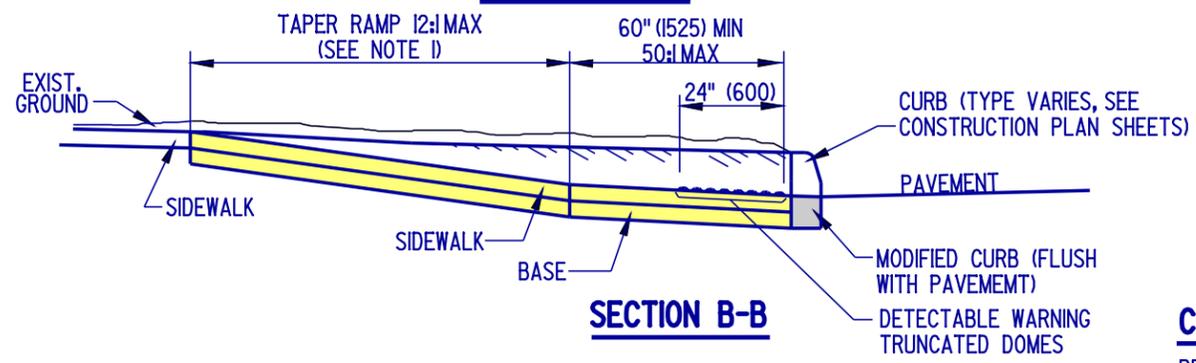
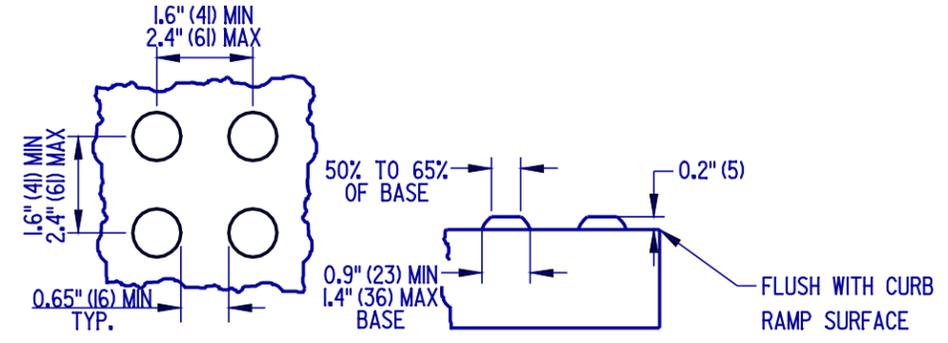


ELEVATION A-A

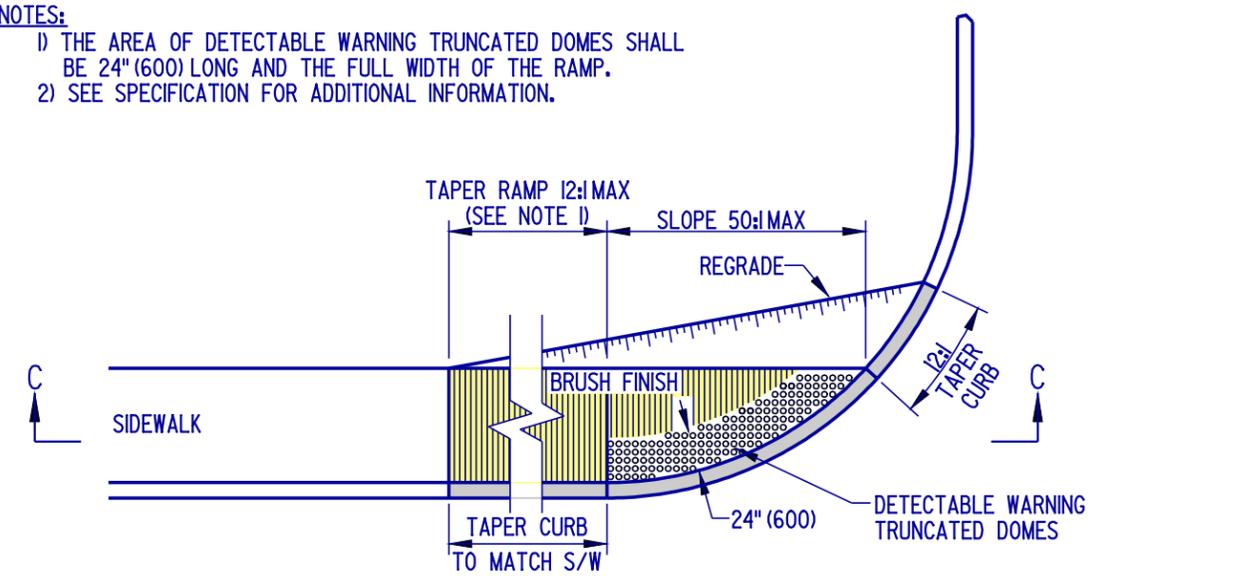


SECTION B-B



DETECTABLE WARNING TRUNCATED DOME DETAILS

- NOTES:**
 1) THE AREA OF DETECTABLE WARNING TRUNCATED DOMES SHALL BE 24" (600) LONG AND THE FULL WIDTH OF THE RAMP.
 2) SEE SPECIFICATION FOR ADDITIONAL INFORMATION.



SECTION C-C

- NOTES:** 1). WHERE A 12:1 MAXIMUM SLOPE RAMP WILL NOT MEET THE SIDEWALK GRADE WITHIN A LENGTH OF 15' (4570) DUE TO STEEP ADJACENT ROADWAY, THE RAMP LENGTH MAY BE LIMITED TO 15' (4570), AND THE RAMP SLOPE ALLOWED TO EXCEED 12:1.
 2). RAMP WIDTH SHALL BE 4' (1200) MINIMUM, HOWEVER, 5' (1525) IS PREFERRED.

CURB RAMP, TYPE 1
 PERPENDICULAR CURB RAMP

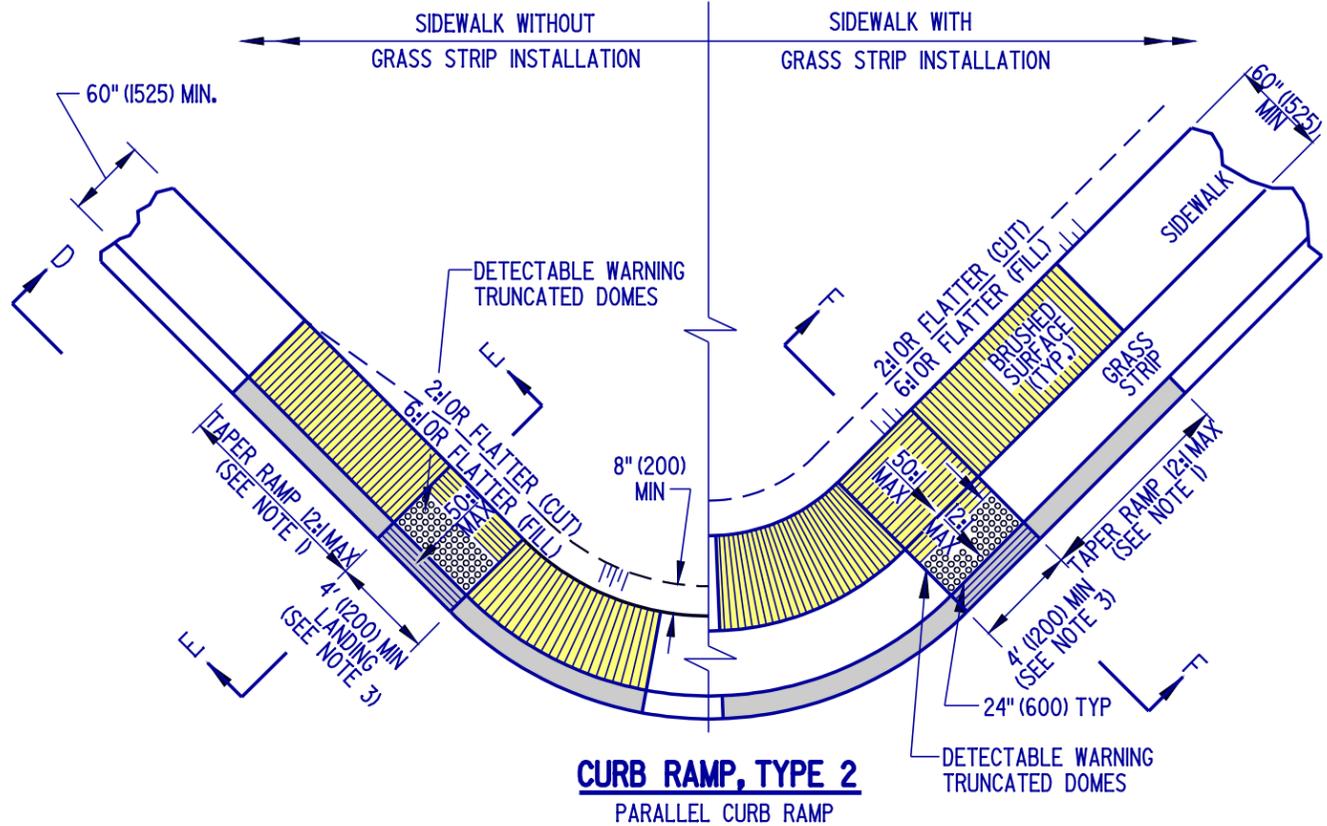


DELAWARE
DEPARTMENT OF TRANSPORTATION

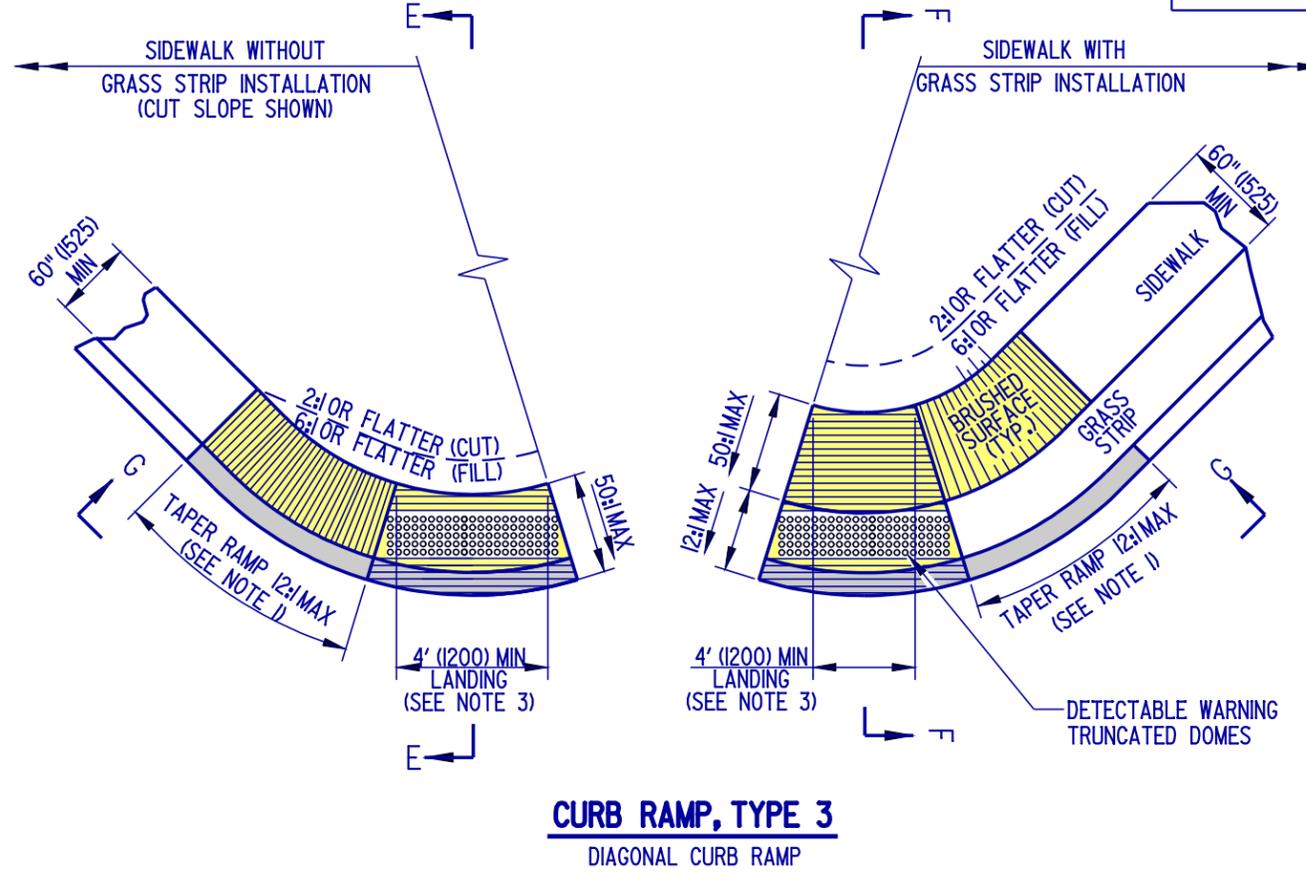
CURB RAMP, TYPE 1 AND SECTIONS

STANDARD NO. C-2 (2004) SHT. 1 OF 4

APPROVED *Carolann Wicks* 1/10/05
 CHIEF ENGINEER DATE
 RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
 DESIGN ENGINEER DATE

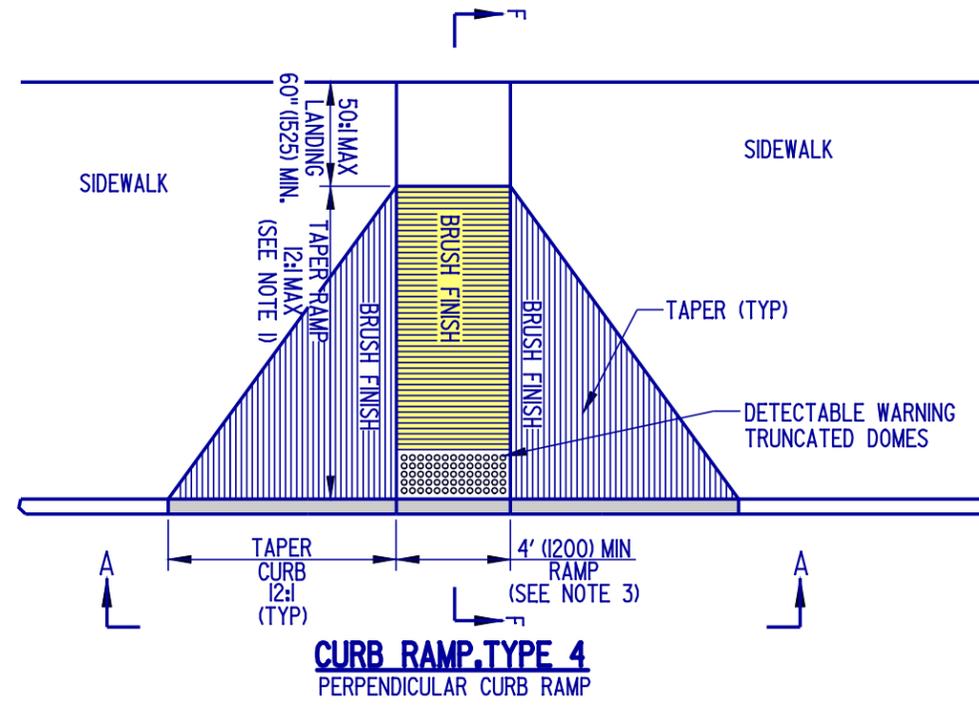


CURB RAMP, TYPE 2
PARALLEL CURB RAMP



CURB RAMP, TYPE 3
DIAGONAL CURB RAMP

NOTE: THE DIAGONAL CURB RAMP IS NOT THE PREFERRED TREATMENT.



CURB RAMP, TYPE 4
PERPENDICULAR CURB RAMP

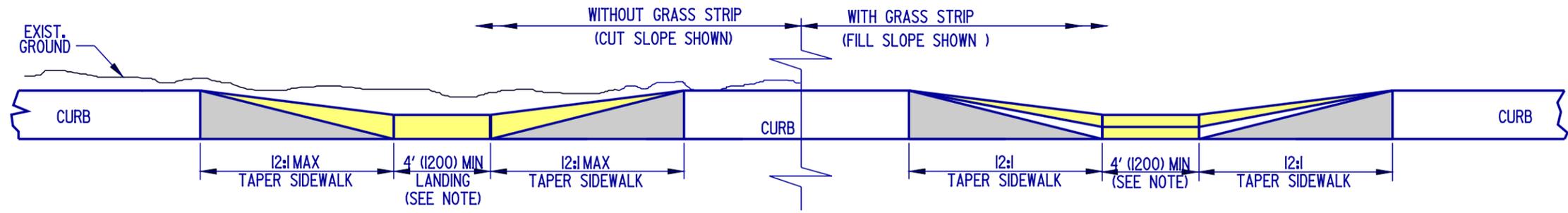
- NOTES:**
- 1). WHERE A 12:1 MAXIMUM SLOPE RAMP WILL NOT MEET THE SIDEWALK GRADE WITHIN A LENGTH OF 15' (4570) DUE TO STEEP ADJACENT ROADWAY, THE RAMP LENGTH MAY BE LIMITED TO 15' (4570), AND THE RAMP SLOPE ALLOWED TO EXCEED 12:1.
 - 2). TRANSITION TO EXISTING SIDEWALK WIDTH OVER THE LENGTH OF THE RAMP.
 - 3). RAMP WIDTH SHALL BE 4' (1200) MINIMUM, HOWEVER, 5' (1525) IS PREFERRED.



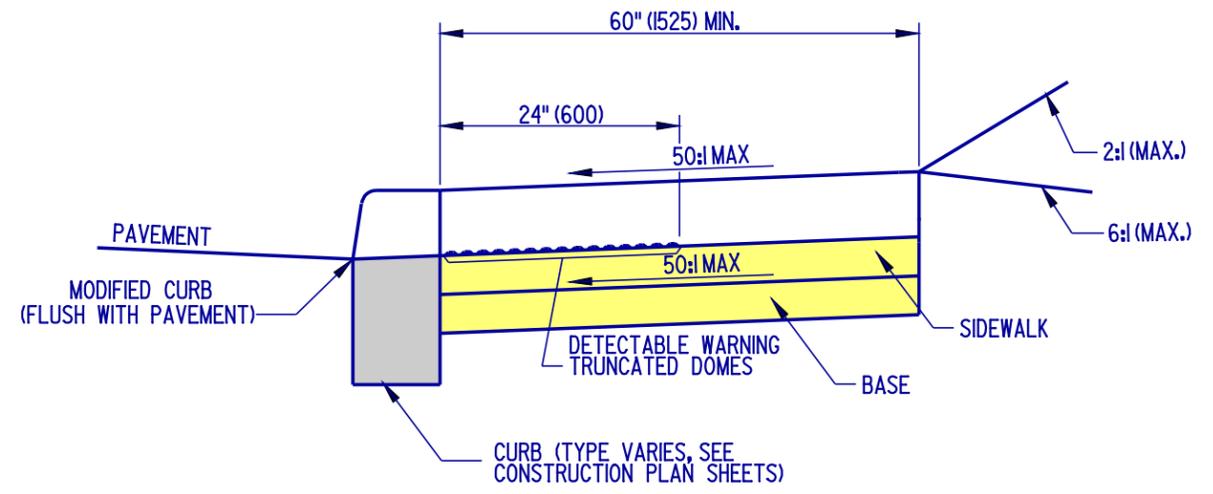
DELAWARE
DEPARTMENT OF TRANSPORTATION

CURB RAMPS, TYPES 2, 3, & 4
STANDARD NO. C-2 (2004) SHT. 2 OF 4

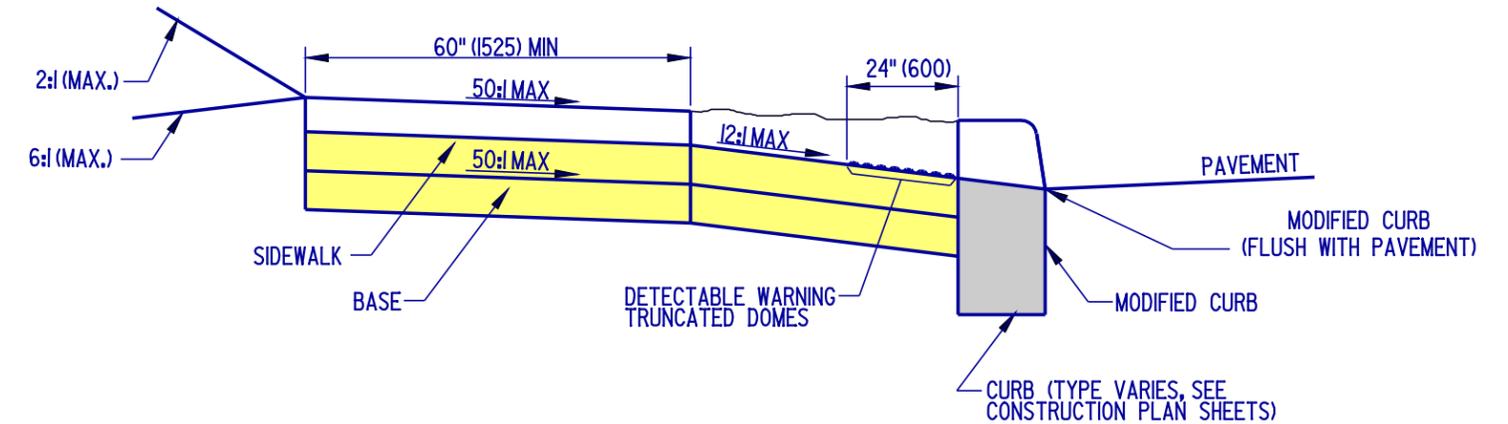
APPROVED *Carolann Wick* 1/10/05
CHIEF ENGINEER DATE
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



