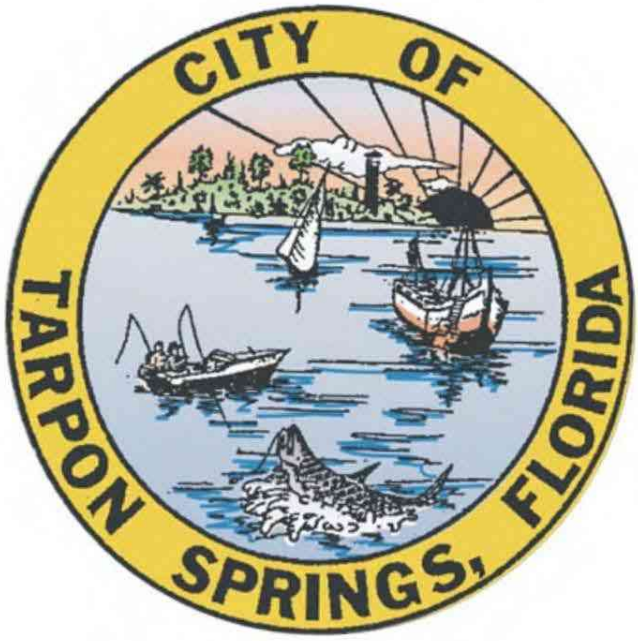


CITY OF TARPON SPRINGS, FLORIDA

# STANDARD DETAILS

JUNE 2016

UPDATED MARCH 2023

PUBLISHED BY:

PROJECT ADMINISTRATION DEPARTMENT

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**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

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**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

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**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

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| | |



**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

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**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**SANITARY STRUCTURE SHEET INDEX**

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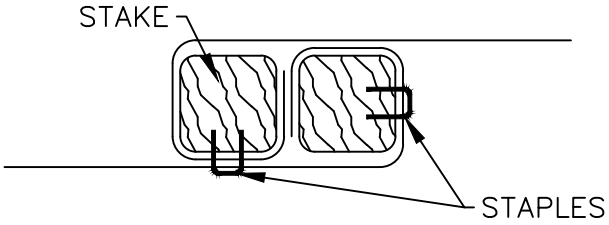
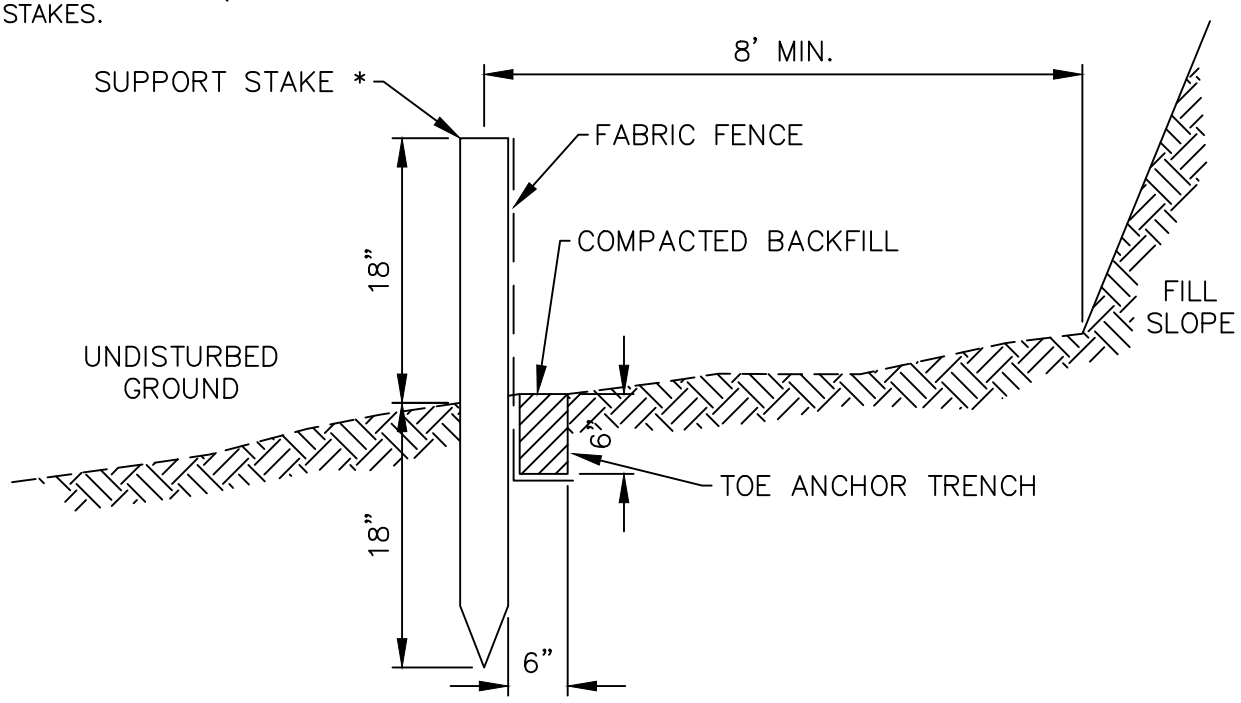
# STANDARD SILT FENCE (18" HIGH)




## JOINING FENCE SECTIONS

*STAKES SPACED @ 8' MAX.
USE 2"x2" (± ⅜") WOOD OR EQUIVALENT STEEL (U OR T) STAKES.




FABRIC WIDTH SHALL BE 30" MINIMUM. STAKES SHALL BE HARDWOOD OR EQUIVALENT STEEL (U OR T) STAKES.

SILT FENCE SHALL BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE FENCE SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

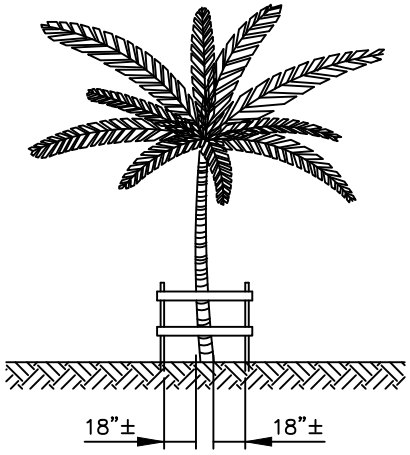
SEDIMENT SHALL BE REMOVED WHEN ACCUMULATIONS REACH HALF THE ABOVE GROUND HEIGHT OF THE FENCE.

ANY SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED SHALL BE IMMEDIATELY REPLACED WITH A ROCK FILTER.

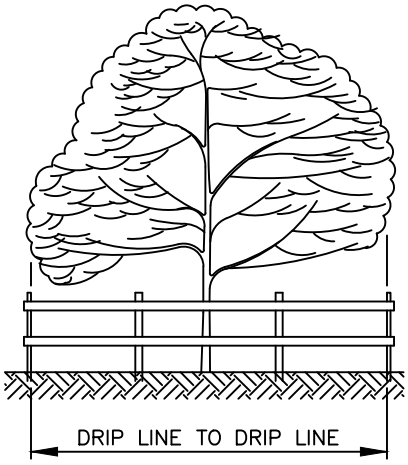
FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHEN TRIBUTARY AREA IS PERMANENTLY STABILIZED.



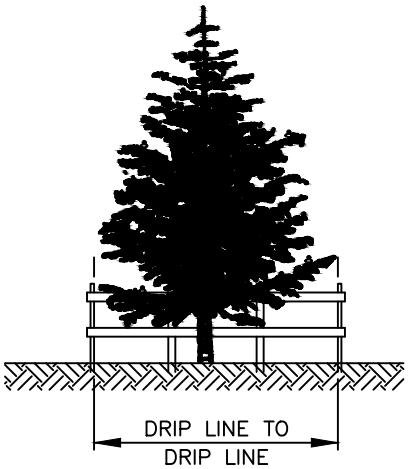
| | | | |
|---|---|---|---|
| **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **SILT FENCE INSTALLATION DETAIL** | DATE: **12/15/15**<br>INDEX: **G-01**<br>SCALE: **N.T.S.** SHEET: **1 OF 1** | |



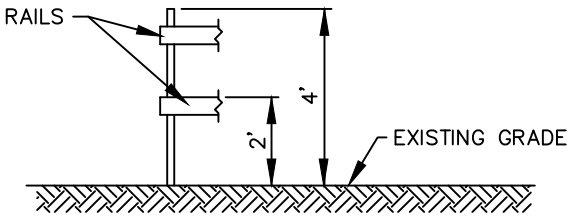

PALM TREES



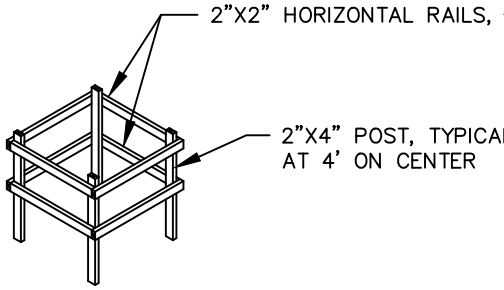

DECIDUOUS TREES



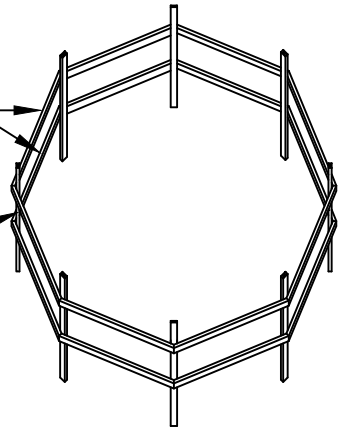

CONIFER TREES




TYPICAL ELEVATION




PALMS AND SMALL TREES
SEE NOTE 5



LARGE TREES AND TREE CLUSTERS
SEE NOTE 6

NOTES:

1. NO TRUCKS OR HEAVY EQUIPMENT ALLOWED WITHIN BARRIERS, ONLY HAND LABOR ALLOWED.
2. NO CONSTRUCTION MATERIALS, SOIL DEPOSITS, OR SOLVENTS SHALL BE ALLOWED INSIDE BARRIERS.
3. BARRIERS ARE TO BE IN PLACE PRIOR TO ANY CONSTRUCTION ACTIVITIES NEAR TREES.
4. BARRIERS ARE TO REMAIN IN PLACE UNTIL ALL PAVING, CONSTRUCTION, AND HEAVY EQUIPMENT ARE REMOVED FROM THE AREA.
5. FOR SINGULAR PALM TREES AND TREES FROM 1" TO 8" DBH.
6. FOR LARGER TREES LARGER THAN 8" DBH AND TREE CLUSTERS THAT NEED BARRIERS.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## TREE PROTECTION FENCE BARRIERS DETAIL

| | |
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# FERTILIZATION REQUIREMENTS

## TREES, PALMS, SHRUBS, AND GROUNDCOVER:

ALL TREES, PALMS, SHRUBS, AND GROUNDCOVER SHALL BE FERTILIZED WITH "AGRIFORM" OR APPROVED EQUAL OF 20–15–5 TABLETS AT THE TIME OF INSTALLATION AND PRIOR TO COMPLETION OF PIT BACK–FILLING. THE TABLETS SHALL BE PLACED UNIFORMLY AROUND THE ROOT MASS AT A DEPTH THAT IS BETWEEN THE MIDDLE AND BOTTOM OF THE ROOT MASS.

| | APPLICATION RATE: |
|---|---|
| TREES: | 3 – 21 GRAM TABLETS PER EACH 1/2" OF CALIPER |
| PALMS: | 1 – 21 GRAM TABLETS PER EACH 1" OF CALIPER |
| 1 GALLON CONTAINER: | 1 – 21 GRAM TABLETS |
| 3 GALLON CONTAINER: | 2 – 21 GRAM TABLETS |
| 5 GALLON CONTAINER: | 3 – 21 GRAM TABLETS |
| 7 GALLON CONTAINER: | 4 – 21 GRAM TABLETS |
| 15 GALLON CONTAINER: | 7 – 21 GRAM TABLETS |

## GROUND COVER AREAS:

ALL GROUND COVER AREAS SHALL RECEIVE FERTILIZATION WITH "OZMOCOTE" OR APPROVED EQUAL, TIME RELEASE FERTILIZER AS PER THE MANUFACTURER'S RECOMMENDATIONS.

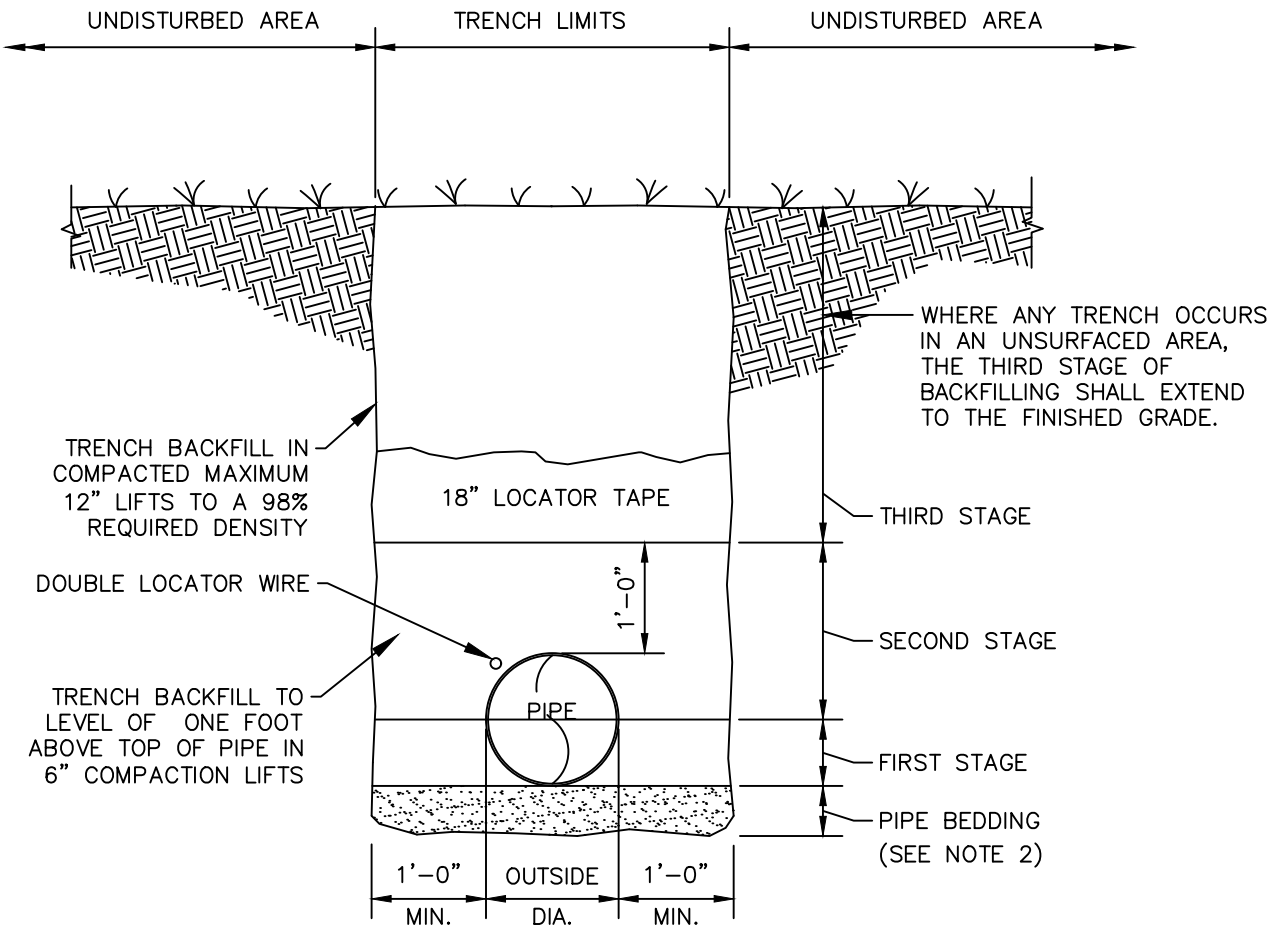
# WATERING SCHEDULE

THE 52 WEEK ESTABLISHMENT WATERING SCHEDULE SHALL BE AS FOLLOWS:

| | |
|---|---|
| WEEKS 1 AND 2 | 6 TIMES PER WEEK |
| WEEKS 3 THRU 5 | 5 TIMES PER WEEK |
| WEEKS 6 THRU 11 | 4 TIMES PER WEEK |
| WEEKS 12 THRU 17 | 3 TIMES PER WEEK |
| WEEKS 18 THRU 25 | 2 TIME PER WEEK |
| WEEKS 25 THRU 52 | 1 TIME EVERY OTHER WEEK, MIN. OR AS NEEDED TO INSURE THE SURVIVABILITY OF THE TREES, PALMS, SHRUBS AND GROUNDCOVER THROUGHOUT THE WARRANTY PERIOD |
| TREES: | 20 GALLONS EACH |
| PALMS: | 20 GALLONS EACH |
| SHRUBS: | 3 GALLONS EACH |
| GROUNDCOVER: | 2 GALLONS PER PLANTING |

# WARRANTY PERIOD

| | |
|---|---|
| TREES: | ONE YEAR FROM DATE OF FINAL ACCEPTANCE |
| PALMS: | ONE YEAR FROM DATE OF FINAL ACCEPTANCE |
| SHRUBS: | 120 DAYS FROM THE DATE OF FINAL ACCEPTANCE |
| GROUNDCOVER: | 120 DAYS FROM THE DATE OF FINAL ACCEPTANCE |




NOTES:

1. BACKFILL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. BACKFILL MATERIAL SHALL CONSIST OF EARTH, LOAM, SANDY CLAY, GRAVEL OR OTHER APPROVED MATERIAL.

2. IF TRENCH BOTTOM CONTAINS ROCK, THEN A MINIMUM OF A 6" PIPE BEDDING SHALL BE USED.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## UNPAVED AREA TRENCH BACKFILL DETAIL

| | |
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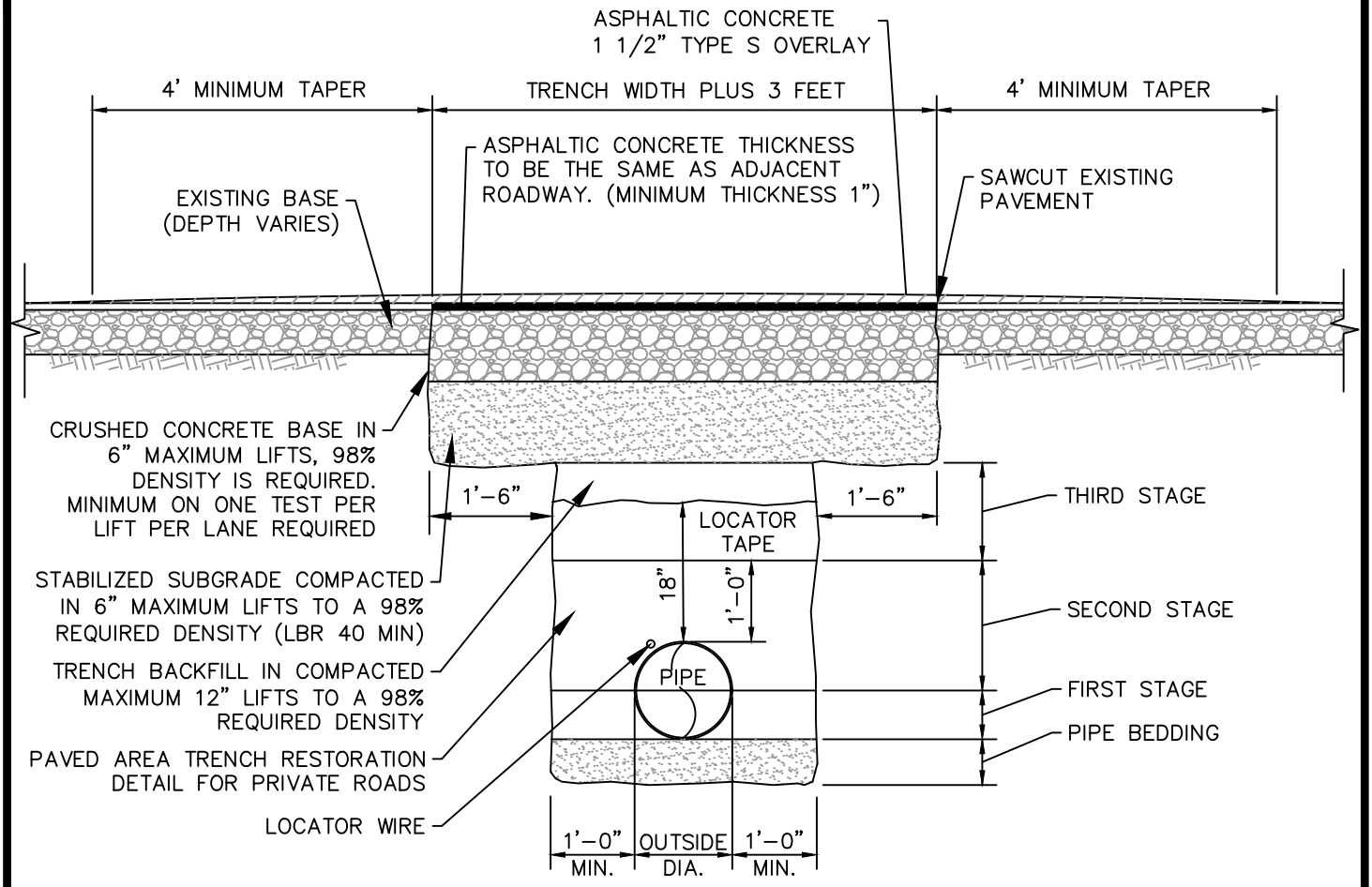


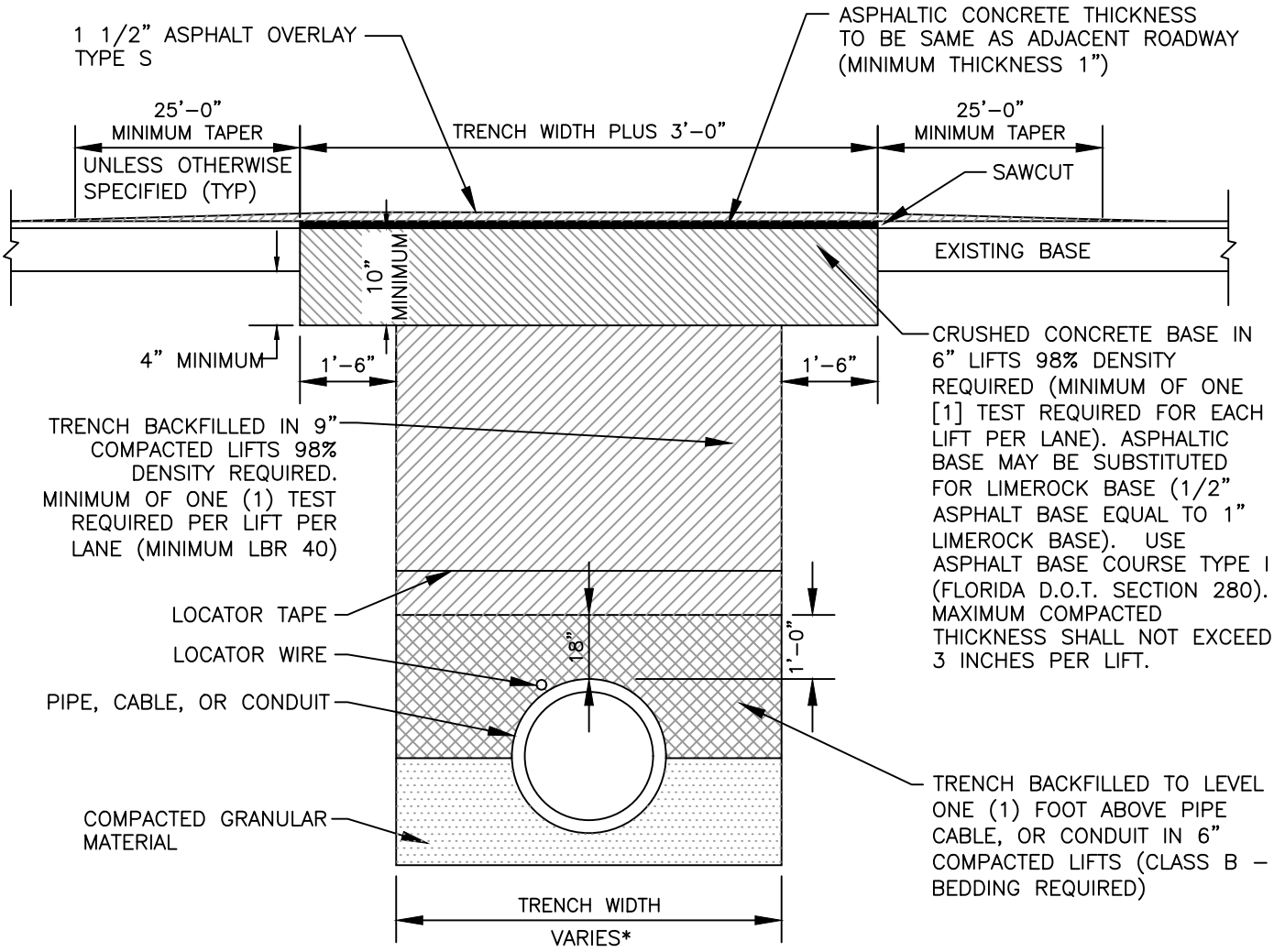

NOTES:

1. BACKFILL SHALL BE OF SUITABLE MATERIAL REMOVED FROM EXCAVATION EXCEPT WHERE OTHER MATERIAL IS SPECIFIED. BACKFILL MATERIAL SHALL CONSIST OF EARTH, LOAM, SANDY CLAY, GRAVEL OR OTHER APPROVED MATERIAL. REFER TO TECHNICAL SPECIFICATIONS FOR DETAIL REQUIREMENTS.

2. IF TRENCH BOTTOM CONTAINS ROCK, THEN A MINIMUM OFA 6" PIPE BEDDING SHALL BE USED.

3. R.O.W. PERMIT STIPULATIONS OVERRIDE THIS DETAIL WHERE TRENCH IS LOCATED WITHIN A COUNTY R.O.W.

| | | | |
|---|---|---|---|
| | **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **PAVED AREA TRENCH RESTORATION DETAIL FOR PRIVATE ROADS** | DATE **12/15/15**<br>INDEX **G-05**<br>SCALE **N.T.S.** SHEET **1 OF 1** |




*TRENCH WIDTH = PIPE OUTSIDE DIAMETER PLUS 2 FEET

NOTES:

1. ALL MODIFIED PROCTOR AND DENSITY TESTS SHALL BE TAKEN BY A CERTIFIED LABORATORY.
2. ALL TESTS SHALL BE COMPLETED AND SHALL MEET MINIMUM DENSITY REQUIREMENTS PRIOR TO ADDITIONAL BACKFILLING.
3. RIGHT-OF-WAY PERMIT STIPULATIONS OVERRIDE THIS DETAIL WHERE TRENCH IS LOCATED WITHIN A COUNTY RIGHT-OF-WAY.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## ROAD & TRENCH RESTORATION FOR LOCAL ROADS

| | |
|---|---|
| DATE | 1/28/2015 |
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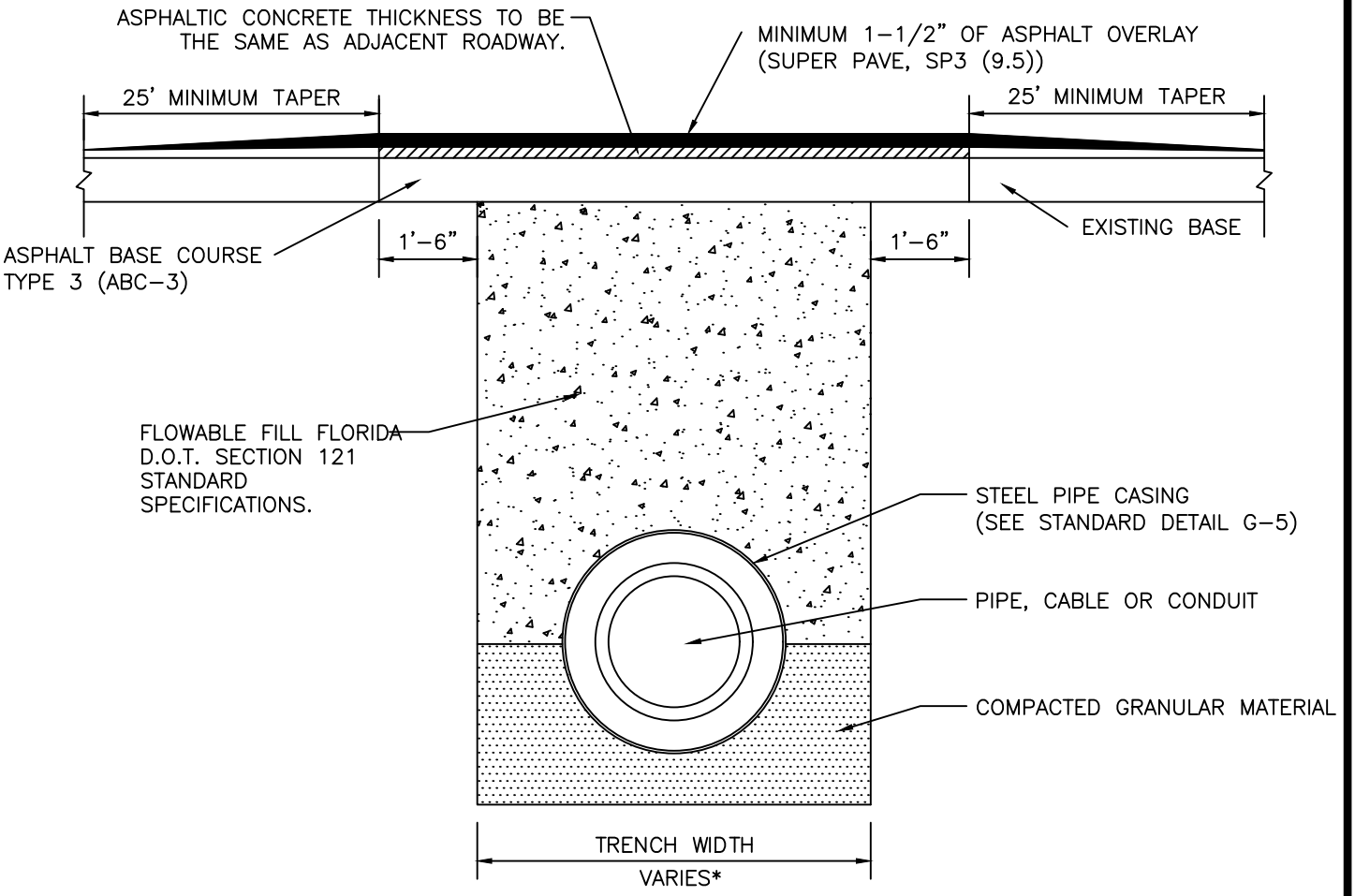


*TRENCH WIDTH = PIPE OUTSIDE DIAMETER PLIS 2 FEET

NOTES:

1. OVERLAY REQUIRED AT CITY OF TARPON SPRINGS'S DISCRETION.
2. WRAP PIPE JOINTS WITH FILTER FABRIC.
3. ALL PIPES SHALL BE CONSTRUCTED WITHIN STEEL CASING PIPE IF INSTALLED ON A ROAD TO BE WIDENED.
4. RIGHT–OF–WAY PERMIT STIPULATIONS OVERRIDE THIS DETAIL WHERE TRENCH IS LOCATED WITHIN A CITY RIGHT–OF–WAY.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

**STATE ROAD, MAJOR COUNTY ROAD, AND NUMBERED COUNTY ROAD FLOWABLE FILL ROAD AND TRENCH RESTORATION**

| | |
|---|---|
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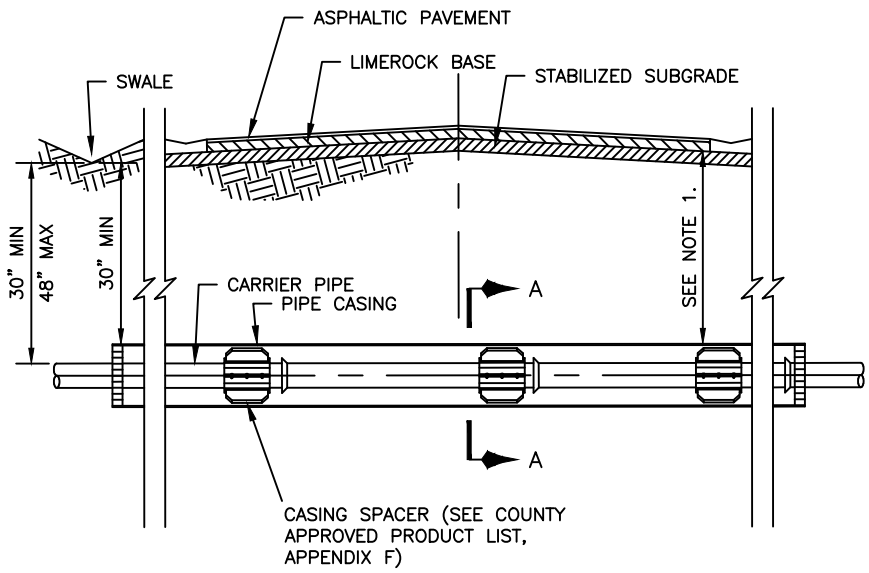
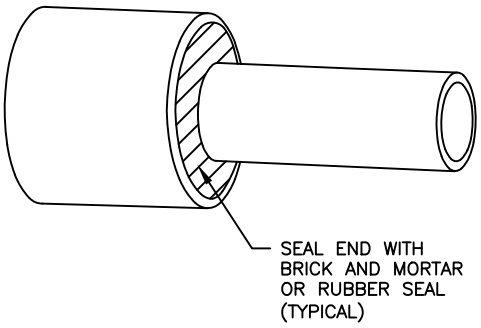
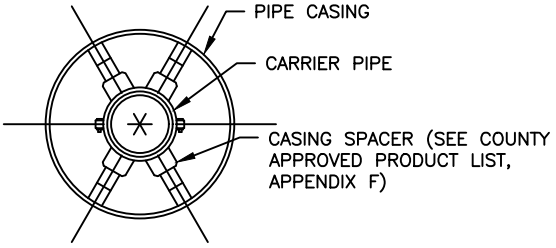
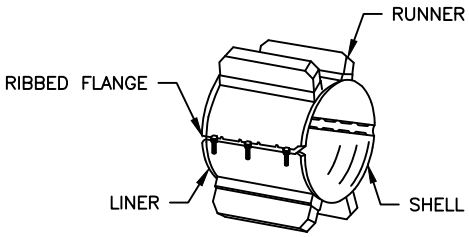



## CASING END SEAL




## SECTION A–A




## SPACER

STANDARD NUMBER OF RUNNERS REQUIRED

| | |
|---|---|
| UP TO 14" CARRIER PIPE | – 4 REQUIRED |
| OVER 14" THROUGH 36" CARRIER PIPE | – 6 REQUIRED |
| OVER 36" THROUGH 48" CARRIER PIPE | – 7 REQUIRED |

NOTES:

1. UNDERGROUND CROSSINGS REQUIRE A MINIMUM VERTICAL CLEARANCE OF 48" BELOW PAVEMENT SURFACE FOR FREEWAYS, 36" FOR OTHER HIGHWAYS AND SUBAQUEOUS CROSSINGS OR 30" BELOW UNPAVED GROUND INCLUDING DITCH GRADE PER FLORIDA D.O.T.

