

PREEMPTION (PE) CHANNELS

PE CHANNEL A = NB PREEMPTOR 3 (ø2)  
 PE CHANNEL B = EB PREEMPTOR 4 (ø4)  
 PE CHANNEL C = SB PREEMPTOR 5 (ø6)  
 PE CHANNEL D = WB PREEMPTOR 6 (ø8)

EVP A = ø2 + ø5  
 EVP B = ø4 + ø7  
 EVP C = ø6 + ø1  
 EVP D = ø8 + ø3

NOTES:

1. PHASE 2 IS ALWAYS NORTHBOUND, REGARDLESS OF STREET CLASSIFICATION.

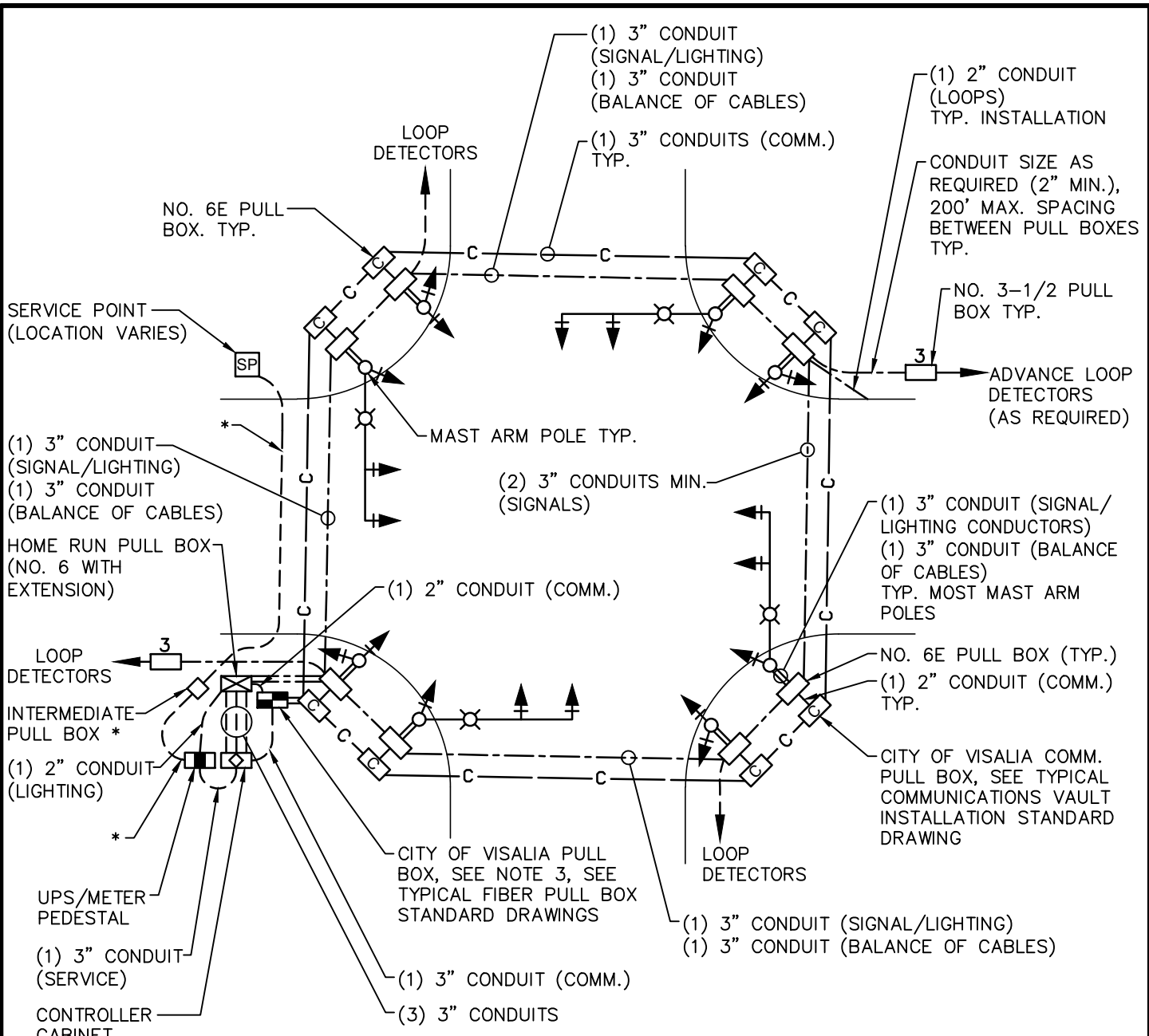
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 DATE

CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS

STANDARD TRAFFIC SIGNAL PHASING

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TE-1



**LEGEND:**

\* = PER ELECTRICAL UTILITY REQUIREMENTS

**NOTES:**

1. DRAWINGS ACCURATE FOR CONDUIT INFORMATION ONLY.
2. CONDUITS FOR LOOP DETECTORS ARE TYPICAL FOR ALL QUADRANTS.
3. WHEN CONDUIT AND PULL BOXES ARE BEING CONSTRUCTED PRIOR TO TRAFFIC SIGNAL DESIGN AND INSTALLATION, CITY OF VISALIA COMMUNICATION PULL BOXES SHALL BE INSTALLED ON ALL CORNERS OR AS DIRECTED BY THE CITY ENGINEER.
4. ALL EMPTY CONDUITS SHALL HAVE A #12 TRACING WIRE INSTALLED.

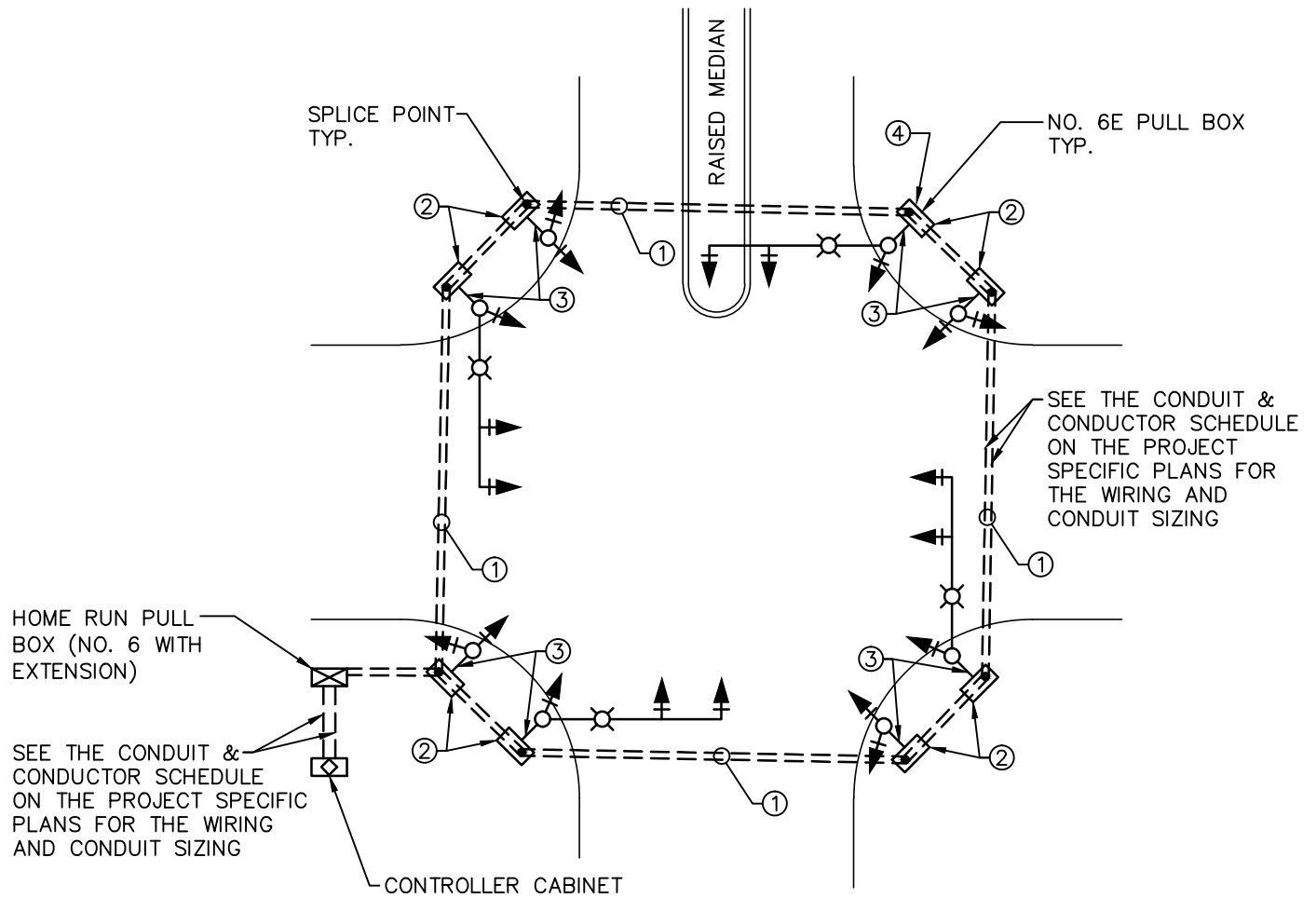
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CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS

