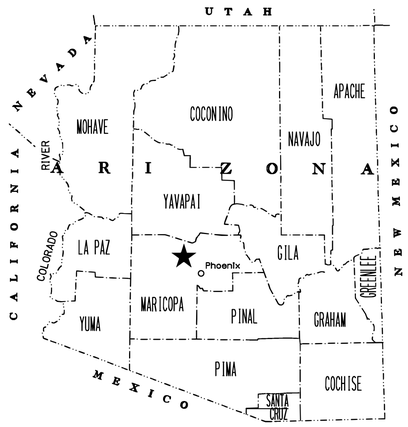
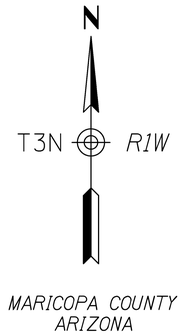


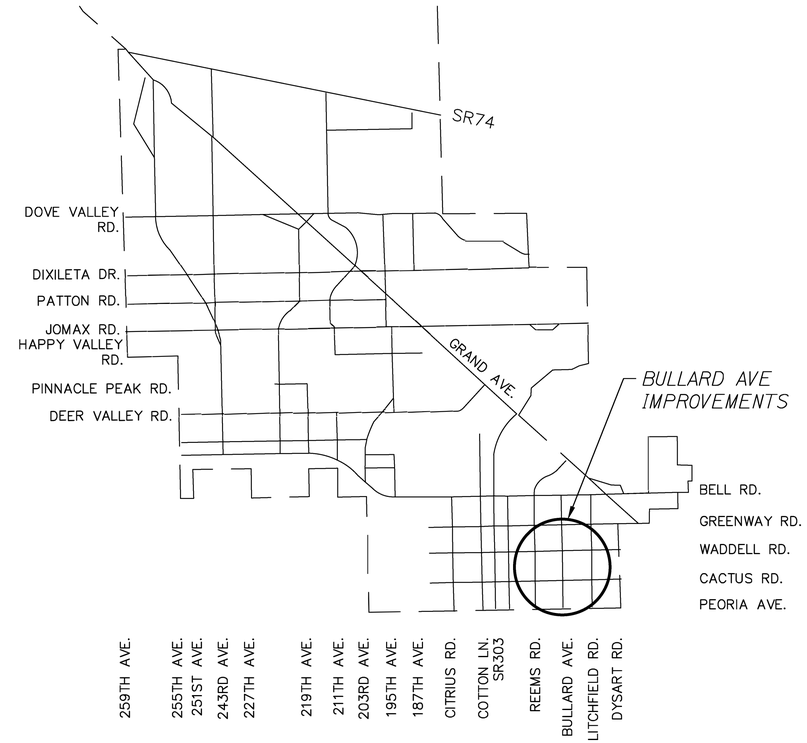
STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION

ADOT

PROJECT PLANS

URBANIZED AREA
CITY OF SURPRISE





VICINITY MAP

Constructed by:

Construction Company

Completion Date

Red-Lines by:

Construction Company

Completion Date

Record Drawings by:

Record Drawing Designer Name & Company

Completion Date

BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

PROJECT NO. 0000 MA SUR T0063 01C
FEDERAL AID NO. CM-SUR-0(230)T

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811
Call 811 or dial ArizonaBlue Stake, Inc.811.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
Dallas Hammit, P.E. STATE ENGINEER

RECORD DRAWING DATA	REC. DWG DATE	OF OF

P:\0014-06\CADD\Production\Sheets\T4014_CS.dwg — Iscale: 1.0000 — Islnts: 2
Plotted by: Pat Rasten at 2/27/2018 7:19 AM on printer DWG To PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Pentable: PREMIER.ctb — portscale: 1:1

ADOT STANDARD DRAWINGS
C STANDARDS

ISSUE OR REVISION DATE	STANDARD NO.		SUBJECT
			CONSTRUCTION
5/12	C-01.10	SH 1	SYMBOL LEGEND
5/12	C-01.10	SH 2	SYMBOL LEGEND
5/12	C-01.10	SH 3	SYMBOL LEGEND
5/12	C-01.10	SH 4	SYMBOL LEGEND
12/17	C-01.30	SH 1	GENERAL ABBREVIATIONS
5/12	C-01.30	SH 2	GENERAL ABBREVIATIONS
5/12	C-01.30	SH 3	GENERAL ABBREVIATIONS
5/12	C-02.10		SLOPES, RURAL DIVIDED HIGHWAYS
5/12	C-02.20		SLOPES, RURAL UNDIVIDED AND FRINGE-URBAN HIGHWAYS
5/12	C-02.30		SLOPES, MISCELLANEOUS ROADWAYS
5/12	C-03.10	SH 1	DITCHES, CHANNELS, DIKES AND BERMS, DITCHES AND CHANNELS
5/12	C-03.10	SH 2	DITCHES, CHANNELS, DIKES AND BERMS, DIKES
5/12	C-03.10	SH 3	DITCHES, CHANNELS, DIKES AND BERMS, DITCH DIKE
5/12	C-03.10	SH 4	DITCHES, CHANNELS, DIKES AND BERMS, PIPE BERMS
5/12	C-03.10	SH 5	DITCHES, CHANNELS, DIKES AND BERMS, HEADWALL BERMS
12/17	C-04.10	SH 1	SPILLWAY, EMBANKMENT SINGLE INLET
12/17	C-04.10	SH 2	SPILLWAY, EMBANKMENT DOUBLE INLET
12/17	C-04.20	SH 1	DOWNDRAIN, EMBANKMENT SINGLE INLET
12/17	C-04.20	SH 2	DOWNDRAIN, EMBANKMENT DOUBLE INLET
12/17	C-04.30		SPILLWAY LENGTH TABLE
12/17	C-04.40		DOWNDRAIN LENGTH TABLE
5/12	C-04.50		DOWNDRAIN ENERGY DISSIPATOR
5/12	C-05.10		CURB & GUTTER, CURB, GUTTER
5/12	C-05.12	SH 1	CURB & GUTTER TRANSITIONS
5/12	C-05.12	SH 2	CURB & GUTTER TRANSITIONS
5/12	C-05.12	SH 3	CURB AND GUTTER TRANSITIONS
5/12	C-05.20	SH 1	CONCRETE DRIVEWAYS & SIDEWALKS, DRIVEWAYS
5/12	C-05.20	SH 2	CONCRETE DRIVEWAYS & SIDEWALKS, SIDEWALKS
5/12	C-05.30	SH 1	SIDEWALK RAMP, TYPE A
5/12	C-05.30	SH 2	SIDEWALK RAMP, TYPE B
5/12	C-05.30	SH 3	SIDEWALK RAMP, TYPE C
5/12	C-05.30	SH 4	SIDEWALK RAMP, TYPE D
5/12	C-05.30	SH 5	SIDEWALK RAMP, TYPE E
5/12	C-05.30	SH 6	SIDEWALK RAMP, TYPE F
5/12	C-05.30	SH 7	SIDEWALK RAMP, DETECTABLE WARNING STRIP
5/12	C-05.40		MEDIAN PAVING AND NOSE TAPER
5/12	C-05.50		CONCRETE BUS BAY
5/12	C-06.10	SH 1	DRIVEWAY & TURNOUT LAYOUTS
5/12	C-06.10	SH 2	DRIVEWAY & TURNOUT LAYOUTS
5/12	C-07.01	SH 1	PCCP JOINTS
5/12	C-07.01	SH 2	PCCP JOINTS
5/12	C-07.02		LOAD TRANSFER DOWEL ASSEMBLY
5/12	C-07.03	SH 1	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03	SH 2	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03	SH 3	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03	SH 4	PCCP JOINT LOCATIONS, MAINLINE SKEWED JOINTS
5/12	C-07.03	SH 5	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03	SH 6	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03	SH 7	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.03	SH 8	PCCP JOINT LOCATIONS, MAINLINE NON-SKEWED JOINTS
5/12	C-07.04	SH 1	PCCP JOINT LOCATIONS, PARALLEL-TYPE ENTRANCE RAMP WITH AUXILIARY LANE
5/12	C-07.04	SH 2	PCCP JOINT LOCATIONS, PARALLEL-TYPE EXIT RAMP WITH AUXILIARY LANE
5/12	C-07.04	SH 3	PCCP JOINT LOCATIONS, TAPER-TYPE ENTRANCE RAMP
5/12	C-07.04	SH 4	PCCP JOINT LOCATIONS, TAPER-TYPE EXIT RAMP
5/12	C-07.04	SH 5	PCCP JOINT LOCATIONS, CROSSROAD AND RAMP TERMINI
5/12	C-07.06		TRENCH BACKFILL AND PAVEMENT REPLACEMENT
5/12	C-08.20		PAVED GORE AREA
12/17	C-10.00		GUARDRAIL MEASUREMENT LIMITS
12/17	C-10.01		GUARDRAIL INSTALLATION
12/17	C-10.03		W-BEAM GUARDRAIL, MGS BLOCKED-OUT TIMBER POST
12/17	C-10.04		W-BEAM GUARDRAIL, MGS BLOCKED-OUT STEEL POST
12/17	C-10.05	SH 1	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER
12/17	C-10.05	SH 2	W-BEAM GUARDRAIL (MODIFIED) WITH FREEWAY CURB AND GUTTER
12/17	C-10.06		W-BEAM GUARDRAIL LONG-SPAN
12/17	C-10.07	SH 1	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST
12/17	C-10.07	SH 2	W-BEAM GUARDRAIL, BOX CULVERT GUARDRAIL POST
12/17	C-10.08	SH 1	W-BEAM GUARDRAIL, END ANCHOR
12/17	C-10.08	SH 2	W-BEAM GUARDRAIL, END ANCHOR
12/17	C-10.09		GUARDRAIL POST ROCK INSTALLATION
12/17	C-10.20	SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
12/17	C-10.20	SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
12/17	C-10.21	SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
12/17	C-10.21	SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
12/17	C-10.30	SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST
12/17	C-10.30	SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, TIMBER POST
12/17	C-10.31	SH 1	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST
12/17	C-10.31	SH 2	GUARDRAIL TRANSITION TO CONCRETE BARRIER, STEEL POST
12/17	C-10.38	SH 1	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH STAGGERED POST
12/17	C-10.38	SH 2	GUARDRAIL TAPER G4 TO MGS W-BEAM WITH OFFSET RAIL
12/17	C-10.40		CONCRETE MEDIAN BARRIER, 32" TYPE 'F', CAST-IN-PLACE
12/17	C-10.41		CONCRETE MEDIAN BARRIER, 42" TYPE 'F', CAST-IN-PLACE
12/17	C-10.44	SH 1	CONCRETE MEDIAN BARRIER, 42" TYPE 'F'WITH VARIABLE HEIGHT SIDES, H=0"TO 26"
12/17	C-10.44	SH 2	CONCRETE MEDIAN BARRIER, 42" TYPE 'F'WITH VARIABLE HEIGHT SIDES, H=0"TO 26"
12/17	C-10.45	SH 1	CONCRETE MEDIAN BARRIER, 42" TYPE 'F'WITH VARIABLE HEIGHT SIDES, H=26"TO 60"
12/17	C-10.45	SH 2	CONCRETE MEDIAN BARRIER, 42" TYPE 'F'WITH VARIABLE HEIGHT SIDES, H=26"TO 60"
12/17	C-10.50	SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F', CAST-IN-PLACE
12/17	C-10.50	SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F', PRECAST
12/17	C-10.51		CONCRETE HALF BARRIER, 32" TYPE 'F' WITH SIDEWALK
12/17	C-10.52		CONCRETE HALF BARRIER, 32" TYPE 'F' WITH GUTTER
12/17	C-10.53		CONCRETE HALF BARRIER, 42" TYPE 'F' WITH GUTTER

ISSUE OR REVISION DATE	STANDARD NO.		SUBJECT
			CONSTRUCTION
12/17	C-10.54	SH 1	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, CAST-IN-PLACE
12/17	C-10.54	SH 2	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, PRECAST
12/17	C-10.54	SH 3	CONCRETE HALF BARRIER, 32" TYPE 'F' AT PIERS, LAYOUT
12/17	C-10.55	SH 1	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, CAST-IN-PLACE
12/17	C-10.55	SH 2	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, PRECAST
12/17	C-10.55	SH 3	CONCRETE HALF BARRIER, 42" TYPE 'F' AT PIERS, LAYOUT
12/17	C-10.70	SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.70	SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.70	SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CAISSONS
12/17	C-10.71	SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
12/17	C-10.71	SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 32" TYPE 'F' WITH CURB & GUTTER
12/17	C-10.72	SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.72	SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.72	SH 3	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH CAISSONS
12/17	C-10.73	SH 1	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
12/17	C-10.73	SH 2	CONCRETE HALF-BARRIER TRANSITION TO VERTICAL, 42" TO 32" TYPE 'F' WITH GUTTER
12/17	C-10.74		CONCRETE HALF-BARRIER TRANSITION, 42" TO 32" TYPE 'F'
12/17	C-10.75	SH 1	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 1
12/17	C-10.75	SH 2	CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' TANGENT DEPARTURE TYPE 2
12/17	C-10.76		CONCRETE HALF-BARRIER TRANSITION, TYPE 'F' AT RADIUS, 32" TO 0"
12/17	C-10.77		CONCRETE BARRIER TRANSITION TO GUARDRAIL END TERMINAL LAYOUT WITH CURB
12/17	C-10.78		CONCRETE HALF-BARRIER TRANSITION, 32" TYPE 'F' LOW SPEED APPROACH
12/17	C-10.79		CONCRETE HALF-BARRIER TRANSITION, 42" TYPE 'F' TANGENT DEPARTURE
5/12	C-11.10	SH 1	ROADWAY CATTLE GUARD
5/12	C-11.10	SH 2	ROADWAY CATTLE GUARD
5/12	C-11.10	SH 3	ROADWAY CATTLE GUARD
5/12	C-11.10	SH 4	ROADWAY CATTLE GUARD
5/12	C-11.20		CATTLE GUARD, DRAINAGE
5/12	C-12.10	SH 1	FENCE, WOVEN WIRE
5/12	C-12.10	SH 2	FENCE, BARBED WIRE
5/12	C-12.10	SH 3	FENCE, TYPE 1 AND 2 GATES, FLOOD GATE
5/12	C-12.10	SH 4	FENCE, FLOOD GATE INSTALLATION
5/12	C-12.10	SH 5	FENCE, MISCELLANEOUS DETAILS
5/12	C-12.20	SH 1	FENCE, CHAIN LINK, TYPE 1
5/12	C-12.20	SH 2	FENCE, CHAIN LINK, TYPE 2
5/12	C-12.20	SH 3	FENCE, CHAIN LINK, GATES
5/12	C-12.30	SH 1	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-12.30	SH 2	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-12.30	SH 3	FENCE, CHAIN LINK CABLE BARRIER
5/12	C-13.10	SH 1	PIPE CULVERT INSTALLATION
5/12	C-13.10	SH 2	PIPE CULVERT INSTALLATION
5/12	C-13.15		TYPICAL PIPE INSTALLATION
5/12	C-13.20		PIPE, REINFORCED CONCRETE END SECTION
5/12	C-13.25		PIPE, CORRUGATED METAL END SECTION
5/12	C-13.30		PIPE AND PIPE ARCH, CORRUGATED METAL, CONCRETE INVERT PAVING
5/12	C-13.55		PIPE, CATTLE-VEHICLE PASS, MITERED END TREATMENT
5/12	C-13.60		SLOTTED DRAIN DETAILS
5/12	C-13.65		SLOTTED DRAIN INSTALLATION DETAILS
5/12	C-13.70		STORM DRAIN CONNECTION DETAILS
5/12	C-13.75		STORM DRAIN OUTLET BARRIER GATE
5/12	C-13.76		STORM DRAIN OUTLET AND STORM DRAIN PLUG
5/12	C-13.80		PIPE COLLAR DETAILS
5/12	C-15.10		CATCH BASIN, TYPE 1
5/12	C-15.20	SH 1	CATCH BASIN, TYPE 3
5/12	C-15.20	SH 2	CATCH BASIN, TYPE 3
5/12	C-15.20	SH 3	CATCH BASIN, ACCESS FRAME AND COVER DETAILS
5/12	C-15.30		CATCH BASIN, TYPE 4
5/12	C-15.40	SH 1	CATCH BASIN, TYPE 5
5/12	C-15.40	SH 2	CATCH BASIN, TYPE 5
5/12	C-15.50		CATCH BASIN, FRAME AND GRATE
5/12	C-15.70	SH 1	CATCH BASIN, MISCELLANEOUS DETAILS
5/12	C-15.70	SH 2	CATCH BASIN, MISCELLANEOUS DETAILS
5/12	C-15.75		CATCH BASIN, DROP INLET
5/12	C-15.80		CATCH BASIN, FLUSH
5/12	C-15.81		CATCH BASIN, SIDE SLOPE
5/12	C-15.90		CATCH BASIN, MEDIAN DIKE, PRECAST
5/12	C-15.91	SH 1	FREEWAY CATCH BASIN DETAILS
5/12	C-15.91	SH 2	FREEWAY CATCH BASIN DETAILS
5/12	C-15.92	SH 1	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER
5/12	C-15.92	SH 2	CATCH BASIN WITH TYPE 'F' CONCRETE HALF BARRIER
5/12	C-16.40		IRRIGATION SLEEVES
5/12	C-17.10		RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 1, 2 & 3
5/12	C-17.15		RAIL BANK PROTECTION AT ABUTMENTS, TYPES 4, 5 & 6
5/12	C-17.20		RAIL BANK PROTECTION FOR DRAINAGEWAYS, TYPES 7, 8 & 9
5/12	C-18.10	SH 1	MANHOLE, RISER DETAILS
5/12	C-18.10	SH 2	MANHOLE, BASE DETAILS, NORMAL INSTALLATION
5/12	C-18.10	SH 3	MANHOLE, FRAME AND COVER DETAILS
5/12	C-19.10	SH 1	FORD, CONCRETE WALLS
5/12	C-19.10	SH 2	FORD, TYPES 1 AND 2
5/12	C-21.10		SURVEY MONUMENT FRAME AND COVER
5/12	C-21.20		SURVEY MARKER

REV.: 12/17

ADOT STANDARD DRAWINGS REVISION DATES AND STANDARD NO.'S REVIEW		
	NAME	DATE
CONSTRUCTION STANDARDS	MATT TSARK	12-17
PROJECT NO. 0000 MA SUR T0063 01C	1A OF 117	
RECORD DRAWING DATA / FEDERAL AID NO. SUR-0(230)T / REC. DWG DATE	____ OF ____	

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS
(SHEET 1 OF 2)
EFFECTIVE MAY 2015

REVISION	STANDARD	SUBJECT: SIGNING & MARKING DETAILS
6/14	M-1	CURB MARKINGS FOR RAISED MEDIAN AND ISLANDS
6/14	M-2 SHT 1	INTERSECTION STRIPING
5/15	M-2 SHT 2	INTERSECTION STRIPING (TWO-LANE RURAL)
6/14	M-2 SHT 3	CENTERLINE & REVERSE CURVE DETAILS
6/14	M-3	STRIPING AND DELINEATION FOR FREEWAY TERMINALS
6/14	M-4	PASSING LANE STRIPING DETAILS
6/14	M-5	RAILROAD PAVEMENT MARKINGS
6/14	M-6	WORD MARKINGS
6/14	M-7	PAVEMENT LETTERS
6/14	M-8	PAVEMENT LETTERS
6/14	M-9	PAVEMENT NUMBERS
6/14	M-10 SHT 1	PAVEMENT MARKING SYMBOLS
6/14	M-10 SHT 2	PAVEMENT MARKING SYMBOLS
6/14	M-11	TURN LANE PAVEMENT MARKINGS
6/14	M-12	WRONG-WAY ARROWS
6/14	M-13	PREFERENTIAL LANE PAVEMENT MARKINGS
6/14	M-14	STRIPING AND DELINEATION FOR TRUCK ESCAPE RAMPS
6/14	M-15 SHT 1	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - TAPERED ACCELERATION LANE
6/14	M-15 SHT 2	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE
6/14	M-15 SHT 3	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE WITH HOV BYPASS
6/14	M-15 SHT 4	PAVEMENT MARKING FOR FREEWAY PARALLEL - ACCELERATION LANE
6/14	M-16 SHT 1	PAVEMENT MARKING FOR FREEWAY EXIT RAMPS - TAPERED DECELERATION LANE
6/14	M-16 SHT 2	PAVEMENT MARKING FOR FREEWAY EXIT RAMP - PARALLEL DECELERATION LANE
5/15	M-17	FREEWAY LANE DROP PAVEMENT MARKINGS
6/14	M-18	RECESSED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 1	RAISED PAVEMENT MARKER PLAN LEGEND
6/14	M-19 SHT 2	NON-REFLECTIVE RAISED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 3	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
6/14	M-19 SHT 4	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
5/15	M-19 SHT 5	PAVEMENT MARKING DETAILS FOR UNDIVIDED HIGHWAYS
6/14	M-19 SHT 6	RETROREFLECTIVE RAISED PAVEMENT MARKERS (RPM) FOR UNDIVIDED HIGHWAYS
6/14	M-19 SHT 7	FREEWAY AND DIVIDED HIGHWAY EDGE LINE AND LANE STRIPING
5/15	M-19 SHT 8	LANE DROP MARKING AND RAMP OR INTERSECTION GUIDE STRIPING
6/14	M-19 SHT 9	PAVEMENT MARKING CROSS-SECTION DETAILS FOR HIGHWAYS AND FREEWAYS

REVISION	STANDARD	SUBJECT: SIGNING & MARKING DETAILS
6/14	M-20 SHT 1	CHIP SEAL MARKER USAGE FOR TEMPORARY MARKERS
6/14	M-20 SHT 2	CHIP SEAL MARKER USAGE FOR TEMPORARY MARKERS
6/14	M-21	TRANSVERSE RUMBLE STRIP DETAILS
6/14	M-22 SHT 1	LONGITUDINAL RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-22 SHT 2	LONGITUDINAL RUMBLE STRIP EXCEPTION DETAILS
6/14	M-22 SHT 3	CENTERLINE RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-23	OBJECT MARKER DETAILS
6/14	M-24	OBJECT MARKER PLACEMENT DETAILS
6/14	M-26 SHT 1	DELINEATOR PLACEMENT AND SPACING
6/14	M-26 SHT 2	DELINEATOR PLACEMENT AND SPACING
6/14	M-26 SHT 3	FLEXIBLE DELINEATOR ASSEMBLIES
6/14	M-26 SHT 4	SQUARE STEEL POST DELINEATOR
6/14	M-26 SHT 5	DELINEATOR FOUNDATION DETAILS
6/14	M-27	DELINEATION DETAILS FOR MEDIAN CROSSOVERS
6/14	M-29	OFF-MAINLINE REFERENCE MARKER LOCATION DETAIL
6/14	M-30	OFF-MAINLINE REFERENCE MARKER DETAILS
6/14	M-32	BRIDGE AND BARRIER MARKER DETAILS
6/14	M-33	BRIDGE & BARRIER MARKER PLACEMENT AND INSTALLATION DETAILS
6/14	M-34	GUARDRAIL END TERMINAL DELINEATION DETAILS
6/14	M-35	OBJECT MARKER FOR SAND BARREL CRASH CUSHION

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
	NAME	DATE	
SIGNING & MARKING STANDARDS	MATT TSARK	12-17	
PROJECT NO. 0000 MA SUR T0063 01C		1B-1 OF 117	
RECORD DRAWING DATA	FEDERAL AID NO. SUR-0(230)T	REC. DWG DATE	OF

8/11 L. LOPEZ REVISED M-26 SHT 3, REVISED M-26 SHT 1 & SHT 2, REVISED M-36, M-37, S-4, S-6, S-8 SHT 2.

10/10 L. LOPEZ REVISED M-25, REVISED M-4, M-12, M-15 SHT 3, M-20, M-21, S-2 ADDED SHT 2, S-3 SHT 1 AND SHT 2, S-4, S-5, S-6.

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS
(SHEET 2 OF 2)
EFFECTIVE MAY 2015

REVISION	STANDARD	SUBJECT: SIGNING & MARKING DETAILS
6/14	S-1 SHT 1	GENERAL SIGNING NOTES
6/14	S-2 SHT 1	S & W BREAKAWAY POST SELECTION CHART
6/14	S-2 SHT 2	S & W BREAKAWAY POST INSTALLATION DETAILS
6/14	S-3 SHT 1	FLAT SHEET SIGNS SQUARE TUBE POST GENERAL NOTES
6/14	S-3 SHT 2	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 12, 18 AND 24 INCH WIDTHS
6/14	S-3 SHT 3	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 30, 36, 42 AND 54 INCH WIDTHS
6/14	S-3 SHT 4	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 36, 42 AND 48 INCH WIDTHS
6/14	S-3 SHT 5	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 54, 60 AND 72 INCH WIDTHS
6/14	S-3 SHT 6	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 84 – 144 INCH WIDTHS
6/14	S-3 SHT 7	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 48, 60 AND 72 INCH WIDTHS
6/14	S-3 SHT 8	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY – 84 – 144 INCH WIDTHS
6/14	S-3 SHT 9	WARNING SIGN ASSEMBLY – SINGLE POST
6/14	S-3 SHT 10	WARNING SIGN ASSEMBLY – TWO POST
6/14	S-3 SHT 11	WARNING SIGN ASSEMBLY – THREE POST
6/14	S-3 SHT 12	MULTIPLE ROUTE MARKER ASSEMBLIES
6/14	S-3 SHT 13	SPECIAL SIGN ASSEMBLIES
6/14	S-3 SHT 14	STRINGER DETAILS FOR SQUARE TUBE POSTS
6/14	S-3 SHT 15	SQUARE TUBE SIGN POST FOUNDATION
6/14	S-3 SHT 16	SQUARE TUBE POST SLIP BASE DETAILS
6/14	S-4	W SHAPE BREAKAWAY POST FUSE PLATE AND HINGE DETAILS
6/14	S-5	W SHAPE BREAKAWAY POST DETAILS
6/14	S-6	S4x7.7 BREAKAWAY POST DETAILS
6/14	S-7 SHT 1	ALUMINUM EXTRUSION SIGN PANEL DETAILS
6/14	S-7 SHT 2	ALUMINUM EXTRUSION AUXILIARY SIGN INSTALLATION DETAILS
5/15	S-7 SHT 3	ALUMINUM EXTRUSION EXIT PANEL INSTALLATION DETAIL
6/14	S-8 SHT 1	FLAT SHEET ALUMINUM PANEL ON BREAKAWAY POSTS INSTALLATION DETAIL
6/14	S-8 SHT 2	ALUMINUM EXTRUSION SIGN TO PERFORATED POSTS INSTALLATION DETAIL
6/14	S-9 SHT 1	SIGN INSTALLATION ON POLE
6/14	S-9 SHT 2	SIGN INSTALLATION ON SIGNAL POLE
6/14	S-9 SHT 3	SIGN INSTALLATION ON POLE BAND-TYPE CLAMP
6/14	S-10	MILEPOST AND REFERENCE LOCATION SIGNS
6/14	S-11 SHT 1	TAPERED TUBE SIGN STRUCTURE CANTILEVER
6/14	S-11 SHT 2	TAPERED TUBE SIGN STRUCTURE CANTILEVER POST AND MAST ARM DETAILS
6/14	S-11 SHT 3	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM
6/14	S-11 SHT 4	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM POST AND BEAM DETAILS

REVISION	STANDARD	SUBJECT: SIGNING & MARKING DETAILS
6/14	S-12 SHT 1	TYPE A, B, AND DOWN ARROWS
6/14	S-12 SHT 2	TYPE C AND D ARROWS
6/14	S-12 SHT 3	C2 ARROW DETAIL
6/14	S-13	SIGN IDENTIFICATION DETAILS
6/14	S-14 SHT 1	ROTATING OPEN/CLOSED SIGN
6/14	S-14 SHT 2	ROTATING OPEN/CLOSED SIGN DETAILS
6/14	S-14 SHT 3	ROTATING OPEN/CLOSED SIGN MOUNTING DETAILS
6/14	S-15 SHT 1	FOLDING RECTANGULAR SIGN ASSEMBLY
6/14	S-15 SHT 2	FOLDING RECTANGULAR SIGN OPERATION
6/14	S-15 SHT 3	FOLDING DIAMOND SIGN ASSEMBLY
6/14	S-16 SHT 1	TEMPORARY WOOD POSTS
6/14	S-16 SHT 2	TEMPORARY WOOD POSTS SELECTION CHART
6/14	S-17	END OF ROAD BARRICADE
6/14	C-1	SAND BARREL CRASH CUSHION
6/14	C-2	SAND BARREL CRASH CUSHION TYPICAL INSTALLATION
6/14	C-3 SHT 1	PRECAST CONCRETE BARRIER STRUCTURAL DETAILS
6/14	C-3 SHT 2	PRECAST CONCRETE BARRIER PIN AND LOOP ASSEMBLY
6/14	C-4 SHT 1	MEDIAN CROSSOVER
6/14	C-4 SHT 2	TYPICAL END TREATMENTS FOR DETOURS USING TEMPORARY CONCRETE BARRIER (TCB)
6/14	C-5 SHT 1	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER
6/14	C-5 SHT 2	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW		
	NAME	DATE
SIGNING & MARKING STANDARDS	MATT TSARK	12-17
PROJECT NO. 0000 MA SUR T0063 01C	1B-2 OF 117	
RECORD DRAWING DATA / FEDERAL AID NO. SUR-0(230)T / REC. DWG. DATE	_____ OF _____	

5/15 L. LOPEZ REVISED S-7 SHT3. REVISED M-2 SHT2, M-17, M-19 SHTS S&B ON PG1. UPDATED BORDER TITLE BLOCK.

6/14 L. LOPEZ REVISED ALL DRAWINGS AND RE-ISSUED. CREATED SHEET 2.

ADOT STANDARD DRAWINGS

TRAFFIC SIGNAL AND LIGHTING STANDARDS
(SHEET 1 OF 2)
EFFECTIVE MAY 2015

REVISION DATE	STANDARD NUMBER		SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T.S. 0		ABBREVIATIONS, SYMBOLS AND DEFINITIONS
05/15	0-1		STANDARD ABBREVIATIONS
01/12	0-2	SHT 1	PLAN SYMBOLS
01/12	0-2	SHT 2	PLAN SYMBOLS
01/12	0-2	SHT 3	PLAN SYMBOLS
03/10	0-3	SHT 1	STANDARD DEFINITIONS
03/10	0-3	SHT 2	STANDARD DEFINITIONS
03/10	0-4		REFERENCE DOCUMENTS AND GENERAL REQUIREMENTS
	T.S. 1		PULL BOXES
09/11	1-1	SHT 1	LIGHT DUTY – LIGHT WEIGHT NO. 5 AND NO. 7 PULL BOX
09/11	1-1	SHT 2	LIGHT DUTY – LIGHT WEIGHT NO. 5 AND NO. 7 SLOPE WALL BODY PULL BOX DETAILS
03/15	1-2		HEAVY DUTY NO. 5 AND NO. 7 STRAIGHT BODY WALL PULL BOX DETAILS
09/11	1-3		REPLACEMENT LID SIZING FOR EXISTING NO. 5 AND NO. 7 PULL BOXES
09/11	1-4	SHT 1	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS
09/11	1-4	SHT 2	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS
09/11	1-4	SHT 3	TYPICAL PULL BOX INSTALLATION DETAILS
09/11	1-5	SHT 1	ELECTRICAL CONDUIT COVER AND TRENCH REQUIREMENTS
09/11	1-5	SHT 2	CONDUIT EXPANSION COUPLINGS
09/11	1-6		CONDUCTOR REQUIREMENTS
03/10	1-7		TRAFFIC SIGNAL IMSA CABLE COLOR CODES
09/11	1-8	SHT 1	FRONT OF BARRIER JUNCTION BOX
09/11	1-8	SHT 2	BACK OF BARRIER JUNCTION BOX
09/11	1-9		TOP OF BARRIER JUNCTION BOX DETAILS
09/11	1-10		TOP OF BARRIER JUNCTION BOX DETAILS
10/13	1-11	SHT 1	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX
10/13	1-11	SHT 2	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX
03/15	1-11	SHT 3	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX LID
03/15	1-12	SHT 1	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX
03/15	1-12	SHT 2	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX
	T.S. 2		FOUNDATIONS
03/10	2-1		FOUNDATION FOR TYPE II LOAD CENTER CABINET
03/10	2-2		FOUNDATION FOR TYPE IV LOAD CENTER CABINET
03/10	2-3		FOUNDATION FOR TYPE III CONTROL CABINET
03/10	2-4		FOUNDATION FOR TYPE IV AND V CONTROL CABINETS
03/10	2-5		FOUNDATION FOR TYPE 340 CONTROL CABINET
03/10	2-6		METER PEDESTAL CABINET FOUNDATION AND BASE
03/15	2-7		TRAFFIC SIGNAL UPS CABINET FOUNDATION DETAIL
	T.S. 3		CABINETS
12/12	3-0		NOTES FOR TYPE II AND IV LOAD CENTER CABINETS
03/10	3-1		TYPE II LOAD CENTER CABINET
03/10	3-2		TYPE IV LOAD CENTER CABINET
03/10	3-3		TYPE II OR IV LOAD CENTER CABINET WIRING DETAILS 240/480 3W W/DISCONNECT
03/10	3-4	SHT 1	PHOTO ELECTRIC CELL MOUNTING DETAILS
03/10	3-4	SHT 2	PHOTO ELECTRIC CELL MOUNTING DETAILS
03/10	3-5	SHT 1	TYPE I AND II METER PEDESTAL CABINET
12/12	3-5	SHT 2	METER PEDESTAL CABINET
03/10	3-6		TYPE III CONTROL CABINET
03/10	3-7		POLE MOUNTED TYPE III CONTROL CABINET
03/10	3-8	SHT 1	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET
03/10	3-8	SHT 2	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET
03/10	3-9	SHT 1	TYPE IV AND V CONTROL CABINET NOTES
03/10	3-9	SHT 2	TYPE IV CONTROL CABINET
03/10	3-9	SHT 3	TYPE V CONTROL CABINET
03/10	3-10		CABINET EXTENSION OR ELEVATOR BASE
03/10	3-11		CONTROL CABINET MOUNTED SERVICE ENCLOSURE
03/10	3-12	SHT 1	120/240 OR 240/480 VOLT, SINGLE PHASE UTILITY PULL SECTION AND SERVICE DISCONNECT DETAILS
03/10	3-12	SHT 2	120/240 OR 240/480 VOLT, SINGLE PHASE UTILITY PULL SECTION AND SERVICE DISCONNECT DETAILS
03/10	3-13	SHT 1	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET DETAILS
03/10	3-13	SHT 2	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET DETAILS
03/10	3-13	SHT 3	TRAFFIC SIGNALS AND LIGHTING MODEL 345 CABINET CAGE DETAILS

REVISION DATE	STANDARD NUMBER		SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T.S. 4		POLES AND POSTS
10/13	4-1		TYPE "A" POLE
10/13	4-2		TYPE "E" POLE
10/13	4-3		TYPE "F" POLE
10/13	4-4		TYPE "G" POLE
10/13	4-5		ALUMINUM TYPE "G" POLE
10/13	4-6		ALUMINUM TYPE "H" POLE
10/13	4-7		ALUMINUM TYPE "I" POLE
10/13	4-8		TYPE "J" POLE
10/13	4-9		TYPE "K" POLE
10/13	4-10		TYPE "Q" POLE
10/13	4-11		TYPE "R" POLE
10/13	4-12		TYPE "S" POLE
10/13	4-13		ALUMINUM TYPE "S" POLE
10/13	4-14	SHT 1	TYPE "T" POLE
10/13	4-14	SHT 2	TYPE "S" AND "T" STEEL TWIN LUMINAIRE MOUNTING BRACKET AND EXTENSIONS
10/13	4-15		ALUMINUM TYPE "T" POLE
10/13	4-16		TYPE "U" POLE ELLIPTICAL BASE DETAILS
10/13	4-17	SHT 1	TYPE "U" POLE SQUARE BASE
10/13	4-17	SHT 2	TYPE "U" POLE ROUND POLE / SQUARE BASE
03/10	4-17	SHT 3	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17	SHT 4	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17	SHT 5	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-17	SHT 6	TYPE "U" POLE ROUND POLE / SQUARE BASE
10/13	4-18		TYPE "V" POLE AND 60' OR 65' MAST ARM
10/13	4-19		TYPE "W" POLE AND 60' OR 65' MAST ARM
03/10	4-20		POLE HAND HOLE DETAIL
03/10	4-21		EQUIPMENT MOUNTING HEIGHT DETAILS
03/15	4-22		PEDESTRIAN PUSH BUTTON POST "TYPE PB POLE"
10/13	4-23		POLE FOUNDATION ANCHOR BOLTS
03/10	4-26		STEEL MAST ARM DETAILS LUMINAIRE AND SIGNAL ARMS TO 20'
03/10	4-27		ALUMINUM TRUSS ARM DETAILS TYPE G, H, AND I POLES
03/10	4-28		SIGNAL MAST ARM CONNECTION DETAIL TYPE J AND Q POLES
03/10	4-29		SIGNAL MAST ARM CONNECTION DETAIL TYPE K AND R POLES
03/10	4-30		MAST ARM CONNECTION DETAIL TYPE V AND W POLES
03/10	4-31		SIGNAL MAST ARM TENON DETAIL
12/12	4-32		TYPICAL HIGHWAY LIGHTING OFFSETS IN CUT AND FILL SECTIONS
	T.S. 5		POLE BASES – SPECIAL
03/15	5-0		TYPE 2 AND 3 CAST ALUMINUM BREAK-AWAY BASES
12/12	5-1		TYPE 2 CAST ALUMINUM BREAK-AWAY BASE
12/12	5-2		TYPE 3 CAST ALUMINUM BREAK-AWAY BASE
12/12	5-3		INSTALLATION DETAILS FOR POLE FOUNDATIONS WITH TYPE 2 AND 3 BREAK-AWAY BASES
	T.S. 6		HIGHWAY TRAFFIC DATA DETECTORS
03/10	6-1		TYPE C VEHICLE DETECTOR LOOPS FOR TRAFFIC COUNTERS
03/10	6-2	SHT 1	TYPE SA AND SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	6-2	SHT 2	TYPE SA SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	6-2	SHT 3	TYPE SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
12/12	6-3		PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
12/12	6-4	SHT 1	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
12/12	6-4	SHT 2	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/15	6-4	SHT 3	DETAIL A PIEZOELECTRIC SENSOR DETAILS
12/12	6-4	SHT 4	DETAIL B DETECTOR LOOP DETAILS
12/12	6-4	SHT 5	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/10	6-5		MICROLOOPS FOR SPEED/VEHICLE CLASSIFICATION
03/10	6-6		QUARTZ PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
03/10	6-7		TRAFFIC DATA COLLECTION CABINET INSTALLATION DETAILS
03/10	6-8		TYPE MPD CABINET POLE, BASE AND FOUNDATION INSTALLATION DETAILS

REVISED TS 0-1. UPDATED BORDER TITLE BLOCK. L. LOPEZ 05/15

REVISED STDS 1-2, 1-11, 2-7, 4-22, 5-0, 6-4. L. LOPEZ 03/15

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW		
	NAME	DATE
TRAFFIC SIGNAL & LIGHTING STANDARDS	MATT TSARK	12-17
PROJECT NO. 0000 MA SUR T0063 01C	1C-1 OF 117	
RECORD DRAWING DATA / FEDERAL AID NO. SUR-0(230)T / REC. DWG. DATE	OF	

ADOT STANDARD DRAWINGS

TRAFFIC SIGNAL AND LIGHTING STANDARDS
(SHEET 2 OF 2)
EFFECTIVE MAY 2015

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T.S. 7	TRAFFIC SIGNAL DETECTORS
03/10	7–1 SHT 1	LOOP DETECTOR LOCATION SAWCUT PATTERNS AND INSTALLATION DETAILS
03/10	7–1 SHT 2	SAW CUT AND CORING DETAILS
03/15	7–1 SHT 3	SAW CUT AND CORING DETAILS
03/10	7–1 SHT 4	TYPICAL DETECTOR LOOP LEAD–IN ROAD TO PULL BOX DETAIL
03/10	7–1 SHT 5	LOOP DETECTOR LOCATION AND INSTALLATION DETAILS
03/10	7–2	PRE–FORMED LOOP DETECTORS FOR RAMP METERING AND COUNTING
03/10	7–3	PRE–FORMED LOOP DETECTORS IN BRIDGE DECK
03/10	7–4	PRE–FORMED LOOP DETECTORS IN PCCP
03/10	7–5	TYPICAL PRE–FORMED LOOP DETECTOR STUB–OUT DETAIL
	T.S. 8	SIGNAL ASSEMBLIES
01/12	8–0	TRAFFIC SIGNAL VEHICLE FACE ASSEMBLY REQUIREMENTS AND DETAILS
01/12	8–1	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
01/12	8–2	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
01/12	8–3	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
10/13	8–4 SHT 1	12–INCH VEHICLE TRAFFIC SIGNAL HOUSING/SECTION
01/12	8–4 SHT 2	12–INCH VEHICLE TRAFFIC SIGNAL HOUSING/SECTION NOTES
01/12	8–4 SHT 3	VEHICLE TRAFFIC SIGNAL HOUSING/SECTION DETAILS
03/10	8–4 SHT 4	VISORS FOR 8–INCH AND 12–INCH VEHICLE TRAFFIC SIGNAL FACE ASSEMBLIES
01/12	8–5	FLASHING BEACON SIGNAL FACE ASSEMBLY
01/12	8–6	LED LAMP FOR PROGRAMMED VISIBILITY SIGNAL
01/12	8–7 SHT 1	PEDESTRIAN SIGNAL ASSEMBLY REQUIREMENTS AND DETAILS
01/12	8–7 SHT 2	PEDESTRIAN SIGNAL ASSEMBLY HOUSING
01/12	8–7 SHT 3	PEDESTRIAN SIGNAL ASSEMBLY VISOR
	T.S. 9	MOUNTING ASSEMBLIES – SIGNAL
03/10	9–0 SHT 1	MOUNTING ASSEMBLY GENERAL REQUIREMENTS
03/10	9–0 SHT 2	MOUNTING ASSEMBLY GENERAL REQUIREMENTS
03/10	9–1	TYPE I AND II MOUNTING ASSEMBLIES
03/10	9–2	TYPE III AND IV MOUNTING ASSEMBLIES
10/13	9–3	TYPE V MOUNTING ASSEMBLY
03/10	9–4	TYPE VI MOUNTING ASSEMBLY
03/10	9–5	TYPE VII MOUNTING ASSEMBLY
03/10	9–6	TYPE VIII MOUNTING ASSEMBLY
03/10	9–7	TYPE IX MOUNTING ASSEMBLY
03/10	9–8	TYPE X MOUNTING ASSEMBLY
03/10	9–9	TYPE XI MOUNTING ASSEMBLY
	T.S. 10	MOUNTING CASTINGS – SIGNAL
03/10	10–1	MISCELLANEOUS SIGNAL MOUNTING PARTS
03/10	10–2	MAST ARM SIGNAL MOUNTING PLUMBIZER
03/10	10–3	SIGNAL MOUNTING POLE PLATE DETAILS
03/10	10–4	TERMINAL COMPARTMENT, SIDE MOUNTED AND POLE TOP MOUNTED
	T.S. 11	PEDESTRIAN DETAILS
03/15	11–1	TYPE I PEDESTRIAN PUSH BUTTON HOUSING ASSEMBLY
03/15	11–2	CAN STYLE PEDESTRIAN PUSH BUTTON
	T.S. 12	FLASHERS
03/10	12–1 SHT 1	ADVANCE WARNING FLASHER POLE DETAIL
03/10	12–1 SHT 2	ADVANCE WARNING FLASHER POLE SIGN MOUNTING DETAILS
03/10	12–1 SHT 3	ADVANCE WARNING FLASHER POLE DETAIL
	T.S. 13	ILLUMINATION – SIGNS
03/10	13–1	SIGN LIGHTING DETAIL FOR TUBULAR SIGN STRUCTURES
03/10	13–2	FUSE PANEL DETAILS FOR SIGN LIGHTING
03/15	13–3	PLACEMENT OF LIGHTING FIXTURES FOR OVERHEAD SIGNS
	T.S. 14	ILLUMINATION – SPECIAL
03/10	14–1 SHT 1	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14–1 SHT 2	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14–1 SHT 3	HIGH PRESSURE SODIUM (HPS) LAMPS
03/10	14–2	PEDESTRIAN BRIDGE LIGHTING DETAILS

REVISION DATE	STANDARD NUMBER	SUBJECT: TRAFFIC SIGNALS AND LIGHTING DETAILS
	T.S. 15	SPAN WIRE SIGNALS AND LIGHTING
01/12	15–0 SHT 1	GENERAL NOTES
01/12	15–0 SHT 2	GENERAL NOTES
01/12	15–0 SHT 3	GENERAL NOTES
01/12	15–1 SHT 1	STEEL POLE TYPICAL DETAILS
01/12	15–1 SHT 2	STEEL POLE FOUNDATION DETAILS
01/12	15–1 SHT 3	STEEL POLE ATTACHMENT DETAILS
01/12	15–1 SHT 4	WOOD POLE TYPICAL DETAILS
01/12	15–1 SHT 5	WOOD POLE TYPICAL DETAILS
01/12	15–1 SHT 6	TYPICAL DETAILS
01/12	15–2	HANGER AND BALANCE ADJUSTER TYPICAL DETAILS
01/12	15–3 SHT 1	SIGNAL ASSEMBLY DETAILS
01/12	15–3 SHT 2	CONDUCTOR ENTRANCE HEADS TYPE A, B AND C
01/12	15–3 SHT 3	ALUMINUM PIPE EXTENSION AND TYPICAL DETAILS
01/12	15–4 SHT 1	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15–4 SHT 2	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15–4 SHT 3	ADJUSTABLE SIGN HANGER TYPICAL DETAILS
01/12	15–5	ADJUSTABLE HANGER TOP AND EXTENSION DETAILS
01/12	15–6	SIGNAL TETHER CLAMP TYPICAL DETAILS
01/12	15–7	POLE BAND TYPICAL DETAILS
01/12	15–8	WEATHERHEAD TYPICAL DETAILS

REVISED TS 0–1 ON SHT1. UPDATED BORDER TITLE BLOCK. 5/15 L. LOPEZ

REVISED STDS 7–1, 11–1, 11–2, 13–3. ADDED NEW STD 1–12. 3/15 L. LOPEZ

ADOT STANDARD DRAWINGS REVISION DATES AND STANDARD NO.'s REVIEW		
	NAME	DATE
TRAFFIC SIGNAL AND LIGHTING STANDARDS	MATT TSARK	12–17
PROJECT NO. 0000 MA SUR T0063 01C	1C–2 OF 117	
RECORD DRAWING DATA / FEDERAL AID NO. SUR–0(230)T / REC. DWG. DATE	_____ OF _____	

ADOT STANDARD DRAWINGS

ITS STANDARDS
EFFECTIVE JUNE 2016

REVISION DATE	STANDARD NUMBER	SUBJECT: ITS DETAILS
July–14	FM–0.01	SYMBOLS AND ABBREVIATIONS
Aug–13	FM–1.01	TRENCH DETAILS, FMS TRUNKLINE
Aug–13	FM–1.02	TRENCH UNDER PAVEMENT, FMS TRUNKLINE
Aug–13	FM–1.03	BURIED CONDUIT AROUND OBSTRUCTION, DIRECTIONAL DRILLING
Aug–13	FM–1.04	CONDUIT REQUIREMENTS FOR DMS, RMC TO PVC CONDUIT CONNECTION, THROUGH WALL CONDUIT
Aug–13	FM–1.05	CONDUIT MOUNTING DETAILS
Aug–13	FM–1.06	CONDUIT EXPANSION, COUPLING AND JUNCTION BOX, INSTALLATION PLAN
Aug–13	FM–1.07	FMS TRUNK LINE IN BOX GIRDER BRIDGE
Aug–13	FM–1.08	FMS TRUNKLINE IN I–BEAM OR I–GIRDER BRIDGE
Aug–13	FM–2.01	PULL BOX ADJACENT TO FMS PULL BOX
Aug–13	FM–2.02	PULL BOX NO. 9 CABINET CONDUIT INTERFACE PLANS
Aug–13	FM–2.03	PULL BOX NO. 9 DETAILS
Aug–13	FM–2.04	NO. 9 PULL BOX CONDUIT ROUTING AND CABLE RACKING DETAILS
Aug–13	FM–2.05	No. 9 PULL BOX TORSION ASSIST COVER
Aug–13	FM–2.06	PULL BOX NO. 7 TYPICAL INSTALLATION
Aug–13	FM–2.07	BURIED PULL BOX NO. 7 TYPICAL INSTALLATION
Aug–13	FM–2.08	SPLIT NO. 9 PULL BOX
Aug–13	FM–3.01	RAMP METER CABINET DETAILS (SHEET 1 of 2)
Aug–13	FM–3.02	RAMP METER CABINET DETAILS (SHEET 2 of 2)
Aug–13	FM–3.03	RAMP METER CABINET SPECIAL DETAILS
Aug–13	FM–3.04	RAMP METER CABINET ACCESSORIES
Aug–13	FM–3.05	RAMP METER FIELD PANEL DETAILS
Aug–13	FM–3.06	RAMP METER FIELD PANEL CONNECTIONS
Aug–13	FM–3.07	RAMP METER SIGNAL POWER INTERRUPT RELAY AND PIN ASSIGNMENTS
Aug–13	FM–3.08	POWER DISTRIBUTION ASSEMBLY CONNECTOR AND INSTALLATION DETAILS
Aug–13	FM–3.09	POWER DISTRIBUTION ASSEMBLY #4 (PDA4) SCHEMATIC DIAGRAM
Aug–13	FM–3.10	RAMP METER CI HARNESS CONNECTIONS
Aug–13	FM–3.11	CCTV CABINET DETAILS (SHEET 1 of 2)
Aug–13	FM–3.12	CCTV CABINET DETAILS (SHEET 2 of 2)
Aug–13	FM–3.13	CABINET NUMBER DECAL DETAIL
Aug–13	FM–3.14	TRANSFORMER CABINET, EXTERNAL POWER DISCONNECT
Aug–13	FM–3.15	TRANSFORMER, 3kVA & 7.5kVA, DRY TYPE DETAILS AND WIRING DIAGRAMS
Aug–13	FM–3.16	TRANSFORMER, 10kVA & 25kVA, DRY TYPE DETAILS AND WIRING DIAGRAMS
Aug–13	FM–3.17	CLEAR ZONES, UNPROTECTED EQUIPMENT
Aug–13	FM–3.18	TYPE II LOAD CENTER
Aug–13	FM–3.19	TYPE IV LOAD CENTER FOUNDATION AND CABINET DETAIL
Aug–13	FM–3.20	TYPE IV MODIFIED LOAD CENTER
July–14	FM–3.21	RAMP METER CABINET FOUNDATION W/O TRANSFORMER
July–14	FM–3.22	RAMP METER CABINET WITH TRANSFORMER, FOUNDATION
July–14	FM–3.23	SKYLINE 336S DMS CABINET FOUNDATION DETAILS
July–14	FM–3.23A	SKYLINE 332 DMS CABINET FOUNDATION DETAILS
July–14	FM–3.24	SKYLINE 336S DMS & TRANSFORMER CABINET FOUNDATION DETAILS
July–14	FM–3.24A	SKYLINE 332 DMS & TRANSFORMER CABINET FOUNDATION DETAILS
July–14	FM–3.25	NOT USED
Aug–13	FM–3.26	TRANSFORMER CABINET FOUNDATION
July–14	FM–3.27	DAKTRONICS DMS CABINET FOUNDATION DETAILS
July–14	FM–3.28	DAKTRONICS DMS & TRANSFORMER CABINET FOUNDATION DETAILS
Aug–13	FM–3.29	DMS CABINET ADPATER AND ELEVATOR BASE DETAILS
Aug–13	FM–4.01	CCTV CABINET BLOCK DIAGRAM
Aug–13	FM–4.02	FREEWAY MANAGEMENT SYSTEM CABINET BLOCK ETHERNET DIAGRAM
Aug–13	FM–4.03	DMS CABINET ETHERNET BLOCK DIAGRAM
Aug–13	FM–5.01	DETECTION DEFINITION
Jun–16	FM–5.02	TYPICAL DETECTOR LOOP INSTALLATION DETAILS
Aug–13	FM–5.03	TYPICAL PREFORMED DETECTOR LOOP INSTALLATION DETAILS
Aug–13	FM–5.04	DETECTOR LOOP IN AC PAVEMENT INSTALLATION LAYOUT
Aug–13	FM–5.05	DETECTOR LOOP IN PCCP PAVEMENT INSTALLATION LAYOUT
Aug–13	FM–5.06	DETECTOR LOOP TEST FORM 1
Aug–13	FM–5.07	DETECTOR LOOP TEST FORM 2 PART A
Aug–13	FM–5.08	DETECTOR LOOP TEST FORM 2 PART B
Aug–13	FM–6.01	RAMP METER DETAILS
Aug–13	FM–6.02	SINGLE–LANE RAMP METER
Aug–13	FM–6.03	SINGLE–LANE RAMP METER WITH FRONTAGE ROAD
Aug–13	FM–6.04	TWO–LANE RAMP METER
Aug–13	FM–6.05	TWO–LANE RAMP METER WITH FRONTAGE ROAD
Aug–13	FM–6.06	RAMP METER WITH OBSTRUCTION INSTALLATION DETAILS
Aug–13	FM–7.01	CCTV POLE CCTV CABINET MOUNTING DETAILS AND FIELD ORIENTATION
Aug–13	FM–7.02	CCTV POLE AND MOUNTING DETAILS
Aug–13	FM–7.03	CCTV POLE MOUNTING PLATE DETAILS

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW		
	NAME	DATE
ITS STANDARD DRAWINGS	MATT TSARK	12–17
PROJECT NO. 0000 MA SUR T0063 01C	1E OF 117	
RECORD DRAWING DATA	FEDERAL AID NO. SUR–0(230)T	AS BUILT DATE _____ OF _____

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	2	117	
		0000 MA SUR			

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

SHEET INDEX

SHEET NO.	DWG NO.	SHEET TITLE
GENERAL		
1		FACE SHEET
	1A	ADOT STANDARD DRAWINGS
	1B-1	ADOT STANDARD DRAWINGS
	1B-2	ADOT STANDARD DRAWINGS
	1C-1	ADOT STANDARD DRAWINGS
	1C-2	ADOT STANDARD DRAWINGS
	1E	ADOT STANDARD DRAWINGS
2	G-1.01	DESIGN DATA & LEGEND
3	G-1.02	GENERAL NOTES
PAVING		
4	C-1.01	KEY MAP
5	C-1.02	KEY MAP
6	C-1.03	TYPICAL SECTIONS
7	C-1.04	PAVING DETAILS
8	C-1.05	PAVING DETAILS
9	C-1.06	PAVING DETAILS
10 - 21	C-2.01 - C-2.12	PAVING PLAN & PROFILE - BULLARD AVENUE - PEORIA AVENUE TO CACTUS ROAD
22 - 33	C-2.13 - C-2.24	PAVING PLAN & PROFILE - BULLARD AVENUE - CACTUS ROAD TO WADDELL ROAD
34 - 45	C-2.25 - C-2.36	PAVING PLAN & PROFILE - BULLARD AVENUE - WADDELL ROAD TO GREENWAY ROAD
TRAFFIC CONTROL		
46	CS01	CONSTRUCTION SEQUENCE - PHASE 1
47	CS02	CONSTRUCTION SEQUENCE - PHASE 2
48	GN01	TRAFFIC CONTROL GENERAL NOTES
49	TC01	TRAFFIC CONTROL QUANTITIES
50	TC02	ADVANCE WARNING SIGN PLAN
51	TC03	MAINTENANCE OF TRAFFIC
SIGNING & MARKING		
52	GN01	ROADWAY SIGNING & PAVEMENT MARKING GENERAL NOTES
53 - 65	SS01 - SS13	ROADWAY SIGNING & PAVEMENT MARKING SIGN SUMMARY
66 - 71	SM01 - SM06	ROADWAY SIGNING & PAVEMENT MARKING PLANS - BULLARD AVENUE - PEORIA AVENUE TO CACTUS ROAD
72 - 77	SM07 - SM12	ROADWAY SIGNING & PAVEMENT MARKING PLANS - BULLARD AVENUE - CACTUS ROAD TO WADDELL ROAD
78 - 83	SM13 - SM18	ROADWAY SIGNING & PAVEMENT MARKING PLANS - BULLARD AVENUE - WADDELL ROAD TO GREENWAY ROAD
TRAFFIC SIGNAL		
84	GN01	TRAFFIC SIGNAL NOTES
85	SG01	ACOMA DR TRAFFIC SIGNAL PLAN
86	SG02	ACOMA DR TRAFFIC SIGNAL SCHEDULE
87	SG03	SWEETWATER AVE TRAFFIC SIGNAL PLAN
88	SG04	SWEETWATER AVE TRAFFIC SIGNAL SCHEDULE
89	SG05	FLASHING YELLOW SIGN MOUNTING DETAILS
LANDSCAPING & IRRIGATION		
90	L-0.01	LANDSCAPE & IRRIGATION NOTES AND SUMMARY
91 - 92	L-0.02 -L-0.03	LANDSCAPE & IRRIGATION DETAILS
93 - 98	L-1.01 - L-1.06	LANDSCAPE PLANS - BULLARD AVENUE - WADDELL ROAD TO GREENWAY ROAD
99 - 104	L-1.07 - L-1.12	IRRIGATION PLANS - BULLARD AVENUE - WADDELL ROAD TO GREENWAY ROAD
EROSION CONTROL		
105	EC-1.01	AZPDES SWPPP INDEX SHEET
106	EC-1.02	AZPDES SWPPP SUMMARY SHEET
107 - 115	EC-2.01 - EC-2.09	EROSION/SEDIMENT CONTROL PLANS
116 - 117	EC-3.01 - EC-3.02	STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

HORIZONTAL DATUM:

METADATA

ALL UNITS ARE INTERNATIONAL FEET (1 Ift. = 0.3048 meters)

HORIZONTAL DATUM/COORDINATE SYSTEM:
ARIZONA STATE PLANE COORDINATE SYSTEM NAD '83 CENTRAL ZONE
SCALED BY A COMBINED FACTOR OF 1.00013 ABOUT THE CARTESIAN ORIGIN (NORTHING = 0, EASTING = 0)
TO REDUCE/CONVERT PROJECT COORDINATES TO UNMODIFIED STATE PLANE COORDINATES, DIVIDE BY 1.00013

PRIMARY HORIZONTAL CONTROL
GDACS CONTROL STATION 30830-1
3" COS BC (BULLARD & GREENWAY)
PROJECT NORTHING = 954,924.691
PROJECT EASTING = 560,064.709
GDACS CONTROL STATION 30770-1M
CAPPED IP (BULLARD & PEORIA)
PROJECT NORTHING = 939,111.633
PROJECT EASTING = 560,065.917

VERTICAL DATUM:

NAVD '88, BASED ON CITY OF SURPRISE FIELD SURVEY TIE TO THE MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION BRASS CAP IN HAND HOLE MARKED "C7" AT BULLARD AVE AND PEORIA AVE HAVING A PUBLISHED ELEVATION OF 1139.55 FEET (347.33 METERS).

DESIGN DATA

2017 AADT = 6,347 vpd
2037 AADT = NOT AVAILABLE
DESIGN SPEED = 40 MPH

LENGTH OF PROJECT

STA: 0+00 TO STA: 158+13
GROSS & NET LENGTH = 3.00 MILES

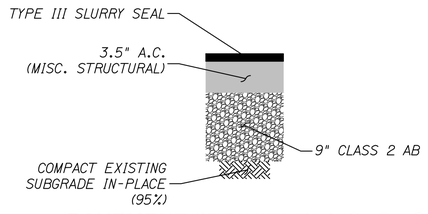
FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

COMMUNITY NUMBER	PANEL #	SUFFIX	DATE OF FIRM (INDEX DATE)	FLOOD ZONE	BASE FLOOD ELEV. (IN AO ZONE, USE DEPTH)
040053	1660	L	OCT 16, 2013	X	---

EARTHWORK QUANTITIES

EMBANKMENT (INCLUDES GROUND COMPACTION)	1863 CY
ROADWAY EXCAVATION (INCLUDES SHRINKAGE)	8055 CY
WASTE	6192 CY (WASTE)

EARTHWORK FACTORS:	
SHRINKAGE	0.10%
GROUND COMPACTION	0.15 FT



PAVEMENT STRUCTURAL SECTION 1

LEGEND & ABBREVIATIONS:

CENTERLINE		ARROWS / STRAIGHT	
SECTION LINE		ARROW / TURNS	
RIGHT-OF-WAY LINE (NEW)		ARROWS / TURNS	
EX. RIGHT-OF-WAY LINE		BIKE LANE	
PROPERTY LINE		HANDICAP	
EX. FENCE		TRAFFIC PAINT	
EX. PAVEMENT		TRAFFIC PAINT	
DRAINAGE EASEMENT		BUILDING	
TCE (TEMPORARY CONSTRUCTION EASEMENT)		AERIAL PANELS	
EX. AC PAVEMENT		PALM TREE	
EX. SIDEWALK		SINGLE TREE	
PROPOSED AC PAVEMENT	BOC OR B/C	PEDESTRIAN SIGNAL	
PENDING FLOOD PLAIN		CULVERT	
		FIRE HYDRANT	
		METER / UTILITY	
		MAN HOLE	
		STREET LIGHT	
		LIGHT POLE	
	BCF	BACK OF CURB	
	BCHH	BRASS CAP FLUSH	
	BOT	BRASS CAP IN HANDHOLE	
	C OR CONC	BOTTOM OF BASIN ELEVATION	
		CONCRETE	
	C.O.S.	CENTERLINE	
DRAINAGE ARROW	EOP	CITY OF SURPRISE	
SLOPE ARROW	EX	EDGE OF PAVEMENT	
PARKING STRIPES	FL	EXISTING	
INDEX CONTOUR	FO	FLOW LINE	
INTER CONTOUR	G	FIBER OPTIC	
CURB / GUTTER	G.B.	GUTTER	
RAILROAD	G.C.	GRADE BREAK	
TREE LINE	GR	GRADE CHANGE	
GUARD RAIL	HW	GRATE	
BILLBOARD	M	HIGH WATER ELEVATION	
CACTUS	NG	MONUMENT LINE	
FLAG	P	NATURAL GROUND	
GRID TICK	PUE	PAVEMENT	
POST- MISC	R/W	PUBLIC UTILITY EASEMENT	
SPOT ELEVATION	RW	RIGHT OF WAY	
TRANSMISSION	SW	RECLAIMED WATER	
BRIDGE SIGNS	UE	SIDEWALK	
CATCH BASIN	WM	UNDERGROUND ELECTRIC	
UTILITY POLE	WV	WATER METER	
SIGNS	DE	WATER VALVE	
SIGNS	SE	TRAFFIC SIGNAL	
TV DISH	TCE	VALVE	
STREET SIGN		DRAINAGE EASEMENT	
EX. FIBER OPTIC		SLOPE EASEMENT	
EX. CABLE TV		TEMPORARY CONSTRUCTION EASEMENT	
EX BUSH/SHRUB			
EX SISSOO (> 6")			
EX SISSOO (< 6")			
EX PALO VERDE (> 6")			
EX PALO VERDE (< 6")			
EX ACACIA (>6")			
EX ACACIA (<6")			

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

DESIGN DATA & LEGEND

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

SHEET G-1.01

TRACS NO. T0063 01C | SUR-0(230)T | OF

Registered Professional Engineer CERTIFICATE NO. 37417 MATTHEW K. TSARK Arizona U.S.A. EXPIRES 3/31/20

Plotted by Pat Kastler at 2/27/2018 7:19 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Plotstyle: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\140114-06_GN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	3	117	
		0000 MA SUR			

GENERAL ENGINEERING NOTES

1. ALL CONSTRUCTION MUST CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENT (MAG) SPECIFICATIONS AND DETAILS AND LATEST REVISIONS UNLESS OTHERWISE STATED ON PLANS.
2. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND THEY WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS. CALL BLUE STAKE FOR FIELD LOCATION AT AZ 811.
4. THE CITY OF SURPRISE ENGINEERING SERVICES OF PUBLIC WORKS SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK AT 623-222-6150.
5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED AND RESUBMITTED FOR REVIEW AND APPROVAL.
6. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.
7. ANY INSPECTION BY THE CITY, COUNTY, OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.
8. THE CONTRACTOR IS TO LOCATE ALL EXISTING LANDSCAPING, LANDSCAPING IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
9. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.
10. ALL CONSTRUCTION WATER USED WITHIN THE CITY OF SURPRISE WATER SERVICE AREA REQUIRES APPROVAL BY THE CITY OF SURPRISE PUBLIC WORKS DEPARTMENT AND MAY BE SUBJECT TO VOLUME AND TIME RESTRICTIONS. PLEASE SEE THE CITY OF SURPRISE CONSTRUCTION WATER GUIDELINES FOR ADDITIONAL INFORMATION. THE GUIDELINES CAN BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT AT 623-222-7000.
11. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.
12. EMERGENCY VEHICLE ACCESS (E.V.A.) MUST BE PROVIDED BY THE CONTRACTOR THROUGHOUT THE PROJECT SITE. E.V.A. ROADS AND SIGNAGE SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. SIGNAGE SHALL BE POSTED AT THE POINT OF ENTRY TO THE SITE AND AT ALL LOCATIONS WHERE A CHANGE IN DIRECTION OCCURS.
13. THE PLANS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT'S ACCESSIBILITY GUIDELINES, AS PUBLISHED IN THE FEDERAL REGISTER ON SEPTEMBER 15, 2010.
14. THE CITY WILL APPLY FOR AND SUPPLY THE CONTRACTOR WITH NEW WATER METERS. THE CONTRACTOR WILL INSTALL NEW METERS AND CONNECT TO THE NEW IRRIGATION SYSTEM AS SHOWN ON THE PLANS.
15. APS WILL PROVIDE THE CONTRACTOR WITH THE NEW IRRIGATION CONTROLLER SES. THE CONTRACTOR WILL INSTALL SES AND CONDUIT PER APS REQUIREMENTS AT THE LOCATION SPECIFIED BY APS AND AS SHOWN ON THE PLANS.

GENERAL GRADING NOTES

1. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO VARIOUS FIELD CONDITIONS.
2. AN APPROVED GRADING AND DRAINAGE PLAN MUST BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THIS PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
3. A GRADING PERMIT IS REQUIRED. BEFORE A GRADING PERMIT IS ISSUED BY THE CITY OF SURPRISE ENGINEERING SERVICES, THE CONTRACTOR MUST FIRST OBTAIN A DUST CONTROL PERMIT FROM MARICOPA COUNTY ENVIRONMENTAL SERVICES - AIR QUALITY DIVISION.
4. HAUL PERMITS, WHEN REQUIRED, MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.
5. APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.
6. ALL CONSTRUCTION SITES WITH DISTURBED AREAS OF ONE (1) ACRE OR GREATER SHALL HAVE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ALL ASSOCIATED DOCUMENTS (SEE ENGINEERING AND PERMITTING APPLICATION PACKET).
7. CLEARING & GRUBBING IS CONSIDERED INCIDENTAL TO THE PROJECT.
8. THE REMOVAL OF TREES (TRUNK DIA.>6") WILL BE PAID FOR AS NOTED ON THE PLANS. BACKFILL AND COMPACTION WILL BE PER ADOT SPEC 201. ALL TREES NOT SPECIFICALLY CALLED FOR REMOVAL SHALL REMAIN PROTECTED IN PLACE.

GENERAL NOTES

GENERAL:

1. THE PROJECT ROADWAY SHALL BE STRIPED BY THE CONTRACTOR IN ACCORDANCE WITH THE CURRENT EDITION OF THE SIGNING AND MARKING STANDARD DRAWINGS (M&S-SERIES) AND THE PAVEMENT MARKING PLANS.
2. SURVEY MONUMENTS WILL BE FURNISHED AND PLACED BY THE CONTRACTOR PER MAG STD 120-1.
3. PAVEMENT LIFT THICKNESS IS NOMINAL.
4. THE AVERAGE PROJECT ELEVATION IS 1173.
5. NEW RIGHT OF WAY AND EASEMENTS ARE NOT REQUIRED.
6. AN APPROVED SET OF PLANS AND A COPY OF SPECIAL PROVISIONS SHALL BE ON THE SITE DURING CONSTRUCTION AND INSPECTIONS.
7. THE EXISTING CONDITIONS ON THESE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITION FOR ALL NEW CONSTRUCTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STABILITY OF ALL STRUCTURES AND EXCAVATION DURING CONSTRUCTION.
9. THE CONTRACTOR IS ADVISED THAT DAMAGE TO ANY PORTION OF THE EXISTING CURBS, GUTTERS, PAVEMENTS AND SURROUNDING AREAS THAT ARE NOT NOTED ON THE PLANS TO BE DISTURBED ARE TO BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT THE JOB SITE TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT COULD AFFECT THE INSTALLATION OF ANY WORK SET FORTH IN THESE PLANS OR ADOT SPECIFICATIONS PRIOR TO SUBMITTING A BID.
11. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.

EARTHWORK:

1. CONTRACTOR TO VERIFY LIMITS OF DISTURBANCE THROUGHOUT THE PROJECT AND BRING ANY DISCREPANCIES IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
2. THE DEPTH AND WIDTH OF THE SIDE SLOPES SHALL BE VARIED WHERE NECESSARY IN ORDER TO PROVIDE PROPER DRAINAGE.
3. BREAK POINTS ON SLOPES AND IN BOTTOMS OF DITCHES SHALL BE ROUNDED DURING CONSTRUCTION FOR A PLEASING APPEARANCE.

UTILITIES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE THERETO. ALL UTILITIES SHALL BE LOCATED AND VERIFIED PRIOR TO ANY EXCAVATION. ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL INFORMATION BEFORE ANY CONSTRUCTION WORK COMMENCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION. UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN.
3. WHERE ONLY THE HORIZONTAL LOCATION OF AN EXISTING UTILITY IS SHOWN, THE LOCATION IS APPROXIMATE. WHERE BOTH THE HORIZONTAL AND VERTICAL LOCATION OF AN EXISTING UTILITY IS SHOWN, THE LOCATION HAS BEEN VERIFIED BY FIELD SURVEY METHODS. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT BLUE STAKE LAWS AND SECTION 107.15 OF THE SPECIFICATIONS.

CONSTRUCTION:

1. THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM WATER AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE, SHALL BE PROMPTLY DEWATERED AND RESTORED AT NO COST TO THE DEPARTMENT. THIS SHALL INCLUDE REMOVAL OF ANY DEBRIS CAUSED BY FLOODING.
2. LIMITS OF CONSTRUCTION SHALL BE CONFINED TO PUBLIC RIGHT-OF-WAY, EASEMENTS, CONSTRUCTION LIMIT AREAS OR AS DIRECTED BY THE ENGINEER.
3. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS, IRRIGATION OR LANDSCAPING DUE TO CONTRACTOR'S OPERATION IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL ASSOCIATED COSTS FOR IMPROVEMENT REPAIRS SHALL BE PAID FOR BY THE CONTRACTOR, AT NO EXPENSE TO THE DEPARTMENT.
4. THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPES AS SHOWN ON THE PLANS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. CONSTRUCTION ACTIVITIES IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER, AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ANY DEBRIS RESULTING FROM CONSTRUCTION. AT NO TIME SHALL ANY OF THIS MATERIAL OBSTRUCT THE NORMAL OPERATION OF ANY ADJOINING STREET, OR ANY OF THE ACTIVE AREAS ASSOCIATED WITH THIS PROJECT.
6. THE JOB SITE AT THE COMPLETION OF THE CONSTRUCTION SHALL BE CLEANED OF ANY DEBRIS RESULTING FROM CONSTRUCTION. NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, GUTTERS AND PAVEMENT HAVE BEEN SWEPT CLEAN OF ALL DIRT AND DEBRIS.
7. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE ARIZONA DEPARTMENT OF TRANSPORTATION AND ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GENERAL NOTES

Registered Professional Engineer (Civil) — Certificate No. 37417 — MATTHEW K. TSARK — Date Signed 06/29/18 — Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

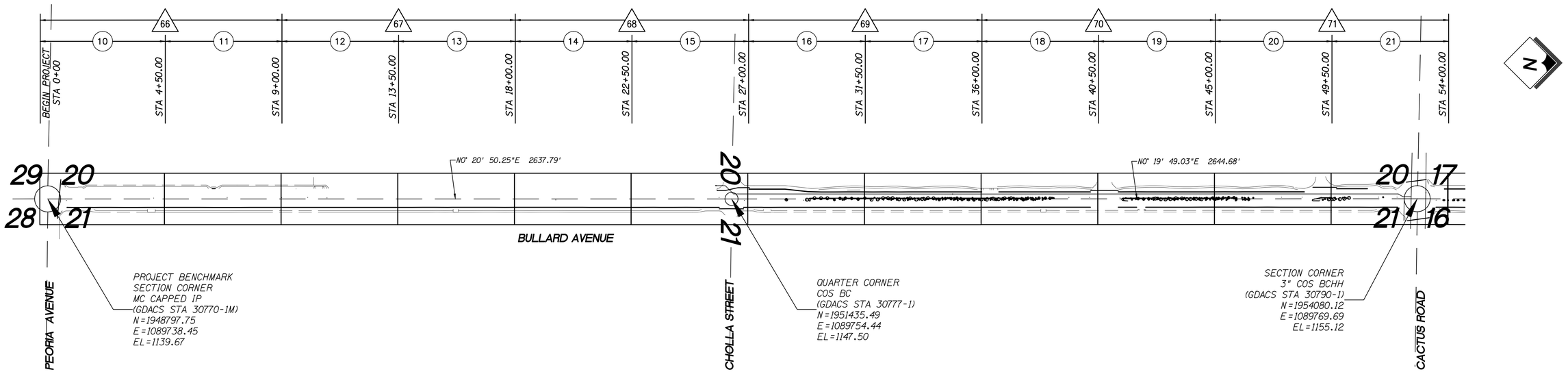
SHEET G-1.02

TRACS NO. T0063 01C		SUR-0(230)T	OF

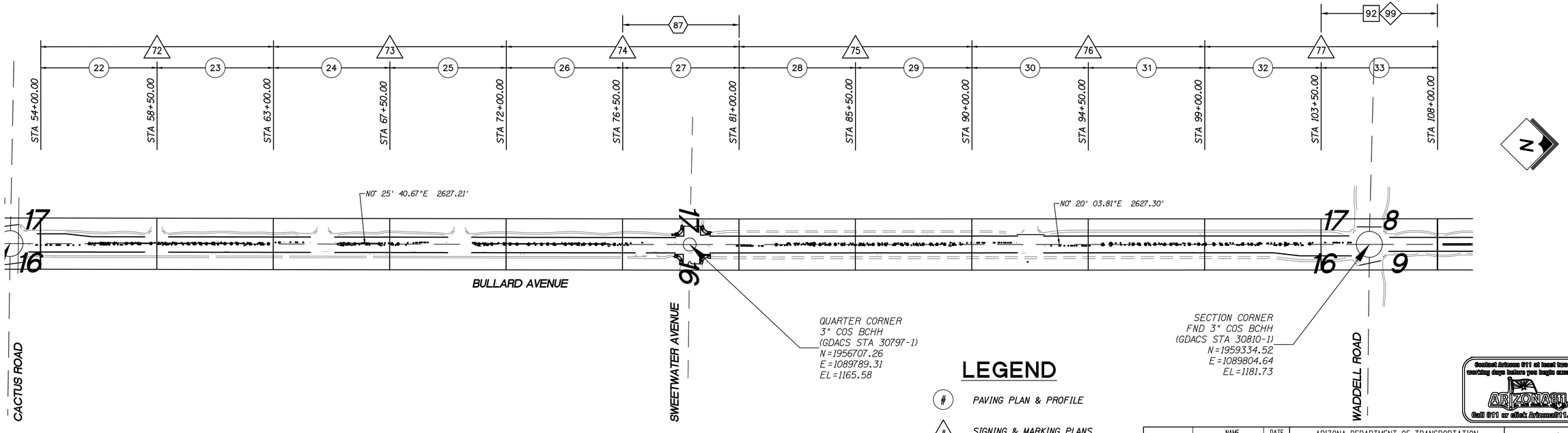
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:19 AM on printer \\Nexus\UWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Plottable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_GN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	4	117	
		0000 MA SUR			



TOWNSHIP 3 NORTH, RANGE 1 WEST, G.+S.R.M.



TOWNSHIP 3 NORTH, RANGE 1 WEST, G.+S.R.M.

LEGEND

- (#) PAVING PLAN & PROFILE
- (#) SIGNING & MARKING PLANS
- (#) TRAFFIC SIGNAL PLANS
- (#) LANDSCAPING PLANS
- (#) IRRIGATION PLANS

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

KEY MAP

37417 MATTHEW K. TSARK — EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-1.01
TRACS NO. T0063 01C	SUR-0(230)T	OF

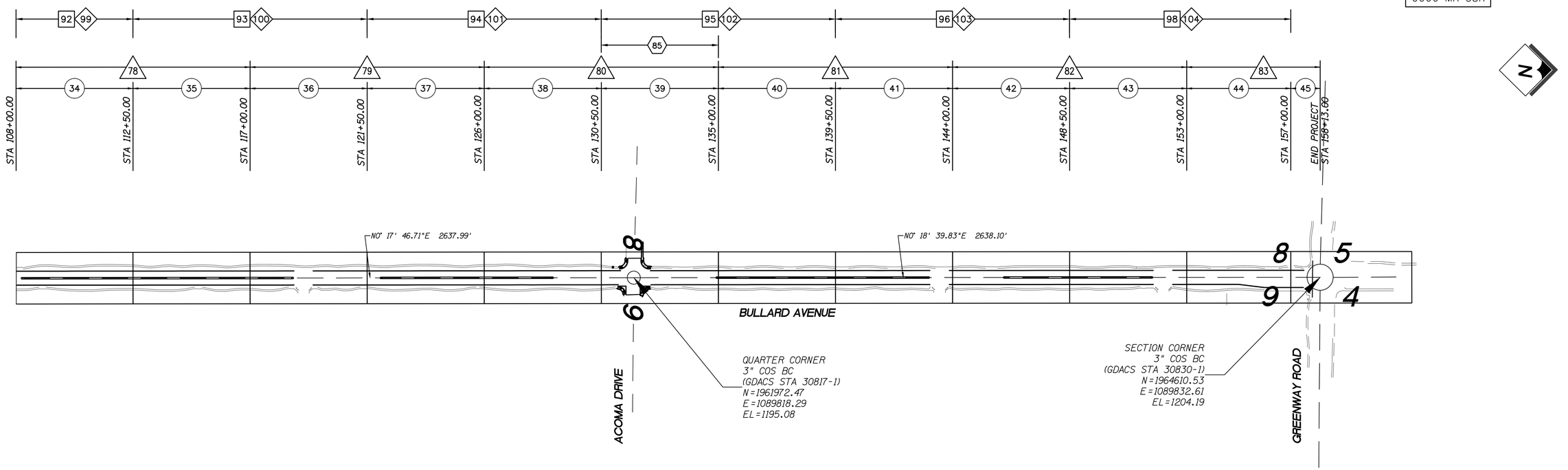
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:21 AM on printer \\nexus\CWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Template: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\140141_KM.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	5	117	
		0000 MA SUR			

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.



TOWNSHIP 3 NORTH, RANGE 1 WEST, G.+S.R.M.

LEGEND

- (#) PAVING PLAN & PROFILE
- (#) SIGNING & MARKING PLANS
- (#) TRAFFIC SIGNAL PLANS
- [#] LANDSCAPING PLANS
- (#) IRRIGATION PLANS

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

KEY MAP

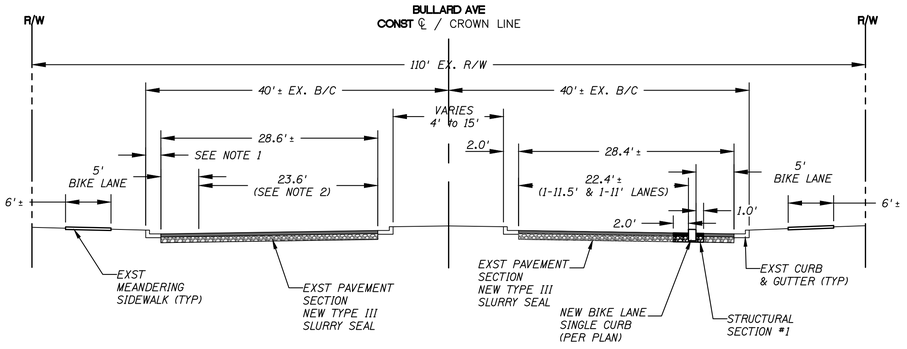
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 12/27/17 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-1.02
TRACS NO. T0063 01C	SUR-0(230)T	OF

Plotted by Pat Kastler at 2/27/2018 7:22 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\140141_KM.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	6	117	
		0000 MA SUR			

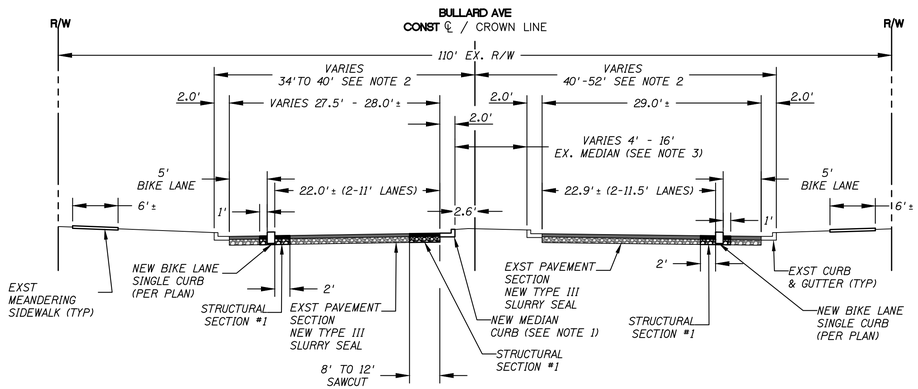
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-



NOTES:

1. STA 11+60 TO STA 26+00 THE SOUTHBOUND PAVEMENT WIDTH REDUCES TO 18' WIDE WITH NO CURB & GUTTER
2. STA 0+00 TO 10+00: DUAL 12' TRAVEL LANE.
   STA 10+00 TO 22+50: SINGLE 11' TRAVEL LANE
   STA 22+50 TO 26+50: SINGLE 18' TRAVEL LANE

BULLARD AVENUE - PEORIA AVENUE TO CHOLLA STREET
STA 0+00 TO 26+50
TYPICAL SECTION
N.T.S. (LOOKING NORTH)



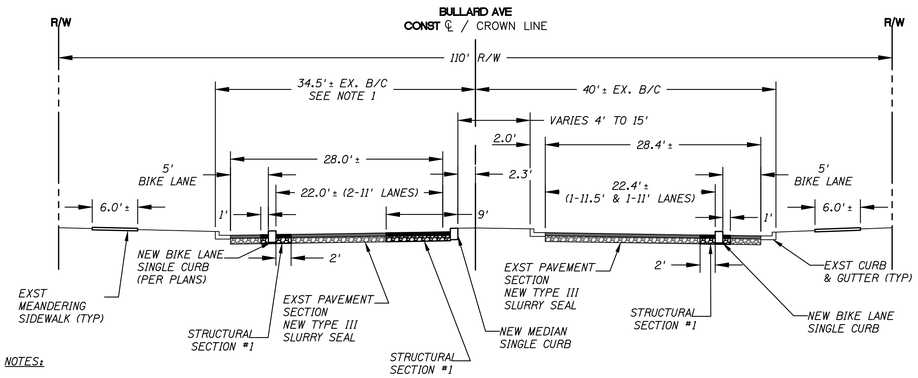
NOTES:

1. THE EXISTING SOUTHBOUND MEDIAN CURB IS TO REMAIN, PROTECTED IN PLACE, BETWEEN SWEETWATER AVENUE AND WADDELL ROAD. NEW ASPHALT PAVEMENT IS NOT REQUIRED.

2. LANES VARIES 34' TO 52'
   Sta 54+98 TO 55+98 = 34'-40'
   Sta 78+57 TO 79+77 = 45'-34.5'
   Sta 102+66 TO 105+40 = 40'-52'

3. EXISTING MEDIAN TO BE REPLACED WITH NEW ASPHALT PAVEMENT (STRUCTURAL SECTION #1) BETWEEN:
   Sta 53+50 TO 64+47 (WIDTH VARIES 4'-16')
   Sta 65+36 TO 69+75 (WIDTH VARIES 4'-16')
   Sta 70+66 TO 78+55 (WIDTH VARIES 4'-16')
   Sta 79+79 TO 83+92 (WIDTH VARIES 3'-15')
   Sta 89+16 TO 91+80 (WIDTH VARIES 3'-15')
   Sta 92+76 TO 95+39 (WIDTH VARIES 4'-16')
   Sta 102+09 to 104+71 (WIDTH VARIES 4'-16')

BULLARD AVENUE - CACTUS ROAD TO WADDELL ROAD
STA 52+80 TO 105+40
TYPICAL SECTION
N.T.S. (LOOKING NORTH)

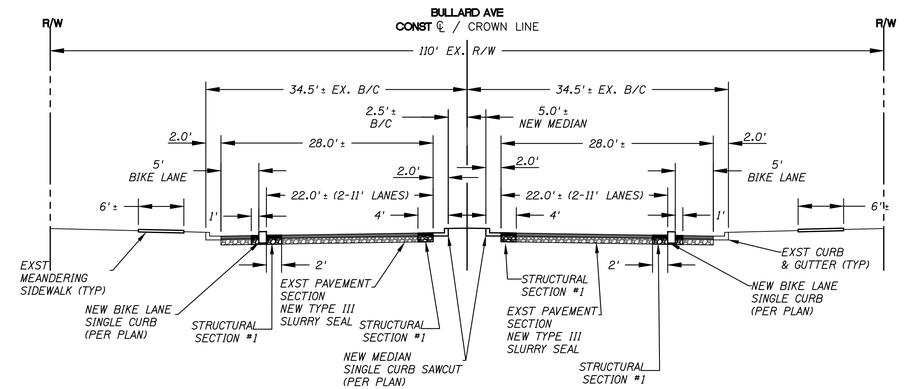


NOTES:

1. SOUTHBOUND TRAVEL LANE WIDTH VARIES 34' TO 46':
   Sta 26+50 TO 28+44 = 45'
   Sta 28+44 TO 29+33 = 45'-34'
   Sta 29+33 TO 48+48 = 34'
   Sta 48+48 TO 49+70 = 34'-46'
   Sta 49+70 TO 50+91 = 46'
   Sta 50+91 TO 51+92 = 46'-34'
   Sta 51+92 TO 52+09 = 34'
   Sta 52+09 TO 52+80 = 34'-46'

2. EXISTING MEDIAN TO BE REPLACED WITH NEW ASPHALT PAVEMENT (STRUCTURAL SECTION #1) BETWEEN:
   Sta 26+84 TO 40+24 (WIDTH VARIES 4'-16')
   Sta 41+27 TO 48+43 (WIDTH VARIES 3'-15')
   Sta 49+01 TO 52+12 (WIDTH VARIES 4'-16')

BULLARD AVENUE - CHOLLA STREET TO CACTUS ROAD
STA 26+50 TO 52+80
TYPICAL SECTION
N.T.S. (LOOKING NORTH)



BULLARD AVENUE - WADDELL ROAD TO GREENWAY ROAD
STA 105+40 TO 158+13
TYPICAL SECTION
N.T.S. (LOOKING NORTH)

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

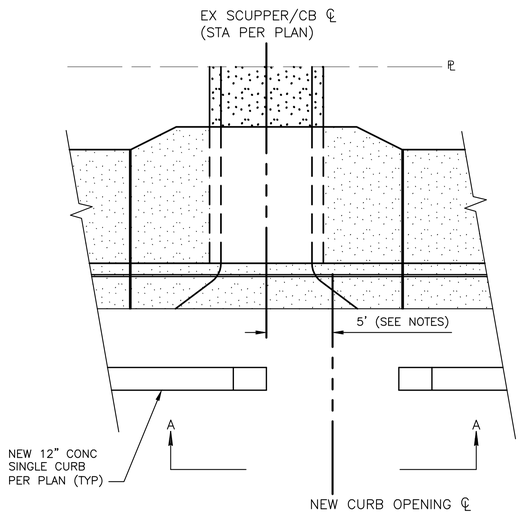
TYPICAL SECTIONS

Registered Professional Engineer (Civil)
CERTIFICATE NO. 37417
MATTHEW K. TSARK
Date Signed 03/27/18
Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-1.03
TRACS NO. T0063 01C	SUR-0(230)T	OF

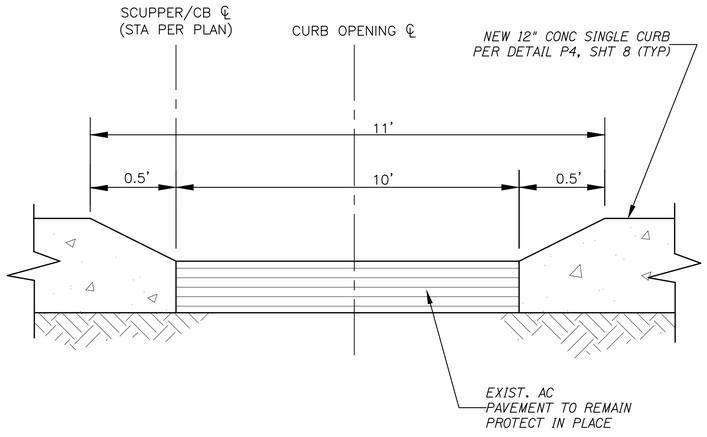
Plotted by Matt Tsark at 3/27/2018 10:31 AM on printer \\nexus\DWG to PDF.pc3 — Plotsize: ANSI full bleed D (34.00 x 22.00 Inches) — Plotstyle: PREMIER.ctb
P:\20140114-06\CADD\Production\Sheets\14014-06_XSECT.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	7	117	
		0000 MA SUR			



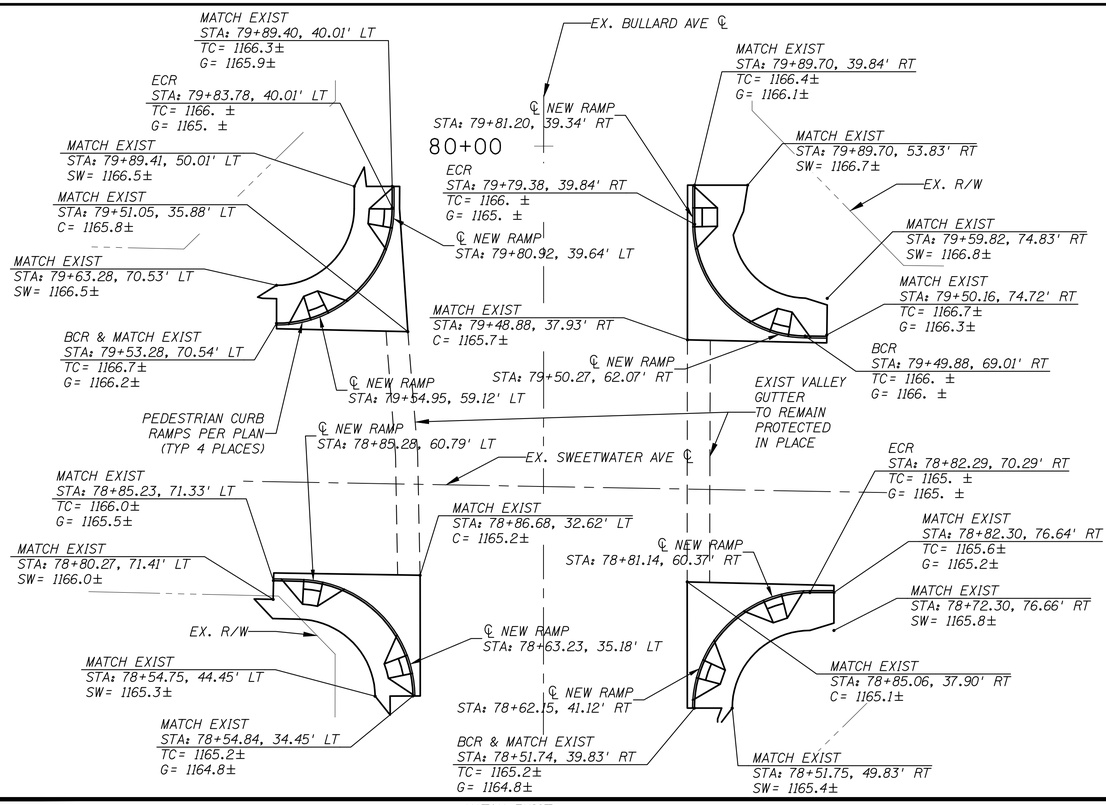
PLAN

NOTES:
1. THIS OFFSET WILL BE APPLIED TO ALL CURB OPENINGS THAT WILL BE INSTALLED AT OR NEAR EXISTING CATCH BASINS/SCUPPERS, AS SHOWN ON THE PLANS.
2. DUE TO THE SUMP CONDITION AT SCUPPER 29 (STA 133+36.50) & SCUPPER 30 (STA 133+35.00), THE OFFSET WILL NOT BE APPLIED AND THE CURB OPENINGS SHALL BE INSTALLED PER THE LOCATION SHOWN ON THE PLANS.