2. SEE TECHNICAL SPECIFICATIONS FOR CARRIER PIPE AND CASING PIPE REQUIREMENTS.

STAINLESS STEEL SPACERS:

1. SPACERS SHALL BE BOLT–ON STYLE WITH A TWO PIECE SOLID SHELL MADE FROM T–304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS. THE SHELL SHALL BE LINED WITH A RIBBED PVC SHEET OF A 0.090" THICKNESS THAT OVERLAPS THE EDGES. RUNNERS MADE FROM UHMW POLYMER SHALL BE ATTACHED TO RISERS AT APPROPRIATE POSITIONS TO PROPERLY LOCATE THE CARRIER WITHIN THE CASING AND TO EASE INSTALLATION. RISERS SHALL BE MADE FROM T–304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS AND SHALL BE ATTACHED TO THE SHELL BY MIG WELDING. ALL WELDS SHALL BE FULLY PASSIVATED. ALL FASTENERS SHALL BE MADE FROM T–304 STAINLESS STEEL. CASING SPACERS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).

PLACEMENT OF SPACERS ON CARRIER PIPE:

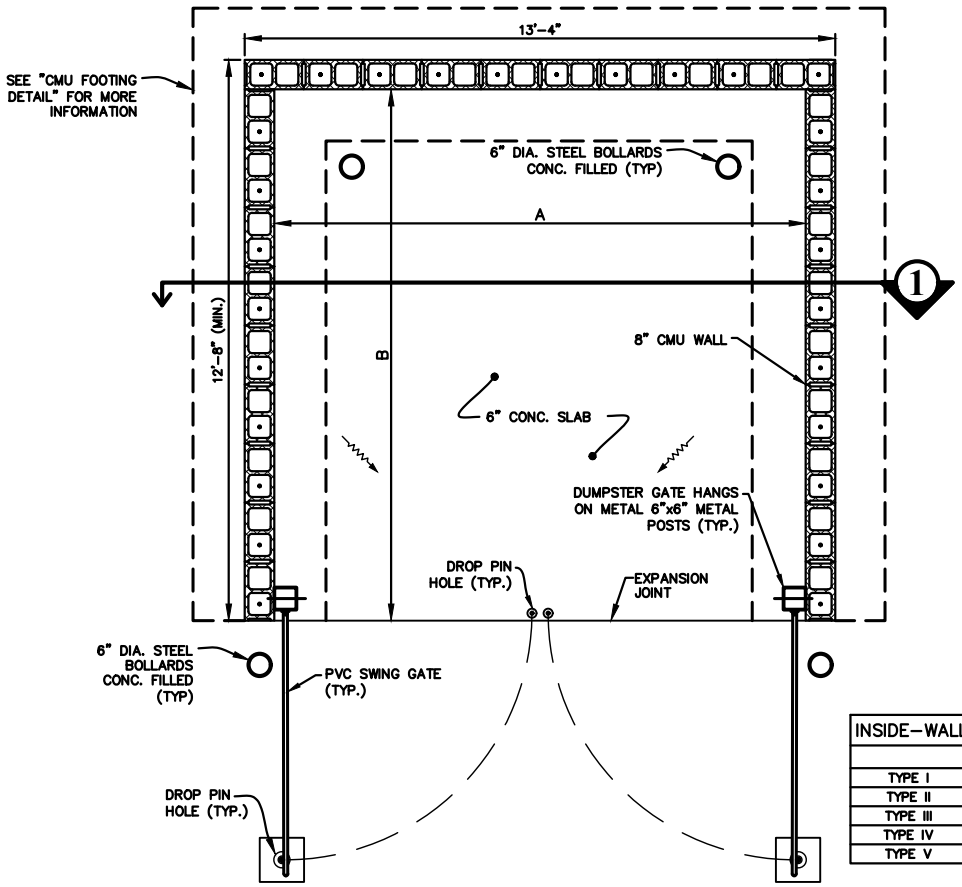
1. GENERAL – ONE SPACER SHALL BE PLACED NOT MORE THAN TWO FEET FROM EACH END OF CASING. SUBSEQUENT SPACERS SHALL BE PLACED AT 6' TO 10' INTERVALS WITHIN THE CASING, OR IN ACCORDANCE WITH PIPE MANUFACTURER'S RECOMMENDATIONS.

2. PVC CARRIER – ONE SPACER SHALL BE PLACED ON THE SPIGOT END OF EACH SEGMENT AT THE LINE MARKING THE LIMIT OF INSERTION INTO THE BELL. WHEN THE JOINT IS COMPLETE, THE SPACER SHALL BE IN CONTACT WITH THE BELL OF THE JOINT SO THAT THE SPACER PUSHES THE JOINT AND RELIEVES COMPRESSION WITHIN THE JOINT. SUBSEQUENT SPACERS SHALL BE PLACED AT 6' TO 10' INTERVALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

CARRIER PIPE:

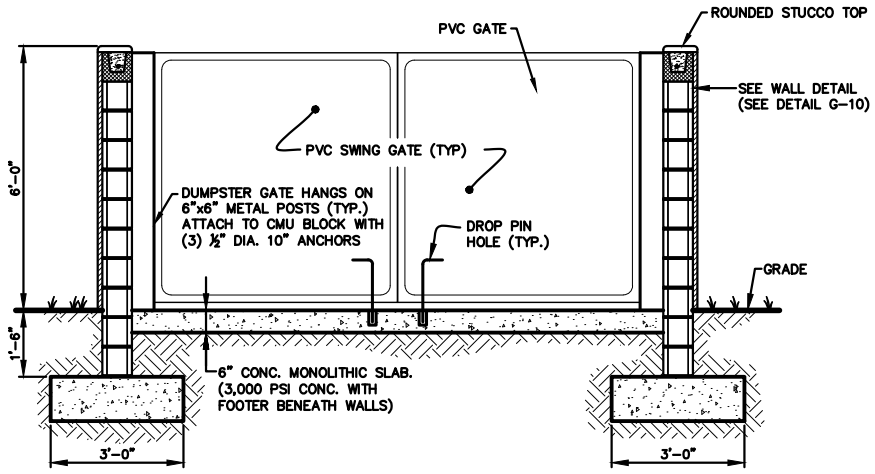
1. CARRIER PIPE SHALL BE CENTERED WITHIN CASING BY USE OF STAINLESS STEEL CASING SPACERS (SEE COUNTY APPROVED PRODUCT LIST, APPENDIX F).

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | JACK AND BORE DETAIL | DATE 12/15/15<br>INDEX G-08<br>SCALE N.T.S. / SHEET 1 OF 1 | |



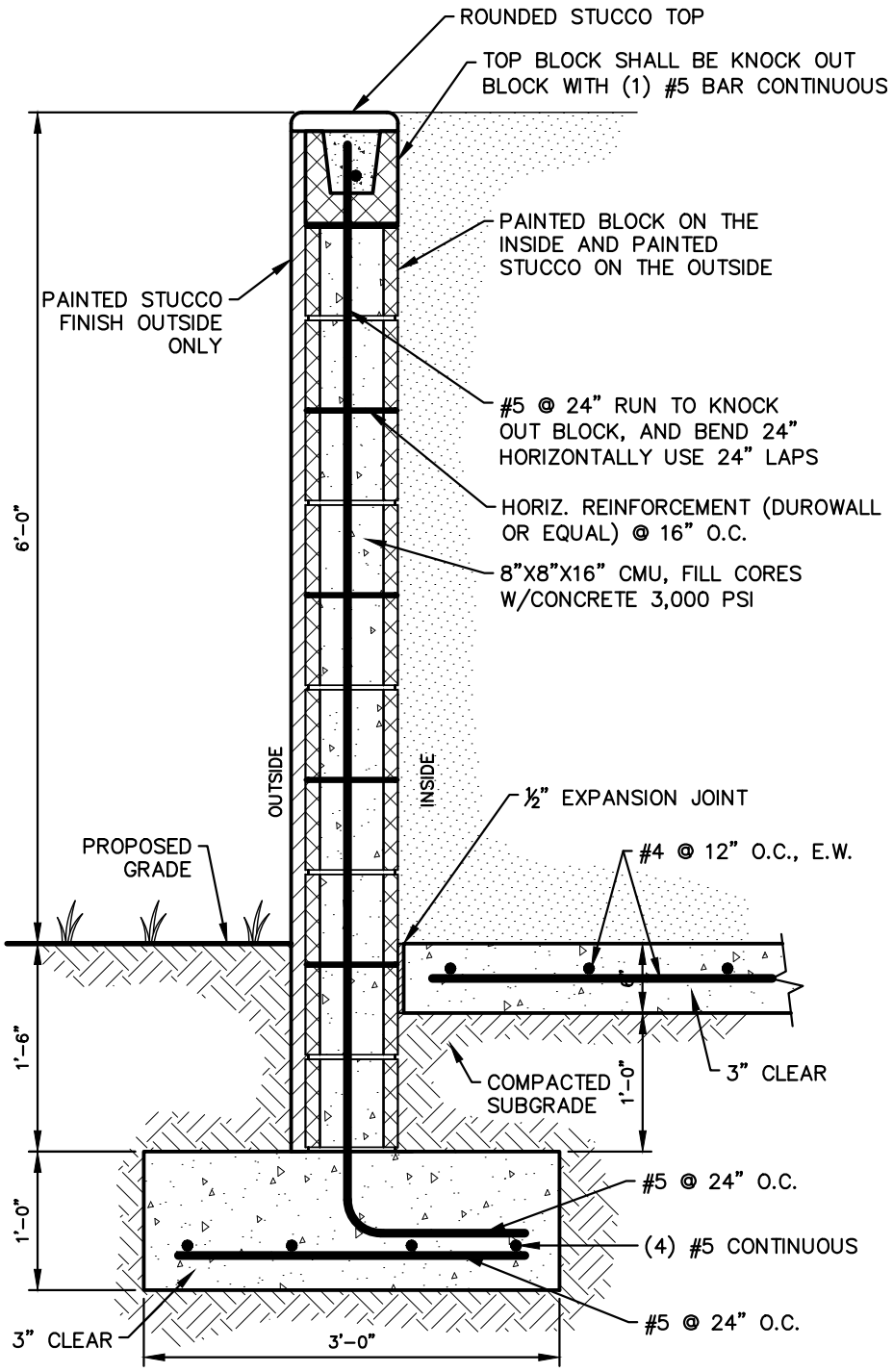

| INSIDE-WALL ENCLOSURE DIMENSIONS | | |
|---|---|---|
| | A | B |
| TYPE I | 10'-8" | 10'-4" |
| TYPE II | 14'-8" | 10'-4" |
| TYPE III | 18'-8" | 10'-4" |
| TYPE IV | 14'-8" | 15'-4" |
| TYPE V | 18'-8" | 15'-4" |

## DUMPSTER ENCLOSURE: PLAN




## DUMPSTER ENCLOSURE: SECTION

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | DUMPSTER ENCLOSURE | DATE 10/16/17 | |
| | | INDEX G-09 | |
| | | SCALE ¼"=1-0" | SHEET 1 OF 1 |



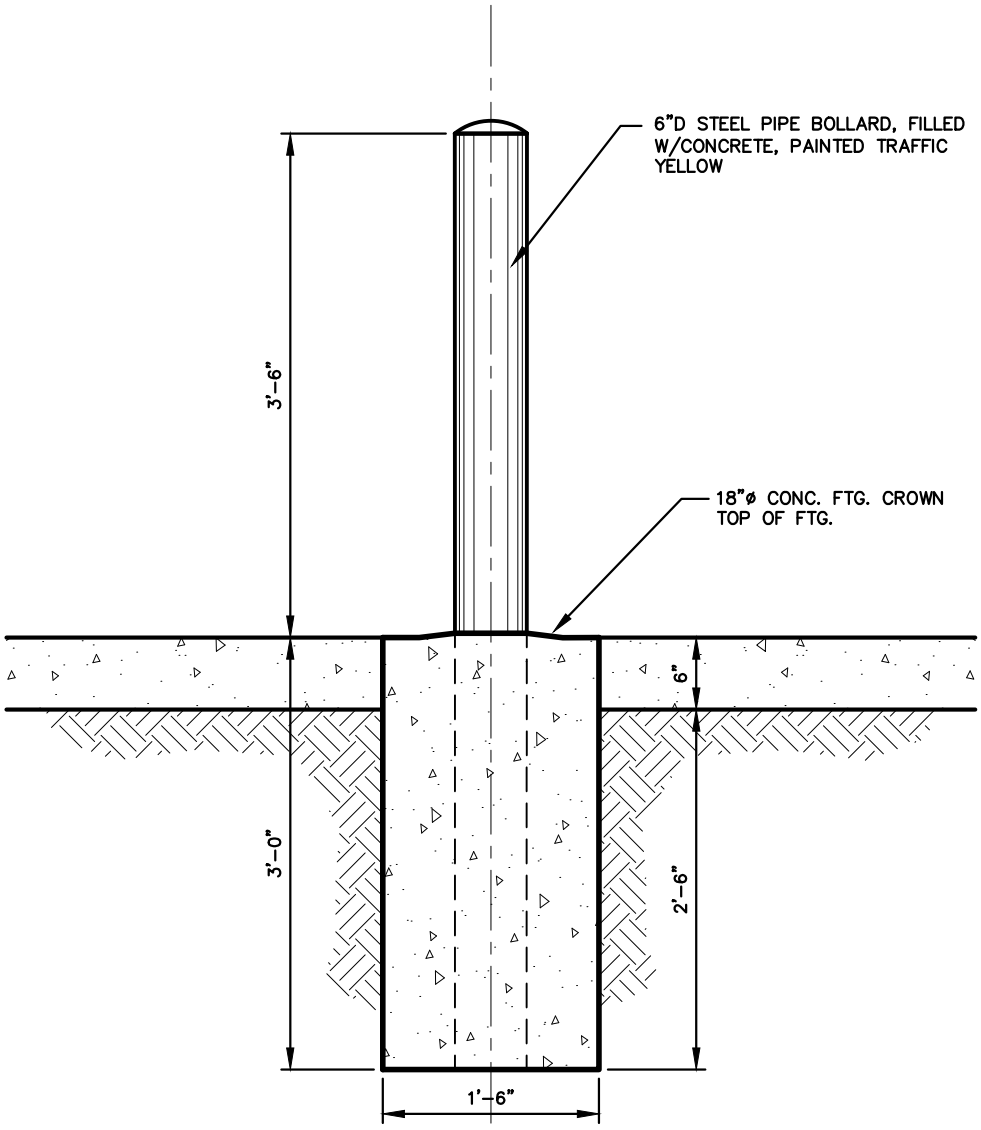



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## DUMPSTER: CMU WALL FOOTING

| | |
|---|---|
| DATE | 1/4/17 |
| INDEX | G-10 |
| SCALE | 3/4"=1-0" |
| SHEET | 1 OF 1 |




# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## BOLLARD DETAIL

| | |
|---|---|
| DATE | 1/4/17 |
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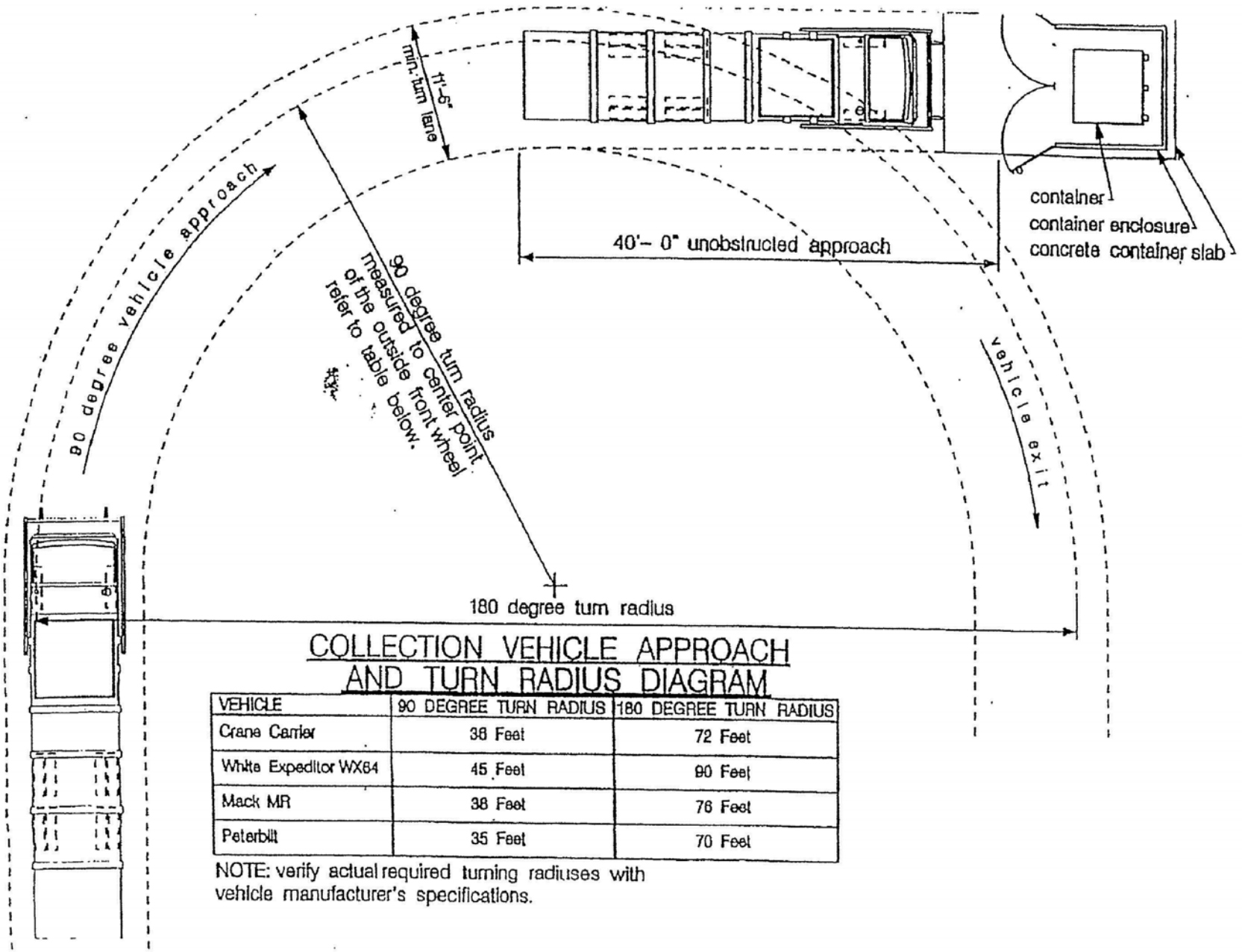
| SCALE | 3/4"=1-0" |
| SHEET | 1 OF 1 |

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

# COLLECTION VEHICLE TURNING RADIUS




## COLLECTION VEHICLE APPROACH AND TURN RADIUS DIAGRAM

| VEHICLE | 90 DEGREE TURN RADIUS | 180 DEGREE TURN RADIUS |
|---|---|---|
| Crane Carrier | 38 Feet | 72 Feet |
| White Expeditor WX64 | 45 Feet | 90 Feet |
| Mack MR | 38 Feet | 76 Feet |
| Peterbilt | 35 Feet | 70 Feet |

NOTE: verify actual required turning radiuses with vehicle manufacturer's specifications.

| DATE | INDEX | SCALE | SHEET |
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| 1/4/17 | G-12 | N.T.S. | 1 OF 1 |

## NOTES:

1. WALLS; MAXIMUM 6'–0' HIGH AND CONSTRUCTED OF CONCRETE BLOCK (8"X8"X16").

2. GATES; CONSTRUCTED OF PVC MATERIAL, HINGE–MOUNTED ON MIN. 6"x6" HOT DIPPED GALVANIZED STEEL POST (PAINTED) OR EQUAL.

3. DROP PIN; 1" GAL. STEEL SLEEVE CENTERED IN 12"x12"x18" CONCRETE FOOTING FLUSH WITH GRADE FOR CANE BOLT ANCHORING (TYP.).

4. BOLLARD; 3'–6" HIGH, 6" DIAMETER STEEL PIPE BOLLARD FILLED WITH CONCRETE, PAINTED TRAFFIC YELLOW, IMBEDDED 3'–0" DEEP IN 18" CONCRETE FOUNDATION. (SEE DETAIL G–11)

## CONCRETE MASONRY WALL CONSTRUCTION

MATERIALS, CONSTRUCTION AND QUANTITY CONTROL OF MASONRY SHALL BE IN ACCORDANCE WITH UNIFORM BUILDING CODE (UBC), CHAPTER 24. GENERAL CONDITIONS AND CONSTRUCTION REQUIREMENTS SHALL BE APPLIED AS SPECIFIED IN UBC, SECTION 2404 (F), DURING GROUTED MASONRY WORK.

1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A–615, GRADE 60. VERTICAL REINFORCEMENT SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL, AND SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM.

2. HORIZONTAL WALL REINFORCEMENT SHALL BE STANDARD TRUSS TYPE DUR–O–WALL (OR EQUIVALENT) AT 16" O.C..

3. HOLLOW LOAD–BEARING CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT CONFORMING TO ASTM C–90, WITH A MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI.

4. MORTAR SHALL BE TYPE M OR S, IN ACCORDANCE WITH ASTM C–270. PLACE ALL MASONRY IN RUNNING BOND WITH 3/8" MORTAR JOINTS. PROVIDE COMPLETE COVERAGE FACE SHELL MORTAR BEDDING, HORIZONTAL AND VERTICAL.

5. COARSE GROUT SHALL CONFORM TO ASTM C–476, WITH A MAXIMUM AGGREGATE SIZE OF 3/8", 8" TO 10" SLUMP, AND A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.

## DESIGN CRITERIA:

DESIGN CRITERIA BASED ON 2014 FLORIDA BUILDING CODE, 5TH EDITION AND ASCE 7–10.



| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | DUMPSTER ENCLOSURE STRUCTURE NOTES | DATE | 1/4/17 |
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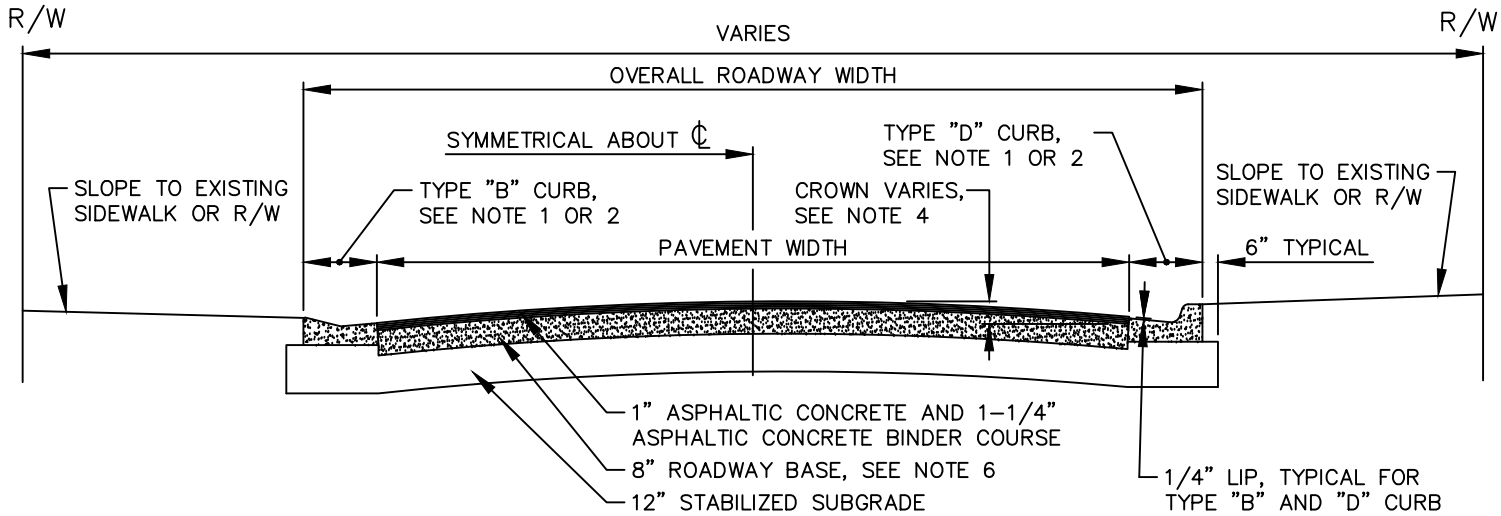
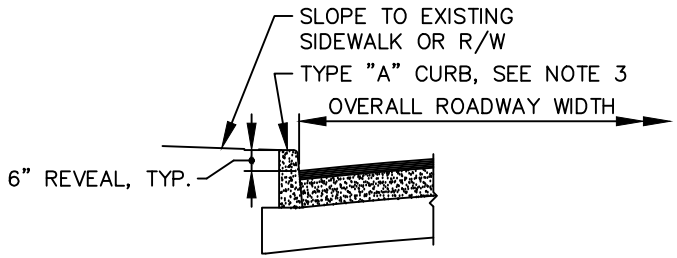
# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

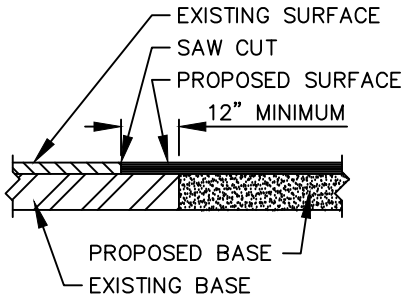
## HEAVY DUTY ROADWAY DETAIL




TYPICAL HEAVY DUTY ROADWAY SECTION




TYPE "A" CURB
(OPTION)




TIE-IN OF PROPOSED CONSTRUCTION TO EXISTING

NOTES:

1. 36' WIDE ROADWAY: 36' OF PAVEMENT (THREE 12' LANES) WITH EITHER TYPE "B" OR TYPE "D" CURB EQUALS 40' OVERALL WIDTH.
2. 60' WIDE ROADWAY: 60' OF PAVEMENT (FIVE 12' LANES) WITH EITHER TYPE "B" OR TYPE "D" CURB EQUALS 64' OVERALL WIDTH.
3. WIDTH OF ROADWAY WITH TYPE "A" CURB IS MEASURED FACE TO FACE OF CURB.
4. ROADWAY CROSS SLOPE: 0.02 FT/FT, UNLESS OTHERWISE SHOWN OR DIRECTED.
5. SEE STANDARD DETAIL-TYPE "A", "B", "C", AND "D" CURB.
6. BASE THICKNESS SHOWN IS FOR LIMEROCK, ALTERNATE MATERIALS MAY REQUIRE A DIFFERENT THICKNESS.

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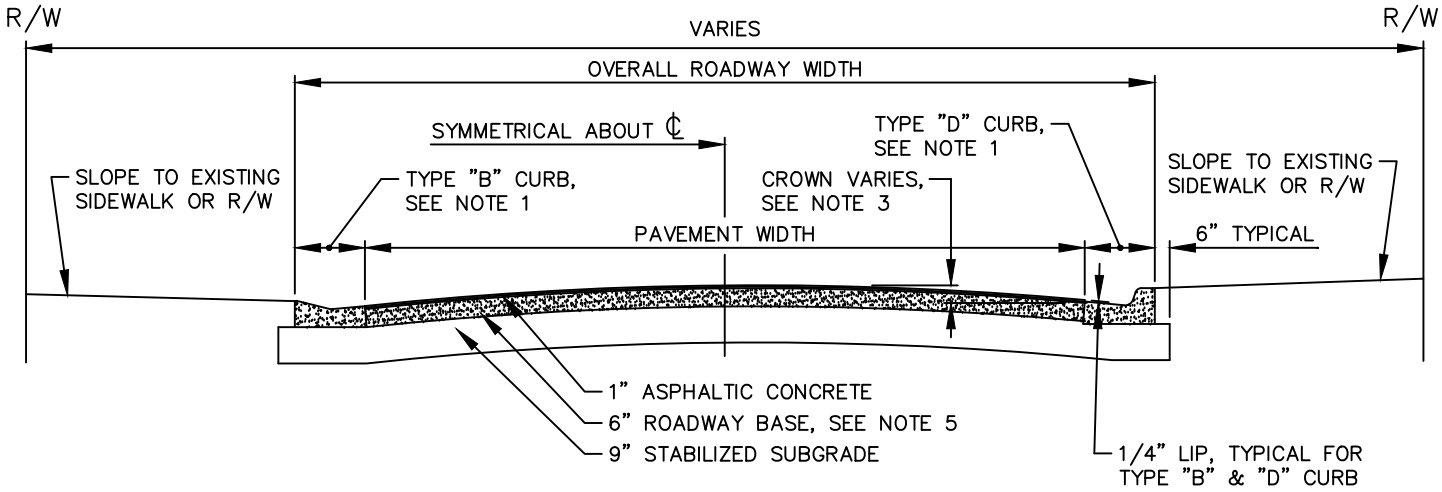
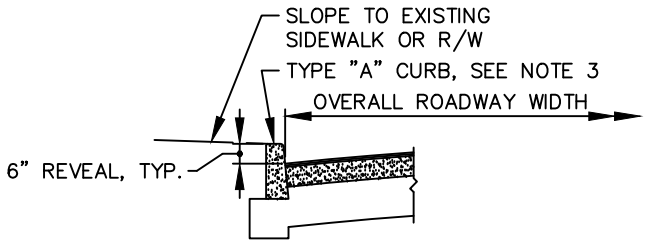
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

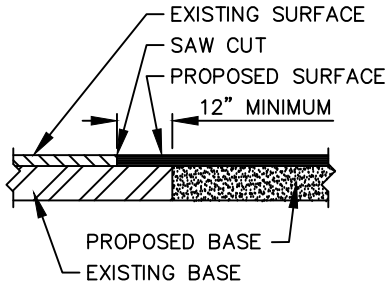
# STANDARD DUTY ROADWAY DETAIL




TYPICAL STANDARD DUTY ROADWAY SECTION




TYPE "A" CURB
(OPTION)




TIE-IN OF PROPOSED CONSTRUCTION TO EXISTING

NOTES:

1. 24' WIDE ROADWAY: 20' OF PAVEMENT WIDTH WITH EITHER TYPE "B" OR TYPE "D" CURB EQUALS 24' OVERALL WIDTH.
2. PAVEMENT WIDTH WITH TYPE "A" CURB IS 20' WIDE, MEASURED FACE TO FACE OF CURB.
3. ROADWAY CROSS SLOPE: 0.02 FT/FT, UNLESS OTHERWISE SHOWN OR DIRECTED.
4. SEE STANDARD DETAIL-TYPE "A", "B", "C", AND "D" CURB.
5. BASE THICKNESS SHOWN IS FOR LIMEROCK, ALTERNATE MATERIALS MAY A REQUIRE DIFFERENT THICKNESS.

