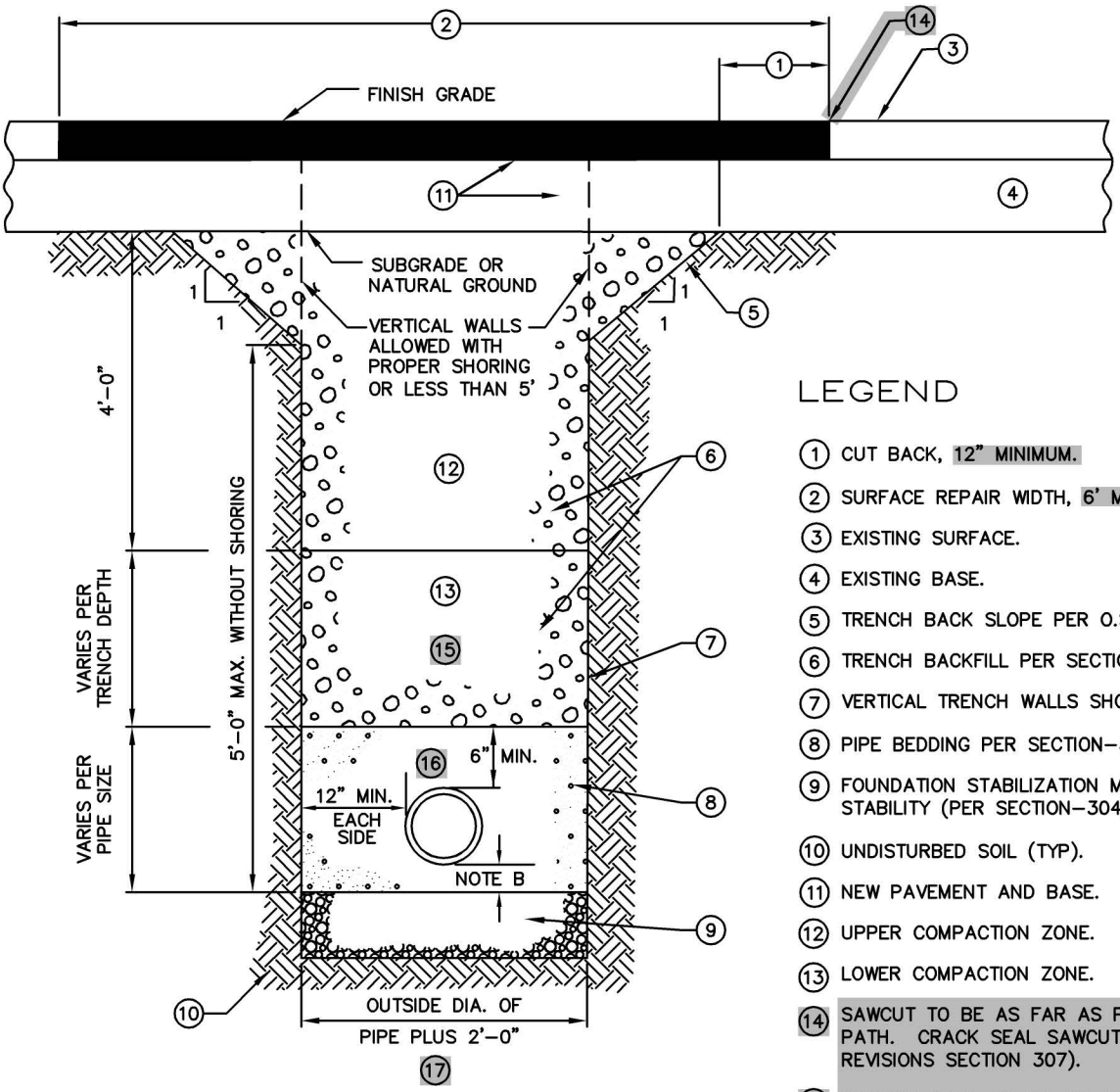


LEGEND

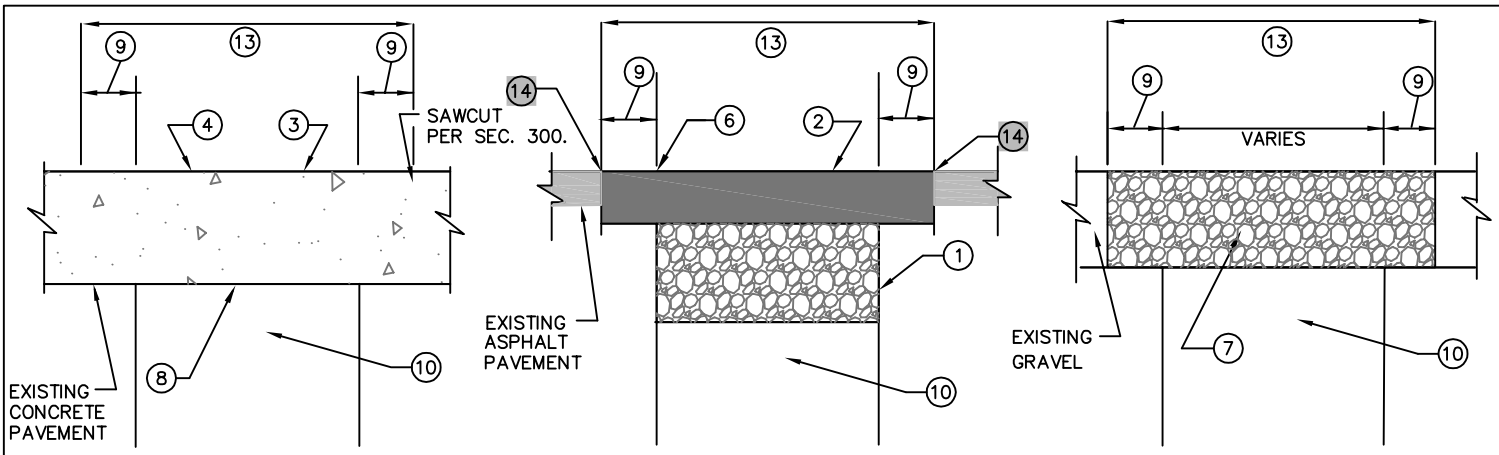
1. CUT BACK, 12" MINIMUM.
2. SURFACE REPAIR WIDTH, 6' MINIMUM.
3. EXISTING SURFACE.
4. EXISTING BASE.
5. TRENCH BACK SLOPE PER O.S.H.A. OR SUITABLE SHORING.
6. TRENCH BACKFILL PER SECTION–306.
7. VERTICAL TRENCH WALLS SHORING PER O.S.H.A..
8. PIPE BEDDING PER SECTION–305 (SEE SD–302).
9. FOUNDATION STABILIZATION MAY VARY PER SOIL TYPE AND STABILITY (PER SECTION–304).
10. UNDISTURBED SOIL (TYP).
11. NEW PAVEMENT AND BASE.
12. UPPER COMPACTION ZONE.
13. LOWER COMPACTION ZONE.
14. SAWCUT TO BE AS FAR AS POSSIBLE FROM VEHICULAR WHEEL PATH. CRACK SEAL SAWCUT(S). (SEE CITY OF TWIN FALLS REVISIONS SECTION 307).
15. MARKING TAPE TO BE 12" ABOVE TOP OF PIPE.
16. PLACE OR ATTACH FINDER WIRE AT CROWN OF PIPE FOR WATER AND PRESSURIZED IRRIGATION PIPES.
17. ROCK SAW WIDTH MAY BE NARROWER WITH WRITTEN PERMISSION OF CITY ENGINEER.

NOTES

- (A) TRENCH EXCAVATION PER SECTION–301.
- (B) PIPE BEDDING PER SECTION–305.
- (C) BACKFILL AND COMPACTION PER SECTION–306.
- (D) SURFACE REPAIR AND BASE PER SECTION–307 (SEE TFSD–303).
- (E) MINIMUM 30" COVER ON TOP OF WATER, IRRIGATION, STORM AND SEWER PIPES.

2016

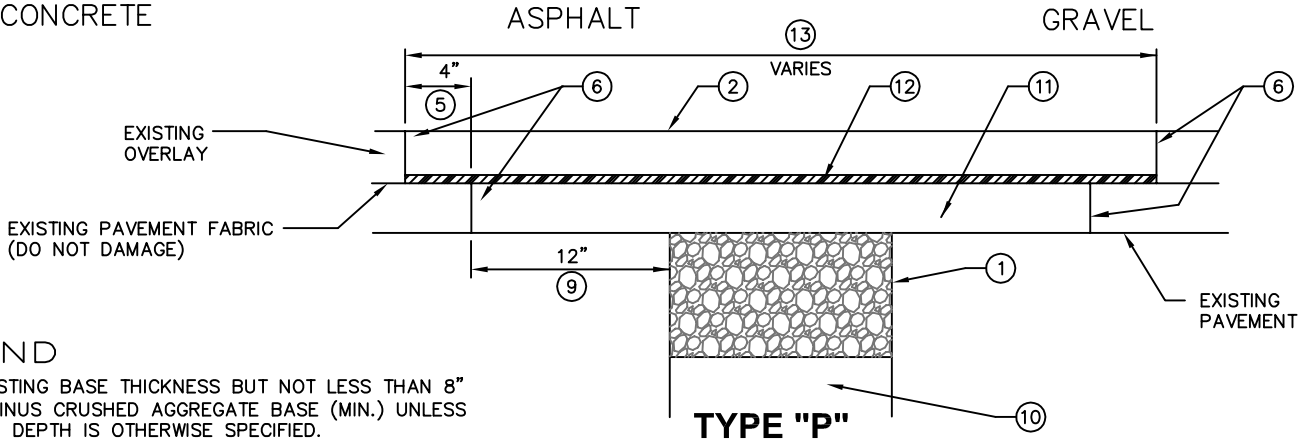
CITY OF TWIN FALLS	TYPICAL TRENCH	STANDARD DRAWING NO. TFSD–301



TYPE "B"
CONCRETE

TYPE "P"
ASPHALT

TYPE "C"
GRAVEL



TYPE "P"
ASPHALT W/PAVEMENT FABRIC

LEGEND

(1) MATCH EXISTING BASE THICKNESS BUT NOT LESS THAN 8" OF 3/4" MINUS CRUSHED AGGREGATE BASE (MIN.) UNLESS A GREATER DEPTH IS OTHERWISE SPECIFIED.

(2) PAVEMENT DEPTH TO BE 2" MORE THAN ADJACENT EXISTING PAVEMENT, BUT IT NEED NOT EXCEED 6" UNLESS A GREATER DEPTH IS OTHERWISE SPECIFIED. USE NO LESS THAN A 2 1/2" (MIN.) MAT ON RESIDENTIAL STREETS AND 3" (MIN.) MAT ON COLLECTORS.

(3) PORTLAND CEMENT CONCRETE SHALL BE CLASS 4000 PSI EARLY STRENGTH, AND COMPLY WITH SECTION–706.

(4) KEEP TRAFFIC OFF ROADWAY UNTIL IT ACHIEVES SPECIFIED STRENGTH, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

(5) MINIMUM DISTANCES. 4" OVERLAP APPLIES WHERE FABRIC IS BETWEEN ASPHALT LAYERS.

(6) CUT ASPHALT IN NEAT STRAIGHT LINE.

(7) 3/4" MINUS AGGREGATE SURFACE COURSE (8") OR THICKNESS OF EXISTING GRAVEL, WHICHEVER IS GREATER.

(8) THICKNESS EQUALS EXISTING PAVEMENT DEPTH PLUS 2" OF CONCRETE PAVEMENT.

(9) CUT BACK, 12" MINIMUM. NOT LESS THAN 1' TO EDGE OF CONCRETE PANEL.

(10) COMPACTED TRENCH BACKFILL AS PER TFSD–301 AND SECTION–306 OF THESE SPECIFICATIONS.

(11) ASPHALT TO EXISTING SHELF (MIN 2" THICK).

(12) PLACE NEW PAVEMENT FABRIC FULL WIDTH OF ASPHALT PATCH.

(13) 6' MINIMUM WIDTH FOR SURFACE RESTORATION. FULL PANEL TO BE REPLACED WHEN IN CONCRETE SECTION.

(14) SAWCUT TO BE AS FAR AS POSSIBLE FROM VEHICULAR WHEEL PATH. CRACK SEAL SAWCUT(S). (SEE CITY OF TWIN FALLS REVISIONS SECTION 307).

NOTES:

(A) REFER TO SECTION–307 FOR MATERIALS AND WORKMANSHIP REQUIREMENTS.

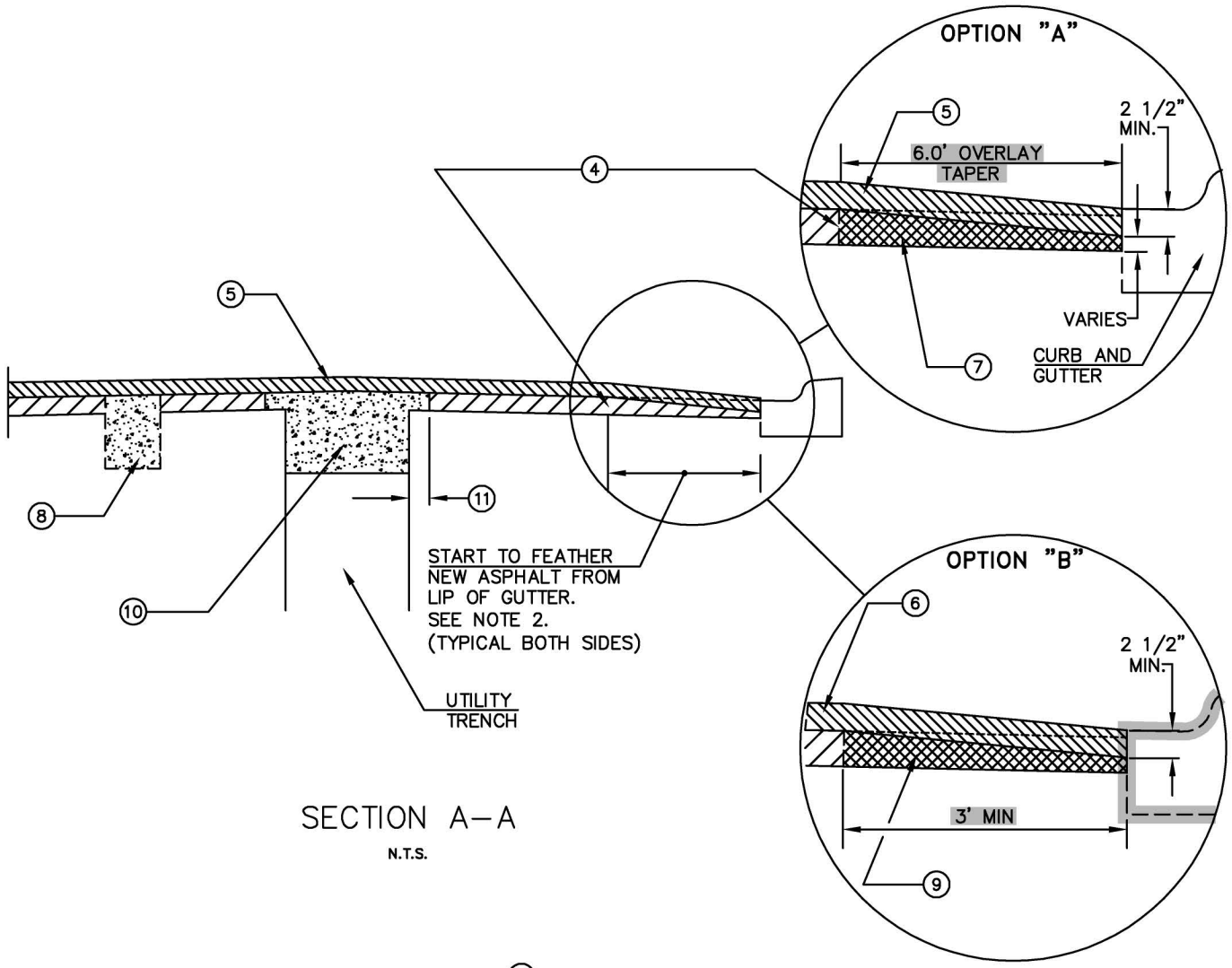
(B) ALL STREET CUTS WILL REQUIRE RESURFACING BY A PAVING MACHINE OR SPREADER BOX. PATCH WIDTHS ARE NEVER TO BE LESS THAN 4' IN WIDTH. LOCATE THE MATCH OF THE NEW TO EXISTING PAVEMENT OUT OF THE VEHICLE WHEEL PATH OF THE STREET.

(C) WHERE THE STREET SURFACE INCLUDES AN OVERLAY WITH FABRIC, TAKE THE FOLLOWING ADDITIONAL STEPS:
- A. OVERLAY ABOVE FABRIC AN ADDITIONAL 4" ON EACH SIDE TO EXPOSE EXISTING FABRIC.
- B. INSTALL NEW ASPHALT TO GRADE FABRIC.
- C. INSTALL NEW FABRIC FULL WIDTH OF CUT, IN ACCORDANCE WITH MANUFACTURE'S INSTRUCTIONS.
- D. OVERLAY FABRIC WITH ASPHALT TO FINISH GRADE OF STREET.

(D) TACK ALL COLD JOINT SURFACES WITH EMULSION WHICH HAS BEEN "BROKEN" PRIOR TO PATCHING.

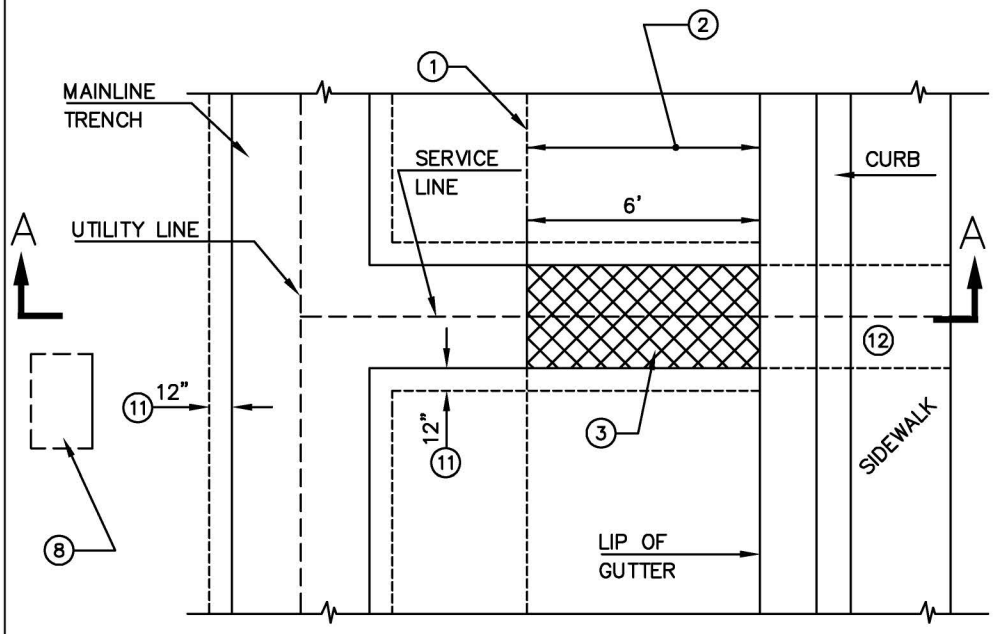
2018

CITY OF TWIN FALLS	STREET CUTS AND SURFACE REPAIR DETAILS	STANDARD DRAWING NO. TFSD–303



SECTION A–A

N.T.S.



PLAN VIEW

N.T.S.

MODIFIED FULL WIDTH SURFACE RESTORATION

NOTE:

(A) REPAIR PAVEMENT SOFT SPOTS PRIOR TO OVERLAY.

(B) SEE TFSD–303B FOR LEGEND.

2016 * FOR LOCAL OR RESIDENTIAL STREETS ONLY.

CITY OF TWIN FALLS	TYPE "P" ALTERNATE FOR MODIFIED FULL WIDTH SURFACE RESTORATION *	STANDARD DRAWING NO. TFSD–303A

LEGEND

(1) BEGIN TAPER.

(2) REMOVE OR ROTOMILL 6' OF PAVEMENT UNDER OPTION "A". UNDER OPTION "B", THIS DISTANCE CAN BE 3' WHEN THE SERVICE LINES ARE PATCHED AND THE CROWN OF THE STREET IS NOT EXCESSIVE ENOUGH TO PROMOTE A SLOPE THAT EXCEEDS 8% CROSS SLOPE IN A PARKING LANE OR 4% IN A DRIVING LANE. IF THE ASPHALT IS CUT OR REMOVED, DO NOT ALLOW THE PATCH SEAM TO FALL WITHIN A WHEEL PATH. OPTION "B" IS MORE TYPICAL OF A STREET THAT DOES NOT HAVE CURB OR GUTTER.

(3) WIDTH OF ROAD EDGE REPAIR: 6' FOR OPTION "A". MINIMUM 3' FOR OPTION "B". SEE NOTE (2).

(4) REMOVE OR ROTOMILL 6' WIDE ASPHALT STRIP FOR OPTION "A" AND PREPARE A MINIMUM 3' WIDE SECTION FOR OPTION "B" (TYPICAL FOR BOTH SIDES). OPTION "B" WILL BE USED WHERE NO CURB IS PRESENT, UNLESS OTHERWISE APPROVED.

(5) 2.5" (MIN.) ASPHALT FULL WIDTH OVERLAY.

(6) ASPHALT WILL TAPER FROM 2.5" TO THE LIP OF CURB.

(7) PLACE 3/4" MINUS CRUSHED GRAVEL TO CREATE TAPER. ALL SERVICE LINES SHALL FOLLOW NOTE (10).

(8) SOFT SPOT REPAIR, SEE SPECIFICATIONS.

(9) ALL SERVICE LINE TRENCH PATCHES TO MATCH EXISTING MAT, UNLESS OTHERWISE SPECIFIED. EXTEND THE SERVICE PATCH 12" BEYOND THE START OF THE TAPER. THE PATCH WILL BE PLACED TO THE ORIGINAL SURFACE GRADE.

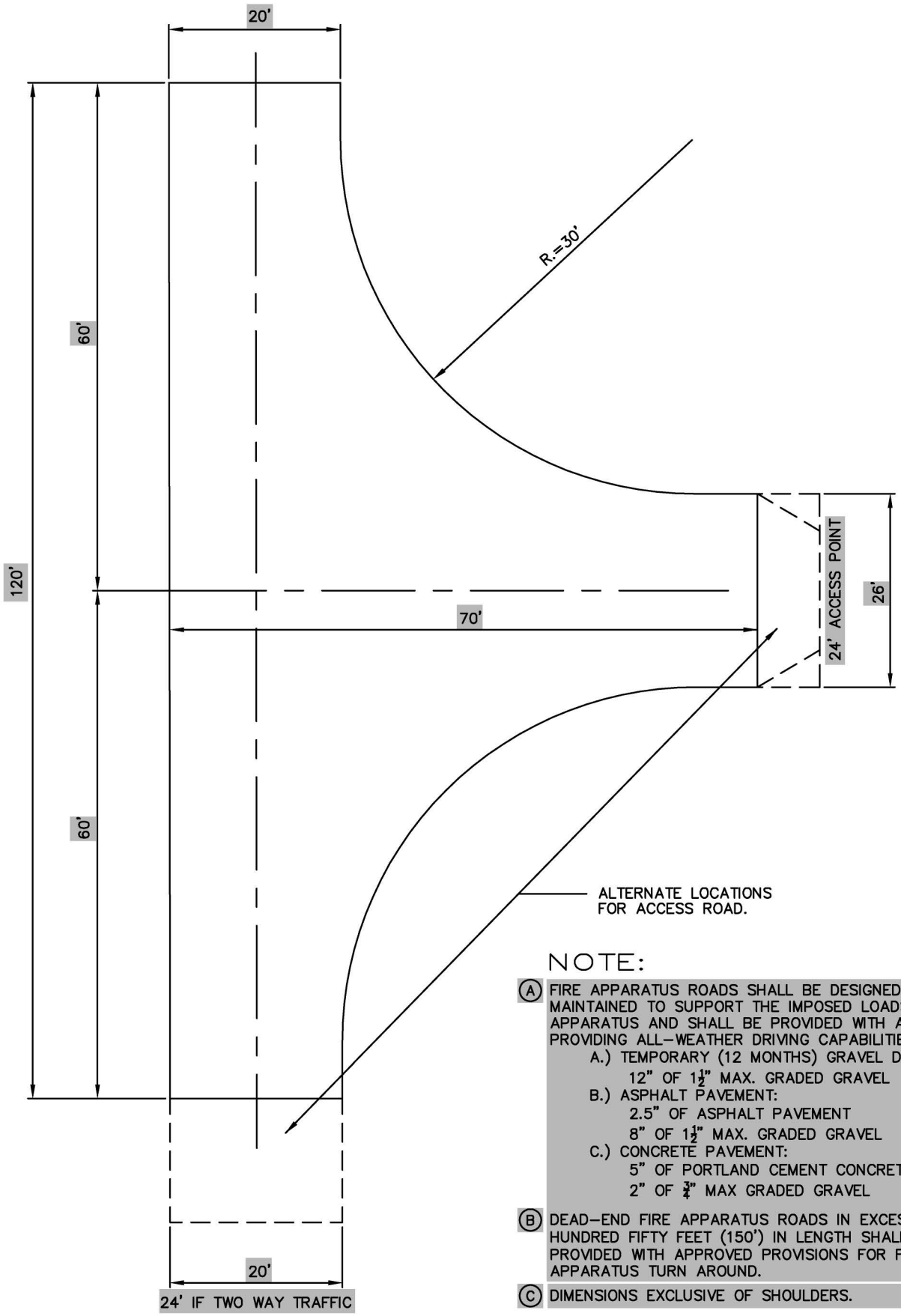
(10) PLACE A MINIMUM OF 8" OF 3/4" MINUS GRAVEL AS BASE IN TRENCH OR MATCH EXISTING BASE THICKNESS, WHICHEVER IS GREATER.

(11) NO LONGITUDINAL ASPHALT PATH SEAMS SHALL FALL IN THE WHEEL PATH FOR VEHICULAR TRAFFIC.

(12) REPLACE ANY DAMAGED CURB, GUTTER, OR SIDEWALK DURING CONSTRUCTION.

2016

CITY OF TWIN FALLS	TYPE "P" ALTERNATE FOR MODIFIED FULL WIDTH SURFACE RESTORATION *	STANDARD DRAWING NO. TFSD-303B



NOTE:

(A) FIRE APPARATUS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE PROVIDED WITH A SURFACE PROVIDING ALL-WEATHER DRIVING CAPABILITIES.

A.) TEMPORARY (12 MONTHS) GRAVEL DRIVES:
12" OF 1½" MAX. GRADED GRAVEL

B.) ASPHALT PAVEMENT:
2.5" OF ASPHALT PAVEMENT
8" OF 1½" MAX. GRADED GRAVEL

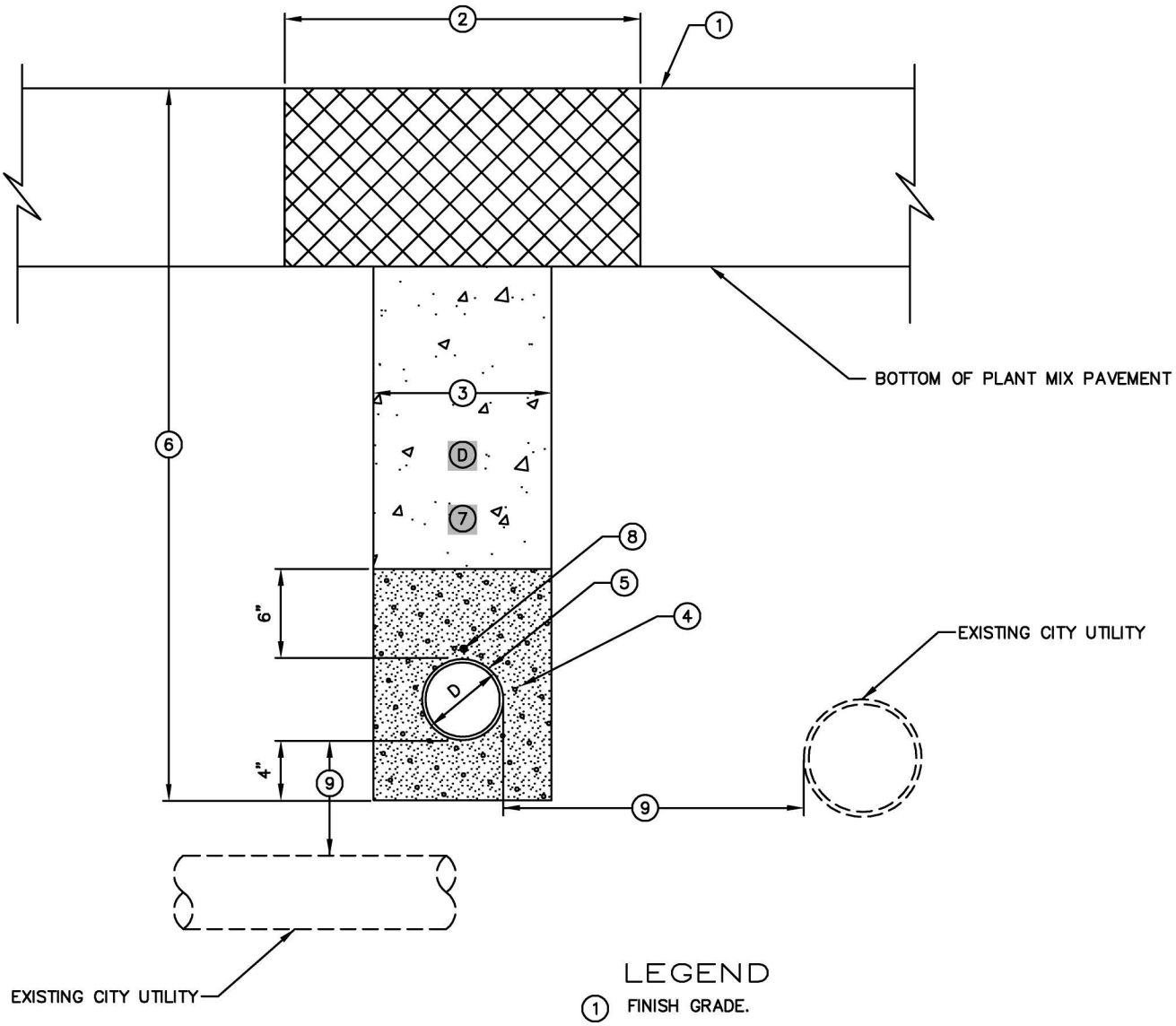
C.) CONCRETE PAVEMENT:
5" OF PORTLAND CEMENT CONCRETE
2" OF ¾" MAX GRADED GRAVEL

(B) DEAD-END FIRE APPARATUS ROADS IN EXCESS OF ONE HUNDRED FIFTY FEET (150') IN LENGTH SHALL BE PROVIDED WITH APPROVED PROVISIONS FOR FIRE APPARATUS TURN AROUND.

(C) DIMENSIONS EXCLUSIVE OF SHOULDERS.

2016

CITY OF TWIN FALLS	FIRE ACCESS ROAD TURNAROUND DETAIL	STANDARD DRAWING NO. TFSD-305



LEGEND

1. FINISH GRADE.
2. SURFACE REPAIRS PER SECTION–307 AND TFSD–303.
3. 12" MINIMUM INSIDE VEHICLE TRAVEL AREAS, D+3" OUTSIDE VEHICLE TRAVEL AREAS.
4. TYPE I OR TYPE III BEDDING FOR AREAS INSIDE THE VEHICLE TRAVEL AREA. TYPE I OR TYPE III BEDDING, OR NATIVE NON–ORGANIC MATERIAL WITH MAXIMUM PARTICLE SIZE OF 3/4" OUTSIDE VEHICLE TRAVEL AREA.
5. PIPE OR CONDUIT.
6. 48" MAX. UNLESS OTHERWISE SPECIFIED.
   30" MIN. OR BELOW THE BALLAST, WHICHEVER IS GREATER. INSIDE VEHICLE TRAVEL AREAS.
   24" MIN. OR BELOW THE BALLAST WHICHEVER IS GREATER. OUTSIDE VEHICLE TRAVEL AREAS.
7. MARKING TAPE TO BE 12" ABOVE TOP OF PIPE.
8. LOCATE WIRE IN OR ON PIPE IF REQUIRED BY OWNER.
9. UTILITY WORK MUST MAINTAIN A 6" MIN VERTICAL AND A 36" MIN HORIZONTAL SEPARATION FROM EXISTING CITY UTILITIES, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

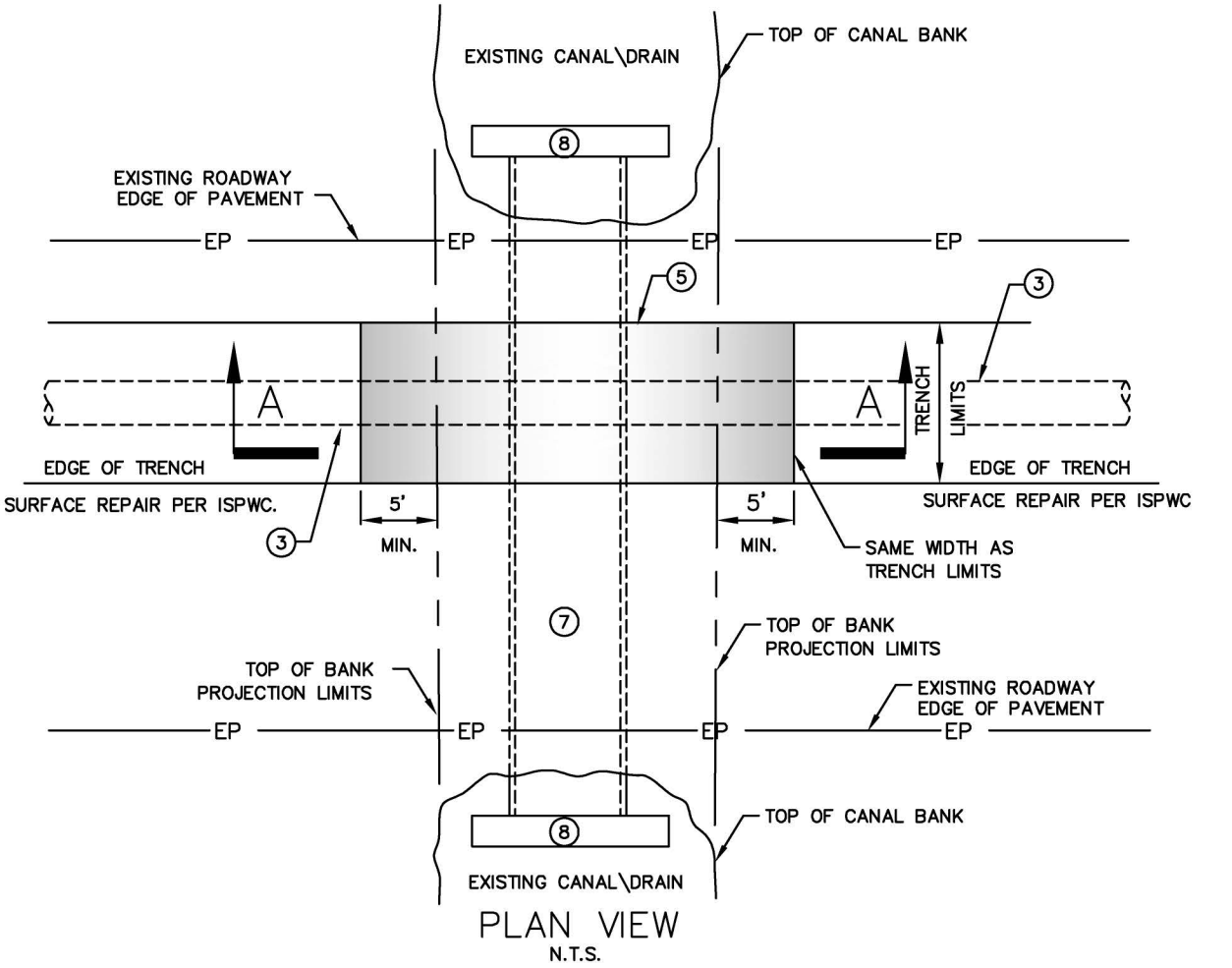
NOTES

- (A) USE THIS TRENCH TO PLACE CABLE, CONDUIT, OR PIPE LESS THAN 6" IN DIAMETER.
- (B) COMPACT BACKFILL PER SECTION–306.
- (C) CUT ALL ASPHALT IN A STRAIGHT LINE.
- (D) FOR ANY TRENCH WIDTH < 24" IN TRAFFIC AREAS, USE LOW STRENGTH FLOWABLE OR COMPACTABLE FILL PER SECTION 703.

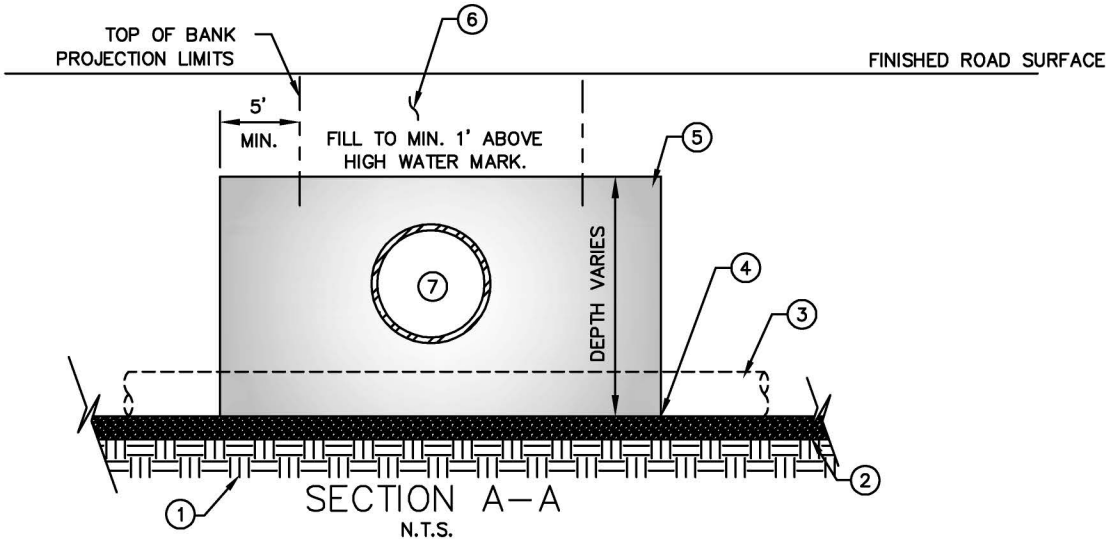
UTILITY POTHOLES 1 SQUARE FOOT OR LESS MAY BE REPAIRED USING GROUT. IF POTHOLES ARE GREATER THAN 1 SQUARE FOOT USE COMPACTED PEA GRAVEL BELOW A PLANT MIX CAP.

2016

CITY OF TWIN FALLS	UTILITY TRENCH	STANDARD DRAWING NO. TFSD–306



PLAN VIEW
N.T.S.



SECTION A–A
N.T.S.

LEGEND

1. EXISTING GROUND.
2. PIPE BEDDING PER ISPWC.
3. INSTALLED PIPE BENEATH CANAL\DRAIN CROSSING.
4. FLOWABLE FILL FROM TOP OF PIPE BEDDING.
5. FLOWABLE FILL.
6. BACKFILL PER TFSD–301. SURFACE REPAIR PER TFSD–303.
7. CULVERT CROSSING.
8. HEADWALL.

2016

CITY OF TWIN FALLS	FLOWABLE FILL AT CULVERT CROSSINGS	STANDARD DRAWING NO. TFSD–308

NOTES:

(A) ALL PRODUCTS AS LISTED OR APPROVED SUBSTITUTIONS.

(B) NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED.

(C) SERVICE PIPE: POLYETHYLENE PRESSURE PIPE, SDR 9, 200 PSI, CENFLO HDPE, ASTM D2737 CTS.

(D) SADDLE COUPLINGS: USED FOR CONNECTION OF ALL SERVICE LINES TO PVC MAIN. SERVICE SADDLES: PAINTED SADDLE WITH STAINLESS STEEL DOUBLE BAND, ROMAC, STYLE 202S.