TYPICAL TRAFFIC SIGNAL CONDUIT  
 SCHEMATIC

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**NOTES:**

1. DRAWINGS ACCURATE FOR CABLING INFORMATION ONLY.

**CONSTRUCTION NOTES:**

- ① SPLICE PERMITTED ONLY AT DESIGNATED SPLICE LOCATIONS AS SHOWN ON THIS PLAN. EACH SIGNAL CABLE IN USE AS SHOWN SHALL BE CONTINUOUS AND UNSPLICED BETWEEN PULL BOXES.
- ② PROVIDE 1 WRAP OF SLACK (3' MIN.) FOR EACH SIGNAL CABLE IN EACH PULL BOX. TERMINATE BETWEEN PULL BOXES.
- ③ LINE REPRESENTS CABLING AS SHOWN IN TRAFFIC SIGNAL WIRING SCHEMATIC STANDARD DRAWING.
- ④ INSTALL A GROUNDING ROD IN THE PULL BOX OPPOSITE THE TRAFFIC SIGNAL CABINET.

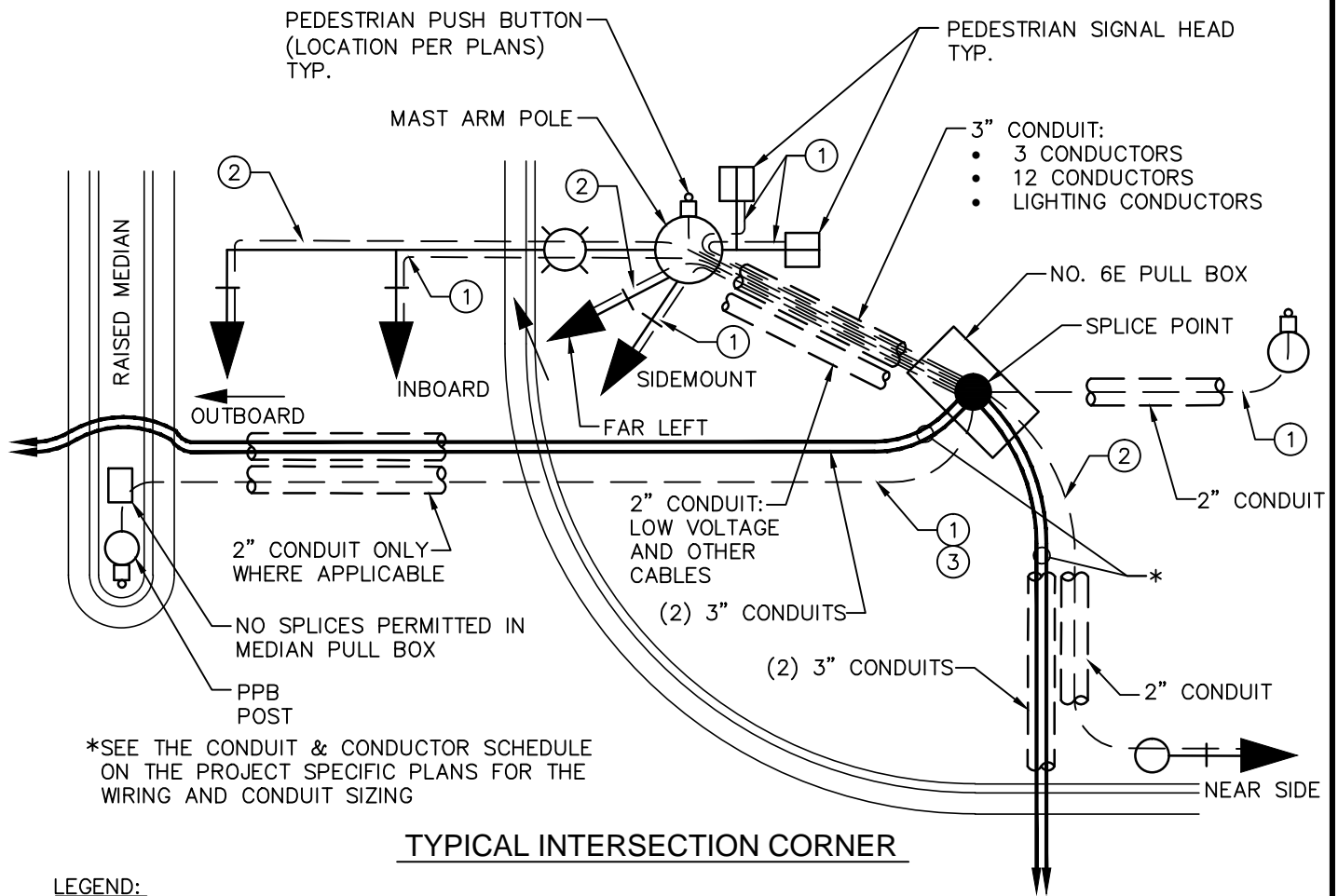
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CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS

TYPICAL TRAFFIC SIGNAL CABLE  
 SCHEMATIC

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**LEGEND:**

- — EXISTING 3 OR 12CSC CONDUCTOR (IMSA 19-1)
- PROPOSED 3 OR 12CSC CONDUCTOR (IMSA 19-1)

**NOTES:**

1. QUANTITY OF CABLES MAY VARY BASED ON ACTUAL FIELD CONDITIONS OR AS DIRECTED BY THE CITY ENGINEER.
2. DRAWING ACCURATE FOR WIRING INFORMATION ONLY.