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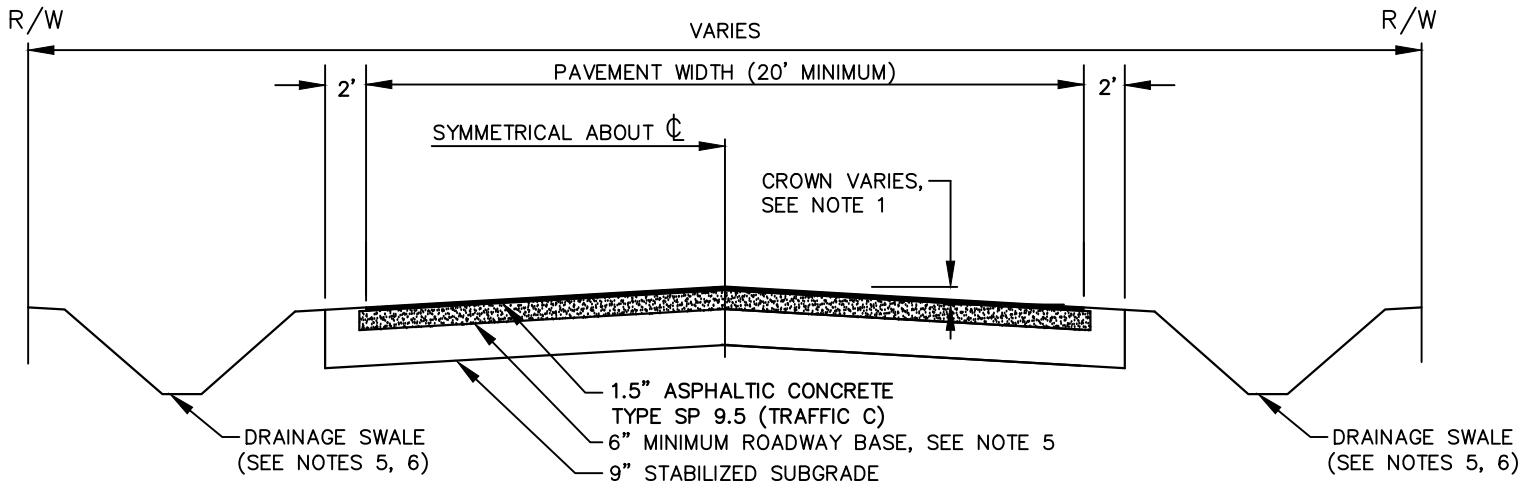
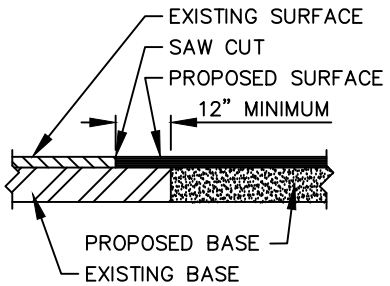
CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

UNIMPROVED ROADWAY




TYPICAL UNIMPROVED ROADWAY SECTION




TIE–IN OF PROPOSED CONSTRUCTION TO EXISTING

NOTES:

1. CROSS SECTION ROADWAY SLOPE OF AT LEAST 0.25–INCH/FOOT, FROM CENTER CROWN TO EDGE OF ROADWAY PAVEMENT, SHALL BE MAINTAINED THROUGHOUT PROPOSED ROADWAY.
2. BASE THICKNESS SHOWN IS FOR CRUSHED CONCRETE (PREFERRED BASE MATERIAL), ALTERNATE MATERIALS MAY A REQUIRE DIFFERENT THICKNESS.
3. ASPHALT PAVEMENT, CRUSHED CONCRETE BASE, AND STABILIZATION SHALL MEET THE FOLLOWING CURRENT FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION:
   - ASPHALT PAVEMENT – SECTION 334
   - TYPE B STABILIZATION – SECTION 160
   - CRUSHED CONCRETE – SECTIONS 204, 285, AND 901–5
4. FINISHED ROADWAY SEGMENT MUST BE CONSTRUCTED ALONG ENTIRE FRONTAGE OF LOT BEING DEVELOPED AND EXTENDED TO THE NEAREST CITY PAVED ROADWAY
5. SWALES ARE TO BE CONSTRUCTED ON BOTH SIDES OF THE PROPOSED ROADWAY, ALONG ENTIRE SEGMENT, HAVING MAXIMUM SIDE SLOPES OF 4:1 AND STABILIZED WITH SOD, PREFERABLY BAHIA (WHERE FEASIBLE). REFER TO THE LATEST EDITION OF THE FDOT MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS (FLORIDA GREENBOOK) FOR ROADSIDE SLOPE CRITERIA.
6. PROVIDE A SWALE BOTTOM OF 5–FT (WHERE FEASIBLE). DO NOT USE V–BOTTOM SWALES UNLESS 6:1 FRONT AND BACK SLOPES ARE USED.
7. WHERE WARRANTED, CULVERT PIPE (OF ADEQUATE SIZE SIZE TO CONVEY UPSTREAM DRAINAGE FLOWS AND NO LESS THAN 12–INCH DIAMETER AND OF APPROVED MATERIAL) SHALL BE INSTALLED UNDER EACH DRIVEWAY CONSTRUCTED TO CONNECT SWALES ON EACH SIDE.
8. WHERE APPLICABLE, PROVIDE CLEAR ZONE WIDTHS FOLLOWING THE LATEST EDITION OF THE FLORIDA GREENBOOK.

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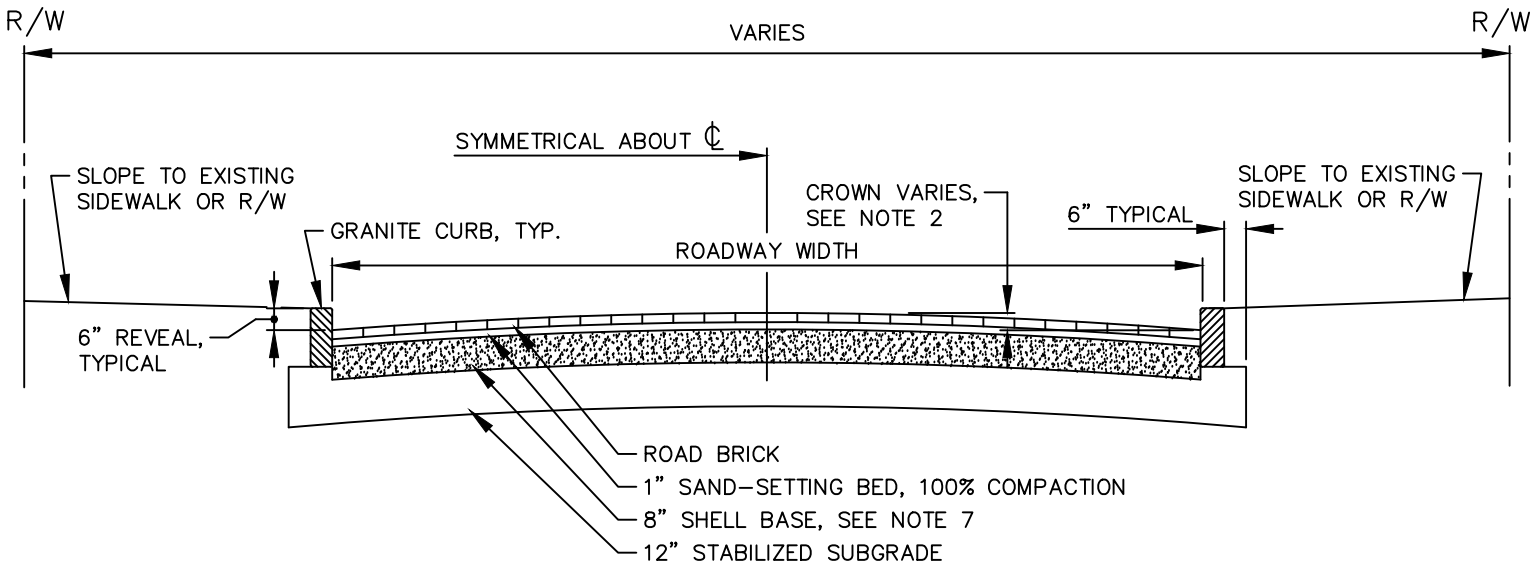
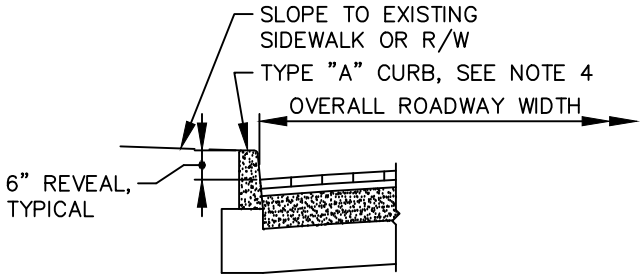
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

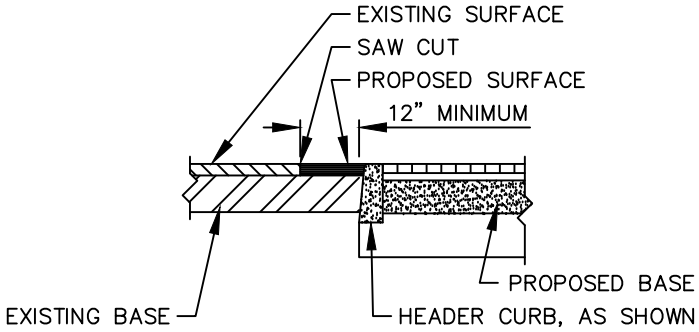
# BRICK SURFACE ROADWAY DETAIL




TYPICAL BRICK ROADWAY SECTION




TYPE "A" CURB
SEE NOTES 3 AND 4




TIE-IN OF PROPOSED CONSTRUCTION TO EXISTING

NOTES:

1. ROADWAY WIDTH, MEASURED FACE TO FACE OF CURBS.
2. ROADWAY CROSS SLOPE: 0.02 FT/FT, UNLESS OTHERWISE SHOWN OR DIRECTED.
3. EXISTING GRANITE CURB IS TO BE REPLACED AND/OR NEW GRANITE CURB SHALL BE INSTALLED.
4. GRANITE CURB MAY BE REPLACED WITH TYPE "A" CURB AT THE RADII, DRIVEWAY AND/OR ALLEY CURB CUTS, AND CURB RAMPS.
5. BRICK ROADWAYS SHALL END WITH A "HEADER CURB", IF NO OTHER BARRIER IS AVAILABLE.
6. SEE STANDARD DETAIL-TYPE "A", "B", "C", AND "D" CURB.
7. ALTERNATE BASE MATERIAL MAY BE 9" OF RECYCLED CONCRETE, WITH APPROVAL OF THE ENGINEER.

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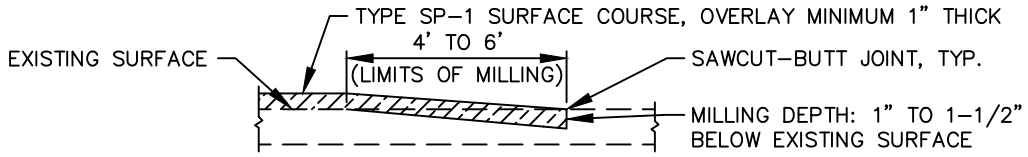
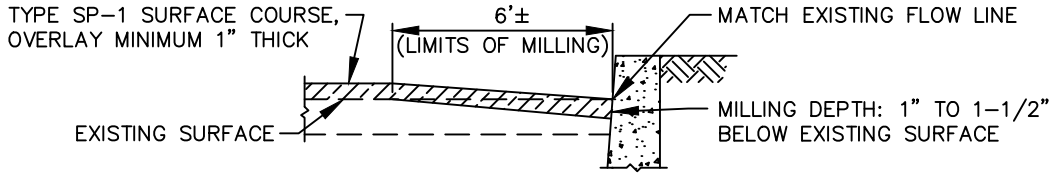
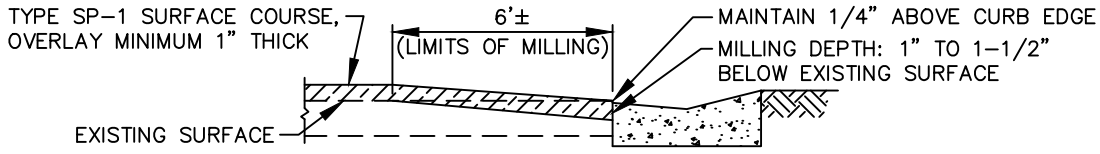


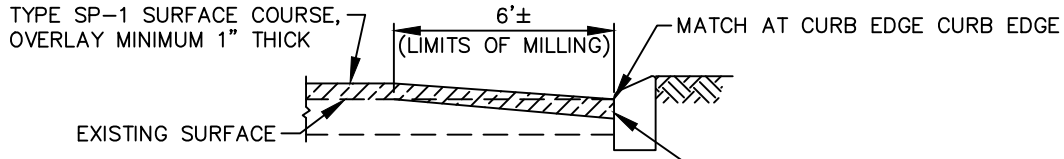

BEGINNING OR END OF OVERLAY TRANSITION



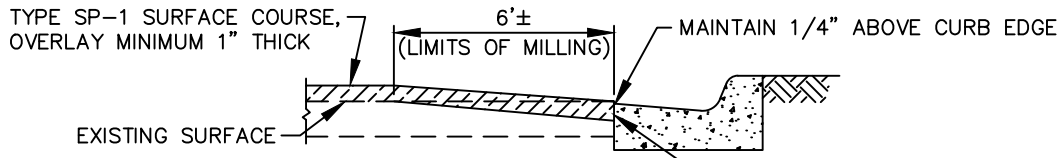

TYPE "A" CURB




TYPE "B" CURB




TYPE "C" CURB




TYPE "D" CURB

NOTES:

1. TACK COAT SHALL BE APPLIED AS PER TECHNICAL SPECIFICATIONS, OR AS DIRECTED.
2. CURBS SHALL NOT BE SCARRED, OR DAMAGED AS A RESULT OF THE MILLING ACTIVITIES.
3. SAWCUT-BUTT EDGE SHALL BE A MINIMUM 1" DEEP AND HAVE A CLEAN EDGE, NOT RAVELED.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## COLD MILLING PAVEMENT TRANSITION DETAILS

| | |
|---|---|
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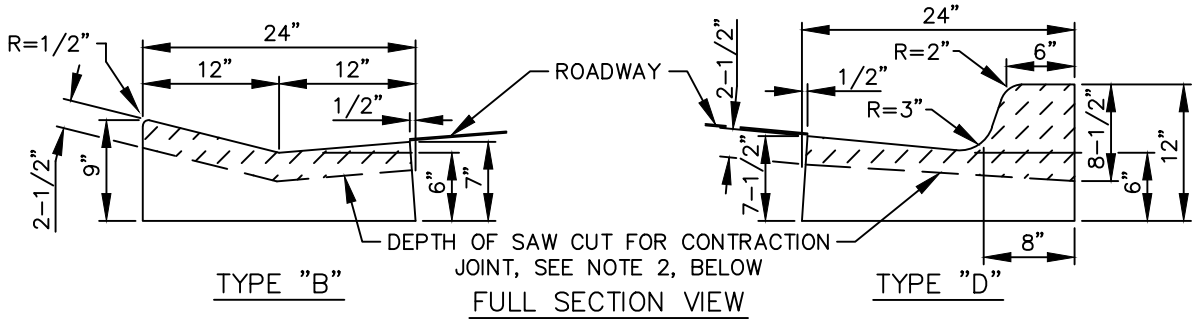
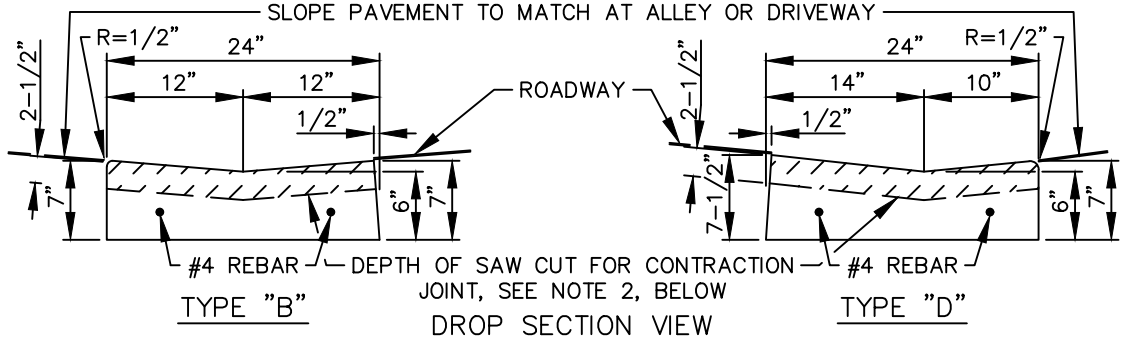
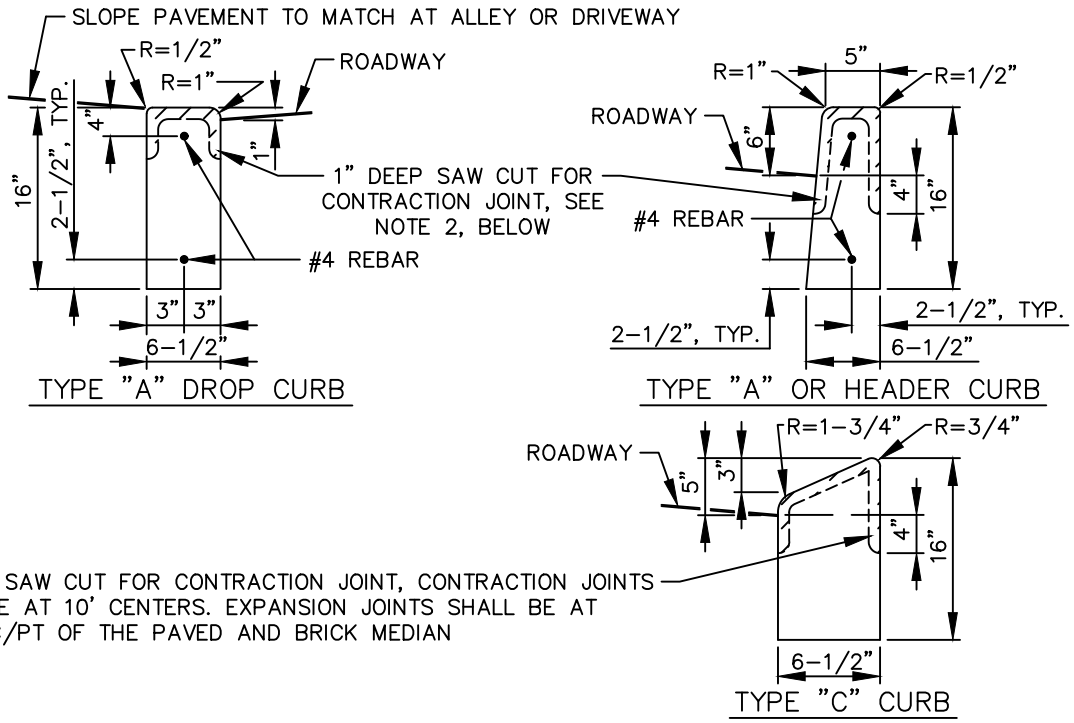



FULL SECTION VIEW



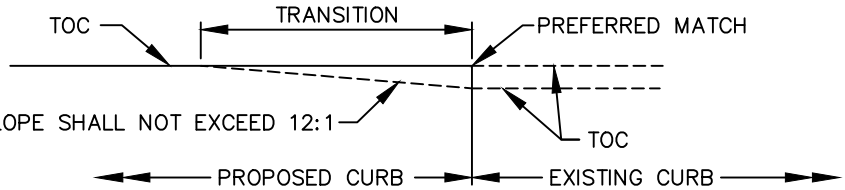

DROP SECTION VIEW



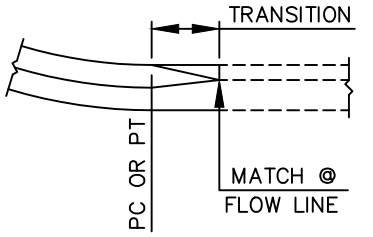

NOTES:

1. WHEN REMOVING EXISTING CURB, THE CURB SHALL BE SAW CUT AT THE NEAREST CONTRACTION JOINT AND A FULL SECTION OF CURB REPLACED.
2. INSTALL EXPANSION JOINTS AT 50' INTERVALS, SAW CUT CONTRACTION JOINTS AT 10' INTERVALS. SAW CUTS SHOULD BE AVOIDED WITHIN VALLEY GUTTERS AND WITHIN CURB AND GUTTER ENDINGS.

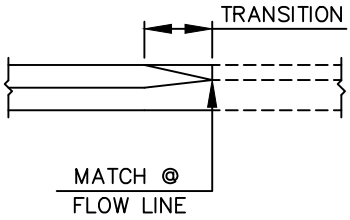
| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS, FLORIDA | **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **TYPE "A", "B", "C", AND "D" CURB DETAIL** | DATE **12/15/15**<br>INDEX **R-05**<br>SCALE **N.T.S.** SHEET **1 OF 1** |



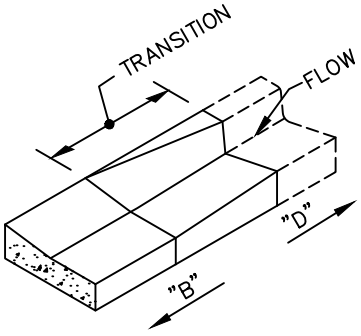

TYPICAL TRANSITION PROFILE OF PROPOSED TO EXISTING TOP OF CURB




@ CURB RETURN CONNECTION

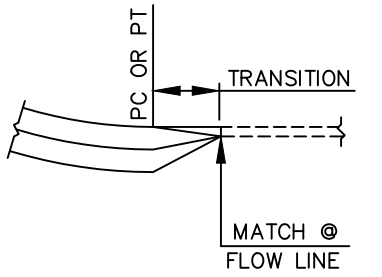



@ STRAIGHT CONNECTION

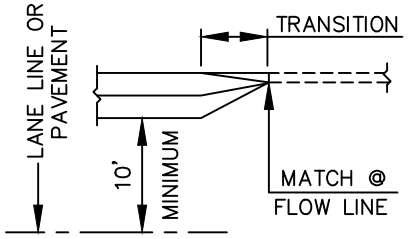



ISOMETRIC

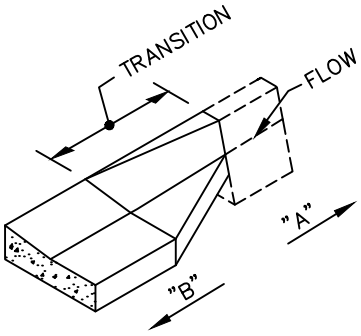
TYPE "B" TO TYPE "D"




@ CURB RETURN CONNECTION

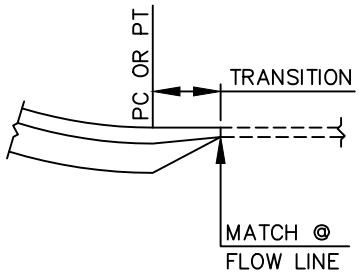



@ STRAIGHT CONNECTION

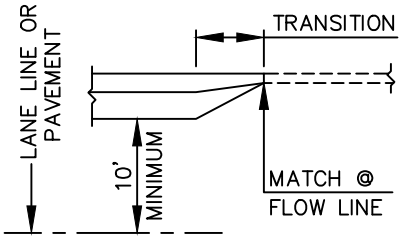



ISOMETRIC

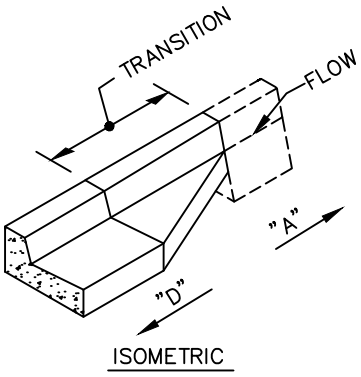
TYPE "B" TO TYPE "A"




@ CURB RETURN CONNECTION




@ STRAIGHT CONNECTION



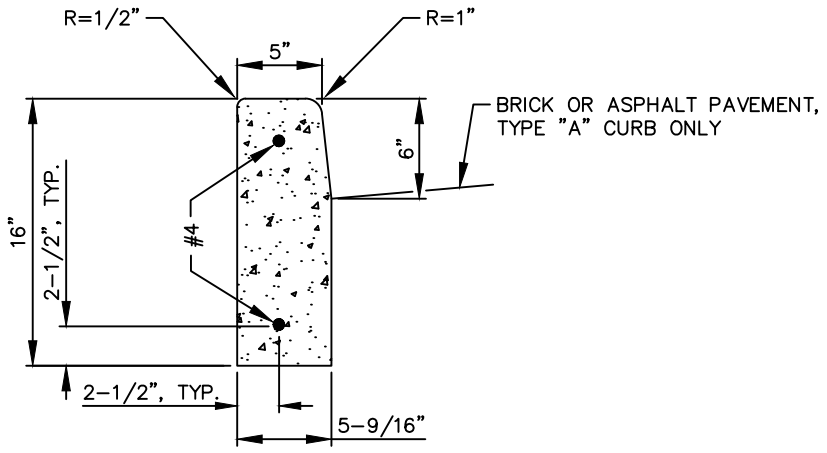

ISOMETRIC

TYPE "D" TO TYPE "A"

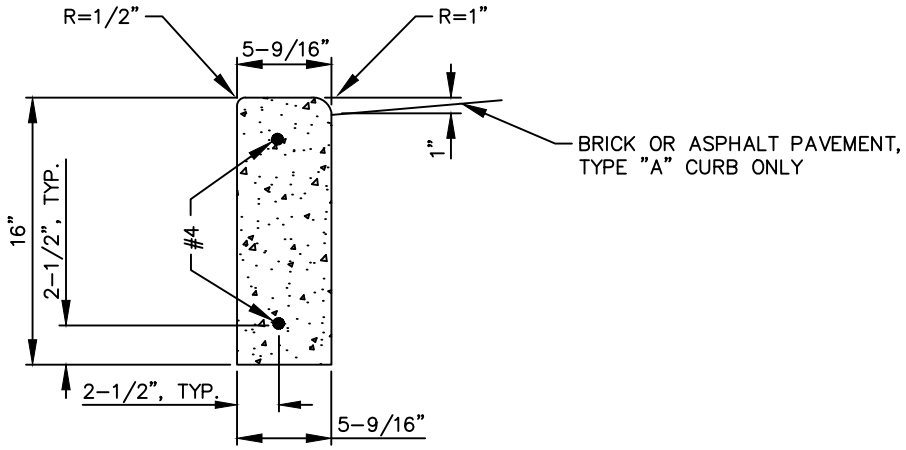
NOTE:

ALL TRANSITIONS SHALL BE 3'-0" IN LENGTH.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS, FLORIDA | CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | CURB TRANSITIONS DETAIL | DATE 12/15/15<br>INDEX R-06<br>SCALE N.T.S. SHEET 1 OF 1 |




TYPE "A" REPLACEMENT CURB




TYPE "A" REPLACEMENT
DROP CURB

NOTES:

1. WHEN REMOVING EXISTING CURB, THE CURB SHALL BE SAW CUT AT THE NEAREST CONSTRUCTION JOINT AND A FULL SECTION OF CURB REPLACED.
2. INSTALL EXPANSION JOINTS AT 50' INTERVALS, SAW CUT CONTRACTION JOINTS AT 10' INTERVALS.
3. WHEN TYPE "A" CURB IS DROPPED FOR DRIVEWAY OR SIDEWALK CURB RAMP, FULL SECTION CURB SHALL BE MAINTAINED.



| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | TYPE 'A' CURB REPLACEMENT DETAIL | DATE | 12/15/15 |
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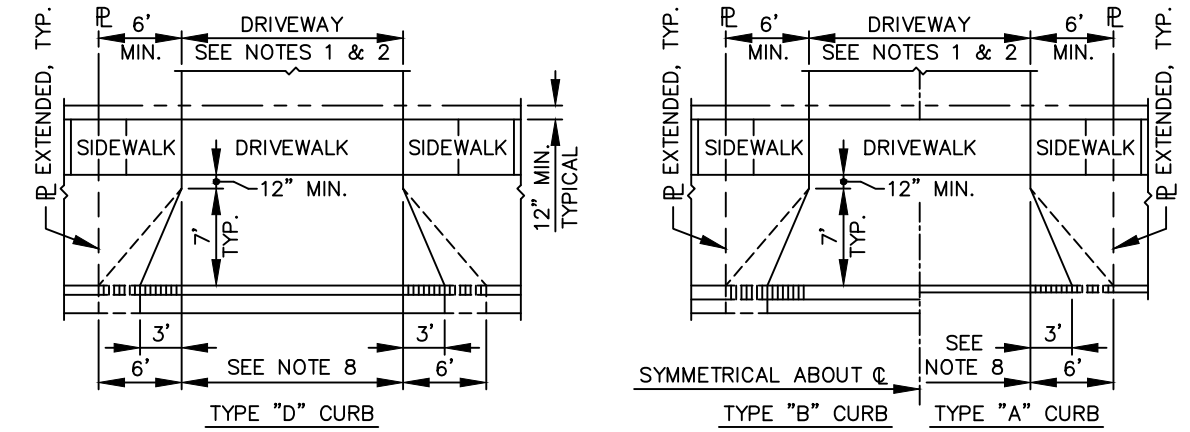
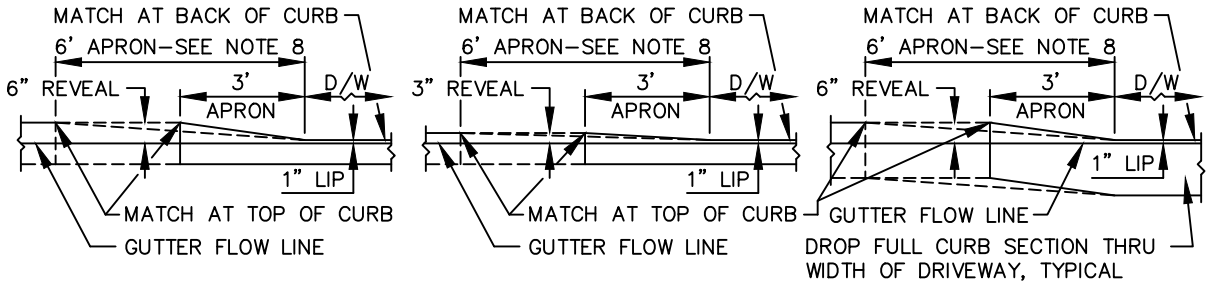
| | | SCALE | N.T.S. |
| | | SHEET | 1 OF 1 |