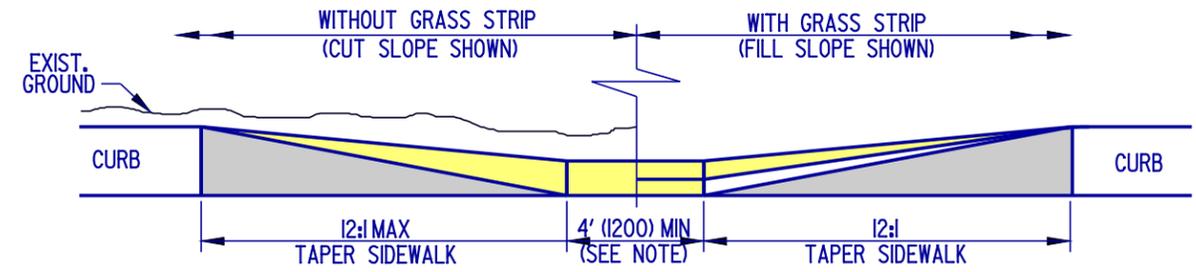
ELEVATION D-D



SECTION E-E



SECTION F-F



ELEVATION G-G

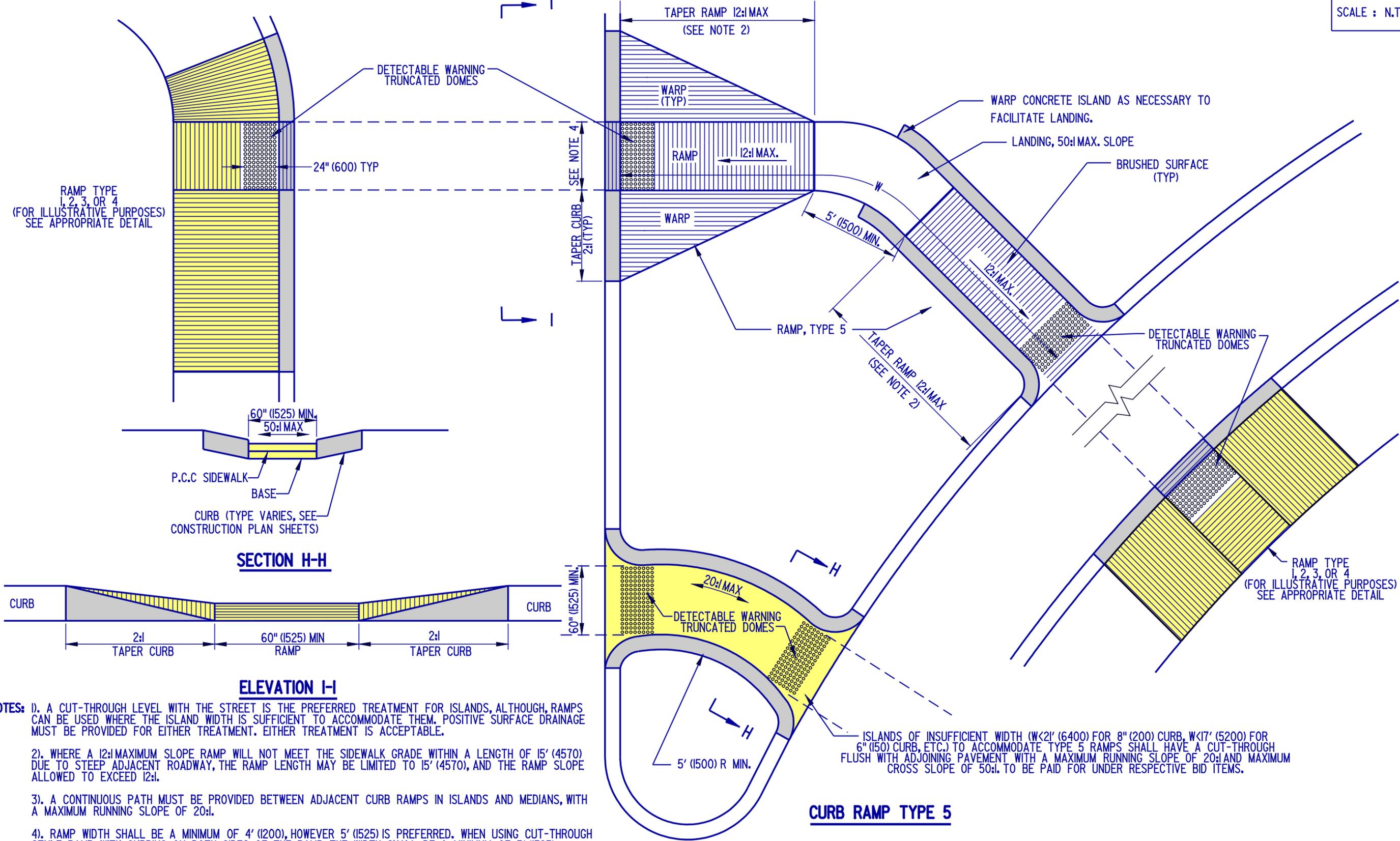
NOTE: CURB RAMP WIDTH SHALL BE 4' (1200) MINIMUM, HOWEVER, 5' (1525) IS PREFERRED.



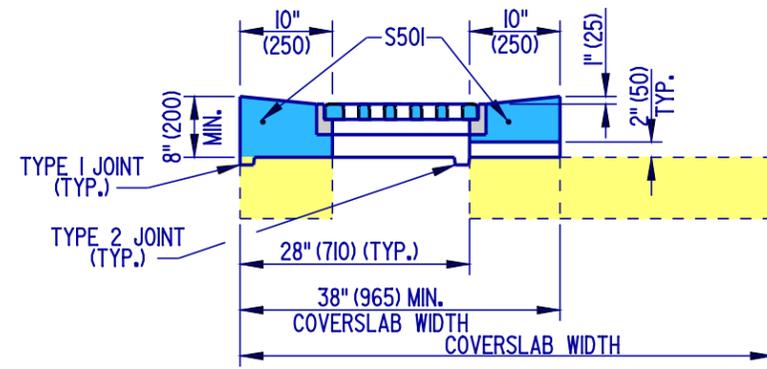
DELAWARE
DEPARTMENT OF TRANSPORTATION

| | | | |
|---|------------|------|--------|
| CURB RAMP SECTIONS FOR TYPES 2 & 3 | | | |
| STANDARD NO. | C-2 (2004) | SHT. | 3 OF 4 |

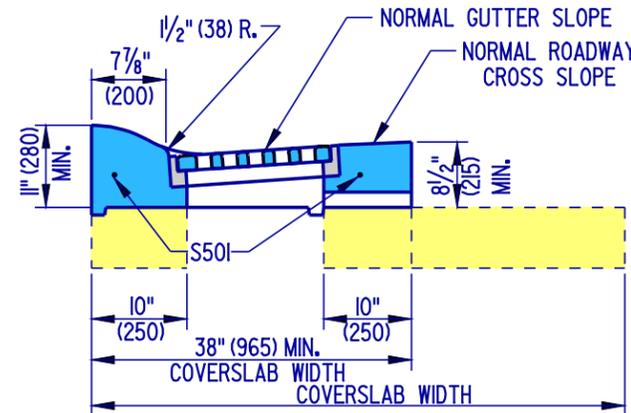
APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE
 RECOMMENDED *Dennis M. O'Flaherty* 1/3/05
DESIGN ENGINEER DATE



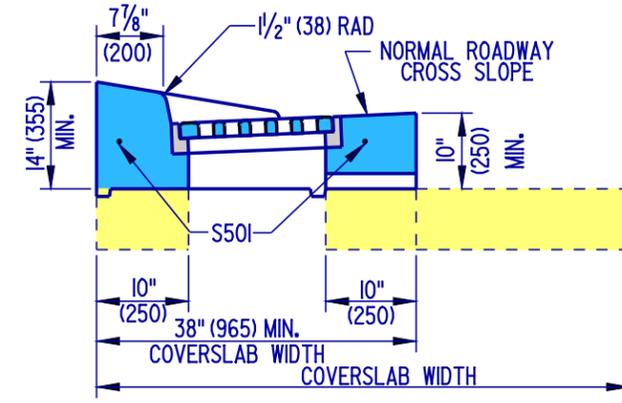
- NOTES:**
- 1). A CUT-THROUGH LEVEL WITH THE STREET IS THE PREFERRED TREATMENT FOR ISLANDS, ALTHOUGH, RAMPS CAN BE USED WHERE THE ISLAND WIDTH IS SUFFICIENT TO ACCOMMODATE THEM. POSITIVE SURFACE DRAINAGE MUST BE PROVIDED FOR EITHER TREATMENT. EITHER TREATMENT IS ACCEPTABLE.
 - 2). WHERE A 12:1 MAXIMUM SLOPE RAMP WILL NOT MEET THE SIDEWALK GRADE WITHIN A LENGTH OF 15' (4570) DUE TO STEEP ADJACENT ROADWAY, THE RAMP LENGTH MAY BE LIMITED TO 15' (4570), AND THE RAMP SLOPE ALLOWED TO EXCEED 12:1.
 - 3). A CONTINUOUS PATH MUST BE PROVIDED BETWEEN ADJACENT CURB RAMPS IN ISLANDS AND MEDIANS, WITH A MAXIMUM RUNNING SLOPE OF 20:1.
 - 4). RAMP WIDTH SHALL BE A MINIMUM OF 4' (1200), HOWEVER 5' (1525) IS PREFERRED. WHEN USING CUT-THROUGH STYLE RAMP, WITH CURBING ON BOTH SIDES OF THE RAMP, THE WIDTH SHALL BE A MINIMUM OF 5' (1525).



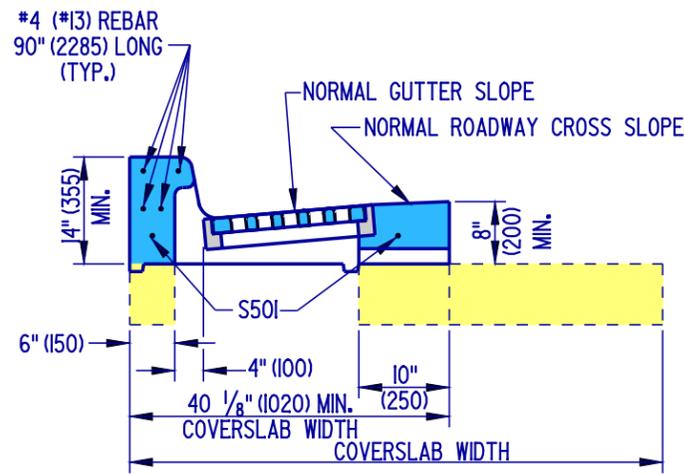
TYPE A



TYPE D

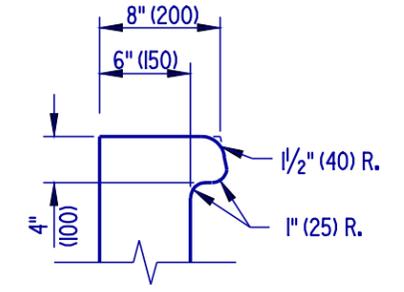


TYPE E

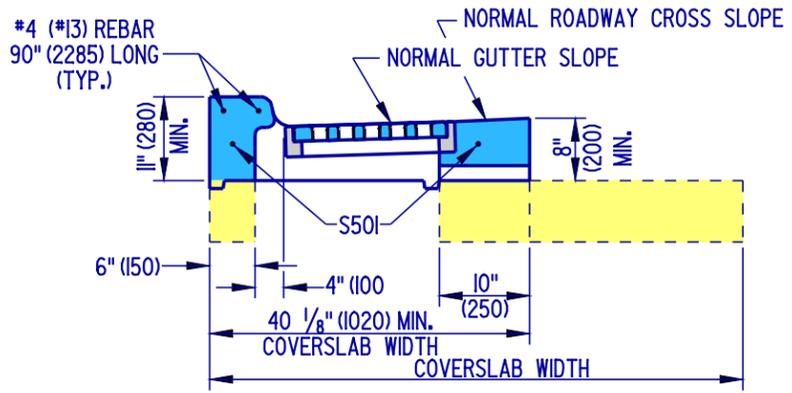


TYPE B

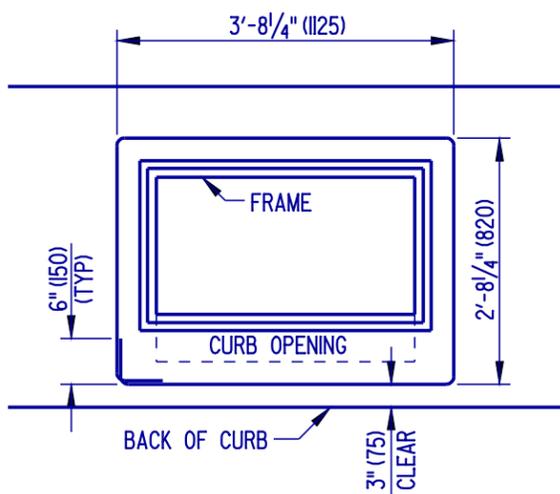
| INLET TOP UNIT APPLICATIONS | |
|-----------------------------|---|
| TOP UNIT | CURB |
| TYPE A | USE IN DRAINAGE SWALE |
| TYPE B | INTEGRAL PCC CURB & GUTTER, TYPE 1 & 3, PCC CURB TYPE 1 |
| TYPE C | INTEGRAL PCC CURB & GUTTER, TYPE 4, PCC CURB TYPE 3 |
| TYPE D | INTEGRAL PCC CURB & GUTTER, TYPE 2 |
| TYPE E | PCC CURB TYPE 2 |



CURB OPENING DETAIL



TYPE C

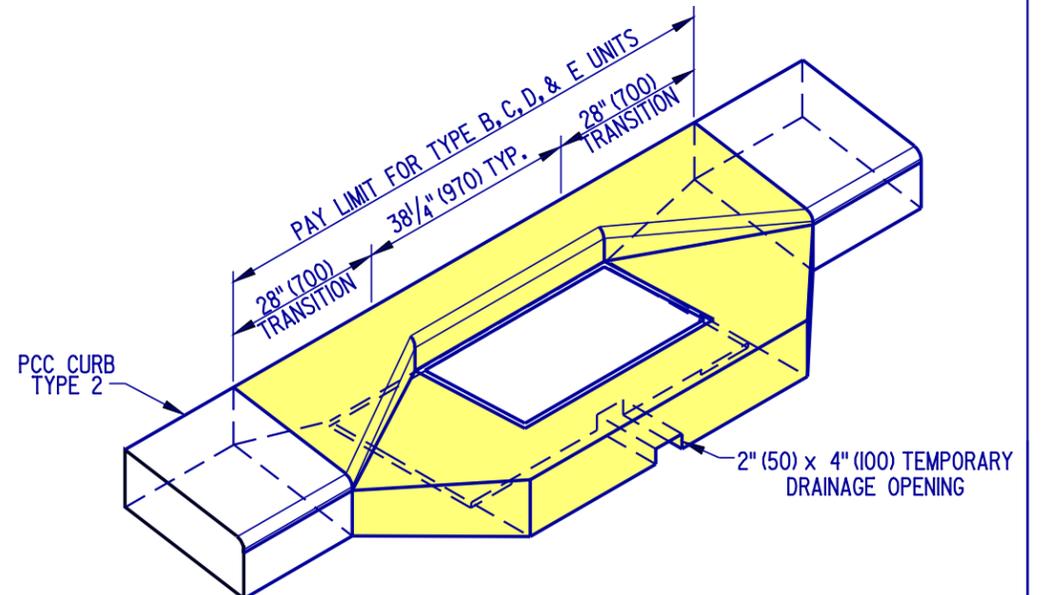


S501 BENDING DIAGRAM

S501 IS NOT REQUIRED TO BE ONE CONTINUOUS BAR. IF MORE THAN ONE BAR IS USED, THERE MUST BE A 12" (300) OVERLAP BETWEEN BARS.

DRAINAGE INLET TOP UNITS

NOTE: TOP UNIT IS TO BE CAST-IN-PLACE TO GRADE AS SPECIFIED ON PLAN SHEETS OR AS DIRECTED BY ENGINEER.



ISOMETRIC VIEW

TYPE E UNIT SHOWN

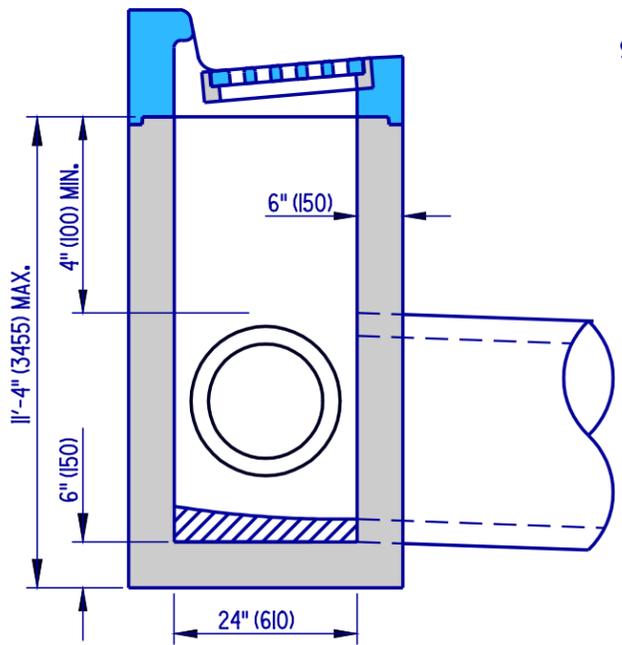
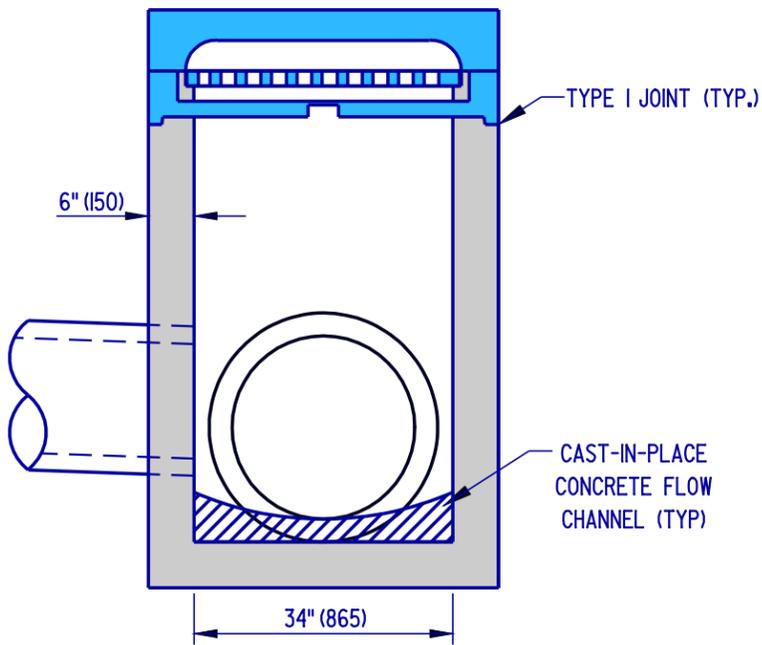
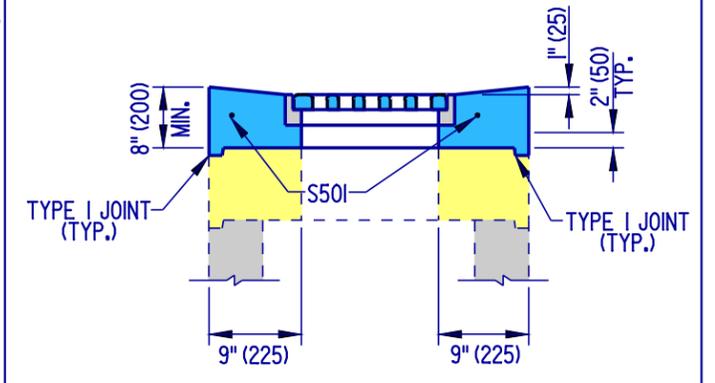
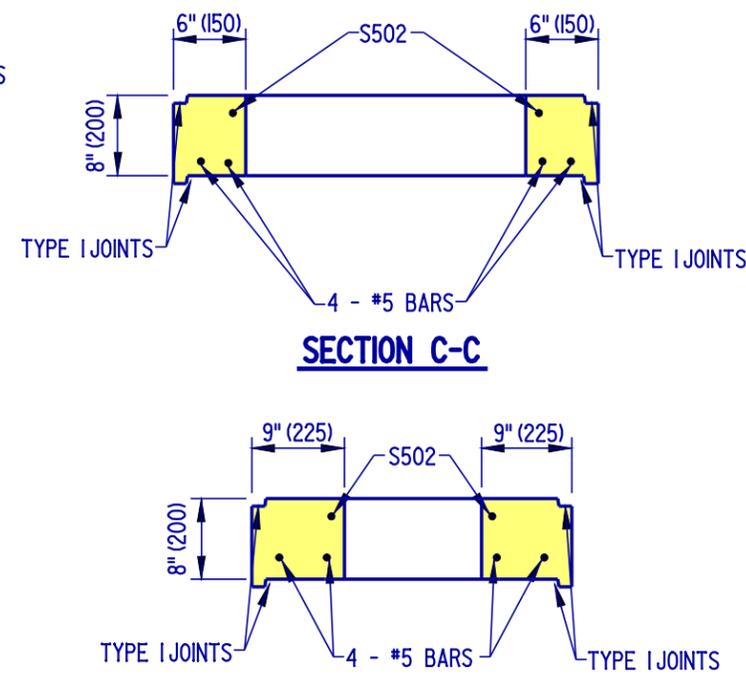
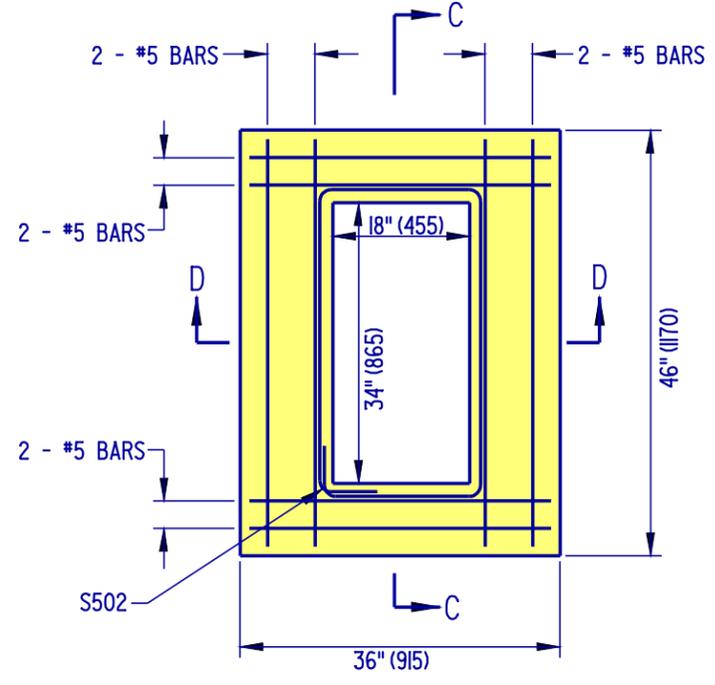
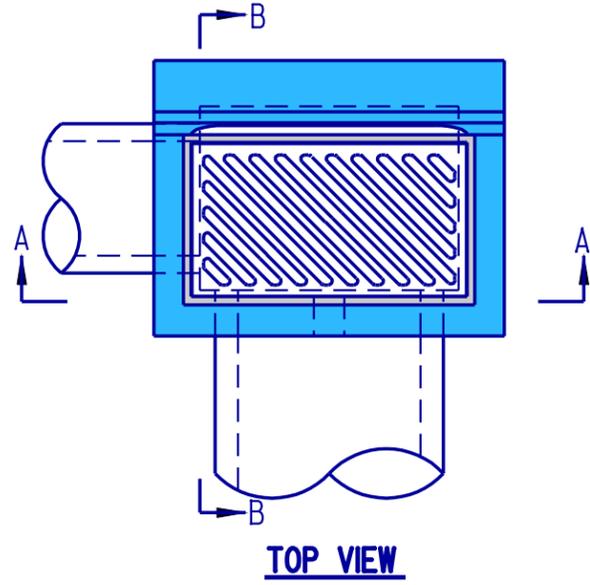