**CONSTRUCTION NOTES:**

- ① INSTALL 3 OR 12CSC CONDUCTOR (IMSA 19-1) CABLE CONTINUOUS AND UNSPLICED AS SHOWN FROM PULL BOX TO EACH OF THE FOLLOWING:
  - SIDEMOUNT VEHICULAR SIGNAL
  - PEDESTRIAN SIGNAL HEAD
  - PEDESTRIAN PUSH BUTTON
  - INBOARD
- ② INSTALL 3 OR 12CSC CONDUCTOR (IMSA 19-1) CABLE CONTINUOUS AND UNSPLICED AS SHOWN FROM PULL BOX TO EACH OF THE FOLLOWING:
  - OUTBOARD VEHICULAR SIGNAL
  - FAR LEFT MOUNTED VEHICULAR SIGNAL
  - NEAR SIDE/RIGHT TURN OVERLAP VEHICULAR SIGNAL
- ③ CONDUCTORS TO MEDIAN SHALL BE SPLICED IN THE BULL BOX ON THE ADJACENT CORNER IN THE CLOCKWISE DIRECTION FROM THE MEDIAN.

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CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS

TRAFFIC SIGNAL WIRING SCHEMATIC

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3/8" STAINLESS  
STEEL PENTA HEAD  
BOLT. TYP.

1/8" STAINLESS  
STEEL FLAT WASHER  
TYP.

1/2"x4" PULL SLOT  
WITH 1/4" CENTER PIN  
TYP.

GROUNDING LUG

36" CABLE RACK  
(2 EACH SIDE WALL)

1/2" LIFTING BOLT  
TYP.

LETTERS SHALL  
BE 1" MINIMUM,  
ALL UPPERCASE

VISALIA  
COMMUNICATIONS

LOGO DETAIL

SKID RESISTANT SURFACE

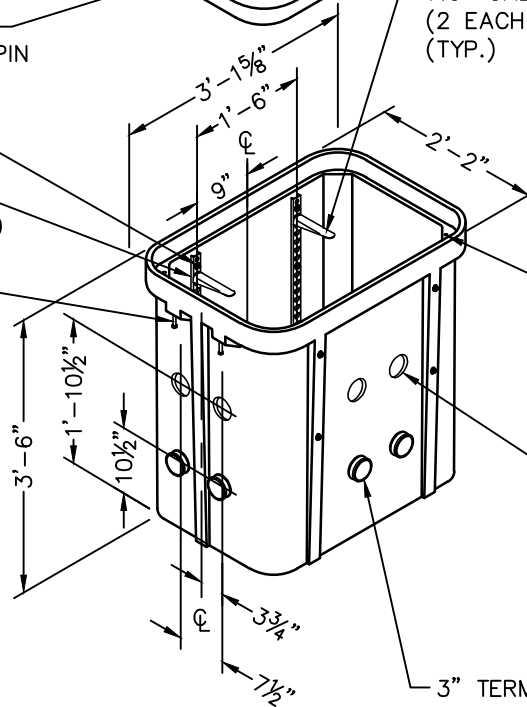
5/8" THRU HOLE WITH  
1-1/4"x 1/2" COUNTER  
BORE

7.5" CABLE RACK HOOKS  
(2 EACH SIDE WALL)  
(TYP.)

3/8" SELF ALIGNING,  
REPLACEABLE STAINLESS  
STEEL EZ-NUT TYP.

KNOCKOUT FOR 3"  
TERMINATOR (2 EACH  
SIDE DIRECTLY ACROSS  
FROM EACH OTHER)

3" TERMINATOR (2 EACH SIDE DIRECTLY  
ACROSS FROM EACH OTHER),  
TERMINATORS SHALL BE MANUFACTURER  
INSTALLED, NO PLASTIC INSERTS WILL  
BE ACCEPTED TYP.



PLAN SYMBOL:

NEW

EXISTING

NOTE:

THE BOX OF THIS ASSEMBLY SHALL MEET BOTH PERFORMANCES AND TESTING OF ANSI/SCTE 77 TIER 15. INDEPENDENT THIRD PARTY VERIFICATION OF TEST REPORTS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER CERTIFYING THAT ALL TEST PROVISIONS OF THIS SPECIFICATION HAVE BEEN MET ARE REQUIRED WITH EACH SUBMITTAL. SEE THE FOLLOWING TYPICAL FIBER PULL BOX STANDARD DRAWINGS FOR INSTALLATION INFORMATION.

TYPICAL PULL BOX

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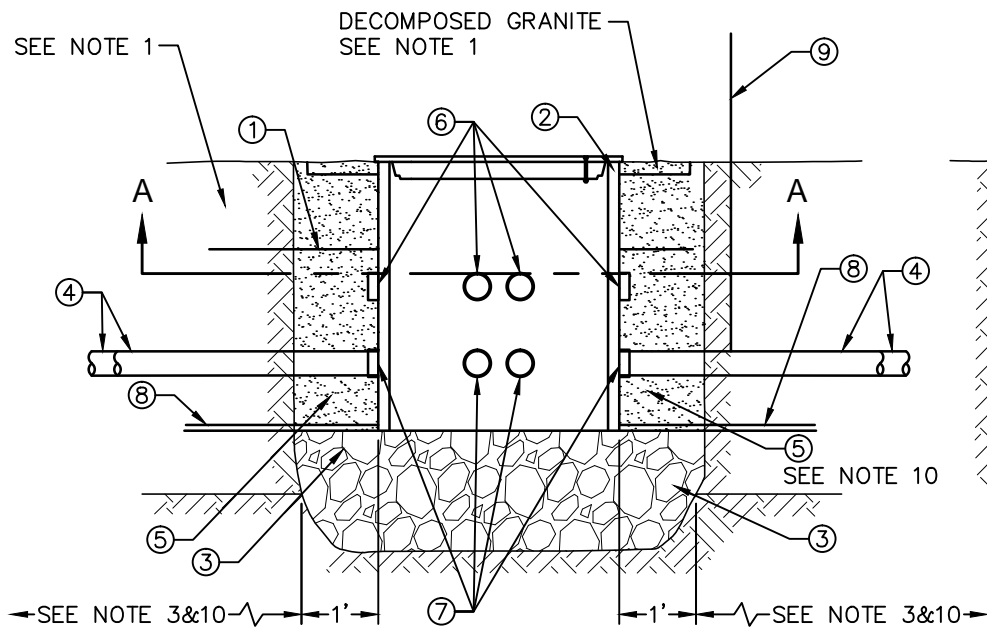
TYPICAL FIBER PULL BOX

REVISIONS

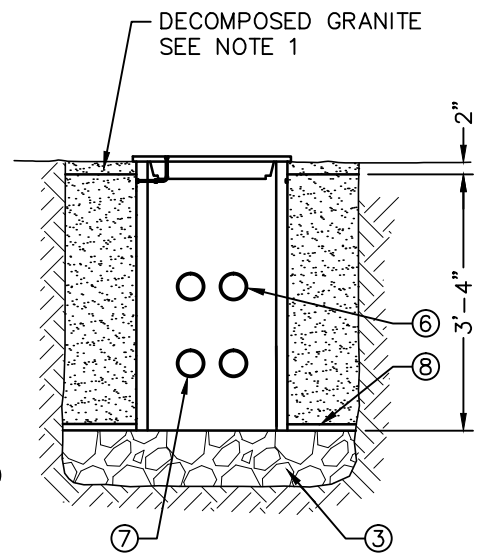
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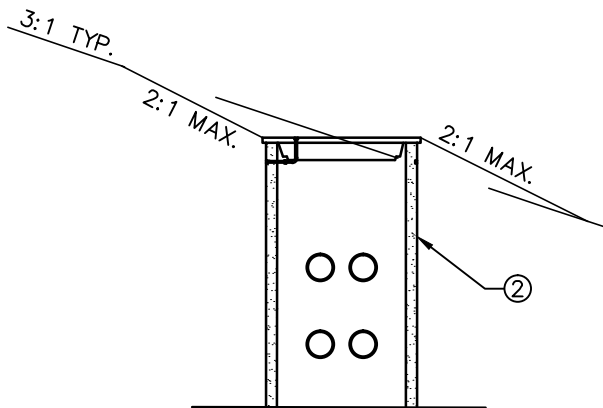
TE-5