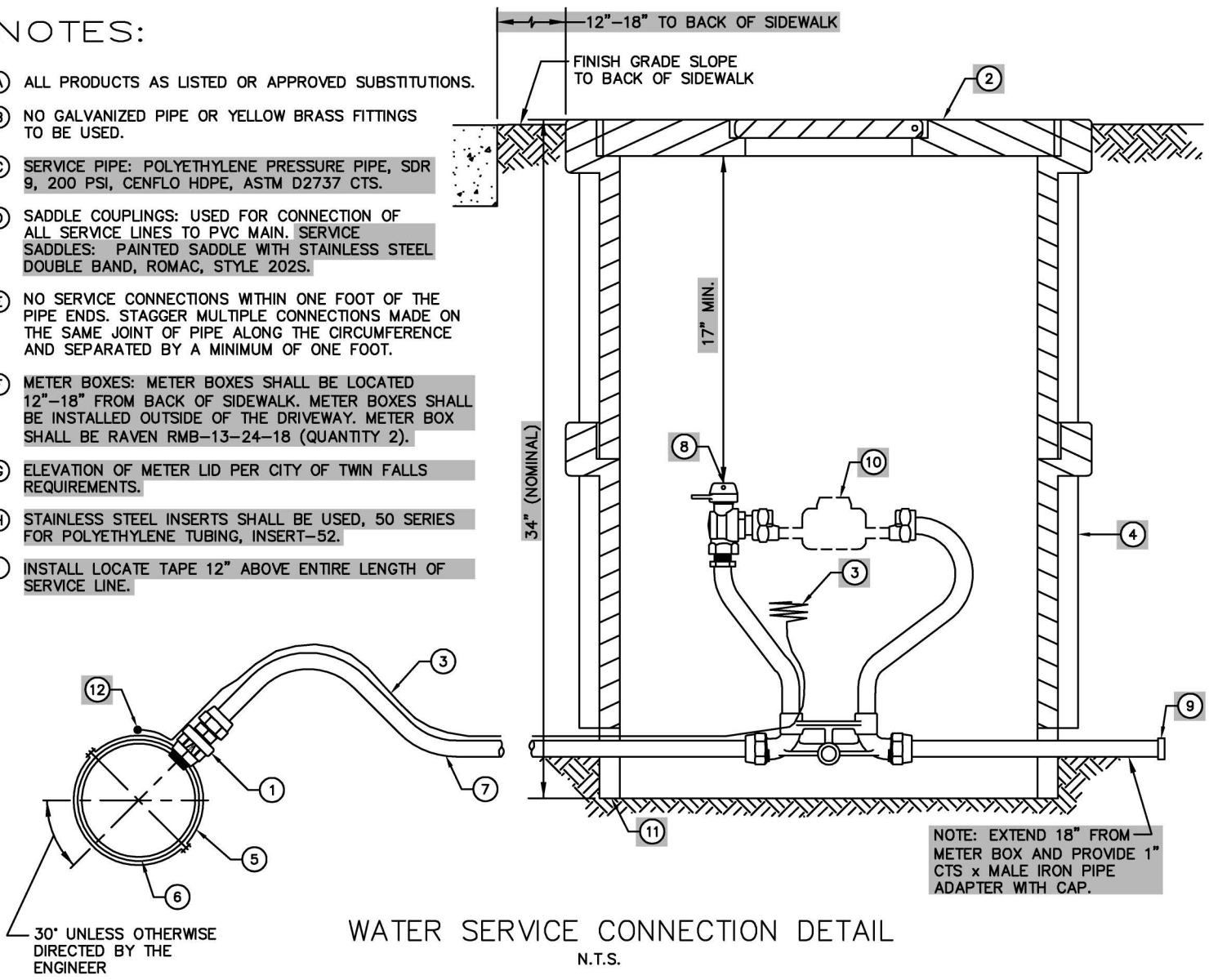
(E) NO SERVICE CONNECTIONS WITHIN ONE FOOT OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF ONE FOOT.

(F) METER BOXES: METER BOXES SHALL BE LOCATED 12"–18" FROM BACK OF SIDEWALK. METER BOXES SHALL BE INSTALLED OUTSIDE OF THE DRIVEWAY. METER BOX SHALL BE RAVEN RMB–13–24–18 (QUANTITY 2).

(G) ELEVATION OF METER LID PER CITY OF TWIN FALLS REQUIREMENTS.

(H) STAINLESS STEEL INSERTS SHALL BE USED, 50 SERIES FOR POLYETHYLENE TUBING, INSERT–52.

(I) INSTALL LOCATE TAPE 12" ABOVE ENTIRE LENGTH OF SERVICE LINE.



WATER SERVICE CONNECTION DETAIL

N.T.S.

KEYNOTES:

1. GRIP JOINT CORPORATION STOP, FB1000–4–G–NL BALLCORP STYLE FOR CTS PE PIPE, OR APPROVED EQUAL.
2. RAVEN METER BOX LID, RML 13x24–POLY LID, OR APPROVED EQUAL.
3. NO. 12 COPPER LOCATE WIRE. PROVIDE A MINIMUM OF 24" COILED LOCATE WIRE IN BOX.
4. RAVEN PRODUCTS WATER METER BOX, RMB–13–24–18, OR APPROVED EQUAL.
5. ROMAC PAINTED STAINLESS STEEL DOUBLE BAND SADDLE, ROMAC 202S, OR APPROVED EQUAL.
6. WATER MAIN.
7. 1" SERVICE LINE, NO SPLICING ALLOWED.
8. FORD 70 SERIES COPPERSETTER CENTERED IN BOX, VB74–18W–44–44–G–NL, OR APPROVED EQUAL.
9. PROVIDE 1" CTS x MALE IRON PIPE ADAPTER WITH CAP.
10. CITY APPROVED METER TO BE PAID FOR BY OTHERS & FURNISHED & INSTALLED BY CITY OF TWIN FALLS.
11. PLACE METER BOX ON FIRM, UNDISTURBED, LEVEL EARTH.
12. CONNECT WATER SERVICE LOCATE WIRE WITH WATER MAIN LOCATE WIRE WITH WATERPROOF SPLICE CONNECTOR.

2016

CITY OF TWIN FALLS	WATER SERVICE CONNECTION (1")	STANDARD DRAWING NO. TFSD–401

NOTES:

(A) ALL PRODUCTS AS LISTED OR APPROVED EQUALS.

(B) NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED.

(C) SERVICE PIPE: POLYETHYLENE PRESSURE PIPE, SDR 9, 200 PSI, CENFLO HDPE, ASTM D2737 CTS.

(D) SADDLE COUPLINGS: USED FOR CONNECTION OF ALL SERVICE LINES TO PVC MAIN. SERVICE SADDLES: PAINTED SADDLE WITH STAINLESS STEEL DOUBLE BAND, ROMAC, STYLE 202S.

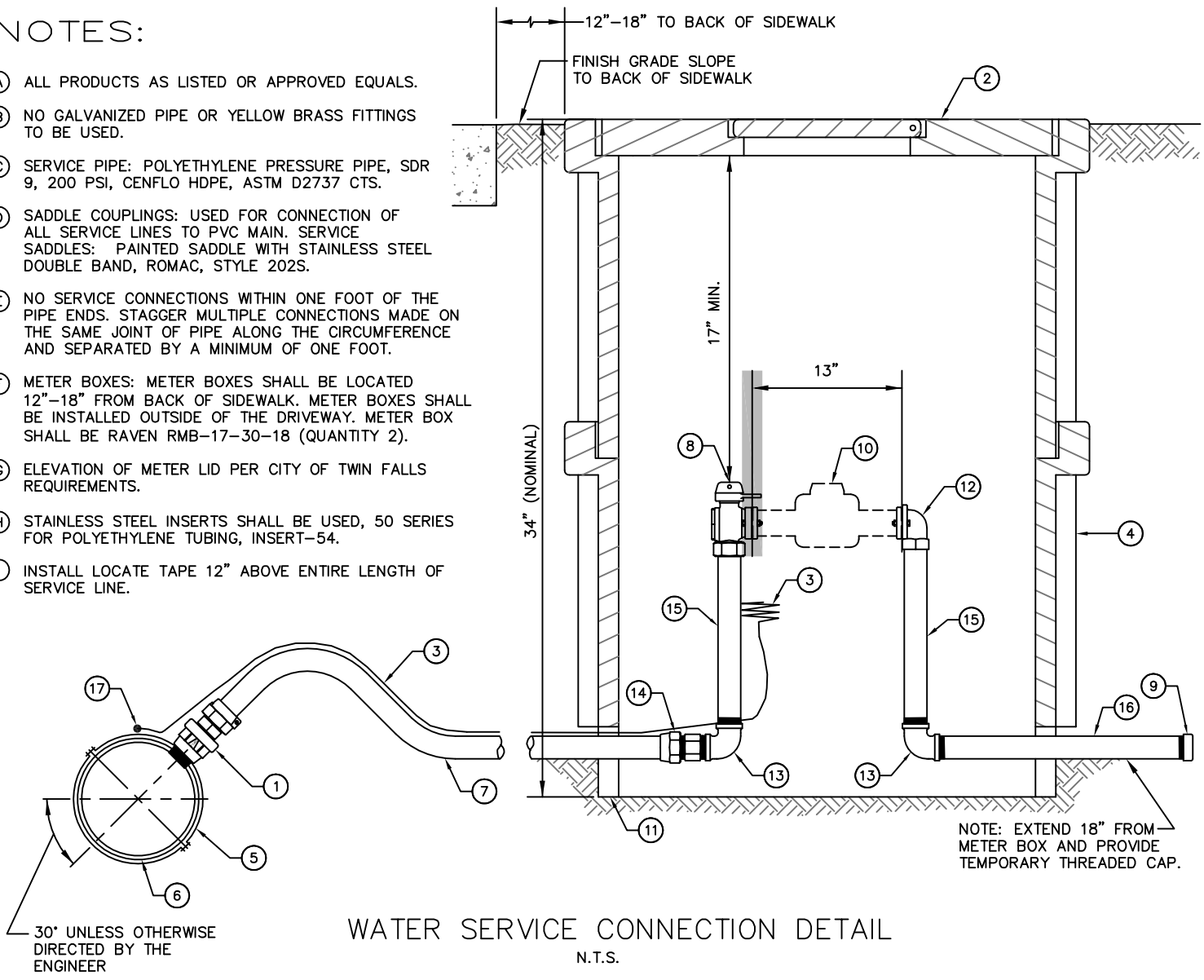
(E) NO SERVICE CONNECTIONS WITHIN ONE FOOT OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF ONE FOOT.

(F) METER BOXES: METER BOXES SHALL BE LOCATED 12"–18" FROM BACK OF SIDEWALK. METER BOXES SHALL BE INSTALLED OUTSIDE OF THE DRIVEWAY. METER BOX SHALL BE RAVEN RMB–17–30–18 (QUANTITY 2).

(G) ELEVATION OF METER LID PER CITY OF TWIN FALLS REQUIREMENTS.

(H) STAINLESS STEEL INSERTS SHALL BE USED, 50 SERIES FOR POLYETHYLENE TUBING, INSERT–54.

(I) INSTALL LOCATE TAPE 12" ABOVE ENTIRE LENGTH OF SERVICE LINE.



WATER SERVICE CONNECTION DETAIL

N.T.S.

KEYNOTES:

(1) GRIP JOINT CORPORATION STOP, (1 1/2") FB1001–6–IDR7–NL, BALLCORP STYLE FOR CTS PE PIPE, OR APPROVED EQUAL.

(2) RAVEN METER BOX LID, RML 17x30–POLY LID, OR APPROVED EQUAL.

(3) NO. 12 COPPER LOCATE WIRE. PROVIDE A MINIMUM OF 24" COILED LOCATE WIRE IN BOX.

(4) RAVEN PRODUCTS WATER METER BOX, RMB–17–30–18, OR APPROVED EQUAL.

(5) ROMAC PAINTED SADDLE WITH STAINLESS STEEL DOUBLE BAND, ROMAC 202S, OR APPROVED EQUAL.

(6) WATER MAIN.

(7) 1 1/2" SERVICE LINE, NO SPLICING ALLOWED.

(8) ANGLE BALL FLANGE METER VALVE, BFA13–666W, OR APPROVED EQUAL.

(9) PROVIDE TEMPORARY THREADED CAP.

(10) CITY APPROVED METER TO BE PAID FOR BY OTHERS & FURNISHED & INSTALLED BY CITY OF TWIN FALLS.

(11) PLACE METER BOX ON FIRM, UNDISTURBED, LEVEL EARTH.

(12) FLANGE METER ELL, LF31–66–NL, OR APPROVED EQUAL.

(13) 1 1/2" CAST BRONZE THREADED 90° EL.

(14) 1 1/2" GRIP JOINT COUPLING A.Y. McDONALD 74753G 1 1/2", 1 1/2" PACK JOINT COUPLING A.Y. McDONALD 74753–22 1 1/2", OR APPROVED EQUAL.

(15) 1 1/2" SCHEDULE 80 PVC NIPPLE, 18" IN LENGTH.

(16) 1 1/2" SCHEDULE 80 PVC NIPPLE, 24" IN LENGTH.

(17) CONNECT WATER SERVICE LOCATE WIRE WITH WATER MAIN LOCATE WIRE WITH WATERPROOF SPLICE CONNECTOR.

2018

CITY OF TWIN FALLS	WATER SERVICE CONNECTION (1 1/2")	STANDARD DRAWING NO. TFSD–402

NOTES:

(A) ALL PRODUCTS AS LISTED OR APPROVED EQUALS.

(B) NO GALVANIZED PIPE OR YELLOW BRASS FITTINGS TO BE USED.

(C) SERVICE PIPE: POLYETHYLENE PRESSURE PIPE, SDR 9, 200 PSI, CENFLO HDPE, ASTM D2737 CTS.

(D) SADDLE COUPLINGS: USED FOR CONNECTION OF ALL SERVICE LINES TO PVC MAIN. SERVICE SADDLES: PAINTED SADDLE WITH STAINLESS STEEL DOUBLE BAND, ROMAC, STYLE 202S.

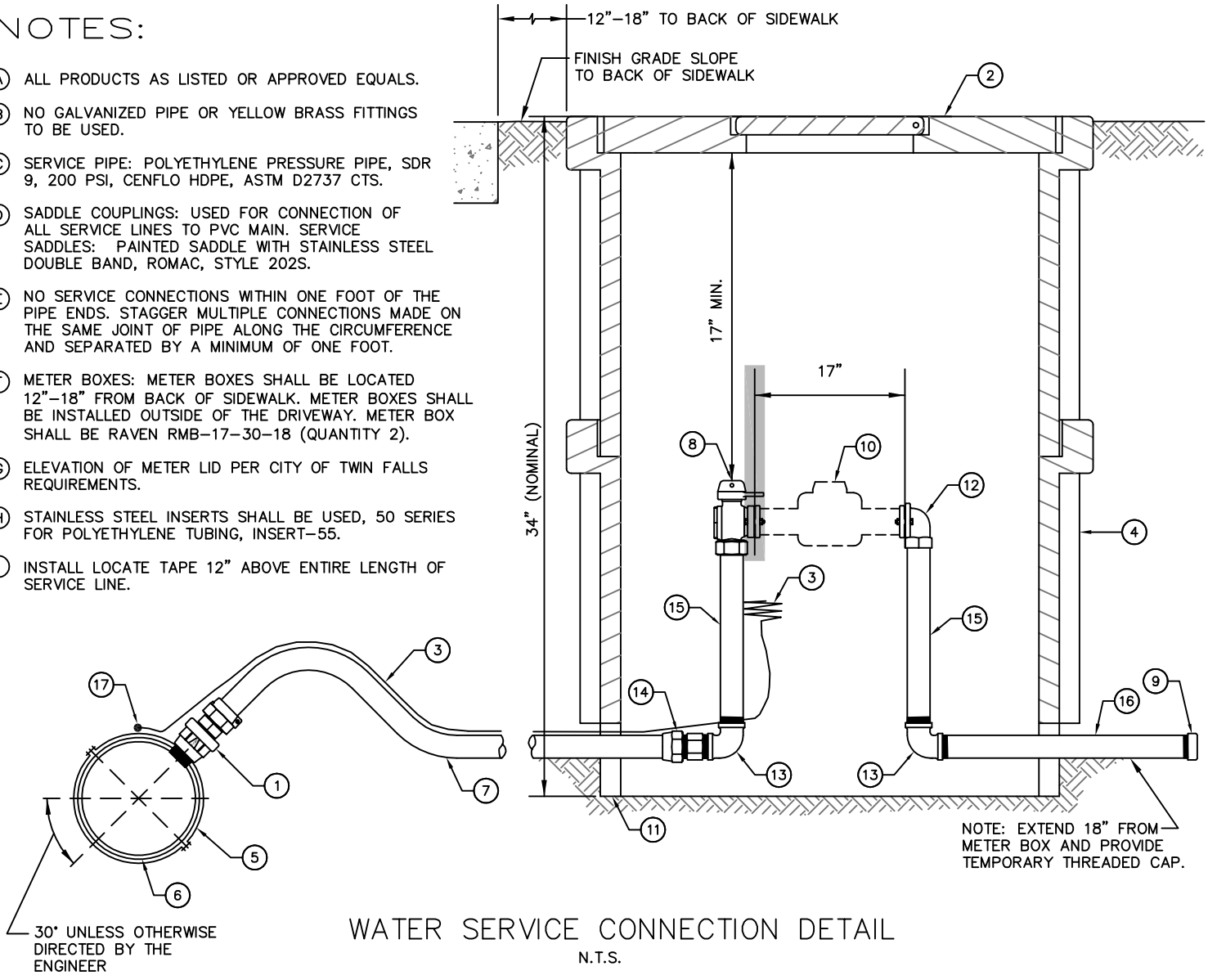
(E) NO SERVICE CONNECTIONS WITHIN ONE FOOT OF THE PIPE ENDS. STAGGER MULTIPLE CONNECTIONS MADE ON THE SAME JOINT OF PIPE ALONG THE CIRCUMFERENCE AND SEPARATED BY A MINIMUM OF ONE FOOT.

(F) METER BOXES: METER BOXES SHALL BE LOCATED 12"–18" FROM BACK OF SIDEWALK. METER BOXES SHALL BE INSTALLED OUTSIDE OF THE DRIVEWAY. METER BOX SHALL BE RAVEN RMB–17–30–18 (QUANTITY 2).

(G) ELEVATION OF METER LID PER CITY OF TWIN FALLS REQUIREMENTS.

(H) STAINLESS STEEL INSERTS SHALL BE USED, 50 SERIES FOR POLYETHYLENE TUBING, INSERT–55.

(I) INSTALL LOCATE TAPE 12" ABOVE ENTIRE LENGTH OF SERVICE LINE.



WATER SERVICE CONNECTION DETAIL

N.T.S.

KEYNOTES:

(1) GRIP JOINT CORPORATION STOP, (2") FB1001–7–IDR7–NL, BALLCORP STYLE FOR CTS PE PIPE, OR APPROVED EQUAL.

(2) RAVEN METER BOX LID, RML 17x30–POLY LID, OR APPROVED EQUAL.

(3) NO. 12 COPPER LOCATE WIRE. PROVIDE A MINIMUM OF 24" COILED LOCATE WIRE IN BOX.

(4) RAVEN PRODUCTS WATER METER BOX, RMB–17–30–18, OR APPROVED EQUAL.

(5) ROMAC PAINTED SADDLE WITH STAINLESS STEEL DOUBLE BAND, ROMAC 202S, OR APPROVED EQUAL.

(6) WATER MAIN.

(7) 2" SERVICE LINE, NO SPLICING ALLOWED.

(8) ANGLE BALL FLANGE METER VALVE, BFA13–777W, OR APPROVED EQUAL.

(9) PROVIDE TEMPORARY THREADED CAP.

(10) CITY APPROVED METER TO BE PAID FOR BY OTHERS AND FURNISHED & INSTALLED BY CITY OF TWIN FALLS.

(11) PLACE METER BOX ON FIRM, UNDISTURBED, LEVEL EARTH.

(12) FLANGE METER ELL, LF31–77–NL, OR APPROVED EQUAL.

(13) 2" CAST BRONZE THREADED 90° EL.

(14) 2" GRIP JOINT COUPLING A.Y. McDONALD 74753G 2", 2" PACK JOINT COUPLING A.Y. McDONALD 74753–22 2", OR APPROVED EQUAL.

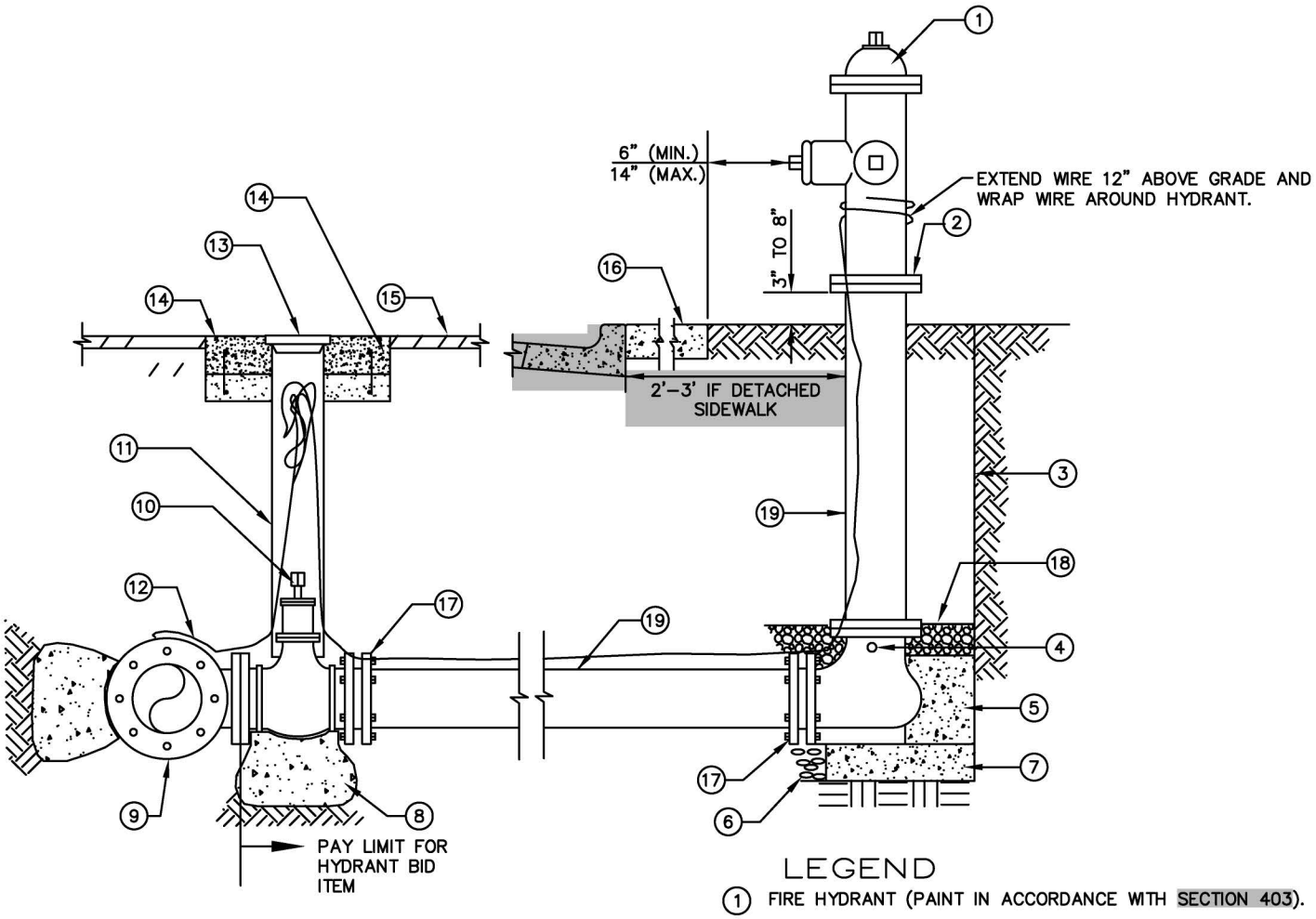
(15) 2" SCHEDULE 80 PVC PIPE NIPPLE, 18" IN LENGTH.

(16) 2" SCHEDULE 80 PVC PIPE NIPPLE, 24" IN LENGTH.

(17) CONNECT WATER SERVICE LOCATE WIRE WITH WATER MAIN LOCATE WIRE WITH WATERPROOF SPICE CONNECTOR.

2018

CITY OF TWIN FALLS	WATER SERVICE CONNECTION (2")	STANDARD DRAWING NO. TFSD–402A



FIRE HYDRANT DETAIL

N.T.S.

NOTES:

(A) ALL HYDRANTS SHALL BE NEW. HYDRANTS SHALL NOT BE RELOCATED AND REUSED UNLESS APPROVED BY THE CITY ENGINEER.

(B) ALL AUXILIARY VALVES TO BE LOCATED AT THE TEE ON THE WATER MAIN AS SHOWN ON THIS DETAIL OR AS DIRECTED BY THE ENGINEER. WHERE EXISTING FITTINGS ARE NOT COMPATIBLE WITH NEW MAIN CONSTRUCTION, USE SUITABLE ADAPTERS OR NEW FITTINGS UPON APPROVAL BY THE ENGINEER.

(C) ALL ANCHORS AND BLOCKING TO BEAR AGAINST UNDISTURBED SOIL.

(D) IF WATER SERVICE TO HYDRANT IS TO COMMENCE PRIOR TO SETTING OF CONCRETE THRUST BLOCKING, USE A COMBINATION OF CONCRETE AND UNI-FLANGE SERIES 1300 JOINT RESTRAINT.

(E) PLACE LOCATOR WIRE DIRECTLY ABOVE PIPE. SECURE FINDER WIRE UNDER (MJ) BOLT AT MAIN.

(F) JOINT RESTRAINT DEVICES MAY BE USED AS AN ALTERNATE TO THRUST BLOCK WITH ENGINEER'S APPROVAL.

LEGEND

(1) FIRE HYDRANT (PAINT IN ACCORDANCE WITH SECTION 403).

(2) BREAK AWAY BOLTS.

(3) END OF TRENCH.

(4) DRAIN – KEEP CLEAR.

(5) CAST IN PLACE CONCRETE THRUST BLOCK (4 SQ. FT. OF THRUST BLOCK REQUIRED) (SEE NOTE D).

(6) 1" DRAIN ROCK EXTENDS 12" HORIZONTALLY FROM EACH SIDE OF CONCRETE BASE AND THRUST BLOCK AND VERTICALLY TO 2" ABOVE HYDRANT DRAIN WALL.

(7) PRECAST CONCRETE BLOCK 1' X 1' X 6" THICK.

(8) VALVE SUPPORT (PRECAST OR CAST IN PLACE).

(9) TEE (MJ X MJ X FLANGE) WITH THRUST BLOCK.

(10) 6" C.I. AUXILIARY VALVE (MJ X FLANGE).

(11) CAST IRON VALVE BOX.

(12) NO. 12 AWG. COPPER WIRE FINDER. SEE SD-514 FOR SPLICING (SEE NOTE E).

(13) 5 1/4" LID.

(14) MIN 24"ø X 12" CONCRETE COLLAR WITH (2) #4 REBAR HOOPS AND (4) #4 VERTICAL BARS.

(15) FINISHED GRADE.

(16) SIDEWALK.

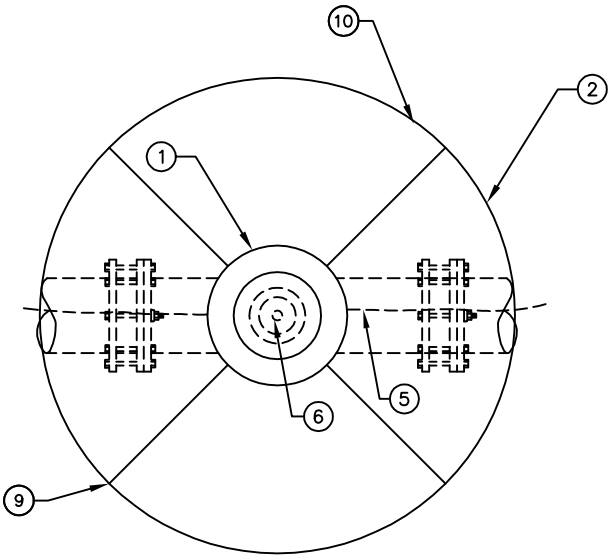
(17) MECHANICAL CONNECTION.

(18) COVER DRAIN ROCK WITH FILTER FABRIC.

(19) 6" DIAMETER DUCTILE IRON PIPE.

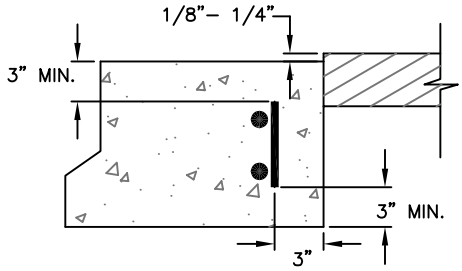
2016

CITY OF TWIN FALLS	FIRE HYDRANT DETAIL	STANDARD DRAWING NO. TFSD-404



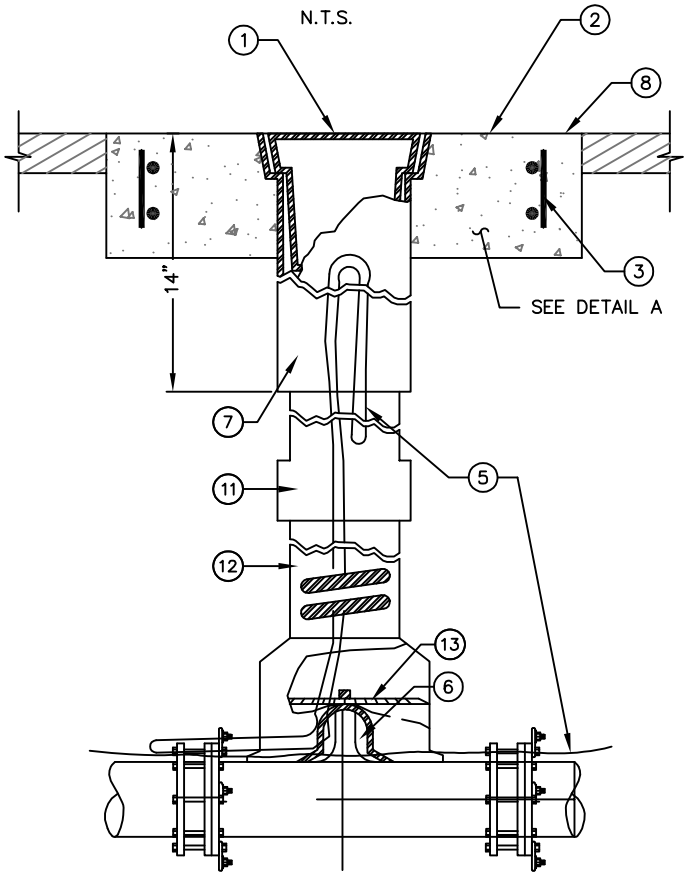
PLAN VIEW

N.T.S.



DETAIL A

N.T.S.



ELEVATION VIEW

VALVE BOX AND LID

N.T.S.

LEGEND

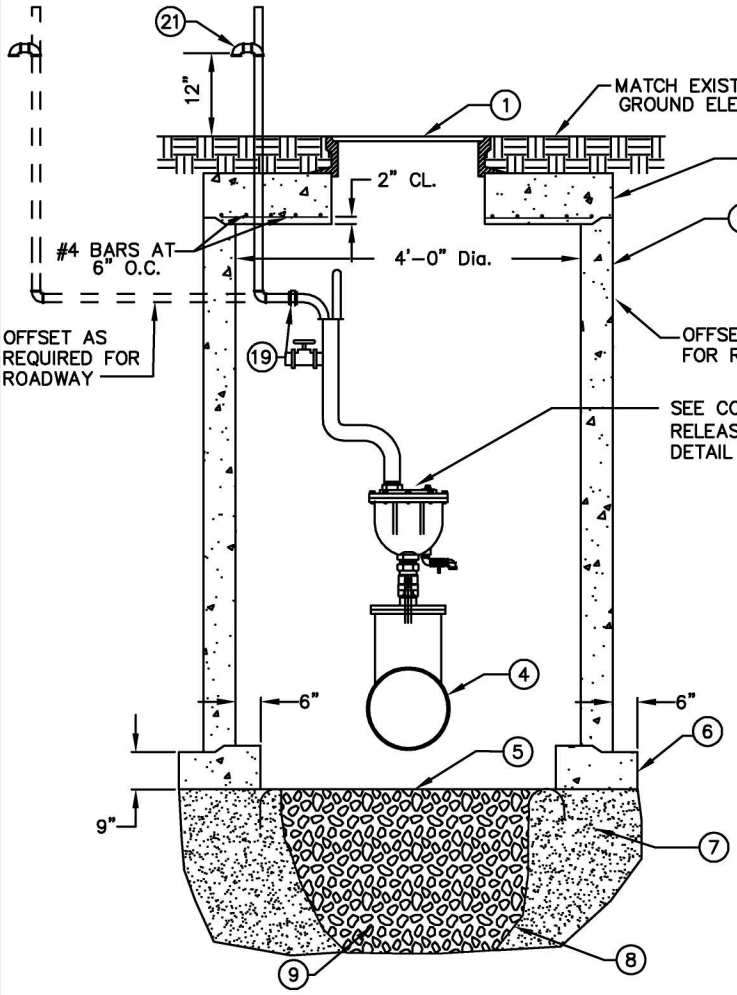
1. BINGHAM & TAYLOR 5 1/4" LID
   TRI SKIRT 4"; PART NO. GRE5LHVTSK4WCL35 (REQUIRED IN COLLECTORS AND ARTERIALS)
   STD RD; PART NO. GRE5LWRD (FOR ALL OTHER APPLICATIONS)
2. MIN. 12"RADIUS X 12" CONCRETE COLLAR.
3. (2) #4 REBAR HOOPS WITH (4) #4 VERTICALS.
4. NOT USED
5. NO. 12 AWG. COPPER WIRE FINDER.
6. VALVE.
7. TOP OF BINGHAM & TAYLOR 15" LONG 2–PIECE SCREW TYPE ADJUSTABLE 5 1/4" CAST IRON VALVE BOX NO. GRE5T55B (FIG. NO. 4905) OR APPROVED SUBSTITUTE.
8. FINISHED GRADE.
9. SCORE 4 LINES ON TOP OF CONCRETE COLLAR 1/2" DEEP TYPICALLY 2 PARALLEL & 2 AT 90° TO ℄.
10. CUT CIRCULAR AND SMOOTH.
11. HIGHLINE 20" ADJUSTABLE EXTENSION VALVE BOX NO. 111146 OR APPROVED SUBSTITUTE. USE ONLY AS NEEDED.
12. HIGHLINE 36" V.B. WHITE BOX BOTTOM SECTION NO. 111050 OR APPROVED SUBSTITUTE.
13. USA BLUEBOOK GATE BOX ALIGNER, NO. 75181 OR APPROVED SUBSTITUTE.

NOTE:

A. ALL PRODUCTS AS INDICATED OR APPROVED SUBSTITUTION BY CITY OF TWIN FALLS WATER DEPARTMENT SUPERINTENDENT.

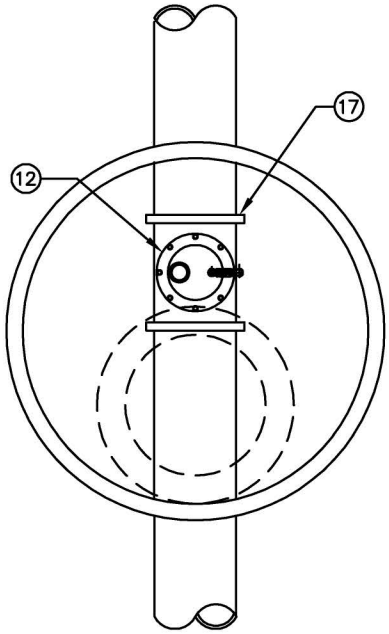
2018

CITY OF TWIN FALLS	VALVE BOX AND LID DETAIL	STANDARD DRAWING NO. TFSD–406



ELEVATION

N.T.S.

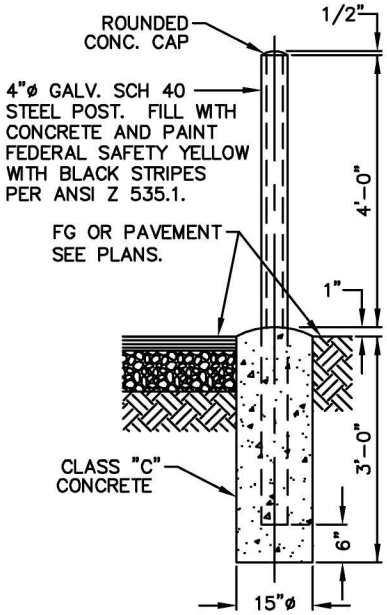


PLAN

N.T.S.

NOTE:

(A) USE GALVANIZED STEEL FOR PIPE AND NIPPLES AND GALVANIZED MALLEABLE FITTINGS.



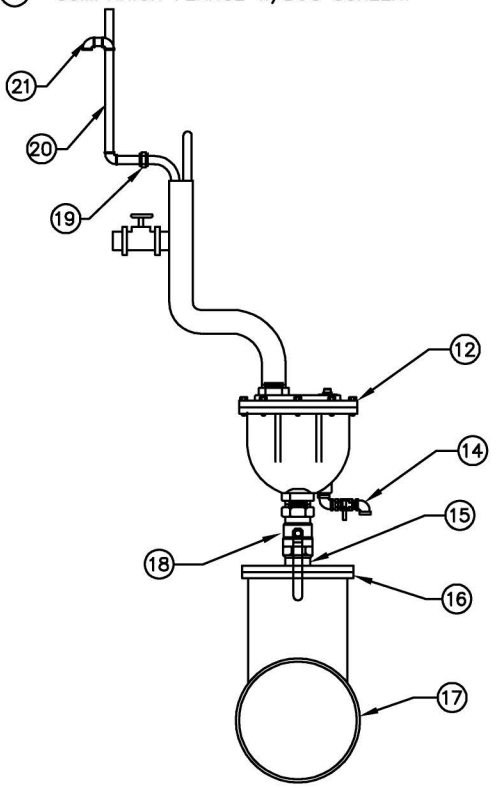
GUARD POST FOR BLOWOFF

N.T.S.

NOTE: PROVIDE 3/8" EJ MATERIAL WHERE INSTALLED IN CONC PAVING.

LEGEND

1. CAST IRON RING AND COVER MARKED "WATER" PER TFSD-507.
2. STANDARD MANHOLE SLAB.
3. MANHOLE TYPE "A" PER TFSD-501.
4. WATER PIPE.
5. VOLUME OF ROCK TO BE 15 CUBIC FEET MINIMUM.
6. CONCRETE FOOTING.
7. COMPACTED TYPE 1 BEDDING.
8. DRAIN ROCK ABSORPTION SUMP WITH GEOTEXTILE FABRIC.
9. 2" MINUS WASHED DRAIN ROCK.
10. NOT USED.
11. NOT USED.
12. APCO COMBINATION AIR RELEASE / VACUMM VALVE OR APPROVED SUBSTITUTE SIZED FOR APPLICATION.
13. NOT USED.
14. DRAIN VALVE.
15. THREADED CONNECTION.
16. BLIND FLANGE TAPPED FOR IPT NIPPLE.
17. CAST IRON FLANGED X FANGED TEE.
18. INLET SHUT-OFF VALVE.
19. FLANGE OR UNION.
20. BRASS NIPPLE OR C.I. SPOOL DISCHARGE PIPE. SIZE AS SHOWN ON PLANS.
21. COMPANION FLANGE W/BUG SCREEN.



AIR RELEASE AND VACUUM VALVE DETAIL

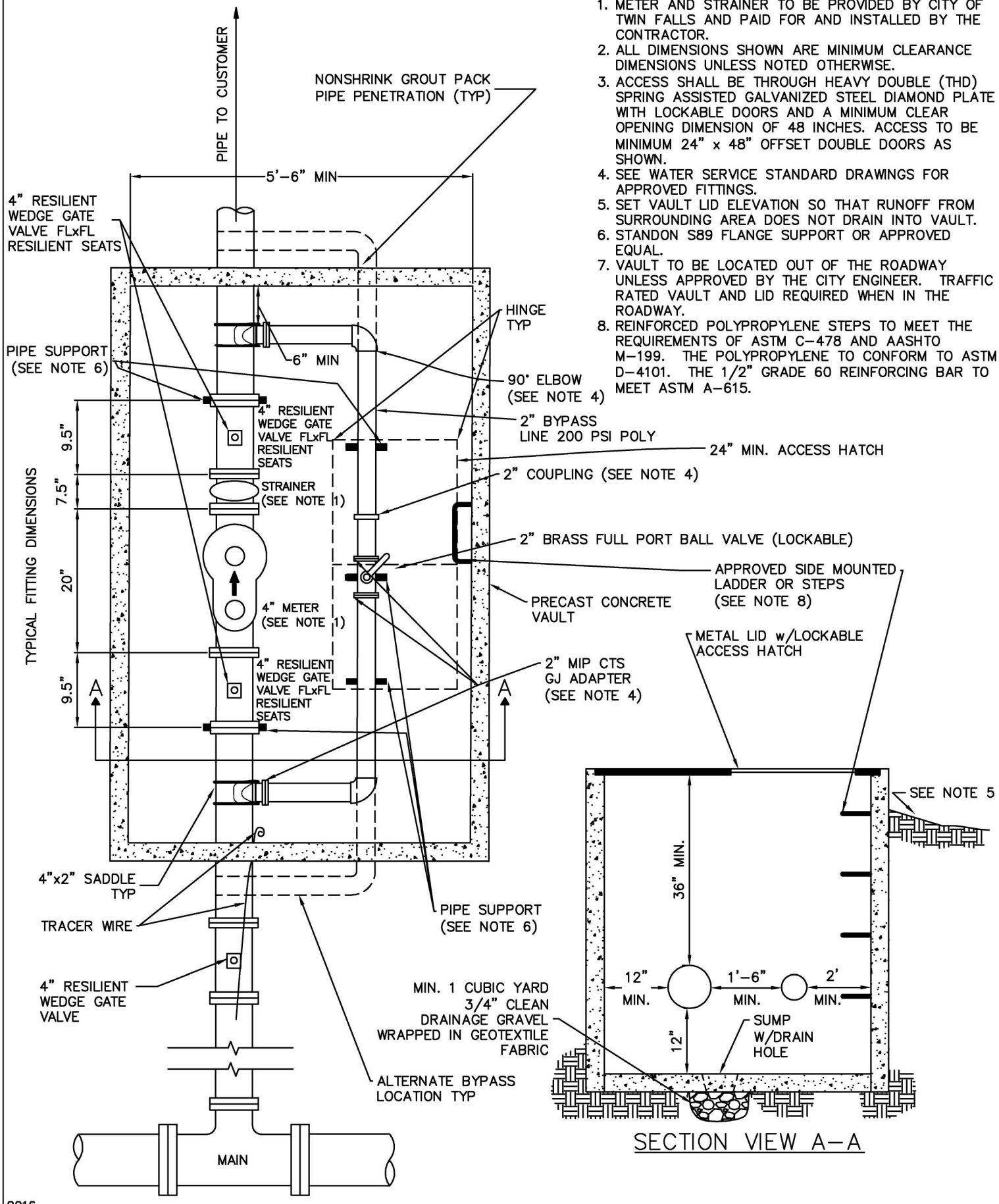
N.T.S.

