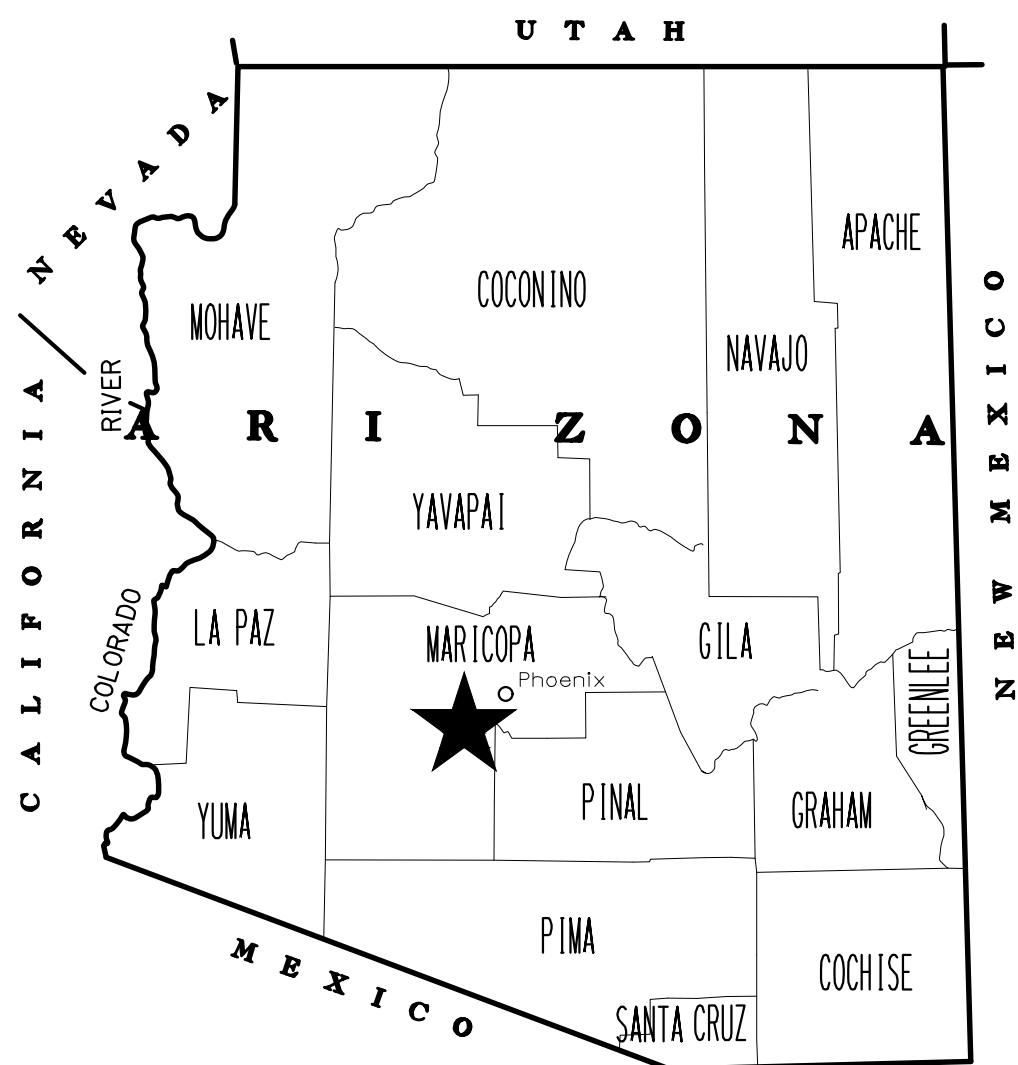
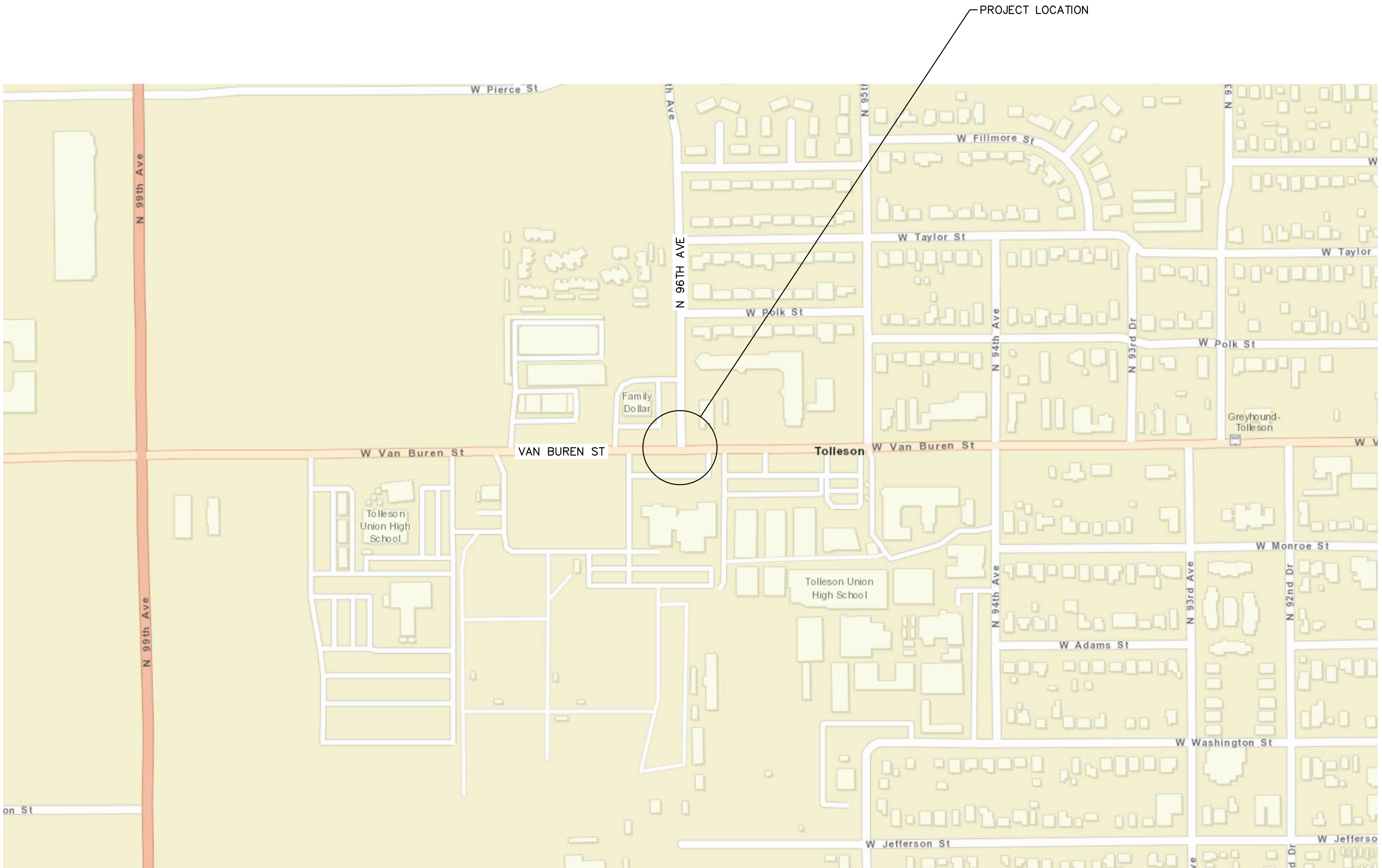
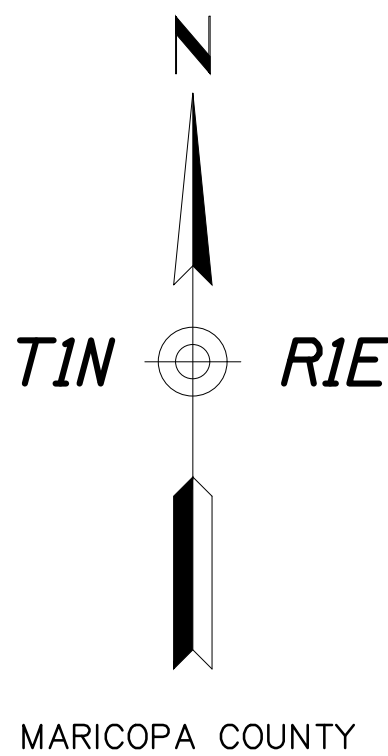




STATE OF ARIZONA
DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

PROJECT PLANS

URBANIZED AREA
CITY OF TOLLESON



Constructed by:

Construction Company

Completion Date

Red-Lines by:

Construction Administrator Name & Company

Completion Date

Record Drawings by:

Record Drawing Designer Name & Company

Completion Date

VAN BUREN AT 96TH AVE, TOLLESON
PROJECT NO. 0000 MA TOL T0619 01 C
FEDERAL AID NO. TOL-0(200)T

ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
AUDRA MERRICK, P.E., STATE ENGINEER

ADOT STANDARD DRAWINGS

CONSTRUCTION STANDARDS
EFFECTIVE MARCH 2025

DATE	STANDARD	SUBJECT TITLE
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
8/21	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
4/19	C-10.20 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
4/19	C-10.20 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SOFTSTOP
4/19	C-10.21 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
4/19	C-10.21 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MSKT
4/19	C-10.22 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MAX-TENSION
4/19	C-10.22 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MAX-TENSION
4/21	C-10.23 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR SGET
4/21	C-10.23 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR SGET
3/25	C-10.24 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR NGT
3/25	C-10.24 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR NGT
11/19	C-10.26 SH 1	GUARDRAIL END TERMINAL PAD LAYOUT FOR MFLEAT
11/19	C-10.26 SH 2	GUARDRAIL END TERMINAL PAD LAYOUT FOR MFLEAT
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

DATE	STANDARD	SUBJECT TITLE
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
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"
4/19	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
8/23	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

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
CONSTRUCTION STANDARDS		NAME	DATE
PROJECT NO.		Charlie Golek	09/26
0000 MA TOL T0619 01C		1A	OF 70
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS

(SHEET 1 OF 2)

EFFECTIVE MAY 2025

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND MARKING DETAILS
6/14	M-1	CURB MARKINGS FOR RAISED MEDIAN AND ISLANDS
1/20	M-2 SHT 1	INTERSECTION STRIPING
5/15	M-2 SHT 2	INTERSECTION STRIPING (TWO-LANE RURAL)
6/14	M-2 SHT 3	CENTERLINE AND 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
5/25	M-10 SHT 3	PAVEMENT MARKING SYMBOLS
6/14	M-11	TURN LANE PAVEMENT MARKINGS
6/14	M-12	WRONG-WAY ARROWS
1/19	M-13	PREFERENTIAL LANE PAVEMENT MARKINGS
6/14	M-14	STRIPING AND DELINEATION FOR TRUCK ESCAPE RAMPS
8/20	M-15 SHT 1	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - TAPERED ACCELERATION LANE
8/20	M-15 SHT 2	PAVEMENT MARKING FOR FREEWAY ENTRANCE RAMP - PARALLEL ACCELERATION LANE
8/20	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
8/20	M-16 SHT 1	PAVEMENT MARKING FOR FREEWAY EXIT RAMPS - TAPERED DECELERATION LANE
8/20	M-16 SHT 2	PAVEMENT MARKING FOR FREEWAY EXIT RAMP - PARALLEL DECELERATION LANE
8/20	M-17	FREEWAY LANE DROP PAVEMENT MARKINGS
11/24	M-19 SHT 1	RAISED PAVEMENT MARKER PLAN LEGEND
6/14	M-19 SHT 2	NON-REFLECTIVE RAISED PAVEMENT MARKER DETAILS
11/24	M-19 SHT 3	RETROREFLECTIVE RAISED PAVEMENT MARKER DETAILS
11/24	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
8/20	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
8/20	M-19 SHT 9	PAVEMENT MARKING CROSS-SECTION DETAILS FOR HIGHWAYS AND FREEWAYS
6/24	M-19 SHT 10	CONTRAST LANE LINE FOR FREEWAY AND DIVIDED HIGHWAY
10/23	M-19 SHT 11	LEAD-LAG CONTRAST PAVEMENT MARKINGS FOR CONCRETE PAVEMENT

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND 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
9/21	M-22 SHT 1	LONGITUDINAL RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
9/21	M-22 SHT 2	LONGITUDINAL RUMBLE STRIP EXCEPTION DETAILS
9/21	M-22 SHT 3	ENTRANCE AND EXIT RAMPS RUMBLE STRIP INSTALLATION DETAILS
3/22	M-22 SHT 4	CENTERLINE RUMBLE STRIP GROOVE, PATTERN - AND LOCATION DETAILS
6/14	M-23	OBJECT MARKER DETAILS
6/14	M-24	OBJECT MARKER PLACEMENT DETAILS
2/21	M-26 SHT 1	DELINEATOR PLACEMENT AND SPACING
2/21	M-26 SHT 2	DELINEATOR PLACEMENT AND SPACING
2/21	M-26 SHT 3	FLEXIBLE DELINEATOR ASSEMBLIES
2/21	M-26 SHT 4	SQUARE STEEL POST DELINEATOR
2/21	M-26 SHT 5	DELINEATOR FOUNDATION DETAILS
2/21	M-27 SHT 1	DELINEATION DETAILS FOR MEDIAN CROSSEOVERS
2/21	M-27 SHT 2	DELINEATION DETAILS FOR MEDIAN CROSSEOVERS
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 AND 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			
CONSTRUCTION STANDARDS		NAME	DATE
		Charlie Golek	09/26
PROJECT NO.		1B-1	OF 70
0000 MA TOL T0619 01C			
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNING & MARKING STANDARDS

(SHEET 2 OF 2)

EFFECTIVE MAY 2025

REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND MARKING DETAILS	REVISION DATE	STANDARD NUMBER	SUBJECT : SIGNING AND MARKING DETAILS
4/19	S-1 SHT 1	GENERAL SIGNING NOTES	6/14	S-12 SHT 1	TYPE A, B, AND DOWN ARROWS
6/14	S-2 SHT 1	S & W BREAKAWAY POST SELECTION CHART	6/14	S-12 SHT 2	TYPE C AND D ARROWS
6/14	S-2 SHT 2	S & W BREAKAWAY POST INSTALLATION DETAILS	6/14	S-12 SHT 3	C2 ARROW DETAIL
6/14	S-3 SHT 1	FLAT SHEET SIGNS SQUARE TUBE POST GENERAL NOTES	6/14	S-13	SIGN IDENTIFICATION DETAILS
6/14	S-3 SHT 2	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 12, 18 AND 24 INCH WIDTHS	6/14	S-14 SHT 1	ROTATING OPEN/CLOSED SIGN
6/14	S-3 SHT 3	SINGLE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 30, 36, 42 AND 54 INCH WIDTHS	6/14	S-14 SHT 2	ROTATING OPEN/CLOSED SIGN DETAILS
6/14	S-3 SHT 4	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 36, 42 AND 48 INCH WIDTHS	6/14	S-14 SHT 3	ROTATING OPEN/CLOSED SIGN MOUNTING DETAILS
6/14	S-3 SHT 5	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 54, 60 AND 72 INCH WIDTHS	6/14	S-15 SHT 1	FOLDING RECTANGULAR SIGN ASSEMBLY
6/14	S-3 SHT 6	TWO POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 84 - 144 INCH WIDTHS	6/14	S-15 SHT 2	FOLDING RECTANGULAR SIGN OPERATION
6/14	S-3 SHT 7	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 48, 60 AND 72 INCH WIDTHS	6/14	S-15 SHT 3	FOLDING DIAMOND SIGN ASSEMBLY
6/14	S-3 SHT 8	THREE POST FLAT SHEET RECTANGULAR SIGN ASSEMBLY - 84 - 144 INCH WIDTHS	4/19	S-16 SHT 1	TEMPORARY WOOD POSTS
6/14	S-3 SHT 9	WARNING SIGN ASSEMBLY - SINGLE POST	4/19	S-16 SHT 2	TEMPORARY WOOD POSTS SELECTION CHART
6/14	S-3 SHT 10	WARNING SIGN ASSEMBLY - TWO POST	6/14	S-17	END OF ROAD BARRICADE
6/14	S-3 SHT 11	WARNING SIGN ASSEMBLY - THREE POST	7/19	S-18 SHT 1	ALUMINUM GRAFFITI SHIELD EXIT AND GUIDE SIGN ASSEMBLY
6/14	S-3 SHT 12	MULTIPLE ROUTE MARKER ASSEMBLIES	7/19	S-18 SHT 2	ALUMINUM GRAFFITI SHIELD RIGHT RIDER SIDE PANEL
6/14	S-3 SHT 13	SPECIAL SIGN ASSEMBLIES	7/19	S-18 SHT 3	ALUMINUM GRAFFITI SHIELD LEFT RIDER SIDE PANEL
6/14	S-3 SHT 14	STRINGER DETAILS FOR SQUARE TUBE POSTS	7/19	S-18 SHT 4	ALUMINUM GRAFFITI SHIELD CORNER
6/14	S-3 SHT 15	SQUARE TUBE SIGN POST FOUNDATION	7/19	S-18 SHT 5	ALUMINUM GRAFFITI SHIELD SPLICE PLATE
6/14	S-3 SHT 16	SQUARE TUBE POST SLIP BASE DETAILS	7/19	S-18 SHT 6	ALUMINUM GRAFFITI SHIELD FIN
6/14	S-4	W SHAPE BREAKAWAY POST FUSE PLATE AND HINGE DETAILS	7/19	S-18 SHT 7	ALUMINUM GRAFFITI SHIELD TOP PANEL
6/22	S-5	W SHAPE BREAKAWAY POST DETAILS	7/19	S-18 SHT 8	ALUMINUM GRAFFITI SHIELD SIDE PANEL
6/22	S-6	S4x7.7 BREAKAWAY POST DETAILS	7/19	S-18 SHT 9	ALUMINUM GRAFFITI SHIELD RIGHT TRANSITION FROM RIDER
6/14	S-7 SHT 1	ALUMINUM EXTRUSION SIGN PANEL DETAILS	7/19	S-18 SHT 10	ALUMINUM GRAFFITI SHIELD LEFT TRANSITION FROM RIDER
6/14	S-7 SHT 2	ALUMINUM EXTRUSION AUXILIARY SIGN INSTALLATION DETAILS	7/19	S-18 SHT 11	ALUMINUM GRAFFITI SHIELD SPLICE PLATE FOR FIN
5/15	S-7 SHT 3	ALUMINUM EXTRUSION EXIT PANEL INSTALLATION DETAIL	12/18	C-1	SAND BARREL CRASH CUSHION
6/14	S-8 SHT 1	FLAT SHEET ALUMINUM PANEL ON BREAKAWAY POSTS INSTALLATION DETAIL	12/18	C-2	SAND BARREL CRASH CUSHION TYPICAL INSTALLATION
6/14	S-8 SHT 2	ALUMINUM EXTRUSION SIGN TO PERFORATED POSTS INSTALLATION DETAIL	6/14	C-3 SHT 1	PRECAST CONCRETE BARRIER STRUCTURAL DETAILS
8/22	S-9 SHT 1	SIGN INSTALLATION ON POLE	6/14	C-3 SHT 2	PRECAST CONCRETE BARRIER PIN AND LOOP ASSEMBLY
8/22	S-9 SHT 2	SIGNS (BACK TO BACK) INSTALLATION ON POLE	6/14	C-4 SHT 1	MEDIAN CROSSOVER
8/22	S-9 SHT 3	SIGN INSTALLATION ON SIGNAL POLE	6/14	C-4 SHT 2	TYPICAL END TREATMENTS FOR DETOURS USING TEMPORARY CONCRETE BARRIER (TCB)
8/22	S-9 SHT 4	SIGN INSTALLATION ON POLE BAND-TYPE CLAMP	6/14	C-5 SHT 1	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER
6/14	S-10	MILEPOST AND REFERENCE LOCATION SIGNS	6/14	C-5 SHT 2	APPROACH PLATE AND TRANSITION SECTION FOR TEMPORARY CONCRETE BARRIER
11/22	S-11 SHT 1	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM			
4/19	S-11 SHT 2	TAPERED TUBE SIGN STRUCTURE SINGLE BEAM POST AND BEAM DETAILS			

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
CONSTRUCTION STANDARDS		NAME	DATE
		Charlie Golek	09/26
PROJECT NO.		1B-2	OF 70
0000 MA TOL T0619 01C			
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS
TRAFFIC SIGNAL AND LIGHTING STANDARDS
(SHEET 1 OF 2)
EFFECTIVE NOVEMBER 2024

REVISION DATE	STANDARD NUMBER	SUBJECT : TRAFFIC SIGNALS AND LIGHTING DETAILS	REVISION DATE	STANDARD NUMBER	SUBJECT : TRAFFIC SIGNALS AND LIGHTING DETAILS
	T.S. 0	ABBREVIATIONS, SYMBOLS AND DEFINITIONS		T-SL. 4	POLES AND POSTS
05/15	0-1	STANDARD ABBREVIATIONS	11/22	4.01	TYPE A POLE
01/12	0-2 SHT 1	PLAN SYMBOLS	11/22	4.02	TYPE S POLE
01/12	0-2 SHT 2	PLAN SYMBOLS	11/22	4.03	TYPE T POLE
01/12	0-2 SHT 3	PLAN SYMBOLS	11/22	4.04	TYPE S AND TYPE T STEEL TWIN LUMINAIRE MOUNTING BRACKET AND EXTENSIONS
03/10	0-3 SHT 1	STANDARD DEFINITIONS	11/22	4.05	ALUMINUM TYPE S POLE
03/10	0-3 SHT 2	STANDARD DEFINITIONS	11/22	4.06	ALUMINUM TYPE T POLE
11/22	0-4	REFERENCE DOCUMENTS AND GENERAL REQUIREMENTS	11/22	4.07	TYPE G POLE
	T.S. 1	PULL BOXES	11/22	4.08	ALUMINUM TYPE G POLE
09/11	1-1 SHT 1	LIGHT DUTY - LIGHT WEIGHT NO. 5 AND NO. 7 PULL BOX	11/22	4.09	ALUMINUM TYPE H POLE
09/11	1-1 SHT 2	LIGHT DUTY - LIGHT WEIGHT NO. 5 AND NO. 7 SLOPE WALL BODY PULL BOX DETAILS	11/22	4.10	ALUMINUM TYPE I POLE
03/15	1-2	HEAVY DUTY NO. 5 AND NO. 7 STRAIGHT BODY WALL PULL BOX DETAILS	11/22	4.11	GENERAL NOTES FOR TRAFFIC SIGNALS AND LIGHTING POLES WITH MAXIMUM LOADING CASE
09/11	1-3	REPLACEMENT LID SIZING FOR EXISTING NO. 5 AND NO. 7 PULL BOXES	04/19	4.12	TYPE J POLES (25-J, 30-J, 35-J, AND 40-J) WITH 25 FT TO 40 FT MAST ARM SPAN LENGTH
09/11	1-4 SHT 1	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS	04/19	4.13	TYPE Q POLES (25-QL, 30-QL, 35-QL, AND 40-QL) WITH 25 FT TO 40 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
09/11	1-4 SHT 2	TYPICAL PULL BOX INSTALLATION AND WIRING DETAILS			TYPE K POLES (45-K, 50-K, AND 55-K) WITH 45 FT TO 55 FT MAST ARM SPAN LENGTH
09/11	1-4 SHT 3	TYPICAL PULL BOX INSTALLATION DETAILS	04/19	4.14	TYPE R POLES (45-RL, 50-RL, AND 55-RL) WITH 45 FT TO 55 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
09/11	1-5 SHT 1	ELECTRICAL CONDUIT COVER AND TRENCH REQUIREMENTS			TYPE V POLES (60-V AND 65-V) WITH 60 FT TO 65 FT MAST ARM SPAN LENGTH
09/11	1-5 SHT 2	CONDUIT EXPANSION COUPLINGS	11/22	4.16	TYPE W POLES (60-WL AND 65-WL) WITH 60 FT TO 65 FT MAST ARM SPAN LENGTH WITH LUMINAIRES
09/11	1-6	CONDUCTOR REQUIREMENTS	11/22	4.17	POLE HAND HOLE DETAILS
09/11	1-9	TOP OF BARRIER JUNCTION BOX DETAILS	11/22	4.18	TYPE U POLE (ELLIPTICAL BASE) DETAILS
09/11	1-8 SHT 1	FRONT OF BARRIER JUNCTION BOX	11/22	4.19	TYPE U POLE (ROUND POLE WITH SQUARE BASE) NOTES
09/11	1-8 SHT 2	BACK OF BARRIER JUNCTION BOX	11/22	4.20	TYPE U POLE (ROUND POLE WITH SQUARE BASE) FOUNDATION DETAILS
03/10	1-7	TRAFFIC SIGNAL IMSA CABLE COLOR CODES	04/19	4.21	TYPE U POLE (ROUND POLE WITH SQUARE BASE) DEATILS 1
09/11	1-10	TOP OF BARRIER JUNCTION BOX DETAILS	04/19	4.22	TYPE U POLE (ROUND POLE WITH SQUARE BASE) DEATILS 2
10/13	1-11 SHT 1	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX	04/19	4.23	TYPE U POLE (ROUND POLE WITH SQUARE BASE) PIPE TENON DETAILS
10/13	1-11 SHT 2	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX	04/19	4.24	TYPE U POLE (ROUND POLE WITH SQUARE BASE) TWIN LUMINAIRE BRACKET DETAILS
03/15	1-11 SHT 3	HEAVY DUTY LIGHTING NO. 4 AND NO. 6 PULL BOX LID	04/19	4.25	EQUIPMENT MOUNTING HEIGHT DETAILS
03/15	1-12 SHT 1	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX	04/19	4.26	PEDESTRIAN PUSH BUTTON POST "TYPE PB POLE"
03/15	1-12 SHT 2	PRECAST HEAVY DUTY LIGHTING NO. 4B AND NO. 6B PULL BOX	04/19	4.27	POLE FOUNDATION ANCHOR BOLTS
	T.S. 2	FOUNDATIONS	11/22	4.28	STEEL MAST ARM DETAILS LUMINAIRE AND SIGNAL ARMS TO 20'
03/10	2-1	FOUNDATION FOR TYPE II LOAD CENTER CABINET	04/19	4.29	ALUMINUM TRUSS MAST ARM DETAILS FOR TYPE G, H, AND I POLES
03/10	2-2	FOUNDATION FOR TYPE IV LOAD CENTER CABINET	04/19	4.30	SIGNAL MAST ARM TENON DETAIL
03/10	2-3	FOUNDATION FOR TYPE III CONTROL CABINET	04/19	4.31	TYPICAL HIGHWAY LIGHTING OFFSETS IN CUT AND FILL SECTIONS
03/10	2-4	FOUNDATION FOR TYPE IV AND V CONTROL CABINETS	11/22	4.32	STEEL ADAPTER PLATE FOR 30 FT ALUMINUM TYPE "G" OR TYPE "S" LIGHT POLES
03/10	2-5	FOUNDATION FOR TYPE 340 CONTROL CABINET			
03/10	2-6	METER PEDESTAL CABINET FOUNDATION AND BASE		T.S. 5	POLE BASES - SPECIAL
03/15	2-7	TRAFFIC SIGNAL UPS CABINET FOUNDATION DETAIL	11/24	5-0	TYPE 2 AND 3 CAST ALUMINUM BREAK-AWAY BASES
	T.S. 3	CABINETS	04/19	5-1	TYPE 2 CAST ALUMINUM BREAK-AWAY BASE
12/12	3-0	NOTES FOR TYPE II AND IV LOAD CENTER CABINETS	04/19	5-2	TYPE 3 CAST ALUMINUM BREAK-AWAY BASE
03/10	3-1	TYPE II LOAD CENTER CABINET	05/21	5-3	INSTALLATION DETAILS FOR POLE FOUNDATIONS WITH TYPE 2 AND 3 BREAK-AWAY BASES
03/10	3-2	TYPE IV LOAD CENTER CABINET		T.S. 6	HIGHWAY TRAFFIC DATA DETECTORS
03/10	3-3	TYPE II OR IV LOAD CENTER CABINET WIRING DETAILS 240/480 3W W/DISCONNECT	03/10	6-1	TYPE C VEHICLE DETECTOR LOOPS FOR TRAFFIC COUNTERS
03/10	3-4 SHT 1	PHOTO ELECTRIC CELL MOUNTING DETAILS	03/10	6-2 SHT 1	TYPE SA AND SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	3-4 SHT 2	PHOTO ELECTRIC CELL MOUNTING DETAILS	03/10	6-2 SHT 2	TYPE SA SPEED/VEHICLE CLASSIFICATION SYSTEMS
03/10	3-5 SHT 1	TYPE I AND II METER PEDESTAL CABINET	03/10	6-2 SHT 3	TYPE SB SPEED/VEHICLE CLASSIFICATION SYSTEMS
12/12	3-5 SHT 2	METER PEDESTAL CABINET	12/12	6-3	PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
03/10	3-6	TYPE III CONTROL CABINET	12/12	6-4 SHT 1	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/10	3-7	POLE MOUNTED TYPE III CONTROL CABINET	12/12	6-4 SHT 2	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/10	3-8 SHT 1	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET	03/15	6-4 SHT 3	DETAIL A PIEZOELECTRIC SENSOR DETAILS
03/10	3-8 SHT 2	POLE MOUNT DETAILS FOR TYPE III CONTROL CABINET	12/12	6-4 SHT 4	DETAIL B DETECTOR LOOP DETAILS
03/10	3-9 SHT 1	TYPE IV AND V CONTROL CABINET NOTES	12/12	6-4 SHT 5	DETECTOR LOOPS AND PIEZOELECTRIC SENSOR DETAILS
03/10	3-9 SHT 2	TYPE IV CONTROL CABINET	03/10	6-5	MICROLOOPS FOR SPEED/VEHICLE CLASSIFICATION
03/10	3-9 SHT 3	TYPE V CONTROL CABINET	03/10	6-6	QUARTZ PIEZOELECTRIC WEIGHT SENSOR AND LOOP LANE LAYOUT
03/10	3-10	CABINET EXTENSION OR ELEVATOR BASE	03/10	6-7	TRAFFIC DATA COLLECTION CABINET INSTALLATION DETAILS
03/10	3-11	CONTROL CABINET MOUNTED SERVICE ENCLOSURE	03/10	6-8	TYPE MPD CABINET POLE, BASE AND FOUNDATION INSTALLATION DETAILS
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			

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW				
		NAME	DATE	
CONSTRUCTION STANDARDS		Charlie Golek	09/26	
PROJECT NO.			1C-1	OF 70
0000 MA TOL T0619 01C				
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE		OF

ADOT STANDARD DRAWINGS

TRAFFIC SIGNAL AND LIGHTING STANDARDS

(SHEET 2 OF 2)

EFFECTIVE NOVEMBER 2024

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
12/23	8-0	TRAFFIC SIGNAL VEHICLE FACE ASSEMBLY REQUIREMENTS AND DETAILS
12/23	8-1	VEHICLE TRAFFIC SIGNAL FACE ASSEMBLY
12/23	8-2	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
04/19	15-0 SHT 1	GENERAL NOTES
04/19	15-0 SHT 2	GENERAL NOTES
04/19	15-0 SHT 3	GENERAL NOTES
04/19	15-1 SHT 1	STEEL POLE TYPICAL DETAILS
04/19	15-1 SHT 2	STEEL POLE FOUNDATION DETAILS
04/19	15-1 SHT 3	STEEL POLE ATTACHMENT DETAILS
04/19	15-1 SHT 4	WOOD POLE TYPICAL DETAILS
04/19	15-1 SHT 5	WOOD POLE TYPICAL DETAILS
04/19	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

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
CONSTRUCTION STANDARDS		NAME	DATE
		Charlie Golek	09/26
PROJECT NO.		1C-2	OF 70
0000 MA TOL T0619 01C			
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE	OF

ADOT STANDARD DRAWINGS

STRUCTURE DETAIL DRAWINGS
EFFECTIVE NOVEMBER 2024

DATE	STANDARD	SUBJECT TITLE
RAILINGS		
09/24	SD 1.10 (1 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
09/24	SD 1.10 (2 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
10/24	SD 1.11 (1 OF 1)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
10/24	SD 1.11 (2 OF 2)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION
06/23	SD 1.12	COMBINATION PEDESTIAN-TRAFFIC BRIDGE RAILING
01/20	SD 1.13	PEDESTRIAN FENCE FOR BRIDGE RAILING SD1.12
01/20	SD 1.20	32' TYPE F ROADWAY BARRIER TRANSITION TO 38' SINGLE SLOPE BARRIER
01/20	SD 1.21	32' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER
01/20	SD 1.22	42' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER
01/20	SD 1.30	BARRIER JUNCTION BOX
APPROACHES		
08/23	SD 2.01	APPROACH SLAB DETAILS
08/23	SD 2.02	TYPE 1 ANCHOR SLAB DETAILS
08/23	SD 2.03	TYPE 2 ANCHOR SLAB DETAILS
08/23	SD 2.04	SLOPE PAVING DETAILS
DECK JOINTS		
02/20	SD 3.01	DECK JOINT ASSEMBLY - COMPRESSION SEAL
02/20	SD 3.02	DECK JOINT ASSEMBLY - STRIP SEAL
02/20	SD 3.03 (1 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL
02/20	SD 3.03 (2 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL
SUBSTRUCTURE		
11/12	SD 5.01	STRUCTURAL EXCAVATION - PAYMENT LIMITS
11/12	SD 5.02	STRUCTURE BACKFILL - PAYMENT LIMITS
DRAINAGE STRUCTURES		
05/15	SD 6.01 (1 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
02/12	SD 6.01 (2 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS
02/12	SD 6.01 (3 OF 5)	REINFORCED CONCRETE BOX CULVERTS - EXTENSION DETAILS
02/12	SD 6.01 (4 OF 5)	REINFORCED CONCRETE BOX CULVERTS - STRUCTURAL EXCAVATION & STRUCTURE BACKFILL
05/15	SD 6.01 (5 OF 5)	REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL (0'-30' FILLS)
05/15	SD 6.02 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (0'-15' FILLS)
05/15	SD 6.02 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (15'-30' FILLS)
05/15	SD 6.03 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (0'-15' FILLS)
05/15	SD 6.03 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (15'-30' FILLS)
05/15	SD 6.04 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (0'-15' FILLS)
05/15	SD 6.04 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (15'-30' FILLS)
05/15	SD 6.05 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (0'-15' FILLS)
05/15	SD 6.05 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (15'-30' FILLS)
05/15	SD 6.06 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (0'-15' FILLS)
05/15	SD 6.06 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (15'-30' FILLS)
02/12	SD 6.07	REINFORCED CONCRETE BOX CULVERTS - 16'x 14' EQUIPMENT PASS (0'-20' FILLS)
05/15	SD 6.08 (1 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (2 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (3 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (4 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0°to 20° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (5 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (6 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.08 (7 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 3'to 7'
02/12	SD 6.08 (8 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25°to 45° - CULVERT HEIGHT 8'to 12'
05/15	SD 6.09 (1 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 2 :1 SLOPE
05/15	SD 6.09 (2 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 4 :1 SLOPE
05/15	SD 6.09 (3 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 6 :1 SLOPE
05/15	SD 6.10 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 3'to 7'
02/12	SD 6.10 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 8'to 12'
02/12	SD 6.11 (1 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON DETAILS
05/15	SD 6.11 (2 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (2 :1 SLOPE)
05/15	SD 6.11 (3 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (4 :1 SLOPE)
05/15	SD 6.11 (4 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (6 :1 SLOPE)
PRECAST REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL NOTES & DIMENSIONS		
10/24	SD 6.20 (1 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 1
10/24	SD 6.20 (2 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 1
10/24	SD 6.20 (3 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - END SECTION & CONNECTION DETAILS
10/24	SD 6.20 (4 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 2
10/24	SD 6.20 (5 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 3
PIPE CULVERT HEADWALLS - MISCELLANEOUS DETAILS		
07/12	SD 6.30 (1 OF 5)	PIPE CULVERT HEADWALLS - INLET AND OUTLET - 18" to 42" PIPES
07/12	SD 6.30 (2 OF 5)	PIPE CULVERT HEADWALLS - INLET AND OUTLET - 18" to 42" PIPES
07/12	SD 6.30 (3 OF 5)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET AND OUTLET - 48" to 84" PIPES
07/12	SD 6.30 (4 OF 5)	PIPE CULVERT HEADWALLS - SKEWED INLET AND OUTLET - 48" to 84" PIPES
07/12	SD 6.30 (5 OF 5)	PIPE CULVERT HEADWALLS - MULTI-PIPE - 48" to 84" PIPES
07/12	SD 6.31 (1 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET
07/12	SD 6.31 (2 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 2 :1 SLOPE
07/12	SD 6.31 (3 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 4 :1 SLOPE
07/12	SD 6.31 (4 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 6 :1 SLOPE
07/12	SD 6.31 (5 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET
07/12	SD 6.31 (6 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 2 :1 SLOPE
07/12	SD 6.31 (7 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 4 :1 SLOPE
07/12	SD 6.31 (8 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 6 :1 SLOPE
07/12	SD 6.32 (1 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET
07/12	SD 6.32 (2 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.32 (3 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.32 (4 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.32 (5 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET
07/12	SD 6.32 (6 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.32 (7 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.32 (8 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 6 :1 SLOPE

DATE	STANDARD	SUBJECT TITLE
DRAINAGE STRUCTURES (Continued)		
07/12	SD 6.33 (1 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET
07/12	SD 6.33 (2 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.33 (3 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.33 (4 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.33 (5 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET
07/12	SD 6.33 (6 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.33 (7 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.33 (8 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 6 :1 SLOPE
07/12	SD 6.34 (1 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET
07/12	SD 6.34 (2 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 2 :1 SLOPE
07/12	SD 6.34 (3 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 4 :1 SLOPE
07/12	SD 6.34 (4 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 6 :1 SLOPE
07/12	SD 6.34 (5 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET
07/12	SD 6.34 (6 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 2 :1 SLOPE
07/12	SD 6.34 (7 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 4 :1 SLOPE
07/12	SD 6.34 (8 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 6 :1 SLOPE
07/12	SD 6.35 (1 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITHOUT APRON
07/12	SD 6.35 (2 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITH OUTLET APRON
07/12	SD 6.36 (1 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRONS
07/12	SD 6.36 (2 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 2 :1 SLOPE
07/12	SD 6.36 (3 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 4 :1 SLOPE
07/12	SD 6.36 (4 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 6 :1 SLOPE
RETAINING WALLS		
10/24	SD 7.01 (1 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (2 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (3 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (4 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.01 (5 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
12/21	SD 7.02 (1 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
12/21	SD 7.02 (2 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
SOUND BARRIER WALLS		
06/22	SD 8.01	SOUND BARRIER WALL (CONCRETE)
06/22	SD 8.02 (1 OF 2)	SOUND BARRIER WALL (MASONRY)
06/22	SD 8.02 (2 OF 2)	SOUND BARRIER WALL (MASONRY)
TRAFFIC STRUCTURES		
04/19	SD 9.01 (1 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - ELEVATION & NOTES
03/22	SD 9.01 (2 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - FOUNDATION DETAILS
04/19	SD 9.01 (3 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE A SIGN MOUNT ASSEMBLY
04/19	SD 9.01 (4 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE B SIGN MOUNT ASSEMBLY
04/19	SD 9.01 (5 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - LIGHT SUPPORT AND MISC. DETAILS
04/19	SD 9.02 (1 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - ELEVATION & NOTES
03/22	SD 9.02 (2 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - FOUNDATION DETAILS
04/19	SD 9.02 (3 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE A SIGN MOUNT ASSEMBLY
04/19	SD 9.02 (4 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE B SIGN MOUNT ASSEMBLY
04/19	SD 9.02 (5 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - LIGHT SUPPORT AND MISC. DETAILS
TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - GENERAL PLAN		
04/19	SD 9.10 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - GENERAL PLAN
09/23	SD 9.10 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - FOUNDATION DETAILS
04/19	SD 9.10 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - POST AND MAST ARM DETAILS
04/19	SD 9.10 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - SIGN SUPPORT DETAILS
09/23	SD 9.10 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - LIGHT SUPPORT DETAILS
TUBULAR SIGN STRUCTURES - TUBULAR FRAME - GENERAL PLAN		
04/19	SD 9.20 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - GENERAL PLAN
09/23	SD 9.20 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - FOUNDATION DETAILS
04/19	SD 9.20 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - POST AND MAST ARM DETAILS
04/19	SD 9.20 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - SIGN SUPPORT DETAILS
09/23	SD 9.20 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - LIGHT SUPPORT AND MISC. DETAILS
VARIABLE MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION		
04/19	SD 9.50 (1 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.50 (2 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.50 (3 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING & SIGN BRACKET DETAILS
04/19	SD 9.50 (4 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
04/19	SD 9.50 (5 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
DUAL VARIABLE MESSAGE SIGN - TUBULAR FRAME		
04/19	SD 9.51	DUAL VARIABLE MESSAGE SIGN - TUBULAR FRAME
04/19	SD 9.52 (1 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.52 (2 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.52 (3 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.52 (4 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
04/19	SD 9.52 (5 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - PLAN & ELEVATION		
04/19	SD 9.53 (1 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - PLAN & ELEVATION
04/19	SD 9.53 (2 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.53 (3 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
04/19	SD 9.53 (4 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - HANDRAIL DETAILS
04/19	SD 9.53 (5 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - MISCELLANEOUS DETAILS
DYNAMIC MESSAGE SIGN (BUTTERFLY) - GENERAL PLAN AND ELEVATION		
05/22	SD 9.60 (1 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - GENERAL PLAN AND ELEVATION
05/22	SD 9.60 (2 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - FOUNDATION DETAILS
05/22	SD 9.60 (3 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MONOTUBE ASSEMBLY
05/22	SD 9.60 (4 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MAST ARM DETAILS
05/22	SD 9.60 (5 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - MISCELLANEOUS DETAIL
05/22	SD 9.60 (6 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK ASSEMBLY AND HANDRAIL
05/22	SD 9.60 (7 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK DETAILS

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW				
		NAME	DATE	
CONSTRUCTION STANDARDS		Charlie Golek	09/26	
PROJECT NO.			1D	OF 70
0000 MA TOL T0619 01C				
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE		OF

ADOT STANDARD DRAWINGS

ITS STANDARDS

EFFECTIVE OCTOBER 2021

REVISION DATE	STANDARD NUMBER	SUBJECT : ITS STANDARDS
July-14	FM-0.01	SYMBOLS AND ABBREVIATIONS
July-20	FM-1.01	TRENCH DETAILS, FMS TRUNKLINE
July-20	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
Oct-21	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
Oct-21	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
Oct-17	FM-3.27	DAKTRONICS DMS CABINET FOUNDATION DETAILS
Oct-17	FM-3.28	DAKTRONICS DMS & TRANSFORMER CABINET FOUNDATION DETAILS
Aug-13	FM-3.29	DMS CABINET ADAPTER 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
Apr-19	FM-6.01	RAMP METER DETAILS
Apr-19	FM-6.02	SINGLE-LANE RAMP METER
Apr-19	FM-6.03	SINGLE-LANE RAMP METER WITH FRONTAGE ROAD
Apr-19	FM-6.04	TWO-LANE RAMP METER
Apr-19	FM-6.05	TWO-LANE RAMP METER WITH FRONTAGE ROAD
Apr-19	FM-6.06	RAMP METER WITH OBSTRUCTION INSTALLATION DETAILS
Apr-19	FM-7.01	CCTV POLE CCTV CABINET MOUNTING DETAILS AND FIELD ORIENTATION
Apr-19	FM-7.02	CCTV POLE AND MOUNTING DETAILS
Apr-19	FM-7.03	CCTV POLE MOUNTING PLATE DETAILS

ADOT STANDARD DRAWINGS REVISION DATES and STANDARD NO.'s REVIEW			
	NAME	DATE	
CONSTRUCTION STANDARDS	Charlie Golek	09/26	
PROJECT NO.		1E	OF 70
0000 MA TOL T0619 01C			
RECORD DRAWING DATA	FEDERAL ID NO. TOL-0(200)T	REC. DWG. DATE	OF

1. SPILL PREVENTION, CONTROL, AND COUNTERMEASURES – CWA SECTION 311

If total above-ground storage capacity, including mobile re-fuelers stationed on-site, is greater than 1,320 gallons of oil (oils, greases, fuel, asphalt, and asphalt derivatives), where a spill has the potential to reach Waters of the US, the Contractor shall prepare a SPCC plan per contract specifications in Section 104.16 (C) of the Standard Specifications.

2. SURFACE WATER POLLUTION PREVENTION – CWA SECTION 402

☒ No CWA Section 402 Construction General Permit (CGP) Action Required; See Std. Spec. 104.09 and 104.10 for General Requirements

3. WORK IN WATERS OF THE UNITED STATES – CWA SECTION 404/401

☒ No Permit Required; Refer to Section 104.16 (D) of the Standard Specifications for General Requirements

4. BIOLOGY PROGRAM – ESA SECTION 7; MBTA, ARIZONA REVISED STATUTES TITLE 17

BIO-1: Environmental Awareness, Monitoring and Avoidance ☒ N/A

BIO-2: Migratory Bird Treaty Act (MBTA) ☐ N/A

The contractor shall avoid nests with relocation directions.

BIO-2A: General Seasonal Restrictions for MBTA, refer to seasonal dates in EPIC and general requirements in 104.16(E) of the Standard Specifications.

If construction occurs during the migratory bird breeding season: March 1 to August 31 refer to Section 104.16 BIO-2 of the specifications for direction.

BIO-2D: MBTA – Active Cliff Swallow Nests ☒ N/A

BIO-3: Burrowing Owls ☒ N/A

BIO-4: Bats ☒ N/A

BIO-5: Sonoran Desert Tortoise ☒ No ☐ Yes

5. VEGETATION PROTECTION PROGRAM – CWA SECTION 402, EO 13122

General (applies to all projects); The contractor shall comply with the requirements specified in Section 104.16 (F) of the Special Provisions and Section 104.16 (B) of the Standard Specifications.

☒ Noxious Species Control Plan (NSCP) required

6. CULTURAL RESOURCES PROGRAM

☒ No Cultural Resources Program Action Required; See Std. Spec. 107.05 and 107.06 for General Requirements

7. HAZARDOUS MATERIALS PROGRAM

General (applies to all projects); See Std. Spec. 107.07 for General Requirements.

☐ No Hazardous Materials Program Action Required

Is Asbestos present? ☒ No ☐ Yes

Is a NESHAP notice required? ☒ No ☐ Yes

Is Lead-based paint present? ☒ No ☐ Yes

8. NOISE PROGRAM

☒ No Noise Program Specific Project Action Required; See Std. Spec. 104.08 for General Requirements

9. AIR QUALITY PROGRAM

☒ No Air Quality Program Action Required; See Std. Spec. 104.08 for General Requirements

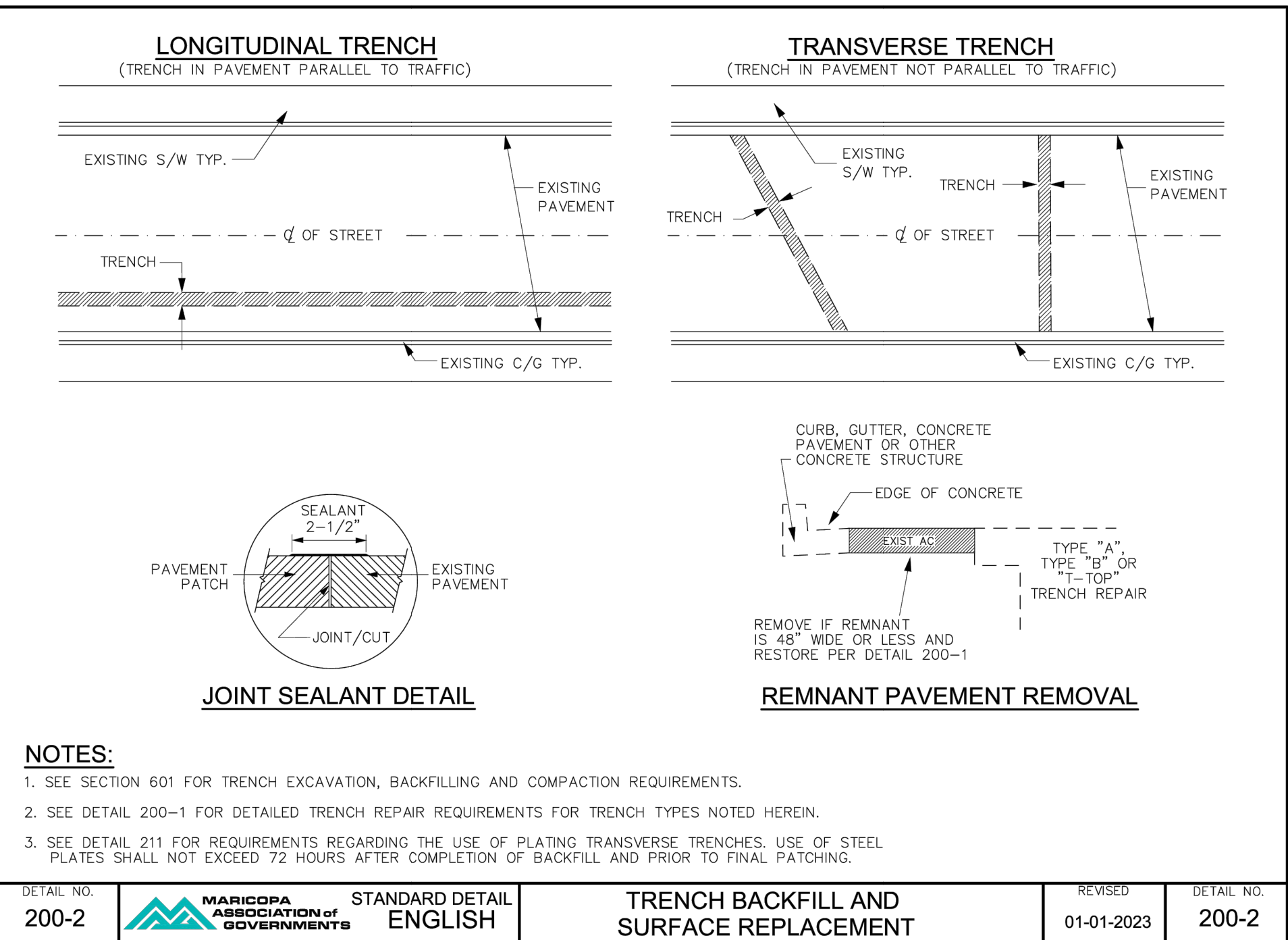
10. OTHER ENVIRONMENTAL ISSUES

Project Specific Environmental Commitments: ☐ N/A

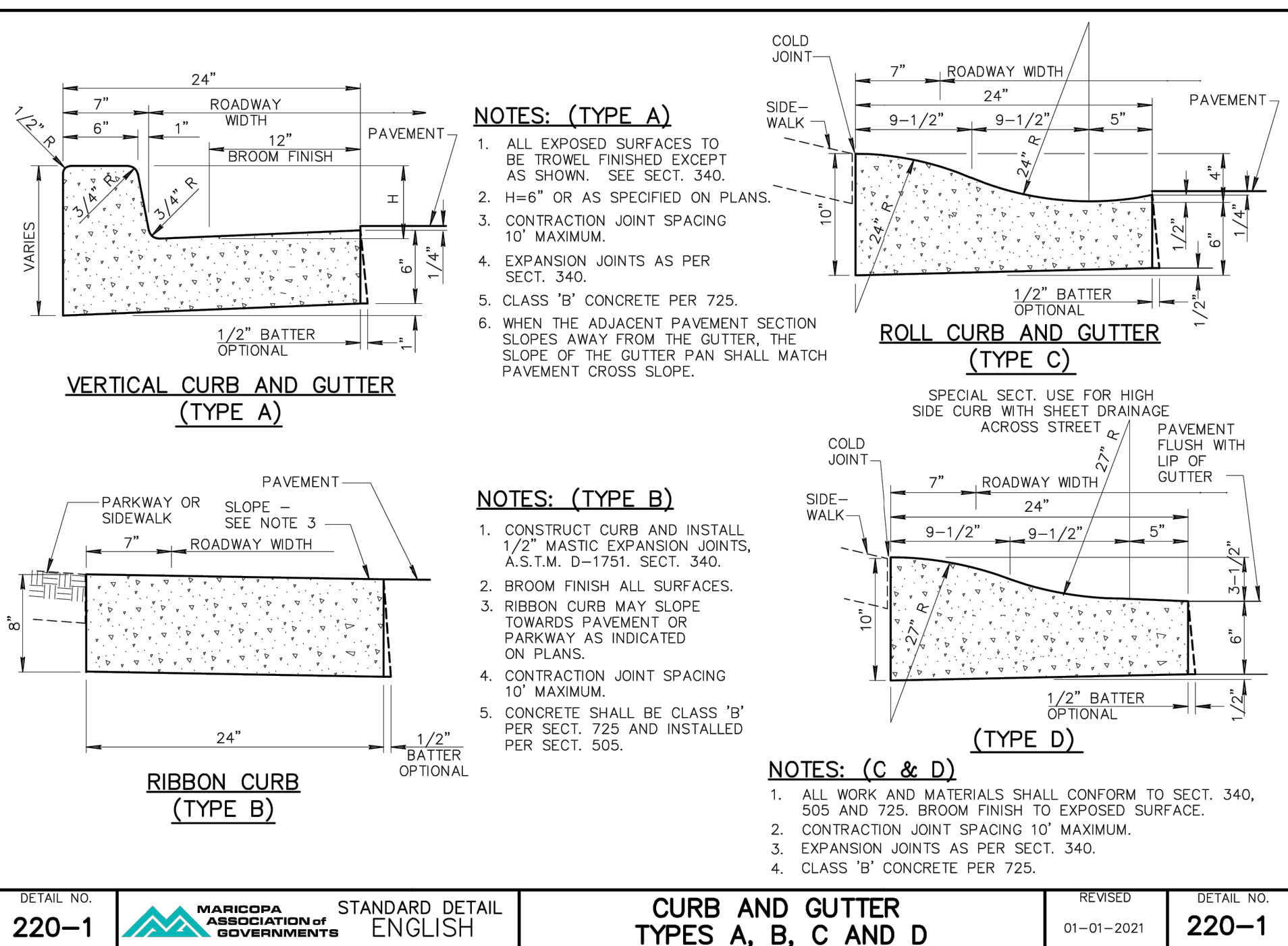
- The contractor shall not utilize any abrasive tools or methods for the removal of the painted light poles that would disturb the lead-based paint. This includes, but is not limited to, sawing, grinding, sanding, or heating. Woven straps or other non-abrasive items (not linked chains) may be used to lift the painted light poles from their base.

Arizona Department of Transportation Environmental Planning Standard Template			
Environmental, Permits, Issues, And Commitments (EPIC) Sheet			
Environmental Planner Name	Dena Whitaker		R.E. Name
Environmental Planning Date of Completion	1/26/2026		R.E. Signature With the above signature, the R.E. attests that all EPIC work for this project has been satisfactorily completed.
FEDERAL ID NO.	TOL-0(200)T		
PROJECT NO.	0000 MA TOL T0619 01C		
REC DWG DATE:			_____ OF _____ Sheet 1F

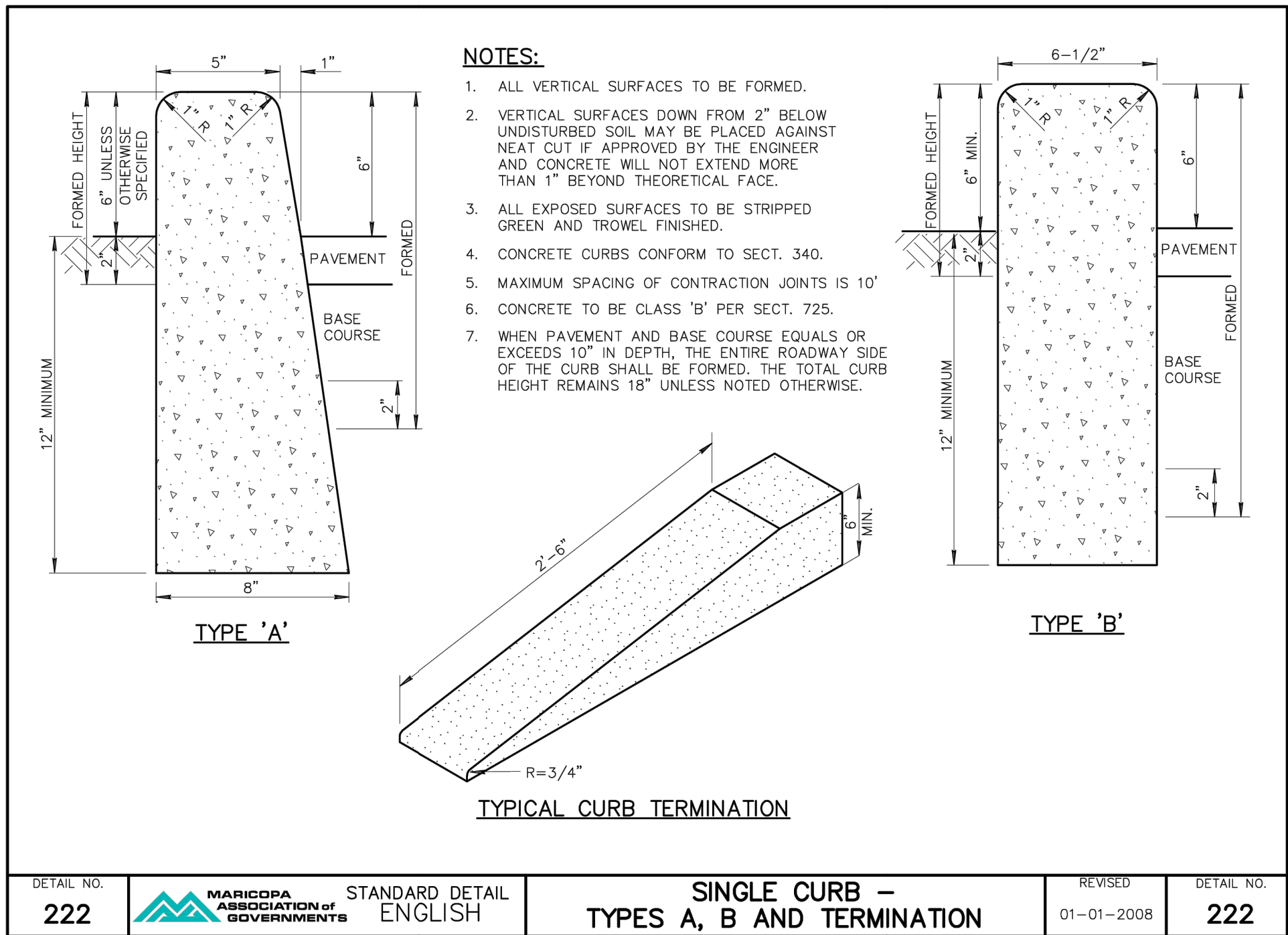
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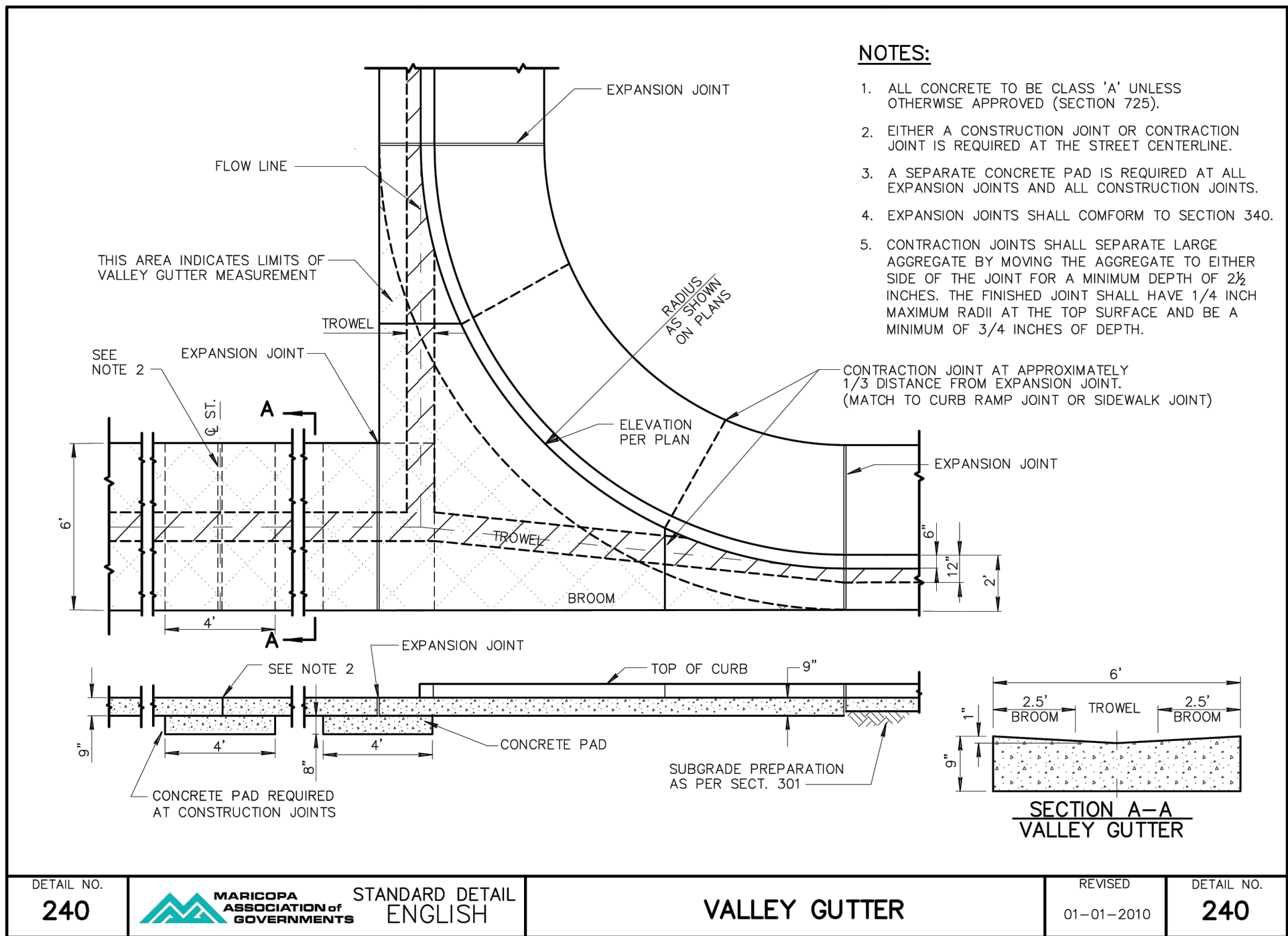
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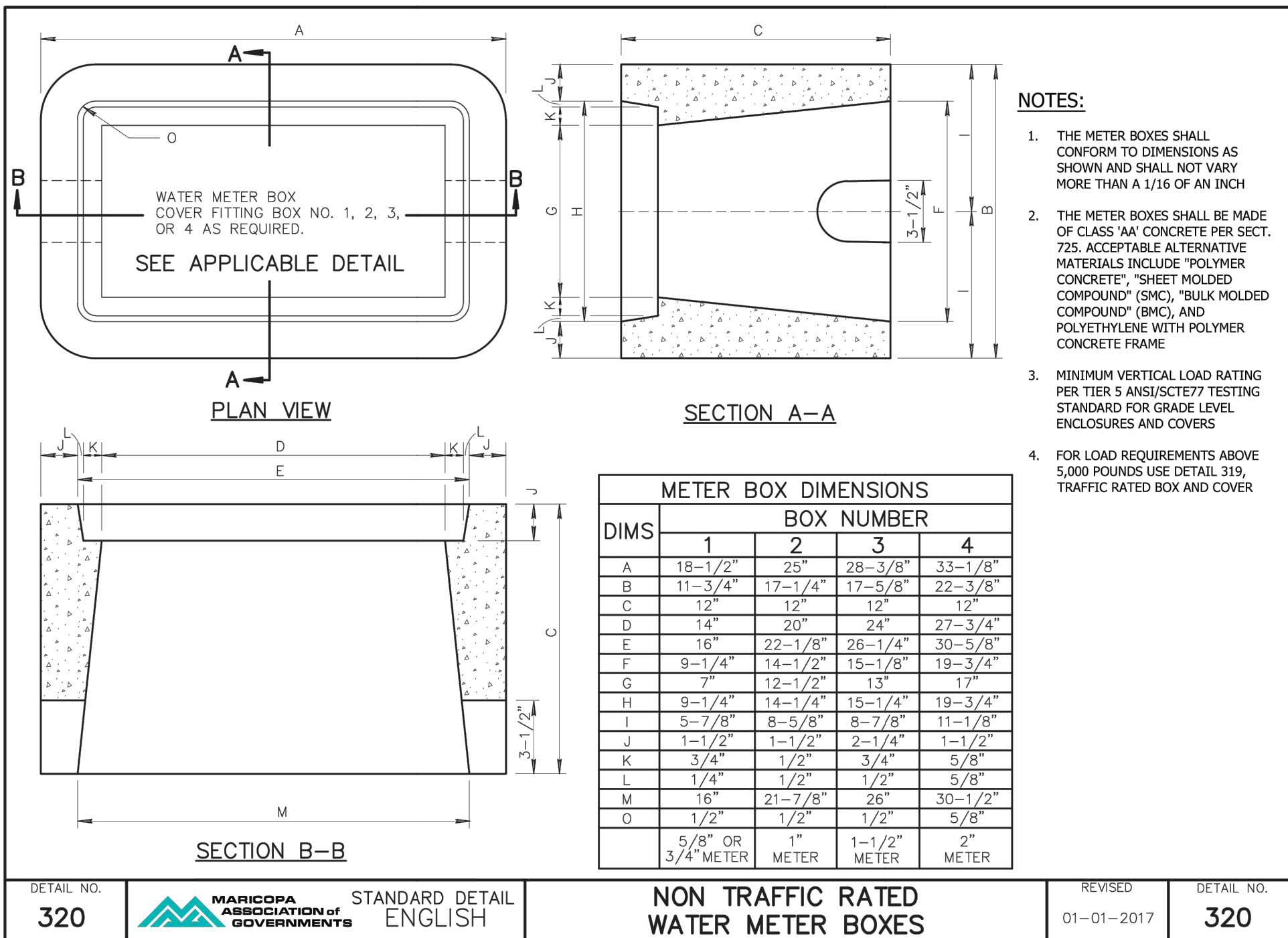
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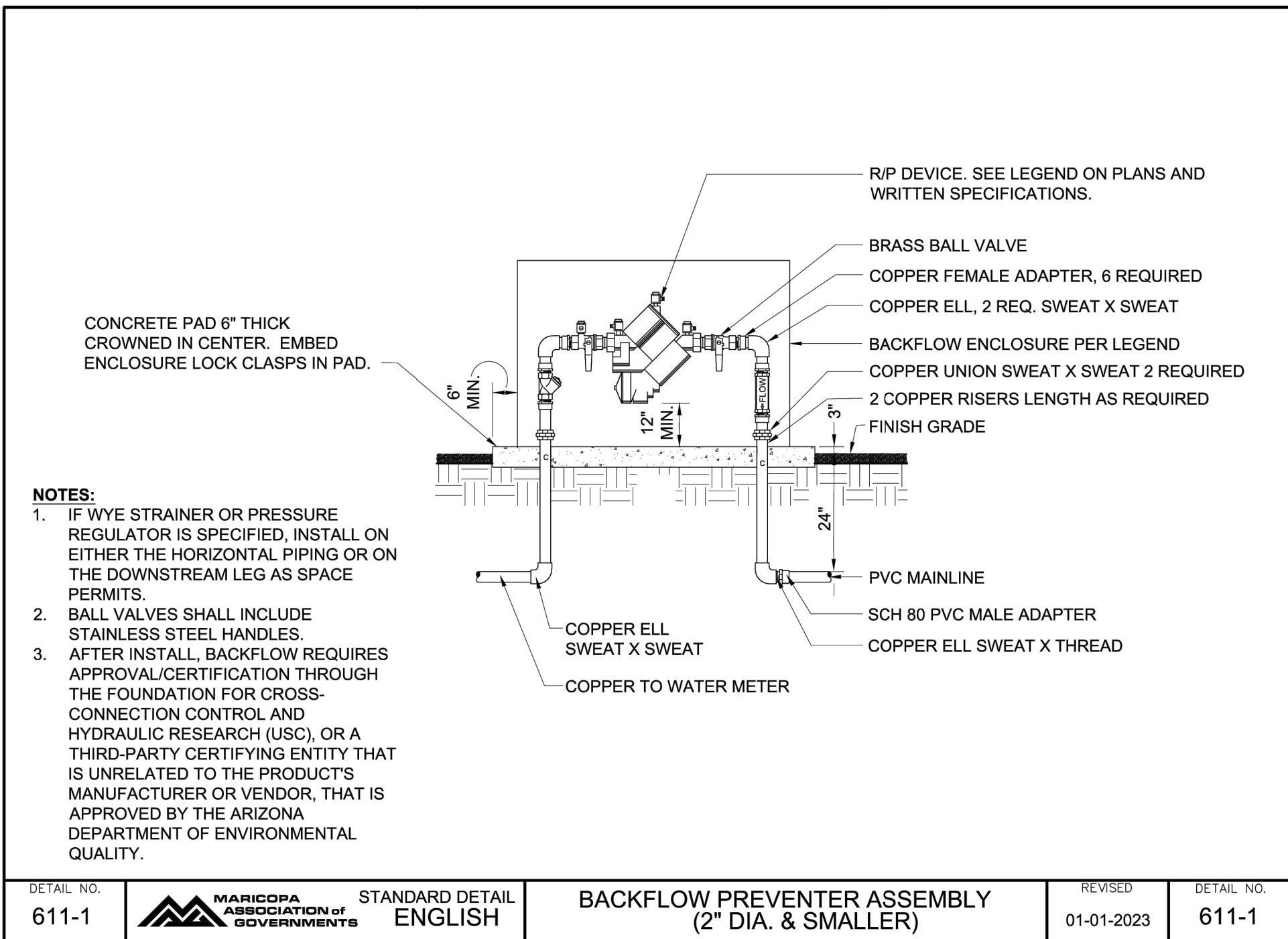
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DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 1G-2	TOTAL SHEETS 70	RECORD DRAWING
	MILEPOST							
MAG SD 02	STRUCTURE NO.	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. SD08
		TRACS NO. T0619 01C						1G-2 OF 70

REFERENCES

NO RELEVANT PROJECTS NEARBY

MIDPOINT OF PROJECT

CENTRAL ZONE
STATE PLANE COORDINATES

X=593,498
Y=891,531

DESIGN DATA

VAN BUREN ST
2025 AADT = 14,500
2045 AADT = 17,700
96TH AVE
2025 AADT = 2,500
2045 AADT = 3,050

VAN BUREN ST DESIGN SPEED = 25 MPH
96TH AVE DESIGN SPEED = 25 MPH

LENGTH OF PROJECT

VAN BUREN ST CST @
STA 13+00 TO 15+25
GROSS & NET LENGTH

96TH AVE @
STA 20+00 TO 21+75
GROSS & NET LENGTH

= 225'

= 225' = 0.04 MILES

= 175'

= 175' = 0.03 MILES

GENERAL NOTES

ROADWAY PLANS HAVE BEEN DESIGNED UTILIZING THE CONSTRUCTION STANDARD DRAWINGS (C-SERIES). REFER TO THE 1A SHEET FOR A LISTING OF CURRENT REVISION DATES. WHERE RELEVANT, ROADWAY PLANS HAVE BEEN DESIGNED USING MAG STANDARDS.

THE PROJECT ROADWAY SHALL BE STRIPED BY THE CONTRACTOR IN ACCORDANCE WITH THE CURRENT EDITION OF THE SIGNING AND MARKING STANDARD DRAWINGS (M AND S-SERIES) AND THE PAVEMENT MARKING PLANS.

BENCH MARKERS WILL BE FURNISHED BY THE STATE AND SHALL BE PLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE DEPARTMENT: STD C-21.20

WHERE ONLY THE HORIZONTAL LOCATION OF AN EXISTING UTILITY IS SHOWN, THE LOCATION IS APPROXIMATE. WHERE BOTH 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 ARIZONA 811 AND SECTION 107.15 OF THE SPECIFICATIONS.

OBJECT MARKERS SHALL BE REMOVED AND RESET AS REQUIRED AT NO ADDITIONAL COST TO THE DEPARTMENT.

THE AVERAGE PROJECT ELEVATION IS 1012'.

NEW RIGHT OF WAY IS REQUIRED.

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
1A	ADOT SD 01
1B-1	ADOT SD 02
1B-2	ADOT SD 03
1C-1	ADOT SD 04
1C-2	ADOT SD 05
1D	ADOT SD 06
1E	ADOT SD 07
1F	EPIC
1G-1	MAG SD 01
1G-2	MAG SD 02
2	DESIGN SHEET
3	LEGEND & ABBREVIATIONS
4	GEOMETRIC CONTROL
5	GENERAL NOTES
6	REMOVALS
7	SITE PLAN
8	SIDEWALK STAKING SHEET
9	SIDEWALK STAKING SHEET
10	DRAINAGE PLANS
11	DRAINAGE PROFILES
12	DRAINAGE DETAILS
13	PLAN & ELEVATION
14	BRIDGE GENERAL NOTES & QUANTITIES
15	ABUTMENT 1 PLAN & ELEVATION
16	ABUTMENT 2 PLAN & ELEVATION
17	GENERAL STRUCTURAL NOTES 1
18	GENERAL STRUCTURAL NOTES 2
19	GENERAL STRUCTURAL NOTES 3
20	TYPICAL STRUCTURAL DETAILS 1
21	TYPICAL STRUCTURAL DETAILS 2
22	TYPICAL STRUCTURAL DETAILS 3
23	ELEVATOR SHAFT, ELECTRICAL ROOM, & MECHANICAL ROOM LAYOUT PLAN
24	SOUTH FRAMING PLAN
25	NORTH FRAMING PLAN
26	SOUTH STAIR FRAMING PLAN
27	NORTH STAIR FRAMING PLAN
28	FOUNDATION DETAILS
29	DRILLED SHAFT DETAILS
30	ELEVATOR SHAFT, ELECTRICAL ROOM, & MECHANICAL ROOM DETAILS 1
31	ELEVATOR SHAFT, ELECTRICAL ROOM, & MECHANICAL ROOM DETAILS 2
32	STAIR DETAILS 1
33	STAIR DETAILS 2
34	STAIR DETAILS 3
35	ANTICLIMB DETAILS
36	EQUIPMENT PAD DETAILS
37	MAIN SPAN DETAILS
38	MOT
39	TRAFFIC CONTROL DETAILS 1
40	TRAFFIC CONTROL DETAILS 2
41	UTILITY RELOCATION PLAN
42	AESTHETIC LETTERING DETAILS
43	DMS PLAN
44	DMS DETAILS
45	ARCHITECTURAL COVER SHEET
46	LEVEL 1 - NORTH SHAFT
47	LEVEL 2 - NORTH SHAFT
48	LEVEL 1 - SOUTH SHAFT
49	LEVEL 2 - SOUTH SHAFT
50	BRIDGE ELEVATIONS
51	BRIDGE SECTIONS
52	DOOR SCHEDULE
53	EXTERIOR ASSEMBLIES
54	EXTERIOR DETAILS
55	BRIDGE LIGHTING PLAN
56	BRIDGE LIGHTING DETAILS
57	BRIDGE LIGHTING SPEC SHEET
58	CONDUIT DIAGRAM
59	STREET LIGHTING PLAN
60	ELECTRICAL LEGEND, NOTES, AND ABBREVIATIONS
61	ELECTRICAL SITE PLAN
62	ELECTRICAL ENLARGED PLANS - SOUTH SHAFT
63	ELECTRICAL ENLARGED PLANS - NORTH SHAFT
64	ELECTRICAL DETAILS
65	ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES
66	ELECTRICAL PANELBOARD SCHEDULES
67	MECHANICAL LEGEND, NOTES, AND ABBREVIATIONS
68	MECHANICAL & PLUMBING PLANS
69	MECHANICAL DETAILS
70	MECHANICAL SCHEDULES

DESIGN

DRAWN

CHECKED

NAME

JOT

SED

CHG

DATE

09/26

09/26

09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

ROUTE

-

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO.

0000 MA TOL

FEDERAL ID NO.

CDS TOL-0(200)T

SHEET NO.

2

TOTAL SHEETS

70

RECORD DRAWING

LOCATION

VAN BUREN AT 96TH AVE, TOLLESON

DWG NO.

CV02

TRACS NO.

T0619 01C

2 OF 70

DATE SAVED:6/18/26

K:\PHX_STRUCTURE\291151013 - 96TH AVE PEDESTRIAN BRIDGE\CADD\12-SHEETS\STRUCTURES\291151013_ST06_ALT 2.DWG

SYMBOL LEGEND

NEW	EXIST	SYMBOL DESCRIPTION
		VERTICAL CURB AND GUTTER
		SINGLE VERTICAL CURB
		SIDEWALK
		CATCH BASIN
		HEAD WALL
		SCUPPER
		RIPRAP
		RIGHT-OF-WAY LINE
		EASEMENT LINE
		CUT SLOPE
		FILL SLOPE
		SLOPE LINE
		SAWCUT
		FENCE
		STORM DRAIN PIPE
		COX CABLE TELEVISION LINE (FIBER OPTIC)
		UNDERGROUND ELECTRIC
		SRP UNDERGROUND POWER
		NATURAL GAS LINE
		OVERHEAD UTILITIES
		SANITARY SEWER LINE
		PRIVATE IRRIGATION LINE
		SRP IRRIGATION LINE
		FIBER OPTIC
		TELEPHONE LINE
		WATER LINE

EXIST	SYMBOL DESCRIPTION
	ALUMINUM CAP FLUSH
	ALUMINUM CAP IN HAND HOLE
	BRASS CAP FLUSH
	BRASS CAP IN HAND HOLE
	PK NAIL
	BOLLARD
	ELECTRICAL MANHOLE
	ELECTRICAL METER
	ELECTRICAL PULL BOX
	ELECTRICAL TRANSFORMER
	ELECTRICAL VAULT
	FIBER MANHOLE
	FIBER VAULT
	FIRE HYDRANT
	GAS MARKER
	IRRIGATION CONTROL VALVE
	IRRIGATION MANHOLE
	SANITARY SEWER MANHOLE
	SIGN
	STORM DRAIN MANHOLE
	STREET LIGHT WITH MAST ARM
	PEDESTRIAN PUSH BUTTON
	POWER BOX
	POWER RISER
	COMMUNICATIONS VAULT
	TREE
	WATER MANHOLE
	WATER METER
	WATER VALVE

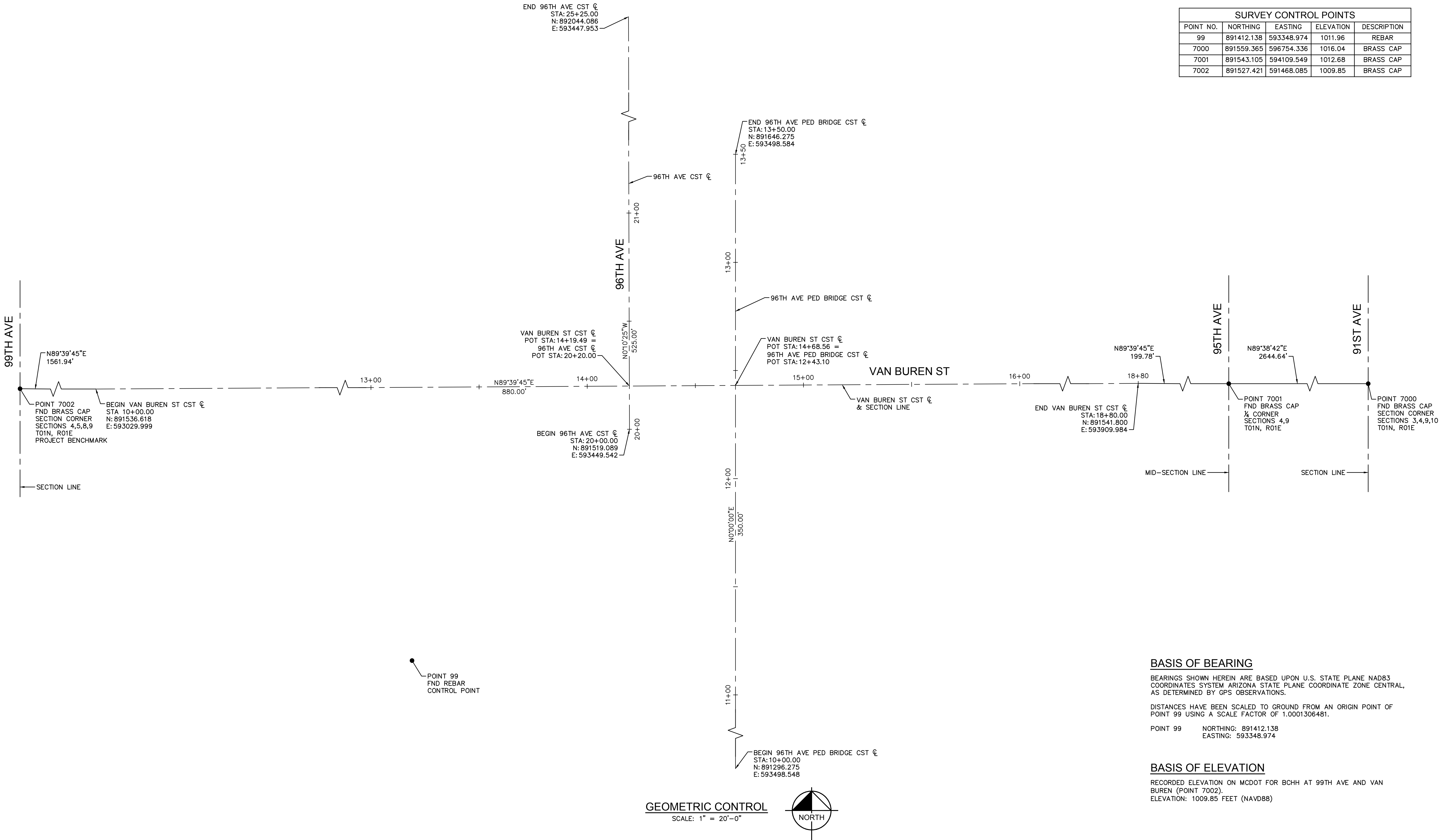
PAVEMENT MARKING LEGEND

		4" SOLID WHITE LINE
		4" SOLID YELLOW LINE
		8" SOLID WHITE LINE
		8" SOLID WHITE LINE WITH TYPE 'G' RMP'S @ 20' SPACING
		4" DASHED WHITE LINE W/ A 2' LINE SEGMENT & A 6' GAP
		8" DASHED WHITE LINE W/ A 2' LINE SEGMENT & A 6' GAP
		12" SOLID WHITE LINE
		4" DOTTED WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP
		PAVEMENT ARROW MARKING PER ADOT STD. DWG. M-10
		'ONLY' PAVEMENT LEGEND MARKING PER ADOT STD. DWG. M-6

ABBREVIATIONS

ABC	AGGREGATE BASE COURSE
AD	ALGEBRAIC DIFFERENCE
AFF	ABOVE FINISHED FLOOR
AP	ANGLE POINT
ARV	AIR RELEASE VALVE
AVE	AVENUE
AZPDDES	ARIZONA POLLUTION DISCHARGE ELIMINATION SYSTEM
BB	BOTTOM OF BASIN
BCF	BRASS CAP FLUSH
BCHH	BRASS CAP HAND HOLE
B/C	BACK OF CURB
BP	BEGINNING POINT
BVC	BEGIN VERTICAL CURVE
C	CUT
C&G	CURB AND GUTTER
CATV	CABLE TV
CL OR C	CENTERLINE
COMM	COMMUNICATIONS
CST	CONSTRUCTION
CT	COURT
CTL	CENTURYLINK
CV	CONTROL VALVE
D	DEGREE OF CURVATURE
DE	DRAINAGE EASEMENT
DR	DRIVE
E	EASTING
EL	ELEVATION
EOP	EDGE OF PAVEMENT
EP	ENDING POINT
ELEC	ELECTRIC
ESMT	EASEMENT
EVC	END VERTICAL CURVE
EX	EXISTING
F	FILL
F/C	FACE OF CURB
FM	FORCE MAIN
FND	FOUND
FO	FIBER OPTIC
G	GUTTER ELEVATION
GB	GRADE BREAK
GV	GAS VALVE
H	HEIGHT
HP	HIGH POINT
IRR	IRRIGATION
LP	LOW POINT
L	LENGTH
LSCP	LANDSCAPE
LT	LEFT
N	NORTHING
NO	NUMBER
NOI	NOTICE OF INTENT
NOT	NOTICE OF TERMINATION
NPI	NO PAY ITEM
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
MCDOT	MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION
M	MONUMENT LINE
OHE	OVERHEAD ELECTRIC
P	PAVEMENT ELEVATION
PC	POINT OF CURVATURE
PE G	POLYETHYLENE GAS
PI	POINT OF INTERSECTION
PROP	PROPERTY
PSS	PAVEMENT STRUCTURAL SECTION
PT	POINT OF TANGENCY
PUE	PUBLIC UTILITY EASEMENT
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS
RD	ROAD
RRFB	RECTANGULAR RAPID FLASHING BEACON
RT	RIGHT
RW	RECLAIMED WATER
RWCD	ROOSEVELT WATER CONSERVATION DISTRICT
R/W	RIGHT-OF-WAY
S	SEWER
SEC	SECTION
SRP	SALT RIVER PROJECT
STA	STATION
STR	STRUCTURAL
SWCT	SAWCUT
SWLK	SIDEWALK
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TANGENT
TB	TOP OF BASIN
TC	TOP OF CURB/TOP OF CURB ELEVATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TOG	TOWN OF GILBERT
TP	TELEPHONE PEDESTAL
T/S	TRAFFIC SIGNAL
UGE	UNDERGROUND ELECTRIC
VC	VERTICAL CURVE
W	WATER

SURVEY CONTROL POINTS				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
99	891412.138	593348.974	1011.96	REBAR
7000	891559.365	596754.336	1016.04	BRASS CAP
7001	891543.105	594109.549	1012.68	BRASS CAP
7002	891527.421	591468.085	1009.85	BRASS CAP



 REGISTERED PROFESSIONAL ENGINEER CERTIFICATE NO. 68796 CHARLES H. GOLEK ARIZONA, U.S.A. DATE SIGNED 09/10/26 DESIGN DRAWN CHECKED	NAME JOT JOT CHG	DATE 09/26 09/26 09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP		ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 4	TOTAL SHEETS 70	RECORD DRAWING
	Kimley»Horn © 2026 KIMLEY-HORN AND ASSOCIATES, INC.		GEOMETRIC CONTROL		MILEPOST			LOCATION VAN BUREN AT 96TH AVE, TOLLESON DWG NO. GC01				
					STRUCTURE NO.	TRACS NO. T0619 01C 4 OF 70						

GENERAL NOTES:

1. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE ENGINEER 7-14 DAYS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL INCLUDE CITY OF TOLLESON IN THE PRE-CONSTRUCTION MEETING.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
3. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
4. THE ENGINEER AND CITY OF TOLLESON BUILDING DEPARTMENT SHALL BE NOTIFIED 24 HOURS PRIOR TO STARTING EACH PHASE OF CONSTRUCTION. PHONE, (623) 936-7111.
5. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE ENGINEER AND/OR ALL WORK AND MATERIAL NOT IN CONFORMANCE WITH THE SPECIFICATIONS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
6. THE UTILITIES DEPICTED HEREON ARE BASED UPON THE BEST AVAILABLE INFORMATION AT THE TIME OF THE FIELD SURVEY. THE CONTRACTOR SHALL CONTACT ARIZONA 811, BLUE STAKE CENTER AT (602) 263-1100 A MINIMUM OF 72 HOURS PRIOR TO ANY CONSTRUCTION AND FIELD-VERIFY EXACT LOCATION OF ALL UTILITIES AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND WILL ELIMINATE ALL CONFLICTS PRIOR TO START OF CONSTRUCTION.
7. THE CITY OF TOLLESON IS NOT RESPONSIBLE FOR LIABILITY ACCRUED DUE TO DELAYS AND/OR DAMAGES TO UTILITIES IN CONJUNCTION WITH THIS CONSTRUCTION. ALSO, THE CITY WILL NOT PARTICIPATE IN THE COST OF CONSTRUCTION FOR UTILITY RELOCATION.
8. NO FINAL INSPECTION WALK THROUGH WILL BE SCHEDULED UNTIL "AS-BUILT" PLANS HAVE BEEN SUBMITTED BY THE ENGINEER OR SURVEYOR FOR REVIEW. NO FINAL ACCEPTANCE SHALL BE ISSUED UNTIL "AS-BUILT" PLANS HAVE BEEN REVIEWED AND APPROVED BY THE CITY ENGINEER. UPON APPROVAL, THE OWNER SHALL PROVIDE TO THE CITY ONE SET OF MYLAR REPRODUCIBLE PLANS, TWO BLACKLINE COPIES, AND ONE DIGITAL COPY ON CD IN .TIF FORMAT.
9. LOCATION OF ALL VALVES MUST BE REFERENCED AT ALL TIMES BY THE CONTRACTOR DURING CONSTRUCTION.
10. NO CONSTRUCTION SHALL BE STARTED UNTIL ALL UNDERGROUND UTILITIES WITHIN THE ROADWAY ARE COMPLETED.
11. EXACT POINT OF MATCHING TERMINATION AND OVERLAY, IF NECESSARY, MAY BE DETERMINED IN THE FIELD BY THE ENGINEER.
12. NO JOB WILL BE CONSIDERED COMPLETE UNTIL ALL CURBS, PAVEMENT, AND SIDEWALKS HAVE BEEN SWEEPED CLEAN OF ALL DIRT AND DEBRIS.
13. THE CONTRACTOR SHALL KEEP SUITABLE EQUIPMENT ON HAND AT THE JOBSITE FOR MAINTAINING DUST CONTROL, AND SHALL CONTROL DUST AS REQUIRED BY THE SPECIFICATIONS.
14. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS FOR CLEANING TRUCKS AND/OR OTHER EQUIPMENT OF MUD PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN STREETS AND TAKE WHATEVER MEASURES ARE NECESSARY TO ENSURE THAT ALL ROADS ARE MAINTAINED IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.
15. DISPOSAL OF EXCESS MATERIAL WITHIN THE CITY LIMITS IS PROHIBITED. A USE PERMIT IS REQUIRED FOR DISPOSAL OR STOCKPILING OF MATERIAL WITHIN A RESIDENTIAL AREA.
16. STOCKPILING OF EXCAVATED MATERIAL SHALL NOT EXCEED A HEIGHT OF SIX (6) FEET ABOVE THE NATURAL GROUND ELEVATION.
17. THE SLOPES ON ALL SIDES OF STOCKPILES OF EXCAVATED MATERIAL SHALL NOT EXCEED A 1 TO 4 RATIO OF HEIGHT.
18. ALL CONTRACTORS SHALL CONTRACT FOR PRIVATE TRASH PICKUP.
19. ANY AND ALL DAMAGE TO EXISTING PUBLIC IMPROVEMENTS SHALL BE REPAIRED BY THE CONTRACTOR TO THE ENGINEER'S SATISFACTION PRIOR TO ISSUANCE OF FINAL PROJECT ACCEPTANCE.
20. CONSTRUCTION WATER IS AVAILABLE FROM THE CITY OF TOLLESON IN ACCORDANCE WITH THE CITY'S HYDRANT METER ISSUANCE POLICY AND UPON PAYMENT OF APPLICABLE FEES. THE CITY REQUIRES ALL CONSTRUCTION WATER TO BE DELIVERED THROUGH AN APPROVED WATER TOWER WITH AIR-GAP. A WATER TOWER SHALL BE PROVIDED ON OR NEAR THE SITE AT ALL TIMES THAT WATER FOR CONSTRUCTION IS REQUIRED. THE HYDRANT FROM WHICH CONSTRUCTION WATER IS TO BE DELIVERED SHALL BE DETERMINED BY THE CITY. CALL (623) 936-8500 FOR DETAILS.
21. NEW RIGHT OF WAY IS NEEDED FOR CONSTRUCTION. NEW RIGHT OF WAY WILL BE OBTAINED FOR ALL CONSTRUCTION WITHIN PROJECT LIMITS.

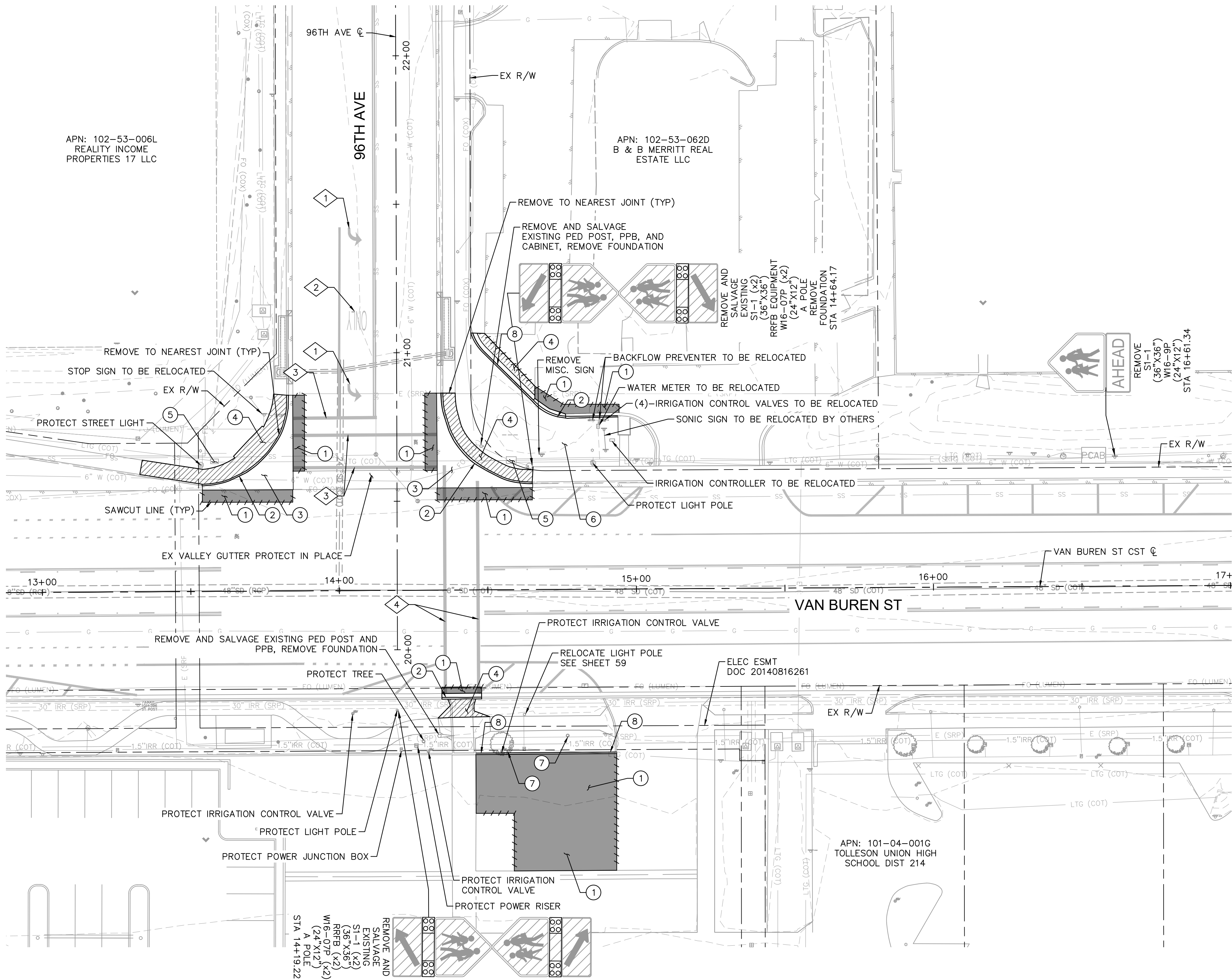
PAVEMENT MARKING AND SIGNING GENERAL NOTES:

1. THE ENGINEER SHALL BE NOTIFIED 48 HOURS PRIOR TO STARTING ANY SIGNING OR STRIPING WORK.
2. UNLESS OTHERWISE SPECIFIED, ALL PAVEMENT MARKING AND TRAFFIC CONTROL SIGNING INSTALLATIONS AND REMOVALS SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF TOLLESON AND AS SET FORTH IN THE ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) STANDARD DRAWINGS, DETAILS AND SPECIFICATIONS OR THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) LATEST EDITION, AS APPLICABLE.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT AND INSTALLATION OF THE PERMANENT PAVEMENT MARKINGS FOLLOWING CONTROL POINTS THAT HAVE BEEN SET NO MORE THAN 50 FEET APART ALONG THE LINES TO BE STRIPED. PAVEMENT MARKING DIMENSIONS ARE TO CENTER OF THE STRIPE FOR SINGLE LINE STRIPING, AND TO CENTER OF THE SPACE BETWEEN THE TWO LINES FOR DOUBLE LINE STRIPING. WHERE CURB AND GUTTER IS PRESENT, DIMENSIONS ARE TO THE BACK OF CURB.
4. UNLESS OTHERWISE DIRECTED, ALL FINAL LOCATION LANE STRIPING INCLUDING CROSSWALKS AND STOP BARS SHALL BE THERMOPLASTIC MATERIAL APPLIED AT A MINIMUM THICKNESS OF 90 MIL. ALL PAVEMENT SYMBOLS, ARROWS, AND LETTERING SHALL BE THERMOPLASTIC, TYPE I (PERMANENT) PREFORMED PAVEMENT MARKINGS. TEMPORARY PAVEMENT MARKINGS SHALL BE REFLECTORIZED TRAFFIC PAINT. TEMPORARY STRIPING OF A HALF STREET ROADWAY SHALL BE PAINT.
5. ALL SIGNS SHALL CONFORM TO THE (MUTCD) AND SHALL BE MADE FROM .080 INCH THICK ALUMINUM. SIGN POSTS AND EXTENSIONS SHALL BE GALVANIZED SQUARE PERFORATED STEEL TUBING PER CITY STANDARDS. HEIGHT REQUIREMENTS PER MUTCD.
6. ALL TRAFFIC CONTROL SIGN FACES SHALL BE CONSTRUCTED OF PRISMATIC LENS GRADE REFLECTIVE SHEETING SUCH AS 3M DIAMOND GRADE REFLECTIVE SHEET WITH 1170 PROTECTIVE OVERLAY MATERIAL, UNLESS OTHERWISE NOTED.
7. ALL SIGNS SHALL HAVE A MINIMUM CLEARANCE FROM EDGE OF SIGN TO THE FACE OF THE CURB OF AT LEAST TWO FEET; OR IF NO CURB EXISTS, IT SHALL BE AT LEAST 10 FEET FROM THE EDGE OF THE PAVEMENT. ALL SIGNS SHALL BE PLACED SO AS TO NOT INTERFERE WITH PEDESTRIAN MOVEMENT.
8. ANY TRAFFIC CONTROL SIGNAGE, INCLUDING STREET NAME SIGNS, WHICH MAY BE LOCATED WITHIN 10 FEET OF AN EXISTING STREET LIGHT POLE, MAY BE PROPERLY MOUNTED TO THE POLE WITH STEEL BANDS, WITH APPROVAL FROM THE CITY. SIGN LOCATIONS AND OFFSETS MAY BE ADJUSTED BY THE CITY TO IMPROVE VISIBILITY.
9. ANY EXISTING SIGNAGE THAT IS REQUIRED TO BE RELOCATED BY THE CONTRACTOR SHALL BE REMOVED, PROTECTED AND STORED FOR REINSTALLATION BY THE CONTRACTOR. DAMAGED SIGNAGE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY EXISTING SIGNS REQUIRED TO BE PERMANENTLY REMOVED BY THE CONTRACTOR SHALL BE SALVAGED FOR RETURN TO THE CITY.
10. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS AND STRIPING IN CONFLICT WITH THE FINAL STRIPING PLAN, BY ULTRA HIGH PRESSURE WATER (36,000 PSI), OR BY SLURRY SEAL PER MAG SPECIFICATION. ALL REMOVAL METHODS SHALL BE DONE IN CONFORMANCE WITH E.P.A. REQUIREMENTS. IF THE REMOVAL OF STRIPING CAUSES A DEPRESSION OF 1/8 INCH OR GREATER IN THE PAVEMENT SURFACE, THE CONTRACTOR SHALL FILL AND SLURRY SEAL THE AREA PER MAG STANDARD SPECIFICATIONS 713 AND 715, TYPE II.
11. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE TO THE SATISFACTION OF THE CITY BY POWER BROOM, STREET SWEEPING, AIR JET BLOWING AND/OR WATER JET/TRUCK PRIOR TO THE PLACEMENT OF ALL PAVEMENT MARKINGS. THE ROAD PAVEMENT SURFACE SHALL BE ABSOLUTELY DRY. THE AIR AND PAVEMENT TEMPERATURES SHALL NOT BE LESS THAN 55° F AND 61° F FOR THE PLACEMENT OF THERMOPLASTIC MARKING AND TYPE I MARKING TAPE, RESPECTIVELY.
12. THE CONTRACTOR SHALL MARK THE LOCATIONS OF THE PAVEMENT MARKINGS AND SIGNING AND VERIFY WITH THE ENGINEER BEFORE THE APPLICATION OF THE PAVEMENT MARKINGS AND INSTALLATION OF THE SIGNS.
13. THE CONTRACTOR SHALL CONFIRM THE POST LENGTHS OF SIGNS WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE SIGNING PLANS BASED ON FIELD CONDITIONS.
14. THE PLACEMENT OF THE SIGN FOUNDATIONS SHALL BE ADJUSTED BY THE CONTRACTOR PER BLUE STAKE AND APPROVED BY THE ENGINEER.
15. ALL PAVEMENT MARKINGS AND SIGNING SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

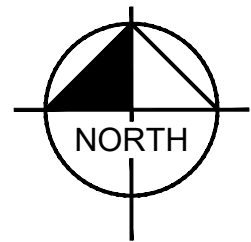
ENGINEER'S NOTES:

1. THE QUANTITIES AND SITE CONDITIONS DEPICTED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERRORS AND OMISSIONS. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THESE PLANS.
2. A REASONABLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONSTRUCTION AREA. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL CALL 48-HOURS IN ADVANCE FOR BLUE STAKE (602-263-1100) PRIOR TO ANY EXCAVATION.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELOCATION WORK.
4. THE CONTRACTOR IS TO VERIFY THE LOCATION AND THE ELEVATIONS OF ALL EXISTING UTILITIES AT POINT OF TIE-IN PRIOR TO COMMENCING ANY NEW CONSTRUCTION. SHOULD ANY LOCATION OR ELEVATION DIFFER FROM THAT SHOWN ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE CITY ENGINEER OR HIS REPRESENTATIVE.
5. CONTRACTOR TO VERIFY AND COORDINATE ALL DIMENSIONS BEFORE STARTING WORK, REPORT DISCREPANCIES TO CITY ENGINEER OR HIS REPRESENTATIVE.
6. COORDINATION BETWEEN ALL PARTIES IS AN ESSENTIAL PART OF THE CONTRACT.
7. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WORK WITH WEATHER AND TRAFFIC CONDITIONS. THE PROJECT SITE MAY BE SUBJECT TO FLOODING AND ASSOCIATED HAZARDS.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL POTHOLE FOR ALL UTILITIES THAT ARE IN POTENTIAL CONFLICT AND FOR UTILITIES WHERE CONDUIT INSTALLATION CROSS EXISTING FACILITIES.
9. ALL STATIONING AND MEASUREMENT IS TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 5	TOTAL SHEETS 70	RECORD DRAWING
	DESIGN	SED	09/26		MILEPOST			LOCATION VAN BUREN AT 96TH AVE, TOLLESON				
	DRAWN	SED	09/26		 © 2028 KIMLEY-HORN AND ASSOCIATES, INC.	STRUCTURE NO.	TRACS NO. T0619 01C		5 OF 70			
	CHECKED	AJ	09/26	GENERAL NOTES								



PLAN
SCALE: 1" = 20'-0"



PAVEMENT MARKING REMOVALS

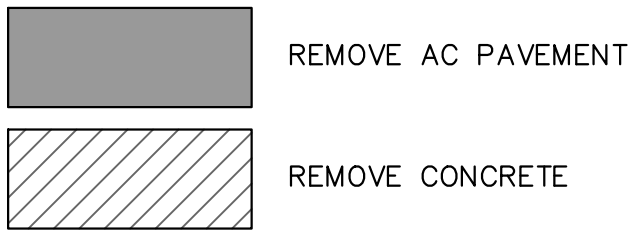
ITEM	DESCRIPTION	UNIT	QTY
1	ARROW PAVEMENT SYMBOLS	EA	2
2	"ONLY" PAVEMENT LEGEND	EA	1
3	12" SOLID WHITE	LF	110*
4	12" SOLID YELLOW	LF	140*

*QUANTITY NOT MEASURED IN
4" EQUIVALENTS

REMOVAL NOTES

ITEM	DESCRIPTION	UNIT	QTY
1	SAWCUT AND REMOVE AC PAVEMENT	SY	242
2	REMOVE CONCRETE CURB AND GUTTER	LF	138
3	REMOVE CONCRETE VALLEY GUTTER & APRON	SF	569
4	REMOVE CONCRETE SIDEWALKS, DRIVEWAYS, RAMPS, AND SLABS	SF	659
5	EXISTING CITY LIGHTING ELECTRICAL JUNCTION BOX, TO BE REMOVED AND RELOCATED	EA	2
6	RESTORE LANDSCAPE AND IRRIGATION	LS	1
7	REMOVE TREE	EA	2
8	REMOVE CONCRETE SINGLE CURB	LF	78

LEGEND



NOTES:

1. REMOVE ALL CONCRETE SIDEWALKS, CURB, VALLEY GUTTERS, APRONS, AND CURB RAMPS TO THE NEAREST EXISTING JOINT.
2. SEE SHEET 59 FOR RELOCATED JUNCTION BOX LOCATIONS.
3. COST OF PAVEMENT SAWCUT IS INCLUDED IN ITEM 2020029 - REMOVAL OF ASPHALTIC CONCRETE PAVEMENT.
4. COST OF JUNCTION BOX RELOCATION IS INCLUDED IN ITEM 7320480 - RELOCATE EXISTING PULL BOXES.
5. COST OF LIGHT POLE RELOCATION IS INCLUDED IN ITEM 2020400 - REMOVE AND RELOCATE (STREET LIGHT POLE AND MAST ARM).
6. COST OF IRRIGATION CONTROLLER AND VALVE RELOCATION IS INCLUDED IN ITEM 9240052 - MISCELLANEOUS WORK (LANDSCAPE AND IRRIGATION RESTORATION).
7. COST OF WATER METER RELOCATION IS INCLUDED IN ITEMS 2020156 - REMOVE (WATER METER BOX AND COVER) AND 8080633 - WATER METER (FOR 1" SERVICE).
8. COST OF PEDESTRIAN CROSSING POST AND PUSH BUTTON REMOVAL IS INCLUDED IN ITEM 2020057 - REMOVE AND SALVAGE (EXISTING PEDESTRIAN CROSSING POST & PEDESTRIAN PUSH BUTTON).
9. COST OF STOP SIGN REMOVAL AND RELOCATION IS INCLUDED IN ITEM 7370309 - REMOVE AND RELOCATE (STOP SIGN).



