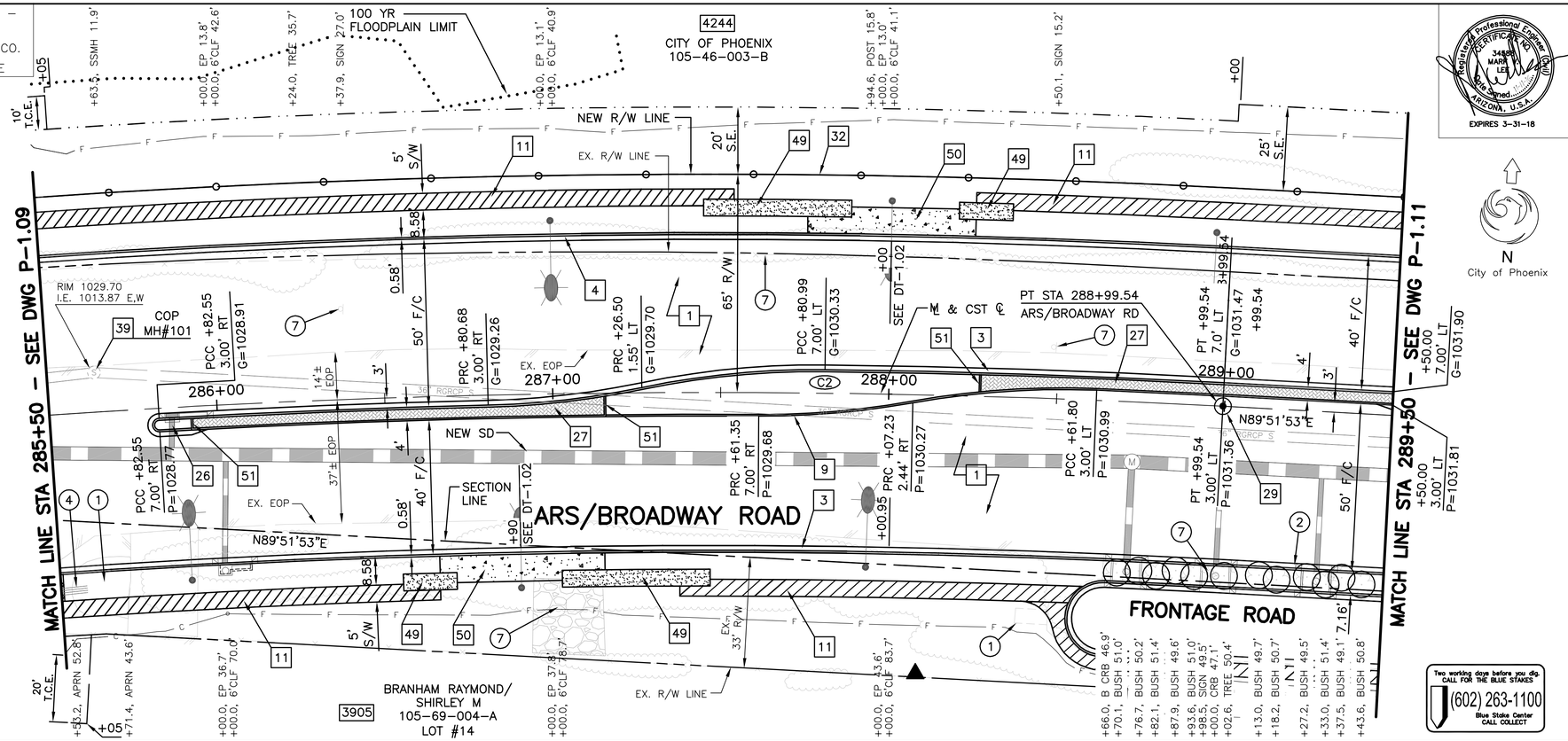
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.09

ST85100371 P-1_09.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

C2 PI STA 283+09.81
N= 875737.03
E= 631324.60

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
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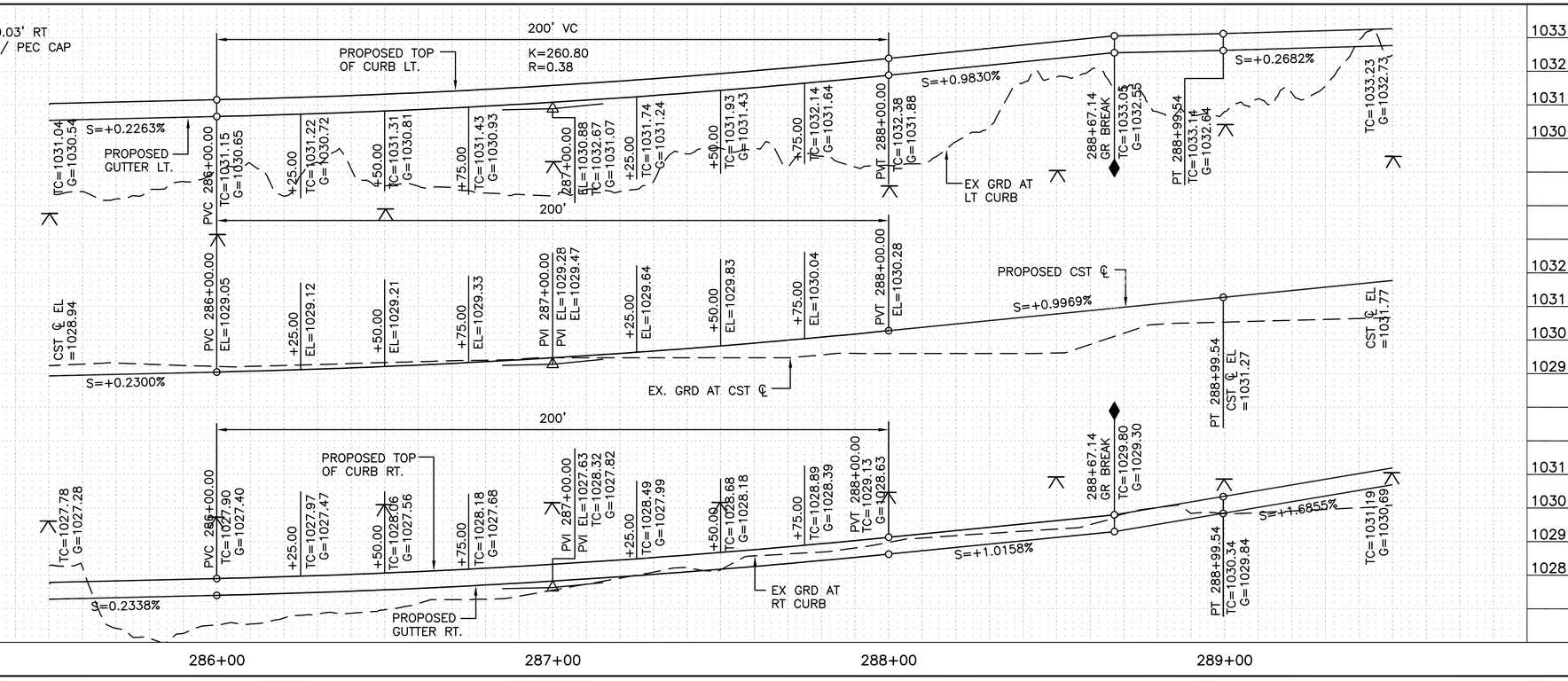


REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	285+53 TO 285+72 RT	SF	272
	288+39 TO 288+56 RT	SF	104
2	REMOVE CONCRETE SINGLE CURB, AND CURB AND GUTTER		
	288+66 TO 289+50 RT	LF	84
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	2414
4	REMOVE PIPE, BACKFILL & COMPACT	LF	8
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	RIP RAP, REMOVE	SY	52
	FENCE, REMOVE		
	285+50 TO 289+50 LT	LF	405

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	3738
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	421
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1157
	TACK COAT	TON	3
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	789
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	406
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	349
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	2769
26	CONCRETE MEDIAN NOSE	SF	30
	STAMPED ASPHALT PAVEMENT	SF	788
27	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	13
	AGGREGATE BASE COURSE	TON	19
29	SURVEY MARKER, MAG STD DETAIL 120-1, TYPE 'B'	EA	1
32	NEW 6 FOOT CHAIN LINK FENCE	LF	408
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD DET. P1422	EA	1
49	DECORATIVE CONC. SIDEWALK, MOD. COP STD DETAIL P-1230, 6" THICK	SF	600
50	CONCRETE BUS PAD PAVEMENT PER COP STD DETAIL P-1260	SF	686
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	15

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.09 FOR STORM DRAIN PLAN
3. SEE CP-1.07 & CP-1.08 FOR CB CONN PIPE PROFILES
4. SEE P-1.19 FOR FRONTAGE ROAD PLAN AND PROFILE
5. SEE SL-1.02 FOR STREET LIGHT PLAN

"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."

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

Registered Professional Engineer CERTIFICATE NO. 34868 MARK V. LEE Date Signed ARIZONA, U.S.A. EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	26	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

PAVING PLAN & PROFILE
STA 285+50 TO STA 289+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

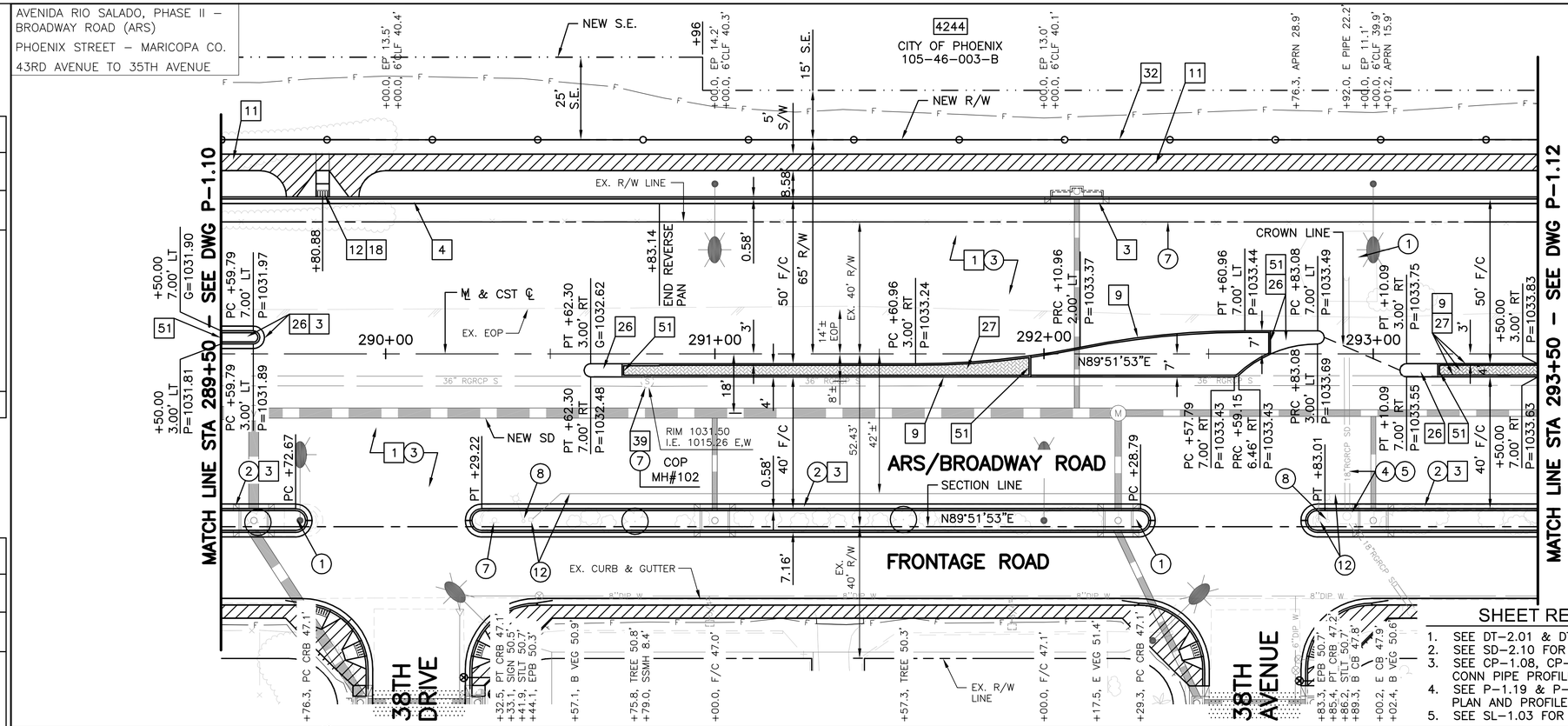
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

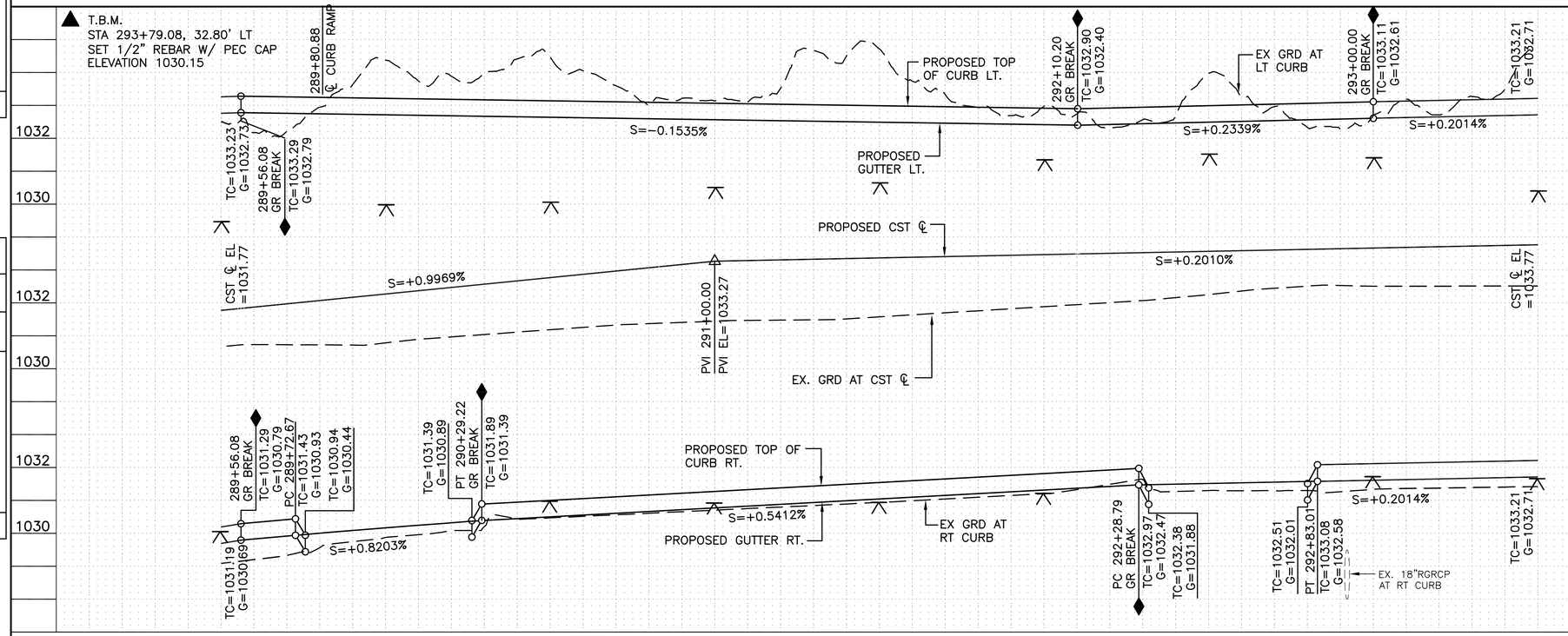
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.10

ST85100371 P-1_10.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.10 FOR STORM DRAIN PLAN
3. SEE CP–1.08, CP–1.09 & CP–1.10 FOR CB CONN PIPE PROFILES
4. SEE P–1.19 & P–1.20 FOR FRONTAGE ROAD PLAN AND PROFILE
5. SEE SL–1.03 FOR STREET LIGHT PLANS

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	MEDIAN NOSE	SF	104
	292+76 TO 293+01 RT	SF	457
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	289+50 TO 289+78 RT	LF	28
	290+26 TO 292+32 RT	LF	206
	292+80 TO 293+50 RT	LF	70
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	2614
4	REMOVE PIPE, BACKFILL & COMPACT	LF	71
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	1
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE & SALVAGE FENCE, REMOVE	LS	–
	289+50 TO 293+50 LT	LF	400
	MANHOLE CONE, ROTATE, SEE DETAIL ON SHEET DT–1.04	EA	1
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
12	MISCELLANEOUS WORK BY OTHERS		
	ELECTRIC PULLBOX & CONDUCTORS, RELOCATE	NPI	–

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	3860
	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	435
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1195
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	605
4	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", MODIFIED WITH REVERSE PAN	LF	133
9	SINGLE CURB, MAG STD DET 222, TYPE 'A'	LF	458
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1923
12	TRUNCATED DOMES, COP STD DET P1232	SF	10
18	CURB RAMP, MID BLOCK WITH DETACHED SIDEWALK, COP STD DET P1241–2	SF	340
26	CONCRETE MEDIAN NOSE	SF	198
	STAMPED ASPHALT PAVEMENT	SF	487
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	8
	AGGREGATE BASE COURSE	TON	12
32	NEW 6 FOOT CHAIN LINK FENCE	LF	400
39	ADJUST EXISTING MANHOLE FRAME & COVER. COP STD DET. P1422	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B'	LF	20

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PAVING PLAN & PROFILE
STA 289+50 TO 293+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	JG	DES:	MVL	CK:	SM	DWG SERIES NO.
DATE:	07/16	DATE:	07/16	DATE:	07/16	
SCALE:	HORIZ 1"= 20' VERT 1"= 2'					P–1.11

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	27	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34868 MARK LEE Date Signed 11/17/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

N
City of Phoenix

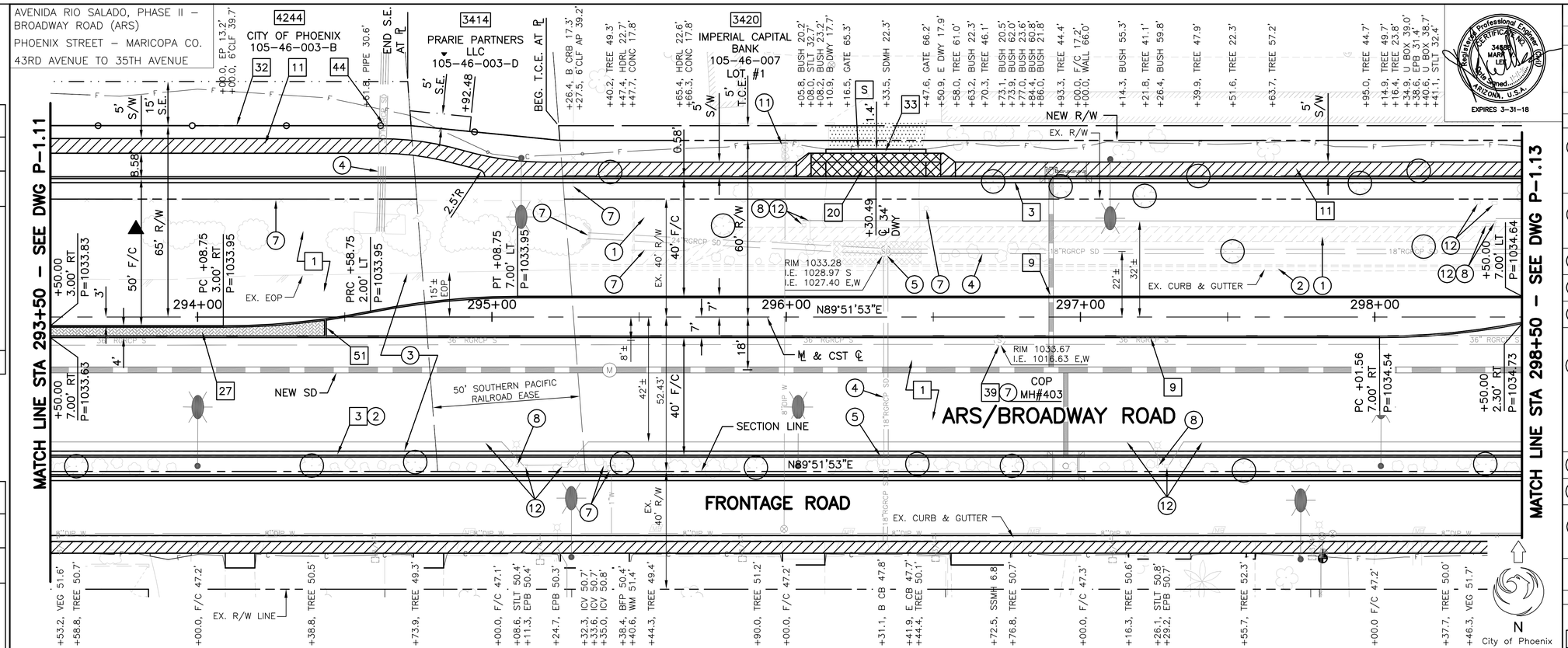
Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

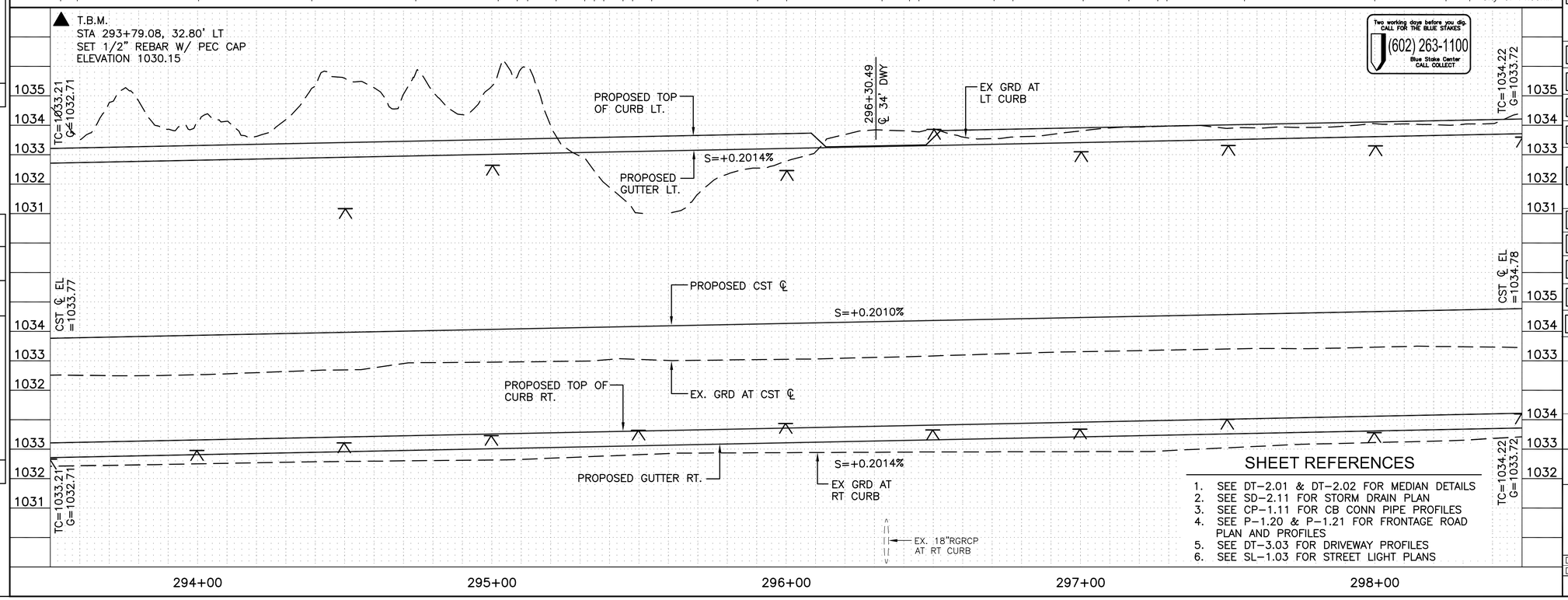
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ST85100371 P–1_11.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100 Blue Stake Center CALL COLLECT

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.11 FOR STORM DRAIN PLAN
3. SEE CP–1.11 FOR CB CONN PIPE PROFILES
4. SEE P–1.20 & P–1.21 FOR FRONTAGE ROAD PLAN AND PROFILES
5. SEE DT–3.03 FOR DRIVEWAY PROFILES
6. SEE SL–1.03 FOR STREET LIGHT PLANS

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

REVISION BY CITY OF PHOENIX

Registered Professional Engineer CERTIFICATE NO. 34868 MARK V. LEE Not Valid Unless Signed In Black Ink ARIZONA, U.S.A. EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	28	164	

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2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	295+47 TO 295+66 LT	SF	302
	S/W 295+47 TO 298+50 LT	SF	1500
	D/W 296+11 TO 296+51 LT	SF	297
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	295+26 TO 298+50 LT	LF	324
	293+50 TO 298+50 RT	LF	500
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3475
4	REMOVE PIPE, BACKFILL & COMPACT	LF	485
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	3
	MISCELLANEOUS WORK		
7	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	HANDRAIL, REMOVE	NPI	–
	LANDSCAPE IRR. SYSTEM, REMOVE	LS	–
	HEADWALL, REMOVE	NPI	–
	FENCE, REMOVE		
	293+50 TO 295+28 LT	LF	196
	MANHOLE CONE, ROTATE SEE DETAIL ON SHEET DT–1.04	EA	1
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
11	BACKFLOW PREVENTER, RELOCATE	EA	1
	MISCELLANEOUS WORK BY OTHERS		
12	IRRIGATION CONTROL VALVE, REMOVE	NPI	–
	ELECTRIC PULLBOX & CONDUCTORS, RELOCATE	NPI	–

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	SUBGRADE PREPARATION	SY	4417
	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	497
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1367
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	1000
9	SINGLE CURB, MAG STD DET 222, TYPE 'A'	LF	1000
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230. 6" THK, CLASS 'A'	SF	2317
20	DRIVEWAY ENTRANCE– TYPE 1, COP STD DETAIL P1255–1, 9" THK	SF	352
	STAMPED ASPHALT PAVEMENT	SF	307
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	5
	AGGREGATE BASE COURSE	TON	7
32	NEW 6 FOOT CHAIN LINK FENCE	LF	174
33	DRIVEWAY CONNECTION, ASPHALT	TON	1
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD DET P1422	EA	1
44	PIPE PLUG, MAG STD DET 427	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B'	LF	6

"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."

PAVING PLAN & PROFILE
STA 293+50 TO STA 298+50

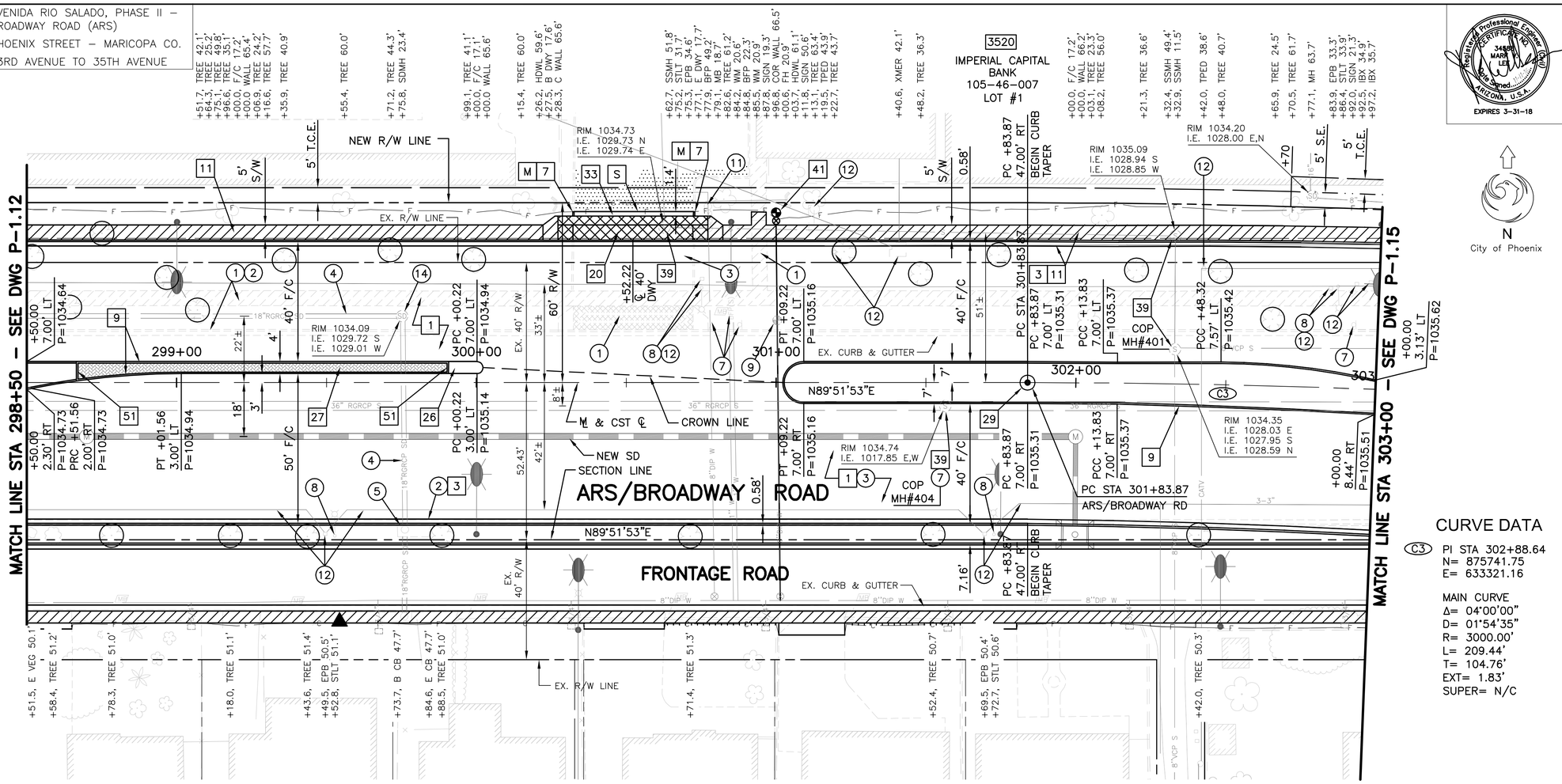
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.12

ST85100371 P–1_12.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
(1)	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	S/W 298+50 TO 303+00 LT	SF	2408
	D/W 300+27 TO 300+77 LT	SF	379
(2)	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	298+50 TO 303+00 LT	LF	450
	298+50 TO 303+00 RT	LF	450
(3)	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3197
(4)	REMOVE PIPE, BACKFILL & COMPACT	LF	197
(5)	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	1
(7)	MISCELLANEOUS WORK		
	MAILBOX, RELOCATE	EA	1
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	LANDSCAPE IRRIGATION SYSTEM, REMOVE	LS	–
	MANHOLE CONE, ROTATE SEE DETAIL ON SHEET DT–1.04	EA	1

NO.	DESCRIPTION	UNIT	QTY
(8)	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
(9)	FIRE HYDRANT, REMOVE	EA	1
(11)	BACKFLOW PREVENTER, RELOCATE	EA	1
(12)	MISCELLANEOUS WORK BY OTHERS		
	IRRIGATION CONTROL VALVE, REMOVE	NPI	–
	ELECTRIC TRANSFORMER, RELOCATE	NPI	–
	ELECTRIC PULLBOX & CONDUCTORS, RELOCATE	NPI	–
	TELEPHONE PEDESTAL, RELOCATE	NPI	–
	CATV PEDESTAL, RELOCATE	NPI	–
	PRIVATE SIGN, RELOCATE	NPI	–
(14)	REMOVE MANHOLE, BACKFILL & COMPACT	EA	1

CURVE DATA

(C3)
PI STA 302+88.64
N= 875741.75
E= 633321.16

MAIN CURVE
Δ= 04°00'00"
D= 01°54'35"
R= 3000.00'
L= 209.44'
T= 104.76'
EXT= 1.83'
SUPER= N/C

N
City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	29	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer CERTIFICATE NO. 34580 MARK LEE Date Signed 11/17/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	4185
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	471
	5–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1295
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	900
7	SINGLE CURB, MAG STD DET 222, CURB TERMINATION	LF	3
9	SINGLE CURB, MAG STD DET 222, TYPE 'A'	LF	686
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	2028
20	DRIVEWAY ENTRANCE– TYPE 1, COP STD DETAIL P1255–1, 9" THICK	SF	400
26	CONCRETE MEDIAN NOSE	SF	45
	STAMPED ASPHALT PAVEMENT	SF	397
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	7
	AGGREGATE BASE COURSE	TON	10
29	SURVEY MARKER, MAG STD DETAIL 120–1, TYPE 'B'	EA	1
33	DRIVEWAY CONNECTION, ASPHALT	TON	1
39	ADJUST EXISTING MANHOLE FRAME & COVER. COP STD DET P1422	EA	4
	6" D.I.P., RESTRAINED	LF	131
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B'	LF	9

SHEET REFERENCES

1. SEE DT–2.01 & DT–2.02 FOR MEDIAN DETAILS
2. SEE SD–2.12 FOR STORM DRAIN PLAN
3. SEE CP–1.11 FOR CB CONN PIPE PROFILE
4. SEE P–1.14 FOR PAVING PROFILE
5. SEE P–1.21 & P–1.22 FOR FRONTAGE ROAD PLAN AND PROFILE
6. SEE DT–3.03 FOR DRIVEWAY PROFILES
7. SEE SL–1.03 FOR STREET LIGHT PLANS

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

PAVING PLAN
STA 298+50 TO STA 303+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

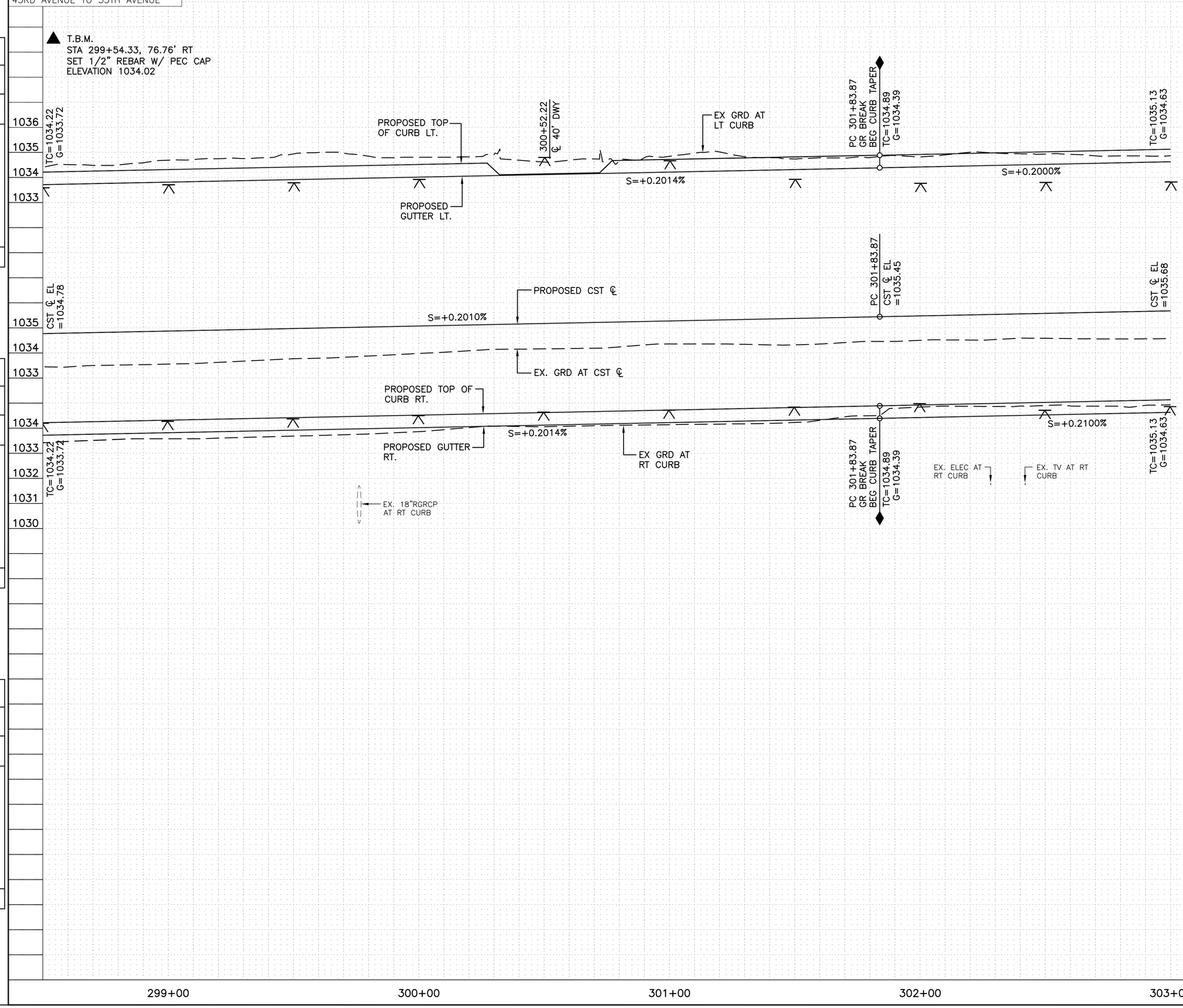
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.13

ST85100371 P-1_13.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	30	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

SHEET REFERENCES

1. SEE P–1.13 FOR PAVING PLAN

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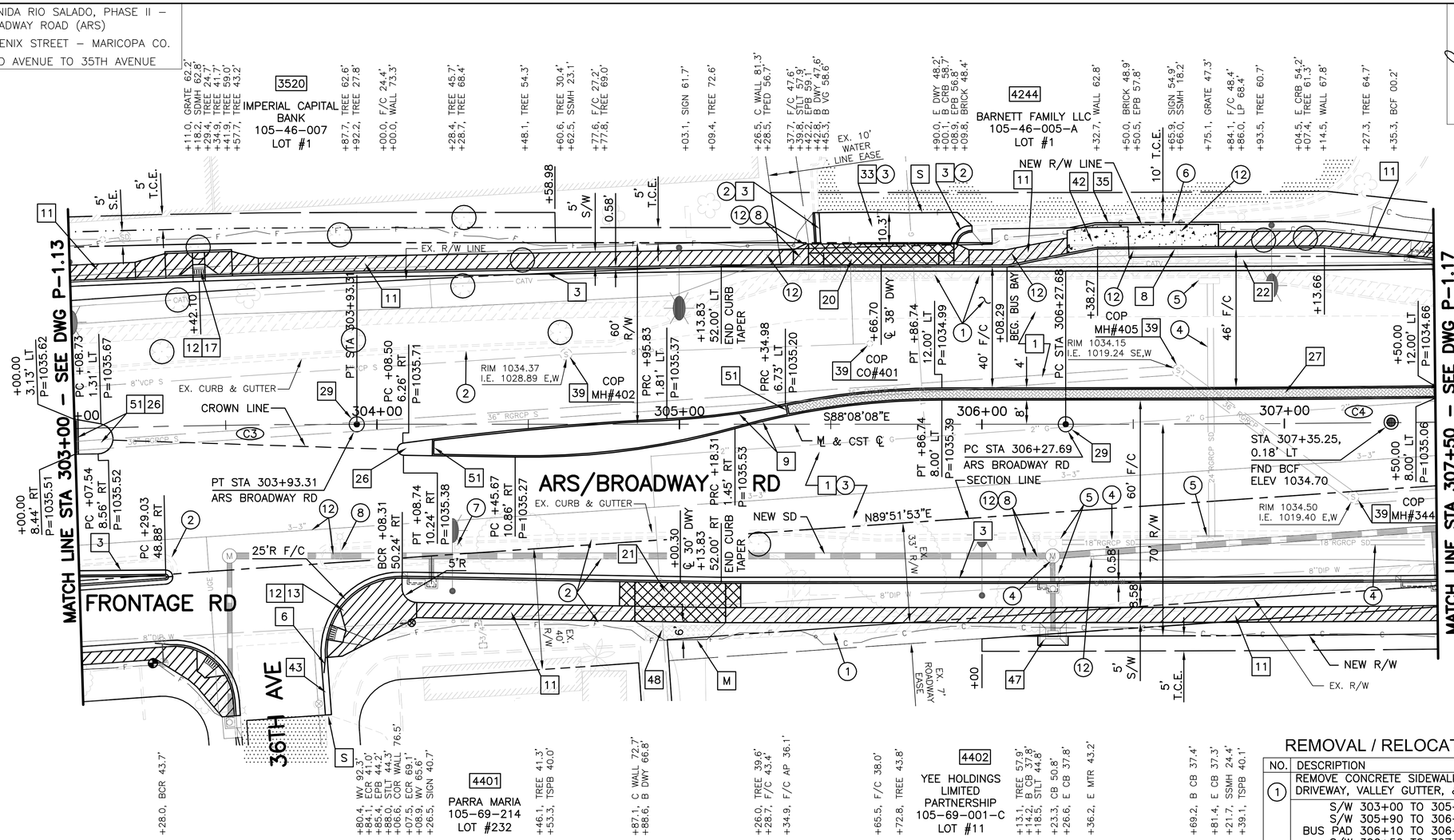
PAVING PROFILE
STA 298+50 TO STA 303+00
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.14

ST85100371 P-1_14.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

(C3) PI STA 302+88.64
N= 875741.75
E= 633321.16

MAIN CURVE
Δ= 04°00'00"
D= 01°54'35"
R= 3000.00'
L= 209.44'
T= 104.76'
EXT= 1.83'
SUPER= N/C

(C4) PI STA 310+36.28
N= 875691.36
E= 634067.18

MAIN CURVE
Δ= 04°05'03"
D= 00°30'00"
R= 11459.16'
L= 816.83'
T= 408.59'
EXT= 7.28'
SUPER= N/C

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	S/W 303+00 TO 305+43 LT	SF	1254
	S/W 305+90 TO 306+10 LT	SF	127
	BUS PAD 306+10 TO 306+50 LT	SF	410
	S/W 306+50 TO 307+50 LT	SF	500
	S/W 305+13 TO 307+50 RT	SF	1267
	DWY 305+43 TO 305+90 LT	SF	510
	DWY 304+88 TO 305+13 RT	SF	115
	BUS BAY 304+87 TO 307+44 LT	SF	2719
	VG 303+81 TO 304+08 RT	SF	176
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	303+00 TO 307+50 LT	LF	467
	303+00 TO 303+31 RT	LF	36
	303+81 TO 307+50 RT	LF	714
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	3778
4	REMOVE PIPE, BACKFILL & COMPACT	LF	220
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	4
6	REMOVE EXISTING BLOCK WALL (MISCELLANEOUS REMOVALS)		
	306+00 TO 306+82 LT	LF	86
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
12	MISCELLANEOUS WORK BY OTHERS		
	ELECTRIC METER, RELOCATE	NPI	–
	ELECTRIC PULLBOX & CONDUCTORS, RELOCATE	NPI	–
	TELEPHONE PEDESTAL, RELOCATE	NPI	–
	PRIVATE SIGN WITH ELEC, RELOCATE	NPI	–

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(602) 263-1100
Blue Stake Center CALL COLLECT

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO.
34580
MARK LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

N
City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	31	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	4753
1	2" ASPHALT CONCRETE SURFACE COURSE, MOD. TYPE D 1/2	TON	535
	5-1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1-1/2	TON	1471
	TACK COAT	TON	4
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	724
6	CURB TRANSITION, MAG STD DET 221	–	–
8	SINGLE CURB, MAG STD DET 222, TYPE 'A', MODIFIED FOR BUS BAY	LF	142
9	SINGLE CURB, MAG STD DET 222, TYPE 'A',	LF	668
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	3231
12	TRUNCATED DOMES, COP STD DET P1232	SF	20
13	CURB RAMP, 25' RADII, COP STD DET P1235	SF	448
17	CURB RAMP, MID BLOCK, COP STD DETAIL P1241-1	SF	178
20	DRIVEWAY ENTRANCE- TYPE 1, COP STD DETAIL P1255-1, 9" THICK	SF	336
21	DRIVEWAY ENTRANCE - TYPE II, COP STD DETAIL P1255-2, 9" THICK	SF	472
22	CONCRETE PAVEMENT, 9" THICK BUS BAY, TYPE I, COP STD DETAIL P1256-1, SEE DET 3, DT-1.01	SF	729
26	CONCRETE MEDIAN NOSE	SF	161
	STAMPED ASPHALT PAVEMENT	SF	638
27	2-1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	10
	AGGREGATE BASE COURSE	TON	15
29	SURVEY MARKER, MAG STD DETAIL 120-1, TYPE 'B'	EA	2
33	DRIVEWAY CONNECTION, ASPHALT	TON	8
35	NEW RETAINING WALL, SEE DWG DT-1.03	LF	127
39	ADJUST EXISTING MANHOLE FRAME & COVER. COP STD DET P1422	EA	2
42	BUS SHELTER / ACCESSORY PAD, COP STANDARD DETAIL P1261	SF	373
43	ROLL CURB & GUTTER, MAG STD DET 220, TYPE 'C'	LF	19
47	CONCRETE APRON, SEE DET 1 ON DT-1.01	EA	1
48	AGGREGATE BASE CONN. (6" THK)	TON	5
51	SINGLE CURB, MAG STD DET 222, TYPE 'B',	LF	18

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.13 FOR STORM DRAIN PLAN
3. SEE CP-1.12 FOR CB CONN PIPE PROFILE
4. SEE P-1.16 FOR ROADWAY PROFILE
5. SEE P-1.19, P-1.20 AN P-1.21 FOR FRONTAGE RD PLANS
6. SEE TS-1.02 FOR TRAFFIC SIGNAL ITEMS
7. SEE DT-3.03 & DT-3.04 FOR DRIVEWAY PROFILES
8. SEE SL-1.03 FOR STREET LIGHT PLAN

"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."

PAVING PLAN
STA 303+00 TO STA 307+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.15

ST85100371 P-1_15.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

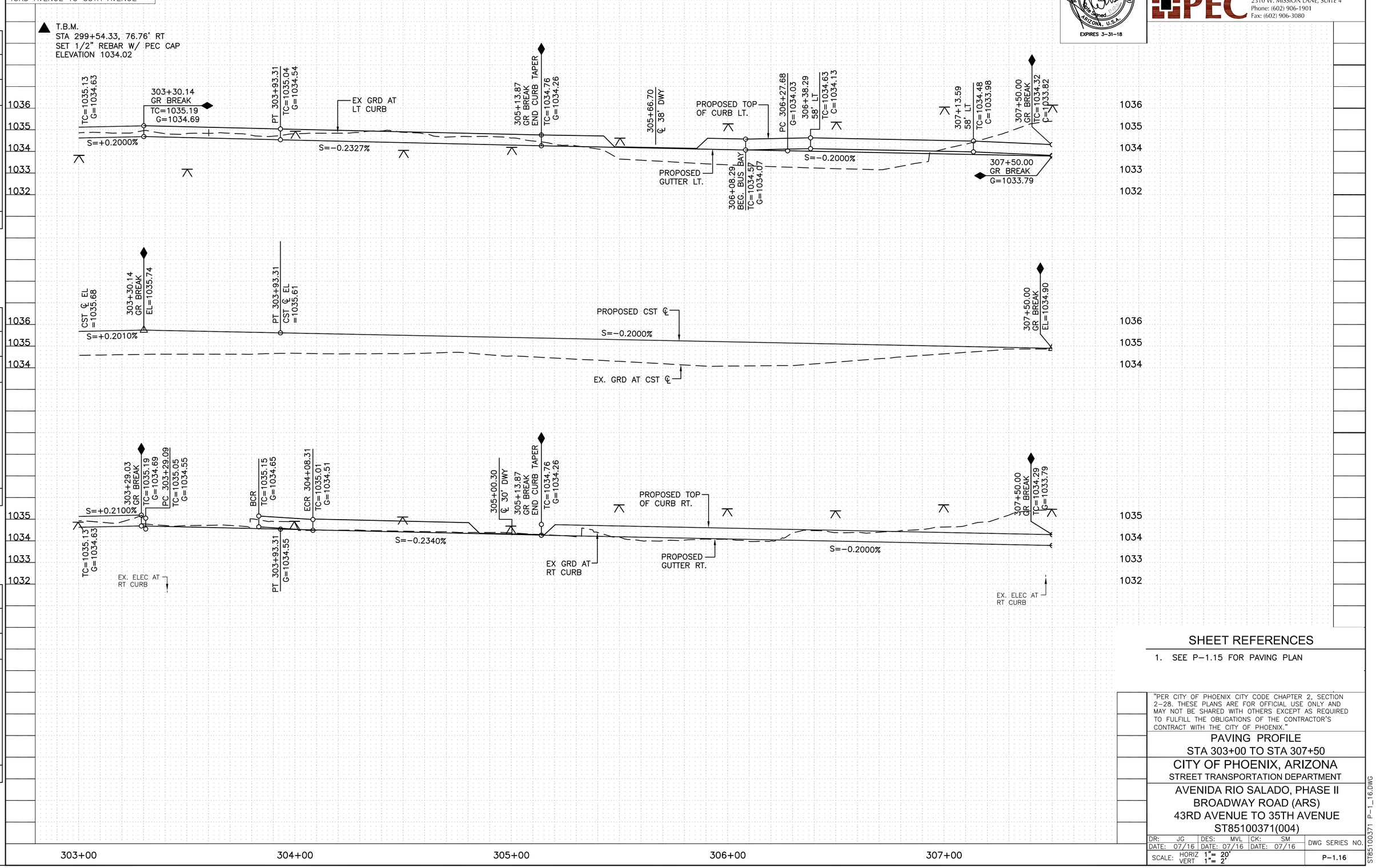
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	32	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



SHEET REFERENCES

1. SEE P–1.15 FOR PAVING PLAN

"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."

PAVING PROFILE
STA 303+00 TO STA 307+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.16

ST85100371 P–1_16.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

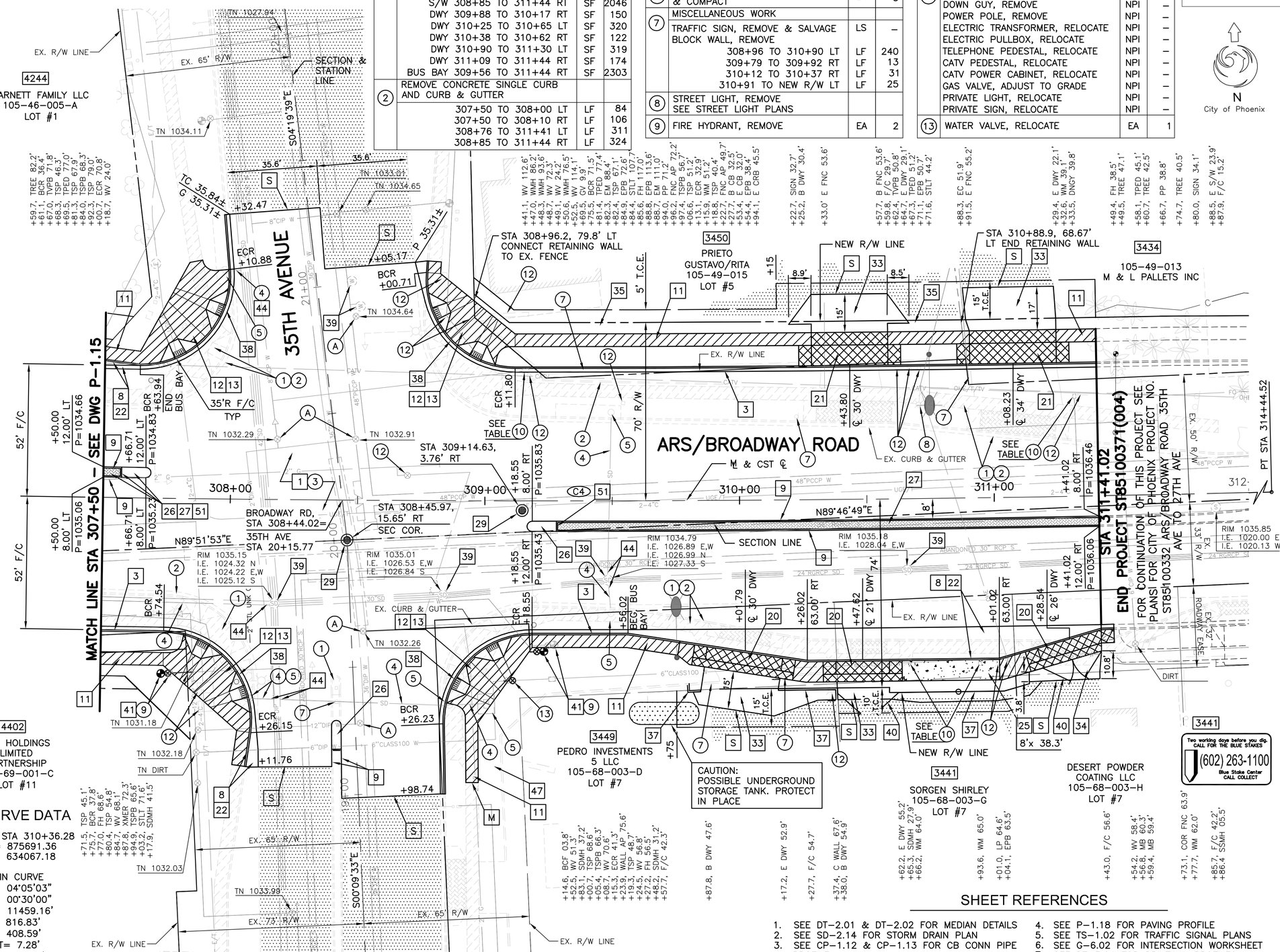
REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CK'D BY	DATE

RELOCATED WATER METERS

STA 20+65.9, 78' RT
STA 310+63.8, 73' RT
STA 310+91.4, 73' RT
STA 311+33.2, 67' LT

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	S/W 307+50 TO 308+00 LT	SF	637
	S/W 307+50 TO 308+10 RT	SF	659
	S/W 308+76 TO 311+41 LT	SF	1823
	S/W 308+85 TO 311+44 RT	SF	2046
	DWY 309+88 TO 310+17 RT	SF	150
	DWY 310+25 TO 310+65 LT	SF	320
	DWY 310+38 TO 310+62 RT	SF	122
	DWY 310+90 TO 311+30 LT	SF	319
	DWY 311+09 TO 311+44 RT	SF	174
	BUS BAY 309+56 TO 311+44 RT	SF	2303
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	307+50 TO 308+00 LT	LF	84
	307+50 TO 308+10 RT	LF	106
	308+76 TO 311+41 LT	LF	311
	308+85 TO 311+44 RT	LF	324
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	4250
4	REMOVE PIPE, BACKFILL & COMPACT	LF	179
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	5
7	MISCELLANEOUS WORK		
	TRAFFIC SIGN, REMOVE & SALVAGE	LS	–
	BLOCK WALL, REMOVE		
	308+96 TO 310+90 LT	LF	240
	309+79 TO 309+92 RT	LF	13
	310+12 TO 310+37 RT	LF	31
	310+91 TO NEW R/W LT	LF	25
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
9	FIRE HYDRANT, REMOVE	EA	2
10	RELOCATE WATER METER, BOX AND COVER PER COP SUPP 610.11 AND COP DET P1363, SEE TABLE THIS SHEET	EA	4
12	MISCELLANEOUS WORK BY OTHERS		
	DOWN GUY, REMOVE	NPI	–
	POWER POLE, REMOVE	NPI	–
	ELECTRIC TRANSFORMER, RELOCATE	NPI	–
	ELECTRIC PULLBOX, RELOCATE	NPI	–
	TELEPHONE PEDESTAL, RELOCATE	NPI	–
	CATV PEDESTAL, RELOCATE	NPI	–
	CATV POWER CABINET, RELOCATE	NPI	–
	GAS VALVE, ADJUST TO GRADE	NPI	–
	PRIVATE LIGHT, RELOCATE	NPI	–
	PRIVATE SIGN, RELOCATE	NPI	–
13	WATER VALVE, RELOCATE	EA	1



SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.14 FOR STORM DRAIN PLAN
3. SEE CP-1.12 & CP-1.13 FOR CB CONN PIPE PROFILE
4. SEE P-1.18 FOR PAVING PROFILE
5. SEE TS-1.02 FOR TRAFFIC SIGNAL PLANS
6. SEE G-6.02 FOR INTERSECTION WORKSHEET
7. SEE DT-3.04 FOR DRIVEWAY PROFILES
8. SEE SL-1.04 FOR STREET LIGHT PLAN

Registered Professional Engineer (Civil) CERTIFICATE NO. 34860 MARK LEE Date Signed 11/17/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	33	164	

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2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	5301
1	1–1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE D 1/2	TON	597
	6–1/2" ASPHALT CONCRETE BASE COURSE, TYPE A 1–1/2	TON	1640
	TACK COAT	TON	5
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	340
8	SINGLE CURB, MAG STD DET 222, TYPE 'A', MODIFIED FOR BUS BAY	LF	220
9	SINGLE CURB, MAG STD DET 222, TYPE 'A'	LF	439
11	5' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1722
12	TRUNCATED DOMES, COP STD DET P1232	SF	80
	CONC SIDEWALK, MOD. 9" THICK	SF	2594
13	CURB RAMP, 35' RADII, COP STD DET P1235		
20	DRIVEWAY ENTRANCE– TYPE 1, COP STD DETAIL P1255–1, 9" THICK	SF	835
21	DRIVEWAY ENTRANCE – TYPE II, COP STD DETAIL P1255–2, 9" THICK	SF	992
22	CONCRETE PAVEMENT, 9" THICK	SF	1835
	BUS BAY, TYPE I, COP STD DETAIL P1256–1		
25	BUS SHELTER / ACCESSORY PAD, COP STANDARD DETAIL P1260	SF	307
26	CONCRETE MEDIAN NOSE	SF	133
	STAMPED ASPHALT PAVEMENT	SF	658
27	2–1/2" ASPHALT CONCRETE SURFACE COURSE, (D 1/2)	TON	11
	AGGREGATE BASE COURSE	TON	16
29	SURVEY MARKER, MAG STD DETAIL 120–1, TYPE 'B'	EA	2
33	DRIVEWAY CONNECTION, ASPHALT	TON	42
34	DRIVEWAY CONNECTION, CONCRETE, 6" THICK	SF	204
35	NEW RETAINING WALL, SEE DETAIL ON DT–1.03	LF	166
37	NEW MASONRY BLOCK WALL, SEE DETAIL ON DT–1.03	SF	522
38	VERT. CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6", 9" THICK	LF	231
39	ADJUST EXISTING MANHOLE FRAME & COVER, COP STD DET P1422	EA	6
40	DOUBLE GATE, MAG STD DET 160 (24' WIDE)	EA	2
	6" D.I.P., RESTRAINED	LF	120
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	2
	6" VALVE, BOX AND COVER	EA	2
44	PIPE PLUG, MAG STD DET 427	EA	6
47	CONCRETE APRON, SEE DET 1 ON DT–1.01	EA	1
51	SINGLE CURB, MAG STD DET 222, TYPE 'B'	LF	6
Ⓐ	ADJUST WATER VALVE BOX PER COP STD DET P1391 ,TYPE 'A' & P1391–1	EA	5

PAVING PLAN SHEET
STA 307+50 TO STA 311+41.02

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			P-1.17

ST85100371 P-1_17.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

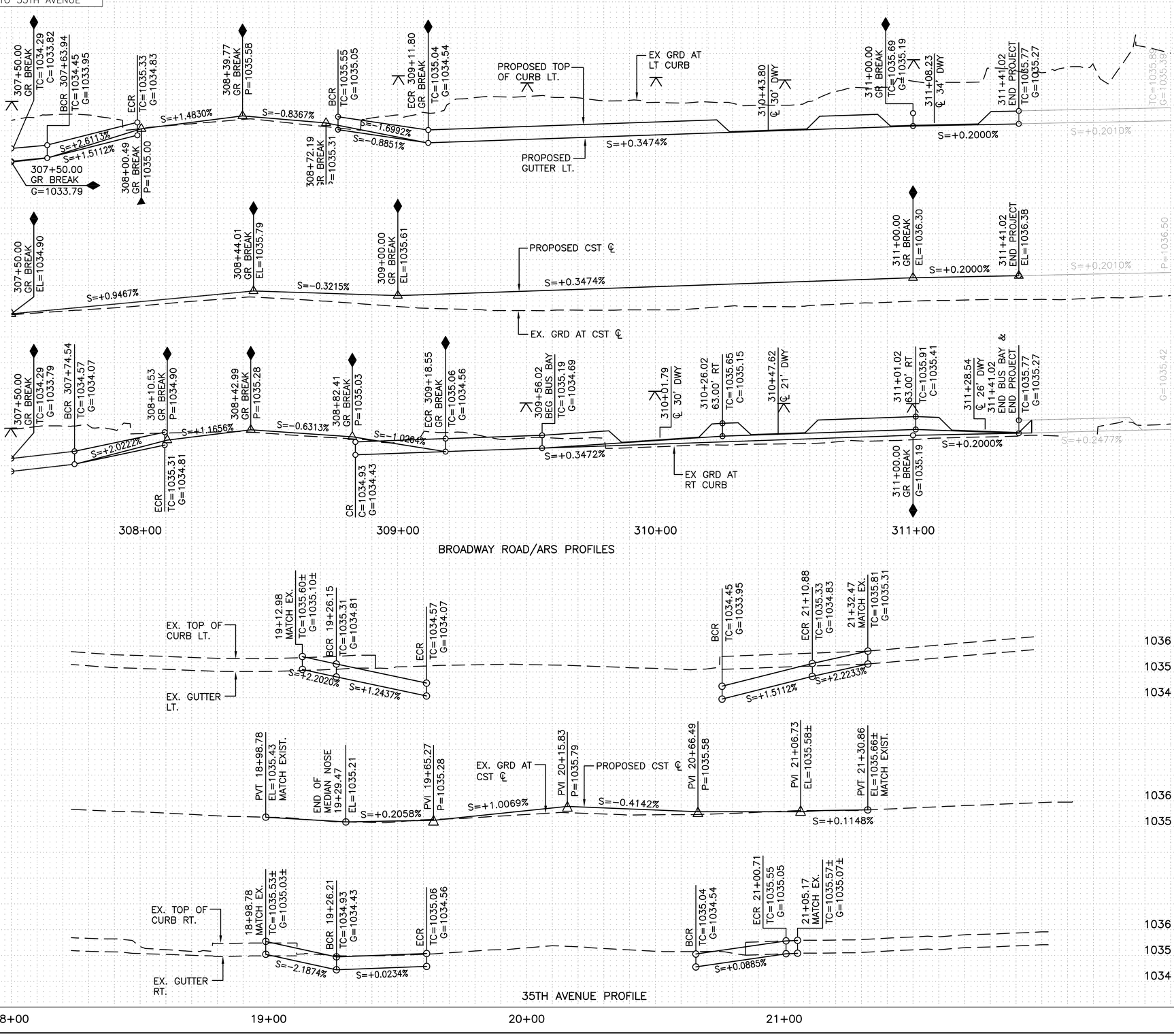
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	34	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed ARIZONA, U.S.A. EXPIRES 3-31-18

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



BROADWAY ROAD/ARS PROFILES

35TH AVENUE PROFILE

18+00 19+00 20+00 21+00

SHEET REFERENCES

1. SEE P-1.17 FOR PAVING PLAN

"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."

PAVING PROFILE SHEET
STA 307+50 TO STA 311+41.02

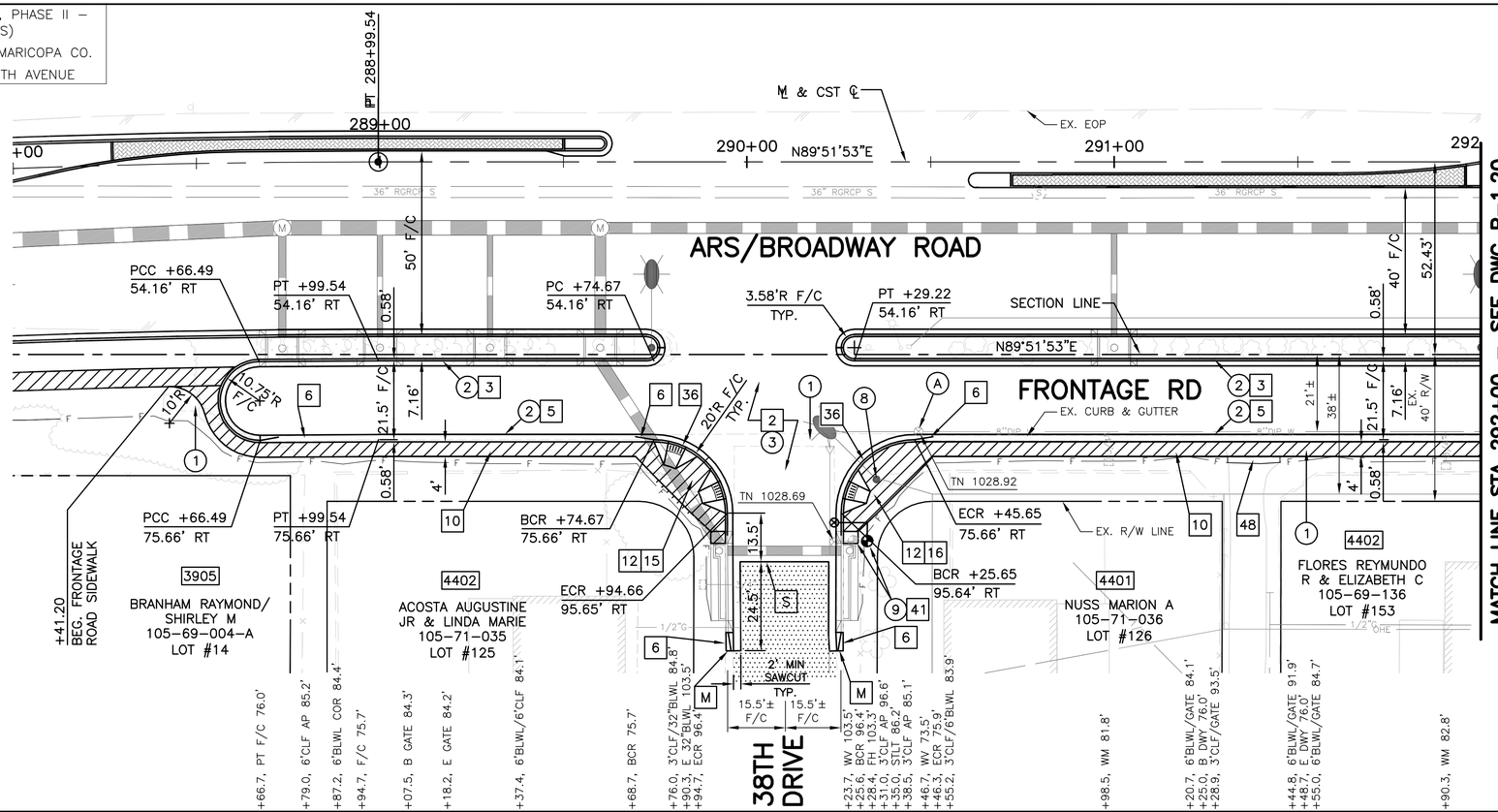
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

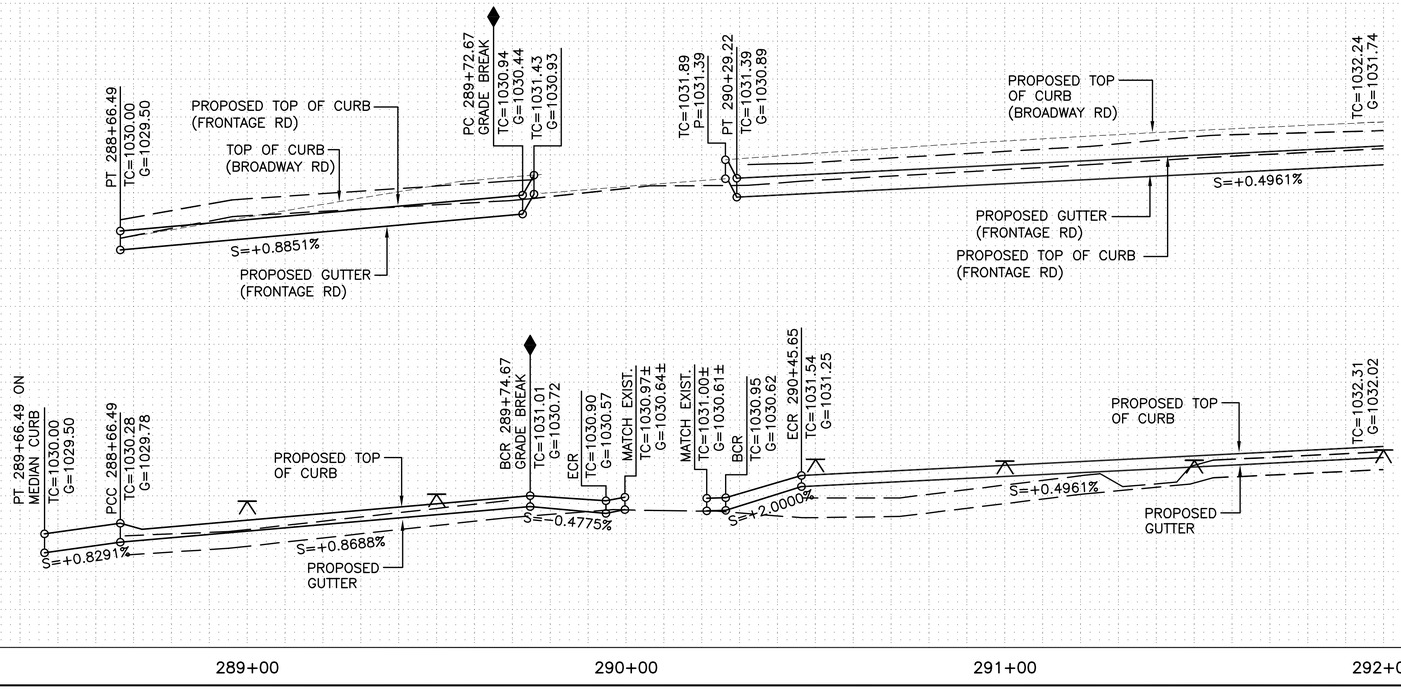
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT 1"= 2'			P-1.18

ST85100371 P-1_18.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





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City of Phoenix

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	35	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	SLAB 288+40 TO 288+56 RT	SF	103
	DWY 291+25 TO 291+49 RT	SF	97
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	288+55 TO 289+95 RT	LF	295
	290+26 TO 292+00 RT	LF	369
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	804
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
9	FIRE HYDRANT, REMOVE	EA	1

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	788
2	3" ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4	TON	133
	AGGREGATE BASE COURSE, 8" THK	TON	343
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	329
5	ROLL CURB & GUTTER, MAG STD DET 220, TYPE 'D'	LF	287
6	CURB TRANSITION, MAG STD DET 221	LF	
10	4' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1078
12	TRUNCATED DOMES, COP STD DET P1232	SF	30
	CONCRETE SIDEWALK, 6" THICK	SF	311
15	CURB RAMP, 20' RADII, 4" VERTICAL CURB RETURN COP STD DETAIL P1239		
	CONCRETE SIDEWALK, 6" THICK	SF	311
16	CURB RAMP, 20' RADII, 4" VERT. CURB RETURN COP STD DETAIL P1239, MOD WITH RAMP AS SHOWN		
36	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=4"	LF	63
	6" D.I.P., RESTRAINED	LF	19
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
48	AGGREGATE BASE CONN. (6" THK)	TON	1
A	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391-1	EA	2

SHEET REFERENCES

1. SEE SD-2.09 & SD-2.10 FOR STORM DRAIN PLANS
2. SEE CP-1.08, CP-1.09 & CP-1.10 FOR CB CONN PIPE PROFILES
3. SEE P-1.10 & P-1.11 FOR ARS/BROADWAY RD PAVING SHEETS
4. SEE SL-1.03 FOR STREET LIGHT PLANS

"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."

FRONTAGE RD PAVING PLAN & PROFILE
STA 288+50 TO STA 292+00

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

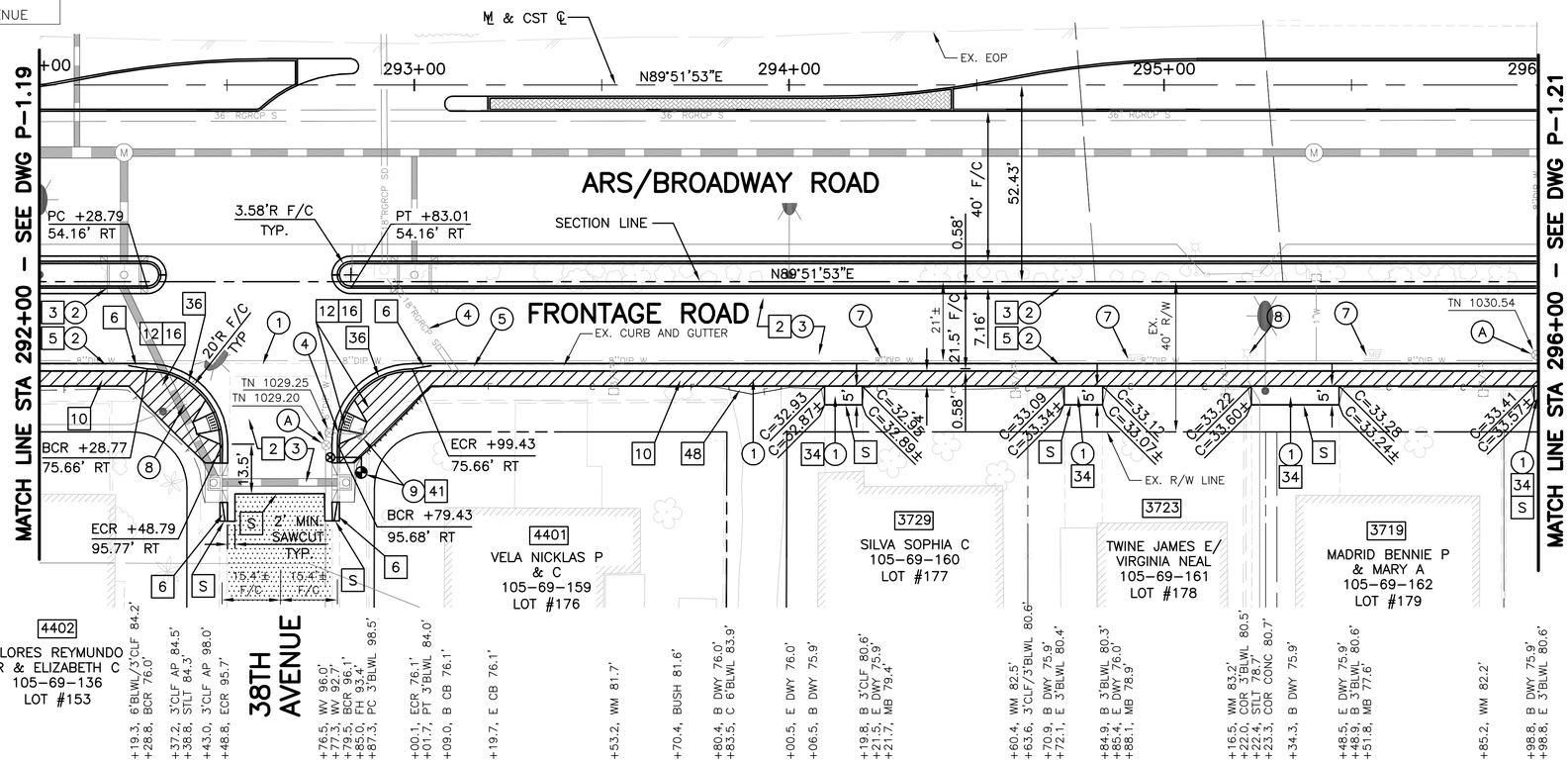
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.19

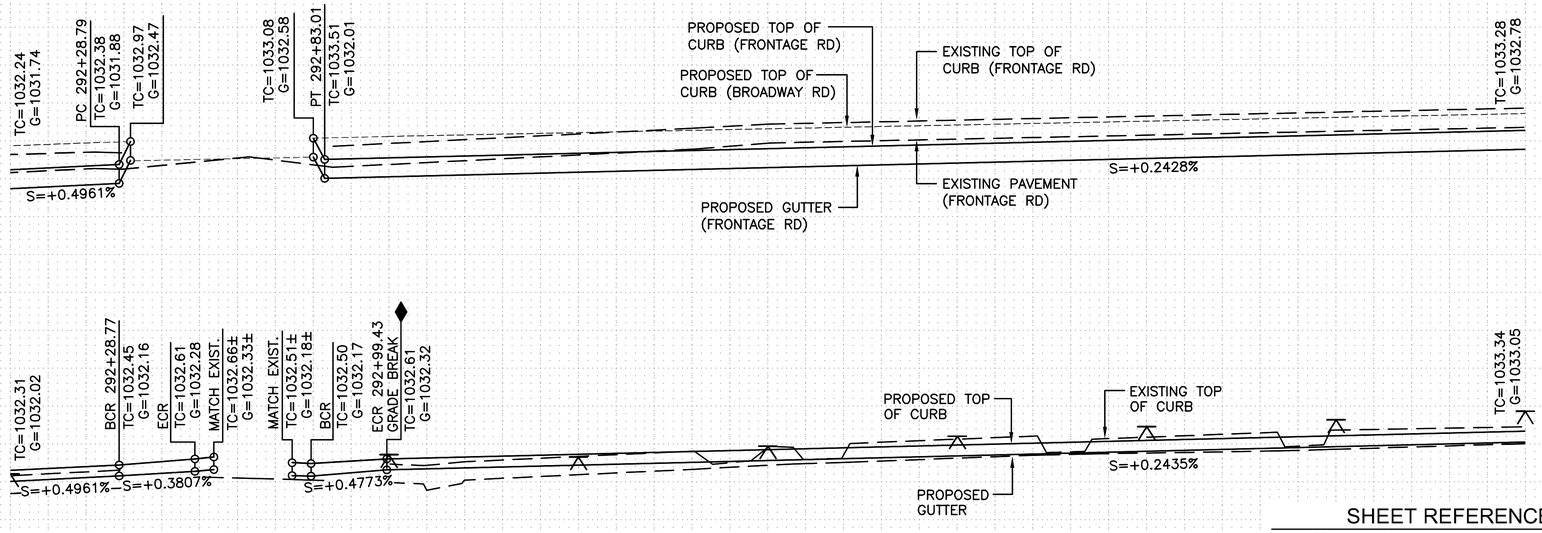
ST85100371 P-1_19.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





SHEET REFERENCES

1. SEE SD-2.10 & SD-2.11 FOR STORM DRAIN PLAN
2. SEE CP-1.08, CP-1.09, CP-1.10 & CP-1.11 FOR CB CONN PIPE PROFILES
3. SEE P-1.11 & P-1.12 FOR ARS/BROADWAY RD PAVING PLAN
4. SEE SL-1.03 FOR STREET LIGHT PLANS

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

N
City of Phoenix

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	36	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	VG 292+29 TO 292+99 RT	SF	280
	DWY 293+80 TO 294+00 RT	SF	79
	DWY 294+06 TO 294+22 RT	SF	94
	DWY 294+71 TO 294+85 RT	SF	100
	DWY 295+34 TO 295+49 RT	SF	156
	DWY 295+99 TO 296+00 RT	SF	7
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	292+00 TO 292+49 RT	LF	38
	292+80 TO 296+00 RT	LF	38
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	957
4	REMOVE PIPE, BACKFILL & COMPACT	LF	45
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	1
7	MISCELLANEOUS WORK		
	MAILBOX, REMOVE AND RESET 294+21, 82' RT 294+88, 82' RT 295+52, 82' RT	EA	3
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
9	FIRE HYDRANT, REMOVE	EA	1

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	996
2	3" ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4	TON	168
	AGGREGATE BASE COURSE, 8" THK	TON	433
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	362
5	ROLL CURB & GUTTER, MAG STD DET 220, TYPE 'D'	LF	340
6	CURB TRANSITION, MAG STD DET 221	LF	
10	4' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1278
12	TRUNCATED DOMES, COP STD DET P1232	SF	20
	CONCRETE SIDEWALK, 6" THICK	SF	623
16	CURB RAMP, 20' RADII, 4" VERT. CURB RETURN COP STD DETAIL P1239, MOD WITH RAMP AS SHOWN		
34	DRIVEWAY CONNECTION, CONCRETE, 6" THICK	SF	221
36	VERTICAL CURB & GUTTER, MAG STD DET. 220, TYPE 'A', H=4"	LF	63
	6" D.I.P., RESTRAINED	LF	19
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
48	AGGREGATE BASE CONN. (6" THK)	TON	1
A	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391-1	EA	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."

FRONTAGE RD PAVING PLAN & PROFILE
STA 292+00 TO STA 296+00

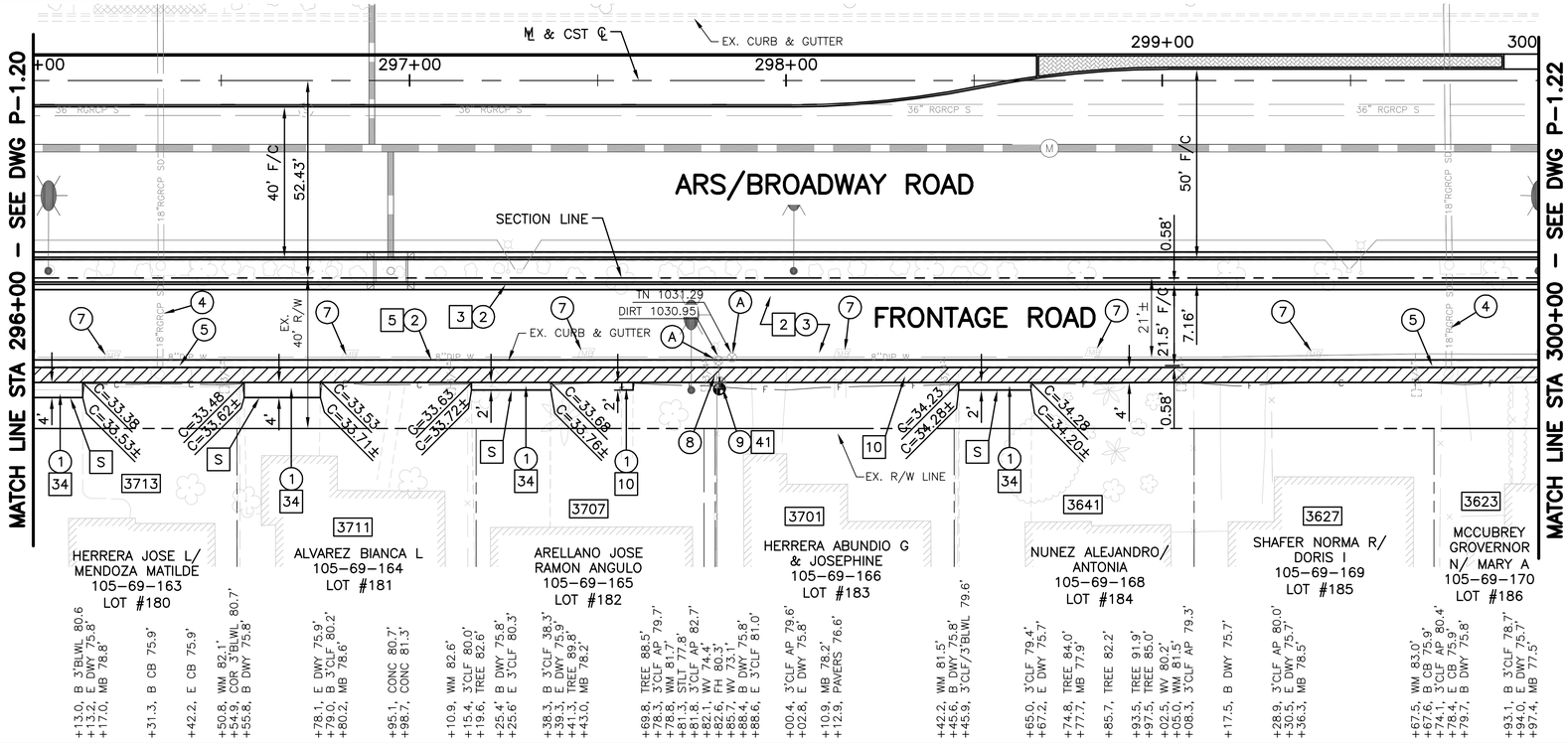
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

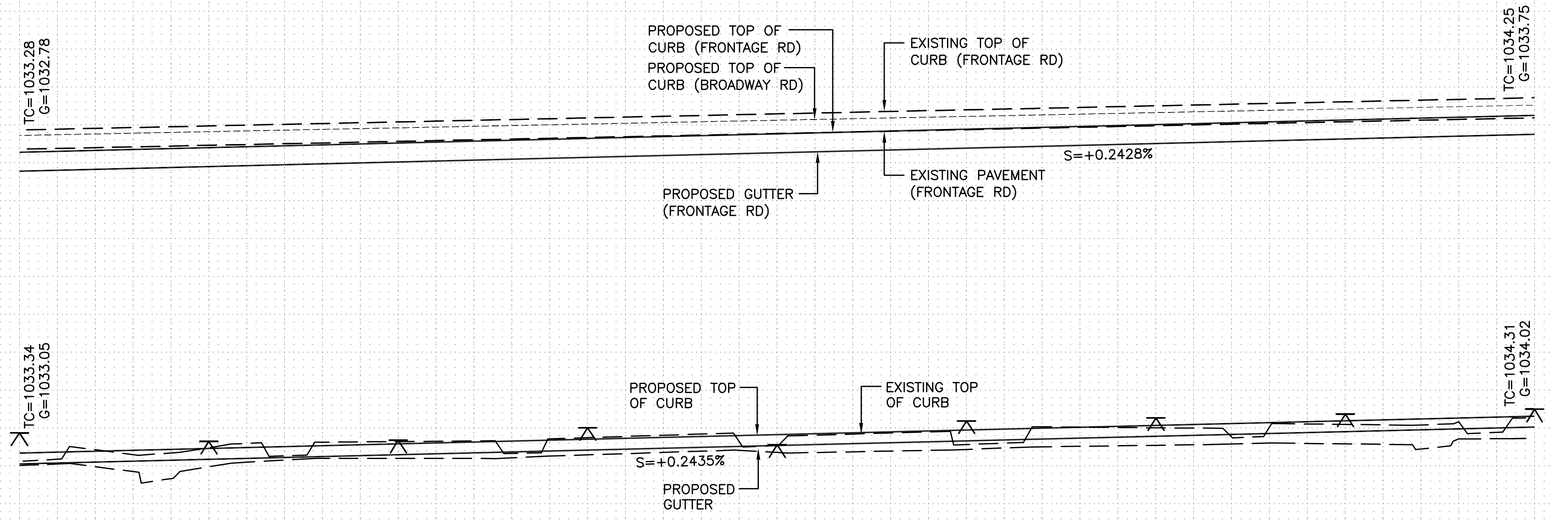
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P-1.20

ST85100371 P-1_20.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed 11-15-17 ARIZONA, U.S.A.
EXPIRES 3-31-18

N
City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	37	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	DWY 296+00 TO 296+14 RT	SF	72
	DWY 296+56 TO 296+78 RT	SF	125
	DWY 297+25 TO 297+40 RT	SF	90
	S/W 297+56 TO 297+60 RT	SF	18
	DWY 298+46 TO 298+67 RT	SF	113
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	296+00 TO 300+00 RT	LF	800
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	893
4	REMOVE PIPE, BACKFILL & COMPACT	LF	58
5	REMOVE CATCH BASIN, BACKFILL & COMPACT	EA	2
7	MISCELLANEOUS WORK		
	MAILBOX, REMOVE AND RESET	EA	7
	296+17, 82' RT		
	296+80, 82' RT		
	297+43, 82' RT		
	298+11, 82' RT		
	298+78, 82' RT		
	299+36, 82' RT		
	298+37, 82' RT		
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
9	FIRE HYDRANT, REMOVE	EA	1

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	893
2	3" ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4	TON	151
	AGGREGATE BASE COURSE, 8" THK	TON	388
3	VERTICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	400
5	ROLL CURB & GUTTER, MAG STD DET 220, TYPE 'D'	LF	400
10	4' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1600
34	DRIVEWAY CONNECTION, CONCRETE, 6" THICK	SF	139
	6" D.I.P., RESTRAINED	LF	11
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
A	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391–1	EA	2

SHEET REFERENCES

1. SEE SD–2.11 & SD–2.12 FOR STORM DRAIN PLANS
2. SEE CP–1.11 FOR CB CONN PIPE PROFILES
3. SEE P–1.12 & P–1.13 FOR ARS/BROADWAY RD PAVING PLANS
4. SEE SL–1.03 FOR STREET LIGHT PLANS

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

"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."

FRONTAGE RD PAVING PLAN & PROFILE
STA 296+00 TO STA 300+00

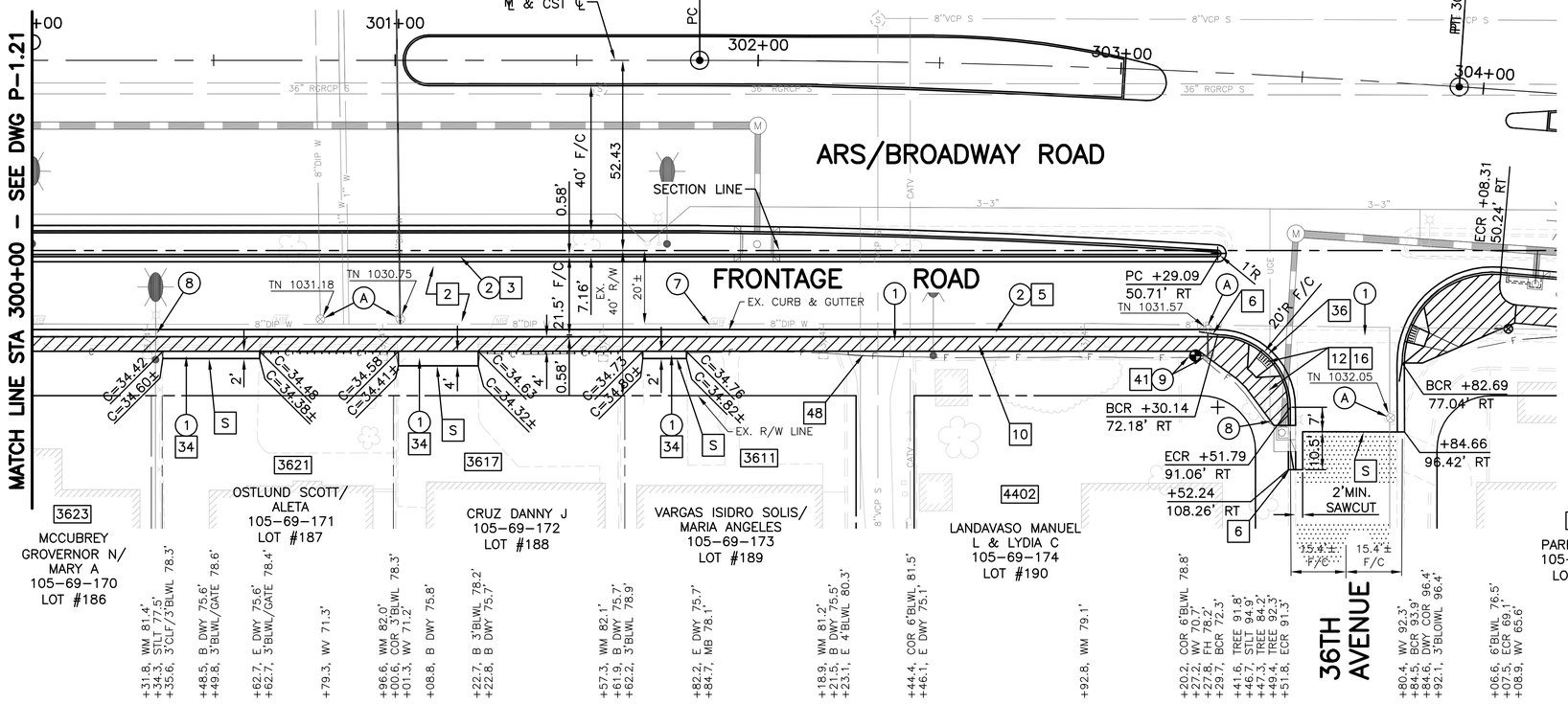
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

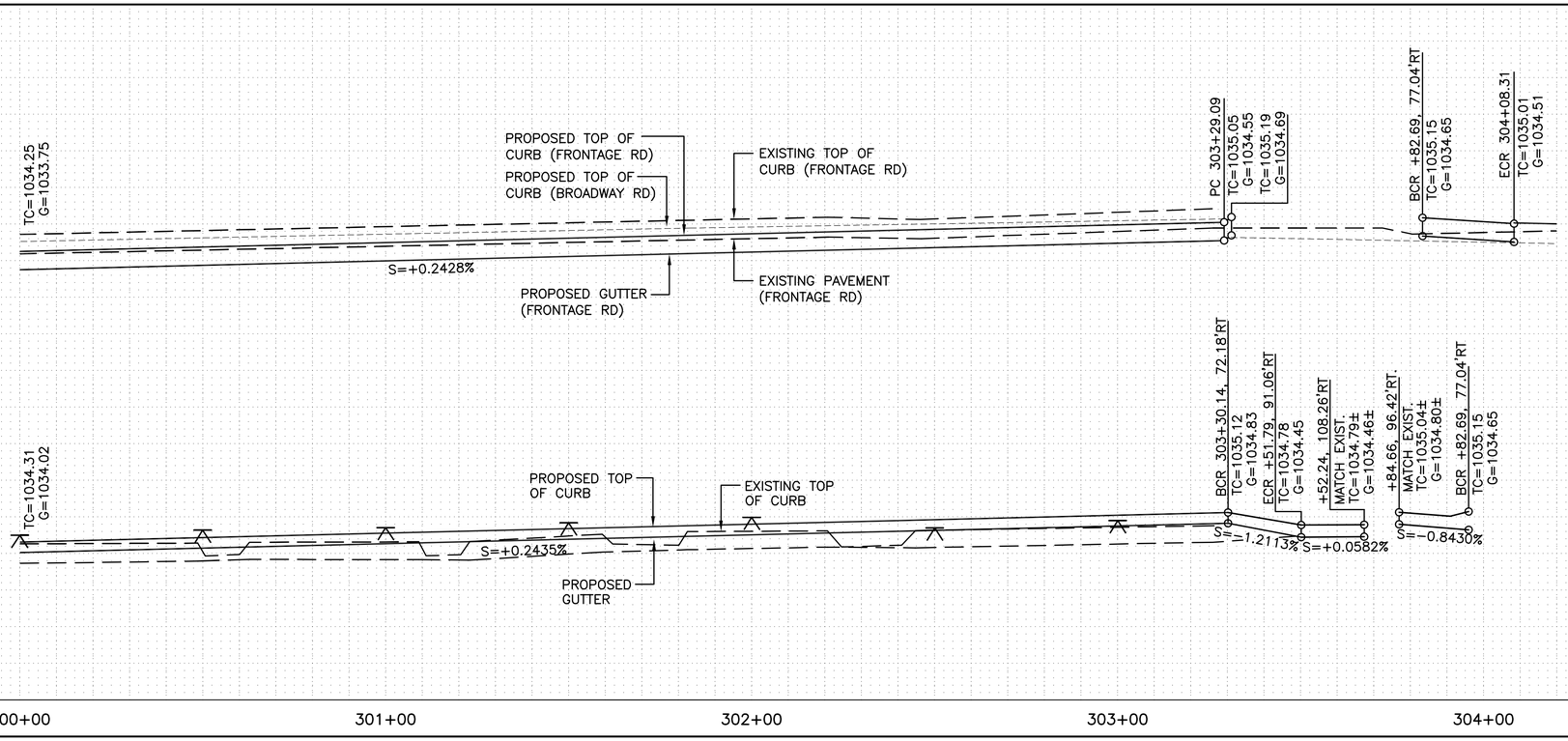
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 2'			P–1.21

ST85100371 P–1_21.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





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City of Phoenix

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	38	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REMOVAL / RELOCATION NOTES

NO.	DESCRIPTION	UNIT	QTY
1	REMOVE CONCRETE SIDEWALK, DRIVEWAY, VALLEY GUTTER, & SLAB		
	DWY 300+34 TO 300+63 RT	SF	155
	DWY 301+01 TO 301+24 RT	SF	146
	DWY 301+68 TO 301+83 RT	SF	76
	SDWK 301+83 TO 302+21 RT	SF	152
	DWY 302+21 TO 302+46 RT	SF	92
	VG 303+72 TO 303+84 RT	SF	198
2	REMOVE CONCRETE SINGLE CURB AND CURB & GUTTER		
	300+00 TO 303+52 RT	LF	452
3	REMOVE ASPHALT CONCRETE PAVEMENT	SY	926
7	MISCELLANEOUS WORK		
	MAILBOX, REMOVE AND RESET 301+85, 82' RT	EA	1
8	STREET LIGHT, REMOVE SEE STREET LIGHT PLANS		
9	FIRE HYDRANT, REMOVE	EA	1

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
	SUBGRADE PREPARATION	SY	926
2	3" ASPHALT CONCRETE SURFACE COURSE, TYPE C 3/4	TON	156
	AGGREGATE BASE COURSE, 8" THK	TON	403
3	VERICAL CURB & GUTTER, MAG STD DET 220, TYPE 'A', H=6"	LF	327
5	ROLL CURB & GUTTER, MAG STD DET 220, TYPE 'D'	LF	332
6	CURB TRANSITION, MAG STD DET 221	LF	
10	4' CONCRETE SIDEWALK, MOD. COP STD DET P1230, 6" THK, CLASS 'A'	SF	1287
12	TRUNCATED DOMES, COP STD DET P1232	SF	10
	CONCRETE SIDEWALK, 6" THICK	SF	275
16	CURB RAMP, 20' RADII, 4" VERT. CURB RETURN COP STD DETAIL P1239, MOD WITH RAMP AS SHOWN		
34	DRIVEWAY CONNECTION, CONCRETE, 6" THICK	SF	166
36	VERTICAL CURB & GUTTER, MAG STD DET. 220, TYPE 'A', H=4"	LF	32
	6" D.I.P., RESTRAINED	LF	15
41	FIRE HYDRANT, FURNISHED BY CITY OF PHOENIX	EA	1
	6" VALVE, BOX AND COVER	EA	1
48	AGGREGATE BASE CONN. (6" THK)	TON	1
A	ADJUST WATER VALVE BOX PER COP STD DET P1391, TYPE 'A' & P1391-1	EA	4

SHEET REFERENCES

1. SEE DT-2.01 & DT-2.02 FOR MEDIAN DETAILS
2. SEE SD-2.12 FOR STORM DRAIN PLAN
3. SEE SHEET CP-1.11 FOR CB CONN PIPE PROFILE
4. SEE P-1.13, P-1.14 & P-1.15 FOR ARS/BROADWAY RD
5. SEE SL-1.03 FOR STREET LIGHT PLANS

"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."