DELAWARE DEPARTMENT OF TRANSPORTATION

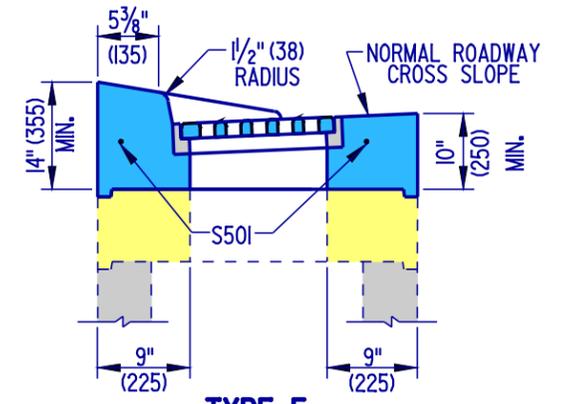
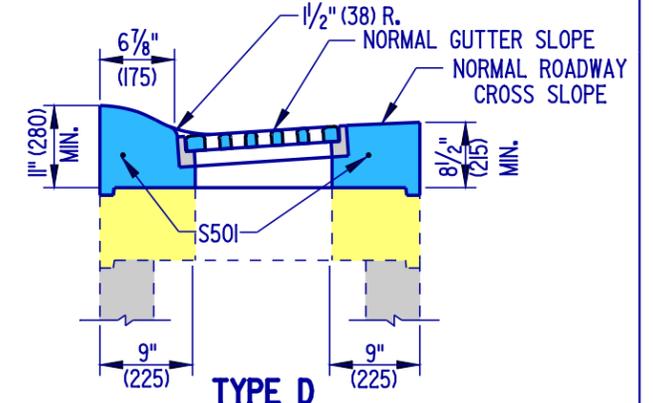
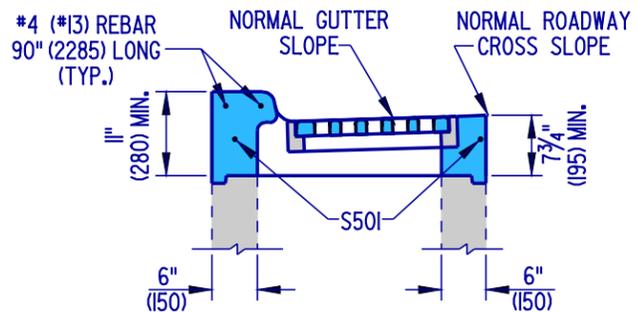
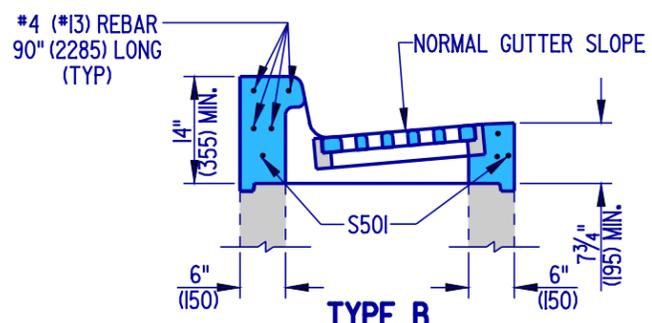
DRAINAGE INLET DETAILS
 STANDARD NO. **D-5 (2004)** SHT. **3** OF **8**

APPROVED *Carolann Wicks* 1/10/05
 CHIEF ENGINEER DATE
 RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
 DESIGN ENGINEER DATE

SCALE : N.T.S.



34" (865) x 24" (610) DRAINAGE INLET DETAILS
NOTE: REFER TO PREVIOUS SHEETS FOR REINFORCING REQUIREMENTS



TOP UNIT DETAILS

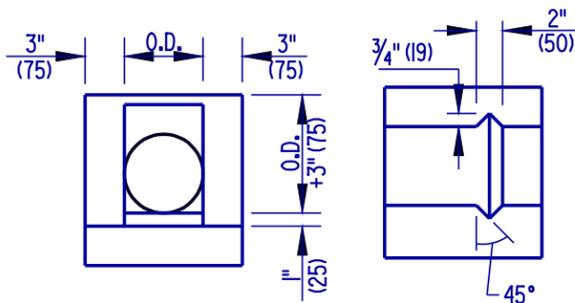
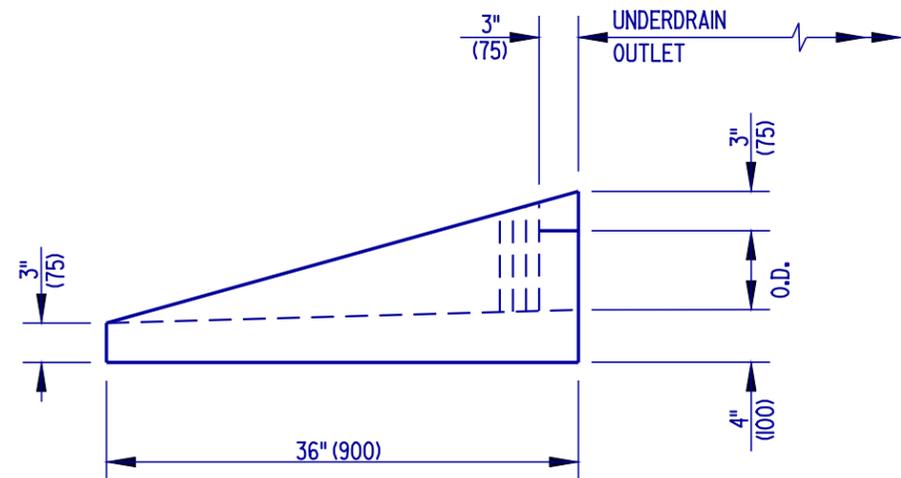


DELAWARE
DEPARTMENT OF TRANSPORTATION

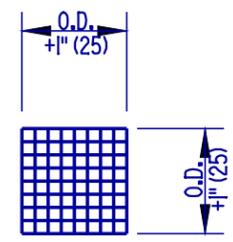
DRAINAGE INLET DETAILS
STANDARD NO. **D-5 (2004)** SHT. **6** OF **8**

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE

SCALE : N.T.S.

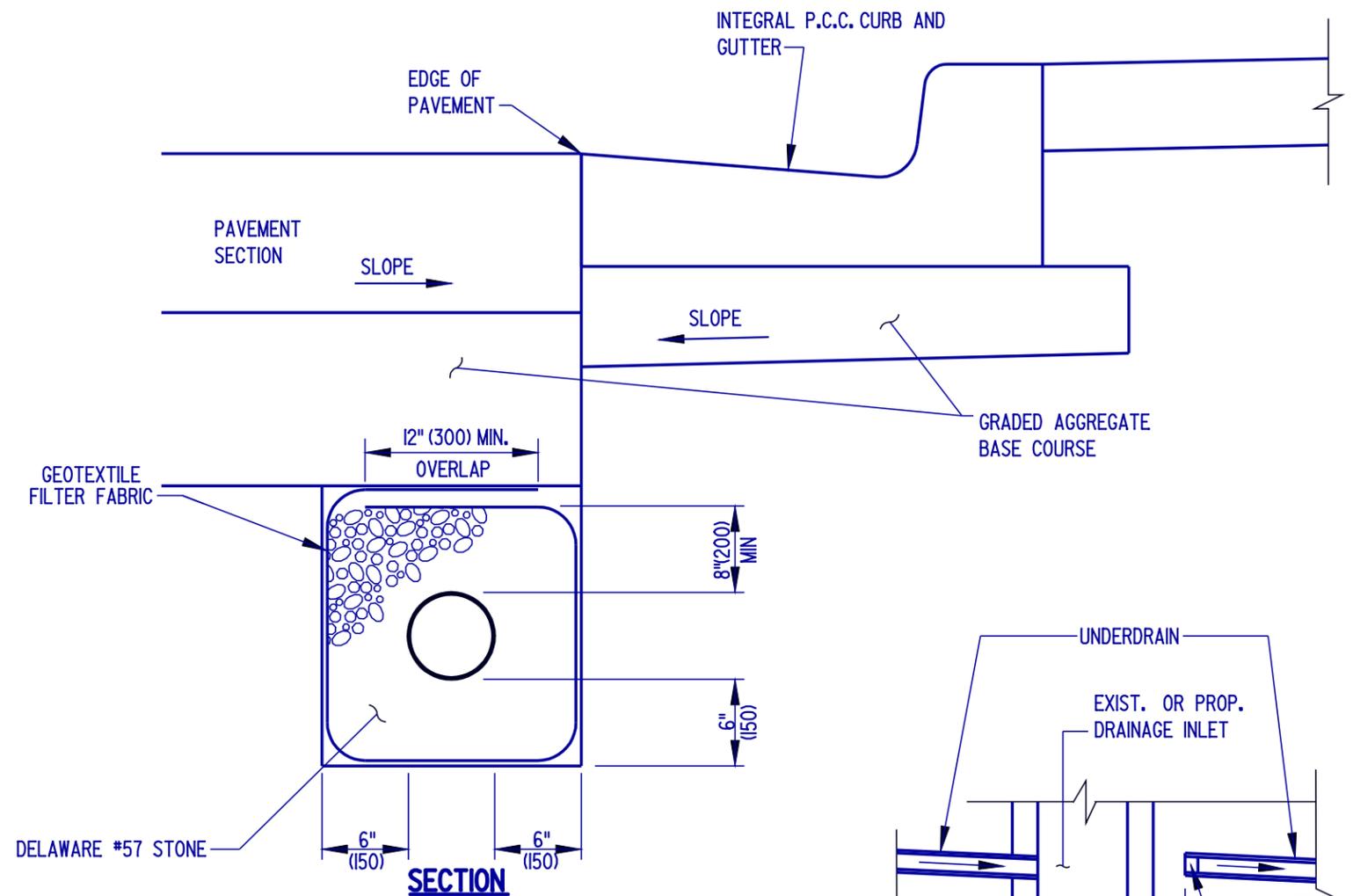


FRONT VIEW
TOP VIEW
SLOTTED HEADWALL DETAIL

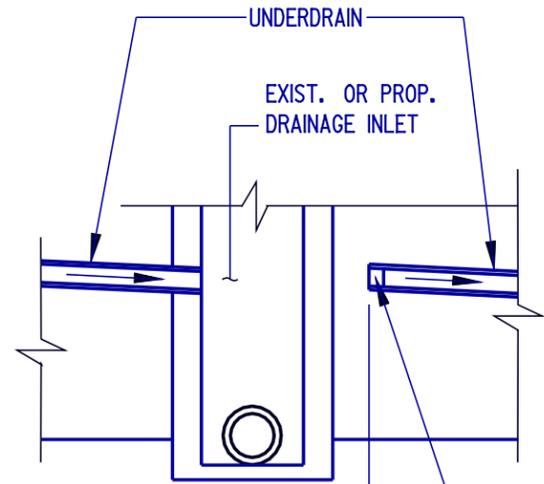


FRONT VIEW
RODENT SCREEN

CONCRETE HEADWALL FOR UNDERDRAIN OUTLET
NOT TO SCALE



SECTION



12" (300) MIN.

PIPE END CAP TO BE INCLUDED IN THE UNIT PRICE BID FOR PERFORATED PIPE UNDERDRAIN ITEM.

ELEVATION

PERFORATED PIPE UNDERDRAIN
NOT TO SCALE

NOTES:

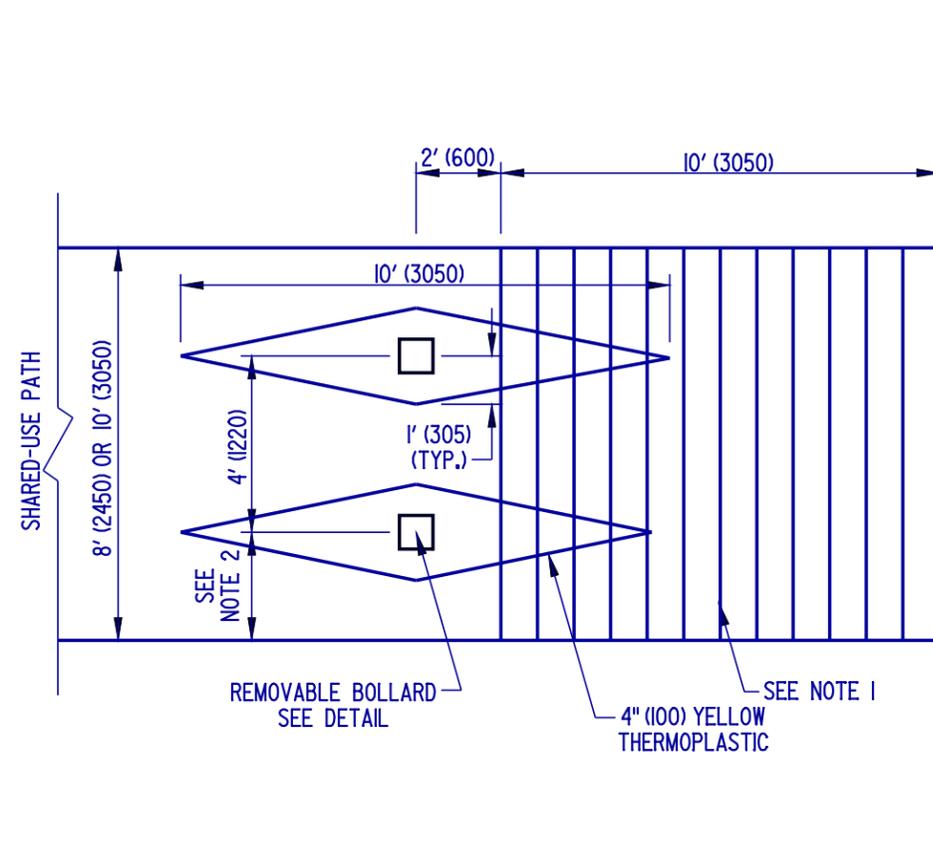
1. GEOTEXTILE FILTER FABRIC SHALL BE PLACED ENTIRELY OVER THE TOP OF UNDERDRAIN TRENCH AND LAPPED AS SHOWN.
2. SLOPE OF UNDERDRAINS SHALL MATCH ROADWAY GRADE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. OUTLET PIPE CONFIGURATIONS SHALL USE 45 DEGREE ELBOWS OR SHALL USE STRAIGHT PIPE WITH A MINIMUM RADIUS OF 3' (900) TO DIRECT UNDERDRAIN PIPE INTO SIDE OF DRAINAGE INLET OR TO POSITIVE GRADE. PIPE SHALL ALSO BE NON-PERFORATED AND HAVE A SMOOTH INTERIOR.
4. RODENT SCREEN SHALL SNUGLY FIT THE PROVIDED SLOT WITH THE SCREEN LIP FITTING TIGHT TO THE BOTTOM FLOW LINE.
5. A 4' (1200) FLEXIBLE DELINEATOR SHALL BE FURNISHED AND INSTALLED AT THE DIRECTION OF THE ENGINEER TO MARK THE LOCATION OF THE CONCRETE HEADWALL. COST INCIDENTAL TO DOWNSPOUT SPLASH APRONS ITEM.
6. WHEN TWO LINES OF PIPE UNDERDRAIN DRAIN TO A LOW POINT, EACH PIPE MUST HAVE ITS OWN OUTLET.

DELAWARE
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|--|------------|------|---|----|---|
| PERFORATED PIPE UNDERDRAIN DETAIL | | | | | |
| STANDARD NO. | D-9 (2004) | SHT. | 1 | OF | 1 |

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE

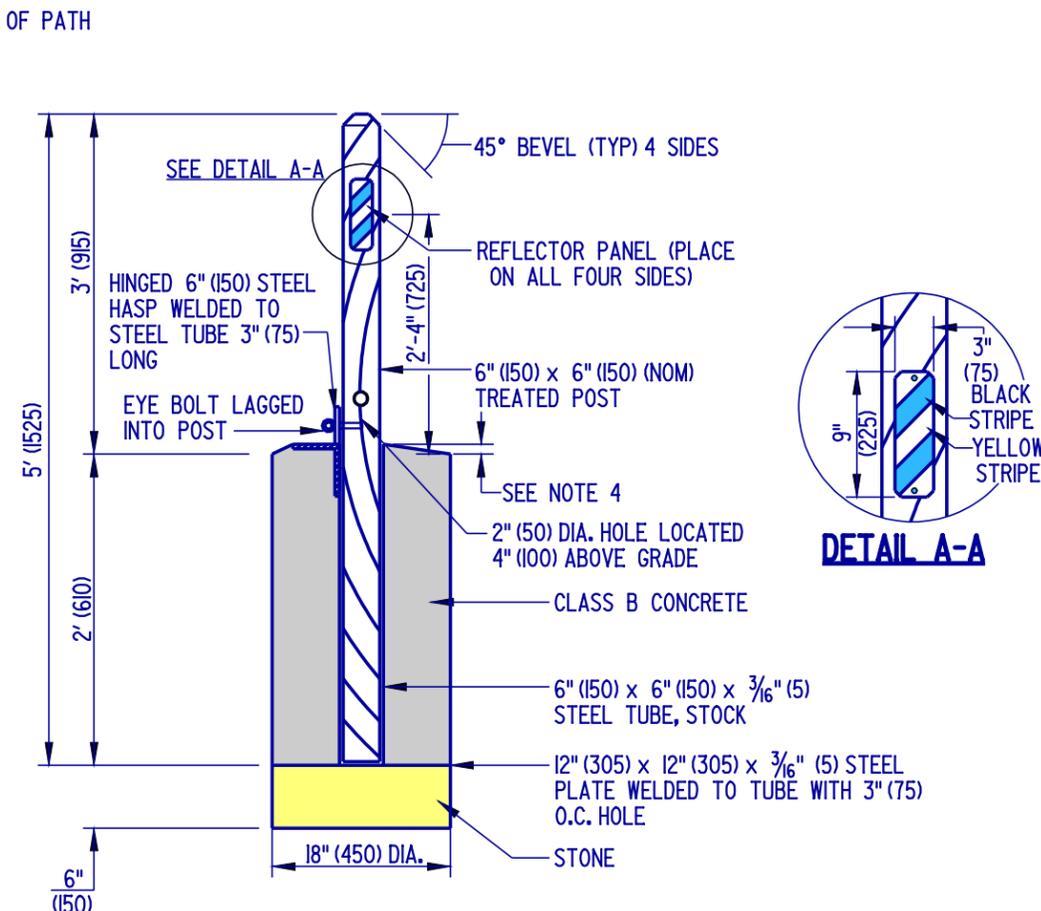
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



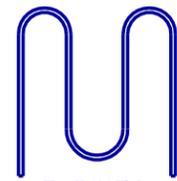
SHARED USE PATH INTERSECTION

NOTES:

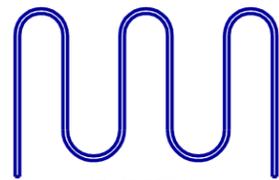
1. THE 4" (100) CONCRETE SHARED-USE PATH SHALL BE FINISHED TO INCLUDE A TEXTURED WARNING SURFACE BY USING A JOINT STRIKE TO PRODUCE A 1/2" (12) DEEP V-JOINT AT 6" (150) O.C. PAYMENT FOR INSTALLING THE GROOVED FINISH SHALL BE INCIDENTAL TO THE SIDEWALK CONSTRUCTION.
2. FOR 8' (2450) AND 10' (3050) PATH WIDTH, THE OUTSIDE DIMENSION FROM CENTER OF BOLLARD TO EDGE OF PATH SHALL BE 2' (610) AND 3' (915) RESPECTIVELY.
3. IF THE SHARED USE PATH ENDS AT A ROADWAY, THEN DETECTABLE WARNING TRUNCATED DOMES 24" (600) LONG AND THE FULL WIDTH OF THE PATH SHALL BE INSTALLED. SEE SHEET C-2.
4. STEEL TUBE TO EXTEND 1/2" (13) ABOVE GROUND WITH CONCRETE TO SLOPE AWAY FROM TUBE TO KEEP WATER AND SEDIMENT FROM DRAINING INTO TUBE.



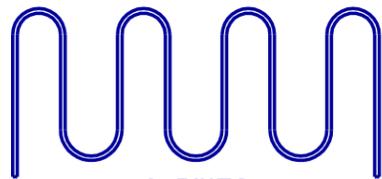
REMOVABLE BOLLARD



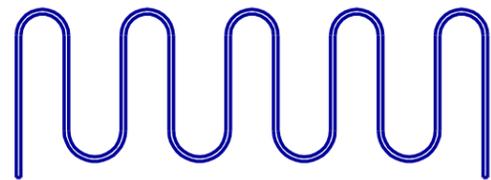
5 BIKES
W = 38" (965)



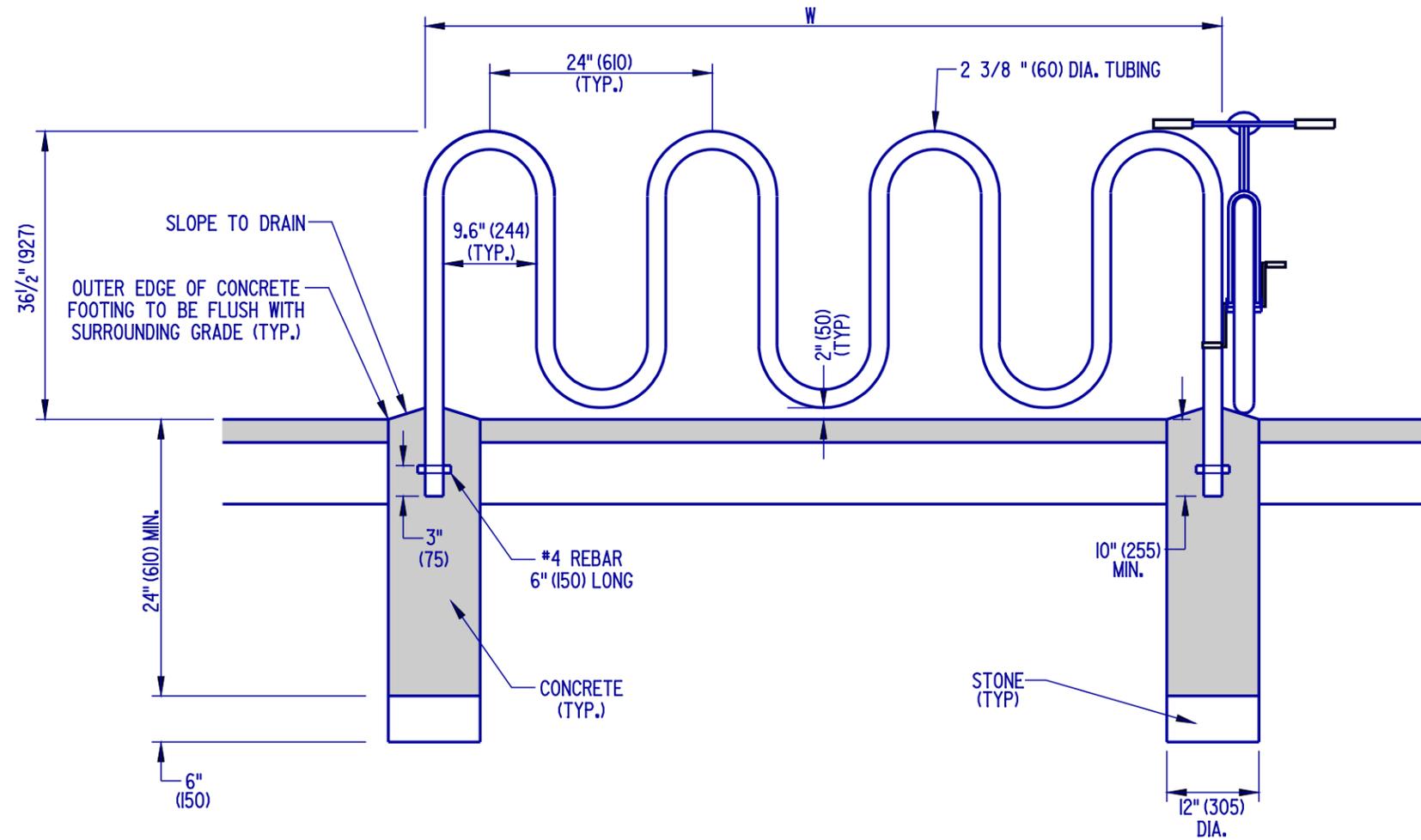
7 BIKES
W = 63" (1600)



9 BIKES
W = 87" (2210)



11 BIKES
W = 111" (2819)



BICYCLE RACK
N.T.S.