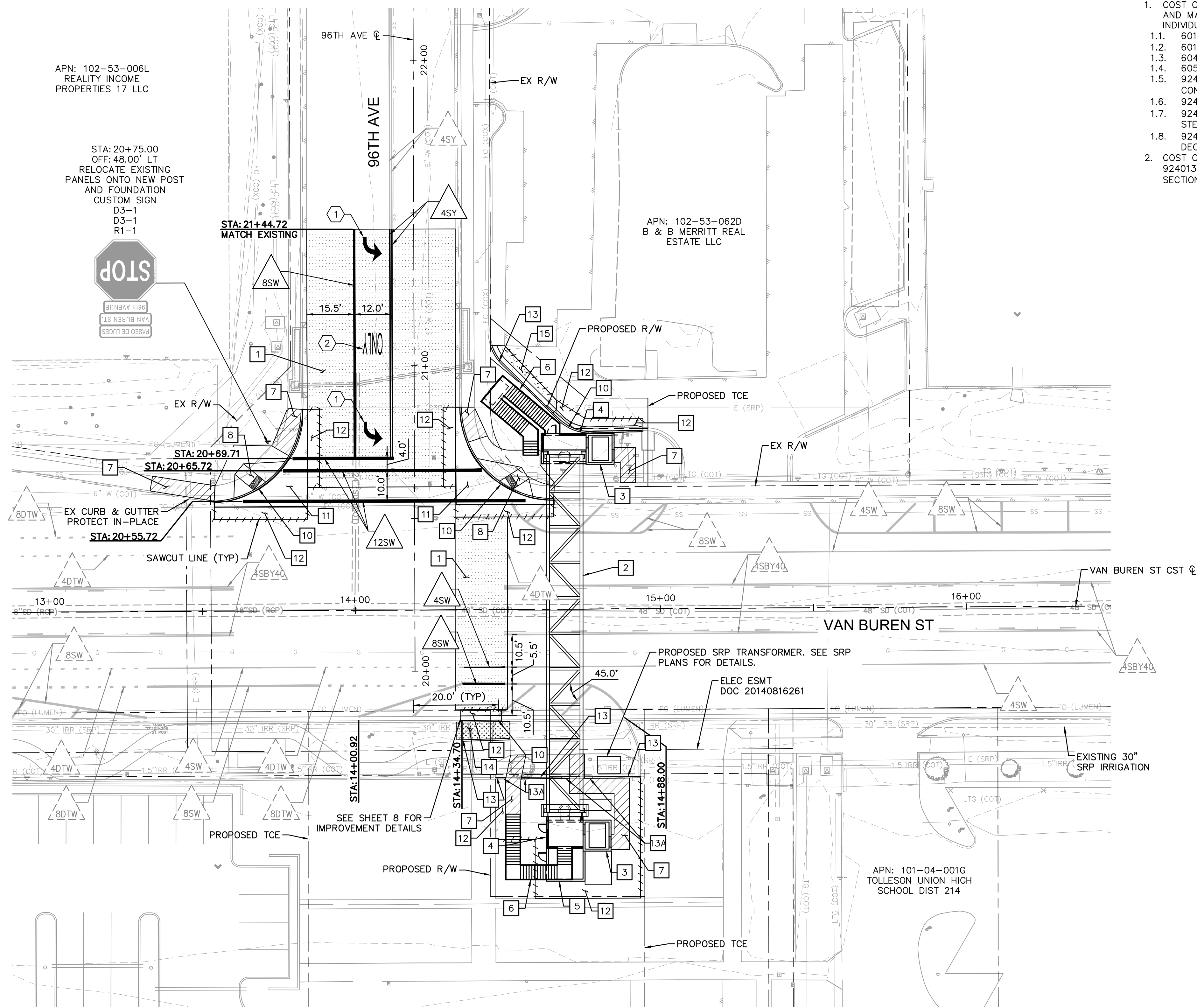
DESIGN	NAME	DATE
DRAWN	SED	09/26
CHECKED	SED	09/26
	AJ	09/26

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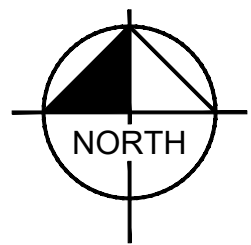
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

REMOVALS

ROUTE	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
-	ARIZ.	0000 MA TOL	CDS TOL-Q(200)T	6	70	
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. RM01
STRUCTURE NO.	TRACS NO. T0619 01C					6 OF 70



PLAN
SCALE: 1" = 20'-0"



NOTES

- COST OF MASONRY ELEVATOR SHAFT, MASONRY MACHINE ROOM, AND MASONRY ELECTRICAL ROOM IS INCLUDED IN BID ITEMS FOR INDIVIDUAL MATERIALS, INCLUDING:
 - 6010003 - STRUCTURAL CONCRETE (CLASS S)(F'c = 3,500)
 - 6010005 - STRUCTURAL CONCRETE (CLASS S)(F'c = 4,000)
 - 6040001 - STRUCTURAL STEEL
 - 6050002 - REINFORCING STEEL
 - 9240038 - MISCELLANEOUS WORK (FULLY GROUTED CONCRETE MASONRY UNIT)
 - 9240055 - MISCELLANEOUS WORK (WALL AND ROOF FINISHES)
 - 9240117 - MISCELLANEOUS WORK (1½' X 20 GA COMPOSITE STEEL FLOOR DECK)
 - 9240118 - MISCELLANEOUS WORK (1½' X 20 GA STEEL ROOF DECK)
- COST OF PAVEMENT RECONSTRUCTION IS INCLUDED IN ITEM 9240139 - MISCELLANEOUS WORK (MATCH EXISTING PAVEMENT SECTION)

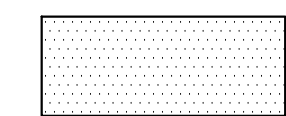
PAVEMENT MARKING LEGEND

ITEM	DESCRIPTION	UNIT	QTY
	EXISTING 4" SOLID YELLOW LINE		
	4" BROKEN YELLOW LINE WITH A 10' LINE SEGMENT AND A 30' GAP WITH TYPE 'D' RPM's AT 40' SPACING		
	EXISTING 4" SOLID YELLOW LINE		
	EXISTING 4" SOLID WHITE LINE		
	EXISTING 8" SOLID WHITE LINE		
	EXISTING 4" DOTTED WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP		
	EXISTING 8" DOTTED WHITE LINE WITH A 2' LINE SEGMENT AND A 4' GAP		
	4" SOLID YELLOW LINE	LF	150
	4" SOLID WHITE LINE	LF	20
	8" SOLID WHITE LINE	LF	95*
	12" SOLID WHITE LINE	LF	195*
	*QUANTITY NOT MEASURED IN 4" EQUIVALENTS		
	LEFT TURN ARROW PAVEMENT MARKING SYMBOL PER ADOT STD. DWG. M-10	EA	2
	'ONLY' PAVEMENT MARKING LEGEND PER ADOT STD. DWG. M-6	EA	1

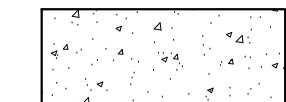
CONSTRUCTION NOTES

ITEM	DESCRIPTION	UNIT	QTY
	SLURRY SEAL, TYPE II	SY	552
	PREFABRICATED STEEL TRUSS BRIDGE	EA	1
	MASONRY ELEVATOR SHAFT	EA	2
	MASONRY MACHINE ROOM	EA	2
	MASONRY ELECTRICAL ROOM	EA	1
	STEEL PAN STAIRS	EA	2
	CONCRETE SIDEWALK, MAG DET 230	SF	652
	SIDEWALK RAMP, PER MAG DET 237-1, MODIFIED PER SHEET 8	SF	577
	CONCRETE CURB & GUTTER, MAG DET 220-1, TYPE A, H=6"	LF	138
	CONCRETE VALLEY GUTTER APRON, MAG DET 240	SF	583
	NEW AC PAVEMENT SHALL MATCH EXISTING PAVEMENT STRUCTURAL SECTION	SY	242
	SINGLE CURB, MAG DET 222, TYPE A	LF	75
	SINGLE CURB TERMINATION, MAG DET 222, TYPE A	NPI	-
	DECOMPOSED GRANITE, 2" THICK	SY	11
	PORTLAND CEMENT CONCRETE PAVEMENT (7")	SY	8

LEGEND



SLURRY SEAL, TYPE II



PCCP, 7" THICK



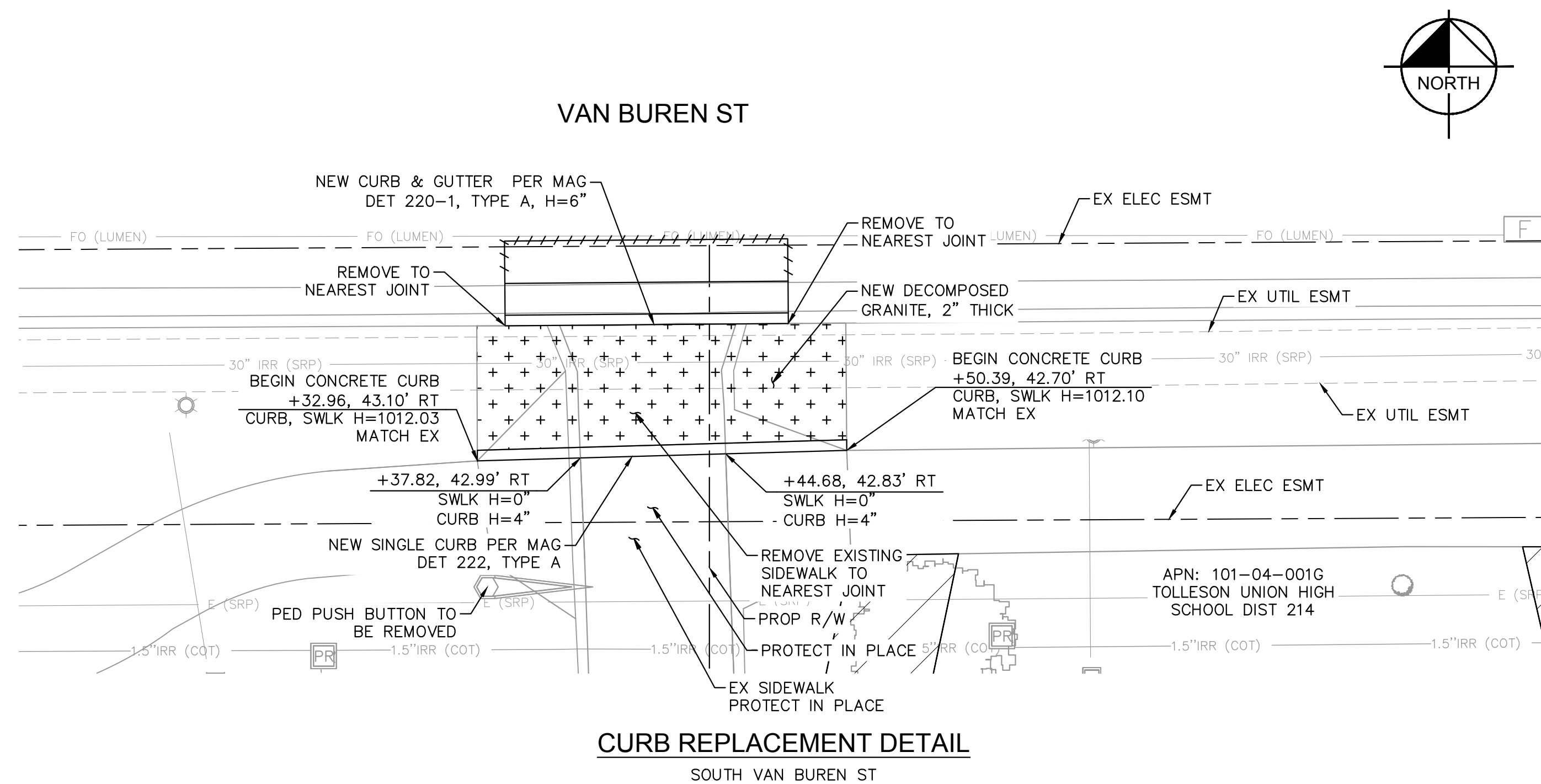
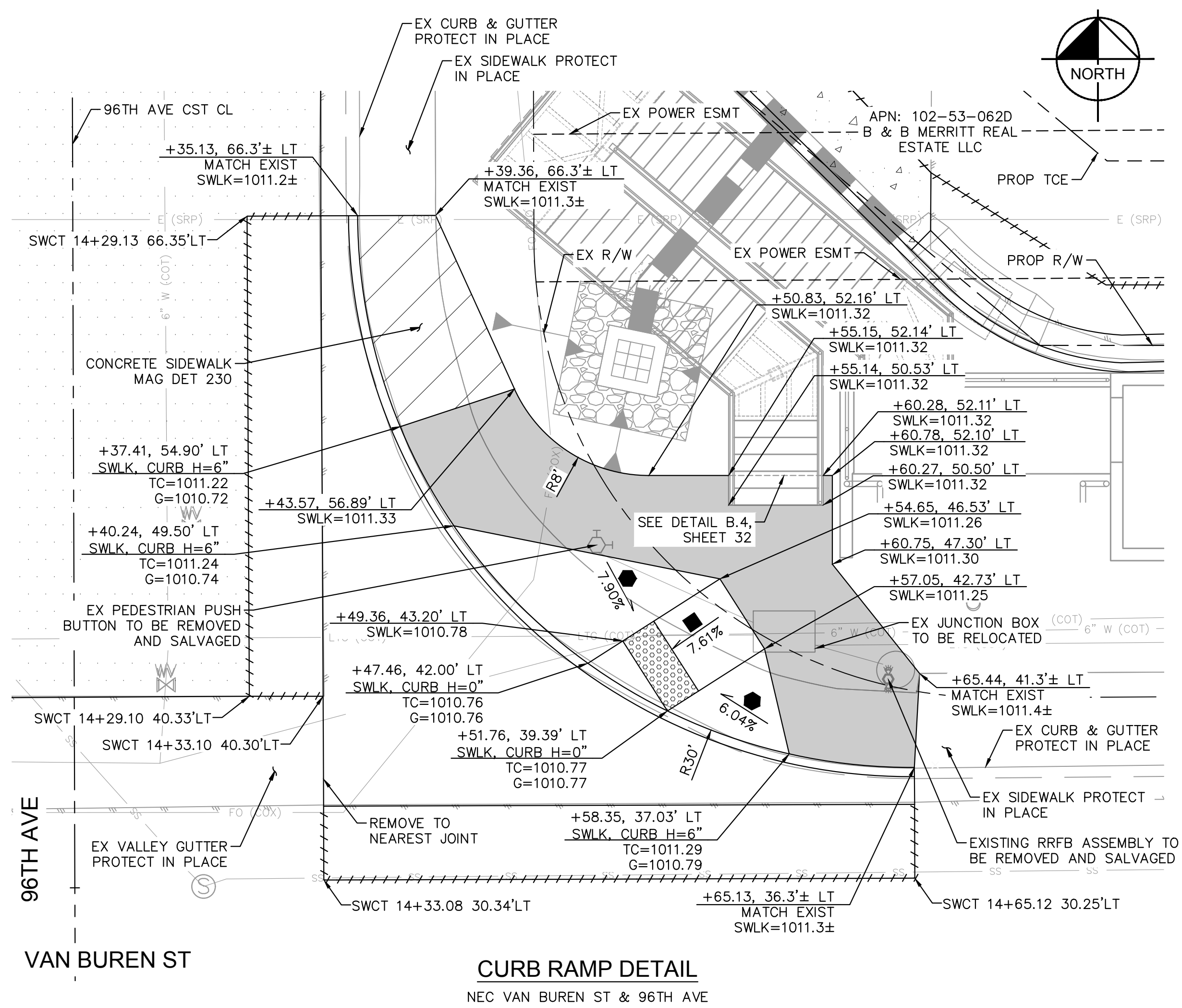
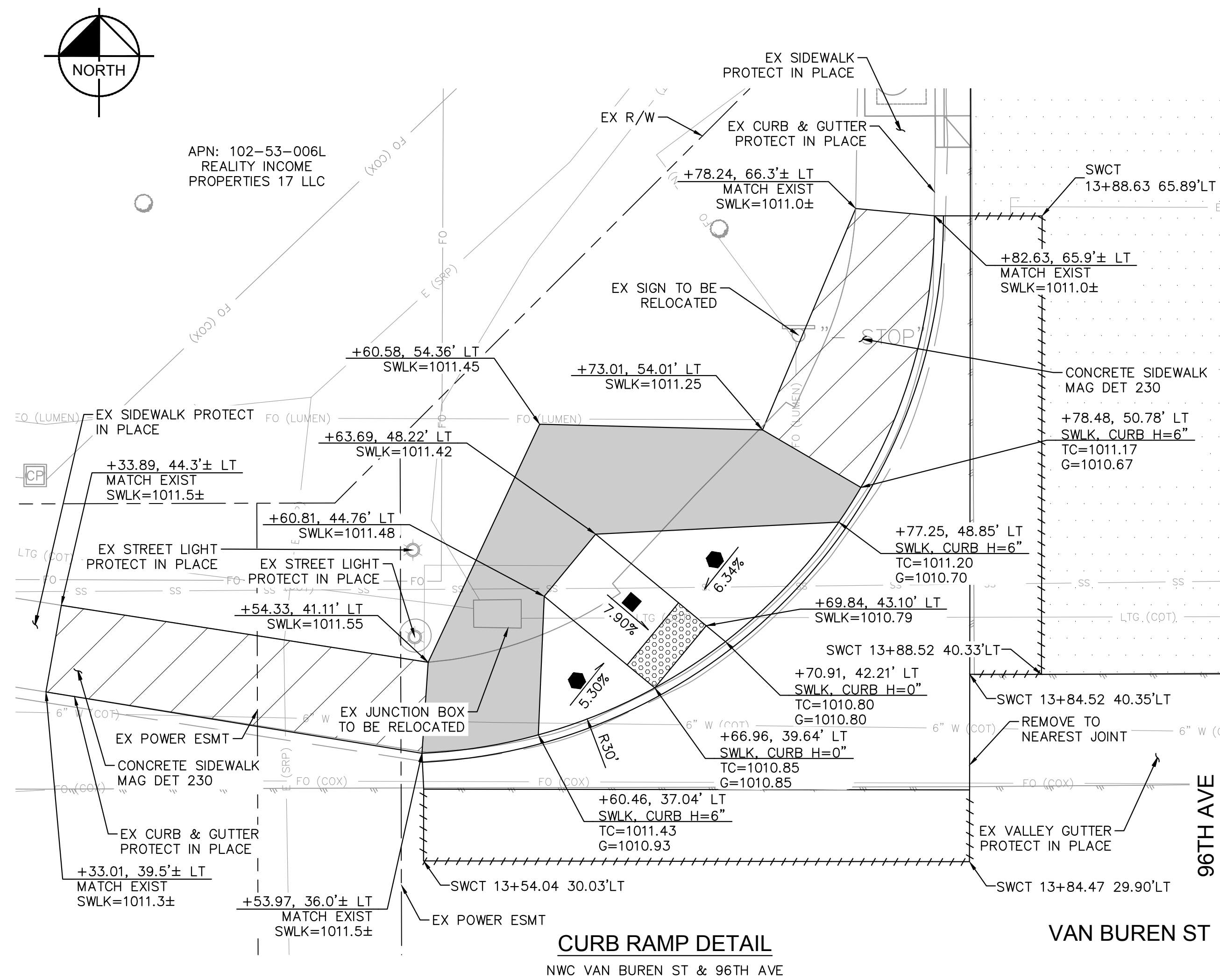
	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	AJ	09/26

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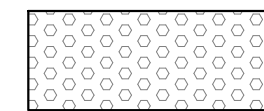
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

SITE PLAN

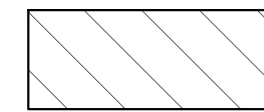
ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	0000 MA TOL	CDS TOL-Q(200)T	7	70	
STRUCTURE NO.	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. SP01	
	TRACS NO. T0619 01C					7 OF 70	



LEGEND



NEW DETECTABLE WARNING PANEL



SIDEWALK, PER MAG 230



LANDING AREA
(2% MAXIMUM SLOPE IN ALL
DIRECTIONS)



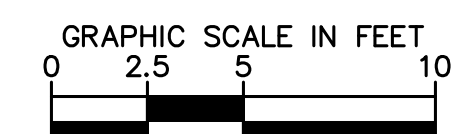
RAMP RUNNING SLOPE
NOT TO EXCEED 8.3%

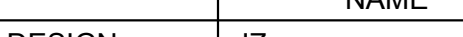


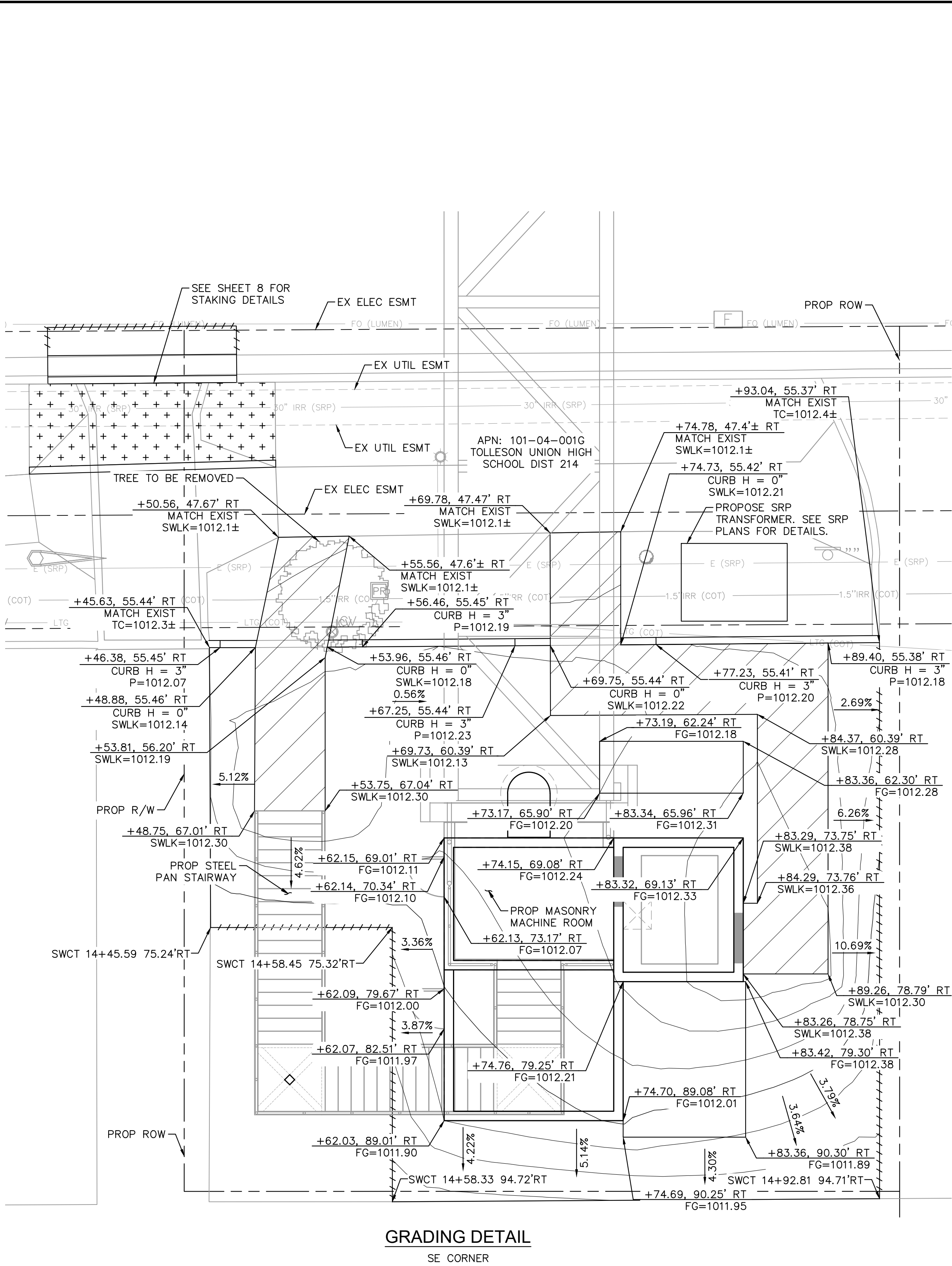
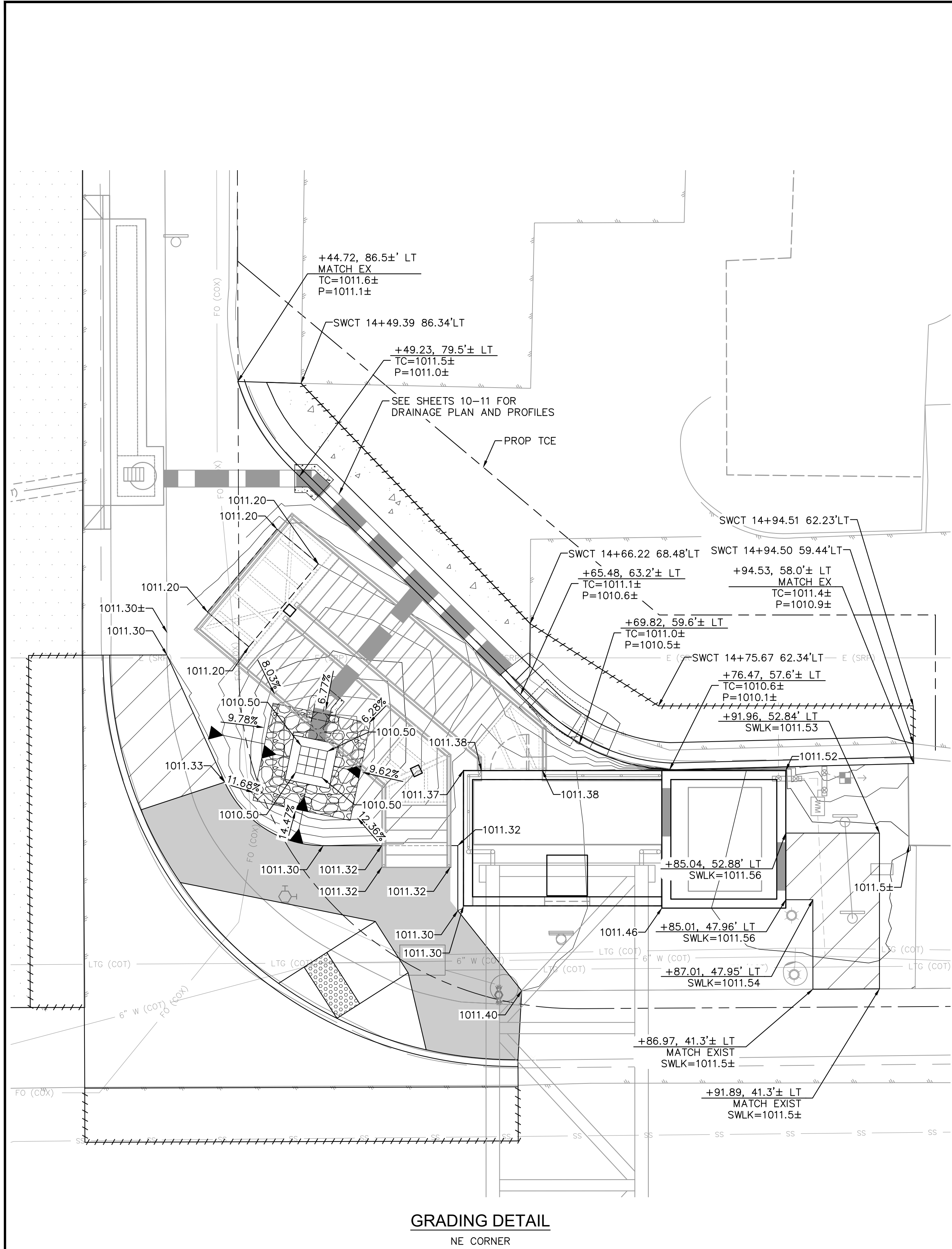
RAMP WING SLOPES
NOT TO EXCEED 10%

NOTES:

1. ALL CURB OR CURB AND GUTTER CALLOUTS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL STATION AND OFFSETS ARE IN REFERENCE TO THE VAN BUREN STREET CONST & UNLESS OTHERWISE NOTED.
3. CURB HEIGHTS (H="X") ARE MEASURED RELATIVE TO THE PROPOSED GUTTER ELEVATION AT THE CONSTRUCTION JOINT.
4. UNLESS OTHERWISE MODIFIED ON THIS SHEET, CONCRETE SIDEWALK RAMPS SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE REFERENCE DETAILS CALLED OUT IN THESE PLANS.
5. DETECTABLE WARNING PANELS SHOULD BE INSTALLED IN ACCORDANCE WITH MAG SECTION 340. THE MEASUREMENT AND INSTALLATION OF DETECTABLE WARNING PANELS ARE INCLUDED IN THE MEASUREMENT AND INSTALLATION OF THE CORRESPONDING RAMP AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR DETECTABLE WARNING PANEL INSTALLATION.
6. ALL CONCRETE REMOVAL SHALL BE SAWCUT OR REMOVED TO THE NEAREST JOINT. ANY DAMAGED CONCRETE PANELING WILL BE REMOVED OR REPLACED TO A LIKE OR BETTER CONDITION, AT NO ADDITIONAL COST TO THE CITY.
7. SIDEWALK CROSS SLOPES SHALL NOT EXCEED 1.75%, AND SIDEWALK RUNNING SLOPES SHALL NOT EXCEED 4.0%.
8. COST OF JUNCTION BOX RELOCATION IS INCLUDED IN ITEM 7320480 – RELOCATE EXISTING PULL BOXES.



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	JZ	09/26		MILEPOST			0000 MA TOL	CDS TOL-0(200)T	8	70	
	DRAWN	JZ	09/26			STRUCTURE NO.	LOCATION VAN BUREN AT 96TH AVE, TOLLESON DWG NO. SW01					
	CHECKED	BRS	09/26	TRACS NO. T0619 01C 8 OF 70								



LEGEND

- NEW DETECTABLE WARNING PANEL
- SIDEWALK, PER MAG 230
- LANDING AREA (2% MAXIMUM SLOPE IN ALL DIRECTIONS)
- RAMP RUNNING SLOPE NOT TO EXCEED 8.3%
- RAMP WING SLOPES NOT TO EXCEED 10%

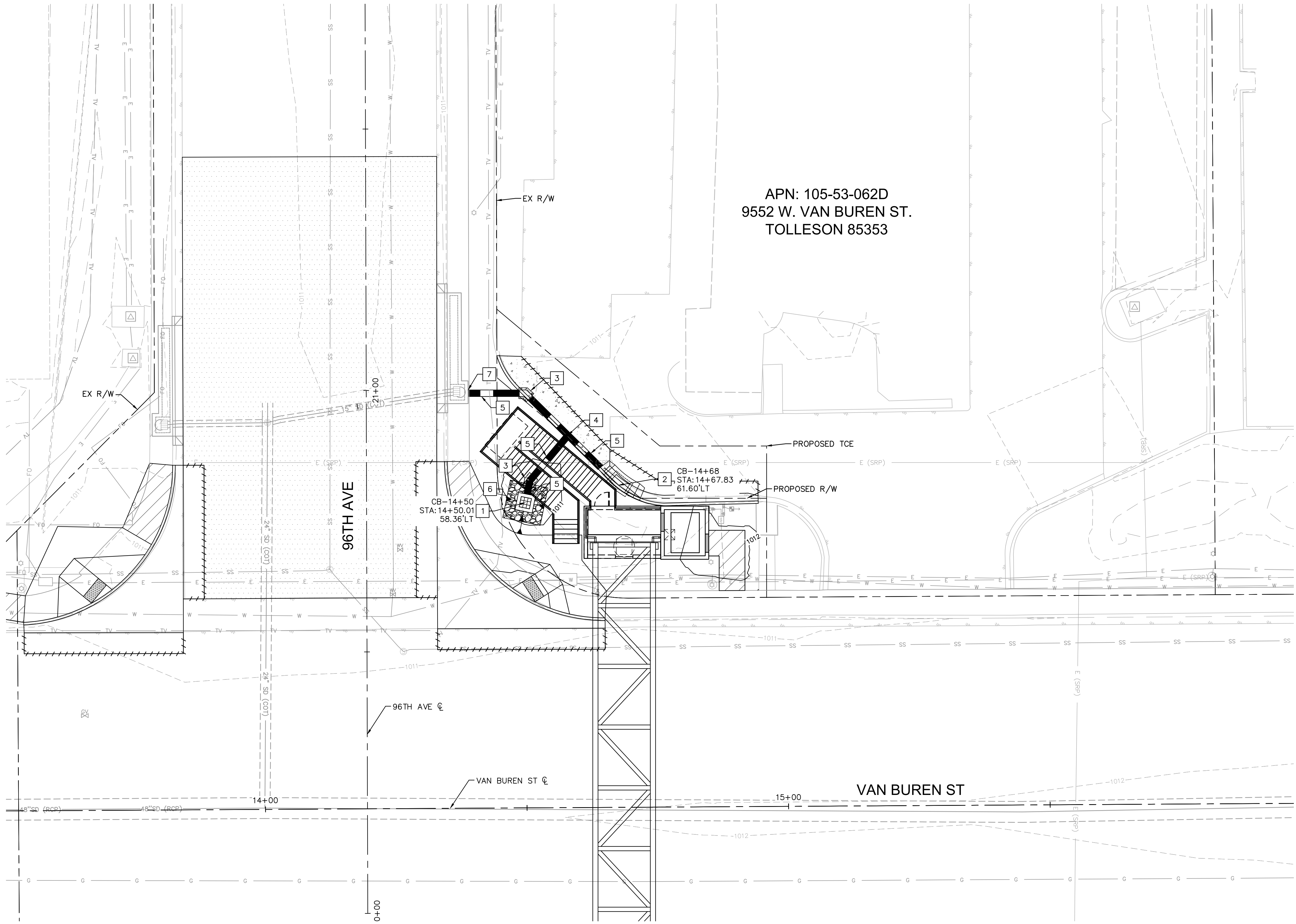
NOTES:

- ALL CURB OR CURB AND GUTTER CALLOUTS ARE MEASURED TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
- ALL STATION AND OFFSETS ARE IN REFERENCE TO THE VAN BUREN STREET CONST C UNLESS OTHERWISE NOTED.
- CURB HEIGHTS (H=X") ARE MEASURED RELATIVE TO THE PROPOSED GUTTER ELEVATION AT THE CONSTRUCTION JOINT.
- UNLESS OTHERWISE MODIFIED ON THIS SHEET, CONCRETE SIDEWALK RAMPS SHOULD BE CONSTRUCTED IN ACCORDANCE WITH THE REFERENCE DETAILS CALLED OUT IN THESE PLANS.
- DETECTABLE WARNING PANELS SHOULD BE INSTALLED IN ACCORDANCE WITH MAG SECTION 340. THE MEASUREMENT AND INSTALLATION OF DETECTABLE WARNING PANELS ARE INCLUDED IN THE MEASUREMENT AND INSTALLATION OF THE CORRESPONDING RAMP AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE FOR DETECTABLE WARNING PANEL INSTALLATION.
- ALL CONCRETE REMOVAL SHALL BE SAWCUT OR REMOVED TO THE NEAREST JOINT. ANY DAMAGED CONCRETE PANELING WILL BE REMOVED OR REPLACED TO A LIKE OR BETTER CONDITION, AT NO ADDITIONAL COST TO THE CITY.
- SIDEWALK CROSS SLOPES SHALL NOT EXCEED 1.75%, AND SIDEWALK RUNNING SLOPES SHALL NOT EXCEED 4.0%

GRAPHIC SCALE IN FEET

0 2.5 5 10

	NAME		DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING	
	DESIGN	JZ	09/26					0000 MA TOL	CDS TOL-Q(200)T	9	70		
	DRAWN	LL	09/26		SIDEWALK STAKING SHEET	MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						
	CHECKED	BRS	09/26	STRUCTURE NO.		TRACS NO. T0619 01C							9 OF 70



APN: 105-53-062D
9552 W. VAN BUREN ST.
TOLLESON 85353

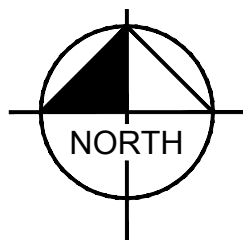
DRAINAGE NOTES

ITEM	DESCRIPTION	UNIT	QTY
1	CATCH BASIN PER MAG STD DET 535 TYPE 'F' - WITHOUT CURB	1	EA
2	CATCH BASIN PER MAG STD DET 534-1 & 2 TYPE E (COMBO INLET)	1	EA
3	CONCRETE PIPE COLLAR PER ADOT STD DET C-13.80 (NPI)	2	EA
4	STORM DRAIN LATERAL CONNECTION 15"X15"X15" TEE (NPI)	1	EA
5	15" RGRCP STORM DRAIN, CLASS III	54	LF
6	PLACED RIPRAP D50=6" TH=1'	3	CY
7	EXISTING CATCH BASIN PIPE PENETRATION (NPI)	1	EA

NOTES:

- COST OF CONCRETE PIPE COLLAR IS INCLUDED IN ITEM 5011008 - PIPE, REINFORCED CONCRETE, CLASS III, 15".
- COST OF STORM DRAIN LATERAL CONNECTION IS INCLUDED IN ITEM 5011008 - PIPE, REINFORCED CONCRETE, CLASS III, 15".
- COST OF CATCH BASIN PIPE PENETRATION IS INCLUDED IN ITEM 5011008 - PIPE, REINFORCED CONCRETE, CLASS III, 15".

SCALE: 1" = 10'-0"



	NAME	DATE
DESIGN	ER	09/26
DRAWN	ER	09/26
CHECKED	ATC	09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

DRAINAGE PLANS

ROUTE
-
MILEPOST
STRUCTURE NO.

F.H.W.A. Arizona Division

STATE
ARIZ.

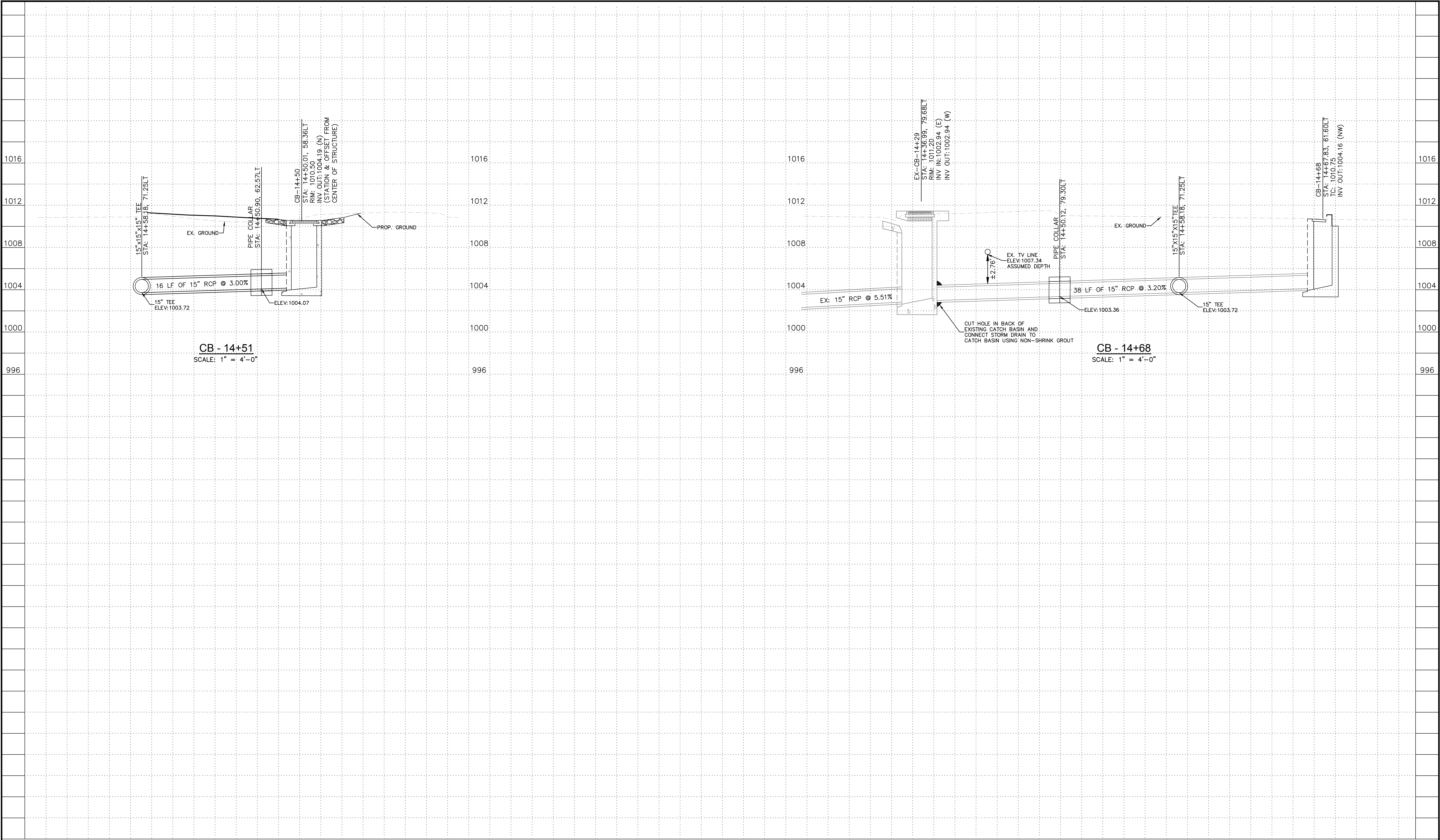
PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
0000 MA TOL	CDS TOL-Q(200)T	10	70	

LOCATION VAN BUREN AT 96TH AVE, TOLLESON

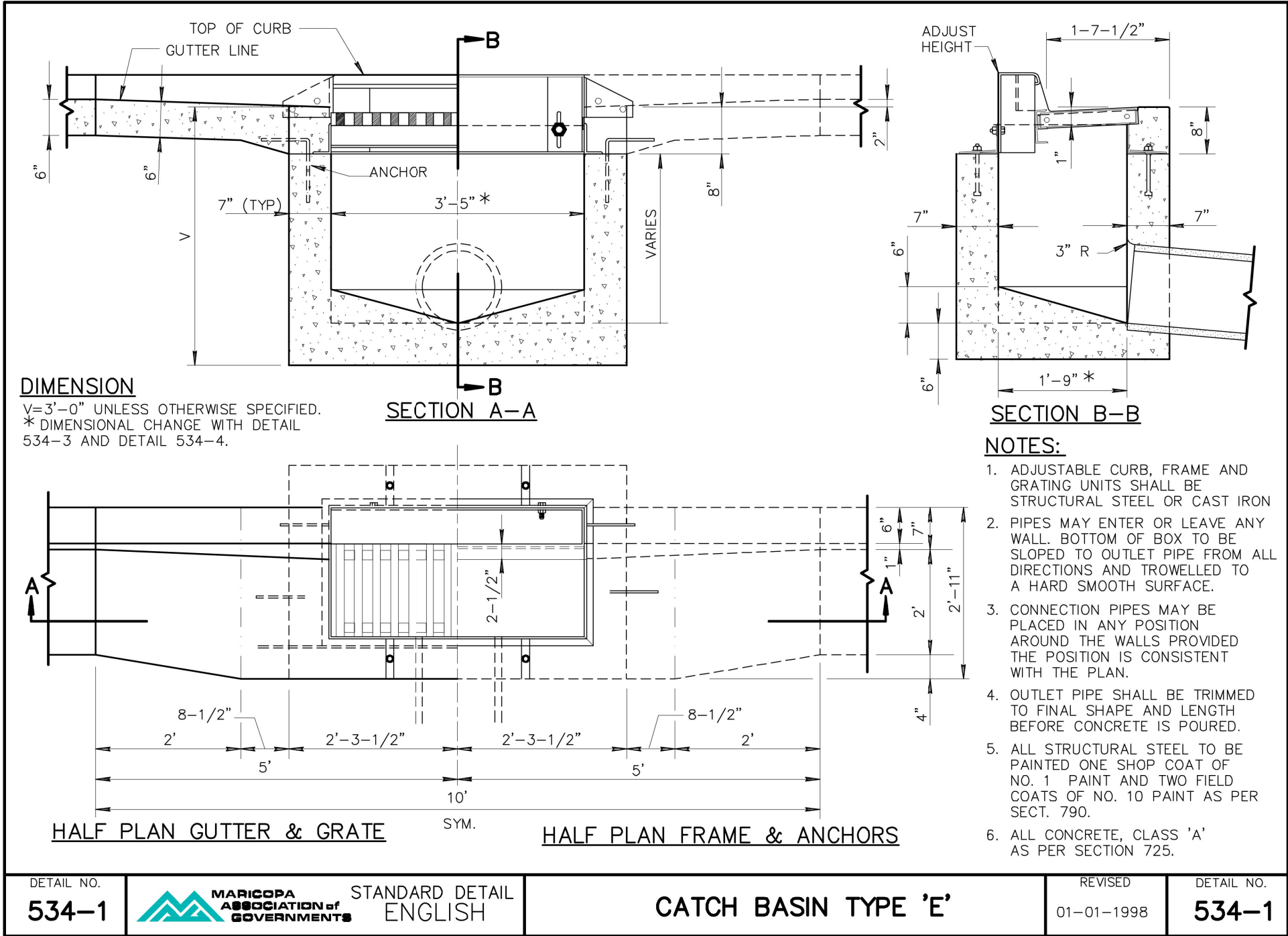
DWG NO. DR01

TRACS NO. T0619 01C

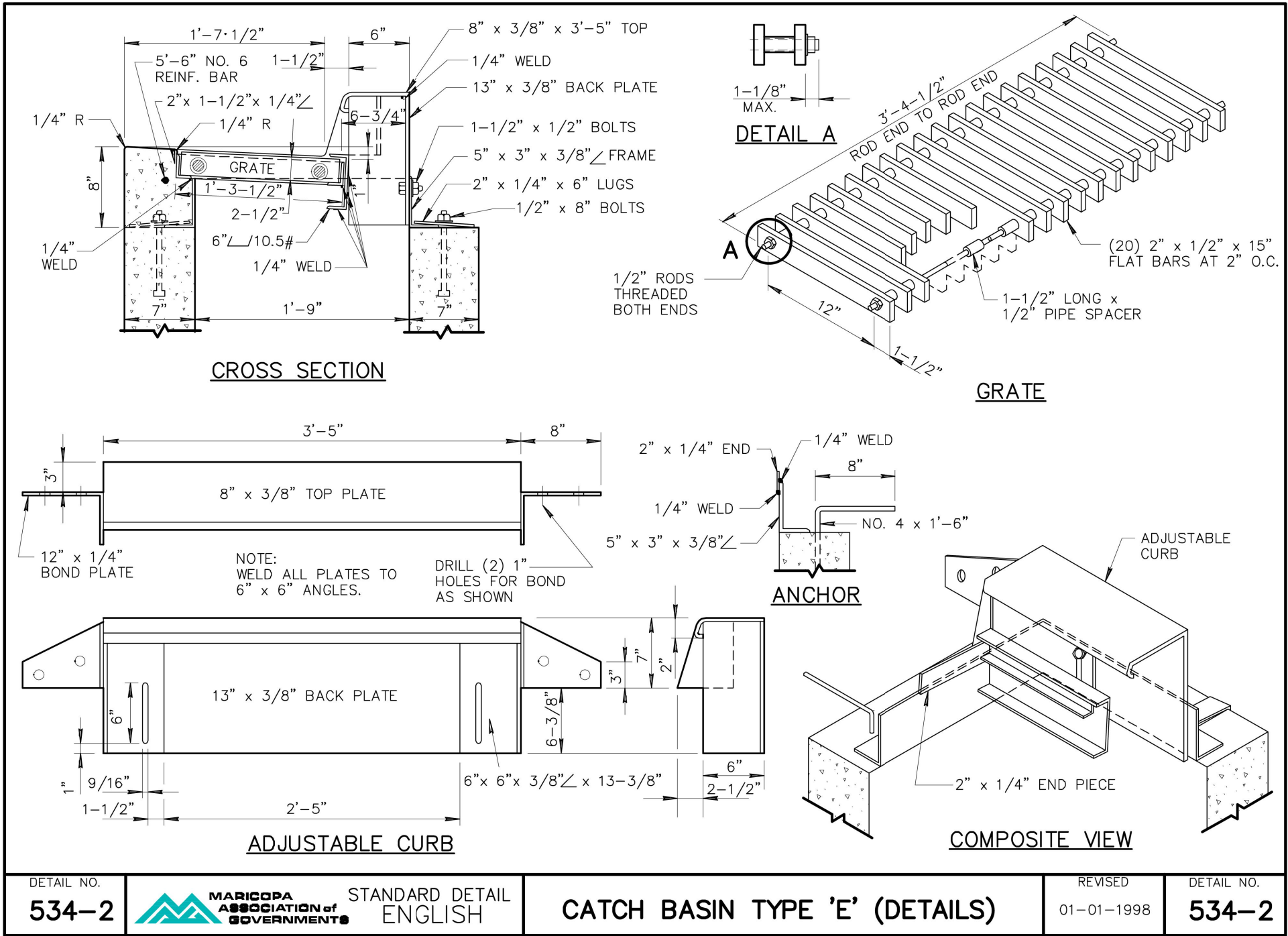
10 OF 70



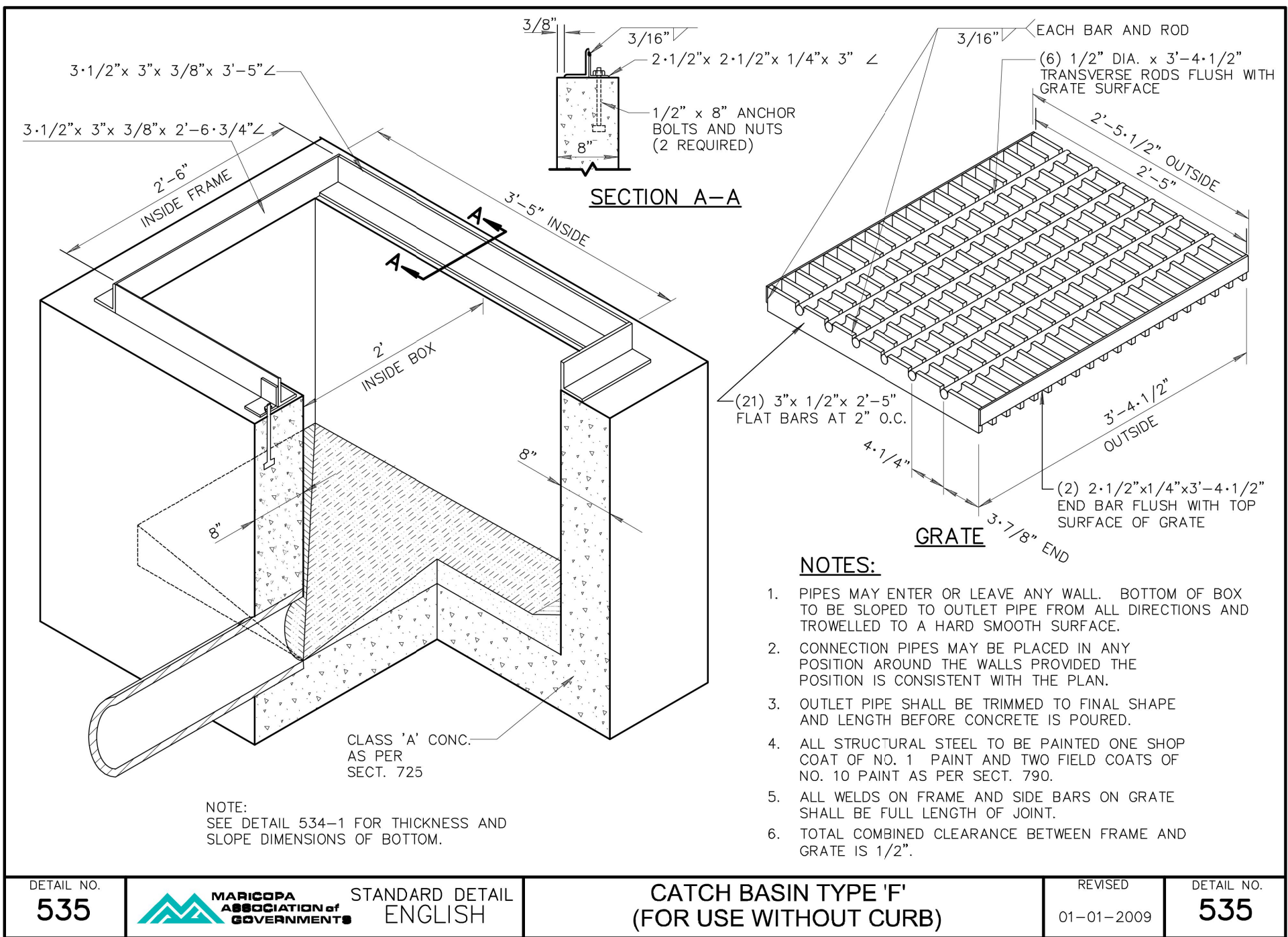
	NAME		DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	ER	09/26					0000 MA TOL	CDS TOL-0(200)T	11	70	
	DRAWN	ER	09/26									
	CHECKED	ATC	09/26									
	Kimley»Horn © 2025 KIMLEY-HORN AND ASSOCIATES, INC.			DRAINAGE PROFILES		MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					
					STRUCTURE NO.	TRACS NO. T0619 01C		11 OF 77				



SCALE: NOT TO SCALE

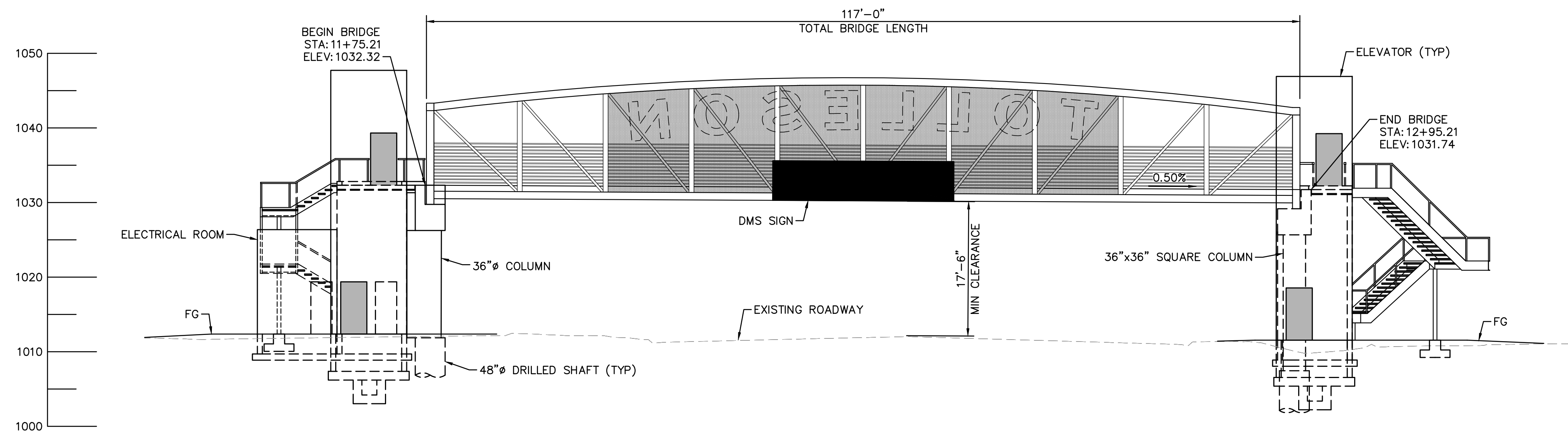
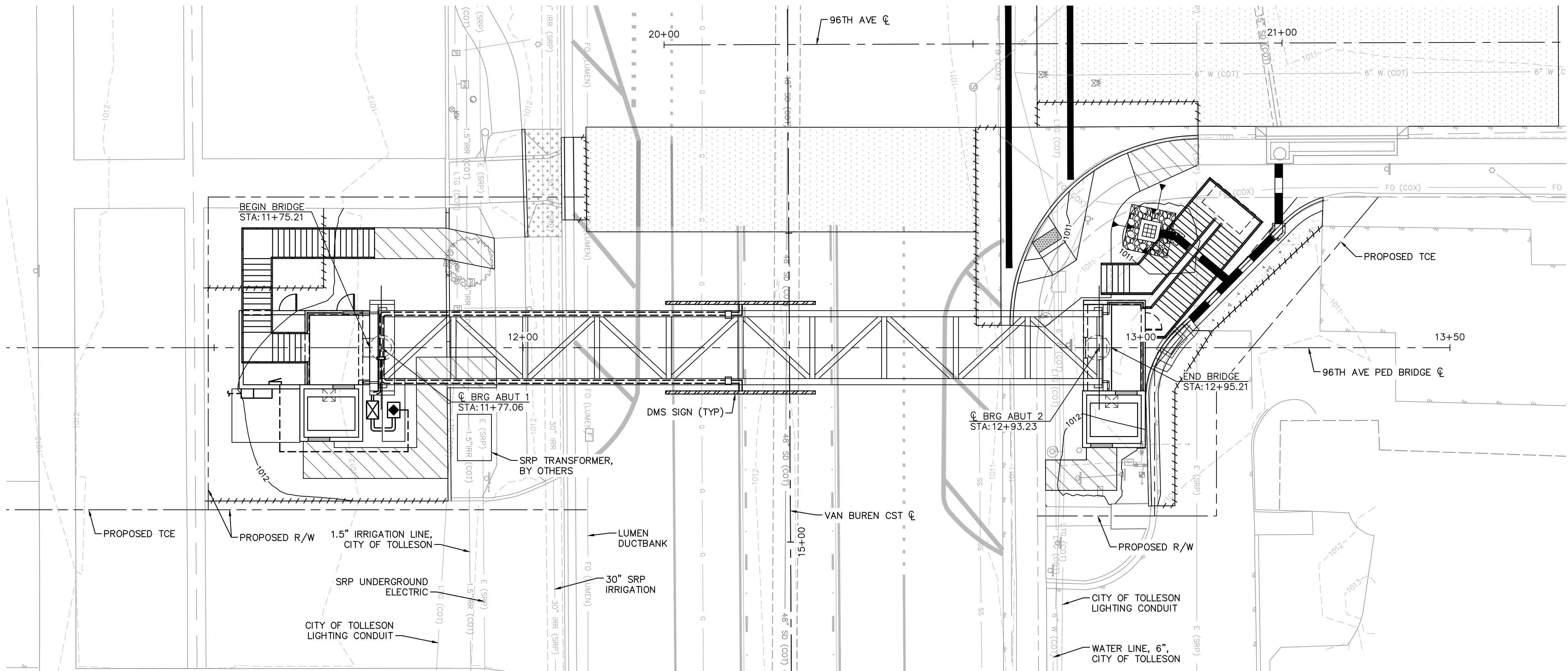


SCALE: NOT TO SCALE



SCALE: NOT TO SCALE

	DESIGN	ER	09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE	-	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	0000 MA TOL	FEDERAL ID NO.	CDS TOL-0(200)T	SHEET NO.	12	TOTAL SHEETS	70	RECORD DRAWING	
	DRAWN	ER	09/26		MILEPOST														
	CHECKED	AC	09/26		STRUCTURE NO.		LOCATION	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. DR03					
	 © 2025 KIMLEY-HORN AND ASSOCIATES, INC.				DRAINAGE DETAILS		TRACS NO.		T0619 01C						12 OF 70				



	NAME	DATE
DESIGN	JOT	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

PLAN & ELEVATION

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
-		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	13	70	
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. ST01
STRUCTURE NO.	TRACS NO. T0619 01C						13 OF 70

GENERAL NOTES:

ARIZONA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2021.

DESIGN SPECIFICATIONS — AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION. AASHTO LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2009.

LIVE LOAD — 90 POUNDS PER SQUARE FOOT.

WIND LOAD — 50 PSF APPLIED TO ENTIRE VERTICAL TRUSS SURFACE AND ENTIRE LENGTH

SEISMIC DESIGN CATEGORY B

ALL CONCRETE SHALL BE CLASS "S" UNLESS NOTED OTHERWISE.

ALL STRUCTURAL STEEL SHALL CONFORM TO AASHTO SPECIFICATION M270 (ASTM A709) GRADE 50, OR ASTM A847 UNLESS NOTED OTHERWISE.

ALL WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY. ANSI/AASHTO/AWS D1.5–96 BRIDGE WELDING CODE.

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615. ALL REINFORCING SHALL BE FURNISHED AS GRADE 60.

ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO ARTICLE 5.10.2 ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT–TO–OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS NOTED OTHERWISE.

STRESSES:

SUPERSTRUCTURE. F'c = 4,500 PSI
ABUTMENTS. F'c = 3,500 PSI
PIERS & DRILLED SHAFTS. F'c = 3,500 PSI
EQUIPMENT PADS. F'c = 3,500 PSI
ALL OTHER CLASS "S" CONCRETE. F'c = 3,500 PSI
GRADE 60. F's = 24,000 PSI
STRUCTURAL STEEL (NOT INCLUDING STEEL TRUSS). . . Fy = 50,000 PSI

DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.

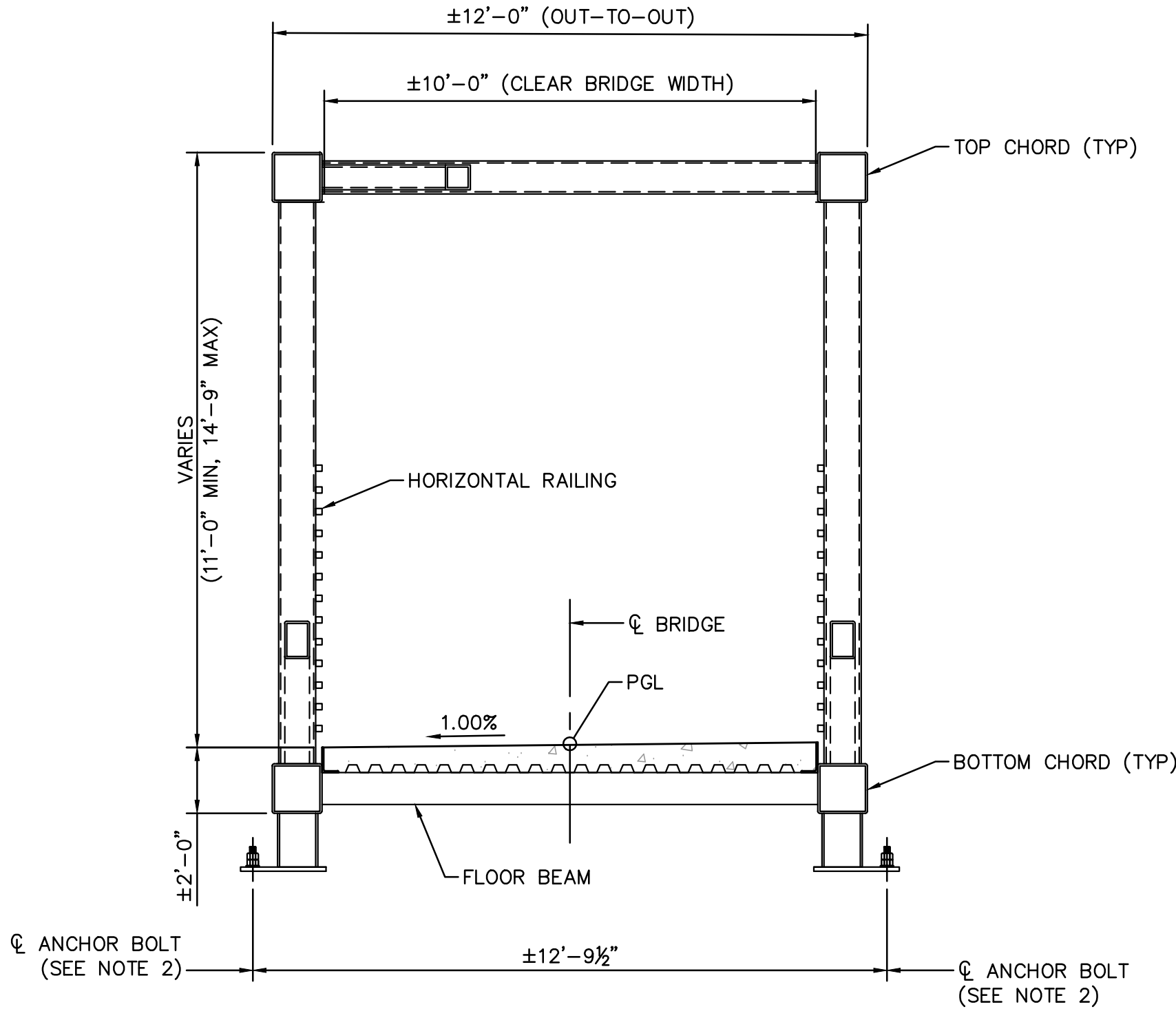
CHAMFER ALL EXPOSED CORNERS ¼" UNLESS NOTED OTHERWISE.

STEEL TRUSS TO BE DESIGNED, FABRICATED, DELIVERED AND ERECTED BY THE FABRICATOR. STEEL TRUSS AND ALL COMPONENTS SHALL BE PAINTED STEEL PER ASTM A847 AND AASHTO M270 GRADE 50, UNLESS NOTED OTHERWISE.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SUPERSTRUCTURE DIMENSIONS AND ELEVATIONS, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

STEEL TRUSS SUPERSTRUCTURE SHOWN IS CONCEPTUAL ONLY. CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS ADDRESSING THE FOLLOWING STEEL TRUSS DETAILS: LOCATION AND SIZE OF BEARINGS AND ANCHOR BOLTS, DETAILS FOR ATTACHING TO ABUTMENTS, BRIDGE DEPTH AND PROFILE ADJUSTMENTS OR TRANSITIONS (IF ANY).

COST OF STEEL BRIDGE TRUSS, METAL RAILING, BRIDGE AESTHETICS, METAL HANDRAIL, BEARING DEVICES, ANCHOR BOLTS, DECK JOINT ASSEMBLY, STAY–IN–PLACE METAL DECK FORMS, CONCRETE BRIDGE DECK, SHOP AND WORKING DRAWING PREPARATION, AND WELDING IS ALL INCLUDED IN ITEM 9240050 — MISCELLANEOUS WORK (STEEL TRUSS BRIDGE).



BRIDGE TYPICAL SECTION

SCALE: ⅝" = 1'-0"

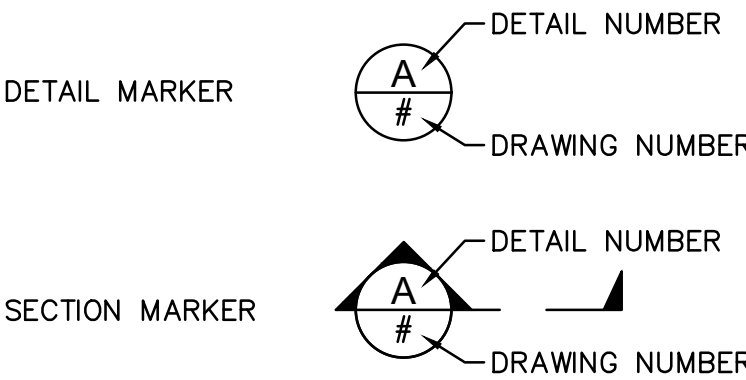
NOTES:

1. TYPICAL SECTION PROVIDES GENERAL TRUSS CONFIGURATION AND DESIGN REQUIREMENTS.
2. ANCHOR BOLT LAYOUT AND DETAILS SHALL BE COORDINATED WITH PREFABRICATED STEEL TRUSS BRIDGE MANUFACTURER. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. BEARING SEAT ELEVATION AT ABUTMENTS SET BASED ON ±2'-8¾" DIMENSION FROM PROFILE GRADE LINE TO BOTTOM OF BRIDGE BEARING PLATES. CONTRACTOR SHALL COORDINATE WITH PREFABRICATED STEEL TRUSS BRIDGE MANUFACTURER AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
4. MINIMUM CLEARANCE IS CALCULATED BASED ON A MAXIMUM DISTANCE OF ±2'-0" FROM PGL TO LOWEST BRIDGE BOTTOM CHORD.

APPROXIMATE QUANTITIES							
UNIT	STRUCTURAL EXCAVATION	STRUCTURAL BACKFILL	F'c = 3,500 PSI		STRUCTURAL STEEL	REINFORCED STEEL	DRILLED SHAFT 48" DIA.
			CY	CY			
ABUTMENT 1	2	2	16			2,400	30
ABUTMENT 2	6	2	16			2,400	30
SUPERSTRUCTURE							
NORTH ELEVATOR SHAFT & MECHANICAL ROOM	16	10	5	9	1,968	5,766	
SOUTH ELEVATOR SHAFT, MECHANICAL ROOM, AND ELECTRICAL ROOM	23	14	8	11	1,151	7,218	
TOTAL	47	28	45	20	3,119	17,784	60
AS-BUILT TOTAL							

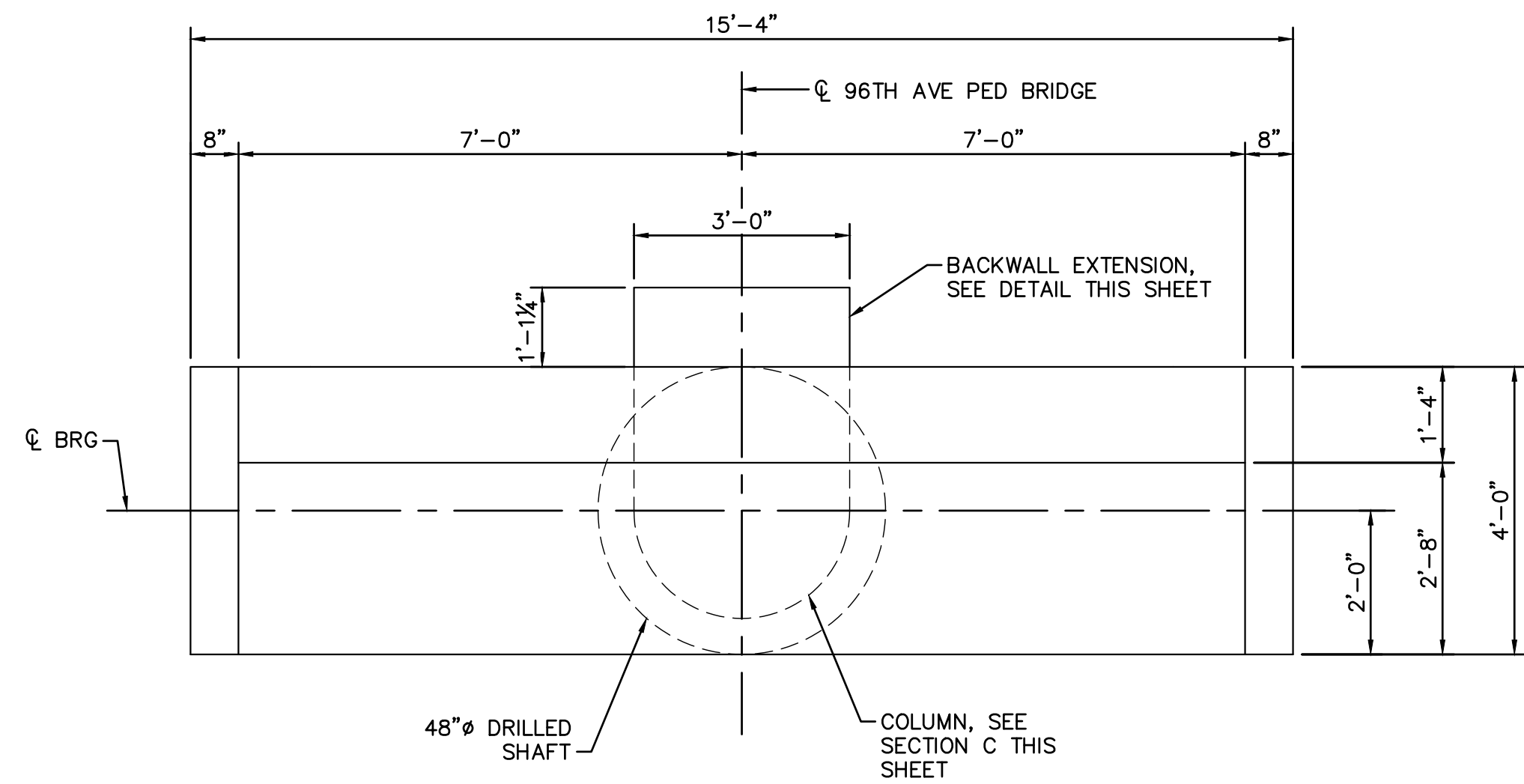
MISCELLANEOUS WORK (FULLY GROUTED CONCRETE MASONRY UNIT) 4,362 SQ.FT.
MISCELLANEOUS WORK (STEEL TRUSS BRIDGE) 1 LS
MISCELLANEOUS WORK (AESTHETIC LETTERING) 1 LS
MISCELLANEOUS WORK (WALL AND ROOF FINISHES) 1 LS
MISCELLANEOUS WORK (1½" X 20 GA COMPOSITE STEEL FLOOR DECK) 213 SQ.FT.
MISCELLANEOUS WORK (1½" X 20 GA STEEL ROOF DECK) 254 SQ.FT
MISCELLANEOUS WORK (STEEL STAIRS) 2 EA
MISCELLANEOUS WORK (DMS, 24'-3" X 5'-4") 2 EA
MISCELLANEOUS WORK (PEDESTRIAN FENCE) 43 L.FT.
MISCELLANEOUS WORK (ELEVATOR & MACHINE ROOM EQUIPMENT) 2 EA
MISCELLANEOUS WORK (CONCRETE EQUIPMENT PAD) 3 EA
MISCELLANEOUS WORK (DOORS AND HARDWARE) 3 EA

LEGEND:

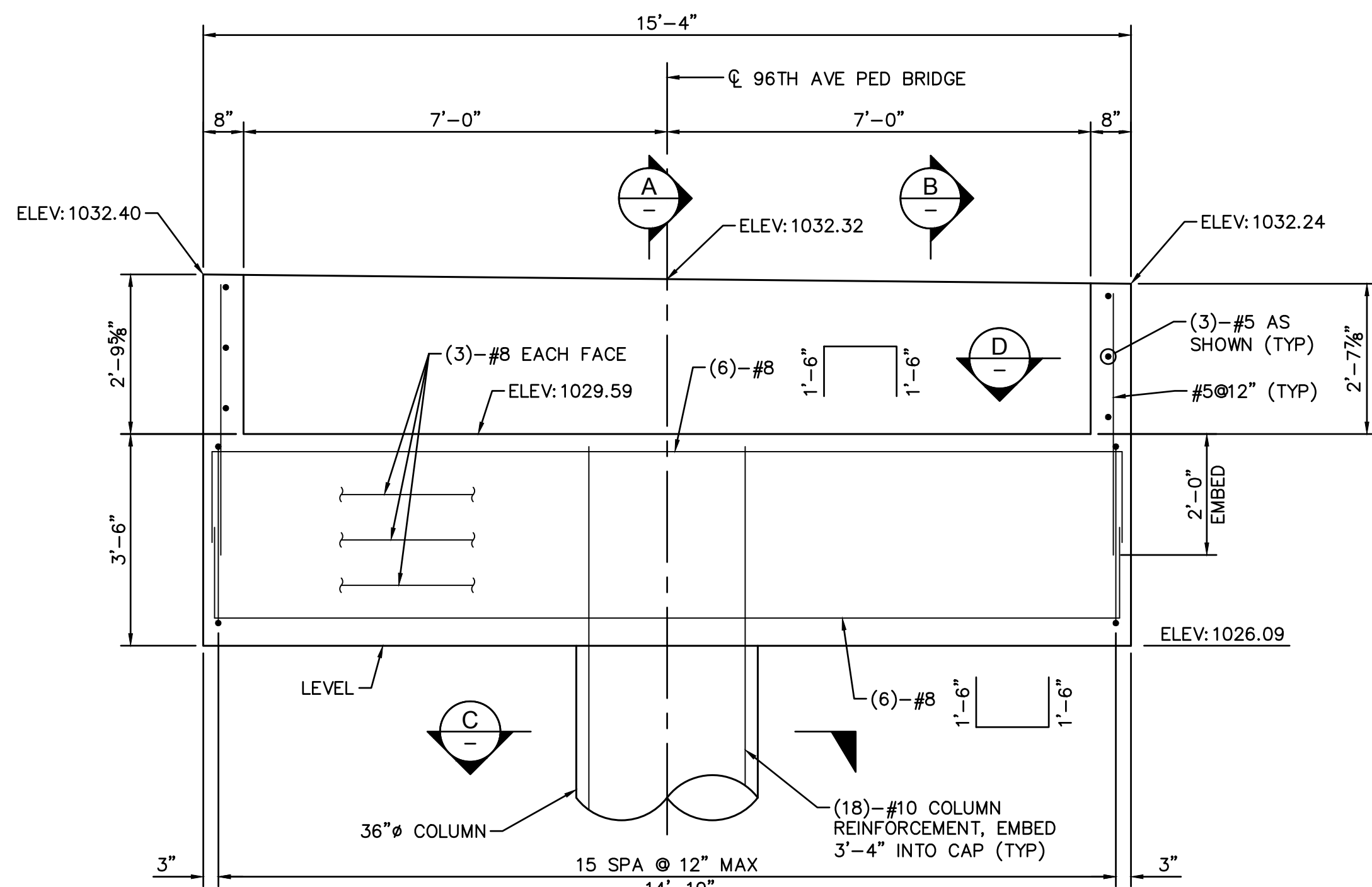
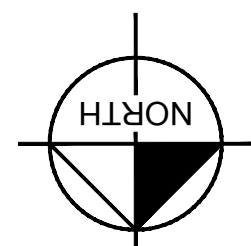


NOTE: A LINE (–) IN PLACE OF THE DRAWING NUMBER INDICATES THAT THE SECTION OR DETAIL IS LOCATED ON THE SAME DRAWING THAT THE SECTION OR DETAIL IS CUT.

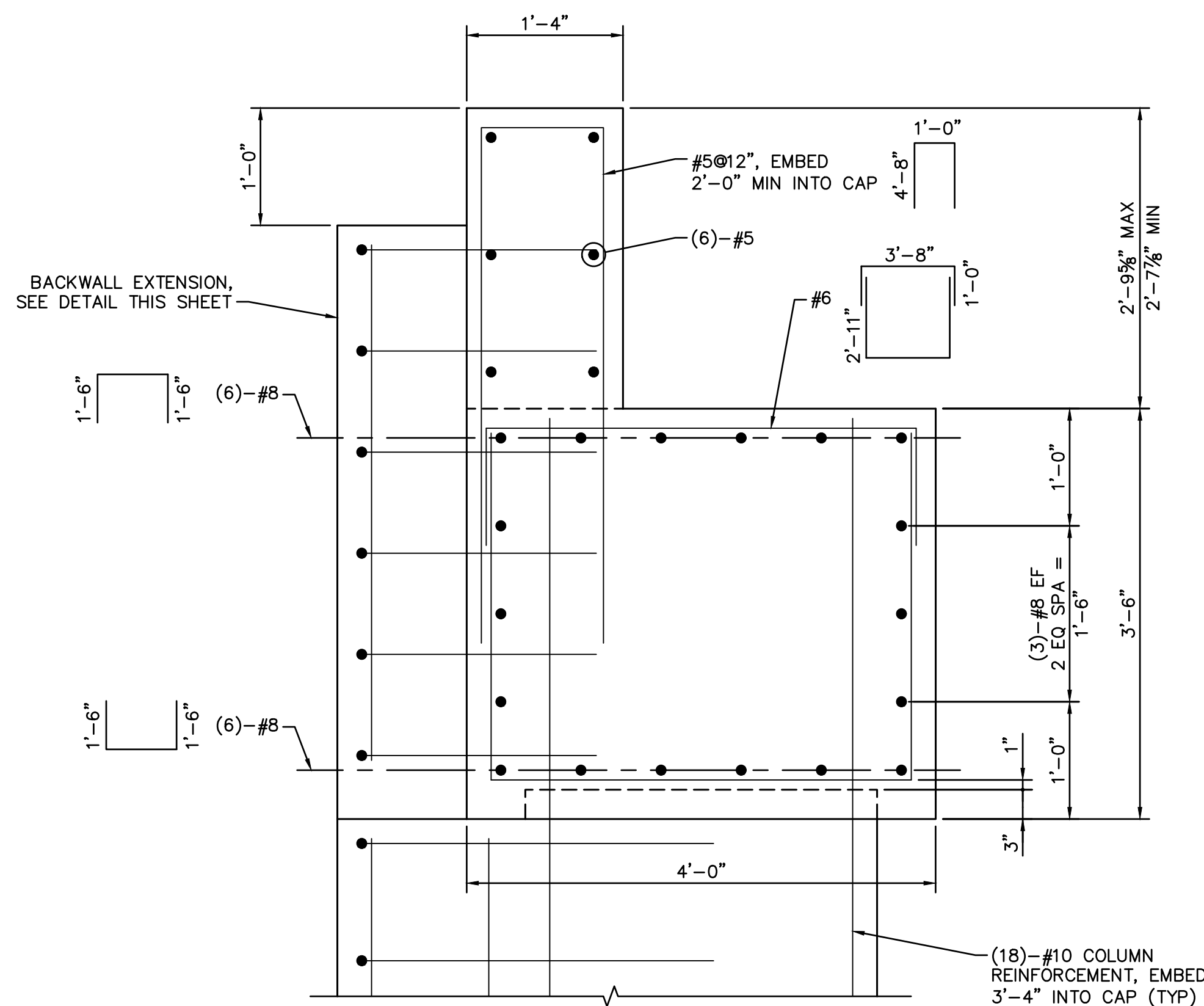
Registerd Professional Engineer CERTIFICATE NO. 68796 CHARLES H. GOLEK Date Signed 09/10/26 ARIZONA, USA	Kimley»Horn © 2026 KIMLEY-HORN AND ASSOCIATES, INC.	<table><tr><td></td><td>NAME</td><td>DATE</td></tr><tr><td>DESIGN</td><td>JOT</td><td>09/26</td></tr><tr><td>DRAWN</td><td>JOT</td><td>09/26</td></tr><tr><td>CHECKED</td><td>CHG</td><td>09/26</td></tr></table>		NAME	DATE	DESIGN	JOT	09/26	DRAWN	JOT	09/26	CHECKED	CHG	09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 14	TOTAL SHEETS 70	RECORD DRAWING
			NAME	DATE																			
		DESIGN	JOT	09/26																			
		DRAWN	JOT	09/26																			
		CHECKED	CHG	09/26																			
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON									DWG NO. ST02													
STRUCTURE NO.	TRACS NO. T0619 01C									14 OF 70													
BRIDGE GENERAL NOTES & QUANTITIES																							



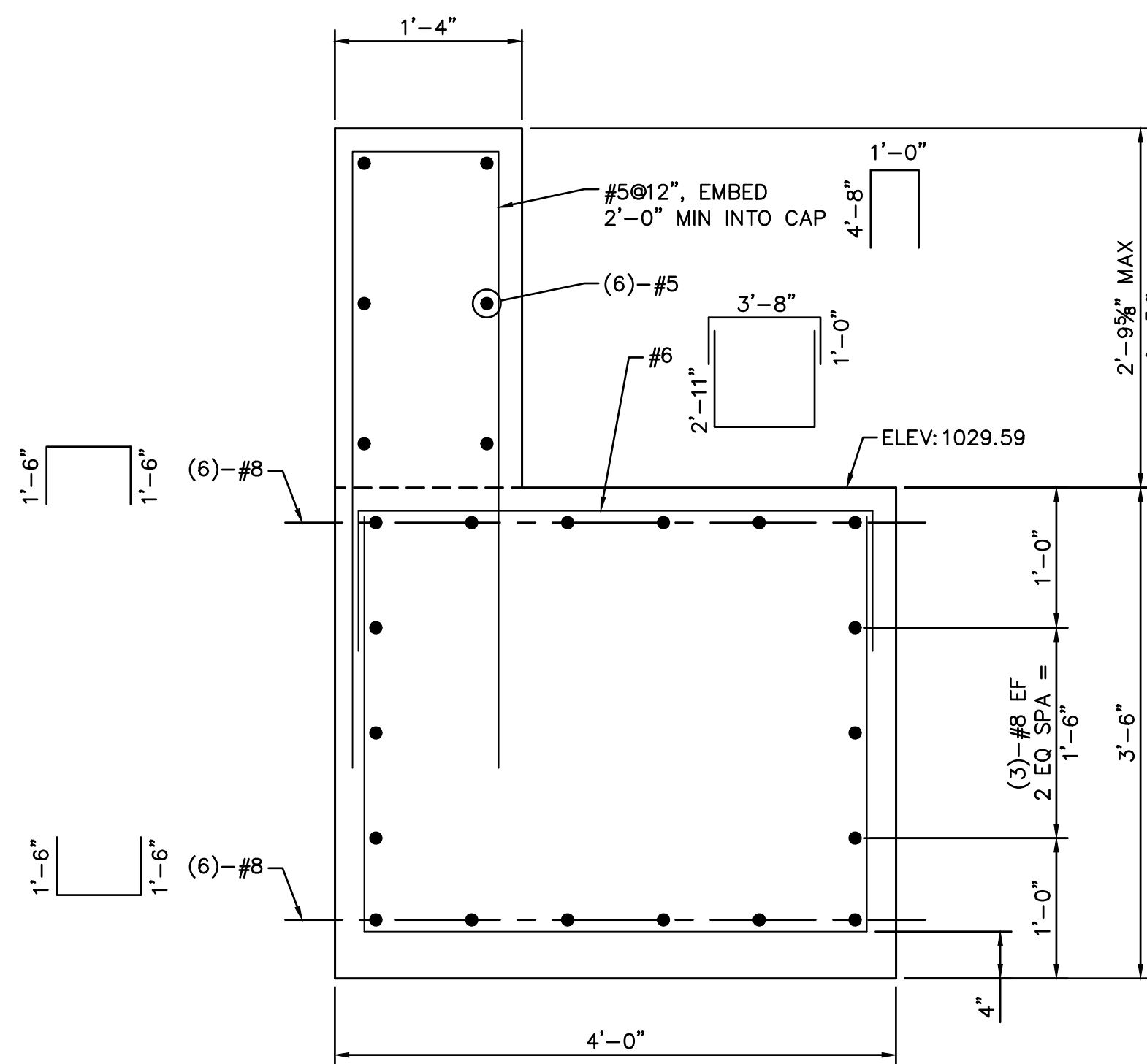
ABUTMENT 1 PLAN
SCALE: 1/2" = 1'-0"



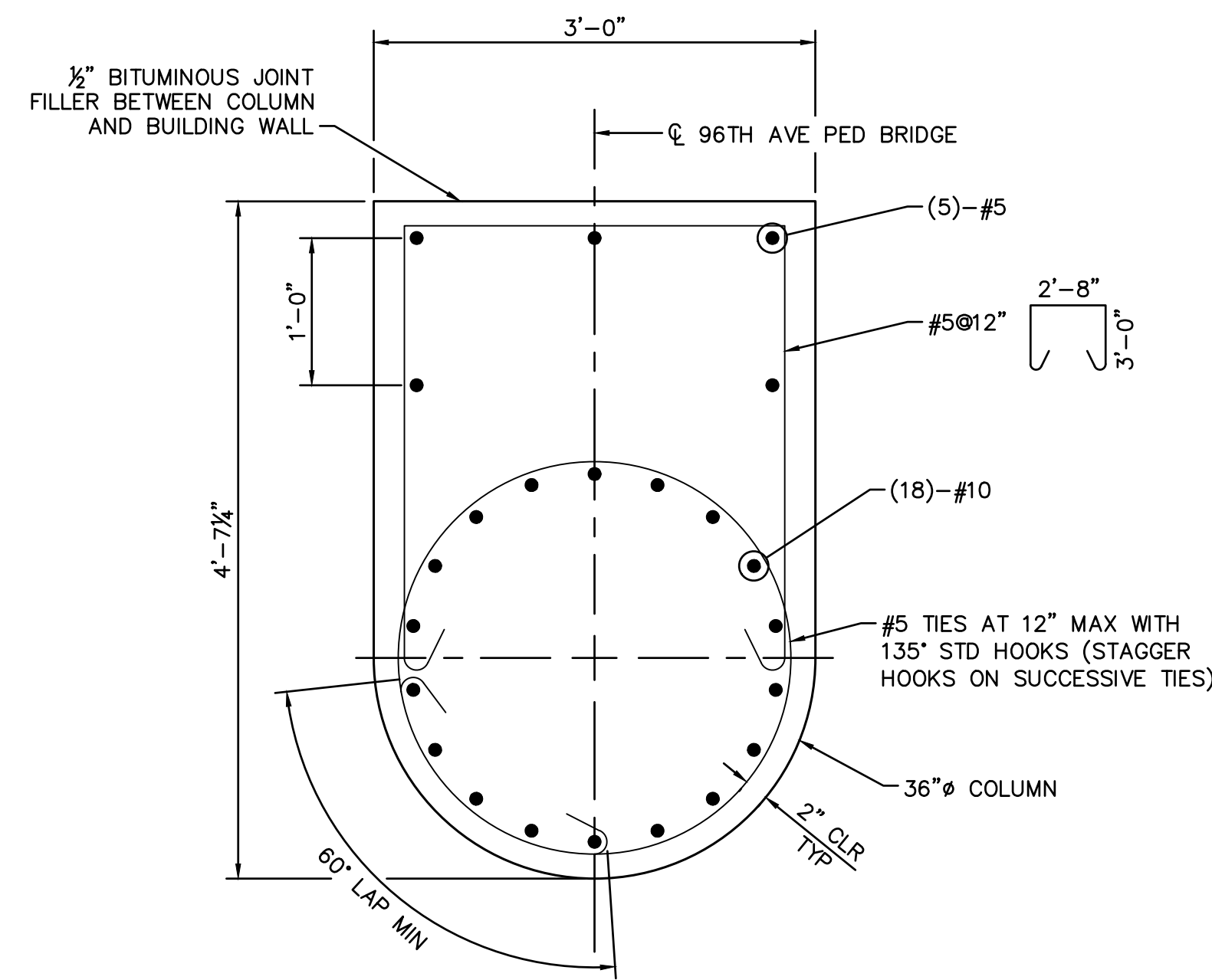
ABUTMENT 1 ELEVATION
SCALE: 1/2" = 1'-0"



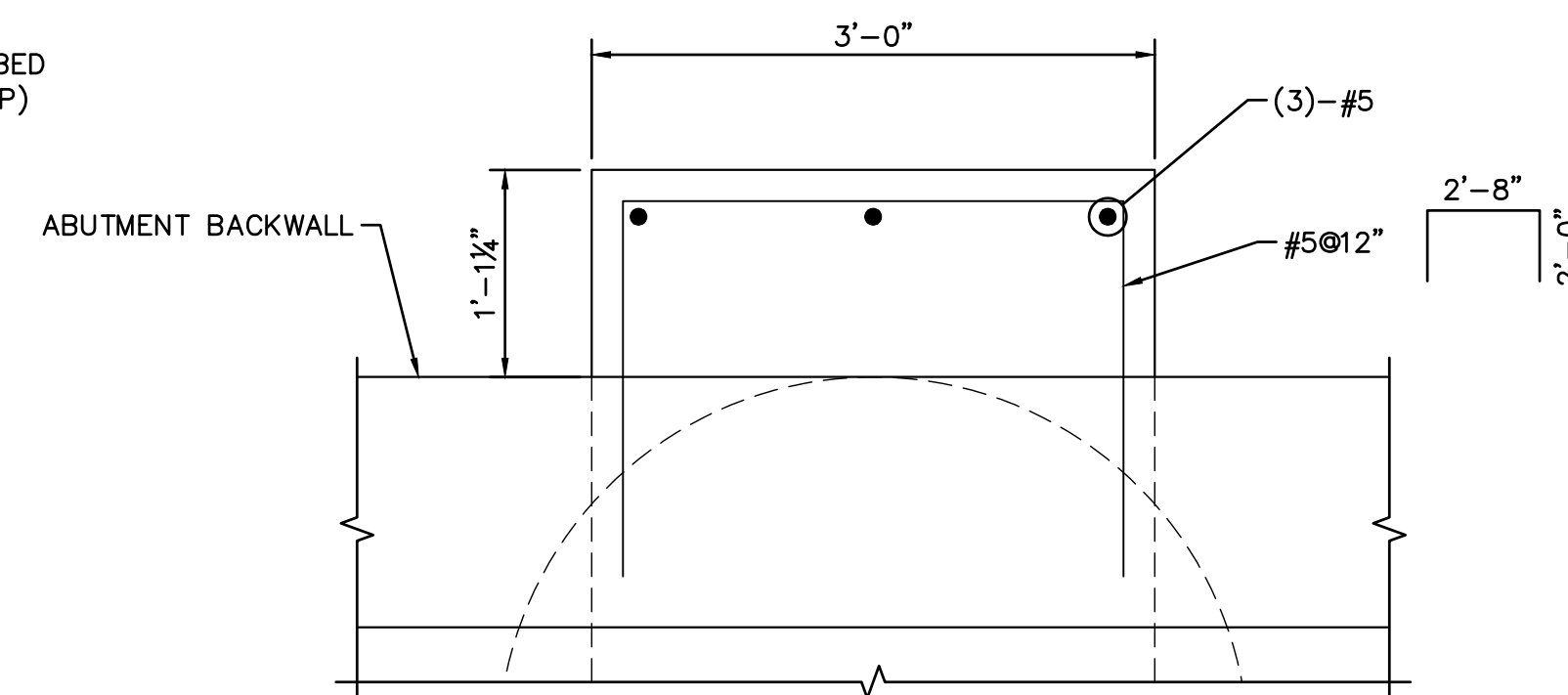
A SECTION
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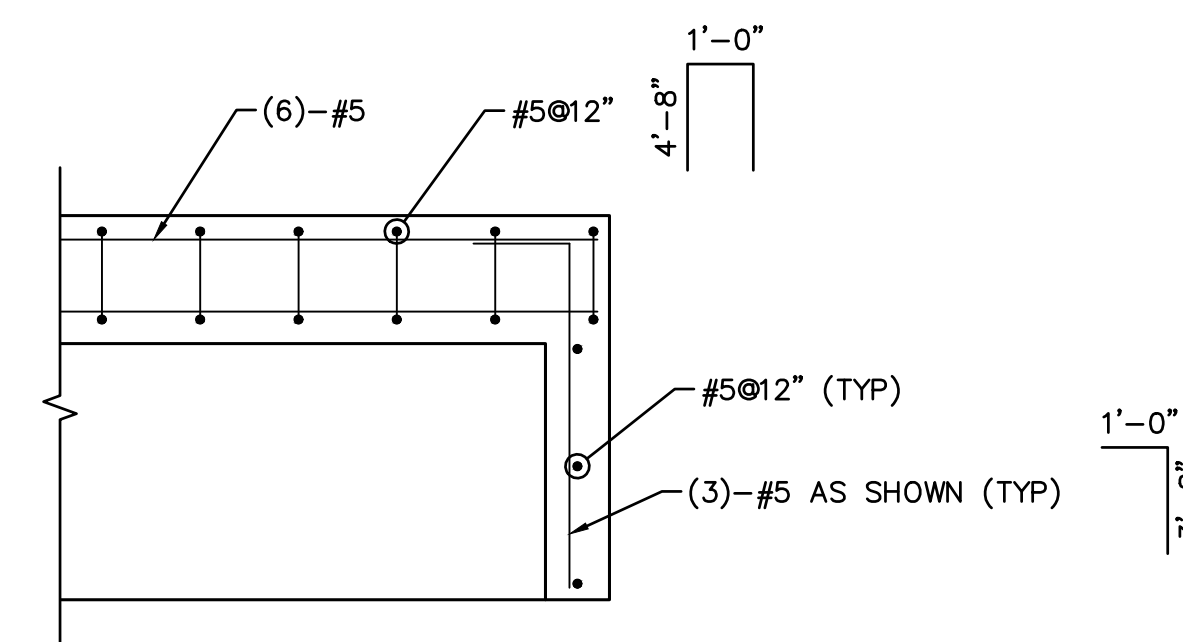
B SECTION
SCALE: 1" = 1'-0"



C SECTION
SCALE: 1" = 1'-0"



BACKWALL EXTENSION DETAIL
SCALE: 1" = 1'-0"



D SECTION
SCALE: 1/2" = 1'-0"



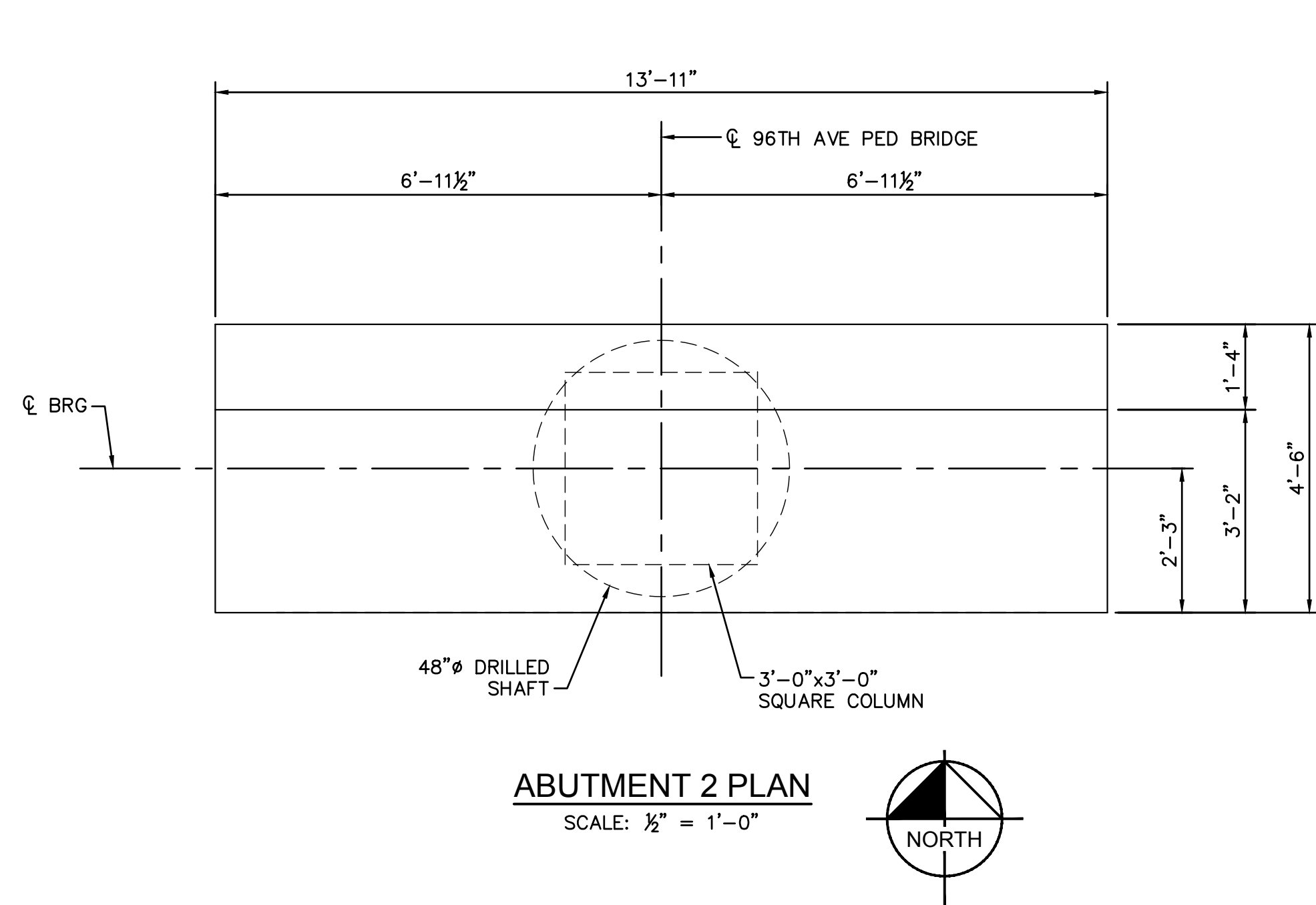
	NAME	DATE
DESIGN	JOT	09/26
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CHECKED	CHG	09/26

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.

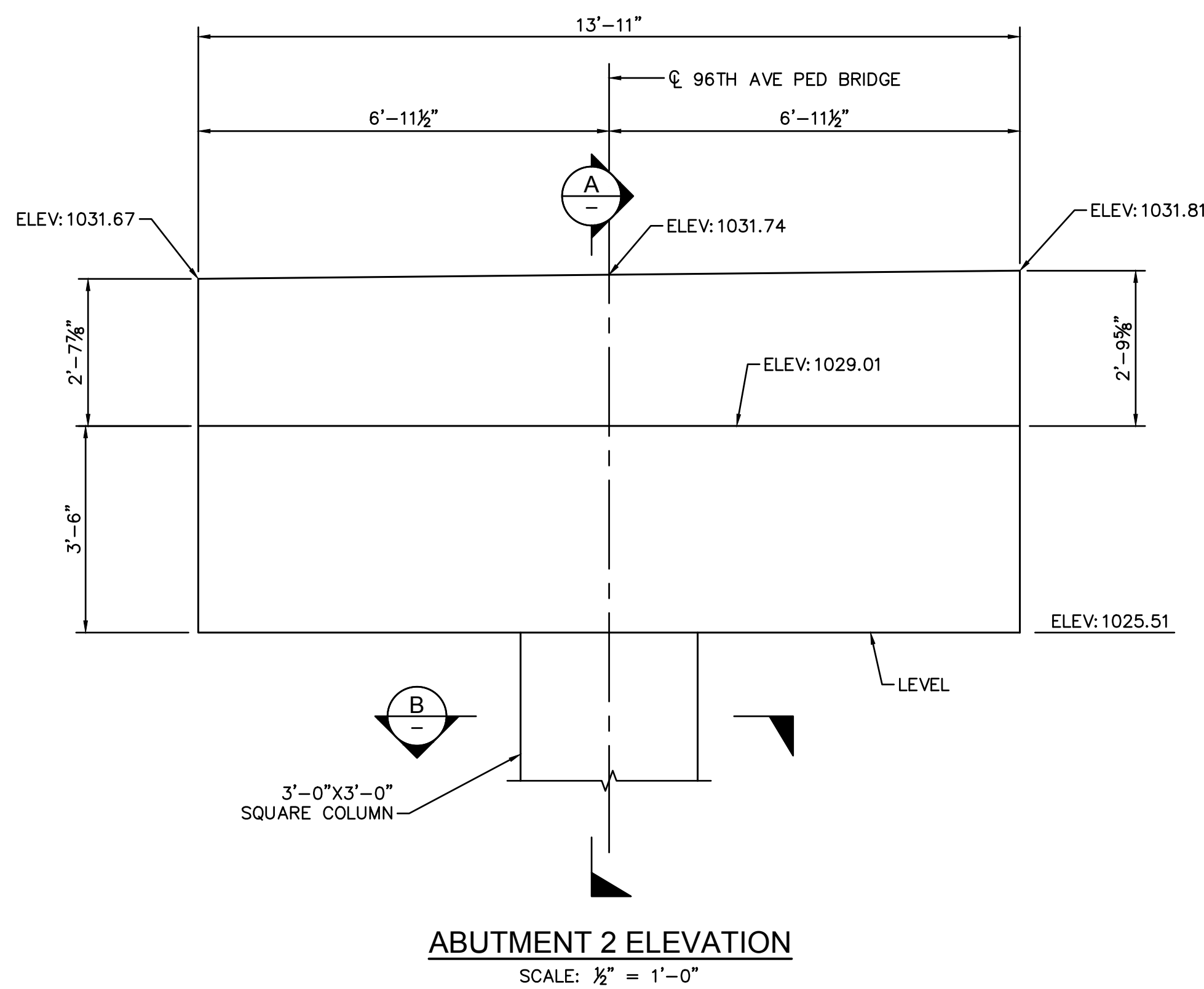
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

ABUTMENT 1 PLAN & ELEVATION

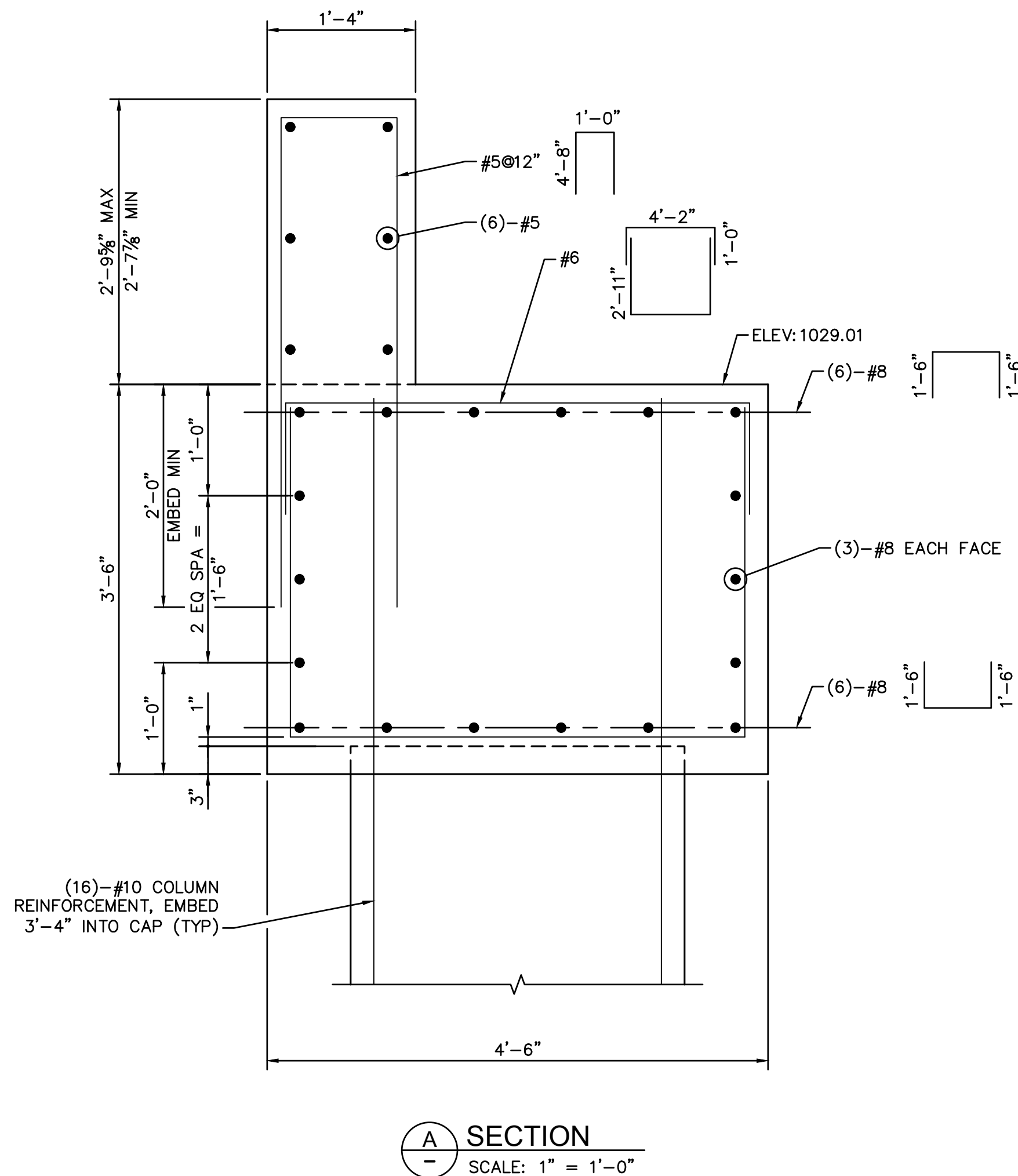
ROUTE	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	0000 MA TOL	FEDERAL ID NO.	CDS TOL-Q(200)T	SHEET NO.	15	TOTAL SHEETS	70	RECORD DRAWING
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON										DWG NO. ST02	
STRUCTURE NO.	TRACS NO. T0619 01C										15 OF 70	



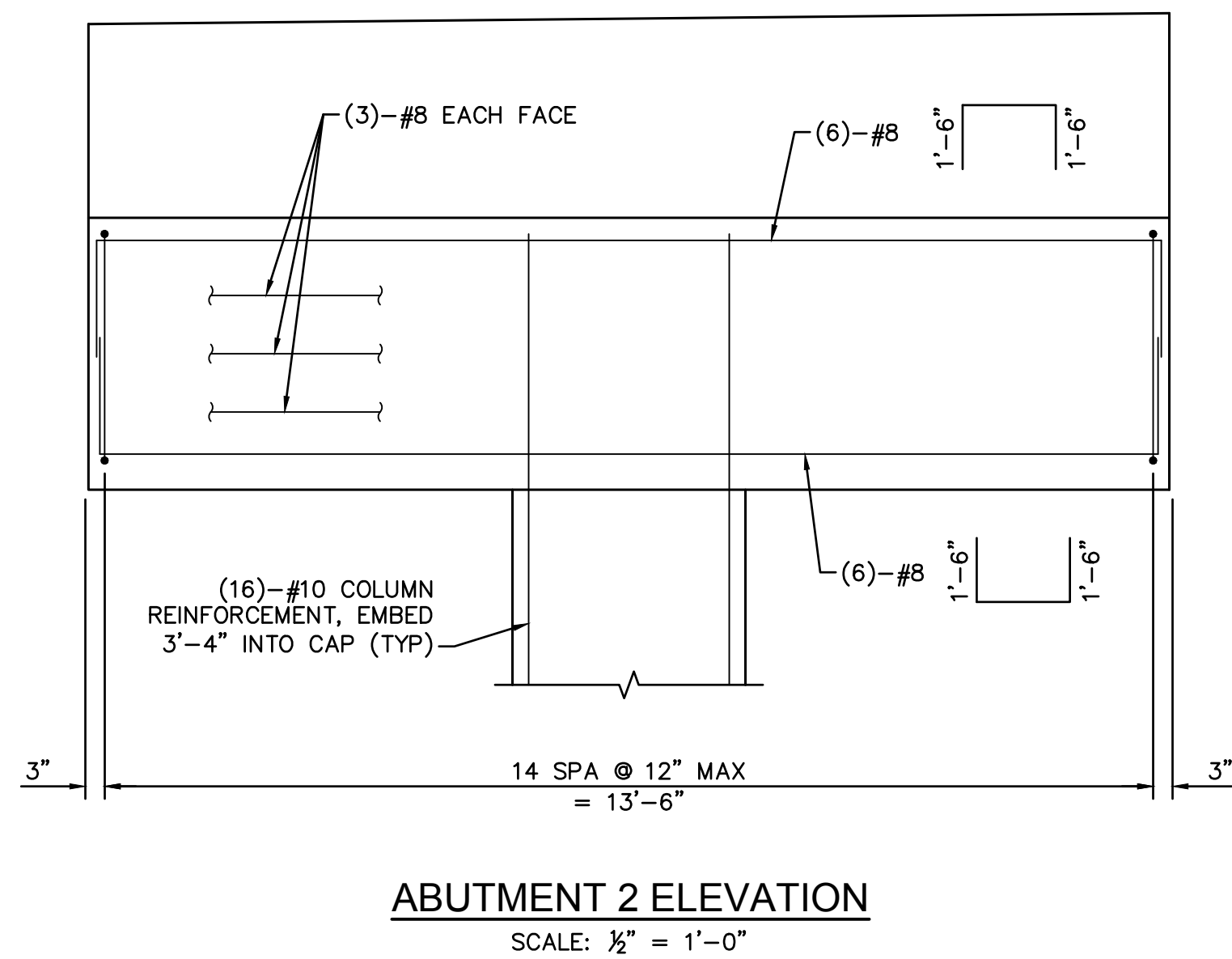
ABUTMENT 2 PLAN
SCALE: 1/2" = 1'-0"



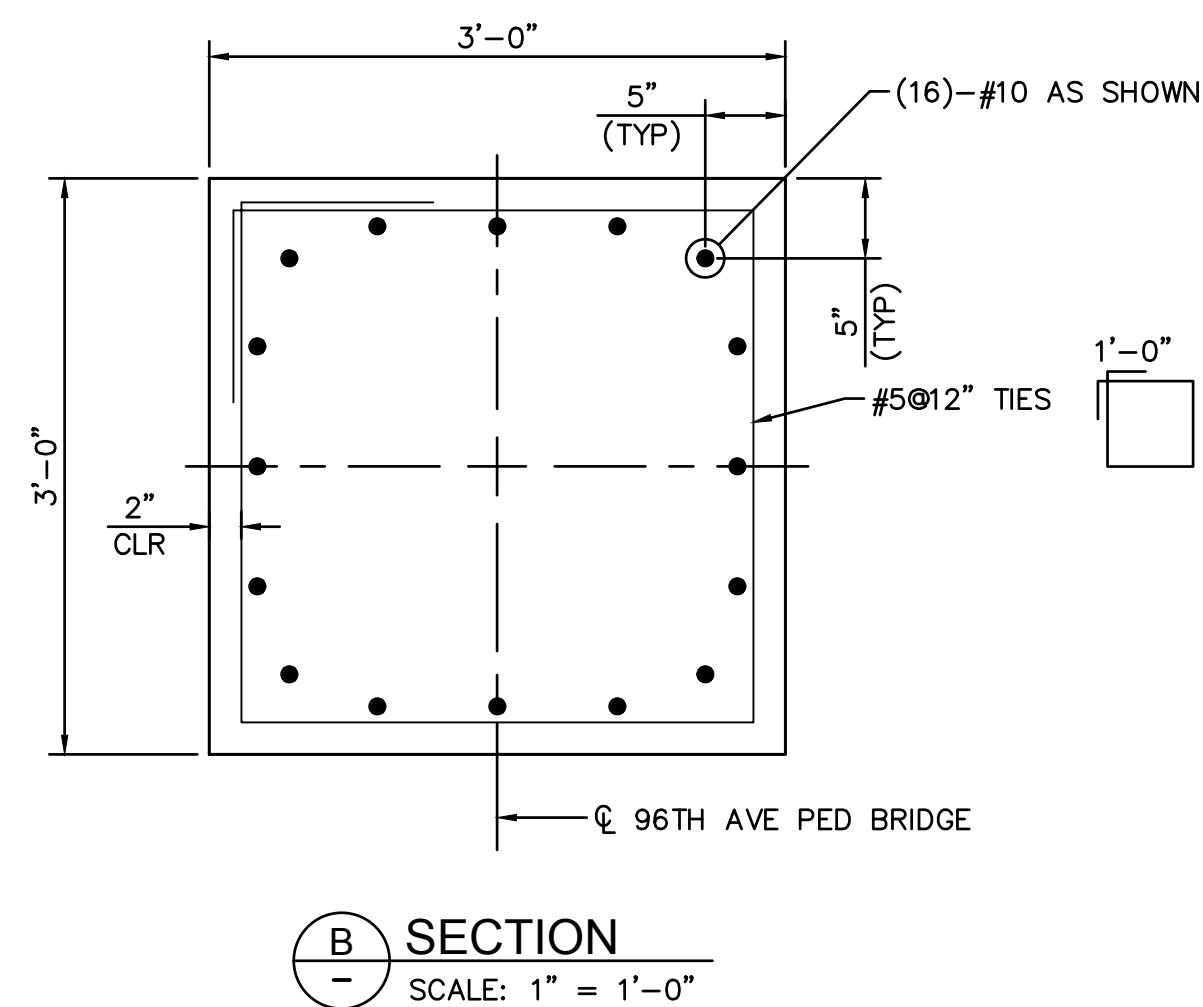
ABUTMENT 2 ELEVATION
SCALE: 1/2" = 1'-0"



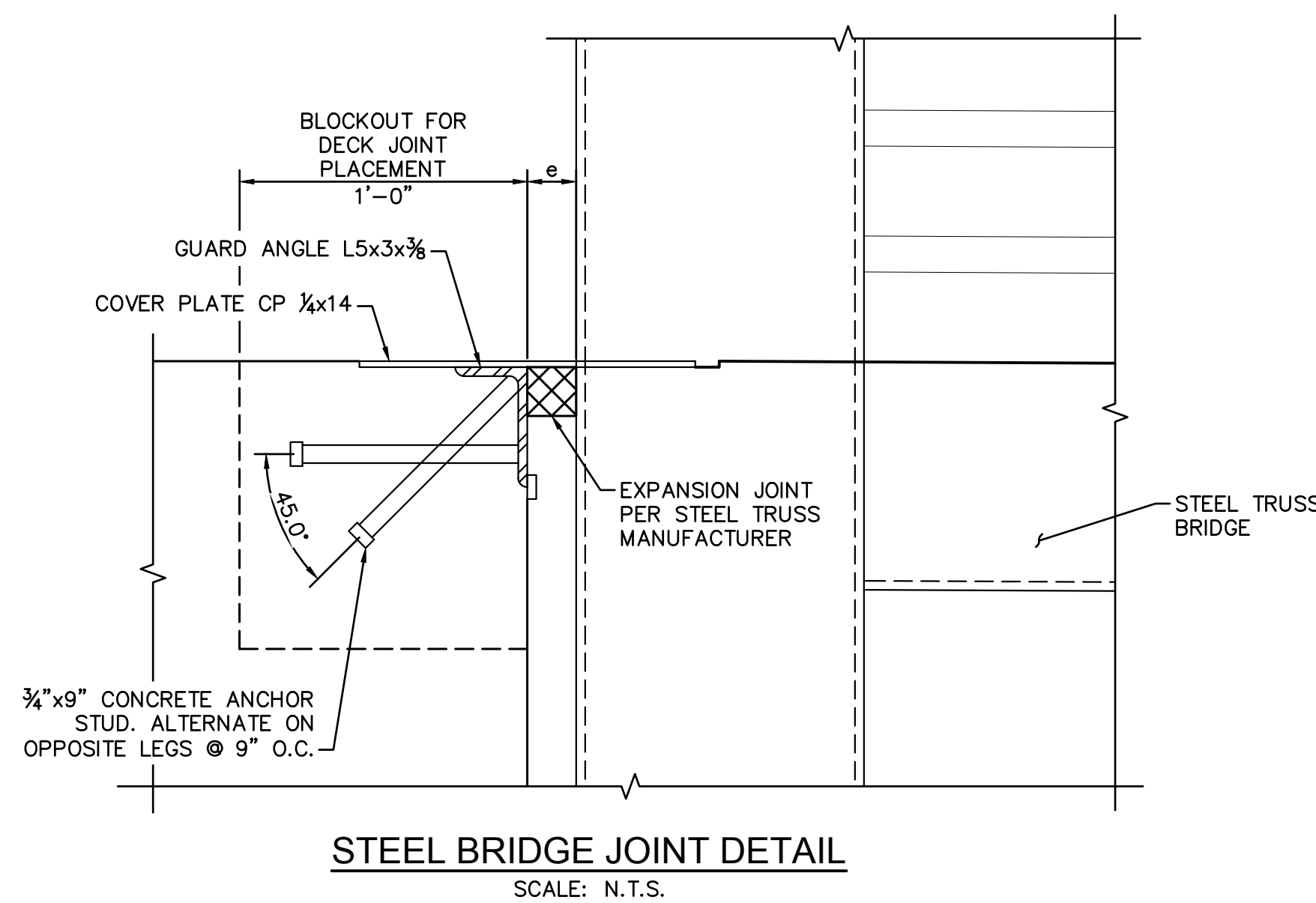
SECTION A
SCALE: 1" = 1'-0"



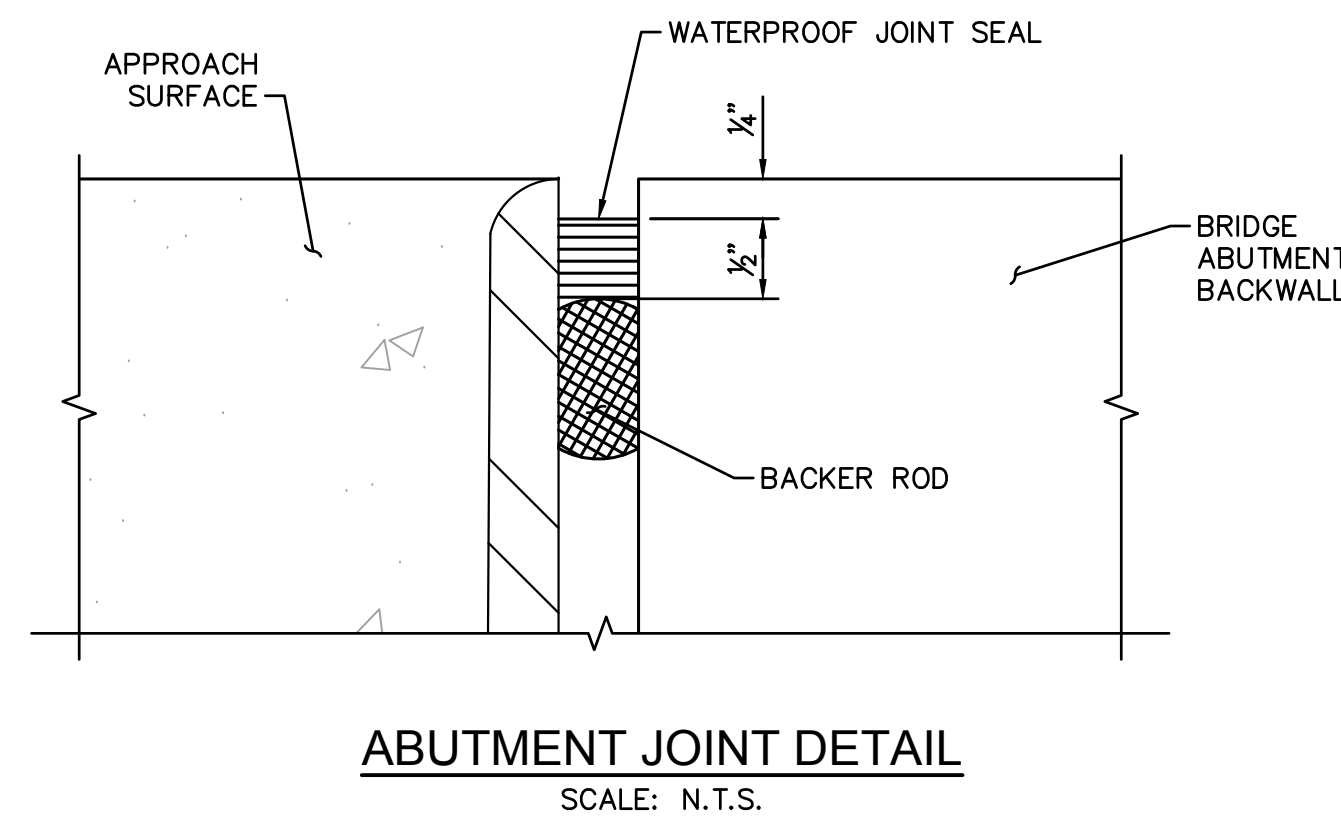
ABUTMENT 2 ELEVATION
SCALE: 1/2" = 1'-0"



SECTION B
SCALE: 1" = 1'-0"



STEEL BRIDGE JOINT DETAIL
SCALE: N.T.S.



ABUTMENT JOINT DETAIL
SCALE: N.T.S.

GENERAL NOTES:

1. DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.
2. CHAMFER ALL EXPOSED CORNERS ¼" UNLESS NOTED OTHERWISE.
3. THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH THE SITE AND LOCAL CONDITIONS.
4. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL BUILDING CODES, CODES OF APPLICABLE REGULATORY AGENCIES, AND WITH PROJECT SPECIFICATIONS AND DRAWINGS.
5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SUPERSTRUCTURE DIMENSIONS AND ELEVATIONS, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
6. THE CONTRACTOR SHALL COMPLY WITH LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING UPON THE PERFORMANCE OF THE WORK.
7. SUBJECT TO THE STRUCTURAL ENGINEER'S ACCEPTANCE, UTILIZE DETAILS FOR SIMILAR CONDITIONS WHEN DETAILS FOR CONSTRUCTION ARE NOT INDICATED FOR A SPECIFIC CONDITION.
8. CONNECTION OF ALL TRADES TO THE STRUCTURE SHALL BE DESIGNED AND DETAILED BY THE CONTRACTOR. CONNECTIONS TO STRUCTURAL MEMBERS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. RESPONSIBILITY FOR THE PERFORMANCE OF THE SUPPLIED SYSTEM AND ASSOCIATED CONNECTIONS SHALL REMAIN THAT OF THE CONTRACTOR. ALL CONNECTION SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE OF ARIZONA.
9. OPENINGS AND PENETRATIONS THROUGH STRUCTURAL ELEMENTS AND ITEMS EMBEDDED IN STRUCTURAL ELEMENTS THAT ARE NOT INDICATED ON THE STRUCTURAL DRAWINGS SHALL BE REVIEWED BY STRUCTURAL ENGINEER PRIOR TO IMPLEMENTING WORK.
10. DO NOT PLACE MATERIALS OR EQUIPMENT ON UNFINISHED FLOORS OR ROOFS IN EXCESS OF 20 PSF NOR ON FINISHED FLOORS OR ROOFS IN EXCESS OF THE INDICATED DESIGN LIVE LOADS. AVOID IMPACT LOADING.
11. THE STRUCTURES WERE DESIGNED FOR THE IN-SERVICE CONDITIONS ONLY. THE METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURES AT ALL STAGES OF CONSTRUCTION.
12. DRAWINGS DO NOT INDICATE TEMPORARY REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM TEMPORARY MEASURES IF INDICATED ON THE DRAWINGS, IDENTIFY OTHER AREAS OR CONDITIONS REQUIRING TEMPORARY MEASURES, DETERMINE MOST EFFICIENT TEMPORARY SYSTEMS, AND DESIGN AND CONSTRUCT REQUIRED TEMPORARY SYSTEMS. ALL TEMPORARY SYSTEMS SHALL BE DESIGNED BY A LICENSED ENGINEER IN ARIZONA.
13. REPORT EXISTING CONDITIONS THAT VARY FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING CONSTRUCTION WHILE PERFORMING WORK. THE CONTRACTOR SHALL PROPERLY REINSTATE EXISTING FINISHES, FIREPROOFING OR ITEMS THAT ARE REMOVED OR DAMAGED WHILE PERFORMING WORK.
15. ALL ACCESSIBLE ROUTES AND GENERAL SITE AND BUILDING ELEMENTS SHALL CONFORM TO ADA STANDARDS FOR ACCESSIBLE DESIGN, LATEST EDITION.

DESIGN CRITERIA

- 1.ALL CONSTRUCTION SHALL CONFORM TO THE MORE RESTRICTIVE OF THE FOLLOWING CODES, THE MOST RECENT EDITIONS OF THE STANDARDS ADOPTED BY THE AUTHORITY HAVING JURISDICTION AS REFERENCED THROUGHOUT THE STRUCTURAL GENERAL NOTES, AND THE FOLLOWING DESIGN CRITERIA:
- 2.BUILDING CODE: 2024 INTERNATIONAL BUILDING CODE WITH LOCAL AMENDMENTS
- 3.BUILDING RISK CATEGORY (IBC TABLE 1604.5): II
- 4.DESIGN DEAD LOADS: SELF-WEIGHT OF MATERIALS AND SYSTEMS
- 5.DESIGN LIVE LOADS (REDUCIBLE WHERE ALLOWED PER BUILDING CODE):
ROOFS: 20 PSF
FLOORS: 100 PSF
STAIRS AND EXIT WAYS: 100 PSF
- 6.DESIGN WIND LOADS:
LATERAL LOAD RESISTANCE SYSTEM (ASCE 7):
BASIC WIND SPEED: 101 MPH
WIND EXPOSURE: C
INTERNAL PRESSURE COEFFICIENT: +0.18, -0.18
COMPONENTS AND CLADDING: SEE TYPICAL DETAIL
- 7.DESIGN SEISMIC LOADS:
SITE CLASS: D
SEISMIC IMPORTANCE FACTOR, IE: 1.0
MAPPED SPECTRAL RESPONSE ACCELERATION, SS: 0.17G
MAPPED SPECTRAL RESPONSE ACCELERATION, S1: 0.063G
DESIGN SPECTRAL RESPONSE ACCELERATION, SDS: 0.18G
DESIGN SPECTRAL RESPONSE ACCELERATION, SD1: 0.12G
SEISMIC DESIGN CATEGORY: B

BASIC SEISMIC-FORCE-RESISTING SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
SEISMIC RESPONSE COEFFICIENT, CS: 0.051
DESIGN BASE SHEAR: 0.051XW
RESPONSE MODIFICATION FACTOR, R: 3.5
ANALYSIS PROCEDURE USED: EQUIVALENT LATERAL FORCE (ASCE 7 SECTION 12.8)

NON-STRUCTURAL COMPONENTS: PER ASCE7, THE SEISMIC DESIGN CATEGORY OF B EXEMPTS SEISMIC DESIGN REQUIREMENTS FOR MECHANICAL AND ELECTRICAL COMPONENTS, AND FOR ARCHITECTURAL COMPONENTS WITH IMPORTANCE FACTORS OF 1.0. REFER TO RESPECTIVE DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

FOUNDATIONS - GENERAL

1. FOUNDATION DESIGN IS BASED ON GEOTECHNICAL REPORT BY ETHOS ENGINEERING, PROJECT NO. 2025007, DATED APRIL 21, 2026.
2. ALL SUBGRADES AND EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE GEOTECHNICAL ENGINEER WHEN THE SUBGRADES AND EXCAVATIONS ARE READY FOR INSPECTION.
3. ALL SUBGRADES SHALL BE PREPARED AND MOISTURE CONTROLLED AS SPECIFIED IN THE GEOTECHNICAL REPORT.
4. ALL SLAB ON GRADE AREAS SHALL BE INSPECTED BY A SOILS TESTING LABORATORY AND BE PROOF ROLLED. ALL SOFT SPOTS ENCOUNTERED SHALL BE REMOVED AND REPLACED TO FINISHED GRADE WITH APPROVED FILL MATERIAL AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
5. NO FOUNDATIONS SHALL BE PLACED ONTO OR AGAINST SUBGRADES CONTAINING FREE WATER, FROST OR ICE.
6. REMOVE ABANDONED FOUNDATIONS AND UTILITIES WHICH INTERFERE WITH NEW CONSTRUCTION UNLESS OTHERWISE NOTED.
7. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND AFTER CONSTRUCTION.

SHALLOW FOUNDATIONS

1. ALL FOOTINGS SHALL BEAR ON UNDISTURBED SOIL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 1,500 PSF AT A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE.
2. MAT FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 1,500 PSF AT A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE.
3. FINISHED GRADE IS DEFINED AS TOP OF SLAB FOR INTERIOR FOOTINGS AND LOWEST ADJACENT GRADE WITHIN 5 FEET OF EXTERIOR FOOTINGS.
4. THE UPPER 2 FEET BELOW FOOTINGS SHALL BE REMOVED AND REPLACED WITH ENGINEERED FILL MEETING THE SPECIFICATIONS AS OUTLINED IN SECTION 5.2.4 OF THE GEOTECHNICAL REPORT.
5. ENGINEERED FILL SHOULD EXTEND Laterally AT A 1H:1V RATIO FROM THE BOTTOM OF FOOTINGS, AND SHOULD EXTEND TO A MINIMUM DEPTH OF 12 INCHES BELOW SLABS.
6. STRUCTURE BACKFILL SHALL BE COMPRISED OF GRANULAR SOILS WHICH MEET THE CURRENT REQUIREMENTS OF MAG SECTION 206. STRUCTURE BACKFILL SHALL EXTEND A MINIMUM OF 3 FEET Laterally FROM THE BACK EDGE OF ALL WALLS.

CAST-IN-PLACE CONCRETE

1. ALL CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
2. CONCRETE PLACEMENT AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
3. PROVIDE ASTM C150 TYPE I OR TYPE II CEMENT UNLESS NOTED OTHERWISE. THE CEMENTITIOUS MATERIAL CONTENT SHALL BE ADEQUATE FOR THE SPECIFIED REQUIREMENTS FOR STRENGTH, WATER-CEMENTITIOUS MATERIAL RATIO, DURABILITY, WORKABILITY, AND FINISHABILITY.
4. PROVIDE NORMAL-WEIGHT CONCRETE WITH 28-DAY COMPRESSIVE STRENGTHS AS INDICATED:

FOOTINGS: 3500 PSI
MAT FOUNDATIONS: 4500 PSI
FOUNDATION WALLS: 4500 PSI
SLABS ON GRADE: 4500 PSI
STAIR TREADS AND LANDINGS: 4500 PSI (FIBER REINFORCED)
WEARING SLAB: 4500 PSI (FIBER REINFORCED)
EQUIPMENT PADS: 4500 PSI
CONCRETE ON STEEL DECK: 4500 PSI
5. ALL CONCRETE SLABS ON GRADE SHALL HAVE A MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO OF 0.45.
6. CONCRETE SHALL HAVE, AT THE POINT OF DELIVERY, A SLUMP OF 4 INCHES AS DETERMINED BY ASTM C143. SLUMP TOLERANCES SHALL MEET THE REQUIREMENTS OF ACI 117. WHEN A PLASTICIZING ADMIXTURE OR HIGH-RANGE WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494 IS PERMITTED TO INCREASE THE SLUMP OF CONCRETE, CONCRETE SHALL HAVE BEEN PROPORTIONED TO A SLUMP OF 2 TO 4 IN. BEFORE THE ADMIXTURE IS ADDED AND A MAXIMUM SLUMP OF 8 IN. AT THE POINT OF DELIVERY AFTER THE ADMIXTURE IS ADDED.
7. ADDITION OF WATER TO A CONCRETE BATCH WITH INSUFFICIENT SLUMP WILL NOT BE PERMITTED, UNLESS THE SUPPLIER HAS SPECIFICALLY WITHHELD WATER FROM THE BATCH AT THE PLANT. IN SUCH CASE, THE MIX DESIGN AND TRUCK TICKET MUST CLEARLY STATE THE MAXIMUM AMOUNT OF WATER THAT CAN BE ADDED TO THE CONCRETE BATCH ON SITE. IN NO CASE SHALL THE MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO BE EXCEEDED.
8. NO CHLORIDES AND/OR ADMIXTURES CONTAINING CHLORIDES SHALL BE USED IN ANY CONCRETE.
9. UNLESS A GREATER CONCRETE COVER IS REQUIRED FOR FIRE RESISTANCE, THE MINIMUM CONCRETE COVER FOR CAST-IN-PLACE CONCRETE REINFORCING STEEL SHALL CONFORM TO THE COVERS AS INDICATED:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 INCHES
CONCRETE EXPOSED TO EARTH OR WEATHER:
NO. 6 BAR AND LARGER: 2 INCHES
NO. 5 BAR AND SMALLER: 1½ INCHES
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
SLABS, WALLS, JOISTS:
NO. 14 AND NO. 18 BARS: 1½ INCHES
NO. 11 BAR AND SMALLER: ¾ INCHES
BEAMS, COLUMNS:
PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS: 1½ INCHES
10. CHAMFER ALL EXPOSED CORNERS WITH ¾ INCH, 45 DEGREE CHAMFERS.