FRONTAGE RD PAVING PLAN & PROFILE
STA 300+00 TO STA 304+00

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

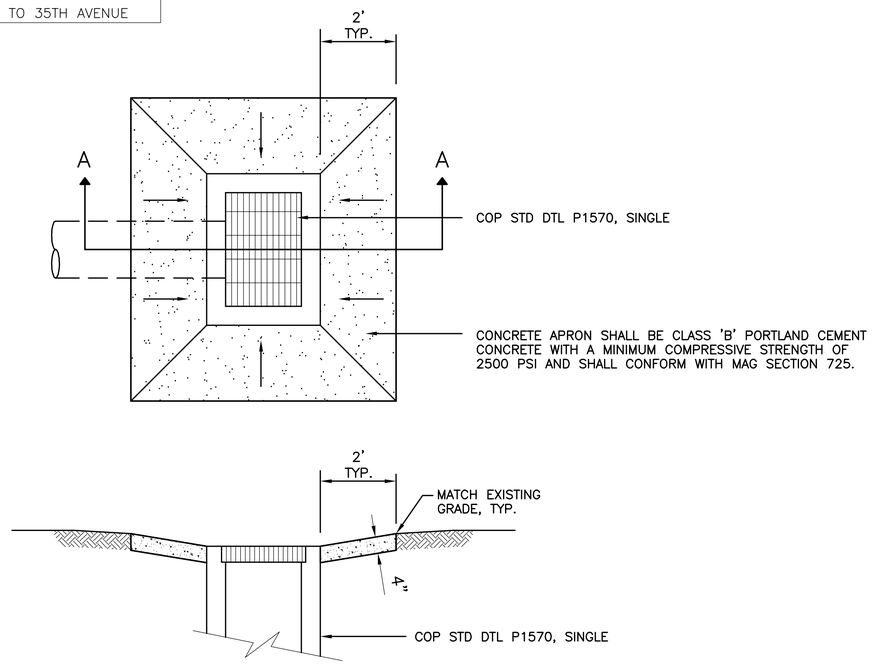
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	P-1.22
SCALE: HORIZ 1"= 20' VERT 1"= 2'			

ST85100371 P-1_22.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

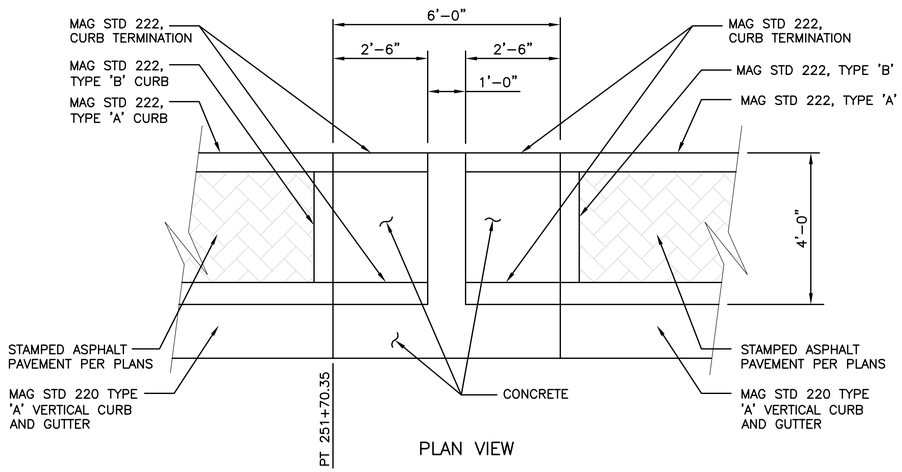


SECTION A–A

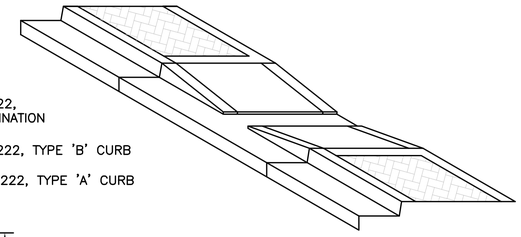
CONCRETE APRON FOR P1570 CATCH BASINS

NO SCALE

DETAIL NO. 1



PLAN VIEW

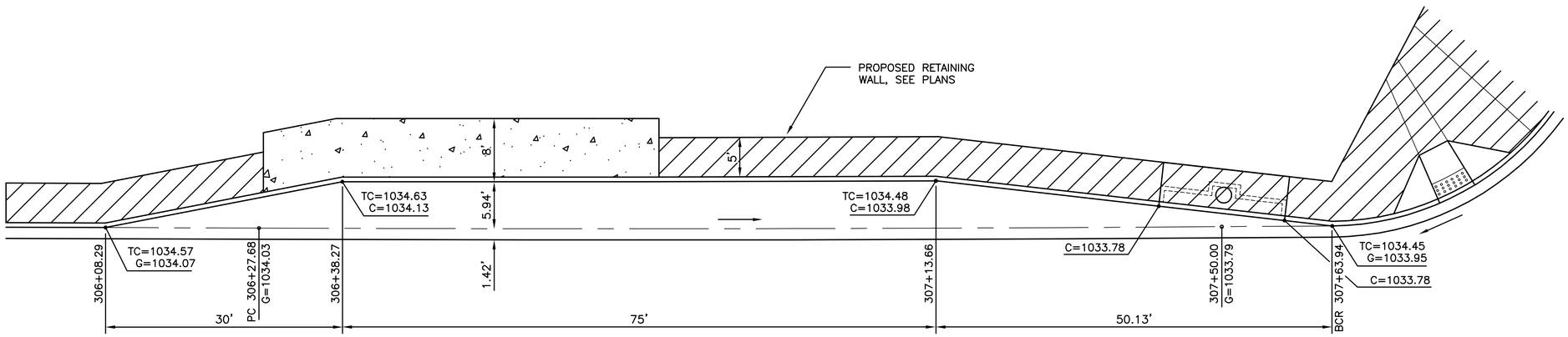


ISOMETRIC VIEW

MEDIAN OPENING AT STATION 251+73.35

NO SCALE

DETAIL NO. 2



MODIFIED BUS BAY (TYPE 1) P-1256-1

NO SCALE

DETAIL NO. 3

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO.
34880
MARK W. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	39	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

SPECIAL DETAILS - PAVING

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			DT–1.01

ST85100371 DT–1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	40	164	

Registered Professional Engineer CERTIFICATE NO. 34880 MARK W. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

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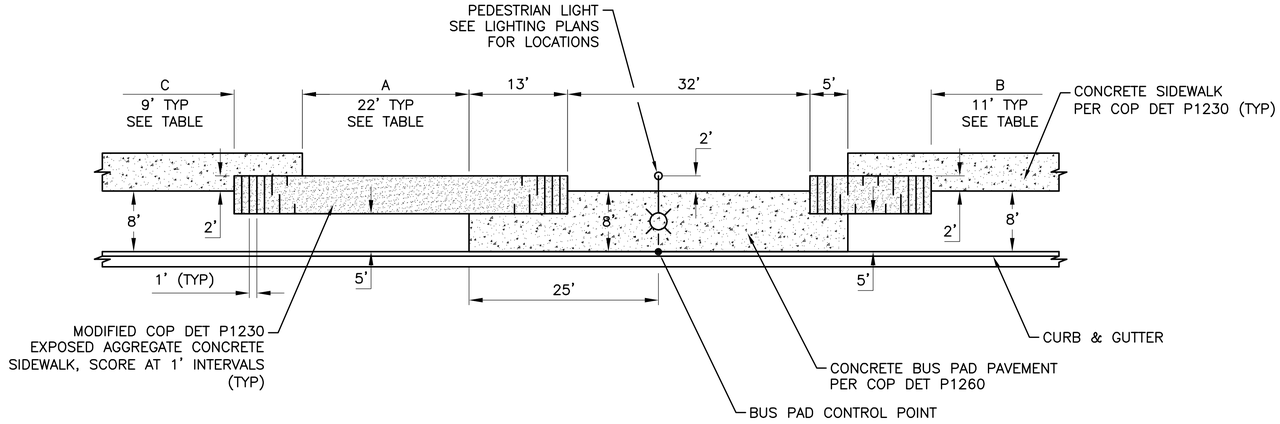
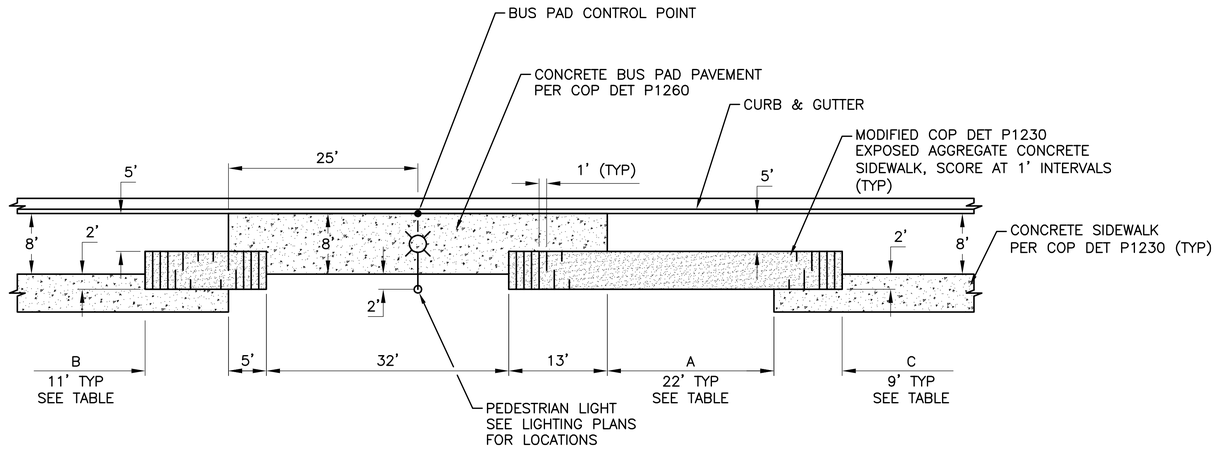


NORTH SIDE (LT)

BUS PAD LOCATION TABLE					
BUS PAD SEGMENT	CONTROL POINT STATION	RT/LT	DIMENSION A	DIMENSION B	DIMENSION C
4	265+75	LT	22'	11'	9'
4	269+00	RT	22'	11'	9'
4	286+90	RT	22'	11'	9'
4	288+00	LT	22'	11'	9'



SOUTH SIDE (RT)

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

DETAIL NO. 4

"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."

SPECIAL DETAILS - PAVING

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-1.02

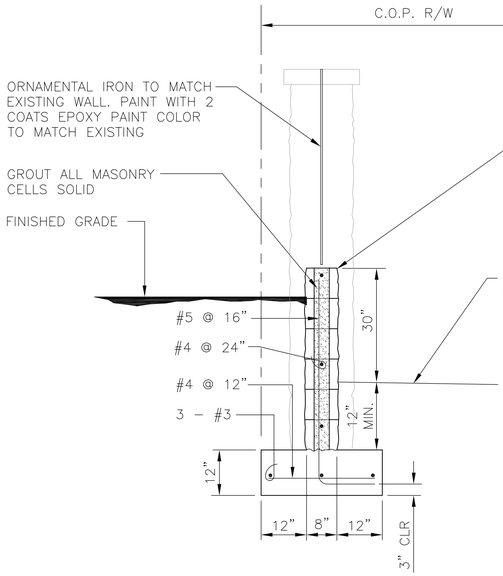
ST85100371 DT-1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

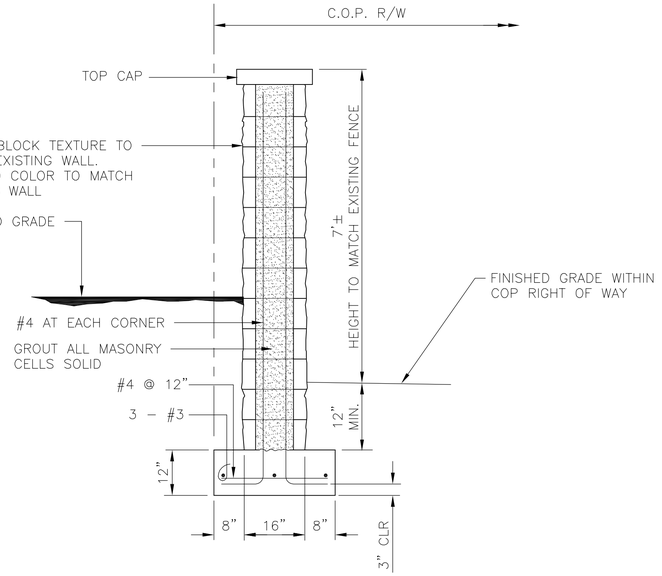
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	

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

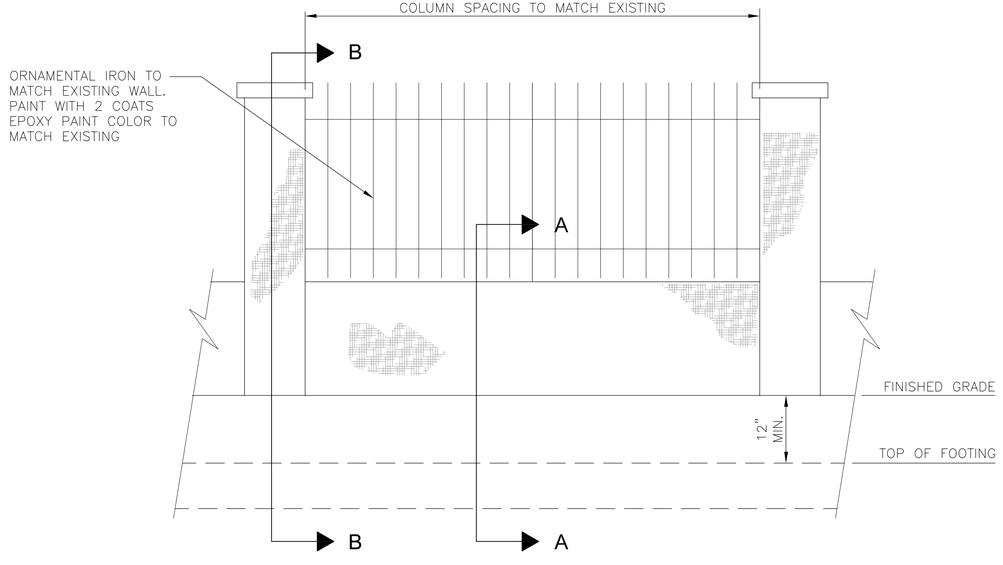
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	



SECTION A-A



SECTION B-B



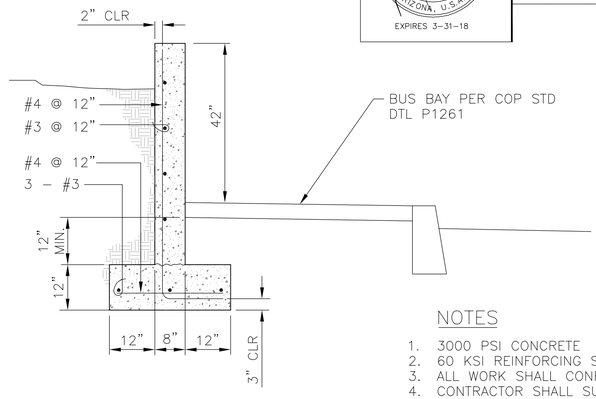
ELEVATION VIEW

RETAINING WALL AT NORTHEAST CORNER OF
35TH AVE AND BROADWAY ROAD (APN 105-49-015)

NO SCALE

FENCE FOR PARCEL 105-68-003D IS SIMILAR EXCEPT WITH 12" MIN COVER AT BOTH SIDES OF WALL FOOTING

DETAIL NO. 5



RETAINING WALL FROM
306+07.84 LT TO 307+28.88 LT

NO SCALE

NOTES

1. 3000 PSI CONCRETE
2. 60 KSI REINFORCING STEEL
3. ALL WORK SHALL CONFORM TO MAG SPECIFICATIONS
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW
5. PLACE ON UNDISTURBED NATIVE MATERIAL OR 8" COMPACTED ABC

DETAIL NO. 6

STRUCTURAL NOTES:

1. MASONRY CONSTRUCTION SHALL COMPLY WITH THE 2009 INTERNATIONAL BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-02/ASCE 5-02/TMS 402-02).
2. ALL WORK SHALL CONFORM WITH THE LATEST EDITION OF THE UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (HEREINAFTER REFERRED TO AS MAG) AS SPONSORED AND DISTRIBUTED BY THE MARICOPA COUNTY ASSOCIATION OF GOVERNMENTS.
3. EXCAVATION AND BACKFILL SHALL CONFORM WITH MAG SECTION 601.
4. CONCRETE BLOCK MASONRY SHALL CONFORM WITH MAG SECTIONS 510, 775, AND 776. CONCRETE MASONRY UNITS SHALL BE ASTM C-90, NORMAL WEIGHT, TYPE I WITH MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. MORTAR SHALL BE TYPE M WITH MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI. GROUT SHALL BE TYPE FINE WITH MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI .
5. STEEL REINFORCING SHALL BE GRADE 60 CONFORMING WITH MAG SECTION 727.
6. CONCRETE FOOTING SHALL CONFORM WITH MAG SECTION 505. CONCRETE SHALL BE CLASS A PORTLAND CEMENT CONCRETE WITH MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL CONFORM WITH MAG SECTION 725.
7. CONCRETE FOOTING SHALL BE PLACED ON UNDISTURBED NATIVE SOIL. BLOCK COURSES SHALL BE PLACED WITH RUNNING BOND CONFIGURATION. SURFACE TEXTURE AND COATING SHALL MATCH EXISTING.

Registered Professional Engineer (Civil) CERTIFICATE NO. 34898 MARK V. LEE Date Signed 11/30/16 ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003371(004)	41	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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SPECIAL DETAILS - PAVING

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

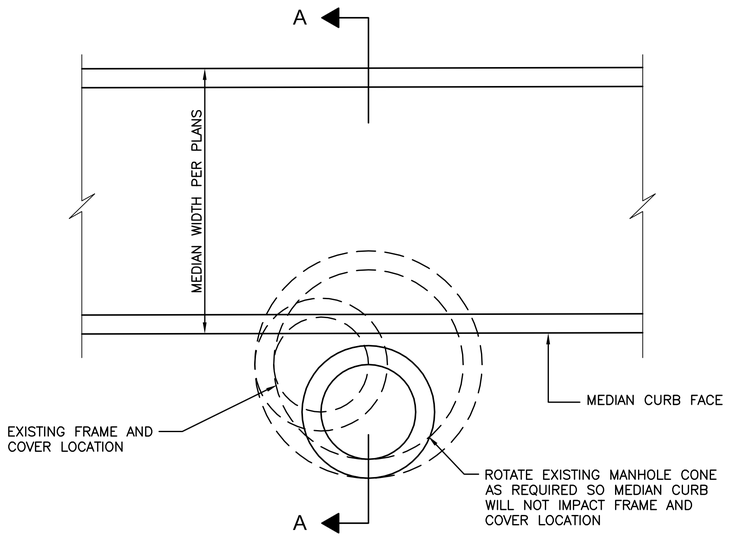
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			DT-1.03

ST85100371 DT-1_03.DWG

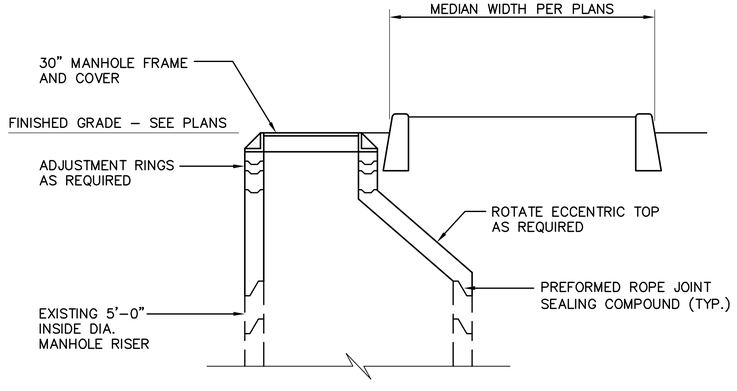
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



PLAN VIEW



SECTION A-A

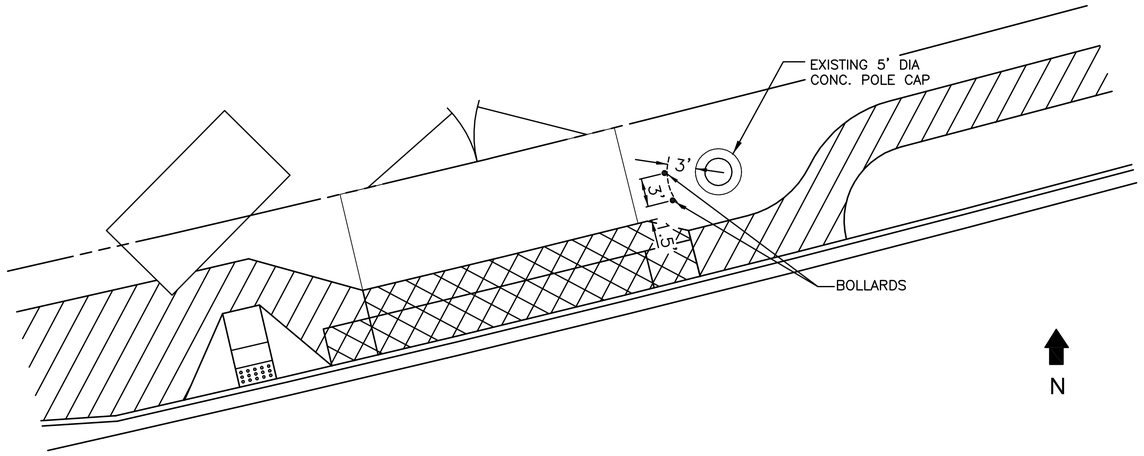
MANHOLE CONE ROTATION DETAIL

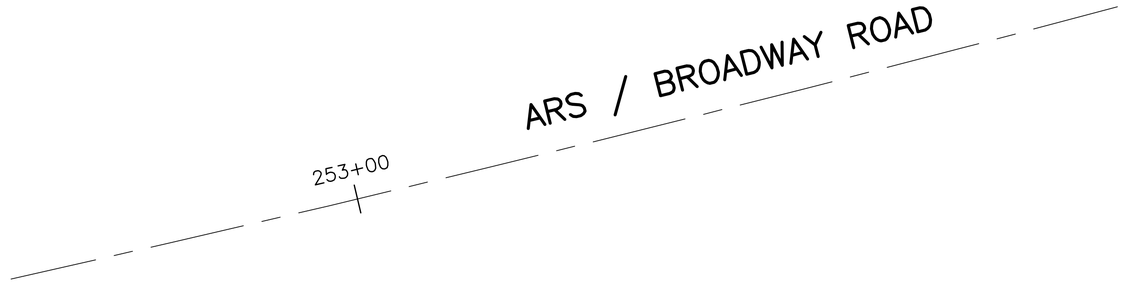
NO SCALE

DETAIL NO. 7

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE





BOLLARD LOCATION DETAIL

NO SCALE

DETAIL NO. 8

Registered Professional Engineer
CERTIFICATE NO.
34880
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003 71(004)	42	164	

PEC
PROJECT ENGINEERING CONSULTANTS
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SPECIAL DETAILS - PAVING

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			DT–1.04

ST85100371 DT–1_04.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST851003 71(004)	43	164	

Registered Professional Engineer CERTIFICATE NO. 34880 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

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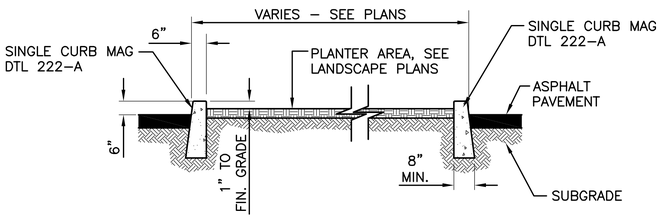

SECTION "A - A"
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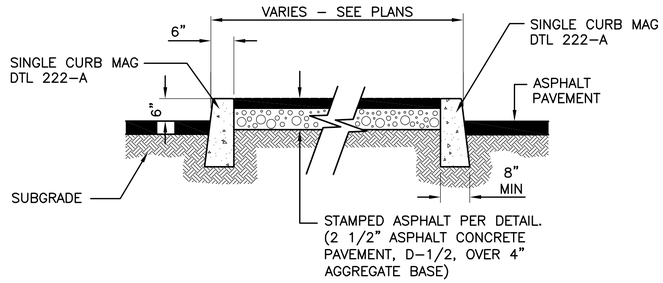

SECTION "B - B"
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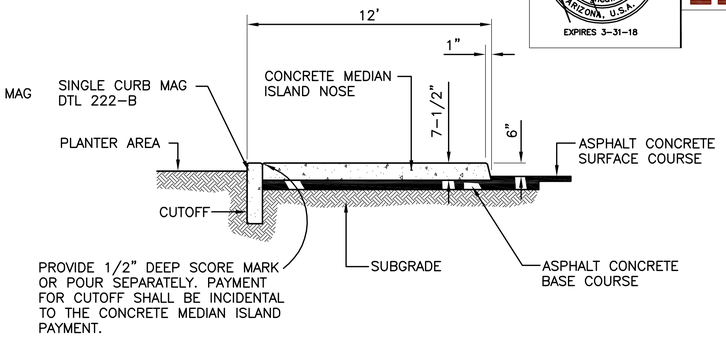

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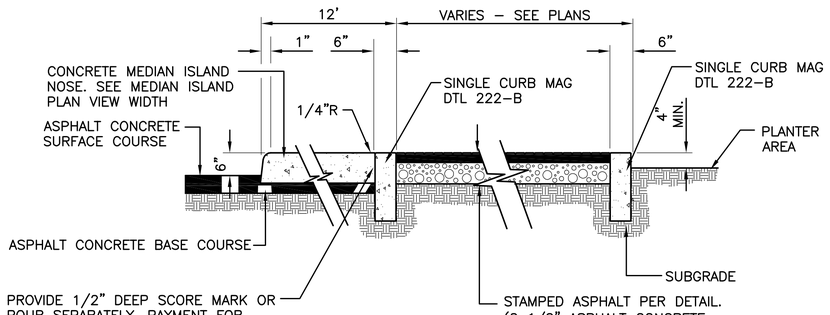

SECTION "D - D"
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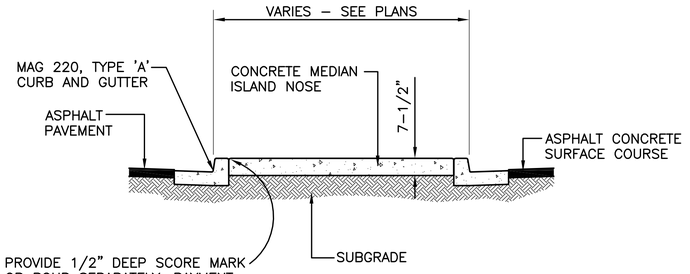

SECTION "E-E"
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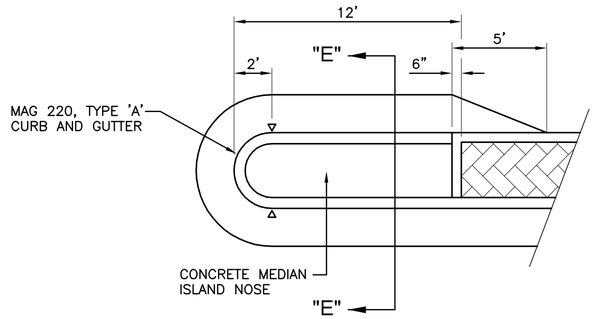
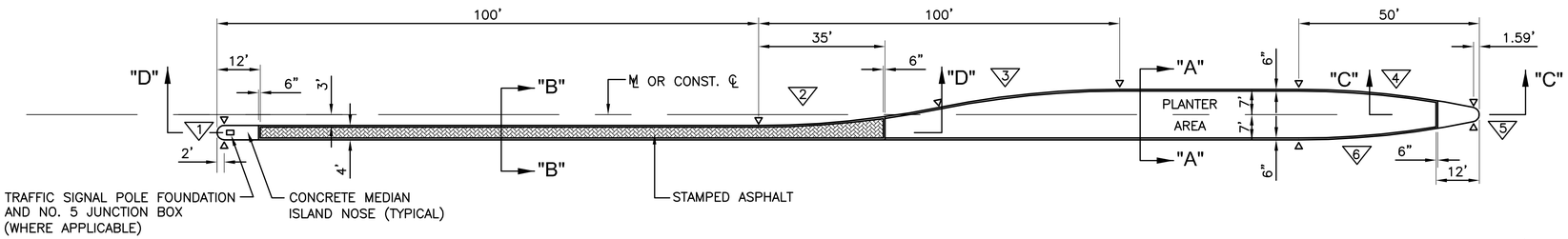


PLAN OF TYPICAL MEDIAN ISLAND NOSE IN SUPER ELEVATED ROADWAY AREAS
NO SCALE



PLAN OF TYPICAL MEDIAN ISLAND

CURVE DATA

CURVE	1	2	3	4	5	6
△	*	*	*	*	*	*
RADIUS	*	*	*	*	*	*
TANGENT	*	*	*	*	*	*
LENGTH	*	*	*	*	*	*

* SEE MEDIAN GEOMETRIC SHEETS 8, 9 & 10 FOR CURVE DATA

NOTES:

WHERE MEDIANS ARE CONSTRUCTED IN SUPERELEVATED ROADWAY AREAS, CURB AND GUTTER PER MAG STD DTL 220, TYPE 'A' SHALL BE CONSTRUCTED ALONG THE HIGH SIDE OF THE MEDIAN INSTEAD OF SINGLE CURB AS SHOWN IN THESE DETAILS, SEE PLANS AND TYPICAL SECTIONS.

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MEDIAN ISLAND DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			DT–2.01

ST85100371 DT–2_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ASPHALT STAMPING GENERAL NOTES

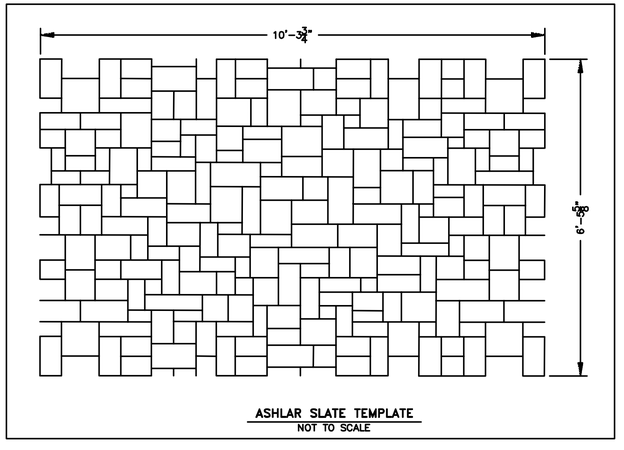
1. THE CONTRACTOR PERFORMING THIS WORK SHALL BE A LEVEL TWO STREET PRINT APPLICATOR AS LICENSED BY INTEGRATED PAVING CONCEPTS INC., AND SHALL HAVE A FOREMAN, SUPERVISOR, OR LEAD HAND ON SITE THAT HAS SUCCESSFULLY COMPLETED A STREET PRINT LEVEL TWO ACCREDITATION PROGRAM.
2. THE CONTRACTOR PERFORMING THIS WORK SHALL HAVE COMPILED A MINIMUM YEARLY ALLOWANCE OF 50,000 SQUARE FEET IN THREE OR MORE PROJECTS AND TRAINING AS WELL AS QUALITY EXPECTATIONS DESIGNATED BY INTEGRATED PAVING CONCEPTS INC. WITHIN ONE YEAR OF BID DATE IN THE STATE OF ARIZONA. THE CONTRACTOR SHALL FURNISH EVIDENCE OF APPLICATOR CERTIFICATION TO THE CITY INSPECTOR OR DESIGNEE.
3. THE CONTRACTOR SHALL SUBMIT THE MANUFACTURER'S PRODUCT AND TECHNICAL DATA FOR ALL MATERIALS BEING INSTALLED FOR APPROVAL TO THE CITY INSPECTOR OR DESIGNEE.
4. THE CONTRACTOR SHALL SUBMIT A SAMPLE OF THE STAMPED ASPHALT MATERIAL PRIOR TO INSTALLATION FOR APPROVAL BY THE CITY INSPECTOR OR DESIGNEE.
5. ALL ROADWAY CONSTRUCTION MATERIALS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF MAG SECTION 321 AND THE PROJECT PLANS AND SPECIFICATIONS.
6. ALL CONSTRUCTION MATERIALS SHALL BE TRANSPORTED TO THE JOB SITE IN CLEAN TRUCKS AND IN A MANNER TO PREVENT SEGREGATION OF MATERIALS OR INCLUSION OF FOREIGN SUBSTANCES.
7. THE AGGREGATE BASE COURSE SHALL BE CLEAN, WELL-GRADED SAND AND GRAVEL COMPACTED AND PLACED PER MAG SECTION 321.5.1 AND THE PROJECT PLANS AND SPECIFICATIONS.
8. FOR RAISED MEDIANS, THE SURFACE COURSE SHALL BE AT LEAST 2-1/2" OF R12.5 ASPHALT AT 95% COMPACTION MINIMUM. IN ADDITION, THE SUBGRADE SHALL BE 4" ABC AT 95% COMPACTION MINIMUM. THE ABC SHALL CONFORM TO MAG SECTION 702.
9. DURING TRANSPORT, THE HOT-MIX ASPHALTIC CONCRETE SHALL HAVE A MINIMUM TEMPERATURE OF 285°F AND MAXIMUM TEMPERATURE OF 350°F.
10. THE HOT-MIX ASPHALTIC CONCRETE SHALL BE PLACED PER THE PROJECT PLANS AND SPECIFICATIONS. THE HOT-MIX ASPHALTIC CONCRETE SHALL BE PLACED ON A DRY BASE COURSE AND WHEN THE AMBIENT TEMPERATURE IN THE SHADE IS 45°F AND RISING. THE HOT-MIX ASPHALTIC CONCRETE SHALL NOT BE PLACED WHEN WEATHER IS FOGGY, RAINY, OR WHEN THE BASE COURSE IS WET OR FROZEN.
11. AFTER APPLICATION AND COMPACTION OF ASPHALTIC CONCRETE, WHILE IT IS STILL HOT, TEMPLATES SHALL BE POSITIONED ON THE SURFACE IN REQUIRED ORIENTATION. TEMPLATES SHALL BE SET IN PLACE USING A PLATE COMPACTOR AND FULLY EMBEDDED USING THE SAME COMPACTION EQUIPMENT USED IN PLACING THE ASPHALT (MINIMUM STATIC WEIGHT 650-700 LBS). ASPHALT SHALL BE FULLY COMPACTED PRIOR TO PATTERNING.
12. THE PATTERNING EQUIPMENT SHALL BE METAL TEMPLATES AND CORRESPOND TO THE TEMPLATES IN THE DETAILS ON THIS SHEET. REFER TO PROJECT PLANS AND SPECIFICATIONS FOR TEMPLATE TYPE.
13. TEMPLATE PRINT DEPTH SHALL BE 3/8" OVER 99% OF THE AFFECTED AREA. ALL HAND TOLLING SHALL BE COMPLETE, FULL DEPTH, STRAIGHT IN MANNER, AND TO THE EDGE OF ASPHALT PAVEMENT, COMMON EDGE, CONCRETE CURB, GUTTER OR BORDER. THERE SHALL BE NO OVERPRINT OF PATTERNS AND NO REMNANTS OF EXCESS PRINT ON SURROUNDING UNINTENDED AREA.
14. THE PRODUCTS USED IN THE SURFACING SYSTEM SHALL MEET THE MINIMUM PHYSICAL AND PERFORMANCE PROPERTIES IN TABLE 1 AND TABLE 2 ON THIS SHEET. THE CONTRACTOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE INDICATING THAT MATERIALS TO BE INCLUDED IN WORK MEET SPECIFICATION REQUIREMENTS TO THE CITY INSPECTOR OR DESIGNEE.
15. THE COLOR USED FOR PAINTED ASPHALT SHALL BE TERRACOTTA OR AS APPROVED BY A CITY DESIGNEE.
16. THE CONTRACTOR SHALL APPLY THE SURFACE SYSTEM PRODUCTS WITH A MINIMUM OF FOUR COMPLETE PASSES ON THE ROADWAY SURFACE. THREE PASSES SHALL BE ALLOWED ON MEDIANS, WALKWAYS, PATHWAYS, AND BIKE PATHS WHERE TRAFFIC IS PRIMARILY PEDESTRIAN WITH MINIMAL OR NO AUTOMOBILE TRAFFIC. THICKNESS SHALL BE 20 MILS OR GREATER. PATTERN SHALL BE AS INDICATED ON THE PROJECT PLANS AND SPECIFICATIONS OR AS DIRECTED BY A CITY DESIGNEE.
17. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR ROADWAY COMPACTION APPROVAL PRIOR TO ASPHALT STAMPING.
18. THE AIR TEMPERATURE SHALL BE AT LEAST 50°F AND RISING BEFORE APPLYING THE SURFACE SYSTEM PRODUCTS. THERE SHALL BE NO PRECIPITATION EXPECTED WITHIN 24 HOURS AFTER APPLYING.
19. AFTER THE SURFACE SYSTEM PRODUCTS HAVE BEEN APPLIED, THE TREATED ASPHALT SHALL NO BE EXPOSED TO VEHICULAR TRAFFIC UNTIL AFTER EIGHT HOURS OR OVERNIGHT, WHICHEVER IS LONGEST.
20. THE SURFACE SYSTEM PRODUCTS SHALL BE SPRAY-APPLIED AND PAINTED ON USING A BROOM OR BRUSHES TO CUT IN SMALL AREAS WHERE REQUIRED. THE ENTIRE SURFACE SHALL BE COVERED WITH NO EXPOSED ASPHALT PRESENT.
21. THE CONTRACTOR SHALL USE SUFFICIENT MASKING TO ENSURE THAT THE SURFACE SYSTEM PRODUCTS ARE APPLIED ONLY WHERE SPECIFIED. MASKING SHALL BE COMPLETE AND NO OVERSPRAY ONTO NON-DESIGNATED COATED SURFACES SHALL BE ALLOWED.
22. AFTER THE APPLICATION AND CURING OF COLOR COATS, THE CONTRACTOR SHALL APPLY SEALER OVER ENTIRE SURFACE IN ACCORDANCE WITH MANUFACTURER'S DIRECTIONS. THE CONTRACTOR SHALL LEAVE THE APPLICATION CLEAN AND FREE OF DEFECTS UPON COMPLETION.
23. THE CONTRACTOR SHALL REPAIR ALL DAMAGED OR OTHER UNSUITABLE AREAS PRIOR TO INSPECTION BY THE CITY INSPECTOR OR DESIGNEE AT NO EXPENSE TO THE CITY. THE CONTRACTOR SHALL ALSO REPAIR ANY UNSUITABLE AREAS AS DETERMINED BY INSPECTION BY THE CITY INSPECTOR OR DESIGNEE AT NO EXPENSE TO THE CITY.
24. NEW ASPHALT MAY BE STAMPED HOT OR COLD. HOT MIX ASPHALT MAY ONLY BE STAMPED AFTER COMPACTION DENSITY HAS BEEN ACHIEVED. COLD ASPHALT MAY BE HEATED USING PROPER EQUIPMENT DESIGNED FOR THIS TYPE OF WORK. ASPHALT SURFACE MAY NOT BE HEATED ABOVE 325°F.
25. UTILIZING FLEXIBLE TEMPLATES, A CITY APPROVED PATTERN MAY BE REVERSE-ABLE VIBRATORY PLATE COMPACTED OR STAMPED INTO ASPHALT AS APPROVED BY ENGINEER.
26. DECORATIVE PAVEMENT COATING MAY BE DP-200 AND SHALL BE APPLIED IN THREE TO FOUR COATS AT RATE OF 100-125 SF/GALLON AS SUPPLIED BY FLORIC POLYTECH WWW.floricpolytech.com; OR EQUAL AS APPROVED BY ENGINEER.
27. DECORATE STAMPED ASPHALT SHALL BE SEALED USING DP-100 CLEARSEAL IN TWO COATS AT A RATE OF 400-600 SF/GALLON AS SUPPLIED BY FLORIC POLYTECH, WWW.floricpolytech.com; OR EQUAL AS APPROVED BY ENGINEER.
28. FOR ASPHALT STAMPING INSTALLED WITHIN RAISED MEDIANS:
    A. THE CONTRACTOR SHALL USE VIBRATORY COMPACTION FOR THE SUBGRADE BETWEEN POURED CURBS PRIOR TO LAYING ASPHALT
    B. THE CONTRACTOR SHALL USE VIBRATORY COMPACTION FOR FINISHED COMPACTION ONCE ASPHALT IS INSTALLED BETWEEN POURED CURBS.

TABLE 1: DP-100 CLEARSEAL TECHNICAL DATA

SYSTEM THICKNESS	2-4 MILS PER COAT STANDARD APPLICATION IS ONE-TWO COATS
COVERAGE PER LIQUID GALLON	400-660 SQ FT PER US GALLON
ABRASION	EXCELLENT
IMPACT RESISTANCE	(ASTM D-2794) PASSES DIRECT > 160 INCH LBS REVERSE > 160 INCH LBS
FLEXIBILITY	(ASTM D-1737, 180° BEND, 1/8" MANDREL) PASSES
DEGREE OF GLOSS	GLOSS-SEMI-GLOSS
SOLIDS CONTENT BY WEIGHT (%)	29%
SOLIDS CONTENT BY VOLUME (%)	28%
CURE TIME AT 77°F	DRY TIME - 1 HOUR RECOAT - 2 HOURS LIGHT FOOT TRAFFIC - 12 HOURS FULL CURE - 5-7 DAYS

TABLE 1: DP-200 COATING TECHNICAL DATA

SYSTEM THICKNESS	12-15 WET MILS PER COAT STANDARD APPLICATION IS TWO-FOUR COATS
COVERAGE PER LIQUID GALLON	100-125 SQ FT PER US GALLON AT 13 WET MILS
ABRASION (TABER-H 10)	ASTM D-4060 <0.16 mg LOSS @ 1,000 FOR 1,000 CYCLES
IMPACT RESISTANCE	(ASTM D-2794) PASSES DIRECT > 160 INCH LBS REVERSE > 160 INCH LBS
FLEXIBILITY MANDREL @ 70°F	ASTM D-1737 (LOW 1") PASSES ASTM D-1737 (HIGH 2") PASSES
TENSILE STRENGTH	ASTM D412 >675 PSI
DEGREE OF GLOSS	<3@85°F
QUV	ASTM G-53 400 HOURS 1 HIE UNITS ASTM G154 (ASTM G154)
DENSITY (LBS/GAL)	13.7
FLASH POINT	ASTM D-3278 >195°F (93°C)
% PIGMENT (BY WEIGHT INCL. CEMENT)	ASTM D-3723 64%
SOLIDS CONTENT BY WEIGHT (%)	78%
SOLIDS CONTENT BY VOLUME (%)	68%
CURE TIME AT 77°F	RECOAT - 20 MIN-3 HOURS LIGHT VEHICULAR TRAFFIC - 2-4 HOURS FULL CURE - 5-7 DAYS
VOC	<25G PER LITER
ADHESION (PLI) TO AN ASPHALT SUBSTRATE	ASTM D-4840 - COHESIVE FAILURE OF ASPHALT PRIOR TO ADHESIVE FAILURE
TEMPERATURE LIMITS OF SERVICE	DRY, CURED MATERIAL -35°F TO 155°F



ASHLAR SLATE TEMPLATE
NOT TO SCALE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34586 MARK LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	44	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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Fax: (602) 906-3080

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STAMPED ASPHALT DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-2.02

ST85100371 DT-2_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	45	164	

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EXPIRES 3-31-18

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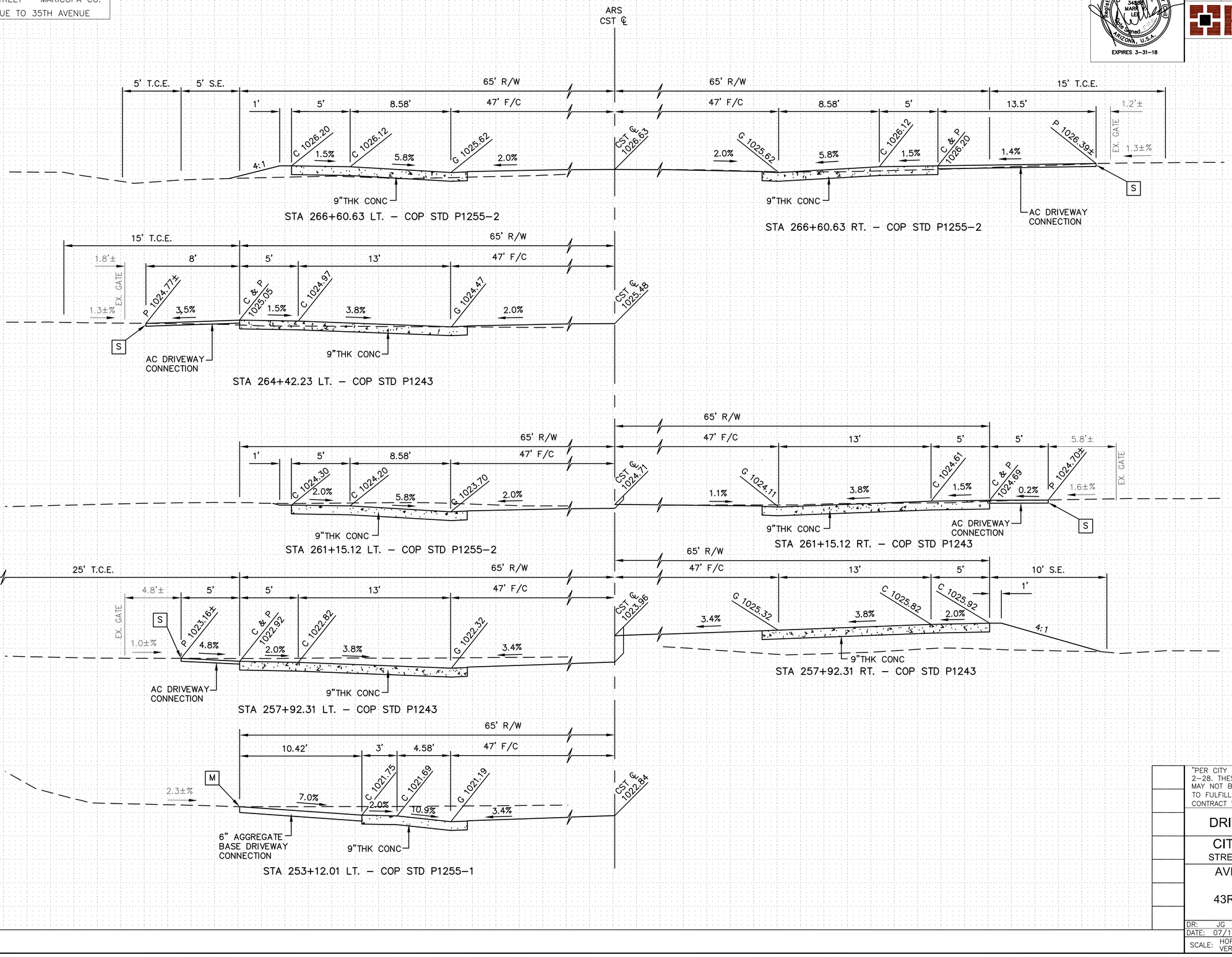

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DRIVEWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT–3.01

ST85100371 DT 3 CROSS SECTS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	46	164	

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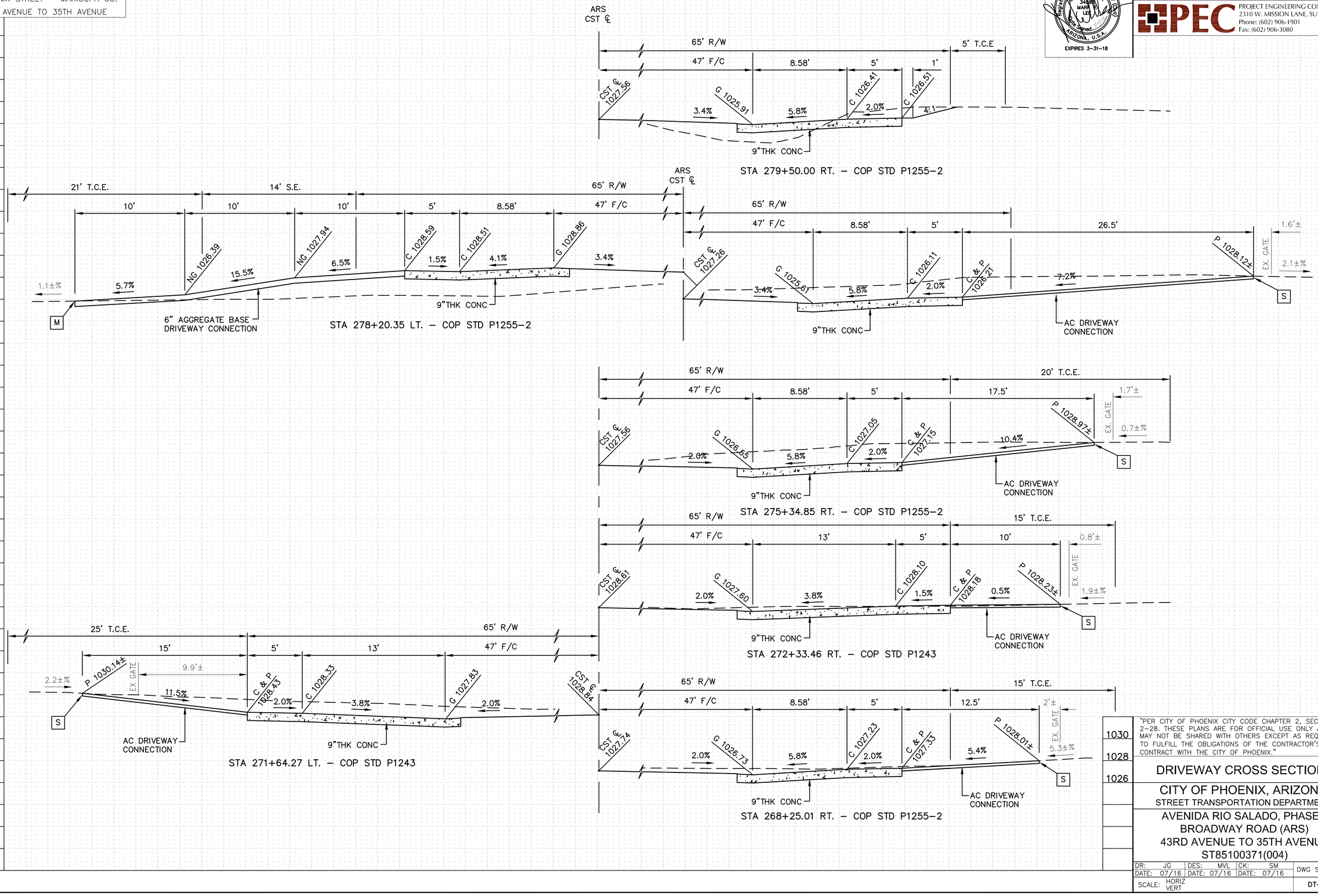

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DRIVEWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-3.02

ST85100371 DT 3 CROSS SECTIONS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	47	164	

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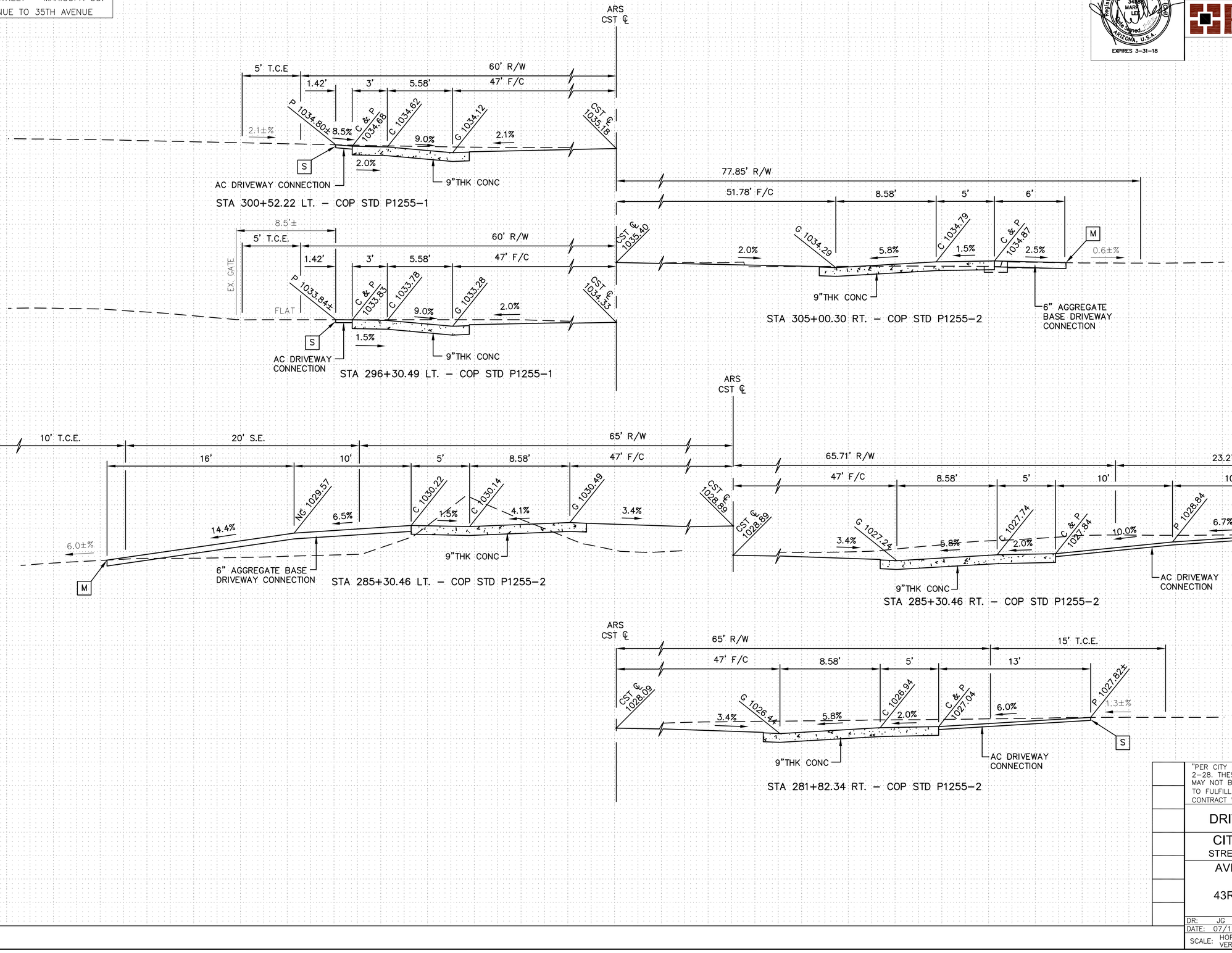

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DRIVEWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT–3.03

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AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	48	164	

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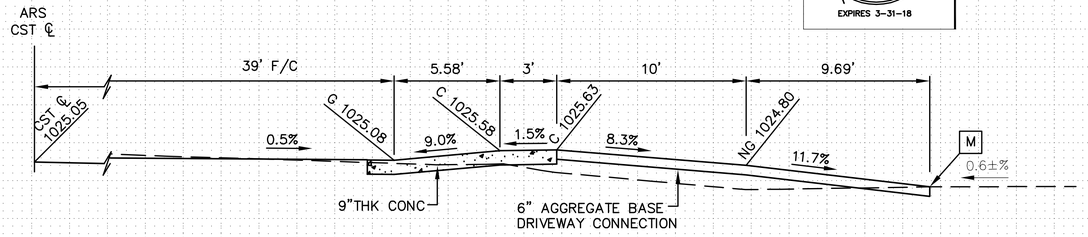

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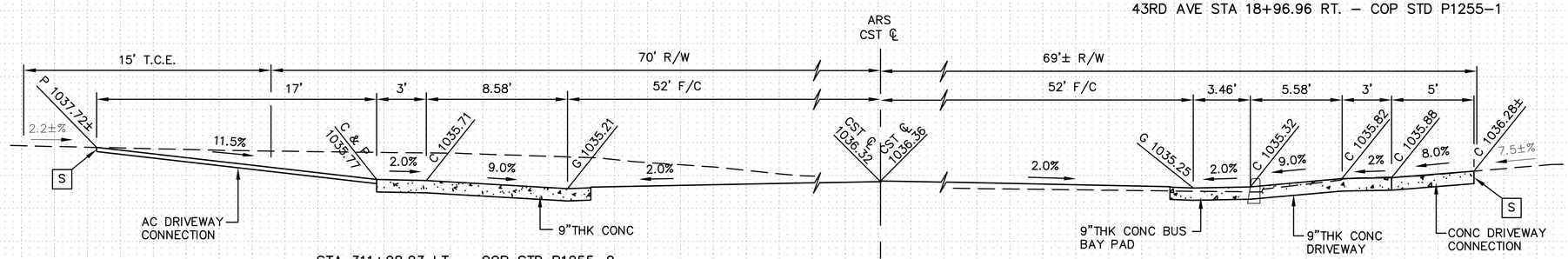

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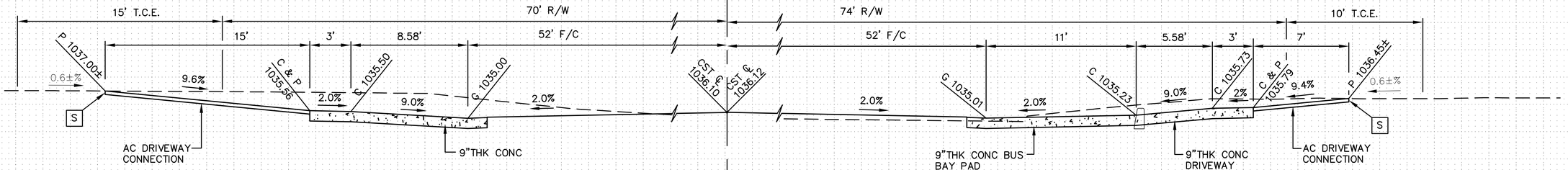

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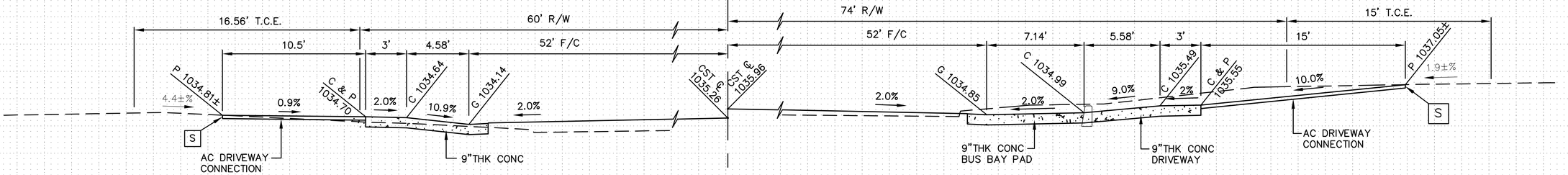

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DRIVEWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
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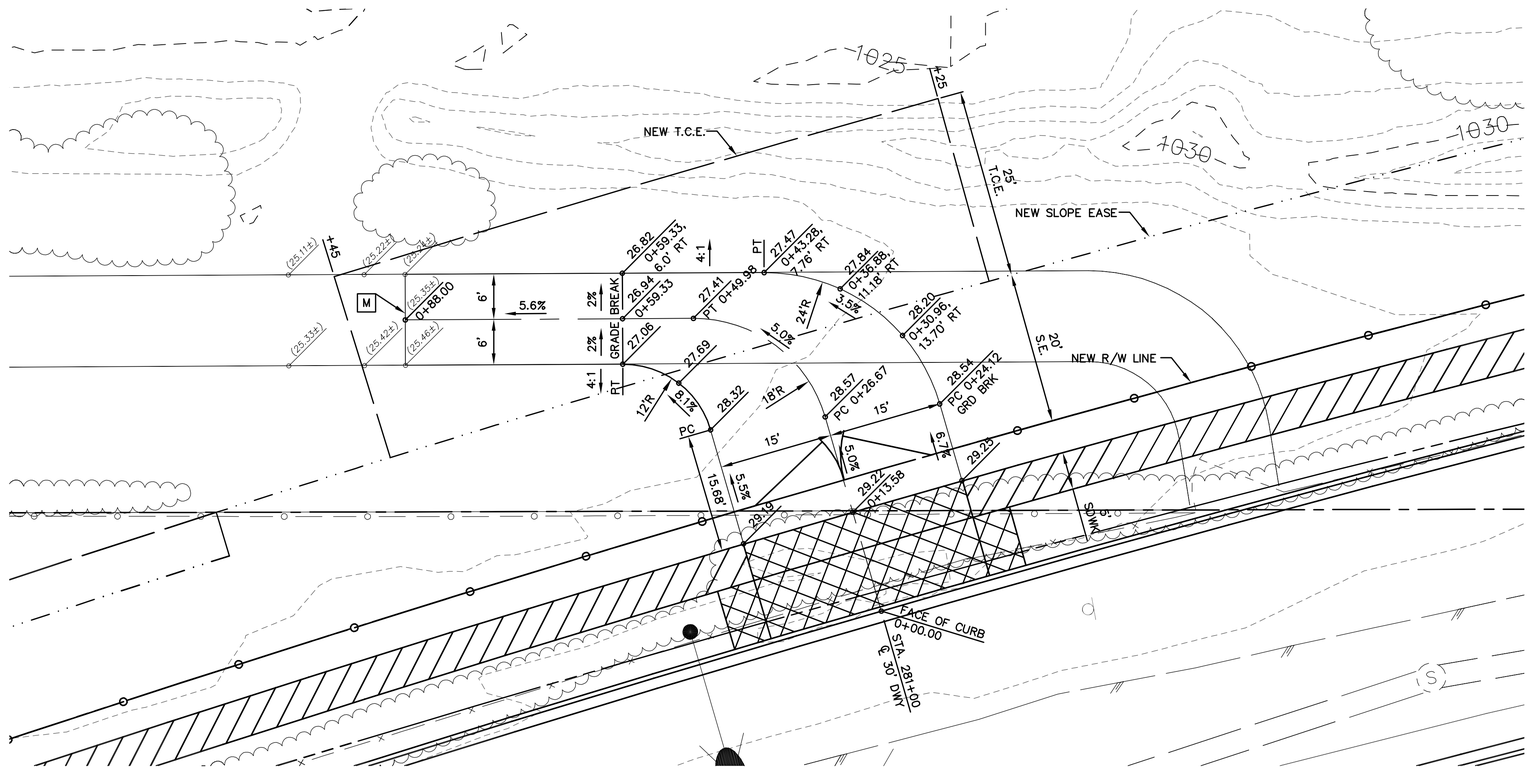
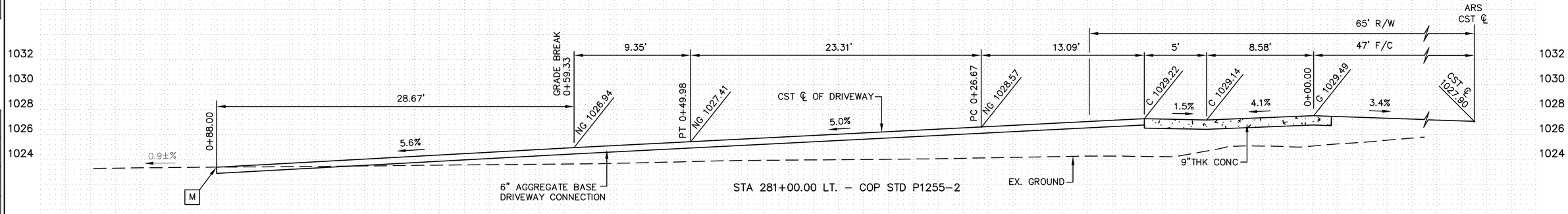
STD1100371 DT 3 SERIES SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

PHOENIX STREET – MARICOPA CO.

43RD AVENUE TO 35TH AVENUE





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DRIVEWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
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Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK V. LEE Date Signed ARIZONA, U.S.A. EXPIRES 3–31–18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	49	164	

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AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	50	164	

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Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

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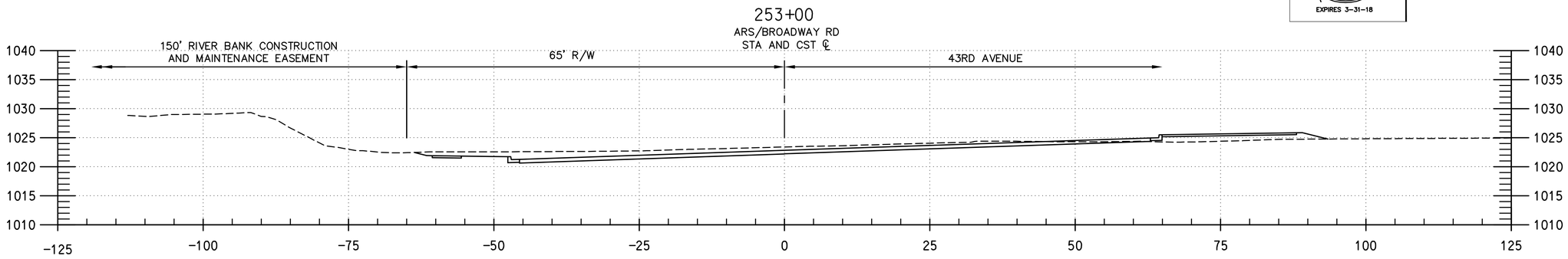

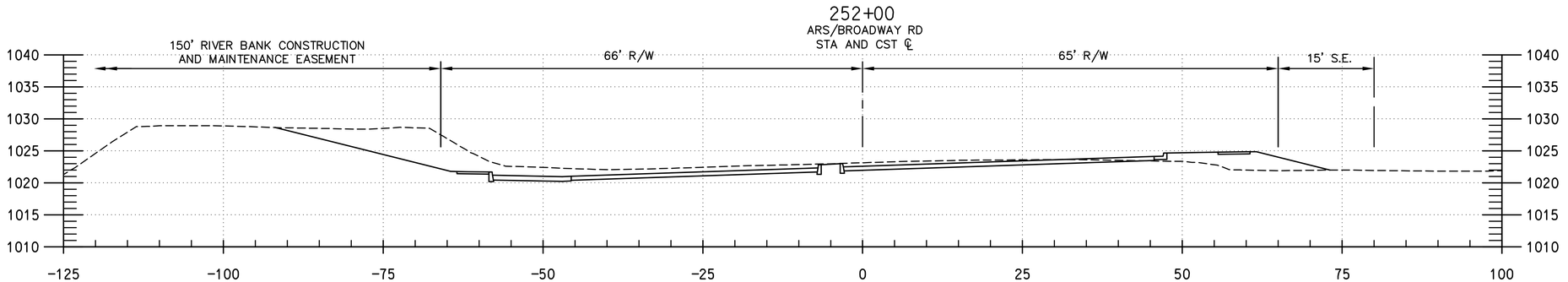

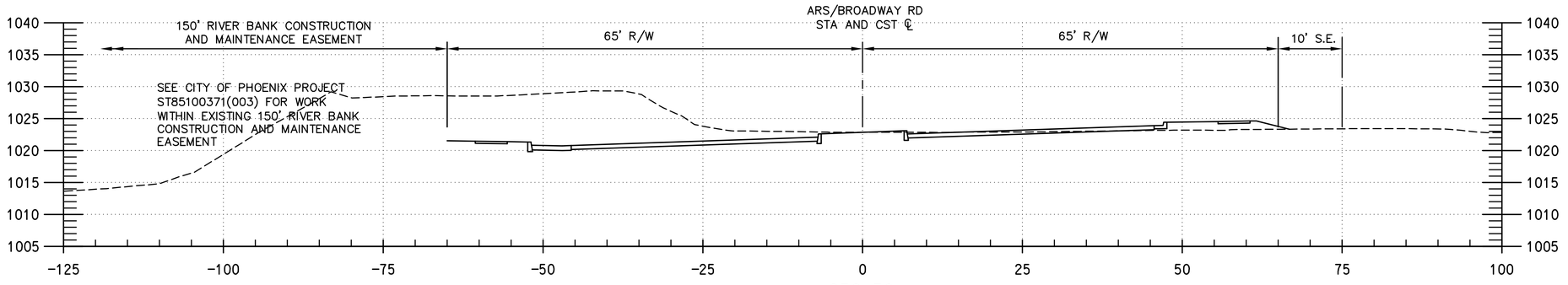

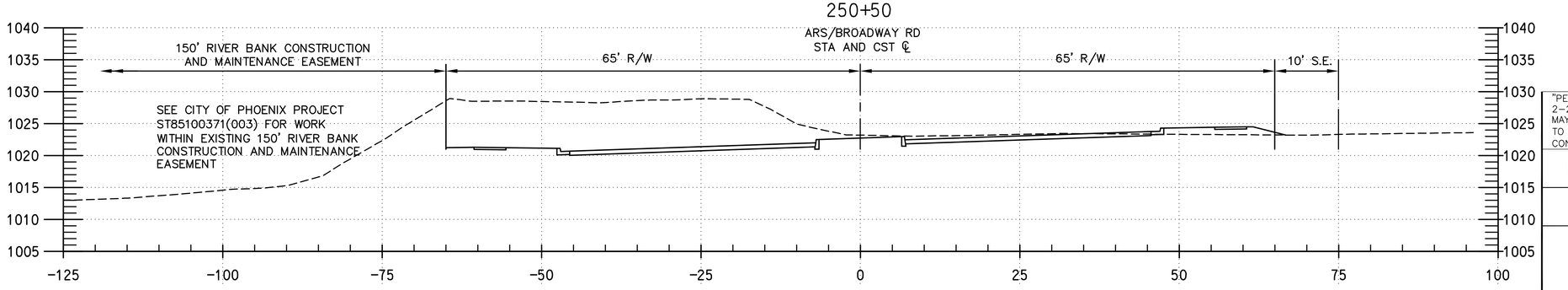

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ROADWAY CROSS SECTIONS

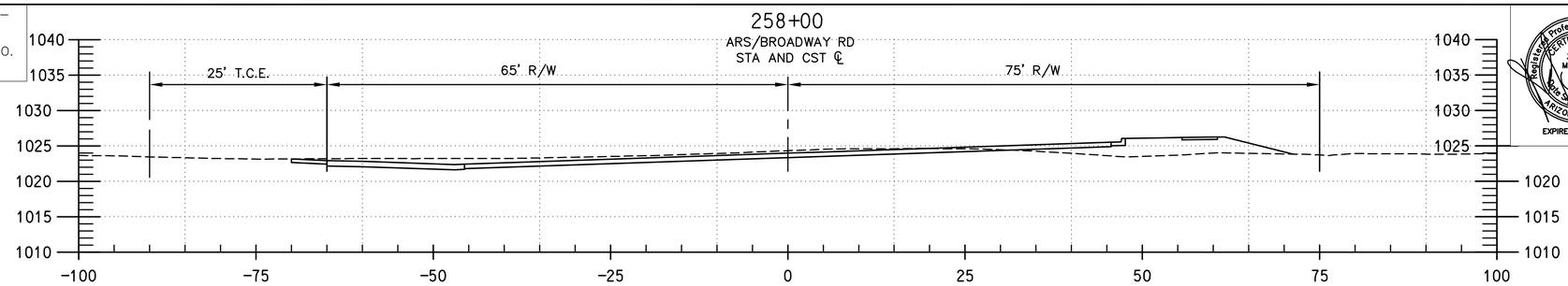
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

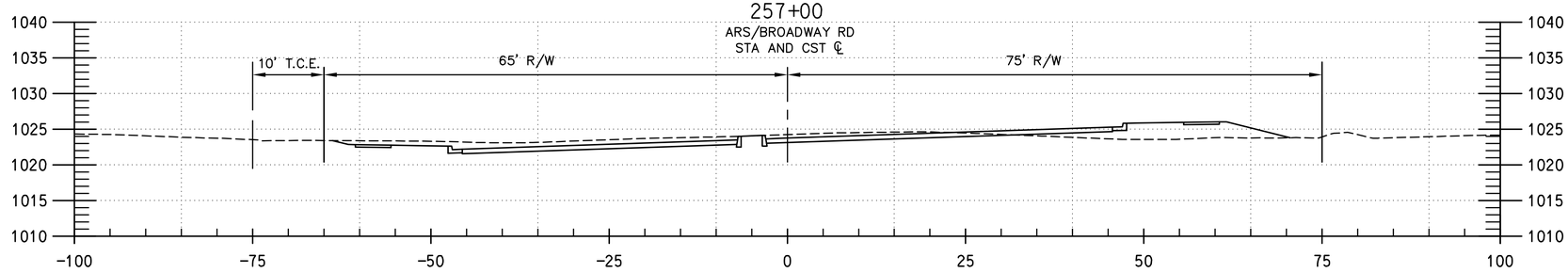
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

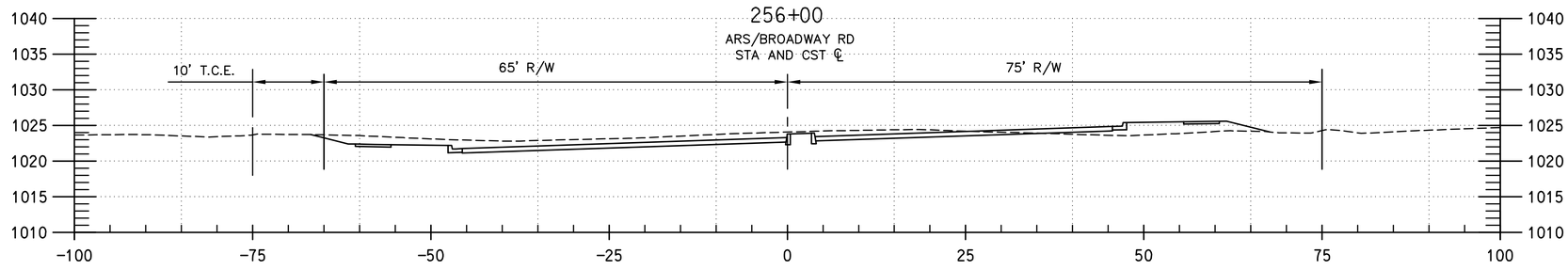
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.01

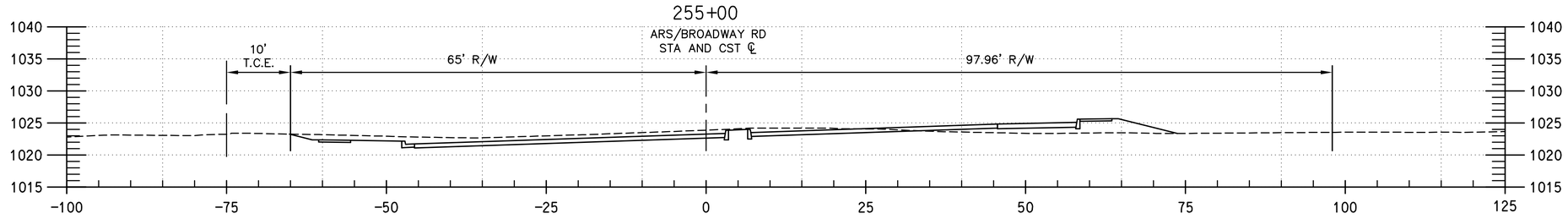
ST85100371 DT A SERIES SHEETS.DWG

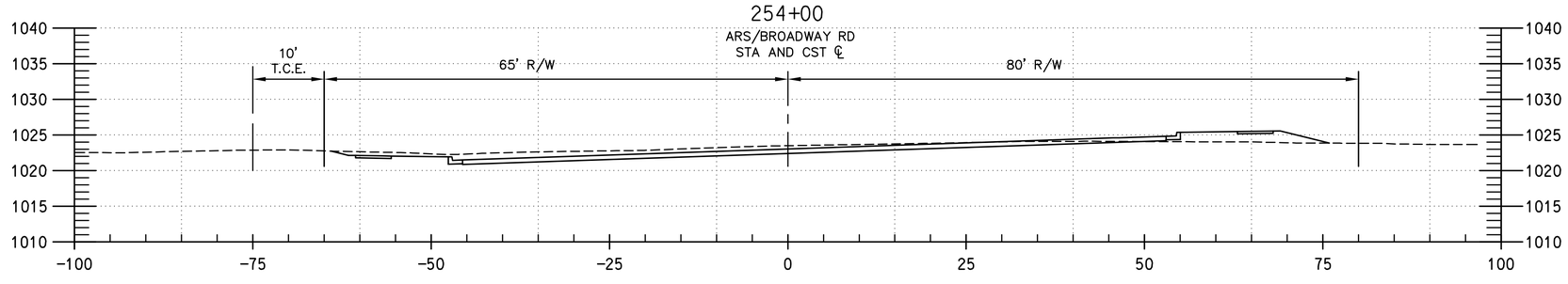
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	51	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.02

ST85100371 DT 4 SERIES SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

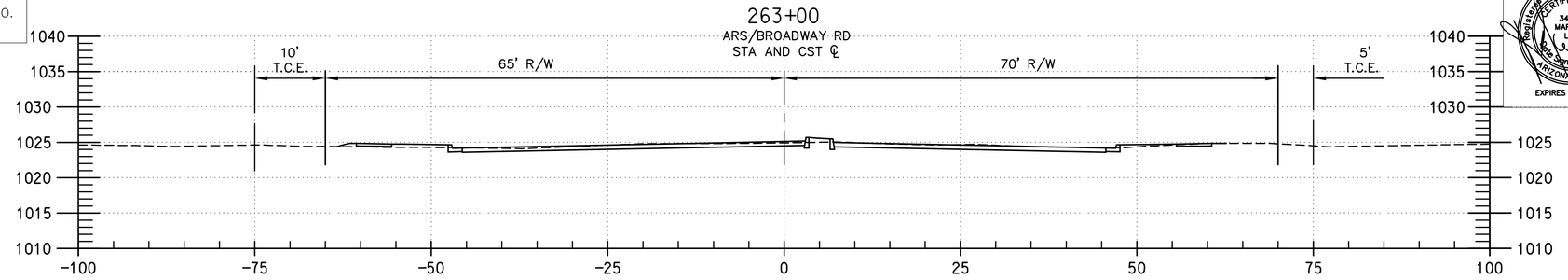
PHOENIX STREET – MARICOPA CO.

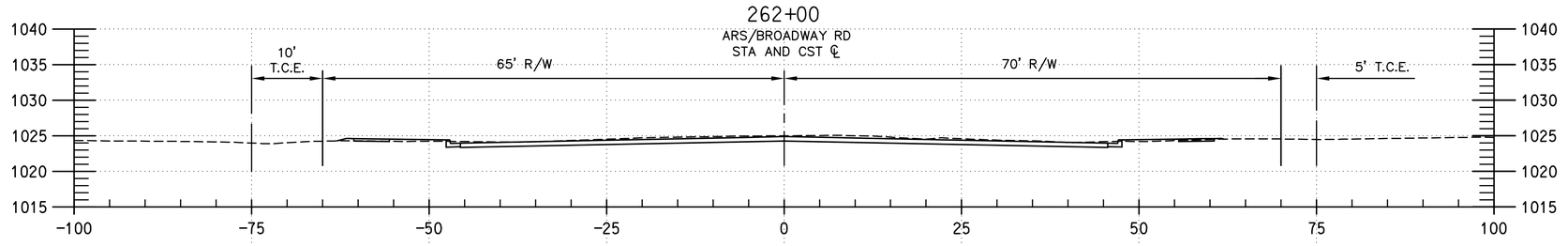
43RD AVENUE TO 35TH AVENUE

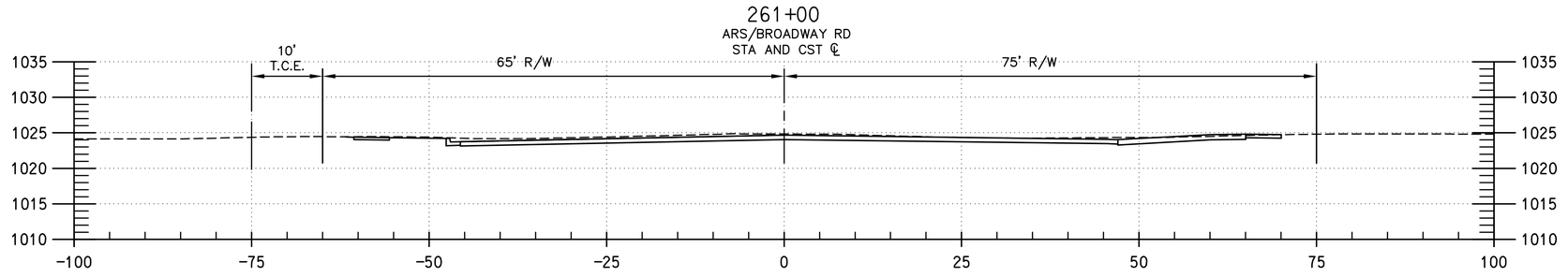
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	

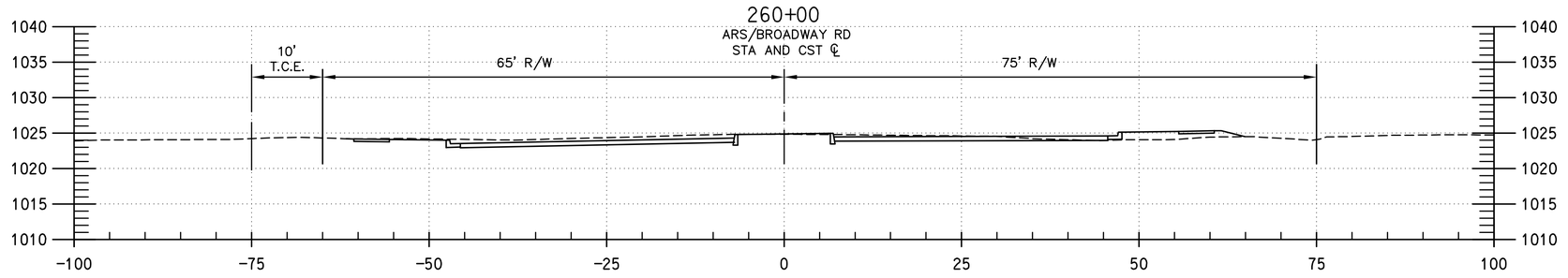
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	

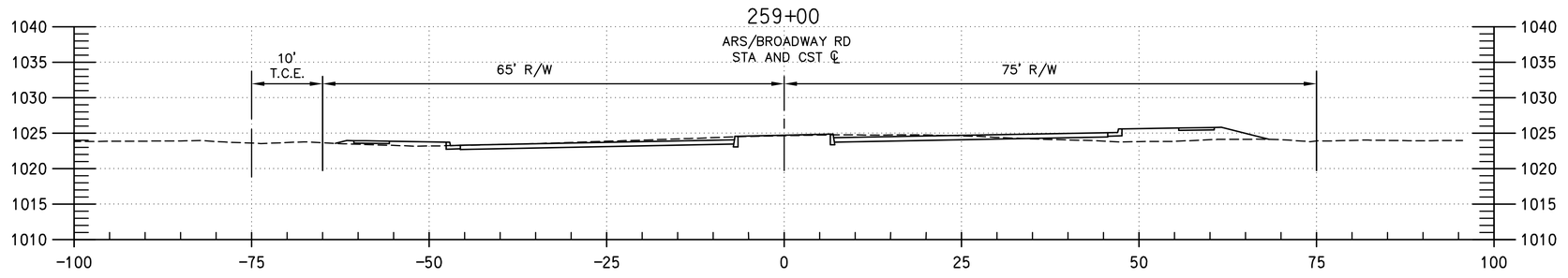
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	











Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK LEE Date Signed ARIZONA, U.S.A.

EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	52	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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ROADWAY CROSS SECTIONS

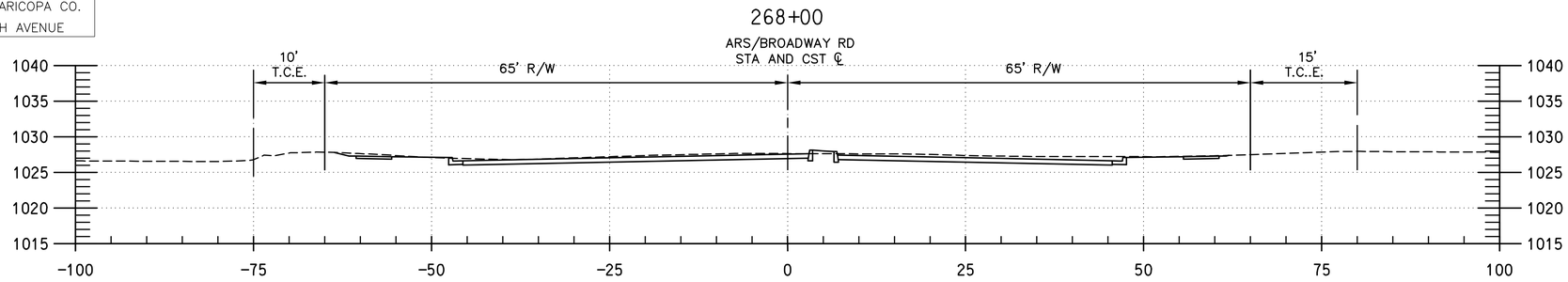
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

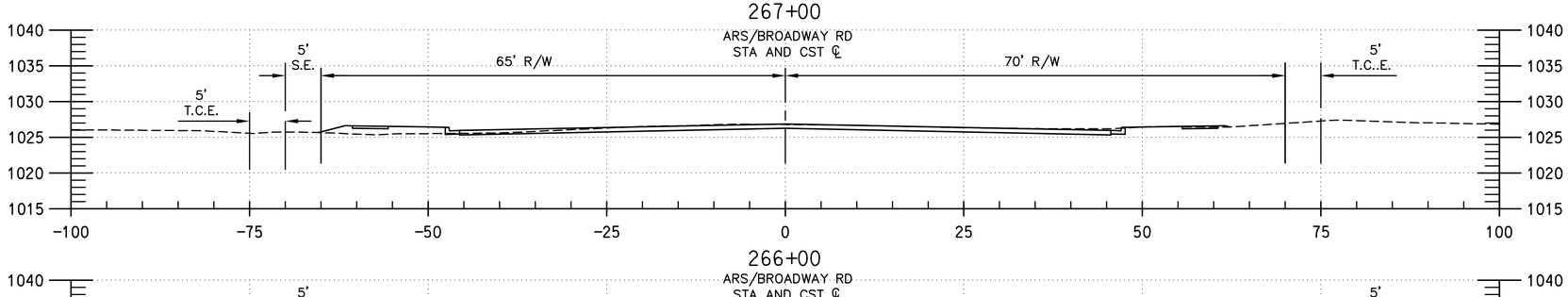
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

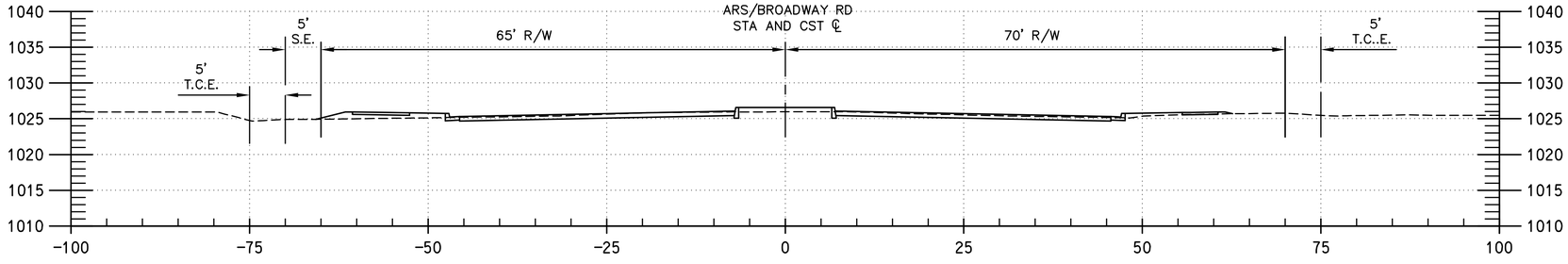
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.03

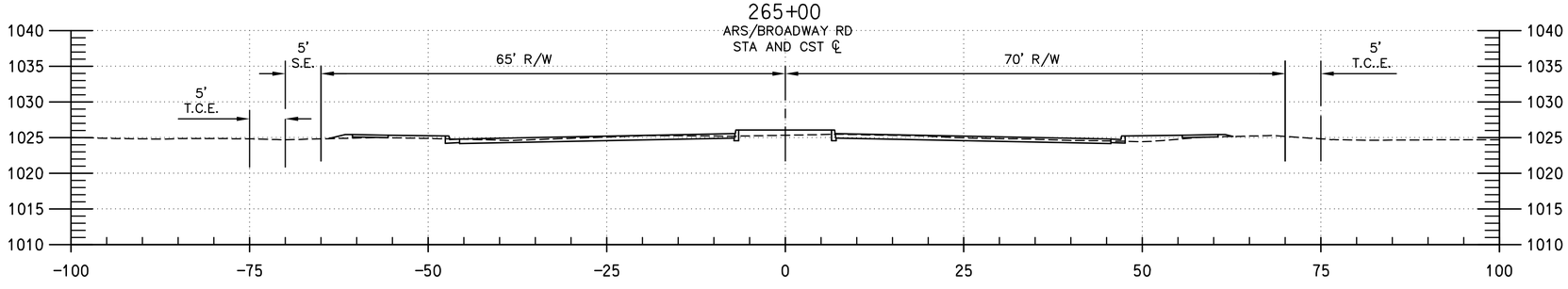
ST85100371 DT 4 SERIES SHEETS.DWG

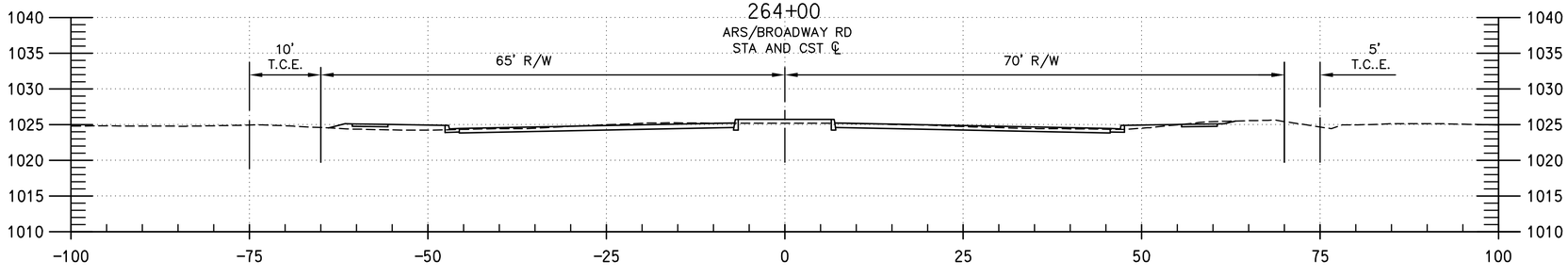
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
34888
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	53	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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ROADWAY CROSS SECTIONS

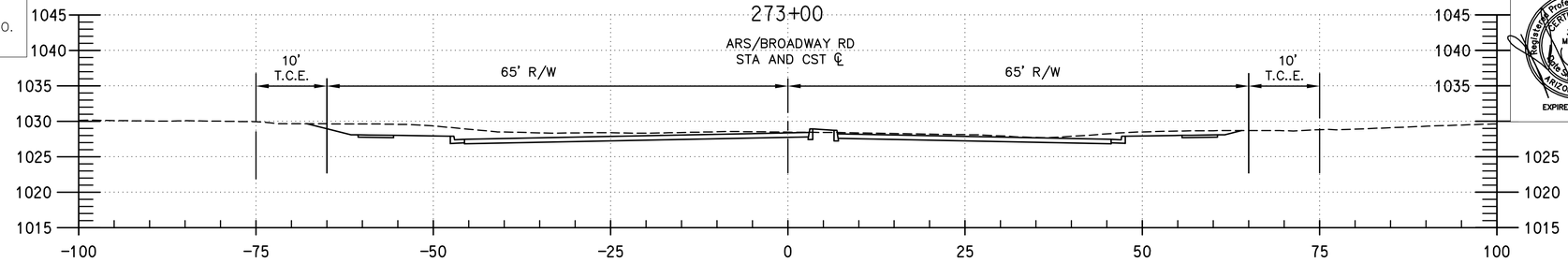
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

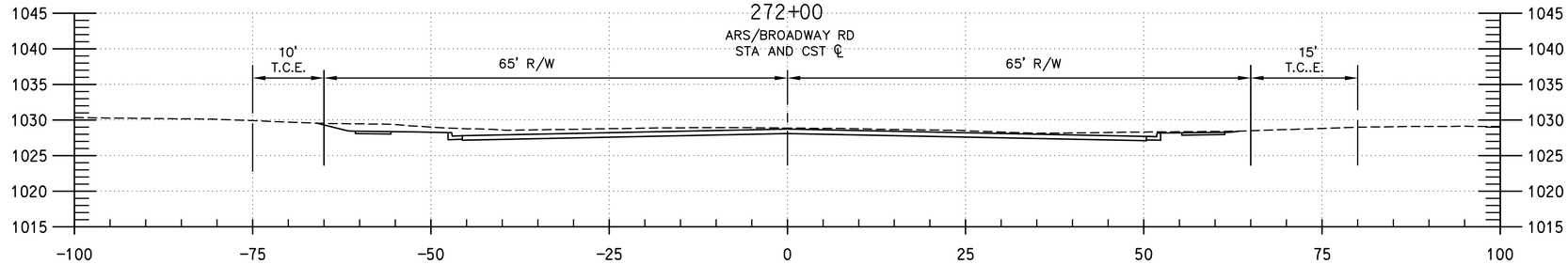
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

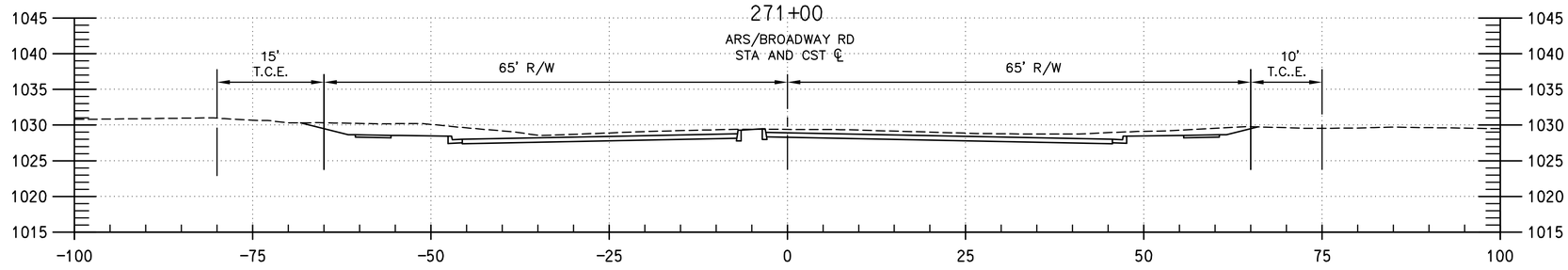
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.04

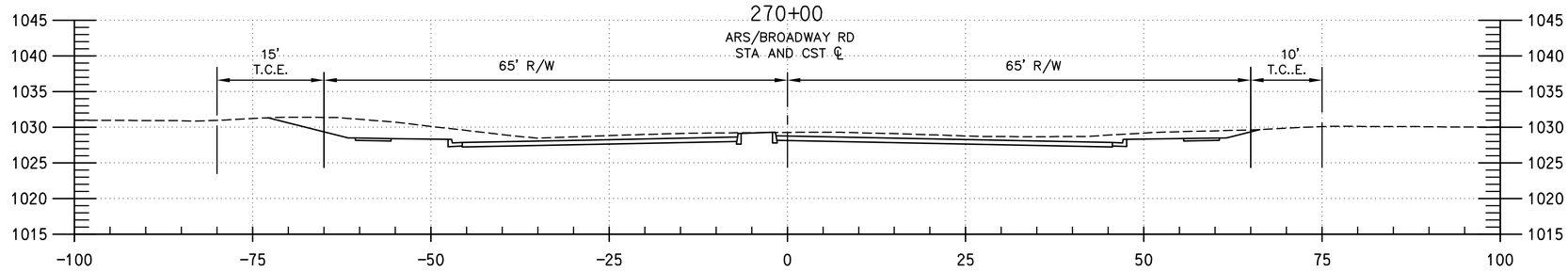
CREATION DATE: 3/14 ET 4 SERIES SHEETS PLOTTED

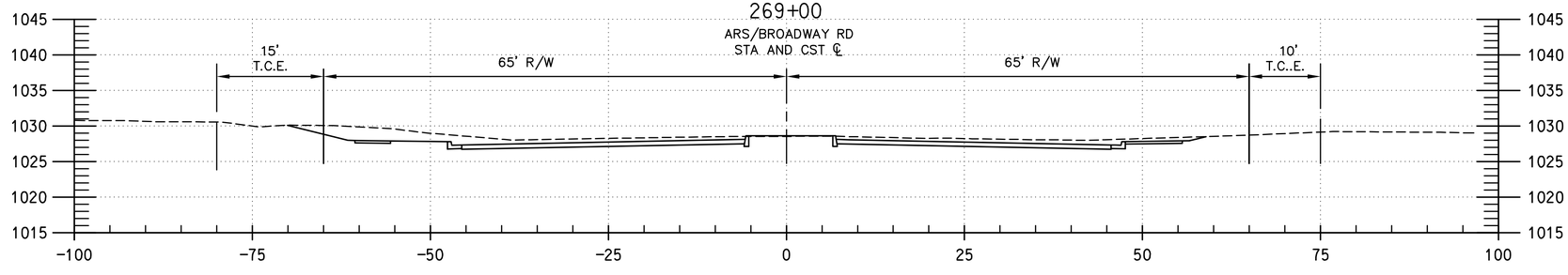
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
34888
MARK W. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	54	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

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ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.05

ST85100371 DT 4 SERIES STREETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

PHOENIX STREET – MARICOPA CO.

43RD AVENUE TO 35TH AVENUE

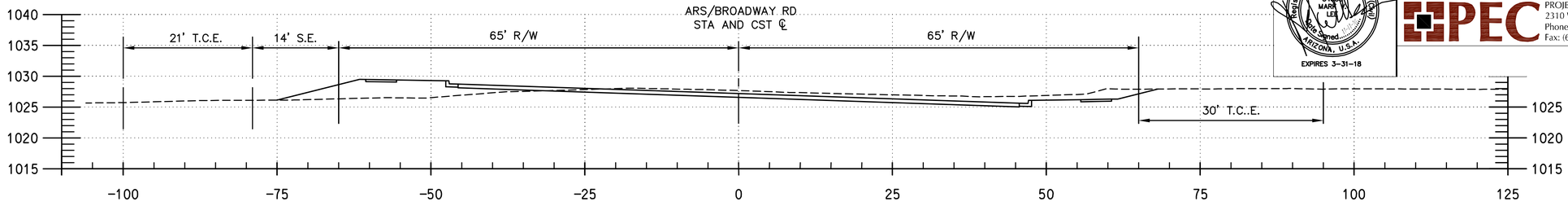
REVISION BY CITY OF PHOENIX					
NO.	DESCRIPTION	REV BY	CKD BY	DATE	

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

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

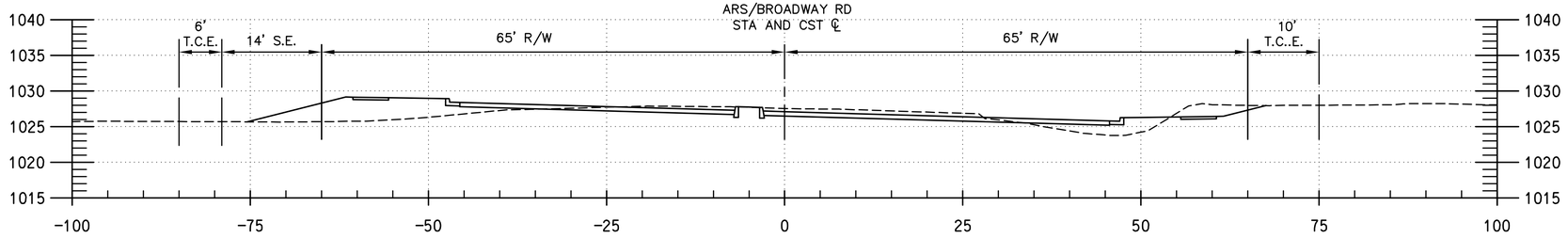
278+00

ARS/BROADWAY RD
STA AND CST ℄



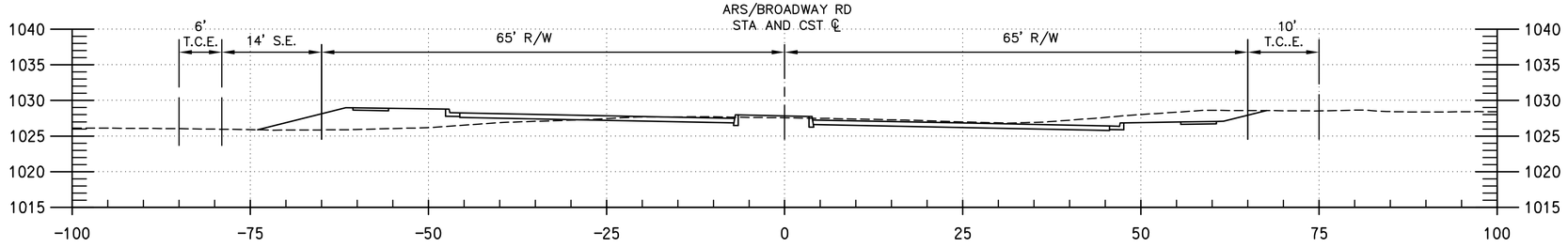
277+00

ARS/BROADWAY RD
STA AND CST ℄



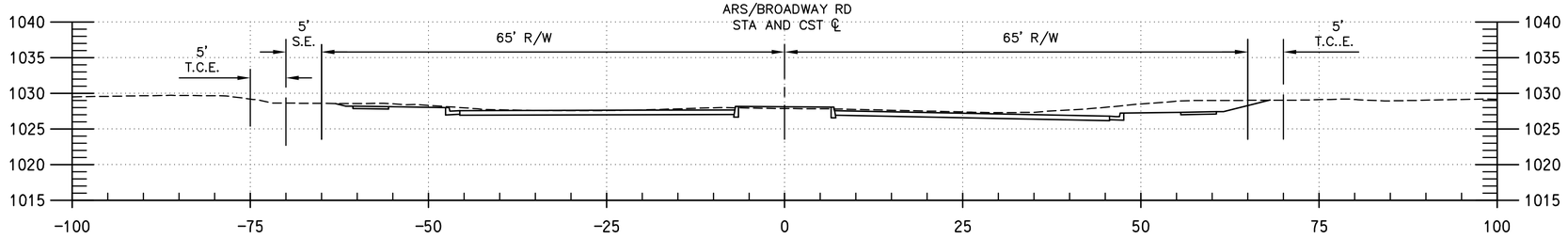
276+00

ARS/BROADWAY RD
STA AND CST ℄



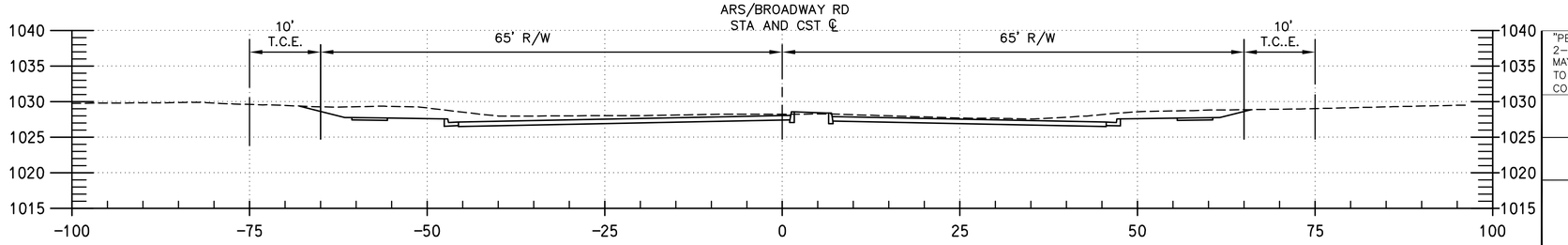
275+00

ARS/BROADWAY RD
STA AND CST ℄



274+00

ARS/BROADWAY RD
STA AND CST ℄



Registered Professional Engineer (Civil)
CERTIFICATE NO.
34888
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	55	164	

"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."