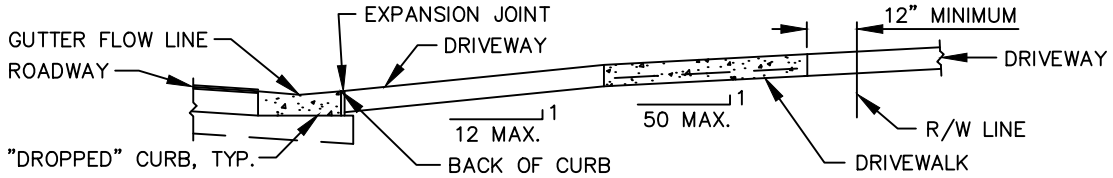



TYPICAL PLAN VIEWS




TYPICAL CURB ELEVATION VIEWS

LOOKING AT FACE OF CURB

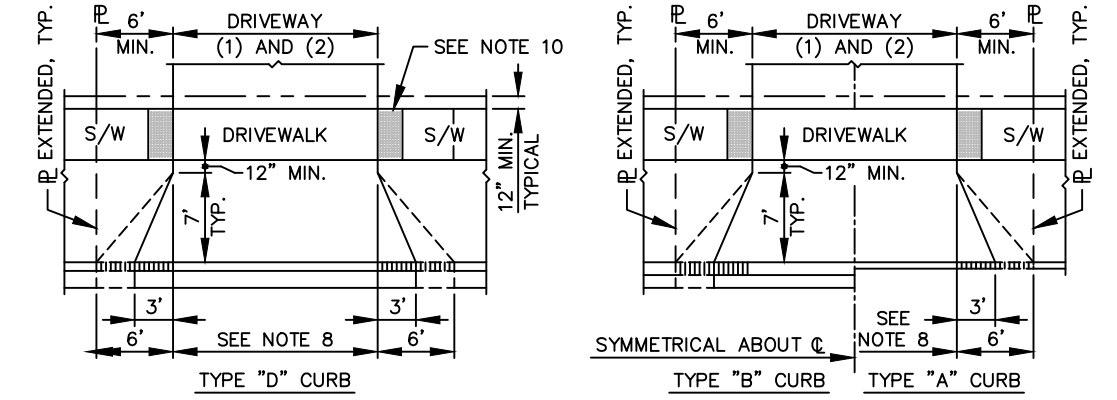



TYPICAL SECTION THRU DRIVEWAY AND DRIVEWALK

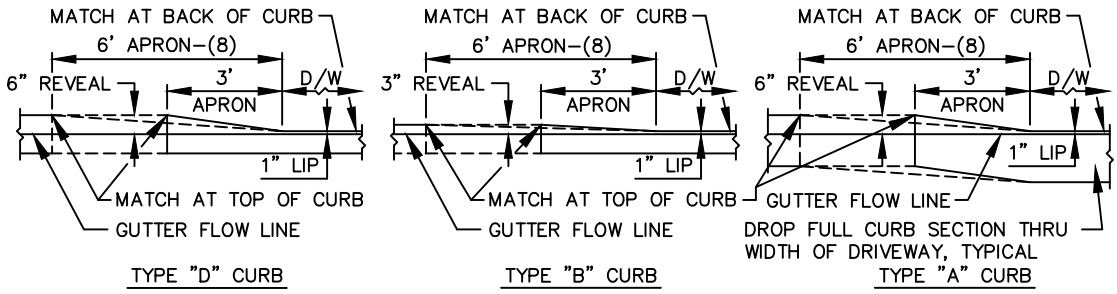
NOTES:

1. DRIVEWAY WIDTHS: 10' MINIMUM TO 20' MAXIMUM, STANDARD.
2. IF EXISTING DRIVEWAY IS LESS THAN 10' WIDE AT THE R/W LINE: REPLACEMENT WIDTH AT BACK OF SIDEWALK SET AT 10' WIDE, THEN TAPER 1:6 TO MATCH EXISTING WIDTH.
3. ALL RESIDENTIAL CONCRETE DRIVES SHALL BE PLACED ON A COMPACTED SUBGRADE AND SHALL BE A MINIMUM OF 5" THICK REINFORCED WITH A SINGLE LAYER OF WWF 6x6–W1.4xW1.4.
4. ALL CONCRETE SHALL BE 3000 psi @ 28 DAYS MINIMUM.
5. ALL ASPHALTIC CONCRETE DRIVEWAYS SHALL BE PLACED ON A MINIMUM 5" COMPACTED LIMEROCK OR SHELL BASE OVER A COMPACTED SUBGRADE, AS APPROVED BY THE ENGINEER. ASPHALTIC DRIVES SHALL BE A MINIMUM 1" THICK OF DOT TYPE S–III ASPHALTIC CONCRETE, OR OTHER ASPHALTS WITH APPROVAL BY THE ENGINEER.
6. ALL BRICK DRIVEWAYS SHALL BE PLACED ON A 1" COMPACTED SAND BED OVER A MINIMUM 5" COMPACTED SHELL SUBGRADE.
7. NO DRIVEWAYS SHALL BE ALLOWED IN CURB RADII.
8. WHEN THE SIDEWALK ABUTS THE CURB THE WING SHALL BE 6' WIDE AS SHOWN.
9. FOR DROPPED CURB REQUIREMENTS, SEE STANDARD DETAIL–TYPE "A", "B", "C", AND "D" CURB.

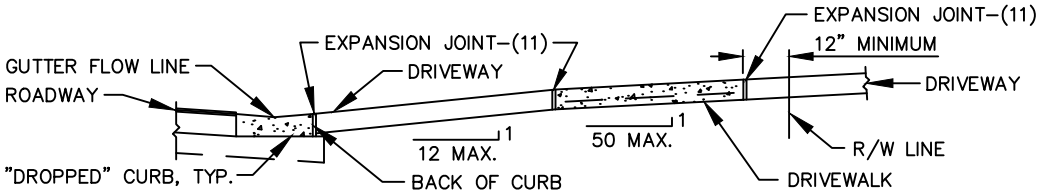
| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | RESIDENTIAL DRIVEWAY CONSTRUCTION DETAIL | DATE: 12/15/15<br>INDEX: R-08<br>SCALE: N.T.S.<br>SHEET: 1 OF 1 | |




TYPICAL PLAN VIEWS




TYPICAL CURB ELEVATION VIEWS
LOOKING AT FACE OF CURB

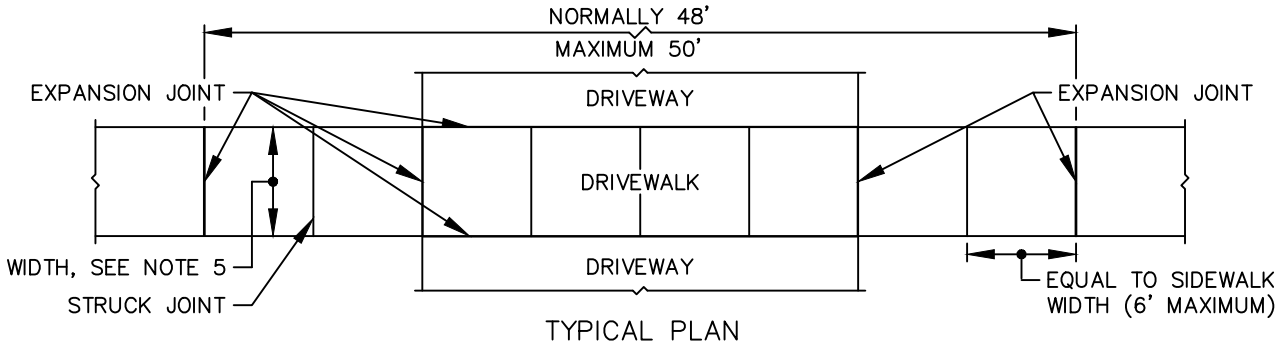



TYPICAL SECTION THRU DRIVEWAY AND DRIVEWALK

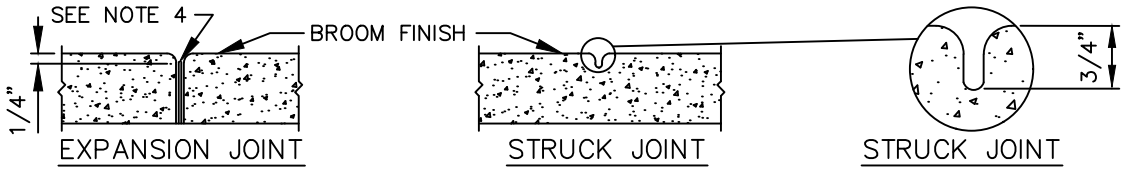
## NOTES:

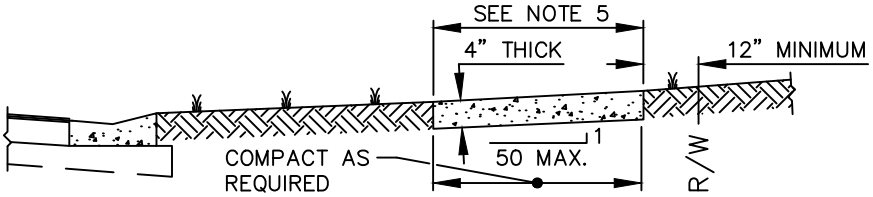
1. DRIVEWAY WIDTHS: 12' MIN. TO LIMITS AS APPROVED BY THE CITY.
2. IF EXISTING DRIVEWAY IS LESS THAN 12' WIDE AT THE R/W LINE: REPLACEMENT WIDTH AT BACK OF SIDEWALK SET AT 12' WIDE. CENTERED ON EXISTING DRIVEWAY LOCATION.
3. ALL COMMERCIAL CONCRETE DRIVES SHALL BE PLACED ON A COMPACTED SUBGRADE AND SHALL BE A MINIMUM OF 6" THICK AND REINFORCED WITH A DOUBLE LAYER OF WWF 6x6–W1.4xW1.4.
4. ALL CONCRETE SHALL BE 3000 psi @ 28 DAYS MINIMUM.
5. ALL ASPHALTIC CONCRETE DRIVEWAYS SHALL BE PLACED ON A MINIMUM 8" COMPACTED LIMEROCK OR SHELL BASE OVER A COMPACTED SUBGRADE, AS APPROVED BY THE ENGINEER. ASPHALTIC DRIVES SHALL BE A MIN. 1" THICK OF FDOT TYPE S–III ASPHALTIC CONCRETE, OR OTHER ASPHALTS WITH APPROVAL BY THE ENGINEER.
6. ALL BRICK DRIVEWAYS SHALL BE PLACED ON A 1" COMPACTED SAND BED OVER A MINIMUM 8" COMPACTED SHELL SUB–GRADE.
7. NO DRIVEWAYS SHALL BE ALLOWED IN CURB RADII.
8. WHEN THE SIDEWALK ABUTS THE CURB THE WING SHALL BE 6' WIDE AS SHOWN.
9. FOR DROPPED CURB REQUIREMENTS, SEE STANDARD DETAIL–TYPE "A", "B", "C", AND "D" CURB.
10. WHERE A SIDEWALK MEETS A DRIVEWAY, THE SIDEWALK PANELS ON BOTH SIDES OF DRIVEWAY SHALL HAVE A DETECTABLE WARNING SURFACE. WHERE A CURB IS PRESENT, PROPOSED, OR THE LANDING SLOPE IS GREATER THAN 2%, A CURB RAMP SHALL BE REQUIRED, SEE STANDARD DETAIL–TYPE I, II, AND III SIDEWALK CURB RAMP, AND CITY STANARD DETAIL–DETECTABLE WARNING SURFACES.
11. EXPANSION JOINT SHALL CONSIST OF CONTINUOS 1/2"x6" MINIMUM, BITUMINOUS EXPANSION STRIP.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS, FLORIDA | **CITY OF TARPON SPRINGS** PINELLAS COUNTY, FLORIDA | **COMMERCIAL DRIVEWAY CONSTRUCTION DETAIL** | DATE **12/15/15** INDEX **R-09** SCALE **N.T.S.** SHEET **1 OF 1** |

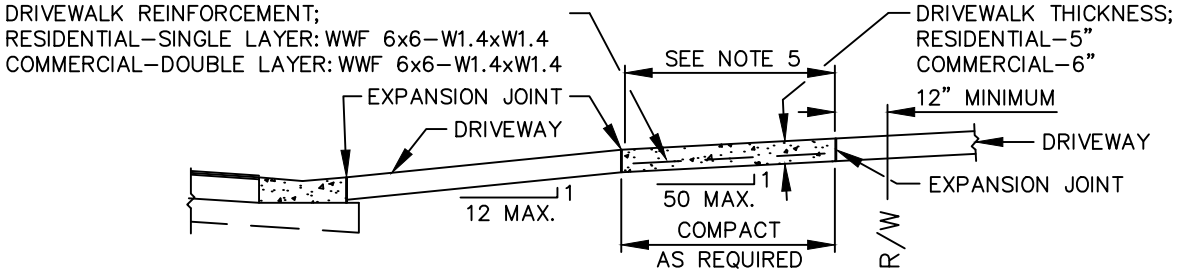



TYPICAL PLAN




TYPICAL SIDEWALK SECTION




TYPICAL DRIVEWALK SECTION

NOTES:

1. SIDEWALKS SHALL BE CONCRETE AND HAVE TOOLED EDGES.
2. RESTORATION AND UTILITY CUTS SHALL BE A MINIMUM FULL PANEL BETWEEN EXISTING JOINTS.
3. EXPANSION JOINTS SHALL BE INSTALLED WHERE SHOWN AND AT 50' MAXIMUM SPACING.
4. EXPANSION JOINTS SHALL CONSIST OF CONTINUOUS 1/2"x6" MINIMUM, BITUMINOUS EXPANSION STRIP.
5. SIDEWALKS SHALL CONFORM TO CITY CODE AS FOLLOWS: SIDEWALKS SHALL BE REQUIRED ON BOTH SIDES OF ALL MAJOR ARTERIAL AND COLLECTOR STREETS; ON THE NORTH AND WEST SIDES OF OF ALL LOCAL STREETS, COMMERCIAL SERVICE STREET; AND LOCAL STREETS LEADING TO SCHOOLS, PARKS, SHOPPING CENTERS, CHURCHES, AND OTHER PUBLIC FACILITIES. SIDEWALK WIDTHS SHALL BE NOT LESS THAN THE FOLLOWING:
   A–6' ALONG ARTERIAL AND COLLECTOR ROADWAYS.
   B–4' ALONG ROADWAYS NOT DESIGNATED ON TRAFFIC CORRIDORS MAP, IN RESIDENTIAL AND INDUSTRIAL ZONES.*
   C–5' ALONG ROADWAYS NOT DESIGNATED ON THE TRAFFIC CORRIDORS MAP, IN COMMERCIAL AND OFFICE ZONES.*
   D–4' FOR PEDESTRIAN CROSSWALKS.
   E–12' FOR PEDESTRIAN/BICYCLE JOINT USE.
   *–ALL SIDEWALKS ABUTTING CURBS SHALL BE 6' WIDE, MININUM.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | SIDEWALK AND DRIVEWALK CONSTRUCTION DETAIL | DATE | 12/15/15 |
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| | | SCALE | N.T.S. |
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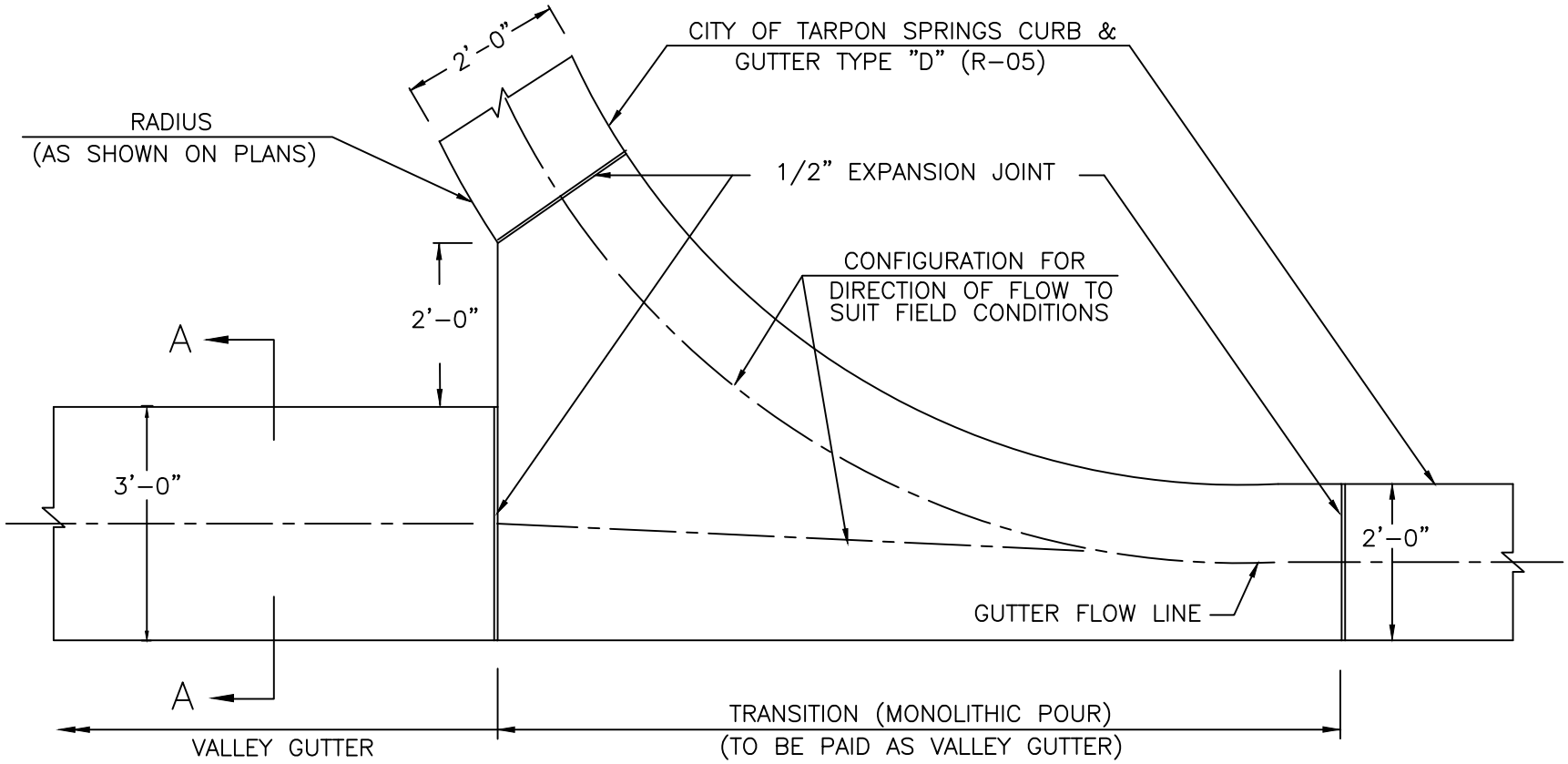
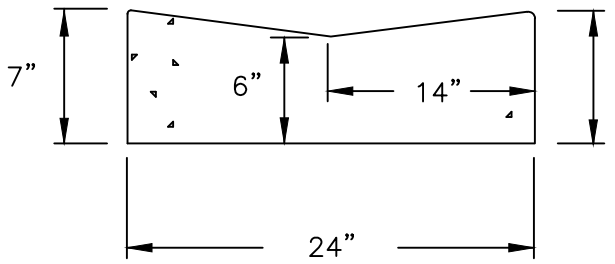
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

# VALLEY GUTTER & TRANSITION




PLAN VIEW

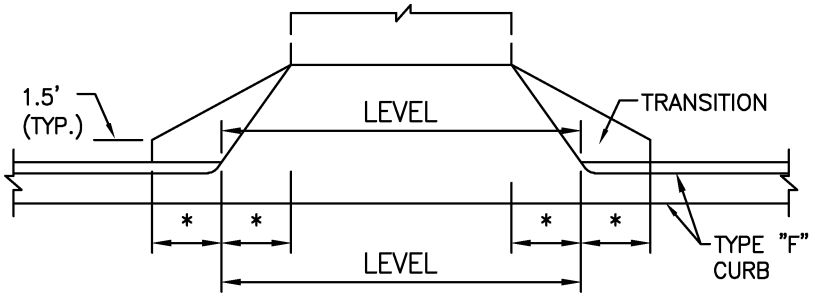



VALLEY GUTTER
SECTION A-A

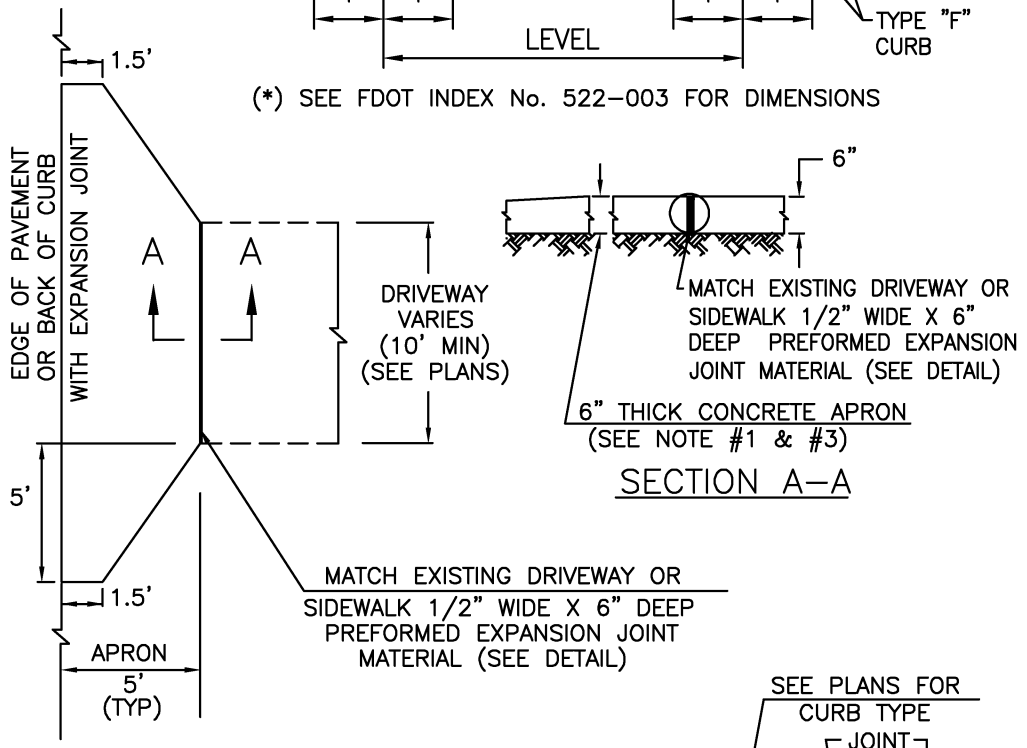
NOTE:

1. SURFACE OF PAVEMENT SHALL BE 1/4" ABOVE LIP OF GUTTER.
2. 1/2" EXPANSION JOINT (AS SHOWN) AND CENTERLINE OF SIDE STREET, WITH (SAWCUT) FALSE JOINTS EVERY 10', LONGITUDINALLY. (SEE SECTION 520 OF THE FDOT STANDARD SPECIFICATIONS).

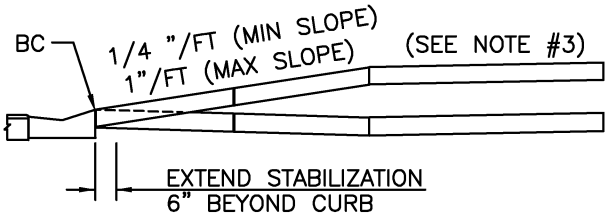
| DATE | INDEX | SCALE | SHEET |
|---|---|---|---|
| 12/15/15 | R-11 | N.T.S. | 1 OF 1 |



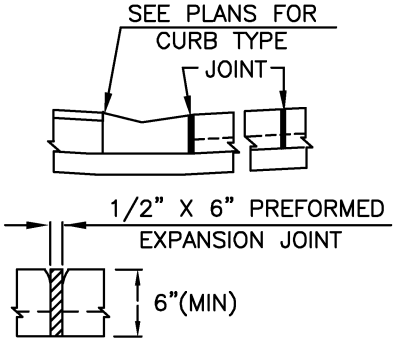

(*) SEE FDOT INDEX No. 522–003 FOR DIMENSIONS




SECTION A–A




PLAN AND PROFILE VIEW




JOINT DETAIL

NOTES

1. CONCRETE DRIVEWAY APRONS AND SIDEWALK CROSSINGS SHALL BE CONSTRUCTED OF CEMENT CONCRETE PAVEMENT (3000 PSI), 6" THICK REINFORCED WITH 6" X 6" #10/#10 WELDED WIRE FABRIC, (2" MINIMUM COVER FROM THE BOTTOM.)
2. FIBER REINFORCED CONCRETE 3000 PSI (MIN.) MAY BE USED IN PLACE OF THE REQUIREMENTS OF NO. 1 ABOVE.
3. CONSTRUCTION OF APRON/DRIVEWAY CROSS SLOPES AND SIDEWALK CROSS SLOPE THROUGH THE DRIVEWAY SHALL COMPLY WITH FDOT INDEX NO. 522–003 (SHEETS 3 & 4 OF 4) FOR ADA REQUIREMENTS.
4. REMOVE TREE ROOTS WITHIN 10" OF PROPOSED GRADE.
5. WHEN THERE IS EXISTING SIDEWALK CROSSING THE PROPOSED DRIVEWAY, IT MUST BE REMOVED TO THE NEAREST JOINT BEYOND THE DRIVEWAY.
6. SIDEWALKS ADJACENT TO LOT PROPERTY LINES SHALL NOT HAVE A CROSS SLOPE GREATER THAN 2% PER FDOT INDEX 522–001.
7. CORNER LOTS INVOLVING HANDICAP RAMPS SHALL BE IN ACCORDANCE WITH FDOT INDEX 522–002 FOR SIDEWALK AND RAMP CONSTRUCTION.
8. SPECIAL NOTE FOR ASSESSMENT PROJECTS ONLY: IF THE DISTANCE BETWEEN THE APRON AND THE EXISTING DRIVEWAY IS 2' –0" OR LESS, THE CONTRACTOR SHALL EXTEND APRON CONSTRUCTION TO CONNECT TO EXISTING DRIVEWAY (PAYABLE UNDER THIS CONTRACT). IF THIS DISTANCE IS GREATER THAN 2'–0", CONSTRUCTION OF THE DRIVEWAY SHALL BE AGREED UPON BY THE PROPERTY OWNER AND CONTRACTOR, AT THE PROPERTY OWNER'S EXPENSE.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | CONCRETE DRIVEWAY APRON | DATE | 10/05/20 |
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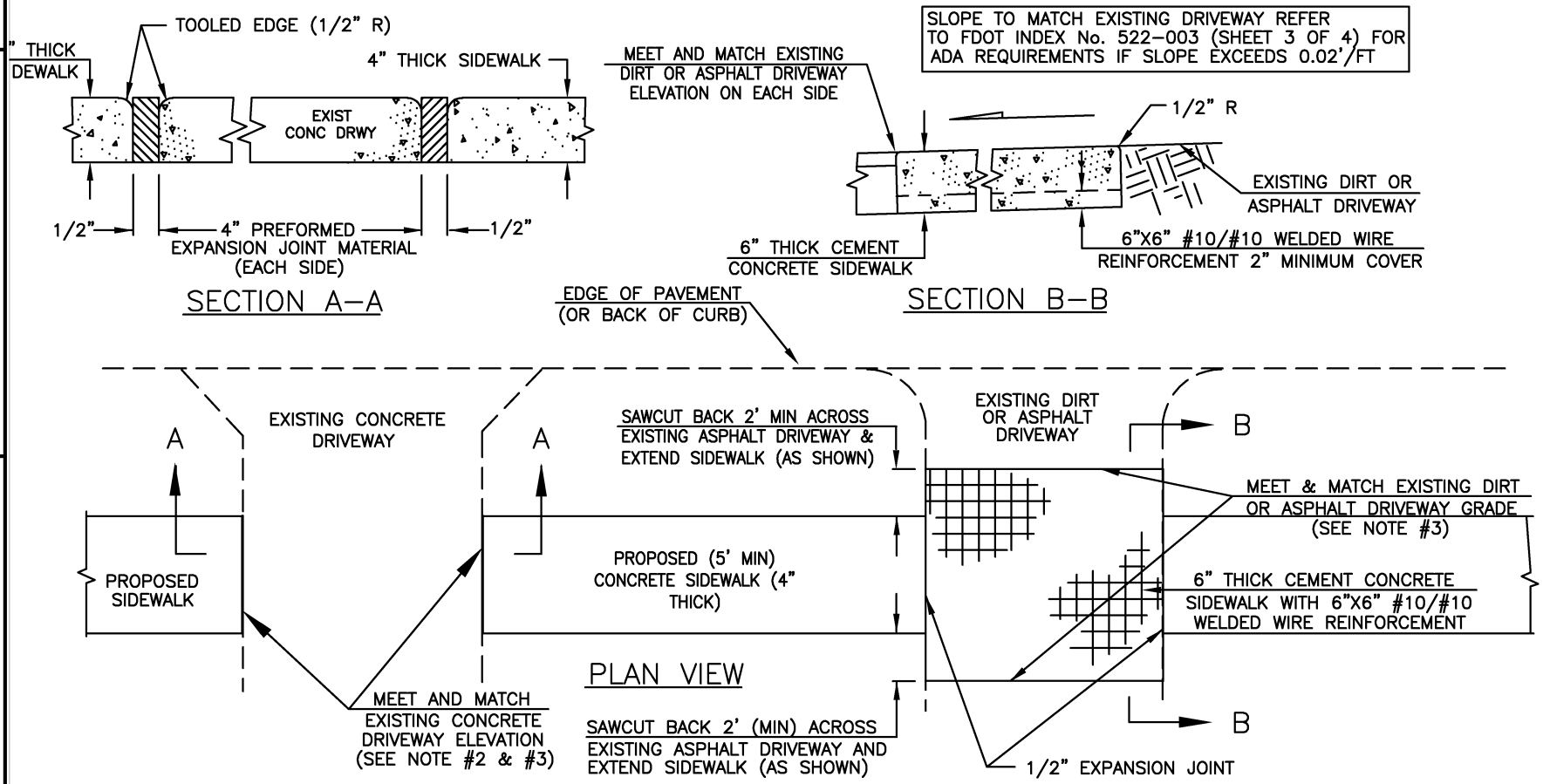
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |

CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

# SIDEWALK THROUGH EXISTING DRIVEWAYS




NOTES:

1. SEE PLANS FOR LIMITS OF SIDEWALKS AT ALL DRIVEWAYS.
2. PLACE 1/2" EXPANSION JOINT WHERE CONCRETE ABUTS CONCRETE CURBS, SIDEWALKS DRIVEWAYS.
3. SIDEWALK SHALL COMPLY WITH FDOT INDEX No. 522–003 AND CITY OF TARPON SPRINGS ORDINANCE 132.00.
4. REMOVE TREE ROOTS WITHIN 10" OF PROPOSED GRADE.
5. SIDEWALKS ALONG RURAL CROSS SECTION ROADWAYS WHERE VEHICLES CAN CROSS THE SIDEWALK SHALL BE 6" THICK.