11. PROVIDE FINISHES AS INDICATED IN THE PROJECT SPECIFICATIONS AND IN THE ARCHITECTURAL DRAWINGS.
12. JOINTS NOT INDICATED SHALL BE MADE AND LOCATED TO LEAST IMPAIR THE STRENGTH AND APPEARANCE OF THE STRUCTURE. HORIZONTAL JOINTS ARE NOT PERMITTED IN CONCRETE EXCEPT WHERE THEY NORMALLY OCCUR OR WHERE INDICATED. VERTICAL JOINTS SHALL OCCUR ONLY AT LOCATIONS ACCEPTED BY STRUCTURAL ENGINEER.
13. ROUGHEN CONCRETE SURFACES OF CONSTRUCTION JOINTS TO ¼ INCH AMPITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES. LOCATE CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS.
14. AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING CONCRETE, ROUGHEN CONTACT SURFACES TO ¼ INCH AMPITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES.
15. CONTROL JOINTS FOR SLABS ON GRADE SHALL BE AS NOTED IN PLAN, IF CONTROL JOINTS ARE CUT, THEY SHALL BE CUT WITHIN 12 HOURS AFTER THE CONCRETE IS PLACED.
16. THE CONCRETE CONTRACTOR SHALL REVIEW ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND CONSULT WITH OTHER CONTRACTORS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, INSERTS, SLAB DEPRESSIONS AND OTHER ITEMS RELATED TO THE CONCRETE WORK AND SHALL ASSUME RESPONSIBILITY FOR THEIR PROPER LOCATION. NO CORING OF CAST-IN-PLACE CONCRETE IS ALLOWED WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER.
17. NO STRUCTURAL CONCRETE SHALL BE PLACED UNTIL THE CONCRETE DESIGN MIXES, THE CONCRETE PLACEMENT PROCEDURE, THE LOCATION OF CONSTRUCTION JOINTS AND THE SETTING OF REINFORCING STEEL ARE REVIEWED BY THE STRUCTURAL ENGINEER AND ARCHITECT AS APPLICABLE.
18. CHECKED SHOP DRAWINGS SHOWING REINFORCING DETAILS, INCLUDING STEEL SIZES, LAPS, SPACING AND PLACEMENT, LOCATIONS AND DETAILS OF ALL CONSTRUCTION JOINTS, SLAB DEPRESSIONS, OPENINGS, CURBS, AND ANY OTHER DETAILING REQUIRED TO DETAIL THE WORK SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
19. FORMWORK, SHORING, AND RESHORING SHALL BE IN ACCORDANCE WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 347 "RECOMMENDED PRACTICE FOR CONCRETE FORMWORK". DESIGN AND DETAILING OF FORMWORK, SHORING, AND RESHORING SYSTEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FORMWORK, SHORING, AND RESHORING SYSTEMS SHALL BE DESIGNED BY AN ENGINEER LICENSED IN THE STATE OF ARIZONA.
20. DO NOT REMOVE FORMWORK PRIOR TO CONCRETE BEING SUFFICIENTLY CURED TO PREVENT DAMAGE BY FORMWORK REMOVAL OR PRIOR TO CONCRETE ATTAINING 75% OF THE SPECIFIED 28-DAY COMPRESSIVE STRENGTH.
21. CONCRETE FILL THICKNESS SHOWN ON THE DRAWINGS ARE MINIMUM THICKNESSES. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE REQUIRED TO COMPENSATE FOR FRAME, DECK, OR FORMWORK DEFLECTIONS TO MAINTAIN SURFACE TOLERANCES SPECIFIED.
22. HEADED CONCRETE ANCHOR INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MATERIAL SHALL CONFORM TO ASTM A108.
23. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED. ENSURE FULL CONSOLIDATION OF CONCRETE AROUND REINFORCING STEEL, POST-TENSIONING STEEL, DOWELS, ANCHOR BOLTS, DEFORMED BAR ANCHORS, HEADED CONCRETE ANCHORS AND OTHER SIMILAR ITEMS DURING CONCRETE PLACEMENT.
24. CONCRETE SLABS ON GRADE AND CONCRETE TOPPING SLABS SHALL BE CONSTRUCTED PER ACI 302.1R "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" AND ACI 302.2R "GUIDE FOR CONCRETE SLABS THAT RECEIVE MOISTURE-SENSITIVE FLOORING MATERIALS". THE SLABS SHALL BE PLACED IN STRIP POURS. CONCRETE AGGREGATE MATERIALS SHALL BE SUFFICIENTLY GRADED AND CONCRETE SLABS-ON-GRADE SHALL BE CURED AS REQUIRED TO MINIMIZE POSSIBILITY OF SLAB CURLING.
25. CONTINUOUSLY MOIST CURE CONCRETE SLABS ON GRADE FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS, OR MOISTURE RETAINING COVERS MAY BE USED. CURING COMPOUNDS ARE NOT ACCEPTABLE.
26. TEST CYLINDERS SHALL BE MADE AND TESTED IN ACCORDANCE WITH ACI 318 SECTION 5.6.

REINFORCING STEEL

1. FABRICATE AND PLACE REINFORCING STEEL IN ACCORDANCE WITH ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
2. UNLESS NOTED OTHERWISE, REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCING STEEL THAT IS TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60.
3. SMOOTH STEEL DOWELS IN SLABS ON GRADE SHALL CONFORM TO ASTM A36.
4. ALL FIELD BENDING OF REINFORCING SHALL BE PERFORMED COLD. HEATING OF BARS SHALL NOT BE PERMITTED.
5. UNLESS NOTED OTHERWISE, "CONTINUOUS" REINFORCEMENT SHALL HAVE MINIMUM TENSION LAP OF CLASS "B" PER ACI 318 AT SPLICES AND SHALL HOOK AT DISCONTINUOUS ENDS. REINFORCEMENT SPECIFIED AS CONTINUOUS SHALL BE CONTINUOUS THROUGH COLUMNS, PIERS, FOUNDATION CAPS OR OTHER INTERSECTING ELEMENTS. ALTERNATIVELY, REINFORCEMENT SPECIFIED AS CONTINUOUS SHALL BE LAP SPLICED WITH A CLASS "B" LAP SPLICE TO DOWELS IN THE INTERSECTING ELEMENTS THAT DEVELOP THE FULL YIELD STRENGTH OF THE CONTINUOUS REINFORCEMENT.
6. REINFORCEMENT SHALL BE CONTINUOUS ACROSS JOINTS AND AROUND CORNERS OR SPLICE BARS SHALL BE PROVIDED IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315 OR ACI 315R. CORNER BARS SHALL BE PROVIDED AT ALL WALL CORNERS, EQUAL TO THE HORIZONTAL WALL REINFORCEMENT.
7. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCEMENT AT POSITIONS SHOWN ON THE PLANS AND DETAILS. PLASTIC COATED ACCESSORIES SHALL BE USED IN ALL EXPOSED CONCRETE WORK.

NON-SHRINK GROUT

- 1.ALL GROUT AT THE FOLLOWING LOCATIONS SHALL BE NON-METALLIC, SHRINKAGE-RESISTANT GROUT CONFORMING TO ASTM C1107:

COLUMN BASE PLATES
BEAM BEARING PLATES
EQUIPMENT BASE PLATES
TILT PANEL BASES
- 2.GROUT SHALL BE FACTORY-PACKAGED WITH NONMETALLIC AGGREGATE, NONCORROSIVE AND NONSTAINING, MIXED WITH WATER TO CONSISTENCY SUITABLE FOR APPLICATION AND A 30-MINUTE WORKING TIME.
- 3.COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR SHRINKAGE-RESISTANT GROUTS.
- 4.NON-METALLIC, SHRINKAGE-RESISTANT GROUT SHALL HAVE A COMPRESSIVE STRENGTH AT 28 DAYS EQUAL TO OR GREATER THAN THE COMPRESSIVE STRENGTH OF THE SUPPORTING CONCRETE OR MASONRY ELEMENT, 5000 PSI MINIMUM.
- 5.NON-METALLIC, SHRINKAGE-RESISTANT GROUT SHALL BE INSTALLED PRIOR TO LOAD BEING APPLIED.

POST-INSTALLED ANCHORS

1. POST-INSTALLED ANCHORS SHALL NOT BE SUBSTITUTED FOR CAST-IN ANCHORS WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD.
2. CONCRETE WEDGE EXPANSION ANCHORS, MADE OF STEEL, SHALL BE HILTI KWIK-BOLT TZ2 WEDGE ANCHOR (ICC-ES ESR-4266), SIMPSON STRONG-BOLT 2 WEDGE ANCHOR (ICC-ES ESR-3037), DEWALT POWER-STUD+SD2 WEDGE EXPANSION ANCHOR (ICC-ES ESR-2502) OR APPROVED EQUAL.
3. CONCRETE ADHESIVE ANCHORS SHALL BE HILTI HIT-RE 500 V3 ADHESIVE ANCHORAGE SYSTEMS (ICC-ES ESR-3814), SIMPSON SET-3G ADHESIVE ANCHORAGE SYSTEMS (ICC-ES ESR-4057), DEWALT PURE110+ ADHESIVE ANCHORAGE SYSTEMS (ICC-ES ESR-3298) OR APPROVED EQUAL. THREADED RODS USED IN ADHESIVE ANCHORAGE SYSTEMS SHALL MEET THE REQUIREMENTS OF ASTM F1554, GRADE 36 FOR BASE PLATE ANCHOR RODS AND ASTM A193, GRADE B7 FOR ALL OTHER THREADED RODS UNLESS NOTED OTHERWISE. REINFORCING BARS USED IN ADHESIVE ANCHORAGE SYSTEMS SHALL BE ASTM A615, GRADE 60 REINFORCING BARS. REMOVE GREASE, OIL, RUST, AND OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.
4. POST-INSTALLED ANCHORS OR POST-INSTALLED REINFORCING SHALL NOT BE INSTALLED IN CONCRETE THAT IS LESS THAN 7 DAYS OLD AND SHALL NOT BE LOADED UNTIL CONCRETE IS AT LEAST 21 DAYS OLD.
5. MASONRY WEDGE EXPANSION ANCHORS, MADE OF STEEL, INSTALLED IN GROUT-FILLED CONCRETE BLOCK SHALL BE HILTI KWIK BOLT 1 EXPANSION ANCHOR (IAMPO-UES ER-677), SIMPSON STRONG-BOLT 2 (IAPMO-UES ER-240), DEWALT POWER-STUD+SD1 EXPANSION ANCHOR (ICC-ES ESR-2966) OR APPROVED EQUAL.
6. PROVIDE STAINLESS STEEL FASTENERS FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS, UNLESS OTHERWISE NOTED.
7. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
8. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE NEW ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED, THE ENGINEER WILL DETERMINE A NEW LOCATION.
9. ALL POST-INSTALLED ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE APPLICABLE ICC EVALUATION SERVICES REPORT.

CONCRETE FIBER REINFORCEMENT

1. FOR USE IN FIBER REINFORCED CONCRETE CONFORMING WITH ASTM C1116, TYPE III.
2. TYPICAL PHYSICAL PROPERTIES:
SYNTHETIC MICRO FIBERS: (CONCRETE PAN STAIRS)
SPECIFIC GRAVITY: 0.9
MODULUS OF ELASTICITY: 500 KSI TO 800 KSI
TENSILE STRENGTH: 70 KSI TO 110 KSI
LENGTH: ½" TO 2"
DOSAGE: VERIFY WITH MANUFACTURER, 1.5 LB/CY MIN
3. SYNTHETIC FIBERS SHALL BE MANUFACTURED FROM 100% POLYPROPYLENE AND HAVE A CURRENT ICC-ES ESR REPORT.
4. ADD FIBERS TO CONCRETE UNDER CONTROLLED CONDITIONS AT BATCH PLANT, THEN MIX FOR 5 MINUTES AT MIXING SPEED.
5. MANUFACTURER SHALL CONSULT WITH CONCRETE SUPPLIER ON MIX DESIGN, FIBER DOSAGE, AND METHODS OF MIXING, PLACING, AND FINISHING CONCRETE.

MASONRY

1. ALL MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" AND TMS 602 "SPECIFICATION FOR MASONRY STRUCTURES".
2. SUMBIT SHOP DRAWINGS FOR REVIEW PRIOR TO INSTALLATION INCLUDING REINFORCING BAR PLACEMENT, LENGTHS, QUANTITIES, SIZES AND TEST REPORT DOCUMENTATION RELATED TO THE APPROPRIATE ASTM STANDARDS.
3. DESIGN MASONRY ASSEMBLAGE STRENGTH F'M = 2000 PSI. NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS SHALL BE A MINIMUM OF 2000 PSI.
4. CONCRETE MASONRY UNITS SHALL BE MEDIUM-WEIGHT UNITS CONFORMING TO ASTM C90. UNITS SHALL BE LAID IN RUNNING BOND, TYPICAL UNLESS NOTED OTHERWISE. VERTICAL ALIGNMENT OF CELLS SHALL MAINTAIN A CONTINUOUS CLEAR, UNOBSTRUCTED CELL NOT LESS THAN 3 INCHES SQUARE. MINIMUM DEPTH OF HORIZONTAL BOND BEAM CHANNEL BELOW TOP OF UNIT SHALL BE 1½ INCHES, AND CHANNEL SHALL BE 3 INCHES WIDE MINIMUM. ALL UNITS SHALL BE FREE OF DUST AND DIRT AT THE TIME OF LAYING.
5. GROUT SHALL CONFORM TO ASTM C476. THE ADDITIONS OF ADMIXTURES IN THE FIELD IS NOT PERMITTED. GROUT SHALL ATTAIN A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2000 PSI. MORTAR SHALL BE TYPE S CONFORMING TO ASTM C270 AND WITH PROPORTIONS PER TABLE SC-1 OF TMS 602.
6. ALL GROUT SHALL BE MECHANICALLY VIBRATED. GROUT POURS SHALL BE STOPPED 1½" INCHES BELOW THE TOP OF A COURSE TO FORM A KEY AT POURED JOINTS.
7. PROVIDE CLEANOUTS IF GROUT POUR EXCEEDS 5'-0" IN HEIGHT. IF CLEANOUTS ARE PROVIDED, GROUT POUR MAXIMUM HEIGHT EQUALS 10'-0", IN LIFTS NOT TO EXCEED 6'-0".
8. REINFORCEMENT SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 AND SHALL HAVE FABRICATION TOLERANCES IN ACCORDANCE WITH ACI 315. REINFORCING STEEL THAT IS TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE INDICATED TO BE BENT OR HOOKED.
9. VERTICAL REINFORCEMENT SIZE AND SPACING AS SHOWN ON PLAN AND IN MASONRY WALL SCHEDULE WITH ONE BAR MINIMUM AT ALL CORNERS, INTERSECTIONS, WALL ENDS, BEAM BEARING, JAMBS, AND EACH SIDE OF CONTROL JOINTS. TIE AT 8'-0" VERTICALLY WITH SINGLE WIRE LOOP TIE BY A.A. PRODUCTS COMPANY. UNLESS NOTED OTHERWISE, LAP SPLICES SHALL BE PER LAP SPLICE SCHEDULE.
10. HORIZONTAL REINFORCEMENT (UNLESS NOTED OTHERWISE) SHALL BE (2)-#5 BARS IN MINIMUM 8 INCH DEEP GROUTED CONTINUOUS BOND BEAM AT ROOF AND ELEVATED FLOOR LINES. PLACE #5 BAR IN MINIMUM 8 INCH DEEP GROUTED CONTINUOUS BOND BEAM AT TOP OF PARAPET. PLACE #4 BAR IN MINIMUM 8 INCH DEEP GROUTED CONTINUOUS BOND BEAM AT GRADE LEVEL FLOOR LINE. PLACE THESE BARS CONTINUOUS THROUGH CONTROL JOINT. WRAP MASTIC TAPE FOR 1'-6" EACH SIDE OF CONTROL JOINT. PROVIDE BENT BARS TO MATCH HORIZONTAL BOND BEAM REINFORCING AT CORNERS AND WALL INTERSECTIONS TO MAINTAIN BOND BEAM CONTINUITY. STAGGER ALTERNATE SPLICES A MINIMUM OF 4'-0".
11. STEEL ANCHORS INTO MASONRY SHALL CONFORM TO THE DETAILS SHOWN IN THE DRAWINGS. J-BOLTS ARE NOT ACCEPTABLE.
12. PLACE PIPES AND CONDUITS PASSING HORIZONTALLY THROUGH MASONRY IN STEEL SLEEVES.
13. ALUMINUM CONDUITS, PIPES, AND ACCESSORIES SHALL NOT BE EMBEDDED IN MASONRY GROUT OR MORTAR, UNLESS EFFECTIVELY COATED OR COVERED TO PREVENT ALUMINUM-CEMENT CHEMICAL REACTION OR ELECTROLYTIC REACTION BETWEEN ALUMINUM AND STEEL.
14. HORIZONTAL JOINT AND HORIZONTAL BOND BEAM REINFORCING SHALL BE DISCONTINUOUS THROUGH ALL CONTROL JOINTS EXCEPT THOSE AT STEEL BEARING ELEVATIONS AND FLOOR AND ROOF CONNECTIONS.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED BY A FABRICATOR WITH ONE OF THE FOLLOWING MINIMUM QUALIFICATIONS AND BE APPROVED BY AUTHORITY HAVING JURISDICTION (AHJ). QUALIFICATIONS SHALL BE IN EFFECT AT TIME OF BID.

INTERNATIONAL ACCREDITATION SERVICE, INC. (IAS) APPROVED FABRICATOR
AISC CERTIFIED BUILDING FABRICATOR (BU)
AHJ CERTIFIED FABRICATOR
2. ALL STEEL SHALL BE ERECTED BY AN AISC CERTIFIED ERECTOR (CSE).
3. FABRICATOR SHALL SUBMIT DOCUMENTATION OF THEIR CERTIFICATION WITH THE FIRST SHOP DRAWING SUBMITTAL.
4. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" USING LOAD AND RESISTANCE FACTOR DESIGN (LRFD).
5. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATED ASTM STANDARDS:

WIDE FLANGES: ASTM A992
HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A500, GRADE C
CHANNELS AND ANGLES: ASTM A36
PLATES: ASTM A36, TYPICAL U.N.O.
CONTINUITY PLATES AND CAP PLATES AT MOMENT CONNECTIONS: ASTM A572, GRADE 50
PIPE: ASTM A53, GRADE B
ANCHOR RODS: ASTM F1554, GRADE 36 (J-BOLTS AND L-BOLTS ARE NOT ACCEPTABLE)
6. BOLTED CONNECTIONS SHALL BE DESIGNED AND INSTALLED USING HIGH-STRENGTH BOLTS IN ACCORDANCE WITH THE RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". USE ASTM A325 BOLTS IN BEARING-TYPE CONNECTIONS WITH THREADS PERMITTED IN THE SHEAR PLANE (TYPE N), UNLESS OTHERWISE NOTED. WASHERS SHALL CONFORM TO ASTM F436. CONNECTIONS MAY BE SNUG-TIGHTENED, UNLESS NOTED OTHERWISE.
7. ALL CONNECTION FORCES INDICATED ON THE DRAWINGS ARE FACTORED LOADS ACCORDING TO THE LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD.
8. UNLESS NOTED OTHERWISE, THE STEEL FABRICATOR SHALL DETAIL ALL CONNECTIONS PER THE CONSTRUCTION DOCUMENT CONNECTION DESIGN DETAILS. SUBSTITUTION OR MODIFICATION TO THE CONSTRUCTION DOCUMENT CONNECTION DETAILS IS ACCEPTABLE AS LONG AS THEY ARE SUBMITTED WITH SEALED CALCULATIONS PROVIDED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ARIZONA. CONNECTION DETAILS MAY BE SELECTED OR COMPLETED USING DETAILS INDICATED ON THE DRAWINGS AND THE SECTIONS REGARDING CONNECTIONS IN THE AISC "MANUAL OF STEEL CONSTRUCTION" AND DESIGNED USING THE LRFD METHOD TO WITHSTAND THE REACTION FORCES INDICATED. JOINTS THAT ARE NOT SHOWN IN THE CONSTRUCTION DOCUMENTS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW THROUGH A REQUEST FOR INFORMATION OR CLOUDED AND DETAILED IN THE SHOP DRAWINGS.
9. INSTALL ANCHOR RODS AT COLUMN BASE PLATES WITH ASTM A36 STEEL PLATE WASHERS AND ASTM A563 STEEL HEAVY HEX NUTS. INSTALL ANCHOR RODS AT OTHER LOCATIONS AS INDICATED WITH ASTM F436, TYPE 1, STEEL HARDENED WASHERS AND ASTM A563 STEEL HEAVY HEX NUTS.
10. WELDING SHALL CONFORM TO STANDARDS OF AWS D1.1 "STRUCTURAL WELDING CODE"--STEEL: TYPICAL AND AWS D1.8 "STRUCTURAL WELDING CODE"--SEISMIC SUPPLEMENT" WHERE SPECIFIED. ELECTRODES FOR FIELD AND SHOP WELDING SHALL CONFORM TO AWS RECOMMENDATIONS. WELDS NOT INDICATED ON THE DRAWINGS SHALL BE AWS MINIMUM OR AS REQUIRED TO SATISFY STRENGTH CRITERIA, WHICHEVER IS GREATER. FOLLOW PREHEAT REQUIREMENTS OF AWS.
11. ARC-WELDING ELECTRODES AND FILLER METALS TO BE LOW HYDROGEN TYPES E7XTX, E7XTXX OR E70XXX MINIMUM AS APPLICABLE. ELECTRODES WITH CHARPY V-NOTCH (CVN) TESTS VALUES OF A MINIMUM 20 FOOT-POUNDS AT -20 DEGREES FAHRENHEIT AND 40 FOOT-POUNDS AT 70 DEGREE FAHRENHEIT SHALL BE USED AT THE FOLLOWING LOCATIONS:

COMPLETE JOINT PENETRATION WELDS
BEAM TO COLUMN MOMENT CONNECTIONS INCLUDING FLANGE, WEB, AND CONTINUITY PLATE FILLET AND PARTIAL JOINT PENETRATION WELDS
BRACE CONNECTIONS INCLUDING BRACE, GUSSET, BASE PLATES, BEAM STIFFENER PLATES, AND CONTINUITY PLATE FILLET AND PARTIAL JOINT PENETRATION WELDS
WELDS NOTED AS DEMAND-CRITICAL (DC) ON THE DRAWINGS
12. WELDERS SHALL BE CERTIFIED BY AWS AND THE APPLICABLE AUTHORITY HAVING JURISDICTION.
13. GENERALLY, DRAWINGS DO NOT DISTINGUISH BETWEEN SHOP-WELDING AND FIELD-WELDING. THE CONTRACTOR SHALL DETERMINE THE MOST ECONOMICAL, EFFICIENT AND PRACTICAL COMBINATIONS OF SHOP-WELDING AND FIELD-WELDING.
14. CAMBER BEAMS UPWARD THE DESIGNATED AMOUNT INDICATED ON THE STRUCTURAL DRAWINGS. BEAMS WITHOUT A SPECIFIED CAMBER SHALL BE ORIENTED SUCH THAT ANY NATURAL CAMBER IS UPWARD.
15. SPLICING STRUCTURAL MEMBERS WHERE NOT DETAILED ON STRUCTURAL DRAWINGS IS PROHIBITED WITHOUT PRIOR ACCEPTANCE BY THE STRUCTURAL ENGINEER.
16. HEADED CONCRETE ANCHORS, SHEAR CONNECTORS AND DEFORMED BAR ANCHORS SHALL BE AUTOMATICALLY END WELDED.
17. STUDS SHALL CONFORM TO ALL REQUIREMENTS OF THE LATEST EDITION OF AWS C5.4 "RECOMMENDED PRACTICES FOR STUD WELDING" AND AWS D1.1 "STRUCTURAL WELDING CODE".
18. SEE ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS. FOR FIREPROOFING PURPOSES, FRAMING SHALL BE CONSIDERED EITHER "UNRESTRAINED" OR "RESTRAINED" DEPENDING ON STRUCTURAL SYSTEM AS DEFINED IN ASTM E119 AND UL 263.
19. ALL STRUCTURAL STEEL EXCEPT EMBEDDED STEEL WHICH IS IN CONTACT WITH CONCRETE, STEEL TO BE FIREPROOFED, AND STEEL TO BE GALVANIZED SHALL BE CLEANED AND SHOP-PRIMED AS INDICATED IN THE PROJECT SPECIFICATIONS. SEE THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR FINISH PAINTING REQUIREMENTS.
20. UNLESS SPECIFICALLY SHOWN TO BE PAINTED, GALVANIZE ALL EXTERIOR STRUCTURAL STEEL. PROVIDE GALVANIZING AS INDICATED IN THE PROJECT SPECIFICATIONS. TOUCH-UP GALVANIZING WITH GALVANIZING REPAIR PAINT AS INDICATED IN THE PROJECT SPECIFICATIONS.
21. AT GALVANIZED BOLTED CONNECTIONS, THE NUT SHALL BE OVERTAPPED TO ACCOMADATE VARIATION IN COATING THICKNESS ON THE BOLT THREAD. BOLT HOLES SHALL NOT BE ENLARGED TO ACCOMMODATE COATING THICKNESS. THE PROOF LOAD FOR THE NUT MUST BE HIGHER THAN THE TENSILE STRENGTH OF THE BOLT. ASTM A563 GRADES DH AND DH3 AND ASTM A194 GRADE 2H NUTS SHALL BE USED AS GALVANIZED NUTS FOR OVERTAPPING.

NONDESTRUCTIVE TESTING (NDT) OF WELDED JOINTS

1. FOR STRUCTURES IN RISK CATEGORY I AND II WHERE THERE ARE TWENTY (20) OR FEWER CJP GROOVE WELDS ON THE PROJECT, ALL CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS IN MATERIALS ¾" THICK OR GREATER SHALL HAVE ULTRASONIC TESTING (UT) PERFORMED BY A QUALIFIED MATERIALS TESTING LABORATORY. ON STRUCTURES IN RISK CATEGORY I AND II WHERE THERE ARE MORE THAN TWENTY (20) CJP GROOVE WELDS ON THE PROJECT, 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS IN MATERIALS ¾" THICK OR GREATER SHALL HAVE UT PERFORMED BY A QUALIFIED TESTING LABORATORY.
2. FOR STRUCTURES IN RISK CATEGORY I AND II, WHERE THE INITIAL RATE FOR UT IS 10%, THE NOT RATE FOR AN INDIVIDUAL WELDER OR WELD OPERATOR SHALL BE INCREASED TO 100% SHOULD THE REJECT RATE, THE NUMBER OF WELDS CONTAINING UNACCEPTABLE DEFECTS DIVIDED BY THE NUMBER OF WELDS COMPLETED, EXCEED 5% OF THE WELDS TESTED FOR THE WELDER OR WELDING OPERATOR. A SAMPLE OF 20 COMPLETED WELDS FOR THE PROJECT SHALL BE MADE PRIOR TO IMPLEMENTING SUCH AN INCREASE.

STEEL DECK

1. ALL STEEL DECK SHALL BE DETAILED, FABRICATED, AND INSTALLED IN ACCORDANCE WITH THE STEEL DECK INSTITUTE SPECIFICATIONS, LATEST EDITION.
2. ALL STEEL DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS, EXCEPT WHERE THE STEEL LAYOUT DOES NOT PERMIT.
3. MINIMUM SECTION PROPERTIES OF STEEL ROOF DECK SHALL BE AS FOLLOWS:

1½" X 20GA (TYPE B): IP = 0.197 IN⁴/FT
IN = 0.217 IN⁴/FT
SP = 0.224 IN³/FT
SN = 0.229 IN³/FT
4. MINIMUM SECTION PROPERTIES OF COMPOSITE STEEL FLOOR DECK SHALL BE AS FOLLOWS:

1½" X 18GA: IP = 0.277 IN⁴/FT
IN = 0.290 IN⁴/FT
SP = 0.306 IN³/FT
SN = 0.318 IN³/FT
5. ALL COMPOSITE STEEL FLOOR DECK SHALL HAVE DEFORMATIONS ADEQUATE TO PROVIDE A BOND WITH THE CONCRETE.
6. STEEL ROOF DECK SHALL CONFORM TO ASTM A653 GR50, STRUCTURAL STEEL GRADE WITH A MINIMUM YIELD STRENGTH OF 50 KSI. STEEL FLOOR DECK SHALL CONFORM TO ASTM A653 GR50, STRUCTURAL STEEL GRADE WITH A MINIMUM YIELD STRENGTH OF 50 KSI.
7. GALVANIZE STEEL ROOF DECK IN ACCORDANCE WITH ASTM A653, G60. GALVANIZE COMPOSITE STEEL FLOOR DECK IN ACCORDANCE WITH ASTM A653, G60.
8. THE STEEL ROOF DECK IS PART OF THE MAIN LATERAL LOAD RESISTING SYSTEM. STRUCTURAL DIAPHRAGM ACTION SHALL BE PROVIDED BY THE STEEL ROOF DECK. DECK DIAPHRAGM ATTACHMENT REQUIREMENTS INDICATED BELOW SHALL BE INCREASED AS REQUIRED FOR THE SPECIFIED UPLIFT LOADING INDICATED OR AS REQUIRED BY ROOF SYSTEM MANUFACTURER TO CONFORM TO SYSTEM REQUIREMENTS. THE DECK AND ITS ATTACHMENTS TO THE STRUCTURE SHALL BE CAPABLE OF RESISTING THE HORIZONTAL SHEAR FORCE LISTED BELOW OR AS INDICATED ON THE DRAWINGS, WITH A MINIMUM SAFETY FACTOR AS PRESCRIBED IN THE STEEL DECK INSTITUTE DIAPHRAGM DESIGN MANUAL. MINIMUM ATTACHMENT OF THE STEEL ROOF DECK SHALL BE AS LISTED BELOW OR AS INDICATED ON THE DRAWINGS, WHICHEVER IS MORE STRINGENT.
9. MINIMUM ROOF DECK ATTACHMENT TO SUPPORTS:

36/4 WELD PATTERN AT SUPPORTS, WITH 1¼" X ¾" ARC SEAM WELD AT SUPPORTS ADJACENT TO SIDELAP AND ¾" VISIBLE DIAMETER ARC SPOT WELDS AT INTERIOR FLUTES, PNEUMATIC PUNCH SIDELAPS AT 24" O.C.
10. CONNECT ROOF DECK TO SUPPORTS AROUND PERIMETER OF EDGES, OPENINGS, AND PENETRATIONS WITH ¾" VISIBLE DIAMETER ARC SPOT WELDS AT 12" O.C.
11. STEEL DECK MANUFACTURER SHALL FURNISH COMPLETE SHOP DRAWINGS DEPICTING DECK PLACEMENT, SHEET METAL CLOSURES, SHEET METAL ACCESSORIES, AND DECK CONNECTION REQUIREMENTS.
12. THE ROOF DECK AREAS REQUIRE VARYING SLOPES, INCLUDING POSSIBLE WARPING OF THE DECK. THE STEEL DECK FABRICATOR SHALL PROVIDE PROPER FIT AND WELDING OF ALL DECK.
13. COMPOSITE STEEL FLOOR DECK AT NON-COMPOSITE SYSTEMS (HAVING NO SHEAR CONNECTORS) SHALL BE WELDED TO STRUCTURAL STEEL SUPPORTS WITH 36/4 WELD PATTERN WITH 1½" X ¾" ARC SEAM WELD AT SUPPORTS ADJACENT TO SIDELAP AND ¾" VISIBLE DIAMETER ARC SPOT WELDS AT INTERIOR FLUTES. CONNECT COMPOSITE STEEL FLOOR DECK TO SUPPORTS AROUND PERIMETER OF EDGES, OPENINGS, AND PENETRATIONS WITH ¾" VISIBLE DIA ARC SPOT WELDS AT 12" O.C., UNLESS A MORE STRINGENT CONNECTION IS NOTED ON THE DRAWINGS.
14. ALL SINGLE SPAN FLOOR DECK CONDITIONS MUST BE SHORED. SHORES SHALL BE LEFT IN PLACE UNTIL THE CONCRETE ATTAINS 75% OF THE SPECIFIED COMPRESSIVE STRENGTH.
15. ALL STEEL DECK AND MECHANICAL FASTENERS SHALL HAVE CURRENT ICC OR IAPMO EVALUATION REPORT. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3.
16. DO NOT SUSPEND ANY ITEM FROM ANY STEEL DECK. ALL HANGERS FOR CONDUIT, PIPING, FIXTURES OR ANY OTHER ITEMS, SHALL BE HUNG DIRECTLY FROM STRUCTURAL STEEL WORK OR SUPPLEMENTARY MEMBERS ACCEPTABLE TO THE ARCHITECT AND STRUCTURAL ENGINEER. ALL HANGING LOAD LOCATIONS AND DETAILS SHALL BE SUBMITTED FOR REVIEW.
17. DECK WELDS SHALL BE IN ACCORDANCE WITH AWS D1.3.
18. FURNISH AND INSTALL MISCELLANEOUS DECK SUPPORT ANGLES AT COLUMNS AND SIMILAR CONDITIONS.
19. PROVIDE SUMP PANS AT ALL ROOF DRAINS AND REINFORCE AS REQUIRED.
20. STEEL DECK SHALL BE LAPPED OVER SUPPORTS WITH A MINIMUM LAP LENGTH OF 2 INCHES AT ALL NON-COMPOSITE FLOOR AND ROOF DECKS.

STEEL PAN STAIRS

1. REFER TO PROJECT SPECIFICATIONS, ARCHITECTURAL DRAWINGS AND STRUCTURAL DRAWINGS TO DETERMINE EXTENT, LOCATION, DIMENSIONS OF STAIRS.
2. SUBSTITUTION OR MODIFICATION TO THE CONSTRUCTION DOCUMENT STAIR ASSEMBLY DESIGN AND DETAILS IS ACCEPTABLE AS LONG AS THEY ARE SUBMITTED WITH SEALED SHOP DRAWINGS AND CALCULATIONS PROVIDED BY A LICENSED ENGINEER IN THE STATE OF ARIZONA.
3. LANDING PANS SHALL BE 12 GAGE MINIMUM, TREAD PANS SHALL BE 14 GAGE MINIMUM AND CONCRETE FILL SHALL BE REINFORCED WITH 6 X 6 – W1.4 X W1.4 W.W.R.

SHOP DRAWINGS

1. SHOP DRAWINGS ARE TO BE SUBMITTED FOR ALL STRUCTURAL ITEMS AND AS REQUIRED BY THE SPECIFICATIONS. CONTRACT DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
2. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO FABRICATION.
3. CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS AND PRODUCT DATA FOR CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTAL. ALL ITEMS NOT IN ACCORDANCE WITH THE CONTRACT SHALL BE SO NOTED UPON THE CONTRACTOR'S REVIEW. ANY SHOP DRAWINGS OR PRODUCT DATA NOT REVIEWED AND STAMPED BY THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW.
4. ANY SHOP DRAWING NOT CHECKED AND INITIALED BY THE SUPPLIER/DETAILER PRIOR TO SUBMITTING FOR ARCHITECTURAL AND ENGINEERING REVIEW WILL BE RETURNED WITHOUT REVIEW.
5. ANY CHANGE FROM THE ORIGINAL DRAWINGS SHALL BE NOTED BY THE SUBMITTING PARTY. ANY CHANGES NOT CALLED OUT SHALL BE CONSIDERED NOT APPROVED UNLESS SPECIFICALLY NOTED OTHERWISE. THE SHOP DRAWING STAMP SHALL NOT BE CONSIDERED IMPLIED APPROVAL OF ANY CHANGES.
6. SHOP DRAWINGS SHALL NOT REPLACE THE CONTRACT DRAWINGS. ITEMS OMITTED OR SHOWN INCORRECTLY AND NOT NOTED BY THE REVIEWER ARE NOT TO BE CONSIDERED CHANGES TO THE CONTRACT DRAWINGS. REVIEW IS INTENDED AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT ITEMS ARE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DRAWINGS.
7. ANY ENGINEERING DESIGN PERFORMED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF AN ENGINEER REGISTERED IN THE APPROPRIATE JURISDICTION AND DISCIPLINE. COMPLETE DESIGN CALCULATIONS FOR EACH MEMBER SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW BY THE ENGINEER OF RECORD. THE ADEQUACY OF DESIGNS AND LAYOUTS PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING PARTY.

STRUCTURAL OBSERVATIONS

1. STRUCTURAL OBSERVATIONS SHALL BE REQUIRED FOR THIS PROJECT IN ACCORDANCE WITH IBC 1704.6. THE OWNER SHALL EMPLOY A REGISTERED DESIGN PROFESSIONAL TO PROVIDE STRUCTURAL OBSERVATIONS. CONTRACTOR SHALL NOTIFY THE STRUCTURAL OBSERVER AT LEAST 48 HOURS PRIOR TO A REQUIRED OBSERVATION AS NOTED BELOW:

a. STRUCTURAL OBSERVATION SHALL BE PERFORMED AFTER INSTALLATION OF REINFORCING STEEL BUT PRIOR TO CONCRETE PLACEMENT AT FOUNDATIONS SUPPORTING LATERAL FORCE-RESISTING ELEMENTS.

b. STRUCTURAL OBSERVATION SHALL BE PERFORMED AFTER PLACEMENT REINFORCING BUT PRIOR CONCRETE PLACEMENT AT THE FIRST ELEVATED DECK.

c. STRUCTURAL OBSERVATIONS SHALL BE PERFORMED ON THE COMPLETED STRUCTURE, PRIOR TO CONCEALING STRUCTURAL ELEMENTS.
2. THE STRUCTURAL OBSERVER SHALL PROVIDE THE CONTRACTOR WITH A WRITTEN REPORT AFTER EACH OBSERVATION WHICH IDENTIFIES ANY DEFICIENCIES NOTED WHICH HAVE NOT BEEN RESOLVED.
3. AT THE CONCLUSION OF THE PROJECT, THE STRUCTURAL OBSERVER WILL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

LEGEND:

DETAIL MARKER

A

#

DETAIL NUMBER

DRAWING NUMBER

SECTION MARKER

A

#

DETAIL NUMBER

DRAWING NUMBER

NOTE: A LINE (—) IN PLACE OF THE DRAWING NUMBER INDICATES THAT THE SECTION OR DETAIL IS LOCATED ON THE SAME DRAWING THAT THE SECTION OR DETAIL IS CUT.

SPECIAL INSPECTIONS

1. THE OWNER SHALL EMPLOY SPECIAL INSPECTORS, QUALIFIED TO THE SATISFACTION OF THE BUILDING OFFICIAL, WHO SHALL PROVIDE SPECIAL INSPECTIONS DURING CONSTRUCTION FOR THE WORK INDICATED BY THE SPECIAL INSPECTIONS TABLES ON THE APPROVED DESIGN DRAWINGS.
2. SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY. INSPECTORS FOR EACH SYSTEM AND MATERIAL SHALL BE INTERNATIONAL CODE COUNCIL (ICC) CERTIFIED OR OTHERWISE APPROVED BY THE BUILDING OFFICIAL.
3. THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR CONFORMANCE TO THE APPROVED DESIGN DRAWINGS AND SPECIFICATIONS.
4. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, CONTRACTOR, OWNER, AND ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
5. SEE PROJECT SPECIFICATIONS AND REFERENCED STANDARDS FOR FREQUENCY OF TESTING.
6. AT THE CONCLUSION OF CONSTRUCTION, A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF PREVIOUSLY NOTED DISCREPANCIES SHALL BE SUBMITTED.
7. THE FOLLOWING TYPES OF WORK SHALL BE INSPECTED BY A SPECIAL INSPECTOR IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE:

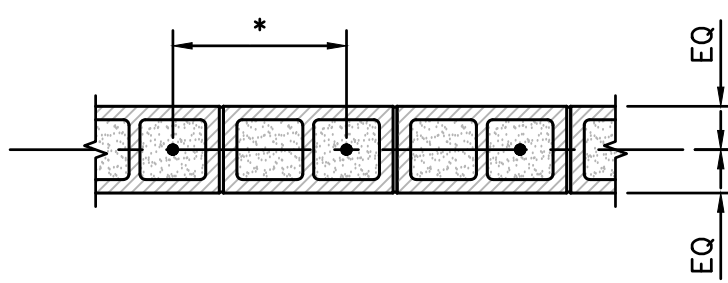
REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (IBC TABLE 1705.3)				
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD	IBC REFERENCE
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 B. INSPECT SINGLE-PASS FILLET WELDS, MXIMUM ⅜" C. INSPECT ALL OTHER WELDS	- - X	X X -	AWS D1.4 ACI 318: 26.6.4	-
INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2	-
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS. A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	X -	- X	ACI 318:17.8.2.4 ACI 318: 17.8.2	-
VERIFY USE OF REQUIRED DESIGN MIX.	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP & AIR CONTENT TESTS, & DETERMINE THE TEMP. OF THE CONCRETE.	X	-	ASTM C172, ASTM C31, ACI 318: 26.5, 26.12	1908.10
INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	-	ACI 318: 26.5	1908.6, 1908.7, 1908.8
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	X	ACI 318: 26.11.1.2(b)	-

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS (IBC TABLE 1705.6)		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	—	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	—	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	—	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	—
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	—	X

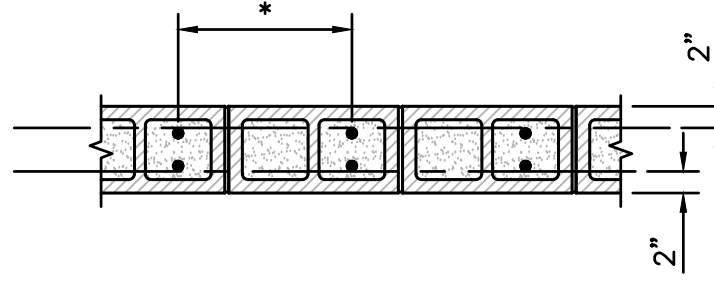
MINIMUM MASONRY SPECIAL INSPECTIONS				
INSPECTION TASK	FREQUENCY (a)		REFERENCE FOR CRITERIA	
	CONTINUOUS	PERIODIC	TMS 402/ACI 530/ASCE 5	TMS 602/ACI 530.1/ASCE 6
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		ART. 1.5
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE–PREPARED MORTAR		X		ART. 2.1, 2.6A
B. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3B
C. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		ART. 2.4B, 2.4H
D. LOCATION OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X		ATR. 3.4, 3.6A
E. PROPERTIES OF THIN–BED MORTAR FOR AAC MASONRY	X(b)	X(c)		ART. 2.1C
3. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE		X		ART. 3.2D, 3.2F
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1	ART. 2.4, 3.4
C. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES		X	SEC. 6.1, 6.2.1, 6.2.6, 6.2.7	ART. 3.2E, 3.4, 3.6A
D. PROPORTIONS OF SITE–PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		ART. 2.6B, 2.4G.1.b
E. CONSTRUCTION OF MORTAR JOINTS		X		ART. 3.3B
4. VERIFY DURING CONSTRUCTIONS:				
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X		ART. 3.3F
B. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	SEC. 1.2.1(e), 6.1.4.3, 6.2.1	
C. WELDING OF REINFORCEMENT	X		SEC. 8.1.6.7.2, 9.3.3.4(c) 11.3.3.4(B)	
D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURE ABOVE 90°F (32.2°C))		X		ART. 1.8C, 1.8D
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		ART. 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3, 1.4B.3, 1.4.B.4

MASONRY WALL (MW) SCHEDULE

ADDITIONAL INFORMATION PER TYPICAL DETAILS.



SINGLY REINFORCED WALLS



DOUBLY REINFORCED WALLS

NOTE: PROVIDE LADDER REINFORCING PER GENERAL STRUCTURAL NOTES IN ADDITION TO HORIZONTAL REINFORCING PER SCHEDULE.

MARK	THICKNESS	TYPE	REINFORCING		REMARKS
			VERTICAL	HORIZONTAL	
MW1	0'–7⅝"	CMU	#5@32"	PER G.S.N.	–
MW2	0'–7⅝"	CMU	#5@24"	PER G.S.N., MAX BOND BEAM SPACING OF 4'–0"	SOLID GROUT ALL CELLS
MW3	0'–7⅝"	CMU	#5@32"	PER G.S.N., MAX BOND BEAM SPACING OF 2'–0"	–

- (a) FREQUENCY REFERS TO THE FREQUENCY OF SPECIAL INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODIC DURING THE LISTED TASK, AS DEFINED IN THE TABLE.
- (b) REQUIRED FOR THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.
- (c) REQUIRED AFTER THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.

LEDGER (L) SCHEDULE		
WELD PLATE NOTE: THE JOIST OR BEAM IS NOT CONSIDERED A SUPPORT POINT FOR A STEEL LEDGER ANGLE AND MAY NOT BE USED IN PLACE OF A WELD PLATE. REQUIRED LAYOUT OF WELD PLATES OR ANCHOR RODS AT MASONRY WALL PER TYPICAL DETAILS. J–BOLTS ARE NOT ACCEPTABLE.		
MARK	LEDGER SIZE	CONNECTION
L1	L3½ X 3½ X ¼	WELD PLATES AT 24" O.C.
L2	L3½ X 3½ X ¼	WELD PLATES AT 48" O.C.
L3	L4 X 4 X ⅝	WELD PLATES AT 24" O.C.

LINTEL (LT) SCHEDULE		
NOTE: LINTEL TYPE PER TYPICAL DETAILS		
MARK	LINTEL SIZE	REMARKS
LT1	"H" = 16" (2)–#5 BOTTOM	PER TYPICAL DETAIL 6 / 21

WALL FOOTING (WF) SCHEDULE						
NOTES: SCHEDULED REINFORCING IS BOTTOM REINFORCING U.N.O., REINFORCING LAYOUT AND CLEARANCES PER TYPICAL DETAILS.						
MARK	DIMENSIONS			REINFORCING		REMARKS
	"W"	"L"	"H"	LONGITUDINAL	TRANSVERSE	
WF1	2'–0"	CONTINUOUS	1'–0"	(2)–#5	#4@12"	—
WF2	2'–9"	CONTINUOUS	1'–0"	(3)–#5	#4@12"	—

COLUMN BASE PLATE (BP) SCHEDULE									
MARK	BASE PLATE				ANCHOR RODS				REMARKS
	THICKNESS	LENGTH "L"	WIDTH "W"	DETAIL	NUMBER	DIAMETER (IN)	EMBEDMENT (IN)	TYPE	
BP1	0'-0 5/8"	1'-1"	1'-1"	A.4/32	4	1	9	B	—
BP2	0'-0 5/8"	1'-4"	1'-4"	A.4/32	4	7/8	9	B	—

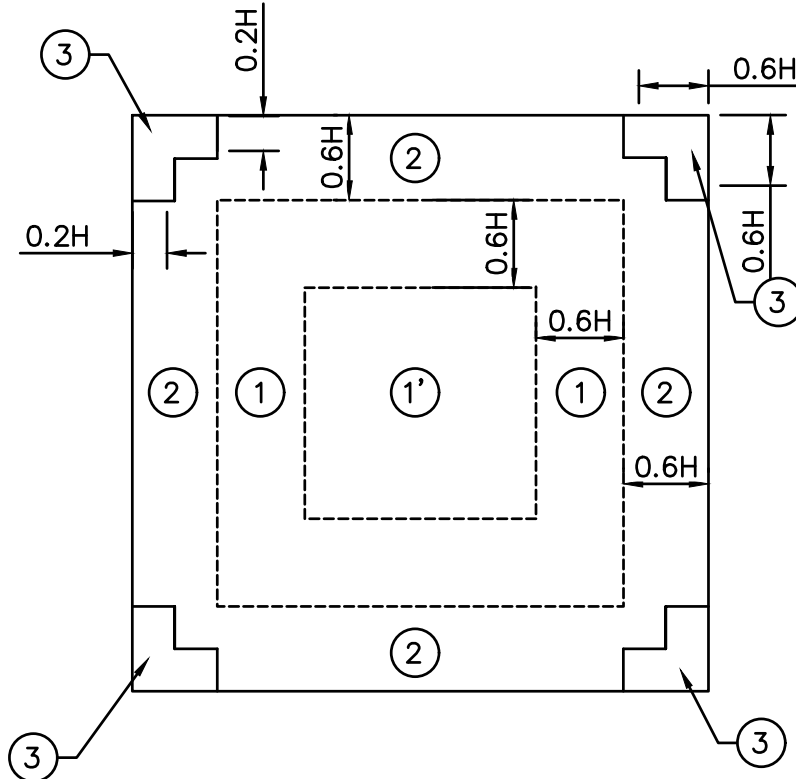
FOOTING (F) SCHEDULE

The diagram illustrates the cross-section of a footing. The overall width is labeled "W". The height is labeled "H". The footing is reinforced with top reinforcement (indicated by a dashed line) and bottom reinforcement (indicated by a solid line). The top reinforcement is labeled "CONSTRUCTION ABOVE FOOTING PER DETAILS" and "TOP REINFORCING WHERE REQUIRED". The bottom reinforcement is labeled "BOTTOM REINFORCING PER SCHEDULE". The footing is shown with a 3" clearance (CLR) from the bottom. The footing is also shown with a 2" clearance (CLR) from the top and a 2" clearance (CLR) from the bottom.

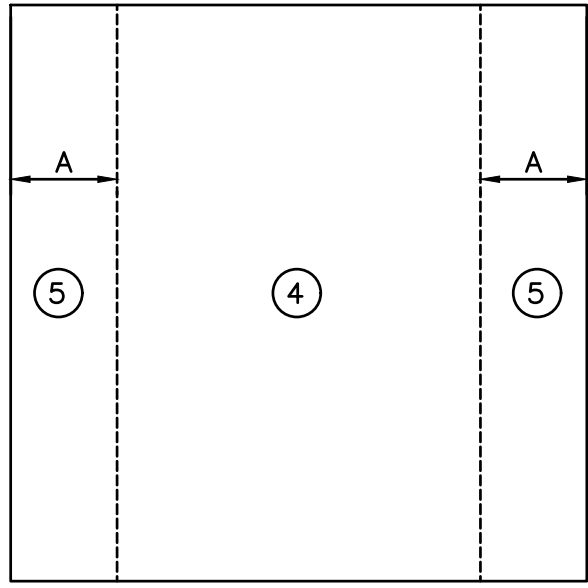
MARK	DIMENSIONS			REINFORCING	REMARKS
	"W"	"L"	"H"		
F1	4'-0"	4'-0"	1'-2"	#5@12" EW T&B	—
F2	5'-3"	4'-0"	1'-2"	#5@12" EW T&B	—
F3	4'-6"	4'-6"	1'-2"	#5@12" EW T&B	—

MECHANICAL EQUIPMENT WEIGHTS		
VERIFY ALL WEIGHTS AND LOCATIONS OF MECHANICAL EQUIPMENT WITH MECHANICAL ENGINEER AND ARCHITECT. MECHANICAL UNIT WEIGHTS TO BE MULTIPLIED BY 1.4.		
MARK	EQUIPMENT WEIGHT	REMARKS
A	119	—

ULTIMATE WIND SURFACE PRESSURE (PSF)						
ZONE	EFFECTIVE WIND AREA (SQ. FT)					
	10	20	50	100	200	500
①'	-29.8 16.0	-	-29.8 16.0	-29.8 16.0	-	-20.2 16.0
①	-51.9 16.0	-	-43.9 16.0	-40.5 16.0	-	-32.6 16.0
②	-68.4 32.6	-	-58.2 29.2	-53.8 27.7	-	-43.6 24.3
③	-68.4 32.6	-	-58.2 29.2	-53.8 27.7	-	-43.6 24.3
④	-35.3 32.6	-	-	-30.5 27.7	-29.0 26.2	-27.0 24.3
⑤	-43.6 32.6	-	-	-33.9 27.7	-30.9 26.2	-27.0 24.3
PARAPET	-68.7 94.5	-64.1 88.4	-58.1 80.3	-53.5 74.3	-49.0 68.2	-42.9 60.1



SCHEMATIC ROOF PLAN



SCHEMATIC WALL ELEVATION

- NOTES:
1. WIND DESIGN PARAMETERS PER GENERAL STRUCTURAL NOTES.
 2. POSITIVE AND NEGATIVE VALUES SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.
 3. H INDICATES THE MEAN ROOF HEIGHT.
 4. WALL AND ROOF WIND FORCES ARE CALCULATED FOR MEAN ROOF HEIGHT = 35'-4".
 5. A=10% OF LEAST HORIZONTAL DIMENSION OR 0.4H, WHICHEVER IS SMALLER BUT NOT LESS THAN 4% OF THE LEAST HORIZONTAL DIMENSION OR 3'-0".
 6. WALL AND PARAPET FORCES SHALL BE APPLIES INWARD AND OUTWARD AS ALTERNATIVE LOAD CASES.
 7. BUILDING SKETCHES SHOWN DO NOT REPRESENT THE ACTUAL BUILDING SHAPE, BUT ARE INTENDED TO SHOW ZONES OF PRESSURE VARIATION.

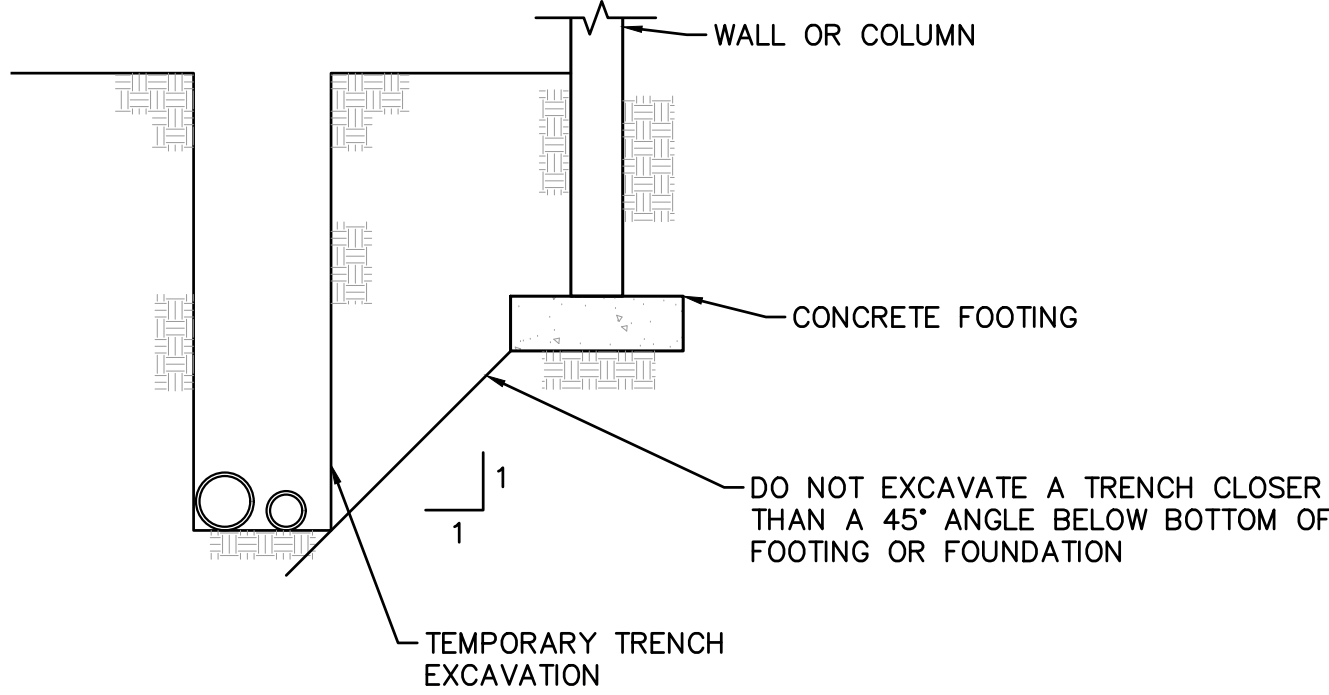
CLASS B TENSION LAP SPLICE TABLE																				
CASE	BAR SIZE	#3		#4		#5		#6		#7		#8		#9		#10		#11		
	BAR DIAMETER	0.375"ø		0.500"ø		0.625"ø		0.750"ø		0.875"ø		1.000"ø		1.128"ø		1.270"ø		1.410"ø		
	CASTING POSITION	T	O	T	O	T	O	T	O	T	O	T	O	T	O	T	O	T	O	
1	3000 PSI	28	22	38	29	47	36	56	43	81	63	93	72	105	81	118	91	131	101	
	4000 PSI	25	19	33	25	41	31	49	37	71	54	81	62	91	70	102	79	114	87	
	5000 PSI	22	17	29	23	36	28	44	34	63	49	72	56	81	63	92	71	102	78	
	5000 PSI	20	16	27	21	33	26	40	31	58	45	66	51	74	57	84	64	93	71	
2	3000 PSI	42	33	56	43	70	54	84	65	122	94	139	107	157	121	177	136	196	151	
	4000 PSI	37	28	49	37	61	47	73	56	106	81	121	93	136	105	153	118	170	131	
	5000 PSI	33	25	44	34	54	42	65	50	95	73	108	83	122	94	137	106	152	117	
	6000 PSI	30	23	40	31	50	38	59	46	86	67	99	76	111	86	125	96	139	107	

- CASE 1:
CLEAR SPACING OF BARS BEING SPLICED IS NOT LESS THAN 1 BAR DIAMETER, CLEAR COVER IS NOT LESS THAN 1 BAR DIAMETER, AND TIES OR STIRRUPS ARE PRESENT THROUGHOUT THE SPLICE LENGTH NOT LESS THAN THE CODE MINIMUM
OR
THE CLEAR SPACING OF BARS BEING SPLICES IS NOT LESS THAN 2 BAR DIAMETERS AND CLEAR COVER IS NOT LESS THAN 1 BAR DIAMETER
- NOTE:
TOP BARS (T IN TABLE) ARE HORIZONTAL BARS WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW THE BAR. OTHER BARS (O IN TABLE) ARE ALL VERTICAL BARS AND HORIZONTAL BARS WITH LESS THAN 12" OF FRESH CONCRETE CAST BELOW THE BAR.

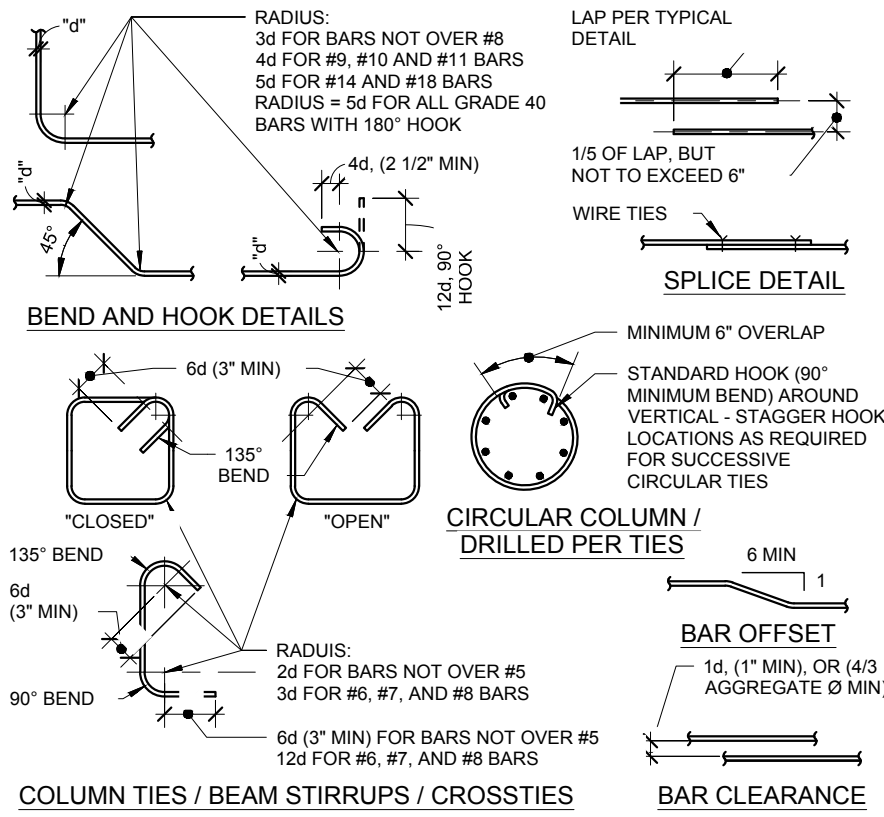
- CASE 2:
ALL OTHER CASES

CLASS "B" TENSION LAP SPLICE LENGTHS FOR UNCOATED GRADE 60 REINFORCING STEEL IN NORMAL WEIGHT CONCRETE

1 COMPONENT AND CLADDING WIND FORCES PER ASCE 7-16 (H 60'-0" AT GABLE ROOFS WITH SLOPE ≤ 7° OR MONOSLOPE ROOFS WITH SLOPE ≤ 3°)
SCALE: NTS

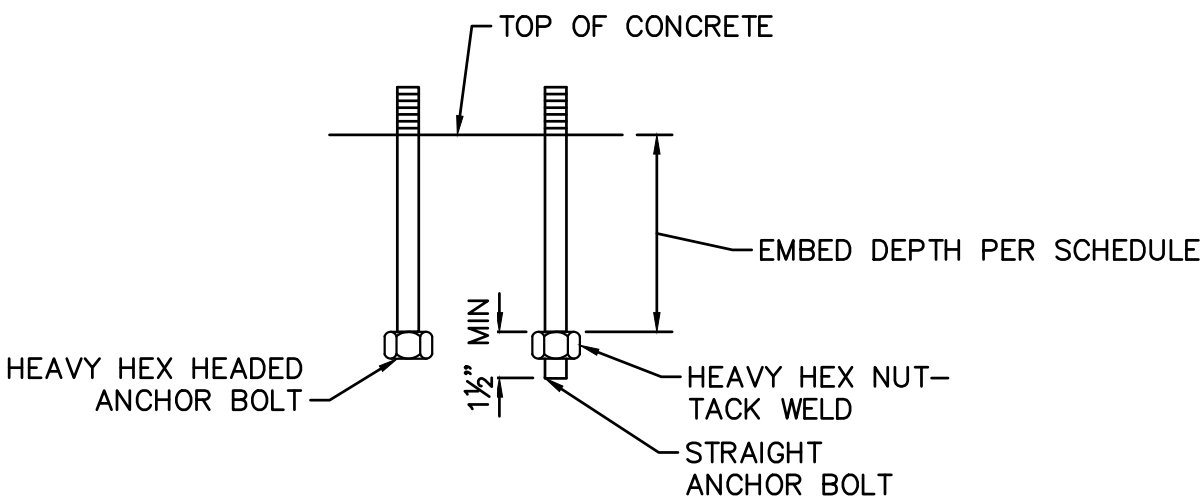


3 TRENCH ADJACENT TO FOOTING
SCALE: NTS

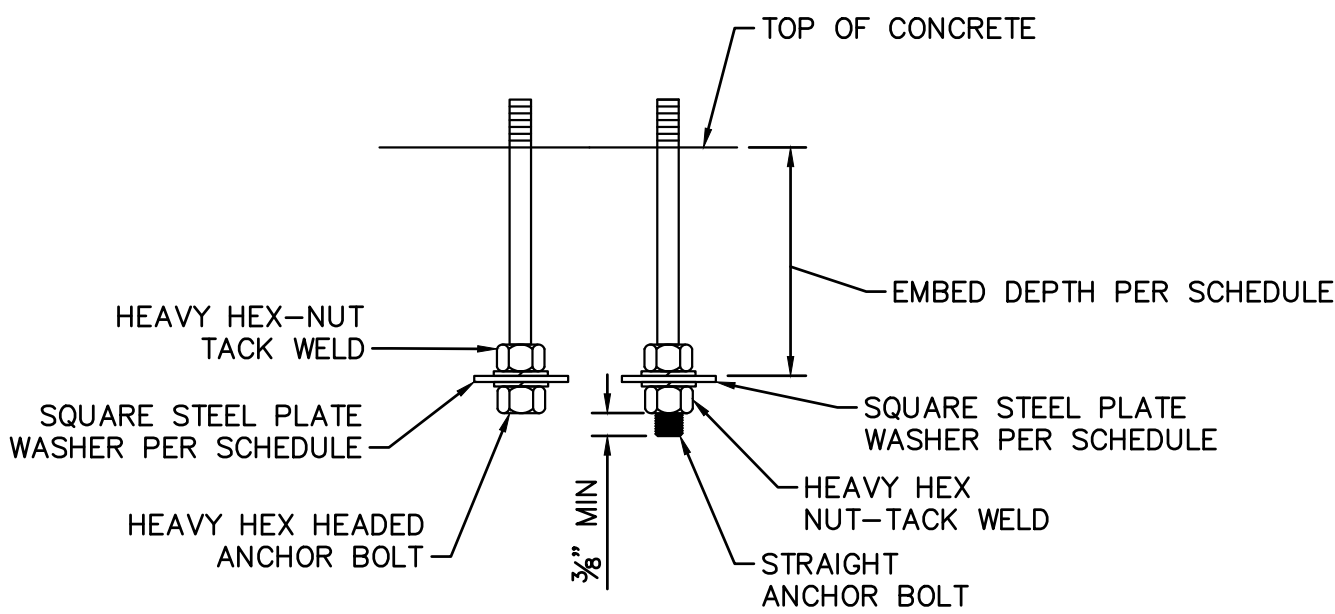


4 CONCRETE REINFORCING BARS
SCALE: NTS

ANCHOR ROD PLATE WASHERS	
ANCHOR ROD DIAMETER	STEEL PLATE WASHER (A36)
½"	¾"x1½"x1½"
⅝"	½"x1¾"x1¾"
¾"	½"x2¼"x2¼"
⅞"	½"x2½"x2½"
1"	⅝"x3½"x3½"
1¼"	¾"x3½"x3½"
1½"	⅞"x4¼"x4¼"



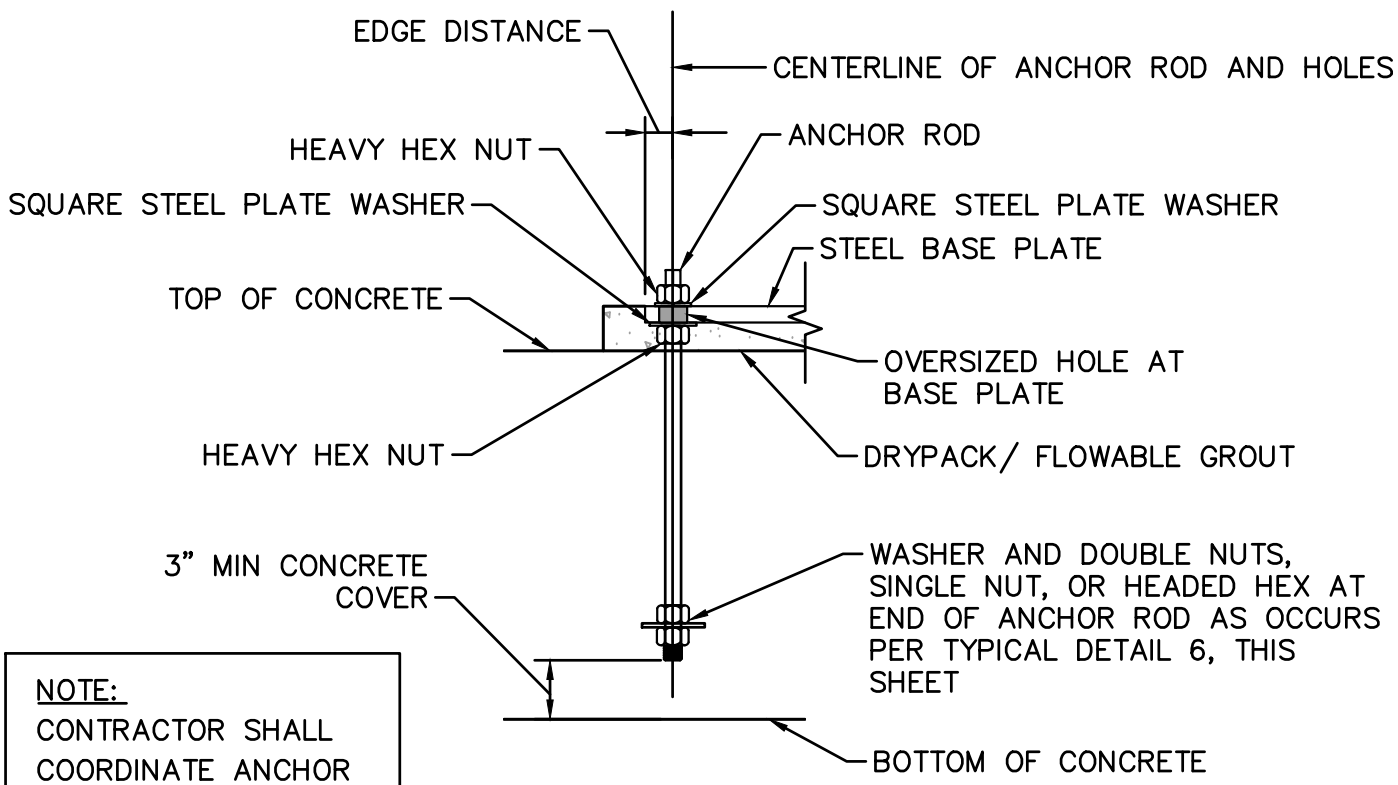
TYPE "A"



TYPE "B"

6 STEEL ANCHOR RODS
SCALE: NTS

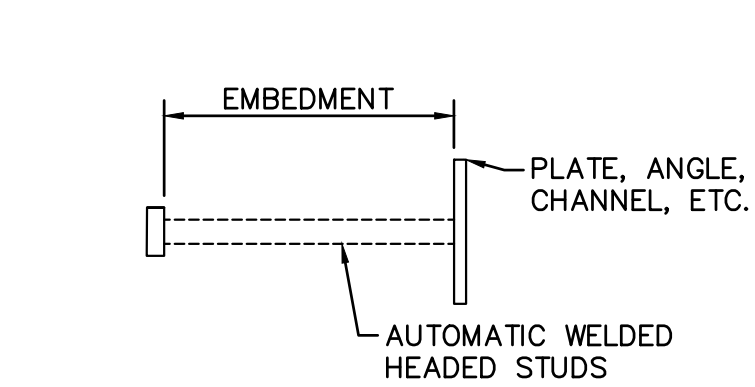
STEEL COLUMN BASE PLATES					
ANCHOR ROD DIAMETER	STEEL PLATE WASHER (A36)	HOLE SIZE AT STEEL PLATE WASHER	OVERSIZED HOLE AT STEEL BASE PLATE	EDGE DISTANCE OF BASE PLATE TO CENTERLINE OF HOLE "X"	THICKNESS OF GROUT "T"
¾"	⅝"x3½"x3½"	1⅞"	1⅜"	2"	2" MAX
1"	¾"x3½"x3½"	1⅞"	1⅜"	2"	2" MAX



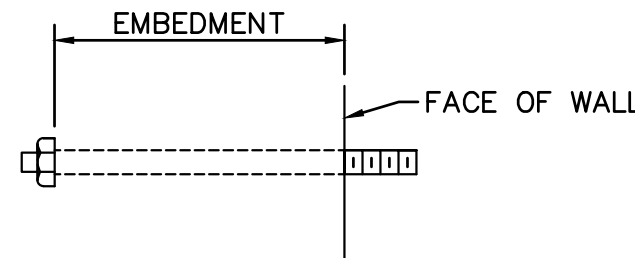
- NOTE:
CONTRACTOR SHALL COORDINATE ANCHOR ROD EXTENSIONS AND THREAD LENGTHS

5 PLATE WASHERS, HOLE SIZES, AND EDGE DISTANCES AT STEEL COLUMN BASE PLATES
SCALE: NTS

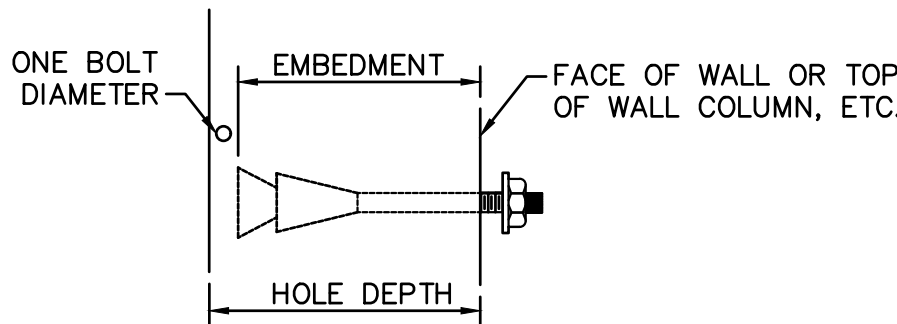
ANCHOR AND EXPANSION ANCHOR SCHEDULE - FOR COLUMN ANCHOR RODS, SEE BASE PLATE SCHEDULE			
ANCHOR TYPE	DIAMETER	VERTICAL EMBEDMENT LENGTH	HORIZONTAL EMBEDMENT LENGTH
ALL	½"	6"	5"
ALL	⅝"	6"	5"
ALL	¾"	7"	5"
ANCHOR RODS/ HEADED STUDS	⅞"	8"	6"
ANCHOR ROD	1"	9"	7"
ANCHOR ROD	1¼"	11"	9"
ANCHOR ROD	1½"	12"	10"



HEADED STUD ANCHOR

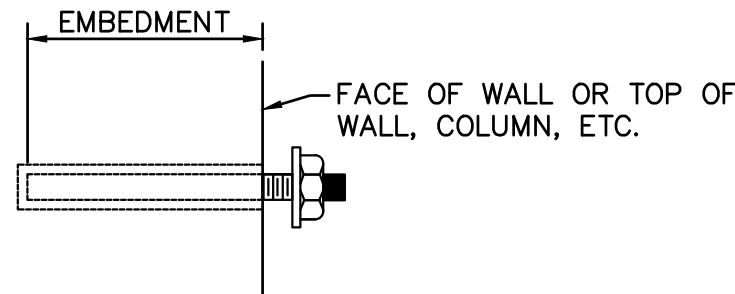


ANCHOR ROD



EXPANSION ANCHOR

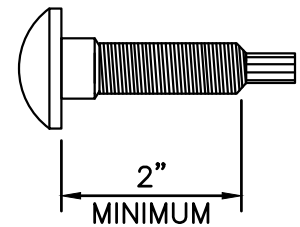
ADHESIVE ANCHOR SCHEDULE		
TREADED ANCHOR DIAMETER	VERTICAL AND HORIZONTAL ANCHOR EMBEDMENT LENGTH	
	CONCRETE	MASONRY
½"	6"	5"
⅝"	6"	6"
¾"	7"	7"
⅞"	8"	N/A
1"	9"	N/A
1¼"	11"	N/A



ADHESIVE ANCHOR

- ADHESIVE ANCHOR NOTES:
1. PROVIDED ADHESIVE ANCHORS PER THIS SCHEDULE UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.
 2. ADHESIVE ANCHORS USED IN MASONRY SHALL BE INSTALLED GROUTED CELLS – IF GROUTED CELLS ARE NOT ENCOUNTERED, BREAK OUT CELL AND GROUT SOLID FOR 8" ALL-AROUND EACH ANCHOR LOCATION.
 3. THREADED ANCHORS AND ADHESIVE SHALL BE SUPPLIED BY THE MANUFACTURER.
 4. THREADED ANCHORS SHALL BE INSTALLED WITH STEEL WASHERS.
 5. APPROVED MANUFACTURERS OF ADHESIVE ANCHORS IN CONCRETE AND MASONRY PER GENERAL STRUCTURAL NOTES.

3/4 " BOLTS - BOLTS TYPE PER GSN		
NOMINAL BEAM DEPPTH "D" IN INCHES	NUMBER OF BOLTS IN A ROW	SHEAR PLATE THICKNESS
UP TO 7	2	⅝"
8–11	2	⅝"
12–14	3	⅝"
15–17	4	⅝"
18–20	5	⅝"
21–23	6	⅝"
24–25	7	⅝"



FABRICATOR SHALL TAKE NECESSARY PRECAUTIONS AGAINST BOLT SHANK OUT FABRICATOR'S OPTION:

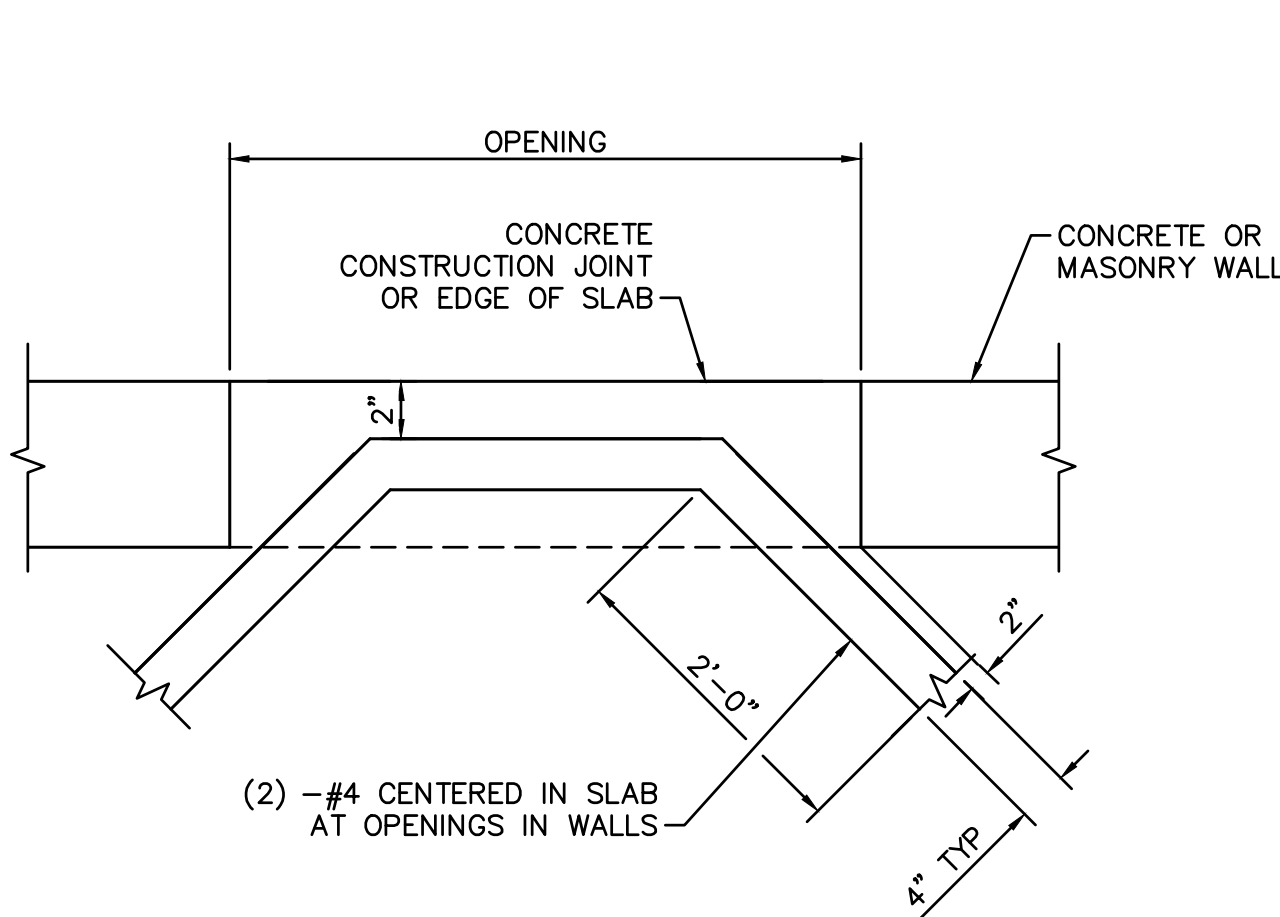
A. PROVIDE THICKER SHEAR PLATE

B. PROVIDE MULTIPLE WASHERS AT EITHER END OF BOLT (2 MAXIMUM PER END)

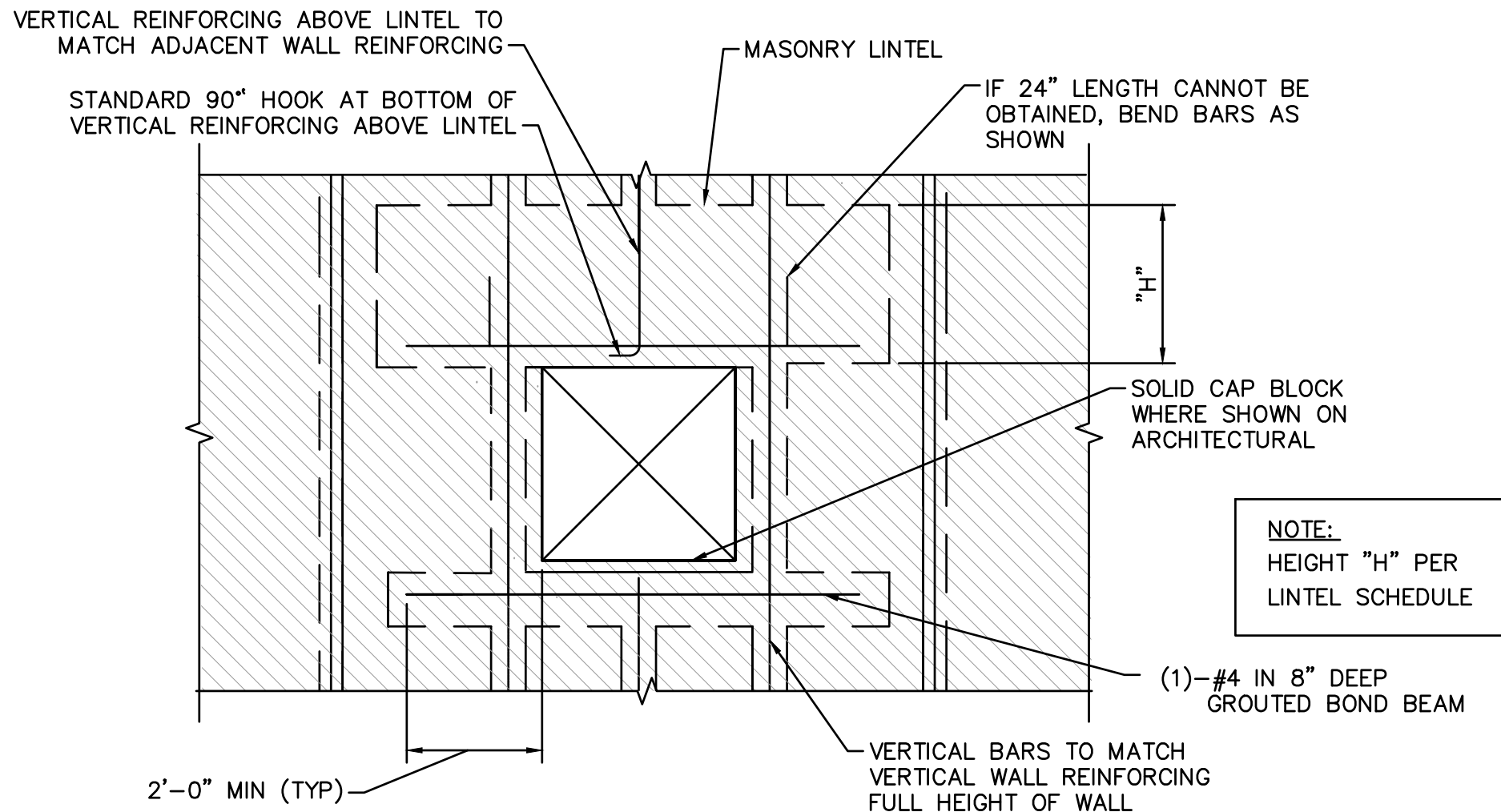
NOTE:
¾" BOLTS SHALL NOT BE USED FOR CONNECTIONS WITH BEAM DEPTH "D" GREATER THAN OR EQUAL TO 27"

1 ANCHOR, ANCHOR ROD, EXPANSION ANCHOR AND ADHESIVE SCHEDULE
SCALE: NTS

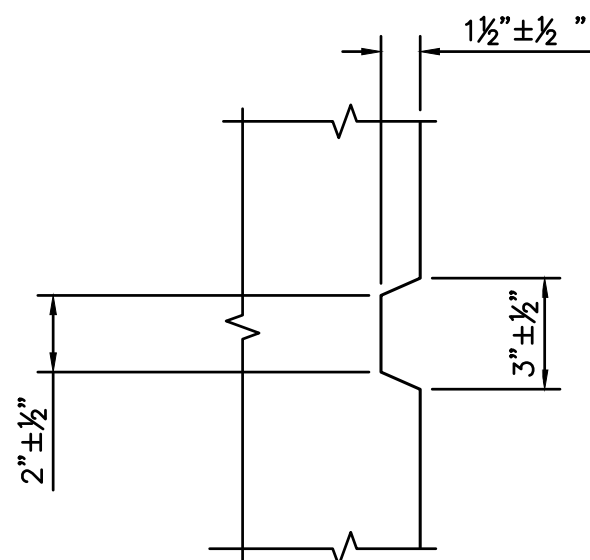
2 BOLT SCHEDULE FOR TYPICAL STEEL CONNECTIONS
SCALE: NTS



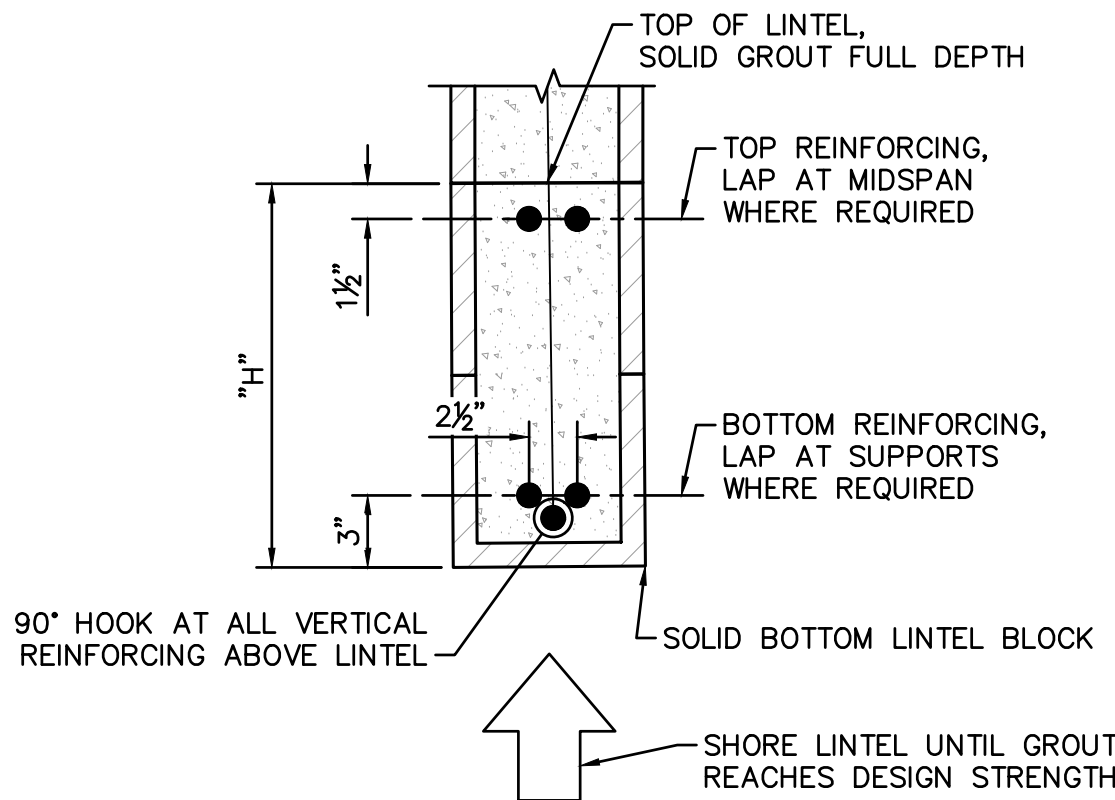
3 REENTRANT REINFORCING IN WALL OPENING
SCALE: NTS



4 MASONRY LINTEL AT OPENING IN MASONRY WALL
SCALE: NTS

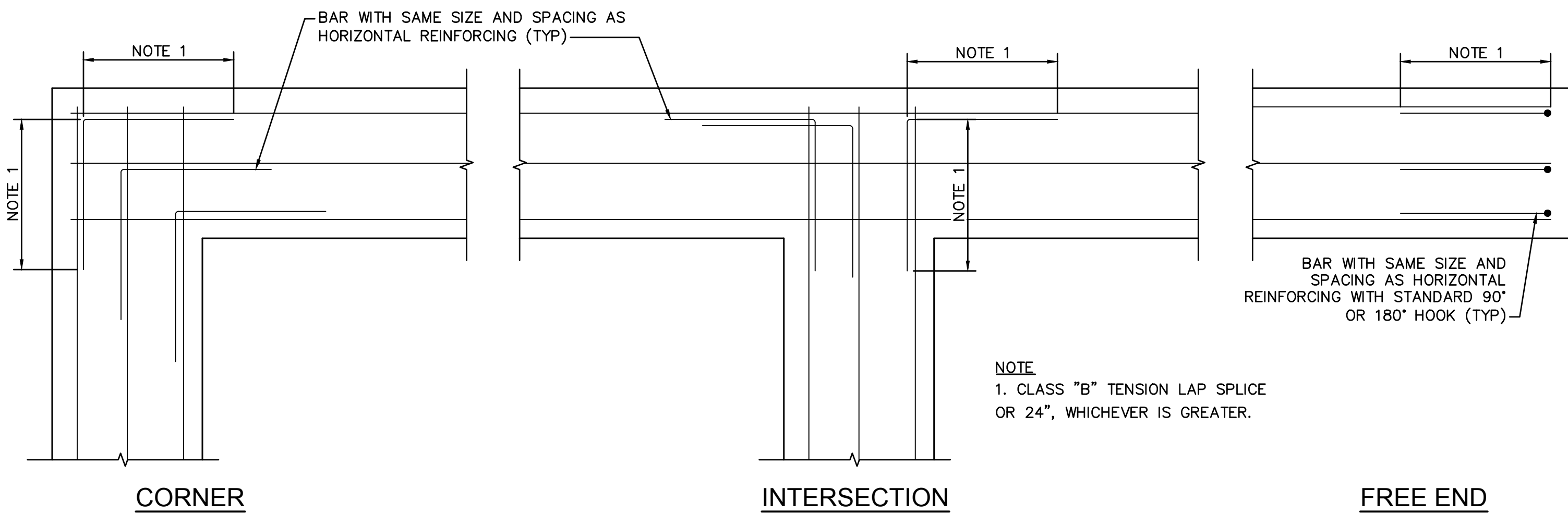


5 KEY IN CONCRETE
SCALE: NTS



- NOTES:
1. HEIGHT "H" PER LINTEL SCHEDULE.
 2. WHERE THE LINTEL INTERSECTS AT PERPENDICULAR MASONRY WALL, BREAK OUT THE FACE SHELLS OF THE MASONRY WALL FULL HEIGHT OF THE LINTEL – HOOK LINTEL REINFORCING 90° AND SOLID GROUT.
 3. EXTEND GROUT, MASONRY UNITS, AND REINFORCING 24" PAST EACH JAM.

6 MASONRY LINTEL
SCALE: 1½" = 1'–0"



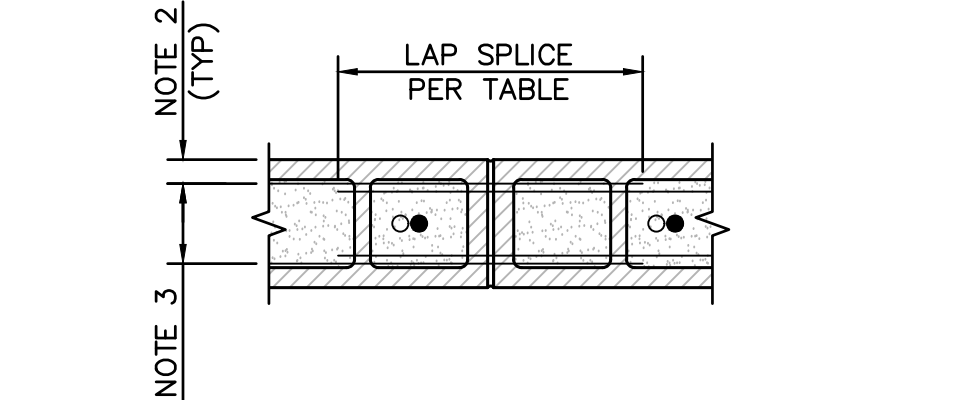
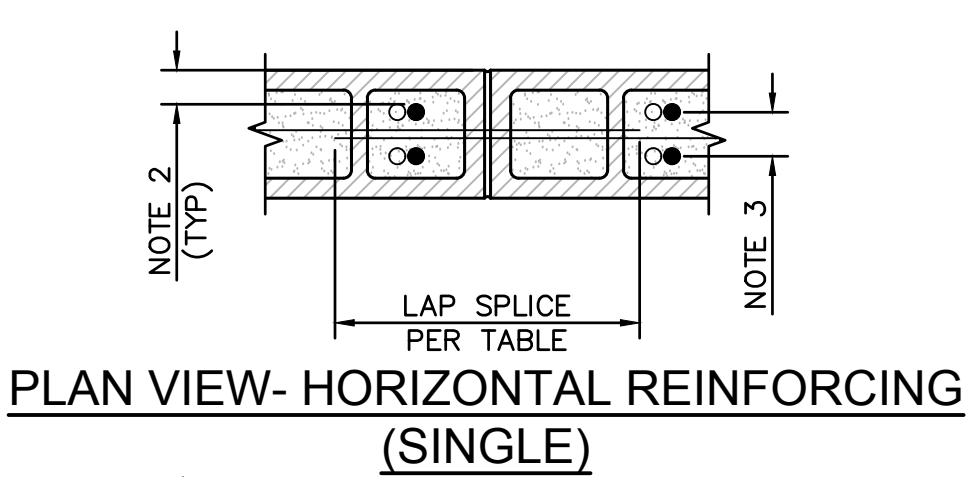
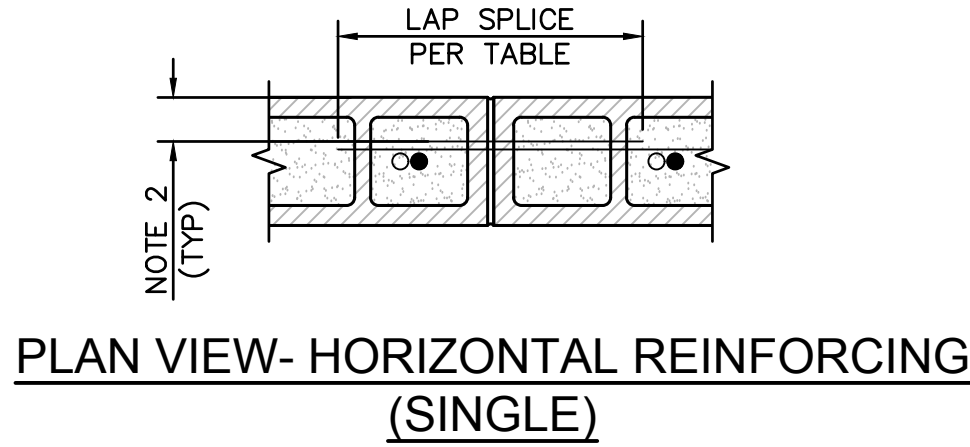
7 REINFORCING IN CONCRETE FOOTING - PLAN VIEW
SCALE: ¾" = 1'–0"

DEVELOPMENT LENGTH AND LAP SPLICE TABLE

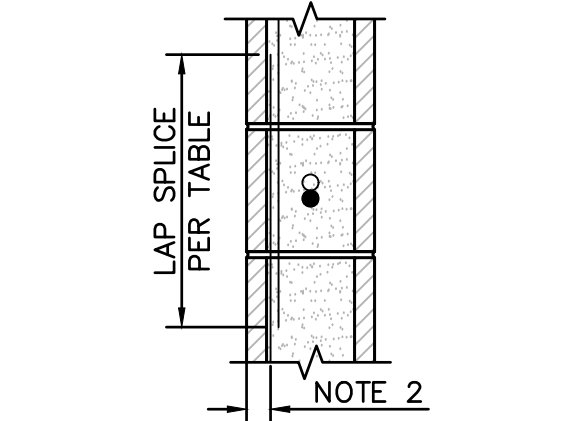
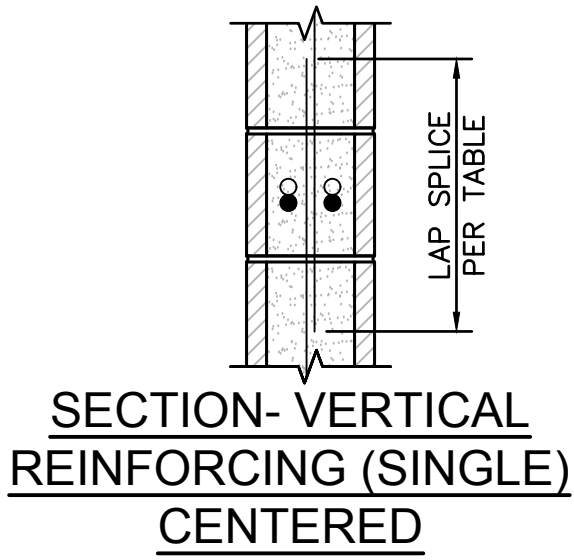
BAR SIZE	VERTICAL REINFORCING (SINGLE) CENTERED	VERTICAL REINFORCING (SINGLE) EDGE AND (DOUBLE)	HORIZONTAL REINFORCING (SINGLE) AND (DOUBLE)
#3	1'-4"	1'-4"	1'-4"
#4	2'-0"	2'-0"	2'-0"
#5	2'-6"	3'-0"	3'-0"
#6	3'-8"	4'-6"	4'-6"
#7	5'-0"	5'-3"	5'-3"
#8	6'-0"	11"	9"

NOTES:

- MASONRY ASSEMBLAGE SHALL HAVE A COMPRESSIVE STRENGTH, F'm, OF 2000 PSI MINIMUM. BREAK INTO CELLS AND GROUT SOLID FOR 8" MINIMUM ALL-AROUND EACH ANCHOR LOCATION.
- CLEAR COVER FOR REINFORCING SHALL BE 2" MINIMUM.
- CLEAR SPACING BETWEEN REINFORCING SHALL BE 2" MINIMUM.
- MASONRY SHALL HAVE A MINIMUM THICKNESS OF 8".

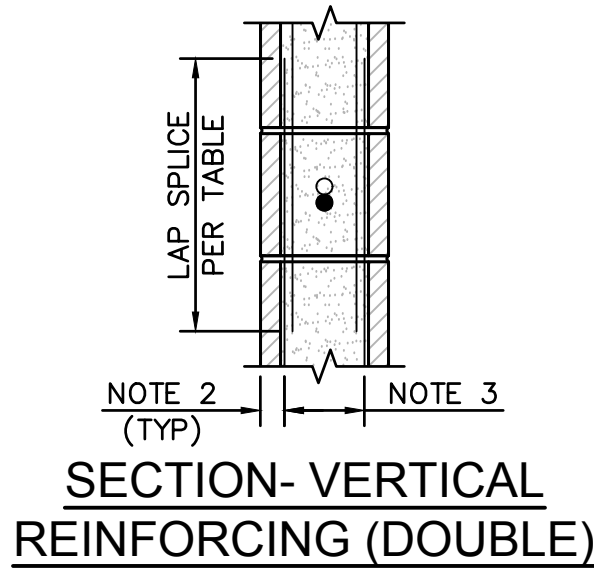


PLAN VIEW- HORIZONTAL REINFORCING (DOUBLE)

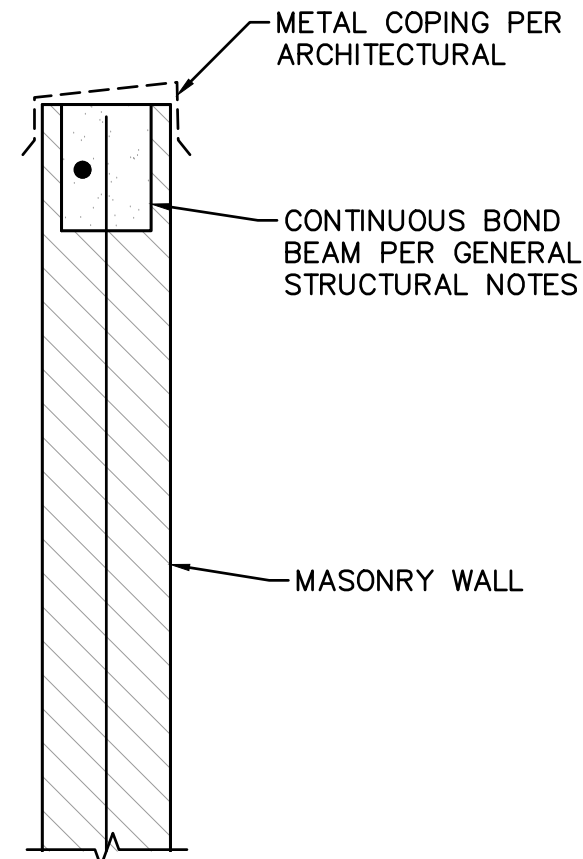


SECTION- VERTICAL REINFORCING (SINGLE)

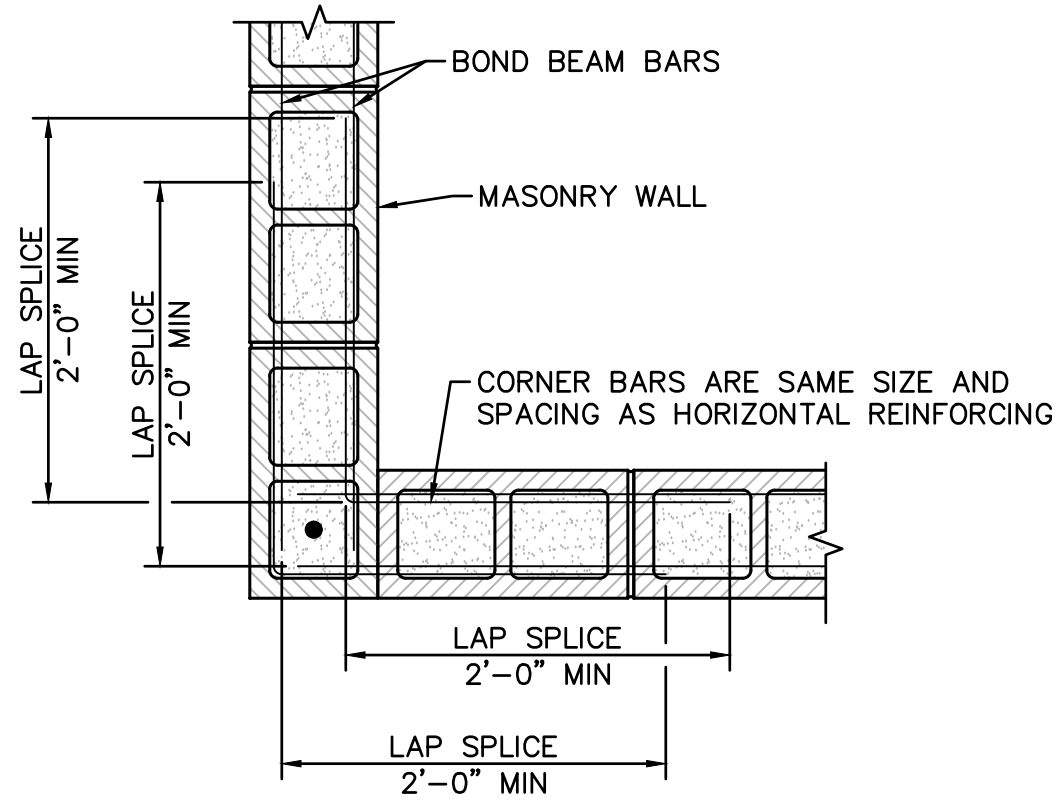
- LEGEND:
- : REINFORCING
 - : LAPPED REINFORCING



SECTION- VERTICAL REINFORCING (DOUBLE)



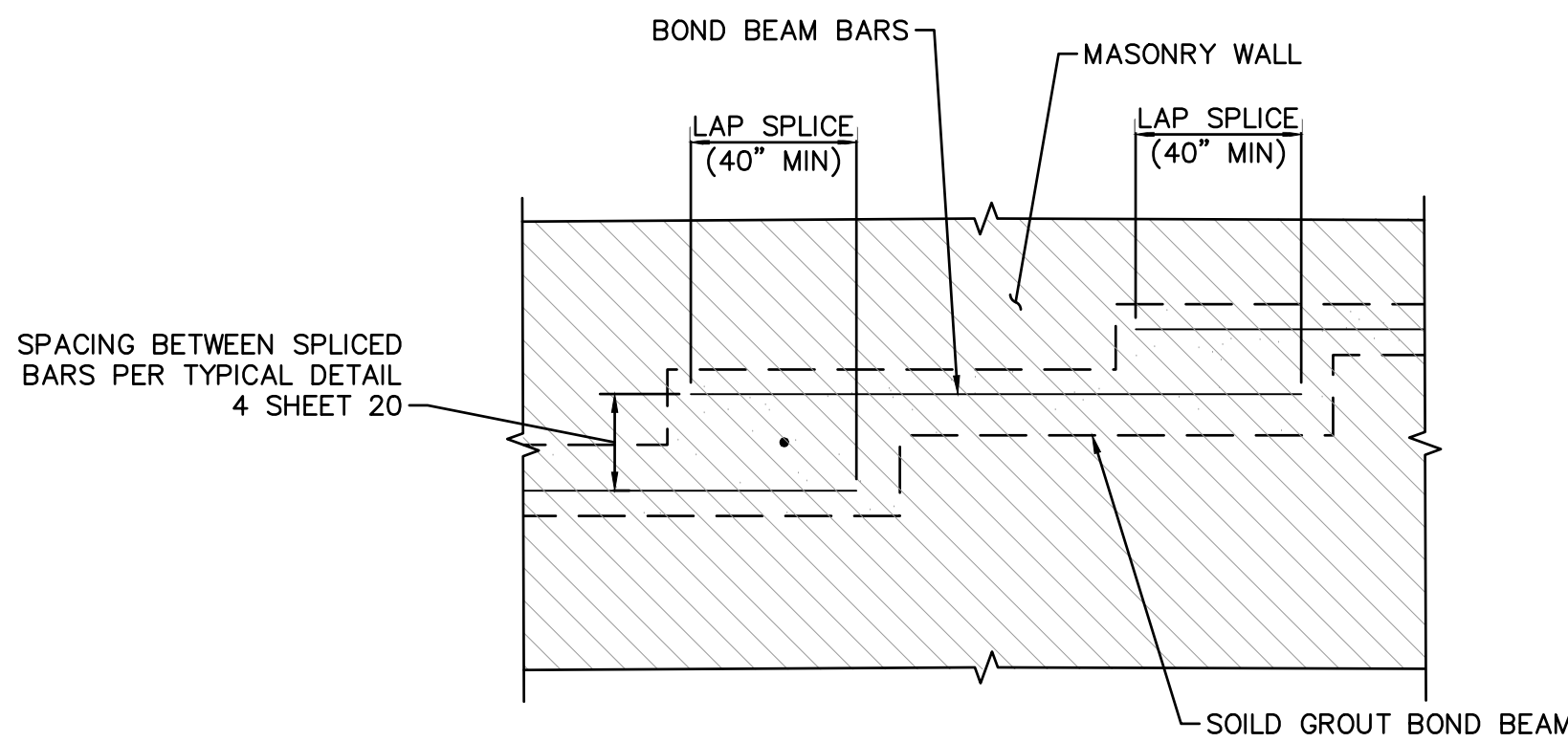
2 MASONRY PARAPET
SCALE: NTS



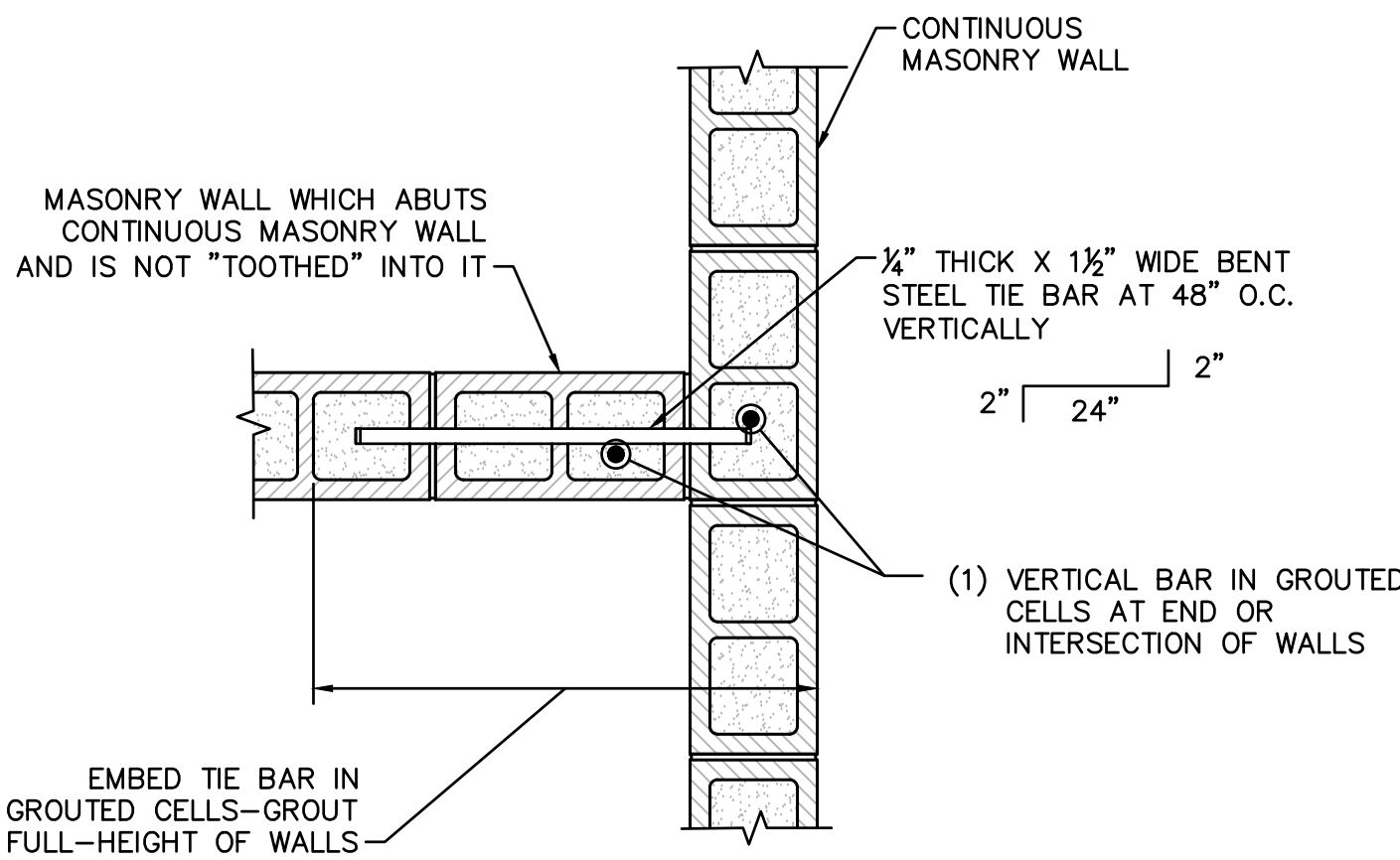
3 BOND BEAM REINFORCING AT WALL CORNER
SCALE: 1" = 1'-0"