ROADWAY CROSS SECTIONS

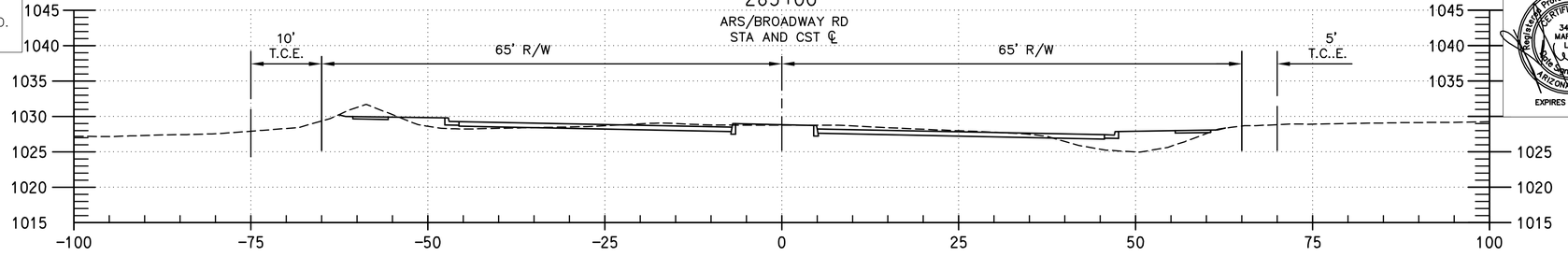
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

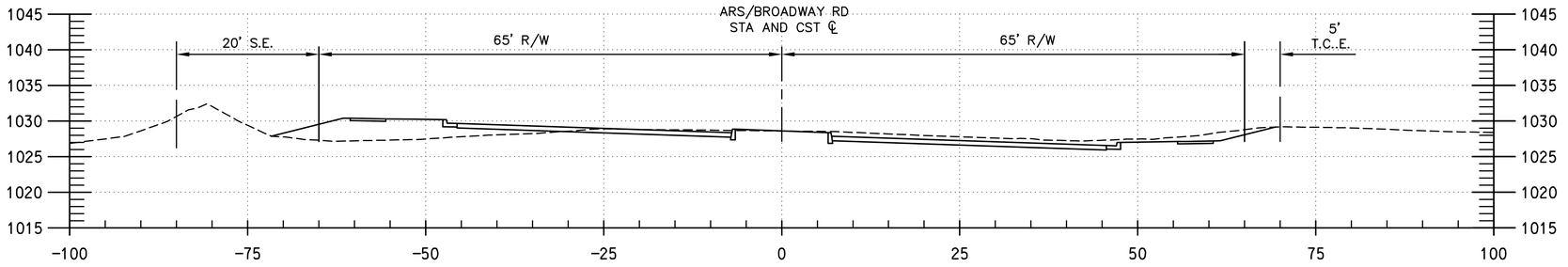
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

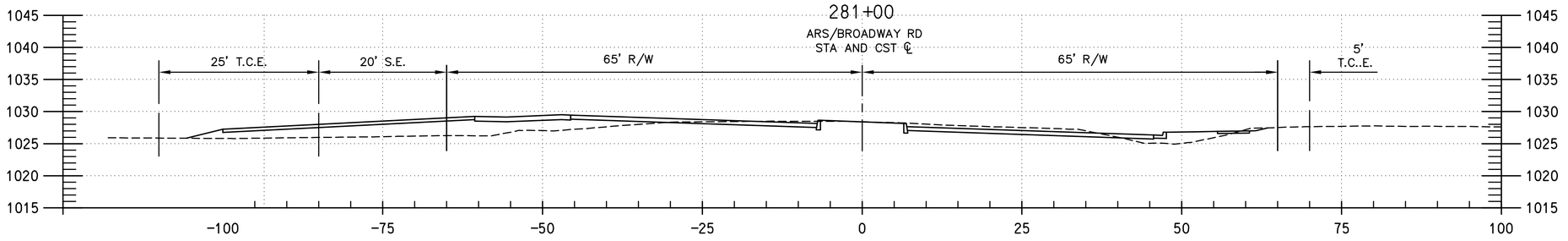
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.06

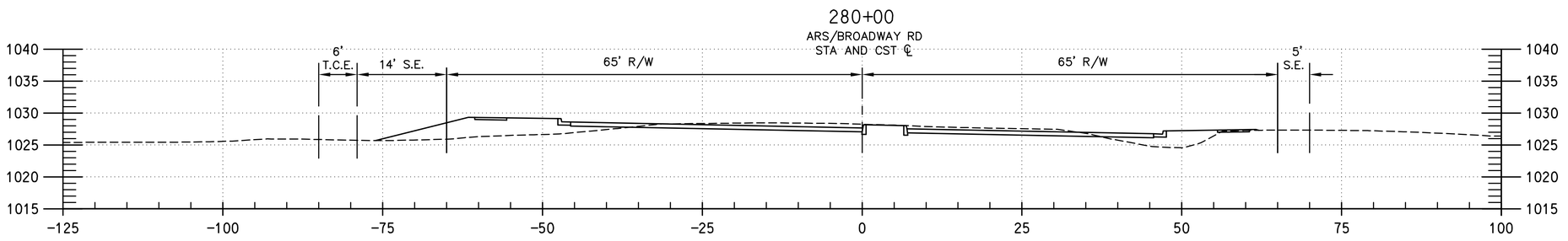
STREET DETAILS DWG

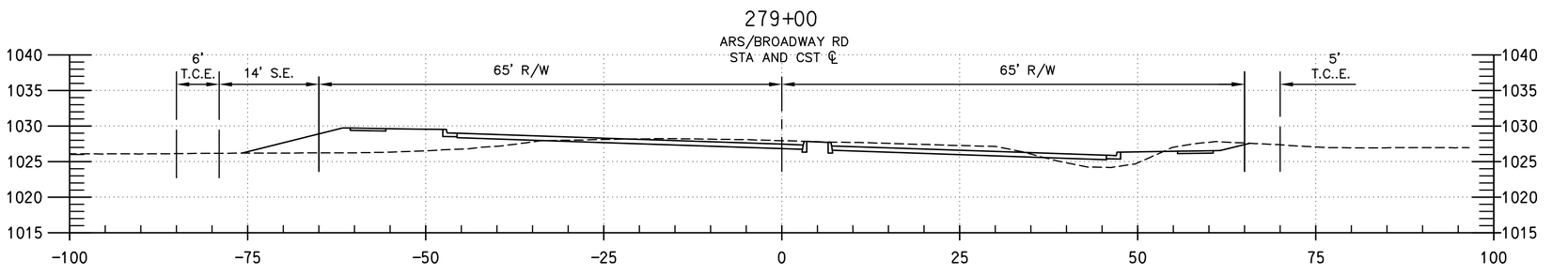
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	56	164	

PEC
PROJECT ENGINEERING CONSULTANTS
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ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.07

ST85100371 DT 4.07.DGN CURRENT PLOT

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

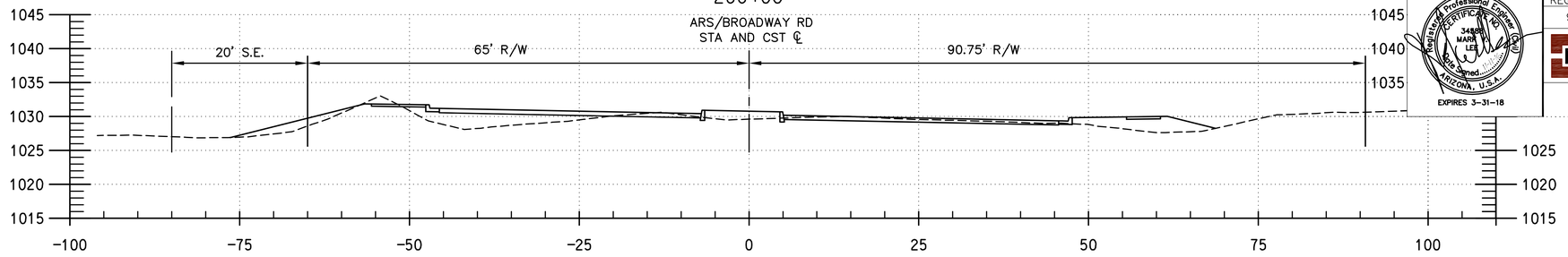
PHOENIX STREET – MARICOPA CO.

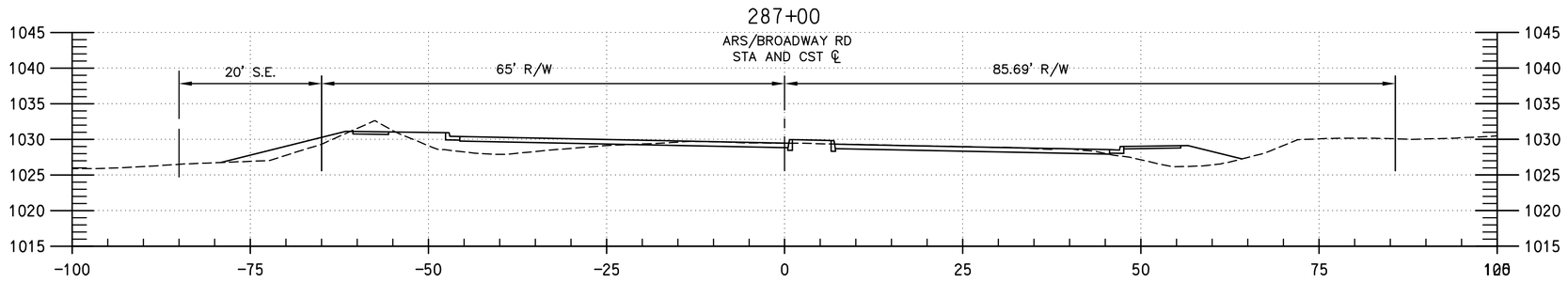
43RD AVENUE TO 35TH AVENUE

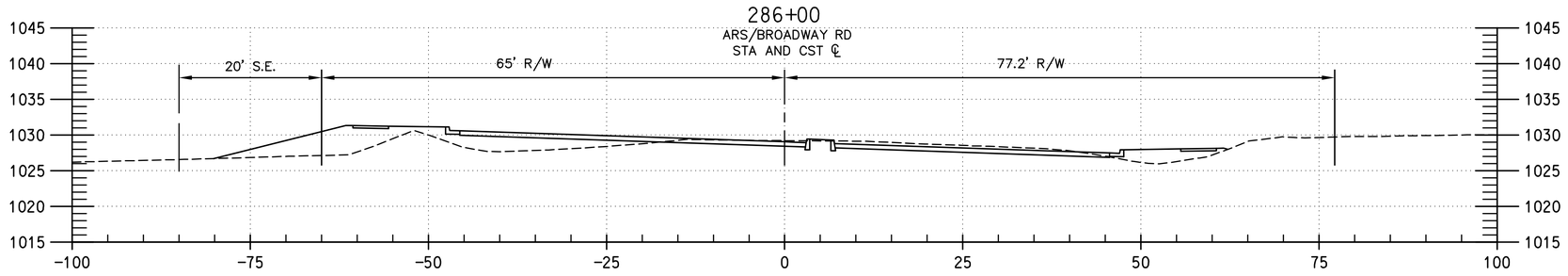
REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE

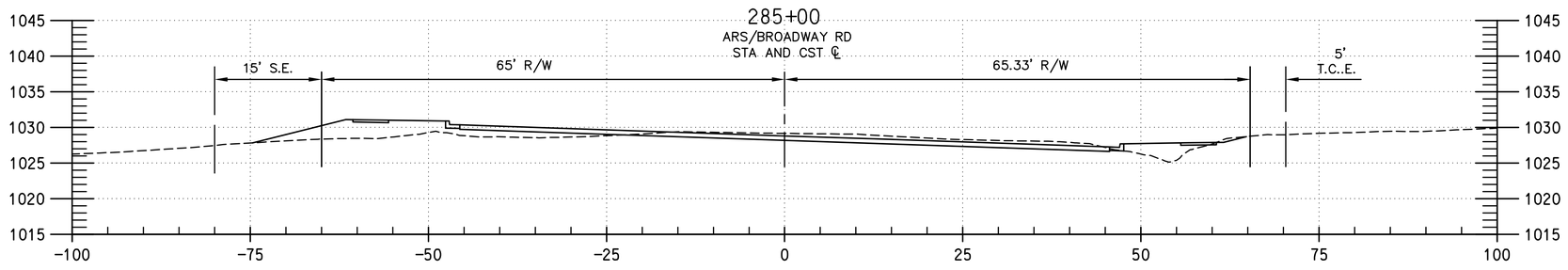
REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE

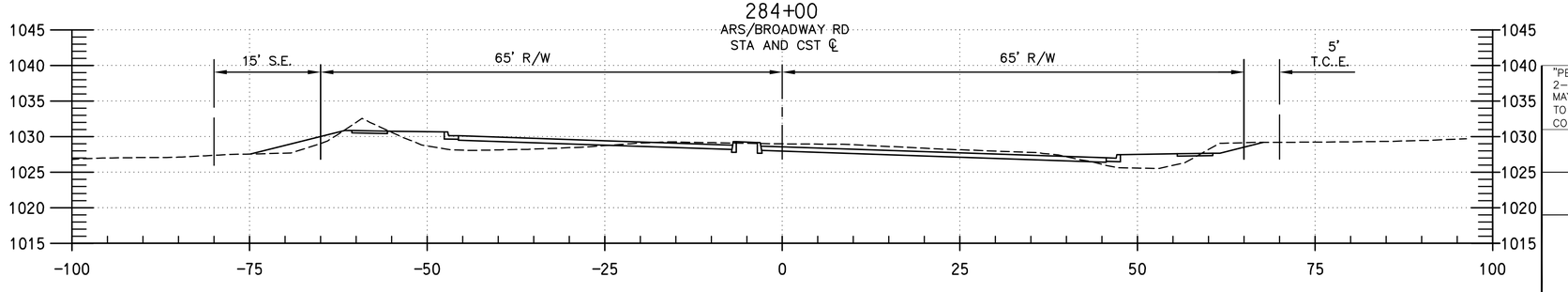
REVISION BY CITY OF PHOENIX				
NO.	DESCRIPTION	REV BY	CKD BY	DATE

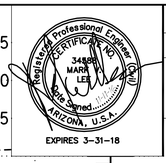












F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	57	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

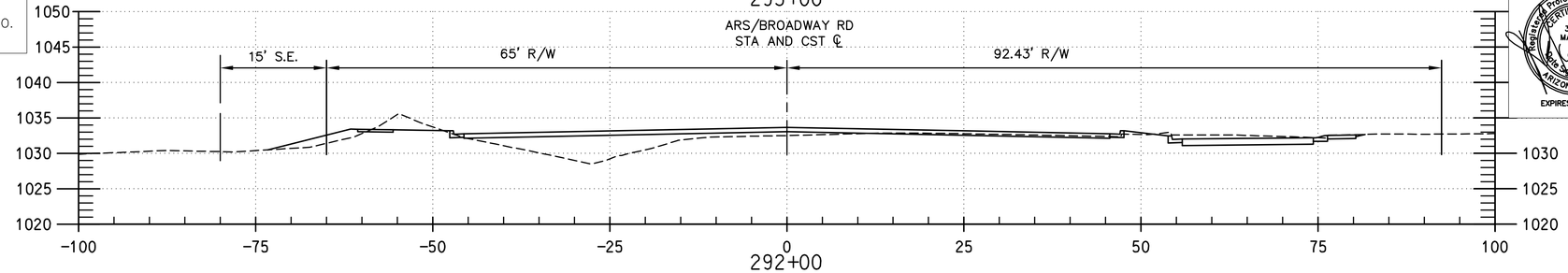
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.08

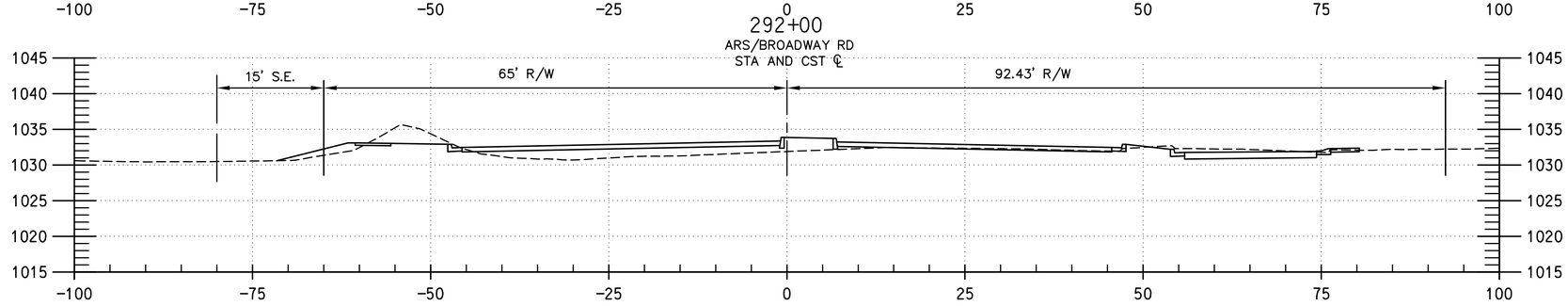
STREET DWG 4 SERIES SHEETS/ST85100371

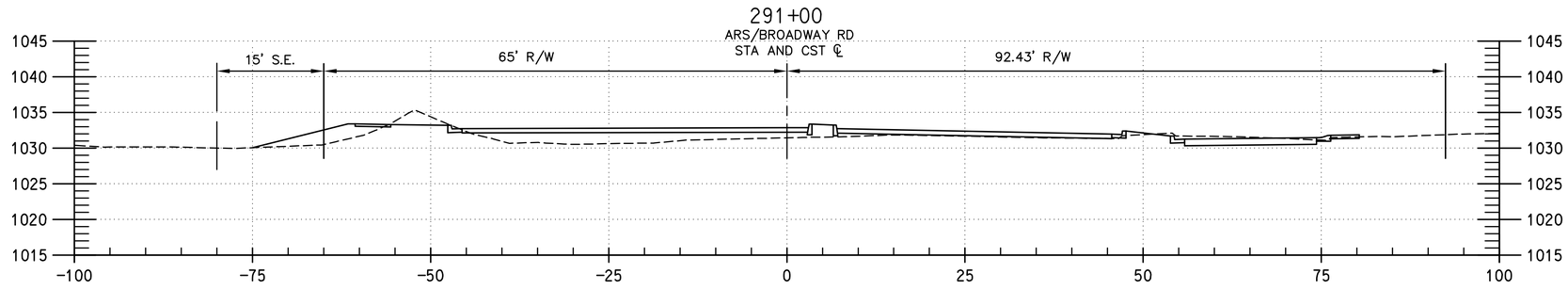
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

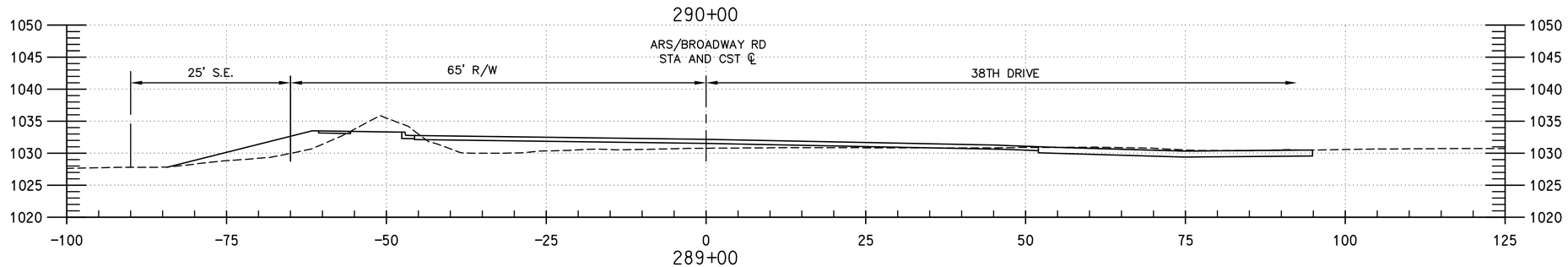
PHOENIX STREET – MARICOPA CO.

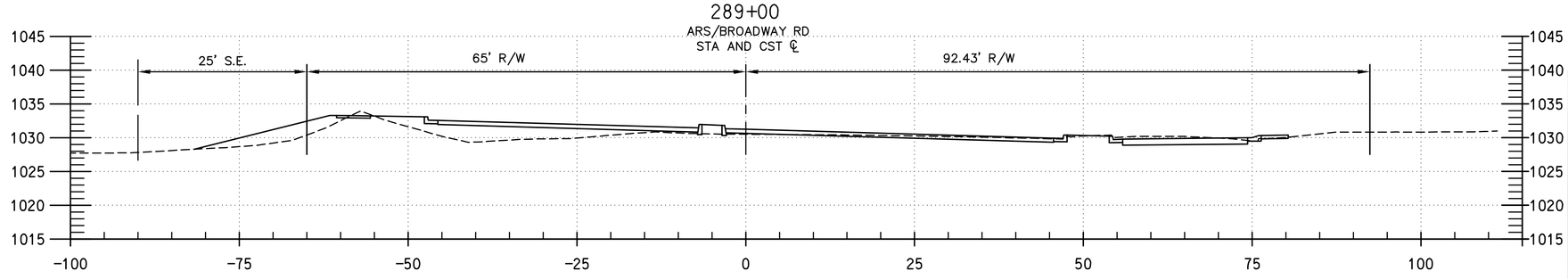
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK W. LEE Date Signed ARIZONA, U.S.A.

EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	58	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

ROADWAY CROSS SECTIONS

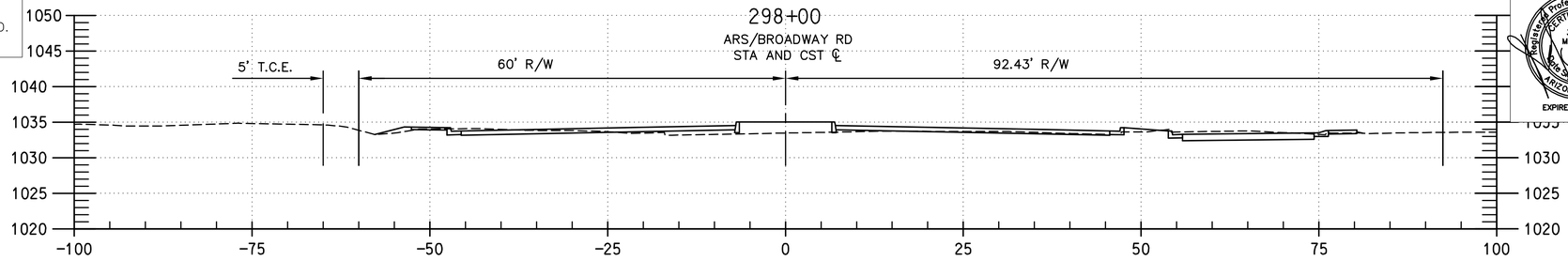
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

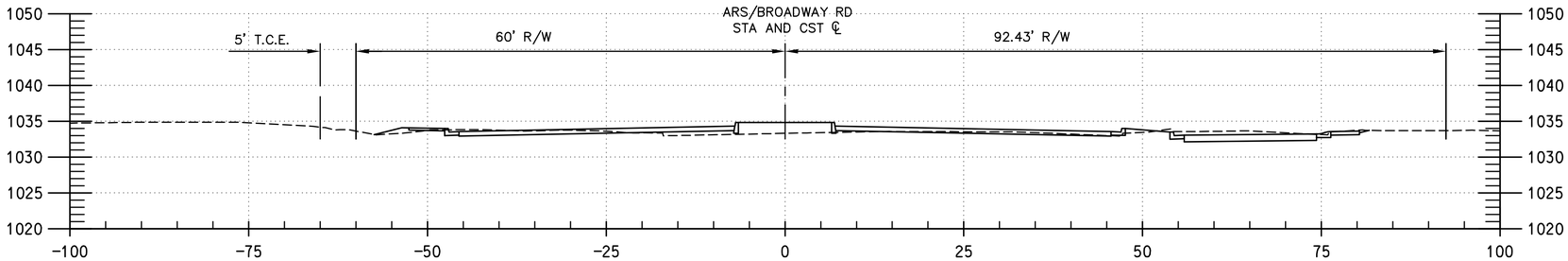
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

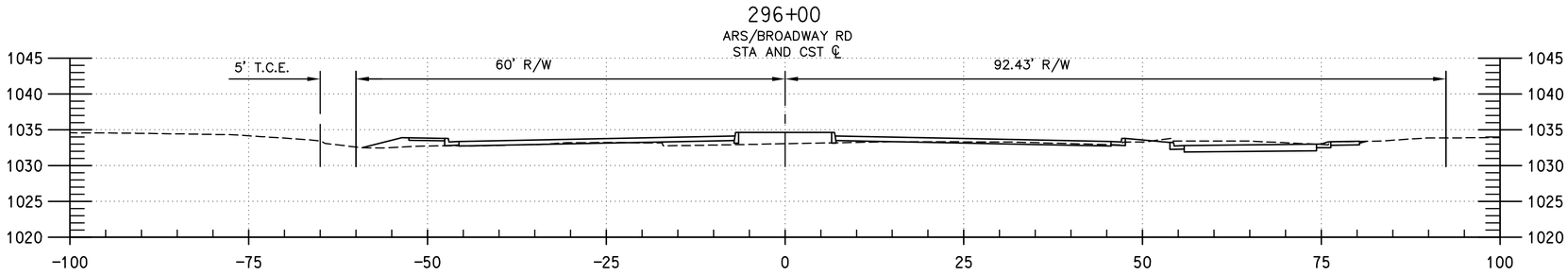
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.09

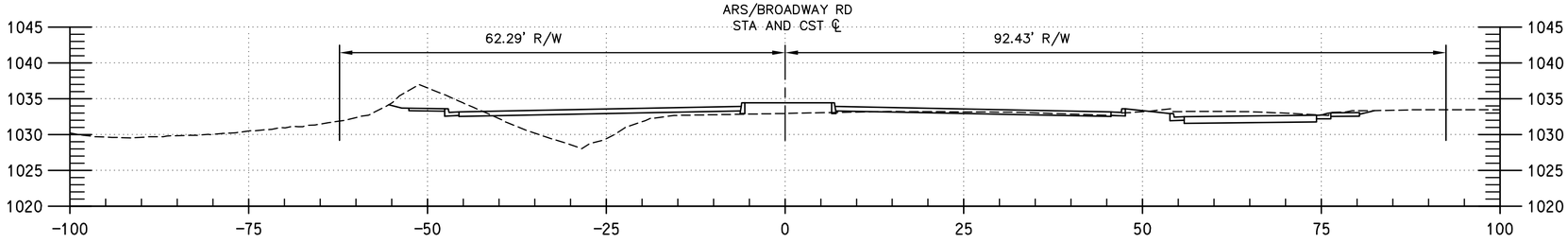
ST85100371 DT 4 CROSS SECTS.DWG

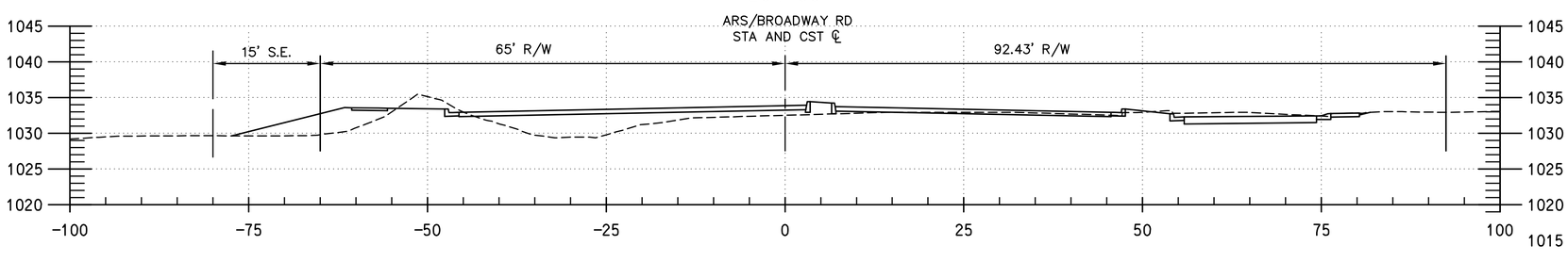
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34888 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	59	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

ROADWAY CROSS SECTIONS

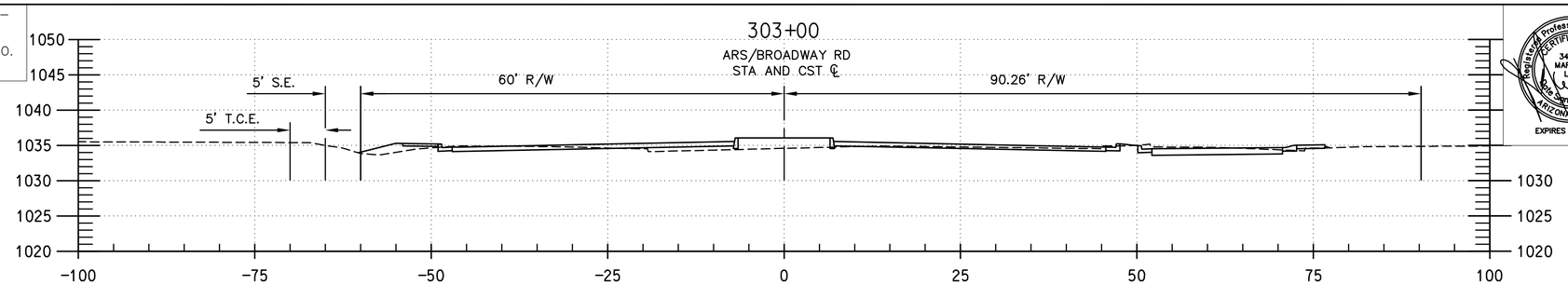
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

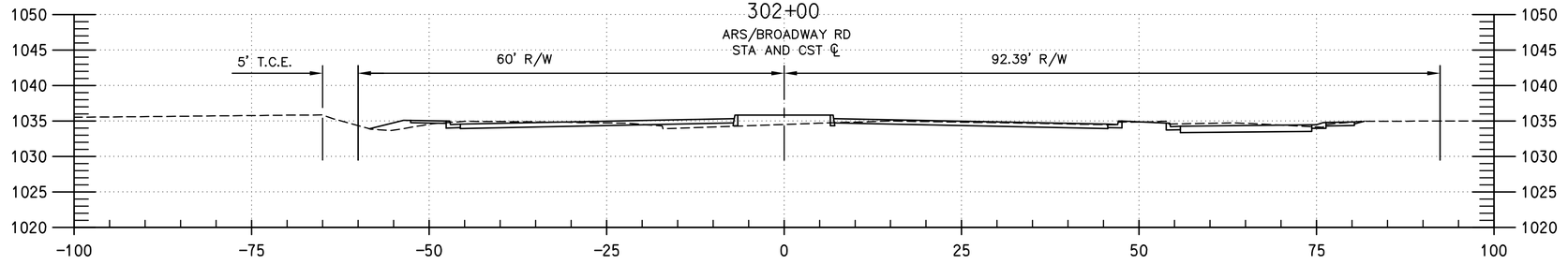
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

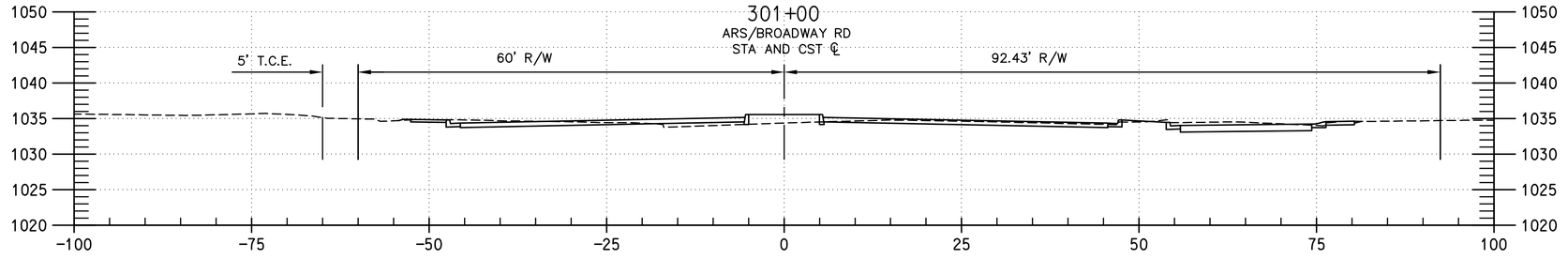
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.10

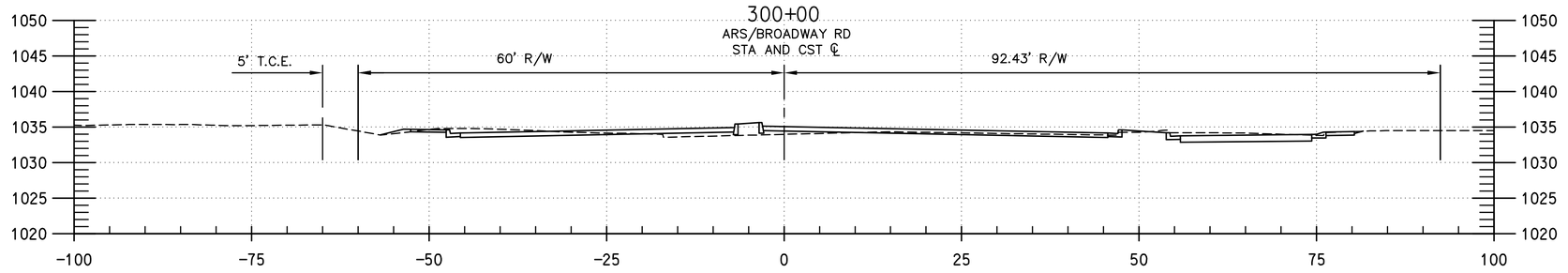
CREATED ON 11/1/2017 AT 4:55:05 PM BY MVL

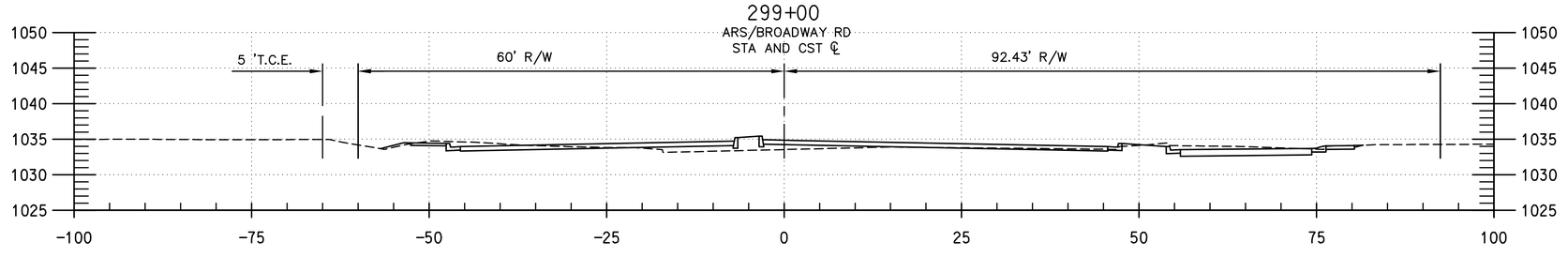
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE











REVISION BY CITY OF PHOENIX

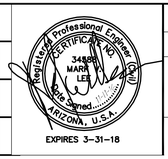
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	60	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.11

ST85100371 DT 4 SERIES SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

PHOENIX STREET – MARICOPA CO.

43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	61	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

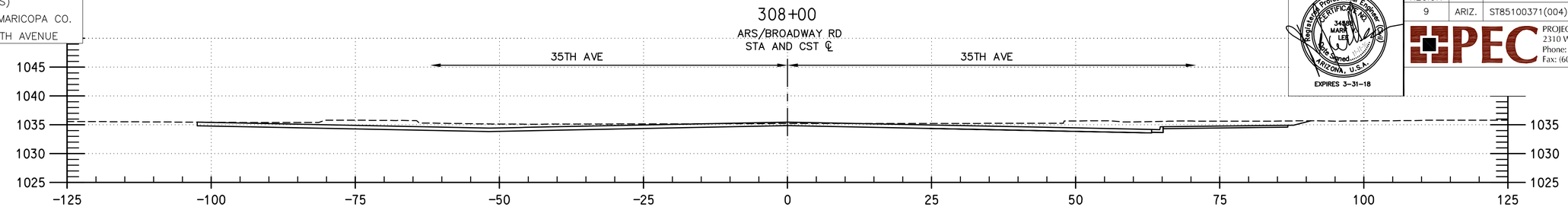
NO.	DESCRIPTION	REV BY	CKD BY	DATE

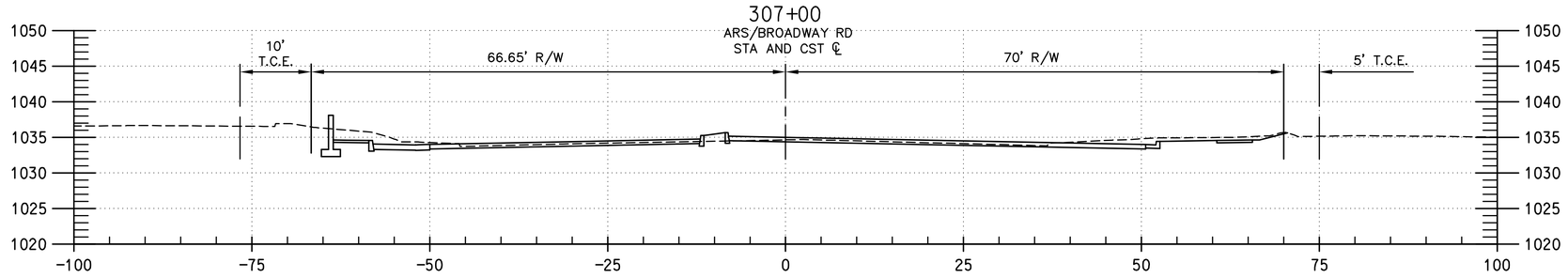
REVISION BY CITY OF PHOENIX

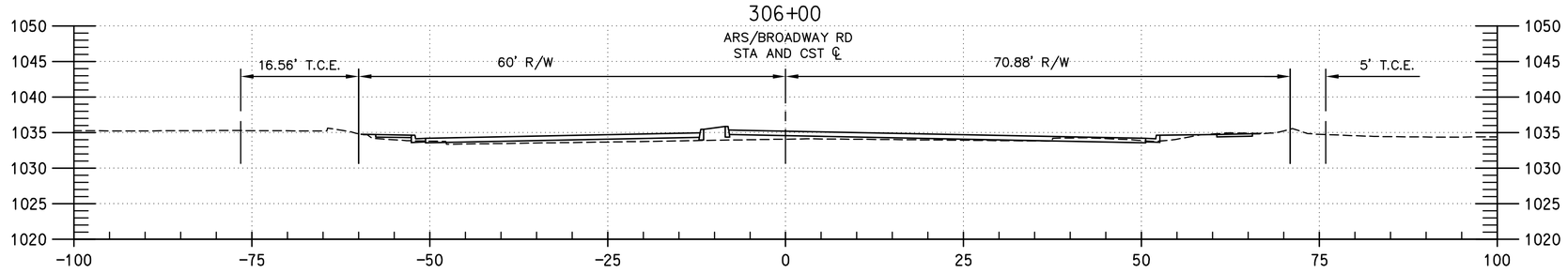
NO.	DESCRIPTION	REV BY	CKD BY	DATE

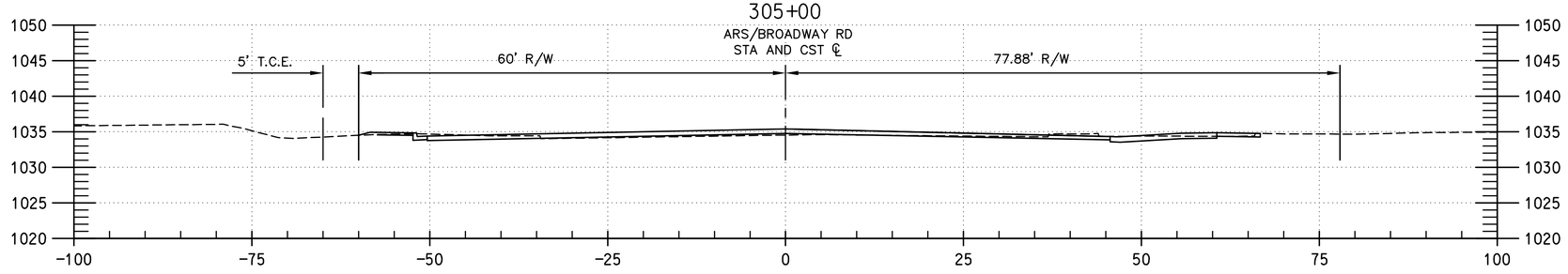
REVISION BY CITY OF PHOENIX

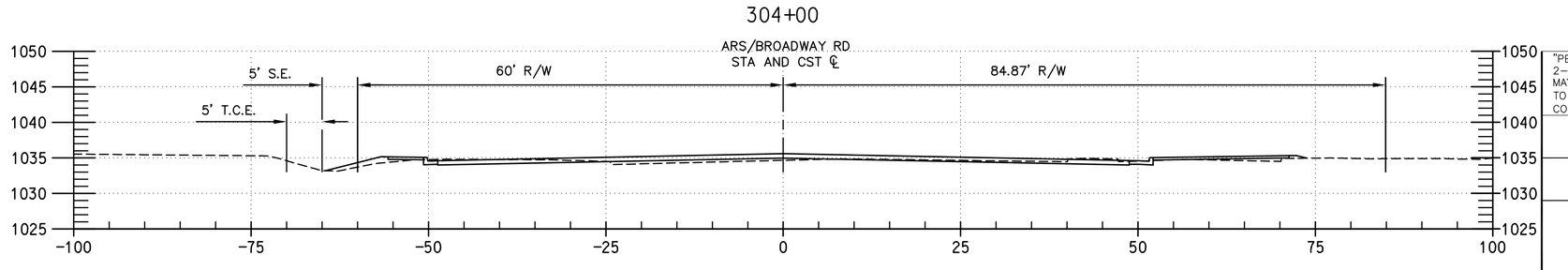
NO.	DESCRIPTION	REV BY	CKD BY	DATE











"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."

ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.12

STREET CROSS SECTIONS DT 4 SERIES

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	62	164	

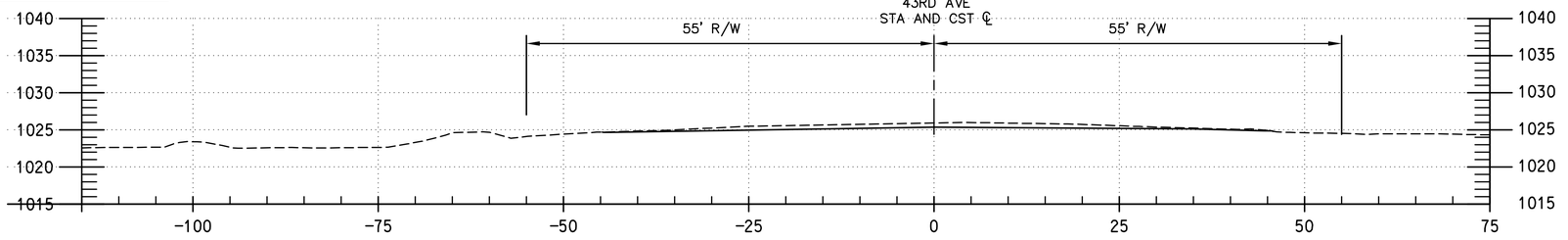
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34880 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

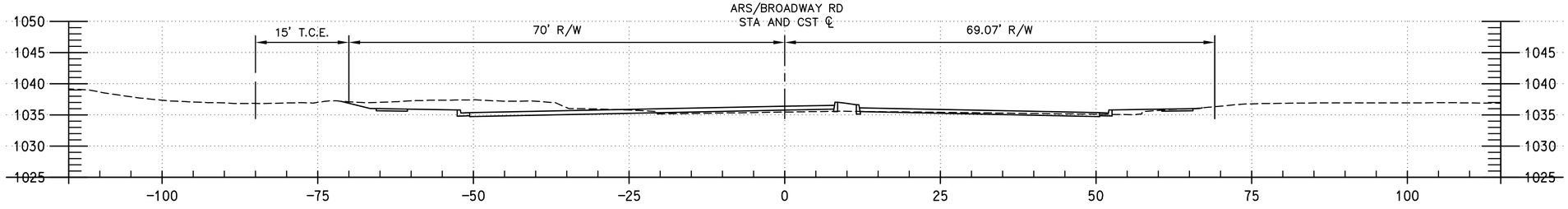
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

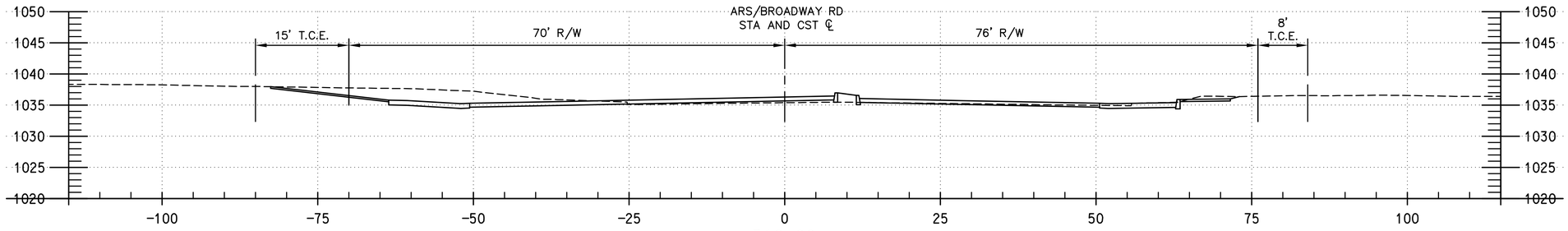
18+50
43RD AVE
STA AND CST ℄



311+40
ARS/BROADWAY RD
STA AND CST ℄



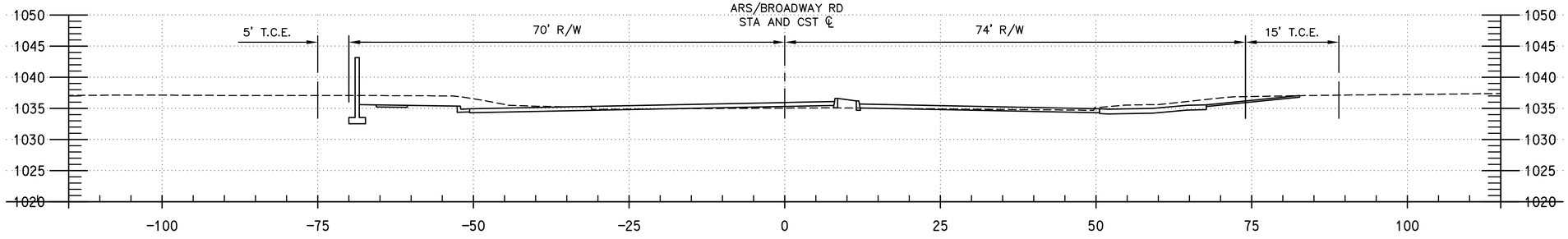
311+00
ARS/BROADWAY RD
STA AND CST ℄



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

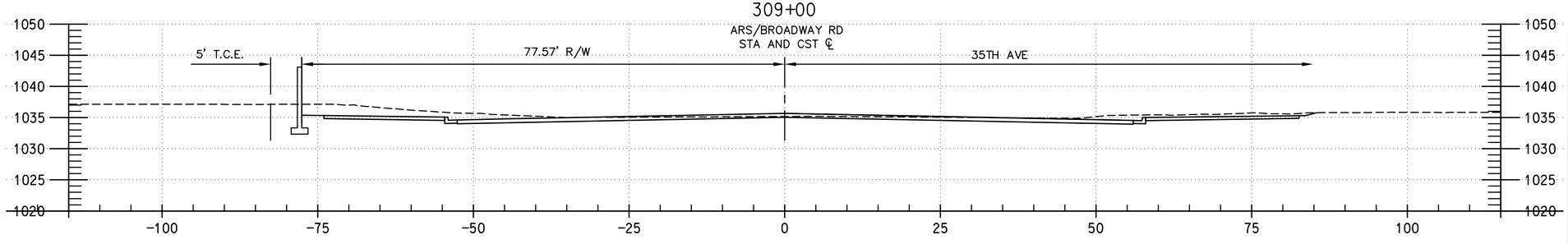
310+00
ARS/BROADWAY RD
STA AND CST ℄



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

309+00
ARS/BROADWAY RD
STA AND CST ℄



"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."

ROADWAY CROSS SECTIONS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ VERT			DT-4.13

ST85100371_DT_4.13.DGN

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

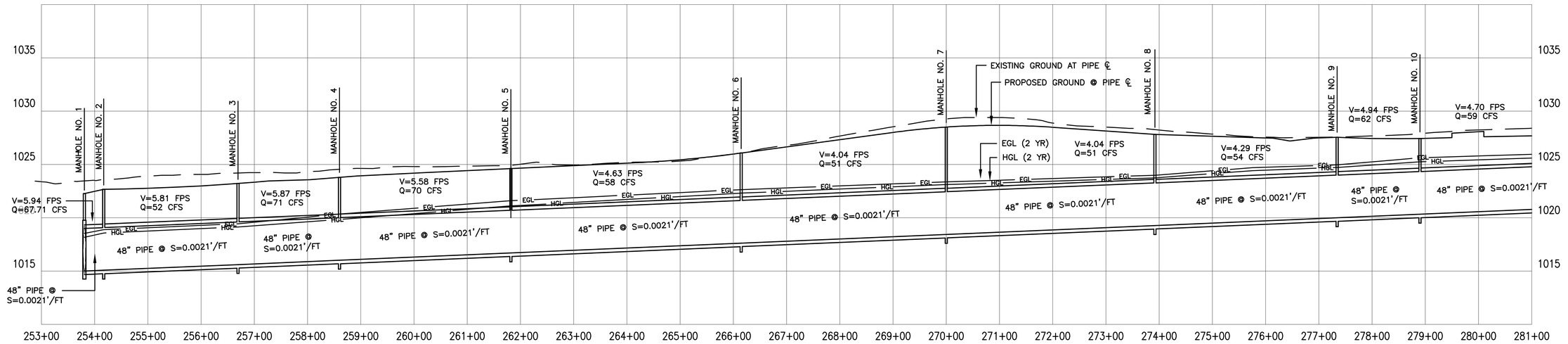
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	63	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL V. HEATON — Date Signed — ARIZONA, U.S.A.
EXPIRES 3-31-19

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

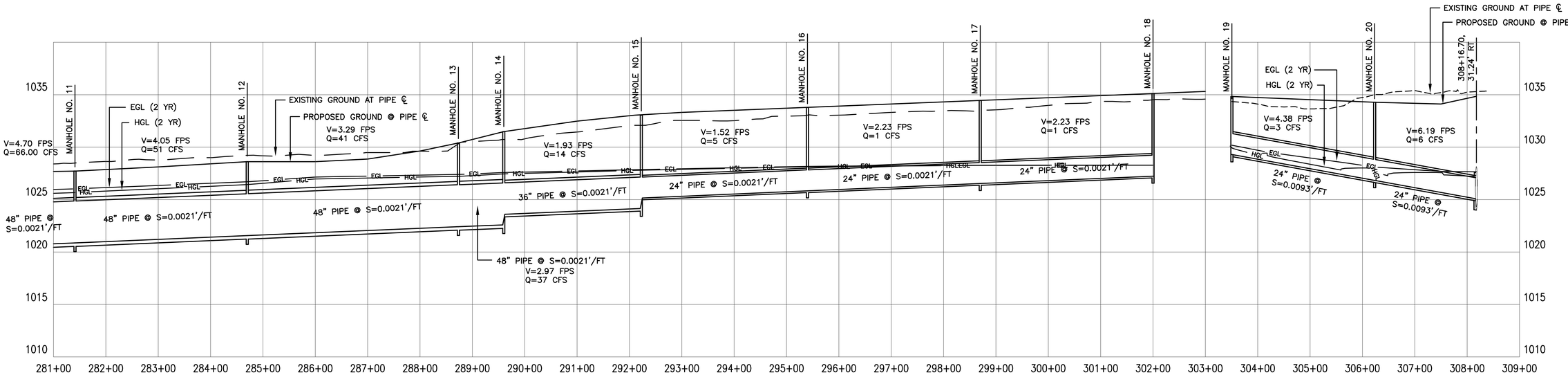
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	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."

STORM SEWER HYDRAULIC GRADE LINE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			SD-1.01

ST85100371 SD-1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

STREET TRANSPORTATION STORM DRAIN DESIGN SUMMARY SHEET

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	64	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN LEEUWEN HEATON Signed ARIZONA, U.S.A. EXPIRES 3-31-19

STORM DRAINAGE DESIGN DATA

PROJECT: ST85100333

LOCATION: AVENIDA RIO SALADO / BROADWAY RD
43RD AVENUE TO 35TH AVENUE

AREA NO.	INLET NO.	INLET STA.	AREA – ACRES: TOTAL AREA ACRES	AREA – ACRES: C FACTOR	AREA – ACRES: IMPROV. AREA CA	INFILTRATION in. / hr. f_c	FOR CONCENTRATION TIME: STREET SLOPE ft. / ft.	FOR CONCENTRATION TIME: MAX. DIST.	** T_C MIN.	INLET I	RUNOFF TO INLET Q = C.I.A.	AVERAGE UPSTREAM GUTTER SLOPE ft. / ft.	CROSS SLOPE AT INLET ft. / ft.	*** FLOWBY TO THIS CATCH BASIN	FLOW BY + RUNOFF (Q)	DEPTH OF WATER UPSTREAM GUTTER	WIDTH OF WATER IN STREET	GUTTER VELOCITY	DEPTH OF SUMP IF A SUMP	INLET TYPE	Q ACCEPTED BY C.B.	FLOWBY	TO INLET NO.	T_{C2} MAIN STORM DRAIN: TOTAL AREA IMPER.	T_{C2} MAIN STORM DRAIN: T_C (MIN.)	MAIN STORM DRAIN: I	MAIN STORM DRAIN: Q_2	SLOPE MAIN STORM DRAIN ft. / ft.	SIZE MAIN STORM DRAIN	VELOCITY MAIN STORM DRAIN f.p.s.	LENGTH MAIN STORM DRAIN	△ T_{C2} MIN.	ELEVATION: CROWN INLET	ELEVATION: CROWN OUTLET	HYDRAULIC GRADE LINE: S_f ft. / ft.	HYDRAULIC GRADE LINE: H_L ft.	HYDRAULIC GRADE LINE: ELEVATION INLET	HYDRAULIC GRADE LINE: ELEVATION OUTLET	HEAD BETWEEN 1.0' BELOW LIP GUTTER TO H.G. MAIN	LENGTH CONN. PIPE	DIA. CONN. PIPE	DEPTH CATCH BASIN
	48	309+26	****																																					
	44	307+96	****																																					
43	43	307+50 LT	0.63	0.90	0.56	N/A	0.0020	420	10	2.35	1.33	0.0020	0.020	0.50	1.83	0.14	6.85	3.89	0.14	P1569–1	1.83	0.00		6.34	22.82	1.60	5.07	0.0093	24	6.62	50	N/A	1027.55	1027.08	0.0001	0.14	1027.44	1027.30	1.99	89	18	4.0
36	36	296+90 LT	0.96	0.90	0.86	N/A	0.0020	640	10	2.35	2.02	0.0020	0.020	0.00	2.02	0.25	12.44	1.30		P1569–1	1.70	0.32	31	1.78	16.01	1.90	2.20	0.0021	24	1.52	480	N/A	1028.16	1027.15	0.0009	0.42	1028.22	1027.80	2.00	65	18	4.0
31	31	292+10 LT	0.91	0.90	0.82	N/A	0.0025	607	10	2.35	1.92	0.0025	0.020	0.32	2.24	0.16	7.84	3.64	0.16	P1569–2	2.24	0.00		8.51	25.57	1.50	8.30	0.0021	36	1.93	625	N/A	1027.15	1025.84	0.0016	0.99	1027.80	1026.81	1.97	65	18	4.0
22	22	285+85 LT	0.56	0.90	0.50	N/A	0.0023	375	10	2.35	1.18	0.0023	0.034	0.00	1.18	0.24	7.12	1.37		P1573	1.07	0.11	21	52.95	38.88	1.20	41.30	0.0021	48	4.70	695	N/A	1025.84	1024.33	0.0022	1.56	1026.81	1025.25	1.92	9	18	4.0
18	18	278+90 LT	0.88	0.90	0.79	N/A	0.0023	590	10	2.35	1.86	0.0023	0.034	0.00	1.86	0.29	8.43	1.54		P1573	1.51	0.35	17	78.79	41.98	1.10	49.32	0.0021	48	4.29	498	N/A	1024.33	1023.27	0.0030	1.51	1025.25	1023.74	1.06	4	18	4.0
14	14	273+92 LT	1.00	0.90	0.90	N/A	0.0035	673	10	2.35	2.12	0.0035	0.020	0.35	2.12	0.11	5.70	6.54	0.11	P1569–2	2.12	0.00		116.00	56.15	0.82	51.95	0.0021	48	4.63	787	N/A	1023.27	1021.62	0.0018	1.43	1023.74	1022.31	2.17	33	18	4.0
11	11	266+05 LT	0.73	0.90	0.66	N/A	0.0023	492	10	2.35	1.55	0.0023	0.020	0.00	1.55	0.22	10.98	1.29		P1569–2	1.07	0.49	8	116.00	56.15	0.82	51.95	0.0021	48	5.58	433	N/A	1021.62	1020.70	0.0028	1.20	1022.31	1021.11	1.61	34	18	4.0
8	8	261+72 LT	0.65	0.90	0.58	N/A	0.0023	433	10	2.35	1.37	0.0023	0.020	0.49	1.85	0.23	11.74	1.35		P1569–2	1.20	0.65	3	116.00	56.15	0.82	51.95	0.0021	48	5.58	740	N/A	1020.70	1019.08	0.0034	2.54	1021.11	1018.57	1.23	34	18	4.0
3	3	254+32 LT	1.10	0.90	0.99	N/A	0.0023	740	10	2.35	2.34	0.0023	0.034	0.65	2.99	0.34	10.07	1.73		P1569–2	2.68	*0.31		116.00	56.15	0.82	51.95	0.0021	48	4.49	51	N/A	1019.08	1019.00	0.0080	0.41	1018.57	1018.16	1.59	33	18	4.0
	49	309+26	****																																					
	47	309+01	****																																					
	46	308+86	****																																					
	45	308+06	****																																					
42	42	307+50 RT	0.19	0.90	0.17	N/A	0.0020	127	10	2.35	0.40	0.0020	0.020	2.78	3.18	0.15	7.46	5.72	0.15	P1569–2	3.18	0.00		6.34	22.82	1.60	5.07	0.0093	24	6.62	50	N/A	1027.55	1027.08	0.0011	0.14	1027.44	1027.30	1.82	17	18	4.0
40	40	306+23 RT	0.31	0.90	0.28	N/A	0.0023	205	10	2.35	0.65	0.0023	0.020	2.94	3.59	0.30	15.04	1.59		P1569–2	1.31	2.28	42	6.34	22.82	1.60	5.07	0.0093	24	6.19	127	N/A	1028.87	1027.55	0.0016	0.32	1027.76	1027.44	2.13	11	18	4.0
	41	306+23 RT	OFFSITE			N/A								2.54	2.54					P1570	2.54	0.00		6.34	22.82	1.60	5.07	0.0093	24	6.19	127	N/A	1028.87	1027.55	0.0016	0.32	1027.76	1027.44	2.13	11	18	4.0
39	39	304+18 RT	0.13	0.90	0.12	N/A	0.0023	89	10	2.35	0.28	0.0023	0.020	5.07	5.35	0.35	17.47	1.75		P1569–1	2.41	2.94	40	6.34	22.82	1.60	5.07	0.0093	24	4.62	205	N/A	1030.77	1028.87	0.0229	1.56	1029.32	1027.76	2.13	7	18	4.0
	50	303+50 RT	OFFSITE			N/A							0.020	2.54	2.54	0.31	15.73	1.03	0.31	P1569–1	2.54	0.00		6.34	22.82	1.60	2.54	0.0093	24	4.38	68	N/A	1031.61	1030.77	0.0047	0.71	1030.03	1029.32	1.54	51	18	3.5
38	38	302+00 RT	0.26	0.88	0.23	N/A	0.0020	129	10	2.35	0.53	0.0020	0.020	2.20	2.73	0.12	6.08	0.81		P1571	1.24	1.49	37	1.78	16.01	1.90	2.20	0.0021	24	2.23	505	N/A	1029.23	1028.16	0.0001	0.06	1028.28	1028.22	1.90	28	18	4.0
37	37	296+95 RT	1.01	0.88	0.89	N/A	0.0020	505	10	2.35	2.08	0.0020	0.020	1.49	3.57	0.20	10.14	1.14		P1571	1.77	1.80	35	1.78	16.01	1.90	2.20	0.0021	24	1.52	395	N/A	1028.16	1027.31	0.0007	0.28	1028.22	1027.94	1.60	29	18	4.0
35	35	293+00 RT	0.79	0.88	0.69	N/A	0.0020	395	10	2.35	1.63	0.0020	0.020	5.55	7.17	0.21	10.41	1.16		P1571	2.52	4.66	32	4.82	24.34	1.50	4.70	0.0021	24	2.33	77	N/A	1027.31	1027.15	0.0018	0.14	1027.94	1027.80	1.34	29	18	4.0
32	32	292+23 RT	0.15	0.88	0.14	N/A	0.0054	77	10	2.35	0.32	0.0054	0.020	3.35	6.01	0.24	11.99	2.09		P1571	2.03	3.98	30	8.51	25.57	1.50	8.30	0.0021	36	1.93	123	N/A	1027.15	1026.88	0.0011	0.13	1027.80	1027.67	3.04	27	24	6.2
30	30	291+00 RT	0.25	0.88	0.22	N/A	0.0054	123	10	2.35	0.51	0.0054	0.020	14.07	14.58	0.21	10.46	1.91		P1571	2.90	11.68	27	18.86	32.02	1.25	15.32	0.0021	36	2.34	140	N/A	1026.88	1026.59	0.0016	0.22	1027.67	1027.45	1.32	29	18	4.0
27	27	289+60 RT	0.51	0.88	0.45	N/A	0.0082	140	10	2.35	1.05	0.0082	0.029	13.51	20.68	0.40	13.96	3.66		P1571	4.37	16.31	26	52.95	38.88	1.20	41.30	0.0021	48	2.97	30	N/A	1026.59	1026.41	0.0077	0.23	1027.45	1027.22	1.68	27	30	7.2
26	26	289+30 RT	0.06	0.88	0.05	N/A	0.0169	30	10	2.35	0.12	0.0169	0.032	16.31	16.44	0.33	10.21	4.55		P1571	3.16	13.28	25	52.95	38.88	1.20	41.30	0.0021	48	3.29	30	N/A	1026.41	1025.84	0.0137	0.41	1027.22	1026.81	1.16	28	18	4.0
25	25	289+00 RT	0.06	0.88	0.05	N/A	0.0169	30	10	2.35	0.12	0.0169	0.034	13.28	13.40	0.30	8.79	4.29		P1571	2.80	10.60	24	52.95	38.88	1.20	41.30	0.0021	48	3.47	27	N/A	1026.41	1025.84	0.0152	0.41	1027.22	1026.81	0.72	28	18	4.0
24	24	288+73 RT	0.05	0.88	0.05	N/A	0.0169	27	10	2.35	0.11	0.0169	0.034	10.60	10.72	0.26	7.70	3.93		P1571	2.37	8.34	23	52.95	38.88	1.20	41.30	0.0021	48	4.05	273	N/A	1026.41	1025.84	0.0015	0.41	1027.22	1026.81	0.98	28	24	4.5
23	23	286+00 RT	0.41	0.90	0.37	N/A	0.0023	273	10	2.35	0.86	0.0023	0.034	2.55	3.42	0.36	10.59	1.79		P1569–2	2.32	1.09	21	52.95	38.88	1.20	41.30	0.0021	48	4.70	130	N/A	1025.84	1025.56	0.0029	0.38	1026.81	1026.43	−0.60	31	18	4.0
21	21	284+70 RT	0.39	0.88	0.34	N/A	0.0023	130	10	2.35	0.80	0.0023	0.034	7.40	8.21	0.50	14.71	2.22		P1569–2	7.38	0.82	20	78.79	41.98	1.10	49.32	0.0021	48	4.94	329	N/A	1025.56	1024.86	0.0023	0.76	1026.43	1025.67	−0.79	41	18	4.0
20	20	281+41 RT	0.49	0.90	0.44	N/A	0.0023	329	10	2.35	1.04	0.0023	0.034	7.02	8.06	0.50	14.61	2.22		P1569–2	7.26	0.78	19	78.79	41.98	1.10	49.32	0.0021	48	3.92	251	N/A	1024.86	1024.33	0.0017	0.42	1025.67	1025.25	−0.85	32	18	4.0
19	19	278+90 RT	0.37	0.90	0.34	N/A	0.0023	251	10	2.35	0.79	0.0023	0.034	0.78	1.57	0.27	7.92	1.48		P1569–2	1.56	0.01	17	78.79	41.98	1.10	49.32	0.0021	48	4.29	110	N/A	1024.33	1024.00	0.0048	0.53	1025.25	1024.72	−0.49	44	18	4.0
17	17	277+80 RT	0.16	0.90	0.15	N/A	0.0023	110	10	2.35	0.35	0.0023	0.034	6.56	6.91	0.47	13.79	2.14		P1569–2	4.95	1.96	16	78.79	41.98	1.10	49.32	0.0021	48	4.04	45	N/A	1024.00	1024.00	0.0104	0.47	1024.72	1024.25	−0.50	42	18	4.0
16	16	277+35 RT	0.07	0.90	0.06	N/A	0.0023	45	10	2.35	0.14	0.0023	0.034	2.74	2.88	0.19	5.46	5.68	0.19	P1569–2	2.88	0.00		78.79	41.98	1.10	49.32	0.0021	48	4.63	159	N/A	1024.00	1023.66	0.0032	0.51	1024.25	1023.74	−0.55	58	18	4.6
15	15	275+76 RT	0.29	0.90	0.26	N/A	0.0035	194	10	2.35	0.61	0.0035	0.027	4.81	5.42	0.36	13.45	2.22		P1569–2	4.64	0.78	16	81.52	44.15	1.10	50.73	0.0021	48	4.63	194	N/A	1023.66	1023.27	0.0032	0.62	1023.74	1023.12	0.76	59	18	4.0
13	13	273+82 RT	0.43	0.90	0.38	N/A	0.0035	285	10	2.35	0.90	0.0035	0.020	5.60	6.50	0.35	17.37	2.15		P1569–2	4.70	1.80	15	116.00	56.15	0.82	51.95	0.0021	48	4.63	767	N/A	1023.27	1021.62	0.0011	0.81	1023.12	1022.31	1.67	59	18	4.0
12	12	266+15 RT	0.72	0.90	0.65	N/A	0.0023	482	10	2.35	1.52	0.0023	0.020	5.60	7.12	0.39	19.45	1.88		P1569–2	7.12	0.00	10	116.00	56.15	0.82	51.95	0.0021	48	5.58	375	N/A	1021.62	1020.70	0.0032	1.20	1022.31	1021.11	1.52	58	18	4.0
10	10	262+40 RT	0.56	0.90	0.50	N/A	0.0023	375	10	2.35	1.18	0.0023	0.020	0.00	1.19	0.20	9.93	1.20		P1569–2	0.35	0.83	9	116.00	56.15	0.82	51.95	0.0021	48	5.58	58	N/A	1020.70	1020.01	0.0219	1.27	1021.11	1019.84	0.65	59	18	4.0
9	9	261+82 RT	0.27	0.90	0.24	N/A	0.0023	182	10	2.35	0.57	0.0023	0.020	6.47	7.05	0.25	12.68	4.38	0.25	P1569–2	7.05	0.00		116.00	56.15	0.82	51.95	0.0021	48	5.58	124	N/A	1020.70	1020.01	0.0102	1.27	1021.11	1019.84	0.65	58	18	4.0
7	7	260+58 RT	0.06	0.90	0.05	N/A	0.0023	38	10	2.35	0.12	0.0023	0.020	0.00	0.12	0.08	4.20	0.68		P1569–2	0.08	0.04	9	116.00	56.15	0.82	51.95	0.0021	48	6.51	198	N/A	1020.70	1020.01	0.0064	1.27	1021.11	1019.84	0.65	59	18	4.0
6	6	258+60 RT	0.24	0.90	0.21	N/A	0.0023	160	10	2.35	0.50	0.0023	0.020	0.00	0.50	0.08	4.09	3.02		P1569–2	0.50	0.00		116.00	56.15	0.82	51.95	0.0021	48	5.33	191	N/A	1020.01	1019.61	0.0037	0.70	1019.84	1019.14	2.23	13	18	4.0
5	5	256+69 RT	0.14	0.90	0.12	N/A	0.0023	91	10	2.35	0.29	0.0023	0.020	0.00	0.29	0.12	5.83	0.84		P1573	0.29	0.00		116.00	56.15	0.82	51.95	0.0021	48	5.33	245	N/A	1019.61	1019.08	0.0023	0.57	1019.14	1018.57	2.28	8	18	4.0
	4	255+25 RT	OFFSITE								NUISANCE	RUNOFF								P1570				116.00	56.15	0.82	51.95	0.0021	48	4.49	43	N/A	1019.08	1019.00	0.0095	0.41	1018.57	1018.16	1.60	18	18	4.0
2	2	254+24 RT	0.20	0.90	0.18	N/A	0.0023	135	10	2.35	0.43	0.0023	0.034	5.60	6.03	0.45	13.10	2.07		P1573	5.75	*0.27	1	116.00	56.15	0.82	51.95	0.0021	48	4.49	43	N/A	1019.08	1019.00	0.0095	0.41	1018.57	1018.16	1.60	18	18	4.0
	1	18+73 RT	NUISANCE RUNOFF, DRAINING TO 43RD AVENUE STORM DRAIN.																																					

* FLOWBYS FROM CB2 AND CB3 WILL CONTRIBUTE TO PROJECT ST85100334.

** T_C REFERS TO ONSITE TIME OF CONCENTRATION.

*** FLOWBY TO THIS CATCH BASIN INCLUDES OFFSITE RUNOFF CONTRIBUTING TO THE CATCH BASIN.

**** EXISTING CATCH BASINS TO BE RELOCATED DUE TO ROAD WIDENING. THEY ARE LOCATED AT THE BROADWAY ROAD AND 35TH AVENUE INTERSECTION DRAINING TO THE EXISTING 35TH AVENUE STORM DRAIN. HYDRAULIC DETAILS ARE AVAILABLE IN THE DRAINAGE REPORT OF 35TH AVENUE STORM DRAIN LOWER BUCKEYE ROAD TO BROADWAY ROAD (ST83110026).

REVISION BY CITY OF PHOENIX

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STORM DRAIN DESIGN SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N.T.S. VERT			DS-1.01

ST85100371 DS-1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

N
City of Phoenix

Registered Professional Engineer (Civil)
CERTIFICATE NO.
34580
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	65	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

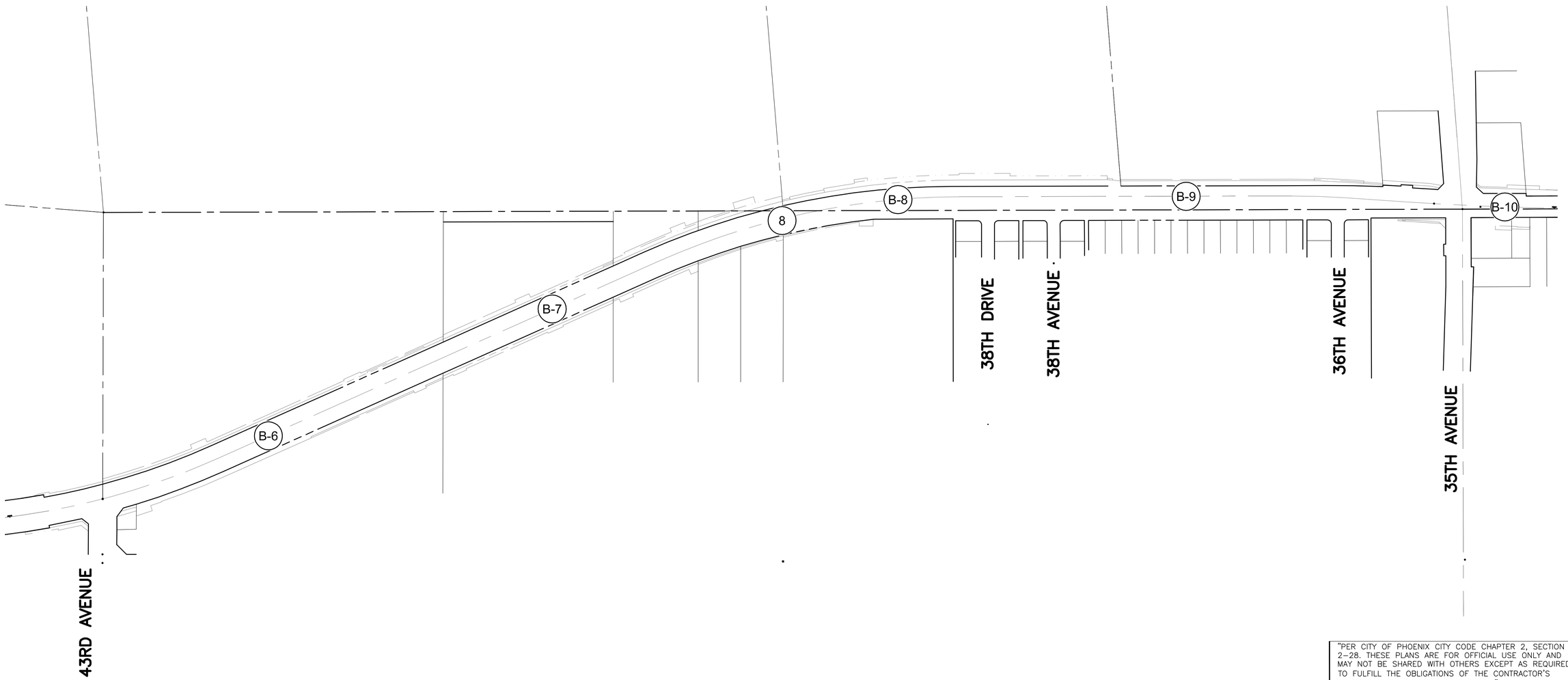
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



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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."

GEOTECHNICAL INFORMATION

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			SB-1.01

ST85100371 SB-1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	66	164	

PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed 11/15/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

THE MATERIAL BORING LOGS SHOWN ON THESE PLANS ARE INCLUDED FOR THE CMAR'S CONVENIENCE ONLY. THEY ARE NOT INTENDED TO IMPLY THAT THE CHARACTER OF MATERIALS SHOWN IN THE LOGS IS REPRESENTATIVE THROUGHOUT THE PROJECT. THE SOIL BORINGS ARE INDICATIVE OF THE SOIL CHARACTERISTICS ONLY AT THE LOCATION AND TO THE DEPTH OF EACH OF THE BORINGS. EVEN IF NOT SPECIFICALLY SHOWN IN THE GEOTECHNICAL INFORMATION PROVIDED, THE CMAR MAY ENCOUNTER LARGE COBBLES, BOULDERS, CALICHE, CONGLOMERATE, HARD ROCK, PERCHED GROUNDWATER, HISTORIC OR PREHISTORIC CULTURAL RESOURCES, OR OTHER DIFFERING SITE CONDITIONS ON THIS PROJECT.

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

DATE DRILLED 01/19/07 BORING NO. B-6
GROUND ELEVATION 1,025'±(MSL) SHEET 1 OF 2
METHOD OF DRILLING AP-1000 9" Percussion Becker Hammer (Layne Christensen)
DRIVE WEIGHT 140 lbs. (Automatic) DROP 30"
SAMPLED BY WTD LOGGED BY WTD REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							GP	FILL: Brown, damp, medium dense, poorly graded GRAVEL with sand.
							GM	Brown, damp, medium dense, silty GRAVEL with sand.
5			11				SM	Brown, damp, medium dense, silty SAND; scattered clay clumps.
							SM	ALLUVIUM: Brown, damp, medium dense, silty SAND.
10			37				GP	Light brown, damp, medium dense, poorly graded GRAVEL with sand; cobbles and possible boulders.
15			46					Very dense.
20		X	50/5"					

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-11

DATE DRILLED 01/19/07 BORING NO. B-7
GROUND ELEVATION 1,028'±(MSL) SHEET 1 OF 2
METHOD OF DRILLING AP-1000 9" Percussion Becker Hammer (Layne Christensen)
DRIVE WEIGHT 140 lbs. (Automatic) DROP 30"
SAMPLED BY WTD LOGGED BY WTD REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							GP	FILL: Brown, damp, dense, poorly graded GRAVEL with sand.
							ML	Brown, damp, loose, sandy SILT.
5			8	10.7	85.8			
							SP	ALLUVIUM: Brown to light brown, damp, very dense, poorly graded SAND.
10			42					Few to little gravel; cobbles and possible boulders.
15			62				GP	Brown, damp, dense, poorly graded GRAVEL with sand; cobbles and possible boulders.
20			50/3"					Very dense.

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-13

DATE DRILLED 01/19/07 BORING NO. B-8
GROUND ELEVATION 1,028'±(MSL) SHEET 2 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								Total Depth = 20 feet. Groundwater not encountered during drilling. Backfilled and asphalt patched on 01/19/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
35								
40								

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-16

DATE DRILLED 01/19/07 BORING NO. B-6
GROUND ELEVATION 1,025'±(MSL) SHEET 2 OF 2
METHOD OF DRILLING AP-1000 9" Percussion Becker Hammer (Layne Christensen)
DRIVE WEIGHT 140 lbs. (Automatic) DROP 30"
SAMPLED BY WTD LOGGED BY WTD REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20							GP	ALLUVIUM: (continued) Light brown, damp, very dense, GRAVEL with sand; cobbles and possible boulders.
								Total Depth = 22 feet. Groundwater not encountered during drilling. Backfilled on 01/19/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
35								
40								

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-12

DATE DRILLED 01/19/07 BORING NO. B-7
GROUND ELEVATION 1,028'±(MSL) SHEET 2 OF 2
METHOD OF DRILLING AP-1000 9" Percussion Becker Hammer (Layne Christensen)
DRIVE WEIGHT 140 lbs. (Automatic) DROP 30"
SAMPLED BY WTD LOGGED BY WTD REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20							GP	ALLUVIUM: (continued) Brown, damp, very dense, poorly graded GRAVEL with sand; few silt; cobbles and possible boulders.
								Total Depth = 23 feet. Groundwater not encountered during drilling. Backfilled on 01/19/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
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Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-14

DATE DRILLED 01/19/07 BORING NO. B-8
GROUND ELEVATION 1,028'±(MSL) SHEET 2 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20								Total Depth = 20 feet. Groundwater not encountered during drilling. Backfilled and asphalt patched on 01/19/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
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Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-16

"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."

GEOTECHNICAL INFORMATION

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			SB-1.02

ST85100371 SB-1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

DATE DRILLED 01/18/07 BORING NO. B-9
GROUND ELEVATION -- SHEET 1 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0								ASPHALT CONCRETE: Approximately 6 inches thick.
							SM	ALLUVIUM: Brown, damp, medium dense, silty fine to medium SAND; trace coarse gravel.
5			34	6.4	88.3			
							SP	Brown, damp, very dense, poorly graded SAND with gravel.
10			74					
15			61					
20							GP	Brown damp, very dense, poorly graded GRAVEL; trace fine sand; cobbles and possible boulders.

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-17

DATE DRILLED 01/19/07 BORING NO. B-10
GROUND ELEVATION 1,036'±(MSL) SHEET 1 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							GP	ASPHALT CONCRETE: Approximately 3.5 inches thick.
								AGGREGATE BASE: Approximately 12 inches thick.
							SM	Brown, damp, medium dense, poorly graded GRAVEL with sand. FILL: Dark brown, damp, loose, silty SAND.
5			12	11.0	94.8			Moist.
							SM	ALLUVIUM: Brown, damp, loose, silty SAND.
10			89				GP	Brown, damp, very dense, poorly graded GRAVEL with sand.
15			50/3"					Cobbles and possible boulders.
20								

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-19

DATE DRILLED 09/30/04 BORING NO. Site 8
GROUND ELEVATION -- SHEET 1 OF 1
METHOD OF DRILLING CME-75, 6.5" Diameter Hollow-Stem Auger
DRIVE WEIGHT 140 lbs. (Automatic Hammer) DROP 30"
SAMPLED BY JSR/TLC LOGGED BY JSR/TLC REVIEWED BY RDL

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
0							GP	ASPHALTIC CONCRETE: Approximately 3-1/2" thick.
								AGGREGATE BASE: Approximately 7-1/2" thick.
							SM	Brown, damp, sandy fine to coarse GRAVEL; some silt. FILL:
			54	3.3	121.8		GP-GM	Brown, damp, dense, sandy fine to coarse GRAVEL; trace clay. ALLUVIUM: Light brown, damp, dense, sandy fine to coarse GRAVEL with silt; cobbles.
5			17					Medium dense.
			23					Dense.
							SM	Brown, damp, medium dense to dense, silty fine to medium SAND; trace gravel.
10			20					Increase in gravel.
							GP	Light brown, damp, medium dense, sandy fine to coarse GRAVEL; cobbles; possible boulders.
15			40					Increase in cobbles.
								Total depth = 16.5 feet. (Refusal on gravel and cobbles) Groundwater not encountered. Backfilled on 09/30/04. Caving at 7.0 feet.
20								

Ninyo & Moore

BORING LOG
CITY OF PHOENIX SEWER REHABILITATION
PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941001	11/04	8-1

DATE DRILLED 01/18/07 BORING NO. B-9
GROUND ELEVATION -- SHEET 2 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20			95/11"				GP	ALLUVIUM: (continued) Brown, damp, very dense, poorly graded GRAVEL; trace fine sand; cobbles and possible boulders.
25								Total Depth = 22 feet. Groundwater not encountered during drilling. Backfilled and asphalt patched on 01/18/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
30								
35								
40								

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-18

DATE DRILLED 01/19/07 BORING NO. B-10
GROUND ELEVATION 1,036'±(MSL) SHEET 2 OF 2
METHOD OF DRILLING BK-66, 4" Diameter Tubex (Yellow Jacket)
DRIVE WEIGHT 140 lbs. (Cathead) DROP 30"
SAMPLED BY DM LOGGED BY DM REVIEWED BY KJT

DEPTH (feet)	SAMPLES Bulk	SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DESCRIPTION/INTERPRETATION
20			50/2"				GP	ALLUVIUM: (continued) Brown, damp, very dense, poorly graded GRAVEL with sand; cobbles and possible boulders. Total Depth = 20.1 feet. Groundwater not encountered during drilling. Backfilled and asphalt patched on 01/19/07 promptly after completion of drilling. Groundwater, though not encountered at the time of drilling, may rise to a higher level due to seasonal variations in precipitation and several other factors as discussed in the report.
25								
30								
35								
40								

Ninyo & Moore

BORING LOG
SEWER MAIN IMPROVEMENTS
BROADWAY ROAD, 10TH AVENUE TO 51ST AVENUE - PHOENIX, ARIZONA

PROJECT NO.	DATE	FIGURE
600941002	07/07	A-20

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK LEE Date Signed 11-15-17 ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	67	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

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GEOTECHNICAL INFORMATION

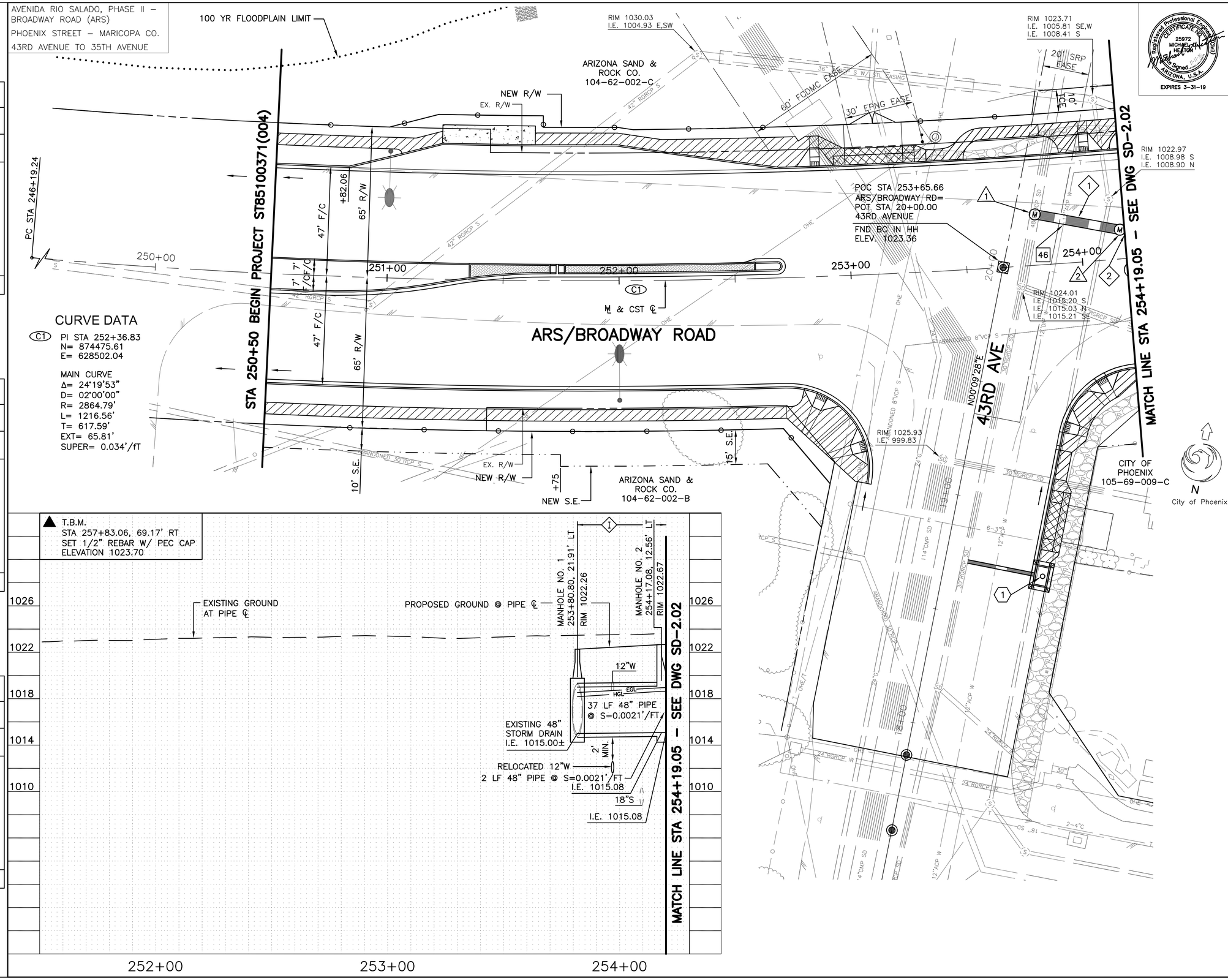
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT N/A			SB-1.03

ST85100371 SB-1_03.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

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PI STA 252+36.83
N= 874475.61
E= 628502.04

MAIN CURVE
Δ= 24°19'53"
D= 02°00'00"
R= 2864.79'
L= 1216.56'
T= 617.59'
EXT= 65.81'
SUPER= 0.034'/ft

▲ T.B.M.
STA 257+83.06, 69.17' RT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1023.70

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	68	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL V. LEE TOK Signed ARIZONA, U.S.A. EXPIRES 3-31-19

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	253+80.80, 21.91' LT TO 254+17.08, 12.56' LT	48"	37
2	254+17.08, 12.56' LT TO 254+19.05	48"	2

STORM DRAIN MANHOLE

	STATION	TYPE
1	253+80.80, 21.91' LT	P1520 & MAG 522
2	254+17.08, 12.56' LT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
1	18+72.71, 42.55' RT	P1571	P1578	18"	31

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
46	VERTICAL REALIGNMENT OF 10" OR 12" WATER MAIN, COP STD. P1370	EA	1

SHEET REFERENCES

1. SEE P-1.01 FOR PAVING PLAN
2. SEE CP-1.01 FOR CB CONN PIPE PROFILES

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE
STA 250+50 TO STA 254+19.05

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

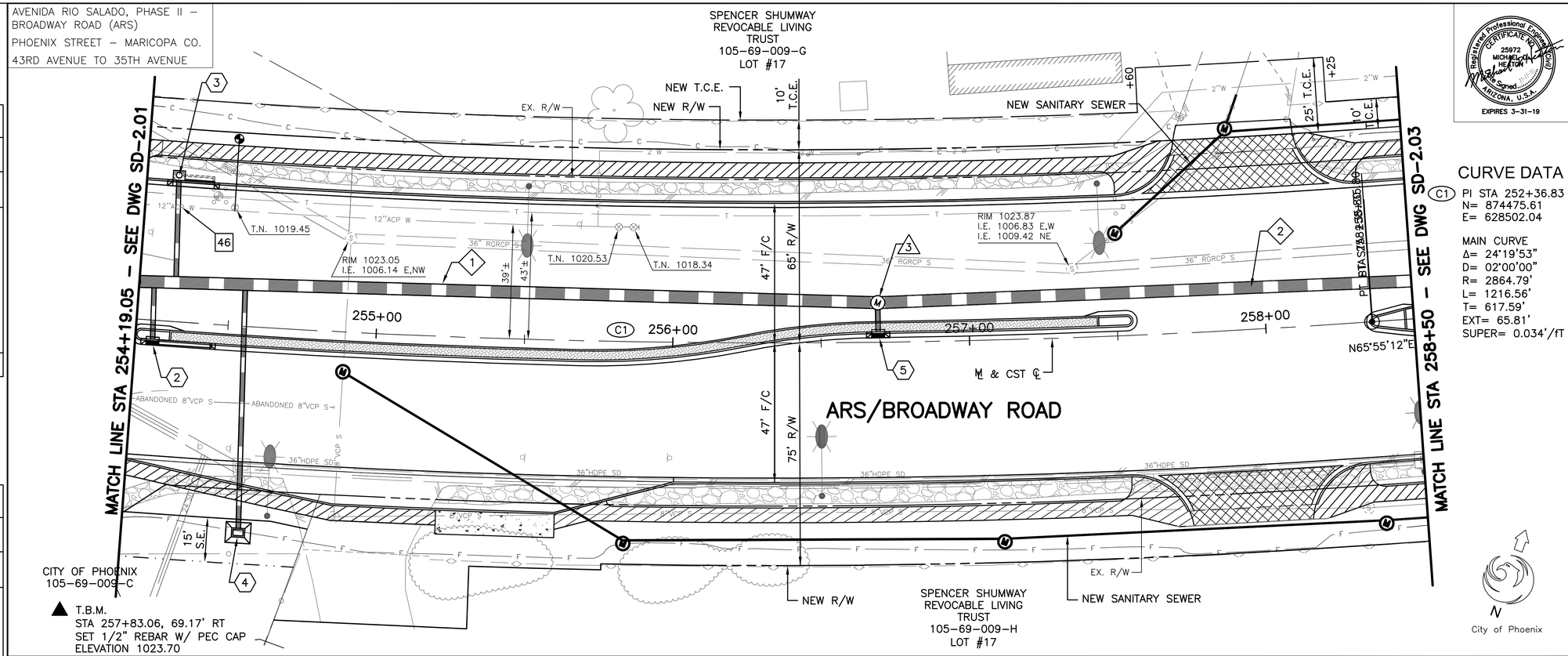
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.01

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

ST85100371 SD-2_01A.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

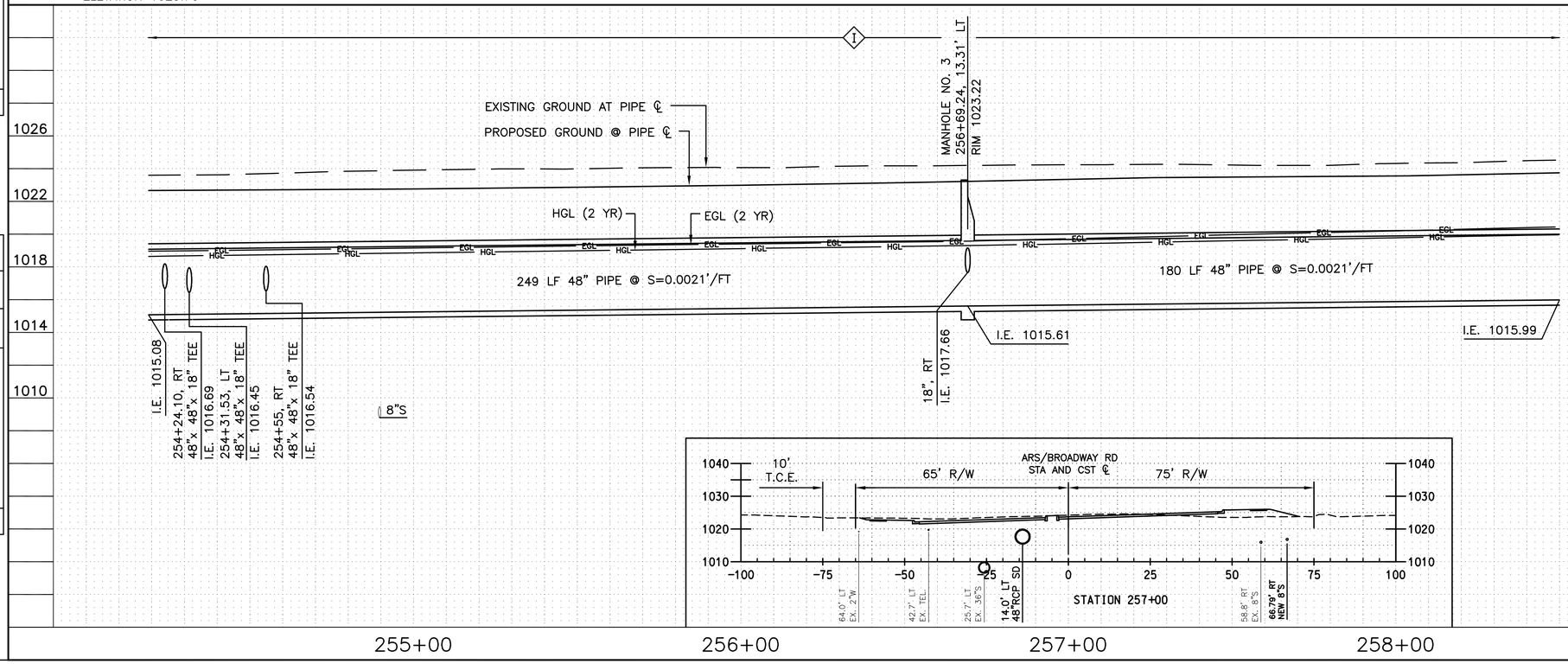


CURVE DATA

C1
PI STA 252+36.83
N= 874475.61
E= 628502.04

MAIN CURVE
Δ= 24°19'53"
D= 02°00'00"
R= 2864.79'
L= 1216.56'
T= 617.59'
EXT= 65.81'
SUPER= 0.034'/FT

City of Phoenix



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	69	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer
CERTIFICATE NO. 25972
MICHAEL VAN HEKTOR
Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	254+19.05, TO 256+69.24, 13.31' LT	48"	249
2	256+69.24, 13.31' LT TO 258+50	48"	180

STORM DRAIN MANHOLE

	STATION	TYPE
3	256+69.24, 13.31' LT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
2	254+25, 7.00' RT	P1573	PREFAB TEE	18"	18
		SLOTTED VANE DRAIN SEE DD-1.01		18"	18
3	254+30, 49.34' LT	M-1, L=10' P1569-2	PREFAB TEE	18"	33
4	254+55, 69.50' RT	P1570,SINGLE CONC APRON SEE DT-1.01	PREFAB TEE	18"	81
5	256+69.24, 3.00' LT	P1573	MANHOLE	18"	8

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
46	VERTICAL REALIGNMENT OF 10" OR 12" WATER MAIN, COP STD. P1370	EA	1

SHEET REFERENCES

1. SEE P-1.03 FOR PAVING PLAN
2. SEE CP-1.01 & CP-1.02 FOR CB CONN PIPE PROFILES
3. SEE SP-1.01 FOR SANITARY SEWER PLAN

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE
STA 254+19.05 TO STA 258+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

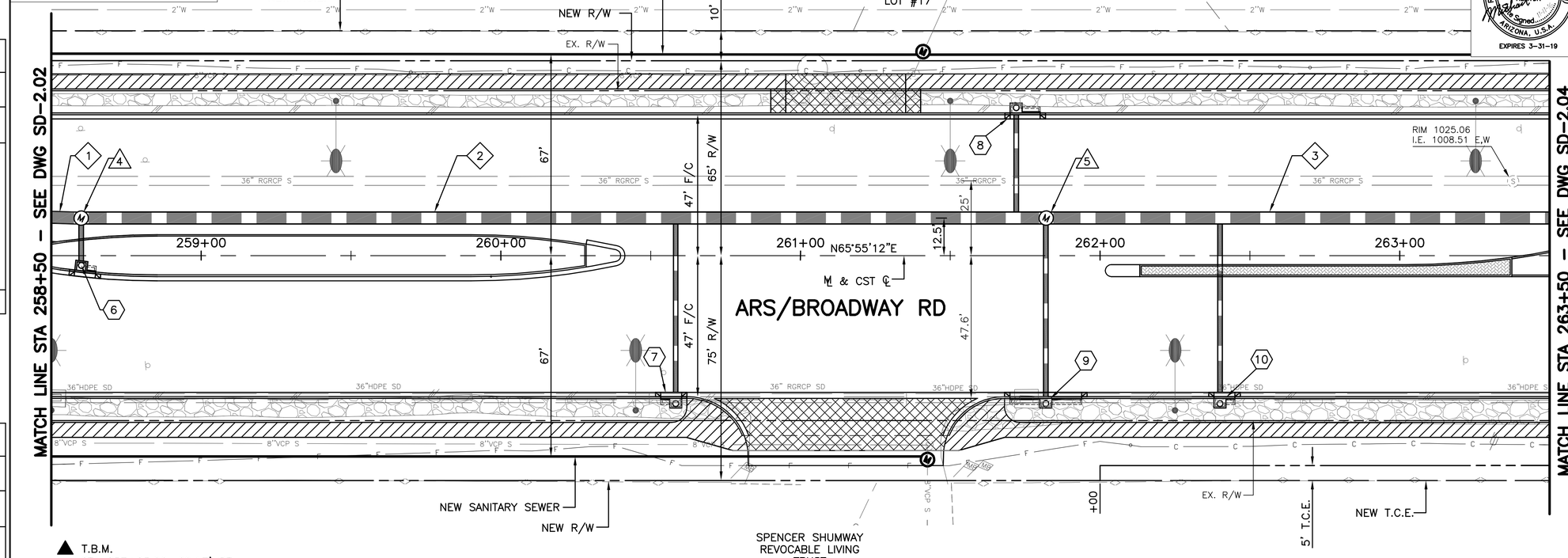
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.02

ST85100371 SD-2_02.DWG

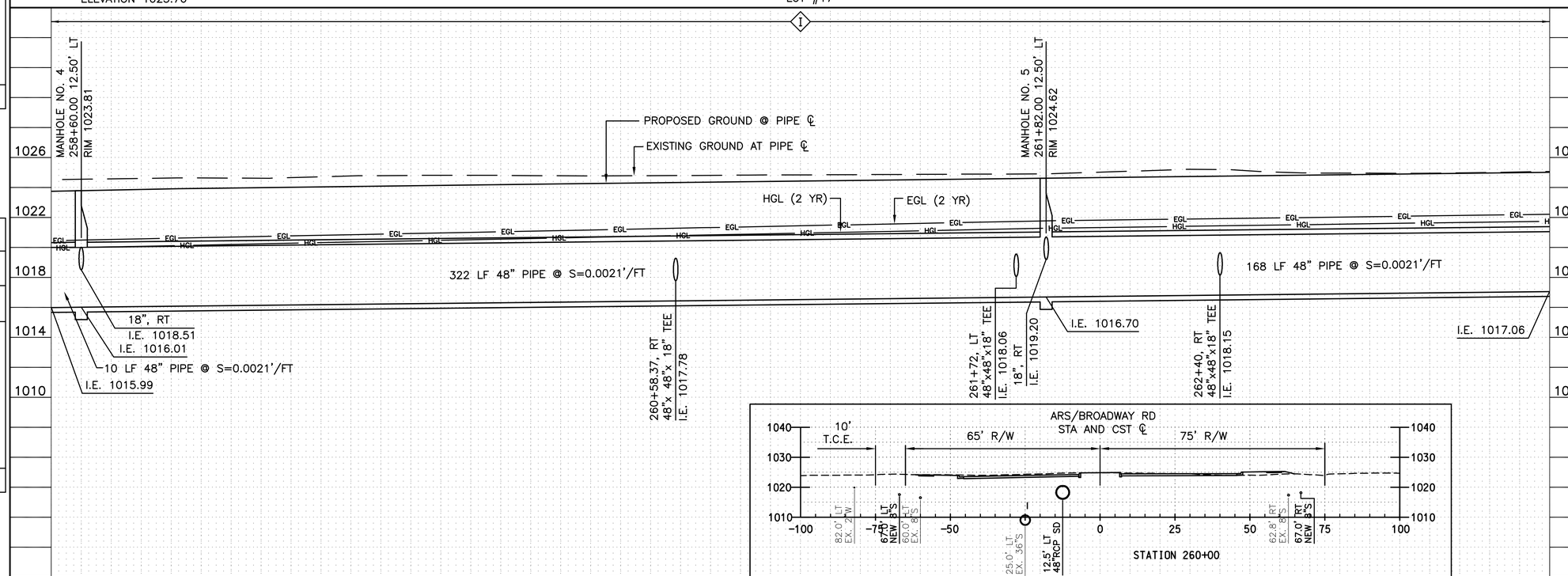
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



▲ T.B.M.
STA 257+83.06, 69.17' RT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1023.70



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO. 25972
MICHAEL V. HEATON
Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	70	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	258+50.00, 12.50' LT TO 258+60.00, 12.50' LT	48"	10
2	258+60.00, 12.50' LT TO 261+82.00, 12.50' LT	48"	322
3	261+82.00, 12.50' LT TO 263+50.00, 12.50' LT	48"	168

STORM DRAIN MANHOLE

	STATION	TYPE
4	258+60.00, 12.50' LT	P1520 & MAG 522
5	261+82.00, 12.50' LT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
6	258+60, 3.81' RT	M-1, L=3' P1569-2	MANHOLE	18"	13
7	260+58.37, 49.33' RT	M-1, L=3' P1569-2	PREFAB TEE	18"	59
8	261+72, 49.33' LT	M-1, L=6' P1569-2	PREFAB TEE	18"	34
9	261+81.87, 49.33' RT	M-2, L=10' P1569-2	MANHOLE	18"	58
10	262+40, 49.33' RT	M-1, L=3' P1569-2	PREFAB TEE	18"	59

SHEET REFERENCES

1. SEE P-1.04 FOR PAVING PLAN
2. SEE CP-1.02, CP-1.03 & CP-1.04 FOR CB CONN PIPE PROFILES
3. SEE SP-1.03 FOR SANITARY SEWER PLAN

City of Phoenix

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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."