2016

CITY OF TWIN FALLS	COMBINATION AIR RELEASE/VACUUM VALVE	STANDARD DRAWING NO. TFSD-408A

LEGEND:

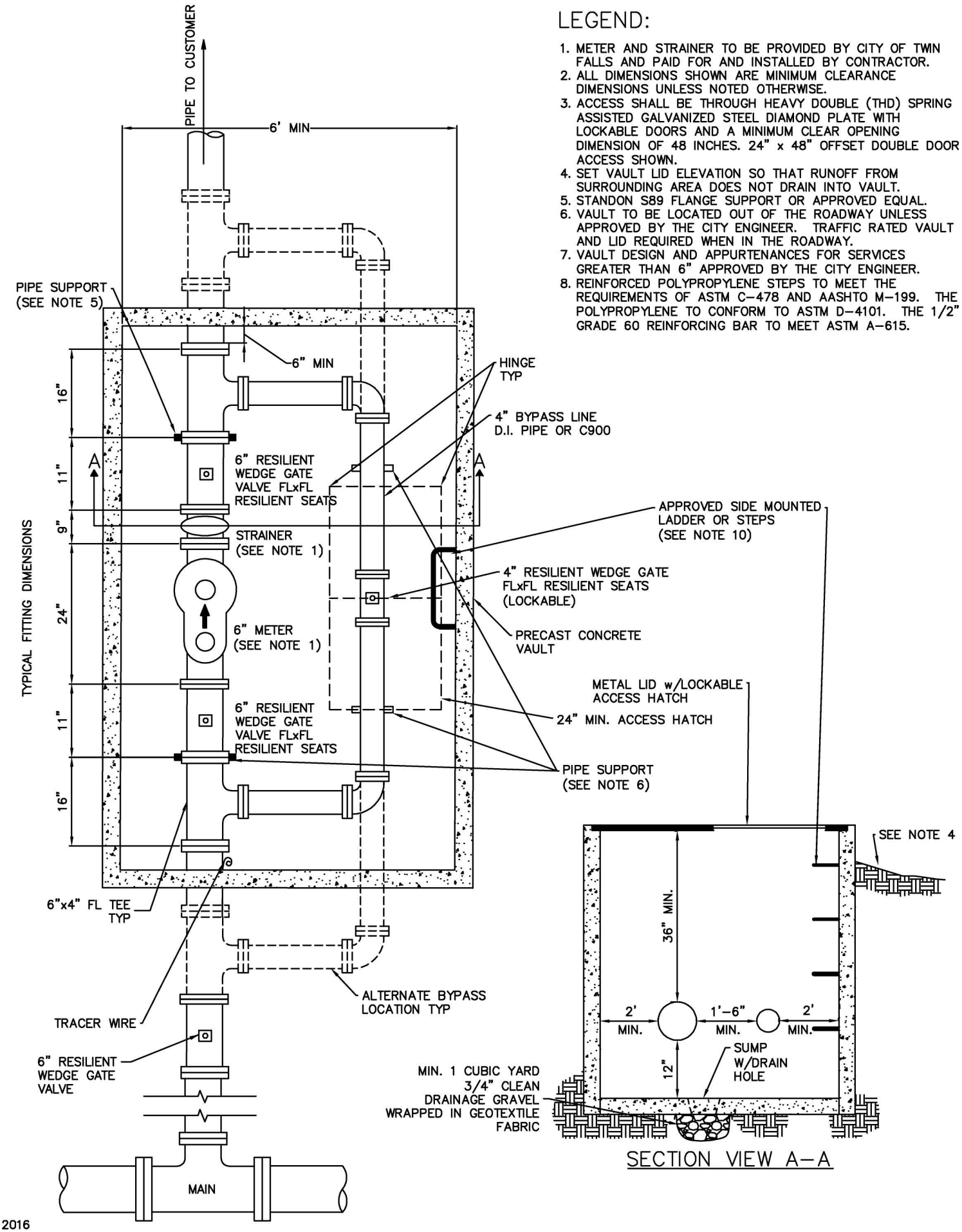
1. METER AND STRAINER TO BE PROVIDED BY CITY OF TWIN FALLS AND PAID FOR AND INSTALLED BY THE CONTRACTOR.
2. ALL DIMENSIONS SHOWN ARE MINIMUM CLEARANCE DIMENSIONS UNLESS NOTED OTHERWISE.
3. ACCESS SHALL BE THROUGH HEAVY DOUBLE (THD) SPRING ASSISTED GALVANIZED STEEL DIAMOND PLATE WITH LOCKABLE DOORS AND A MINIMUM CLEAR OPENING DIMENSION OF 48 INCHES. ACCESS TO BE MINIMUM 24" x 48" OFFSET DOUBLE DOORS AS SHOWN.
4. SEE WATER SERVICE STANDARD DRAWINGS FOR APPROVED FITTINGS.
5. SET VAULT LID ELEVATION SO THAT RUNOFF FROM SURROUNDING AREA DOES NOT DRAIN INTO VAULT.
6. STANDON S89 FLANGE SUPPORT OR APPROVED EQUAL.
7. VAULT TO BE LOCATED OUT OF THE ROADWAY UNLESS APPROVED BY THE CITY ENGINEER. TRAFFIC RATED VAULT AND LID REQUIRED WHEN IN THE ROADWAY.
8. REINFORCED POLYPROPYLENE STEPS TO MEET THE REQUIREMENTS OF ASTM C-478 AND AASHTO M-199. THE POLYPROPYLENE TO CONFORM TO ASTM D-4101. THE 1/2" GRADE 60 REINFORCING BAR TO MEET ASTM A-615.



SECTION VIEW A-A

2016

CITY OF TWIN FALLS	4" WATER METER VAULT	STANDARD DRAWING NO. TFSD-409



SECTION VIEW A–A

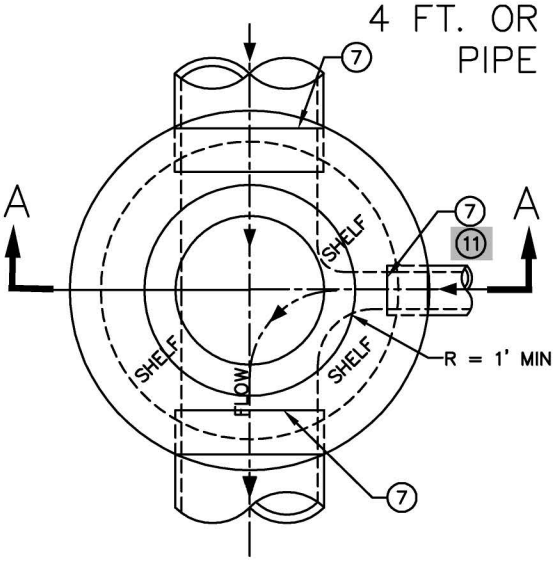
LEGEND:

1. METER AND STRAINER TO BE PROVIDED BY CITY OF TWIN FALLS AND PAID FOR AND INSTALLED BY CONTRACTOR.
2. ALL DIMENSIONS SHOWN ARE MINIMUM CLEARANCE DIMENSIONS UNLESS NOTED OTHERWISE.
3. ACCESS SHALL BE THROUGH HEAVY DOUBLE (THD) SPRING ASSISTED GALVANIZED STEEL DIAMOND PLATE WITH LOCKABLE DOORS AND A MINIMUM CLEAR OPENING DIMENSION OF 48 INCHES. 24" x 48" OFFSET DOUBLE DOOR ACCESS SHOWN.
4. SET VAULT LID ELEVATION SO THAT RUNOFF FROM SURROUNDING AREA DOES NOT DRAIN INTO VAULT.
5. STANDON S89 FLANGE SUPPORT OR APPROVED EQUAL.
6. VAULT TO BE LOCATED OUT OF THE ROADWAY UNLESS APPROVED BY THE CITY ENGINEER. TRAFFIC RATED VAULT AND LID REQUIRED WHEN IN THE ROADWAY.
7. VAULT DESIGN AND APPURTENANCES FOR SERVICES GREATER THAN 6" APPROVED BY THE CITY ENGINEER.
8. REINFORCED POLYPROPYLENE STEPS TO MEET THE REQUIREMENTS OF ASTM C–478 AND AASHTO M–199. THE POLYPROPYLENE TO CONFORM TO ASTM D–4101. THE 1/2" GRADE 60 REINFORCING BAR TO MEET ASTM A–615.

2016

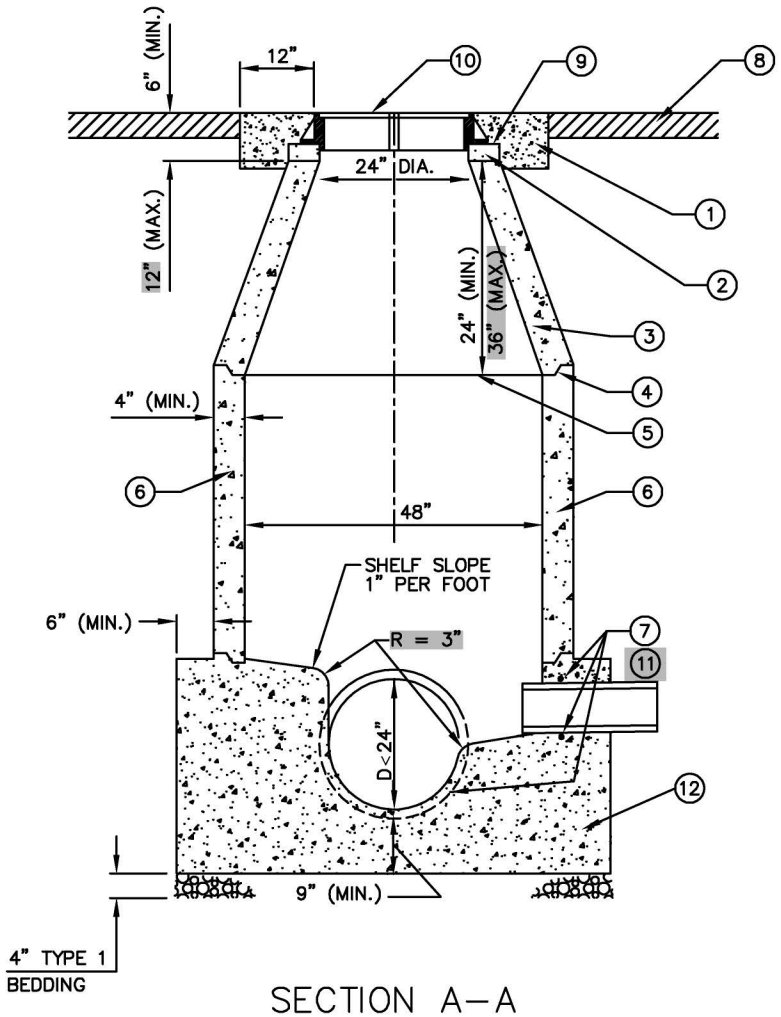
CITY OF TWIN FALLS	6" WATER METER VAULT	STANDARD DRAWING NO. TFSD–410

4 FT. OR GREATER DEPTH, PIPE DIA. ≤ 24"



PLAN

N.T.S.



SECTION A–A

N.T.S.

LEGEND

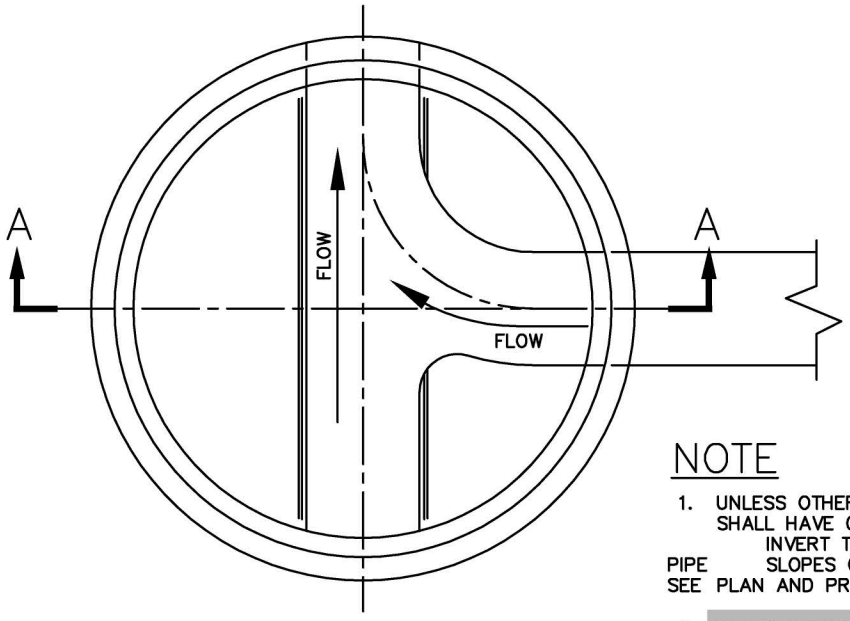
1. CONCRETE COLLAR IN PAVED STREET SECTIONS PER TFSD–508.
2. GRADE RINGS NOT TO EXCEED 12" FROM FINISHED SURFACE TO TOP OF CONE.
3. PRECAST MONOLITHIC CONCENTRIC CONE SECTION. (REBAR NOT SHOWN).
4. RAMNEK OR APPROVED GASKETS ALL JOINTS.
5. PROPERLY ALIGN ALL INTERIOR JOINTS.
6. PRECAST CONCRETE MANHOLE–BARREL SECTION (REBAR NOT SHOWN).
7. PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR–FLEXIBLE AND WATER TIGHT.
8. REPLACEMENT SURFACING TO MATCH FLUSH WITH EXISTING SURFACING (AC SHOWN).
9. FRAME TO GRADE RINGS.
10. FRAME AND COVER PER TFSD–507.
11. IF THE CROWN OF THE LATERAL IS MORE THAN 12" HIGHER THAN THE CROWN OF THE TRUNK, NOTIFY THE CITY ENGINEER FOR APPROVAL.
12. CAST IN PLACE MANHOLE BASE. SEE TFSD–501A FOR PREFABRICATED BASE.

NOTES:

- (A) OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE TFSD–501A.
- (C) FOR DIAMETER, D, GREATER THAN 24", SEE TFSD–502.
- (D) MANHOLE FRAME AND COVER:
  - A. REFER TO DRAWING NO. TFSD–507.
  - B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.
- (E) WHERE PVC PIPE IS UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL. EXTEND PIPE SUFFICIENTLY INSIDE MANHOLE TO ALLOW FOR GROUT SEAL OF PIPES ENTERING THE BARREL SEE 502.3.3E.
- (F) EITHER BASE ON TFSD–501 OR TFSD–501A MAY BE USED WITH ANY MANHOLE DESIGN.
- (G) PROVIDE FRAMES, COVERS, AND MANHOLE CONCRETE REINFORCING TO ACCOMMODATE H–20 TRAFFIC LOADINGS UNLESS OTHERWISE SPECIFIED.
- (H) THE MINUMUM INVERT ELEVATION FOR STUB –OUTS AND LATERAL CONNECTIONS SHALL BE AT THE CENTERLINE ELEVATION OF THE MAINLINE PIPE OR AT THE ELEVATION WHICH MATCHES THE TOP OF THE LATERAL WITH THE TOP OF THE MAINLINE PIPE, WHICHEVER IS HIGHER.
- (I) UNLESS OTHERWISE SHOWN, MANHOLES SHALL HAVE 0.1 FT FALL FROM UPSTREAM TRUNK INVERT TO DOWNSTREAM TRUNK INVERT.

2016

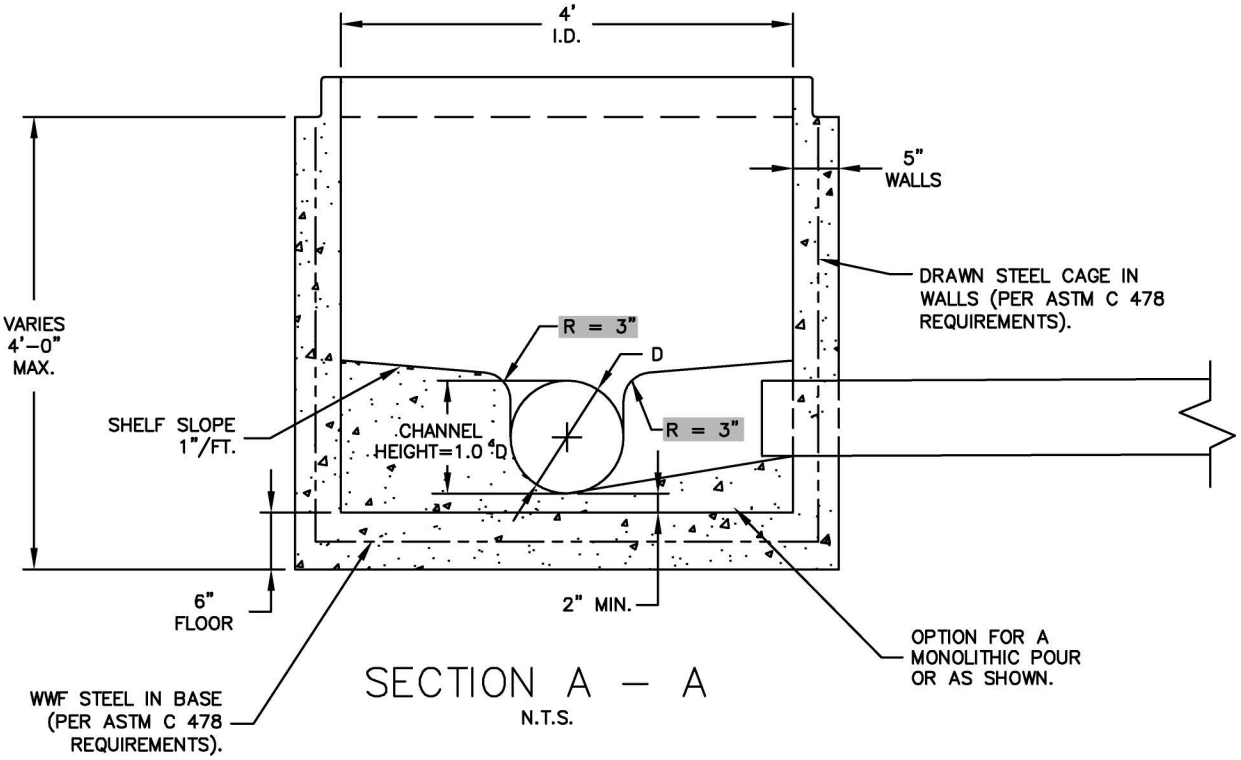
CITY OF TWIN FALLS	STANDARD MANHOLE TYPE A	STANDARD DRAWING NO. TFSD–501



PLAN VIEW
48" ID CHANNELED BASE
N.T.S.

NOTE

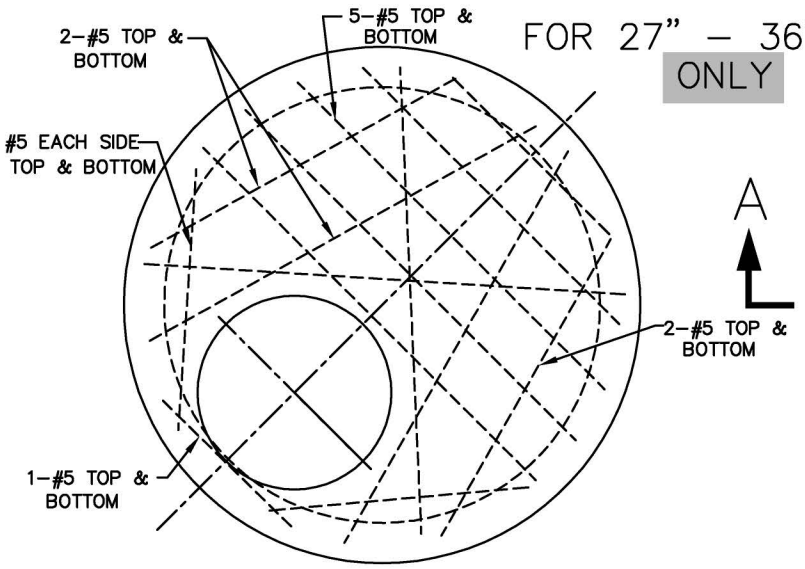
1. UNLESS OTHERWISE SHOWN, MANHOLES SHALL HAVE 0.1 FT FALL FROM UPSTREAM INVERT TO DOWNSTREAM INVERT. FOR PIPE SLOPES GREATER THAN 2.5% SLOPE, SEE PLAN AND PROFILE.
2. IF THE CROWN OF THE LATERAL IS 12" HIGHER THAN THE CROWN OF THE TRUNK, NOTIFY CITY ENGINEER FOR APPROVAL
3. THE MINIMUM INVERT ELEVATION FOR STUB-OUTS AND LATERAL CONNECTIONS SHALL BE AT THE CENTERLINE ELEVATION OF THE MAINLINE PIPE OR AT THE ELEVATION WHICH MATCHES THE TOP OF THE LATERAL WITH THE TOP OF THE MAINLINE PIPE, WHICHEVER IS HIGHER.



SECTION A – A
N.T.S.

2016

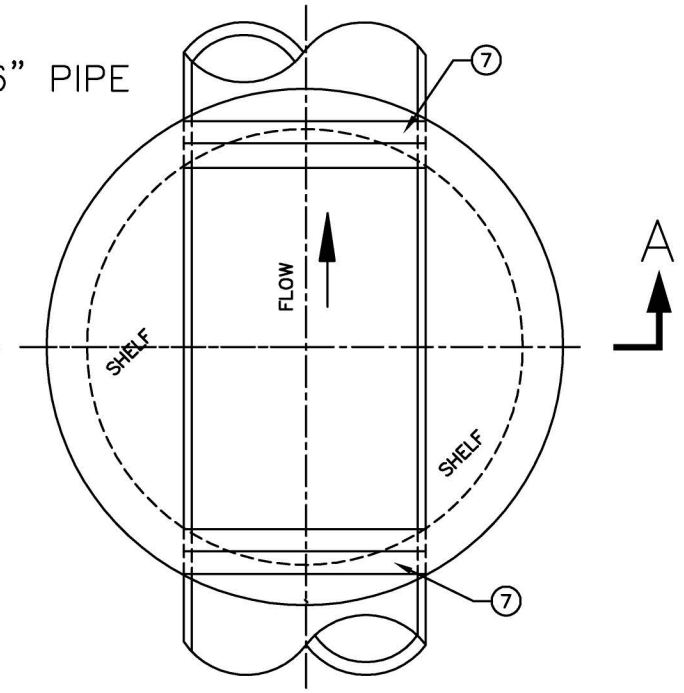
CITY OF TWIN FALLS	STANDARD MANHOLE PRECAST BASE TYPE A	STANDARD DRAWING NO. TFSD-501A



FOR 27" – 36" PIPE ONLY

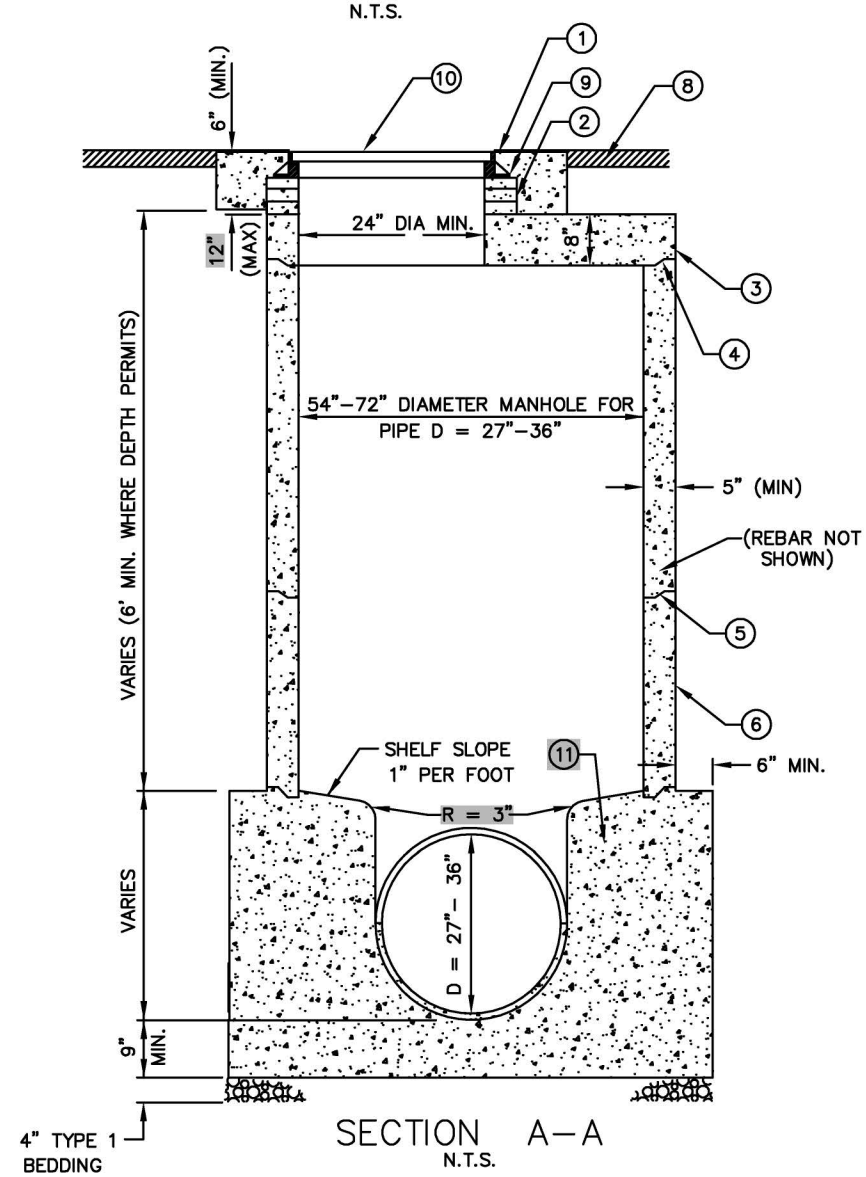
STANDARD SLAB TOP DETAILS

N.T.S.



PLAN

N.T.S.



SECTION A–A

N.T.S.

LEGEND

1. CONCRETE COLLAR IN PAVED AND GRAVEL AREAS PER TFSD–508.
2. GRADE RINGS GROUT WATERTIGHT IN PLACE, NOT TO EXCEED 12" FROM FINISHED SURFACE TO TOP OF CONE.
3. REINFORCED CONCRETE REDUCER SLAB OR CONE.
4. RAMNEK OR APPROVED GASKET AT ALL JOINTS.
5. PROPERLY ALIGN ALL INTERIOR JOINTS.
6. PRECAST CONCRETE MANHOLE BARREL SECTION (REBAR NOT SHOWN), 54"–72" RCP.
7. PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR–FLEXIBLE AND WATER TIGHT.
8. REPLACEMENT SURFACING TO MATCH FLUSH WITH EXISTING SURFACING (AC SHOWN).
9. SEAL FRAME TO GRADE RINGS WITH RAM–NEK GASKET.
10. FRAME AND COVER PER TFSD–507 OR TFSD–507A.
11. CAST–IN–PLACE MANHOLE BASE. SEE SD–502A FOR PREFABRICATED BASE.

NOTES:

A. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE SD–502A.

B. PLACE VERTICAL WALL ON UPSTREAM SIDE OF MANHOLE, ROTATED 45 DEGREES.

C. NOT USED

D. MANHOLE FRAME AND COVER:
   A. REFER TO DRAWING NO. TFSD–507 (24" OPENING) OR TFSD–508 (30" OPENING).
   B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.

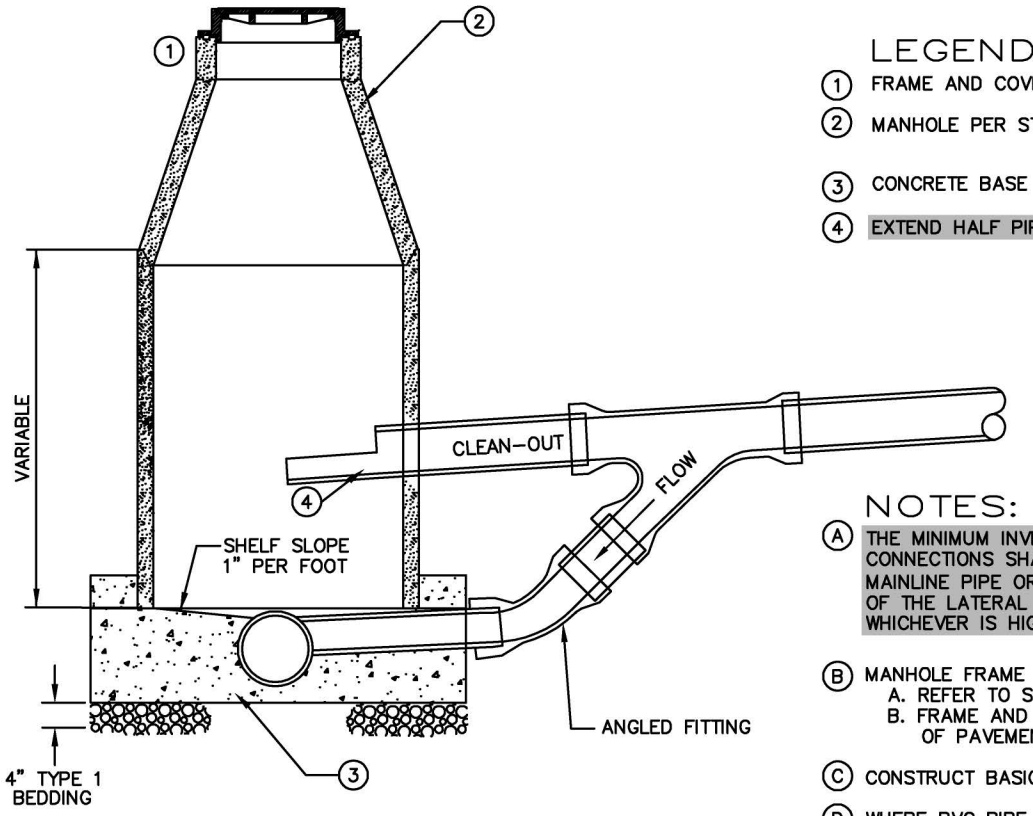
E. WHERE PVC IS PIPE UTILIZED, INSTALL A RUBBER RING OR GASKET COLLAR WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.

F. PROVIDE FRAMES, COVERS, AND MANHOLE CONCRETE REINFORCING TO ACCOMMODATE H–20 TRAFFIC LOADINGS.

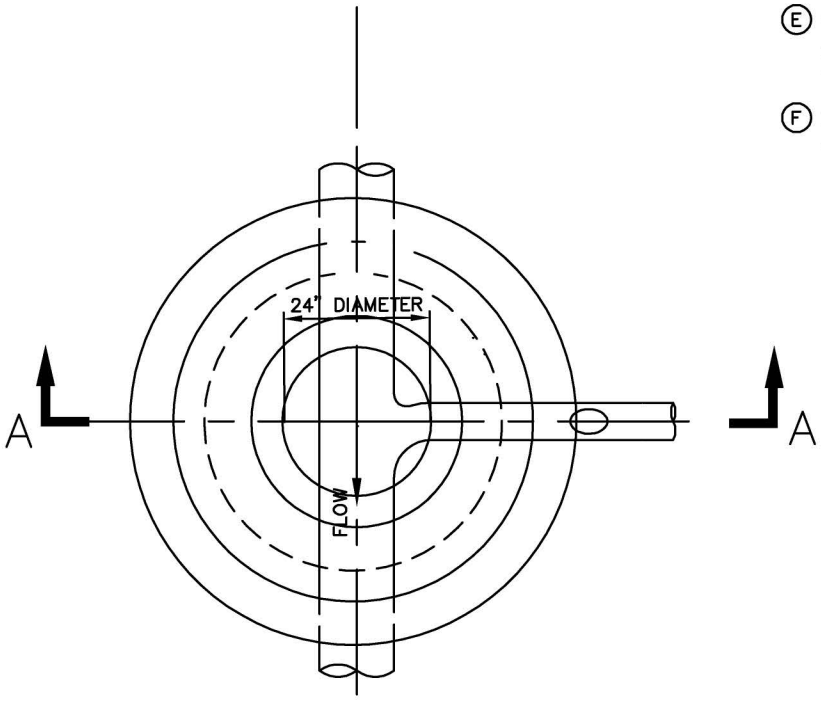
G. UNLESS OTHERWISE SHOWN, MANHOLES SHALL HAVE 0.1 FT FALL FROM UPSTREAM TRUNK INVERT TO DOWNSTREAM TRUNK INVERT.

2016

CITY OF TWIN FALLS	STANDARD MANHOLE TYPE B	STANDARD DRAWING NO. TFSD–502



SECTION A–A
N.T.S.



PLAN
N.T.S.

LEGEND

1. FRAME AND COVER PER STANDARD DRAWING TFSD–507.
2. MANHOLE PER STANDARD DRAWING TFSD–501 OR TFSD–502
3. CONCRETE BASE CAST IN PLACE PER SECTION 703.
4. EXTEND HALF PIPE DIAMETER INTO MANHOLE A MINIMUM OF 12".

NOTES:

A. THE MINIMUM INVERT ELEVATION FOR STUB–OUTS AND LATERAL CONNECTIONS SHALL BE AT THE CENTERLINE ELEVATION OF THE MAINLINE PIPE OR AT THE ELEVATION WHICH MATCHES THE TOP OF THE LATERAL WITH THE TOP OF THE MAINLINE PIPE, WHICHEVER IS HIGHER.

B. MANHOLE FRAME AND COVER
   A. REFER TO STANDARD DRAWING TFSD–507.
   B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.

C. CONSTRUCT BASIC MANHOLE PER TYPE SPECIFIED.

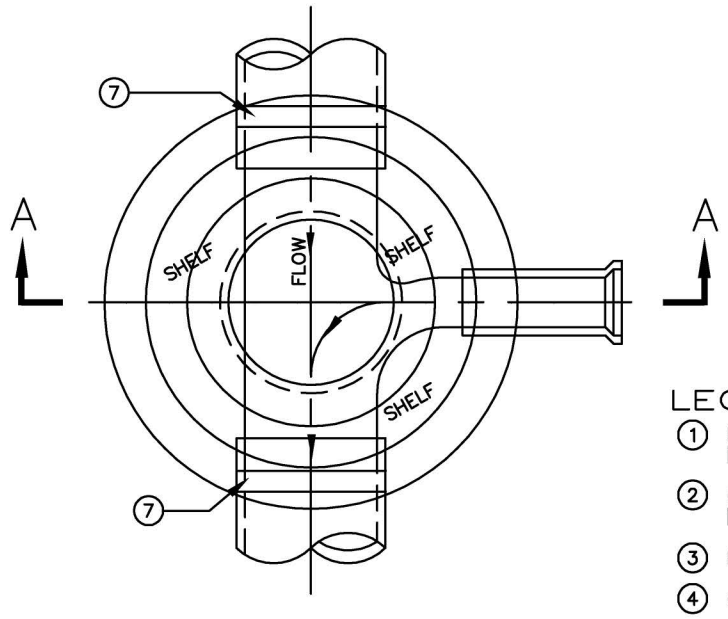
D. WHERE PVC PIPE IS UTILIZED, A RUBBER RING OR GASKETED COLLAR IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL.

E. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEER'S APPROVAL, SEE TFSD–501A.

F. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADINGS.

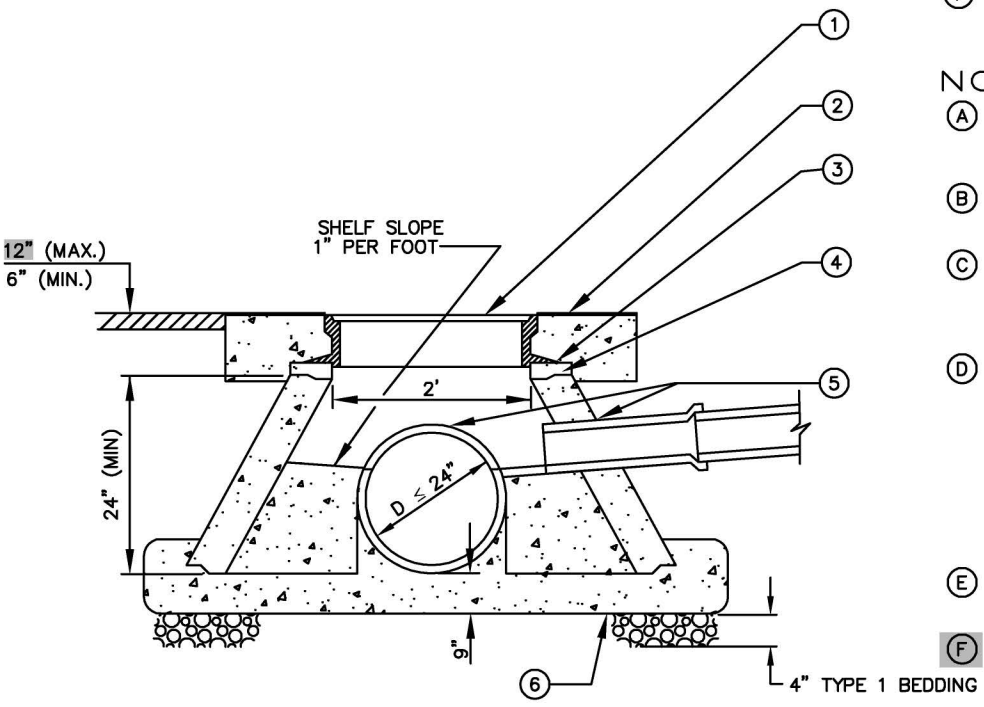
2016

CITY OF TWIN FALLS	DROP MANHOLE	STANDARD DRAWING NO. TFSD–504



PLAN

N.T.S.



SECTION A–A

≥ 30" DEEP AND ≤ 48" DEEP

N.T.S.

LEGEND

1. FRAME AND COVER PER STANDARD DRAWING TFSD–507.
2. CONCRETE COLLAR IN PAVED SECTIONS PER TFSD–508.
3. FRAME TO BE GROUTED TO GRADE RINGS.
4. GRADE RINGS GROUTED IN PLACE.
5. CORE–DRILL THROUGH PRECAST SECTION.
6. CAST IN PLACE OR PRECAST CONCRETE BASE.
7. PRECAST GASKETED HUB RING OR RUBBER GASKETED COLLAR–FLEXIBLE AND WATER TIGHT.

NOTES:

A. OPTIONAL PREFABRICATED MANHOLE BASE WITH APPROVED PIPE CONNECTIONS MAY BE USED WITH ENGINEERS APPROVAL, SEE TFSD–501A.

B. FOR DIAMETER, D, GREATER THAN 24", SEE TFSD–502" STANDARD MANHOLE TYPE B".

C. MANHOLE FRAME AND COVER:
   A. REFER TO DRAWING NO. TFSD–507.
   B. FRAME AND COVER SHALL BE FLUSH WITH SLOPE OF PAVEMENT.

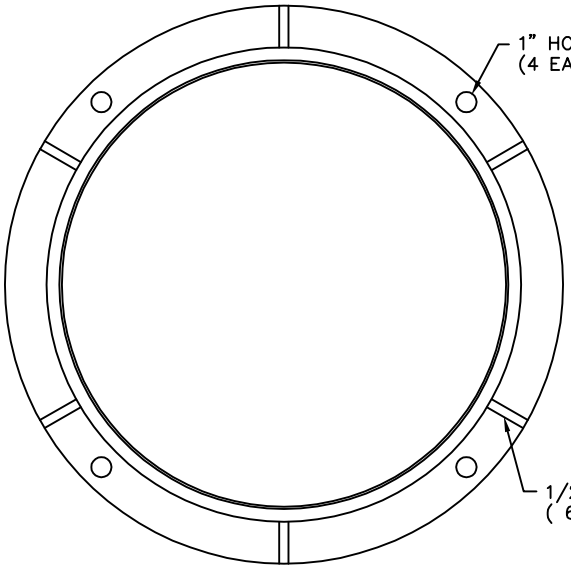
D. WHERE PVC PIPE IS UTILIZED, A RUBBER RING OR GASKET COLLAR IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH MANHOLE BASE AND/OR MANHOLE CHANNEL, IN ORDER TO INSURE A WATERTIGHT SEAL. EXTEND PIPE SUFFICIENTLY INSIDE MANHOLE TO ALLOW FOR GROUT SEAL OF PIPES ENTERING THE BARREL. SEE 502.3.3E.