DELAWARE
DEPARTMENT OF TRANSPORTATION

BIKE RACK DETAILS

STANDARD NO.

M-4 (2004)

SHT. 1

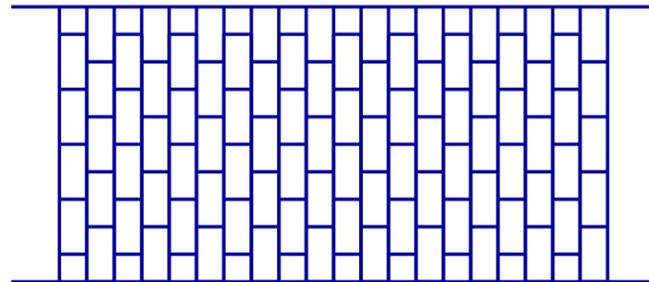
OF 1

APPROVED

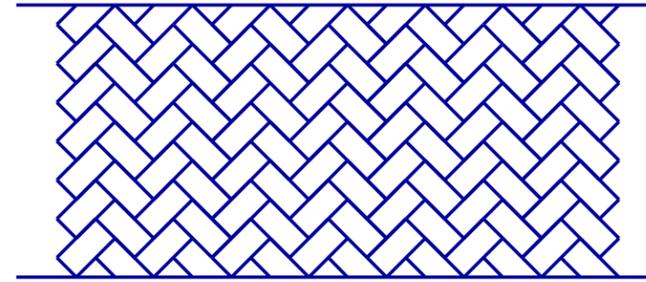
Carolann Wicks
CHIEF ENGINEER 1/10/05
DATE

RECOMMENDED

Dennis M. O'Flaherty
DESIGN ENGINEER 1/13/05
DATE



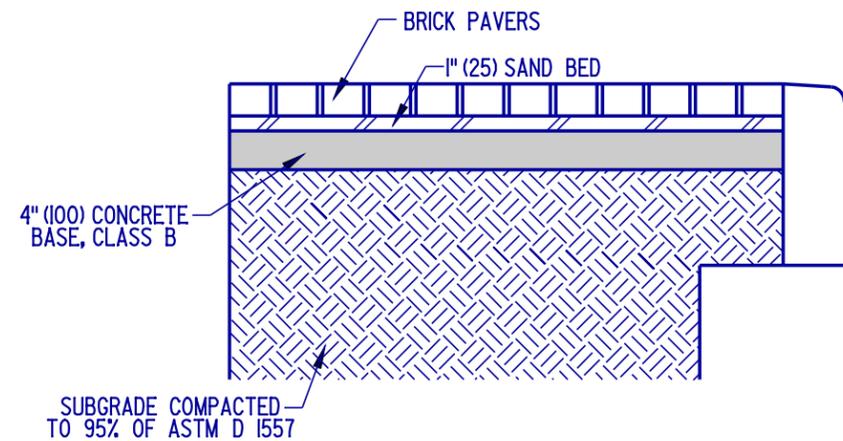
4" (100) x 8" (200) RUNNING BOND PATTERN



4" (100) x 8" (200) HERRINGBONE PATTERN

NOTES:

1. ACTUAL PATTERN TO BE USED SHALL BE SPECIFIED ON THE PLANS. COLOR IS TO BE "BRICK RED" UNLESS OTHERWISE NOTED ON THE PLANS.
2. MATERIALS AND PAVEMENT BOX VARY DEPENDING ON PLANS.
3. FOR CROSSWALK APPLICATIONS, 8" (200) WHITE LINES SHOULD BE PLACED ON BOTH SIDES.
4. THE PATTERNS ABOVE ARE THE PREFERRED PATTERNS AVAILABLE FOR SIDEWALK OR CROSSWALK APPLICATIONS.



BRICK PAVER SIDEWALK DETAIL

NOTES:

1. ALL PAVERS ARE TO BE "BRICK RED" UNLESS OTHERWISE SPECIFIED ON THE PLANS. THE PATTERN SHALL BE SPECIFIED ON THE PLANS.
2. EXPANSION JOINT MAY BE NEEDED ON NON-CURB SIDE OF BRICK PAVER SIDEWALK IF THAT SIDE IS AGAINST BUILDING OR OTHER CONFINING FEATURE.



**DELAWARE
DEPARTMENT OF TRANSPORTATION**

PATTERNED HOT-MIX OR CONCRETE & BRICK PAVER DETAILS

STANDARD NO. **M-6 (2004)**

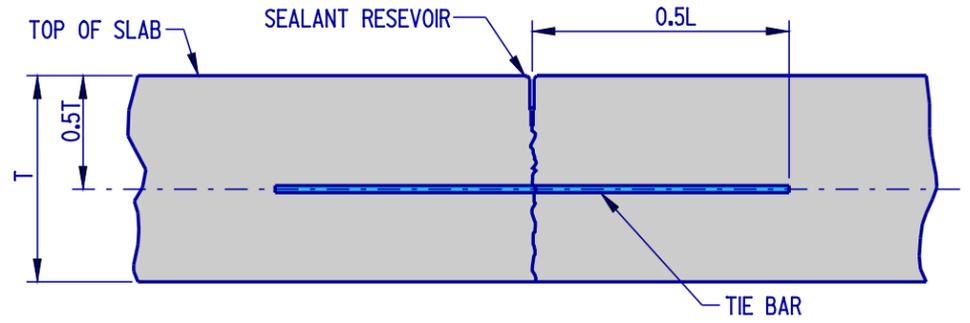
SHT. **1** OF **1**

APPROVED

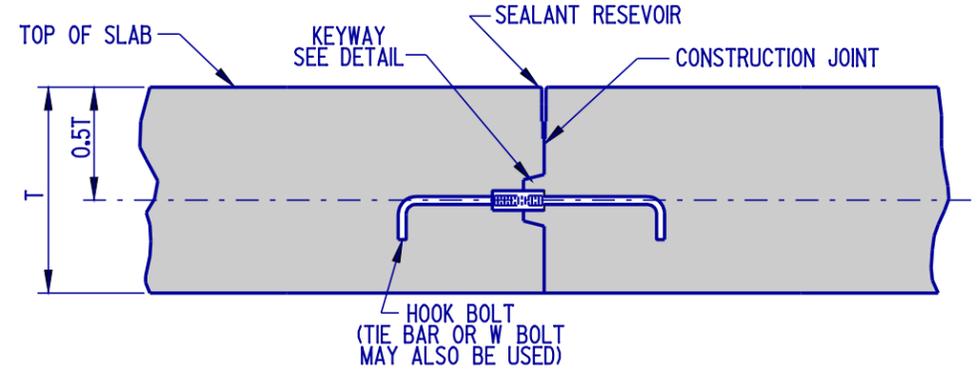
Carolann Wicks 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED

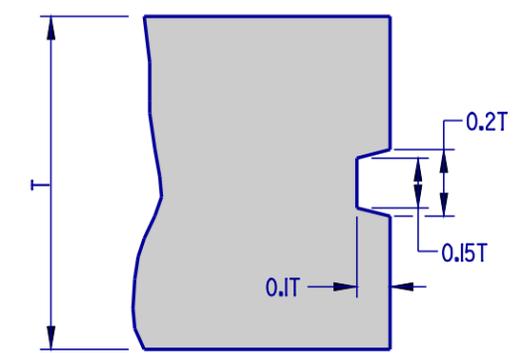
Dennis M. O'Flaherty 1/3/05
DESIGN ENGINEER DATE



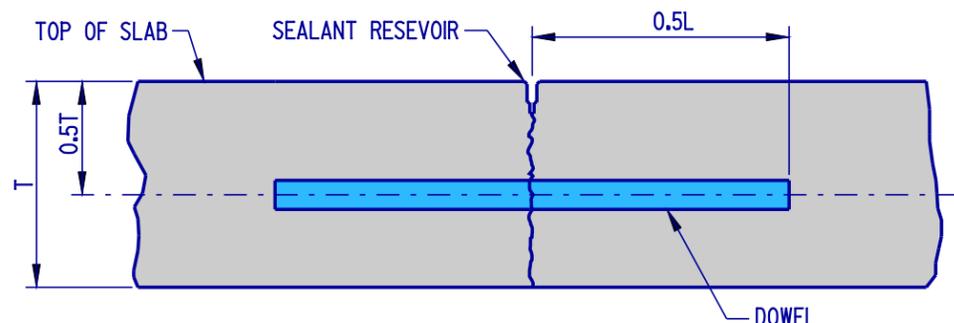
LONGITUDINAL SAW-CUT JOINT DETAIL



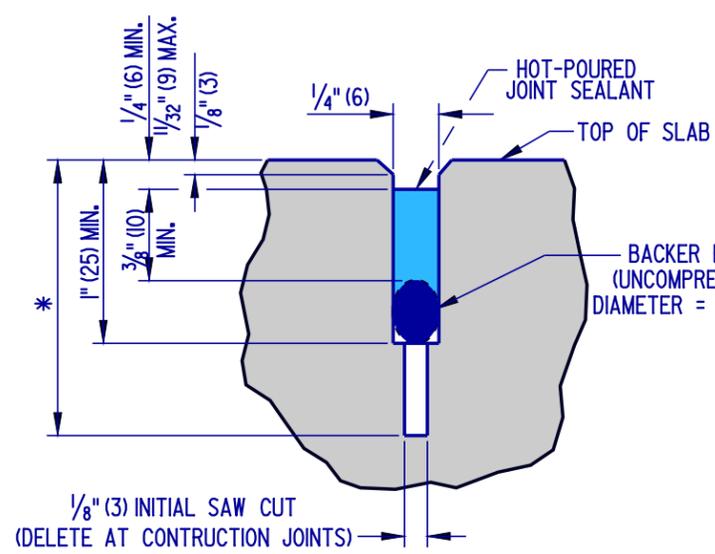
LONGITUDINAL CONSTRUCTION JOINT DETAIL



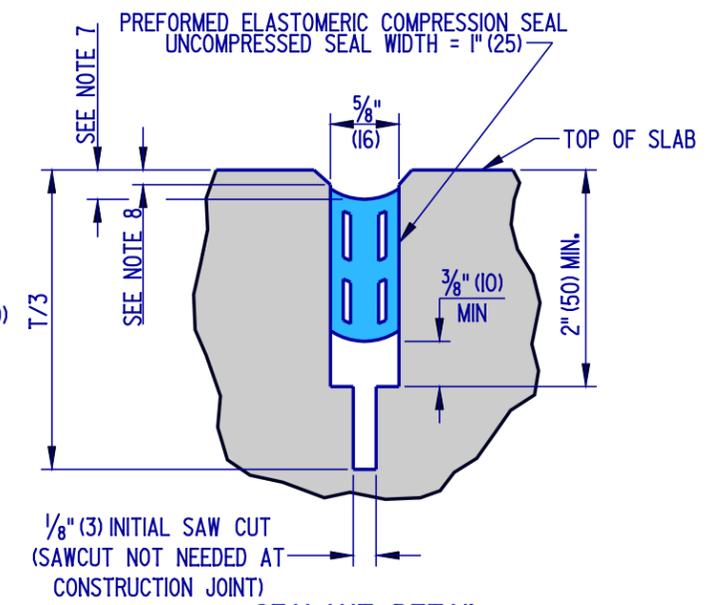
KEYWAY DETAIL



TRANSVERSE SAW-CUT JOINT DETAIL



SEALANT DETAIL-LONGITUDINAL JOINT



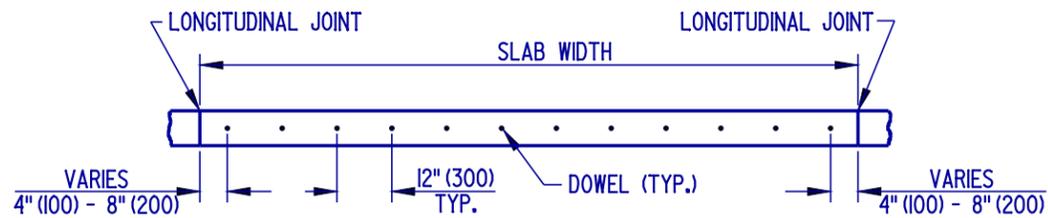
SEALANT DETAIL-TRANSVERSE JOINT

* - 0.3T (10" (250) P.C.C. PAVEMENT)
0.4T (12" (300) P.C.C. PAVEMENT)

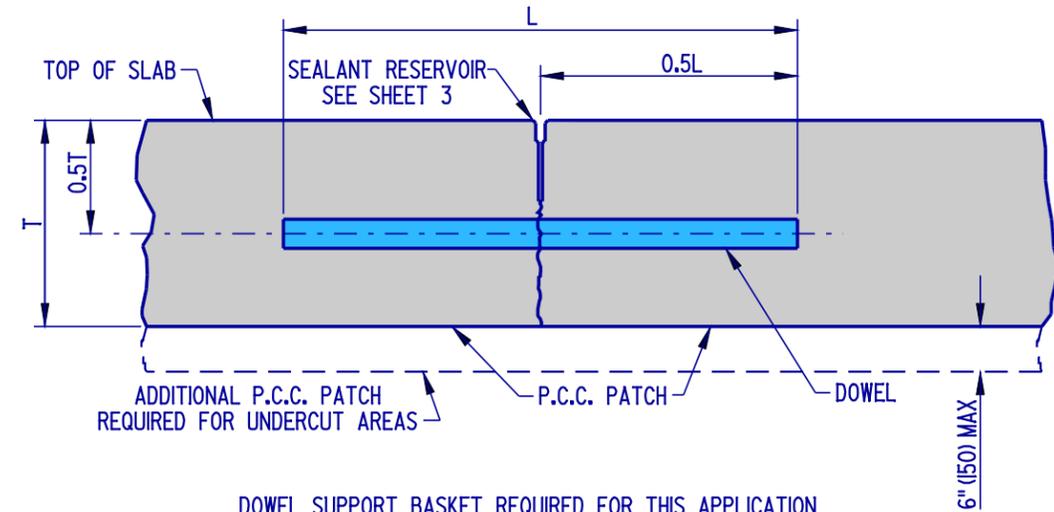
- NOTES:
- 1). AS DIMENSIONED, THE WIDTH OF THE TRANSVERSE SEALANT RESERVOIR IS APPLICABLE WHEN THE TEMPERATURE OF THE PAVEMENT SURFACE IS BETWEEN 60°F (16°C) AND 80°F (27°C). WHEN THE TEMPERATURE IS BELOW 60°F (16°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) WIDER. WHEN THE TEMPERATURE IS ABOVE 80°F (27°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) NARROWER.
 - 2). "T" REFERS TO THE ACTUAL CONSTRUCTED SLAB THICKNESS.
 - 3). TOLERANCE ON ALL JOINT SEALANT DETAIL DIMENSIONS SHOWN WITHOUT RANGES SHALL BE PLUS 1/16" (2), MINUS 0" (0).
 - 4). THE TOP EDGES OF THE CONTACT SURFACES OF THE SEALANT MATERIAL ON BOTH SIDES OF THE JOINT RESERVOIR SHALL BE AT THE SAME ELEVATION.
 - 5). TRANSVERSE JOINT MATERIAL SHALL BE PLACED BEFORE LONGITUDINAL JOINT MATERIAL; THE TRANSVERSE JOINT MATERIAL SHALL BE CONTINUOUS FOR THE FULL WIDTH OF ALL ADJACENT P.C.C. PAVEMENT SLABS.
 - 6). LONGITUDINAL JOINT MATERIAL SHALL BE PLACED WITHOUT GAPS WHENEVER INTERRUPTED BY THE TRANSVERSE JOINT MATERIAL.
 - 7). TRANSVERSE JOINT SEAL TO BE RECESSED 3/16" (5) TO 5/16" (8) BELOW THE TOP OF THE SLAB.
 - 8). A 45° CHAMFER SHALL BE CUT 1/8" (3) TO 1/4" (6) DEEP AT THE TOP OF THE SLAB ALONG BOTH SIDES OF THE TRANSVERSE SEALANT RESERVOIR.
 - 9). THE TOP EDGES OF THE COMPRESSION SEAL SHALL BE IN FULL CONTACT WITH THE SLAB SIDES.

JOINT AND SEALANT DETAILS

| | | | | | |
|---|-------------------------|--------|------|--|--|
|  DELAWARE DEPARTMENT OF TRANSPORTATION | P.C.C. PAVEMENT | | | | APPROVED <i>Carolann Wicks</i> 1/10/05 <small>CHIEF ENGINEER DATE</small> |
| | STANDARD NO. P-1 (2004) | SHT. 2 | OF 5 | | RECOMMENDED <i>Dennis M. O'Flaherty</i> 1/3/05 <small>DESIGN ENGINEER DATE</small> |



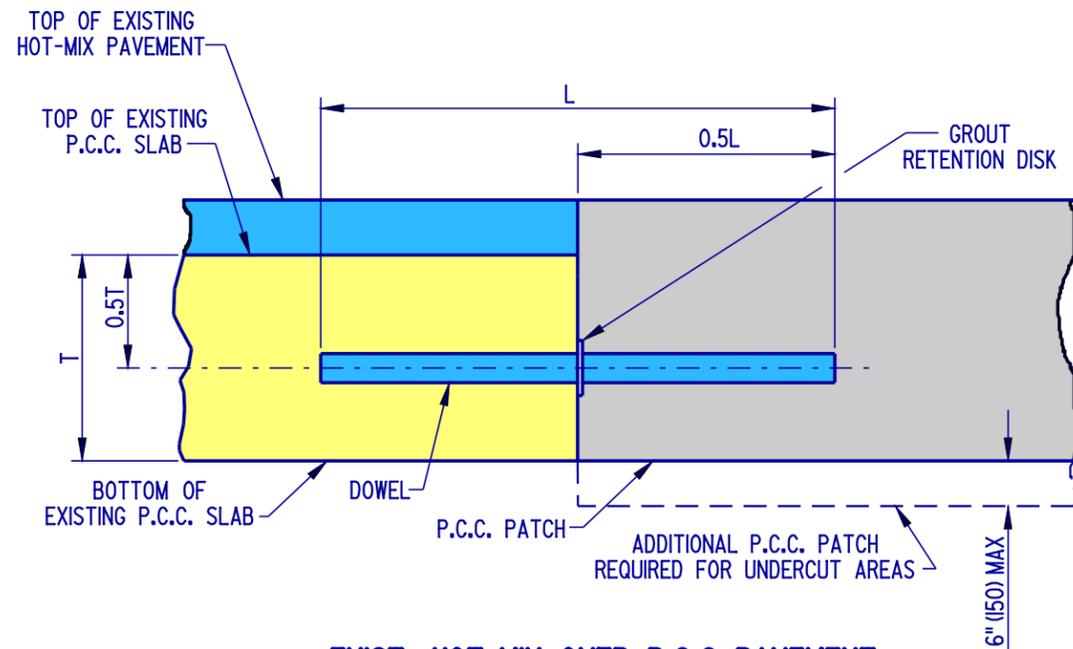
SECTION A-A



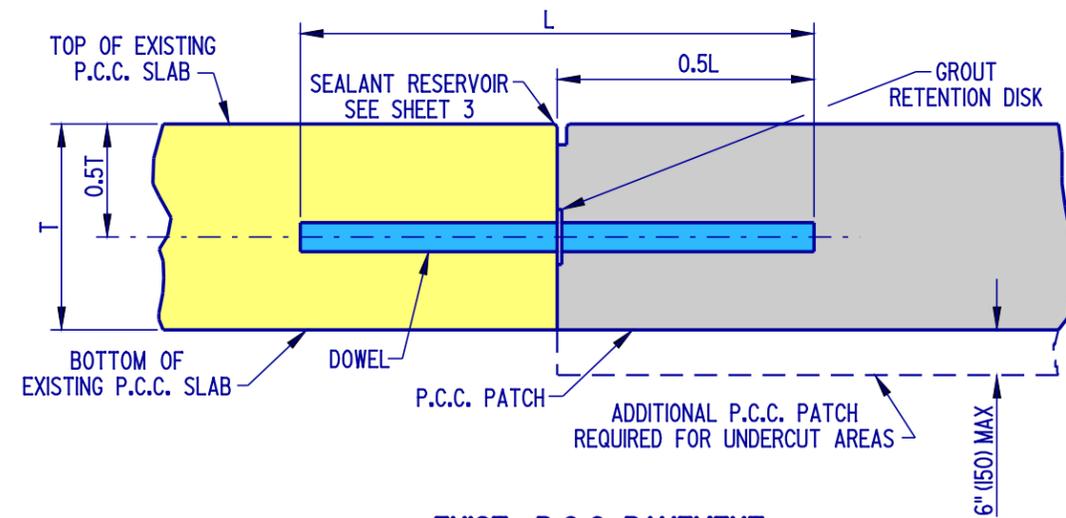
DOWEL SUPPORT BASKET REQUIRED FOR THIS APPLICATION
(REFER TO STANDARD CONSTRUCTION DETAIL FOR P.C.C. PAVEMENT.)

SECTION B-B

TRANSVERSE SAW-CUT USED FOR JOINTS LOCATED WITHIN THE PATCH



EXIST. HOT-MIX OVER P.C.C. PAVEMENT



EXIST. P.C.C. PAVEMENT

SECTION C-C

TRANSVERSE CONSTRUCTION JOINT USED ON JOINTS BETWEEN EXISTING PAVEMENT AND PATCH

FULL DEPTH PATCH



DELAWARE
DEPARTMENT OF TRANSPORTATION

P.C.C. PAVEMENT PATCHING

STANDARD NO.