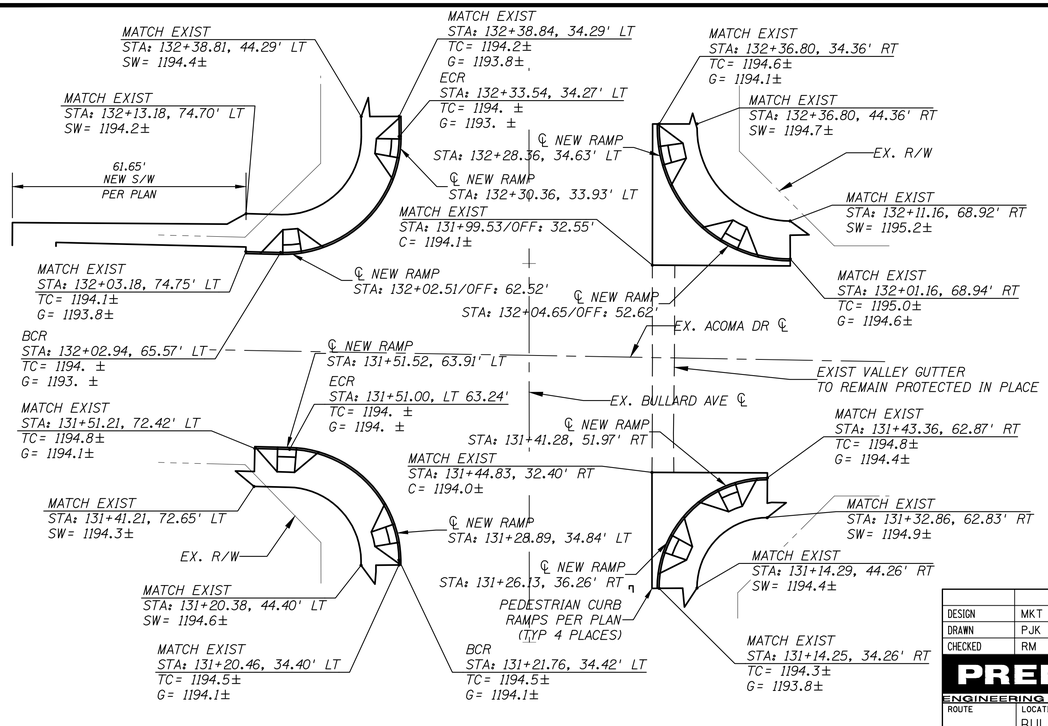
SECTION A-A

DETAIL P1
CURB OPENING
BID ITEM 9240144



NOTE: ALL RADIUS CALLOUTS TO BACK OF CURB

DETAIL P2
SWEETWATER AVE
PEDESTRIAN RAMPS



NOTE: ALL RADIUS CALLOUTS TO BACK OF CURB

DETAIL P3
ACOMA DRIVE
PEDESTRIAN RAMPS

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING DETAILS

37417 MATTHEW K. TSARK — Registered Professional Engineer — EXPIRES 3/31/20

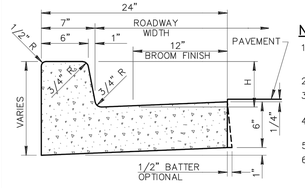
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-1.04
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:24 AM on printer \\Nexus\UWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penstable: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\140114-06_DTL.dwg

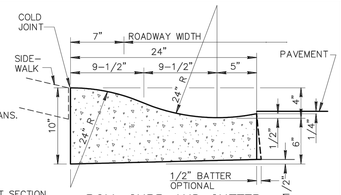
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	8	117	
		0000 MA SUR			



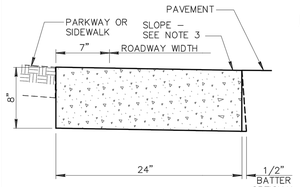
VERTICAL CURB AND GUTTER
(TYPE A)

NOTES: (TYPE A)

1. ALL EXPOSED SURFACES TO BE TROWEL FINISHED EXCEPT AS SHOWN. SEE SECT. 340.
2. H=6" OR AS SPECIFIED ON PLANS.
3. CONTRACTION JOINT SPACING 10' MAXIMUM.
4. EXPANSION JOINTS AS PER SECT. 340.
5. CLASS 'B' CONCRETE PER 725.
6. WHEN THE ADJACENT PAVEMENT SECTION SLOPES AWAY FROM THE GUTTER, THE SLOPE OF THE GUTTER PAN SHALL MATCH PAVEMENT CROSS SLOPE.



ROLL CURB AND GUTTER
(TYPE C)

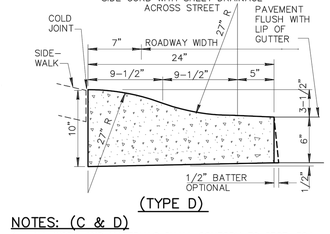


RIBBON CURB
(TYPE B)

NOTES: (TYPE B)

1. CONSTRUCT CURB AND INSTALL 1/2" MASTIC EXPANSION JOINTS, A.S.T.M. D-1751. SECT. 340.
2. BROOM FINISH ALL SURFACES.
3. RIBBON CURB MAY SLOPE TOWARDS PAVEMENT OR PARKWAY AS INDICATED ON PLANS.
4. CONTRACTION JOINT SPACING 10' MAXIMUM.
5. CONCRETE SHALL BE CLASS 'B' PER SECT. 725 AND INSTALLED PER SECT. 505.

SPECIAL SECT. USE FOR HIGH SIDE CURB WITH SHEET DRAINAGE ACROSS STREET

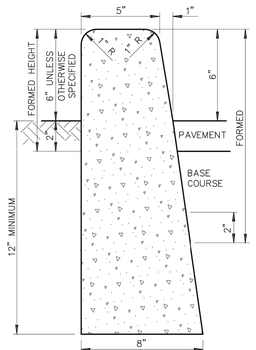


(TYPE D)

NOTES: (C & D)

1. ALL WORK AND MATERIALS SHALL CONFORM TO SECT. 304, 505 AND 725. BROOM FINISH TO EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAXIMUM.
3. EXPANSION JOINTS AS PER SECT. 340.
4. CLASS 'B' CONCRETE PER 725.

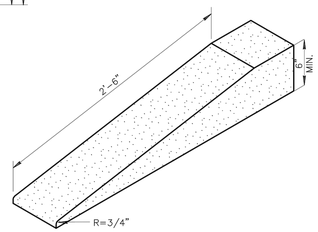
DETAIL NO.	STANDARD DETAIL		REVISED	DETAIL NO.
220–1	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	CURB AND GUTTER TYPES A, B, C AND D	01–01–2007	220–1



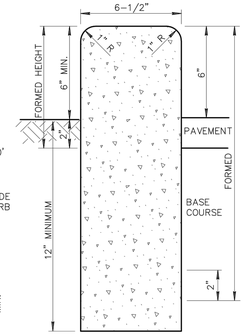
TYPE 'A'

NOTES:

1. ALL VERTICAL SURFACES TO BE FORMED.
2. VERTICAL SURFACES DOWN FROM 2" BELOW UNDISTURBED SOIL MAY BE PLACED AGAINST NEAT CUT IF APPROVED BY THE ENGINEER AND CONCRETE WILL NOT EXTEND MORE THAN 1" BEYOND THEORETICAL FACE.
3. ALL EXPOSED SURFACES TO BE STRIPPED GREEN AND TROWEL FINISHED.
4. CONCRETE CURBS CONFORM TO SECT. 340.
5. MAXIMUM SPACING OF CONTRACTION JOINTS IS 10'
6. CONCRETE TO BE CLASS 'B' PER SECT. 725.
7. WHEN PAVEMENT AND BASE COURSE EQUALS OR EXCEEDS 10" IN DEPTH, THE ENTIRE ROADWAY SIDE OF THE CURB SHALL BE FORMED. THE TOTAL CURB HEIGHT REMAINS 18" UNLESS NOTED OTHERWISE.

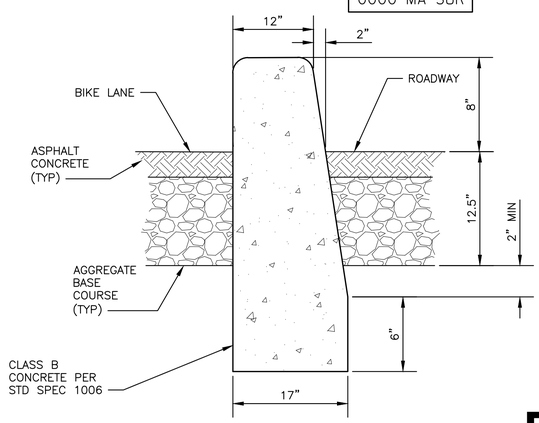


TYPICAL CURB TERMINATION



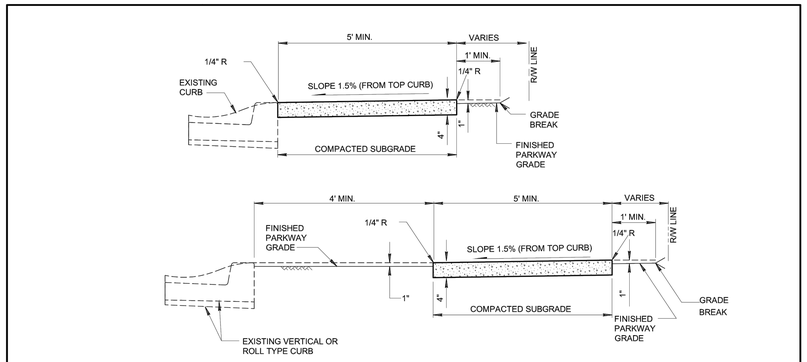
TYPE 'B'

DETAIL NO.	STANDARD DETAIL		REVISED	DETAIL NO.
222	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	SINGLE CURB – TYPES A, B AND TERMINATION	01–01–2008	222



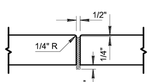
DETAIL P4

MODIFIED MAG SINGLE CURB
DETAIL 222, TYPE A

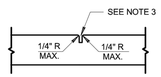


NOTES:

1. SIDEWALK CONSTRUCTION SHALL CONFORM TO SECTION 340.
2. EXPANSION JOINTS SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER, PER SECTION 729.
3. LARGE AGGREGATE, IN CONTRACTION JOINT SHALL BE SEPARATED TO A DEPTH OF 1", FINISH DEPTH SHALL BE A MINIMUM OF 3/4".
4. EXPANSION JOINTS SHALL CONFORM TO SECTION 340, BE INSTALLED PRIOR TO CONCRETE PLACEMENT, AND AT A MAXIMUM SPACING OF 50'.
5. CONCRETE SHALL BE CLASS 'B' PER SECTION 725.
6. WHEN SIDEWALK AND ADJACENT CURB ARE CONSTRUCTED MONOLITHICALLY, ALL EXPANSION AND CONTRACTION JOINTS SHALL EXTEND ACROSS THE CURB.

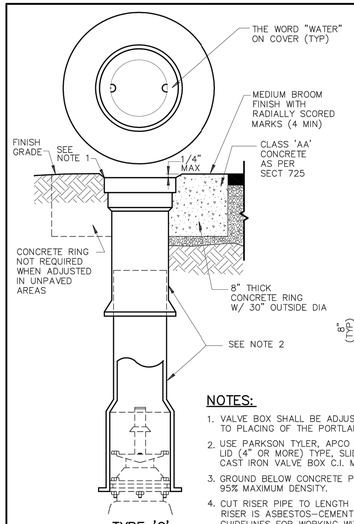


EXPANSION JOINT

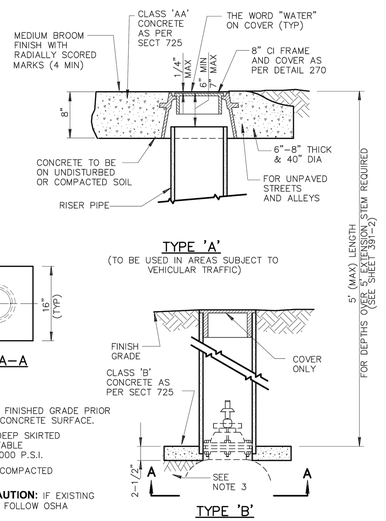


CONTRACTION JOINT

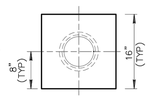
DETAIL NO.	STANDARD DETAIL		REVISED	DETAIL NO.
230	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	SIDEWALKS	01-01-2014	230



TYPE 'C'



TYPE 'A'
(TO BE USED IN AREAS SUBJECT TO VEHICULAR TRAFFIC)



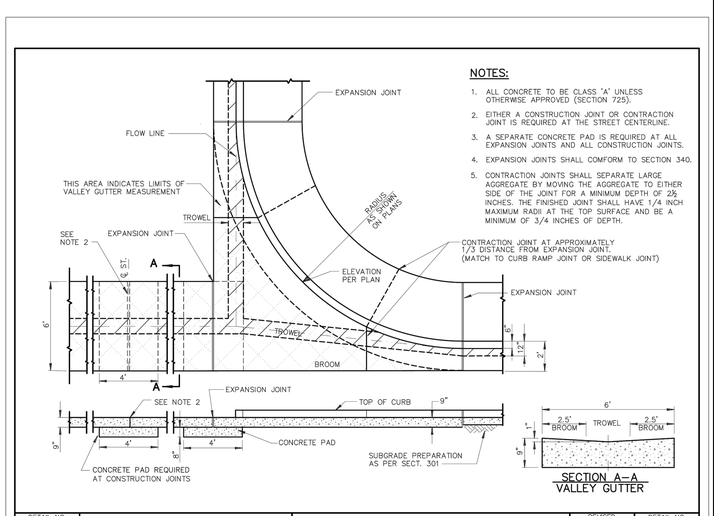
VIEW A–A

TYPE 'B'
(NOT SUBJECT TO VEHICULAR TRAFFIC)

NOTES:

1. VALVE BOX SHALL BE ADJUSTED TO THE FINISHED GRADE PRIOR TO PLACING OF THE PORTLAND CEMENT CONCRETE SURFACE.
2. USE PARKSON TYLER, APCO OR EQUAL DEEP SKIRTED LID (4" OR MORE) TYPE, SLIDING ADJUSTABLE CAST IRON VALVE BOX C.I. MIN. T.S. 30,000 P.S.I.
3. GROUND BELOW CONCRETE PAD TO BE COMPACTED 95% MAXIMUM DENSITY.
4. CUT RISER PIPE TO LENGTH IN FIELD. **CAUTION:** IF EXISTING RISER IS ASBESTOS–CEMENT PIPE (ACP) FOLLOW OSHA GUIDELINES FOR WORKING WITH ACP.

DETAIL NO.	STANDARD DETAIL		REVISED	DETAIL NO.
391–1	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	01–01–2015	391–1



SECTION A–A
VALLEY GUTTER

NOTES:

1. ALL CONCRETE TO BE CLASS 'A' UNLESS OTHERWISE APPROVED (SECTION 725).
2. EITHER A CONSTRUCTION JOINT OR CONTRACTION JOINT IS REQUIRED AT THE STREET CENTERLINE.
3. A SEPARATE CONCRETE PAD IS REQUIRED AT ALL EXPANSION JOINTS AND ALL CONSTRUCTION JOINTS.
4. EXPANSION JOINTS SHALL COMFORM TO SECTION 340.
5. CONTRACTION JOINTS SHALL SEPARATE LARGE AGGREGATE BY MOVING THE AGGREGATE TO EITHER SIDE OF THE JOINT FOR A MINIMUM DEPTH OF 2½ INCHES. THE FINISHED JOINT SHALL HAVE 1/4 INCH MAXIMUM RADII AT THE TOP SURFACE AND BE A MINIMUM OF 3/4 INCHES OF DEPTH.

DETAIL NO.	STANDARD DETAIL		REVISED	DETAIL NO.
240	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	VALLEY GUTTER	01–01–2010	240

Contact Arizona 811 at least two full working days before you begin excavation

ARIZONA811 BLUE STAKE, INC.
Call 811 or dial Arizona811.com

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING DETAILS

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T | OF

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/31/20 Arizona U.S.A.

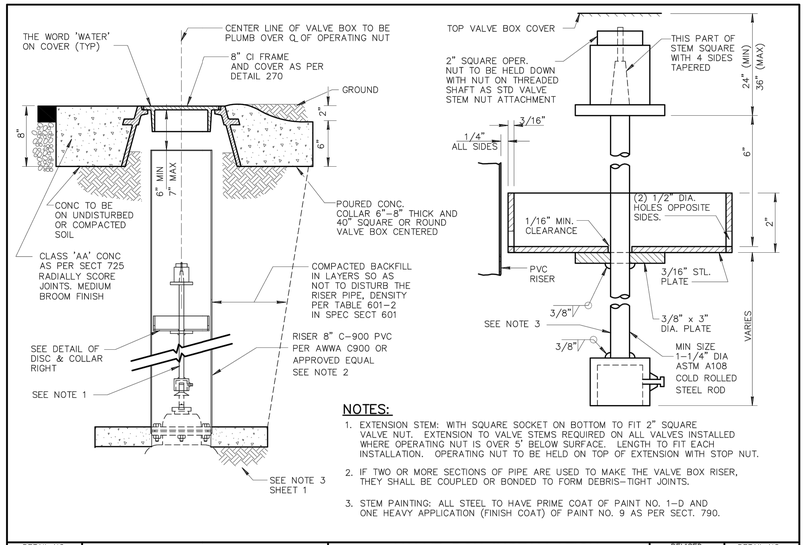
EXPIRES 3/31/20

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kasler at 2/27/2018 7:25 AM on printer \\Nexus\LWG 16 PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) – Pentable: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\T4014-06_DTL.dwg

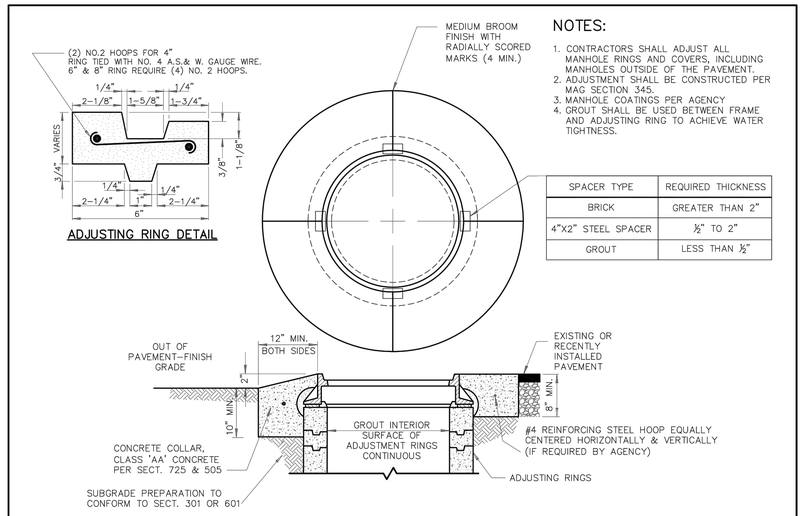
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	9	117	
		0000 MA SUR			



NOTES:

1. EXTENSION STEM: WITH SQUARE SOCKET ON BOTTOM TO FIT 2" SQUARE VALVE NUT. EXTENSION TO VALVE STEMS REQUIRED ON ALL VALVES INSTALLED WHERE OPERATING NUT IS OVER 5' BELOW SURFACE. LENGTH TO FIT EACH INSTALLATION. OPERATING NUT TO BE HELD ON TOP OF EXTENSION WITH STOP NUT.
2. IF TWO OR MORE SECTIONS OF PIPE ARE USED TO MAKE THE VALVE BOX RISER, THEY SHALL BE COUPLED OR BONDED TO FORM DEBRIS–TIGHT JOINTS.
3. STEM PAINTING: ALL STEEL TO HAVE PRIME COAT OF PAINT NO. 1–D AND ONE HEAVY APPLICATION (FINISH COAT) OF PAINT NO. 9 AS PER SECT. 790.

DETAIL NO.	STANDARD DETAIL	TITLE	REVISED	DETAIL NO.
391–2	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	VALVE BOX INSTALLATION AND GRADE ADJUSTMENT	01–01–2015	391–2

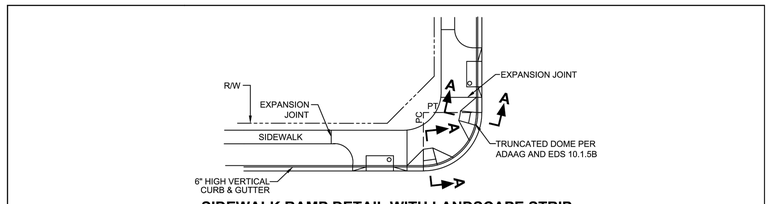


NOTES:

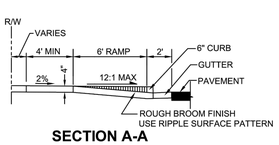
1. CONTRACTORS SHALL ADJUST ALL MANHOLE RINGS AND COVERS, INCLUDING MANHOLES OUTSIDE OF THE PAVEMENT.
2. ADJUSTMENT SHALL BE CONSTRUCTED PER MAG SECTION 345.
3. MANHOLE COATINGS PER AGENCY
4. GROUT SHALL BE USED BETWEEN FRAME AND ADJUSTING RING TO ACHIEVE WATER TIGHTNESS.

SPACER TYPE	REQUIRED THICKNESS
BRICK	GREATER THAN 2"
4"X2" STEEL SPACER	½" TO 2"
GROUT	LESS THAN ½"

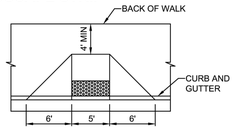
DETAIL NO.	STANDARD DETAIL	TITLE	REVISED	DETAIL NO.
422	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	MANHOLE FRAME AND COVER ADJUSTMENT	01-01-2015	422



SIDEWALK RAMP DETAIL WITH LANDSCAPE STRIP



SECTION A-A

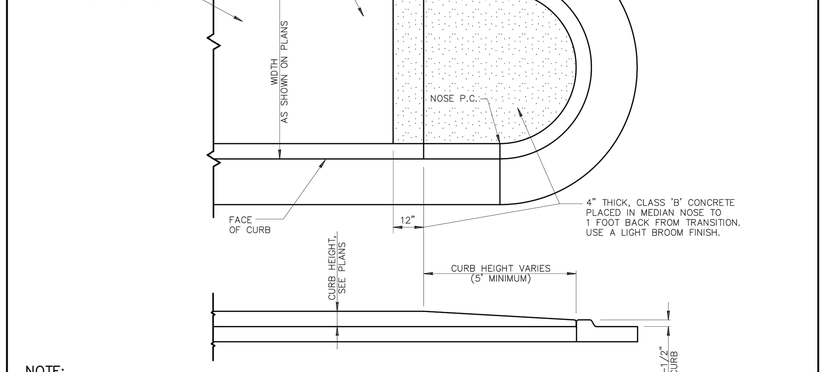


RAMP DETAIL

NOTES:

1. WIDTH OF SIDEWALK AND LANDSCAPE STRIP SHALL BE PER TABLE 3-2 AND STANDARD STREET CROSS SECTION DETAILS.
2. DUAL RAMPS SHALL ONLY BE INSTALLED AT ALL PARKWAY AND ARTERIAL INTERSECTIONS.
3. CONCRETE CURB AND GUTTER AT CURB RETURNS WITH RAMPS SHALL BE MAG CLASS A. CONCRETE SIDEWALK AND RAMPS AT CURB RETURNS SHALL BE MAG CLASS A.
4. RAMP CURBS MAY BE PLACED MONOLITHICALLY WITH A CONTRACTION JOINT.
5. EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED EXPANSION JOINT FILLER A.S.T.M. D-1751, INSTALLED AS SHOWN ON MAG DETAIL 230.
6. RAMPS MAY BE ROTATED AS NECESSARY TO PROVIDE SHORTEST TRAVEL PATH.

DATE REVISED: 8/2016		DETAIL NO:
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	**DUAL RAMP DETAILS** 3-11



NOTE:

LENGTH OF TRANSITION SHALL BE EQUAL TO RADIUS OF MEDIAN NOSE, (5' MINIMUM). FOR LOCATION SEE PLANS.

DETAIL NO.	STANDARD DETAIL	TITLE	REVISED	DETAIL NO.
223	MARICOPA ASSOCIATION of GOVERNMENTS ENGLISH	MEDIAN NOSE TRANSITION	01–01–1998	223

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

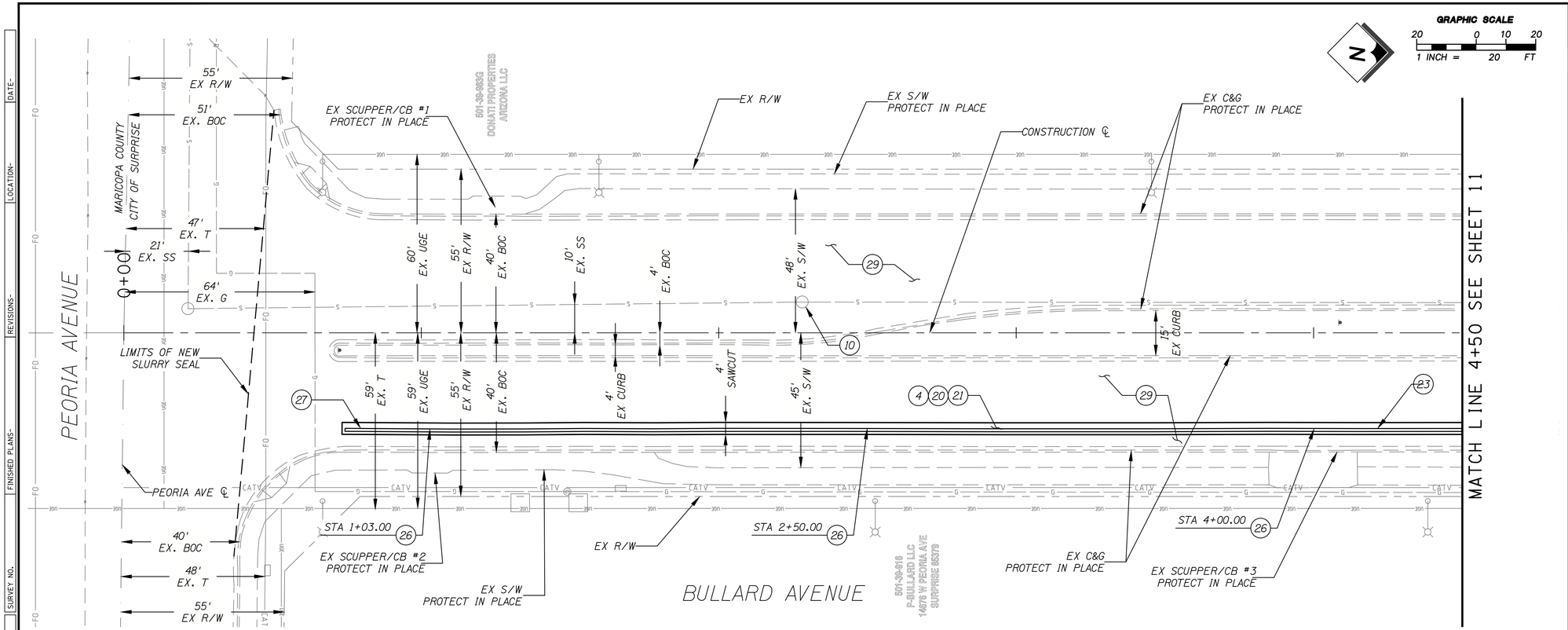
PAVING DETAILS

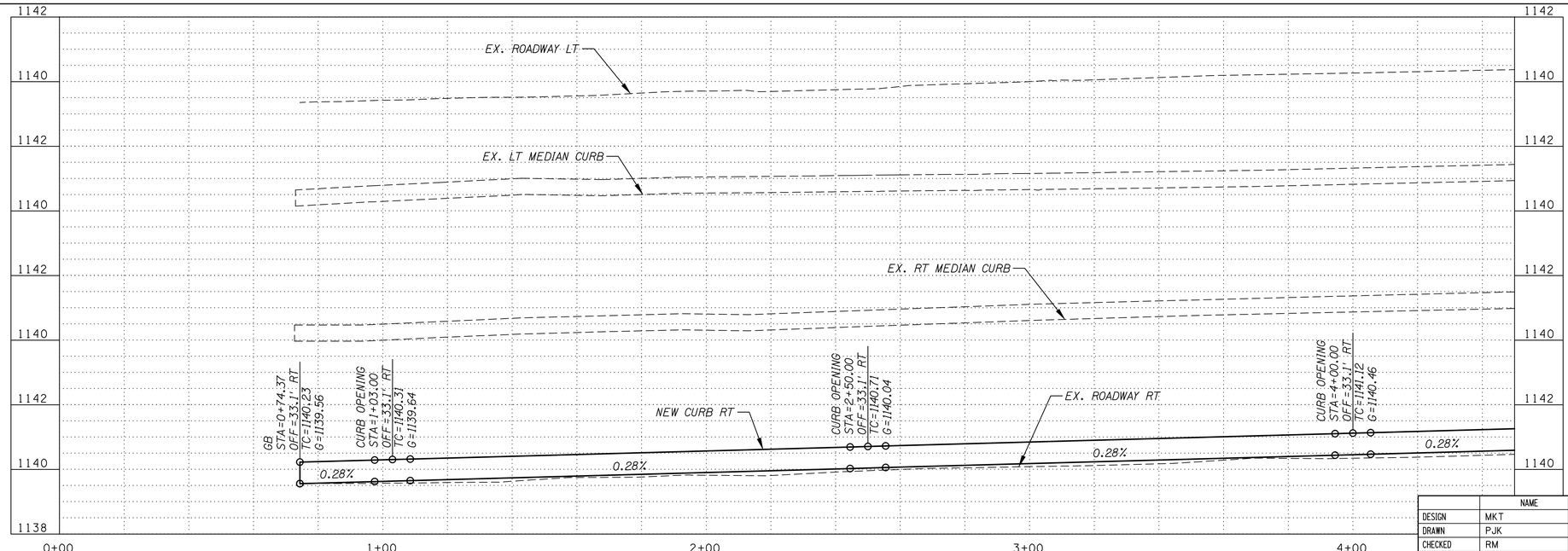
ROUTE	LOCATION	SHEET C-1.06
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

CERTIFICATE NO. 37417 MATTHEW K. TSARK REGISTERED PROFESSIONAL ENGINEER Arizona U.S.A. EXPIRES 3/31/20

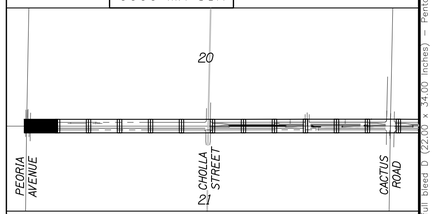
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kassler at 2/27/2018 7:25 AM on printer \\nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_DTL.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	10	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	168
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	33
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	26
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	340
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	3
(27)	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	3
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or dial: Arizona811.com

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 0+0.00 TO STA 4+50

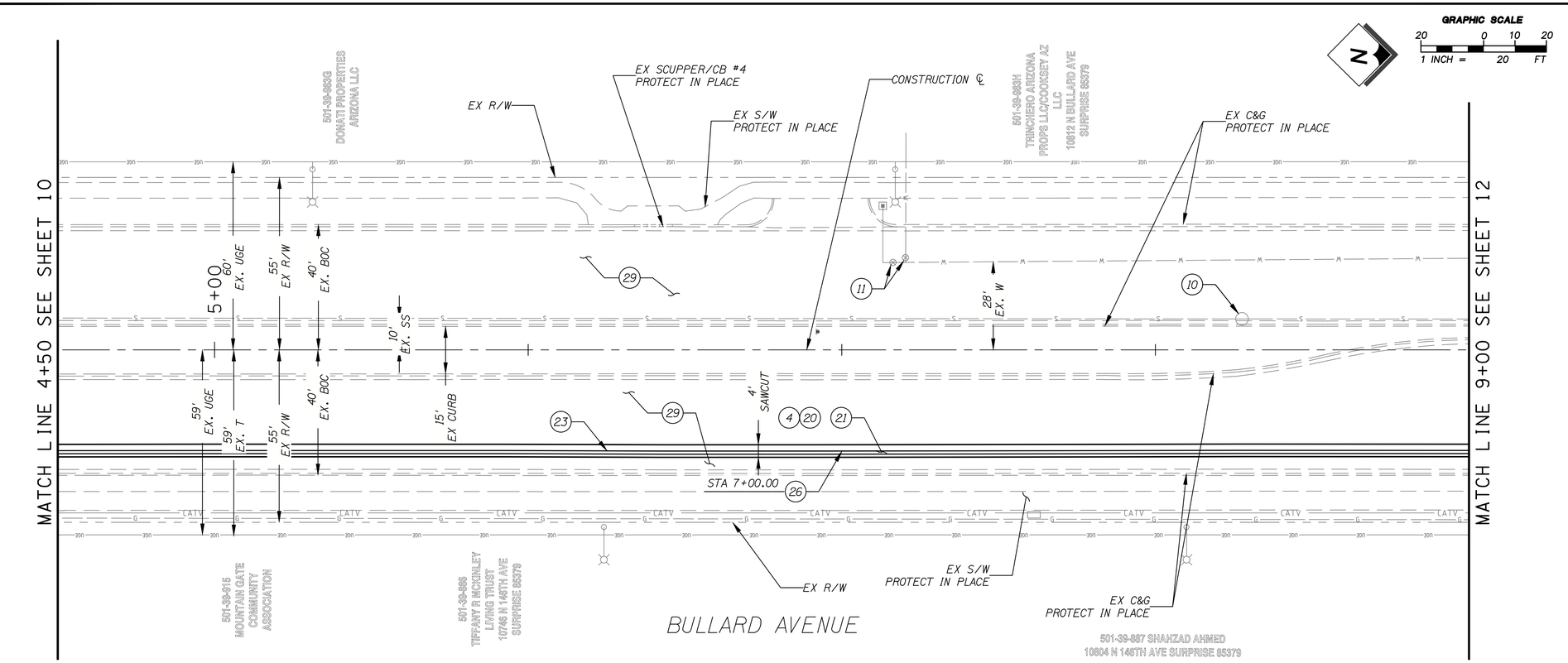
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/29/18 Arizona U.S.A.
EXPIRES 3/31/20

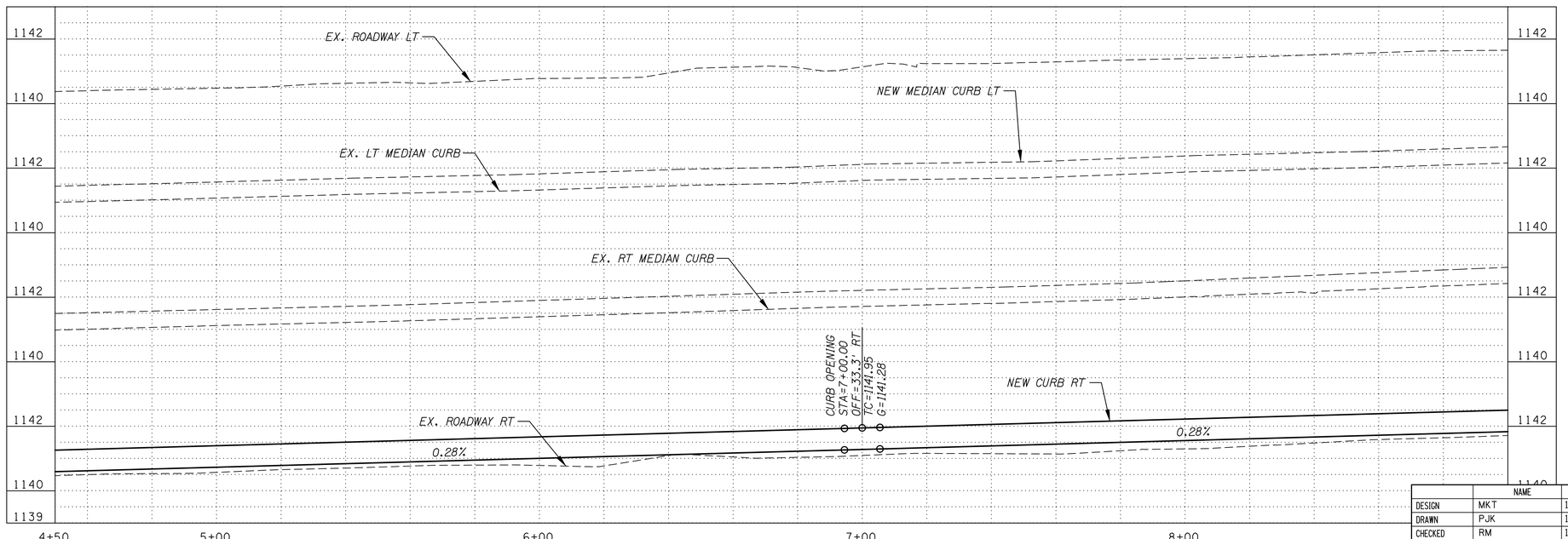
ROUTE	LOCATION	DWG NO. C-2.01
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

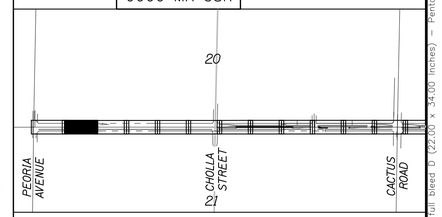
Plotted by Pat Kastner at 2/27/2018 7:26 AM on printer \\Plexus\UWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PFP-01.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	11	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	200
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	38
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	30
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	439
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

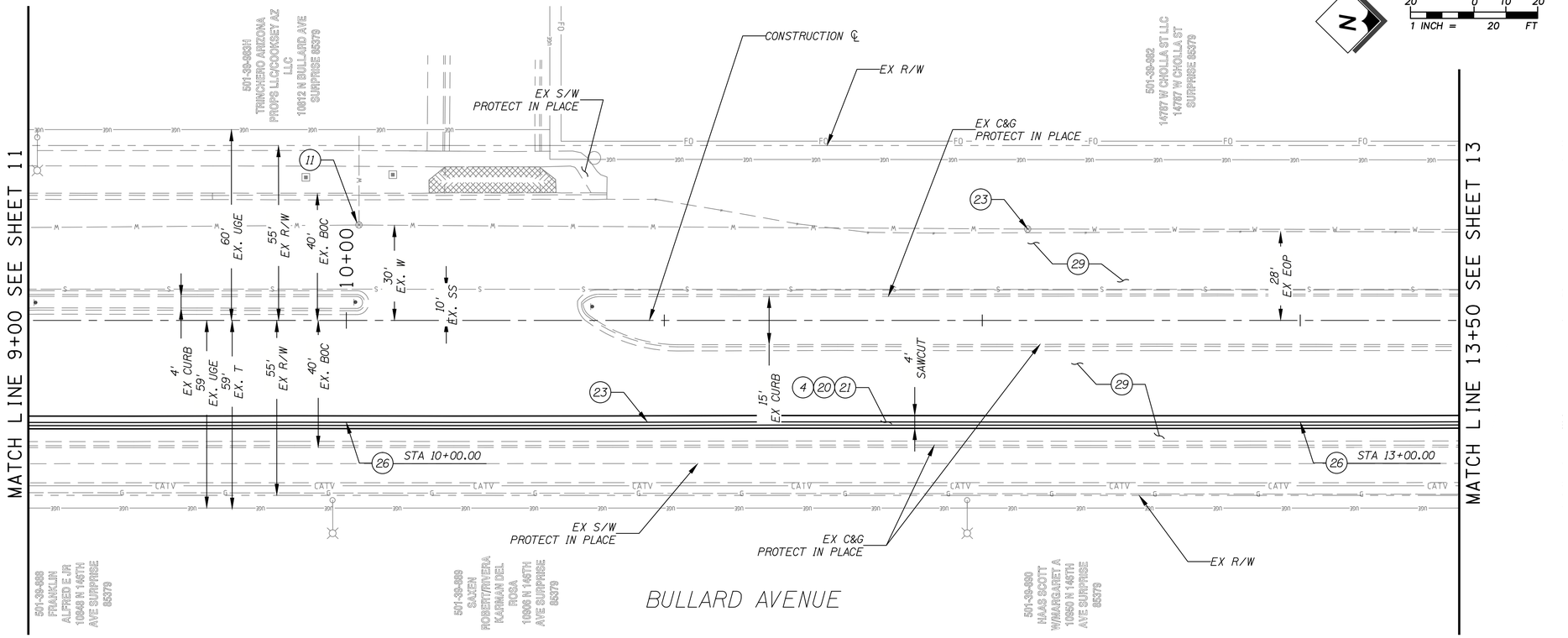
PAVING PLAN & PROFILE
STA 4+50 TO STA 9+00

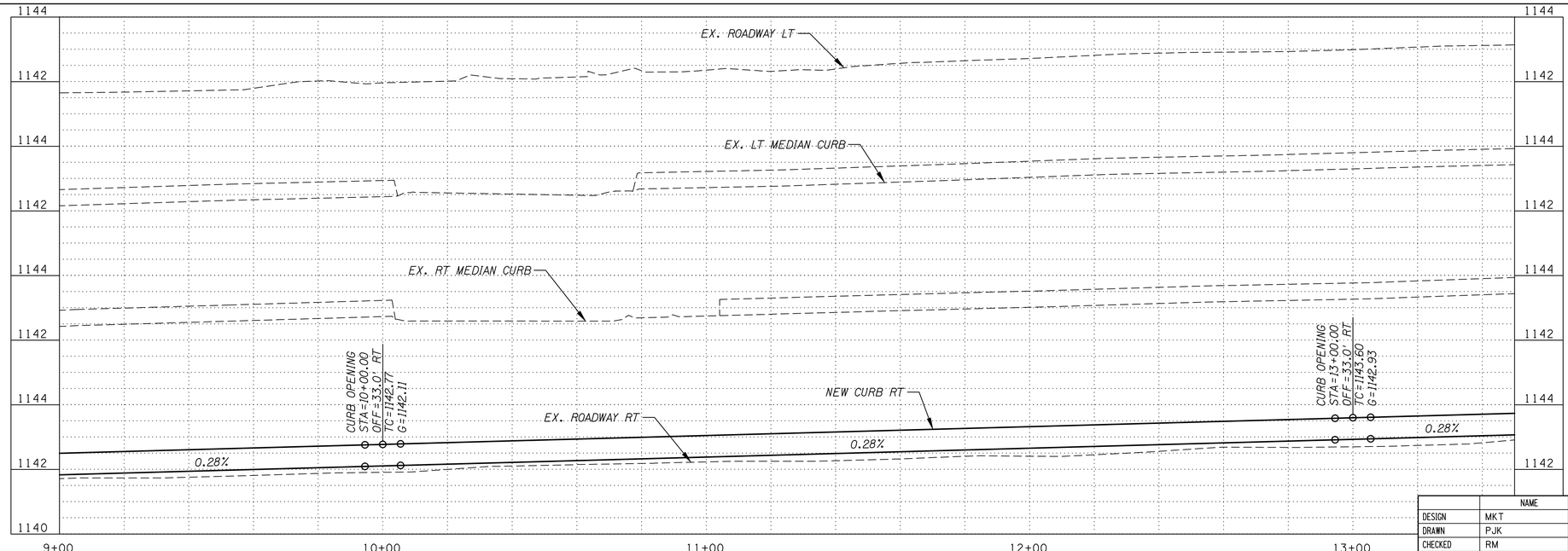
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.02
TRACS NO. T0063 01C	SUR-0(230)T	OF

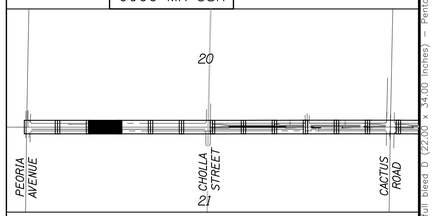
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastner at 2/27/2018 7:27 AM on printer \\Nexus\LWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	12	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	200
(11)	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	38
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	30
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	428
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 9+00 TO STA 13+50

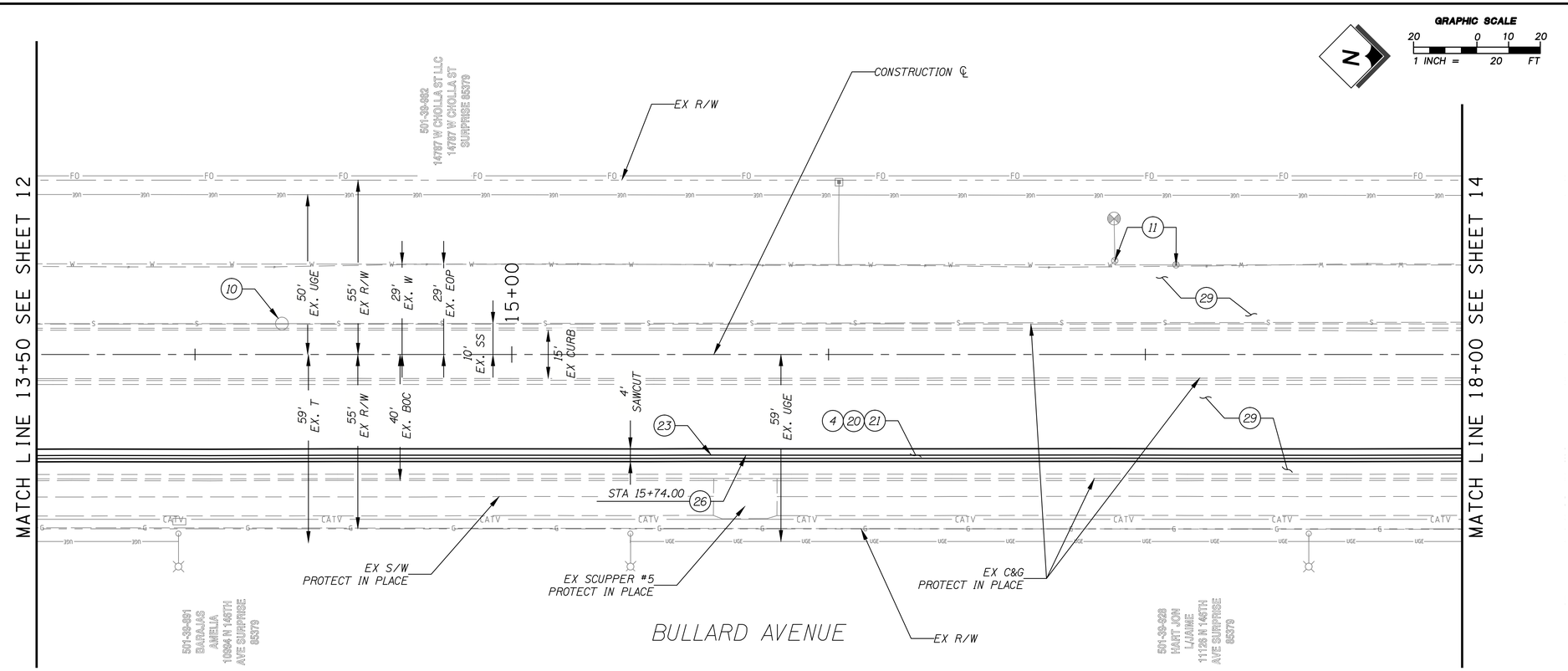
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

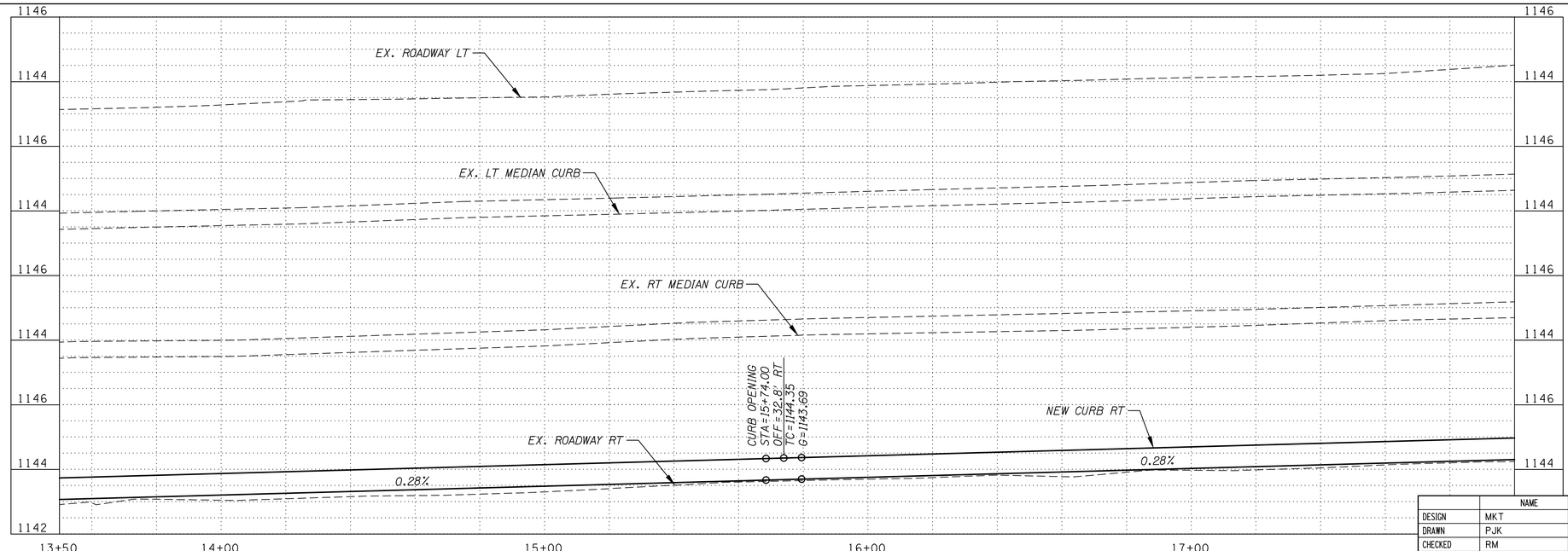
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.03
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

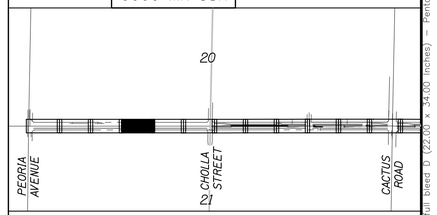
Plotted by Pat Kastler at 2/27/2018 7:27 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penfable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	13	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	200
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	38
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	30
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	439
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	25

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

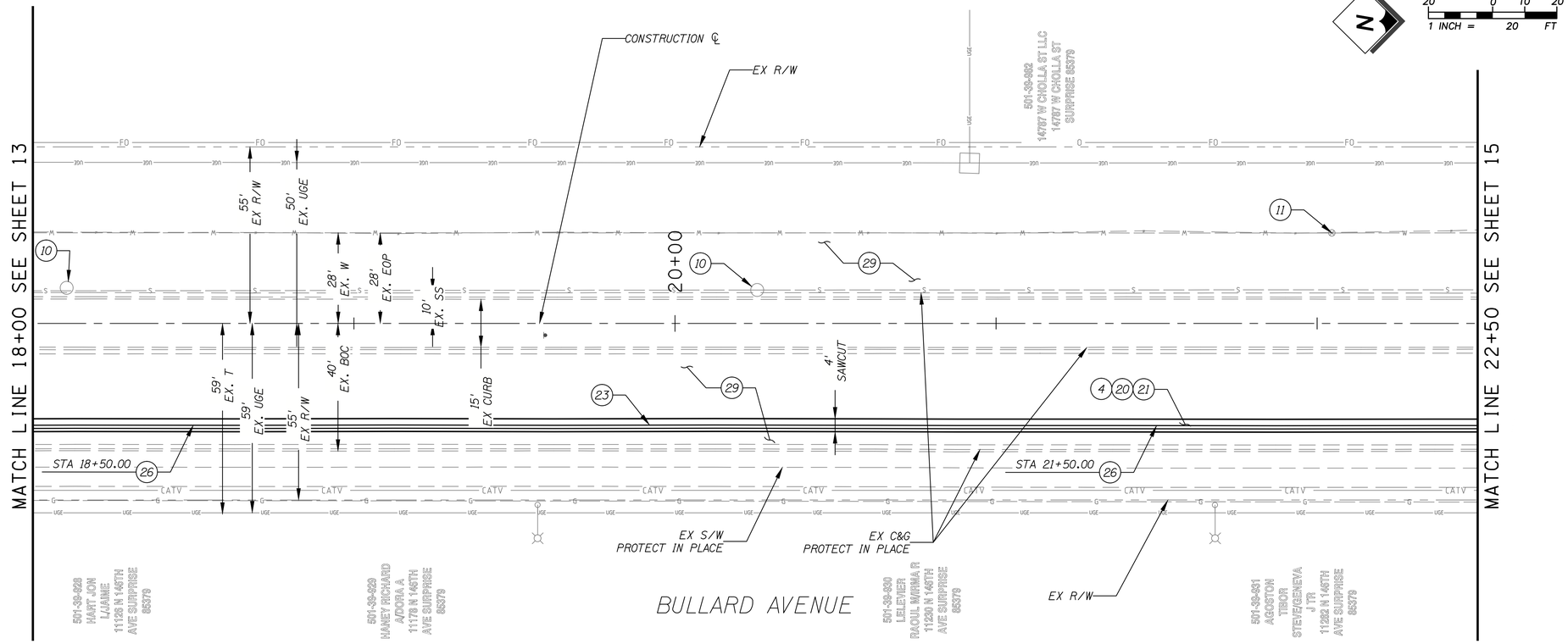
PAVING PLAN & PROFILE
STA 13+50 TO STA 18+00

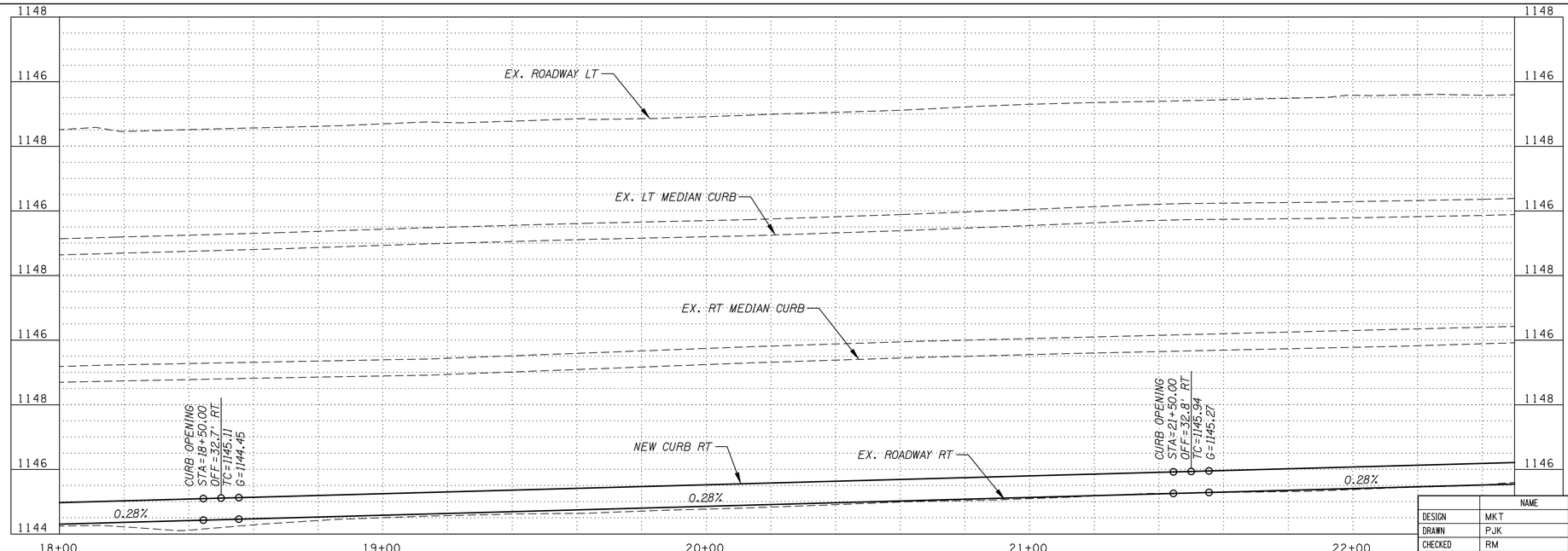
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 12/21/18 Arizona U.S.A. EXPIRES 3/31/20

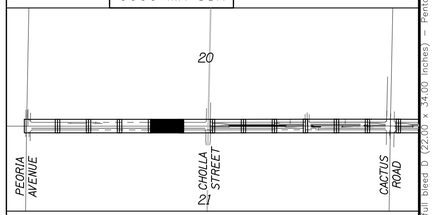
ROUTE	LOCATION	SHEET NO.
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.04
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:28 AM on printer \\nexus\LVWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg







F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	14	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	200
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	38
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	30
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	428
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	26

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 18+00 TO STA 22+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

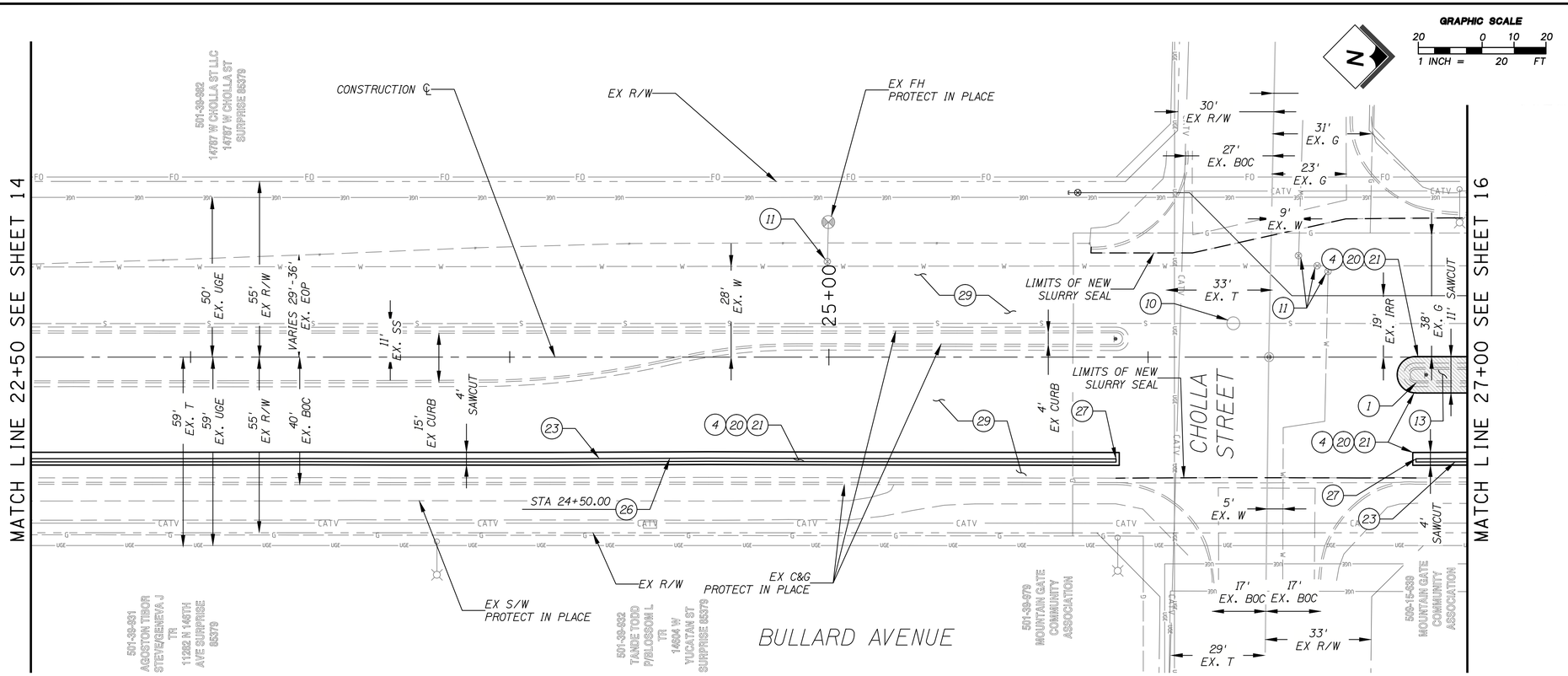
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.05
TRACS NO. T0063 01C	SUR-0(230)T	OF

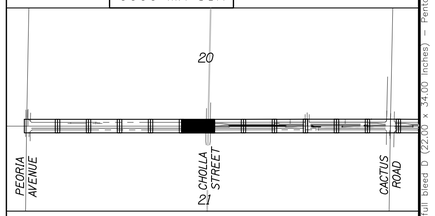
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:28 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penfolder: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg

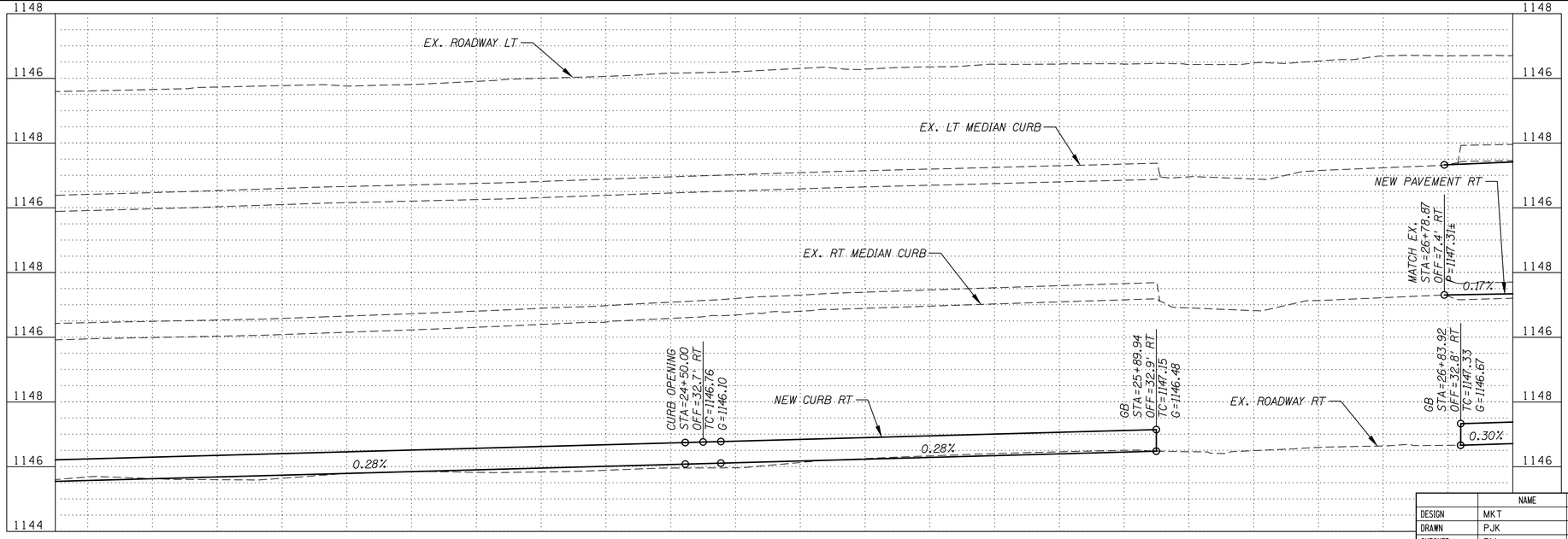
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	15	117	
		0000 MA SUR			





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	40
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	185
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	4
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	37
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	29
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	339
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	6
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	34



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 22+50 TO STA 27+00

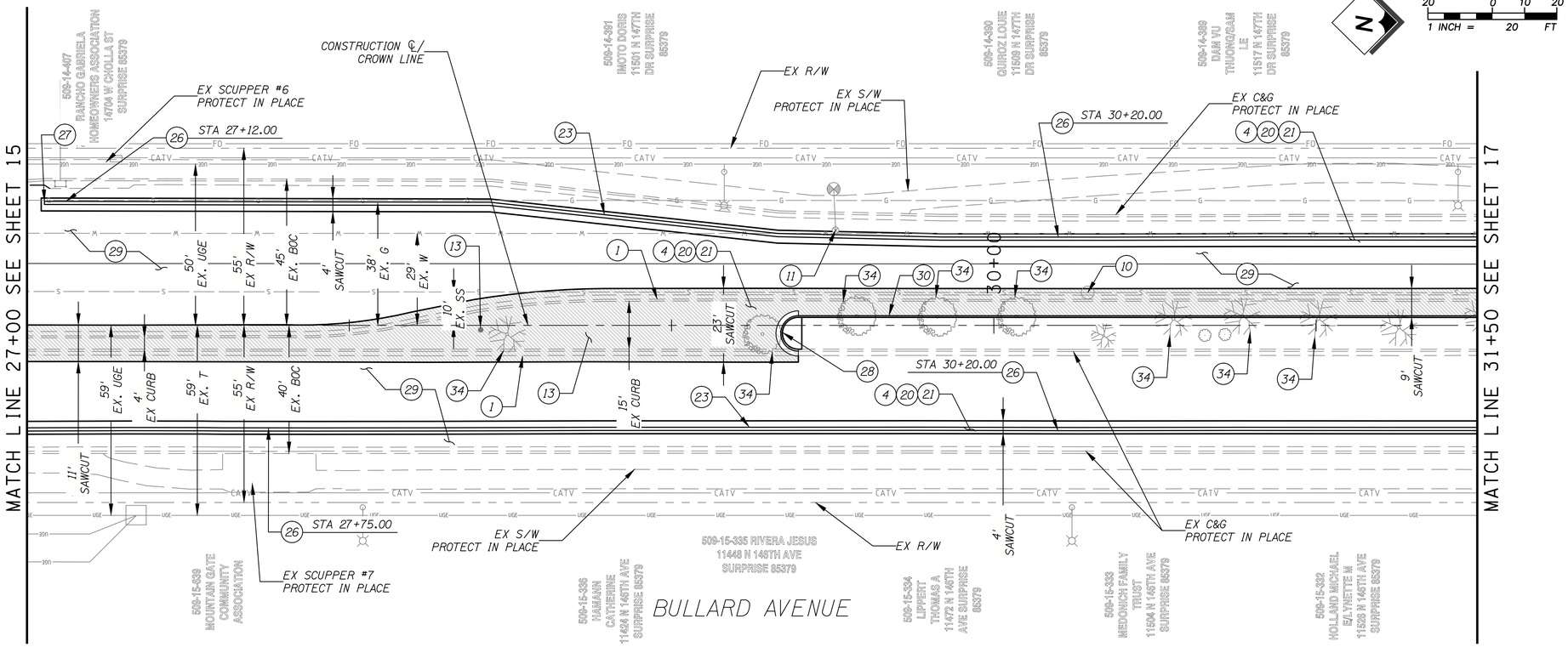
CERTIFICATE NO. 37417 MATTHEW K. TSARK — Date Signed 12/31/19 — Arizona U.S.A. — EXPIRES 3/31/20

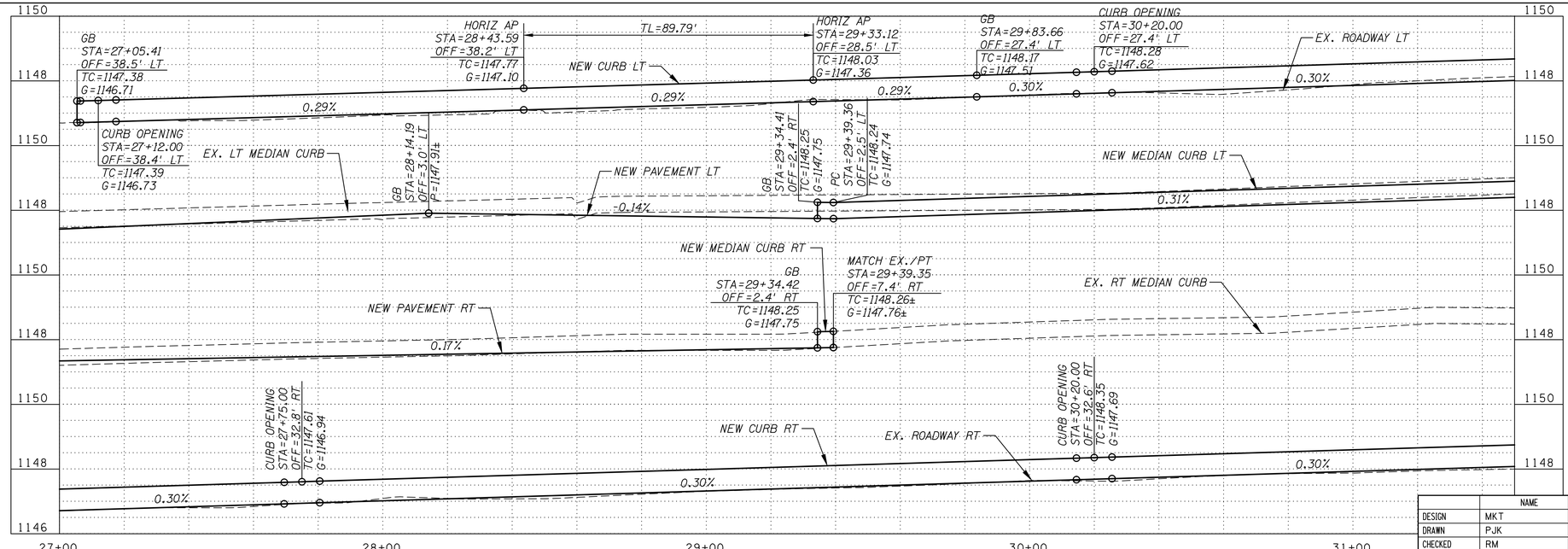
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.06
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

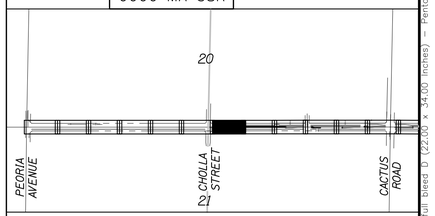
Plotted by Pat Kastler at 2/27/2018 7:29 AM on printer \\Plexus\UWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06I_PPP-01.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	16	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	690
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	1024
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	232
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	183
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	848
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	3
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	10
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	27
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	211
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	8

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 27+00 TO STA 31+50

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

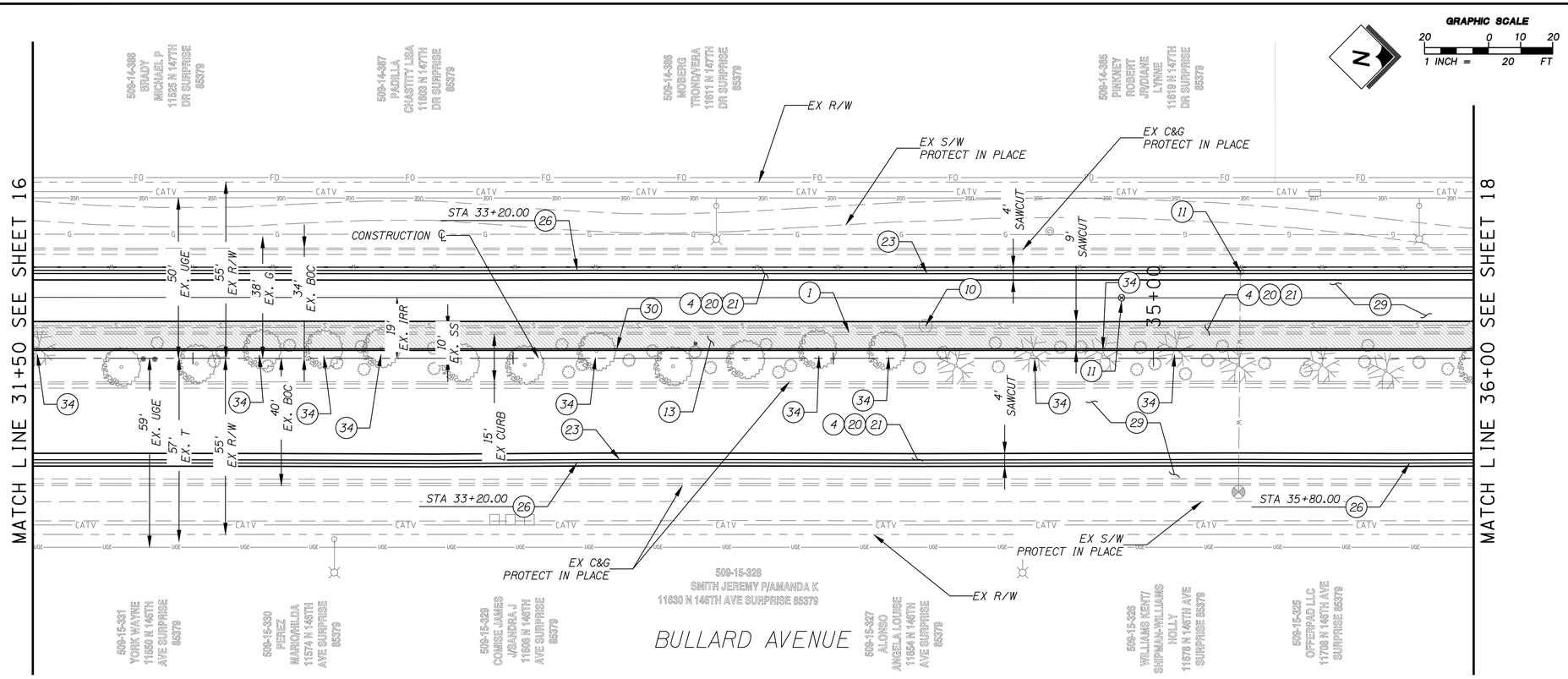
REGISTERED PROFESSIONAL ENGINEER (Civil)
CERTIFICATE NO.
37417
MATTHEW K. TSARK
DATE SIGNED 12/17/19
Arizona U.S.A.
EXPIRES 3/31/20

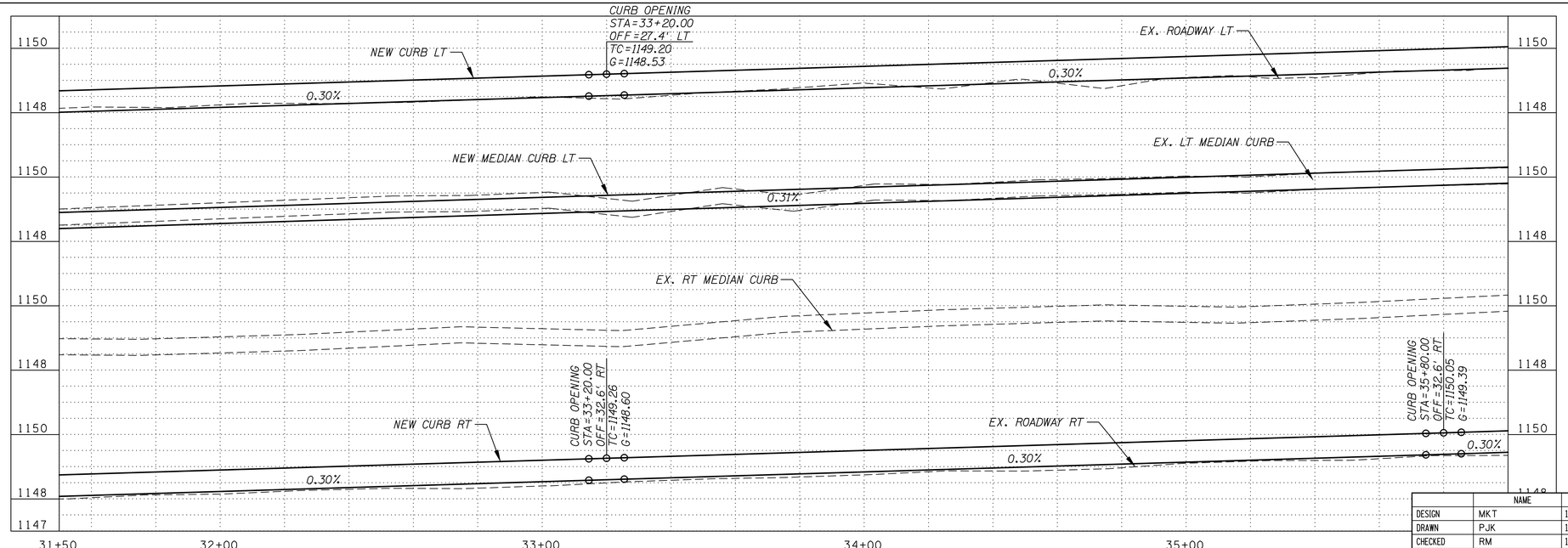
SHEET C-2.07

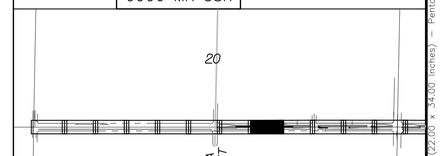
OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:29 AM on printer \\Nexus\UWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\20140114-06\CADD\production\Sheets\Y14014-06_PP-01.dwg







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	450
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	827
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	183
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	144
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	867
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	3
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	450
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	10

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 31+50 TO STA 36+00

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/31/18 Arizona U.S.A.
EXPIRES 3/31/20

SHEET C-2.08

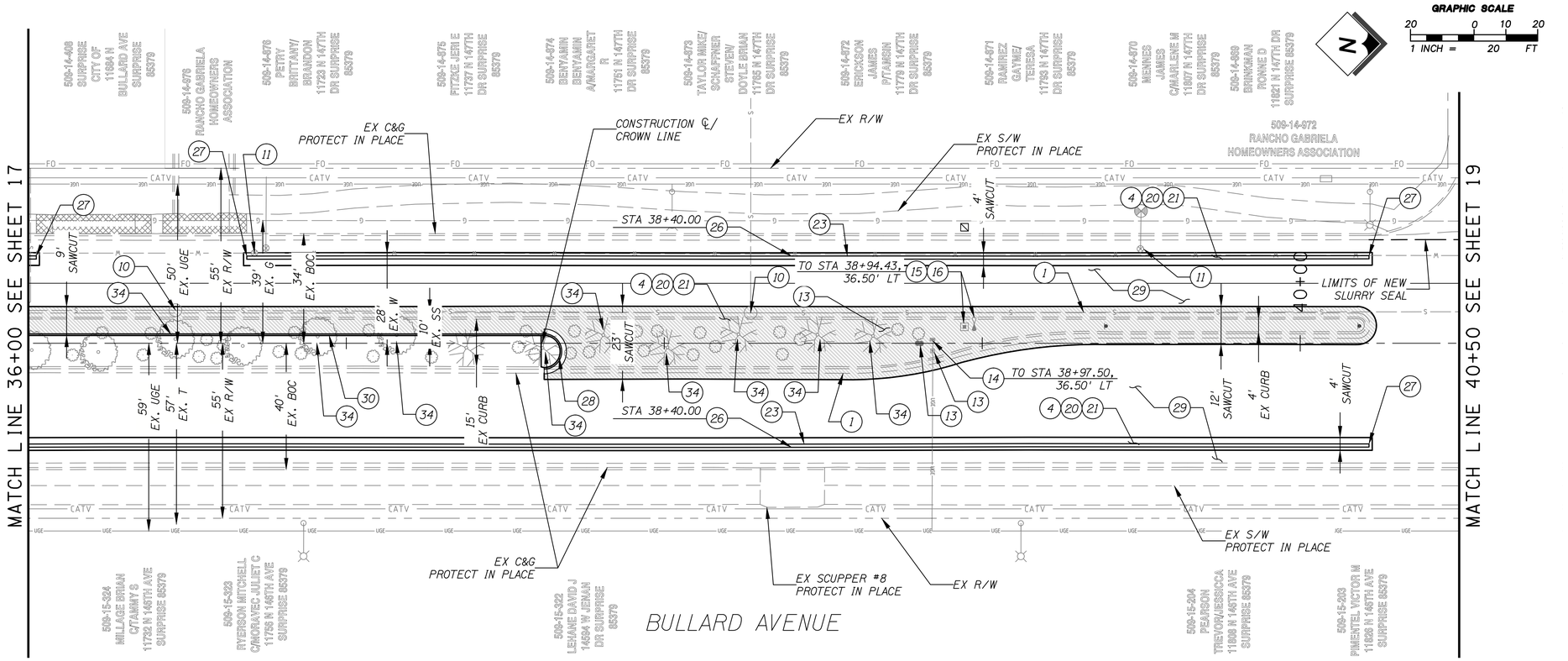
OF

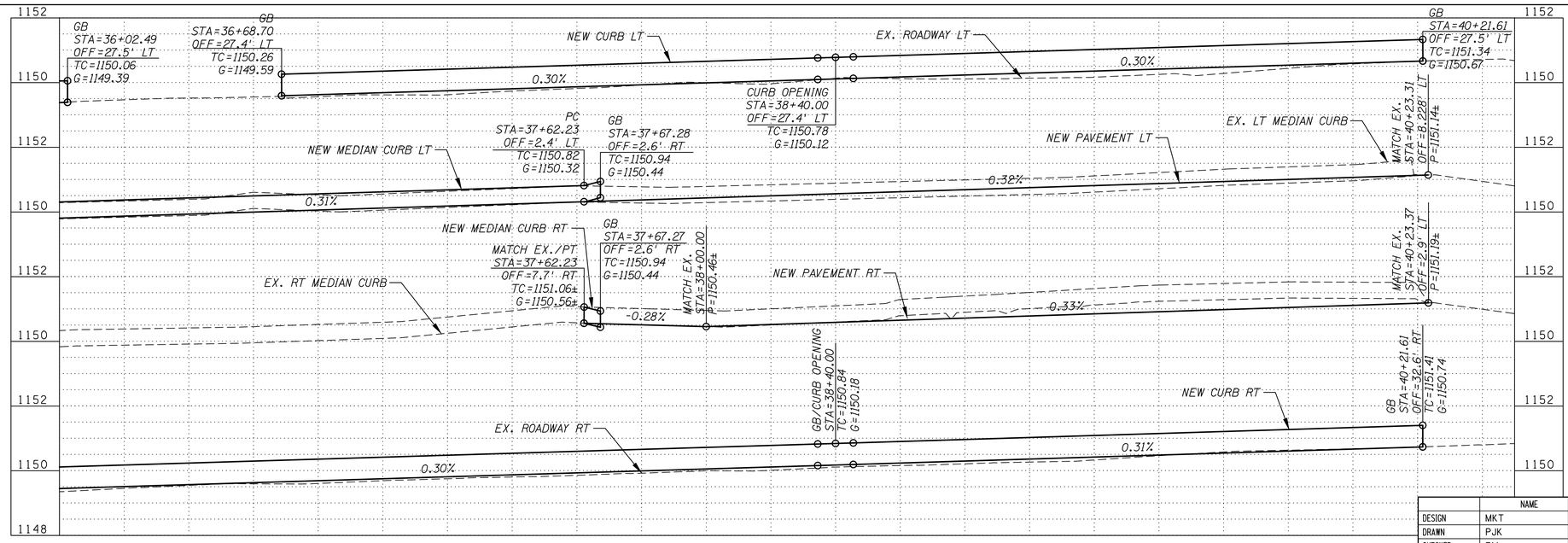
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	17	117	
		0000 MA SUR			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:30 AM on printer \\nexus\LVWC to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06I_PP-01.dwg





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	683
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	999
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
14	RELOCATE ELECTRIC SERVICE METER & PEDESTAL. BID ITEM 8080201	EA	1
15	RELOCATE WATER METER, VALVE BOX & COVER. BID ITEM 8080638	EA	1
16	RELOCATE BACKFLOW PREVENTOR & ENCLOSURE BID ITEM 8080203	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030082	CY	229
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	180
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	743
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	10
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	35
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	162
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	9

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 36+00 TO STA 40+50

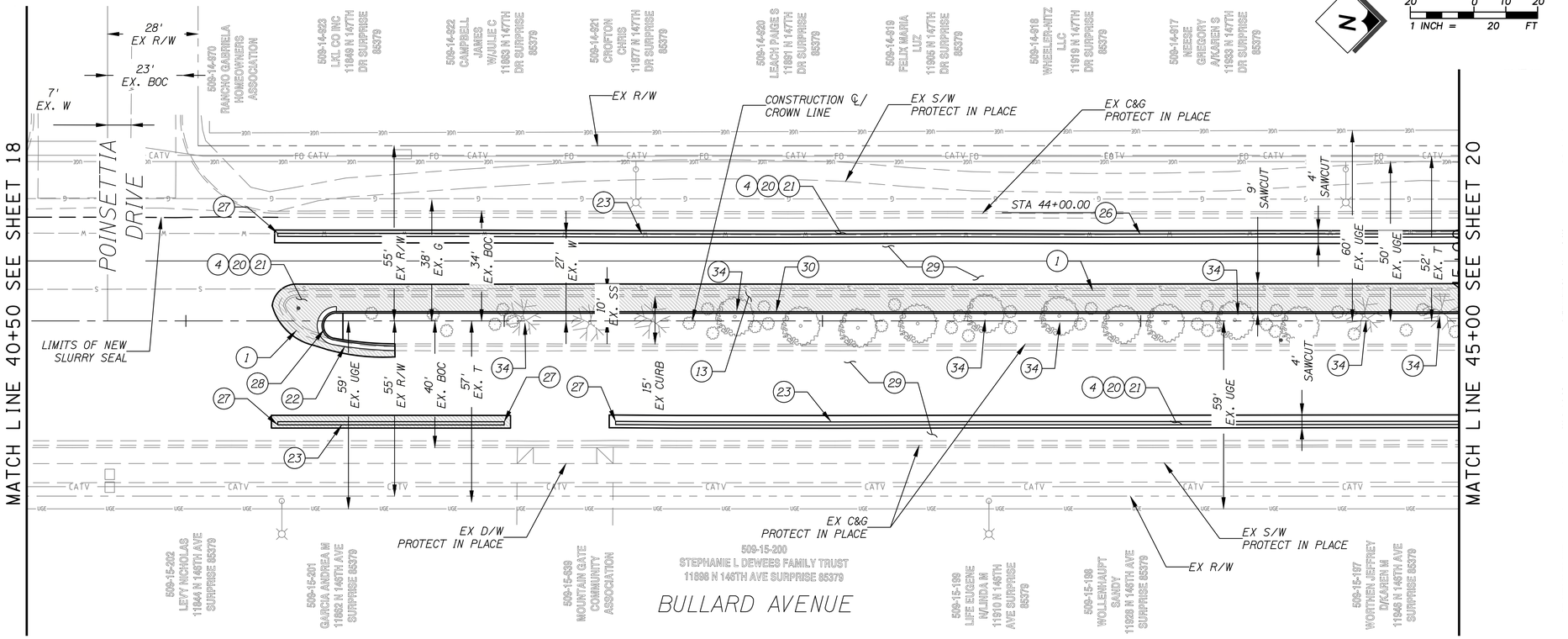
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	SHEET C-2.09
TRACS NO. T0063 01C	SUR-0(230)T	OF

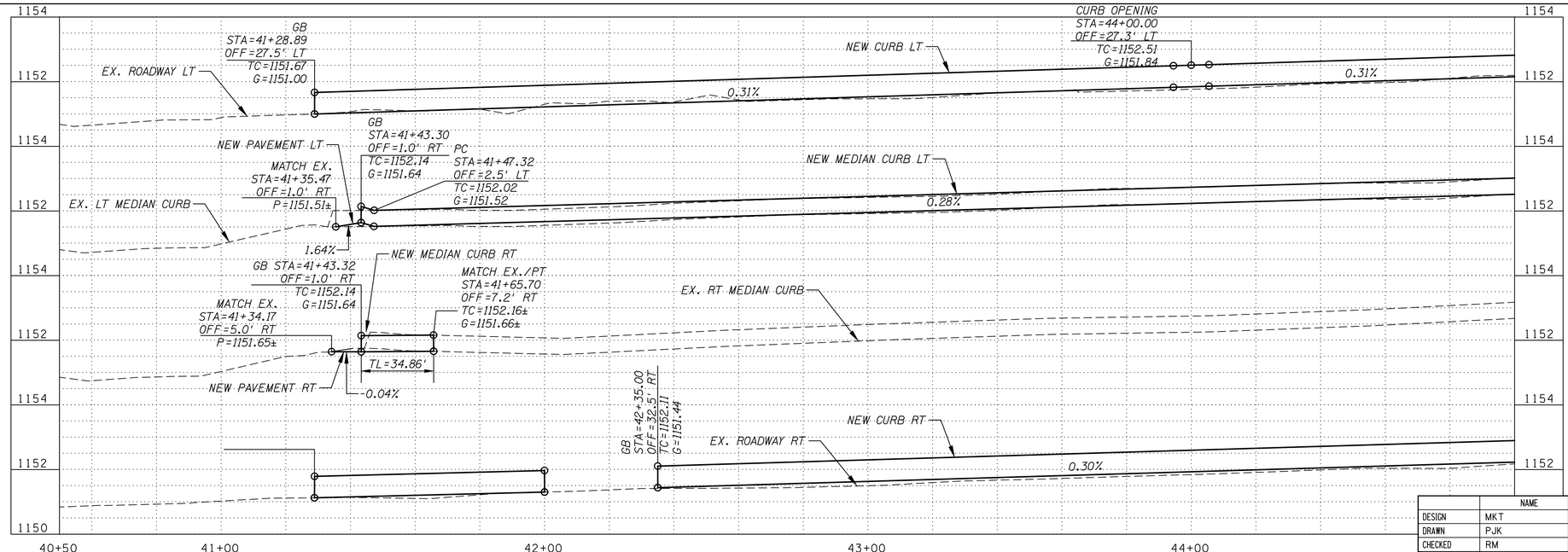
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	18	117	
		0000 MA SUR			

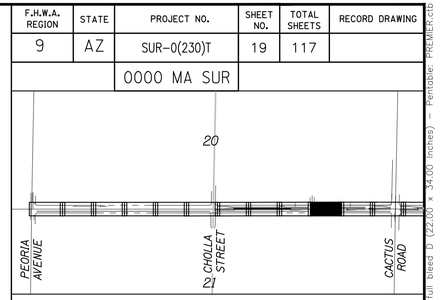
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:30 AM on printer \\nexus\CWC to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CAD0\production\Sheets\14014-061_PPP-01.dwg







F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	19	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	391
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	692
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	154
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	121
22	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG DET. 220, TYPE A BID ITEM 9080101	LF	19
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	684
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	8
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	26
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	353
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	7

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 40+50 TO STA 45+00

37417 MATTHEW K. TSARK Registered Professional Engineer Arizona U.S.A. EXPIRES 3/31/20

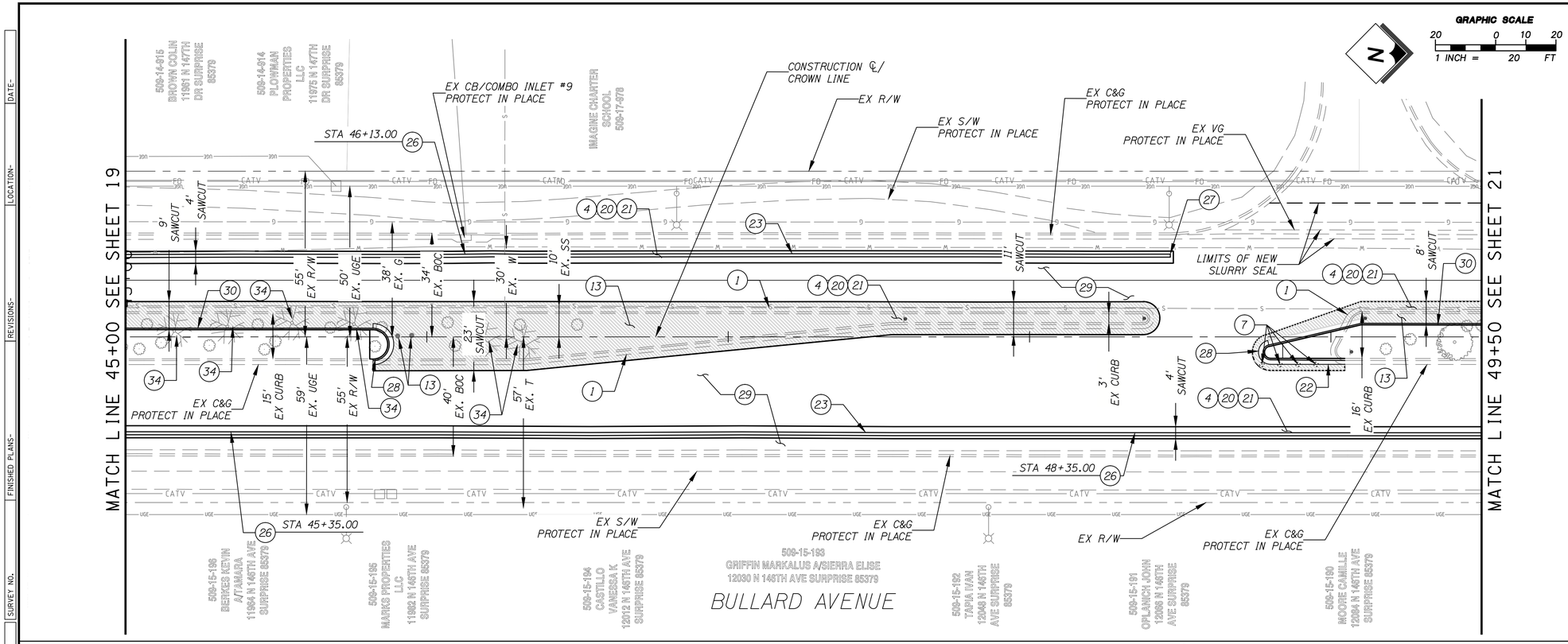
ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.10
TRACS NO. T0063 01C	SUR-0(230)T	OF

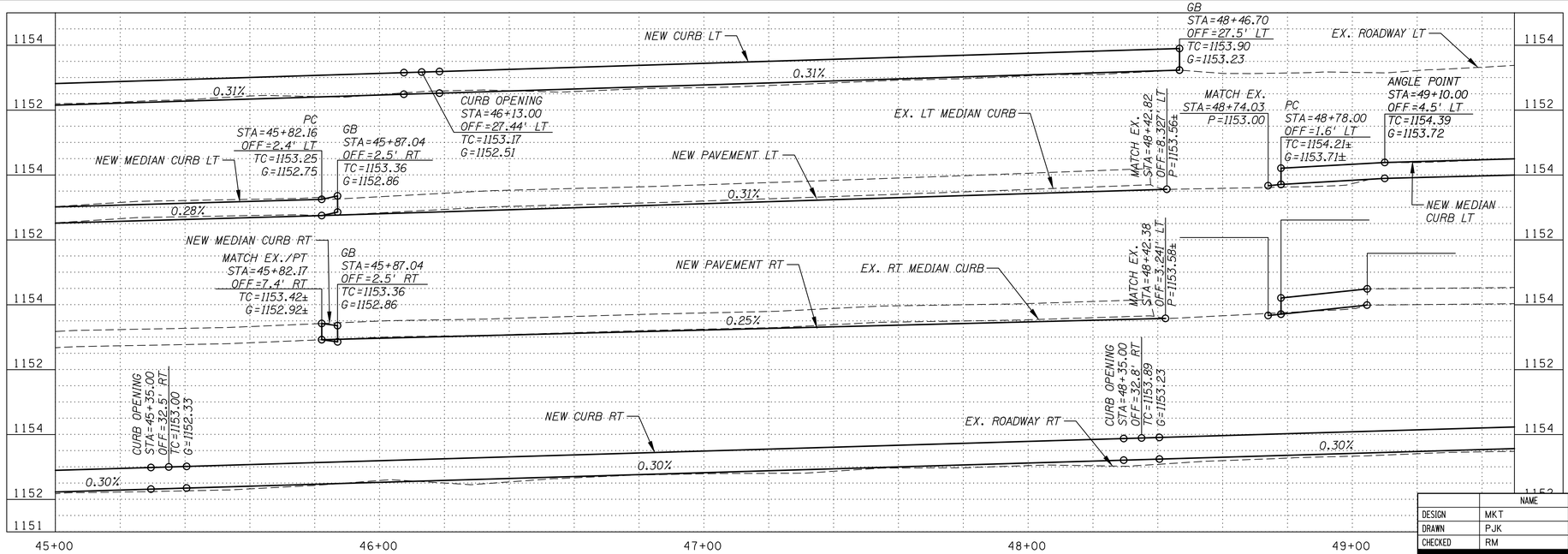
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