E. PROVIDE MANHOLE CONCRETE REINFORCING TO ACCOMMODATE TRAFFIC LOADING.

F. THIS MANHOLE IS ONLY ALLOWED WITH WRITTEN PERMISSION BY THE CITY ENGINEER.

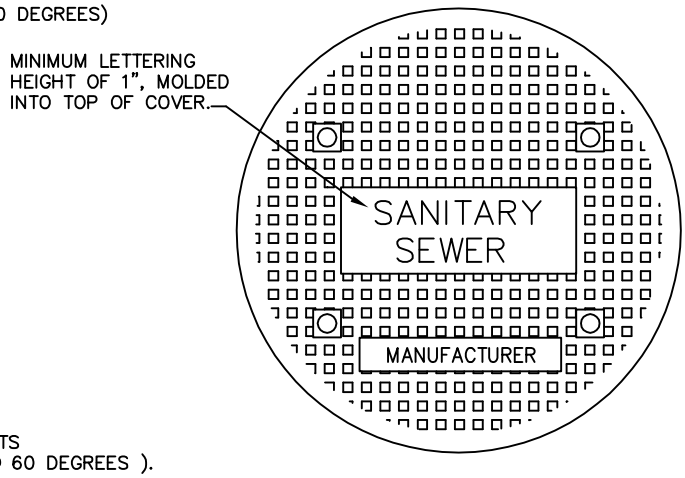
2016

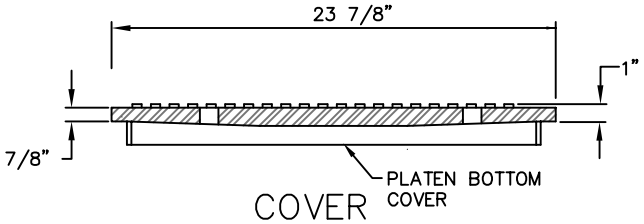
CITY OF TWIN FALLS	STANDARD SHALLOW MANHOLE	STANDARD DRAWING NO. TFSD–505



PLAN

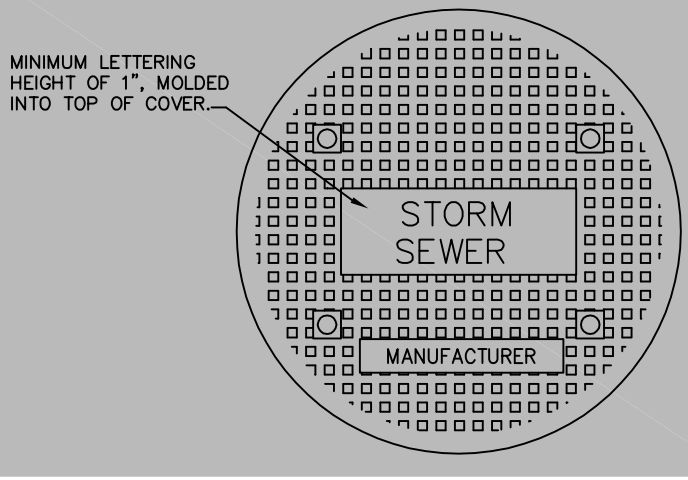
N.T.S.

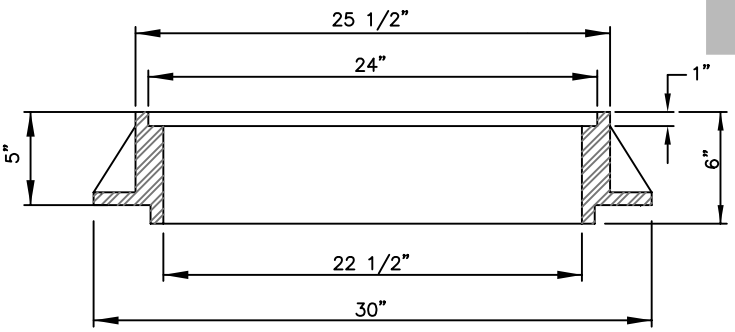




COVER

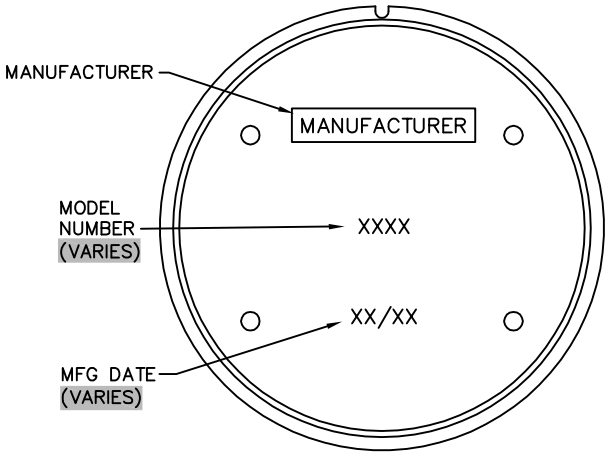
N.T.S.





FRAME

N.T.S.



COVER

N.T.S.

NOTES:

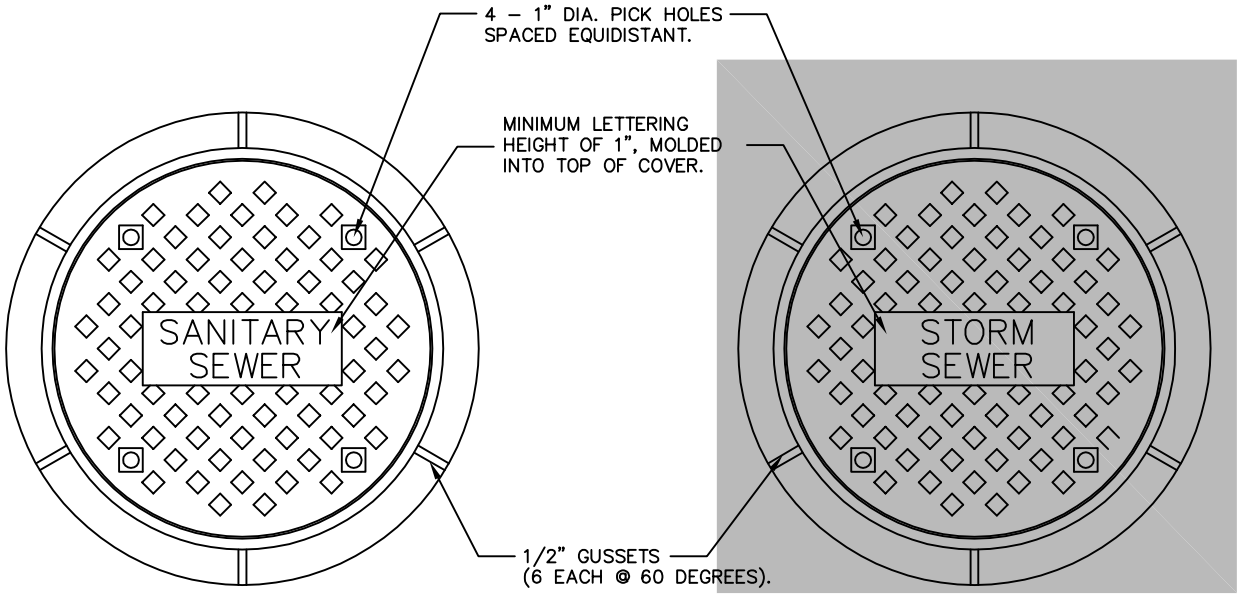
(A) MANHOLE FRAMES AND COVERS TO HAVE A TOLERANCE OF 1/4" OR LESS.

(B) COVERS NOT TO BE WARPED. REPLACE ALL THAT RATTLE OR VIBRATE WHEN TRAVELED UPON. MACHINE ALL MATCHING SURFACES.

(C) MINIMUM WEIGHT OF FRAME AND COVER = 265 LBS.

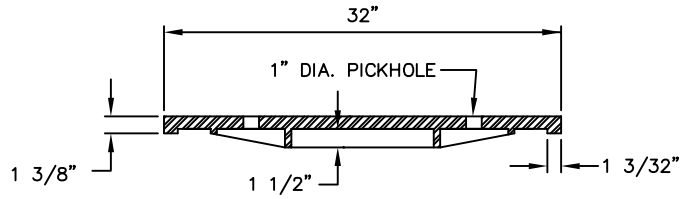
2018

CITY OF TWIN FALLS	STANDARD MANHOLE COVER AND FRAME	STANDARD DRAWING NO. TFSD-507

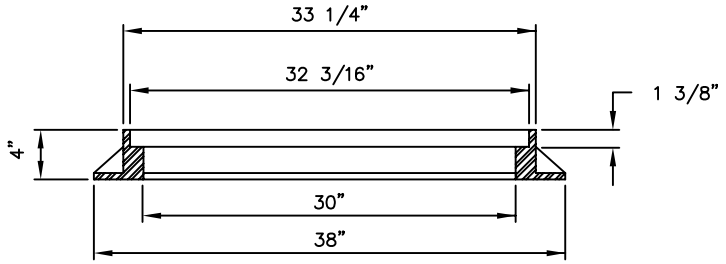


PLAN
N.T.S.

PLAN
N.T.S.



COVER
N.T.S.



FRAME
N.T.S.

NOTES:

(A) MANHOLE FRAMES AND COVERS TO HAVE A TOLERANCE OF 1/4" OR LESS.

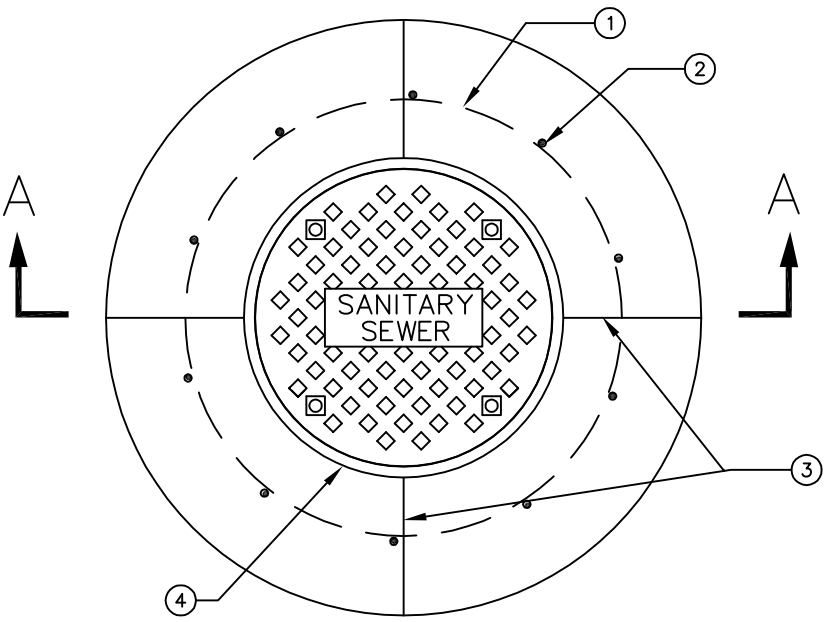
(B) COVERS NOT TO BE WARPED. REPLACE ALL THAT RATTLE OR VIBRATE WHEN TRAVELED UPON. MACHINE ALL MATCHING SURFACES.

(C) MINIMUM WEIGHT OF FRAME AND COVER = 400 LBS.

(D) USE WITH WRITTEN PERMISSION OF CITY ENGINEER.

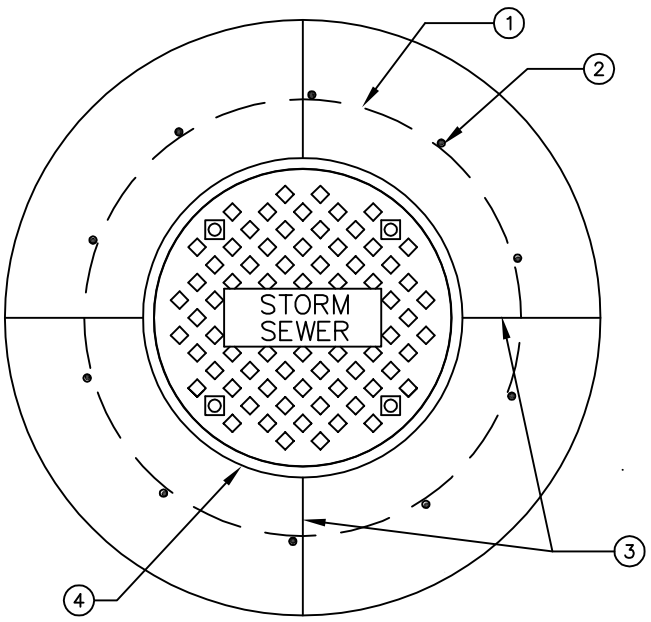
2018

CITY OF TWIN FALLS	MANHOLE COVER AND FLAT FRAME	STANDARD DRAWING NO. TFSD–507A



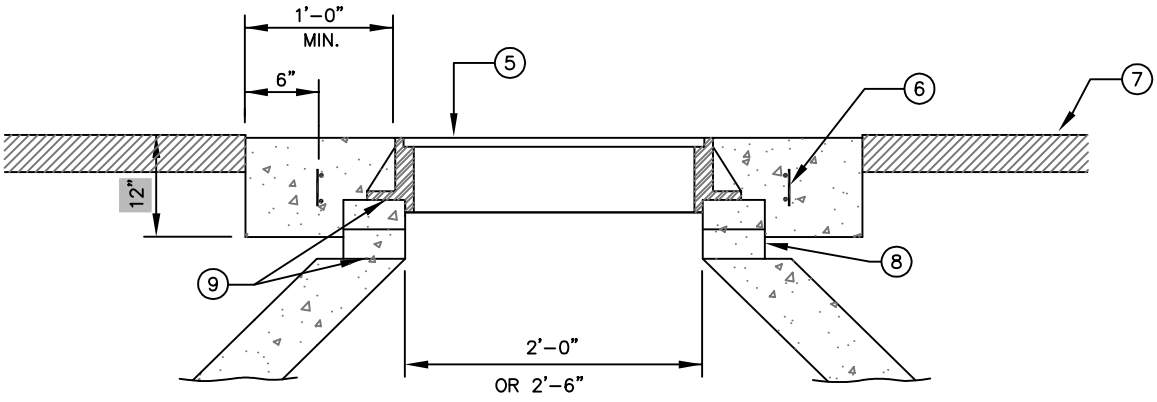
PLAN

N.T.S.



PLAN

N.T.S.



SECTION A–A

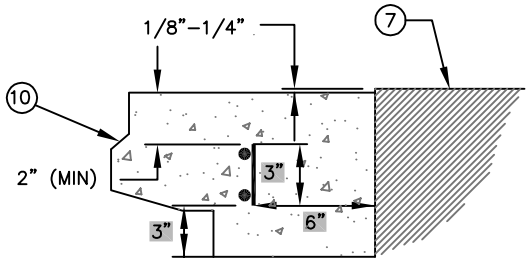
N.T.S.

NOTE:

(A) TOP OF COLLAR TO BE FLUSH WITH MANHOLE COVER.

LEGEND

1. #4 REBAR HOOPS (2 EACH) SEE SECTION A–A).
2. #4 REBAR AT 20" SPACING.
3. SCORES.
4. RIM.
5. FRAME AND COVER PER TFSD–507 AND TFSD–507A.
6. SEE "DETAIL A" FOR REBAR IN COLLAR.
7. FINISHED GRADE.
8. SEE OTHER STANDARD DRAWINGS OF MANHOLES FOR MAXIMUM HEIGHT.
9. JOINTS SHALL BE SEALED WITH RAM–NEK (OR EQUAL) AND GROUT ON THE INSIDE.

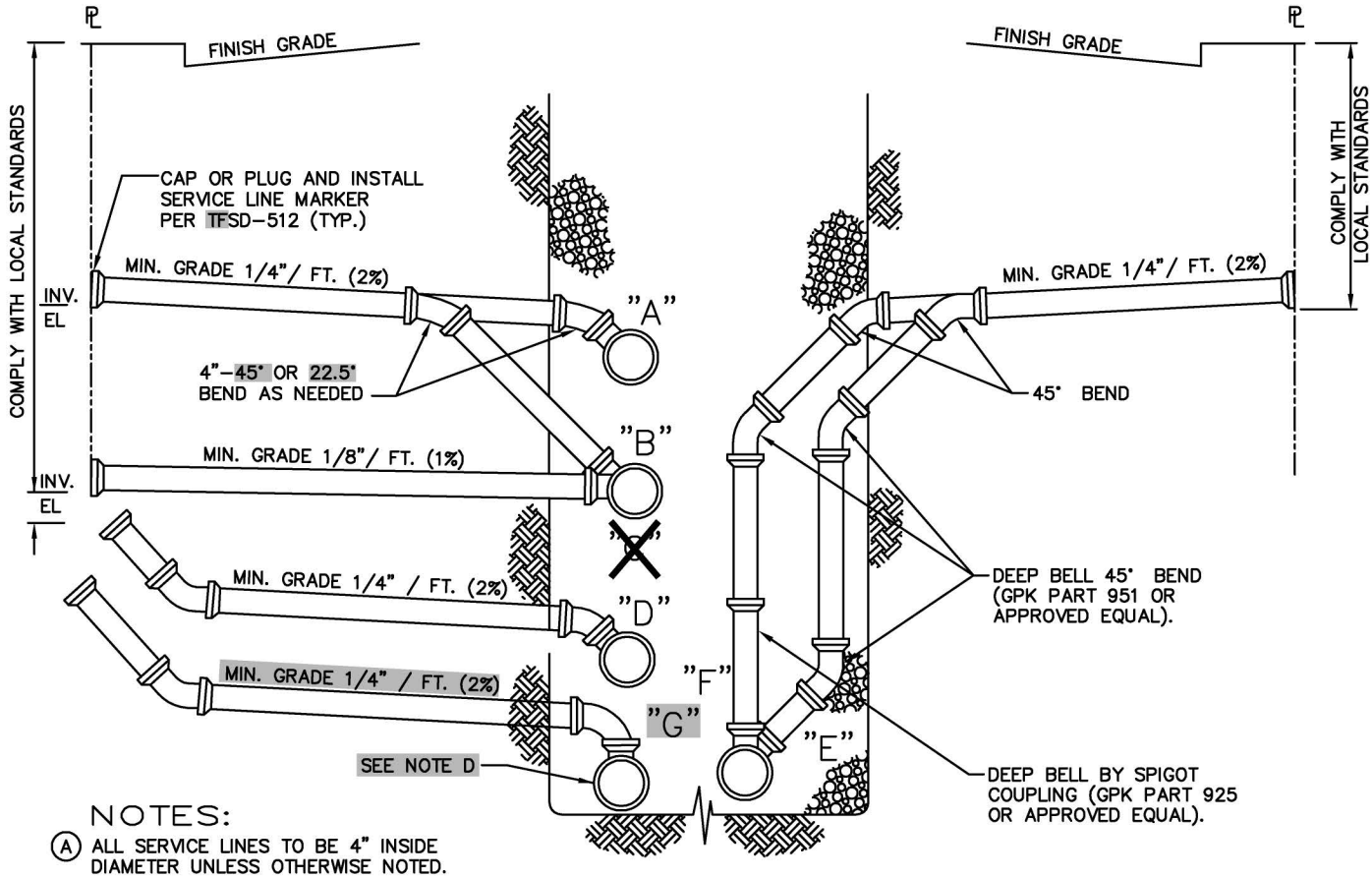


DETAIL A

N.T.S.

2018

CITY OF TWIN FALLS	MANHOLE COLLAR	STANDARD DRAWING NO. TFSD–508



ELEVATIONS

N.T.S.

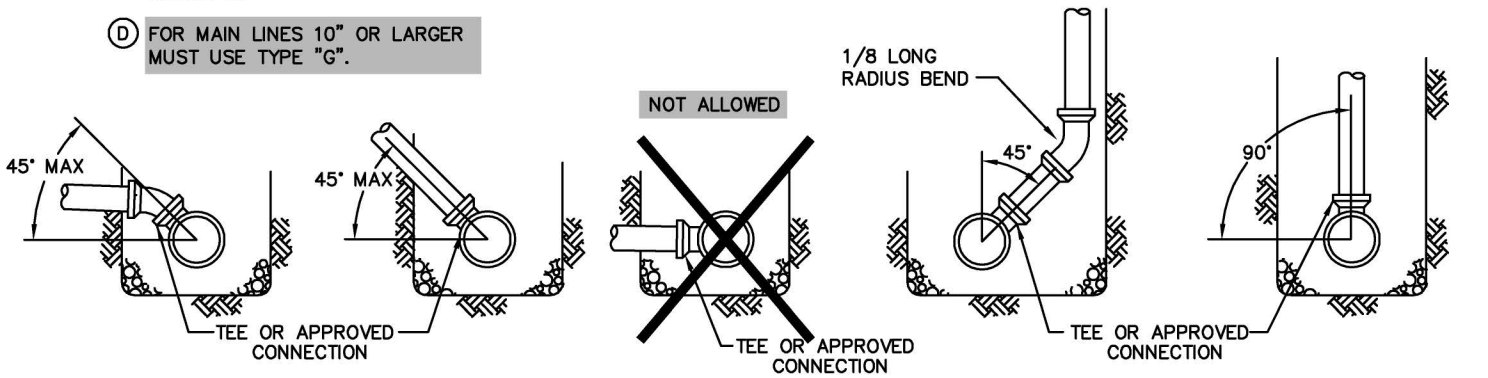
NOTES:

(A) ALL SERVICE LINES TO BE 4" INSIDE DIAMETER UNLESS OTHERWISE NOTED.

(B) TYPE "C" CONNECTION WILL ONLY BE ALLOWED IF APPROVED BY THE CITY ENGINEER.

(C) TYPE "E" OR "F" ALLOWABLE FOR TRENCHES 15' DEEP OR GREATER WITH PRE-APPROVAL BY THE CITY ENGINEER.

(D) FOR MAIN LINES 10" OR LARGER MUST USE TYPE "G".



TYPE "A"&"D" TYPE "B" TYPE "C" (SEE NOTE B) TYPE "E" (SEE NOTE C) *TYPE "F" & "G" (SEE NOTE C)*

CONNECTION DETAILS

N.T.S.

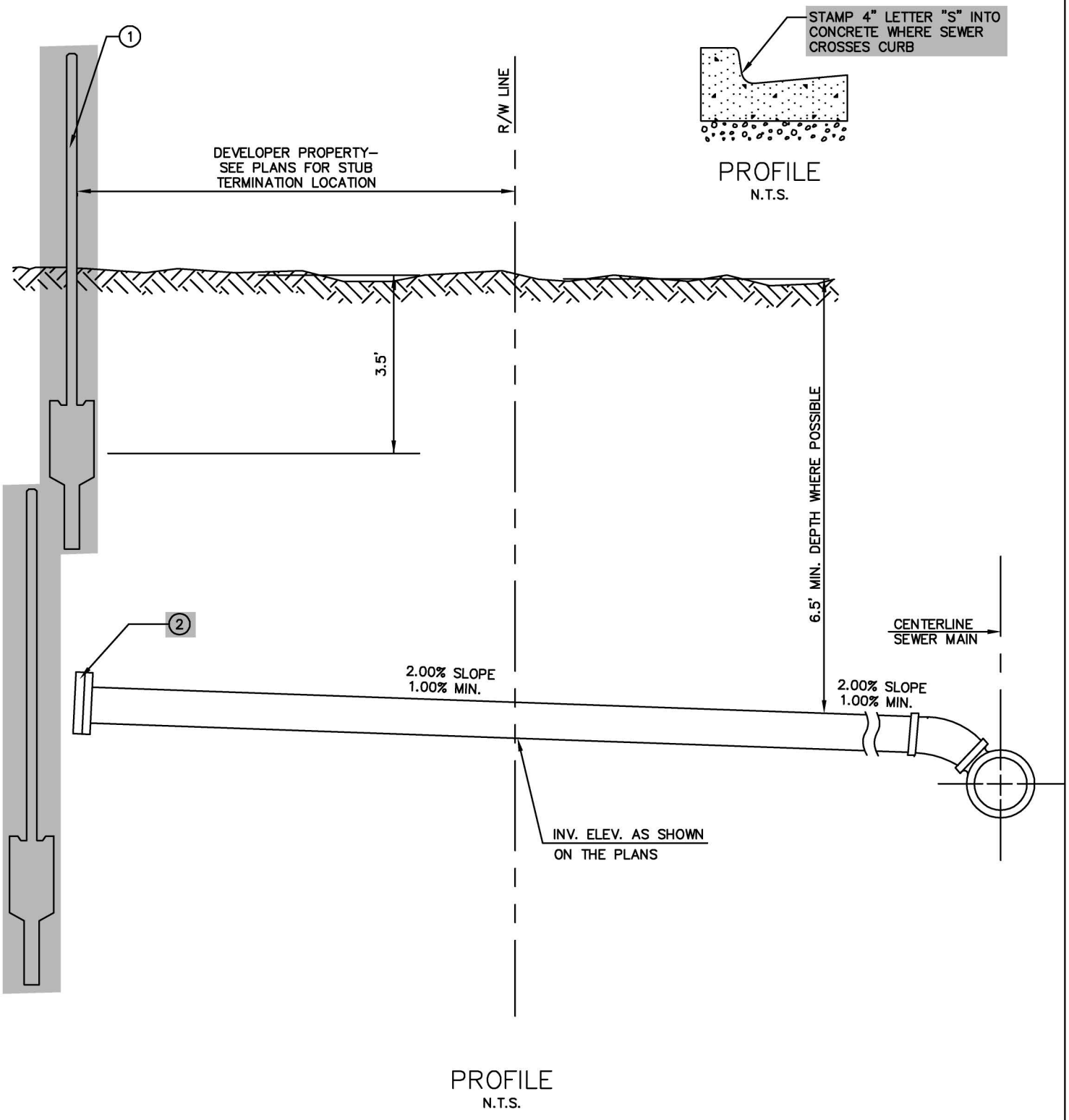
2016

CITY OF TWIN FALLS	STANDARD SEWER SERVICE LINES	STANDARD DRAWING NO. TFSD-511

LEGEND

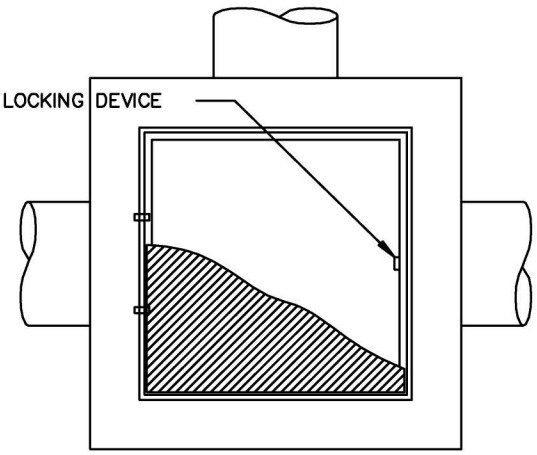
① 2 STEEL "T" POST FENCE MARKERS PER TFSD–512.

② WATER–TIGHT PLUG OR CAP.



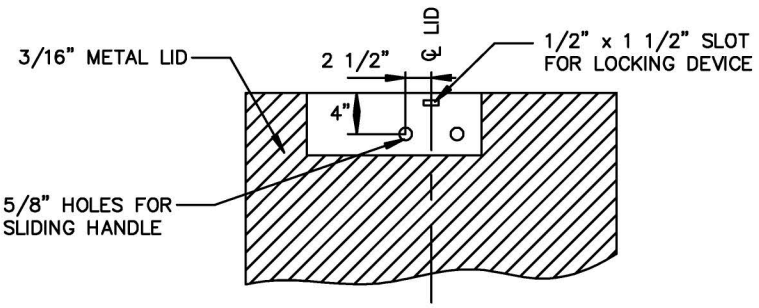
2016

CITY OF TWIN FALLS	STANDARD SEWER SERVICE CONNECTION FOR NEW DEVELOPMENT PROJECTS	STANDARD DRAWING NO. TFSD–511A



PLAN

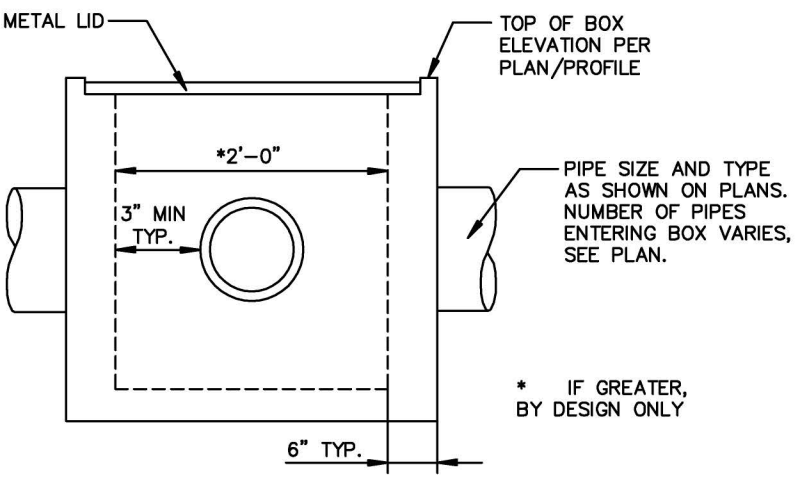
N.T.S



ALL EXPOSED METAL PARTS SHALL HAVE NON-LEAD RUST INHIBITIVE RED OXIDE PAINT APPLIED TO THEM. OUTSIDE DIMENSIONS OF THE LID TO BE (3/8") THREE-EIGHTS INCHES LESS THAN INSIDE DIMENSIONS OF ANGLE IRON FRAME.

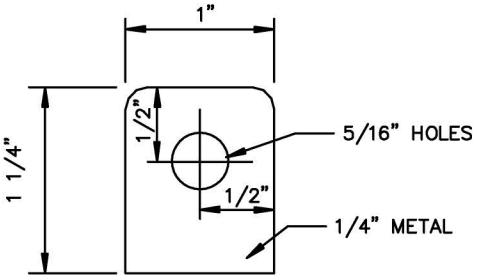
METAL LID

N.T.S



PROFILE

N.T.S



LOCKING DEVICE TO BE CENTERED ON INSIDE EDGE OF ANGLE IRON FRAME AND WELDED. SEE PLAN.

LOCKING DEVICE

N.T.S

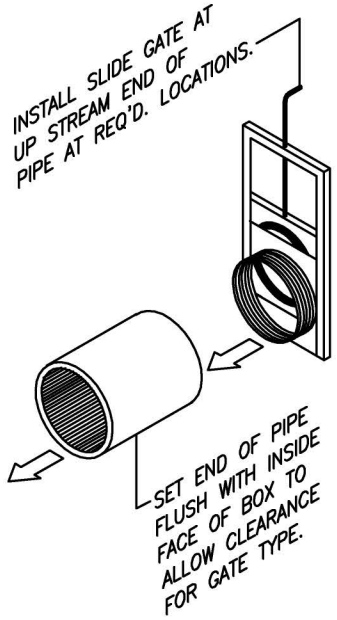
NOTE:

(A) PLACE SUFFICIENT REINFORCING STEEL TO ALLOW FOR SITE SPECIFIC LOADING CONDITIONS AND ACCOMMODATE PIPE PENETRATIONS.

(B) TYPICAL MANUFACTURER'S SIZING REFERS TO STRUCTURE INTERIOR DIMENSIONS.

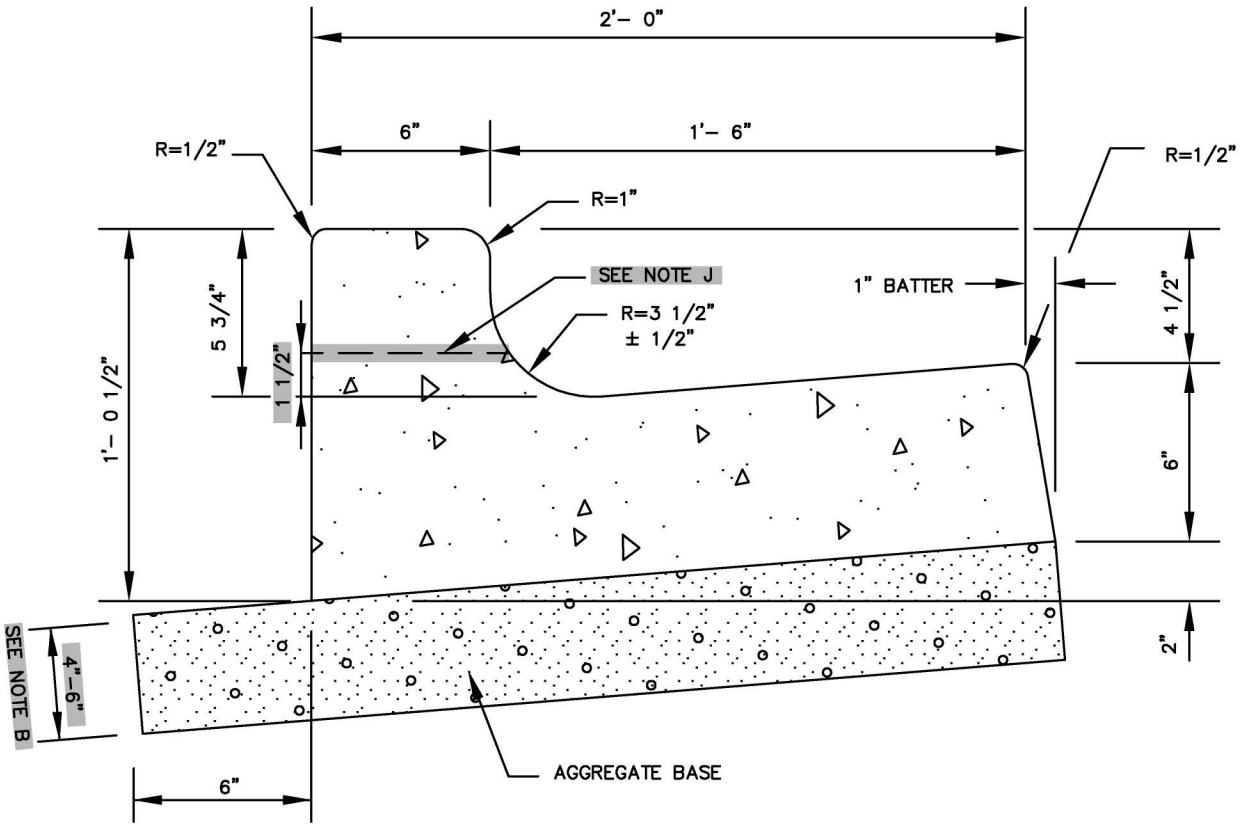
(C) 1' MIN. FROM BOTTOM PIPE TO INSIDE BOTTOM OF BOX.

(D) NOT TO BE USED IN ROADWAY OR SIDEWALK.



2016

CITY OF TWIN FALLS	STANDARD IRRIGATION BOX	STANDARD DRAWING NO. TFSD-619



NOTES:

(A) GRADE OF CURB AND GUTTER MINIMUM 0.40%, UNLESS APPROVED BY CITY ENGINEER.

(B) BASE: ARTERIALS AND COLLECTORS: 6-INCH, OTHERWISE: 4-INCH COMPACTED DEPTH OF 3/4-INCH MINUS CRUSHED AGGREGATE BASE MATERIAL, PLACE AS SPECIFIED AND PAID UNDER SECTION-802 ISPWC; COMPACTED TO EXCEED 95% OF STANDARD PROCTOR.

(C) 1/2-INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.

(D) CONTINUOUS PLACEMENT PREFERRED, SCORE LOCATIONS TO MATCH ADJACENT SIDEWALK WITH 10-FEET MAXIMUM SPACING. SCORES TO BE PER CITY OF TWIN FALLS REVISIONS - SECTION 706.

(E) MATERIALS AND CONSTRUCTION IN COMPLIANCE WITH ISPWC SPECIFICATIONS.

(F) BACKFILL AS PER SECTION-706.

(G) SECURE RIGHT-OF-WAY PERMIT BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT-OF-WAY.

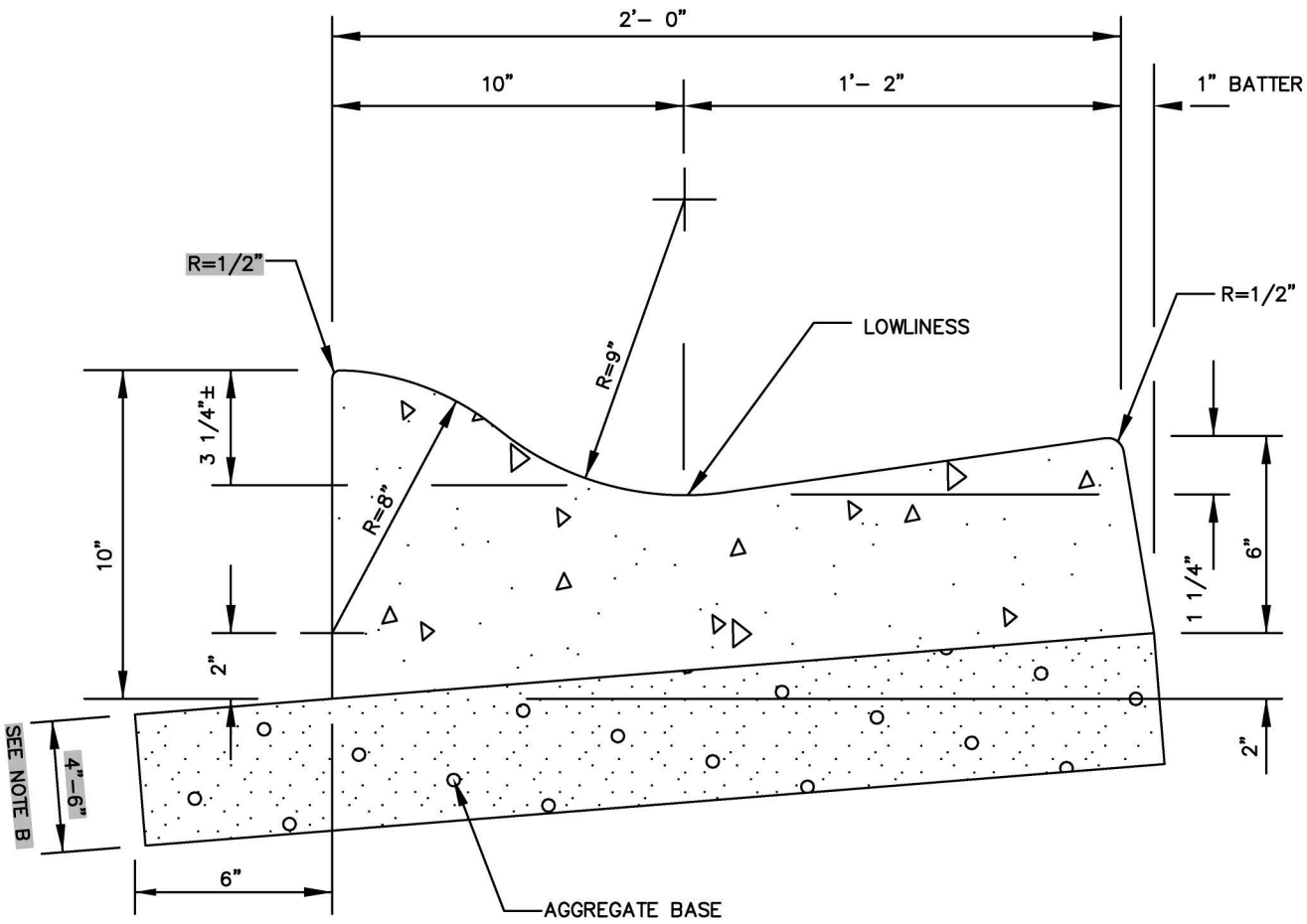
(H) STANDARD CURB TO BE USED ON:
1. COLLECTOR AND ARTERIAL STREETS, UNLESS OTHERWISE INDICATED.
2. ALL RADII PLUS 5-FEET EACH END WITH 5-FEET TRANSITION TO ROLL CURB.
3. TO MATCH EXISTING CURBS.
4. SEE SD-709 FOR CURB CONSTRUCTION WHEN SIDEWALK IS INCLUDED.

(I) NO SECTION OF CURB SHALL BE LESS THAN 5 FEET IN LENGTH.

(J) CURB CUT AT DRIVEWAY APPROACHES

2016

CITY OF TWIN FALLS	6" VERTICAL CURB AND GUTTER	STANDARD DRAWING NO. TFSD-701



NOTES:

(A) GRADE OF GUTTER MINIMUM 0.40%, UNLESS APPROVED BY THE CITY ENGINEER.

(B) BASE: ARTERIALS AND COLLECTORS: 6–INCH, OTHERWISE: 4–INCH COMPACTED DEPTH OF 3/4–INCH MINUS CRUSHED AGGREGATE BASE MATERIAL, PLACED AS SPECIFIED AND PAID UNDER SECTION–802 ISPWC; COMPACTED TO EXCEED 95% OF STANDARD PROCTOR.

(C) 1/2–INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.