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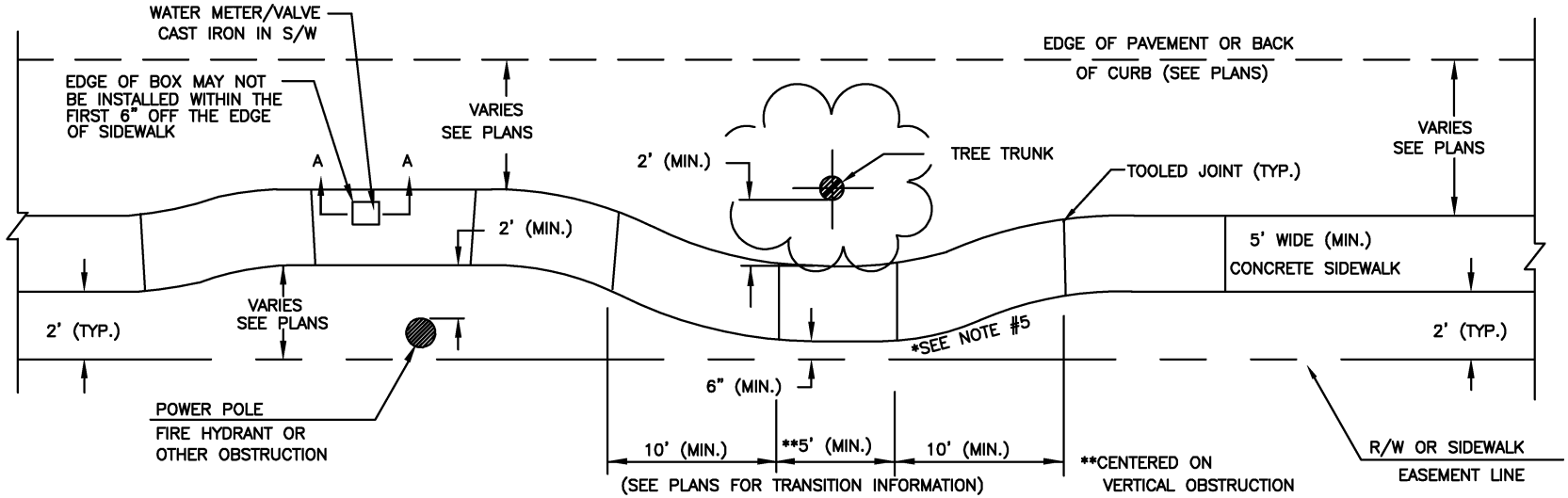
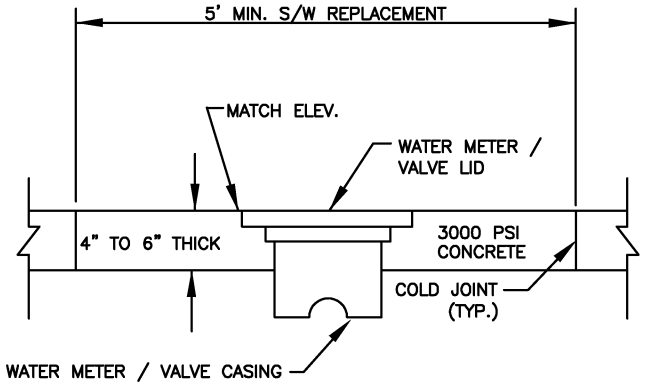
CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

# GUIDELINES FOR SIDEWALK ALIGNMENT




PLAN VIEW




SECTION A – A *

NTS

*MAY ONLY BE USED WHERE APPROVED BY THE ENGINEER.

NOTE:

1. ADJUST SIDEWALK TO AVOID OBSTRUCTIONS, AS SHOWN, OR AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH FDOT MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS – LATEST EDITION ("FLORIDA GREEN BOOK").
2. CONSTRUCTION OF SIDEWALKS SHALL MEET ADA REQUIREMENTS AS SPECIFIED IN FDOT INDEX NOS. 522–003 AND 522–002.
3. POWER POLES SHALL BE MOVED WHEN POSSIBLE.
4. TREES SHALL BE TRIMMED TO MAINTAIN VERTICAL CLEARANCE: 14 FT. WITHIN ALL RIGHT–OF–WAYS.

*5. MAXIMUM LATERAL DEFLECTION SHALL BE 5:1.

6. REMOVE TREE ROOTS WITHIN 10" OF PROPOSED GRADE.
7. CONTRACTION JOINTS SHALL MEET FDOT INDEX No. 522–001.
8. APPLY DETAIL TO ACCOMMODATE M.H. CONFLICTS. COVERS TO BE REPLACED AS REQUIRED TO MAINTAIN FLUSH SURFACE AND PATTERN.

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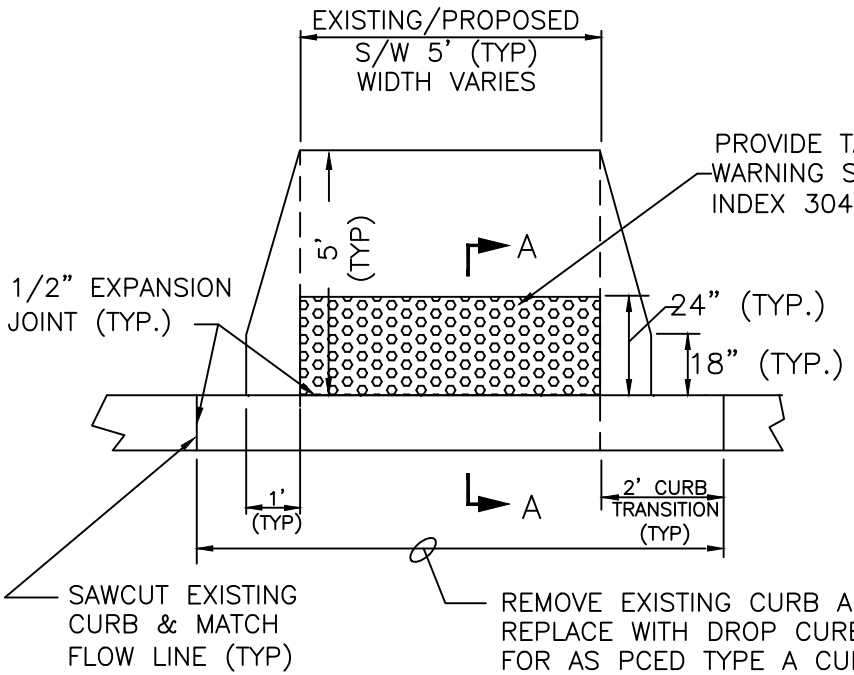
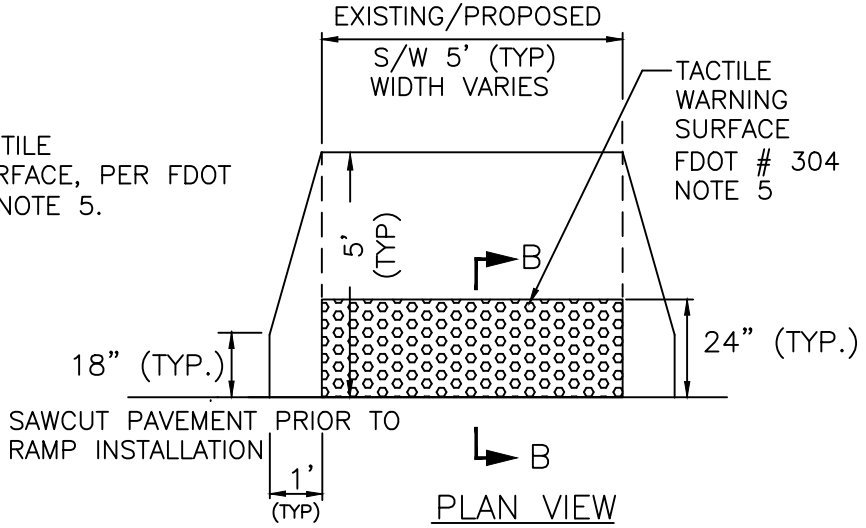
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

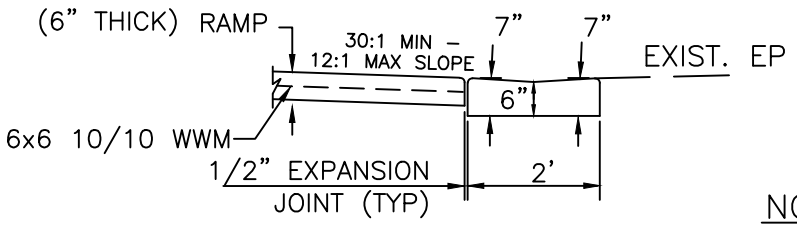
# TYPE "A" AND "B" HANDICAP RAMP DETAIL




PLAN VIEW



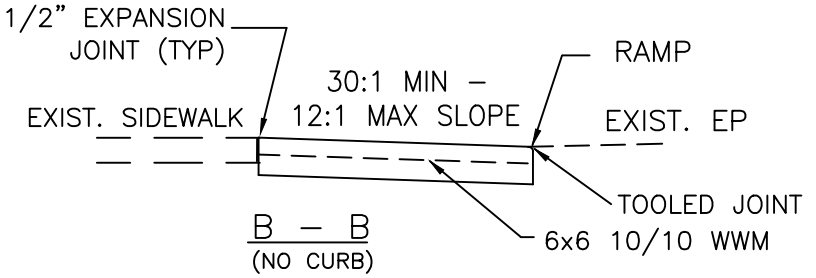

PLAN VIEW




A – A
DROP CURB

TYPE–A HANDICAP RAMP DETAIL

N.T.S.




B – B
(NO CURB)

TYPE–B HANDICAP RAMP DETAIL

N.T.S.

NOTE:

6" THICK W/6x6 10/10 WWM REINFORCED CLASS I (3000 PSI) CONCRETE RAMP.
(TYP. FOR TYPE A & B)

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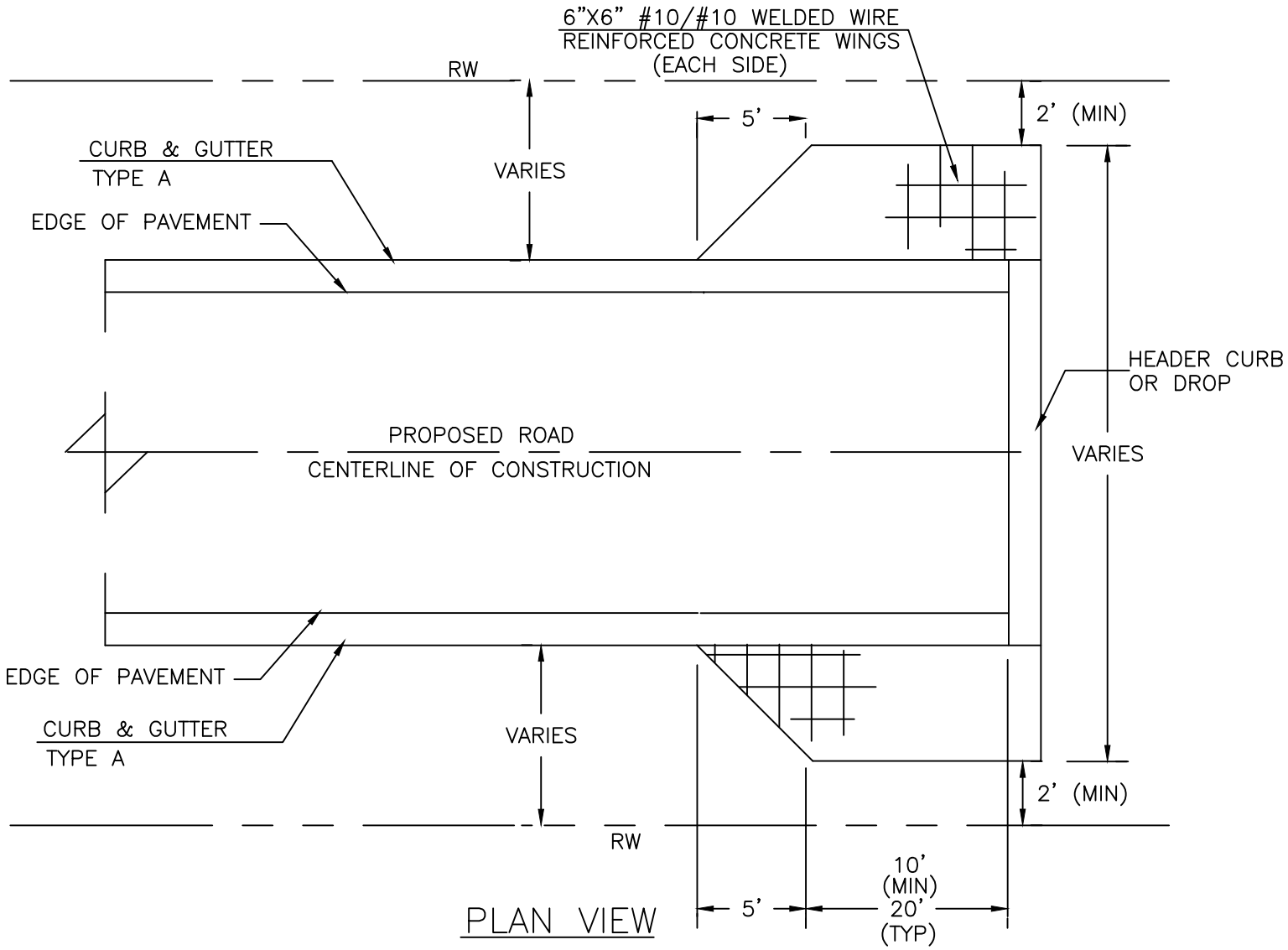
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

# DEAD END STREET TURN - AROUND




PLAN VIEW

## NOTE:

SEE PLANS FOR LOCATION OF BARRICADES AND REFLECTORS. (R-14)

REMOVE TREE ROOTS WITHIN 10" OF PROPOSED GRADE.

| DATE | INDEX | SCALE | SHEET |
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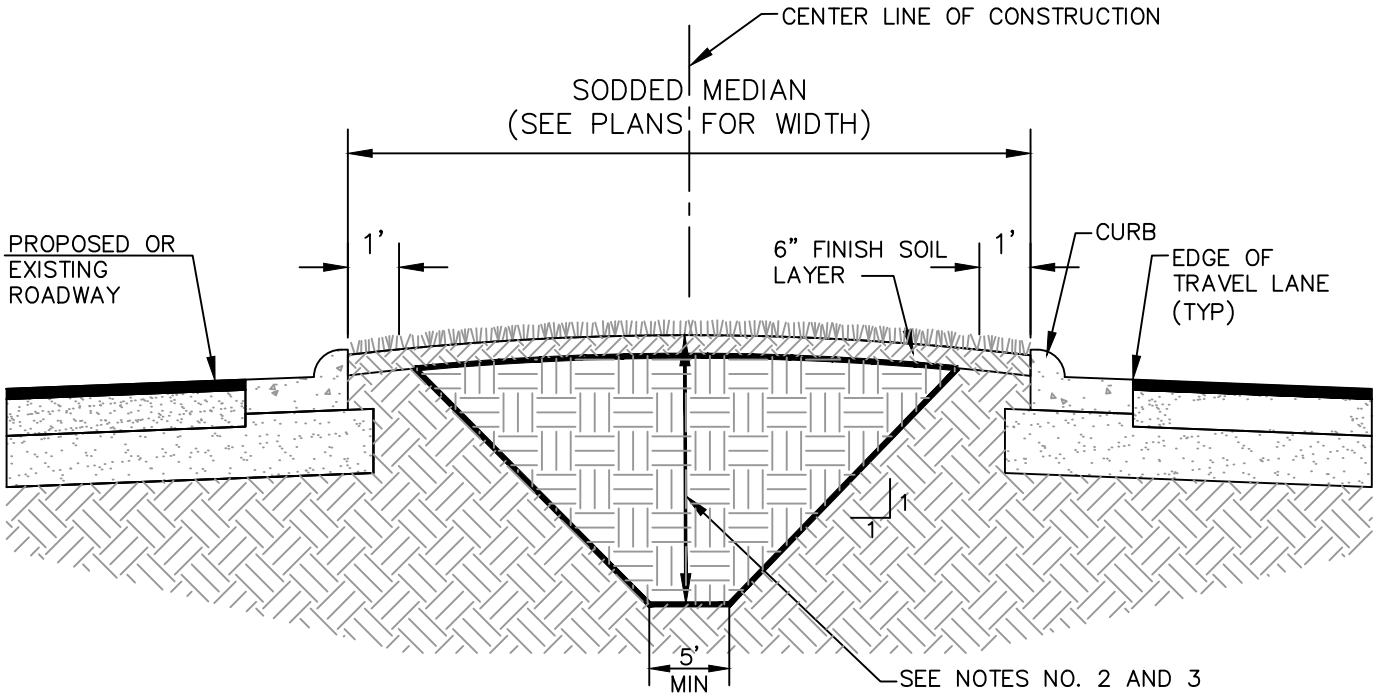



TYPICAL SECTION

NTS

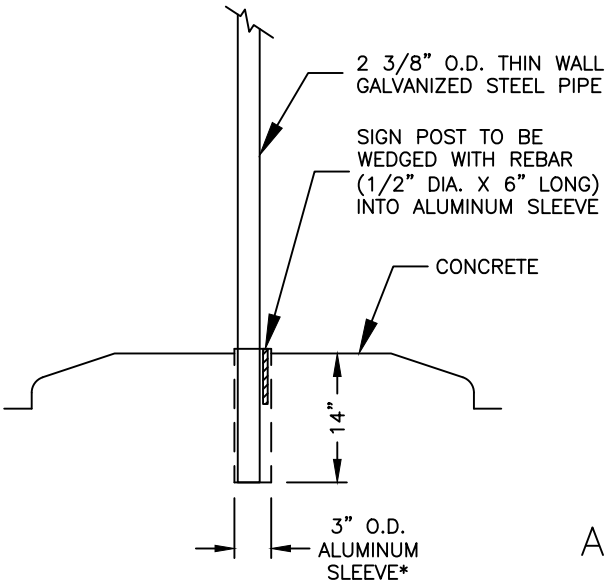
NOTES:

1. 6" FINISH SOIL LAYER SHALL COMPLY WITH SECTION 162 OF FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION.

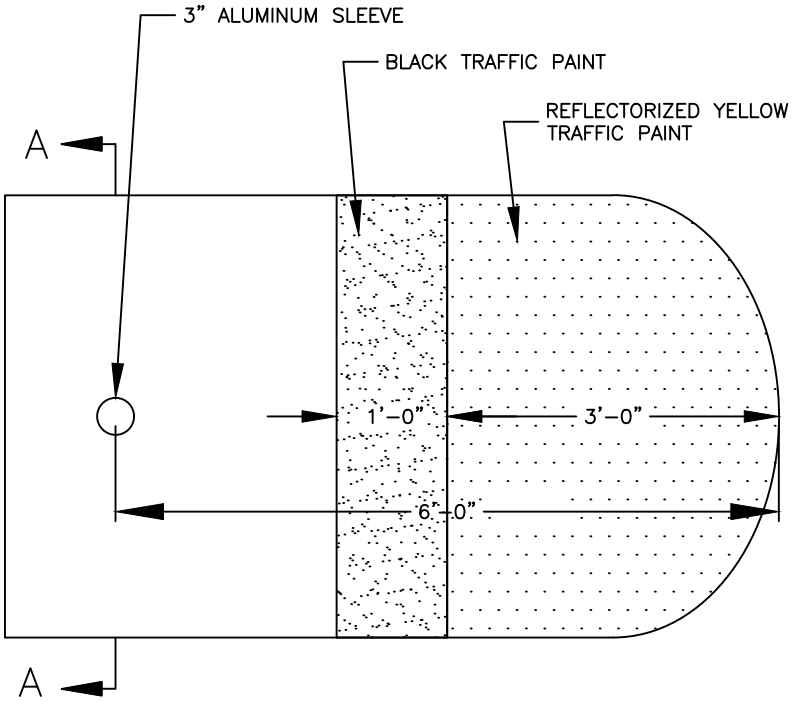
2. REMOVE UNSUITABLE MATERIAL (EXISTING PAVEMENTS, ROADWAY BASE, LIMEROCK, MILLINGS AND OTHER DEBRIS), TO A MINIMUM DEPTH OF 4'–0" BELOW FINISHED GRADE IN MEDIAN AREAS. MEDIAN FILL SOIL, FOR AREAS THAT ARE EXCAVATED, SHALL BE NATIVE SITE SOILS APPROVED BY THE ENGINEER. IN THE ABSENCE OF SUFFICIENT NATIVE SITE SOILS, REPLACEMENT FILL SHALL BE SUITABLE FOR PLANT GROWTH AND APPROVED BY THE ENGINEER. EXCAVATION AND REPLACEMENT SOIL SHALL BE INCLUDED IN PAY ITEM FOR "EXCAVATION OF UNSUITABLE MATERIAL"

3. DO NOT DISTURB EXISTING MEDIAN SOILS EXCEPT TO REMOVE EXISTING UNSUITABLE MATERIALS LISTED IN NOTE NO. 2, OR TO CONSTRUCT PROPOSED IMPROVEMENTS.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | MEDIAN SOIL;<br>COMPOSITION AND DEPTH | DATE | 12/15/15 |
| | | INDEX | R-17 |
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |




SECTION A–A
N.T.S.



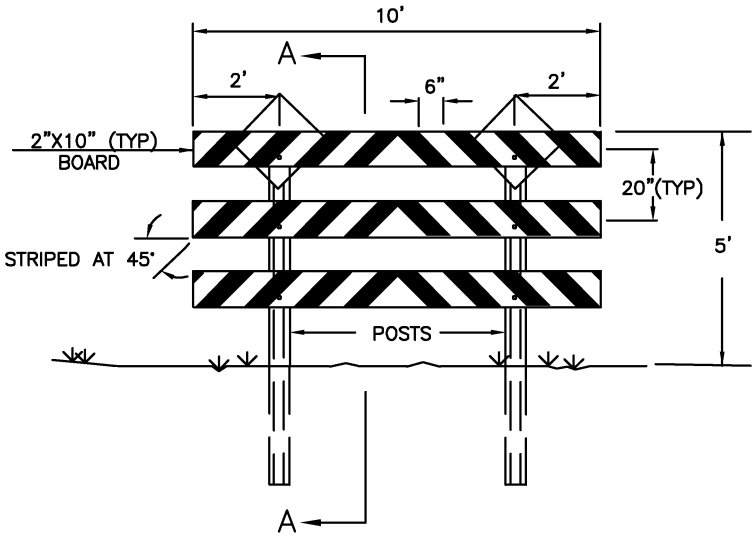

TOP VIEW MEDIAN NOSE
N.T.S.

NOTE:
THE USE OF ALUMINUM SLEEVES SHALL BE APPLICABLE FOR ALL CASES WHERE A SIGN POST IS PLACED IN CONCRETE (I.E., SIDEWALKS, ETC.). WHEN PLACED IN A CONCRETE MEDIAN OR TRAFFIC SEPARATOR, IT SHALL BE CENTERED 6' FROM NOSE END, UNLESS OTHERWISE SPECIFIED IN THE PLANS.

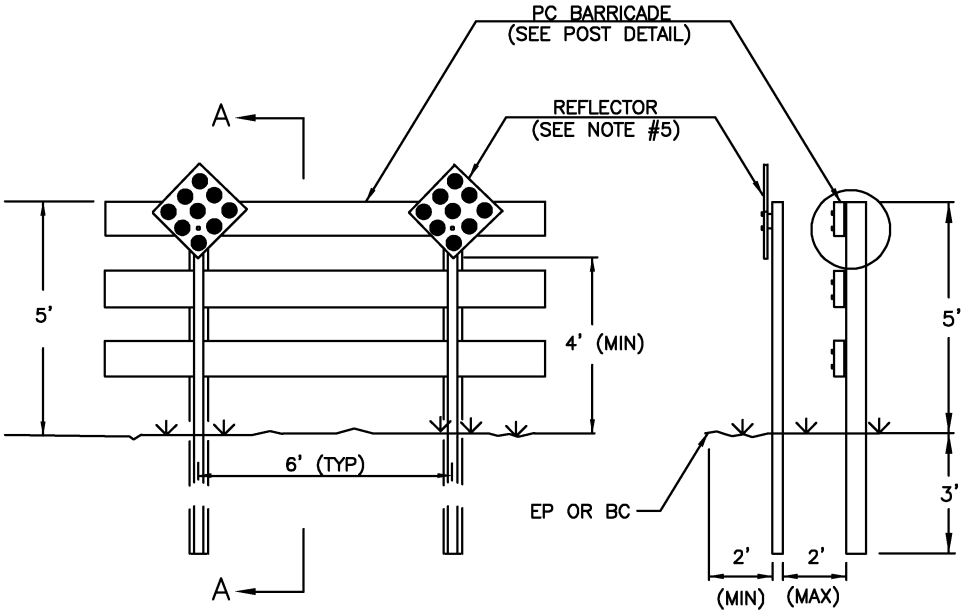
# CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

## TRAFFIC SIGN INSTALLATION INTO CONCRETE MEDIAN

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | R-18 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




BARRICADE TYPE 3

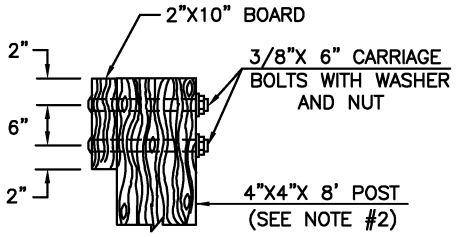



REFLECTOR CASE 2

SECTION A–A

## NOTES

1. STRIPES SHALL BE WHITE AND ORANGE FOR TEMPORARY BARRICADE DURING CONSTRUCTION PHASE OF WHITE AND RED FOR PERMANENT BARRICADE WITH A MATERIAL THAT HAS A HIGH INTENSITY AND SMOOTH SEALED OUTER SURFACE.
2. USE ONLY PRESSURE TREATED POSTS (ASTM D–1760 PRESSURE TREATMENT OF TIMBER PRODUCTS).
3. USE ONLY GALVANIZED COATED HARDWARE.
4. THE SPACING OF REFLECTORS SHALL ALIGN WITH BARRICADE POSTS.
5. REFLECTOR PANEL AND POST ASSEMBLY SHALL COMPLY WITH FDOT INDEX No.700–109 FOR CASE 2.




WOOD POST

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## BARRICADE WITH REFLECTORS

| | |
|---|---|
| DATE | 10/05/20 |
| INDEX | R-19 |
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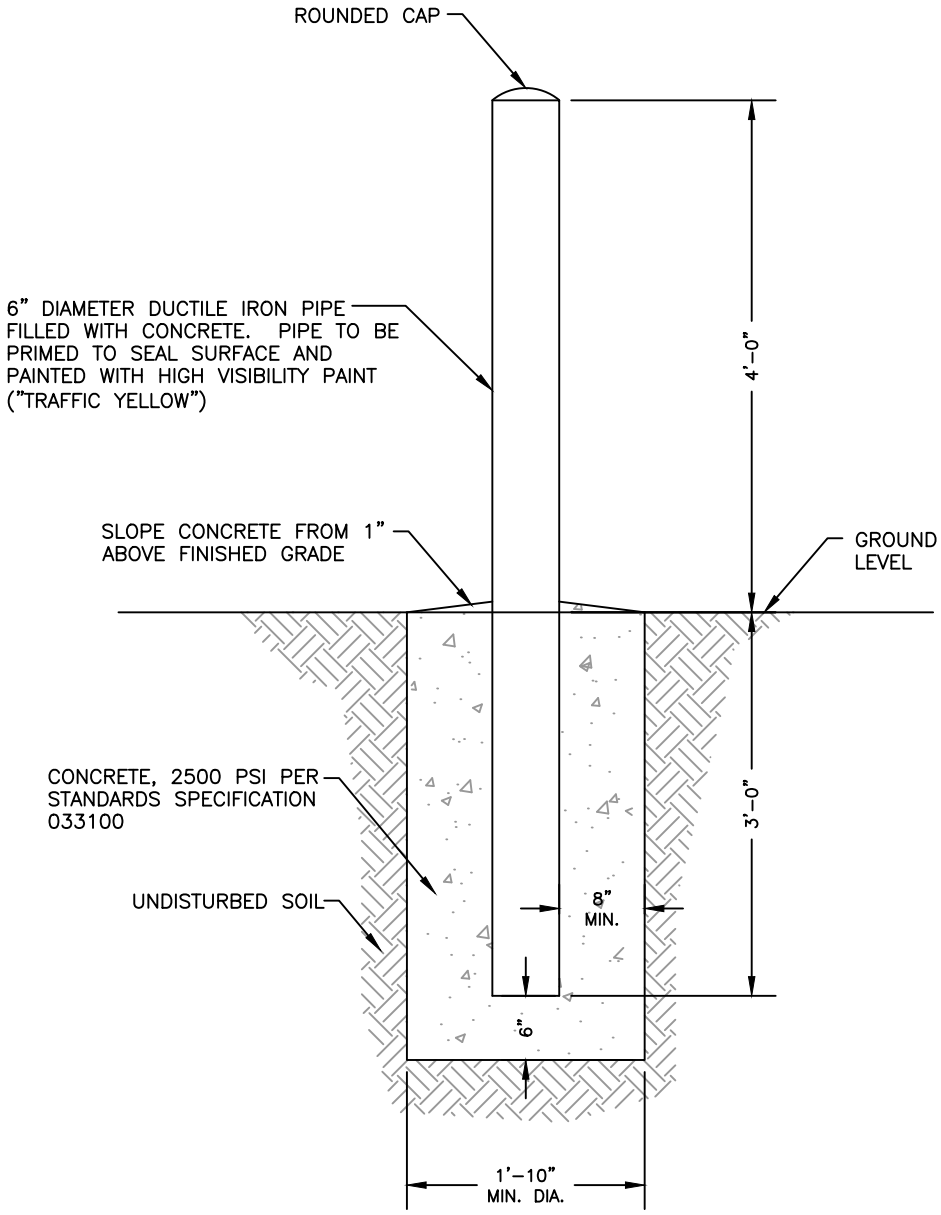



## VEHICULAR GUARD POST DETAIL

NTS



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## BOLLARD DETAIL

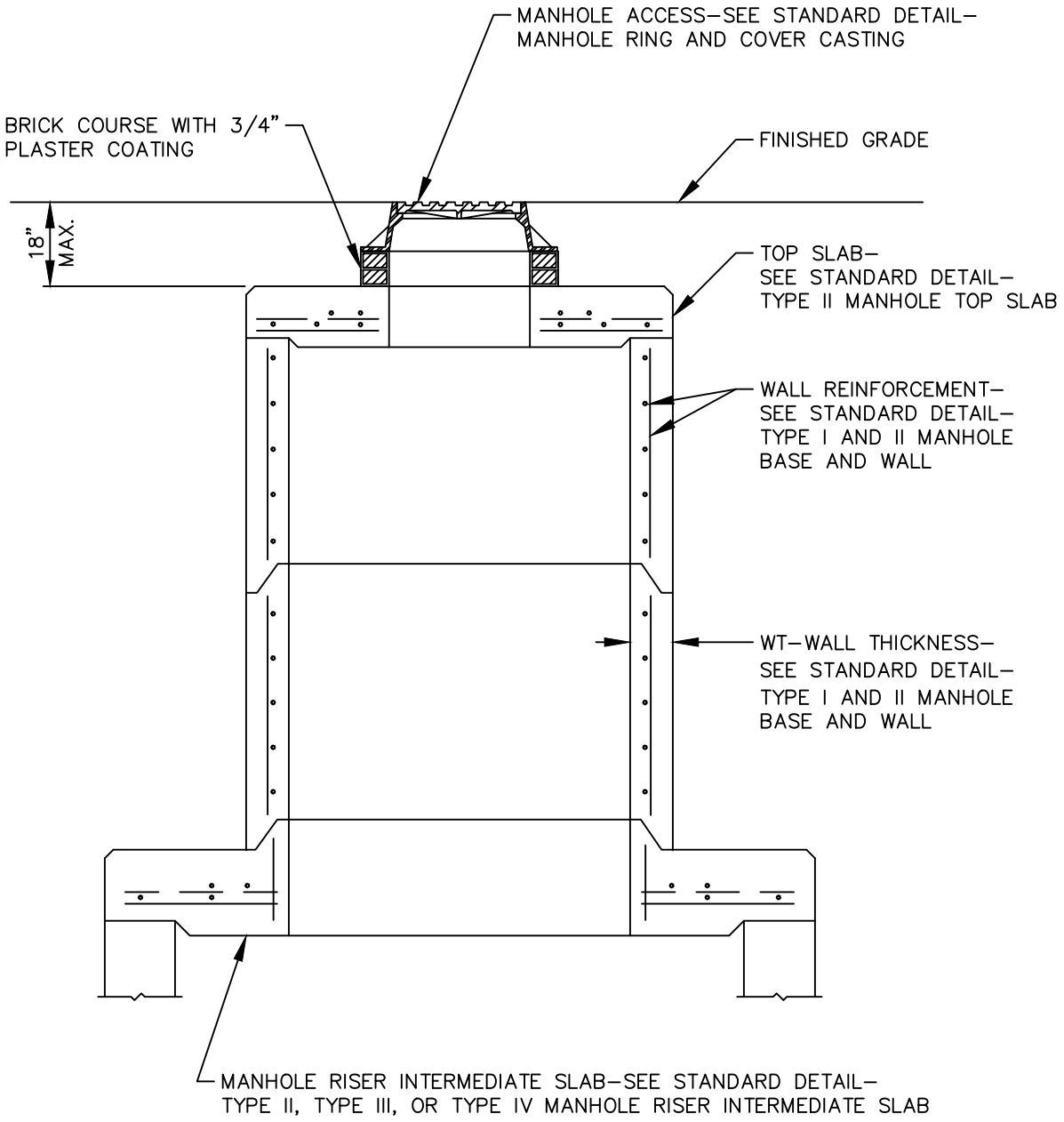
| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | R-20 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