STORM DRAIN PLAN & PROFILE
STA 258+50 TO STA 263+50

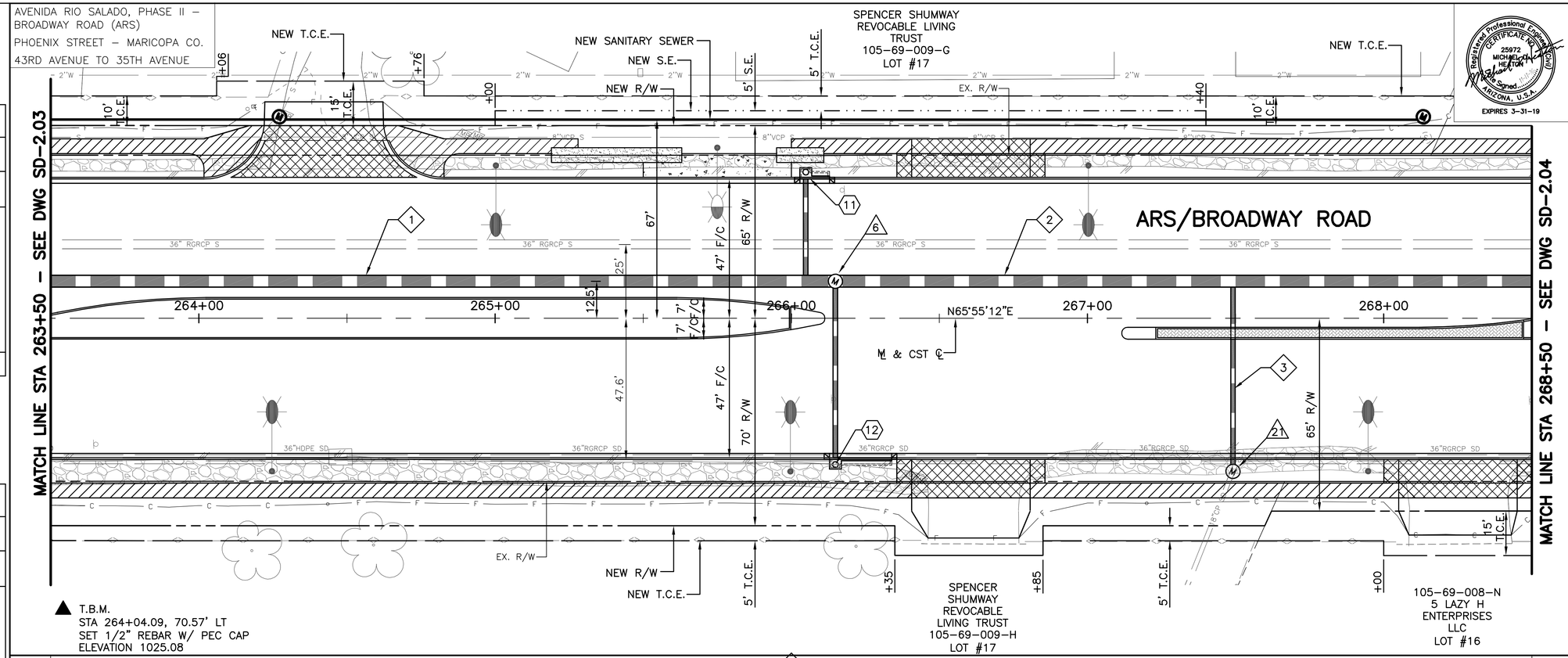
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

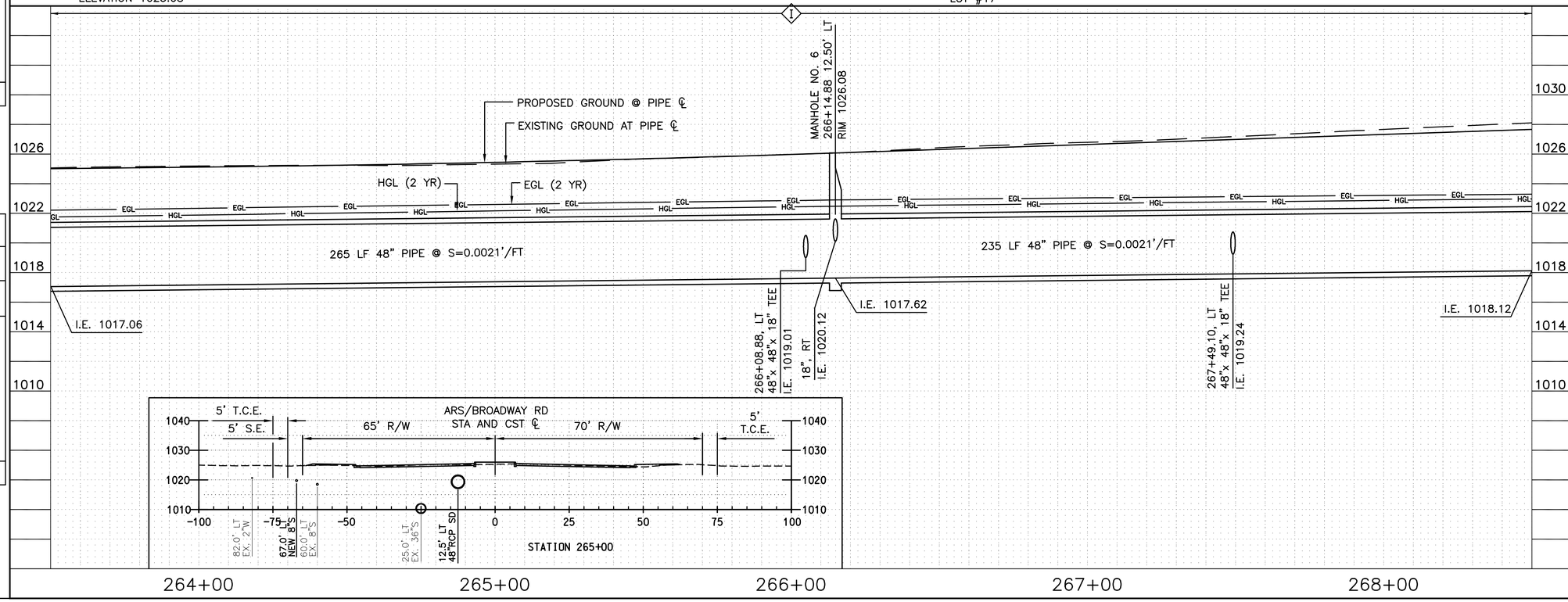
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.03

ST85100371 SD-2_03.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	71	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer CERTIFICATE NO. 25972 MICHAEL V. LEHTOLA Signed ARIZONA, U.S.A. EXPIRES 3–31–19

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	263+50.00, 12.50' LT TO 266+14.88, 12.50' LT	48"	265
2	266+14.88, 12.50' LT TO 268+50.00, 12.50' LT	48"	235
3	267+49.10 12.5' LT TO 51.6' RT CONNECT TO 48" W/ 18" TEE	18"	61

STORM DRAIN MANHOLE

	STATION	TYPE
6	266+14.88, 12.50' LT	P1520 & MAG 522
21	267+49.10 51.64' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
11	266+04.88, 49.33' LT	M–1, L=6' P1569–2	PREFAB TEE	18"	34
12	266+14.88, 49.33' RT	M–2, L=17' P1569–2	MANHOLE	18"	58

SHEET REFERENCES

1. SEE P–1.05 FOR PAVING PLAN
2. SEE CP–1.01 & CP–1.04 FOR CB CONN PIPE PROFILES
3. SEE SP–1.05 FOR SANITARY SEWER PLAN

City of Phoenix

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STORM DRAIN PLAN & PROFILE STA 263+50 TO STA 268+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

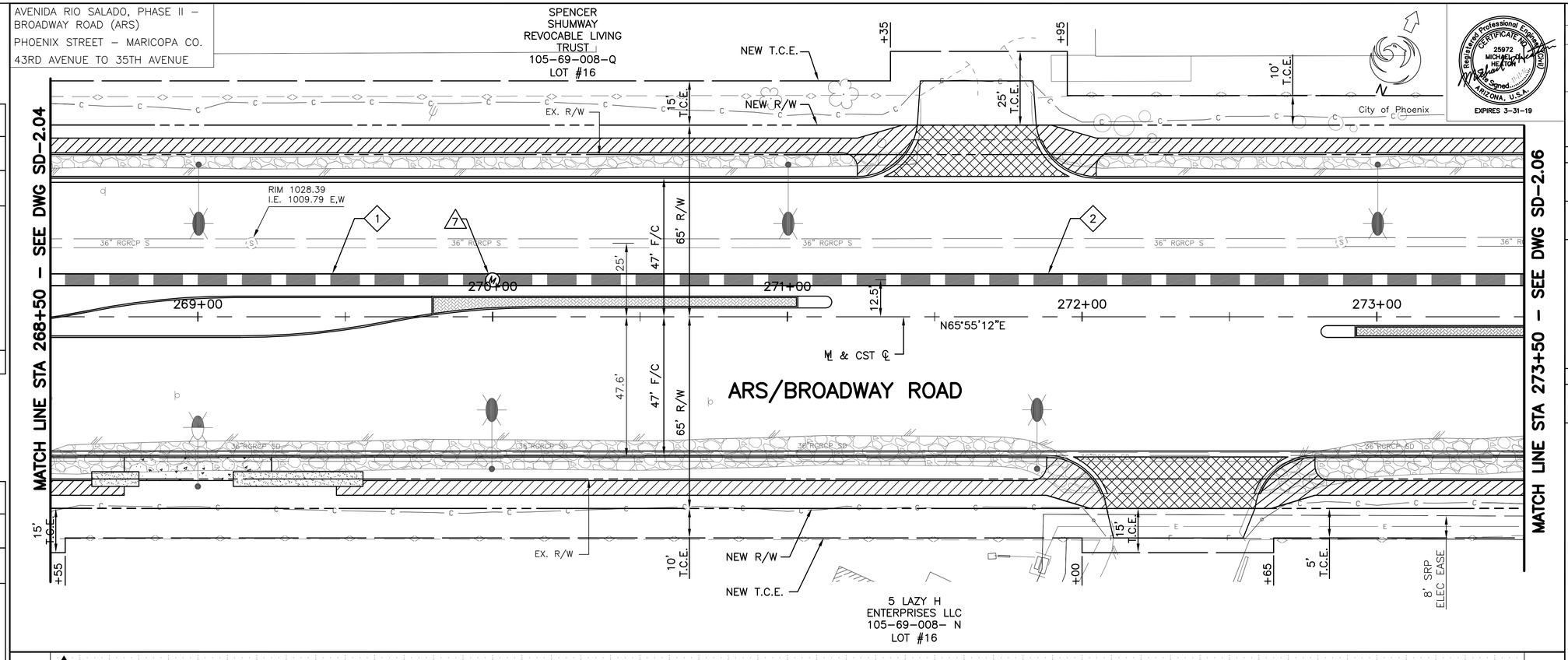
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD–2.04

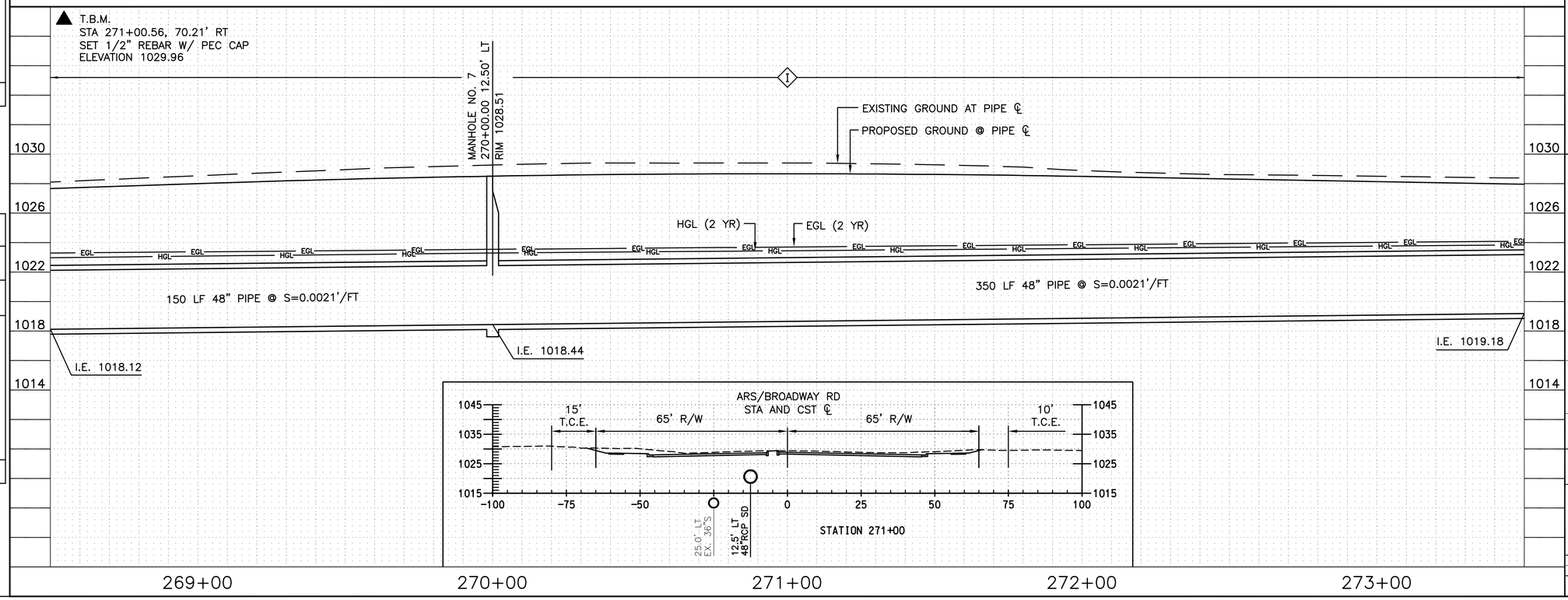
ST85100371 SD–2_04.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO. 25972
MICHAEL VAN HEKTOR
Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	72	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	268+50.00, 12.50' LT TO 270+00.00, 12.50' LT	48"	150
2	270+00.00, 12.50' LT TO 273+50.00, 12.50' LT	48"	350

STORM DRAIN MANHOLE

	STATION	TYPE
7	270+00.00, 12.50' LT	P1520 & MAG 522

SHEET REFERENCES

1. SEE P-1.06 FOR PAVING PLAN

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

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STORM DRAIN PLAN & PROFILE
STA 268+50 TO STA 273+50

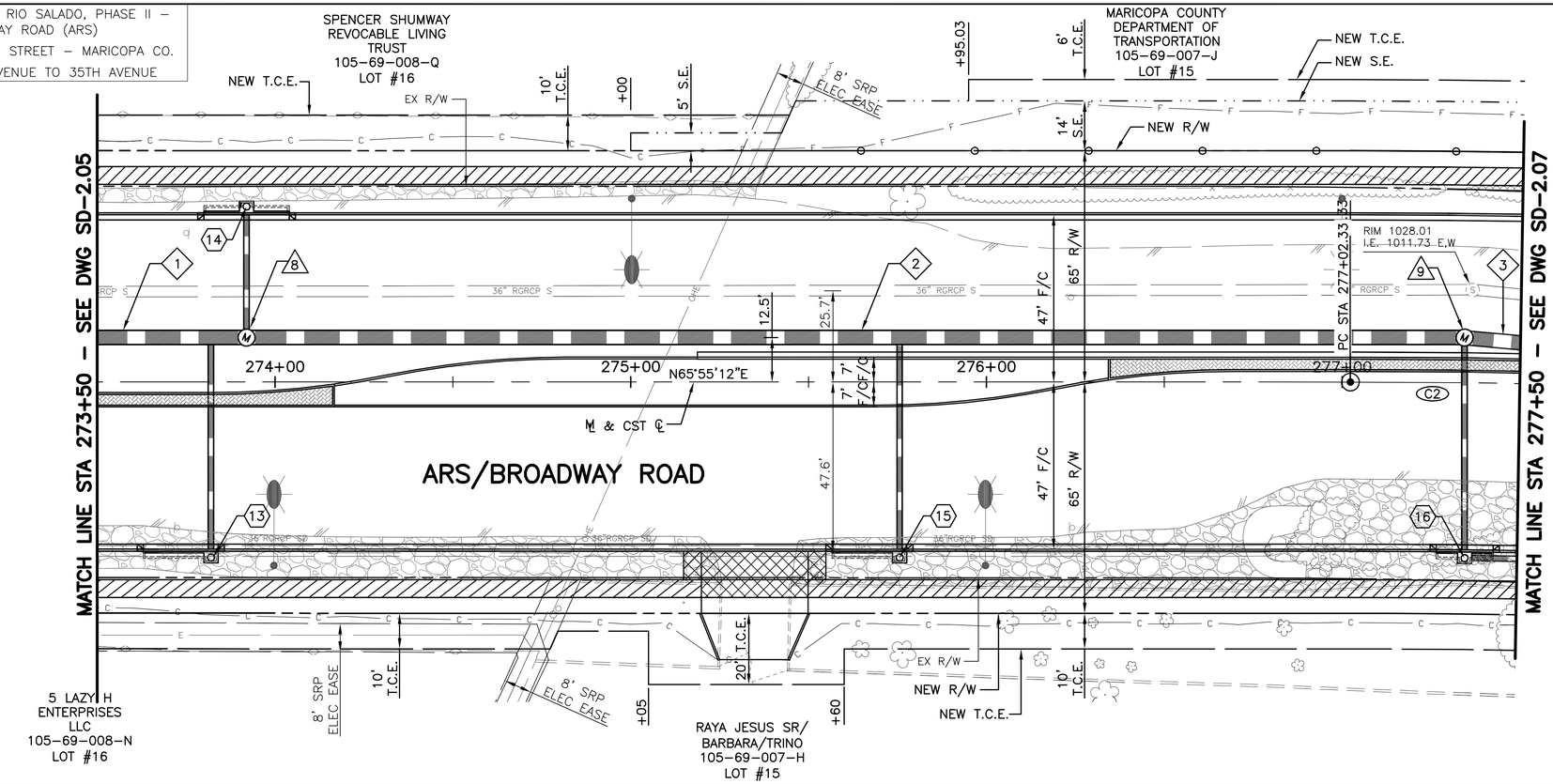
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

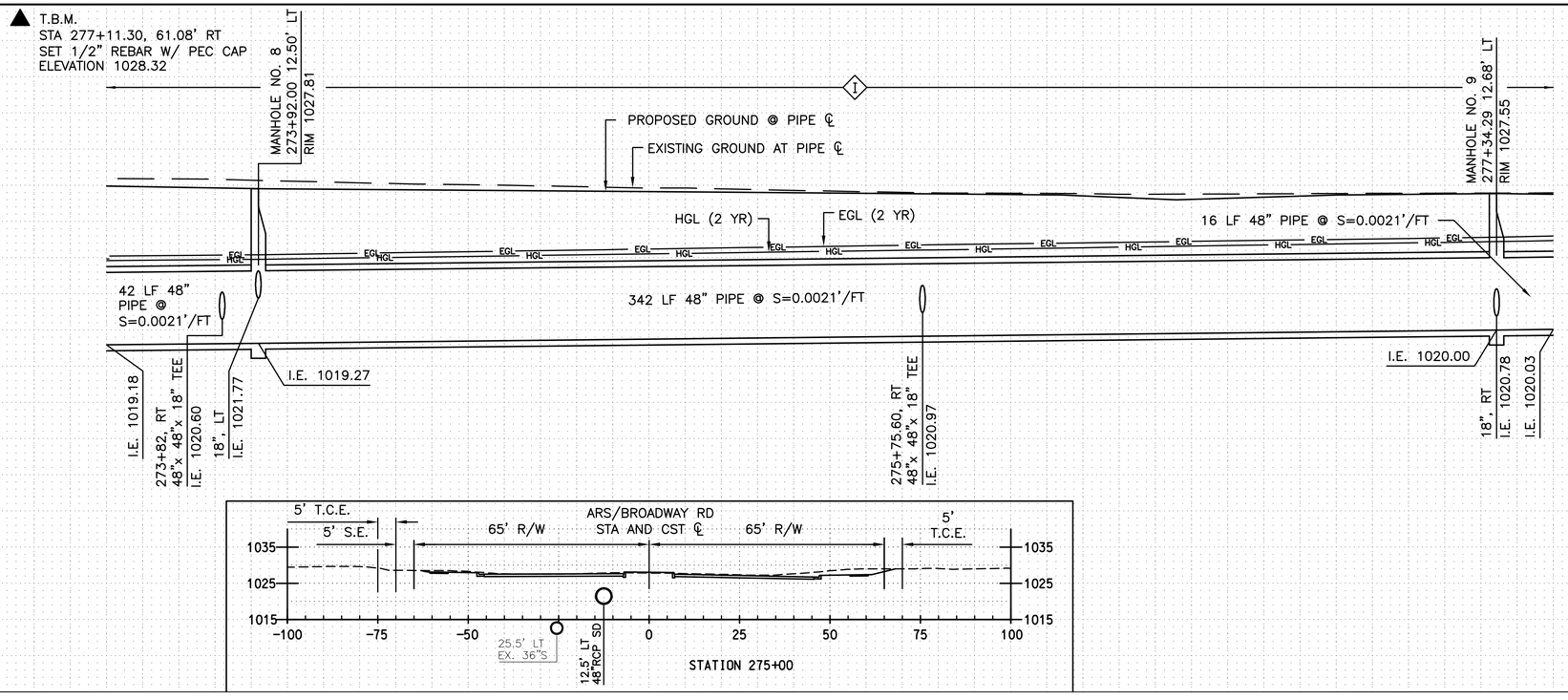
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.05

ST85100371 SD-2_05.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





C2 CURVE DATA

PI STA 283+09.81
N= 875737.0279
E= 631324.6025

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft

City of Phoenix

Registered Professional Engineer CERTIFICATE NO. 25972 MICHAEL V. HEATON Signed Arizona, U.S.A. EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	73	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	273+50.00, 12.50' LT TO 273+92.00, 12.50' LT	48"	42
2	273+92.00, 12.50' LT TO 277+34.29, 12.68' LT	48"	342
3	277+34.29, 12.68' LT TO 277+50.00, 11.07' LT	48"	16

STORM DRAIN MANHOLE

	STATION	TYPE
8	273+92.00, 12.50' LT	P1520 & MAG 522
9	277+34.29, 12.68' LT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
13	273+82, 49.33' RT	M-1, L=17' P1569-2	PREFAB TEE	18"	59
14	273+92, 49.33' LT	M-2, L=10' P1569-2	MANHOLE	18"	33
15	275+75.60, 49.33' RT	M-1, L=17' P1569-2	PREFAB TEE	18"	59
16	277+35, 49.33' RT	M-2, L=6' P1569-2	MANHOLE	18"	58

SHEET REFERENCES

1. SEE P-1.07 FOR PAVING PLAN
2. SEE CP-1.05 & CP-1.06 FOR CB CONN PIPE PROFILES

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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STORM DRAIN PLAN & PROFILE
STA 273+50 TO STA 277+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

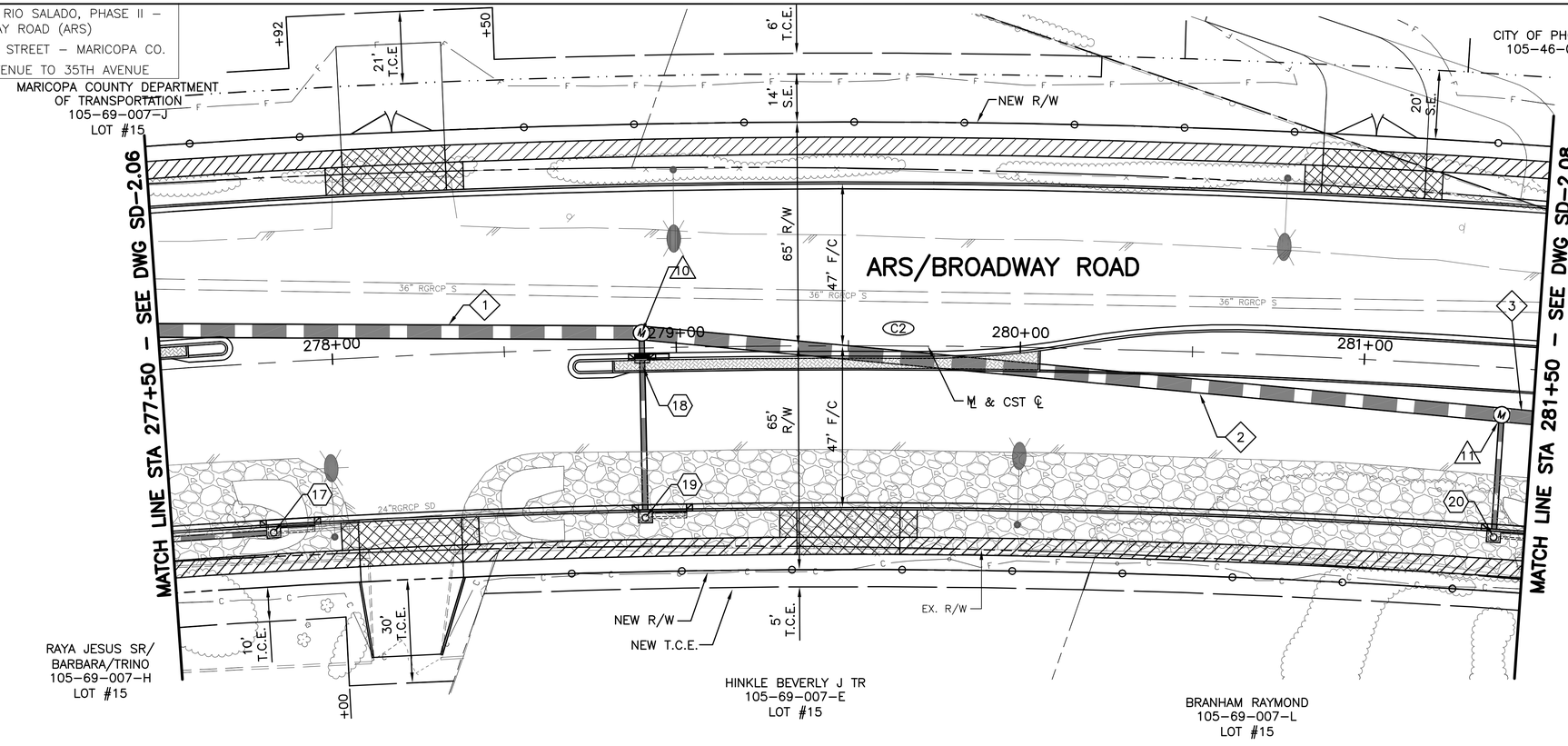
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.06

ST85100371 SD-2_06.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

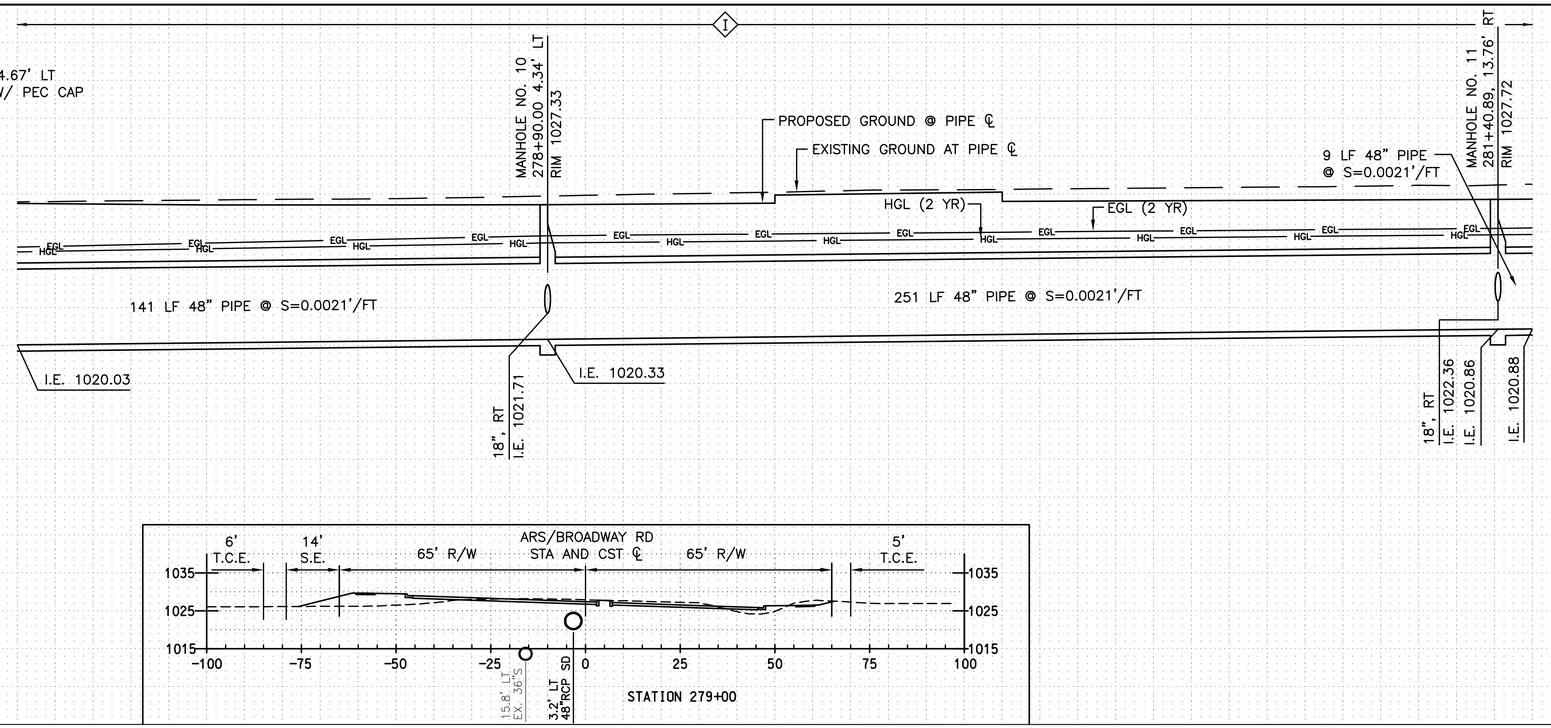
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

C2
PI STA 283+09.81
N= 875737.0279
E= 631324.6025

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft



278+00 279+00 280+00 281+00

N
City of Phoenix

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL V. HEATON Signed Arizona, U.S.A. EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	74	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	277+50.00, 11.07' LT TO 278+90.00, 4.34' LT	48"	141
2	278+90.00, 4.34' LT TO 281+40.89, 0.85' RT	48"	251
3	281+40.89, 0.85' RT TO 281+50, 1.45' RT	48"	9

STORM DRAIN MANHOLE

	STATION	TYPE
10	278+90.00, 4.34' LT	P1520 & MAG 522
11	281+40.89, 13.76' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
17	277+80, 49.33' RT	M-1, L=10' P1569-2	CATCH BASIN	18"	42
18	278+90, 3.00' RT	P1573	MANHOLE	18"	4
		SLOTTED VANE DRAIN SEE DD-1.01		18"	6
19	278+90, 49.33' RT	M-1, L=10' P1569-2	CATCH BASIN	18"	44
20	281+40.90, 49.33' RT	M-1, L=17' P1569-2	MANHOLE	18"	32

SHEET REFERENCES

1. SEE P-1.08 FOR PAVING PLAN
2. SEE CP-1.06 & CP-1.07 FOR CB CONN PIPE PROFILES

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STORM DRAIN PLAN & PROFILE
STA 277+50 TO STA 281+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

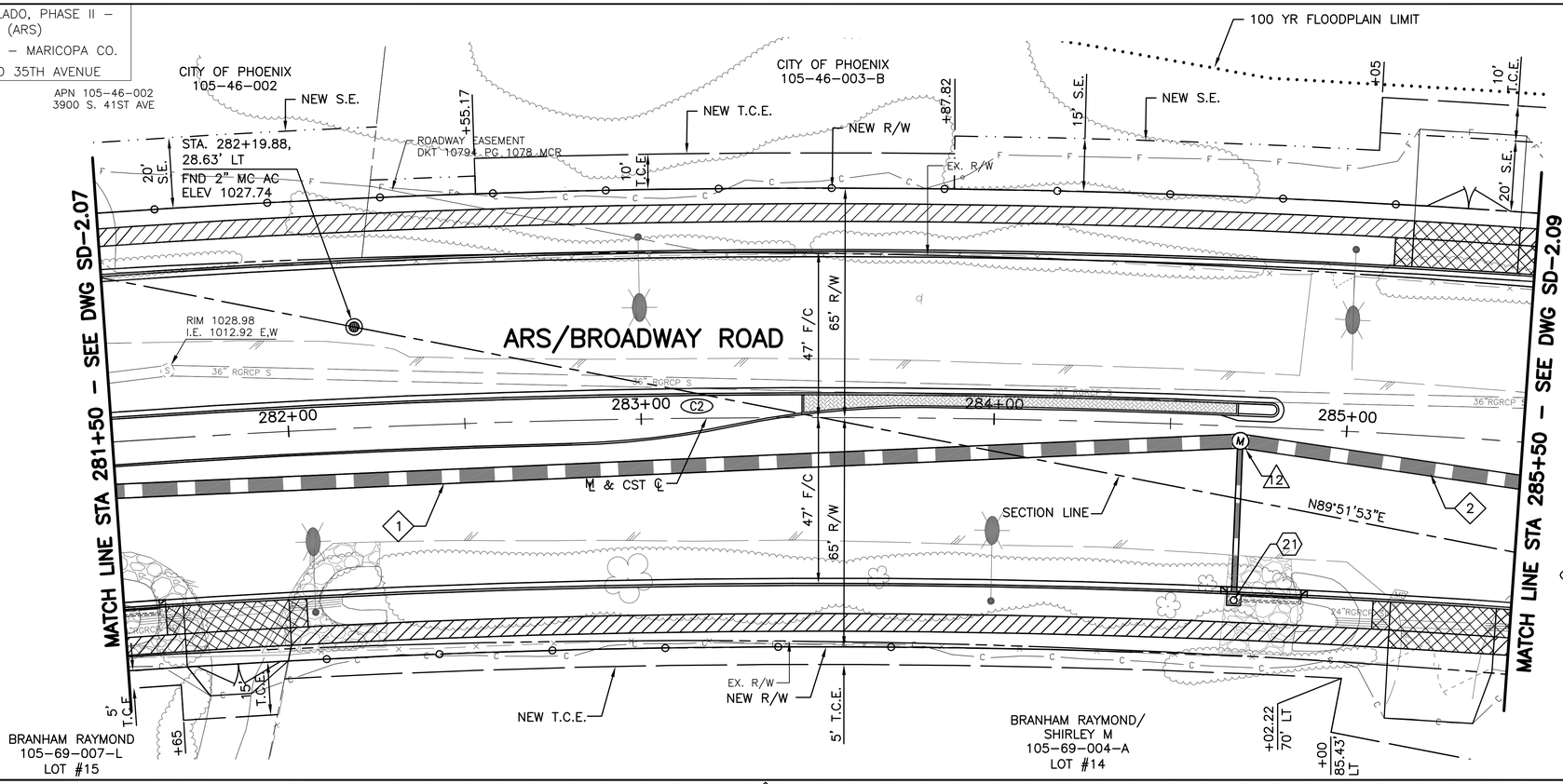
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.07

ST85100371 SD-2_07.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

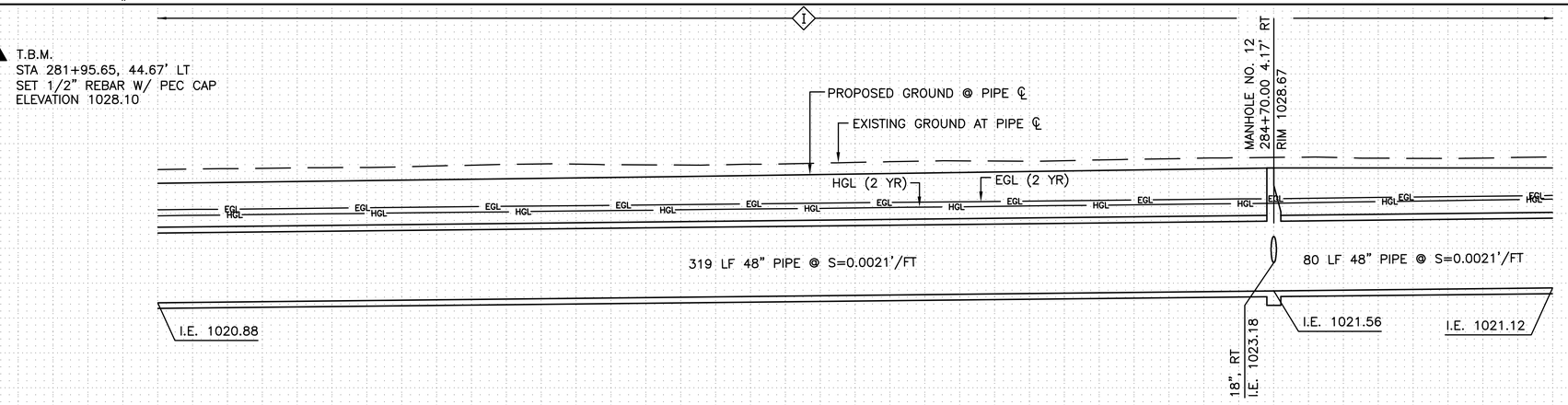
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

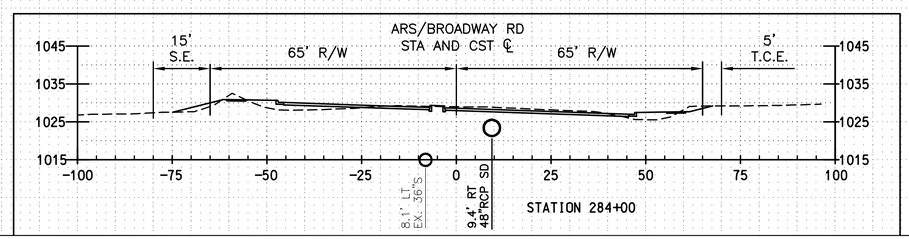


CURVE DATA

C2
PI STA 283+09.81
N= 875737.0279
E= 631324.6025

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft





F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	75	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL M. HEATON Signed ARIZONA, U.S.A. EXPIRES 3-31-19

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	281+50.00, 1.45' RT TO 284+70.00, 4.17' RT	48"	319
2	284+70.00, 4.17' RT TO 285+50.00, 10.34' RT	48"	80

STORM DRAIN MANHOLE

	STATION	TYPE
12	284+70.00, 4.17' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
21	284+70, 49.33' RT	M-1, L=17' P1569-2	MANHOLE	18"	41

SHEET REFERENCES

1. SEE P-1.09 FOR PAVING PLAN
2. SEE CP-1.07 FOR CB CONN PIPE PROFILES

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

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STORM DRAIN PLAN & PROFILE
STA 281+50 TO STA 285+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

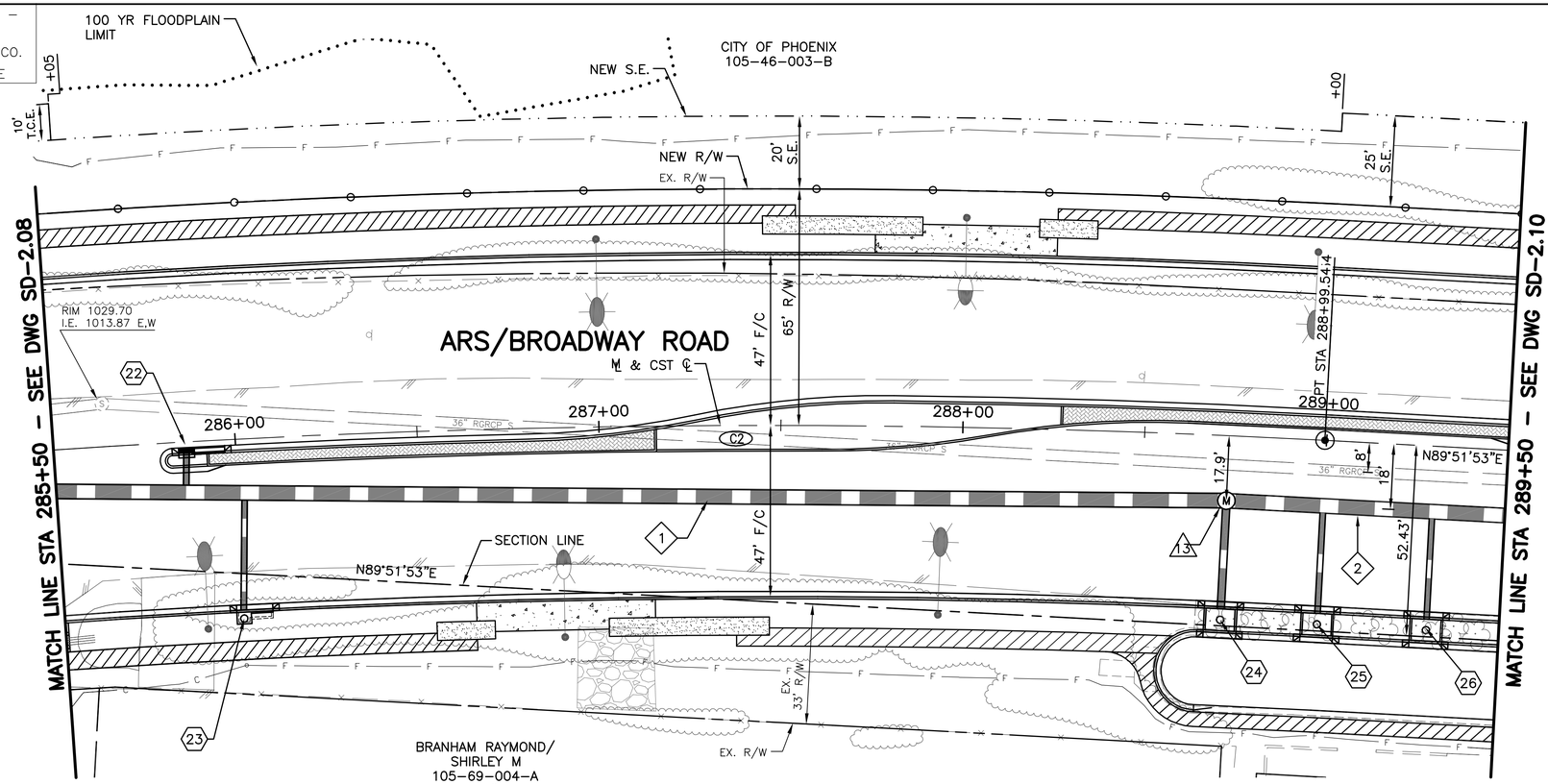
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.08

ST85100371 SD-2_08.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

C2
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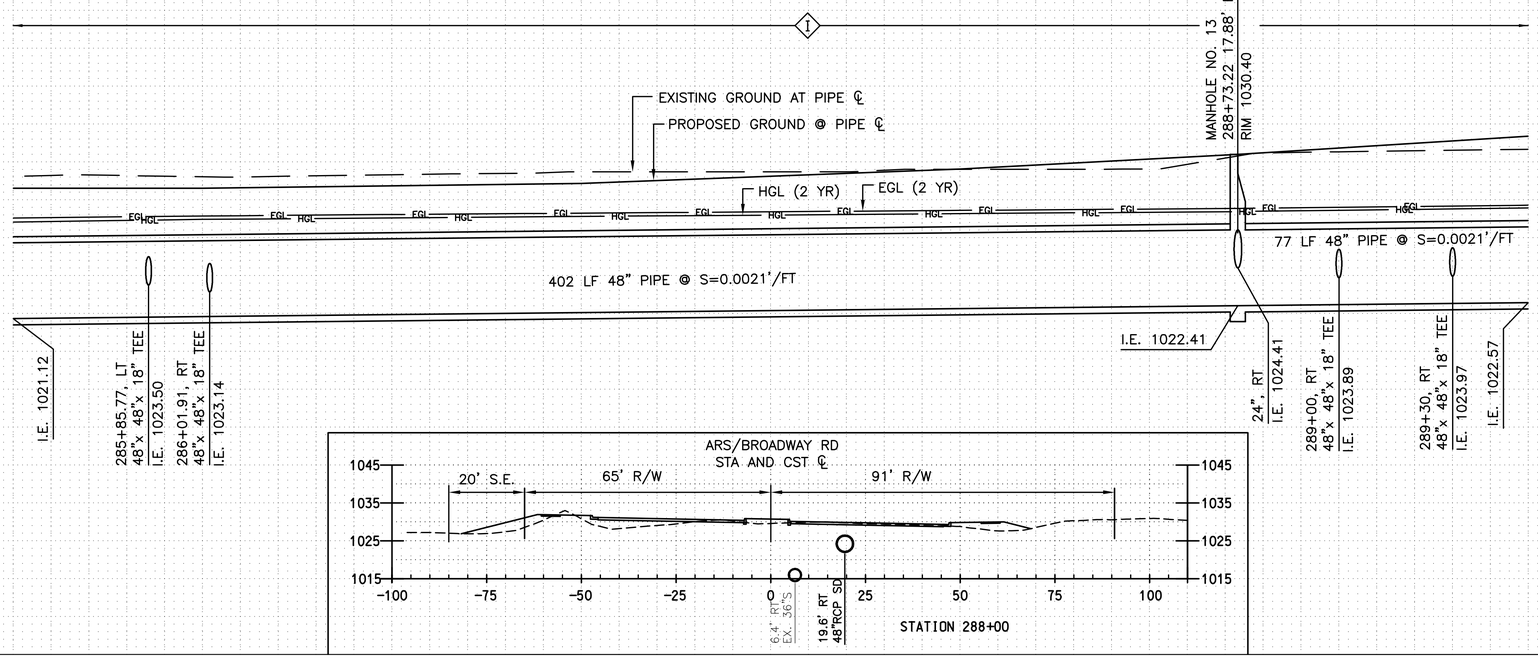
E= 631324.6025

MAIN CURVE
Δ= 23°56'39"
D= 02°00'00"
R= 2864.79'
L= 1197.20'
T= 607.47'
EXT= 63.70'
SUPER= 0.034'/ft

▲ T.B.M.
STA 288+09.68, 80.03' RT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1030.77



286+00 287+00 288+00 289+00

N
City of Phoenix

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HETTON Signed Arizona, U.S.A. EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	76	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	285+50.00, 10.34' RT TO 288+73.22, 17.88' RT	48"	402
2	288+73.22, 17.88' RT TO 289+50.00, 18.00' RT	48"	77

STORM DRAIN MANHOLE

	STATION	TYPE
13	288+73.22, 17.88' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
22	285+85.48, 3.00' RT	P1573	PREFAB TEE	18"	9
		SLOTTED VANE DRAIN SEE DD-1.01		18"	9
23	286+00, 49.33' RT	M-1, L=6' P1569-2	PREFAB TEE	18"	31
24	288+72.91, 50.65' RT	P1571	MANHOLE	24"	28
25	289+00, 50.58' RT	P1571	PREFAB TEE	18"	28
26	289+30, 50.58' RT	P1571	PREFAB TEE	18"	28

SHEET REFERENCES

1. SEE P-1.10 FOR PAVING PLAN
2. SEE CP-1.07 & CP-1.08 FOR CB CONN PIPE PROFILES
3. SEE P-1.19 FOR FRONTAGE RD PAVING

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE
STA 285+50 TO STA 289+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

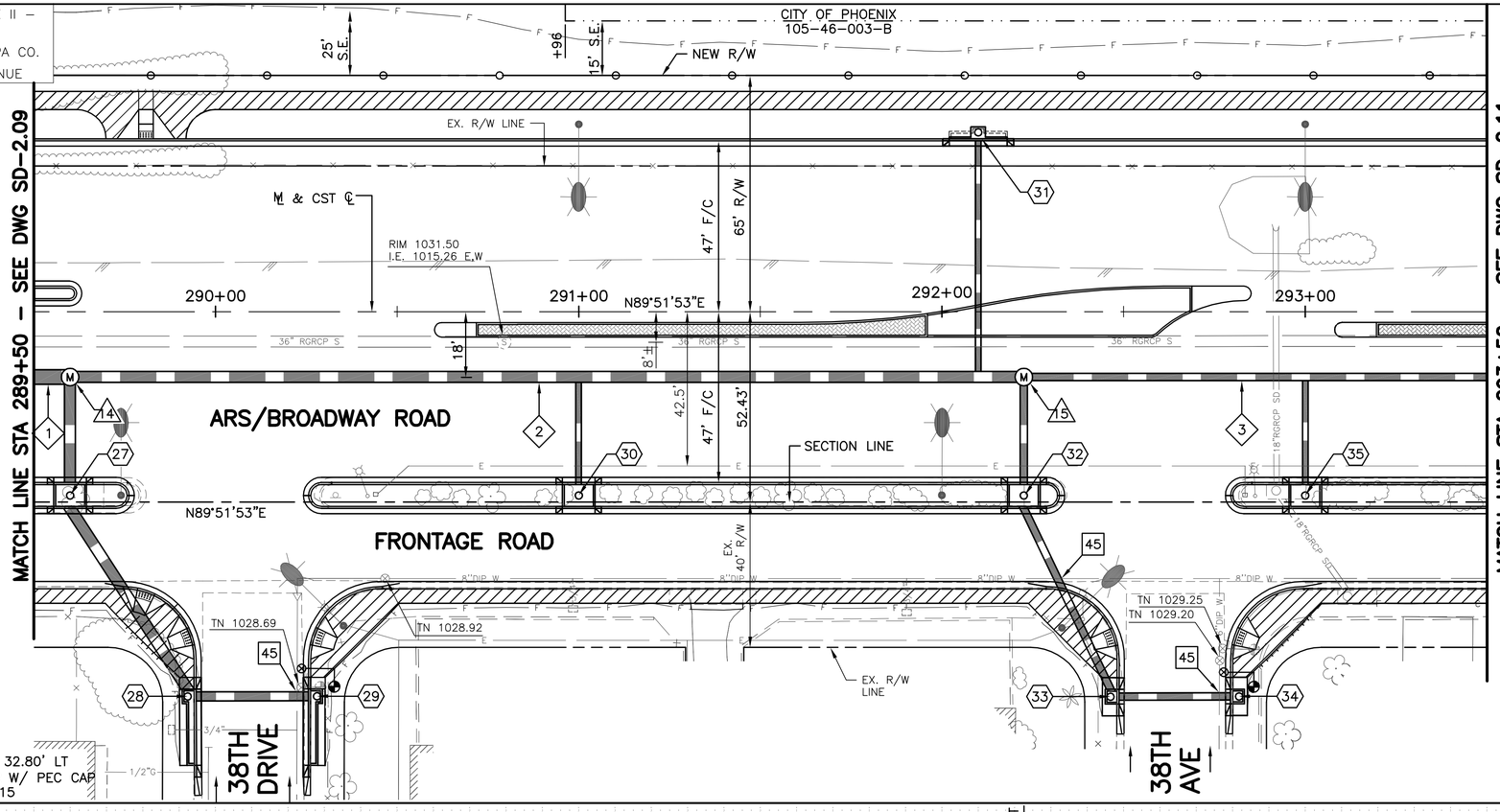
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.09

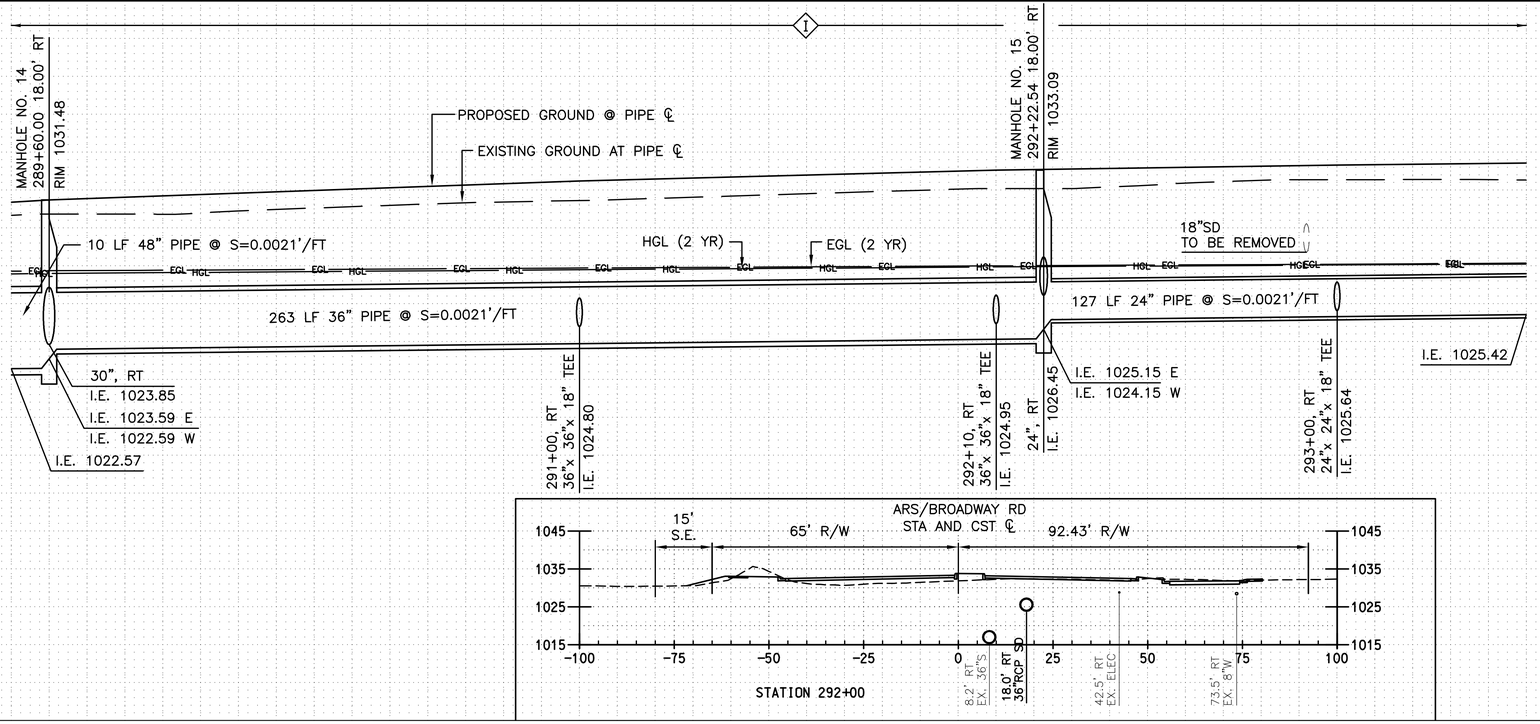
ST85100371 SD-2_09.DWG

REVISION BY CITY OF PHOENIX
NO. | DESCRIPTION | REV BY | CKD BY | DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



▲ T.B.M.
STA 293+79.08, 32.80' LT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1030.15



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO. 25972
MICHAEL VICTOR HEITOK
Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

N
City of Phoenix

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	77	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	289+50.00, 18.00' RT TO 289+60.00, 18.00' RT	48"	10
2	289+60.00, 18.00' RT TO 292+22.54, 18.00' RT	36"	263
3	292+22.54, 18.00' RT TO 293+50.00, 18.00' RT	24"	127

STORM DRAIN MANHOLE

	STATION	TYPE
14	289+60.00, 18.00' RT	P1520 & MAG 522
15	292+22.54, 18.00' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
27	289+60, 50.58' RT	P1571	MANHOLE	30"	27
28	289+92.36, 105.92' RT	M-1, L=17' P1569-1	CATCH BASIN	30"	61
29	290+27.97, 105.89' RT	M-1, L=17' P1569-1	CATCH BASIN	30"	32
30	291+00, 50.58' RT	P1571	PREFAB TEE	18"	29
31	292+10, 49.33' LT	M-2 L=6' P1569-2	PREFAB TEE	18"	65
32	292+22.54, 50.58' RT	P1571	MANHOLE	24"	27
33	292+46.40, 106.00' RT	M-2, L=3' P1569-1	CATCH BASIN	24"	56
34	292+81.77, 105.92' RT	M-2, L=3' P1569-1	CATCH BASIN	24"	32
35	293+00, 50.58' RT	P1571	PREFAB TEE	18"	29

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
45	VERTICAL REALIGNMENT OF 6" OR 8" WATER MAIN, COP STD P1370	EA	3

SHEET REFERENCES

1. SEE P-1.11 FOR ROADWAY PLAN
2. SEE CP-1.08, CP-1.09 & CP-1.10 FOR CB CONN PIPE PROFILES
3. SEE P-1.19 & P-1.20 FOR FRONTAGE RD PAVING

Arizona Blue Stake, Inc.
CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center
CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE
STA 289+50 TO 293+50

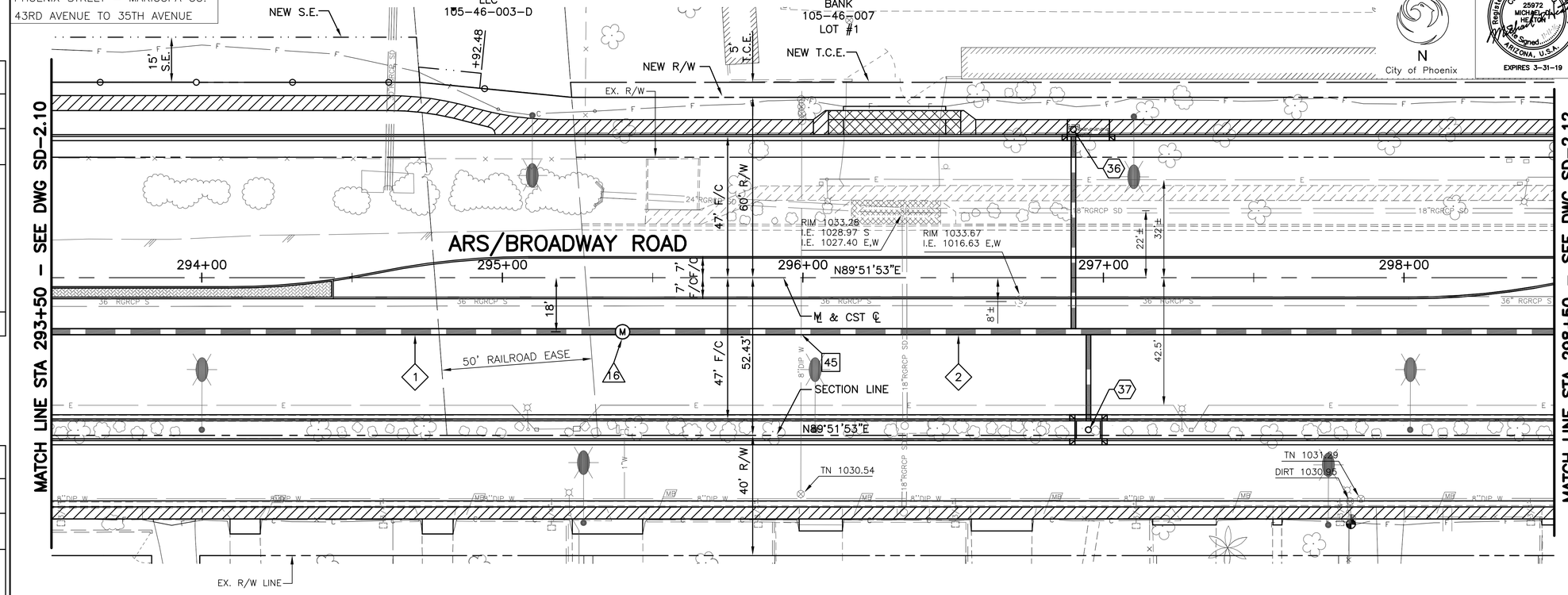
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

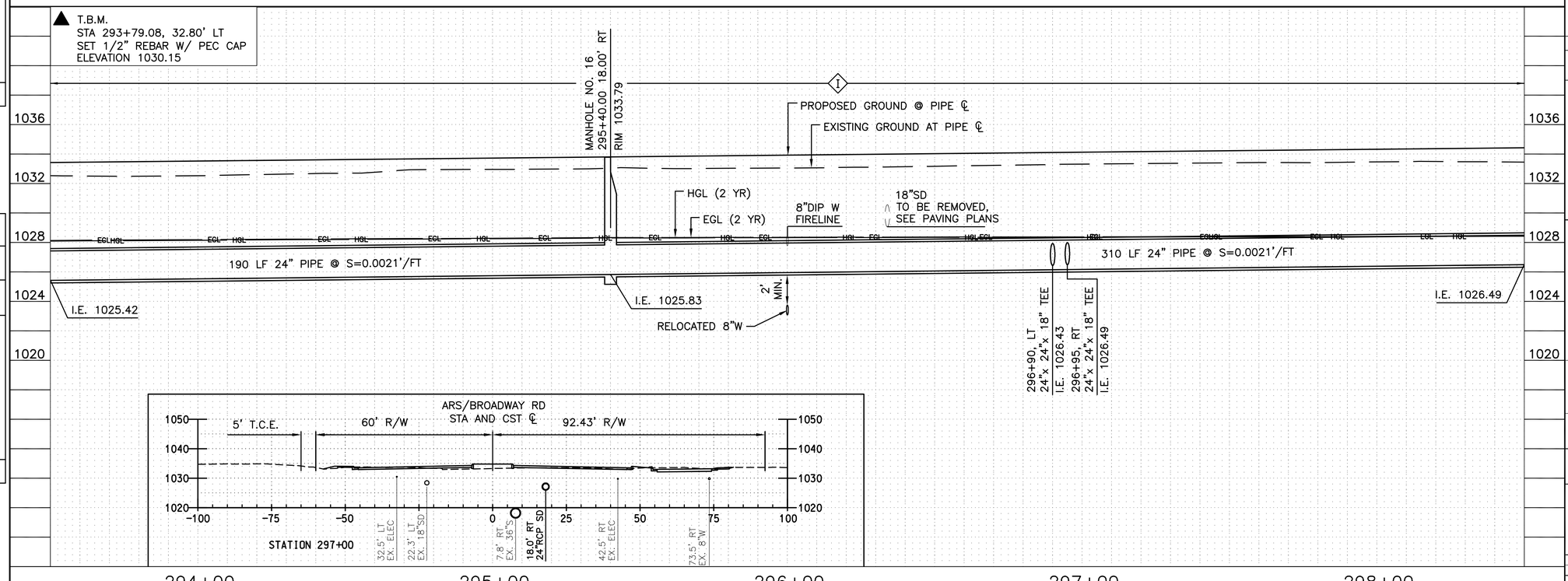
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.10

ST85100371 SD-2_10.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer
CERTIFICATE NO. 25972
MICHAEL VINCENT HEITOK
Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	78	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	293+50.00, 18.00' RT TO 295+40.00, 18.00' RT	24"	190
2	295+40.00, 18.00' RT TO 298+50.00, 18.00' RT	24"	310

STORM DRAIN MANHOLE

	STATION	TYPE
16	295+40.00, 18.00' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
36	296+90, 49.33' LT	M-1, L=10' P1569-1	PREFAB TEE	18"	65
37	296+95, 50.58' RT	P1571	PREFAB TEE	18"	29

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
45	VERTICAL REALIGNMENT OF 6" OR 8" WATER MAIN, COP STD P1370	EA	1

SHEET REFERENCES

1. SEE P-1.12 FOR PAVING PLAN
2. SEE CP-1.11 FOR CB CONN PIPE PROFILE
3. SEE P-1.20 & P-1.21 FOR FRONTAGE RD PAVING

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE
STA 293+50 TO STA 298+50

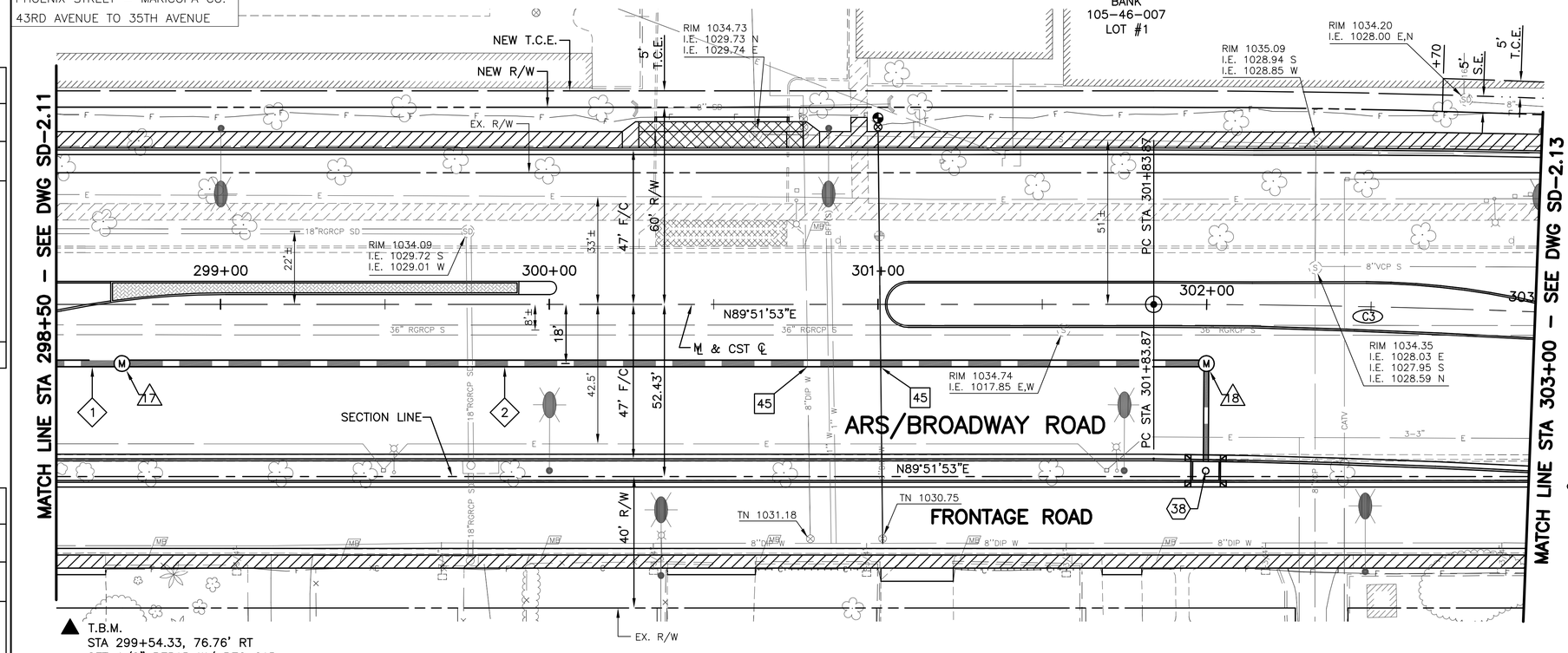
CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

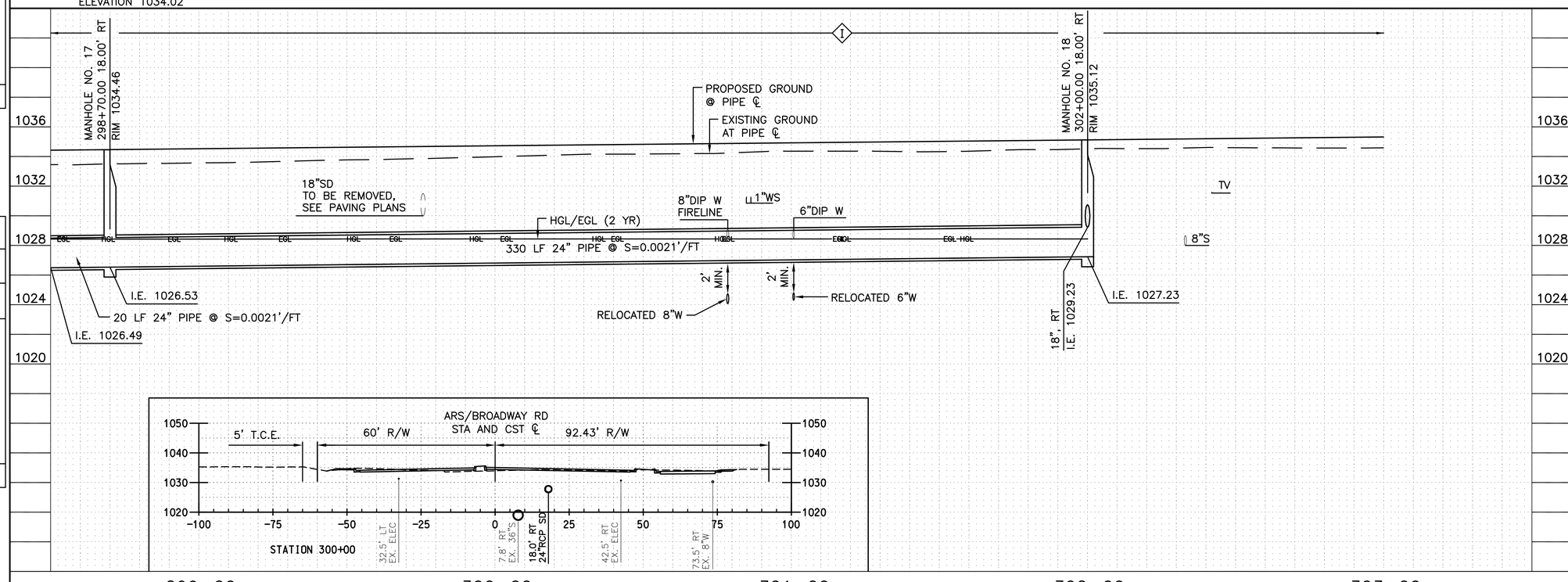
AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	JG	DES:	MVL	CK:	SM	DWG SERIES NO.
DATE:	07/16	DATE:	07/16	DATE:	07/16	
SCALE:	HORIZ 1"= 20' VERT 1"= 4'					SD-2.11

ST85100371 SD-2_11.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE





CURVE DATA

(C3) PI STA 302+88.64
N= 875741.7537
E= 633321.1617

MAIN CURVE
Δ= 04°00'00"
D= 01°54'35"
R= 3000.00'
L= 209.44'
T= 104.76'
EXT= 1.83'
SUPER= N/C

N
City of Phoenix

Registered Professional Engineer CERTIFICATE NO. 25972 MICHAEL VAN HETEK Signed Arizona, U.S.A. EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	79	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	298+50.00, 18.00' RT TO 298+70.00, 18.00' RT	24"	20
2	298+70.00, 18.00' RT TO 302+00.00, 18.00' RT	24"	330

STORM DRAIN MANHOLE

	STATION	TYPE
17	298+70.00, 18.00' RT	P1520 & MAG 522
18	302+00.00, 18.00' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
38	302+00, 50.64' RT	P1571	MANHOLE	18"	28

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
45	VERTICAL REALIGNMENT OF 6" OR 8" WATER MAIN, COP STD P1370	EA	2

SHEET REFERENCES

1. SEE P-1.13 FOR PAVING PLAN
2. SEE CP-1.11 FOR CB CONN PIPE PROFILE
3. SEE CP-1.21 & CP-1.22 FOR FRONTAGE RD PAVING

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN & PROFILE STA 298+50 TO STA 303+00

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

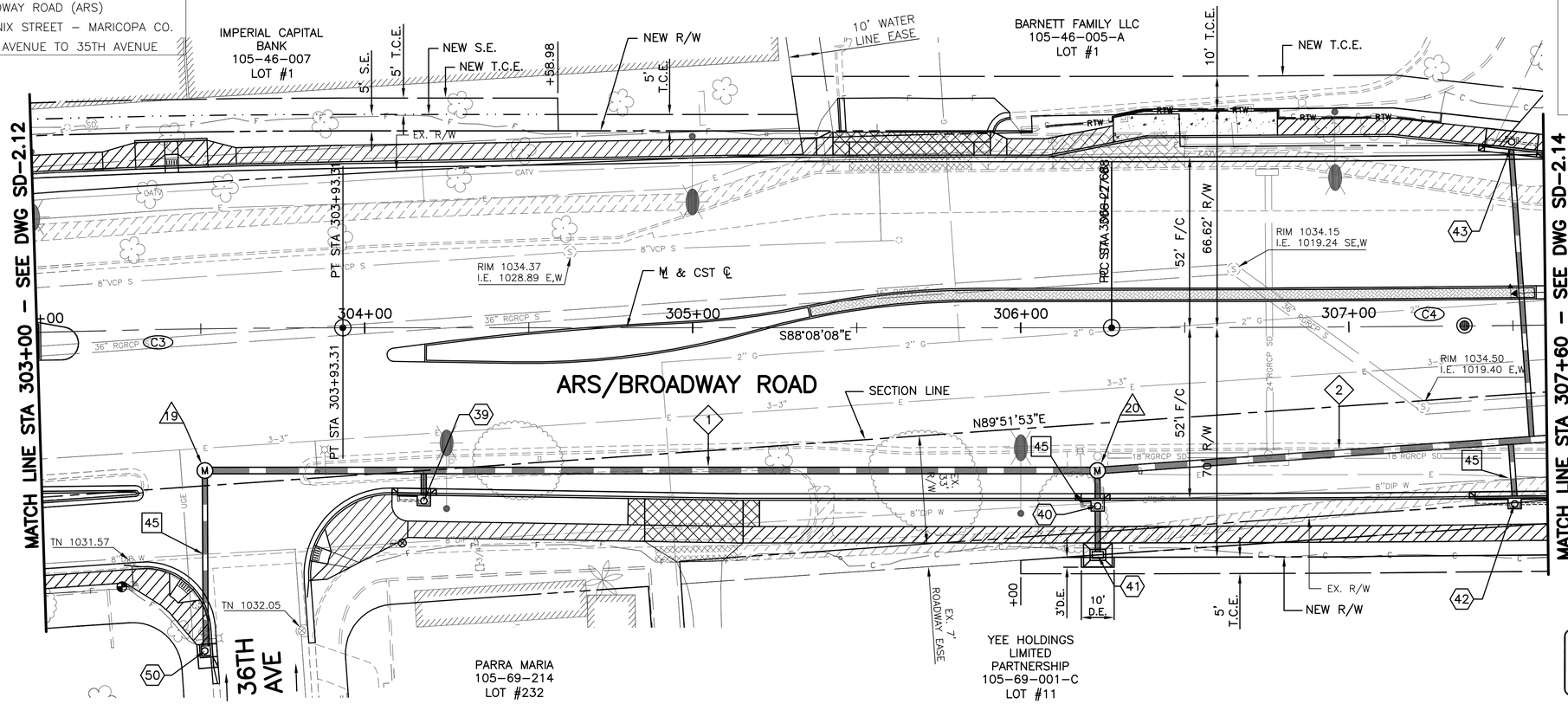
DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SD-2.12

ST85100371 SD-2_12.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

Registered Professional Engineer CERTIFICATE NO. 25972 MICHAEL VAN HEYTON Signed Michael Van Heyton ARIZONA, U.S.A. EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	80	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	303+50.64, 43.22' RT TO 306+23.36, 43.52' RT	24"	273
2	306+23.36, 43.52' RT TO 307+60.00, 34.50' RT	24"	138

STORM DRAIN MANHOLE

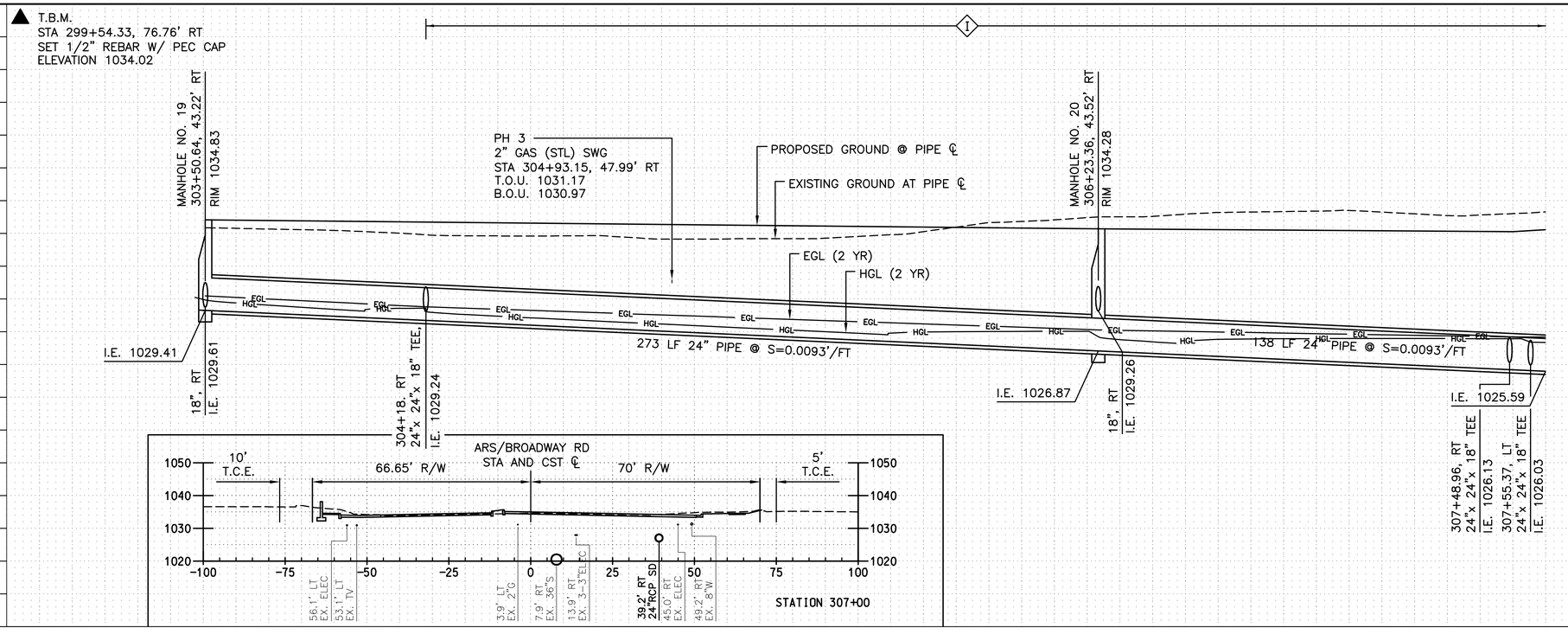
	STATION	TYPE
19	303+50.64, 43.22' RT	P1520 & MAG 522
20	306+23.36, 43.52' RT	P1520 & MAG 522

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
39	304+18.00, 52.75' RT	M-1, L=6' P1569-2	PREFAB TEE	18"	7
40	306+23.41, 54.33' RT	M-1, L=3' P1569-2	MANHOLE	18"	11
41	306+23.47, 69.50' RT	P1570,SINGLE CONC APRON SEE DT-1.01	CATCH BASIN	18"	13
42	307+50, 54.33' RT	M-2, L=10' P1569-2	PREFAB TEE	18"	17
43	307+50, 54.33' LT	M-2, L=6' P1569-1	PREFAB TEE	18"	89
50	307+50, 54.33' LT	M-1, L=3' P1569-1	MANHOLE	18"	54

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
45	VERTICAL REALIGNMENT OF 6" OR 8" WATER MAIN, COP STD P1370	EA	3



SHEET REFERENCES

1. SEE P-1.15 FOR PAVING PLAN
2. SEE CP-1.12 FOR CB CONN PIPE PROFILES
3. SEE P-1.22 FOR FRONTAGE RD PAVING

CURVE DATA

C3	C4
PI STA 302+88.64	PI STA 310+36.95
N= 875741.7537	N= 875691.3136
E= 633321.1617	E= 634067.8589
MAIN CURVE	MAIN CURVE
Δ= 04°00'00"	Δ= 04°05'02"
D= 01°54'35"	D= 00°30'00"
R= 3000.00'	R= 11459.16'
L= 209.44'	L= 816.77'
T= 104.76'	T= 408.56'
EXT= 1.83'	EXT= 7.28'
SUPER= N/C	SUPER= N/C

"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."

STORM DRAIN PLAN & PROFILE
STA 303+00 TO STA 307+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

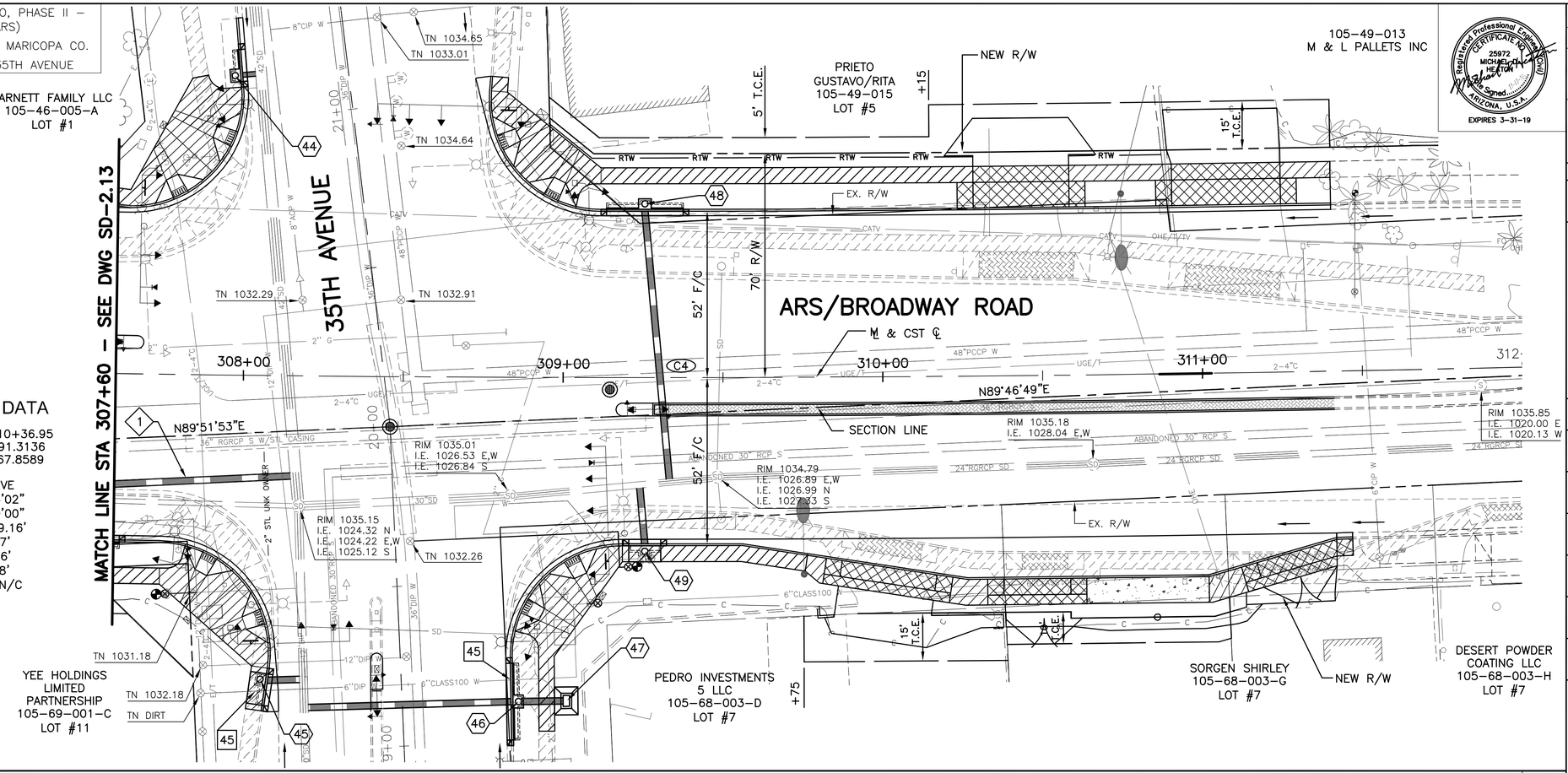
DR:	JG	DES:	MVL	CK:	SM	DWG SERIES NO.
DATE:	07/16	DATE:	07/16	DATE:	07/16	
SCALE: HORIZ	1"= 20'					SD-2.13
VERT	1"= 4'					

ST85100371 SD-2_13.DWG

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE



CURVE DATA

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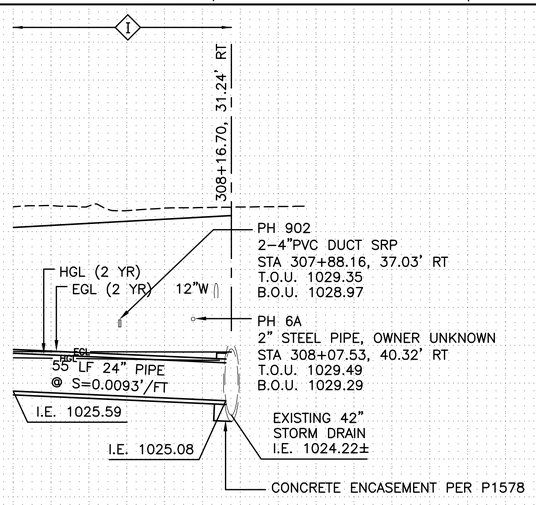
N= 875691.3136
E= 634067.8589

MAIN CURVE
Δ= 04°05'02"
D= 00°30'00"
R= 11459.16'
L= 816.77'
T= 408.56'
EXT= 7.28'
SUPER= N/C



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	81	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer CERTIFICATE NO. 25972 MICHAEL VAN HEYTON Signed ARIZONA, U.S.A. EXPIRES 3-31-19

STORM DRAIN PIPE

	STA. TO STA.	SIZE	LF
1	307+60.00, 34.50' RT TO 308+16.70, 31.24' RT	24"	55

CATCH BASIN & CONNECTOR PIPE

NO	INLET STA.	INLET TYPE	CONNECTION TYPE	PIPE SIZE	PIPE LF
44	307+96.37, 93.71' LT	M-1, L=6' P1569-2	P1578	18"	8
45	308+06.20, 94.96' RT	M-1, L=6' P1569-1	P1578	18"	12
46	308+86.40, 101.37' RT	M-2, L=10' P1569-2	P1578	18"	65
47	309+01.47, 101.12' RT	P1570,SINGLE CONC APRON SEE DT-1.01	CATCH BASIN	18"	13
48	309+25.59, 54.37' LT	M-2, L=10' P1569-2	P1578	18"	86
49	309+25.56, 54.30' RT	M-2, L=3' P1569-1	P1578	18"	19

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
45	VERTICAL REALIGNMENT OF 6" OR 8" WATER MAIN, COP STD P1370	EA	2

SHEET REFERENCES

1. SEE P-1.17 FOR PAVING PLAN
2. SEE CP-1.13 & CP-1.14 FOR CB CONN PIPE PROFILES

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STORM DRAIN PLAN SHEET
STA 307+50 TO STA 311+02.86

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 5'			SD-2.14

ST85100371 SD-2_14.DWG

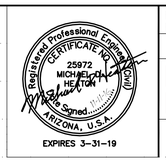
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

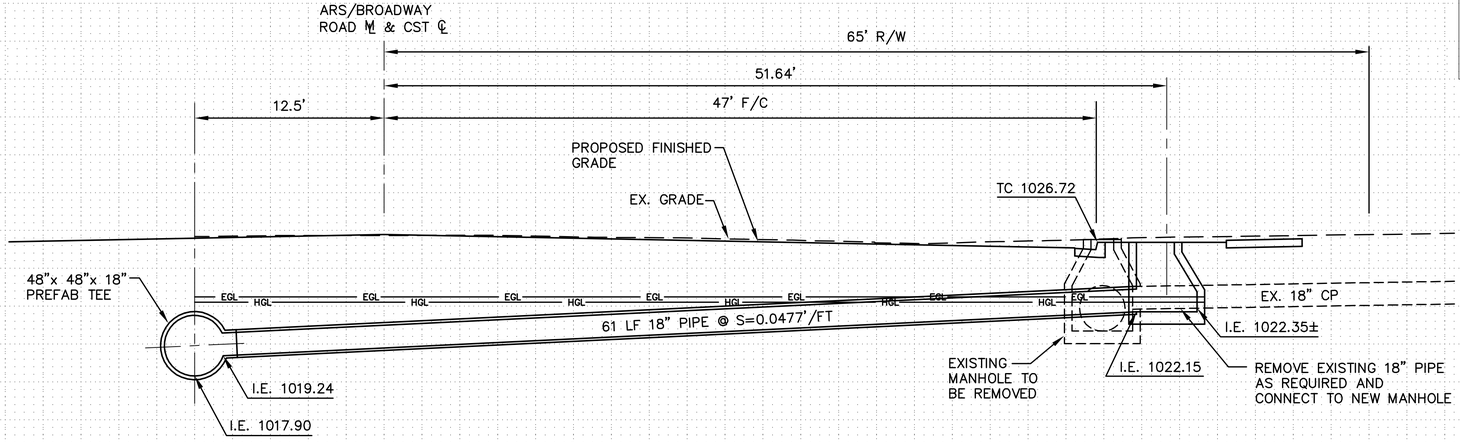
NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

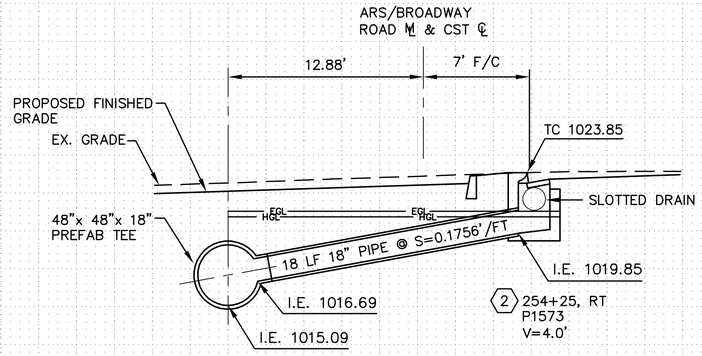


F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	82	164	

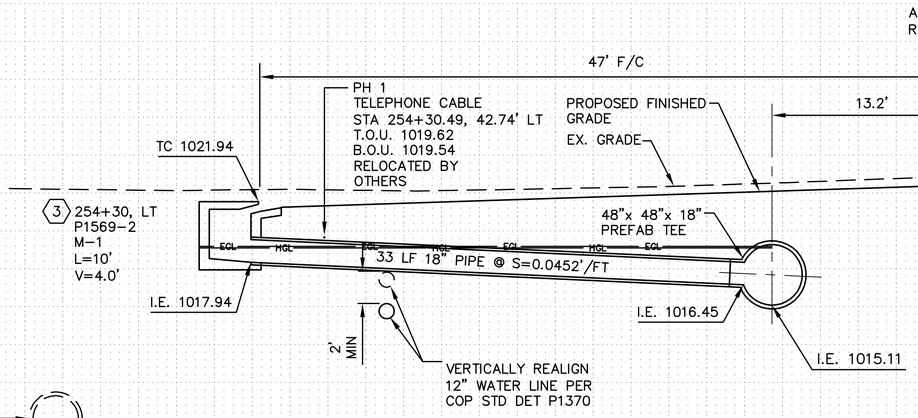
PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080



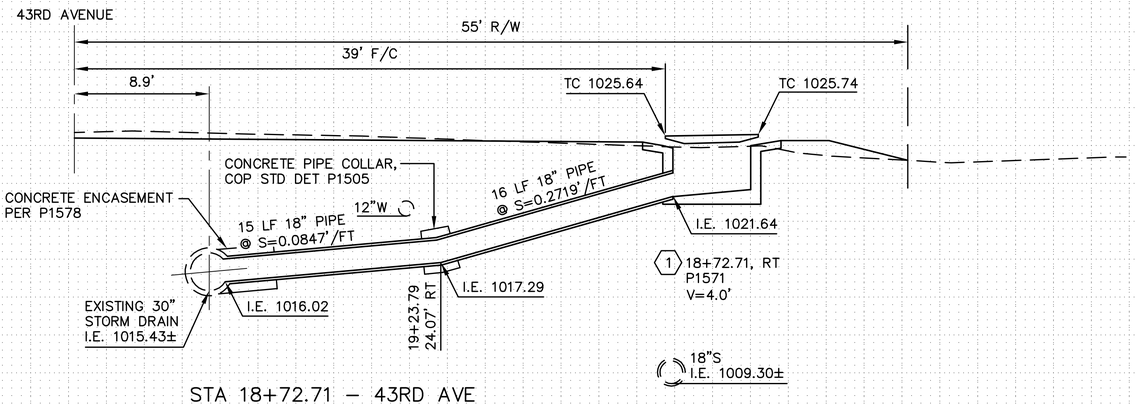
21 STA 267+49.10
DWG SD-2.04



STA 254+24.10
DWG SD-2.02



STA 254+31.53
DWG SD-2.02



STA 18+72.71 – 43RD AVE
DWG SD-2.01

"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."

CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.01

ST85100371 CP-1 SERIES SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

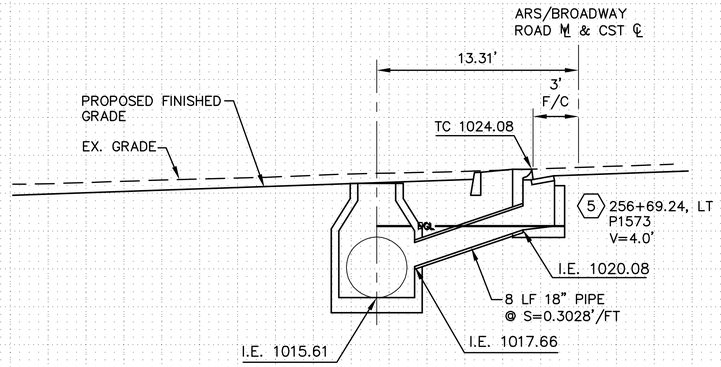
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	83	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

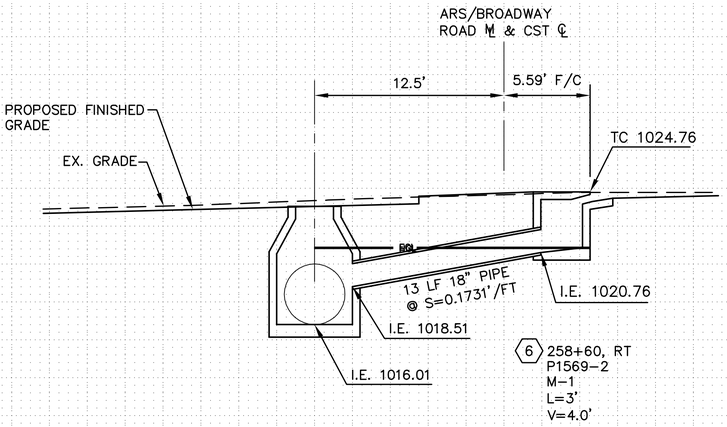
PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



3 STA 256+69.24
DWG SD-2.02



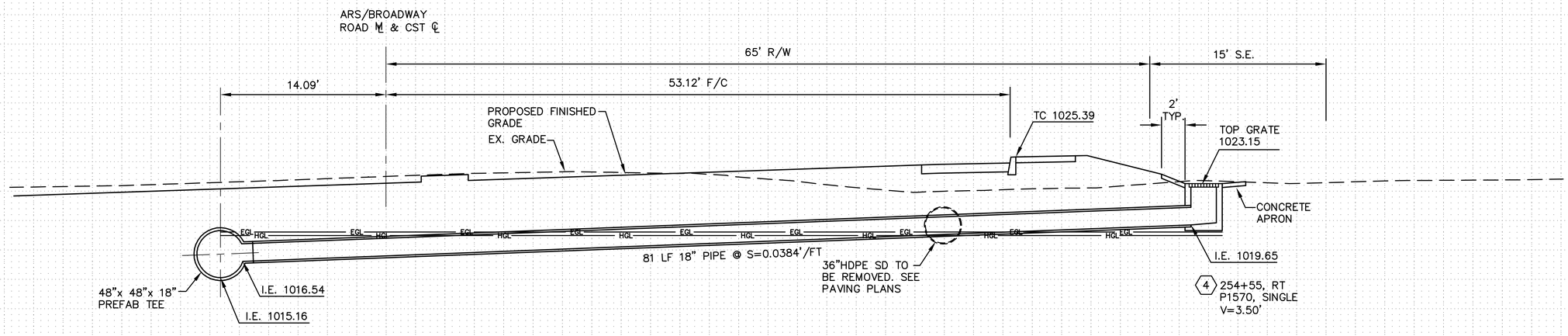
4 STA 258+60
DWG SD-2.03

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



STA 254+55.00
DWG SD-2.02

"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."

CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.02

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

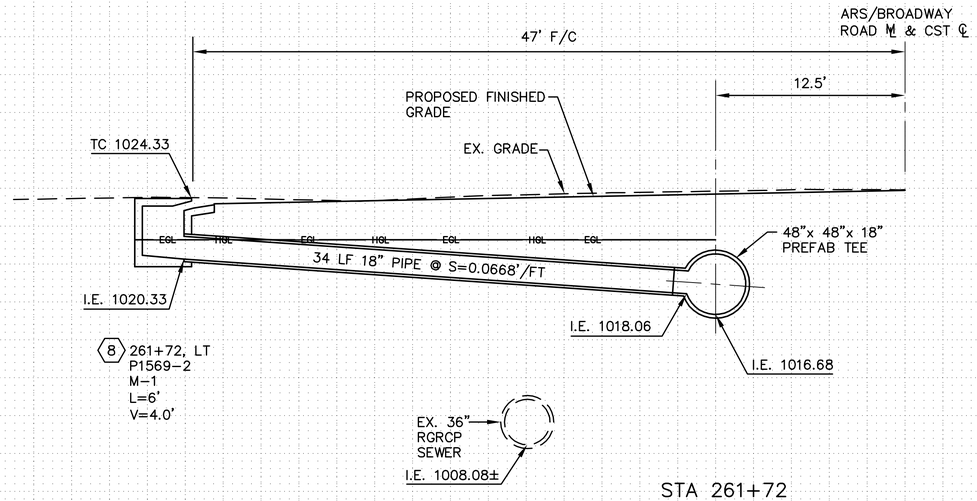
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	84	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Not Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

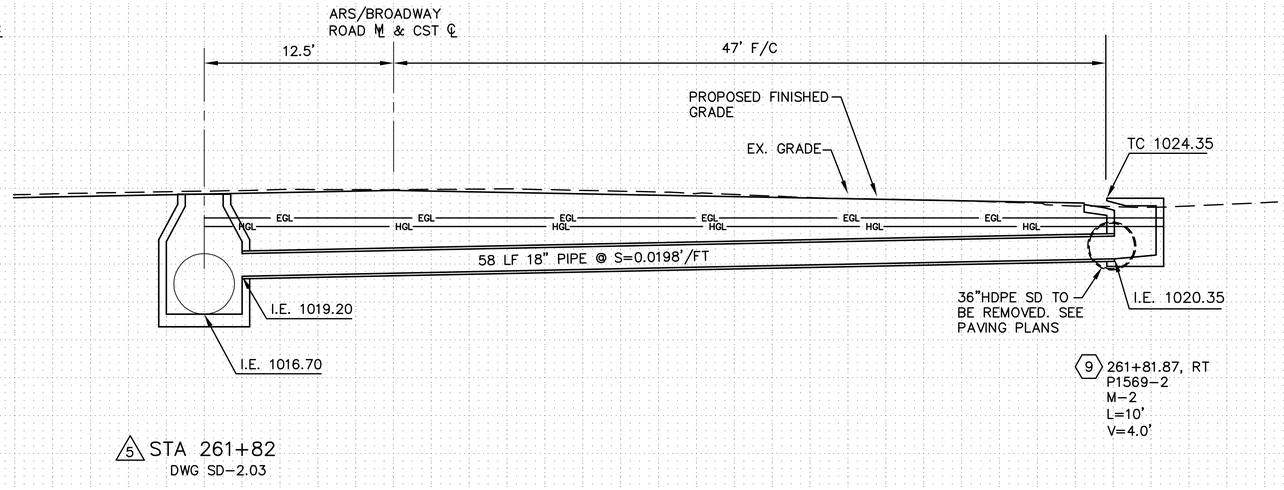
PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

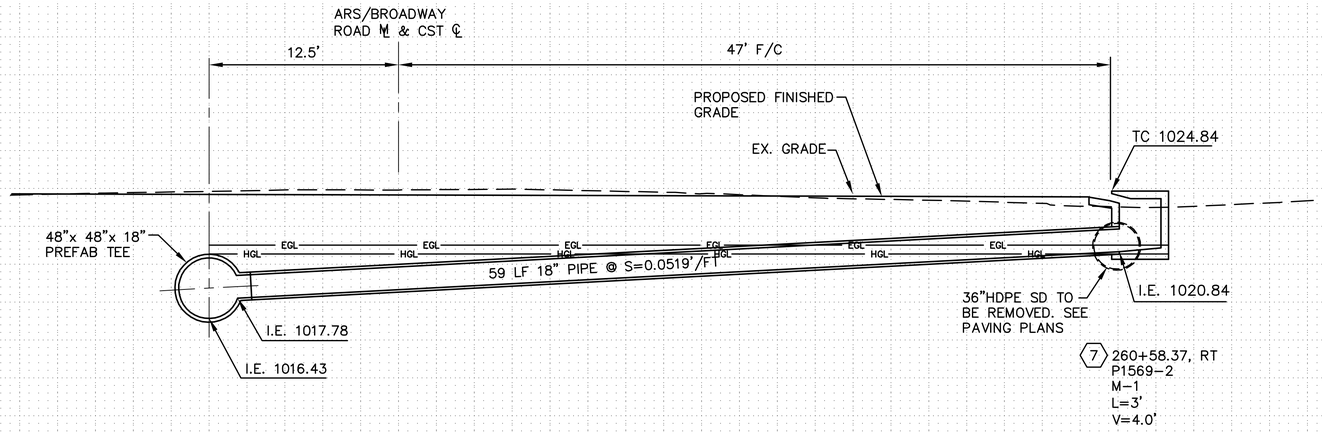
NO.	DESCRIPTION	REV BY	CKD BY	DATE



STA 261+72
DWG SD-2.03



5 STA 261+82
DWG SD-2.03



STA 260+58.37
DWG SD-2.03

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.03

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

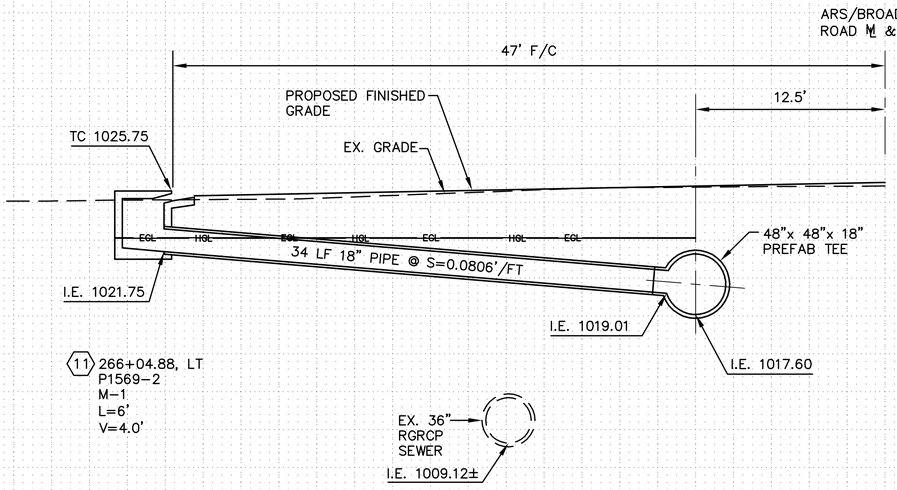
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	85	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Not Valid Without Signature ARIZONA, U.S.A.
EXPIRES 3-31-19

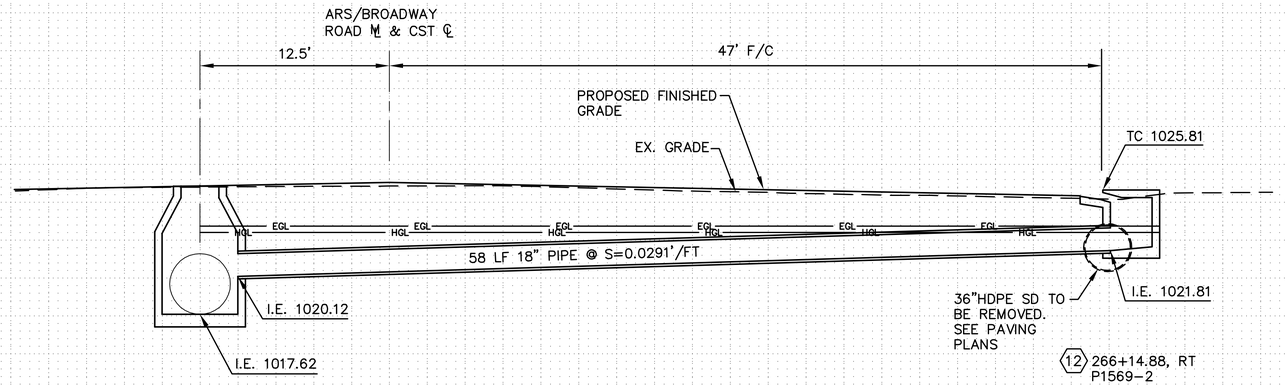
PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

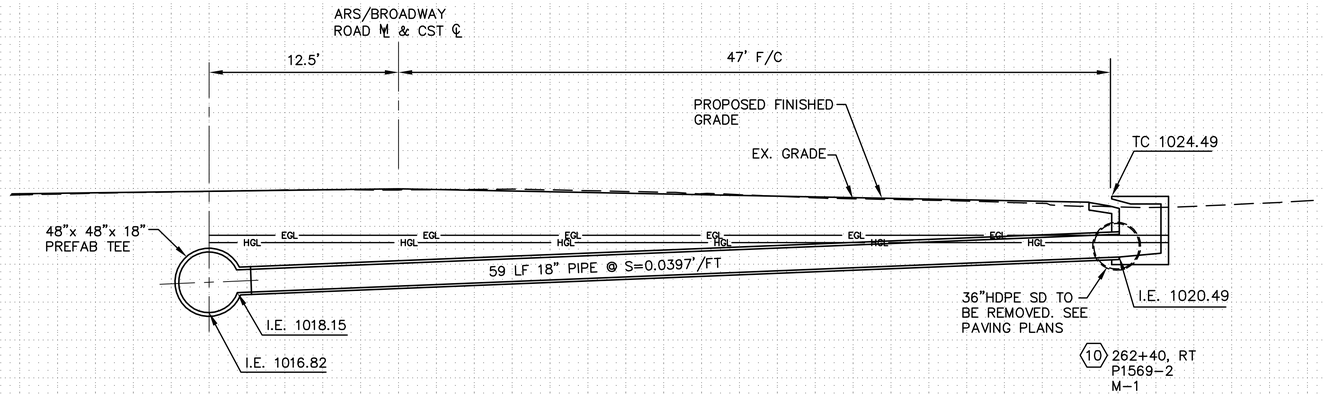
NO.	DESCRIPTION	REV BY	CKD BY	DATE



STA 266+04.88
DWG SD-2.04



6 STA 266+14.88
DWG SD-2.04



STA 262+40
DWG SD-2.03

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.04

ST85100371_CP_1.04_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	86	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL CHAD HEATON Not Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

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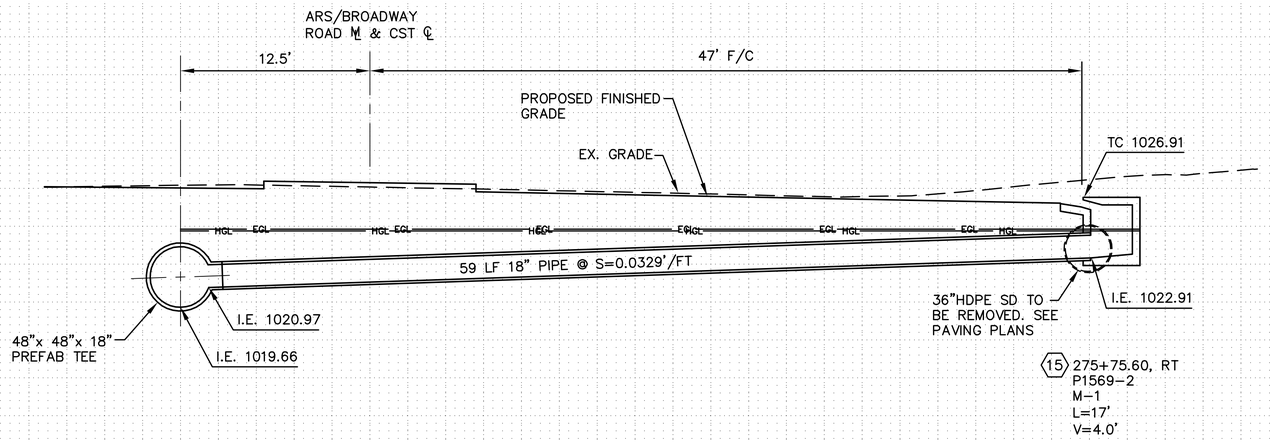
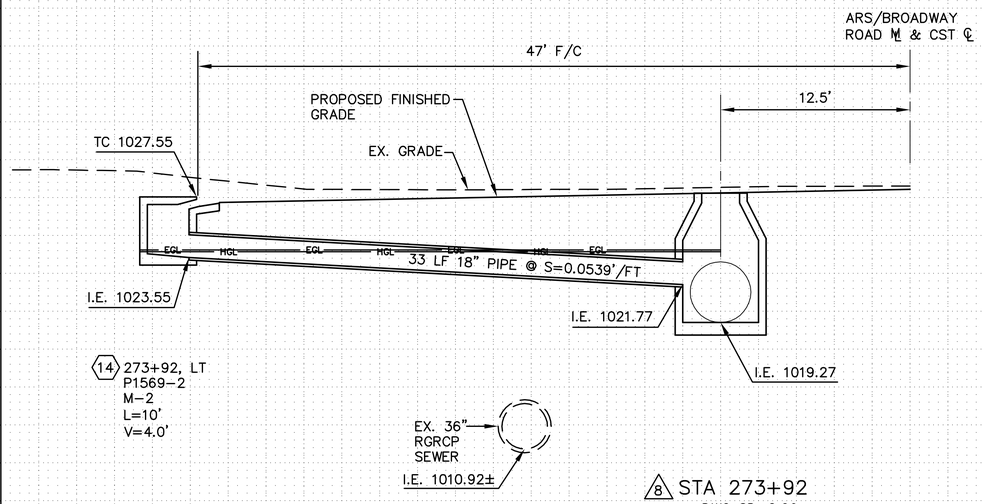
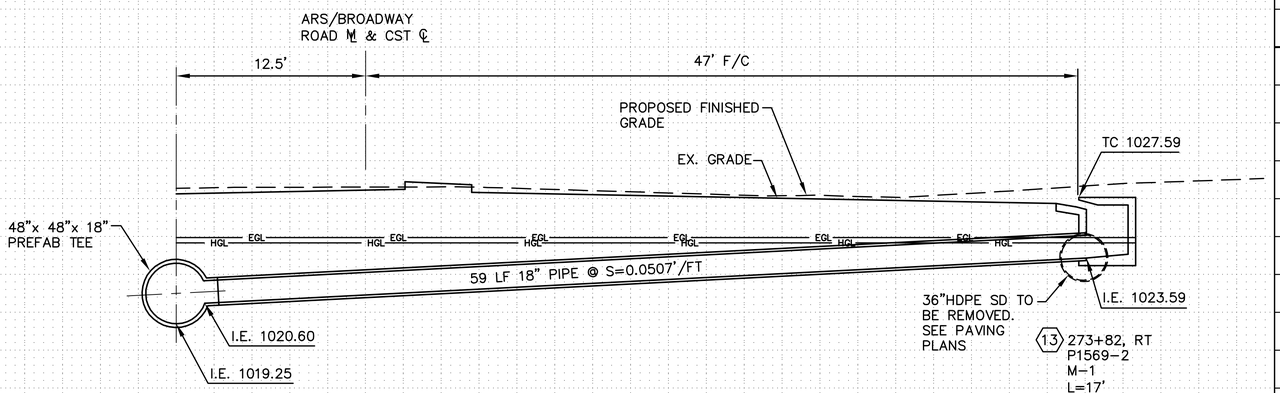


STA 275+75.60
DWG SD-2.06



8 STA 273+92
DWG SD-2.06



STA 273+82
DWG SD-2.06

"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."

CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.05

CP85100371_CP_1 SERIES SHEETS.DWG

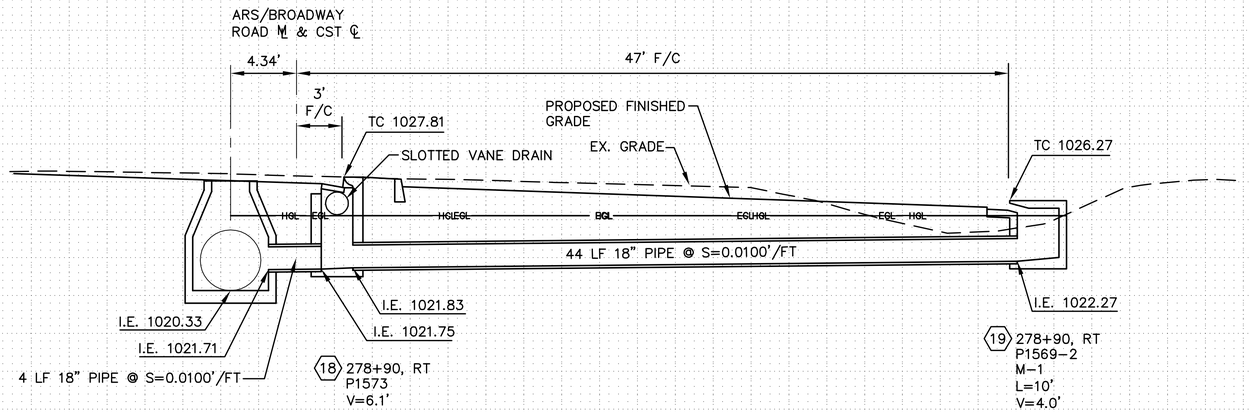
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)

PHOENIX STREET – MARICOPA CO.

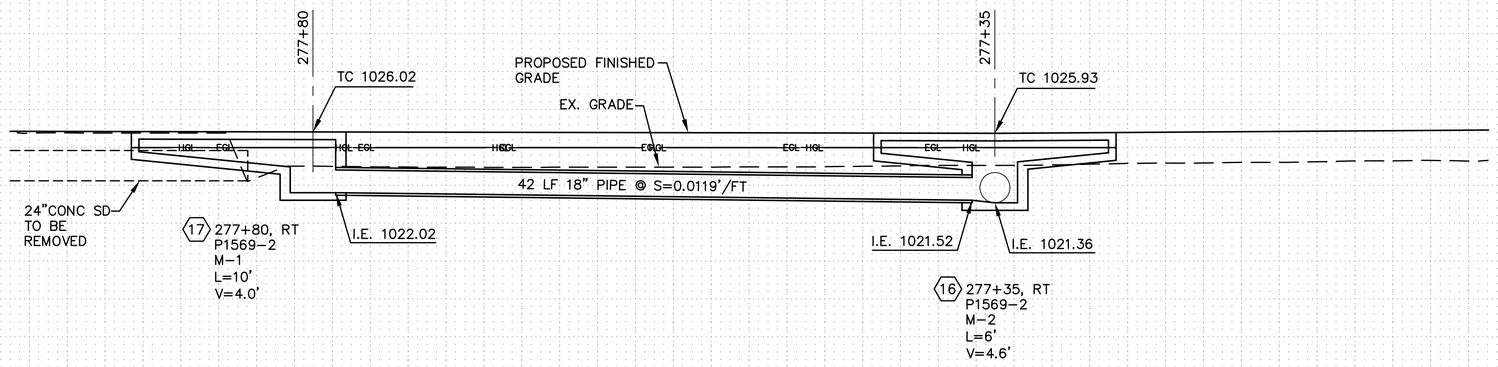
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

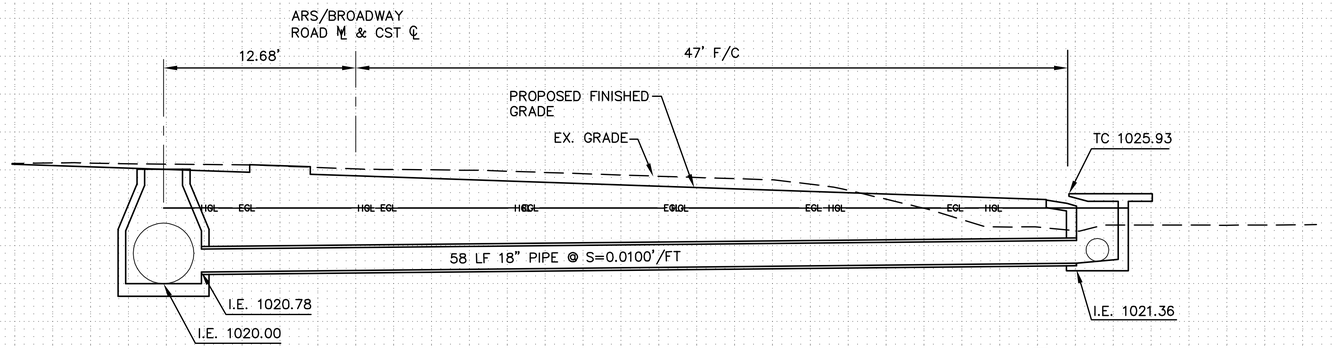
NO.	DESCRIPTION	REV. BY	CKD. BY	DATE



10 STA 278+90.00
DWG SD-2.07



STA 277+35 & STA 277+80
DWG SD-2.06 & SD-2.07



9 STA 277+34.29
DWG SD-2.06

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV. BY	CKD. BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV. BY	CKD. BY	DATE

Registered Professional Engineer (Civil)
CERTIFICATE NO.
25972
MICHAEL CHAD
HEATON
Not Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	87	164	

PEC
PROJECT ENGINEERING CONSULTANTS
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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.06

ST85100371_CP_1_CP06_CP07.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	88	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Not Signed ARIZONA, U.S.A. EXPIRES 3-31-19

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REVISION BY CITY OF PHOENIX

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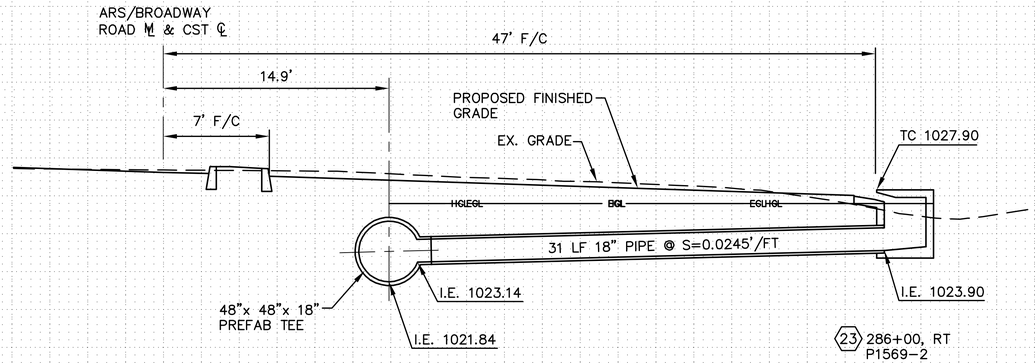
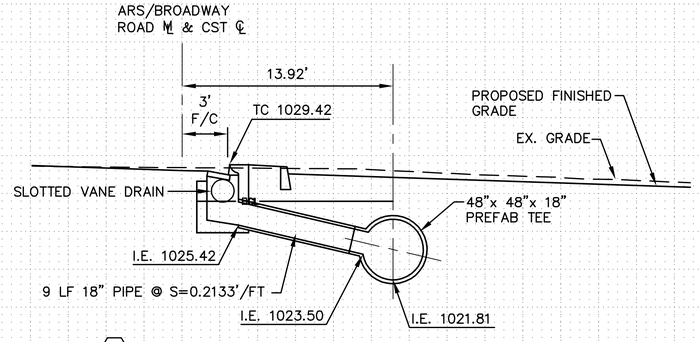
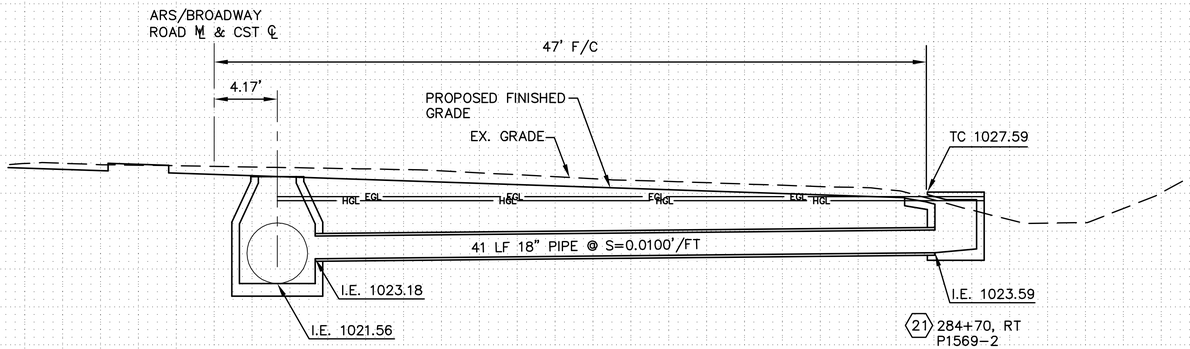


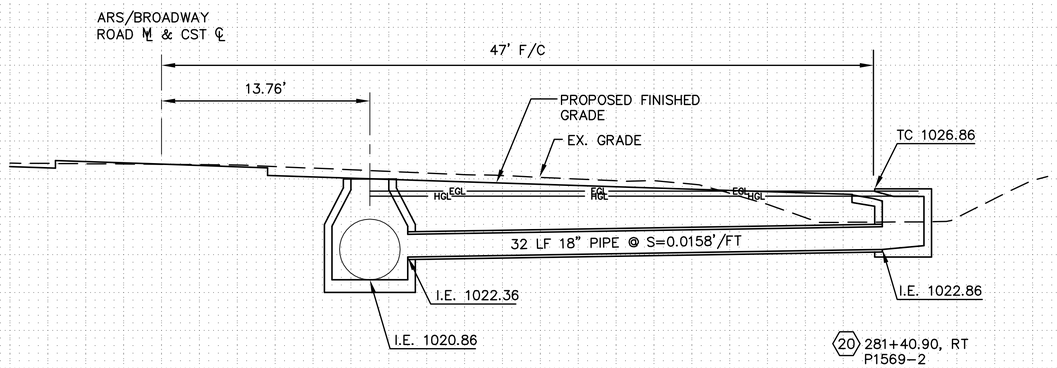
STA 286+01.91
DWG SD-2.09



STA 285+85.77
DWG SD-2.09



12 STA 284+70.00
DWG SD-2.08



11 STA 281+40.89
DWG SD-2.07

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

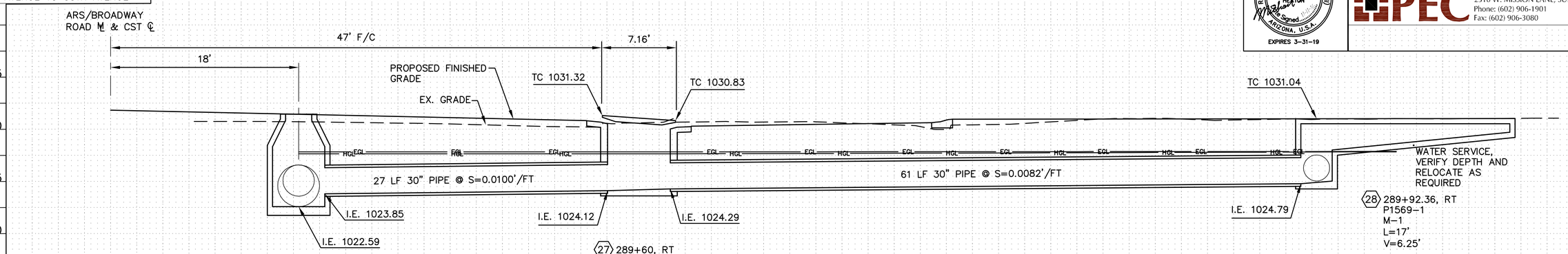
DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.07

ST85100371 CP 1 SERIES SHEETS.DWG

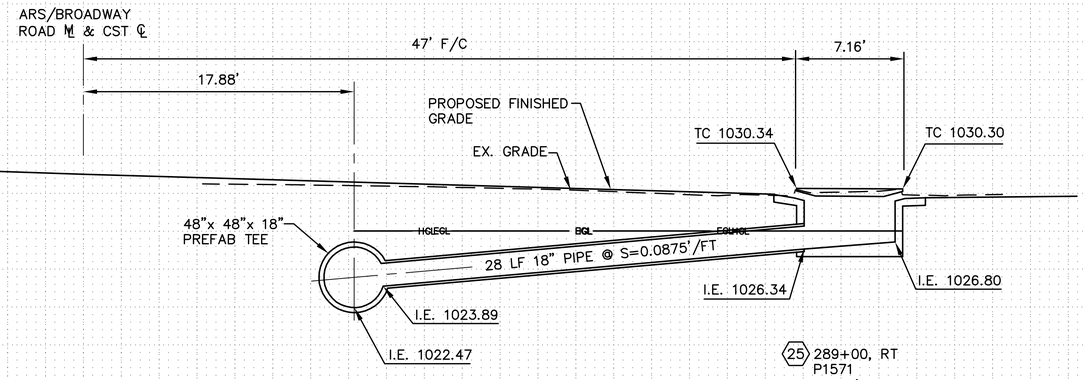
AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

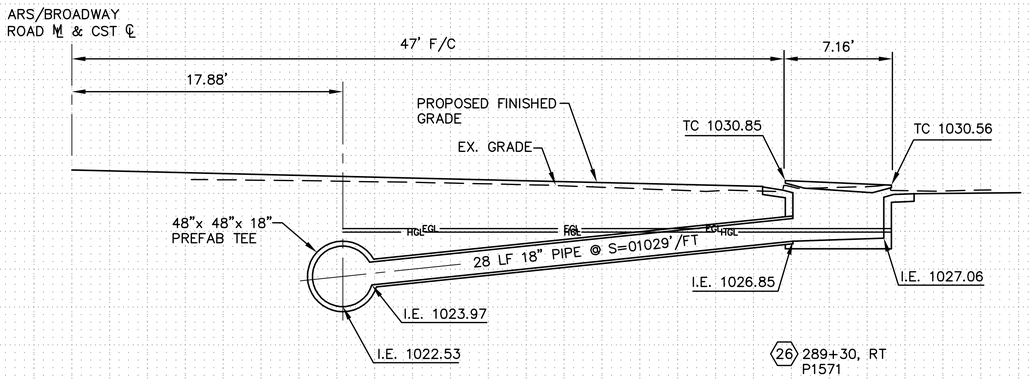
NO.	DESCRIPTION	REV BY	CKD BY	DATE



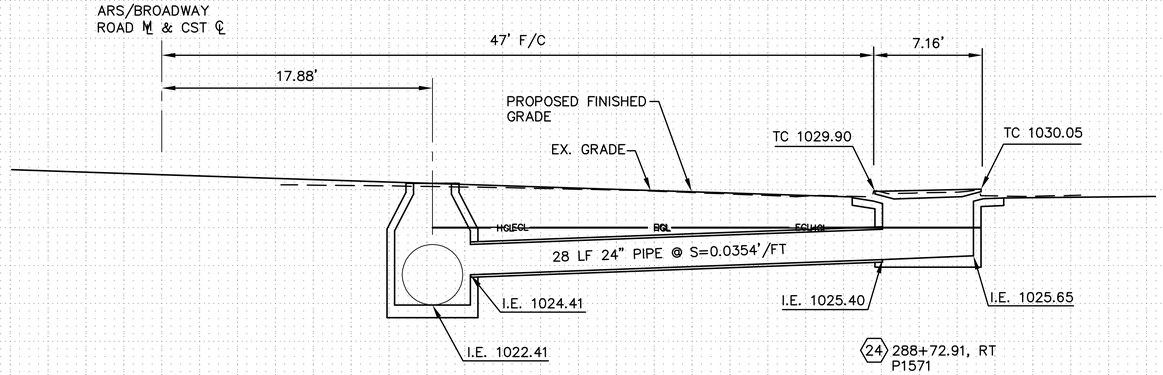
14 STA 289+60
DWG SD-2.10



STA 289+00
DWG SD-2.09



STA 289+30
DWG SD-2.09



13 STA 288+73.22
DWG SD-2.09

Registered Professional Engineer (Civil)
CERTIFICATE NO. 25972
MICHAEL VON HEATON
Not Signed Until Date Shown
ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	89	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.08

ST85100371_CP_1_CP1.08_PLOTTED_DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

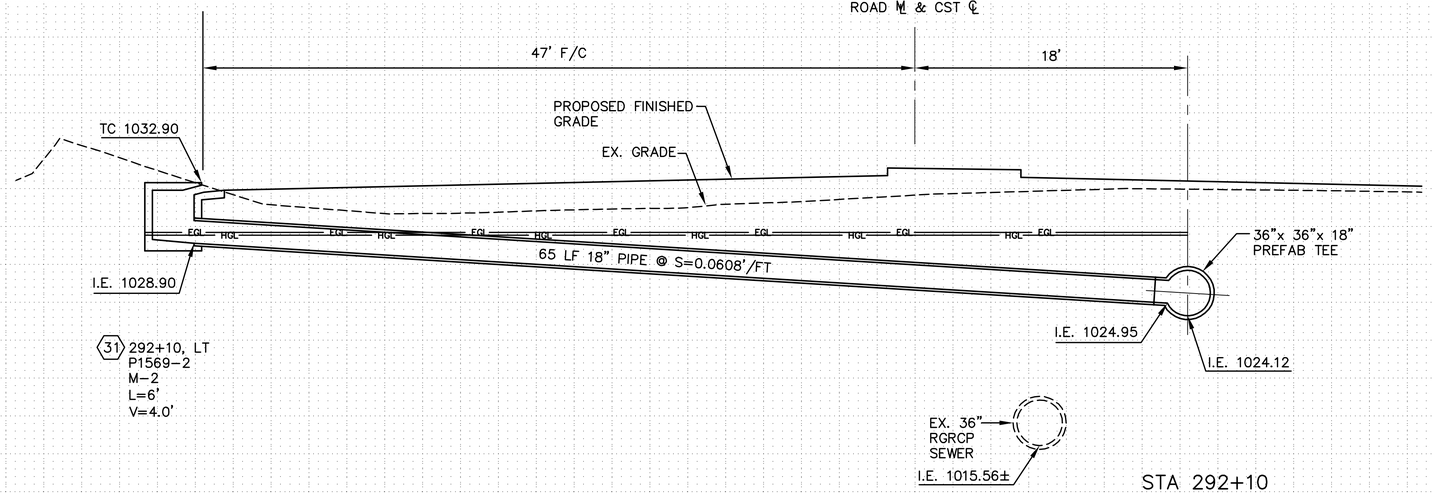
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

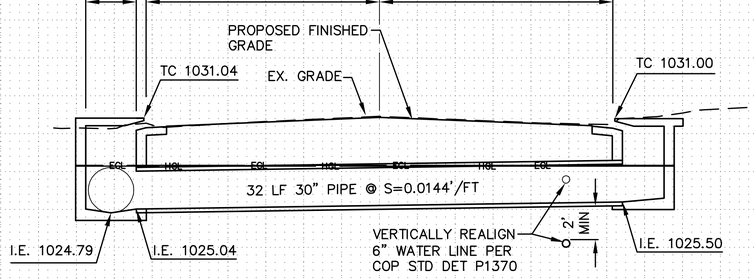
NO.	DESCRIPTION	REV BY	CKD BY	DATE



(31) 292+10, LT
P1569–2
M–2
L=6'
V=4.0'

EX. 36" RGRCP SEWER
I.E. 1015.56±

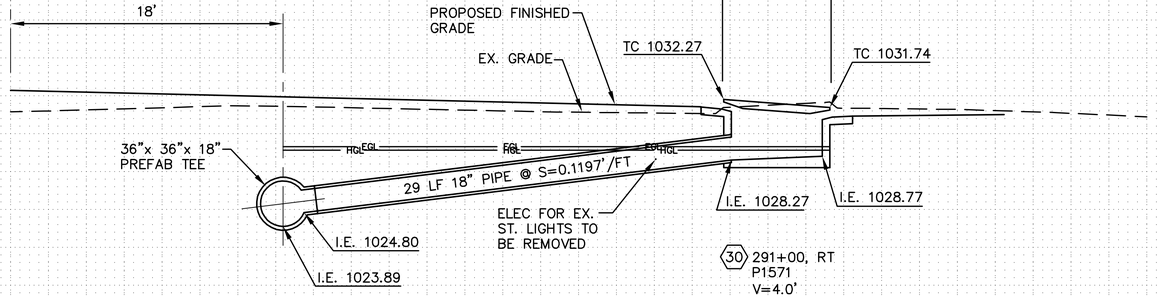
STA 292+10
DWG SD–2.10



(28) 289+92.36, RT
P1569–1
M–1
L=17'
V=6.25'

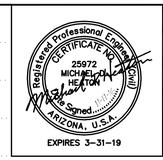
(29) 290+27.97, RT
P1569–1
M–1
L=17'
V=5.5'

STA 289+92.36 & STA 290+27.97
DWG SD–2.10



(30) 291+00, RT
P1571
V=4.0'

STA 291+00
DWG SD–2.10



EXPIRES 3–31–19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	90	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP–1.09

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	91	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Date Signed 3-31-17 ARIZONA, U.S.A.
EXPIRES 3-31-19

PEC
PROJECT ENGINEERING CONSULTANTS
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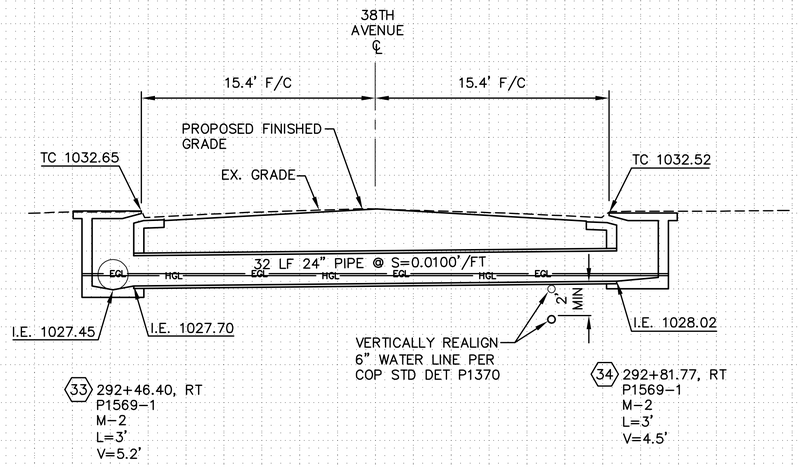
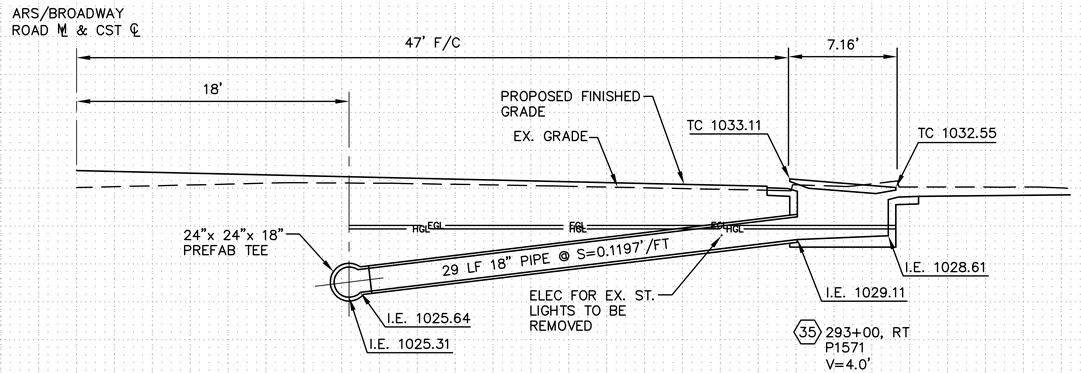
REVISION BY CITY OF PHOENIX

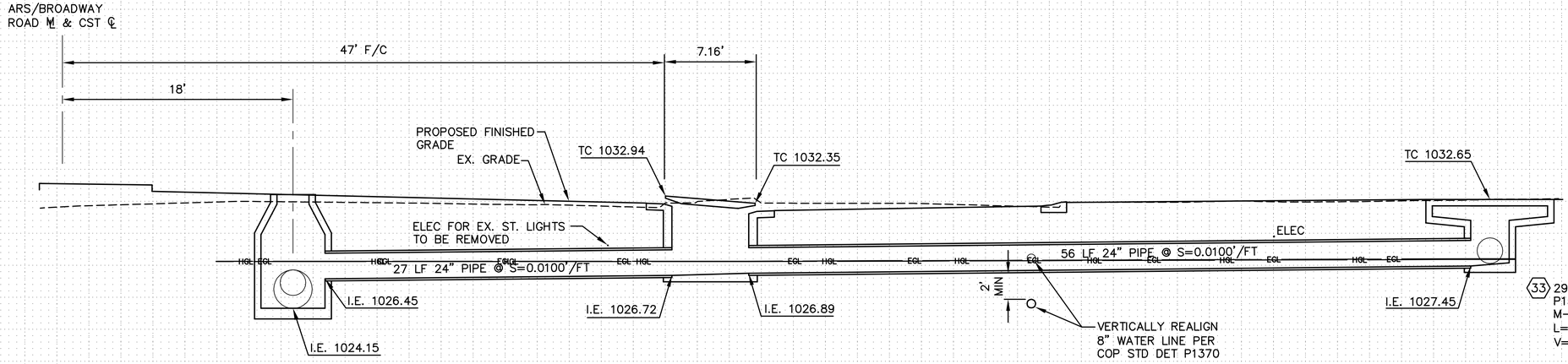
NO.	DESCRIPTION	REV BY	CKD BY	DATE



STA 292+46.40 & STA 292+81.77
DWG SD–2.10



STA 293+00
DWG SD–2.10



15 STA 292+22.54
DWG SD–2.10

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	JG	DES:	MVL	CK:	SM	DWG SERIES NO.
DATE:	07/16	DATE:	07/16	DATE:	07/16	
SCALE:	HORIZ 1"=5' VERT 1"=5'					CP–1.10

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	92	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Not Signed Until Date ARIZONA, U.S.A. EXPIRES 3-31-19

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ARS/BROADWAY ROAD ℄ & CST ℄

98.18' F/C
43.22'
PROPOSED FINISHED GRADE
EX. GRADE
TC 1034.78
51 LF 18" PIPE @ S=0.0327'/FT
EGL HGL
2' MIN
I.E. 1029.61
I.E. 1029.41
I.E. 1031.28
VERTICALLY REALIGN 8" WATER LINE PER COP STD DET P1370

(50) 303+49.82, RT
P1569–1
M–1
L=3'
V=3.5'

(19) STA 303+50.64
DWG SD–2.13

ARS/BROADWAY ROAD ℄ & CST ℄

47' F/C
7.16'
18'
PROPOSED FINISHED GRADE
EX. GRADE
TC 1033.91
TC 1033.51
29 LF 18" PIPE @ S=0.1179'/FT
EGL HGL
I.E. 1026.49
I.E. 1026.16
ELEC FOR EX. ST. LIGHTS TO BE REMOVED
I.E. 1029.91
I.E. 1030.07

(37) 296+95, RT
P1571
V=4.0'

(22) STA 296+95
DWG SD–2.11

ARS/BROADWAY ROAD ℄ & CST ℄

47.17' F/C
6.95'
18'
PROPOSED FINISHED GRADE
EX. GRADE
TC 1034.92
TC 1034.74
28 LF 18" PIPE @ S=0.0604'/FT
EGL HGL
I.E. 1029.23
I.E. 1027.23
ELEC FOR EX. ST. LIGHTS TO BE REMOVED
I.E. 1030.92
I.E. 1031.17

(38) 302+00, RT
P1571
V=4.0'

(18) STA 302+00
DWG SD–2.12

ARS/BROADWAY ROAD ℄ & CST ℄

47' F/C
18'
PROPOSED FINISHED GRADE
TC 1033.90
ELEC FOR EX. ST. LIGHTS TO BE REMOVED
EX. GRADE
EGL HGL
65 LF 18" PIPE @ S=0.0534'/FT
I.E. 1029.90
I.E. 1027.66±
EX. 18"RGRCP SD, TO BE REMOVED. SEE PAVING PLANS
I.E. 1026.43
I.E. 1026.15

(36) 296+90, LT
P1569–1
M–1
L=10'
V=4.0'

EX. 36" RGRCP SEWER
I.E. 1016.67±

STA 296+90
DWG SD–2.11

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP–1.11

ST85100371_CP_1_CODES_CURRENT.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	93	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEYTON Not Valid Unless Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

PEC PROJECT ENGINEERING CONSULTANTS
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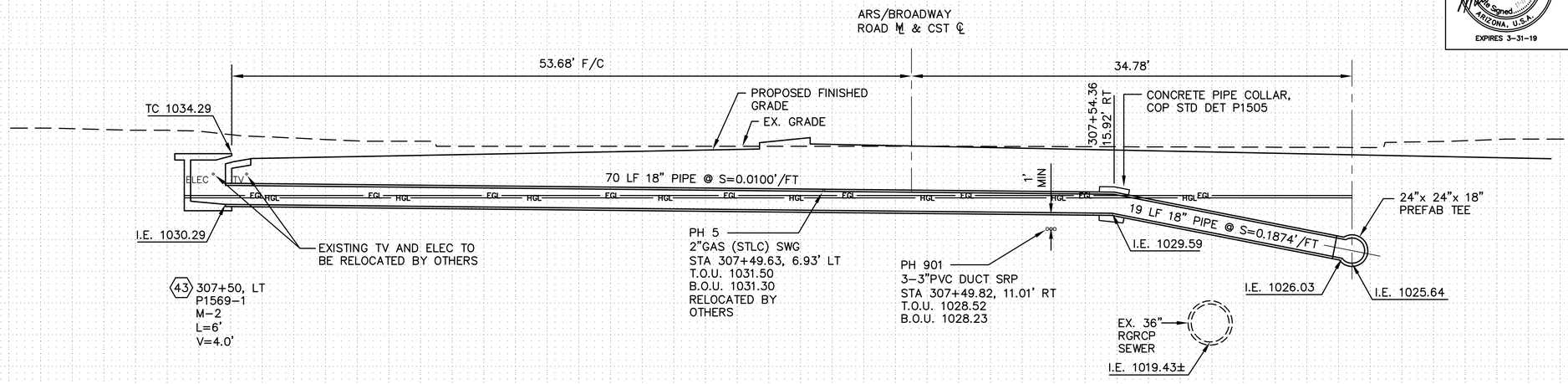
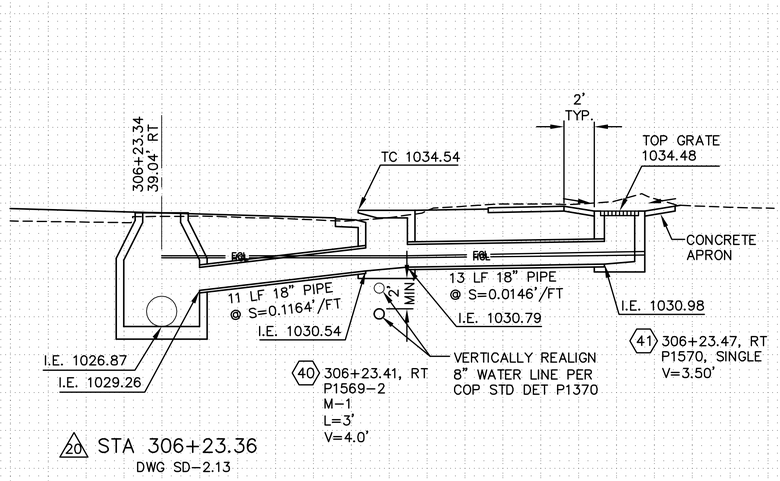
Phone: (602) 906-1901
Fax: (602) 906-3080

REVISION BY CITY OF PHOENIX

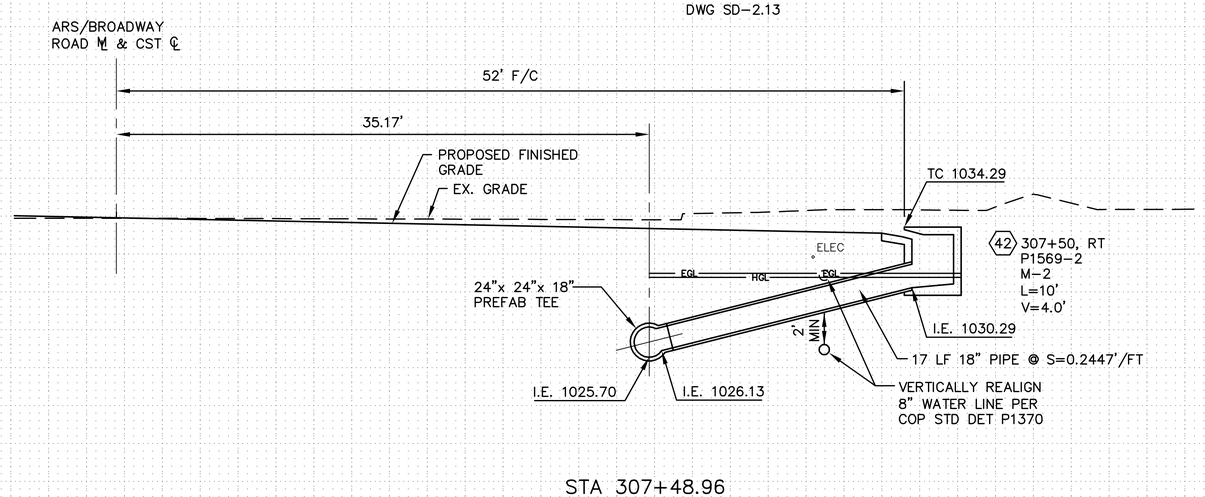
NO.	DESCRIPTION	REV. BY	CKD. BY	DATE



STA 307+55.37
DWG SD-2.13



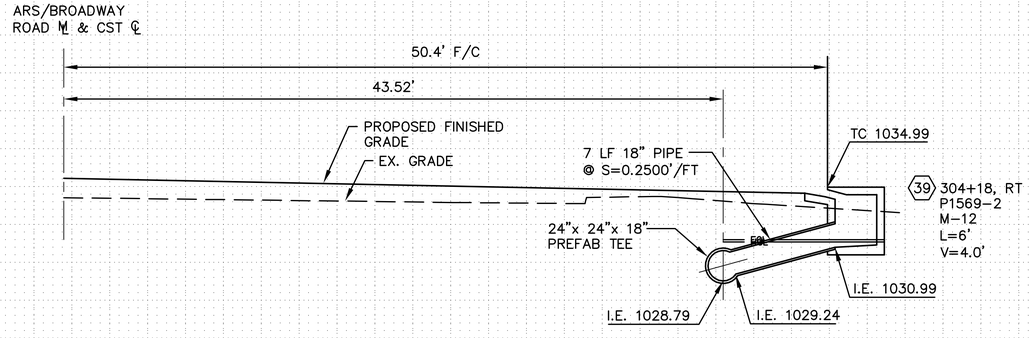
20 STA 306+23.36
DWG SD-2.13



STA 307+48.96
DWG SD-2.13

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV. BY	CKD. BY	DATE



STA 304+18
DWG SD-2.13

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.12

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	94	164	

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL VAN HEATON Not Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

PEC PROJECT ENGINEERING CONSULTANTS
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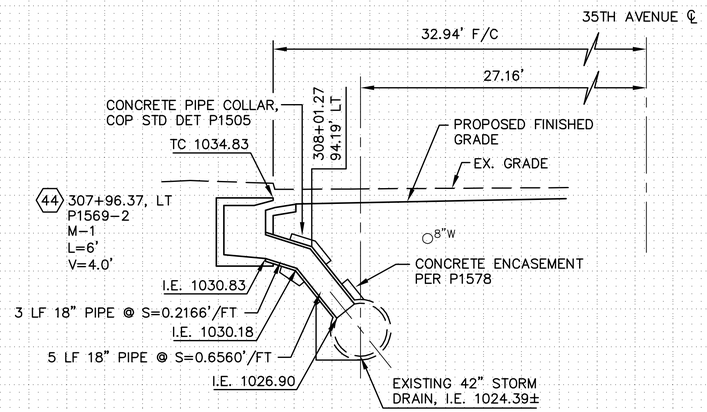
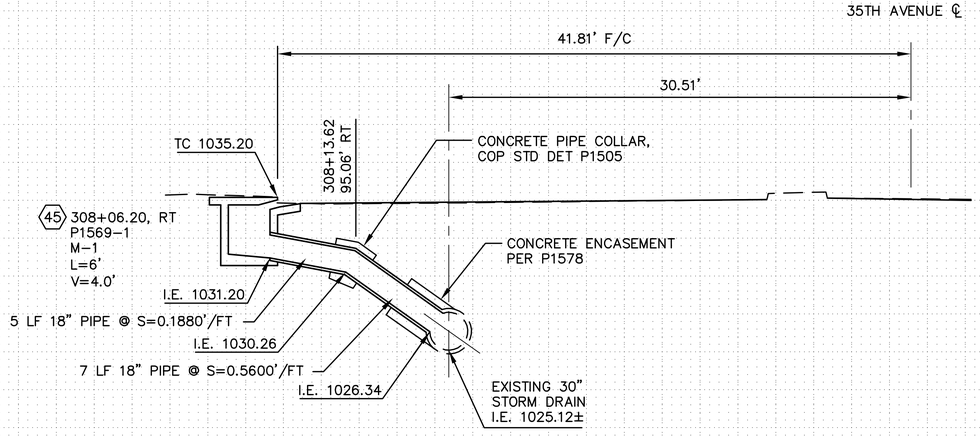
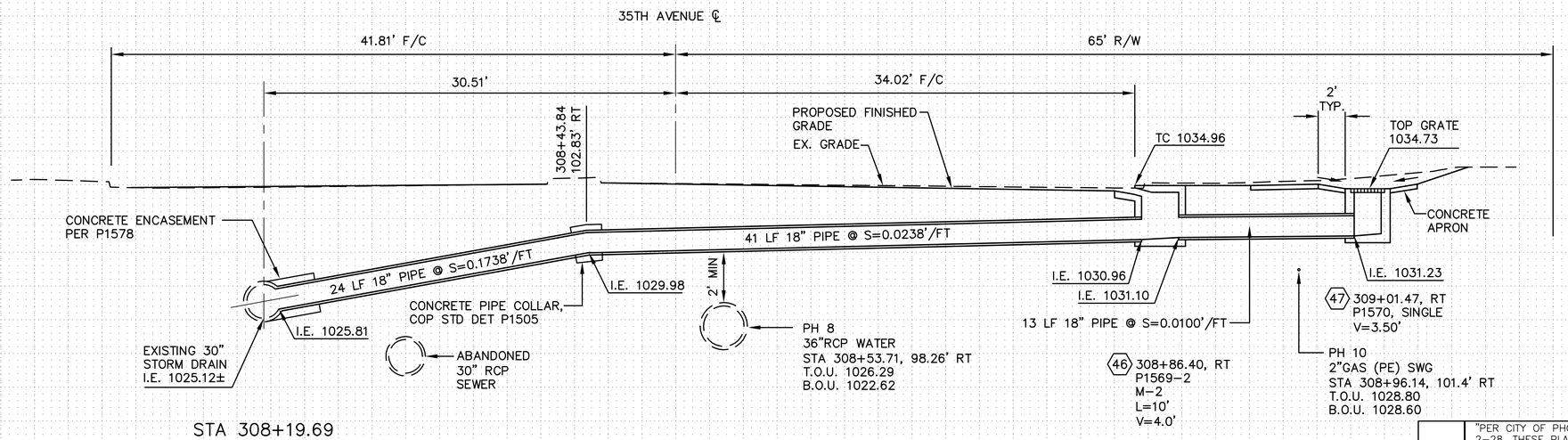


STA 308+04.52
DWG SD-2.14



STA 308+06.20
DWG SD-2.14



STA 308+19.69
DWG SD-2.14

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.13

ST85100371_CP_1_SERIES_SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

Registered Professional Engineer (Civil) CERTIFICATE NO. 25972 MICHAEL V. HEATON Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-19

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	95	164	

PEC
PROJECT ENGINEERING CONSULTANTS
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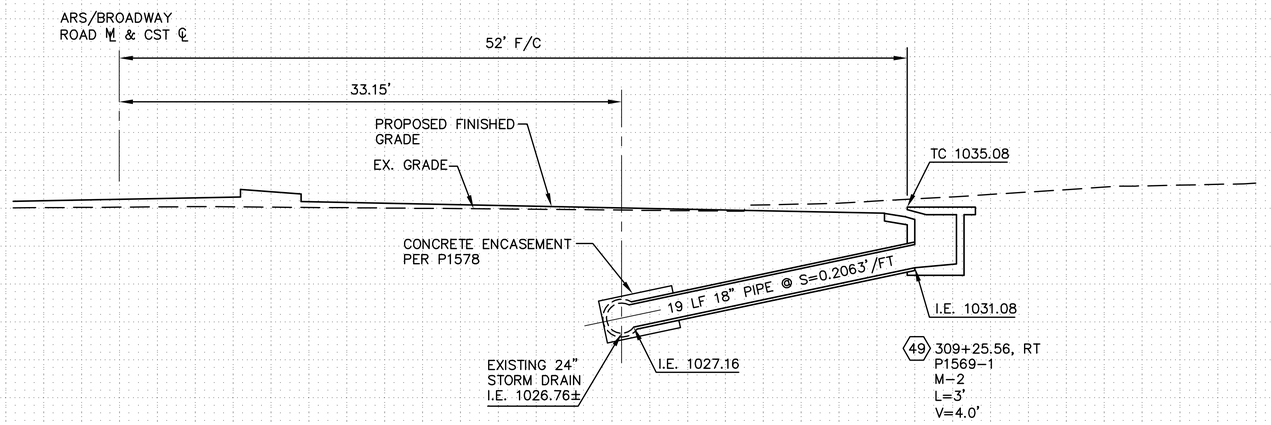
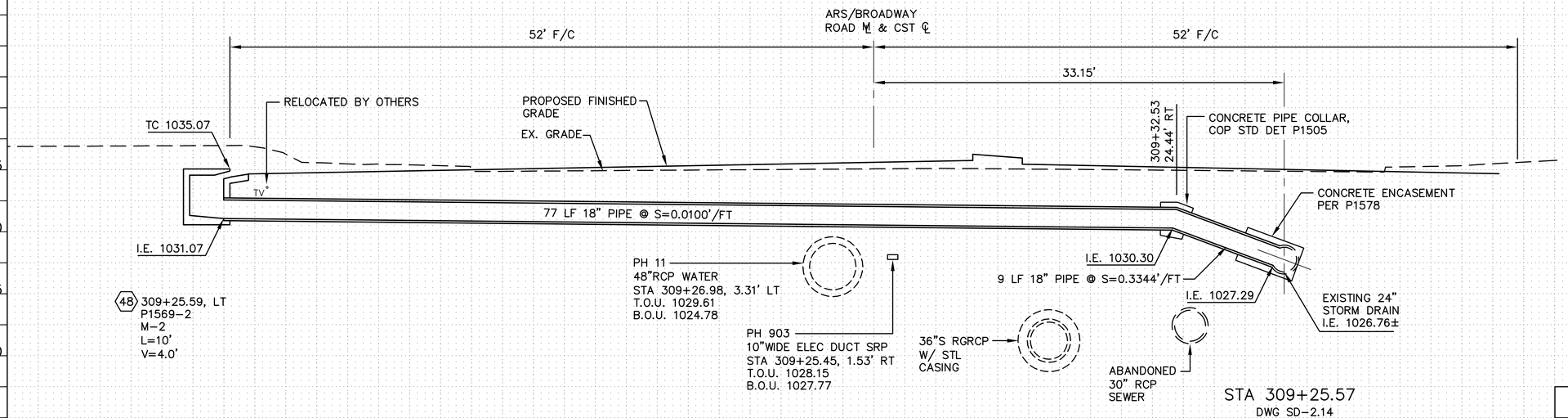


STA 309+25.57
DWG SD-2.14



STA 309+25.57
DWG SD-2.14

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CATCH BASIN CONNECTOR PIPE PROFILE

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	
JG	MVL	SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=5' VERT 1"=5'			CP-1.14

ST85100371 CP 1 SERIES SHEETS.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

STORM DRAIN
ALTERNATE PIPE MATERIAL

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	96	164	

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REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

MAIN LINE PIPE

STATION FROM	STATION TO	QUANTITY L.F.	PIPE DIAMETER R.C.P. (I.D.) IN.	PIPE DIAMETER HDPE ** (I.D.) IN.	PIPE DIAMETER CIPP & C.S.P. (I.D.) IN.	DEPTH TO TOP OF PIPE MIN. (FT.)	DEPTH TO TOP OF PIPE MAX. (FT.)	MAX TRENCH WIDTH AT TOP OF PIPE R.C.P.,C.S.P., & HDPE ** FT.	REINFORCED CONCRETE PIPE * MIN. D-LOAD (TO PRODUCE 0.01" CRACK) (CLASS)	CAST-IN-PLACE CONCRETE PIPE *** MINIMUM WALL THICKNESS IN.	CORRUGATED STEEL PIPES 2 2/3" x 1/2" CORR. MIN. GAGE	CORRUGATED STEEL PIPES 3" x 1" CORR. MIN. GAGE
253+80.80	254+17.08	37	48	48	N/A	3.0	3.3	UNRESTRICTED	850 (V)	N/A	N/A	N/A
254+17.08	256+69.24	251	48	48	N/A	3.6	3.6	UNRESTRICTED	850 (II)	N/A	N/A	N/A
256+69.24	258+60	190	48	48	N/A	3.6	3.8	UNRESTRICTED	850 (II)	N/A	N/A	N/A
258+60	261+82	322	48	48	N/A	3.8	3.9	UNRESTRICTED	850 (II)	N/A	N/A	N/A
261+82	266+14.88	433	48	48	N/A	3.9	4.5	UNRESTRICTED	950 (II)	N/A	N/A	N/A
266+14.88	270+00	385	48	48	N/A	4.5	6.1	UNRESTRICTED	1250 (III)	N/A	N/A	N/A
270+00	273+92	392	48	48	N/A	4.5	6.1	UNRESTRICTED	1250 (III)	N/A	N/A	N/A
273+92	277+34.29	342	48	48	N/A	3.0	4.5	UNRESTRICTED	950 (II)	N/A	N/A	N/A
277+34.29	278+90	157	48	48	N/A	3.1	3.6	UNRESTRICTED	850 (II)	N/A	N/A	N/A
278+90	281+40.89	251	48	48	N/A	2.7	3.1	UNRESTRICTED	850 (II)	N/A	N/A	N/A
281+40.89	284+70	329	48	48	N/A	3.1	3.1	UNRESTRICTED	850 (II)	N/A	N/A	N/A
284+70	288+73.22	482	48	48	N/A	3.1	4.0	UNRESTRICTED	850 (II)	N/A	N/A	N/A
288+73.22	289+60	87	48	48	N/A	4.0	4.9	UNRESTRICTED	950 (II)	N/A	N/A	N/A
289+60	292+22.54	263	36	36	N/A	4.9	5.9	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
292+22.54	295+40	317	24	24	N/A	5.9	5.9	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
295+40	298+70	330	24	24	N/A	5.9	6.1	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
298+70	302+00	330	24	24	N/A	5.9	6.1	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
303+50.64	306+23.36	273	24	24	N/A	3.2	5.4	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
306+23.36	307+55.37	138	24	24	N/A	5.4	6.2	UNRESTRICTED	1150 (III)	N/A	N/A	N/A
307+55.37	308+16.70	55	24	24	N/A	6.2	8.2	UNRESTRICTED	1450 (IV)	N/A	N/A	N/A

CONNECTOR PIPE

LOCATION STATION (LT. or RT.)	QUANTITY L.F.	DEPTH TO TOP OF PIPE MIN. (FT.)	DEPTH TO TOP OF PIPE MAX (FT.)	PIPE DIA. R.C.P.,C.S.P., & HDPE ** (I.D.) IN.	R.C.P. * MIN. D-LOAD (TO PRODUCE 0.01" CRACK) (CLASS)	C.S.P. 2 2/3" x 1/2" CORR. ALUMINIZED TYPE "2" MIN. GAGE
254+24.10, RT	18	2.0	4.4	18	1200 (III)	8
254+31.53, LT	33	2.0	4.4	18	1200 (III)	8
255+25, RT	97	2.0	4.8	18	1200 (III)	8
256+69.24, LT	8	2.0	3.8	18	1200 (III)	8
258+60, RT	13	2.0	3.8	18	1200 (III)	8
260+58.37, RT	59	2.0	5.0	18	1200 (III)	8
261+72, LT	34	2.0	5.0	18	1200 (III)	8
261+82, RT	58	2.0	3.8	18	1200 (III)	8
262+40, RT	59	2.0	5.0	18	1200 (III)	8
266+04.88, LT	34	2.0	5.0	18	1200 (III)	8
266+14.88, RT	58	2.0	4.4	18	1200 (III)	8
273+82, RT	59	2.0	5.6	18	1200 (III)	8
273+92, LT	33	2.0	4.4	18	1200 (III)	8
275+75.60, RT	59	2.0	5.0	18	1200 (III)	8
277+34.29, RT	58	2.6	5.0	18	1200 (III)	8
277+80, RT	42	2.0	2.4	18	1200 (III)	8
278+90, RT	4	4.1	4.3	18	1000 (II)	8
278+90, RT	44	2.0	4.1	18	1200 (III)	8
281+40.89, RT	32	2.0	3.6	18	1200 (III)	8
284+70, RT	41	2.0	3.6	18	1200 (III)	8
285+85.77, RT	9	2.0	3.5	18	1200 (III)	8
286+01.91, RT	31	2.0	3.8	18	1200 (III)	8
288+73.22, RT	28	2.0	3.1	30	1200 (III)	8
289+00, RT	20	2.5	3.0	24	850 (II)	8
289+30, RT	22	2.0	2.5	24	1200 (III)	8
289+60, RT	27	4.2	5.0	30	1000 (II)	8
289+92.36, RT	61	3.3	3.5	30	1200 (III)	8
290+27.97, RT	32	2.5	3.0	30	1000 (II)	8
291+00, RT	29	2.0	6.2	18	1200 (III)	8
292+10, LT	65	2.0	6.5	18	1200 (III)	8
292+22.54, RT	27	3.7	4.5	24	1000 (II)	8
292+46.40, RT	56	2.7	3.0	24	900 (II)	8
292+81.77, RT	32	2.0	2.5	24	1200 (III)	8
293+00, RT	29	2.0	5.5	18	1200 (III)	8
296+90, LT	65	2.0	5.6	18	1200 (III)	8
296+95, RT	29	2.0	5.6	18	1200 (III)	8
302+00, LT	28	2.0	4.0	18	1200 (III)	8
306+23.41, RT	11	2.0	3.2	18	1200 (III)	8
306+23.47, RT	13	2.0	2.0	18	1200 (III)	8
307+50, LT	89	2.0	6.5	18	1200 (III)	8
307+50, RT	17	2.0	6.5	18	1200 (III)	8
307+96.37, LT	8	2.0	6.3	18	1200 (III)	8
308+06.20, RT	12	2.0	6.9	18	1200 (III)	8
308+86.40, RT	65	2.0	7.5	18	1200 (III)	8
309+01.47, RT	13	2.0	2.0	18	1200 (III)	8
309+25.59, LT	86	2.0	6.3	18	1200 (III)	8
309+25.56, RT	19	2.0	6.3	18	1200 (III)	8
43RD AVE 18+72.71, RT	31	2.0	8.0	18	1200 (III)	8

GENERAL NOTES:

1. ONLY PIPE MATERIALS SPECIFIED ON THIS SHEET ARE ACCEPTABLE FOR THIS PROJECT.
2. WHERE MAXIMUM TRENCH WIDTH IS NOTED AS "UNRESTRICTED", PIPE STRENGTHS ARE SPECIFIED FOR A POSITIVE PROJECTING OR EMBANKMENT LOADING CONDITION. TRENCH WIDTH RESTRICTIONS FOR THE CAST-IN-PLACE CONCRETE PIPE OPERATION, SHALL COMPLY WITH SECTION 620.
3. CITY POLICY REQUIRES THAT CAST-IN-PLACE PIPE AND CORRUGATED STEEL PIPE MAINLINES BE UPSIZED A MINIMUM OF 6-INCHES GREATER DIAMETER THAN THE SPECIFIED REINFORCED CONCRETE PIPE DIAMETER. IF EITHER OF THESE OPTIONS ARE USED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESOLVING ANY UTILITY CONFLICTS ASSOCIATED WITH THE INCREASED PIPE DIAMETER. MINIMUM WALL THICKNESS FOR CAST-IN-PLACE PIPE SHALL BE 1/12 OF INSIDE DIAMETER PLUS ONE INCH, BASED ON THE UPSIZED DIAMETER.
4. A MINIMUM OF 14 GAUGE IS REQUIRED FOR ALL CSP BY CITY OF PHOENIX TO OBTAIN DESIGN LIFE REQUIREMENTS OF 75 YEARS TO FIRST PERFORATION.
5. WHERE NEW MAINLINE STORM DRAIN CONNECTION TO EXISTING MAINLINE SYSTEM IS REQUIRED, AND THE NEW MAINLINE IS LARGER THAN THE EXISTING, (SUCH AS NEW 6" OVERSIZED CIPP OR CSP CONNECTING TO EXISTING RGRCP), PIPE INVERTS SHALL BE MATCHED. IN ALL OTHER CASES, INSIDE TOP OF PIPE (CROWN) ELEVATIONS SHALL BE MATCHED.
6. MAX TRENCH WIDTH AT TOP OF PIPE SHALL BE BASED ON MAG PAY WIDTH ON PROJECTS WITH MINIMUM PAVEMENT REPLACEMENT ("PATCH"). ON PROJECTS WITH NEW FULL PAVEMENT (SUCH AS MAJOR ARTERIAL STREET CONSTRUCTION PROJECTS), THE MAX TRENCH WIDTH SHALL BE LABELED, "UNRESTRICTED".

* RUBBER GASKETED PIPE REQUIRED FOR ALL REINFORCED CONCRETE PIPE

** HIGH DENSITY POLYETHYLENE (HDPE), TYPE "S" WITH WATERTIGHT JOINTS PER AASHTO 252, AASHTO M294, MAG AND CITY SUPPLEMENTS TO MAG. JOINTS SHALL MEET ASTM D-3212 WATERTIGHT REQUIREMENT (10.8 psi). MAXIMUM DIAMETER ALLOWED = 48-INCH.

*** THE MINIMUM DIAMETER FOR CIPP IS 30 INCHES

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STORM DRAIN
ALTERNATE PIPE CHART

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N.T.S. VERT			AP-1.01

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

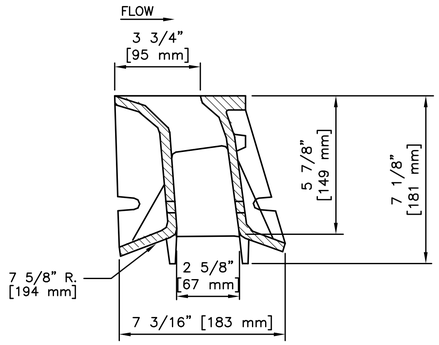
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	97	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

Registered Professional Engineer
CERTIFICATE NO.
25972
MICHAEL V. HEFTON
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-19

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



SECTION A-A
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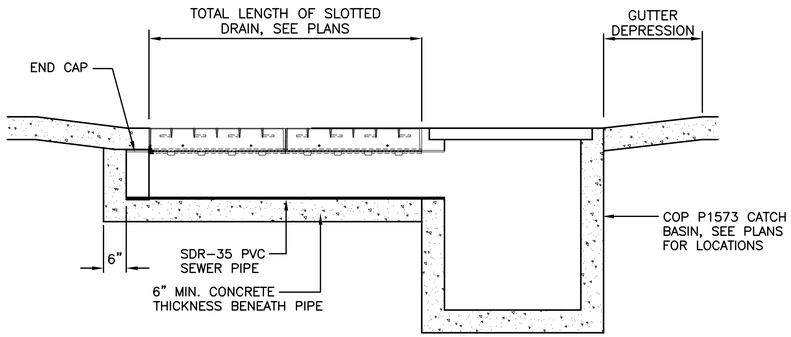
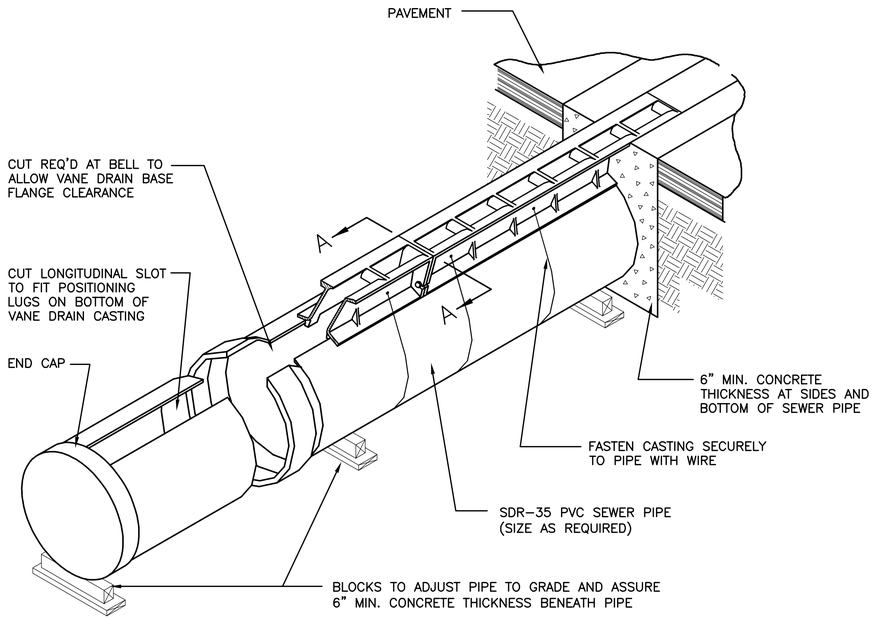


SLOTTED VANE DRAIN TO CATCH BASIN CONNECTION
NO SCALE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



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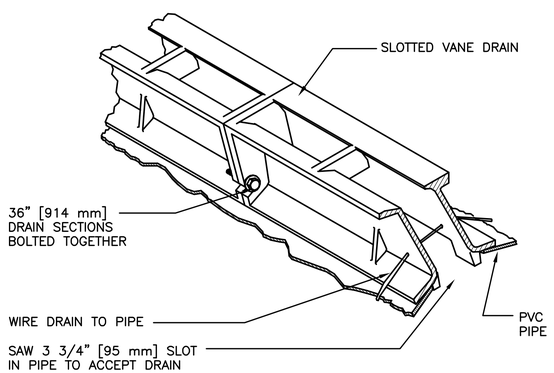


REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

SPECIFICATIONS

G-NEENAH FOUNDRY R-3599
SLOTTED VANE DRAIN OR APPROVED EQUIVALENT
CAST GRAY IRON:
ASTM A48 (AASHTO M105 AND AASHTO M306)
CLASS 35B
CONTRACTOR TO SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.

"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."

SPECIAL DETAILS - STORM DRAIN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ NO SCALE VERT			DD-1.01

ST85100371 DD-1_01.DWG

AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	98	164	

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/14/2016
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QTY	COMMENTS
	TREES				
	ACACIA STENOPHYLLA	SHOESTRING ACACIA	24" BOX (2" CALIPER)	136	SINGLE-TRUNK, DENSE CANOPY
	CHILOPSIS LINEARIS	'DORIS DAY' WILLOW	24" BOX (2" CALIPER)	96	SINGLE-TRUNK, DENSE CANOPY
	EUCALYPTUS MICROTHECA	COOLIBAH	24" BOX (2" CALIPER)	18	SINGLE-TRUNK, DENSE CANOPY
	QUERCUS V. 'CATHEDRAL'	HERITAGE OAK	48" BOX (3" CALIPER)	27	SINGLE-TRUNK, DENSE CANOPY
	SOPHORA SECUNDIFLORA	TEXAS MOUNTAIN LAUREL	24" BOX (2" CALIPER)	13	MULTI-TRUNK, DENSE CANOPY
	ACCENTS				
	AGAVE DESMETTIANA	AGAVE	5-GAL	163	AS PER PLAN
	ALOE X 'BLUE ELF'	BLUE ELF ALOE	5-GAL	428	AS PER PLAN
	EUPHORBIA ANTISYPHILITICA	CANDELILLA	5-GAL	269	AS PER PLAN
	HESPERALOE PARVIFLORA 'PERPA'	BRAKELIGHTS RED YUCCA	5-GAL	319	AS PER PLAN
	NOLINA MICROCARPA	BEAR GRASS	5-GAL	313	AS PER PLAN
	YUCCA PALLIDA	PALE LEAF YUCCA	5-GAL	37	AS PER PLAN
	SHRUBS				
	EREMOPHILA MACULATA	VALENTINE	5-GAL	117	AS PER PLAN
	LEUCOPHYLLUM ZYGOPHYLLUM 'CIMMARRON'	BLUE RANGER	5-GAL	262	AS PER PLAN
	GROUND COVERS				
	LANTANA 'NEW GOLD'	NEW GOLD LANTANA	1-GAL	482	AS PER PLAN
	LANTANA MONTEVIDENSIS	TRAILING LANTANA	1-GAL	155	AS PER PLAN
	TETRANEURIS ACAULIS	ANGELITA DAISY	1-GAL	462	AS PER PLAN

MISCELLANEOUS

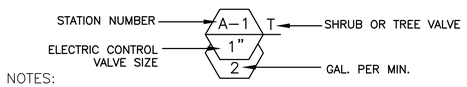
DECOMPOSED GRANITE – PLANTING AND DISTURBED AREAS SIZE: 3/4" MINUS, COLOR: EXPRESS BROWN 2" DEPTH IN ALL PLANTING AND DISTURBED AREAS (TYP)

BACK OF CURB TO SIDEWALK – 85,662 SQ. FT.
BACK OF SIDEWALK TO ROW – 67,258 SQ. FT.

SIGHT VISABILITY TRIANGLE

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
A B	CONTROLLER: RAINMASTER EAGLE, I-CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT.INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL. 5, SHT. LD-1.04
	**NOTE: OWNER TO FIELD VERIFY ALL FINAL CONTROLLER LOCATIONS WITH LANDSCAPE CONTRACTOR PRIOR TO THE START OF LANDSCAPE CONSTRUCTION. COORDINATE LOCATIONS WITH NEW ELECTRICAL SERVICES FOR CONTROLLERS. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
M	WATER METERS – FIELD VERIFY PRIOR TO LANDSCAPE CONSTRUCTION. REFER TO TECHNICAL PROVISIONS FOR ADDITIONAL INFORMATION ON LOCATIONS.
E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL, SEE DTL 3, SHT LD-1.05
	SCH. 40 PVC MIN. MAINLINE SIZE NOTED ON PLAN REF DETAIL 6, SHEET LD-1.05
TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DETAIL 6, SHEET LD-1.05
	SCH. 40 PVC SLEEVES UNDER PAVED AREAS FOR ALL IRRIGATION LINES REF. DETAIL 6, SHEET LD-1.05. PLACE PULL BOX AT EACH END OF ALL SLEEVES EXCEPT THOSE SLEEVES UNDER SIDEWALK ONLY.
	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL REF DETAIL 4, SHEET LD-1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DETAIL 2, SHEET LD-1.04
	DRIP VALVE ASSEMBLY: REF. DETAIL 3, SHEET LD-1.04 CONTROL VALVE: RAINBIRD EFB-CP, ELECTRIC VALVES: SIZE PER PLAN IN-LINE PRESSURE REGULATOR: SENNINGER PRODUCTS PMR-LF 30 PSI Y-STRAINER: AGRICULTURAL PRODUCTS INC. 4E-1"-B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI-OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DETAIL 1 & 2, SHEET LD-1.05
	FLUSH VALVE – REF DETAIL 6, SHEET LD-1.04



NOTES:

1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J-BOX.
2. POINT OF CONNECTION– USE TYPE 'K' COPPER MINIMUM 5' BETWEEN SOURCE AND PRESSURE VACUUM BREAKER.
3. IRRIGATION VALVES, MAINLINE, AND LATERALS ARE SHOWN DIAGRAMMATICALLY. ALL COMPONENTS TO BE LOCATED WITHIN PLANTING AREAS.

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

"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 THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

LANDSCAPE AND IRRIGATION SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
NTS			LD-1.01

ST85100371(004)

R:\Phoenix\Projects\AZE1504_PhoenixOn-CallEngineering_ConsultingServices_FiscalYears2015-2016\03_ARS_Phasell_Repackaging\CADD\Sheets\Landscape\ST85100333LD01.dwg jperillo Nov 14, 2016 – 1:18pm

AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	99	164	

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
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REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

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NO.	DESCRIPTION	REV BY	CKD BY	DATE

GENERAL NOTES

1. THESE NOTES ARE TO BE USED FOR GENERAL REFERENCE IN CONJUNCTION WITH AND AS A SUPPLEMENT TO THE WRITTEN SPECIFICATIONS, APPROVED ADDENDUM, AND CHANGE ORDERS ASSOCIATED WITH THESE LANDSCAPE DRAWINGS.
2. A QUALIFIED SUPERVISOR SHALL BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION.
3. BEFORE WORK BEGINS ON THE PROJECT, THE LANDSCAPE CONTRACTOR SHALL REVIEW THE PROJECT WITH THE LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE. THE LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE SHALL APPROVE ANY OR ALL CHANGES PRIOR TO THE START OF ANY WORK.
4. LANDSCAPE CONTRACTOR SHALL INSPECT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE ALL SIDEWALK AND CURB DEFECTS PRIOR TO BEGINNING WORK. ALL HARDSCAPE SHALL BE RE-INSPECTED DURING THE FINAL WALK-THRU. ANY SUBSEQUENT DAMAGED AREAS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. VERIFY CRITICAL DIMENSIONS, REFERENCE POINT LOCATIONS, AND CONSTRUCTION CONDITIONS PRIOR TO INITIATING CONSTRUCTION., NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ALL CONSTRUCTION ELEMENT LOCATIONS WITH OTHER TRADES PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE LOCATIONS OF EXISTING AND FUTURE UNDERGROUND SERVICES AND IMPROVEMENTS WHICH MAY CONFLICT WITH THE WORK TO BE DONE. CONTACT BLUE STAKE AT 602-263-1100, 72 HOURS MINIMUM PRIOR TO INITIATING CONSTRUCTION. NOTIFY THE OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY SHOULD CONFLICTS ARISE.
7. OBSERVATION VISITS TO THE JOB SITE BY THE LANDSCAPE ARCHITECT DO NOT INCLUDE INSPECTIONS OF CONSTRUCTION METHODS AND SAFETY CONDITIONS AT THE WORK SITE. THESE VISITS SHALL NOT BE CONSTRUED AS CONTINUOUS AND DETAILED INSPECTIONS.
8. UNLESS OTHERWISE NOTED ON PLANS, DECOMPOSED GRANITE SHALL EXTEND UNDER SHRUBS AND BE RAKED UNIFORMLY ALONG WALK, SIDEWALK, AND CURBS.
9. LANDSCAPE CONTRACTOR SHALL PROVIDE BARRICADES AND TRAFFIC CONTROL ALONG PUBLIC STREETS IF REQUIRED DURING INSTALLATION.
10. REFER TO THE ENGINEERING DRAWINGS FOR DRAINAGE FLOWS. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE THAT THESE ARE MAINTAINED AND NOT IMPAIRED WITH OBSTRUCTIONS.
11. LANDSCAPE CONTRACTOR TO CONTACT LANDSCAPE ARCHITECT AND/OR OWNER'S AUTHORIZED REPRESENTATIVE BEFORE EACH APPLICATION OF PRE-EMERGENT FOR VERIFICATION.
12. PRE-EMERGENT IS TO BE PLACED IN ALL PLANTING AREAS PER MANUFACTURERS RECOMMENDATIONS PRIOR TO INSTALLATION OF DECOMPOSED GRANITE AND AFTER INSTALLATION OF DECOMPOSED GRANITE.

PLANTING NOTES

1. CLARIFICATION OF DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE SITE SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
2. ALL PLANT MATERIAL MUST MEET ANA SPECIFICATIONS.
3. THE LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL HE DEEMS UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE INSPECTED PRIOR TO INSTALLATION.
4. PLANTS TO BE LOCATED AWAY FROM OBSTACLES SUCH AS FIRE HYDRANTS, TRANSFORMERS, POWER POLES, AND LIGHT FIXTURES AS NECESSARY. DO NOT INSTALL PLANT MATERIAL IN ANY AREA WHICH WILL CAUSE HARM TO ADJACENT IMPROVEMENTS.
5. VERIFY PLANT QUANTITIES PRIOR TO INSTALLATION. QUANTITIES ARE LISTED FOR CONVENIENCE ONLY, THE ACTUAL NUMBER OF SYMBOLS INDICATED ON THE PLANTING PLANS SHALL HAVE PRIORITY OVER QUANTITIES DESIGNATED. NOTIFY THE LANDSCAPE ARCHITECT OF QUANTITY DISCREPANCIES IMMEDIATELY.
6. PLANT TREES, SHRUBS, AND CACTI PLUMB, AND FACED TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT PLANTS OR VIEWS.
7. NOTIFY OWNER AND LANDSCAPE ARCHITECT IMMEDIATELY SHOULD SOIL CONDITIONS BE PRESENT WHICH WOULD PREVENT PROPER SOIL DRAINAGE AND ALLOW WATER TO STAND IN PLANTING PITS.
8. DOUBLE STAKE ALL TREES OUTSIDE ROOTBALL., EXCEPT FOR SALVAGED TREES.
9. LANDSCAPE CONTRACTOR TO PERFORM A SOILS TEST PRIOR TO LANDSCAPE CONSTRUCTION TO DETERMINE ANY NUTRIENT DEFICIENCIES. IF ANY DEFICIENCIES EXIST, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AMEND THE SOIL ACCORDINGLY.

IRRIGATION NOTES

1. ALL IRRIGATION EQUIPMENT TO BE LOCATED IN LANDSCAPE AREAS WITHIN ROW BOUNDARIES OF THE PROJECT – ALL LINES AND EQUIPMENT ARE SCHEMATIC AND ARE SOMETIMES SHOWN IN ROADWAYS, SIDEWALKS, OR OUTSIDE PROPERTY LINES. THIS IS DONE FOR CLARITY PURPOSES ONLY.
2. 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. 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 REVISIONS NECESSARY.
3. THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM SOURCE PRESSURE OF xx PSI, A MINIMUM OPERATING PRESSURE OF xx PSI, AND A MAXIMUM FLOW DEMAND OF xx GPM. THE CONTRACTOR SHALL VERIFY WATER PRESSURES 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 ARCHITECT IMMEDIATELY.
4. ALL MATERIAL USED SHALL BE INSTALLED AS DETAILED. ALL IRRIGATION EQUIPMENT NOT OTHERWISE DETAILED OR SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT SHALL APPROVE ALL DEVIATION'S FROM DRAWINGS OR MATERIALS USED.
5. 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.
6. INSTALL BACKFLOW PREVENTION UNIT(S) PIPING BETWEEN THE POINT OF CONNECTION AND THE BPU PER LOCAL CODES. THE OWNER'S AUTHORIZED REPRESENTATIVE SHALL APPROVE THE FINAL LOCATION OF THE BPU. BACKFLOW PREVENTOR MUST BE SCREENED FROM VIEW.
7. 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.
8. 24 VOLT WIRE SHALL BE 600V, UF, UL APPROVED, #14 GAUGE, SINGLE STRAND, PLASTIC INSULATED, COPPER WIRE. COMMON WIRE IS TO BE WHITE, CONTROL WIRE IS TO BE RED (USE NO BLACK WIRE). TAPE AND BUNDLE WIRE AT 10' ON CENTER. LAY BESIDE MAINLINE. SPLICE IN VALVE BOXES ONLY, USING MANUFACTURED EPOXY OR RESIN FILLED WIRE CONNECTORS. PROVIDE 18" SLACK AT EACH ELBOW IN MAIN LINE AND AT EACH REMOTE CONTROL VALVE. PULL ONE ADDITIONAL SPARE WIRE TO THE MOST DISTANT VALVE LOCATION FOR POTENTIAL FUTURE USE. COLOR OF EXTRA WIRE SHALL BE YELLOW.
9. LEVEL OF PEA GRAVEL IN IRRIGATION BOXES SHALL BE A MINIMUM OF 2" BELOW THE BOTTOM OF THE VALVE SO THAT THE VALVE IS COMPLETELY VISIBLE. ALL PEA GRAVEL IN VALVE BOX TO BE CLEANED FROM TOP OF VALVE SO THAT VALVE IS COMPLETELY VISIBLE. LIP OF VALVE BOX IS ALSO TO BE FREE OF DEBRIS.
10. LOCATE PRESSURE REGULATOR AND 'Y' STRAINER IN A VALVE BOX AS REQUIRED. REMOTE CONTROL VALVE TO BE LOCATED IN A SEPARATE (ADJACENT) VALVE BOX, OR A JUMBO VALVE BOX MAY BE USED IN LIEU OF TWO SEPARATE BOXES.
11. ALL DRIP SYSTEMS TO BE FLUSHED THROUGH FLUSH CAPS. FLUSH CAPS TO BE LOCATED IN 10" ROUND ECONOMY BOXES.
12. THE CONTRACTOR SHALL PROVIDE CHECK VALVES AND AIR VACUUM RELIEF VALVES AS REQUIRED, OR AT THE DISCRETION OF THE LANDSCAPE ARCHITECT, THROUGHOUT THE IRRIGATION SYSTEM LOCATED WITHIN SLOPED AREAS TO PREVENT LOW IRRIGATION HEAD DRAINAGE.
13. PIPE SIZES SHALL CONFORM TO THOSE SHOWN ON THE DRAWINGS AND PER PIPE SIZING SCHEDULE ON DETAIL SHEET. IF THERE IS A DISCREPANCY BETWEEN THE PIPE SIZES SHOWN ON THE PLAN AND THOSE OUTLINED IN THE PIPING SCHEDULE, THE SCHEDULE SHALL TAKE PRECEDENCE. NO SUBSTITUTIONS OF SMALLER PIPE SIZES SHALL BE PERMITTED BUT SUBSTITUTIONS OF LARGER SIZES MAY BE APPROVED BY THE LANDSCAPE ARCHITECT.
14. ALL PIPE SHALL BE BEDDED ON ALL SIDES WITH FOUR INCHES OF ROCK FREE (3/8" MINUS) MATERIAL IMPORT SAND IF NECESSARY. BACKFILL IN TWO OR MORE COMPACTED LIFTS. SETTLING OF TRENCHES BY MORE THAN AN INCH SHALL BE BROUGHT TO FINISH GRADE AT THE CONTRACTOR'S EXPENSE.
15. ALL IRRIGATION LINES ON SLOPES OR WITHIN RETENTION BASINS SHALL BE RUN PARALLEL WITH GRADE AND ARE TO MAINTAIN THE HIGHEST ELEVATIONS POSSIBLE AT ALL TIMES.
16. MULTI-OUTLET EMITTERS SHALL SERVICE ALL TREES AND SHRUBS AND/OR GROUNDCOVERS.
17. ALL PLANTS THAT REQUIRE MORE THAN ONE DRIP EMITTER SHALL HAVE EMITTERS DISTRIBUTED EVENLY AROUND PERIMETER OF PLANTING WELL. EMISSION POINTS AT ROOTBALLS SHALL BE LOCATED ON THE UPHILL SIDE, MIDWAY BETWEEN THE CENTER OF THE PLANT AND THE EDGE OF THE ROOTBALL.
18. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL LANDSCAPE SLEEVING. COORDINATE INSTALLATION WITH THE GENERAL CONTRACTOR. VERIFY ANY EXISTING SLEEVES INSTALLED BY OTHER CONTRACTORS.
19. IRRIGATION AND ELECTRICAL SLEEVES TO BE SCHEDULE 40 PVC. ALL SLEEVES TO EXTEND AT LEAST 12" BEYOND CONCRETE STRUCTURES. ALLOW AT LEAST 4" – 6" FROM END OF SLEEVES TO FIRST FITTING ON IRRIGATION LINE. ALL SLEEVES TO BE 24" BELOW GRADE AND/OR AS PER OWNER'S SPECIFICATIONS. ALL SLEEVES UNDER PARKING LOTS, STREETS, STAGING AREAS, AND PATIOS TO BE INSTALLED BY PAVING CONTRACTOR PRIOR TO PAVING.
20. NOTIFY THE OWNER'S REPRESENTATIVE 48 HOURS PRIOR TO THE FOLLOWING REQUIRED STAGES OF OBSERVATION FOR:
    MAINLINE: Installation, depth, valves, wire, line pressure test
    EMITTER LATERALS: Installation, depth, valves, emitters, outlet tubing, at line pressure
    CONTROLLER: Installation, functioning
21. PRIOR TO OWNER'S APPROVAL, AN IRRIGATION "TUNE UP" MUST BE PERFORMED AS FOLLOWS:
    A. ALL IRRIGATION EQUIPMENT (INCLUDING ALL PIPELINES AND SLEEVES) TO BE DOCUMENTED FROM TWO STATIONARY POINTS.
    B. ALL DRIP SYSTEMS TO BE FLUSHED BEGINNING WITH "Y" STRAINER, WORKING AWAY FROM THE PRESSURE REGULATOR.
    C. IRRIGATION VALVES TO BE LABELED ON A SHEET OF PAPER WITH STATIONS CORRESPONDING TO ETCHED LABELS ON TOP OF VALVE BOXES. THIS SHEET TO BE PLACED IN A PLASTIC POUCH AND ATTACHED TO INSIDE OF CONTROLLER.
22. LOCATE VALVE BOXES IN PLANTING AREAS SO THAT THEY ARE SCREENED FROM VIEW. NO VALVE BOXES SHALL BE LOCATED IN TURF AREAS.

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

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LANDSCAPE AND IRRIGATION NOTES

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE: 11/16	DATE: 11/16	DATE: 11/16	
NTS			LD-1.02

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	100	164	

27437 STEVEN E. LOHIDE
DATE Signed 11/1/2016
REGISTERED LANDSCAPE ARCHITECT
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

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NO.	DESCRIPTION	REV BY	CKD BY	DATE

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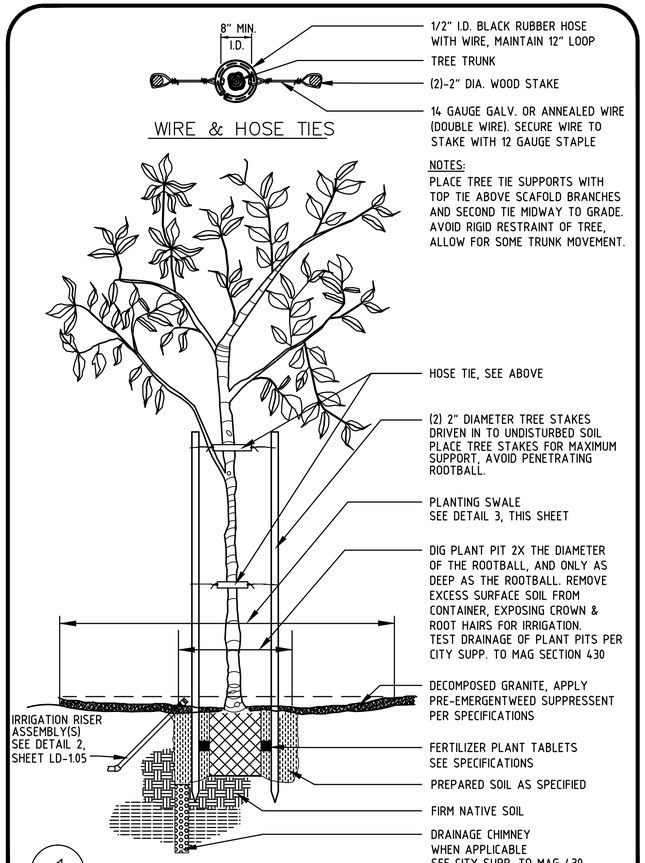
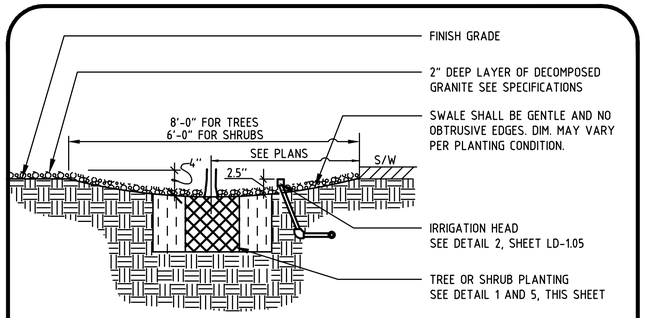
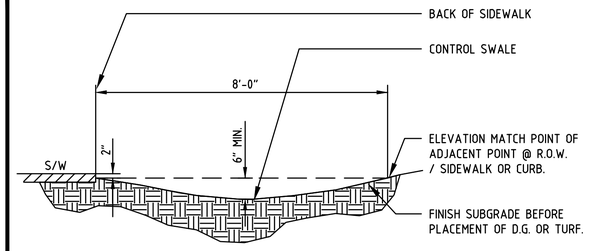


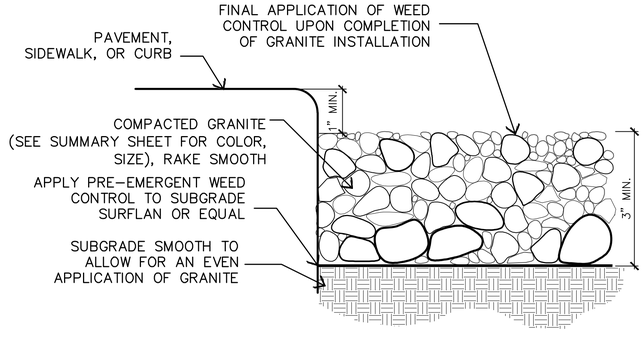
1 *TREE PLANTING & STAKING*
NOT TO SCALE PLT-TRE-02



3 *PLANTING DETAIL*
NOT TO SCALE PLT-SWL-01

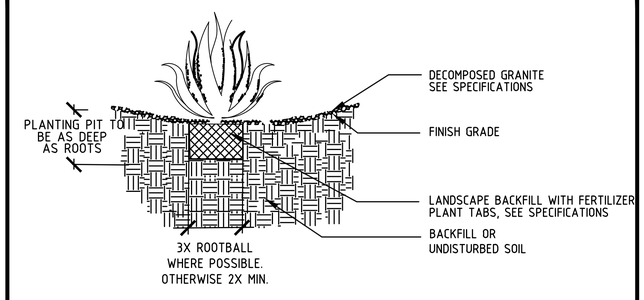


4 *NUISANCE WATER CONTROL SWALE*
NOT TO SCALE PLT-SWL-02



NOTE: PROVIDE GRANITE SAMPLE (1 CF) TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

2 DECOMPOSED GRANITE
SCALE: N.T.S. LD-4



5 *SHRUB, GROUNDCOVER & ACCENT PLANTING DETAIL*
NOT TO SCALE PLT-ACCENT DETAIL

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LANDSCAPE DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 100

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
NTS			LD-1.03

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	101	164	

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

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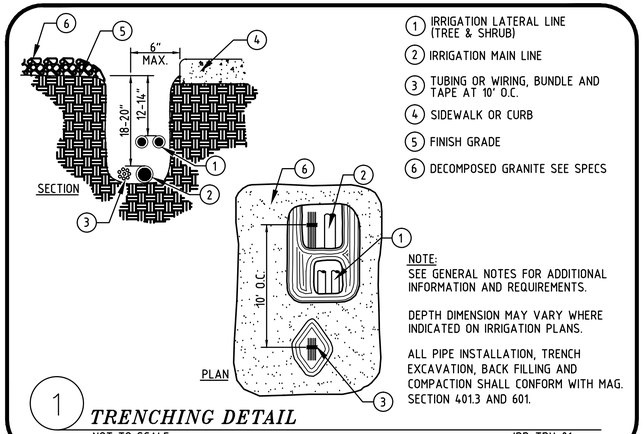


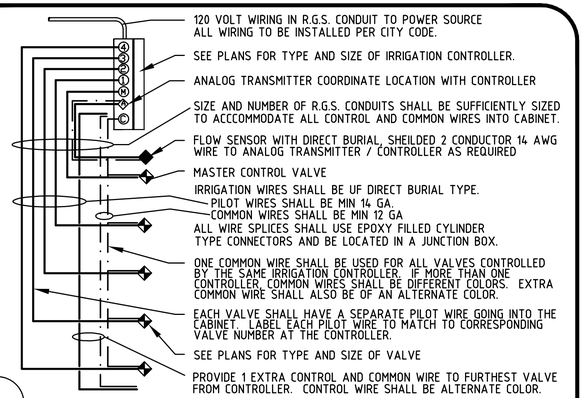
1. IRRIGATION LATERAL LINE (TREE & SHRUB)
2. IRRIGATION MAIN LINE
3. TUBING OR WIRING, BUNDLE AND TAPE AT 10' O.C.
4. SIDEWALK OR CURB
5. FINISH GRADE
6. DECOMPOSED GRANITE SEE SPECS

NOTE:
SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

DEPTH DIMENSION MAY VARY WHERE INDICATED ON IRRIGATION PLANS.

ALL PIPE INSTALLATION, TRENCH EXCAVATION, BACK FILLING AND COMPACTION SHALL CONFORM WITH MAG. SECTION 401.3 AND 601.