(D) CONTINUOUS PLACEMENT PREFERRED, SCORE LOCATIONS TO MATCH SIDEWALK WITH 10 FEET MAXIMUM SPACING. SCORES TO BE PER CITY OF TWIN FALLS REVISIONS – SECTION 706.

(E) MATERIALS AND CONSTRUCTION IN COMPLIANCE WITH ISPWC SPECIFICATIONS.

(F) BACKFILL AS PER ISPWC SECTION–706.

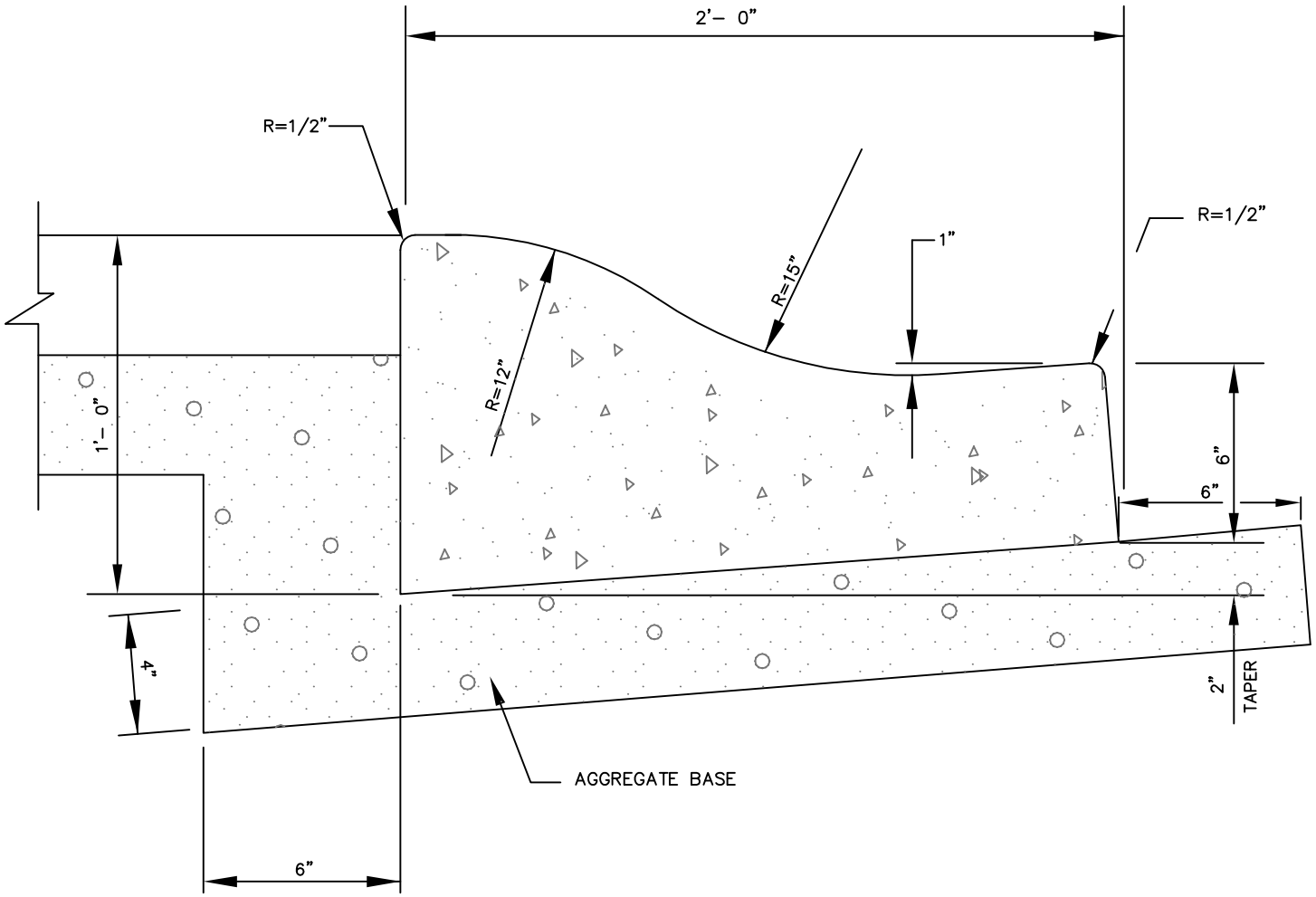
(G) SECURE RIGHT–OF–WAY PERMIT BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT–OF–WAY.

(H) USE ROLLED CURB IN RESIDENTIAL AREAS. WHEN LOCAL JURISDICTION REQUIRES VERTICAL CURB AT INTERSECTIONS VERTICAL CURB LENGTH TO BE FULL RADIUS PLUS 5 FEET AT EACH END. TRANSITION LENGTH FROM ROLLED CURB TO VERTICAL CURB 5 FEET.

(I) NO SECTION OF CURB SHALL BE LESS THAN 5 FEET IN LENGTH.

2016

CITY OF TWIN FALLS	3" ROLLED CURB AND GUTTER	STANDARD DRAWING NO. TFSD–702



NOTES:

(A) GRADE OF GUTTER MINIMUM 0.40% UNLESS APPROVED BY THE CITY ENGINEER.

(B) BASE: ARTERIALS AND COLLECTORS: 6–INCH, OTHERWISE: 4–INCH COMPACTED DEPTH OF 3/4–INCH MINUS CRUSHED AGGREGATE BASE MATERIAL, PLACED AS SPECIFIED AND PAID UNDER SECTION–802 ISPWC; COMPACTED TO EXCEED 95% OF STANDARD PROCTOR; A MINIMUM WIDTH OF 3–FEET TO GRADE, PRIOR TO SETTING CURB FORMS.

(C) 1/2–INCH PREFORMED EXPANSION JOINT MATERIAL (AASHTO M 213) AT TERMINAL POINTS OF RADII.

(D) CONTINUOUS PLACEMENT PREFERRED, SCORE LOCATIONS TO MATCH SIDEWALK WITH 10 FEET MAXIMUM SPACING. SCORES TO BE PER CITY OF TWIN FALLS REVISIONS – SECTION 706.

(E) MATERIALS AND CONSTRUCTION IN COMPLIANCE WITH ISPWC SPECIFICATIONS.

(F) BACKFILL AS PER ISPWC SECTION–706.

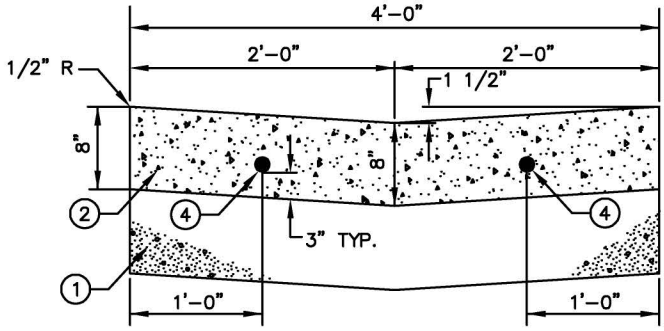
(G) SECURE RIGHT–OF–WAY PERMIT BEFORE BEGINNING CONSTRUCTION IN PUBLIC RIGHT–OF–WAY.

(H) WHEN LOCAL JURISDICTION REQUIRES VERTICAL CURB AT INTERSECTION, VERTICAL CURB LENGTH TO BE FULL CURVE CIRCUMFERENCE PLUS 5 FEET TANGENT AT EACH END. TRANSITION LENGTH FROM TYPE II CURB TO VERTICAL CURB 5 FEET.

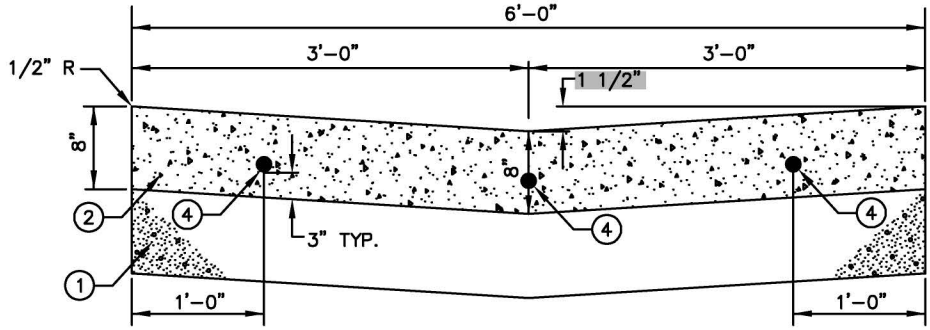
(I) NO SECTION OF CURB SHALL BE LESS THAN 5 FEET IN LENGTH.

2018

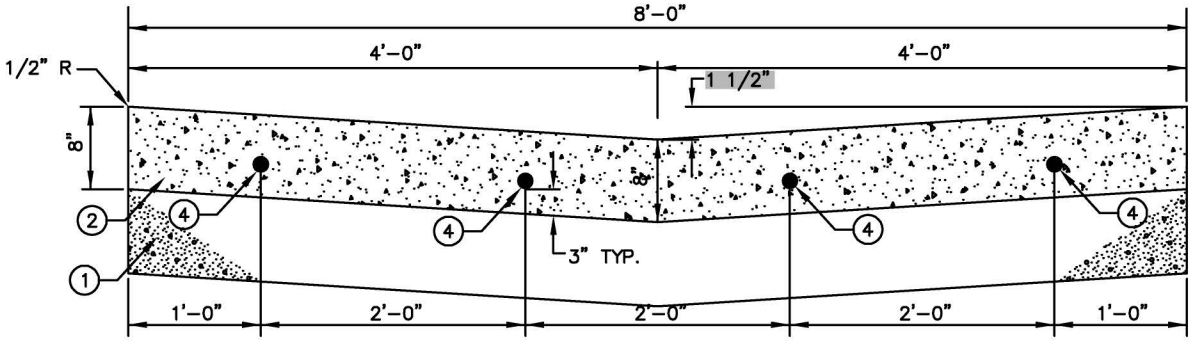
IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	CURB AND GUTTER TYPE II	STANDARD DRAWING NO. TFSD–704



TYPICAL SECTION (4')



TYPICAL SECTION (6')



TYPICAL SECTION (8')

LEGEND:

1. 6" OF 3/4" MINUS CRUSHED AGGREGATE BASE MINIMUM.
2. CONCRETE
3. NOT USED
4. #4 REBAR

NOTES:

A. SEE TFSD-708A FOR ADDITIONAL NOTES.

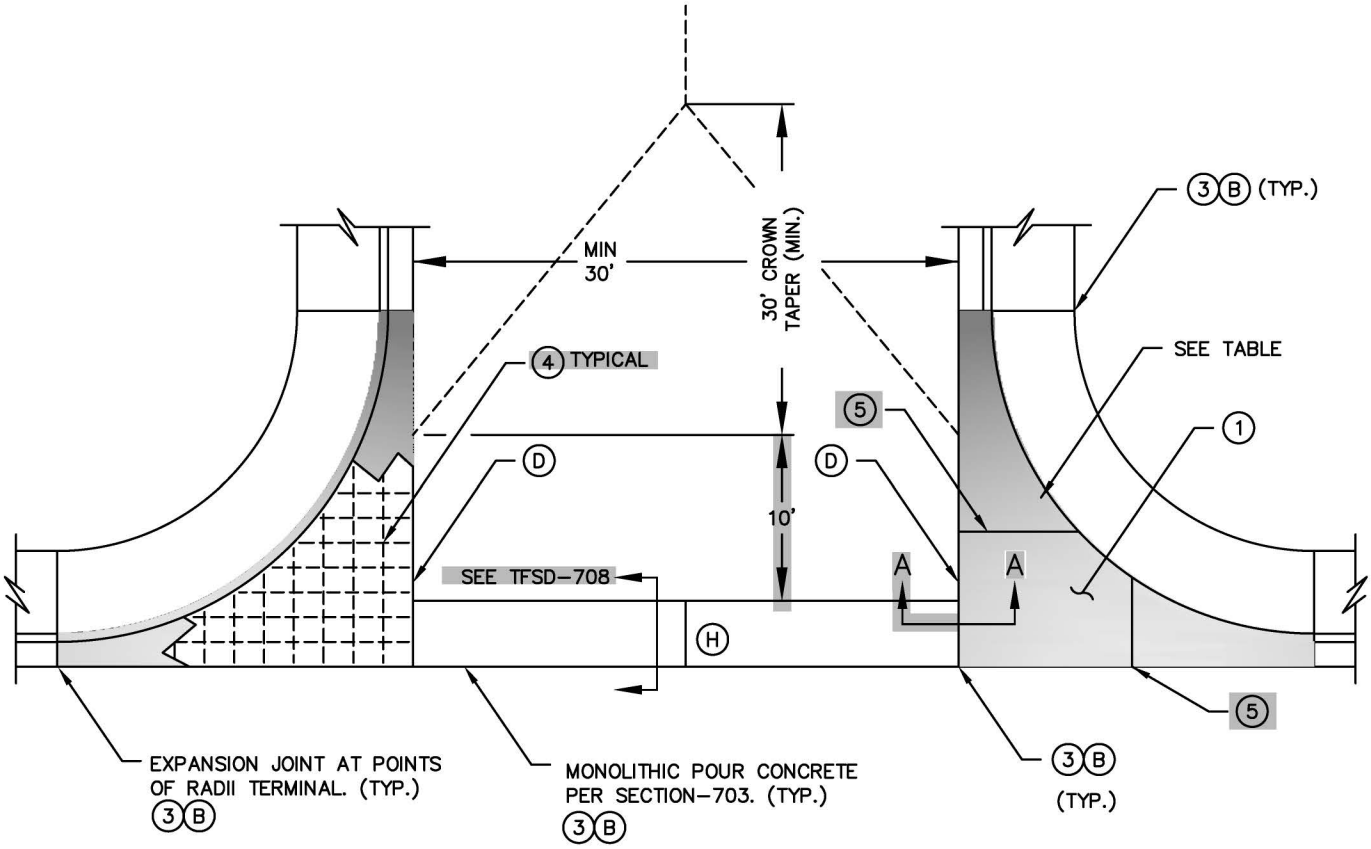
WIDTH TABLE

TYPE OF STREET	MINIMUM WIDTH
ARTERIALS	8'
COLLECTORS	6'

VALLEY GUTTER WIDTH DETERMINED BY STREET TYPE EITHER CROSSING OR ADJACENT TO NEW VALLEY GUTTER. IN CASE WITH MULTIPLE STREET TYPES, USE WIDER WIDTH UNLESS APPROVED BY CITY ENGINEER.

2016

CITY OF TWIN FALLS	VALLEY GUTTER TYPICAL SECTIONS	STANDARD DRAWING NO. TFSD-708



APPROACH WIDTH TABLE

Commercial	30–40 feet
Truck	40–65 feet

PLAN VIEW

N.T.S

FOC RADIUS	STREET TYPE
20'	RESIDENTIAL
30'	COLLECTOR/ARTERIAL
40'	W/ PERMISSION OF CITY ENGINEER

LEGEND:

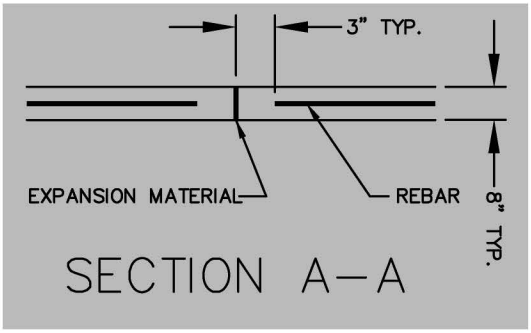
(1) 6" OF 3/4" MINUS CRUSHED AGGREGATE BASE MINIMUM UNDER CURB TURN FILLET. BASE TO BE MINIMUM 6" FOR COMMERCIAL AND TRUCK APPROACHES.

(2) CONCRETE PER ISPWC SECTION 703.

(3) 1/2" EXPANSION JOINT.

(4) #4 REBAR AT 18" ON CENTER EACH WAY.

(5) TOOLED JOINT



SECTION A–A

NOTES:

(A) GRADE OF GUTTER MINIMUM 0.40%, UNLESS APPROVED BY CITY ENGINEER

(B) EXPANSION JOINT 1/2–INCH PREFORMED JOINT MATERIAL (AASHTO M 213).

(C) FILLET AND BASE SECTION THICKNESS SHALL MATCH THE VALLEY GUTTER, TYPICAL.

(D) SHADED AREAS ARE PAY LIMITS FOR CURB TURN FILLET.

(E) CRACKS OR BROKEN SECTIONS PER CITY OF TWIN FALLS REVISIONS–SECTION 703

(F) ALL REBAR OVERLAP SHALL BE 15" MINIMUM.

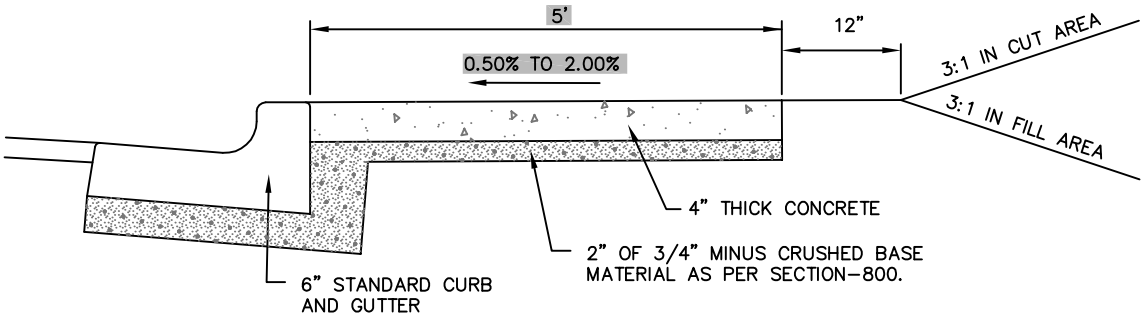
(G) WHEN SECTIONS OF VALLEY GUTTER ARE REMOVED OR REPLACED THE NEW SECTION SHALL BE DOWELED INTO THE EXISTING CONCRETE 15" INCHES. THE NEW VALLEY GUTTER SECTION SHALL BE NO LESS THAN 6' LONG.

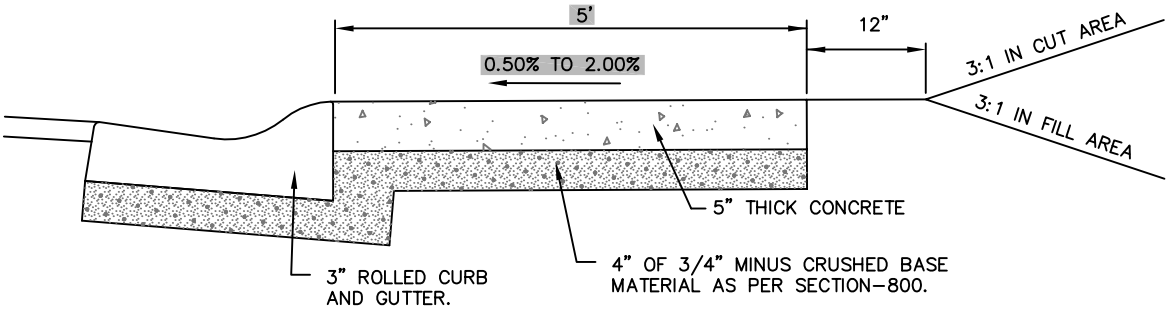
(H) TOOLED CONTRACTION JOINTS SHALL BE PLACED IN THE VALLEY GUTTER AT 20' FEET INTERVALS OR IF LESS THAN 40' FEET LONG, PLACE ONE IN THE MIDDLE.

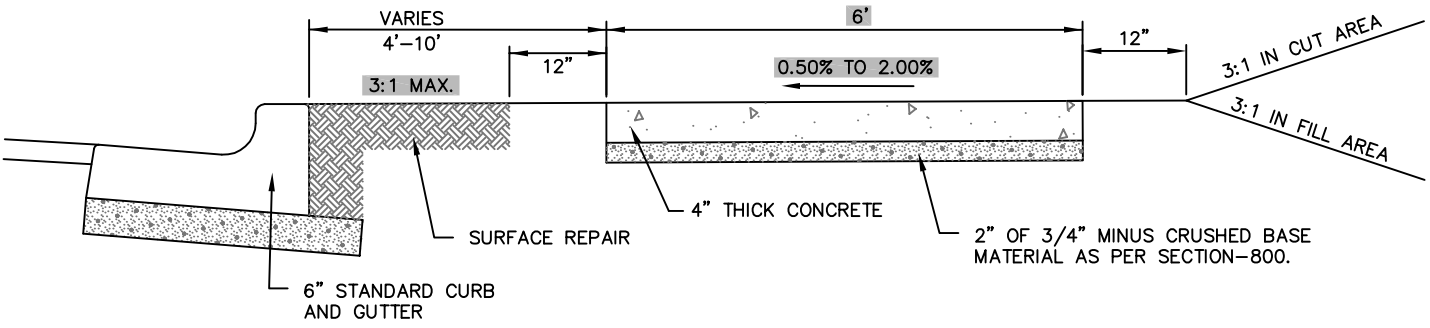
(I) ADA RAMPS NOT SHOWN, SEE STANDARD DRAWING TFSD–712 SERIES. CURB TURN FILLET TO MEET ADA REQUIREMENTS.

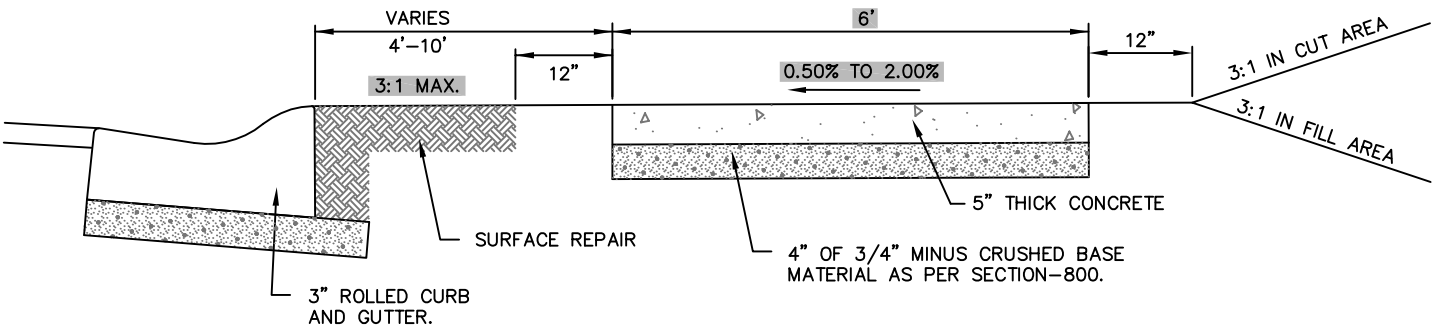
2016

CITY OF TWIN FALLS	CURB TURN FILLET APPROACH	STANDARD DRAWING NO. TFSD–708A









NOTES:

(A) LOCATION, GRADE, AND WIDTH TO BE ESTABLISHED OR APPROVED BY THE OWNER.

(B) BASE TO BE COMPACTED TO EXCEED 95% OF STANDARD DENSITY.

(C) SLOPE SIDEWALK TOWARD THE STREET NO LESS THAN 0.50% AND NOT TO EXCEED 2.00%.

(D) SCORE AT INTERVALS TO MATCH WIDTH OF WALK NOT TO EXCEED 5 FEET SPACING.

(E) 1/2" TRANSVERSE PREFORMED BITUMINOUS JOINTS AT THE TERMINUS POINTS FOR CURVE AND WHERE SIDEWALK IS PLACED BETWEEN TWO PERMANENT FOUNDATIONS, PLACE 1/2" EXPANSION JOINT MATERIAL ALONG THE BACK OF WALK THE FULL LENGTH. (TRANSVERSE EXPANSION JOINTS SHALL BE PLACED AT NO MORE THAN 20').

(F) DRIVEWAY APPROACH ACROSS PLANTER STRIP TO BE 5" MINIMUM CONCRETE OVER 4" OF 3/4" MINUS CRUSHED BASE.

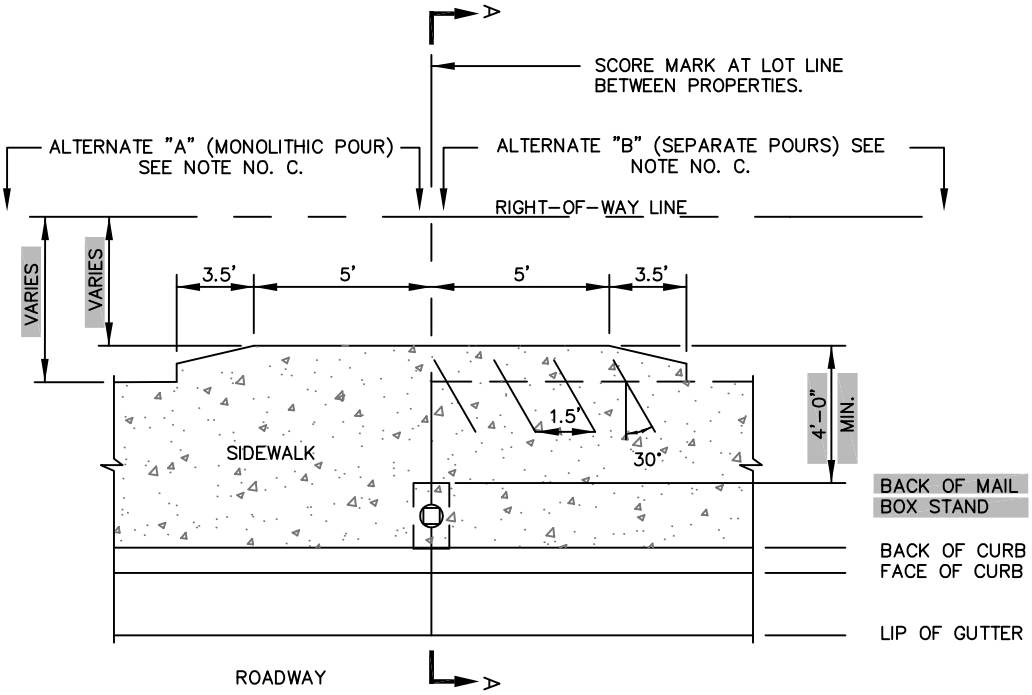
(G) SIDEWALK WIDTH TO BE 5' MINIMUM UNLESS APPROVED BY THE CITY ENGINEER.

(H) ON SIDEWALKS IN COMMERCIAL AREAS WHERE THE WALK EXTENDS FROM THE BUILDING TO THE CURBING, OR EXCEEDS THE STANDARD FIVE (5) FEET WIDTH, THE WALK SHALL BE LAID OUT IN BLOCKS NOT TO EXCEED TEN (10) FEET BY TEN (10) FEET SQUARES.

(I) WHEN TRANSITIONING NEW SIDEWALK TO EXISTING SIDEWALK A 5 FOOT TRANSITION PANEL MAY BE CONSTRUCTED AND SHALL BE SEPARATED AND ISOLATED WITH EXPANSION MATERIAL.

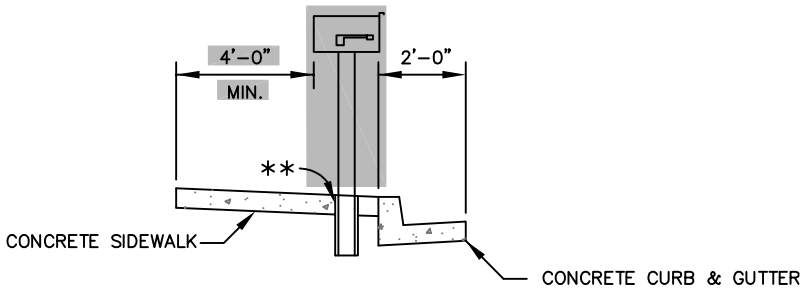
2018

CITY OF TWIN FALLS	CONCRETE SIDEWALK	STANDARD DRAWING NO. TFSD-709



PLAN

N.T.S



SECTION A-A

N.T.S

** 16" DEEP x 6" DIAMETER PVC PIPE TO BE USED AND BACKFILLED OR COVERED FOR USE AT A LATER TIME.

NOTES:

(A) LOCATIONS SHOWN ON CONSTRUCTION PLANS.

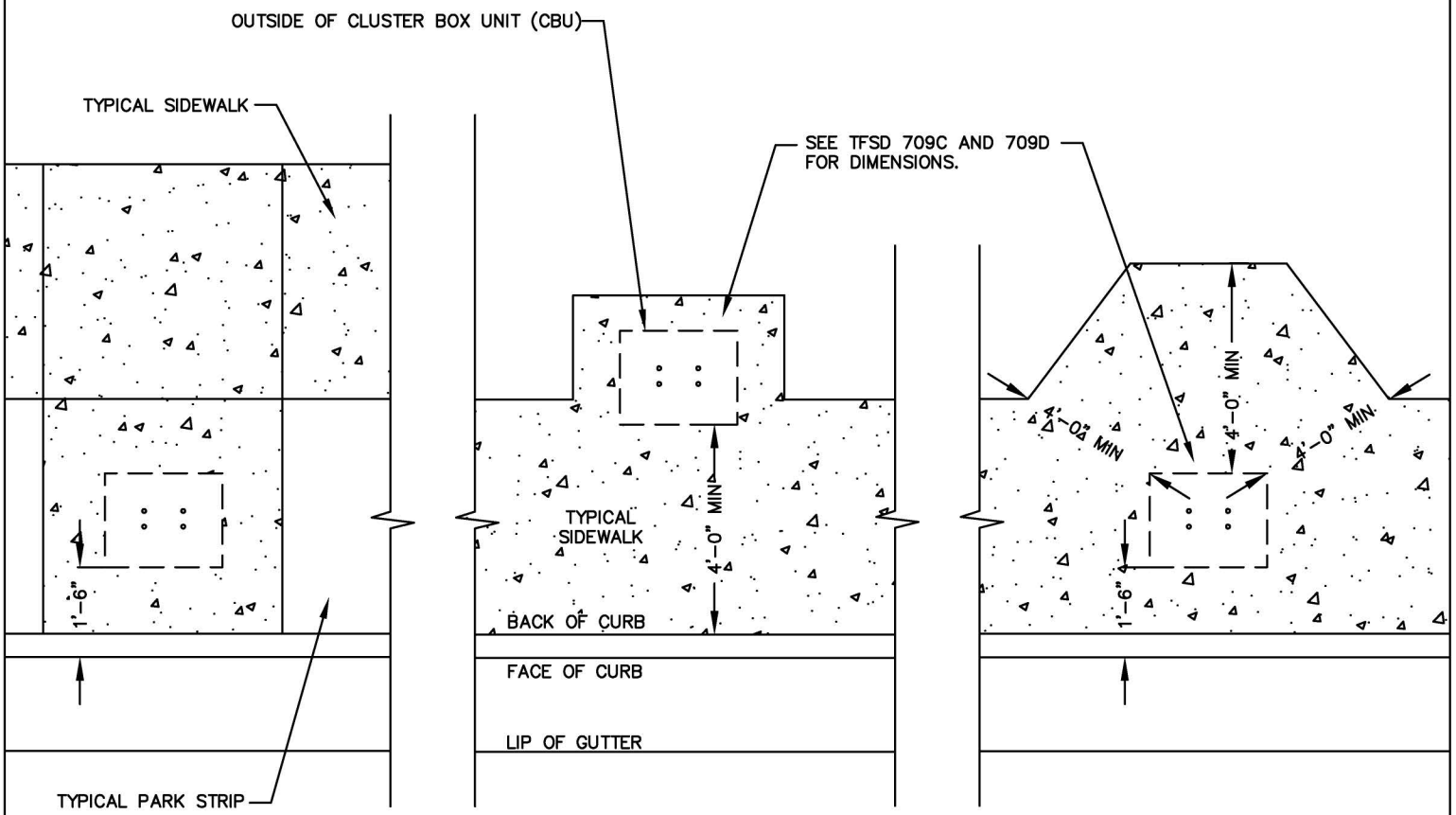
(B) SEE STANDARD SPECIFICATIONS SECTION 700 FOR DETAILS NOT SHOWN.

(C) ALL SIDEWALK CONSTRUCTION OF MAILBOX LOCATIONS SHALL BE EITHER BY ALTERNATE "A" OR ALTERNATE "B" CONSTRUCTION. ALTERNATE "B" SHALL INCLUDE PLACEMENT OF 2' x 1/2" (NO. 4) STEEL REINFORCING BARS PLACED 1.5' O.C. DIRECTED TOWARD THE LOT LINE BETWEEN PROPERTIES ON BOTH SIDES OF LOT LINE AT BACK OF WALK AREA (SEE PLAN VIEW).

(D) MAIL BOXES SHALL HAVE SUCCESFULLY PASSED THE TESTING REQUIREMENTS OF THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) OR THE NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) 350. INSTALL MAIL BOXES IN ACCORDANCE WITH MANUFACTURES' INSTALLATION INSTRUCTIONS.

2018

CITY OF TWIN FALLS	CURBSIDE MAIL BOX STAND	STANDARD DRAWING NO. TFSD-709A



PLAN VIEW
N.T.S

NOTES:

(A) CONTRACTOR TO PROVIDE AND INSTALL CBUS

(B) LOCATION OF CBU TO BE APPROVED BY CITY ENGINEER AND USPS POSTMASTER.

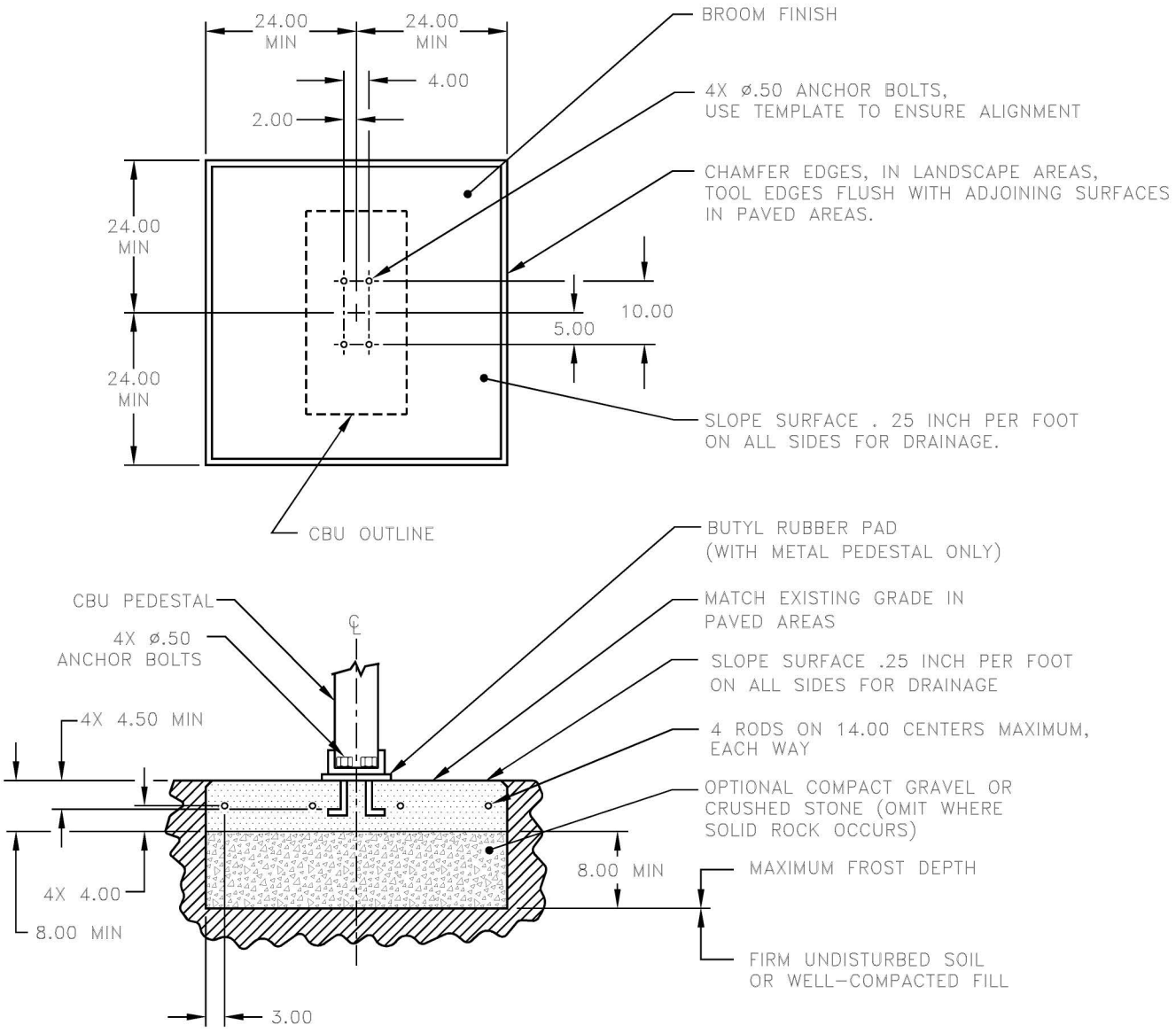
(C) ALL CBUS SHALL BE PLACED AT A MINIMUM DISTANCE OF 1.5 FEET FROM THE FACE OF CURB TO MAINTAIN CLEARZONE REQUIREMENTS.

(D) MAINTAIN 4' CLEARANCE AROUND CLUSTER BOX UNIT.

(E) USE 8 DOOR OR 16 DOOR CLUSTER BOX UNITS.

2016

CITY OF TWIN FALLS	CLUSTER BOX UNIT DETAIL	STANDARD DRAWING NO. TFSD-709B



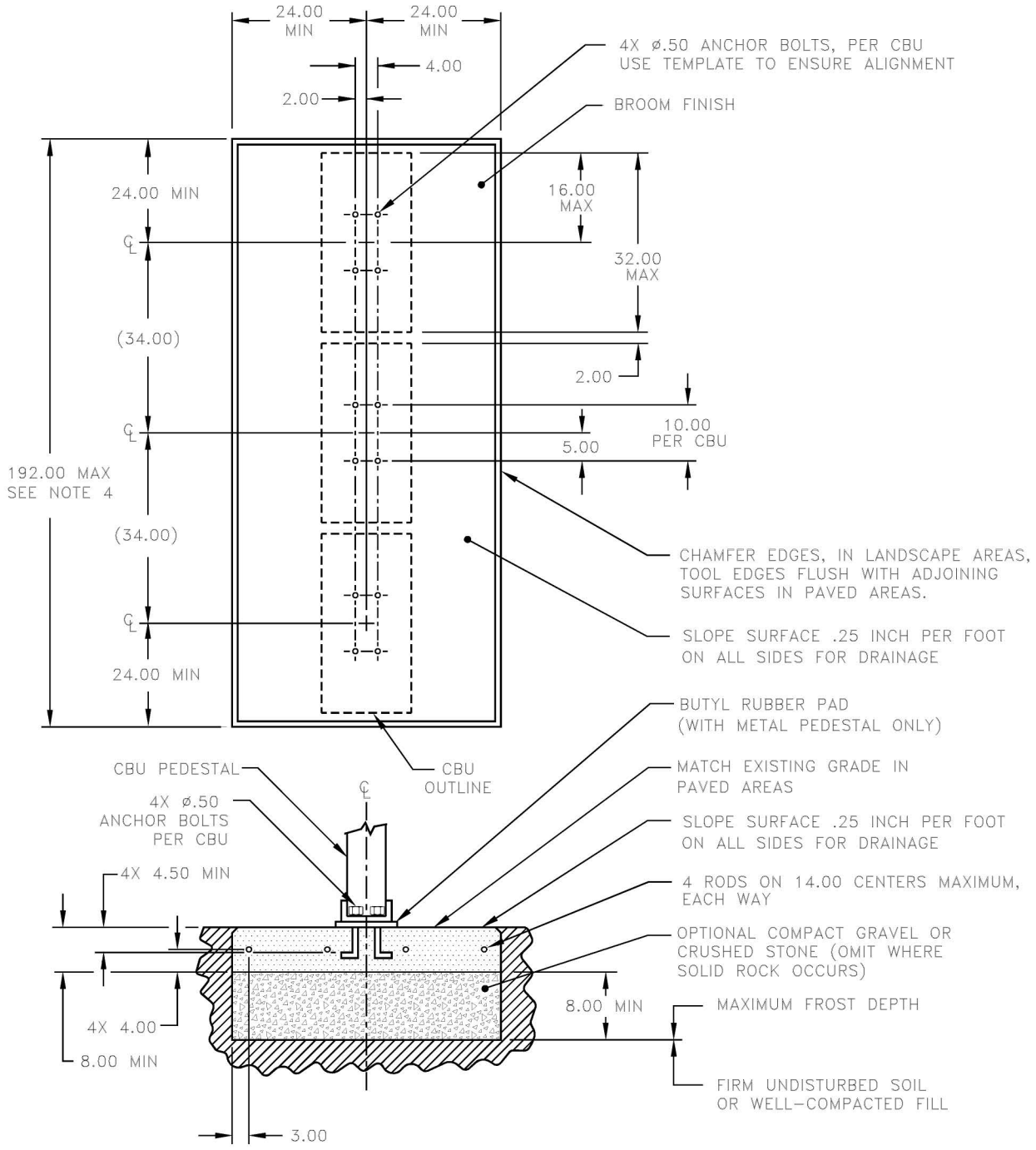
NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN – 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 – 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE B8M, TYPE 316 STAINLESS STEEL.

