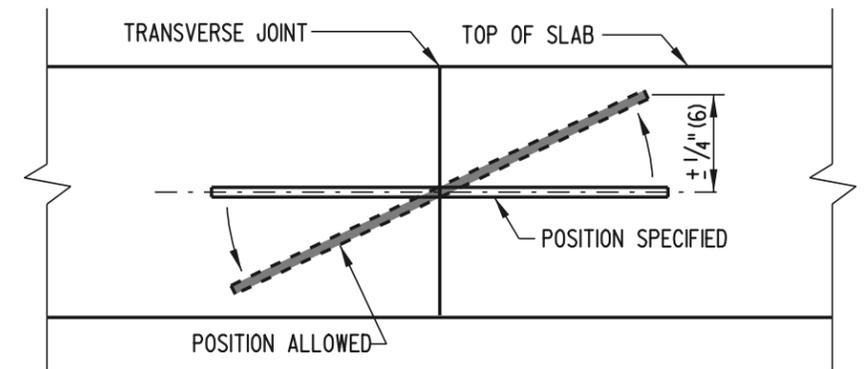
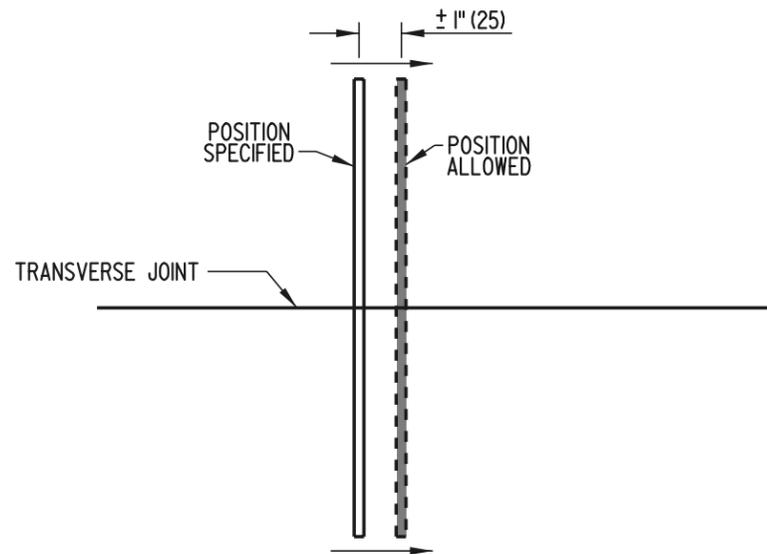


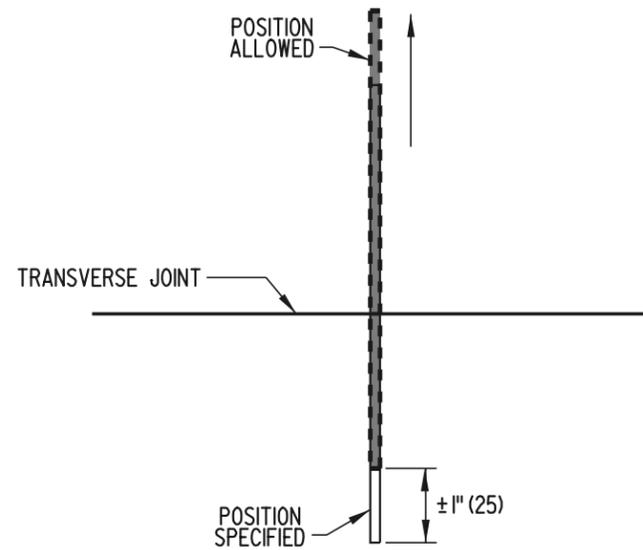
VERTICAL TRANSLATION



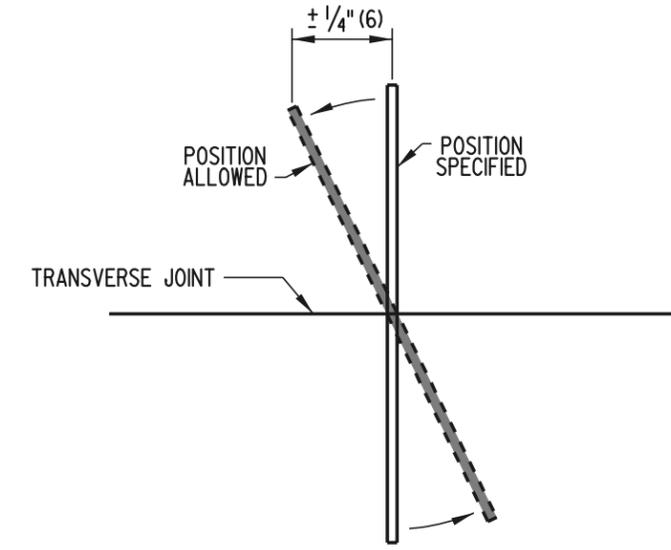
VERTICAL ROTATION



HORIZONTAL TRANSLATION



LONGITUDINAL TRANSLATION



HORIZONTAL ROTATION

DOWEL & TIE BAR PLACEMENT TOLERANCES

FULL DEPTH PATCH



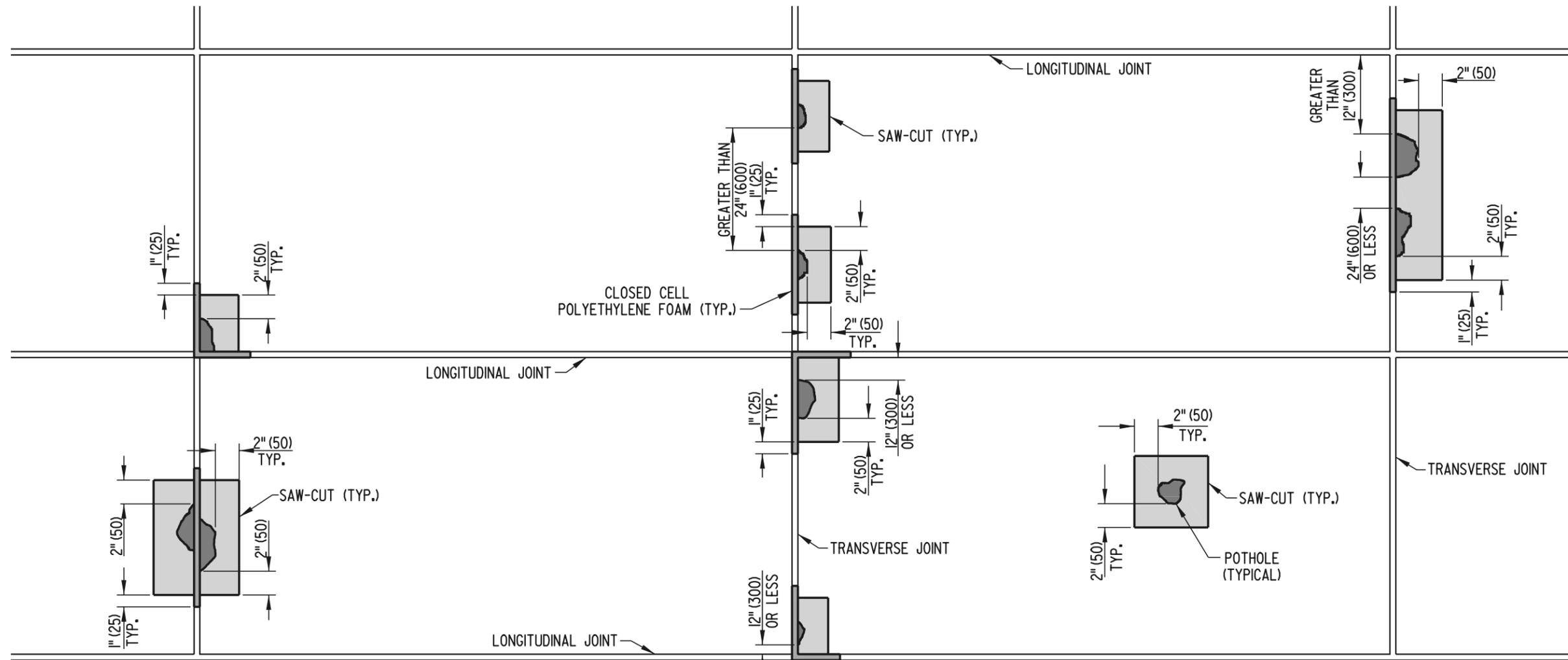
**DELAWARE
DEPARTMENT OF TRANSPORTATION**

P.C.C. PAVEMENT PATCHING

STANDARD NO. **P-2 (2001)**

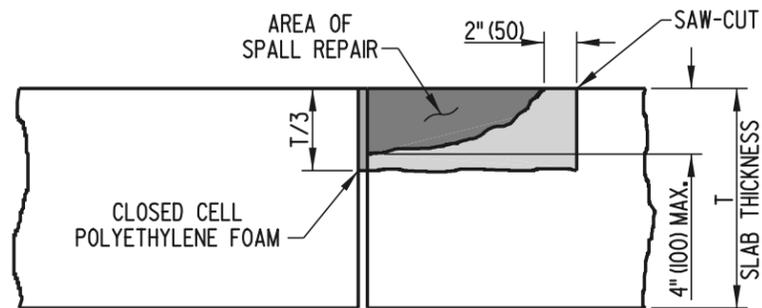
SHT. **4** OF **5**

APPROVED *Ryan M. Harshbarger* **6/18/01**
CHIEF ENGINEER DATE
 RECOMMENDED *Michael R. [Signature]* **6/18/01**
DESIGN ENGINEER DATE

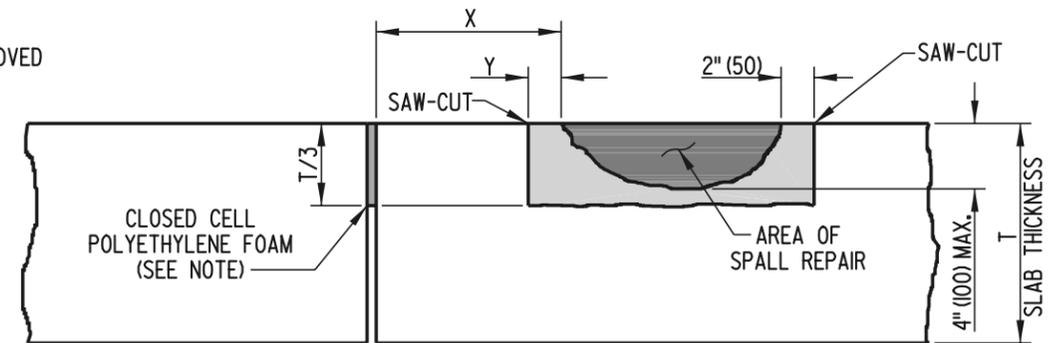


PLAN

NOTE: CLOSED CELL POLYETHYLENE FOAM SHALL BE THE SAME WIDTH AS THE JOINT AND 5" (125) IN DEPTH. AFTER THE CONCRETE IN THE REPAIR AREA HAS ACHIEVED THE SPECIFIED STRENGTH, THE FOAM SHALL BE REMOVED AND REPLACED WITH BACKER ROD AND HOT-POUR SEALANT MEETING ALL APPLICABLE STANDARD DETAILS AND SPECIFICATIONS.



SECTION WITH SPALL ADJACENT TO JOINT



SECTION WITH SPALL NOT ADJACENT TO JOINT

NOTE: WHEN $X > 12" (300)$, THEN $Y=1" (25)$ AND POLYETHYLENE FOAM IS NOT USED. WHEN $X \leq 12" (300)$, THEN $Y=X$ AND POLYETHYLENE FOAM IS USED.

PARTIAL DEPTH PATCH



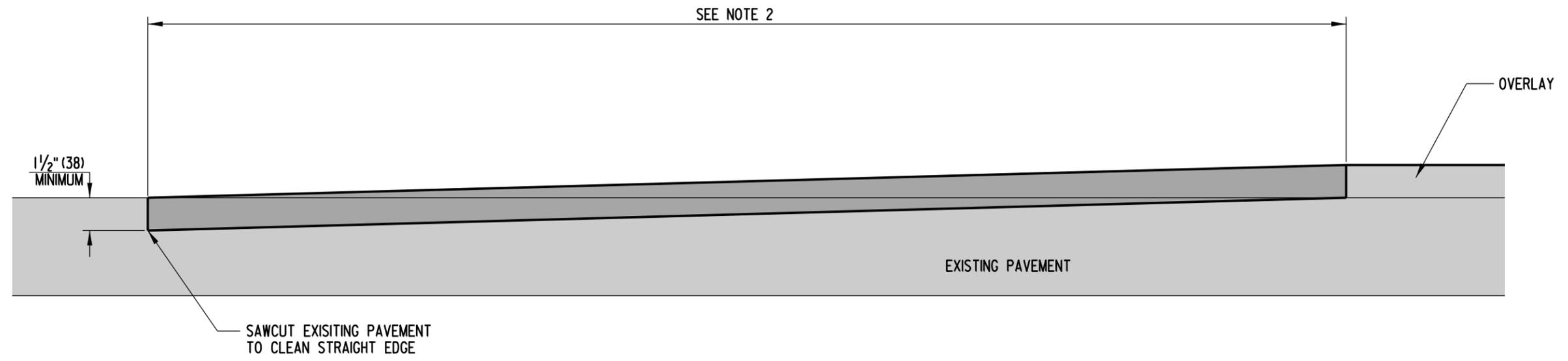
**DELAWARE
DEPARTMENT OF TRANSPORTATION**

P.C.C. PAVEMENT PATCHING

STANDARD NO. **P-2 (2001)** SHT. **5** OF **5**

APPROVED *Ryan M. Harshbarger* 6/18/01
CHIEF ENGINEER DATE

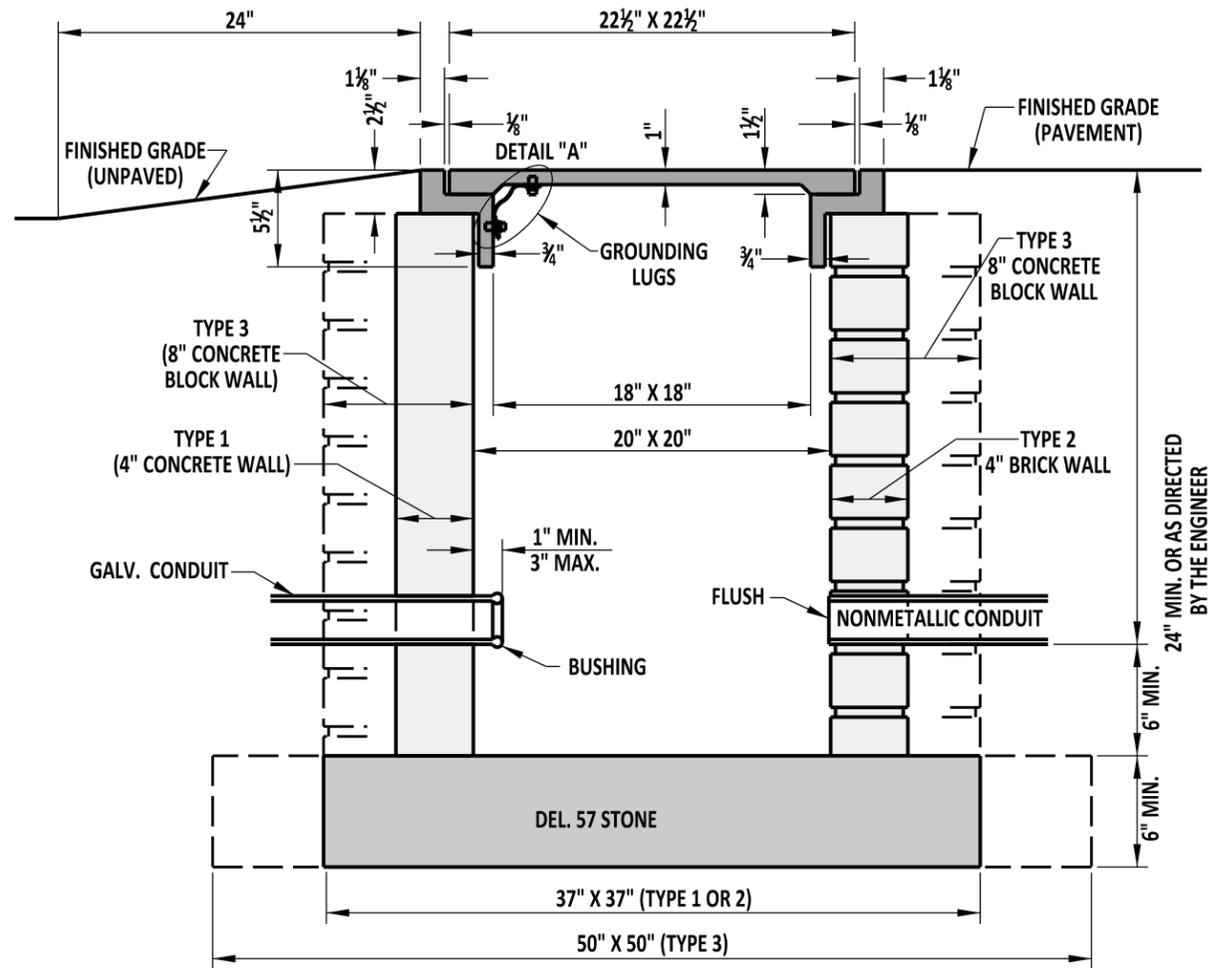
RECOMMENDED *Michael R. [Signature]* 6/18/01
DESIGN ENGINEER DATE



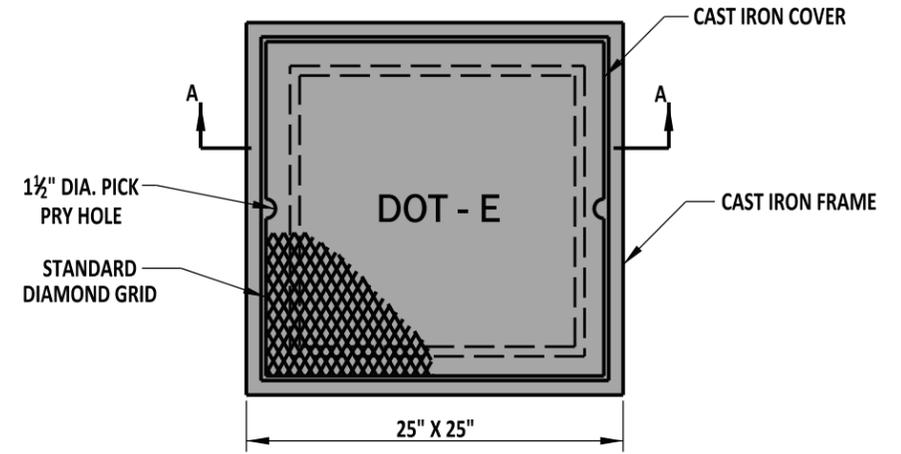
NOTES:

- 1). THE PROFILE OF THE OVERLAY PAVING SHALL BE ADJUSTED TO ASSURE A SMOOTH TRANSITION THROUGH THE BUTT JOINT. THE REMOVAL AND CLEANUP OF THE HOT MIX RESIDUE WEDGE LEFT FROM THE MILLING OPERATIONS ALONG CURB LINES, ADJACENT TO SPEED HUMPS, ACROSS INTERSECTING STREETS, AND AT THE BEGINNING AND ENDING POINTS OF THE BUTT JOINT, SHALL BE INCIDENTAL TO THE BUTT JOINT ITEM.
- 2). THE LENGTH OF THE BUTT JOINT SHALL BE EQUAL TO 30' (90m) FOR EVERY 1" (25) OF OVERLAY DEPTH.