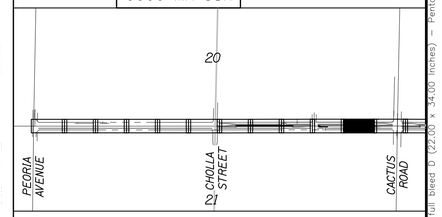
Plotted by Pat Kastler at 2/27/2018 7:31 AM on printer \\Nexus\UWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014106\CADD\production\Sheets\14014-061_PP-01.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	20	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	662
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	945
7	REMOVE FLEXIBLE DELINEATOR BID ITEM 2020054	EA	4
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	215
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	169
22	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG DET. 220, TYPE A BID ITEM 9080101	LF	25
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	761
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	3
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	3
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	13
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	27
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	123
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	6

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 45+00 TO STA 49+50

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	C-2.11
TRACS NO. T0063 01C	SUR-0(230)T	OF

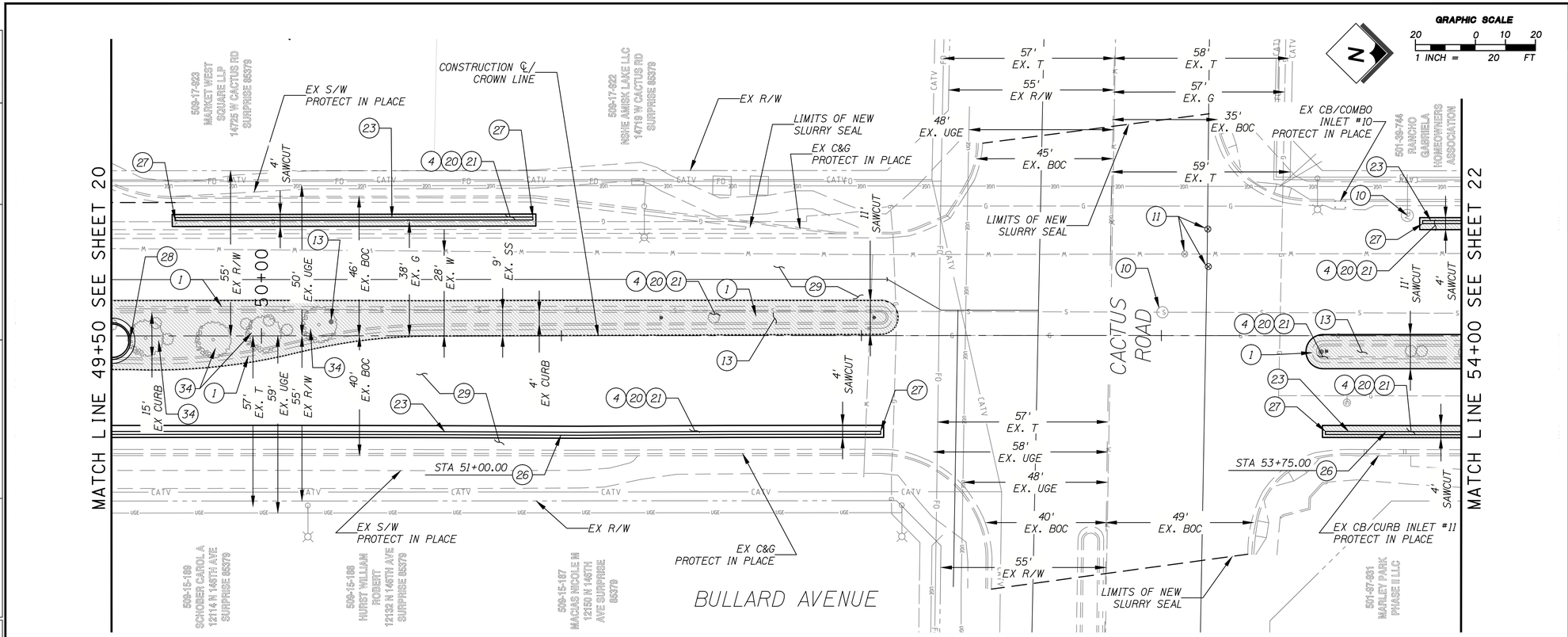
37417 MATTHEW K. TSARK — EXPIRES 3/31/20

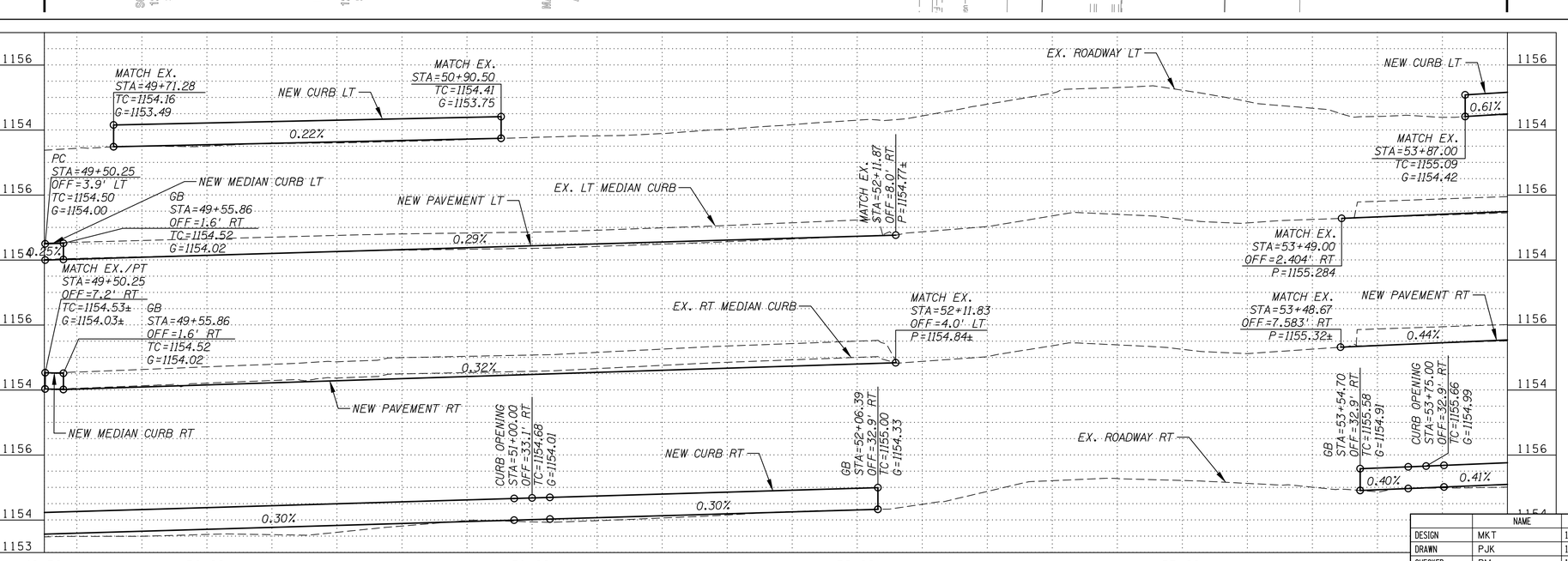
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

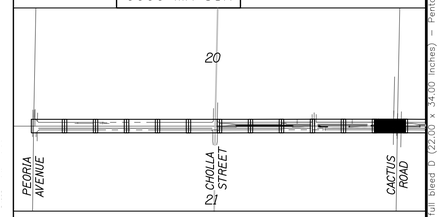
Plotted by Pat Kastler at 2/27/2018 7:52 AM on printer \\nexus\CWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	21	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	620
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	663
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	3
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	155
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	122
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	397
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	15
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	12
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	50
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	4

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 49+50 TO STA 54+00

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

37417 MATTHEW K. TSARK — EXPIRES 3/31/20

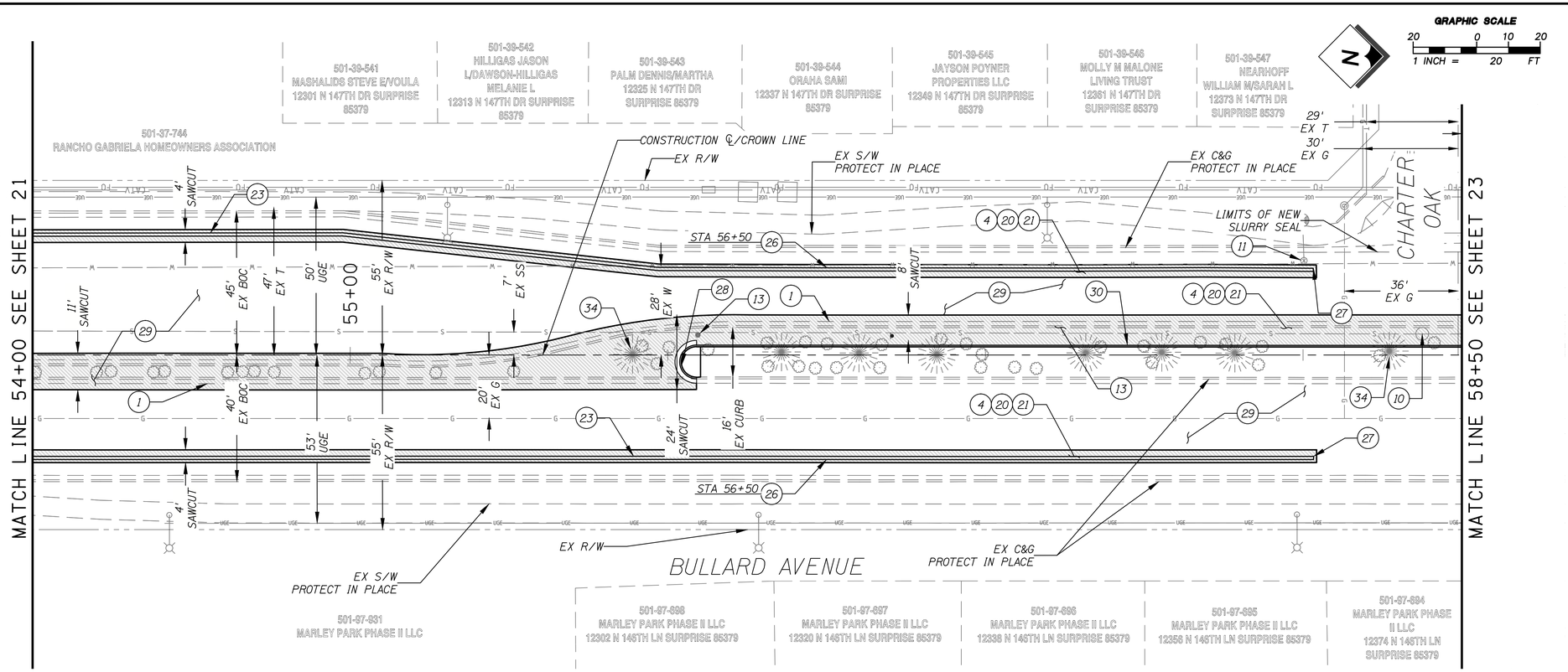
SHEET C-2.12

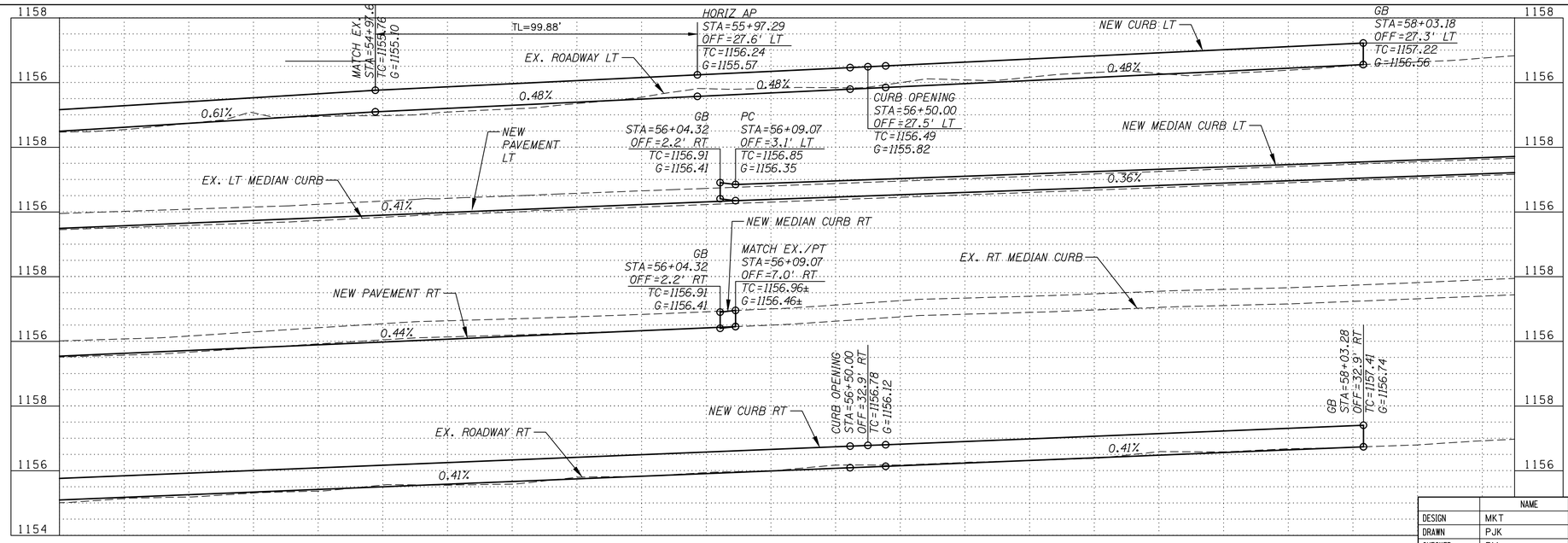
OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

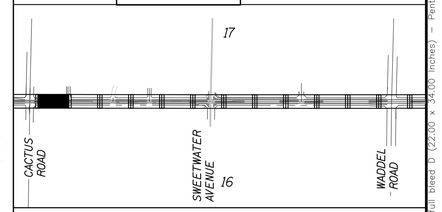
Plotted by Pat Kastler at 2/27/2018 7:52 AM on printer \\Nexus\CWC to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-01.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	22	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	660
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	923
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	209
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	165
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	779
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	6
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	9
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	36
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	241
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	2

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 54+00 TO STA 58+50

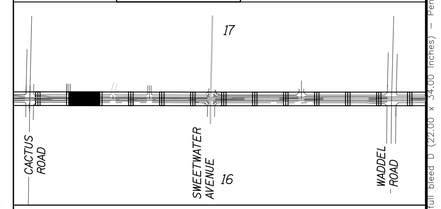
CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A.
EXPIRES 3/31/20

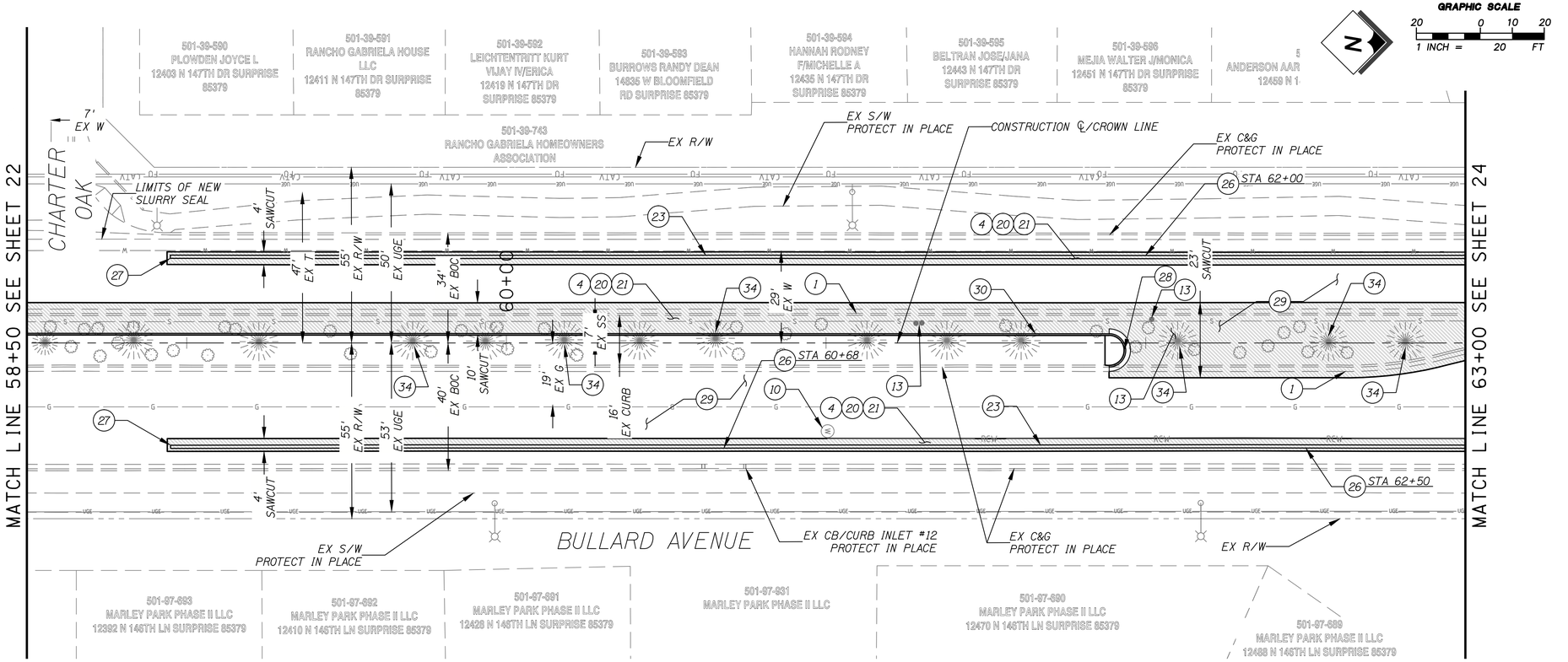
ROUTE	LOCATION	DWG NO. C-2.13
TRACS NO. T0063 01C	SUR-0(230)T	OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kassler at 2/27/2018 7:54 AM on printer \\Nexus\UWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-061_PP-02.dwg

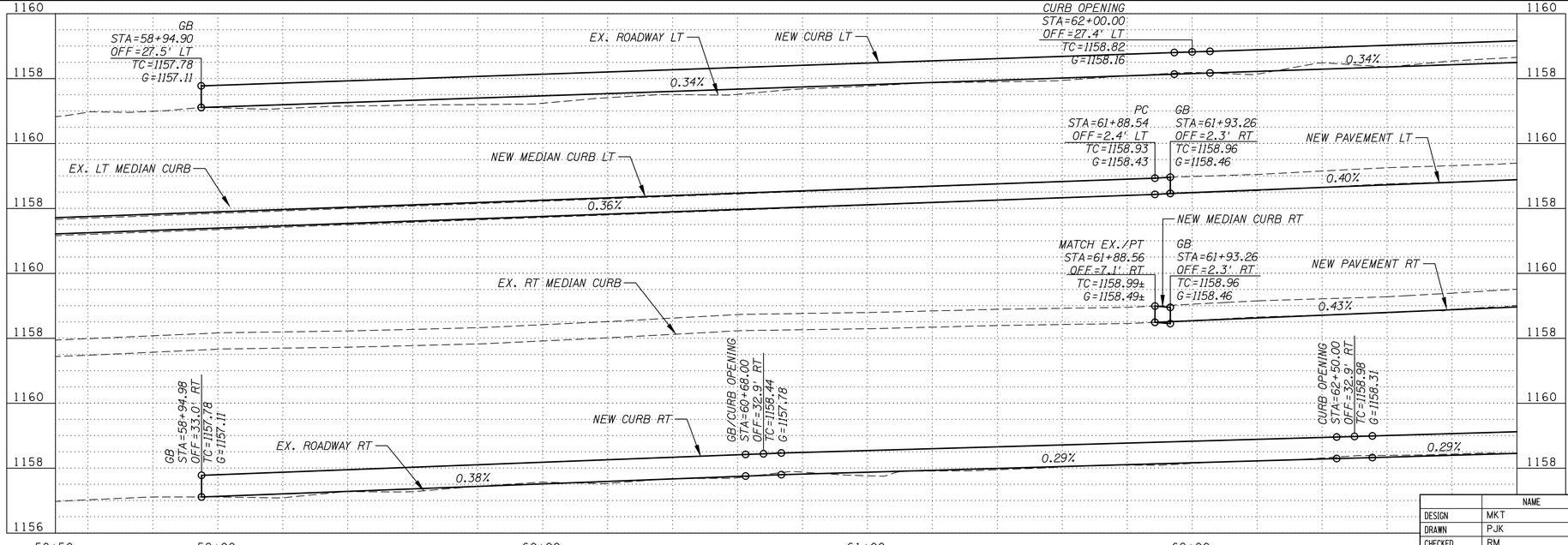
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	23	117	
		0000 MA SUR			





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	562
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	999
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	228
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	180
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	771
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	3
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	6
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	9
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	33
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	339
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	6



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 58+50 TO STA 63+00

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

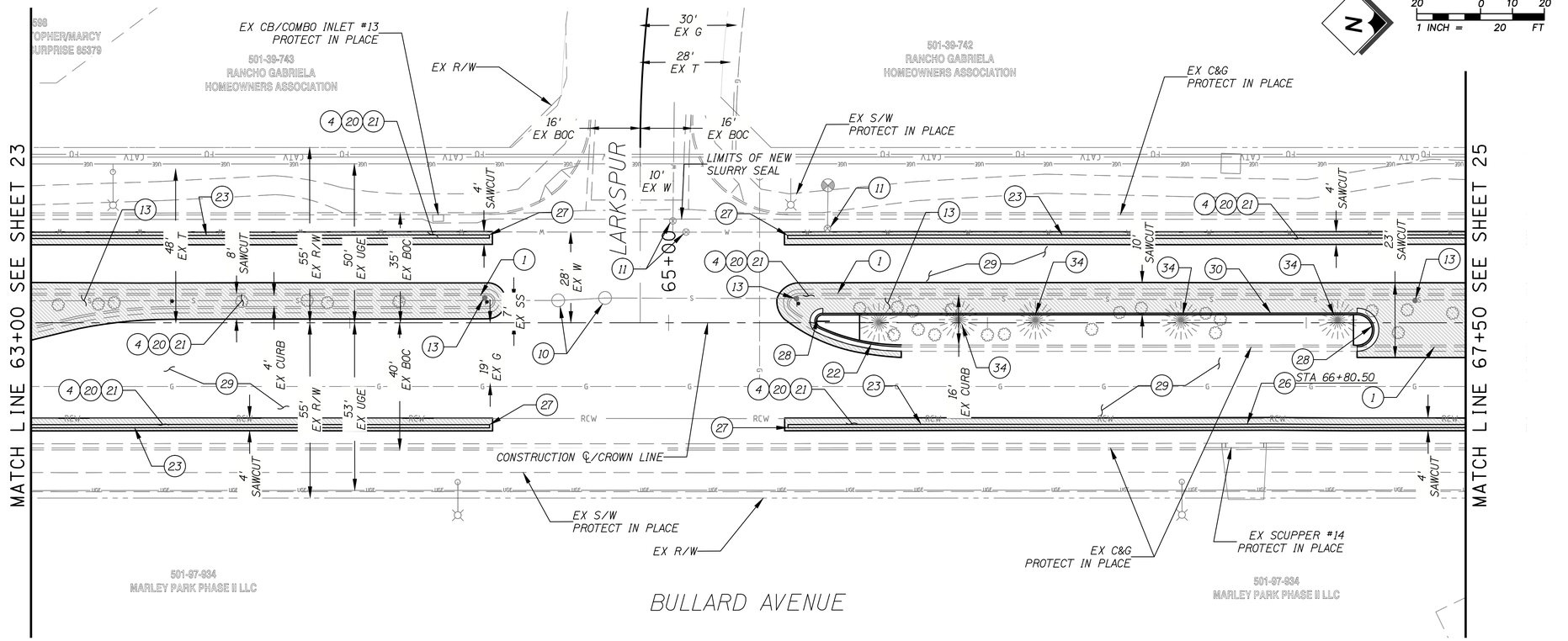
TRACS NO. T0063 01C | SUR-0(230)T | DWG NO. C-2.14 | OF

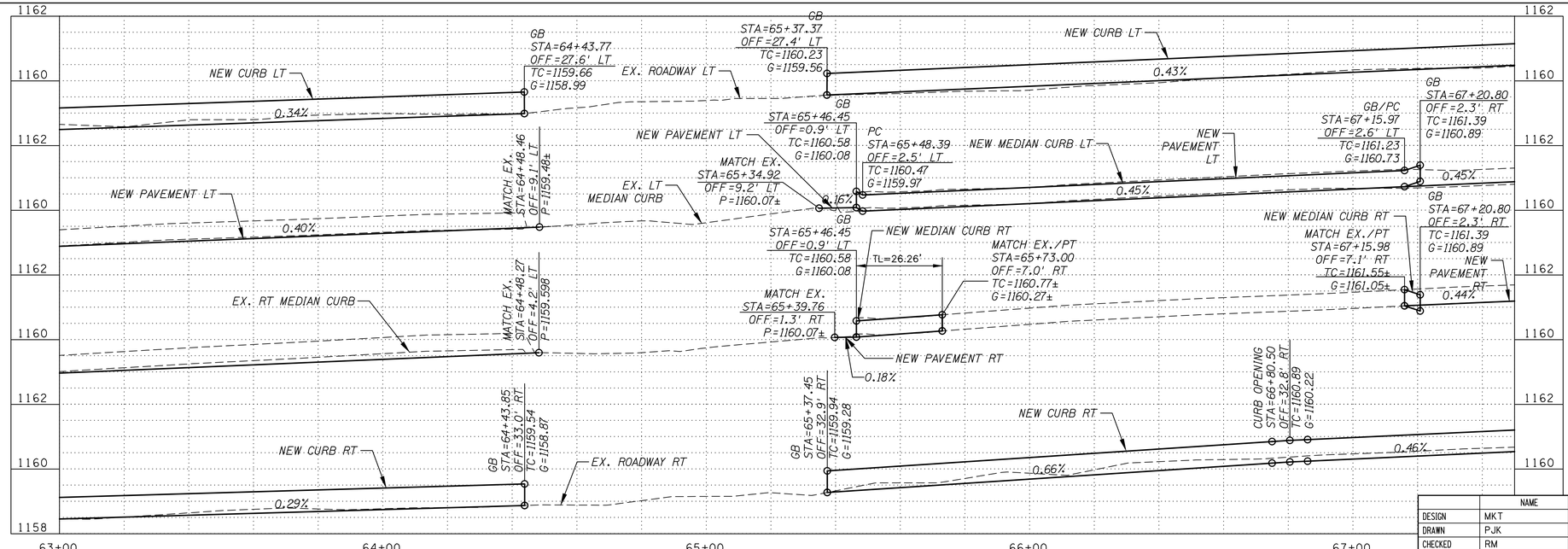
37417 MATHEW K. TSARK — EXPIRES 3/31/20

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kistler at 2/27/2018 7:35 AM on printer \\Nexus\DWG to PDF.pc3 - Plotsize: ANSI full bleed D (22.00 x 34.00 inches) - Penbase: PREMIER.ctb

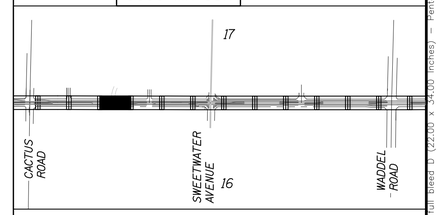
P:\2014014-06\CADD\production\Sheets\14014-061_PPF-02.dwg





GRAPHIC SCALE
20 0 10 20
1 INCH = 20 FT

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	24	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	571
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	708
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	3
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	158
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	124
22	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG DET. 220, TYPE A BID ITEM 9080101	LF	26
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	690
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	28
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	35
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	168
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	4

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 63+00 TO STA 67+50

ROUTE	LOCATION	DWG NO. C-2.15
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

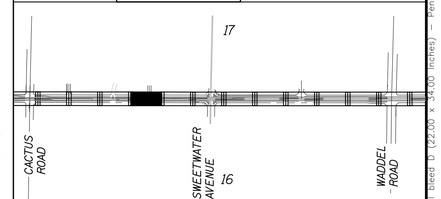
37417 MATTHEW K. TSARK
EXPIRES 3/31/20

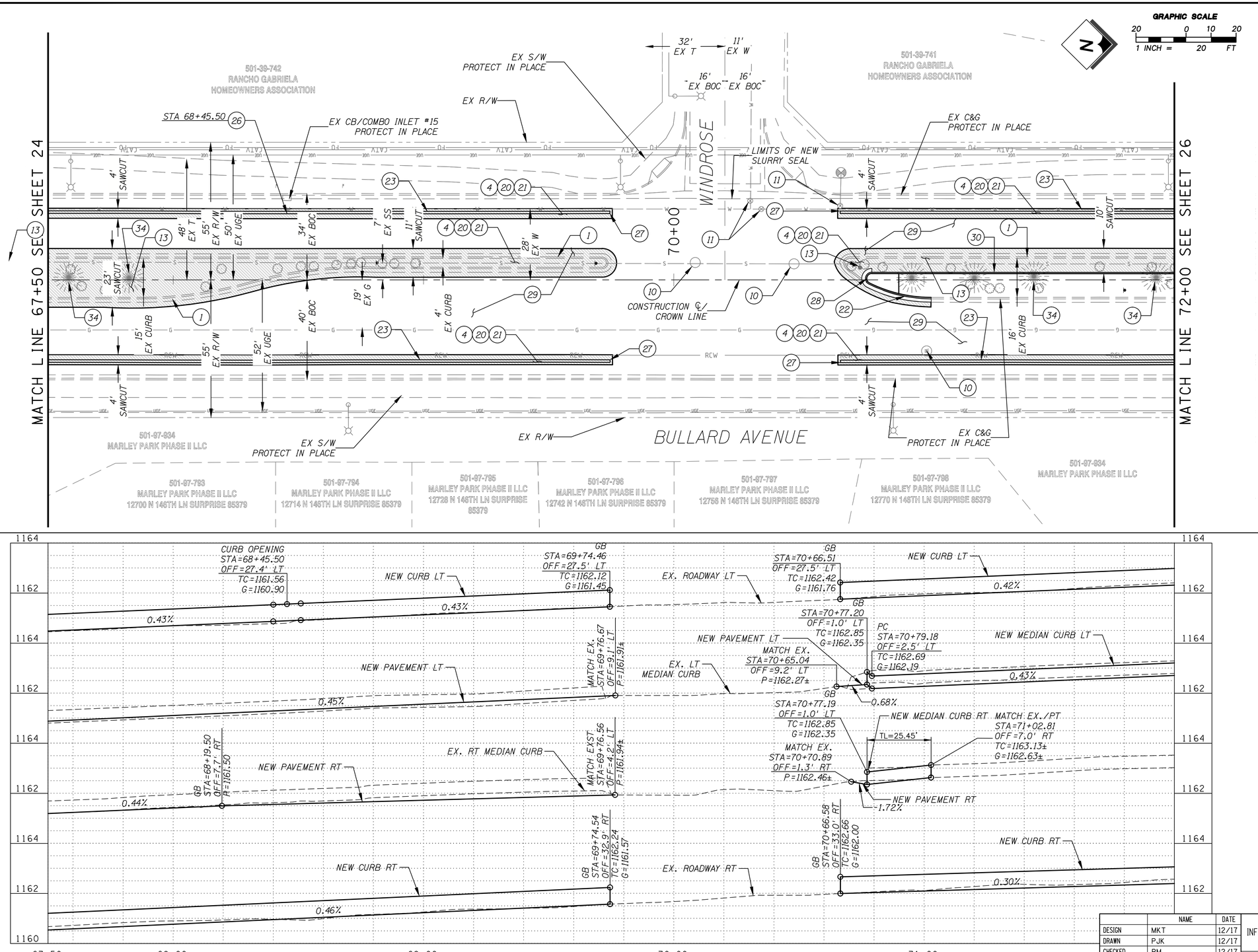
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:35 AM on printer \\Pwxes\DWG to PDF pc3 - Plotsize: ANSI full bleed D (22.00 x 34.00 inches) - Penfolder: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-02.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	25	117	
		0000 MA SUR			





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	609
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	868
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	3
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	3
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	198
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	156
22	CONSTRUCT CONCRETE CURB AND GUTTER PER MAG DET. 220, TYPE A BID ITEM 9080101	LF	26
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	693
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	14
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	36
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	121
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	4

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 67+50 TO STA 72+00

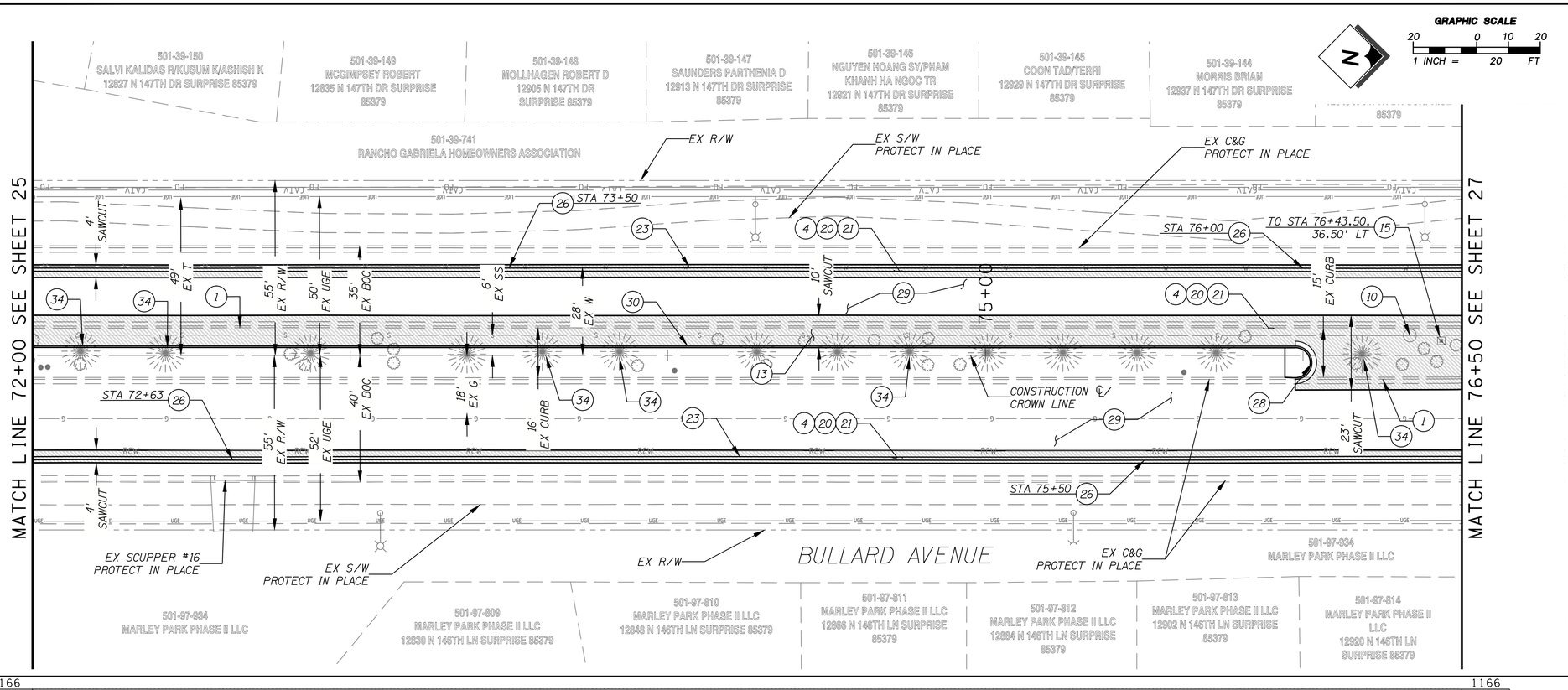
ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

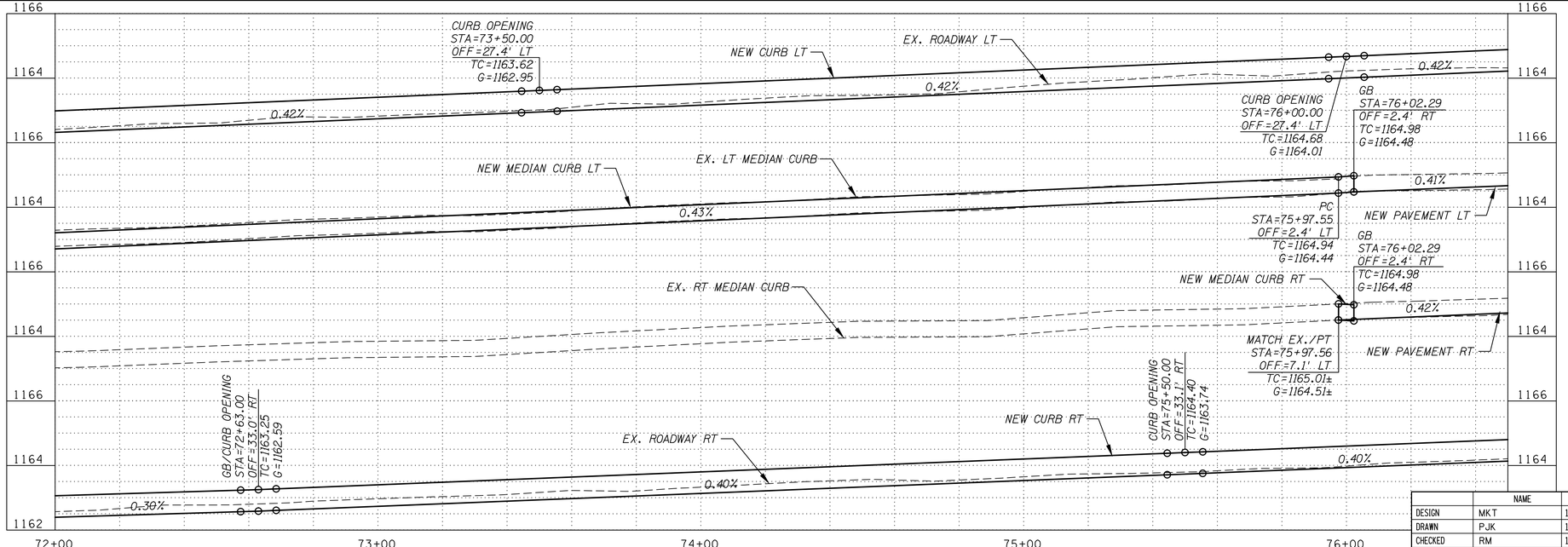
TRACS NO. T0063 01C | SUR-0(230)T | DWG NO. C-2.16 | OF

REGISTERED ENGINEER
37417
MATTHEW K. TSARK
Arizona U.S.A.
EXPIRES 3/31/20

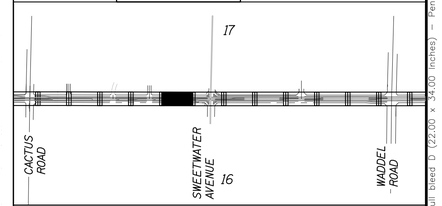
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kostler at 2/27/2018 7:36 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014074-06\CADD\production\Sheets\14074-06_PP-02.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	26	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	502
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	951
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
15	RELOCATE WATER METER, VALVE BOX & COVER. BID ITEM 8080638	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	214
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	169
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	11
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	29
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	398
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	6

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 72+00 TO STA 76+50

ROUTE	LOCATION	DWG NO. C-2.17
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

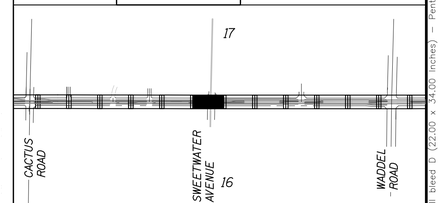
CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 12/27/17 Registered Professional Engineer State of Arizona U.S.A.
EXPIRES 3/31/20

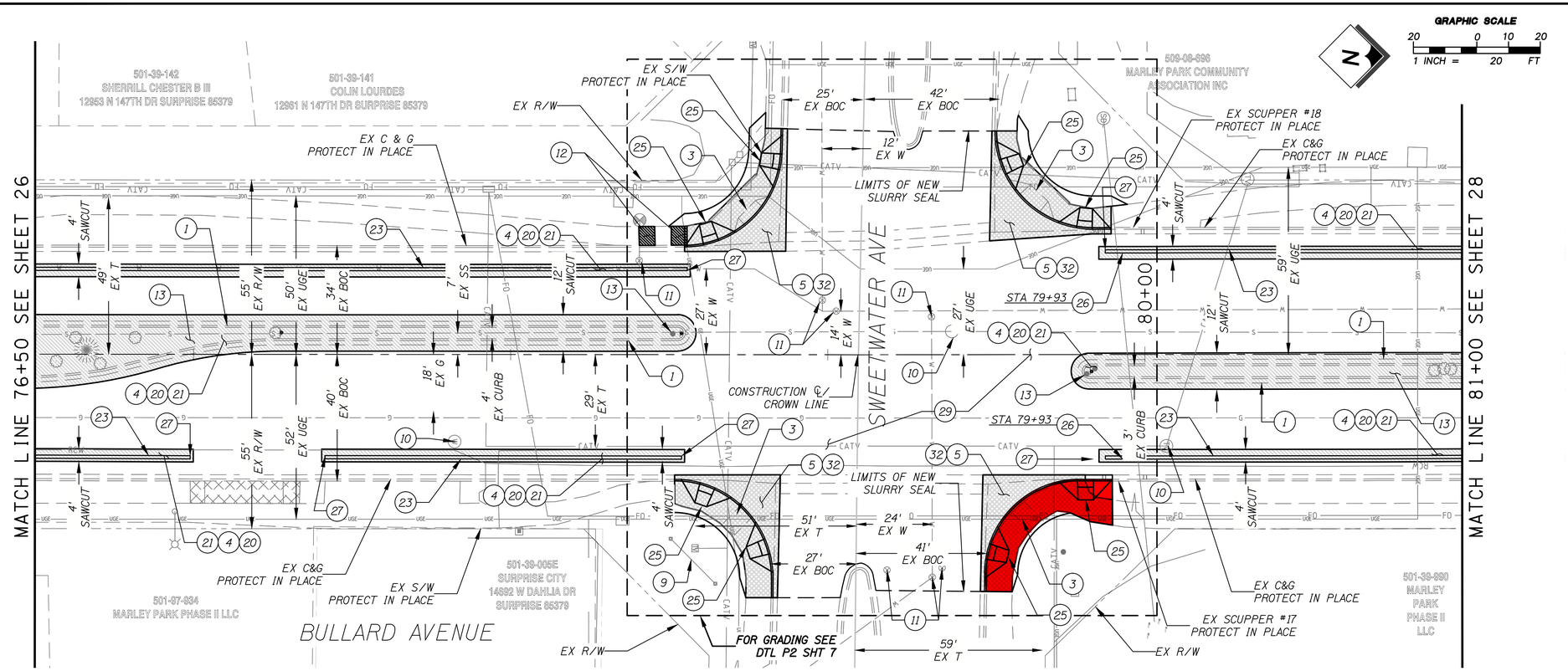
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

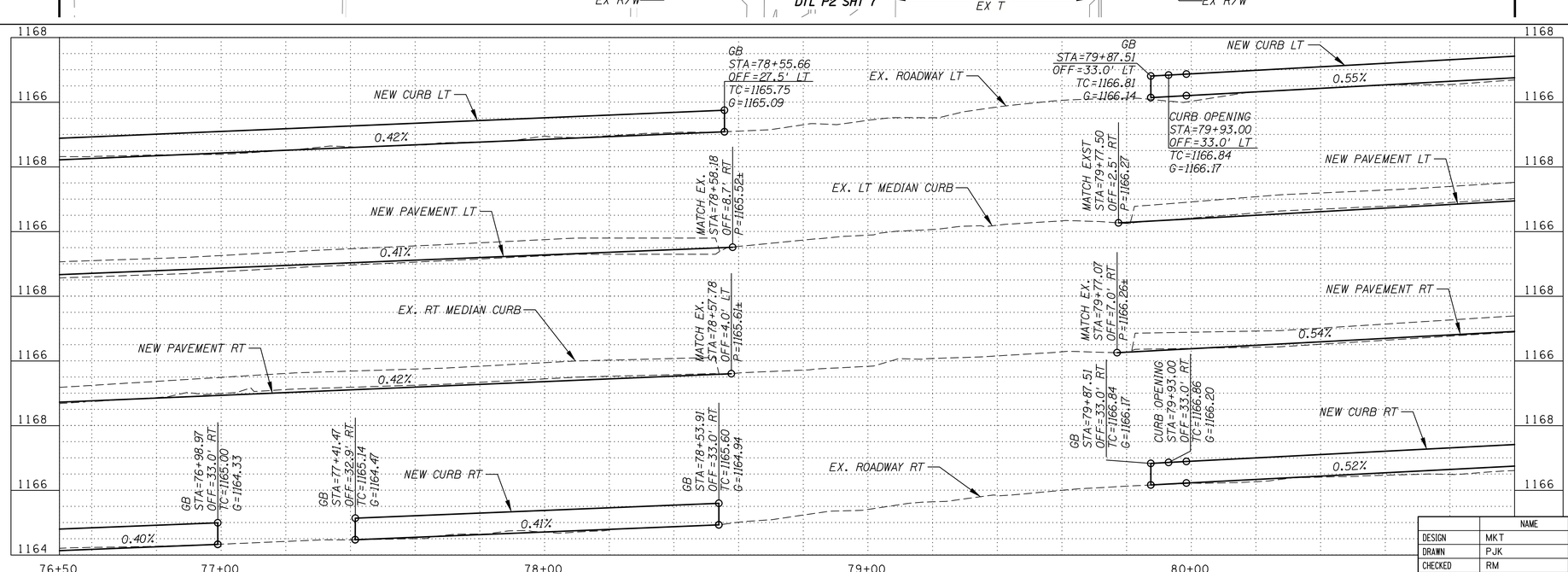
Plotted by Pat Kastler at 2/27/2018 7:37 AM on printer \\Plexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-02.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	27	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	656
3	SAWCUT & REMOVE CONCRETE SIDEWALK RAMP. BID ITEM 2020053	EA	4
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	754
5	SAWCUT & REMOVE CONCRETE VALLEY GUTTER APRON BID ITEM 2020025	SF	1248
9	REMOVE SWING GATE AND FOUNDATIONS. BID ITEM 2020155	EA	1
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	3
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	7
12	GRIND CONCRETE SIDEWALK TO LEVEL BID ITEM 9240117	SF	60
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	168
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	132
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	552
25	CONSTRUCT CONCRETE SIDEWALK RAMP PER COS STD DTL 3-11 & DTL P2, SHT 7 BID ITEM 9080296	EA	8
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	18
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	39
32	CONSTRUCT CONCRETE VALLEY GUTTER (APRON ONLY) PER MAG DET 240 BID ITEM 9080134	SF	1248

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 76+50 TO STA 81+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/29/18 Arizona U.S.A.
EXPIRES 3/31/20

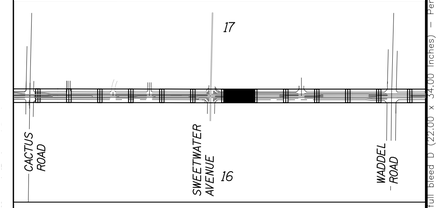
ROUTE	LOCATION	DWG NO. C-2.18
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

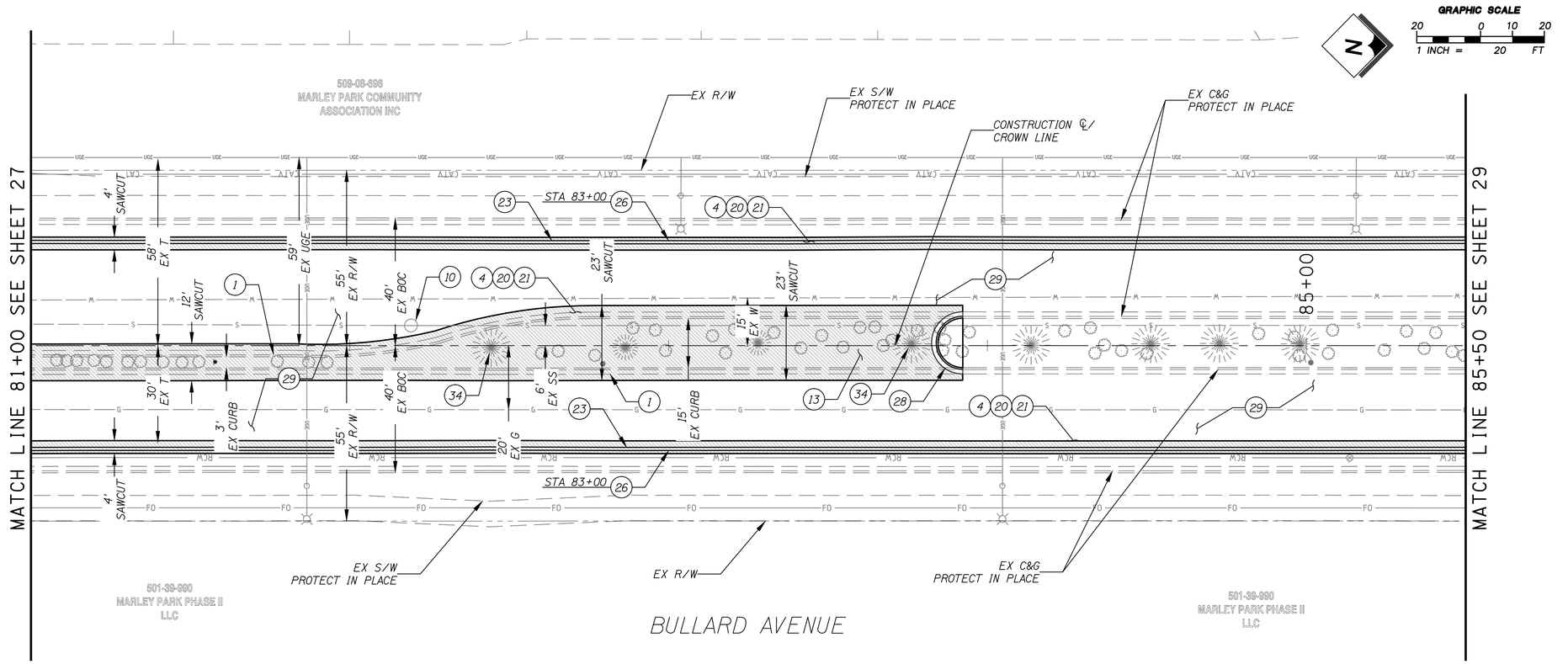
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

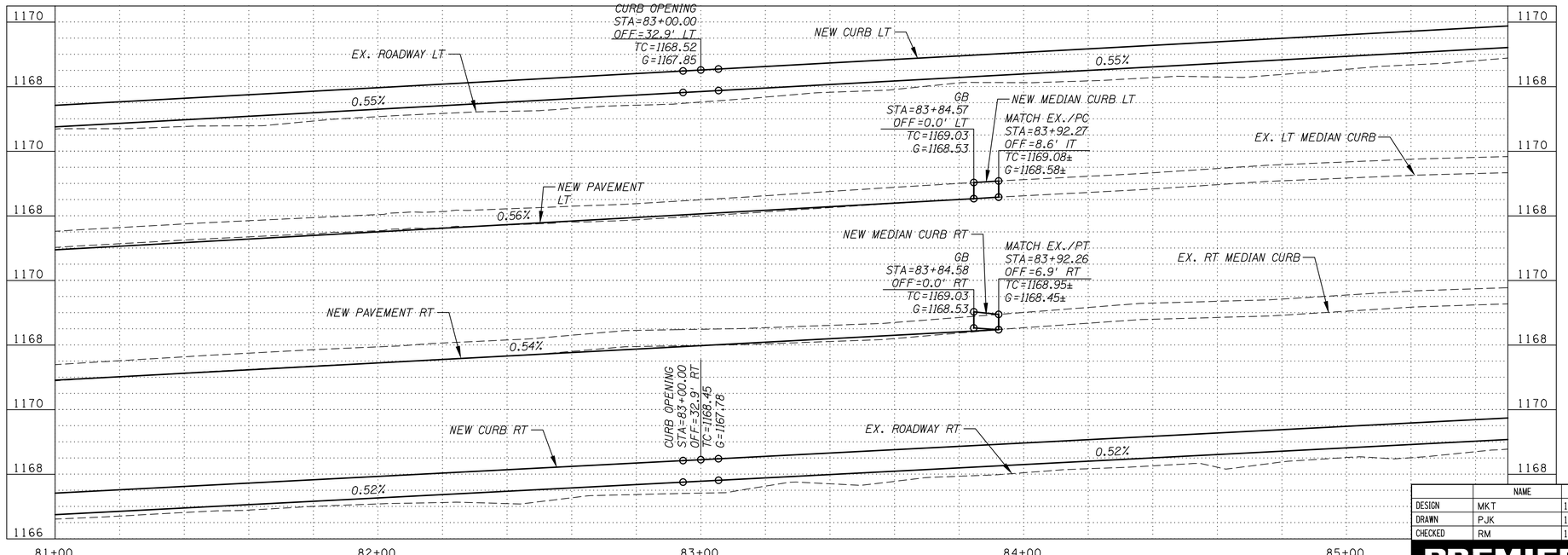
Plotted by Pat Kastler at 2/27/2018 7:38 AM on printer \\Nexus\LDWG to PDF.pc3 – Plotsizes: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06T_PP-02.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	28	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	586
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	968
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	218
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	171
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	878
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	17
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	37
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	2

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 81+00 TO STA 85+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date SIGNED 03/31/19 Arizona U.S.A.
EXPIRES 3/31/20

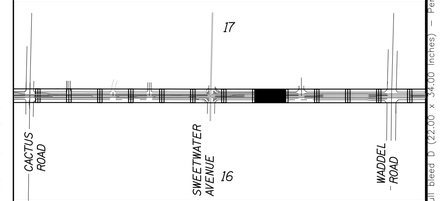
ROUTE	LOCATION	DWG NO. C-2.19
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

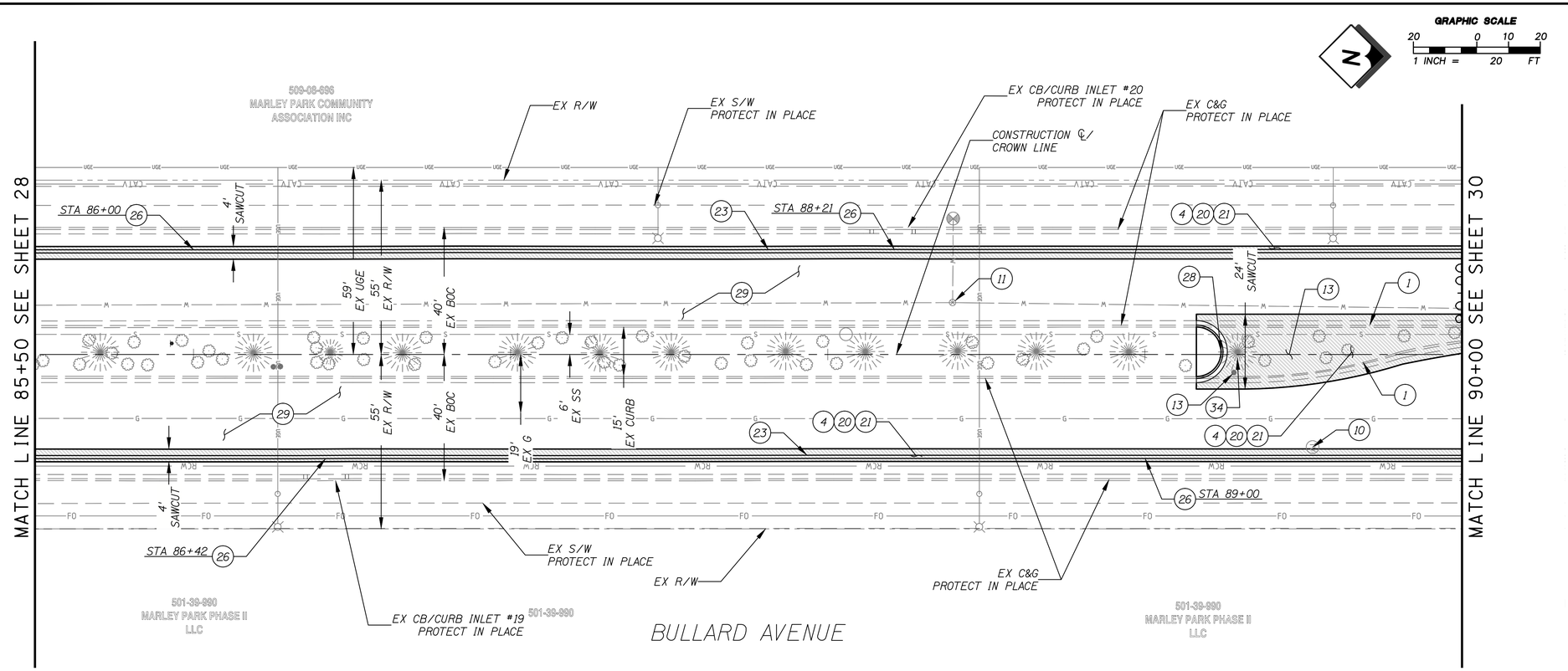
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by: Pat Kostler at 2/27/2018 7:59 AM on printer: \\Nexus\LWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penfolder: PREMIER.ctb

p:\2014014-06\CADD\production\sheets\14014-061_PP-02.dwg

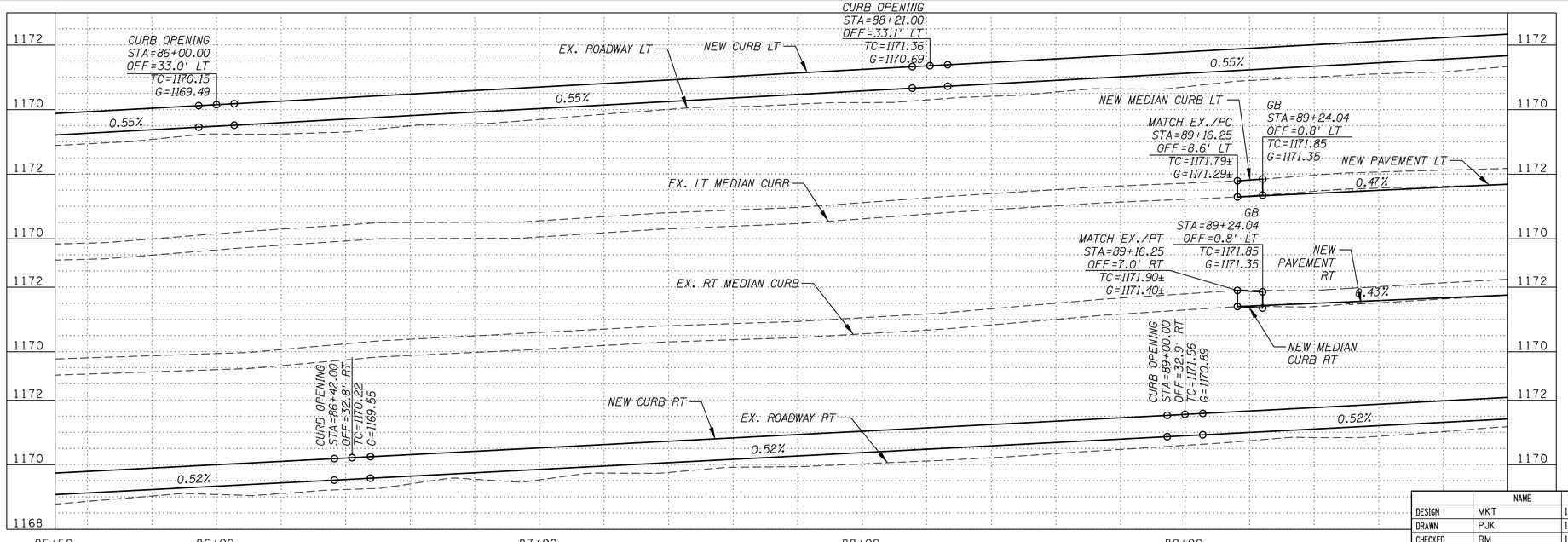
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	29	117	
		0000 MA SUR			





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	169
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	568
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	118
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	93
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	17
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	1



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

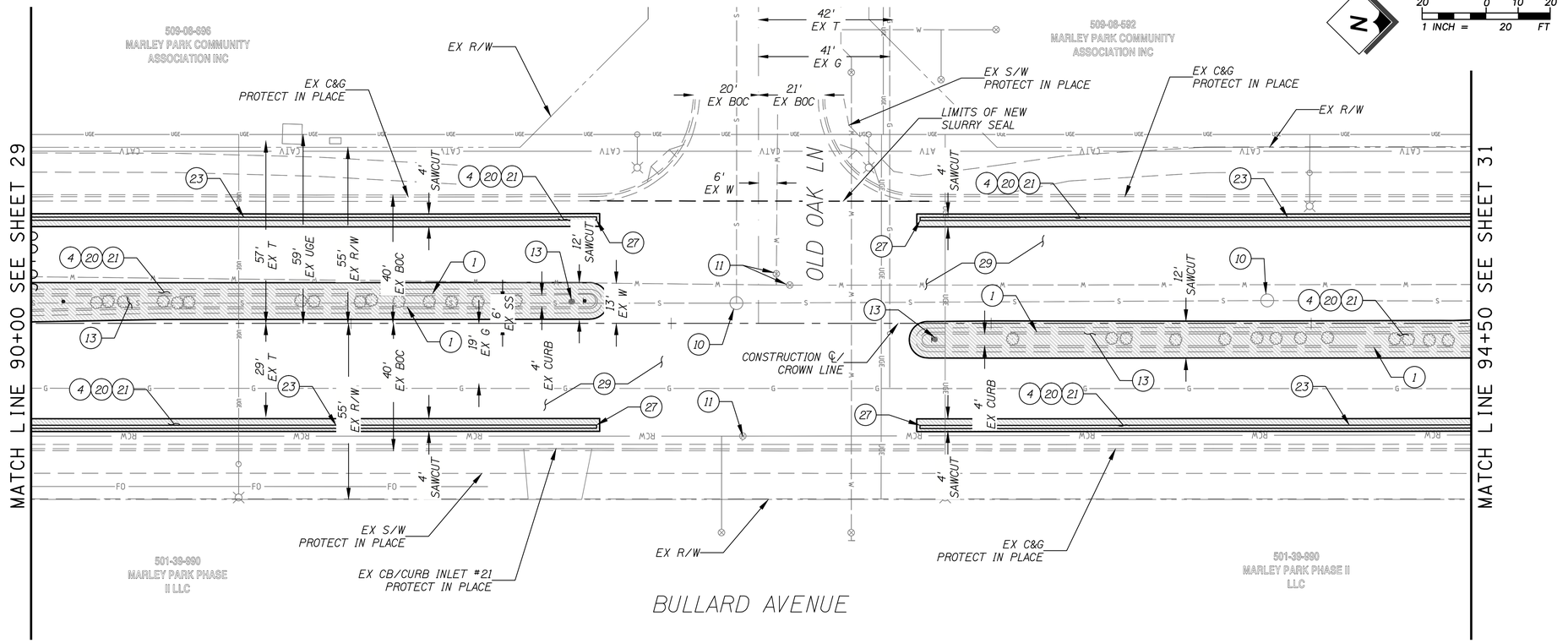
PAVING PLAN & PROFILE
STA 85+50 TO STA 90+00

CERTIFICATE NO. 37417 MATTHEW K. TSARK — EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. C-2.20
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

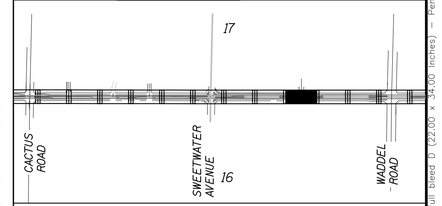
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:40 AM on printer \\nexus\DWG to PDF.pc3 - Plotsize: ANSI full bleed D (22.00 x 34.00 inches) - Penfile: PREMIER.ctb
p:\201404-06\CADD\production\Sheets\14014-06_PPP-02.dwg



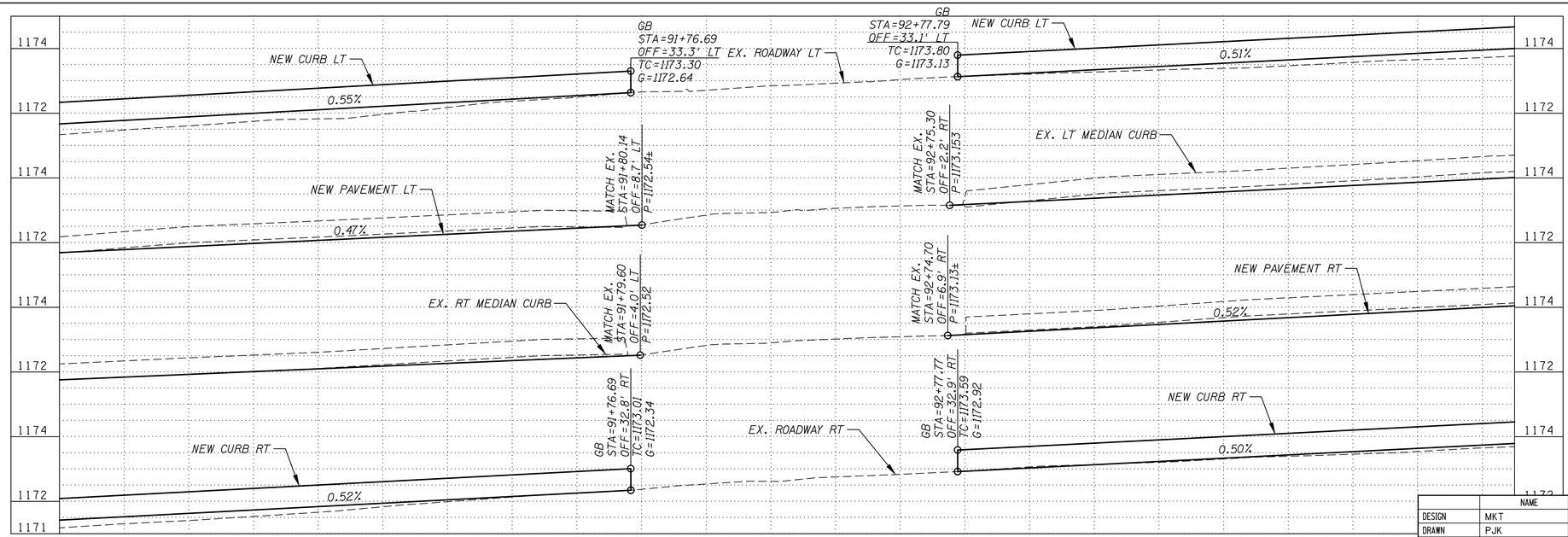
GRAPHIC SCALE
20 0 10 20
1 INCH = 20 FT

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	30	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	703
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	767
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	3
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	172
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	136
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	686
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	41



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 90+00 TO STA 94+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date SIGNED 08/31/18 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

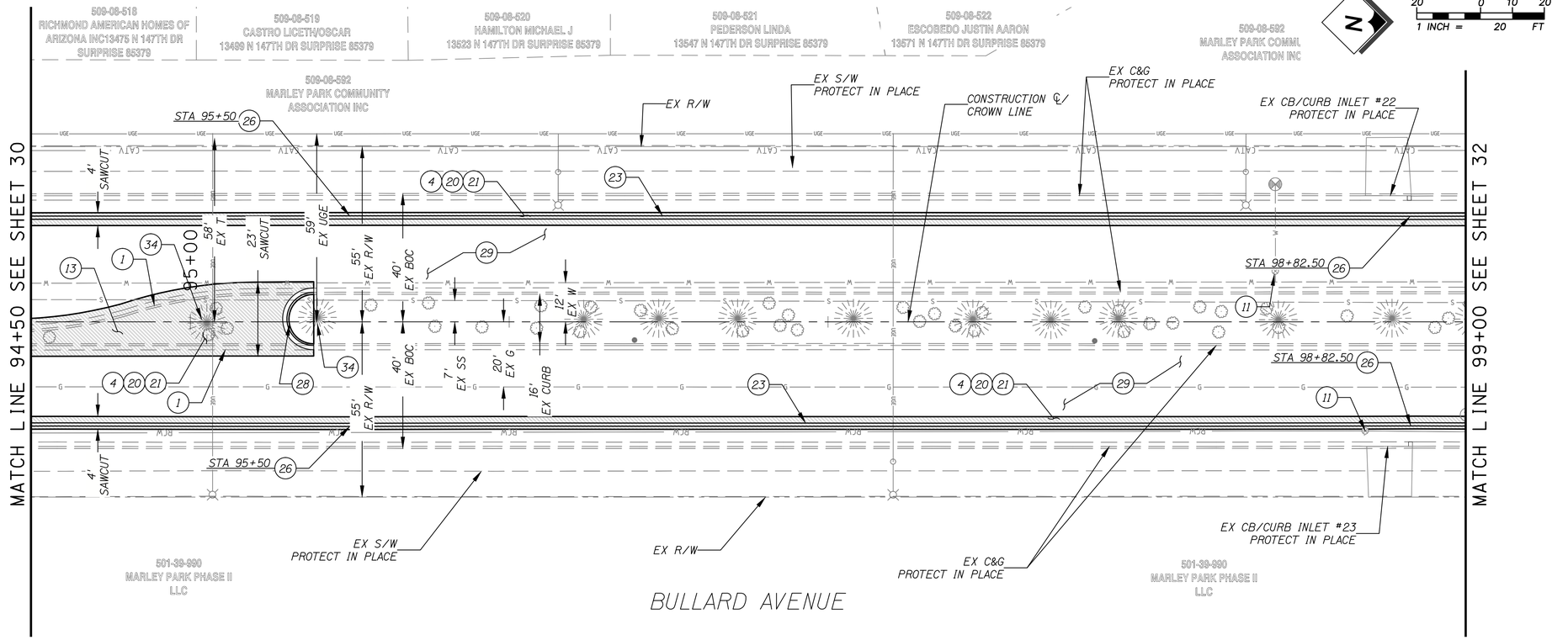
DWG NO. C-2.21

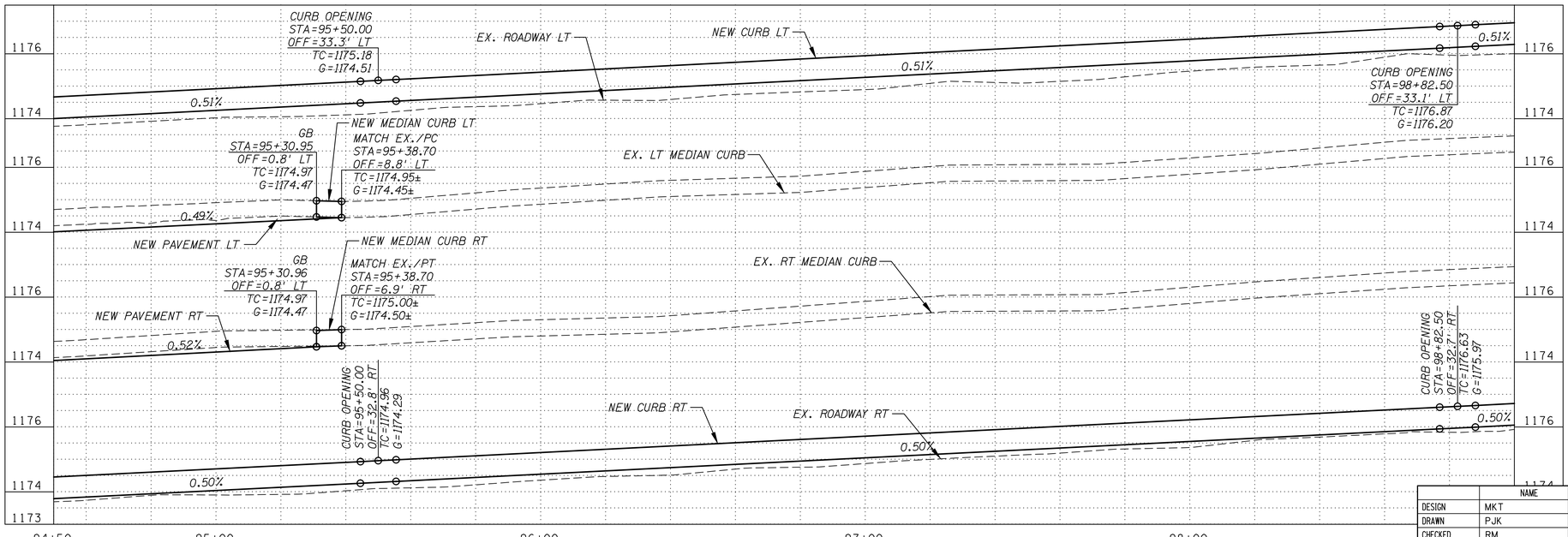
TRACS NO. T0063 01C | SUR-0(230)T | OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

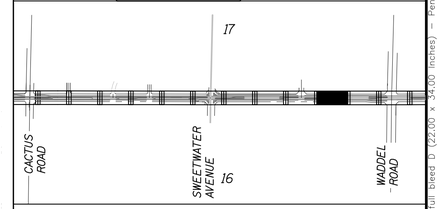
Plotted by Pat Kastler at 2/27/2018 7:40 AM on printer \\Plexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-02.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	31	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	179
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	572
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	119
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	94
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	16
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 20200065	EA	2

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 94+50 TO STA 99+00

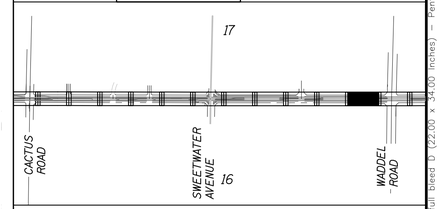
CERTIFICATE NO. 37417 MATTHEW K. TSARK
EXPIRES 3/31/20

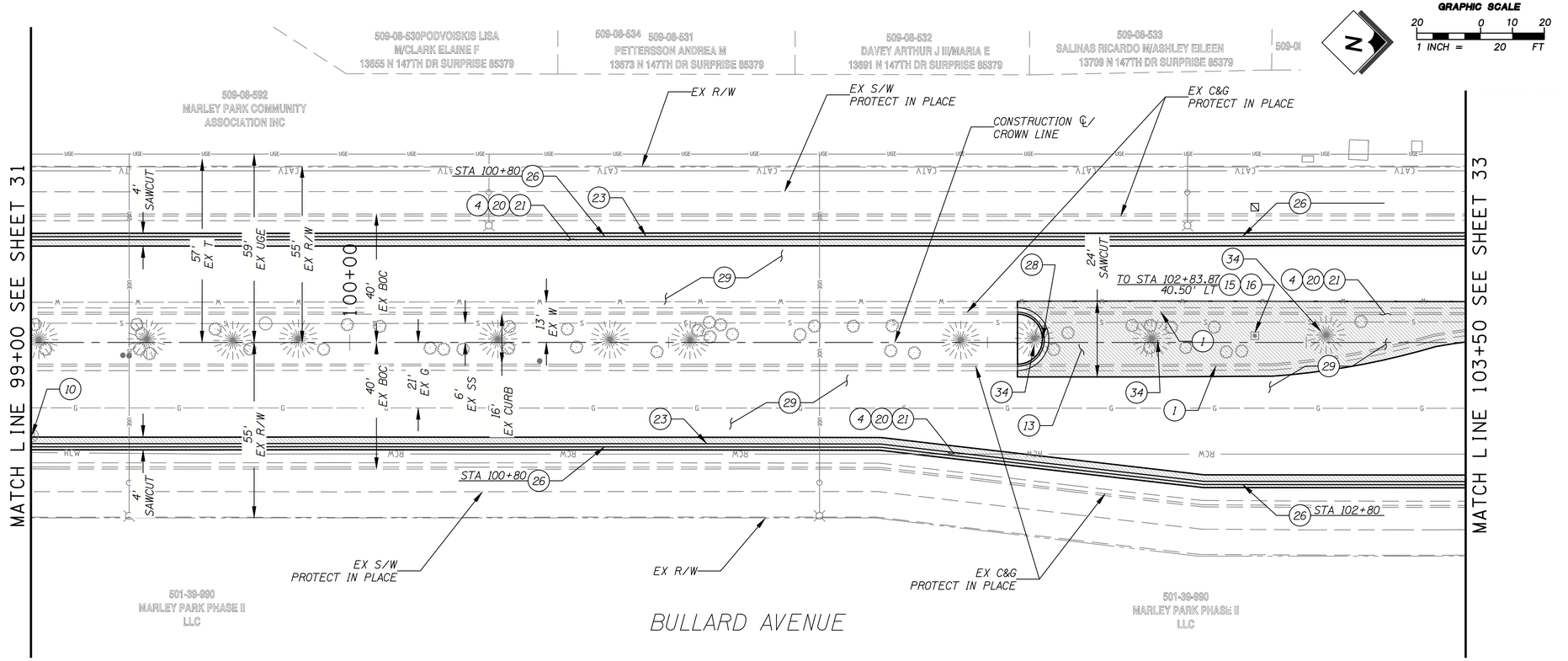
ROUTE	LOCATION	DWG NO. C-2.22
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

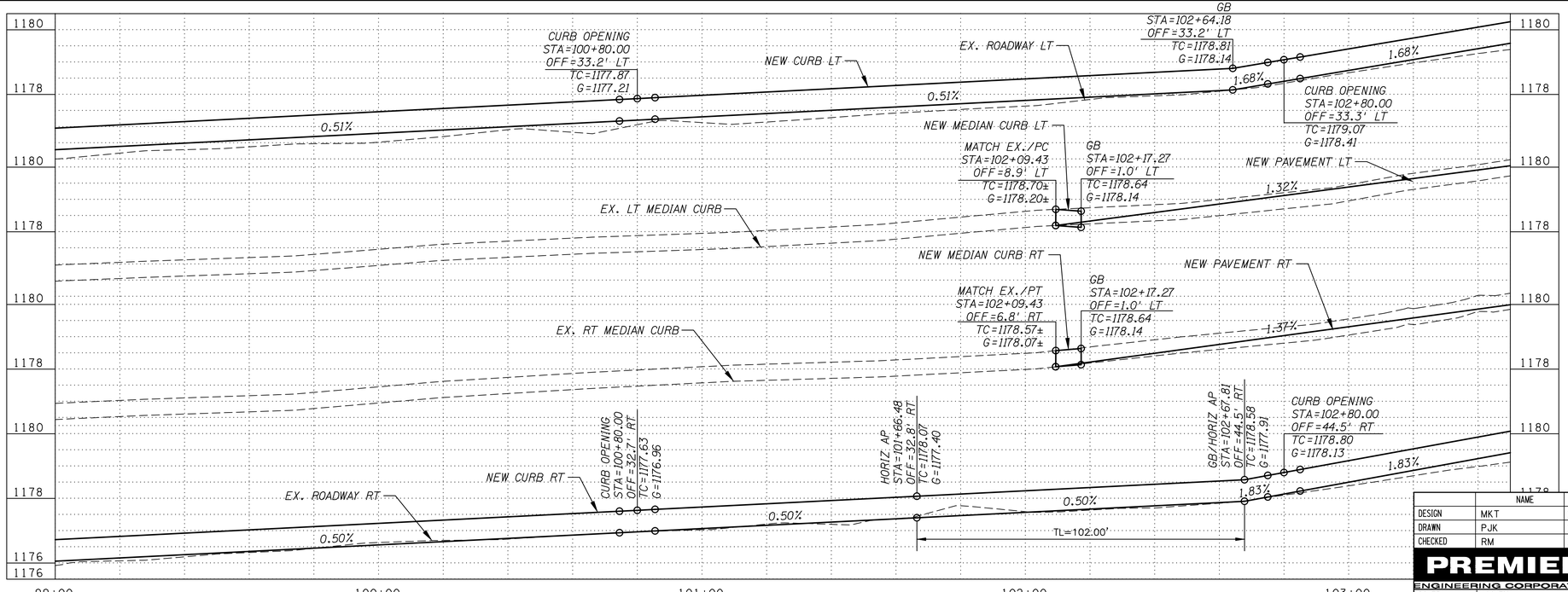
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:41 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06I_PP-02.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	32	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	282
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	720
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
15	RELOCATE WATER METER, VALVE BOX & COVER. BID ITEM 8080638	EA	1
16	RELOCATE BACKFLOW PREVENTOR & ENCLOSURE BID ITEM 8080203	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	155
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	123
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	857
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	17
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	35
34	REMOVE EXISTING TREE, BACKFILL & COMPACT, SEE NOTE 7 & 8, SHT 3 BID ITEM 2020065	EA	3

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 99+00 TO STA 103+50

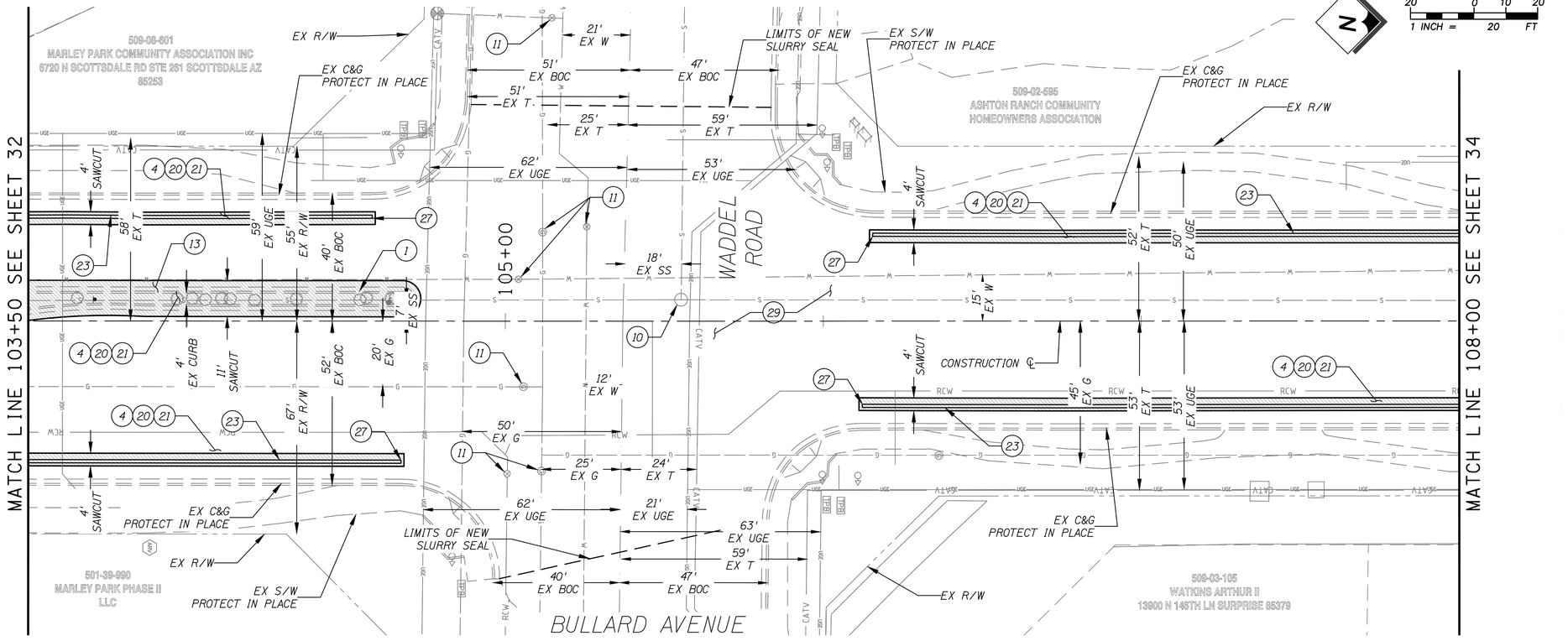
ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

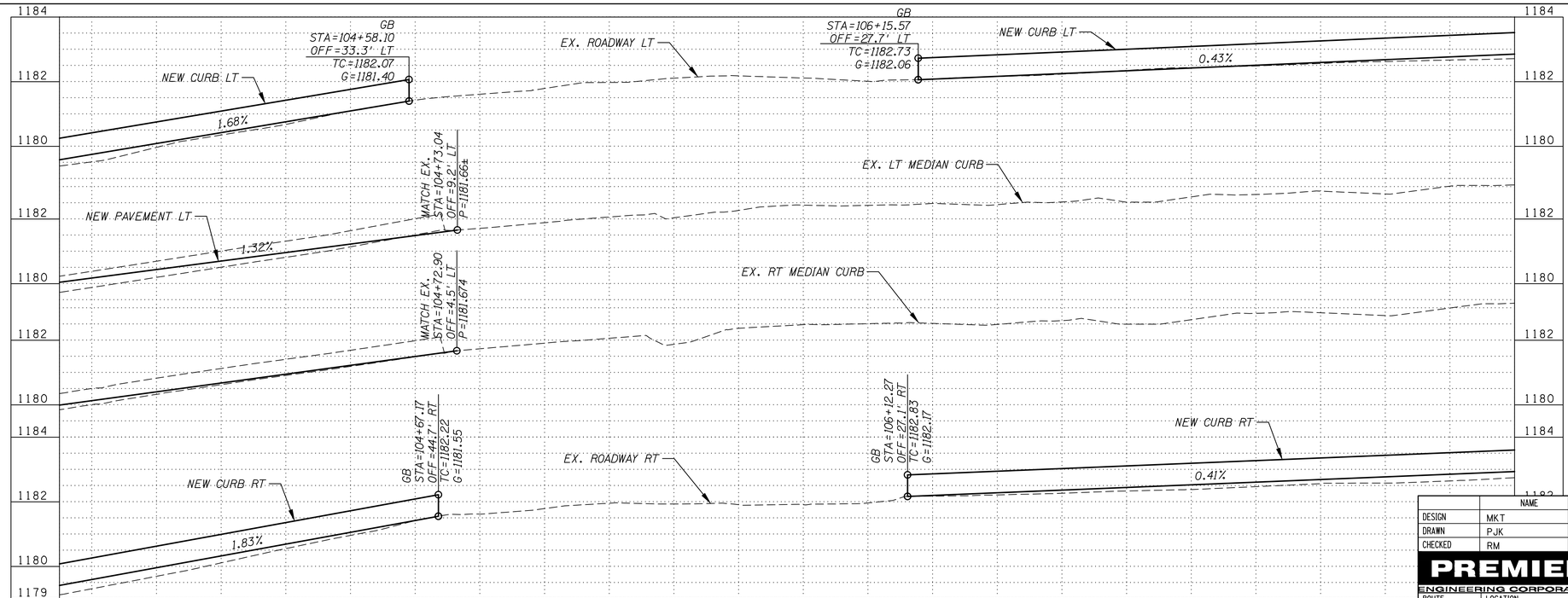
TRACS NO. T0063 01C | SUR-0(230)T | DWG NO. C-2.23 | OF

REGISTERED PROFESSIONAL ENGINEER (CIVIL)
CERTIFICATE NO.
37417
MATHEW K. TSARK
Date Signed 12/17/18
Arizona U.S.A.
EXPIRES 3/31/20

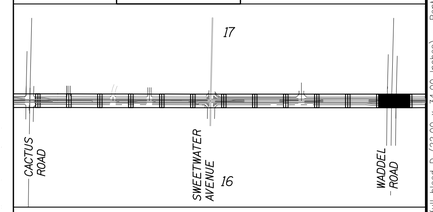
DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:42 AM on printer \\Nexus\VWC to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) – Penfolder: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-061_PP-02.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	33	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
1	SAWCUT & REMOVE CONCRETE CURB & GUTTER TO NEAREST JOINT. BID ITEM 2020021	LF	243
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	422
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	7
13	MODIFY EXISTING MEDIAN IRRIGATION SYSTEM BID ITEM 8080003	LS	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	89
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	70
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	586
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	48

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 103+50 TO STA 108+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATHEW K. TSARK Date Signed 12/31/19 Arizona U.S.A. EXPIRES 3/31/20

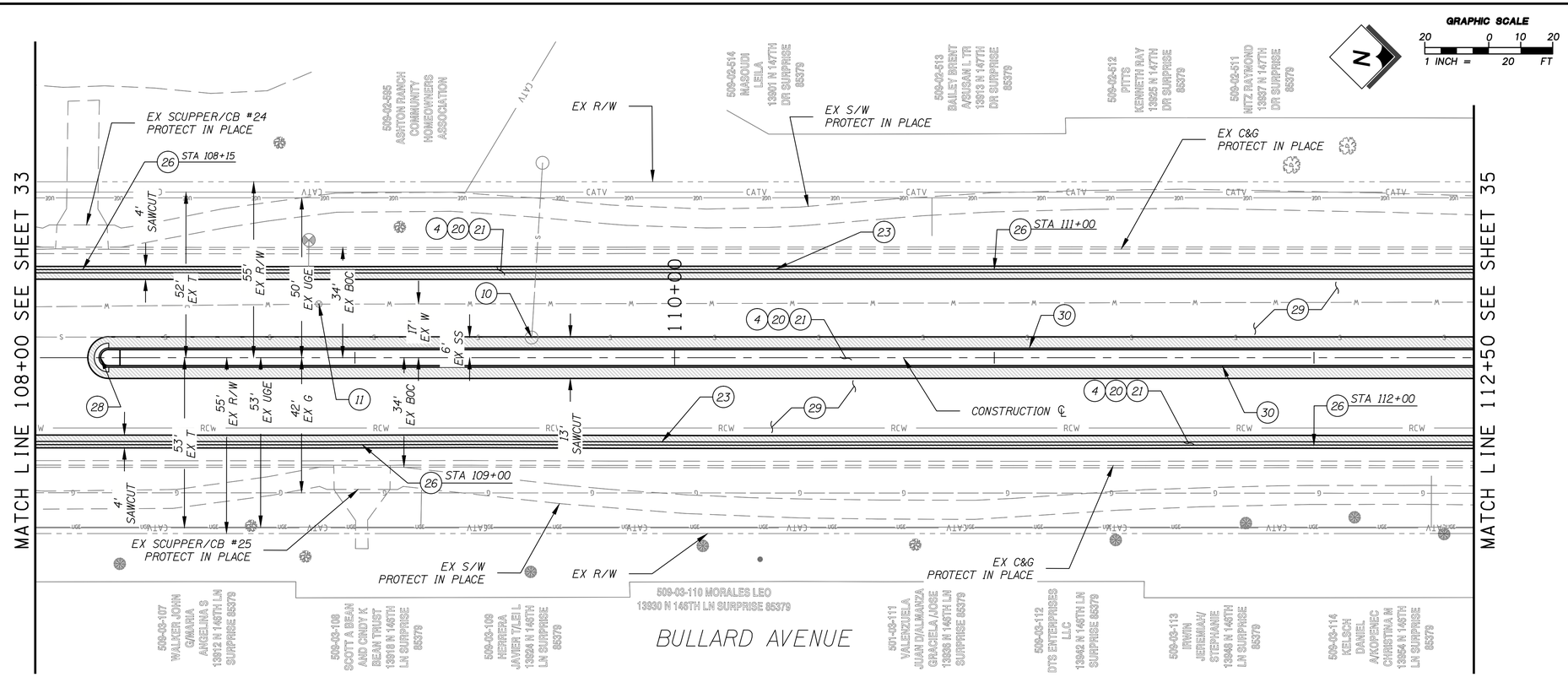
ROUTE	LOCATION	DWG NO. C-2.24
TRACS NO. T0063 01C	SUR-0(230)T	OF

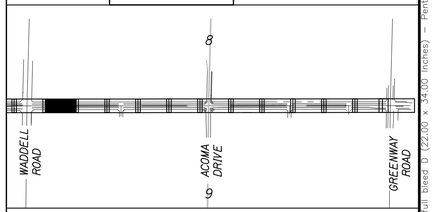
BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:43 AM on printer \\nexus\VOWG To PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) — Pentable: PREMIER.ctb

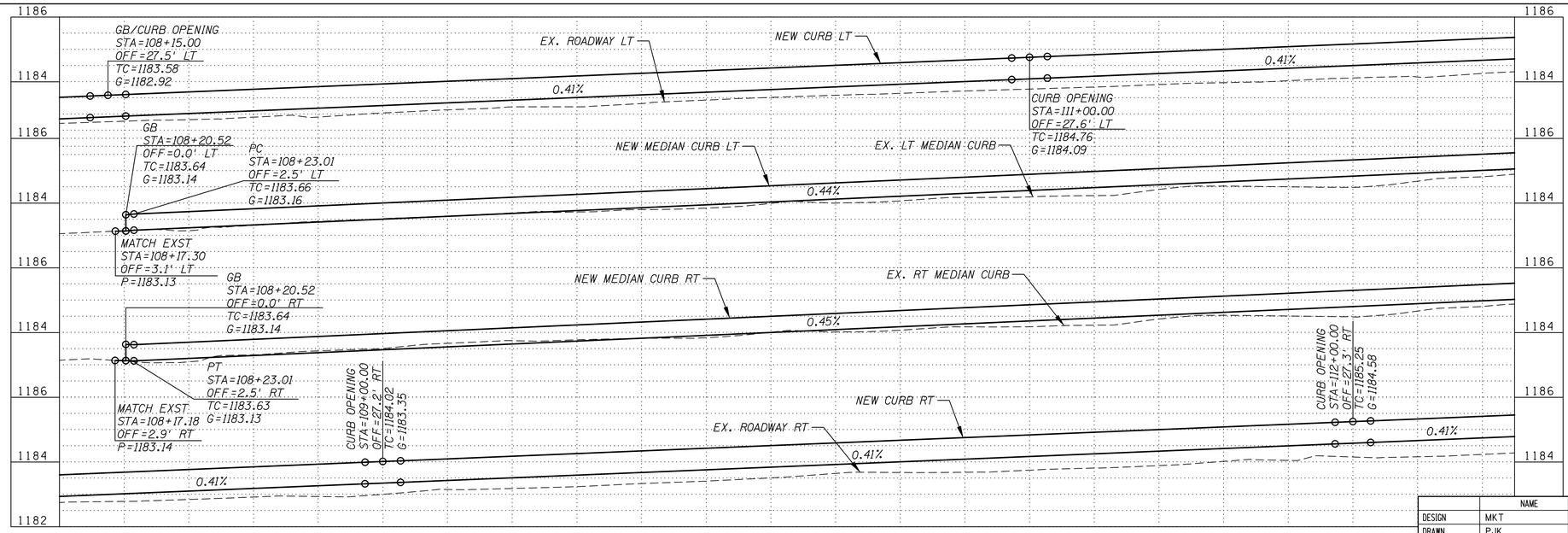
p:\2014014-06\CADD\production\Sheets\14014-06T_PP-02.dwg





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	1024
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
(11)	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	232
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	183
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
(28)	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	6
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31
(30)	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	853