1 DEVELOPMENT LENGTHS AND SPLICES FOR UNCOATED GRADE 60 REINFORCED STEEL IN MASONRY

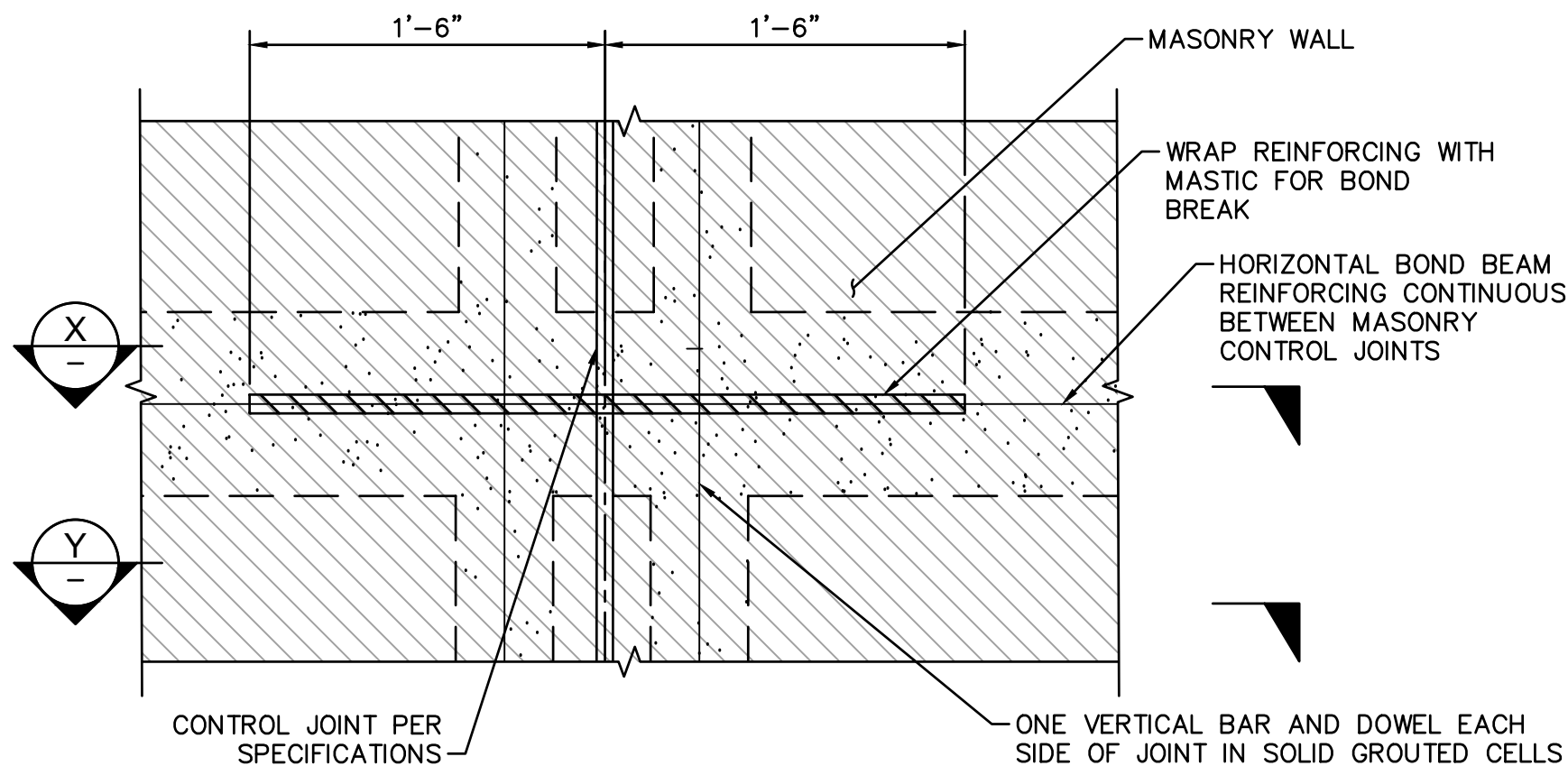
SCALE: NTS



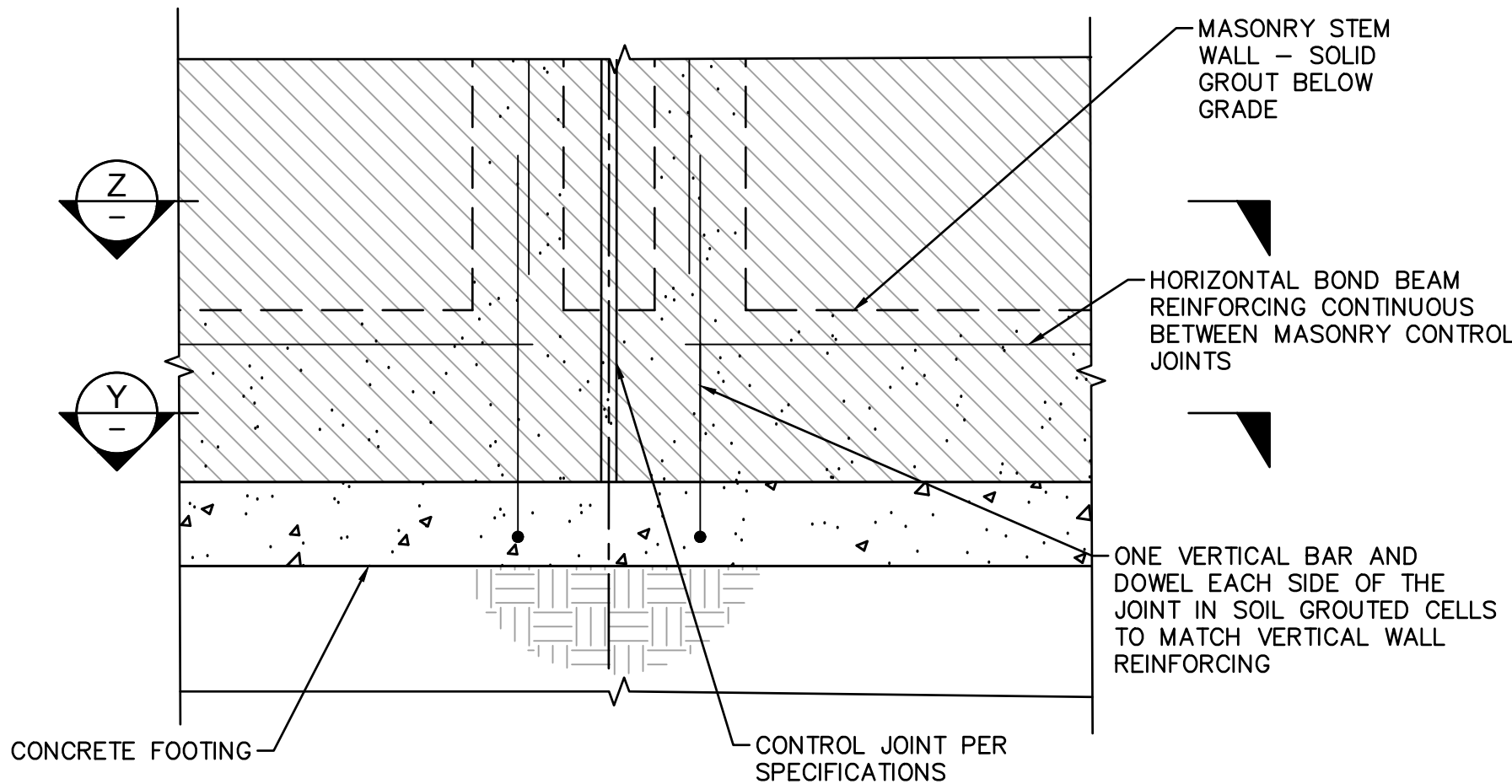
4 STEPPED MASONRY WALL BOND BEAM
SCALE: NTS



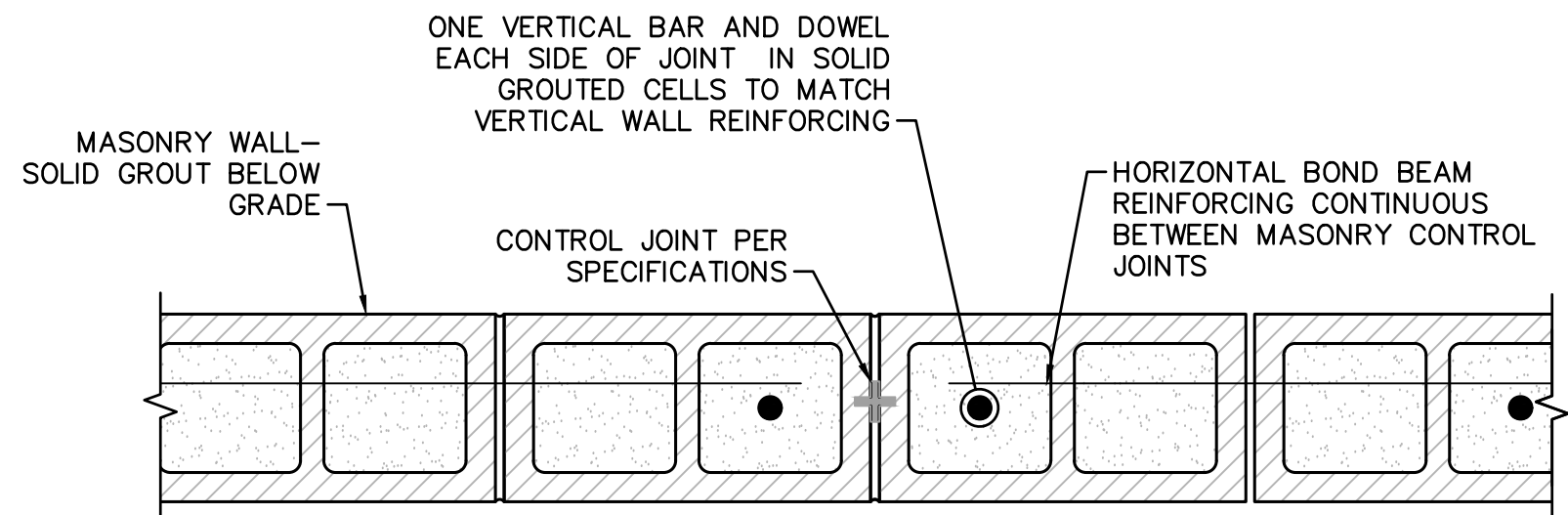
5 PLAN VIEW- CONNECTION FOR NON-TOOTHED ABUTTING MASONRY WALL
SCALE: NTS



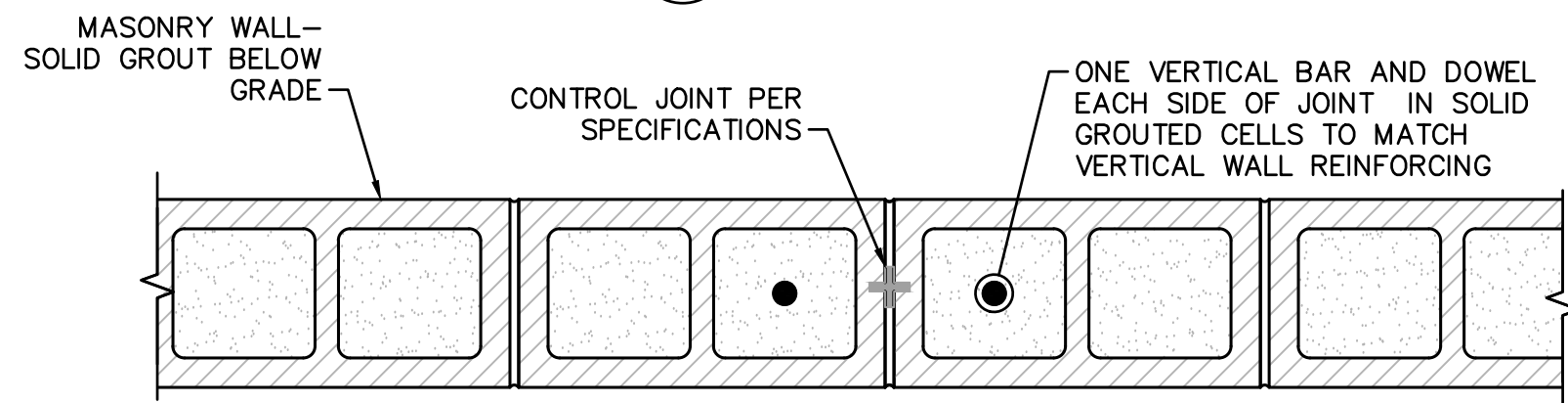
AT ELEVATED BOND BEAM



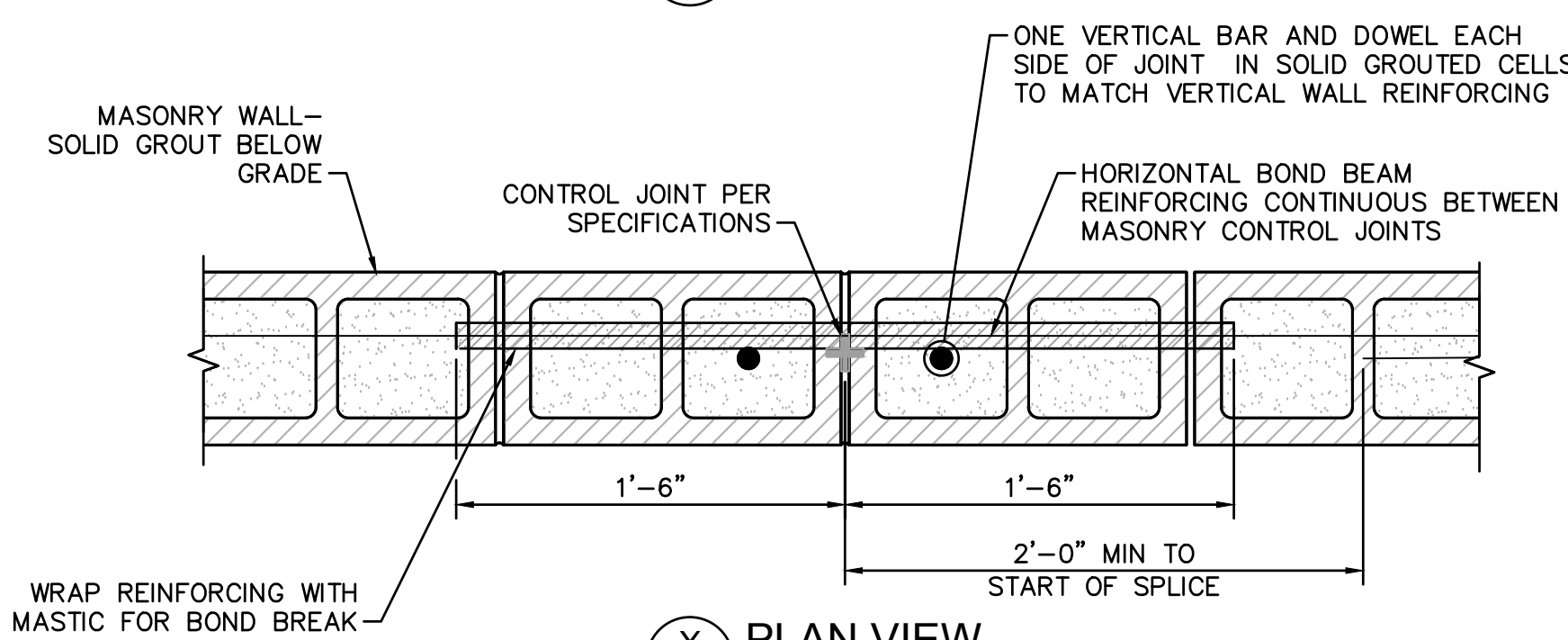
AT STEM WALL BOND BEAM



Z PLAN VIEW



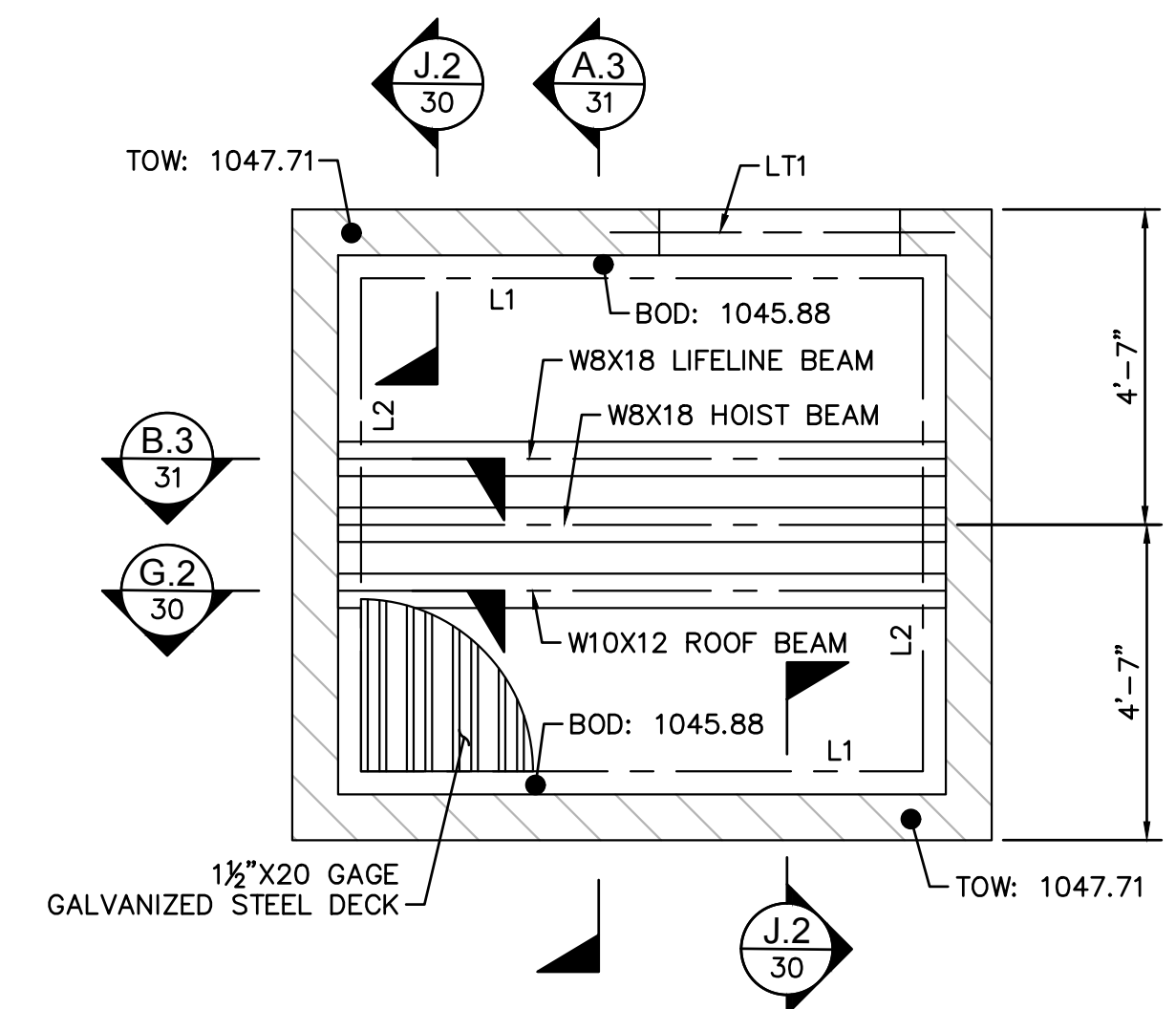
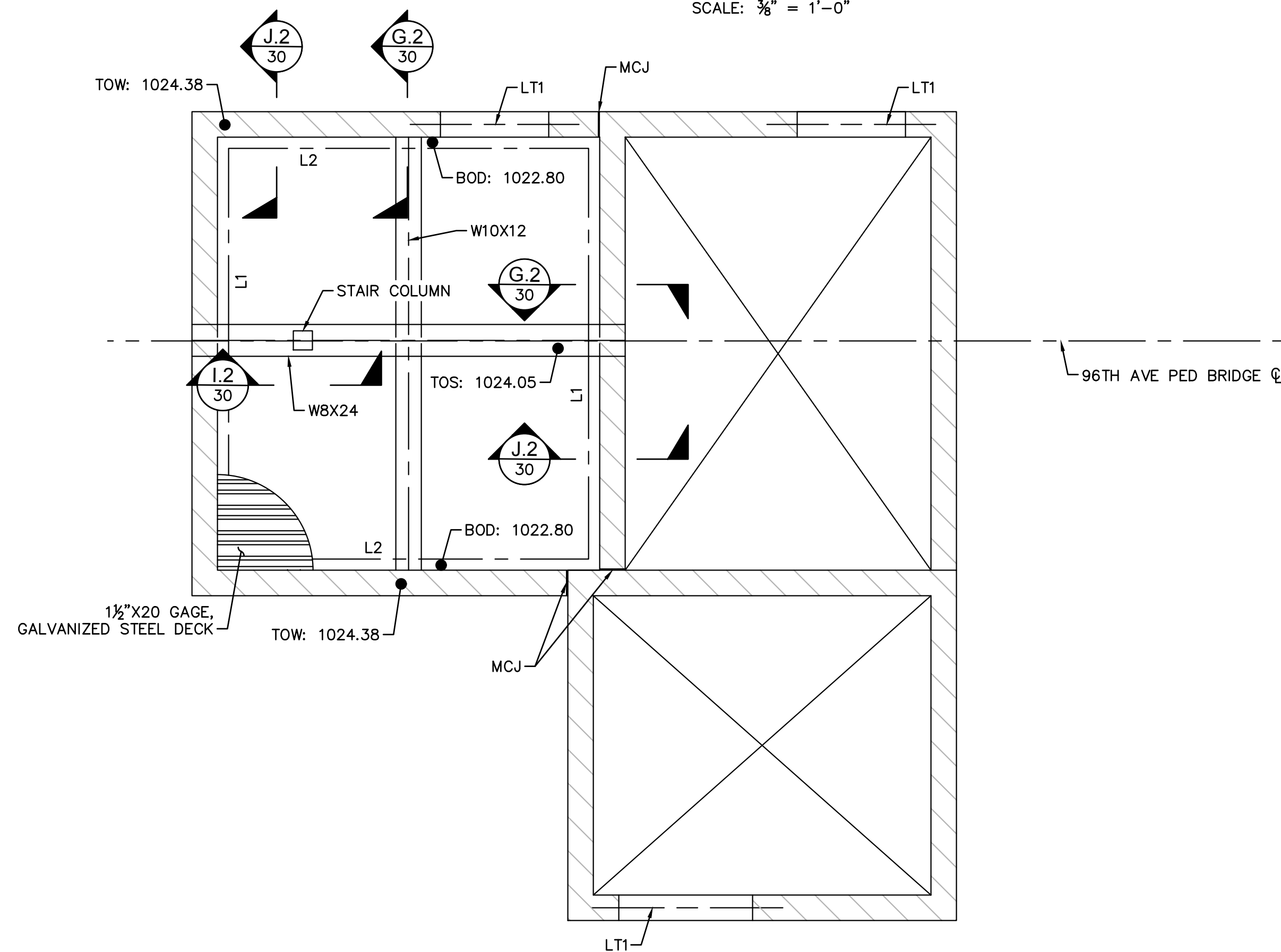
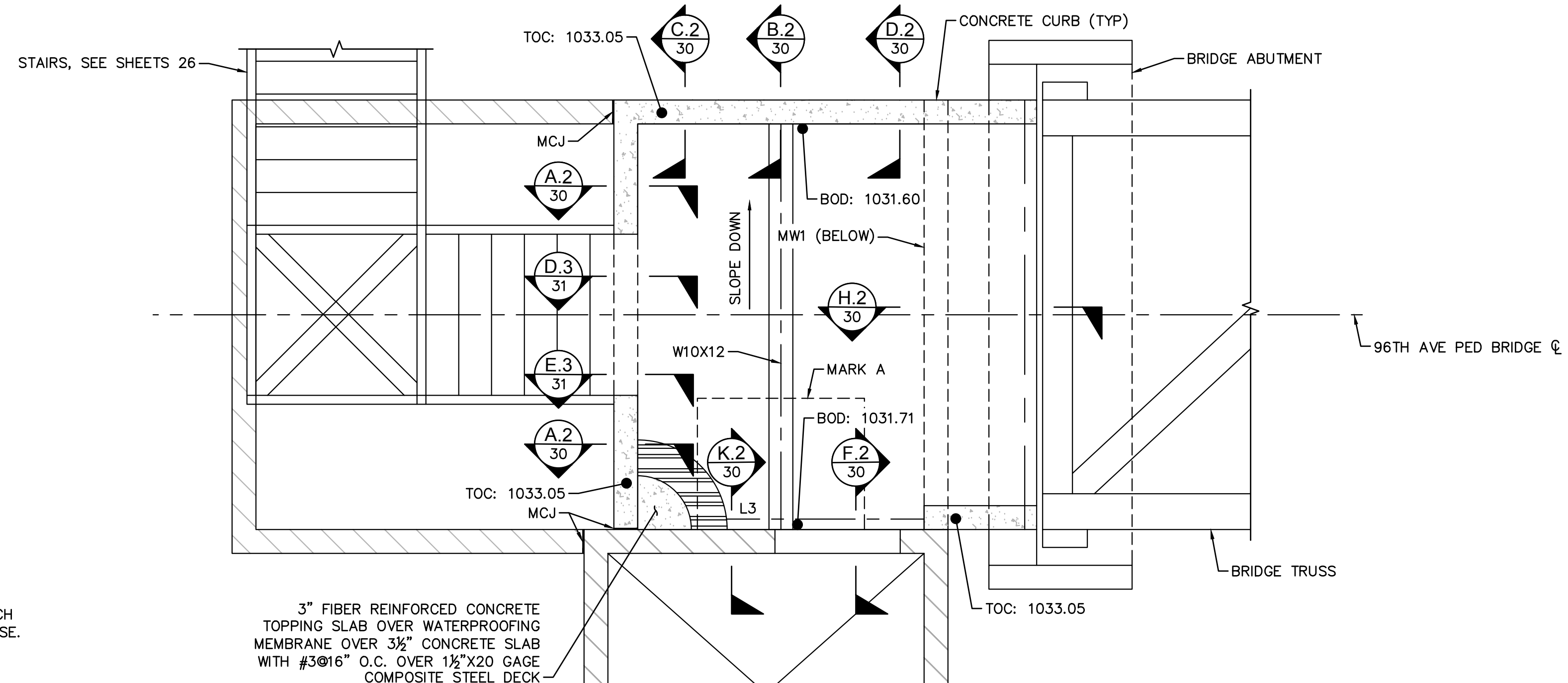
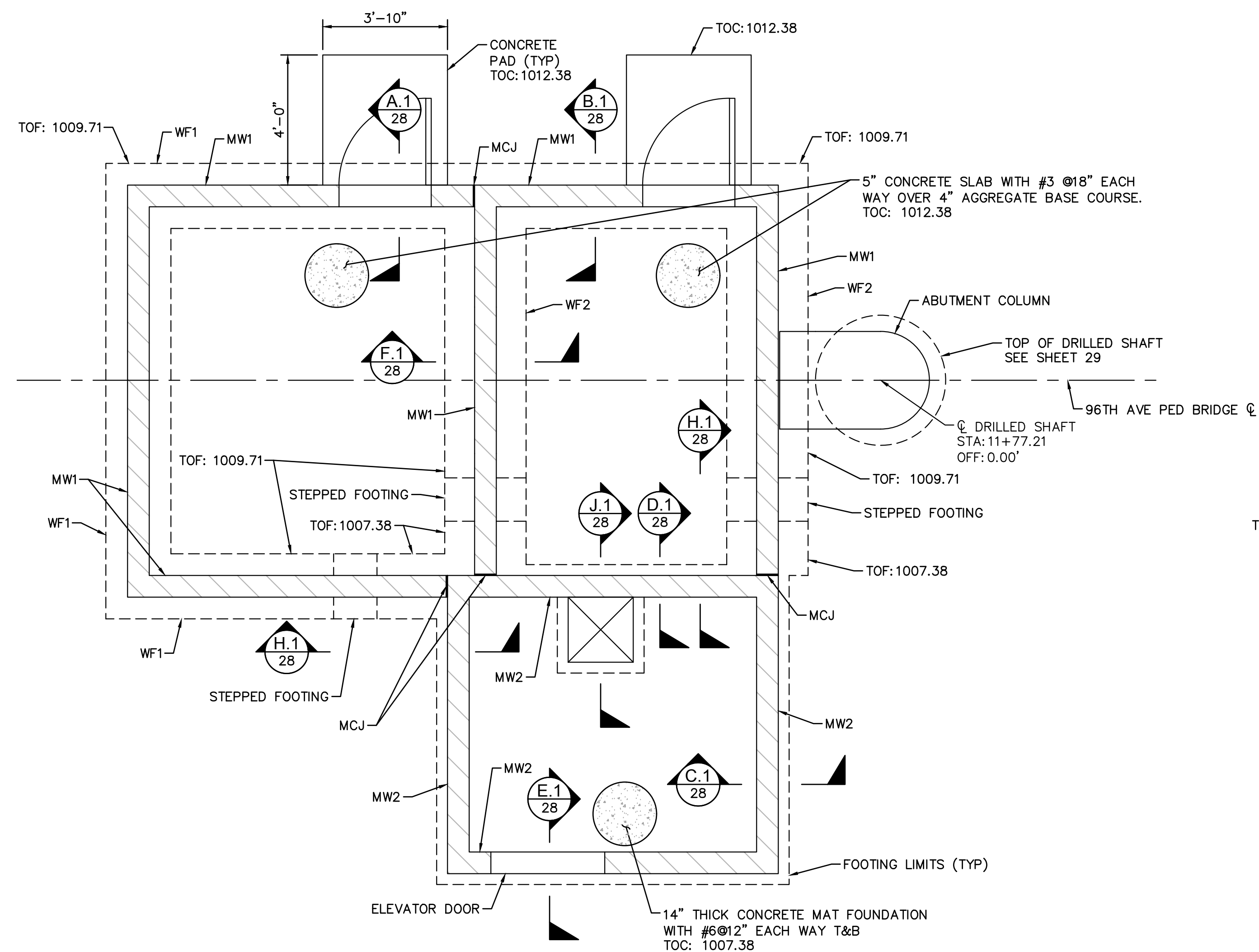
Y PLAN VIEW



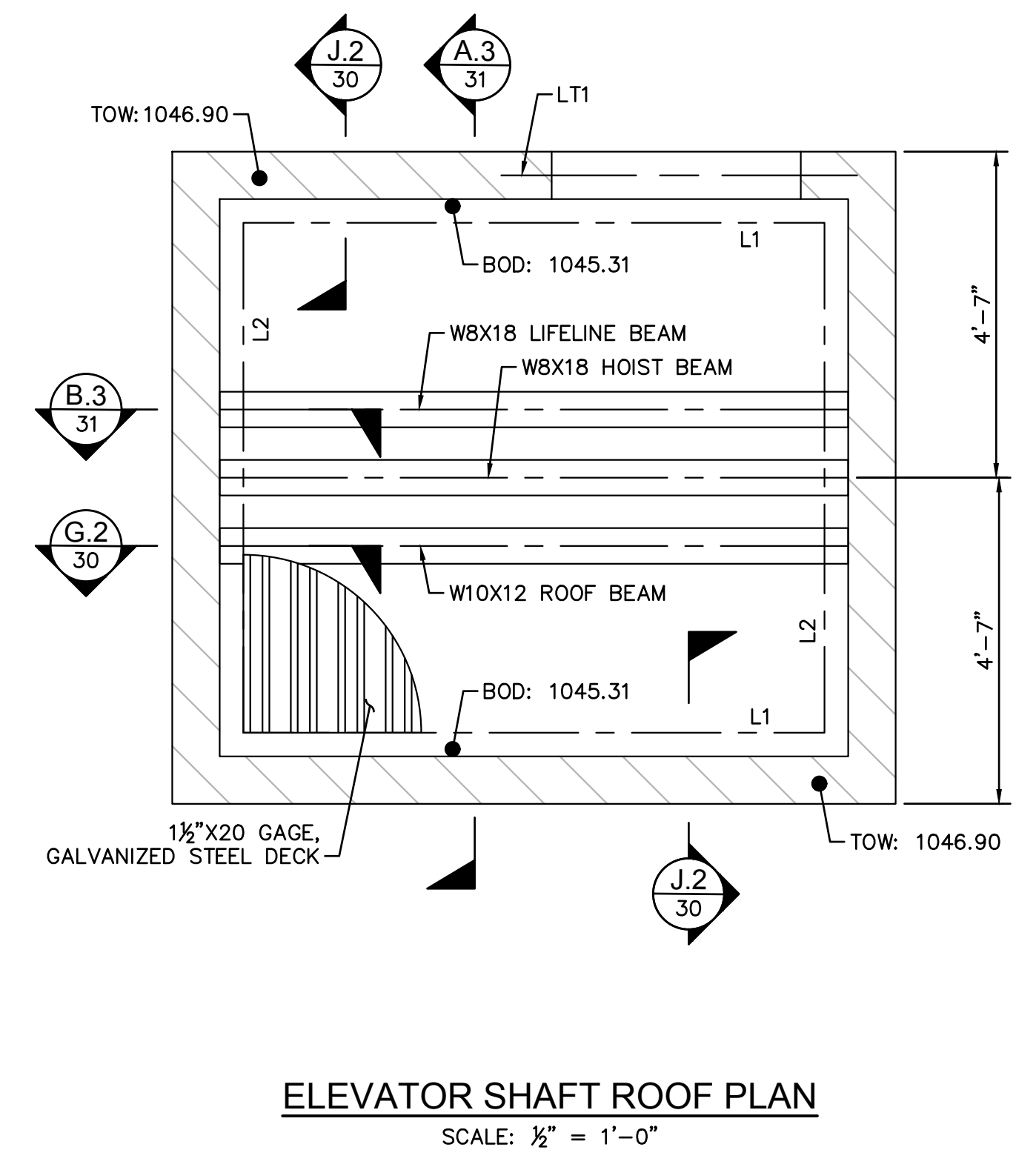
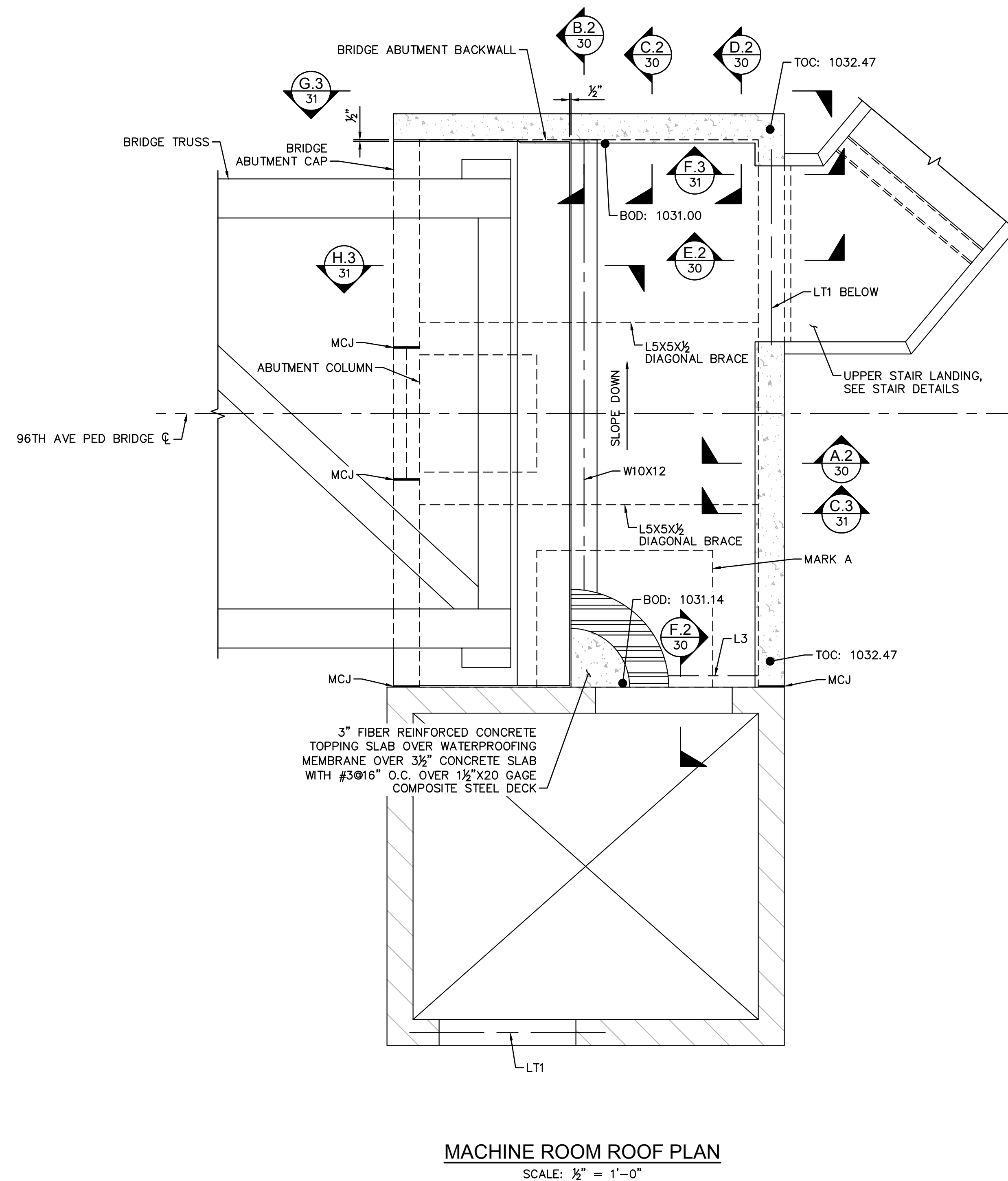
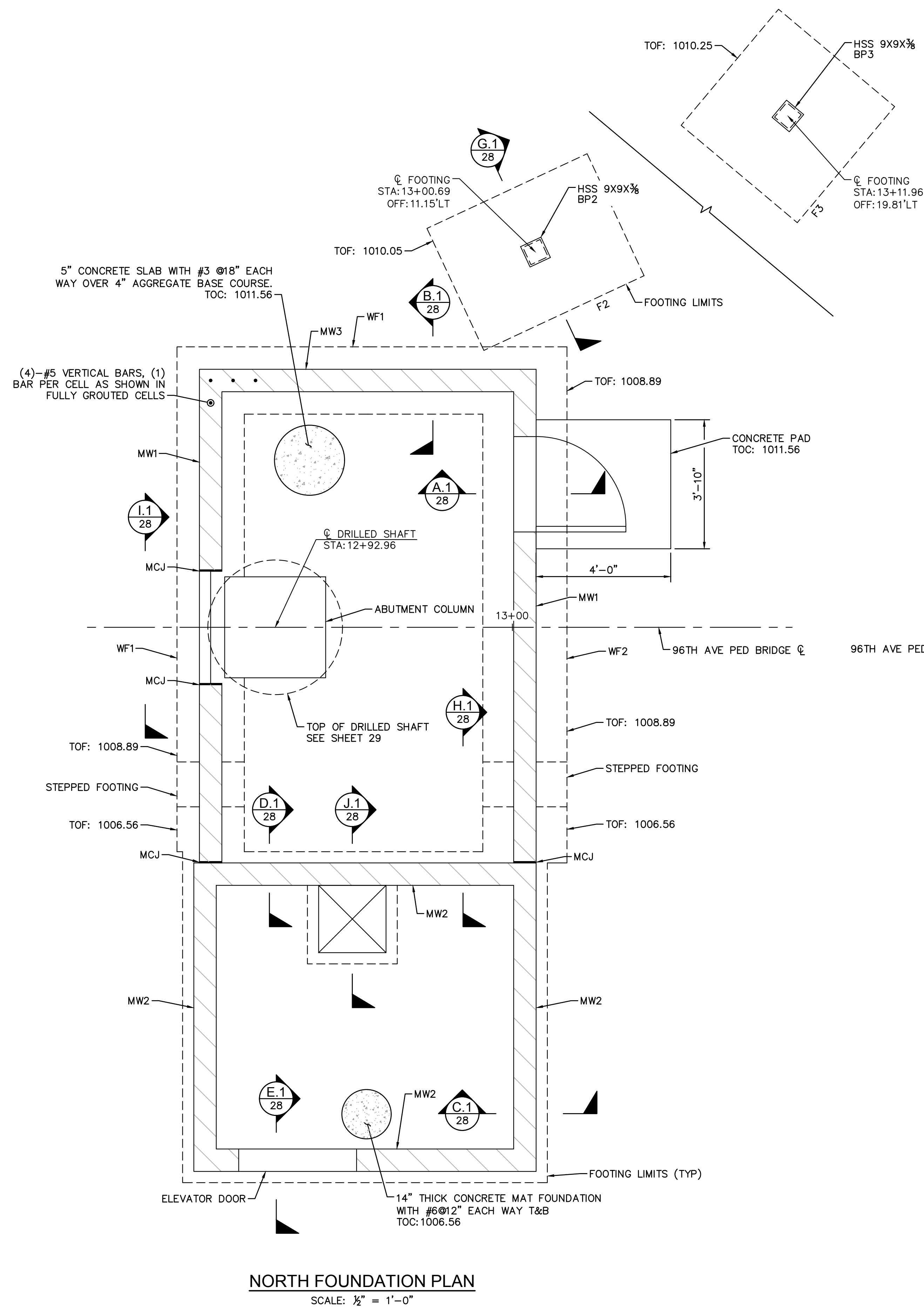
X PLAN VIEW

NOTE:
BOND BEAM BARS SHALL NOT BE LAPPED WITHIN 2'-0" MINIMUM EACH SIDE OF THE CONTROL JOINT

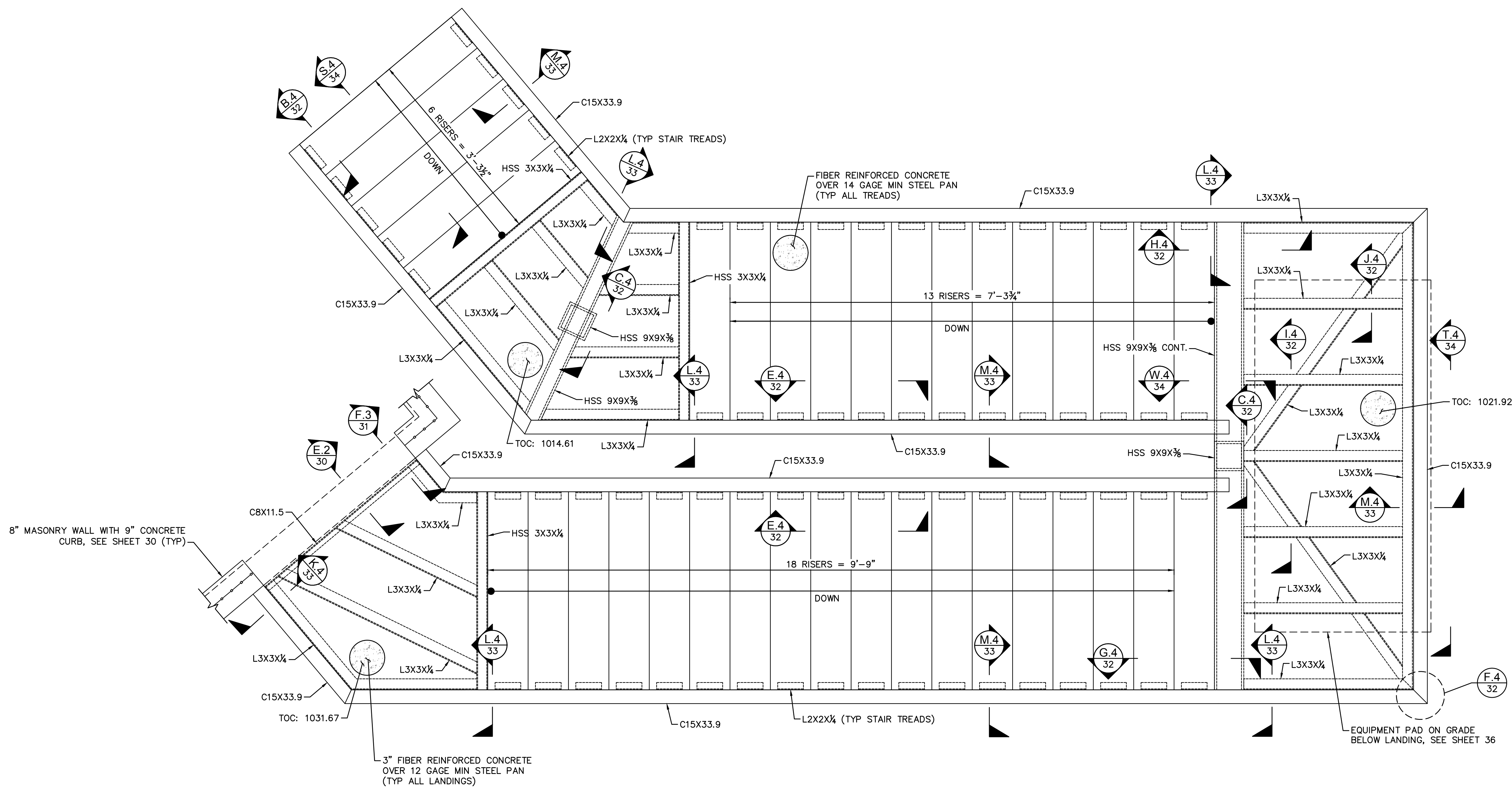
6 CONTROL JOINT IN MASONRY WALL
SCALE: NTS



		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
	DESIGN	SED	09/26		-			0000 MA TOL	CDS TOL-0(200)T	24	70	
	DRAWN	SED	09/26		MILEPOST							
	CHECKED	CHG	09/26	 © 2026 KIMLEY-HORN AND ASSOCIATES, INC.	SOUTH FRAMING PLAN	STRUCTURE NO.	LOCATION VAN BUREN AT 96TH AVE, TOLLESON				DWG NO. ST12	
						TRACS NO. T0619 01C		24 OF 70				



	<table><tr><th></th><th>NAME</th><th>DATE</th></tr><tr><td>DESIGN</td><td>SED</td><td>09/26</td></tr><tr><td>DRAWN</td><td>SED</td><td>09/26</td></tr><tr><td>CHECKED</td><td>CHG</td><td>09/26</td></tr></table>		NAME	DATE	DESIGN	SED	09/26	DRAWN	SED	09/26	CHECKED	CHG	09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 25	TOTAL SHEETS 70	RECORD DRAWING
		NAME	DATE																			
	DESIGN	SED	09/26																			
	DRAWN	SED	09/26																			
CHECKED	CHG	09/26																				
	NORTH FRAMING PLAN	MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON							DWG NO. ST13												
		STRUCTURE NO.	TRACS NO. T0619 01C							25 OF 70												



NORTH FRAMING PLAN
SCALE: 3/4" = 1'-0"

		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 27	TOTAL SHEETS 70	RECORD DRAWING
	DESIGN	SED	09/26		MILEPOST			LOCATION VAN BUREN AT 96TH AVE, TOLLESON				
	DRAWN	SED	09/26		NORTH STAIR FRAMING PLAN	STRUCTURE NO. TRACS NO. T0619 01C						
	CHECKED	CHG	09/26									
	 © 2026 KIMLEY-HORN AND ASSOCIATES, INC.											



	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26



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FOUNDATION DETAILS

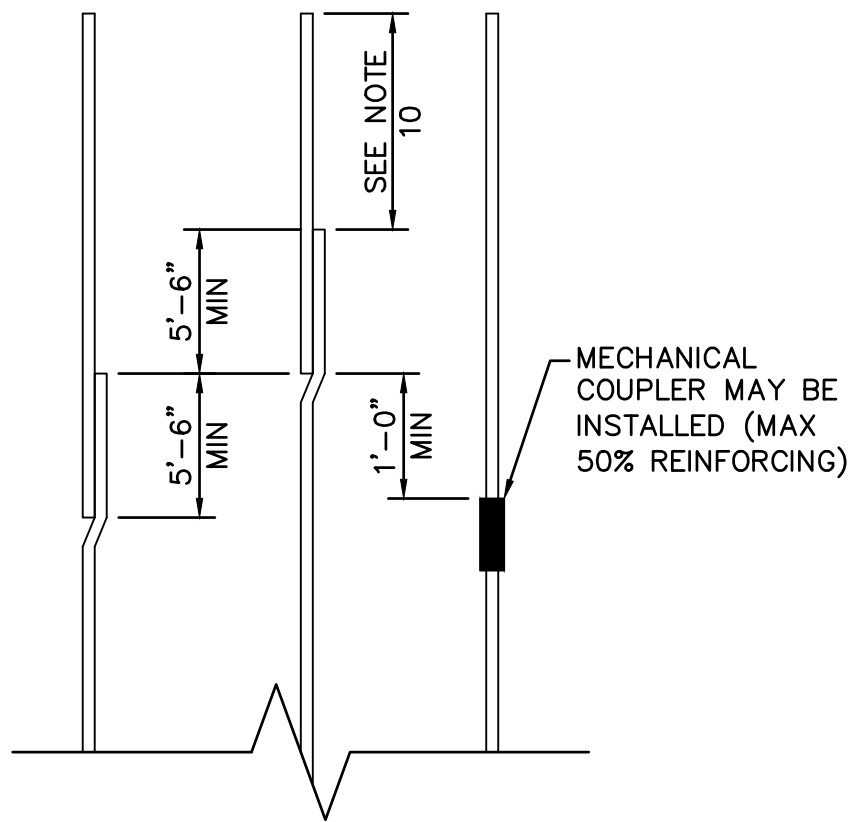
ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	28	70	
	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. ST16
STRUCTURE NO.	TRACS NO. T0619 01C					28 OF 70	

DRILLED SHAFT NOTES:

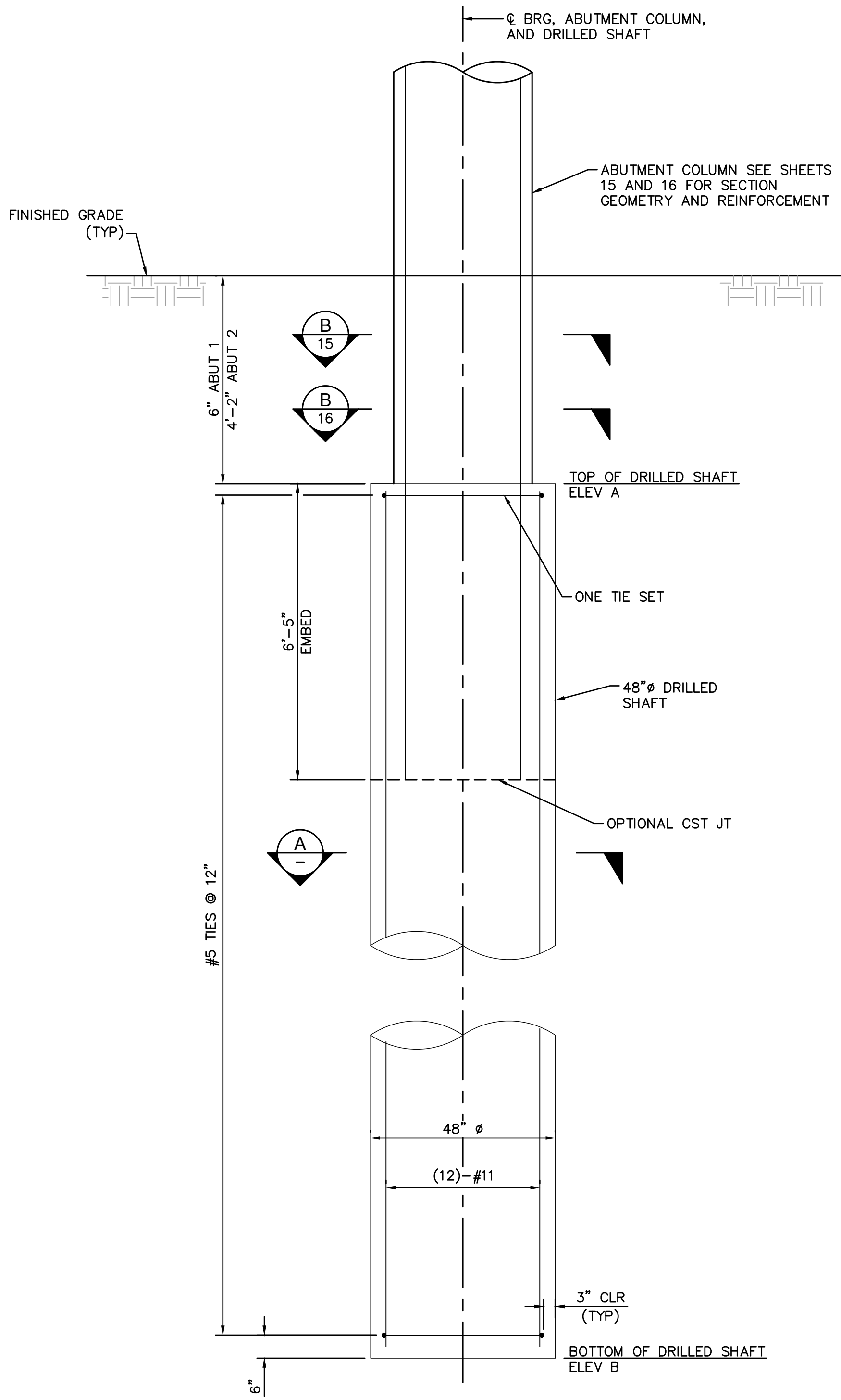
1. THE CONTRACTOR SHALL ORIENT THE DRILLED SHAFT REINFORCING CAGE AS SHOWN TO AVOID CONFLICT WITH THE REINFORCEMENT IN THE BOTTOM OF THE CAP.
2. EXCAVATION OF AN ADJACENT DRILLED SHAFT SHALL NOT BE PERMITTED UNTIL 48 HOURS AFTER THE ADJACENT DRILLED SHAFT HAS BEEN POURED. AN ADJACENT SHAFT IS ANY SHAFT WITHIN FOUR DIAMETERS MEASURED CENTER TO CENTER.
3. SLURRY-ASSISTED DRILLING AND/OR ADVANCING OF TEMPORARY CASING DURING DRILLING MAY BE NECESSARY TO PREVENT CAVING OF SITE SOILS. IF CASING IS USED, THE CASING SHALL BE REMOVED DURING PLACEMENT OF SHAFT CONCRETE.
4. DRILLED SHAFT CONSTRUCTION AND TESTING SHALL BE COMPLETED PER SECTION 609 OF THE ADOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2021.
5. THE COST OF CASING OR SLURRY, IF NEEDED, IS INCLUDED IN THE DRILLED SHAFT ITEM.
6. EXCAVATION REQUIRED TO CONSTRUCT DRILLED SHAFT IS INCLUDED IN THE DRILLED SHAFT ITEM.
7. INTEGRITY TESTING TUBES SHALL BE INSTALLED IN ALL SHAFTS. THE SIZE, TYPE, AND DETAILS OF TUBES SHALL BE PER SECTION 609 OF THE ADOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2021. TUBES SHALL NOT BE ATTACHED TO VERTICAL REINFORCING.
8. THE INTEGRITY TESTING TUBES SHALL BE EXTENDED TO WITHIN 6" OF THE COMPLETED TIP ELEVATION. IF THE TIP ELEVATION IS GREATER THAN 3'-0" BELOW PLAN, SUPPORT REINFORCING FOR THE TUBES SHALL BE INSTALLED TO PROVIDE A MAXIMUM UNSUPPORTED LENGTH OF 3'-0".
9. AFTER THE INTEGRITY TESTING IS COMPLETED AND THE SHAFT HAS BEEN ACCEPTED, ALL TEST TUBES SHALL BE FILLED WITH APPROVED GROUT.
10. DRILLED SHAFT REINFORCING SHALL NOT BE SPLICED IN THE UPPER ½ OF THE SHAFT. LAP SPLICES SHALL BE STAGGERED AS FAR AS POSSIBLE BELOW THIS REGION.

DRILLED SHAFT DATA		
	ELEV A	ELEV B
ABUT 1	1011.88	981.88
ABUT 2	1007.46	977.46

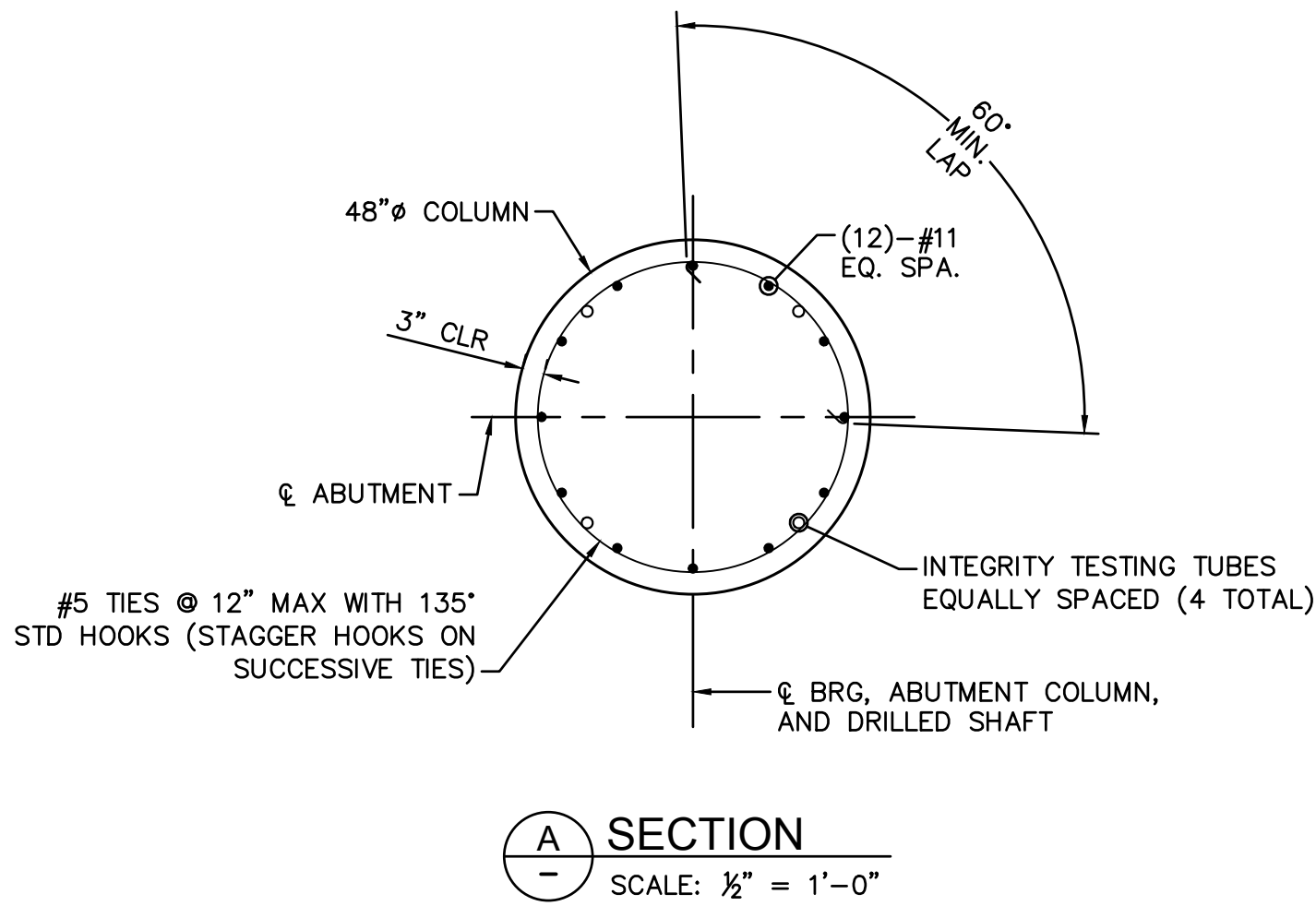
DRILLED SHAFT AXIAL LOAD DATA				
LOCATION	DRILLED SHAFT DIA (IN)	NO REQ'D	(1) STRENGTH DESIGN LOAD BEFORE REDUNDANCY OR GROUP EFFECTS (KIPS)	(2) STRENGTH DESIGN LOAD AFTER REDUNDANCY OR GROUP EFFECTS (KIPS)
ABUT 1	48	1	300	375
ABUT 2	48	1	300	375



RESTRICTION ON SPLICE
AT DRILLED SHAFT
SCALE: N.T.S.



TYPICAL DRILLED SHAFT ELEVATION
SCALE: ½" = 1'-0"





	NAME	DATE
DESIGN	SED	09/26/2025
DRAWN	SED	09/26/2025
CHECKED	CHG	09/26/2025

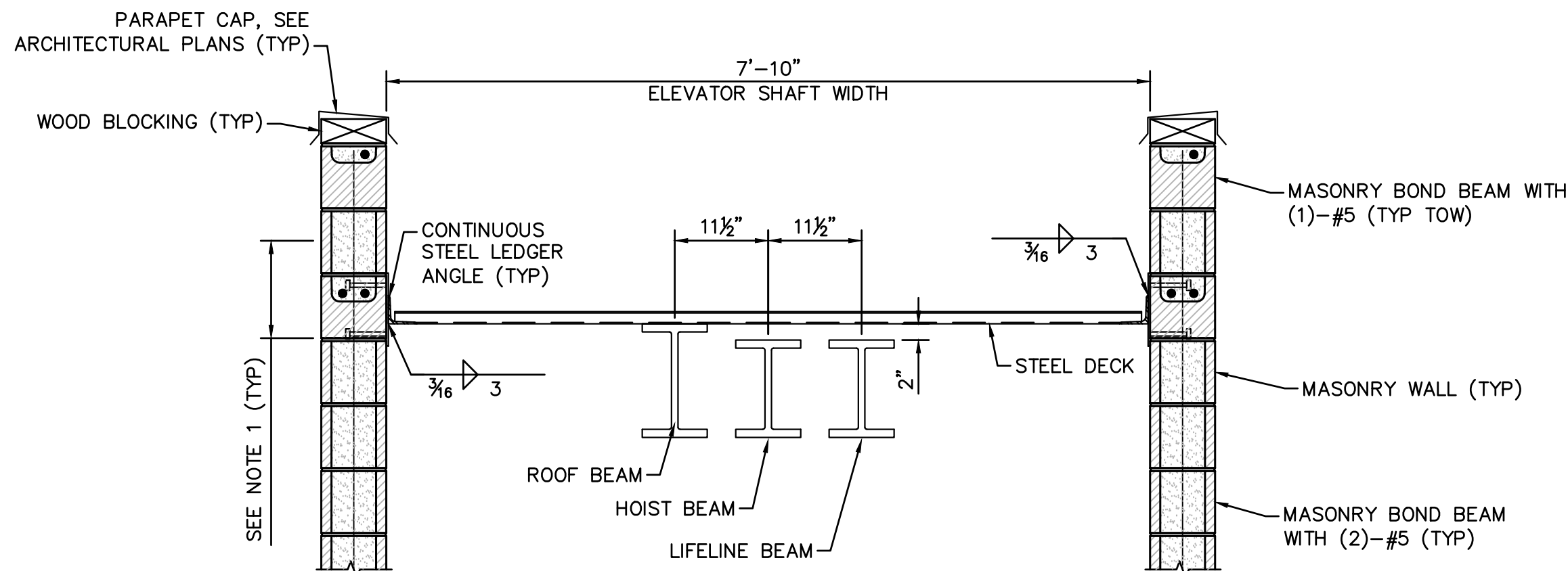
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ELEVATOR SHAFT, ELECTRICAL ROOM, & MECHANICAL ROOM DETAILS 1

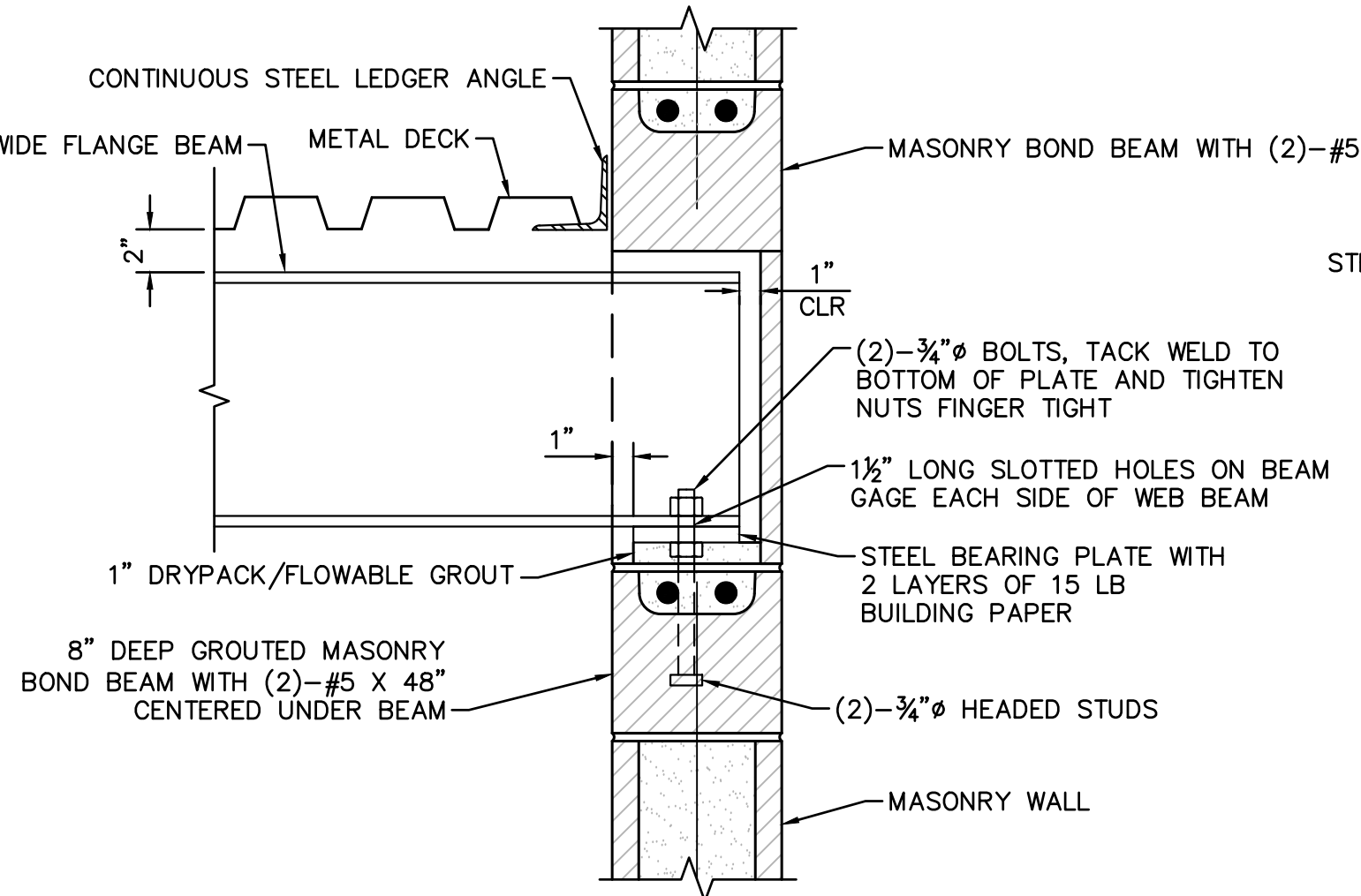
TRACS NO. T0619 01C

30 OF 70

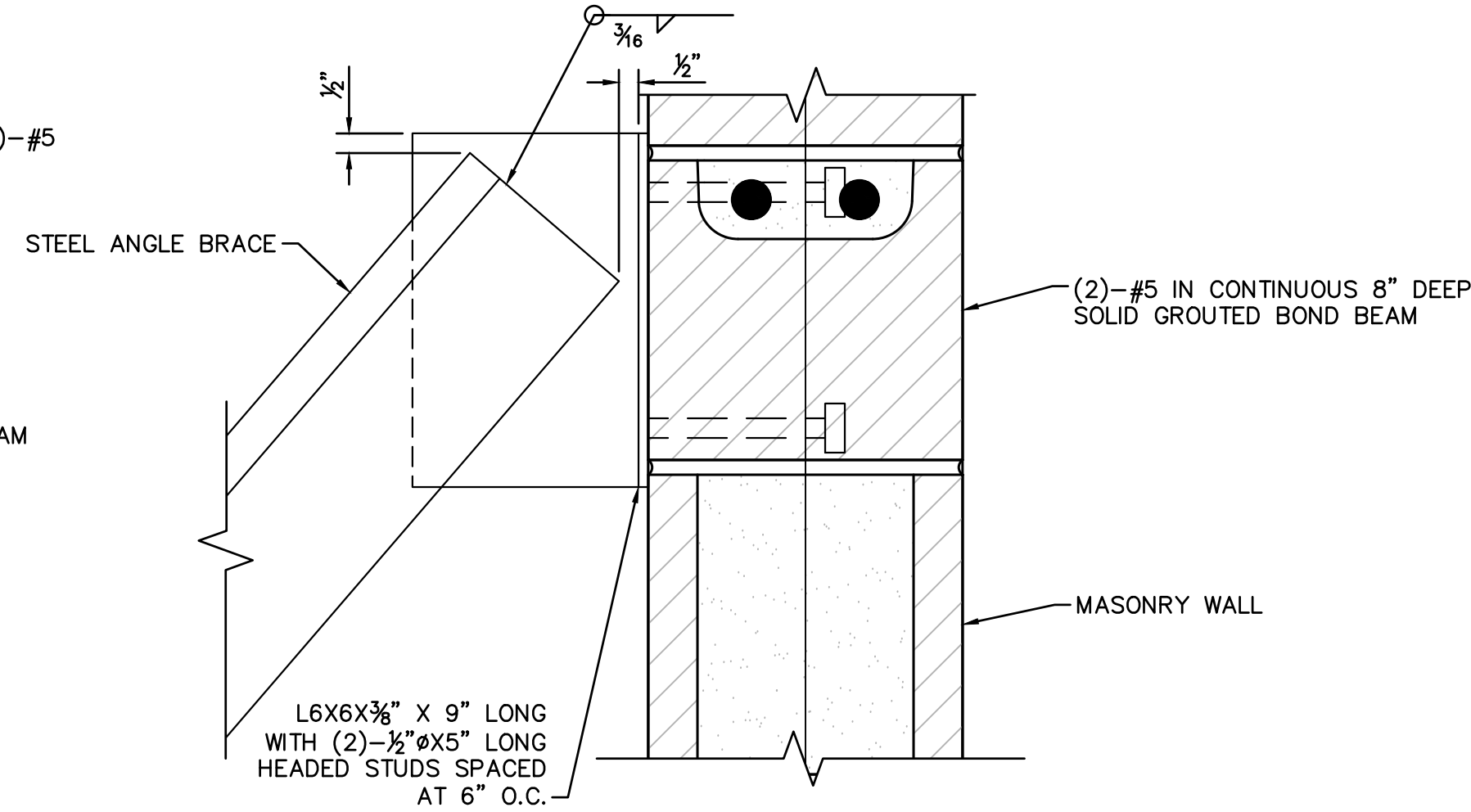


A.3 SECTION
24,25 SCALE: $\frac{3}{4}$ " = 1'-0"

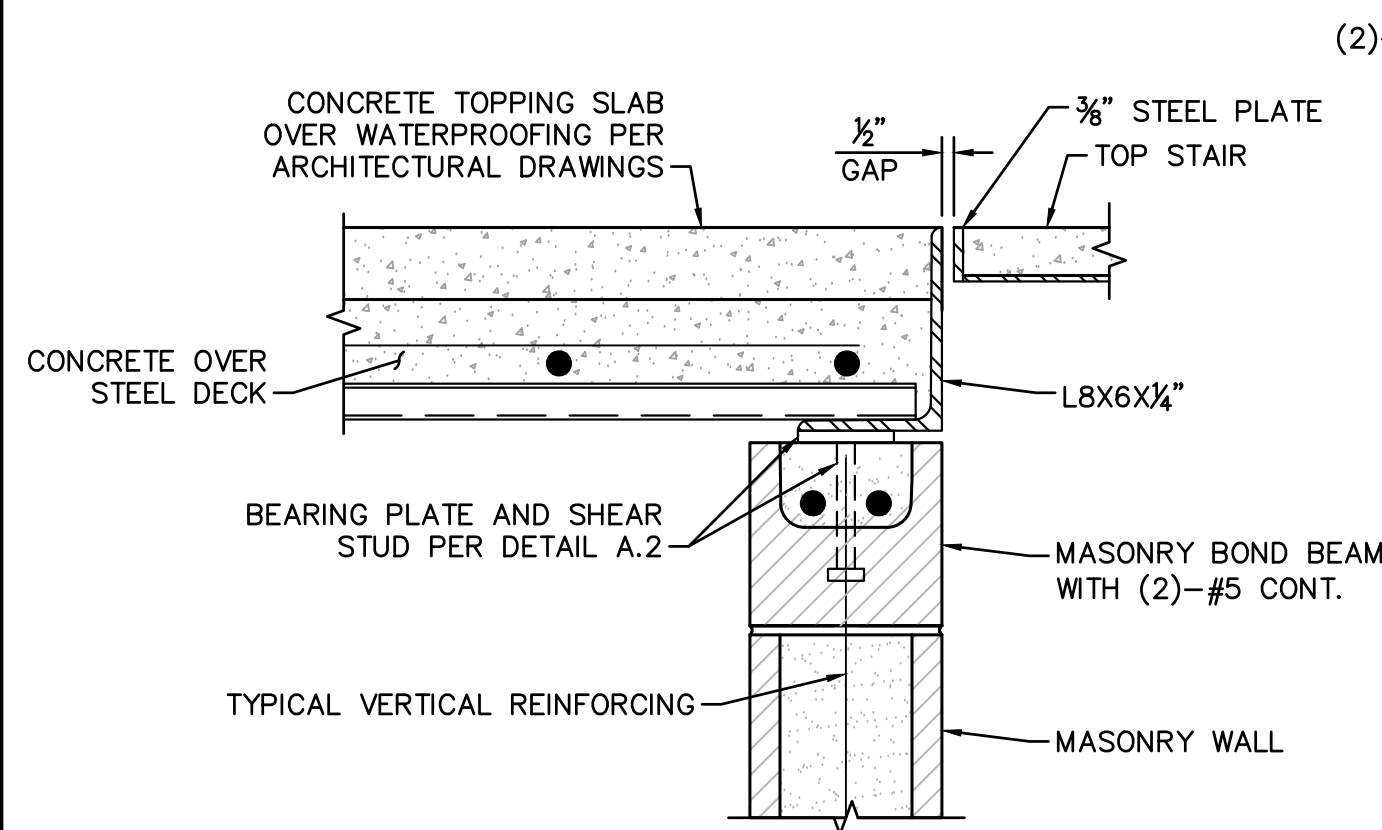
NOTE:
1. GROUT SOLID CONTINUOUS FROM BOND BEAM TO 4" ABOVE ROOF LINE.



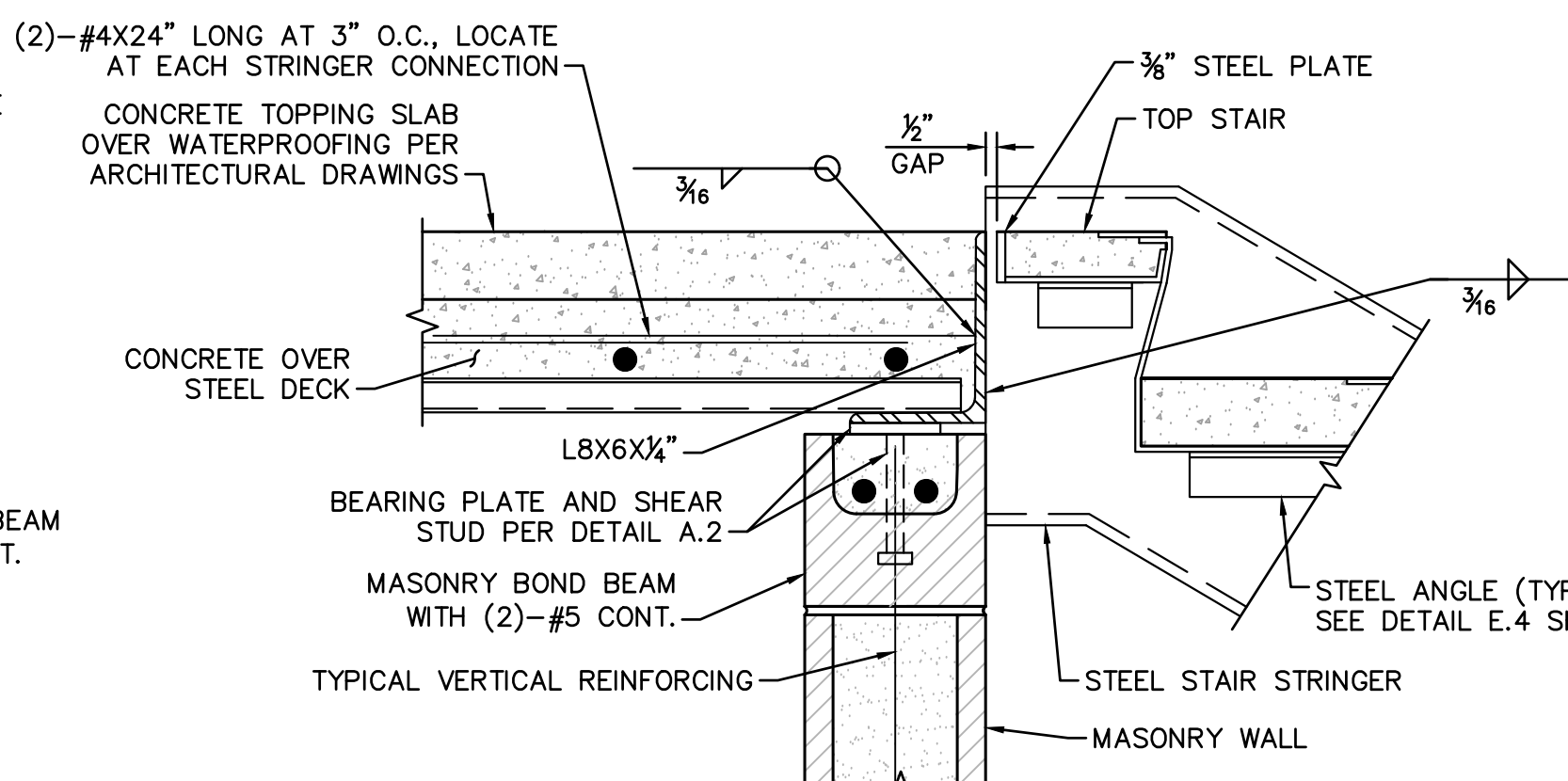
B.3 SECTION
24 SCALE: $\frac{1}{2}$ " = 1'-0"



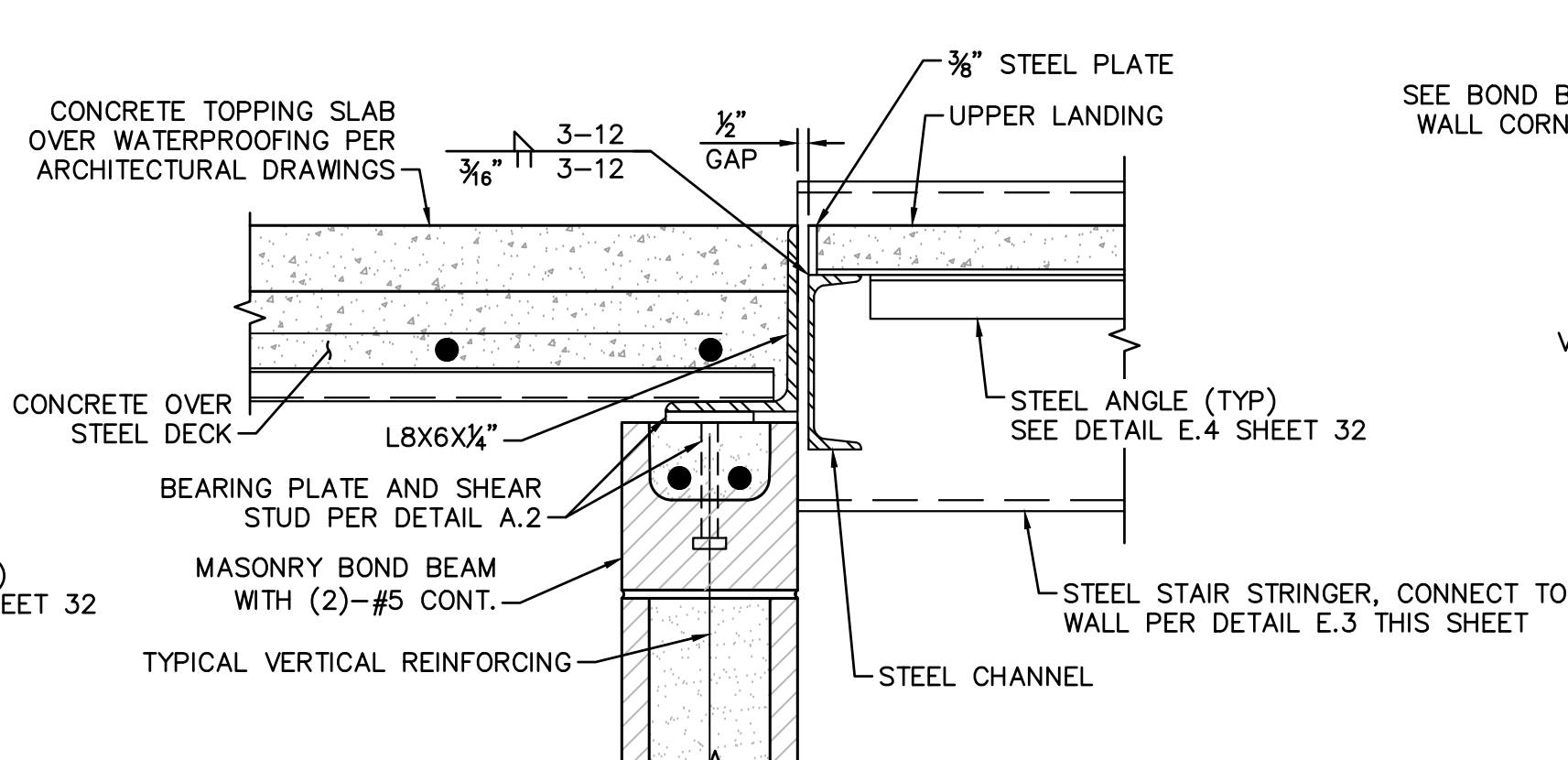
C.3 SECTION
25 SCALE: $\frac{1}{2}$ " = 1'-0"



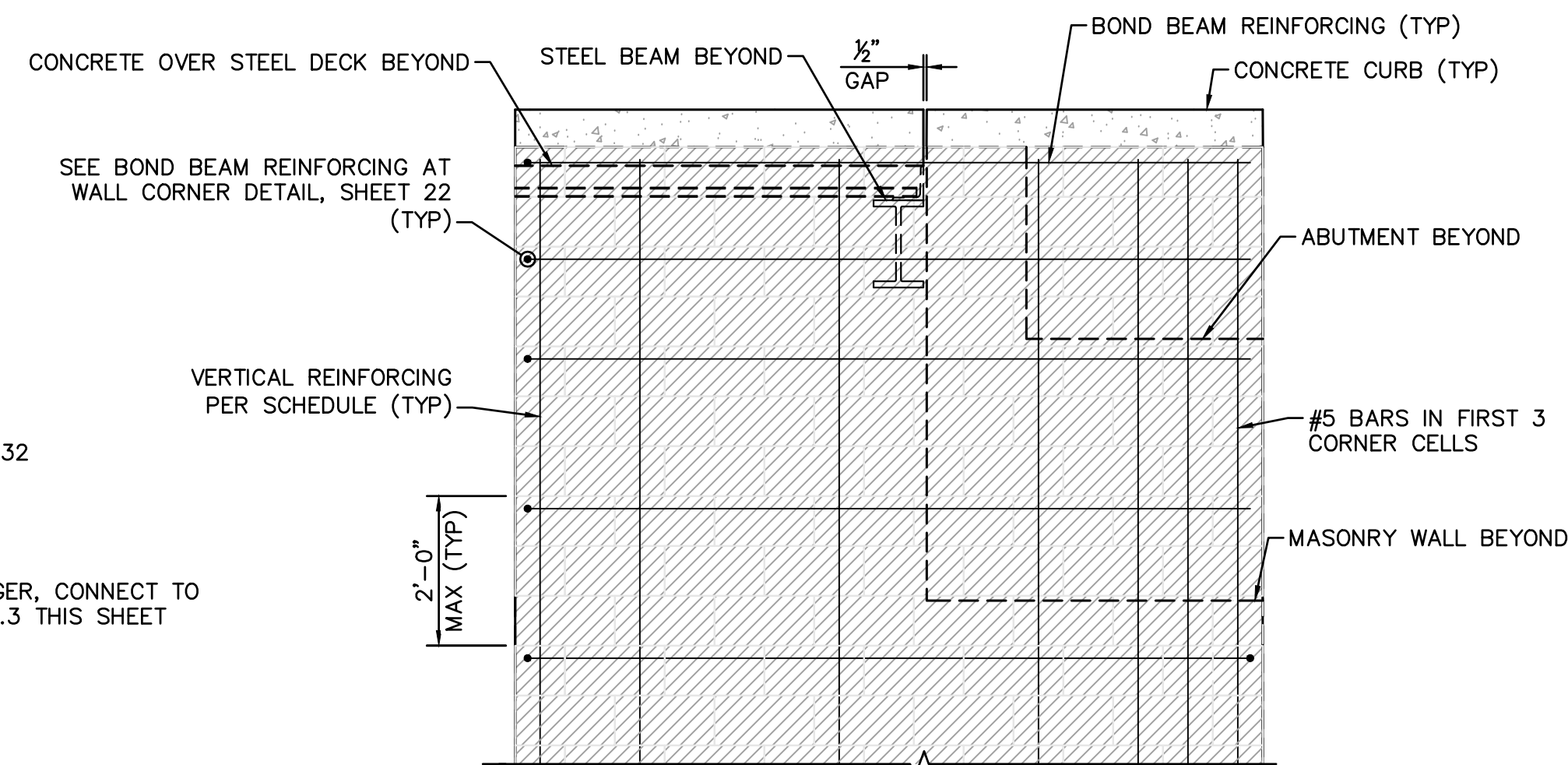
D.3 SECTION
24 SCALE: $\frac{1}{2}$ " = 1'-0"



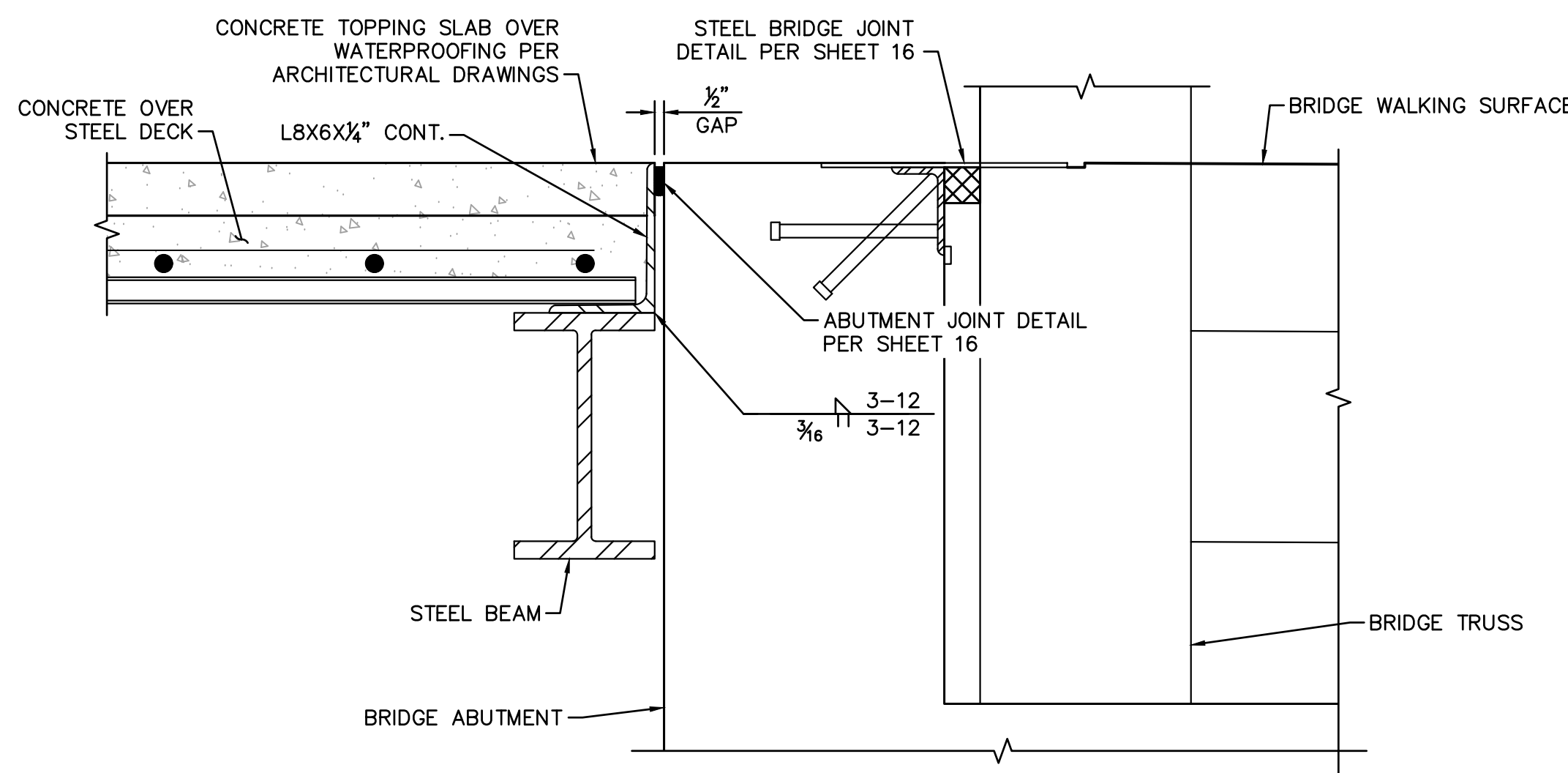
E.3 SECTION
24 SCALE: $\frac{1}{2}$ " = 1'-0"



F.3 SECTION
25 SCALE: $\frac{1}{2}$ " = 1'-0"



G.3 ELEVATION
25 SCALE: $\frac{1}{2}$ " = 1'-0"



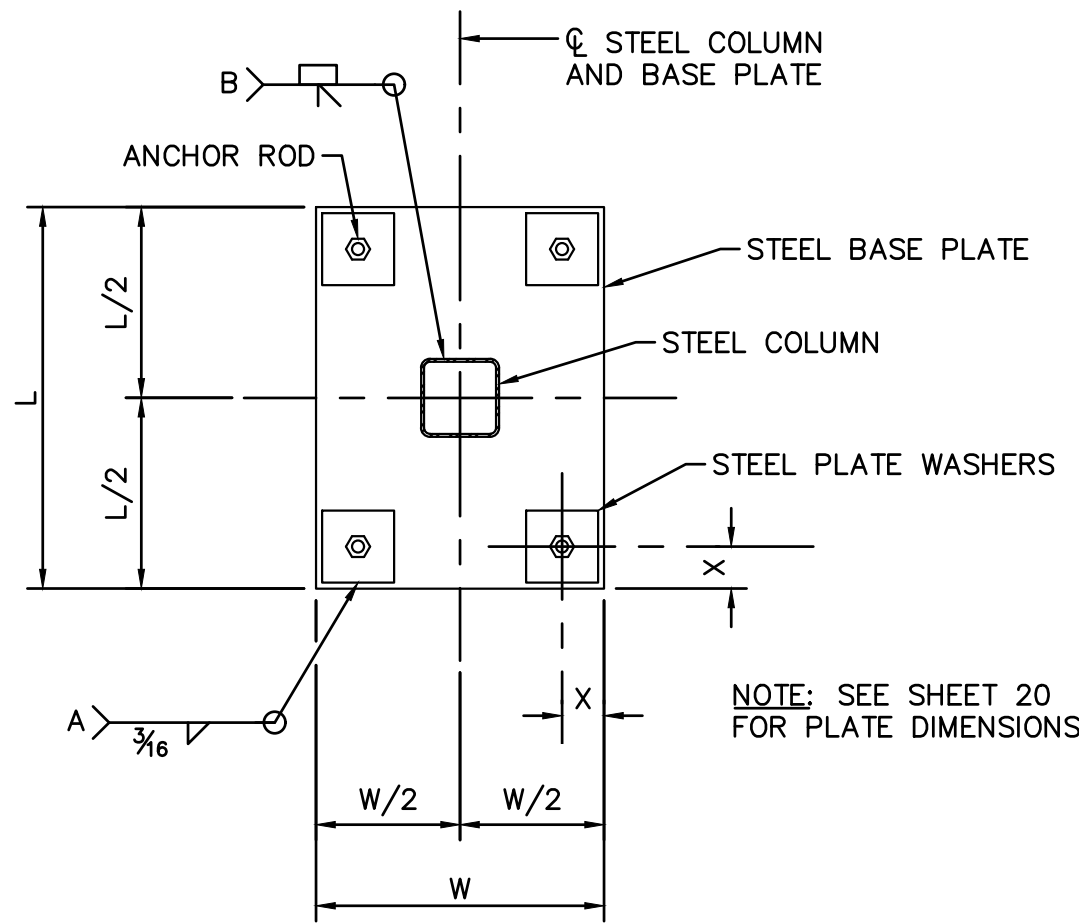
H.3 SECTION
25 SCALE: $1\frac{1}{2}$ " = 1'-0"



NAME	DATE
DESIGN SED	09/26
DRAWN SED	09/26
CHECKED CHG	09/26

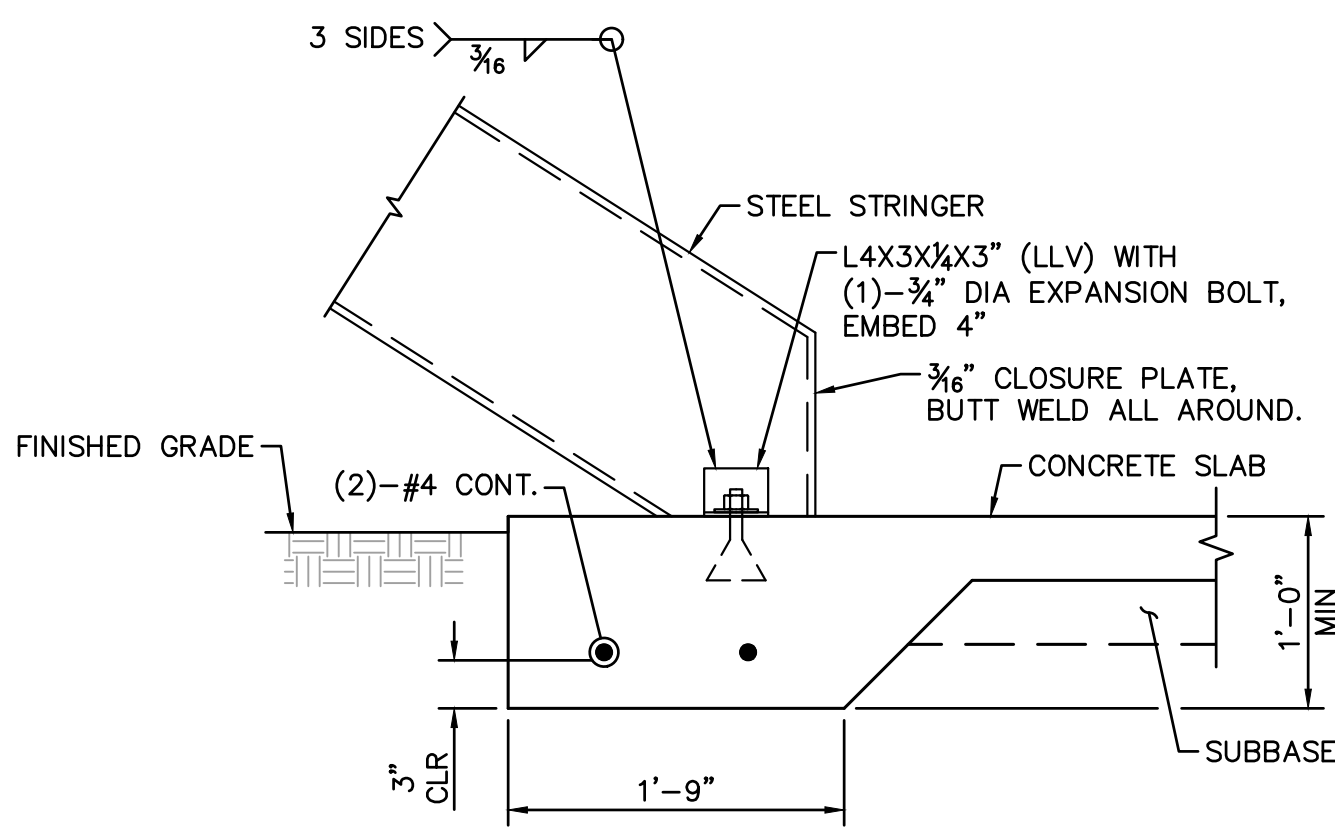
ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP
Kimley»Horn © 2025 KIMLEY-HORN AND ASSOCIATES, INC.
ELEVATOR SHAFT, ELECTRICAL ROOM, & MECHANICAL ROOM DETAILS 2

ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 31	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON	TRACS NO. T0619 01C	DWG NO. ST19	31 OF 70			
STRUCTURE NO.							

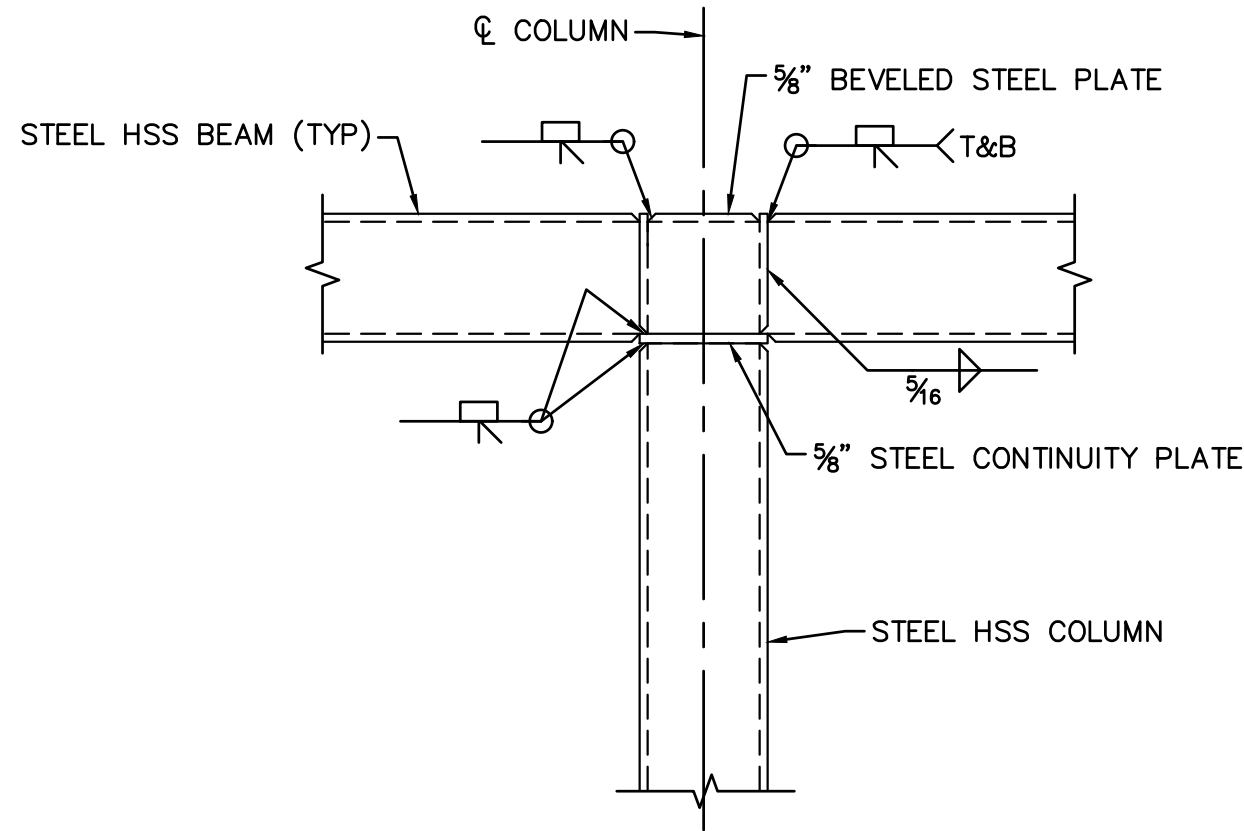


(A.4) STEEL TUBE COLUMN BASE PLATE TYPICAL DETAIL
SCALE: 1½" = 1'-0"

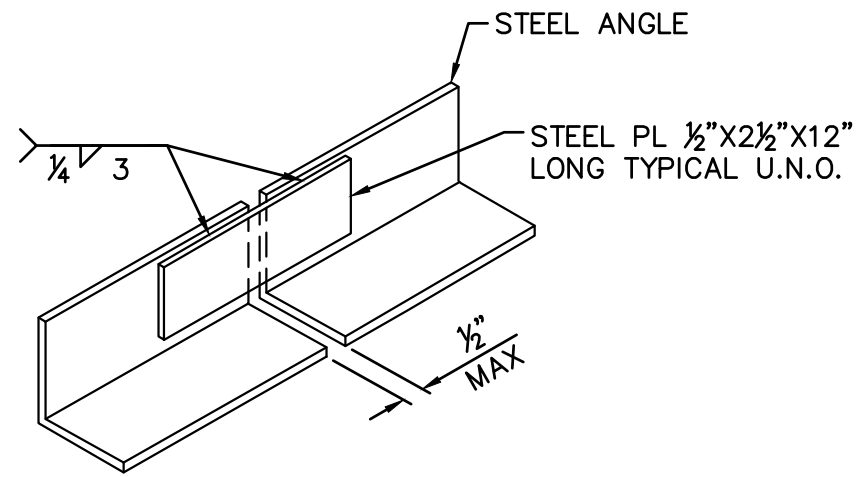
WELD NOTES:
A. WELD TOP STEEL PLATE WASHERS ALL AROUND



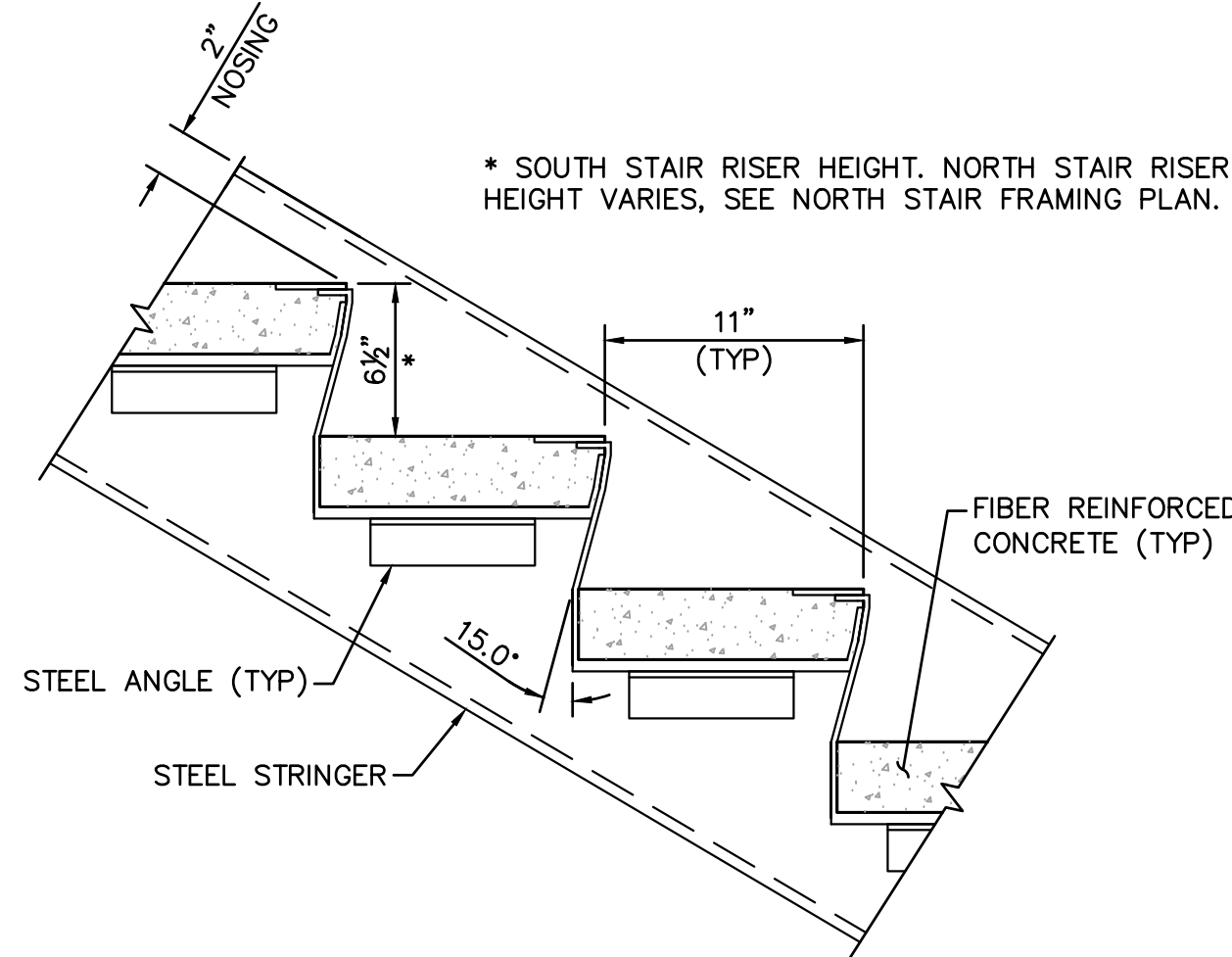
(B.4) STEEL STRINGER AT FOUNDATION DETAIL
SCALE: 1" = 1'-0"



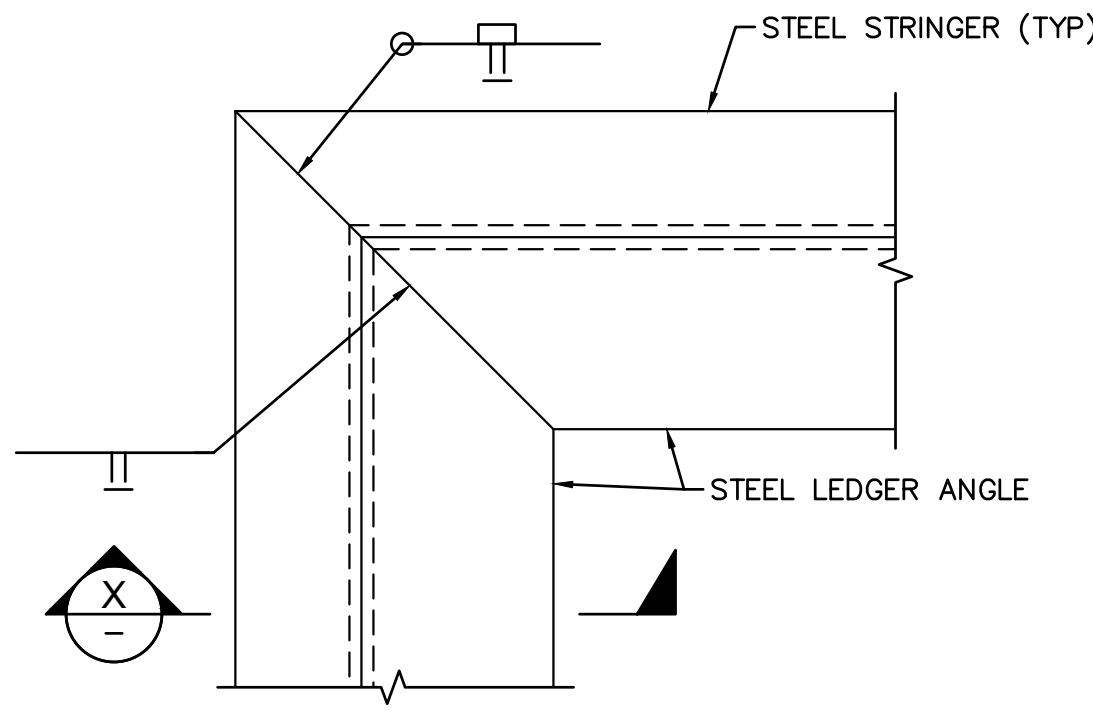
(C.4) STEEL BEAM AT STEEL COLUMN DETAIL
SCALE: 1" = 1'-0"



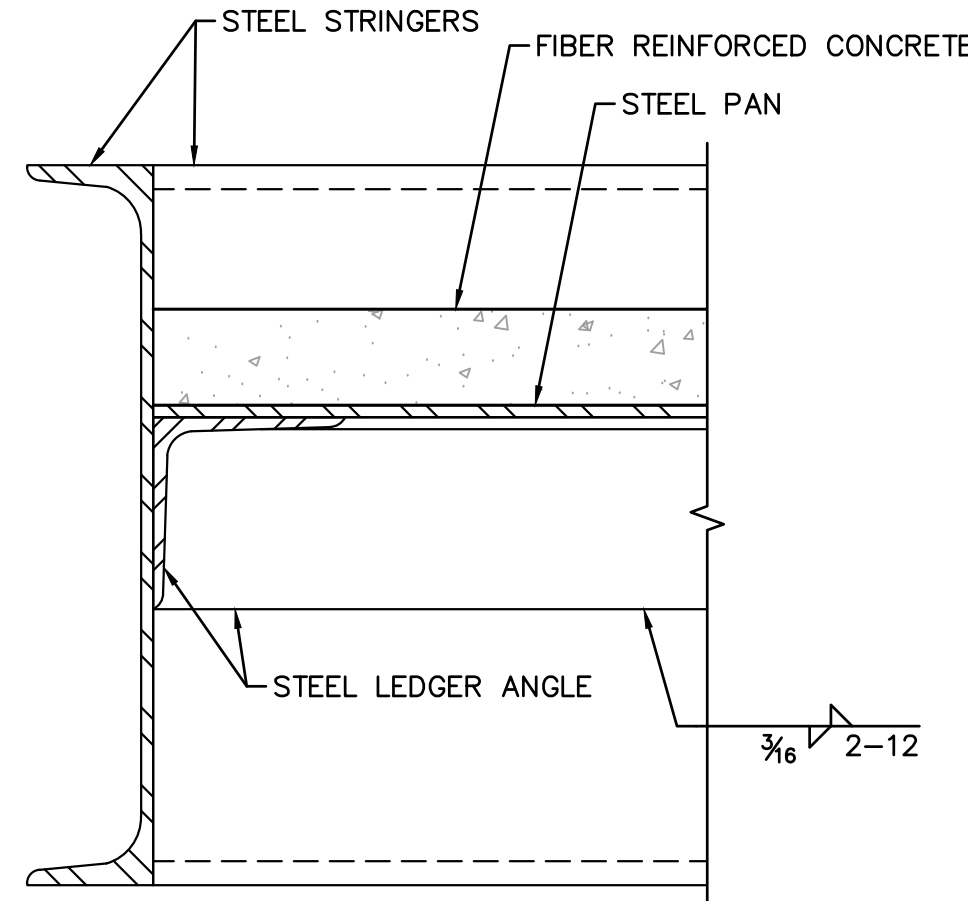
(D.4) SPLICE IN CONTINUOUS STEEL LEDGER ANGLE
SCALE: 1" = 1'-0"



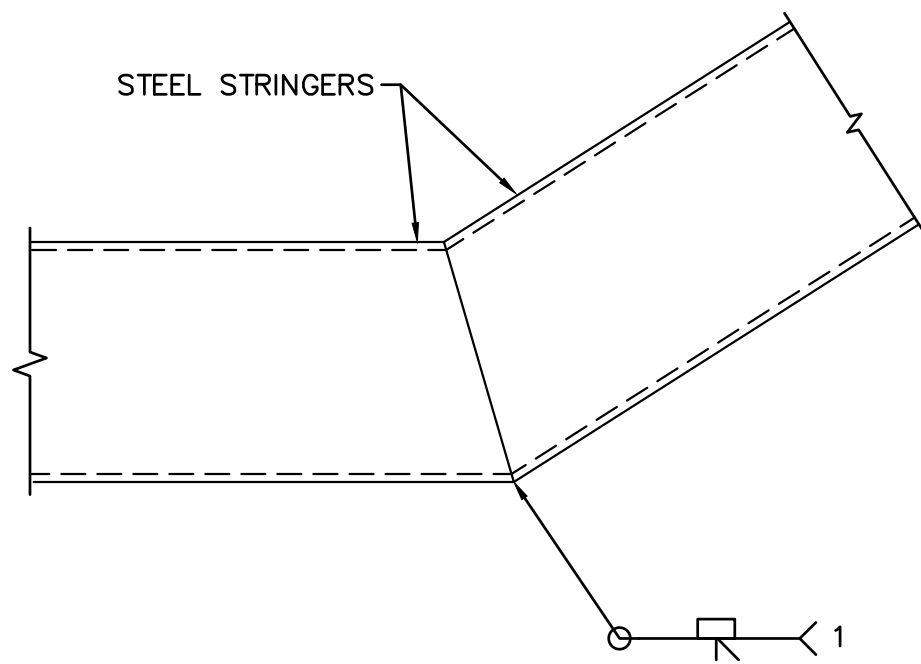
(E.4) STEEL PAN CONNECTIONS TO STEEL CHANNEL STRINGER
SCALE: 1½" = 1'-0"



(F.4) STEEL CHANNEL CORNER CONDITION - PLAN VIEW
SCALE: 3" = 1'-0"

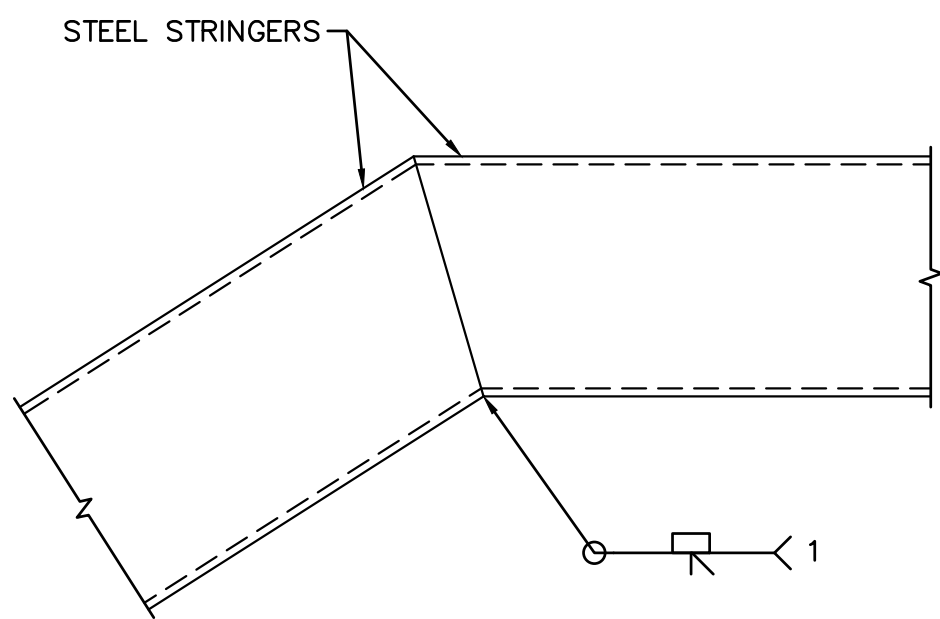


(X) SECTION
SCALE: 3" = 1'-0"

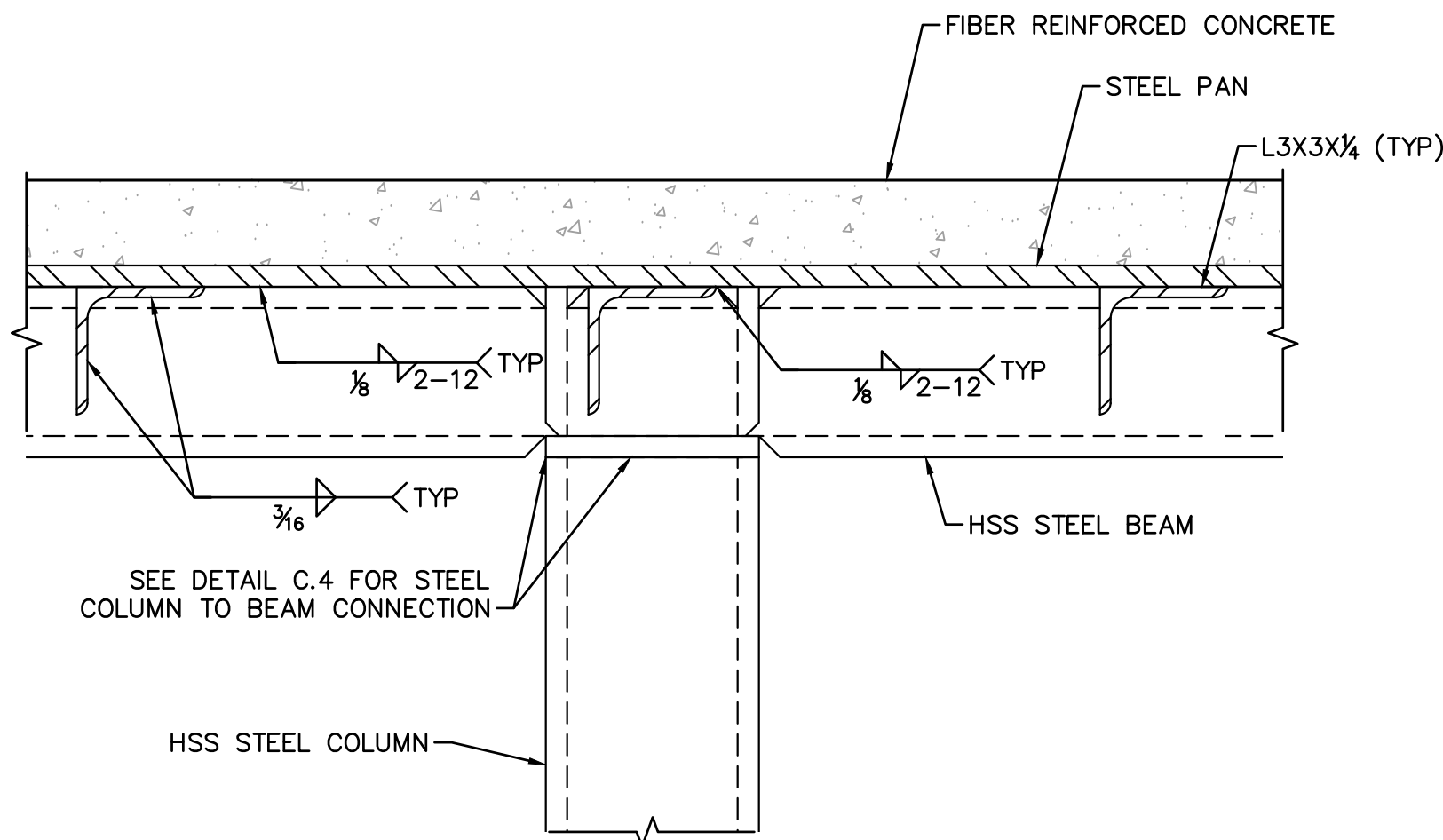


(G.4) TYPICAL SPLICE AT STEEL CHANNELS
SCALE: 1" = 1'-0"

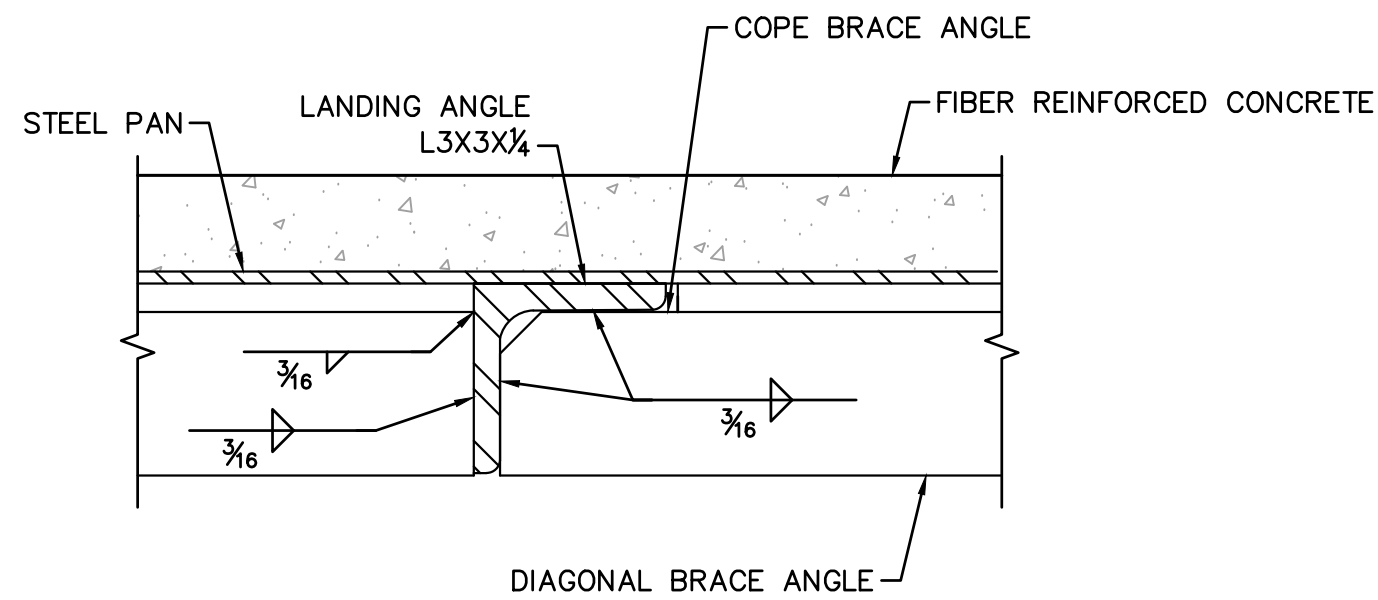
NOTES:
1. FULL PENETRATION WELD, TYPICAL.
2. STAIR TREADS, RISERS, AND LANDING NOT SHOWN FOR CLARITY.