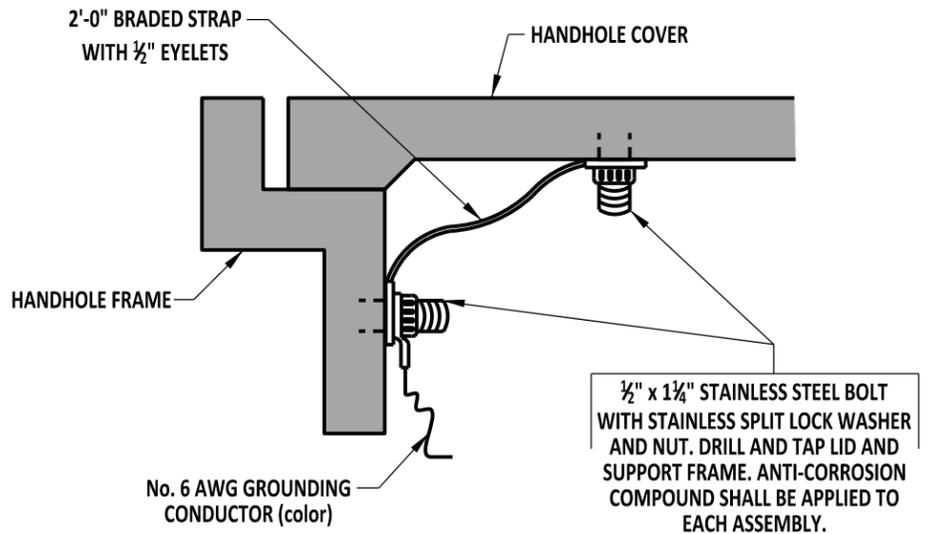
 <p>DELAWARE DEPARTMENT OF TRANSPORTATION</p>	BUTT JOINTS			APPROVED	SIGNATURE ON FILE	01/19/2010
	STANDARD NO. P-3 (2009)	SHT. 1	OF 1	RECOMMENDED	SIGNATURE ON FILE	01/14/2010



SECTION A-A



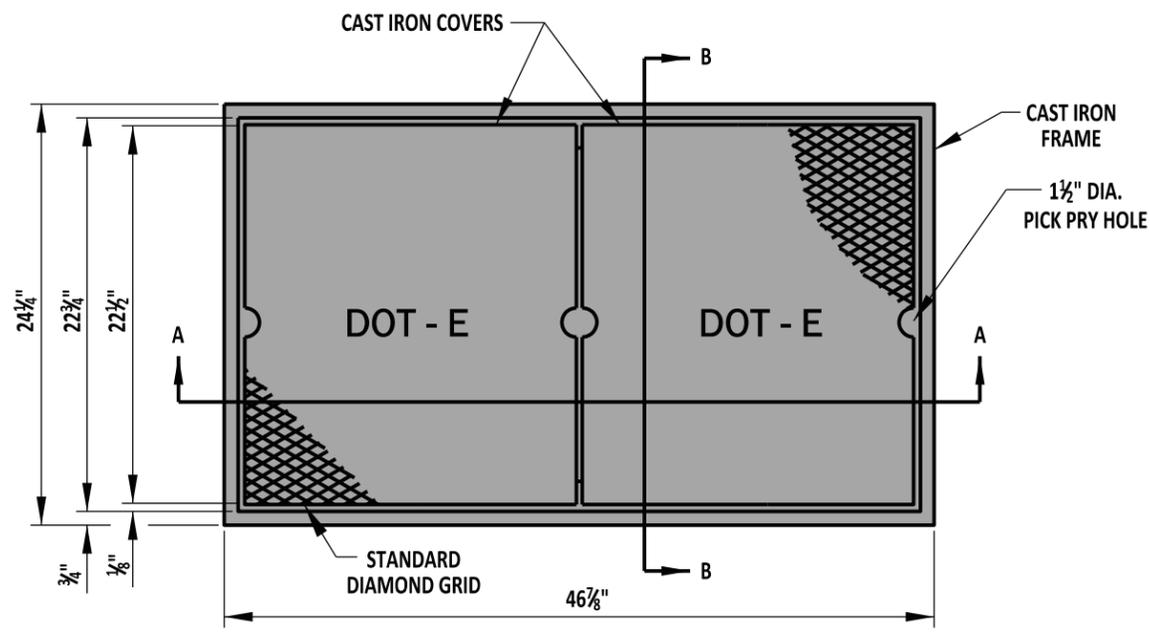
PLAN VIEW



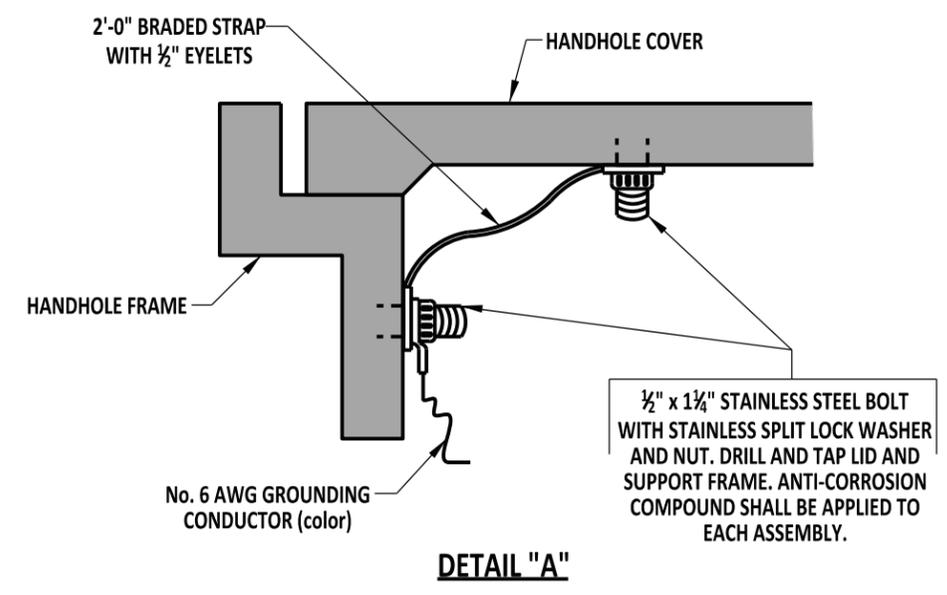
DETAIL "A"

NOTES:

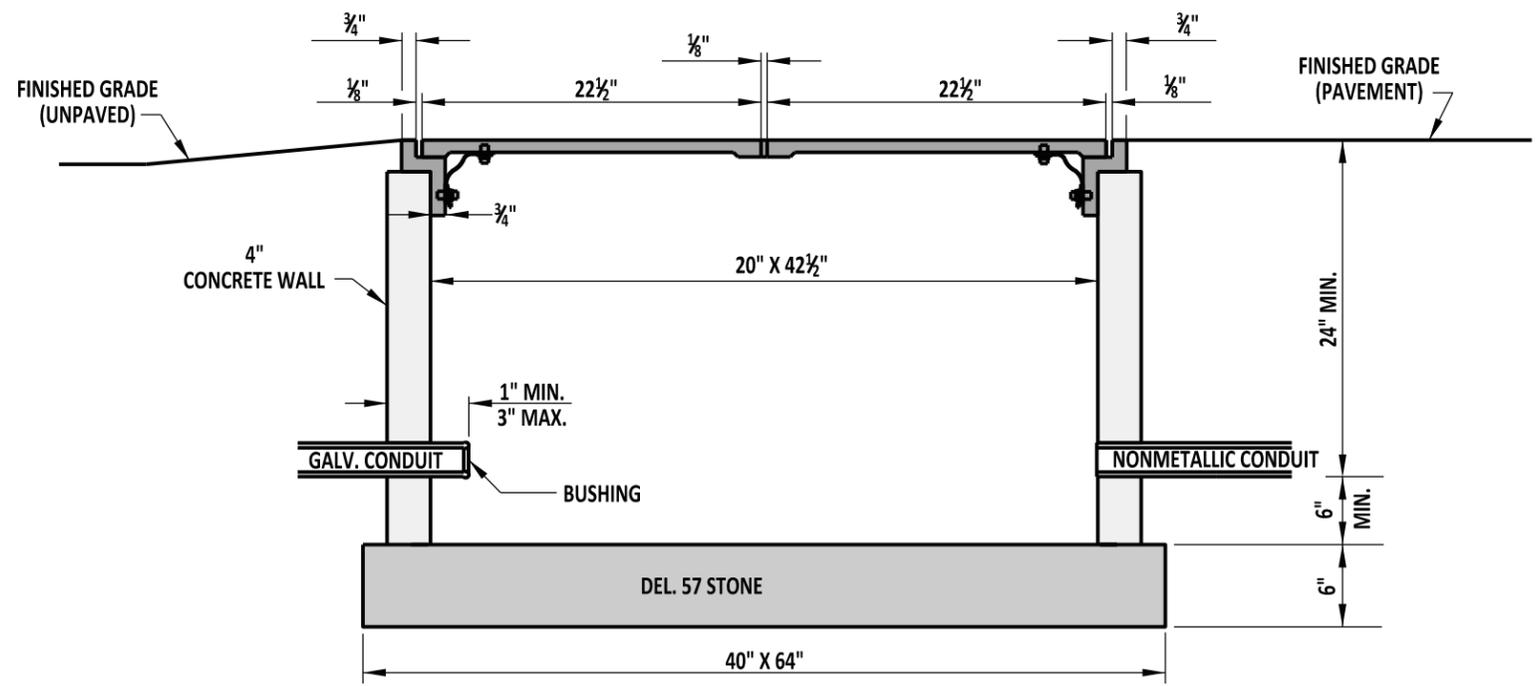
- 1). TYPE 1 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.
- 2). TYPES 2 AND 3 CONDUIT JUNCTION WELLS SHALL BE BRICK AND WILL CONFORM TO STANDARD SPECIFICATIONS FOR BRICK MASONRY. JOINTS SHALL BE CONCAVE TYPE. TYPE 2 WALLS WILL BE A NOMINAL 4" THICK. TYPE 3 WALL WILL BE A NOMINAL 8" THICK.
- 3). JUNCTION WELLS SHALL NOT BE PLACED UNDER ANY TYPE OF PAVEMENT.
- 4). ALL CONDUIT JUNCTION WELLS SHALL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.
- 5). ALL CRACKS, GAPS, OR OPENINGS IN JUNCTION WELL WALL SHALL BE SEALED WITH CONCRETE.



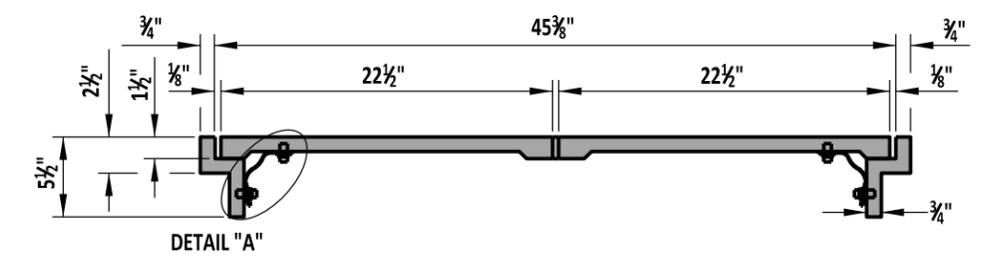
PLAN VIEW



DETAIL "A"

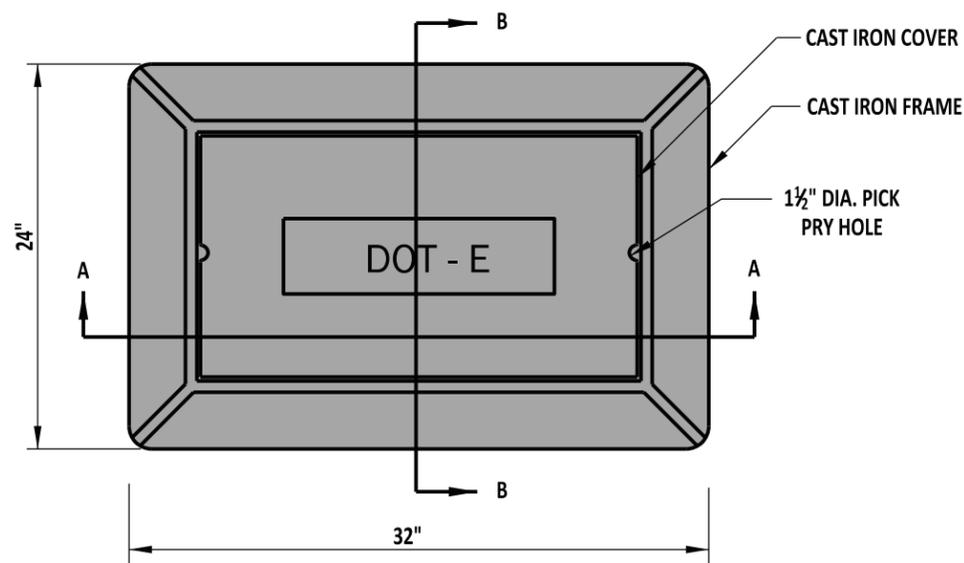


SECTION B-B



SECTION A-A

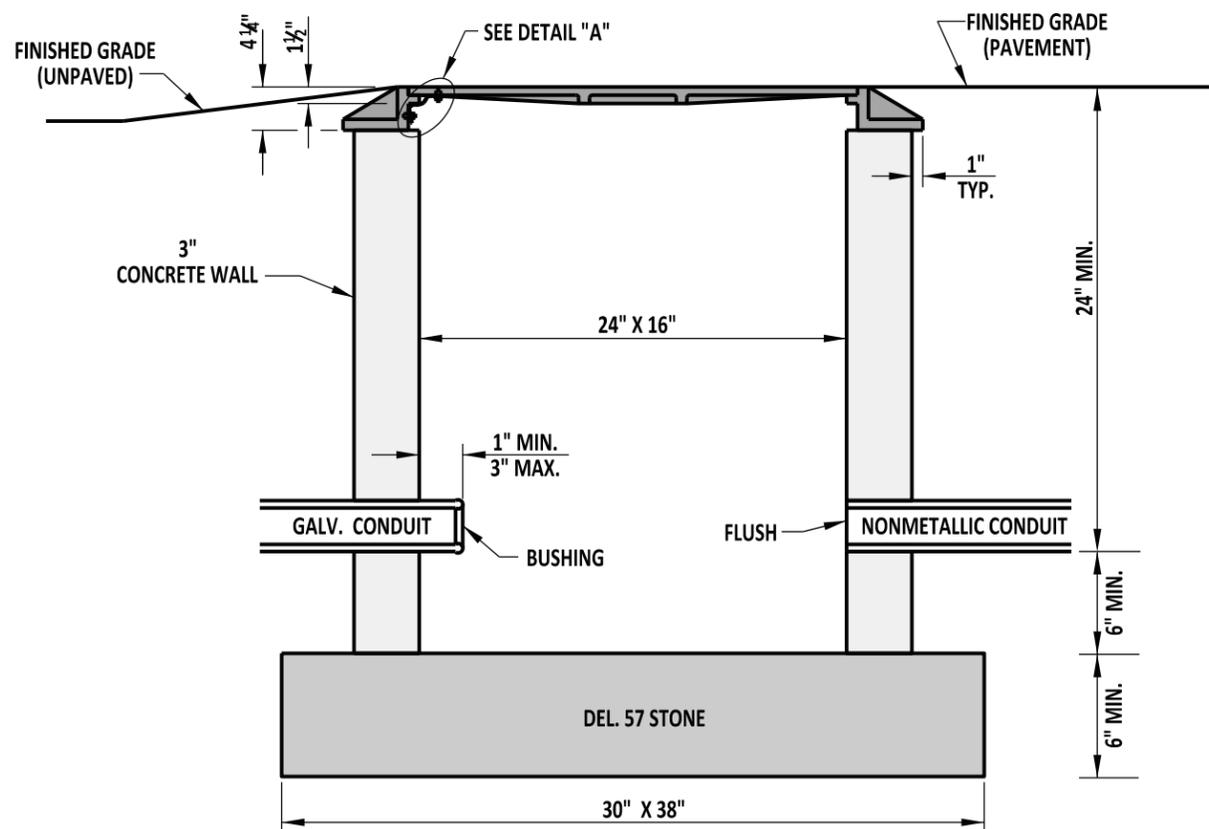
- NOTES:**
- 1). TYPE 4 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.
 - 2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED SHALL BE WITHIN CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.
 - 3). ALL CRACKS, GAPS, OR OPENINGS IN JUNCTION WELL WALL SHALL BE SEALED WITH CONCRETE.



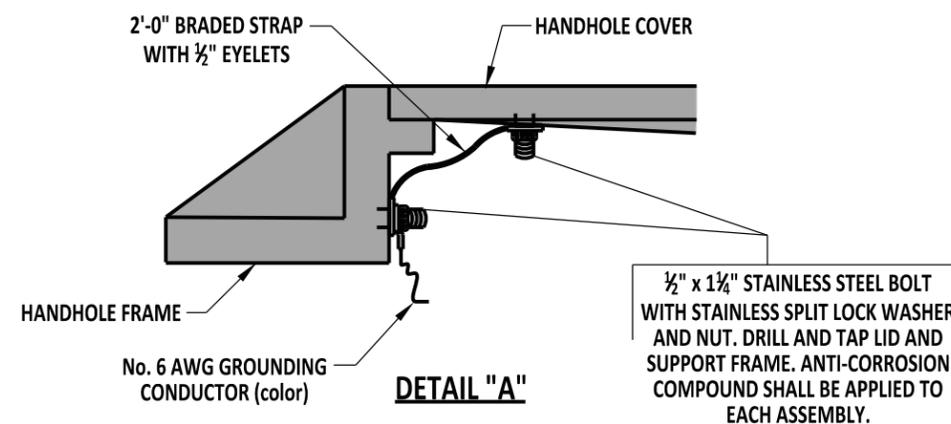
PLAN VIEW

NOTES:

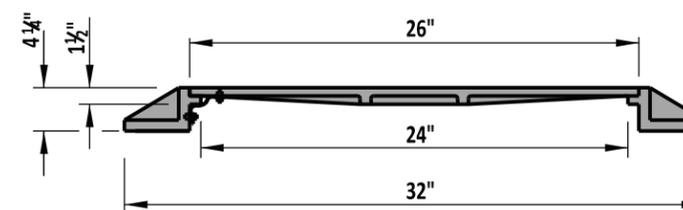
- 1). TYPE 5 CONDUIT JUNCTION WELL SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.
- 2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED SHALL BE WITHIN CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM CONDUIT JUNCTION WELL.
- 3). ALL CRACKS, GAPS, OR OPENINGS IN JUNCTION WELL WALL SHALL BE SEALED WITH CONCRETE.