ALL DIMENSIONS ARE IN INCHES

2016

CITY OF TWIN FALLS	USPS CLUSTER BOX UNIT DETAIL	STANDARD DRAWING NO. TFSD–709C



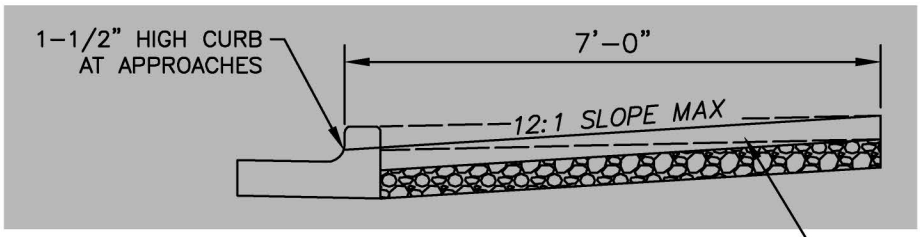
NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS, CONTAIN 4% MIN – 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 – 4.50 SLUMP IN ACCORDANCE WITH ACI 301.
2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615, GRADE 60.
3. ANCHOR BOLTS SHALL CONFORM TO ASTM A193, GRADE B8M, TYPE 316 STAINLESS STEEL.
4. A 3 CBU CONFIGURATION IS DEPICTED. A 2 OR 4 CBU CONFIGURATION MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 192 INCHES.

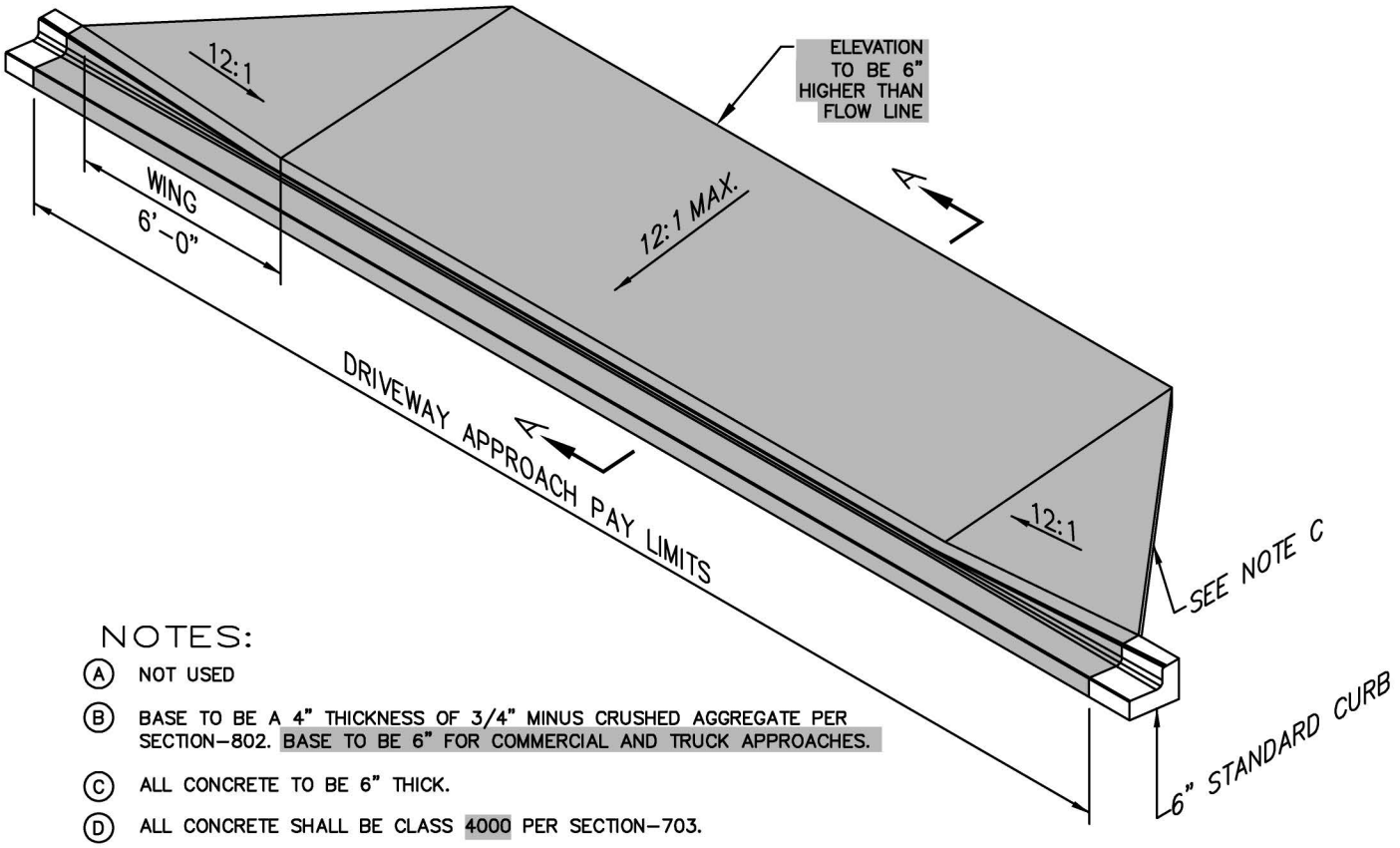
ALL DIMENSIONS ARE IN INCHES

2016

CITY OF TWIN FALLS	USPS MULTI-CLUSTER BOX UNIT DETAIL	STANDARD DRAWING NO. TFSD-709D



SECTION A–A
N.T.S.



NOTES:

(A) NOT USED

(B) BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION–802. BASE TO BE 6" FOR COMMERCIAL AND TRUCK APPROACHES.

(C) ALL CONCRETE TO BE 6" THICK.

(D) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION–703.

(E) NOT USED

(F) THE SHADED AREAS ARE PAY LIMITS FOR CONCRETE DRIVEWAY APPROACH.

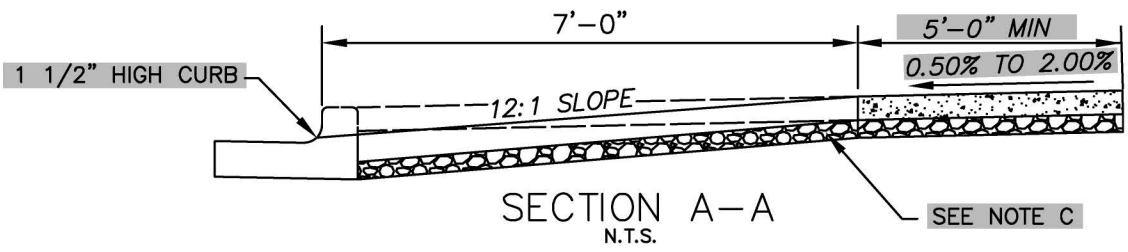
(G) DRIVEWAY APPROACHES BETWEEN 20' AND 30' WIDE SHALL HAVE 1 CONTRACTION JOINT CENTERED. DRIVEWAY APPROACHES OVER 30' WIDE SHALL HAVE CONTRACTION JOINTS EVENLY SPACED (MAXIMUM SPACING 15').

APPROACH WIDTH TABLE

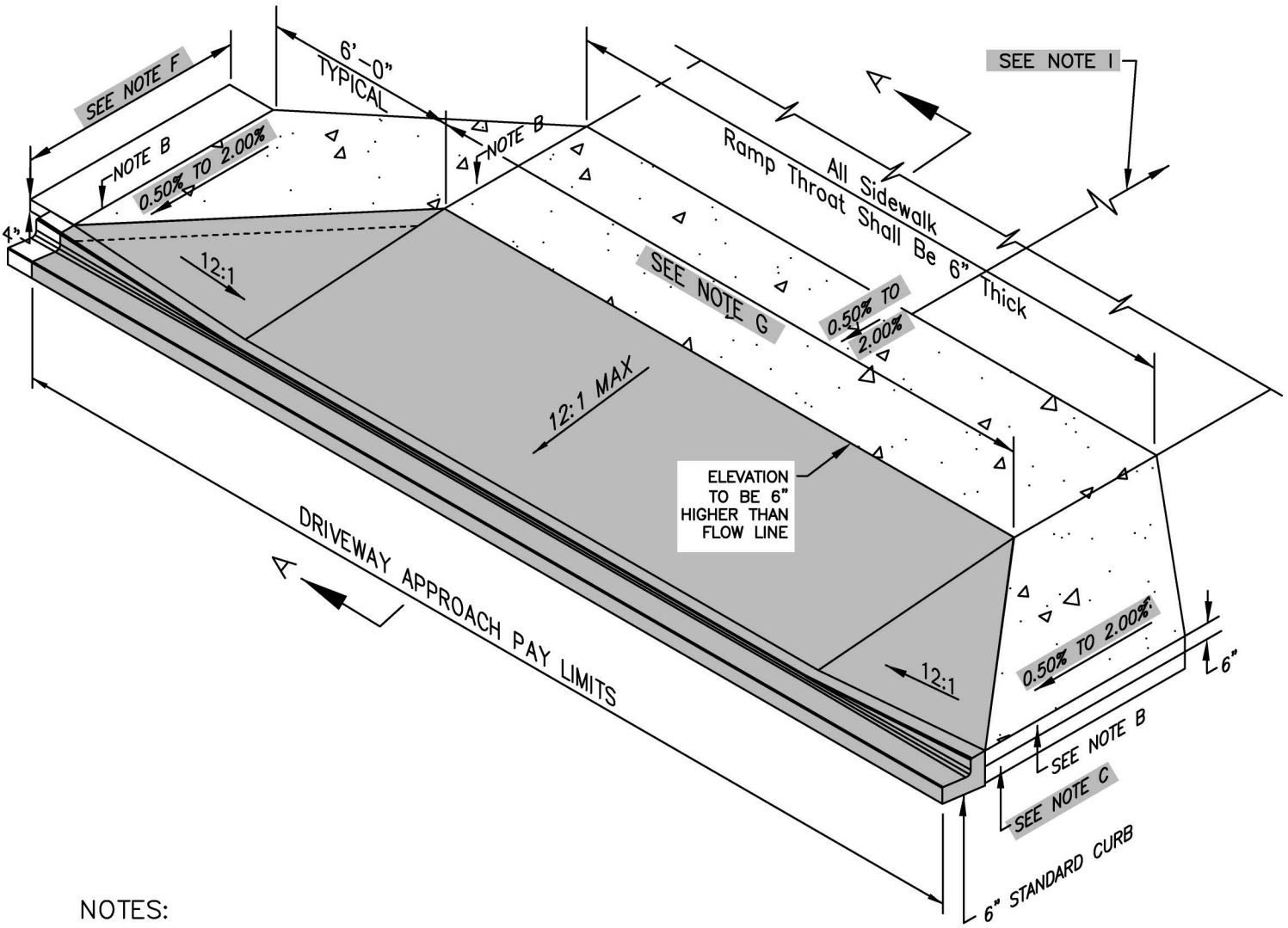
Residential	12–36 feet
Joint Use	20–40 feet
Commercial	30–40 feet
Truck	40–65 feet

2016

CITY OF TWIN FALLS	CONCRETE DRIVEWAY APPROACH WITHOUT SIDEWALK	STANDARD DRAWING NO. TFSD–710



SECTION A-A
N.T.S.



NOTES:

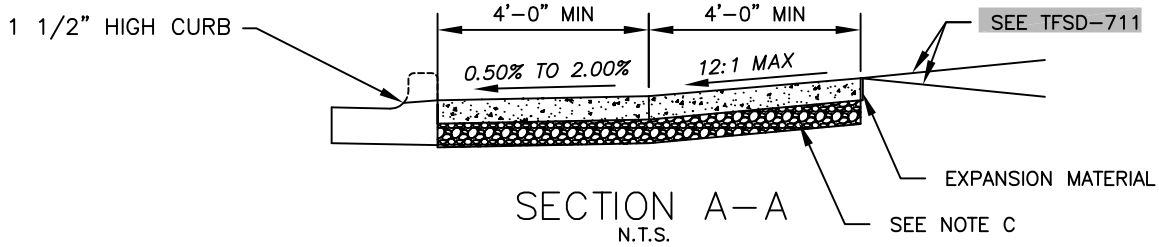
- (A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.
- (B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.
- (C) BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION – 802.
- (D) APPROACH THROAT WIDTHS SET BY POLICY AND APPLICATION. ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPARATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.
- (E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION – 703.
- (F) SIDEWALK WIDTH TO BE 5' MINIMUM UNLESS APPROVED BY THE CITY ENGINEER.
- (G) APPROACH WIDTHS CAN BE FOUND ON TABLE.
- (H) THE SHADED AREAS ARE PAY LIMITS FOR CONCRETE DRIVEWAY APPROACH.
- (I) 20' MIN FROM BACK OF SIDEWALK TO ANY STRUCTURE.
- (J) THIS STANDARD DRAWING TO BE USED ONLY UPON APPROVAL OF CITY ENGINEER.
- (K) DRIVEWAY APPROACHES BETWEEN 20' AND 30' WIDE SHALL HAVE 1 CONTRACTION JOINT CENTERED. DRIVEWAY APPROACHES OVER 30' WIDE SHALL HAVE CONTRACTION JOINTS EVENLY SPACED (MAXIMUM SPACING 15').

APPROACH WIDTH TABLE

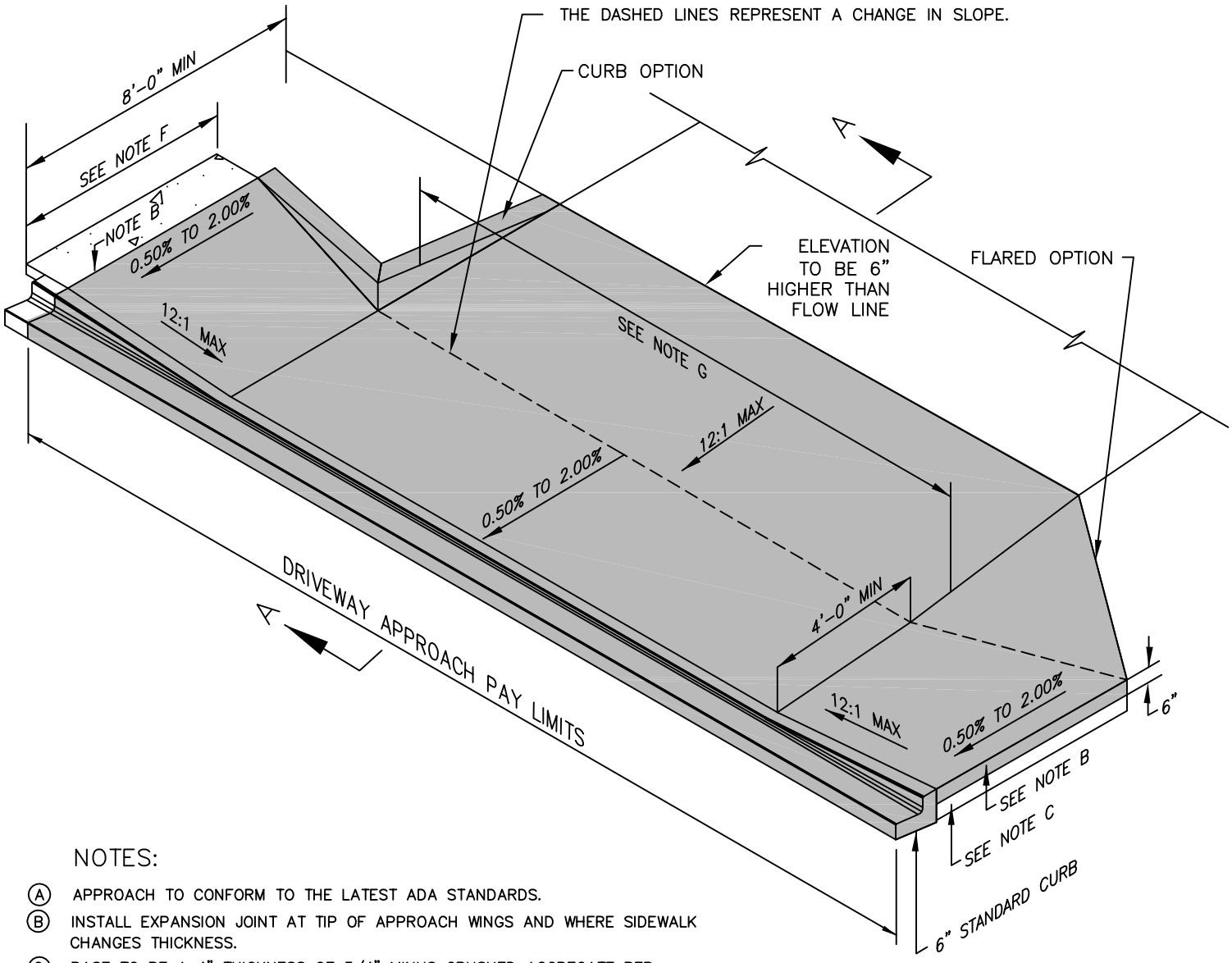
Residential	12–36 feet
Joint Use	20–40 feet

2016

CITY OF TWIN FALLS	RESIDENTIAL DRIVEWAY WITH SIDEWALK AROUND APPROACH	STANDARD DRAWING NO. TFSD–710A



SECTION A-A
N.T.S.



NOTES:

(A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.

(B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.

(C) BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION – 802.

(D) ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPARATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.

(E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION – 703.

(F) SIDEWALK WIDTH TO BE 5' MINIMUM UNLESS APPROVED BY THE CITY ENGINEER.

(G) APPROACH WIDTHS CAN BE FOUND ON TABLE.

(H) THE SHADED AREAS ARE PAY LIMITS FOR CONCRETE DRIVEWAY APPROACH.

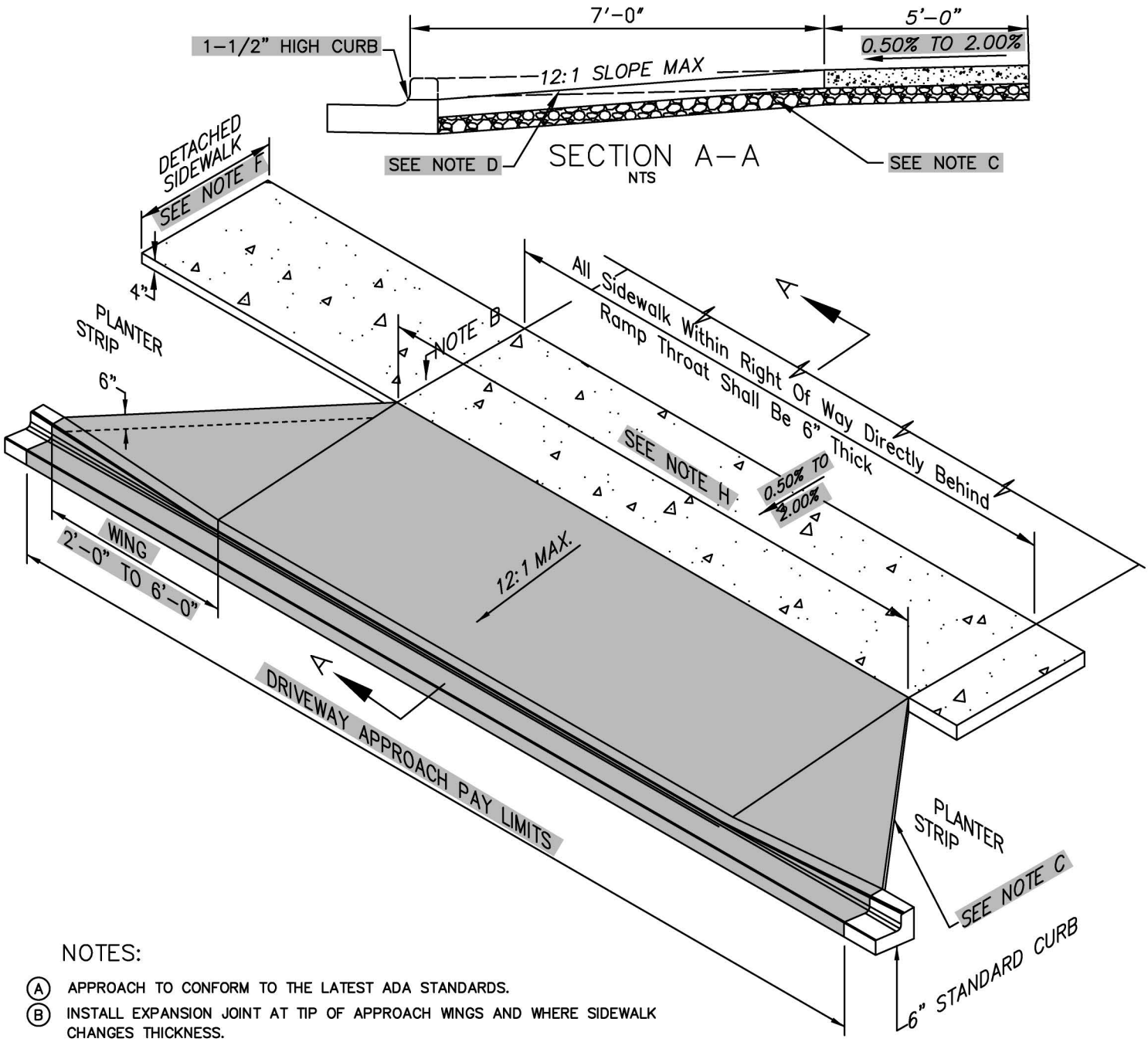
(I) DRIVEWAY APPROACHES BETWEEN 20' AND 30' WIDE SHALL HAVE 1 CONTRACTION JOINT CENTERED. DRIVEWAY APPROACHES OVER 30' WIDE SHALL HAVE CONTRACTION JOINTS EVENLY SPACED (MAXIMUM SPACING 15').

APPROACH WIDTH TABLE

Residential	12–36 feet
Joint Use	20–40 feet

2018

CITY OF TWIN FALLS	RESIDENTIAL DRIVEWAY WITH RAMPED SIDEWALK	STANDARD DRAWING NO. TFSD-710B



NOTES:

(A) APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.

(B) INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.

(C) BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION – 802.

(D) ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPERATE FROM CURB THE SIDEWALK IMMEDIATLEY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.

(E) ALL CONCRETE SHALL BE CLASS 4000 PER SECTION – 703.

(F) SIDEWALK WIDTH TO BE 5' MINIMUM UNLESS APPROVED BY THE CITY ENGINEER.

(G) ROUTING OF SIDEWALK AROUND APPROACH IS NOT NECESSARY WHEN THE PLANTING STRIP EQUALS OR EXCEEDS 6.5 FEET.

(H) APPROACH WIDTHS CAN BE FOUND ON TABLE.

(I) THE SHADED AREAS ARE PAY LIMITS FOR CONCRETE DRIVEWAY APPROACH.

(J) DRIVEWAY APPROACHES BETWEEN 20' AND 30' WIDE SHALL HAVE 1 CONTRACTION JOINT CENTERED. DRIVEWAY APPROACHES OVER 30' WIDE SHALL HAVE CONTRACTION JOINTS EVENLY SPACED (MAXIMUM SPACING 15').

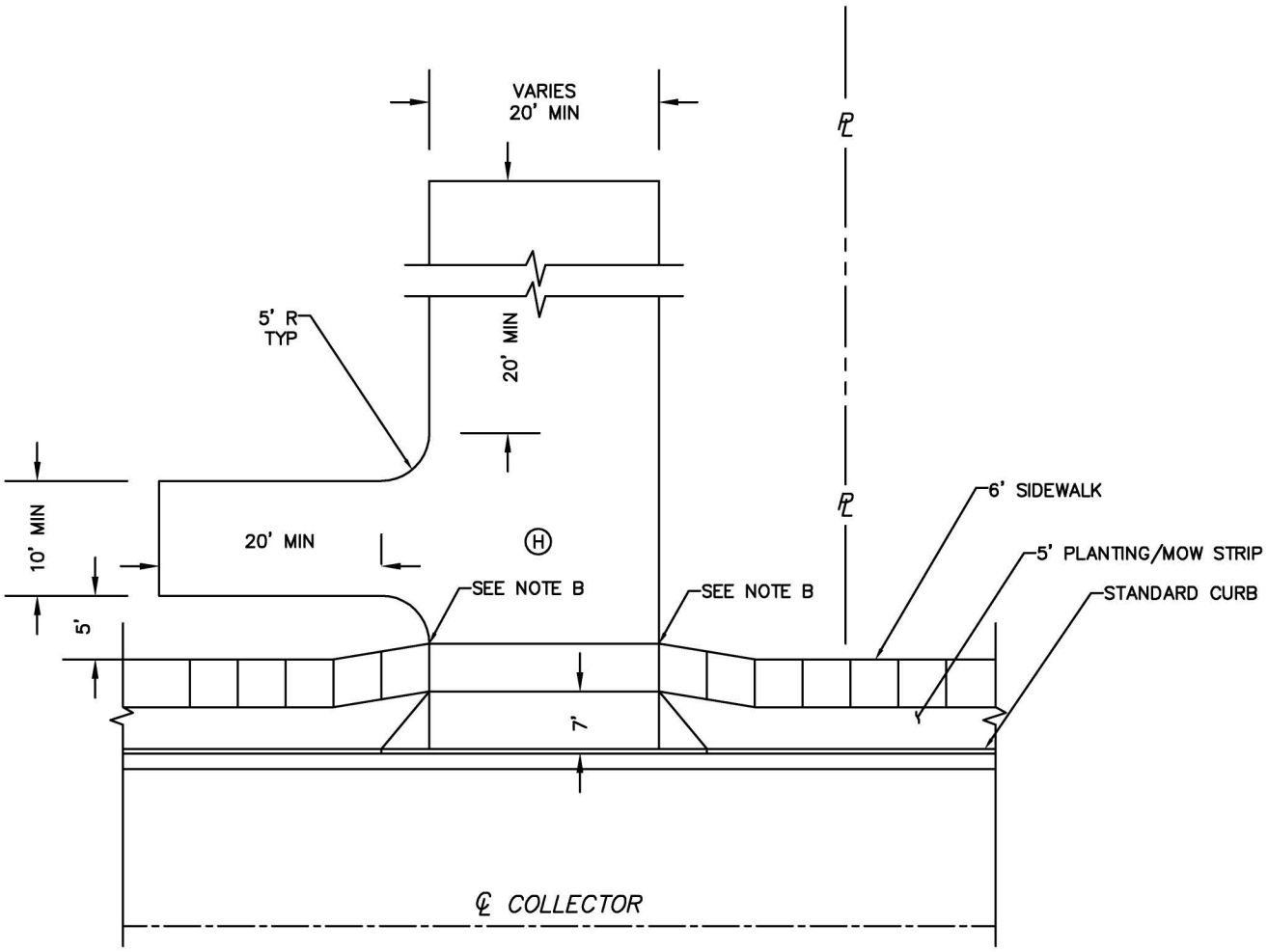
(K) 20' MIN FROM BACK OF SIDEWALK TO ANY STRUCTURE.

APPROACH WIDTH TABLE

Residential	12–36 feet
Joint Use	20–40 feet

2016

CITY OF TWIN FALLS	RESIDENTIAL DRIVEWAY WITH DETACHED SIDEWALK	STANDARD DRAWING NO. TFSD–710C



NOTES:

Ⓐ APPROACH TO CONFORM TO THE LATEST ADA STANDARDS.

Ⓑ INSTALL EXPANSION JOINT AT TIP OF APPROACH WINGS AND WHERE SIDEWALK CHANGES THICKNESS.

Ⓒ BASE TO BE A 4" THICKNESS OF 3/4" MINUS CRUSHED AGGREGATE PER SECTION – 802. BASE TO BE 6" FOR COMMERCIAL AND TRUCK APPROACHES.

Ⓓ ALL CONCRETE TO BE 6" THICK FROM TIP OF WING TO TIP TIP OF WING UP TO THE EXPANSION JOINT. WHEN SIDEWALK IS SEPERATE FROM CURB THE SIDEWALK IMMEDIATELY BEHIND THE APPROACH THROAT SHALL BE 6" THICK ALSO.

Ⓔ ALL CONCRETE SHALL BE CLASS 4000 PER SECTION – 703.

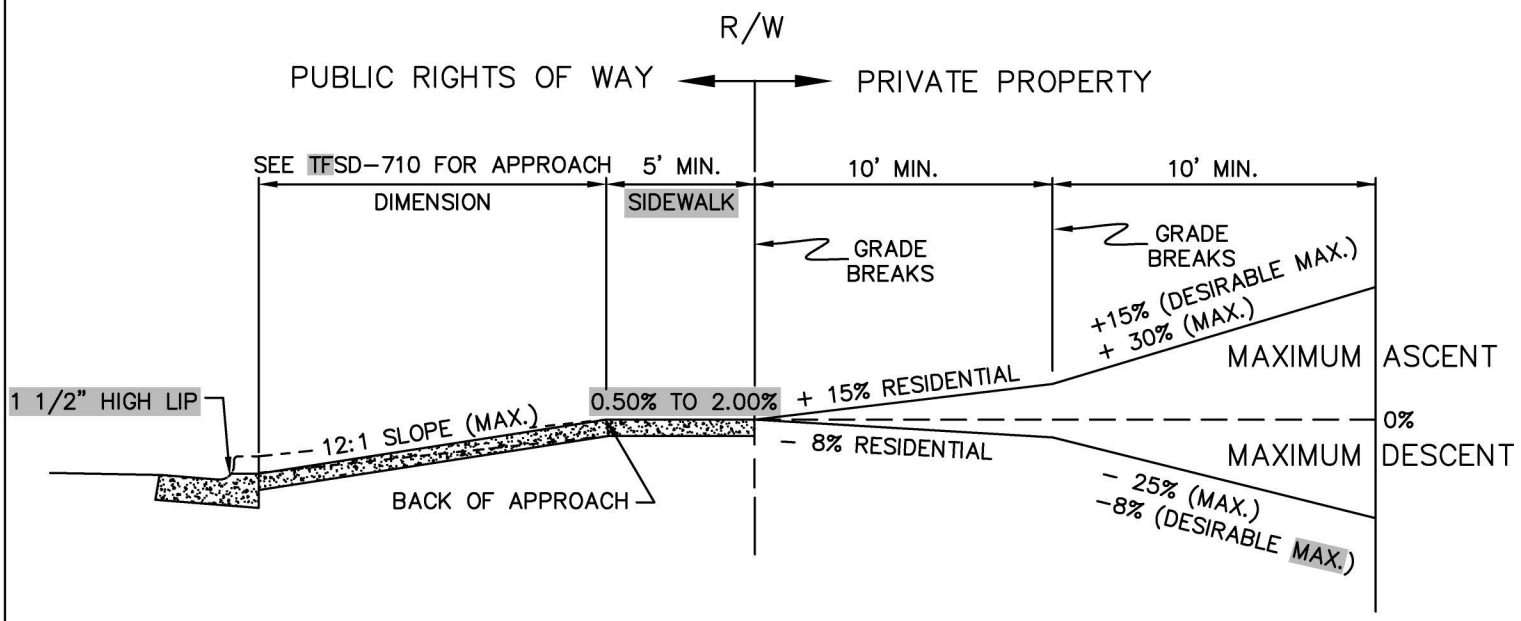
Ⓕ SIDEWALK WIDTH TO BE 6' MINIMUM UNLESS APPROVED BY THE CITY ENGINEER.

Ⓖ ROUTING OF SIDEWALK AROUND APPROACH IS NOT NECESSARY WHEN THE PLANTING STRIP EQUALS OR EXCEEDS 6.5 FEET.

Ⓗ DRIVEWAY AND ONSITE TURNAROUND TO BE AN ALL WEATHER SURFACE.

2016

CITY OF TWIN FALLS	ONSITE TURNAROUND	STANDARD DRAWING NO. TFSD–710D



NOTES:

(A) SAME PRINCIPLES APPLY FOR ALL CURB TYPES.

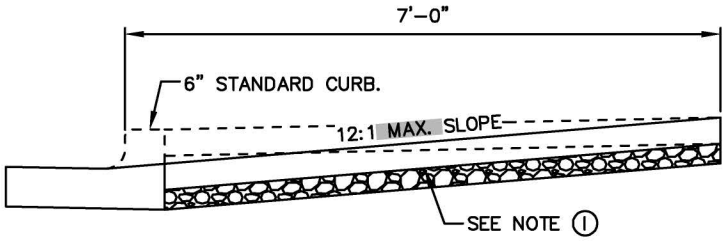
(B) MINIMUM AND MAXIMUM GRADES SHOWN FOR ASCENDING AND DESCENDING DRIVES

(C) DESIGNED TO MINIMIZE BUMPER DRAGGING OF VEHICLES.

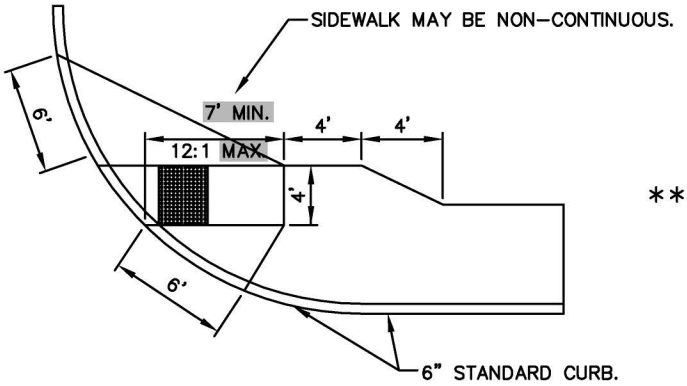
(D) WHEN DIFFERENCE IN GRADE IS GREATER THAN 1' USE THE SLOPES ABOVE.

2016

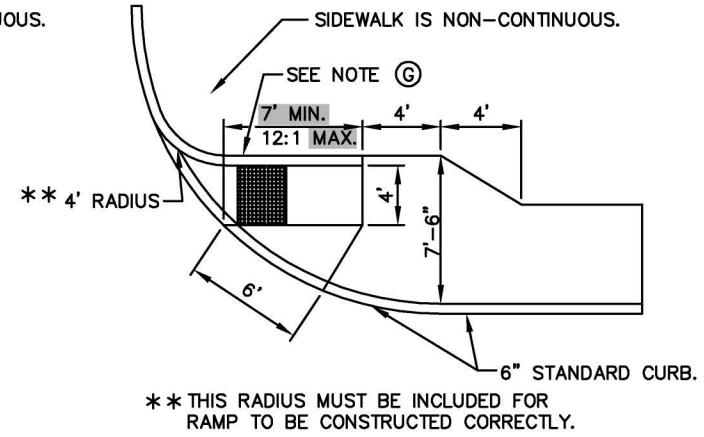
CITY OF TWIN FALLS	DRIVEWAY GRADE STANDARD	STANDARD DRAWING NO. TFSD–711



RAMP SECTION



TYPE "C3"
20' RADIUS MINIMUM



** THIS RADIUS MUST BE INCLUDED FOR RAMP TO BE CONSTRUCTED CORRECTLY.

TYPE "C4"
20' RADIUS MINIMUM

NOTES:

(A) THIS TYPE OF RAMP MAY BE USED FOR LARGE COMMERCIAL APPROACHES WHERE THE STANDARD CONCRETE APPROACH IS NOT REQUIRED. THESE ALSO MAY BE USED FOR ALLEY AND PRIVATE STREET APPROACHES WHERE:
   A. THE SIDEWALK IS NOT REQUIRED TO CONTINUE AROUND THE RADIUS
   B. A SECOND RAMP IS NOT REQUIRED TO MOVE PEDESTRIANS ACROSS THE PRIMARY STREET.

(B) CURB ON THE RADIUS MUST BE 6" STANDARD CURB FOR SHOWN DIMENSIONS.

(C) ALL RAMP SURFACES MUST CONFORM TO ADA REQUIREMENTS.

(D) THIS TYPE OF CORNER MUST HAVE A SINGLE RAMP TURNED PARALLEL TO THE PRIMARY STREET.

(E) CORNER RADIUS IS 20' AS A MINIMUM UNLESS APPROVED BY THE CITY ENGINEER. THE CITY MAY REQUIRE LARGER RADIUS SIZES WHERE LARGER VEHICLE TURNING IS EXPECTED.

(F) THE 7 FOOT SIDE OF THE RAMP THROAT MUST BE PARALLEL WITH THE EXPECTED PATH OF THE PEDESTRIAN AND NOT PERPENDICULAR TO THE CURB FOR EXAMPLE: PARALLEL WITH THE CROSS WALK STRIPES, THE STOP BAR, OR THE PRIMARY STREET CURB.

(G) THE RAMP WING MUST BE 6 FEET MEASURED AT THE CURB FACE FOR 6" STANDARD CURB. THE WING AWAY FROM THE ROAD IS ELIMINATED AND REPLACED WITH A WING SUBSTITUTE THAT IS 6 INCHES HIGH AT THE FACE OF THE STANDARD CURB AND 0 INCHES HIGH AT THE BACK OF THE RAMP AND POURED MONOLITHICALLY WITH THE RAMP.

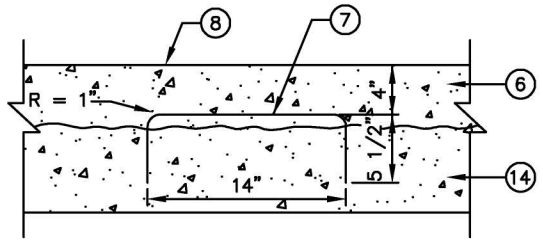
(H) ALL RAMPS MUST HAVE A MINIMUM 4 FEET X 4 FEET LANDING BEHIND THEM FOR PEDESTRIANS.

(I) ALL CONCRETE ADJOINING THE RADIUS WITHIN AND AROUND THE RAMPS SHALL BE 5 INCHES THICK WITH 4 INCHES OF 3/4 INCH AGGREGATE BASE.

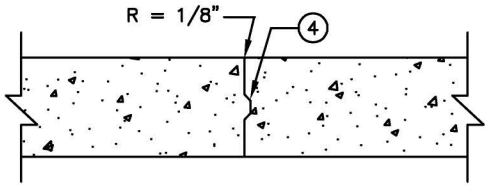
(J) RAMP CROSS SLOPE TO BE 0.50% TO 2.00%.

2016

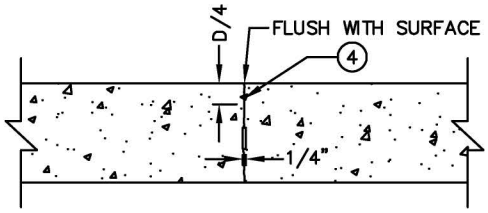
CITY OF TWIN FALLS	PEDESTRIAN RAMP TYPE "C" FOR NEW DEVELOPMENT	STANDARD DRAWING NO. TFSD-712C



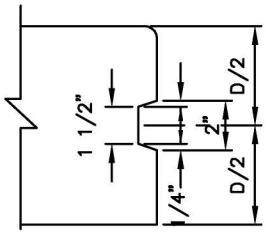
CURB TIE DETAIL



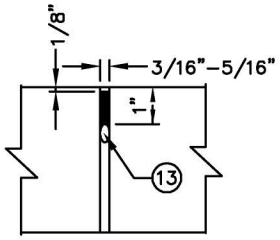
KEYED CONSTRUCTION
JOINT – TYPE C



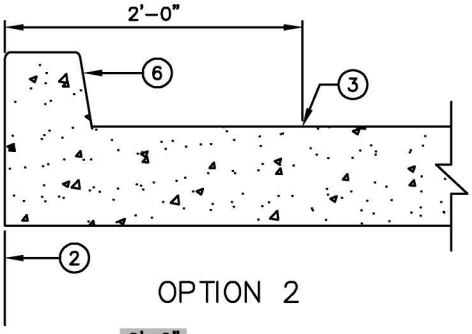
KEYED CONSTRUCTION SAWED
OR PREMOLDED STRIP
CONSTRUCTION JOINT – TYPE B



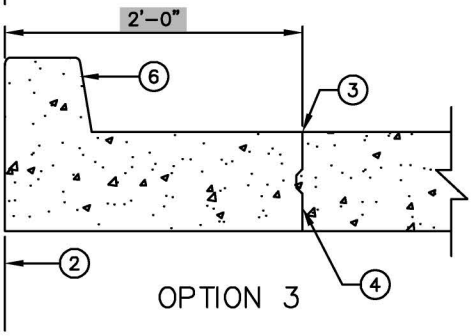
KEYWAY DETAIL
(ON 10" THICK PAVEMENT OR GREATER)



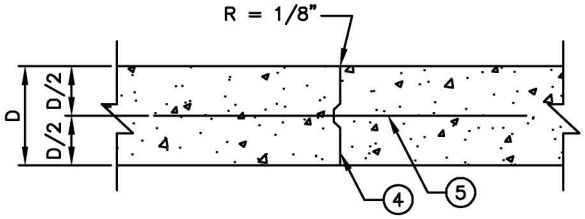
HOT POURED JOINT
FILLER DETAIL



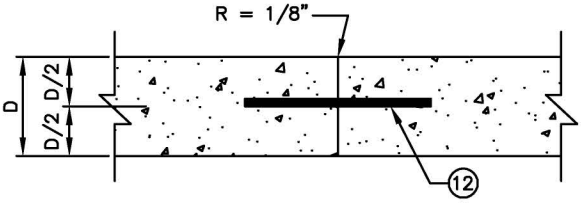
OPTION 2



OPTION 3



KEYED CONSTRUCTION
JOINT – TYPE C



TIED TRANSVERSE CONSTRUCTION
JOINT ALTERNATIVE – TYPE D

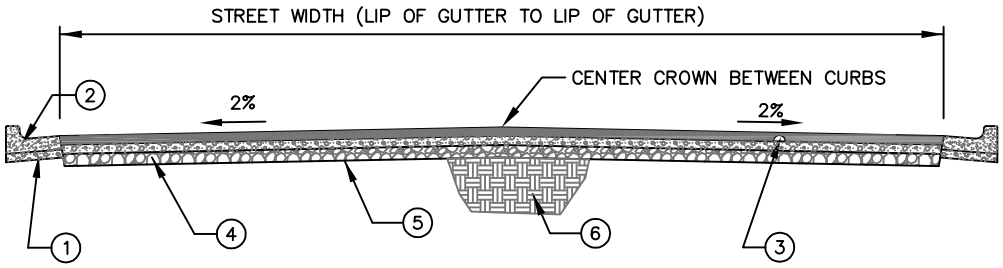
LEGEND

1. NOT USED.
2. CONCRETE PAVEMENT LIMIT.
3. PROFILE GRADE.
4. KEYWAY FORMED BY FASTENING KEY TO FORM.
5. NO. 4 DEFORMED TIE BARS 30" LONG AT 30" O.C.
6. CURB.
7. NO. 3 CURB TIE PLACE AT 27" O.C.
8. TOP OF CURB.
9. NOT USED.
10. NOT USED.
11. NOT USED.
12. NO. 8 SMOOTH EPOXY COATED GREASED ON ONE END TIE BARS 15" LONG AT 12" O.C.
13. HEAT RESISTANT BACKER ROD OF TYPE RECOMMENDED BY JOINT FILLER MANUFACTURER.
14. CONCRETE PAVEMENT.