(H.4) TYPICAL SPLICE AT STEEL CHANNELS
SCALE: 1" = 1'-0"



(I.4) LANDING DETAIL
SCALE: 3" = 1'-0"



(J.4) DIAGONAL BRACE ANGLE DETAIL
SCALE: 3" = 1'-0"



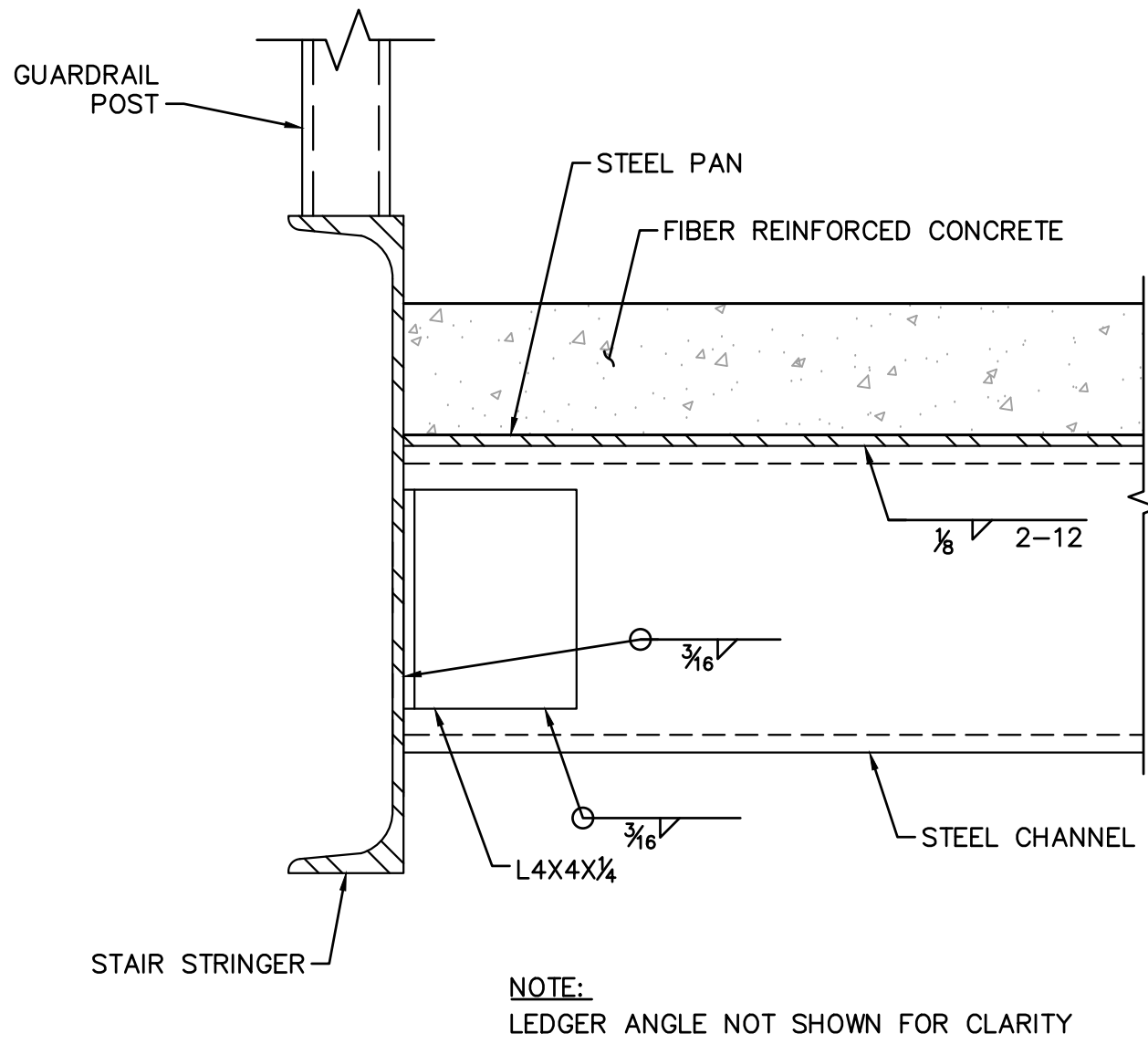
	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

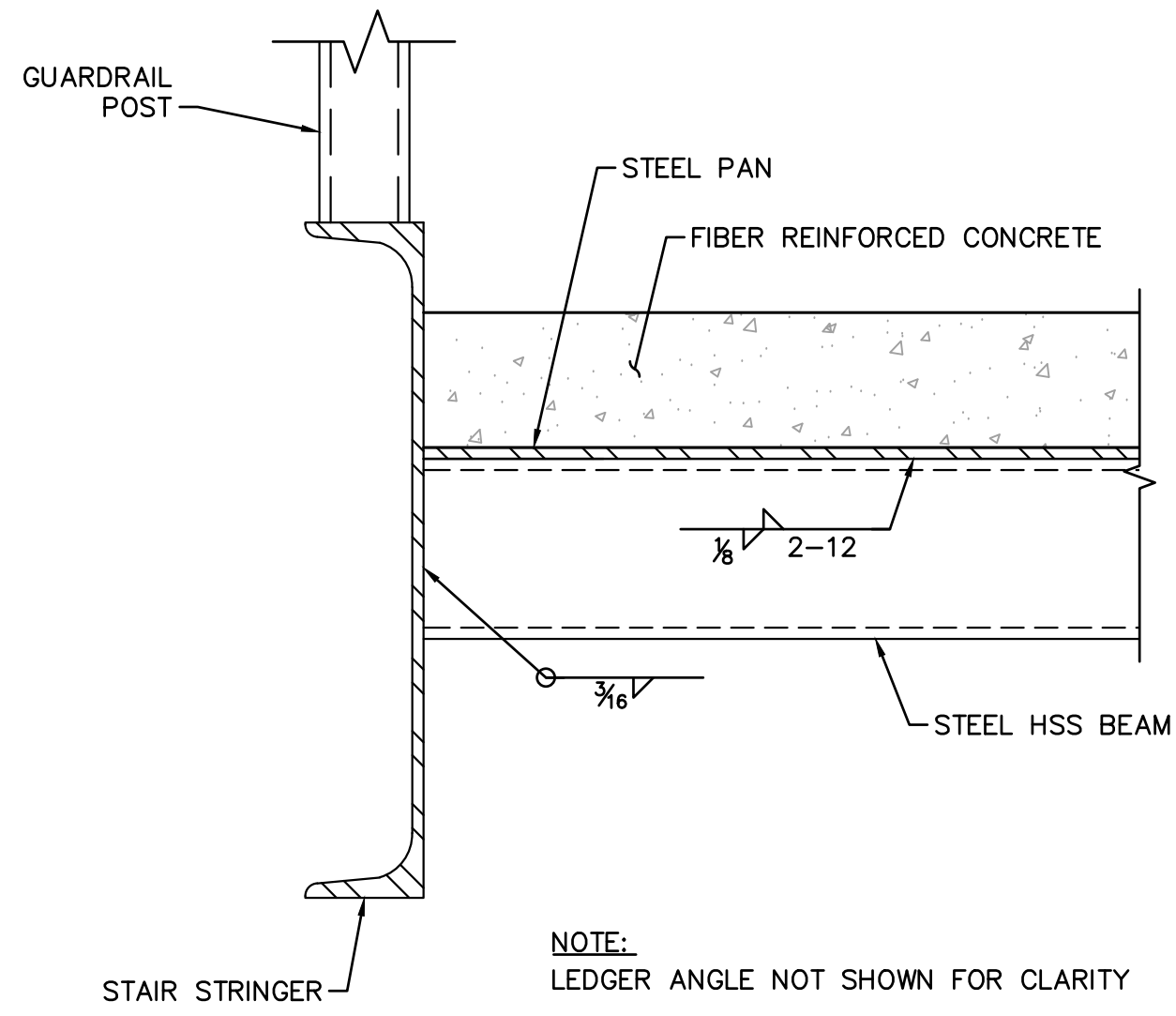
STAIR DETAILS 1

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
-		ARIZ.	0000 MA TOL	CDS TOL-Q(200)T	32	70	
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. ST20	
STRUCTURE NO.	TRACS NO. T0619 01C		32 OF 70				



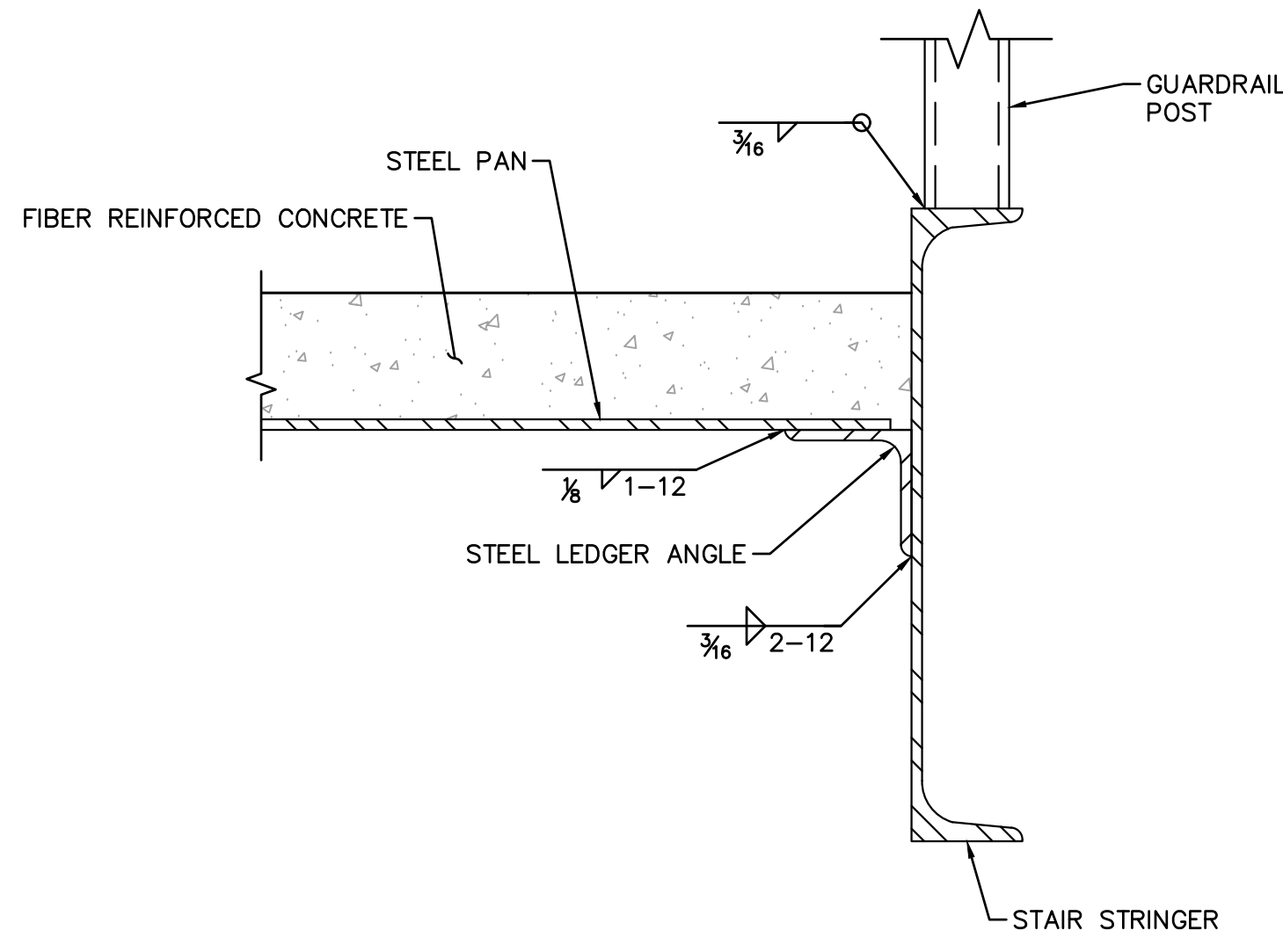
K.4
27 SCALE: 3" = 1'-0"

CHANNEL TO STAIR STRINGER CONNECTION



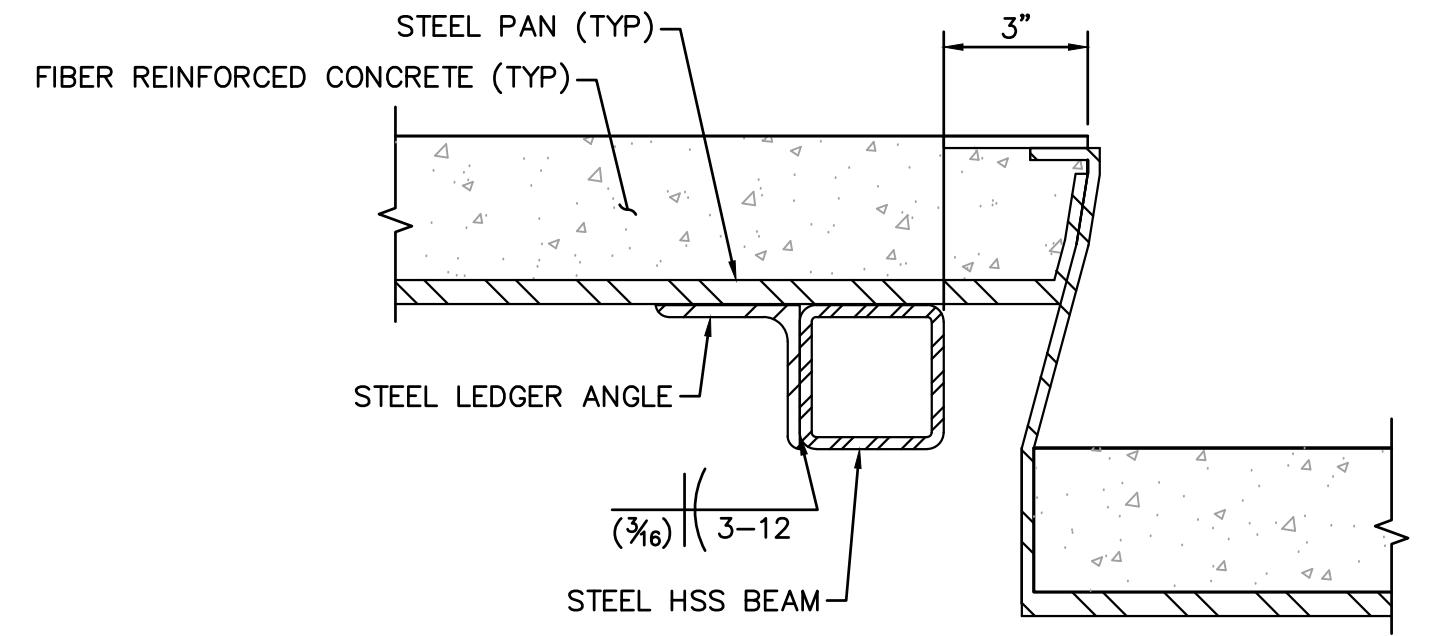
L.4
26,27 SCALE: 3" = 1'-0"

LANDING BEAM TO STAIR STRINGER CONNECTION



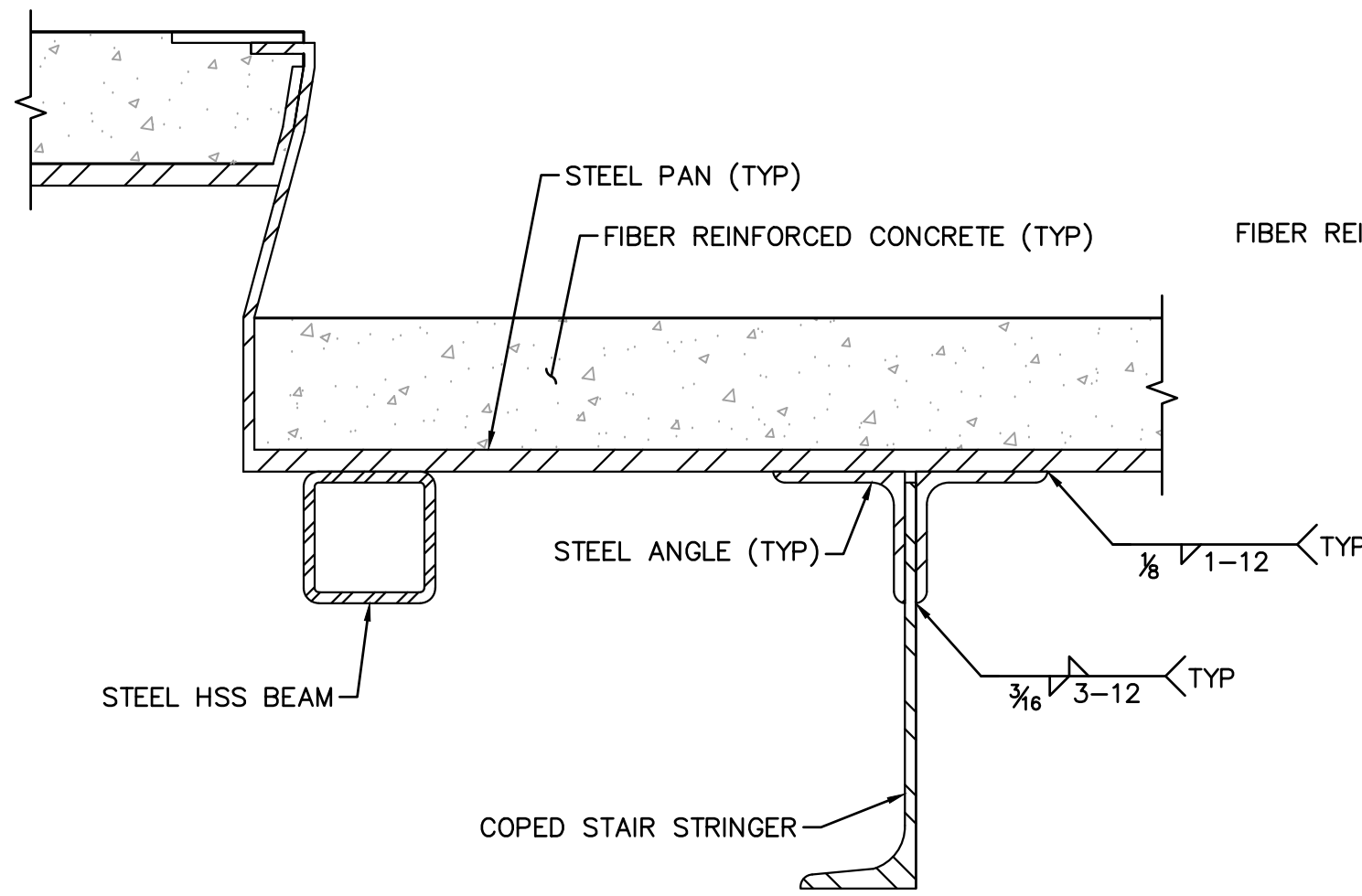
M.4
26,27 SCALE: 3" = 1'-0"

GUARDRAIL CONNECTION



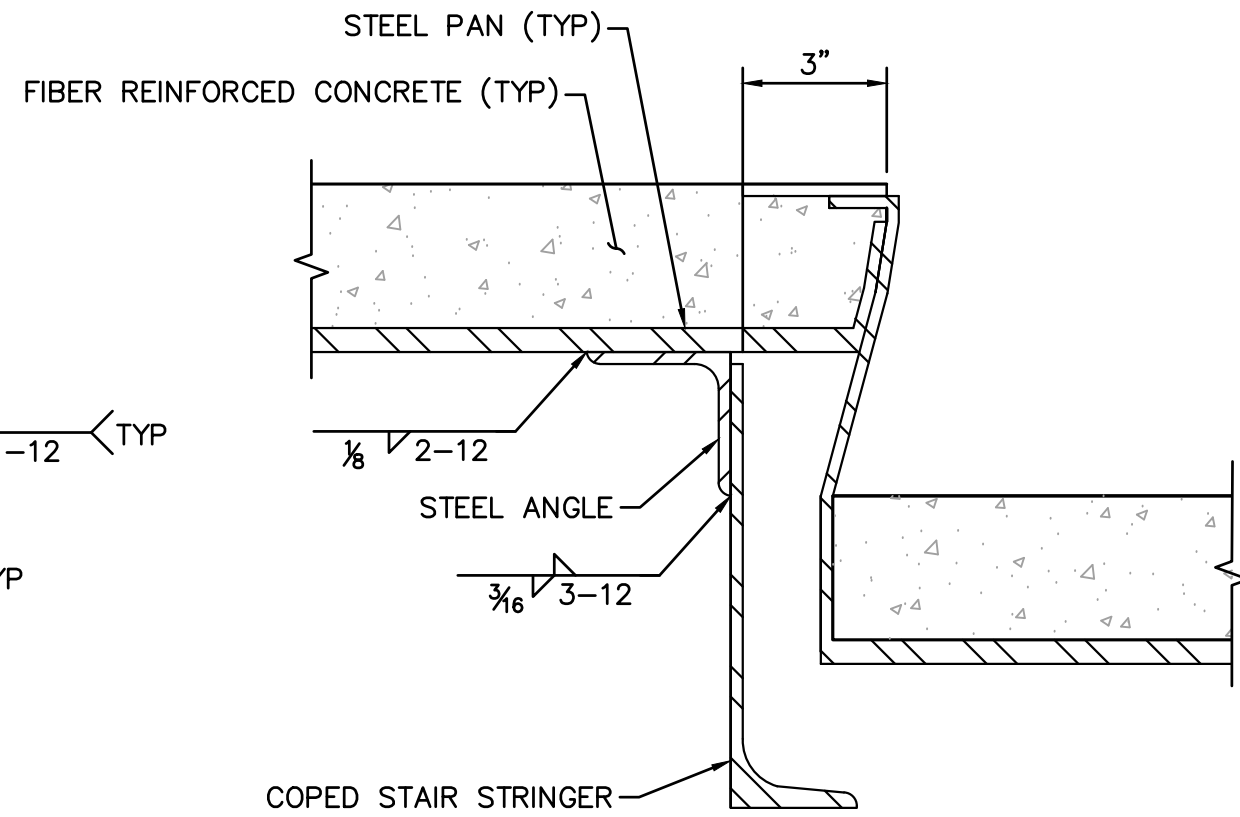
N.4
26 SCALE: 3" = 1'-0"

LANDING FRAMING SECTION



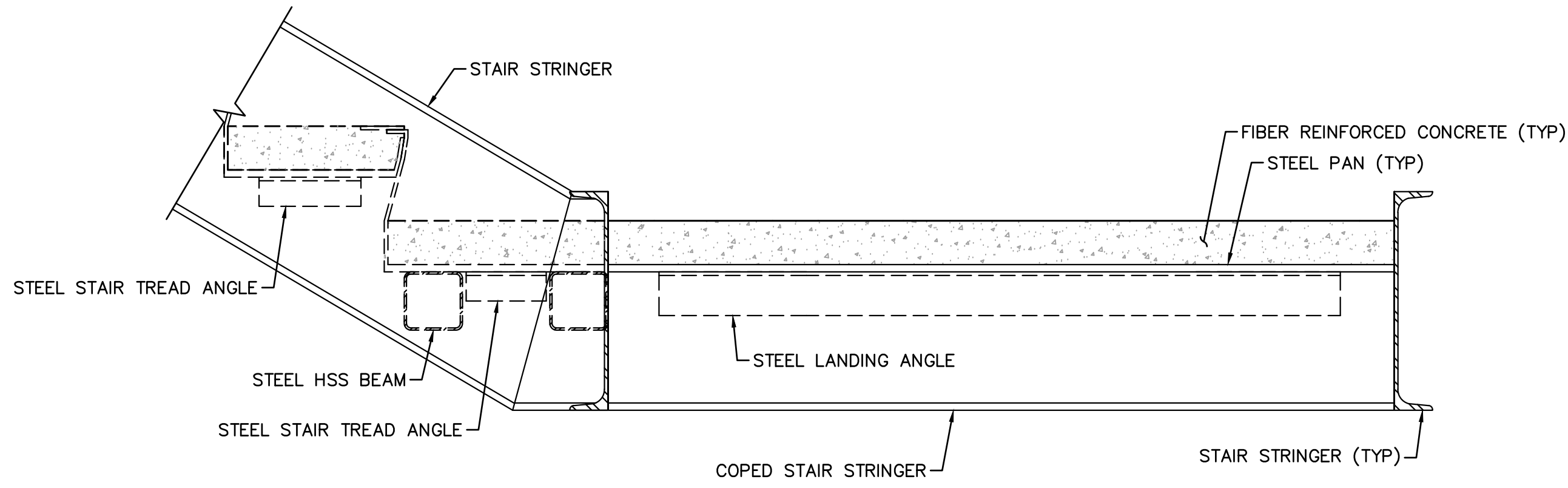
O.4
26 SCALE: 3" = 1'-0"

COPED STAIR STRINGER



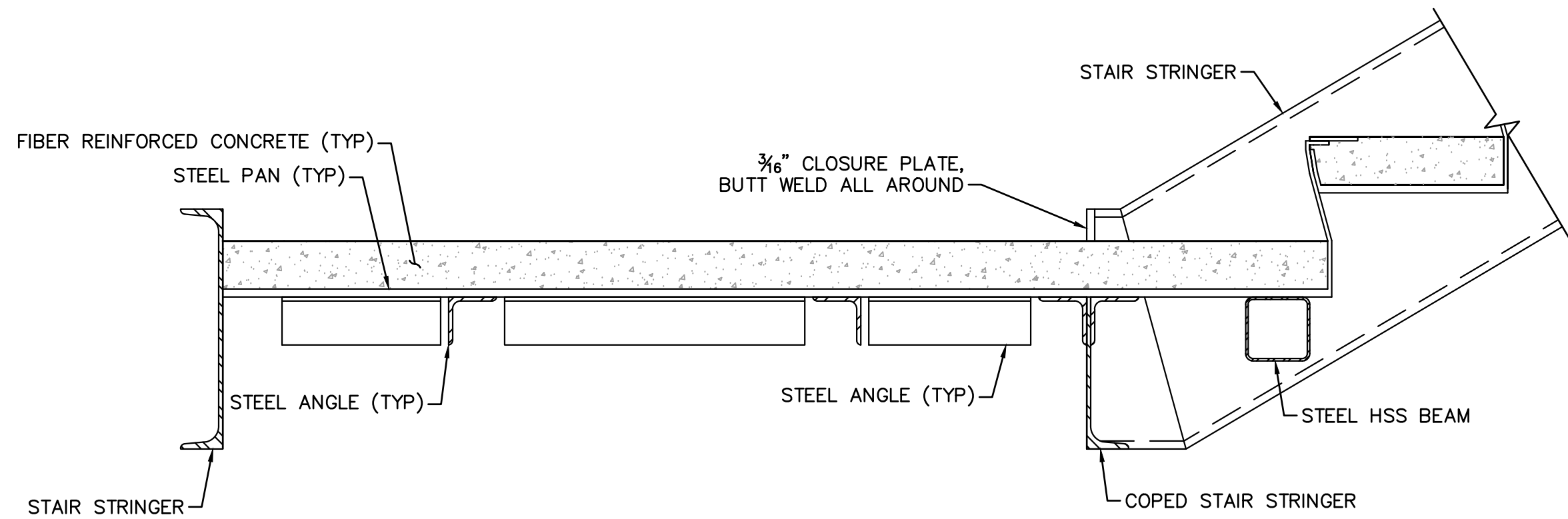
P.4
26 SCALE: 3" = 1'-0"

COPED STAIR STRINGER



Q.4
26 SCALE: 1 1/2" = 1'-0"

LANDING SECTION



R.4
26 SCALE: 1 1/2" = 1'-0"

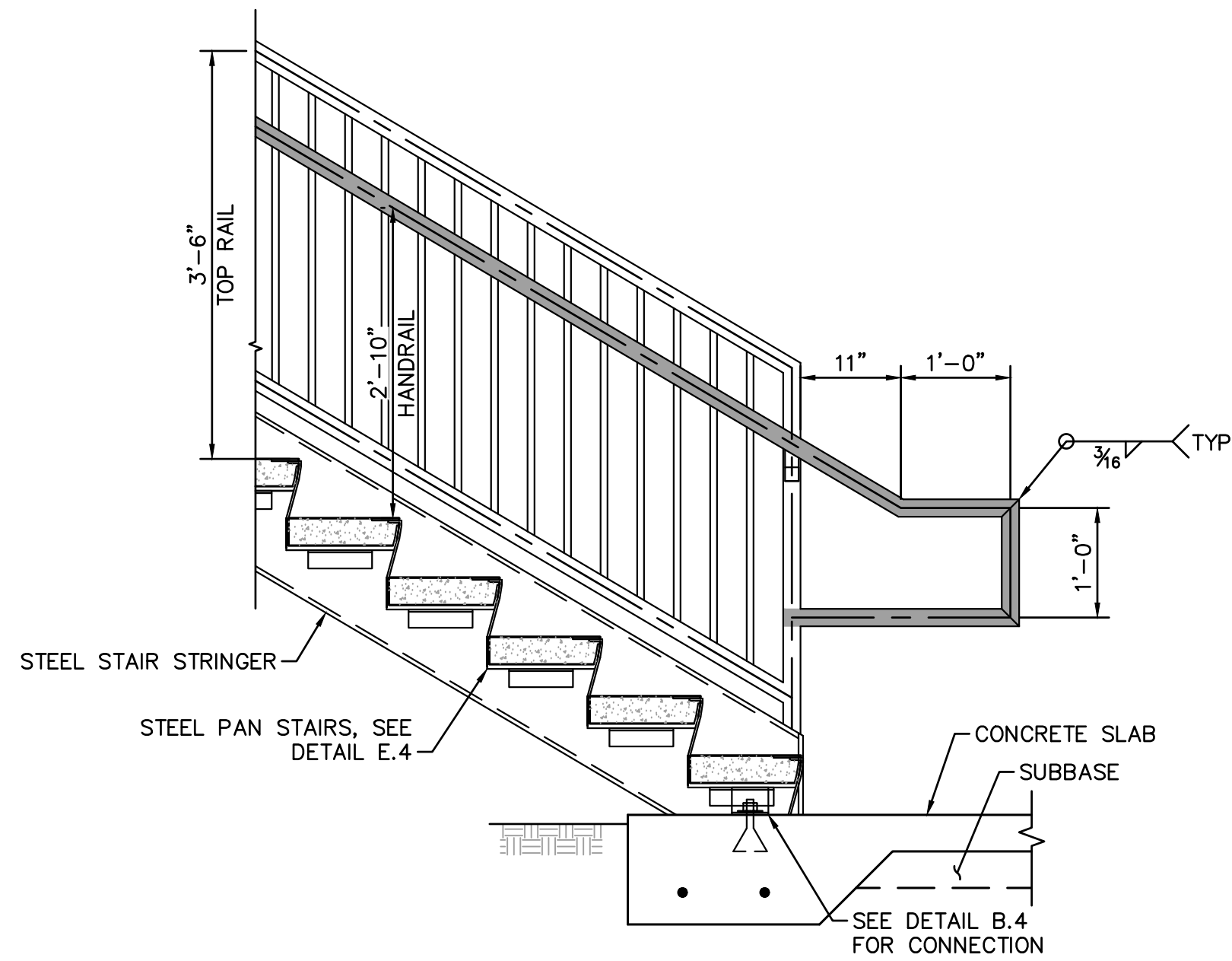
LANDING SECTION



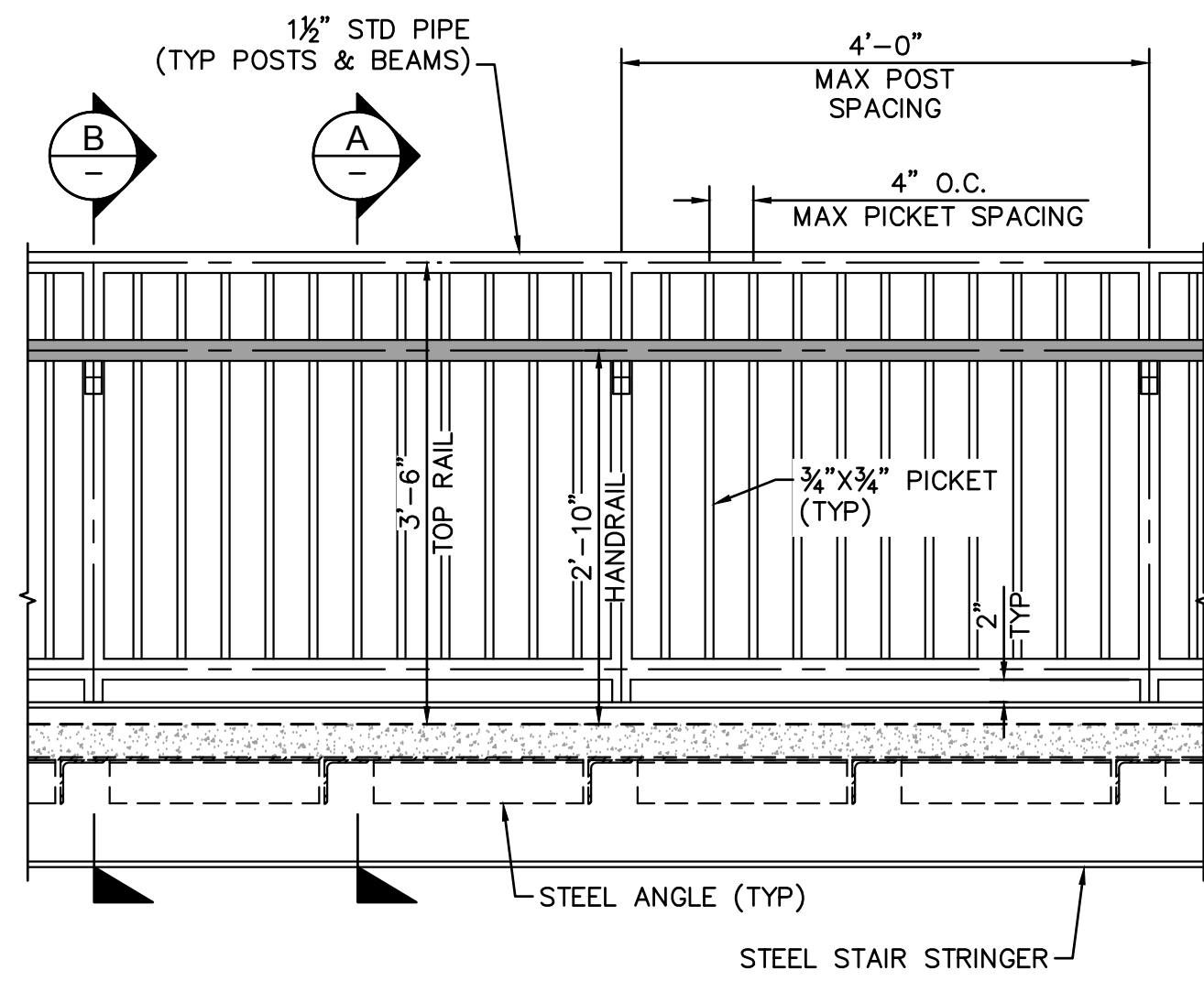
	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

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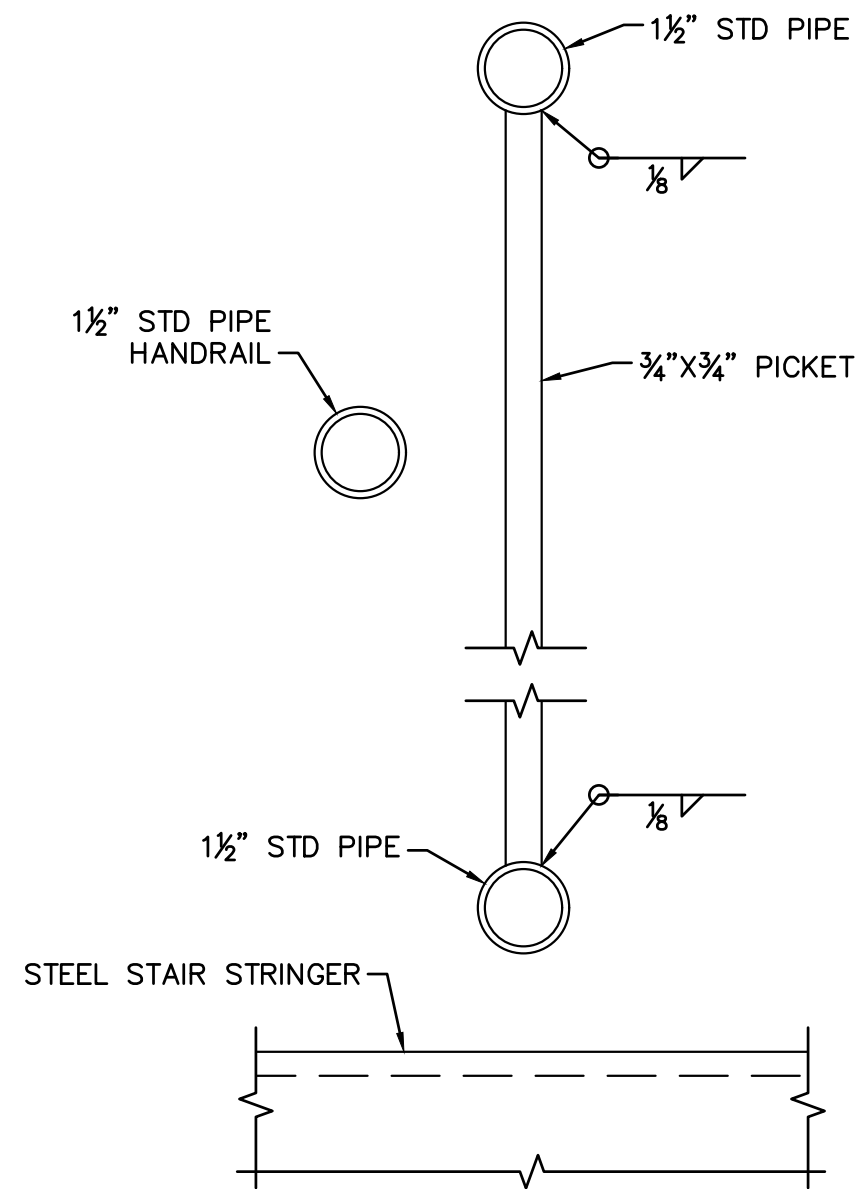
ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP		ROUTE -	F.H.W.A. Arizona Division		STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 33	TOTAL SHEETS 70	RECORD DRAWING
STAIR DETAILS 2		MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON							DWG NO. ST21
		STRUCTURE NO.	TRACS NO. T0619 01C		33 OF 70					



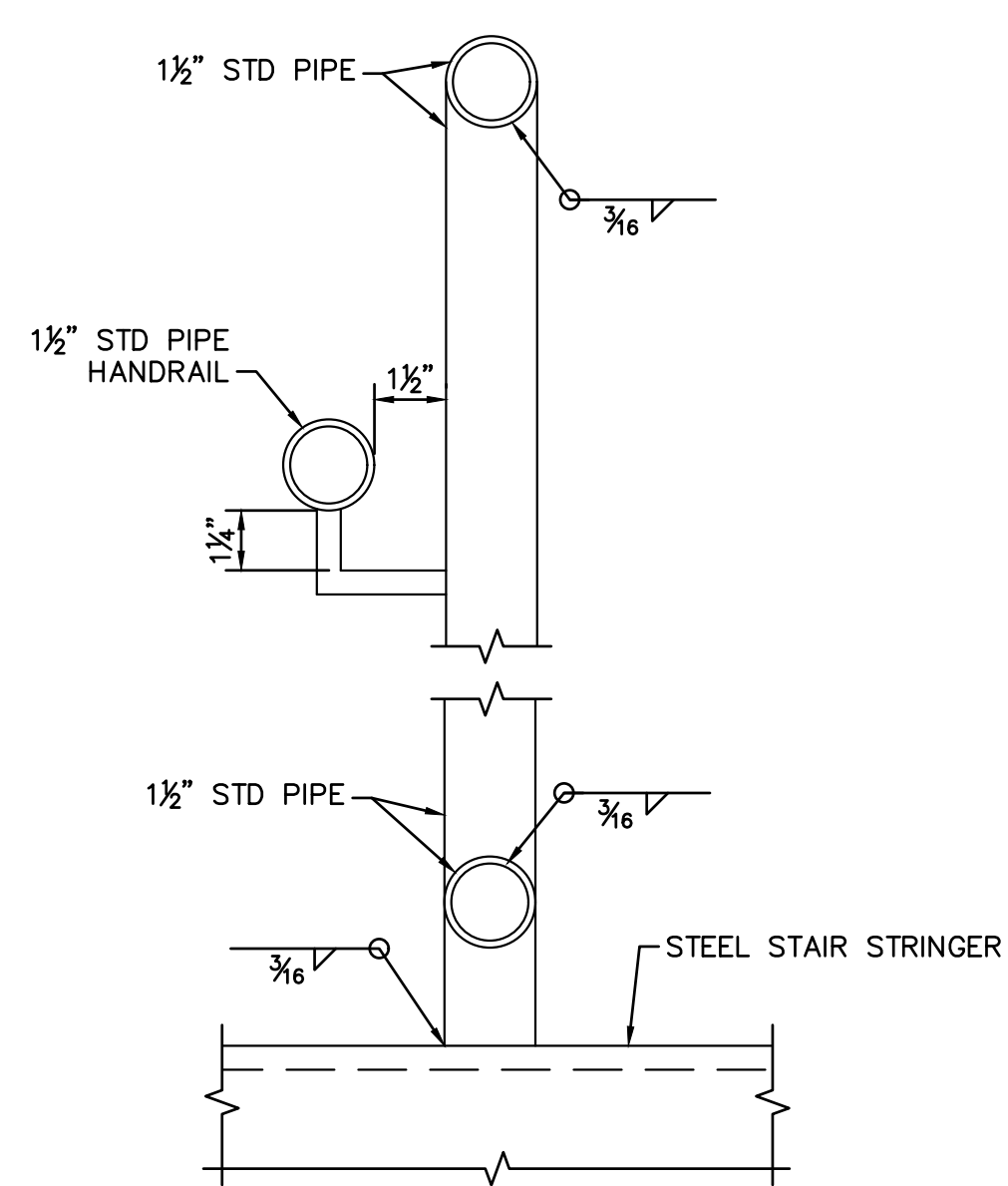
S.4 GUARDRAIL AT SIDEWALK
26,27 SCALE: 3/4" = 1'-0"



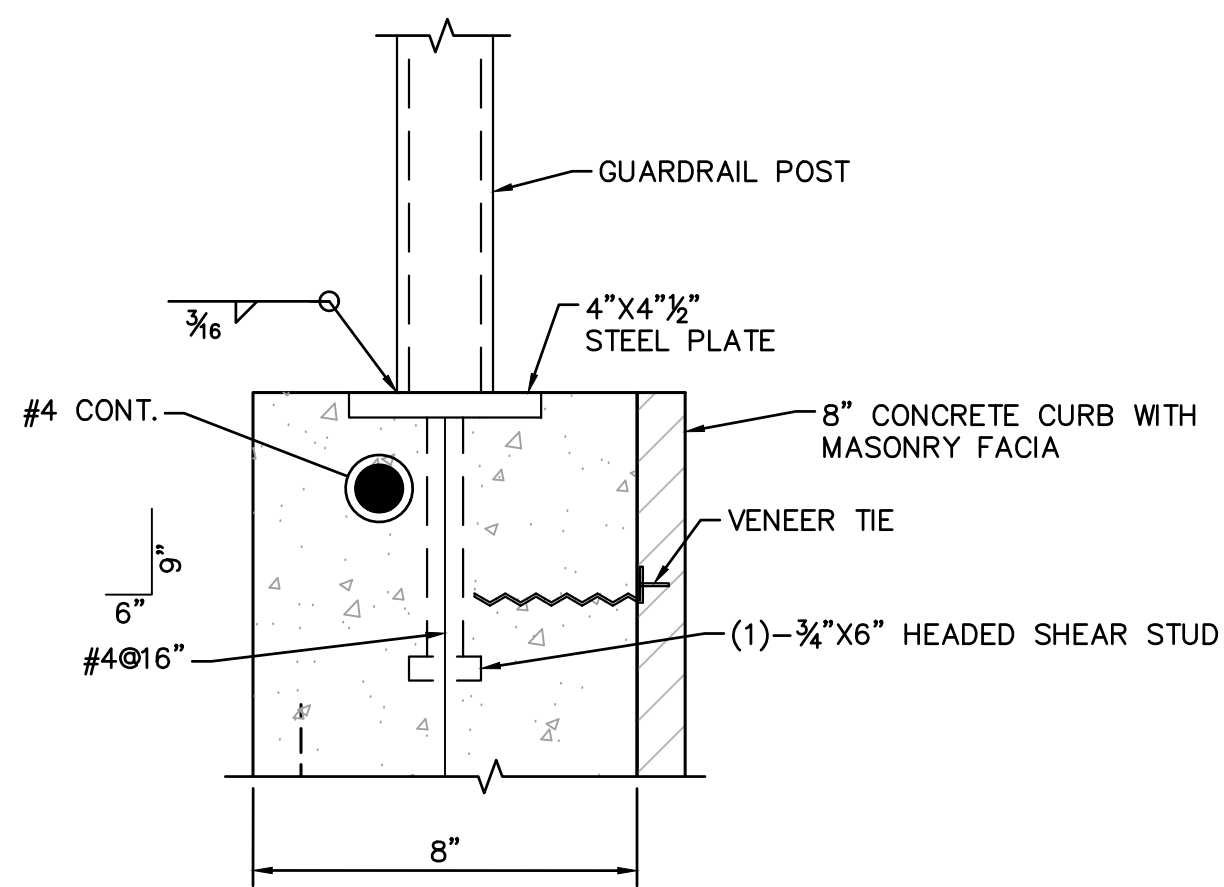
T.4 GUARDRAIL AT LANDINGS
26,27 SCALE: 3/4" = 1'-0"



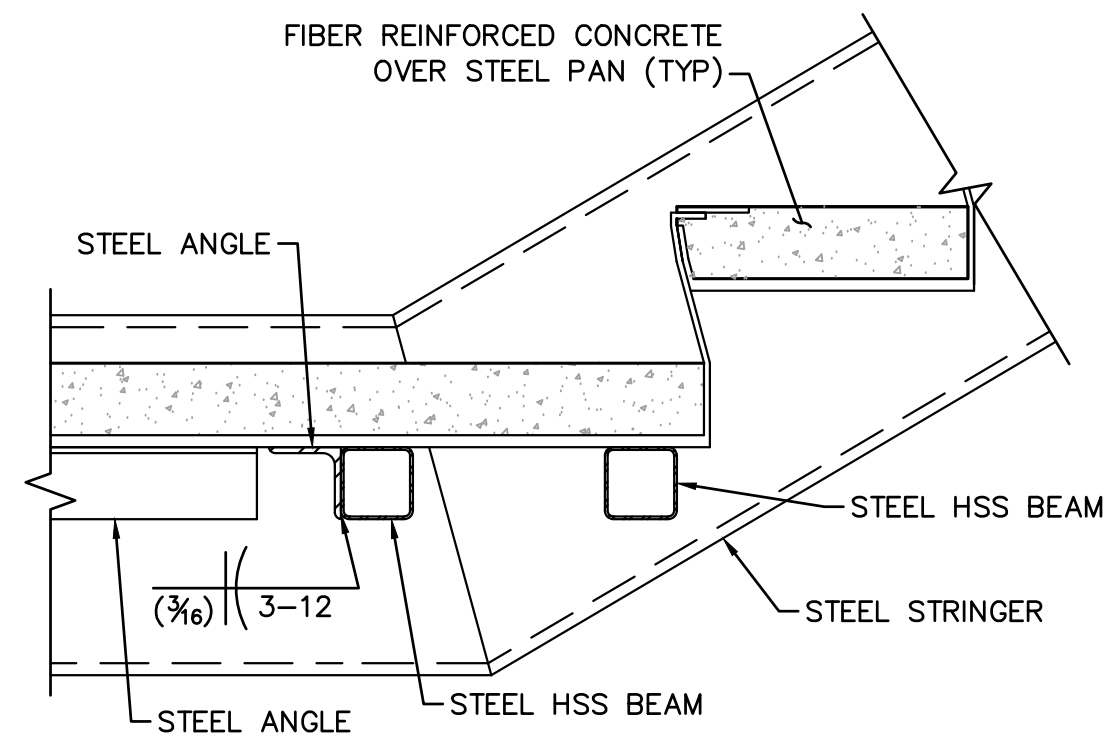
A SECTION
- SCALE: 3" = 1'-0"



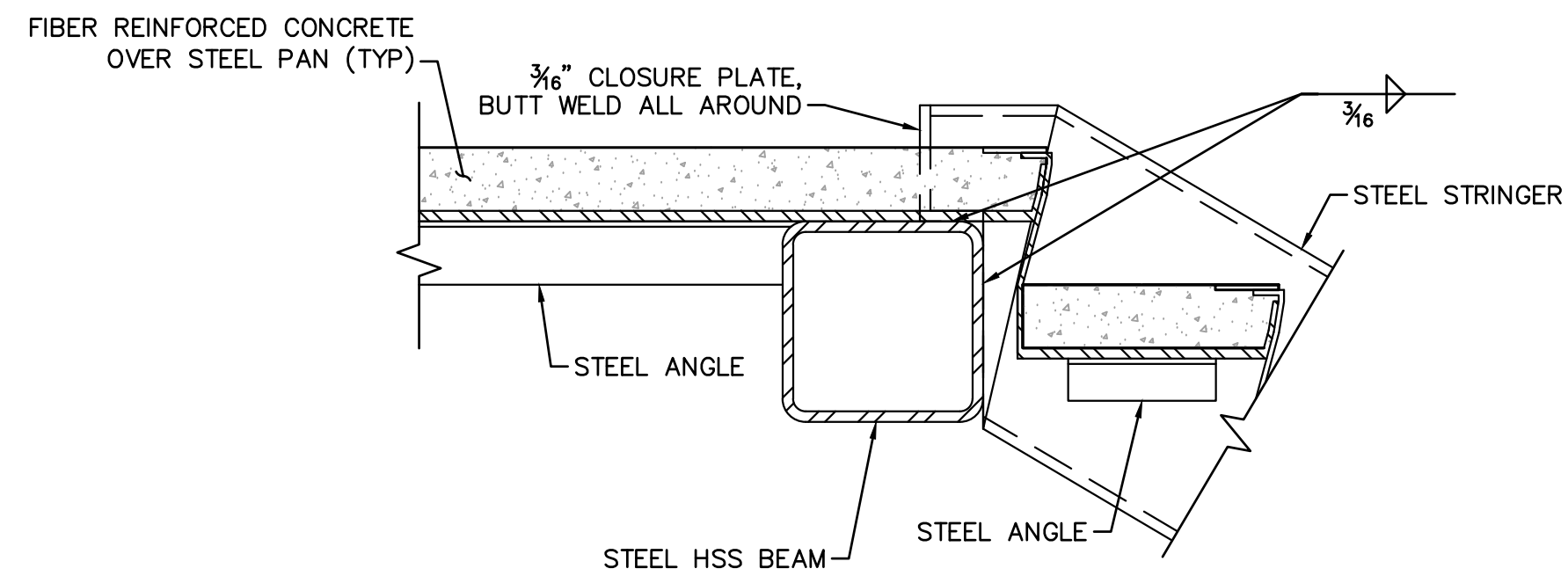
B SECTION
- SCALE: 3" = 1'-0"



U.4 GUARDRAIL POST CONNECTION AT CURB
30 SCALE: 3" = 1'-0"



V.4 SECTION
26 SCALE: 1 1/2" = 1'-0"



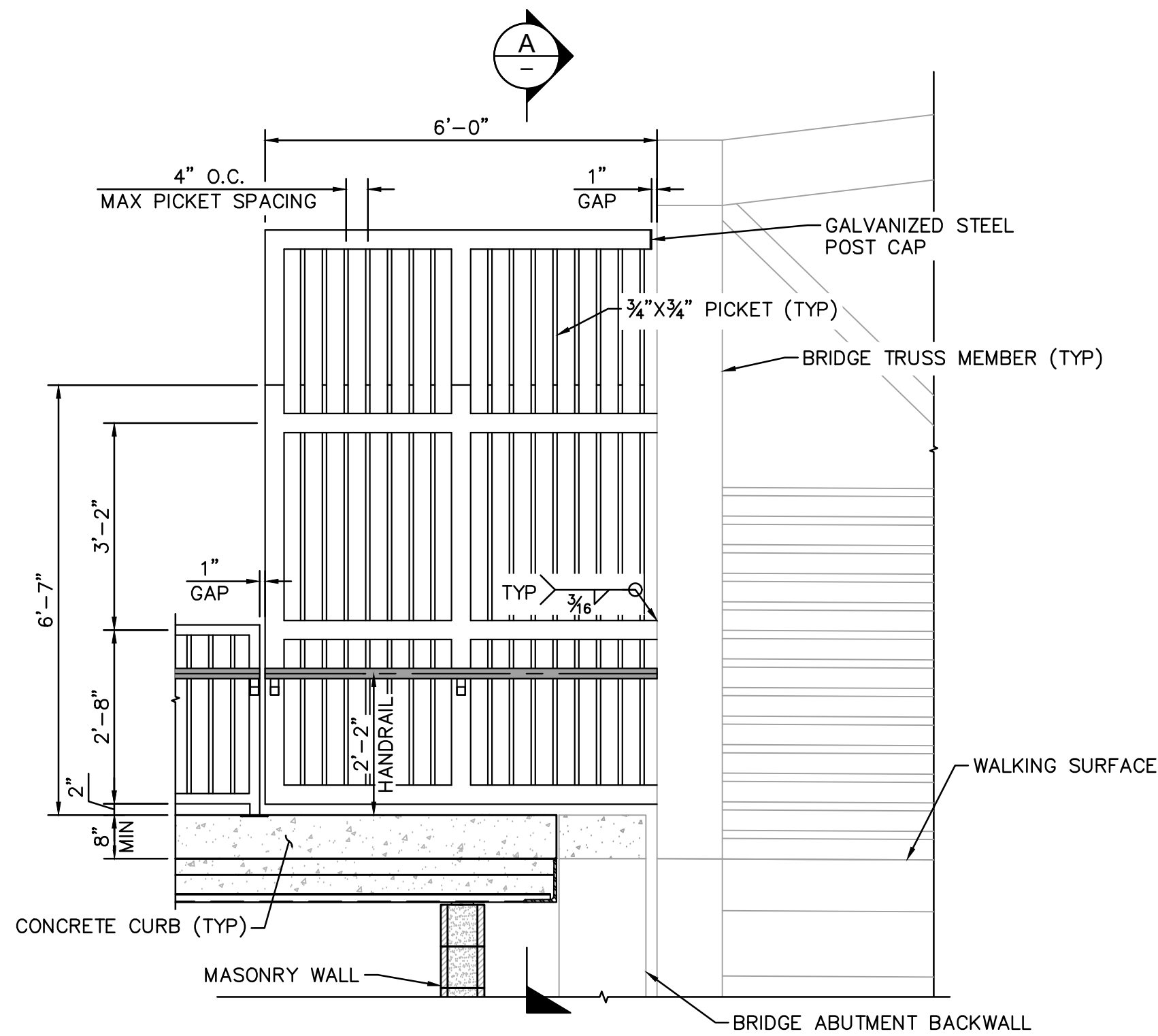
W.4 SECTION
27 SCALE: 1 1/2" = 1'-0"



	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

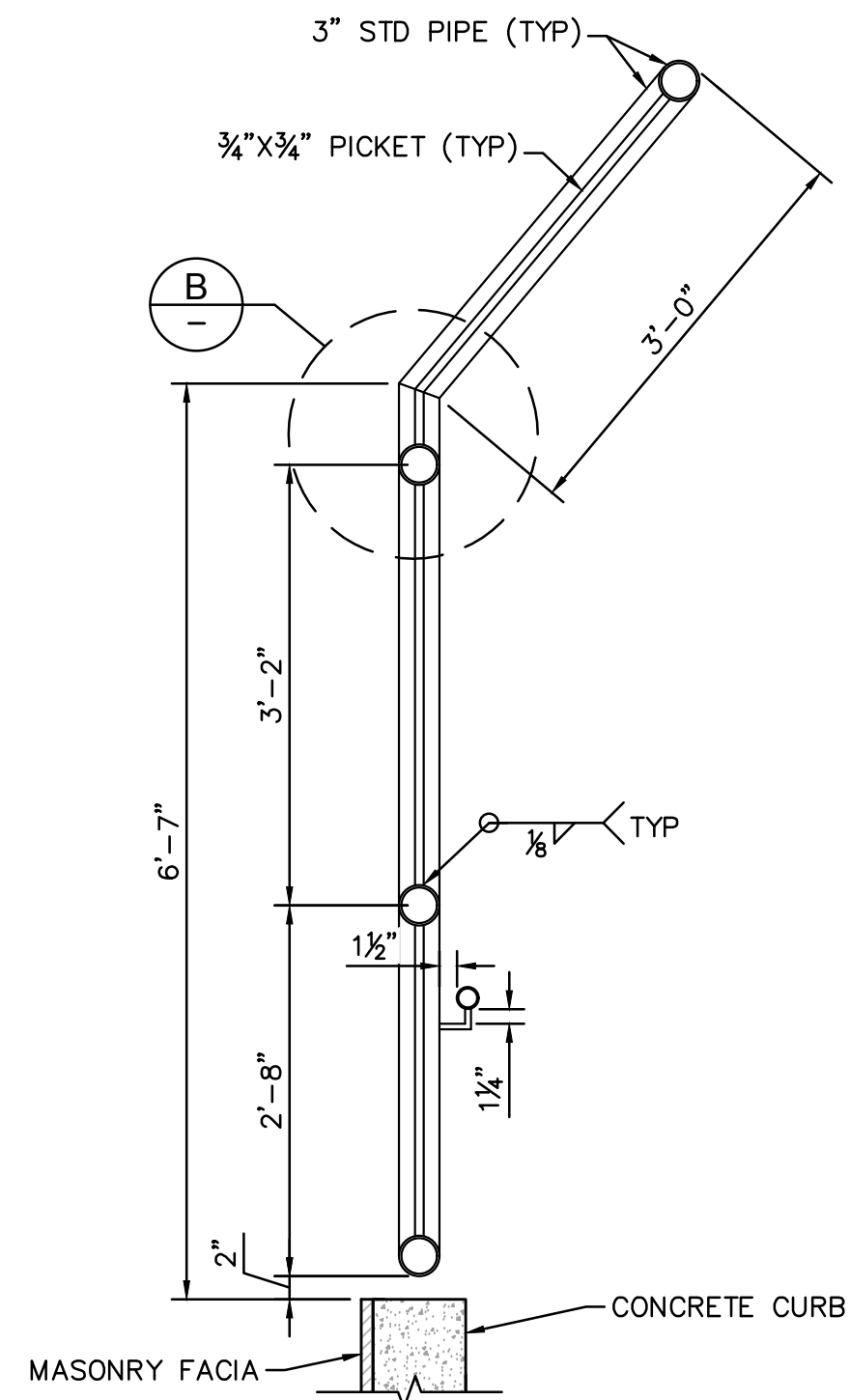
Kimley»Horn
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ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 34	TOTAL SHEETS 70	RECORD DRAWING
	MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. ST22
STAIR DETAILS 3	STRUCTURE NO.	TRACS NO. T0619 01C		34 OF 70				



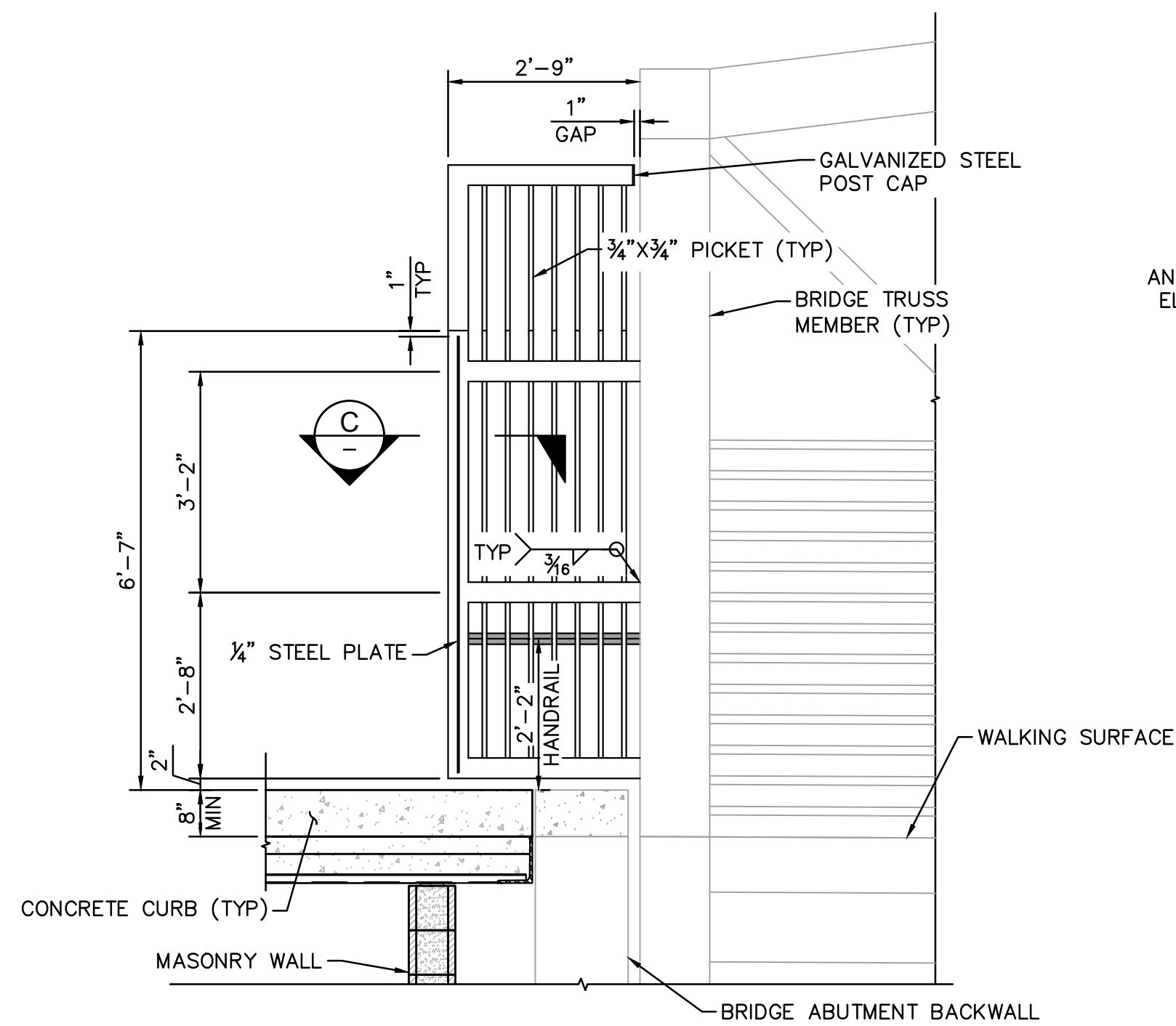
ANTI-CLIMB FENCE CANTILEVER AT BRIDGE ELEVATION

SCALE: $\frac{1}{8}" = 1'-0"$
SOUTHWEST SIDE SHOWN



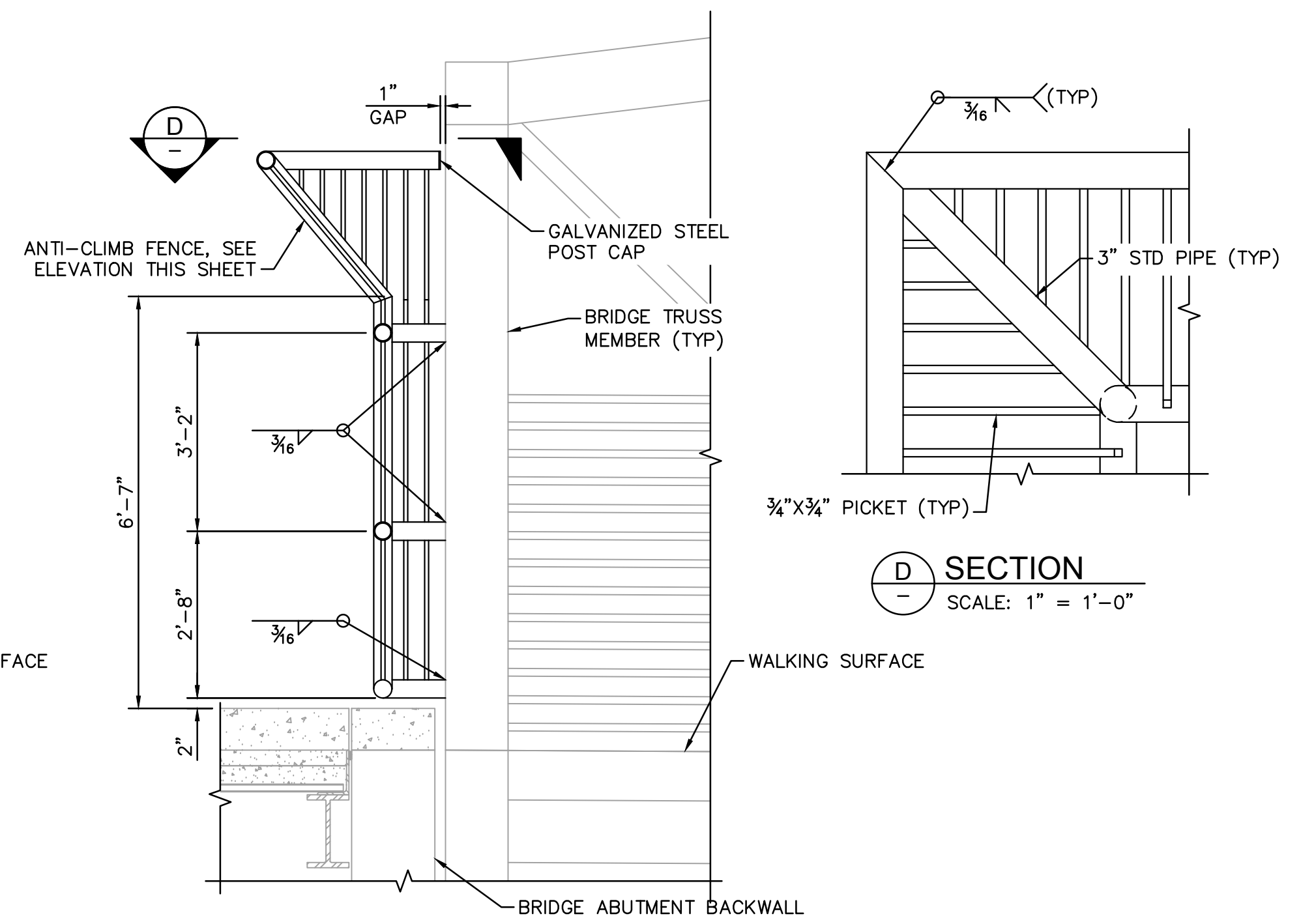
A SECTION

SCALE: $1" = 1'-0"$



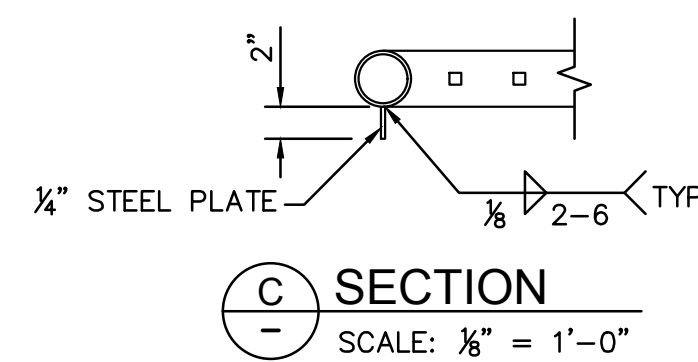
ANTI-CLIMB FENCE CANTILEVER AT BRIDGE ELEVATION

SCALE: $\frac{1}{8}" = 1'-0"$
SOUTHEAST SIDE SHOWN



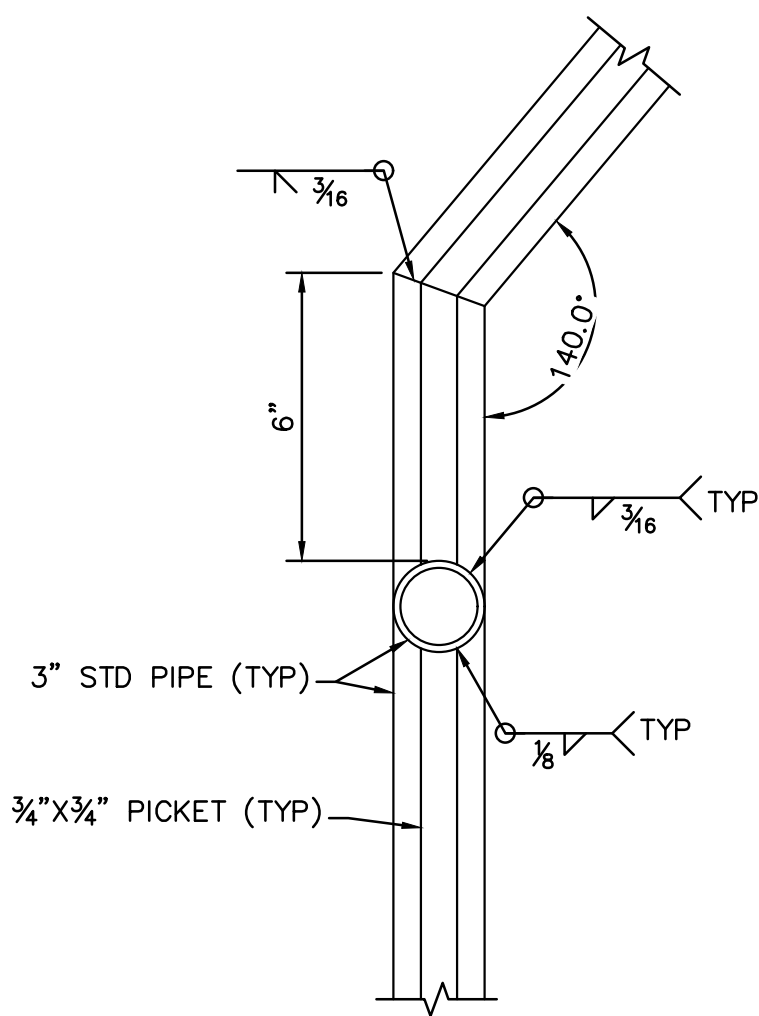
ANTI-CLIMB FENCE CANTILEVER AT BRIDGE ELEVATION

SCALE: $\frac{1}{8}" = 1'-0"$
NORTHWEST SIDE SHOWN, NORTHEAST SIDE SIMILAR



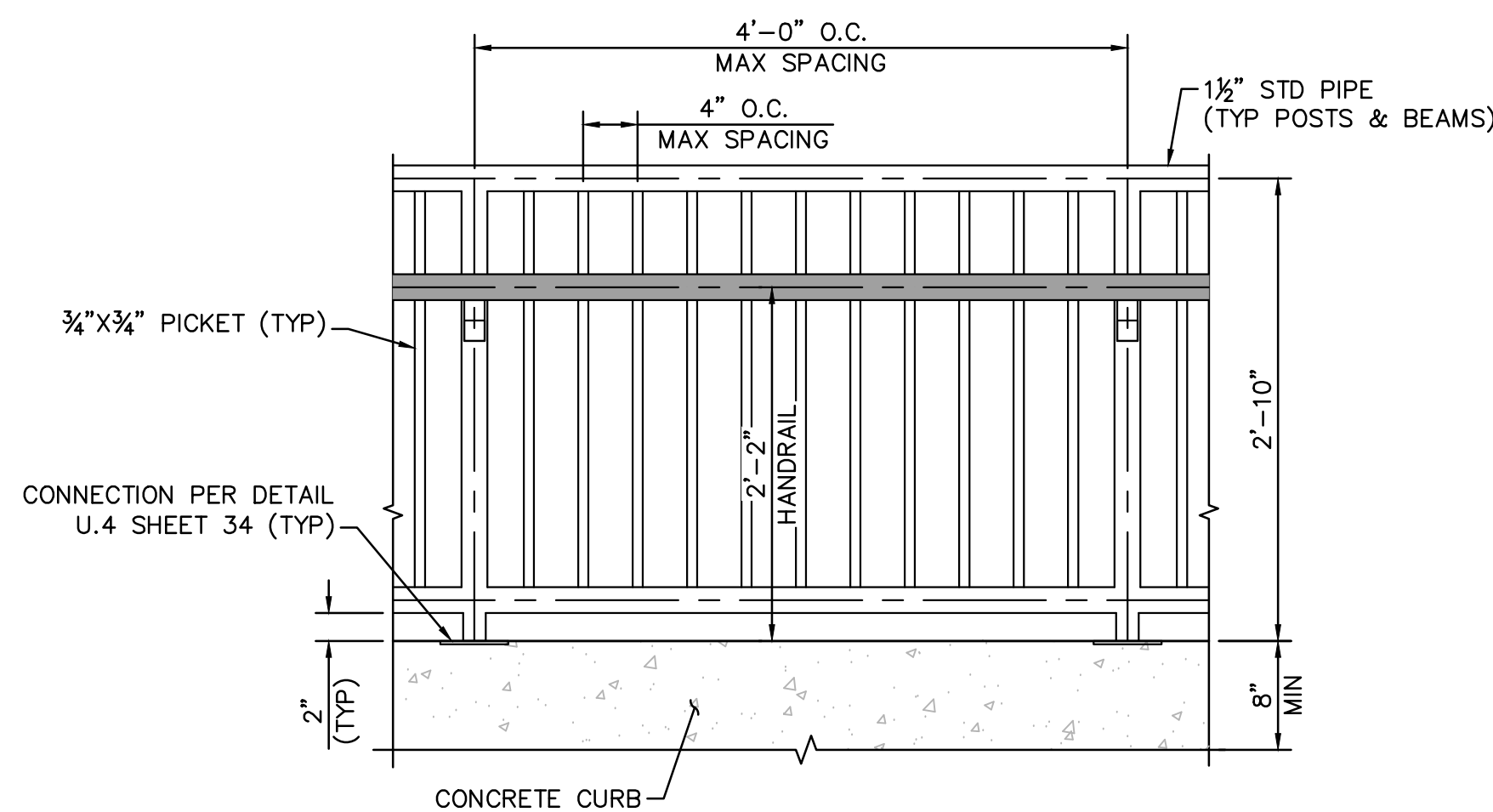
C SECTION

SCALE: $\frac{1}{8}" = 1'-0"$



B SECTION

SCALE: $3" = 1'-0"$



GUARDRAIL AT ROOF

SCALE: $1" = 1'-0"$

NOTES:

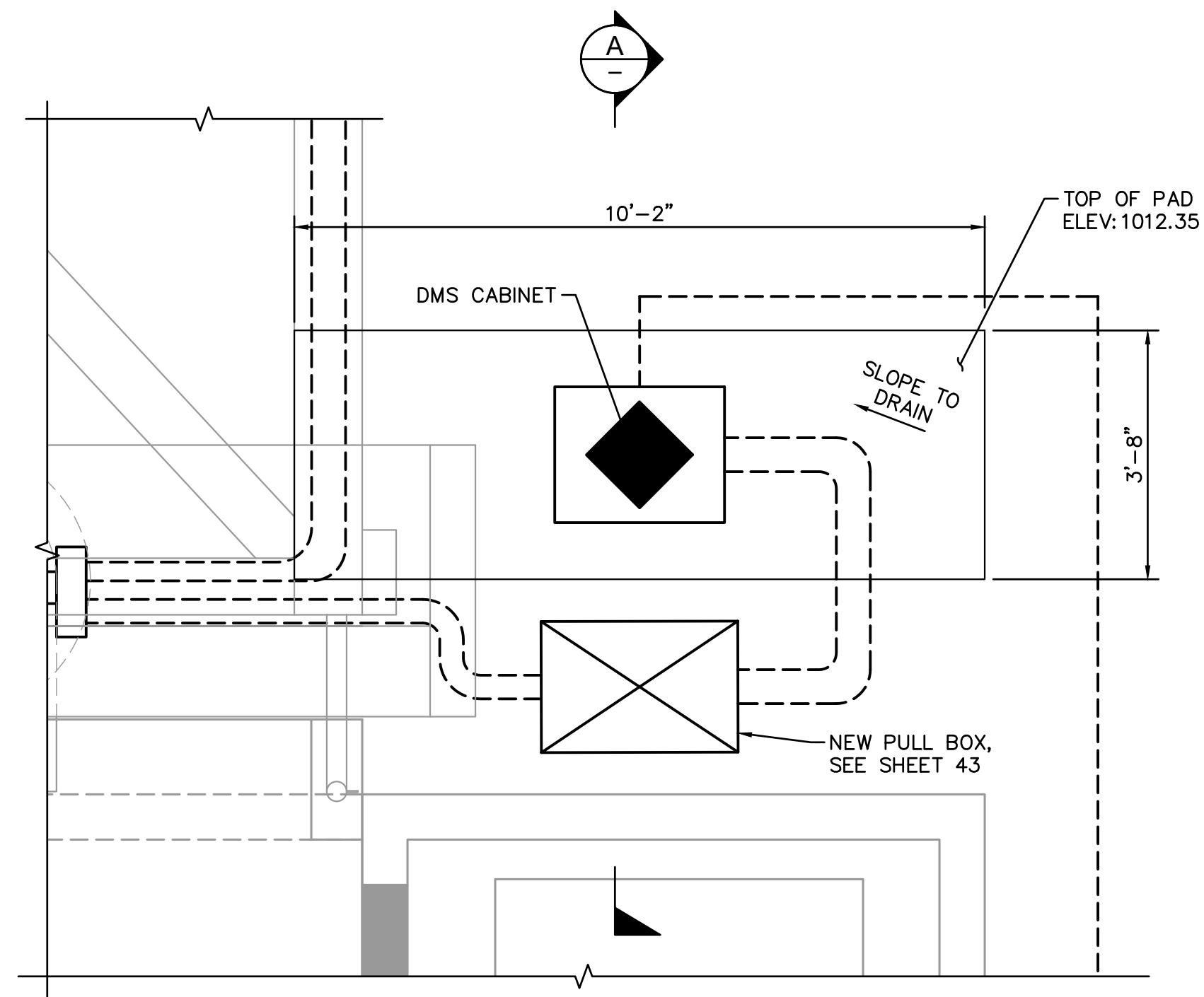
1. THE CLEAR DISTANCE BETWEEN RAILING ELEMENTS AND OTHER RAILINGS/STRUCTURAL ELEMENTS SHALL NOT EXCEED 1 INCH.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL ANTICLIMB RAILING PRIOR TO CONSTRUCTION.



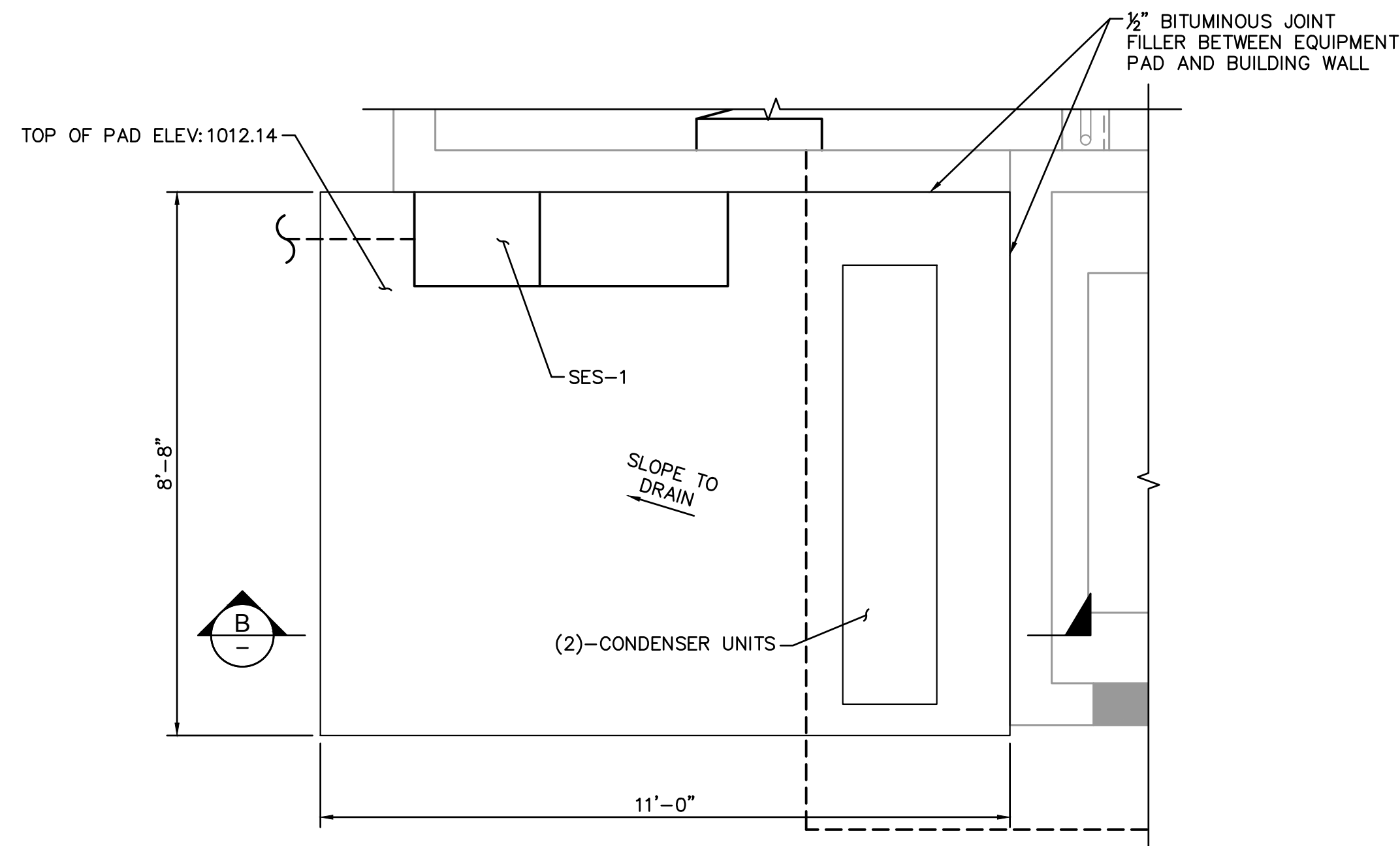
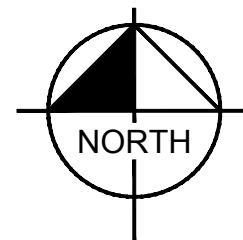
	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	CHG	09/26

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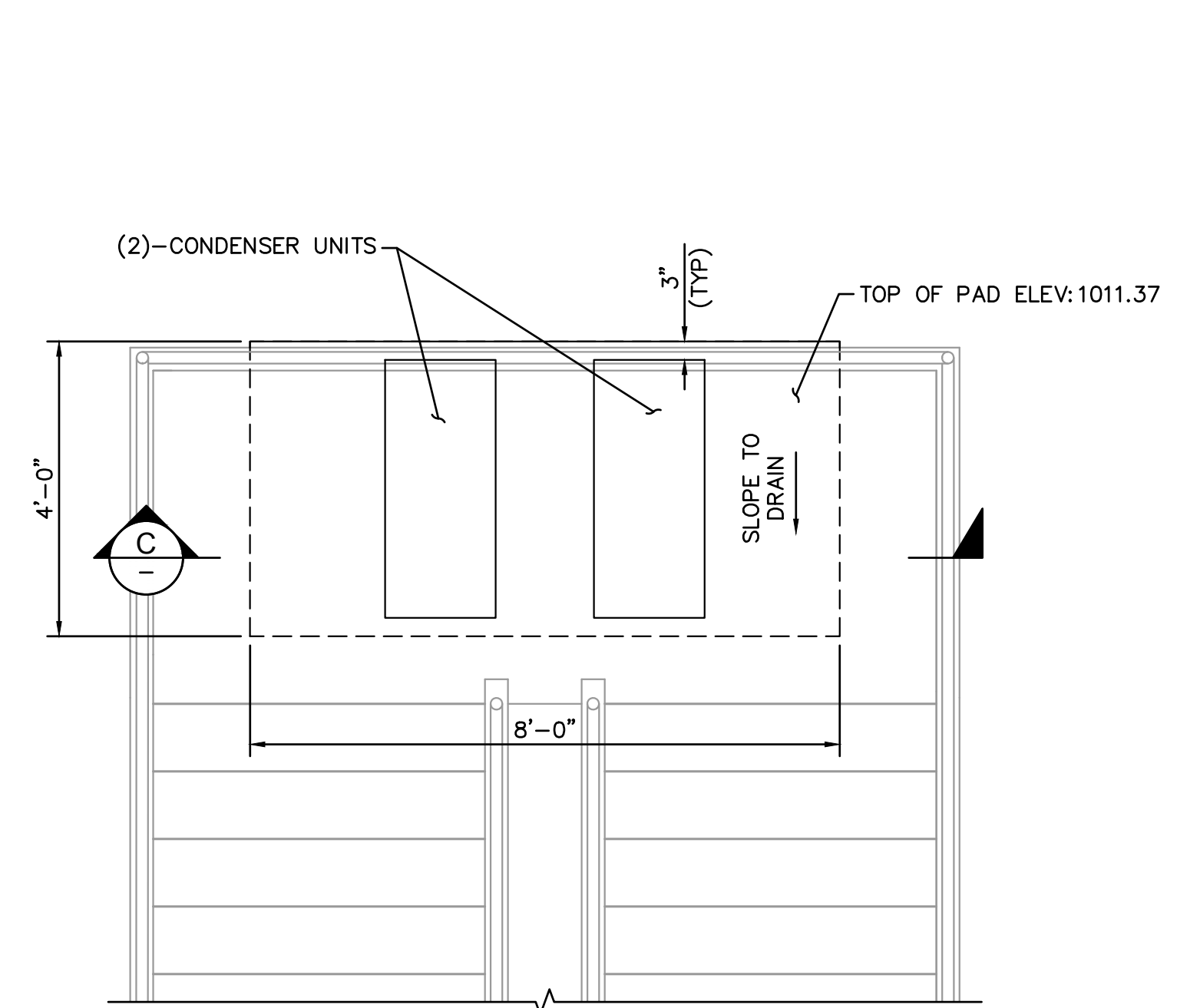
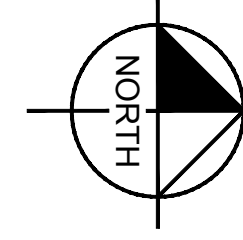
ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 35	TOTAL SHEETS 70	RECORD DRAWING
	MILEPOST			VAN BUREN AT 96TH AVE, TOLLESON				
	ANTICLIMB DETAILS	STRUCTURE NO.	TRACS NO. T0619 01C			35 OF 70		



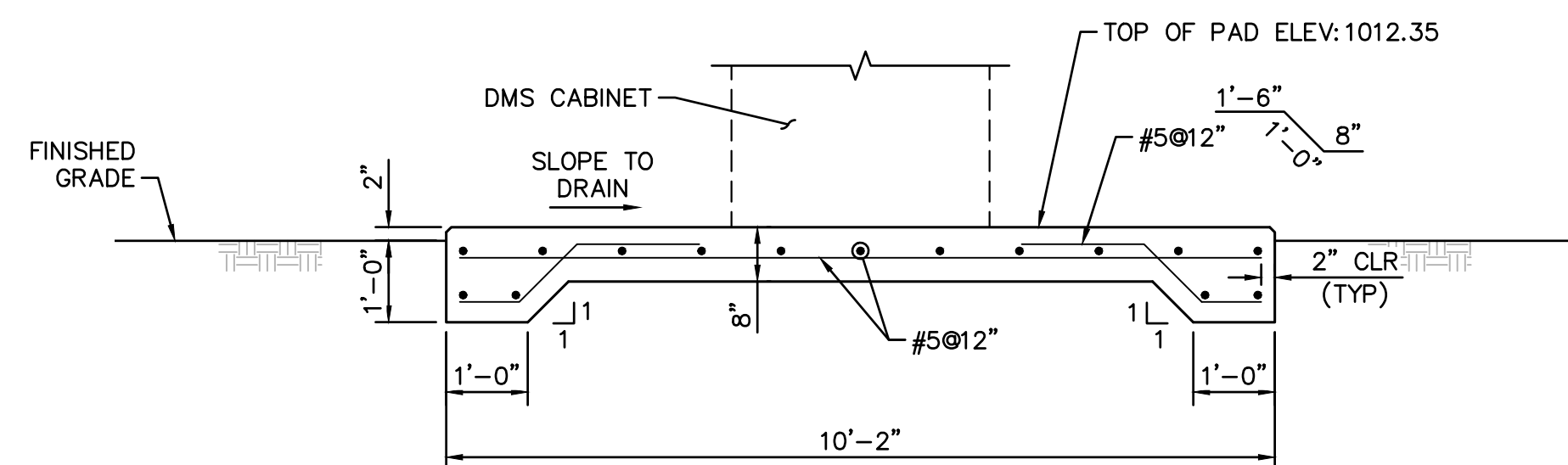
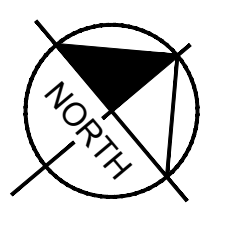
EQUIPMENT PAD PLAN
SCALE: 1/2" = 1'-0"



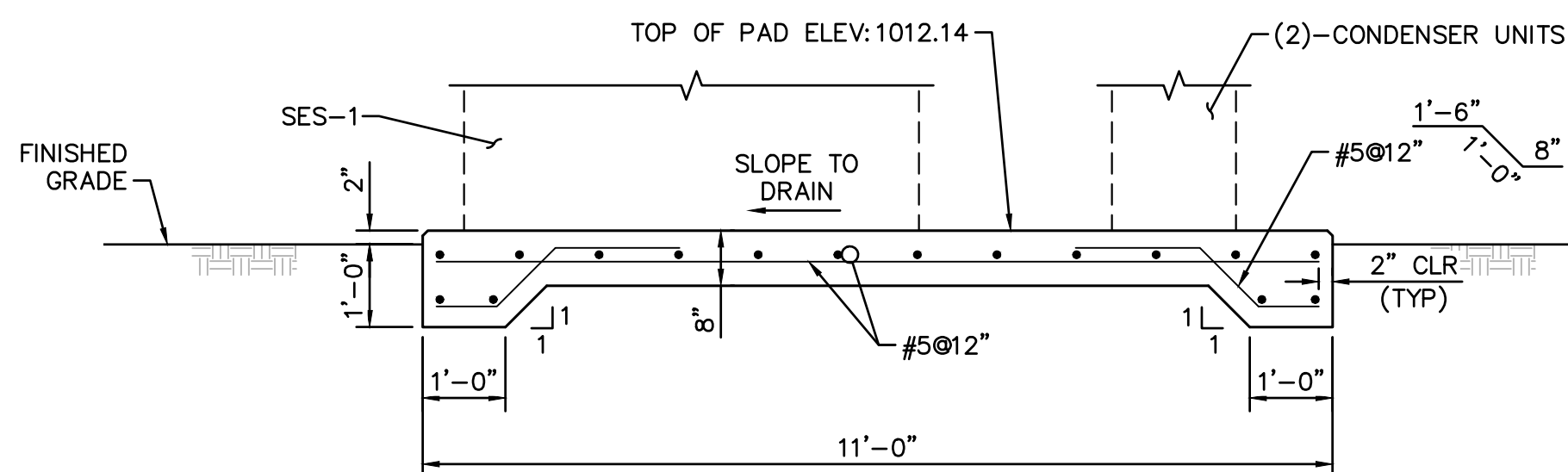
EQUIPMENT PAD PLAN
SCALE: 1/2" = 1'-0"



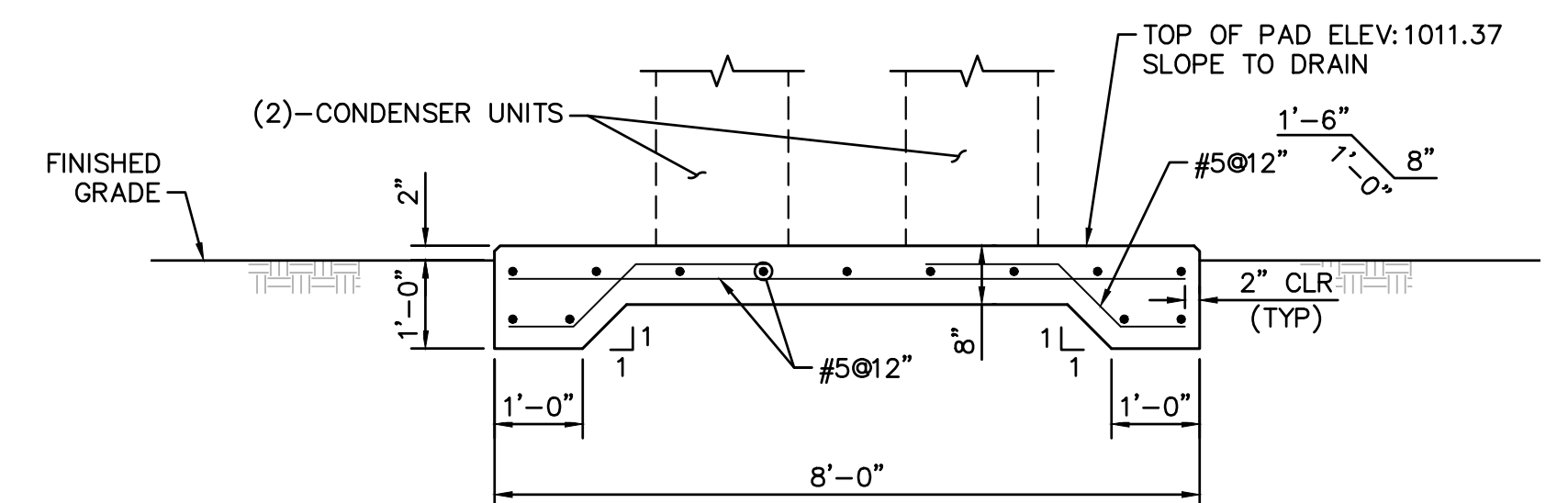
EQUIPMENT PAD PLAN
SCALE: 1/2" = 1'-0"



A SECTION
SCALE: 1/2" = 1'-0"



B SECTION
SCALE: 1/2" = 1'-0"



C SECTION
SCALE: 1/2" = 1'-0"

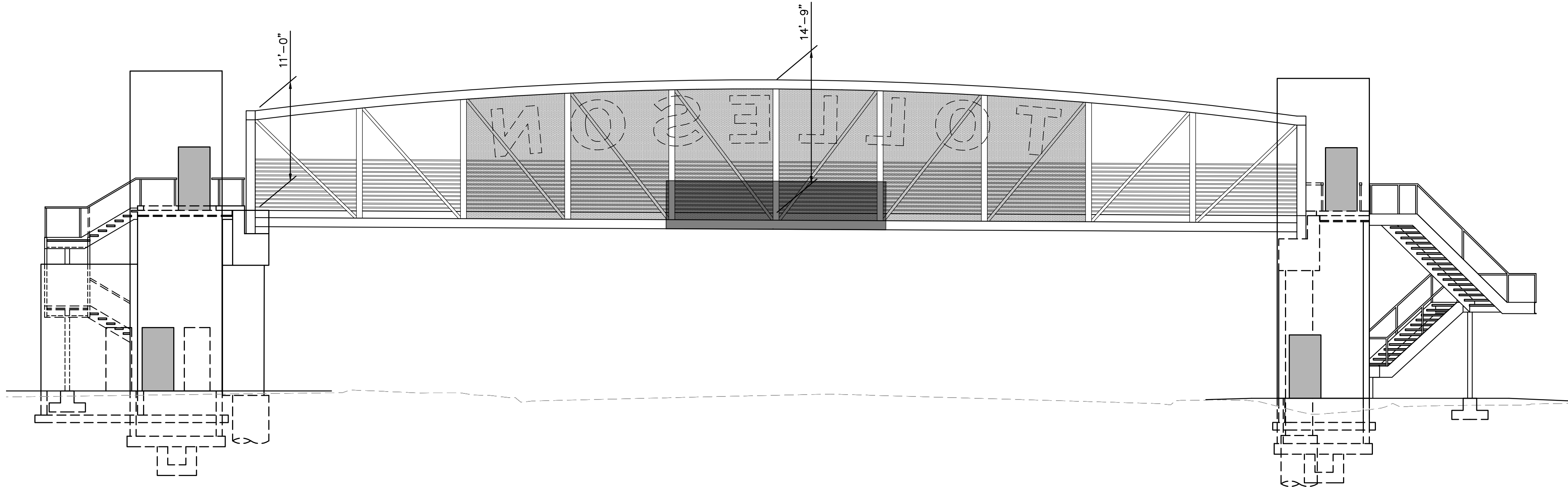


	NAME	DATE
DESIGN	JOT	09/26
DRAWN	JOT	09/26
CHECKED	CHG	09/26

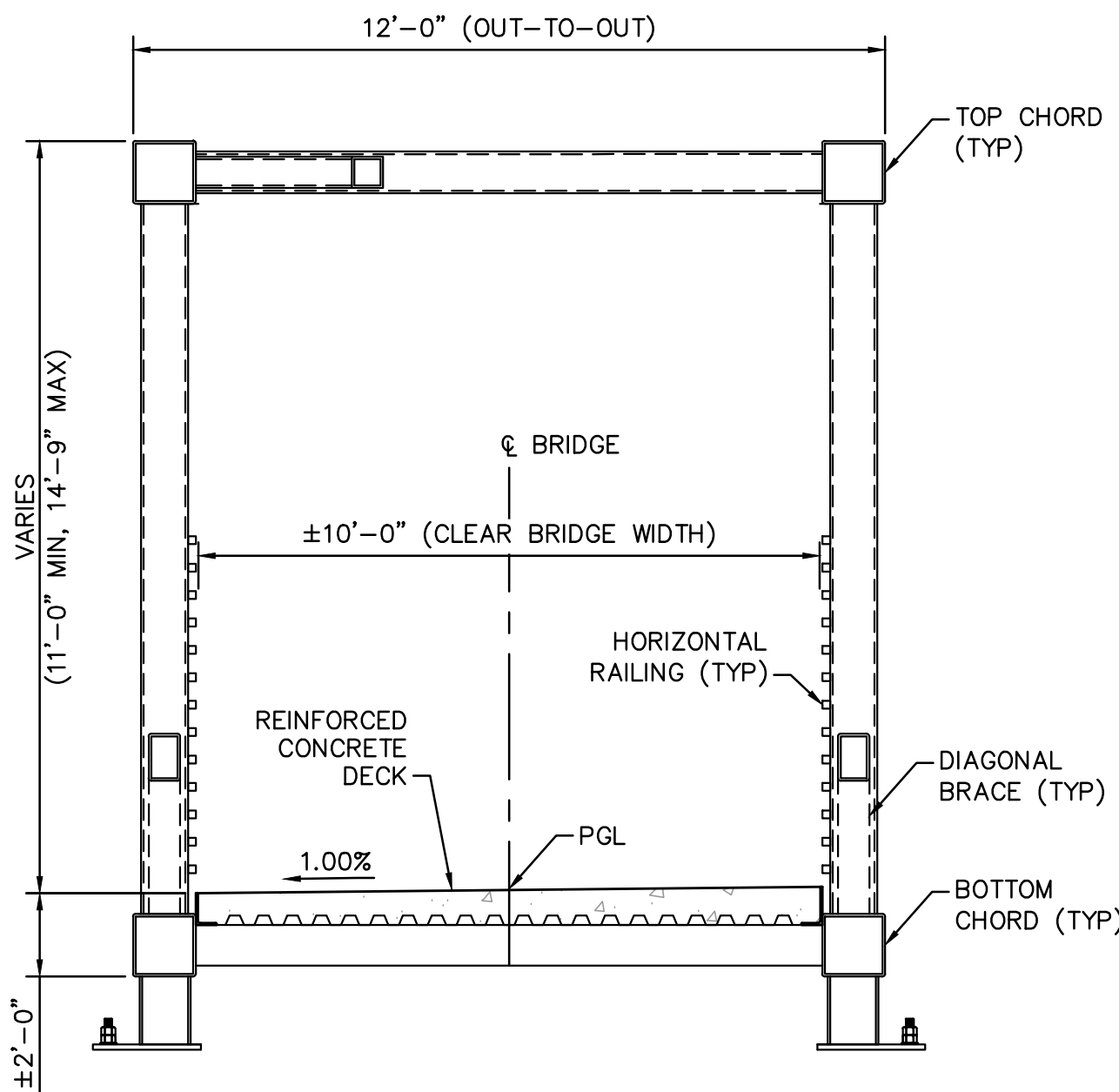
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

EQUIPMENT PAD DETAILS

ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 36	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. ST02	
STRUCTURE NO.	TRACS NO. T0619 01C		36 OF 70				



MAIN SPAN ELEVATION
SCALE: 3/8" = 1'-0"



BRIDGE TYPICAL SECTION
SCALE: 3/8" = 1'-0"

PREFABRICATED STEEL TRUSS BRIDGE DESIGN:

- PREFABRICATED STEEL TRUSS BRIDGE SHALL BE DESIGNED BY THE BRIDGE MANUFACTURER IN ACCORDANCE WITH THE AASHTO "LRFD BRIDGE DESIGN SPECIFICATIONS", 8TH EDITION AND AASHTO "LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES", 2015 INTERIM REVISIONS TO 2009 EDITION. DESIGN LOADING SHALL BE SPECIFIED IN THE AASHTO LRFD GUIDE SPECIFICATIONS AND THESE STRUCTURAL NOTES. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS AND SHOP DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL. STRUCTURAL CALCULATIONS AND SHOP DRAWINGS SHALL BE PREPARED BY AND BEAR THE SEAL OF A QUALIFIED, LICENSED PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF ARIZONA. THE SHOP DRAWINGS SHALL INCLUDE THE DESIGN OF THE FOLLOWING ITEMS:
A. BRIDGE TRUSS
B. TRUSS BEARING ASSEMBLIES, INCLUDING ANCHOR BOLT SIZE AND SPACING
C. CONCRETE DECK WITH METAL DECK FORMS AND REINFORCING STEEL
- PREFABRICATED STEEL TRUSS BRIDGE SHALL BE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ATMOSPHERIC CORROSION RESISTANT, ASTM A847, COLD FORMED WELDED SQUARE OR RECTANGULAR TUBING AND ASTM A588, ASTM A606, OR ASTM A709-50 PLATE AND STRUCTURAL SHAPES (Fy = 50,000 PSI).
- VERTICAL DEFLECTION DUE TO SERVICE PEDESTRIAN LIVE LOAD SHALL NOT EXCEED L/360 OF THE BRIDGE SPAN. THE BRIDGE SHALL BE CAMBERED TO OFFSET DEAD LOADS.
- BRIDGE SHALL BE DESIGNED FOR A TEMPERATURE DIFFERENCE OF $\pm 40^{\circ}\text{F}$, WITH A MEAN TEMPERATURE OF 75°F .
- BRIDGE METAL DECK SHALL BE NORMAL WEIGHT CONCRETE WITH REINFORCING STEEL OVER GALVANIZED METAL DECKING.
- WELDING OF STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE-STEEL ANSI/AWS D1.1, CURRENT EDITION. ALL OTHER WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY, BRIDGE WELDING CODE D1.5, CURRENT EDITION.

STEEL TRUSS AESTHETIC DETAILS:

- CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR THE ENGINEER'S APPROVAL PRIOR TO FABRICATION.
- AESTHETIC DETAILS SHOWN ARE FOR 10-BAY BRIDGE AS SHOWN. CONTRACTOR MUST GET APPROVAL FROM THE ENGINEER PRIOR TO FABRICATION IF THE BRIDGE DESIGN DEVIATES FROM THIS ASSUMPTION.

BRIDGE DESIGN REACTIONS:

REACTIONS SHOWN ARE THE DESIGN REACTIONS USED IN THE DESIGN OF THE SUBSTRUCTURE (ABUTMENTS). CONTRACTOR SHALL PROVIDE ACTUAL REACTIONS IN THE CALCULATIONS/SHOP DRAWINGS FOR THE PREFABRICATED STEEL TRUSS BRIDGE. BASED ON REACTIONS, ABUTMENT DIMENSIONS MAY BE REVISED.

UNFACTORED BRIDGE REACTIONS (LBS)			
ITEM DESCRIPTION	P (KIPS)	H (KIPS)	L (KIPS)
DEAD (DC)	40.5	-	-
PEDESTRIAN LIVE (PL)	29	-	-
VEHICLE LIVE (H10) (LL)	8.3	-	-
WIND (WL)	± 23.4	41.5	-
OVERTURNING WIND (OW)	WINDWARD: -10.7 LEEWARD: -3.7	-	-
SEISMIC (E)	-	-	-
THERMAL (TU)	-	-	-

P - VERTICAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)
H - HORIZONTAL LOAD AT EACH FOOTING (2 PER BRIDGE)
L - LONGITUDINAL LOAD AT EACH BASE PLATE (4 PER BRIDGE)

BRIDGE FINAL WEIGHT: 162,000 LBS (INCLUDES WEIGHT OF CONCRETE DECK AND STAY-IN-PLACE FORMS)

ALL DIMENSIONS AND VALUES ARE SUBJECT TO CHANGE AFTER RECEIVING ACTUAL REACTIONS IN THE CALCULATIONS/SHOP DRAWINGS FOR THE PREFABRICATED STEEL TRUSS BRIDGE.

NOTES:

- COORDINATE ABUTMENT GEOMETRY & BEARING ELEVATIONS WITH PREFABRICATED STEEL TRUSS BRIDGE MANUFACTURER PRIOR TO PIER CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- COORDINATE ANCHOR BOLT LAYOUT AND DETAILS WITH PREFABRICATED STEEL TRUSS BRIDGE MANUFACTURER PRIOR TO PIER CONSTRUCTION. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

TRAFFIC CONTROL NOTES:

1. ALL EXISTING SIGNS IN CONFLICT WITH CONSTRUCTION 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 AT NO ADDITIONAL COST TO THE DEPARTMENT.
2. THE RETROREFLECTIVE SHEETING ON ALL CONSTRUCTION SIGNS SHALL MEET CRITERIA ESTABLISHED IN SECTION 1007 OF THE SPECIFICATIONS.
3. ALL SIGNS MAY BE INSTALLED ON SPRING STANDS, AT THE HEIGHT RECOMMENDED BY THE SPRING STAND MANUFACTURER.
4. SIGNS INSTALLED ON SPRING STANDS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 7 FEET AS MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF PAVEMENT, OR AT THE HEIGHT RECOMMENDED BY THE SPRING STAND MANUFACTURER.
5. THE NEAREST EDGE OR CORNER OF A SIGN SHALL BE APPROXIMATELY 6 FEET FROM THE NEAREST EDGE OF PAVEMENT FOR ALL SIGNS MOUNTED ON SPRING STANDS.
6. FLAGS SHALL BE MOUNTED ON TOP OF ALL CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN.
7. TYPE A FLASHING WARNING LIGHTS SHALL BE REQUIRED ON ALL CONSTRUCTION SIGNS EXCEPT THE "END ROAD WORK THANK YOU" SIGN.
8. TYPE C STEADY BURNING YELLOW LIGHTS SHALL BE MOUNTED ON EVERY BARRICADE USED FOR CHANNELIZATION AT NIGHT.
9. CHANNELIZING DEVICES SHALL BE PLACED IN ACCORDANCE WITH THE ADOT TEMPORARY TRAFFIC CONTROL DESIGN GUIDELINES.
10. CONSTRUCTION SIGNS SHALL NOT BE DISPLAYED TO TRAFFIC MORE THAN 24 HOURS PRIOR TO THE ACTUAL START OF CONSTRUCTION. THESE SIGNS MAY BE INSTALLED EARLIER BUT THEY MUST BE COVERED OR TURNED AWAY FROM TRAFFIC. THE COST FOR COVERING THEM WILL NOT BE MEASURED OR PAID FOR SEPARATELY, THE COST BEING CONSIDERED INCLUDED IN THE COST OF THE TRAFFIC CONTROL ITEMS. THESE SIGNS SHALL BE REMOVED WITHIN 24 HOURS AFTER COMPLETION OF CONSTRUCTION ACTIVITIES.
11. ALL CONSTRUCTION SIGNS SHALL HAVE BLACK LETTERS ON A FLUORESCENT ORANGE BACKGROUND, EXCEPT AS OTHERWISE NOTED.
12. SPEED LIMIT SIGNING IS PRELIMINARY AND IS SUBJECT TO REVIEW AND CHANGE BY THE ENGINEER AS DICTATED BY FIELD CONDITIONS.
13. THE CONTRACTOR MAY SUBSTITUTE TYPE 1 BARRICADES FOR TYPE 2 BARRICADES AS LONG AS THE REFLECTIVE AREA ON TOP OF THE PANEL OF EACH TYPE 1 BARRICADE IS EQUIVALENT OR GREATER THAN THE REFLECTIVE AREA OF A TYPE 2 BARRICADE.
14. WHEN TRAFFIC CONTROL DEVICES ARE NOT IN USE, THEY SHALL BE COVERED AND PLACED 20 FEET OR MAXIMUM POSSIBLE FROM THE EDGE OF TRAVEL WAY OR REMOVED AND REINSTALLED WHEN NEEDED AGAIN.
15. THE CONTRACTOR SHALL MAINTAIN ONE LANE OF TRAFFIC PER DIRECTION AT ALL TIMES ON ALL SIDE STREETS AND VAN BUREN ST, WITH THE EXCEPTION OF FULL CLOSURE OF VAN BUREN STREET NEAR 96TH AVENUE, REQUIRED FOR BRIDGE CONSTRUCTION. FULL CLOSURE ON VAN BUREN STREET IS LIMITED TO WEEKENDS ONLY.
16. ALL DRAWINGS ARE SCHEMATIC ONLY AND NOT TO SCALE.
17. MAINTAIN MINIMUM 10.5 FEET WIDE TRAVEL LANE AND 4 FEET WIDE SIDEWALK, EXCEPT DURING FULL STREET AND SIDEWALK CLOSURES.
18. CONTRACTOR SHALL COORDINATE AND CONFIRM WITH ENGINEER ON THE SCHEDULE OF THE FULL CLOSURES ON VAN BUREN STREET AND SIDEWALK.
19. 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 SPECIFICATIONS. ALL TRAFFIC CONTROL PLANS ARE SUBJECT TO THE APPROVAL OF THE ENGINEER BEFORE BEGINNING CONSTRUCTION.
20. THE CONTRACTOR SHALL ABIDE BY THE TRAFFIC CONTROL REQUIREMENTS SPECIFIED IN SUBSECTION 104.04 OF THE SPECIAL PROVISIONS.

ACTIVITY	CONSTRUCTION ACTIVITY	TRAFFIC CONTROL	REMARKS
CONSTRUCTION OF PEDESTRIAN BRIDGE OVER VAN BUREN STREET AT 96TH AVENUE			
1	MOBILIZATION AND INSTALL ADVANCE WARNING SIGNS	PLACE SIGNS PER DETAIL TC-B - ADVANCE WARNING SIGN PLACEMENT ON VAN BUREN ST	ALL ADVANCE WARNING SIGNS SHALL BE PLACED ON SPRING STANDS NO WORK CAN BE COMPLETED AT NIGHT INSTALL ADVANCE WARNING SIGNS 5 DAYS BEFORE START OF CONSTRUCTION TRAVEL SPEED REDUCED TO 25 MPH FOR THE DURATION OF CONSTRUCTION
2	CONSTRUCTION OF OFF-ROAD BRIDGE INFRASTRUCTURE	FENCE THE CONSTRUCTION SITE WITH TYPE 3 BARRICADE	NO SIDEWALK CLOSURES ALLOWED, MAINTAIN MINIMUM 4 FEET SIDEWALK AT ALL TIME NO DRIVEWAY CLOSURES ALLOWED DURING BUSINESS HOURS OF THE FACILITY
3	BRIDGE PLACEMENT	CLOSE THE INTERSECTION OF VAN BUREN ST AT 96TH AVENUE DETOUR ROUTE: 95TH AVENUE TO PIRECE STREET TO 99TH AVENUE DETOUR PLAN FOR CLOSURE OF VAN BUREN STREET AT 95TH AVENUE PER TC-A- DETOUR PLAN CLOSE SIDEWALKS AT THE INTERSECTION OF 96TH AVE AT VAN BUREN STREET	COORDINATE WITH THE CITY OF TOLLESON ON THE SCHDULED CLOSURE DATES WEEKEND CLOSURE ONLY OFF DUTY POLICE OFFICER TO BE PRESENT DURING THE DURATION OF THE CLOSURE AT THE FOLLOWING LOCATIONS: - AT 95TH AVENUE AT VAN BUREN STREET - ON VAN BUREN STREET AT 96TH AVE CLOSURE - ON 99TH AVENUE NEAR VAN BUREN STREET AND NEAR PIERCE ST
4	SIDEWALK AND RAMP CONSTRUCTION	CLOSE SIDEWALK AND INSTALL TEMPORARY WALKWAY PER TC-C SIDEWALK DIVERSION DETAIL USE PEDESTRIAN BARRIER OR TEMP WATER FILLED BARRIER MAINTAIN MINIMUM 10.5 FEET TRAVEL LANES	OFF DUTY POLICE OFFICER CAN ASSIST WITH TRAFFIC CONTROL DURING 30 MINS IN THE AM and PM SCHOOL INGRESS/EGRESS TIME
5	INSTALL FINAL PAVEMENT MARKING INSTALL FINAL THERMOPLASTIC PAVEMENT MARKINGS	INSTALL TRAFFIC CONTROL PER SA-19 B AND SA 19C	NIGHT TIME IS ALLOWED IF TEMPERATURES PERMIT

ITEM NO.	ITEM DESCRIPTION	DURATIONS (CALENDAR DAYS)	ACTIVITY 1	ACTIVITY 2	ACTIVITY 3	ACTIVITY 4	ACTIVITY 5	TOTAL
		UNIT	371	339	4	22	1	
		QUANTITY						
7010005	MAINTENANCE AND PROTECTION OF TRAFFIC	L.SUM						1
7015091	SPECIALTY SIGNS	SQ.FT.	30					30
7016067	CHANGEABLE MESSAGE BOARD (CONTRACTOR FURNISHED)	EACH-DAY	40		16			56
7016050	TRUCK MOUNTED ATTENUATOR	EACH-DAY					1	1
7016079	FLAGGING SERVICES (UNIFORMED OFFICER)	HOUR			384	20	16	420

48127

ANITA

JOHARI

09/14/2026

Signed...

ARIZONA, USA

Registered Professional Engineer/Civil

DESIGN

AO

09/26

DRAWN

AO

09/26

CHECKED

AJ

09/26

NAME

DATE

ARIZONA DEPARTMENT OF TRANSPORTATION

PROJECT DELIVERY AND OPERATIONS DIVISION

BRIDGE GROUP

ROUTE

-

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO.

0000 MA TOL

FEDERAL ID NO.

CDS TOL-Q(200)T

SHEET NO.

38

TOTAL SHEETS

70

RECORD DRAWING

LOCATION

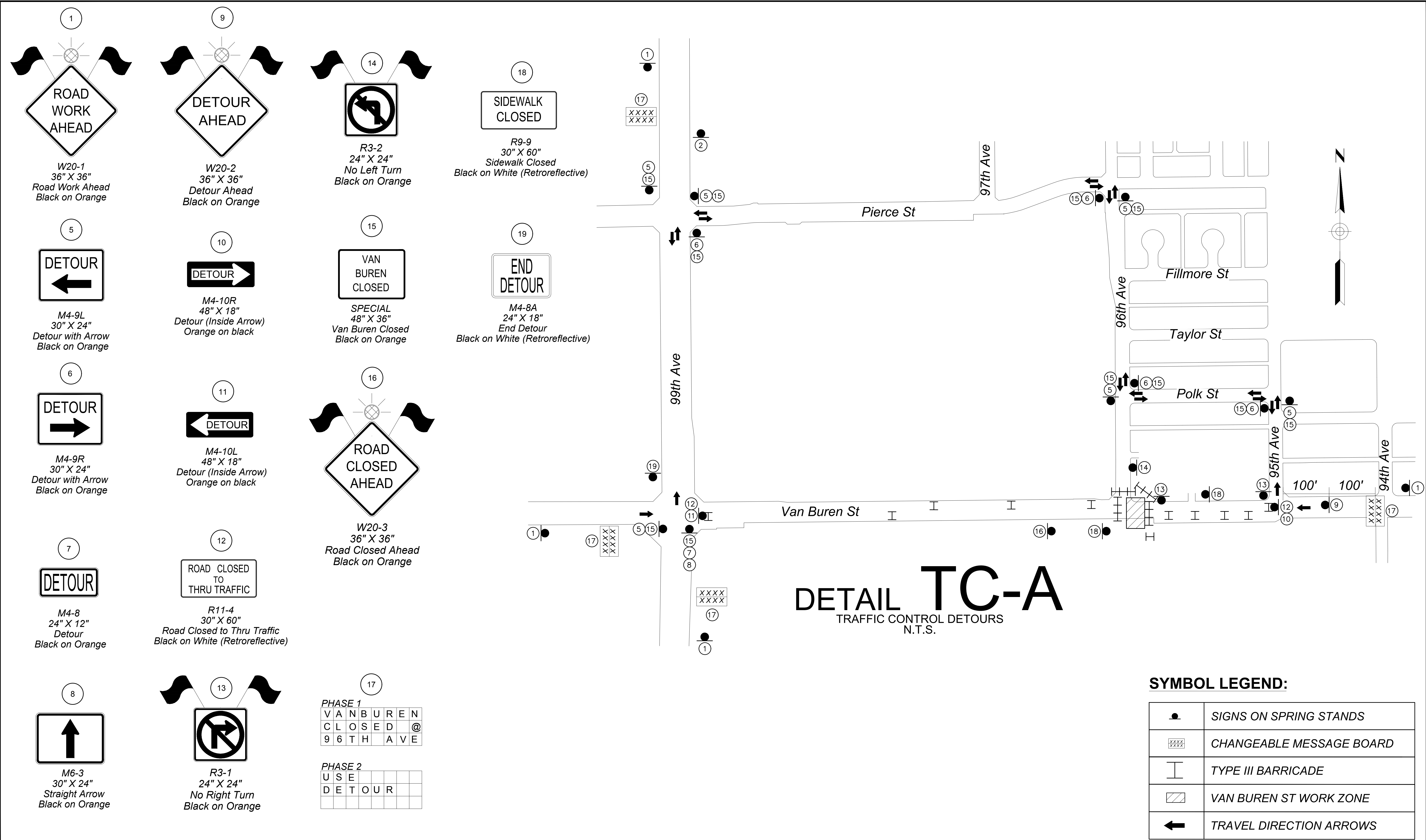
VAN BUREN AT 96TH AVE, TOLLESON

DWG NO. MOT

TRACS NO.

T0619 01C

38 OF 70



DETAIL TC-A
TRAFFIC CONTROL DETOURS
N.T.S.

SYMBOL LEGEND:

	SIGNS ON SPRING STANDS
	CHANGEABLE MESSAGE BOARD
	TYPE III BARRICADE
	VAN BUREN ST WORK ZONE
	TRAVEL DIRECTION ARROWS

48127
ANITA
JOHARI
09/14/2026
Arizona, USA

Registered Professional Engineer

DESIGN

AO

09/26

DRAWN

AO

09/26

CHECKED

AJ

09/26

NAME

DATE

AO

09/26

AO

09/26

AJ

09/26

ARIZONA DEPARTMENT OF TRANSPORTATION

PROJECT DELIVERY AND OPERATIONS DIVISION

BRIDGE GROUP

ROUTE

-

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO.

0000 MA TOL

FEDERAL ID NO.

CDS TOL-Q(200)T

SHEET NO.

39

TOTAL SHEETS

70

RECORD DRAWING

LOCATION

VAN BUREN AT 96TH AVE, TOLLESON

DWG NO.

TC01

TRACS NO.

T0619 01C

39 OF 70

Kimley»Horn

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TRAFFIC CONTROL DETAILS 1

DATE SAVED:4/14/26 K:\PHX_STRUCTURE\291151013 - 96TH AVE PEDESTRIAN BRIDGE\CADD\12-SHEETS\TRAFFIC\291151013_TC01.DWG

1



W20-1
36" X 36"
Road Work Ahead
Black on Orange

2

END
ROAD WORK
THANK YOU

G20-2AZ
48" X 36"
End Road Work Thank You
Black on Orange

4

SPEED
LIMIT
25

R2-1(25)
30" X 36"
Speed Limit
Black on Orange

3

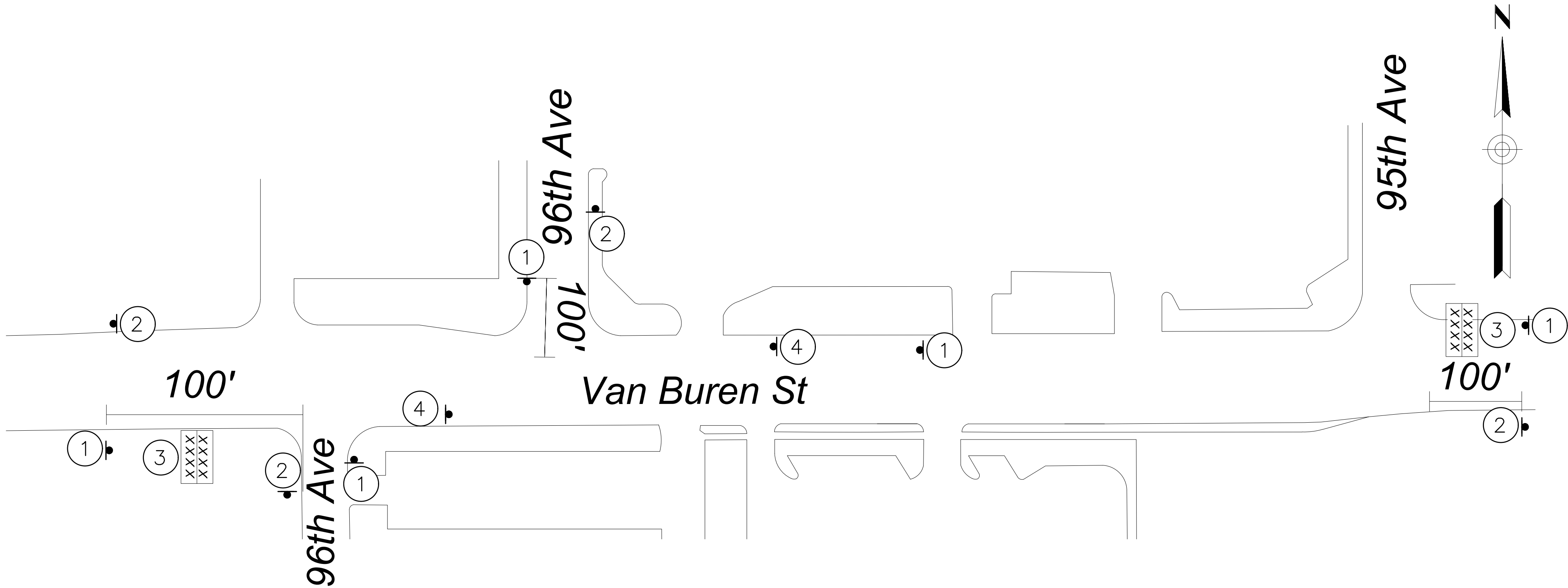
PHASE 1
C O N S T O N
V A N B R E N @
9 6 T H A V E

PHASE 2
E X P E C T
L A N E
C L O S U R E

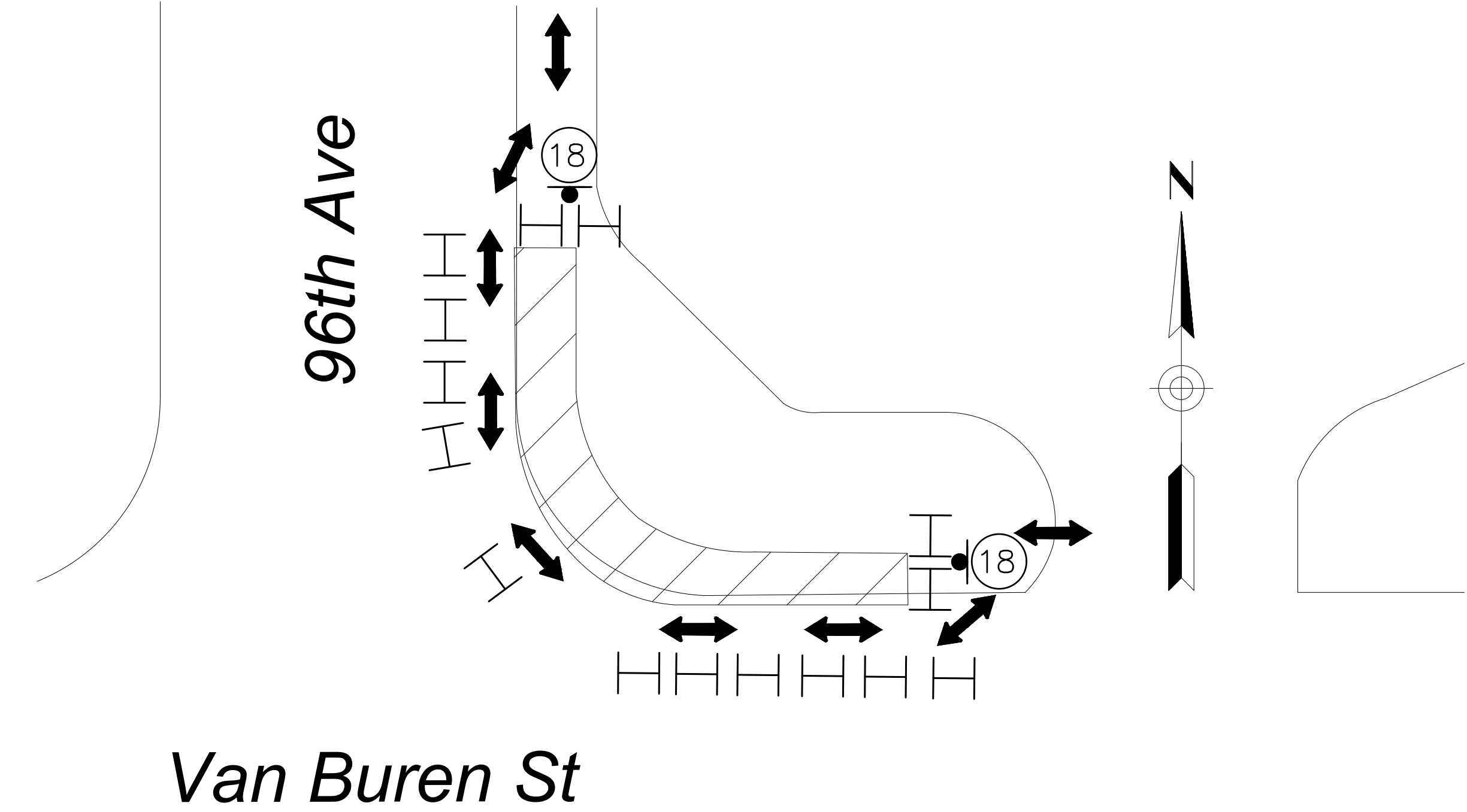
18

SIDEWALK
CLOSED

R9-9
30" X 60"
Sidewalk Closed
Black on White (Retroreflective)



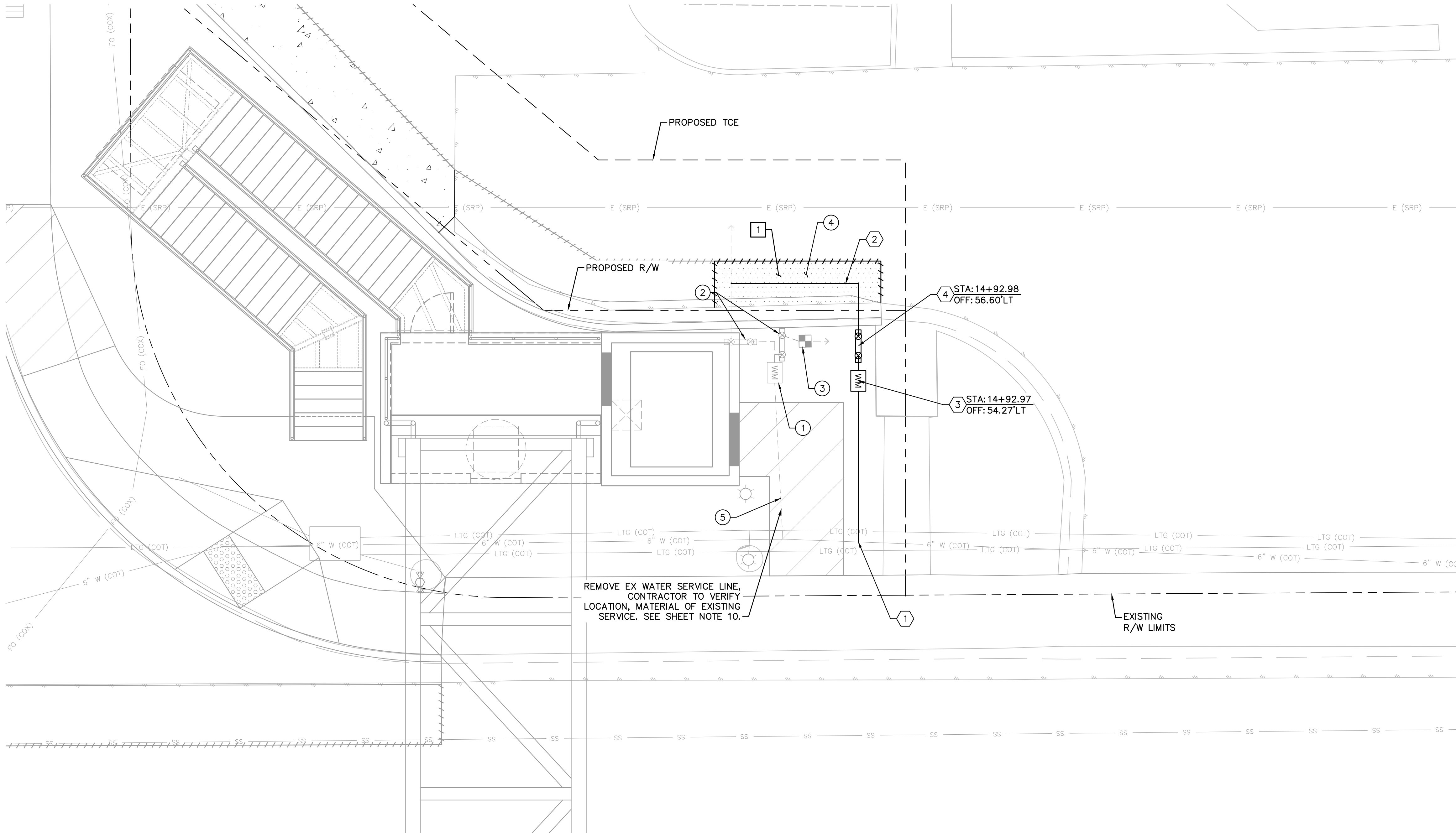
DETAIL TC-B
ADANCED WARNING SIGN PLACEMENT FOR VAN BUREN STREET
N.T.S.



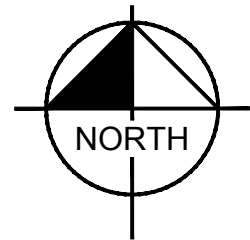
DETAIL TC-C
SIDEWALK DIVERSION DETAIL
N.T.S.