SECTION B-B



DETAIL "A"



SECTION A-A



DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELL, TYPE 5

STANDARD NO.

T-1 (2011)

SHT. 3

OF 3

APPROVED

SIGNATURE ON FILE
CHIEF ENGINEER

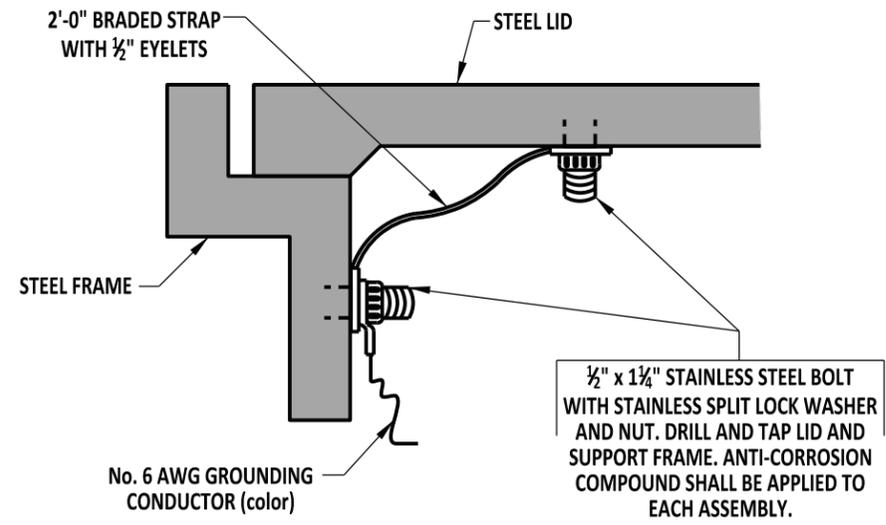
12/22/2011
DATE

RECOMMENDED

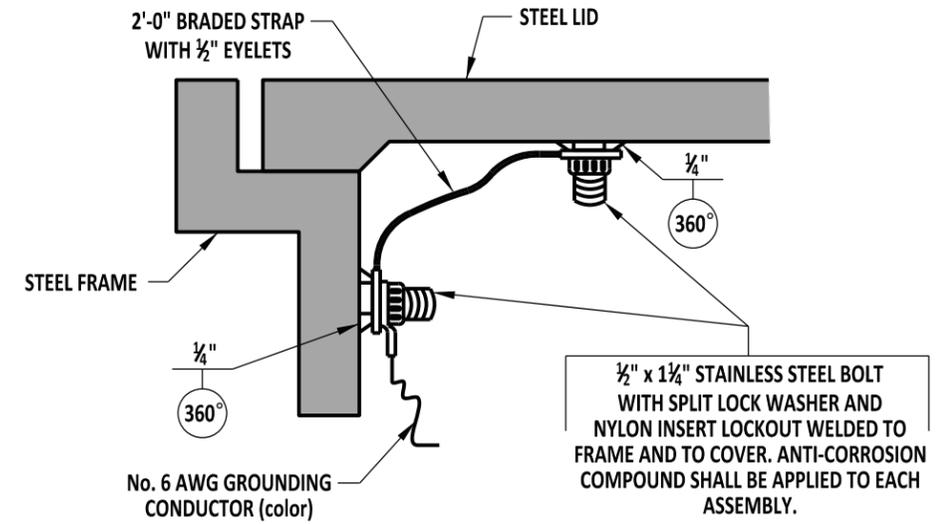
SIGNATURE ON FILE
DESIGN ENGINEER

12/21/2011
DATE

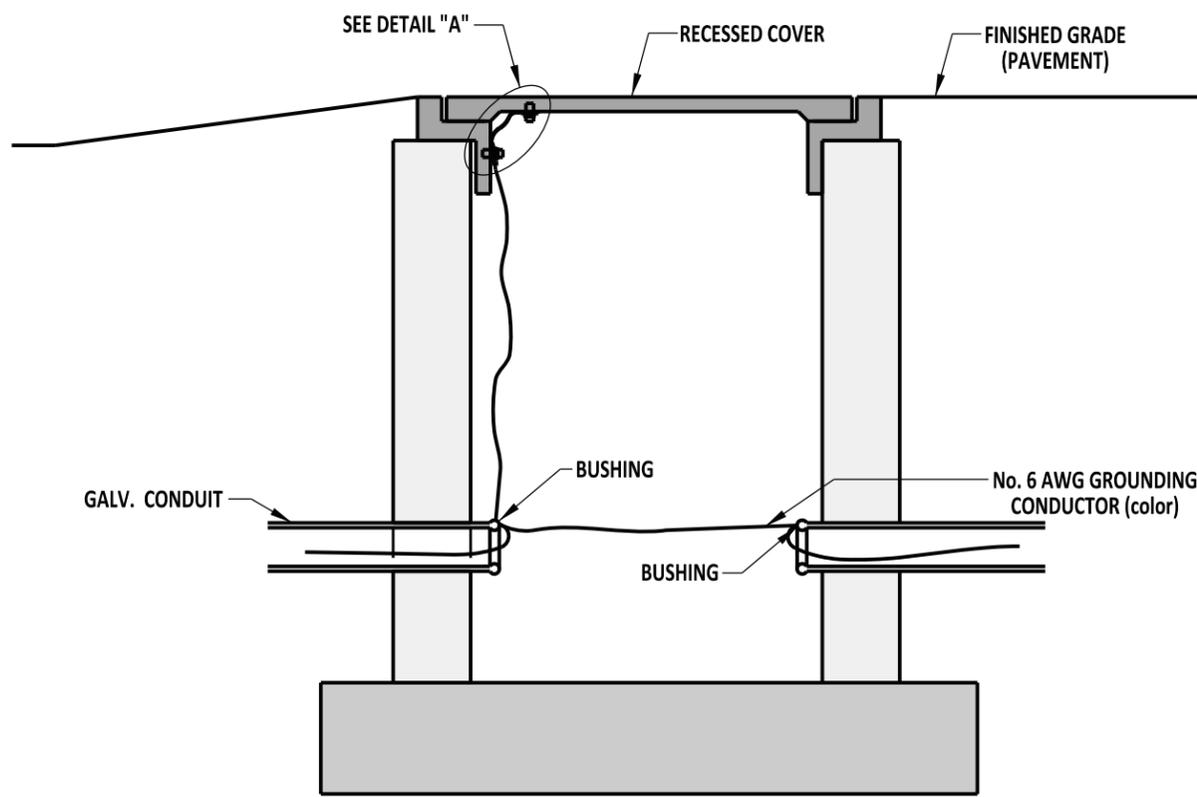
SCALE : NTS



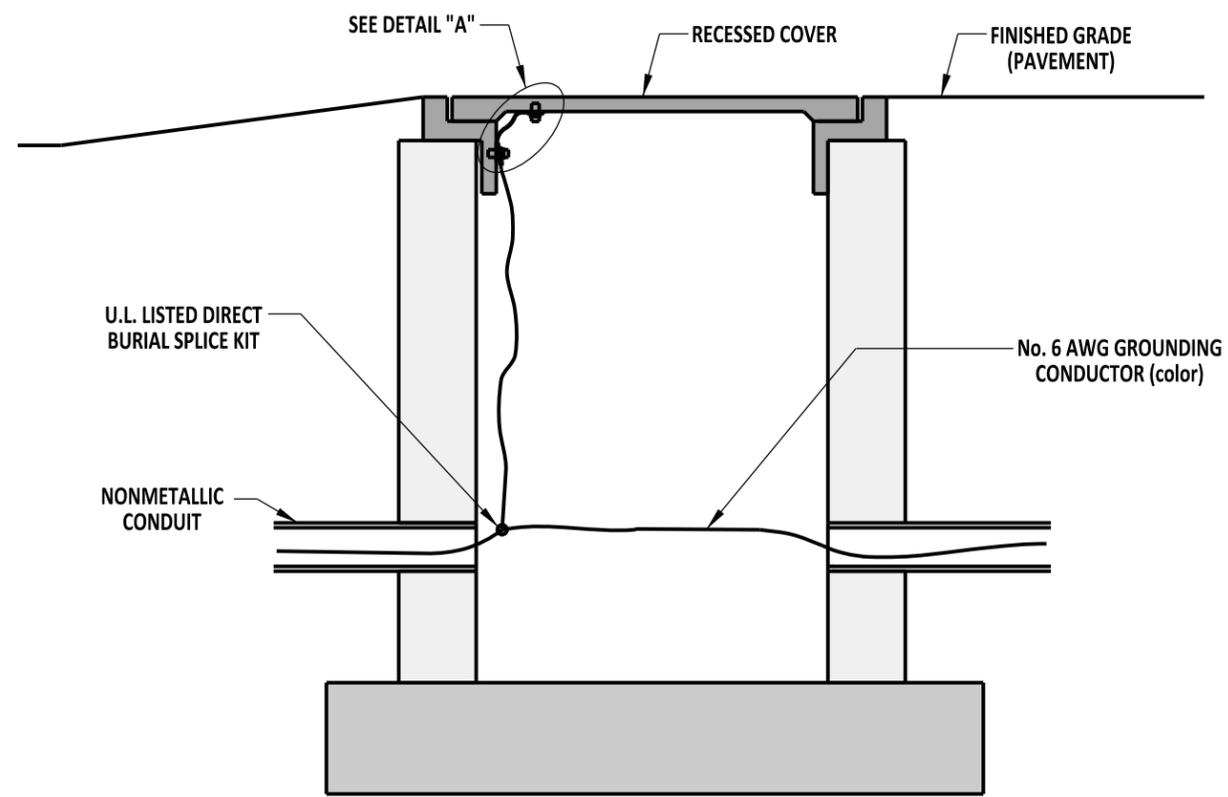
DETAIL "A"