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 108+00 TO STA 112+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

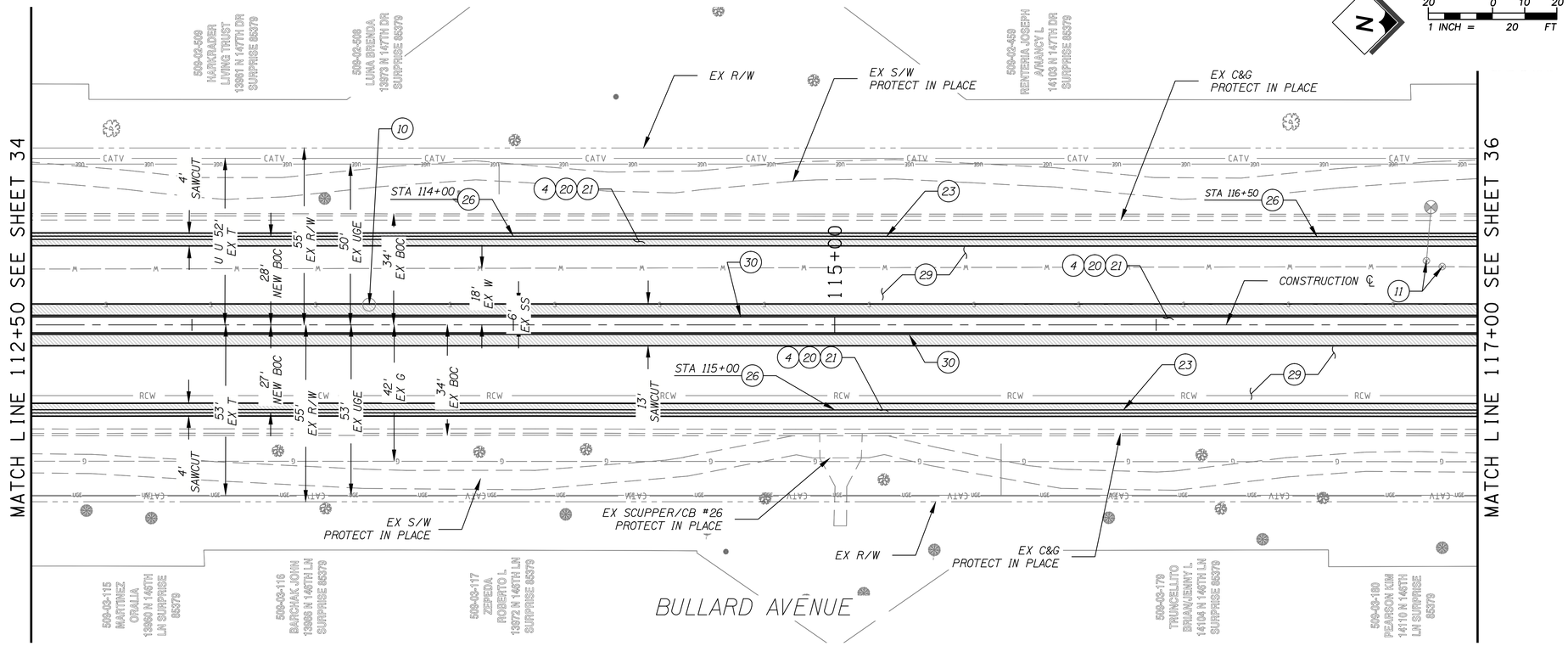
ROUTE	LOCATION	DWG NO. C-2.25
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

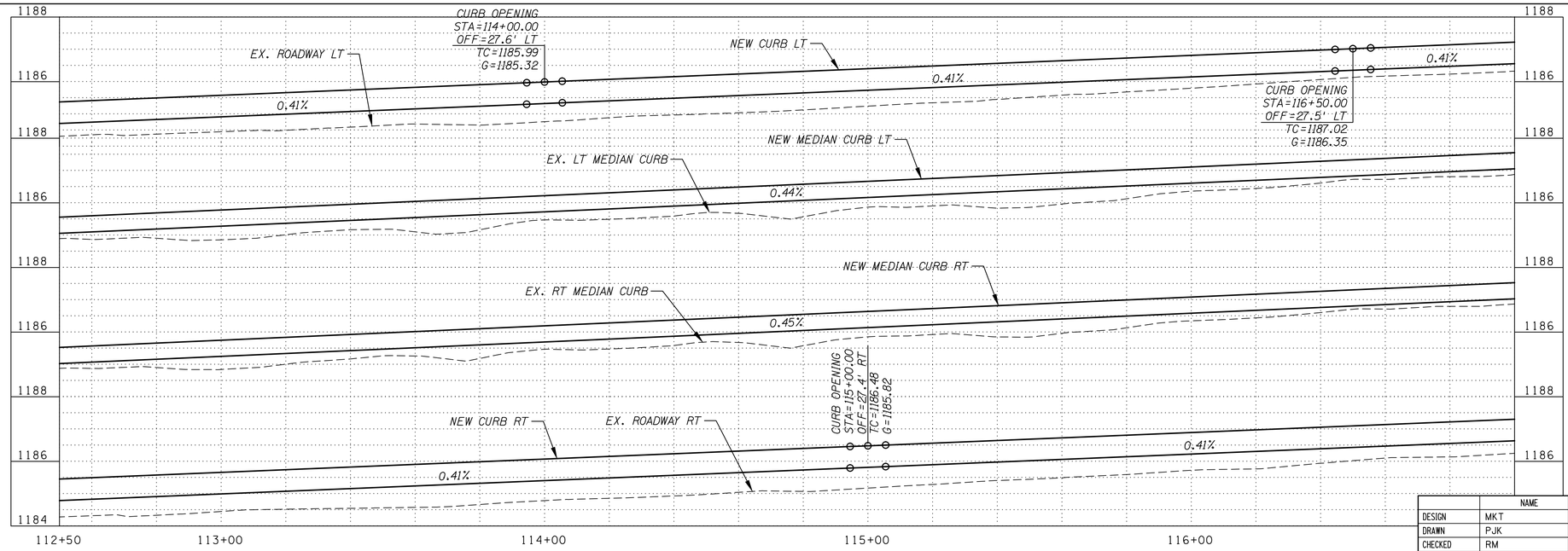
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	34	117	
		0000 MA SUR			

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

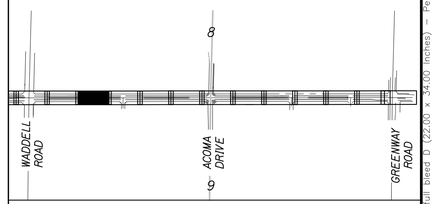
Plotted by Pat Kastler at 2/27/2018 7:44 AM on printer \\Nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	35	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	1050
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	238
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	188
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	867
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	3
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	900

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 112+50 TO STA 117+00

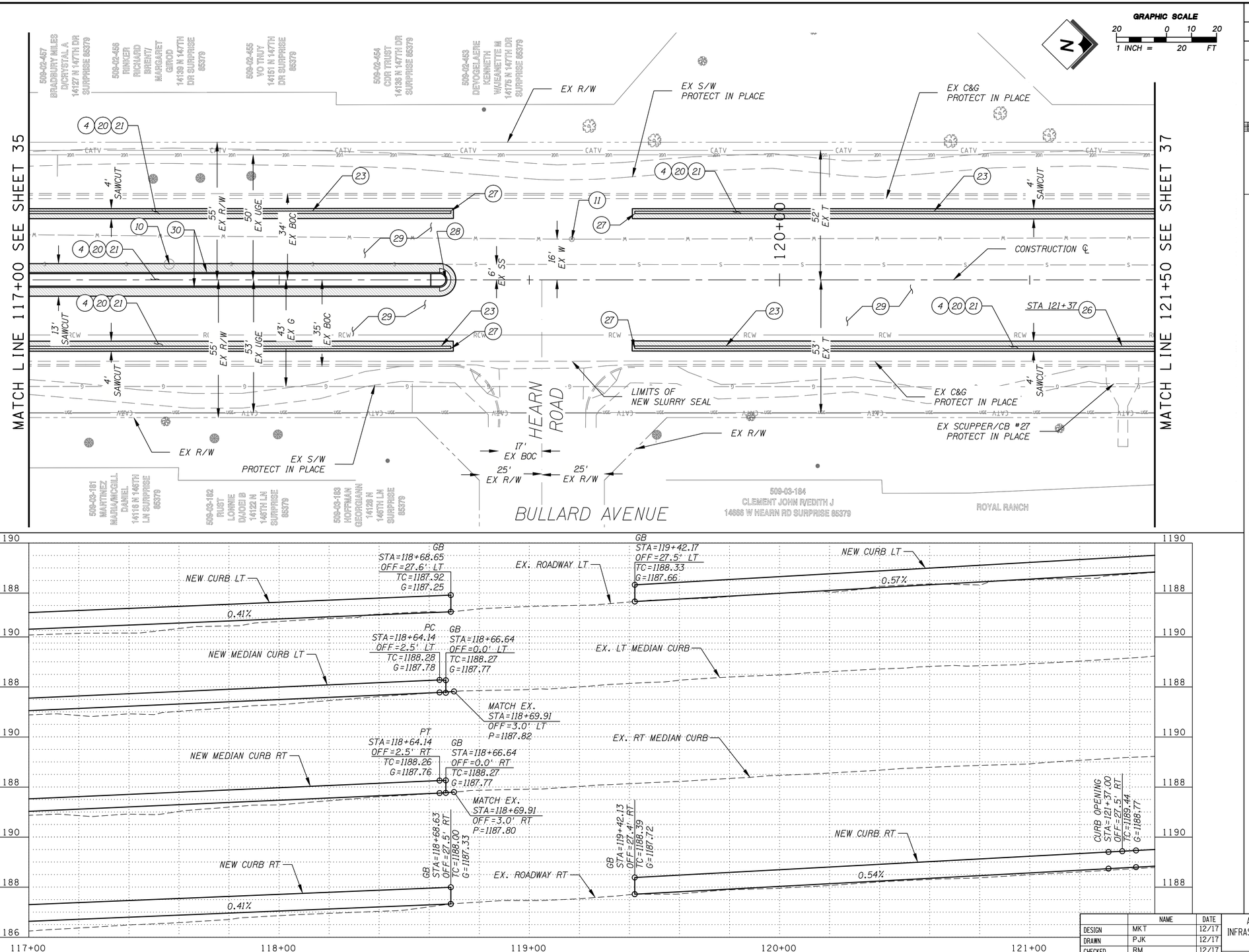
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. C-2.26
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

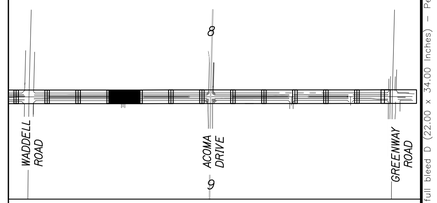
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

Plotted by Pat Kastler at 2/27/2018 7:45 AM on printer \\Prexus\DWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06I_PP-03.dwg



F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	36	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	581
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	125
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	98
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	730
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	1
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	6
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	34
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	328

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or dial Arizona811.com

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 117+00 TO STA 121+50

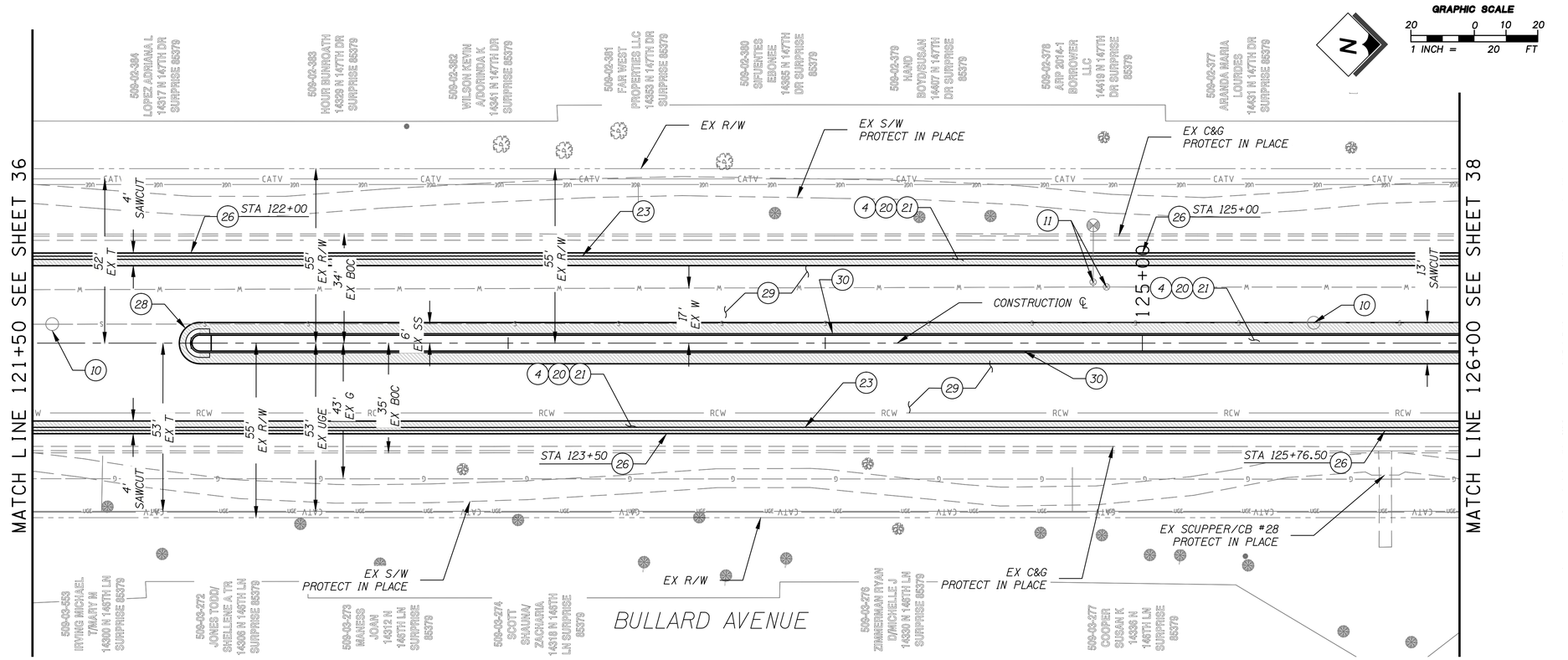
ROUTE	LOCATION	DWG NO. C-2.27
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

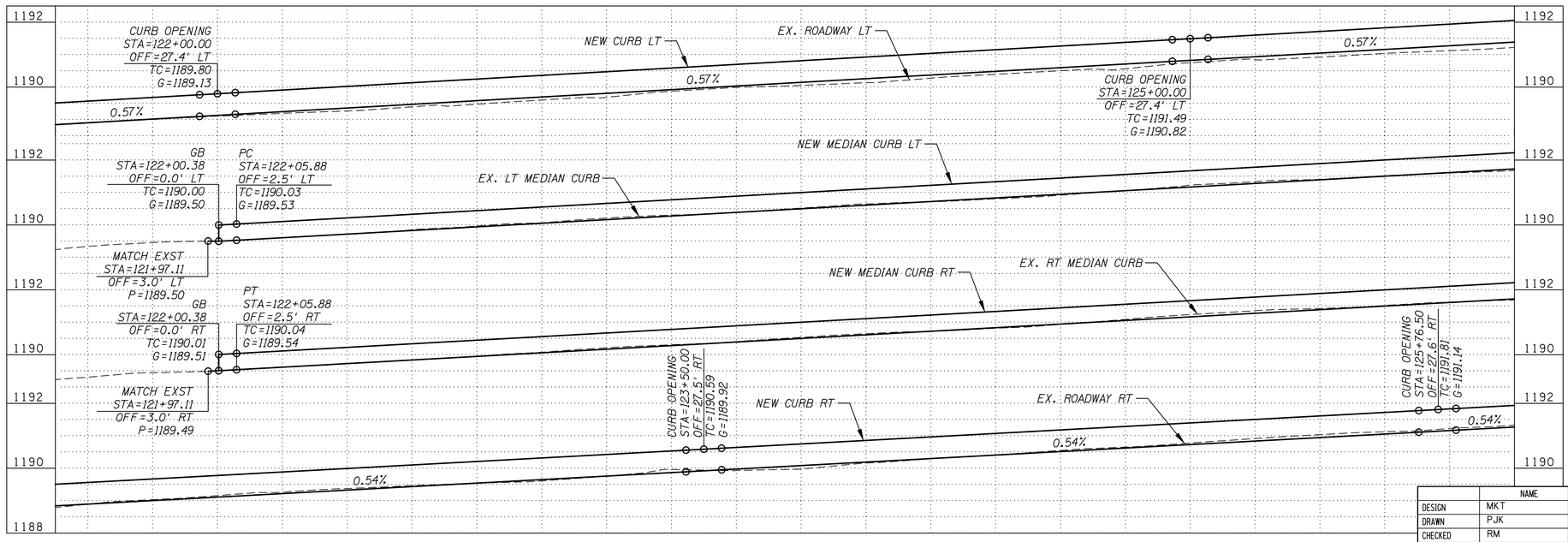
CERTIFICATE NO. 37417 MATTHEW K. TSARK
DATE SIGNED 12/27/18
Arizona U.S.A.
EXPIRES 3/31/20

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

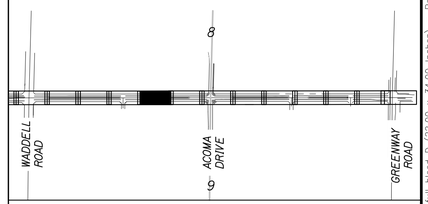
Plotted by Pat Kastler at 2/27/2018 7:46 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06I_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	37	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	981
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
(11)	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	221
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	174
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
(28)	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32
(30)	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	788

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 121+50 TO STA 126+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/21/18 Arizona U.S.A. EXPIRES 3/31/20

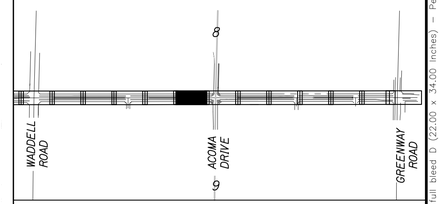
ROUTE	LOCATION	DWG NO. C-2.28
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

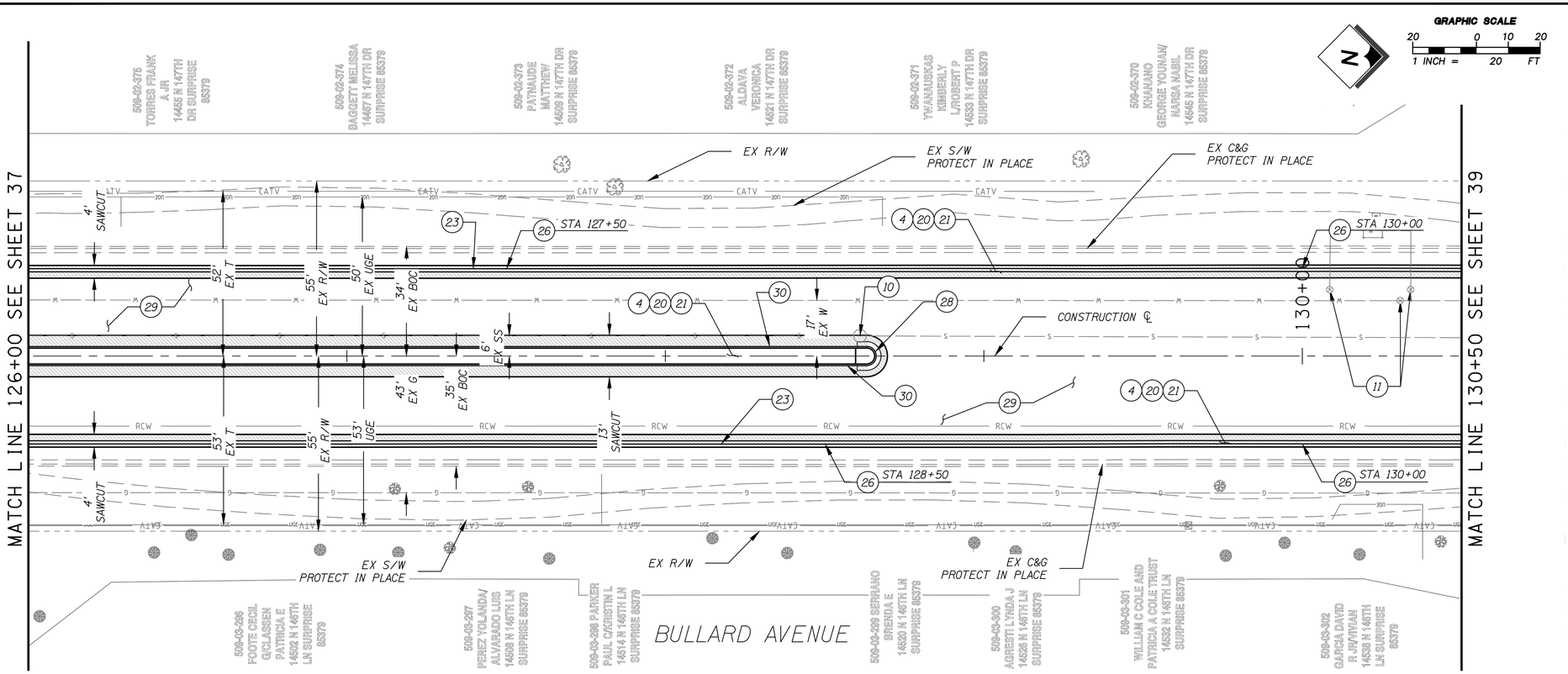
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:47 AM on printer \\nexus\DWG To PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06T_PP-03.dwg

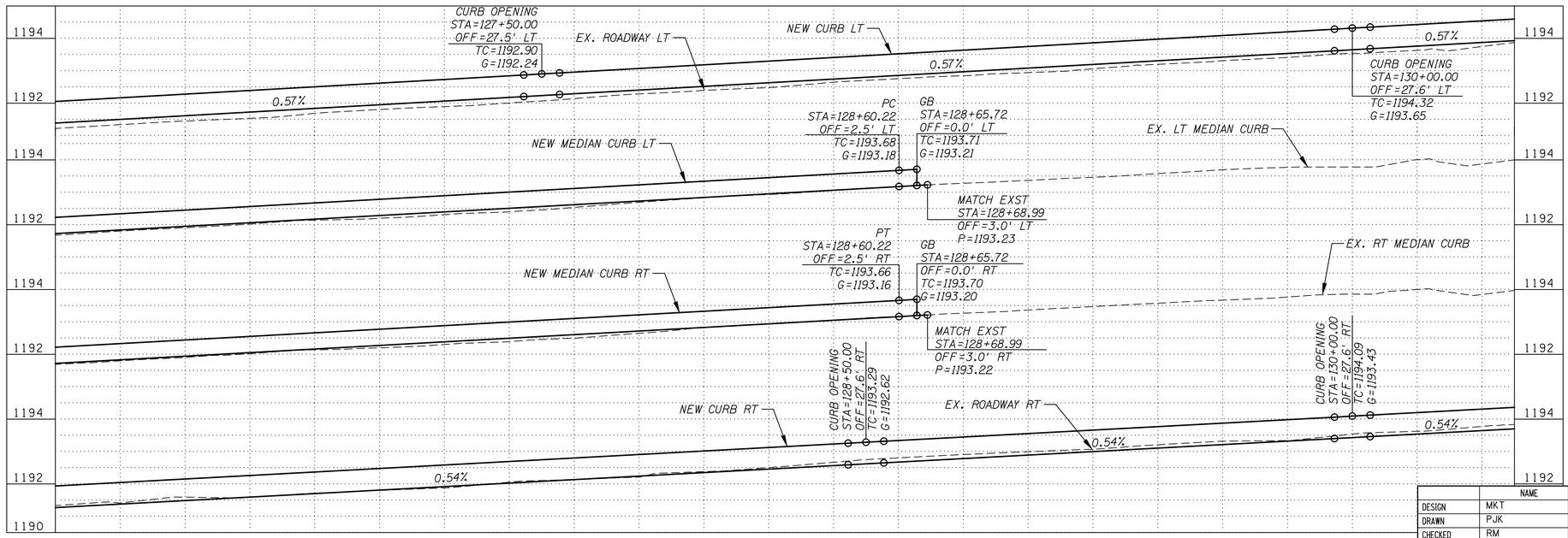
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	38	117	
		0000 MA SUR			





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	788
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	3
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	173
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	136
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	33
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	520



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 126+00 TO STA 130+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A.
EXPIRES 3/31/20

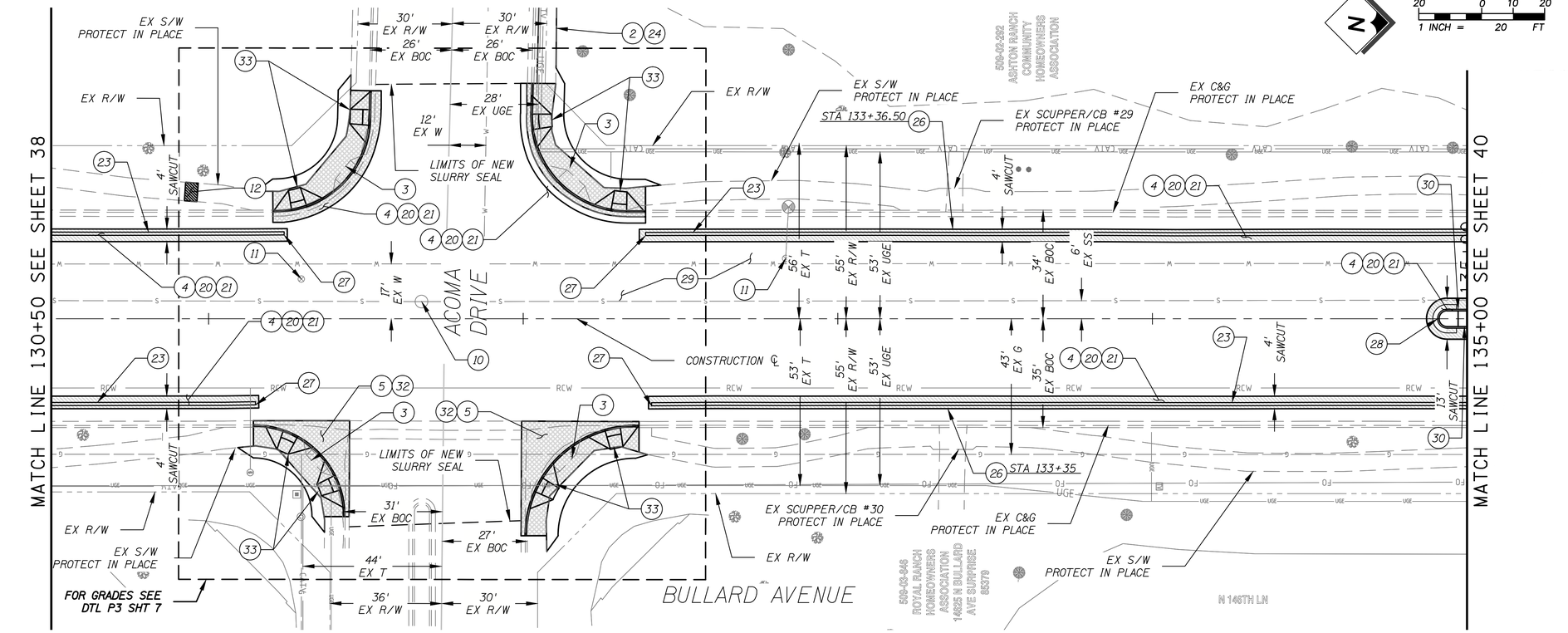
ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

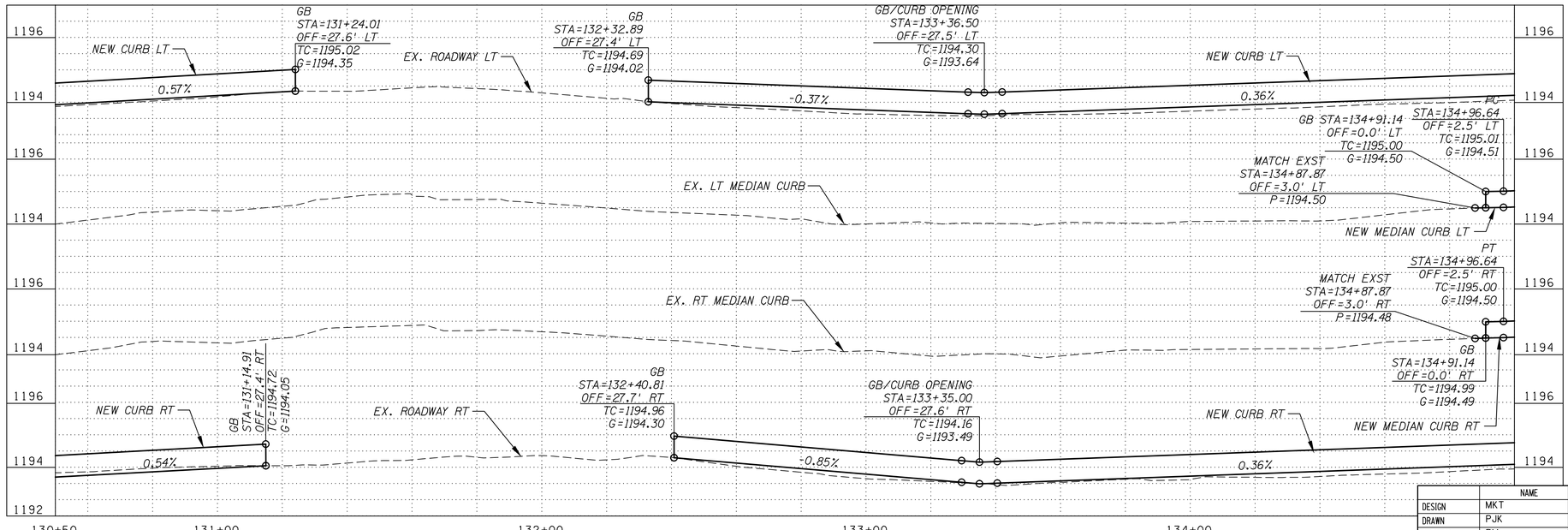
DWG NO. C-2.29

TRACS NO. T0063 01C | SUR-0(230)T | OF

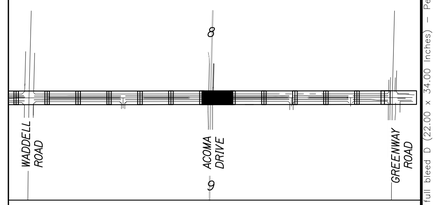
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:47 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	39	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(2)	SAWCUT & REMOVE CONCRETE SIDEWALK TO NEAREST JOINT. BID ITEM 2020025	SF	356
(3)	SAWCUT & REMOVE CONCRETE SIDEWALK RAMP. BID ITEM 2020053	EA	4
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	311
(5)	SAWCUT & REMOVE CONCRETE VALLEY GUTTER APRON BID ITEM 2020025	SF	616
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
(11)	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
(12)	GRIND CONCRETE SIDEWALK TO LEVEL BID ITEM 9240117	SF	24
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	60
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	48
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	625
(24)	CONSTRUCT CONCRETE SIDEWALK PER MAG DET. 230 BID ITEM 9080241	SF	356
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
(27)	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
(28)	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	40
(30)	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	7
(32)	CONSTRUCT CONCRETE VALLEY GUTTER (APRON ONLY) PER MAG DET 240 BID ITEM 9080134	SF	616
(33)	CONSTRUCT CONCRETE SIDEWALK RAMP PER COS STD DTL 3-11 & DTL P3, SHT 7 BID ITEM 9080296	EA	8

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 130+50 TO STA 135+00

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

DWG NO. C-2.30

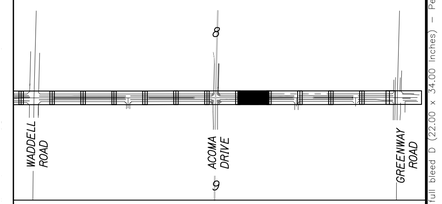
OF

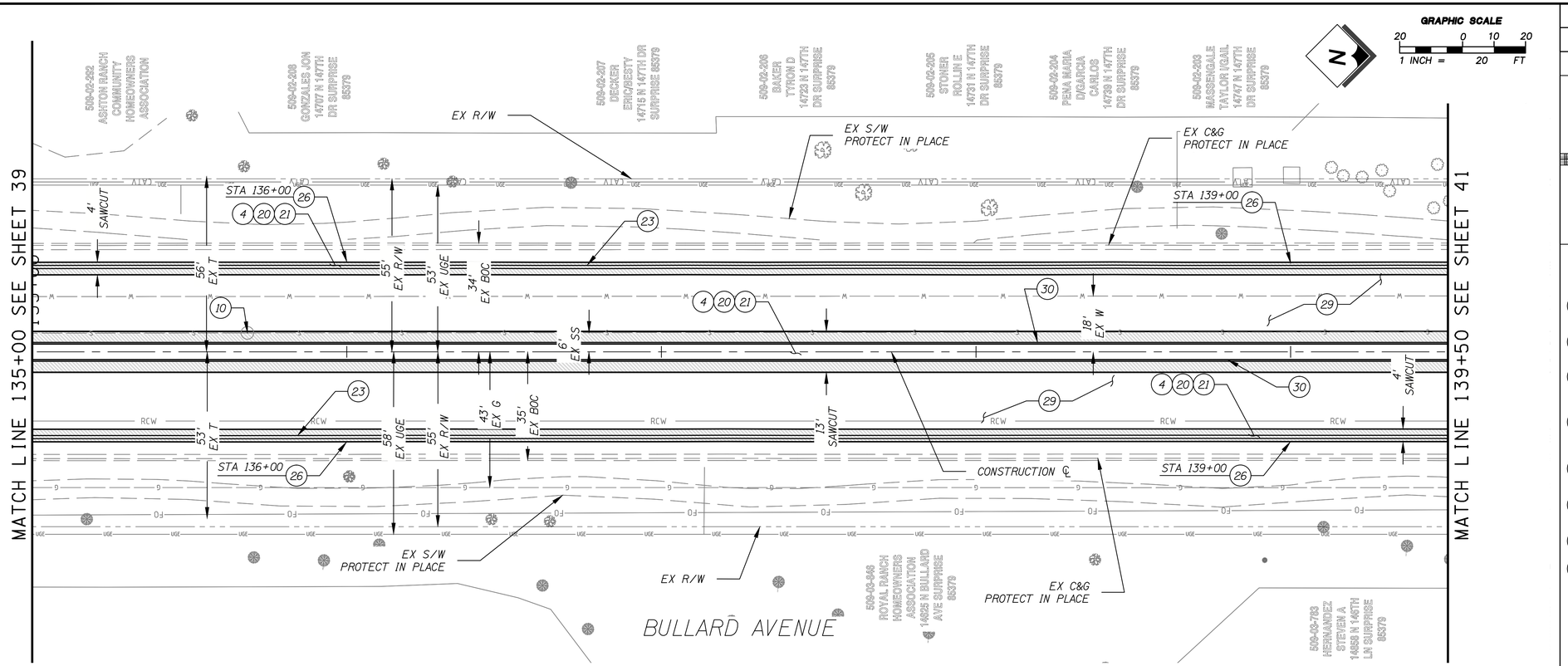
37417 MATTHEW K. TSARK — EXPIRES 3/31/20

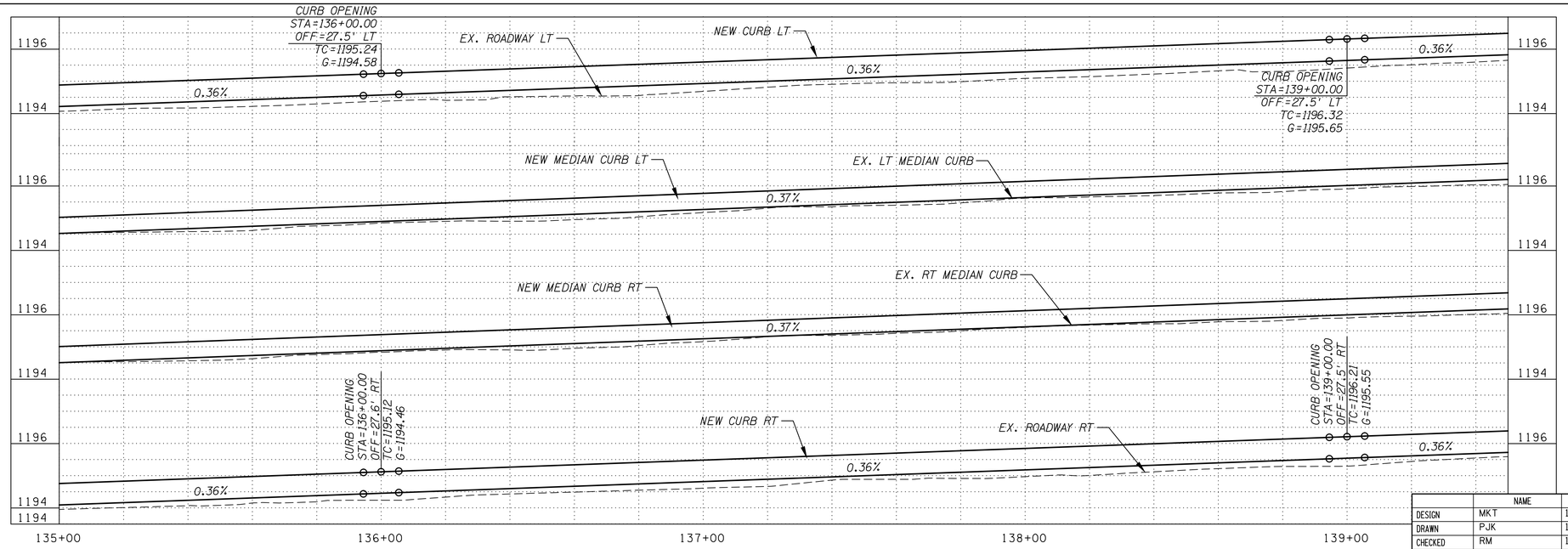
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:48 AM on printer \\nexus\DWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penfobie: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-061_PP-03.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	40	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	1050
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	239
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	188
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	856
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	31
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	900

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or dial: Arizona811.com

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 135+00 TO STA 139+50

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/21/18 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

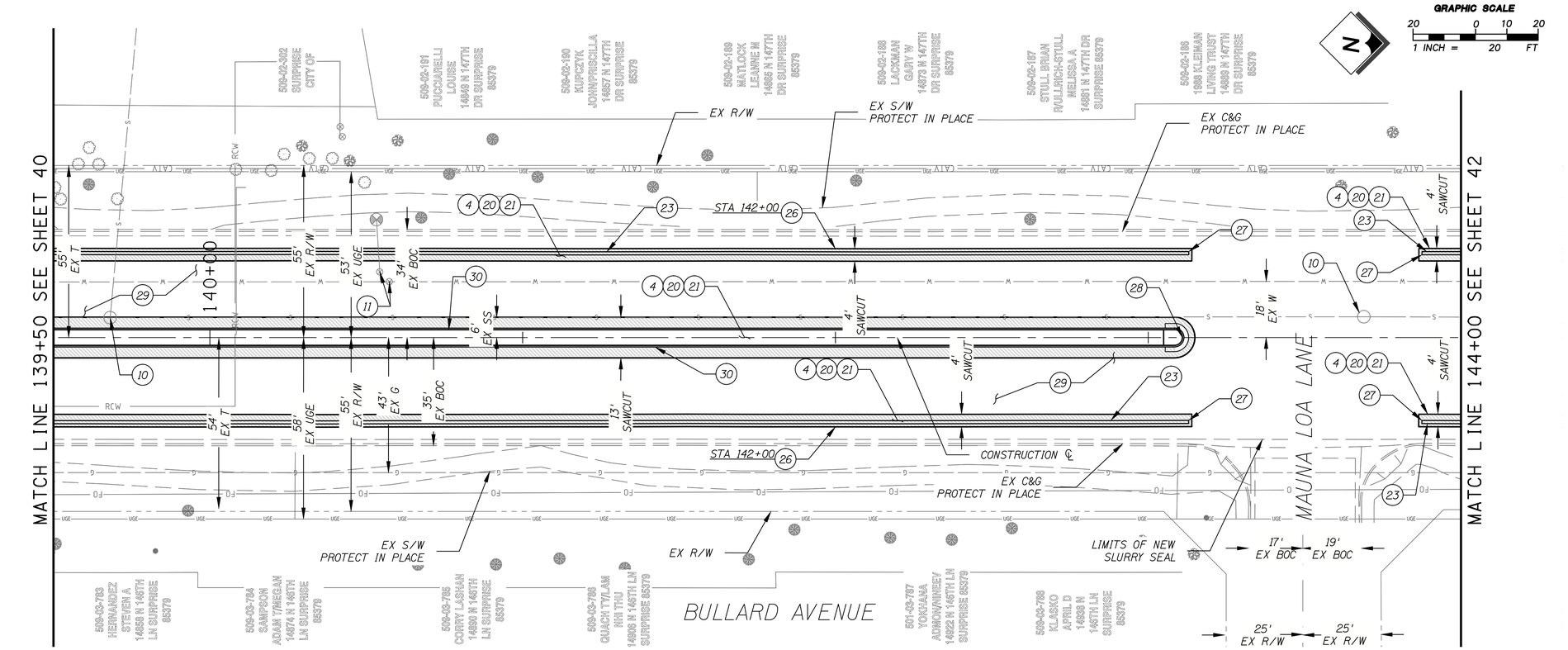
DWG NO. C-2.31

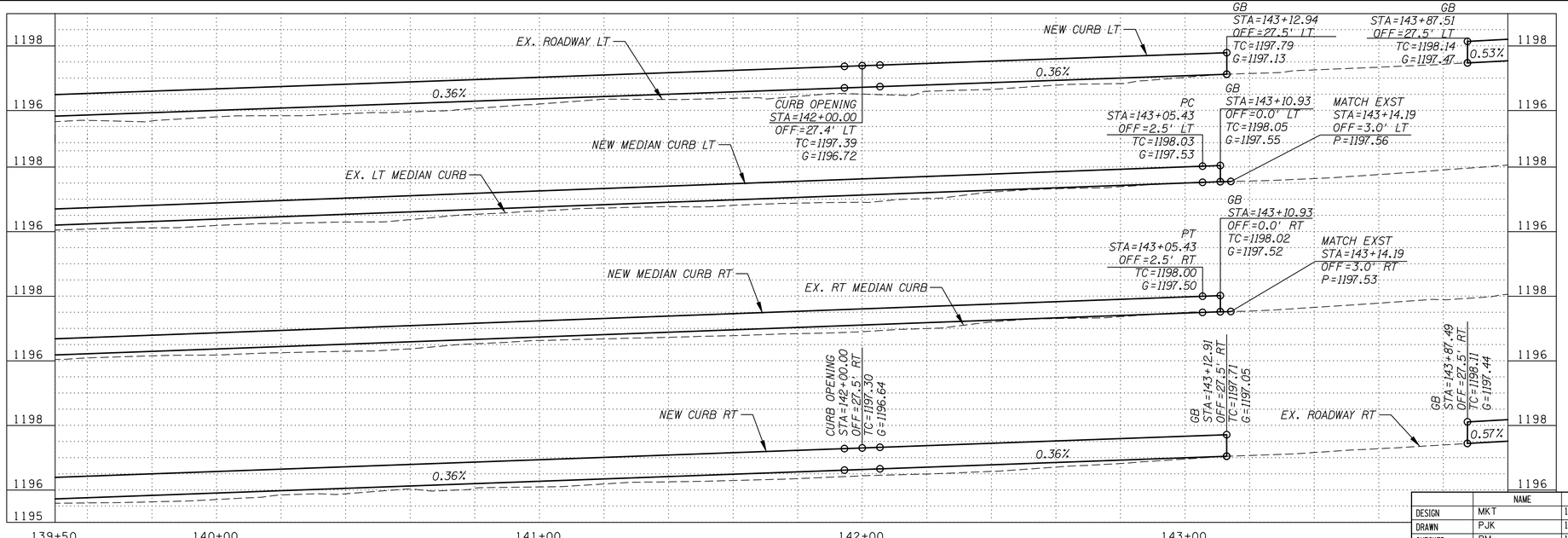
TRACS NO. T0063 01C | SUR-0(230)T | OF

DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

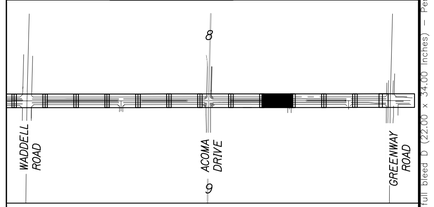
Plotted by Pat Kastler at 2/27/2018 7:49 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	41	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	861
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	2
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	195
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	154
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	717
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	711

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 139+50 TO STA 144+00

37417 MATTHEW K. TSARK
Registered Professional Engineer
Arizona U.S.A.
EXPIRES 3/31/20

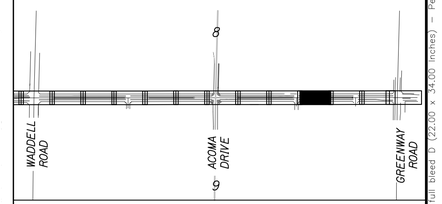
ROUTE	LOCATION	DWG NO. C-2.32
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

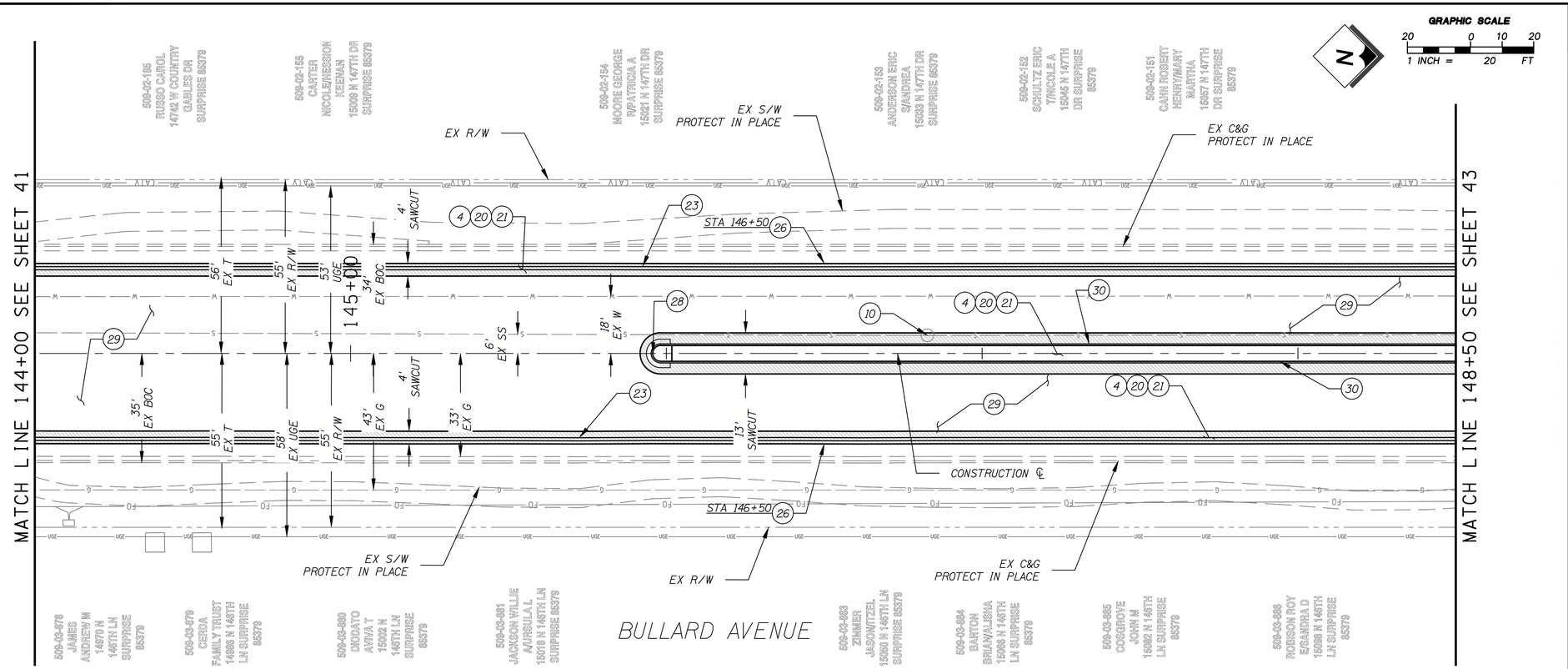
Plotted by Pat Kastler at 2/27/2018 7:50 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penfolder: PREMIER.ctb

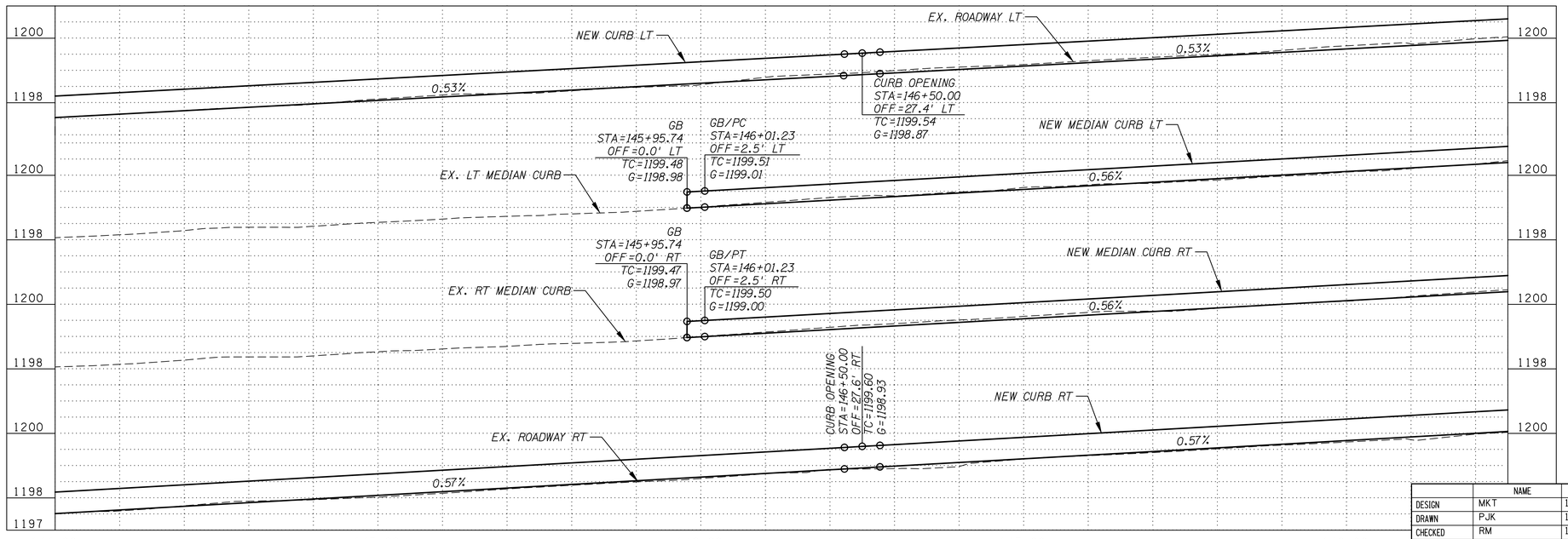
p:\2014014-06\CADD\production\Sheets\14014-06_PP-03.dwg

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	42	117	
		0000 MA SUR			







CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	771
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	168
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	133
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	878
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
(28)	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	33
(30)	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	504

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or dial: Arizona811.com

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 144+00 TO STA 148+50

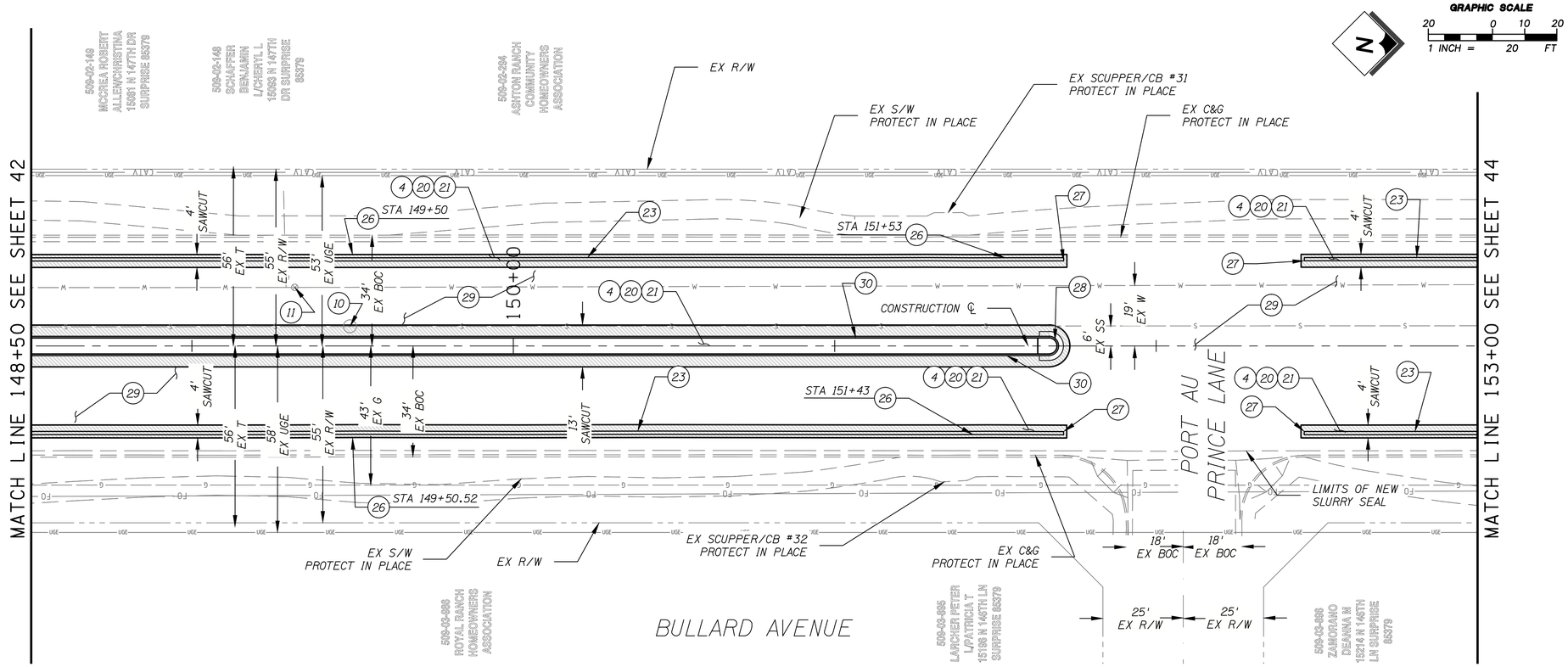
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/21/18 Arizona U.S.A.
EXPIRES 3/31/20

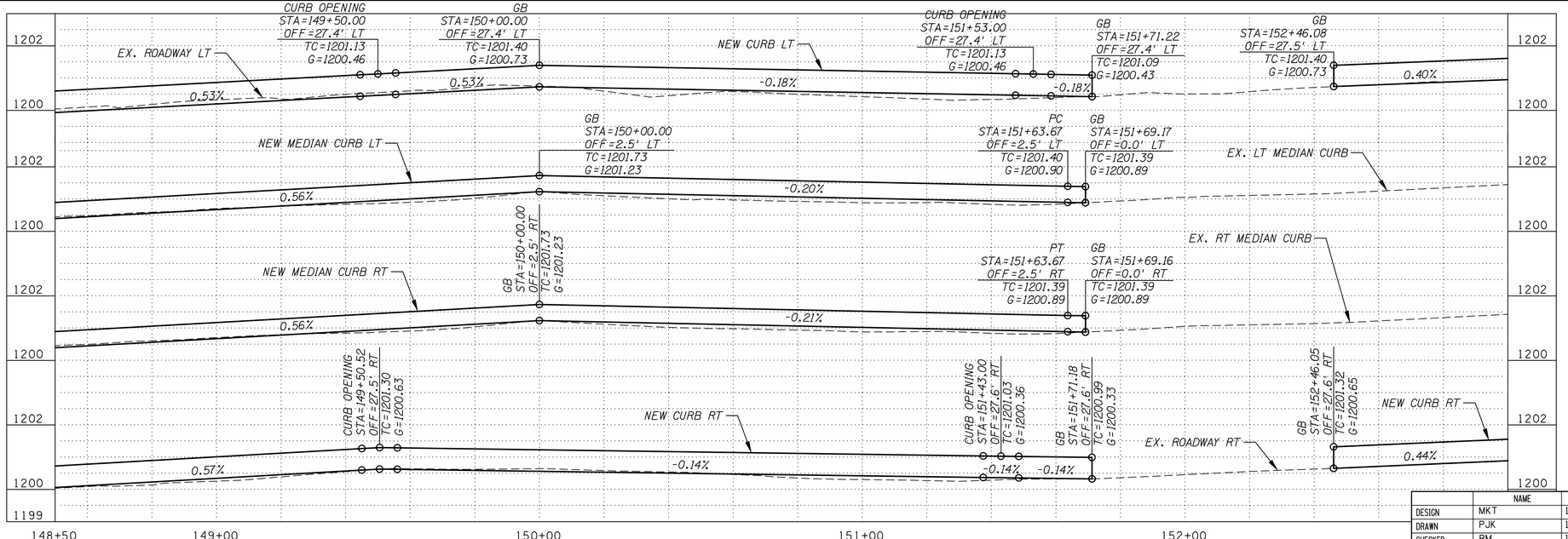
ROUTE	LOCATION	DWG NO. C-2.33
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:51 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	43	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	800
10	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	1
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	181
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	142
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	694
26	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	4
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	12
28	CONSTRUCT CONCRETE MEDIAN NOSE TRANSITION PER MAG DET. 223. BID ITEM 9210012	SY	7
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	32
30	CONSTRUCT CONCRETE SINGLE CURB PER MAG DET 222, TYPE A. BID ITEM 9080108	LF	633

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 148+50 TO STA 153+00

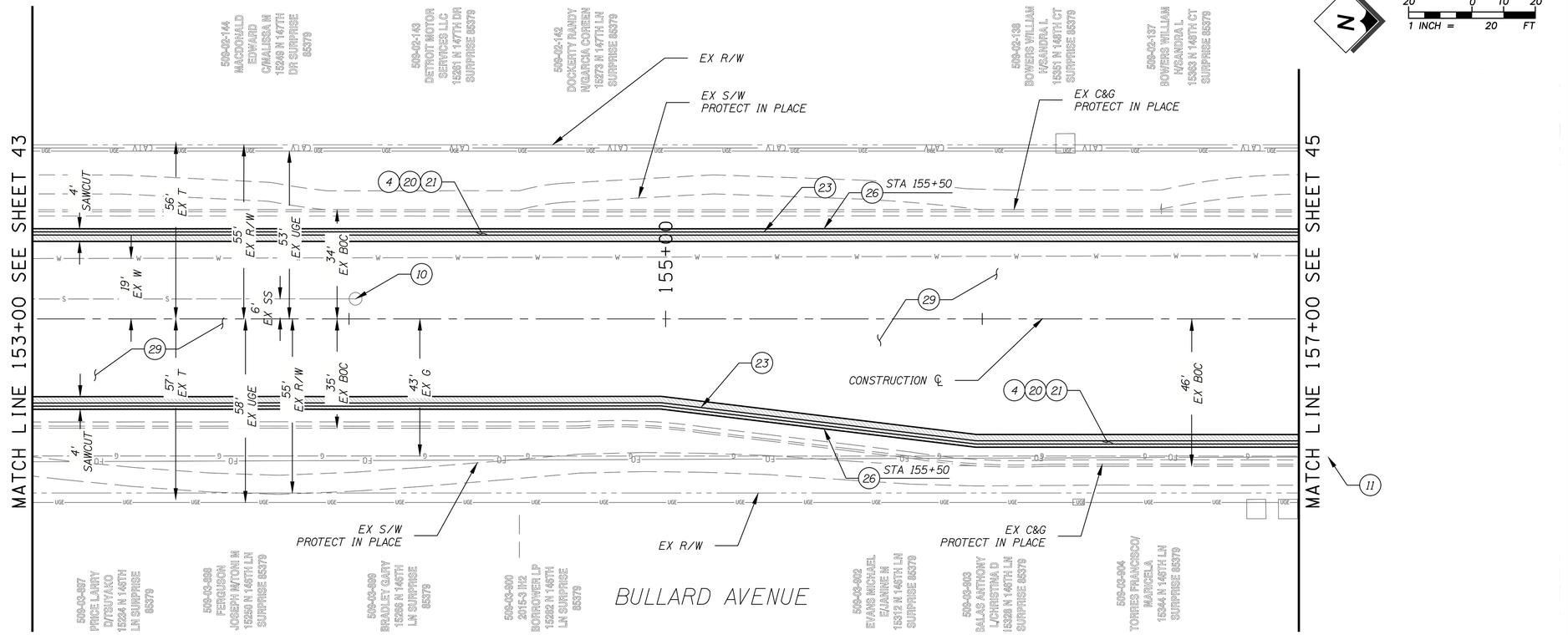
ROUTE	LOCATION	DWG NO. C-2.34
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

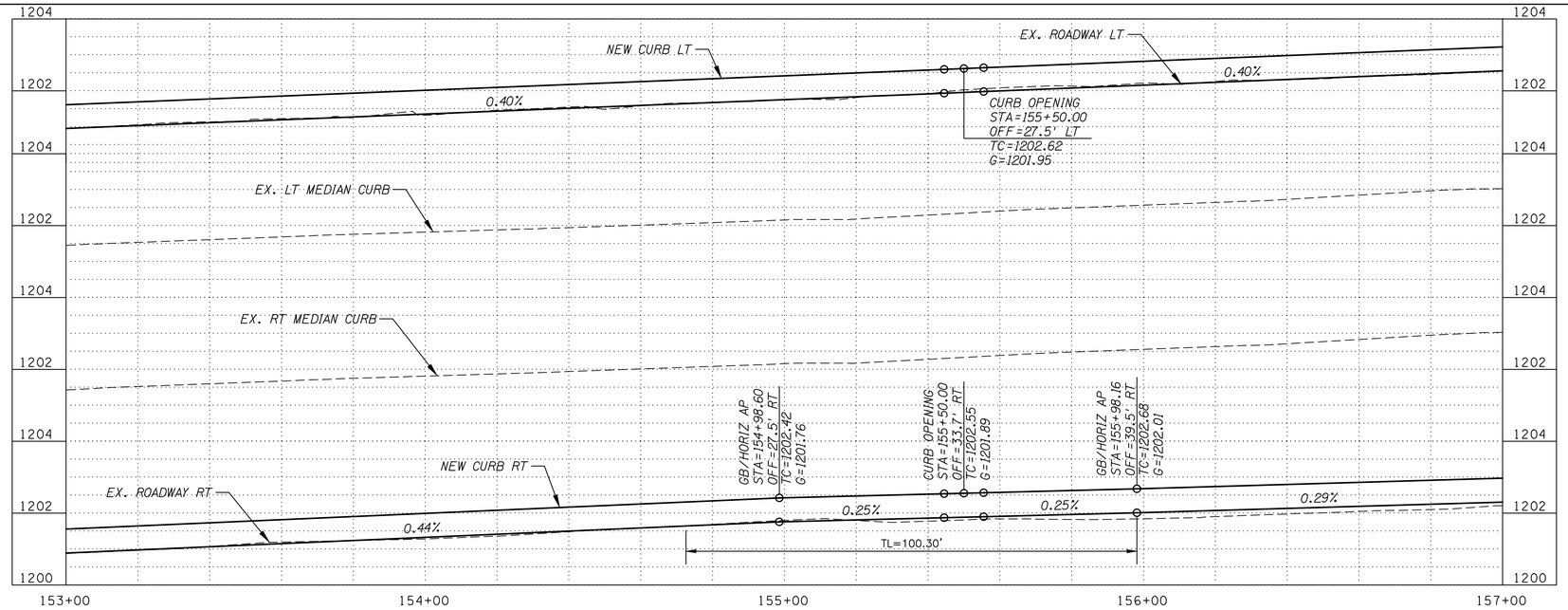
37417 MATTHEW K. TSARK
EXPIRES 3/31/20

DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO.

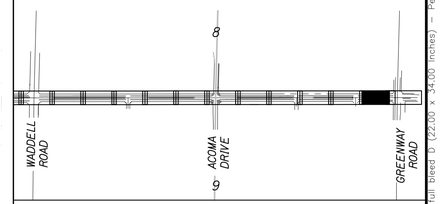
Plotted by Pat Kastler at 2/27/2018 7:51 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-061_PPP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	44	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(4)	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	356
(10)	RESET FRAME AND COVER FOR MANHOLE PER MAG STD DTL 422 BID ITEM 5050202	EA	1
(20)	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	67
(21)	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	53
(23)	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	779
(26)	CONSTRUCT 10' CURB OPENING PER DTL P1, SHT 7 BID ITEM 9240144	EA	2
(29)	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	33

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 153+00 TO STA 157+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/29/18 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

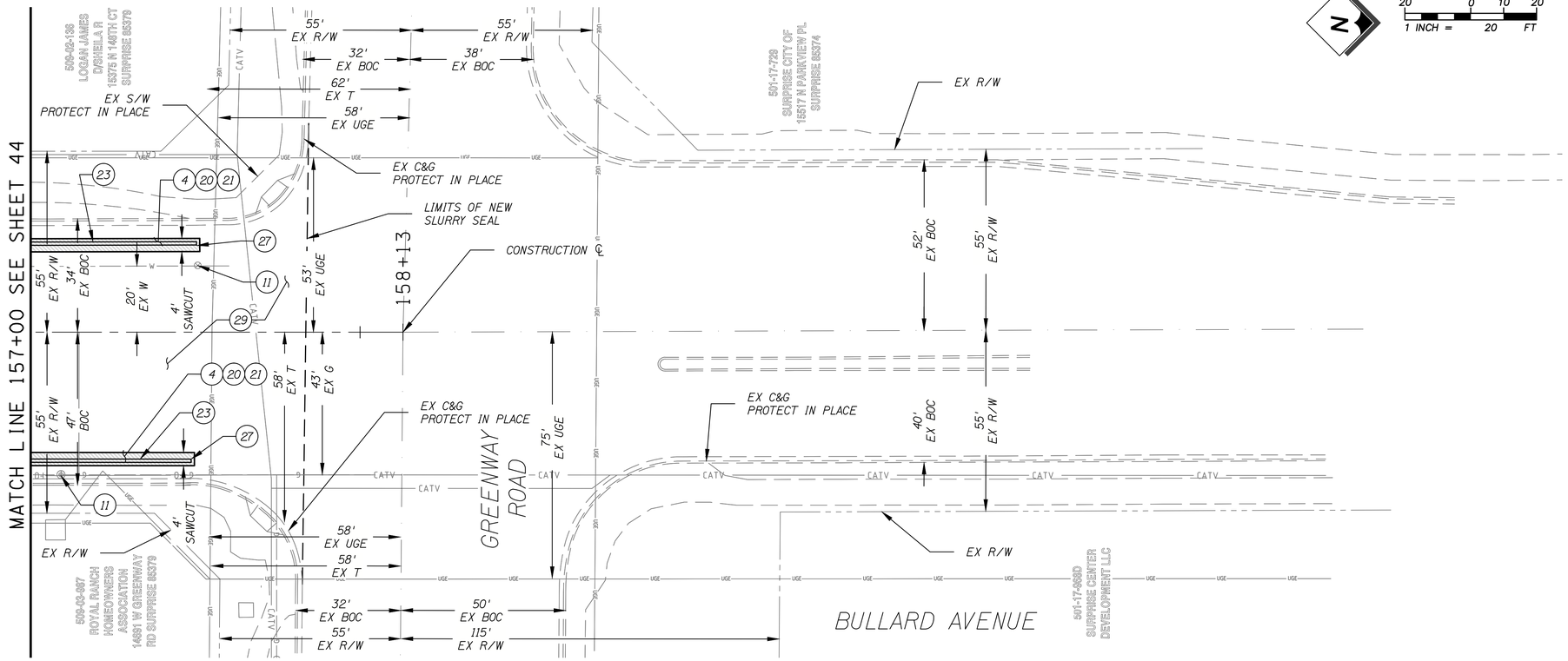
DWG NO. C-2.35

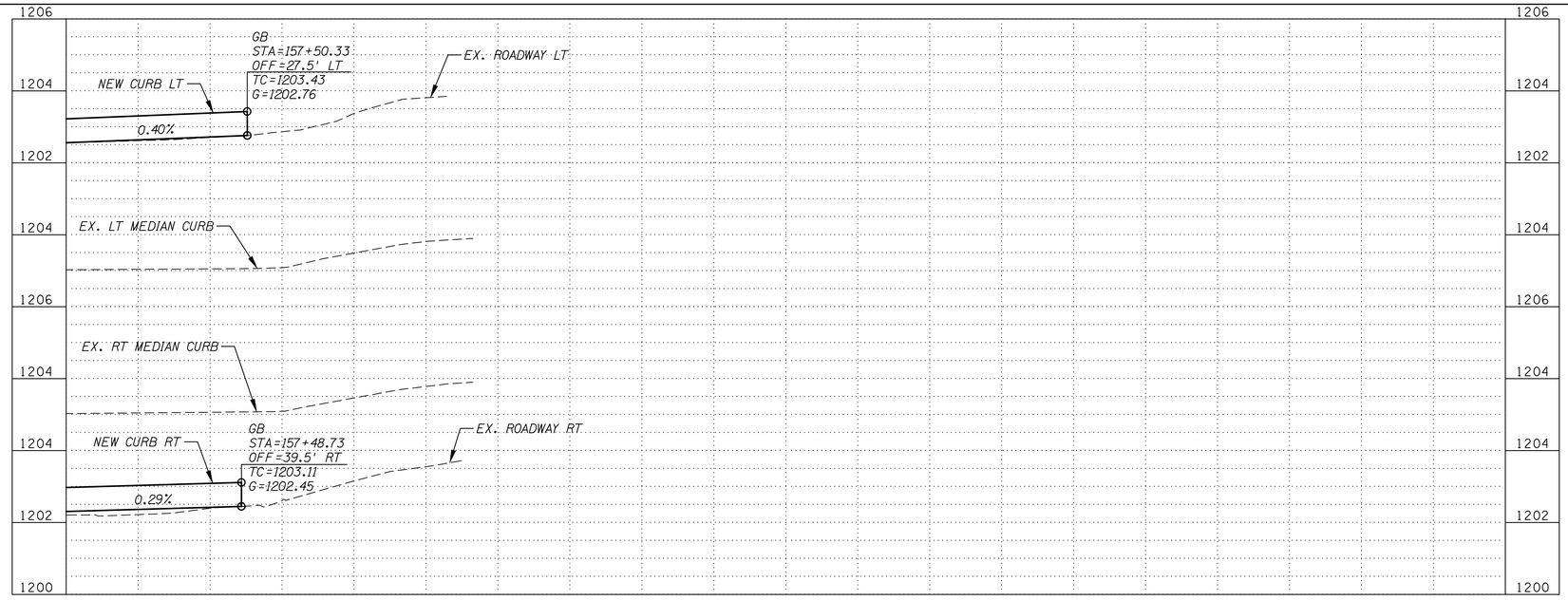
TRACS NO. T0063 01C | SUR-0(230)T | OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

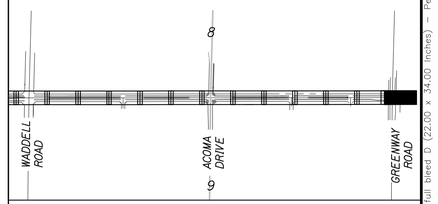
Plotted by Pat Kastler at 2/27/2018 7:52 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\140114-06_PP-03.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	45	117	
		0000 MA SUR			



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
4	SAWCUT & REMOVE ASPHALTIC CONCRETE PAVEMENT. BID ITEM 2020029	SY	45
11	RESET FRAME AND COVER FOR VALVE BOX PER MAG STD DTL 391-1, TYPE A BID ITEM 8080646	EA	2
20	CONSTRUCT 9" AGGREGATE BASE COURSE, CLASS 2, PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 3030022	CY	9
21	CONSTRUCT 3.5" ASPHALTIC CONCRETE (MISCELLANEOUS STRUCTURAL) PER PAVEMENT STRUCTURAL SECTION 1, SHT 2 BID ITEM 4090003	TON	7
23	CONSTRUCT CONCRETE SINGLE CURB (MOD MAG DET. 222, TYPE A) PER DTL P4, SHT 8. BID ITEM 9080109	LF	93
27	CONSTRUCT CONCRETE CURB TRANSITION PER MAG DET. 222. BID ITEM 9080109	LF	6
29	INSTALL TYPE III ASPHALT SLURRY SEAL BID ITEM 4040174	TON	8

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PAVING PLAN & PROFILE
STA 157+00 TO STA 158+13

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK DATE SIGNED 03/21/18 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. C-2.36
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

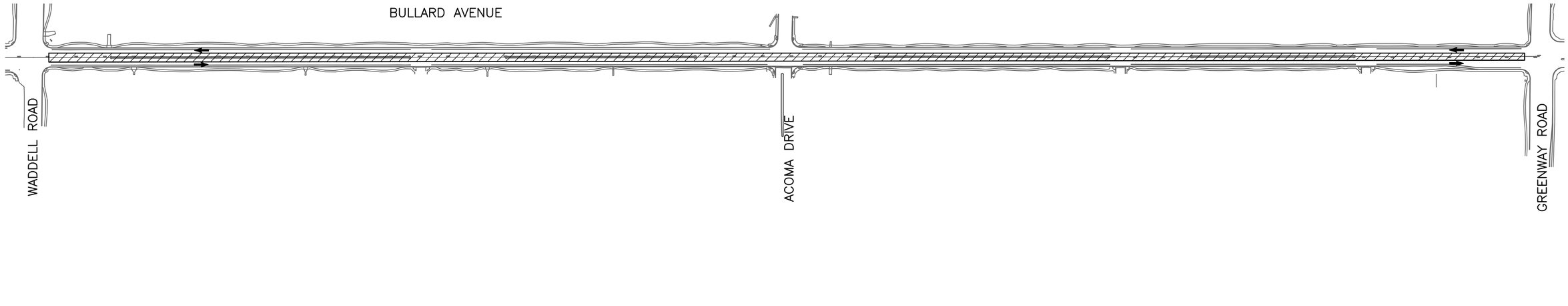
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:53 AM on printer \\nexus\DWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) – Pentable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06_PP-03.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	46	117	



PHASE	CONSTRUCTION ACTIVITY
1	CONSTRUCT MEDIAN ON BULLARD AVENUE BETWEEN WADDELL AND GREENWAY ROADS.

PHASE 1 WORK ZONE

DIRECTION OF TRAVEL

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

CONSTRUCTION SEQUENCE
PHASE 1

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
Not Signed Until Date Below
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	CS01

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

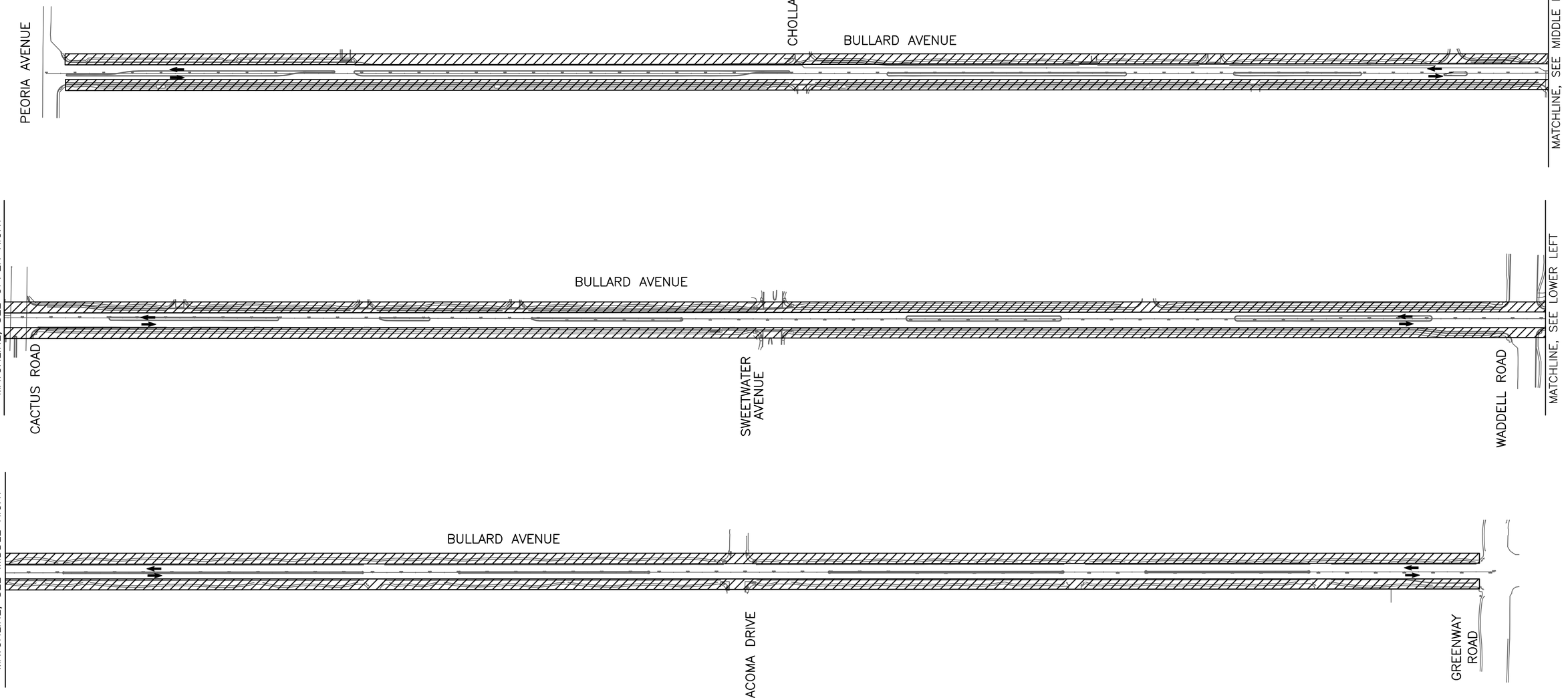
richard Feb 28, 2018 - 8:18am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-TCPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	47	117	

N



PHASE	CONSTRUCTION ACTIVITY
2	CONSTRUCT BIKE LANES, ADA IMPROVEMENTS AND TRAFFIC SIGNALS ON BULLARD AVENUE.

PHASE 2 WORK ZONE

DIRECTION OF TRAVEL

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE, (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

CONSTRUCTION SQUENCE
PHASE 2

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
Date Signed
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. CS02

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:18am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-TCPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ		48	117	
		0000 MA SUR			

GENERAL TRAFFIC ENGINEERING NOTES: ADOT

1. ADJUSTMENTS TO THE DETAILS OF THESE TRAFFIC CONTROL PLANS AND REQUIREMENTS MAY BE NECESSARY DUE TO CONSTRUCTION ACTIVITIES, AS DIRECTED AND APPROVED BY THE ENGINEER.
2. ALL EXISTING SIGNS IN CONFLICT WITH THE CONSTRUCTION SIGNS SHALL BE REMOVED, RELOCATED, OR COVERED IN PLACE, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL STORE AND REINSTALL ITEMS WHICH HAVE BEEN REMOVED OR RELOCATED IN A MANNER APPROVED BY THE ENGINEER. THE COST SHALL BE INCLUDED IN THE PRICE OF CONTRACT ITEMS. ANY SIGN DAMAGED DURING THE COURSE OF CONSTRUCTION SHALL BE REPLACED AT NO COST TO THE DEPARTMENT.
3. ALL CONSTRUCTION SIGNS SHALL HAVE BLACK LETTERS ON AN ORANGE BACKGROUND, EXCEPT AS OTHERWISE NOTED.
4. THE RETRO-REFLECTIVE SHEETING ON ALL CONSTRUCTION SIGNS SHALL MEET CRITERIA ESTABLISHED IN SECTION 380 OF ADOT'S TRAFFIC ENGINEERING GUIDELINES AND PROCESSES AND SECTION 1007 OF THE STANDARD SPECS.
5. ALL ADVANCE WARNING SIGNS THAT ARE TO REMAIN FOR THE DURATION OF THE PROJECT SHALL BE MOUNTED ON EMBEDDED POSTS. FOR SIGNS INSTALLED ON EMBEDDED POSTS, SIGN MOUNTING HEIGHT IS A MINIMUM OF 7 FEET AS MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT. ALL OTHER SHORT-TERM SIGNS USED FOR INDIVIDUAL ACTIVITIES MAY BE INSTALLED ON PORTABLE SIGN STANDS (SPRING TYPE) AT LEAST 7 FOOT ABOVE THE PAVEMENT.
6. THE NEAREST EDGE OR CORNER OF A SIGN SHALL BE APPROXIMATELY 12 FEET FROM THE NEAREST EDGE OF PAVEMENT OR 6 FEET BEHIND CURB FOR ALL SIGNS MOUNTED ON EMBEDDED POSTS.
7. FLAGS SHALL BE MOUNTED ON TOP OF ALL CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN. TYPE "A" FLASHING WARNING LIGHTS SHALL BE REQUIRED ON ALL NIGHT-TIME CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN.
8. VERTICAL PANELS OR TYPE II BARRICADES SHALL BE USED FOR CHANNELIZING DEVICES.
9. CHANNELIZING DEVICES FOR TAPERS SHALL BE AT A MAXIMUM SPACING OF 20 FEET ON CENTER. THE CHANNELIZING DEVICES ON TANGENTS SHALL BE AT A MAXIMUM SPACING OF 40 FEET ON CENTER.
10. A TYPE "C" STEADY-BURNING YELLOW LIGHT SHALL BE MOUNTED ON EACH CHANNELIZING DEVICE ON BOTH TAPER AND TANGENT SECTIONS.
11. TEMPORARY TRAFFIC CONTROL DEVICES FOR DAILY WORK ACTIVITIES SHALL BE PLACED DURING THE ONE HOUR PERIOD IMMEDIATELY PRIOR TO THE WORK SHIFT AND REMOVED DURING THE ONE HOUR PERIOD IMMEDIATELY FOLLOWING THE WORK SHIFT UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. WHEN NO CLOSURE IS NECESSARY BUT WHERE THERE IS CONSTRUCTION ALONGSIDE A ROADWAY, THE CONTRACTOR SHALL PLACE 48 INCH X 48 INCH "ROAD WORK AHEAD" AND "SHOULDER WORK AHEAD" SIGNING AS DIRECTED BY THE ENGINEER TO ALERT THE PUBLIC TO THE CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REMOVE THE EXISTING PAVEMENT MARKERS IN CONNECTION WITH THE STRIPE OBLITERATION ACTIVITIES.
13. WHEN TRAFFIC CONTROL ITEMS ARE NOT IN USE, THE CONTRACTOR SHALL REMOVE THESE ITEMS TO A LOCATION AT LEAST 30 FEET FROM THE EDGE OF THE PAVED ROADWAY. THIS INCLUDES ALL SUPPORTS WITHOUT SIGN PANELS. ANY SIGNS WHICH ARE NOT IN USE BUT WHICH CANNOT BE MOVED AT LEAST 30 FEET FROM THE ROADWAY SHALL BE COVERED SO THE PUBLIC CANNOT READ THE LEGENDS.
14. THE CONTRACTOR SHALL ABIDE BY THE TRAFFIC CONTROL REQUIREMENTS CONTAINED IN SUBSECTION 104.04 "MAINTENANCE OF TRAFFIC" OF THE STANDARD SPECIFICATIONS.
15. IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL TEMPORARY AND PERMANENT MARKINGS, THE CONTRACTOR SHALL CLEAN AND DRY THE ROADWAY SURFACE TO THE SATISFACTION OF THE ENGINEER BY SWEEPING AND AIR-JET BLOWING, THE COST BEING CONSIDERED AS INCLUDED IN THE PRICE OF CONTRACT ITEMS.
16. TEMPORARY STRIPING SHALL BE STANDARD REFLECTORIZED TRAFFIC PAINT UNLESS OTHERWISE NOTED ON PLANS.
17. WHERE STRIPING OBLITERATION IS NECESSARY, IT SHALL BE ACCOMPLISHED BY APPROVED METHODS. PAINTING OVER STRIPING, REMOVAL OF PAVEMENT, AND OVERLAYING PAVEMENT DOES NOT CONSTITUTE AS STRIPE OBLITERATION. THERE SHALL BE NO MEASUREMENT OR PAYMENT FOR THE REMOVAL OF EXISTING PAVEMENT MARKERS.
18. SPEED LIMIT SIGNING IS PRELIMINARY AND IS SUBJECT TO REVIEW AND CHANGE BY THE ENGINEER AS DICTATED BY FIELD CONDITIONS.
19. THE CONTRACTOR SHALL PLACE THE CHANGEABLE MESSAGE BOARDS 7 DAYS PRIOR TO THE START OF CONSTRUCTION TO ALERT TRAFFIC OF THE UPCOMING ROAD RESTRICTIONS. THE MESSAGE TO BE DISPLAYED SHALL BE AS DIRECTED BY THE ENGINEER AND COORDINATED WITH THE ADOT PHOENIX CONSTRUCTION DISTRICT AND CITY OF GLENDALE.
20. SIGNING FOR DOUBLE FINES IN WORK ZONES, WHEN ALLOWED BY THE ENGINEER, SHALL GENERALLY CONFORM TO FIGURE SA-12 OF THE 2010 ADOT TRAFFIC CONTROL DESIGN GUIDELINES. SUCH SIGNING SHALL ONLY BE IN PLACE DURING WORKING PERIODS WHEN WORKERS ARE PRESENT IN ACCORDANCE WITH THE GUIDELINES FOR SIGNING FOR DOUBLE FINES IN THE WORK ZONES. THE COST FOR COVERING OR MOVING THE SIGNS BEFORE AND AFTER WORK PERIODS IS CONSIDERED INCIDENTAL TO THE CONTRACT.
21. ALL DRAWINGS ARE SCHEMATIC ONLY AND ARE NOT TO SCALE.
22. OFF-DUTY UNIFORMED POLICE OFFICERS AND THEIR VEHICLES SHALL BE INCLUDED AS PART OF THE CONTRACTOR'S TRAFFIC CONTROL WHEN THE ENGINEER DECIDES THEY SHOULD BE PRESENT INCLUDING DURING THE INSTALLATION, RELOCATION, AND REMOVAL OF CHANNELIZING DEVICES.
23. IF NECESSARY, AN ADEQUATE NUMBER OF TYPE III BARRICADES SHALL BE PLACED ACROSS EACH ROADWAY TO BE CLOSED. A 60 INCH X 36 INCH "ROAD CLOSED" SIGN, AS APPROPRIATE, SHALL BE ATTACHED TO ONE OF THE TYPE III BARRICADES CLOSING THE ROADWAY. A TYPE "A" FLASHING WARNING LIGHT SHALL BE MOUNTED ON EACH END OF EACH TYPE III BARRICADE.
24. TYPE A FLASHING WARNING LIGHTS SHALL BE REQUIRED ON ALL NIGHTTIME CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN.
25. THE CONTRACTOR MAY SUBSTITUTE TYPE I BARRICADES FOR TYPE II BARRICADES AS LONG AS THE REFLECTIVE AREA ON THE TOP PANEL OF EACH TYPE I BARRICADE IS EQUIVALENT OR GREATER THAN THE REFLECTIVE AREA OF A TYPE II BARRICADE.
26. THE CONTRACTOR SHALL UTILIZE A FLASHING ARROW PANEL IN THE SEQUENTIAL CHEVRON MODE FOR EACH CLOSURE OF A THROUGH LANE. THE CONTRACTOR SHALL NOT UTILIZE A FLASHING ARROW PANEL IN CONNECTION WITH ANY SHIFTING TAPER.
27. THE TRAFFIC CONTROL PLANS REPRESENT A SUGGESTED METHOD FOR TRAFFIC CONTROL DURING CONSTRUCTION. THE CONTRACTOR MAY PREPARE ANOTHER TRAFFIC CONTROL PLAN IN ACCORDANCE WITH SECTION 701 OF THE STANDARD SPECIFICATIONS. ALL TRAFFIC CONTROL PLANS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER BEFORE BEGINNING CONSTRUCTION.
28. TEMPORARY PAVEMENT MARKINGS SHALL BE REMOVED BY APPROVED METHODS WHEN NO LONGER REQUIRED.
29. CONSTRUCTION SIGNS SHALL NOT BE DISPLAYED TO TRAFFIC MORE THAN 24 HOURS PRIOR TO THE ACTUAL START OF CONSTRUCTION. THESE SIGNS MAY BE INSTALLED SOONER BUT THEY MUST BE COVERED OR TURNED AWAY FROM TRAFFIC. THE COST FOR COVERING OR TURNING THEM SHALL BE CONSIDERED PART OF THE SIGN INSTALLATION COST. NO FURTHER COMPENSATION WILL BE MADE. THESE SIGNS SHALL BE REMOVED WITHIN 24 HOURS AFTER THE COMPLETION OF CONSTRUCTION ACTIVITIES.

GENERAL TEMPORARY TRAFFIC CONTROL NOTES: CITY OF SURPRISE

1. TEMPORARY TRAFFIC CONTROL SHALL BE PLACED AND MAINTAINED BY A COMPANY CERTIFIED BY THE CITY OF SURPRISE FOR TEMPORARY TRAFFIC CONTROL. ALL TEMPORARY TRAFFIC CONTROL SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT REVISION OF THE CITY OF SURPRISE TEMPORARY WORK ZONE TRAFFIC MANAGEMENT POLICY OR AS DIRECTED BY THE CITY TRAFFIC ENGINEER OR DESIGNEE.
2. WHERE LANES ARE RESTRICTED, RESTRICTION OF THE LANES SHALL BE ACCOMPLISHED BY USING REFLECTIVE VERTICAL PANELS. CONES SHALL NOT BE CONSIDERED ACCEPTABLE DEVICES FOR TRAFFIC DECLINATION ON ARTERIAL OR COLLECTOR STREETS.
3. ALL TRAFFIC CONTROL SIGNS SHALL BE TYPE XI SHEETING OR APPROVED EQUAL WHEN IN USE DURING NIGHTTIME HOURS.
4. ADJUSTMENTS TO THE DETAILS OF THESE TRAFFIC CONTROL PLANS AND REQUIREMENTS MAY BE NECESSARY DUE TO CONSTRUCTION ACTIVITIES. ALL ADJUSTMENTS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER OR DESIGNEE PRIOR TO IMPLEMENTATION.
5. THE ROADWAY SURFACE SHALL BE SWEPT, AND CLEANED BY AIR-JET BLOWING, IMMEDIATELY PRIOR TO PLACEMENT OF TEMPORARY MARKINGS.
6. WHEN TRAFFIC CONTROL DEVICES ARE NOT IN USE, THEY SHALL BE MOVED AT LEAST THIRTY (30) FEET FROM THE EDGE OF TRAVEL WAY AND TURNED AWAY SO THE LEGENDS ARE NOT VISIBLE TO THE TRAVELING MOTORISTS. WHERE A THIRTY (30) FOOT DISTANCE CANNOT BE ACHIEVED, THE DEVICES SHALL BE MOVED AWAY AS FAR AS POSSIBLE WITHOUT INTERFERING WITH THE SIDEWALK, DRIVEWAY OR OTHER FACILITIES. NO TRAFFIC CONTROL DEVICES SHALL BE LEFT IN THE MEDIAN.
7. SPEED LIMIT REDUCTION SIGNING IS SUBJECT TO REVIEW AND CHANGE BY THE CITY TRAFFIC ENGINEER OR DESIGNEE AS DICTATED BY FIELD CONDITIONS.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE
SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL
GENERAL NOTES

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
Date Signed 1/31/18
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. GN01

TRACS NO. T0063 01C | SUR-0(230)T

____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 - 8:18am
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-TCPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	49	117	

APPROXIMATE TRAFFIC CONTROL QUANTITIES

		PHASE					
			(1)	(2)	(3)	(4)	
	DURATION DAYS	120*	45*	40*	5*	14*	
ELEMENT OF WORK	UNIT						TOTAL
BARRICADE (TYPE II, VERT PANEL)	EACH–DAY	–	18900	13800	1725	–	34425
PORTABLE SIGN STANDS (RIGID)	EACH–DAY	–	630	560	70	30	1290
PORTABLE SIGN STANDS (SPRING TYPE)	EACH–DAY	–	360	320	40	60	780
WARNING LIGHTS (TYPE A)	EACH–DAY	480	990	880	110	210	2670
WARNING LIGHTS (TYPE C)	EACH–DAY	–	18900	13800	1725	–	34425
EMBEDED SIGN POST	EACH–DAY	960	–	–	–	–	960
TEMPORARY SIGN (LESS THAN 10 SF)	EACH–DAY	–	630	560	70	90	1350
TEMPORARY SIGN (10 SF OR GREATER)	EACH–DAY	480	360	320	40	120	1320
FLASHING ARROW PANEL	EACH–DAY	–	90	–	–	30	120
CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED)**	EACH–DAY	268	–	–	–	–	268
FLAGGING SERVICES (CIVILIAN)	HOUR	–	180	160	100	60	500
FLAGGING SERVICES (LOCAL ENFORCEMENT OFFICER)	HOUR	–	180	160	100	60	500

* ESTIMATED CALENDAR DAYS

** TRAFFIC CONTROL QUANTITIES FOR ADVANCED SIGNING ARE FOR 120 CALENDAR DAYS, THE ANTICIPATED APPROXIMATE DURATION OF THE PROJECT. CHANGEABLE MESSAGE BOARD SHALL BE DISPLAYED FOR TWO WEEKS PRIOR TO START OF PROJECT.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL QUANTITIES

48476 STEPHAINE S. WILHARDT-SMITH
Expires 9-30-20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	TC01

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

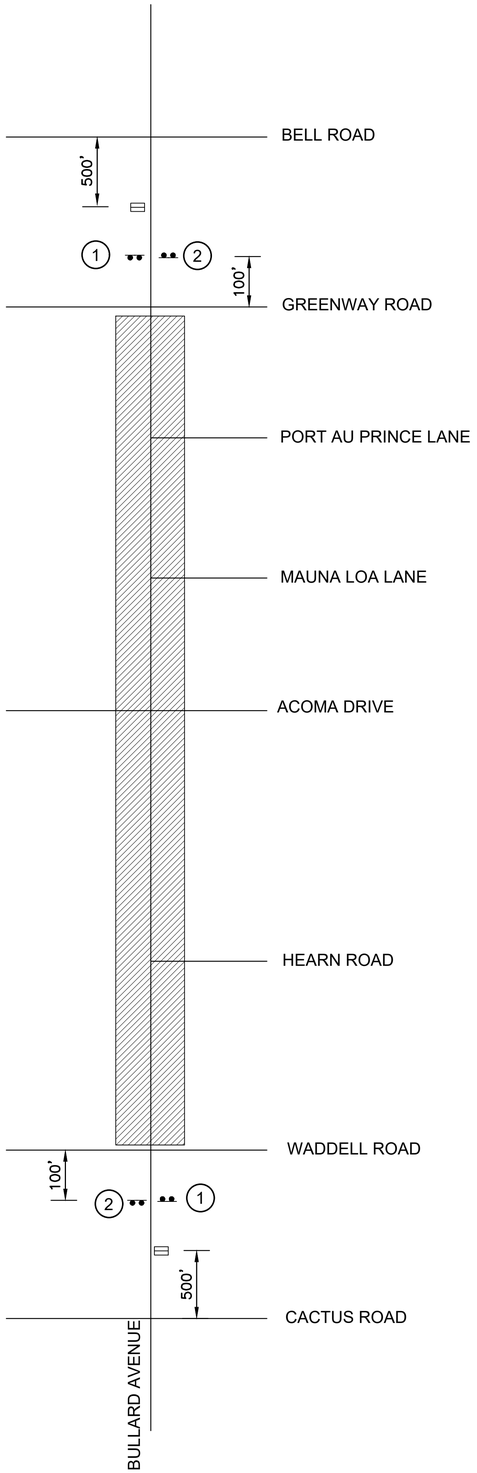
richard Feb 28, 2018 - 8:18am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-TCPL02.dwg

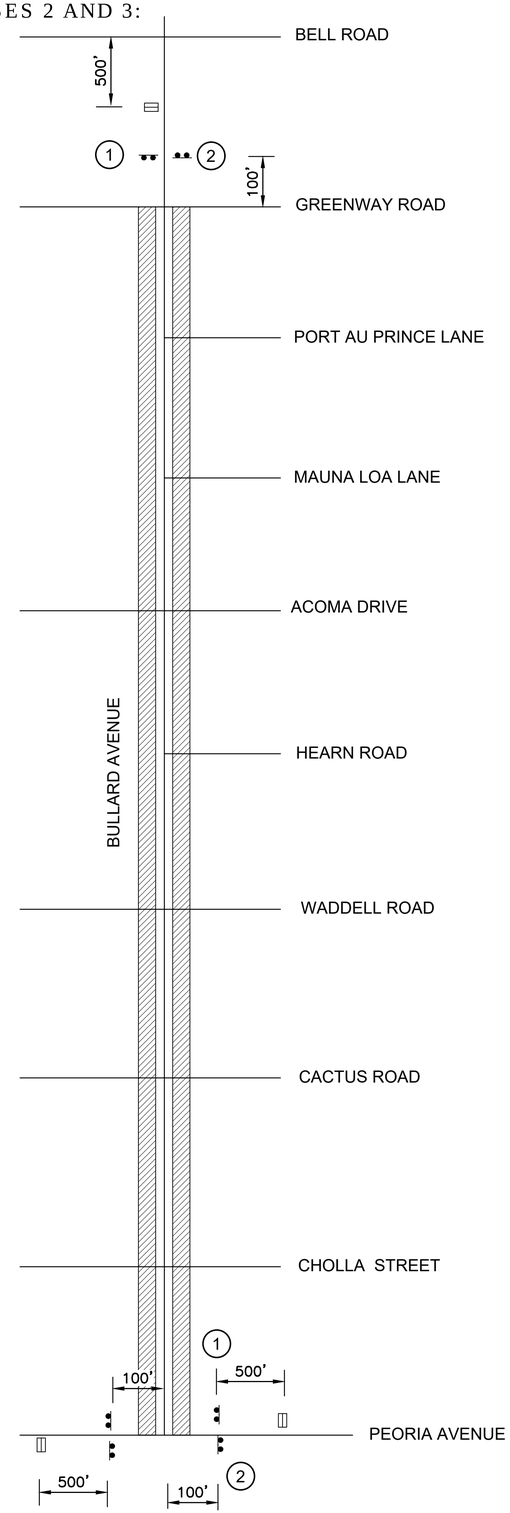
Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ		50	117	
		0000 MA SUR			

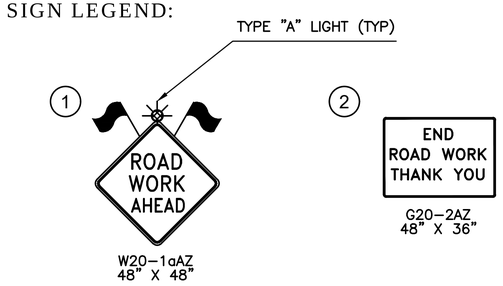
PHASE 1:



PHASES 2 AND 3:



SIGN LEGEND:



SYMBOL LEGEND:	
	WORK ZONE
	CHANGEABLE MESSAGE SIGN (COORDINATE MESSAGE WITH THE ENGINEER)
	SIGN ON TWO EMBEDDED POSTS

ADVANCE WARNING SIGNS

THE ABOVE SIGNS SHALL BE IN PLACE FOR THE DURATION OF THE PROJECT. REFER TO MAINTENANCE OF TRAFFIC TABLE FOR MORE INFORMATION ON TRAFFIC CONTROL SIGNING FOR THE INDIVIDUAL ACTIVITIES.