P-2 (2004)

SHT. 2

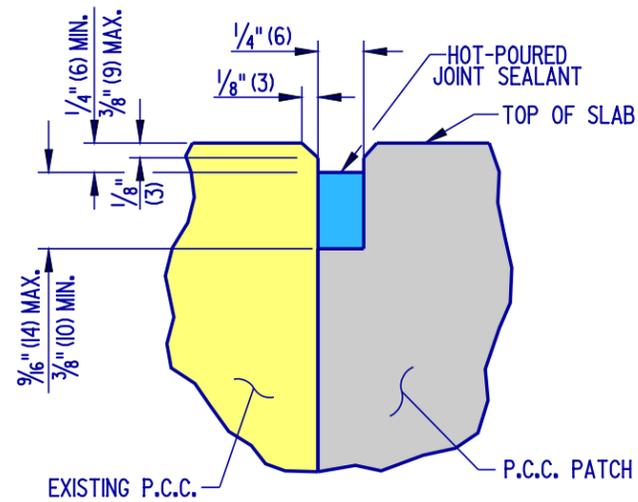
OF 5

APPROVED

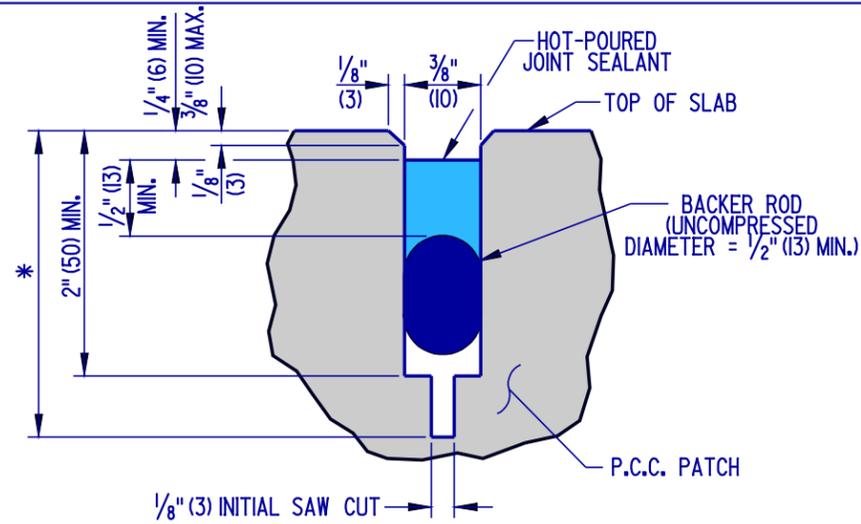
Carolann Wicks
CHIEF ENGINEER 1/10/05
DATE

RECOMMENDED

Dennis M. O'Flaherty
DESIGN ENGINEER 1/3/05
DATE

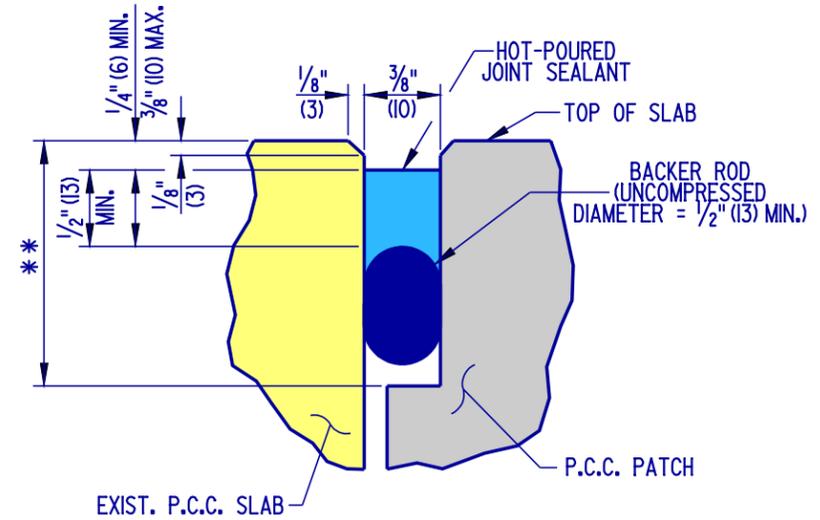


SEALANT DETAIL - LONGITUDINAL JOINT



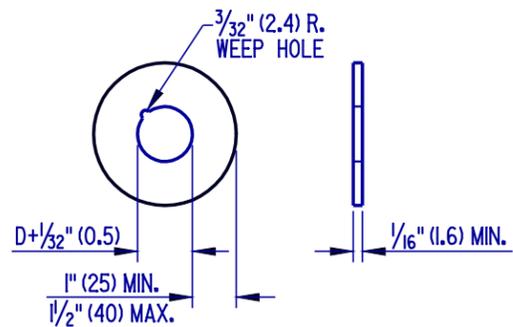
* - 0.3T (T < 10" (250) P.C.C. PAVEMENT)
0.4T (T > 10" (250) P.C.C. PAVEMENT)

SEALANT DETAIL - TRANSVERSE SAW-CUT JOINT



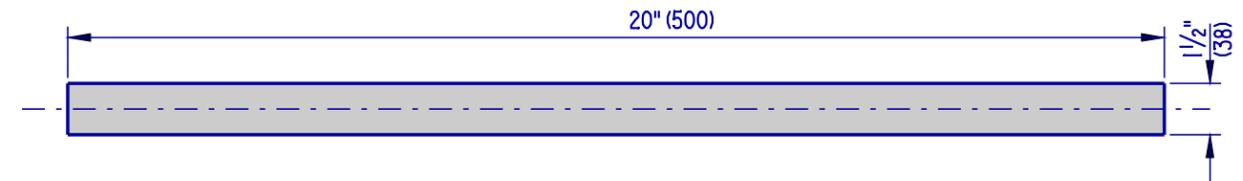
** - 2" (50) MIN. WITH BACKER ROD
5/8" (16) MIN. WITH BOND BREAKER TAPE

SEALANT DETAIL - TRANSVERSE CONSTRUCTION JOINT



D - DOWEL DIAMETER (INCLUDING PROTECTING COATINGS, IF ANY.)

GROUT RETENTION DISK



DOWEL BAR

NOTES:

- 1). AS DIMENSIONED, THE WIDTH OF THE TRANSVERSE SEALANT RESERVOIR IS APPLICABLE WHEN THE TEMPERATURE OF THE PAVEMENT SURFACE IS BETWEEN 60°F (16°C) AND 80°F (27°C). WHEN THE TEMPERATURE IS BELOW 60°F (16°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) WIDER. WHEN THE TEMPERATURE IS ABOVE 80°F (27°C), THE SEALANT RESERVOIR SHALL BE CUT 1/16" (2) NARROWER.
- 2). "T" REFERS TO THE EXISTING "AS-BUILT" SLAB THICKNESS.
- 3). TOLERANCE ON ALL JOINT SEALANT DETAIL DIMENSIONS SHOWN WITHOUT RANGES SHALL BE PLUS 1/16" (2), MINUS 0" (0).
- 4). THE TOP EDGES OF THE CONTACT SURFACES OF THE SEALANT MATERIAL ON BOTH SIDES OF THE JOINT RESERVOIR SHALL BE AT THE SAME ELEVATION.

FULL DEPTH PATCH



DELAWARE DEPARTMENT OF TRANSPORTATION

P.C.C. PAVEMENT PATCHING

STANDARD NO.

P-2 (2004)

SHT. 3

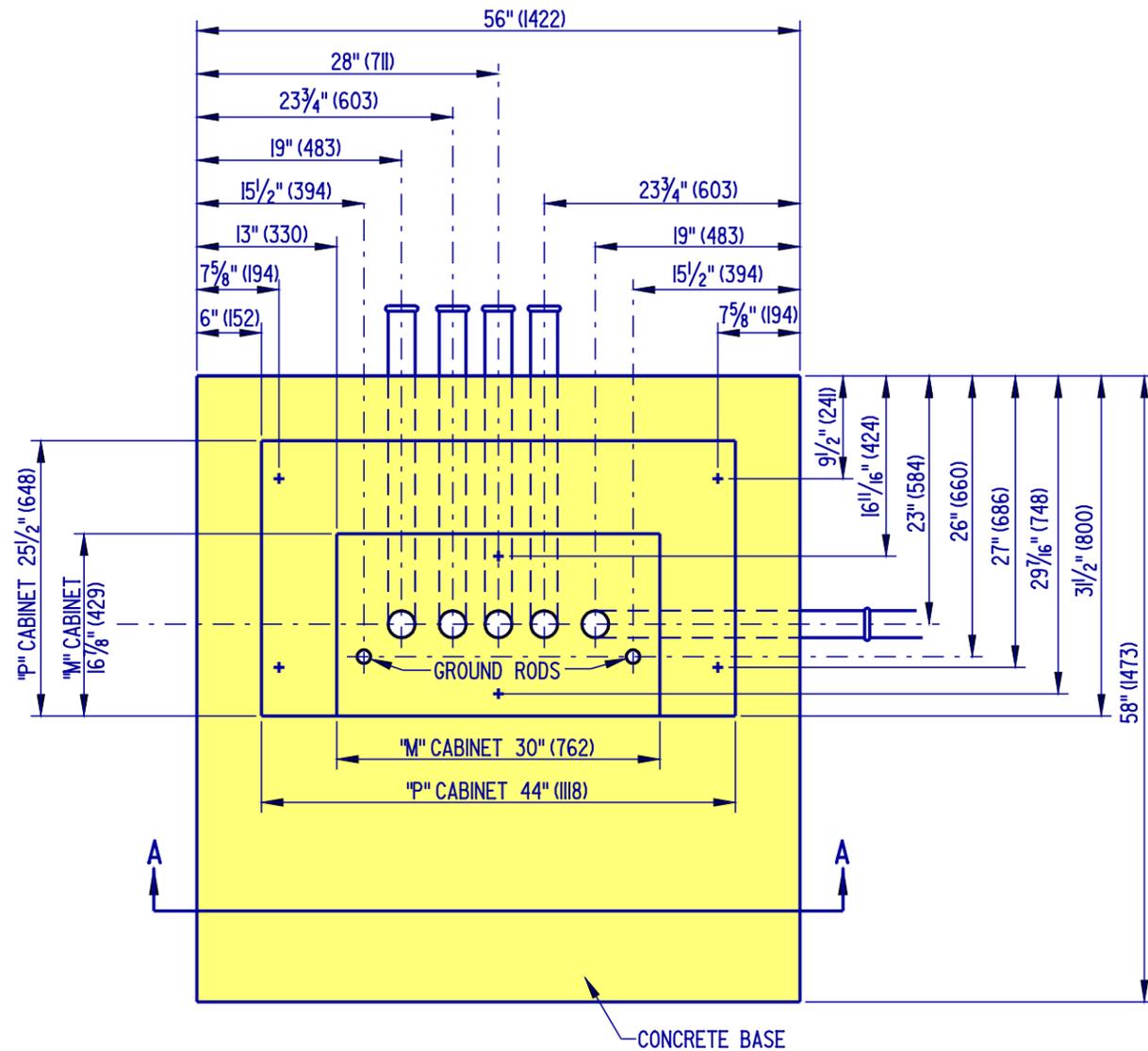
OF 5

APPROVED

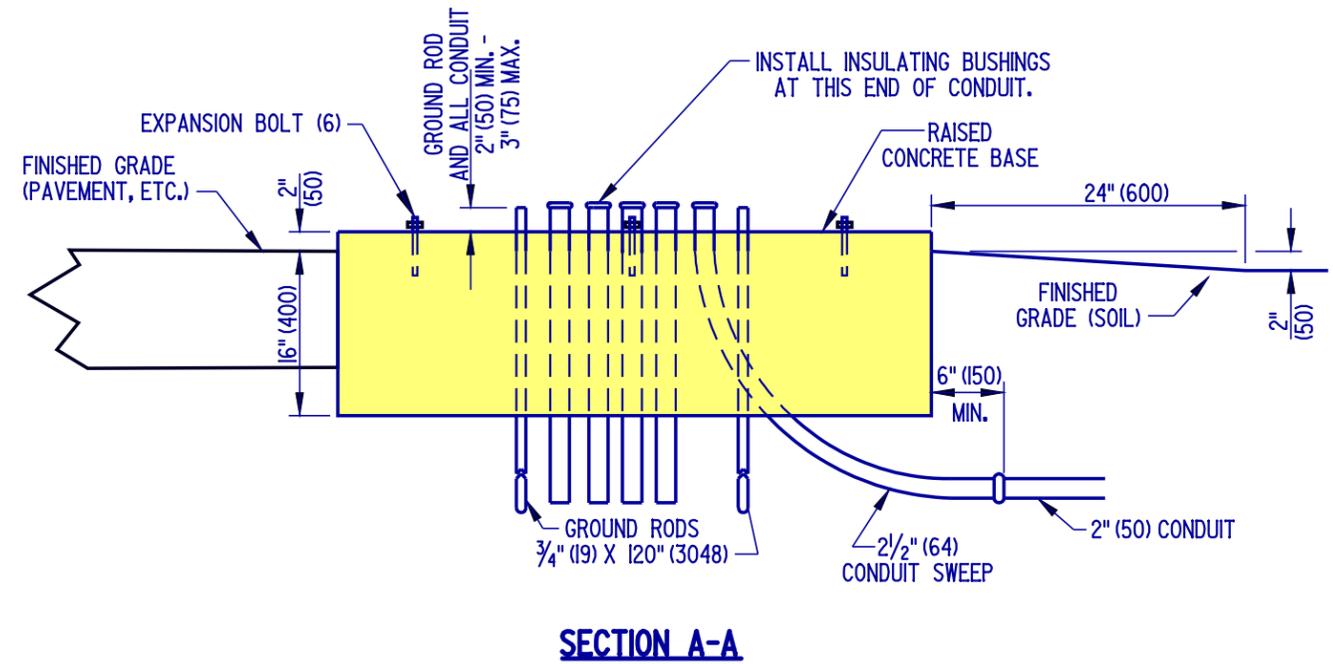
Carolann Wicks 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED

Dennis M. O'Flaherty 1/13/05
DESIGN ENGINEER DATE



PLAN VIEW



SECTION A-A

CONCRETE CABINET BASE

PLAN SYMBOL



**DELAWARE
DEPARTMENT OF TRANSPORTATION**

CABINET BASES (TYPES 'M' & 'P')

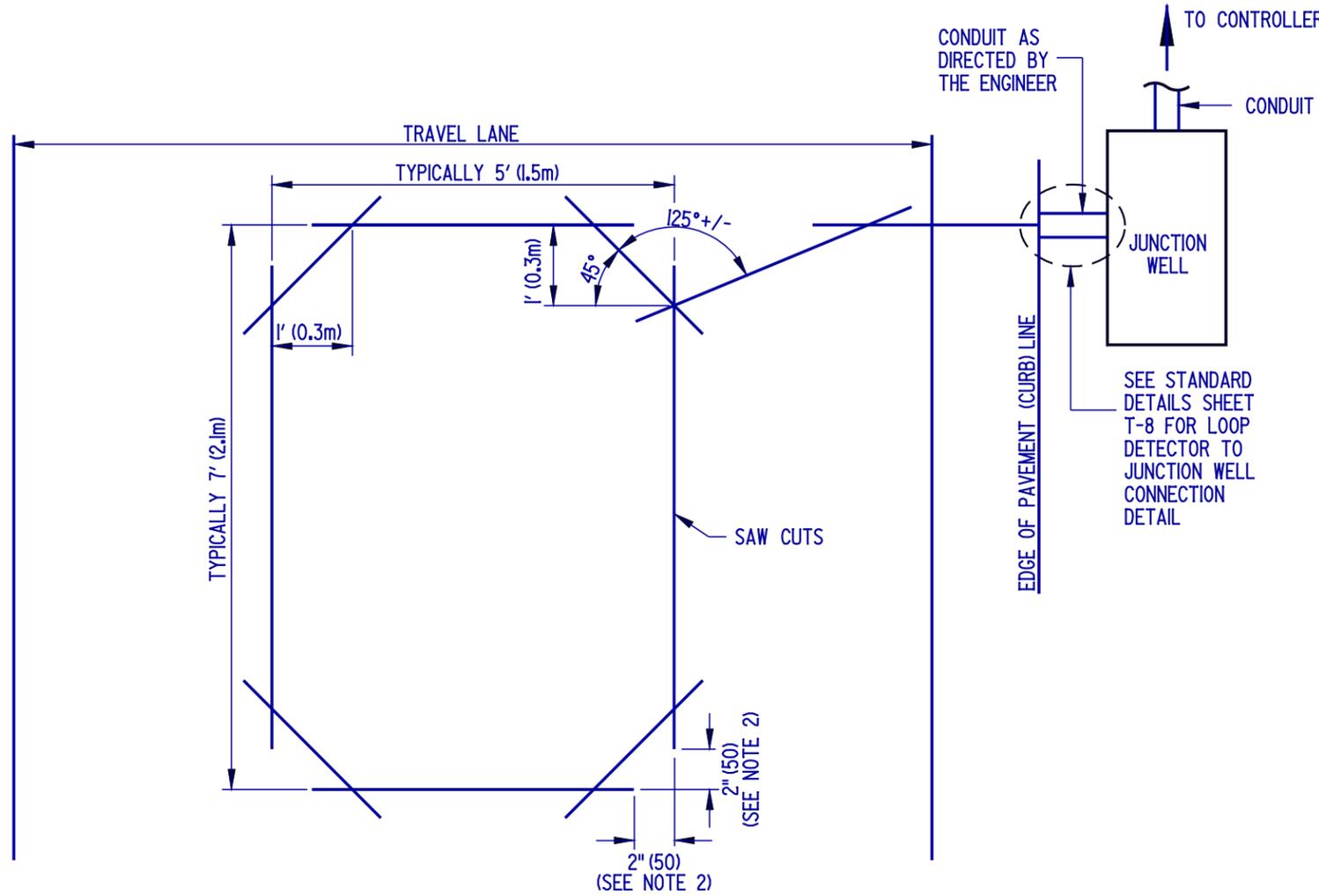
STANDARD NO. T-4 (2004)

SHT. 1 OF 1

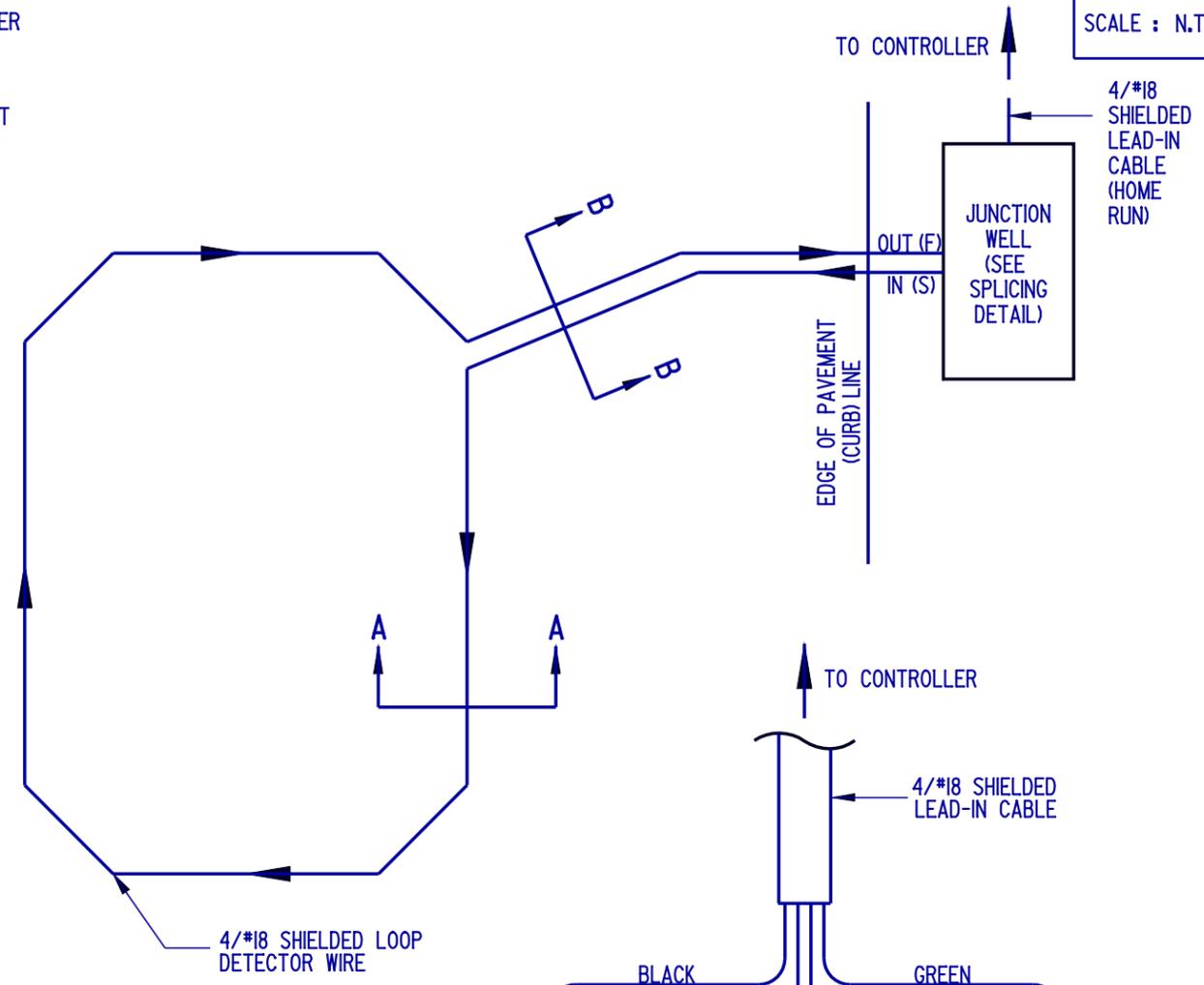
APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE

SCALE : N.T.S.