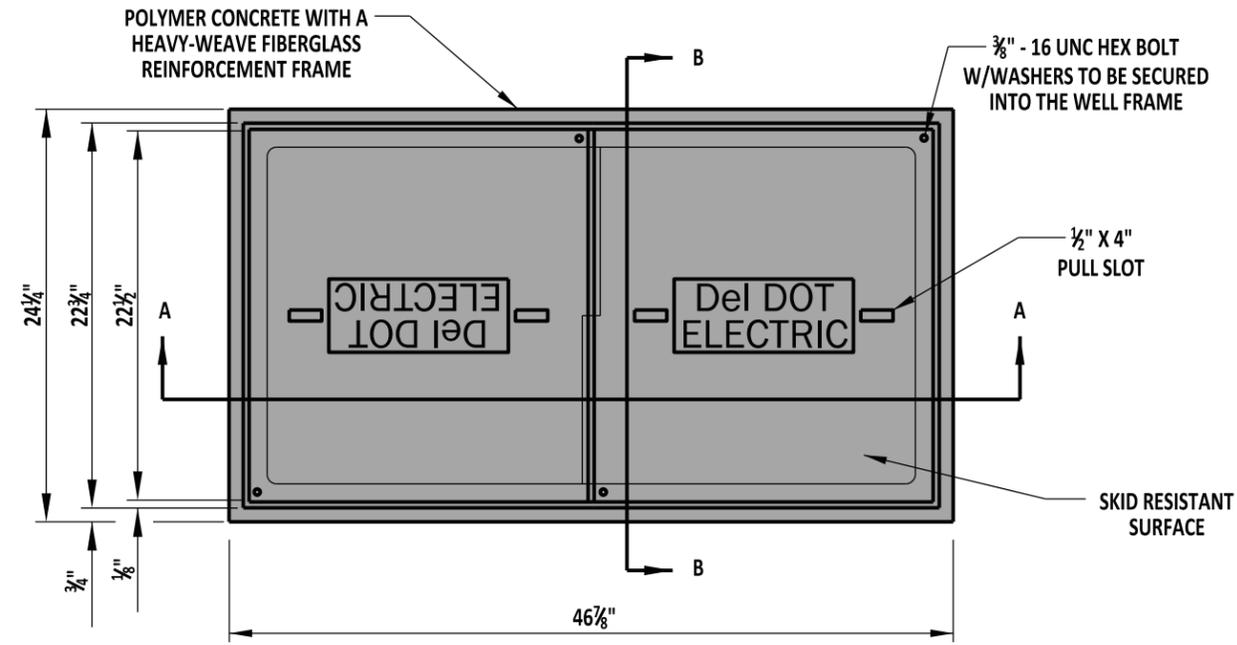
BONDING AN EXISTING JUNCTION WELL COVER & FRAME



JUNCTION WELL BONDING GALVANIZED TO GALVANIZED

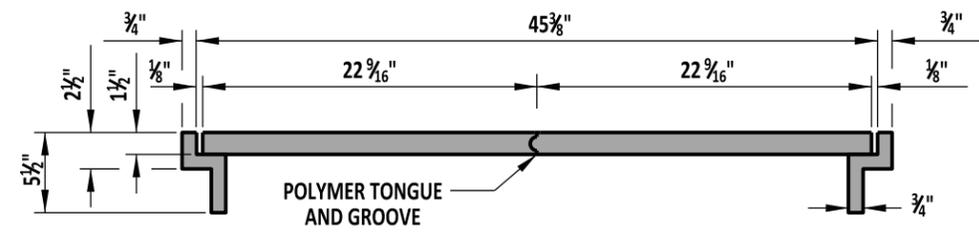


JUNCTION WELL BONDING NONMETALLIC CONDUIT

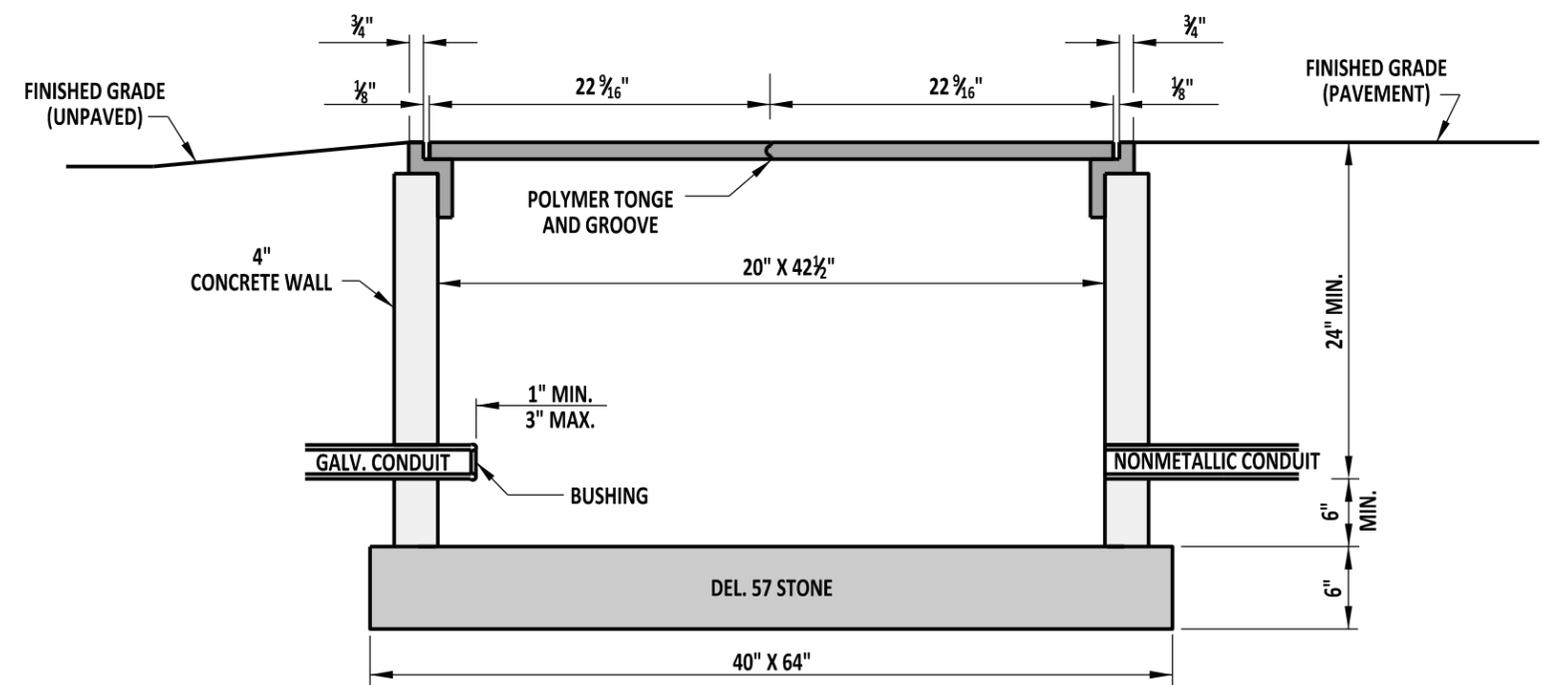


PLAN VIEW

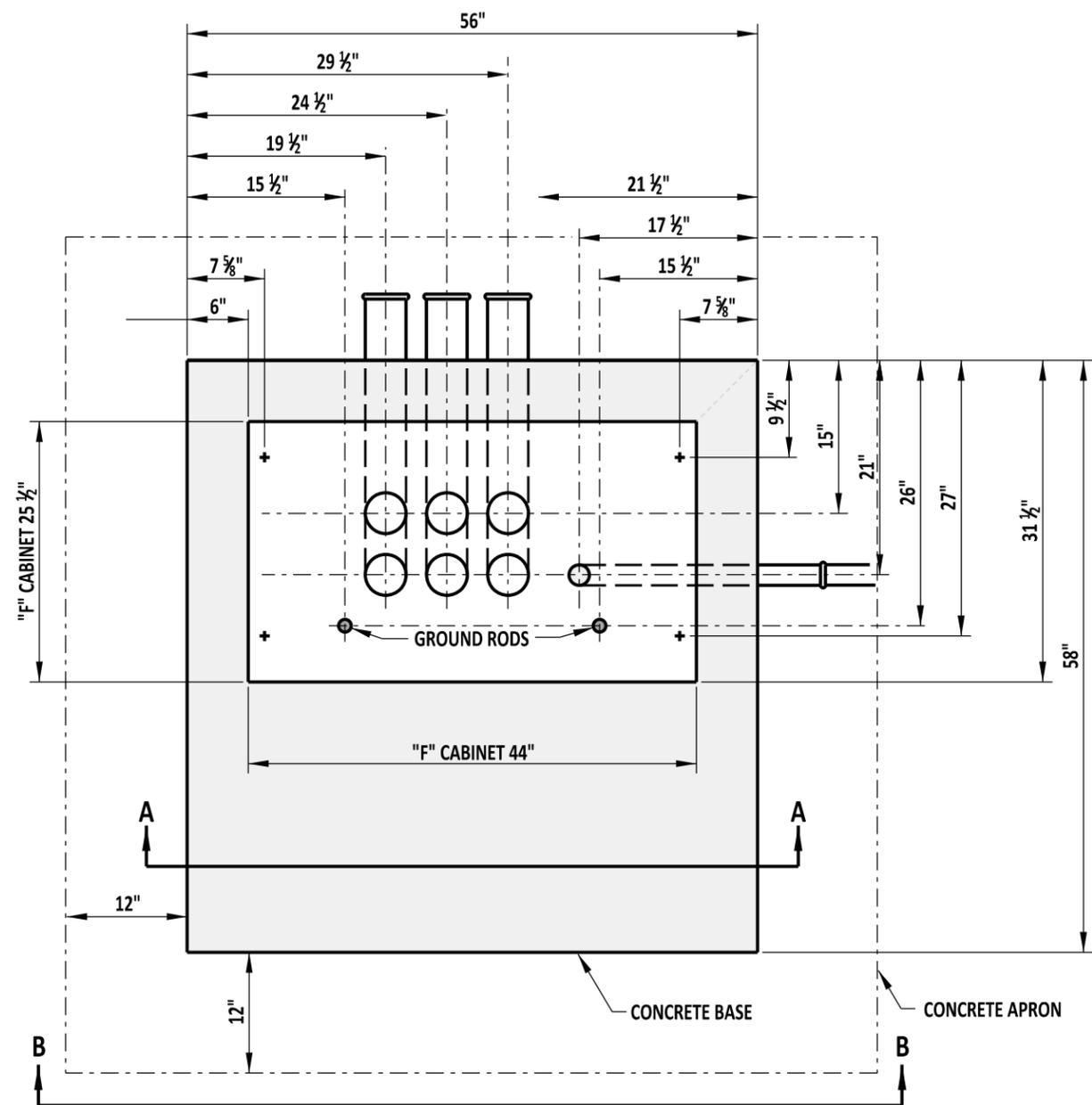
- NOTES:**
- 1). TYPE 14 CONDUIT JUNCTION WELL LID SHALL BE PRECAST POLYMER CONCRETE WITH A HEAVY-WEAVE FIBERGLASS FRAME. INSTALLED ON A PRECAST CONCRETE WELL.
 - 2). TYPE 14 CONDUIT JUNCTION WELL BODY SHALL BE PRECAST CONCRETE. AT LEAST ONE HOLE IN PRECAST WELLS WILL BE OF A 5" DIAMETER COMPLETELY THROUGH THE WALL. UNUSED HOLES SHALL BE PLUGGED.
 - 3). TYPE 14 CONDUIT JUNCTION WELLS SHALL BE CONSTRUCTED FLUSH WITH THE SURFACE OF THE SAME. INSTALLATION IN UNPAVED AREAS WILL BE CONSTRUCTED ABOVE GRADE AND GRADED TO DRAIN AWAY FROM THE CONDUIT JUNCTION WELL.
 - 4). ALL CRACKS, GAPS, OR OPENINGS IN JUNCTION WELL WALL SHALL BE SEALED WITH CONCRETE.



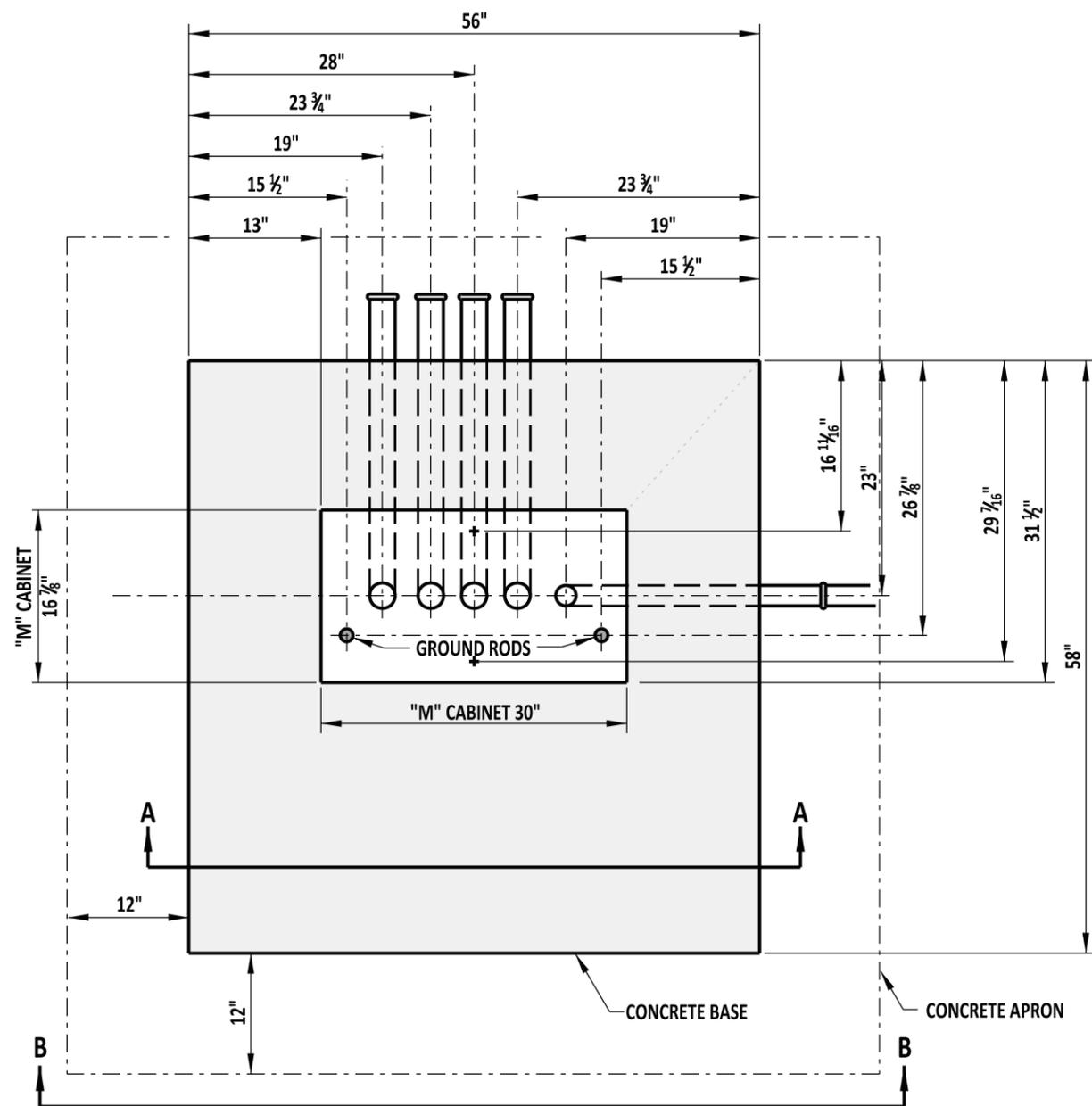
SECTION A-A



SECTION B-B



**"F" CABINET
PLAN VIEW**



**"M" CABINET
PLAN VIEW**

NOTE:
CONCRETE APRON IS REQUIRED ONLY WHEN CABINET BASE IS INSTALLED IN EARTH AREAS OR AS DIRECTED ON PLAN.



**DELAWARE
DEPARTMENT OF TRANSPORTATION**

CABINET BASES, TYPES M & F

STANDARD NO. T-4 (2011)

SHT. 1 OF 2

APPROVED

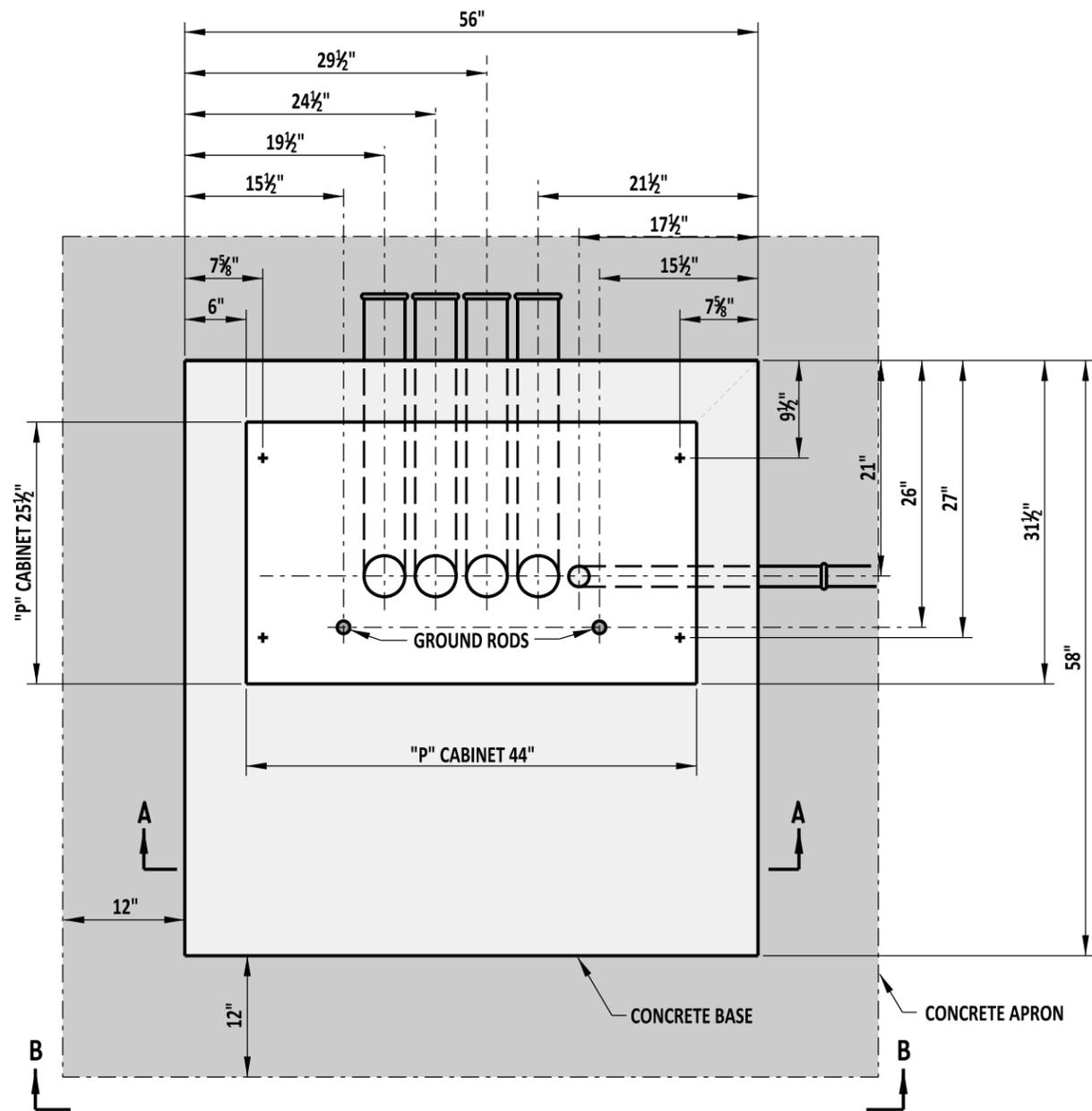
SIGNATURE ON FILE
CHIEF ENGINEER

12/22/2011
DATE

RECOMMENDED

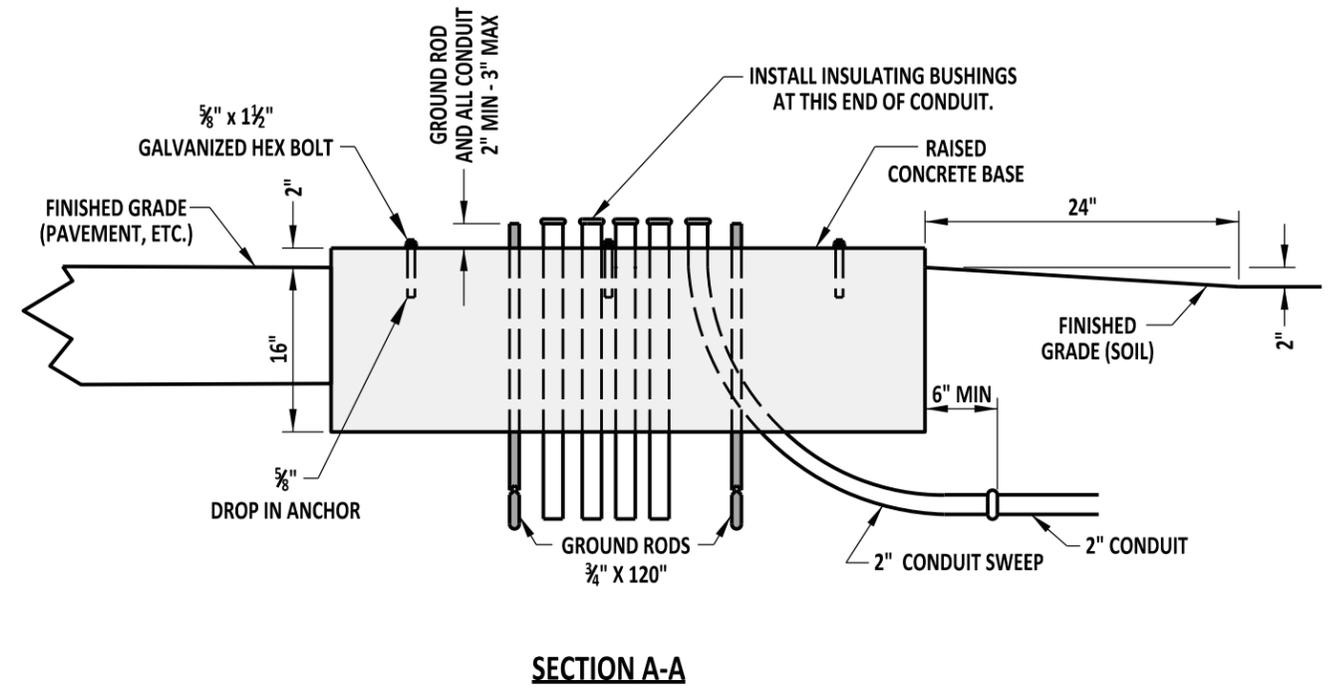
SIGNATURE ON FILE
DESIGN ENGINEER

12/21/2011
DATE

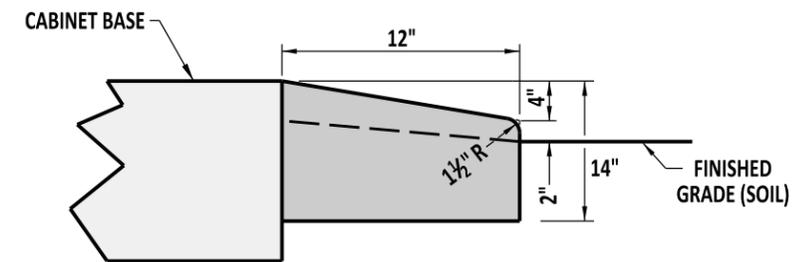


"P" & "R" CABINETS
PLAN VIEW

NOTE:
CONCRETE APRON IS REQUIRED ONLY WHEN CABINET BASES IS INSTALLED IN EARTH AREAS OR AS DIRECTED ON PLAN.