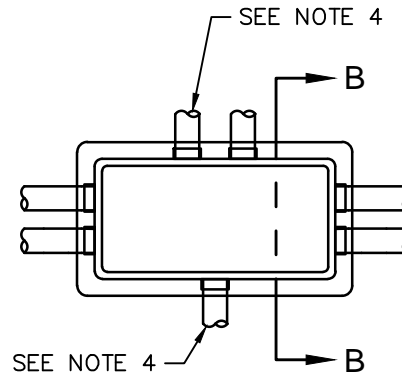
**INSTALLATION FOR FIBER PULL BOX**



**SECTION B-B**



**INSTALLATION ON SLOPE**



**SECTION A-A**

**NOTES:**

1. SEE TYPICAL FIBER TRENCH DETAILS STANDARD DRAWING AND TYPICAL FIBER TRENCH & STREET LIGHT JOINT TRENCH DETAIL STANDARD DRAWING FOR TRENCH REQUIREMENTS.
2. SEE TYPICAL FIBER PULL BOX INSTALLATION NOTES STANDARD DRAWING FOR ADDITIONAL NOTES.
3. STRICTER REQUIREMENTS AS DIRECTED BY THE CITY ENGINEER IF PULL BOX IS WITHIN ROADWAY.

**MATERIAL LIST**

ITEM	DESCRIPTION
①	WARNING TAPE—"CAUTION FIBER OPTIC LINE BURIED BELOW"
②	CITY OF VISALIA FIBER PULL BOX - SEE TYPICAL FIBER PULL BOX STANDARD DRAWINGS
③	3/4" CLEAN CRUSHED ROCK
④	3" DIAMETER SCHEDULE 40 PVC CONDUITS
⑤	CONTROLLED LOW STRENGTH MATERIAL—SEE NOTE 10
⑥	3" TERMINATOR KNOCK OUT - SEE TYPICAL FIBER PULL BOX STANDARD DRAWINGS
⑦	3" TERMINATOR
⑧	30# FELT PAPER & GALVANIZED STEEL SCREEN - SEE NOTE 8
⑨	PULL BOX DELINEATOR (FLEXIBLE IDENTIFICATION MARKER)—SEE NOTE 9

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**CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS**

**TYPICAL FIBER PULL BOX  
 INSTALLATION 1 OF 2**

REVISIONS  
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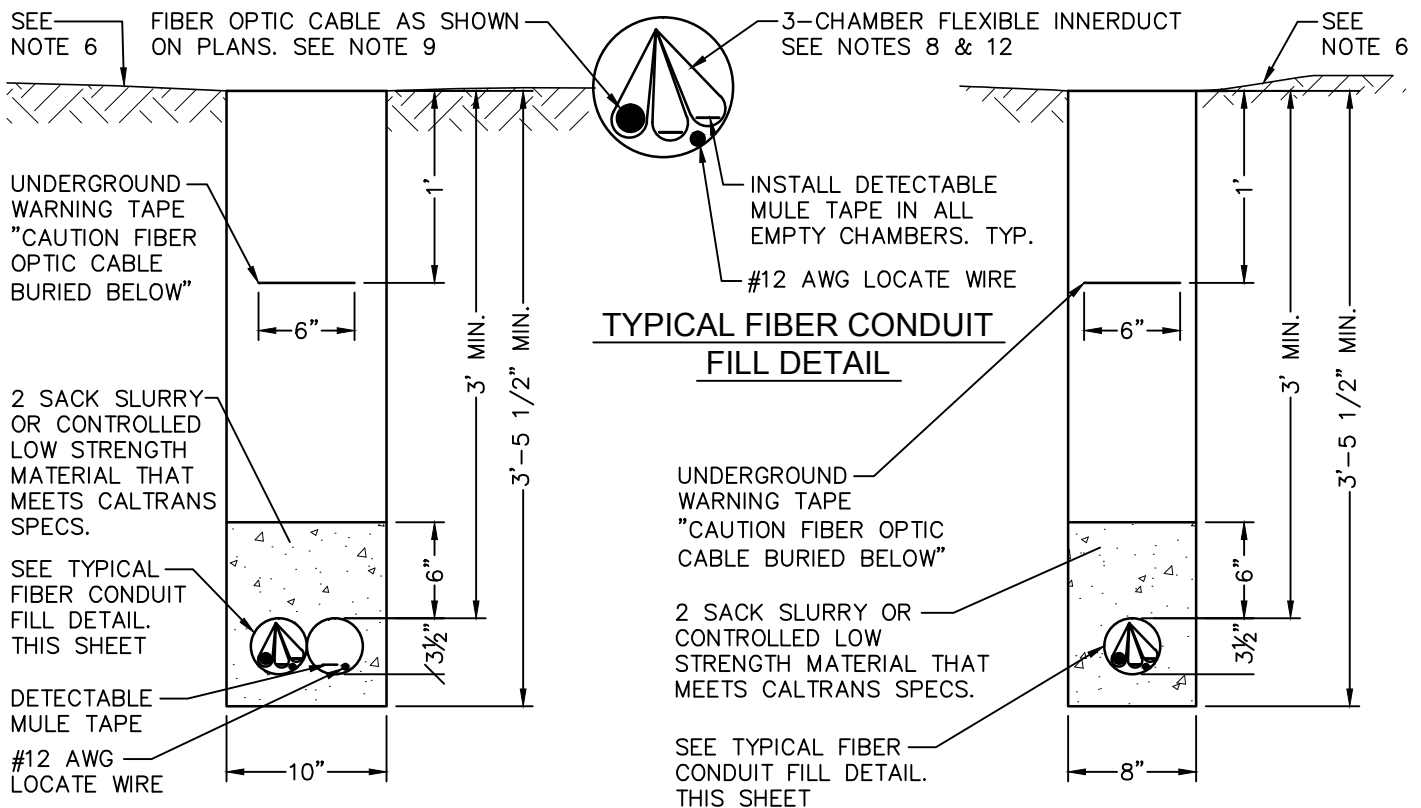
TYPICAL FIBER PULL BOX INSTALLATION NOTES:

1. BACKFILL WITH DESIGNATED 3/4" CLASS 2 AGGREGATE BASE TO SIX (6) INCHES BELOW FINISH GRADE. BACKFILL WITH FOUR (4) INCHES OF WITH SELECT EXCAVATED MATERIAL AND THOROUGHLY COMPACT. TWO (2) INCHES OF DECOMPOSED GRANITE SHALL BE USED TO MATCH SLOPES.
2. THIS PULL BOX IS DESIGNED FOR NON-TRAFFIC AREAS.
3. CONDUIT FROM THE TYPICAL TRENCH SECTION SHALL NOT DEFLECT BY MORE THAN ONE (1) INCHES PER FOOT FROM THE ALIGNMENT PRECEDING OR FOLLOWING THE PULL BOX.
4. LATERAL CONDUIT AS REQUIRED.
5. ALL POWER AND COMMUNICATIONS CABLE SHALL BE TAGGED WITH CABLE IDENTIFICATION.
6. "VISALIA COMMUNICATIONS" SHALL BE THE TITLE EMBOSSED ON THE LID.
7. PVC CONDUIT SHALL BE USED TO ATTACH TO PULL BOX TERMINATORS. SEE TYPICAL FIBER PULL BOX STANDARD DRAWING.
8. 30# FELT PAPER AND A GALVANIZED STEEL SCREEN WITH NO LARGER THAN THREE QUARTERS (3/4) OF AN INCH OPENINGS SHALL BE INSTALLED BETWEEN PULL BOX AND AGGREGATE.
9. INSTALL ORANGE FLEXIBLE IDENTIFICATION MARKERS TWELVE (12) INCHES IN FRONT OF EACH PULL BOX WITHOUT TOUCHING CONDUIT. MARKER HEIGHT SHALL BE THREE (3) FEET ABOVE GRADE AND LABELED "FIBER OPTIC CABLE". FLEXIBLE IDENTIFICATION MARKERS SHALL NOT BE INSTALLED AT PULL BOXES AT SIGNALIZED INTERSECTIONS.
10. POUR 2-SACK SLURRY, OR A CONTROLLED LOW STRENGTH MATERIAL THAT MEETS CALTRANS SPECIFICATIONS, WITHIN TWELVE (12) INCHES OF PULL BOX.
11. PULL BOX HEIGHT ABOVE FINISHED GRADE SHALL PERMIT TWO (2) INCHES OF DECOMPOSED GRANITE TO BE USED TO MATCH SLOPE.
12. REFER TO TYPICAL FIBER PULL BOX STANDARD DRAWING FOR PULL BOX DIMENSIONS.
13. EXISTING PULL BOX CONFIGURATIONS MAY VARY. LOCATIONS WHERE PULL BOXES ARE BEING REPLACED, FIBER PULL BOXES SHALL BE INSTALLED AS SHOWN ON THIS SHEET UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER OR DESIGNEE.
14. EXISTING CONDUIT ENTERING A PULL BOX MAY NOT BE CORRECTLY ALIGNED TO FACILITATE PULLING CABLES THROUGH THE PULL BOX BY USE OF A PULLING SHOE. THE FORCE ACCOUNT ITEM FOR CONDUIT RECONDITIONING DOES NOT COVER REALIGNMENT OF CONDUIT TO ALLOW FOR PULLING THROUGH AN EXISTING PULL BOX, THEREBY ELIMINATING IT AS A PULL POINT.
15. IN ALL LOCATIONS WHERE FIBER OPTIC CABLE ENTERS A PULL BOX, CABLE SLACK SHALL BE LOOSELY LOOPED USING THE RACK AND HOOK SYSTEM. THIRTY FOOT (30') OF SLACK SHALL BE LEFT WHERE THE FIBER OPTIC CABLE ENTERS/EXITS THE COMMUNICATION VAULT PROVIDING A SIXTY FOOT (60') COIL OF SLACK.
16. A GROUNDING ELECTRODE REQUIRED WHEN SPECIFIED.

INSTRUCTIONS:

IT IS INTENDED THAT THESE NOTES SHALL BE PLACED ON THE PLANS WHERE APPROPRIATE TO FIT SPECIFIC PROJECT CONDITIONS. IF THEY ARE EDITED OR ALTERED, THESE NOTES SHALL REQUIRE APPROVAL BY THE CITY ENGINEER OR DESIGNEE.

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TYPICAL FIBER PULL BOX INSTALLATION 2 OF 2	REVISIONS 09/15/16 BK 2016	TE-7



**(2) 3" PVC CONDUIT  
OPEN TRENCH INSTALLATION**

**(1) 3" PVC CONDUIT  
OPEN TRENCH INSTALLATION**

**NOTES:**

1. CONDUIT CONTENTS ARE ORIENTED ASSUMING THE SECTION FACING IN THE DIRECTION OF TRAVEL FOR THE MAJOR ARTERIAL.
2. ALL SPOIL MATERIAL SHALL BE REMOVED OFFSITE BY THE CONTRACTOR.
3. AREA SHALL BE RETURNED TO EXISTING GRADE.
4. CONDUIT COUPLINGS SHALL BE STAGGERED.
5. #12 AWG LOCATE WIRE SHALL BE INSTALLED IN ALL CONDUITS. DETECTABLE MULE TAPE SHALL BE INSTALLED IN ALL UNUSED CONDUITS AND FLEXIBLE INNERDUCT CHAMBERS. LEAVE A 10 FOOT LOOP OF WIRE IN A SMALL JUNCTION BOX WITHIN 5 FEET OF THE CONTROLLER CABINET, OR WITHIN THE CABINET.
6. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT TO 95% OF MAXIMUM DENSITY.
7. CONTROLLED LOW STRENGTH MATERIAL REQUIRED WHEN TRUNK AND/OR BRANCH FIBER-OPTIC CABLES INSTALLED IN CONDUIT (2-SACK SLURRY).
8. FLEXIBLE INNERDUCT, MULE TAPE, AND LOCATE WIRE SHALL BE INSTALLED AT TIME OF CONDUIT INSTALLATION AND SHALL TERMINATE AT EACH PULL BOX LOCATED ON PLANS.
9. IF FIBER IS BEING INSTALLED IN EXISTING CONDUIT AND INNERDUCT IS NOT PRESENT, THE 3 CHAMBER FLEXIBLE INNERDUCT SHALL BE INSTALLED PRIOR TO FIBER INSTALLATION.
10. TRENCH UNDER PAVEMENT OR SIDEWALK SHALL REQUIRE MINIMUM ONE-SACK SLURRY (DIRECTED BY CITY ENGINEER OR DESIGNEE) AND BACKFILL PER CITY OF VISALIA EXCAVATION STANDARD DRAWINGS.
11. FIBER INSTALLATION AND TESTING SHALL CONFORM TO THE CITY OF VISALIA STANDARDS AND SPECIFICATIONS.
12. IN CASES WHERE FIBER IS NOT BEING INSTALLED (I.E., CONDUIT ONLY INSTALLATIONS), THE FLEXIBLE INNERDUCT SHALL NOT BE INSTALLED.
13. WHERE CONDUIT IS PLACED IN AN OPEN TRENCH, IT SHALL NOT DEVIATE MORE THAN ONE INCH PER FOOT (1":12" MAX.) IN EITHER THE HORIZONTAL OR VERTICAL PLANES.
14. CONDUIT RUNS SHALL FOLLOW THE MOST DIRECT ROUTE POSSIBLE WITH NO MORE THAN TWO 90° BENDS BETWEEN PULL POINTS AND NO MORE THAN A TOTAL OF 270° OF BEND BETWEEN PULL POINTS.
15. NO MORE THAN ONE WEEK PRIOR TO THE INSTALLATION OF ANY CABLE, ALL NEW AND EXISTING CONDUIT RUNS IN WHICH CABLE IS TO BE INSTALLED SHALL BE CLEARED BY PULLING A METAL-DISC MANDREL OF 90% DIAMETER OF THE CONDUIT.
16. WHEN CONDUIT IS TRENCHED UNDER ROADWAY PAVEMENT, THERE SHALL BE SUFFICIENT VERTICAL CLEARANCE BETWEEN CONDUIT AND PAVEMENT STRUCTURAL SECTION AS DIRECTED BY THE CITY ENGINEER.