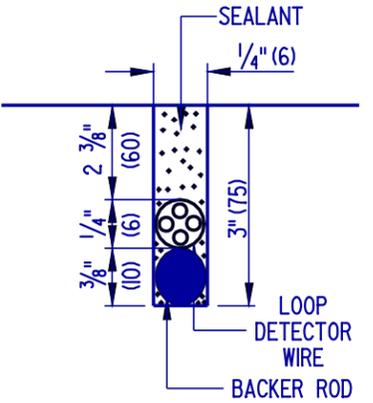
WIRE SLOT CONSTRUCTION



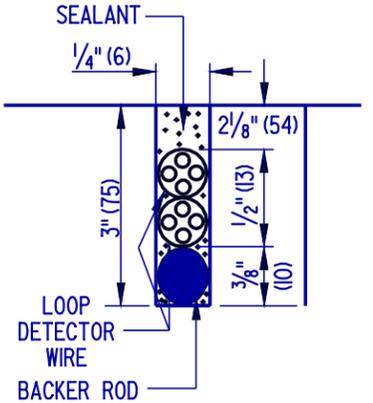
DETAILS FOR INSTALLING LOOP DETECTOR WIRE (SINGLE WRAP)

NOTES:

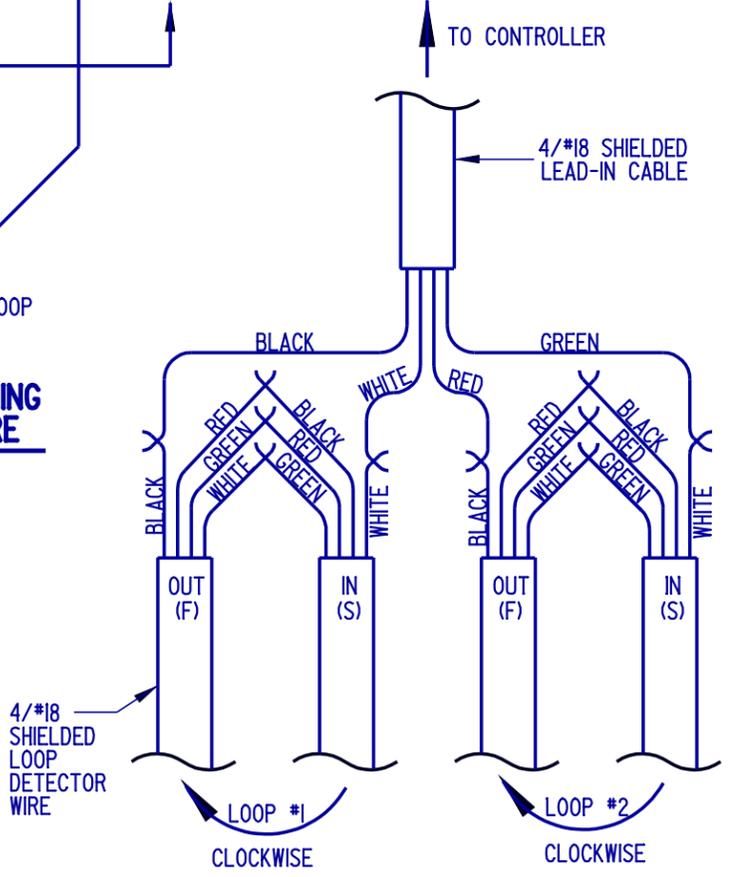
- 1). SAW CUTS FOR WIRE SLOT CONSTRUCTION SHALL BE EXTENDED BEYOND THE CORNERS SO THAT THE SLOT IS FULL DEPTH AT TURN POINTS. A FORTY-FIVE (45) DEGREE ANGLE SHALL BE CUT 12" (300) BACK FROM THE POINT OF THE EXTENDED CORNER.
- 2). THE DIAGONAL CUT SHALL BE STOPPED APPROXIMATELY 2" (50) FROM THE CORNER 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)

PLAN SYMBOL

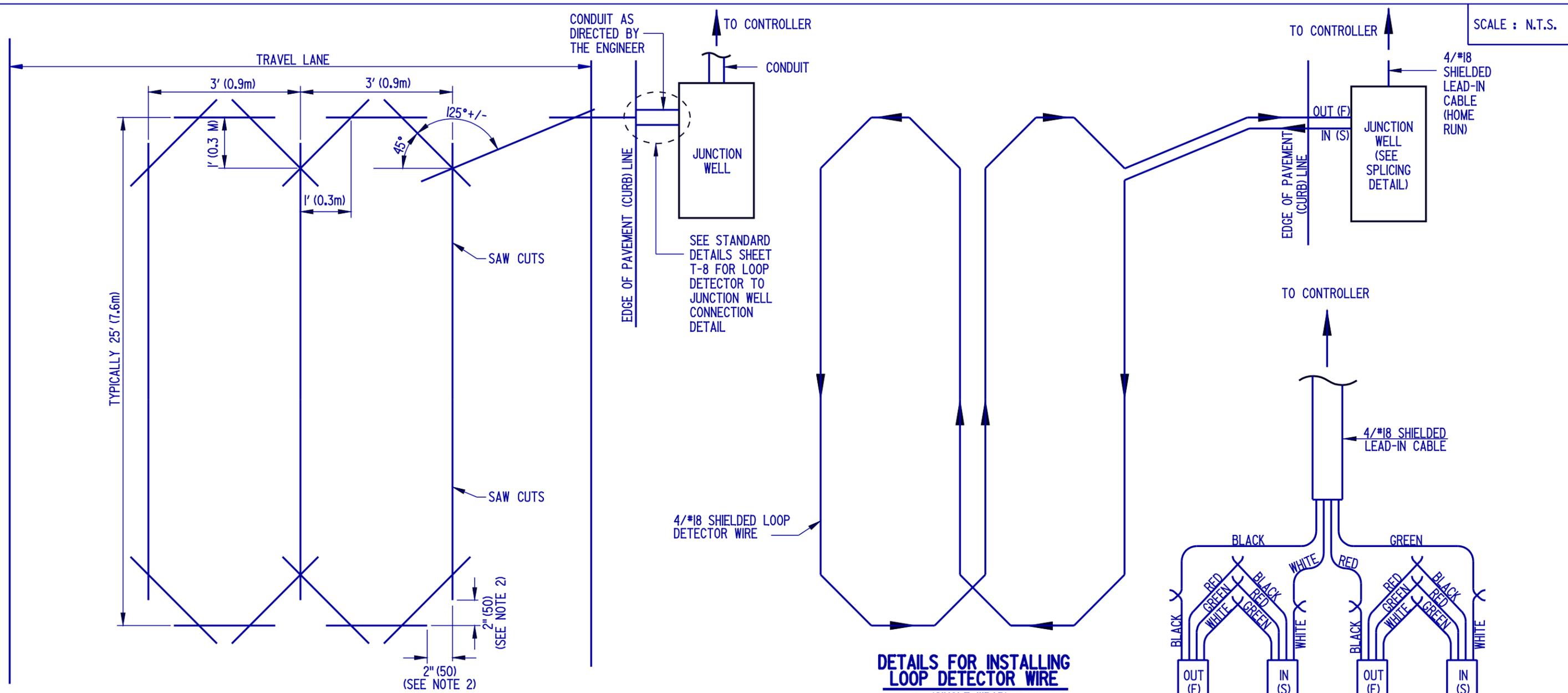


DELAWARE DEPARTMENT OF TRANSPORTATION

TYPE #1 LOOP DETECTOR
 STANDARD NO. T-9 (2004) SHT. 1 OF 1

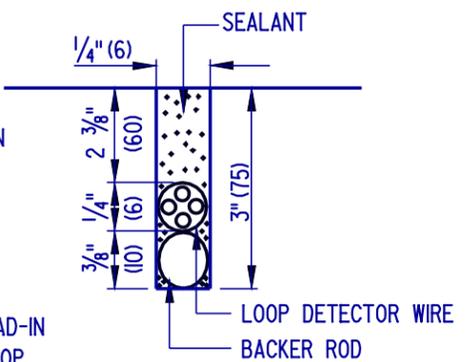
APPROVED *Carolann Wick* 1/10/05
 CHIEF ENGINEER DATE
 RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
 DESIGN ENGINEER DATE

SCALE : N.T.S.

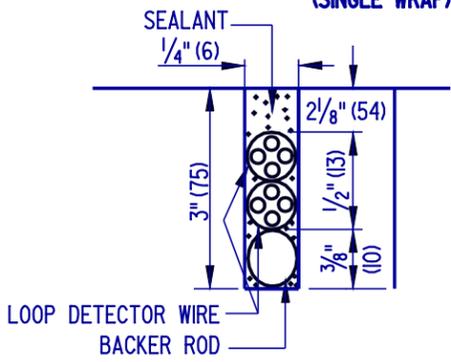


WIRE SLOT CONSTRUCTION

- 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 DIAGONAL 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.

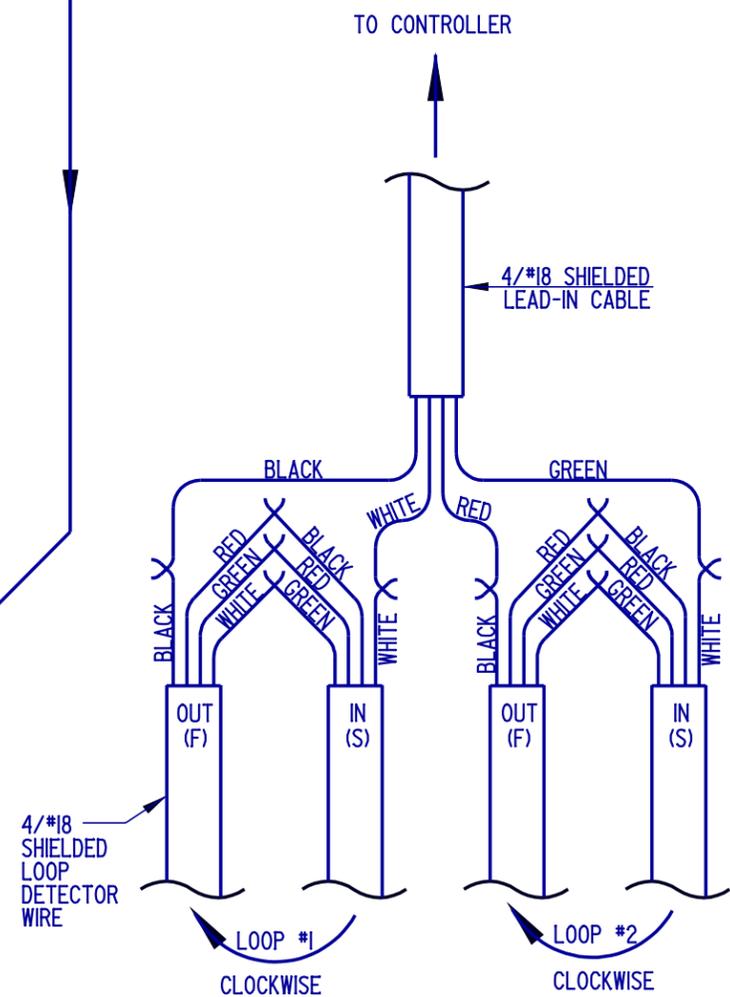


SECTION A - A



SECTION B - B

DETAILS FOR INSTALLING LOOP DETECTOR WIRE (SINGLE WRAP)

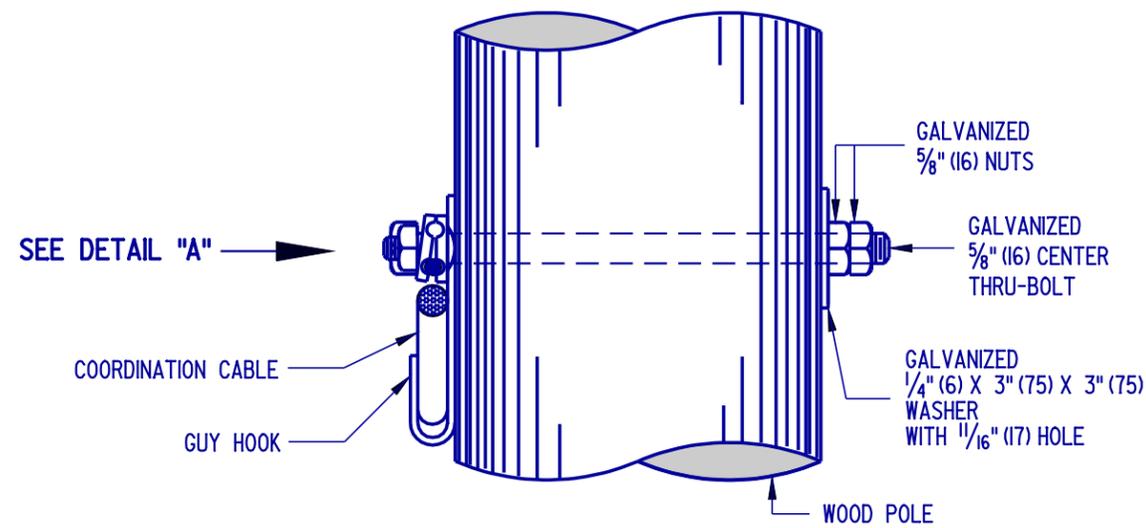


SPlicing DETAIL (SEE NOTE 3)

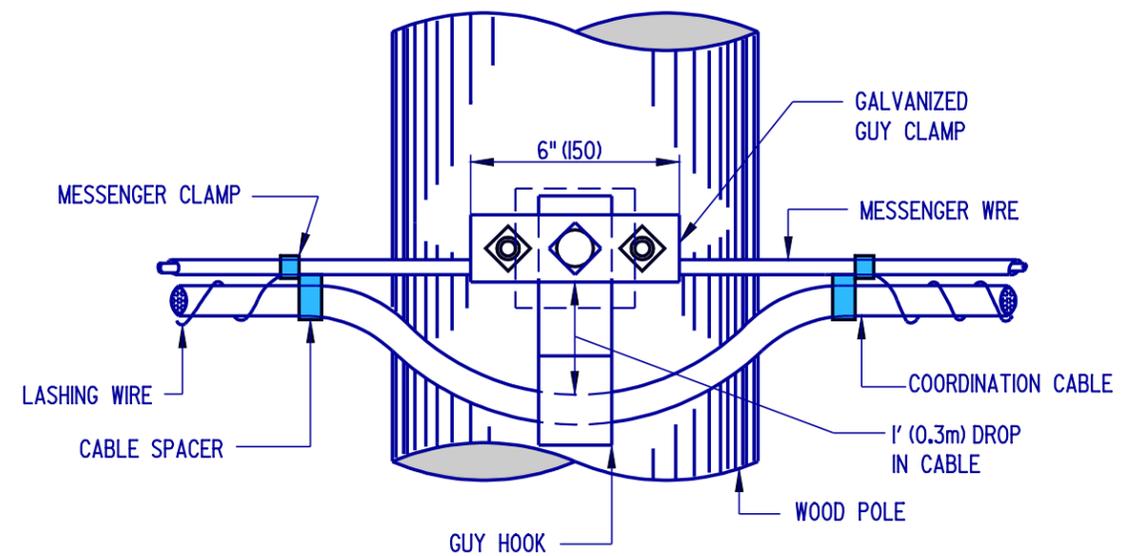
PLAN SYMBOL



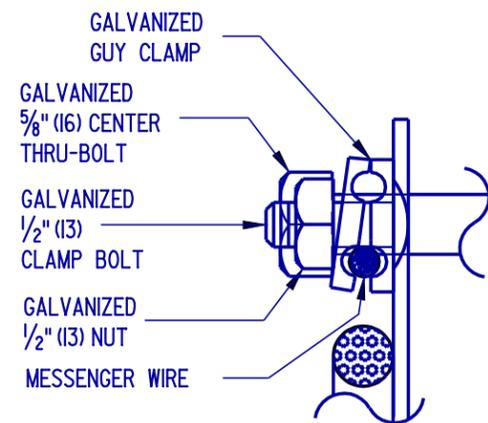
INTERMEDIATE



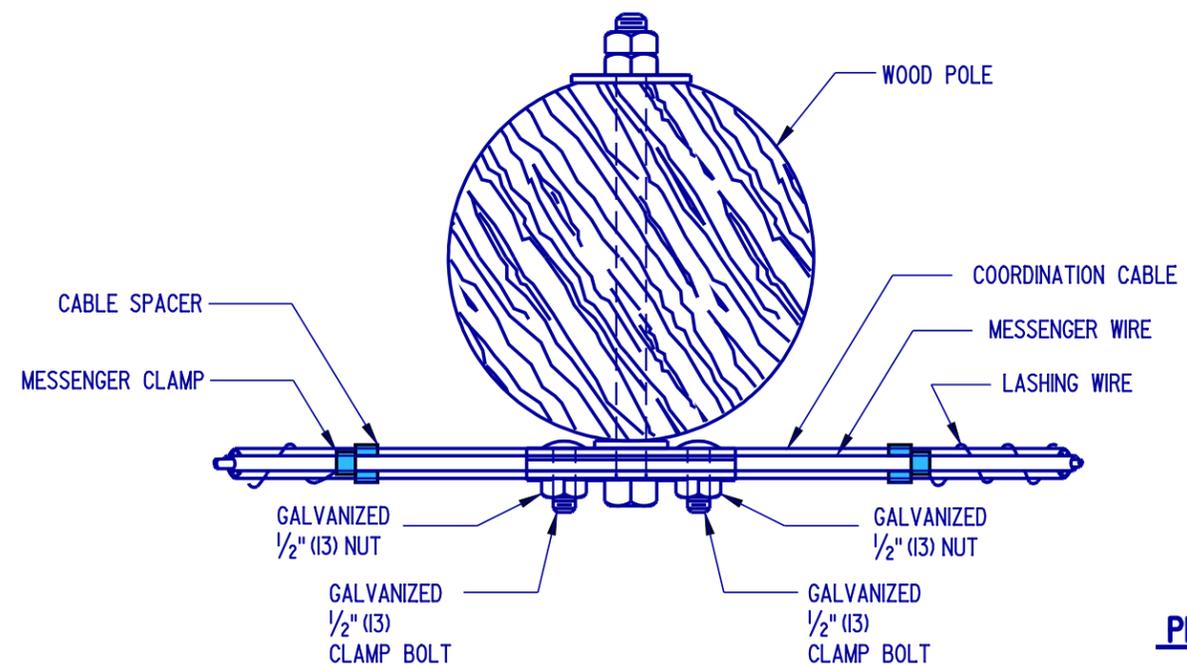
SIDE VIEW



FRONT VIEW



DETAIL "A"



TOP VIEW

PLAN SYMBOL



**DELAWARE
DEPARTMENT OF TRANSPORTATION**

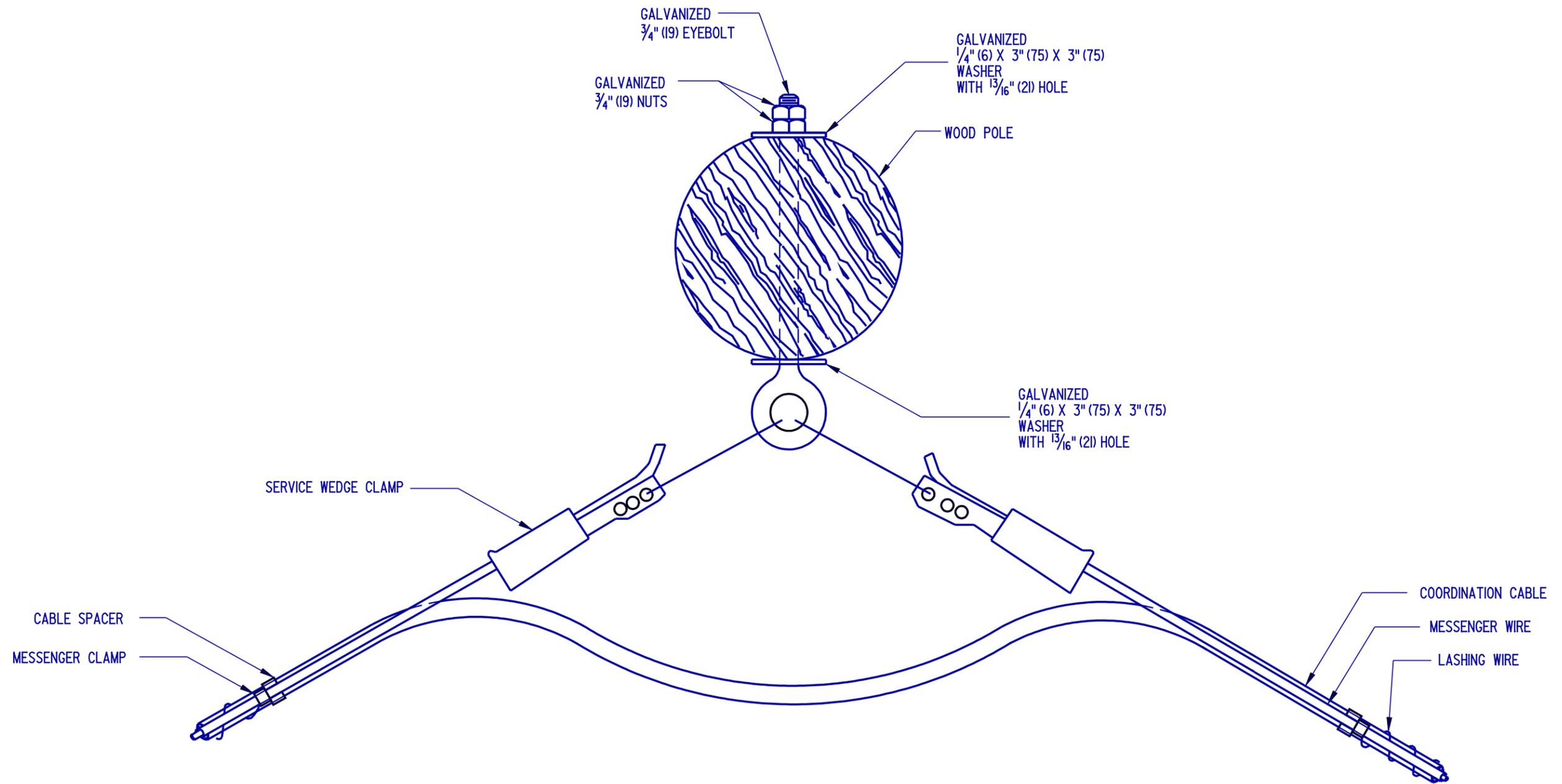
INTERMEDIATE MESSENGER WIRE ATTACHMENT ON WOOD POLES

STANDARD NO. T-11 (2004)