SECTION A-A



SECTION B-B



DELAWARE
DEPARTMENT OF TRANSPORTATION

CABINET BASES, TYPES P & R

STANDARD NO. T-4 (2011)

SHT. 2 OF 2

APPROVED

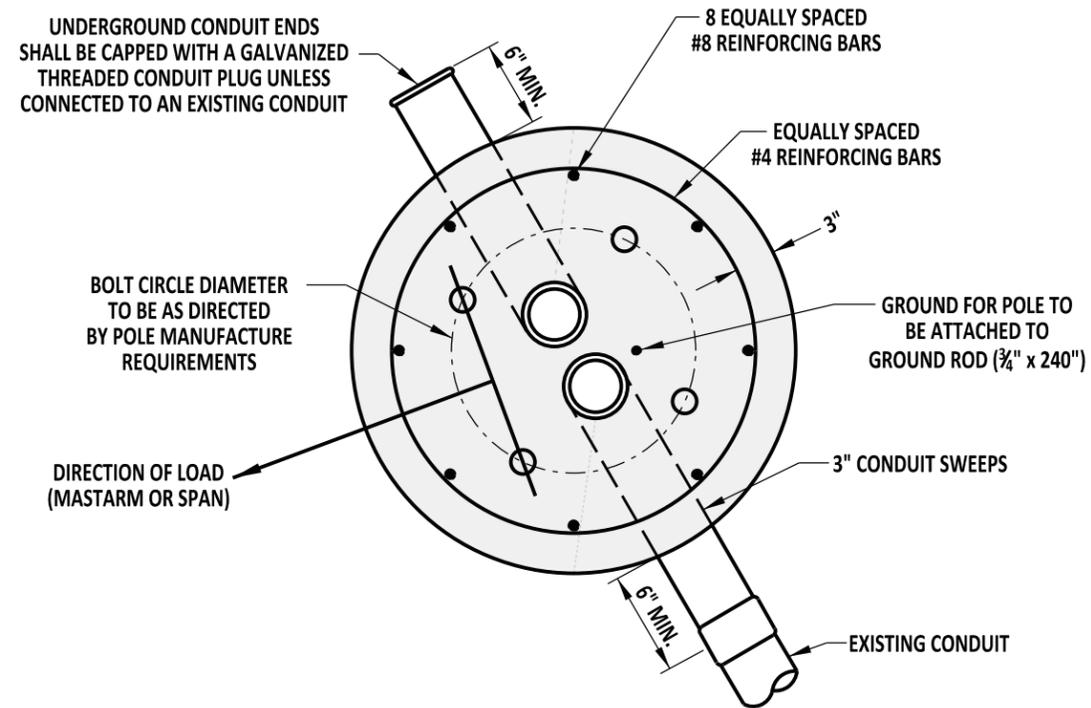
SIGNATURE ON FILE
CHIEF ENGINEER

12/22/2011
DATE

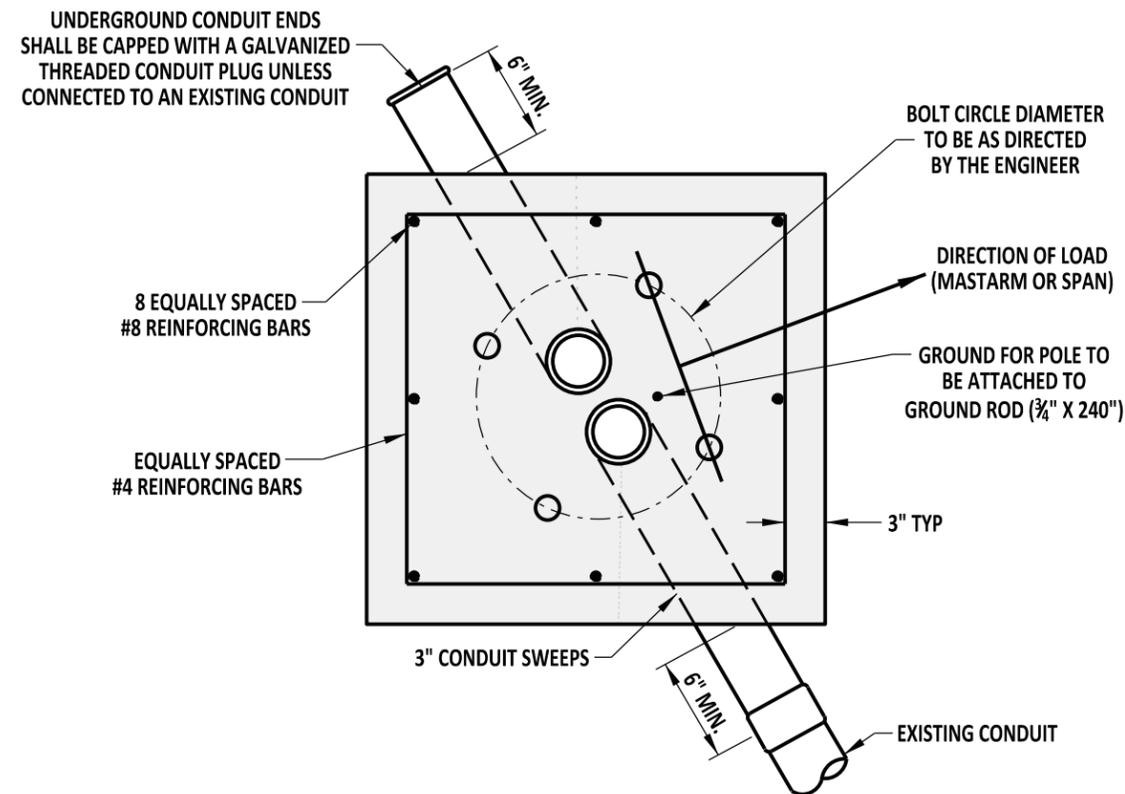
RECOMMENDED

SIGNATURE ON FILE
DESIGN ENGINEER

12/21/2011
DATE



ROUND BASE

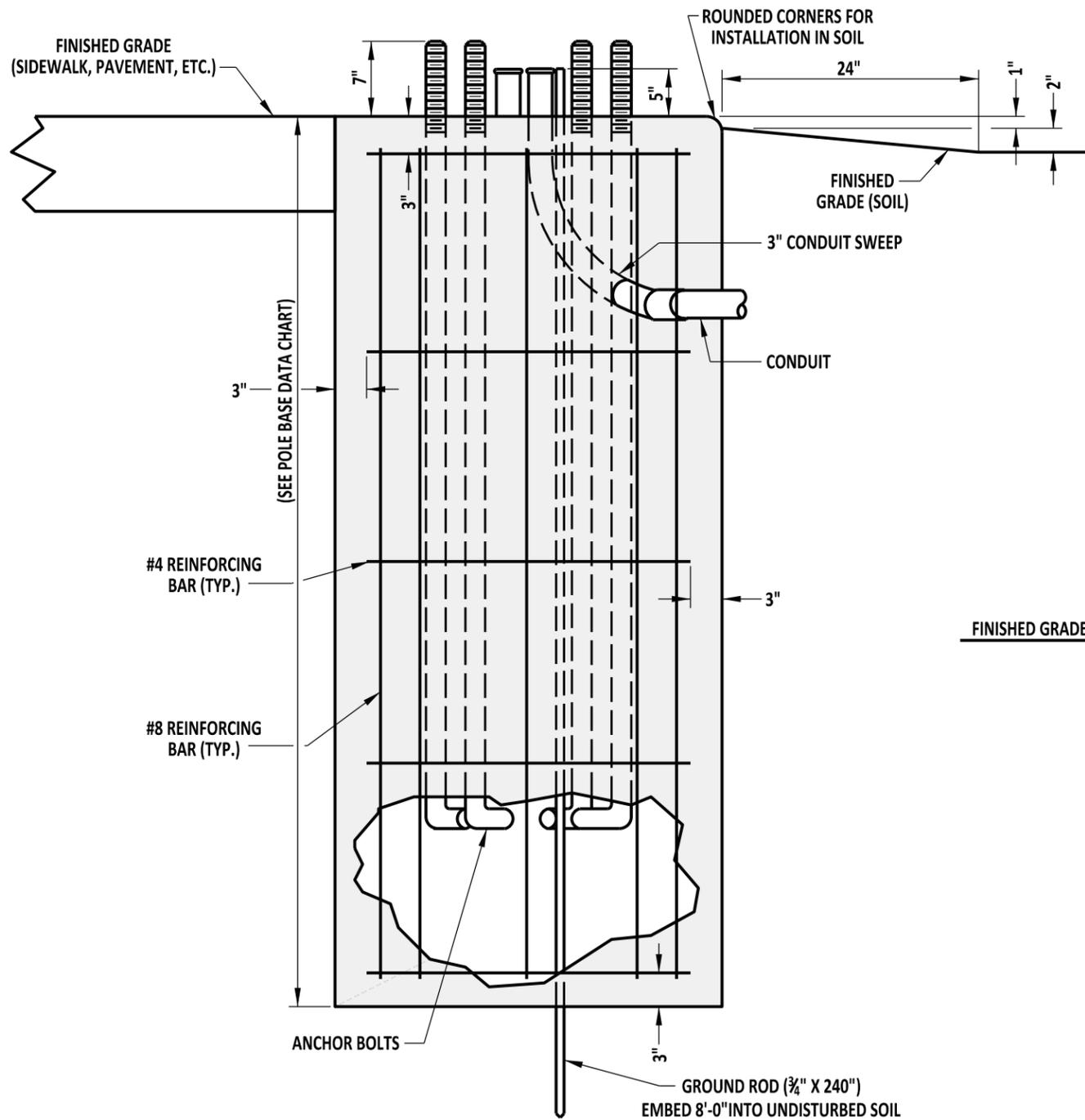


SQUARE BASE



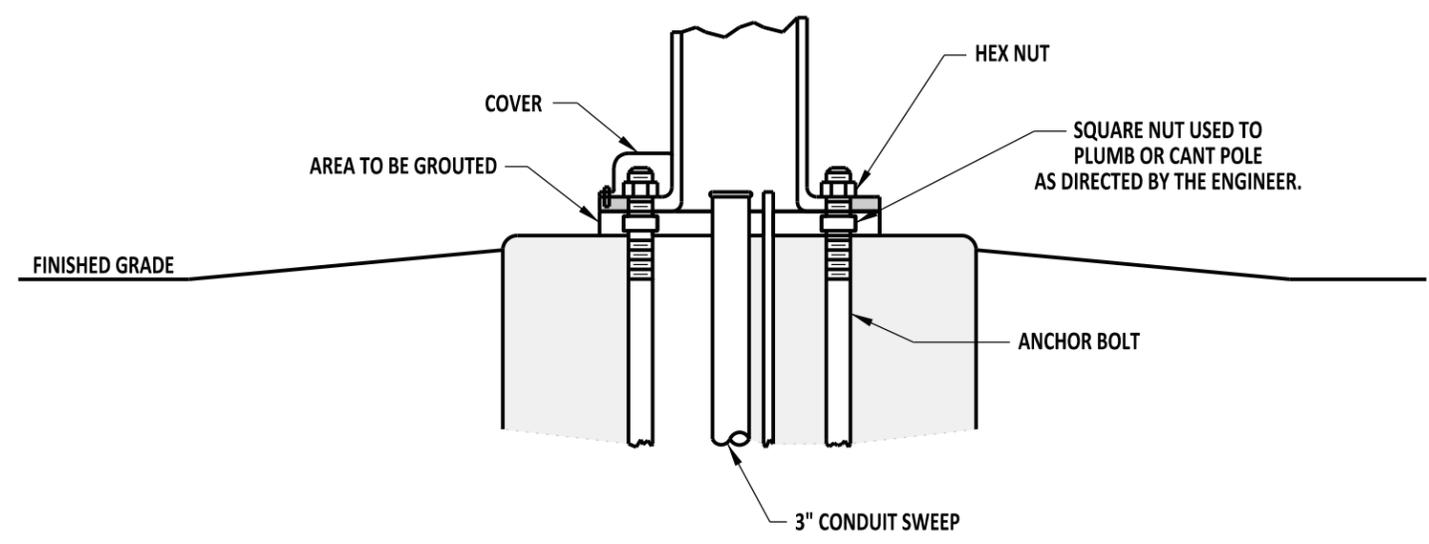
DELAWARE
DEPARTMENT OF TRANSPORTATION

STANDARD NO. T-5 (2011)		SHT. 1 OF 4		POLE BASES		APPROVED	SIGNATURE ON FILE	12/22/2011
				RECOMMENDED	SIGNATURE ON FILE	12/21/2011		



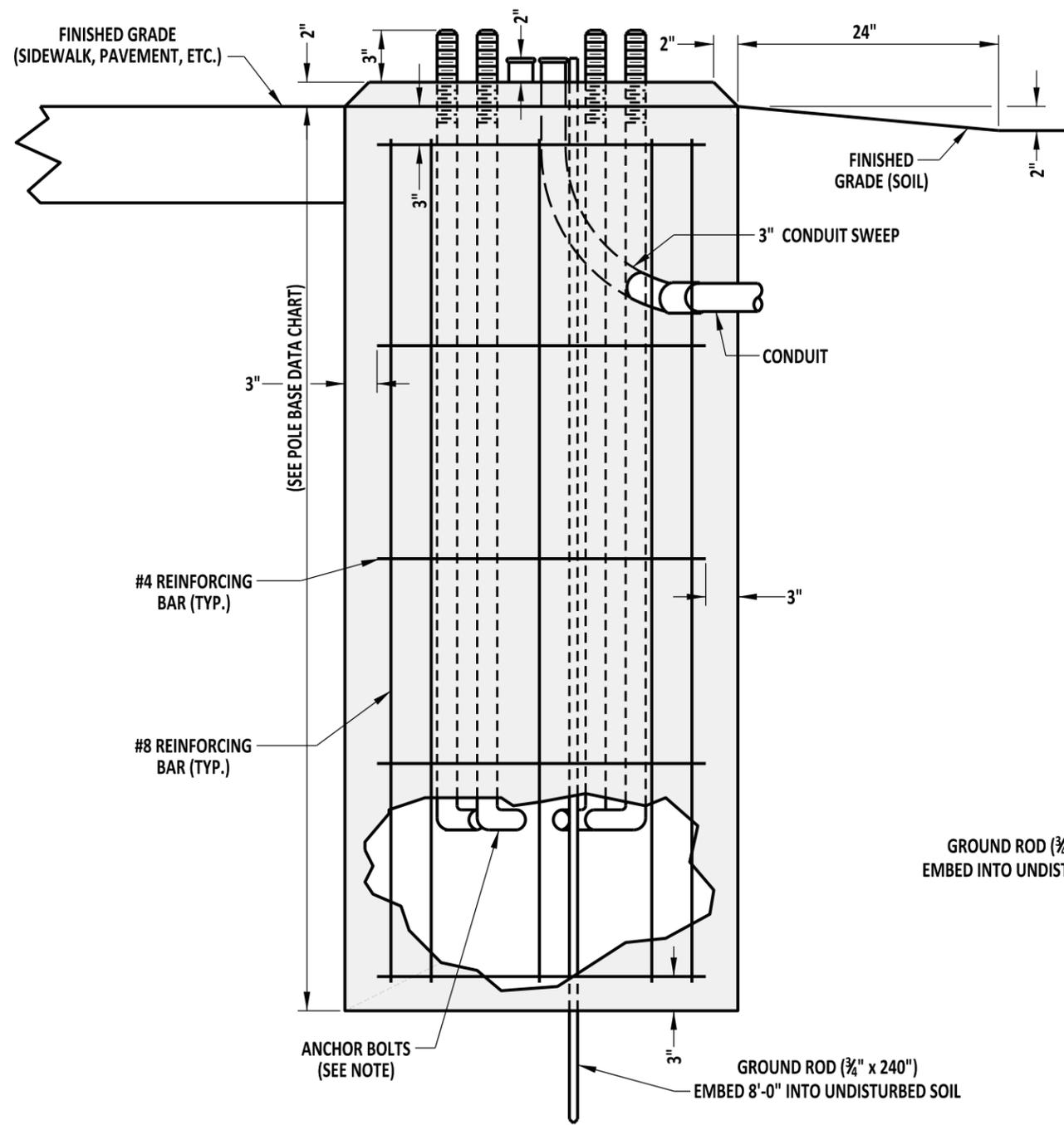
TYPICAL SECTION (BASES 1,2,2A,2B,3,3A,3B, AND 7)

- NOTES:**
- 1.) ANCHOR BOLTS AND BOLT PATTERN TO BE PROVIDED BY DELDOT'S SIGNAL CONSTRUCTION INSPECTOR UNLESS OTHERWISE DENOTED.
 - 2.) ANCHOR BOLTS AND BOLT PATTERN FOR TYPE 7 POLE BASES TO BE PROVIDED BY THE MANUFACTURE.



TYPICAL INSTALLATION (BASES 1,2,2A,2B,3,3A,3B, AND 7)

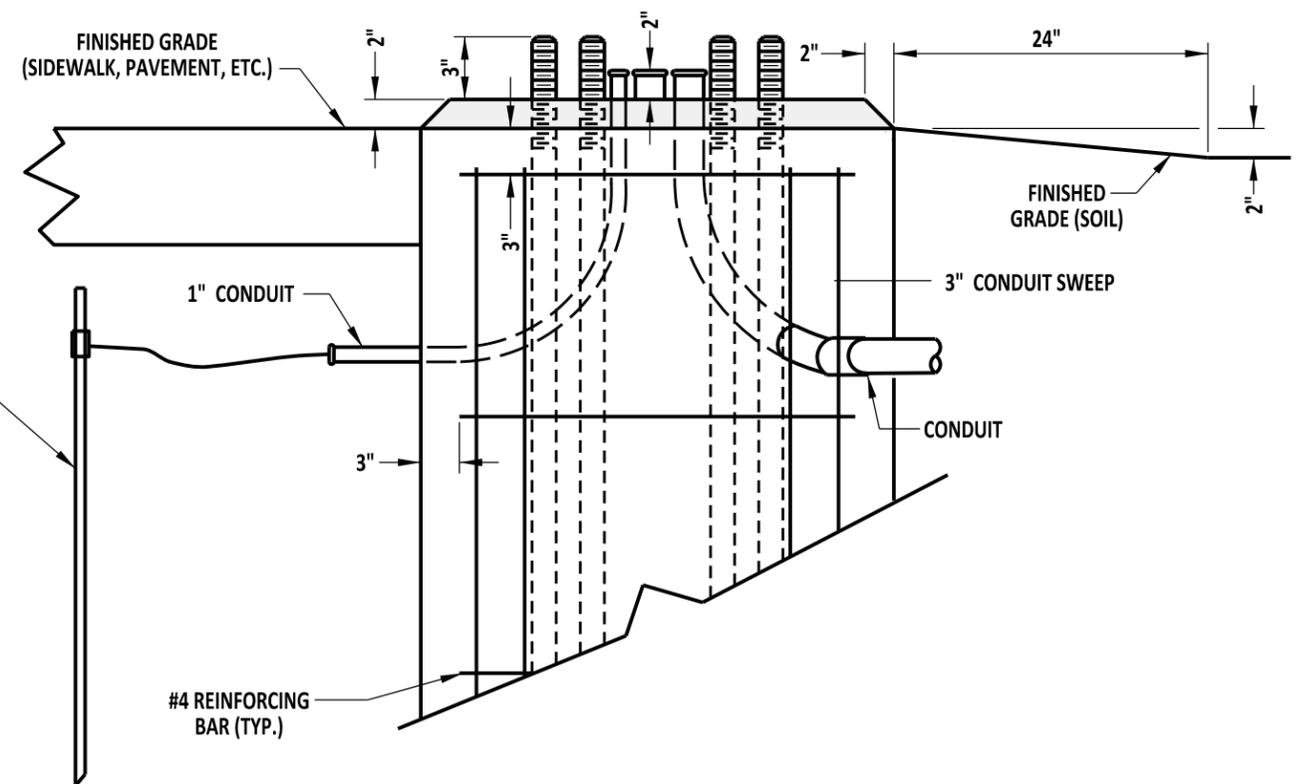
- NOTES:**
- 1). PLACE 2 EACH 6" LONG x 1/2" DIA. P.V.C., SCHEDULE 40 (TYP) VENTS IN THE GROUT AS DIRECTED IN THE FIELD BY ENGINEER.
 - 2). SEE POLE BASE DATA CHART FOR POLE BASE DIMENSIONS.



TYPICAL SECTION (BASES 5 AND 6)

NOTE:
ANCHOR BOLTS AND BOLT PATTERN FOR TYPE 5 & 6 POLE BASES TO BE PROVIDED BY THE MANUFACTURE.