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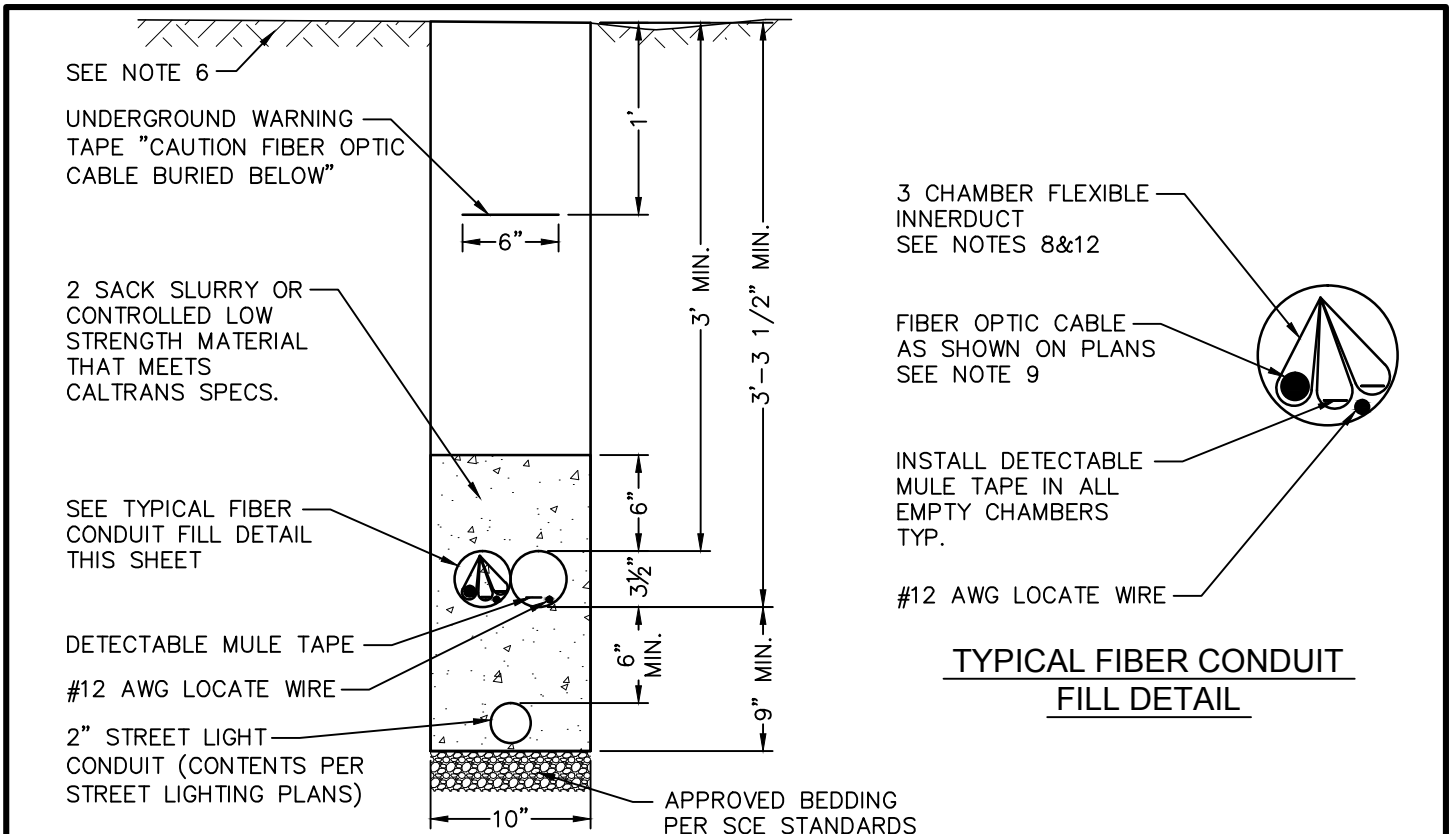
**CITY OF VISALIA  
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**TYPICAL FIBER TRENCH DETAILS**

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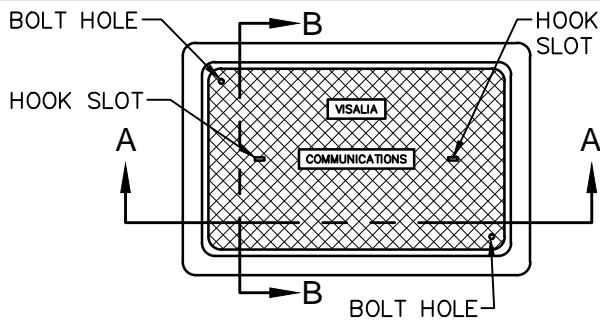
**(2) 3" PVC CONDUIT  
OPEN TRENCH INSTALLATION**

**NOTES:**

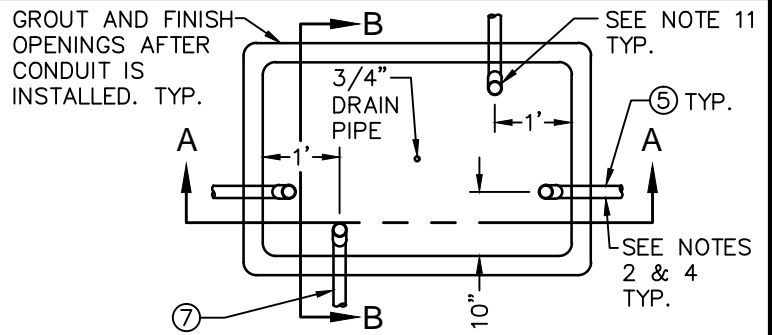
1. CONDUIT CONTENTS ARE ORIENTED ASSUMING THE SECTION FACING IN THE DIRECTION OF TRAVEL FOR THE MAJOR ARTERIAL.
2. ALL SPOIL MATERIAL SHALL BE REMOVED OFFSITE BY THE CONTRACTOR.
3. AREA SHALL BE RETURNED TO EXISTING GRADE.
4. CONDUIT COUPLINGS SHALL BE STAGGERED.
5. #12 AWG LOCATE WIRE SHALL BE INSTALLED IN ALL CONDUITS. LEAVE A 10 FOOT LOOP OF WIRE IN A SMALL JUNCTION BOX (CHRISTY FIBERLYTE FL9 OR APPROVED EQUAL) WITHIN 5 FEET OF THE CONTROLLER CABINET. DETECTABLE MULE TAPE SHALL BE INSTALLED IN ALL UNUSED CONDUITS AND FLEXIBLE INNERDUCT CHAMBERS.
6. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT TO 95% OF MAXIMUM DENSITY.
7. CONTROLLED LOW STRENGTH MATERIAL REQUIRED WHEN TRUNK AND/OR BRANCH FIBER-OPTIC CABLES INSTALLED IN CONDUIT.
8. FLEXIBLE INNERDUCT, MULE TAPE, AND LOCATE WIRE SHALL BE INSTALLED AT TIME OF CONDUIT INSTALLATION AND SHALL TERMINATE AT EACH PULL BOX LOCATED ON PLANS.
9. IF FIBER IS BEING INSTALLED IN EXISTING CONDUIT AND INNERDUCT IS NOT PRESENT, THE 3 CHAMBER FLEXIBLE INNERDUCT SHALL BE INSTALLED PRIOR TO FIBER INSTALLATION.
10. TRENCH UNDER PAVEMENT OR SIDEWALK SHALL REQUIRE MINIMUM ONE-SACK SLURRY (DIRECTED BY CITY ENGINEER OR DESIGNEE) BACKFILL PER CITY OF VISALIA EXCAVATION STANDARD DRAWINGS.
11. FIBER INSTALLATION AND TESTING SHALL CONFORM TO THE CITY OF VISALIA STANDARDS AND SPECIFICATIONS.
12. IN CASES WHERE FIBER IS NOT BEING INSTALLED (I.E., CONDUIT ONLY INSTALLATIONS), THE FLEXIBLE INNERDUCT SHALL NOT BE INSTALLED.
13. WHERE CONDUIT IS PLACED IN AN OPEN TRENCH, IT SHALL NOT DEVIATE MORE THAN ONE INCH PER FOOT (1":12" MAX.) IN EITHER THE HORIZONTAL OR VERTICAL PLANES.
14. CONDUIT RUNS SHALL FOLLOW THE MOST DIRECT ROUTE POSSIBLE WITH NO MORE THAN TWO 90° BENDS BETWEEN PULL POINTS AND NO MORE THAN A TOTAL OF 270° OF BEND BETWEEN PULL POINTS.
15. NO MORE THAN ONE WEEK PRIOR TO THE INSTALLATION OF ANY CABLE, ALL NEW AND EXISTING CONDUIT RUNS IN WHICH CABLE IS TO BE INSTALLED SHALL BE CLEARED BY PULLING A METAL-DISC MANDREL OF 90% DIAMETER OF THE CONDUIT.