SHT. 1 OF 2

APPROVED *Carolann Wick* 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



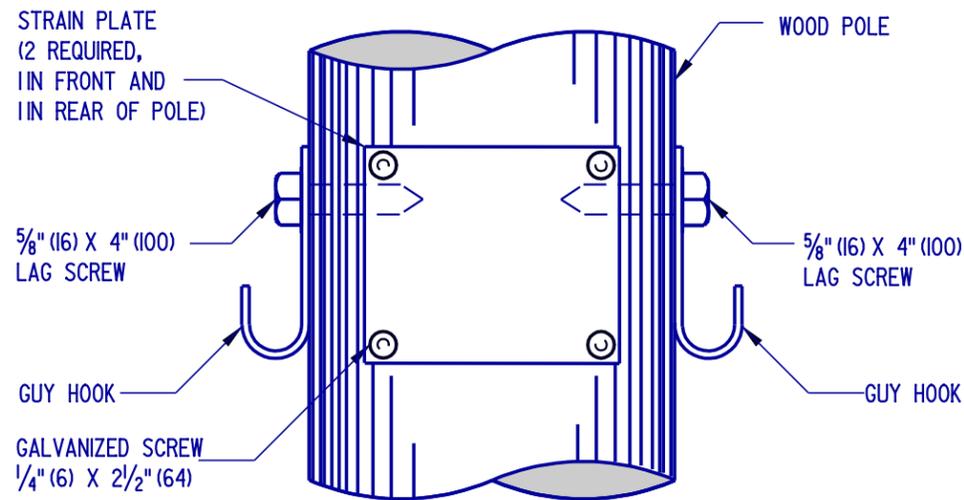
TOP VIEW

PLAN SYMBOL

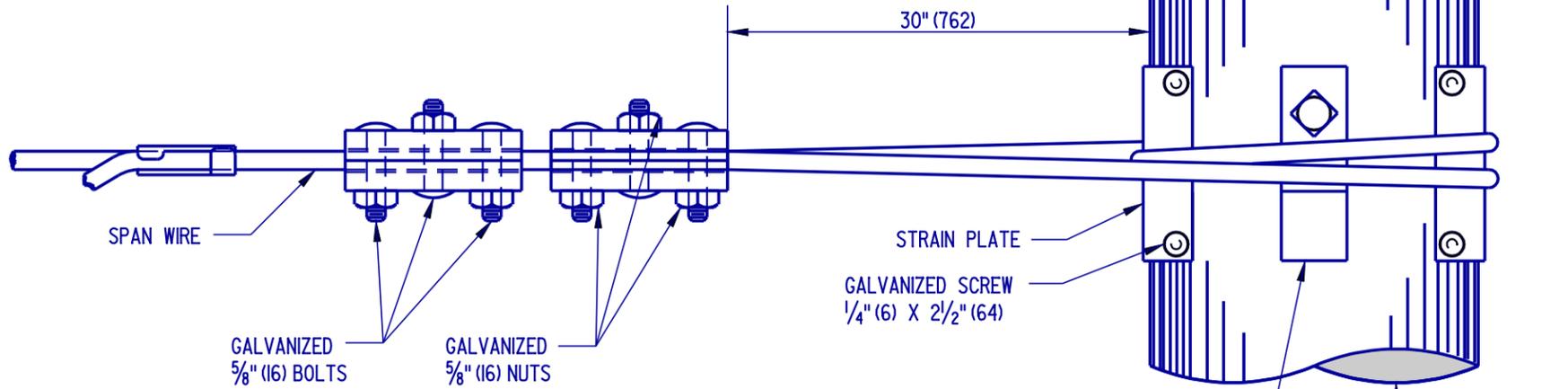


| | | | | |
|--|---|---------------|-------------|---|
|  DELAWARE DEPARTMENT OF TRANSPORTATION | ANGULAR INTERMEDIATE MESSENGER WIRE ATTACHMENT | | | APPROVED <i>Carolann Wicks</i> <u>1/10/05</u> <small>CHIEF ENGINEER DATE</small> |
| | STANDARD NO. T-11 (2004) | SHT. 2 | OF 2 | RECOMMENDED <i>Dennis M. O'Flaherty</i> <u>1/3/05</u> <small>DESIGN ENGINEER DATE</small> |

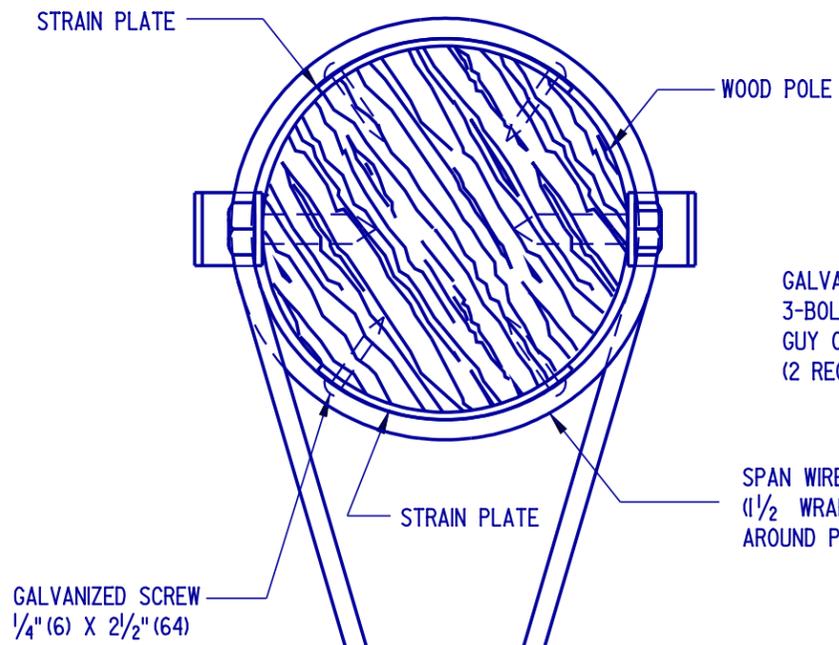
SCALE : N.T.S.



FRONT VIEW
(SPAN WIRE NOT SHOWN)

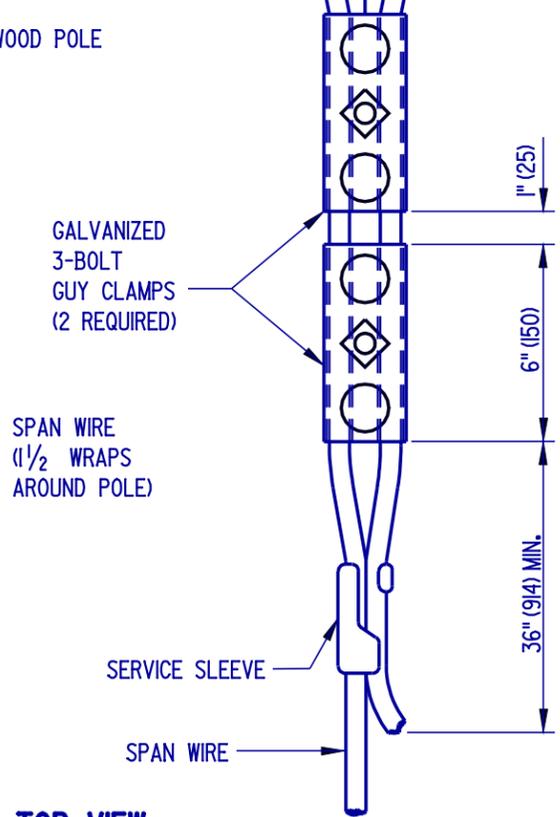


SIDE VIEW



MATCH LINE A - A

MATCH LINE A - A



TOP VIEW

NOTE: SPAN WIRE ATTACHMENT BETWEEN METAL POLES IS THE SAME AS SHOWN FOR WOOD POLES EXCEPT THAT THE STRAIN PLATES AND GUY HOOKS ARE NOT USED. FOR DETAIL SEE T-14 SHEET 2 - "DEAD END MESSENGER WIRE ATTACHMENT, METAL POLES".

PLAN SYMBOL



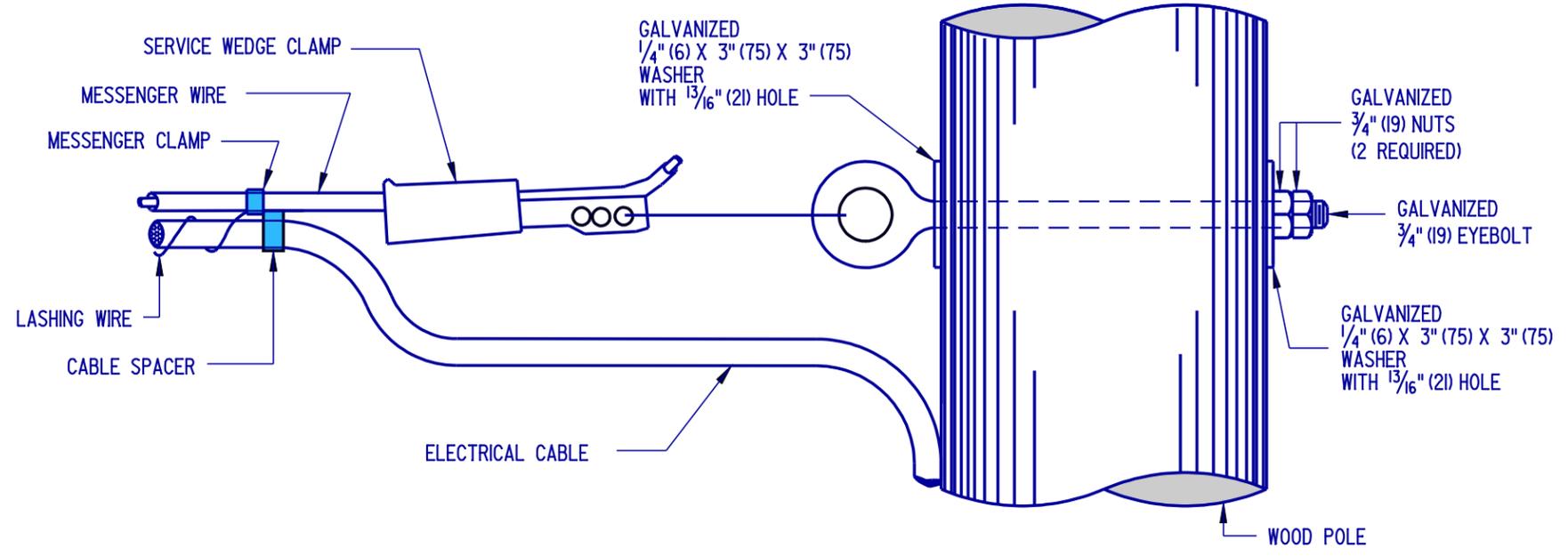
DELAWARE
DEPARTMENT OF TRANSPORTATION

SPAN WIRE ATTACHMENT BETWEEN POLES

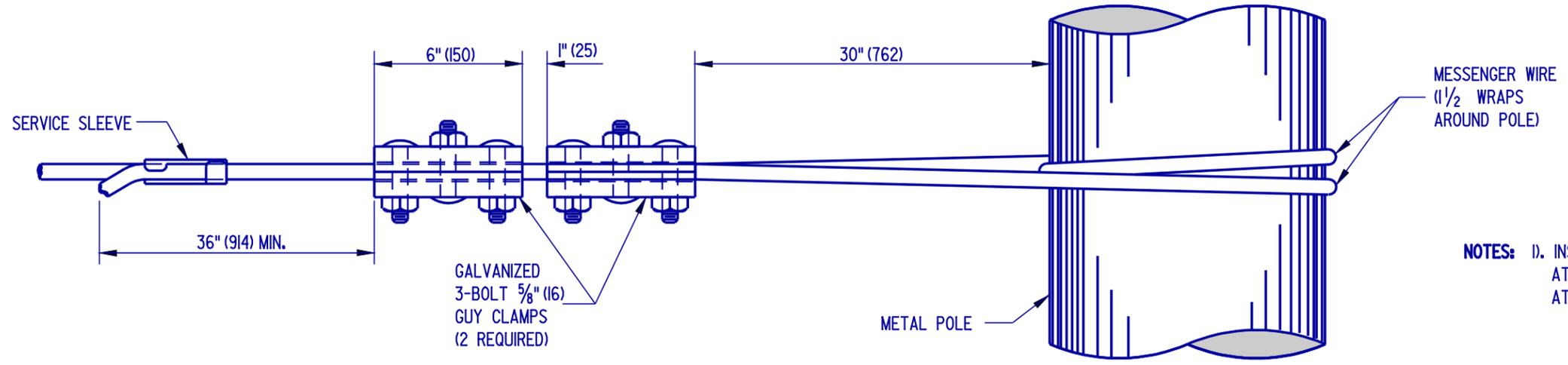
STANDARD NO. T-12 (2004) SHT. 1 OF 2

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



WOOD POLES



NOTES: 1). INSTALLATION METHOD SHOWN FOR DEAD END MESSENGER WIRE ATTACHMENT TO METAL POLES SHALL BE USED FOR SPAN WIRE ATTACHMENT BETWEEN METAL POLES.

PLAN SYMBOL



METAL POLES

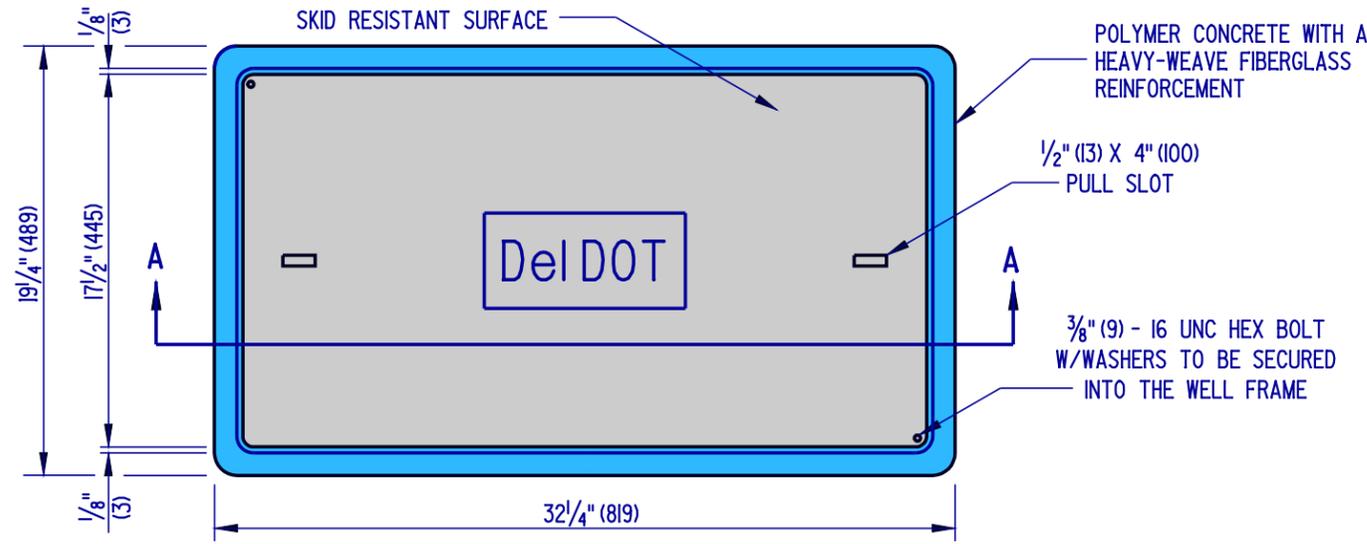


**DELAWARE
DEPARTMENT OF TRANSPORTATION**

| | | | | | |
|---|-------------|------|---|----|---|
| DEAD END MESSENGER WIRE ATTACHMENT | | | | | |
| STANDARD NO. | T-12 (2004) | SHT. | 2 | OF | 2 |

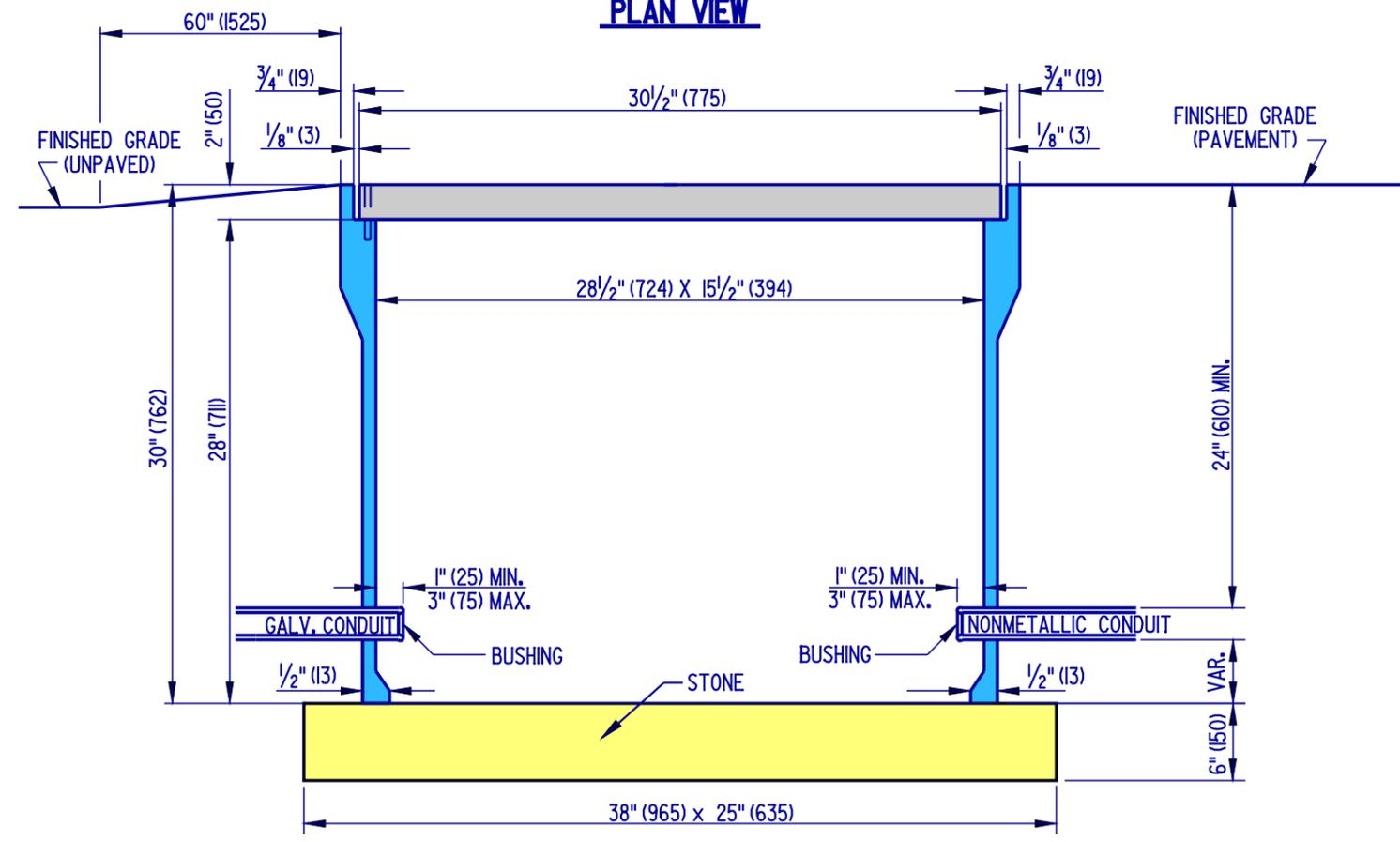
APPROVED *Carolann Wick* 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



- NOTES:**
1. TYPE 6 CONDUIT JUNCTION WELL SHALL BE PRECAST POLYMER CONCRETE.
 2. ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL 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.
 3. POLYMER CONCRETE COVERS SHALL BE THE HEAVY-DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.

PLAN VIEW



SECTION A-A

PLAN SYMBOL



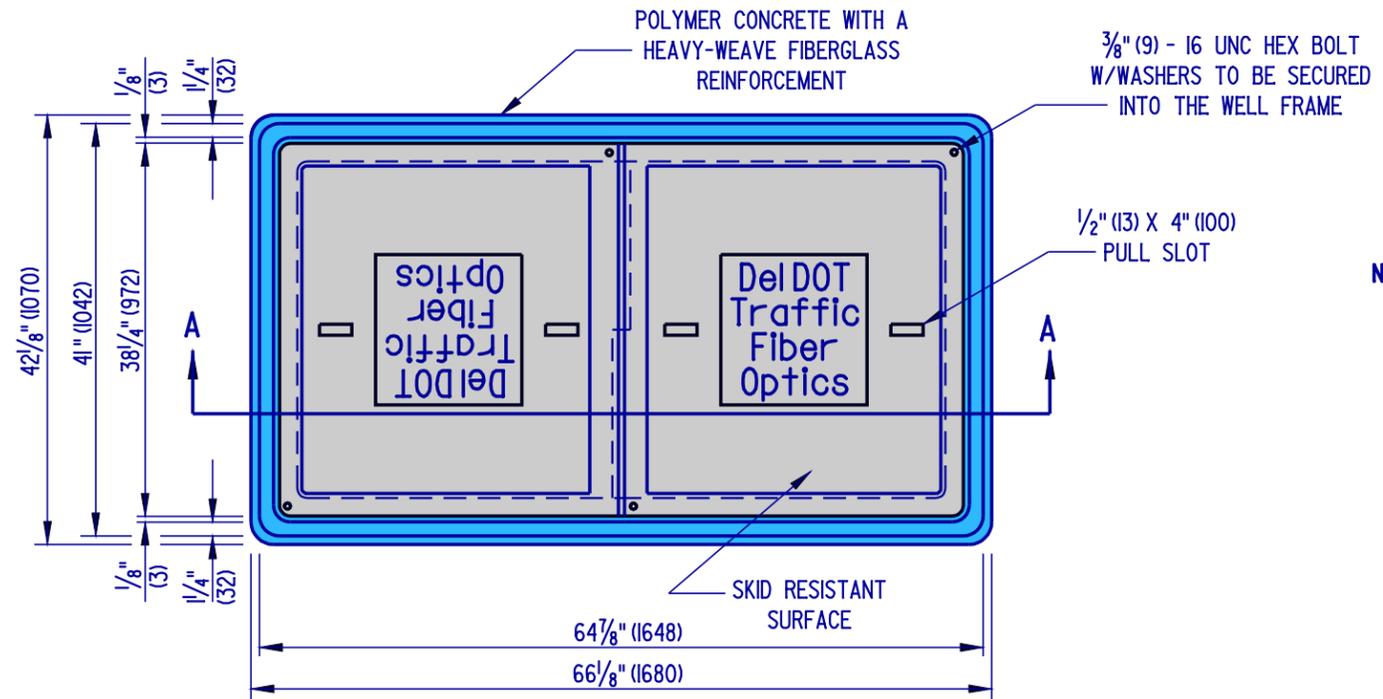
DELAWARE
DEPARTMENT OF TRANSPORTATION

CONDUIT JUNCTION WELL, TYPE 4

STANDARD NO. T-13 (2004) SHT. 1 OF 3

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE

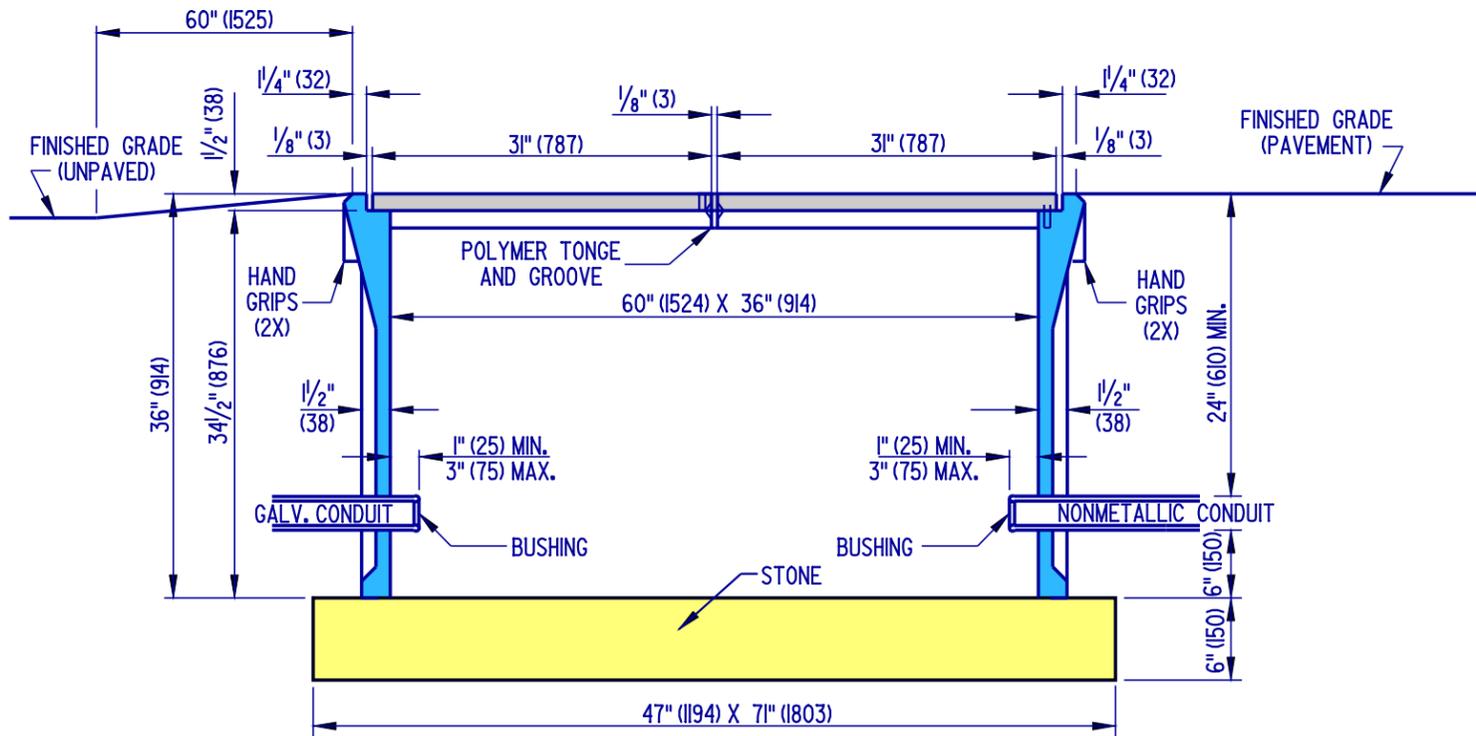
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



NOTES:

- 1). TYPE 7 CONDUIT JUNCTION WELL SHALL BE PRECAST POLYMER CONCRETE.
- 2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL 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.
- 3). POLYMER CONCRETE COVERS SHALL BE THE HEAVY DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.