POLE BASE DATA CHART					
POLE BASE TYPE #	DIAMETER	DEPTH	#4 HORIZONTAL REINFORCING BARS	#8 VERTICAL REINFORCING BARS	CONDUITS
1	36"	7'-0"	5	8	2 - 3"
2	36"	10'-0"	6	8	2 - 3"
2A	48"	8'-0"	5	8	2 - 3"
2B	60"	7'-0"	5	8	2 - 3"
3	48"	10'-0"	6	8	2 - 3"
3A	60"	9'-0"	6	8	2 - 3"
3B	72"	7'-0"	5	8	2 - 3"
4	24"	2'-4"	NONE	NONE	2 - 2.5"
5	36"	4'-0"	NONE	NONE	2 - 3"
6	24"	6'-0"	4	8	2 - 3"
*7	48"	13'-4"	7	8	1 - 1", 2 - 3"



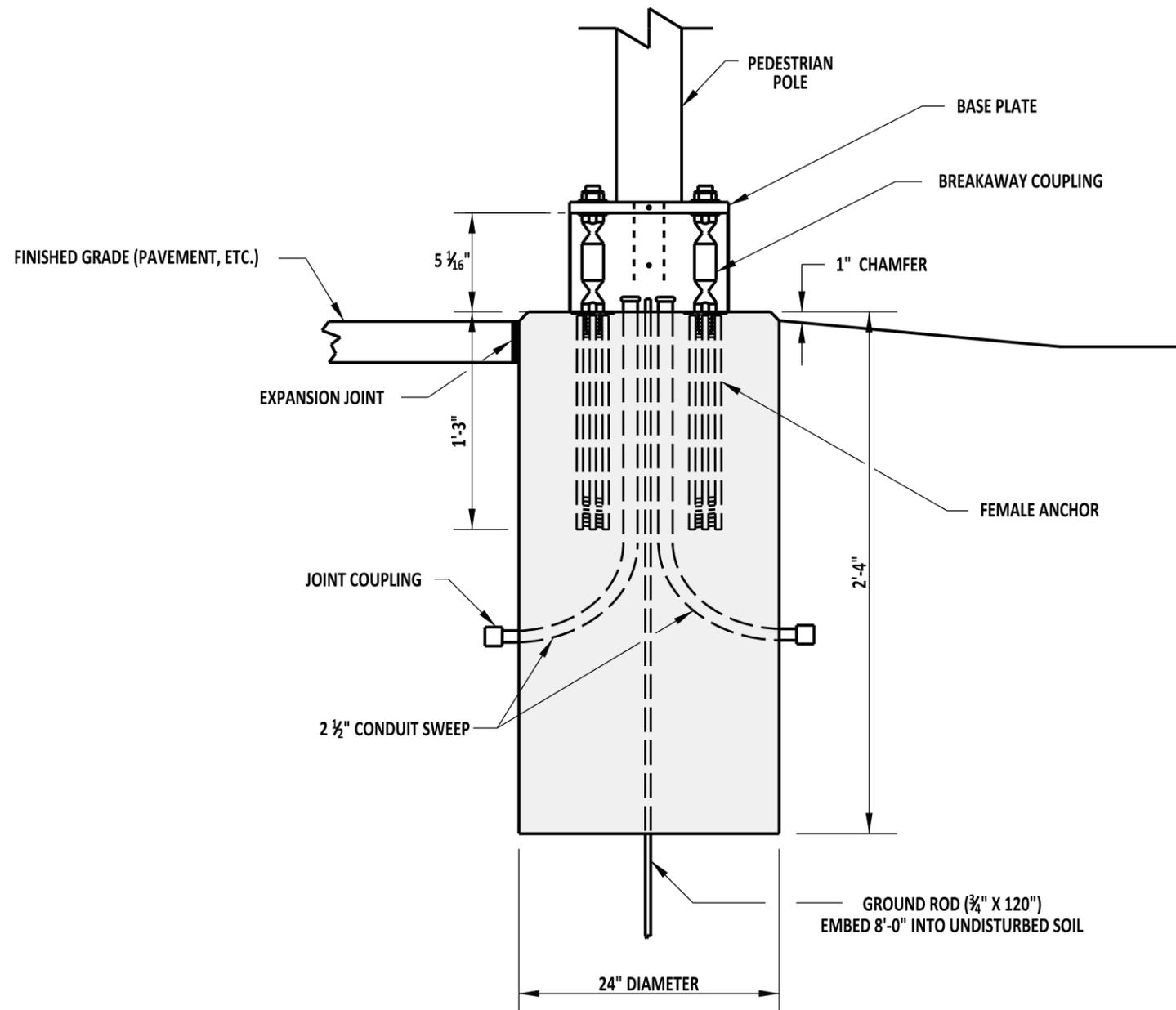
TYPE 7 GROUND ROD TYPICAL

NOTE:
ANCHOR BOLTS AND BOLT PATTERN FOR TYPE 7 POLE BASES TO BE PROVIDED BY THE MANUFACTURE.

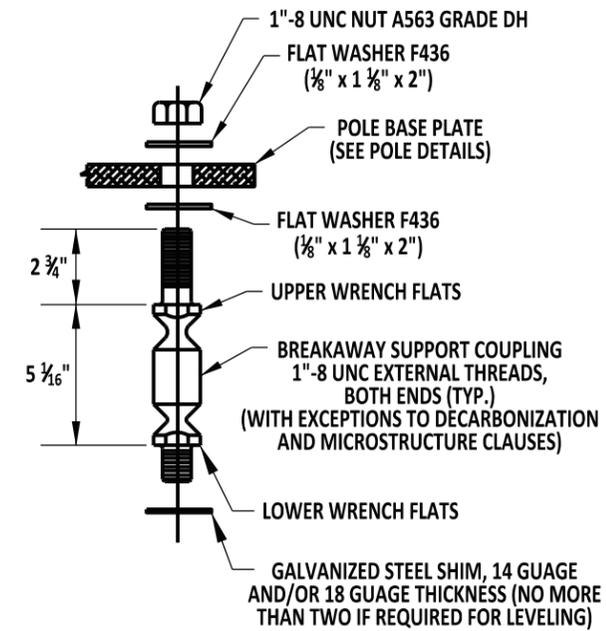


DELAWARE
DEPARTMENT OF TRANSPORTATION

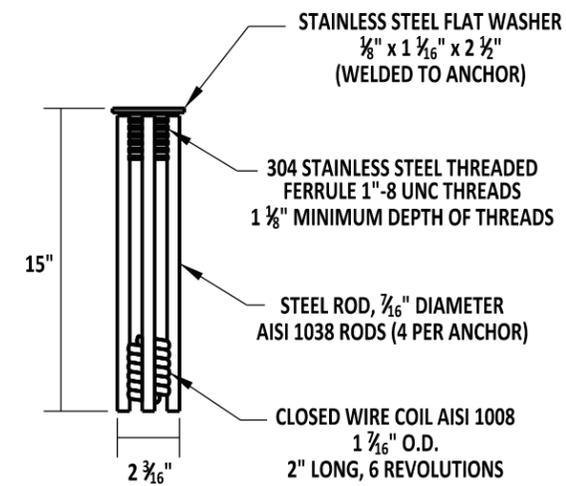
POLE BASES				APPROVED	SIGNATURE ON FILE <small>CHIEF ENGINEER</small>	01/17/2012 <small>DATE</small>
STANDARD NO.	T-5 (2011)	SHT.	3 OF 4	RECOMMENDED	SIGNATURE ON FILE <small>DESIGN ENGINEER</small>	01/17/2012 <small>DATE</small>



TYPICAL SECTION (BASE 4)



BREAKAWAY COUPLING DETAIL



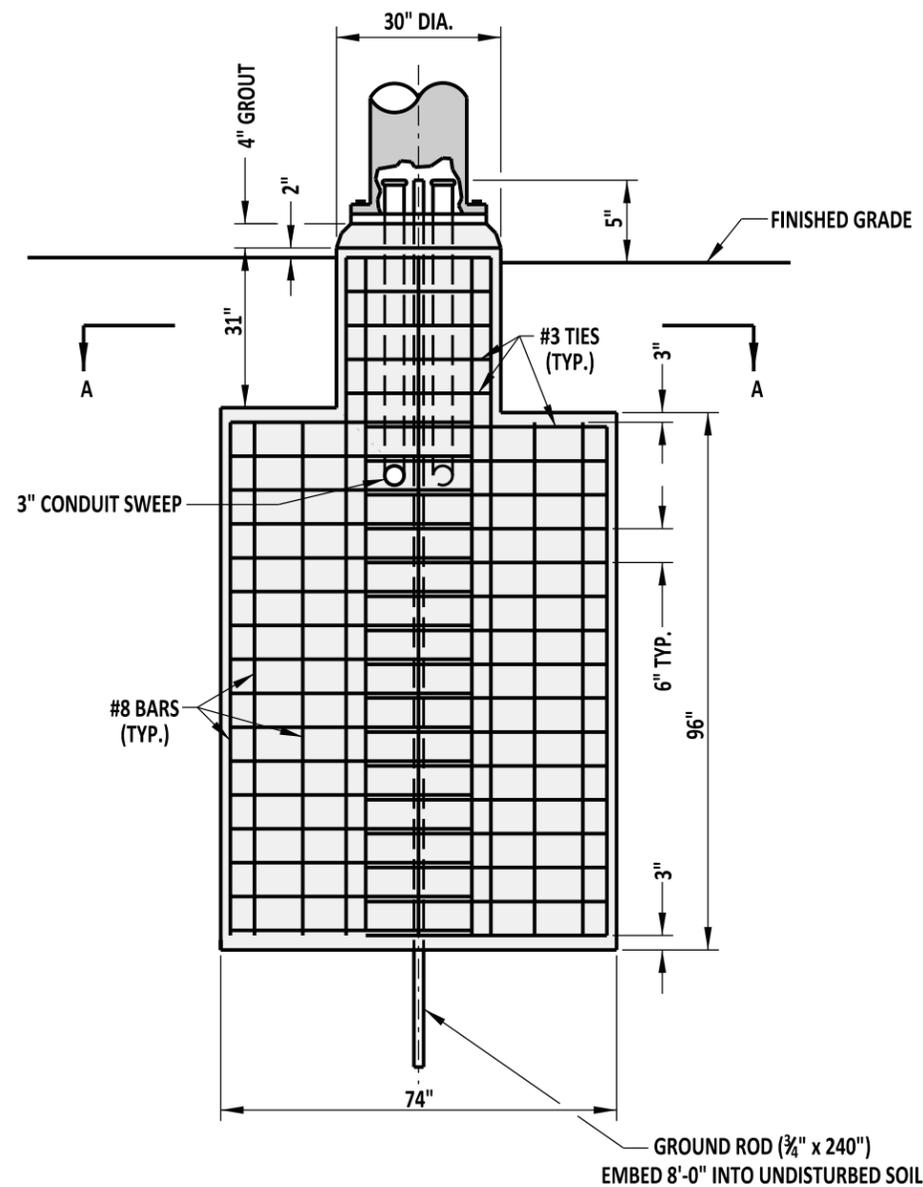
ANCHOR DETAIL

NOTES:
ANCHOR BOLTS AND BOLT PATTERN TO BE PROVIDED BY DELDOT'S SIGNAL CONSTRUCTION INSPECTOR.

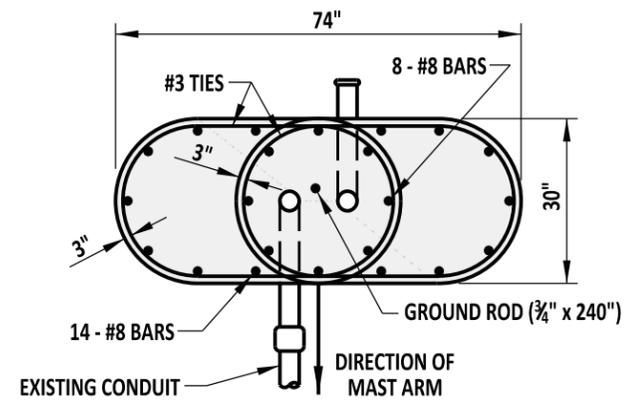


DELAWARE
DEPARTMENT OF TRANSPORTATION

STANDARD NO. T-5 (2011)		POLE BASES		APPROVED	SIGNATURE ON FILE	12/22/2011
		SHT. 4	OF 4	RECOMMENDED	SIGNATURE ON FILE	12/21/2011



FOUNDATION DETAILS



SECTION A-A

NOTES:

- 1). UNDERGROUND CONDUIT ENDS SHALL BE CAPPED WITH A GALVANIZED THREADED CONDUIT PLUG UNLESS CONNECTED TO AN EXISTING CONDUIT.
- 2). PLACE 2 EACH 6" x 1/2" P.V.C., SCHEDULE 40 (TYP) VENTS IN THE GROUT AS DIRECTED IN THE FIELD BY THE ENGINEER.



DELAWARE
DEPARTMENT OF TRANSPORTATION

SPECIAL POLE BASE

STANDARD NO. T-6 (2011)