# NOTES FOR STORM STRUCTURES

1. ALL PIPE STUBS FROM STRUCTURES FOR FUTURE CONNECTIONS, SHALL BE INSTALLED WITH REMOVABLE WATERTIGHT PLUGS, PLACED FROM WITHIN THE STRUCTURE.
2. FOR APPLICABLE RING AND COVER, SEE STANDARD DETAIL–MANHOLE RING AND COVER CASTING.
3. STORM STRUCTURES SHALL NOT HAVE OUTSIDE DROP CONNECTIONS.
4. PROVIDE MINIMUM 8" SOLID WALL BETWEEN ALL OPENINGS FOR PIPES. SEAL BETWEEN PIPE AND STRUCTURE WITH NON SHRINK GROUT.
5. ALL BRICK SHALL BE CONCRETE OR CLAY BRICK AND SHALL HAVE A MINIMUM 3/4" CEMENT PLASTER COATING ON ALL SURFACES.
6. BENCH SHALL SLOPE @ 1:12 MINIMUM.
7. PRECAST AND CAST–IN–PLACE MANHOLES, CATCH BASINS, AND GRATE INLETS ARE DESIGNED FOR A MAXIMUM DEPTH OF 12 FEET, STRUCTURES IN EXCESS OF 12 FEET, AS MEASURED FROM THE FINISHED GRADE TO THE INSIDE OF THE BASE SLAB, SHALL REQUIRE VERIFICATION OF THE STRUCTURAL DESIGN AND SPECIFIC MODIFICATIONS TO THE REINFORCING REQUIREMENTS FOR THE DEPTH REQUIRED.
8. PRIOR TO PRECASTING STRUCTURES THE PRECASTER SHALL SUBMIT SITE SPECIFIC INDIVIDUAL SHOP DRAWINGS FOR APPROVAL. SHOP DRAWINGS SUBMITTED FOR NON–STANDARD STRUCTURES OR STRUCTURES THAT DEVIATE FROM THE STANDARD DETAILS MUST BE DESIGNED AND CERTIFIED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER.
9. PRECAST MANHOLES SHALL CONSIST OF A LIMITED NUMBER OF SECTIONS, AS APPROVED BY THE ENGINEER.
10. ALL PRECAST STRUCTURES SHALL HAVE AN INTEGRAL FLOOR AND BASE RISER SECTION.
11. SEE STANDARD DETAIL–PRECAST STRUCTURE JOINT ASSEMBLY AND STRUCTURE SEALING.
12. ALL EXPOSED EDGES TO HAVE 3/4" CHAMFER.
13. ALL REINFORCING STEEL SHALL HAVE A MINIMUM 2" CONCRETE COVER, UNLESS NOTED ELSEWHERE.
14. ADDITIONAL REINFORCEMENT IS REQUIRED IN ALL TYPE CATCH BASIN WALLS, GRATE INLETS, AND TYPE II, III, IV, AND TYPE V MANHOLE WALLS WITH OPENINGS FOR PIPE OR CULVERT. THE VERTICAL AND HORIZONTAL WALL REINFORCEMENT DISPLACED DUE TO OPENINGS SHALL BE REPLACED WITH ADDITIONAL REINFORCEMENT BARS ABOVE, BELOW, AND ON BOTH SIDES OF OPENING, EQUAL IN AREA TO THOSE DISPLACED. REPLACEMENT REINFORCEMENT SHALL BE PLACED WITH 3" CLEARANCE TO THE EDGES OF OPENINGS.



| | | | |
|---|---|---|---|
| | **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **STORM STRUCTURE NOTES** | DATE **12/15/15**<br>INDEX **D-01**<br>SCALE **N.T.S.** SHEET **1 OF 1** |




NOTE:

1. GENERAL NOTES, SEE STANDARD DETAIL–STORM STRUCTURE NOTES.



| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | PRECAST MANHOLE RISER DETAIL | DATE | 12/15/15 |
| | | INDEX | D-02 |
| | | SCALE | N.T.S. |
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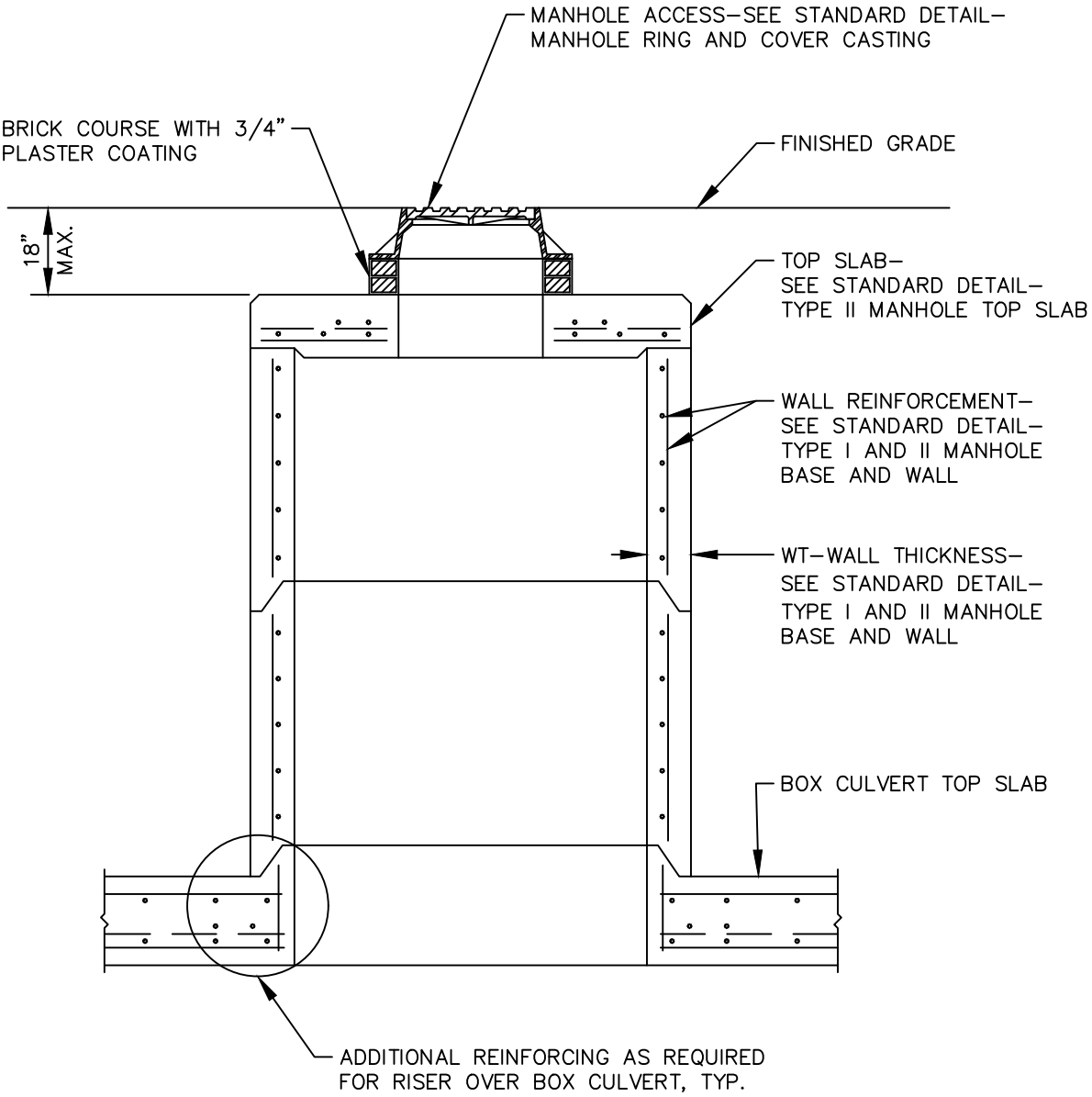


NOTE:

1. GENERAL NOTES, SEE STANDARD DETAIL–STORM STRUCTURE NOTES.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PRECAST MANHOLE RISER FOR BOX CULVERT DETAIL

| | |
|---|---|
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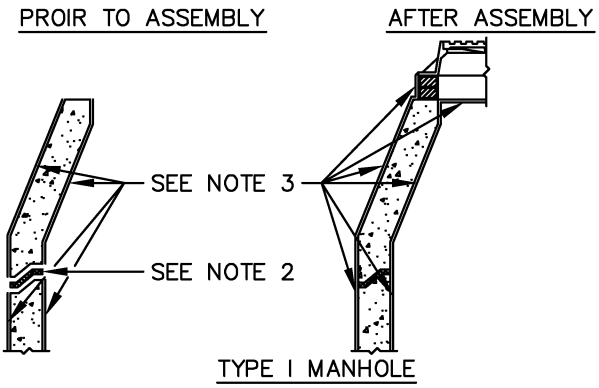
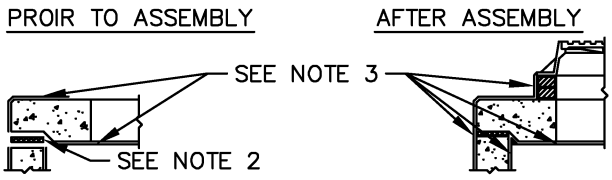
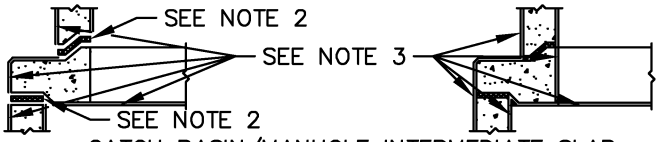
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |



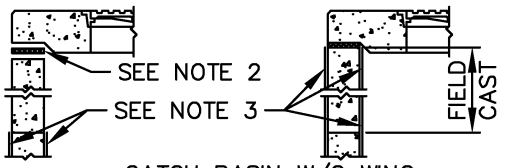

TYPE I MANHOLE



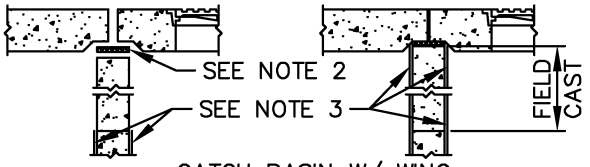

TYPE II, III, IV, IV TOP SLAB



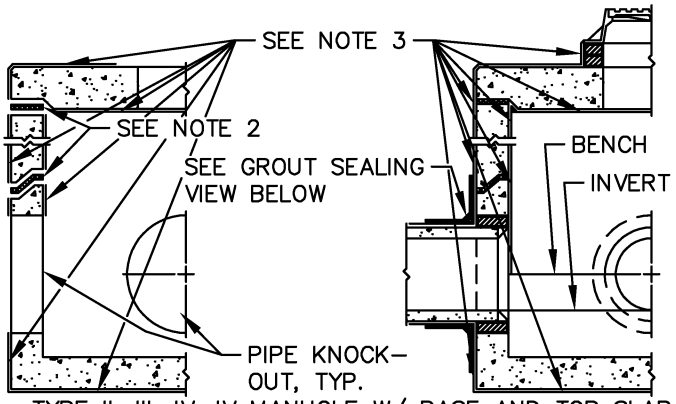

CATCH BASIN/MANHOLE INTERMEDIATE SLAB




CATCH BASIN W/O WING

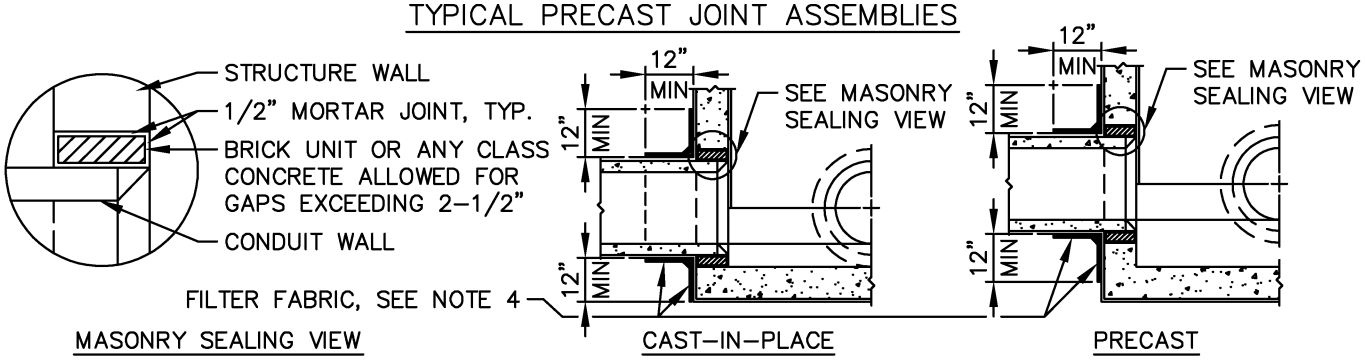



CATCH BASIN W/ WING




TYPE II, III, IV, IV MANHOLE W/ BASE AND TOP SLAB

## TYPICAL PRECAST JOINT ASSEMBLIES




MASONRY SEALING VIEW | CAST-IN-PLACE | PRECAST

## TYPICAL GROUTED PIPE SEALING AT STRUCTURE

NOTES:

1. JOINTS SHALL CONFORM TO ASTM C443.
2. A LAYER OF PREFORMED JOINT SEALING COMPOUND SUCH AS "RAM-NEK" SHALL BE INSTALLED AT ALL PRECAST STRUCTURE JOINTS AND STRUCTURE TOP AND CATCH BASIN LID PEDESTALS PRIOR TO ASSEMBLY.
3. ONE COAT OF PROTECTIVE SEALER SHALL BE APPLIED TO THE EXTERIOR AND INTERIOR OF ALL PRECAST, CAST-IN-PLACE, AND BRICK STRUCTURES. THE EXTERIOR COATING SHALL COVER FROM THE BOTTOM OF THE BASE UPTO AND INCLUDING BRICK GRADE RINGS FOR THE COVER CASTING, THE INTERIOR COATING SHALL COVER FROM THE BENCH UPTO AND INCLUDING THE BOTTOM OF THE TOP SLAB, EXCLUDING CATCH BASIN COVER AND WING COVER(S). THE BOTTOM SLAB MAY ALSO BE EXCLUDED AT THE CONTRACTORS OPTION.
   THE CONTRACTOR SHALL TOUCH UP THOSE PLACES DISTURBED DURING ASSEMBLY AND THOSE CAST-IN-PLACE PORTIONS OF CATCH BASINS PRIOR TO ACCEPTANCE AND BACK FILLING.
   THE SEALER SHALL BE COAL TAR EPOXY SUCH AS "CARBOLINE" 300-M OR APPROVED EQUAL, WITH A DRY FILM THICKNESS OF 9 mils.
4. FILTER FABRIC SHALL BE MIRAFI 140-N, OR APPROVED EQUAL. FILTER FABRIC IS TO BE PLACED IN A BEDDING OF BITUMINOUS MASTIC AND APPLIED AS PER FDOT DESIGN STANDARDS INDEX NO. 425-001.
5. FOR ADDITIONAL NOTES, SEE STANDARD DETAIL-STORM STRUCTURE NOTES.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PRECAST STRUCTURE JOINT ASSEMBLY AND STRUCTURE SEALING DETAIL

| | |
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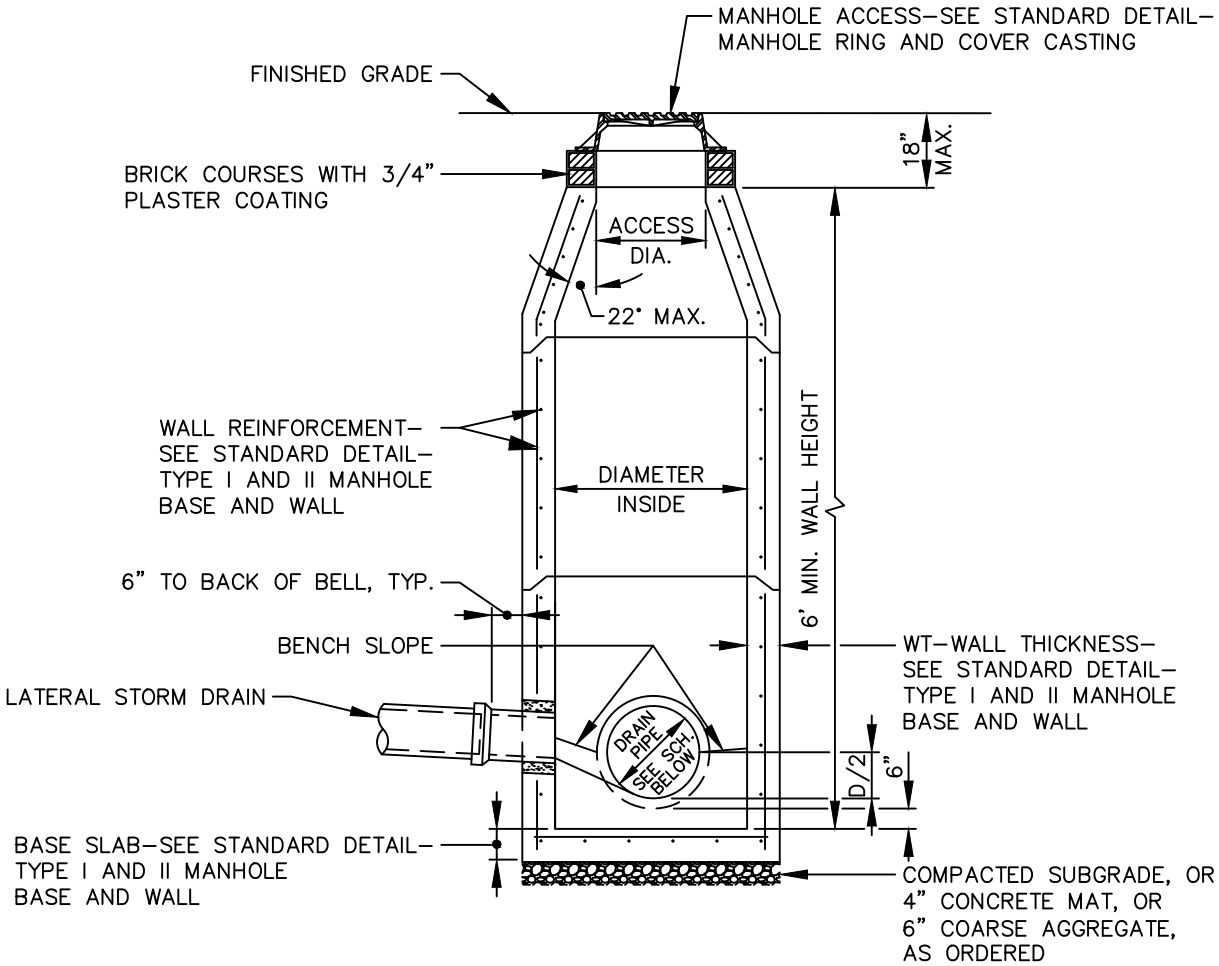
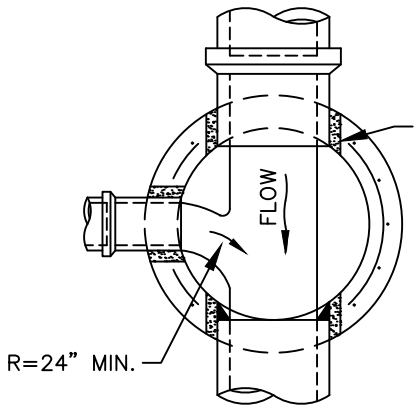



TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | |
|---|---|---|
| RECOMMENDED MIMINUM DIAMETER MANHOLE DIMENSION | | |
| RCP | ERCP | DIA. |
| 24" | N/A | 4' |
| 30" | 19"x30" | 5' |

NOTE:

FOR GENERAL NOTES, SEE STANDARD DETAIL–STORM STRUCTURE NOTES.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | PRECAST STORM MANHOLE TYPE I DETAIL | DATE | 12/15/15 |
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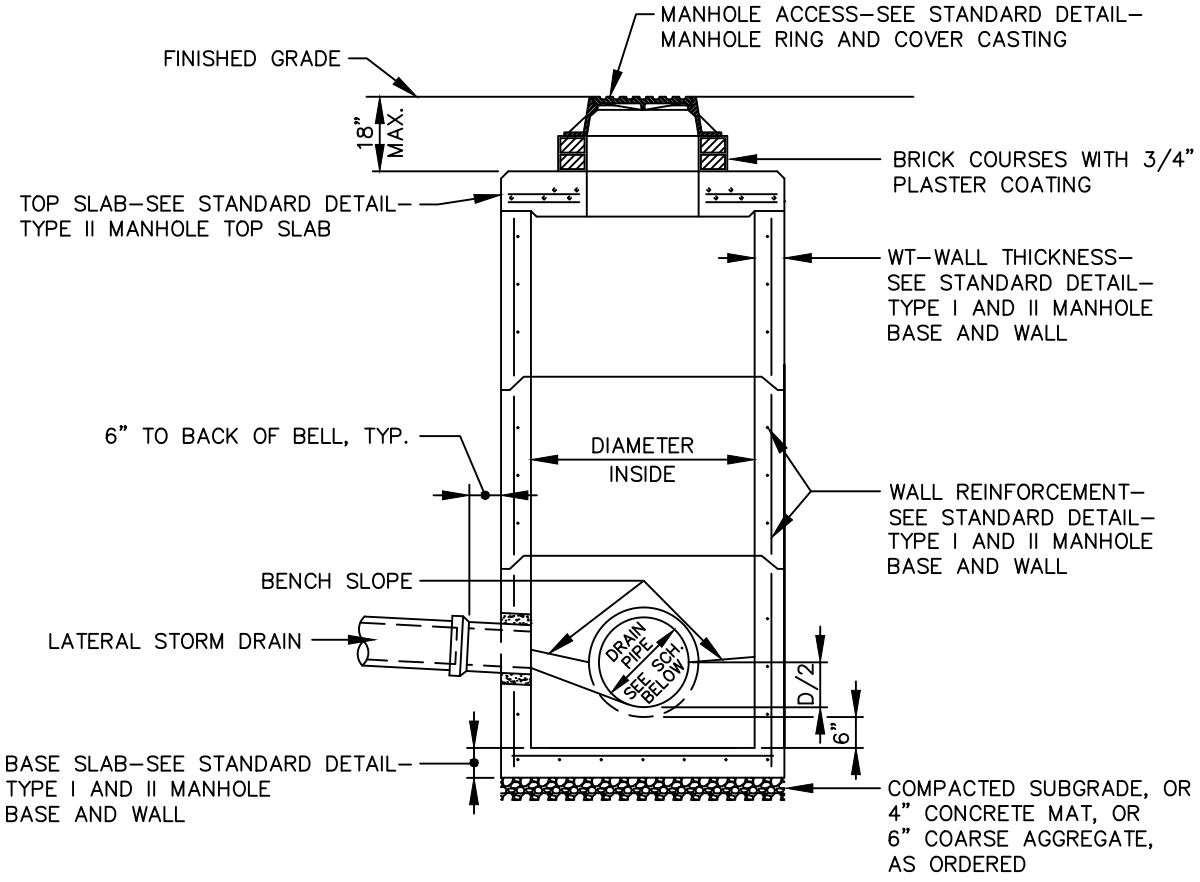
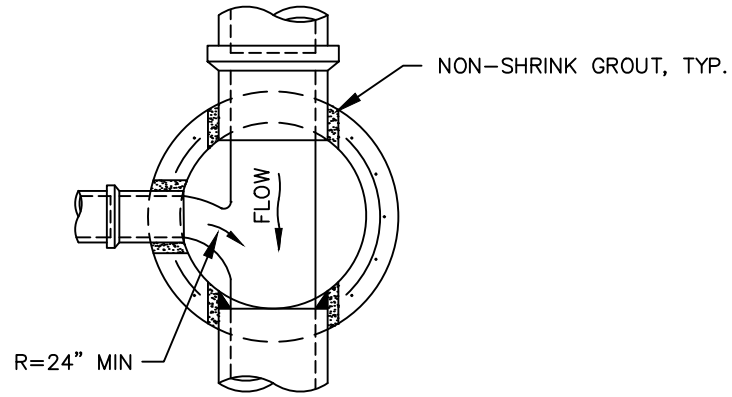



TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | |
|---|---|---|
| RECOMMENDED MIMINUM DIAMETER MANHOLE DIMENSION | | |
| RCP | ERCP | DIA. |
| 24" | N/A | 4' |
| 30" | 19"x30" | 5' |
| 42" | 24"x38" | 6' |
| 48" | 32"x49" | 7' |
| 66" | 38"x60" | 8' |

NOTE:

FOR GENERAL NOTES, SEE STANDARD DETAIL–STORM STRUCTURE NOTES.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PRECAST STORM MANHOLE TYPE II DETAIL

| | |
|---|---|
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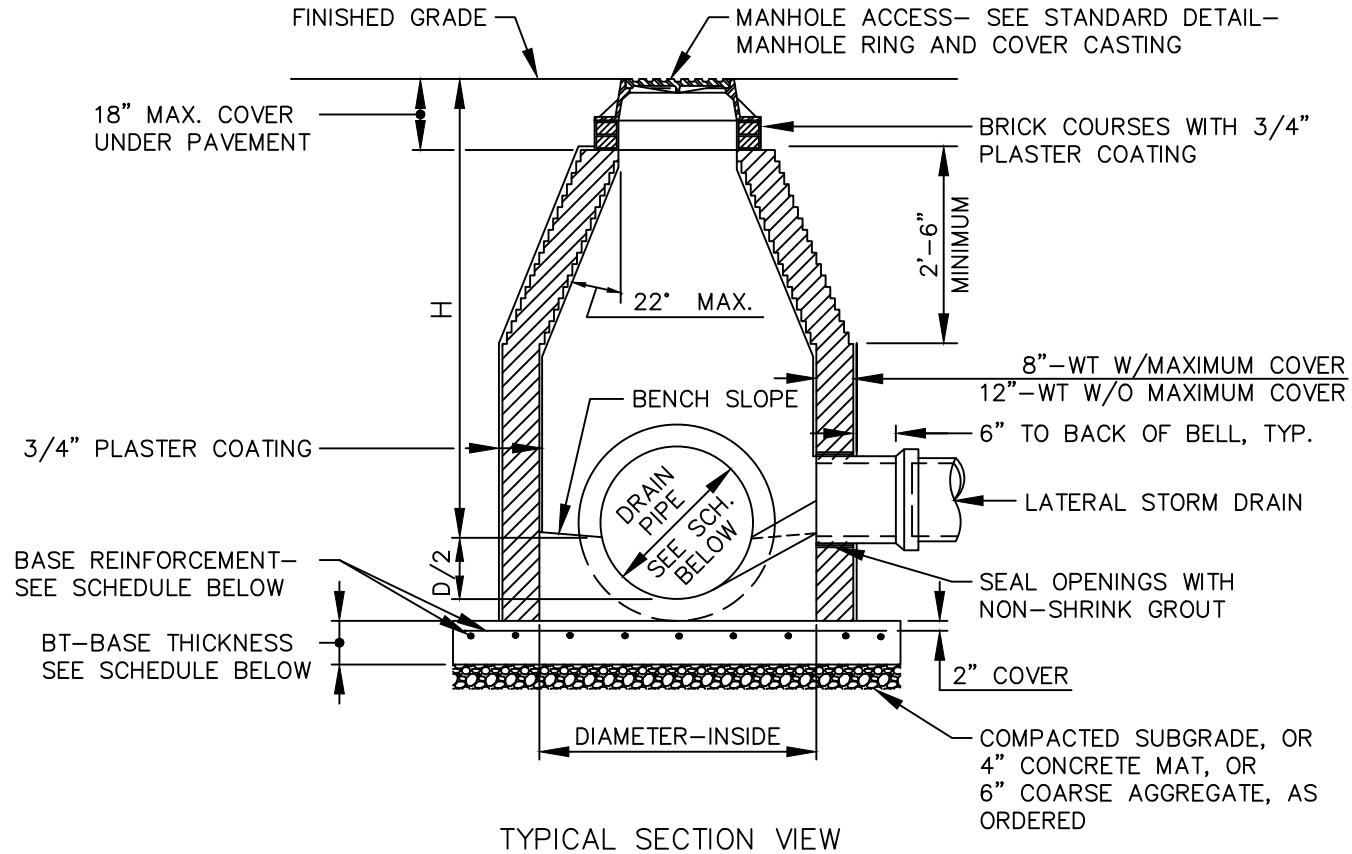
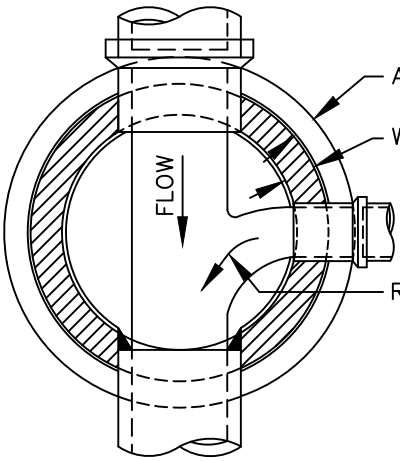



TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | | | | | | |
|---|---|---|---|---|---|---|---|
| RECOMMENDED MAXIMUM PIPE | DIA. INSIDE | BASE DIA. 8" WALL | BASE DIA. 12" WALL | H MAX. | BT MIN. | ANTI–FLOAT. LIP | BASE REINFORCEMENT |
| 24" | 4' | 6'–4" | 7'–0" | 6' | 8" | 6" | #6 @ 12" EW |
| 30" | 5' | 7'–4" | 8'–0" | 8' | 8" | 6" | #6 @ 9" EW |
| 42" | 6' | 8'–4" | 9'–0" | 8' | 8" | 6" | #6 @ 9" EW |
| 42" | 6' | 8'–4" | 9'–0" | 15' | 12" | 6" | #6 @ 6" EW |

NOTES:

1. FOR GENERAL NOTES SEE, STANDARD DETAIL–STORM STRUCTURE NOTES.
2. NO INLET PIPE SHALL BE INSTALLED IN THE CONE SECTION.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**STORM BRICK MANHOLE TYPE I DETAIL**

| | |
|---|---|
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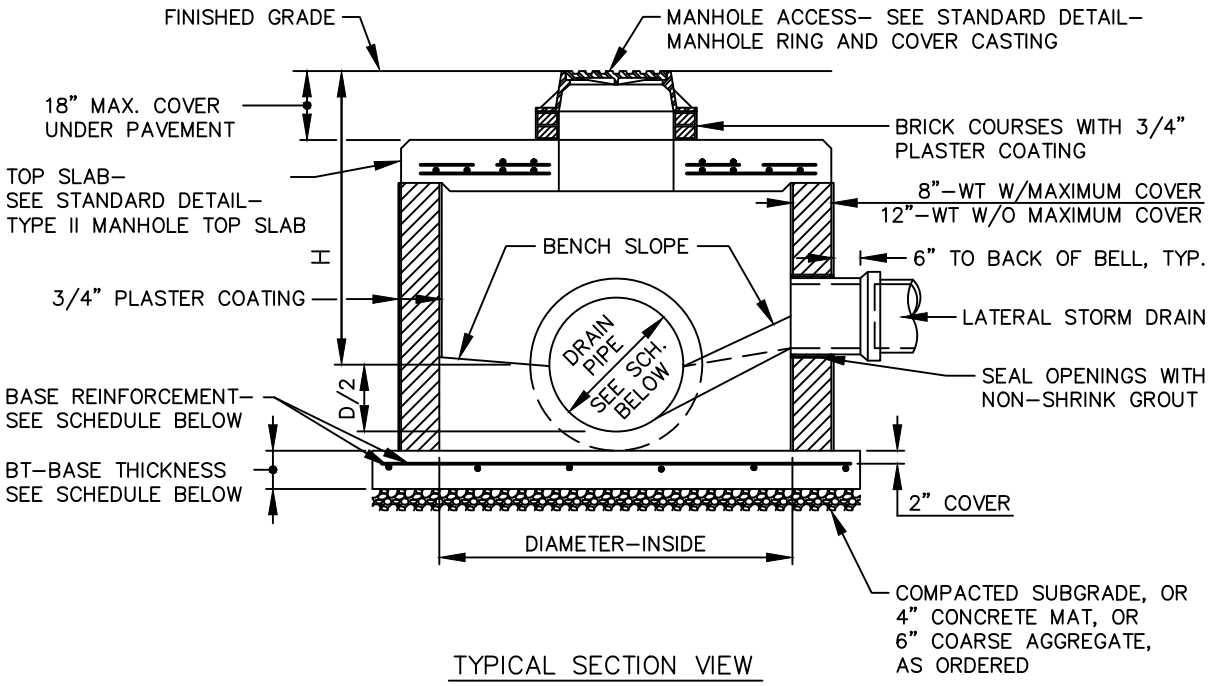
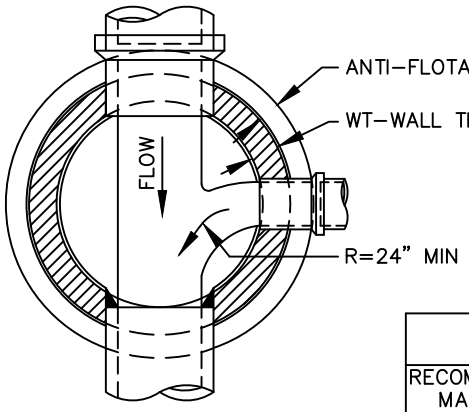



TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | | | | | | |
|---|---|---|---|---|---|---|---|
| RECOMMENDED MAXIMUM PIPE | DIA. INSIDE | BASE DIA. 8" WALL | BASE DIA. 12" WALL | H MAX. | BT MIN. | ANTI–FLOAT. LIP | BASE REINFORCEMENT |
| 24" | 4' | 6'–4" | 7'–0" | 6' | 8" | 6" | #6 @ 12" EW |
| 30" | 5' | 7'–4" | 8'–0" | 8' | 8" | 6" | #6 @ 9" EW |
| 42" | 6' | 8'–4" | 9'–0" | 8' | 8" | 6" | #6 @ 9" EW |
| 42" | 6' | 8'–4" | 9'–0" | 15' | 12" | 6" | #6 @ 6" EW |

NOTE:

FOR GENERAL NOTES, SEE STANDARD DETAIL–STORM STRUCTURE NOTES.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## STORM BRICK MANHOLE TYPE II DETAIL

| | |
|---|---|
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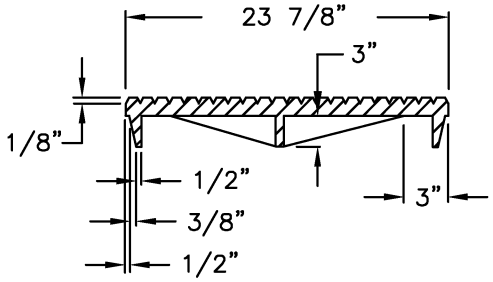
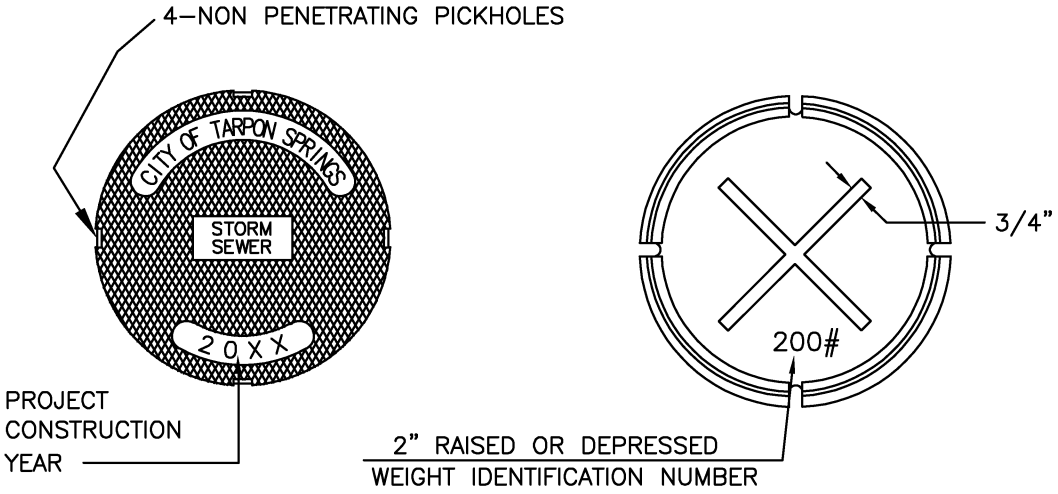



PROFILE VIEW
Alternative 1




TOP VIEW
Alternative 1

BOTTOM VIEW
Alternative 1

NOTES:

1. THIS COVER IS NOT TO BE USED FOR SANITARY SEWER MANHOLES.
2. THIS COVER MAY BE USED WITH FRAME TYPE I, II OR III AS DETAILED IN FDOT INDEX No. 425–001. THE ACTUAL FRAME TO BE USED SHALL BE AS SPECIFIED IN THE PLANS.
3. MATERIALS AND FABRICATION SHALL CONFORM TO SECTION 425 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
4. COVERS FOR UNDERDRAIN CLEANOUTS SHALL BE LABELED UNDERDRAIN AND NOT STORM SEWER.
5. COVERS SHALL BE U.S.F. TYPE X OR EQUAL. (200 LBS. MINIMUM)

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**STORM SEWER COVER ALTERNATIVE 1**

| | |
|---|---|
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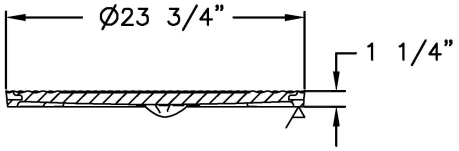
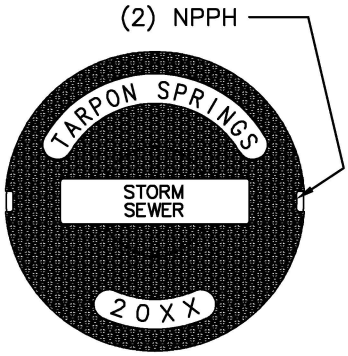
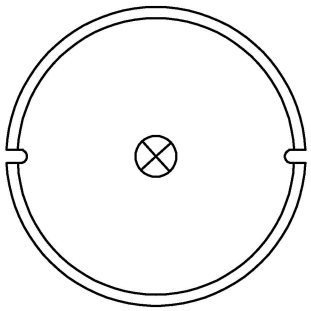



PROFILE VIEW
Alternative 2




TOP VIEW
Alternative 2

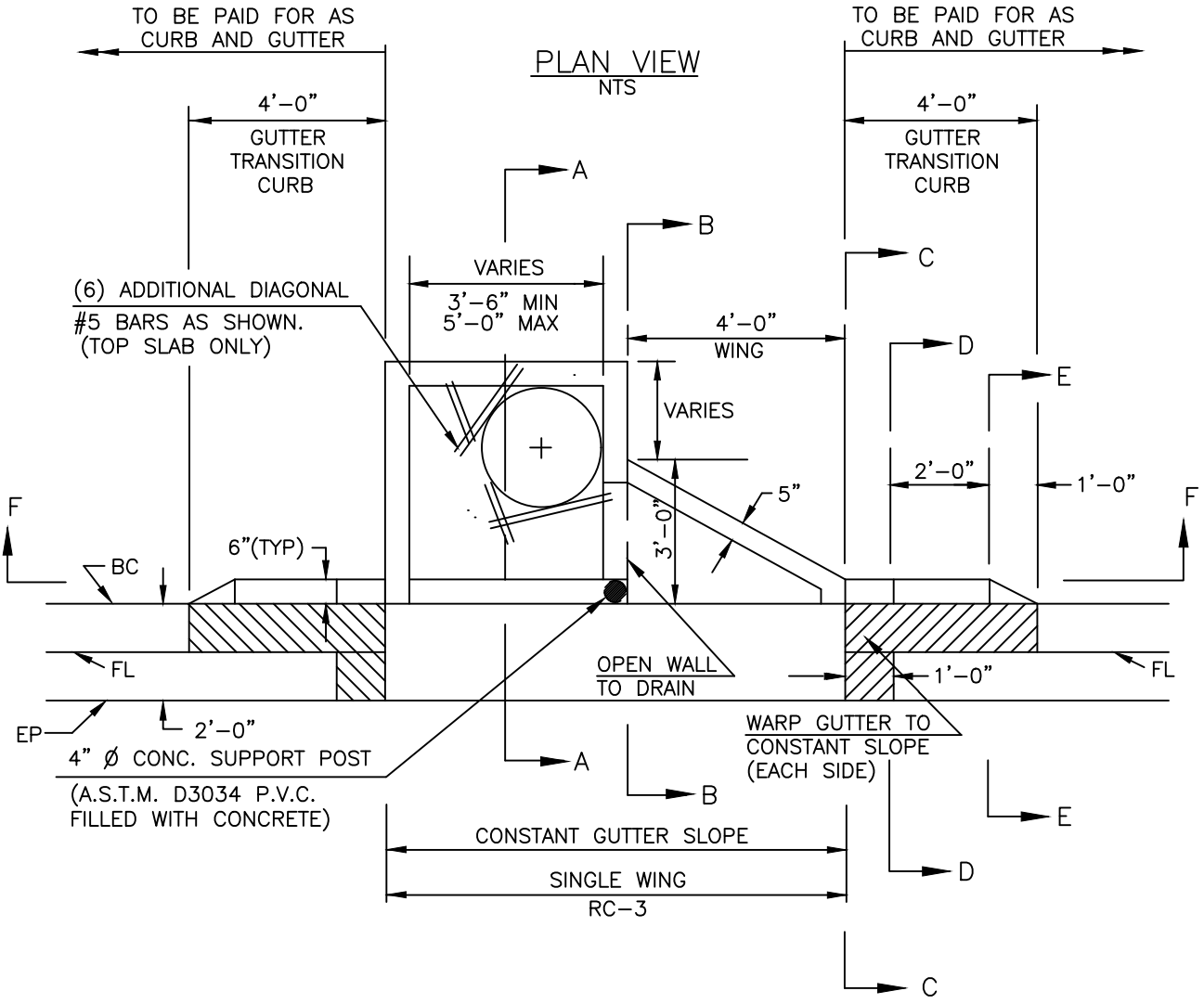


BOTTOM VIEW
Alternative 2

NOTES:

1. THIS COVER IS NOT TO BE USED FOR SANITARY SEWER MANHOLES.
2. THIS COVER MAY BE USED WITH FRAME TYPE I, II OR III AS DETAILED IN FDOT INDEX No. 425–001. THE ACTUAL FRAME TO BE USED SHALL BE AS SPECIFIED IN THE PLANS.
3. MATERIALS AND FABRICATION SHALL CONFORM TO SECTION 425 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
4. COVERS FOR UNDERDRAIN CLEANOUTS SHALL BE LABELED UNDERDRAIN AND NOT STORM SEWER.
5. COVERS SHALL BE U.S.F. TYPE X OR EQUAL. (200 LBS. MINIMUM)

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | STORM SEWER COVER<br>ALTERNATIVE 2 | DATE | 10/05/20 |
| | | INDEX | D-09A |
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |




## NOTES

1. SECTIONS 'A'–'A' AND 'B'–'B' ARE ON SHEET 2 OF 4.
2. SECTIONS 'C'–'C', 'D'–'D', AND 'E'–'E' ON THIS SHEET SHOW TRANSITION FOR TYPE 'A' CURB AND GUTTER.
3. TRANSITION FOR TYPE 'F' CURB IS ON SHEET 4 OF 4.
4. SECTION 'F'–'F' IS ON SHEET 3 OF 4.
5. RC–4 IS SYMMETRICAL ABOUT THE CENTERLINE.
6. RC–5 IS CONSTRUCTED WITHOUT WINGS.



# CITY OF TARPON SPRINGS

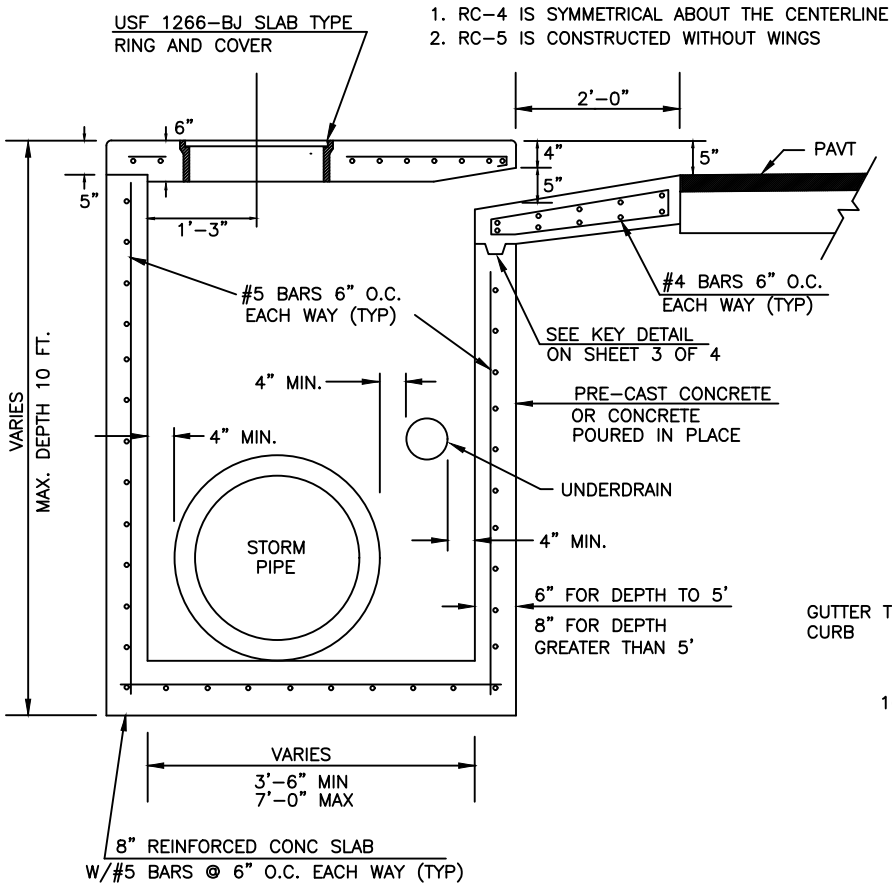
PINELLAS COUNTY, FLORIDA

## CURB INLET (TYPES RC-3, 4 &5)

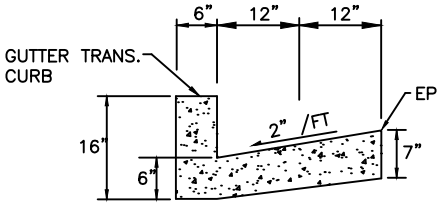
| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-10 |
| SCALE | N.T.S. |
| SHEET | 1 OF 4 |

## NOTES

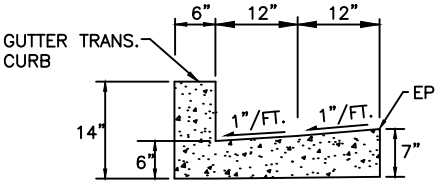
1. RC–4 IS SYMMETRICAL ABOUT THE CENTERLINE
2. RC–5 IS CONSTRUCTED WITHOUT WINGS



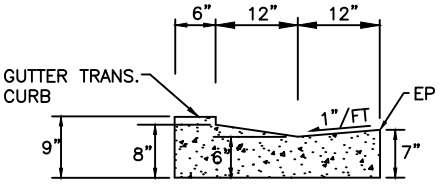

SECTION A–A
NTS



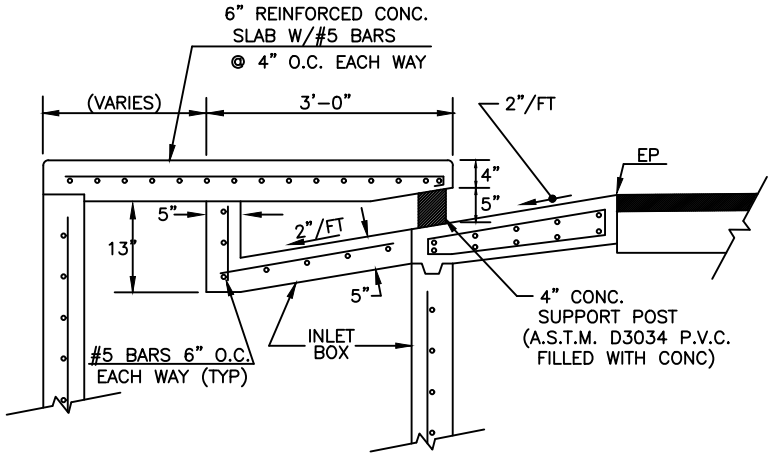

SECTION C–C




SECTION D–D




SECTION E–E




SECTION B–B
(VIEW THROUGH INLET BOX AND WING TRANSITION)



# CITY OF TARPON SPRINGS

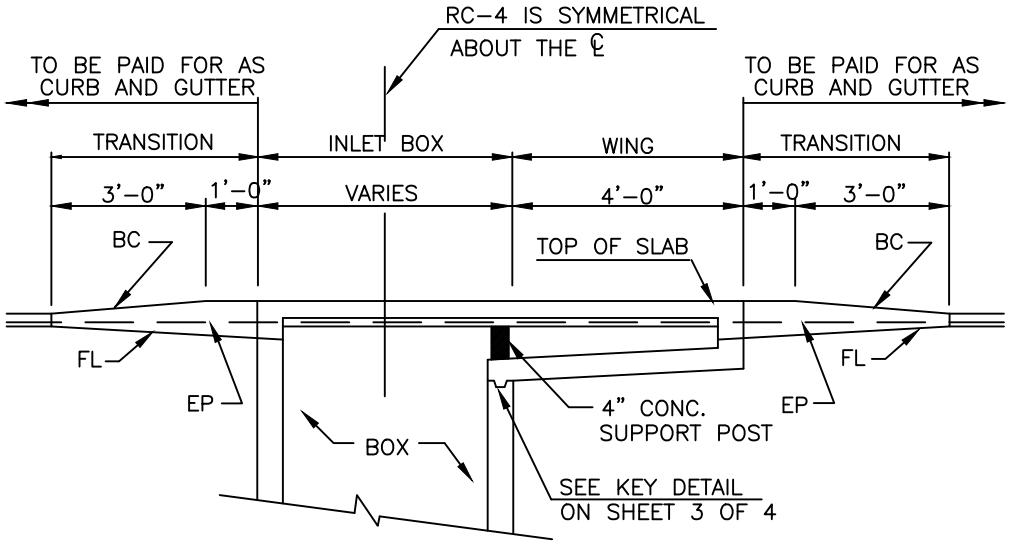
PINELLAS COUNTY, FLORIDA

## CURB INLET (TYPES RC-3, 4 &5)

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-11 |
| SCALE | N.T.S. |
| SHEET | 2 OF 4 |

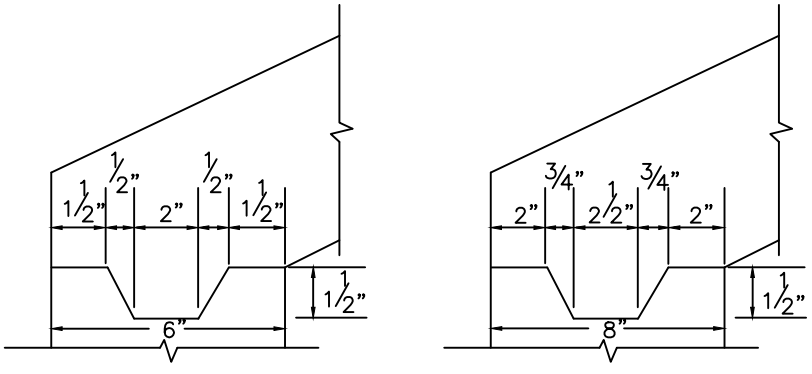
## NOTES

1. RC–4 IS SYMMETRICAL ABOUT THE CENTERLINE
2. RC–5 IS CONSTRUCTED WITHOUT WINGS



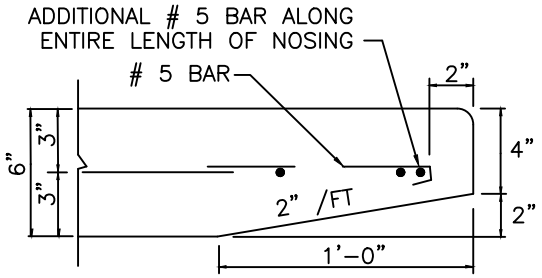

## SECTION F–F

NTS




## KEY DETAIL

NTS




## NOSING DETAIL

NTS

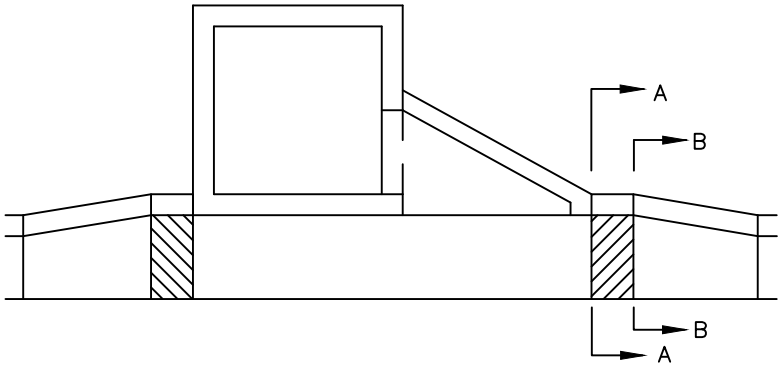
USER: [Steven.Torres] Date: [May 27, 2016] Time: [2:52pm] File Location: [\\AED–SERVER\Shared Folders\CADD\Municipal\Tarpon Springs\14.TS–25 (Standards Update)\Cadd_Current\D–12.dwg]

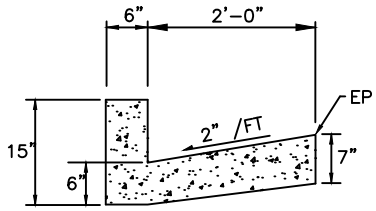
# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

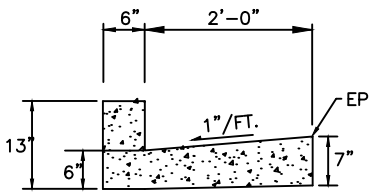
## CURB INLET (TYPES RC-3, 4 &5)

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-12 |
| SCALE | N.T.S. |
| SHEET | 3 OF 4 |




SECTION A–A




SECTION B–B

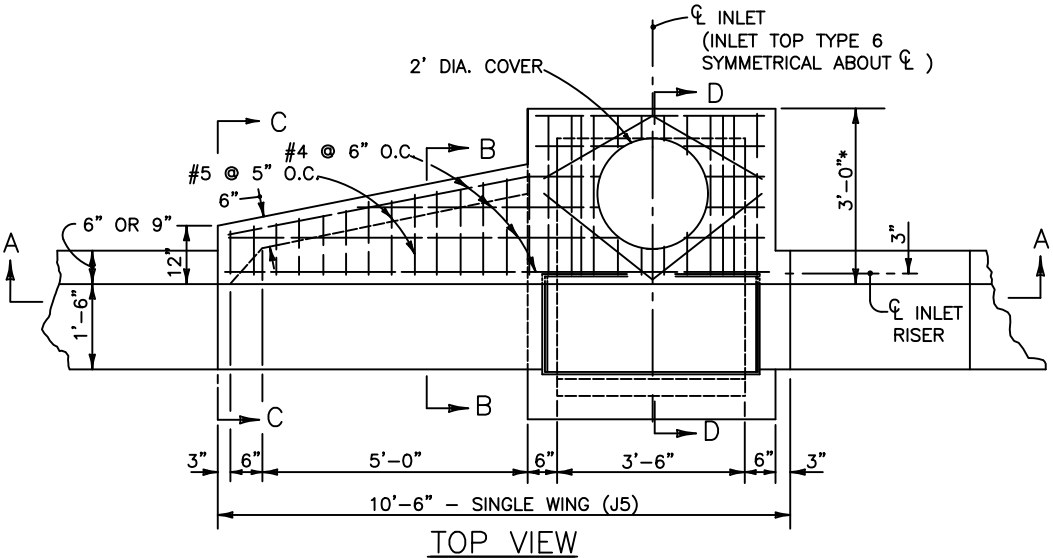
NOTE

1. SECTIONS 'A'–'A' AND 'B'–'B' ON THIS SHEET SHOW TRANSITION FOR TYPE 'F' CURB

## GENERAL NOTES

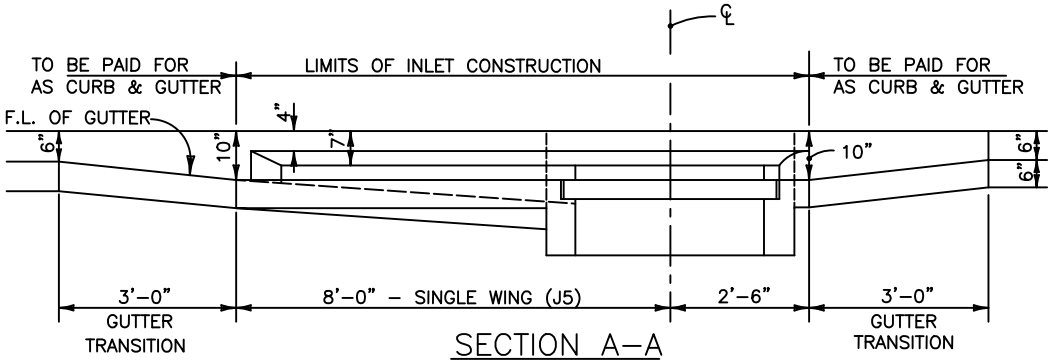
1. THESE INLETS FOR USE WITH CITY OF TARPON SPRINGS TYPE 'A' CURB AND GUTTER, AND WITH FDOT TYPE 'F' CURB (FOR USE WITH TYPE 'F', SEE DETAILS FOR TYPE 'F' CURB TRANSITION).
2. ℄ OF INLETS SHOULD BE LOCATED AT PROPERTY LINES UNLESS OTHERWISE APPROVED.
3. COVER FOR ALL REINFORCING STEEL SHALL BE 2" MINIMUM.
4. SUGGESTED MAXIMUM INLET DESIGN FLOWS FOR 0.4% PROFILE GRADE AND 1/4"/FT. CROSS SLOPE.
   RC–3: 4.5 CFS (3'–6" WIDTH) / 5.5 CFS (5'–0" WIDTH)
   RC–4: 6.5 CFS (3'–6" WIDTH) / 7.5 CFS (5'–0" WIDTH)
   RC–5: 3 CFS (3'–6" WIDTH) / 4 CFS (5'–0" WIDTH)
5. INLETS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE, AND MAY BE EITHER PRECAST OR POURED IN PLACE.
6. CONCRETE SHALL BE CLASS II , WITH Fc' = 3400 PSI (MIN). (Fc' = 4000 PSI (MIN) FOR TOP SLAB).
7. REINFORCING STEEL SHALL BE GRADE 40, DEFORMED, AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 615 (GRADE 60 FOR TOP SLAB.)
8. WHEN INLET TOPS EXTEND INTO SIDEWALK OR OTHER PAVED AREAS, THE FINISHED SURFACE OF THE INLET TOPS SHALL CONFORM TO THE FINISHED GRADE AND CROSS SLOPE OF THE ADJACENT SIDEWALK OR PAVEMENT. TO ACHIEVE THIS CONFORMITY THE DEPTH OF THE INLET SLAB MAY BE INCREASED WHERE NECESSARY, AND/OR THE HEIGHT OF THE INLET SIDE AND REAR WALLS MAY BE INCREASED OR DECREASED AS REQUIRED. HOWEVER, THE THICKNESS OF THE INLET SLAB AT ANY POINT SHALL NOT BE LESS THAN THAT SHOWN IN THE PLANS, AND NO ADJUSTMENT SHALL BE MADE TO THE DEPTH OF INLET OPENINGS OR THE HEIGHT OF THE TOP FRONT EDGE OF THE INLET SLAB.
9. UNLESS OTHERWISE NOTED, ALL EXPOSED EDGES AND CORNERS OF CONCRETE SHALL HAVE A 3/4" CHAMFER.
10. FDOT TYPE 'J' BOTTOM MAY BE USED WITH 'RC–3', 'RC–4' AND 'RC–5' INLETS. IN SUCH CASES THE STRUCTURE BOTTOM MAY BE ROTATED AS DIRECTED BY ENGINEER IN ORDER TO FACILITATE CONNECTIONS BETWEEN THE STRUCTURE WALLS AND STORM SEWER PIPES.
11. INLET SHOWN IS TYPE 'RC–3' (SINGLE WING). TYPE 'RC–4' (DOUBLE WING) IS THE SAME AS 'RC–3', EXCEPT THAT IT IS SYMMETRICAL ABOUT CENTERLINE OF BOX, AND RC–5 IS THE SAME, EXCEPT THAT IT IS CONSTRUCTED WITHOUT WINGS.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | CURB INLET (TYPES RC-3, 4 &5) | DATE | 12/15/15 |
| | | INDEX | D-13 |
| | | SCALE: N.T.S. | SHEET: 4 OF 4 |



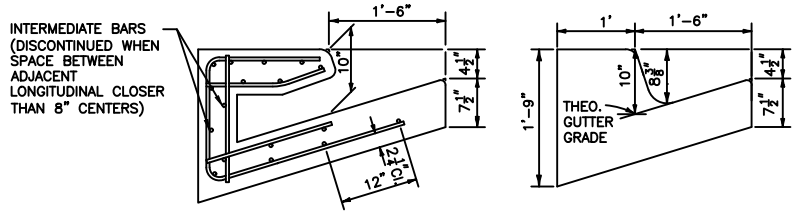

TOP VIEW

NTS




SECTION A-A

(CURB INLET TOP TYPE J6 IS SYMMETRICAL ABOUT THE CENTER LINE)




SECTION B-B

NTS

SECTION C-C

NTS

GENERAL NOTES

1. COVER FOR ALL REINFORCING STEEL SHALL BE 2" MINIMUM.
2. INLETS SHALL BE CONSTRUCTED OF REINFORCED CONCRETE, AND MAY BE EITHER PRECAST OR POURED IN PLACE.
3. CONCRETE SHALL BE CLASS II, WITH Fc' = 3400 PSI (MIN). CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 346 OF F.D.O.T'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
4. REINFORCING STEEL SHALL BE GRADE 60, DEFORMED, AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 615.
5. UNLESS OTHERWISE NOTED, ALL EXPOSED EDGES AND CORNERS OF CONCRETE SHALL HAVE A 3/4" CHAMBER.