SYMBOL LEGEND:

	SIGNS ON SPRING STANDS
	CHANGEABLE MESSAGE BOARD
	TYPE III BARRICADE
	VAN BUREN ST WORK ZONE
	TRAVEL DIRECTION ARROWS



UTILITY RELOCATION PLAN
SCALE: 3/4" = 1'-0"



WATERLINE NOTES

ITEM	DESCRIPTION	UNIT	QTY
①	INSTALL NEW 1" WATER SERVICE LINE PER CITY OF PHOENIX STD DTL P-1342, TRENCH AND BACKFILL PER MAG STD DTL 200-1	EA	1
②	INSTALL 1" SCHEDULE 80 PVC, 36" MINIMUM COVER, TRENCH AND BACKFILL PER MAG STD DTL 200-1	LF	22
③	INSTALL NEW NON TRAFFIC RATED WATER METER BOX AND COVER PER MAG STD DTL 320, SIZE FOR 1" WATER METER	EA	1
④	INSTALL NEW 1" BACKFLOW PREVENTER PER MAG STD DTL 611-1	EA	1

REMOVAL NOTES

ITEM	DESCRIPTION	UNIT	QTY
①	REMOVE EX WATER METER BOX AND COVER	EA	1
②	REMOVE EX BACKFLOW PREVENTER	EA	2
③	REMOVE EX IRRIGATION REMOTE CONTROL VALVES	EA	4
④	SAWCUT AND REMOVE AC PAVEMENT	SY	4
⑤	REMOVE EX WATER SERVICE LINE, SEE NOTE 7	EA	1

CONSTRUCTION NOTES

ITEM	DESCRIPTION	UNIT	QTY
①	NEW AC PAVEMENT SHALL MATCH EXISTING PAVEMENT STRUCTURAL SECTION	SY	4

SHEET NOTES

- STATIONING AND OFFSETS MEASURED ALONG VAN BUREN ST CST $\varnothing$
- CONTRACTOR TO COORDINATE WITH CITY AND PROPERTY OWNER TO LOCATE EXISTING SERVICE LINES CONNECTING TO EXISTING WATER METER AND BACKFLOW PREVENTER PRIOR TO CONSTRUCTION.
- CONTRACTOR TO COORDINATE WITH CITY FOR RELOCATION OF WATER METERS. CONTRACTOR SHALL NOTIFY CITY 14-DAYS IN ADVANCE OF CONSTRUCTION.
- IMPACTS TO THE PROPERTY OWNER'S LANDSCAPING SHOULD BE KEPT TO A MINIMUM.
- THE CONTRACTOR SHALL STAKE THE NEW LOCATION OF THE WATER SERVICE LINE AND WATER METER BOX FOR FINAL APPROVAL BY THE CITY.
- NEW WATER SERVICE LINES SHALL BE INSTALLED USING CONTRACTOR'S PREFERRED MEANS AND METHODS TO PROTECT THE EXISTING CURB, GUTTER, AND SIDEWALK IN PLACE. THE CONTRACTOR SHALL REMOVE AND REPLACE ANY EX CURB, GUTTER, AND SIDEWALK THAT IS DAMAGED DUE TO CONSTRUCTION ACTIVITIES AT NO COST TO THE CITY.
- CONTRACTOR TO DISCONNECT EXISTING SERVICE LINE FROM THE EXISTING CORP STOP AT THE EXISTING WATER MAIN AND REMOVE.
- ALL SERVICE LINES 3/4" TO 2" SIZE SHALL BE TYPE K COPPER PIPE FROM CITY MAIN TO METER AND FROM METER TO BACKFLOW PREVENTER AND A MINIMUM BURIED LENGTH OF THREE FEET BEYOND THE BACKFLOW PREVENTER, IF APPLICABLE. SERVICE CONNECTIONS SHALL CONFORM TO CITY OF PHOENIX STANDARD DETAIL P1342. ALL SERVICE LINES GREATER THAN 2" SIZE SHALL BE DUCTILE IRON PIPE FROM CITY MAIN TO METER AND FROM METER TO BACKFLOW PREVENTER AND A MINIMUM BURIED LENGTH OF THREE FEET BEYOND THE BACKFLOW PREVENTER, IF APPLICABLE.
- AL TAPS SHALL USE A BRONZE SERVICE SADDLE. EIGHT (8) INCHES OR SMALLER SHALL BE SINGLE STRAP AND TEN (10) INCHES OR GREATER SHALL BE DOUBLE STRAP.
- CONTRACTOR TO VERIFY EXISTING IRRIGATION WATER SOURCE, RELOCATE EXISTING IRRIGATION EQUIPMENT, AND ESTABLISH ON A NEW WATER METER, SEPARATE FROM DOMESTIC WATER METER.
- COST OF WATER SERVICE INSTALLATION IS INCLUDED IN ITEMS 8080627 - RECONSTRUCT WATER SERVICE AND 8080633 - WATER METER (FOR 1" SERVICE).
- COST OF IRRIGATION CONTROLLER AND CONTROL VALVE RELOCATION IS INCLUDED IN ITEM 9240052 - MISCELLANEOUS WORK (LANDSCAPE AND IRRIGATION RESTORATION).
- COST OF PAVEMENT SAWCUT IS INCLUDED IN ITEM 2020029 - REMOVAL OF ASPHALTIC CONCRETE PAVEMENT.
- COST OF PAVEMENT RECONSTRUCTION IS INCLUDED IN ITEM 9240139 - MISCELLANEOUS WORK (MATCH EXISTING PAVEMENT SECTION).



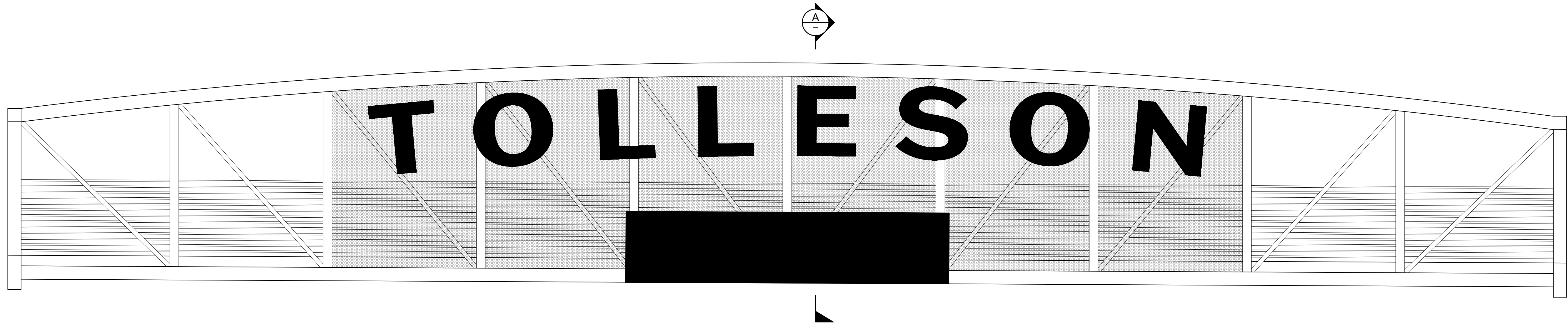
	NAME	DATE
DESIGN	JOT	09/26
DRAWN	JOT	09/26
CHECKED	JDP	09/26

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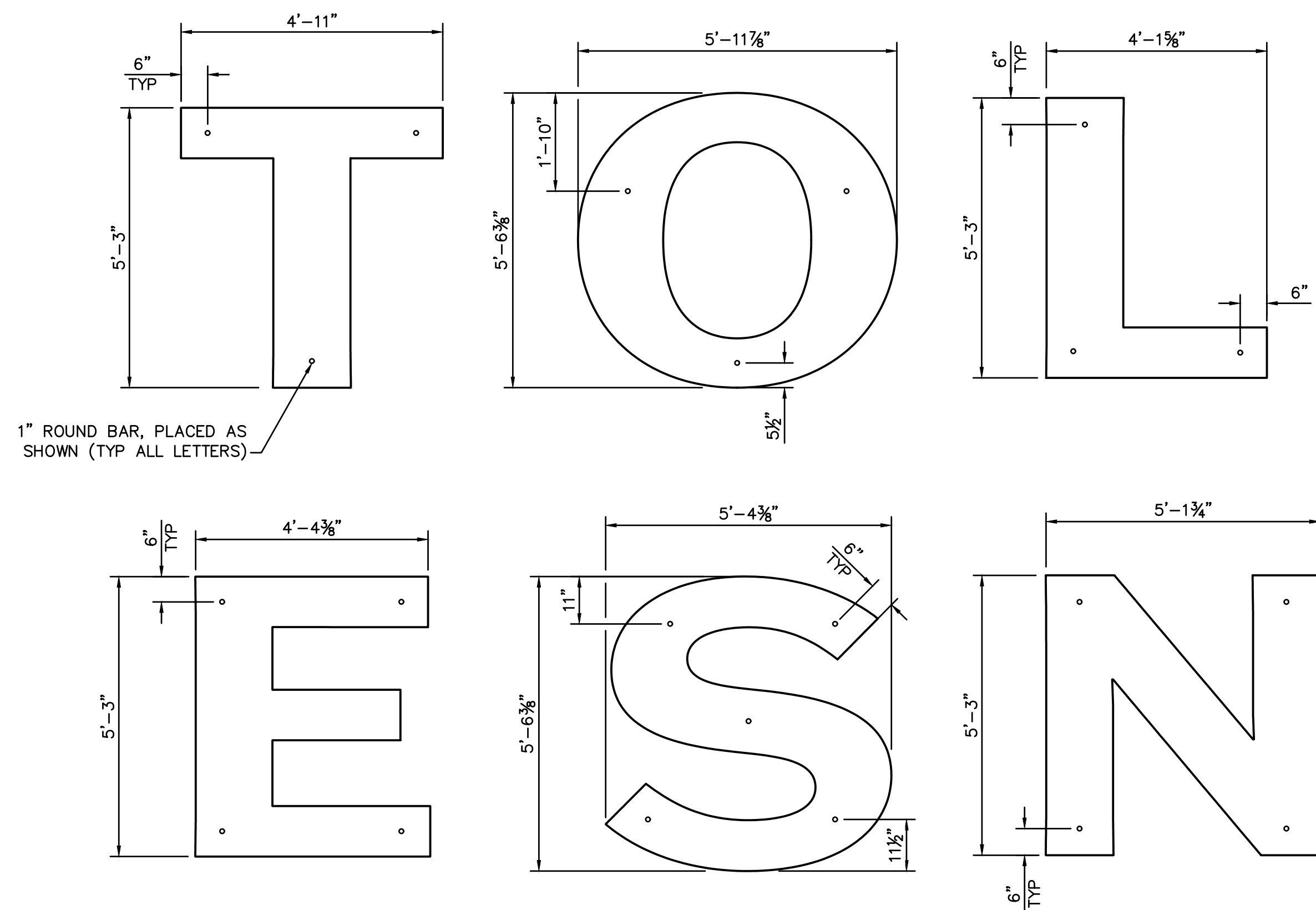
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

UTILITY RELOCATION PLAN

ROUTE	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
-		ARIZ.	0000 MA TOL	CDS TOL-Q(200)T	41	70	
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. UT01
STRUCTURE NO.	TRACS NO. T0619 01C						41 OF 70

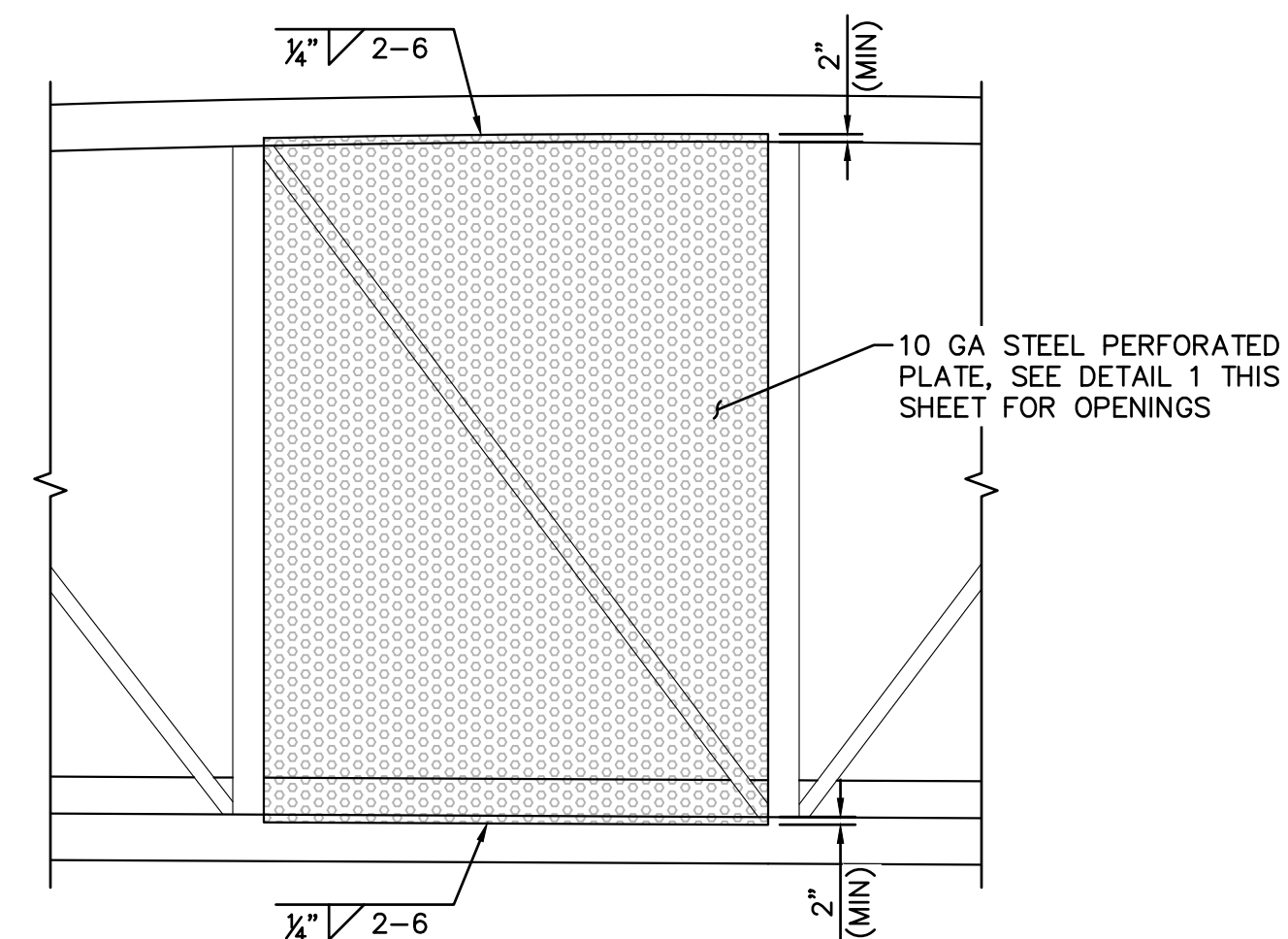


BRIDGE LETTERING
LOOKING EAST
SCALE: 1/4" = 1'-0"

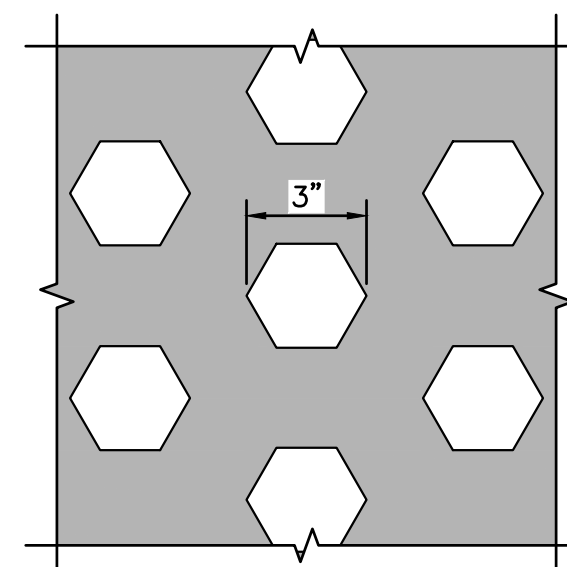


BRIDGE LETTERING
SCALE: 1/2" = 1'-0"

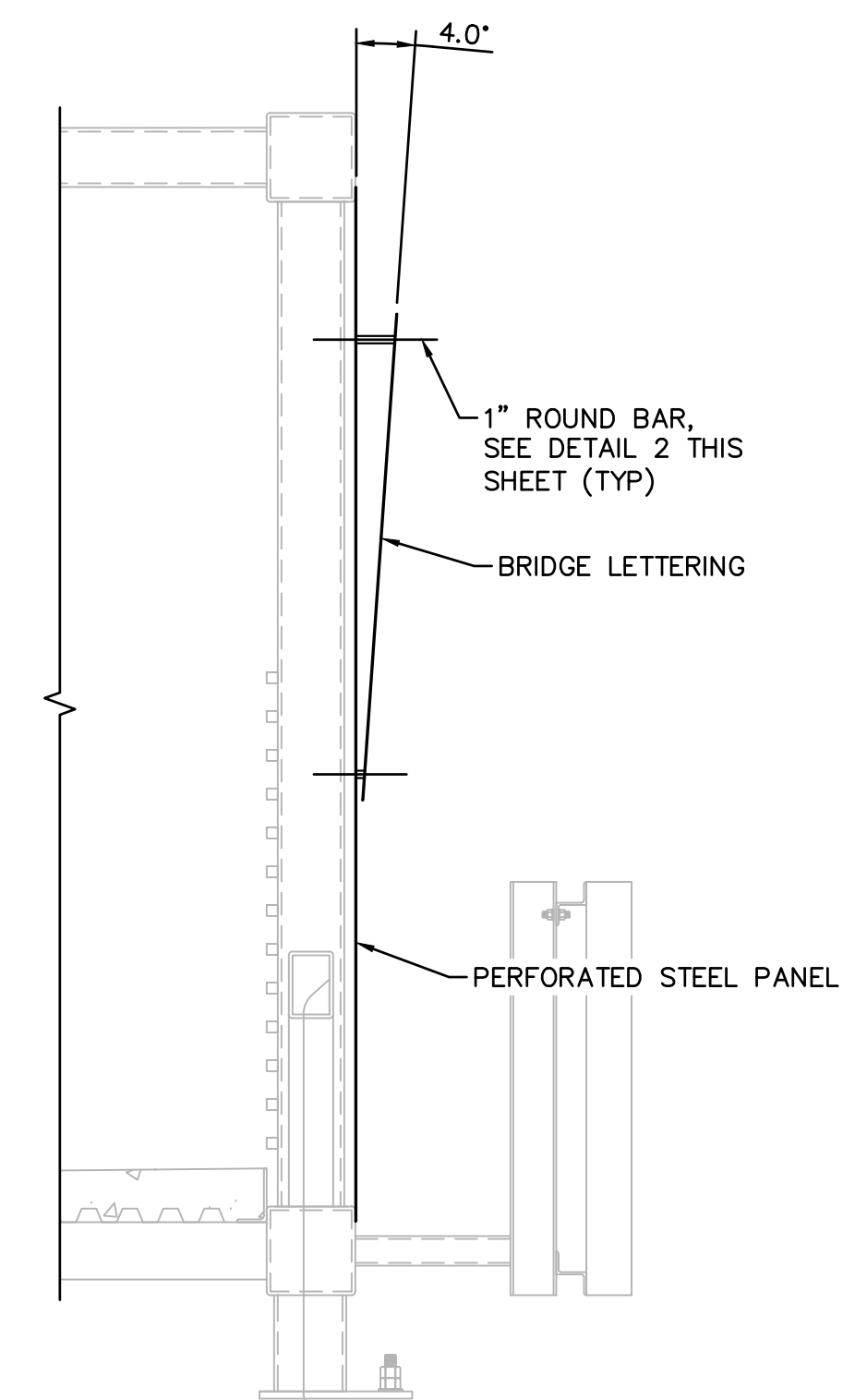
- NOTES:**
- LETTERING FONT IS FRANKLIN GOTHIC ATF
 - ALL LETTERS ARE 10 GA STEEL PLATE, PAINTED WHITE



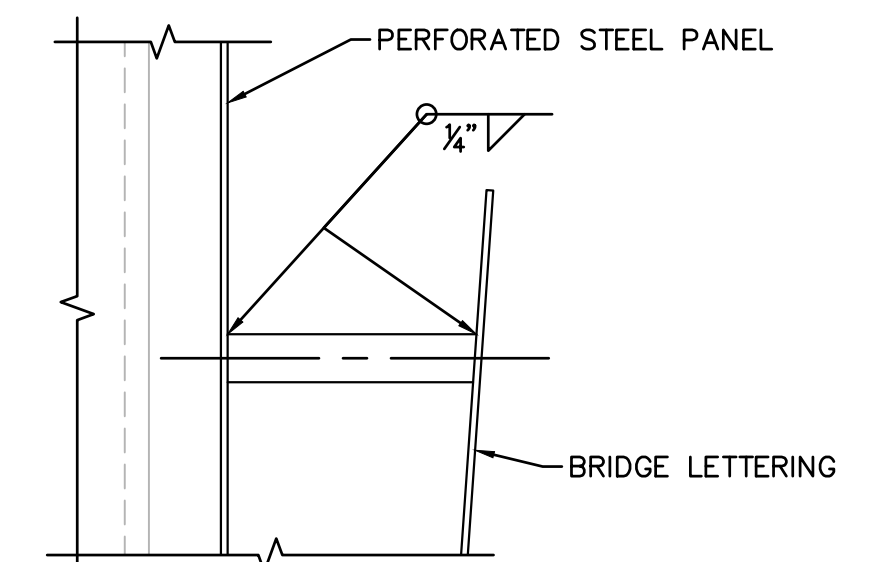
PERFORATED STEEL PANEL
SCALE: 1/4" = 1'-0"



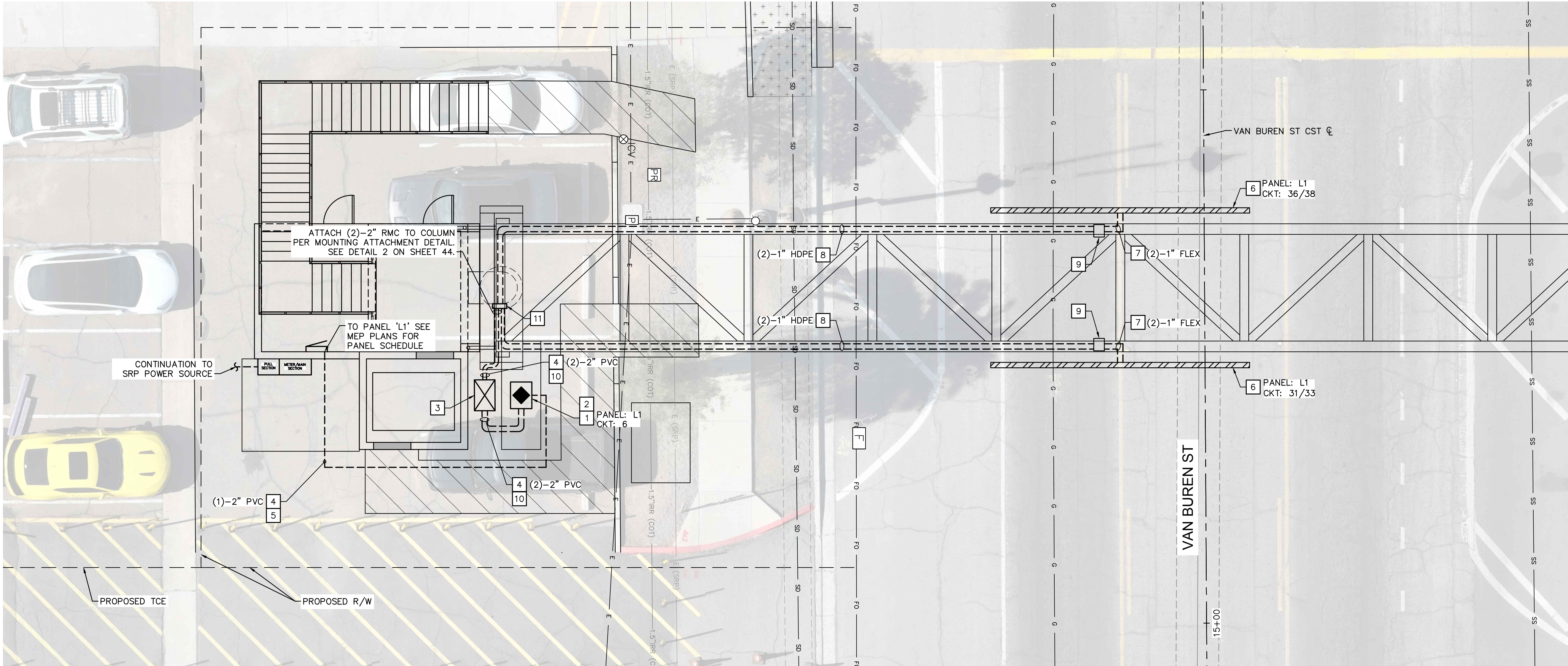
DETAIL 2
SCALE: N.T.S.



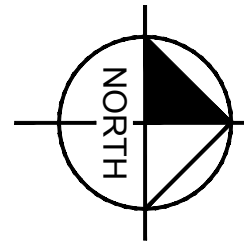
SECTION A
SCALE: 1/2" = 1'-0"



DETAIL 3
SCALE: N.T.S.



DMS PLAN
SCALE: 3/16" = 1'-0"

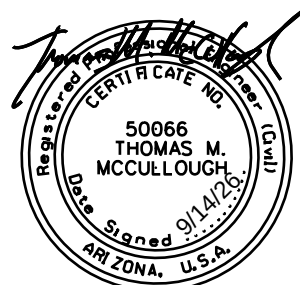


CONSTRUCTION NOTES

NO.	DESCRIPTION
1	INSTALL DMS CABINET AND FOUNDATION.
2	INSTALL NEW DISTRIBUTION ETHERNET SWITCH AND CELLULAR MODERN IN CABINET.
3	INSTALL NEW NO. 7 PULL BOX WITH EXTENSION PER CITY OF AVONDALE DETAIL A1717.
4	TRENCH CONDUIT RUN PER MAG STD DTL 200. CONDUIT DEPTH SHALL BE A MINIMUM OF 30"
5	INSTALL (1) 2" SCHEDULE-40 PVC CONDUIT WITH (8) #8 AWG CONDUCTORS AND (1) #8 AWG GROUND.
6	INSTALL NEW DMS SIGN. SEE ELEVATION AND MOUNTING DETAIL
7	INSTALL (1) 1" FLEX CONDUIT WITH (3) #8 AWG CONDUCTORS AND (1) #8 AWG GROUND AND (1) 1" FLEX CONDUIT WITH (1) 24 STRAND SMFO CABLE.
8	INSTALL (2)-1" INNERDUCTS, (1) WITH (3) #8 AWG CONDUCTORS AND (1) #8 AWG GROUND (1) WITH (1) 24 STRAND SMFO CABLE WITHIN BOTTOM CHORD. SEE BRIDGE STRUCTURAL PLANS FOR ROUTING.
9	INSTALL BRIDGE MOUNTED NEMA 3R RATED JUNCTION BOX. SEE BRIDGE STRUCTURAL PLANS.
10	INSTALL (1) 2" SCHEDULE-40 PVC CONDUIT WITH (6) #8 AWG CONDUCTORS AND (1) #8 AWG GROUND. AND (1) 2" SCHEDULE-40 PVC CONDUIT WITH (2) 24 STRAND SMFO CABLE.
11	INSTALL NEAMA 3R 18"x18"x6" JUNCTION BOX 11'-6" AFF.

NOTES:

- COST OF TRENCHING AND INSTALLING CONDUIT IS INCLUDED IN ITEM 7320291 - ELECTRICAL CONDUIT (2-2")(PVC)(TRENCHED).
- COST OF NEW 2" SCHEDULE-40 PVC CONDUITS IS INCLUDED IN ITEM 7320050 - ELECTRICAL CONDUIT (2")(PVC).
- COST OF NEW INNERDUCT CONDUIT IS INCLUDED IN ITEM 7320298 - ELECTRICAL CONDUIT (2-1" INNERDUCT).
- COST OF ADDITIONAL CONDUITS IS INCLUDED IN ITEM 7320290 - ELECTRICAL CONDUIT.
- COST OF NEW DMS SIGN IS INCLUDED IN ITEM 9240136 - MISCELLANEOUS WORK (DMS, 24'-3" X 5'-4").
- COST OF NEW JUNCTION BOX IS INCLUDED IN ITEM 5030500 - JUNCTION BOX.



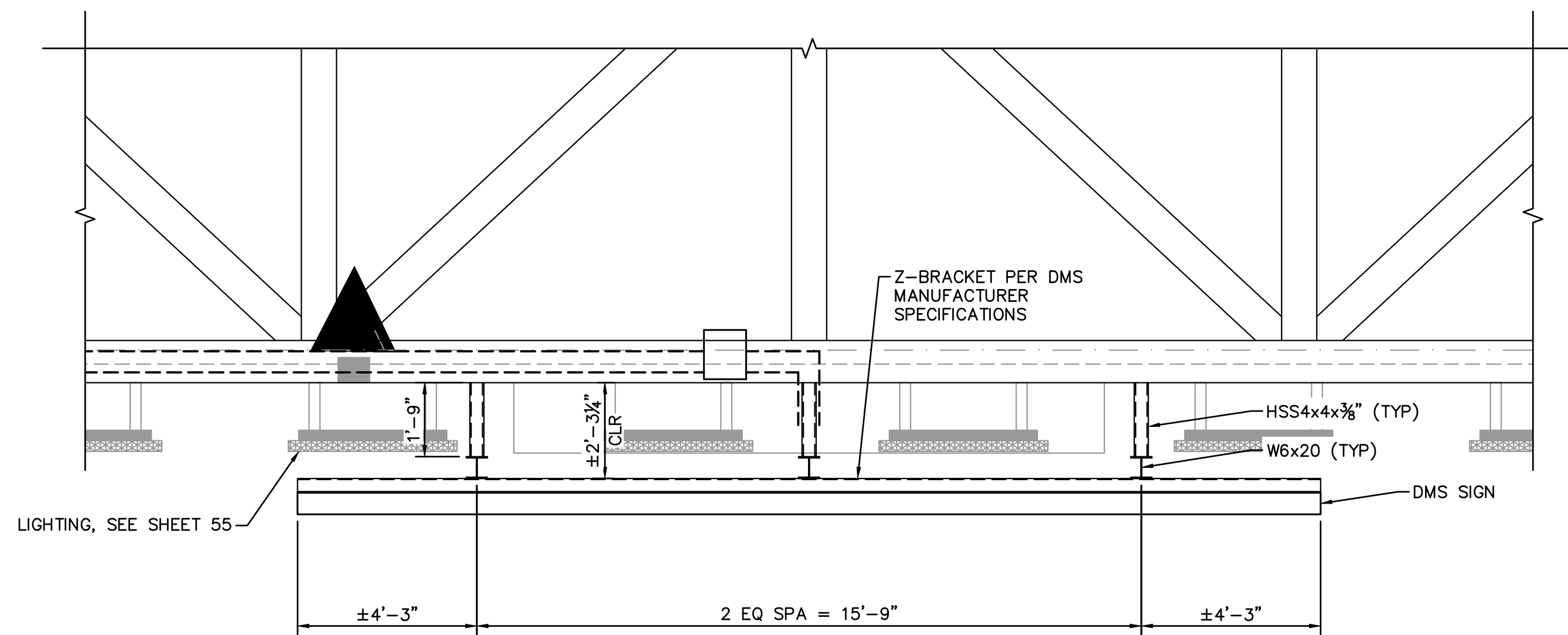
	NAME	DATE
DESIGN	SED	09/26
DRAWN	SED	09/26
CHECKED	TMM	09/26

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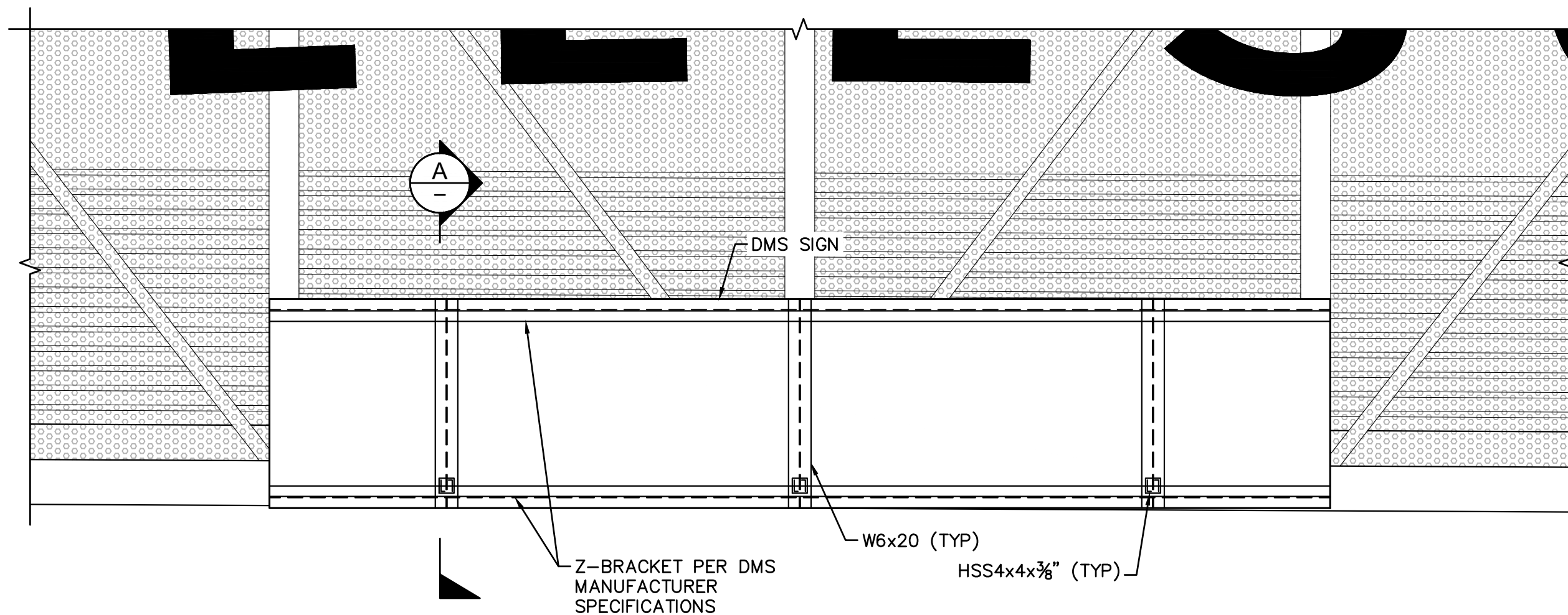
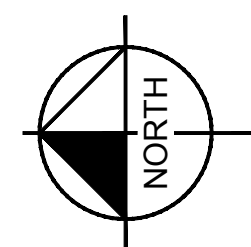
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

DMS PLAN

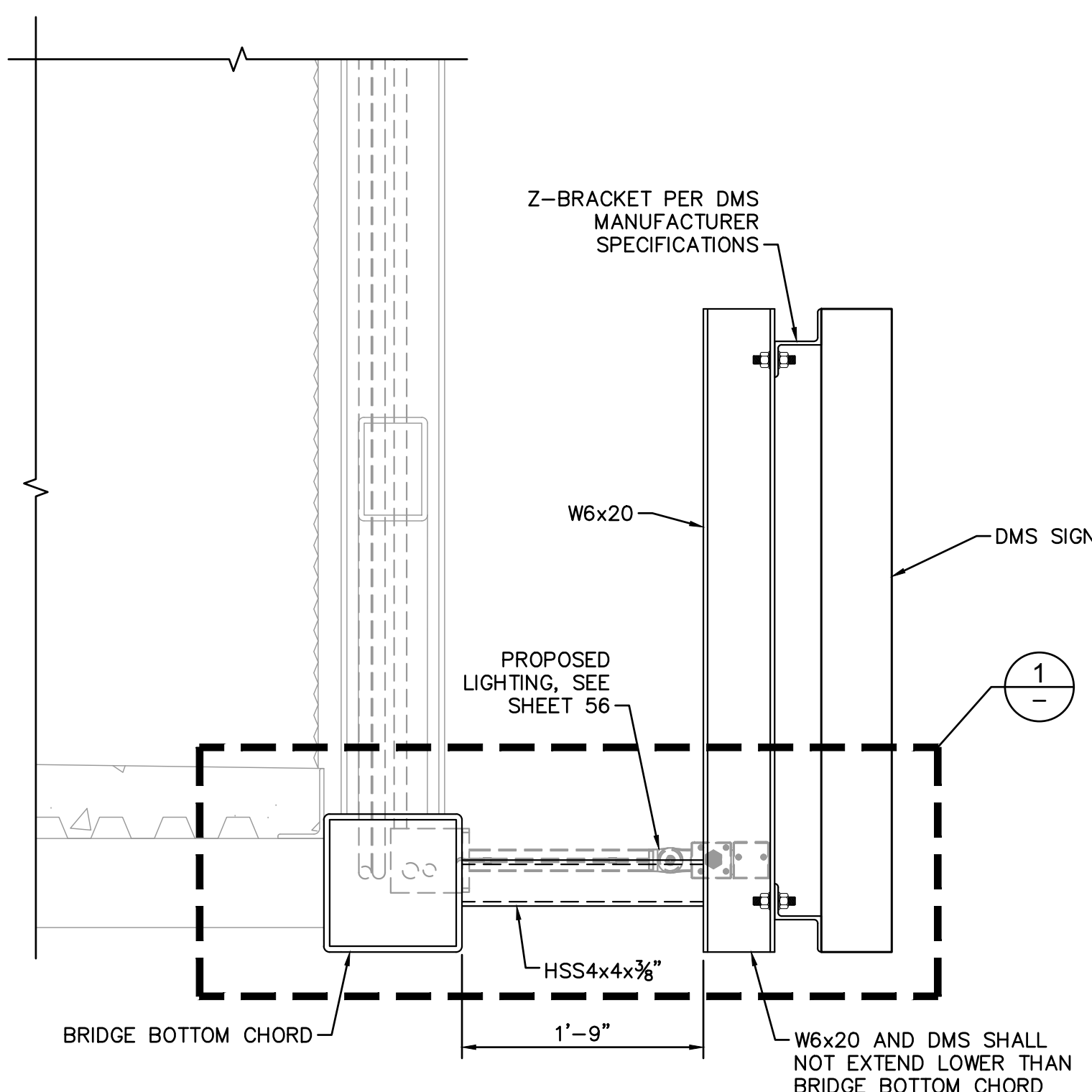
ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NO. 43	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. ITS01
STRUCTURE NO.	TRACS NO. T0619 01C	43 OF 70					



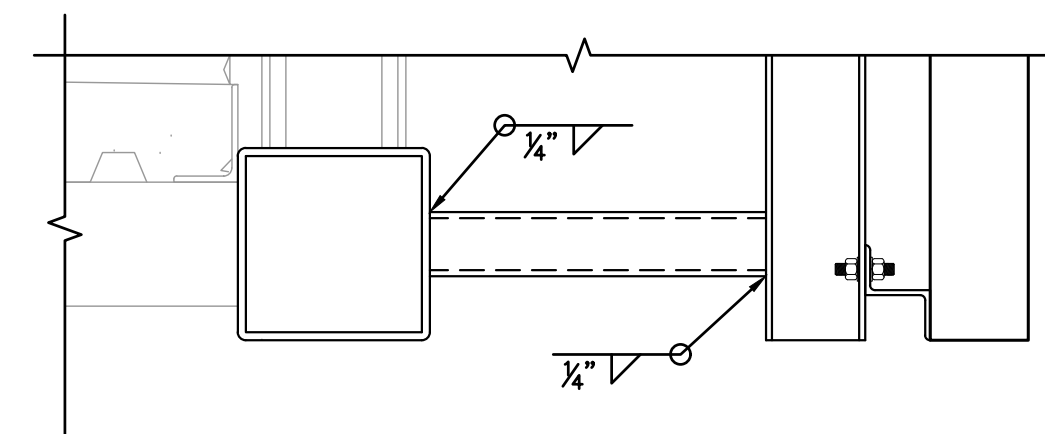
DYNAMIC MESSAGE SIGN PLAN
WEST SIDE OF BRIDGE SHOWN, EAST SIDE OF BRIDGE SIMILAR
SCALE: 3/8" = 1'-0"



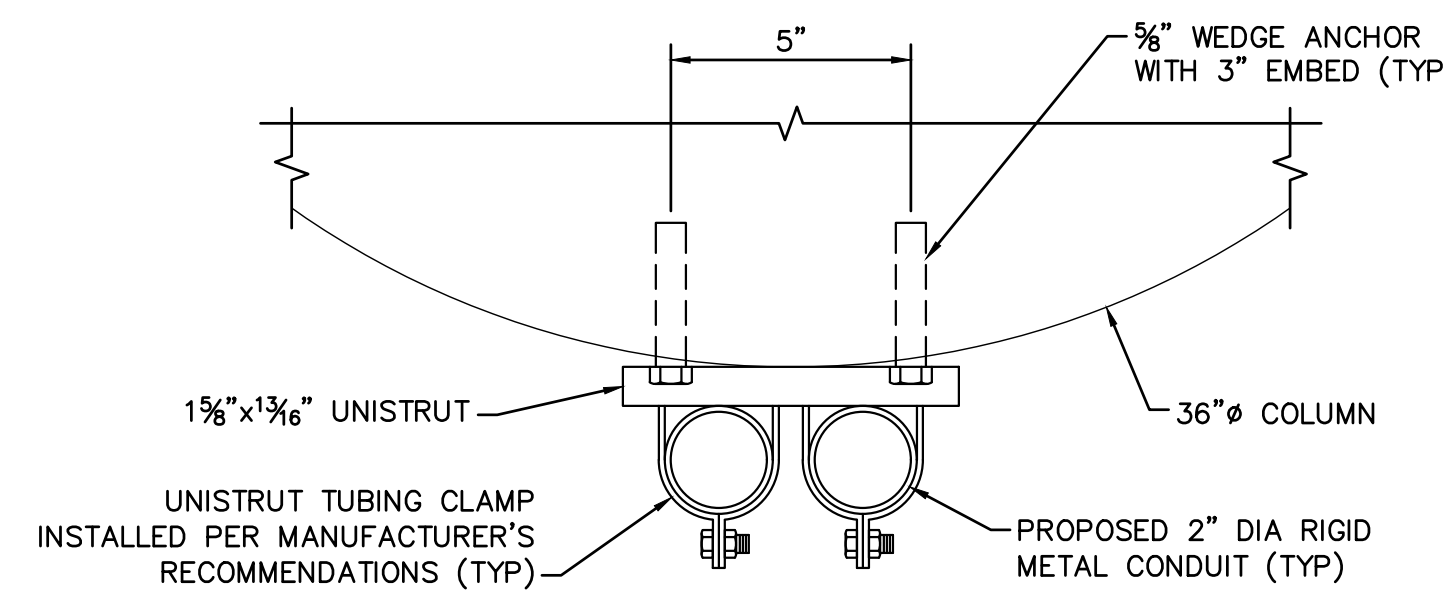
DYNAMIC MESSAGE SIGN ELEVATION
WEST SIDE OF BRIDGE SHOWN, EAST SIDE OF BRIDGE SIMILAR
SCALE: 3/8" = 1'-0"



A SECTION
SCALE: 1" = 1'-0"

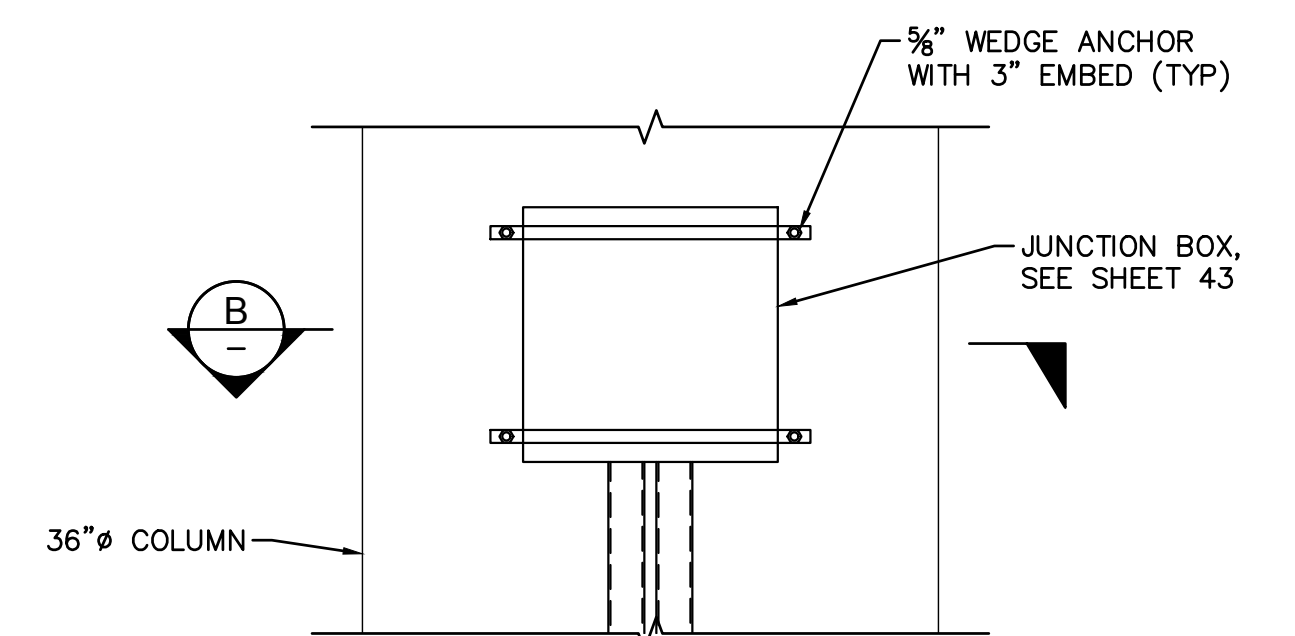


1 DETAIL
SCALE: 1" = 1'-0"

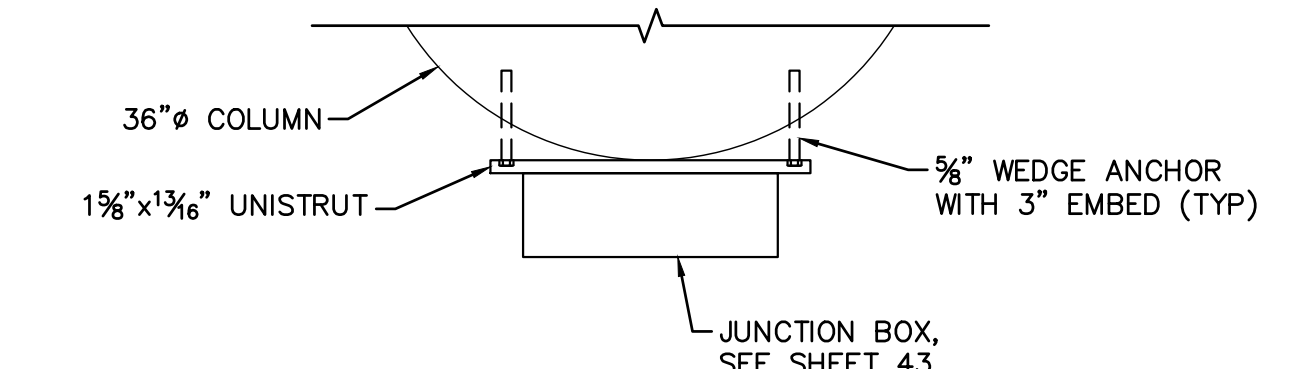


2 DETAIL
SCALE: 3" = 1'-0"

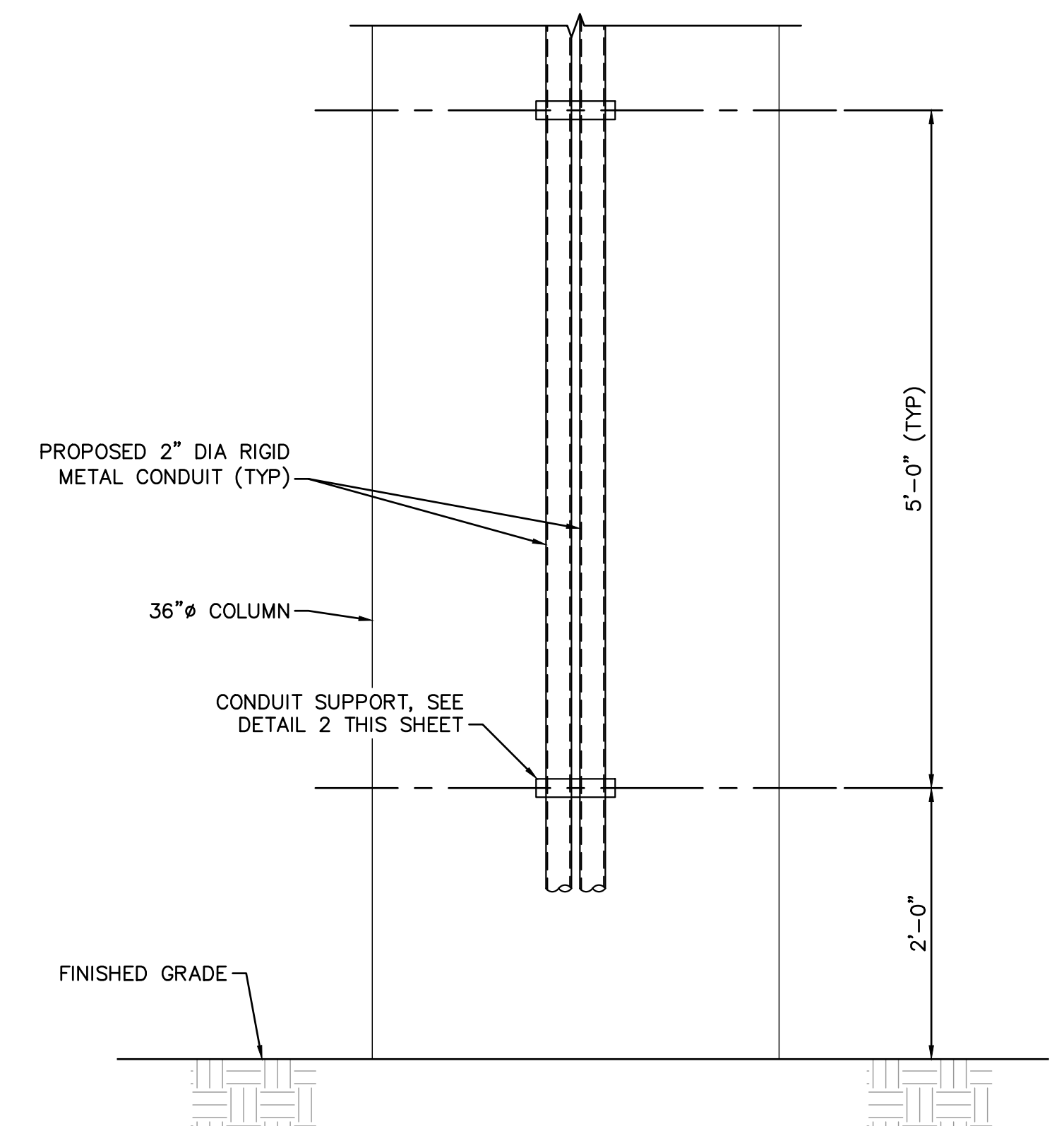
NOTE: SPACE SUPPORTS EVERY 5'-0" O.C.



3 DETAIL
SCALE: 3" = 1'-0"



B SECTION
SCALE: 1" = 1'-0"



4 DETAIL
SCALE: 1" = 1'-0"



	NAME	DATE
DESIGN	JOT	09/26
DRAWN	JOT	09/26
CHECKED	CHG	09/26

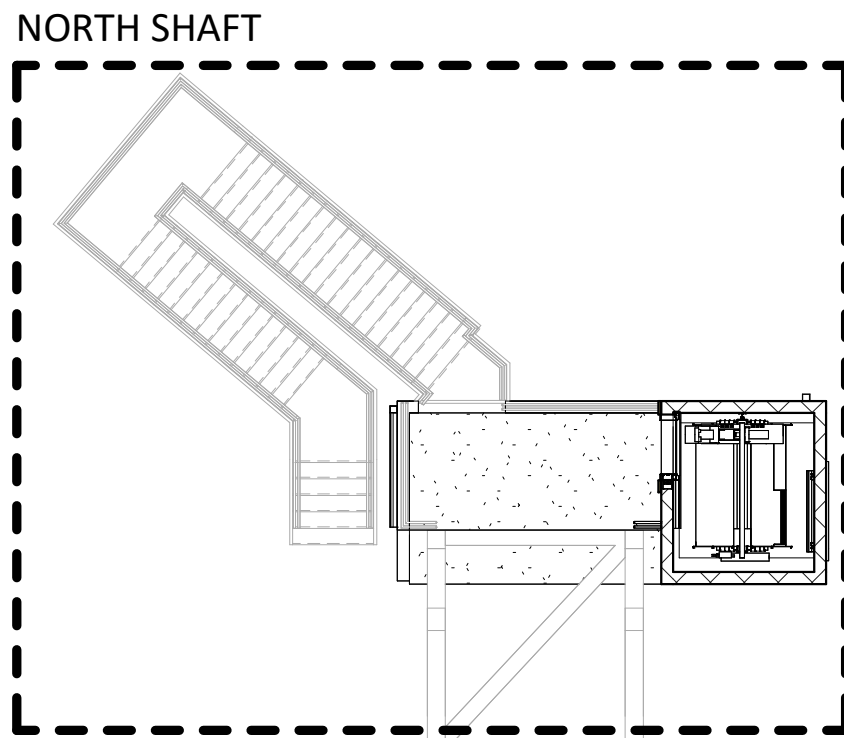
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PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

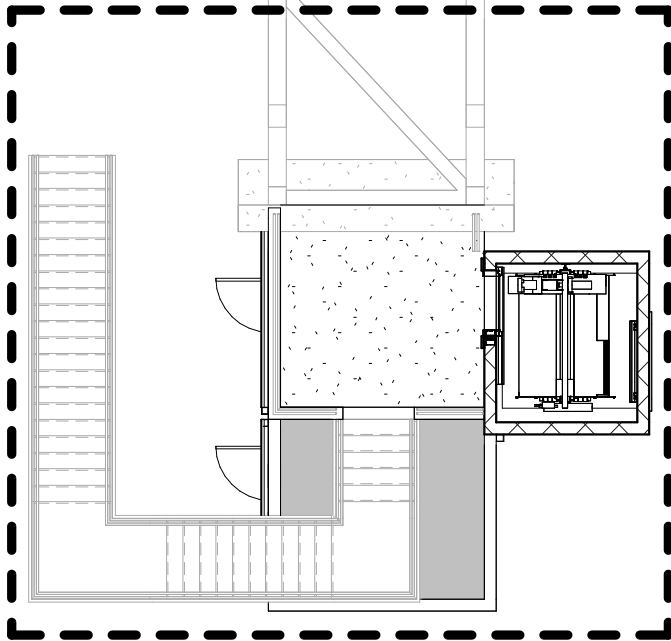
DMS DETAILS

ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NO. 44	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. ITS02	
STRUCTURE NO.	TRACS NO. T0619 01C		44 OF 70				

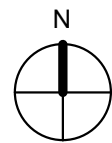
VAN BUREN AT 96TH AVE, TOLLESON



SOUTH SHAFT



① OVERALL BRIDGE PLAN
3/32" = 1'-0"



ABBREVIATIONS

ADA	AMERICANS WITH DISSABILITIES ACT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ARCH	ARCHITECTURE/ARCHITECTURAL
AWI	AMERICAN WOODWORKING INTITUTE
BLDG	BUILDING
B.O.D.	BOTTOM OF DECK
B.O.S.	BOTTOM OF STEEL
CJ	CONTROL JOINT
¢ / C.L.	CENTERLINE
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CLR	CLEAR
CIP	CAST-IN-PLACE
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
CSI	CONSTRUCTION SPECIFICATIONS INSTITUTE
DEMO	DEMOLITION
D.F.	DRINKING FOUNTAIN
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
EA	EACH
EJ	EXPANSION JOINT
ELEC	ELECTRICAL
E.Q.	EQUAL
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
FFE	FURNITURE, FIXTURES & EQUIPMENT
FLR	FLOOR
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GL	GLASS
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HDWR	HARDWARE
HM	HOLLOW METAL
HT	HEIGHT
IBC	INTERNATIONAL BUILDING CODE
JAN	JANITOR
K.B.	KNOX BOX
KIT	KITCHEN
MAX	MAXIMUM
MISC	MISCELLANEOUS
MIN	MINIMUM
MTL	METAL
NA OR N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NTS	NOT TO SCALE

OC OR O.C.	ON CENTER
OFOI	OWNER FURNISHED OWNER INSTALLED
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OPP	OPPOSITE
PT	PAINT
P.L.	PROPERTY LINE
RAD	RADIUS
RB	RUBBER BASE
RCP	REFLECTED CEILING PLAN
R.D.	ROOF DRAIN
REV	REVISION
RM	ROOM
R.O.	ROUGH OPENING
R.O.W.	RIGHT OF WAY
SCHED	SCHEDULE
SPEC	SPECIFICATION
SQ	SQUARE
STC	SOUND TRANSMISSION CLASS
STL	STEEL
STO	STORAGE
STRCT	STRUCTURAL
TBD	TO BE DETERMINED
T.O.C.	TOP OF CURB/CONCRETE
T.O.S.	TOP OF STEEL
T.O.R.	TOP OF ROOF
TYP	TYPICAL
TYPE 'X'	FIRE RATED GYPSUM BOARD
UL	UNDERWRITERS LABRATORY
U.N.O.	UNLESS NOTED OTHERWISE
V.I.F.	VERIFY IN FIELD
W/	WITH
W.C.	WATER CLOSET
W/O	WITHOUT

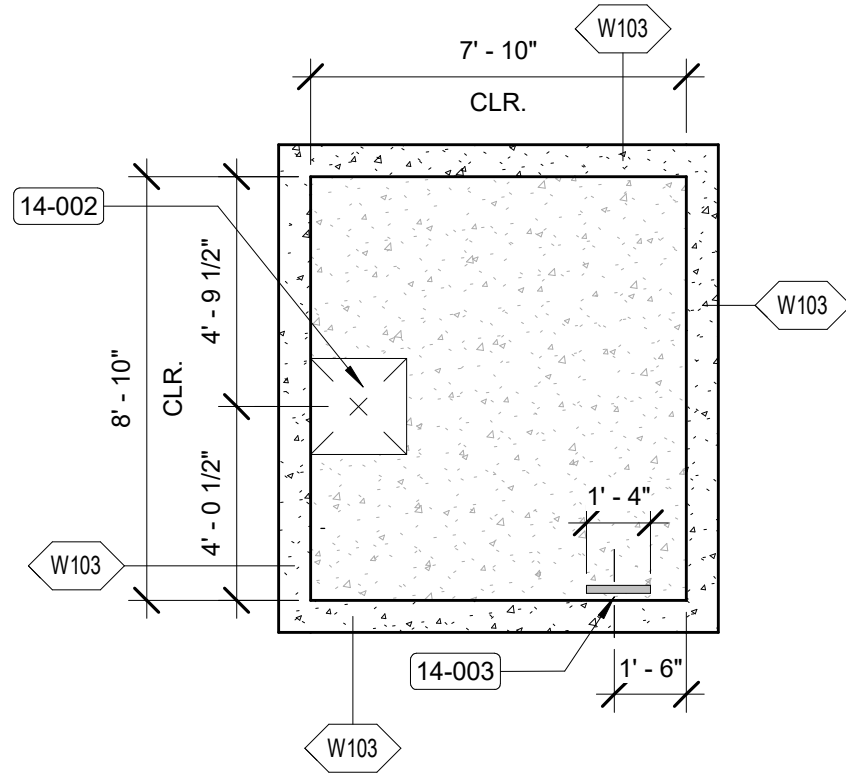
CONSTRUCTION NOTES

- DRAWINGS ARE PREPARED USING DIMENSIONS AND PRODUCT CONFIGURATIONS OR DETAILS OF SPECIFIC MANUFACTURERS (TYPICALLY THE FIRST MANUFACTURER LISTED UNDER "ACCEPTABLE MANUFACTURERS" IN THE SPECIFICATIONS). DIMENSIONS AND DETAILS FOR SPECIFIC PRODUCTS MAY CHANGE BEFORE THEY ARE ACTUALLY INCORPORATED INTO THE WORK, AND PRODUCTS BY OTHER MANUFACTURERS MAY ALSO BE ACCEPTABLE. THEREFORE, ACTUAL INSTALLATION DETAILS AND DIMENSIONS MAY DIFFER FROM THOSE SHOWN. CONTRACTOR SHALL VERIFY INSTALLATION REQUIREMENTS FOR ALL PRODUCTS TO BE INCORPORATED IN THE WORK (INCLUDING PARTITION THICKNESSES FOR RECESSED OR SEMI-RECESSED PRODUCTS), AND IS RESPONSIBLE FOR ACCOMMODATING AND COORDINATING CHANGES TO OTHER MATERIALS OR PRODUCTS THAT ARE NECESSARY BECAUSE OF THESE DIFFERENCES.
- PROVIDE SOLID BLOCKING SECURELY ATTACHED TO ADJACENT FRAMING WITHIN PARTITIONS AT ALL LOCATIONS WHERE ITEMS WILL BE MOUNTED ON PARTITIONS INCLUDING, BUT NOT LIMITED TO, ACCESSORIES, CASEWORK TRIM, FLASHING, WALL MOUNTED EQUIPMENT, TACK/BULLETIN/MARKER BOARDS, ETC.
- ALL WOOD BLOCKING SHALL BE FIRE-RETARDANT WOOD.
- THE CONTRACTOR SHALL INVESTIGATE, VERIFY, AND BE RESPONSIBLE FOR ALL CONDITIONS OF THE PROJECT, AND NOTIFY THE ARCHITECT OF ANY CONDITIONS THAT REQUIRE MODIFICATION BEFORE PROCEEDING WITH THE WORK.
- ALL EXISTING LIGHT FIXTURES ARE TO BE MAINTAINED IN PLACE. ANY OF THESE DISTURBED OR DAMAGED BY THIS WORK SHALL BE REPLACED BY THE CONTRACTOR.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITY LINES. REPAIR ALL DAMAGE TO UTILITY LINES CAUSED BY CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
- ALL PERSONS DIRECTLY OR INDIRECTLY ASSOCIATED WITH THE PROJECT SHALL BE FAMILIAR WITH THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT, AND IMPLEMENT THOSE RULES AS THEY APPLY TO THIS PROJECT.
- ALL WORK PERFORMED SHALL BE IN ACCORDANCE WITH THE BUILDING CODE & LOCAL AMENDMENTS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES AND THE PREVENTION OF CONFLICT BETWEEN ALL TRADES.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EQUIPMENT PRESENTLY IN PLACE THAT IS DAMAGED DURING CONSTRUCTION.
- CAULK ALL JOINTS OR CRACKS WHICH OCCUR WHERE DISSIMILAR MATERIALS INTERSECT PERPENDICULAR TO EACH OTHER AND WHERE THE INTERSECTION IS EXPOSED TO VIEW, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- FIREBLOCK ALL CONCEALED SOFFITS, SHAFTS, CHASES AND CEILING AREAS PER REQUIREMENTS OF THE DESIGNATED CODE AND THE LOCAL JURISDICTION'S AMENDMENTS.
- PROVIDE SLIP JOINT CONNECTIONS AT PARTITIONS THAT EXTEND TO STRUCTURE ABOVE. PROVIDE BRACING ABOVE AS REQUIRED.
- DO NOT SCALE THE DRAWINGS.
- ALL DIMENSIONS ON PLANS ARE TO FACE OF BLOCK OR TO FACE OF STUD UNLESS NOTED OTHERWISE, EXCEPT ON REFLECTED CEILING PLANS WHERE DIMENSIONS ARE FROM FACE OF FINISH.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ARCHITECT IMMEDIATELY SHOULD ANY DISCREPANCIES BE FOUND IN THE DRAWINGS AND SPECIFICATIONS.
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL FIELD CONDITIONS AND DIMENSIONS AS THEY RELATE TO THIS PROJECT. SHOULD DISCREPANCIES EXIST BETWEEN THE WORK INDICATED AND ACTUAL FIELD CONDITIONS NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- ACTUAL CONTRACT LIMITS ARE TO BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER BEFORE ACTUAL CONSTRUCTION WORK BEGINS. ANY INDICATION OF PROJECT LIMITS OR LINES OF DEMARCACTION ARE SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, AND ARE NOT TO BE TAKEN LITERALLY. SEE GENERAL NOTES ON ALL 'A' SERIES DRAWINGS FOR INFORMATION RELATED TO PLANS AND DETAILS ON THOSE SHEETS.
- THE TERM "ALIGN" REFERS TO LOCATING DIFFERENT COMPONENTS OF CONSTRUCTION TO PROVIDE A FLUSH FINISH SURFACE. WHEN NOTED AS ALIGNED, FACE OF FINISH IS TO BE ALIGNED.
- CONTRACTORS AND ALL SUB-CONTRACTORS SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION AND/OR ORDERING OF MATERIALS.
- USE OF THE WORD "VERIFY" POINTS OUT A SITUATION WHICH MUST BE CONFIRMED PRIOR TO PROCEEDING WITH THE WORK, FABRICATION OF EQUIPMENT, OR ORDERING MATERIAL. NOTIFY THE ARCHITECT OF ANY DISCREPANCY.
- REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR COMPLETE CONSTRUCTION REQUIREMENTS & LOCATIONS OF ALL CEILING FIXTURES.
- THE GENERAL CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INSTALLING THEIR RESPECTIVE EQUIPMENT IN THE CEILING PLENUMS.
- ALL EXISTING DOOR SEALS AND SWEEPS SHALL BE REPAIRED OR REPLACED TO PROVIDE A WEATHERTIGHT AND PEST PROOF CONDITION.

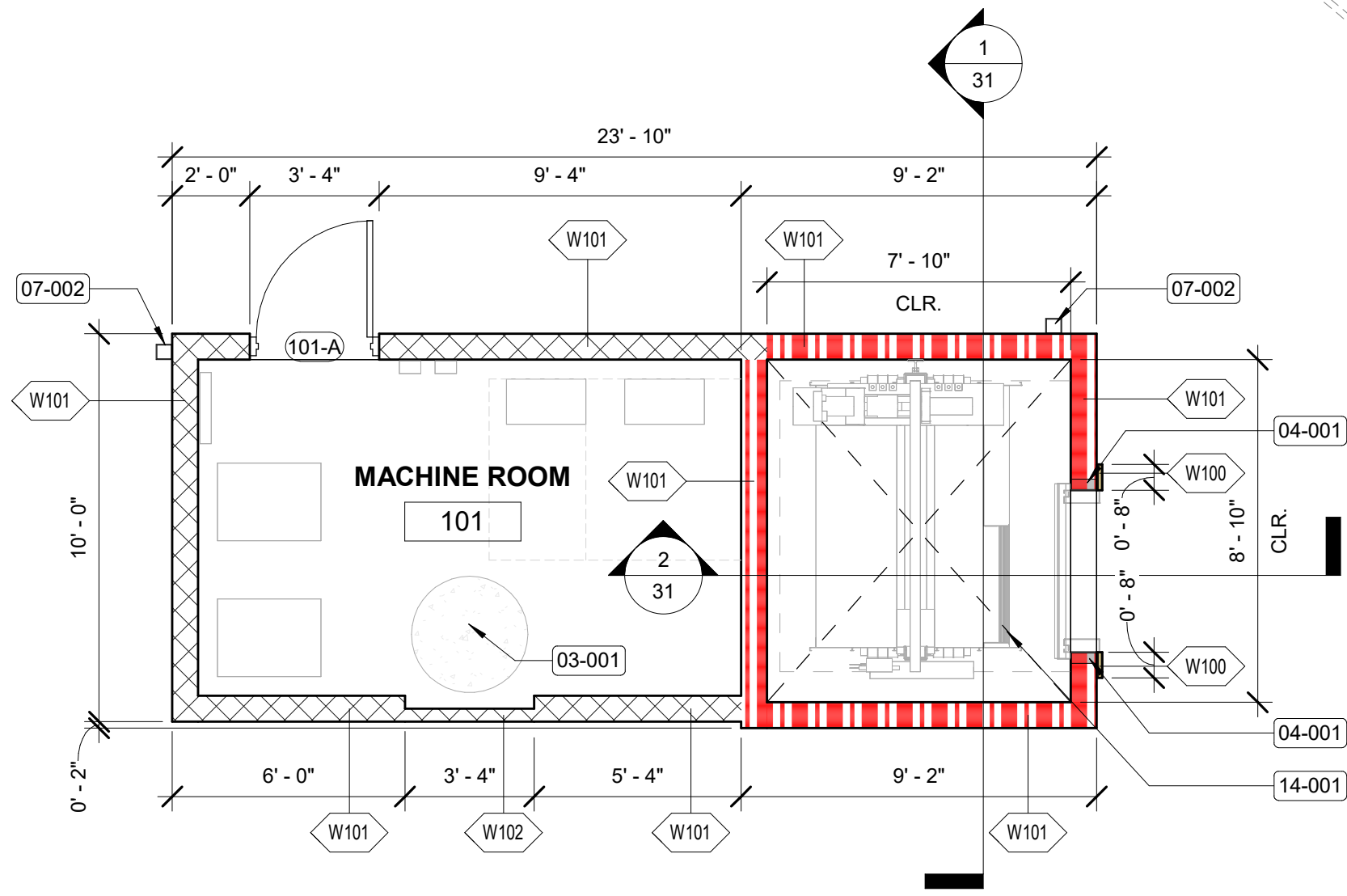
GENERAL REQUIREMENTS

- ATTENTION ALL USERS OF THESE DRAWINGS, GENERAL CONTRACTORS, SUB-CONTRACTORS, MANUFACTURERS, SUPPLIERS, CAREFULLY AND THOROUGHLY REVIEW THESE GENERAL NOTES. IT IS YOUR RESPONSIBILITY TO KNOW AND ADHERE TO THESE REQUIREMENTS.
- THE DRAWINGS AND SPECIFICATIONS ARE SEPARATED INTO DISCIPLINES FOR THE CONVENIENCE OF THE ARCHITECT AND THE CONTRACTOR. THE SEPARATIONS USED HEREIN ARE USED ONLY FOR THE PURPOSES OF CONVENIENCE AND REFERENCE, AND IN NO WAY DO THEY DEFINE OR LIMIT THE SCOPE OR INTENT OF ANY PART OF THE DRAWINGS, OR OF THE DRAWINGS AND SPECIFICATIONS AS A WHOLE. THE FACT THAT THE DRAWINGS ARE SEPARATED IN NO WAY SUGGESTS THAT THE WORK IS NOT TO BE CONSTRUCTED AS A COMPLETE, INTEGRATED AND UNIFIED WHOLE.
- EVERY EFFORT HAS BEEN MADE TO MAKE THESE DOCUMENTS CONCISE AND COORDINATED, TO DEFINE WORK IN THE MOST LOGICAL PLACE AND TO ELIMINATE REDUNDANCY. DO NOT PRESUME THAT YOUR SCOPE OF WORK IS SINGULARLY DEFINED. YOUR SCOPE OF WORK IS DEFINED THROUGHOUT THE ENTIRE SET OF DRAWINGS AND SPECIFICATIONS AND IS NOT CONTAINED IN JUST ONE SERIES OF DRAWINGS OR DIVISION OF SPECIFICATIONS. YOU MUST REVIEW THE ENTIRE SET OF CONTRACT DOCUMENTS TO DETERMINE YOUR SCOPE OF WORK.
- THE DRAWINGS AND SPECIFICATIONS, INCLUDING DRAWINGS PREPARED BY SPECIFIC ENGINEERING DISCIPLINES (SUCH AS CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, ETC.) ARE COMPLEMENTARY; ITEMS SHOWN IN ANY ONE LOCATION IN THE DRAWINGS SHALL BE CONSIDERED TO BE REQUIREMENTS OF THE CONTRACT FOR CONSTRUCTION. IN THE EVENT OF AN INCONSISTENCY BETWEEN THE DRAWINGS AND SPECIFICATIONS, OR WITHIN EITHER DOCUMENT, THE CONTRACTOR SHALL SEEK CLARIFICATION OR INTERPRETATION FROM THE ARCHITECT PRIOR TO BIDDING. WHERE INCONSISTENCIES ARE NOT CLARIFIED PRIOR TO BIDDING, AND WHERE THE ACTUAL SOLUTION OR INTENT CANNOT BE REASONABLY INFERRED, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER QUANTITY OF WORK.
- MECHANICAL AND ELECTRICAL DRAWINGS SHOW INFORMATION IN A DIAGRAMMATIC FASHION WITHOUT DIMENSIONING. THE GENERAL CONTRACTOR IS TO COORDINATE THE LOCATIONS OF ALL MECHANICAL AND ELECTRICAL EQUIPMENT WITH RESPECT TO THE ARCHITECTURAL AND STRUCTURAL DETAILING OF SHAFTS, CHASES, AND SUCH.

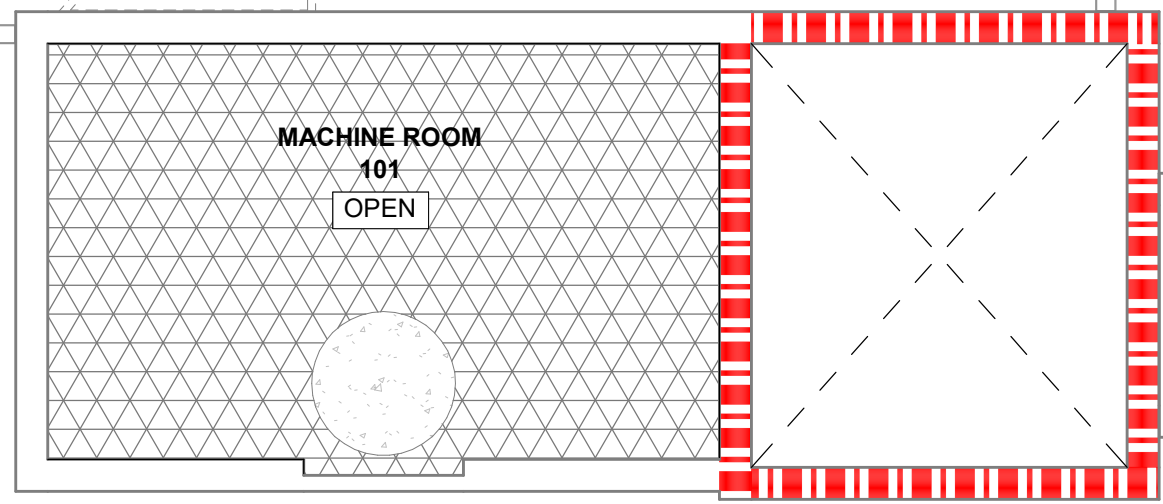
2 ELEVATOR PIT PLAN - NORTH SHAFT
1/4" = 1'-0"



1 LEVEL 1 FLOOR PLAN - NORTH SHAFT
1/4" = 1'-0"



3 LEVEL 1 REFLECTED CEILING PLAN - NORTH SHAFT
1/4" = 1'-0"



KEYNOTES

NUMBER	TEXT
03-001	CAST-IN-PLACE CONCRETE BRIDGE COLUMN - SEE STRUCTURAL DWGS.
04-001	LEAVE BLOCK OUT IN MASONRY SHAFT AS REQUIRED FOR JAMB-MOUNTED CONTROLLER AND HALL STATION PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ROUGH OPENING IN MASONRY WITH MANUFACTURER PRIOR TO INSTALL AS ROUGH OPENING REQUIRED IS LARGER THAN SPECIFIED ELEVATOR DOOR.
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.
14-001	TRACTION ELEVATOR W/ MACHINE ROOM PER MANUFACTURER'S RECOMMENDATIONS. FLOORING IN ELEVATOR CAB TO BE 1/4" SLIP RESISTANT DIAMOND PLATE WITH MAX TOTAL WEIGHT OF 200 POUNDS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALL.
14-002	ELEVATOR SUMP PIT PER MANUFACTURER'S RECOMMENDATIONS
14-003	ELEVATOR PIT LADDER PER MANUFACTURER'S RECOMMENDATIONS

FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE TO THE STRUCTURAL GRID, FACE OF CMU, FACE OF CONCRETE, OR FACE OF STUD UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- PROVIDE SHEET METAL BLOCKING AS REQUIRED FOR ALL RESTROOM ACCESSORIES
- REFER TO SLAB PLANS FOR LOCATIONS OF ALL FLOOR DRAINS AND ELECTRICAL FLOOR BOXES
- ALL DOORS AND DOOR FRAMES TO BE LOCATED 4" FROM OUTSIDE OF FRAME PERPENDICULAR TO ADJACENT WALL, UNLESS NOTED OTHERWISE AND AT MASONRY WALLS
- REFER TO SLAB PLANS FOR INTERIOR AND EXTERIOR MASONRY WALL DIMENSIONS

FLOOR PLAN LEGEND

ROOM TAG	WINDOW TAG	WALL TAG
ROOM NAME ### XXX SF	WINDOW TAG WINDOW DESIGNATION A	WALL TAG WALL DESIGNATION S4A
BUILDING ELEVATION TAG A300 1 VIEW DIRECTION	INTERIOR ELEVATION TAG A300 1 VIEW DIRECTION	BUILDING SECTION TAG 1 VIEW DIRECTION A400 SHEET NUMBER
LEGEND RATED WALL - SEE WALL TYPES		

REFLECTED CEILING PLAN GENERAL NOTES

- ALL VERTICAL SURFACES TO RECEIVE THE SAME FINISH AS THE ADJACENT HORIZONTAL SURFACE UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- LOCATION OF CEILING ACCESS PANELS ARE TO BE APPROVED BY ARCHITECT PRIOR TO INSTALL
- CENTER CEILING GRIDS IN BOTH DIRECTIONS OF A ROOM UNLESS NOTED OTHERWISE
- ALL LIGHT FIXTURES ARE TO BE CENTERED IN SPACE OR WITHIN THE CEILING GRID UNLESS NOTED OTHERWISE
- AT ALL PAINTED SOFFITS INSTALL A PREFINISHED CUSTOM COLOR COVER PLATE TO MATCH ADJACENT SOFFIT FOR ALL FIRE SPRINKLER HEADS
- ALL GYPSUM BOARD CEILINGS TO BE PAINTED PT-1 UNLESS NOTED OTHERWISE

REFLECTED CEILING PLAN LEGEND

ROOM TAG	ROOM NAME
### XXX	ROOM NUMBER CEILING FINISH
LEGEND	
PAINTED GYP CEILING	
OPEN TO STRUCTURE PAINTED PT-1	

FINISH LEGEND

LEGEND	
CMU-1	8" NOMINAL CONCRETE MASONRY UNIT (CMU), SMOOTH FACE, STANDARD GREY COLOR RAKED MORTAR JOINTS APPLY CLEAR ANTI-GRAFFITI SEALER PER MANUFACTURER'S RECOMMENDATIONS.
EIFS-1	BASIS OF DESIGN: MANUFACTURER: DRYVIT FINISH: SANDBLEBBLE FINE COLOR: DEW380 - WHITE
PT-1	INTERIOR CEILING PAINT COLOR: ALABASTER SW 7008 MANUFACTURER: SHERWIN WILLIAMS
PT-2	ACCENT PAINT COLOR: IRON ORE SW 7069 MANUFACTURER: SHERWIN WILLIAMS

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STUDIO

4LINE STUDIO LLC
WWW.4LINESTUDIO.COM
480.251.2048
CFORD@4LINESTUDIO.COM



DESIGN NL 09/26
DRAWN NL 09/26
CHECKED CF 09/26

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

LEVEL 1 - NORTH SHAFT

ROUTE
-
MILEPOST
STRUCTURE NO.

F.H.W.A. Arizona Division

STATE
ARIZ.

PROJECT NO.
0000 MA TOL

FEDERAL ID NO.
CDS TOL-0(200)T

SHEET
NUMBER
46

TOTAL
SHEETS
70

RECORD DRAWING

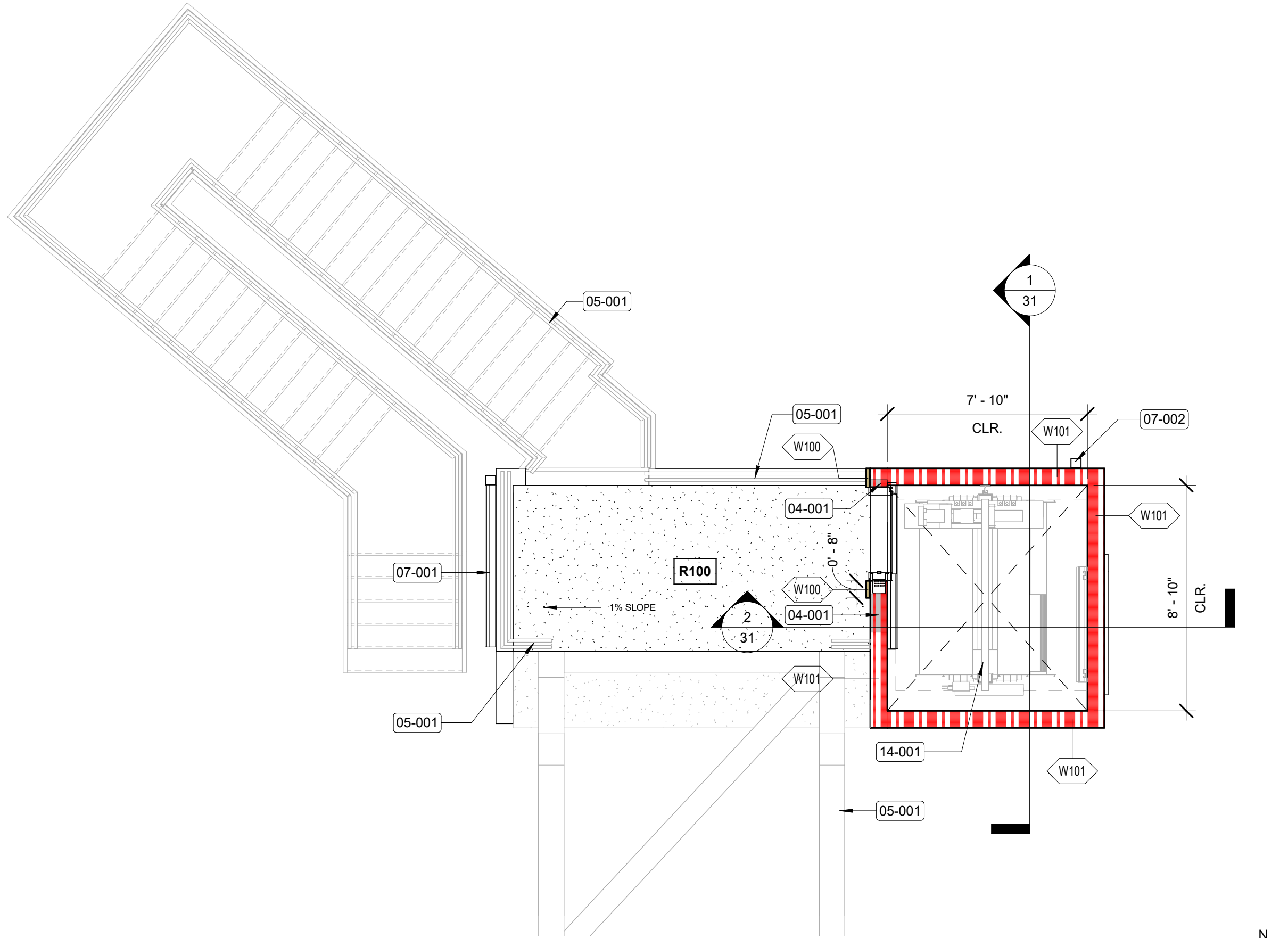
LOCATION
VAN BUREN AT 96TH AVE, TOLLESON

TRACS NO. T0619 01C

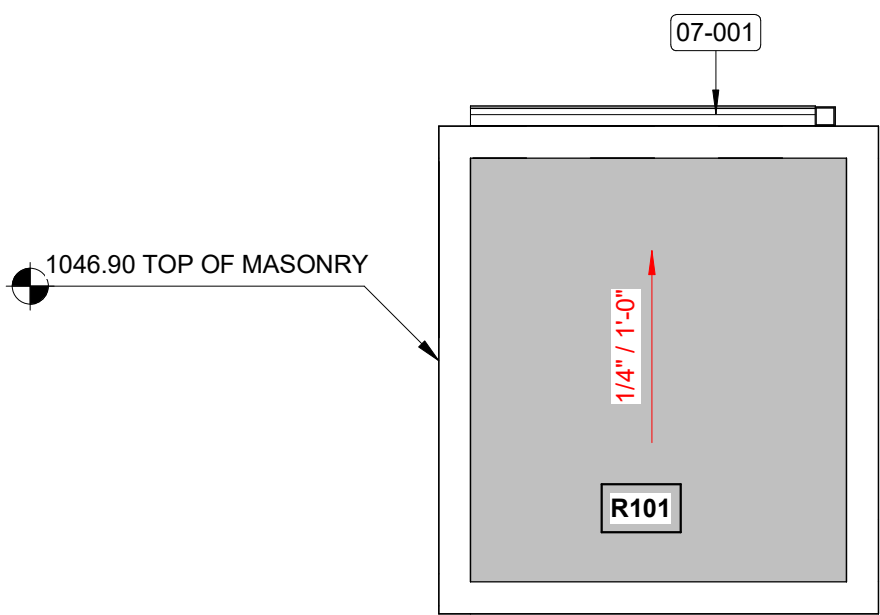
ADOT

DWG NO. ARCH02

46 OF 70



1 LEVEL 2 FLOOR PLAN - NORTH SHAFT
1/4" = 1'-0"



3 ROOF PLAN - NORTH SHAFT
1/4" = 1'-0"

KEYNOTES

NUMBER	TEXT
04-001	LEAVE BLOCK OUT IN MASONRY SHAFT AS REQUIRED FOR JAMB-MOUNTED CONTROLLER AND HALL STATION PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ROUGH OPENING IN MASONRY WITH MANUFACTURER PRIOR TO INSTALL AS ROUGH OPENING REQUIRED IS LARGER THAN SPECIFIED ELEVATOR DOOR.
05-001	STAIRS, HANDRAIL, GUARDRAIL, AND BRIDGE STRUCTURE SHOWN FOR REFERENCE ONLY - SEE CIVIL/STRUCTURAL DWGS.
07-001	CONTINUOUS GUTTER AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.
14-001	TRACTION ELEVATOR W/ MACHINE ROOM PER MANUFACTURER'S RECOMMENDATIONS. FLOORING IN ELEVATOR CAB TO BE 1/2" SLIP RESISTANT DIAMOND PLATE WITH MAX TOTAL WEIGHT OF 200 POUNDS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALL.

FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE TO THE STRUCTURAL GRID, FACE OF CMU, FACE OF CONCRETE, OR FACE OF STUD UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- PROVIDE SHEET METAL BLOCKING AS REQUIRED FOR ALL RESTROOM ACCESSORIES
- REFER TO SLAB PLANS FOR LOCATIONS OF ALL FLOOR DRAINS AND ELECTRICAL FLOOR BOXES
- ALL DOORS AND DOOR FRAMES TO BE LOCATED 4" FROM OUTSIDE OF FRAME PERPENDICULAR TO ADJACENT WALL, UNLESS NOTED OTHERWISE AND AT MASONRY WALLS
- REFER TO SLAB PLANS FOR INTERIOR AND EXTERIOR MASONRY WALL DIMENSIONS

FLOOR PLAN LEGEND

ROOM TAG

ROOM NAME

→ ROOM NUMBER
XXX SF → ROOM AREA

WINDOW TAG

WINDOW DESIGNATION

WALL TAG

WALL DESIGNATION

BUILDING ELEVATION TAG

SHEET NUMBER
VIEW NUMBER
VIEW DIRECTION

INTERIOR ELEVATION TAG

SHEET NUMBER
VIEW NUMBER
VIEW DIRECTION

BUILDING SECTION TAG

VIEW NUMBER
VIEW DIRECTION
SHEET NUMBER

WALL SECTION TAG

VIEW NUMBER
VIEW DIRECTION
SHEET NUMBER

LEGEND

RATED WALL - SEE WALL TYPES

REFLECTED CEILING PLAN GENERAL NOTES

- ALL VERTICAL SURFACES TO RECEIVE THE SAME FINISH AS THE ADJACENT HORIZONTAL SURFACE UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- LOCATION OF CEILING ACCESS PANELS ARE TO BE APPROVED BY ARCHITECT PRIOR TO INSTALL
- CENTER CEILING GRIDS IN BOTH DIRECTIONS OF A ROOM UNLESS NOTED OTHERWISE
- ALL LIGHT FIXTURES ARE TO BE CENTERED IN SPACE OR WITHIN THE CEILING GRID UNLESS NOTED OTHERWISE
- AT ALL PAINTED SOFFITS INSTALL A PREFINISHED CUSTOM COLOR COVER PLATE TO MATCH ADJACENT SOFFIT FOR ALL FIRE SPRINKLER HEADS
- ALL GYPSUM BOARD CEILINGS TO BE PAINTED PT-1 UNLESS NOTED OTHERWISE

REFLECTED CEILING PLAN LEGEND

ROOM TAG

ROOM NAME

→ ROOM NUMBER
XXX → CEILING FINISH

LEGEND

PAINTED GYP CEILING

OPEN TO STRUCTURE
PAINTED PT-1

FINISH SCHEDULE

PAINT	
PT-1	INTERIOR MASONRY PAINT COLOR: ALABASTER SW 7008 MANUFACTURER: SHERWIN WILLIAMS
PT-2	EXTERIOR MASONRY PAINT COLOR: TBD MANUFACTURER: SHERWIN WILLIAMS

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DESIGN	NL	09/26
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CHECKED	CF	09/26

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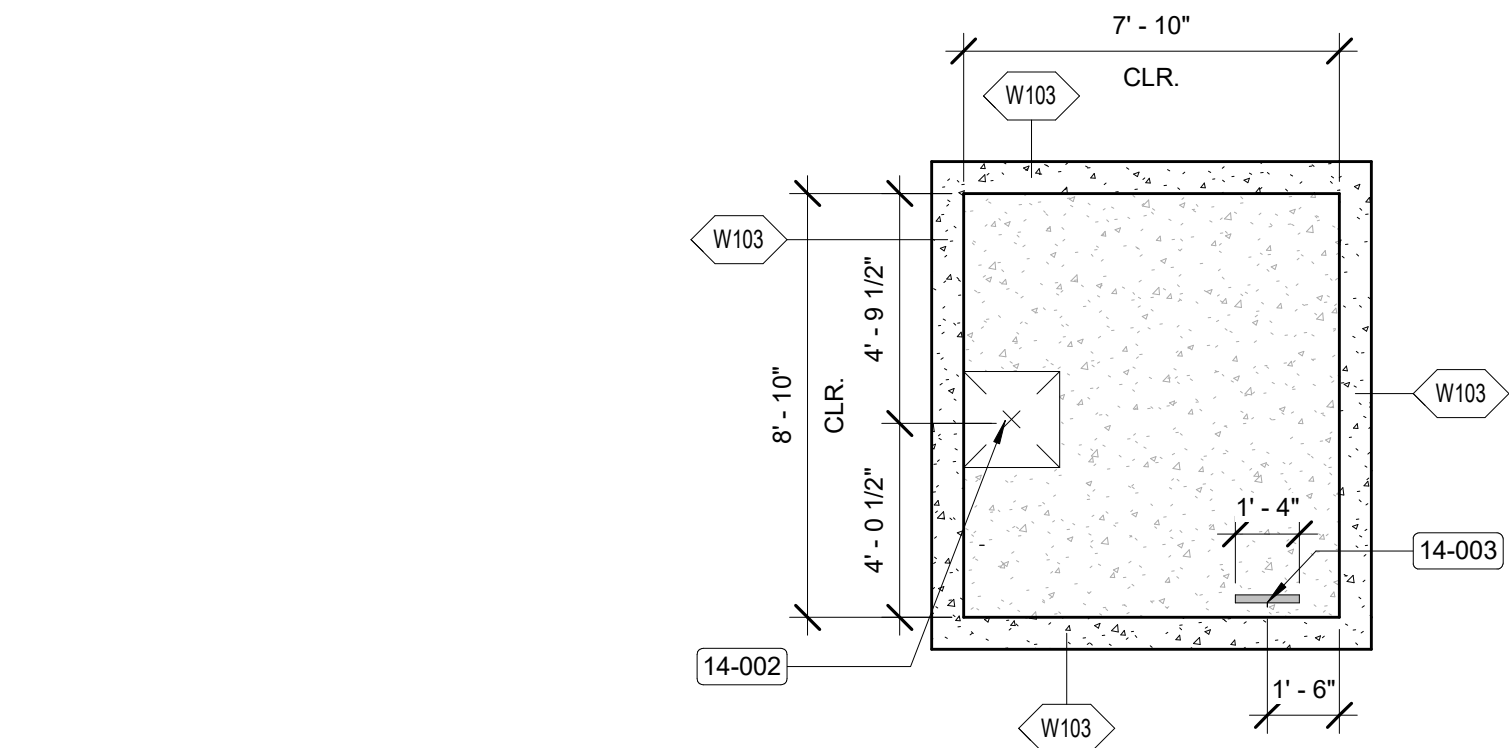
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PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

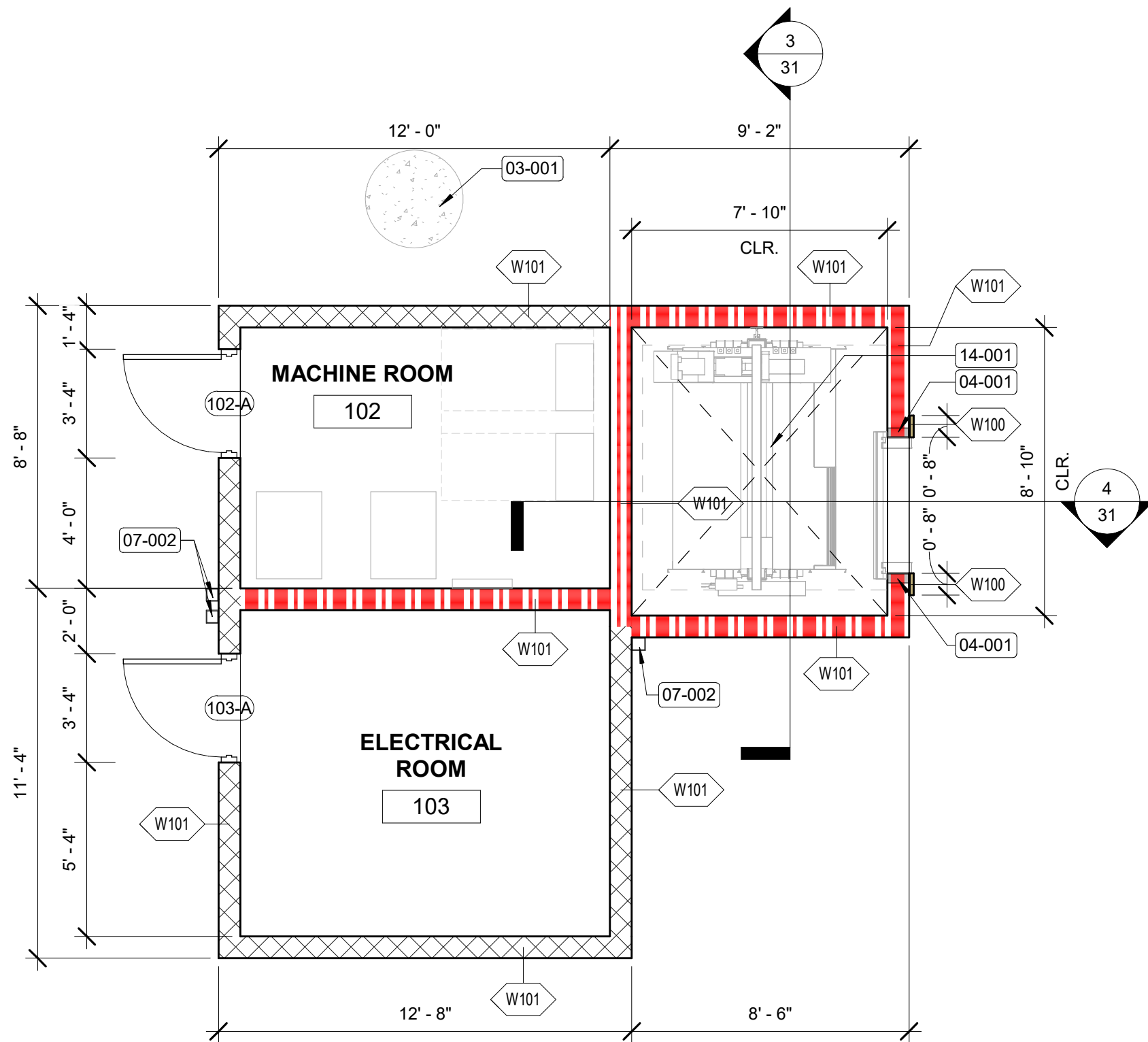
LEVEL 2 - NORTH SHAFT

ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NUMBER 47	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. ARCH03	
STRUCTURE NO.	TRACS NO. T0619 01C		ADOT		47 OF 70		

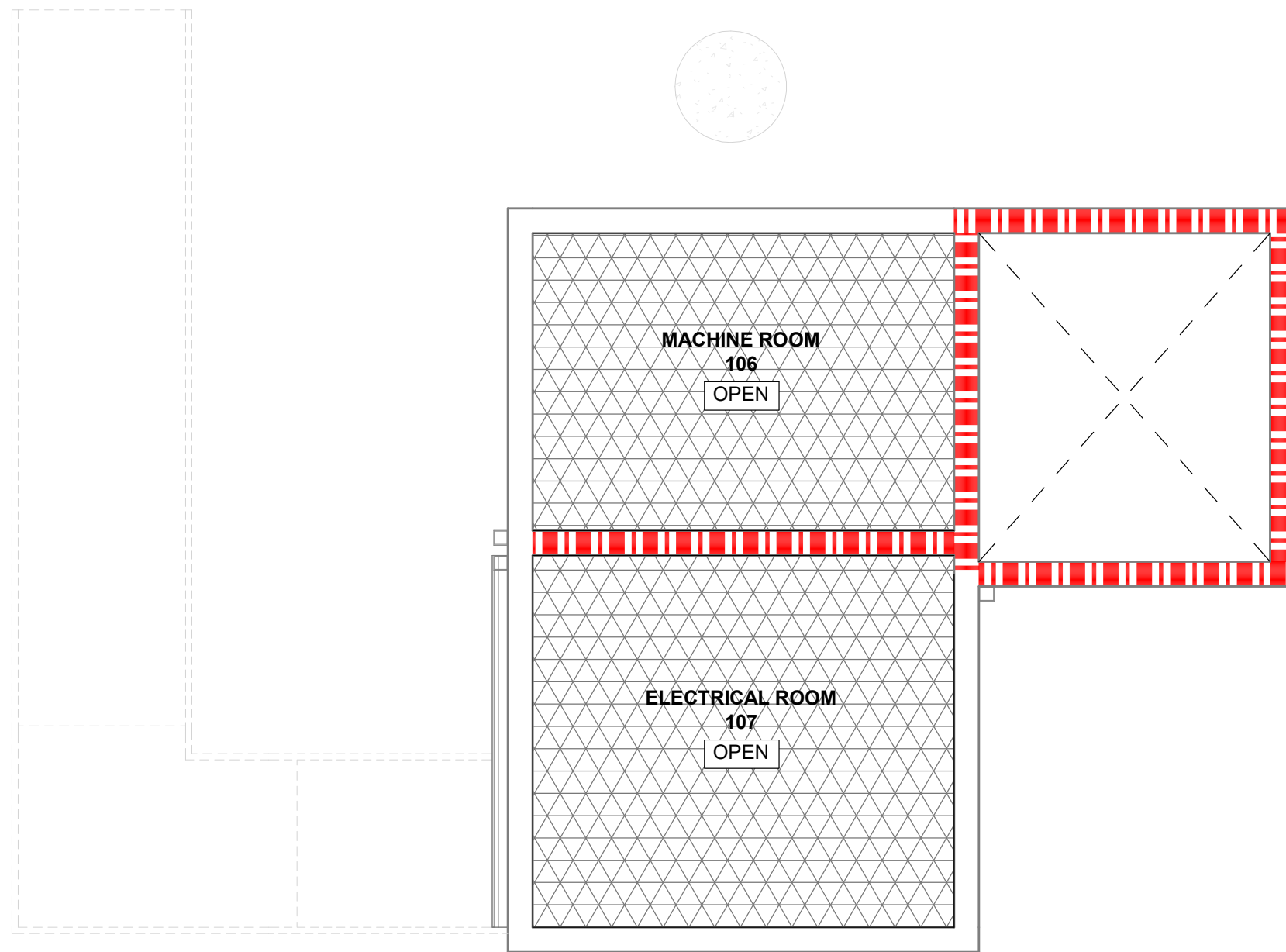
2 ELEVATOR PIT PLAN - SOUTH SHAFT
1/4" = 1'-0"



1 LEVEL 1 FLOOR PLAN - SOUTH SHAFT
1/4" = 1'-0"



3 LEVEL 1 REFLECTED CEILING PLAN - SOUTH SHAFT
1/4" = 1'-0"



KEYNOTES

NUMBER	TEXT
03-001	CAST-IN-PLACE CONCRETE BRIDGE COLUMN - SEE STRUCTURAL DWGS.
04-001	LEAVE BLOCK OUT IN MASONRY SHAFT AS REQUIRED FOR JAMB-MOUNTED CONTROLLER AND HALL STATION PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ROUGH OPENING IN MASONRY WITH MANUFACTURER PRIOR TO INSTALL AS ROUGH OPENING REQUIRED IS LARGER THAN SPECIFIED ELEVATOR DOOR.
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.
14-001	TRACTION ELEVATOR W/ MACHINE ROOM PER MANUFACTURER'S RECOMMENDATIONS. FLOORING IN ELEVATOR CAB TO BE 1/4" SLIP RESISTANT DIAMOND PLATE WITH MAX TOTAL WEIGHT OF 200 POUNDS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALL.
14-002	ELEVATOR SUMP PIT PER MANUFACTURER'S RECOMMENDATIONS
14-003	ELEVATOR PIT LADDER PER MANUFACTURER'S RECOMMENDATIONS

FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE TO THE STRUCTURAL GRID, FACE OF CMU, FACE OF CONCRETE, OR FACE OF STUD UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- PROVIDE SHEET METAL BLOCKING AS REQUIRED FOR ALL RESTROOM ACCESSORIES
- REFER TO SLAB PLANS FOR LOCATIONS OF ALL FLOOR DRAINS AND ELECTRICAL FLOOR BOXES
- ALL DOORS AND DOOR FRAMES TO BE LOCATED 4" FROM OUTSIDE OF FRAME PERPENDICULAR TO ADJACENT WALL, UNLESS NOTED OTHERWISE AND AT MASONRY WALLS
- REFER TO SLAB PLANS FOR INTERIOR AND EXTERIOR MASONRY WALL DIMENSIONS

FLOOR PLAN LEGEND

ROOM TAG

ROOM NAME

XXX SF

WINDOW TAG

WINDOW DESIGNATION
A

WALL TAG

WALL DESIGNATION
S4A

BUILDING ELEVATION TAG

SHEET NUMBER
A300
VIEW NUMBER
1
VIEW DIRECTION

INTERIOR ELEVATION TAG

SHEET NUMBER
A300
VIEW NUMBER
1
VIEW DIRECTION

BUILDING SECTION TAG

VIEW NUMBER
1
VIEW DIRECTION
SHEET NUMBER
A400

WALL SECTION TAG

VIEW NUMBER
1
VIEW DIRECTION
SHEET NUMBER
A400

LEGEND

RATED WALL - SEE WALL TYPES

REFLECTED CEILING PLAN GENERAL NOTES

- ALL VERTICAL SURFACES TO RECEIVE THE SAME FINISH AS THE ADJACENT HORIZONTAL SURFACE UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- LOCATION OF CEILING ACCESS PANELS ARE TO BE APPROVED BY ARCHITECT PRIOR TO INSTALL
- CENTER CEILING GRIDS IN BOTH DIRECTIONS OF A ROOM UNLESS NOTED OTHERWISE
- ALL LIGHT FIXTURES ARE TO BE CENTERED IN SPACE OR WITHIN THE CEILING GRID UNLESS NOTED OTHERWISE
- AT ALL PAINTED SOFFITS INSTALL A PREFINISHED CUSTOM COLOR COVER PLATE TO MATCH ADJACENT SOFFIT FOR ALL FIRE SPRINKLER HEADS
- ALL GYPSUM BOARD CEILINGS TO BE PAINTED PT-1 UNLESS NOTED OTHERWISE

REFLECTED CEILING PLAN LEGEND

ROOM TAG

ROOM NAME

XXX

LEGEND

PAINTED GYP CEILING
OPEN TO STRUCTURE
PAINTED PT-1

FINISH LEGEND

LEGEND

CMU-1
8" NOMINAL CONCRETE MASONRY UNIT (CMU), SMOOTH FACE, STANDARD GREY COLOR
RAKED MORTAR JOINTS
APPLY CLEAR ANTI-GRAFFITI SEALER PER MANUFACTURER'S RECOMMENDATIONS.

EIFS-1
BASIS OF DESIGN:
MANUFACTURER: DRYVIT
FINISH: SANDPEBBLE FINE
COLOR: DEW380 - WHITE

PT-1
INTERIOR CEILING PAINT
COLOR: ALABASTER SW 7008
MANUFACTURER: SHERWIN WILLIAMS

PT-2
ACCENT PAINT
COLOR: IRON ORE SW 7069
MANUFACTURER: SHERWIN WILLIAMS

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WWW.4LINESTUDIO.COM
480.251.2048
CFORD@4LINESTUDIO.COM



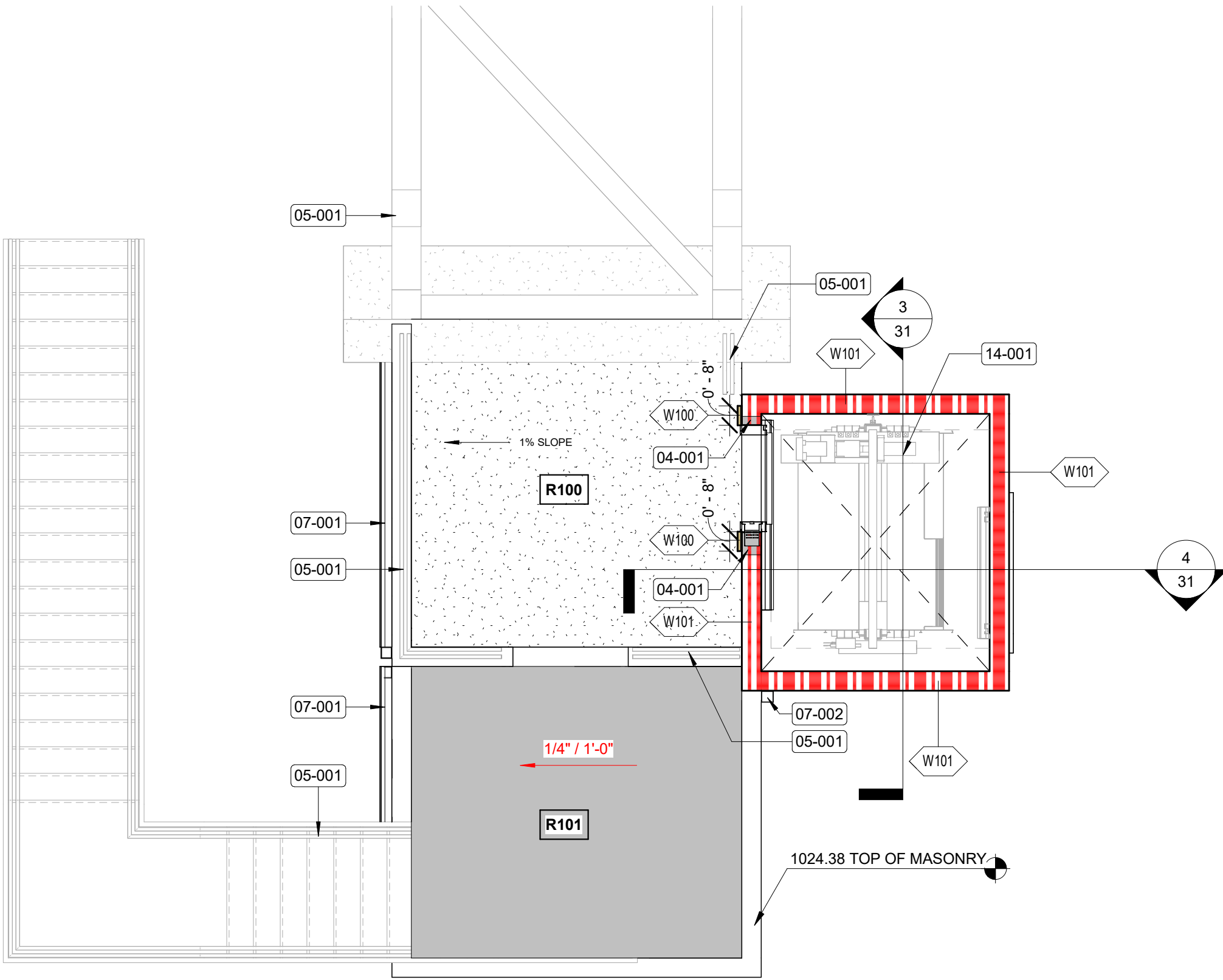
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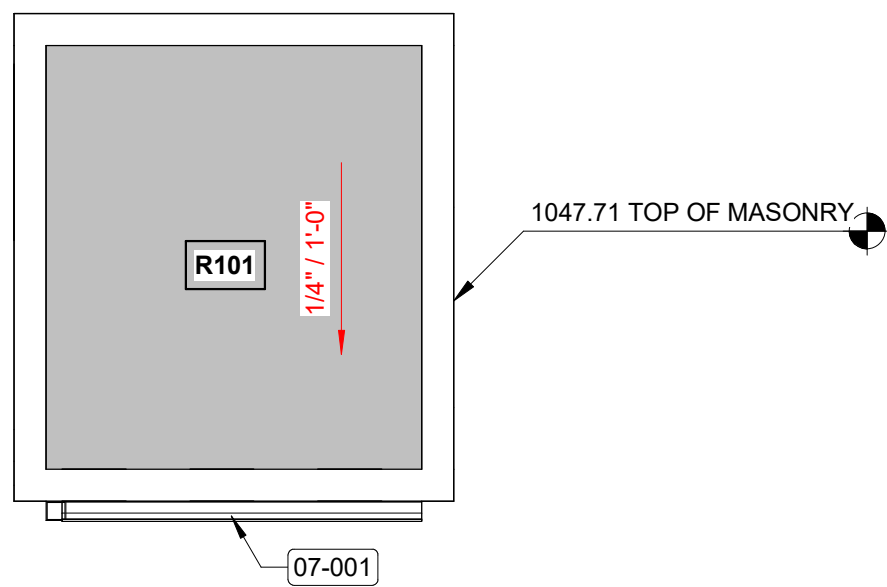
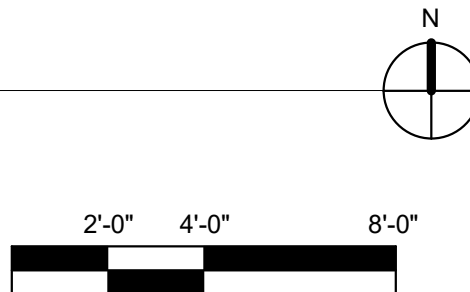
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PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

LEVEL 1 - SOUTH SHAFT

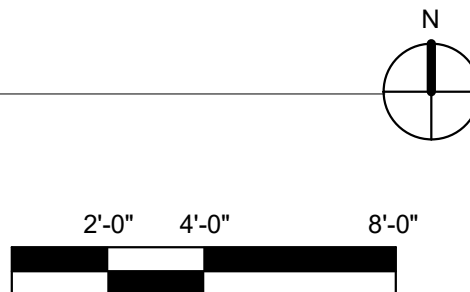
ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NUMBER 48	TOTAL SHEETS 70	RECORD DRAWING
LOCATION	VAN BUREN AT 96TH AVE, TOLLESON					DWG NO.	ARCH04
STRUCTURE NO.	TRACS NO. T0619 01C					48 OF 70	



① LEVEL 2 FLOOR PLAN - SOUTH SHAFT
1/4" = 1'-0"



③ ROOF PLAN - SOUTH SHAFT
1/4" = 1'-0"



KEYNOTES

NUMBER	TEXT
04-001	LEAVE BLOCK OUT IN MASONRY SHAFT AS REQUIRED FOR JAMB-MOUNTED CONTROLLER AND HALL STATION PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ROUGH OPENING IN MASONRY WITH MANUFACTURER PRIOR TO INSTALL AS ROUGH OPENING REQUIRED IS LARGER THAN SPECIFIED ELEVATOR DOOR.
05-001	STAIRS, HANDRAIL, GUARDRAIL, AND BRIDGE STRUCTURE SHOWN FOR REFERENCE ONLY - SEE CIVIL/STRUCTURAL DWGS.
07-001	CONTINUOUS GUTTER AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.
14-001	TRACTION ELEVATOR W/ MACHINE ROOM PER MANUFACTURER'S RECOMMENDATIONS. FLOORING IN ELEVATOR CAB TO BE 1/2\"/>

FLOOR PLAN GENERAL NOTES

- ALL DIMENSIONS ARE TO THE STRUCTURAL GRID, FACE OF CMU, FACE OF CONCRETE, OR FACE OF STUD UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"
- PROVIDE SHEET METAL BLOCKING AS REQUIRED FOR ALL RESTROOM ACCESSORIES
- REFER TO SLAB PLANS FOR LOCATIONS OF ALL FLOOR DRAINS AND ELECTRICAL FLOOR BOXES
- ALL DOORS AND DOOR FRAMES TO BE LOCATED 4" FROM OUTSIDE OF FRAME PERPENDICULAR TO ADJACENT WALL, UNLESS NOTED OTHERWISE AND AT MASONRY WALLS
- REFER TO SLAB PLANS FOR INTERIOR AND EXTERIOR MASONRY WALL DIMENSIONS

FLOOR PLAN LEGEND

ROOM TAG

ROOM NAME

→ ROOM NUMBER

XXX SF → ROOM AREA

WINDOW TAG

WINDOW DESIGNATION

WALL TAG

WALL DESIGNATION

BUILDING ELEVATION TAG

SHEET NUMBER

VIEW NUMBER

VIEW DIRECTION

INTERIOR ELEVATION TAG

SHEET NUMBER

VIEW NUMBER

VIEW DIRECTION

BUILDING SECTION TAG

VIEW NUMBER

VIEW DIRECTION

SHEET NUMBER

WALL SECTION TAG

VIEW NUMBER

VIEW DIRECTION

SHEET NUMBER

LEGEND

RATED WALL - SEE WALL TYPES

REFLECTED CEILING PLAN GENERAL NOTES

- ALL VERTICAL SURFACES TO RECEIVE THE SAME FINISH AS THE ADJACENT HORIZONTAL SURFACE UNLESS NOTED OTHERWISE
- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
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- ALL LIGHT FIXTURES ARE TO BE CENTERED IN SPACE OR WITHIN THE CEILING GRID UNLESS NOTED OTHERWISE
- AT ALL PAINTED SOFFITS INSTALL A PREFINISHED CUSTOM COLOR COVER PLATE TO MATCH ADJACENT SOFFIT FOR ALL FIRE SPRINKLER HEADS
- ALL GYPSUM BOARD CEILINGS TO BE PAINTED PT-1 UNLESS NOTED OTHERWISE

REFLECTED CEILING PLAN LEGEND

ROOM TAG

ROOM NAME

→ ROOM NUMBER

XXX → CEILING FINISH

LEGEND

PAINTED GYP CEILING

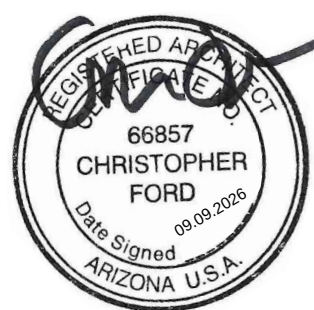
OPEN TO STRUCTURE
PAINTED PT-1

FINISH SCHEDULE

PAINT	INTERIOR MASONRY PAINT COLOR: ALABASTER SW 7008 MANUFACTURER: SHERWIN WILLIAMS
PT-2	EXTERIOR MASONRY PAINT COLOR: TBD MANUFACTURER: SHERWIN WILLIAMS

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WWW.4LINESTUDIO.COM
480.251.2048
CFORD@4LINESTUDIO.COM



DESIGN	NL	09/26
DRAWN	NL	09/26
CHECKED	CF	09/26

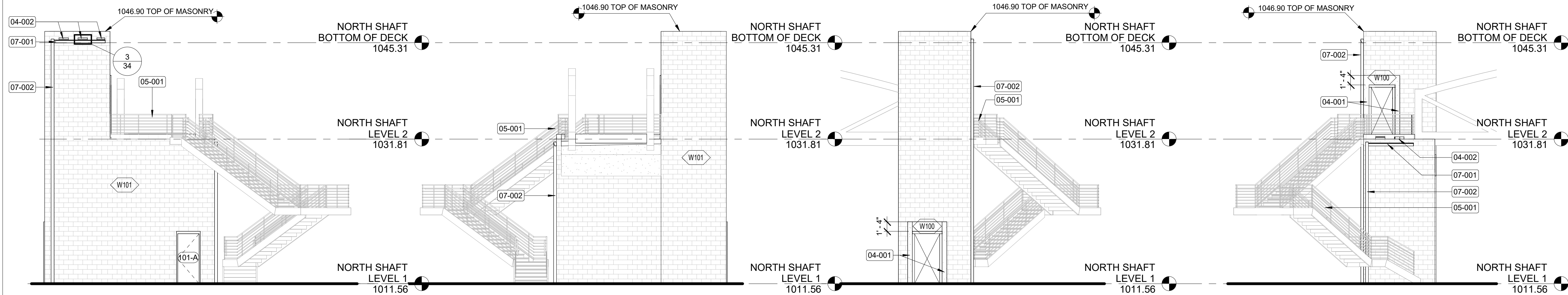
Kimley»Horn

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

LEVEL 2 - SOUTH SHAFT

ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-Q(200)T	SHEET NUMBER 49	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON					DWG NO. ARCH05	
STRUCTURE NO.	TRACS NO. T0619 01C		ADOT		49 OF 70		

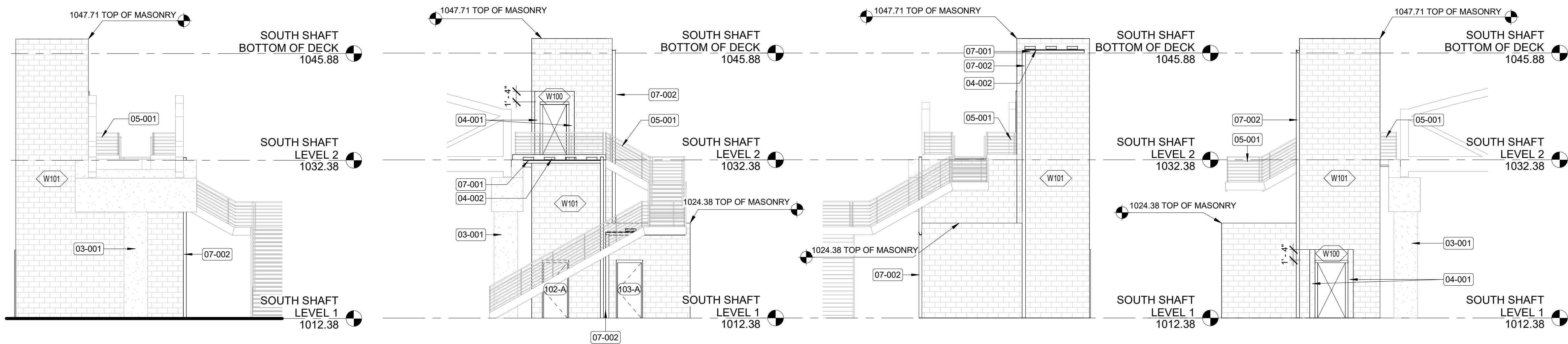


1 NORTH ELEVATION - NORTH SHAFT
1/8" = 1'-0"

2 SOUTH ELEVATION - NORTH SHAFT
1/8" = 1'-0"

3 EAST ELEVATION - NORTH SHAFT
1/8" = 1'-0"

4 WEST ELEVATION - NORTH SHAFT
1/8" = 1'-0"

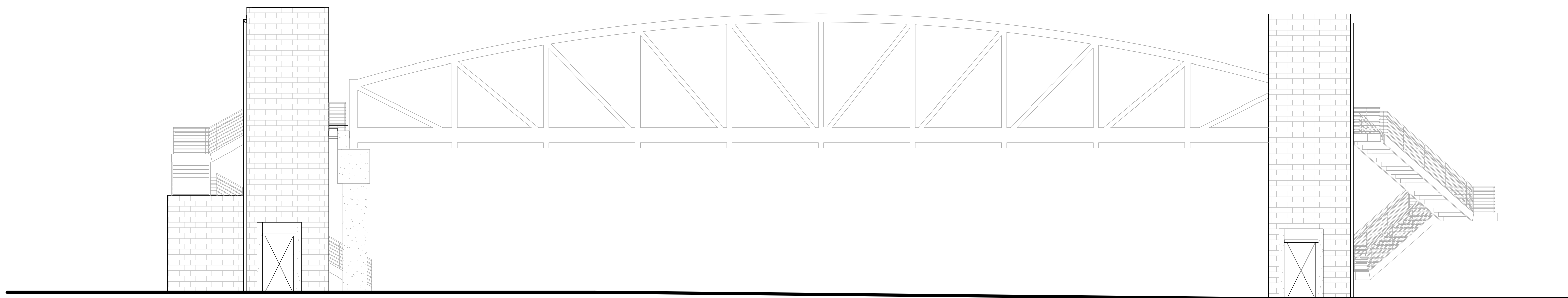


5 NORTH ELEVATION - SOUTH SHAFT
1/8" = 1'-0"

6 SOUTH SHAFT - WEST ELEVATION
1/8" = 1'-0"

7 SOUTH SHAFT - SOUTH ELEVATION
1/8" = 1'-0"

8 SOUTH SHAFT - EAST ELEVATION
1/8" = 1'-0"



9 OVERALL BRIDGE ELEVATION
1/8" = 1'-0"

BUILDING ELEVATION GENERAL NOTES

- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"

FINISH LEGEND

LEGEND

CMU-1
8" NOMINAL CONCRETE MASONRY UNIT (CMU), SMOOTH FACE, STANDARD GREY COLOR
RAKED MORTAR JOINTS
APPLY CLEAR ANTI-GRAFFITI SEALER PER MANUFACTURER'S RECOMMENDATIONS.