1 *TRENCHING DETAIL*
NOT TO SCALE IRR-TRH-01



120 VOLT WIRING IN R.G.S. CONDUIT TO POWER SOURCE
ALL WIRING TO BE INSTALLED PER CITY CODE.

SEE PLANS FOR TYPE AND SIZE OF IRRIGATION CONTROLLER.

ANALOG TRANSMITTER COORDINATE LOCATION WITH CONTROLLER

SIZE AND NUMBER OF R.G.S. CONDUITS SHALL BE SUFFICIENTLY SIZED TO ACCCOMMODATE ALL CONTROL AND COMMON WIRES INTO CABINET.

FLOW SENSOR WITH DIRECT BURIAL, SHEILDED 2 CONDUCTOR 14 AWG WIRE TO ANALOG TRANSMITTER / CONTROLLER AS REQUIRED

MASTER CONTROL VALVE

IRRIGATION WIRES SHALL BE UF DIRECT BURIAL TYPE.
PILOT WIRES SHALL BE MIN 14 GA.
COMMON WIRES SHALL BE MIN 12 GA
ALL WIRE SPLICES SHALL USE EPOXY FILLED CYLINDER TYPE CONNECTORS AND BE LOCATED IN A JUNCTION BOX.

ONE COMMON WIRE SHALL BE USED FOR ALL VALVES CONTROLLED BY THE SAME IRRIGATION CONTROLLER. IF MORE THAN ONE CONTROLLER, COMMON WIRES SHALL BE DIFFERENT COLORS. EXTRA COMMON WIRE SHALL ALSO BE OF AN ALTERNATE COLOR.

EACH VALVE SHALL HAVE A SEPARATE PILOT WIRE GOING INTO THE CABINET. LABEL EACH PILOT WIRE TO MATCH TO CORRESPONDING VALVE NUMBER AT THE CONTROLLER.

SEE PLANS FOR TYPE AND SIZE OF VALVE

PROVIDE 1 EXTRA CONTROL AND COMMON WIRE TO FURTHEST VALVE FROM CONTROLLER. CONTROL WIRE SHALL BE ALTERNATE COLOR.

4 *CONTROLLER WIRING*
NOT TO SCALE IRR-CTL-03

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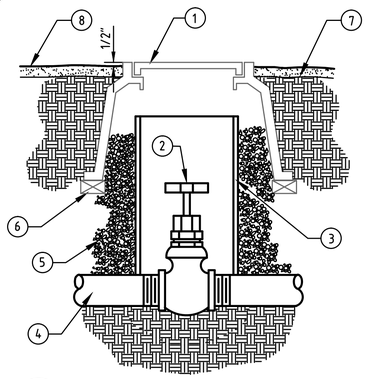


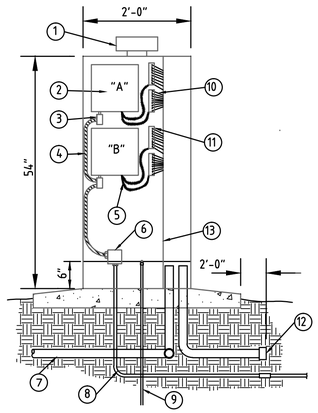
1. VALVE BOX WITH BOLT LOCKING COVER
2. NIBCO T-113 GATE VALVE
3. 6 INCH PVC SEWER PIPE (LENGTH AS REQUIRED)
4. PVC MAIN LINE LATERAL FROM PRESSURE B.F.P.U. OFF METER
5. BACKFILL TO DEPTH OF SEWER PIPE W/3" OF 3/4 INCH WASHED GRAVEL
6. BRICK (1 OF 4)
7. FINISH GRADE
8. DECOMPOSED GRANITE

NOTE:
NOMINAL SIZE OF GATE VALVE TO MATCH NOMINAL SIZE OF MAINLINE PIPE

2 *ISOLATION VALVE–2.5"& SMALLER*
NOT TO SCALE IRR-VAL-04

ENCLOSURE NOTES

- PRE-FABRICATED 10 GA. VANDAL RESISTANT SECURITY ENCLOSURE, 24" WIDE, 18" DEEP, 54" HIGH.
- MOUNT ENCLOSURE ON A 4" THICK CLASS "B" CONCRETE SLAB. PROVIDE 1'-0" WIDE MOWING STRIP ON ALL 4 SIDES.
- TOP OF CONCRETE SLAB 1 1/2" ABOVE FIN. GRADE.
- MOUNT CONTROLLERS & TERMINAL STRIP TO PLY-WOOD BACKBOARD. PROVIDE OPENINGS IN BACK BOARD FOR CONTROL WIRING.
- INSTALL 8' X 5/8" DIA. COPPER CLAMP GROUND ROD. THERMAL WELD #4 BARE CU. TO ENCLOSURE AND ROD.
- ALL R.G.S. IN CONTACT WITH EARTH SHALL BE TAPED WITH SCOTCH WRAP #50, MIN. THICKNESS = 40 MILS.
- STUB OUT ALL CONDUIT FOR CONTROL WIRING 2' BEYOND CONCRETE SLAB. BUSHINGS TYPICAL FOR ALL CONDUIT.
- TAPE CONTROL WIRING INTO NEAT BUNDLES. PROVIDE SLACK IN WIRE BUNDLES.



1. VENT W/BUILT-IN FAN.
2. IRR. CONTROLLER.
3. JUNCTION BOX
4. 1/2" FLEXIBLE CONDUIT
5. PRE-INSTALLED CABLE HARNESS.
6. 20A SINGLE POLE CIRCUIR BREAKER.
7. R.G.S. CONDUIT FOR IRR. CONTROL WIRING
8. 1" R.G.S. CONDUIT FOR POWER SOURCE.
9. GROUNDING ROD.
10. CONTROL WIRING
11. TERMINAL STRIPS.
12. BUSHING.
13. 6" X 12" WIRING GUTTER.

5 *CONTROLLER ENCLOSURE*
NOT TO SCALE IRR-CTL-01

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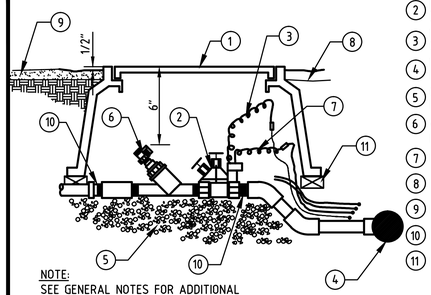
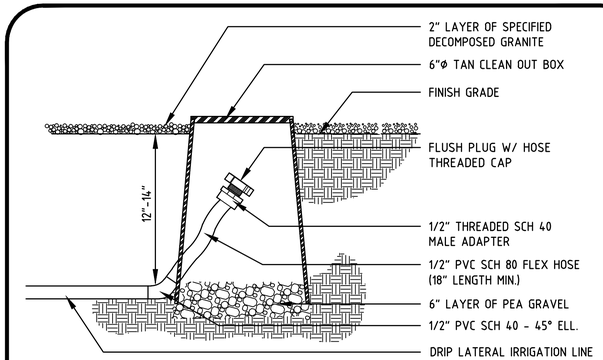


1. JUMBO VALVE BOX W/ BOLT LOCKING COVER
2. ELECT. REMOTE CONTROL VALVE (BRASS)
3. NO.12 COMMON WIRE TO VALVES ON SAME CONTROLLER. (WHITE)
4. MAIN LINE LATERAL FROM PRESSURE B.F.P.U. OFF METER
5. 6" LAYER OF PEA GRAVEL MIN. 1 CU. FT. MATERIAL.
6. WILKINS #500 YSBR 'Y' STRAINER FILTRATION DEVICE
7. NO. 14 CONTROL WIRE (ORANGE).
8. FINISH GRADE
9. DECOMPOSED GRANITE
10. PVC SCH. 80 TOE NIPPLE
11. BRICK (1 OF 4)

NOTE:
SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

3 *EMITTER CONTROL VALVE ASSEMBLY*
NOT TO SCALE IRR-VAL-02



2" LAYER OF SPECIFIED DECOMPOSED GRANITE
6"ø TAN CLEAN OUT BOX
FINISH GRADE
FLUSH PLUG W/ HOSE THREADED CAP
1/2" THREADED SCH 40 MALE ADAPTER
1/2" PVC SCH 80 FLEX HOSE (18" LENGTH MIN.)
6" LAYER OF PEA GRAVEL
1/2" PVC SCH 40 - 45° ELL.
DRIP LATERAL IRRIGATION LINE

6 *FLUSH VALVE W/ CLEAN OUT BOX*
NOT TO SCALE IRR-FLUSH VALVE

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IRRIGATION DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
NTS			LD-1.04

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

PLANT SIZE	FLOW/PER PLANT	EMITTER/BUBBLER	QTY
1 GAL.	1 GPH	BOWSMITH ML-210	(4-5) SHRUBS MAX.
5 GAL.	1 GPH	BOWSMITH ML-210	(4-5) SHRUBS MAX.
15 GAL.	4 GPH	BOWSMITH ML-210	1
24" BOX	6 GPH	BOWSMITH ML-210	2
36" BOX	8 GPH	BOWSMITH ML-210	2
48" BOX	12 GPH	BOWSMITH ML-220	2
54"-72" BOX	16 GPH	BOWSMITH ML-220	3

NOTE:
1. PROVIDE IRRIGATION TO 4-5 SHRUBS MAX PER MULTI PORT EMITTERS. (TYP.)
2. ALL EMITTERS TO BE BOWSMITH MODEL ONLY, NO SUBSTITUTIONS.
3. DO NOT PROVIDE IRRIGATION TO CACTUS.

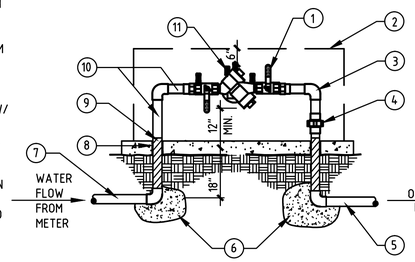
1 EMITTER SIZING SCHEDULE

SCALE: N.T.S.

ID-13

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

NOTE: USE COP SUPPLEMENT DET. 1351 FOR ASSEMBLIES 3" AND OVER



1. BALL VALVE W/ REMOVABLE HANDLE (TYP.)
2. SECURITY CAGE
3. COPPER / 90 ELBOWS
4. BRASS OR COPPER UNION
5. IRRIGATION MAINLINE, CLASS & SIZE PER PLANS AND SPECIFICATIONS.
6. THRUST BLOCKS
7. MAINLINE PIPING METER TO RPBP DEVISE: SCH 80 PVC (EXCEPT WITH IN ROW USE TYPE "L" COPPER)
8. EXPANSION JOINT 1/2" FILLER STRIP
9. WRAP PIPE BELOW GRADE FOR CORROSION PROTECTION PER MAG 753.2
10. COPPER SPOOL (TYPE L) TYP. BETWEEN FITTINGS
11. TEST COCKS W/BRASS PLUGS OR ADAPTORS W/ CAPS INSTALLED. (4 REQUIRED)

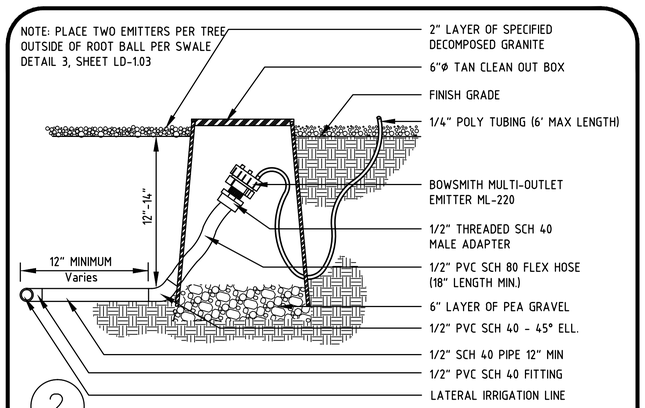
4 *REDUCED PRESSURE BACKFLOW ASSEMBLY(2.5 INCH AND UNDER)*

NOT TO SCALE

IRR-BFP-05

SEAL BY STEVEN LOHIDE IS FOR DETAILS 1,2,4,5,6 THIS SHEET.

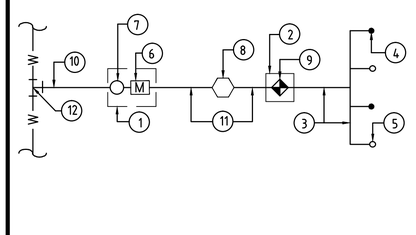
NOTE: PLACE TWO EMITTERS PER TREE OUTSIDE OF ROOT BALL PER SWALE DETAIL 3, SHEET LD-1.03



2 *MULTI-EMITTER-W/ CLEAN OUT BOX*

NOT TO SCALE

IRR-EMT-03



1. CONC. WATER METER BOX, INSTALLED BY CITY OF PHOENIX.
2. PLASTIC VALVE BOX W/LOCKING COVER, 1-VALVE BOX PER VALVE
3. P.V.C. LATERAL -1/2" , 3/4", 1", 1-1/4" SCH 40
4. 1/2 G.P.M. PRESSURE COMPENSATION EMITTER (1-PER TREE).
5. 1/4 G.P.M. PRESSURE COMPENSATION EMITTER (1-PER SHRUB).
6. WATER METER, INSTALLED BY CITY OF PHOENIX.
7. CURB STOP, INSTALLED BY CITY OF PHOENIX.
8. REDUCED PRESSURE TYPE BACKFLOW PREVENTER.
9. ELECTRIC VALVE
10. WATER MAIN.
11. SCHED. 80. PIPE
12. WATER TAP.

5 *WATER SYSTEM SCHEMATIC*

NOT TO SCALE

IRR-SCH-01

NOTE:
ALL PIPE SLEEVES SHALL BE SCHEDULE 40 PVC AND INSTALLED WITH A MINIMUM OFFSET AT THE JOINTS TO PERMIT EASY INSTALLATION AND REMOVAL OF THE IRRIGATION LINES. ALL PLASTIC LINES SHALL BE INSTALLED IN SLEEVES UNDER PAVED AREAS. SLEEVES SHALL EXTEND AT LEAST 12" BEYOND THE EDGES OF THE PAVEMENT. PULL BOXES SHALL BE PLACED AT EACH END OF THE SLEEVE UNLESS SLEEVE IS UNDER SIDEWALK ONLY. SIZE OF SLEEVES SHALL BE AS FOLLOWS:

SLEEVING SCHEDULE

PIPE SIZE	MIN. SLEEVE SIZE	PIPE SIZE	MIN. SLEEVE SIZE
1/2"	2"	2", 2-1/4"	4"
3/4"	2-1/2"	3", 4"	6"
1", 1-1/4", 1-1/2"	3"		

PIPE SIZING SCHEDULE

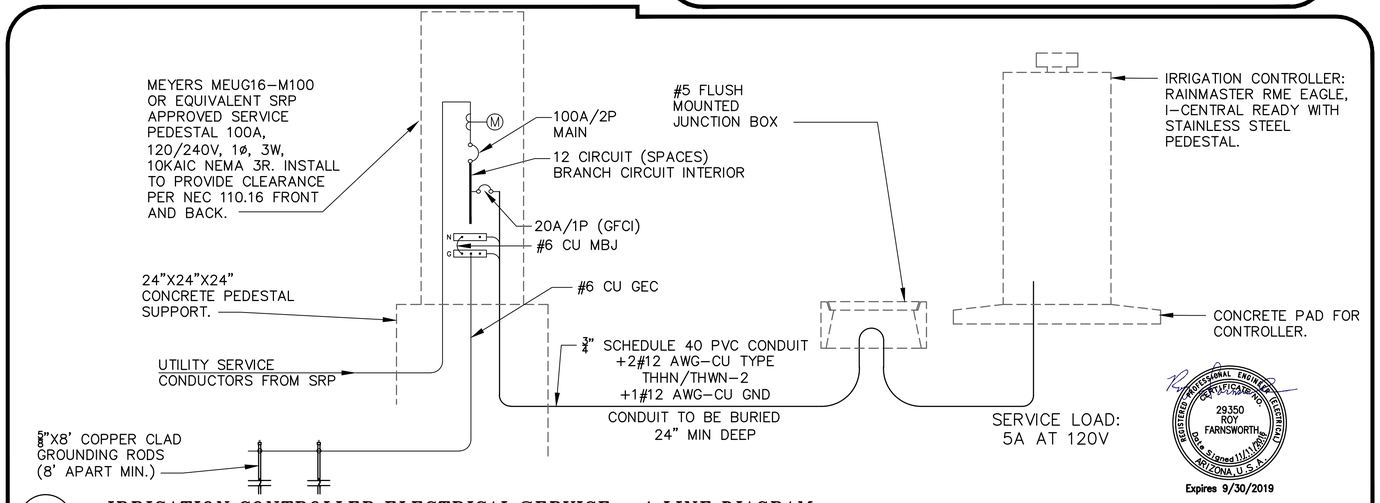
PIPE SIZE	FLOW (GPM)	PIPE SIZE	FLOW (GPM)
1/2"	0 – 5	2"	36 – 60
3/4"	6 – 10	2-1/2"	61 – 80
1"	11 – 15	3"	81 – 120
1-1/4"	16-25	3 1/2"	121 – 150
1-1/2"	26 – 35	4"	151 – 200

NOTE:
ALL MAINLINE PIPE 2 1/2" AND LARGER SHALL BE A MINIMUM CLASS 200 RING-TIGHT PIPE. MAINLINE 2" AND LESS SHALL BE A MINIMUM SCHEDULE 40 PVC. ALL LATERAL PIPE ABOVE 1/2" SHALL BE MINIMUM CLASS 200. ALL 1/2" LATERAL PIPE SHALL BE CLASS 315.

6 SLEEVE/PIPE SIZE

SCALE: N.T.S.

ID-8



3 *IRRIGATION CONTROLLER ELECTRICAL SERVICE – 1 LINE DIAGRAM*

NOT TO SCALE

SEAL BY ROY FARNSWORTH IS FOR DETAIL 3, THIS SHEET.

REGISTERED PROFESSIONAL ENGINEER – CERTIFICATE NO. 29350 – ROY FARNSWORTH – ARIZONA, U.S.A. – Date Signed 11/1/16 – Expires 9/30/2019

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

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IRRIGATION DETAILS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
NTS			LD-1.05

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	102	164	

REGISTERED LANDSCAPE ARCHITECT – 27437 – STEVEN E. LOHIDE – Date Signed 11/1/16 – ARIZONA, U.S.A. – Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

ST85100371(004)

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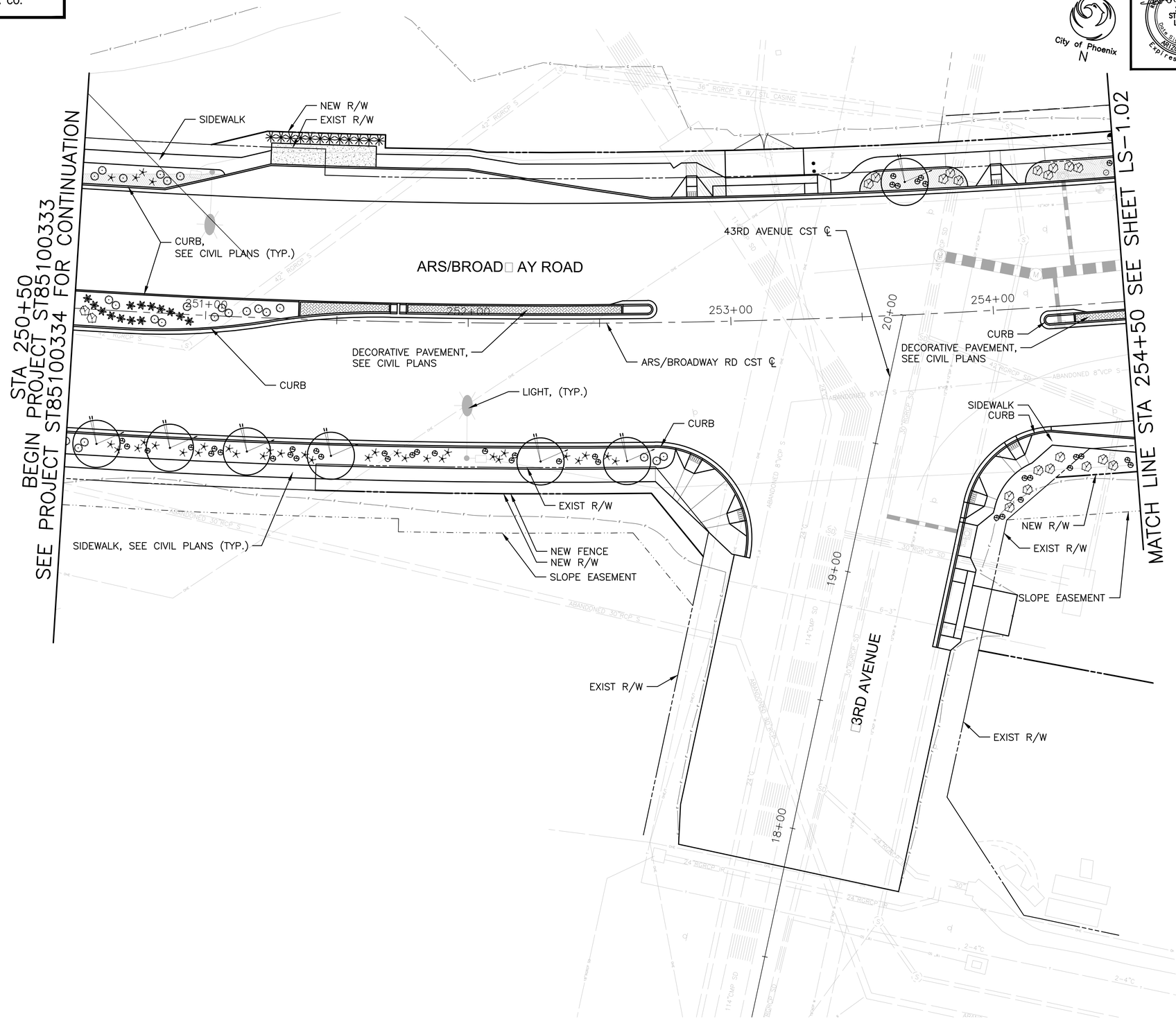
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.



City of Phoenix
N

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/1/2016
ARIZONA, U.S.A.
Expires 09/30/2017

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PLANT SCHEDULE

SYMBOL BOTANICAL NAME

TREES

BOTANICAL NAME
COMMON NAME

- ACACIA STENOPHYLLA
  SHOESTRING ACACIA
- CHILOPSIS LINEARIS
  'DORIS DAY' WILLOW
- EUCALYPTUS MICROTHECA
  COOLIBAH
- QUERCUS V. 'CATHEDRAL'
  HERITAGE OAK
- SOPHORA SECUNDIFLORA
  TEXAS MOUNTAIN LAUREL

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  AGAVE
- ALOE X ''BLUE ELF'
  BLUE ELF ALOE
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  BEAR GRASS
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  PALE LEAF YUCCA

SHRUBS

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  'VALENTINE'
- LEUCOPHYLLUM ZYGOPHYLLUM
  BLUE RANGER 'CIMMARRON'

GROUND COVERS

- LANTANA 'NEW GOLD'
  NEW GOLD LANTANA
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  TRAILING LANTANA
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  ANGELITA DAISY

MISCELLANEOUS

DECOMPOSED GRANITE–PLANTING AND DISTURBED AREAS
BACK OF CURB TO SIDEWALK AND
BACK OF SIDEWALK TO ROW
(SIZE: 3/4" MINUS, COLOR: EXPRESS BROWN)
2" DEPTH IN ALL AREAS (TYP)

SIGHT VISIBILITY TRIANGLE

CALL TWO WORKING DAYS BEFORE YOU DIG
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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-1.01

ST85100371(004)

REVISION BY CITY OF PHOENIX

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

REVISION BY CITY OF PHOENIX

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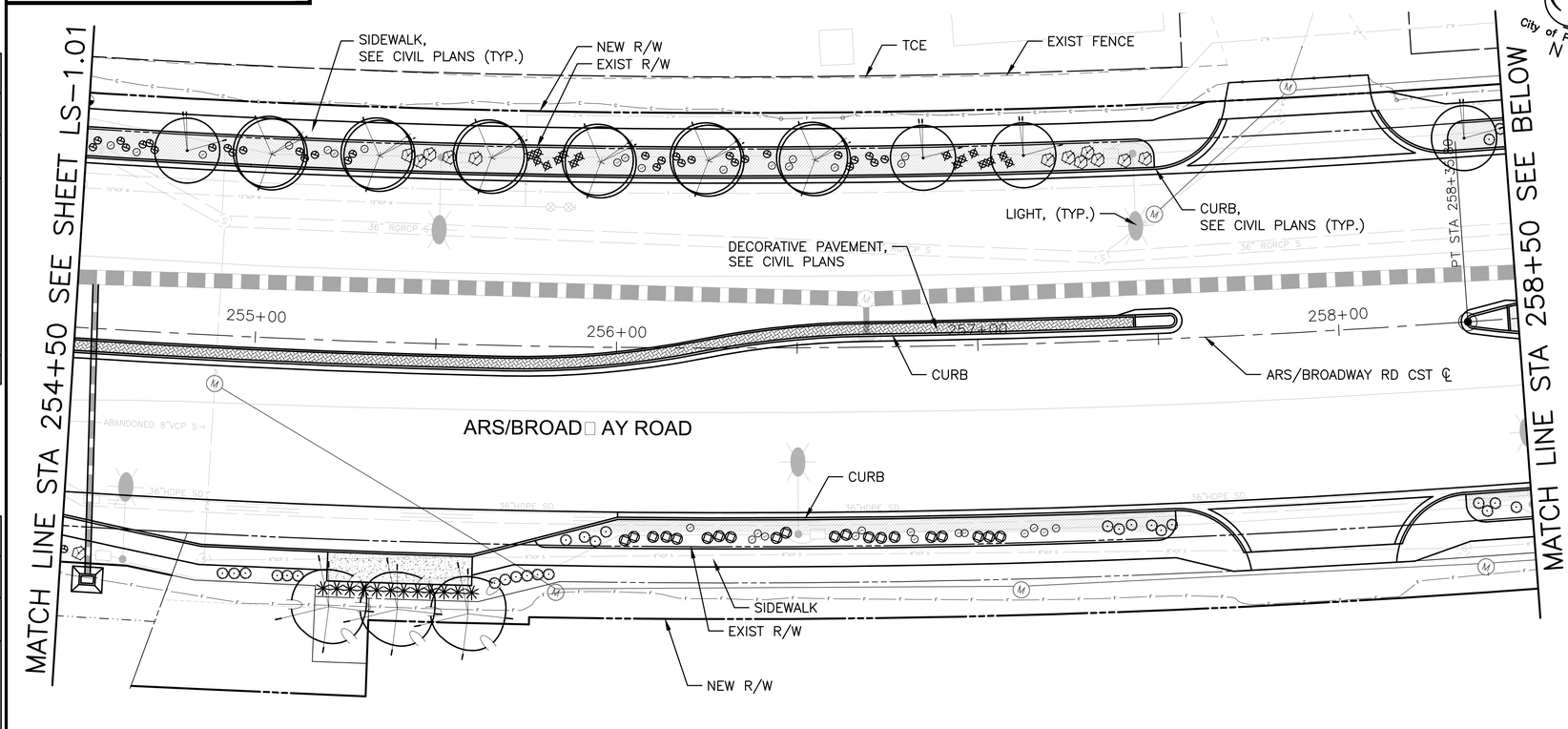

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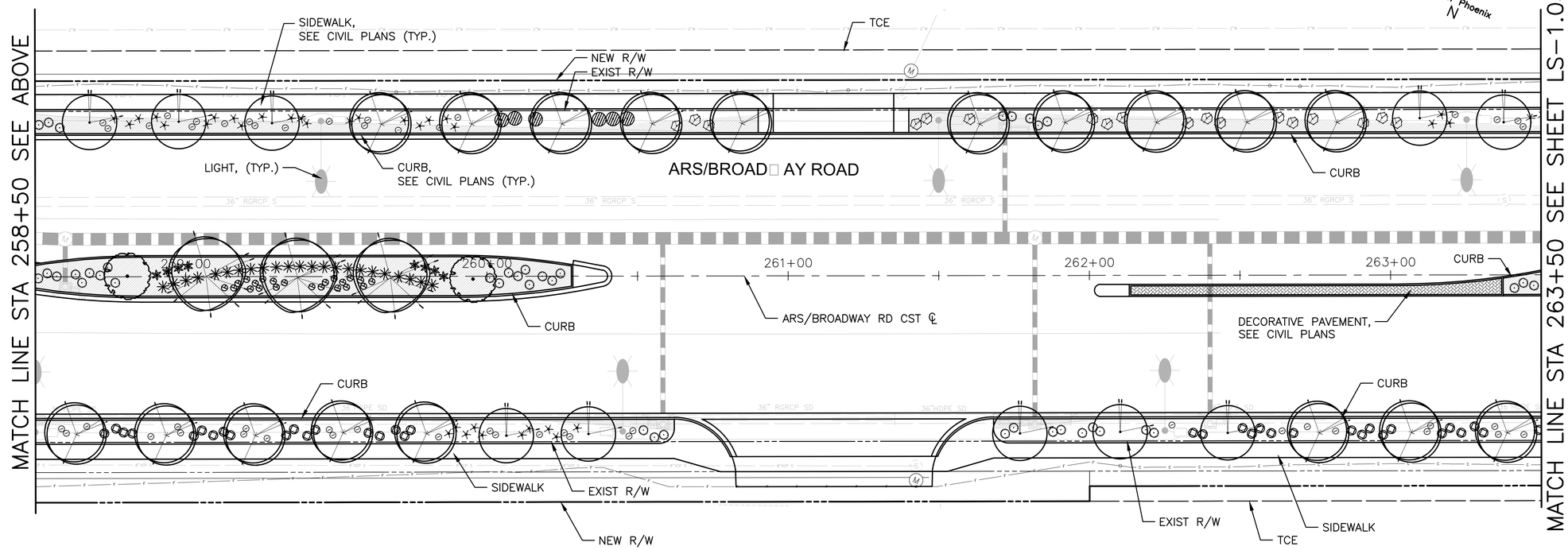

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F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	104	164	

REGISTERED LANDSCAPE ARCHITECT
27437
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DATE Signed 11/1/2016
ARIZONA, U.S.A.
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PLANT SCHEDULE

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ANGELITA DAISY

MISCELLANEOUS

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BACK OF CURB TO SIDEWALK AND
BACK OF SIDEWALK TO ROW
(SIZE: 3/4" MINUS, COLOR: EXPRESS BROWN)
2" DEPTH IN ALL AREAS (TYP)

SIGHT VISIBILITY TRIANGLE

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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-1.02

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	105	164	

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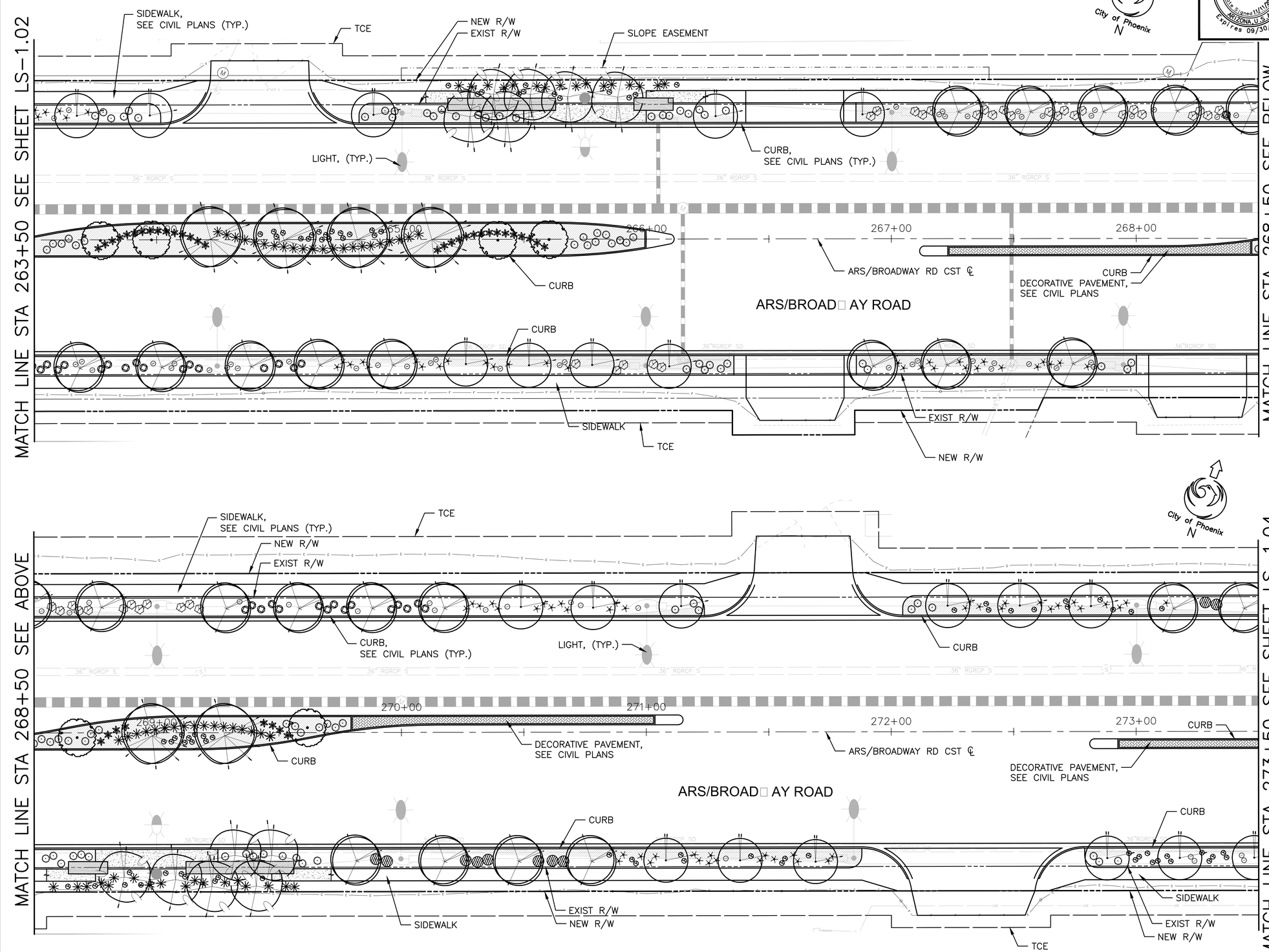

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27437 STEVEN E. LOHIDE
DATE Signed 11/11/2016
REGISTERED LANDSCAPE ARCHITECT
ARIZONA, U.S.A.
Expires 09/30/2017

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4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

PLANT SCHEDULE

SYMBOL	BOTANICAL NAME
TREES	
	BOTANICAL NAME COMMON NAME
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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS–1.03

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
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REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
DATE Signed 11/11/2016
ARIZONA, U.S.A.
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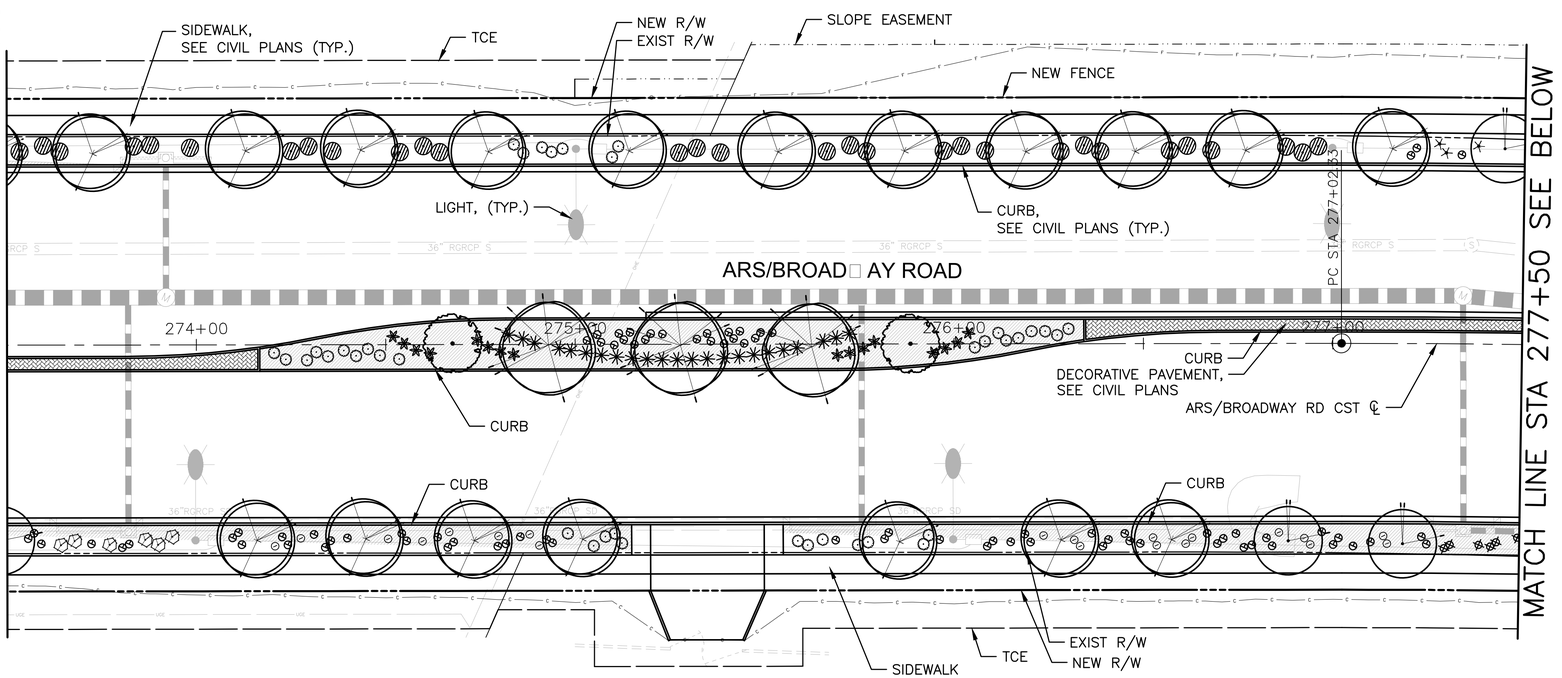

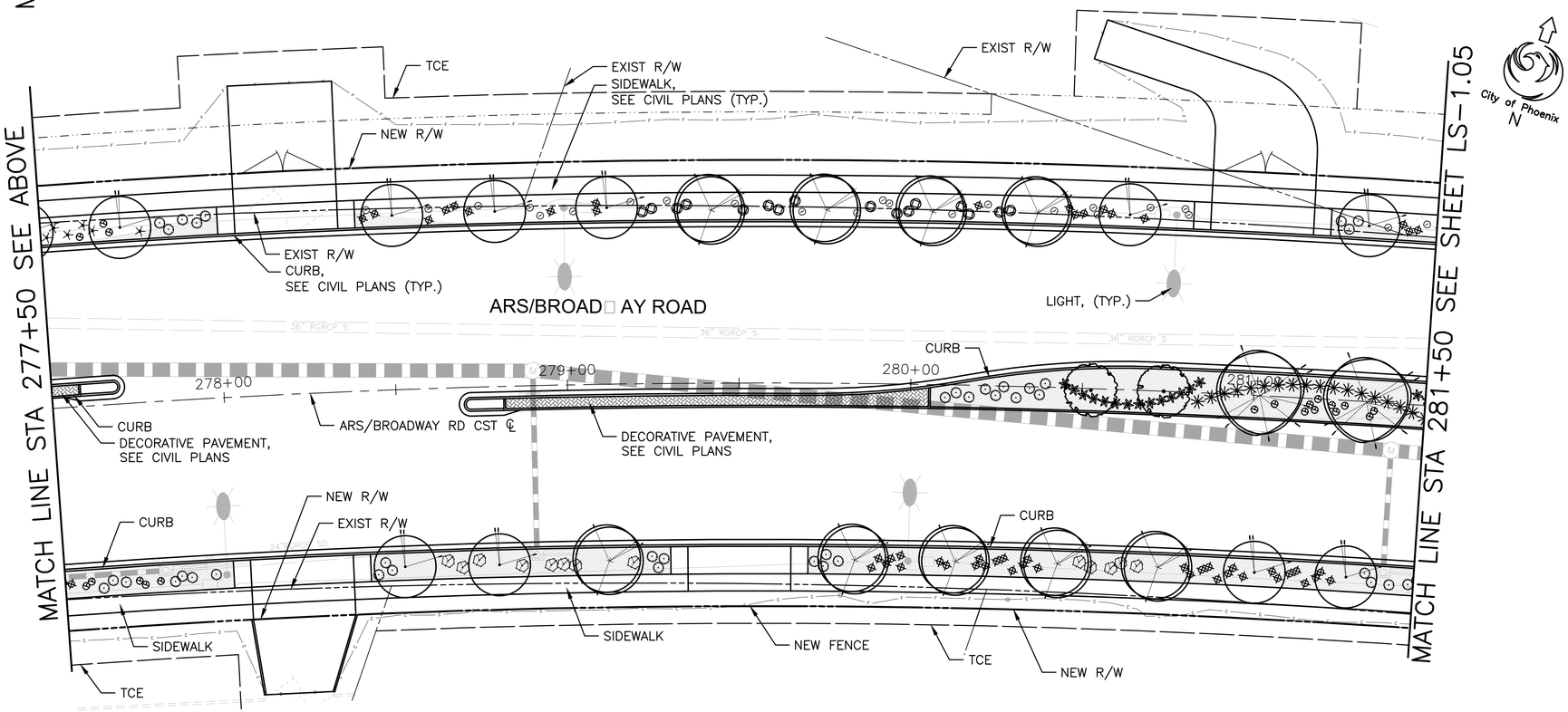

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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
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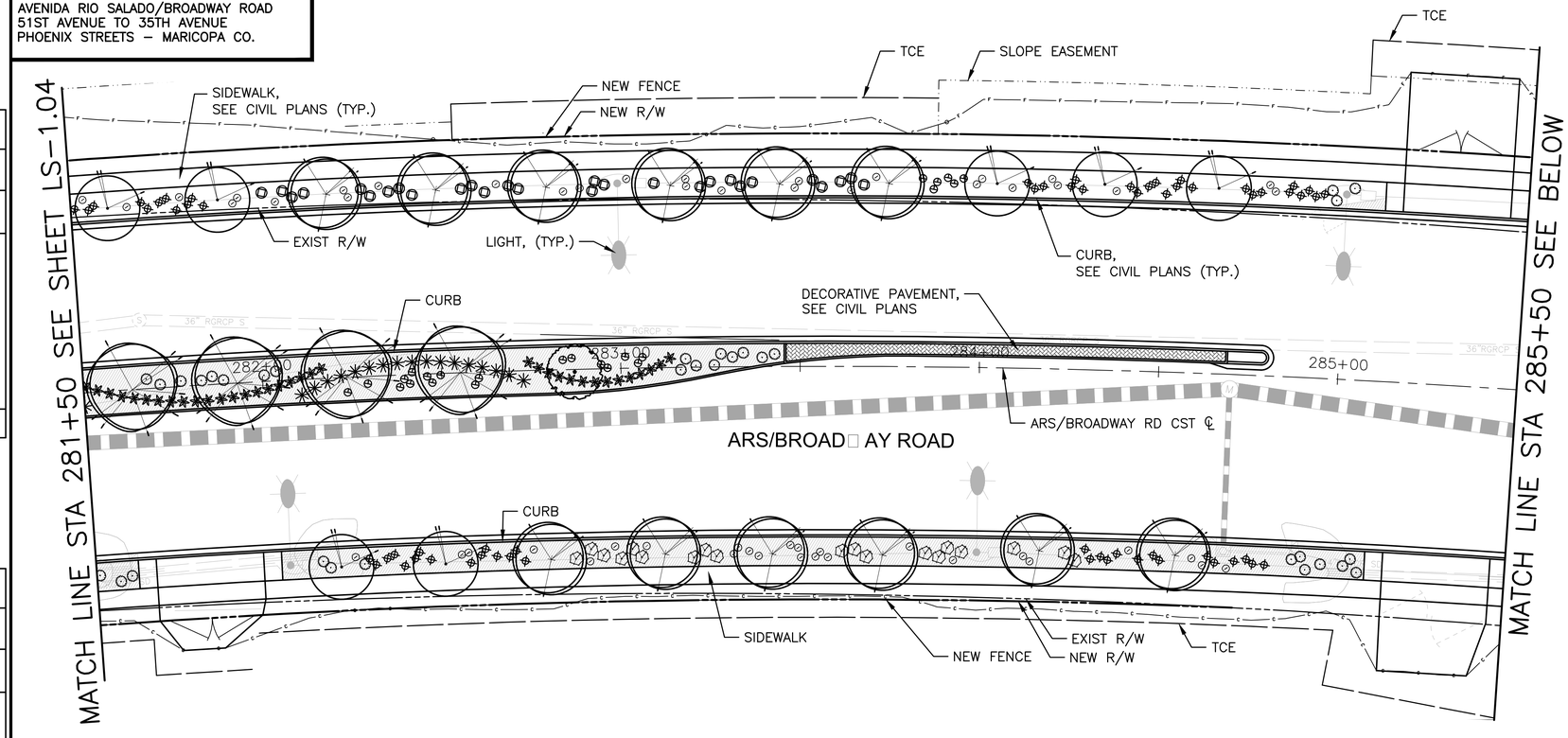
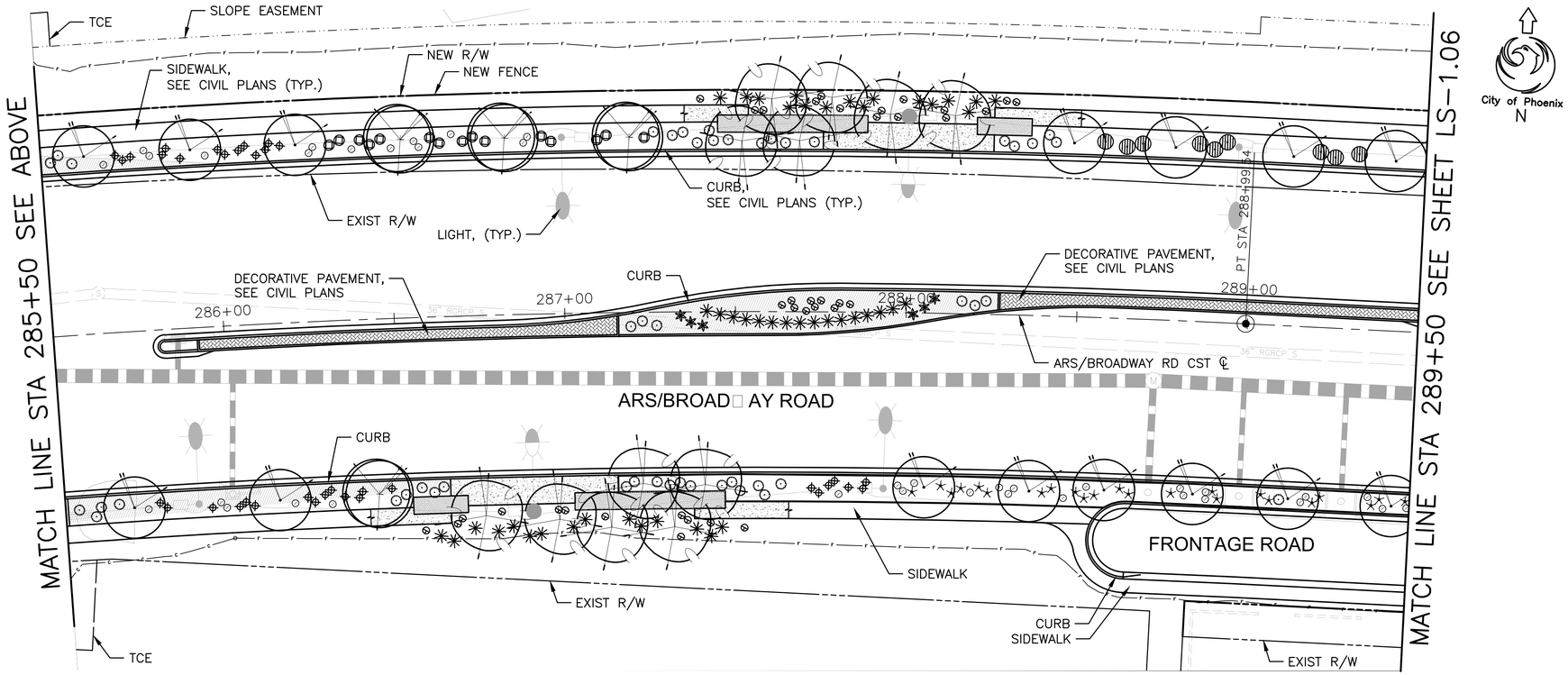
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.





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REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	107	164	

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

PLANT SCHEDULE

SYMBOL | BOTANICAL NAME

TREES

BOTANICAL NAME
COMMON NAME

- ACACIA STENOPHYLLA
  SHOESTRING ACACIA
- CHILOPSIS LINEARIS
  'DORIS DAY' WILLOW
- EUCALYPTUS MICROTHECA
  COOLIBAH
- QUERCUS V. 'CATHEDRAL'
  HERITAGE OAK
- SOPHORA SECUNDIFLORA
  TEXAS MOUNTAIN LAUREL

ACCENTS

- AGAVE DESMETTIANA
  AGAVE
- ALOE X ''BLUE ELF'
  BLUE ELF ALOE
- EUPHORBIA ANTISYPHILITICA
  CANDELILLA
- HESPERALOE PARVIFLORA 'PERPA'
  BRAKELIGHTS RED YUCCA
- NOLINA MICROCARPA
  BEAR GRASS
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SHRUBS

- EREMOPHILA MACULATA
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  BLUE RANGER 'CIMMARRON'

GROUND COVERS

- LANTANA 'NEW GOLD'
  NEW GOLD LANTANA
- LANTANA MONTEVIDENSIS
  TRAILING LANTANA
- TETRANEURIS ACAULIS
  ANGELITA DAISY

MISCELLANEOUS

DECOMPOSED GRANITE–PLANTING AND DISTURBED AREAS
BACK OF CURB TO SIDEWALK AND
BACK OF SIDEWALK TO ROW
(SIZE: 3/4" MINUS, COLOR: EXPRESS BROWN)
2" DEPTH IN ALL AREAS (TYP)

SIGHT VISIBILITY TRIANGLE

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS–1.05

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

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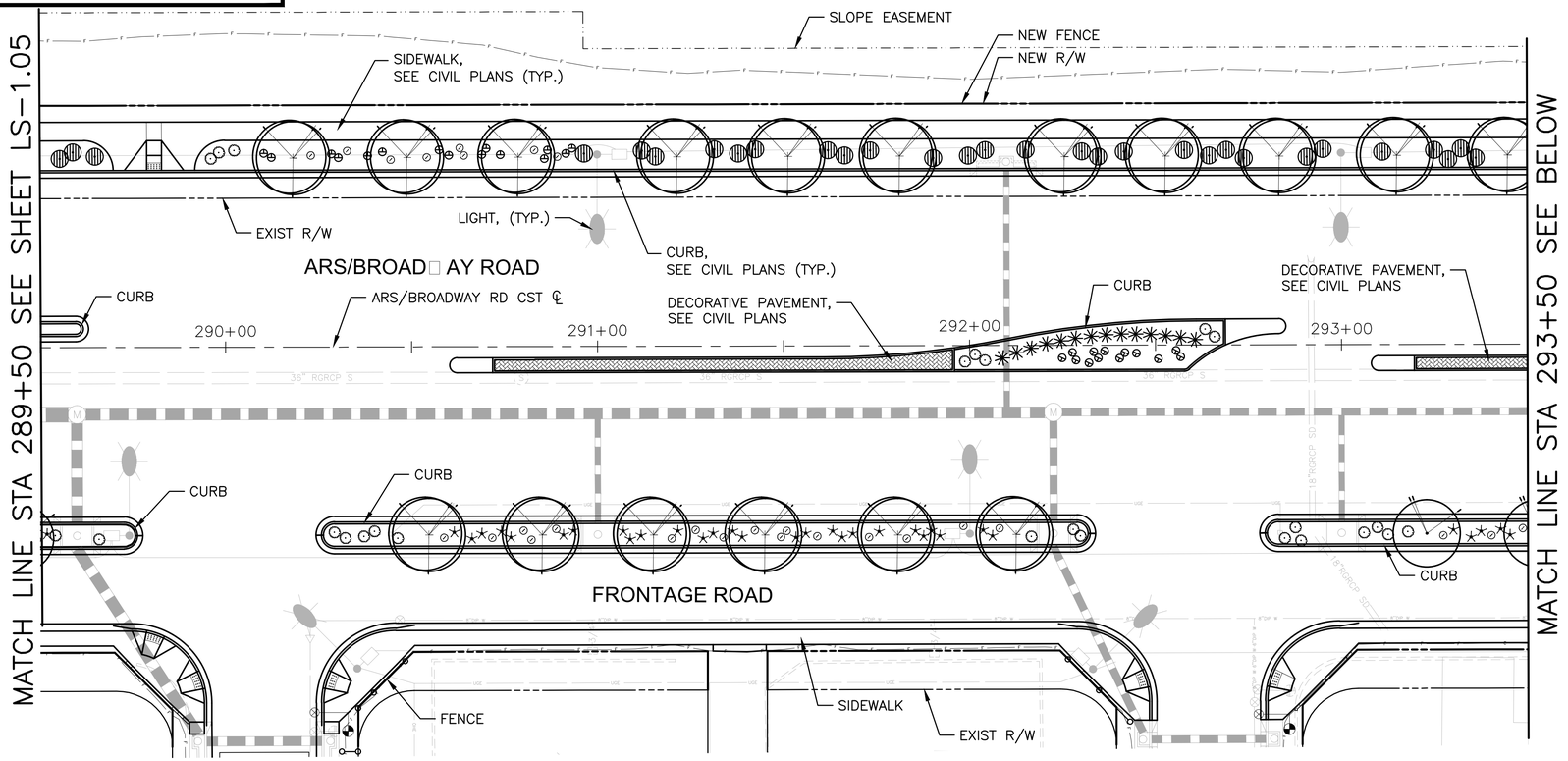
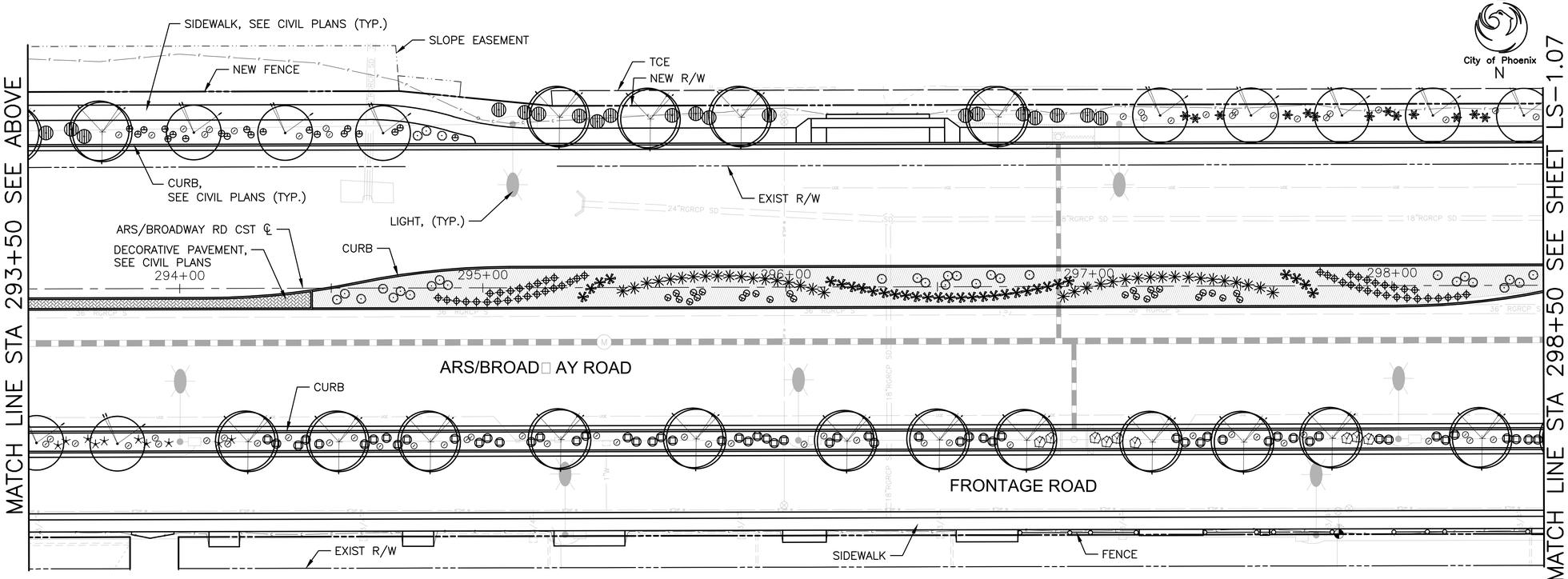


City of Phoenix
N



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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-1.06

ST85100371(004)

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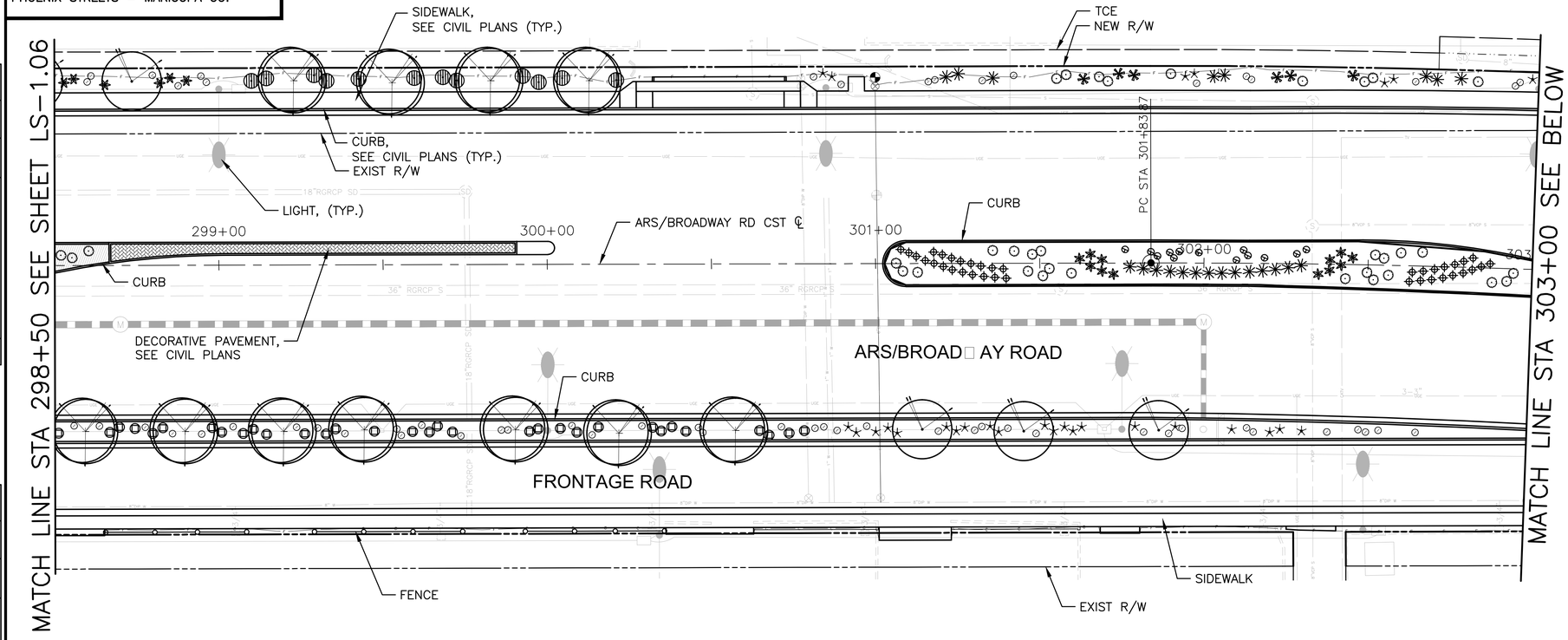
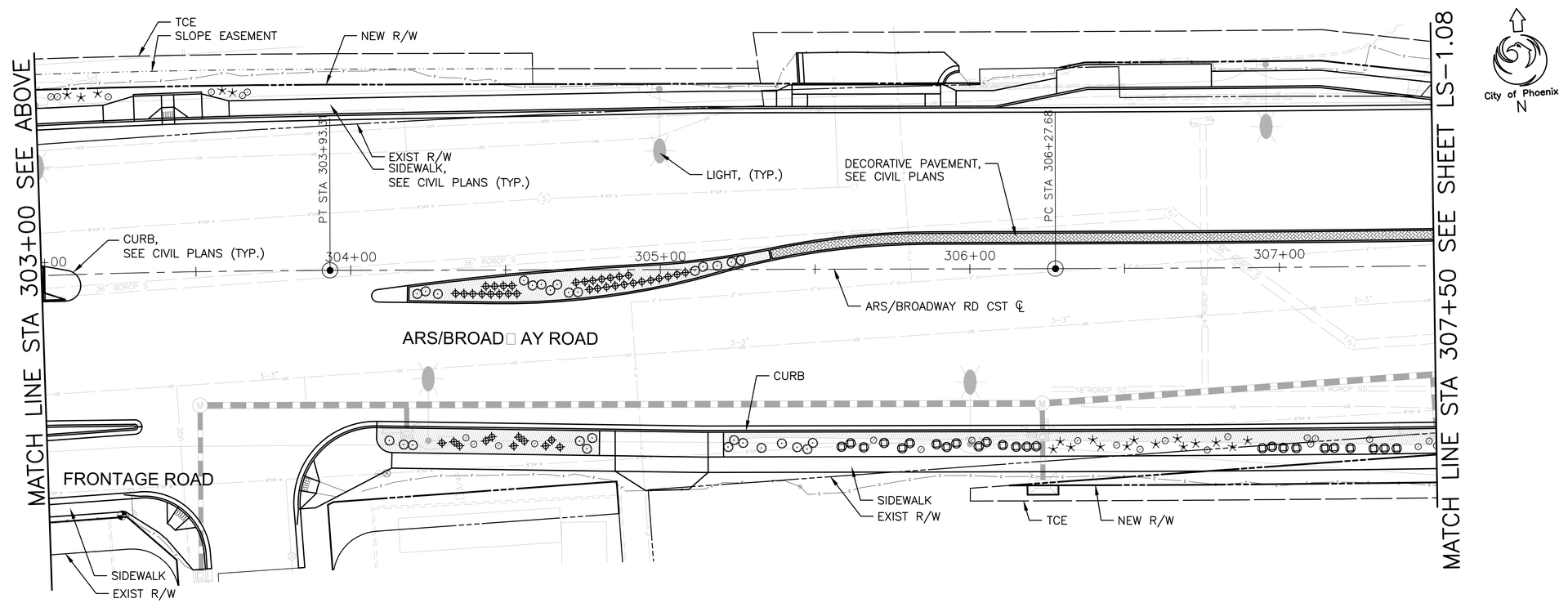
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.





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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-1.07

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
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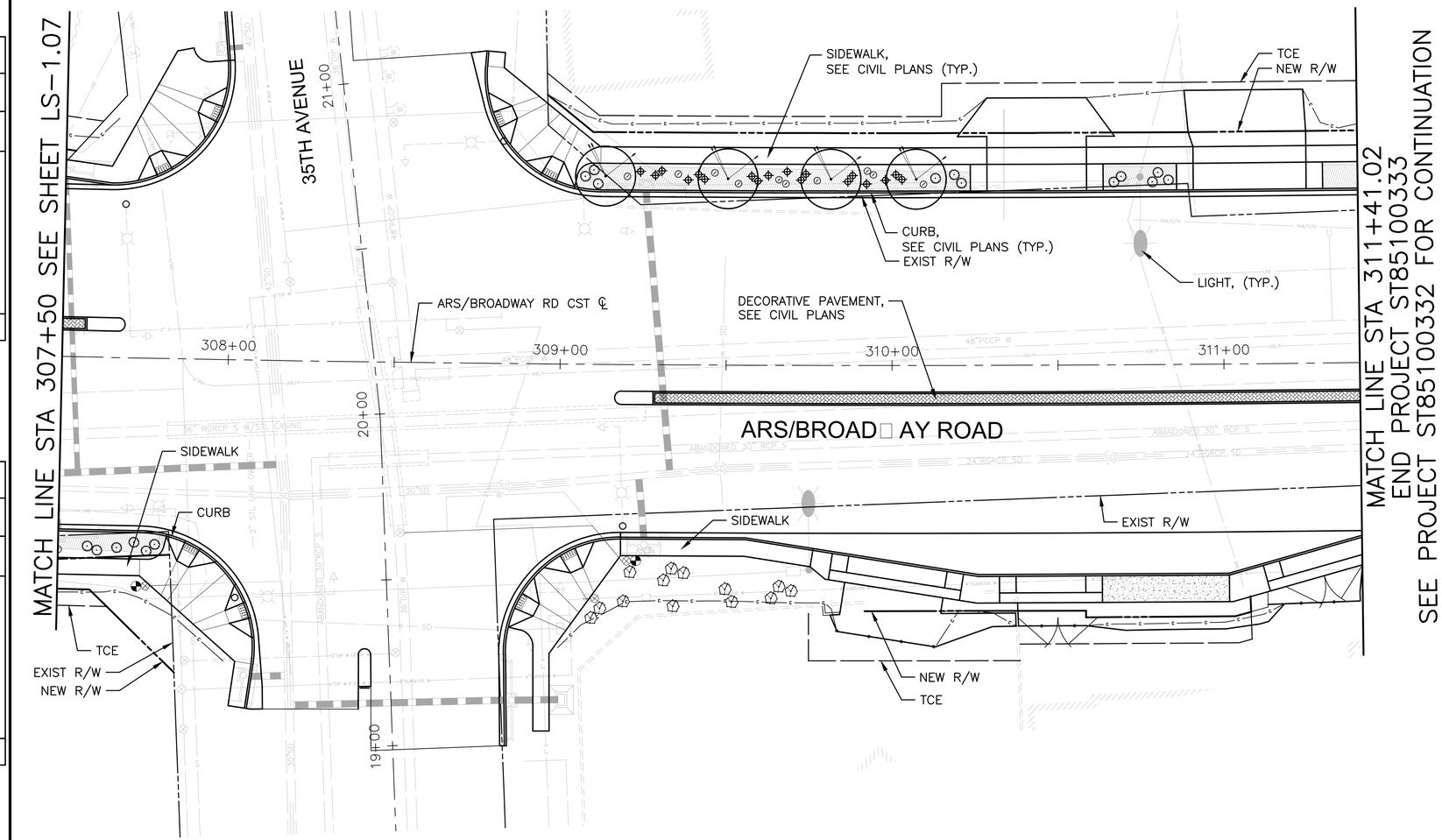

City of Phoenix
N

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LANDSCAPE PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-1.08

ST85100371(004)

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51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

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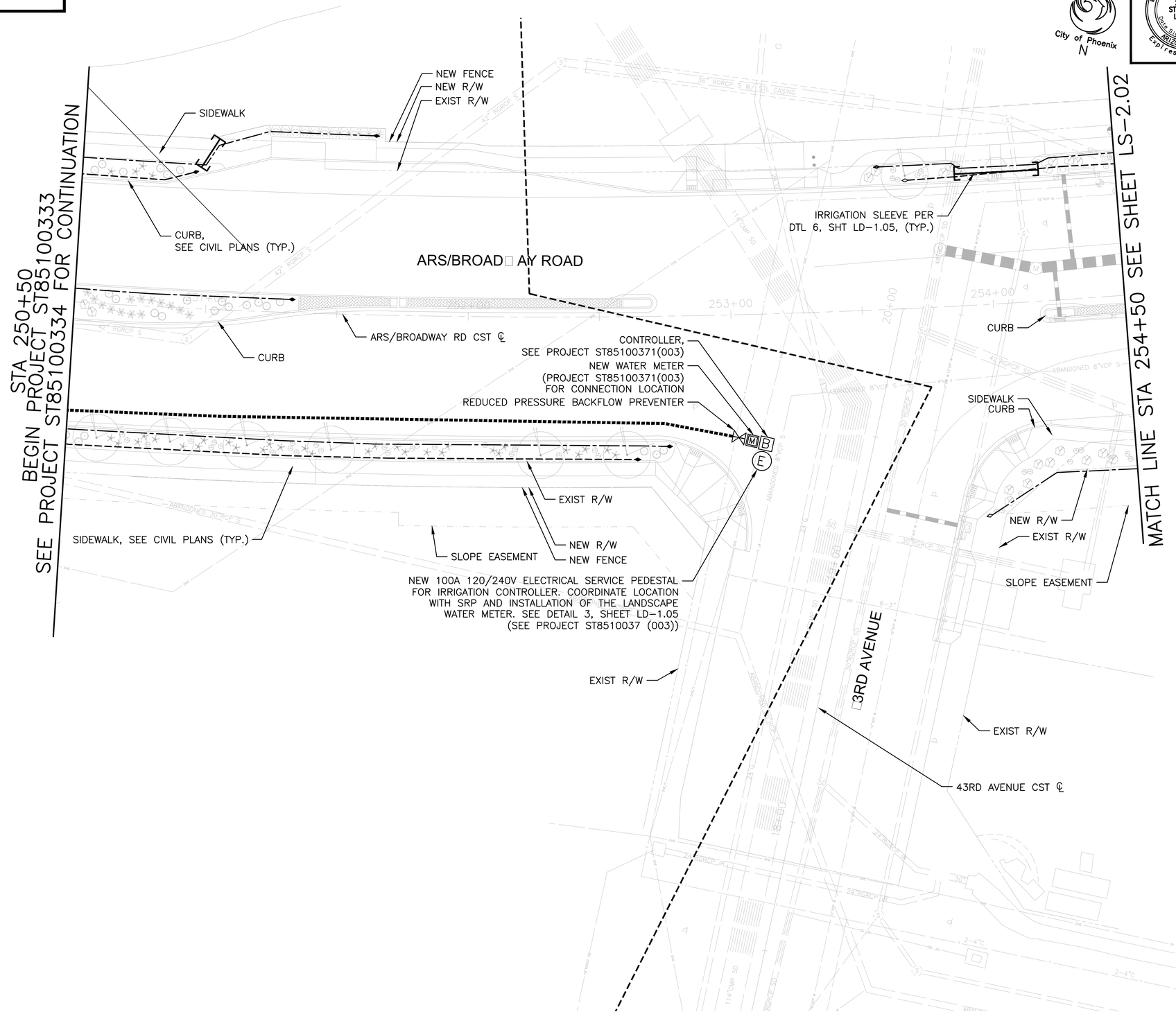

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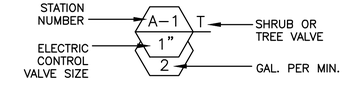
4561 E. McDowell Road
Phoenix, AZ 85008–4505
Tel(602)454–0402
Fax(602)454–0403
www.aztec.us

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I–CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD–1.04
M	WATER METER–FIELD VERIFY PRIOR TO LANDSCAPE CONSTRUCTION. REF. TO TECHNICAL PROVISIONS FOR ADDITIONAL INFORMATION ON LOCATIONS.
E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL,SEE DTL 3, SHT LD–1.05
	SCH. 40 PVC MIN. MAINLINE SIZE NOTED ON PLAN, REF DTL 6, SHT LD–1.05
TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DTL 6, SHT LD–1.05
	SCH. 40 PVC SLEEVES WITH PULL BOXES UNDER PAVED AREAS FOR ALL IRRIGATION LINES REF. DTL 6, SHT LD–1.05
	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL, REF DTL 4, SHT LD–1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DTL 2, SHT LD–1.04
	DRIP VALVE ASSEMBLY: REF. DTL 3, SHT LD–1.04, CONTROL VALVE: RAINBIRD EFB–CP, ELECTRIC VALVES: SIZE PER PLAN IN–LINE PRESSURE REGULATOR: SENNINGER PRODUCTS MR–LF30 PSI Y–STRAINER: AGRICULTURAL PRODUCTS INC. 4E–1"–B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI–OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DTL 1 & 2, SHT LD–1.05
	FLUSH VALVE, SEE DTL 6, SHT LD–1.04



NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J–BOX.
2. POINT OF CONNECTION– USE TYPE 'K' COPPER MINIMUM 5' BETWEEN SOURCE AND PRESSURE VACUUM BREAKER.
3. IRRIGATION VALVES, MAINLINE, AND LATERALS ARE SHOWN DIAGRAMMATICALLY. ALL COMPONENTS TO BE LOCATED WITHIN PLANTING AREAS.

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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
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ST85100371(004)

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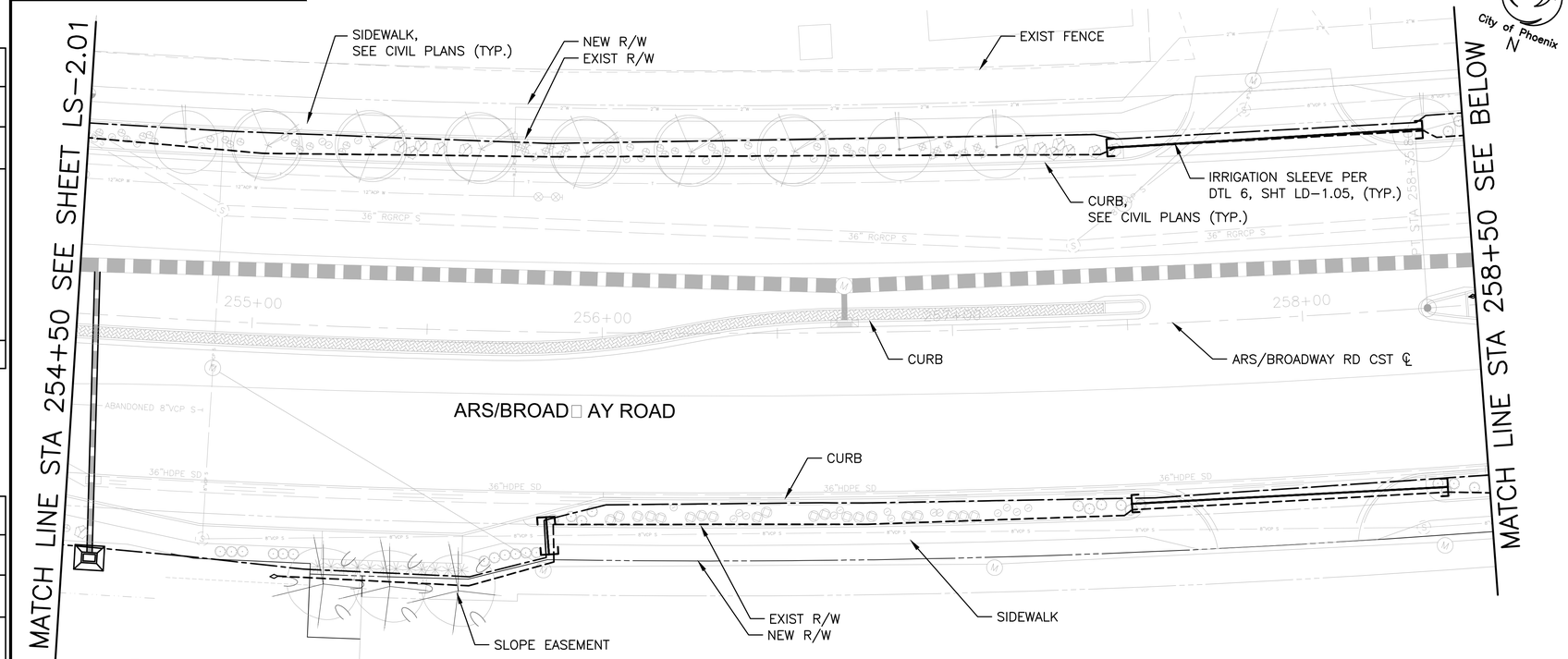

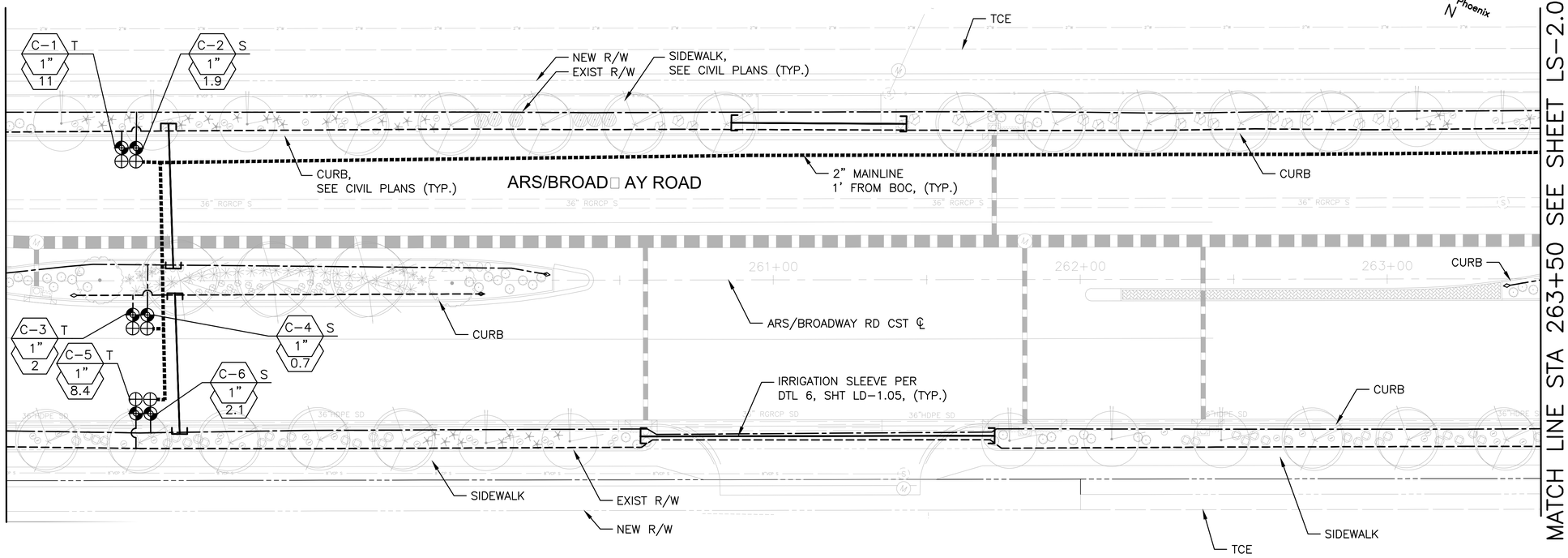

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	DRIP VALVE ASSEMBLY: REF. DTL 3, SHT LD-1.04, CONTROL VALVE: RAINBIRD EFB-CP, ELECTRIC VALVES: SIZE PER PLAN IN-LINE PRESSURE REGULATOR: SENNINGER PRODUCTS MR-LF30 PSI Y-STRAINER: AGRICULTURAL PRODUCTS INC. 4E-1"-B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI-OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DTL 1 & 2, SHT LD-1.05
	FLUSH VALVE, SEE DTL 6, SHT LD-1.04

STATION NUMBER → A-1 T ← SHRUB OR TREE VALVE
ELECTRIC CONTROL VALVE SIZE → 1" 2 ← GAL. PER MIN.

NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J-BOX.
2. POINT OF CONNECTION- USE TYPE 'K' COPPER MINIMUM 5' BETWEEN SOURCE AND PRESSURE VACUUM BREAKER.
3. IRRIGATION VALVES, MAINLINE, AND LATERALS ARE SHOWN DIAGRAMMATICALLY. ALL COMPONENTS TO BE LOCATED WITHIN PLANTING AREAS.

CALL TWO WORKING DAYS BEFORE YOU DIG
602-263-1100
1-800-STAKE-IT
(OUTSIDE MARICOPA COUNTY)

"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 THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION PLAN

CITY OF PHOENIX, ARI□ONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROAD□ AY ROAD
□3RD AVENUE TO 35TH AVENUE
ST85100371 □00□□

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-2.02

ST85100371(004)

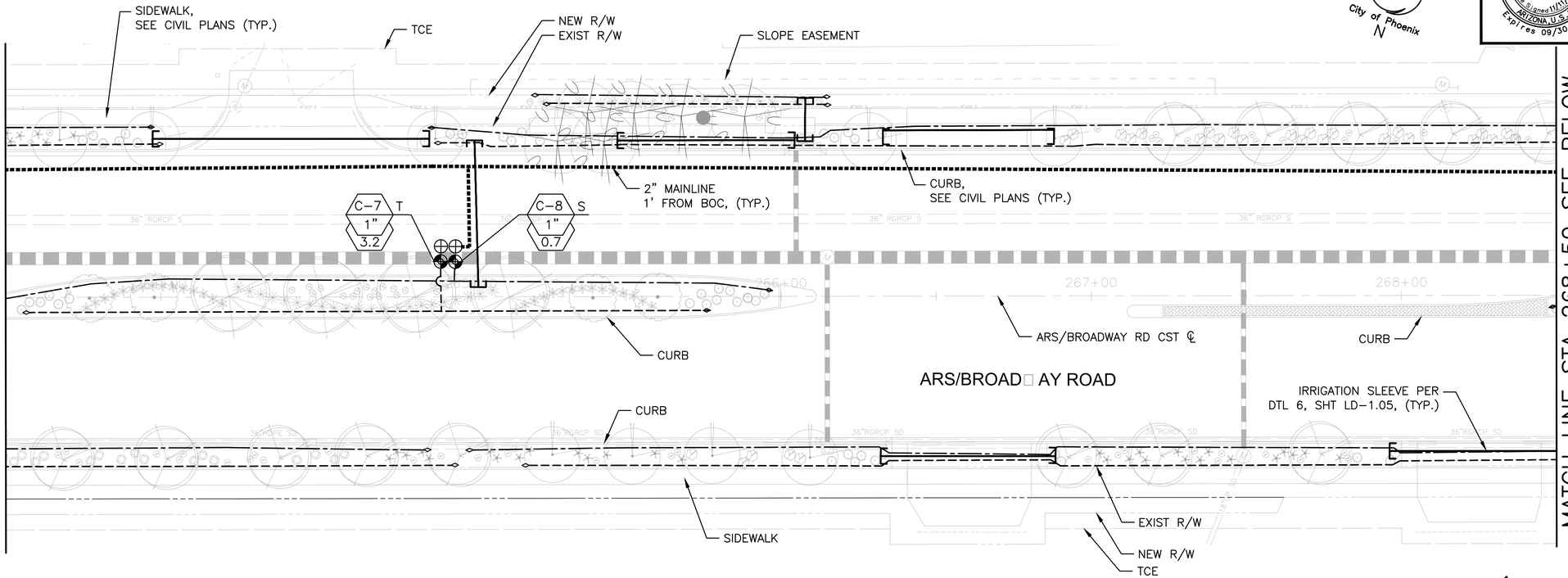
R:\Phoenix\Projects\AZE1504_PhoenixOn-CallEngineering_ConsultingServices_FiscalYears2015-2016\03_ARS_PhaseII_Repackaging\CADD\Sheets\Landscape\ST85100333LS22.dwg dwoelzlein Nov 11, 2016 – 1:37pm

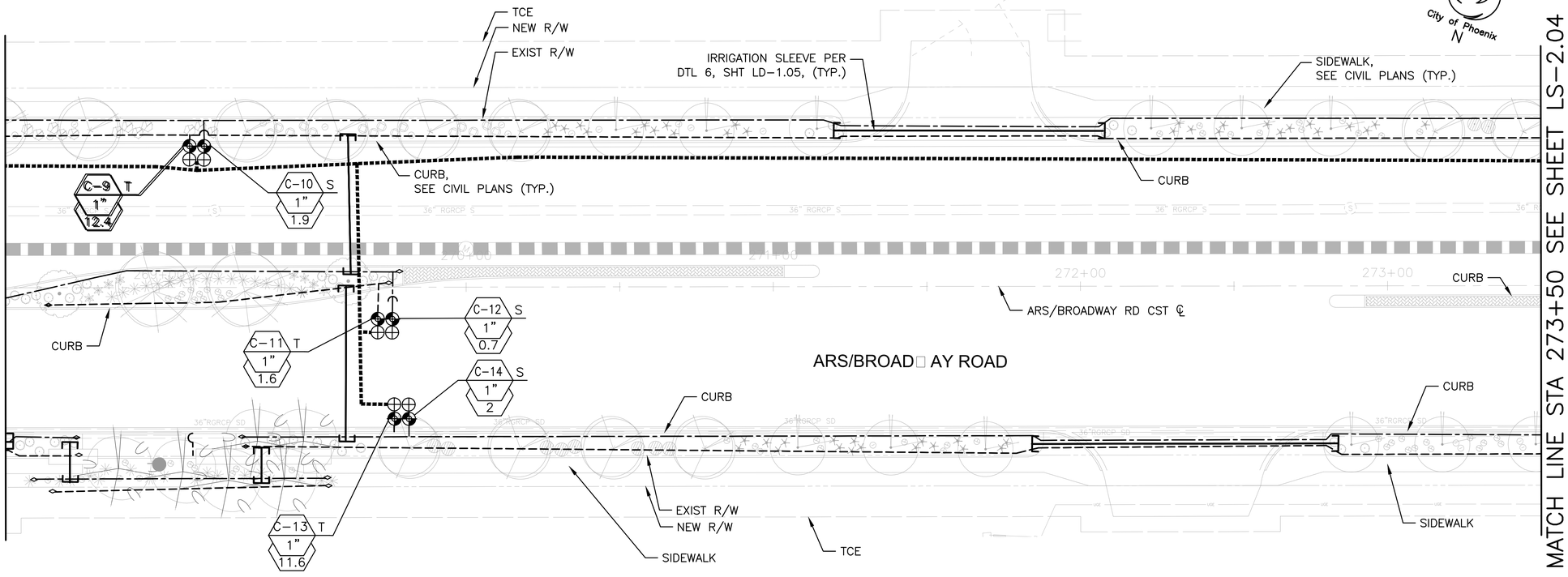
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

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

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

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





F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	113	164	

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/1/2016
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I-CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD-1.04
M	WATER METER-FIELD VERIFY PRIOR TO LANDSCAPE CONSTRUCTION. REF. TO TECHNICAL PROVISIONS FOR ADDITIONAL INFORMATION ON LOCATIONS.
E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL,SEE DTL 3, SHT LD-1.05
	SCH. 40 PVC MIN. MAINLINE SIZE NOTED ON PLAN, REF DTL 6, SHT LD-1.05
TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DTL 6, SHT LD-1.05
	SCH. 40 PVC SLEEVES WITH PULL BOXES UNDER PAVED AREAS FOR ALL IRRIGATION LINES REF. DTL 6, SHT LD-1.05
	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL, REF DTL 4, SHT LD-1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DTL 2, SHT LD-1.04
	DRIP VALVE ASSEMBLY: REF. DTL 3, SHT LD-1.04, CONTROL VALVE: RAINBIRD EFB-CP, ELECTRIC VALVES: SIZE PER PLAN IN-LINE PRESSURE REGULATOR: SENNINGER PRODUCTS MR-LF30 PSI Y-STRAINER: AGRICULTURAL PRODUCTS INC. 4E-1"-B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI-OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DTL 1 & 2, SHT LD-1.05
	FLUSH VALVE, SEE DTL 6, SHT LD-1.04

STATION NUMBER → A-1 T ← SHRUB OR TREE VALVE
ELECTRIC CONTROL VALVE SIZE → 1" 2 ← GAL. PER MIN.

NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J-BOX.
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (00)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-2.03

ST85100371(004)

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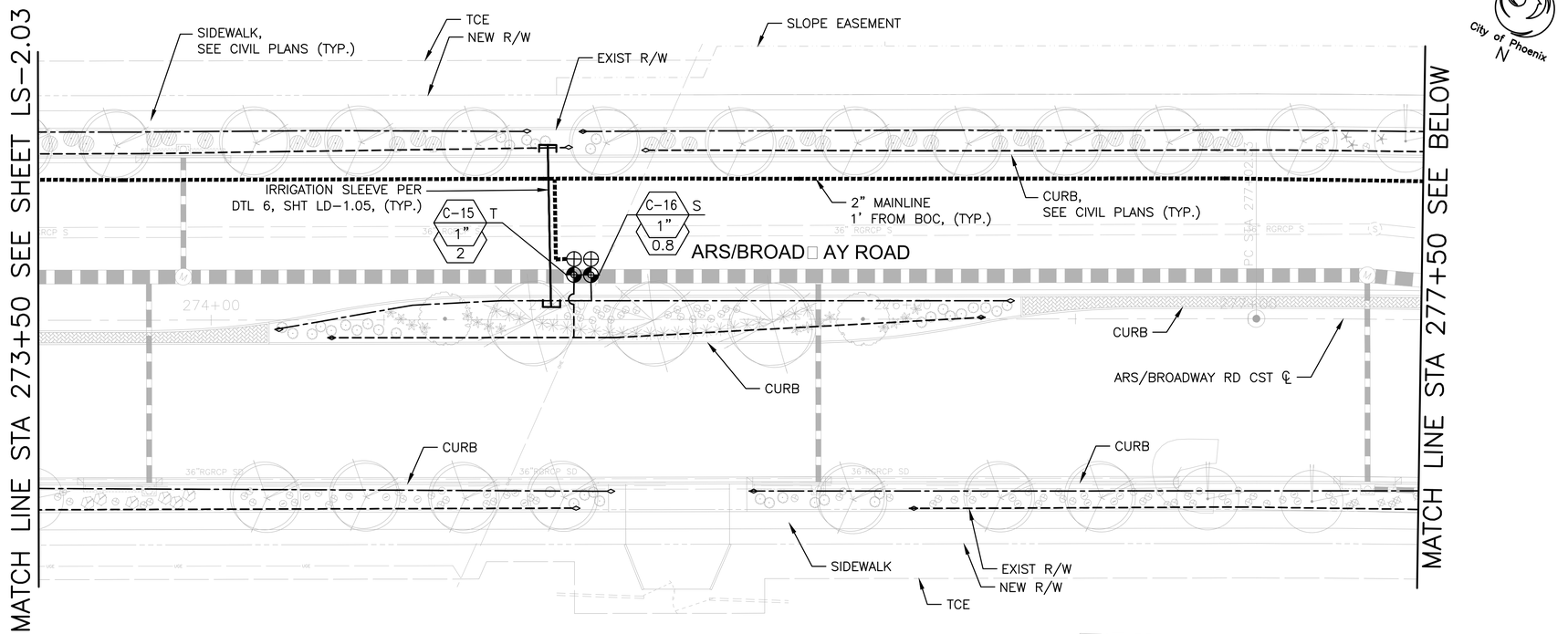
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



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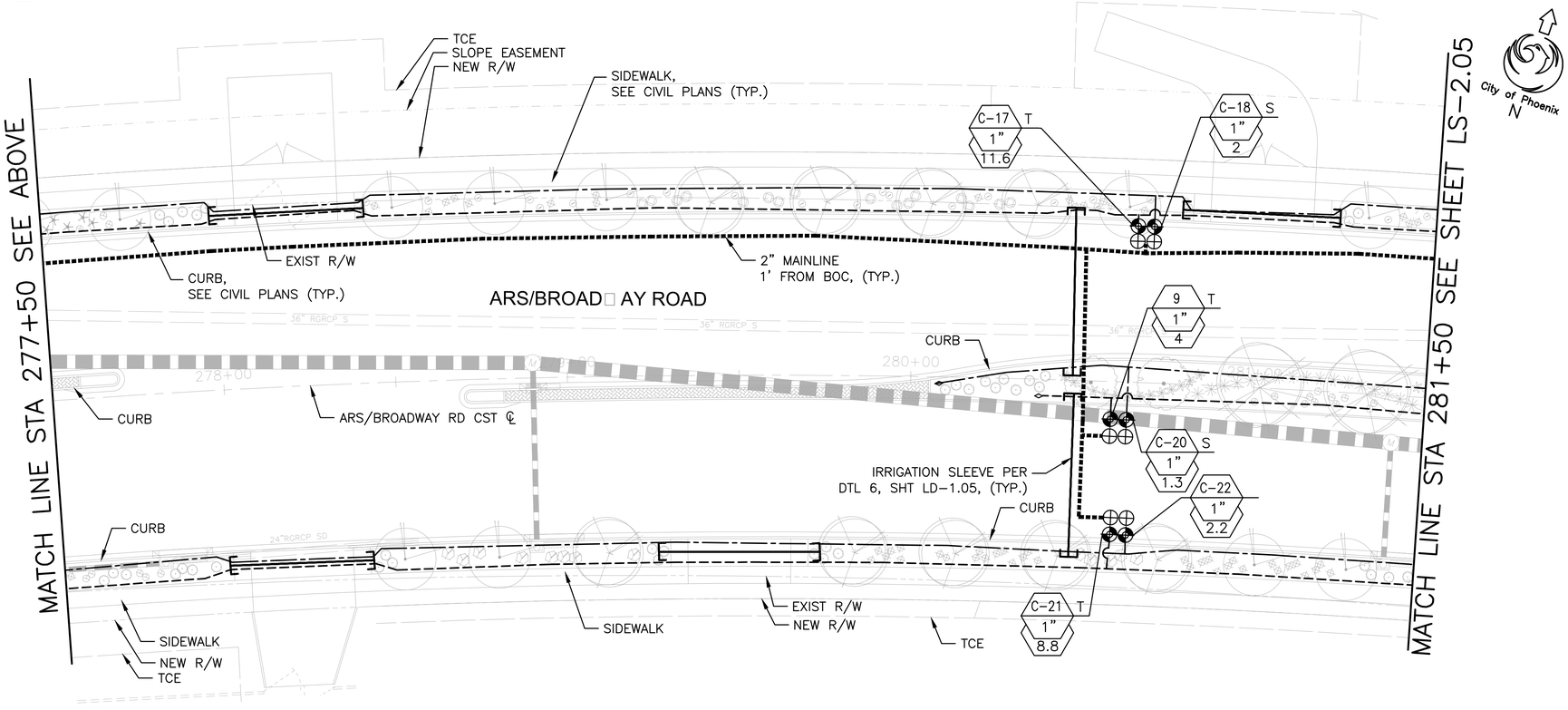

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

27437 STEVEN E. LOHIDE
DATE Signed 11/1/2016
REGISTERED LANDSCAPE ARCHITECT
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	114	164	

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I-CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD-1.04
M	WATER METER-FIELD VERIFY PRIOR TO LANDSCAPE CONSTRUCTION. REF. TO TECHNICAL PROVISIONS FOR ADDITIONAL INFORMATION ON LOCATIONS.
E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL,SEE DTL 3, SHT LD-1.05
----------	SCH. 40 PVC MIN. MAINLINE SIZE NOTED ON PLAN, REF DTL 6, SHT LD-1.05
TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DTL 6, SHT LD-1.05
	SCH. 40 PVC SLEEVES WITH PULL BOXES UNDER PAVED AREAS FOR ALL IRRIGATION LINES REF. DTL 6, SHT LD-1.05
	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL, REF DTL 4, SHT LD-1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DTL 2, SHT LD-1.04
	DRIP VALVE ASSEMBLY: REF. DTL 3, SHT LD-1.04, CONTROL VALVE: RAINBIRD EFB-CP, ELECTRIC VALVES: SIZE PER PLAN IN-LINE PRESSURE REGULATOR: SENNINGER PRODUCTS MR-LF30 PSI Y-STRAINER: AGRICULTURAL PRODUCTS INC. 4E-1"-B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI-OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DTL 1 & 2, SHT LD-1.05
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STATION NUMBER → A-1 T ← SHRUB OR TREE VALVE
ELECTRIC CONTROL VALVE SIZE → 1" 2 ← GAL. PER MIN.

NOTES:
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-2.04

ST85100371(004)

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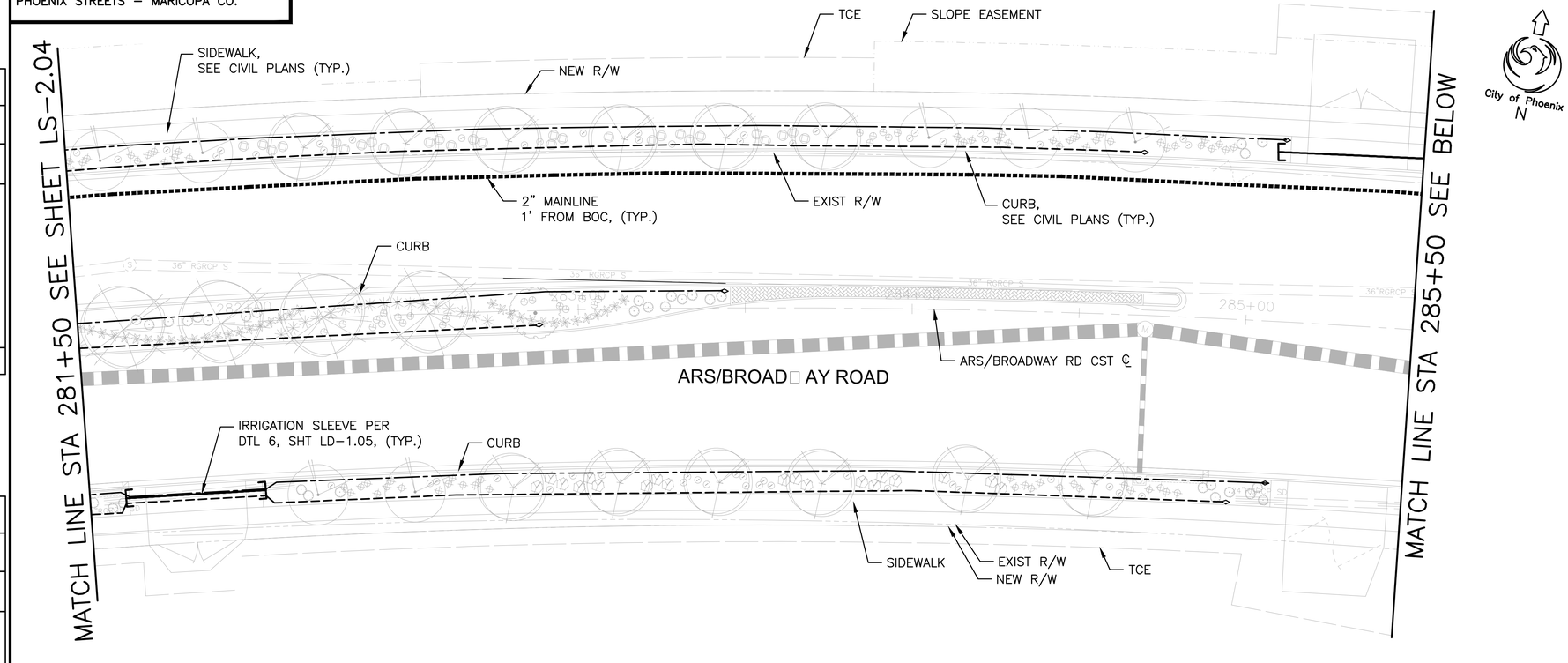
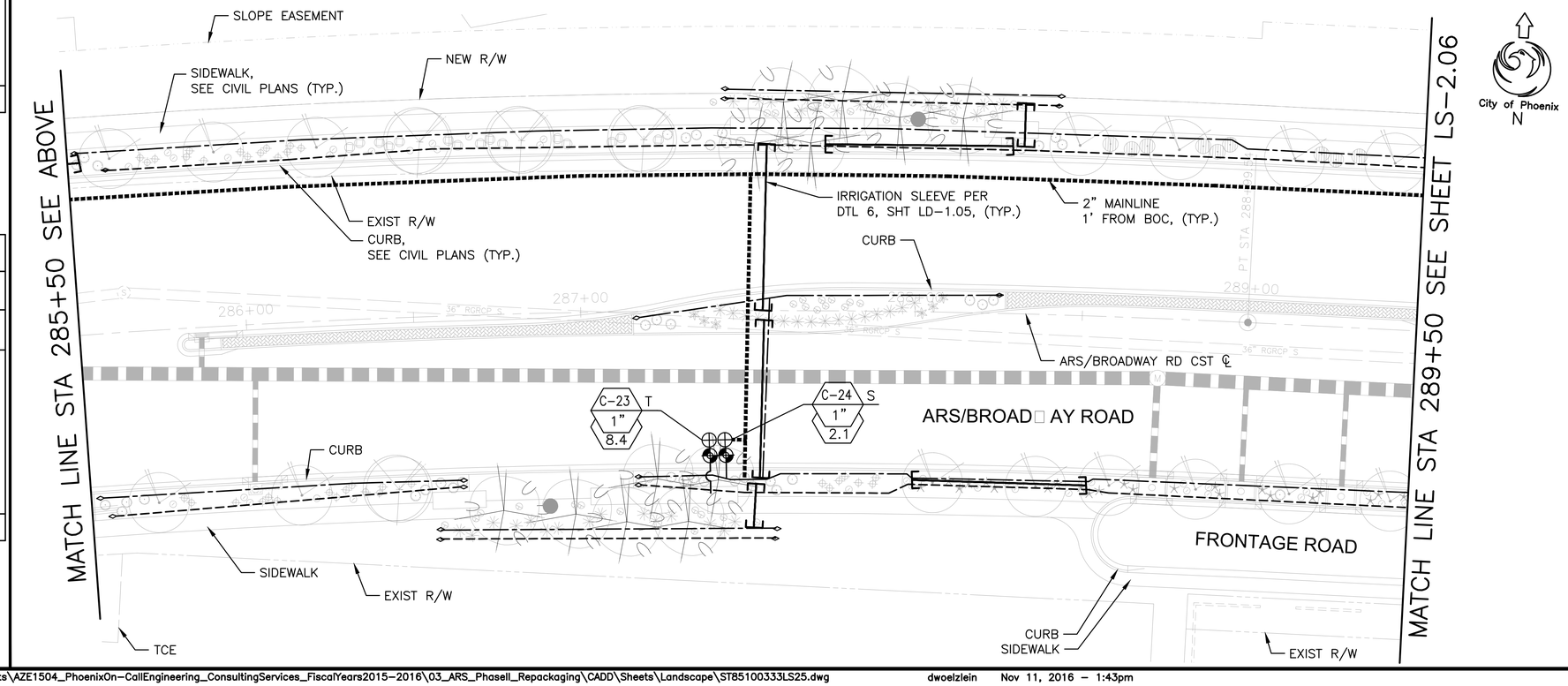
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.





REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

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REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	115	164	

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I-CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD-1.04
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	FLUSH VALVE, SEE DTL 6, SHT LD-1.04

STATION NUMBER — A-1 T — SHRUB OR TREE VALVE
ELECTRIC CONTROL VALVE SIZE — 1" / 2 — GAL. PER MIN.

NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J-BOX.
2. POINT OF CONNECTION- USE TYPE 'K' COPPER MINIMUM 5' BETWEEN SOURCE AND PRESSURE VACUUM BREAKER.
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (004)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-2.05

ST85100371(004)

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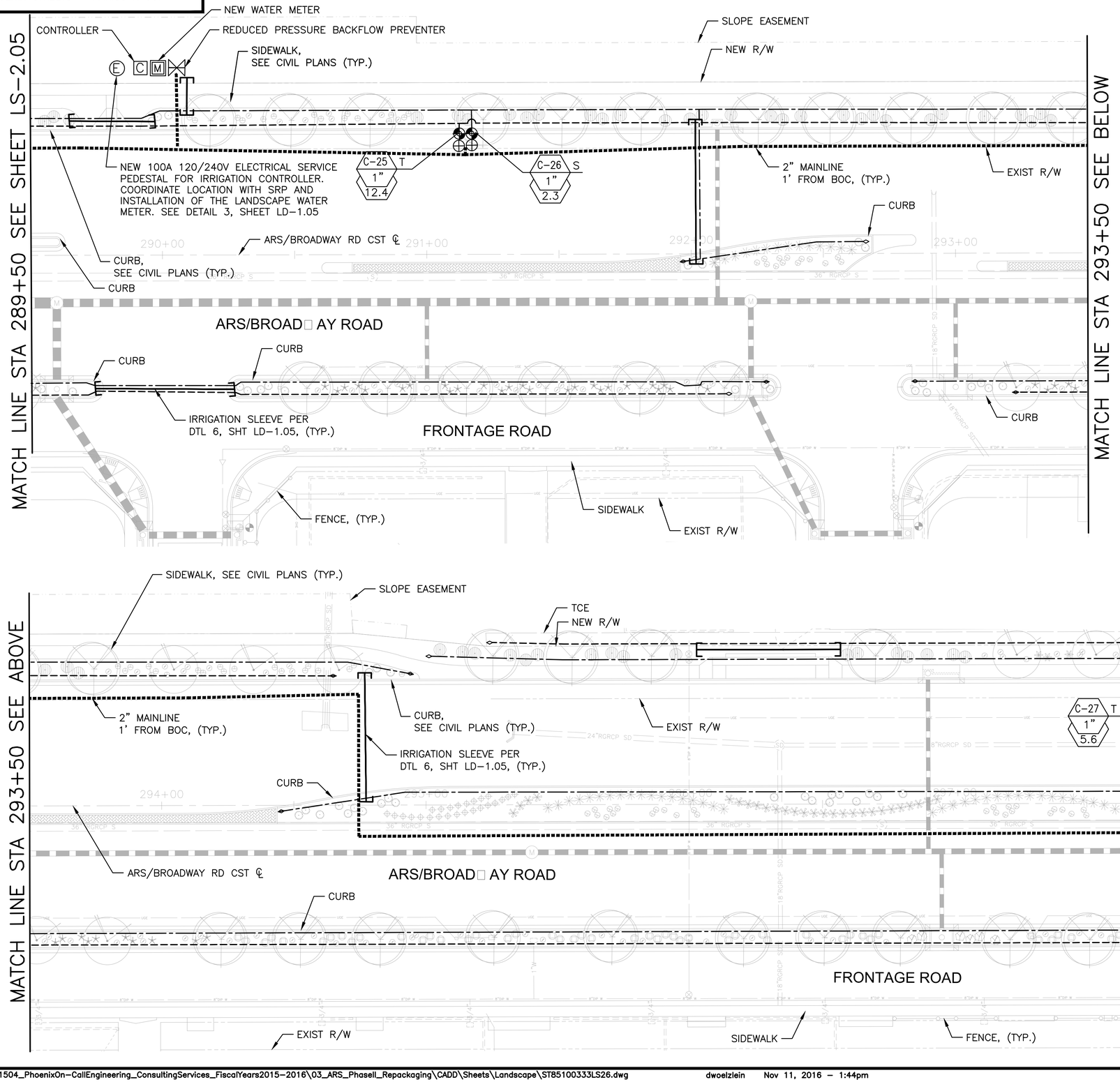
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.



REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

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F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	116	164	

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008–4505
Tel(602)454–0402
Fax(602)454–0403
www.aztec.us

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I–CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD–1.04
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E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL,SEE DTL 3, SHT LD–1.05
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TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DTL 6, SHT LD–1.05
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STATION NUMBER — A–1 T — SHRUB OR TREE VALVE
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NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J–BOX.
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS–2.06

ST85100371(004)

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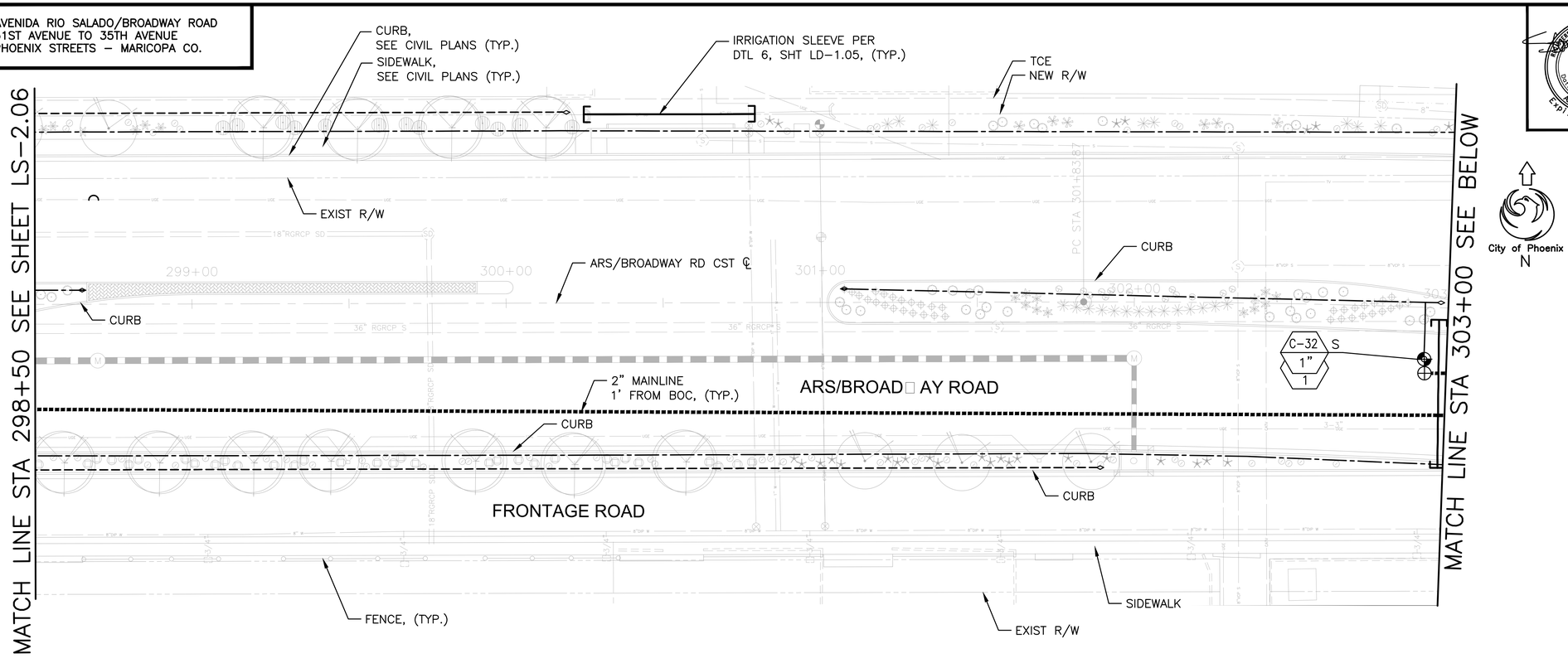
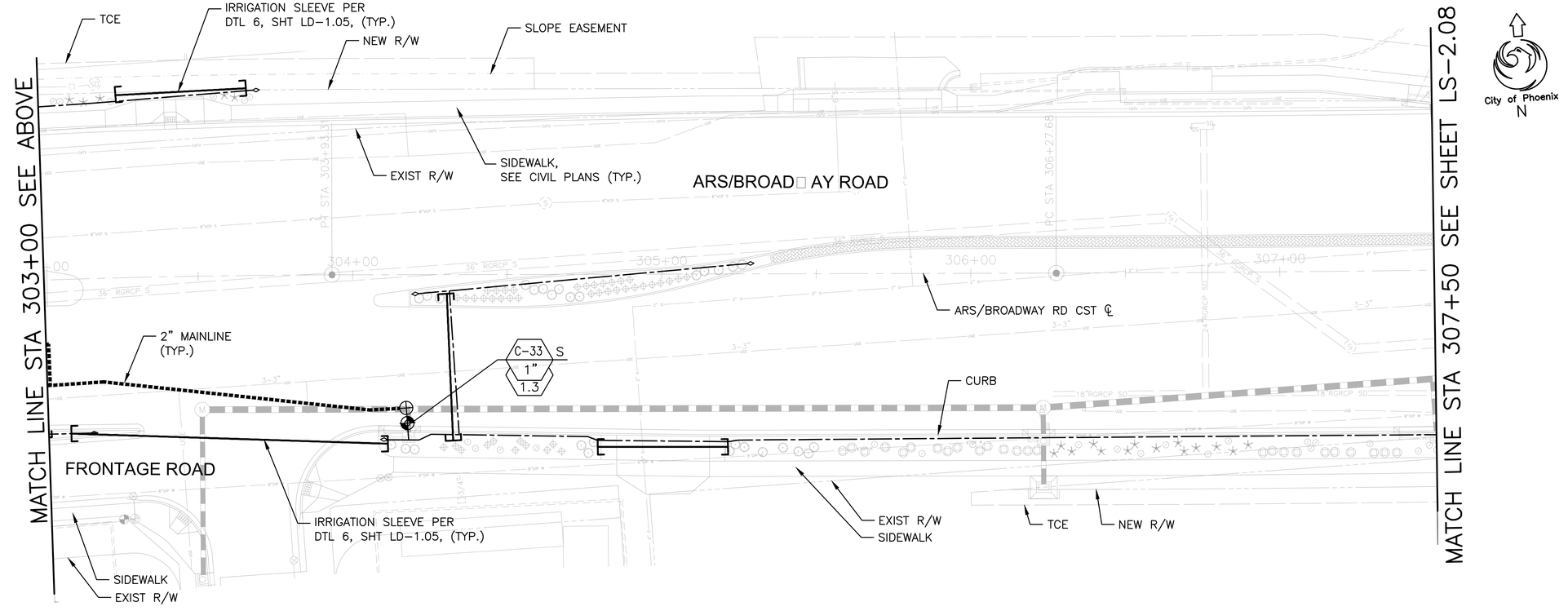
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.





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Tel(602)454–0402
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IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
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	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL, REF DTL 4, SHT LD–1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DTL 2, SHT LD–1.04
	DRIP VALVE ASSEMBLY: REF. DTL 3, SHT LD–1.04, CONTROL VALVE: RAINBIRD EFB–CP, ELECTRIC VALVES: SIZE PER PLAN IN–LINE PRESSURE REGULATOR: SENNINGER PRODUCTS MR–LF30 PSI Y–STRAINER: AGRICULTURAL PRODUCTS INC. 4E–1"–B W/200 MESH SCREEN
NO SYMBOL	BOWSMITH ML200 MULTI–OUTLET EMITTER FOR TREES. SEE EMITTER SCHEDULE REF DTL 1 & 2, SHT LD–1.05
	FLUSH VALVE, SEE DTL 6, SHT LD–1.04

STATION NUMBER → A–1 T ← SHRUB OR TREE VALVE
ELECTRIC CONTROL VALVE SIZE → 1" 2 ← GAL. PER MIN.

NOTES:
1. USE LARGE RADIUS SWEEP ELL BELOW CONTROLLER FOR VALVE WIRES SUPPLY 110V, 15 AMP POWER SOURCE, HARD WIRE TO J–BOX.
2. POINT OF CONNECTION– USE TYPE 'K' COPPER MINIMUM 5' BETWEEN SOURCE AND PRESSURE VACUUM BREAKER.
3. IRRIGATION VALVES, MAINLINE, AND LATERALS ARE SHOWN DIAGRAMMATICALLY. ALL COMPONENTS TO BE LOCATED WITHIN PLANTING AREAS.

CALL TWO WORKING DAYS BEFORE YOU DIG
602–263–1100
1–800–STAKE–IT
(OUTSIDE MARICOPA COUNTY)

"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 THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX."

IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 (00)

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS–2.07

ST85100371(004)

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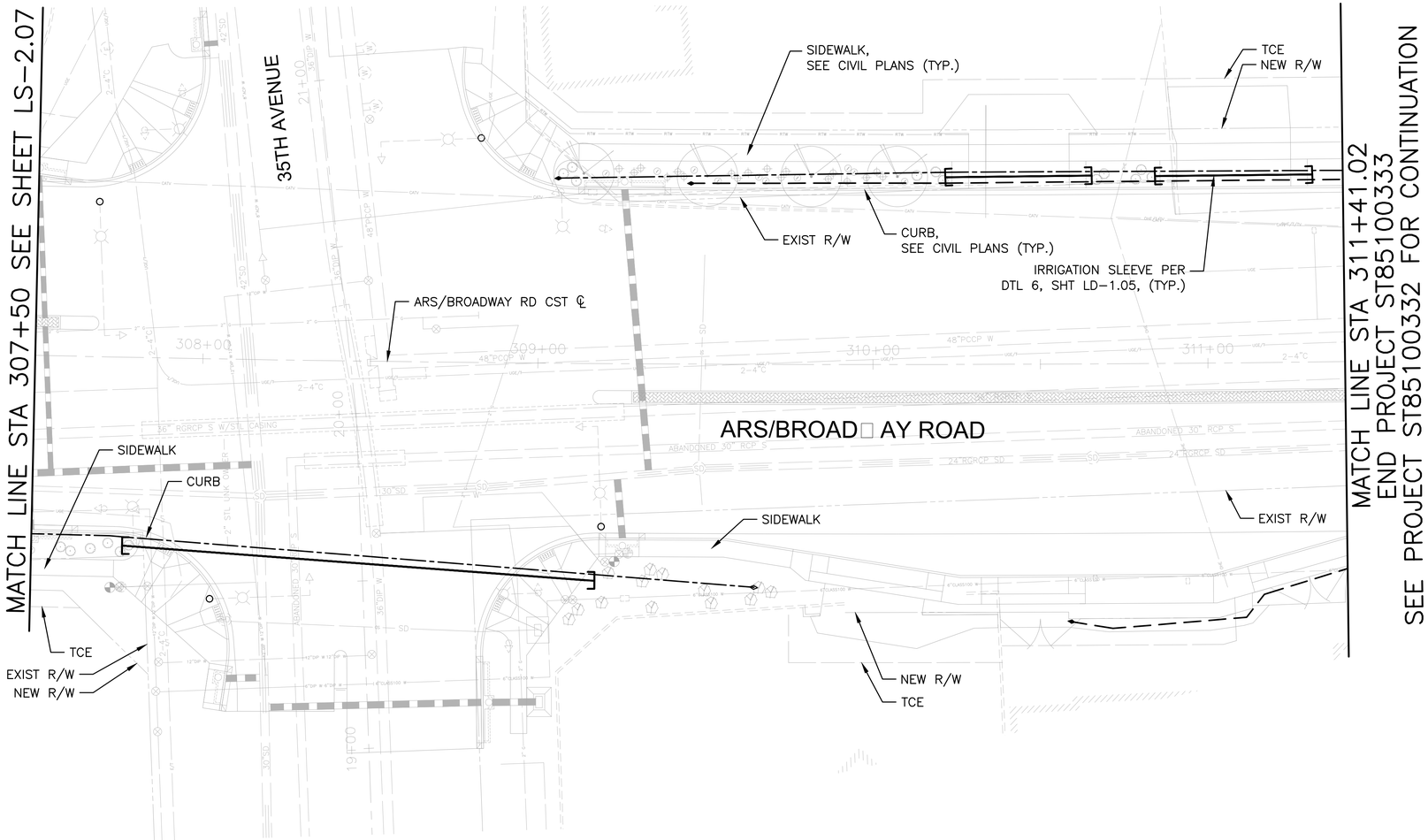
AVENIDA RIO SALADO/BROADWAY ROAD
51ST AVENUE TO 35TH AVENUE
PHOENIX STREETS – MARICOPA CO.



City of Phoenix
N

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

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NO.	DESCRIPTION	REV BY	CKD BY	DATE

REGISTERED LANDSCAPE ARCHITECT
27437
STEVEN E. LOHIDE
Date Signed 11/11/2016
ARIZONA, U.S.A.
Expires 09/30/2017

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	118	164	

AZTEC
4561 E. McDowell Road
Phoenix, AZ 85008-4505
Tel(602)454-0402
Fax(602)454-0403
www.aztec.us

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION
C	CONTROLLER: RAINMASTER EAGLE, I-CENTRAL READY, STAINLESS STEEL PEDESTAL MOUNT. INSTALL PER MANUFACTURER.S SPECIFICATONS. SEE DTL 5, SHT LD-1.04
M	WATER METER-FIELD VERIFY PRIOR TO LANDSCAPE CONSTRUCTION. REF. TO TECHNICAL PROVISIONS FOR ADDITIONAL INFORMATION ON LOCATIONS.
E	NEW 100A 120/240V ELEC SERVICE & PEDESTAL,SEE DTL 3, SHT LD-1.05
----------	SCH. 40 PVC MIN. MAINLINE SIZE NOTED ON PLAN, REF DTL 6, SHT LD-1.05
TREE / SHRUB	PVC LATERAL : CLASS 200 MIN. (ALL 1/2" PIPE TO BE CLASS 315) REF DTL 6, SHT LD-1.05
	SCH. 40 PVC SLEEVES WITH PULL BOXES UNDER PAVED AREAS FOR ALL IRRIGATION LINES REF. DTL 6, SHT LD-1.05
	REDUCED PRESSURE BACKFLOW PREVENTER: FEBCO MODEL 825 YA. SAME SIZE AS METER. ENCLOSURE: LE MEUR OR APPROVED EQUAL, REF DTL 4, SHT LD-1.05
	ISOLATION VALVE – SAME SIZE AS MAINLINE. REF DTL 2, SHT LD-1.04
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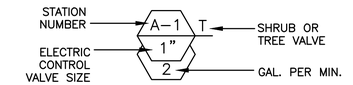

NOTES:
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IRRIGATION PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY ROAD
3RD AVENUE TO 35TH AVENUE
ST85100371 00

DR: JP	DES: SEL	CK: SEL	DWG SERIES No.
DATE:11/16	DATE: 11/16	DATE: 11/16	
SCALE: 1"=20'			LS-2.08

ST85100371(004)

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AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

CITY OF PHOENIX STREET LIGHTING
STREET TRANSPORTATION DEPARTMENT
AVENIDA RIO SALADO, PHASE II - BROADWAY ROAD (ARS)
43RD AVE TO 35TH AVE
COP PROJECT NO. ST85100371(004)

Registered Professional Engineer
CERTIFICATE NO. 44464
SHANTHI M. KRISHNAN
Date Signed 6/30/16
ARIZONA, U.S.A.
EXPIRES: 6/30/18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	119	164

CONSULTING ENGINEER

DES	SMT	DR:	SMT	CK:	SMK	DATE:	07/16

JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003

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STREET LIGHTING GENERAL NOTES

THE FOLLOWING INFORMATION IS PROVIDED TO EMPHASIZE CRITICAL WORK AND IS INTENDED TO SUPPLEMENT THE SPECIFICATIONS.

1. THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES AND ORDINANCES.
2. PRIOR TO SUBMITTAL, THE STREET LIGHT DESIGNER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT.
3. THE STREET LIGHT DESIGNER SHOULD VERIFY DIMENSIONS AT THE SITE AND IMMEDIATELY REPORT DIFFERENCES TO THE DEVELOPER'S CONSTRUCTION MANAGER AND NOT PROCEED WITH WORK UNTIL THE CONSTRUCTION MANAGER RENDERS A DECISION.
4. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN CITY OF PHOENIX RIGHT-OF-WAY.
5. ONE DRY UTILITY PERMIT FOR EACH CITY OF PHOENIX STREET LIGHT PROJECT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
6. LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETED.
7. STREET LIGHTS ARE INSPECTED BY THE CITY OF PHOENIX STREETLIGHTING INSPECTOR. WHEN ACCEPTED AND ENERGIZED THE CONTRACTOR WILL INSTALL POLE NUMBERS PRIOR TO INSPECTION.
8. LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCELL. THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT.
9. LUMINAIRES FURNISHED WITH MULTI-TAP DRIVERS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.
10. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS, NINETY (90) DEGREES APART.
11. SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.
12. WIRING SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. CONDUIT SHALL BE INSTALLED
13. AT THE DEPTH SPECIFIED ON THEIR PLANS. CONDUIT MUST BE LISTED AND LABELED AND SUITABLE FOR UNDERGROUND USE.
14. CONNECTIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS. EACH POLE SHALL HAVE A 8' X 5/8" COPPER CLAD GROUND ROD DRIVEN BENEATH PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE IS REQUIRED.
15. EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS.
16. TRENCH SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED.
17. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF THE TRENCHING AND THE INSTALLATION OF CONDUIT.
18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH MAG SPECIFICATION SECTION 107.9.
19. IF A FIXTURE SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED. THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT NECESSARY TO SUCCESSFULLY REPAIR THE FIXTURE.
20. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE ENGINEERING MANAGER, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP.
21. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. MATERIALS AND WORKMANSHIP FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.
22. TRENCHING MUST BE COMPLETED IN ACCORDANCE WITH CITY OF PHOENIX SPECIAL PROVISIONS SECTION 362.1 TRENCHING FOR UNDERGROUND STREET LIGHT CIRCUITS.

SALT RIVER PROJECT (SRP) NOTES

1. CONTRACTOR SHALL CALL SRP FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY EXCAVATION AT (602) 236-6300.
2. CONTRACTOR WILL SUPPLY ALL TRENCHING AND CONDUIT IF REQUESTED BY THE COP PROJECT MANAGER.
3. CONTRACTOR WILL STAKE STREET LIGHTS PER CITY OF PHOENIX APPROVED STREET LIGHT CONSTRUCTION DRAWINGS.
4. GRADE STAKE WILL BE SET WITHIN TWO (2) FEET OF J-BOX LOCATION.
5. CONTRACTOR WILL COORDINATE WITH SRP AND CITY OF PHOENIX FOR DE-ENERGIZING OF STREETLIGHT CONDUCTOR.
6. GROUND ROD WILL BE PROVIDED AND INSTALLED BY CONTRACTOR IN SRP J-BOX AT EACH STREETLIGHT LOCATION.
7. #6 BARE COPPER GROUND WIRE TO BE ATTACHED FROM GROUNDING LUG ON STREETLIGHT POLE TO GROUND ROD IN J-BOX.
8. IF THE CONTRACTOR INSTALLS THE POLE, THE BARE #6 COPPER GROUND WIRE SHALL BE CONNECTED FROM THE GROUND ROD IN THE SRP J-BOX TO THE GROUND CONNECTION IN THE POLE HAND-HOLE.
9. ALL TRENCHING AND CONDUIT TO BE INSPECTED BY SRP. DO NOT BACKFILL UNTIL INSPECTED.
10. SRP CONSTRUCTION PRINT MUST BE USED AS A TRENCHING REFERENCE. TRENCHING VARIATIONS MUST HAVE WRITTEN SRP DESIGNER APPROVAL. FOLLOW DETAILS FOR CONSTRUCTION. VARIATIONS IN TRENCH ROUTE MAY RESULT IN A REDESIGN FEE PAYABLE BY CONTRACTOR.
11. TRENCHES SHOULD BE STRAIGHT, LEVEL AND FREE OF DEBRIS. ALL TRENCH DEPTHS MEASURED FROM FINAL GRADE TOP OF CONDUIT (PER SRP DESIGN) WITHIN ALL EASEMENTS AND RIGHT OF WAY. MAINTAIN MINIMUM 6" CLEARANCE FROM WATER LINES, 19" FROM ALL GAS LINES AND 12" CLEARANCE FORM OTHER UTILITIES.
12. USE DB120 PVC FOR ALL STRAIGHT CONDUIT, 36" RADIUS SCHEDULE 40 PVC SWEEPS FOR ALL ELBOWS. NO REDUCERS ARE ALLOWED IN CONDUIT SYSTEM, NO COUPLINGS OR BELL ENDS ARE ALLOWED AT EQUIPMENT LOCATIONS. ALL CONDUITS WITHIN ROAD RIGHT OF WAY OR P.U.E. MUST BE RED.
13. RETAINING WALLS ARE REQUIRED ADJACENT TO EQUIPMENT WHERE THE GRADE SLOPE IS GREATER THAN 30" IN 12'.
14. ALL CONDUIT STUB OUTS ARE TO BE CAPPED AND MARKED WITH ELECTRONIC MARKER AND 7" RED FLAG MARKING RIBBON.
15. HARD CAPS ARE TO BE USED FOR ALL STUB OUTS BELOW GRADE.
16. A MANDREL INSPECTION IS REQUIRED WITH SRP INSPECTOR WITHIN 3 DAYS OF FINAL INSPECTION. CONTRACTOR MUST PROVIDE 2 REPRESENTATIVES, MINIMUM 125-CFM TRAILER MOUNTED COMPRESSOR AND ALL NECESSARY ATTACHMENTS.
17. THE CONTRACTOR IS RESPONSIBLE FOR THE INTEGRITY OF ALL CONDUITS UNTIL SRP HAS INSTALLED CONDUCTORS.
18. BACKFILL REQUIREMENTS FOR A TRENCH IN OR UNDER FUTURE PAVEMENT TO BE 1 PART SLURRY MIX IN ROAD RIGHT OF WAY AND IN DIRT TO BE 1/2 SLURRY MIX AND 1/2 SLURRY MIX MAXIMUM UNDER ALL SRP EQUIPMENT.
19. SEE DUCT BANK SPECIFICATIONS FOR ALL DUCT BANK ENCASEMENT REQUIREMENTS.

LEGEND

- PROPOSED NEW LED COBRAHEAD LUMINAIRE STREET LIGHT POLE (SEE NOTE FOR DESCRIPTION)
- EXISTING STREET LIGHT MOUNTED ON POWER POLE
- EXISTING STREET LIGHT POLE

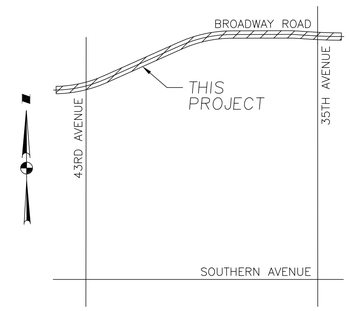
STREETLIGHT NOTES

(1) INSTALL ONE 113W LED (10,000 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 38'-6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.

(2) INSTALL ONE 60W LED (5,100 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 30'-6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.

ITEM NUMBER	TYPE OF STREET	QUANTITY	MOUNTING HEIGHT	POLE LENGTH	MAST ARM	APPROVED POLE & ARM MANUFACTURERS	LUMEN	TYPE	WATTAGE	VOLTAGE	LUMINAIRE STYLE	APPROVED LUMINAIRE MANUFACTURERS
(1)	ARTERIAL	58	32'-11"	38'-6"	20"x6'	CEM-TEC MS-1944 VALMONT CB09159 SOUTHWEST FABRICATION, LLC 386RDB	10,000	LED	113 W	120/240 AS POWER CO. REQUIRES	COBRAHEAD	GENERAL ELECTRIC ERS20D3E1740A GRAY R
(2)	LOCAL	7	25'-11"	30'-6"	20"x6'	CEM-TEC MS-1936 VALMONT CB09158 SOUTHWEST FABRICATION, LLC 386RDB	5,100	LED	60 W	120/240 AS POWER CO. REQUIRES	COBRAHEAD	GENERAL ELECTRIC ERS10A3B1740A GRAY R

ALL CATALOG NUMBERS SHALL BE CONFIRMED WITH POWER COMPANY PRIOR TO ORDERING



VICINITY MAP
N.T.S.

SHEET INDEX

COVER SHEET	SC-1.01
SITE PLAN	SL-1.01 THRU SL-1.04
DETAIL SHEET	ST-1.01

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

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STREET LIGHTING PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: SMT	DES: SMT	CK: SMK	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: N/A			SC-1.01

AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

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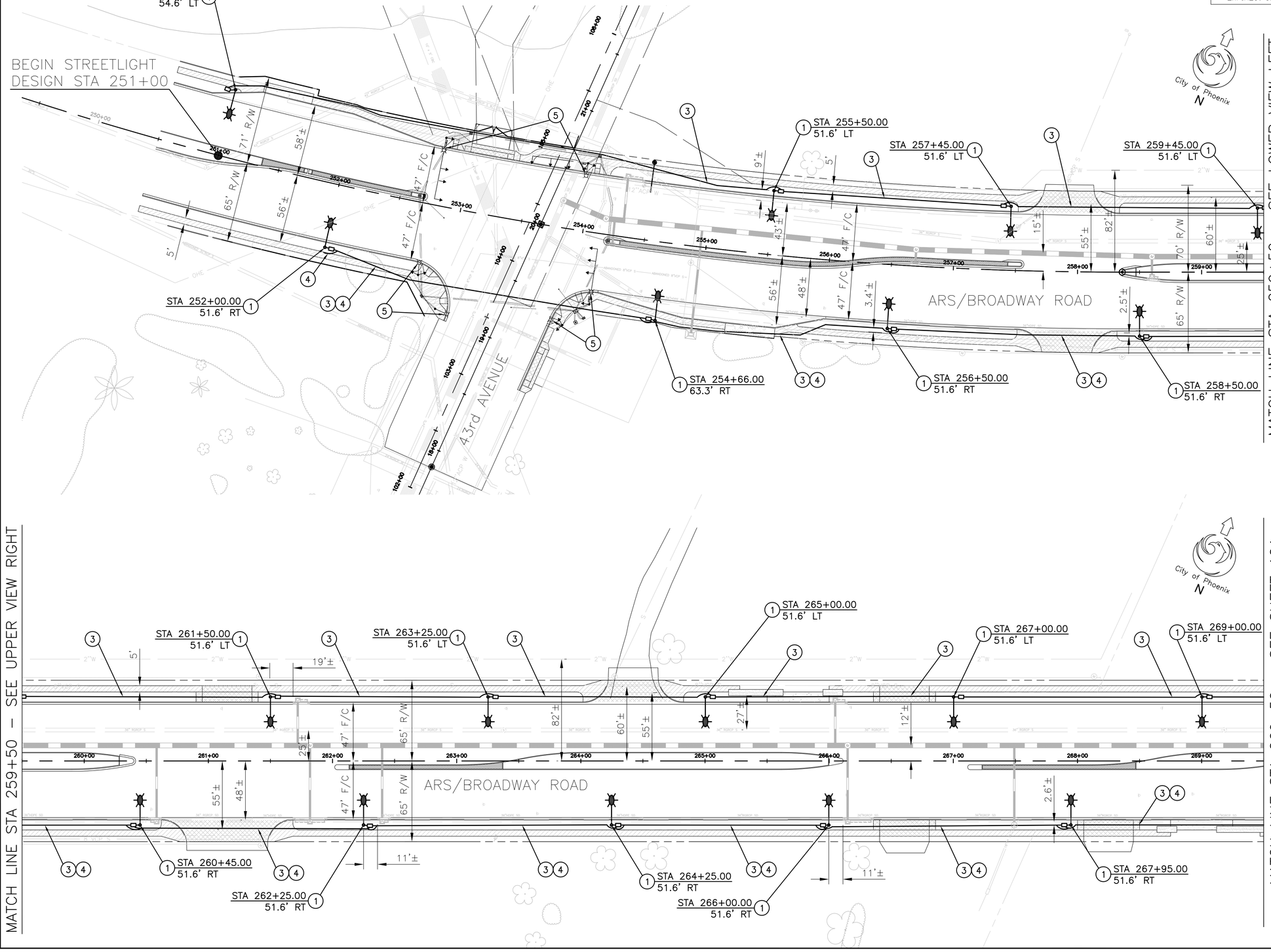

LEGEND

- PROPOSED NEW LED COBRAHEAD LUMINAIRE STREET LIGHT POLE (SEE NOTE FOR DESCRIPTION)
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- EXISTING STREET LIGHT POLE

STREETLIGHT NOTES

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(3)	INSTALL 2½" SCHEDULE 40 PVC CONDUIT	3,615 LF
(4)	INSTALL 1–4" PVC ELECTRICAL CONDUIT (IN SAME TRENCH AS 2½" SCHEDULE 40 PVC LIGHTING CONDUIT, SPACED 6" APART)	1,780 LF
(5)	LUMINAIRE MAST ARM AS PART OF TRAFFIC SIGNAL INSTALLATION (BY OTHERS)	

REMOVAL NOTES

[1]	EXISTING STREETLIGHT TO BE REMOVED AND PROPERLY DISPOSED.	0 EA

Registered Professional Engineer
CERTIFICATE NO. 44464
SHANTHI M. KRISHNAN
Date Signed 11/30/17
ARIZONA, U.S.A.
EXPIRES: 6/30/18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	120	164

CONSULTING ENGINEER

DES	SMT	DR:	SMT	CK:	SMK	DATE:	07/16

JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003

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CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	SMT	DES:	SMT	CK:	SMK	DWG SERIES NO.
DATE:	07/16	DATE:	07/16	DATE:	07/16	
SCALE:	HORIZ 1"=40' VERT					SL–1.01

AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
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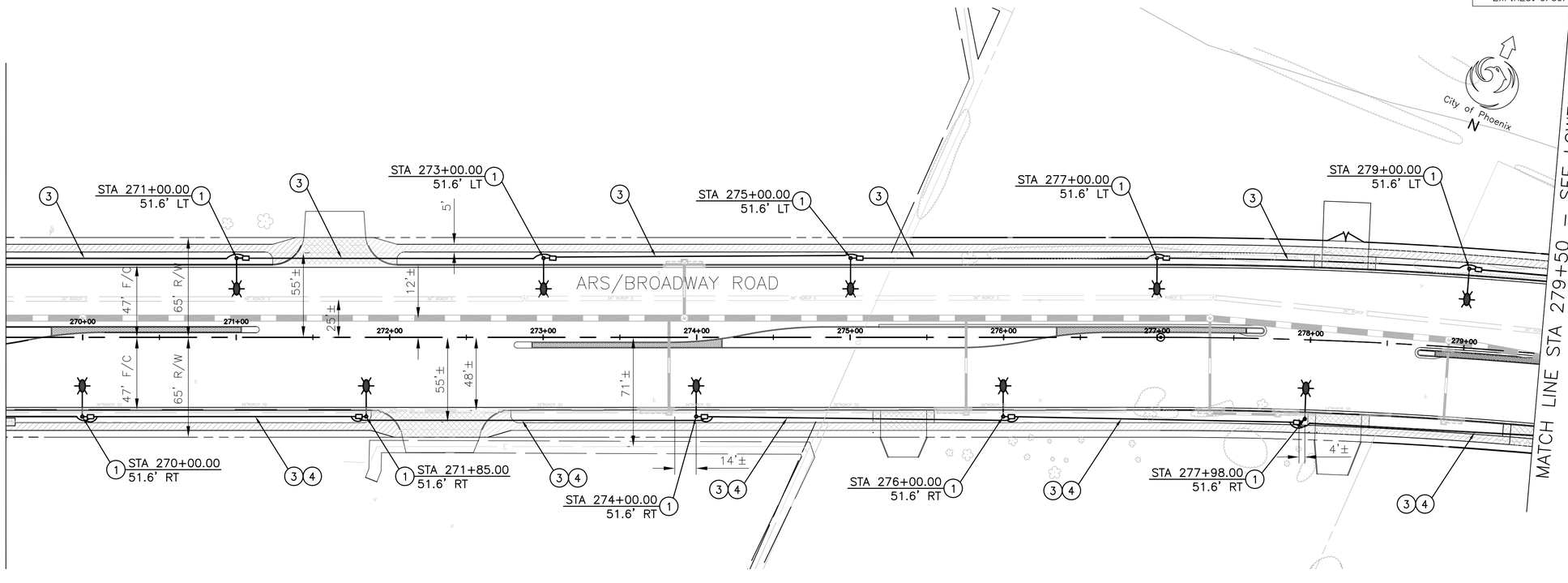

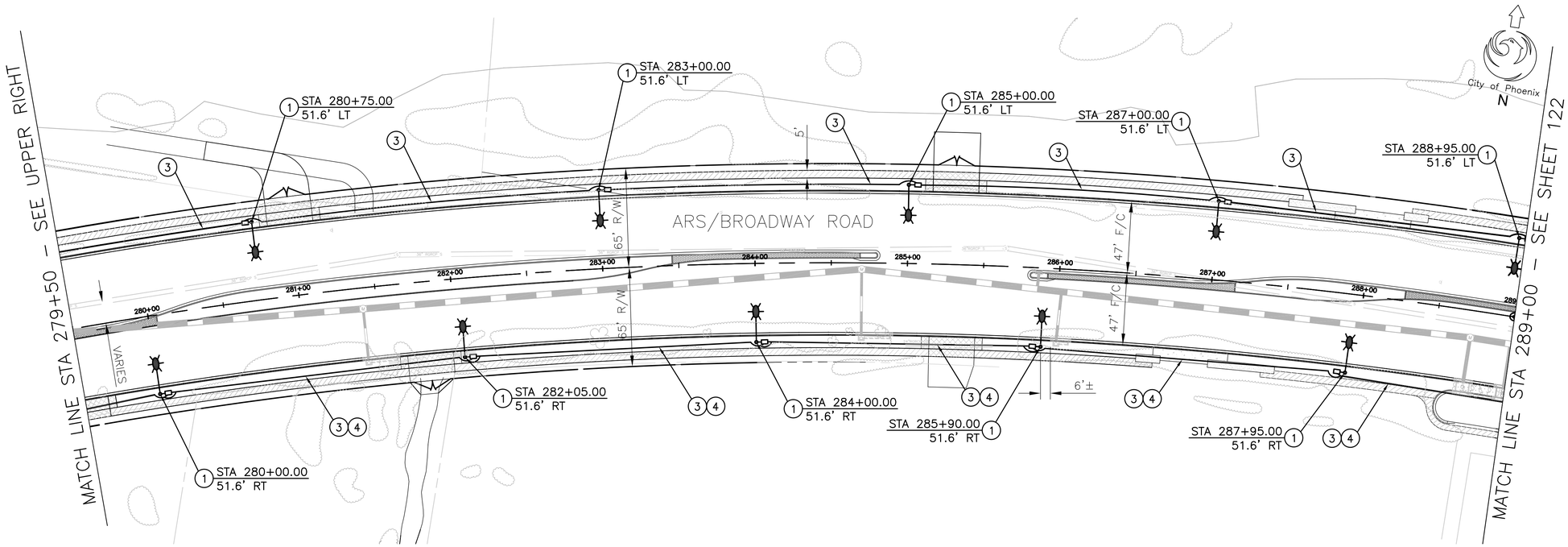

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- EXISTING STREET LIGHT MOUNTED ON POWER POLE
- EXISTING STREET LIGHT POLE

STREETLIGHT NOTES

		QTY
(1)	INSTALL ONE 113W LED (10,000 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 38'–6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.	20 EA
(2)	INSTALL ONE 60W LED (5,100 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 30'–6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.	0 EA
(3)	INSTALL 2½" SCHEDULE 40 PVC CONDUIT	4,030 LF
(4)	INSTALL 1–4" PVC ELECTRICAL CONDUIT (IN SAME TRENCH AS 2½" SCHEDULE 40 PVC LIGHTING CONDUIT, SPACED 6" APART)	1,985 LF
(5)	LUMINAIRE MAST ARM AS PART OF TRAFFIC SIGNAL INSTALLATION (BY OTHERS)	

REMOVAL NOTES

[1]	EXISTING STREETLIGHT TO BE REMOVED AND PROPERLY DISPOSED.	0 EA

Two working days before you dig. CALL FOR THE BLUE STAKES
(602) 263-1100
Blue Stake Center CALL COLLECT

"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."

STREET LIGHTING PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: SMT	DES: SMT	CK: SMK	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=40' VERT			SL–1.02

AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	122	164

CONSULTING ENGINEER

DES	SMT	DR:	SMT	CK:	SMK	DATE:	07/16

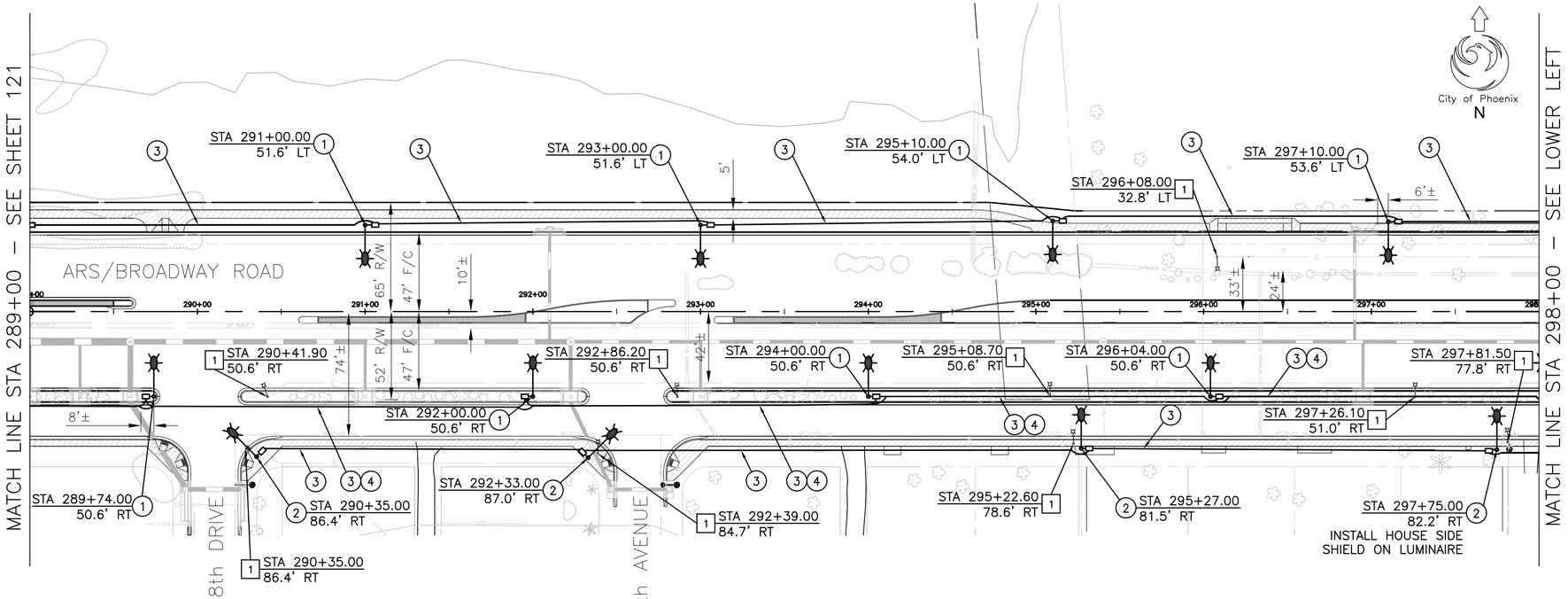
JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003

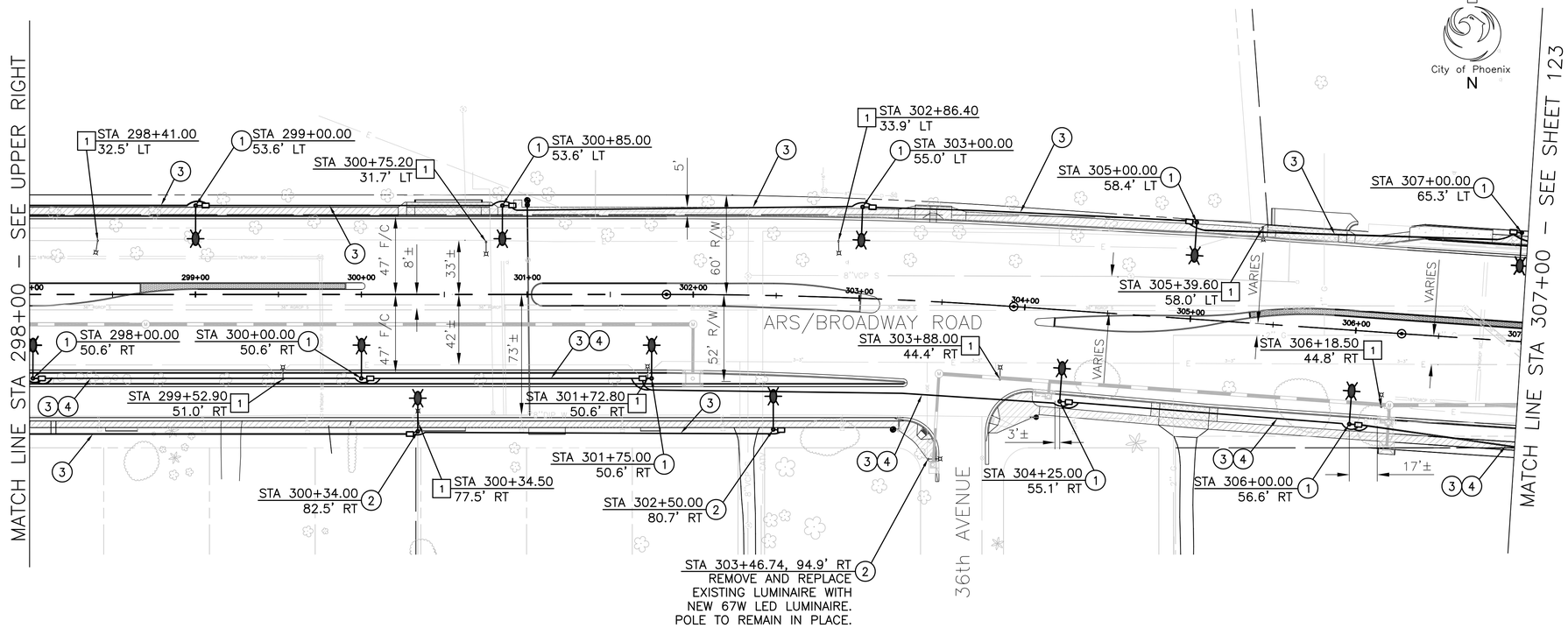
Registered Professional Engineer CERTIFICATE NO. 44464 SHANTHI M. KRISHNAN Date Signed 6/30/16 ARIZONA, U.S.A.

EXPIRES: 6/30/18

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE





LEGEND

- PROPOSED NEW LED COBRAHEAD LUMINAIRE STREET LIGHT POLE (SEE NOTE FOR DESCRIPTION)
- EXISTING STREET LIGHT MOUNTED ON POWER POLE
- EXISTING STREET LIGHT POLE

STREETLIGHT NOTES

		QTY
(1)	INSTALL ONE 113W LED (10,000 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 38'–6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.	18 EA
(2)	INSTALL ONE 60W LED (5,100 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 30'–6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.	7 EA
(3)	INSTALL 2½" SCHEDULE 40 PVC CONDUIT	5,420 LF
(4)	INSTALL 1–4" PVC ELECTRICAL CONDUIT (IN SAME TRENCH AS 2½" SCHEDULE 40 PVC LIGHTING CONDUIT, SPACED 6" APART)	1,850 LF
(5)	LUMINAIRE MAST ARM AS PART OF TRAFFIC SIGNAL INSTALLATION (BY OTHERS)	

REMOVAL NOTES

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STREET LIGHTING PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: SMT	DES: SMT	CK: SMK	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"=40' VERT			SL–1.03

AVENIDA RIO SALADO/BROADWAY RD
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

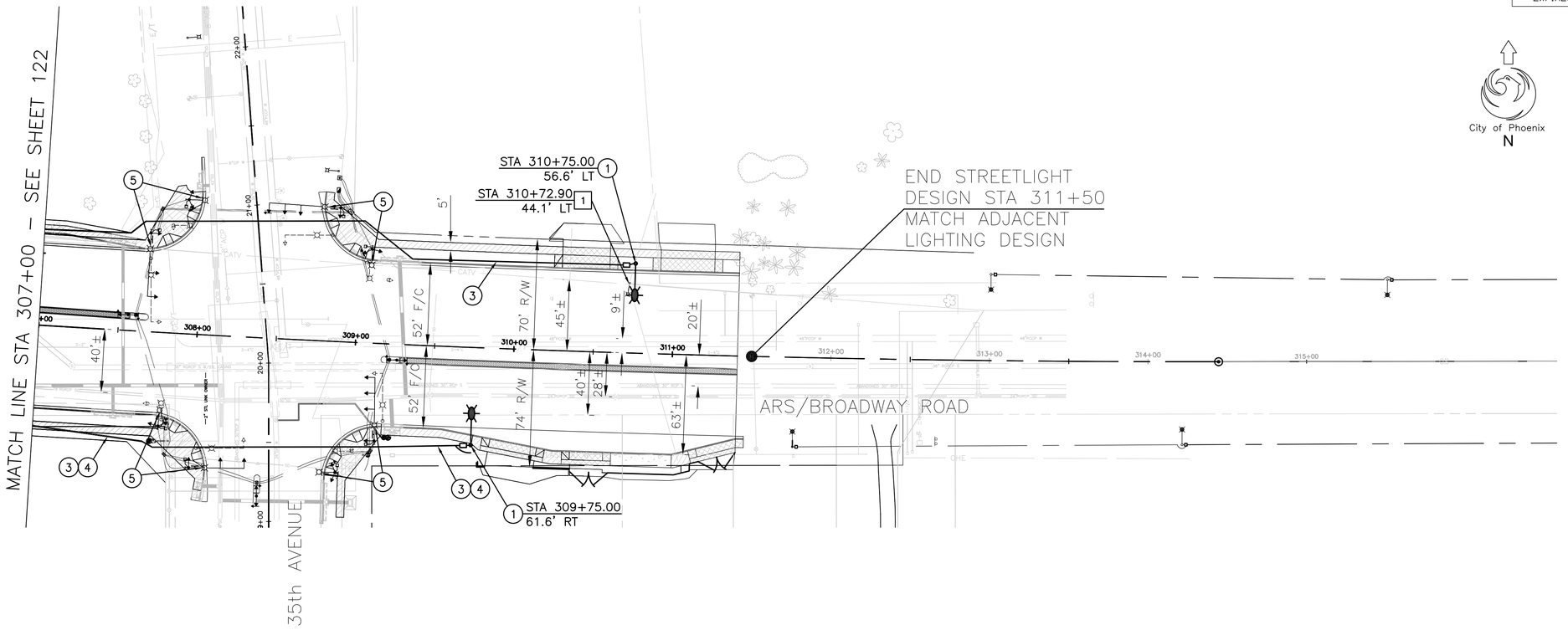
F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	123	164

CONSULTING ENGINEER

DES	SMT	DR:	SMT	CK:	SMK	DATE:	07/16

Registered Professional Engineer
CERTIFICATE NO. 44464
SHANTHI M. KRISHNAN
Date Signed 11/30/17
ARIZONA, U.S.A.
EXPIRES: 6/30/18

JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003



City of Phoenix
N

LEGEND

- PROPOSED NEW LED COBRAHEAD LUMINAIRE STREET LIGHT POLE (SEE NOTE FOR DESCRIPTION)
- EXISTING STREET LIGHT MOUNTED ON POWER POLE
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(2)	INSTALL ONE 60W LED (5,100 LUMEN) FIXTURE WITH PHOTOELECTRIC CONTROL ON A 30'–6" POLE WITH A 20" X 6' MAST ARM PER SRP DETAIL 8040 AND SPECIFICATIONS. FOUNDATION AND GROUNDING PER SRP STANDARDS AND SPECIFICATIONS. INSTALL (2) #12 THHN/THWN FROM LUMINAIRE TO FUSE HOLDER IN POLE. INSTALL SRP PULL BOX ADJACENT POLE WITH 1" FLEX CONDUIT TO POLE PER SRP SPECIFICATIONS AND REQUIREMENTS. ALL WIRING, FUSING, AND GROUNDING PER SRP DETAILS AND SPECIFICATIONS.	0 EA
(3)	INSTALL 2½" SCHEDULE 40 PVC CONDUIT	650 LF
(4)	INSTALL 1–4" PVC ELECTRICAL CONDUIT (IN SAME TRENCH AS 2½" SCHEDULE 40 PVC LIGHTING CONDUIT, SPACED 6" APART)	280 LF
(5)	LUMINAIRE MAST ARM AS PART OF TRAFFIC SIGNAL INSTALLATION (BY OTHERS)	

REMOVAL NOTES

[1]	EXISTING STREETLIGHT TO BE REMOVED AND PROPERLY DISPOSED.	1 EA

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REVISION BY CITY OF PHOENIX

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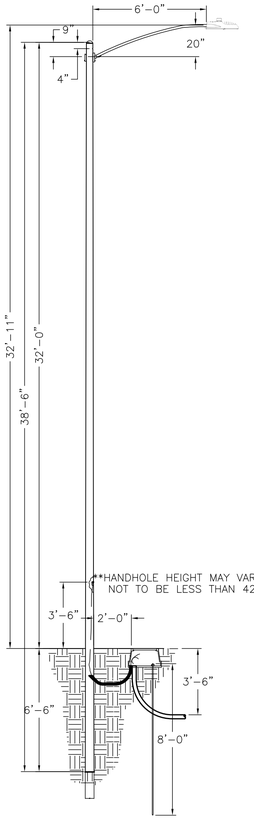
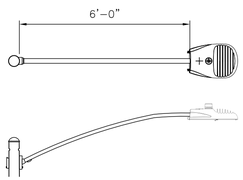


COLLECTOR

GRAY ROADWAY POLE STANDARDS

1/4"=1'-0"



GRAY ROADWAY POLE LUMINAIRES

3/8"=1'-0"

GRAY ROADWAY LUMINAIRE DESCRIPTIONS

APN# 128329
45W LED RWGR - PEDESTRIAN
ERS10A3B1540A GRAY R

APN# 128330
60W LED RWGR - LOCAL
ERS10A3B1740A GRAY R

APN# 128331
95W LED RWGR - COLLECTOR
ERS10C3C1740A GRAY R

APN# 128332
113W LED RWGR - MAJOR
ERS20D3E1740A GRAY R

APN# 128364
257W LED RWGR - SPECIAL MAJOR
ERS20G3C1140A GRAY R

1944.30

19 = 19'- 0" POLE SNG SIMPLEX
30 = 30'- 6" POLE SNG SIMPLEX
38 = 38'- 6" POLE SNG SIMPLEX
38X = 38'- 6" POLE DBL SIMPLEX
** SEE SPEC. NOTE

1944.38

19 = 19'- 0" POLE SNG SIMPLEX
30 = 30'- 6" POLE SNG SIMPLEX
38 = 38'- 6" POLE SNG SIMPLEX
38X = 38'- 6" POLE DBL SIMPLEX
** SEE SPEC. NOTE

CONSTRUCTION NOTES:

1 **ADJUST PHOTO EYE TO FACE NORTH**

2 **A GROUND ROD IS PROVIDED WITH THE JUNCTION BOX. WHERE A GROUND ROD CANNOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449 THRU 2460 FOR APPROVED ALTERNATES.**

3 **THE 40'-6" SELF-SUPPORTING STEEL POLE AND ONE OF THE 38'-0", HAVE TWO, MANUFACTURED INSTALLED SIMPLEX FITINGS 180 APART FOR DOUBLE ARMS, SEE CHART.**

4 **APN 33701054 IS A POLE BAND ADAPTOR WITH A SIMPLEX FITTING. ADAPTOR IS REQUIRED FOR THE SECOND ARM IN DOUBLE ARM APPLICATIONS ON EXISTING PLES IN THE FIELD WITHOUT TWO SIMPLEX FITTINGS. SEE 8198 FOR AVAILABLE SIZES.**

5 **POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.**

ENGINEERING NOTES:

A **THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM ARE SPECIFIED.**

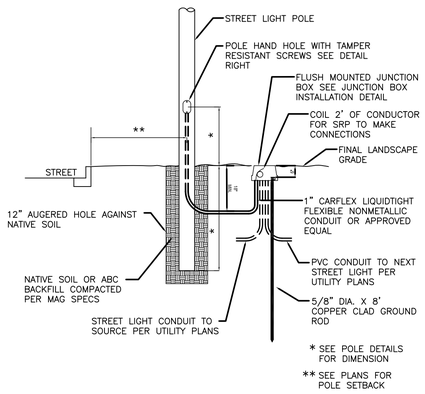
B **SEE SPEC 8130 - 8131 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.**

C **SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.**

LIGHT CODE	COLOR	APN	TYPE	WATTS	VOLTS	INITIAL LUMENS	PHOTOMETRIC CURVE
CL60		00128329		45	120/208/240/277	4,100	454669
CL61		00128330		60	120/208/240/277	5,100	454659
CL62	GRAY	00128331	LED	95	120/208/240/277	8,200	454677
CL63		00128332		113	120/280/240/277	10,000	454688
CL64		00128364		257	120/280/240/277	19,200	454942

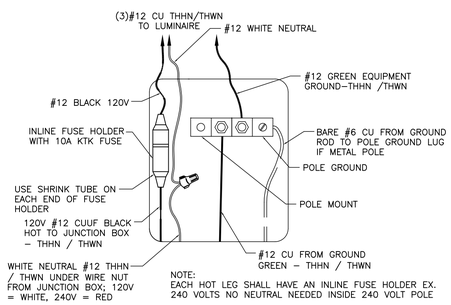
POLE TYPE	POLE CODE	POLE LENGTH	BURY DEPTH	POLE ABOVE GROUND	POLE BUTT DIAMETER			LUMINAIRE HEIGHT ABOVE GROUND ON ARM		
					STEP	TAPER	WEIGHT	20' X 6'	3' X 8'	8' X 8'
LOCAL	1944.30	30' - 6"	5' - 6"	25' - 0"	5-9/16"	7-5/16"	460	25' - 11"	27' - 3"	-
COLLECTOR	1944.38	38' - 6"	6' - 6"	32' - 0"	6-5/8"	9-3/4"	640	32' - 11"	34' - 3"	39' - 3"
ARTERIAL	1944.38X	38' - 6"	6' - 6"	32' - 0"	6-5/8"	9-3/4"	640	32' - 11"	34' - 3"	39' - 3"

**FOR NON-STANDARD POLES, CONTACT THE STREET TRANSPORTATION STREETLIGHTING SECTION FOR INFORMATION.



POLE HAND HOLE FUSING DETAIL

3/16"=1'-0"



GROUNDING DETAIL

3/16"=1'-0"

ELECTRICAL REQUIREMENTS FOR NEW POLE INSTALLATION

1. JUNCTION BOXES SHALL MEET UTILITY COMPANY STANDARDS.
2. CONDUIT, CONDUCTORS, AND FUSE HOLDERS SHALL BE LISTED AND LABELED FOR USE IN A WET LOCATION WHEN USED IN A JUNCTION BOX. NEC300.5(B), 310.8(C)
3. IN-LINE FUSE HOLDER USED IN HAND HOLE OR SERVICE DROP SHALL BE CONSIDERED AS DISCONNECTING MEANS. FUSE HOLDERS TO BE RATED AT 22,000 AIC MINIMUM. NEC 240.40
4. ELECTRICAL CONNECTIONS-CONDUCTORS OF DISSIMILAR METALS SHALL NOT BE INTERMIXED IN A TERMINAL OR SPLICING CONNECTOR WHERE PHYSICAL CONTACT OCCURS BETWEEN DISSIMILAR CONDUCTORS, (COPPER, ALUMINUM) UNLESS THE DEVICE IS IDENTIFIED FOR THE PURPOSE AND CONDITIONS OF USE. NEC 110.14
5. ELECTRICAL CONNECTIONS OR SPLICES IN AN UNDERGROUND INSTALLATION SHALL BE APPROVED FOR WET LOCATIONS. (NEC 300.5)
6. NON-CURRENT CARRYING CONDUCTIVE MATERIALS ENCLOSING ELECTRICAL CONDUCTORS OR EQUIPMENT, OR FORMING PART OF SUCH EQUIPMENT, SHALL BE CONNECTED TO EARTH IN A MANNER THAT WILL LIMIT THE VOLTAGE IMPOSED BY LIGHTNING OR UNINTENTIONAL VOLTAGE DUE TO SHORT CIRCUITS AND LIMIT THE VOLTAGE TO GROUND ON THESE MATERIALS. NEC 250.4(B) (GROUND RODS)
7. AN EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED FROM THE GROUND LUG IN THE HAND-HOLE TO THE LUMINAIRE WITH THE CURRENT CARRYING CONDUCTORS. NEC 410.30(B)(3).
8. CONNECTION TO THE GROUND ROD AND THE GROUNDING ELECTRODE SHALL BE LISTED AND LABELED FOR USE. NEC 250.8
9. CONNECT #6 BARE COPPER WIRE FROM THE GROUND ROD ADJACENT TO THE POLE OR IN JUNCTION BOX TO THE GROUND LUG IN THE POLE.

CONSTRUCTION NOTES:

1 ADJUST PHOTO EYE TO FACE NORTH

2 A GROUND ROD IS PROVIDED WITH THE JUNCTION BOX. WHERE A GROUND ROD CANNOT BE DRIVEN ALTERNATE GROUND SHALL BE USED. SEE 2449THRU 2460 FOR APPROVED ALTERNATES.

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5 POLES THAT HAVE MORE THAN ONE LUMINAIRE REQUIRE A SEPARATE CIRCUIT WITH FUSING FROM THE J-BOX TO EACH LUMINAIRE.

ENGINEERING NOTES:

A THE LIGHT CODE PROVIDES TWO SAME WATTAGE LUMINAIRES WHEN DOUBLE ARM ARE SPECIFIED.

B SEE SPEC 8130 - 8131 FOR IN-LINE FUSE FOR UNDERGROUND FEEDS.

C SEE 8100 THRU 8107 FOR OVERHEAD ATTACHMENTS.

20 YEAR PHOTOCELL REQUIREMENTS

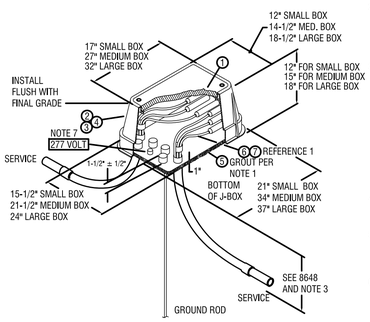
APN# 00073241 CONTROL PHOTO MULTI BR-20 CONTROL, PHOTO-ELECTRIC, BROWN, 20YEAR FAIL OFF, 120/208/240/277 MULTI-VOLT, SILICON, SOLID STATE, 2.40 TO 3.60 FC ON 1.2 TO 2.4 FC OFF, 60 HERTZ, 320 JOULE MOV, INVERSE ON/OFF RATIO .6:1 +/- .1, FAIL OFF, THREE PIN NEMA TWISTLOCK, 20 YEAR LIFE, 8483-SIDE SELC, MODEL #8483F2TMABR

GE Evolve II Gray Cobra LED Fixtures

WATT	LUMEN	DESCRIPTION	APN	MODEL#
45W	4,100	**SCALABLE ROADWAY GE LED GRAY Pedestrian** LUMINAIRE 45WATT, 4000K, 4,100 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, GRAY, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136,15 WATTAGE LABEL.	128329	ERS10A3B1540A GRAY R
60W	5,100	**SCALABLE ROADWAY GE LED GRAY Local Street** LUMINAIRE 60WATT, 4000K, 5,100 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, GRAY, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136,15 WATTAGE LABEL.	128330	ERS10A3B1740A GRAY R
95W	8,200	**SCALABLE ROADWAY GE LED GRAY Collector Street** LUMINAIRE 95WATT, 4000K, 8,200 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, GRAY, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136,15 WATTAGE LABEL.	128331	ERS10C3C1740A GRAY R
113W	10,000	**SCALABLE ROADWAY GE LED GRAY Major Roadway** LUMINAIRE 113WATT, 4000K, 10,000 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, GRAY, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136,15 WATTAGE LABEL.	128332	ERS20D3E1740A GRAY R
257W	19,200	**SCALABLE ROADWAY GE LED GRAY Special Major Roadway** LUMINAIRE 257WATT, 4000K, 19,200 LUMEN, ROADWAY, LED, TERMINAL BOARD, 10KV SURGE PROTECTION, 90 DEGREE CUTOFF, GRAY, MULTIVOLT 120/208/240/277 DRIVER, IES NARROW ASYMMETRIC MEDIUM, ANSI C136.41 7 PIN TWISTLOCK PHOTO CONTROL RECEPTACLE, CSA OR UL CERTIFIED, ANSI C136,15 WATTAGE LABEL.	128364	ERS20G3C1140A GRAY R

CODE	JUNCTION BARS
A	THREE-POSITION MOLDS
B	FIVE-POSITION MOLDS
C	EIGHT-POSITION MOLDS
D	TWO-POSITION GEL PACKS
N	NO CONNECTORS

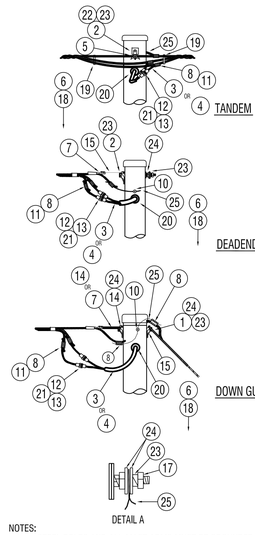
8655. _ _ _ _ SMALL BOX
8656. _ _ _ _ MEDIUM BOX
8657. _ _ _ _ LARGE BOX
IF APPLICABLE G = APS GROUT APPROVED
IF APPLICABLE L = LIGHTS
SECONDARY WIRE CODES
JUNCTION BARS



J-BOX DETAIL

1/4"=1'-0"

NOTES:
1. CONCRETE GROUT SHALL BE PREMIX, APN 71301280 OR EQUIVALENT.
2. PENTA-HEAD BOLTS SHALL BE INSTALLED PRIOR TO ENERGIZING NEW UNDERGROUND SYSTEMS. LOST OR MISPLACED PENTA-HEAD BOLTS SHALL BE REPLACED WITH APN 71402608.
3. BRINGING ALL CABLE/CONDUITS AND GROUND ROD INTO THE SAME END OF THE BOX TO ENABLE CABLES TO BE RAISED AND LOWERED EASILY. CONDUIT SWEEPS SHALL BE POSITIONED AND ALIGNED SO THAT WHEN TWO AND FOUR POSITION JUNCTION BARS ARE SPECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "A". WHEN SIX POSITION JUNCTION BARS ARE SPECIFIED, THE ST. LT., SECONDARY AND SERVICE CONDUITS SHALL BE INSTALLED AS SHOWN IN DETAIL "B".
4. COMPACTION BENEATH AND AROUND JUNCTION BOX SHALL BE A MINIMUM OF 85 PERCENT.
5. REPLACEMENT LID FOR MEDIUM PLASTIC JUNCTION BOX IS 33100981. PENTAHEAD BOLTS AND EMS MARKER MUST BE REUSED FROM OLD LID.
6. ADDITIONAL TRENCH DEPTH IS USUALLY REQUIRED AT ALL EQUIPMENT LOCATIONS. SEE 8648 FOR THE MINIMUM TRENCH DEPTHS AND THE DEGREE OF SLOPE ALLOWED AS THE TRENCH DEPTH CHANGES.
7. ON 277 VOLT STREET LIGHT CIRCUITS, INSTALL "277 VOLT" RED MICARTA TAG (APN 00080796) PROVIDED BY SPEC 8129.
8. TORQUE BOLTS TO 5 FT - LBS (60 IN - LBS).



NOTES:
1. STEEL POLES AND ALL MAST ARMS MUST BE GROUNDED.
2. OVERHEAD ATTACHMENTS MUST BE GROUNDED TO THE STREET LIGHT POLE. A 13/64" HOLE HAS BEEN ADDED 6" BELOW TOP OF STREET LIGHT POLE TO INSTALL A GROUNDING INSERT APN 00055552. TOOL TO INSTALL RIVNUT IS APH 00053279. SEE STANDARD 2408. WHERE RIVNUTS ARE NOT AVAILABLE GROUND PER DETAIL A.
3. ALL OVERHEAD FED STREET IGHT POLES SHALL HAVE A GROUND ROD INSTALLED AND A #6 GROUND WIRE BONDED TO THE GROUNDING LUG AT THE BACK OF THE HAND HOLE.
4. THESE CODES PROVIDE THE #14 CU FOR THE MAST ARMS., HARDWARE FOR ATTACHING TANGENT OR DEADEND SECONDARY, AND THE CONNECTORS.

CODE	8100	8101	8102	8103	8106	8107	DETAIL A	MATERIAL LIST	
ITEM	QTY	QTY	QTY	QTY	QTY	QTY	QTY	DESCRIPTION	APN
1	-	-	-	-	1	1	-	BOLT GALV MACH 5/8"X 10"	33001549
2	1	1	1	1	-	-	-	BOLT GALV MACH 5/8"X 8"	33001547
3	10	-	10	-	10	-	-	CABLE 2/C #14CU UF	31102132
4	-	10	-	10	-	10	-	CABLE 3/C #14CU UF	31102135
5	1	1	-	-	-	-	-	CLAMP ANGLE .162 TO .60	33002502
6	1	1	1	1	1	1	-	CLAMP GROUND ROD 5/8"	33002580
7	-	-	1	1	-	-	-	CLAMP WEDGE FELX 4-2AL	33002772
8	2	3	2	3	4	2	-	CONN AL PG - SEE 2250	
9	-	-	-	-	1	1	-	CONN CU "C" - SEE 2255	
10	1	1	1	1	1	1	-	CONN POST 1/2"S SS #6-1/0	00095704
11	1	2	1	2	1	2	-	COVER D DIE INSULATING	33003192
12	1	2	1	2	1	2	-	FUSE CARTRIDGE 15A	72602410
13	1	2	1	2	1	2	-	FUSEHOLDER IN-LINE 600V	00097502
14	-	-	-	-	-	1	-	GRIP DE PREF - SEE2135	
15	-	-	1	1	2	2	-	HOOK GUY - MED DUTY 5/8"	33003831
16	1	1	1	1	1	1	-	NUT INSERT RIVNUT	00055552
17	-	-	-	-	-	-	1	NUT SQ GALV 5/8"	33004176
18	1	1	1	1	1	1	-	ROD COPPERCLAD GRD 5/8" X 8"	33004805
19	2	2	-	-	-	-	-	SPACER MULTIPLEX CABLE	33006510
20	1	1	1	1	1	1	-	STOPPER BUG AND DUST	33806955
21	1	1	1	1	1	1	-	TUBING SHRINKABLE 1/4	71606200
22	2	2	2	2	-	-	-	WASHER GALV CU 3/0X1/4"	33007126
23	1	1	1	1	1	1	1	WASHER GALV DBL COIL 5/8"	33007154
24	-	-	-	-	-	-	2	WASHER GALV RD 5/8"	33007185
25	2	2	2	2	2	2	-	WIRE BARE #6 SOLID CU	33007580

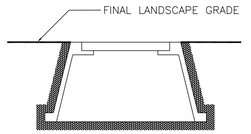
STREET LIGHT POLE CABLE ATTACHMENTS AND GROUNDING DETAIL

1/2"=1'-0"

DESCRIPTION
15" X 21" X 12" JUNCTION BOX WITH 3/8" CAPTIVE PENTA HEAD BOLTS

WORD "ELECTRIC" ON COVER

BOX TO BE POLYMER CONCRETE MATERIAL WITH POLYMER CONCRETE BOLT DOWN (NON–CONDUCTIVE COVER).



FLUSH MOUNTED–BOLT ON COMPOSOLITE LID

SRP APPROVED SUPPLIERS	PART NUMBER
STRONGWELL	PC1118B513 BOX PC1118C504–17/UH0390AA COVER WITH ELECTRIC
ARMORCAST PRODUCTS	6001429A
CDR SYSTEMS	PA40–1015–12
CARSON & ASSOCIATES	HLW1111B–12 BOX HLW1118–PO LID

J-BOX SECTION

3/8"=1'-0"

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

STREET LIGHTING PLANS

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT
AVENIDA RIO SALADO,
PHASE II - BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: SMT	DES: SMT	CK: SMK	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: N/A			ST–1.01

Registered Professional Engineer CERTIFICATE NO. 44464 SHANTHI M. KRISHNAN Date Signed 7/31/17 ARIZONA, U.S.A.
EXPIRES: 6/30/18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.	ST85100371(004)	124	164

CONSULTING ENGINEER

DES SMT	DR: SMT	CK: SMK	DATE: 07/16

JACOBS
101 N. 1st Ave, #2600, Phoenix, AZ 85003

TRAFFIC SIGNAL SUMMARY

ITEM No.	DESCRIPTION	UNIT	SHEET															TOTAL QUANTITY
			10427 - 43rd Ave			10426 - 35th Ave												
			Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	
M4711002	2" PVC Conduit under new pavement or landscaping	LF	235			370												605 LF
M4711004	2 ½" Conduit under new pavement or landscaping	LF	1010			1175												2185 LF
M4712002	No. 5 Junction Box	EA	6			6												12 EA
M4712003	No. 7 Junction Box	EA	1			1												2 EA
M4721003	Foundation for Type LM Pole	EA	2			4												6 EA
M4721004	Foundation for Type SM Pole	EA	1															1 EA
M4721005	Foundation for Type SR Pole	EA	3			2												5 EA
M4721006	Foundation for Type SQ Pole	EA				2												2 EA
M4722001	Power Service Pedestal Foundation	EA	1			1												2 EA
M4722002	Foundation for Traffic Signal Controller Cabinet	EA				1												1 EA
M4741004	Type LM Pole	EA		2			4											6 EA
M4741005	Type SM Pole	EA		1														1 EA
M4741006	Type SR Pole	EA		3			2											5 EA
M4741007	Type SQ Pole	EA					2											2 EA
M4741014	45' Mast Arm for SR pole	EA					2											2 EA
M4741016	55' Mast Arm for SQ Pole	EA					2											2 EA
M4741020	COP Luminaire Mast Arm	EA		6			8											14 EA
M4741021	5' Riser for LM/SM/SR Pole	EA		6			7											13 EA
M4741023	20' Riser for LM/SM/SR Pole	EA					1											1 EA
M4751001	Electrical Power Service Pedestal	EA		1			1											2 EA
M4751002	Traffic Signal Controller Cabinet	EA					1											1 EA

TRAFFIC SIGNAL REMOVALS

ITEM No.	DESCRIPTION	UNIT	10427 - 43rd Ave			10426 - 35th Ave												
			Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	Found	Equip	Wiring	
M4791001	Removal of A Pole	EA				5												5 EA
M4791004	Removal of LM Pole w/10' RIser	EA				4												4 EA
M4791008	Removal of SM/SR Pole w/ Mast Arm & Riser	EA				4												4 EA
M4792001	Removal of Controller Cabinet	EA				1												1 EA
M4792002	Removal of Power Service Pedestal	EA				1												1 EA
M4793001	Removal of Traffic Signal Pole Foundations	CY				13												13 CY
M4794001	Removal of Incidental Traffic Items	LS				1												1 EA

F.H.W.A. REGION	STATE	PROJECT NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100330(004)	125	164	

NOTE:

Lineal Feet quantities for PVC conduit are measured from point to point and may not reflect actual field conditions

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

STEVEN M. OGBURN
42880
REGISTERED PROFESSIONAL ENGINEER (CIVIL)
11/1/16
Date Signed
ARIZONA, U.S.A.
Expires 6/30/2017

"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 THE CONTRACTORS CONTRACT WITH THE CITY OF PHOENIX."

TRAFFIC SUMMARY

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BROADWAY ROAD/AVENIDA RIO SALADO

43rd AVENUE TO 35th AVENUE
ST85100371(004)

DES:	CK:	DWG SERIES No.
DATE:	DATE:	
SCALE: N/A		TS-1.01

ST85100330

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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.

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 Traffic Signal Plan approval is valid for 365 calendar days from date sealed. If signal construction has not begun prior to the 365 days elapsing, the signal plans must be re-submitted for approval or an extension granted by the Deputy Director Traffic Services or an authorized representative to ensure that existing traffic signal equipment locations and standard detail references are current.

1.6 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. CONTRACTOR NOTE FOR CITY OF PHOENIX TRAFFIC SIGNAL POLES

2.1 The contractor shall provide and install three (3) City of Phoenix Type SR poles, one (1) City of Phoenix Type SM poles, two (2) City of Phoenix Type LM poles, all with anchor cages, nuts bolts, six (6) standard 5 ft. pole extensions, six (6) 8 ft. luminaire mast arms per C.O.P. Street Transportation drawing # 10164.

2.2 Signal poles, mast arms, mast arm extensions, pole extensions and 8 ft. luminaire mast arms shall be powder coated with a color prescribed by the Traffic Signal Construction Supervisor. Contact the Supervisor at (602) 262-6733 to confirm color.

2.3 Separate pull strings shall be installed from end of signal mast arm for every signal device on the signal mast arms and a single pull string on the luminaire mast arms to the hand hole at the base of each traffic signal pole.

3. WORK TO BE PERFORMED BY THE CONTRACTOR

The contractor shall provide the traffic signal equipment as indicated in note 2.1. The contractor is to provide all underground work including, but not limited to:

3.1 - All demolition work, unless otherwise noted
- All trenching
- All foundations (pole, controller and power service pedestal)
- All pole anchor cages, nuts and bolts required for pole foundations installed by the contractor in addition to those specified in note 2.1
- All junction boxes with 18" of sump
- All conduit runs
- Provide and install the power service pedestal
- Provide and install conduit runs from PSP to Utility Company feed

3.2 All underground conduits shall be schedule 40 rigid polyvinyl chloride (PVC) installed 24 inches to 30 inches below finished grade with the exception of loop lead-in conduits, which shall be schedule 40 rigid PVC installed in accordance with the latest City of Phoenix Standard Detail Sheet. All conduits shall be installed in straight lines (unless approved by the Signal Shop Inspector) junction box to junction box or junction box to signal equipment foundation with one 90 degree sweep on each end as specified in the plans. All conduits entering junction boxes shall be vertical. Conduits in all foundations shall be located as close as possible to center of the foundation and vertical with foundation below the bottom of the cover. All conduit ends except those in the controller cabinet foundation will be provided with a "bell end" fitting of appropriate size.

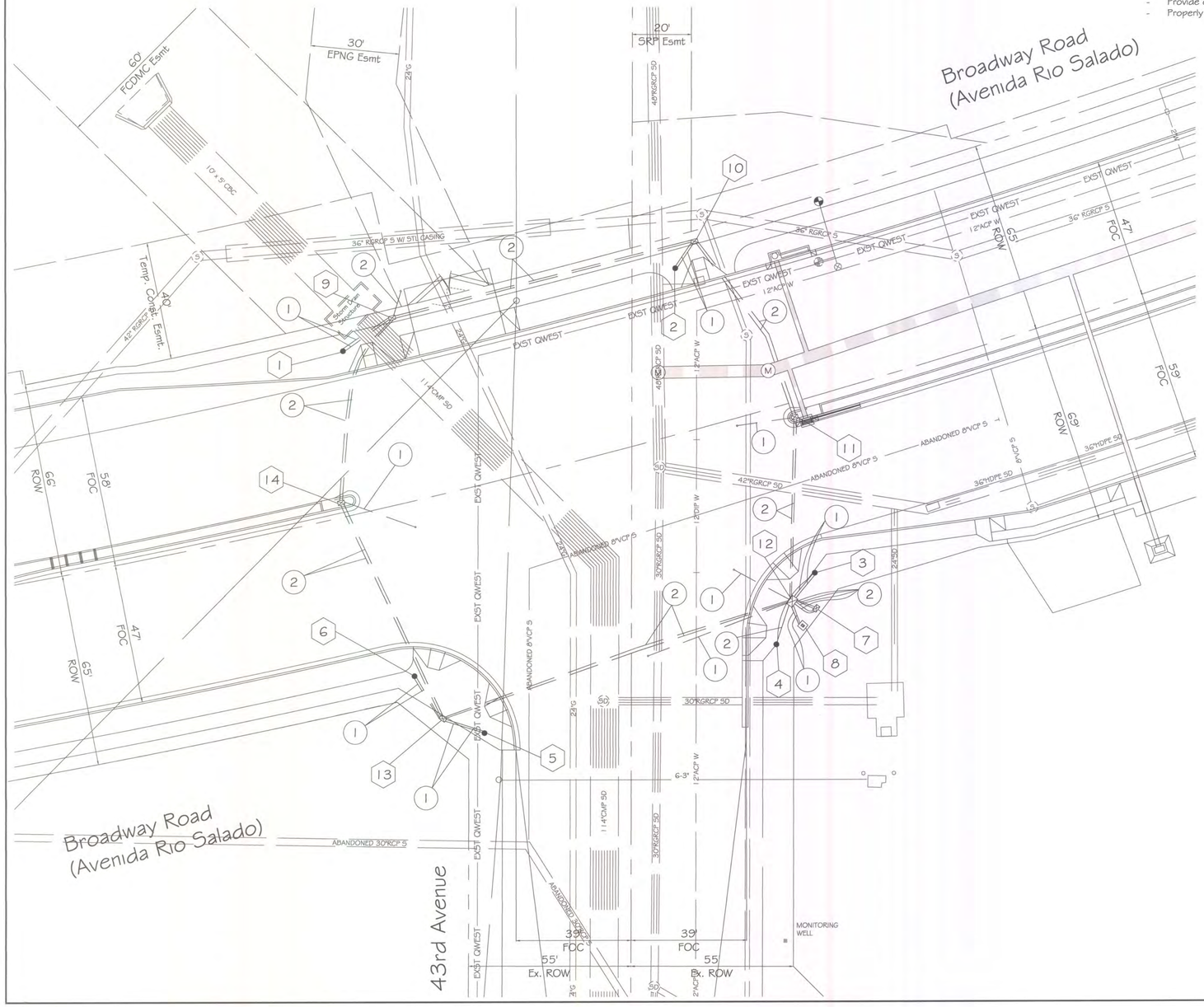
3.3 Removal of existing streetlights:

The contractor shall:
- Request de-energization of all streetlights listed for removal,
- Provide complete removal of streetlight pole, mast arm and luminaire
- Properly dispose of all streetlight material

4. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

The City of Phoenix traffic signal crews will provide and install all above ground traffic signal equipment including:

- All poles and mast arms except as indicated in note 2.1
- All signal heads
- All pedestrian heads
- All APS push buttons
- All controllers
- All LED luminaires
- All illuminated street signs
- All signal wiring
- All loop and non-invasive detectors
- All pole grouting
- All cameras
- All radios



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		126	164

DR:	DES:	CK:	DATE:

54530 BRUCE E. LITTLETON Date Signed 7-11-16 ARIZONA, U.S.A. EXPIRES: 06-30-2019

BROADWAY/AR5 & 43rd AVE

PROPOSED FOUNDATION SCHEDULE

NO.	TYPE	FROM M.OF BROADWAY RD/AR5	FROM M.OF 43rd AVE
1	SR	55 ft. NORTH	98 ft. WEST
2	SR	55 ft. NORTH	15 ft. EAST
3	SR	58 ft. SOUTH	62 ft. EAST
4	LM	75 ft. SOUTH	49 ft. EAST
5	SM	82 ft. SOUTH	50 ft. WEST
6	LM	58 ft. SOUTH	73 ft. WEST
P	PSP	DETERMINED BY POWER	SOURCE LOCATION

NOTE: Distance is perpendicular to roadway center line

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	FROM M.OF BROADWAY RD/AR5	FROM M.OF 43rd AVE
7	#5 **	DETERMINED BY POWER	SOURCE LOCATION
9	#5	62 ft. NORTH	41 ft. WEST
10	#5	62 ft. NORTH	21 ft. EAST
11	#5	5 ft. SOUTH	55 ft. EAST
12	#7	65 ft. SOUTH	54 ft. EAST
13	#5	74 ft. SOUTH	64 ft. WEST
14	#5	5 ft. NORTH	98 ft. WEST

NOTE: Distance is perpendicular to roadway center line
** For future Controller

INSTALL

(P) Power Service Pedestal Foundation

(1) thru (7) See Foundation Schedule

(9) thru (14) See Junction Box Schedule

(1) 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

(2) 2½" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

PROJECT #: ST85100371(004)

FILE #: 10427

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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TRAFFIC SIGNAL PLAN

APPROVED BY:

TRAFFIC SIGNAL ENGINEER: Thomas E. Wolin

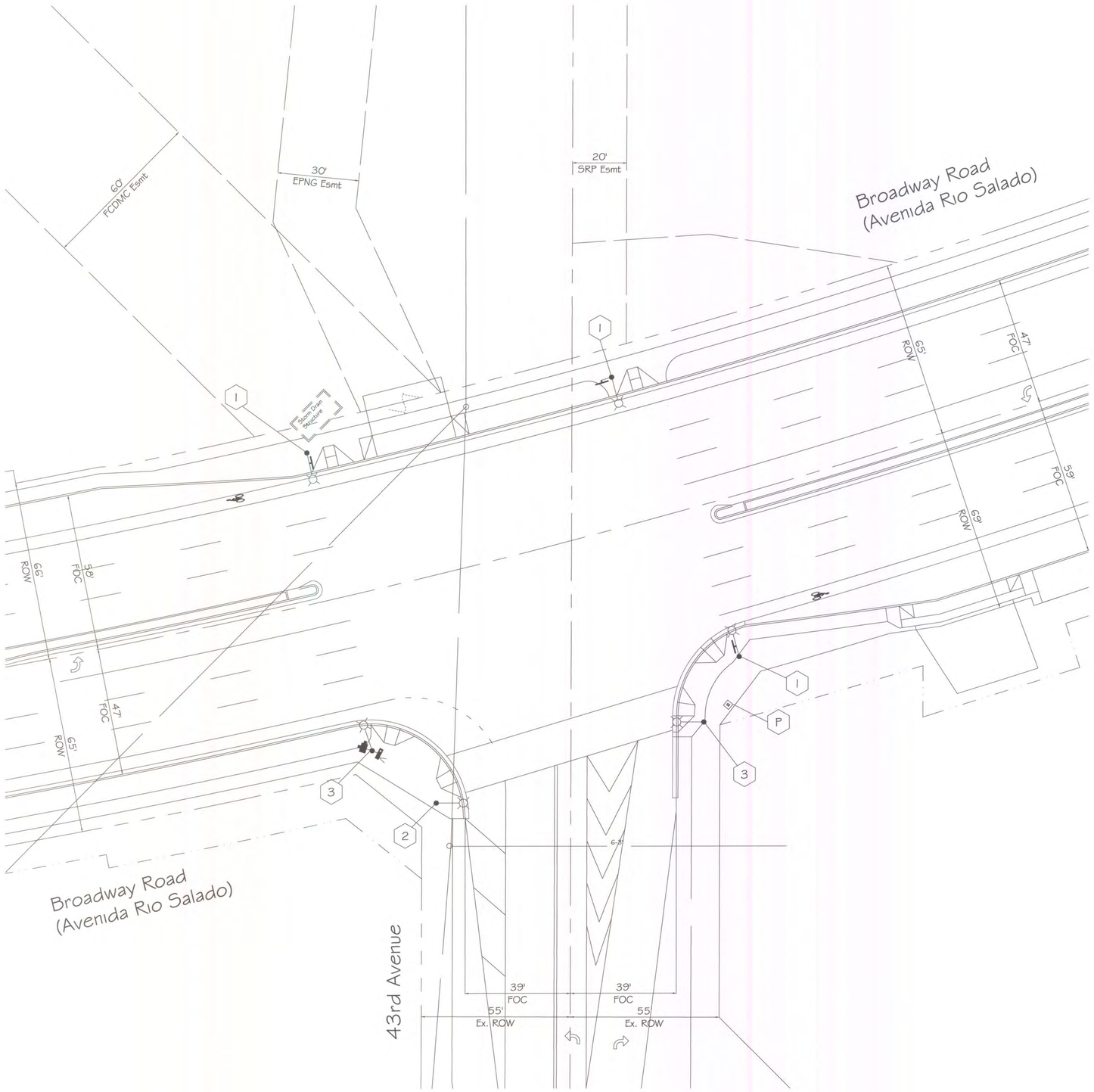
ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR:

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BROADWAY RD/AVENIDA RIO SALADO AT 43rd AVENUE
FOUNDATION

PROJECT #:			FILE NO: 10427	
DR: hsy	DES:	CK:	SHEET NO: 1	TOTAL SHEETS 3
DATE: JUNE 2016	DATE:	DATE:		
SCALE: 1" = 20'		QS. #: 4-17		

DWG SERIES No. TS-1.02



F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		127	164

DR:	DES:	CK:	DATE:

54530
BRUCE E. LITTLETON
Date Signed 7/1/16
ARIZONA, U.S.A.
EXPIRES: 06-30-2018

INSTALL

- (P) Power Service Pedestal - 1 New
- (1) Traffic Signal Pole Type SR - 3 New
- (2) Traffic Signal Pole Type SM - 1 New
- (3) Traffic Signal Pole Type LM - 2 New
- LED Luminaire - 6 New
- LED Illuminated Street Sign - 3 New
  43rd Avenue - 2
  Broadway Road - 1
- PTZ CCTV Camera w/20' Riser - 1 New
- Wireless Network Radio - 1 New

BROADWAY/ARS & 43rd AVE

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake, Center CALL COLLECT

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TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BROADWAY RD/AVENIDA RIO SALADO AT 43rd AVENUE

EQUIPMENT

APPROVED BY:

TRAFFIC SIGNAL ENGINEER: Thomas E. Weber

ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR:

PROJECT #:			FILE NO: 10427	
DR: hsy	DES:	CK:	SHEET NO: 2	TOTAL SHEETS 3
DATE: JUNE 2016	DATE:	DATE:		
SCALE: 1" = 20'		QS. #: 4-17		

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PROJECT #: ST85100371(004)

FILE #: 10427

DWG SERIES No.
TS-1.03

C Junction Box (Future Controller) to #7 Junction Box

CONDUIT 1	CONDUIT 2	CONDUIT 3	CONDUIT 4
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape	Detectible Mule Tape	Detectible Mule Tape

P Power Service Pedestal to #7 Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Radio) 5C IM5A Cable	Detectible Mule Tape

1 NWC Junction Box to SR Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Sign) 3C IM5A Cable (Luminaire)	Detectible Mule Tape

2 NEC Junction Box to SR Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Sign) 3C IM5A Cable (Luminaire)	Detectible Mule Tape

3 SEC Junction Box to SR Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Sign) 3C IM5A Cable (Luminaire)	Detectible Mule Tape

4 SWC Junction Box to SM Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Sign) 3C IM5A Cable (Luminaire)	Detectible Mule Tape

7 SEC Junction Box to LM Pole

CONDUIT 1
#10 Bare Copper 3C IM5A Cable (Luminaire)

8 SWC Junction Box to LM Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper 3C IM5A Cable (Luminaire) 3C IM5A Cable (Radio) 3C IM5A Cable (Camera)	Detectible Mule Tape

13 NWC Junction Box to NEC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper	Detectible Mule Tape

15 NEC Junction Box to East Median Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape

16 East Median Junction Box to SEC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape

17 SEC Junction Box to SWC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape

19 SWC Junction Box to West Median Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape

20 West Median Junction Box to NWC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper 5C IM5A Cable	Detectible Mule Tape

24 NWC Junction Box to Loop

CONDUIT 1
#10 Bare Copper

25 East Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

26 SEC Junction Box to Loop

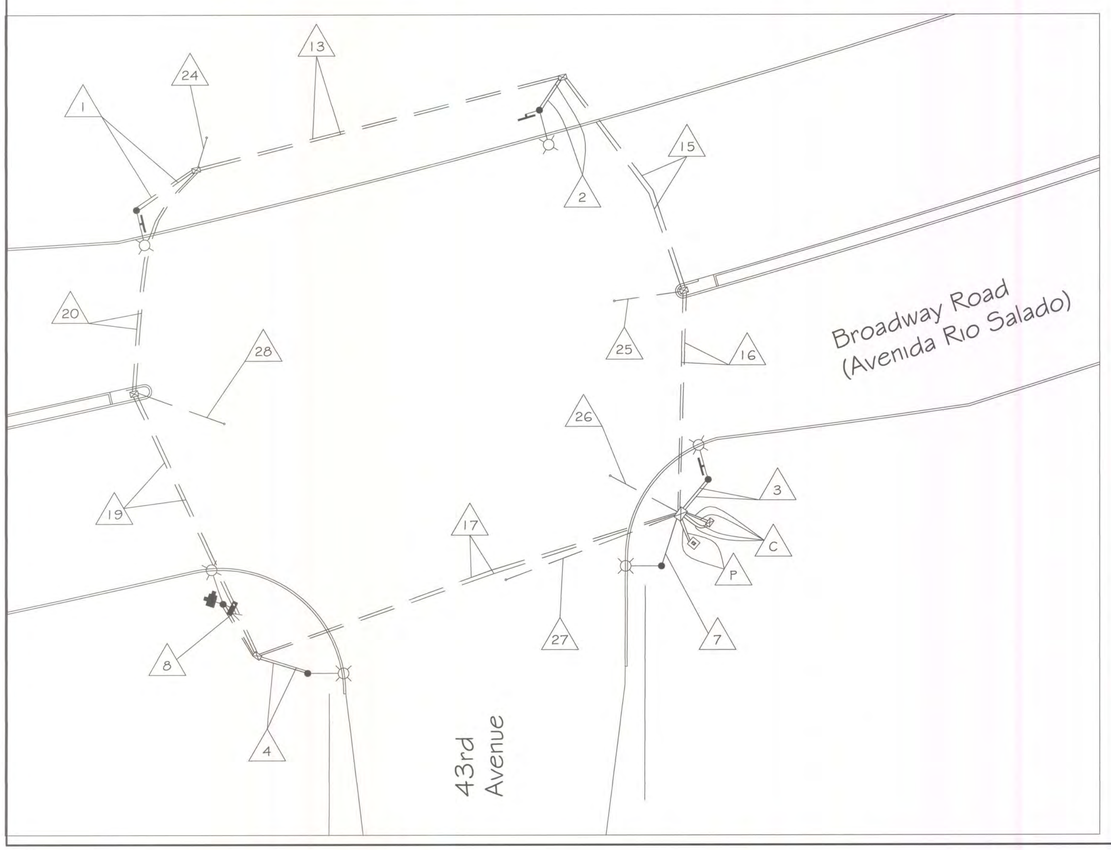
CONDUIT 1
#10 Bare Copper

27 SEC Junction Box to Loop

CONDUIT 1
#10 Bare Copper

25 West Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper



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F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		128	164

DR:	DES:	CK:	DATE:

BRUCE E. LITTLETON 54530 — EXPIRES: 06-30-2018

BROADWAY/ARS AT 43rd AVE

PROJECT #: ST85100371004

FILE #: 10427

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BROADWAY RD/AVENIDA RIO SALADO AT 43rd AVENUE

WIRING DIAGRAM

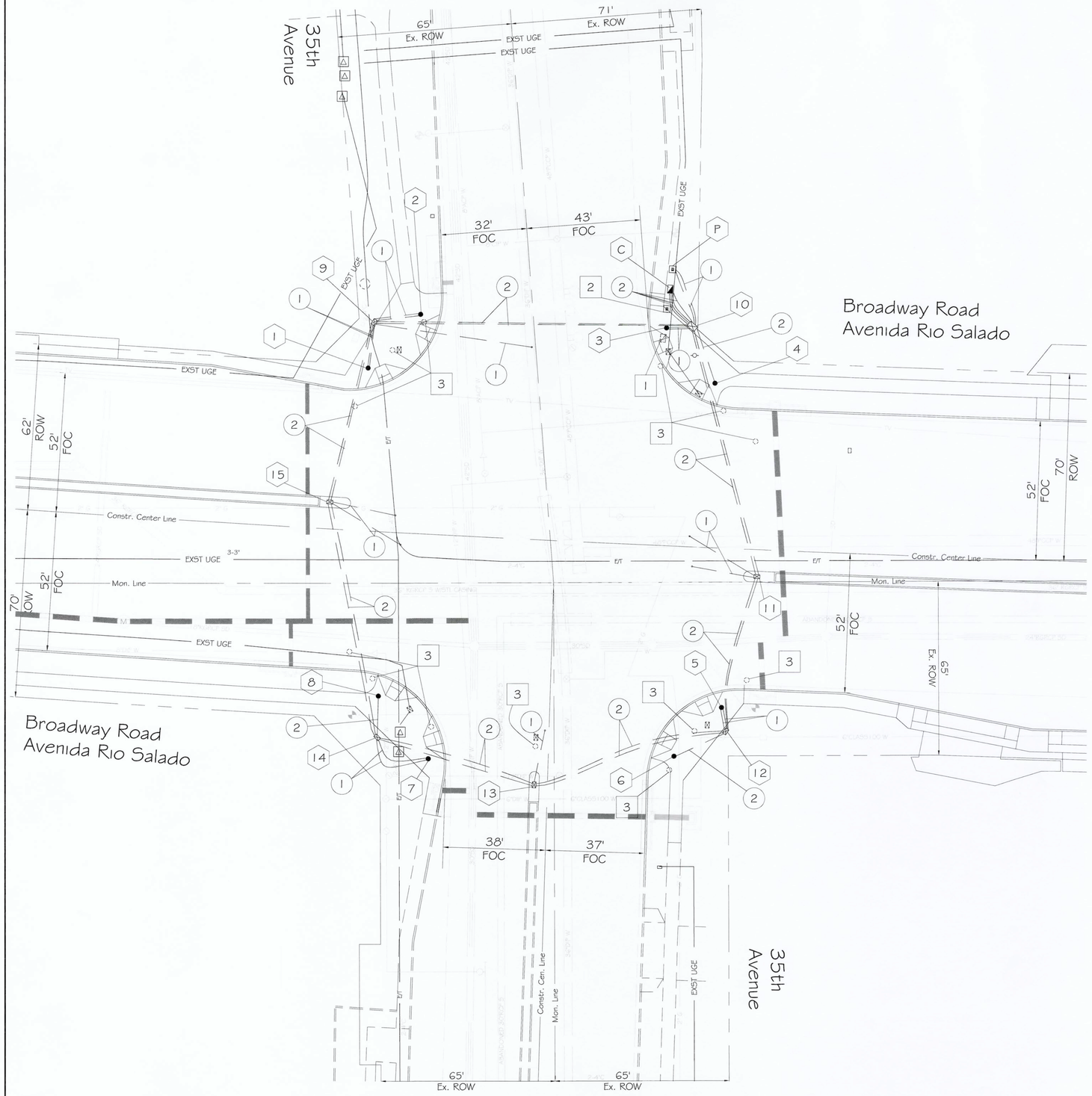
APPROVED BY:

TRAFFIC SIGNAL ENGINEER

ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR

PROJECT #:			FILE NO: 10427
DR: hsy	DES:	CK:	SHEET NO: 3 / TOTAL SHEETS 3
DATE: JUNE 2016	DATE:	DATE:	
SCALE: 1" = 20'		QS. #: 4-25	

DWG SERIES No.
TS-1.04



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.

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 Traffic Signal Plan approval is valid for 365 calendar days from date sealed. If signal construction has not begun prior to the 365 days elapsing, the signal plans must be re-submitted for approval or an extension granted by the Deputy Director Traffic Services or an authorized representative to ensure that existing traffic signal equipment locations and standard detail references are current.