PLAN VIEW



SECTION A-A

PLAN SYMBOL

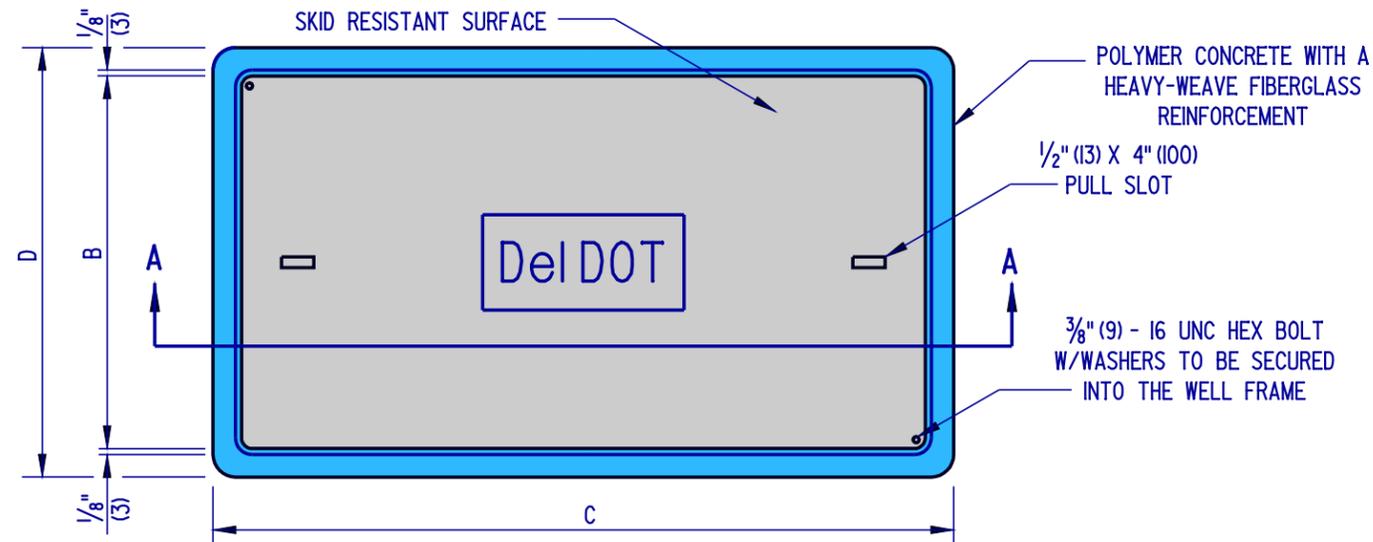


**DELAWARE
DEPARTMENT OF TRANSPORTATION**

CONDUIT JUNCTION WELL, TYPE 7

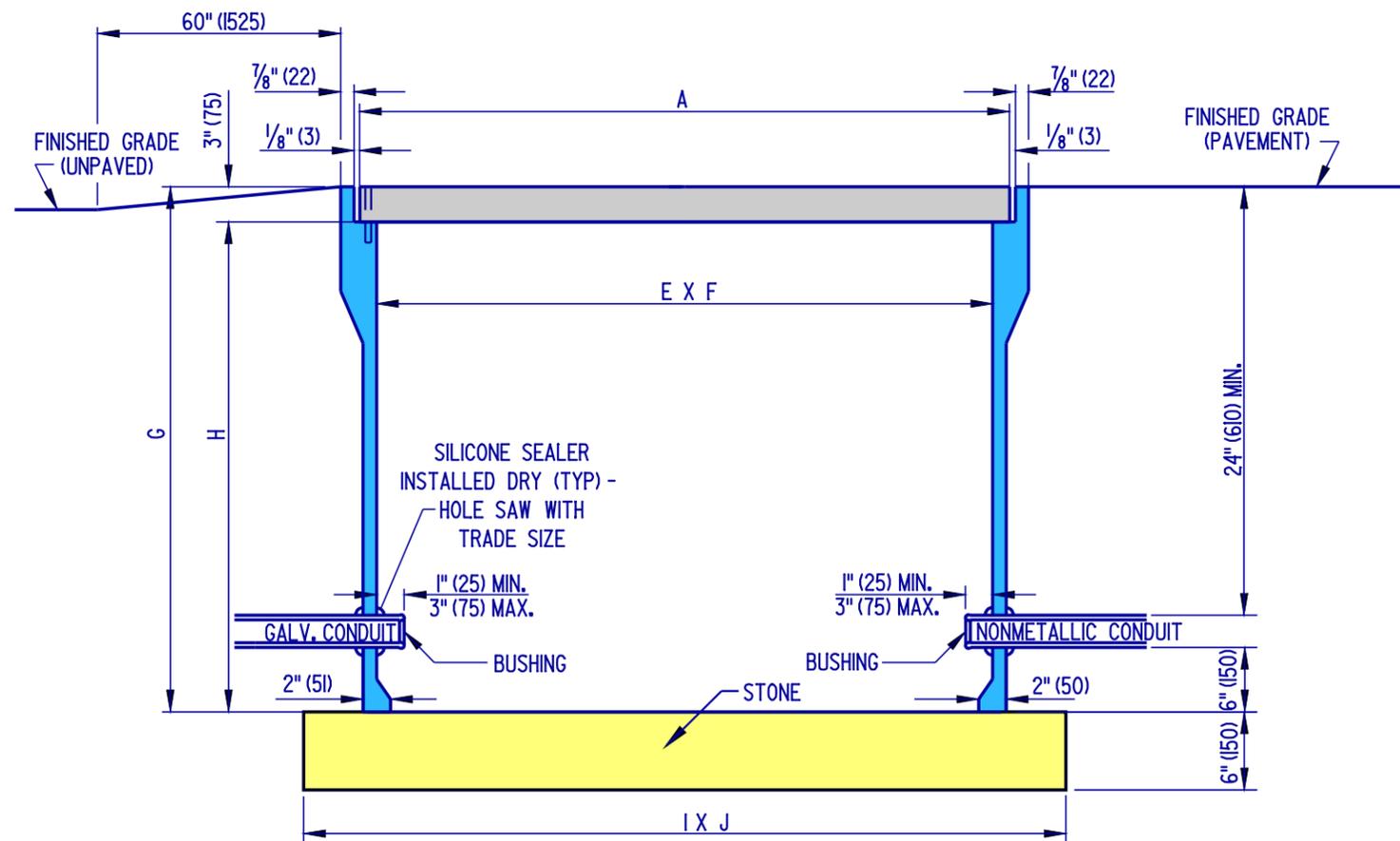
STANDARD NO. **T-13 (2004)** SHT. **2** OF **3**

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE



PLAN VIEW

- NOTES:**
- 1). TYPES 8 & 10 CONDUIT JUNCTION WELLS SHALL BE PRECAST POLYMER CONCRETE.
 - 2). ALL CONDUIT JUNCTION WELLS CONSTRUCTED WITHIN PAVEMENT, SIDEWALKS, ETC. WILL 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.
 - 3). POLYMER CONCRETE COVERS SHALL BE THE HEAVY-DUTY TYPE WITH A DESIGN LOAD OF 15,000 LBS (6800 kg) OVER A 10" (255) SQUARE.



SECTION A-A

| DIMENSIONS | | TYPE 8 | TYPE 10 |
|------------|---|----------------|---------------|
| COVER | A | 47 5/8" (1210) | 35 5/8" (905) |
| | B | 30 1/8" (765) | 24" (610) |
| FRAME | C | 49 5/8" (1261) | 37 5/8" (956) |
| | D | 32 1/8" (816) | 26" (660) |
| | E | 45 5/8" (1159) | 33 7/8" (860) |
| | F | 28 1/8" (714) | 22 1/4" (565) |
| | G | 36" (914) | 30" (1067) |
| | H | 33" (838) | 27" (991) |
| BASE | I | 58" (1473) | 46" (1168) |
| | J | 40" (1016) | 34" (864) |

PLAN SYMBOL



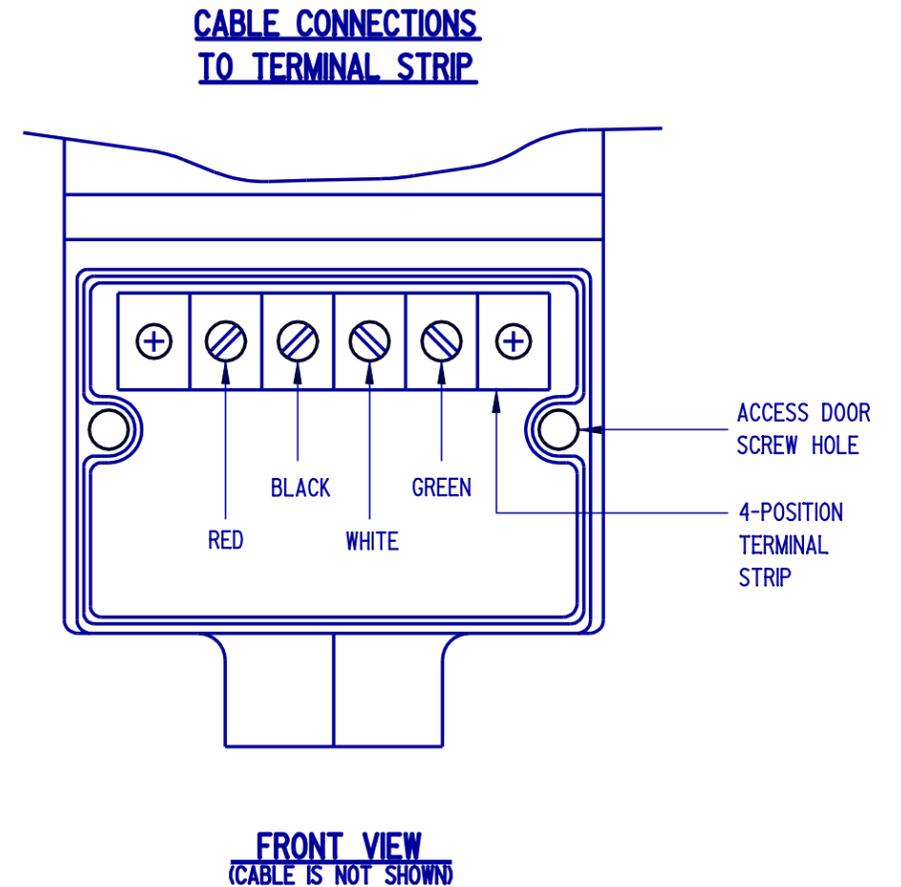
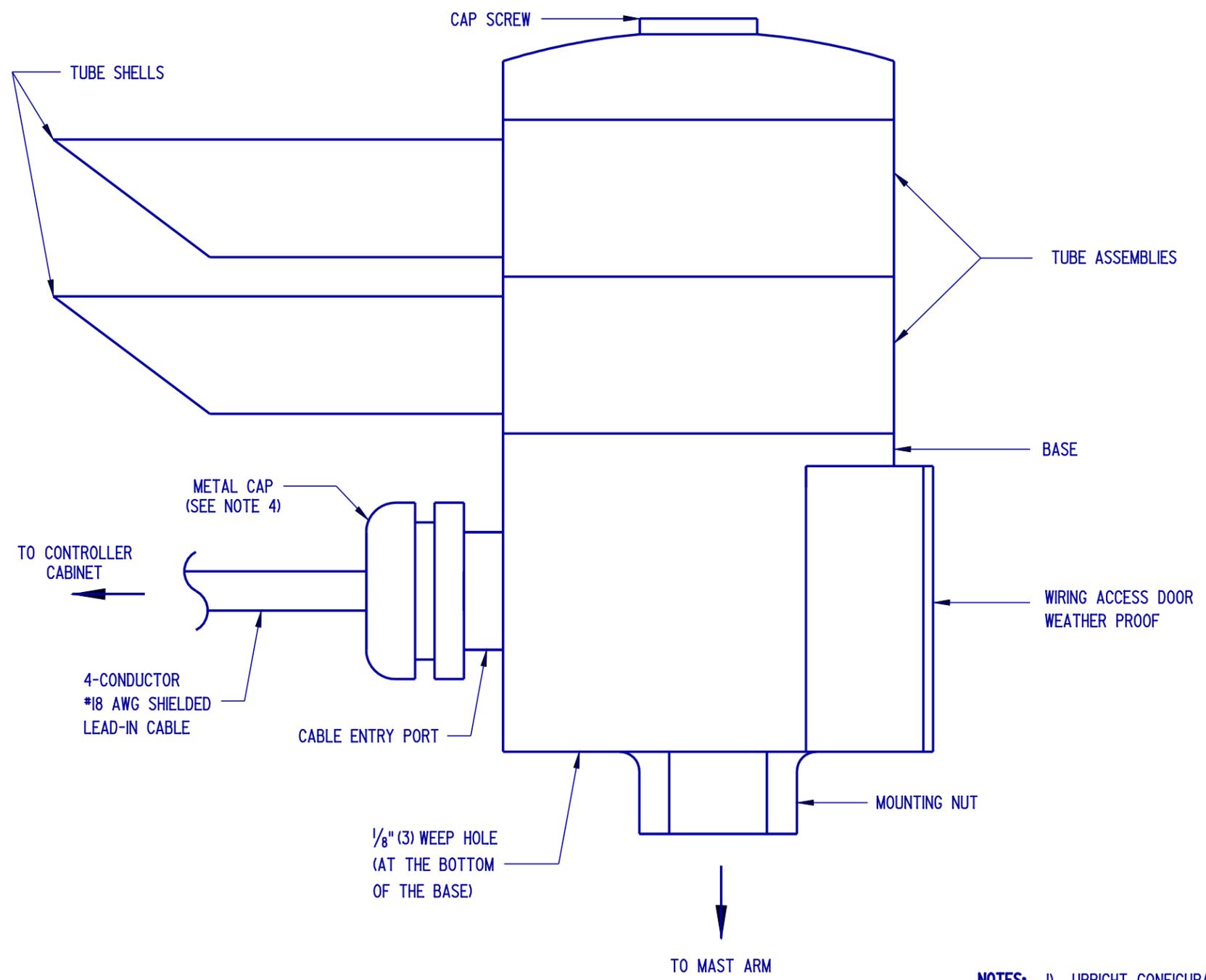
**DELAWARE
DEPARTMENT OF TRANSPORTATION**

CONDUIT JUNCTION WELLS, TYPES 8 & 10

STANDARD NO. **T-13 (2004)** SHT. **3** OF **3**

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE

RECOMMENDED *Dennis M. O'Flaherty* 1/3/05
DESIGN ENGINEER DATE



SIDE VIEW

**FRONT VIEW
(CABLE IS NOT SHOWN)**

- NOTES:**
- 1). UPRIGHT CONFIGURATION SHALL BE USED FOR MOUNTING ON MAST ARMS, SIGNAL HEAD FRAMEWORKS AND PEDESTALS.
 - 2). UPRIGHT MOUNTING HARDWARE SHALL BE SUPPLIED BY THE DEPARTMENT.
 - 3). TEFLON TAPE SHALL BE APPLIED TO THREADS BEFORE MOUNTING.
 - 4). ROUTE THE LEAD-IN CABLE THROUGH THE METAL CAP AND THE RUBBER PLUG. REPLACE THE METAL CAP, SEALING THE CABLE ENTRY PORT. TIGHTEN THE METAL CAP SO THE CABLE WILL NOT SLIDE THROUGH THE RUBBER PLUG.

PLAN SYMBOL

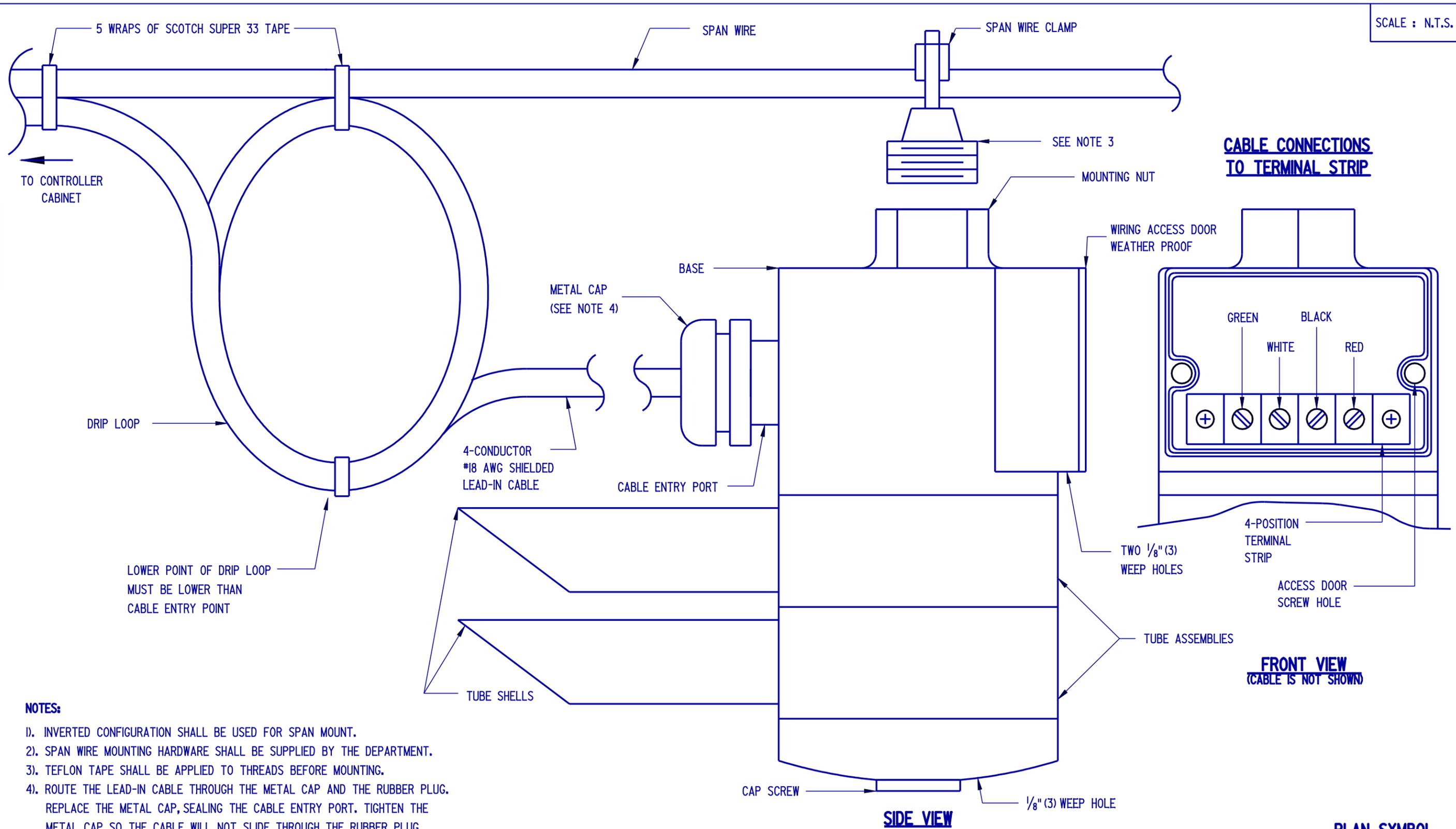


**DELAWARE
DEPARTMENT OF TRANSPORTATION**

EMERGENCY PREEMPTION RECEIVER, UPRIGHT MOUNT
STANDARD NO. T-14 (2004) SHT. 1 OF 2

APPROVED *Carolann Wicks* 1/10/05
CHIEF ENGINEER DATE
RECOMMENDED *Dennis M. O'Flaherty* 1/13/05
DESIGN ENGINEER DATE

SCALE : N.T.S.



NOTES:

- 1). INVERTED CONFIGURATION SHALL BE USED FOR SPAN MOUNT.
- 2). SPAN WIRE MOUNTING HARDWARE SHALL BE SUPPLIED BY THE DEPARTMENT.
- 3). TEFLON TAPE SHALL BE APPLIED TO THREADS BEFORE MOUNTING.
- 4). ROUTE THE LEAD-IN CABLE THROUGH THE METAL CAP AND THE RUBBER PLUG. REPLACE THE METAL CAP, SEALING THE CABLE ENTRY PORT. TIGHTEN THE METAL CAP SO THE CABLE WILL NOT SLIDE THROUGH THE RUBBER PLUG.

| | | | |
|--|--|---------------------------|--|
|  <p>DELAWARE DEPARTMENT OF TRANSPORTATION</p> | EMERGENCY PREEMPTION RECEIVER, INVERTED MOUNT | | APPROVED <i>Carolann Wick</i> <u>1/10/05</u> <small>CHIEF ENGINEER</small> <small>DATE</small> |
| | STANDARD NO. T-14 (2004) | SHT. 2 OF 2 | RECOMMENDED <i>Dennis M. O'Flaherty</i> <u>1/3/05</u> <small>DESIGN ENGINEER</small> <small>DATE</small> |