SHT. 1 OF 1

APPROVED

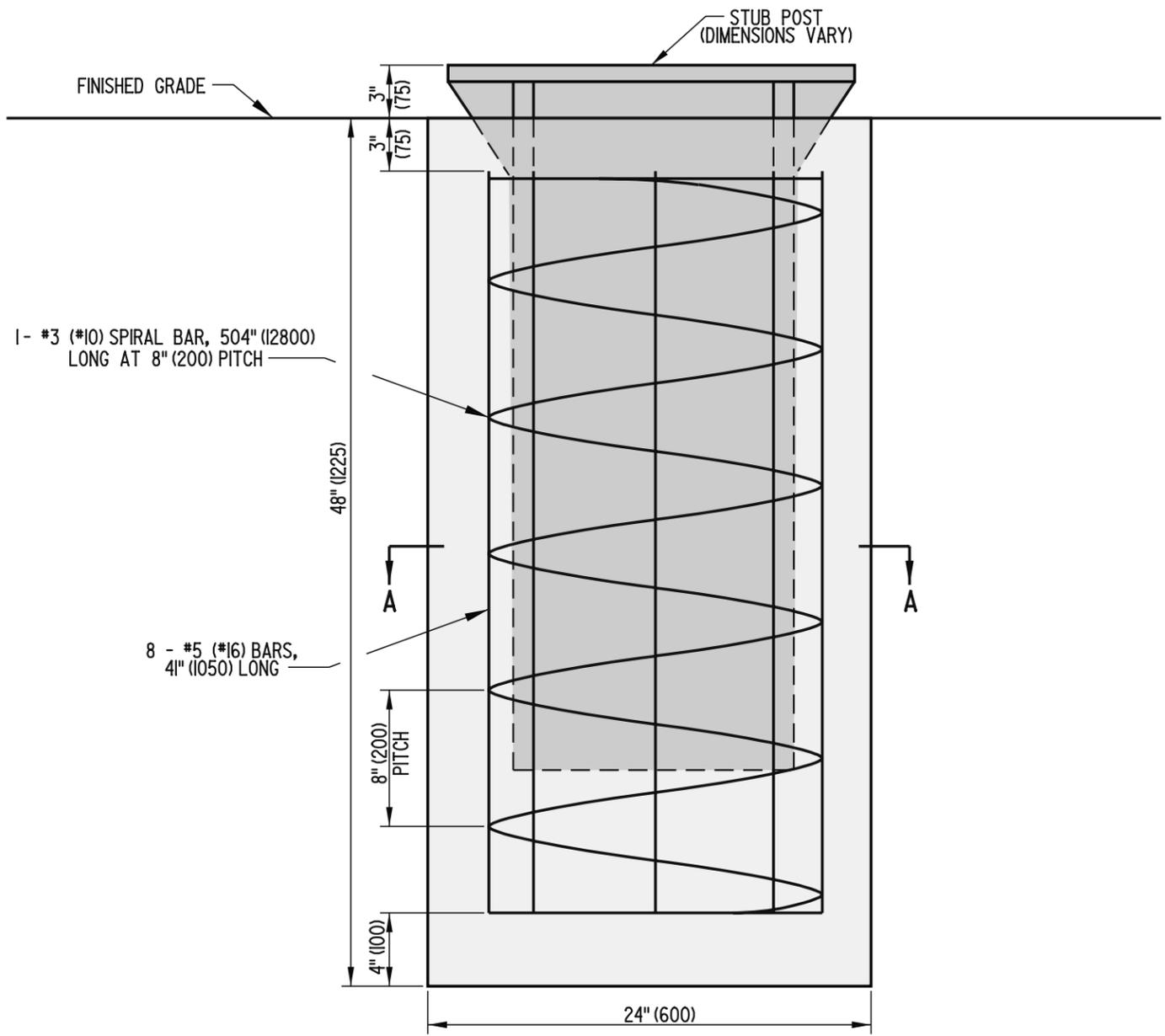
SIGNATURE ON FILE
CHIEF ENGINEER

12/22/2011
DATE

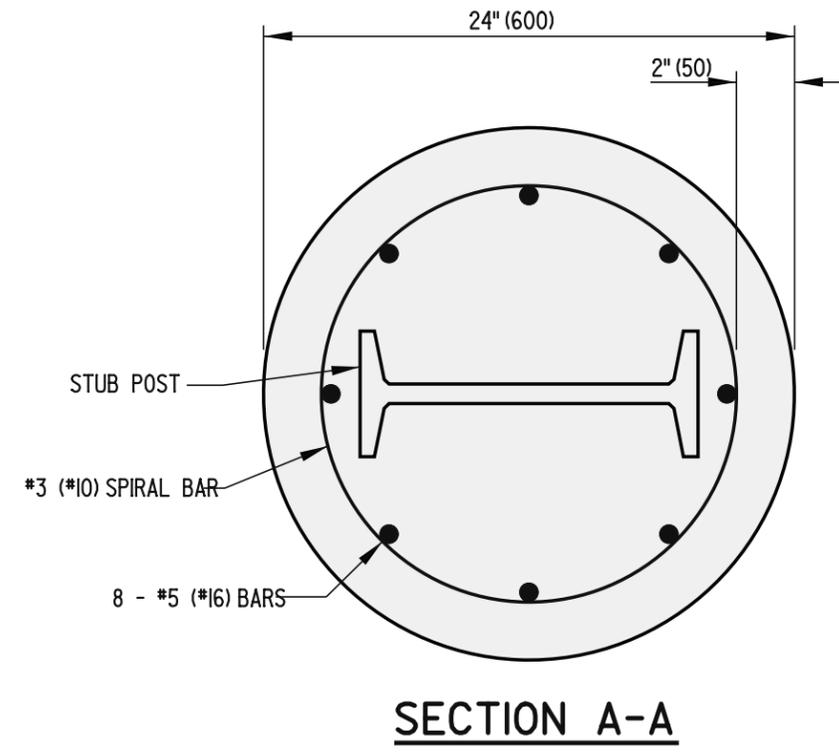
RECOMMENDED

SIGNATURE ON FILE
DESIGN ENGINEER

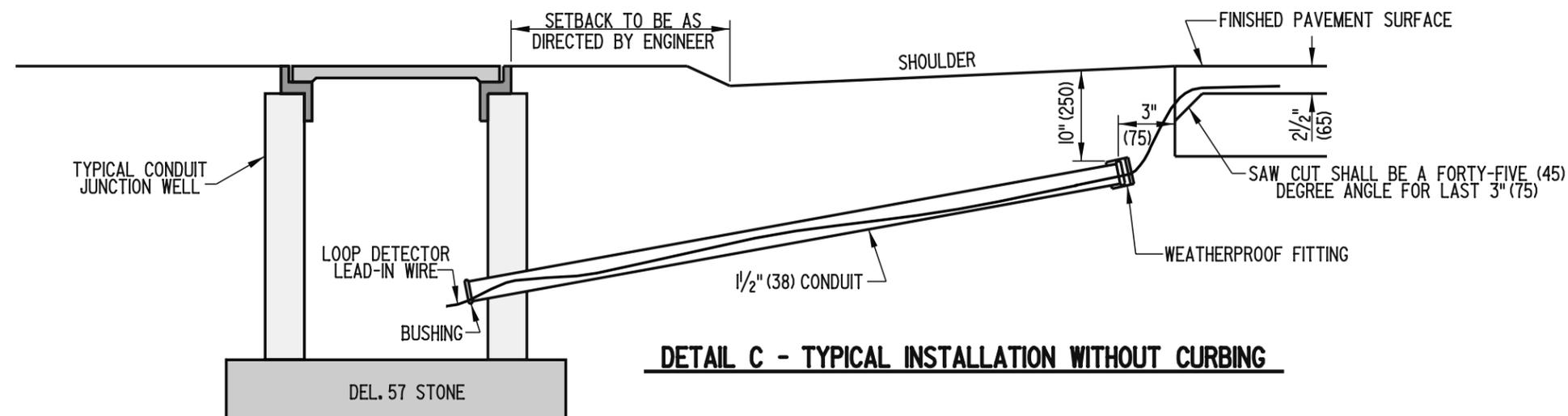
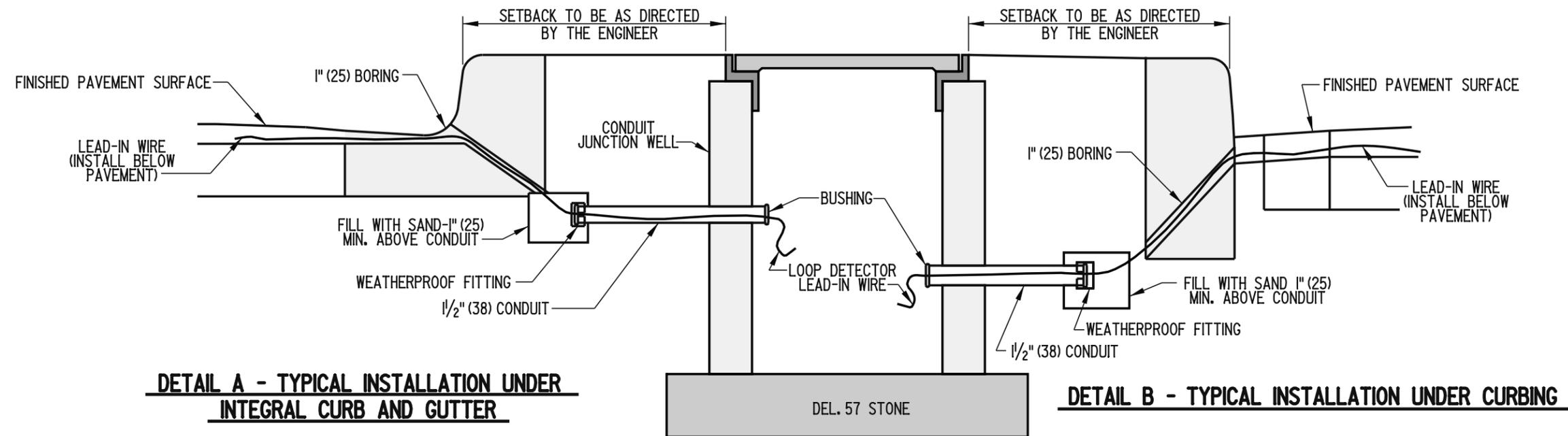
12/21/2011
DATE



NOTES: 1). STUB POST TO BE SUPPLIED BY THE DEPARTMENTS TRAFFIC, ENGINEERING, AND MANAGEMENT SECTION.



- NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE CONDUIT AGAINST ANY POSSIBLE DAMAGE IN PAVING OPERATIONS.
 2. THE WEATHERPROOF FITTING SHALL CONSIST OF A GALVANIZED 1/2" (38) COUPLING CONTAINING A STEEL THREADED REDUCING BUSHING (1/2" (38) TO 3/4" (19)) AND A 3/4" (19) WATERTIGHT CONNECTOR FOR SERVICE ENTRANCE CABLE.
 3. THE LEAD-IN WIRE SHALL BE RUN THROUGH THE RUBBER OF THE WEATHERPROOF FITTING.



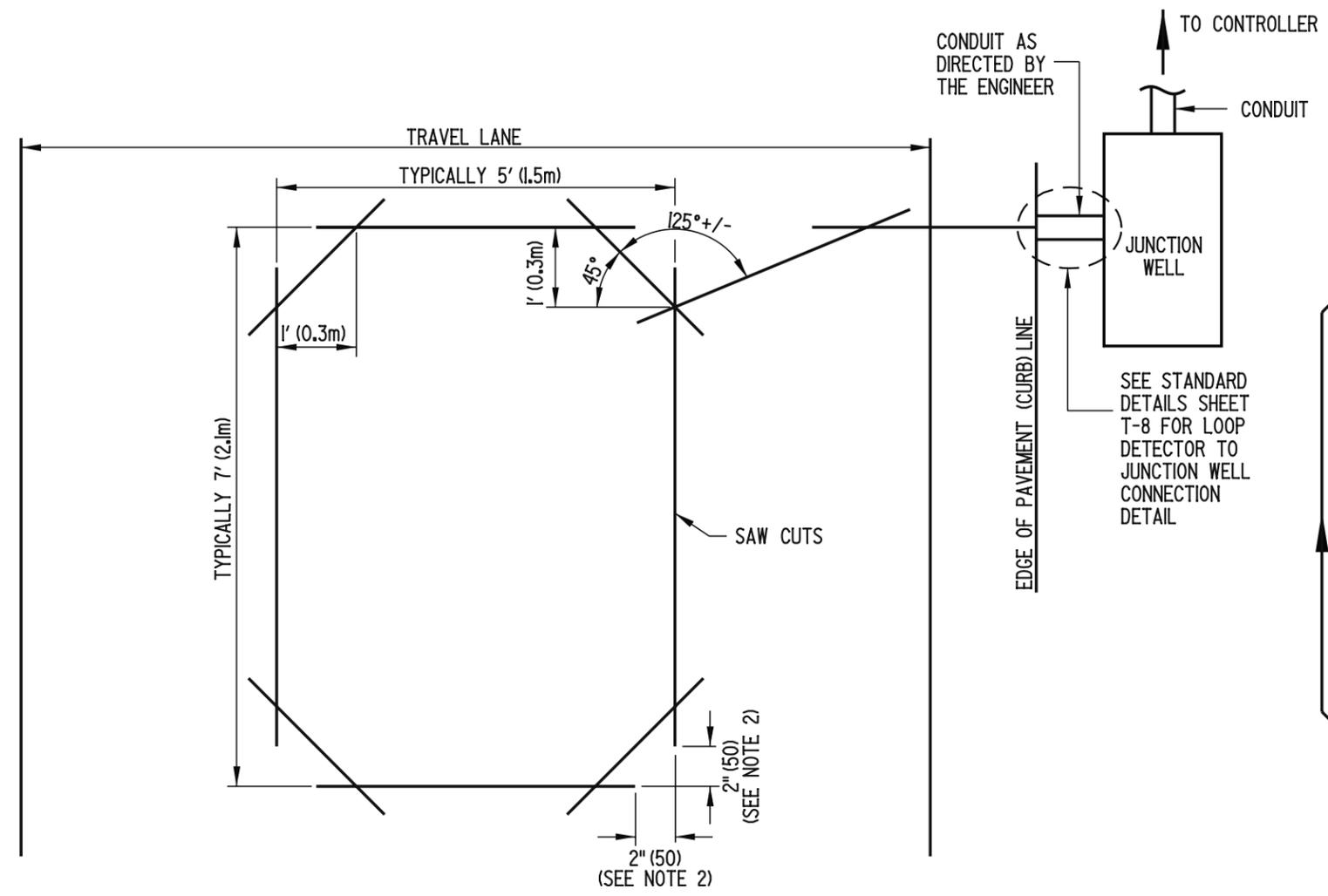
DELAWARE
DEPARTMENT OF TRANSPORTATION

LOOP DETECTOR TO CONDUIT JUNCTION WELL CONNECTION

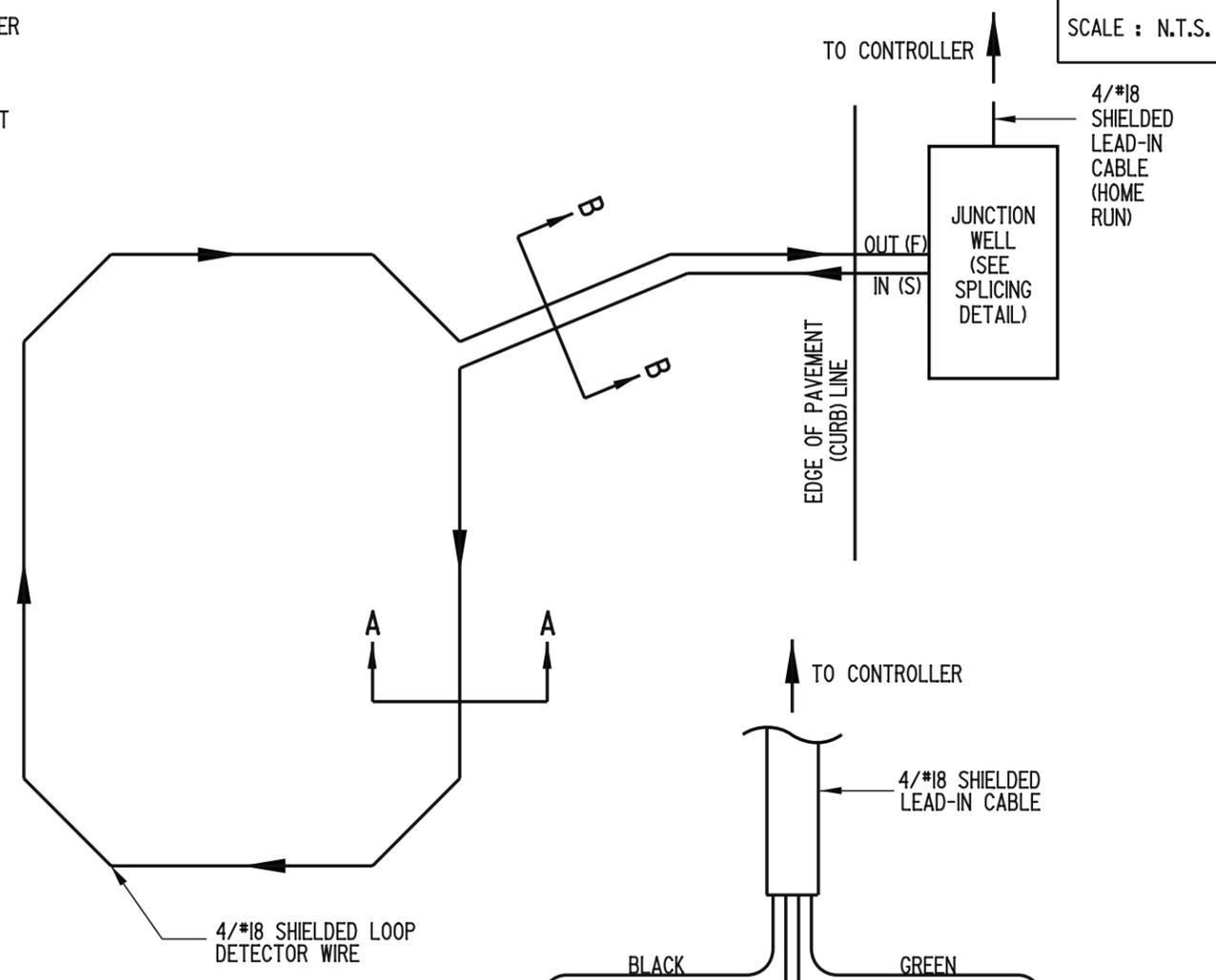
STANDARD NO. T-8 (2005) SHT. 1 OF 1

APPROVED *Candace Wick* 12/15/05
CHIEF ENGINEER DATE
 RECOMMENDED *James M. O'Brien* 11/29/05
DESIGN ENGINEER DATE

SCALE : N.T.S.



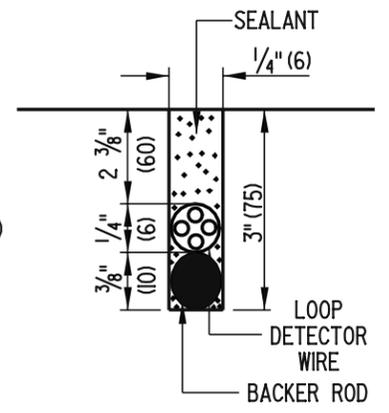
WIRE SLOT CONSTRUCTION



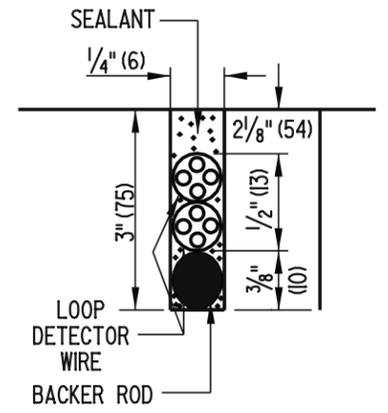
DETAILS FOR INSTALLING LOOP DETECTOR WIRE (SINGLE WRAP)

NOTES:

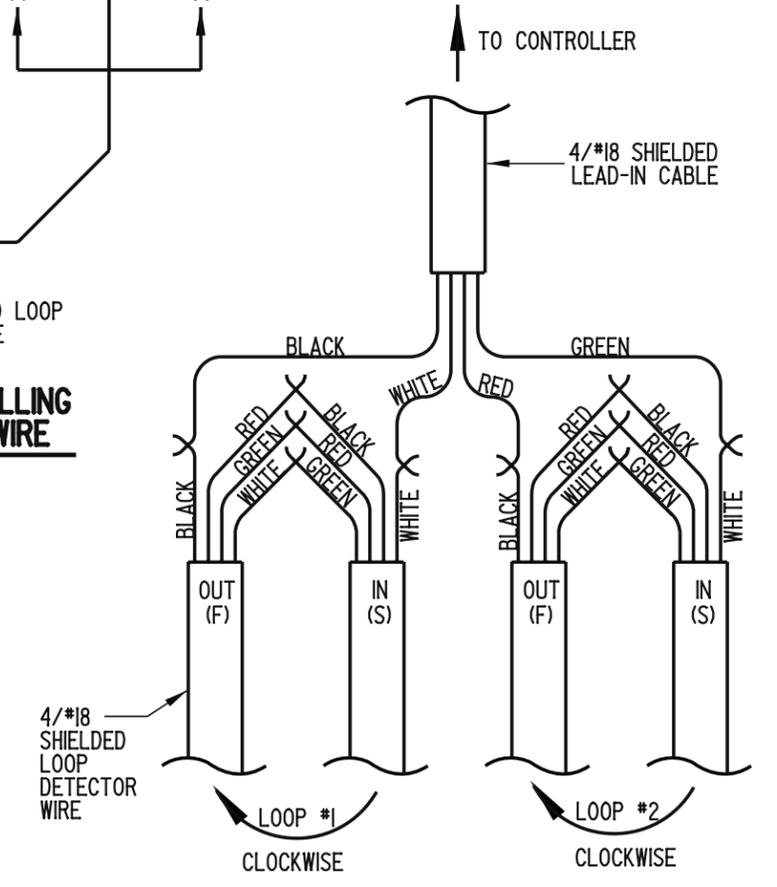
- 1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 12" (300) BACK FROM THE POINT OF THE EXTENDED CORNER.
- 2). THE LONGITUDINAL / TRANSVERSE CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRIANGULAR PORTION OF THE PAVEMENT FROM BREAKING.
- 3). A MAXIMUM OF TWO LOOP DETECTORS CAN BE SPLICED TO ONE LEAD-IN CABLE, THE DETAIL ILLUSTRATES THE METHOD OF SPLICING TWO LOOP DETECTORS (LOOP #1 AND LOOP #2) TO A LEAD-IN CABLE.
- 4). LOOP DETECTOR SHALL BE CENTERED IN TRAVEL LANE.



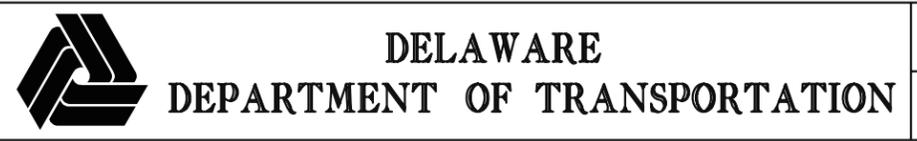
SECTION A - A



SECTION B - B



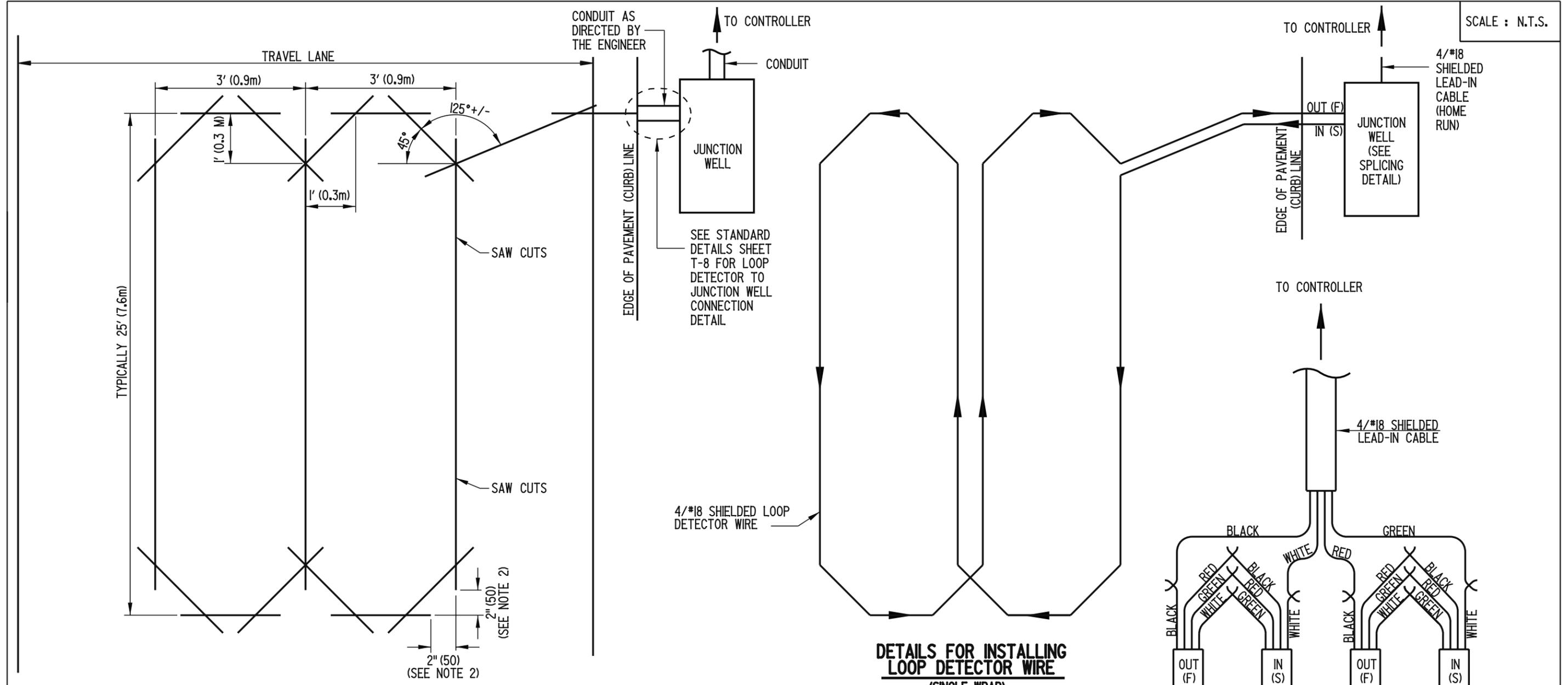
SPLICING DETAIL (SEE NOTE 3)



TYPE #1 LOOP DETECTOR			
STANDARD NO.	T-9 (2005)	SHT.	1 OF 1

APPROVED	<i>Carolyn Wick</i>	12/5/05
	CHIEF ENGINEER	DATE
RECOMMENDED	<i>James M. O'Brien</i>	11/29/05
	DESIGN ENGINEER	DATE

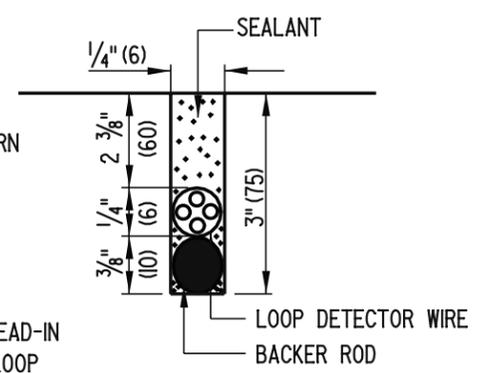
SCALE : N.T.S.