1.6 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. CONTRACTOR NOTE FOR CITY OF PHOENIX TRAFFIC SIGNAL POLES

2.1 The contractor shall provide and install two (2) City of Phoenix Type SQ poles, two (2) City of Phoenix Type SR poles, four (4) City of Phoenix Type LM poles, all with anchor cages, nuts bolts, one (1) 20 ft. pole extension, seven (7) standard 5 ft. pole extensions, eight (8) 8 ft. luminaire mast arms, two (2) 55 ft. signal mast arms, two (2) 45 ft. signal mast arms as per C.O.P. Street Transportation drawing # 10164.

2.2 Signal poles, mast arms, mast arm extensions, pole extensions and 8 ft. luminaire mast arms shall be powder coated with a color prescribed by the Traffic Signal Construction Supervisor. Contact the Supervisor at (602) 262-6733 to confirm color.

2.3 Separate pull strings shall be installed from end of signal mast arm for every signal device on the signal mast arms and a single pull string on the luminaire mast arms to the hand hole at the base of each traffic signal pole.

3. WORK TO BE PERFORMED BY THE CONTRACTOR

The contractor shall provide the traffic signal equipment as indicated in note 2.1. The contractor is to provide all underground work including, but not limited to:

3.1 - All demolition work, unless otherwise noted
- All trenching
- All foundations (pole, controller and power service pedestal)
- All pole anchor cages, nuts and bolts required for pole foundations installed by the contractor in addition to those specified in note 2.1
- All junction boxes with 18" of sump
- All conduit runs
- Provide and install the power service pedestal
- Provide and install conduit runs from PSP to Utility Company feed

3.2 All underground conduits shall be schedule 40 rigid polyvinyl chlonde (PVC) installed 24 inches to 30 inches below finished grade with the exception of loop lead-in conduits, which shall be schedule 40 rigid PVC installed in accordance with the latest City of Phoenix Standard Detail Sheet. All conduits shall be installed in straight lines (unless approved by the Signal Shop Inspector) junction box to junction box or junction box to signal equipment foundation with one 90 degree sweep on each end as specified in the plans. All conduits entering junction boxes shall be vertical. Conduits in all foundations shall be located as close as possible to center of the foundation and vertical with foundation below the bottom of the cover. All conduit ends except those in the controller cabinet foundation will be provided with a "bell end" fitting of appropriate size.

3.3 Removal of existing streetlights:

The contractor shall:
- Request de-energization of all streetlights listed for removal,
- Provide complete removal of streetlight pole, mast arm and luminaire
- Properly dispose of all streetlight material

4. WORK TO BE PERFORMED BY CITY OF PHOENIX SIGNAL CREWS

The City of Phoenix traffic signal crews will provide and install all above ground traffic signal equipment including:

- All poles and mast arms except as indicated in note 2.1
- All signal heads
- All pedestrian heads
- All APS push buttons
- All controllers
- All LED luminaires
- All illuminated street signs
- All signal wiring
- All loop and non-invasive detectors
- All pole grouting
- All cameras
- All radios

Professional Engineer
24530
BRUCE E. LITTLETON
ARIZONA, U.S.A.
9/14/16
EXPIRES: 06-30-2019

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		129	164

DR:	DES:	CK:	DATE:

PROPOSED FOUNDATION SCHEDULE

NO.	TYPE	FROM CCL OF BROADWAY RD/AR5	FROM CCL OF 35th AVE
C	CONT	96 ft. NORTH	52 ft. EAST
P	PSP	103 ft. NORTH	53 ft. EAST
1	SQ	61 ft. NORTH	63 ft. WEST
2	LM	82 ft. NORTH	42 ft. WEST
3	SR	81 ft. NORTH	49 ft. EAST
4	LM	61 ft. NORTH	66 ft. EAST
5	SQ	59 ft. SOUTH	64 ft. EAST
6	LM	78 ft. SOUTH	47 ft. EAST
7	SR	84 ft. SOUTH	45 ft. WEST
8	LM	61 ft. SOUTH	64 ft. WEST

NOTE: Distance is perpendicular to roadway construction center line (CCL)

PROPOSED JUNCTION BOX SCHEDULE

NO.	TYPE	FROM CCL OF BROADWAY RD/AR5	FROM CCL OF 35th AVE
9	#5	78 ft. NORTH	59 ft. WEST
10	#7	82 ft. NORTH	59 ft. EAST
11	#5	10 ft. SOUTH	76 ft. EAST
12	#5	68 ft. SOUTH	66 ft. EAST
13	#5	91 ft. SOUTH	8 ft. WEST
14	#5	76 ft. SOUTH	64 ft. WEST
15	#5	10 ft. NORTH	81 ft. WEST

NOTE: Distance is perpendicular to roadway construction center line (CCL)

INSTALL

- (C) 8 Phase Controller Foundation
- (P) Power Service Pedestal
- (1) thru (8) See Foundation Schedule
- (9) thru (15) See Junction Box Schedule
- (1) 2" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout
- (2) 2 ½" Schedule 40 PVC with #10 copper pull wire bent over lip of stubout

REMOVE

- (1) Pad Mount Controller - 1
- (2) Power Service Pedestal - 1
- (3) Signal Foundation - 13
  - SM/SR - 4
  - A - 5
  - LM - 4

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

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TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY RD AT 35th AVENUE
FOUNDATION

APPROVED BY:

TRAFFIC SIGNAL ENGINEER: Thomas E. Wolcott

ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR:

PROJECT #:			FILE NO: 10426
DR: hsy	DES:	CK:	SHEET NO: 1 / TOTAL SHEETS: 3
DATE: JUNE 2016	DATE:	DATE:	
SCALE: 1" = 20'	QS. #: 4-17		

10426.dwg 9/19/16 08:18am

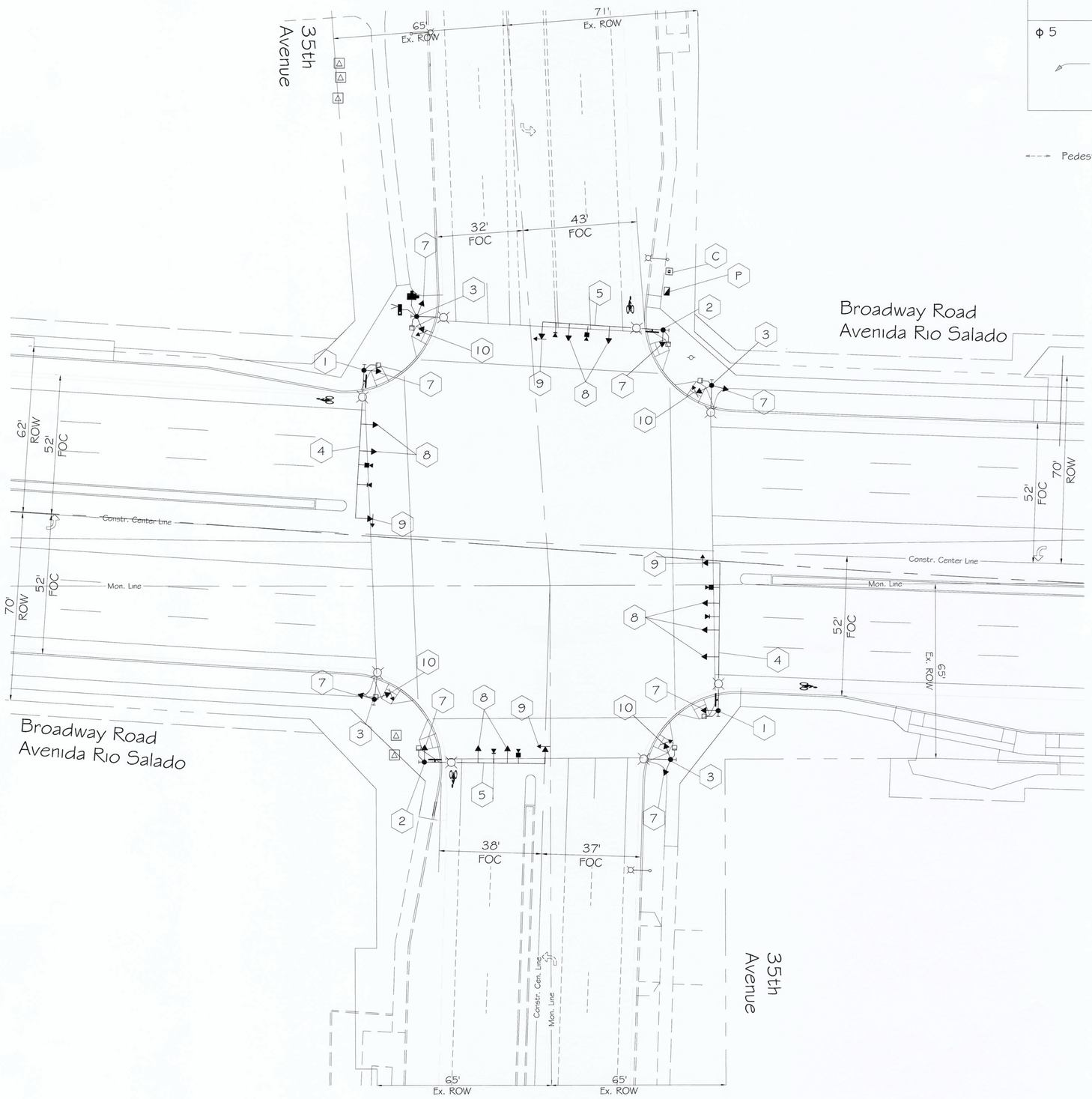
N

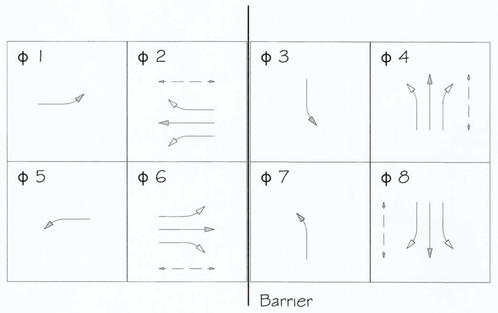
ARS/BROADWAY RD & 35th AVE

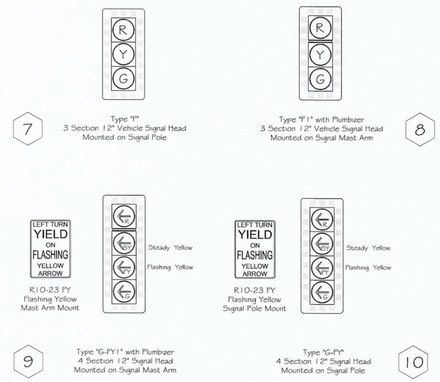
PROJECT #: ST85100371(004)

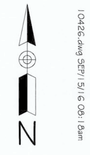
FILE #: 10426

DWG SERIES No.
TS-1.05









54530
BRUCE E. LITTLETON
9/16/16
REGISTERED PROFESSIONAL ENGINEER
ARIZONA, U.S.A.
EXPIRES: 06-30-2019

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		130	164

DR: | DES: | CK: | DATE:

INSTALL

- C 8 Phase Controller Cabinet - 1 New
- P Power Service Pedestal - 1 New
- 1 Traffic Signal Pole Type SQ - 2 New
- 2 Traffic Signal Pole Type SR - 2 New
- 3 Traffic Signal Pole Type LM - 4 New
- 4 55 ft Signal Mast Arm - 2 New
- 5 45 ft Signal Mast Arm - 2 New

- 7 Type F 12" Signal Head - 8 New Pole Mount
- 8 Type F1 12" Signal Head - 9 New Mast Arm Mount with Plumbizer
- 9 Type G-FY1 4 Section Signal Head, Left Arrow - 4 New Mast Arm Mount w/Plumbizer
- 10 Type G-FY 4 Section Signal Head, Left Arrow - 4 New Pole Mount
- LED Luminaire - 8 New
- LED Illuminated Street Sign - 4 New
  35th Avenue - 2
  Broadway Road - 2
- Pedestrian Signal Head - 8 New
- APS Pedestrian Push Button - 8 New
- Video Detection - 4 New
- EVP Detector and Confirmation Light - 4 New
- Wireless Network Radio - 1 New
- PTZ CCTV Camera w/20' Riser - 1 New

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TRAFFIC SIGNAL PLAN

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO/BROADWAY RD AT 35th AVENUE
EQUIPMENT

APPROVED BY:

TRAFFIC SIGNAL ENGINEER: Thomas E. Wilson

ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR:

PROJECT #:		FILE NO: 10426	
DR: hsy	DES:	CK:	SHEET NO: 2 / TOTAL SHEETS 3
DATE: JUNE 201	DATE:	DATE:	
SCALE: 1" = 20'		QS. #:	

10426c.dwg 5/29/16 08:18am

BROADWAY RD/ARS # 35th AVE

PROJECT #: ST85100371(004)

FILE #: 10426

DWG SERIES No. TS-1.06

C Controller to #7 Junction Box

CONDUIT 1	CONDUIT 2	CONDUIT 3	CONDUIT 4
#10 Bare Copper #10 AWG White 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (4) EVP Detection Cable (4) EVP Confirmation Cable (4) CCTV Cable (1) CAT 5e Cable (1)	#10 Bare Copper #10 AWG Black #10 AWG White #10 AWG Green	Detectible Mule Tape

P Power Service Pedestal to #7 Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG Black #10 AWG White #10 AWG Green 3C IMSA Cable (Radio) 5C IMSA Cable	Detectible Mule Tape

1 NWC Junction Box to SQ Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Sign) 3C IMSA Cable (Luminaire) 20C IMSA Cable	#10 Bare Copper EVP Detection Cable (1) EVP Confirmation Cable (1) Detection Camera Cable (1)

2 NEC Junction Box to SR Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Sign) 3C IMSA Cable (Luminaire) 20C IMSA Cable	#10 Bare Copper EVP Detection Cable (1) EVP Confirmation Cable (1) Detection Camera Cable (1)

3 SEC Junction Box to SQ Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Sign) 3C IMSA Cable (Luminaire) 20C IMSA Cable	#10 Bare Copper EVP Detection Cable (1) EVP Confirmation Cable (1) Detection Camera Cable (1)

4 SWC Junction Box to SR Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Sign) 3C IMSA Cable (Luminaire) 20C IMSA Cable	#10 Bare Copper EVP Detection Cable (1) EVP Confirmation Cable (1) Detection Camera Cable (1)

5 NWC Junction Box to LM Pole

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Radio) 3C IMSA Cable (Luminaire) 20C IMSA Cable	#10 Bare Copper CCTV Cable (1) ITS Cable (1)

6 NEC Junction Box to LM Pole

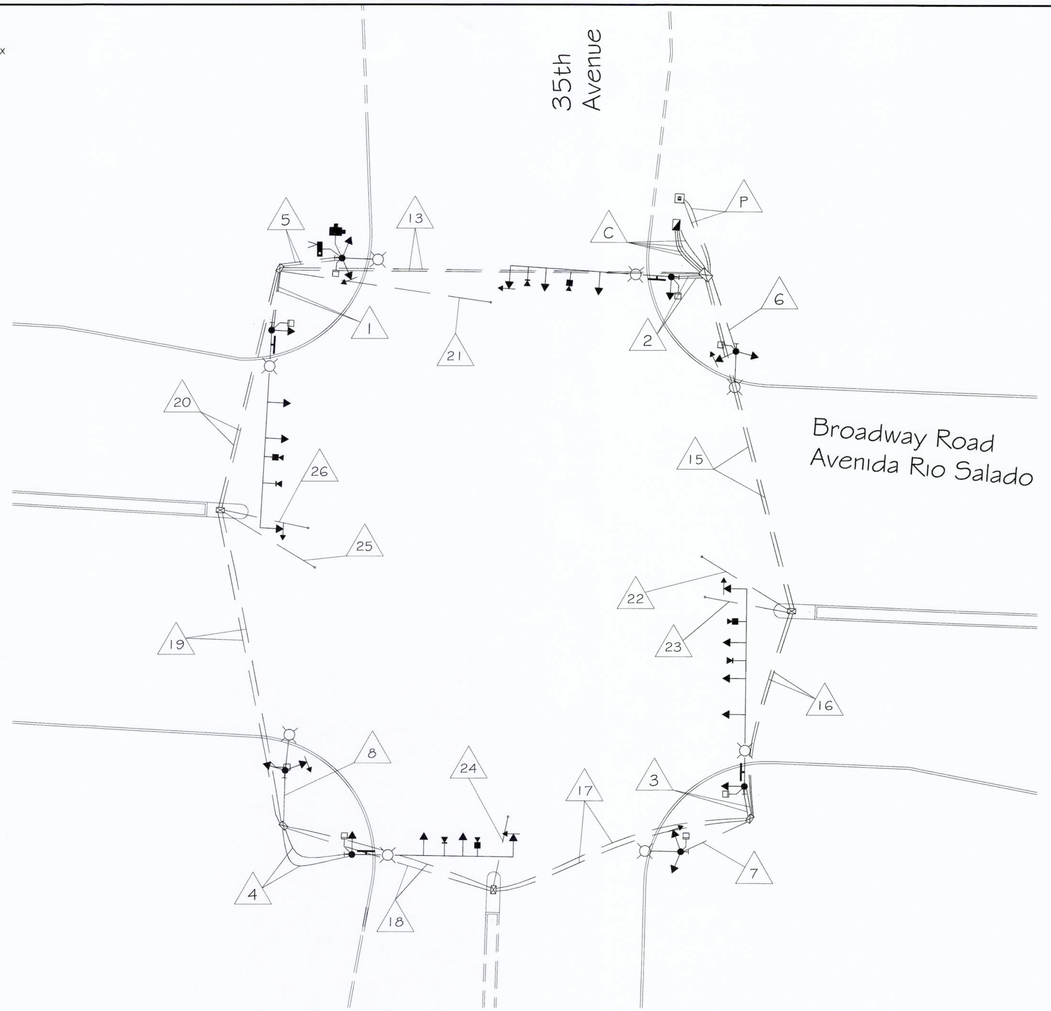
CONDUIT 1
#10 Bare Copper #10 AWG White 3C IMSA Cable (Luminaire) 20C IMSA Cable

7 SEC Junction Box to LM Pole

CONDUIT 1
#10 Bare Copper #10 AWG White 3C IMSA Cable (Luminaire) 20C IMSA Cable

8 SEC Junction Box to LM Pole

CONDUIT 1
#10 Bare Copper #10 AWG White 3C IMSA Cable (Luminaire) 20C IMSA Cable



13 NWC Junction Box to NEC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 3C IMSA Cable (Radio) 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (1) EVP Detection Cable (1) EVP Confirmation Cable (1) CCTV Cable (1) ITS Cable (1) CAT 5e Cable (1)

15 NEC Junction Box to East Median Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (2) EVP Detection Cable (2) EVP Confirmation Cable (2)

16 East Median Junction Box to SEC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (2) EVP Detection Cable (2) EVP Confirmation Cable (2)

17 SEC Junction Box to South Median Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (1) EVP Detection Cable (1) EVP Confirmation Cable (1)

18 South Junction Box to SWC Junction Box

CONDUIT 1	CONDUIT 2
#10 Bare Copper #10 AWG White 5C IMSA Cable 42C IMSA Cable	#10 Bare Copper Detection Camera Cable (1) EVP Detection Cable (1) EVP Confirmation Cable (1)

19 SWC Junction Box to West Median Junction Box

CONDUIT 1	CONDUIT 2
Detectible Mule Tape	Detectible Mule Tape

20 West Median Junction Box to NWC Junction Box

CONDUIT 1	CONDUIT 2
Detectible Mule Tape	Detectible Mule Tape

21 NWC Junction Box to Loop

CONDUIT 1
#10 Bare Copper

22 East Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

23 East Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

24 South Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

25 West Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

26 West Median Island Junction Box to Loop

CONDUIT 1
#10 Bare Copper

N

10426.dwg SEP/15/16 08:18am

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL
9	ARIZ.		131	164

DR:	DES:	CK:	DATE:

BROADWAY/AR5 AT 35th AVE

PROJECT #: ST85 10037 (004)

FILE #: 10426

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TRAFFIC SIGNAL PLAN

APPROVED BY:

TRAFFIC SIGNAL ENGINEER

ACTING STREET TRANSPORTATION TRAFFIC SERVICES DEPUTY DIRECTOR

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

BROADWAY RD/AVENIDA RIO SALADO AT 35th AVENUE

WIRING DIAGRAM

PROJECT #:			FILE NO: 10426	
DR: hsy	DES:	CK:	SHEET NO:	TOTAL SHEETS
DATE: JUNE 2016	DATE:	DATE:		
SCALE: 1" = 20'		QS. #: 4-25	3	3

DWG SERIES No. TS-1.07

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

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

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

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

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

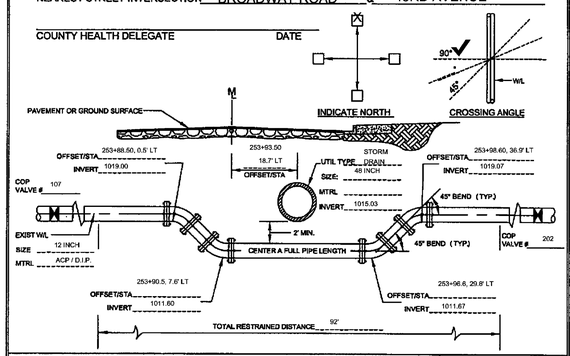
PROJ/KIVA # ST85100333 QS 4-19

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 43RD AVENUE

COUNTY HEALTH DELEGATE DATE



1. ALL CONSTRUCTION TO CONFORM TO ALL APPLICABLE UNIFORM STANDARD DETAILS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AND THE PHOENIX SUPPLEMENTAL STANDARD DETAILS AND SPECIFICATIONS (NEWEST EDITION) AND AS MODIFIED HEREON.
2. PROVIDE THE PROJECT STATION & INVERT OF THE CONFLICTING UTILITY PIPE , INCLUDING INVERT.
3. PROVIDE OFFSETS & INVERTS OF THE DIP SECTION FITTINGS FROM THE UTILITY PIPE IN CONFLICT.
4. RESTRAIN ALL PIPE JOINTS, SEPARATION AND CLEARANCE PER COP STD. DTL. P-1370
5. ALL ELEVATIONS SHOWN HERE ARE RELATIVE TO EACH OTHER.
6. ENGINEER'S COST ESTIMATE MUST BE PROVIDED WITH PLAN.
7. PER CITY OF PHOENIX ORDINANCE G-4396, THIS PLAN IS FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

ENGINEER:
ADDRESS:
CONTACT:
PHONE #

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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

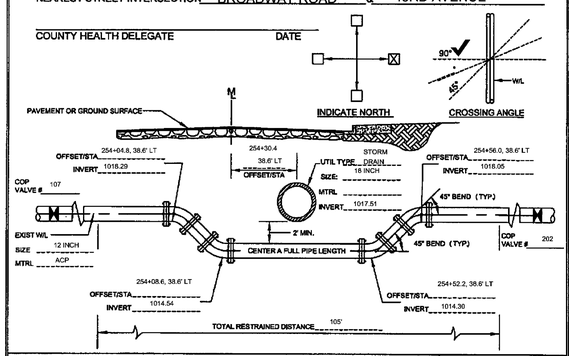
PROJ/KIVA # ST85100333 QS 4-19

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 43RD AVENUE

COUNTY HEALTH DELEGATE DATE



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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

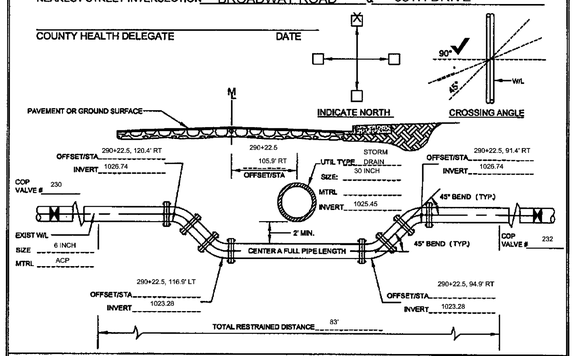
PROJ/KIVA # ST85100333 QS 4-20

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 38TH DRIVE

COUNTY HEALTH DELEGATE DATE



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ADDRESS:
CONTACT:
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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

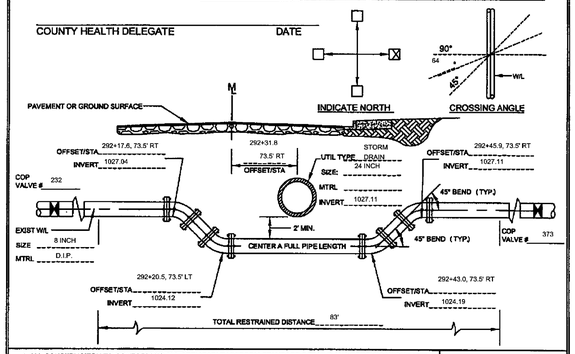
PROJ/KIVA # ST85100333 QS 4-20

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 38TH AVENUE

COUNTY HEALTH DELEGATE DATE



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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

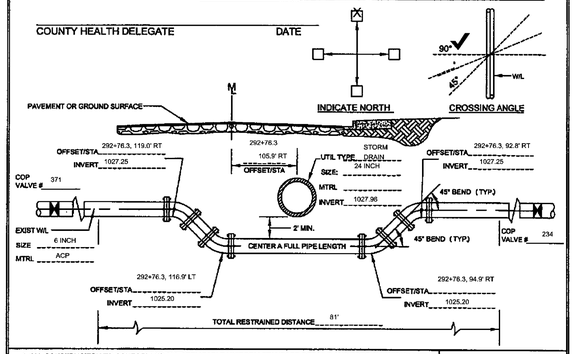
PROJ/KIVA # ST85100333 QS 4-20

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 38TH DRIVE

COUNTY HEALTH DELEGATE DATE



1. ALL CONSTRUCTION TO CONFORM TO ALL APPLICABLE UNIFORM STANDARD DETAILS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) AND THE PHOENIX SUPPLEMENTAL STANDARD DETAILS AND SPECIFICATIONS (NEWEST EDITION) AND AS MODIFIED HEREON.
2. PROVIDE THE PROJECT STATION & INVERT OF THE CONFLICTING UTILITY PIPE , INCLUDING INVERT.
3. PROVIDE OFFSETS & INVERTS OF THE DIP SECTION FITTINGS FROM THE UTILITY PIPE IN CONFLICT.
4. RESTRAIN ALL PIPE JOINTS, SEPARATION AND CLEARANCE PER COP STD. DTL. P-1370
5. ALL ELEVATIONS SHOWN HERE ARE RELATIVE TO EACH OTHER.
6. ENGINEER'S COST ESTIMATE MUST BE PROVIDED WITH PLAN.
7. PER CITY OF PHOENIX ORDINANCE G-4396, THIS PLAN IS FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF YOUR CONTRACT WITH THE CITY OF PHOENIX.

ENGINEER:
ADDRESS:
CONTACT:
PHONE #

RECORD DRAWING CERTIFICATION: I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

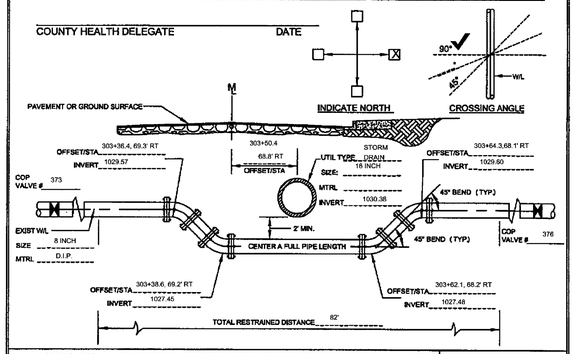
PROJ/KIVA # ST85100333 QS 4-20

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 36TH AVENUE

COUNTY HEALTH DELEGATE DATE



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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed 11/17/17 ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	154	164	

PEC PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

"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."

WATER LINE RELOCATION SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			WD-1.01

ST85100371 WD-1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

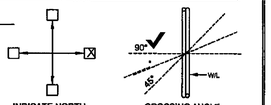
PROJ/KIVA # ST85100333 QS 4-20

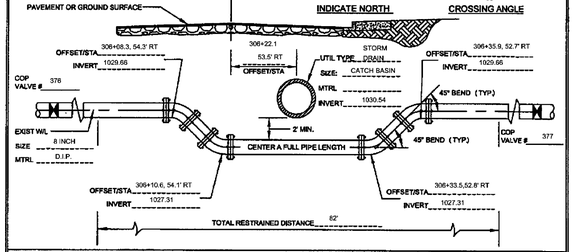
PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 35TH AVENUE

COUNTY HEALTH DELEGATE DATE





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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

COP DSD / WSD RECORD DRAWING TEMPLATE DCE-D01
Vertical Realignment Detail of 12-INCH and Smaller Water Mains

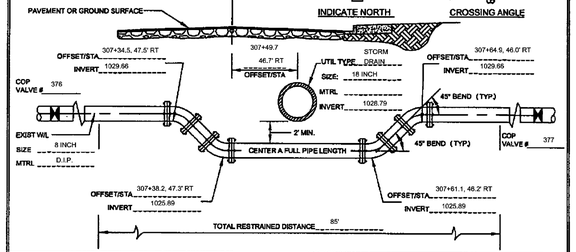
PROJ/KIVA # ST85100333 QS 4-20

PROJECT NAME: AVENIDA RIO SALADO/BROADWAY ROAD, 43RD AVE TO 35TH AVE

LOCATION:

NEAREST STREET INTERSECTION BROADWAY ROAD & 35TH AVENUE

COUNTY HEALTH DELEGATE DATE



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REGISTERED CIVIL ENGINEER DATE
REGISTRATION #

Registered Professional Engineer
CERTIFICATE NO.
34580
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	155	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
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Fax: (602) 906-3080

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WATER LINE RELOCATION SHEET

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ N/A VERT N/A			WD-1.02

ST85100371 WD-1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

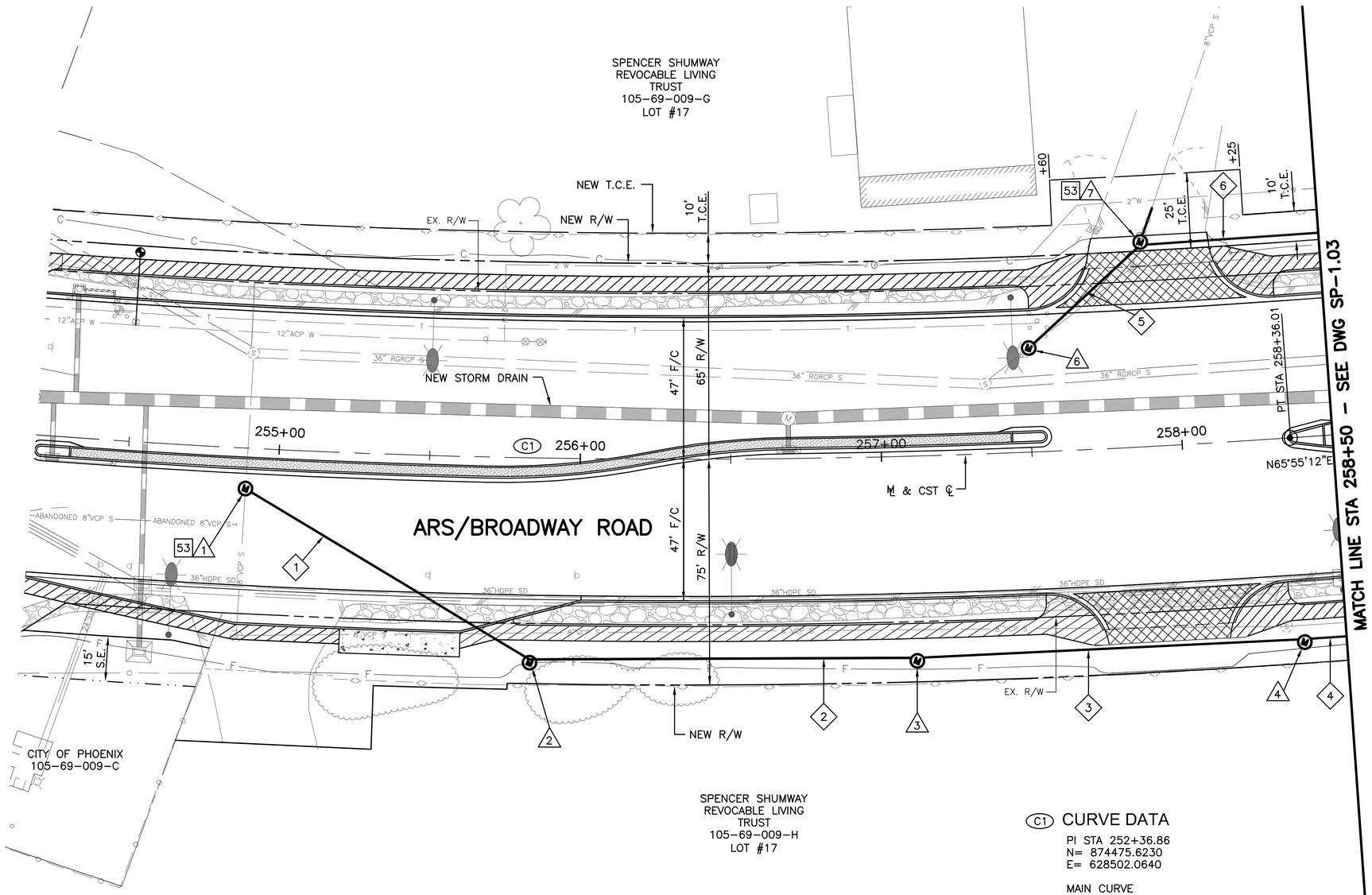
NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE



City of Phoenix

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	156	164	

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Fax: (602) 906-3080

SEWER PIPE

	STA. TO STA.	SIZE	LF
1	254+89.43, 13.42' RT TO 255+84.33, 67' RT	8"	111
2	255+84.33, 67' RT TO 257+10.17, 67' RT	8"	129
3	257+10.17, 67' RT TO 258+36.01, 67' RT	8"	129
4	258+36.01, 67' RT TO 258+50, 67' RT	8"	14
5	257+50.35, 34.58' LT TO 257+89.70, 67' LT	8"	52
6	257+89.70, 67' LT TO 258+50, 67' LT	8"	60

SEWER MANHOLE

	STATION	TYPE
1	254+89.43, 13.42' RT	MAG 420 & 424
2	255+84.33, 68' RT	MAG 421 & 424
3	257+10.17, 68' RT	MAG 421 & 424
4	258+36.01, 68' RT	MAG 421 & 424
6	257+50.35, 34.58' LT	MAG 420 & 424
7	257+89.70, 68' LT	MAG 421 & 424

CONSTRUCTION NOTES

NO.	DESCRIPTION	UNIT	QTY
53	CONSTRUCT DROP SEWER CONNECTION PER COP STD DET S512D AND MAG STD DET 426	EA	2

SHEET REFERENCES

1. SEE P-1.03 FOR PAVING PLAN
2. SEE SD-2.02 FOR STORM DRAIN PLAN
3. SEE SP-1.02 FOR SANITARY SEWER PROFILE

Two working days before you dig CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

C1 CURVE DATA

PI STA 252+36.86
N= 874475.6230
E= 628502.0640

MAIN CURVE
Δ= 24°20'19"
D= 02°00'00"
R= 2864.79'
L= 1216.93'
T= 617.78'
EXT= 65.85'
SUPER= 0.034'/fT

SANITARY SEWER PLAN
STA 254+19.05 TO STA 258+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT –			SP-1.01

ST85100371 SP-1_01.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

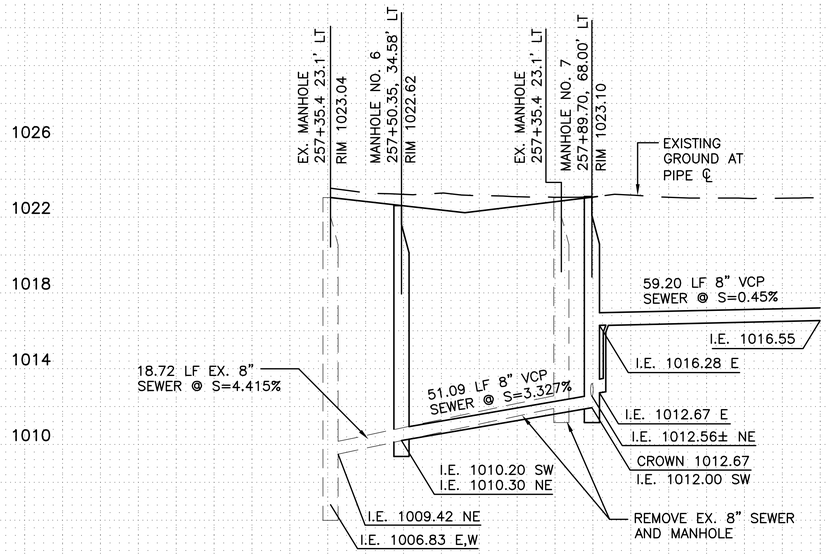
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

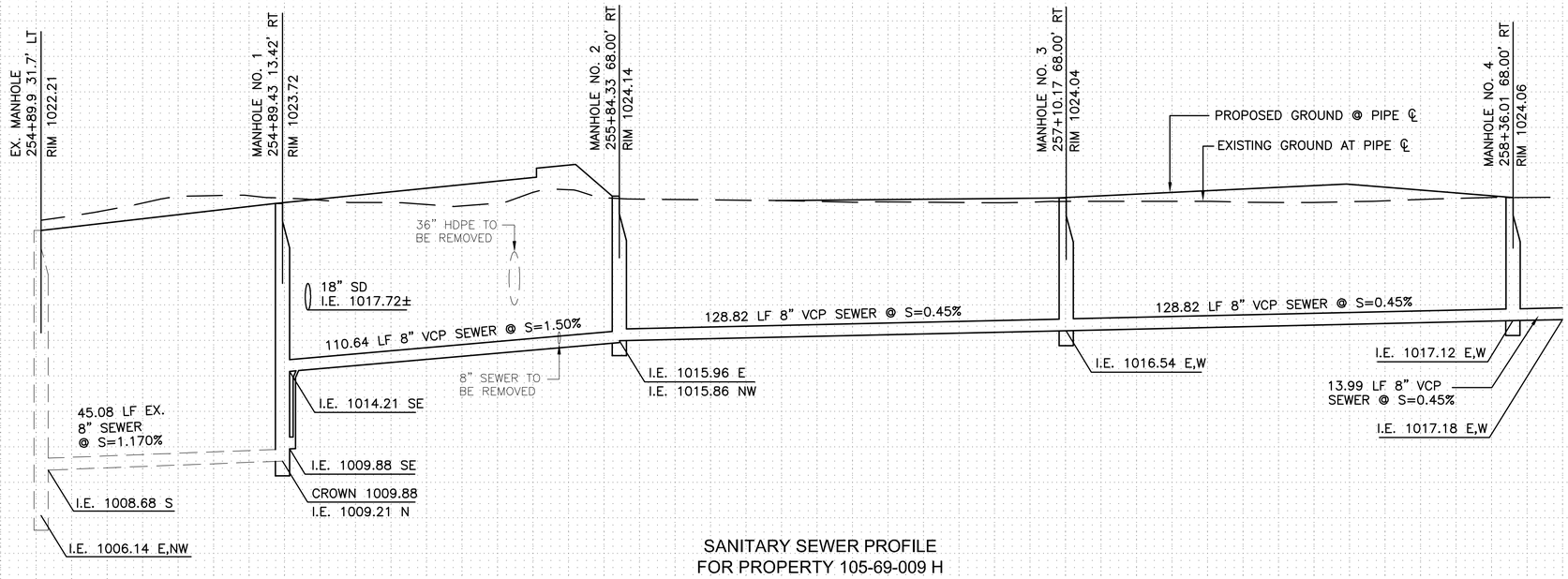
REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CK'D BY	DATE

▲ T.B.M.
STA 257+83.06, 69.17' RT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1023.70



SANITARY SEWER PROFILE
FOR PROPERTY 105-69-009 G



SANITARY SEWER PROFILE
FOR PROPERTY 105-69-009 H

Registered Professional Engineer (Civil)
CERTIFICATE NO.
34580
MARK
LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	157	164	

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Fax: (602) 906-3080

SHEET REFERENCES

1. SEE SP-1.01 FOR SANITARY SEWER PLAN

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SANITARY SEWER PROFILE
STA 254+19.05 TO STA 258+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SP-1.02

ST85100371 SP-1_02.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

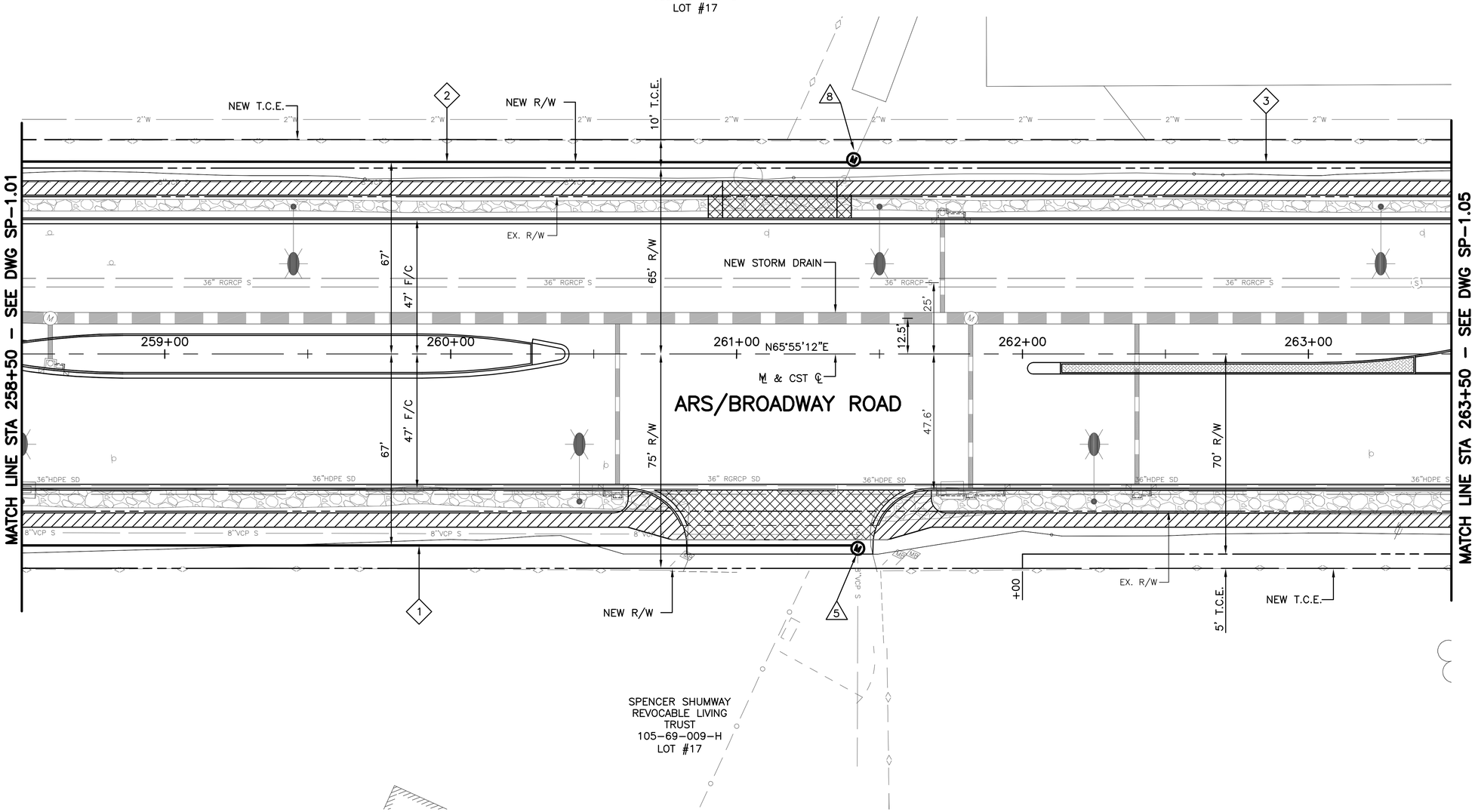
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



City of Phoenix

Registered Professional Engineer (Civil) CERTIFICATE NO. 34580 MARK V. LEE Date Signed 11/17/17 ARIZONA, U.S.A. EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	158	164	

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SEWER PIPE

	STA. TO STA.	SIZE	LF
1	258+50.00, 67' RT TO 261+42.39, 67' RT	8"	293
2	258+50.00, 67' LT TO 261+40.92, 67' LT	8"	291
3	261+40.92, 67' LT TO 263+50.00, 67' LT	8"	209

SEWER MANHOLE

	STATION	TYPE
5	261+42.39, 68' RT	MAG 421 & 424
8	261+40.92, 68' LT	MAG 421 & 424

SHEET REFERENCES

1. SEE P-1.04 FOR PAVING PLAN
2. SEE SD-2.03 FOR STORM DRAIN PLAN
3. SEE SP-1.04 FOR SANITARY SEWER PROFILE

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SANITARY SEWER PLAN
STA 258+50 TO STA 263+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT –			SP-1.03

ST85100371 SP-1_03.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

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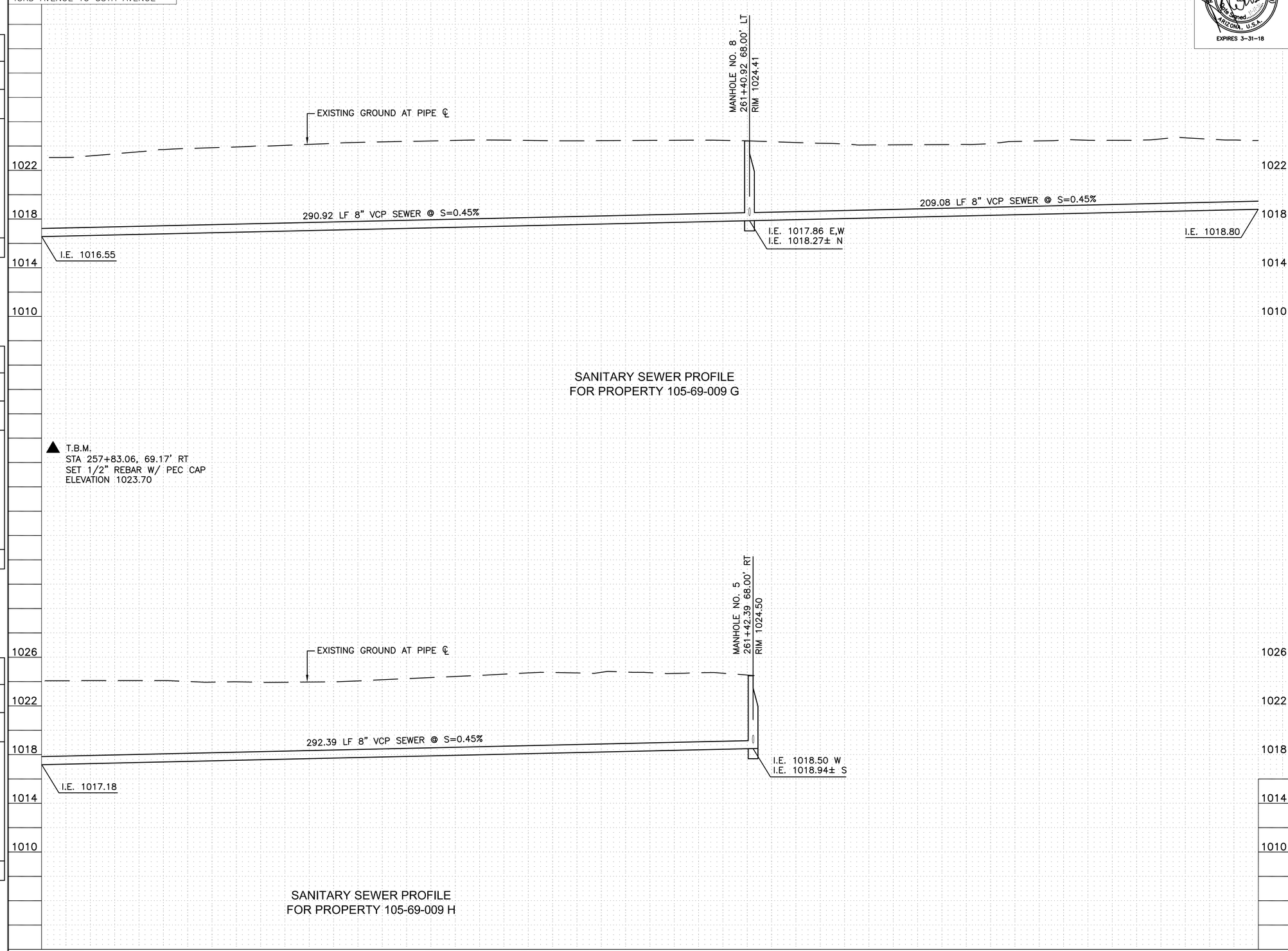

SANITARY SEWER PROFILE
FOR PROPERTY 105-69-009 G

▲ T.B.M.
STA 257+83.06, 69.17' RT
SET 1/2" REBAR W/ PEC CAP
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SANITARY SEWER PROFILE
FOR PROPERTY 105-69-009 H

259+00 260+00 261+00 262+00 263+00

REVISION BY CITY OF PHOENIX

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SANITARY SEWER PROFILE
STA 258+50 TO STA 263+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SP-1.04

ST85100371 SP-1_04.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

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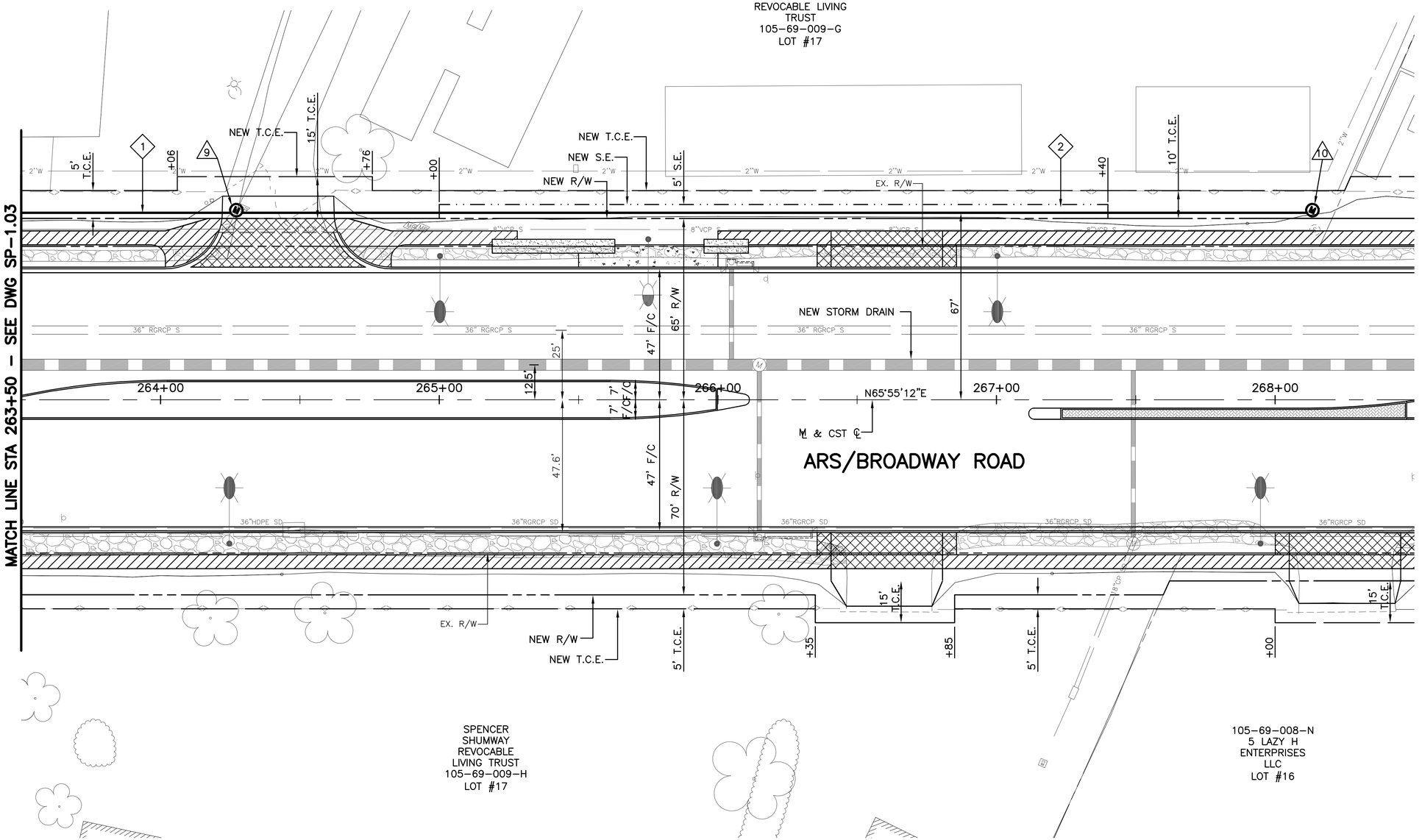

City of Phoenix

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Fax: (602) 906-3080

SEWER PIPE

	STA. TO STA.	SIZE	LF
1	263+50.00, 67' LT TO 264+27.21, 67' LT	8"	78
2	264+27.21, 67' LT TO 268+13.37, 67' LT	8"	387

SEWER MANHOLE

	STATION	TYPE
9	264+27.21, 68' LT	MAG 421 & 424
10	268+13.37 68' LT	MAG 421 & 424

SHEET REFERENCES

1. SEE P-1.05 FOR PAVING PLAN
2. SEE SD-2.04 FOR STORM DRAIN PLAN
3. SEE SP-1.06 FOR SANITARY SEWER PROFILE

Two working days before you dig. CALL FOR THE BLUE STAKES (602) 263-1100 Blue Stake Center CALL COLLECT

"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."

SANITARY SEWER PLAN
STA 263+50 TO STA 268+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR:	DES:	CK:	DWG SERIES NO.
JG	MVL	SM	
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT –			SP-1.05

ST85100371 SP-1_05.DWG

AVENIDA RIO SALADO, PHASE II – BROADWAY ROAD (ARS)
PHOENIX STREET – MARICOPA CO.
43RD AVENUE TO 35TH AVENUE

REVISION BY CITY OF PHOENIX

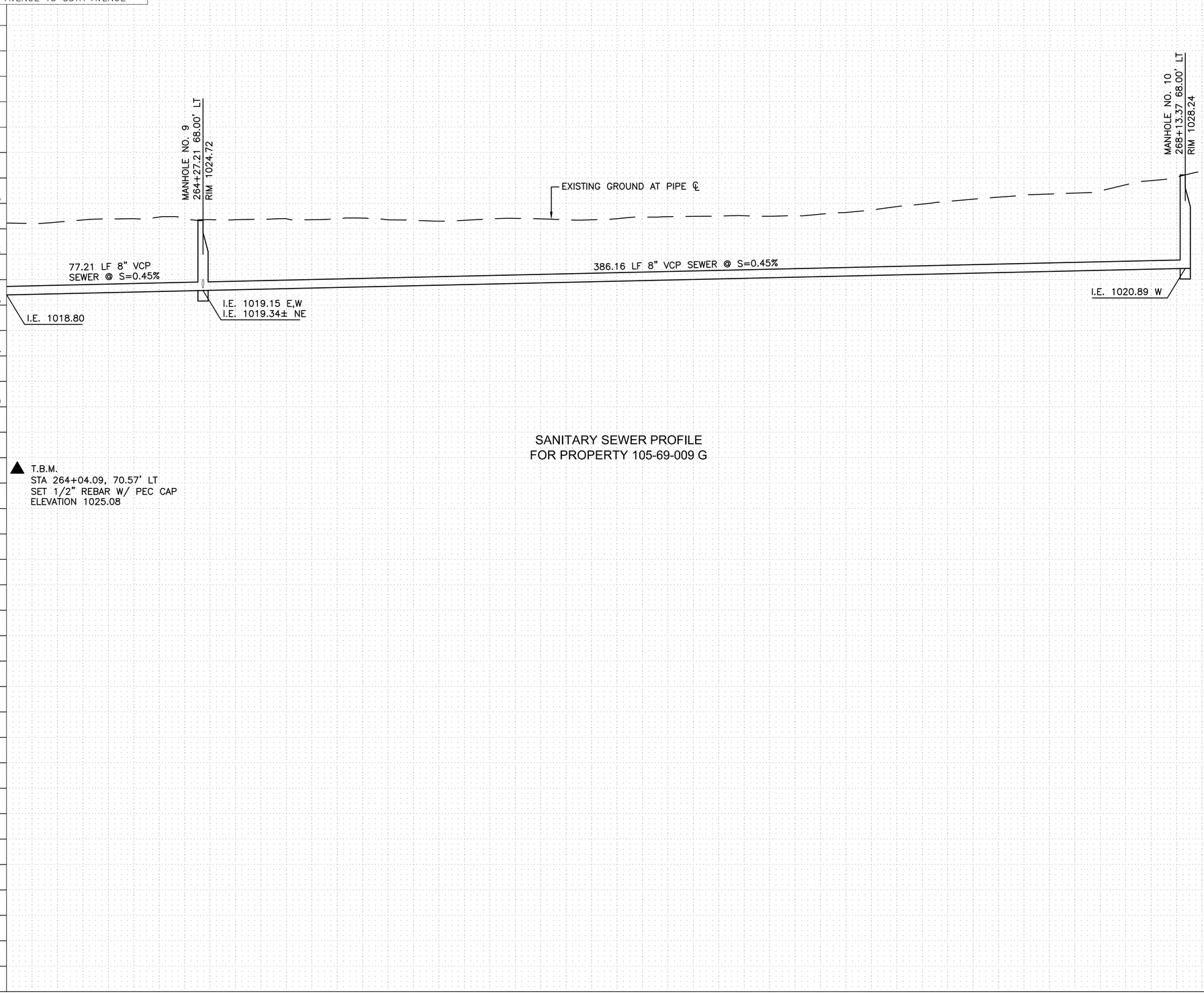
NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE

REVISION BY CITY OF PHOENIX

NO.	DESCRIPTION	REV BY	CKD BY	DATE



SANITARY SEWER PROFILE
FOR PROPERTY 105-69-009 G

▲ T.B.M.
STA 264+04.09, 70.57' LT
SET 1/2" REBAR W/ PEC CAP
ELEVATION 1025.08

Registered Professional Engineer (Civil)
CERTIFICATE NO.
34580
MARK V. LEE
Date Signed
ARIZONA, U.S.A.
EXPIRES 3-31-18

F.H.W.A. REGION	STATE	PROJ. NO.	NO.	TOTAL	AS BUILT
9	ARIZ.	ST85100371(004)	161	164	

PEC
PROJECT ENGINEERING CONSULTANTS
2310 W. MISSION LANE, SUITE 4
Phone: (602) 906-1901
Fax: (602) 906-3080

SHEET REFERENCES

1. SEE SP–1.05 FOR SANITARY SEWER PLAN

"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."

SANITARY SEWER PROFILE
STA 263+50 TO STA 268+50

CITY OF PHOENIX, ARIZONA
STREET TRANSPORTATION DEPARTMENT

AVENIDA RIO SALADO, PHASE II
BROADWAY ROAD (ARS)
43RD AVENUE TO 35TH AVENUE
ST85100371(004)

DR: JG	DES: MVL	CK: SM	DWG SERIES NO.
DATE: 07/16	DATE: 07/16	DATE: 07/16	
SCALE: HORIZ 1"= 20' VERT 1"= 4'			SP–1.06

ST85100371 SP–1_06.DWG

CITY OF PHOENIX NOTES:

CITY OF PHOENIX PROJECT ST85100333

MARAINA SMITH CITY OF PHOENIX UTILITY COORDINATION

DAVID RUTKOWSKI AZTEC ENGINEERING

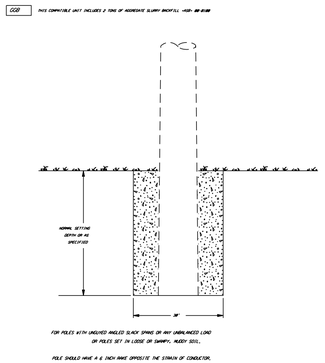
CITY BENCHMARK:
MARICOPA COUNTY BRASS CAP FLUSH AT
WIER AVENUE AND 43RD AVENUE
ELEV 1025.92 (COP DATUM)

FINAL GRADE TO BE SET PRIOR TO SRP SETTING POLES AND EQUIPMENT

CITY OF PHOENIX TO PROVIDE AND INSTALL ALL CONST. SURVEY, TRENCH, CONDUIT, STREET LIGHTS, BACKFILL, AND CALL FOR SRP INSPECTIONS ON ALL INSTALLATIONS.

CITY OF PHOENIX TO REMOVE EXISTING STREET LIGHTS AS INDICATED.

SRP TO PULL WIRE AND ENERGIZE STREET LIGHTS WITH PROVIDED INSPECTIONS ON ALL INSTALLATIONS.



Overhead Distribution Construction Standards — REV. REFORMAT
SRP PROPRIETARY MATERIAL
POLE GUYING AND BRACING STABILIZING BACKFILL
ISSUE DATE: 8/06/81
REV. DATE: 05/28/13
APPROVALS: B.PRIES
4-10-1
8512E12B.DGN

CITY OF PHOENIX
GENERAL NOTES FOR UTILITY CONSTRUCTION

1. All utility construction shall conform to the latest Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, and the City of Phoenix Supplements to MAG
2. All work performed in the City of Phoenix rights-of-way shall be governed by the latest edition of the City of Phoenix Traffic Barricade Manual.
3. This set of plans was reviewed by the City of Phoenix Utility Coordination Section in compliance with City requirements. However, such review shall not prevent the City from requiring correction of errors found to be in violation of any law ordinance or City of Phoenix requirement for utility construction in the rights-of-way
4. The contractor shall have a copy of the approved/stamped construction plans and approved traffic control plan at the project site at all times.
5. All utilities crossing streets must be bored or punched unless permission to open cut has been given in writing by the City Engineer.
6. Before starting any work on a major or collector street, the utility company shall schedule a preconstruction meeting with the City of Phoenix Street Transportation Department 5/32 s Utility Inspection Section.
7. The City of Phoenix does not warrant any quantities shown on these plans.
8. Utility companies are to coordinate alley work with the Refuse Section.
9. The utility company shall contact the City of Phoenix Street Transportation Department 5/32 s Utility Inspection Section a minimum of 48 hours in advance of starting work, giving location and permit number in order to schedule inspections.
10. All work requiring asphalt replacement, concrete replacement, or resurfacing alleys in the City of Phoenix right-of-way will require a final inspection with the utility company representative at time of completion.
11. Maintain a minimum six (6) feet horizontal separation and one (1) foot vertical from all water and sewer mains, all measurements outside to outside.

PHOENIX PERMIT BOXES

CITY OF PHOENIX

/ /2014

UTILITY PERMIT NO.
CITY OF PHOENIX

DEVELOPER: SALT RIVER PROJECT
P.O. BOX 52025
PHOENIX, AZ 85072
CONTACT: KEITH FAULKNER
PHONE NO.: 602-653-1387
DEVELOPER'S DSD NUMBER:
TOTAL TRENCH FOOTAGE:
TOTAL TRENCH FOOTAGE WITHIN CITY RIGHT OF WAY: 0

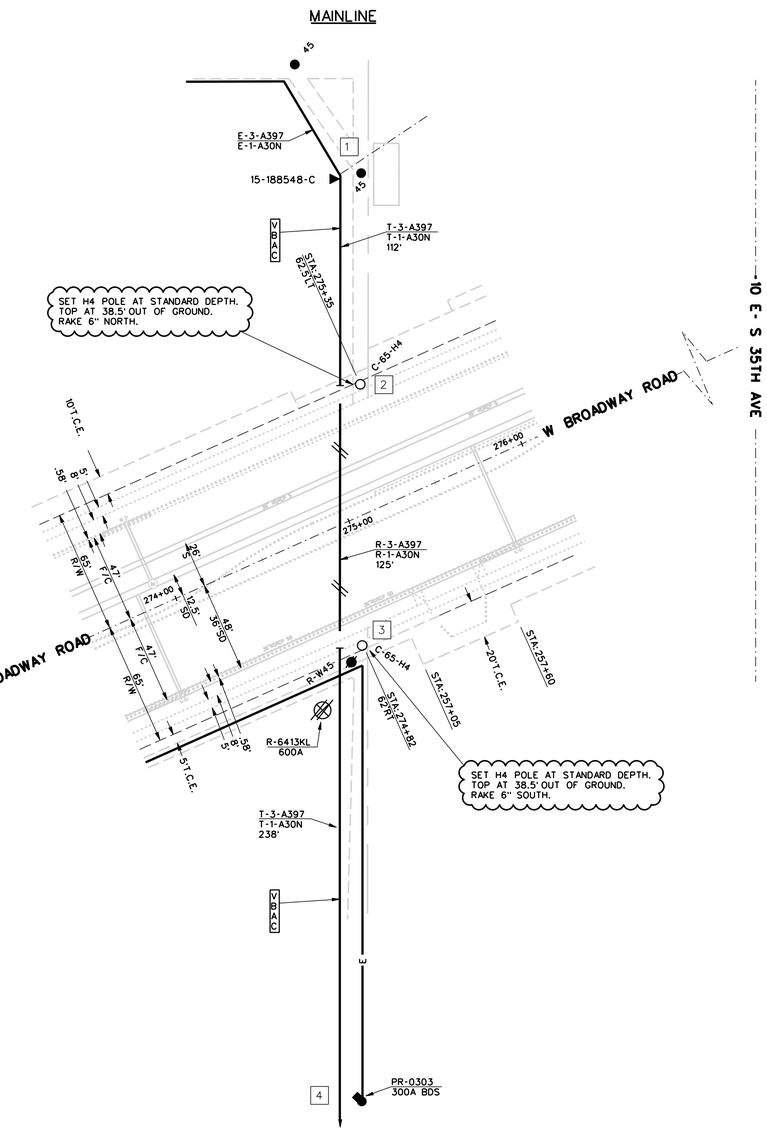
INFORMATION BOX

NOTE:
-CUSTOMER TO MAINTAIN MINIMUM OF 6' CLEARANCE FROM ELECTRICAL TRENCH TO WATER AND SEWER MAINS.
-ALSO MINIMUM OF 3' CLEARANCE FROM ELECTRICAL TRENCH TO WATER AND SEWER SERVICES.

D13

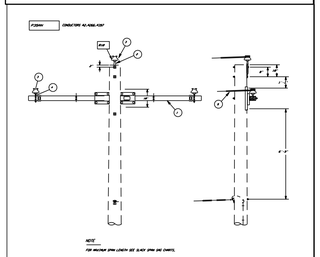
AVENIDA RIO SALADO / BROADWAY RD
ARS 7: 43RD AVE - 35TH AVE
C.O.P. JOB # ST85100333
SRP JOB# JJ2-208/ T1713569

SCALE: 1" = 40'



GRAPHIC SYMBOLS

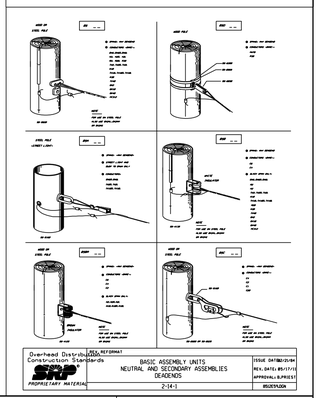
- DOUBLE SLASH LINES INDICATE REMOVAL
- WORK ACTIVITY POINT
- EXISTING POLE WITH RISER
- PROPOSED POLE WITH PROPOSED RISER
- EXISTING OH GANG SWITCH
- EXISTING WOOD DISTRIBUTION POLE
- EXISTING OH 1~ TRANSFORMER
- EXISTING PRIMARY
- SERVICE WIRE
- SECONDARY WIRE
- CENTER LINE
- PROPERTY LINE
- ST LIGHT LINE



NOTE:
FOR MAXIMUM SPAN LENGTH SEE SLACK SPAN DIM CHARTS.

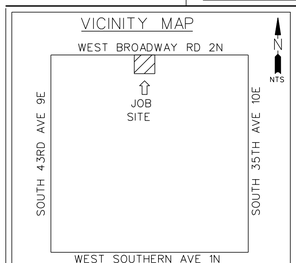
ITEM	MATERIAL DESCRIPTION	QUANTITY	STOCK NO.
1	CROSSARM, 4" SQUARE CHAMFER EDGES	1	SEE NOTE
2	PIN, GALVANIZED, 24" OR LONGER, WITH NUT	1	SEE NOTE
3	INSULATOR, PIN, 55KV, PORCELAIN GRAY	1	SEE NOTE
4	PIN, GALVANIZED, 24.5" OR LONGER, CLOSE	1	SEE NOTE
5	GROUND WIRE, #6 SOLID	1	AR***

Overhead Distribution Construction Standards — REV. REFORMAT
SRP PROPRIETARY MATERIAL
PRIMARY CONSTRUCTION UNITS THREE PHASE DEADEND SLACK SPAN
ISSUE DATE: 08/30/94
REV. DATE: 05/31/13
APPROVALS: B.PRIES
5-31-1
8512E12B.DGN



Overhead Distribution Construction Standards — REV. REFORMAT
SRP PROPRIETARY MATERIAL
BASIC ASSEMBLY UNITS NEUTRAL AND SECONDARY ASSEMBLIES DEADENDS
ISSUE DATE: 08/20/94
REV. DATE: 05/17/13
APPROVALS: B.PRIES
2-14-1
8512E12B.DGN

VICINITY MAP



NOTICE

THIS JOB ORDER INVOLVES OVERHEAD, UNDERGROUND AND/ OR SERVICES
UG* KJ2-733
ST/LT* KJL-377

FIELD INSPECTION STAMP

REV	REVISED BY	DATE	REVISION DESCRIPTION
4			
3			
2			
1			
0	KWFAULKN	8-1-14	DESIGN START

CONTACTS

PRIMARY:
KEITH FAULKNER
PHONE: (602)236-3793
MOBILE: (602)653-1387

SECONDARY:
JASON HUGHES
PHONE: (602)236-0886

SUPERVISOR/SPECIALIST:
RYAN EARWOOD
PHONE: (602)236-4128
MOBILE: (602)818-2952

JOB NAME ARS-BROADWAY RD, 43RD AVE TO 35TH AVE -
FIS JO JJ2-208 MAP 1/4 NW S 27 T 1N R 2E
40/ACRE AB-27-04 COORDS 9 1-8 E - 1 7-8 N
AMP WO T1713569 AMP VERSION
COST CENTER 22680
ROUTING CODE DD1, SCS1, -12

Call at least two full working days before you begin excavation. ARIZONA811 (Arizona Blue Stake, Inc.) Dial 8-1-1 or 1-800-STAKE-IT (782-5348) In Maricopa County: (602) 263-1100

SHEET NUMBER 1 OF 1

C:\JJ2\DWG\WK_02 04-02-2015

DWG SERIES No.
SRPP-1.01

J:\Jobs - 17-NOV-2015, 10:36 - W:\R2015_JobOrders\Customer Improvements JobOrders\ARS\ARS-7\KJ2-733\KJ2-733.dgn

CITY OF PHOENIX NOTES

CITY OF PHOENIX PROJECT ST85100333

MARAINA SMITH CITY OF PHOENIX UTILITY COORDINATION

DAVID RUTKOWSKI AZTEC ENGINEERING

CITY BENCHMARK:
MARICOPA COUNTY BRASS CAP FLUSH AT
WIER AVENUE AND 43RD AVENUE
ELEV 1025.92 (COP DATUM)

FINAL GRADE TO BE SET PRIOR TO SRP SETTING POLES AND EQUIPMENT

CITY OF PHOENIX TO PROVIDE AND INSTALL ALL CONST. SURVEY, TRENCH, CONDUIT, STREET LIGHTS, BACKFILL, AND CALL FOR SRP INSPECTIONS ON ALL INSTALLATIONS.

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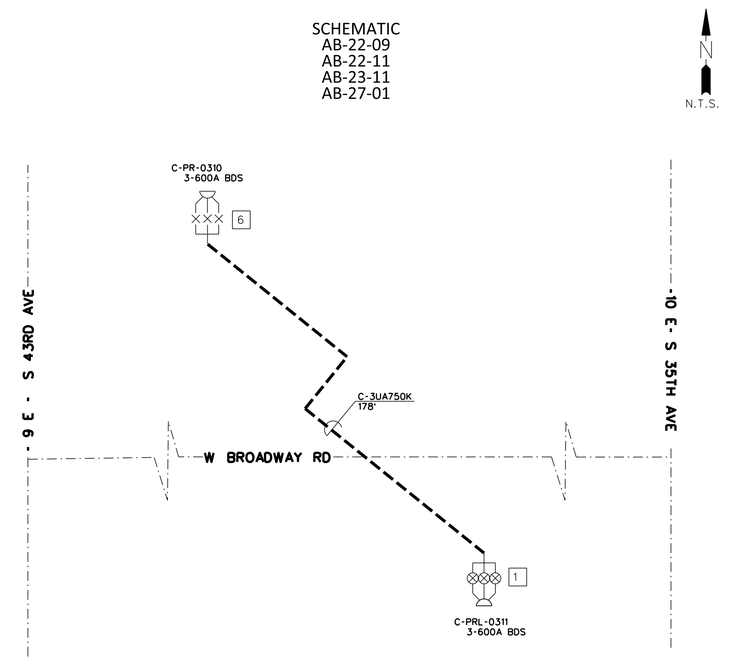
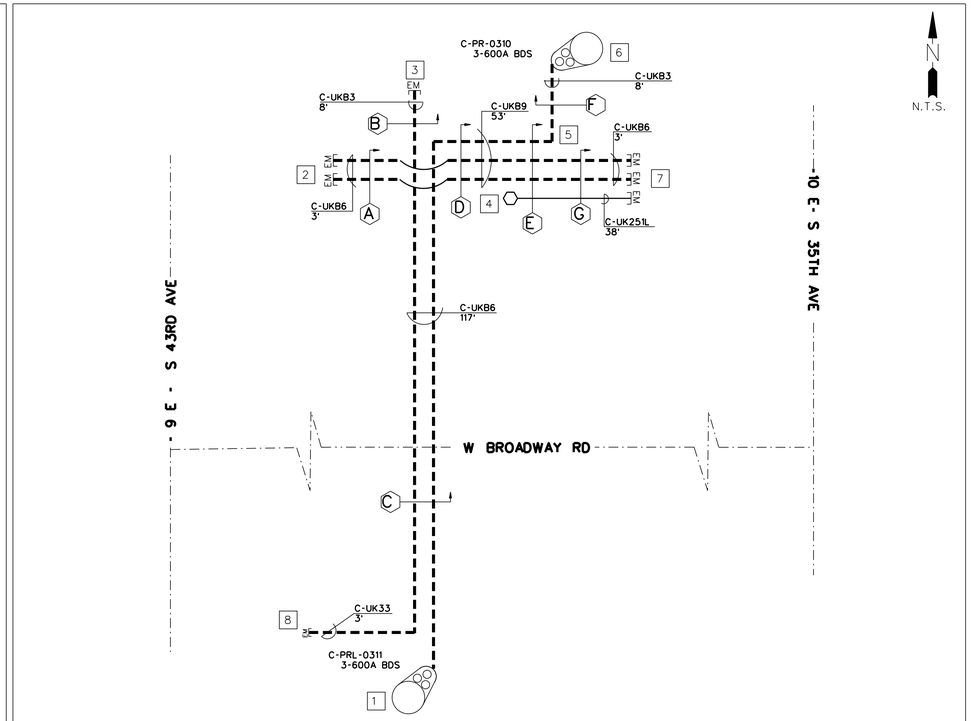
AVENIDA RIO SALADO / BROADWAY RD
ARS 7: 43RD AVE - 35TH AVE
C.O.P. JOB # ST85100333
SRP JOB# KJ2-733/ T1713592

SCHEMATIC

SCHEMATIC
AB-22-09
AB-22-11
AB-23-11
AB-27-01



CONDUIT ONE LINE



SCHEMATIC LEGEND
•UNLESS OTHERWISE INDICATED
C-3UA750K

CONDUIT ONELINE LEGEND
-CONDUITS ARE AS FOLLOWS UNLESS NOTED OTHERWISE-
C-UK33(FEEDER)
C-UK253(PRIMARY)
C-UK252
C-UK251
C-USK25
E-UK33 (PRIMARY)
E-UK251

MAINLINE LEGEND
- EXISTING UG PRIMARY TRENCH ROUTE
- PROPOSED UG PRIMARY TRENCH ROUTE
- EXISTING UG STREET LIGHT TRENCH ROUTE
- EXISTING PADMOUNT THREE PHASE TRANSFORMER
- PROPOSED PADMOUNT SINGLE PHASE TRANSFORMER
- PROPOSED PADMOUNT SWITCH CABINET
- EXISTING WOOD POLE
- EXISTING WOOD POLE TO BE REMOVED
- EXISTING FOREIGN OWNED WOOD POLE
- EXISTING FOREIGN OWNED STEEL POLE
- EXISTING UG RISER
- EXISTING UG RISER TO BE REMOVED
- PROPOSED UG RISER
- DOUBLE DOWN GUY
- EXISTING MUNICIPAL STREET LIGHT
- PROPOSED MUNICIPAL STREET LIGHT
- EXISTING UG J-BOX
- PROPOSED UG J-BOX
- PROPOSED CONDUIT SPLICE POINT
- WORK POINT NUMBER

PHOENIX PERMIT BOXES
CITY OF PHOENIX

/ /2014
UTILITY PERMIT NO.
CITY OF PHOENIX

DEVELOPER:SALT RIVER PROJECT
P.O. BOX 52025
PHOENIX, AZ 85072
CONTACT: KEITH FAULKNER
PHONE NO.:602-653-1387
DEVELOPER'S DSD NUMBER:
TOTAL TRENCH FOOTAGE:
TOTAL TRENCH FOOTAGE WITHIN CITY RIGHT OF WAY: 0

INFORMATION BOX

NOTE:
-CUSTOMER TO MAINTAIN MINIMUM OF 6' CLEARANCE FROM ELECTRICAL TRENCH TO WATER AND SEWER MAINS.
-ALSO MINIMUM OF 3' CLEARANCE FROM ELECTRICAL TRENCH TO WATER AND SEWER SERVICES.

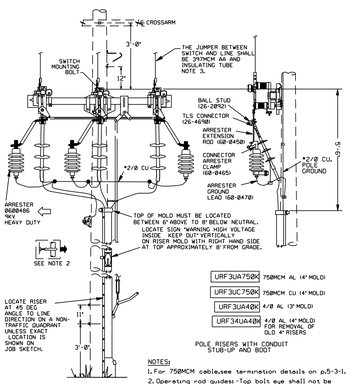
D13

CONTACTS 8
PRIMARY:
KEITH FAULKNER
PHONE: (602)236-3793
MOBILE:(602)653-1387

SECONDARY:
JASON HUGHES
PHONE: (602)236-0886

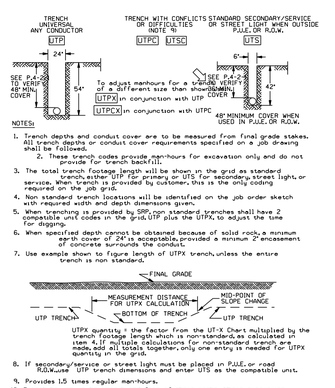
SUPERVISOR/SPECIALIST:
RYAN EARWOOD
PHONE: (602)236-4128
MOBILE:(602)818-2952

DETAILS



NOTES:
1. For 750MCM cable/sec termination details on p.5-3-1.
2. Operating rod guides: Top bolt eye shall not be lower than 6'-6" from grade. Bottom bolt eye shall not be lower than 8'-6" from grade. Intermediate bolt eyes shall not be spaced greater than 5'-6".
3. If running line is 266A, 628V 350A jumper may be used.

Underground Distribution Construction Standards	REV. UPDATED PAGE NUMBER, ADDED ARRESTER STOCK CODE.	ISSUE DATE 01/31/12
SRP PROPRIETARY MATERIAL	RISERS FEEDER RISER WITH GANG-OPERATED SWITCH	REV. DATE: 09/28/12 APPROVAL@_PRIEST 8503E134%DSN
	5-36-1	

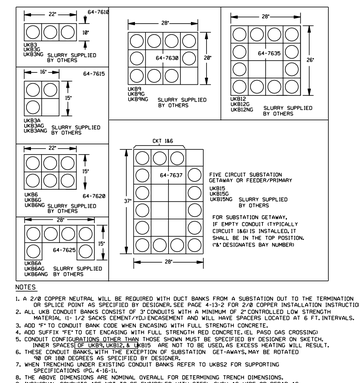


NOTES:
1. Trench depths and conduit cover are to be measured from final grade stakes. All trench depths or conduit cover requirements specified on a job drawing shall be followed.
2. These trench codes provide manhours for excavation only and do not provide for trench backfill.
3. The total trench footage length will be shown in the grid as standard footage. Example: 1 UTP 100' + 1 UTPX 50' = 150' standard, street light, or service. When trench is provided by customer, this is the only coding required on the job grid.
4. Non standard trench locations will be identified on the job order sketch with required width and depth dimensions given.
5. When trenching is provided by SRP, non standard trenches shall have 2 compatible unit codes in the grid, UTP plus the UTPX, to adjust the time for digging.
6. When specified depth cannot be obtained because of solid rock, a minimum earth cover of 24" is acceptable, provided a minimum 2" encasement of concrete surrounds the conduit.
7. Use example shown to figure length of UTPX trench, unless the entire trench is non standard.

UTPX quantity = the factor from the UT-X Chart multiplied by the trench footage length which is non-standard, as calculated in item 4, if multiple calculations for non-standard trench are made, add all totals together, only one entry is needed for UTPX quantity in the grid.

8. If secondary/service or street light must be placed in P.U.E. or road R.O.W. use UTP trench dimensions and enter UTS as the compatible unit.
9. Provides 1.5 times regular man-hours.
10. Trench bottom to be smooth and free of sharp rocks. Where excavation is in rock, bottom of trench to have protective layer of clean, level, tamped backfill or sand.

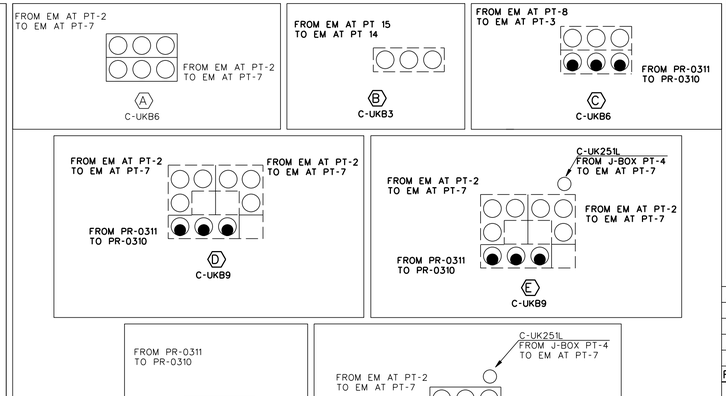
Underground Distribution Construction Standards	REV. CORRECTED TRENCH DEPTH TYPO.	Page 1 of 2
SRP PROPRIETARY MATERIAL	TRENCHING EXCAVATION CODES	ISSUE DATE 01/15/97 REV. DATE: 03/30/13 APPROVAL@_PRIEST
	6-11-1	8503E135.DSN



NOTES
1. A 2/0 COPPER NEUTRAL WILL BE REQUIRED WITH DUCT BANKS FROM A SUBSTATION OUT TO THE TERMINATION OR SPLICE POINT AS SPECIFIED BY DESIGNER, SEE PAGE 4-13-2 FOR 2/0 COPPER INSTALLATION INSTRUCTION.
2. ALL UKB CONDUIT BANKS CONSIST OF 3" CONDUITS WITH A MINIMUM OF 2" CONTROLLED LOW STRENGTH MATERIAL (1- 1/2 SACKS CEMENT/YD) ENCASEMENT AND WILL HAVE SPACERS LOCATED AT 6 FT. INTERVALS.
3. ADD "F" TO CONDUIT BANK CODE WHEN ENCASING WITH FULL STRENGTH CONCRETE.
4. ADD SUFFIX "FE" TO GET ENCASING WITH FULL STRENGTH RED CONCRETE-RED FROG GAS CROSSING!
5. CONDUIT CONFIGURATIONS OTHER THAN THOSE SHOWN MUST BE SPECIFIED BY DESIGNER ON SKETCH, THE CONDUIT CONFIGURATION SPECIFIED MUST BE THE ONLY ONE TO BE USED, AS EXCESS HEATING WILL RESULT.
6. THE CONDUIT BANK SHALL BE STRAIGHT WITH THE EXCEPTION OF SUBSTATION GET-AWAYS, MAY BE ROTATED 90 OR 180 DEGREES AS SPECIFIED BY DESIGNER.
7. WHEN TRENCHING UNDER EXISTING CONDUIT BANKS REFER TO UKB52 FOR SUPPORTING SPECIFICATIONS (PG. 4-16-11).
8. THE ABOVE DIMENSIONS ARE NOMINAL OVERALL FOR DETERMINING TRENCH DIMENSIONS.
9. INDIVIDUAL CONDUITS ARE NOT TO BE ENCIRCLED WITH STEEL SUCH AS WIRE OR REBAR AS EXCESSIVE HEATING WILL RESULT. ENCIRCLEMENT AROUND ENTIRE DUCT BANK IS PERMISSIBLE.
10. REFER TO CLEARANCE SECTION FOR MINIMUM COVER OF A DUCT BANK INSTALLED IN ROAD RIGHT OF WAYS.
11. ON SUBSTATION GET-AWAYS DESIGNATE TOP ROW OF CONDUIT TO BE IN TOP WINDOW OF MANHOLE.

Underground Distribution Construction Standards	REV. REFORMAT	Page 1 of 2
SRP PROPRIETARY MATERIAL	CONDUIT FEEDER OR PRIMARY 3" CONDUIT BANK SPECIFICATION CODES	ISSUE DATE 11-15-97 REV. DATE: 05/15/13 APPROVAL@_PRIEST
	4-13-1	8503E133.DSN

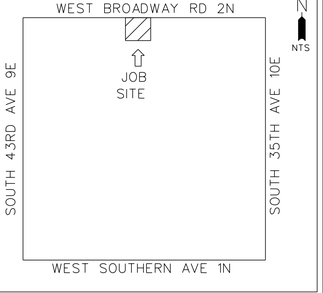
DUCT BANK DETAILS



NOTICE
THIS JOB ORDER INVOLVES OVERHEAD, UNDERGROUND AND/ OR SERVICES
OH* JJ2-208
UG* KJ2-735
ST/LT*

FIELD INSPECTION STAMP

VICINITY MAP



REV	REVISED BY	DATE	REVISION DESCRIPTION
4			
3			
2			
1			
0	KWFAULKN	8-29-13	DESIGN START

JOB NAME ARS-BROADWAY RD\ 43RD AVE TO 35TH AVE -
FIS JO KJ2-733 MAP 1/4 NE S 27 T 1N R 2E
40/ACRE AB-27-04 COORDS 9 1-8 E - 1 7-8 N
AMP WO T1713592 AMP VERSION
COST CENTER 22600
ROUTING CODE

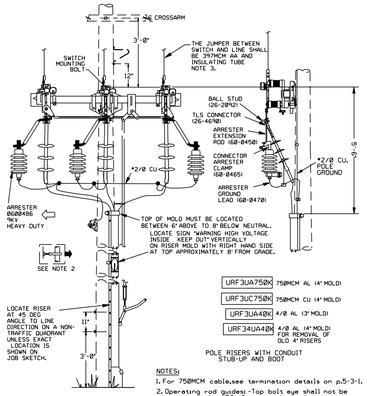
Call (811) or 1-800-STAKE-IT (782-5348) before you begin excavation.
AR/ZONA811
Arizona Blue Stake, Inc.
Outside of Maricopa County (602) 263-1100 or Maricopa County (602) 263-1100

SHEET NUMBER 1 OF 2

CS12E134%DSN_02 04-02-2013

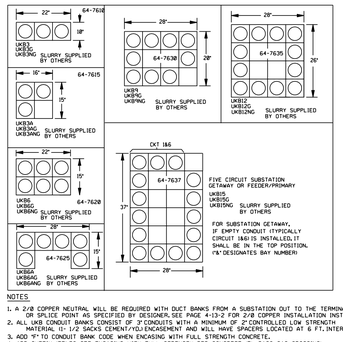
DWG SERIES No.
SRPP-1.02

jahughes • 17-NOV-2015 10:36 • W:\82515 JobOrders\Customer Improvements JobOrders\ARS\ARS-7\KJ2-733\ks12-733.dgn



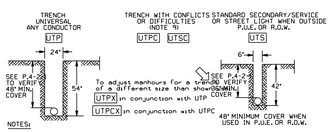
NOTES:
1. For 750MCM cable,see termination details on p.5-3-1.
2. Operating rod guides: Top bolt eye shall not be greater than 5ft from switch crank. Bottom bolt eye shall not be lower than 8ft from grade. Intermediate bolt eyes shall not be spaced greater than 24-30".
3. If running line is 266A, 628V 350A jumper may be used.

Underground Distribution Construction Standards	REV. UPDATED PAGE NUMBER, ADDED ARRESTER STOCK CODE.	ISSUE DATE: 1/31/92
SRP PROPRIETARY MATERIAL	RISERS FEEDER RISER WITH GANG-OPERATED SWITCH	REV. DATE: 09/28/12
	5-36-1	APPROVAL: B.PRIEST 85X3E14%.DGN

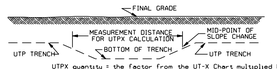


NOTES
1. A 2/0 COPPER NEUTRAL WILL BE REQUIRED WITH DUCT BANKS FROM A SUBSTATION OUT TO THE TERMINATION OR SPLICE POINT AS SPECIFIED BY DESIGNER,SEE PAGE 4-13-2 FOR 2/0 COPPER INSTALLATION INSTRUCTION.
2. ALL UKB CONDUIT BANKS CONSIST OF 3" CONDUITS WITH A MINIMUM OF 2" CONTROLLED LOW STRENGTH MATERIAL (1- 1/2 SACKS CEMENT/YD.) ENCASEMENT AND WILL HAVE SPACERS LOCATED AT 6 FT. INTERVALS.
3. ADD "S" TO CONDUIT BANK CODE WHEN ENCASING WITH FULL STRENGTH CONCRETE.
4. ADD SUFFIX "FE" TO GET ENCASING WITH FULL STRENGTH RED CONCRETE.-EL PASO GAS CROSSING
5. CONDUIT CONFIGURATIONS OTHER THAN THOSE SHOWN MUST BE SPECIFIED BY DESIGNER ON SKETCH. INNER SPACES OF UKB9,UKB12 & UKB15 ARE NOT TO BE USED,AS EXCESS HEATING WILL RESULT.
6. THESE CONDUIT BANKS, WITH THE EXCEPTION OF SUBSTATION GET-AWAYS, MAY BE ROTATED 90 OR 180 DEGREES AS SPECIFIED BY DESIGNER.
7. WHEN TRENCHING UNDER EXISTING CONDUIT BANKS REFER TO UKB52 FOR SUPPORTING SPECIFICATIONS (PG. 4-16-1).
8. THE ABOVE DIMENSIONS ARE NOMINAL OVERALL FOR DETERMINING TRENCH DIMENSIONS.
9. INDIVIDUAL CONDUITS ARE NOT TO BE ENCIRCLED WITH STEEL SUCH AS WIRE OR REBAR AS EXCESSIVE HEATING WILL RESULT, ENCIRCLEMENT AROUND ENTIRE DUCT BANK IS PERMISSIBLE.
10. REFER TO CLEARANCE SECTION FOR MINIMUM COVER OF A DUCT BANK INSTALLED IN ROAD RIGHT OF WAYS.
11. ON SUBSTATION GET-AWAYS DESIGNATE TOP ROW OF CONDUIT TO BE IN TOP WINDOW OF MANHOLE.

Underground Distribution Construction Standards	REFORMAT	Page 1 of 2
SRP PROPRIETARY MATERIAL	CONDUIT FEEDER OR PRIMARY 3" CONDUIT BANK SPECIFICATION CODES	ISSUE DATE: 11-15-87 REV. DATE: 05/15/13 APPROVAL: B.PRIEST
	4-13-1	85X3E13.DGN



NOTES:
1. Trench depths and conduit cover are to be measured from final grade stakes. All trench depths or conduit cover requirements specified on a job drawing shall be followed.
2. These trench codes provide man-hours for excavation only and do not provide for trench backfill.
3. The total trench footage length will be shown in the grid as standard service. When trench is provided by customer, this is the only coding required on the job grid.
4. Non standard trench locations will be identified on the job order sketch with required width and depth dimensions given.
5. When trenching is provided by SRP, non standard trenches shall have 2 compatible unit codes in the grid, UTP plus the UTPX, to adjust the time for digging.
6. When specified depth cannot be obtained because of solid rock, a minimum earth cover of 24" is acceptable,provided a minimum 2" encasement of concrete surrounds the conduit.
7. Use example shown to figure length of UTPX trench,unless the entire trench is non standard.



UTPX quantity = the factor from the UT-X Chart multiplied by the trench footage length which is non-standard,as calculated in item 4. If multiple calculations for non-standard trench are made, add all totals together, only one entry is needed for UTPX quantity in the grid.

8. If secondary/service or street light must be placed in P.U.E. or road R.O.W.,use UTP trench dimensions and enter UTS as the compatible unit.
9. Provides 1.5 times regular man-hours.
10. Trench bottom to be smooth and free of sharp rocks. Where excavation is in rock, bottom of trench to have protective layer of clean, level, tamped backfill or sand.

Underground Distribution Construction Standards	REV. CORRECTED TRENCH DEPTH TYPO.	Page 1 of 2
SRP PROPRIETARY MATERIAL	TRENCHING EXCAVATION CODES	ISSUE DATE: 01/15/87 REV. DATE: 03/06/13 APPROVAL: B.PRIEST
	6-11-1	85X3E35.DGN

CITY OF PHOENIX NOTES

CITY OF PHOENIX PROJECT ST85100333

MARAINA SMITH CITY OF PHOENIX UTILITY COORDINATION

DAVID RUTKOWSKI AZTEC ENGINEERING

CITY BENCHMARK:
MARICOPA COUNTY BRASS CAP FLUSH AT
WIER AVENUE AND 43RD AVENUE
ELEV 1025.92 (COP DATUM)

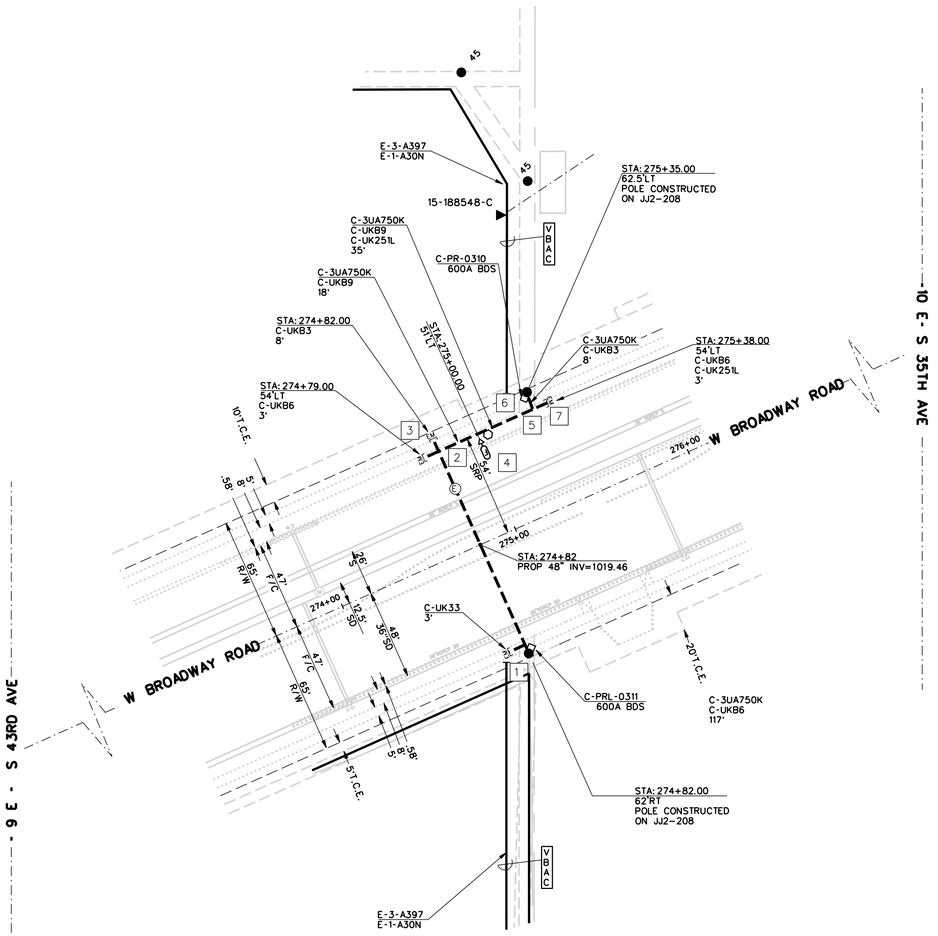
FINAL GRADE TO BE SET PRIOR TO SRP SETTING POLES AND EQUIPMENT

CITY OF PHOENIX TO PROVIDE AND INSTALL ALL CONST. SURVEY, TRENCH, CONDUIT, STREET LIGHTS, BACKFILL, AND CALL FOR SRP INSPECTIONS ON ALL INSTALLATIONS.

CITY OF PHOENIX TO REMOVE EXISTING STREET LIGHTS AS INDICATED.

SRP TO PULL WIRE AND ENERGIZE STREET LIGHTS WITH PROVIDED INSPECTIONS ON ALL INSTALLATIONS.

MAINLINE



SCALE:1"=40'

LEGEND

- E — EXISTING UG PRIMARY TRENCH ROUTE
- PROPOSED UG PRIMARY TRENCH ROUTE
- EXISTING UG STREET LIGHT TRENCH ROUTE
- EXISTING PADMOUNT THREE PHASE TRANSFORMER
- PROPOSED PADMOUNT SINGLE PHASE TRANSFORMER
- PROPOSED PADMOUNT SWITCH CABINET
- EXISTING WOOD POLE
- EXISTING WOOD POLE TO BE REMOVED
- EXISTING FOREIGN OWNED WOOD POLE
- EXISTING FOREIGN OWNED STEEL POLE
- EXISTING UG RISER
- EXISTING UG RISER TO BE REMOVED
- PROPOSED UG RISER
- DOUBLE DOWN GUY
- EXISTING MUNICIPAL STREET LIGHT
- PROPOSED MUNICIPAL STREET LIGHT
- EXISTING UG J-BOX
- PROPOSED UG J-BOX
- PROPOSED CONDUIT SPLICE POINT
- WORK POINT NUMBER

CITY OF PHOENIX
GENERAL NOTES FOR UTILITY CONSTRUCTION

1. All utility construction shall conform to the latest Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, and the City of Phoenix Supplements to MAG
2. All work performed in the City of Phoenix rights-of-way shall be governed by the latest edition of the City of Phoenix Traffic Barricade Manual.
3. This set of plans was reviewed by the City of Phoenix Utility Coordination Section in compliance with City requirements.However, such review shall not prevent the City from requiring correction of errors found to be in violation of any law ordinance or City of Phoenix requirement for utility construction in the rights-of-way
4. The contractor shall have a copy of the approved/stamped construction plans and approved traffic control plan at the project site at all times.
5. All utilities crossing streets must be bored or punched unless permission to open cut has been given in writing by the City Engineer.
6. Before starting any work on a major or collector street, the utility company shall schedule a preconstruction meeting with the City of Phoenix Street Transportation Department 5/32 s Utility Inspection Section.
7. The City of Phoenix does not warrant any quantities shown on these plans.
8. Utility companies are to coordinate alley work with the Refuse Section.
9. The utility company shall contact the City of Phoenix Street Transportation Department 5/32 s Utility Inspection Section a minimum of 48 hours in advance of starting work, giving location and permit number in order to schedule inspections.
10. All work requiring asphalt replacement, concrete replacement, or resod facing alleys in the City of Phoenix right-of-way will require a final inspection with the utility company representative at time of completion.
11. Maintain a minimum six (6) feet horizontal separation and one (1) foot vertical from all water and sewer mains. all measurements outside to outside.

CONTACTS:

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SECONDARY:
JASON HUGHES
PHONE: (602)236-0886

SUPERVISOR/SPECIALIST:
RYAN EARWOOD
PHONE: (602)236-4128
MOBILE:(602)818-2952

FIELD INSPECTION STAMP

JOB NAME ARS-BROADWAY RD, 43RD AVE TO 35TH AVE -
FIS JO KJ2-733 MAP 1/4 NW S 27 T 1N R 2E
40/ACRE AB-27-04 COORDS 9 1-8 E - 1 7-8 N
AMP WO T171.3592 AMP VERSION
COST CENTER 22600
ROUTING CODE DD1.5CS1, -12

Call at least two full working days before you begin excavation. ARIZONA811 Arizona Blue Stake, Inc. Dial 8-1-1 or 1-800-STAKE-IT (782-5348) In Maricopa County: (602)263-1100

SHEET NUMBER 2 OF 2

DWG SERIES No. SRPP-1.03

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