2016

CITY OF TWIN FALLS	CONCRETE PAVEMENT JOINTING DETAILS	STANDARD DRAWING NO. TFSD–714A

STREET TYPE	TYPICAL STREET WIDTH
ARTERIALS	62'
COLLECTORS	48'
RESIDENTIAL	33'
PRIVATE	24' MIN (WITH NO PARKING)



TYPICAL CURB & GUTTER SECTION

N.T.S.

	STREET TYPE	RESIDENTIAL / PRIVATE	MINOR COLLECTOR	MAJOR COLLECTOR
		MINIMUM LAYER THICKNESS (INCHES)		
(3)	PLANT MIX PAVEMENT	2.5	2.5	3.0
(4)	BASE	2.0	5.0	6.0
(5)	SUBBASE	6.0 [7.0]	15.5 [18.5]	17.0 [20.0]
	TOTAL	10.5	23.0	26.0
	PORTLAND CEMENT CONCRETE*	5.0	7.0	7.0

* IF USED, ELIMINATE PLANT MIX PAVEMENT & BASE.
[XX.X] ALTERNATIVE THICKNESS SHOWN IN SQUARE BRACKETS IF 3" MINUS UNCRUSHED IS USED.

LEGEND

(1) CRUSHED AGGREGATE BASE COURSE UNDER CURB AND SIDEWALK. REFER TO TFSD–709.

(2) 6" VERTICAL CURB AND GUTTER. REFER TO TFSD–701

(3) HMA PLANT MIX PAVEMENT SURFACE COURSE.

(4) 3/4" TYPE I CRUSHED AGGREGATE BASE.

(5) SUBBASE CAN BE 2" TYPE II OR 3/4" TYPE I CRUSHED AGGREGATE BASE. SUBBASE CAN ALSO BE 3" MINUS UNCRUSHED WITH INCREASED THICKNESS AS SHOWN IN TABLE.

(6) SUBGRADE.

NOTES:

(A) ALL CONSTRUCTION SHALL BE PER ISPWC SPECIFICATIONS.

(B) STREET PROFILE GRADES 0.4% MINIMUM UNLESS OTHERWISE APPROVED BY THE OWNER.

(C) SEE TABLE FOR TYPICAL STREET WIDTHS. TYPICAL STREET WIDTHS DO NOT APPLY TO INTERSECTIONS.

(D) MINIMUM SECTION THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND "R" VALUE OF SUBGRADE SOILS AND APPROVED BY LOCAL AGENCY. ARTERIALS BY DESIGN ONLY BUT IN NO CASE LESS THAN MAJOR COLLECTOR THICKNESS.

(E) CAN SUBSTITUTE 3/4" TYPE I CRUSHED AGGREGATE BASE FOR ENTIRE BASE/SUBBASE SECTION.

(F) STANDARD CURB AND GUTTER REQUIRED, EXCEPT ON RESIDENTIAL STREET WHERE CURB CALCULATIONS ALLOW ROLLED CURB USE BASED ON LOCAL POLICY, SEE SECTION 700.

(G) CONCRETE SIDEWALK REQUIRED PER TFSD–709. SEE SECTION–700.

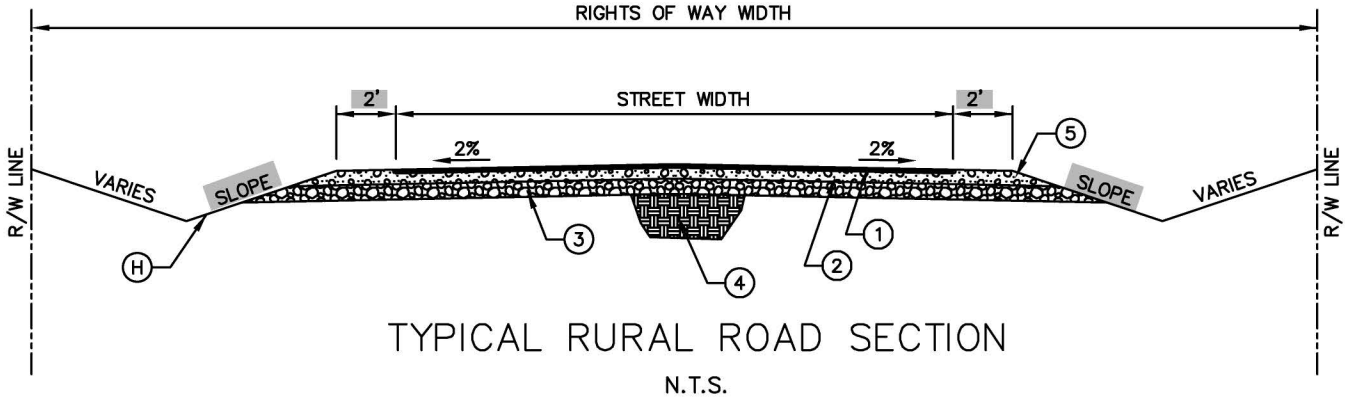
(H) STREET CORNER RADII SIZES SET BY LOCAL POLICY, 20' RESIDENTIAL 30' COLLECTOR/ARTERIAL, UNLESS APPROVED BY CITY ENGINEER.

(I) SUPER ELEVATION, VERTICAL CURVE AND HORIZONTAL CURVE REQUIREMENTS BASED ON SIGHT DISTANCE, VEHICLE DESIGN SPEEDS, SET BY LOCAL POLICY AND TYPE OF USE. MINIMUM 100' TANGENT LENGTH BETWEEN ALL HORIZONTAL CURVES UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

2018

CITY OF TWIN FALLS	TYPICAL STREET SECTION	STANDARD DRAWING NO. TFSD–801

STREET TYPE	TYPICAL STREET WIDTH
ARTERIALS	65'
COLLECTORS	51'
RESIDENTIAL	36'



TYPICAL RURAL ROAD SECTION

N.T.S.

STREET TYPE	RESIDENTIAL	MINOR COLLECTOR	MAJOR COLLECTOR
	MINIMUM LAYER THICKNESS (INCHES)		
PLANT MIX PAVEMENT	2.5	2.5	3.0
BASE	2.0	5.0	6.0
SUBBASE	6.0 [7.0]	15.5 [18.5]	17.0 [20.0]
TOTAL	10.5	23.0	26.0
PORTLAND CEMENT CONCRETE*	5.0	7.0	7.0

* IF USED, ELIMINATE PLANT MIX PAVEMENT & BASE.
[X.XX] ALTERNATIVE THICKNESS SHOWN IN SQUARE BRACKETS IF 3" MINUS UNCRUSHED IS USED.

LEGEND

(1) HMA PLANT MIX PAVEMENT SURFACE COURSE.

(2) 3/4" TYPE I CRUSHED AGGREGATE BASE.

(3) SUBBASE CAN BE 2" TYPE II OR 3/4" TYPE I CRUSHED AGGREGATE BASE COURSE.

(4) SUBGRADE.

(5) CRUSHED AGGREGATE SHOULDERS.

NOTES:

(A) RURAL STREET SECTION USED FOR ARTERIAL, COLLECTOR, AND RESIDENTIAL TYPE STREETS IN THE AREAS OUTSIDE THE ESTABLISHED URBAN AREAS THE USE OF THIS SECTION SUBJECT TO LOCAL POLICY AND TYPE OF USE (SEE CITY OF TWIN FALLS MASTER TRANSPORTATION PLAN).

(B) ALL CONSTRUCTION SHALL BE PER ISPWC SPECIFICATIONS.

(C) STREET PROFILE GRADES 0.4% MINIMUM UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.

(D) RIGHT-OF-WAY WIDTHS AND STREET WIDTHS SET BY LOCAL POLICY AND TYPE OF USE.

(E) MINIMUM ASPHALT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND "R" VALUE OF SUBGRADE SOILS AND APPROVED BY LOCAL AGENCY. ARTERIALS BY DESIGN ONLY BUT IN NO CASE LESS THAN MAJOR COLLECTOR THICKNESS.

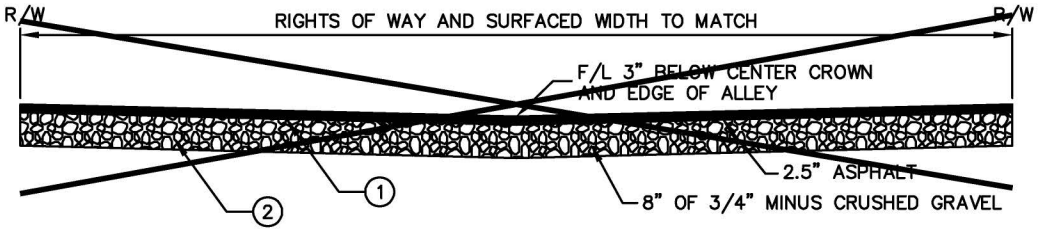
(F) STREET CORNER RADII SIZES FOR EDGE OF PAVEMENT SET BY LOCAL POLICY, 20' RESIDENTIAL AND 30' ARTERIAL/COLLECTOR .

(G) SUPER ELEVATION, VERTICAL CURVE AND HORIZONTAL CURVE REQUIREMENTS BASED ON SIGHT DISTANCE, VEHICLE DESIGN SPEEDS, SET BY LOCAL POLICY AND TYPE OF USE.

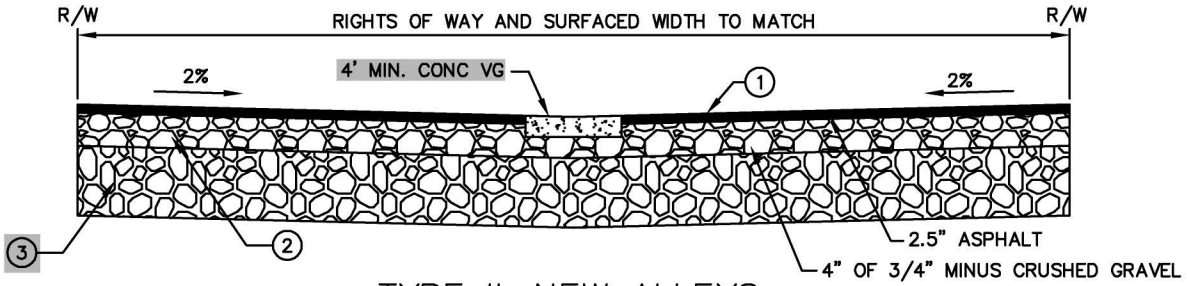
(H) BORROW DITCHES SHALL HAVE A MINIMUM 3:1 FORE SLOPE WITH 4:1 SLOPE RECOMMENDED. THE BACK SLOPE OF BORROW DITCH SHALL BE MINIMUM 1:1 BACK SLOPE WITH 4:1 BACK SLOPE RECOMMENDED. THE FLOW LINE OF THE DITCH SHALL BE MINIMUM 6" BELOW THE LOWEST AGGREGATE BASE COURSE TO ENCOURAGE DRAINAGE. PIPING DITCH UNDER DRIVEWAYS REQUIRED WITH APPROVED LENGTH AND TYPE.

2016

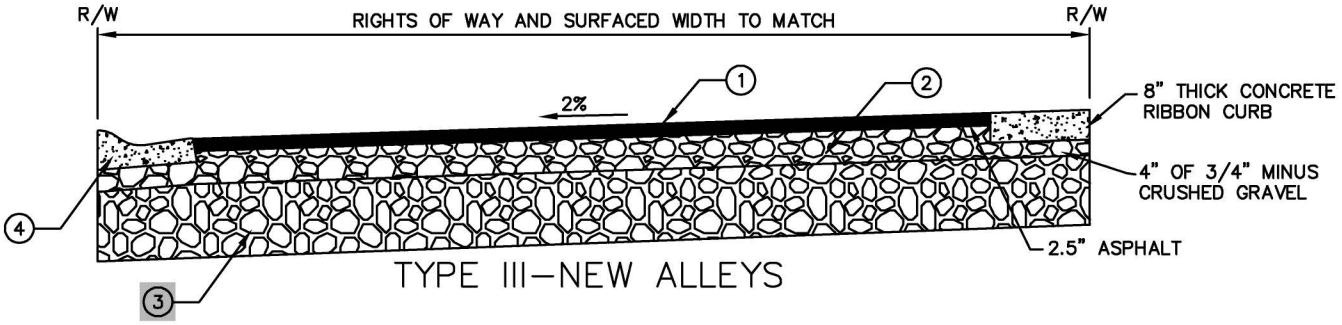
CITY OF TWIN FALLS	TYPICAL RURAL STREET SECTION	STANDARD DRAWING NO. TFSD-802



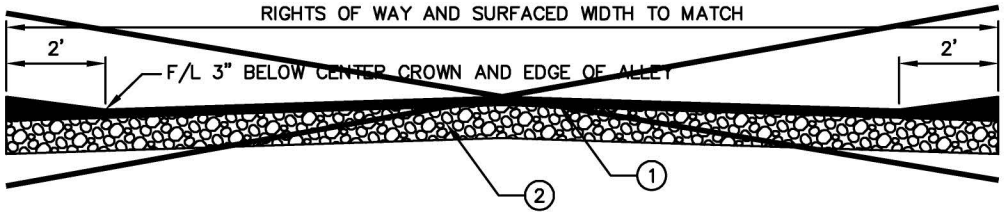
TYPE I–EXISTING GRAVEL ALLEYS OR NEW ALLEYS



TYPE II–NEW ALLEYS



TYPE III–NEW ALLEYS



TYPE IV–NEW ALLEYS

LEGEND

1. HMA PLANT MIX PAVEMENT SURFACE COURSE.
2. CRUSHED AGGREGATE BASE COURSE.
3. 14" OF 2" TYPE II OR 3/4" TYPE I CRUSHED AGGREGATE.
4. 3" ROLLED CURB AND GUTTER OR VALLEY GUTTER.

NOTES:

A. ALL CONSTRUCTION SHALL BE PER ISPWC SPECIFICATIONS.

B. ALLEY PROFILE GRADES 0.4% MINIMUM.

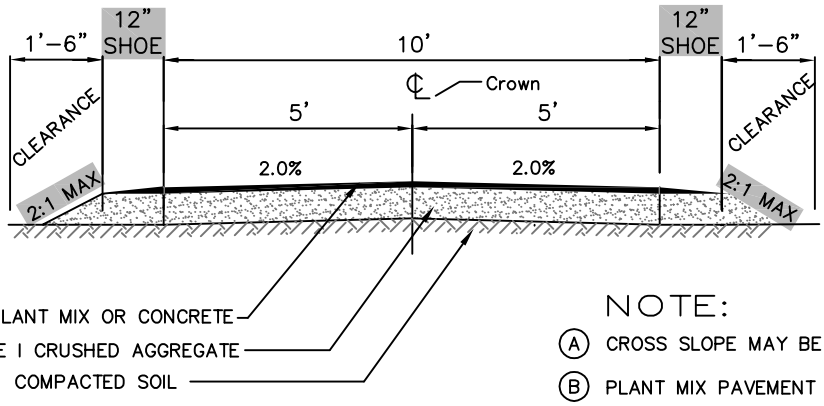
C. RIGHT–OF–WAY WIDTHS AND ALLEY WIDTHS SET BY LOCAL POLICY AND TYPE OF USE.

D. MINIMUM ASPHALT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND "R" VALUE OF SUBGRADE SOILS AND APPROVED BY LOCAL AGENCY.

E. SUPER ELEVATION, VERTICAL CURVE AND HORIZONTAL CURVE REQUIREMENTS BASED ON SIGHT DISTANCE, VEHICLE DESIGN SPEEDS, SET BY LOCAL POLICY AND TYPE OF USE.

2016

CITY OF TWIN FALLS	TYPICAL PAVED ALLEY SECTION	STANDARD DRAWING NO. TFSD–803



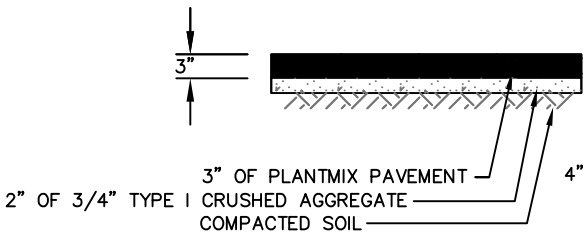
NOTE:

(A) CROSS SLOPE MAY BE TO ONE SIDE OR CROWNED.

(B) PLANT MIX PAVEMENT MAY ONLY BE USED ON CANYON RIM TRAIL AND ROCK CREEK TRAIL UNLESS OTHERWISE APPROVED BY CITY ENGINEER.

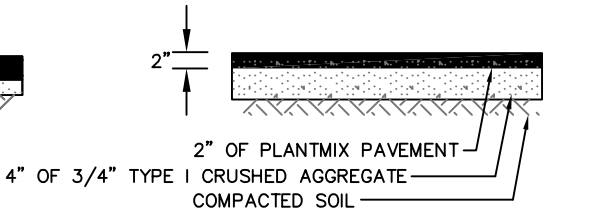
TYPICAL TWO WAY BIKE PATH

N.T.S.



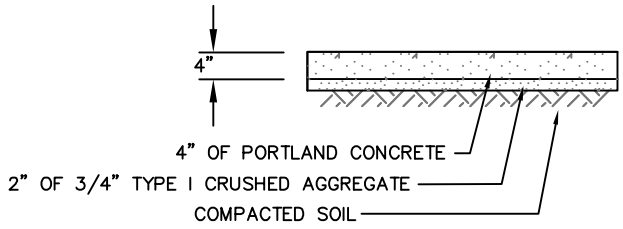
BIKE PATH SECTION "A"

N.T.S.



BIKE PATH SECTION "B"

N.T.S.



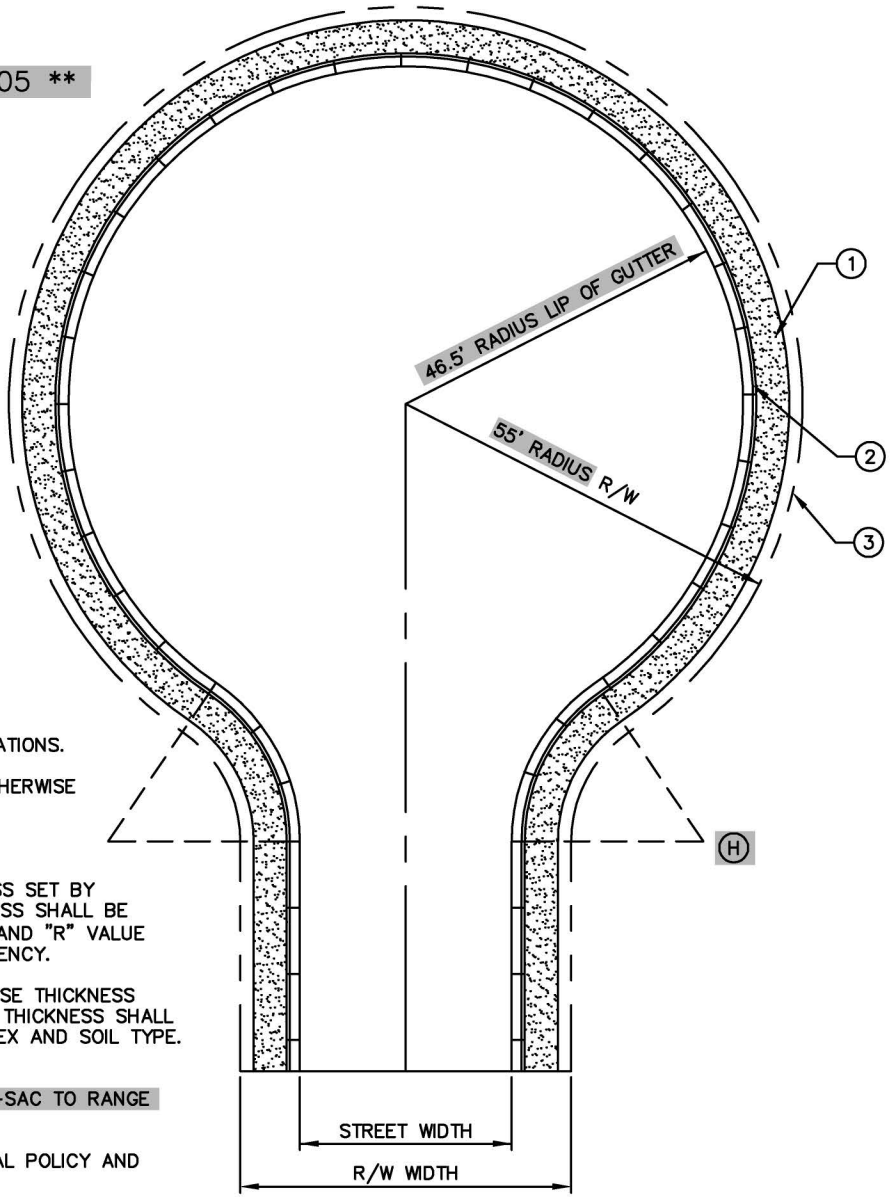
BIKE PATH SECTION "C"

N.T.S.

2018

CITY OF TWIN FALLS	STANDARD BIKE PATH	STANDARD DRAWING NO. TFSD-804

** FOR FIRE ACCESS ROAD SEE TFSD-305 **



NOTES:

(A) ALL CONSTRUCTION SHALL BE PER ISPWC SPECIFICATIONS.

(B) STREET PROFILE GRADES 0.4% MINIMUM UNLESS OTHERWISE APPROVED BY THE OWNER.

(C) NOT USED.

(D) MINIMUM ASPHALT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND "R" VALUE OF SUBGRADE SOILS AND APPROVED BY LOCAL AGENCY.

(E) MINIMUM CONCRETE PAVEMENT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND SOIL TYPE. SEE SECTION-700.

(F) PLANT MIX PAVEMENT FINISHED GRADE IN CUL-DE-SAC TO RANGE BETWEEN 1% AND 3%.

(G) CONCRETE SIDEWALK REQUIRED WIDTH SET BY LOCAL POLICY AND TYPE OF USE. SEE SECTION-700.

(H) STREET CORNER RADII 20' MINIMUM.

(I) CUL-DE-SAC MAY BE OFFSET TO THE LEFT OR RIGHT SO THAT APPROACH STREET CURB IS TANGENT WITH CUL-DE-SAC CIRCLE.

LEGEND

(1) CONCRETE SIDEWALK.

(2) STANDARD OR ROLLED CURB.

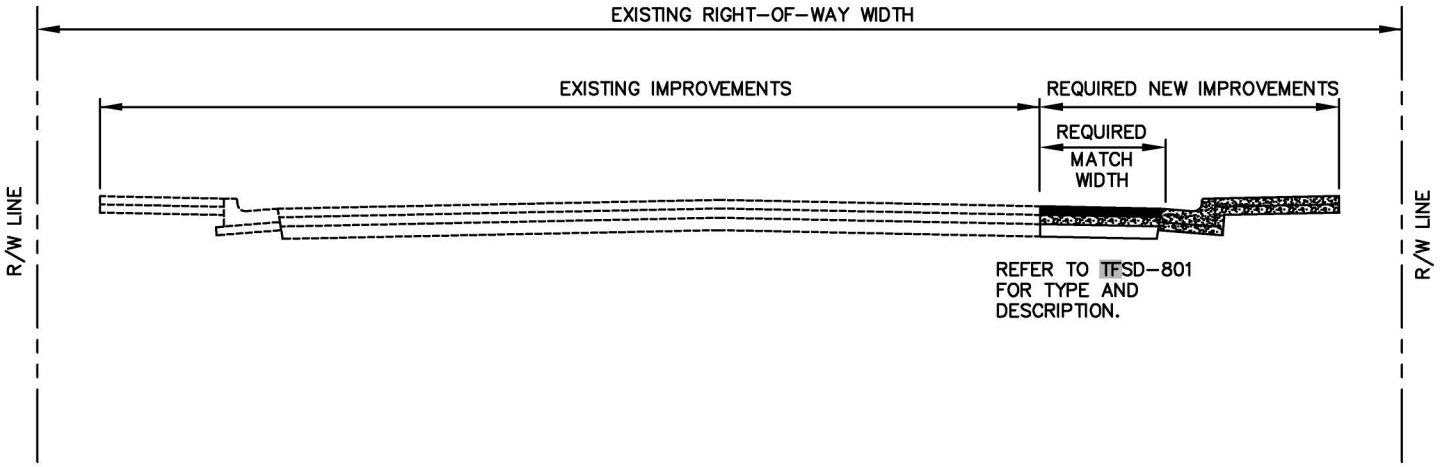
(3) RIGHT-OF-WAY LINE.

STREET TYPE	RESIDENTIAL	MINOR COLLECTOR	MAJOR COLLECTOR
	MINIMUM LAYER THICKNESS (INCHES)		
PLANT MIX PAVEMENT	2.5	2.5	3.0
BASE	2.0	5.0	6.0
SUBBASE	6.0 [7.0]	15.5 [18.5]	17.0 [20.0]
TOTAL	10.5	23.0	26.0
PORTLAND CEMENT CONCRETE*	5.0	7.0	7.0

* IF USED, ELIMINATE PLANT MIX PAVEMENT & BASE.
[XX.X] ALTERNATIVE THICKNESS SHOWN IN SQUARE BRACKETS IF 3" MINUS UNCRUSHED IS USED.

2016

CITY OF TWIN FALLS	STANDARD CUL-DE-SAC	STANDARD DRAWING NO. TFSD-805



NOTES:

(A) ALL CONSTRUCTION SHALL BE PER ISPWC SPECIFICATIONS.

(B) STREET PROFILE GRADES 0.4% MINIMUM UNLESS OTHERWISE APPROVED BY THE OWNER.

(C) RIGHT-OF-WAY WIDTHS AND STREET WIDTHS SET BY LOCAL POLICY AND TYPE OF USE.

(D) MINIMUM ASPHALT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND "R" VALUE OF SUBGRADE SOILS AND APPROVED BY LOCAL AGENCY.

(E) MINIMUM CONCRETE PAVEMENT AND AGGREGATE BASE THICKNESS SET BY LOCAL POLICY AND TYPE OF USE. ACTUAL THICKNESS SHALL BE DESIGNED BY ENGINEER BASED ON TRAFFIC INDEX AND SOIL TYPE. SEE SECTION-700.

(F) STANDARD CURB AND GUTTER RECOMMENDED, WITH ROLL CURB USE BASED ON LOCAL POLICY, SEE SECTION-700.

(G) CONCRETE SIDEWALK REQUIRED WIDTH SET BY LOCAL POLICY AND TYPE OF USE. SEE SECTION-700.

(H) STREET CORNER RADII SIZES SET BY LOCAL POLICY AND TYPE OF USE.

(I) SUPER ELEVATION, VERTICAL CURVE AND HORIZONTAL CURVE REQUIREMENTS BASED ON SIGHT DISTANCE, VEHICLE DESIGN SPEEDS, MATCHING EXISTING IMPROVEMENTS AND SET BY LOCAL POLICY AND TYPE OF USE.

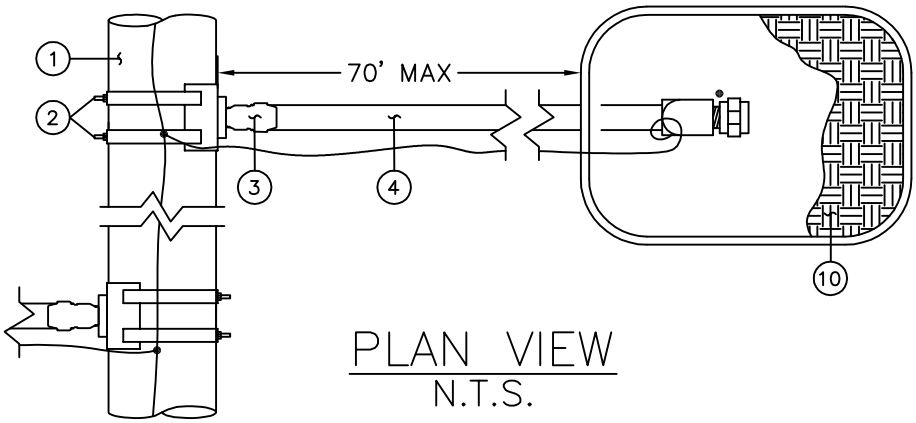
(J) ASPHALT MATCH SHALL DRAIN TOWARD EDGE OF PAVEMENT OR CONCRETE CURB AND SHALL HAVE A MINIMUM CROSS SLOPE OF 1% WITH 2% RECOMMENDED. CROSS SLOPE OF 4% MAXIMUM IN TRAFFIC LANE WITH 8% MAXIMUM IN PARKING AREA.

(K) EXISTING ASPHALT SHALL BE CUT TO A NEAT STRAIGHT LINE PARALLEL AND/OR PERPENDICULAR TO THE CENTERLINE OF THE STREET AND SEALED WITH AN ASPHALT TACK COAT BEFORE PAVING.

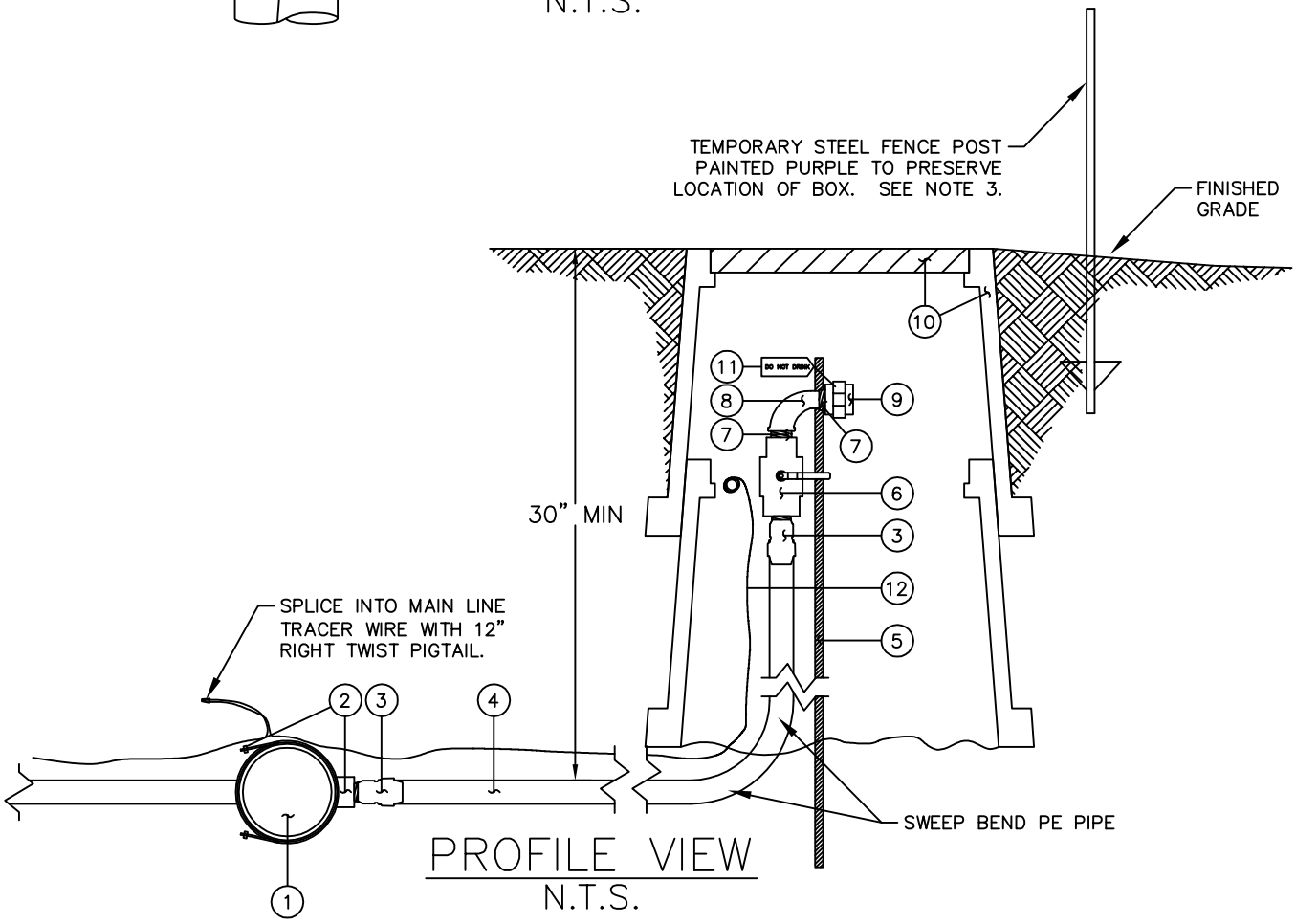
(L) SAWCUT TO BE AS FAR AS POSSIBLE FROM VEHICULAR WHEEL PATH. CRACK SEAL SAWCUT(S). SEE CITY OF TWIN FALLS REVISIONS SECTION 307.

2016

CITY OF TWIN FALLS	TYPICAL STREET WIDENING	STANDARD DRAWING NO. TFSD-806



PLAN VIEW
N.T.S.



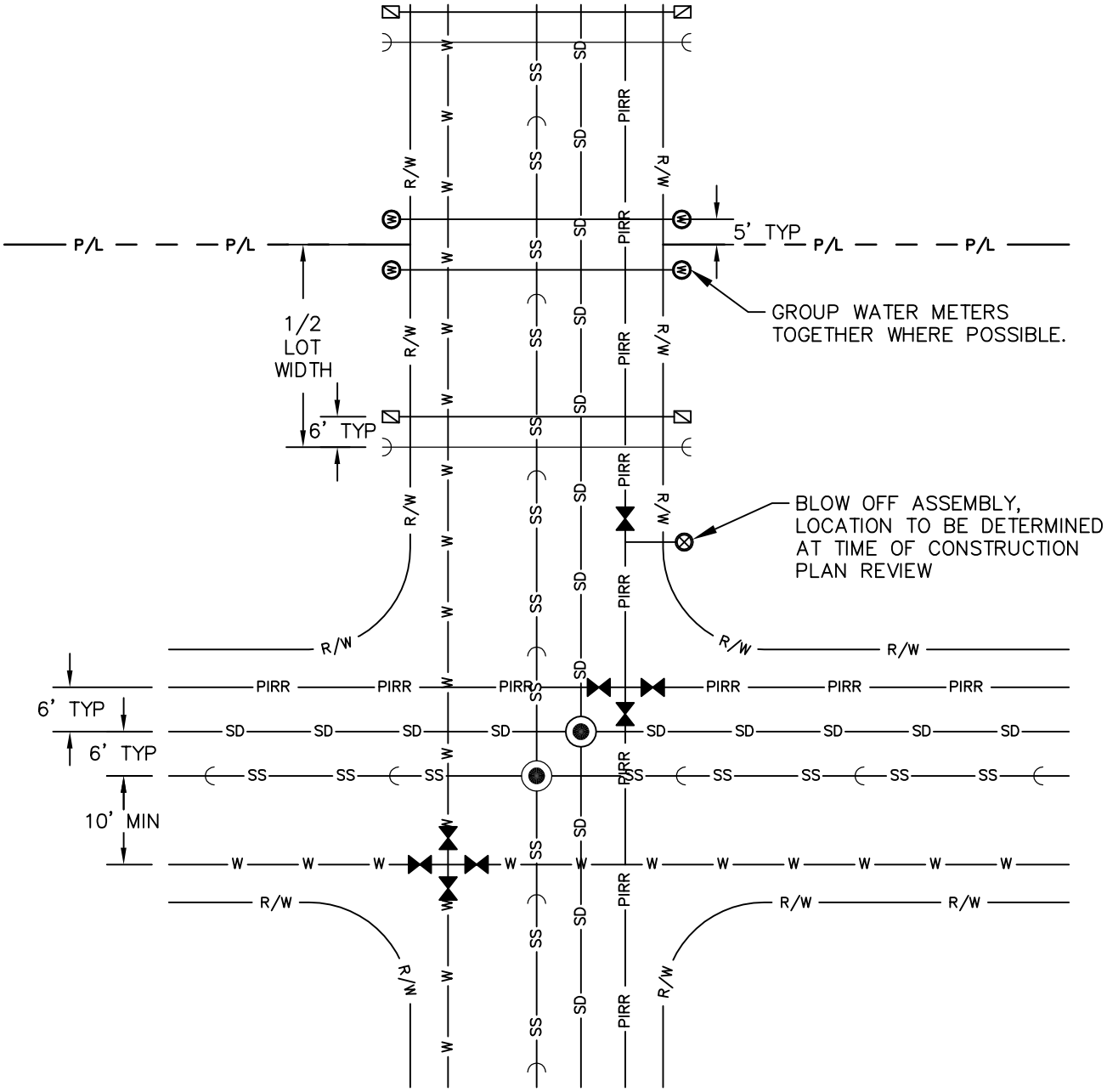
PROFILE VIEW
N.T.S.

NOTES:
1. DRAWING AND MATERIAL LIST APPLICABLE TO ONE INCH SERVICE LINES.
2. SEE STD. DWG. TFSD-903 FOR LOCATIONS OF SERVICE LINES.
3. INSTALL TEMPORARY STEEL POST DURING SUBDIVISION DEVELOPMENT. TO BE REMOVABLE AT THE TIME OF LOT DEVELOPMENT.
4. FOR MORE INFORMATION ABOUT MATERIALS CONTACT THE CITY OF TWIN FALLS WATER DEPARTMENT (208) 736-2275.
5. CONNECT SERVICE LINE LOCATE WIRE WITH MAIN LOCATE WIRE WITH WATERPROOF SPLICE CONNECTOR.

LEGEND:
1. IRRIGATION MAIN (SIZE VARIES).
2. 1" FEMALE IPS DOUBLE STRAP TAPPING SADDLE.
3. 1" BRASS MALE IPS X CTS GRIP JOINT ADAPTER.
4. 1" 200 PSI COPPER TUBE SIZE POLY PIPE.
5. ANCHOR #4 REBAR 4' LONG TO CTS POLY PIPE.
6. 1" BRASS FEMALE BALL VALVE. ACCEPTABLE TYPES INCLUDE:
   - 6.1. MCDONALD BALL VALVE 72033T.
   - 6.2. SMITH COOPER BALL VALVE SERIES 172 8155 THREADED.
   - 6.3. FNW BALL VALVE FIGURE 420.
   - 6.4. LEGEND BALL VALVE TS-1001.
7. 1" BRASS CLOSE NIPPLE.
8. FEMALE 90° ELBOW.
9. 1" BRASS UNION.
10. HDPE IRRIGATION BOXES (2 STACKED). MINIMUM SIZE OF EACH BOX IS 13" x 20" x 12" (L x W x D).
11. "DO NOT DRINK" TAG TO BE CLEARLY VISIBLE ON UNION FITTING.
12. 12 AWG SOLID INSULATED LOCATE WIRE ATTACHED TO SERVICE LINE LONG ENOUGH TO BE PULLED UP AND OUT TO ABOVE GROUND LEVEL.

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	PRESSURE IRRIGATION 1" SERVICE WITH VALVE BOX	STANDARD DRAWING NO. TFSD-901



NOTE:

(A) VERIFY SERVICE LINE LOCATION WITH ENGINEER AND LOCAL IRRIGATION AUTHORITY, PRIOR TO CONSTRUCTION.

(B) "DO NOT DRINK" TAG TO BE CLEARLY VISIBLE ON IRRIGATION SERVICES AND PRESSURE PIPE TERMINATIONS.

(C) 12 AWG SOLID COPPER INSULATED LOCATOR WIRE LONG ENOUGH TO BE PULLED UP AND OUT TO ABOVE GROUND LEVEL.

(D) PLASTIC TAPE IS REQUIRED ONE FOOT (1') BELOW GROUND DIRECTLY ABOVE THE PIPE. ABOVE GROUND ALL PIPES MUST BE CLEARLY LABELED "DO NOT DRINK".