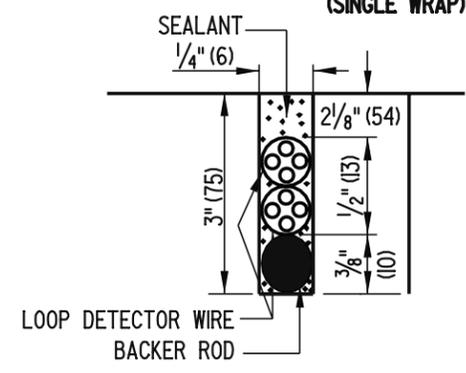
WIRE SLOT CONSTRUCTION

NOTES:

- 1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 1' (0.3m) BACK FROM THE POINT OF THE EXTENDED CORNER.
- 2). THE LONGITUDINAL / TRANSVERSE CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER TO PREVENT THE TRIANGULAR PORTION OF THE PAVEMENT FROM BREAKING.
- 3). A MAXIMUM OF TWO LOOP DETECTORS CAN BE SPLICED TO ONE LEAD-IN CABLE. THE DETAIL ILLUSTRATES THE METHOD OF SPLICING TWO LOOP DETECTORS (LOOP #1 AND LOOP #2) TO A LEAD-IN CABLE.
- 4). LOOP DETECTOR SHALL BE CENTERED IN TRAVEL LANE.

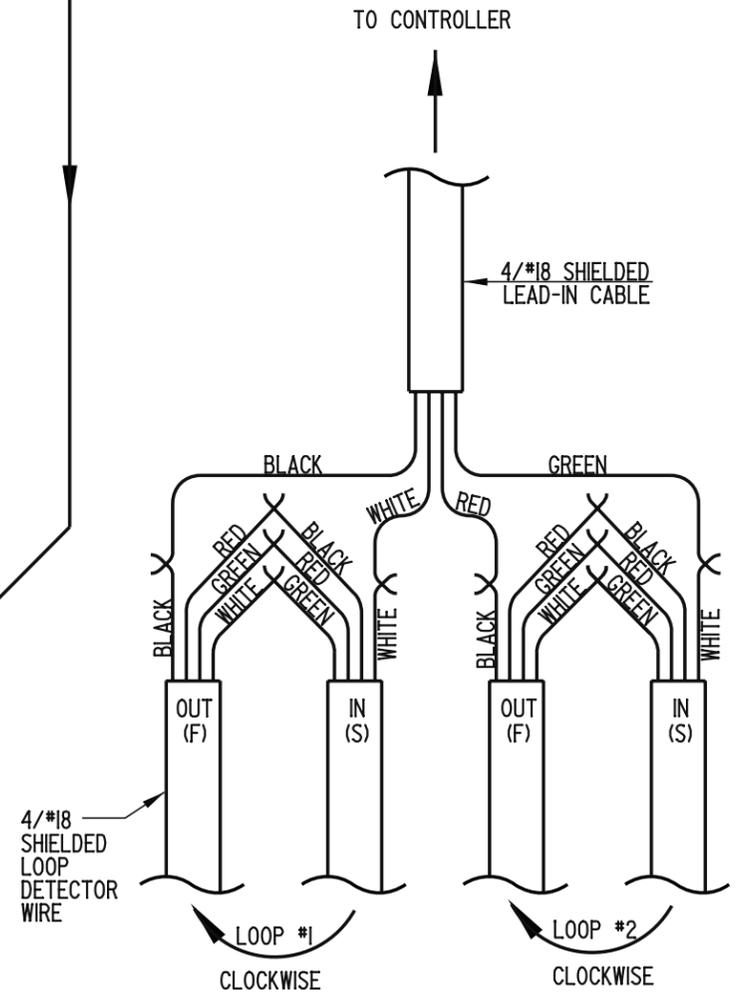


SECTION A - A



SECTION B - B

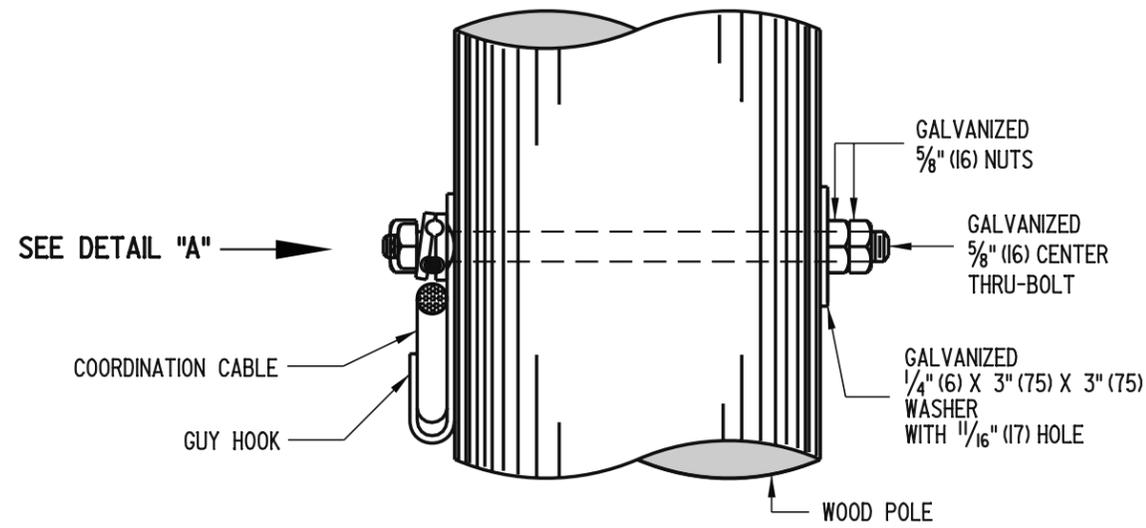
DETAILS FOR INSTALLING LOOP DETECTOR WIRE (SINGLE WRAP)



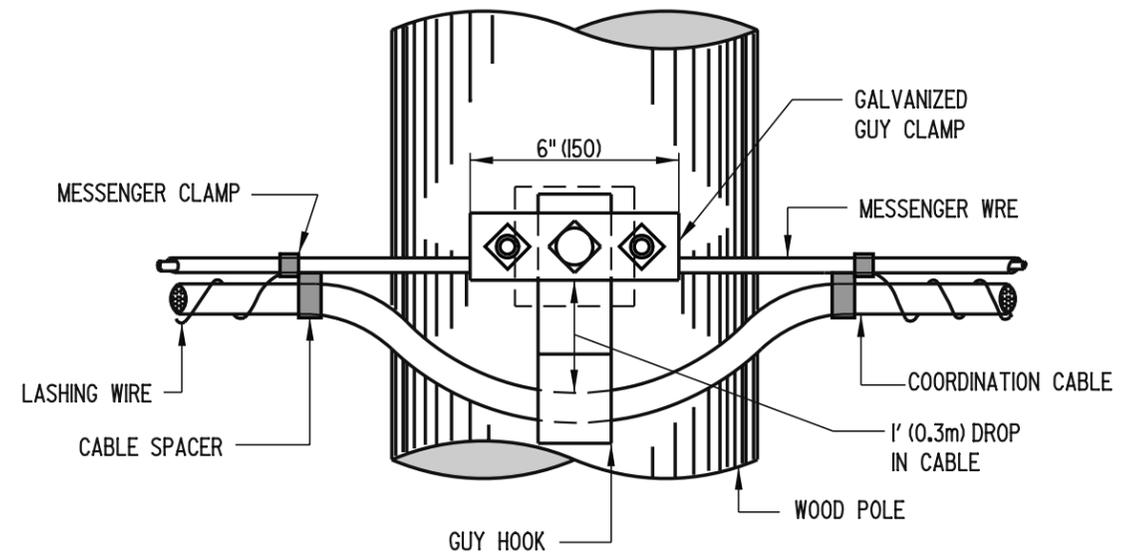
SPlicing DETAIL (SEE NOTE 3)

 DELAWARE DEPARTMENT OF TRANSPORTATION	TYPE #2 LOOP DETECTOR		APPROVED <i>Carolyn Wick</i> 12/5/05 <small>CHIEF ENGINEER DATE</small>
	STANDARD NO. T-10 (2005)	SHT. 1 OF 1	RECOMMENDED <i>James M. O'Brien</i> 11/29/05 <small>DESIGN ENGINEER DATE</small>

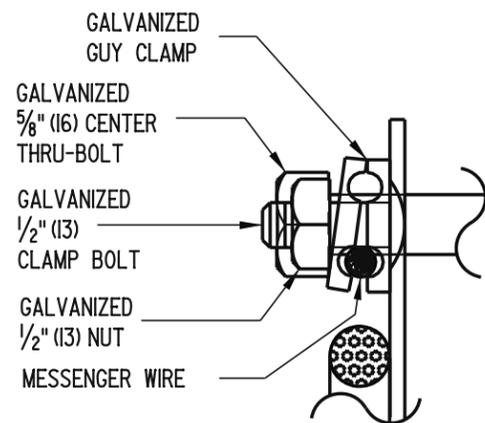
INTERMEDIATE



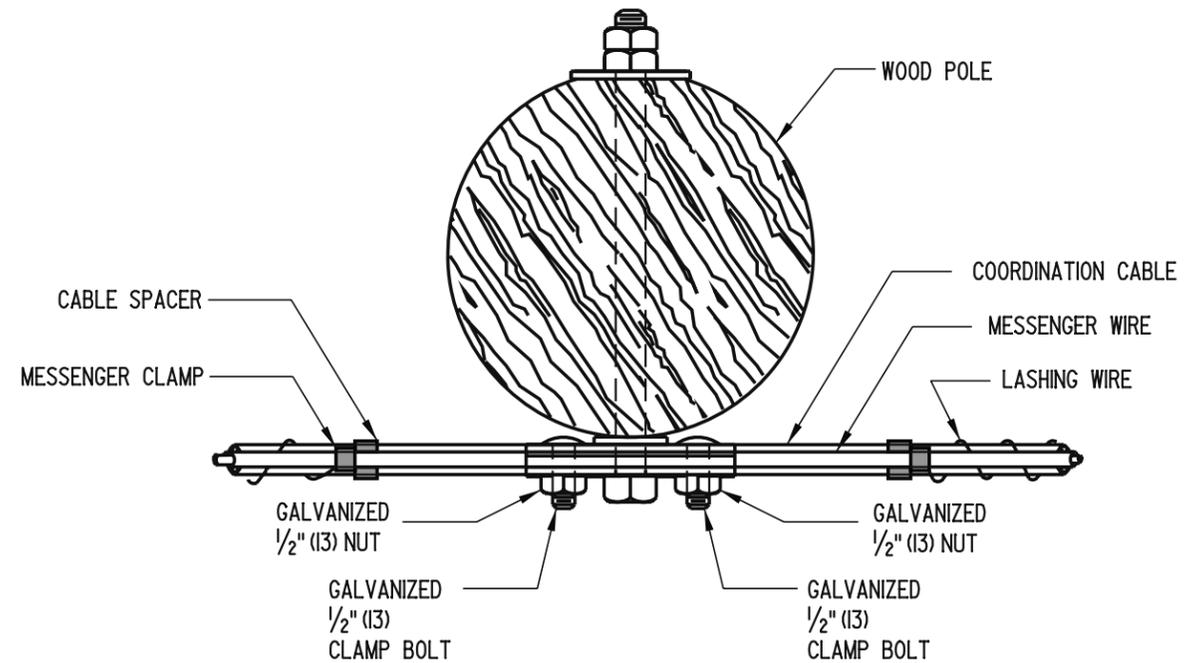
SIDE VIEW



FRONT VIEW



DETAIL "A"



TOP VIEW



**DELAWARE
DEPARTMENT OF TRANSPORTATION**

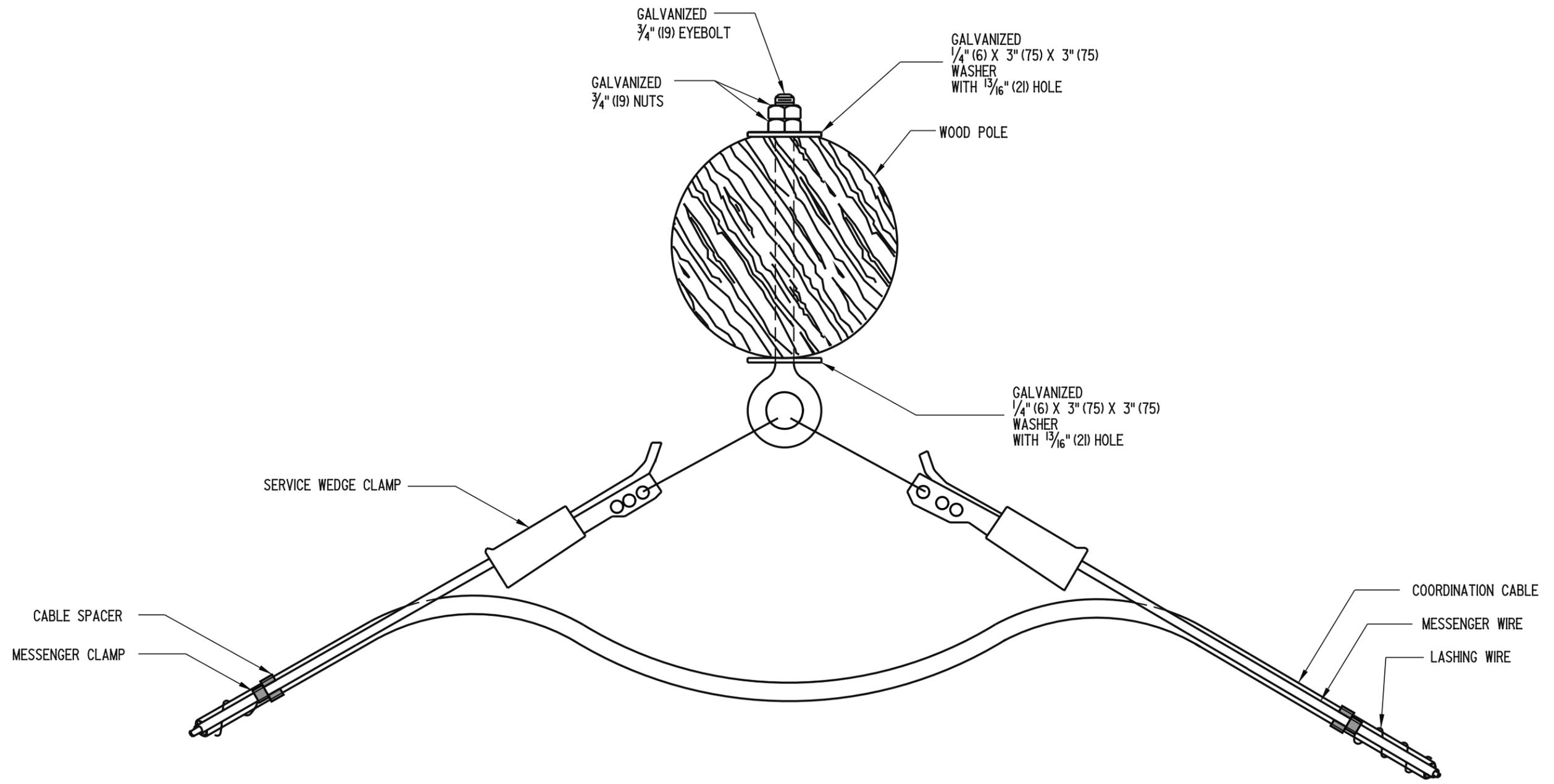
INTERMEDIATE MESSENGER WIRE ATTACHMENT ON WOOD POLES

STANDARD NO. T-11 (2005)

SHT. 1 OF 2

APPROVED *Carolann Wick* **12/5/05**
CHIEF ENGINEER DATE

RECOMMENDED *James M. O'Brien* **11/29/05**
DESIGN ENGINEER DATE



TOP VIEW

 DELAWARE DEPARTMENT OF TRANSPORTATION	ANGULAR INTERMEDIATE MESSENGER WIRE ATTACHMENT		APPROVED <i>Carolann Wick</i> <small>CHIEF ENGINEER</small>	12/15/05 <small>DATE</small>
	STANDARD NO. T-11 (2005)	SHT. 2 OF 2	RECOMMENDED <i>James M. O'Brien</i> <small>DESIGN ENGINEER</small>	11/29/05 <small>DATE</small>