EIFS-1
BASIS OF DESIGN:
MANUFACTURER: DRYVIT
FINISH: SANDBLEB FINE
COLOR: DEW380 - WHITE

PT-1
INTERIOR CEILING PAINT
COLOR: ALABASTER SW 7008
MANUFACTURER: SHERWIN WILLIAMS

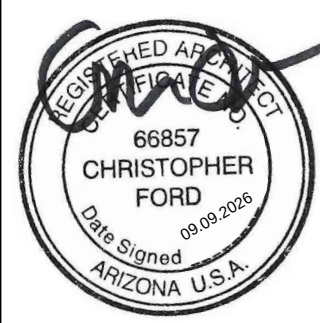
PT-2
ACCENT PAINT
COLOR: IRON ORE SW 7069
MANUFACTURER: SHERWIN WILLIAMS

KEYNOTES

NUMBER	TEXT
03-001	CAST-IN-PLACE CONCRETE BRIDGE COLUMN - SEE STRUCTURAL DWGS.
04-001	LEAVE BLOCK OUT IN MASONRY SHAFT AS REQUIRED FOR JAMB-MOUNTED CONTROLLER AND HALL STATION PER MANUFACTURER'S RECOMMENDATIONS. VERIFY ROUGH OPENING IN MASONRY WITH MANUFACTURER PRIOR TO INSTALL AS ROUGH OPENING REQUIRED IS LARGER THAN SPECIFIED ELEVATOR DOOR.
04-002	OPENING IN MASONRY FOR SCUPPER - SEE STRUCTURAL DWGS. VERIFY HEIGHT AND LOCATION INFIELD BASED ON FINAL ROOF SLOPES
05-001	STAIRS, HANDRAIL, GUARDRAIL, AND BRIDGE STRUCTURE SHOWN FOR REFERENCE ONLY - SEE CIVIL/STRUCTURAL DWGS.
07-001	CONTINUOUS GUTTER AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.

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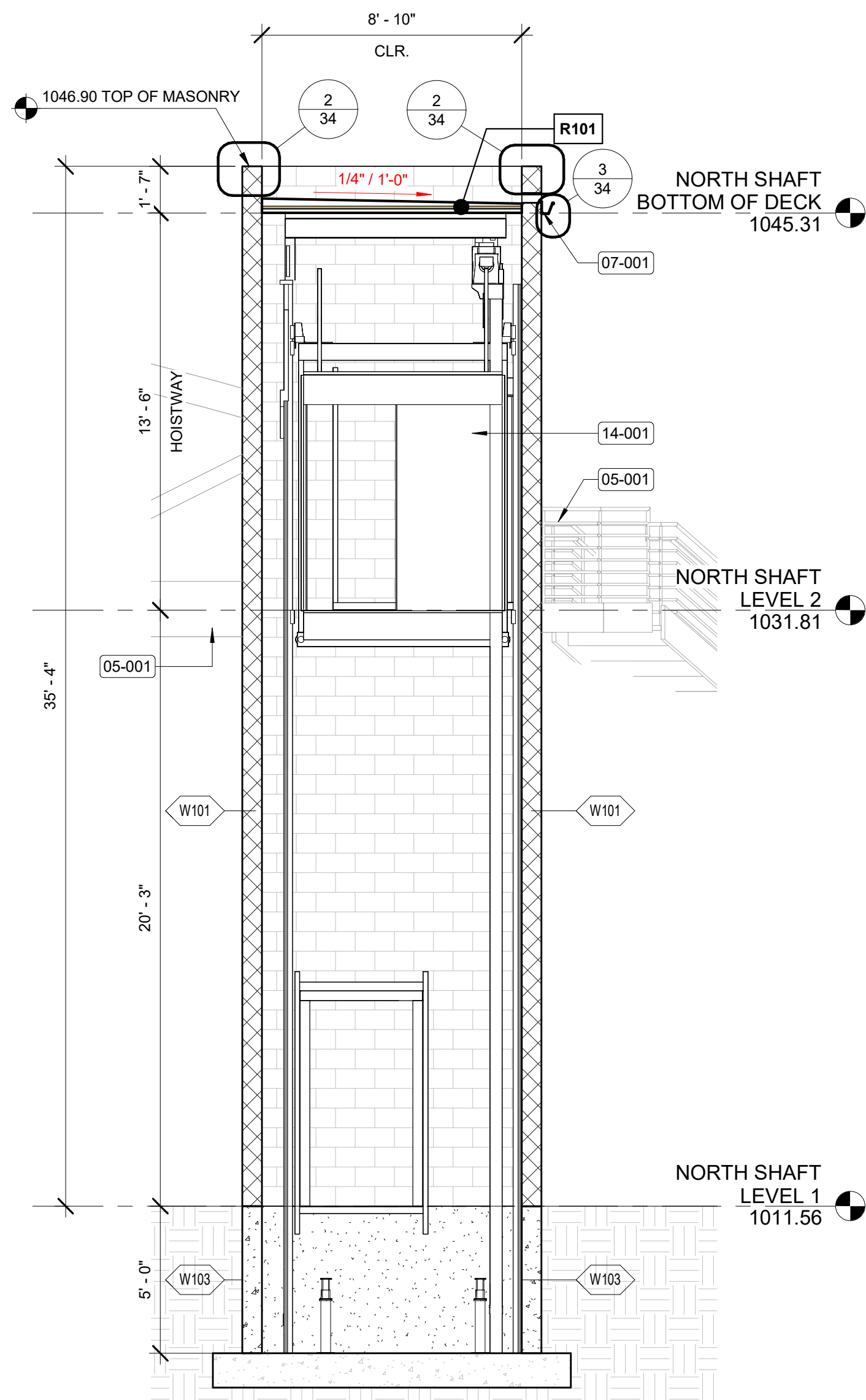
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DRAWN	NL	09/26
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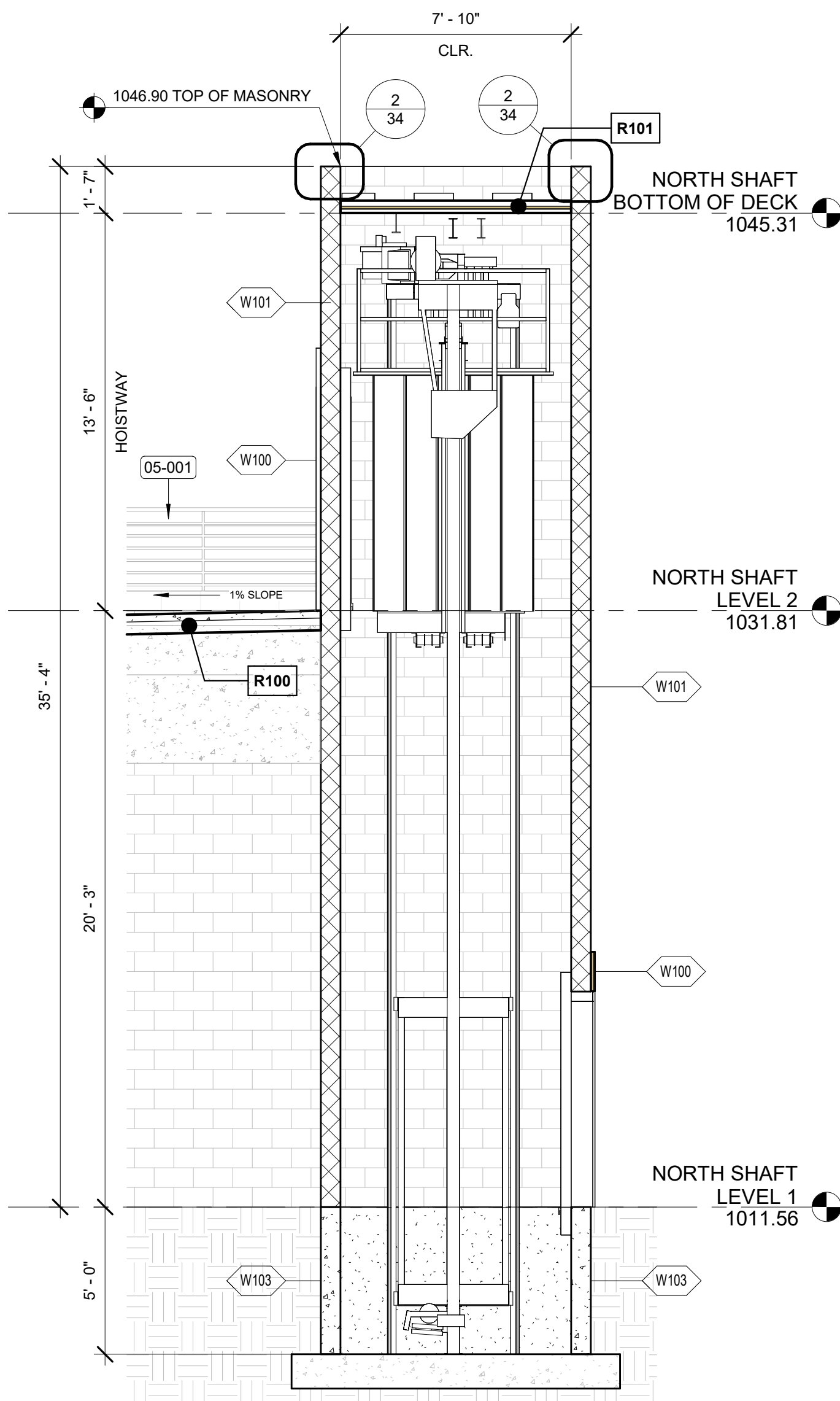
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

BRIDGE ELEVATIONS

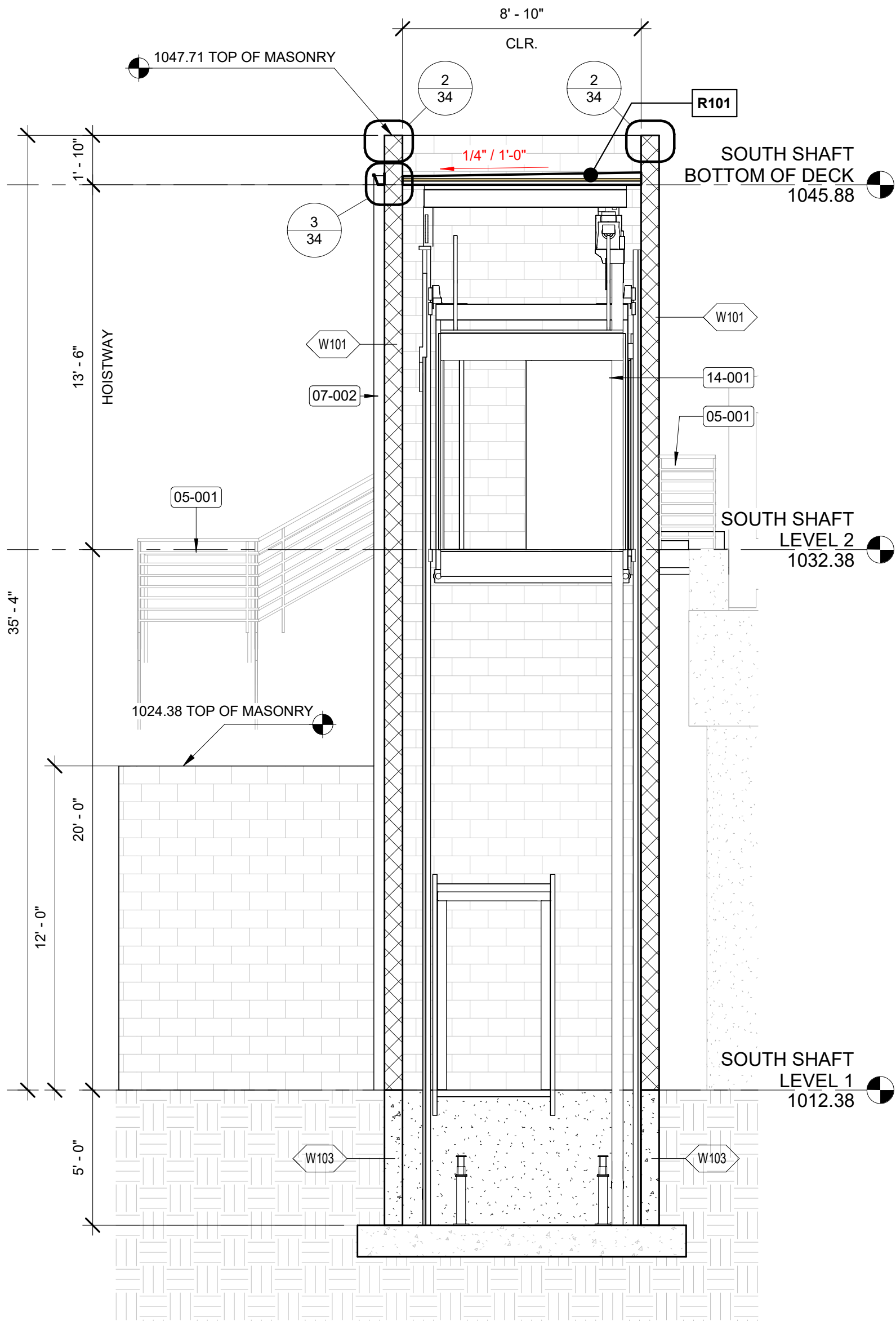
ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NUMBER 50	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. ARCH06
STRUCTURE NO.	TRACS NO. T0619 01C		ADOT		50 OF 70		



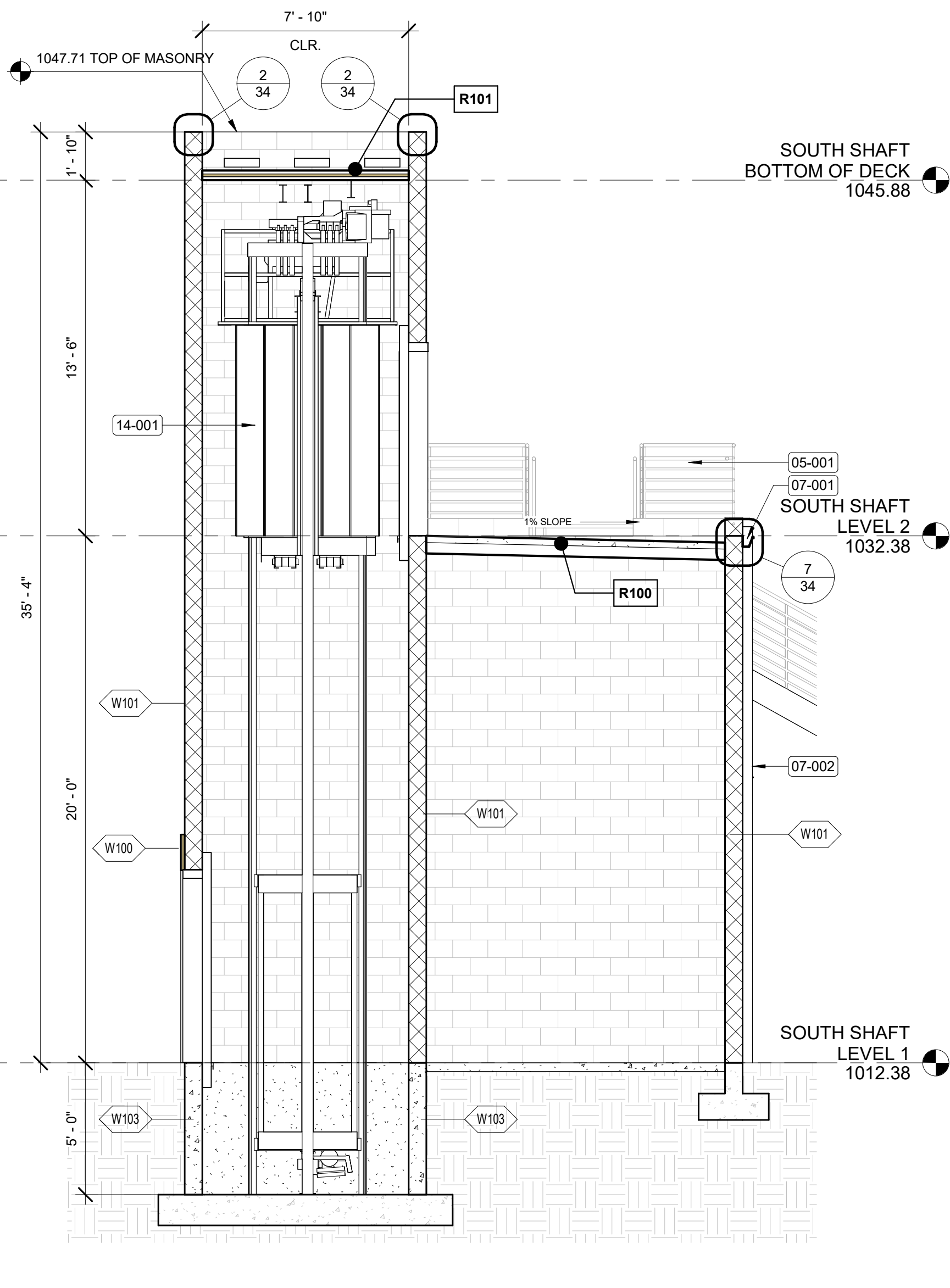
1 EAST/WEST SECTION - NORTH SHAFT
1/4" = 1'-0"



2 NORTH/SOUTH SECTION - NORTH SHAFT
1/4" = 1'-0"



3 EAST/WEST SECTION - SOUTH SHAFT
1/4" = 1'-0"



4 NORTH/SOUTH SECTION - SOUTH SHAFT
1/4" = 1'-0"

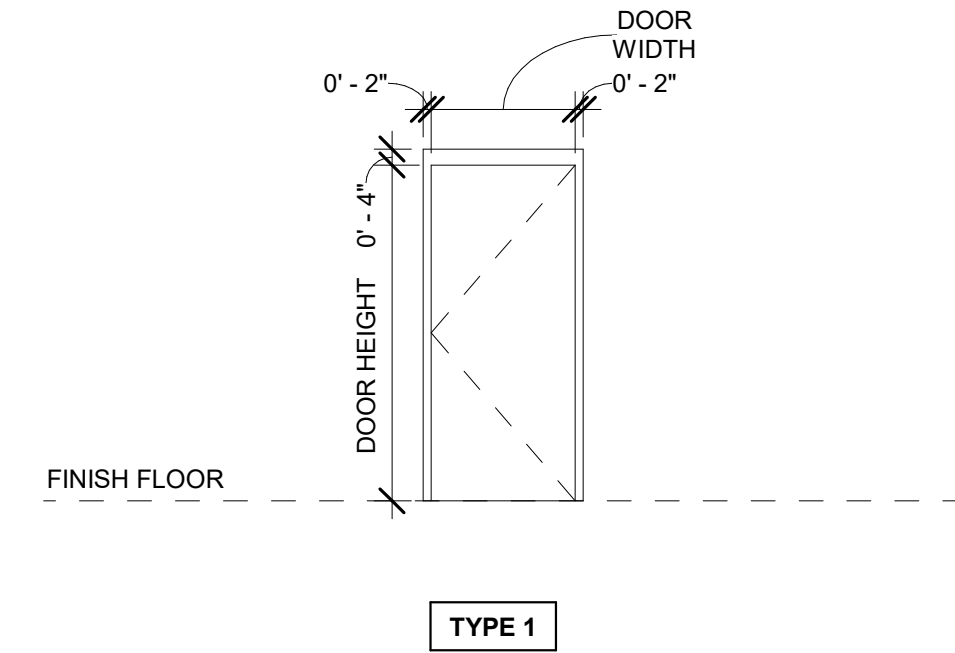
KEYNOTES

NUMBER	TEXT
05-001	STAIRS, HANDRAIL, GUARDRAIL, AND BRIDGE STRUCTURE SHOWN FOR REFERENCE ONLY - SEE CIVIL/STRUCTURAL DWGS.
07-001	CONTINUOUS GUTTER AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS
07-002	CONTINUOUS DOWNSPOUT AS SHOWN INSTALLED PER SMACNA RECOMMENDATIONS. PROVIDE SPLASH BLOCK OR SIM AT BOTTOM OF DOWNSPOUT PER CIVIL DWGS.
14-001	TRACTION ELEVATOR W/ MACHINE ROOM PER MANUFACTURER'S RECOMMENDATIONS. FLOORING IN ELEVATOR CAB TO BE 1/2" SLIP RESISTANT DIAMOND PLATE WITH MAX TOTAL WEIGHT OF 200 POUNDS INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. SUBMIT TO ARCHITECT FOR APPROVAL PRIOR TO INSTALL.

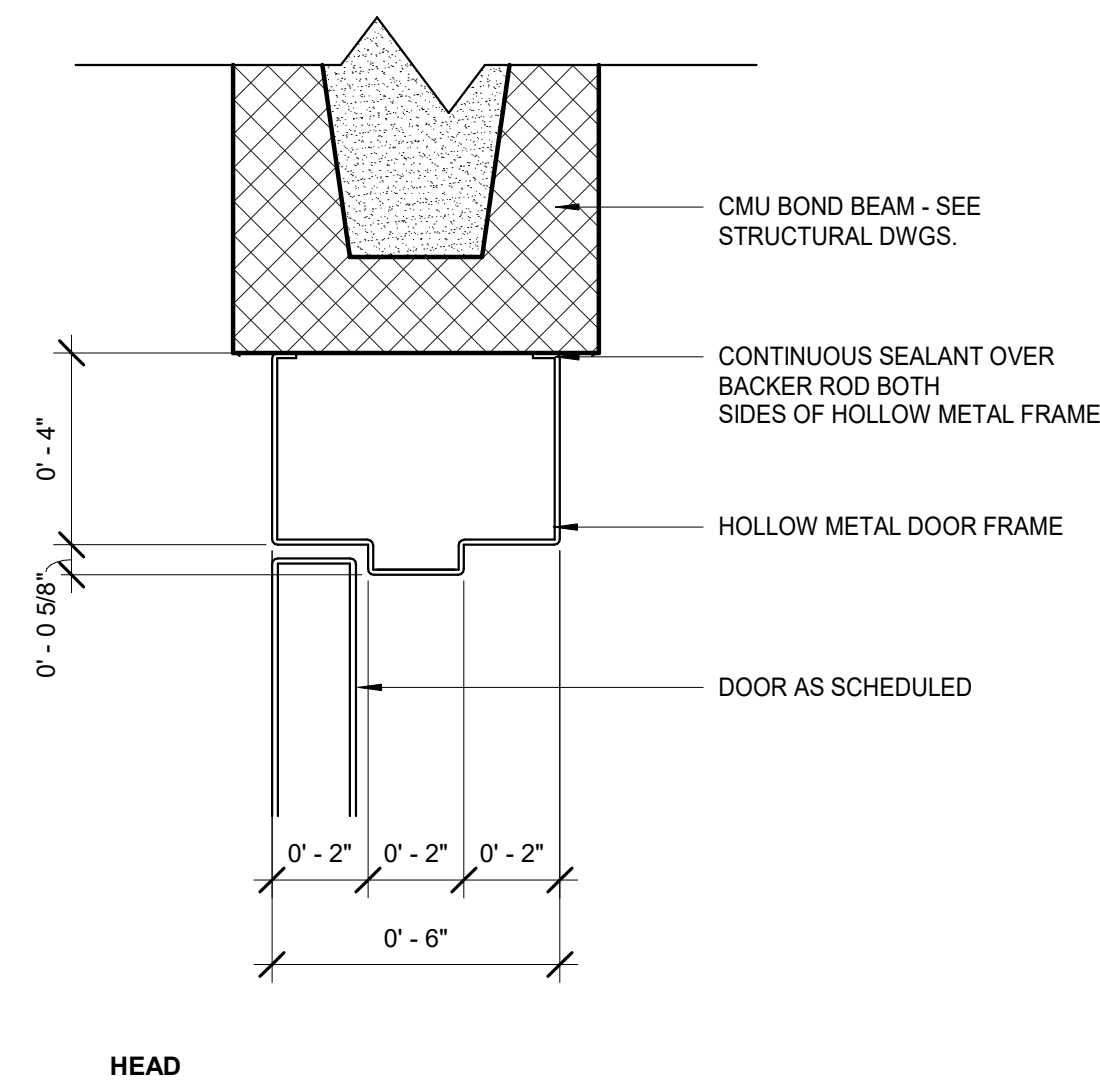
BUILDING SECTION GENERAL NOTES

- ALL DIMENSIONS NOTED AS "CLEAR" OR "CLR" ARE TO THE FINISH FACE OF THE MATERIAL
- FACE OF FINISHES ARE TO ALIGN WHEN NOTED TO "ALIGN"

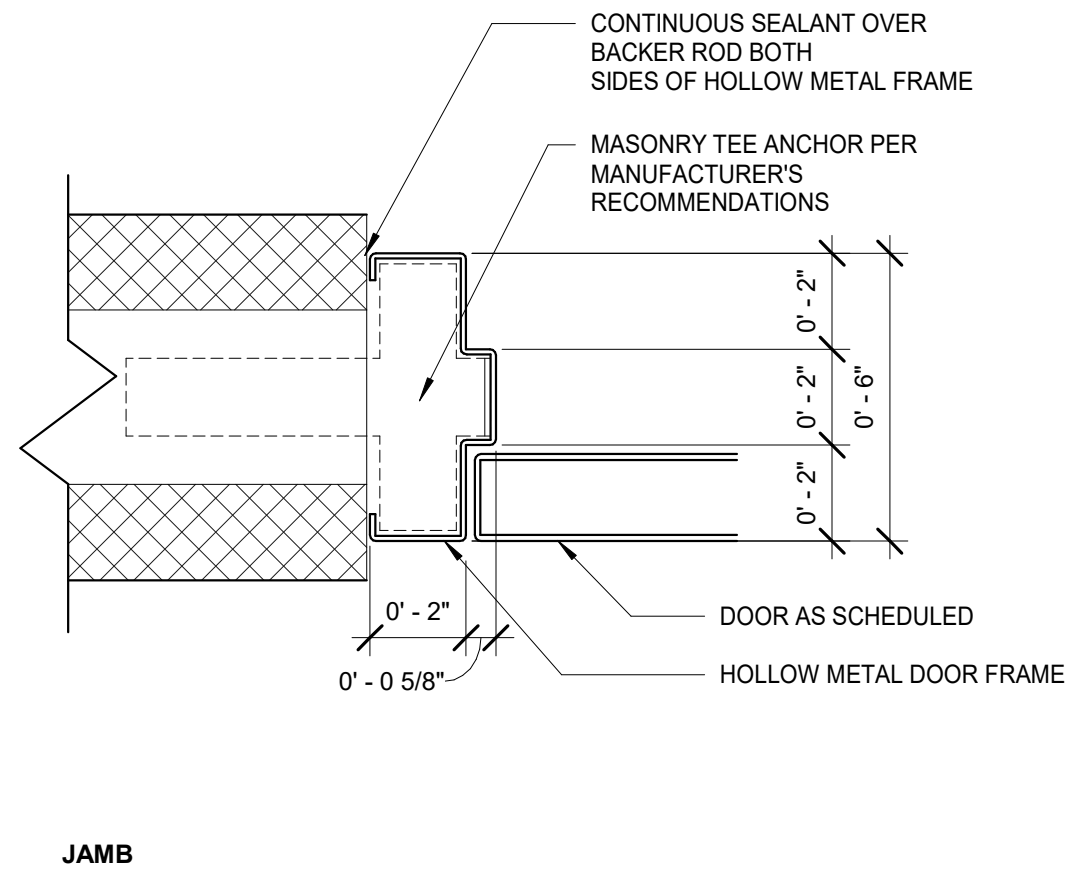
DOOR SCHEDULE											
Door Number	Type	Door					Fire Rating	Frame			Comments
		Width	Height	Thickness	Material	Finish		Type	Material	Finish	
103-A	1	3' - 0"	7' - 0"	0' - 1 3/4"	STL	PT-2	0	1	WHMF	PT-2	A
102-A	1	3' - 0"	7' - 0"	0' - 1 3/4"	STL	PT-2	0	1	WHMF	PT-2	A
101-A	1	3' - 0"	7' - 0"	0' - 1 3/4"	STL	PT-2	0	1	WHMF	PT-2	A



1 DOOR ELEVATIONS
1/4" = 1'-0"



2 TYPICAL DOOR AT MASONRY OPENING
3" = 1'-0"



DOOR SCHEDULE GENERAL NOTES

- FOR DOUBLE DOORS, PROVIDE SPECIFIED HARDWARE IS FOR EACH LEAF UNLESS NOTED OTHERWISE. FOR PAIRS WITH PANIC DEVICES, BOTH DOORS TO BE ACTIVE.
- INACTIVE LEAFS WITH FLUSH BOLTS TO RECEIVE DUMMER LEVER SETS TO MATCH ADJACENT LOCKSET.
- SEE SPECIFICATIONS OR HARDWARE SCHEDULE ON THIS SHEET FOR DOOR HARDWARE SCHEDULE.

COMMENT KEY NOTES

- A. DOOR TO HAVE ELECTRIFIED ACCESS CONTROL PER DOOR HARDWARE SCHEDULE AND ELECTRICAL DRAWINGS.

DOOR SCHEDULE LEGEND

WD = WOOD
STN = STAIN - CONFIRM COLOR WITH CLIENT PRIOR TO INSTALL
WHMF = WELDED HOLLOW METAL FRAME
PT = PRIME AND PAINT - CONFIRM COLOR WITH CLIENT PRIOR TO INSTALL
BM = BY MANUFACTURER
AL = ALUMINUM
BLK = BLACK ANODIZED
GL = GLASS
STL = STEEL
PT = PAINT

0' - 0 3/4" PER STRUCTURAL

PROVIDE 3/4" DRAINAGE BOARD OVER SHEET WATERPROOFING AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS

SHEET WATERPROOFING FOR BELOW GRADE APPLICATIONS ON EXTERIOR FACE OF ELEVATOR PIT PER MANUFACTURER'S RECOMMENDATIONS

EXTERIOR

CAST-IN-PLACE CONCRETE ELEVATOR PIT WALL

INTERIOR

SECTION

PROVIDE 3/4" DRAINAGE BOARD OVER SHEET WATERPROOFING AS REQUIRED PER MANUFACTURER'S RECOMMENDATIONS

SHEET WATERPROOFING FOR BELOW GRADE APPLICATIONS ON EXTERIOR FACE OF ELEVATOR PIT PER MANUFACTURER'S RECOMMENDATIONS

CAST-IN-PLACE CONCRETE ELEVATOR PIT WALL

EXTERIOR

INTERIOR

PLAN

EXTERIOR WALL ASSEMBLY - W103

CONCRETE ELEVATOR PIT WALL

0' - 3 5/8"

PROVIDE CLEAR PENETRATING SEALER ON ALL FACES OF MASONRY EXPOSED TO THE EXTERIOR

4" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

SECTION

PROVIDE CLEAR PENETRATING SEALER ON ALL FACES OF MASONRY EXPOSED TO THE EXTERIOR

4" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

PLAN

EXTERIOR WALL ASSEMBLY - W102

EXPOSED 4" CMU WALL W/ CLEAR SEALER

0' - 7 5/8"

PROVIDE CLEAR PENETRATING SEALER ON ALL FACES OF MASONRY EXPOSED TO THE EXTERIOR

8" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

SECTION

PROVIDE CLEAR PENETRATING SEALER ON ALL FACES OF MASONRY EXPOSED TO THE EXTERIOR

8" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

PLAN

EXTERIOR WALL ASSEMBLY - W101

EXPOSED 8" CMU WALL W/ CLEAR SEALER

1" +/- 1/4" 7 5/8"

EIFS SYSTEM

EIFS MESH, BASE W/ ACRYLIC FINISH

1" RIGID INSULATION, FLUID APPLIED AIR/WATER BARRIER

8" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

SECTION

EIFS SYSTEM

EIFS MESH, BASE W/ ACRYLIC FINISH

1" RIGID INSULATION, FLUID APPLIED AIR/WATER BARRIER

8" CMU - SEE STRUCTURAL

EXTERIOR

INTERIOR

PLAN

EXTERIOR WALL ASSEMBLY - W100

EIFS OVER 8" CMU WALL

EXTERIOR

SLOPE TO DRAIN

INTERIOR

SECTION

ROOF ASSEMBLY - R100

SPLIT SLAB WALK DECK

INSTALL 3" CONCRETE TOPPING SLAB OVER METAL DECK AS SPECIFIED. PROVIDE REINFORCEMENT, CONTROL JOINTS, AND FINISH PER STRUCTURAL REQUIREMENTS.

INSTALL NEW ROOF ROLL-ON MEMBRANE. PROVIDE CONTINUOUS, WATERTIGHT SEAL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. LAP AND SEAL ALL JOINTS, FLASHINGS, AND PENETRATIONS.

PROVIDE COMPOSITE METAL DECK AS SPECIFIED. SEE STRUCTURAL DRAWINGS FOR PROFILE, THICKNESS, AND ATTACHMENT REQUIREMENTS. COORDINATE INSTALLATION WITH STRUCTURAL FOR CONTINUITY AND LOAD CAPACITY.

EXTERIOR

SLOPE TO DRAIN

INTERIOR

SECTION

ROOF ASSEMBLY - R101

SPRAY FOAM ROOF MEMBRANE OVER FLAT STRUCTURE

SPRAY POLYURETHANE FOAM, 1" MINIMUM PLUS TAPERED INSULATION AS REQUIRED FOR DRAINAGE, REFER TO ROOF PLAN

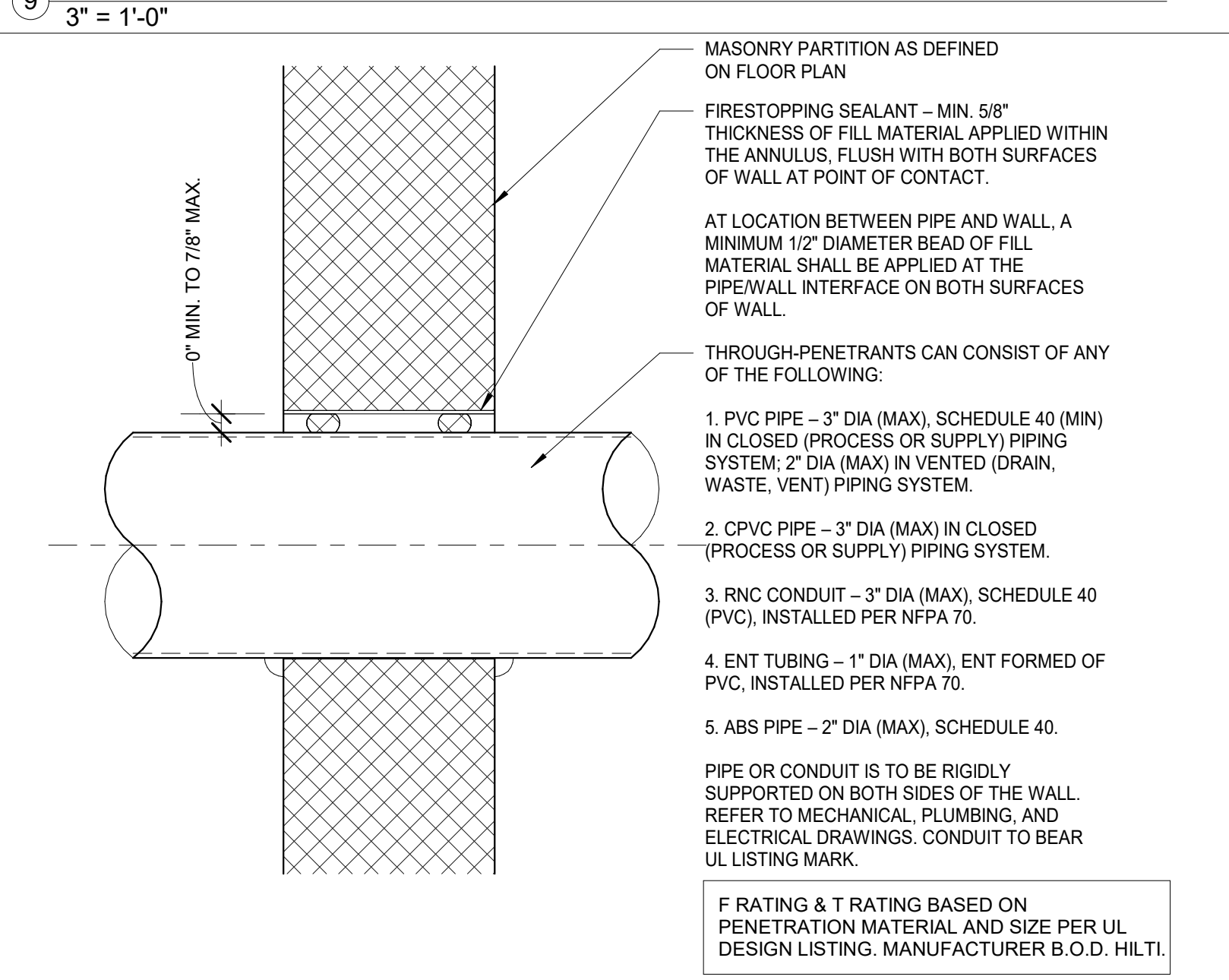
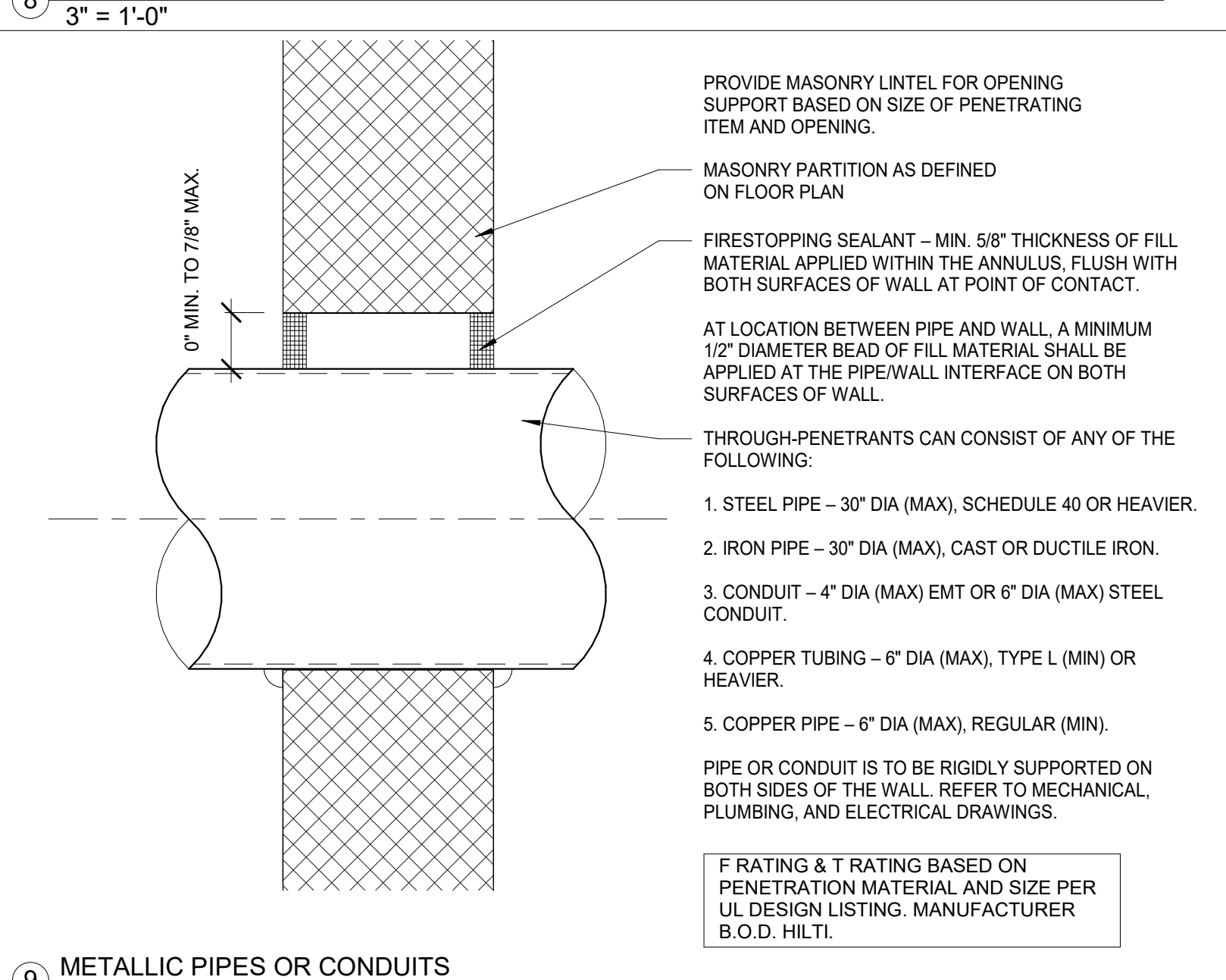
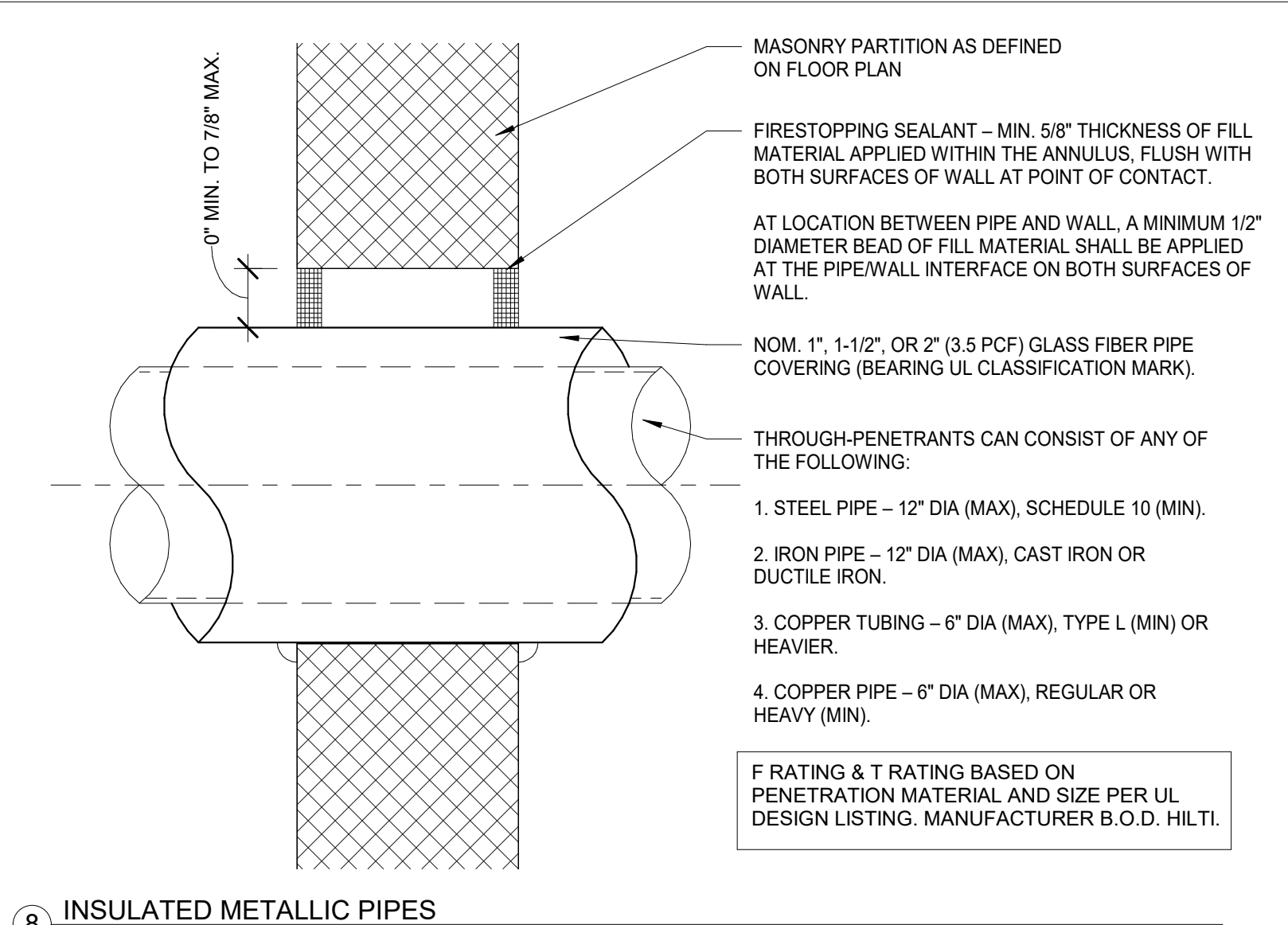
INSTALL MINIMUM 1" RIGID INSULATION ALIGN PANELS WITH TIGHT, STAGGERED JOINTS.

INSTALL NEW 1/4" CONTINUOUS ROOF COVER BOARD OVER METAL DECK. ALIGN BOARDS TIGHTLY WITH STAGGERED JOINTS. FASTEN SECURELY PER MANUFACTURER'S RECOMMENDATIONS TO PROVIDE SMOOTH, UNIFORM SUBSTRATE FOR ROOF MEMBRANE INSTALLATION.

INSTALL NEW 1 1/2" METAL ROOF DECK, FACTORY-PRIMED, LAID WITH RIBS PERPENDICULAR TO SUPPORTING MEMBERS. COORDINATE FASTENING WITH STRUCTURAL FOR WELDING OR MECHANICAL ATTACHMENT AS REQUIRED. ENSURE PANELS ARE ALIGNED, SECURELY FASTENED, AND PROVIDE CONTINUOUS BEARING AT SUPPORTS.

4LINE STUDIO 4LINE STUDIO LLC WWW.4LINESTUDIO.COM 480.251.2048 CFORD@4LINESTUDIO.COM	DESIGN DRAWN CHECKED NL NL CF 09/26 09/26 09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP EXTERIOR ASSEMBLIES	ROUTE - MILEPOST STRUCTURE NO.	F.H.W.A. Arizona Division ARIZ. LOCATION VAN BUREN AT 96TH AVE, TOLLESON TRACS NO. T0619 01C	STATE ARIZ. PROJECT NO. 0000 MA TOL FEDERAL ID NO. CDS TOL-Q(200)T SHEET NUMBER 53 TOTAL SHEETS 70 RECORD DRAWING	DWG NO. ARCH09 53 OF 70

PLOT DATE:4/24/2026 9:55:02 AM



8 INSULATED METALLIC PIPES
3" = 1'-0"

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DESIGN

DRAWN

CHECKED

NL

NL

CF

09/26

09/26

09/26

ARIZONA
DEPARTMENT OF
TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

EXTERIOR DETAILS

ROUTE
-

MILEPOST

STRUCTURE NO.

STATE
ARIZ.

PROJECT NO.
0000 MA TOL

FEDERAL ID NO.
CDS TOL-Q(200)T

SHEET
NUMBER
54

TOTAL
SHEETS
70

RECORD DRAWING

LOCATION
VAN BUREN AT 96TH AVE, TOLLESON

TRACS NO. T0619 01C

DWG NO. ARCH10

54 OF 70

ARIZONA
DEPARTMENT OF
TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

EXTERIOR DETAILS

ROUTE
-

MILEPOST

STRUCTURE NO.

STATE
ARIZ.

PROJECT NO.
0000 MA TOL

FEDERAL ID NO.
CDS TOL-Q(200)T

SHEET
NUMBER
54

TOTAL
SHEETS
70

RECORD DRAWING

LOCATION
VAN BUREN AT 96TH AVE, TOLLESON

TRACS NO. T0619 01C

DWG NO. ARCH10

54 OF 70

ARIZONA
DEPARTMENT OF
TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

EXTERIOR DETAILS

ROUTE
-

MILEPOST

STRUCTURE NO.

STATE
ARIZ.

PROJECT NO.
0000 MA TOL

FEDERAL ID NO.
CDS TOL-Q(200)T

SHEET
NUMBER
54

TOTAL
SHEETS
70

RECORD DRAWING

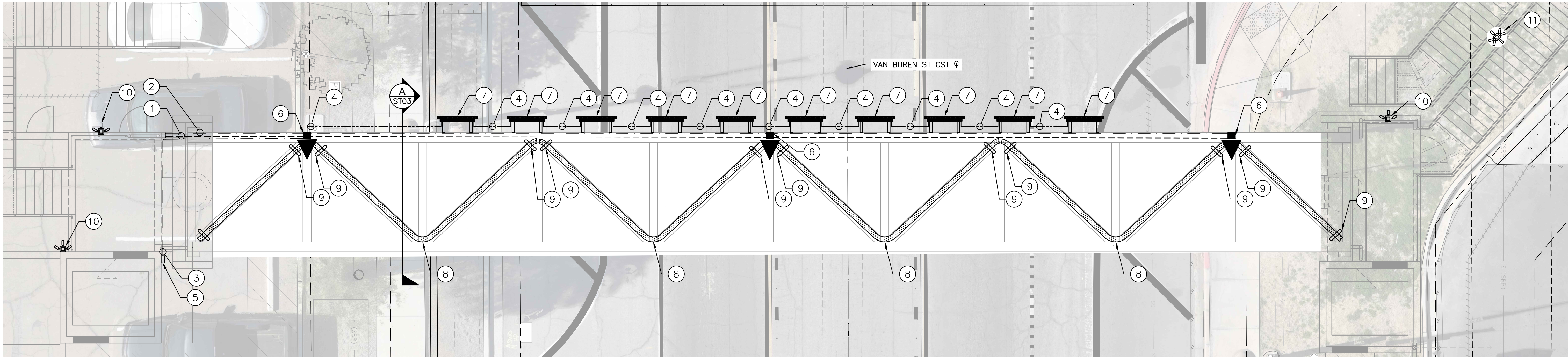
LOCATION
VAN BUREN AT 96TH AVE, TOLLESON

TRACS NO. T0619 01C

DWG NO. ARCH10

54 OF 70

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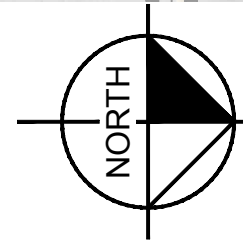
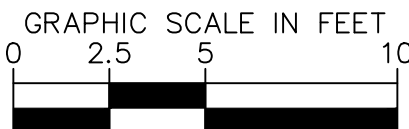


ELECTRICAL CONSTRUCTION NOTES

- EXTEND (4) #10 AWG CONDUCTORS AND (1) #10 AWG GROUND IN 1" GRC CONDUIT (USE HDPE WHERE INSTALLED WITHIN BRIDGE STRUCTURE) FROM PANEL 'L1' TO JUNCTION BOX. SEE DETAIL E, SHEET 56.
- EXTEND DMX CONTROL CABLE (CAT6 ONLY IF APPROVED BY MANUFACTURER; OTHERWISE USE DMX-RATED CABLE) IN 1" GRC CONDUIT (HDPE WITHIN BRIDGE STRUCTURE) FROM DMX MASTER CONSOLE TO DMX DECODERS. SEE DETAIL E, SHEET 56.
- EXTEND DMX CONTROL CABLE IN 1" HDPE CONDUIT FROM COMMUNICATION CONTROL BOX TO WALL-WASH FIXTURES. SEE DETAIL E, SHEET 56.
- EXTEND MANUFACTURER-SPECIFIED JUMPER CABLE TO WALL-WASH FIXTURES. CONTRACTOR TO SECURE EXTERNAL CABLE TO FIXTURE SUPPORT ARMS AND BRIDGE MEMBER TO ENSURE NO LOOSE CABLES. SEE DETAIL E, SHEET 56.
- INSTALL SURFACE-MOUNTED, IP66-RATED CBX60-100 COMMUNICATION CONTROL BOX. ROUTE (2) #10 AWG CONDUCTORS AND (1) #10 AWG GROUND FROM PANEL 'L1', CIRCUIT(S) 15 AND 17, FOR COMPLETE SYSTEM.
- INSTALL 4" X 6" X 6" JUNCTION BOX IN BOTTOM CORD AND 10" X 10" X 10" JUNCTION BOX IN TOP CORD. JUNCTION BOXES TO BE NEMA 1 WITH NEMA 3R COVER PLATE. SEE DETAIL A, SHEET 56.
- INSTALL LUMENPULSE LUMENFACADE MAX MODEL NO. LFM-CH-UL-120_277-48-10W-MRGBWP-WW-CL-LF-DMX/RDM-VRBO-WMCH18-XD-BRZ-NA MOUNTED ON 18" SUPPORT ARMS MOUNTED TO BRIDGE. SEE DETAIL E, SHEET 56.
- INSTALL APPROX. 30 LF OF KELVIX EDURAWAVE NARROW DMX PIXEL FLEXIBLE LED MODEL NO. ENN-TX-RGBW3-24-E67-1-30. INSTALL STRAIGHT SECTIONS IN BRACKET MODEL NO. ENN-CH-AL-SR-2M AND CURVED SECTIONS IN FLEX CHANNEL MODEL NO. ENN-CH-SS-FLX-1M. SEE DETAIL E, SHEET 56.
- INSTALL LIGHTING SECURITY BRACKET AT END OF LED IN CHANNEL PER DETAIL B, SHEET 56.
- INSTALL (3) HK LIGHTING ZXL30-I FIXTURES ON SINGLE JUNCTION BOX WITH 3-HOLE 1/2" NPT COVER PLATE. SEE DETAIL C, SHEET 56. REFER TO MEP PLANS FOR MOUNTING HEIGHTS AND CIRCUITING TO PANEL 'L1'.
- INSTALL (3) HK LIGHTING ZXL30-I FIXTURES ON POLE PER DETAIL D, SHEET 56. REFER TO MEP PLANS FOR MOUNTING HEIGHTS AND CIRCUITING TO PANEL 'L1'.

AESTHETIC LIGHTING PLAN

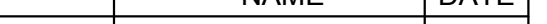
SCALE: 1" = 5'-0"



AESTHETIC LIGHTING EQUIPMENT LEGEND

- BOTTOM CORD JUNCTION BOX
- TOP CORD JUNCTION BOX
- PROPOSED ELECTRICAL WIRING
- PROPOSED COMMUNICATIONS WIRING
- PROPOSED ELEC/COMM JUMPER WIRE
- PROPOSED FLEXIBLE LED FIXTURE



	NAME		DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE -	F.H.W.A. Arizona Division ARIZ.	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING	
	DESIGN	DC	09/26										
	DRAWN	DC	09/26										
	CHECKED	JDM	09/26										
 © 2020 KIMLEY-HORN AND ASSOCIATES, INC.				BRIDGE LIGHTING DETAILS	MILEPOST	VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. SL01	
					STRUCTURE NO.	TRACS NO. T0619 01C						56 OF 70	

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

Pharos TPS 5

Full Color Touch Screen

For Pharos DMX512 eDMX Controller

Partnership with

pharos

CE

RoHS

REACH

UL

I Description

Upgrade your lighting control system with the new Pharos TPS 5 - an elegant touch panel with a customizable 9" capacitive touch screen and seamless glass design that enhances your touch experience. Compatible with any Pharos Designer Controller, the TPS 5 also boasts improved core functionality, touch performance, screen resolution, and a universal mounting solution for easy installation.

I Features

- Touch Interface
- Customizable
- Easy Install
- Scalable

I Dimensions

11.1" (28.2mm)

3.81" (96.7mm)

5.51" (139.9mm)

0.63" (16.1mm)

1/2 | CM TPS5 | quotes@kelvik.com | 800.789.3810

11623JH

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

Pharos LPC

DMX512 eDMX Controller

Partnership with

pharos

CE

RoHS

REACH

UL

I Description

Pharos LPC is a reliable, solid state DMX512 and eDMX controller with a large focus on systems integration and triggering.

I Features

- Remote Management with Pharos Cloud
- Scalable
- Flexible Outputs
- Custom User Interfaces

I Dimensions

5.51" (143.5mm)

3.54" (89.9mm)

2.28" (57.9mm)

8.1" (205.7mm)

1/3 | DMX512-PLX | quotes@kelvik.com | 800.789.3810

Specification Subject to Change | 110724RY

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

DMXD-5C-8A-UNV

5 Channel | 8 AMP/CH | DMX Decoder

RoHS

CE

REACH

UL

I Features

- RGBW 5-Channel DMX Decoder
- Standard DMX512 Compliant Interface
- Digital Numeric Display for DMX Address Assignment
- Adjustable Pulse Width Modulation Frequency
- Adjustable Dimming Curve Gamma Value
- Accepts DMX via XLR, RJ45, and Terminal Block

I Series Spec

Series

DMXD

Input Voltage

12-24V DC

Output

5 x 8A

Constant Voltage

Yes

Length

6.44" (163.51mm)

Width

2.87" (73.02mm)

Height

1.57" (39.1mm)

IP Rating

IP20

Dimming Range

0.4% - 100%

Operating Temperature

-13°F (-25°C) to 122°F (50°C)

Storage Temperature

-4°F (-20°C) to 161°F (70°C)

I Dimensions

1.57" (39.1mm)

2.87" (73.02mm)

6.44" (163.51mm)

I Wiring Example

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

1/1 | DMXD-5C-8A-UNV | quotes@kelvik.com | 800.789.3810

Specification Subject to Change | 110724RY

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

DMXD-5C-8A-UNV

5 Channel | 8 AMP/CH | DMX Decoder

RoHS

CE

REACH

UL

I Features

- RGBW 5-Channel DMX Decoder
- Standard DMX512 Compliant Interface
- Digital Numeric Display for DMX Address Assignment
- Adjustable Pulse Width Modulation Frequency
- Adjustable Dimming Curve Gamma Value
- Accepts DMX via XLR, RJ45, and Terminal Block

I Series Spec

Series

DMXD

Input Voltage

12-24V DC

Output

5 x 8A

Constant Voltage

Yes

Length

6.44" (163.51mm)

Width

2.87" (73.02mm)

Height

1.57" (39.1mm)

IP Rating

IP20

Dimming Range

0.4% - 100%

Operating Temperature

-13°F (-25°C) to 122°F (50°C)

Storage Temperature

-4°F (-20°C) to 161°F (70°C)

I Dimensions

1.57" (39.1mm)

2.87" (73.02mm)

6.44" (163.51mm)

I Wiring Example

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

DMXD-5C-8A-UNV

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1

DMX CONTROLLER INTERFACE CUT SHEET

SCALE: NTS

2

DMX CONTROLLER CUT SHEET

SCALE: NTS

3

DMX DECODER CUT SHEET

SCALE: NTS

4

DMX WALL WASH FIXTURE CUT SHEET

SCALE: NTS

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

PROJECT NAME

LOCATION

EnduraWave Narrow DMX Pixel

Full Color Touch Screen

For Pharos DMX512 eDMX Controller

Partnership with

pharos

CE

RoHS

REACH

UL

I Description

Upgrade your lighting control system with the new Pharos TPS 5 - an elegant touch panel with a customizable 9" capacitive touch screen and seamless glass design that enhances your touch experience. Compatible with any Pharos Designer Controller, the TPS 5 also boasts improved core functionality, touch performance, screen resolution, and a universal mounting solution for easy installation.

I Features

- Touch Interface
- Customizable
- Easy Install
- Scalable

I Dimensions

11.1" (28.2mm)

3.81" (96.7mm)

5.51" (139.9mm)

0.63" (16.1mm)

1/2 | CM TPS5 | quotes@kelvik.com | 800.789.3810

11623JH

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LOCATION

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EnduraWave Narrow DMX Pixel

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11623JH

5

DMX LINEAR FLEXIBLE FIXTURE CUT SHEET

SCALE: NTS

6

CONTROL BOX CUT SHEET

SCALE: NTS

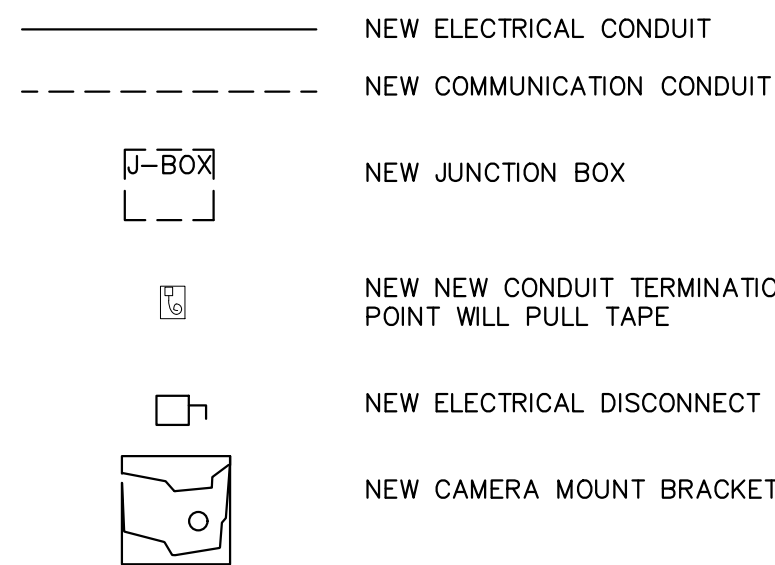
7

FLOODLIGHT FIXTURE CUT SHEET

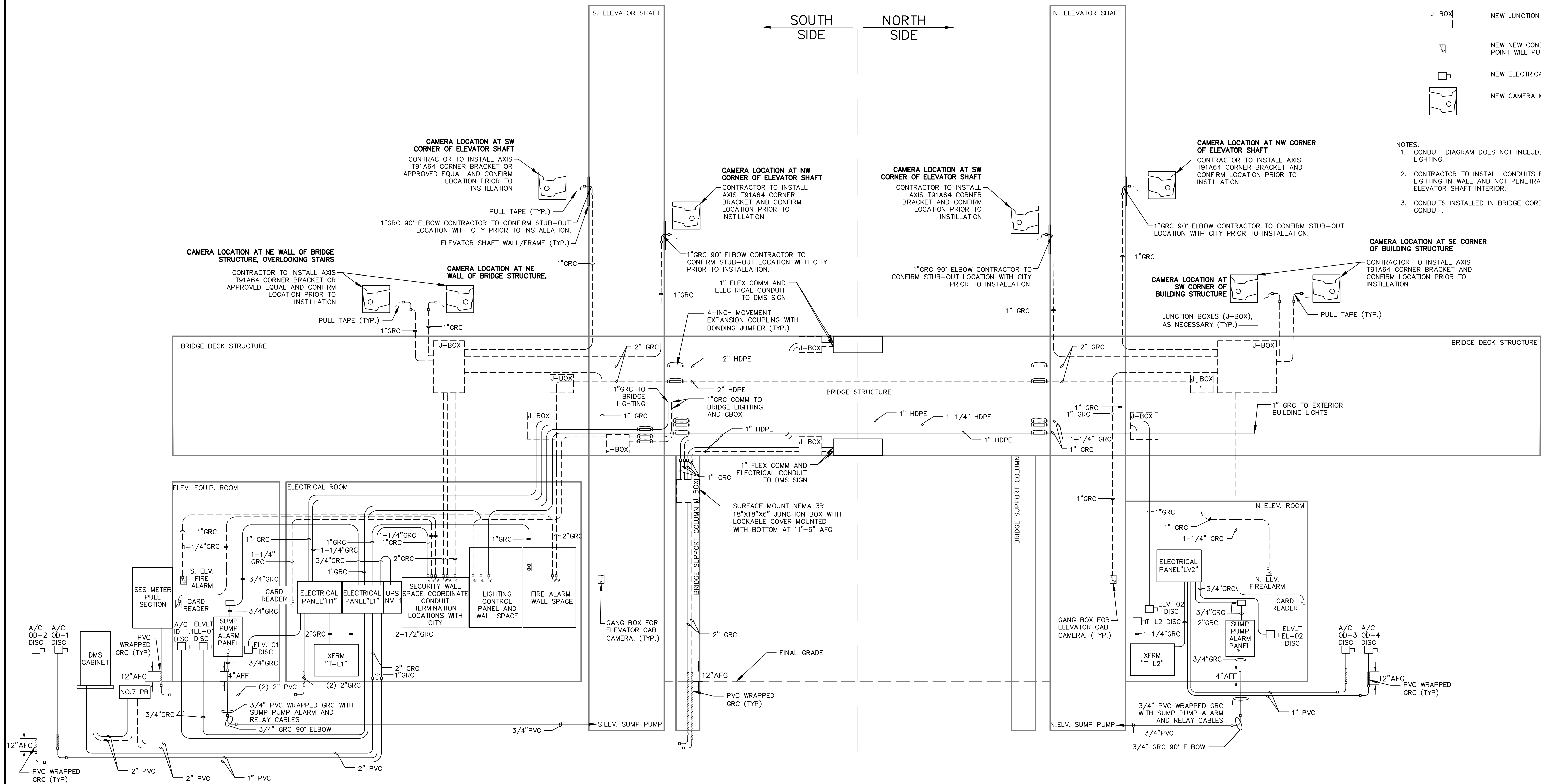
SCALE: NTS

DATE SAVED:5/6/26 K:\PHX_STRUCTURE\291151013 - 96TH AVE PEDESTRIAN BRIDGE\CADD\12-SHEETS\LIGHTING\291151013_ELA.DWG

CONDUIT DIAGRAM LEGEND



- NOTES:
1. CONDUIT DIAGRAM DOES NOT INCLUDE CONDUITS TO EXTERIOR LIGHTING.
2. CONTRACTOR TO INSTALL CONDUITS FOR CAMERAS AND LIGHTING IN WALL AND NOT PENETRATE THROUGH THE ELEVATOR SHAFT INTERIOR.
3. CONDUITS INSTALLED IN BRIDGE CORDS HAL BE HDPE TYPE CONDUIT.

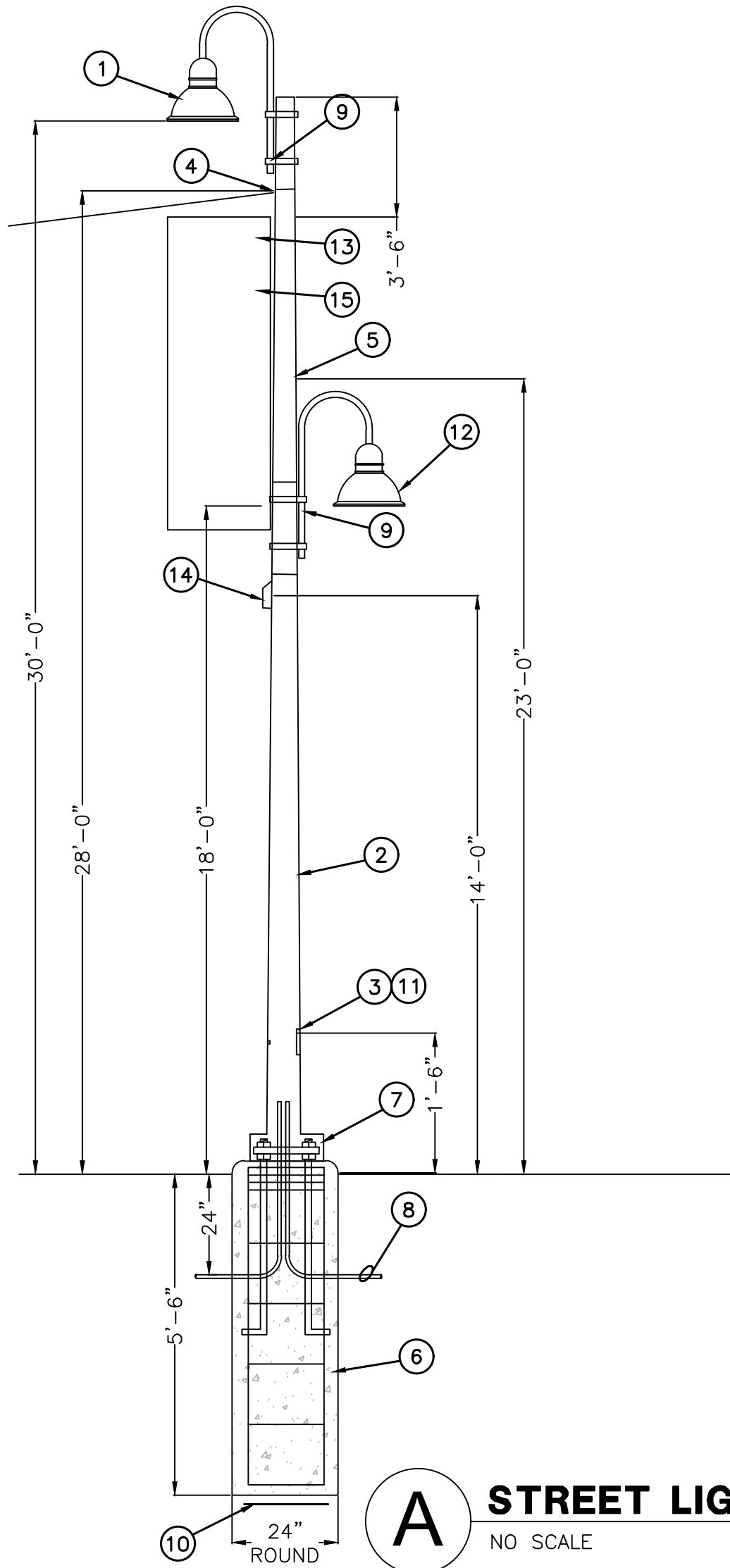


		NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	ROUTE	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO.	FEDERAL ID NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING	
	DESIGN	DC	09/26		-								
	DRAWN	DC	09/26		MILEPOST								
	CHECKED	JDM	09/26	 © 2006 KIMLEY-HORN AND ASSOCIATES, INC.	CONDUIT DIAGRAM	STRUCTURE NO.	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. SL03
	TRACS NO. T0619 01C						58 OF 70						

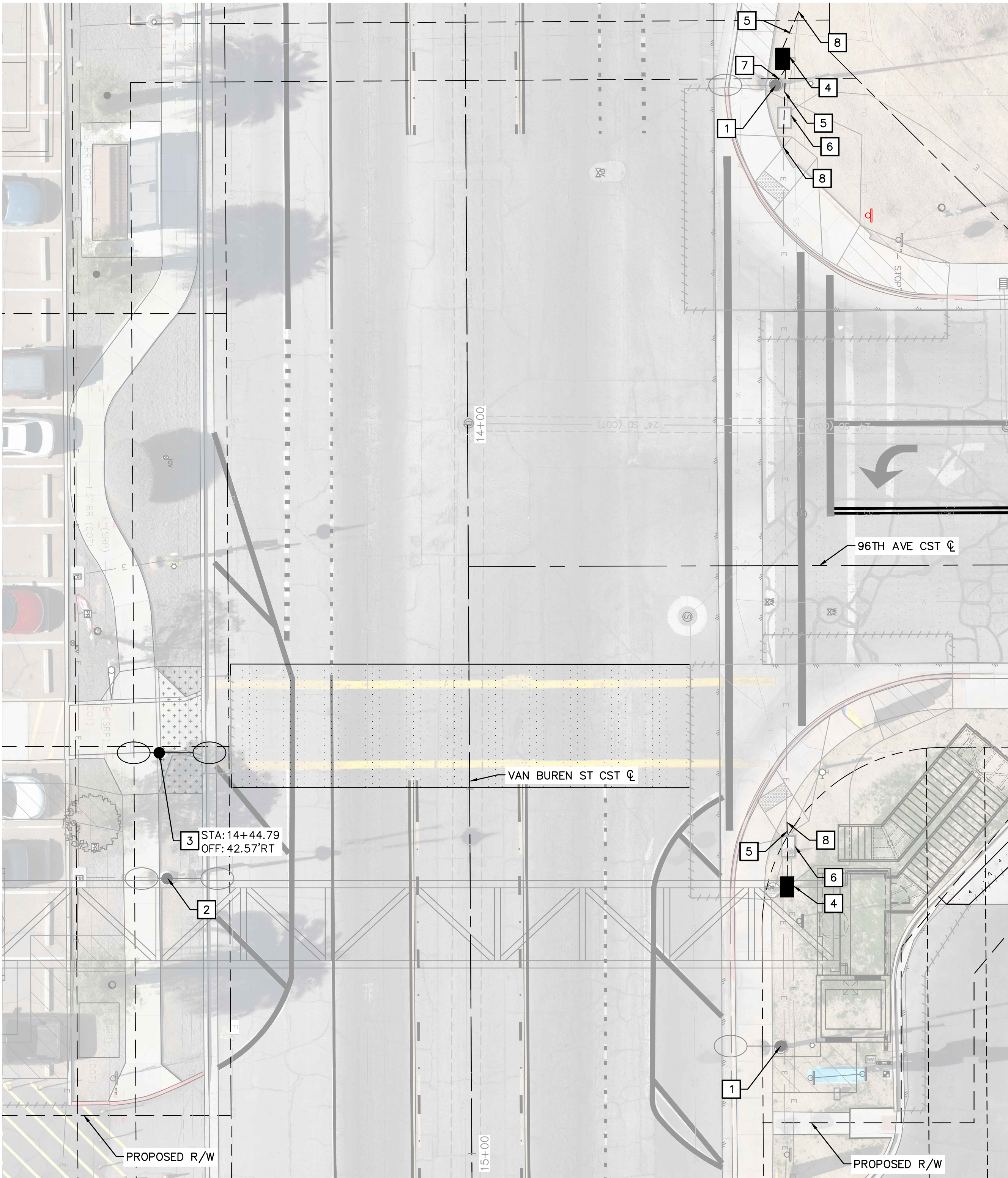
GENERAL NOTES FOR STREET LIGHTS

- A. THE CONTRACTOR SHALL COMPLY WITH STATE AND CITY STATUTES AND ORDINANCES.
- B. PRIOR TO SUBMITTAL, THE STREET LIGHT DESIGNER SHALL EXAMINE ALL GENERAL CONSTRUCTION DRAWINGS AND VISIT THE CONSTRUCTION SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS UNDER WHICH HE WILL OPERATE 12. AND WHICH WILL IN ANY WAY AFFECT THE WORK UNDER THE CONTRACT.
1. THE STREET LIGHT DESIGNER SHOULD VERIFY DIMENSIONS AT THE SITE AND IMMEDIATELY REPORT DIFFERENCES TO THE DEVELOPER'S CONSTRUCTION MANAGER AND NOT PROCEED WITH WORK UNTIL THE CONSTRUCTION MANAGER 13. RENDERS A DECISION.
2. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH ALL LICENSING REQUIREMENTS SET FORTH BY THE STATE REGISTRAR OF CONTRACTORS OFFICE TO PERFORM WORK RELATING TO STREET LIGHT INSTALLATION IN CITY 15. OF TOLLESON RIGHT-OF-WAY.
3. ONE DRY UTILITY PERMIT FOR EACH CITY OF TOLLESON STREET LIGHT PROJECT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
4. LIGHT POLES SHALL BE INSTALLED PLUMB, BE ADJUSTED TO PROVIDE PROPER ALIGNMENT TO THE ROADWAY BEING LIGHTED AND BE PROPERLY GROUNDED WHEN THE INSTALLATION IS COMPLETED.
5. STREET LIGHTS ARE INSPECTED BY THE CITY OF TOLLESON STREET LIGHTING INSPECTOR. WHEN ACCEPTED AND ENERGIZED THE CONTRACTOR WILL INSTALL POLE NUMBERS PRIOR TO INSPECTION.
6. LUMINAIRES SHALL BE INSTALLED LEVEL AND INCLUDE A LAMP AND PHOTOCCELL. THE LUMINAIRES SHALL BE FREE OF DUST, DIRT OR ANYTHING THAT WOULD IMPAIR THE OUTPUT OF THE LIGHT.
7. LUMINAIRES FURNISHED WITH MULTI-TAP DRIVERS SHALL BE REWIRED OR RECONNECTED TO MATCH THE VOLTAGE SUPPLIED BY THE ELECTRIC UTILITY COMPANY.
8. POLE SHALL BE SET PLUMB IN TWO DIRECTIONS, NINETY (90) DEGREES APART.

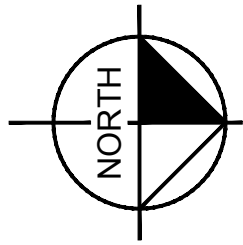
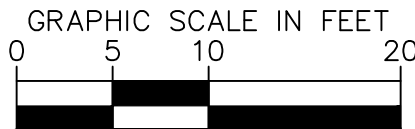
9. SURPLUS EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR.
10. WIRING SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. CONDUIT SHALL BE INSTALLED AT THE DEPTH SPECIFIED ON THEIR PLANS. CONDUIT MUST BE LISTED AND LABELED AND SUITABLE FOR UNDERGROUND USE.
11. CONNECTIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS. EACH POLE SHALL HAVE AN 8" X 5/8" COPPER CLAD GROUND ROD DRIVEN BENEATH PULL BOX. A #6 BARE COPPER LEAD FROM THE GROUND ROD IN PULL BOX TO LANDING LUG IN STREET LIGHT POLE HAND HOLE IS REQUIRED. EXCAVATION FOR PULL BOXES AND MATERIAL SPECIFICATIONS SHALL BE PER SERVING UTILITY COMPANY STANDARDS.
14. TRENCH SHALL BE INSTALLED PER SERVING UTILITY COMPANY STANDARDS. THE USE OF A COMMON ELECTRIC UTILITY COMPANY TRENCH IS PERMITTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANY FOR COORDINATION OF THE TRENCHING AND THE INSTALLATION OF CONDUIT.
16. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RESTORE ALL PROPERTY, LANDSCAPING, PAVING AND DRIVEWAYS THAT ARE DISTURBED DURING STREET LIGHT CONSTRUCTION TO THEIR ORIGINAL CONDITION IN CONFORMANCE WITH MAG SPECIFICATION SECTION 107.9.
17. IF A FIXTURE SHOULD FAIL, IT SHALL BE IMMEDIATELY REPLACED. THE DEVELOPER SHALL BE RESPONSIBLE FOR FURNISHING ALL PERSONNEL AND EQUIPMENT NECESSARY TO SUCCESSFULLY REPAIR THE FIXTURE.
18. THE CONTRACTOR SHALL GUARANTEE ALL WORK FOR A PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE BY THE CITY, AGAINST IMPERFECT WORKMANSHIP, FAILURE, MALFUNCTION OF MATERIALS, AND/OR EQUIPMENT DUE TO FAULTY OR IMPERFECT WORKMANSHIP.
19. THIS GUARANTEE IS TO BE IN WRITING TO THE CITY AT THE TIME OF ISSUING FINAL ACCEPTANCE. MATERIALS AND WORKMANSHIP FOUND TO BE DEFECTIVE WITHIN THE WARRANTY PERIOD SHALL BE REPLACED WITHOUT COST TO THE CITY.



- ① LED STREET LIGHT FIXTURE WITH IES PHOTOMETRIC DISTRIBUTION PER PLANS AND MAST ARM AS SHOWN TO MATCH EXISTING IN AREA. FIXTURE COLOR TO BE DARK BRONZE. FIXTURE MANUFACTURED BY COOPER LIGHTING INVUE, CAT# EMM/B03/LED/E1/T3/SO/BL/BZ/2L/LCF OR VISIONAIRE LIGHTING CAT# ODN-3-L-T3-84LC-3-4K-UNV-BZ-C1-H3-DC.
- ② BASE PLATE MOUNTED, TAPERED, ROUND, STEEL POLE WITH 5-1/8" TOP OD AND 8" BOTTOM OD. POLE SHALL HAVE "TIGER DRYLAC METALLIC - TERRA FINE TEXTURE GLIMMER" POWDERCOAT FINISH (PROVIDE SAMPLES WITH SUBMITTALS FOR FINAL COLOR APPROVAL).
- ③ FLUSH MOUNTED HANDHOLE WITH FLUSH TAMPERPROOF SECURITY SCREWS (BUTTON TORX CENTER PIN). HANDHOLE SIZE 4" X 6" MINIMUM. POLE MANUFACTURER TO PLACE HANDHOLE SO THAT IT WILL BE LOCATED 18" ABOVE FINISHED GRADE TO CENTER AFTER INSTALLATION. INSTALL POLE WITH HANDHOLE FACING AWAY FROM PATH/SIDEWALK, WHERE POSSIBLE. WHERE POLE IS INSTALLED AGAINST WALL, HANDHOLE TO FACE PATH. PROVIDE A FACTORY INSTALLED GROUND LUG OPPOSITE THE HANDHOLE INSIDE THE POLE. CONNECT THE ELECTRICAL SYSTEM GROUND WIRE TO THIS POLE GROUND LUG.
- ④ 1" MINIMUM DIAMETER WIREWAY HOLE TO BE PROVIDED IN POLE, AT DIMENSION ABOVE GRADE AS SHOWN IN DETAIL, TO ALLOW CONDUCTORS TO PASS THROUGH POLE TO FESTOON LIGHTING. INSTALL ONLY IN POLES SHOWN ON SITE PLAN. POLES WITH FESTOON LIGHTING ATTACHED SHALL BE STRUCTURAL REINFORCED TO ALLOW FOR LIGHTS TO BE TENSIONED BETWEEN POLES.
- ⑤ 3/4" DIAMETER THREADED WIREWAY HOLE TO BE PROVIDED IN POLE, AT DIMENSION ABOVE GRADE AS SHOWN IN DETAIL, TO ALLOW CONDUCTORS TO PASS THROUGH POLE TO POLE MOUNTED WI-FI DEVICE. INSTALL ONLY IN POLES SHOWN ON SITE PLAN.
- ⑥ CONCRETE FOUNDATION, 3,000 PSI CONCRETE PLACED AGAINST UNDISTURBED EARTH, CONTRACTOR TO PROVIDE STRUCTURAL CALCULATIONS FOR FOUNDATION BY AN ARIZONA REGISTERED STRUCTURAL ENGINEER. POLE BASE SHALL HAVE LEVELING NUTS AND FLAT WASHERS.
- ⑦ STEEL BASE COVER SHALL COVER ENTIRE POLE BASE DOWN TO FINISHED CONCRETE.
- ⑧ ELECTRICAL BRANCH CIRCUIT. SEE LIGHTING SITE PLAN FOR SIZES, ETC. CONDUITS ARE TO BE ROUTED IN POLE TO A POINT 4" BELOW HANDHOLE OPENING.
- ⑨ 1" MINIMUM DIAMETER WIREWAY HOLE TO BE PROVIDED IN POLE, AT DIMENSION ABOVE GRADE AS SHOWN IN DETAIL, TO ALLOW CONDUCTORS TO PASS THROUGH ARM MOUNT ATTACHMENT TO LIGHT FIXTURE.
- ⑩ RUN #8 STRANDED COPPER BOND THROUGH POLE TO FACTORY INSTALLED GROUND WIRE IN HAND HOLE. CONNECT BOND TO 14" COPPER GROUNDING PLATE AT BOTTOM OF POLE.
- ⑪ PROVIDE BUSSMAN #HEB FUSE HOLDER, ON EACH UNGROUNDED CONDUCTOR, WITH 5 AMP FUSES FOR INLINE FUSING. WHERE CIRCUIT IS SPLICED IN HANDHOLE, MAKE ALL SPLICES WITH UL486D WET LISTED WIRE NUTS, EQUAL TO DRYCONN AQUA WATERPROOF CONNECTORS. PROVIDE 18" MINIMUM OF SLACK IN THE CONDUCTORS.
- ⑫ LED PEDESTRIAN SCALE LIGHT FIXTURE WITH IES PHOTOMETRIC DISTRIBUTION PER PLANS AND MAST ARM AS SHOWN TO MATCH EXISTING IN AREA. FIXTURE COLOR TO BE DARK BRONZE. FIXTURE MANUFACTURED BY COOPER LIGHTING INVUE, CAT# EMM/B02/LED/E1/T2/SO/BL/BZ/2L/LCF OR VISIONAIRE LIGHTING CAT# ODN-2-L-T3-42LC-3-4K-UNV-BZ-C1-H3-DC. INSTALL ON POLES WHERE SHOWN ON SITE PLAN.
- ⑬ 30" X 96" BANNER WITH BREAK-AWAY TENONS ON POLE (GRAPHIC IMAGE ON BANNER TO BE DETERMINED).
- ⑭ 20A GFCI RECEPTACLE WITH METAL WEATHERPROOF WHILE IN-USE COVER. PAINT COVER TO MATCH POLE. LOCATE RECEPTACLE ON SAME SIDE OF POLE AS BANNER ARMS.
- ⑮ STRUCTURAL CALCULATIONS FOR POLE AND FOUNDATION TO INCLUDE THE ATTACHMENT OF A CHRISTMAS DECORATION BY THE CITY. DECORATION WILL BE ATTACHED USING METAL STRAPS AROUND THE POLE. DECORATION APPROXIMATE MAXIMUM WEIGHT = 40 POUNDS AND DIMENSIONS ARE 5'W X 8'H. SEE IMAGES TO LEFT FOR EXAMPLES.



SCALE: 1" = 10'-0"
STREET LIGHTING PLAN



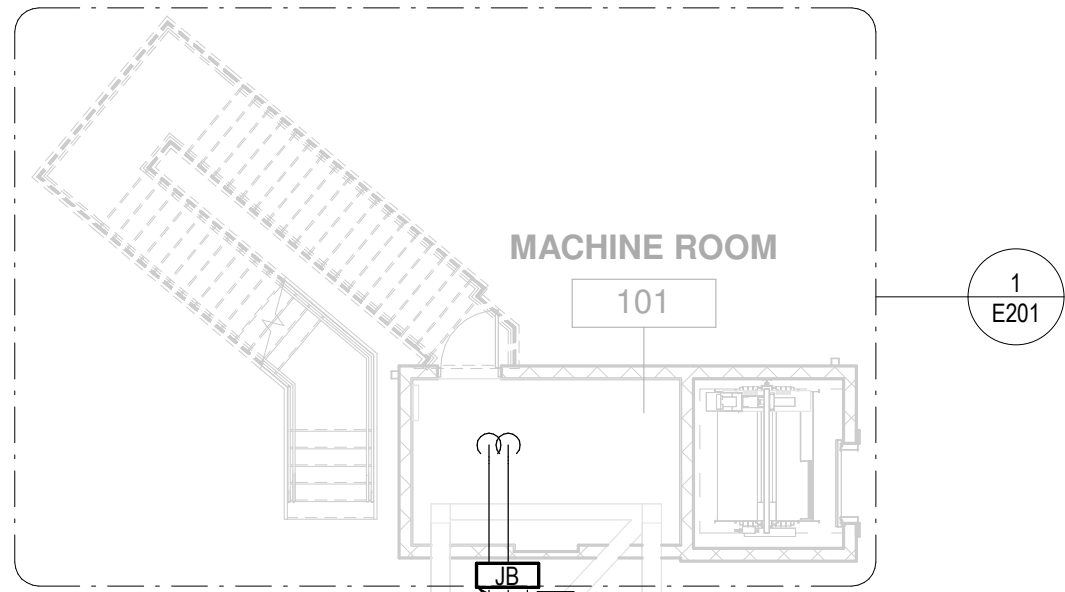
CONSTRUCTION NOTES

NO.	DESCRIPTION
1	EXISTING STREET LIGHT PROTECT IN PLACE.
2	EXISTING STREET LIGHT TO BE REMOVED AND RELOCATED. CAP CONDUIT AND DEMO FOUNDATION 2' BELOW GRADE.
3	INSTALL RELOCATED STREET LIGHT POLE ON NEW FOUNDATION PER DETAIL A ON THIS SHEET.
4	INSTALL RELOCATED NO. 7 PULL BOX FLUSH WITH FINAL GRADE
5	EXTEND CONDUCTORS AND CONDUIT IN KIND TO NEW PULL BOX LOCATION.
6	REMOVE EXISTING NO. 7 PULL BOX AND BACKFILL WITH NATIVE MATERIAL AND COMPACT PRIOR TO NEW SIDEWALK INSTALLATION.
7	INSTALL (1) 1" SCHEDULE-40 PVC CONDUIT WITH (5) #12 AWG CONDUCTORS AND (1) #12 AWG INSULATED GROUND.
8	TIE PROPOSED CONDUIT TO EXISTING AND REPLACE CONDUCTORS IN KIND BACK TO ADJACENT PULL POINT. CONNECT FOR COMPLETE SYSTEM.

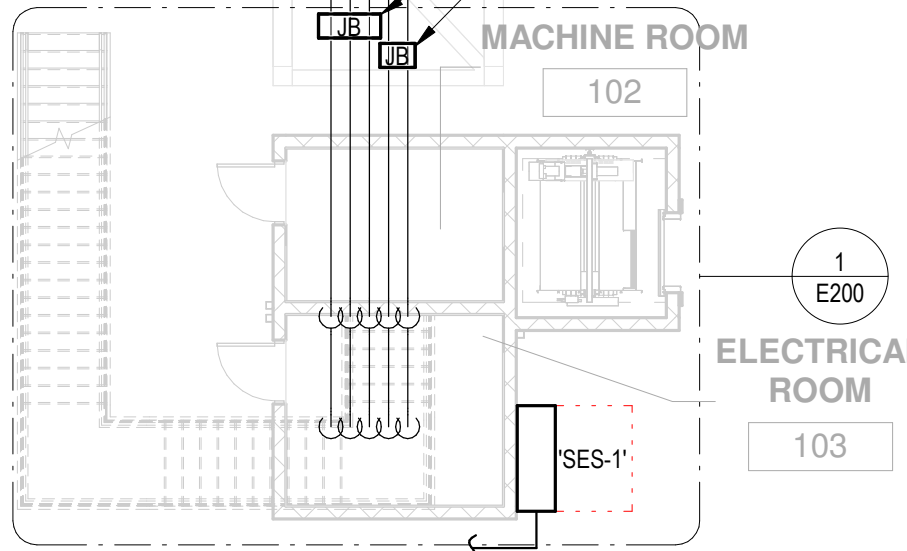
STREET LIGHTING LEGEND

- NEW DOUBLE STREET LIGHT
- EXISTING DOUBLE STREET LIGHT
- EXISTING SINGLE STREET LIGHT
- RELOCATED NO. 7 PULL BOX

ELECTRICAL ABBREVIATIONS				GENERAL		POWER DEVICES		GENERAL NOTES		MOUNTING HEIGHTS				
ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION		KEYNOTE									
A	AMPERES/ABOVE	LTG	LIGHTING		KEYNOTE		DUPLEX RECEPTACLE, 20A, 125V, 2P, 3W. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	1. FURNISH ALL LABOR, MATERIALS, TOOLS, ACCESSORIES, ETC. REQUIRED FOR A COMPLETE WORKING ELECTRICAL SYSTEM.	WALL SWITCHES ----- 3'-10" AFF					
AC	ABOVE CEILING / ALTERNATING CURRENT	LTS	LIGHTS		REVISION NUMBER		QUAD CONVENIENCE OUTLET, ABOVE COUNTER HEIGHT. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	2. ALL ELECTRICAL WORK SHALL COMPLY WITH ALL APPLICABLE STATE, COUNTY, AND LOCAL CODES AND ORDINANCES, AS WELL AS ALL CURRENT STANDARDS, CODES AND PRACTICES AS REQUIRED BY THE LOCAL JURISDICTION, IBC, AND UTILITY COMPANY STANDARDS.	RECEPTACLES ----- 1'-6" AFF					
ADO	AUTOMATIC DOOR OPENER	MC	METAL CLAD		NEW WORK		DUPLEX CONVENIENCE OUTLET W/ GROUND FAULT CIRCUIT INTERRUPTER. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	3. ALL EQUIPMENT, MATERIALS, AND WORK SHOWN ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING OR NOTED OTHERWISE ON OTHER SHEETS.	TELECOMMUNICATIONS OUTLETS ----- 1'-6" AFF					
AF	AMPERE FRAME	MCC	MAIN CIRCUIT BREAKER		EXISTING WORK TO REMAIN		SWITCHED DUPLEX CONVENIENCE OUTLET. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	4. VERIFY EXACT LOCATION OF ALL RECEPTABLES ABOVE OR ADJACENT TO COUNTERS, FIXTURES, MIRRORS OUTDOOR FIXTURES AND MOUNTING HEIGHTS AND LOCATIONS OF ALL FIXTURES AND BOXES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ROUGH-IN.	TELECOMMUNICATIONS OUTLETS - WALL PHONE ----- 4'-6" AFF					
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MCP	MOTOR CIRCUIT PROTECTOR		EXISTING WORK TO BE REMOVED (DEMO)		DUPLEX CONVENIENCE OUTLET ON ALTERNATE POWER SOURCE. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	5. PRIOR TO PURCHASE OF ANY PANEL, PROTECTIVE DEVICES, SWITCH, STARTER, CONDUIT, WIRE, ETC., TO FEED ANY PIECE OF EQUIPMENT, VERIFY THE VOLTAGE, PHASE, AND LOAD OF THAT ITEM WITH THE APPROVED SHOP DRAWINGS. THIS APPLIES TO ALL EQUIPMENT UNDER OTHER SECTIONS & BY THE OWNER. THE CONTRACTORS SHALL AS-BUILT ANY DEVIATIONS WITH DESIGN DOCUMENTS FOR ACCURATE RECORD KEEPING.	DISCONNECT SWITCHES----- 5'-6" AFF					
AFF	ABOVE FINISHED FLOOR	MGB	MAIN GROUNDING BUSBAR		EXISTING WORK TO BE RELOCATED		DOUBLE DUPLEX CONVENIENCE OUTLET ON ALTERNATE POWER SOURCE. SLASH INDICATES MOUNTING ABOVE FINISH COUNTER.	6. COORDINATE ALL SPECIAL NEMA PLUG TYPES WITH EQUIPMENT PRIOR TO ORDERING. NOTIFY ENGINEER WITH ANY DISCREPANCIES WITH DESIGN.	MOTOR STARTERS ----- 5'-6" AFF					
AFG	ABOVE FINISHED GRADE	MH	MANHOLE		BELOW FLOOR OR GRADE		DUPLEX/QUAD CONVENIENCE OUTLET, CEILING MOUNTED.	7. COORDINATE WITH ALL OTHER TRADES PRIOR TO ROUGH-IN.	PANELS & CABINETS----- 6'-0" TO TOP					
AIC	AMP INTERRUPTING CAPACITY	MLO	MAIN LUGS ONLY		FEEDER TAG (REFER TO FEEDER SCHEDULE)		DUPLEX/QUAD CONVENIENCE OUTLET, FLOOR MOUNTED. TYPE PER SUBSCRIPT.	8. IN ADDITION TO PERMITTED DRAWINGS, FOLLOW ALL MANUFACTURER'S INSTRUCTIONS AND SPECIFIC INSTALLATION DETAILS.	DIMMERS ----- 3'-10" AFF					
ALT	ALTERNATE	MOP	MAXIMUM OVERCURRENT PROTECTION		POINT OF CONNECTION		JUNCTION BOX, SPECIFIC USE AS NOTED.	9. CONDUIT/CONDUCTOR RUNS SHOWN ARE DIAGRAMMATICAL ONLY. FINAL CONDUIT ROUTING SHALL BE AS DETERMINED BY THE ELECTRICAL CONTRACTOR AT THE TIME OF CONSTRUCTION.	INDIVIDUAL CIRCUIT BREAKERS ----- 5'-6" TO TOP					
ARCH	ARCHITECTURAL	MTD	MOUNTED		SECTION DRAWING NUMBER		POWER/DATA/AV BOX FOR USE WITH TV. WALL MOUNTED +60" AFF UNO	10. ALL WIRE SHALL BE COPPER. MINIMUM SIZE FOR POWER WIRING SHALL BE #12 AWG. STRANDED UNLESS OTHERWISE NOTED. MINIMUM SIZE FOR CONTROL WIRING SHALL BE #14 AWG. MINIMUM CONDUIT SIZE IS 3/4"	INTERCOM ----- 4'-6" AFF					
AT	AMPERE TRIP	MTG	MOUNTING HEIGHT		REFERENCING SHEET	RECEPTACLE TYPE DESIGNATION LEGEND X = TYPE IG = ISOLATED GROUND OC = OCCUPANCY CONTROLLED USB = USB-A/USB-C DUPLEX WP = WEATHERPROOF, GFCI IW WHILE-IN-USE COVER TV = TELEVISION, MOUNTING HEIGHT @ +60" AFF U.N.O. TP = TAMPERPROOF FB1 = FLOORBOX, WIREMOLD RFB-4-OG FB2 = FLOORBOX, WIREMOLD RFB-6 FB3 = FLOORBOX, WIREMOLD RFB-10 PT1 = POKE-THRU, WIREMOLD 4AT PT2 = POKE-THRU, WIREMOLD 6AT PT3 = POKE-THRU, WIREMOLD 8AT		11. PROVIDE ALL PANEL BOARDS WITH TYPED DIRECTORIES WITH CLEAR, EVIDENT DESCRIPTIONS/INSTALLED UNDER A CLEAR PLASTIC COVER. SUBMIT DIRECTORY INFORMATION TO THE ENGINEER FOR APPROVAL PRIOR TO FINALIZATION.	FIREMAN'S PHONE ----- 3'-10" AFF					
ATS	AUTOMATIC TRANSFER SWITCH	MTR	MOTOR / METER					12. SERIES RATING OF UPSTREAM OR DOWNSTREAM CIRCUIT BREAKERS OR FUSES IS PROHIBITED. ONLY FULLY RATED SYSTEM COMPONENTS WILL BE ACCEPTED.	FIRE ALARM DEVICES HORN/SPEAKERS/STROBES (MOUNTING HEIGHT AT THE BOTTOM OF THE FIRE ALARM DEVICE OR 6" BELOW CEILING WHICH IS LOWER)					
B	BELOW	MTG HGT	MOUNTING HEIGHT	EQUIPMENT		CONDUIT AND RACEWAY		13. PROVIDE ALL TRENCHING, EXCAVATION, BACK FILLING, SHORING, PUMPING, COMP ACTION TEST ETC. THAT ARE REQUIRED FOR THE SCOPE OF ELECTRICAL WORK.	MOUNTING HEIGHT NOTES:					
BC	BARE COPPER	MV	MOTOR / METER		MOTOR RATED SWITCH		CONDUIT DOWN.	14. ALL PANEL BOARDS, SWITCHES, MOTOR STARTERS, AND SWITCHBOARD CIRCUIT BREAKERS SHALL HAVE ENGRAVED PHENOLIC NAMEPLATES.	1. ALL ELEVATIONS ARE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.					
BFL	BELOW FLOOR LEVEL	NA	NOT APPLICABLE		MOTOR RATED HAND-OFF-AUTO SWITCH		CONDUIT UP.	15. PROVIDE DEDICATED NEUTRALS ON ALL BRANCH CIRCUITS, UNO. ALL CIRCUITS THAT SHARE A NEUTRAL SHALL BE PROVIDED WITH MULTIPOLE BREAKER.	2. REFER TO EQUIPMENT ELEVATION DRAWINGS FOR COORDINATION WITH CASEWORK.					
BLDG	BUILDING	NAC	NOTIFICATION APPLIANCE CIRCUIT		EMERGENCY POWER OFF SWITCH, MUSHROOM TYPE		CONDUIT STUB AND CAP.	16. PROVIDE CIRCUIT BREAKER LOCK LOCKED IN THE 'ON' POSITION FOR ALL CIRCUITS SERVING EMERGENCY LIGHTING, AND FIRE ALARM EQUIPMENT.	3. MOUNT MANUAL MOTOR STARTER ADJACENT TO OR ON UNIT. MAINTAIN NEC WORKING CLEARANCE.					
C	CONDUIT	NC	NORMALLY CLOSED		DISCONNECT, HEAVY DUTY, NON-FUSIBLE		BRANCH CIRCUIT (DIAGRAMMATIC)	17. ALL EMERGENCY FIXTURES IN PATH OF EGRESS SHALL BE ALWAYS ON AS NIGHT LIGHTS AND WIRED TO THE UNSWITCHED HOT LEG OF THE CIRCUIT UNLESS PROVIDED WITH A UL924 TRANSFER DEVICE OR EMERGENCY BATTERY PACK.	4. REFER TO ARCHITECTURAL ELEVATIONS FOR ADDITIONAL MOUNTING HEIGHTS.					
CB	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE		DISCONNECT, HEAVY DUTY, FUSIBLE		HOMERUN INDICATING PANEL AND CIRCUIT NUMBER.	COMPLIANCE DATA						
CCTV	CLOSED CIRCUIT TELEVISION	NIC	NOT IN CONTRACT		COMBINATION MOTOR STARTER & DISCONNECT		HOMERUN WITH CIRCUIT NUMBER IN BRACKETS INDICATING MULTI-PHASE LOAD.	THE FOLLOWING ARE THE PRIMARY CODES UNDER WHICH THIS PROJECT IS DESIGNED AND PERMITTED						
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	NTS	NORMALLY OPEN		VARIABLE FREQUENCY DRIVE	LIGHTING FIXTURES		CODE	APPLICABLE CODE BOOK AND YEAR	TYPE DEFINITION: X=TYPE DEFINITION				
CLG	CEILING	OC	ON CENTER		ELECTRICAL PANEL, SURFACE MOUNTED		LIGHTING FIXTURE TAG, INDICATING FIXTURE ID.	BUILDING CODE	2024 INTERNATIONAL BUILDING CODE	SENSOR TYPE DEFINITION: Z = SENSOR TYPE DESIGNATION				
COMM	COMMUNICATIONS	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED		ELECTRICAL PANEL, FLUSH MOUNTED		CIRCUIT NUMBER, SWITCH ID	ELECTRICAL	2023 NATIONAL ELECTRICAL CODE	BLANK = SINGLE POLE 3 = THREE-WAY SWITCH 4 = FOUR-WAY SWITCH D = DIMMER SWITCH I = INDICATOR SWITCH K = KEYSwitch P = PILOT LIGHT SWITCH T = TIMER SWITCH LV = LOW-VOLTAGE SWITCH				
CORR	CORRIDOR	OFOI	OWNER INSTALLED		TRANSFORMER		RECESSED MOUNTED LIGHT FIXTURE	ENERGY	2024 INTERNATIONAL ENERGY CONSERVATION CODE	DT = DUAL TECHNOLOGY PIR = PASSIVE INFRARED U = ULTRASONIC				
CSP	CEILING SERVICE PANEL	OSC	OVERHEAD SERVICE CARRIER		REMOVE REQUIRED		SURFACE MOUNTED LIGHT FIXTURE	ACCESSIBILITY	2010 ADA STANDARDS	FIRE ALARM				
CT	CURRENT TRANSFORMER	P	POLE		RIGID METAL CONDUIT		WALL MOUNTED LIGHT FIXTURE	FIRE ALARM	2024 INTERNATIONAL FIRE CODE	TYPE DEFINITION: X=TYPE DEFINITION				
D	DEDICATED	PA	PUBLIC ADDRESS		SWITCHBOARD / SWITCHGEAR		PENDANT/SUSPENDED MOUNTED LIGHT FIXTURE	SECURITY SYMBOLS						
DC	DIRECT CURRENT	PB	PULL BOX / PUSHBUTTON		ONELINE		RECESSED MOUNTED LINEAR LIGHT FIXTURE		SECURITY CAMERA	ELECTRICAL SHEET INDEX				
DET	DETAIL	PC	PHOTOCELL		SIGNAL		RECESSED MOUNTED DOWN LIGHT		CARD READER	NUMBER				
DF	DRINKING FOUNTAIN	PDJ	POWER DISTRIBUTION UNIT		SAFETY SWITCH		TRACK AND TRACK LIGHT FIXTURE		DOOR CONTACT	NAME				
DIA	DIAMETER	PF	POWER FACTOR		SUPPLY SIDE BONDING JUMPER		EXIT SIGN, SINGLE FACE, UNSWITCHED. ARROWS INDICATE PATH OF EGRESS. REFER TO ARCHITECTURAL PLANS FOR MOUNTING.		POWER SUPPLY	E001				
DISC	DISCONNECT	PH	PHASE		SUITABLE FOR SERVICE ENTRANCE		EXIT SIGN, DOUBLE FACE, UNSWITCHED. ARROWS INDICATE PATH OF EGRESS. REFER TO ARCHITECTURAL PLANS FOR MOUNTING.		ELECTRIC STRIKE	E100				
DN	DOWN	PLBG	PLUMBING		SWITCHBOARD / SWITCHGEAR		UL924 EMERGENCY LIGHTING UNIT. REFER TO ARCHITECTURAL PLANS FOR MOUNTING.		REQUEST TO EXIT	E200				
DP	DISTRIBUTION PANEL	PNL	PANEL		SWITCHBOARD / SWITCHGEAR		SITE LIGHTING FIXTURES		PUSH PLATE	E201				
DS	DISCONNECT SWITCH	PS	POTENTIAL TRANSFORMER		ONELINE		LIGHTING DESIGNATION LEGEND		HAND WAVE	E600				
E	EXISTING TO REMAIN	PWR	POWER		ATS		LIGHTING DESIGNATION LEGEND		GLASS BREAK SENSOR	E700				
EC	ELECTRICAL CONTRACTOR	R	RELOCATE		GROUND		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E800				
EDB	ELECTRIC DUCT BANK	REC	RECEIVED		GROUND BUSBAR		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	ELECTRICAL SHEET INDEX				
EGC	EQUIPMENT GROUND	REF	RELOCATE		NEUTRAL BUSBAR		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NUMBER				
EGS	ENGINE GENERATOR SET	REL	RELOCATE		GENERATOR		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NAME				
EJ	EXPANSION JOINT	REM	REMOVE		TRANSFORMER PAD MOUNTED		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E001				
ELEC	ELECTRIC / ELECTRICAL	REQD	REQUIRED		PANELBOARD		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E100				
EM	EMERGENCY	RMC	RIGID METAL CONDUIT		SURGE PROTECTIVE DEVICE		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E200				
EMI	ELECTROMAGNETIC INTERFERENCE	SCOR	SHORT CIRCUIT CURRENT RATING		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E201				
EMT	ELECTRICAL METALLIC TUBING	SHT	SHEET		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E600				
EMT	ELECTRICAL METALLIC TUBING	SIG	SIGNAL		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E700				
EQUIP	EQUIPMENT	SIM	SIMILAR		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E800				
ETR	EXISTING TO REMAIN	SPD	SPECIFICATION		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	ELECTRICAL SHEET INDEX				
EW	ELECTRIC WATER COOLER	SS	SAFETY SWITCH		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NUMBER				
FA	FIRE ALARM	SSBJ	SUPPLY SIDE BONDING JUMPER		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NAME				
FACP	FIRE ALARM CONTROL PANEL	SUSE	SUITABLE FOR SERVICE ENTRANCE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E001				
FCU	FAN COIL UNIT	SW	SWITCH		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E100				
FDR	FEEDER	SWBD	SWITCHBOARD		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E200				
FDS	FUSED DISCONNECT SWITCH	SWGR	SWITCHGEAR		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E201				
FIXT	FIXTURE	TEL	TELEPHONE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E600				
FLA	FULL LOAD AMPERES	TFA	TO FLOOR ABOVE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E700				
FLEX	FLEXIBLE	TFB	TO FLOOR BELOW		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E800				
FLR	FLOOR	TGB	TELECOMMUNICATIONS GROUNDING BUSBAR		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	ELECTRICAL SHEET INDEX				
FP	FLAT PANEL	TGMB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NUMBER				
FS	FLOW SWITCH	TS	TAMPER SWITCH / TIME SWITCH		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NAME				
GC	GENERAL CONTRACTOR	TV	TELEVISION		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E001				
GD	GARBAGE DISPOSER	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E100				
GEN	GENERATOR	TVTC	TELEVISION TERMINAL CABINET		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E200				
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TYP	TYPICAL		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E201				
GFI	GROUND FAULT INTERRUPTER	UC	UNDER COUNTER		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E600				
GFP	GROUND FAULT PROTECTION	UG	UNDERGROUND		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E700				
GND	GROUND	UH	UNIT HEATER		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E800				
GTB	GROUND TERMINAL BOX	UNO	UNLESS NOTED OTHERWISE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	ELECTRICAL SHEET INDEX				
H	HORIZONTAL	UPS	UNINTERRUPTED POWER SUPPLY		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NUMBER				
HOA	HAND OFF AUTOMATIC	V	VOLTAGE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	NAME				
HP	HORSE POWER	VFD	VARIABLE FREQUENCY DRIVE		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E001				
HV	HIGH VOLTAGE	VP	VAPOR PROOF		ATS		LIGHTING DESIGNATION LEGEND		SECURITY CAMERA	E100				

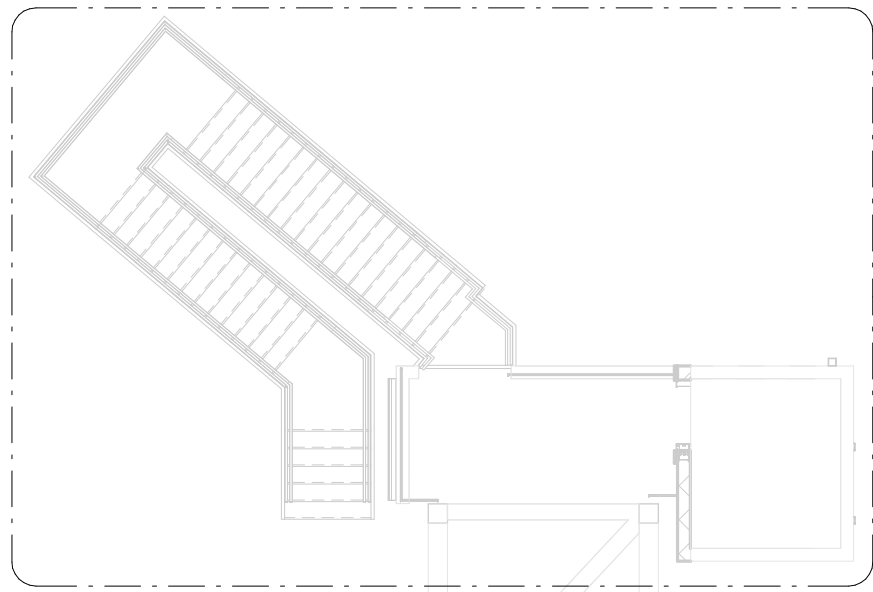


REFER TO CONDUIT DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIRED JUNCTION BOXES. POWER AND COMMUNICATIONS SHALL NOT SHARE THE SAME JUNCTION BOXES.

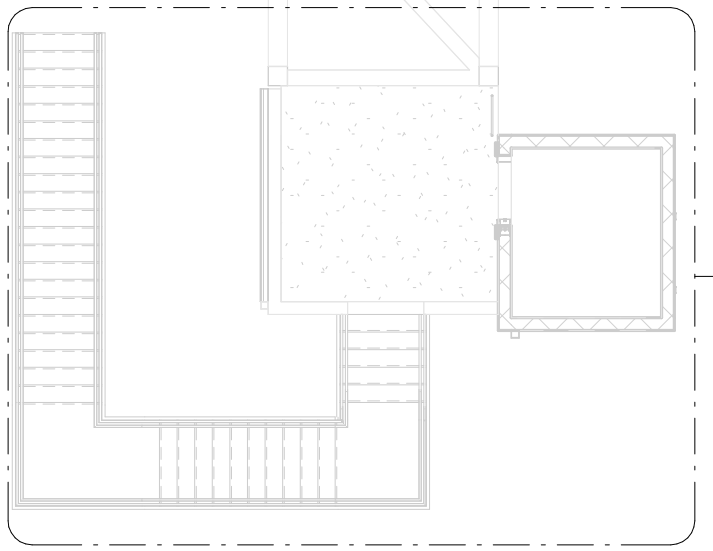


REFER TO CONDUIT DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIRED JUNCTION BOXES. POWER AND COMMUNICATIONS SHALL NOT SHARE THE SAME JUNCTION BOXES.

(1) 4" EMPTY CONDUIT, CONDUIT, TRENCHING, AND BACKFILL BY CONTRACTOR. CONDUCTORS AND TERMINATIONS BY SRP. VERIFY WITH SRP PRIOR TO BACKFILLING TRENCH. CONTRACTOR SHALL COORDINATE SECONDARY TRENCHING AND INTERCONNECTING WITH SRP.



REFER TO BRIDGE LIGHTING SHEETS FOR BRIDGE LIGHTING.