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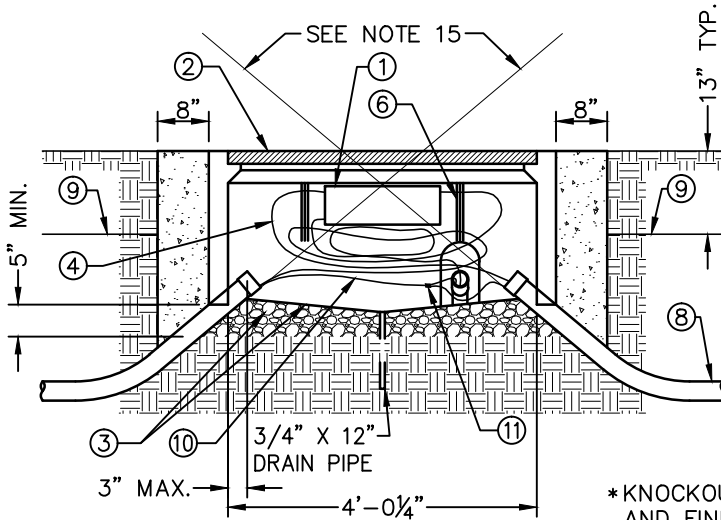
<b>TYPICAL FIBER AND STREET LIGHTING JOINT TRENCH DETAIL</b>	<b>REVISIONS</b> 08/24/16 BK 2016	<b>TE-9</b>
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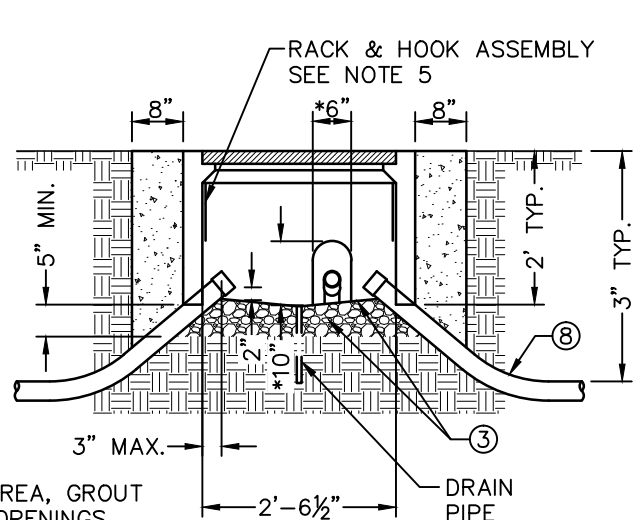
**PLAN**



**PLAN-NO LID**



**SECTION A-A**



**SECTION B-B**

\*KNOCKOUT AREA, GROUT AND FINISH OPENINGS AFTER CONDUIT IS INSTALLED

NOTE: STRICTER REQUIREMENTS AS DIRECTED BY THE CITY ENGINEER IF PULL BOX IS WITHIN ROADWAY.

**LEGEND:**

- ① FIBER OPTIC CABLE SPLICE CLOSURE.
- ② FIBER OPTIC SPLICE VAULT LID.
- ③ 1.5 INCH MAXIMUM COARSE AGGREGATE WITH 2 INCHES GROUT COVER OVER THE AGGREGATE. THE GROUT COVER SHALL BE SLOPED TOWARD THE DRAIN FOR DRAINAGE.
- ④ FIBER OPTIC CABLE. COIL AS REQUIRED.
- ⑤ PROPOSED SMFO BRANCH OR TRUNKLINE CONDUIT, IF NEEDED SEE PLANS
- ⑥ RACK & HOOK ASSEMBLY. SEE NOTE 5 ON TYPICAL COMMUNICATIONS VAULT INSTALLATION NOTES STANDARD DRAWING
- ⑦ TRAFFIC SIGNAL CONDUIT TYP. IF NEEDED. SEE PLANS.
- ⑧ 45 DEGREE ELBOW, 36" RADIUS MIN. ELBOW AND COUPLING MAY NOT BE NECESSARY FOR NEW CONDUIT INSTALLED BY DIRECTIONAL BORING. NEW CONDUIT INSTALLED BY DIRECTIONAL DRILLING SHALL ENTER SPLICE VAULT WITH BENDING RADIUS OF 36" MIN. SEE NOTE 15.
- ⑨ WARNING TAPE. FOR NEW CONDUIT INSTALLED BY TRENCHING
- ⑩ COIL 3 FEET OF TRACER WIRE.
- ⑪ SPLICE TRACER WIRE PER CALTRANS STANDARD SPECIFICATIONS FOR CONDUCTOR SPLICING.

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 CITY ENGINEER R.P.E. 81734 DATE 09/16/16

CITY OF VISALIA  
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TYPICAL COMMUNICATIONS  
 VAULT INSTALLATION 1 OF 2

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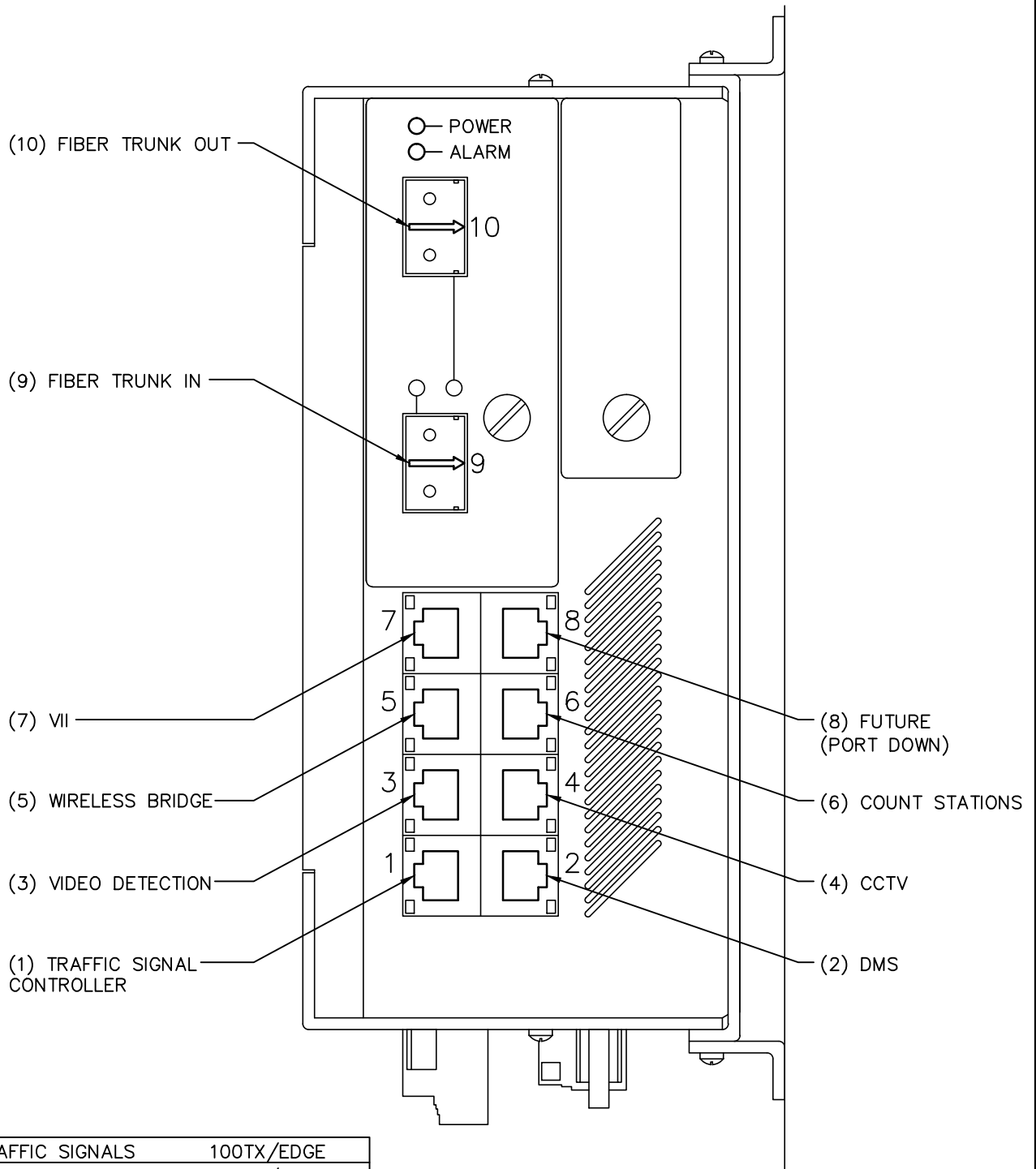
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TYPICAL COMMUNICATIONS VAULT INSTALLATION NOTES:

1. TRUNKLINE CONDUIT(S) FROM THE TYPICAL BORE OR TRENCH SECTION SHOULD NOT DEFLECT BY MORE THAN ONE FOOT PER 10 FEET FROM THE ALIGNMENT PRECEDING OR FOLLOWING PULL BOX/SPLICE VAULT ENTRANCE/EXIT.
2. EXCESS CONDUIT FOR ALL CONDUIT ENDS SHALL BE CUT BACK TO PROVIDE STUB ENDS OF 1" MINIMUM TO 2" MAXIMUM.
3. SEE PLAN SHEETS FOR NUMBER AND SIZE OF CONDUIT.
4. IF MORE THAN 3 CONDUITS ARE REQUIRED IN SAME KNOCKOUT, KNOCKOUT SHALL BE WIDENED TO 1/2" MORE THAN THE COMBINED CONDUIT WIDTH.
5. ALL SPLICE VAULTS SHALL BE FURNISHED WITH TWO RACKS AND HOOKS INSTALLED ON EACH OF THE TWO LONG SIDES.
6. TRUNKLINE CONDUITS SHALL ENTER THROUGH KNOCKOUTS.
7. SPLICE VAULTS, VAULT EXTENSION, AND VAULT LIDS SHALL BE CHRISTY N48 UTILITY BOX OR APPROVED EQUIVALENT, AND SUPPORT MINIMUM TEST LOAD OF 12,500 LBS. IF SPLICE VAULT IS LOCATED IN TRAVEL WAY, SPLICE VAULT AND LID SHALL CONFORM VERTICAL PROOF LOAD STRENGTH REQUIREMENT AS PER CALTRANS STANDARD SPECIFICATIONS, SECTION 86-2.07.
8. LOCKING MECHANISM SHALL BE PROVIDED FOR VAULT LID. TWO 3/8" PENTA HEAD BOLTS AT 90° SHALL BE USED, ONE 3/8" PENTA HEAD SOCKET AND RATCHET SHALL BE PROVIDED TO CITY OF VISALIA FOR EVERY 10 SPLICE VAULTS.
9. "VISALIA COMMUNICATIONS" SHALL BE CASTED ON THE TOP FACE OF ALL VAULT LIDS.
10. CUT CONDUIT, DE-BURR, AND RE-THREAD PRIOR TO INSTALLING FIBER OPTIC CABLE AND/OR OTHER CABLES/CONDUCTORS. ALL METALLIC CONDUITS SHALL HAVE THREADED METALLIC BUSHINGS. ALL PVC AND HDPE CONDUITS SHALL HAVE BELL ENDS.
11. FURNISH AND INSTALL CAPS OR DUCT PLUGS FOR ALL UNUSED CONDUIT.
12. SPLICE CLOSURE SHALL BE ATTACHED TO THE RACK AND HOOK SYSTEM ON THE SAME SIDE AS THE FIBER OPTIC CABLE. THE SPLICE CLOSURE SHALL BE ANGLED TO FACILITATE MINIMUM BENDING RADIUS IN THE CABLE.
13. IF APPLICABLE, SPLICE VAULT HEIGHT ABOVE EXISTING DIRT GRADE SHALL PERMIT 1" OF FUTURE SURFACE LANDSCAPING. WHEN SPLICE VAULT IS INSTALLED IN EXISTING SIDEWALK, SPLICE VAULT LID SHALL SIT FLUSH WITH THE SIDEWALK. COORDINATE WITH ENGINEER WHERE THIS APPLIES.
14. EACH FIBER OPTIC SPLICE VAULT SHALL BE EQUIPPED WITH 50' MIN. OF SLACK IN THE TRUNKLINE CABLE AND 25' MIN. OF SLACK IN THE BRANCH CABLE, ON EACH SIDE OF FIBER OPTIC SPLICE CLOSURE. (I.E. THE TRUNKLINE CABLE TYPICALLY WILL HAVE 50' OF SLACK AND THE BRANCH CABLE WILL TYPICALLY HAVE 25' OF SLACK.)
15. BOTTOM OF CONDUIT CENTERLINE SHALL BE ALIGNED TO EXIT TOP OF SPLICE VAULT TO FACILITATE CABLE PULLING.
16. MINIMUM SPLICE VAULT DEPTH SHALL BE 2'. IF NECESSARY, AN EXTENSION MAY BE USED TO MEET THIS REQUIREMENT.

APPROVED BY:  CITY ENGINEER      R.P.E. 81734	CITY OF VISALIA <b>DESIGN &amp; IMPROVEMENT STANDARDS</b>
09/16/16 DATE	

<b>TYPICAL COMMUNICATIONS VAULT INSTALLATION 2 OF 2</b>	REVISIONS 09/15/16 BK 2016	<b>TE-11</b>
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PORT 1	TRAFFIC SIGNALS	100TX/EDGE
PORT 2	DMS	100TX/EDGE
PORT 3	VIDEO DETECTION	100TX/EDGE
PORT 4	CCTV	100TX/EDGE
PORT 5	WIRELESS	100TX/TRUNK
PORT 6	COUNT STATIONS	100TX/EDGE
PORT 7	VII (FUTURE)	100TX/EDGE
PORT 8	SPARE	100TX/OFF
PORT 9	FIBER IN	1000FX/TRUNK
PORT 10	FIBER OUT	1000FX/TRUNK

APPROVED BY:   
 CITY ENGINEER R.P.E. 81734 DATE 09/16/16

CITY OF VISALIA  
 DESIGN & IMPROVEMENT STANDARDS

ITS FIELD SWITCH STATIC PORT  
 ASSIGNMENTS

REVISIONS  
 08/25/16  
 BK 2016

TE-12