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL
ADVANCED WARNING SIGNS

Registered Professional Engineer (Civil)
48476
STEPHANIE S. WILHARDT-SMITH
Date Signed
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. TC02

TRACS NO. T0063 01C | SUR-0(230)T | ___ OF ___

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Base file provided by PREMIER ENGINEERING on 14 December 2017

richard Feb 28, 2018 - 8:18am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-TCPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	51	117	

MAINTENANCE OF TRAFFIC

PHASE	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	REMARKS
1	CONSTRUCT MEDIAN ON BULLARD AVENUE BETWEEN WADDELL AND GREENWAY ROADS.	CLOSE TWO–WAY, CENTER LEFT TURN LANE ON BULLARD AVENUE. CLOSE NORTHBOUND AND SOUTHBOUND THROUGH LANES. SHIFT TRAFFIC ON BULLARD AVENUE TO BIKE AND GOLF CART LANES. RESTRICT BIKE AND GOLF CART ACCESS TO ROADWAY. MAINTAIN ACCESS TO RESIDENTS AND BUSINESSES. LANE CLOSURE ON BULLARD AVENUE PER ADOT TRAFFIC CONTROL DESIGN GUIDELINES (TCDG) (REV 2011) FIGURE SA–5(L).	A UNIFORMED OFFICER SHALL BE PRESENT DURING SET UP AND BREAK DOWN OF LANE CLOSURE. MAINTAIN AT LEAST ONE ACCESS TO EXISTING ADJACENT BUSINESS AT ALL TIMES. CHANGEABLE MESSAGE BOARDS SHALL BE DISPLAYED TWO WEEKS PRIOR TO START OF PROJECT AND ARE TO REMAIN FOR THE DURATION OF THE WORK.
2	CONSTRUCT BIKE LANES, ADA IMPROVEMENTS AND TRAFFIC SIGNALS ON BULLARD AVENUE.	CLOSE NORTHBOUND AND SOUTHBOUND BIKE AND GOLF CART LANES ON BULLARD AVENUE. EXISTING TRAFFIC TO REMAIN IN SINGLE NORTHBOUND AND SOUTHBOUND LANE. LANE CLOSURE ON BULLARD AVENUE PER ADOT TCDG FIGURE SA–5(R)	A UNIFORMED OFFICER SHALL BE PRESENT DURING SET UP AND BREAK DOWN OF SHOULDER CLOSURE. MAINTAIN AT LEAST ONE ACCESS TO EXISTING ADJACENT BUSINESS AT ALL TIMES. CHANGEABLE MESSAGE BOARDS SHALL BE DISPLAYED TWO WEEKS PRIOR TO START OF PROJECT AND ARE TO REMAIN FOR THE DURATION OF THE WORK.
3	INSTALL ASPHALT SLURRY SEAL.	EXISTING TRAFFIC TO REMAIN IN SINGLE NORTHBOUND & SOUTHBOUND LANE. CLOSURE ON BULLARD AVENUE PER ADOT TCDG FIGURE SA–5(R) AND SA–5(L).	A UNIFORMED OFFICER SHALL BE PRESENT DURING SET UP AND BREAK DOWN OF SHOULDER CLOSURE. MAINTAIN AT LEAST ONE ACCESS TO EXISTING ADJACENT BUSINESS AT ALL TIMES. CHANGEABLE MESSAGE BOARDS SHALL BE DISPLAYED TWO WEEKS PRIOR TO START OF PROJECT AND ARE TO REMAIN FOR THE DURATION OF THE WORK.
4	CONSTRUCT FINAL PAVEMENT MARKINGS AND TRAFFIC SIGN INSTALLATION.	TRAFFIC CONTROL ON BULLARD AVENUE PER ADOT TRAFFIC CONTROL DESIGN GUIDELINES (TCDG) (2010) FIGURE SA–18.	MAINTAIN AT LEAST ONE ACCESS TO EXISTING ADJACENT BUSINESS AT ALL TIMES.

NOTES:

1. THE ABOVE LIST OF ACTIVITIES DOES NOT CONSTITUTE A SEQUENCE OF CONSTRUCTION.
2. THE TABLE ABOVE DOES NOT INCLUDE ALL CONSTRUCTION ACTIVITIES NECESSARY FOR COMPLETION OF THE PROJECT. IT IS INTENDED AS A GUIDELINE SHOWING THE MAIN COMPONENTS.
3. ANY PHASE OVERLAP DURING THE CONSTRUCTION PROCESS SHALL UTILIZE THE SAFEST AND MOST EFFICIENT TRAFFIC CONTROL METHODS.

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC CONTROL
MAINTENANCE OF TRAFFIC

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
Date Signed 12/19
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. TC03

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:18am

P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–TCPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	52	117	

GENERAL SIGNING AND PAVEMENT MARKING NOTES:

1. ALL PAVEMENT MARKING, SIGNING, AND CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF THE ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) STANDARD DRAWINGS AND SPECIFICATIONS, ADOT SIGNING AND MARKING STANDARD DRAWINGS, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND CITY OF SURPRISE TRAFFIC ENGINEERING DEVELOPMENT STANDARDS UNLESS OTHERWISE NOTED IN THE SPECIAL PROVISIONS OR THESE PLANS.
2. CITY SHALL FIELD INSPECT ALL SIGNS AND MARKING FOR FIELD ADJUSTMENT, PRIOR TO INSTALLATION AND FINAL ACCEPTANCE.
3. ALL MEASUREMENTS SHALL BE TAKEN FROM THE EDGE OF PAVEMENT.
4. ALL SIGNS THAT ARE REMOVED AND TO BE SALVAGED SHALL BE DELIVERED TO THE CITY MAINTENANCE YARD SHOP AT 13430 W. WESTGATE, SURPRISE, AZ.
5. THE SIGN LOCATIONS AND QUANTITIES FOR POST LENGTHS ARE APPROXIMATE. THE CONTRACTOR SHALL SPOT MARK THE SIGN LOCATIONS, VERIFY THE ACTUAL POST LENGTHS, AND CONTACT THE ENGINEER FOR INSPECTION PRIOR TO INSTALLING SIGNS. NO FOUNDATIONS, POSTS, OR SIGN PANELS SHALL BE INSTALLED WITHOUT FINAL APPROVAL FROM THE ENGINEER.
6. THE CONTRACTOR SHALL NOT OVERLAY THE SIGN PANELS.
7. THE SIGN LOCATIONS SHOWN ON THESE PLANS MAY BE MODIFIED AS DIRECTED BY THE ENGINEER. ANY SIGNS INSTALLED BEFORE LAYOUT INSPECTION SHALL BE REMOVED AND REINSTALLED AT THE CONTRACTOR'S EXPENSE.
8. ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH PROPOSED MARKINGS SHALL BE REMOVED BY WATERBLASTING, OR CITY APPROVED METHODS, PRIOR TO THE INSTALLATION OF NEW PAVEMENT MARKINGS. REMOVALS SHALL BE TO THE SATISFACTION OF THE ENGINEER.
9. IF THE REMOVAL OF THE STRIPING CAUSES A DEPRESSION OF THE PAVEMENT SURFACE OF ½ INCH OR GREATER IN DEPTH, THE CONTRACTOR SHALL SEAL THE AREA WITH SLURRY PER MAG STANDARD SPECIFICATION 715, TYPE I AT THE CONTRACTOR'S EXPENSE. PAINTING OVER STRIPING DOES NOT CONSTITUTE STRIPE OBLITERATION. STRIPE OBLITERATION SHALL EXTEND AS NEEDED TO ALLOW APPROPRIATE MATCHING OF NEW STRIPING WITH EXISTING STRIPING.
10. AT THE COMPLETION OF THE PAVEMENT SURFACE EACH DAY, THE CONTRACTOR SHALL STRIPE CENTER LINES, LANE LINES, AND STOP BARS WITH ONE APPLICATION OF TEMPORARY REFLECTORIZED TRAFFIC PAINT AT THE LOCATIONS OF FINAL STRIPING, PER CITY OF SURPRISE DETAIL 40–201. 30 DAYS AFTER TEMPORARY STRIPING IS PLACED, THE CONTRACTOR SHALL INSTALL FINAL PAVEMENT MARKINGS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF PAVEMENT MARKINGS ON THE FINAL SURFACE COURSE FOLLOWING CONTROL POINTS THAT HAVE BEEN SET. CONTROL POINTS SHALL BE NO MORE THAN 50 FEET APART ALONG THE ALIGNMENT TO BE STRIPED.
12. THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR INSPECTION OF TEMPORARY STRIPING AND/OR CONTROL POINTS PRIOR TO APPLICATION OF FINAL MARKINGS. ANY FINAL PAVEMENT MARKING APPLIED BEFORE INSPECTION SHALL BE REMOVED AND REAPPLIED AT THE CONTRACTOR'S EXPENSE.
13. THE FINAL PAVEMENT MARKINGS SHOWN ON THESE PLANS MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.
14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE FINAL SURFACE COURSE IS PLACED SO THAT THE STRIPING IS OFFSET ONE FOOT CLEAR OF THE CONSTRUCTION JOINT, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
15. THE DIMENSIONS SHOWN TO PAVEMENT STRIPING ARE TO THE CENTER OF THE STRIPING OR IN THE CASE OF DOUBLE STRIPING THE CENTER OF THE DOUBLE STRIPE.
16. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE ENGINEER, BY SWEEPING AND AIR JET BLOWING. IMMEDIATELY PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS. THE ROADWAY SURFACE SHALL BE DRY PRIOR TO APPLICATION.
17. ALL FINAL PAVEMENT MARKINGS AND CHEVRON MARKINGS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
18. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
19. THE CONTRACTOR SHALL PRESERVE ALL ROADWAY PERMANENT SIGNING, OBJECT MARKERS AND DELINEATORS. THE CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST. PERMANENT SIGNING, OBJECT MARKERS AND DELINEATORS DAMAGED DURING THE ROADWAY CONSTRUCTION ACTIVITIES.
20. THE PAVEMENT MARKING DRAWINGS MAY BE SCHEMATIC OR DIAGRAMMATIC ONLY AND NOT TO SCALE. THE CONTRACTOR SHALL FOLLOW DIMENSIONS SHOWN ON THE PLANS AND STANDARD DETAILS WHEN INSTALLING PAVEMENT MARKINGS THAT ARE NOT DRAWN TO SCALE.
21. ALL DIMENSIONS ARE IN FEET UNLESS NOTED OTHERWISE ON THE PLANS.
22. A DOUBLE–SIDED BLUE RAISED PAVEMENT MARKER SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION PER DETAIL 4–23.
23. RAISED PAVEMENT MARKERS (RPMS) SHALL BE INSTALLED PER ADOT STD. DWG. M–19 WITH BITUMINOUS ADHESIVE WHICH IS ON THE ADOT APPROVED PRODUCTS LIST.
24. SIGNING AND STRIPING SHALL BE INSTALLED SIMULTANEOUSLY. STRIPING SHALL NOT BE PLACED IF ASSOCIATED SIGNING CANNOT BE INSTALLED.

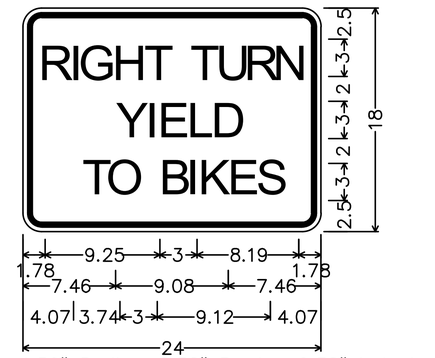
APPROXIMATE PAVEMENT MARKING QUANTITIES

ITEM		UNIT	TOTAL QUANTITY	PAY QUANTITY*
4DY	4" DOUBLE YELLOW	L. FT.	15,000	15,000
4SW	4" SOLID WHITE STRIPE	L. FT.	5,200	5,200
4BW40	4" BROKEN WHITE LINE WITH A 10' LINE SEGMENT AND A 30' GAP WITH 40' RPM SPACING.	L. FT.	6,600	6,600
4DTW	4" BROKEN WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP	L. FT.	200	200
8SW	8" SOLID WHITE STRIPE	L. FT.	1,000	2,000
8SW20	8" SOLID WHITE LINE WITH 20' RPM SPACING.	L. FT.	4,000	8,000
12SW	12" SOLID WHITE STRIPE	L. FT.	3,600	10,800
12SY	12" SOLID YELLOW STRIPE	L. FT.	300	900
24SW	24" SOLID WHITE STRIPE	L. FT.	600	3,600
OBLITERATION PAVEMENT MARKING (STRIPE)		L. FT.	876	2,724
PAINTED BULL NOSE		EACH	24	24

* PAY QUANTITY IS BASED ON A 4 INCH WIDE STRIPE FOR THERMOPLASTIC.

APPROXIMATE SIGN QUANTITIES

ITEM	UNIT	QUANTITY
REMOVE (SIGNS)	EACH	41
REMOVE & SALVAGE (SIGNS)	EACH	30
SIGN POST (PERFORATED) (1 ¾ s)	L. FT.	360
FOUNDATION FOR SIGN POST (CONCRETE)	EACH	30
WARNING, MARKER OR REGULATORY SIGN PANEL	SQ. FT.	444
REMOVE AND RESET (SIGN PANELS)	EACH	8



1.50" Radius, 0.38" Border, 0.38" Indent, Black on White;
[RIGHT TURN] C; [YIELD] C;
[TO BIKES] C;

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

GENERAL NOTES

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Registered Professional Engineer (Civil)
48476
STEPHANIE S. WILHARDT-SMITH
Date Signed 10/19/18
ARIZONA, U.S.A.
Expires 9-30-20

TRACS NO. T0063 01C | SUR-0(230)T | DWG NO. GN01 | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:23am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NORTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
00+72	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
2+25	INFO				X		SURPRISE ADOPT A SIGN							
2+75	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
9+20	R3-5B	X				WH	LEFT LANE	30	12	2.5				INSTALL ABOVE R3-5L
	R3-5L				X		LEFT ARROW (ONLY)							RESET SIGN PANEL
9+77	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
19+58	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
19+58	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
23+95	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
25+90	R3-5B	X				WH	LEFT LANE	30	12	2.5				INSTALL ABOVE R3-5L
	R3-5L				X		LEFT ARROW (ONLY)							RESET SIGN PANEL
26+75	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
26+86	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
29+15	R2-1			X			SPEED LIMIT - 35							
29+15	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
29+39	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
39+17	R3-5L			X			LEFT ARROW (ONLY)							
41+34	R4-7		X				KEEP RIGHT							RELOCATE TO 41+47
	OM3-R		X				OBJECT MARKER							RELOCATE TO 41+47
41+47	R4-7		X				KEEP RIGHT				1	1 3/4 S (12)	1	RELOCATED FROM 41+34
	OM3-R		X				OBJECT MARKER							RELOCATED FROM 41+34
										26	2	24	2	TOTAL

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	53	117	

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or visit Arizona811.com

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE
SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
NB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SS01
TRACS NO. T0063 01C
SUR-0(230)T
____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 - 8:20am
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	54	117	

NORTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
44+42	R2-1				X		SPEED LIMIT - 35							MOUNTED ON LT POLE
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
45+06	W11-2				X		PED CROSSING							
45+06	W11-2				X		PED CROSSING							
47+29	D3-2				X		CACTUS RD							
47+50	R3-5L			X			LEFT ARROW (ONLY)							
48+38	R3-5L			X			LEFT ARROW (ONLY)							
49+07	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
50+43	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
														MOUNT ON LT POLE
52+04	R3-5L			X			LEFT ARROW (ONLY)							
53+55	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
53+77	R2-1				X		SPEED LIMIT - 35							MOUNT ON LT POLE
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
55+15	INFO				X		SURPRISE ADOPT A SIGN							
56+10	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
63+44	R3-5L			X			LEFT ARROW (ONLY)							
64+33	R7-9A				X		NO PARKING - BIKE LANE							
66+39	R4-7		X				KEEP RIGHT							RELOCATE TO 66+51
	OM3-R		X				OBJECT MARKER							RELOCATE TO 66+51
66+51	R4-7		X				KEEP RIGHT				1	1 3/4 S (12)	1	RELOCATED FROM 66+39
	OM3-R		X				OBJECT MARKER							RELOCATED FROM 66+39
68+81	R3-5L			X			LEFT ARROW (ONLY)							
70+71	R4-7		X				KEEP RIGHT							RELOCATE TO 70+81
	OM3-R		X				OBJECT MARKER							RELOCATE TO 70+81
70+81	R4-7		X				KEEP RIGHT				1	1 3/4 S (12)	1	RELOCATED FROM 70+71
	OM3-R		X				OBJECT MARKER							RELOCATED FROM 70+71
										21	3	36	3	TOTAL

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or visit Arizona811.com

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
NB BULLARD AVENUE

Registered Professional Engineer (Civil)
48476
STEPHANIE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SS02
TRACS NO. T0063 01C
SUR-0(230)T
____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:20am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	55	117	

NORTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
70+92	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL ABOVE R7-9A
	R7-9A				X		NO PARKING | BIKE LANE							RESET SIGN PANEL
71+80	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
76+37	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
76+51	R7-9A				X		NO PARKING | BIKE LANE							
77+29	R3-5L			X			LEFT ARROW (ONLY)							
78+52	R3-5L			X			LEFT ARROW (ONLY)							
79+83	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
79+92	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
80+30	R2-1				X		SPEED LIMIT – 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
80+74	R7-9A				X		NO PARKING | BIKE LANE							
83+92	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
90+10	R3-5L			X			LEFT ARROW (ONLY)							
90+70	R7-9A				X		NO PARKING | BIKE LANE							
91+73	R3-5L			X			LEFT ARROW (ONLY)							
92+82	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
95+07	R7-9A				X		NO PARKING | BIKE LANE							
95+39	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
99+87	D3-2				X		WADDELL RD							
101+49	R4-4			X			BEGIN RIGHT TURN | YIELD TO BIKES							
										29	2	24	2	TOTAL

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or visit Arizona811.com

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
NB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SS03

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:20am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	56	117	

NORTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
102+69	R3-7R			X			RIGHT LANE MUST TURN RIGHT							
	R3-5FP	X				WH	RIGHT LANE	30	12	2.5				
	R3-5R	X				WH	RIGHT ARROW (ONLY)	30	36	7.5				
103+70	R3-5L			X			LEFT ARROW (ONLY)							
104+27	R3-5FP	X				WH	RIGHT LANE	30	12	2.5				INSTALL ABOVE R3-5R
	R3-5R				X		RIGHT ARROW (ONLY)							RESET SIGN PANEL
104+68	R3-5L			X			LEFT ARROW (ONLY)							
108+24	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
108+35	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
116+77	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
119+78	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
120+74	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
122+04	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
127+93	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
132+26	W11-2				X		PED CROSSING							
	W16-7PL				X		DIAGONAL ARROW							
134+20	R2-1				X		SPEED LIMIT - 35							MOUNT ON LT POLE
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
134+95	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
141+35	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
										60.5	3	36	3	TOTAL

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or visit Arizona811.com

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
NB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHANIE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	SS04

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 - 8:21am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NORTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
145+11	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
145+99	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
149+42	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
														MOUNT ON LT POLE
152+69	D3-2				X		GREENWAY RD							
154+94	R4-4			X			BEGIN RIGHT TURN | YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	24	18	3				INSTALL ON EXISTING POST
155+99	R3-5FP	X				WH	RIGHT LANE	30	12	2.5	1	1 3/4 S (12)	1	INSTALL ABOVE R3-5R
	R3-5R		X				RIGHT ARROW (ONLY)							RELOCATED FROM 156+32
156+32	R3-5R		X				RIGHT ARROW (ONLY)							RELOCATE TO 155+99
157+49	R3-5FP	X				WH	RIGHT LANE	30	12	2.5	1	1 3/4 S (12)	1	
	R3-5R	X				WH	RIGHT ARROW (ONLY)	30	36	7.5				

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

SOUTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
157+38	INFO				X		SURPRISE ADOPT A SIGN							
					X		CARTWRIGHT FAMILY							
151+66	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
148+43	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
143+08	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
136+75	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
134+73	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
132+26	W11-2				X		PED CROSSING							
	W16-7PL				X		ANGLE ARROW							
128+63	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
126+58	R2-1				X		SPEED LIMIT - 35							MOUNT ON LT POLE
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
118+63	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
115+97	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
110+48	D3-2				X		WADDELL RD							
108+44	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
104+68	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
103+84	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
										58	4	48	4	TOTAL

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	58	117	

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
SB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
Date Signed 2-28-18
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SS06
TRACS NO. T0063 01C
SUR-0(230)T
____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:21am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	59	117	

SOUTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
103+33	INFO				X		SURPRISE ADOPT A SIGN							
					X		CHRIST CHURCH OF THE VALLEY							
102+08	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
100+40	R7-9A				X		NO PARKING | BIKE LANE							
95+02	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
91+89	R7-9A				X		NO PARKING | BIKE LANE							
91+73	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
89+15	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
85+93	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
85+45	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL ABOVE R7-9A
	R7-9A				X		NO PARKING | BIKE LANE							RESET SIGN PANEL
82+56	SPECIALTY			X			RIGHT TURN YIELD TO BIKES & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	SPECIALTY	X				WH	RIGHT TURN YIELD TO BIKES	24	18	3				SEE DETAIL ON GN01
81+58	R3-5B			X			LEFT LANE							
	R3-5L			X			LEFT ARROW (ONLY)							
79+83	R3-5L			X			LEFT ARROW (ONLY)							
79+79	W11-2				X		PED CROSSING							
	W16-7PL				X		ANGLE ARROW							
78+52	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
76+39	R2-1				X		SPEED LIMIT – 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
75+97	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
										40	3	36	3	TOTAL

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
SB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHAINE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SS07
TRACS NO. T0063 01C
SUR-0(230)T
____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:21am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	60	117	

SOUTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
68+81	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
67+15	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
64+44	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
61+88	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
56+71	R3-7L			X			LEFT LANE MUST TURN LEFT							
56+69	R3-7R			X			RIGHT LANE MUST TURN RIGHT							
56+35	D3-2				X		CACTUS RD							
55+98	SPECIALTY			X			BEGIN RIGHT TURN | YIELD TO BIKE & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				
55+18	R3-5R			X			RIGHT ARROW (ONLY)							
54+97	R3-5FP	X				WH	RIGHT LANE	30	12	2.5	1	1 3/4 S (12)	1	
	R3-5R	X				WH	RIGHT ARROW (ONLY)	30	36	7.5				
53+55	R3-5L			X			LEFT ARROW (ONLY)							
53+49	R3-5FP	X				WH	RIGHT LANE	30	12	2.5				INSTALL ABOVE R3-5R
	R3-5R				X		RIGHT ARROW (ONLY)							RESET SIGN PANEL
52+04	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
51+33	W11-2				X		PED CROSSING							
51+32	W11-2			X			PED CROSSING							
50+90	R3-5FP	X				WH	RIGHT LANE	30	12	2.5	1	1 3/4 S (12)	1	
	R3-5R	X				WH	RIGHT ARROW (ONLY)	30	36	7.5				
50+51	R3-7R			X			RIGHT LANE MUST TURN RIGHT							
49+90	R3-5FP	X				WH	RIGHT LANE	30	12	2.5				INSTALL ABOVE R3-5R
	R3-5R				X		RIGHT ARROW (ONLY)							RESET SIGN PANEL
49+51	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
										54	5	60	5	TOTAL

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
SB BULLARD AVENUE

Registered Professional Engineer — 48476 — STEPHANIE S. WILHARDT-SMITH — ARIZONA, U.S.A.
Expires 9-30-20

ROUTE: BULLARD AVENUE
LOCATION: GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SS08
TRACS NO. T0063 01C
SUR-0(230)T
____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:21am richard
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

SOUTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
48+38	R4-7			X			KEEP RIGHT							
	OM3-R			X			OBJECT MARKER							
47+48	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
45+86	INFO				X		SURPRISE ADOPT A SIGN							
					X		CHRIST CHURCH OF THE VALLEY							
45+81	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
40+18	R4-7			X			KEEP RIGHT							
	R3-7			X			NO U TURN							
	OM3-R			X			OBJECT MARKER							
37+60	R4-7	X				WH	KEEP RIGHT	24	30	5	1	1 3/4 S (12)	1	
	OM3-R	X				YL	OBJECT MARKER	12	36	3				
35+85	R2-1				X		SPEED LIMIT - 35							
	SPECIALTY			X			LEFT CART | RIGHT BIKE							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL UNDER R2-1
35+57	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
35+57	W11-2				X		PED CROSSING							
	W16-9P				X		AHEAD							
29+41	SPECIALTY			X			BEGIN RIGHT TURN | YIELD TO BIKES							
28+46	R3-5FP	X				WH	RIGHT LANE	30	12	2.5	1	1 3/4 S (12)	1	
	R3-5R	X				WH	RIGHT ARROW (ONLY)	30	36	7.5				
28+46	R3-7R			X			RIGHT LANE MUST TURN RIGHT							
26+97	W11-2				X		PED CROSSING							
	W16-7PL				X		ANGLE ARROW							
26+86	R3-5L			X			LEFT ARROW (ONLY)							
25+90	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
24+50	SPECIALTY			X			BEGIN RIGHT TURN | YIELD TO BIKE & GOLF CART							REMOVE & SALVAGE SIGN ONLY
	R3-17	X				WH	BIKE LANE	30	24	5				INSTALL ON EXITING POST
23+43	R2-1				X		SPEED LIMIT - 35							
										41	3	36	3	TOTAL

Base file provided by PREMIER ENGINEERING on 14 December 2017

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	61	117	

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Contact Arizona 811 at least two full working days before you begin excavation
ARIZONA811 BLUE STAKE, INC.
Call 811 or visit Arizona811.com

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
SB BULLARD AVENUE

Registered Professional Engineer
48476
STEPHANIE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	SS09
TRACS NO. T0063 01C	SUR-0(230)T	____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:22am richard

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

SOUTHBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
10+02	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
6+11	R3-8 MOD				X		LEFT ARROW (ONLY) | RIGHT ARROW (ONLY)							
4+09	D3-2				X		PEORIA AVENUE							
4+09	D3-2				X		PEORIA AVENUE							
3+26	R3-5B				X		LEFT LANE							
	R3-5L				X		LEFT ARROW (ONLY)							
3+26	R3-5FP				X		RIGHT LANE							
	R3-5R				X		RIGHT ARROW (ONLY)							
00+74	D2-1		X				BULLARD AVE				1	1 3/4 S (12)	1	RELOCATED FROM STA 00+48
	D2-1		X				PEORIA AVE							RELOCATED FROM STA 00+48
	R1-1		X				STOP							RELOCATED FROM STA 00+48
	R4-1		X				ALL WAY							RELOCATED FROM STA 00+48
00+48	D2-1		X				BULLARD AVE							RELOCATE TO STA 00+74
	D2-1		X				PEORIA AVE							RELOCATE TO STA 00+74
	R1-1		X				STOP							RELOCATE TO STA 00+74
	R4-1		X				ALL WAY							RELOCATE TO STA 00+74
00+74	R1-1		X				STOP							RELOCATED FROM STA 00+46
	R4-1		X				ALL WAY							RELOCATED FROM STA 00+46
00+46	R1-1		X				STOP							RELOCATE TO STA 00+74
	R4-1		X				ALL WAY							RELOCATE TO STA 00+74
00+72	R3-5B	X				WH	LEFT LANE	30	12	2.5				INSTALL ABOVE R3-5L
	R3-5L				X		LEFT ARROW (ONLY)							RESET SIGN
-00+26	W1-7				X		DIRECTIONAL ARROW							
	OM1-2				X		OBJECT MARKER							
	OM1-2				X		OBJECT MARKER							

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

WESTBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
00+17	R1-1				X		STOP							
	R1-3P				X		ALL WAY							
00+48	R1-1				X		STOP							
	R1-3P				X		ALL WAY							
26+61	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		CHOLLA ST							
52+75	R3-5B				X		LEFT LANE							
	R3-5L				X		LEFT ARROW (ONLY)							
53+41	R3-5FP				X		RIGHT LANE							
	R3-5R				X		RIGHT ARROW (ONLY)							
79+26	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
79+56	R3-17				X		BIKE LANE							
79+61	R1-1			X			STOP							
119+30	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		HERN RD							
131+67	R3-5L				X		LEFT ARROW (ONLY)							
132+13	R1-1			X			STOP							
	D2-1			X			BULLARD AVE							
	D2-1			X			ACOMA DR							
132+14	R3-17				X		BIKE LANE							
143+52	W1-7				X		DIRECTIONAL ARROW							
	OM1-2				X		OBJECT MARKER							
	OM1-2				X		OBJECT MARKER							
143+76	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		MAUNA LOA LANE							
152+11	W1-7				X		DIRECTIONAL ARROW							
	OM1-2				X		OBJECT MARKER							
	OM1-2				X		OBJECT MARKER							
152+36	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		PORT AU PRINCE							
														TOTAL

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	63	117	

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
WB BULLARD AVENUE

Registered Professional Engineer 48476 STEPHANIE S. WILHARDT-SMITH ARIZONA, U.S.A. Expires 9-30-20

ROUTE	LOCATION	DWG NO.	
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	SS11	
TRACS NO. T0063 01C		SUR-0(230)T	____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 - 8:22am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

EASTBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
131+67	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
131+45	R1-1			X			STOP							
	D2-1			X			BULLARD AVE							
	D2-1			X			ACOMA DR							
105+09	OM3-R				X		OBJECT MARKER							
105+04	OM3-R				X		OBJECT MARKER							
104+98	OM3-R				X		OBJECT MARKER							
104+78	R3-5R				X		RIGHT ARROW (ONLY)							
92+01	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		OLD OAK LN							
79+26	R3-5L				X		LEFT ARROW (ONLY)							
79+10	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
78+78	R1-1			X			STOP							
	D2-1			X			BULLARD AVE							
	D2-1			X			SWEETWATER AVE							
69+96	R1-1				X		STOP							
69+81	D2-1				X		BULLARD AVE							
	D2-1				X		WINDROSE DR							
64+68	R1-1				X		STOP							
64+51	D2-1				X		BULLARD AVE							
	D2-1				X		LARKSPUR DR							
58+25	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		CHARTER OAKS RD							
52+75	R4-7				X		KEEP RIGHT							
	OM3-R				X		OBJECT MARKER							
52+33	R3-17				X		BIKE LANE							
49+09	R6-1		X		X		ONE WAY				1	1 3/4 S (12)	1	RELOCATE INTO NEW MEDIAN
	R3-2		X		X		NO LEFT TURN							RELOCATE INTO NEW MEDIAN
											1	12	1	TOTAL

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	64	117	

NOTE:

1. ALL SIGNS WITH REMARK "REMOVE & SALVAGE SIGN ONLY" SHALL BE SALVAGED TO THE CITY OF SURPRISE MAINTENANCE YARD.

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGN SUMMARY
EB BULLARD AVENUE

Registered Professional Engineer — 48476 — STEPHANIE S. WILHARDT-SMITH — Date Signed — ARIZONA, U.S.A.
Expires 9-30-20

ROUTE
LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SS12

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Feb 28, 2018 - 8:22am richard

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SS01.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

EASTBOUND BULLARD AVENUE			WORK			SIGN BACKGROUND COLOR	PANEL				GROUND MOUNT			REMARKS
							LEGEND	SIGN SIZE		SHEETING TYPE AREA (sq. ft.)	POSTS			
STATION #	SIGN CODE	NEW	RELOCATE	REMOVE	EXISTING TO REMAIN			WIDTH (in)	HEIGHT (in)		NO. POSTS	TYPE (length)	FOUNDATIONS	
48+89	R1-1				X		STOP							
	R3-5R				X		RIGHT ARROW (ONLY)							
40+41	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		POINSETTIA DR							
26+04	R1-1				X		STOP							
	D2-1				X		BULLARD AVE							
	D2-1				X		CHOLLA ST							
10+22	R1-1				X		STOP							
6+92	R6-1				X		ONE WAY							
6+75	R1-1				X		STOP							
-00+15	R1-1				X		STOP							
	R1-3P				X		ALL WAY							
131+21	R10-101	X				WH	LEFT TURN YIELD ON FLASH	30	36	7.5				INSTALL ON TRAFFIC SIGNAL MAST ARM
132+21	R10-101	X				WH	LEFT TURN YIELD ON FLASH	30	36	7.5				INSTALL ON TRAFFIC SIGNAL MAST ARM
78+73	R10-101	X				WH	LEFT TURN YIELD ON FLASH	30	36	7.5				INSTALL ON TRAFFIC SIGNAL MAST ARM
79+82	R10-101	X				WH	LEFT TURN YIELD ON FLASH	30	36	7.5				INSTALL ON TRAFFIC SIGNAL MAST ARM

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	66	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.

EXISTING STREET NAMES, STOP (R1–1), AND ALL WAY (R1–3P) SIGNS TO BE RELOCATED FROM STA 00+48 TO STA 00+74

EXISTING LEFT LANE (R3–5B, 30"x12") AND LEFT ARROW ONLY (R3–5L) SIGNS TO REMAIN STA 3+26

EXISTING RIGHT ARROW ONLY (R3–5R) AND RIGHT LANE (R3–5fP) SIGNS TO REMAIN. STA 3+26

EXISTING ADVANCE STREET NAME (D3–2) SIGN TO REMAIN STA 4+09

EXISTING STOP (R1–1) SIGN TO REMAIN STA 6+75

EXISTING ONE WAY (R6–1) SIGN TO REMAIN STA 6+92

EXISTING LEFT ONLY/RIGHT ONLY (R3–8 MOD) SIGN TO REMAIN (MOUNTED ON LIGHT POLE). STA 6+11

EXISTING STOP (R1–1) AND ALL WAY (R1–3P) SIGNS TO REMAIN STA –00+15

EXISTING DOUBLE ARROW (W1–7) AND OBJECT MARKER (OM1–2) SIGNS TO REMAIN STA –00+26

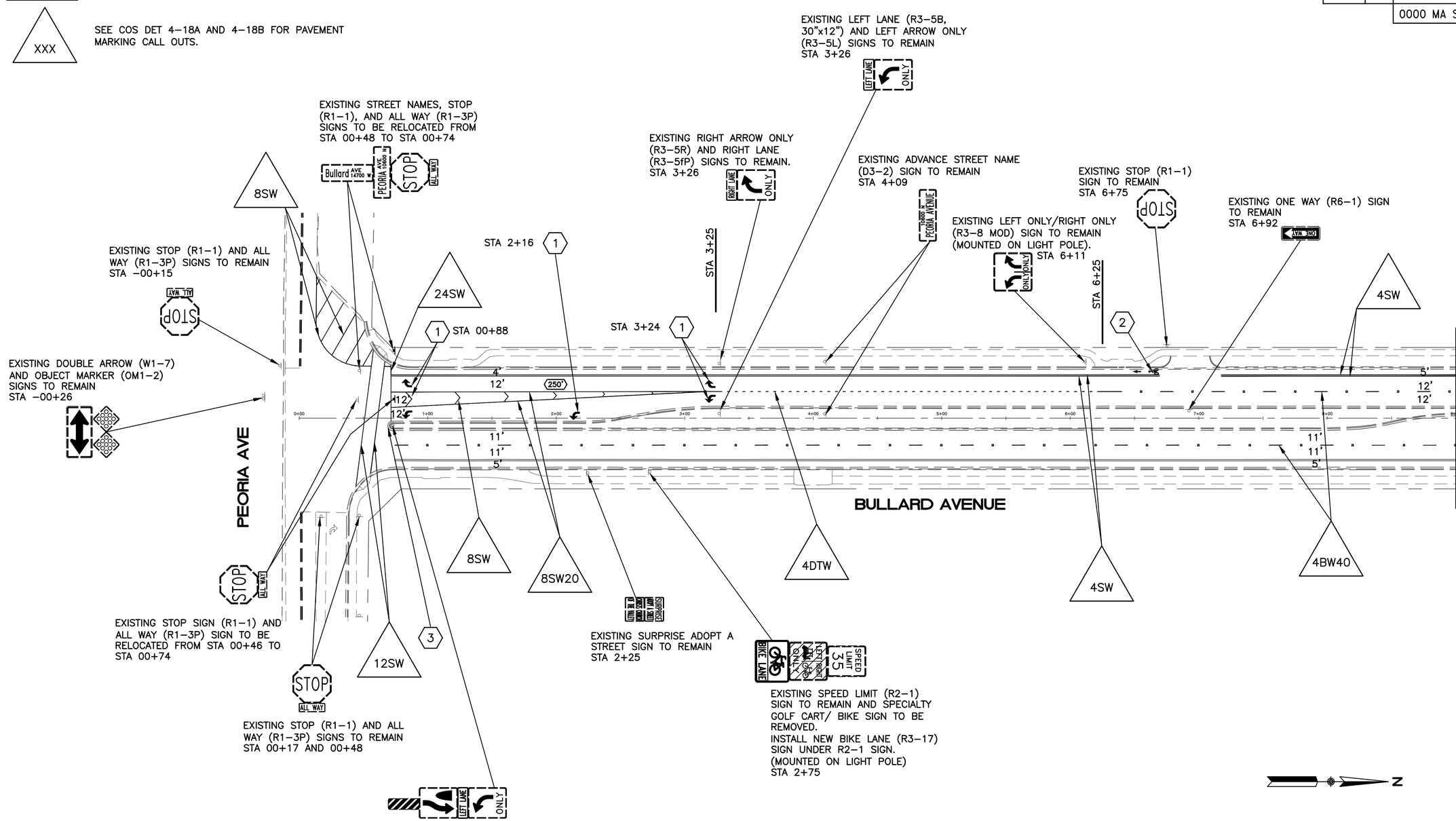
EXISTING STOP SIGN (R1–1) AND ALL WAY (R1–3P) SIGN TO BE RELOCATED FROM STA 00+46 TO STA 00+74

EXISTING STOP (R1–1) AND ALL WAY (R1–3P) SIGNS TO REMAIN STA 00+17 AND 00+48

EXISTING SURPRISE ADOPT A STREET SIGN TO REMAIN STA 2+25

EXISTING SPEED LIMIT (R2–1) SIGN TO REMAIN AND SPECIALTY GOLF CART/ BIKE SIGN TO BE REMOVED.
INSTALL NEW BIKE LANE (R3–17) SIGN UNDER R2–1 SIGN.
(MOUNTED ON LIGHT POLE)
STA 2+75

EXISTING LEFT ARROW ONLY (R3–5L), KEEP RIGHT (R4–7) AND OBJECT MARKER (OM3–R) SIGN TO REMAIN. INSTALL NEW R3–5bP LEFT LANE SIGN ON TOP OF R3–5L LEFT TURN ONLY SIGN.
STA 00+72



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

N

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Registered Professional Engineer — 48476 STEPHANIE S. WILHARDT-SMITH — Date Signed 4/27/18 — ARIZONA, U.S.A. — Expires 9–30–20

DWG NO. SM01

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS– | REVISIONS– | LOCATION– | DATE–

richard Feb 28, 2018 - 8:23am

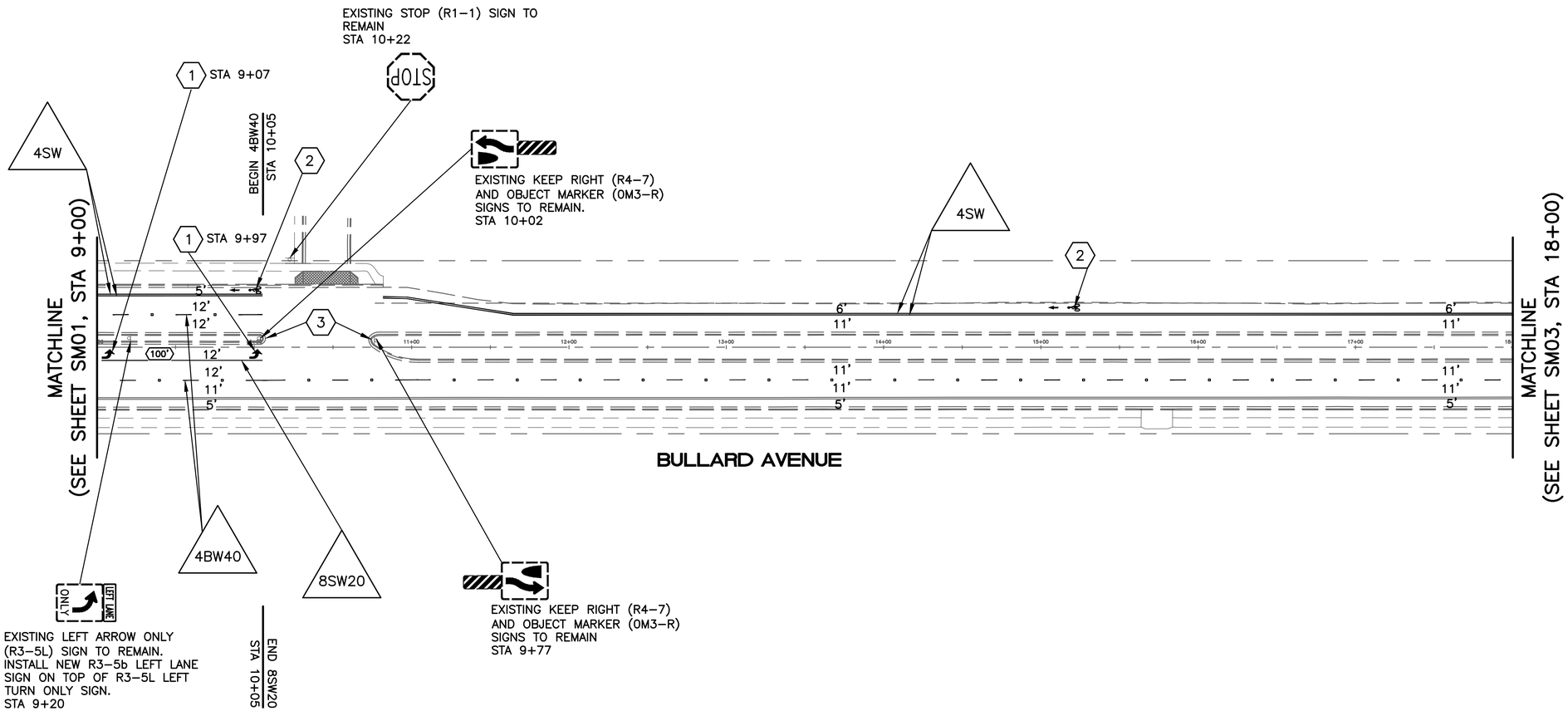
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	67	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



SCALE: 1"=40'

0' 20' 40' 80'

CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Professional Engineer — 48476 — STEPHANIE S. WILHARDT-SMITH — ARIZONA, U.S.A. — Expires 9-30-20

TRACS NO. T0063 01C | SUR-0(230)T | DWG NO. SM02 | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:23am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

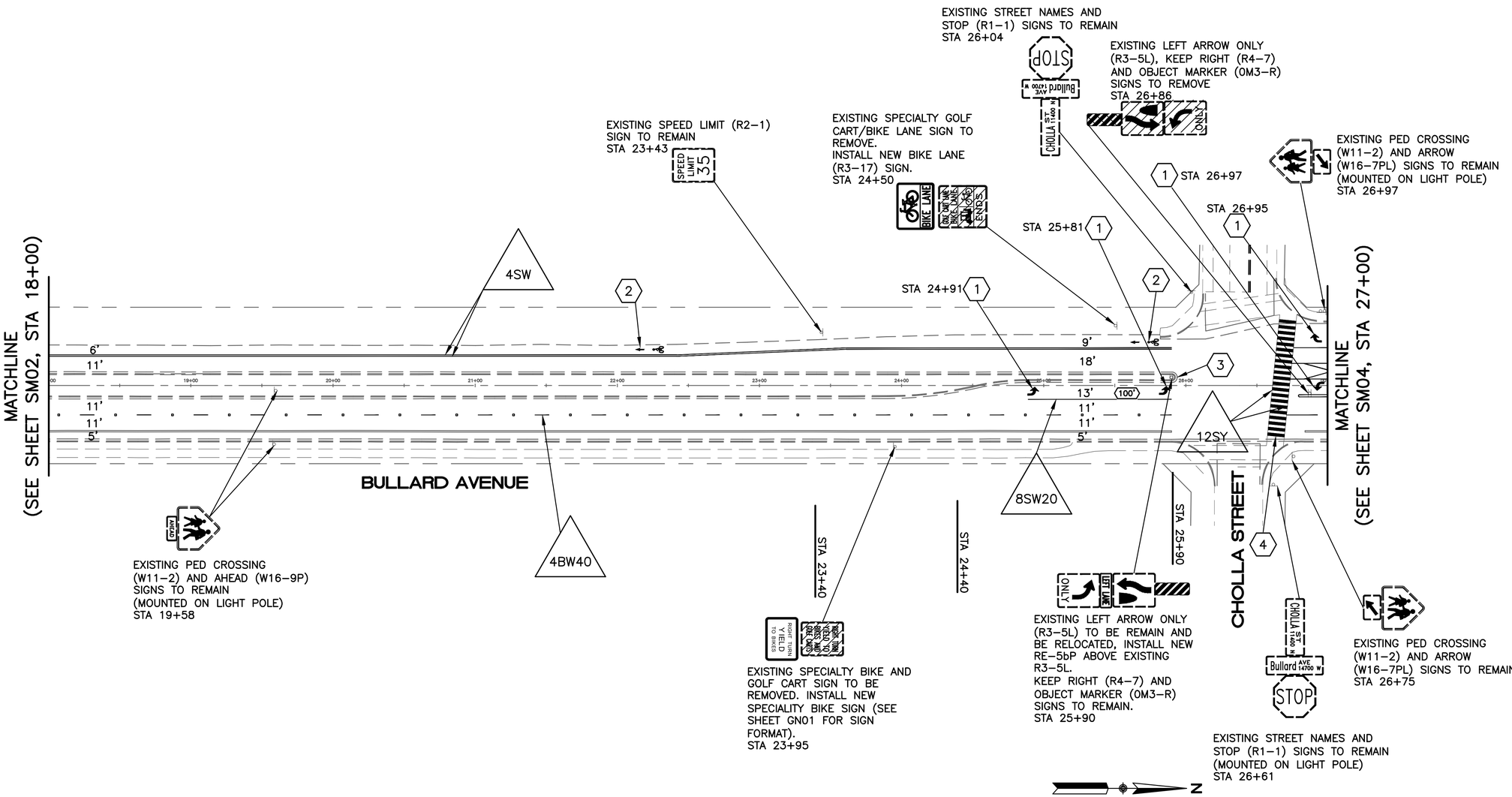
Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	68	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
4. YELLOW STRIPED SCHOOL CROSSING. PER COS DET. 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

48476 STEPHAINE S. WILHARDT-SMITH — Registered Professional Engineer — ARIZONA, U.S.A. — Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SM03

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

richard Feb 28, 2018 – 8:24am

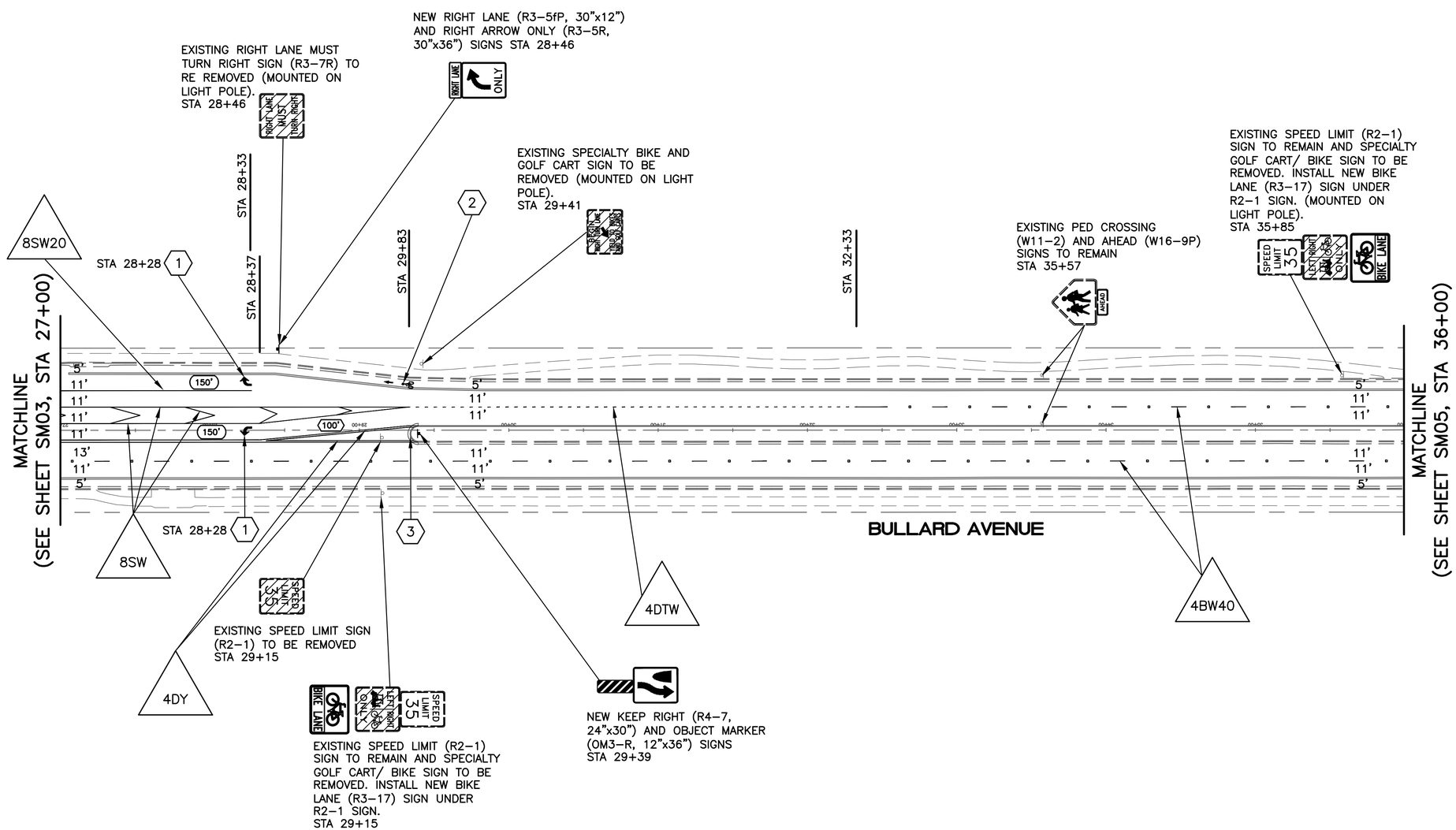
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	69	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Professional Engineer — 48476 — STEPHAINE S. WILHARDT–SMITH — ARIZONA, U.S.A. — Expires 9-30-20

DWG NO. SM04

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:24am

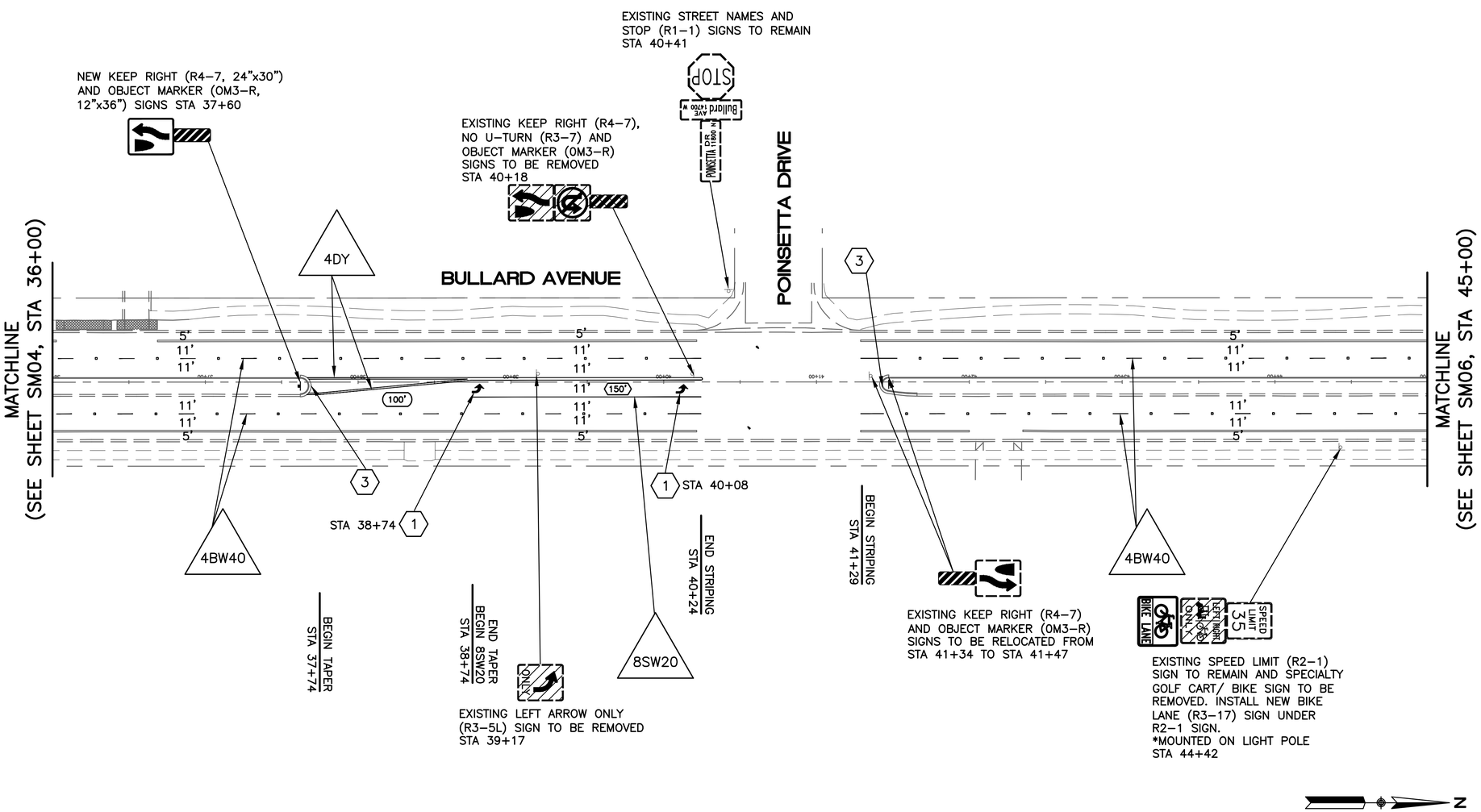
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	70	117	

LEGEND

XXX — SEE COS DET 4-18A AND 4-18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4-20A.
2. BIKE SYMBOL PER COS DET 4-20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4-20A.
4. XXX — TURN LANE STORAGE LENGTH (IN FEET)
5. XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT-SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer (Civil) — 48476 — STEPHANIE S. WILHARDT-SMITH — Date Signed — ARIZONA, U.S.A. — Expires 9-30-20

ROUTE
LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SM05

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 - 8:24am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ		71	117	
		0000 MA SUR			

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.

EXISTING SURPRISE ADOPT A STREET SIGN TO REMAIN
STA 45+86

NEW KEEP RIGHT (R4–7, 24"x30") AND OBJECT MARKER (OM3–R, 12"x36") SIGNS STA 45+81

EXISTING SPEED LIMIT (R2–1) SIGN TO REMAIN AND SPECIALTY GOLF CART/ BIKE SIGN TO BE REMOVED. INSTALL NEW BIKE LANE (R3–17) SIGN UNDER R2–1 SIGN (MOUNTED ON LIGHT POLE).
STA 47+48

EXISTING STOP (R1–1) AND RIGHT ONLY (R3–5R) SIGNS TO REMAIN. STA 48+89

EXISTING LEFT ARROW ONLY (R3–5L), KEEP RIGHT (R4–7) AND OBJECT MARKER (OM3–R) SIGNS TO BE REMOVED
STA 48+38

EXISTING RIGHT ARROW ONLY (R3–5R) SIGN TO REMAIN AND BE RESET, INSTALL NEW R3–5fP SIGN ABOVE EXISTING R3–5R SIGN. STA 49+90

EXISTING RIGHT LANE MUST TURN RIGHT SIGN (R3–7R) TO BE REMOVED. STA 50+51

EXISTING RIGHT ARROW ONLY (R3–5R) SIGN TO REMAIN AND BE RESET, INSTALL NEW R3–5fP SIGN ABOVE EXISTING R3–5R SIGN.
(MOUNTED ON LIGHT POLE)
STA 53+49

NEW RIGHT LANE (R3–5fP, 30"x12") AND RIGHT ARROW ONLY (R3–5R, 30"x36") SIGNS
STA 50+90

EXISTING LEFT ARROW ONLY (R3–5L), KEEP RIGHT (R4–7) AND OBJECT MARKER (OM3–R) SIGNS TO BE REMOVED
STA 53+55

EXISTING PED CROSSING SIGN (W11–2) SIGN TO REMAIN (MOUNTED ON POLE WITH FLASHING LIGHTS) STA 51+33

EXISTING PED CROSSING SIGN (W11–2) SIGN TO REMAIN (MOUNTED ON POLE WITH FLASHING LIGHTS)
STA 45+06

EXISTING PED CROSSING SIGN (W11–2) SIGN TO REMAIN
STA 45+06

EXISTING LEFT ARROW ONLY (R3–5L) SIGN TO BE REMOVED
STA 47+50

EXISTING ADVANCE STREET NAME (D3–2) SIGN TO REMAIN (MOUNTED ON LIGHT POLE)
STA 47+29

EXISTING ONE WAY (R6–1) AND NO LEFT TURN (R3–2) SIGN TO RELOCATED FROM STA 49+09 TO STA 49+09

EXISTING KEEP RIGHT (R4–7) AND OBJECT MARKER (OM3–R) SIGNS TO REMAIN
STA 49+07

NEW KEEP RIGHT (R4–7, 24"x30") AND OBJECT MARKER (OM3–R, 12"x36") SIGNS STA 49+51

EXISTING SPECIALTY BIKE AND GOLF CART SIGN TO REMOVED. INSTALL NEW SPECIALITY BIKE SIGN (SEE SHEET GN01 FOR SIGN FORMAT).
(MOUNTED ON LIGHT POLE)
STA 50+43

EXISTING PED CROSSING SIGN (W11–2) SIGN TO BE REMOVED
STA 51+32

EXISTING BIKE LANE (R3–17) SIGN TO REMAIN. STA 52+33

EXISTING LEFT ARROW ONLY (R3–5L), KEEP RIGHT (R4–7) AND OBJECT MARKER (OM3–R) SIGNS TO BE REMOVED
STA 52+04

EXISTING OBJECT MARKER (OM3, 12"x36"), KEEP RIGHT (R4–7), LEFT LANE (R3–5B) AND LEFT ARROW ONLY (R3–5L) SIGNS TO REMAIN STA 52+75

EXISTING RIGHT LANE (R3–5fP) AND RIGHT ARROW ONLY (R3–5R) SIGNS TO REMAIN
STA 53+41

EXISTING SPEED LIMIT (R2–1) SIGN TO REMAIN AND SPECIALTY GOLF CART/ BIKE SIGN TO BE REMOVED. INSTALL NEW BIKE LANE (R3–17) SIGN UNDER R2–1 SIGN.
(MOUNTED ON LIGHT POLE)
STA 53+77

STA 45+97 — STA 46+97 — STA 48+43 — STA 49+80 — STA 49+61 — STA 50+61 — STA 50+91 — STA 51+92 — STA 52+11

CACTUS ROAD

BULLARD AVENUE

(SEE SHEET SM05, STA 45+00) MATCHLINE

(SEE SHEET SM07, STA 54+00) MATCHLINE

SCALE: 1"=40'

0' 20' 40' 80'

N

CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

Base file provided by PREMIER ENGINEERING on 14 December 2017

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C — SUR-0(230)T

48476 STEPHANIE S. WILHARDT-SMITH — Expires 9-30-20

DWG NO. SM06

____ OF ____

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

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE- | SURVEY NO.

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

richard Feb 28, 2018 - 8:24am

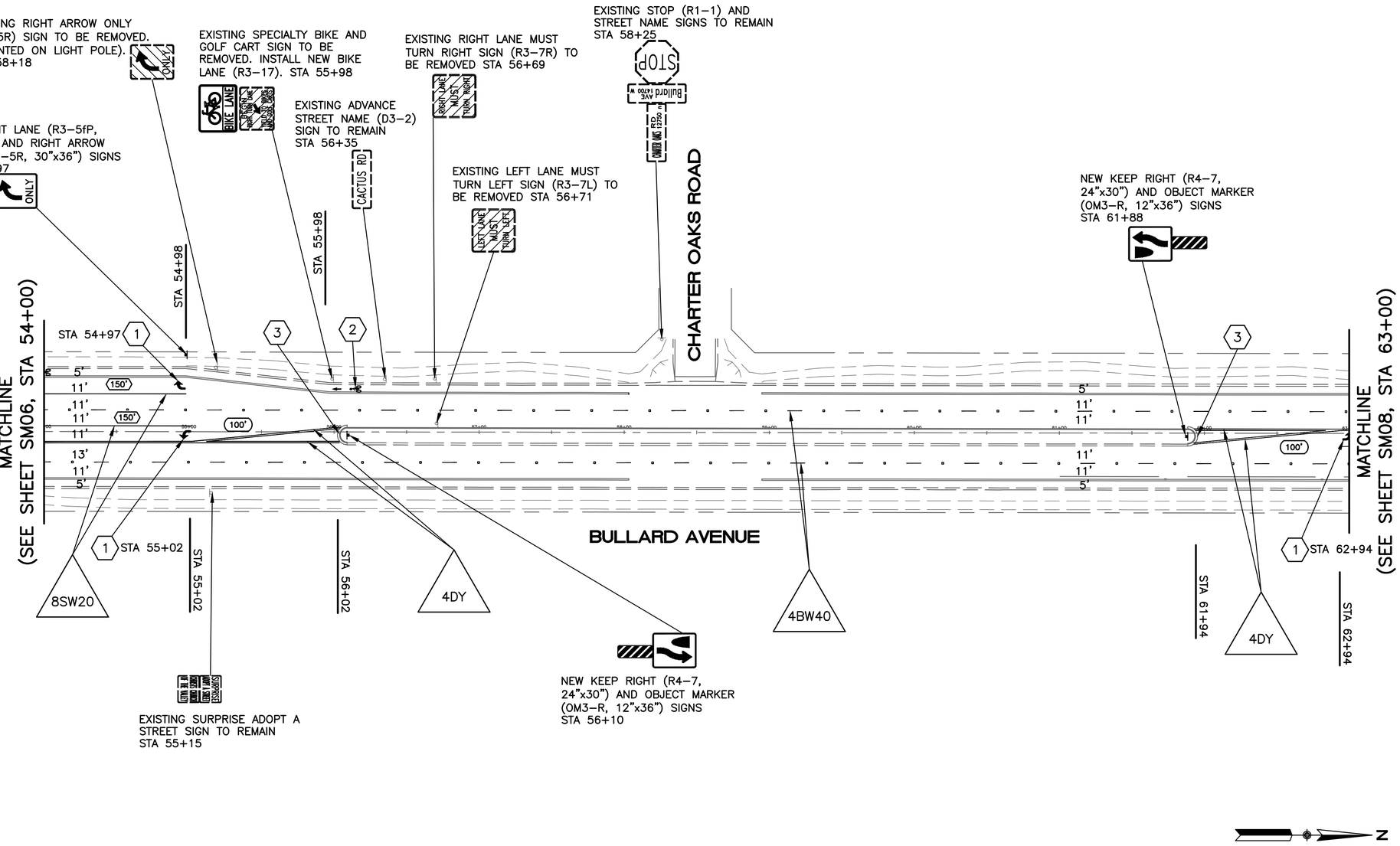
Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	72	117	

LEGEND

XXX

SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

48476 STEPHANIE S. WILHARDT–SMITH — Expires 9–30–20

DWG NO. SM07

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS:- | REVISIONS:- | LOCATION:- | DATE:-

richard Feb 28, 2018 – 8:25am

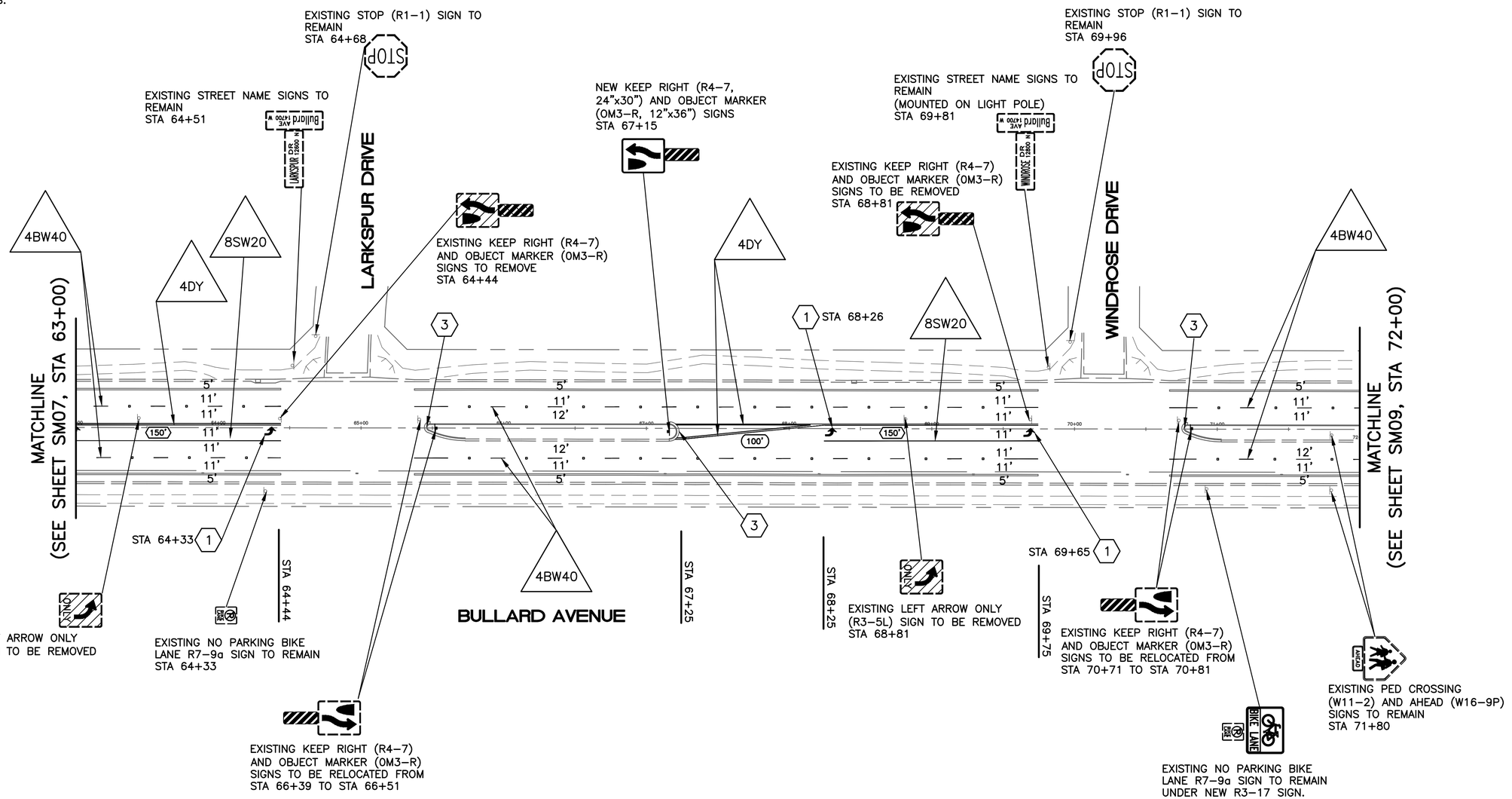
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	73	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

N

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer — 48476 — STEPHAINE S. WILHARDT–SMITH — Date Signed — ARIZONA, U.S.A.
Expires 9–30–20

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE
DWG NO. SM08

TRACS NO. T0063 01C — SUR-0(230)T — ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:25am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

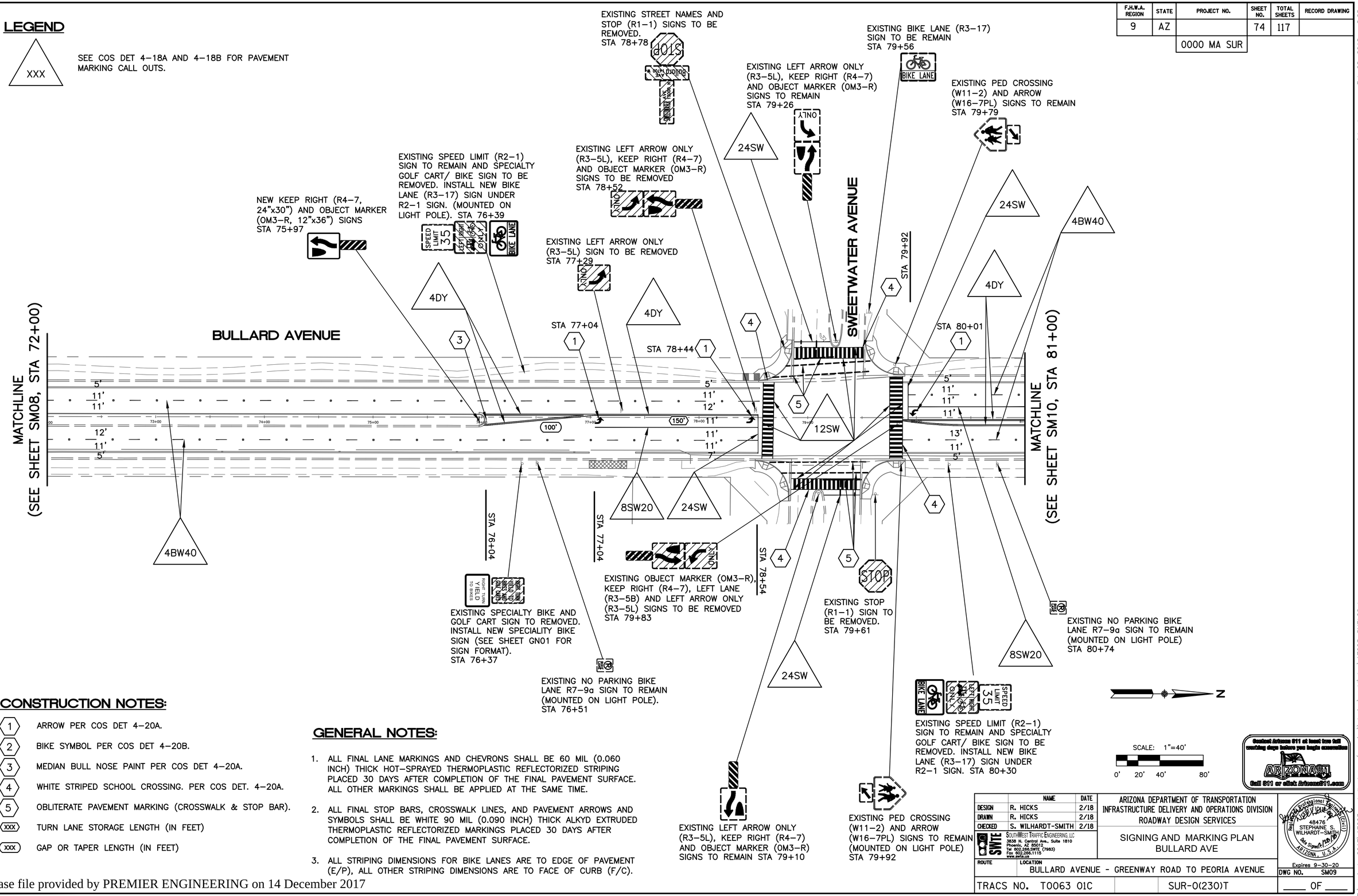
Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	74	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
4. WHITE STRIPED SCHOOL CROSSING. PER COS DET. 4–20A.
5. OBLITERATE PAVEMENT MARKING (CROSSWALK & STOP BAR).
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

Base file provided by PREMIER ENGINEERING on 14 December 2017

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3636 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

48476 STEPHANIE S. WILHARDT-SMITH — Date Signed 2/19/18 — ARIZONA, U.S.A. — Expires 9-30-20

DWG NO. SM09

____ OF ____

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

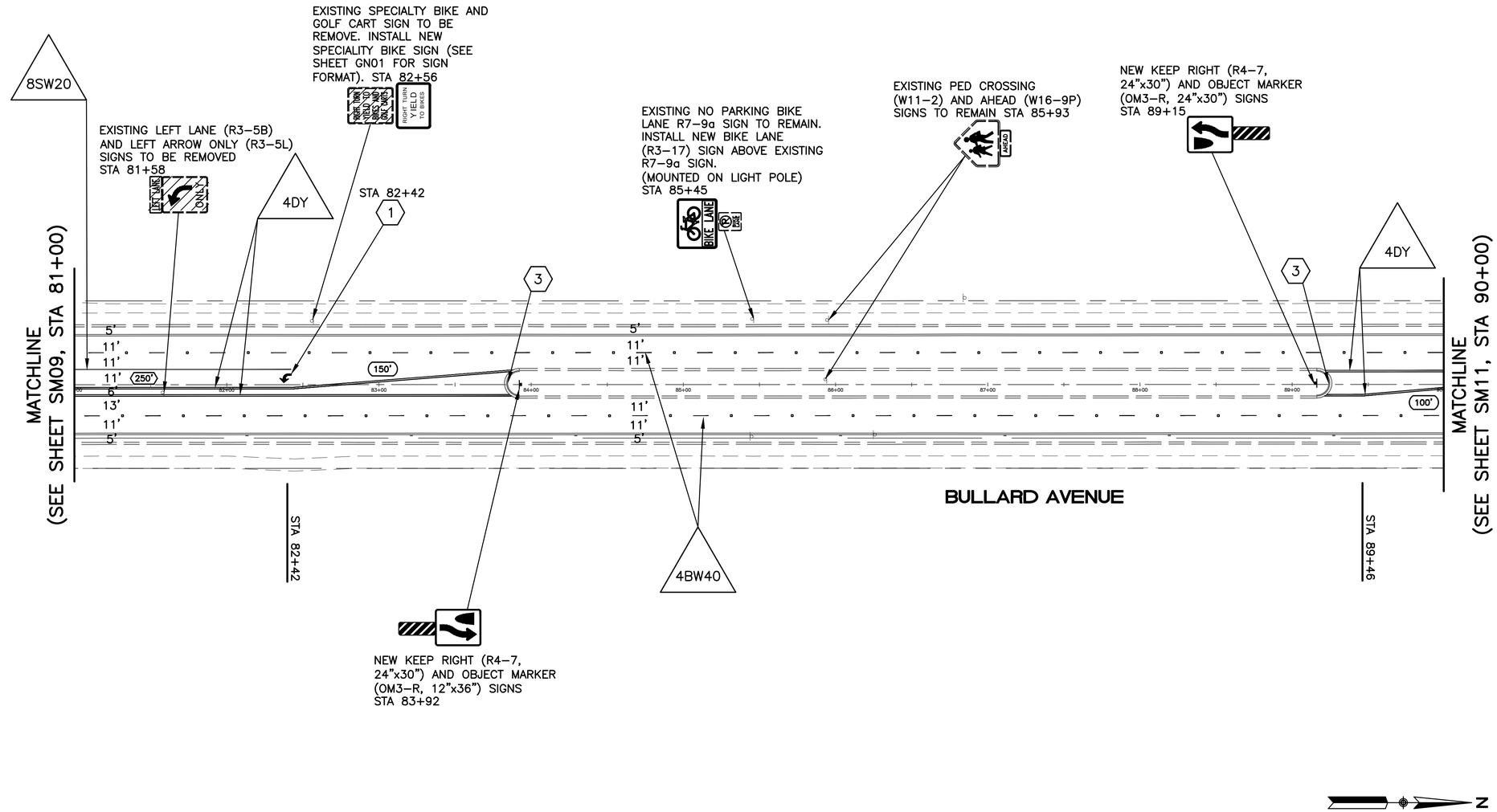
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg
richard Feb 28, 2018 – 8:25am

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	75	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

48476 STEPHANIE S. WILHARDT–SMITH Date Signed 4/19/18 ARIZONA, U.S.A.
Expires 9–30–20

DWG NO. SM10

TRACS NO. T0063 01C — SUR–0(230)T — ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

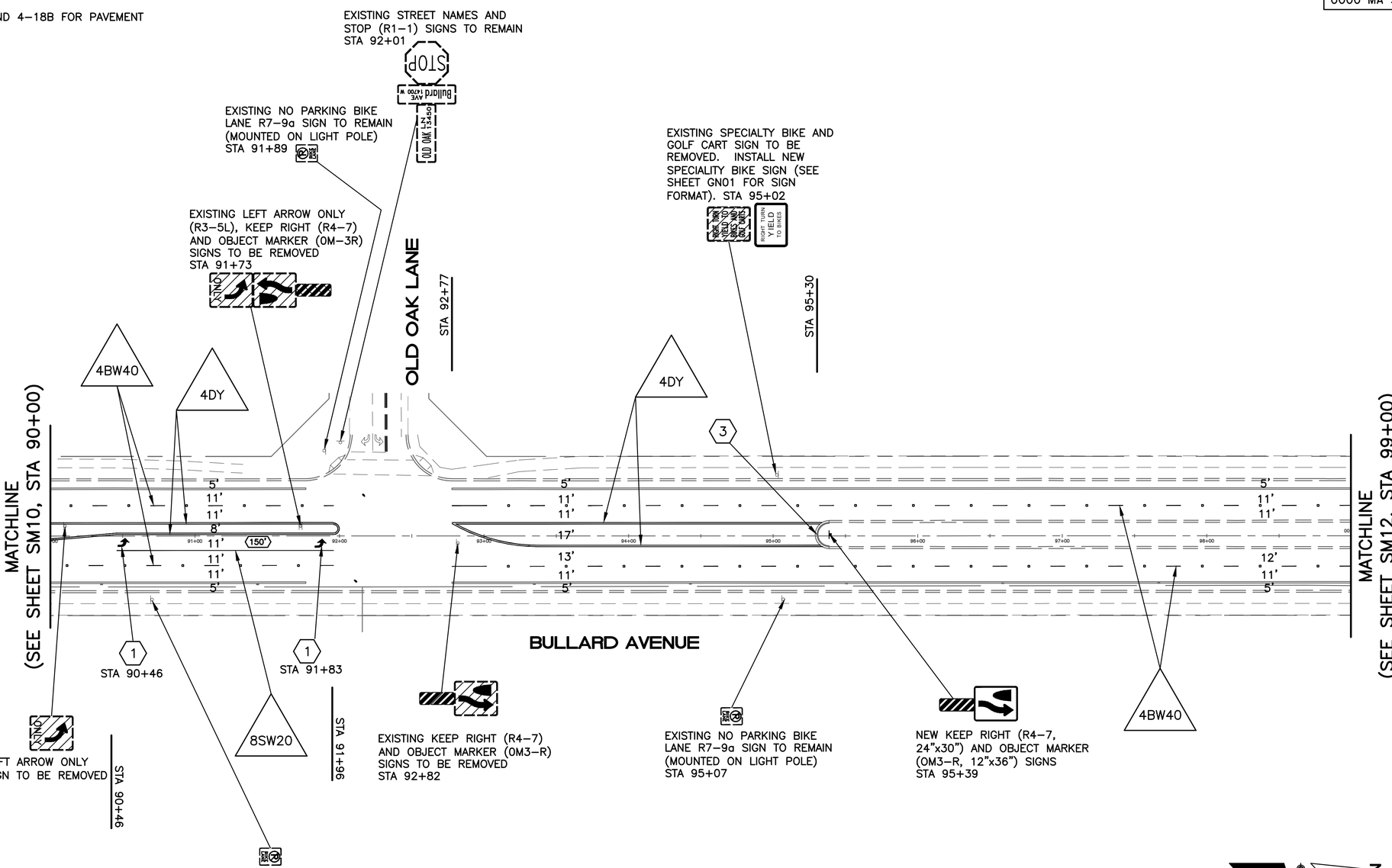
richard Feb 28, 2018 – 8:25am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	76	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3636 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Registered Professional Engineer — 48476 — STEPHANIE S. WILHARDT-SMITH — Date Signed — ARIZONA, U.S.A. — Expires 9-30-20

DWG NO. SM11

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

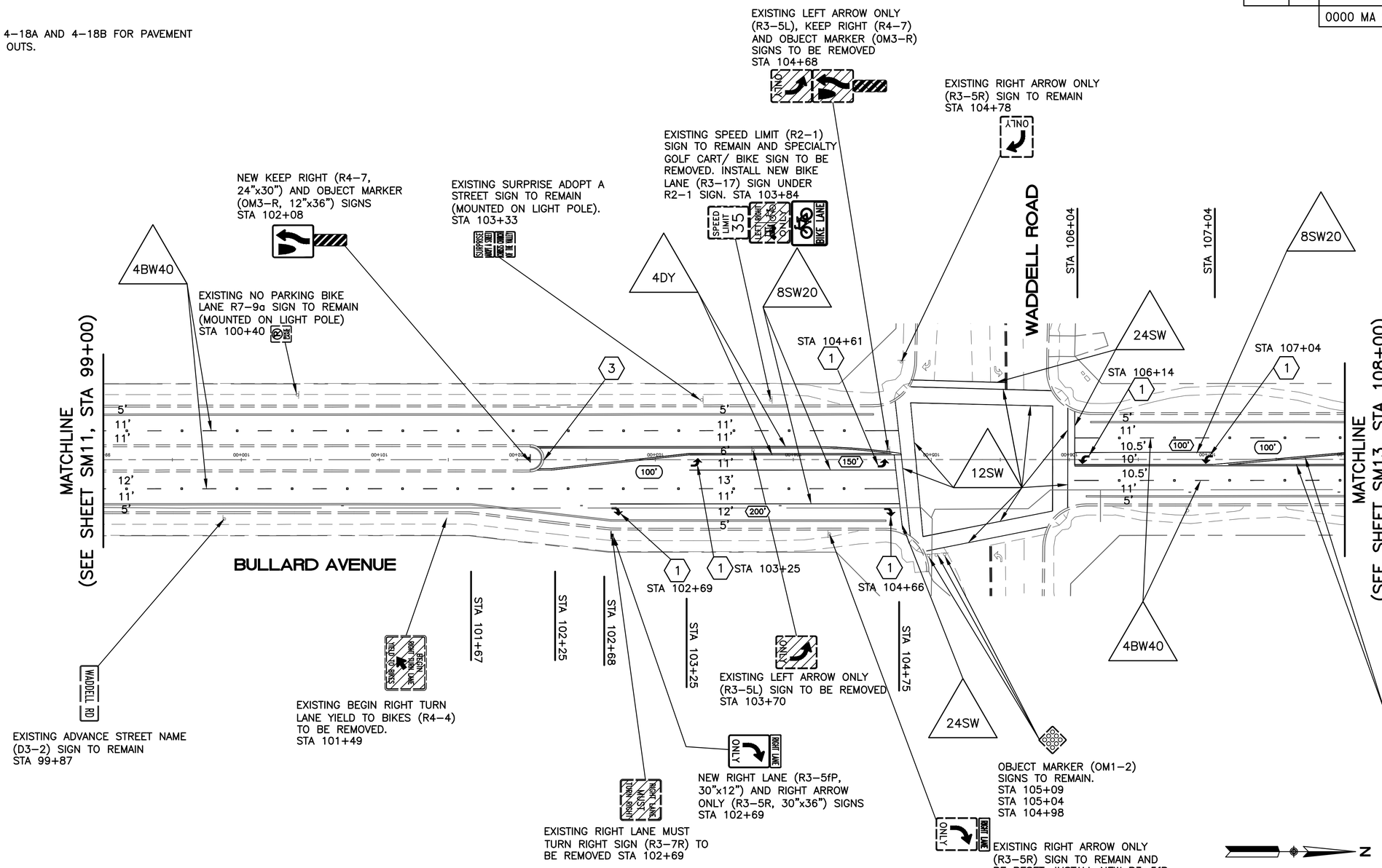
Feb 28, 2018 - 8:25am richard

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	77	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE, (7983)
Fax 602.266.1115
www.swtraffic.com

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

Registered Professional Engineer — 48476 — STEPHANIE S. WILHARDT–SMITH — Date Signed — ARIZONA, U.S.A. — Expires 9–30–20

DWG NO. SM12

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:25am

P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

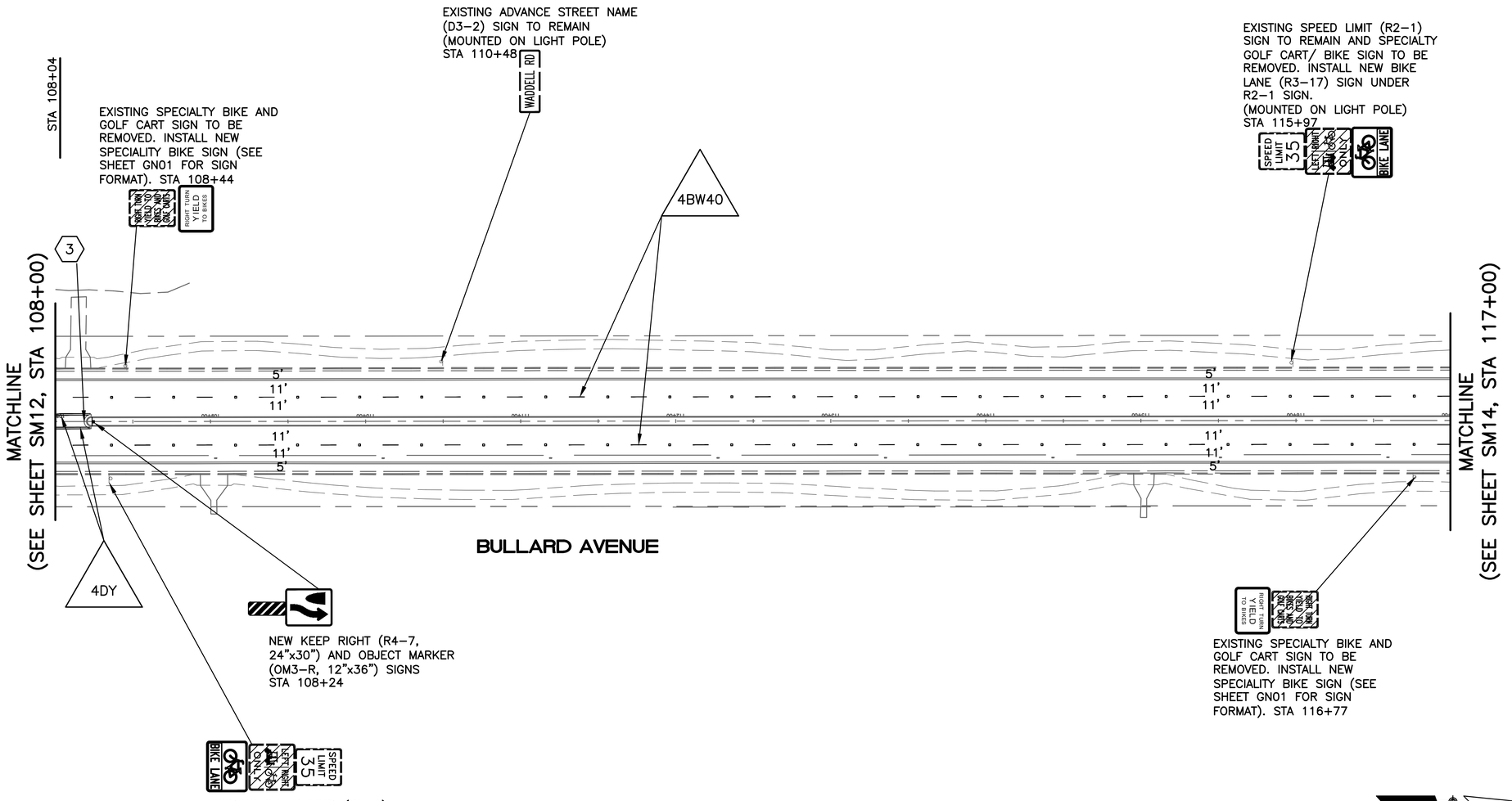
Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	78	117	

LEGEND

XXX

SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE
SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.co

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer (Civil) 48476 STEPHANIE S. WILHARDT–SMITH Date Signed 12/19/18 ARIZONA, U.S.A.
Expires 9–30–20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SM13

TRACS NO. T0063 01C | SUR-0(230)T

____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

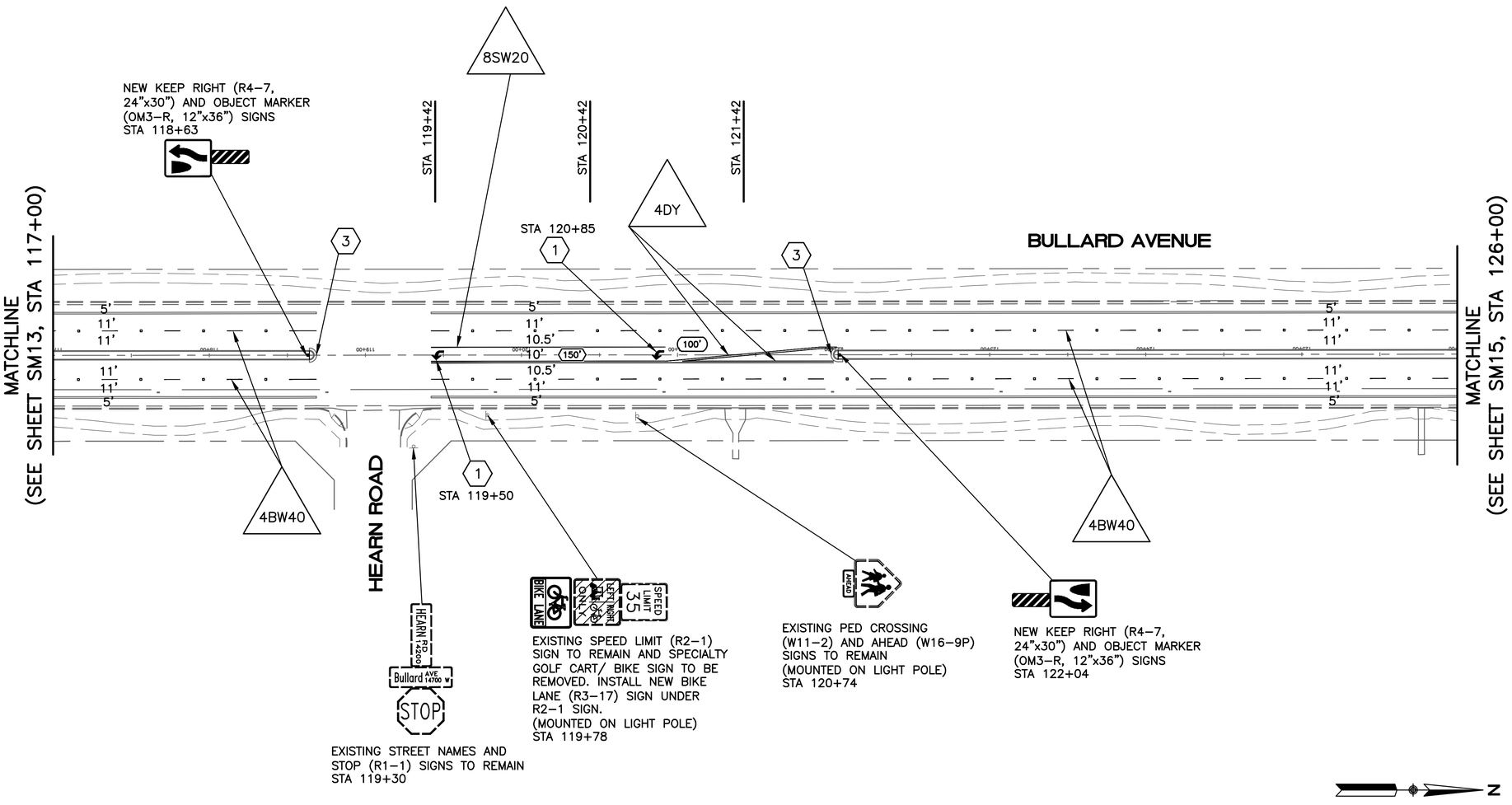
richard Feb 28, 2018 – 8:26am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	79	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- (XXX) TURN LANE STORAGE LENGTH (IN FEET)
- (XXX) GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'
0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

48476 STEPHANIE S. WILHARDT–SMITH — Expires 9–30–20

DWG NO. SM14

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE- | SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

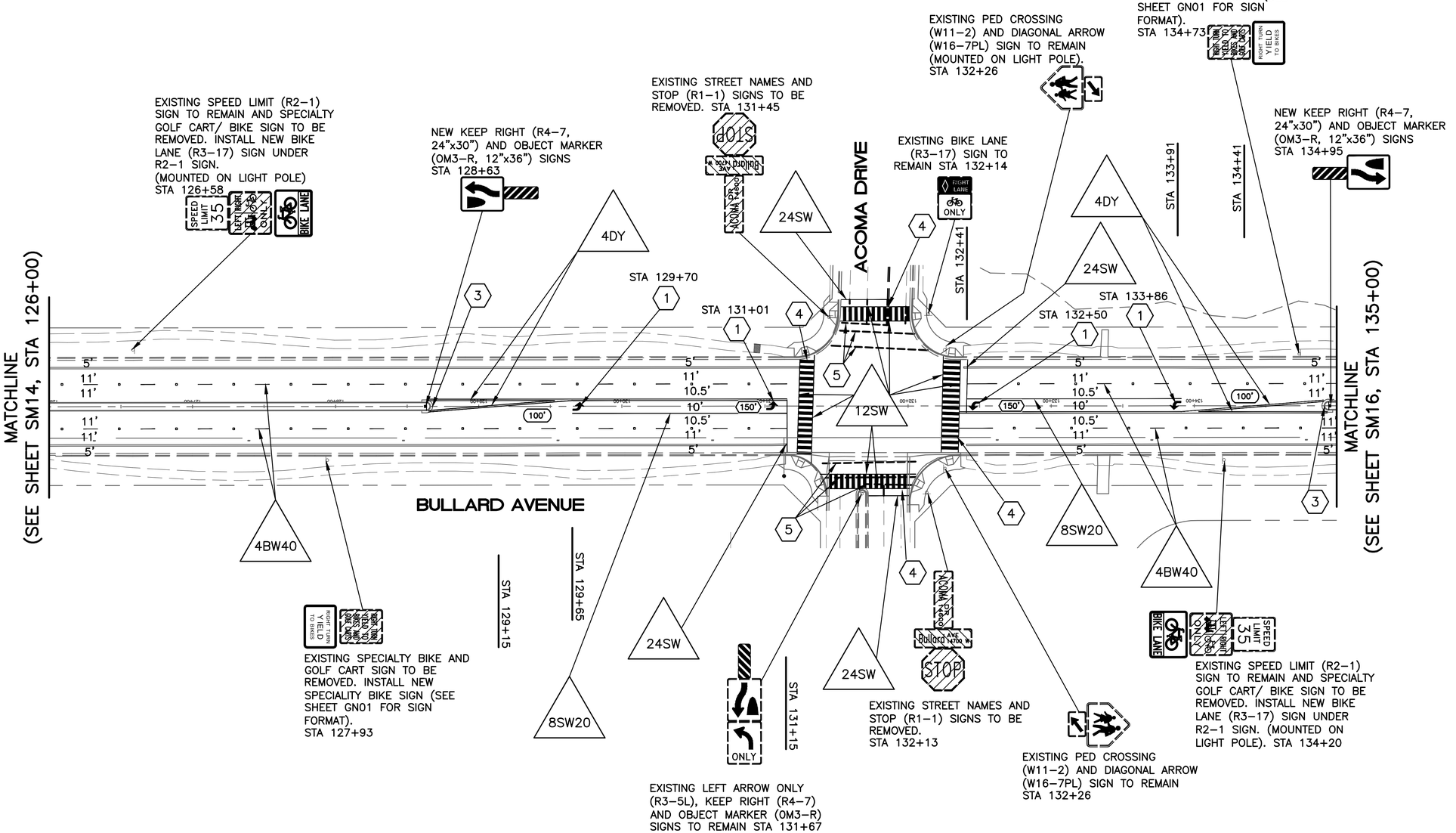
richard Feb 28, 2018 – 8:26am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	80	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
4. WHITE STRIPED SCHOOL CROSSING. PER COS DET. 4–20A.
5. OBLITERATE PAVEMENT MARKING (CROSSWALK & STOP BAR).