(E) ALL POTABLE/NON-POTABLE CROSSINGS TO BE PER DEQ SEPARATION REQUIREMENTS.

LEGEND:

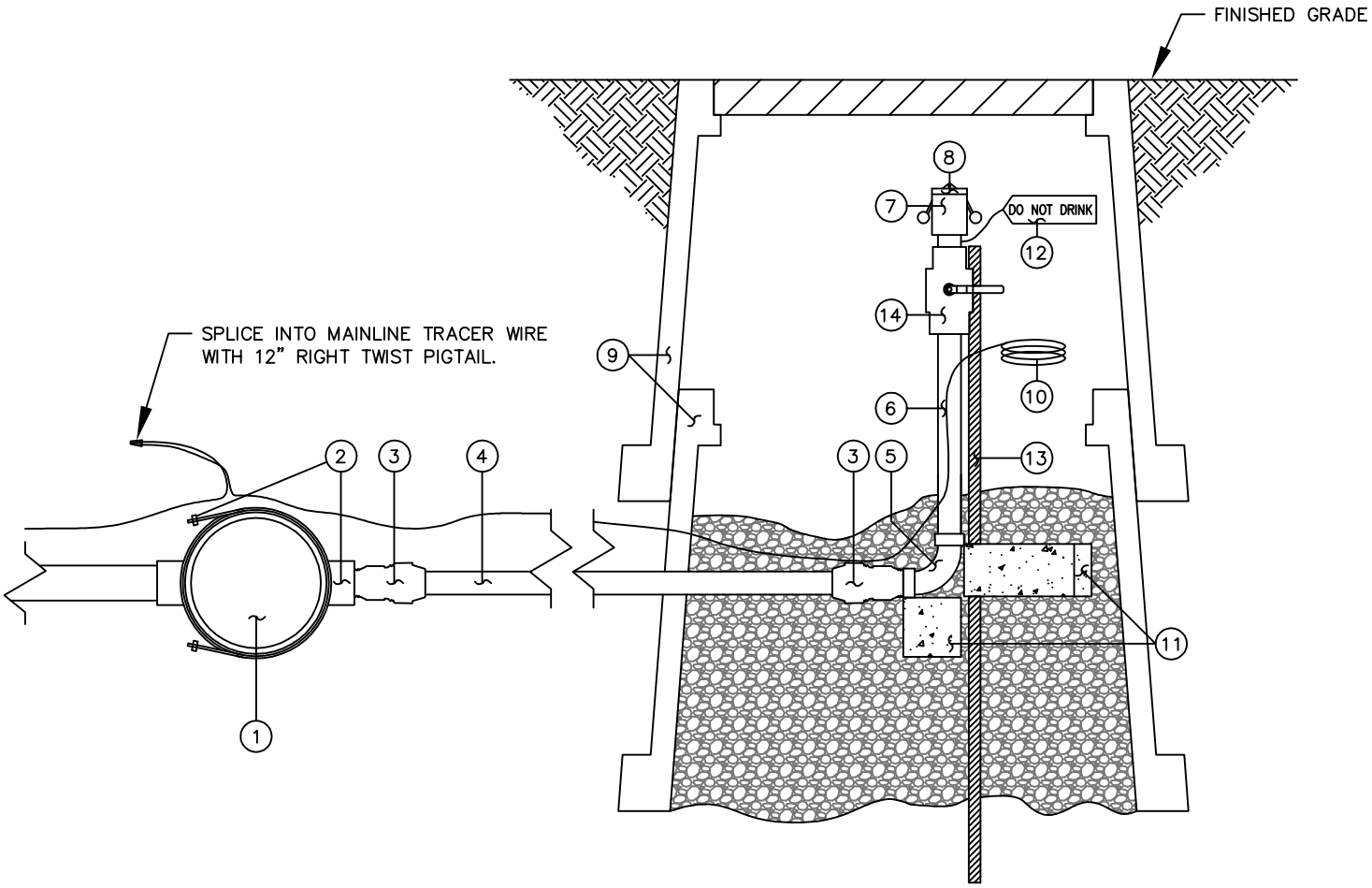
STORM DRAIN LINE	SD
WATER LINE	W
SEWER LINE	SS
PRESSURE IRRIGATION LINE	PIRR
RIGHT-OF-WAY LINE	R/W
PROPERTY LINE	P/L
SEWER SERVICE	
WATER SERVICE	
PRESSURE IRRIGATION SERVICE	
MANHOLE	
VALVE	

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION

TYPICAL UTILITY SERVICE LOCATIONS

STANDARD DRAWING NO. TFSD-903



NOTES

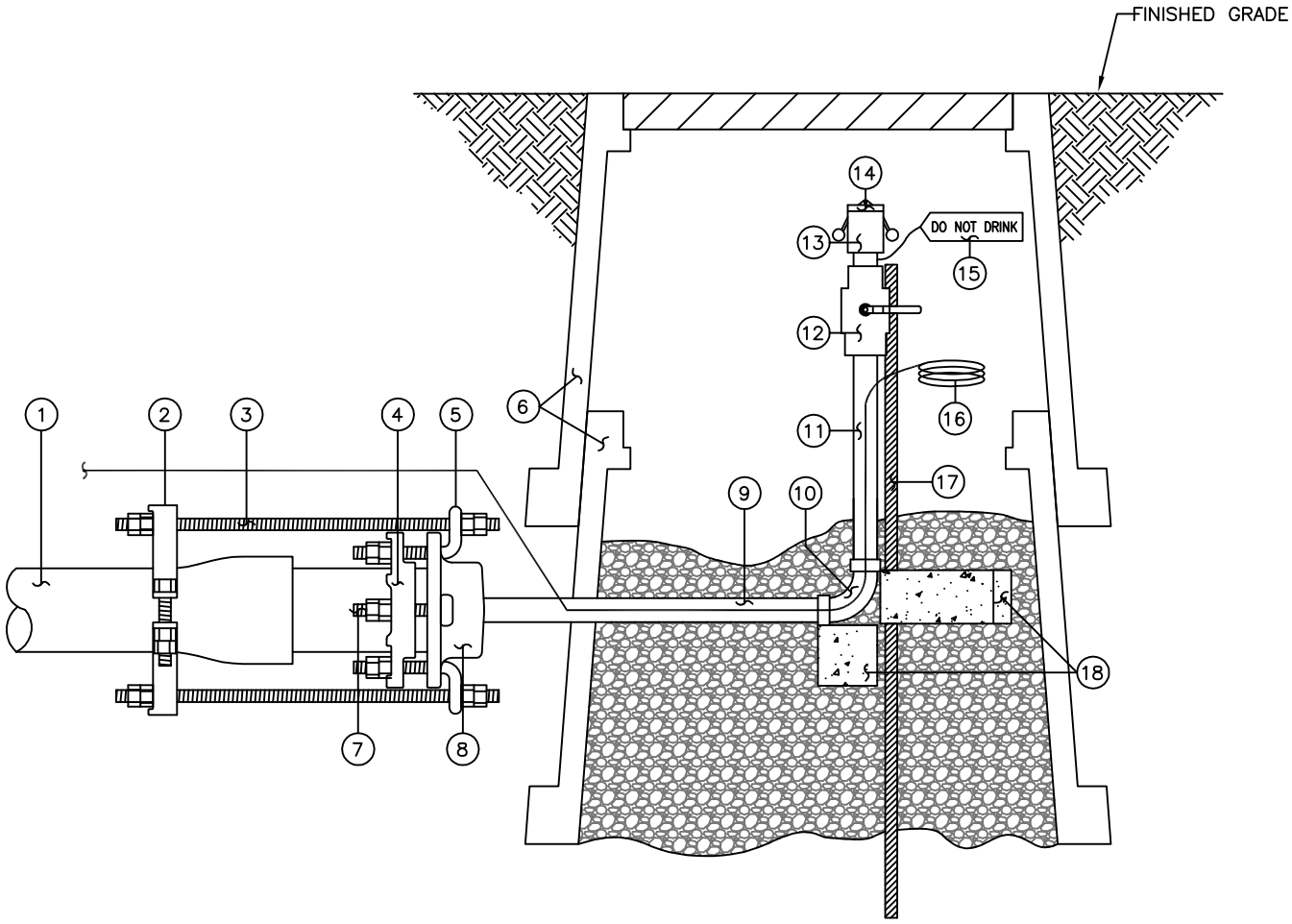
1. USE ONLY PRODUCTS LISTED OR PRE-APPROVED EQUAL.
2. ABOVE GROUND ALL PIPES MUST BE CLEARLY LABELED "DO NOT DRINK".
3. TO BE PLACED BEHIND CURB, GUTTER, AND SIDEWALK.

LEGEND

1. IRRIGATION MAIN (SIZE VARIES).
2. 2" FEMALE IRON PIPE SIZE (IPS) DOUBLE STRAP TAPPING SADDLE.
3. 2" BRASS MALE IPS X COPPER TUBE SIZE (CTS) GRIP JOINT ADAPTER.
4. 2" 200 PSI CTS POLY PIPE.
5. 2" BRASS 90° ELBOW.
6. 2" X 24" SCHEDULE 80 PVC THREADED RISER.
7. 2" THREADED X ALUM. KAM-LOCK QUICK COUPLING MALE ADAPTER.
8. 2" KAM-LOCK CAP.
9. HDPE IRRIGATION BOXES (2 STACKED) WITH PURPLE LID. MINIMUM SIZE OF EACH BOX IS 13" x 20" x 12" (L x W x D).
10. 12 GAUGE SOLID INSULATED COPPER LOCATE WIRE ATTACHED TO BLOW-OFF LINE LONG ENOUGH TO BE PULLED UP AND OUT TO ABOVE GROUND LEVEL.
11. PRE-CAST CONCRETE BLOCKS WEDGED IN PLACE.
12. "DO NOT DRINK" TAG TO BE CLEARLY VISIBLE ON IRRIGATION FAUCETS AND PRESSURE PIPE TERMINATIONS.
13. ANCHOR AND ATTACH 4' LONG #4 REBAR TO PVC RISER.
14. 2" BRASS FEMALE BALL VALVE. ACCEPTABLE TYPES INCLUDE:
    - 14.1. A.Y. McDONALD 72033T
    - 14.2. SMITH COOPER SERIES 172 8155
    - 14.3. FNW 420
    - 14.4. LEGEND TS 1001

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	PRESSURE IRRIGATION 2" BLOW-OFF ASSEMBLY	STANDARD DRAWING NO. TFSD-904



NOTES

1. USE ONLY PRODUCTS LISTED OR PRE-APPROVED EQUAL.
2. WHEN CONSTRUCTING THIS BLOW-OFF ASSEMBLY, INSTALL AN EIGHTEEN INCH (18") LENGTH OF PIPE INTO THE BELL END OF THE LAST LENGTH OF MAIN.
3. ABOVE GROUND ALL PIPES MUST BE CLEARLY LABELED "DO NOT DRINK".
4. TO BE PLACED BEHIND CURB, GUTTER, AND SIDEWALK UNLESS APPROVED BY THE CITY ENGINEER.
5. WHEN ASSEMBLY IS ALLOWED TO BE LEFT IN THE ROADWAY, IT IS TO BE PROTECTED FROM TRAFFIC AND CONSTRUCTION EQUIPMENT.

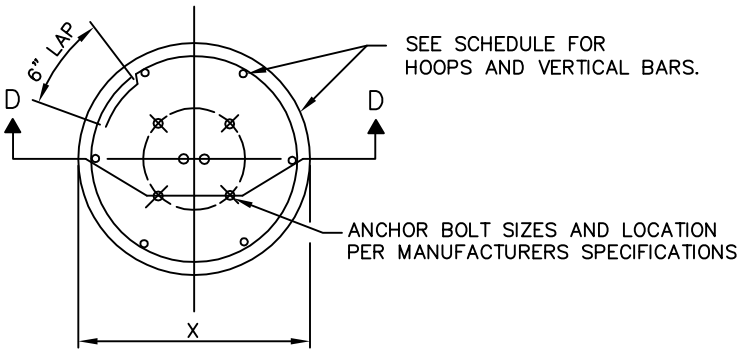
LEGEND

1. IRRIGATION MAIN (SIZE VARIES). BELL END REQUIRED FOR TEMPORARY CAP INSTALLATION WITH AN APPROXIMATELY 18" LONG PIPE SECTION.
2. SPLIT RESTRAINER FASTENED TO IRRIGATION MAIN AT THE THROAT OF THE BELL.
3. ALL THREAD CUT TO LENGTH AND CAPPED ON BOTH ENDS WITH TWO NUTS EACH TO LOCK IN PLACE.
4. ROMAC GRIPRING OR APPROVED EQUIVALENT.
5. MATCH THE NUMBER OF 90° EYE BOLTS WITH THE NUMBER OF HOLES PROVIDED IN THE SPLIT RESTRAINER FOR THE SIZE OF THE IRRIGATION MAIN. FASTEN EACH EYE BOLT WITH TWO NUTS TO LOCK IN PLACE.
6. HDPE IRRIGATION BOXES (2 STACKED). MINIMUM SIZE OF EACH BOX IS 13" x 20" x 12" (L x W x D).
7. USE REMAINING FACTORY SUPPLIED BOLTS AND NUTS TO SECURE AND LOCK GRIP RING AND CAP TO THE IRRIGATION MAIN.
8. MJ CAP WITH 2" IPS FEMALE THREAD.
9. 2" X 12"-18" SCHEDULE 80 PVC THREADED NIPPLE.
10. 2" BRASS 90° ELBOW.
11. 2" X 24" SCHEDULE 80 PVC THREADED RISER. RISER LENGTH MAY VARY SLIGHTLY BASED ON BURY DEPTH OF MAINLINE.
12. 2" BRASS BALL VALVE - SEE TFSD-904 FOR ACCEPTABLE TYPES.
13. 2" THREADED X ALUM. KAM-LOCK QUICK COUPLING MALE ADAPTER.
14. KAM-LOCK CAP.
15. "DO NOT DRINK" TAG TO BE CLEARLY VISIBLE ON IRRIGATION FAUCETS AND PRESSURE PIPE TERMINATIONS.
16. 12 GAUGE INSULATED SOLID COPPER LOCATOR WIRE LONG ENOUGH TO BE PULLED UP AND OUT TO ABOVE GROUND LEVEL.
17. ANCHOR AND ATTACH #4 REBAR 4' LONG TO PVC RISER.
18. PRE-CAST CONCRETE BLOCKS WEDGED IN PLACE.

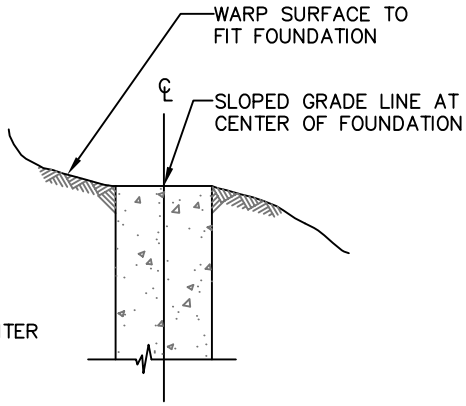
2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	TEMPORARY PRESSURE IRRIGATION BLOW-OFF ASSEMBLY	STANDARD DRAWING NO. TFSD-905

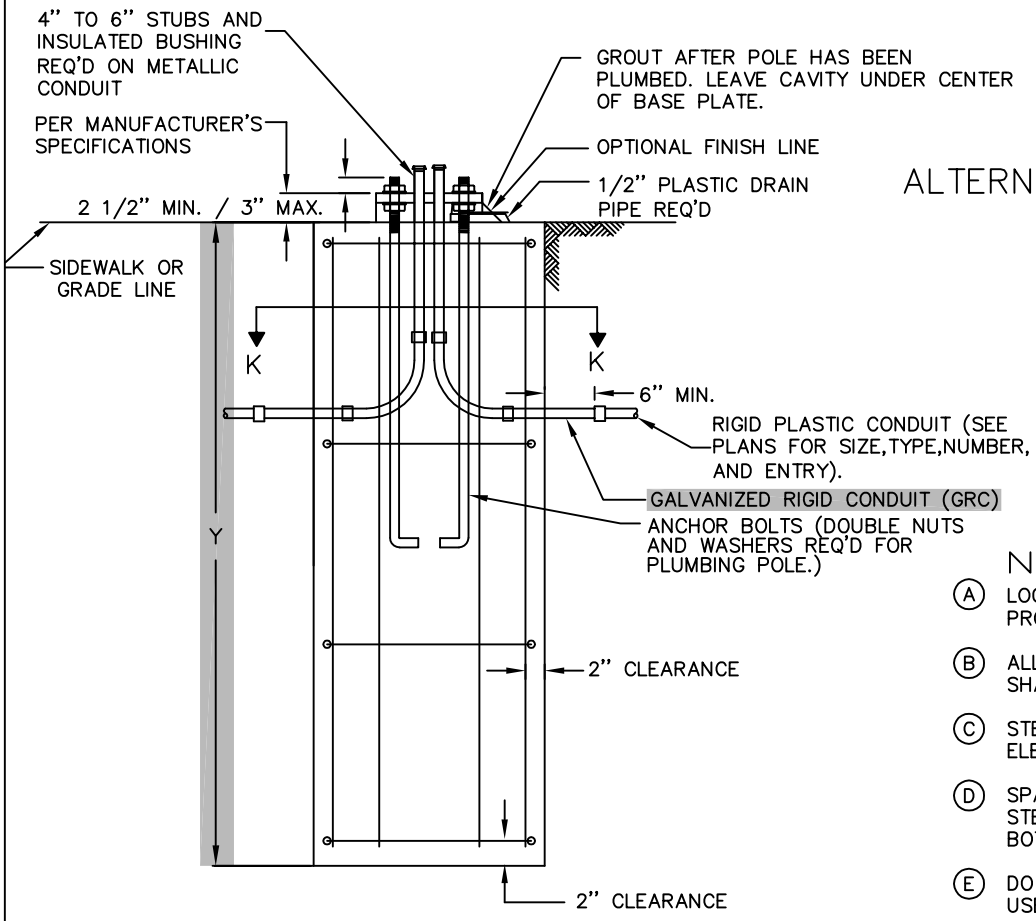
POLE FOUNDATION SCHEDULE												
POLE TYPE	MT.HT.	MASTARM LENGTH	FOUNDATION TYPE	X	Y	HOOPS			VERTICAL RODS			CU. YDS.
						NO.	SIZE	LIN. FT.	NO.	SIZE	LIN. FT.	CONCRETE
PEDESTRIAN SIGNAL POLE	10'	–	A	2'–0"	5'–0"	4	#4	23'–0"	6	#4	28'–0"	.6
LIGHT POLE	25'–30'	ALL	A	2'–0"	5'–0"	4	#4	23'–0"	6	#4	28'–0"	.6
LIGHT POLE	35'	ALL	B	2'–6"	7'–0"	4	#4	29'–4"	6	#6	40'–0"	1.3
LIGHT POLE	40'–50'	ALL	C	3'–0"	8'–0"	5	#4	44'–2"	8	#6	61'–4"	2.1
SIGNAL POLE	–	20' – 45'	D	3'–0"	9'–0"	5	#4	44'–2"	8	#6	69'–4"	2.4
PED. PUSHBUTTON POLE	4'–0"	–	E	1'–6"	2'–6"	–	–	–	–	–	–	.2
DUAL MASTARM SIGNAL POLE	–	ALL	F	3'–0"	12'–0"	8	#5	70'–8"	12	#6	140'	3.1
SIGNAL POLE	–	50' – 55'	F	3'–0"	12'–0"	8	#5	70'–8"	12	#6	140'	3.1
SIGNAL POLE	–	60' – 65'	G	3'–6"	14'–0"	9	#5	78'–10"	12	#6	166'	3.7



SECTION K–K



ALTERNATE SLOPED GRADE SECTION



TYPICAL POLE FOUNDATION
SECTION D–D

NOTES:

(A) LOCATE FOUNDATIONS AS INDICATED ON THE PROJECT PLAN SHEETS.

(B) ALL CONDUIT ELBOWS USED IN CONCRETE BASES SHALL BE GRC.

(C) STEEL CONDUIT SHALL BE USED TO EXTEND ELBOWS BEYOND FOUNDATION.

(D) SPARE STUBOUTS SHALL BE TERMINATED WITH A STEEL COUPLING AND PLASTIC PUSH PLUG AT BOTH ENDS.

(E) DO NOT GROUT IF BREAKAWAY DEVICES ARE USED.

(F) *SEE SD–1117 FOR GROUNDING DETAILS.*

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IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STANDARD POLE FOUNDATION DETAIL	STANDARD DRAWING NO. TFSD–1109

LEGEND

1. 6–#4 VERTICAL REBAR.
2. 6" LAP.
3. ANCHOR BOLT SIZES AND LOCATIONS PER MANUFACTURER'S SPECIFICATIONS.
4. 4" TO 6" STUBS.
5. INSULATED BUSHING REQUIRED WHEN CONDUIT IS USED. PER MANUFACTURE'S SPECIFICATIONS.
6. PER MANUFACTURE'S SPECIFICATIONS.
7. SIDEWALK LINE OR GRADE LINE
8. J–BOX.
9. 1" MINIMUM DIAMETER.
10. (4) ANCHOR BOLTS WITH DOUBLE NUTS FOR PLUMBING POLE, GALVANIZED, WITH (3) GALVANIZED NUTS AND (2) GALVANIZED WASHERS PER BOLT.
11. 4–#4 REBAR HOOPS.
12. C–4000 CONCRETE AS PER SECTION 700 ISPWC.
13. SEE STANDARD SPECIFICATIONS FOR REQUIRED FIXTURES.
14. GENERAL ELECTRIC ALUMINUM SEAMLESS SHAFT NO. C89H235 OR UNION METAL DESIGN 203 OR APPROVED EQUAL.
15. FUSE LOCATION.
16. WATER–TIGHT HANDHOLE.
17. BACKFILL TO BE COMPACTED TO 95%.

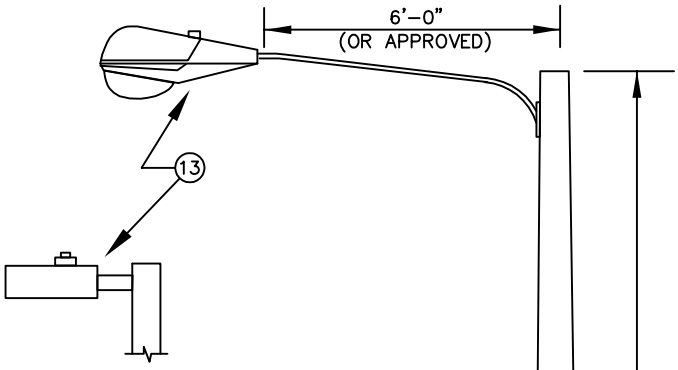
NOTE:

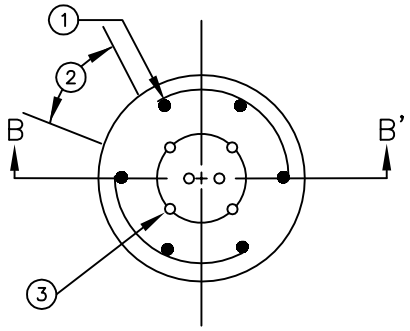
A. SEE ISPWC FOR EXCAVATION, BACKFILLING AND CONSTRUCTION OF POLE FOUNDATION, WIRING, AND ACCEPTANCE OR REJECTION OF THE WORK.

B. GROUND POLE TO THE SERVICE POINT VIA #6 AWG BARE WIRE PER NATIONAL ELECTRICAL CODE.

C. #10 AWG WIRE FROM LUMINAIRE TO FUSE.

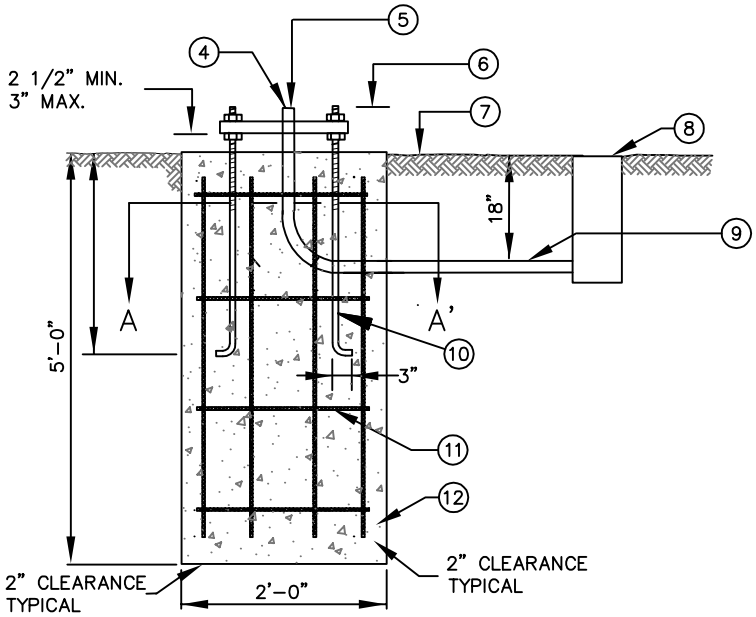
D. FOR GROUNDING DETAILS SEE *SD–1117* .



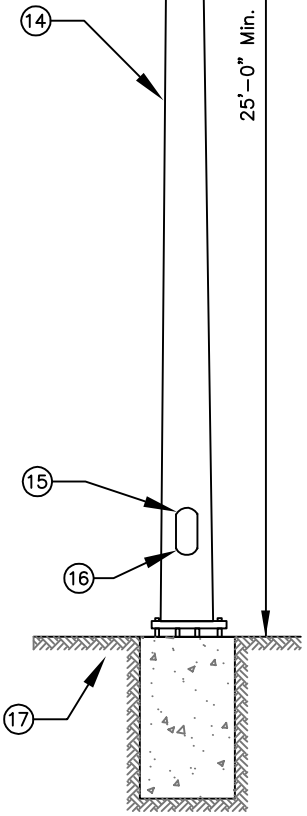


SECTION A–A'

POLE FOUNDATION SCHEDULE					
HOOPS*			VERTICAL RODS*		C.Y. CONC. FND.
QTY.	SIZE	L.F.	QTY	SIZE	
4	#4	23'–0"	6	#4	0.6

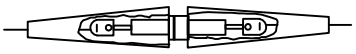


TYPICAL POLE FOUNDATION
SECTION B–B'



2018

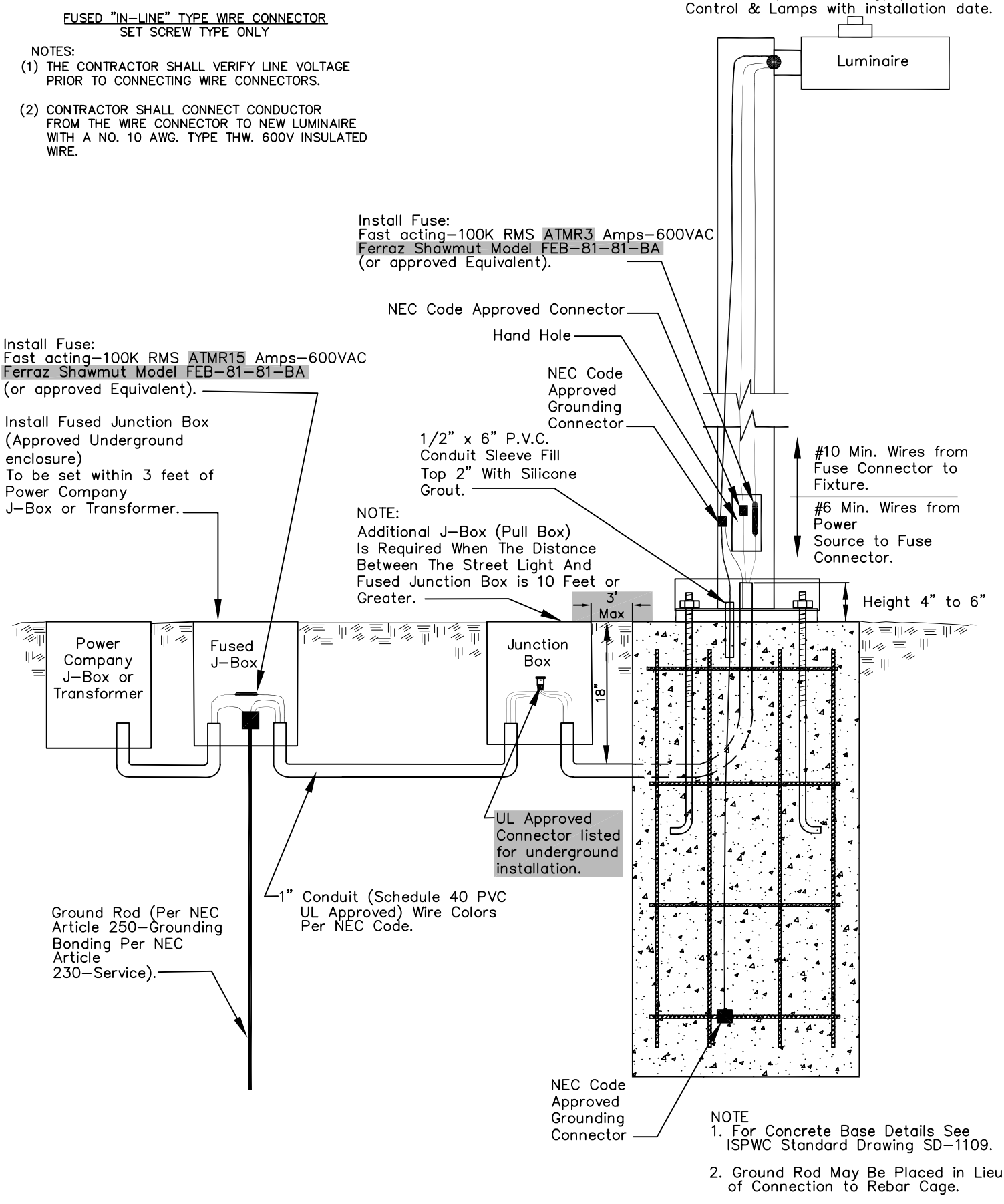
IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	25' STANDARD METAL STREETLIGHT WITH MAST ARM GREATER THAN 6'	STANDARD DRAWING NO. TFSD–1116



FUSED "IN-LINE" TYPE WIRE CONNECTOR
SET SCREW TYPE ONLY

NOTES:
(1) THE CONTRACTOR SHALL VERIFY LINE VOLTAGE PRIOR TO CONNECTING WIRE CONNECTORS.

(2) CONTRACTOR SHALL CONNECT CONDUCTOR FROM THE WIRE CONNECTOR TO NEW LUMINAIRE WITH A NO. 10 AWG. TYPE THW. 600V INSULATED WIRE.

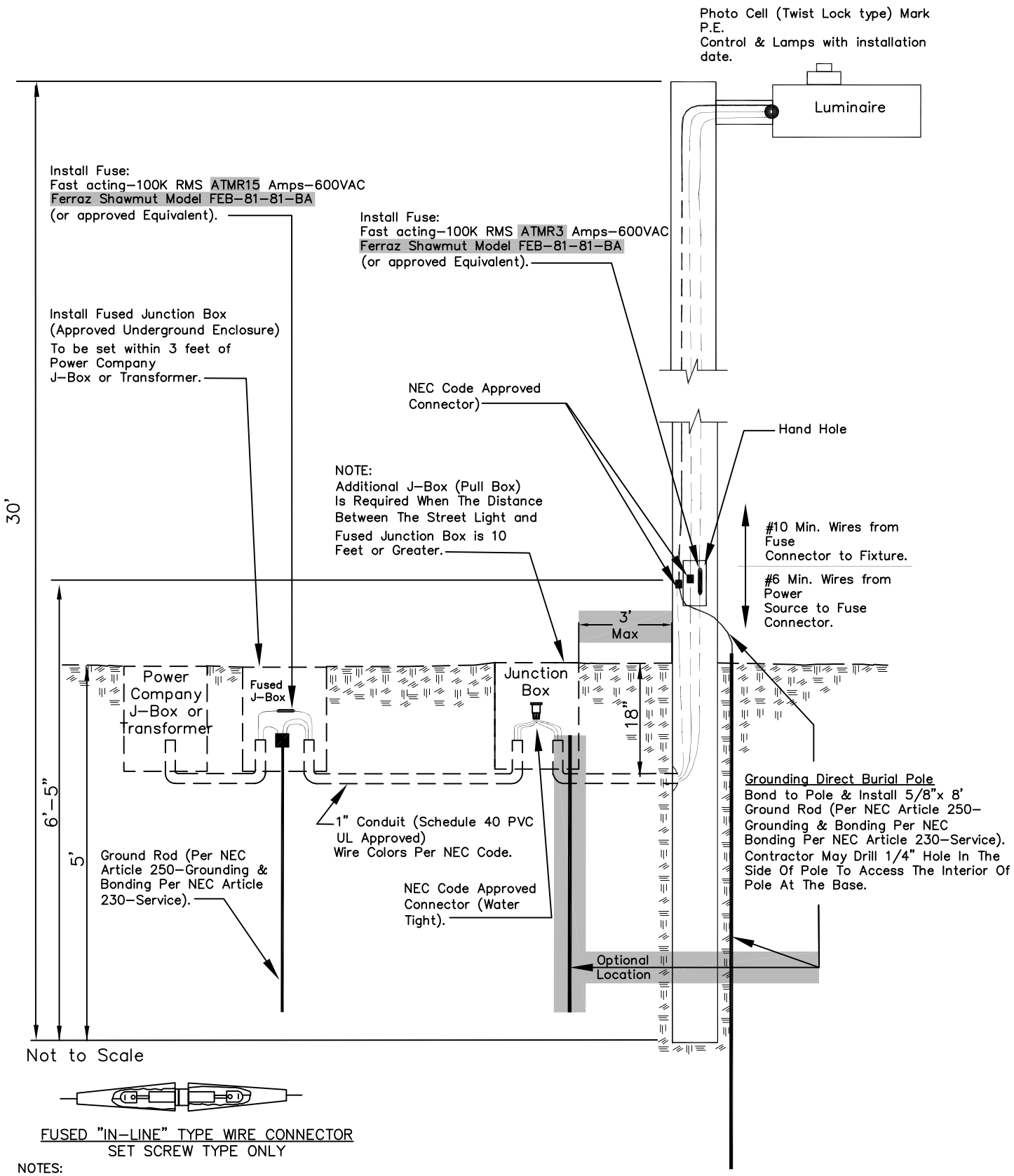


NOTE
1. For Concrete Base Details See ISPWC Standard Drawing SD-1109.

2. Ground Rod May Be Placed in Lieu of Connection to Rebar Cage.

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STREET LIGHT INSTALLATION 25' STANDARD CONCRETE BASE	STANDARD DRAWING NO. TFSD-1117



FUSED "IN–LINE" TYPE WIRE CONNECTOR
SET SCREW TYPE ONLY

NOTES:

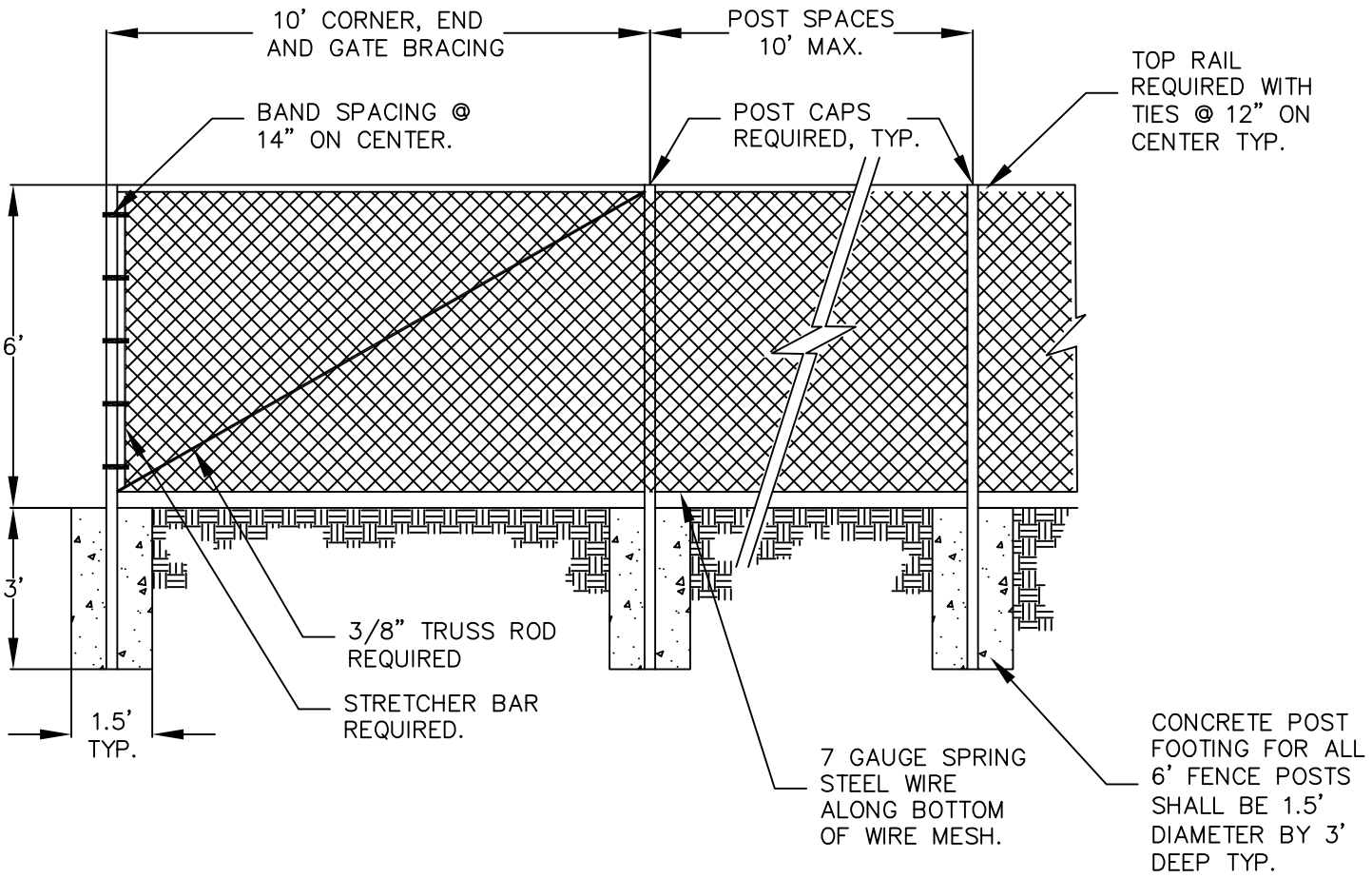
(1) THE CONTRACTOR SHALL VERIFY LINE VOLTAGE PRIOR TO CONNECTING WIRE CONNECTORS.

(2) CONTRACTOR SHALL CONNECT CONDUCTOR FROM THE WIRE CONNECTOR TO NEW LUMINAIRE WITH NO. 10 AWG. TYPE THW. 600V INSULATED WIRE.

(3) ALL CONDUCTORS TO BE COPPER UNLESS OTHERWISE SPECIFIED.

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	STREET LIGHT INSTALLATION 25' STANDARD DIRECT BURIAL	STANDARD DRAWING NO. TFSD–1119



NOTES:

THE FENCE SHALL CONFORM TO THE STATE OF IDAHO STANDARD SPECIFICATIONS 610 AND 708.13, AND STANDARD DWG. F-2-D EXCEPT FOR THE FOLLOWING CHANGES AND CLARIFICATIONS:

1. THE FENCE FABRIC SHALL BE 9 GAUGE 2" DIAMOND WIRE MESH WITH A MINIMUM OF 2 OZ. PER SQ. FT. OF ZINC COATING AND VINYL PRIVACY SLATS, FULL HEIGHT.
2. THE FENCE SHALL HAVE A TOP AND BOTTOM RAIL THAT IS CLASS 1 SCHEDULE 40 1.660 IN. (1 5/8") DIA. O.D. GALVANIZED STEEL.
3. A TRUSS ROD SHALL BE PROVIDED IN ALL END SECTIONS AND CHANGES IN HEIGHT OF FENCE.
4. WIRE TIES SHALL BE USED EVERY 12" ALONG THE TOP RAIL AND ON ALL POSTS. THE TIES SHALL BE 11 1/2 GA. STEEL.
5. END AND BRACE POSTS SHALL BE CLASS 1 SCHEDULE 40 2.375 IN. (2 3/8") DIA. O.D. GALVANIZED STEEL.
6. LINE POSTS SHALL BE CLASS 1 SCHEDULE 40 1.900 IN. (1 7/8") DIA. O.D. GALVANIZED STEEL.
7. TENSION BARS, TRUSS RODS, POST CAPS, EYE-TOP CAPS, AND ALL HARDWARE ITEMS SHALL BE USED AS PER STATE STANDARDS.
8. THE BRACE RAIL MAY BE USED FOR THE TOP RAIL.
9. SUBMITTALS OF SHOP DRAWINGS FOR GATES SHOWING ALL BRACING AND HARDWARE ARE REQUIRED WITH BID.
10. THE DIAMETER AND DEPTH OF POST HOLES IN ROCK SHALL BE DETERMINED BY THE ENGINEER.

2018

IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION	CHAIN LINK FENCE DETAIL	STANDARD DRAWING NO. TFSD-20401