1 ELECTRICAL SITE PLAN - LEVEL 1

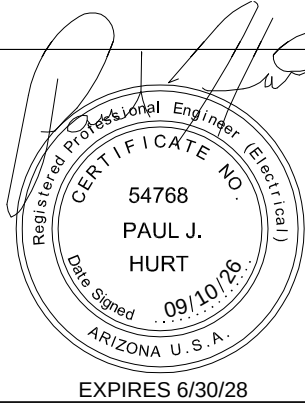
1" = 10'-0"

2 ELECTRICAL SITE PLAN - LEVEL 2

1" = 10'-0"

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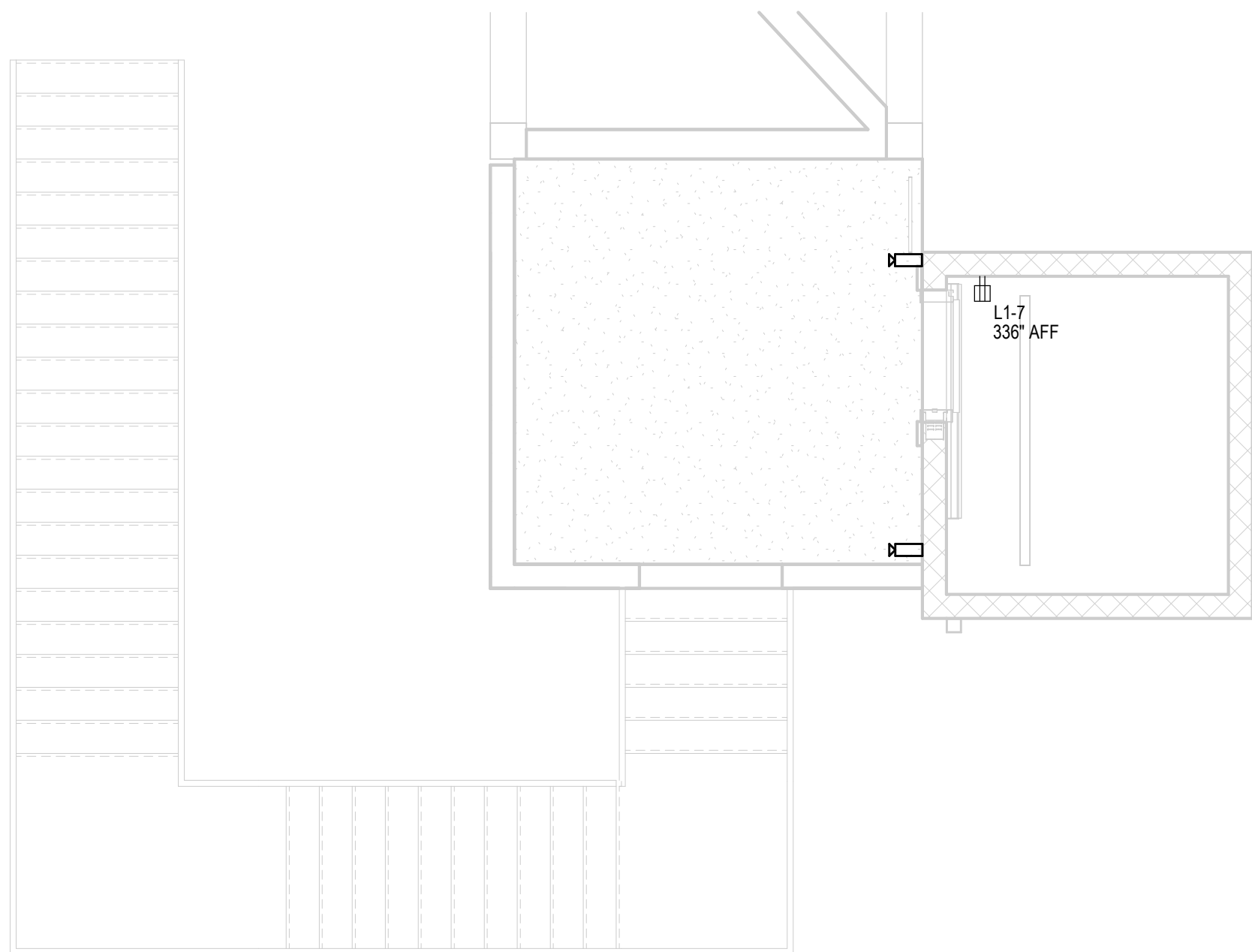
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DRAWN	SHG	09/26
CHECKED	PH	09/26

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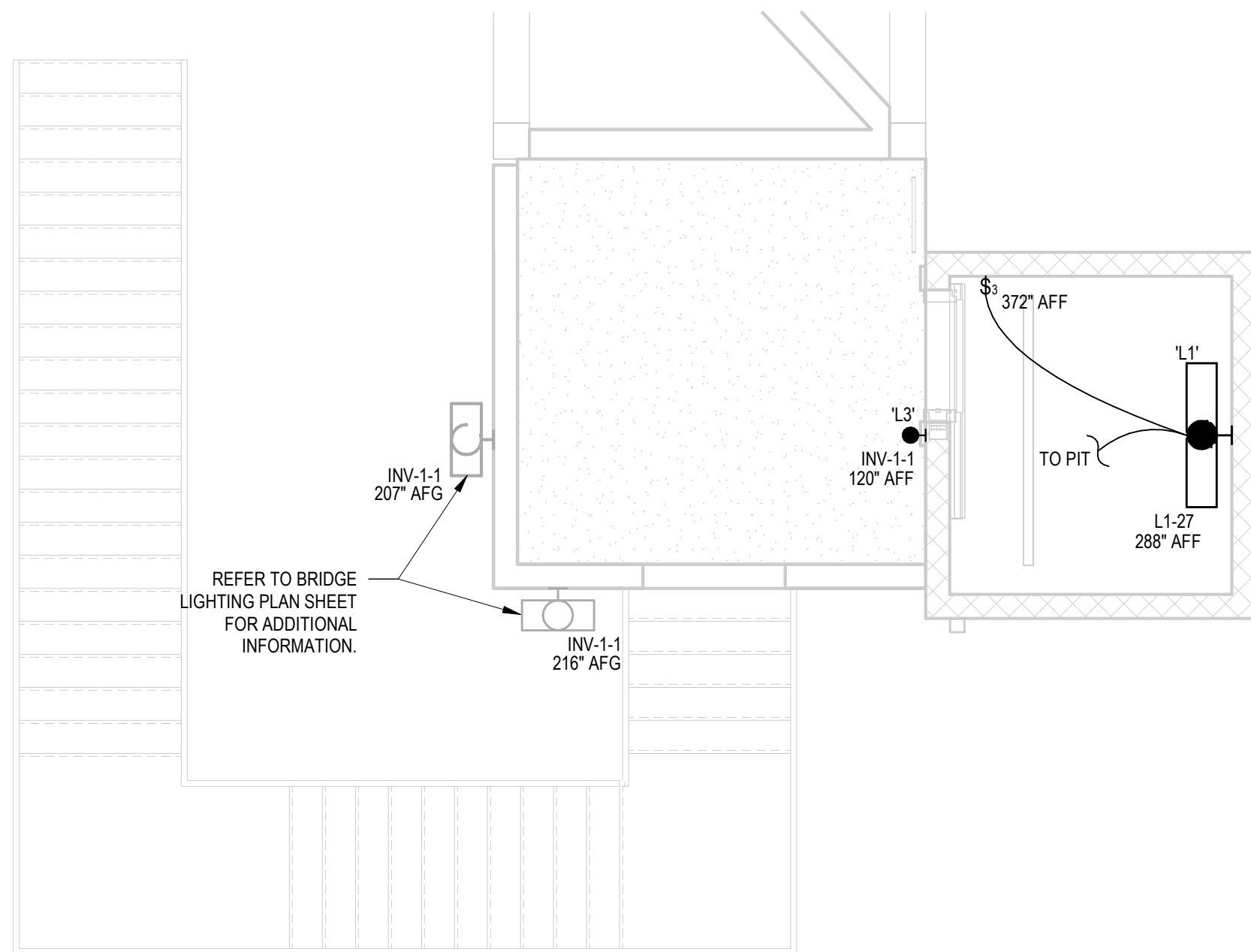
ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

ELECTRICAL SITE PLAN

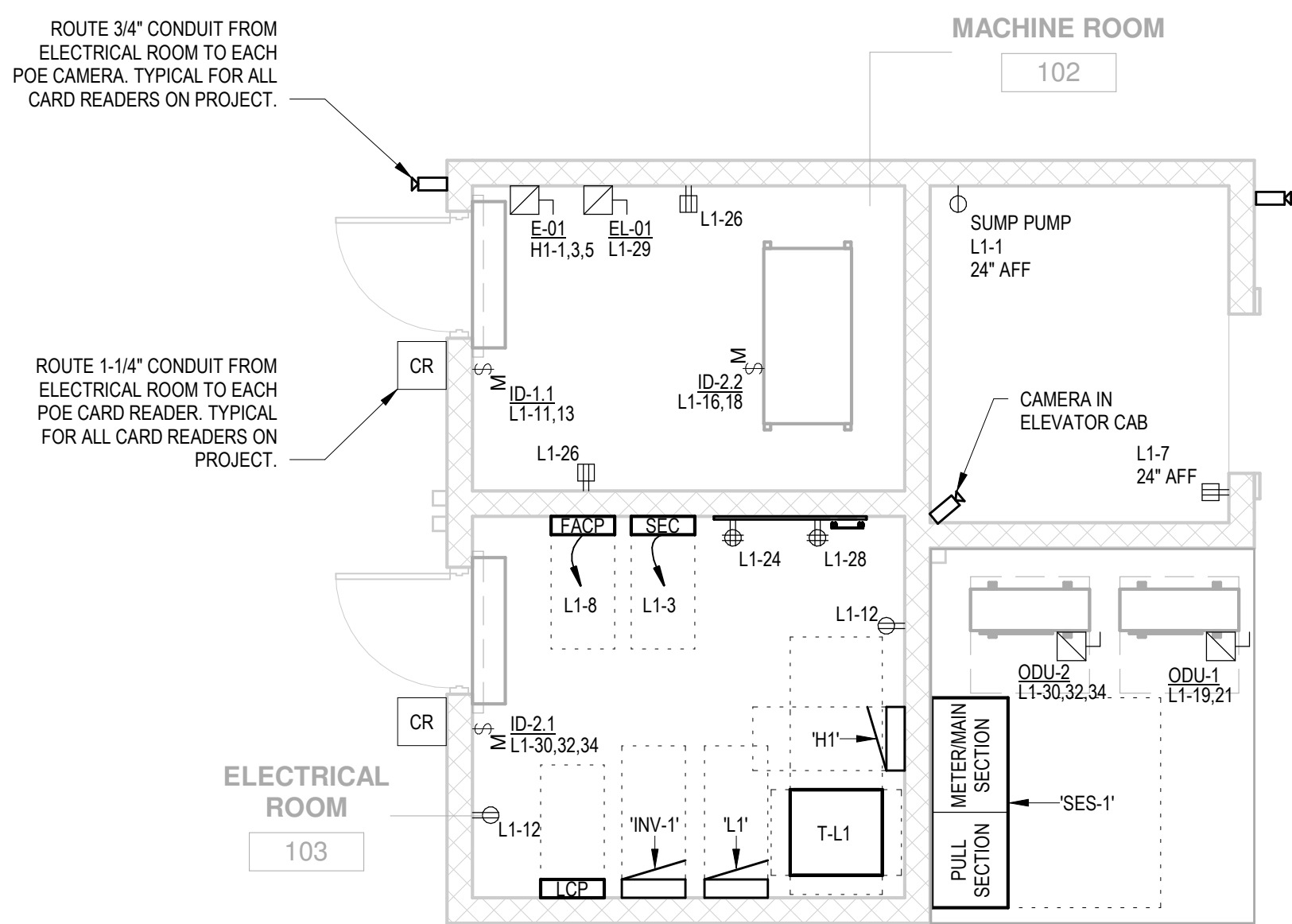
ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NUMBER	TOTAL SHEETS	RECORD DRAWING	
MILEPOST		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	61	70		
STRUCTURE NO.	LOCATION					VAN BUREN AT 96TH AVE, TOLLESON		DWG NO. E100
	TRACS NO. T0619 01C					61 OF 70		



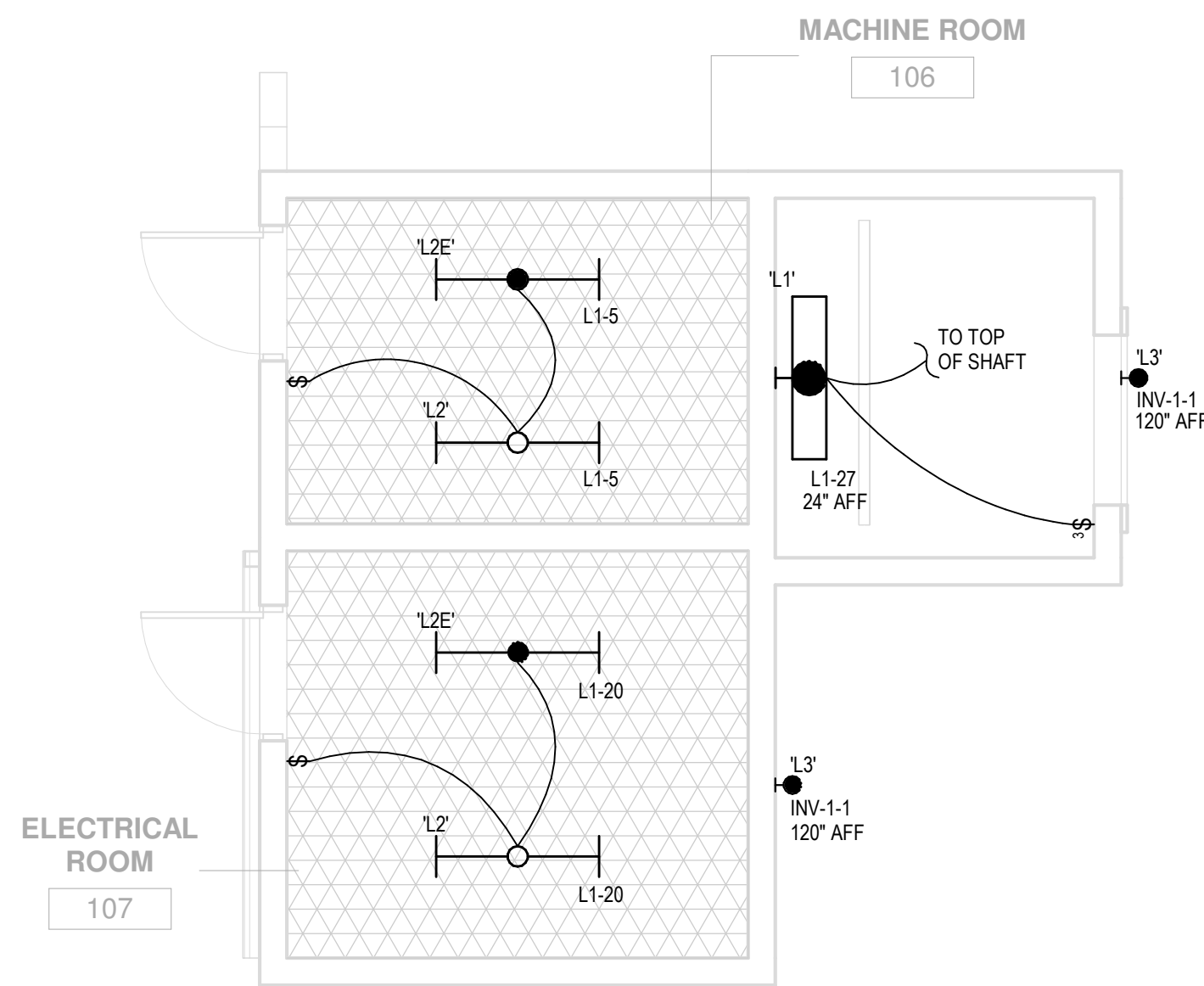
3 ELECTRICAL - LEVEL 2 POWER PLAN - SOUTH SHAFT
1/4" = 1'-0"



4 ELECTRICAL - LEVEL 2 LIGHTING PLAN - SOUTH SHAFT
1/4" = 1'-0"

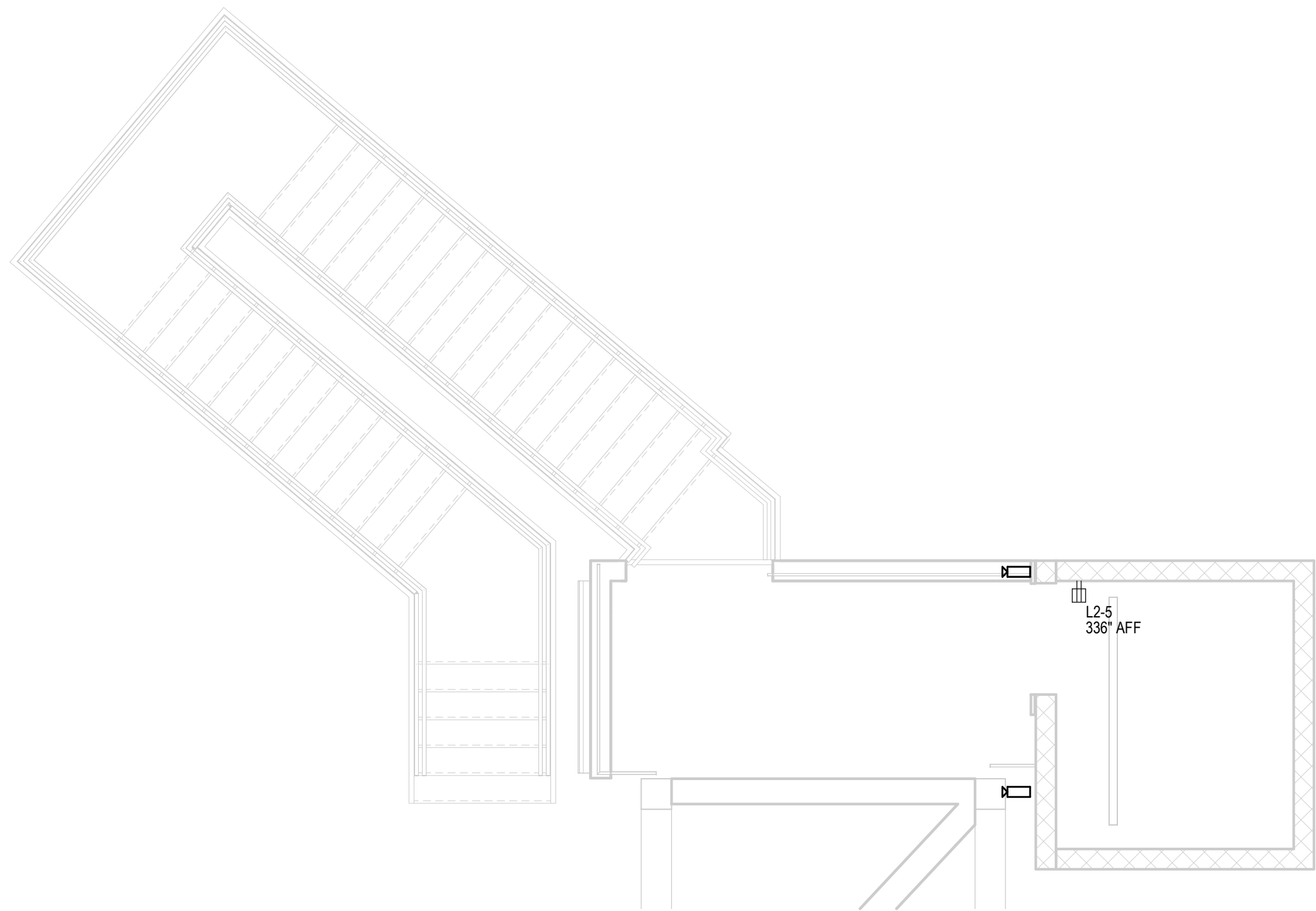


1 ELECTRICAL - LEVEL 1 POWER PLAN - SOUTH SHAFT
1/4" = 1'-0"

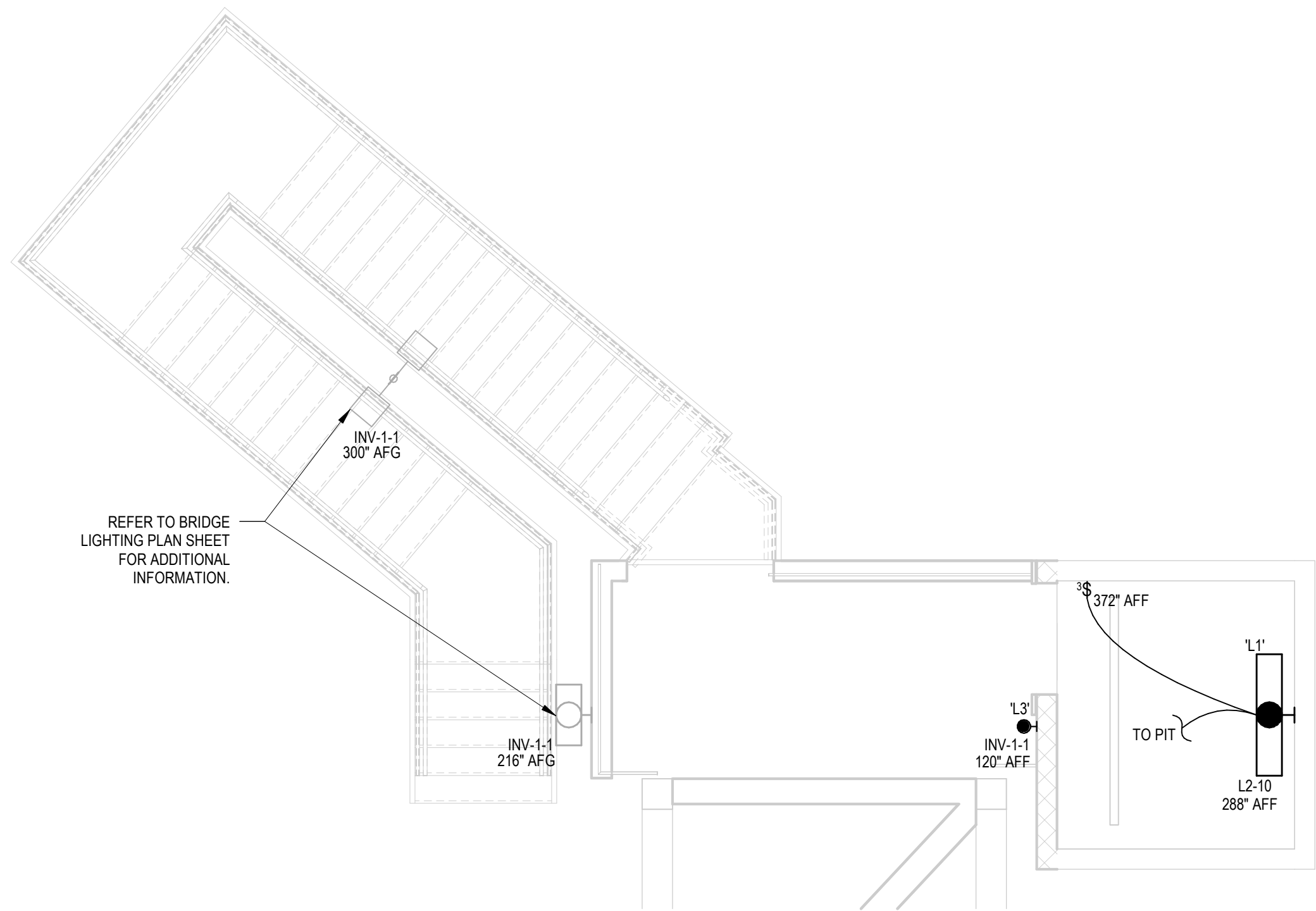


2 ELECTRICAL - LEVEL 1 LIGHTING PLAN - SOUTH SHAFT
1/4" = 1'-0"

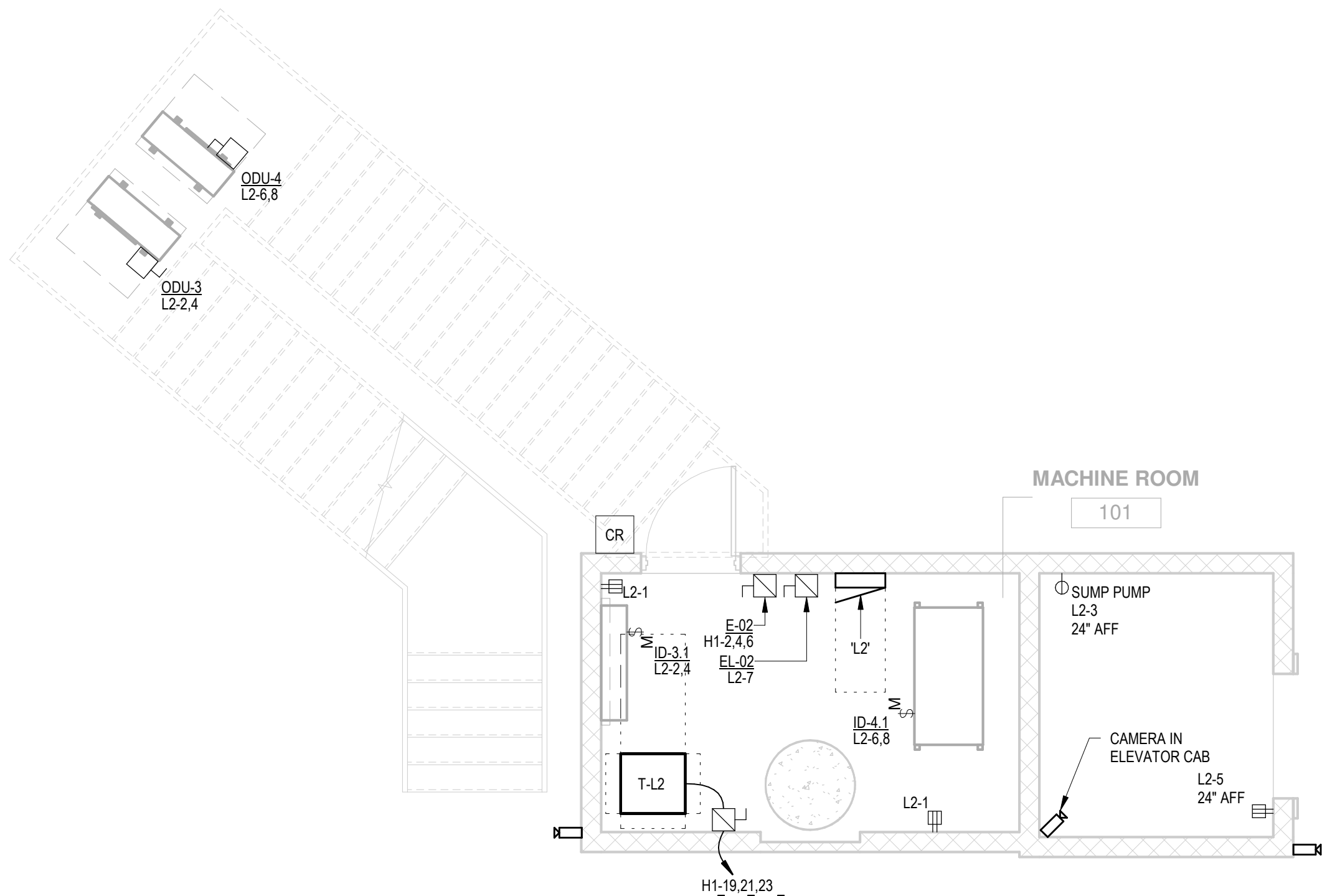
4LINE STUDIO 4LINE STUDIO LLC WWW.4LINESTUDIO.COM 480.251.2048 CFORD@4LINESTUDIO.COM	EXPIRES 6/30/28	<table><tr><td>DESIGN</td><td>SHG</td><td>09/26</td></tr><tr><td>DRAWN</td><td>SHG</td><td>09/26</td></tr><tr><td>CHECKED</td><td>PH</td><td>09/26</td></tr></table>	DESIGN	SHG	09/26	DRAWN	SHG	09/26	CHECKED	PH	09/26	ARIZONA DEPARTMENT OF TRANSPORTATION PROJECT DELIVERY AND OPERATIONS DIVISION BRIDGE GROUP	<table><tr><td>ROUTE</td><td>-</td></tr><tr><td>MILEPOST</td><td></td></tr><tr><td>STRUCTURE NO.</td><td></td></tr></table>	ROUTE	-	MILEPOST		STRUCTURE NO.		<table><tr><td>F.H.W.A. Arizona Division</td><td>STATE</td><td>ARIZ.</td><td>PROJECT NO.</td><td>0000 MA TOL</td><td>FEDERAL ID NO.</td><td>CDS TOL-0(200)T</td><td>SHEET NUMBER</td><td>62</td><td>TOTAL SHEETS</td><td>70</td><td>RECORD DRAWING</td></tr><tr><td colspan="10">LOCATION</td><td colspan="2">DWG NO. E200</td></tr><tr><td colspan="4">TRACS NO. T0619 01C</td><td colspan="4"></td><td colspan="3">62 OF 70</td></tr><tr><td colspan="12"></td></tr></table>	F.H.W.A. Arizona Division	STATE	ARIZ.	PROJECT NO.	0000 MA TOL	FEDERAL ID NO.	CDS TOL-0(200)T	SHEET NUMBER	62	TOTAL SHEETS	70	RECORD DRAWING	LOCATION										DWG NO. E200		TRACS NO. T0619 01C								62 OF 70														
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Kimley»Horn © 2026 KIMLEY-HORN AND ASSOCIATES, INC.		ELECTRICAL ENLARGED PLANS - SOUTH SHAFT																																																																	



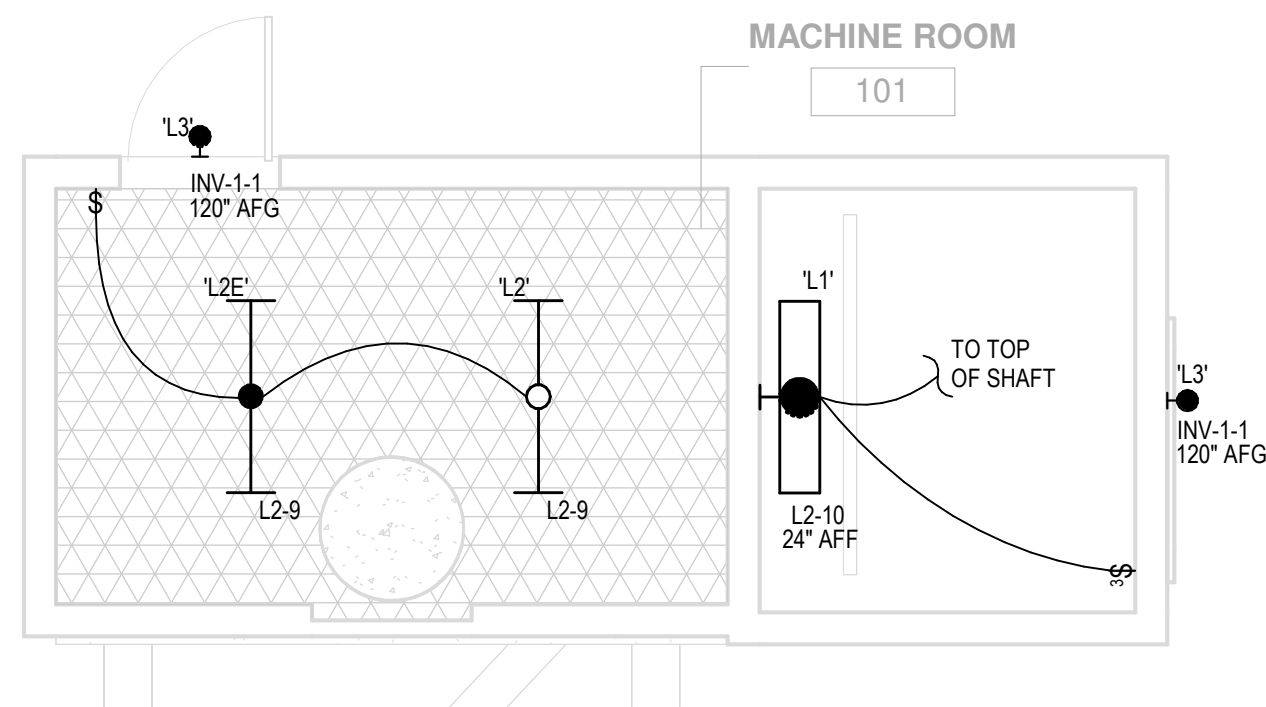
3 ELECTRICAL - LEVEL 2 POWER PLAN - NORTH SHAFT
1/4" = 1'-0"



4 ELECTRICAL - LEVEL 2 LIGHTING PLAN - NORTH SHAFT
1/4" = 1'-0"



1 ELECTRICAL - LEVEL 1 POWER PLAN - NORTH SHAFT
1/4" = 1'-0"



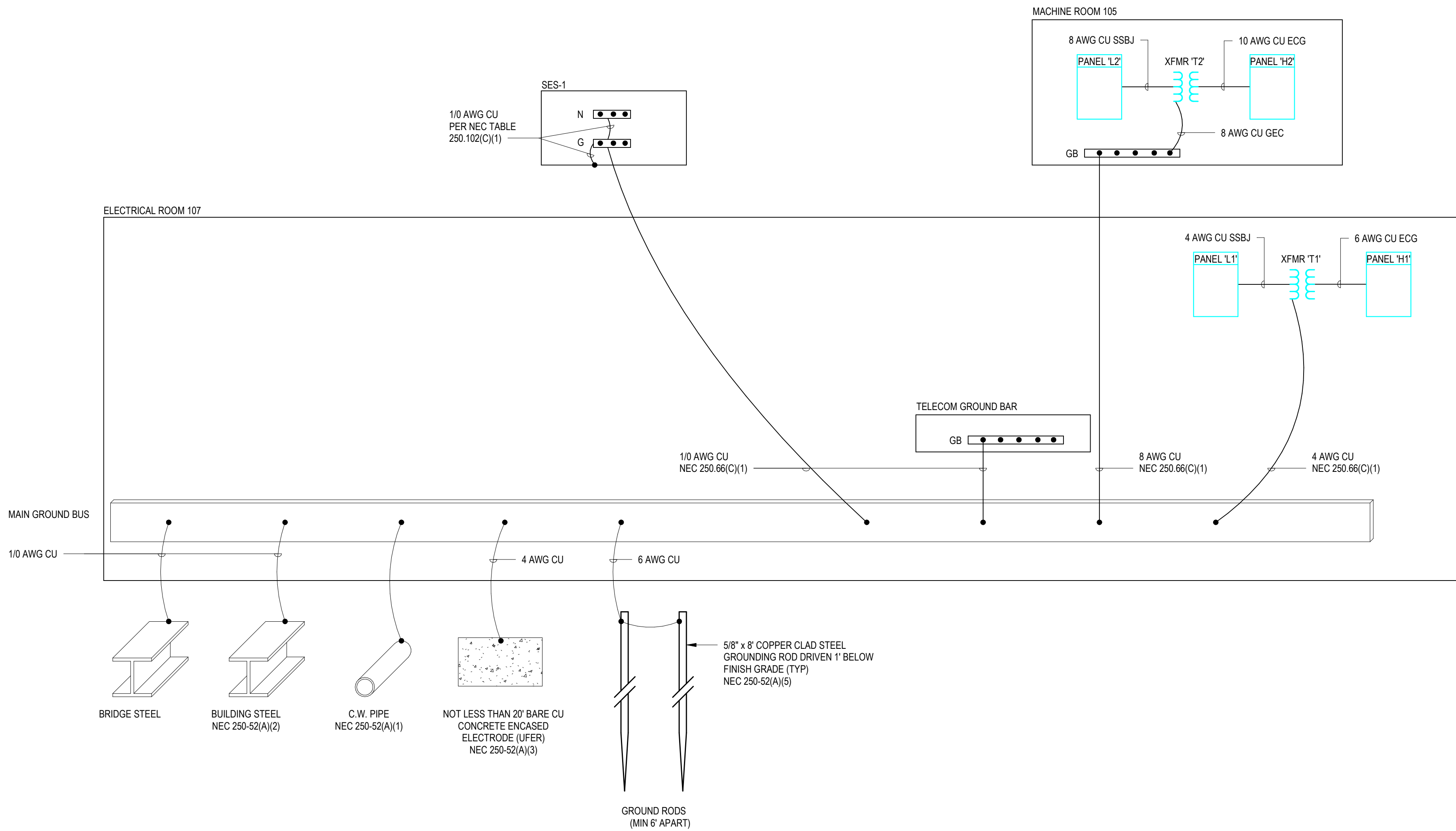
2 ELECTRICAL - LEVEL 1 LIGHTING PLAN - NORTH SHAFT
1/4" = 1'-0"

LIGHTING CONTROLS SEQUENCE OF OPERATIONS

1. GENERAL
1. ALL LIGHTING SHALL BE HIGH EFFICIENCY LED WITH DIMMING CONTROLS. OWNER SHALL HAVE THE ABILITY TO REDUCE TOTAL LUMEN OUTPUT AS DESIRED.
2. ALL EMERGENCY LIGHTING SHALL BE EMERGENCY BATTERY BACKUP EITHER REMOTELY MOUNTED OR INTEGRAL TO THE FIXTURE. FIXTURES WITH EMERGENCY BATTERY BACKUP ARE INDICATED ON THE PLANS. PROVIDE WITH INTEGRAL TEST SWITCH.
3. INTERIOR LIGHTING CONTROLS SHALL BE LOW VOLTAGE, 0-10V DIMMING COMPATIBLE.
4. DAYLIGHTING
- A. FIXTURES SPECIFIED WITH DAYLIGHTING CONTROLS SHALL BE INTEGRAL TO THE FIXTURE TO BE CONTROLLED BY AUTOMATIC PHOTOCELL DIMMING AS REQUIRED IN THE 2018 IECC.
5. OCCUPANCY
- A. ALL LIGHTING SHALL BE CONTROLLED BY AUTOMATIC OFF/MANUAL ON OCCUPANCY SENSOR CONTROLS, EXPECT WHERE PERMITTED UNDER 2018 IECC. CONTRACTOR SHALL COORDINATE WITH END USER TO SET DELAY TIMES FOR OCCUPANCY SENSORS TO A MAXIMUM OF 30 MINUTES.
- B. THE LIGHTING IN THE HALLWAYS, LOBBIES, AND OTHER EGRESS AREAS SHALL BE HAVE NO OCCUPANCY SENSOR CONTROLS AS PERMITTED BY THE 2018 IECC.

2 LIGHTING CONTROLS SEQUENCE OF OPERATIONS

1/8" = 1'-0"



1 GROUNDING ONE-LINE

1/4" = 1'-0"

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WWW.4LINESTUDIO.COM
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BRIDGE GROUP

ELECTRICAL DETAILS

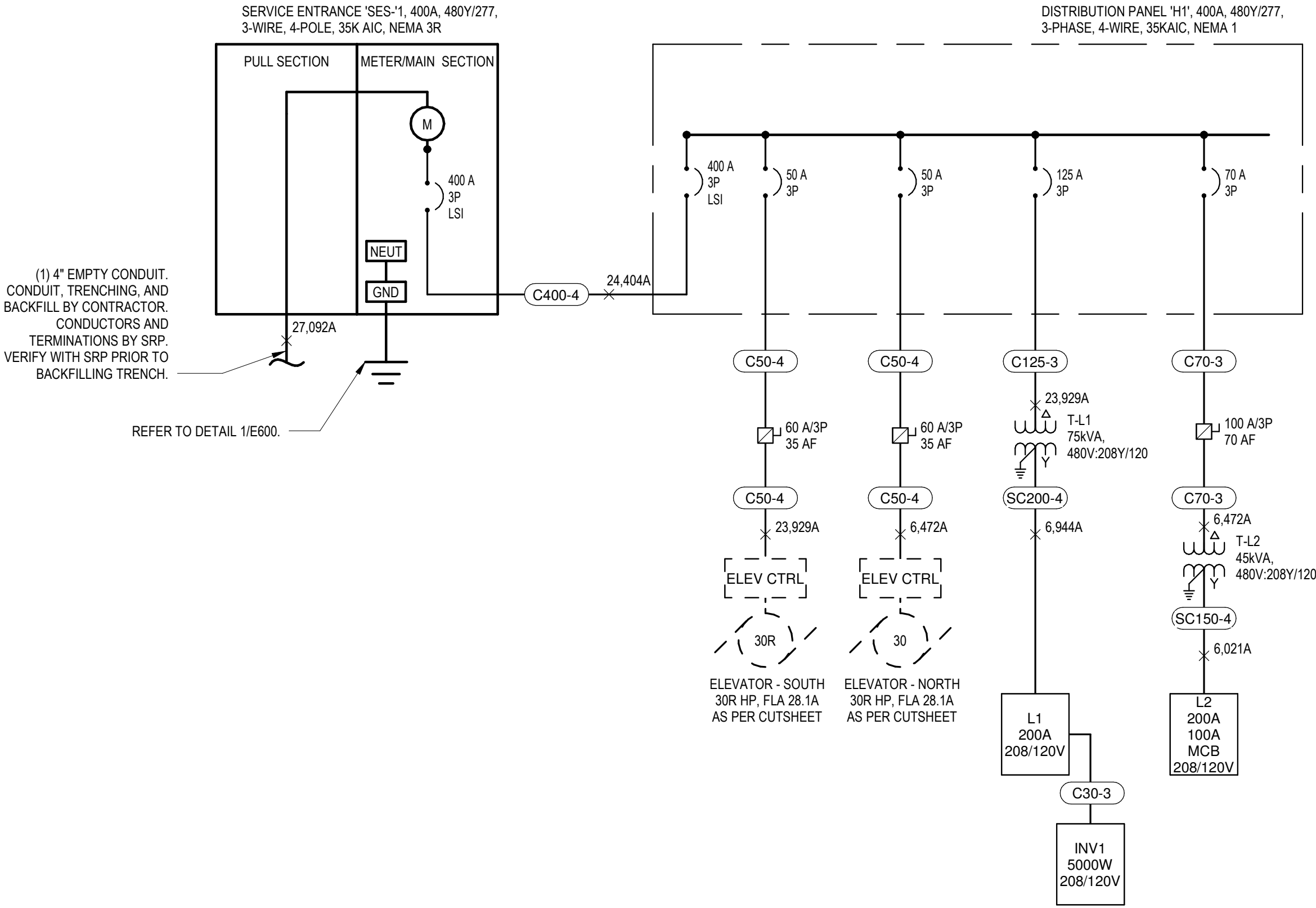
ROUTE -	F.H.W.A. Arizona Division	STATE ARIZ.	PROJECT NO. 0000 MA TOL	FEDERAL ID NO. CDS TOL-0(200)T	SHEET NUMBER 64	TOTAL SHEETS 70	RECORD DRAWING
MILEPOST	LOCATION VAN BUREN AT 96TH AVE, TOLLESON	TRACS NO. T0619 01C	DWG NO. E600				
STRUCTURE NO.	ADOT				64 OF 70		

LIGHTING FIXTURE SCHEDULE												
TAG	DESCRIPTION	MANUFACTURER	MODEL	MOUNTING	PHOTOMETRICS			ELECTRICAL			NOTES	
					CCT	CRI	LUMENS	VOLTAGE	WATTAGE	DRIVER		
L1	4' LINEAR STRIP, 3500K, 3300 LUMENS, MVOLT, WITH EM BACKUP AND WIRE CAGE	COLUMBIA LIGHTING	ESL4-35VW-FA-W-EDU-ELL14	SURFACE / SUSPEND	3500 K	80	3300	120	27	0-10V Dimming	PROVIDE UL924 REMOTE BATTERY BACKUP	
L2	4' LINEAR STRIP, 3500K, 3300 LUMENS, MVOLT	COLUMBIA LIGHTING	ESL4-35VW-FA-W-EDU	SURFACE	3500 K	80	3300	120	27	0-10V Dimming		
L2E	4' LINEAR STRIP, 3500K, 3300 LUMENS, MVOLT, WITH EM BACKUP	COLUMBIA LIGHTING	ESL4-35VW-FA-W-EDU-ELL14	SURFACE	3500 K	80	3300	120	27	0-10V Dimming	PROVIDE UL924 REMOTE BATTERY BACKUP	
L3	MINI WALL PACK, 3000K, 2000 LUMENS, MVOLT,	MULTI-LUMEN	OWP-SL-105-LED-2000L-DIM10-MVOLT-30K-BZ-0-EMG-LED-4W-PHC	SURFACE	3000 K	80	2000	120	16	0-10V Dimming	PROVIDE UL924 REMOTE BATTERY BACKUP, IP65	
NOTES: 1. QUANTITIES SHOWN FOR REFERENCE ONLY. CONTRACTOR RESPONSIBLE FOR CONFIRMING ALL QUANTITIES. 2. COORDINATE EXACT LOCATION AND ELEVATION OF LUMINAIRES WITH ARCHITECTURAL FLOOR PLANS, REFLECTED CEILING PLANS, SECTIONS AND ELEVATIONS. 3. LISTED LUMINAIRES WITH MODEL NUMBERS SHALL SET THE MINIMUM LEVEL OF QUALITY. ALTERNATE FIXTURES ARE SUBJECT TO REVIEW AND WILL NOT BE ACCEPTED WITHOUT THE FORMAL REVIEW AND APPROVAL FROM THE ARCHITECT, ENTINEER AND OWNER. 4. CONTRACTOR TO COORDINATE REQUIRED MOUNTING HARDWARE PRIOR TO ORDER. COORDINATE EXACT MOUNTING HARDWARE WITH CEILING TYPES SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS. 5. LUMINAIRES SHALL BE PROVIDED WITH 1% DIMMABLE DRIVERS, UNLESS SPECIFICALLY NOTED OTHERWISE IN THE LUMINAIRE SCHEDULE.												

FEEDER SCHEDULE									
XXX-XX	FEEDER RATING (A)	CONDUCTOR MATERIAL (AL/CU)	# OF SETS	PHASE CONDUCTORS (AWG/KCMIL)	NEUTRAL CONDUCTOR (N) (AWG/KCMIL)	EQUIPMENT GROUND CONDUCTOR (AWG/KCMIL)	GROUNDING ELECTRODE (AWG/KCMIL)	BONDING JUMPER (AWG/KCMIL)	CONDUIT SIZE (IN) (3Ø+N+EG)
C30-3	30 A	CU	1	3 # 10	-	1 # 10	-	-	3/4"
C50-4	50 A	CU	1	3 # 8	1 # 8	1 # 10	-	-	1"
C70-3	70 A	CU	1	3 # 4	-	1 # 8	-	-	1-1/4"
C125-3	125 A	CU	1	3 # 1	-	1 # 6	-	-	2"
C400-4	400 A	CU	2	3 # 3/0	1 # 3/0	1 # 3	-	-	2"
SC150-4	150 A	CU	1	3 # 1/0	1 # 1/0	-	1 # 6	1 # 6	2"
SC200-4	200 A	CU	1	3 # 3/0	1 # 3/0	-	1 # 4	1 # 4	2-1/2"
NOTES: 1. ALL FEEDERS AND GROUNDS SHALL BE COPPER. 2. FEEDER SIZE SHALL BE ADJUSTED AS REQUIRED BY CODE FOR VOLTAGE DROP BASED ON ACTUAL FEEDER LENGTH. 3. NEUTRALS ARE SHOWN AT 100% OF THE ASSUMED CONNECTED LOAD. FIELD VERIFY ACTUAL LOADS AND SIZE NEUTRALS BASED ON TOTAL UNBALANCED CONNECTED LOAD PER N.E.C. 4. FEEDERS ARE BASED ON THWN WIRE AND EMT CONDUIT. 60° C <100A; 75° C >=100A 5. EG CONDUCTORS BASED ON N.E.C. TABLE 250.122 6. GE CONDUCTORS BASED ON N.E.C. TABLE 250.66 EXAMPLE: 1. 1600NG -(4) SETS OF 3 #600 KCMIL PHASE CONDUCTORS + 1 #600 KCMIL NEUTRAL CONDUCTOR + 1 #4/0 GROUND CONDUCTOR (PER SET).									

EQUIPMENT CONNECTION SCHEDULE															
TAG	LEVEL	AREA	MOTOR/EQUIPMENT DATA							DISCONNECT					
			VOLTAGE	POLES	LOAD (kVA)	FLA (A)	MCA (A)	MOCP (A)	CIRCUIT NUMBER	FEEDER SIZE	TYPE	FRAME (A)	FUSE SIZE (A)	PROVIDED BY	
E-01	Level 1	SOUTH SHAFT - LEVEL 1	480	3	23.24	0	28	0	H1-1,3,5	4 # 6 + 1 #10G IN 1"C	FUSED	60	35		
E-02	Level 1	NORTH SHAFT	480	3	23.24	0	28	0	H1-2,4,6	4 # 6 + 1 #10G IN 1"C	FUSED	60	35		
EL-01	Level 1	SOUTH SHAFT - LEVEL 1	120	1	1.92	0	0	0	L1-29	2 # 12 + 1 # 12G IN 3/4"C	FUSED	30	30		
EL-02	Level 1	NORTH SHAFT	120	1	1.92	0	0	0	L2-7	2 # 12 + 1 # 12G IN 3/4"C	FUSED	30	30		
ID-1.1	Level 1	SOUTH SHAFT - LEVEL 1	208	2	0.07	0	1	15	L1-11,13	3 # 12 + 1 # 12G IN 3/4"C	MOTOR RATED SWITCH	0	0		
ID-2.1	Level 1	SOUTH SHAFT - LEVEL 1	208	3	0	0	0	0	L1-30,32,34	REFER TO MANUFACTURER	MOTOR RATED SWITCH	0	0		
ID-2.2	Level 1	SOUTH SHAFT - LEVEL 1	208	2	1.04	0	5	15	L1-16,18	3 # 12 + 1 # 12G IN 3/4"C	MOTOR RATED SWITCH	0	0		
ID-3.1	Level 1	NORTH SHAFT	208	2	0	0	0	0	L2-2,4	REFER TO MANUFACTURER	MOTOR RATED SWITCH	0	0		
ID-4.1	Level 1	NORTH SHAFT	208	2	0	0	0	0	L2-6,8	REFER TO MANUFACTURER	MOTOR RATED SWITCH	0	0		
ODU-1	Level 1	SOUTH SHAFT - LEVEL 1	208	2	7.07	0	34	56	L1-19,21	3 # 8 + 1 #10G IN 1"C	FUSED	60	50		
ODU-2	Level 1	SOUTH SHAFT - LEVEL 1	208	3	14.4	0	40	60	L1-30,32,34	3 # 6 + 1 #10G IN 1"C	FUSED	60	60		
ODU-3	Level 1	NORTH SHAFT	208	2	7.07	0	34	56	L2-2,4	3 # 8 + 1 #10G IN 1"C	NON-FUSED	60	0		
ODU-4	Level 1	NORTH SHAFT	208	2	7.07	0	34	56	L2-6,8	3 # 8 + 1 #10G IN 1"C	NON-FUSED	60	0		

Point	Point Name	Source* Point	Source Amps	Conduit Type	Conductor Type	Wire Size/Quantity	Load (A)	Distance	Voltage	Phase	XFMR kVA	XFMR %Z	Isc	**% Vdrop	Point
1	Utility Published Data	0	27,092										27,092		1
2			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	2
3	SES-1	1	27,092	M	Copper	1 Set of 500 KCMIL	400	25	480	3			24,404	0.18%	3
4	Panel H1	3	24,404	M	Copper	1 Set of 500 KCMIL	400	5	480	3			23,929	0.22%	4
5	Transformer T1	4	23,929	M	Copper	1 Set of 1	125	5	480	3	75	3.5	22,591	0.25%	5
6			#N/A	M	Copper	Set of							#DIV/0!	#N/A	6
7	Panel L1	5	22,591	M	Copper	1 Set of 3/0	200	5	208	3			21,050	0.33%	7
8	Panel H2	4	23,929	NM	Copper	1 Set of 3	100	150	480	3			6,472	1.46%	8
9	T2 Primary	8	6,472	M	Copper	1 Set of 8	36	5	480	3			6,021	1.51%	9
10	T2 Secondary	9	6,021	M	Copper	1 Set of 3	83	5	208	3			5,719	1.59%	10
11	Panel L2	10	5,719	M	Copper	1 Set of 3	83	5	208	3			5,447	1.67%	11
12			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	12
13	Security Panel	7	21,050	M	Copper	1 Set of 12	20	10	120	1			5,477	0.89%	13
14	Fire Alarm Control Panel	7	21,050	M	Copper	1 Set of 12	20	10	120	1			5,477	0.89%	14
15	Lighting Control Panel	7	21,050	M	Copper	1 Set of 12	20	10	120	1			5,477	0.89%	15
16			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	16
17	Elevator - South	4	23,929	NM	Copper	1 Set of 10	25	40	480	3			5,293	0.61%	17
18	Elevator - North	8	6,472	NM	Copper	1 Set of 10	25	25	480	3			4,057	1.71%	18
19			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	19
20			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	20
21			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	21
22			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	22
23			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	23
24			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	24
25			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	25
26			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	26
27			#N/A	NM	Copper	Set of							#DIV/0!	#N/A	27
28				NM	Copper	Set of									28



SINGLE LINE DIAGRAM

12" = 1'-0"

4LINE
STUDIO

4LINE STUDIO LLC
WWW.4LINESSTUDIO.COM
480.251.2048
CFORD@4LINESSTUDIO.COM



DESIGN	SHG	09/26
DRAWN	SHG	09/26
CHECKED	PH	09/26

Kimley»Horn

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ARIZONA DEPARTMENT OF TRANSPORTATION
PROJECT DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP

ELECTRICAL SINGLE LINE DIAGRAM &
SCHEDULES

ROUTE

-

MILEPOST

STRUCTURE NO.

F.H.W.A. Arizona Division

STATE

ARIZ.

PROJECT NO.

FEDERAL ID NO.

0000 MA TOL

CDS TOL-0(200)/T

SHEET

TOTAL

SHEETS

65

70

RECORD DRAWING

LOCATION VAN BUREN AT 96TH AVE, TOLLESON

TRACS NO. T0619 01C

ADOT

DWG NO. E700

65 OF 70

PANELBOARD: H1																			
LOCATION: ELECTRICAL ROOM 107				VOLTS: 480/277 Wye				A.I.C. RATING: 35K											
SUPPLY FROM: 'SES-1'				PHASES: 3				MAINS TYPE: MCB											
MOUNTING: SURFACE				WIRES: 4				MAINS RATING: 400 A											
ENCLOSURE: NEMA 1								MCB RATING: 400 A											
CKT	DESCRIPTION	NOTES	LOAD	TRIP (A)	POLE S	A (kVA)	B (kVA)	C (kVA)	POLE S	TRIP (A)	LOAD	NOTES	DESCRIPTION	CKT					
1	EQ - ELEV01-DISC		M	50	3	7.75	7.75		3	50	M		EQ - ELEV02-DISC	2					
3	--	--	--	--	--		7.75	7.75	--	--	--	--	--	4					
5	--	--	--	--	--			7.75	7.75	--	--	--	--	6					
7	SPARE	--	--	20	1	0	0		1	20	--	--	SPARE	8					
9	SPARE	--	--	20	1		0	0	1	20	--	--	SPARE	10					
11	SPARE	--	--	20	1			0	0	1	20	--	SPARE	12					
13	SPARE	--	--	20	1	0	0		1	20	--	--	SPARE	14					
15	SPARE	--	--	20	1		0	0	1	20	--	--	SPARE	16					
17	SPARE	--	--	20	1			0	0	1	20	--	SPARE	18					
19	T-L2' (45KVA)		R, S...	50	3	9.99	15.17		3	125	R, S...		T-L1' (75KVA)	20					
21	--	--	--	--	--		4.46	13.19	--	--	--	--	--	22					
23	--	--	--	--	--			4.54	14.99	--	--	--	--	24					
TOTAL LOAD:						40.65	33.15	35.01											
TOTAL AMPS:						148 A	120 A	127 A											
LOAD CLASSIFICATION						CONNECTED LOAD		DEMAND FACTOR		CALCULATED DEMAND		PANEL TOTALS							
R	RECEPTACLE	100% FIRST 10 KVA, 50% OTHER		6720 VA		100.00%		6720 VA		TOTAL CONNECTED LOAD:		108.81 kVA							
C	CONTINUOUS	125%		37727 VA		125.00%		47159 VA		TOTAL CALCULATED LOAD:		127.09 kVA							
N	NON-CONTINUOUS	100%		0 VA		0.00%		0 VA		TOTAL CONNECTED CURRENT:		131 A							
M	MOTOR	125% LARGEST, 100% OTHER		46480 VA		112.50%		52290 VA		TOTAL CALCULATED CURRENT:		153 A							
L	LIGHTING	125%		12126 VA		125.00%		15158 VA											
--	EXISTING	EXISTING LOAD		0 VA		0.00%		0 VA											
NOTES:																			

PANELBOARD: INV-1															
LOCATION: ELECTRICAL ROOM 107						VOLTS: 120/208 Single				A.I.C. RATING: 10K					
SUPPLY FROM:						PHASES: 1				MAINS TYPE: MLO					
MOUNTING: SURFACE						WIRES: 3				MAINS RATING: 40 A					
ENCLOSURE: NEMA 1										MCB RATING: 100 A					
CKT	DESCRIPTION	NOTES	LOAD	TRIP (A)	POLES	A (kVA)		C (kVA)		POLES	TRIP (A)	LOAD	NOTES	DESCRIPTION	CKT
1	LTG - EXTERIOR		L	20	1	0.1	1.5			2	20	L(3)	(3)	LTG - BRIDGE INTERIOR	2
3	SPARE	--	--	20	1			0	1.5	--	--	--	--		4
TOTAL LOAD:						1.60		1.50							
TOTAL AMPS:						15 A		14 A							
LOAD CLASSIFICATION						CONNECTED LOAD		DEMAND FACTOR		CALCULATED DEMAND		PANEL TOTALS			
R	RECEPTACLE	100% FIRST 10 KVA, 50% OTHER		0 VA		0.00%		0 VA				TOTAL CONNECTED LOAD: 3.1 kVA			
C	CONTINUOUS	125%		0 VA		0.00%		0 VA				TOTAL CALCULATED LOAD: 3.87 kVA			
N	NON-CONTINUOUS	100%		0 VA		0.00%		0 VA				TOTAL CONNECTED CURRENT: 15 A			
M	MOTOR	125% LARGEST, 100% OTHER		0 VA		0.00%		0 VA				TOTAL CALCULATED CURRENT: 19 A			
L	LIGHTING	125%		3096 VA		125.00%		3870 VA							
--	EXISTING	EXISTING LOAD		0 VA		0.00%		0 VA							
NOTES:															
(3) REFER TO BRIDGE LIGHTING PLANS FOR ELECTRICAL POINT OF CONNECTION. ROUTE (2) 12 AWG + (1) 12 AWG GND IN 1-1/4" C. TO SPECIFIED LOCATION.															

PANELBOARD: L1																		
LOCATION: ELECTRICAL ROOM 107					VOLTS: 120/208 Wye					A.I.C. RATING: 10K								
SUPPLY FROM: 'T-L1'					PHASES: 3					MAINS TYPE: MCB								
MOUNTING: SURFACE					WIRES: 4					MAINS RATING: 200 A								
ENCLOSURE: NEMA 1										MCB RATING: 200 A								
CKT	DESCRIPTION	NOTES	LOAD	TRIP (A)	POLE S	A (kVA)	B (kVA)	C (kVA)	POLE S	TRIP (A)	LOAD	NOTES	DESCRIPTION	CKT				
1	EQ - ELEV01 - SUMP PUMP		R	20	1	0.18	0		1	20	--	--	SPARE	2				
3	SECURITY PANEL		C	20	1		0.5	0	1	20	--	--	SPARE	4				
5	LTG - MACHINE RM. 106		L	20	1			0.05	1.92	1	20	N(2)	(2) DMS CABINET	6				
7	REC - ELEV01 SHAFT		R	20	1	0.36	0.5		1	20	C(1)	(1) FIRE ALARM CONTROL...	8					
9	SPARE	--	--	20	1		0	0	1	20	--	--	SPARE	10				
11	EQ - ID-1.1		C	15	2			0.04	0.36	1	20	R	REC - ELECTRICAL RM. 107	12				
13	--	--	--	--	--	0.04	0		1	20	--	--	SPARE	14				
15	LTG - BRIDGE EXTERIOR		L	20	2		1.5	0.52	2	65	C		EQ -OD-2	16				
17	--	--	--	--	--			1.5	0.52	--	--	--	--	18				
19	EQ - ODU-1		C	35	2	3.54	0.05		1	20	L		LTG - ELECTRICAL RM. 107	20				
21	--	--	--	--	--		3.54	0	1	20	--	--	SPARE	22				
23	INV-1		S, L	30	2			1.6	0.36	1	20	R	REC - TELECOM	24				
25	--	--	--	--	--	1.5	0.36		1	20	R		REC - MACHINE RM. 106	26				
27	LTG - ELEV01 SHAFT		L	20	1		0.05	0.36	1	20	R		REC - TELECOM	28				
29	EQ - ELEV01-LTG-DISC		L	20	1			1.92	4.8	3	60	C		EQ -ODU-2 & ID-2.1	30			
31	DMS CABINET	(2)	N(2)	20	1	1.92	4.8		--	--	--	--	--	32				
33	DMS CABINET	(2)	N(2)	20	1		1.92	4.8	--	--	--	--	--	34				
35	SPARE	--	--	20	1			0	1.92	1	20	R(2)	(2) DMS CABINET	36				
37	SPARE	--	--	20	1	0	1.92		1	20	R(2)	(2)	DMS CABINET	38				
39	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	40				
41	SPACE	--	--	--	1		--	--	1	--	--	--	SPACE	42				
TOTAL LOAD:						15.17	13.19	14.99										
TOTAL AMPS:						129 A	110 A	127 A										
LOAD CLASSIFICATION				CONNECTED LOAD		DEMAND FACTOR		CALCULATED DEMAND		PANEL TOTALS								
R	RECEPTACLE	100% FIRST 10 KVA, 50% OTHER		5820 VA		100.00%		5820 VA		TOTAL CONNECTED LOAD:		43.34 kVA						
C	CONTINUOUS	125%		9183 VA		125.00%		11479 VA		TOTAL CALCULATED LOAD:		51.28 kVA						
N	NON-CONTINUOUS	100%		0 VA		0.00%		0 VA		TOTAL CONNECTED CURRENT:		120 A						
M	MOTOR	125% LARGEST, 100% OTHER		14400 VA		125.00%		18000 VA		TOTAL CALCULATED CURRENT:		142 A						
L	LIGHTING	125%		8178 VA		125.00%		10223 VA										
--	EXISTING	EXISTING LOAD		0 VA		0.00%		0 VA										
NOTES:																		
(1) PROVIDE CLASS A GFCI CIRCUIT BREAKER. (2) PROVIDE CIRCUIT BREAKER OF COLOR RED WITH LOCK-ON PROVISIONS (2) REFER TO DMS PLANS FOR LOCATION OF DMS CABINET. ROUTE (2) 12 AWG + (1) 12 AWG GND IN 1-1/4" C. BELOW GRADE TO SPECIFIED LOCATION. (3) REFER TO BRIDGE LIGHTING PLANS FOR ELECTRICAL POINT OF CONNECTION. ROUTE (2) 12 AWG + (1) 12 AWG GND IN 1-1/4" C. TO SPECIFIED LOCATION.																		

PANELBOARD: L2														
LOCATION: MACHINE ROOM 101					VOLTS: 120/208 Wye					A.I.C. RATING: 10K				
SUPPLY FROM: 'T-L2'					PHASES: 3					MAINS TYPE: MCB				
MOUNTING: SURFACE					WIRES: 4					MAINS RATING: 200 A				
ENCLOSURE: NEMA 1										MCB RATING: 100 A				
CKT	DESCRIPTION	NOTES	LOAD	TRIP (A)	POLE S	A (kVA)	B (kVA)	C (kVA)	POLE S	TRIP (A)	LOAD	NOTES	DESCRIPTION	CKT
1	REC - MACHINE RM. 105		R	20	1	0.36	3.54		2	50	C		EQ - ODU-3 &ID-3.1	2
3	EQ - ELEV02 - SUMP PUMP		R	20	1		0.18	3.54	--	--	--	--	--	4
5	REC - ELEV02 SHAFT		R	20	1			0.36	3.54	2	50	C	EQ - ODU-4 &ID-4.1	6
7	EQ - ELEV02-LTG-DISC		L	20	1	1.92	3.54		--	--	--	--	--	8
9	LTG - MACHINE RM. 105		L	20	1		0.05	0.05	1	20	L		LTG - ELEV02 SHAFT	10
11	SPARE	--	--	20	1			0	0	1	20	--	SPARE	12
13	SPARE	--	--	20	1	0	0			1	20	--	SPARE	14
15	SPARE	--	--	20	1		0	0		1	20	--	SPARE	16
17	SPARE	--	--	20	1			0	0	1	20	--	SPARE	18
19	SPACE	--	--	--	1	--	--			1	--	--	SPACE	20
21	SPACE	--	--	--	1		--	--		1	--	--	SPACE	22
23	SPACE	--	--	--	1			--	--	1	--	--	SPACE	24
25	SPACE	--	--	--	1	--	--			1	--	--	SPACE	26
27	SPACE	--	--	--	1		--	--		1	--	--	SPACE	28
29	SPACE	--	--	--	1			--	--	1	--	--	SPACE	30
31	SPACE	--	--	--	1	--	--			1	--	--	SPACE	32
33	SPACE	--	--	--	1		--	--		1	--	--	SPACE	34
35	SPACE	--	--	--	1			--	--	1	--	--	SPACE	36
37	SPACE	--	--	--	1	--	--			1	--	--	SPACE	38
39	SPACE	--	--	--	1		--	--		1	--	--	SPACE	40
41	SPACE	--	--	--	1			--	--	1	--	--	SPACE	42
TOTAL LOAD:						9.35	3.82	3.90						
TOTAL AMPS:						78 A	32 A	33 A						
LOAD CLASSIFICATION				CONNECTED LOAD		DEMAND FACTOR		CALCULATED DEMAND		PANEL TOTALS				
R	RECEPTACLE	100% FIRST 10 KVA, 50% OTHER		900 VA		100.00%		900 VA						
C	CONTINUOUS	125%		7072 VA		125.00%		8840 VA		TOTAL CONNECTED LOAD: 17.07 kVA				
N	NON-CONTINUOUS	100%		0 VA		0.00%		0 VA		TOTAL CALCULATED LOAD: 21.12 kVA				
M	MOTOR	125% LARGEST, 100% OTHER		7072 VA		125.00%		8840 VA		TOTAL CONNECTED CURRENT: 47 A				
L	LIGHTING	125%		2028 VA		125.00%		2535 VA		TOTAL CALCULATED CURRENT: 59 A				
EX	EXISTING	EXISTING LOAD		0 VA		0.00%		0 VA						
NOTES:														

MECHANICAL ANNOTATIONS		
SYMBOL	ABBREVIATION	DESCRIPTION
		DETAIL REFERENCE CALLOUT: TOP-DETAIL NUMBER, BOTTOM- DRAWING NUMBER SHOWN ON
		SECTION VIEW CALLOUT: TOP-DETAIL NUMBER, BOTTOM- DRAWING NUMBER SHOWN ON
	POC	CONNECT TO EXISTING
		DEMOLISH TO POINT INDICATED
		SHEET NOTES
		SHEET KEY NOTES
		REVISION TAG
	AP	ACCESS PANEL
	TSTAT	THERMOSTAT
	HSTAT	HUMIDISTAT
		CARBON MONOXIDE SENSOR
		CARBON DIOXIDE SENSOR
		NITROGEN DIOXIDE SENSOR
	BD	BACKDRAFT DAMPER
	SD	DUCT MOUNTED SMOKE DETECTOR
	TCP	TEMPERATURE CONTROL PANEL
	TS	TEMPERATURE SENSOR
	HS	HUMIDITY SENSOR
	DP	DIFFERENTIAL PRESSURE SENSOR
	SP	STATIC PRESSURE SENSOR
	FS	FLOW SWITCH
	ES	EMERGENCY SHUTDOWN SWITCH
	100 UC	AIRFLOW DOOR UNDERCUT

SOME SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT PERTAIN TO THIS PROJECT

MECHANICAL SYMBOLS AND LEGEND - AIR SIDE		
SYMBOL	ABBREVIATION	DESCRIPTION
	CD-1 6"Ø/50	SUPPLY AIR CEILING DIFFUSER, NECK SIZE AND AIR QUANTITY
	RG-1 10"x10"/50	RETURN AIR CEILING GRILL, NECK SIZE AND AIR QUANTITY
	EG-1 10"x10"/50	EXHAUST AIR CEILING GRILL, NECK SIZE AND AIR QUANTITY
	WD-1 24"x6"/50	SUPPLY AIR SIDEWALL DIFFUSER, NECK SIZE AND AIR QUANTITY
		ROUND FLEX DUCT
	FD	FIRE DAMPER
	SD	SMOKE DAMPER
	FSD	COMBINATION FIRE/SMOKE DAMPER
	14"x8"	RECTANGULAR DUCT SIZE, FIRST DIMENSION IS SIDE SHOWN
	14"Ø	OVAl DUCT SIZE, FIRST DIMENSION IS SIDE SHOWN
	14"Ø	ROUND DUCT SIZE
	(E)18"x8"	EXISTING DUCT
	MVD	MANUAL VOLUME/BALANCING DAMPER
	MD	MOTORIZED DAMPER
	AFMS	AIRFLOW MONITORING STATION
		DUCT WITH INTERNAL INSULATION
		SQUARE TO ROUND DUCT TRANSITION
		MITERED ELBOW WITH TURNING VANES
	SA	SUPPLY AIR DUCT UP/DOWN
	RA	RETURN AIR DUCT UP/DOWN
	EA	EXHAUST AIR DUCT UP/DOWN
	VAV	VAV BOX WITH ELECTRIC HEATING COIL
		VAV BOX WITH HOT WATER COIL
		VAV BOX WITH NO HEATING COIL

MECHANICAL SYMBOLS AND LEGEND - WATER SIDE		
SYMBOL	ABBREVIATION	DESCRIPTION
	CWS	CONDENSER WATER SUPPLY PIPING
	CWR	CONDENSER WATER RETURN PIPING
	CHWS	CHILLED WATER SUPPLY PIPING
	CHWR	CHILLED WATER RETURN PIPING
	CD	CONDENSATE
	CR	CONDENSATE RETURN
	RL	REFRIGERANT LIQUID
	RS	REFRIGERANT SUCTION
	HWS	HEATING HOT WATER SUPPLY PIPING
	HWR	HEATING HOT WATER RETURN PIPING
	BV	BALL VALVE
	CS	CIRCUIT SETTER OR FLOW CONTROL VALVE
	BFV	BUTTERFLY VALVE
	GV	GATE VALVE
	CHV	CHECK VALVE
	GLV	GLOBE VALVE
	ANV	ANGLE VALVE
	TDV	TRIPLE DUTY VALVE
	HV	3/4" HOSE END DRAIN VALVE
	BP	BACKFLOW PREVENTOR
	STR	STRAINER
	STR	STRAINER WITH 3/4" HOSE END DRAIN VALVE
	PTR	PRESSURE - TEMPERATURE RELIEF VALVE
	RV	PRESSURE RELIEF VALVE
		2-WAY CONTROL VALVE
		3-WAY CONTROL VALVE
	U	UNION
		REDUCER
	PG	PRESSURE GAGE WITH GAUGE COCK
	TH	THERMOMETER
	FCO/IGO	FLOOR OR GRADE CLEANOUT
	WCO	WALL CLEANOUT
	PD	PIPING TEE DOWN
	PU	PIPING TEE UP
	PU	PIPING ELBOW UP
	PD	PIPING ELBOW DOWN
	COP	CAP ON END OF PIPE
		ARROW INDICATES DIRECTION OF EACH FLOW
		PUMP

MECHANICAL EQUIPMENT TAGS

DIFFUSER / GRILLE / REGISTER TAG

EXAMPLE: CD-1 DESCRIPTION: (TYPE)
12"Ø / 500 (NECK SIZE) / (CFM)

AHU TAG

EXAMPLE: AHU-1 DESCRIPTION: AHU - (UNIT NUMBER)

VAV BOX TAG

EXAMPLE: VAV-1-1 DESCRIPTION: VAV - (AHU NUMBER) - (VAV BOX NUMBER)

MECHANICAL ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
AABC	AMERICAN AIR BALANCE COUNCIL
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
AFMS	AIRFLOW MONITORING STATION
APD	AIR PRESSURE DROP
BAS	BUILDING AUTOMATION SYSTEM
BFF	BELOW FINISHED FLOOR
BFG	BELOW FINISHED GRADE
BHP	BRAKE HORSE POWER
BMS	BUILDING MANAGEMENT SYSTEM
BTU/H	BRITISH THERMAL UNIT PER HOUR
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
COP	COEFFICIENT OF PERFORMANCE
CT	COOLING TOWER
CU	CONDENSING UNIT
CV	CONSTANT AIR VOLUME
(D)	DEMOLISHED
DB	DRY BULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROLS
DIA	DIAMETER
DL	DOOR LOUVER
DN	DOWN
DOAS	DEDICATED OUTSIDE AIR HANDLING UNIT
(E)	EXISTING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
°F	DEGREES FAHRENHEIT
FA	FROM ABOVE
FB	FROM BELOW
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPS
FPM	FEET PER MINUTE
GA	GAGE OR GAUGE
GAL	GALLONS
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HD	HEAD PRESSURE
HP	HORSEPOWER
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
HVLS	HIGH VOLUME LOW SPEED
IBC	INTERNATIONAL BUILDING CODE
IMC	INTERNATIONAL MECHANICAL CODE
IPC	INTERNATIONAL PLUMBING CODE
IE	INVERT ELEVATION BELOW FINISHED FLOOR
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	ONE THOUSAND BTUH
MCA	MINIMUM CIRCUIT AMPS
MIN	MINIMUM
MCCP	MAXIMUM OVER CURRENT PROTECTION
N/A	NOT APPLICABLE
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NEC	NATIONAL ELECTRIC CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIS	NOT IN SCOPE
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
PD	PRESSURE DROP
PDU	PACKAGED DEHUMIDIFICATION UNIT
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PTAC	PACKAGED TERMINAL AIR CONDITIONER
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP AIR HANDLING UNIT
SA	SUPPLY AIR
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SP	STATIC PRESSURE
SS	STAINLESS STEEL
TDH	TOTAL DYNAMIC HEAD
TFA	TO FLOOR ABOVE
TFB	TO FLOOR BELOW
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UC	UNDER CUT
UL	UNDERWRITERS LABORATORIES, INC.
UMC	UNIFORM MECHANICAL CODE
UPC	UNIFORM PLUMBING CODE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

- #### MECHANICAL GENERAL NOTES
- MECHANICAL WORK SHALL CONFORM WITH THE LATEST ADOPTED LOCAL CODES, ORDINANCES, AND DESIGN REQUIREMENTS UNLESS OTHERWISE APPROVED BY THE AUTHORITY HAVING JURISDICTION (AHJ).
 - CONTRACTOR SHALL COORDINATE WITH STRUCTURAL REQUIREMENTS BEFORE DRILLING OR CUTTING ANY CMU WALLS, CEILING JOISTS OR STRUCTURAL ELEMENTS.
 - CONTRACTOR TO PROVIDE ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, AND INSURANCES TO COMPLETE THE DESIGN PER THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO THE SATISFACTION OF THE ENGINEER/ARCHITECT.
 - CONTRACTOR TO PROVIDE ALL REQUIRED PERMITS AND FEES TO COMPLETE THE PROJECT.
 - THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH DRAWINGS PROVIDED BY OTHER DISCIPLINES. CONSTRUCTION CONFLICTS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER/ARCHITECT.
 - DUE TO THE SMALL SCALE OF THE DRAWINGS, IT IS NOT FEASIBLE TO SHOW ALL REQUIRED OFFSETS, ELEVATIONS, ETC., IT IS THEREFORE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE REQUIRED ROUTING, ELEVATION, AND PLACEMENT OF EQUIPMENT AND PROVIDE REQUIRED OFFSETS INSTALLED IN ACCORDANCE WITH SMACNA STANDARDS AND THE SPECIFICATIONS TO MEET THE INTENT OF THE DESIGN. ALL DIMENSIONS AND MEASUREMENTS SHALL BE VERIFIED ONSITE BEFORE FABRICATION AND/OR INSTALLATION OF THE EQUIPMENT.
 - ALL INFORMATION SHOWN ON SCHEDULES ARE BASED ON AVAILABLE PRODUCT INFORMATION AT THE TIME OF DESIGN.
 - THE CONTRACTOR SHALL KEEP INSTALLATION INSTRUCTIONS FOR ALL LISTED EQUIPMENT ON THIS PROJECT AT THE JOBSITE AND SHALL HAVE THEM ACCESSIBLE FOR THE FIELD INSPECTOR UPON REQUEST.
 - PROVIDED DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PROVIDE AN INSTALLATION SUITABLE IN DIMENSION, CONSTRUCTION, FUNCTION AND FINISH FOR THE PURPOSE INTENDED.
 - ANY DISCREPANCIES DURING BID SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER/ARCHITECT AND RESOLVED PRIOR TO FINALIZATION OF THE CONSTRUCTION CONTRACT.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADE.
 - EXACT LOCATION OF ACCESS PANELS SHALL BE COORDINATED WITH FINAL PLACEMENT OF ALL VALVES, DAMPERS, AND ANY OTHER COMPONENT IDENTIFIED ON THE DRAWINGS.
 - THE FABRICATION AND INSTALLATION OF ALL SHEET METAL DUCTWORK SHALL COMPLY WITH SMACNA DUCT CONSTRUCTION STANDARDS, NFPA 90A AND 90B AS DETAILED ON THE DRAWINGS AND PER LOCAL CODES.
 - DUCT ACCESS PANELS SHALL BE PROVIDED FOR ALL FIRE, SMOKE, FIRE/SMOKE AND MOTORIZED DAMPERS.
 - ALL DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
 - FLEXIBLE DUCTS ARE LIMITED TO 6'-0" LENGTH.
 - FINISH AND COLOR OF EXTERNAL SURFACES FOR EXPOSED UNITS, DUCTWORK, OR PIPING SHALL BE APPROVED BY THE ARCHITECT.
 - CONTRACTOR SHALL PERFORM TESTING AND ADJUSTING AS REQUIRED FOR ALL EQUIPMENT AND/OR SYSTEMS WITHIN THIS SCOPE OF WORK PER THE SPECIFICATIONS.

APPLICABLE PROJECT CODES

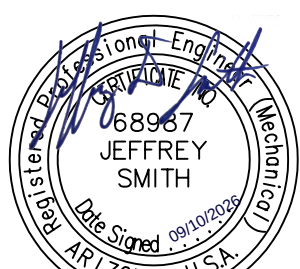
- 2024 IBC - INTERNATIONAL BUILDING CODE
- 2024 IMC - INTERNATIONAL MECHANICAL CODE
- 2024 IPC - INTERNATIONAL PLUMBING CODE
- 2024 IFGC - INTERNATIONAL FUEL GAS CODE
- 2021 IECC - INTERNATIONAL ENERGY CONSERVATION CODE

MECHANICAL SHEET INDEX

NUMBER	NAME
M001	MECHANICAL LEGEND, NOTES AND ABBREVIATIONS
M101	MECHANICAL & PLUMBING PLANS
M201	MECHANICAL DETAILS
M301	MECHANICAL & PLUMBING SCHEDULES



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WWW.4LINESTUDIO.COM
480.251.2048
CFORD@4LINESTUDIO.COM



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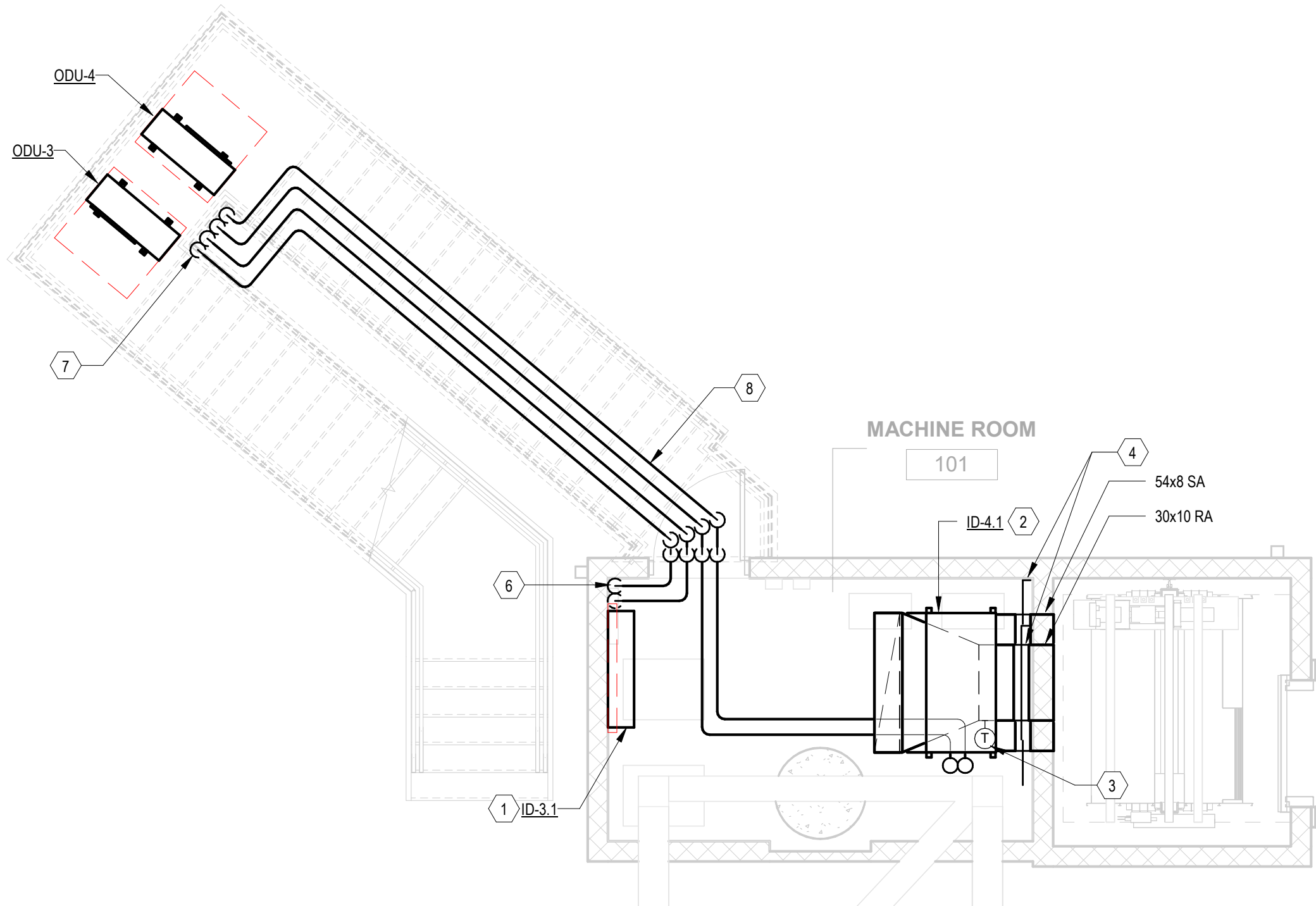
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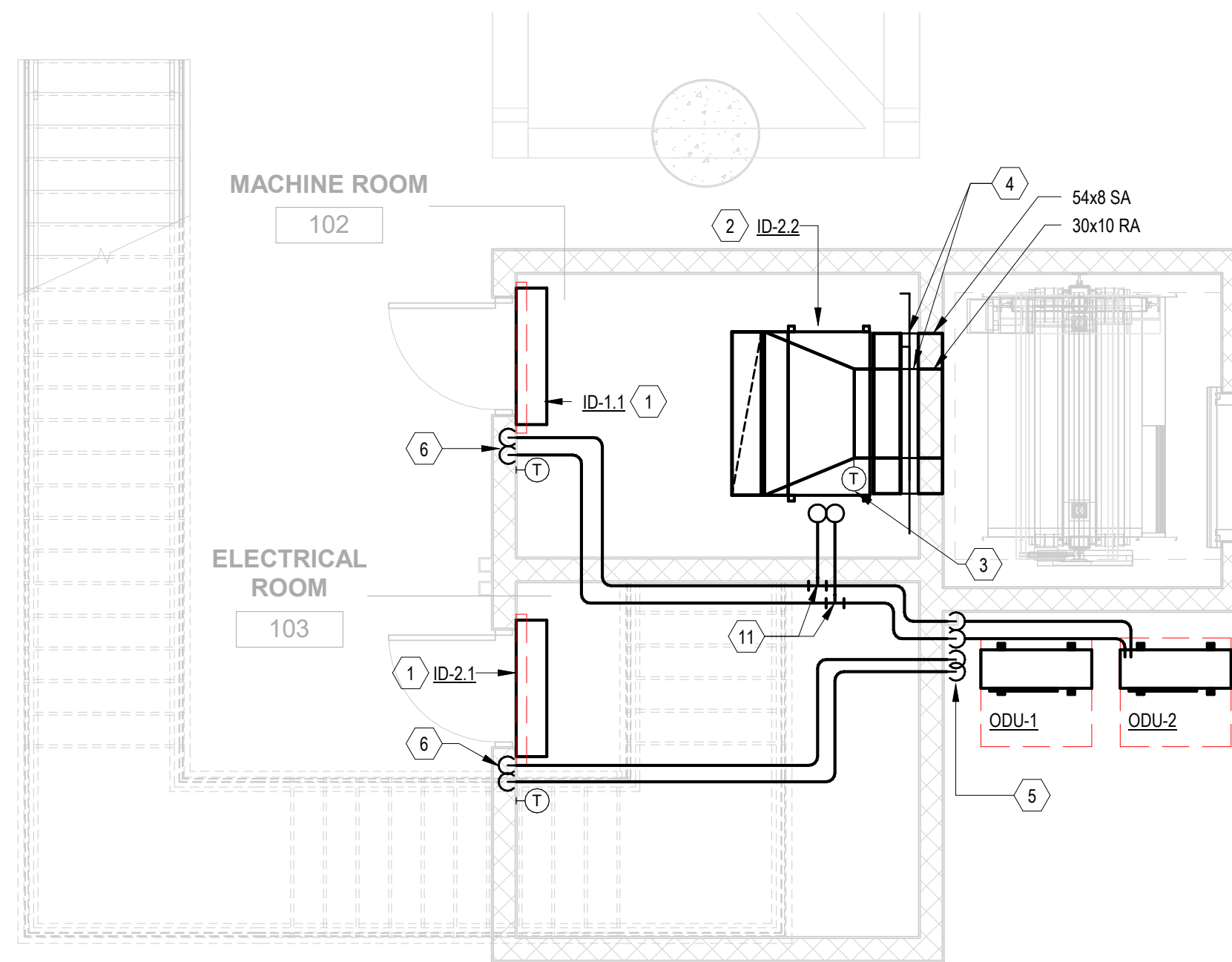
MECHANICAL LEGEND, NOTES AND
ABBREVIATIONS

ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NUMBER	TOTAL SHEETS	RECORD DRAWING
		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	67	70	
MILEPOST	LOCATION						DWG NO. M001
STRUCTURE NO.	TRACS NO. T0619 01C					67	OF 70

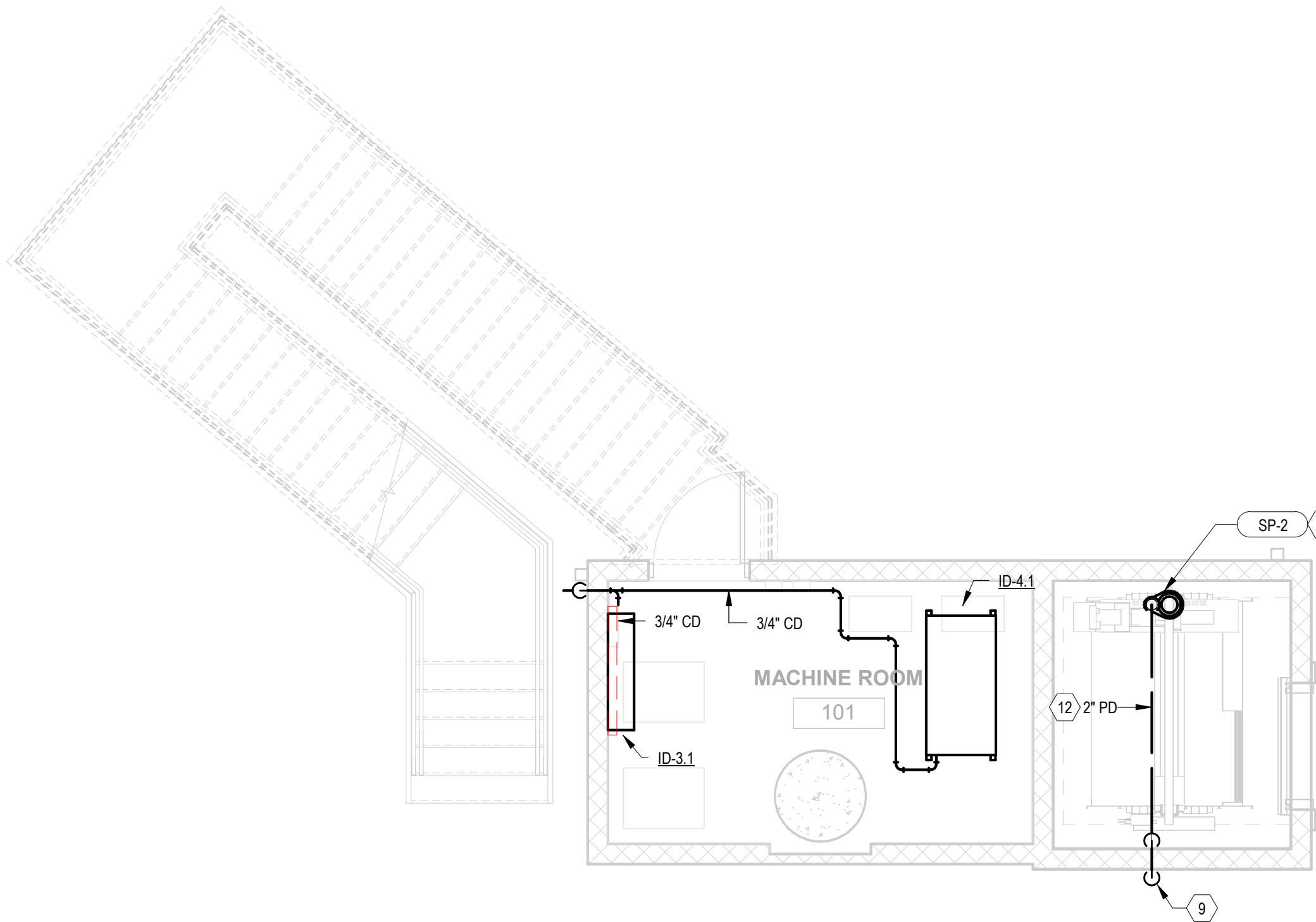
ADOT



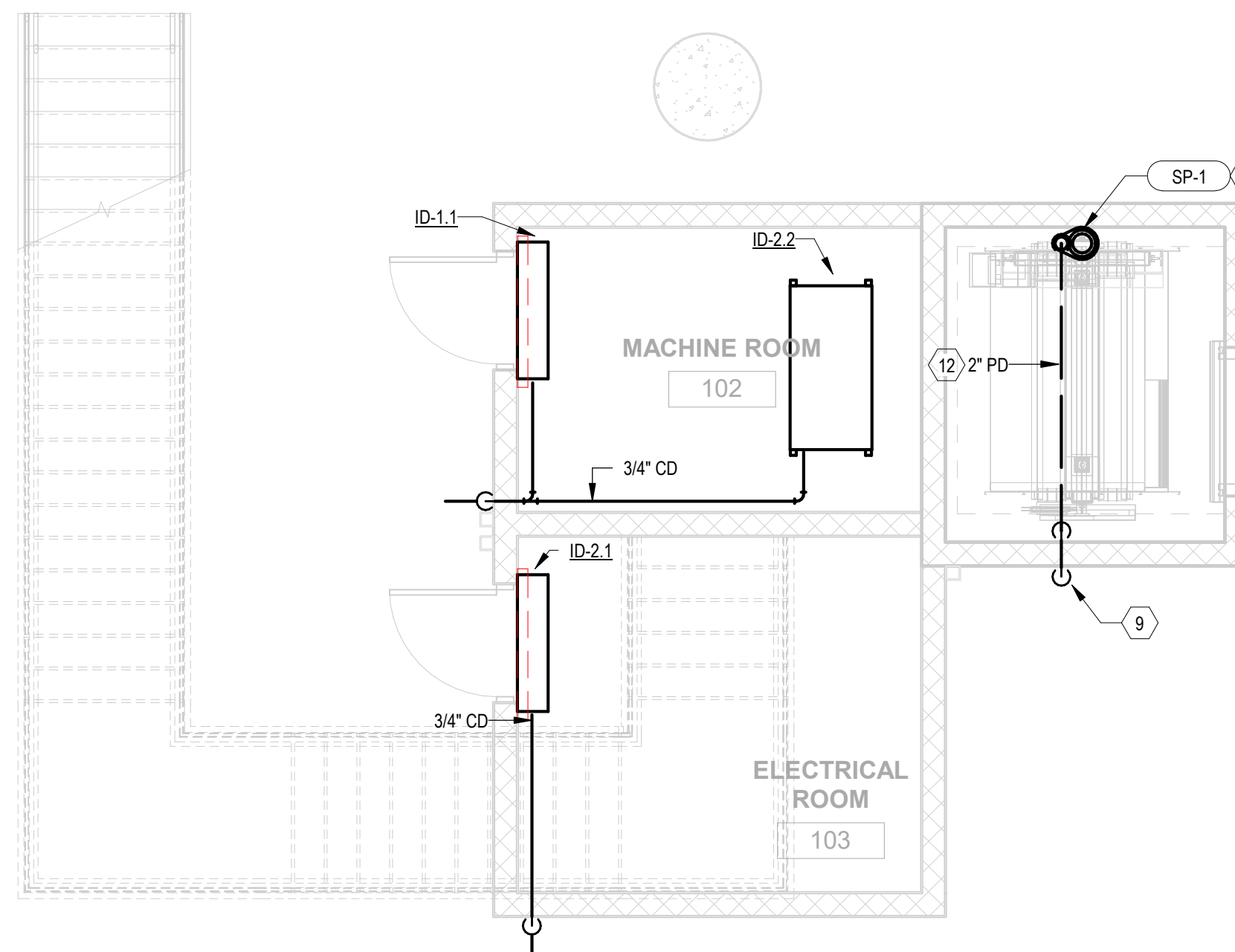
2 MECHANICAL PLAN - NORTH
1/4" = 1'-0"



1 MECHANICAL PLAN - SOUTH
1/4" = 1'-0"



3 PLUMBING PLAN - NORTH PIT
1/4" = 1'-0"

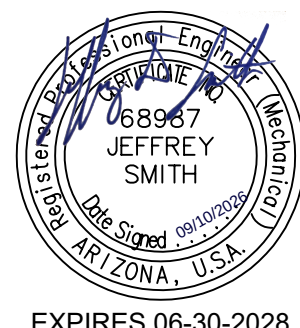


4 PLUMBING PLAN - SOUTH PIT
1/4" = 1'-0"

#	KEYNOTES
1	PROVIDE WALL-MOUNTED FAN COIL INDOOR UNIT WITH MANUFACTURER'S PROGRAMMABLE THERMOSTAT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
2	PROVIDE CONCEALED DUCTED FAN COIL UNIT ABOVE RATED CEILING. HANG UNIT FROM STRUCTURE. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3	PROVIDE PROGRAMMABLE THERMOSTAT IN RETURN AIR DUCT.
4	PROVIDE 2-HR FIRE DAMPER AT DUCT PENETRATIONS INTO ELEVATOR SHAFT.
5	REFRIGERANT PIPING FROM OUTDOOR CONDENSING UNIT. PROVIDE CLOSED CELL FOAM INSULATION ON REFRIGERANT LINESET AND PROVIDE ALUMINUM JACKET OVER INSULATION EXPOSED TO SUNLIGHT. SEAL PENETRATION INTO BUILDING WEATHER-TIGHT.
6	REFRIGERANT PIPING ON TO WALL-MOUNTED FAN COIL UNIT.
7	STRAP REFRIGERANT LINESET TO COLUMN.
8	REFRIGERANT LINESET ROUTED BELOW STAIRS. SECURE PIPE HANGERS TO UNDERSIDE OF STAIRS. COORDINATE WITH OTHER TRADES.
9	TERMINATE SUMP PUMP DRAIN AT EXTERIOR GRADE. DRAIN SHALL TERMINATE 24" AFG WITH A 90 DEGREE ELBOW DIRECT TOWARDS GRADE.
10	PROVIDE ELEVATOR SUMP PUMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. REFER TO EQUIPMENT SCHEDULE.
11	MULTI-CONNECTED P-SERIES SYSTEM INDOOR UNITS CONNECTED VIA MANUFACTURER-APPROVED REFRIGERANT BRANCH JOINT.
12	PUMP DISCHARGE PIPE ROUTING TO ROUTE BELOW ELEVATOR HOIST WAY RAIL TO PREVENT CONFLICT.

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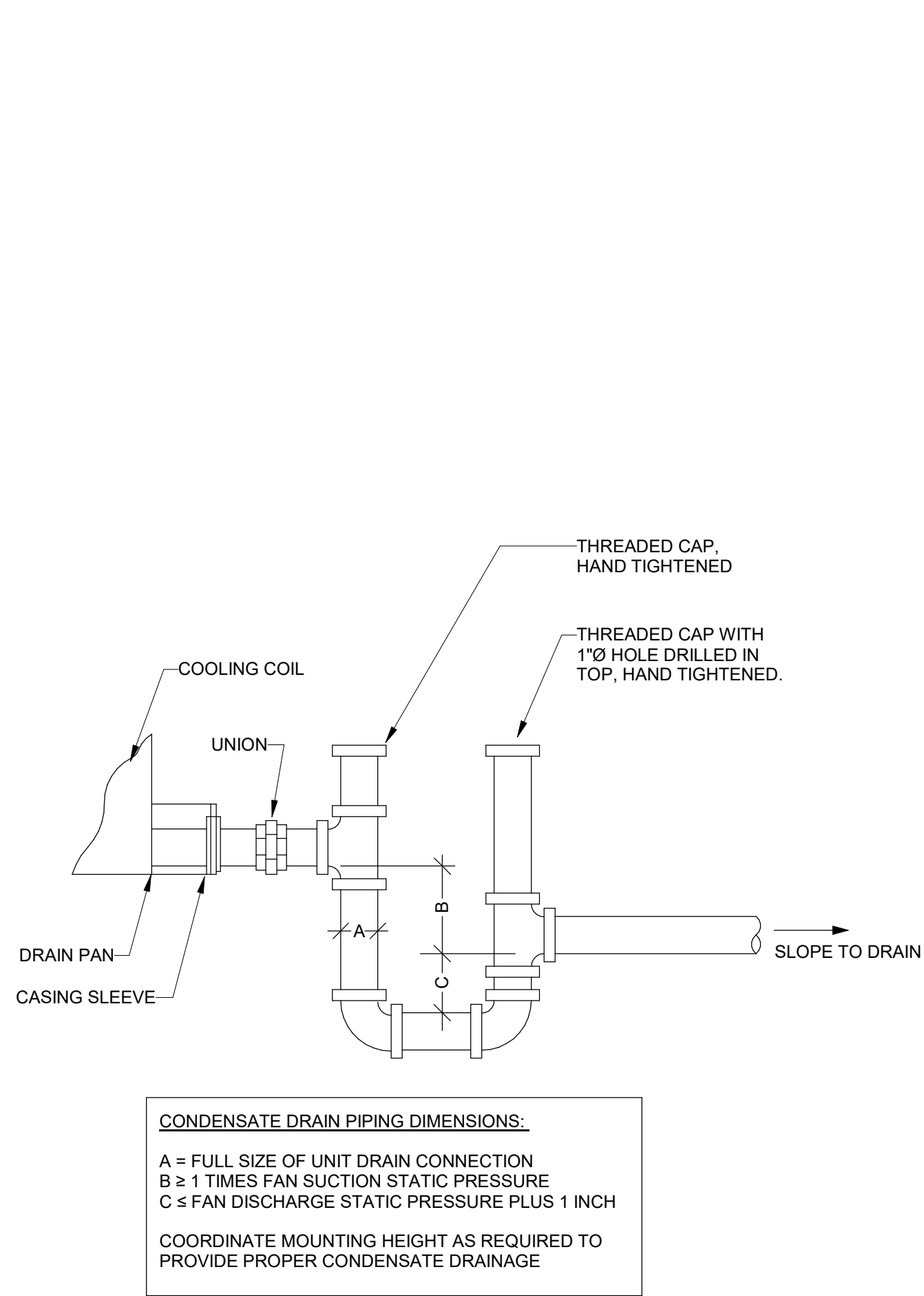
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MECHANICAL & PLUMBING PLANS

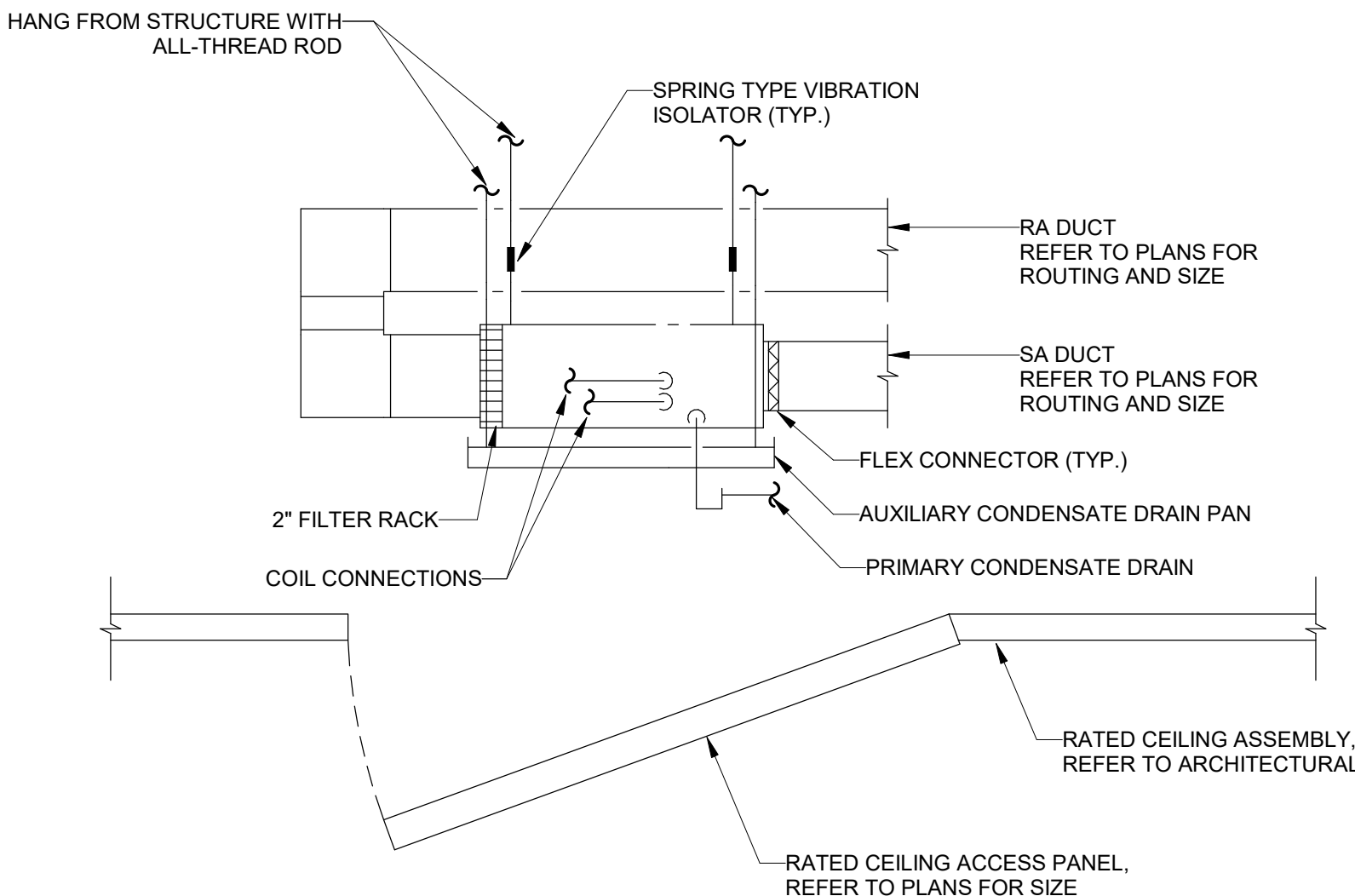
ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NUMBER	TOTAL SHEETS	RECORD DRAWING
MILEPOST		ARIZ.	0000 MA TOL	CDS TOL-Q(200)T	68	70	
	LOCATION VAN BUREN AT 96TH AVE, TOLLESON						DWG NO. M101
STRUCTURE NO.	TRACS NO. T0619 01C					68	OF 70

ADOT

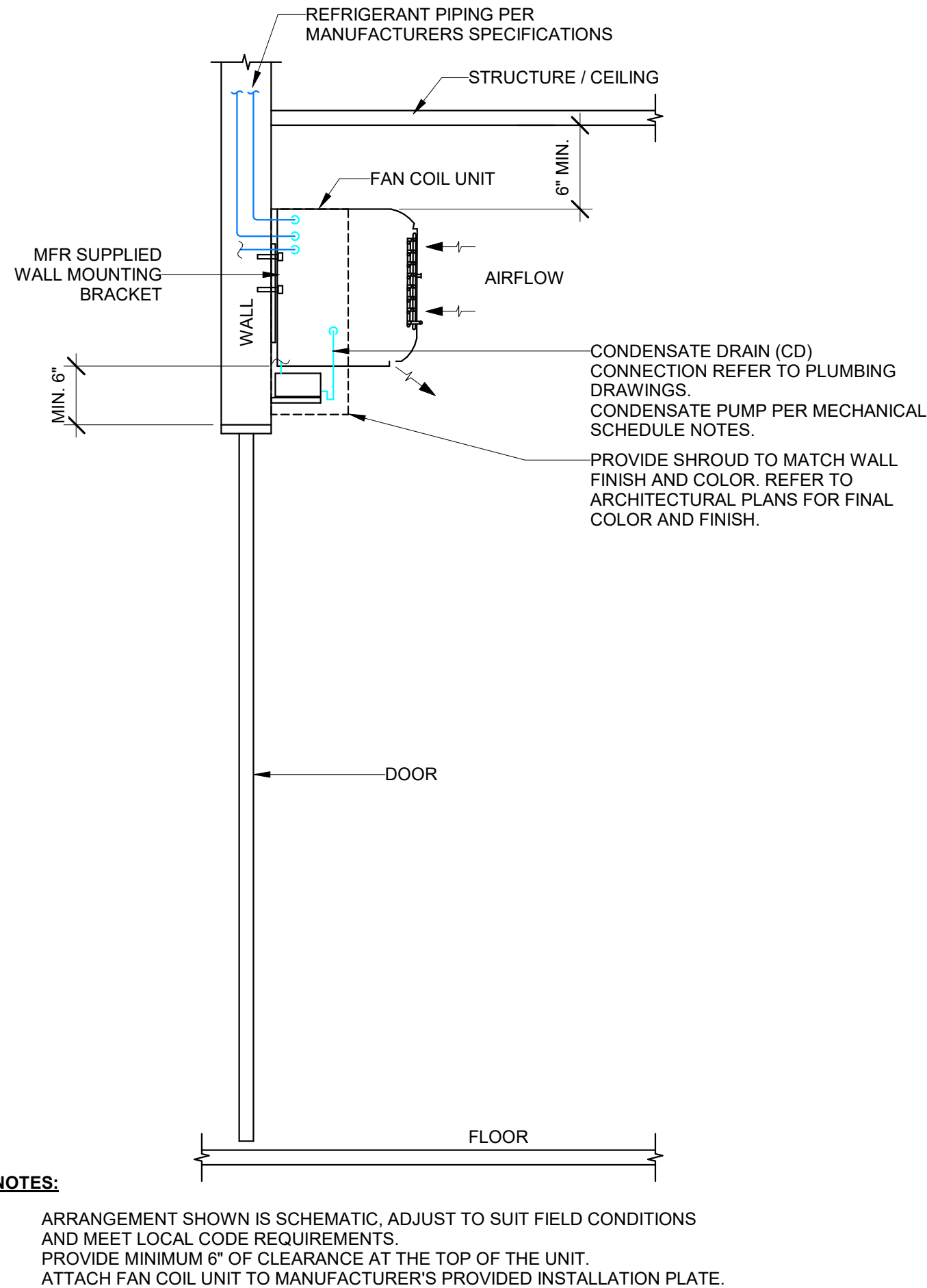


CONDENSATE DRAIN PIPING DIMENSIONS:
A = FULL SIZE OF UNIT DRAIN CONNECTION
B ≥ 1 TIMES FAN SUCTION STATIC PRESSURE
C ≤ FAN DISCHARGE STATIC PRESSURE PLUS 1 INCH
COORDINATE MOUNTING HEIGHT AS REQUIRED TO PROVIDE PROPER CONDENSATE DRAINAGE

3 CONDENSATE DRAIN PIPING DETAIL
NOT TO SCALE

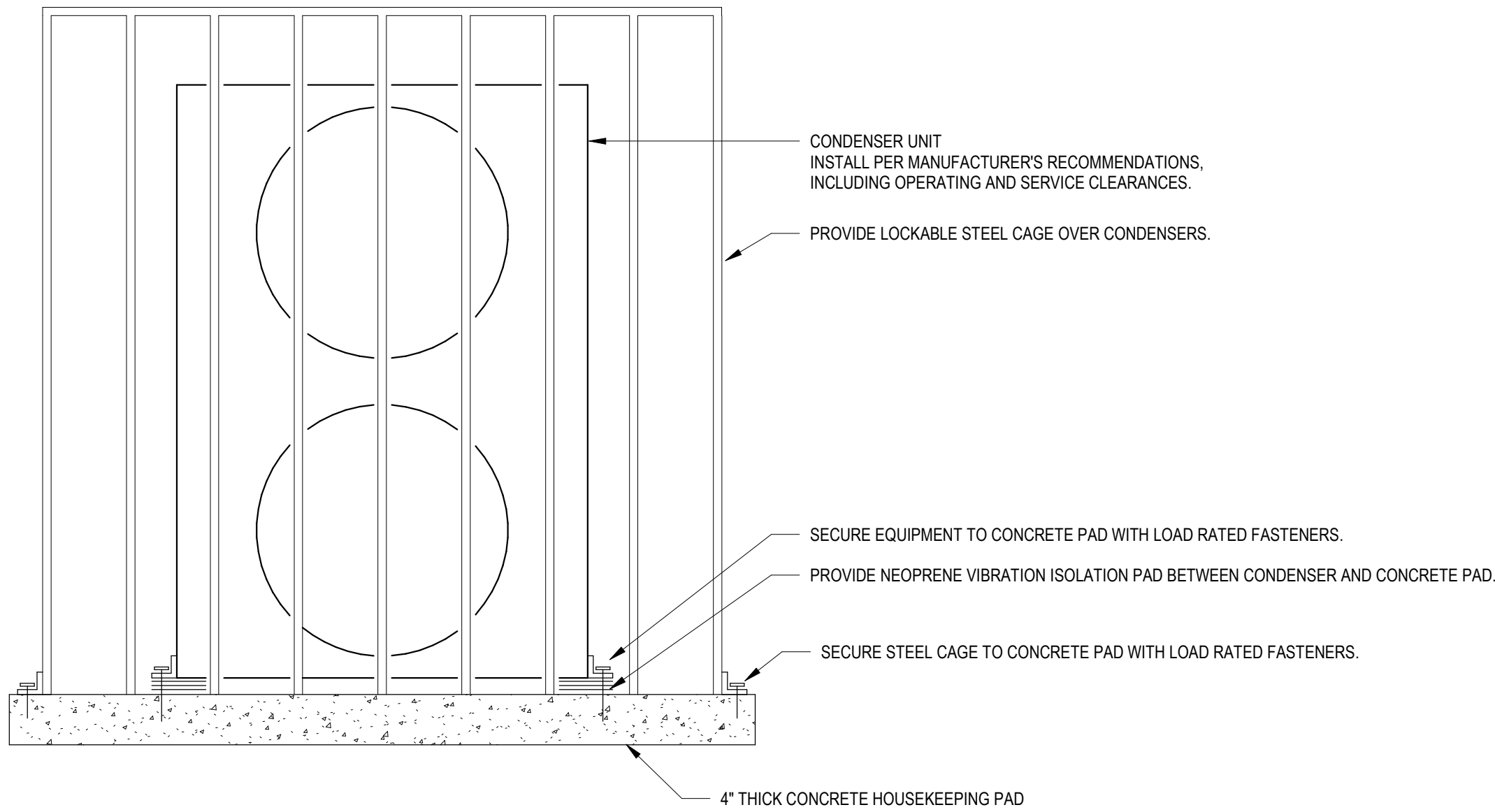


2 HORIZONTAL FAN/COIL UNIT & FURNACE INSTALLATION
NOT TO SCALE

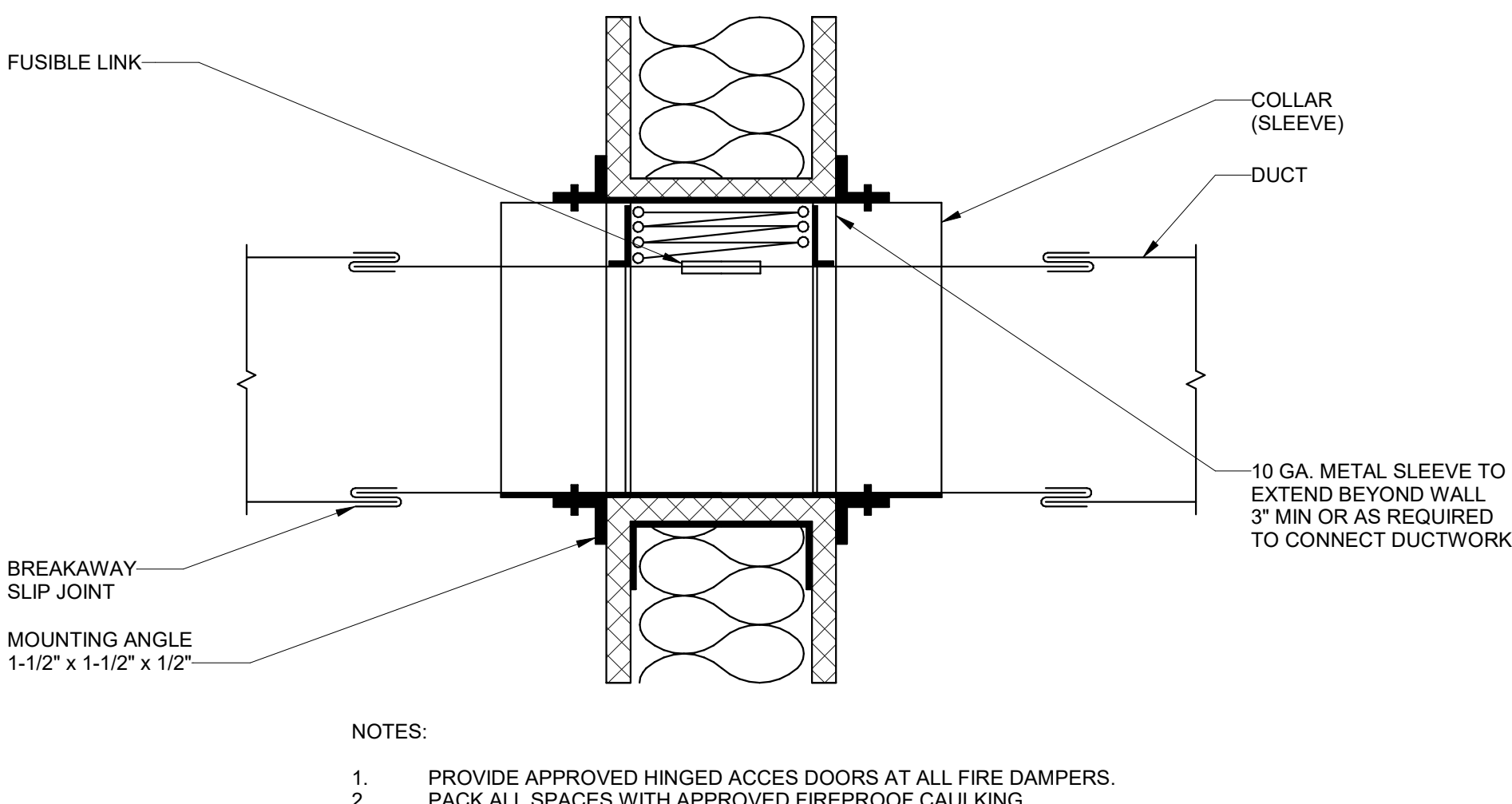


NOTES:
1. ARRANGEMENT SHOWN IS SCHEMATIC, ADJUST TO SUIT FIELD CONDITIONS AND MEET LOCAL CODE REQUIREMENTS.
2. PROVIDE MINIMUM 6" OF CLEARANCE AT THE TOP OF THE UNIT.
3. ATTACH FAN COIL UNIT TO MANUFACTURER'S PROVIDED INSTALLATION PLATE. MOUNT INSTALLATION PLATE TO WALL PER MANUFACTURER'S RECOMMENDATIONS.

1 FCU/VRF WALL-MOUNTED UNIT DETAIL
NOT TO SCALE

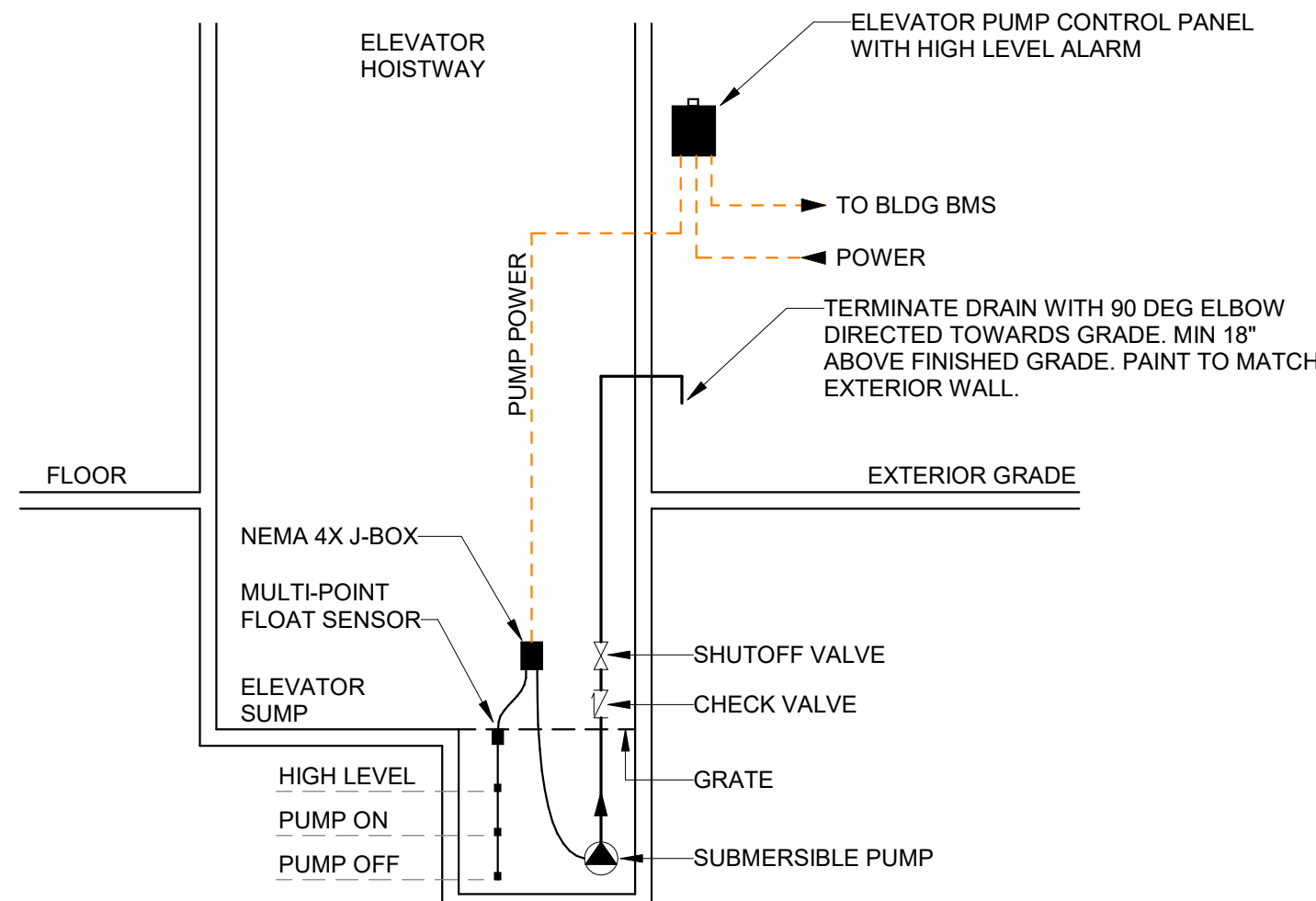


6 CONDENSER UNIT DETAIL
NOT TO SCALE



NOTES:
1. PROVIDE APPROVED HINGED ACCES DOORS AT ALL FIRE DAMPERS.
2. PACK ALL SPACES WITH APPROVED FIREPROOF CAULKING.

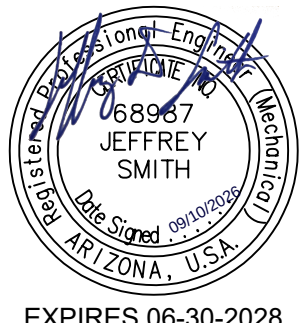
5 TYPICAL FIRE DAMPER
NOT TO SCALE



4 ELEVATOR SUMP PUMP DETAIL
NOT TO SCALE

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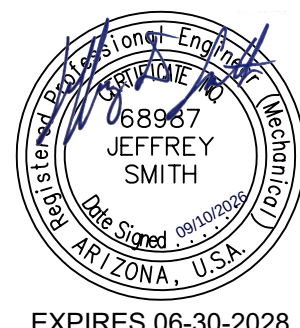
MECHANICAL DETAILS

ROUTE -	F.H.W.A. Arizona Division	STATE	PROJECT NO.	FEDERAL ID NO.	SHEET NUMBER	TOTAL SHEETS	RECORD DRAWING	
MILEPOST		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	69	70		
	LOCATION					VAN BUREN AT 96TH AVE, TOLLESON		DWG NO. M201
STRUCTURE NO.	TRACS NO. T0619 01C					69	OF	70

SPLIT SYSTEM INDOOR UNIT SCHEDULE (HEAT PUMP)																													
MARK	SYSTEM TYPE	AREA SERVED	CONNECTED OUTDOOR UNIT	NOM. UNIT SIZE (TONS)	REFRIG. TYPE	COOLING / HEATING CAPACITIES										ELECTRICAL										WEIGHT (LBS)	MFG	MODEL	NOTES
						AIRFLOW (CFM)	MOTOR (HP)	ESP (IN W.C.)	RATED CLG CAP (MBH)	RATED SENS CLG CAP (MBH)	EAT		LAT		RATED HTG CAP (MBH)	VOLTAGE	PHASE	HZ	MCA	MOCP	DISCONNECT		SCCR (KVA)						
											DB (F)	WB (F)	DB (F)	WB (F)							BY	TYPE							
ID-1.1	DUCTLESS, WALL-MOUNTED	SOUTH MACHINE ROOM	OD-2	2.5	R-454B	1000	0.10	-	28.7	23	80	67	56	54	33.6	208	1	60	0.34	15	EC	NON-FUSED	5	50	TRANE / MITSUBISHI	TPKFYP030KM1M0A	1-8		
ID-2.1	DUCTLESS, WALL-MOUNTED	SOUTH ELEC ROOM	OD-1	3	R-454B	1200	0.10	-	31.9	20.8	80	67	56	54	35.4	REFER TO NOTE #9					EC	NON-FUSED	5	50	TRANE / MITSUBISHI	PKA-AK36NL	1-9		
ID-2.2	DUCTED, CONCEALED	SOUTH ELEVATOR SHAFT	OD-2	3	R-454B	1200	-	0.6	34.4	27.7	80	67	56	54	39.5	208	1	60	3.1	15	EC	NON-FUSED	5	125	TRANE / MITSUBISHI	TPEFYP036MA1M0A	1-8		
ID-3.1	DUCTLESS, WALL-MOUNTED	NORTH MACHINE ROOM	OD-3	3	R-454B	1200	0.10	-	31.9	20.8	80	67	56	54	35.4	REFER TO NOTE #9					EC	NON-FUSED	5	50	TRANE / MITSUBISHI	PKA-AK36NL	1-9		
ID-4.1	DUCTED, CONCEALED	NORTH ELEVATOR SHAFT	OD-4	3	R-454B	1200	0.25	0.6	31.9	21.9	80	67	56	54	37.2	REFER TO NOTE #9					EC	NON-FUSED	5	125	TRANE / MITSUBISHI	PEAD-AA36NL	1-9		
NOTES:																													
1. ASSOCIATED CONDENSER SHALL BE BY THE SAME MANUFACTURER.																													
2. COORDINATE FINAL HORIZONTAL AND VERTICAL REFRIGERANT PIPING LENGTHS WITH MANUFACTURER TO DETERMINE FINAL PIPE SIZES, CIRCUITING, FITTING TYPES, AND REFRIGERATION QUANTITY.																													
3. PROVIDE PRE-FANUFACTURERD OR FIELD FABRICATED FILTER RACK WITH 2" MERV-8 PLEATED THROWAWAY FILTERS.																													
4. PROVIDE WITH MANUFACTURER'S WASHABLE FILTER.																													
5. PROVIDE SMOKE DETECTOR IN RETURN AIR DUCT.																													
6. HANG UNIT FROM STRUCTURE WITH ALL-THREAD ROD AND SPRING VIBRATION ISOLATORS.																													
7. PROVIDE AUXILIARY DRAIN PAN WITH FLOOD DETECTOR SWITCH. FLOOD DETECTOR SWITCH SHALL DISABLE UNIT IF WATER IS DETECTED IN AUXILIARY DRAIN PAN.																													
8. PROVIDE UNIT WITH INTEGRAL CONDENSATE PUMP.																													
9. INDOOR UNIT TO BE POWERED FROM CONDENSING UNIT.																													

SPLIT SYSTEM OUTDOOR CONDENSER UNIT SCHEDULE (HEAT PUMP)																									
MARK	SYSTEM TYPE	UNITS SERVED	NOM. UNIT SIZE (TONS)	EER2	COP	REFRIG. TYPE	COOLING / HEATING CAPACITIES					ELECTRICAL										WEIGHT (LBS)	MANUFACTURER	MODEL	NOTES
							RATED CLG CAP (MBH)	RATED HTG CAP (MBH)	CONNECTION RATIO (%)	AMBIENT		VOLTAGE	PHASE	HZ	MCA	MOCP	DISCONNECT		SCCR (KA)						
										DB (F)	WB (F)						BY	TYPE							
ODU-1	HEAT PUMP	ID-2.1	3	13.7	4.5	R-454B	31.1	36.0	100	115	70	208	1	60	34	56	EC	NON-FUSED	5	225	TRANE-MITSUBISHI	PUZ-AK36NL	1 THRU 5		
ODU-2	HEAT PUMP	ID-1.1, 2.2	6	15 / 25.5	4.5	R-454B	63.9	81.2	100	115	70	208	3	60	40	60	EC	NON-FUSED	5	600	TRANE-MITSUBISHI	TUHYE0723AMMOAN	1 THRU 5		
ODU-3	HEAT PUMP	ID-3.1	3	13.7	4.5	R-454B	31.1	36.0	100	115	70	208	1	60	34	56	EC	NON-FUSED	5	225	TRANE-MITSUBISHI	PUZ-AK36NL	1 THRU 5		
ODU-4	HEAT PUMP	ID-4.1	3	13.7	4.5	R-454B	31.1	36.0	100	115	70	208	1	60	34	56	EC	NON-FUSED	5	225	TRANE-MITSUBISHI	PUZ-AK36NL	1 THRU 5		
NOTES:																									
1. EQUIPMENT SIZED FOR AMBIENT TEMPERATURE OF 115 DEG F (COOLING) AND 32 DEG F (HEATING).																									
2. COORDINATE FINAL HORIZONTAL AND VERTICAL REFRIGERANT PIPING LENGTHS WITH MANUFACTURER TO DETERMINE FINAL PIPE SIZES, CIRCUITING, FITTING TYPES, AND REFRIGERATION AMOUNT.																									
3. PROVIDE WITH CONDENSER HAIL GUARDS.																									
4. PROVIDE CONCRETE HOUSEKEEPING PAD WITH LOCKABLE METAL CAGE AROUND CONDENSER.																									
5. INSTALL EQUIPMENT TO COMPLY WITH MANUFACTURER'S OPERATING CLEARANCES AND SERVICE CLEARANCES.																									

PLUMBING PUMP SCHEDULE													
MARK	EQUIPMENT TYPE	LOCATION	FLOW (GPM)	HEAD (FT)	ELECTRICAL						MANUFACTURER	MODEL	NOTES
					MOTOR WATTS	DISCONNECT		VOLTAGE	PHASE	HZ			
						BY	TYPE						
SP-1	SUMP PUMP	ELEVATOR PIT, SOUTH	50	12	0.5	EC	NON-FUSED	115	1	60	WEIL	1421	1 THRU 5
CP-1	SUMP PUMP	ELEVATOR PIT, NORTH	50	12	0.5	EC	NON-FUSED	115	1	60	WEIL	1421	1 THRU 5
NOTES: 1. PROVIDE WITH WEIL #8111 CONTROL PANEL. 2. DISCONNECT PROVIDED BY ELECTRICAL CONTRACTOR. 3. PROVIDE 2" DISCHARGE PIPING, FULL PORT BALL VALVE, AND FULL PORT NON-CLOG CHECK VALVE. 4. REFER TO DETAIL FOR ADDITIONAL INSTALLATION REQUIREMENTS. 5. PROVIDE WITH MANUFACTURER'S FLOAT SWITCH.													

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				-		ARIZ.	0000 MA TOL	CDS TOL-0(200)T	70	70				
				MILEPOST		LOCATION						VAN BUREN AT 96TH AVE, TOLLESON		DWG NO. M301
				STRUCTURE NO.		TRACS NO. T0619 01C						ADOT		70 OF 70
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