XXX — TURN LANE STORAGE LENGTH (IN FEET)

XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

N

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer — 48476 — STEPHANIE S. WILHARDT–SMITH — Date Signed — ARIZONA, U.S.A.

Expires 9–30–20

ROUTE — LOCATION: BULLARD AVENUE – GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SM15

TRACS NO. T0063 01C — SUR–0(230)T — ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS– | REVISIONS– | LOCATION– | DATE–

richard Feb 28, 2018 – 8:26am

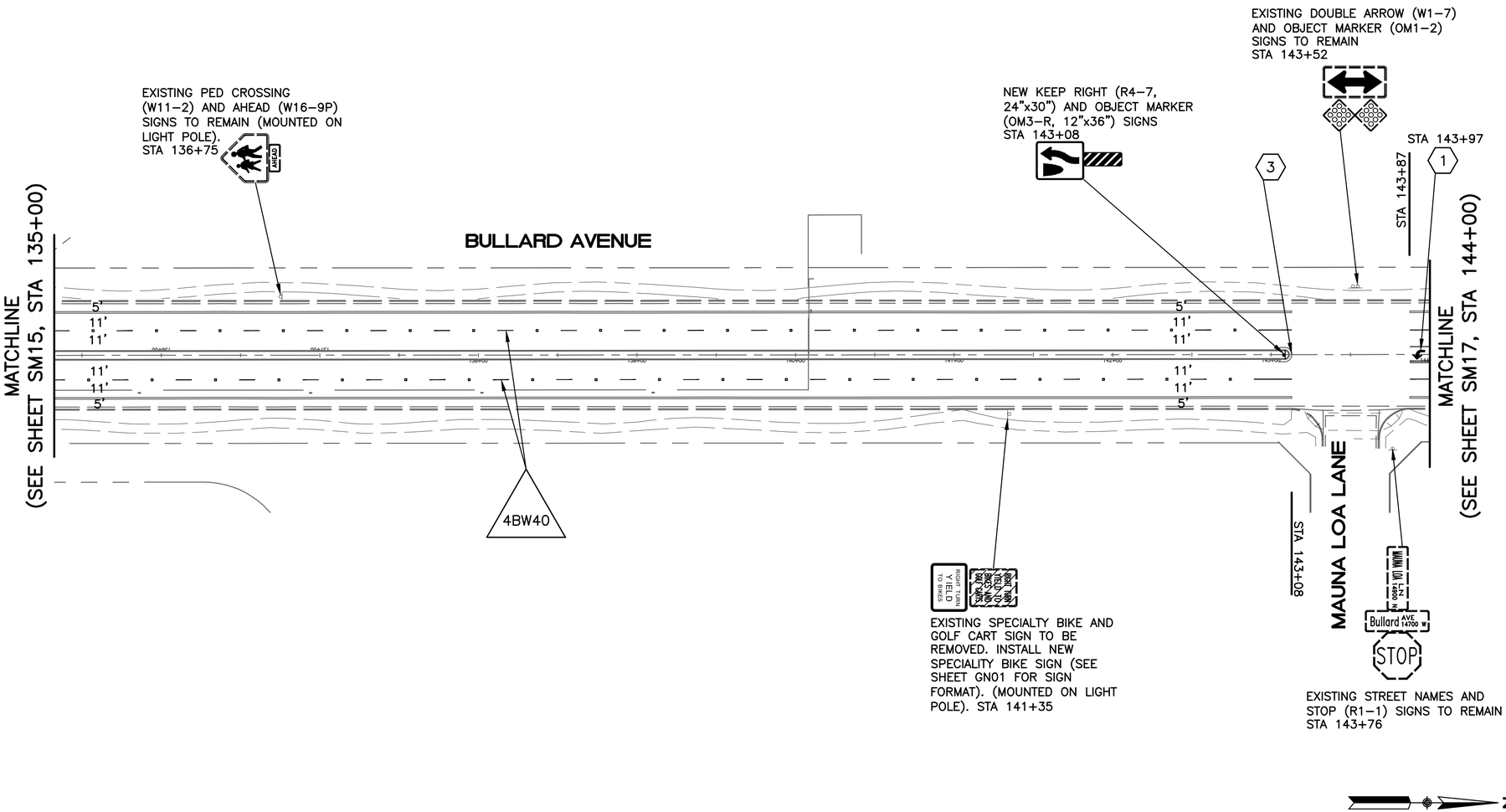
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	81	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3638 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer — Stephaine S. Wilhardt-Smith — 48476 — Date Signed 12/14/17 — Arizona, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE | DWG NO. SM16

TRACS NO. T0063 01C | SUR-0(230)T | ___ OF ___

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

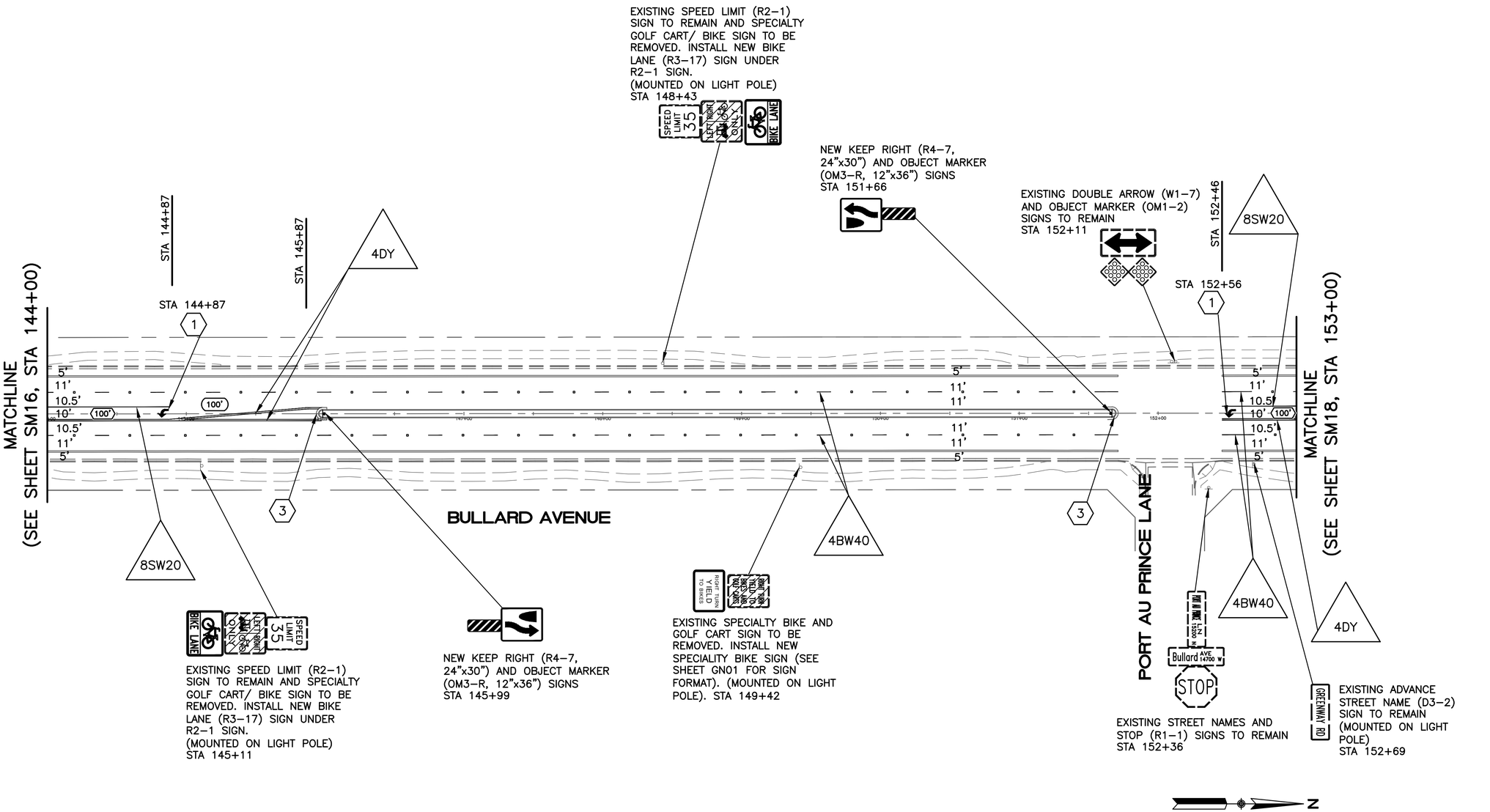
richard Feb 28, 2018 – 8:26am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	82	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

SCALE: 1"=40'

0' 20' 40' 80'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE — SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE, (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

Registered Professional Engineer — 48476 STEPHANIE S. WILHARDT-SMITH — Date Signed — ARIZONA, U.S.A. — Expires 9–30–20

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

DWG NO. SM17

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

richard Feb 28, 2018 – 8:26am

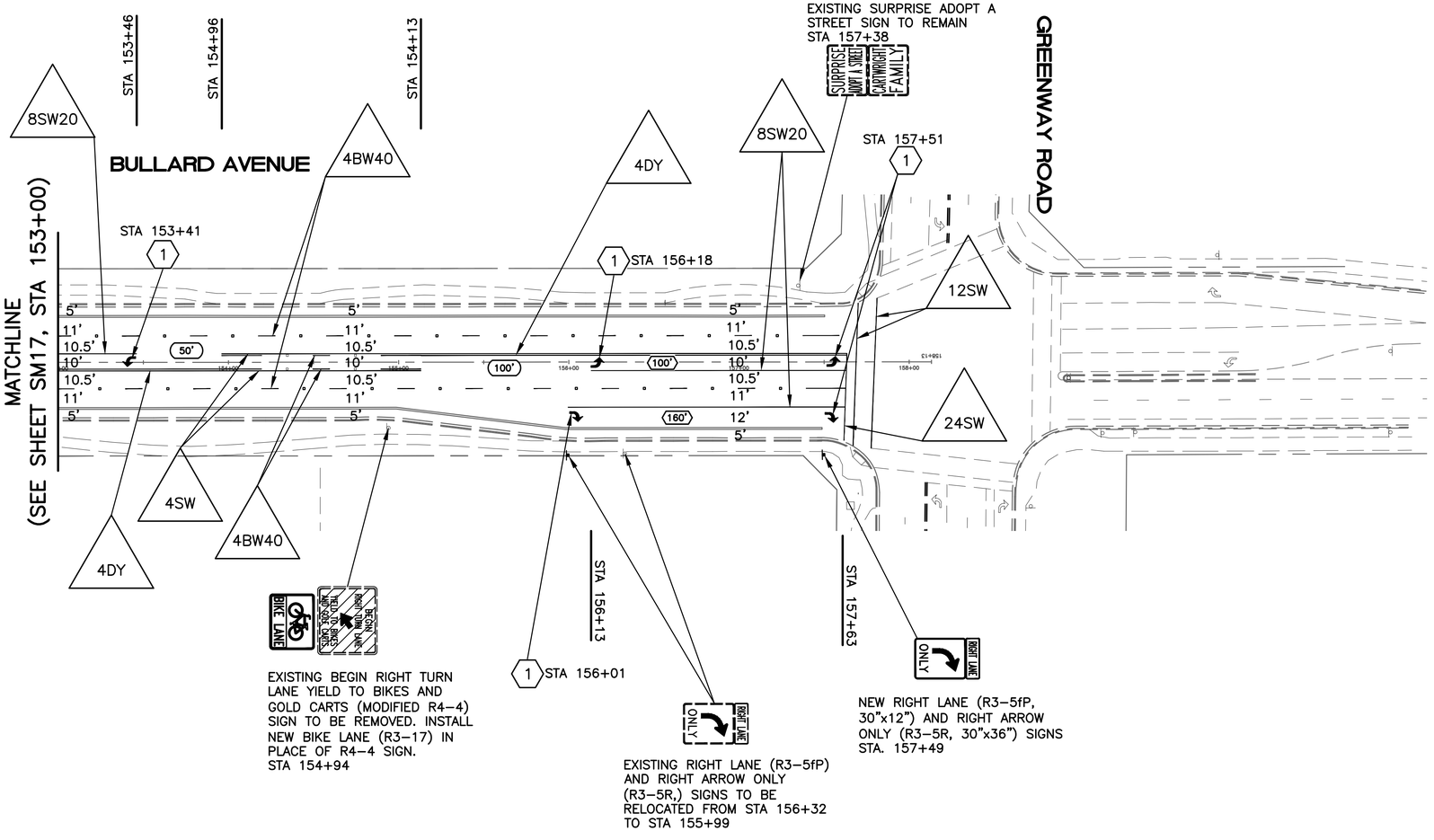
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003-SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	83	117	

LEGEND

XXX — SEE COS DET 4–18A AND 4–18B FOR PAVEMENT MARKING CALL OUTS.



CONSTRUCTION NOTES:

1. ARROW PER COS DET 4–20A.
2. BIKE SYMBOL PER COS DET 4–20B.
3. MEDIAN BULL NOSE PAINT PER COS DET 4–20A.
- XXX — TURN LANE STORAGE LENGTH (IN FEET)
- XXX — GAP OR TAPER LENGTH (IN FEET)

GENERAL NOTES:

1. ALL FINAL LANE MARKINGS AND CHEVRONS SHALL BE 60 MIL (0.060 INCH) THICK HOT–SPRAYED THERMOPLASTIC REFLECTORIZED STRIPING PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE. ALL OTHER MARKINGS SHALL BE APPLIED AT THE SAME TIME.
2. ALL FINAL STOP BARS, CROSSWALK LINES, AND PAVEMENT ARROWS AND SYMBOLS SHALL BE WHITE 90 MIL (0.090 INCH) THICK ALKYD EXTRUDED THERMOPLASTIC REFLECTORIZED MARKINGS PLACED 30 DAYS AFTER COMPLETION OF THE FINAL PAVEMENT SURFACE.
3. ALL STRIPING DIMENSIONS FOR BIKE LANES ARE TO EDGE OF PAVEMENT (E/P), ALL OTHER STRIPING DIMENSIONS ARE TO FACE OF CURB (F/C).

Base file provided by PREMIER ENGINEERING on 14 December 2017

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE SouthWest Traffic Engineering, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

SIGNING AND MARKING PLAN
BULLARD AVE

ROUTE — LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

48476 STEPHANIE S. WILHARDT–SMITH — Registered Professional Engineer — ARIZONA, U.S.A. — Expires 9–30–20

DWG NO. SMI8

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS:- | REVISIONS:- | LOCATION:- | DATE:-

richard Feb 28, 2018 – 8:26am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SMPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS: | REVISIONS: | LOCATION: | DATE:

GENERAL TRAFFIC ENGINEERING NOTES:

1. THE CITY WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT ARIZONA 811 LAWS. CALL ARIZONA 811 FOR FIELD LOCATION AT (602) 659-7500
3. PRIOR TO CONSTRUCTION, THE CITY OF SURPRISE MUST APPROVE ANY ALTERATION OR VARIANCE FROM THESE PLANS. ANY VARIATIONS FROM THESE PLANS SHALL BE PROPOSED ON CONSTRUCTION FIELD PRINTS AND TRANSMITTED TO THE CITY TRAFFIC ENGINEER OR DESIGNEE.
4. ALL CONSTRUCTION MATERIALS NOT COVERED IN THE PLANS OR SPECIFICATIONS SHALL BE SUBMITTED TO THE CITY TRAFFIC ENGINEER OR DESIGNEE FOR APPROVAL PRIOR TO ORDERING.
5. THE CONTRACTOR IS TO LOCATE ALL EXISTING LANDSCAPING, LANDSCAPING IRRIGATION LINES, PROPERTY MONUMENTS, FENCING, OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH LIKE AND KIND PER MAG STANDARDS AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND CITY REQUIREMENTS.
7. ANY CONSTRUCTION WATER OBTAINED FROM A CITY WATER SOURCE REQUIRES AN APPROVAL TO USE CONSTRUCTION WATER FROM THE CITY OF SURPRISE. CONTACT THE CITY OF SURPRISE WATER SERVICES DEPARTMENT FOR AN APPLICATION AND ADDITIONAL INFORMATION. ALL WATER SOURCES MUST BE METERED. CONTACT ARIZONA-AMERICAN WATER TO REQUEST A METER.
8. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ANY ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.
9. THE PLANS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT'S ACCESSIBILITIES GUIDELINES, LATEST EDITION.

GENERAL TRAFFIC SIGNAL NOTES:

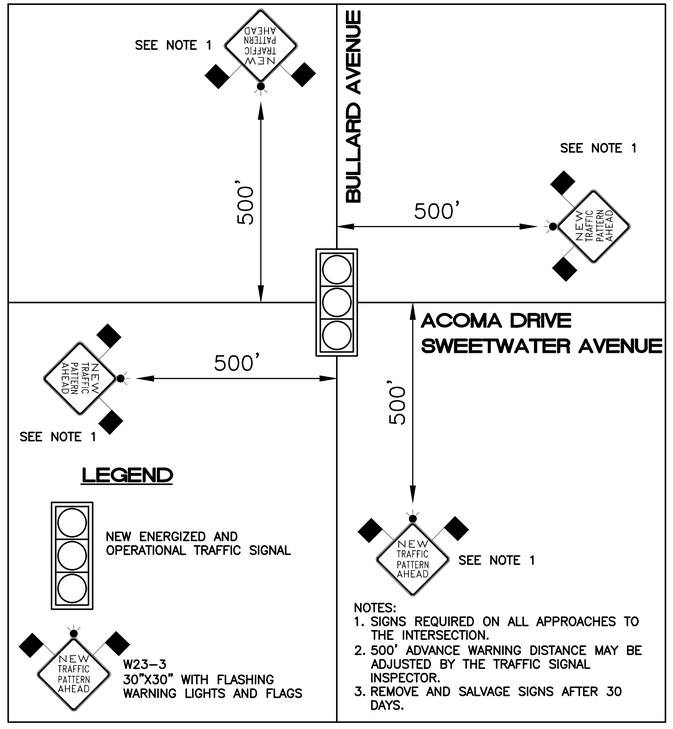
1. ALL MATERIALS AND INSTALLATION SHALL CONFORM TO THE CITY OF SURPRISE TRAFFIC ENGINEERING STANDARDS, LATEST EDITION; THE 2008 ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION"; THE ADOT "TRAFFIC SIGNALS AND LIGHTING STANDARD DRAWINGS"; THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD); THE SPECIAL PROVISIONS; AND THESE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT ARIZONA 811 LAWS. CALL ARIZONA 811 FOR FIELD LOCATION AT (602) 659-7500
3. ANY RECENTLY COMPLETED IMPROVEMENTS THAT ARE DAMAGED OR DESTROYED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE SOLE EXPENSE OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL MAINTAIN THE MINIMUM REQUIRED CLEARANCE FROM ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES ENCOUNTERED ON THE PROJECT.
5. THE CONTRACTOR SHALL POTHOLE ALL UTILITIES PRIOR TO BORING, TRENCHING, OR DIRECTIONAL DRILLING OR INSTALLING FOUNDATIONS TO VERIFY DEPTHS, LOCATIONS AND TO AVOID SUCH. ALL CONDUIT RUNS ARE SCHEMATICALLY DRAWN ON THESE PLANS.
6. THE CONTRACTOR SHALL CONTACT APS, COX CABLE & CENTURY LINK TO VERIFY THE LOCATION OF THE SERVICE AND COMMUNICATION CONNECTIONS FOR THE TRAFFIC SIGNAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL UTILITY PROVIDER'S REQUIREMENTS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD UTILITIES THAT CONFLICT WITH THE SIGNAL EQUIPMENT. ANY AND ALL CONFLICTS SHALL BE REPORTED TO THE CITY.
8. THE EXACT LOCATION AND ELEVATION OF EACH NEW POLE FOUNDATION, PULL BOX, CONTROLLER CABINET FOUNDATION, AND UPS/ELECTRIC SERVICE PEDESTAL FOUNDATION SHALL BE APPROVED BY THE CITY PRIOR TO INSTALLATION.
9. THE TOP OF NEW POLE FOUNDATIONS SHALL BE INSTALLED FOUR (4) INCHES BELOW ADJACENT SIDEWALK ELEVATION AND FINISHED IN WITH APRON (SEE DETAIL 4-09). LEVELING NUTS SHALL BE BLOCKED/FORMED OUT DURING CONCRETE APRON INSTALLATION AND GROUTED BACK IN TO PROVIDE FOR FUTURE ACCESS. ANCHOR BOLTS AND LEVELING NUTS SHALL BE INSTALLED SO THAT THE BOTTOM OF THE POLE BASE IS FLUSH WITH THE TOP OF THE RESPECTIVE SIDEWALK/APRON FINISHED GRADE WITH 1-2 INCHES OF THE ANCHOR BOLT VISIBLE ABOVE THE TOP LEVELING NUT AFTER FINAL TIGHTENING OF ALL NUTS. GROUT TO BE INSTALLED LEVEL WITH THE BASE OF THE POLE.
10. TRAFFIC SIGNAL PULL BOXES AND CONDUIT SHALL BE INSTALLED PER ADOT STANDARD TRAFFIC SIGNAL DRAWINGS.
11. ALL TRAFFIC SIGNAL EQUIPMENT SHALL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
12. ALL BACKPLATES SHALL BE METAL AND LOUVERED.
13. ALL SIGNAL INDICATIONS SHALL BE LED. PEDESTRIAN SIGNALS SHALL BE FILLED-IN LED "MAN/HAND" STYLE WITH COUNTDOWN DISPLAYS.
14. ALL SIGNAL HOUSINGS SHALL BE ALUMINUM AND BLACK. ALL VISORS SHALL BE PAINTED BLACK AND MATERIAL APPROVED BY THE CITY PRIOR TO ORDERING.
15. DRILLING HEIGHT FOR SIGNAL FACES SHALL BE PER ADOT STD DWG T.S. 4-21. TYPE V,VII,VIII AND/OR XI MOUNTS SHALL BE USED FOR ALL SIGNAL AND PEDESTRIAN HEADS ATTACHED TO VERTICAL POLES WITH MAST ARMS. THE CONTRACTOR SHALL CONFER WITH CITY TRAFFIC ENGINEER OR DESIGNEE FOR SIDE MOUNT DRILLING LOCATIONS.
16. WHEN NOT IN FULL OPERATION, ALL SIGNAL HEADS SHALL BE BAGGED/COVERED WITH AN OPAQUE MATERIAL THAT DOES NOT ALLOW LIGHT PENETRATION.
17. CONTRACTOR SHALL PROVIDE AND INSTALL INTERNALLY ILLUMINATED STREET NAME SIGN (IISNS). SEE CITY OF SURPRISE DETAIL 4-14 FOR PROPER SIGN FORMAT. ALL SIGN FORMATS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER OR DESIGNEE PRIOR TO ORDERING.

Base file provided by PREMIER ENGINEERING on 14 December 2017

GENERAL TRAFFIC SIGNAL NOTES (CONTINUED):

18. THE PEDESTRIAN PUSH BUTTONS SHALL CONFORM TO ADOT STD DWG T.S. 11-1 EXCEPT THAT THE PUSH BUTTON SHALL BE A MINIMUM OF TWO (2) INCHES IN DIAMETER. THE PUSH BUTTON SHALL BE RAISED FROM THE FACE OF THE PUSH BUTTON HOUSING. THE FORCE REQUIRED TO ACTIVATE THE CONTROL SHALL BE NO GREATER THAN FIVE (5) LBS. THE CONTRACTOR SHALL INSTALL THE RIO-3e PEDESTRIAN PUSH BUTTON SIGNS.
19. THE SIGNAL CABINET SHALL BE INSTALLED SUCH THAT MAINTENANCE PERSONNEL FACING THE FRONT (DOOR SIDE) OF THE CABINET SHALL ALSO BE ABLE TO VIEW THE INTERSECTION.
20. ONLY NEW CONDUIT CABLE SHALL BE INSTALLED UNLESS OTHERWISE INDICATED ON THE PLANS.
21. CONTRACTOR SHALL BORE ALL CONDUIT UNDER EXISTING PAVEMENT, CONCRETE, OR SIDEWALKS UNLESS OTHERWISE APPROVED BY THE CITY.
22. ALL EXISTING CONDUIT USED SHALL BE FIELD VERIFIED FOR LOCATION AND INTEGRITY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CITY SHOULD ALL EXISTING CONDUIT NOT BE USEABLE.
23. ALL NEWLY CONSTRUCTED CONDUIT SHALL HAVE MULE PULL TAPE AND #12 AWG LOCATE WIRE INSTALLED FOR FUTURE LOCATION AND INSTALLATION OF THE CONDUCTORS.
24. ALL NEW CONDUIT SHALL BE SCHEDULE 40 PVC INSTALLED WITH A MINIMUM COVER OF 30 INCHES BELOW FINISHED GRADE UNLESS STATED OTHERWISE ON THE PROJECT PLANS OR IN THE SPECIAL PROVISIONS.
25. ALL CONDUIT(S) SHALL BE CLEANED BY COMPRESSED AIR AND PROPERLY SIZED CONDUIT PISTON OR MANDREL PRIOR TO CABLE INSTALLATION. NO WATER OR MOISTURE SHALL REMAIN IN CONDUIT(S) PRIOR TO INSTALLING CONDUCTORS.
26. PULL BOXES SHALL NOT BE INSTALLED WITHIN PEDESTRIAN OR DRIVEWAY RAMPS.
27. ANY PULL BOXES INSTALLED ALONG UNCURBED ROADWAYS SHALL BE INSTALLED ADJACENT TO, BUT NOT WITHIN, THE SHOULDER AND LEVEL WITH THE FINAL GRADE.
28. A 3/4" DIAMETER X 10' LONG GROUND ROD (COPPER) SHALL BE INSTALLED IN THE HOME RUN PULL BOX (NO. 7 WITH EXTENSION) ADJACENT TO THE CONTROLLER CABINET. TWO GROUND ROD CLAMPS SHALL BE FURNISHED FOR GROUNDING THE GROUND WIRE.
29. (2) 3/4" DIAMETER X 10' LONG GROUND RODS (COPPER) SHALL BE INSTALLED IN THE CONTROLLER CABINET FOUNDATION.
30. THE HIGH VOLTAGE CABLES AND CONDUCTORS SHALL BE SEPARATED FROM THE LOW VOLTAGE CABLES AND CONDUCTORS, AND SHALL BE INSTALLED IN SEPARATE CONDUIT TO THE EXTENT POSSIBLE.
31. #14 AWG IMSA 19-1 20 CONDUCTOR CABLES SHALL BE INSTALLED CONTINUOUS AND UNSPLICED BETWEEN PULL BOXES. SEE CITY OF SURPRISE STANDARD DETAIL 4-06, 4-07, 4-08A AND 4-08B.
32. ALL CONDUCTORS USED ON THIS PROJECT SHALL CONFORM TO THE PLANS AND TO THE CONDUCTOR TABLE SHOWN IN THE CITY OF SURPRISE DETAIL 4-08B.
33. REFER TO CITY OF SURPRISE TYPICAL TRAFFIC SIGNAL WIRING SCHEMATIC, STANDARD DETAIL 4-08A FOR WIRING DETAILS FOR VEHICULAR SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND PEDESTRIAN PUSHBUTTONS.
34. THE VIDEO DETECTION CABLE SHALL BE INSTALLED, CONTINUOUS AND UNSPLICED, FROM THE VIDEO CAMERA MOUNTING TO THE CONTROLLER CABINET.
35. THE EMERGENCY VEHICLE PREEMPTION (EVPE) SENSOR SHALL BE CABLE MODEL NO. 138 OR AS SPECIFIED BY THE EVPE MANUFACTURER.
36. THE LUMINAIRE STREET LIGHTING AND THE INTERNALLY ILLUMINATED STREET NAME SIGNS (IISNS) SHALL HAVE THEIR OWN SEPARATE CIRCUITS INDEPENDENT FROM THE TRAFFIC SIGNAL CIRCUITRY INSTALLED PER PLAN. EACH CIRCUIT SHALL BE CONTROLLED VIA A SEPARATE PHOTO ELECTRIC CELL INSTALLED IN THE CONTROLLER CABINET. A MINIMUM OF THREE (3) FEET OF SLACK SHALL BE MAINTAINED IN THE RESPECTIVE PULL BOX FOR BOTH IN THE LUMINAIRE AND IISNS CABLING. AN APS APPROVED INLINE FUSE SHALL BE INSTALLED ON CONDUCTORS WITH AN APPROPRIATE RATED FUSE AT THE SPLICE POINT IN RESPECTIVE PULL BOXES.
37. THREE NO. 10 AWG-THHW CONDUCTORS SHALL BE INSTALLED FROM EACH LUMINAIRE TO THE POLE'S PULL BOX THAT THE LUMINAIRE IS MOUNTED ON AND SHALL BE UNSPLICED, LEAVING A MINIMUM OF THREE (3) FEET OF SLACK AS MEASURED FROM THE CONDUIT OPENING FOR EACH CONDUCTOR.
38. ALL SIGNING AND PAVEMENT MARKING THAT PERTAINS TO THE OPERATION OF THE TRAFFIC SIGNAL SHALL BE INSTALLED IMMEDIATELY PRIOR TO THE ACTIVATION OF THE SIGNAL. THE CONTRACTOR SHALL CONTACT THE CITY TRAFFIC ENGINEER THREE (3) WORKING DAYS PRIOR TO INSTALLATION FOR APPROVAL OF STRIPING LAYOUT AND SIGN LOCATIONS.
39. CONTRACTOR TO COORDINATE WITH ALBERT GARCIA AT THE CITY OF SURPRISE (623) 222-1733 FOR THE IISNS DETAIL AND INSTALLATION.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ		84	117	
		0000 MA SUR			



TYPICAL ADVANCE WARNING SIGNING FOR NEW TRAFFIC SIGNAL INSTALLATION

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SWTE
SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC SIGNAL PLAN
BULLARD AVENUE AND ACOMA DRIVE

Registered Professional Engineer
48476
STEPHANIE S. WILHARDT-SMITH
ARIZONA, U.S.A.
Expires 9-30-20

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE | DWG NO. GN01

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

richard Feb 28, 2018 - 8:19am
P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003_SGPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	85	117	

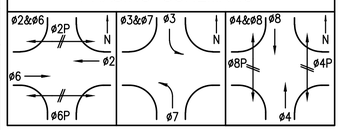
PRELIMINARY TRAFFIC SIGNAL CONTROLLER TIMING

INTERVALS / MOVEMENTS	ø1 EBLT	ø2 WB	ø3 SBLT	ø4 NB	ø5 WBLT	ø6 EB	ø7 NBLT	ø8 SB
VEHICLE/PEDESTRIAN DATA								
MINIMUM GREEN	–	10	7	15	–	10	7	15
PASSAGE	–	–	–	–	–	–	–	–
MAXIMUM #1	–	30	15	30	–	30	15	30
MAXIMUM #2	–	40	20	40	–	40	20	40
WALK	–	7	–	7	–	7	–	7
PEDESTRIAN CLEARANCE	–	26	–	22	–	26	–	22
YELLOW	–	3.0	3.5	3.5	–	3.0	3.5	3.5
ALL RED	–	3.2	2.2	2.2	–	3.2	2.2	2.2
DETECTORS	–	–	–	–	–	–	–	–
VEHICLE RECALL	–	–	–	–	–	–	–	–
DUAL ENTRY	–	YES	–	YES	–	YES	–	YES
MISCELLANEOUS PRE-EMP DATA								
MINIMUM GREEN	–	–	–	–	–	–	–	–
DETECTORS N/L	–	–	–	–	–	–	–	–
DELAY	–	–	–	–	–	–	–	–
EXTEND	–	–	–	–	–	–	–	–
DURATION	–	–	–	–	–	–	–	–
MAXIMUM CALL	–	–	–	–	–	–	–	–
LOCK OUT	–	–	–	–	–	–	–	–
EXIT	–	–	–	–	–	–	–	–
PEDESTRIAN CALL	–	–	–	–	–	–	–	–
PRE-EMP/VEHICLE STATUS								
TRACK GREEN	–	–	–	–	–	–	–	–
DWELL	–	–	–	–	–	–	–	–
CYCLE	–	–	–	–	–	–	–	–
PRE-EMP/PEDESTRIAN STATUS								
TRACK GREEN	–	–	–	–	–	–	–	–
DWELL	–	–	–	–	–	–	–	–
CYCLE	–	–	–	–	–	–	–	–

PRE-EMP/INTERVAL TIMES

SELECT PEDESTRIAN CLEARANCE:	–	TRACT YELLOW / 10:	–
SELECT YELLOW CLEARANCE / 10:	–	TRACT RED / 10:	–
SELECT RED / 10:	–	DWELL GREEN:	–
TRACT GREEN:	–	RETURN PED. CLEARANCE:	–
TRACT PEDESTRIAN CLEARANCE:	–	RETURN YELLOW / 10:	–
		RETURN RED / 10:	

PHASING SCHEMATIC

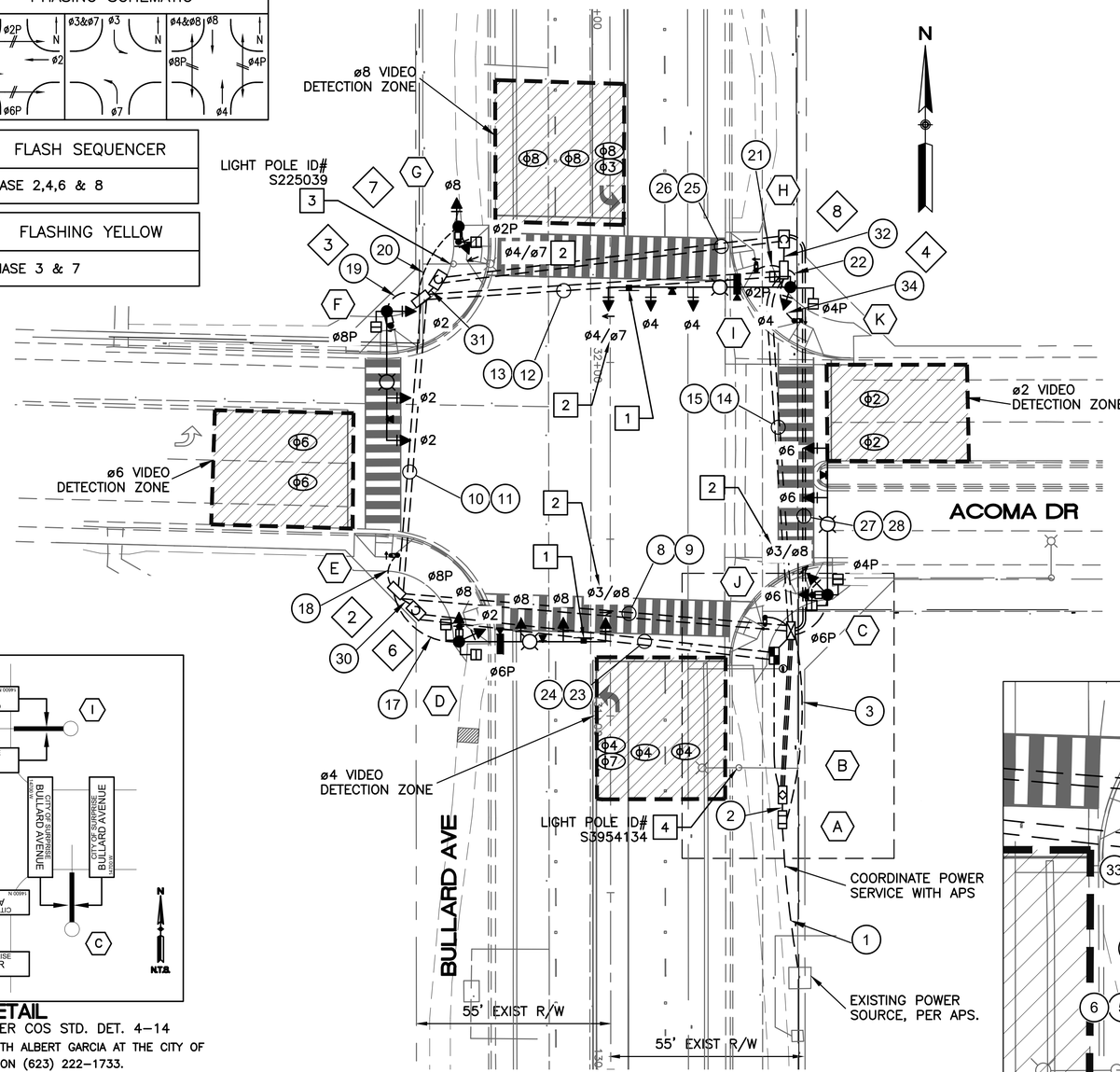


FLASH SEQUENCER

PHASE 2,4,6 & 8

FLASHING YELLOW

PHASE 3 & 7



PULL BOX SCHEDULE

NO.	TYPE	LOCATION*	REMARKS
1	NO. 7 W/ EXTENSION	STA 131+24.1 51.1' RT	PER ADOT DETAILS T.S. 1–3, 1–4 & 1–8
2	NO. 7	STA 131+35.2 60.4' LT	PER ADOT DETAILS T.S. 1–3 & 1–8
3	NO. 7	STA 131+17.7 53.7' LT	PER ADOT DETAILS T.S. 1–3 & 1–8
4	NO. 7	STA 132+26.1 49.1' RT	PER ADOT DETAILS T.S. 1–3 & 1–8
5	NO. 9 PULL BOX	STA 131+17.1 46.3' RT	PER COS DETAIL 4–17B
6	COS COMMUNICATIONS PULL BOX	STA 131+29.8 55.2' LT	PER COS DETAIL 4–15A
7	COS COMMUNICATIONS PULL BOX	STA 131+23.3 48.6' LT	PER COS DETAIL 4–15A
8	COS COMMUNICATIONS PULL BOX	STA 132+34.8 49.1' RT	PER COS DETAIL 4–15A

*ALL STATIONING FROM BULLARD AVENUE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR PRIOR TO PULL BOX INSTALLATION.

[X] CONSTRUCTION NOTES:

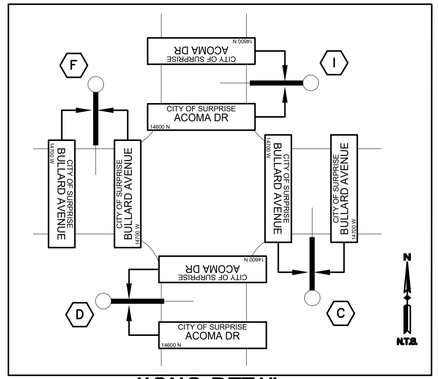
1. INSTALL R10–101; SEE SHEET SG05 FOR FLASHING YELLOW ARROW DETAIL SIGN.
2. INSTALL NEW TYPE G FLASHING YELLOW SIGNAL HEAD.
3. CONTRACTOR TO COORDINATE WITH APS FOR REMOVAL OF EXISTING ROADWAY LIGHT POLE AND IT'S ASSOCIATED EQUIPMENT.
4. EXISTING ROADWAY STREET LIGHT POLE TO REMAIN.

LEGEND

- CONDUIT RUN
- C — COS COMMUNICATIONS PULL BOX
- METER PEDESTAL
- CONTROLLER CABINET
- NO. 7 PULL BOX WITH EXTENSION
- NO. 7 PULL BOX
- NO. 9 PULL BOX
- PRE–EMPTION DETECTOR WITH STROBE
- VIDEO DETECTION CAMERA
- PEDESTRIAN PUSH BUTTON
- UNI–DIRECTIONAL ANTENNA
- φx — VIDEO DETECTION ZONE AND PHASE NUMBER
- X — TRAFFIC SIGNAL (SEE POLE SCHEDULE)
- X — TRAFFIC SIGNAL PULL BOX (SEE PULL BOX SCHEDULE)
- X — CONDUIT RUN NUMBER

SERVICE ADDRESS

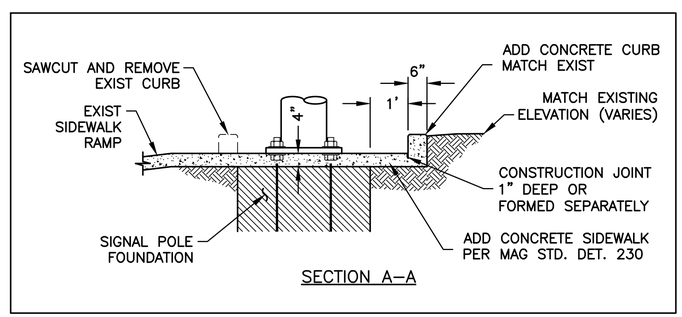
14691 W. ACOMA DRIVE
SURPRISE, AZ 85379



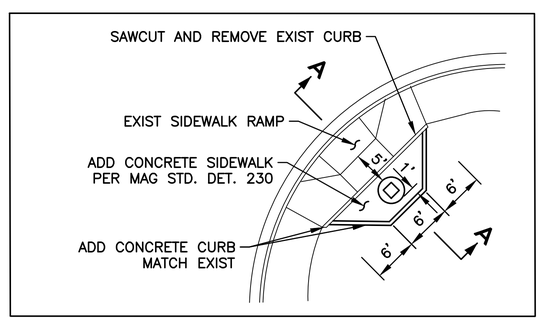
I.I.S.N.S. DETAIL

ILLUMINATED STREET SIGNS PER COS STD. DET. 4–14

* CONTRACTOR TO COORDINATE WITH ALBERT GARCIA AT THE CITY OF SURPRISE FOR IISNS INSTALLATION (623) 222–1733.

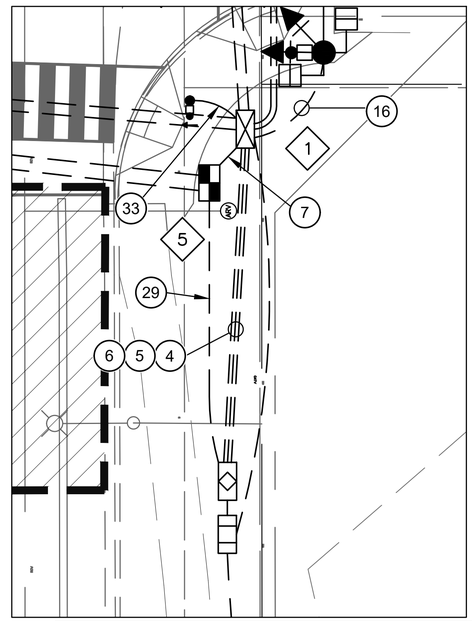


SECTION A–A



APRON DETAIL

PER COS STD. DET. 4–09



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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC SIGNAL PLAN
BULLARD AVENUE AND ACOMA DRIVE

48476 STEPHANIE S. WILHARDT–SMITH — Date Signed 4/12/18 — ARIZONA, U.S.A. — Expires 9–30–20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE – GREENWAY ROAD TO PEORIA AVENUE	SG01
TRACS NO. T0063 01C	SUR-0(230)T	____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS– | REVISIONS– | LOCATION– | DATE–

richard Feb 28, 2018 – 8:19am

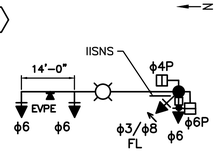
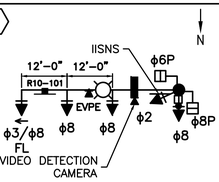
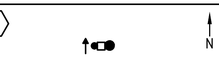
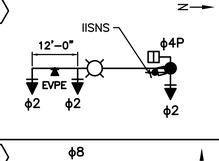
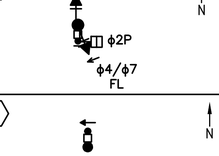
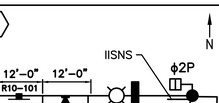
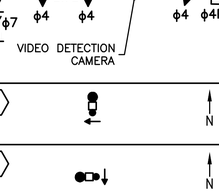
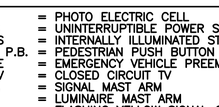
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SGPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

CABINET AND POLE SCHEDULE

TRAFFIC SIGNAL CONTROLLER				REMARKS	LOCATION***
CABINET	TYPE	CONTROLLER	AUX. CONTROL		
(A) PEC	METER UPS	TESCO UPS	–	PROVIDE AND INSTALL TESCO SERVICE PEDESTAL AND BATTERY BACKUP SYSTEM. SEE CONSTRUCTION NOTE 1.	STA 130+70.6, 48.7' RT
(B)	TS2 TYPE IV	MPS–16ø MENU–DRIVEN WITH LCD. ECONOLITE ASC.	INSTALL POLICE OPERATED CONTROL WITH A DETACHABLE 20' CABLE	PROVIDE AND INSTALL CONTROLLER AND CABINET PER CONSTRUCTION NOTES 2 AND 3.	STA 130+77.6, 48.7' RT

POLES		MAST ARMS		SIGNALS		PED P.B. SIGN	REMARKS**	LOCATION***
NO.	TYPE	SIG.	LUM.	MTG.	FACE			
(C) 	Q	40'	20'	1–II 1–ASTRO* 1–VII 1–V	2–F 1–G(FL) 1–F 2–M/H	R10–3e (LEFT)	1. INSTALL "Q" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–10. 3. INSTALL 40' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. (1) INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "BULLARD AVENUE". 7. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. INSTALL ADA PED P.B. 9. PROVIDE AND INSTALL NEW EVPE. 10. PROVIDE AND INSTALL UNI–DIRECTIONAL ANTENNA (SEE CONSTRUCTION NOTE 17). 11. PROVIDE AND INSTALL LUMINAIRE.	STA 131+34.1, 61.4' RT
(D) 	Q	40'	20'	1–II 2–ASTRO* 1–VII 1–V	1–G(FL) 2–F 2–F 2–M/H	R10–3e (LEFT)	1. INSTALL "Q" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–11. 3. INSTALL 40' SMA AND 20' LMA. 4. (4) INSTALL TYPE F SIGNAL HEADS. 5. (1) PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "ACOMA DRIVE". 7. (2) INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. PROVIDE AND INSTALL NEW EVPE. 9. PROVIDE AND INSTALL NEW VIDEO DETECTION (SEE CONSTRUCTION NOTE 18). 10. PROVIDE AND INSTALL LUMINAIRE. 11. INSTALL ADA PED P.B.	STA 131+21.1, 42.8' LT
(E) 	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 131+45.5, 60.1' LT
(F) 	Q	35'	20'	1–II 1–ASTRO* 1–VII 1–V	2–F 1–F 1–M/H	R10–3e (LEFT)	1. INSTALL "Q" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–10. 3. INSTALL 35' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. PROVIDE AND INSTALL IISNS "BULLARD AVENUE". 6. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 7. INSTALL ADA PED P.B. 8. PROVIDE AND INSTALL NEW EVPE. 9. PROVIDE AND INSTALL LUMINAIRE.	STA 132+14.5, 63.2' LT
(G) 	A (15')	–	–	1–VII 1–V	1–F 1–G(FL) 1–M/H	R10–3e (RIGHT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–1. 2. INSTALL TYPE F SIGNAL HEAD. 3. PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 4. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 5. INSTALL ADA PED P.B.	STA 132+38.4 42.9' LT
(H) 	PPB	–	–	–	–	R10–3e (RIGHT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 132+25.9, 41.3' RT
(I) 	R	50'	20'	1–II 2–ASTRO* 1–VII 1–V	1–G(FL) 2–F 1–F 2–M/H	–	1. INSTALL "R" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–11. 3. INSTALL 50' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. (1) PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "ACOMA DRIVE". 7. (2) INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. PROVIDE AND INSTALL NEW EVPE. 9. PROVIDE AND INSTALL NEW VIDEO DETECTION (SEE CONSTRUCTION NOTE 18). 10. PROVIDE AND INSTALL LUMINAIRE.	STA 132+21.3, 51.1' RT
(J) 	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 131+27.8, 43.7' RT
(K)	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 132+11.7, 51.9' RT

PEC = PHOTO ELECTRIC CELL
UPS = UNINTERRUPTIBLE POWER SUPPLY
IISNS = INTERNALLY ILLUMINATED STREET NAME SIGN PER COS.
PED P.B. = PEDESTRIAN PUSH BUTTON
EVPE = EMERGENCY VEHICLE PREEMPTION
CCTV = CLOSED CIRCUIT TV
SMA = SIGNAL MAST ARM
LMA = LUMINAIRE MAST ARM
FL = FLASHING YELLOW SIGNAL G HEAD

* ASTRO BRAC TRAFFIC SIGNAL MOUNTS TO BE PELCO 1–WAY CABLE MOUNT (AS–0125) WITH ASTRO–BRAC CABLE MOUNT STELLAR SERIES (AS–3009).

** ALL EQUIPMENT SUBMITTALS MUST BE SUBMITTED TO THE CITY AND APPROVED BY THE CITY PRIOR TO ORDERING.

*** ALL STATIONING FROM BULLARD AVENUE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR PRIOR TO FOUNDATION INSTALLATION.

Base file provided by PREMIER ENGINEERING on 14 December 2017

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	86	117	

CONDUCTOR SCHEDULE

		CONDUIT RUN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
		CONDUIT SIZE (INCH)	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3
		CONDUIT LENGTH (FEET)	40	5	55	45	45	5	110	110	85	85	100	100	100	100	20	20	25	10	15	25	10	10	100	100	100	100	115	115	35	5	5	5	10	15
SIGNAL HEADS, PEDESTRIAN HEADS, AND PEDESTRIAN PUSH BUTTONS		#14 IMSA 19–1 20–CONDUCTOR				4				2		2				2																				
		#14 IMSA 19–1 7–CONDUCTOR																2	2	1	2	1	1	2											1	1
		#14 IMSA 19–1 4–CONDUCTOR				2												1	1	1	1	1	1	1											1	1
		#8 WHITE THW, COMMON, SOLID			1					1		1				1																				
		#8 GREEN THW, SOLID			1	2			1	1	1	1				1	1	1	1	1	1	1	1	1											1	1
LUMINAIRES AND IISNS	CK #1	#10 BLACK, SOLID, RED TAPE					1			1							1	1	1		1			1												
		#10 WHITE, SOLID, RED TAPE					1			1							1	1	1		1			1												
	CK #2	#10 BLACK, SOLID, BROWN TAPE					1			1							1	1	1		1			1												
		#10 WHITE, SOLID, BROWN TAPE					1			1							1	1	1		1			1												
		#10 GREEN THW, SOLID					1			1							1	1	1		1			1												
SERVICE		#6 (120/240)	3	3																																
PRE–EMPTION		TOMAR 2090–SD EV DETECTOR CABLE					4			2		1				1		1		1		1														
OTHER		#8 BARE BOND					1			1		1				1		1		1		1														
		6 CONDUCTOR TWISTED PAIR (VIDEO DETECTION)					4			2		1				1		1		1		1														
		#12 GREEN THW, SOLID LOCATE WIRE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		MULE TAPE																							1	1	1	1	1	1	1	1	1	1		

CONDUCTOR SCHEDULE NOTES:
1. ALL NEW WIRE SHALL BE PROVIDED AND INSTALLED BY THE CONTRRACTOR.
2. THE IMSA 20–CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19–1. THE IMSA 4–CONDUCTOR AND 7–CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19–1. ALL IMSA CONDUCTORS SHALL BE STRANDED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MULTI–COLOR CONDUCTORS WHICH MEET THE COLOR CODING CRITERIA IDENTIFIED BELOW.
4. INSTALL #8 BARE BOND IN ALL EMPTY CONDUITS.
5. CONTRACTOR SHALL VERIFY ALL CONDUIT AND CONDUCTOR QUANTITIES. ALL CONDUITS CROSSING EXISTING PAVED ROADWAYS TO BE HORIZONTALLY BORED. SEE SPECIAL PROVISIONS.

IMSA CABLE 19–1, #14AWG, 7 CONDUCTOR & 4 CONDUCTOR

SIGNAL HEADS OUTBOARD & FAR LEFT		SIGNAL HEADS INBOARD & SIDEMOUNT		PEDESTRIAN HEADS		PUSH BUTTON	
7 CONDUCTOR CABLE		4 CONDUCTOR CABLE		4 CONDUCTOR CABLE		4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	SIGNAL INTERVAL	BASIC COLOR	PUSH BUTTON STATION
RED	RED	RED	RED	RED	DON'T WALK	RED	PUSH BUTTON
BLACK	YELLOW	BLACK	YELLOW	GREEN	WALK	WHITE	P.B. COM.
GREEN	GREEN	GREEN	GREEN	WHITE	PED. COM.	GREEN	SPARE
ORANGE	YELLOW ARROW	WHITE	VEH. COM.	BLACK	SPARE	BLACK	SPARE
BLUE	GREEN ARROW						
WHITE	VEH. COM.						
WHITE/BLACK	VEH. COM.						

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE

IMSA CABLE 19–1, #14AWG, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR BASIC COLOR	CONDUCTOR COLOR TRACER STRIPE	SIGNAL INTERVAL
ϕ1	ϕ5 OR OVERLAP A	RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
ϕ2	ϕ6 OR OVERLAP B	RED	---	RED
		ORANGE	---	YELLOW
		GREEN	---	GREEN
ϕ3	ϕ7 OR OVERLAP C	BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
ϕ4	ϕ8 OR OVERLAP D	RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
ϕ2 PED	ϕ6 PED	BLUE	---	WALK
		BLACK	---	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
ϕ4 PED	ϕ8 PED	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
ALL PHASES	ALL PHASES	WHITE	---	P.B. COM.
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE STAINLESS STEEL BANDS SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT EACH PULL BOX LOCATION. INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

CONSTRUCTION NOTES:

1. THE MPS–16 CONTROLLER SHALL BE ECONOLITE COLBALT CONTROLLER WITH TOUCH SCREEN PER CITY OF SURPRISE SPECIFICATIONS.
2. TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE ECONOLITE TS2 TYPE I CABINET "R77" FOR 16 PHASE OPERATION,
3. THE CONTROL CABINET SHALL BE WIRED AND LABELED WITH THE SAME PHASE NUMBER DESIGNATIONS FOR INITIAL AND FUTURE PHASES, AS SHOWN IN THE PHASE MOVEMENT DIAGRAM OR AS NOTED ON THE PLANS. EACH CONNECTOR SHALL HAVE ALL PINS WITHIN THE CONNECTOR BROUGHT TO CABINET TIE POINTS. ANY CONTROL CABINET NOT WIRED ACCORDINGLY WILL BE REJECTED BY THE ENGINEER.
4. METER/UPS SHALL BE TESCO "ALL IN ONE" UPS SYSTEM WITH TESCO TRAFFIC 27–22BBS, LOW PROFILE SERVICE PEDESTAL AND BACK TO BACK BATTERY BACKUP SYSTEM.
5. ELECTRICAL SERVICE SHALL BE METERED BY APS. CONTACT BOBBY GARZA AT (602) 361–6840 FOR SERVICE REQUIREMENTS.
6. ALL SIGNAL FACE INSTALLATIONS SHALL BE LED MODULES.
7. ALL PEDESTRIAN SIGNALS SHALL BE LED "MAN/HAND" STYLE WITH COUNTDOWN FEATURE.
8. THE CONTRACTOR SHALL FIELD VERIFY ALL POLE LOCATIONS WITH THE ENGINEER, PRIOR TO ANY CONSTRUCTION ACTIVITY.
9. THE FUSE LOCATION FOR EACH LUMINAIRE SHALL BE IN THE NEAREST AT–GRADE PULL BOX.
10. ALL 12" SIGNAL FACES SHALL HAVE 5" LOUVERED BACKPLATES.
11. ALL STATIONING IS APPROXIMATE. ACTUAL LOCATIONS OF POLES AND PULL BOXES ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR, PRIOR TO INSTALLATION.
12. THE CONTRACTOR SHALL CONTACT ALBERT GARCIA OF THE CITY OF SURPRISE AT (623) 222–1733 TO SCHEDULE THE TRAFFIC SIGNAL TURN–ON. THE SIGNAL TURN–ON SHALL BE SCHEDULED A MINMUM OF 10 DAYS IN ADVANCE.
13. THE CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE GRIDSMART VIDEO DETECTION SYSTEM INCLUDING MOUNTING HARDWARE AND ANY NECESSARY SOFTWARE OR HARDWARE IN THE CONTROLLER CABINET. SYSTEM SHALL HAVE TWO–CAMERAS AND MUST BE CAPABLE OF STOP–BAR DETECTION, ADVANCE DETECTION, TRAFFIC COUNTS, TURN MOVEMENT COUNTS AND VEHICLE CLASSIFICATION.
14. EMERGENCY VEHICLE DETECTION SYSTEM SHALL BE TOMAR WITH CONFIRMATION LIGHT OR STROBE.
15. CONTRACTOR TO POTHOLE ALL POLE LOCATIONS TO VERIFY THERE ARE NO UTILITY CONFLICTS BEFORE FOUNDATION INSTALLATION.
16. PROVIDE AND INSTALL TESCO "ALL IN ONE" UPS SYSTEM WITH TESCO TRAFFIC 27–22BBS LOW PROFILE SERVICE PEDESTAL AND BACK TO BACK BATTERY BACKUP SYSTEM.
17. INSTALL UNI–DIRECTIONAL ANTENNA, SEE MOUNTING DETAILS ON SHEET 5. INSTALL UNI–DIRECTIONAL ANTENNA CABLE UNSPLICED BETWEEN ANTENNA AND TRAFFIC SIGNAL CONTROLLER CABINET.
18. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM. MOUNT CAMERA SECURELY TO MAST ARM USING MANUFACTURER APPROVED HARDWARE. PROVIDE ALL NECESSARY EQUIPMENT INCLUDING ALL WIRING, CAMERA, MOUNTING HARDWARE, AND ANY CONTROLLER INTERFACE EQUIPMENT NECESSARY FOR A FULLY OPERATIONAL VIDEO DETECTION SYSTEM.
19. CONTRACTOR TO COORDINATE WITH THE CITY OF SURPRISE FOR CITY FURNISHED MATERIAL. CONTACT ALBERT GARCIA AT (623) 222–1733.

ADDITIONAL WIRE TAPE REQUIREMENTS

IN ADDITION TO THE STANDARD WIRE COLORS FOR THE IMSA CABLE AS SHOWN ABOVE AND TO THE LEFT, EACH WIRE SHALL BE WRAPPED AS FOLLOWS:

PHASE #	(1) 3/4" WIDE WRAP	(2) 3/4" WIDE WRAP WITH 2" SPACE BETWEEN TAPE	COLOR OF TAPE
1	X		RED
2	X		WHITE
3	X		BLUE
4	X		GREEN
5		X	RED
6		X	WHITE
7		X	BLUE
8		X	GREEN

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT–SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC SIGNAL SCHEDULES
BULLARD AVENUE AND ACOMA DRIVE

ROUTE | LOCATION: BULLARD AVENUE – GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR–0(230)T

Registered Professional Engineer
48476
STEPHANIE S. WILHARDT–SMITH
Date Signed 9-30-20
ARIZONA, U.S.A.
Expires 9–30–20

DWG NO. SG02

____ OF ____

P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SGPL02.dwg
Feb 28, 2018 – 8:19am richard

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

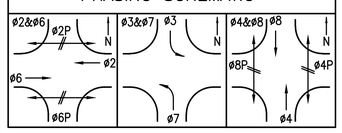
NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	87	117	

LEGEND

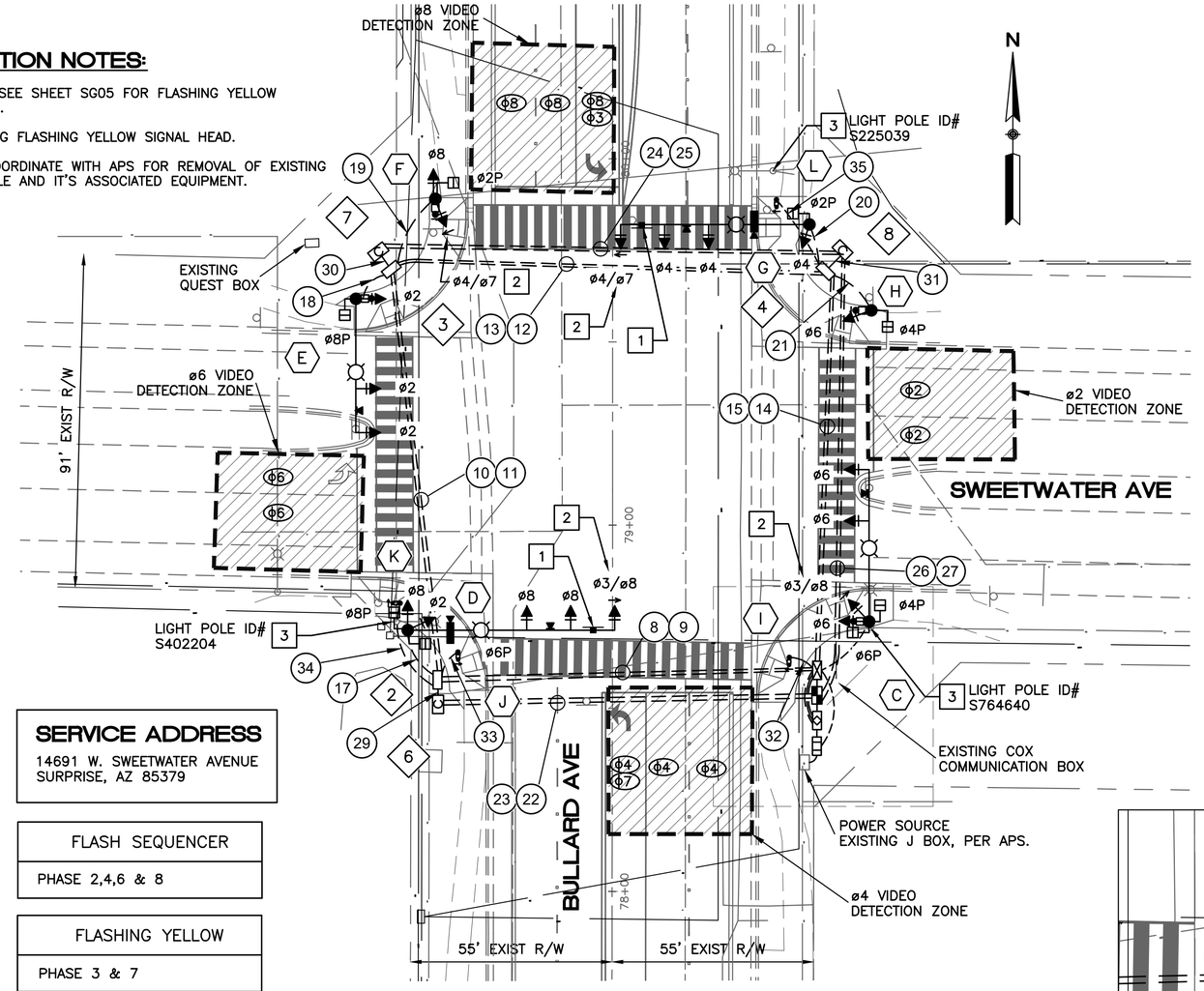
- CONDUIT RUN
- C — COS COMMUNICATIONS PULL BOX
- METER PEDESTAL
- CONTROLLER CABINET
- NO. 7 PULL BOX WITH EXTENSION
- NO. 7 PULL BOX
- NO. 9 PULL BOX
- PRE–EMPTION DETECTOR WITH STROBE
- VIDEO DETECTION CAMERA
- PEDESTRIAN PUSH BUTTON
- UNI–DIRECTIONAL ANTENNA
- ΦX — VIDEO DETECTION ZONE AND PHASE NUMBER
- X — TRAFFIC SIGNAL (SEE POLE SCHEDULE)
- X — TRAFFIC SIGNAL PULL BOX (SEE PULL BOX SCHEDULE)
- (X) — CONDUIT RUN NUMBER

PHASING SCHEMATIC



CONSTRUCTION NOTES:

1. INSTALL R10–101; SEE SHEET SG05 FOR FLASHING YELLOW ARROW DETAIL SIGN.
2. INSTALL NEW TYPE G FLASHING YELLOW SIGNAL HEAD.
3. CONTRACTOR TO COORDINATE WITH APS FOR REMOVAL OF EXISTING ROADWAY LIGHT POLE AND IT'S ASSOCIATED EQUIPMENT.



SERVICE ADDRESS

14691 W. SWEETWATER AVENUE
SURPRISE, AZ 85379

FLASH SEQUENCER
PHASE 2,4,6 & 8

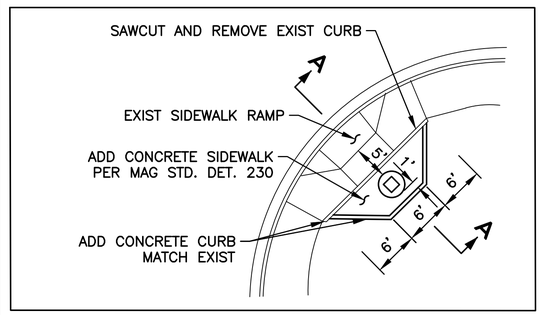
FLASHING YELLOW
PHASE 3 & 7

PRELIMINARY TRAFFIC SIGNAL CONTROLLER TIMING

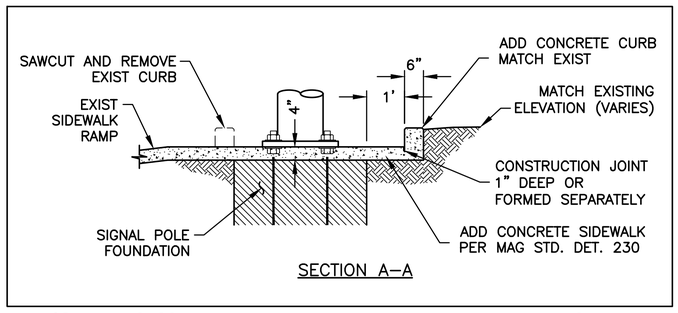
INTERVALS / MOVEMENTS	ø1 EBLT	ø2 WB	ø3 SBLT	ø4 NB	ø5 WBLT	ø6 EB	ø7 NBLT	ø8 SB
VEHICLE/PEDESTRIAN DATA								
MINIMUM GREEN	–	10	7	15	–	10	7	15
PASSAGE	–	–	–	–	–	–	–	–
MAXIMUM #1	–	30	15	30	–	30	15	30
MAXIMUM #2	–	40	20	40	–	40	20	40
WALK	–	7	–	7	–	7	–	7
PEDESTRIAN CLEARANCE	–	26	–	22	–	26	–	22
YELLOW	–	3.0	3.5	3.5	–	3.0	3.5	3.5
ALL RED	–	3.2	2.2	2.2	–	3.2	2.2	2.2
DETECTORS	–	–	–	–	–	–	–	–
VEHICLE RECALL	–	–	–	–	–	–	–	–
DUAL ENTRY	–	YES	–	YES	–	YES	–	YES
MISCELLANEOUS PRE–EMP DATA								
MINIMUM GREEN	–	–	–	–	–	–	–	–
DETECTORS N/L	–	–	–	–	–	–	–	–
DELAY	–	–	–	–	–	–	–	–
EXTEND	–	–	–	–	–	–	–	–
DURATION	–	–	–	–	–	–	–	–
MAXIMUM CALL	–	–	–	–	–	–	–	–
LOCK OUT	–	–	–	–	–	–	–	–
EXIT	–	–	–	–	–	–	–	–
PEDESTRIAN CALL	–	–	–	–	–	–	–	–
PRE–EMP/VEHICLE STATUS								
TRACK GREEN	–	–	–	–	–	–	–	–
DWELL	–	–	–	–	–	–	–	–
CYCLE	–	–	–	–	–	–	–	–
PRE–EMP/PEDESTRIAN STATUS								
TRACK GREEN	–	–	–	–	–	–	–	–
DWELL	–	–	–	–	–	–	–	–
CYCLE	–	–	–	–	–	–	–	–

PRE–EMP/INTERVAL TIMES

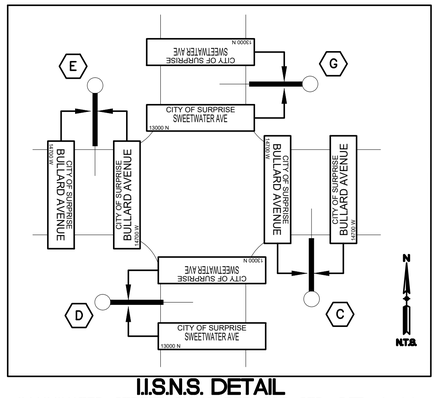
SELECT PEDESTRIAN CLEARANCE:	–	TRACT YELLOW / 10:	–
SELECT YELLOW CLEARANCE / 10:	–	TRACT RED / 10:	–
SELECT RED / 10:	–	DWELL GREEN:	–
TRACT GREEN:	–	RETURN PED. CLEARANCE:	–
TRACT PEDESTRIAN CLEARANCE:	–	RETURN YELLOW / 10:	–
		RETURN RED / 10:	



APRON DETAIL
PER COS STD. DET. 4–09



SECTION A–A



I.I.S.N.S. DETAIL

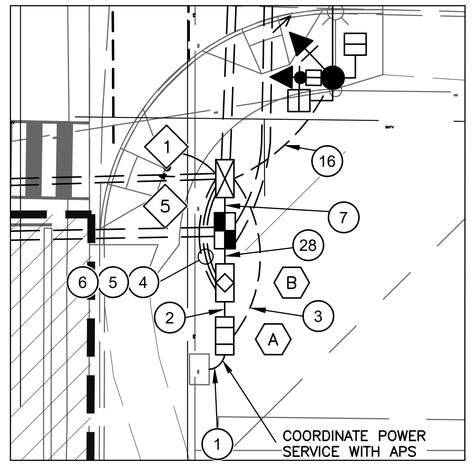
ILLUMINATED STREET SIGNS PER COS STD. DET. 4–14

* CONTRACTOR TO COORDINATE WITH ALBERT GARCIA AT THE CITY OF SURPRISE FOR IISNS INSTALLATION (623) 222–1733.

PULL BOX SCHEDULE

NO.	TYPE	LOCATION*	REMARKS
1	NO. 7 W/ EXTENSION	STA 78+60.4, 55.8' RT	PER ADOT DETAILS T.S. 1–3, 1–4 & 1–8
2	NO. 7	STA 78+57.1, 47.8' LT	PER ADOT DETAILS T.S. 1–3 & 1–8
3	NO. 7	STA 79+69.7, 60.4' LT	PER ADOT DETAILS T.S. 1–3 & 1–8
4	NO. 7	STA 79+69.3, 58.1' RT	PER ADOT DETAILS T.S. 1–3 & 1–8
5	NO. 9 PULL BOX	STA 78+53.8, 55.8' RT	PER COS DETAIL 4–17B
6	COS COMMUNICATIONS PULL BOX	STA 78+51.1, 47.6' LT	PER COS DETAIL 4–15A
7	COS COMMUNICATIONS PULL BOX	STA 79+74.7, 63.6' LT	PER COS DETAIL 4–15A
8	COS COMMUNICATIONS PULL BOX	STA 79+75.2, 62.5' RT	PER COS DETAIL 4–15A

*ALL STATIONING FROM BULLARD AVENUE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR PRIOR TO PULL BOX INSTALLATION.



CONTROL CORNER DETAIL

SCALE: 1"=20'
0' 10' 20' 40'

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT–SMITH	2/18

SWTE SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC SIGNAL PLAN
BULLARD AVE AND SWEETWATER AVE

48476 STEPHAINE S. WILHARDT–SMITH — Expires 9–30–20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE – GREENWAY ROAD TO PEORIA AVENUE	SG03
TRACS NO. T0063 01C	SUR–0(230)T	____ OF ____

Base file provided by PREMIER ENGINEERING on 14 December 2017

richard Feb 28, 2018 – 8:19am
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SGPL02.dwg

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.
SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

CABINET AND POLE SCHEDULE

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	88	117	

TRAFFIC SIGNAL CONTROLLER				REMARKS	LOCATION***
CABINET	TYPE	CONTROLLER	AUX. CONTROL		
A — PEC	METER UPS	TESCO UPS	–	PROVIDE AND INSTALL TESCO SERVICE PEDESTAL AND BATTERY BACKUP SYSTEM. SEE CONSTRUCTION NOTE 1.	STA 78+39.6, 55.8' RT
B	TS2 TYPE IV	MPS–16ø MENU–DRIVEN WITH LCD. ECONOLITE ASC.	INSTALL POLICE OPERATED CONTROL WITH A DETACHABLE 20' CABLE	PROVIDE AND INSTALL CONTROLLER AND CABINET PER CONSTRUCTION NOTES 2 AND 3.	STA 78+46.7, 58.8' RT

POLES		MAST ARMS		SIGNALS		PED P.B. SIGN	REMARKS**	LOCATION***
NO.	TYPE	SIG.	LUM.	MTG.	FACE			
C — IISNS, 12'–0", ϕ4P, EVPE, ϕ6 ϕ6 ϕ3/ϕ8 FL ϕ6 ϕ6P, Z	Q	40'	20'	1–II 1–ASTRO* 1–VII 1–V	2–F 1–G(FL) 1–F 2–M/H	R10–3e (LEFT)	1. INSTALL "Q" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–11. 3. INSTALL 40' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. (1) PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "BULLARD AVENUE". 7. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. INSTALL ADA PED P.B. 9. PROVIDE AND INSTALL NEW EVPE. 10. PROVIDE AND INSTALL LUMINAIRE.	STA 78+73.7, 70.0' RT
D — IISNS, N, 12'–0" 12'–0", R10–10I, EVPE, ϕ8P, ϕ8 ϕ8 ϕ2 ϕ8 ϕ6P, ϕ3/ϕ8 FL, VIDEO DETECTION CAMERA	R	55'	20'	1–II 2–ASTRO* 1–VII 1–V	1–G(FL) 2–F 2–F 2–M/H	R10–3e (RIGHT)	1. INSTALL "R" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–11. 3. INSTALL 55' SMA AND 20' LMA. 4. (4) INSTALL TYPE F SIGNAL HEADS. 5. (1) PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "ACOMA DRIVE". 7. (2) INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. PROVIDE AND INSTALL NEW EVPE. 9. PROVIDE AND INSTALL NEW VIDEO DETECTION (SEE CONSTRUCTION NOTE 18). 10. PROVIDE AND INSTALL LUMINAIRE.	STA 78+71.4, 55.9' LT
E — IISNS, Z, 12'–0", ϕ4P, EVPE, ϕ2 ϕ2 ϕ2	Q	35'	20'	1–II 1–ASTRO* 1–V 1–V	2–F 1–F 1–M/H	R10–3e (LEFT)	1. INSTALL "Q" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–10. 3. INSTALL 35' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. PROVIDE AND INSTALL IISNS "BULLARD AVENUE". 6. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 7. PROVIDE AND INSTALL NEW EVPE. 8. PROVIDE AND INSTALL LUMINAIRE.	STA 79+62.1, 70.1' LT
F — ϕ8, ϕ2P, N, ϕ4/ϕ7 FL	A (15')	–	–	1–VII 1–V	1–F 1–G(FL) 1–M/H	R10–3e (RIGHT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–1. 2. INSTALL TYPE F SIGNAL HEAD. 3. PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 4. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 5. INSTALL ADA PED P.B.	STA 79+89.1, 48.4' LT
G — IISNS, N, 12'–0" 12'–0", R10–10I, EVPE, ϕ2P, ϕ4/ϕ7 FL, ϕ4 ϕ4 ϕ4, VIDEO DETECTION CAMERA	R	50'	20'	1–II 2–ASTRO* 2–V	2–F 1–G(FL) 1–F 1–M/H	R10–3e (LEFT)	1. INSTALL "R" SIGNAL POLE. 2. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–11. 3. INSTALL 50' SMA AND 20' LMA. 4. (3) INSTALL TYPE F SIGNAL HEADS. 5. (1) PROVIDE AND INSTALL TYPE G SIGNAL HEAD. 6. PROVIDE AND INSTALL IISNS "BULLARD AVENUE". 7. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 8. PROVIDE AND INSTALL NEW EVPE. 9. PROVIDE AND INSTALL NEW VIDEO DETECTION (SEE CONSTRUCTION NOTE 18). 10. PROVIDE AND INSTALL LUMINAIRE.	STA 79+82.1, 53.7' RT
H — N, ϕ6, ϕ4P	A (15')	–	–	1–VII 1–V	1–F 1–M/H	R10–3e (RIGHT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–1. 2. INSTALL TYPE F SIGNAL HEAD. 3. INSTALL COUNTDOWN PEDESTRIAN SIGNAL HEADS. 4. INSTALL ADA PED P.B.	STA 79+59.9, 69.1' RT
I — N	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 78+63.9, 48.2' RT
J — N	PPB	–	–	–	–	R10–3e (RIGHT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 78+65.4, 42.2' LT
K — N	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 78+78.7, 57.9' LT
L — N	PPB	–	–	–	–	R10–3e (LEFT)	1. PROVIDE AND INSTALL FOUNDATION PER ADOT STD DETAIL T.S. 4–22. 2. INSTALL PED PUSH BUTTON POLE. 3. INSTALL ADA PED P.B.	STA 79+88.9, 44.7' RT

PEC = PHOTO ELECTRIC CELL
UPS = UNINTERRUPTIBLE POWER SUPPLY
IISNS = INTERNALLY ILLUMINATED STREET NAME SIGN PER COS.
PED P.B. = PEDESTRIAN PUSH BUTTON
EVPE = EMERGENCY VEHICLE PREEMPTION
CCTV = CLOSED CIRCUIT TV
SMA = SIGNAL MAST ARM
LMA = LUMINAIRE MAST ARM
FL = FLASHING YELLOW SIGNAL G HEAD

* ASTRO BRAC TRAFFIC SIGNAL MOUNTS TO BE PELCO 1–WAY CABLE MOUNT (AS–0125) WITH ASTRO–BRAC CABLE MOUNT STELLAR SERIES (AS–3009).

** ALL EQUIPMENT SUBMITTALS MUST BE SUBMITTED TO THE CITY AND APPROVED BY THE CITY PRIOR TO ORDERING.

*** ALL STATIONING FROM BULLARD AVENUE. STATIONS AND OFFSETS SHOWN ARE APPROXIMATE, ACTUAL LOCATIONS ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR PRIOR TO FOUNDATION INSTALLATION.

Base file provided by PREMIER ENGINEERING on 14 December 2017

CONDUCTOR SCHEDULE

		CONDUIT RUN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
		CONDUIT SIZE (INCH)	2.5	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		CONDUIT LENGTH (FEET)	5	5	25	20	20	20	5	105	105	110	110	120	120	105	105	20	15	10	25	15	15	105	105	125	125	125	125	5	5	5	5	10	10	30	25
SIGNAL HEADS, PEDESTRIAN HEADS, AND PEDESTRIAN PUSH BUTTONS		#14 IMSA 19–1 20–CONDUCTOR				4				2		2					2																				
		#14 IMSA 19–1 7–CONDUCTOR																2	2	2	1	2	1											1	1	1	1
		#14 IMSA 19–1 4–CONDUCTOR					1				1		1					1	1	1	1	1												1	1	1	1
		#8 WHITE THW, COMMON, SOLID			1		2				1		1					1	1	1	1	1															
		#8 GREEN THW, SOLID			1		2				1		1					1	1	1	1	1												1	1	1	1
LUMINAIRES AND IISNS	CK #1	#10 BLACK, SOLID, RED TAPE					1				1		1					1	1	1	1	1															
		#10 WHITE, SOLID, RED TAPE					1				1		1					1	1	1	1	1															
	CK #2	#10 BLACK, SOLID, BROWN TAPE					1				1		1					1	1	1	1	1															
		#10 WHITE, SOLID, BROWN TAPE					1				1		1					1	1	1	1	1															
		#10 GREEN THW, SOLID					1				1		1					1	1	1	1	1															
SERVICE		#6 (120/240)	3	3																																	
PRE–EMPTION		TOMAR 2090–SD EV DETECTOR CABLE					4				2		1					1	1	1	1	1															
OTHER		#8 BARE BOND					1				1		1					1	1	1	1	1															
		6 CONDUCTOR TWISTED PAIR (VIDEO DETECTION)					4				2		1					1	1	1	1	1															
		#12 GREEN THW, SOLID LOCATE WIRE	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		MULE TAPE																						1	1	1	1	1	1	1	1	1	1				

CONDUCTOR SCHEDULE NOTES:
1. ALL NEW WIRE SHALL BE PROVIDED AND INSTALLED BY THE CONTRRACTOR.
2. THE IMSA 20–CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19–1. THE IMSA 4–CONDUCTOR AND 7–CONDUCTOR CABLE SHALL BE #14 AWG IMSA 19–1. ALL IMSA CONDUCTORS SHALL BE STRANDED.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MULTI–COLOR CONDUCTORS WHICH MEET THE COLOR CODING CRITERIA IDENTIFIED BELOW.
4. INSTALL #8 BARE BOND IN ALL EMPTY CONDUITS.
5. CONTRACTOR SHALL VERIFY ALL CONDUIT AND CONDUCTOR QUANTITIES. ALL CONDUITS CROSSING EXISTING PAVED ROADWAYS TO BE HORIZONTALLY BORED. SEE SPECIAL PROVISIONS.

IMSA CABLE 19–1, #14AWG, 7 CONDUCTOR & 4 CONDUCTOR

SIGNAL HEADS OUTBOARD & FAR LEFT	
7 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL
RED	RED
BLACK	YELLOW
GREEN	GREEN
ORANGE	YELLOW ARROW
BLUE	GREEN ARROW
WHITE	VEH. COM.
WHITE/BLACK	VEH. COM.

SIGNAL HEADS INBOARD & SIDEMOUNT	
4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL
RED	RED
BLACK	YELLOW
GREEN	GREEN
WHITE	VEH. COM.

PEDESTRIAN HEADS	
4 CONDUCTOR CABLE	
BASIC COLOR	SIGNAL INTERVAL
RED	DON'T WALK
GREEN	WALK
WHITE	PED. COM.
BLACK	SPARE

PUSH BUTTON	
4 CONDUCTOR CABLE	
BASIC COLOR	PUSH BUTTON STATION
RED	PUSH BUTTON
WHITE	P.B. COM.
GREEN	SPARE
BLACK	SPARE

THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE

IMSA CABLE 19–1, #14AWG, 20 CONDUCTOR

CABLE #1	CABLE #2	CONDUCTOR COLOR: BASIC COLOR	CONDUCTOR COLOR: TRACER STRIPE	SIGNAL INTERVAL
ϕ1	ϕ5 OR OVERLAP A	RED	WHITE	RED
		BLACK	WHITE	YELLOW
		GREEN	WHITE	GREEN
ϕ2	ϕ6 OR OVERLAP B	RED	---	RED
		ORANGE	---	YELLOW
		GREEN	---	GREEN
ϕ3	ϕ7 OR OVERLAP C	BLACK	RED	RED
		ORANGE	RED	YELLOW
		BLUE	RED	GREEN
ϕ4	ϕ8 OR OVERLAP D	RED	BLACK	RED
		ORANGE	BLACK	YELLOW
		GREEN	BLACK	GREEN
ϕ2 PED	ϕ6 PED	BLUE	---	WALK
		BLACK	---	DON'T WALK
		WHITE	BLACK	PUSH BUTTON
ϕ4 PED	ϕ8 PED	BLUE	WHITE	WALK
		RED	GREEN	DON'T WALK
		WHITE	RED	PUSH BUTTON
ALL PHASES	ALL PHASES	WHITE	---	P.B. COM.
		BLUE	BLACK	SPARE

CABLE #2 SHALL BE MARKED WITH 2 INDIVIDUAL 3/8 INCH WIDE STAINLESS STEEL BANDS SIDE BY SIDE WITH A 1/2 INCH GAP BETWEEN BANDS, AT EACH PULL BOX LOCATION. INDIVIDUAL CONDUCTORS IN THE CABLE SHALL BE TAGGED AS TO ASSIGNED PHASE.

CONSTRUCTION NOTES:

1. THE MPS–16 CONTROLLER SHALL BE ECONOLITE COLBALT CONTROLLER WITH TOUCH SCREEN PER CITY OF SURPRISE SPECIFICATIONS.
2. TRAFFIC SIGNAL CONTROLLER CABINET SHALL BE ECONOLITE TS2 TYPE I CABINET "R77" FOR 16 PHASE OPERATION,
3. THE CONTROL CABINET SHALL BE WIRED AND LABELED WITH THE SAME PHASE NUMBER DESIGNATIONS FOR INITIAL AND FUTURE PHASES, AS SHOWN IN THE PHASE MOVEMENT DIAGRAM OR AS NOTED ON THE PLANS. EACH CONNECTOR SHALL HAVE ALL PINS WITHIN THE CONNECTOR BROUGHT TO CABINET TIE POINTS. ANY CONTROL CABINET NOT WIRED ACCORDINGLY WILL BE REJECTED BY THE ENGINEER.
4. METER/UPS SHALL BE TESCO "ALL IN ONE" UPS SYSTEM WITH TESCO TRAFFIC 27–22BBS, LOW PROFILE SERVICE PEDESTAL AND BACK TO BACK BATTERY BACKUP SYSTEM.
5. ELECTRICAL SERVICE SHALL BE METERED BY APS. CONTACT BOBBY GARZA AT (602) 361–6840 FOR SERVICE REQUIREMENTS.
6. ALL SIGNAL FACE INSTALLATIONS SHALL BE LED MODULES.
7. ALL PEDESTRIAN SIGNALS SHALL BE LED "MAN/HAND" STYLE WITH COUNTDOWN FEATURE.
8. THE CONTRACTOR SHALL FIELD VERIFY ALL POLE LOCATIONS WITH THE ENGINEER, PRIOR TO ANY CONSTRUCTION ACTIVITY.
9. THE FUSE LOCATION FOR EACH LUMINAIRE SHALL BE IN THE NEAREST AT–GRADE PULL BOX.
10. ALL 12" SIGNAL FACES SHALL HAVE 5" LOUVERED BACKPLATES.
11. ALL STATIONING IS APPROXIMATE. ACTUAL LOCATIONS OF POLES AND PULL BOXES ARE TO BE FIELD VERIFIED BY THE TRAFFIC SIGNAL INSPECTOR, PRIOR TO INSTALLATION.
12. THE CONTRACTOR SHALL CONTACT ALBERT GARCIA OF THE CITY OF SURPRISE AT (623) 222–1733 TO SCHEDULE THE TRAFFIC SIGNAL TURN–ON. THE SIGNAL TURN–ON SHALL BE SCHEDULED A MINMUM OF 10 DAYS IN ADVANCE.
13. THE CONTRACTOR SHALL PROVIDE AND INSTALL A COMPLETE GRIDSMART VIDEO DETECTION SYSTEM INCLUDING MOUNTING HARDWARE AND ANY NECESSARY SOFTWARE OR HARDWARE IN THE CONTROLLER CABINET. SYSTEM SHALL HAVE TWO–CAMERAS AND MUST BE CAPABLE OF STOP–BAR DETECTION, ADVANCE DETECTION, TRAFFIC COUNTS, TURN MOVEMENT COUNTS AND VEHICLE CLASSIFICATION.
14. EMERGENCY VEHICLE DETECTION SYSTEM SHALL BE TOMAR WITH CONFIRMATION LIGHT OR STROBE.
15. CONTRACTOR TO POTHOLE ALL POLE LOCATIONS TO VERIFY THERE ARE NO UTILITY CONFLICTS BEFORE FOUNDATION INSTALLATION.
16. PROVIDE AND INSTALL TESCO "ALL IN ONE" UPS SYSTEM WITH TESCO TRAFFIC 27–22BBS LOW PROFILE SERVICE PEDESTAL AND BACK TO BACK BATTERY BACKUP SYSTEM.
17. INSTALL UNI–DIRECTIONAL ANTENNA, SEE MOUNTING DETAILS ON SHEET 5. INSTALL UNI–DIRECTIONAL ANTENNA CABLE UNSPLICED BETWEEN ANTENNA AND TRAFFIC SIGNAL CONTROLLER CABINET.
18. INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM. MOUNT CAMERA SECURELY TO MAST ARM USING MANUFACTURER APPROVED HARDWARE. PROVIDE ALL NECESSARY EQUIPMENT INCLUDING ALL WIRING, CAMERA, MOUNTING HARDWARE, AND ANY CONTROLLER INTERFACE EQUIPMENT NECESSARY FOR A FULLY OPERATIONAL VIDEO DETECTION SYSTEM.
19. CONTRACTOR TO COORDINATE WITH THE CITY OF SURPRISE FOR CITY FURNISHED MATERIAL. CONTACT ALBERT GARCIA AT (623) 222–1733.

ADDITIONAL WIRE TAPE REQUIREMENTS

IN ADDITION TO THE STANDARD WIRE COLORS FOR THE IMSA CABLE AS SHOWN ABOVE AND TO THE LEFT, EACH WIRE SHALL BE WRAPPED AS FOLLOWS:

PHASE #	(1) 3/4" WIDE WRAP	(2) 3/4" WIDE WRAP WITH 2" SPACE BETWEEN TAPE	COLOR OF TAPE
1	X		RED
2	X		WHITE
3	X		BLUE
4	X		GREEN
5		X	RED
6		X	WHITE
7		X	BLUE
8		X	GREEN

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

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT–SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel 602.266.SWTE (7983)
Fax 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

TRAFFIC SIGNAL SCHEDULES
BULLARD AVE AND SWEETWATER AVE

Registered Professional Engineer (Civil)
48476
STEPHAINE S. WILHARDT–SMITH
Date Signed 1/19/18
ARIZONA, U.S.A.
Expires 9–30–20

ROUTE	LOCATION	DWG NO.
	BULLARD AVENUE – GREENWAY ROAD TO PEORIA AVENUE	SG04

TRACS NO. T0063 01C | SUR–0(230)T | ___ OF ___

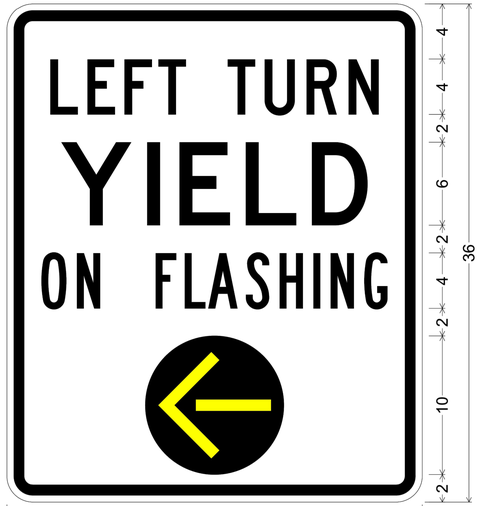
P:\projects 2017\17003 – bullard ave (surprise)\design\cadd\dwg\17003–SGP102.dwg Feb 28, 2018 – 8:20am richard

Use or alteration of the information in this instrument for other than the specific purpose for which it was intended and for other than the client for which it was prepared is forbidden unless expressly permitted in writing in advance by SOUTHWEST TRAFFIC ENGINEERING. SOUTHWEST TRAFFIC ENGINEERING shall have no liability to any use of this information without their written consent.

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	89	117	

CODE: R10-101

SIZE: 30" x 36" STANDARD



R10-101(30x36-STD)WHT;
1.875" Radius, 0.750" Border, 0.500" Indent, Black on White;
"LEFT TURN" C; "YIELD" D; "ON FLASHING" B;
FYA symbol;

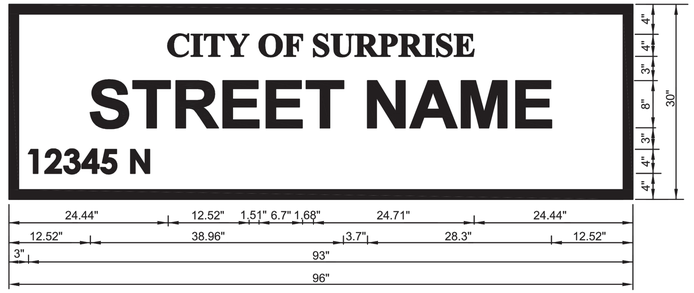
ALL DIMENSIONS ARE IN INCHES

COLORS:
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)

ARIZONA DEPARTMENT OF TRANSPORTATION
TRAFFIC ENGINEERING GROUP

DRAWN:	DATE:
R. MOEUR	MAY / 2013

APPROVED: SIGNATURE ON FILE



INTERNALLY ILLUMINATED STREET NAME SIGN FRONT AND BACK FACE

INTERNALLY ILLUMINATED STREET NAME SIGN NOTES:

1. CONTACT THE CITY OF SURPRISE TRAFFIC ENGINEER FOR ADDRESS LABELS SHOWN ON THE SIGN FACE.
2. FABRICATION:
   - FACES: 3/16" WHITE LEXAN FACES WITH VINYL APPLIED 1ST SURFACE BACKGROUND - #3630-59 DARK BROWN, TO BE TRANSLUCENT WITH REVERSED OUT WHITE COPY.
   - TYPESTYLES: FOR STREET NAMES, UPPERCASE HELVETICA MEDIUM FONT WITH 10% SPACING FOR ADDRESS NUMERALS, UPPERCASE HELVETICA MEDIUM FONT WITH STANDARD SPACING FOR "CITY OF SURPRISE", UPPERCASE CENTURY BOLD FONT WITH STANDARD SPACING.
3. INTERNAL ILLUMINATION SHALL BE 2-LED T12 LAMPS, BI-DIRECTIONAL, RECESSED DUAL PIN, 8 FT LENGTH, 52W, 5,000K COLOR TEMPERATURE.
4. PRIOR TO FABRICATION OF ANY SIGN FACE, THE CONTRACTOR SHALL SUBMIT A LAYOUT TO THE CITY TRAFFIC ENGINEER WITHIN TWO (2) WEEKS OF RECEIPT OF THE SIGN ORDER. THE FABRICATION SHALL BE DONE ONLY AFTER CITY APPROVAL OF THE LAYOUT.

DATE REVISED: 8/2016

APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)

SURPRISE ARIZONA

INTERNALLY ILLUMINATED STREET NAME SIGN FORMAT

DETAIL NO: 4-14

Base file provided by PREMIER ENGINEERING on 14 December 2017

	NAME	DATE
DESIGN	R. HICKS	2/18
DRAWN	R. HICKS	2/18
CHECKED	S. WILHARDT-SMITH	2/18

SOUTHWEST TRAFFIC ENGINEERING, LLC
3838 N. Central Ave., Suite 1810
Phoenix, AZ 85012
Tel: 602.266.SWTE (7983)
Fax: 602.266.1115
www.swte.us

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

FLASHING YELLOW MAST ARM SIGN MOUNT

ROUTE | LOCATION: BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

48476 STEPHANIE S. WILHARDT-SMITH Date Signed 2/28/18 ARIZONA, U.S.A.

Expires 9-30-20

DWG NO. SG05

TRACS NO. T0063 01C | SUR-0(230)T | ____ OF ____

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

NOTE TO CONTRACTOR: Southwest Traffic Engineering, LLC. (SWTE) HAS ENDEAVORED TO PROVIDE ACCURATE UTILITY INFORMATION BASED ON THE MOST CURRENT DATA AVAILABLE THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS WITH RESPECT TO LINE AND GRADE PRIOR TO CONSTRUCTION.

SURVEY NO. | FINISHED PLANS | REVISIONS | LOCATION | DATE

richard Feb 28, 2018 - 8:20am

P:\projects 2017\17003 - bullard ave (surprise)\design\cadd\dwg\17003-SGPL02.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ		90	117	
		0000 MA SUR			

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

GENERAL NOTES

1. ALL LANDSCAPE AND IRRIGATION SPECIFICATIONS AND INSTALLATION DETAILS SHALL BE TO CITY OF SURPRISE, MAG OR ADOT STANDARDS.
2. IRRIGATION PLANS ARE SCHEMATIC. ALL VALVES AND PIPING ARE SHOWN DIAGRAMATICALLY FOR CLARITY. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PLACEMENT OF SYSTEM COMPONENTS. ALL IRRIGATION COMPONENTS TO BE LOCATED IN PLANTING AREAS. SOME IRRIGATION IS SHOWN OUTSIDE OF PLANTING AREAS FOR CLARITY PURPOSES ONLY. COORDINATE IRRIGATION WORK WITH PLANTING PLANS TO AVOID CONFLICTING LOCATIONS BETWEEN PIPING AND PLANT PITS. CONTRACTOR WILL BE RESPONSIBLE FOR 100% IRRIGATION COVERAGE TO PLANT MATERIAL SHOWN ON THE PLANS, INCLUDING EXISTING TREES AND PLANTS TO REMAIN.

IRRIGATION NOTES

1. PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL CONTACT ARIZONA811 TO VERIFY LOCATIONS AND DEPTHS OF ANY UTILITIES THAT MAY BE AFFECTED BY HIS/HER WORK, AND SHALL BE RESPONSIBLE FOR DAMAGES TO SUCH UTILITIES CAUSED AS A RESULT OF THIS WORK.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR FAULTY MATERIAL OR FAULTY WORKMANSHIP FOR THE PERIOD OF 1-YEAR FROM SUBSTANTIAL COMPLETION OF LANDSCAPE WORK.
3. THE IRRIGATION SYSTEM IS DESIGNED FOR A MINIMUM OF 60 PSI. CONTRACTOR SHALL PROVIDE A STATIC PRESSURE READING BEFORE STARTING ANY WORK. IF WATER PRESSURE IS LESS THAN 60 PSI NOTIFY THE ENGINEER BEFORE STARTING WORK.
4. THE CONTRACTOR WILL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, CODES, AND REGULATIONS APPLICABLE TO THE IRRIGATION SYSTEM COVERED BY THESE PLANS.
5. ALL PERMITS, REQUIRED TO COMPLETE THE IRRIGATION WORK SHOWN ON THE PLANS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO START OF WORK.
6. THE CONTRACTOR SHALL CONNECT TO THE NEW WATER METERS AND INSTALL TYPE 'K' COPPER THROUGH THE BACKFLOW PREVENTER AS DETAILED.
7. ALL PIPES SHALL BE INSTALLED PER THE MANUFACTURER'S SPECIFICATION AND ASTM STANDARD D-2774 AT THE DEPTHS SHOWN IN THE IRRIGATION DETAILS.
8. ALL THREADED JOINTS SHALL BE COATED WITH TEFLON TAPE UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. USE LIQUID TEFLON ON METAL PIPE THREADS ONLY.
9. CONTRACTOR SHALL FLUSH ALL LINES PRIOR TO INSTALLATION OF EMITTERS, END CAPS OR ANY OTHER DEVICE THAT IMPACTS THE OUTWARD FLOW OF SYSTEM WATER.
10. ALL ELECTRICAL CONNECTIONS SHALL BE MADE WITHIN REMOTE CONTROL VALVE BOXES, CONTROLLER ENCLOSURES AND VALVE BOXES DESIGNATED SPECIFICALLY FOR ELECTRICAL CONNECTIONS. NO SPLICES OUTSIDE OF BOXES OR ENCLOSURES WILL BE ACCEPTED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING THE AUTOMATIC CONTROLLER. ALL ELECTRICAL WORK SHALL BE INSTALLED PER LOCAL CODE.
12. INSTALL ALL VALVE WIRING IN MAINLINE TRENCH.
13. INSTALL ALL REMOTE CONTROL VALVES AT HEIGHTS INDICATED ON DETAILS, AS HIGH AS POSSIBLE BUT ALLOWING CLEARANCE BETWEEN VALVE BOX LID AND FLOW CONTROL HANDLE ON REMOTE CONTROL VALVE.
14. AT THE COMPLETION OF THE PROJECT, SUPPLY THE FOLLOWING MATERIAL TO THE ENGINEER: TWO (2) WRENCHES FOR DISASSEMBLY AND ADJUSTING OF EACH TYPE OF VALVE SUPPLIED. TWO (2) KEYS FOR EACH TYPE OF CONTROLLER. TEN (10) EMITTERS OF EACH TYPE USED ON THE PROJECT.
15. ALL PVC SOLVENT WELD FITTINGS SHALL BE 'SPEARS' OR APPROVED EQUAL.
16. PROVIDE TWO (2) SPARE WIRES ALONG THE ENTIRE LENGTH OF MAINLINE AND LOOPED INTO EACH ELECTRIC REMOTE CONTROL VALVE BOX.
17. TREES AND SHRUBS SHALL BE IRRIGATED ON SEPARATE REMOTE CONTROL VALVES.
18. AS-BUILT DRAWINGS, CONTROLLER CHARTS, MAINTENANCE MANUALS AND SPECIALTY TOOLS SHALL BE TURNED OVER TO THE ENGINEER AT THE COMPLETION OF CONSTRUCTION.
19. ALL IRRIGATION PIPING REGARDLESS OF SIZE AND CLASS IS TO BE ENCASED IN A PIPE SLEEVE WHEN LOCATED UNDER IMPERVIOUS SURFACE MATERIAL.
20. CITY WILL PROVIDE WATER METER CONTRACTOR SHALL BE RESPONSIBLE OF INSTALLATION.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ELECTRIC METER AND ELECTRICAL CONDUIT AND CONDUCTORS FROM ELECTRIC METER TO NEW CONTROLLER PER APS STANDARDS.

LANDSCAPE NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE ARIZONA NURSERY ASSOCIATION STANDARDS (UNLESS OTHERWISE NOTED ON PLANS). THE ENGINEER RESERVES THE RIGHT TO REFUSE PLANT MATERIAL NOT MATCHING THE STANDARD FOR SIZE, HEALTH, AND FORM.
2. ALL LANDSCAPE AREAS SHALL BE UNIFORMLY GRADED SO THAT FINISHED SURFACES CONFORM TO THE TYPICAL SECTIONS AND PROPOSED GRADES SHOWN ON THE LANDSCAPE AND CIVIL PLANS. FINISHED SURFACES SHALL BE REASONABLY SMOOTH, COMPACTED, AND FREE FROM IRREGULAR SURFACE DRAINAGE. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING THE FINISH GRADE AND SHALL BEAR THE RESPONSIBILITY FOR PROPER SURFACE DRAINAGE OF PLANTED AREAS.
3. PRIOR TO COMMENCEMENT OF ANY WORK, DETERMINE LOCATION OF ALL UNDERGROUND INSTALLATIONS AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE AS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ALL DAMAGES TO UNDERGROUND INSTALLATIONS CAUSED DURING THE LANDSCAPE AND IRRIGATION CONSTRUCTION TO MARKED OR LOCATED UTILITIES.
4. EXCAVATE PITS AS SHOWN ON DRAWINGS. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION. TEST DRAINAGE OF TREE, SHRUB, AND OTHER PLANT PITS BY FILLING TEST PITS. IDENTIFIED BY THE ENGINEER (ONE PER AREA OR VISUAL CHANGE IN SOIL CONDITIONS), WITH WATER TWICE IN SUCCESSION. CONDITIONS PERMITTING THE RETENTION OF WATER IN PLANTING PITS FOR MORE THEN TWENTY-FOUR (24) HOURS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. CONTRACTOR TO SUBMIT IN WRITING A PROPOSAL FOR THE CORRECTION TO THE ENGINEER FOR APPROVAL BEFORE PROCEEDING WITH WORK.
5. IF ROCK, UNDERGROUND CONSTRUCTION, ADVERSE DRAINAGE CONDITIONS, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED IN EXCAVATION FOR PLANTING OF TREES, SHRUBS, AND OTHER PLANTS, NOTIFY THE ENGINEER. NEW LOCATIONS MAY BE SELECTED BY THE ENGINEER, OR INSTRUCTIONS MAY BE ISSUED TO DIRECT REMOVAL OF OBSTRUCTION. PROCEED WITH WORK ONLY AFTER APPROVAL OF THE ENGINEER.
6. DO NOT MAKE SUBSTITUTIONS. IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY FROM AT LEAST FIVE SOURCES TO THE ENGINEER WITH A PROPOSAL FOR USE OF EQUIVALENT MATERIAL FOR FINAL APPROVAL.
7. LAY OUT TREE AND PLANT LOCATIONS AND AREAS FOR MULTIPLE PLANTINGS, STAKE OR FLAG LOCATIONS, OUTLINE AREAS, AND SECURE ENGINEER'S ACCEPTANCE PRIOR TO COMMENCEMENT OF PLANTING WORK. MAKE MINOR ADJUSTMENTS AS DIRECTED.
8. BACKFILL MIX SHALL BE PLACED AND FIRMED AROUND THE PLANT TO PREVENT SETTLEMENT. NO PLANTING SHALL BE DONE WHEN SOIL IS EXCESSIVELY WET. PROVIDE POSITIVE DRAINAGE AWAY FROM CACTI OR SUCCULENTS.
9. ALL SHRUBS SHALL HAVE A FULL HEAD THAT COVERS THE CAN DIAMETER (FULL CAN) AND A MINIMUM OF FIVE STEMS/BRANCHES.
10. TOP OF ROCK MULCH SHALL BE 1/2" BELOW ALL CURBS, WALKS, AND PAVING WITH SMOOTH EVEN LINES AT EDGES OF STRUCTURES, AS DETAILED.
11. FINISH LANDSCAPE GRADES SHALL SLOPE AT A 2% SLOPE AWAY FROM CURBS, WALKS, AND WALLS, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
12. ALL CONSTRUCTION ROADS AND COMPACTED AREAS CREATED THROUGH CONSTRUCTION THAT ARE WITHIN THE LANDSCAPE AREAS SHALL BE SCARIFIED AND LOOSENED TO A DEPTH OF 12" PRIOR TO BEGINNING THE LANDSCAPE AND IRRIGATION WORK.
13. ANY PERMITS REQUIRED TO COMPLETE THE WORK SHOWN ON THE PLANS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO START OF WORK.
14. SUITABLE, NON-ROCK PLANTING PIT SPOILS SHALL BE SPREAD ON-SITE AND INCORPORATED INTO THE FINISH GRADING.
15. CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO VERIFY THE LOCATIONS OF UTILITIES. CONTRACTOR SHALL VERIFY ALL NECESSARY ABOVE AND BELOW GROUND CLEARANCES WITH UTILITIES BEFORE INSTALLATION OF PLANT MATERIAL. NOTIFY THE ENGINEER OF ANY CONFLICTS WITH LOCATIONS OF PLANTS.

LANDSCAPE SCHEDULE

	BOTANICAL NAME / COMMON NAME	CONT	QTY	DETAIL NO.
TREES				
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.	82	COS 8-14
ACCENTS				
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL	55	13 / L-0.02
	ALOE X 'BLUE ELF' ALOE	15 GAL	53	13 / L-0.02
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL	37	13 / L-0.02
SHRUBS				
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL	14	COS, 8-15
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL	13	COS, 8-15
GROUNDCOVER				
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL	54	COS 8-13
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL	113	COS 8-13
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL	56	COS 8-13
OTHER				
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD		1,700 SY	COS 8-13
	ROOT BARRIER		1,968 LF	COS 8-14

IRRIGATION SCHEDULE

SYMBOL	DESCRIPTION	COS DETAIL	QTY
M	WATER METER (BY CITY)		
C	IRRIGATION CONTROLLER	6 / L-0.02	2
	REDUCED PRESSURE ASSEMBLY	COS 6-13	2
	REMOTE CONTROL VALVE	7 / L-0.02	8
	FILTER PRESSURE REGULATOR	COS 8-07	8
N/S	SINGLE OUTLET EMITTER (.6 GPH)	COS 8-01	591
N/S	MULTI-OUTLET EMITTER (1 GPH)	COS 8-02	82
	FLUSH CAP	COS 8-04	16
	3/4" SCHEDULE 40 LATERAL (TREE)	9 / L-0.02	3,010'
	3/4" SCHEDULE 40 LATERAL (SHRUB)		3,050'
	1" SCHEDULE 40 PVC MAINLINE		2,360'
	SCHEDULE 80 PVC SLEEVE		748'

EMITTER SCHEDULE

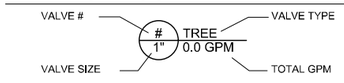
COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0,6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0,6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES
1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT



Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE AND IRRIGATION
NOTES-SCHEDULES-QUANTITIES

REGISTERED LANDSCAPE ARCHITECT 2401 M. WAYNE COLEBANK Date Signed 02/28/18 ARIZONA, U.S.A.

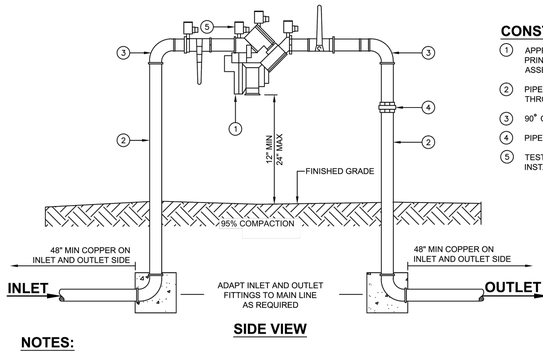
EXP. 06/30/2018

ROUTE	LOCATION	
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	
TRACS NO. T0063 01C		SUR-0(230)T

DWG No. L-0.01

____ OF ____

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	91	117	



SIDE VIEW

CONSTRUCTION NOTES:

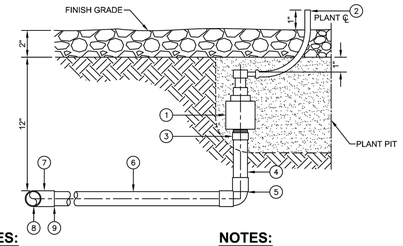
1. APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY, BALL VALVES INCLUDED .
2. PIPE SPOOL, TYPE "K" COPPER, 3/4" THROUGH 2-1/2".
3. 90° COPPER ELL, 3/4" THROUGH 2-1/2".
4. PIPE UNION, BRASS OR COPPER.
5. TEST COCKS WITH BRASS PLUGS INSTALLED (4 REQUIRED).

NOTES:

1. CONTACT CITY OF SURPRISE FOR THE LATEST LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES AND CERTIFIED TESTERS.
2. BACKFLOW PREVENTERS MUST BE TESTED BY A CERTIFIED TESTER BEFORE FINAL APPROVAL IS ISSUED.
3. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD-FREE SOLDER JOINTS
4. SEE CITY OF SURPRISE STANDARD DETAIL 6-14 FOR METAL CAGE DETAILS.
5. ALL BRASS SHALL MEET COS LOW LEAD STANDARDS AND SHALL BE ON THE APPROVED LIST BY USC-FCCCHR (EDS 6.15.8).

DATE REVISED: 8/2016 APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLIES - 2 ½" AND SMALLER	DETAIL NO: 6-13

1 REDUCED PRESSURE ASSEMBLY
NOT TO SCALE



CONSTRUCTION NOTES:

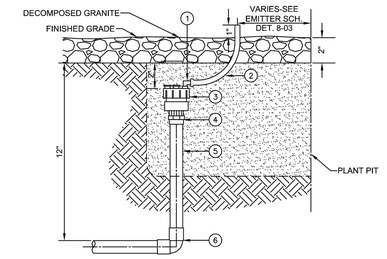
1. SERIES SINGLE PORT EMITTER LOCATE ON UPHILL SIDE OF PLANT CENTERLINE.
2. 1/4 INCH POLY FLEX HOSE EMITTER TUBING (6 FEET MAXIMUM).
3. 1/2 INCH PVC SCH 40 MALE ADAPTOR.
4. 1/2 INCH I.P.S. FLEXIBLE VINYL PVC PIPE OR APPROVED EQUAL.
5. 1/2 INCH PVC SCH 40 90° ELBOW.
6. 1/2 INCH PVC CL 315 PIPE.
7. 1/2 INCH PVC SCH 40 FITTING.
8. PVC CL 315 FOR 1/2 INCH LATERALS, PVC CL 200 FOR LATERALS GREATER THAN 1/2 INCH.
9. INSTALL BUSHING AS REQUIRED.

NOTES:

1. PIPE CEMENT & PRIMER SHALL BE USED FOR FLEXIBLE AND RIGID PIPE CONNECTIONS.
2. EMITTER TUBING EMISSION POINTS SHALL BE EQUALLY SPACED AND LOCATED TO DIRECT WATER FLOW TO THE PERIMETER OF THE DRIP LINE.
3. NUMBER OF OPENINGS AND EMITTER TUBES REQUIRED IS BASED ON PLANT SIZE (SEE COS STD. DET. 8-03).
4. MAXIMUM EMITTER TUBING LENGTH = 6 FEET.
5. NO EMITTER LATERALS OR PIPING SHALL BE INSTALLED THROUGH OR BENEATH PLANT PITS. MINIMUM DISTANCE BETWEEN PLANT PIT PERIMETER AND PIPING SHALL BE 12".
6. EQUIPMENT MANUFACTURED BY HUNTER INDUSTRIES SAN MARCOS, CALIFORNIA OR APPROVED EQUAL.

DATE REVISED: 8/2016 APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	SINGLE-OUTLET EMITTERS - ALL SHRUBS AND GROUND COVER	DETAIL NO: 8-01

2 SINGLE OUTLET EMITTER
NOT TO SCALE



CONSTRUCTION NOTES:

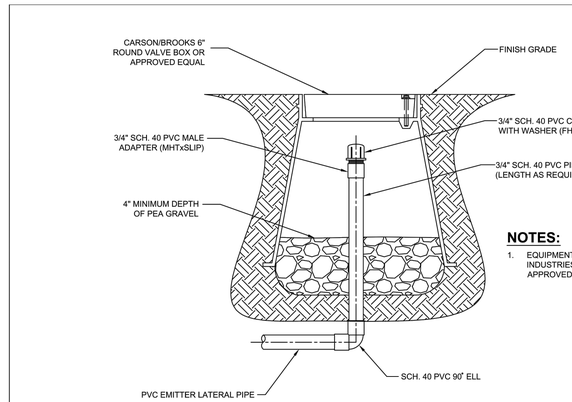
1. SWIVEL OUTLET 90° ELBOW.
2. 1/4 INCH POLY FLEX HOSE EMITTER TUBING (6 FEET MAXIMUM).
3. BOWSMITH ML 200 SERIES MULTI-PORT EMITTER OR APPROVED EQUAL. LOCATE ON UPHILL SIDE OF PLANT ℄.
4. 1/2 INCH PVC SCH 40 MALE ADAPTER.
5. AG PRODUCTS 1/2 INCH I.P.S. FLEXIBLE VINYL PVC PIPE OR APPROVED EQUAL.
6. 1/2 INCH PVC SCH 40 FITTING.

NOTES:

1. PIPE CEMENT & PRIMER SHALL BE USED FOR FLEXIBLE AND RIGID PIPE CONNECTIONS.
2. EMITTER TUBING EMISSION POINTS SHALL BE EQUALLY SPACED AND LOCATED TO DIRECT WATER FLOW TO THE PERIMETER OF THE DRIP LINE.
3. NUMBER OF OPENINGS AND EMITTER TUBES REQUIRED IS BASED ON PLANT SIZE (SEE COS STD. DET. 8-03).
4. MAXIMUM EMITTER TUBING LENGTH = 6 FEET.
5. NO EMITTER LATERALS OR PIPING SHALL BE INSTALLED THROUGH OR BENEATH PLANT PITS. MINIMUM DISTANCE BETWEEN PLANT PIT PERIMETER AND PIPING SHALL BE 12 INCHES.

DATE REVISED: 8/2016 APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	MULTI-OUTLET EMITTERS - FOR TREES ONLY	DETAIL NO: 8-02

3 MULTI-OUTLET EMITTER
NOT TO SCALE

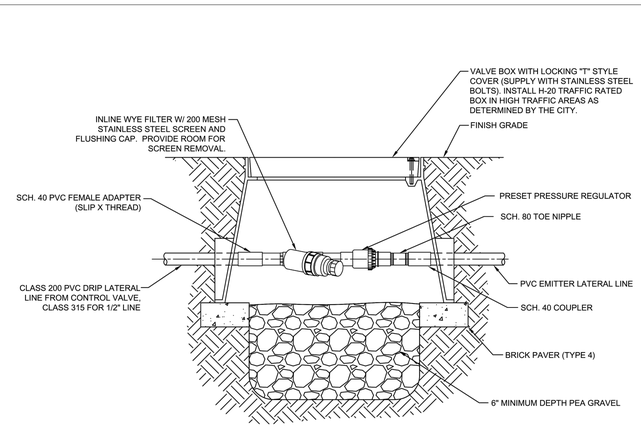


NOTES:

1. EQUIPMENT MANUFACTURED BY HUNTER INDUSTRIES SAN MARCOS, CALIFORNIA OR APPROVED EQUAL.

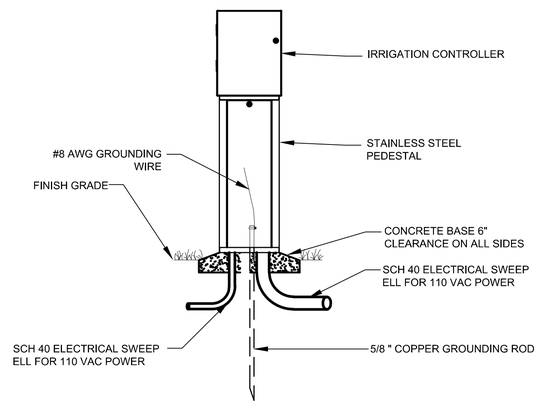
DATE REVISED: 8/2016 APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	EMITTER FLUSH CAP ASSEMBLY	DETAIL NO: 8-04

4 FLUSH CAP
NOT TO SCALE



DATE REVISED: 8/2016 APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA	DRIP FILTER AND PRESSURE REGULATOR	DETAIL NO: 8-07

5 FILTER PRESSURE REGULATOR
NOT TO SCALE



6 IRRIGATION CONTROLLER
NOT TO SCALE

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGAN SIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE AND IRRIGATION DETAILS

REGISTERED LANDSCAPE ARCHITECT — 21401 — M. WAYNE COLEBANK — Date Signed 02/28/18 — ARIZONA, U.S.A.

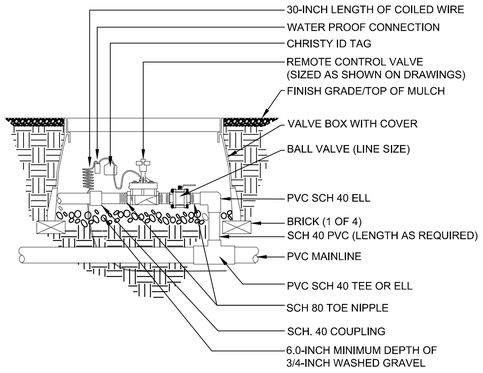
EXP. 06/30/2018

ROUTE	LOCATION	DWG No.
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	L-0.02

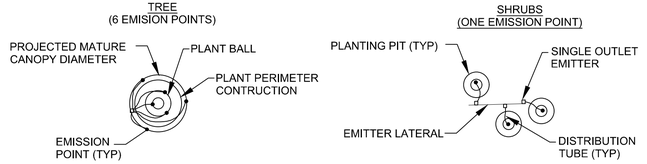
TRACS NO. T0063 01C | SUR-0(230)T | ___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	92	117	

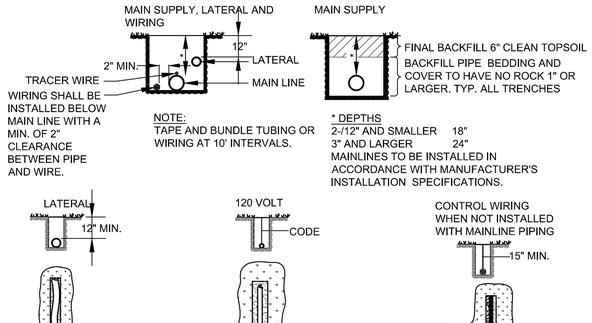


7 REMOTE CONTROL VALVE ASSEMBLY
NOT TO SCALE



EMITTER AND DISTRIBUTION TUBING PLACEMENT NOTES:
1. WHERE SLOPES EXCEED 12:1, EMISSION POINTS SHALL BE LOCATED ON UPHILL SIDE OF PLANT MATERIAL.
2. MAXIMUM DISTRIBUTION TUBING LENGTH IS 12', EMITTERS SHALL NOT EXCEED THIS DISTANCE FROM ANY PLANT BEING SERVED BY SAID EMITTER.

8 EMITTER LOCATION DETAIL
NOT TO SCALE



NOTE:
TAPE AND BUNDLE TUBING OR WIRING AT 10' INTERVALS.

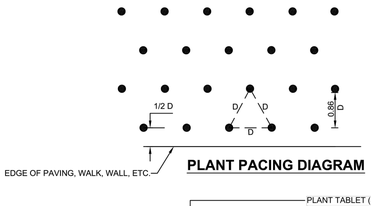
* DEPTHS
2-/12" AND SMALLER 18"
3" AND LARGER 24"
MAINLINES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION SPECIFICATIONS.

NOTE:
ALL PLASTIC PIPING TO BE SNAKED IN TRENCHES WITH A 2" MIN. CLEARANCE BETWEEN PIPES AND PIPES AND SIDE OF TRENCH.

NOTE:
ALL 120 VOLT WIRING IN CONDUIT TO BE INSTALLED IN ACCORDANCE WITH LOCAL CODE. APPROVED "ELECTRICAL POWER WIRES BELOW" WARNING TAPE SHALL BE INSTALLED 12" ABOVE ALL POWER WIRING IN TRENCHES.

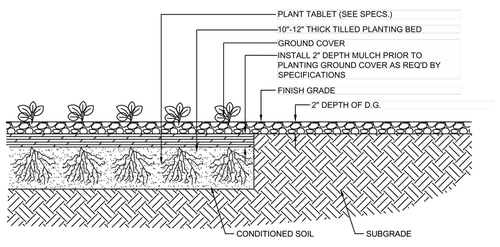
NOTE:
TIE A LOOSE 20" LOOP IN ALL WIRING AT CHANGES OF DIRECTION GREATER THAN 30°. UNTIE ALL LOOPS AFTER ALL CONNECTIONS HAVE BEEN MADE.

9 TYPICAL TRENCHING
NOT TO SCALE

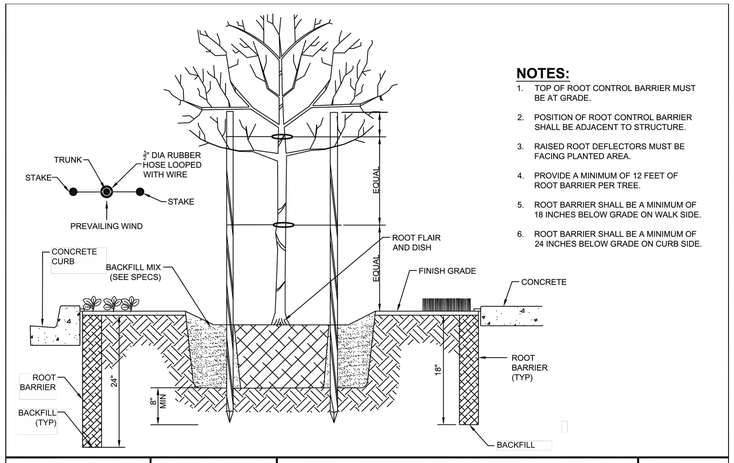


PLANT PACING DIAGRAM

NOTES:
1. LOCATE PLANTS SPACED EQUIDISTANT (D) FROM EACH OTHER AS SHOWN. D = GROUND COVER SPACING (DIMENSION AS SHOWN ON PLANTING PLAN).
2. PLANTS SHALL BE AS APPROVED BY COMMUNITY DEVELOPMENT PLANNING DIVISION.

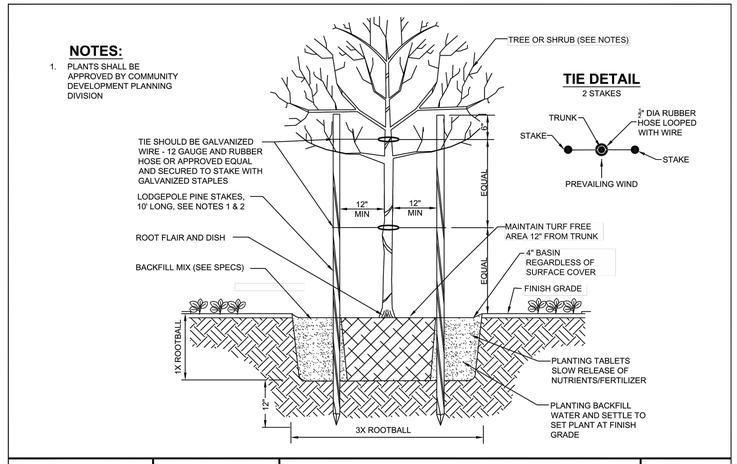


DATE REVISED: 8/2016		MULCH LAYER AND GROUND COVER PLANTING	DETAIL NO:
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA		8-13



NOTES:
1. TOP OF ROOT CONTROL BARRIER MUST BE AT GRADE.
2. POSITION OF ROOT CONTROL BARRIER SHALL BE ADJACENT TO STRUCTURE.
3. RAISED ROOT DEFLECTORS MUST BE FACING PLANTED AREA.
4. PROVIDE A MINIMUM OF 12 FEET OF ROOT BARRIER PER TREE.
5. ROOT BARRIER SHALL BE A MINIMUM OF 18 INCHES BELOW GRADE ON WALK SIDE.
6. ROOT BARRIER SHALL BE A MINIMUM OF 24 INCHES BELOW GRADE ON CURB SIDE.

DATE REVISED: 8/2016		ROOT BARRIER	DETAIL NO:
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA		8-14



NOTES:
1. PLANTS SHALL BE APPROVED BY COMMUNITY DEVELOPMENT PLANNING DIVISION

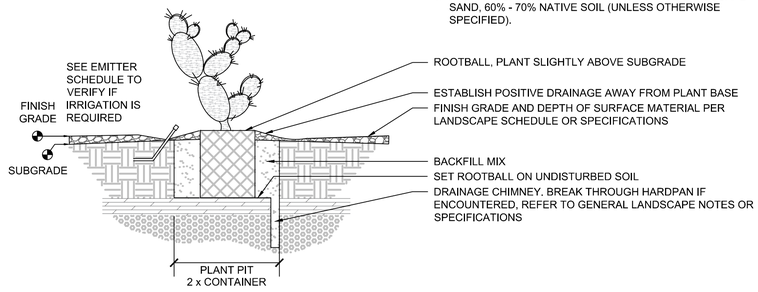
TIE DETAIL
2 STAKES

DATE REVISED: 8/2016		SHRUB OR TREE PLANTING	DETAIL NO:
APPROVED FOR DISTRIBUTION (SIGNATURE ON FILE)	SURPRISE ARIZONA		8-15

10 TREE PLANTING WITH ROOT BARRIER
NOT TO SCALE

11 TREE PLANTING WITH ROOT BARRIER
NOT TO SCALE

12 TREE PLANTING WITH ROOT BARRIER
NOT TO SCALE



NOTES:
1. PREPARE BACKFILL MIX: 30% - 40% COARSE LANDSCAPE SAND, 60% - 70% NATIVE SOIL (UNLESS OTHERWISE SPECIFIED).

13 CACTUS/SUCCULENT PLANTING (CONTAINER STOCK)
NOT TO SCALE

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE AND IRRIGATION DETAILS

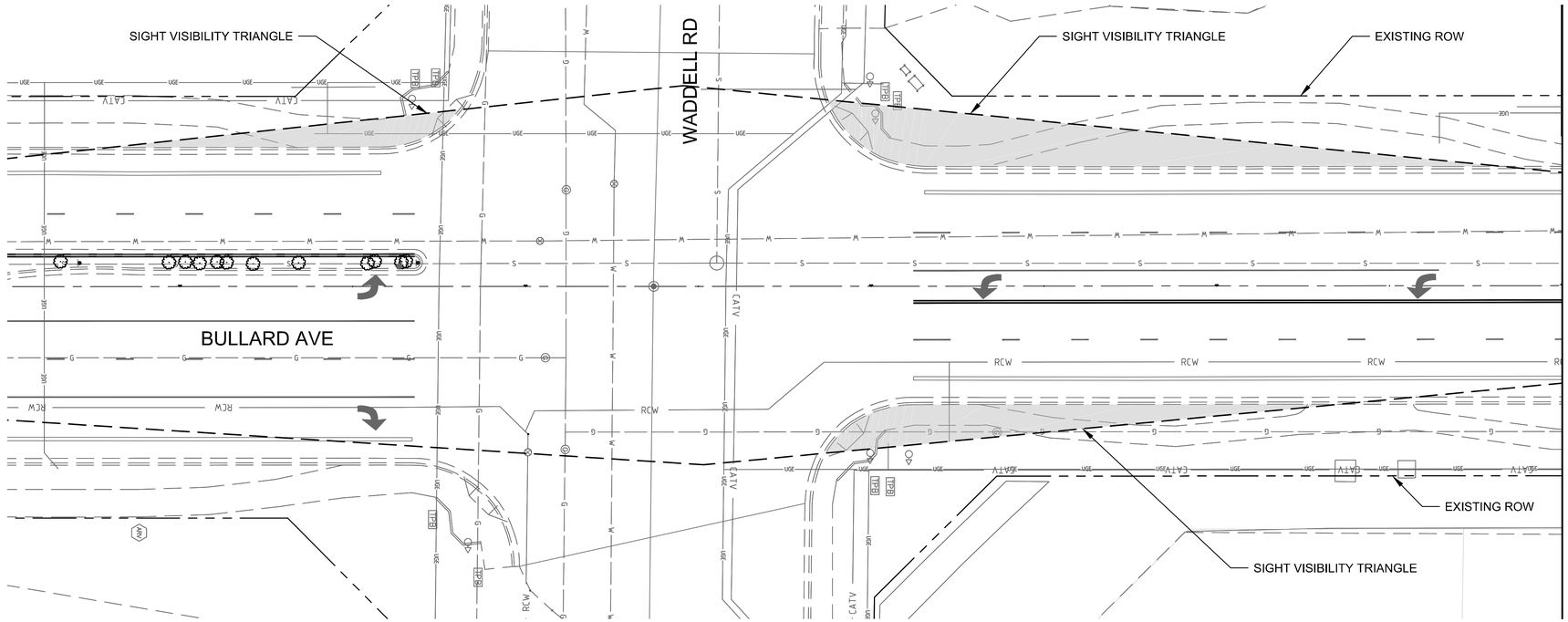
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 21401
M. WAYNE COLEBANK
Date Signed 02/28/18
ARIZONA, U.S.A.
EXP. 06/30/2018

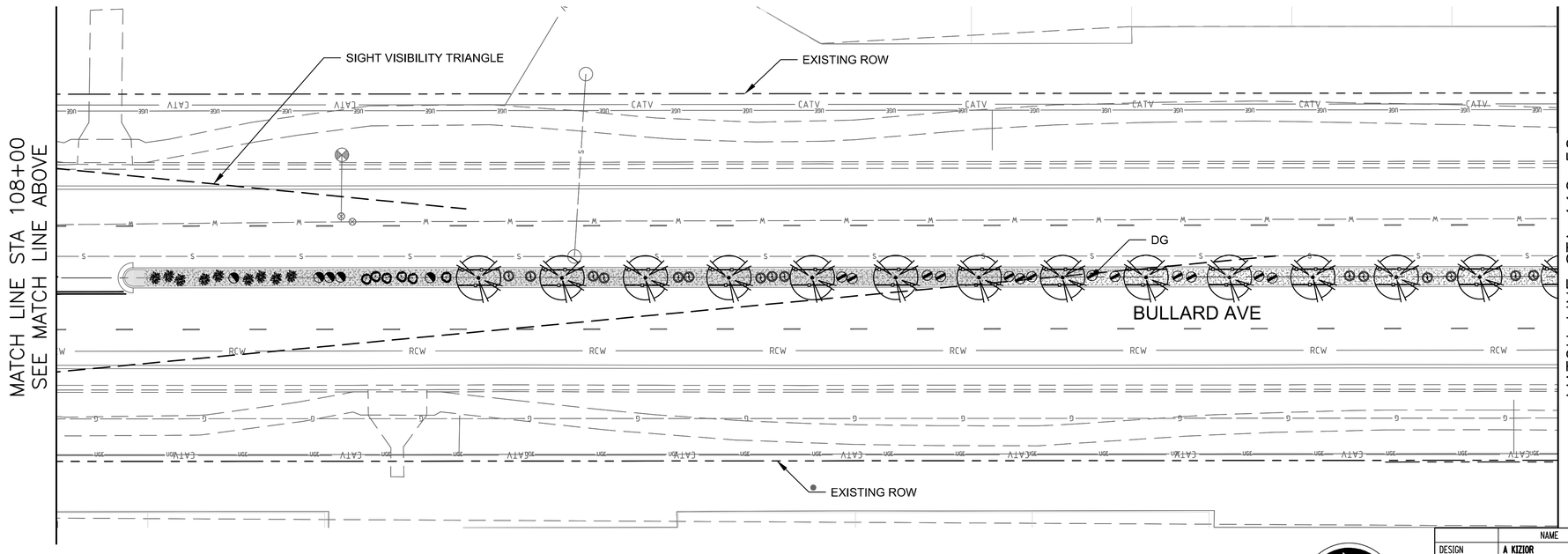
ROUTE	LOCATION	DWG No. L-0.03
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	
TRACS NO. T0063 01C	SUR-0(230)T	___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	93	117	

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-





LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	

0 20' 40'
HORIZ SCALE IN FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGAN SIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

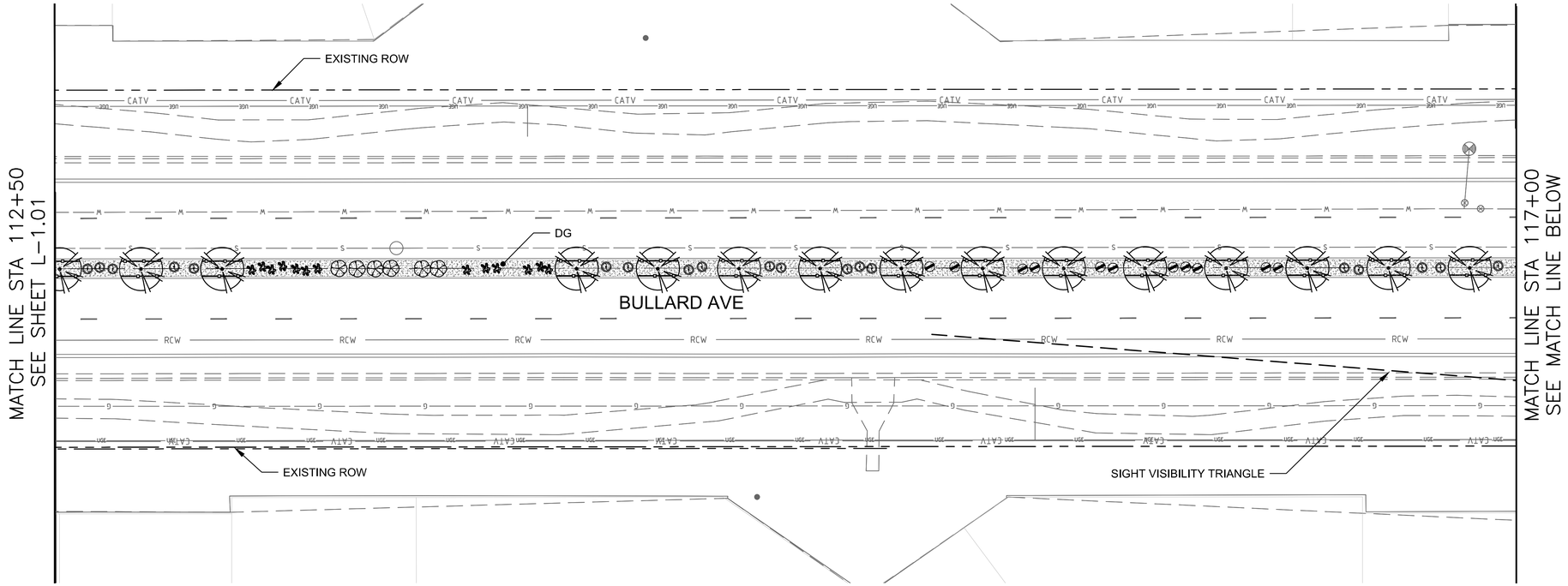
LANDSCAPE PLAN
STA. 103+50 TO STA. 112+50

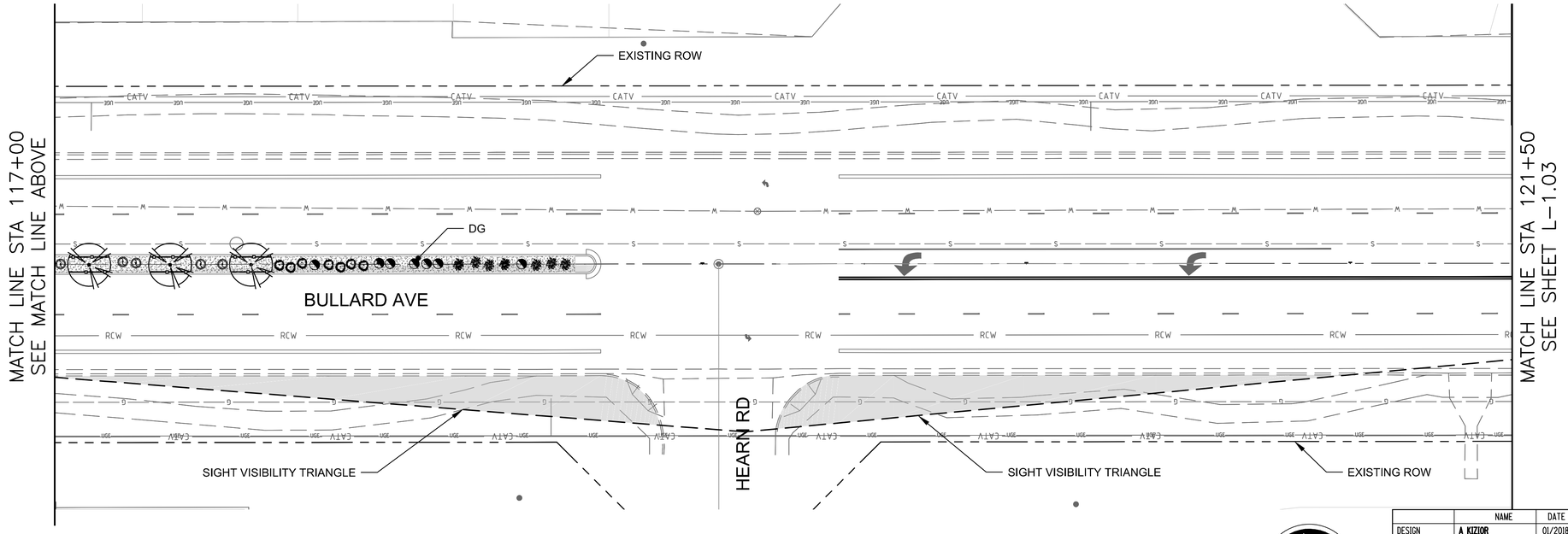
REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.
EXP. 06/30/2018

ROUTE	LOCATION	
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	
TRACS NO. T0063 01C		SUR-0(230)T

DWG No. L-1.01
___ OF ___

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	94	117	





LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE PLAN
STA. 112+50 TO STA. 121+50

REGISTERED LANDSCAPE ARCHITECT 21401 M. WAYNE COLEBANK 02/28/18 ARIZONA, U.S.A.

EXP. 06/30/2018

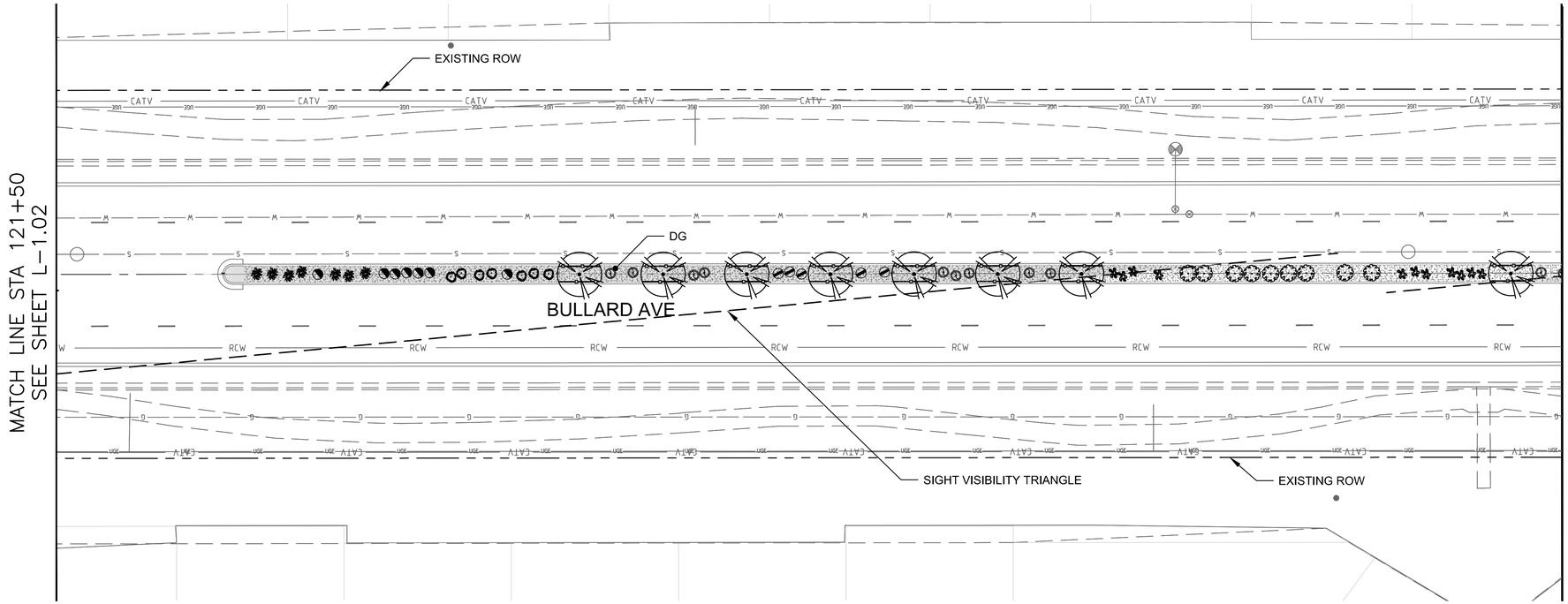
ROUTE	LOCATION
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE

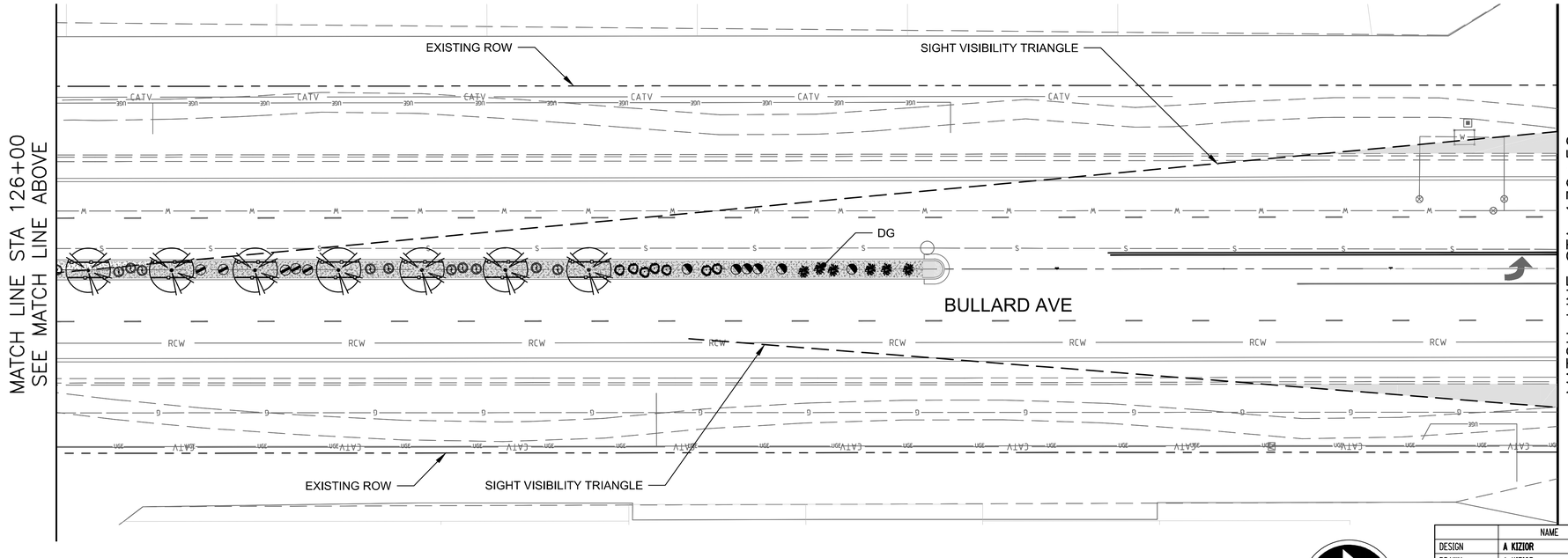
TRACS NO.			DWG No.
T0063 01C		SUR-0(230)T	L-1.02

OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	95	117	





LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	

HORIZ SCALE IN FEET
0 20' 40'

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE PLAN
STA. 121+50 TO STA. 130+50

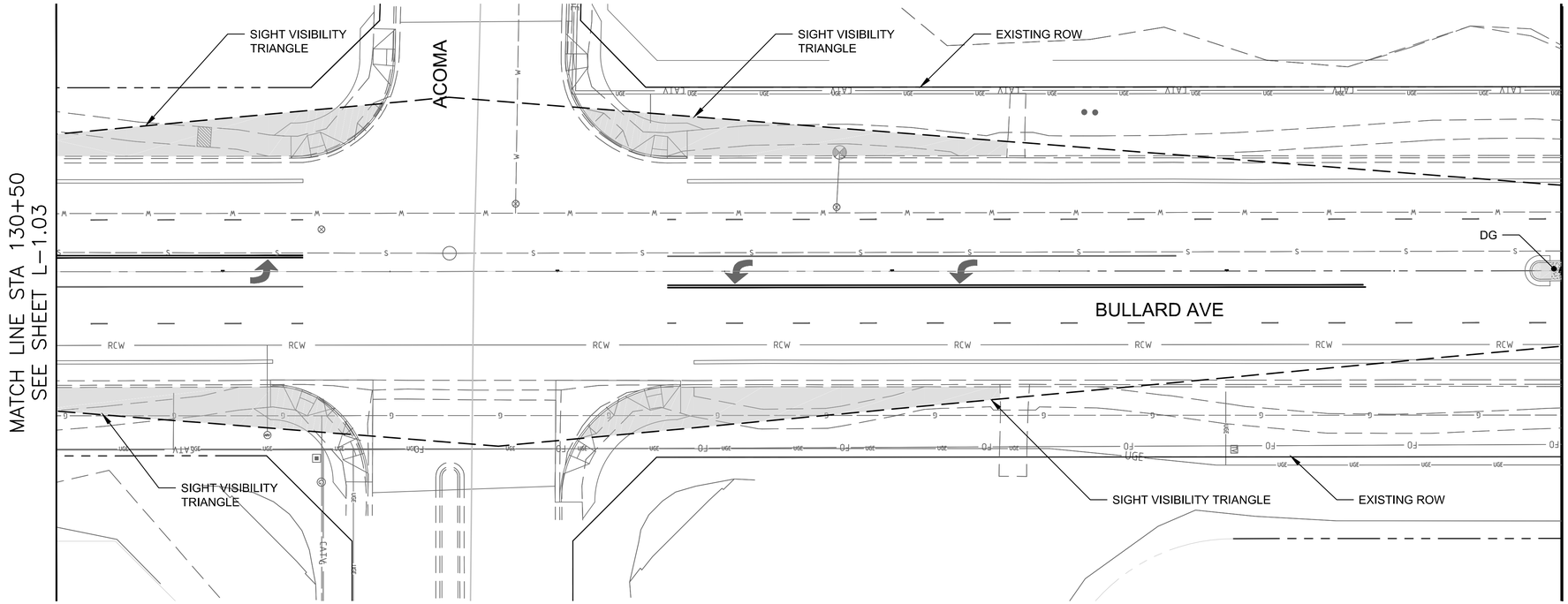
REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.

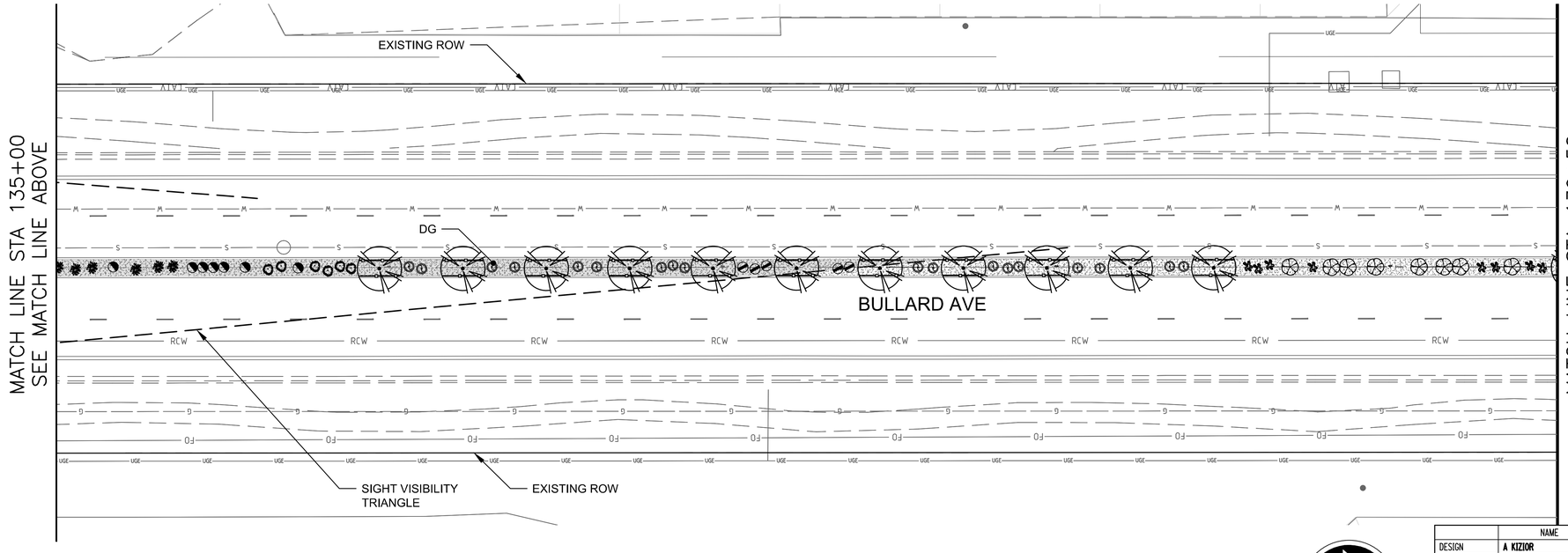
EXP. 06/30/2018

ROUTE	LOCATION	DWG No.
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	L-1.03
TRACS NO. T0063 01C	SUR-0(230)T	___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	96	117	





LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE PLAN
STA. 130+50 TO STA. 139+50

REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.

EXP. 06/30/2018

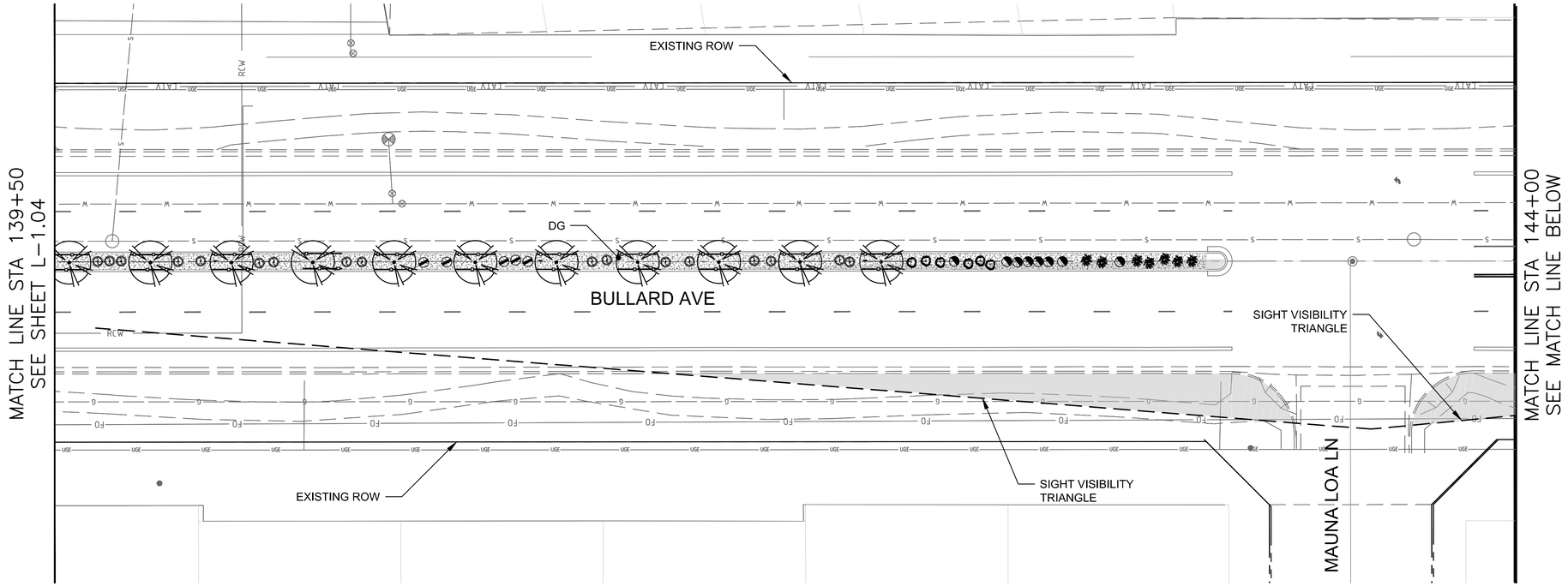
ROUTE	LOCATION	
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	
TRACS NO. T0063 01C		SUR-0(230)T

DWG No. L-1.04

___ OF ___

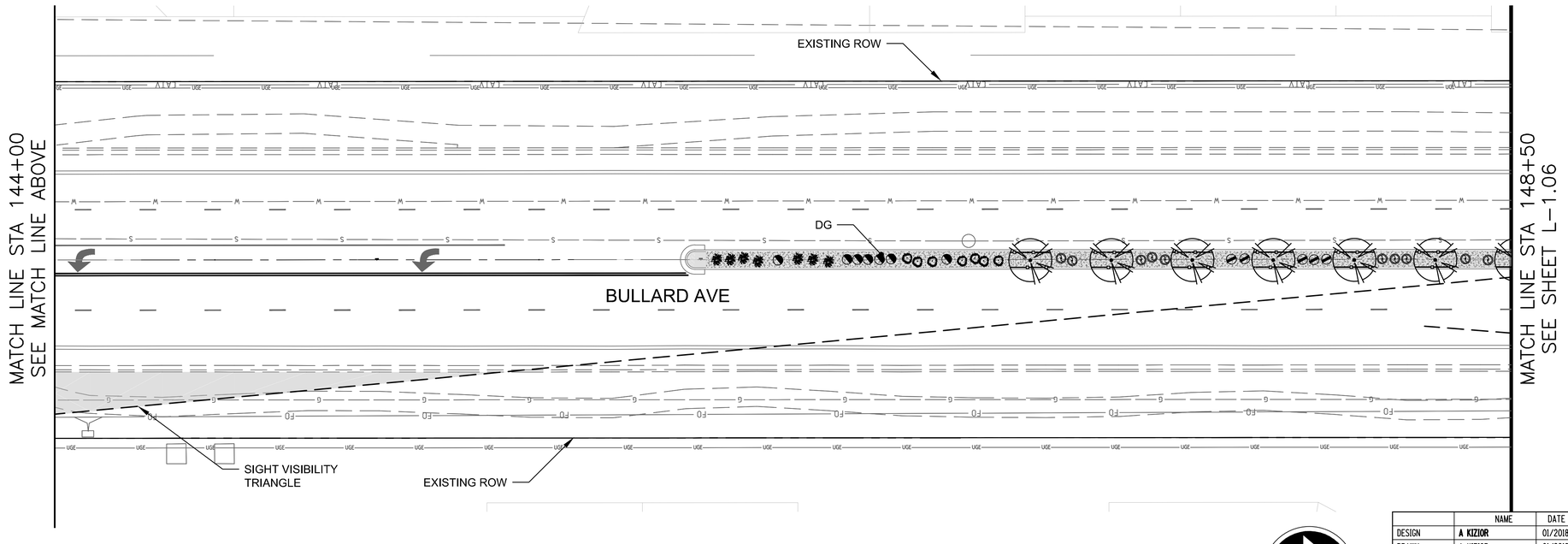
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	97	117	



LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	



0 20' 40'
HORIZ SCALE IN FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGAN SIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE PLAN
STA. 139+50 TO STA. 148+50

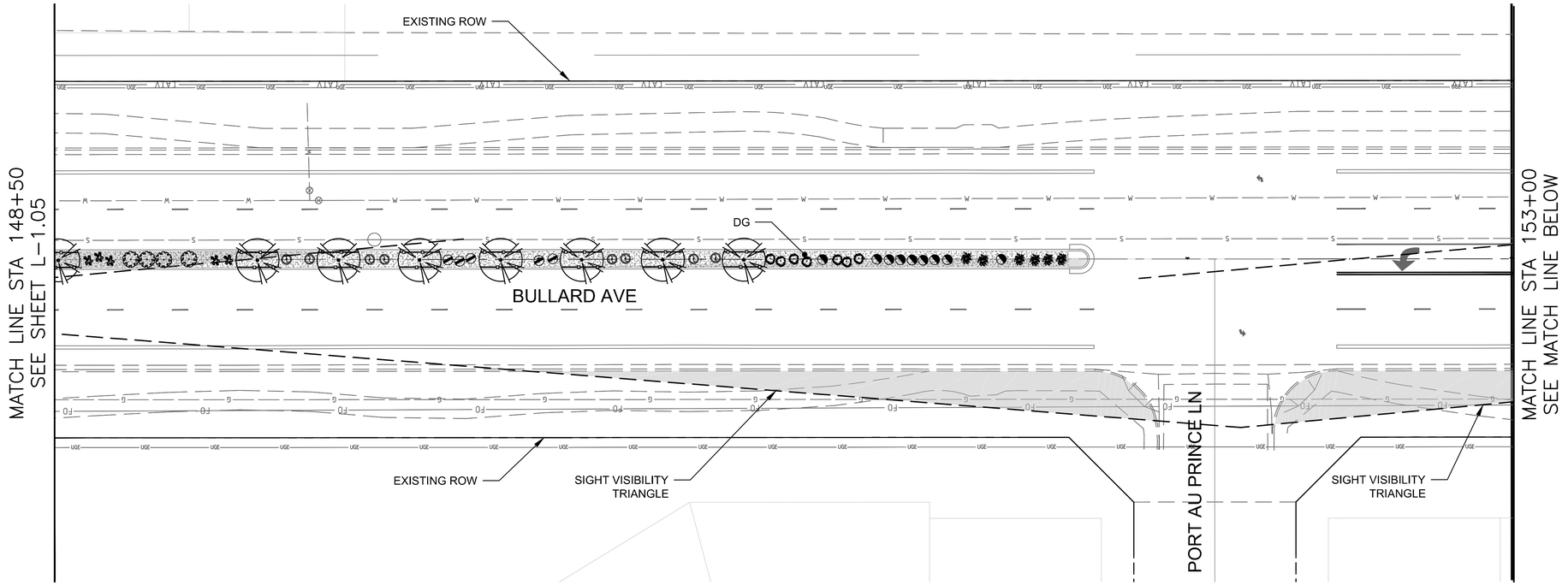
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.
EXP. 06/30/2018

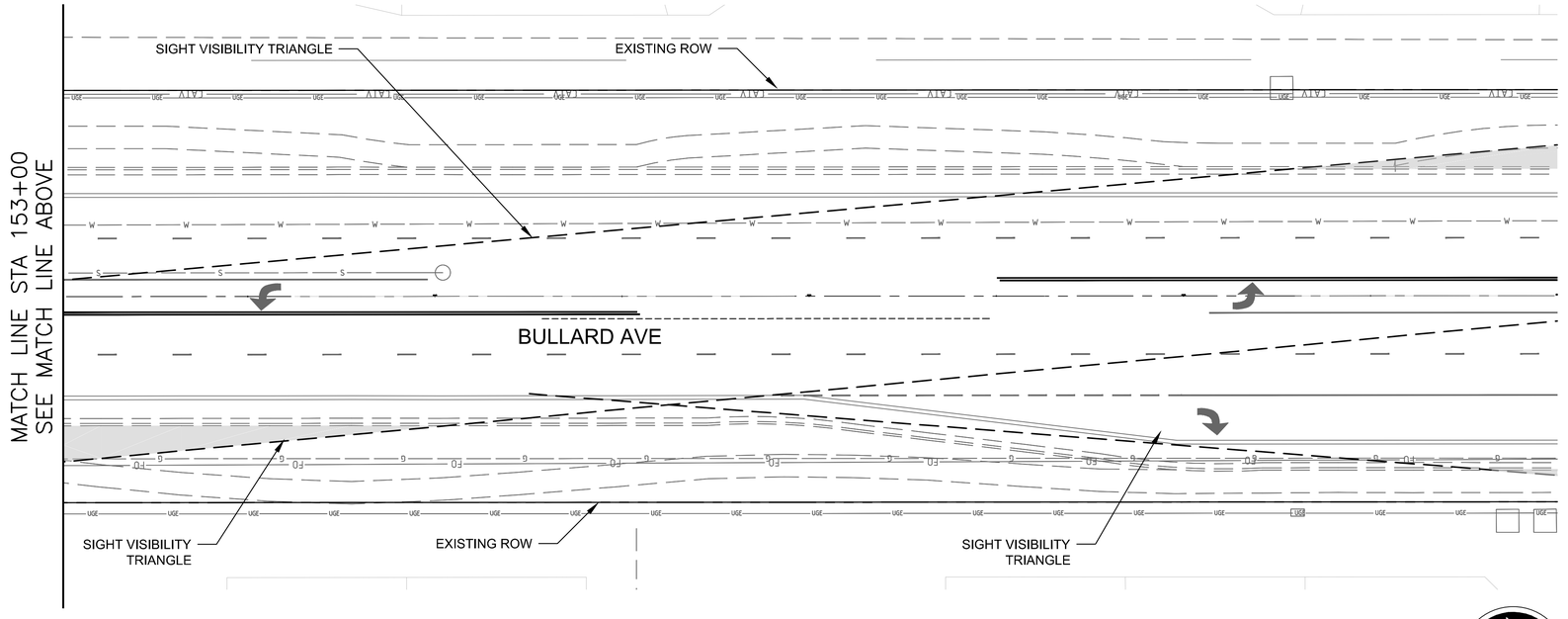
ROUTE	LOCATION	
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	
TRACS NO. T0063 01C		SUR-0(230)T

DWG No. L-1.05
___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	98	117	





LANDSCAPE SCHEDULE:

	BOTANICAL NAME / COMMON NAME	CONT
TREES		
	SOPHORA SECUNDIFLORA TEXAS MOUNTAIN LAUREL	36" BOX 2" CALIPER MIN.
ACCENTS		
	ALOE BARBADENSIS BARBADENSIS ALOE	15 GAL
	ALOE X 'BLUE ELF' ALOE	15 GAL
	HESPERALOE PARVIFLORA `PERPA` BRAKELIGHTS RED HESPERALOE	15 GAL
SHRUBS		
	LEUCOPHYLLUM ZYGOPHYLLUM `CIMARRON` BLUE RANGER	5 GAL
	RUELLIA PENNINSULARIS DESERT RUELLIA	5 GAL
GROUNDCOVER		
	CONVOLVULUS CNEORUM BUSH MORNING GLORY	1 GAL
	LANTANA CAMARA 'IRENE' IRENE LANTANA	1 GAL
	LANTANAMONTEVIDENSIS PURPLE LANTANA	1 GAL
OTHER		
	DECOMPOSED GRANITE (DG), 3/4" SCREENED COLOR - PALOMINO GOLD	
	ROOT BARRIER	

0 20' 40'
HORIZ SCALE IN FEET

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

	NAME	DATE
DESIGN	A KIZIOR	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

LANDSCAPE PLAN
STA. 148+50 TO STA. 157+00

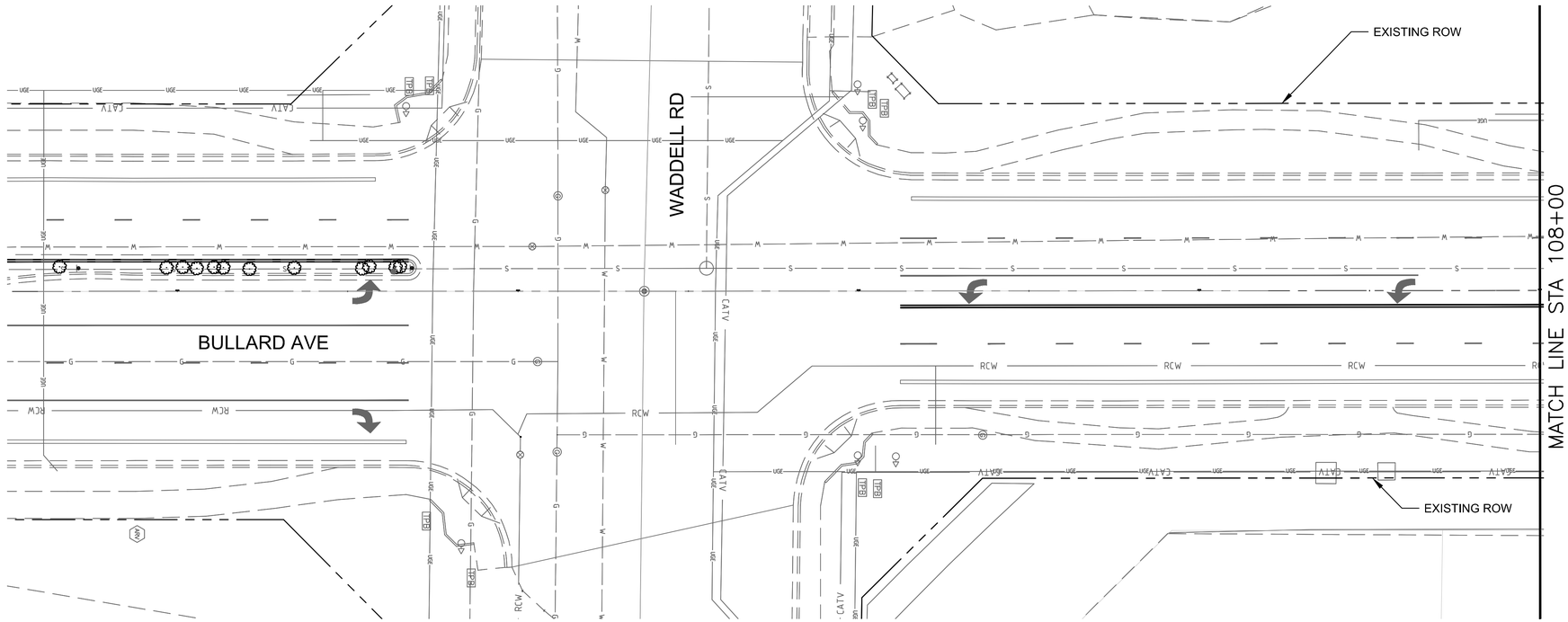
REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.

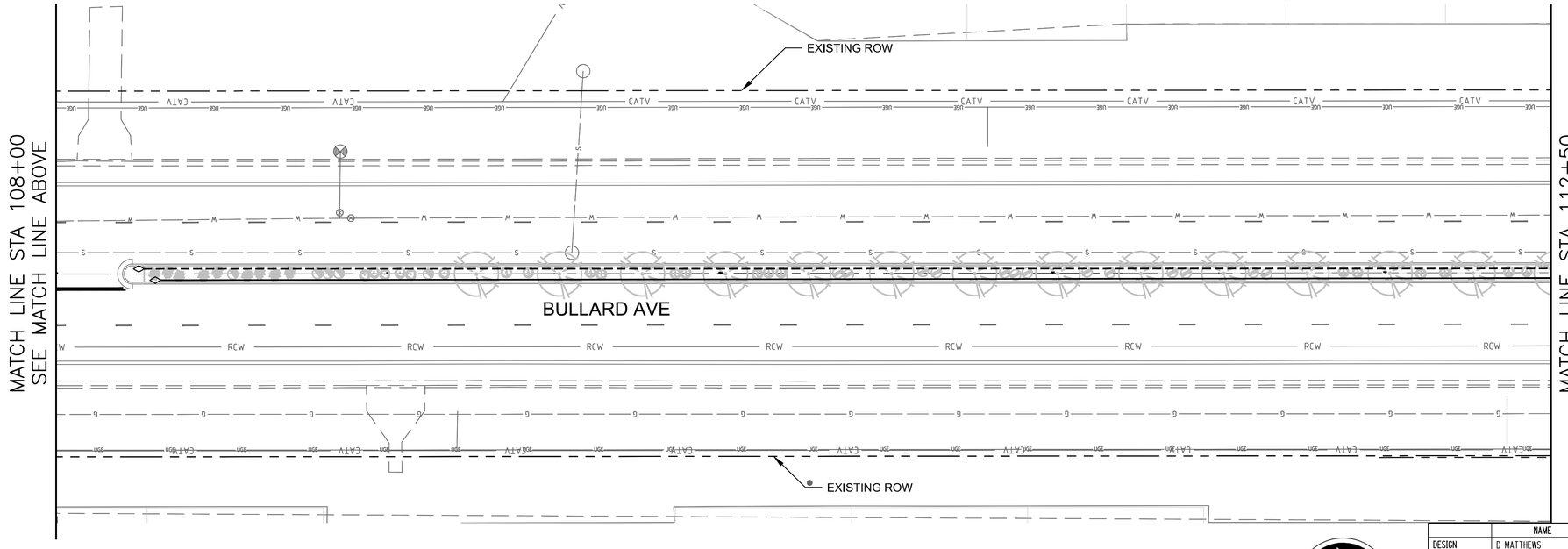
EXP. 06/30/2018

ROUTE	LOCATION	DWG No.
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	L-1.06
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	99	117	





IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT

EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES

1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 103+50 TO STA. 112+50

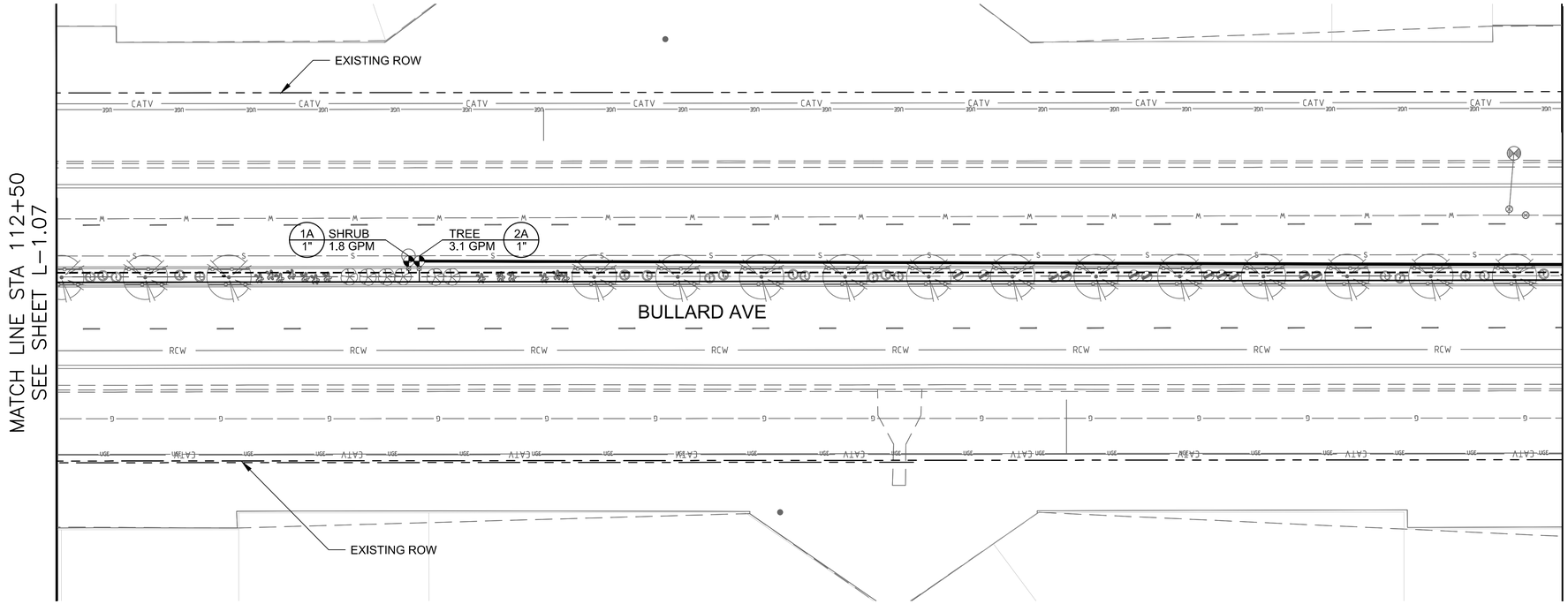
REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.

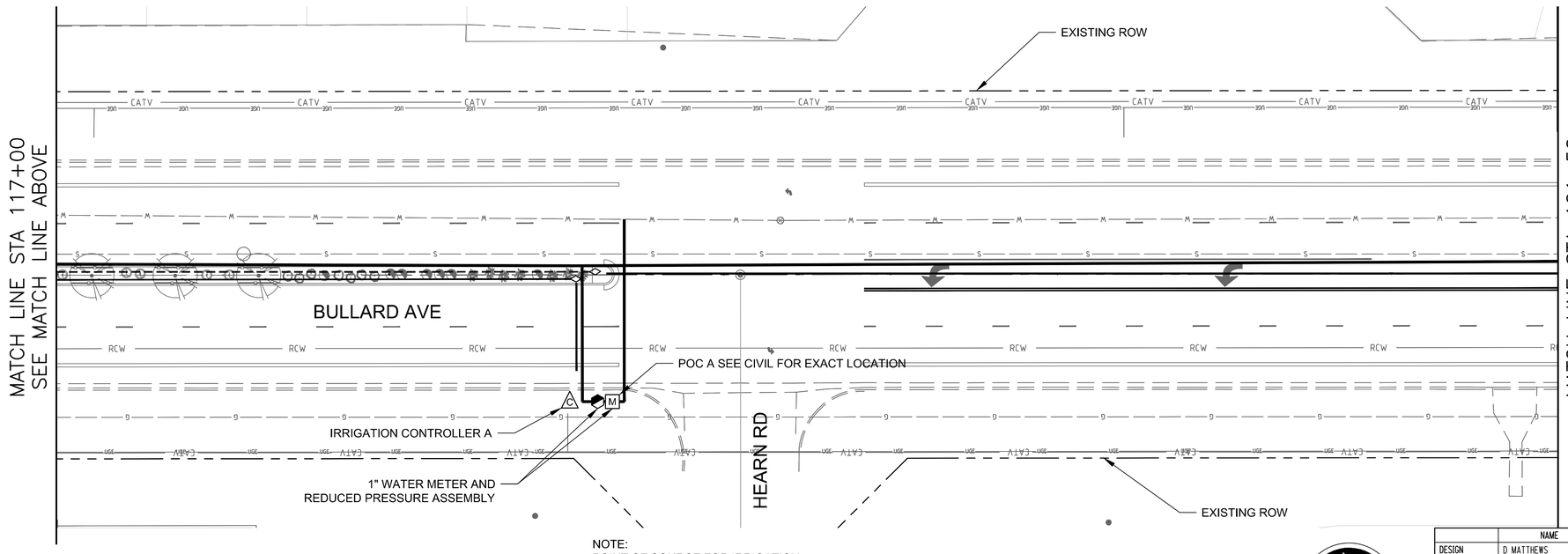
EXP. 06/30/2018

ROUTE	LOCATION	DWG No.
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE	L-1.07
TRACS NO. T0063 01C	SUR-0(230)T	___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	100	117	





NOTE:
POINT OF SOURCE FOR IRRIGATION CONTROLLER IS EXISTING J-BOX AT STREET LIGHT #S395130 FOR NEW 100 AMP METER PEDESTAL

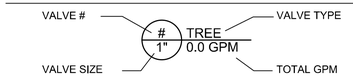
IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT



EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES
1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811 Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 112+50 TO STA. 121+50

REGISTERED LANDSCAPE ARCHITECT 21401 M. WAYNE COLEBANK 02/28/18 ARIZONA, U.S.A.

EXP. 06/30/2018

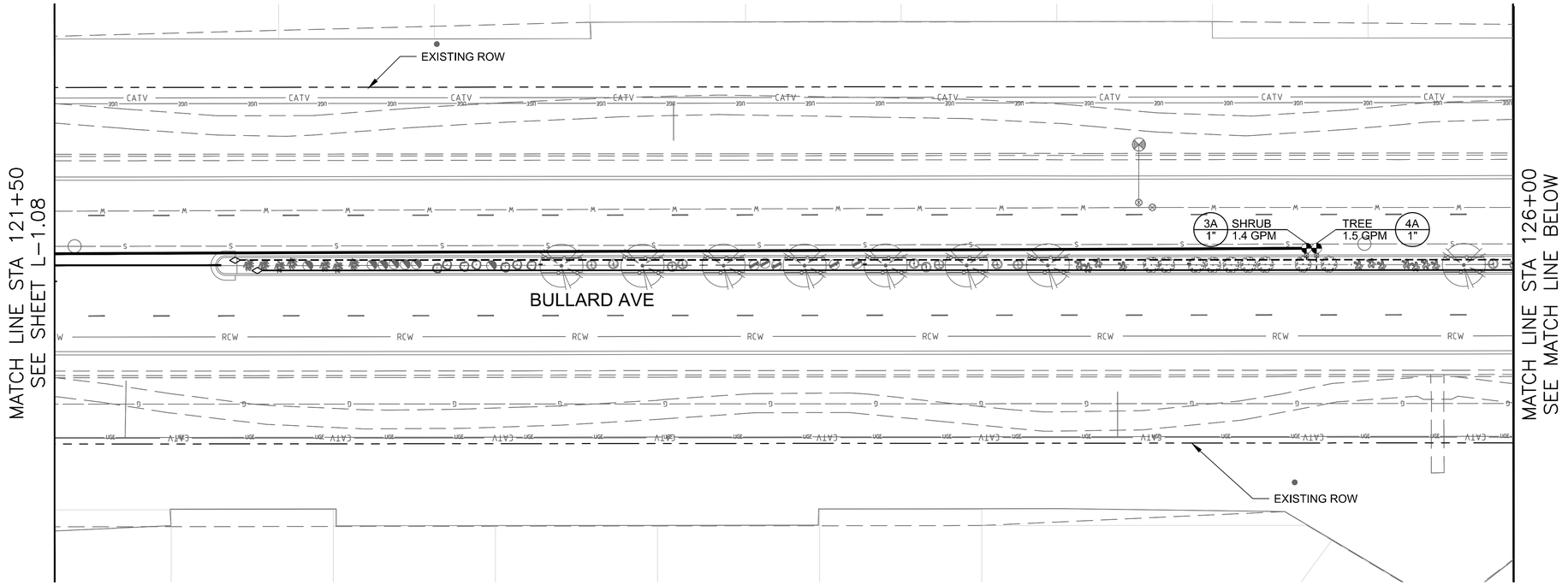
ROUTE	LOCATION
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE

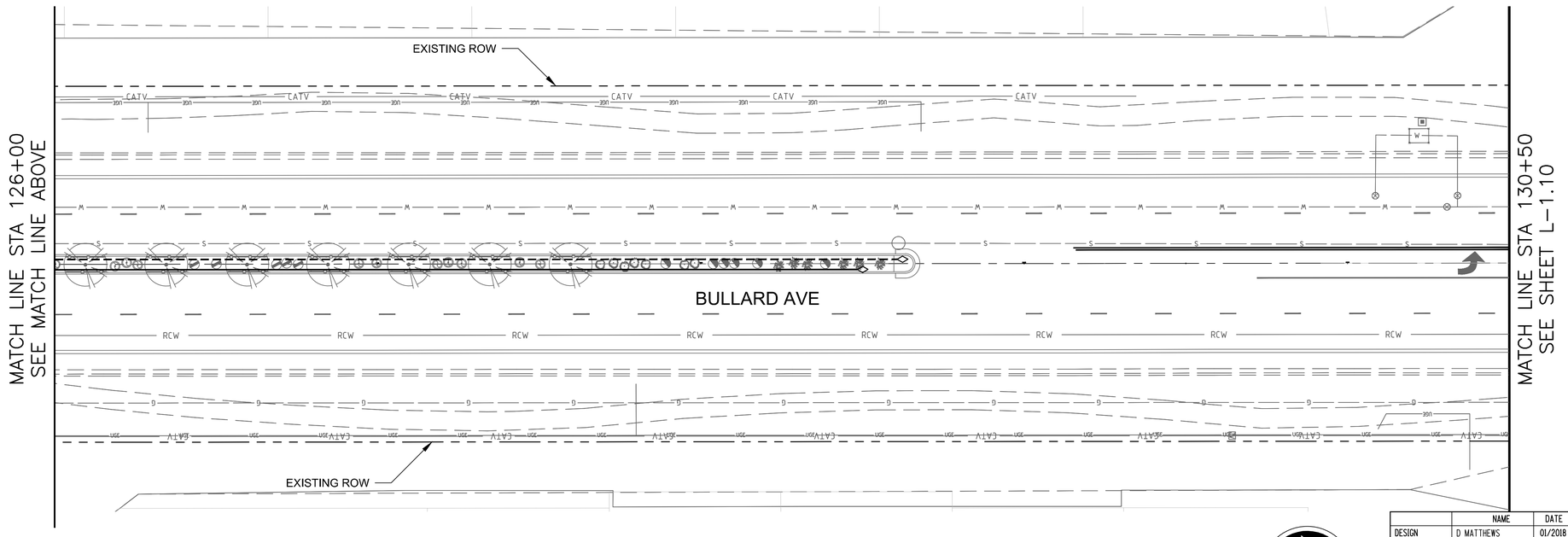
TRACS NO.			DWG No.
T0063 01C		SUR-0(230)T	L-1.08

OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	101	117	





IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT

EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES

1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 121+50 TO STA. 130+50

REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.
EXP. 06/30/2018

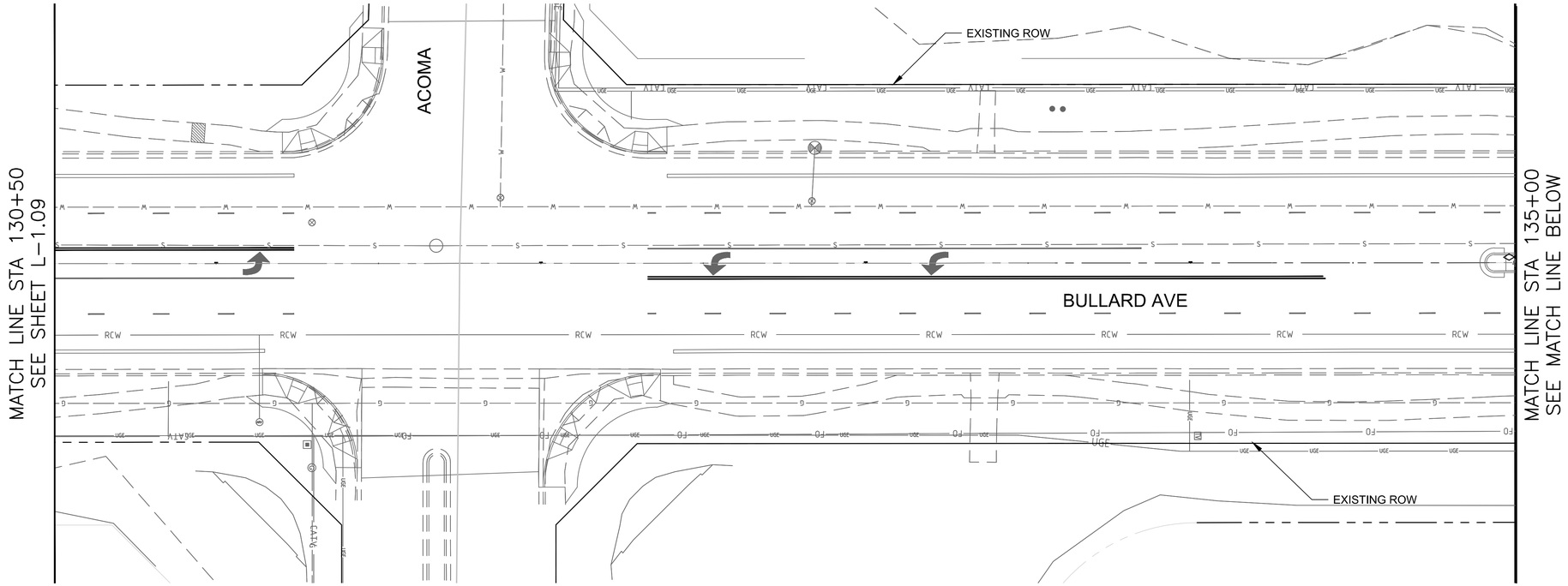
ROUTE	LOCATION
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE

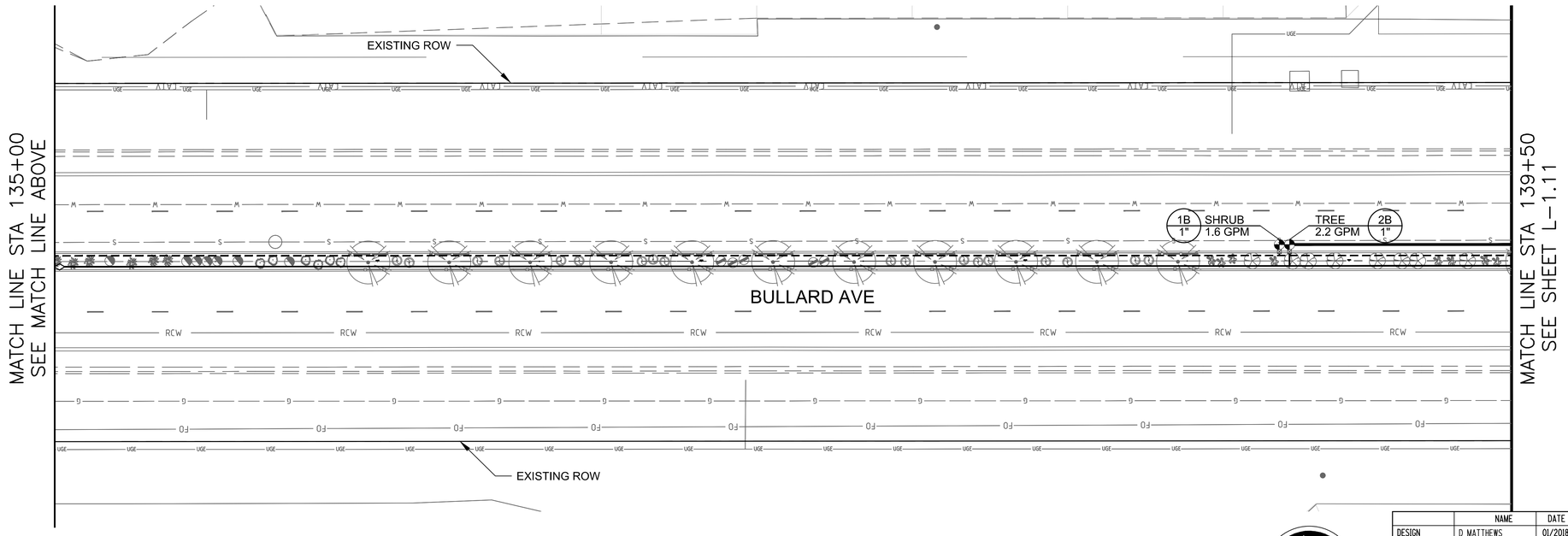
TRACS NO. T0063 01C | SUR-0(230)T | DWG No. L-1.09 | ___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

SURVEY NO.	FINISHED PLANS-	REVISIONS-	LOCATION-	DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	102	117	





IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT

EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES

1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 130+50 TO STA. 139+50

REGISTERED LANDSCAPE ARCHITECT
CERTIFICATE NO. 21401
M. WAYNE COLEBANK
Date Signed 02/28/18
ARIZONA, U.S.A.

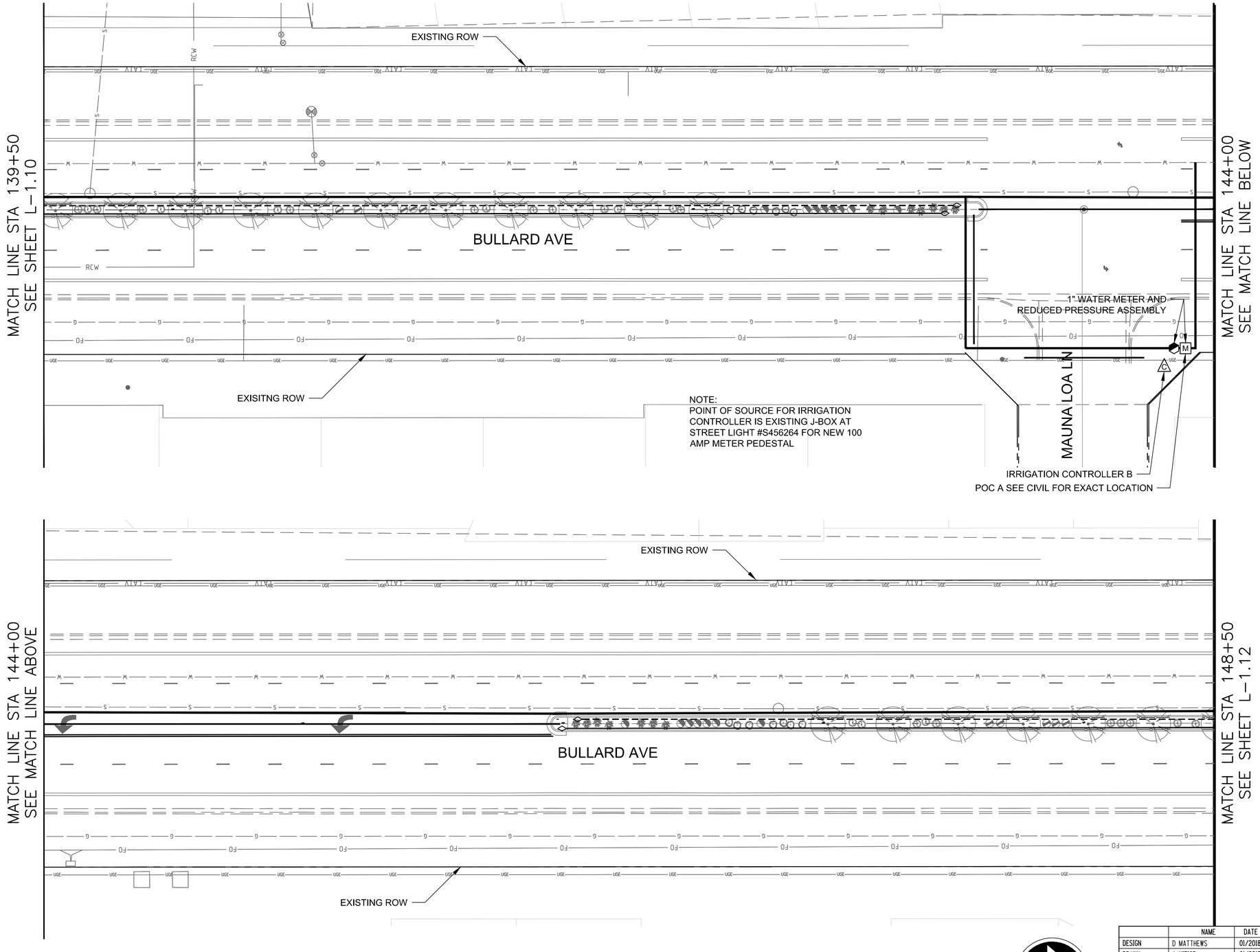
EXP. 06/30/2018

ROUTE	LOCATION		
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE		
TRACS NO. T0063 01C		SUR-0(230)T	

DWG No. L-1.10

OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	103	117	



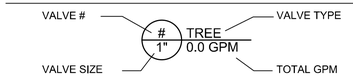
IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT



EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES

1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 139+50 TO STA. 148+50

REGISTERED LANDSCAPE ARCHITECT
21401
M. WAYNE COLEBANK
02/28/18
ARIZONA, U.S.A.
EXP. 06/30/2018

ROUTE	LOCATION		
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE		
TRACS NO. T0063 01C		SUR-0(230)T	

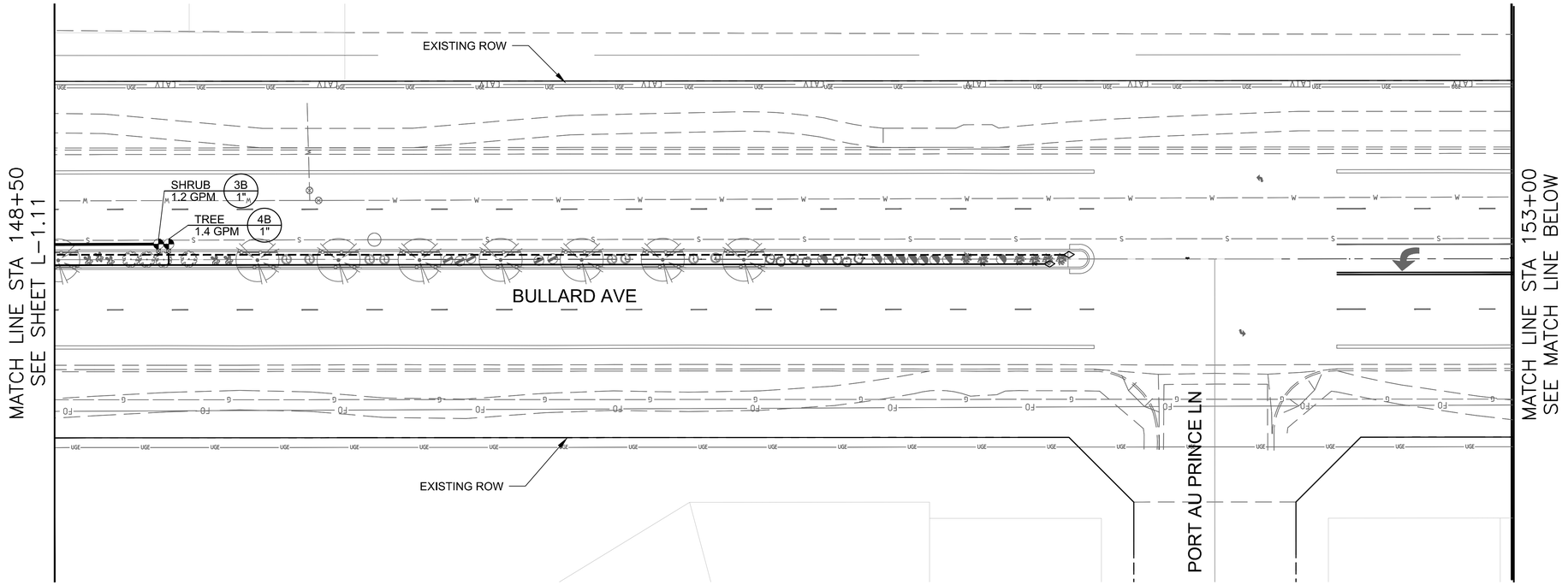
DWG No. L-1.11

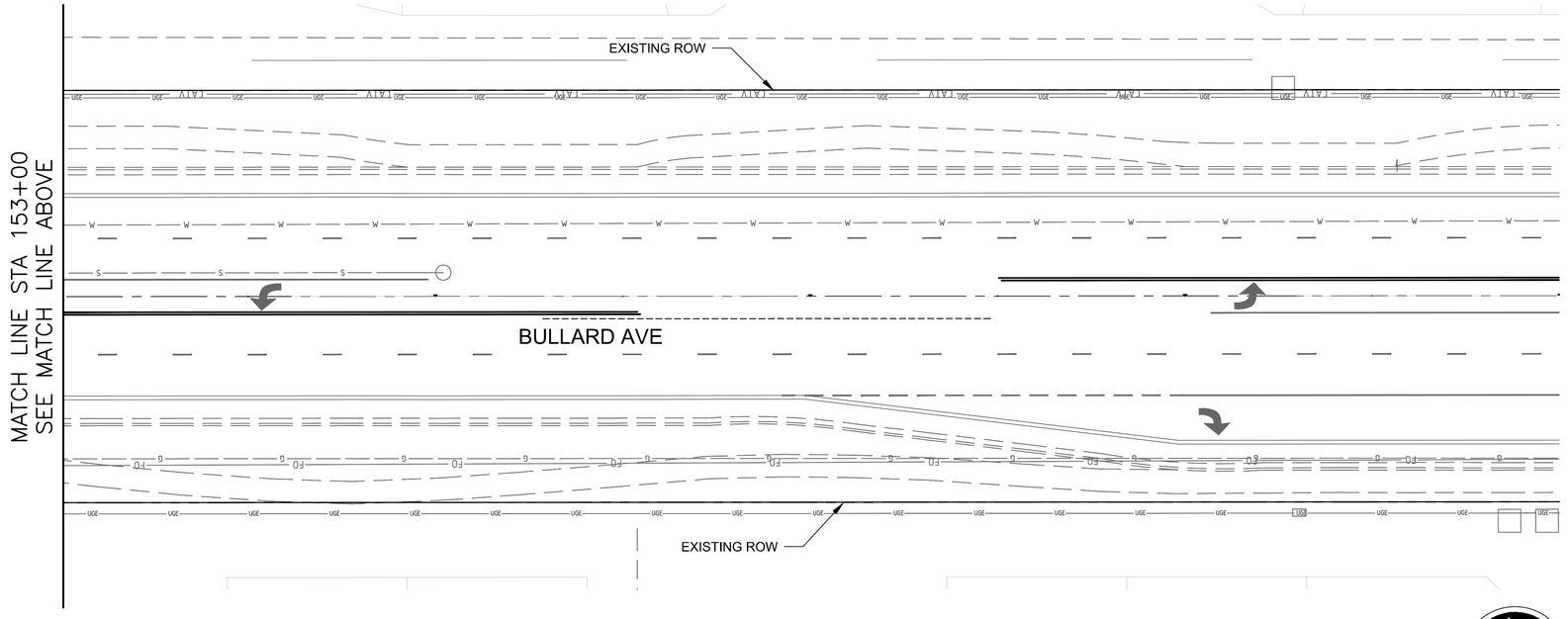
___ OF ___

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	0000 MA SUR	104	117	

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-





IRRIGATION SCHEDULE:

SYMBOL	DESCRIPTION
M	WATER METER (BY CITY)
C	IRRIGATION CONTROLLER
	REDUCED PRESSURE ASSEMBLY
	REMOTE CONTROL VALVE
	PRESSURE REGULATOR FILTER
N/S	SINGLE OUTLET EMITTER (.6 GPH)
N/S	MULTI-OUTLET EMITTER (1 GPH)
	FLUSH CAP
	3/4" SCHEDULE 40 LATERAL (TREE)
	3/4" SCHEDULE 40 LATERAL (SHRUB)
	1" SCHEDULE 40 PVC MAINLINE
	SCHEDULE 80 PVC SLEEVE

IRRIGATION SLEEVES

1. USE SCHEDULE 80 PIPE OR 2 TIMES THE DIAMETER OF THE PIPE(S) BEING SLEEVED, MINIMUM 2".
2. CONTROL WIRES INSTALLED THROUGH IRRIGATION SLEEVES SHALL BE ENCASED IN A PVC ELECTRICAL CONDUIT SIZED TO CONTAIN THE REQUIRED NUMBER OF CONDUCTORS. WIRE SLEEVES CROSSING STREET PAVING SHALL HAVE A 10" PULL BOX AT EACH END.

VALVE CALLOUT

EMITTER SCHEDULE

COMMON NAME	FLOW PER OUTLET	MANIFOLD OUTET	OPEN OUTLETS	GPH PER PLANT
TREES				
TEXAS MTN LAUREL	1.0 GPH	MULTI-OUTLET	6	6.0
ACCENTS/SHRUBS/GRASSES/GROUNDCOVER				
ALOE	0.6 GPH	SINGLE OUTLET	1	0.6
HESPERALOE	0.6 GPH	SINGLE OUTLET	1	0.6
BLUE RANGER	0.6 GPH	SINGLE OUTLET	2	1.2
DESERT RUELLIA	0.6 GPH	SINGLE OUTLET	2	1.2
MORNING GLORY	0.6 GPH	SINGLE OUTLET	1	0.6
LANTANA	0.6 GPH	SINGLE OUTLET	2	1.2

EMITTER NOTES

1. REFER TO EMITTER DETAILS FOR EMITTER SPECIFICATIONS AND LAYOUT.
2. ADJUST IRRIGATION OPERATING TIMES TO ACCOMMODATE PLANT MATURITY, SOIL TYPE, PLANT EXPOSURE AND SEASONAL REQUIREMENTS.

Call at least two full working days before you begin excavation.
ARIZONA 811
Arizona Blue Stake, Inc.
Dial 8-1-1 or 1-800-STAKE-IT (782-5348)
In Maricopa County: (602) 263-1100

0 20' 40'
HORIZ SCALE IN FEET

	NAME	DATE
DESIGN	D MATTHEWS	01/2018
DRAWN	A KIZIOR	01/2018
CHECKED	J MOAR	01/2018

LOGANSIMPSON

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

IRRIGATION PLAN
STA. 148+50 TO STA. 157+00

REGISTERED LANDSCAPE ARCHITECT 21401 M. WAYNE COLEBANK 02/28/18 ARIZONA, U.S.A.

EXP. 06/30/2018

ROUTE	LOCATION
BULLARD AVE	BULLARD AVE - GREENWAY RD TO PEORIA AVE

TRACS NO.		
T0063 01C	SUR-0(230)T	DWG No. L-1.12

OF

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	105	117	
		0000 MA SUR			

PART 1 - To be completed by the Landscape Architect or Design Engineer

I. PROJECT DESCRIPTION

A. Owner Name and Address:

Arizona Department of Transportation
205 South 17th Avenue
Phoenix, Arizona 85007-3213

B. Project TRACS Number: T0063 01C

C. Project Location: Bullard Avenue

City: Surprise County: Maricopa

Beginning Latitude (NAD 83): N 033° 034' 49.7"
Beginning Longitude (NAD 83): W 112° 022' 34.9"

Ending Latitude (NAD 83): N 033° 037' 25.6"
Ending Longitude (NAD 83): W 112° 022' 35.5"

To obtain the project latitude/longitude data, refer to the Flash Earth web link below (Bing Maps with labels): *http://www.flashearth.com/*

D. Project Description:

Roadway and bicycle improvements

Greenway Road to Peoria Avenue

II. HYDROLOGIC INFORMATION

A. Project Size:

Length (MI.) 2.99

Area (Ac.) 41.24

B. Area to be Graded (Ac.) *: 5.14

* Blading of the shoulder build-up area is considered as grading and ground disturbance and should be covered by stormwater and/or other environmental regulations.

C. Percentage of the site that is impervious before and after construction:

Percentage before Construction: 90%

Percentage after Construction: 92%

D. Receiving Water(s), refer to the Arizona Department of Water Resources Web Link below (USGS Topo):
https://gisweb.azwater.gov/WellRegistry/Default.aspx

III. PRESERVATION OF EXISTING VEGETATION

A. In accordance with the specifications, existing vegetation will be preserved. Clearing limits shall be confined to areas that require grading. Existing vegetation outside the boundaries of the cleared area shall be protected from damage by construction activities. Existing trees within the area to be cleared shall be preserved and protected, wherever possible.

IV. SOIL STABILIZATION MEASURES

A. All disturbed soil, which will not be paved, riprapped or otherwise covered to prevent erosion, will be revegetated and/or landscaped in accordance with the project plans and specifications.

B. Scheduling of the revegetation effort can be found on PART 2 of this sheet under SCHEDULE OF MAJOR ACTIVITIES.

V. MEASURES TO CONTROL EROSION AND SEDIMENT

A. Temporary Erosion and Sediment Controls: (Refer to the SWPPP Site Plan and Specifications)

_____ Erosion Control Mattings
_____ Temporary Diversion Dikes
_____ Check Dams
_____ Rock Inlet/Outlet Protection
_____ Sediment Control Berms
_____ Silt Fences
_____ Wattles (Excelsior/Straw)
X Excelsior Logs / Sediment Logs
_____ Seeding (Class II with mulch)
X Others Describe:

Construction entrance/exit gravel pad

B. Permanent Erosion and Sediment Controls and Post-construction Storm Water Management Measures: (Refer to SWPPP Site Plan and Specifications)

_____ Crown Ditch/Dike
_____ Rock Protection
_____ Rock Riprap Channel Lining
_____ Sediment Basin
_____ Embankment Curb
_____ Spillways and Downdrains
_____ Minibenching
X Seeding established as a perennial vegetative cover with a density of 70% of the native background vegetative cover.
_____ Others Describe:

VI. MAINTENANCE AND INSPECTIONS

A. Frequency of Inspections:

____ At least once every 7 calendar days, OR

X Every 14 calendar days and within 24 hours after a rainfall of 0.5 inches (12.7 mm) or more.

NOTE: RAINFALL GAUGE TO BE KEPT ON-SITE TO DETERMINE DEPTH OF RAINFALL

B. Inspection Procedure:

ADOT's Contractor's Inspection Log and Compliance Evaluation Report (CER) will be completed by the contractor or his representative and will be kept on file for 3 years. A signed copy of the CER will be sent to the ADOT resident engineer. If repairs are necessary, they shall be initiated within 24 hours of the inspection report.

PART 2 - To be completed by ADOT & CONTRACTOR

http://www.azdot.gov/Inside_adot/OES/Water_Quality/Stormwater/Docs/swppp_construction_template.dot

I. SCHEDULE OF MAJOR ACTIVITIES

A. Project Schedule:

Start Date:

End Date:

B. Construction Sequencing Schedule: (Attach Additional Sheets)
Construction Activities

II. INVENTORY OF POLLUTANTS

A. The materials or substances checked below are expected to be onsite during construction:

__Concrete __Asphalt
__Paints __Fertilizer
__Herbicides __Wood
__Fuel __ Oil
__Others, List:

III. POLLUTION CONTROL MEASURES

A. Other Best Management Practices:

__Wind Erosion and Dust Control
__Solid Waste Management
__Equipment Maintenance Procedures
__Designated Washout Areas
__Stabilized Construction Entrance
__Protected Chemical and Material Storage Area
__Other, Describe:

IV. SPILL PREVENTION AND RESPONSE

A. Spill Prevention:
The procedures outlined in the Best Management Practices listed under Pollution Control Measures will be followed to prevent and contain spills of hazardous material. These preventative action include BMP's on equipment maintenance and proper handling, storage and disposal of chemicals and materials. All manufacturer's recommendations for usage, clean-up and disposal shall be followed.

B. Spill Response:
In the event of any accidental spill of chemicals or hazardous materials, contact the ADOT Traffic Operations Center at 800-379-3701. If a reportable quantity is discharged into the storm water, ADOT shall contact the National Response Center and document the spill to the EPA. ADOT's Hazardous Materials Specialist shall provide instructions.

V. CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

A. This Storm Water Pollution Prevention Plan (SWPPP) has been prepared in accordance with the latest updated version of ADOT's EROSION AND POLLUTION CONTROL MANUAL FOR HIGHWAY DESIGN AND CONSTRUCTION, published by ADOT Intermodal Transportation Division.

____SWPPP is in compliance with other Federal, State Laws, or Local Regulations.

VI. POLLUTION PREVENTION PLAN CERTIFICATION

A. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Applies to VI. B., C., and D)

B. The operator/contractor as defined in NPDES should sign the SWPPP in accordance with CGP PART VIII. J, and retain the SWPPP on-site at the construction site or other location easily accessible during normal business hours.
Signature: (operator/contractor)
Date:
Name:
Title:
Company:

C. ADOT Resident Engineer
Signature: (owner)
Date:
Name:
Title:
ADOT District:

D. MUNICIPALITY for Municipal Separate Storm Sewer System (MS4)
Signature:
Date:
Name:
Title:
MS4 Name:

VII. OTHER REQUIREMENTS

A. A copy of the General Permit and NOI should be attached in accordance to AZPDES General Permit for Storm Water Discharges From Construction Activities To The Water Of The United States.

B. Projects that are within ¼ mile of impaired or unique waters require the SWPPP to be sent to ADEQ in combination with the NOI. Refer to the Arizona Outstanding, Impaired and Not-Attaining Water *.PDF Maps by County web link:
https://www.azdot.gov/inside_adot/OES/Water_Quality/Stormwater/outstanding_unique_waters_maps_by_county.asp

C. For further requirements, check the ADEQ's Smart NOI Web Page:
https://az.gov/app/smartnoi/

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

AZPDES SWPPP INDEX SHEET

CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 01/19/18 Arizona U.S.A. EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	EC-1.01
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | DATE- | LOCATION- | REVISIONS- | FINISHED PLANS- | SURVEY NO. | DATE-

Plotted by Pat Kastler at 2/27/2018 7:53 AM on printer \\Nexus\DWG to PDF.pc3 - Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) - Plotstyle: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-GEN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	106	117	
		0000 MA SUR			

LOCATION	TYPE INSTALLATION																			QUANTITIES *			REMARKS
	Sediment Wattles			Gravelbag Protection Detail E3			Inlet/Outlet Protection Detail E1			Rock Check Dam Detail E2			Silt Fence			Rock Mulch & Riprap Treatment							
																End Sections		Headwalls					
Coordinates (Northing, Easting)	Plan Reference Number	Left	Right	Spacing (Ft.)	Left	Right	Center	Left	Right	Left	Right	Center	Left	Right	Spacing (Ft.)	Left	Right	Left	Right	Sediment Wattles (LF)	Gravelbag Protection (SY)	Inlet/Outlet Protection (CY)	20" Sediment Logs (LF)	Organic Filter Barrier (LF)	Silt Fence (LF)	
STA 1+25, LT	1																				15				SCUPPER / CATCH BASIN INLET
STA 1+03, RT	2																				15				SCUPPER / CATCH BASIN INLET
STA 4+00, RT	3																				30				SCUPPER / CATCH BASIN INLET
STA 6+40, LT	4																				20				SCUPPER / CATCH BASIN INLET
STA 15+74, RT	5																				25				SCUPPER / CATCH BASIN INLET
STA 27+19, LT	6																				25				SCUPPER / CATCH BASIN INLET
STA 27+75, RT	7																				25				SCUPPER / CATCH BASIN INLET
STA 38+40, RT	8																				25				SCUPPER / CATCH BASIN INLET
STA 46+15, LT	9																				12				SCUPPER / CATCH BASIN INLET
STA 53+63, LT	10																				20				SCUPPER / CATCH BASIN INLET
STA 53+75, RT	11																				18				SCUPPER / CATCH BASIN INLET
STA 60+68, RT	12																				18				SCUPPER / CATCH BASIN INLET
STA 64+33, LT	13																				18				SCUPPER / CATCH BASIN INLET
STA 66+81, RT	14																				18				SCUPPER / CATCH BASIN INLET
STA 68+46, LT	15																				25				SCUPPER / CATCH BASIN INLET
STA 72+63, RT	16																				18				SCUPPER / CATCH BASIN INLET
STA 79+94, RT	17																				18				SCUPPER / CATCH BASIN INLET
STA 79+93, LT	18																				18				SCUPPER / CATCH BASIN INLET
STA 86+42, RT	19																				15				SCUPPER / CATCH BASIN INLET
STA 88+21, LT	20																				18				SCUPPER / CATCH BASIN INLET
STA 91+65, RT	21																				25				SCUPPER / CATCH BASIN INLET
STA 98+82, LT	22																				20				SCUPPER / CATCH BASIN INLET
STA 98+82, RT	23																				20				SCUPPER / CATCH BASIN INLET
STA 108+15, LT	24																				25				SCUPPER / CATCH BASIN INLET
STA 109+02, RT	25																				25				SCUPPER / CATCH BASIN INLET
STA 115+00, RT	26																				18				SCUPPER / CATCH BASIN INLET
STA 121+37, RT	27																				18				SCUPPER / CATCH BASIN INLET
STA 125+77, RT	28																				10				SCUPPER / CATCH BASIN INLET
STA 133+37, LT	29																				10				SCUPPER / CATCH BASIN INLET
STA 133+35, RT	30																				12				SCUPPER / CATCH BASIN INLET
STA 151+35, LT	31																				10				SCUPPER / CATCH BASIN INLET
STA 151+37, RT	32																				10				SCUPPER / CATCH BASIN INLET

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

AZPDES SWPPP SUMMARY SHEET

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

TRACS NO. T0063 01C | SUR-0(230)T

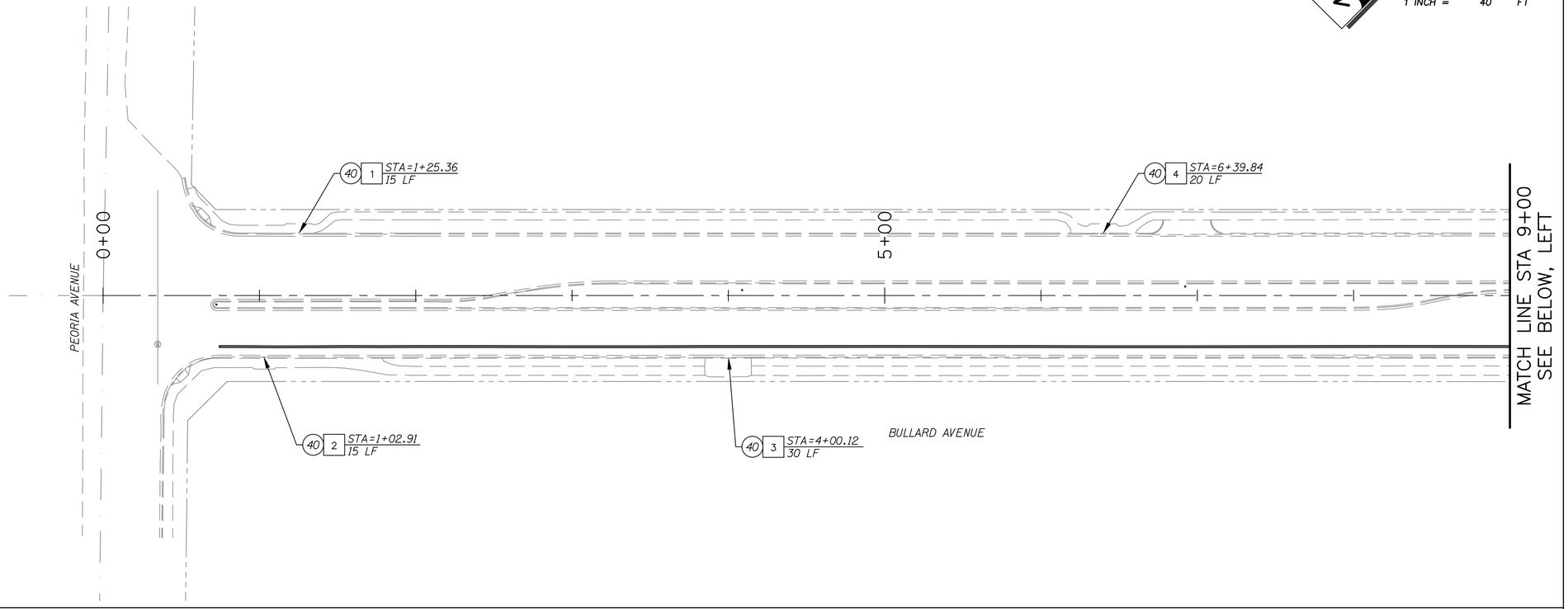
37417 MATHEW K. TSARK — EXPIRES 3/31/20

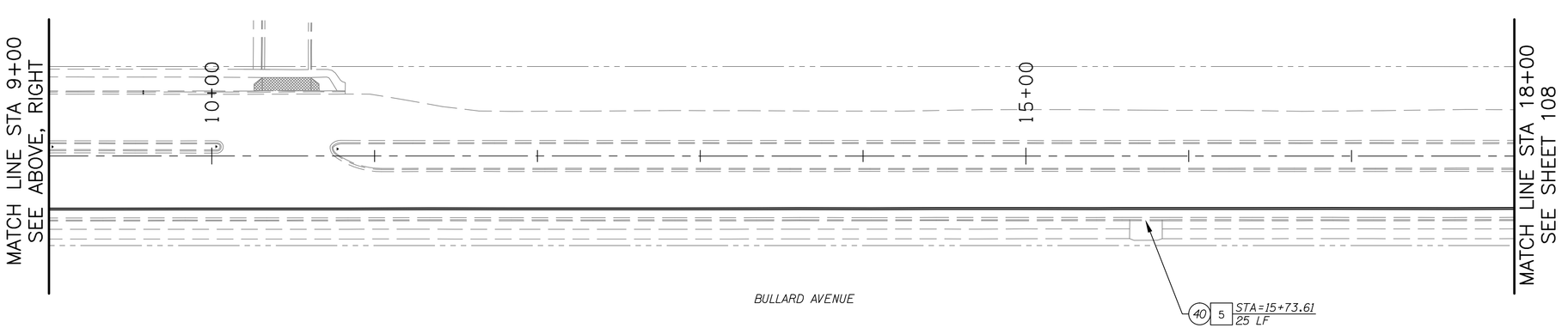
SHEET EC-1.02

OF

Plotted by Pat Kastler at 2/27/2018 7:53 AM on printer \\Nexus\CWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) — Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\Y14014-06_SWPPP-GEN.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	107	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	105

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

EROSION/SEDIMENT CONTROL PLAN
STA 0+00 TO STA 18+00

CERTIFICATE NO. 37417 MATHEW K. TSARK STATE OF ARIZONA U.S.A. EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. EC-2.01
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

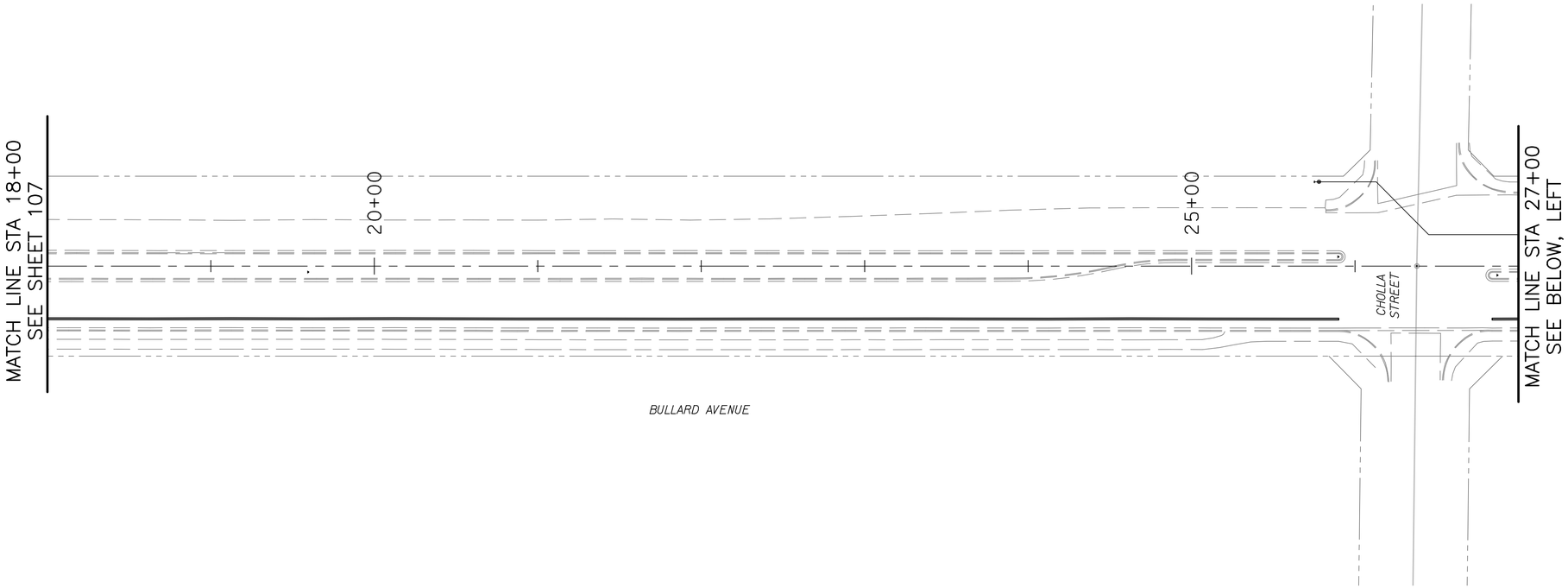
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:55 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

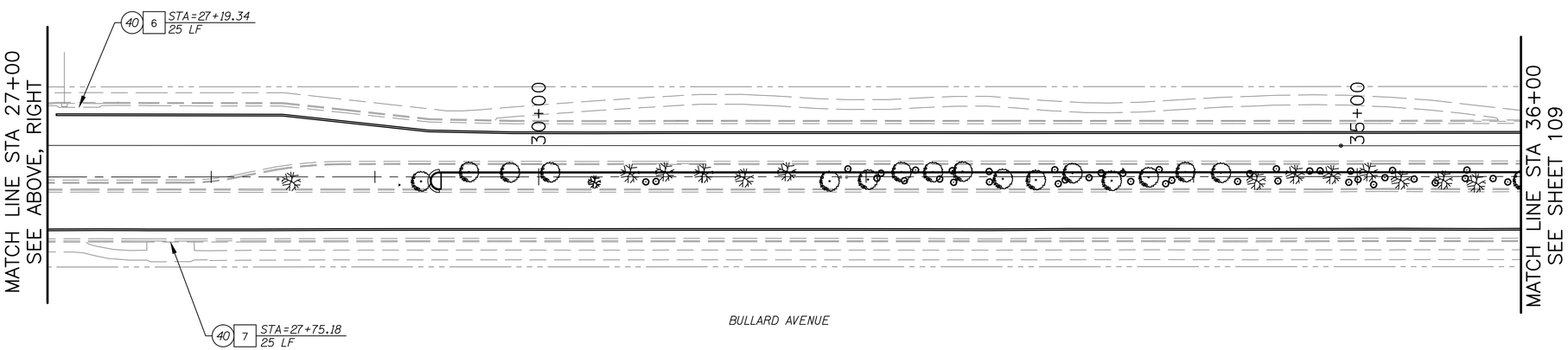
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	108	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT



CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	50



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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PREMIER ENGINEERING CORPORATION

EROSION/SEDIMENT CONTROL PLAN
STA 18+00 TO STA 36+00

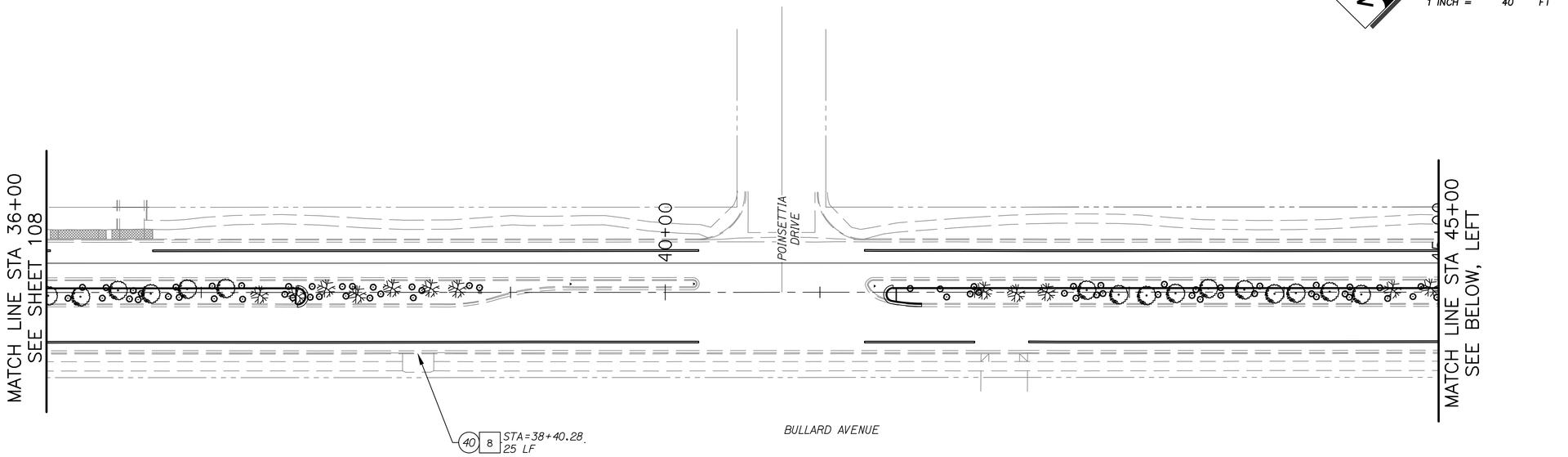
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 12-31-19 Arizona U.S.A.
EXPIRES 3/31/20

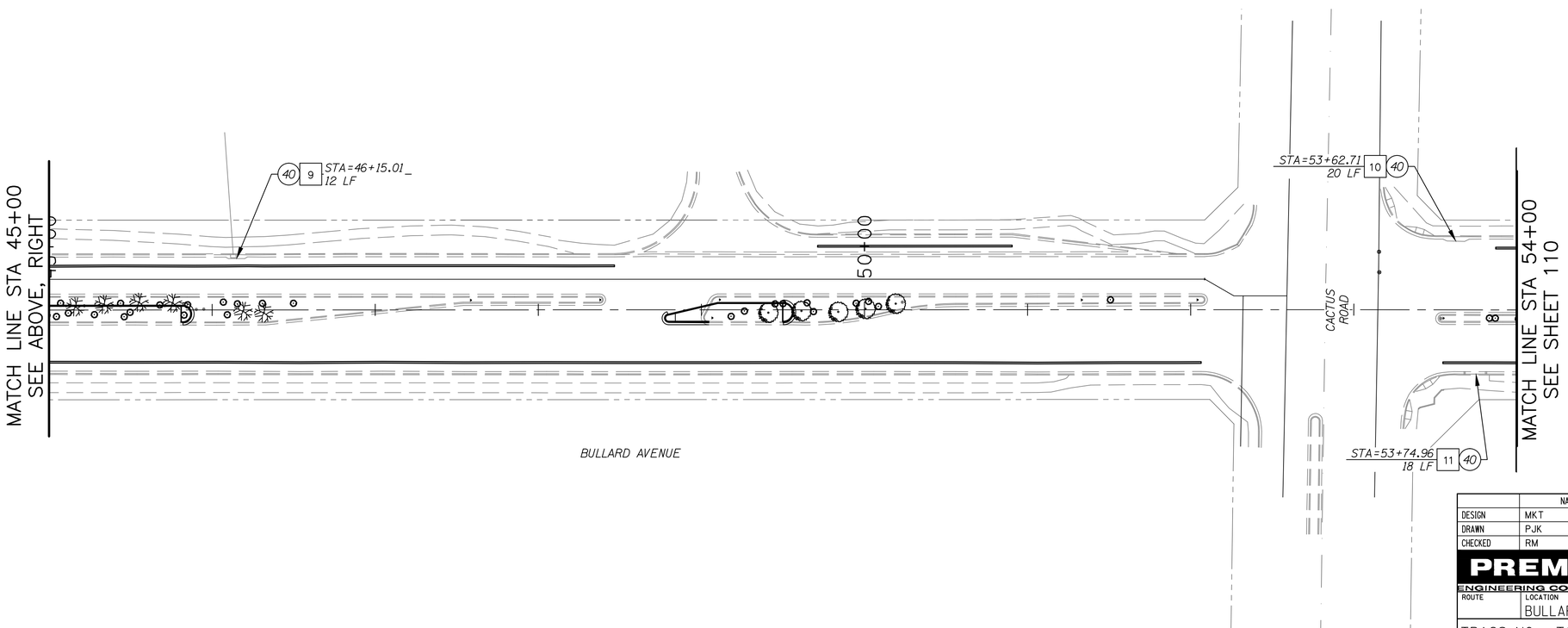
ROUTE	LOCATION	DWG NO. EC-2.02
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:55 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\74014-06_SWPPP-PLN.dwg





GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	109	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	75

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

EROSION/SEDIMENT CONTROL PLAN
STA 36+00 TO STA 54+00

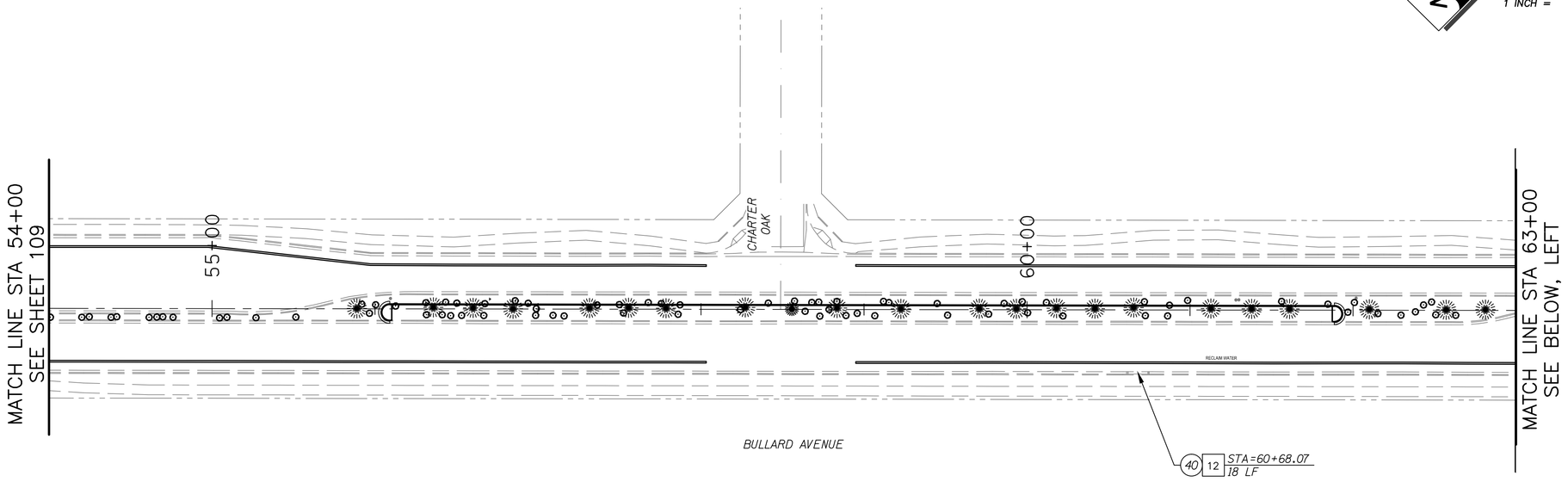
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATHEW K. TSARK Date Signed 12/31/19 Arizona U.S.A.
EXPIRES 3/31/20

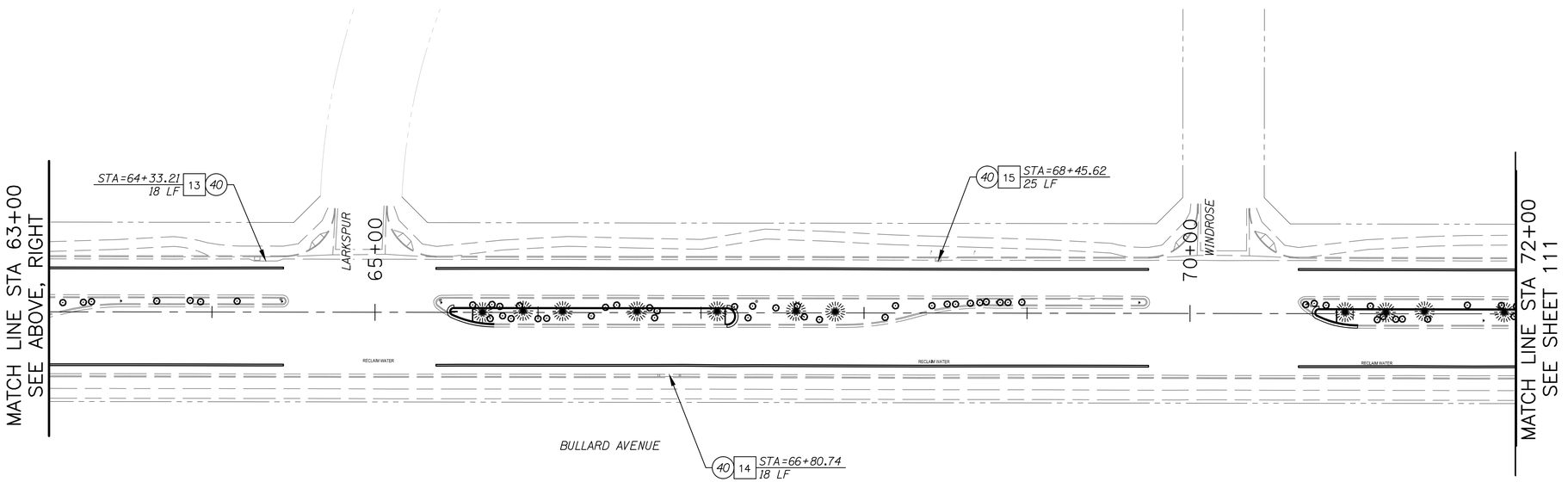
ROUTE	LOCATION	DWG NO. EC-2.03
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

Plotted by Pat Kastler at 2/27/2018 7:56 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	110	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	79

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PREMIER ENGINEERING CORPORATION

EROSION/SEDIMENT CONTROL PLAN
STA 54+00 TO 72+00

Registered Professional Engineer (Civil)
CERTIFICATE NO.
37417
MATHEW K. TSARK
Date Signed 12/31/19
Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. EC-2.04
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

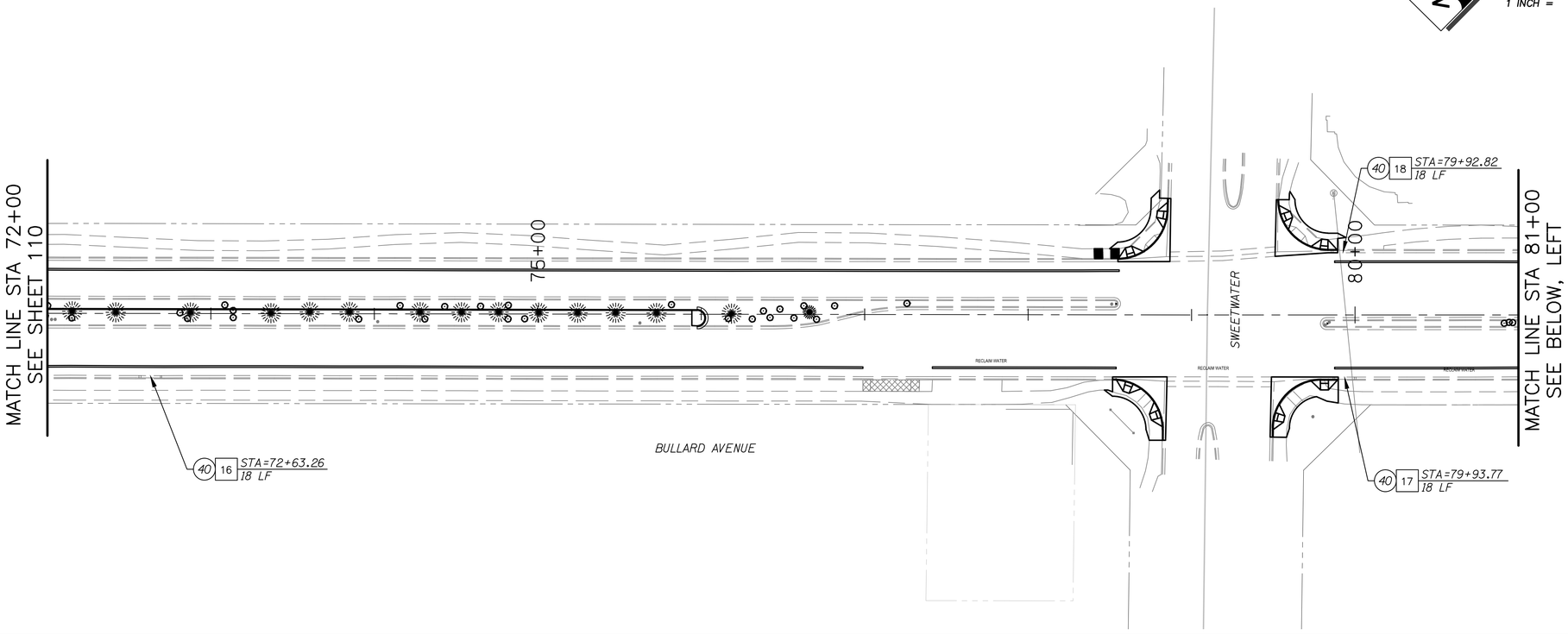
DATE- LOCATION- REVISIONS- FINISHED PLANS- SURVEY NO.

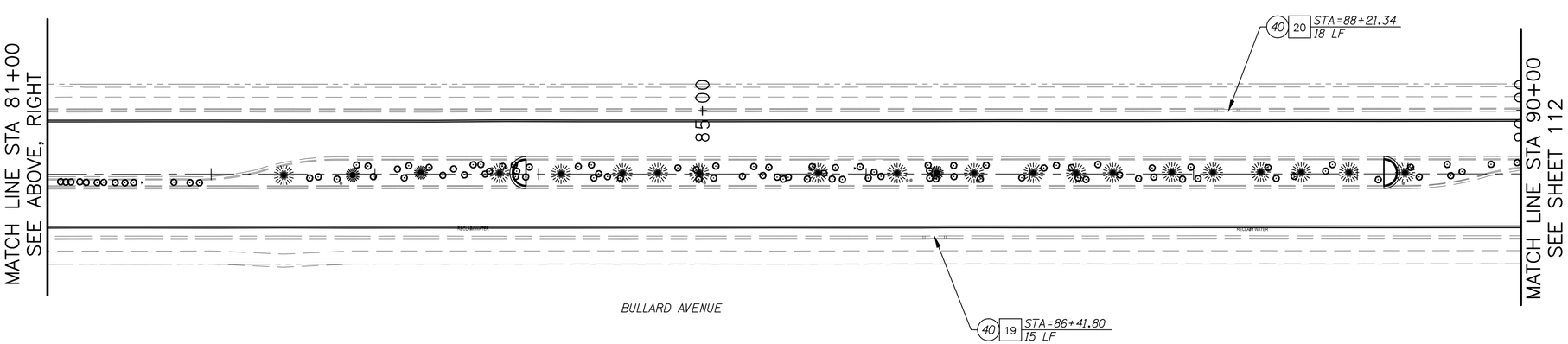
Plotted by Pat Kastler at 2/27/2018 7:57 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 Inches) – Penstable: PREMIER.ctb

p:\20140114-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	111	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	87

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

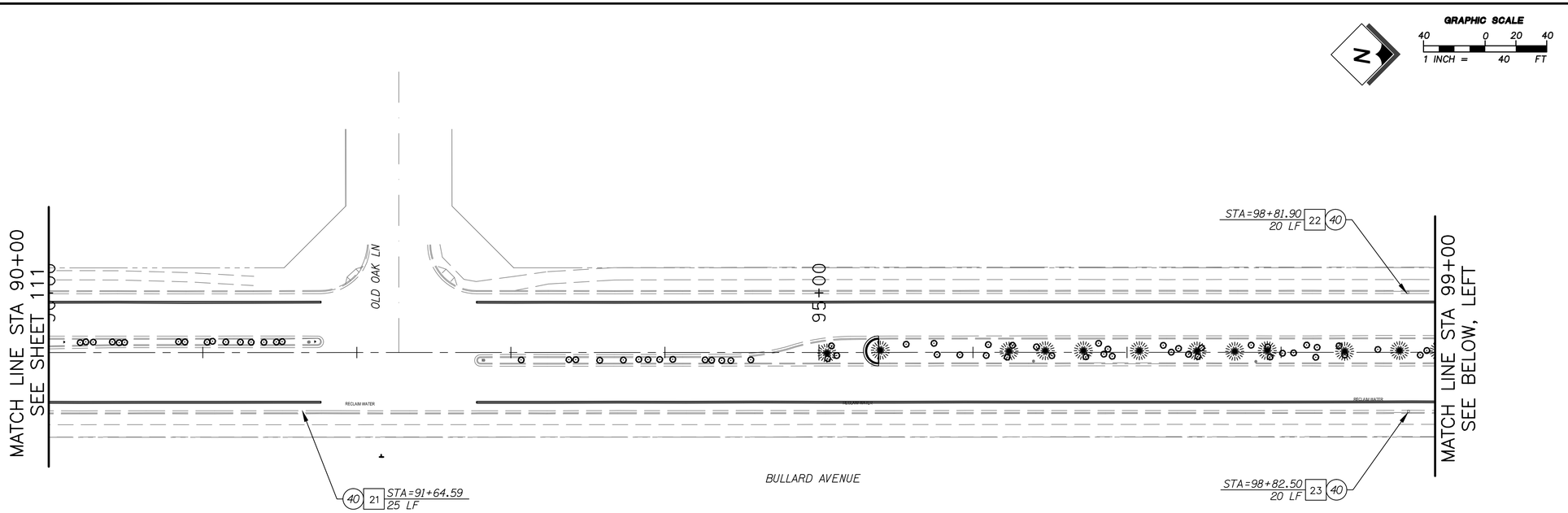
PREMIER ENGINEERING CORPORATION

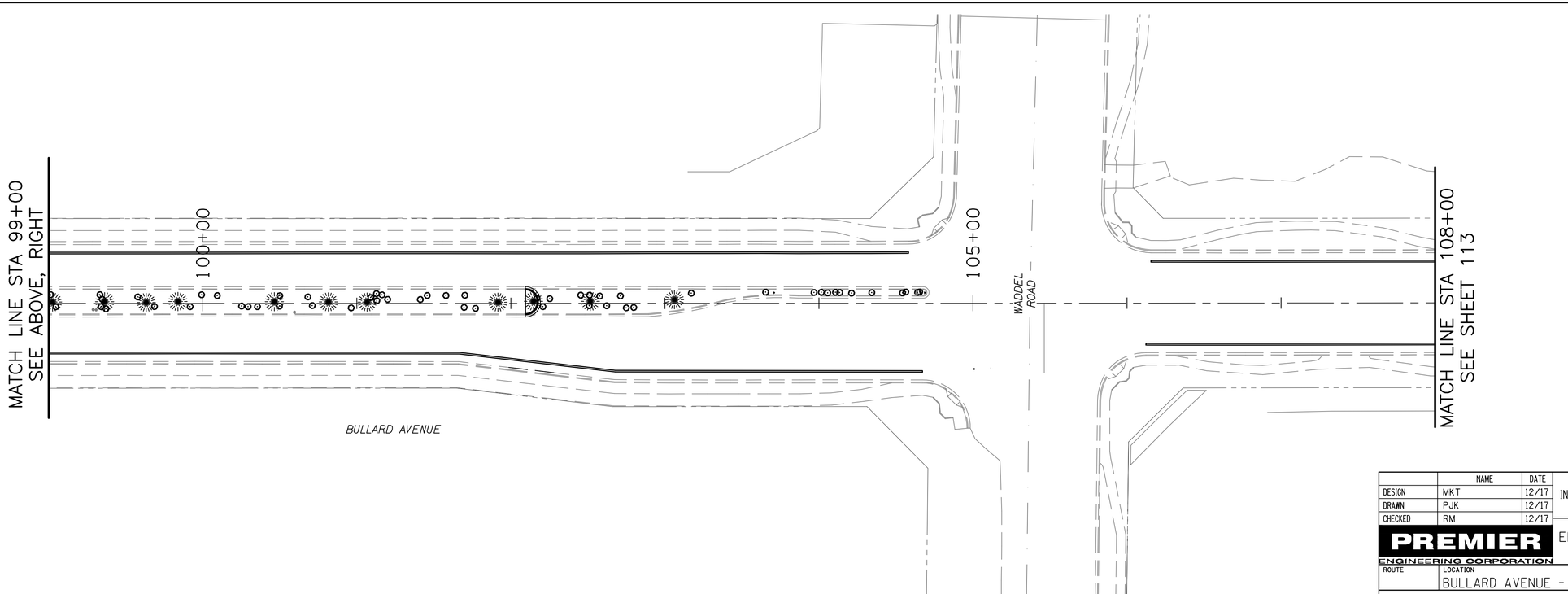
EROSION/SEDIMENT CONTROL PLAN
STA 72+00 TO 90+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATHEW K. TSARK Date Signed 12/31/19 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. EC-2.05
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

Plotted by Pat Kastler at 2/27/2018 7:58 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\20140114-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg





F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	112	117	
		0000 MA SUR			

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	65

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

EROSION/SEDIMENT CONTROL PLAN
STA 90+00 TO 108+00

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 12/31/19 Arizona U.S.A.
EXPIRES 3/31/20

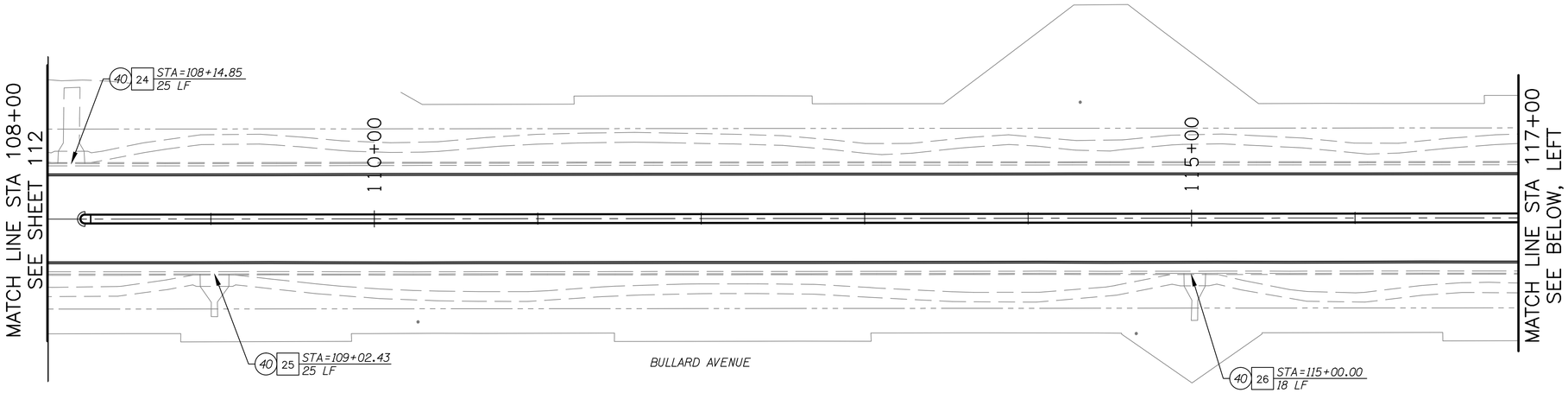
ROUTE	LOCATION	DWG NO. EC-2.06
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

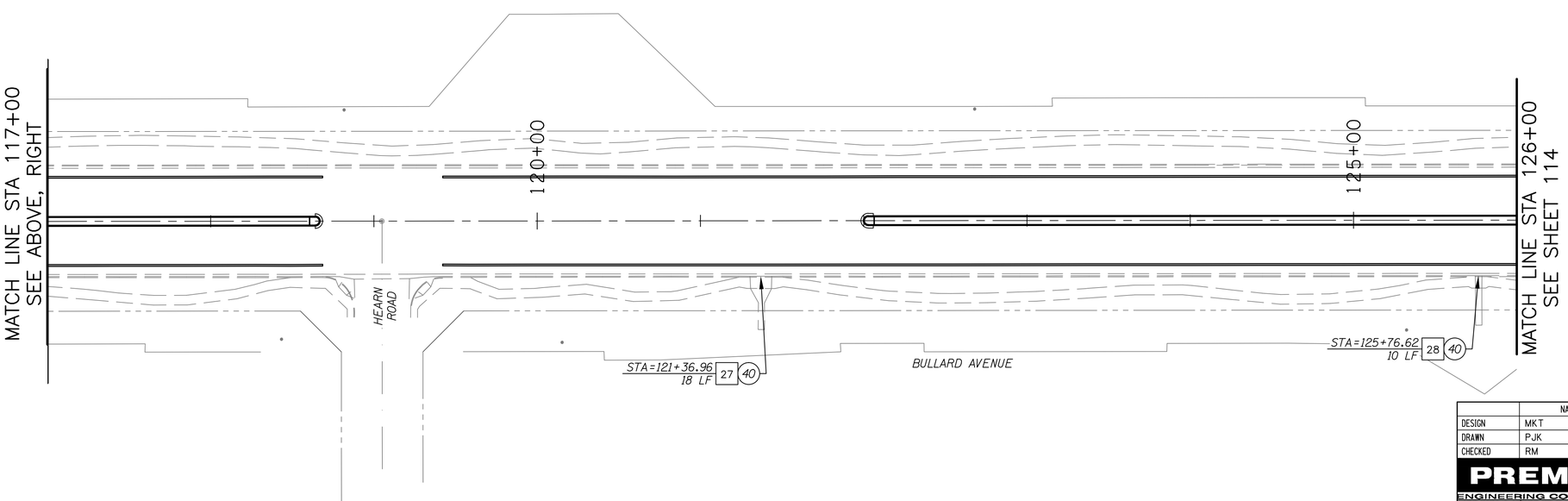
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:58 AM on printer \\Plexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\20140114-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	113	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
40	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	96

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

EROSION/SEDIMENT CONTROL PLAN
STA 108+00 TO STA 126+00

ROUTE	LOCATION	DWG NO. EC-2.07
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

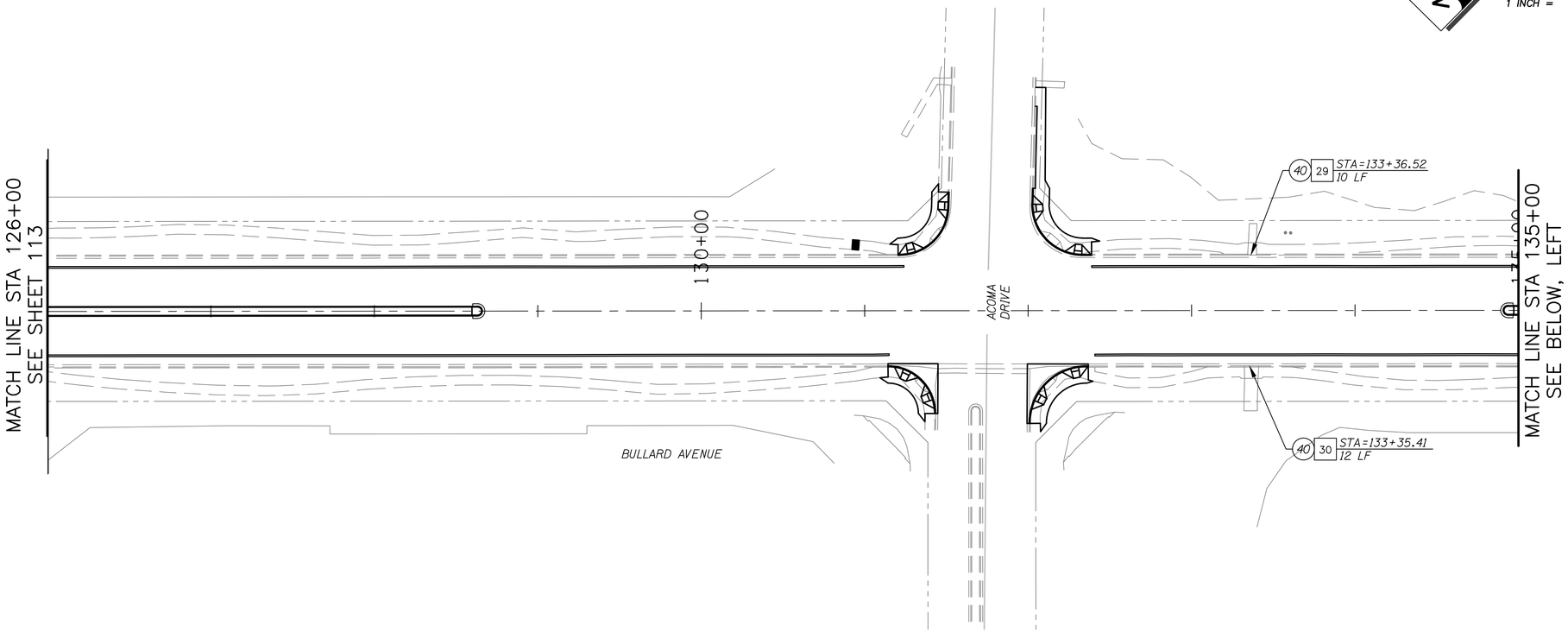
37417 MATHEW K. TSARK — Registered Professional Engineer (Civil) — Arizona U.S.A. — EXPIRES 3/31/20

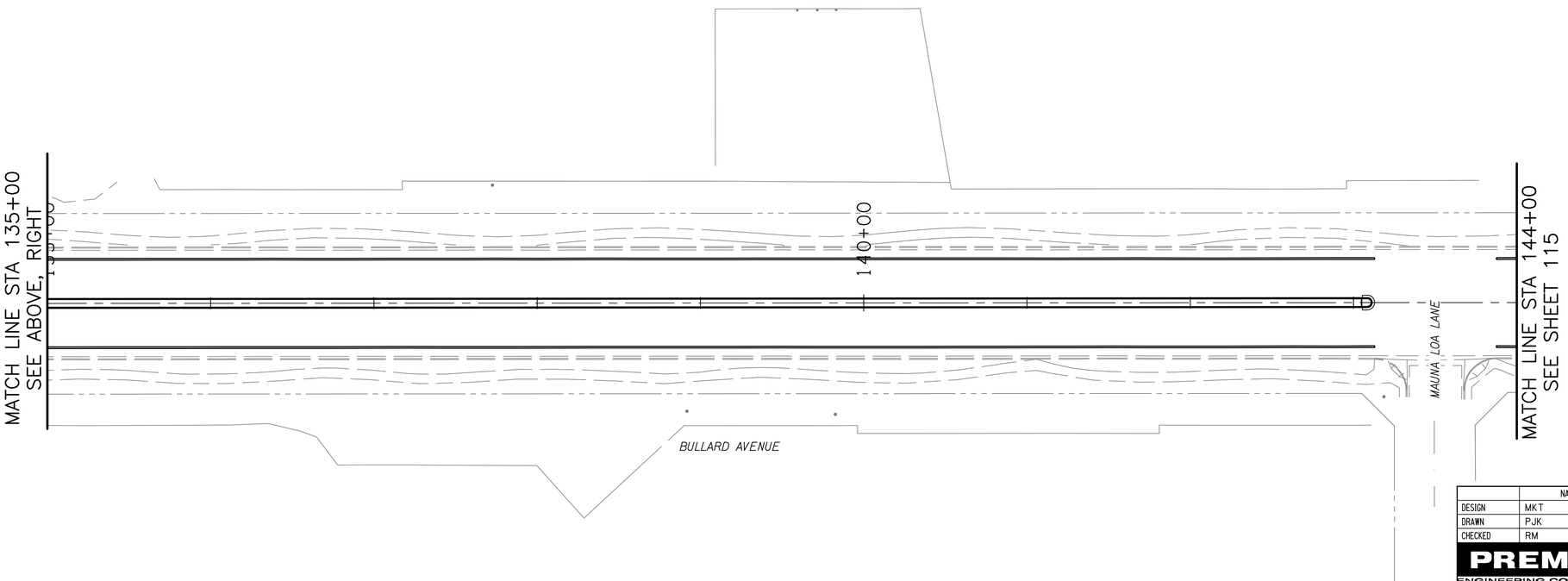
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 7:59 AM on printer \\Nexus\CWG to PDF.pc3 — Plotsize: ANSI full bleed D (22.00 x 34.00 inches) — Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	114	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT





CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	22

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

EROSION/SEDIMENT CONTROL PLAN
STA 126+00 TO STA 144+00

Registered Professional Engineer (Civil)
37417
MATTHEW K. TSARK
Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. EC-2.08
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

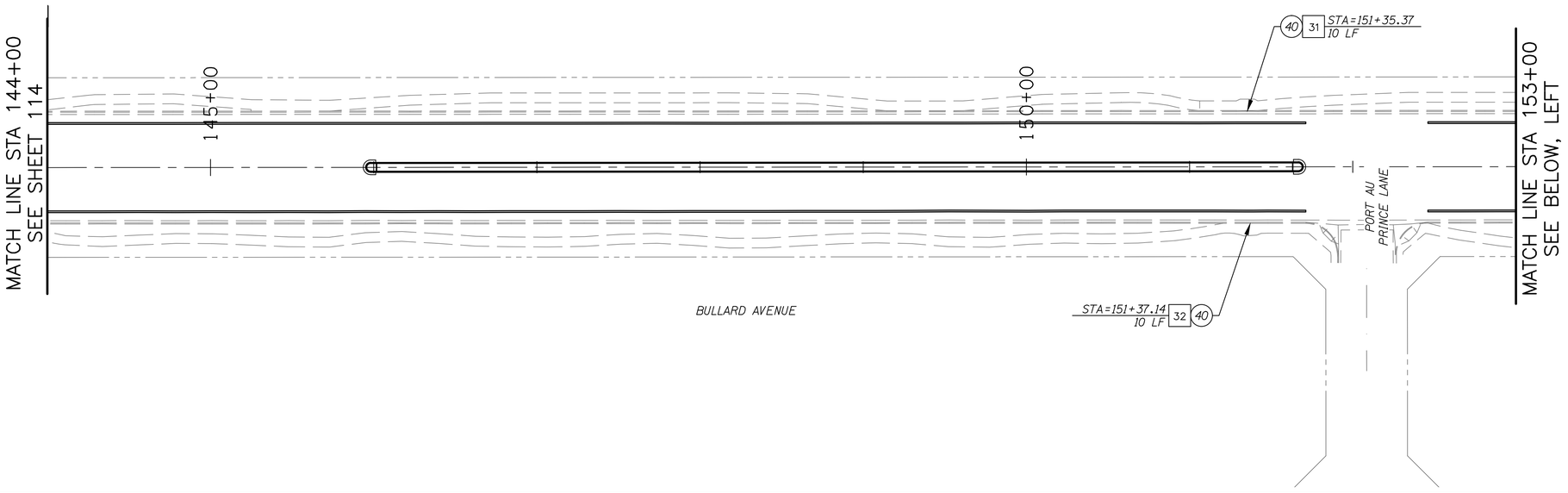
Plotted by Pat Kastler at 2/27/2018 8:00 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

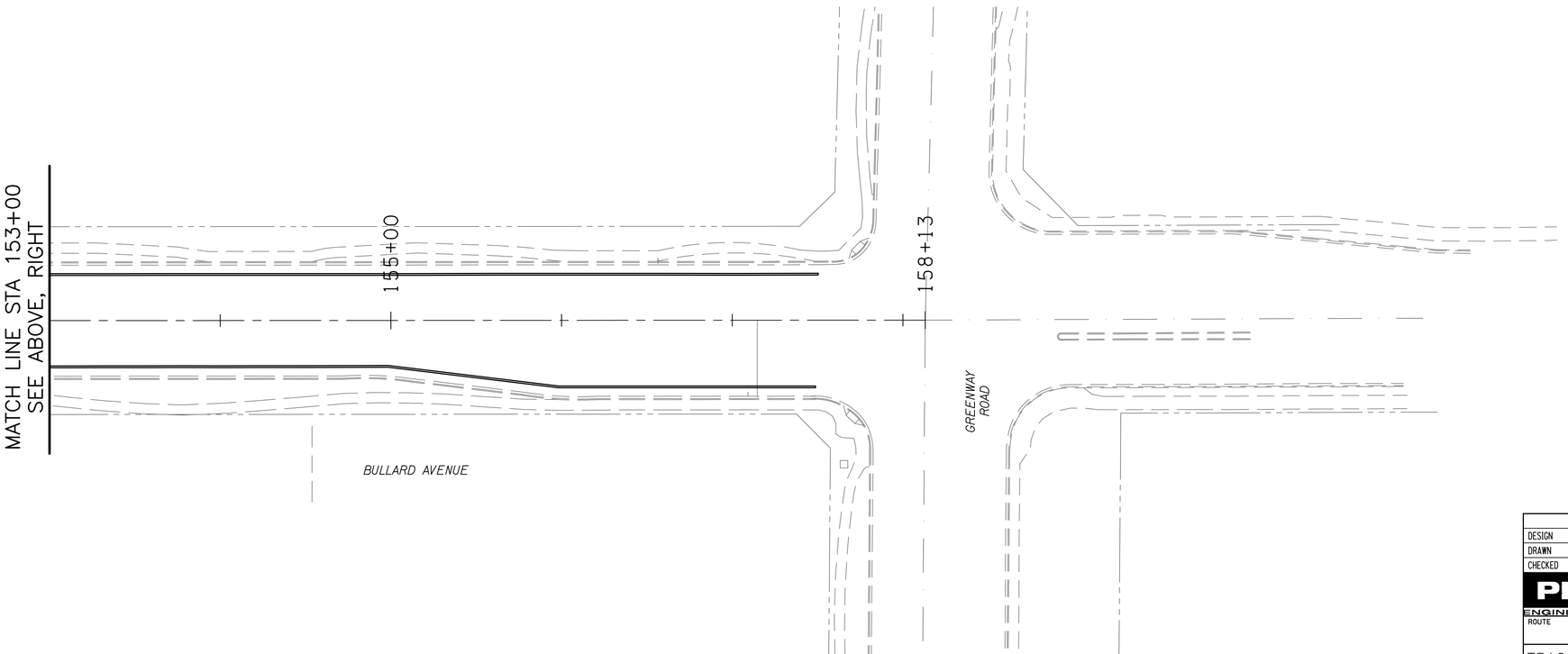
F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	115	117	
		0000 MA SUR			

GRAPHIC SCALE
40 0 20 40
1 INCH = 40 FT

CONSTRUCTION NOTES

NO	DESCRIPTION	UNIT	QTY
(40)	INSTALL SEDIMENT LOG PER ADOT DET. ES3, SHT 116, BID ITEM 8101035	LF	20





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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

PREMIER ENGINEERING CORPORATION

EROSION/SEDIMENT CONTROL PLAN
STA 144+00 TO STA 158+13

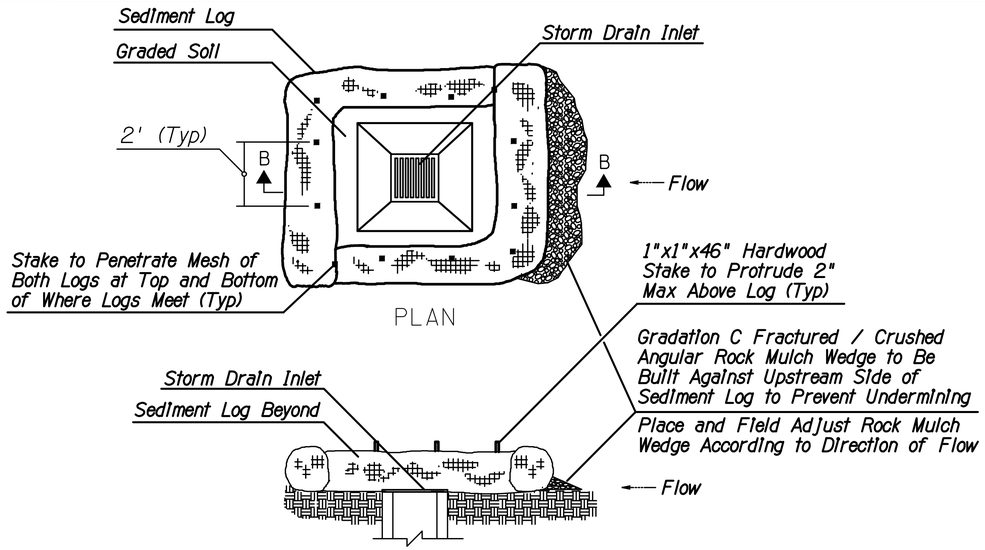
Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATHEW K. TSARK Date Signed 12/31/19 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	DWG NO. EC-2.09
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	
TRACS NO. T0063 01C	SUR-0(230)T	OF

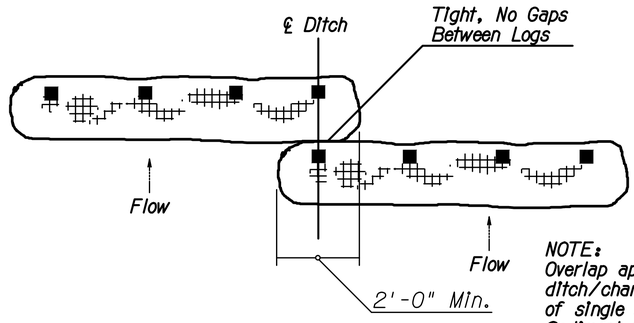
SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastler at 2/27/2018 8:00 AM on printer \\Nexus\CWG to PDF.pc3 – Plotsize: ANSI full bleed D (22.00 x 34.00 inches) – Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-PLN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	116	117	
		0000 MA SUR			

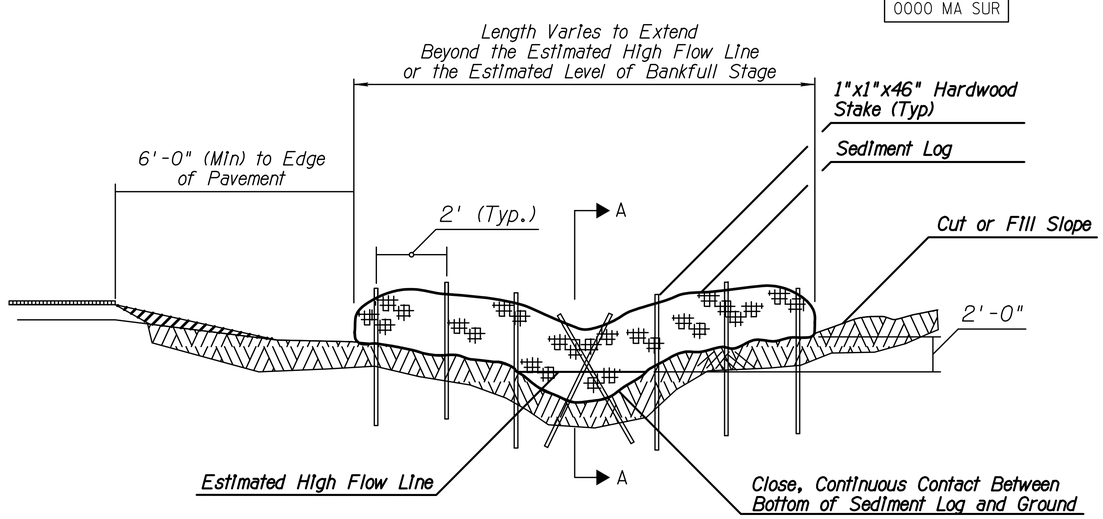


SEDIMENT LOG AT STORM DRAIN
SECTION B-B (NTS)

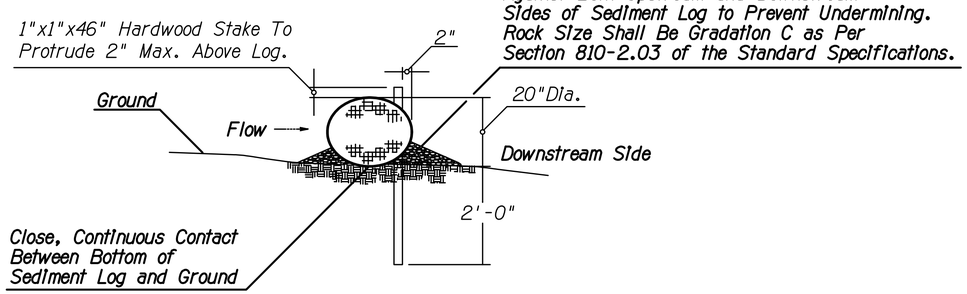


TYPICAL OVERLAP
PLAN (NTS)

NOTE:
Overlap applies to situations where ditch/channel is wider than length of single Sediment Log. Two or multiple Sediment Logs may be necessary.



SEDIMENT LOG IN DITCH/CHANNEL
SECTIONAL ELEVATION (NTS)



SECTION A-A (NTS)

NOTES:
1. Sediment Logs shall not be installed in the urban freeway medians, nor where cable barrier systems are employed.
2. Locate Sediment Logs as indicated in plans, SWPPP or as directed by the Engineer.
3. Select, install and maintain Logs per manufacturers' specifications and good engineering practices.
4. Lay Sediment Log across prepared roadside ditch or channel. Trenching or burial of Sediment Logs is not required. The close, continuous contact between the bottom of the Log and the ground is mandatory. The Logs shall be installed in the roadside ditch, swale or channel bottom perpendicular to the flow of water as shown on detail this sheet.
5. Stake Log as shown. Stakes shall be placed through downstream side only as shown.
6. DO NOT drive stakes through center of the Log. Stakes must be driven into the ground as shown.
7. Ensure that no gaps exist between soil and bottom of Sediment Log. Repair any rills or undercuts promptly.
8. Placement of Sediment Logs shall be evaluated by the Engineer in rocky soil conditions.
9. Remove Sediment Log BMPs within the ditches/channels and around the storm drain inlets as per the direction of the Engineer or as soon as practicable upon stabilization of the construction disturbed area.
10. Dispose of Sediment Logs and trapped sediment material and fill trench created by Sediment Log.
11. The installation and maintenance of Sediment Log BMPs shall not negatively impact traffic safety, nor the designed function of roadway or bridge drainage facilities. Sediment Logs shall be installed and maintained to carry the stormwater of at least 2-year, 24-hour events.
12. Make field adjustments and corrections of Sediment Log BMP immediately if it is causing flooding, erosion, and/or affecting roadway safety.
13. Rock mulch/riprap may be required for channel/ditch lining or rock check dams for longitudinal ditch slopes that exceed 5% and/or for soil conditions not suitable for Log installation.
14. The Sediment Log BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, maintenance, final removal, and disposal, as well as returning the area to an acceptable condition as approved by the Engineer.
15. Refer to Standard Specification Section 810-2.06(B) for Sediment Log material specifications.
16. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.
17. Construct Rock Wedge with angular-shaped Gradation C Rock Mulch as defined in Section 810-2.03 of the Standard Specifications and these special provisions. Natural river-run materials such as rounded river rocks/cobblestones and pebbles are NOT acceptable.

DETAIL ES3
SEDIMENT LOG

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 06/29/18 Arizona U.S.A. EXPIRES 3/31/20

ROUTE	LOCATION
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE

SHEET EC-3.01

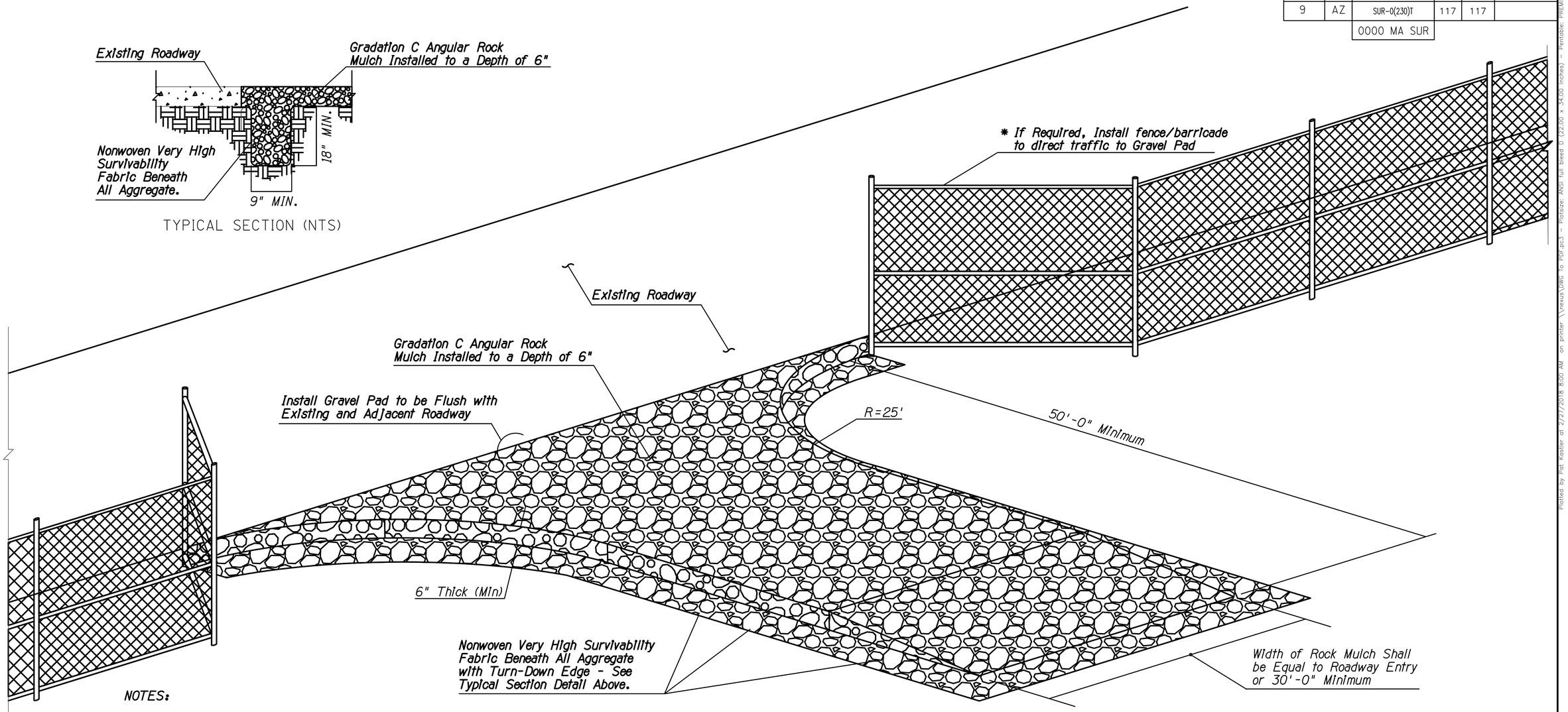
TRACS NO. T0063 01C		SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by: Pat Kasser at 2/27/2018 8:00 AM on printer \\Nexus\CWG to PDF.pc3 -- Plotsize: ANSI full bleed D (22.00 x 34.00 inches) -- Penstable: PREMIER.ctb
p:\2014014-06\CADD\production\Sheets\14014-06_SWPPP-GEN.dwg

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ	SUR-0(230)T	117	117	
		0000 MA SUR			

TYPICAL SECTION (NTS)



BIRD'S EYE VIEW (NTS)

NOTES:

1. Install Stabilized Construction Entrance/Exit Gravel Pad BMP for traffic entering or exiting a construction site where sedimentation, clay, silt or other pollutants can be tracked onto public roads and/or adjacent water bodies, as approved by the Engineer. It may also be applied for construction entrance/exit wind erosion/dust control, as approved by the Engineer.
2. Locate new Construction Entrance(s)/Exit(s) at appropriate project entrance/exit points as determined in field with the approval of the Engineer. Relocate Stabilized Construction Entrance/Exit Gravel Pad BMP as needed as project progresses. Replace Rock Mulch materials in drive paths when dirt or mud accumulates.
3. Nonwoven Very High Survivability Fabric shall conform to the standards of Sub-section 1014-4.04 of the Standard Specifications.
4. Rock Mulch materials shall be fractured/crushed rocks in angular shape and as defined in the Sub-section 810-2.03 of the Standard Specifications. Natural river-run materials, especially rounded natural river rocks are not acceptable.
5. Make field adjustments and corrections of Construction Entrance/Exit Gravel Pad BMP immediately if it is causing flooding and/or affecting roadway safety.
6. When paid separately, the Stabilized Construction Entrance/Exit Gravel Pad BMP's pay/bid item shall include all materials used for this BMP: all ground preparation, furnishing, installing, final removal, and disposal of this temporary BMP, as well as returning the area to an acceptable condition as approved by the Engineer.
7. * Fence/barricade pay/bid item shall not be included as a component of the Stabilized Construction Entrance/Exit Gravel Pad BMP pay/bid item.
8. Make field adjustments and corrections to ensure NO sensitive biological resources (native species / habitats) will be adversely impacted.

DETAIL ES11

STABILIZED CONSTRUCTION ENTRANCE/EXIT GRAVEL PAD

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

	NAME	DATE
DESIGN	MKT	12/17
DRAWN	PJK	12/17
CHECKED	RM	12/17

PREMIER ENGINEERING CORPORATION

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
ROADWAY DESIGN SERVICES

STORMWATER QUALITY PROTECTION & EROSION/SEDIMENT CONTROL DETAILS

Registered Professional Engineer (Civil) CERTIFICATE NO. 37417 MATTHEW K. TSARK Date Signed 03/29/18 Arizona U.S.A.
EXPIRES 3/31/20

ROUTE	LOCATION	SHEET
	BULLARD AVENUE - GREENWAY ROAD TO PEORIA AVENUE	EC-3.02
TRACS NO. T0063 01C	SUR-0(230)T	OF

SURVEY NO. | FINISHED PLANS- | REVISIONS- | LOCATION- | DATE-

Plotted by Pat Kastner at 2/27/2018 8:00 AM on printer \\nexus\CWG to PDF.pc3 -- Plotsize: ANSI full bleed D (22.00 X 34.00 Inches) -- Penstable: PREMIER.ctb

p:\2017\4014-06\CADD\production\Sheets\14014-06_SWPPP-GEN.dwg