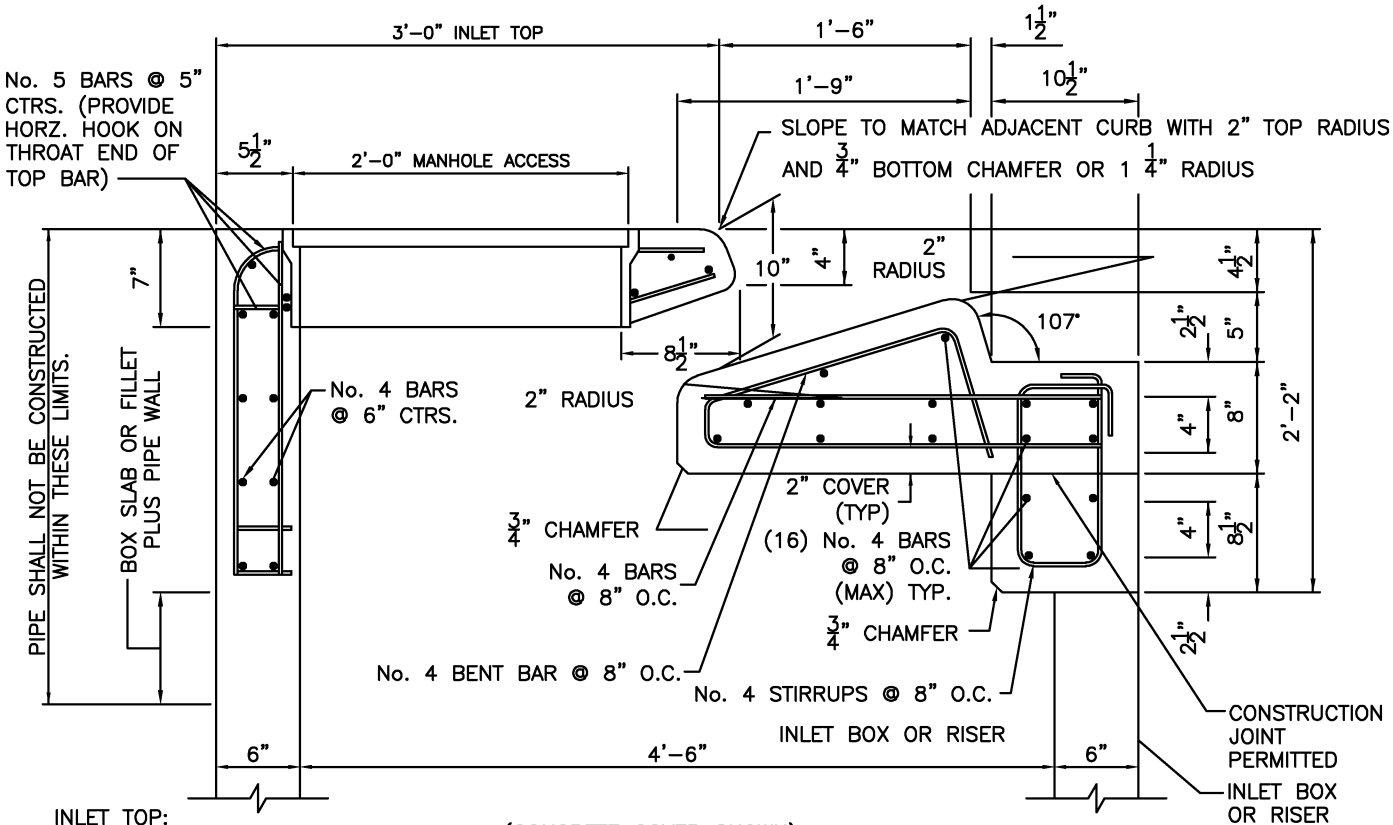


# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## CURB INLET (TYPES J5 & J6)

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-14 |
| SCALE | N.T.S. |
| SHEET | 1 OF 2 |

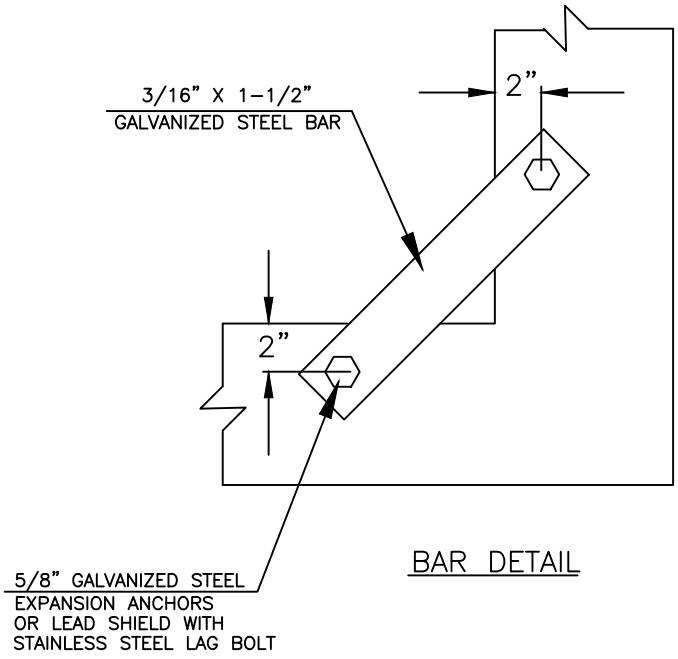



## SECTION D–D

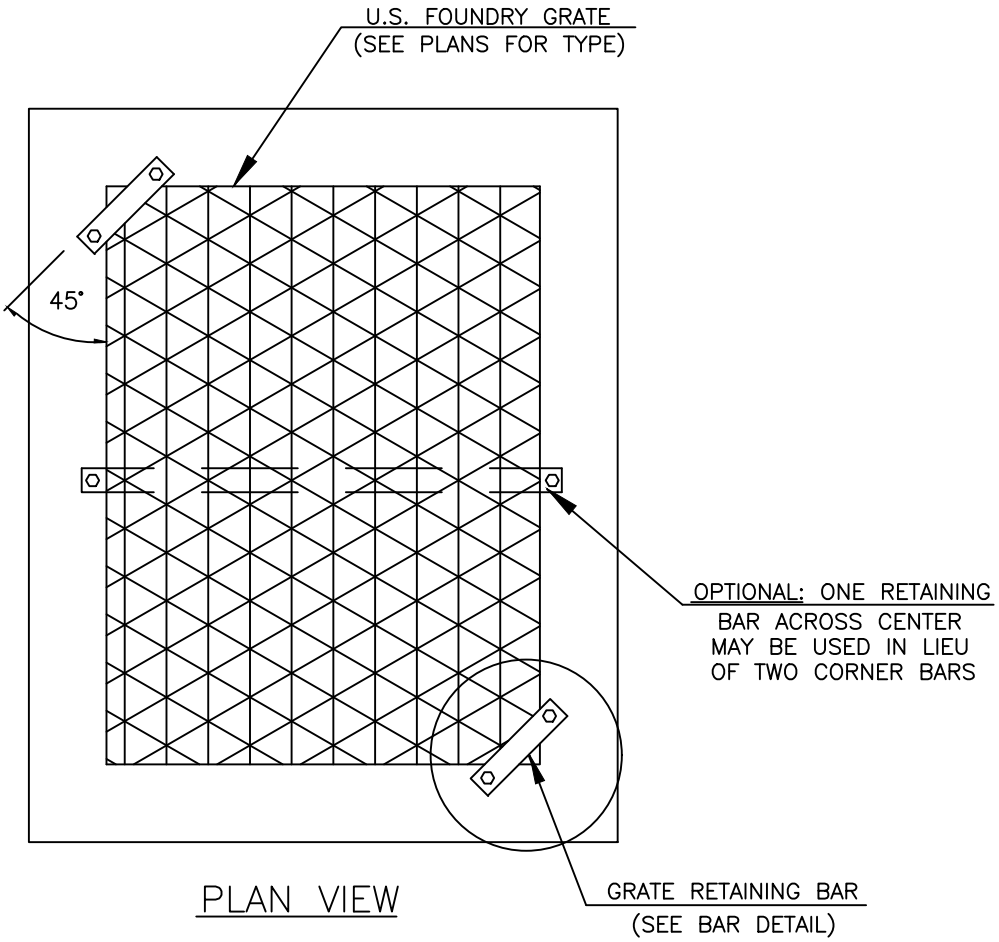
N.T.S.

NOTE: MANHOLE COVER & FRAME TO BE F.D.O.T. INDEX No. 425–001, TYPE III.
CONTRACTOR TO SUBMIT SHOP DRAWING TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
J5 DESIGNATES A SINGLE WING INLET.
J6 DESIGNATES A DOUBLE WING INLET.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | CURB INLET (TYPES J5 & J6) | DATE | 10/05/20 |
| | | INDEX | D-15 |
| | | SCALE: N.T.S. | SHEET: 2 OF 2 |




BAR DETAIL



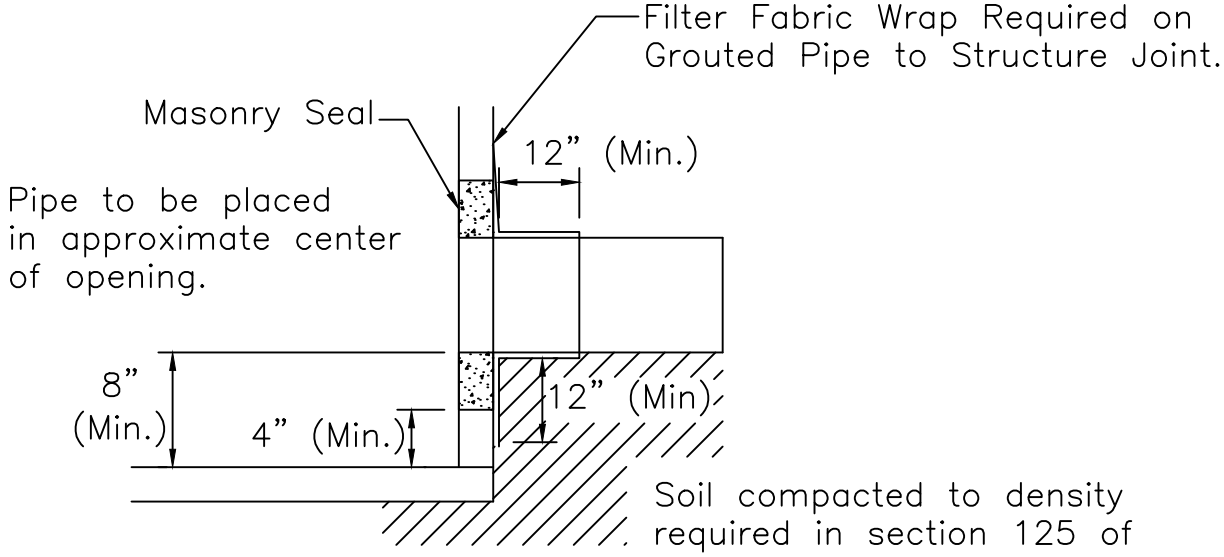

PLAN VIEW

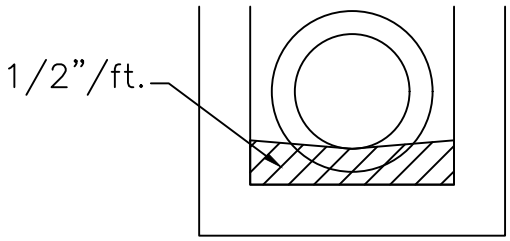
# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## GRATE RETAINING BAR

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-16 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |



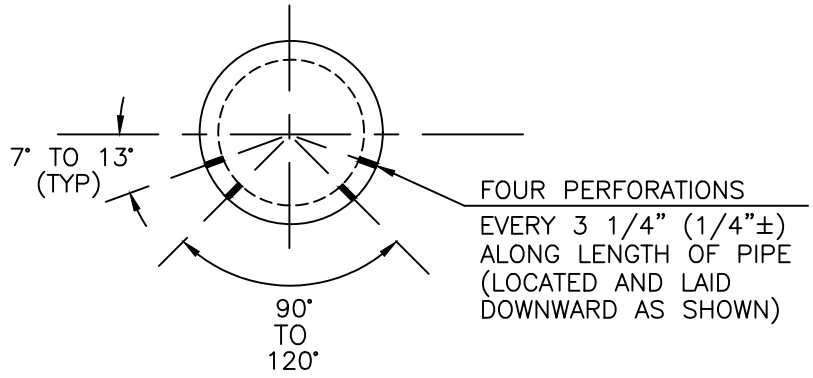

Note: Grout to consist of 3:1 Sand–Cement
Mixture or any Class Concrete.
FOR ALL STRUCTURES UNLESS
EXCLUDED BY SPECIAL DETAIL.



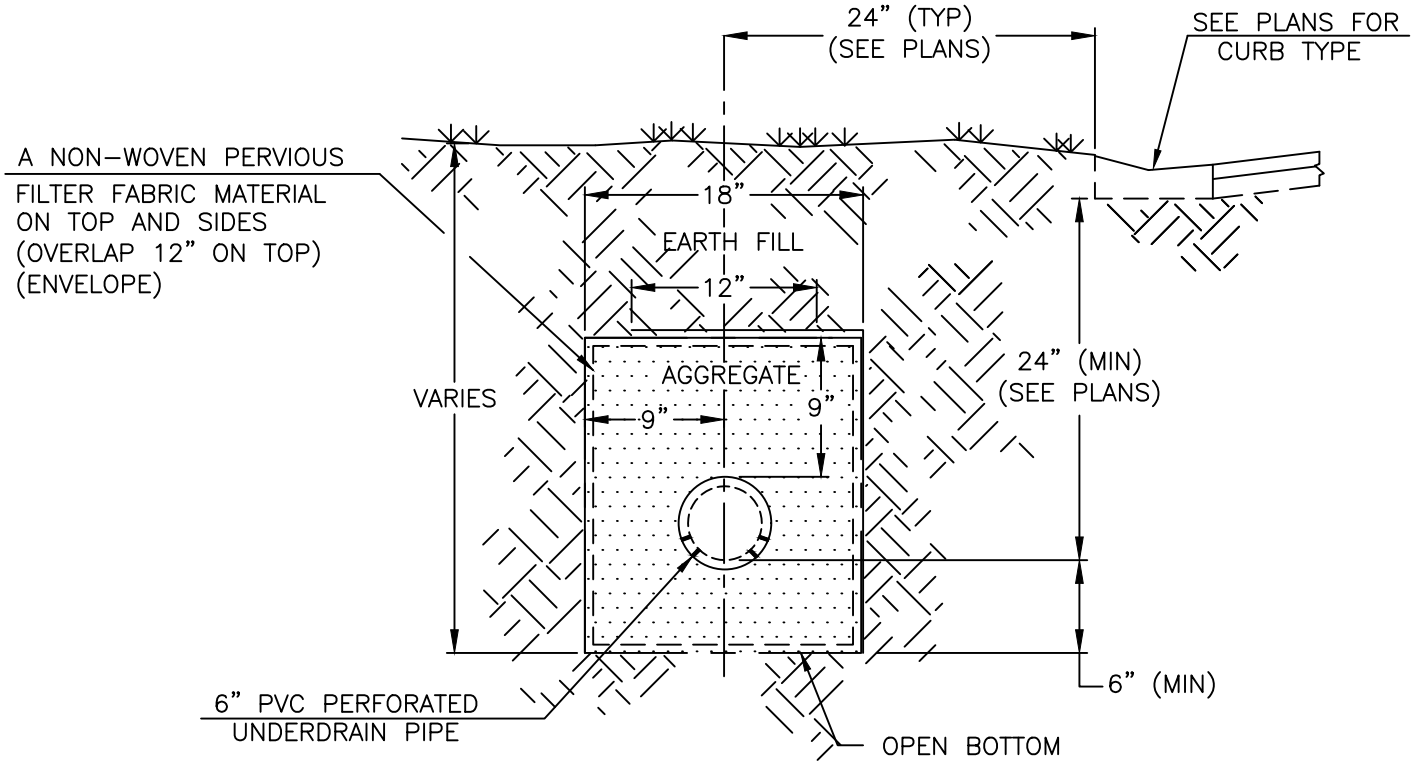
**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**FILTER FABRIC WRAP AND GROUT AT STRUCTURES**

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | D-17 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |



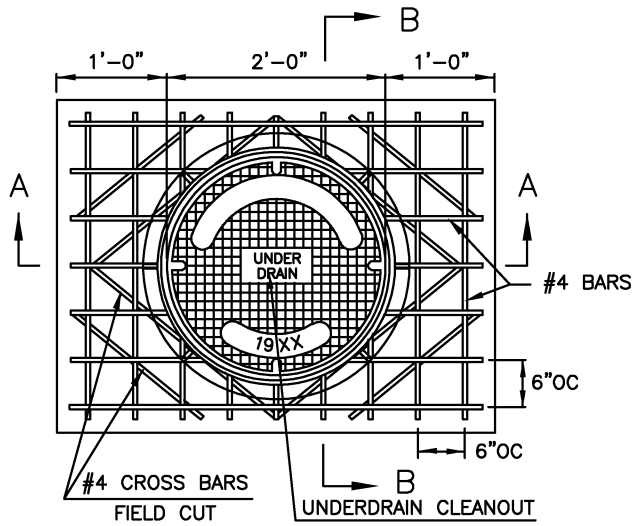

## PERFORATION DETAIL




## NOTES:

1. PVC PIPE SHALL CONFORM TO EITHER ASTM F758 OR ASTM D3034, EXCEPT THAT THE SIZE AND ARRANGEMENT OF PERFORATIONS SHALL CONFORM TO THE PERFORATION DETAIL ON THIS SHEET.
2. AGGREGATE SHALL BE AS SPECIFIED IN THE FDOT STANDARD SPECIFICATIONS, SECTION 901, AND SHALL BE SIZE 57.
3. DIAMETER OF PERFORATIONS SHALL BE 3/16" TO 3/8".
4. MAXIMUM ALLOWABLE BEND SHALL BE 22.5°, WITH A STRAIGHT 2' MINIMUM PIPE SEPARATION BETWEEN BENDS.
5. DO NOT USE PERFORATED PVC PIPE OR AGGREGATE UNDERNEATH ROADWAYS.

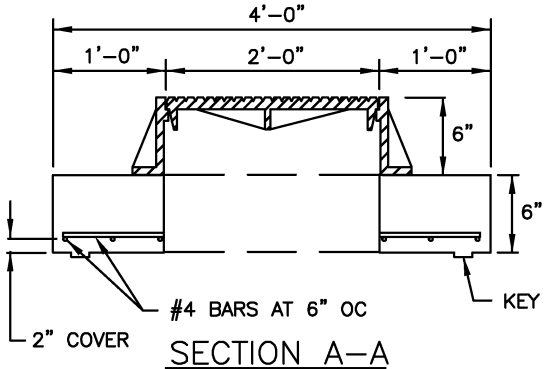
| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | ROADSIDE UNDERDRAIN INSTALLATION | DATE | 12/15/15 |
| | | INDEX | D-18 |
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |



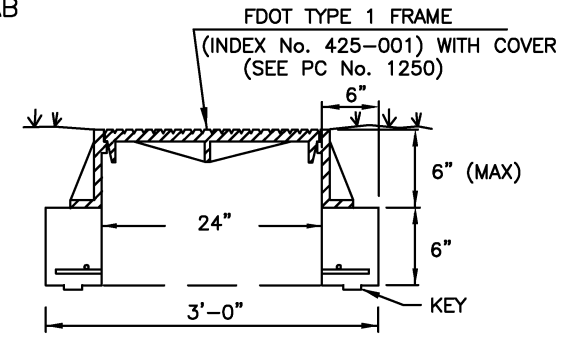

PLAN VIEW
TOP SLAB

NOTES:

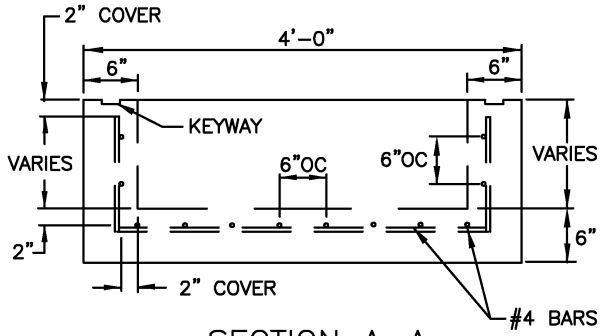
1. THIS MANHOLE SHALL BE CONSTRUCTED OF PRECAST CONCRETE.
2. CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO SECTION 425 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
3. LIFTING HOLES SHALL BE LOCATED AS NEEDED.
4. NO INVERTS SHALL BE POURED.
5. 2" CLEARANCE COVER FOR REINFORCING STEEL.
6. OPENING AROUND UNDERDRAIN PIPE SHALL BE GROUT–FILLED.



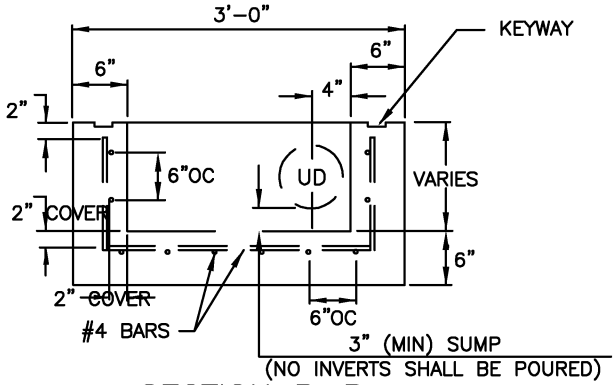

SECTION A–A
TOP SLAB



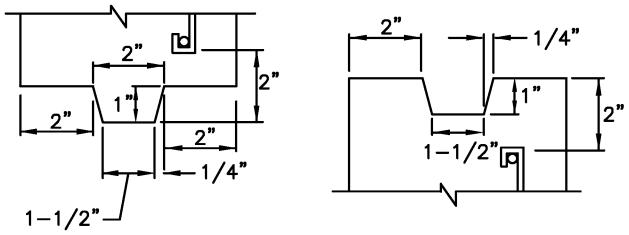

SECTION B–B
TOP SLAB




SECTION A–A
BOTTOM UNIT




SECTION B–B
BOTTOM UNIT



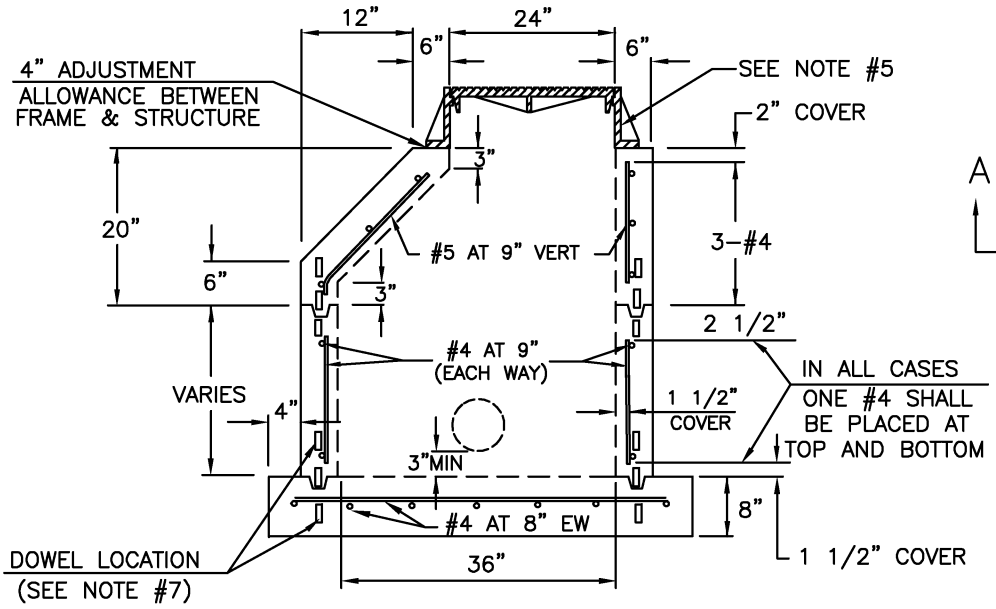

KEY DETAIL

# CITY OF TARPON SPRINGS

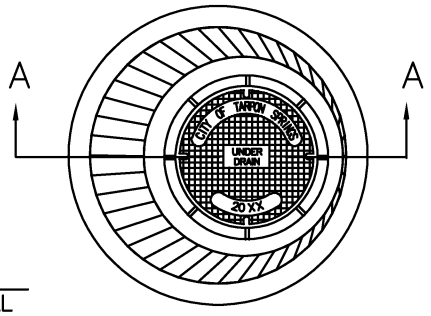
PINELLAS COUNTY, FLORIDA

## UNDERDRAIN INSPECTION MANHOLE TYPE 1

| | |
|---|---|
| DATE | 09/30/20 |
| INDEX | D-19 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




SECTION A–A

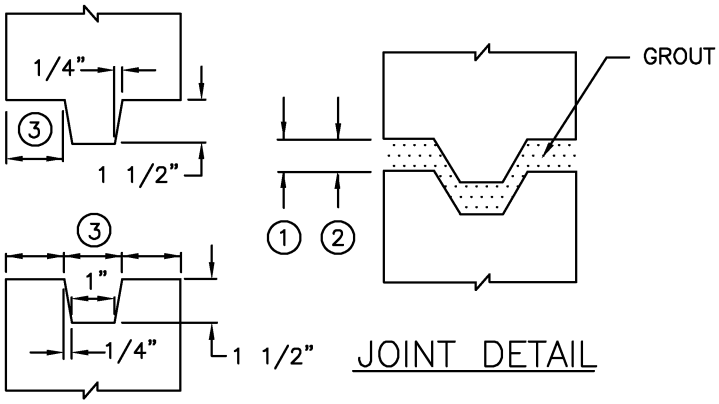



PLAN VIEW

(SEE FDOT INDEX No. 425–010)

## JOINT DIMENSIONS

1. 1" PRIOR TO PLACEMENT OF UPPER SECTION
2. 1/2" MAXIMUM AFTER FINAL SETTLEMENT OF UPPER SECTION
3. 1 1/2" WIDE (4 1/2" WALL)
   2" WIDE (6" WALL)




JOINT DETAIL

## NOTES:

1. CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM WITH SECTION 425 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
2. OPENING AROUND UNDERDRAIN PIPE SHALL BE GROUT–FILLED.
3. WHEN AUTHORIZED BY THE ENGINEER AND AT NO ADDITIONAL EXPENSE TO THE CITY, FDOT INDEX No. 425–010 MANHOLE TYPE P (ALTERNATE A), MAY BE USED IN PLACE OF A CITY OF TARPON SPRINGS UNDERDRAIN INSPECTION MANHOLE.
4. EXCEPT AS OTHERWISE NOTED ON THE PLANS, FRAME FOR MANHOLE COVERS SHALL BE FDOT INDEX No. 425–001, TYPE I.
5. MINIMUM WALL THICKNESS: 4 1/2" FOR PREFAB AND 6" FOR POURED IN PLACE.
6. FOR POURED IN PLACE CONSTRUCTION, DOWELS MAY BE USED IN LIEU OF JOINT KEY AND GROUTING. DOWELS SHALL EXTEND A MINIMUM OF 6" INTO ADJACENT SECTIONS.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

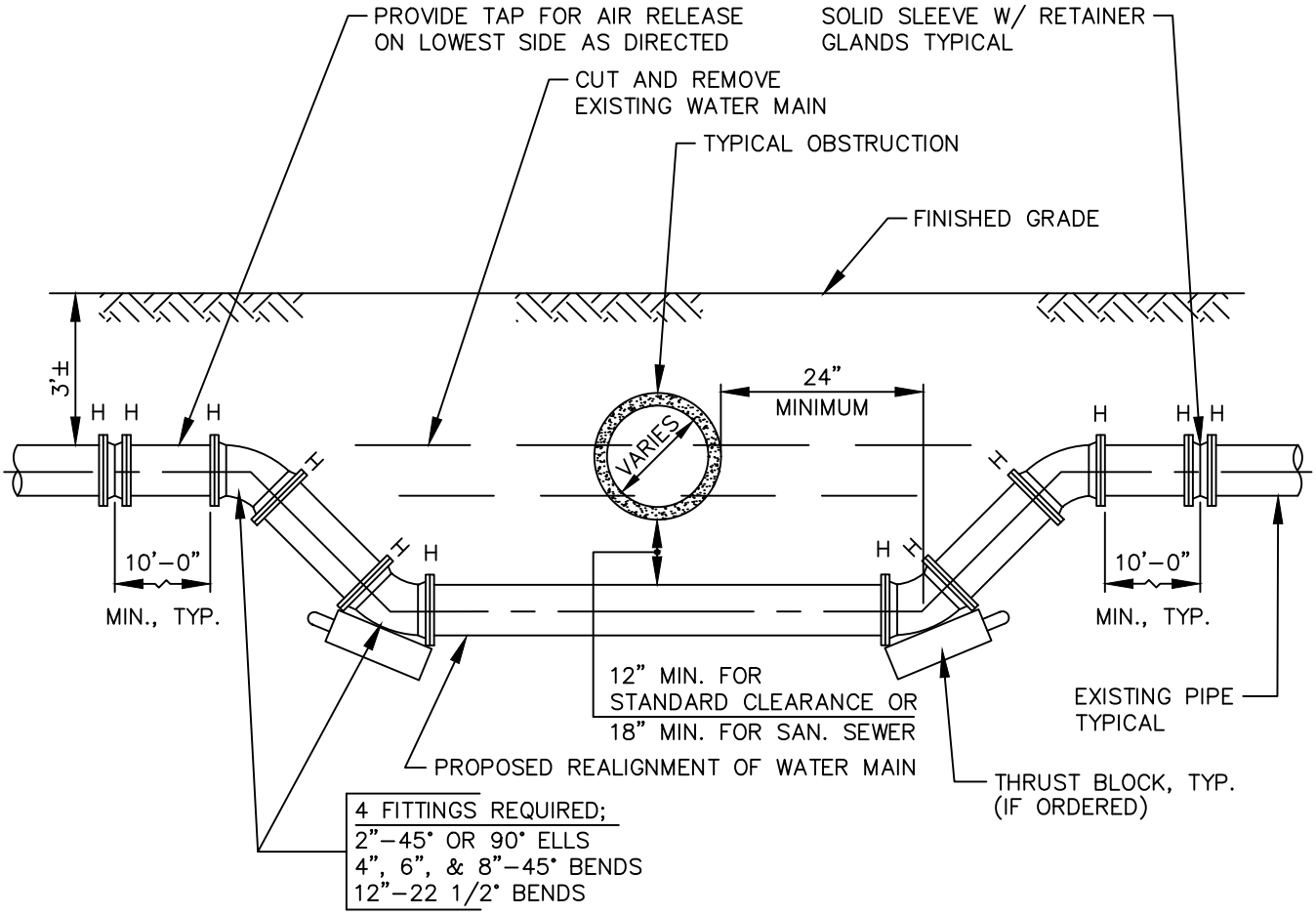
## UNDERDRAIN INSPECTION MANHOLE TYPE 2

| | |
|---|---|
| DATE | 10/05/20 |
| INDEX | D-20 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

1. ALL PRESSURE PIPE MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AS SHOWN HEREIN, OR AS DIRECTED BY THE ENGINEER.
2. PIPE JOINT DEFLECTION SHALL NOT EXCEED 75% OF THE PIPE MANUFACTURE REQUIREMENTS.
3. THE CONTRACTOR SHALL ADJUST PIPELINE ALIGNMENTS HORIZONTALLY AND/OR VERTICALLY AS REQUIRED TO AVOID CONFLICTS WITH ACTUAL FIELD CONDITIONS AS UNCOVERED DURING CONSTRUCTION. FIELD ADJUSTMENTS SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.
4. PRESSURE PIPE CLEARANCES SHALL BE AS FOLLOWS:
   A) POTABLE WATER MAINS IN PARALLEL INSTALLATIONS SHALL MAINTAIN A MINIMUM 10 FEET OUTSIDE TO OUTSIDE HORIZONTAL CLEARANCE FROM ALL SANITARY SEWERS, STORM DRAINS, AND FORCE MAINS.
   B) POTABLE WATER MAINS WHERE CROSSING SHALL MAINTAIN A MINIMUM OF 18 INCHES OUTSIDE TO OUTSIDE VERTICAL CLEARANCE FROM ALL SANITARY SEWERS, STORM DRAINS, AND FORCE MAINS.
   C) POTABLE WATER MAINS SHALL MAINTAIN A MINIMUM OF 5 FOOT CENTER TO CENTER HORIZONTAL CLEARANCE OR 3 FOOT OUTSIDE TO OUTSIDE HORIZONTAL CLEARANCE AND 18 INCHES OUTSIDE TO OUTSIDE VERTICAL CLEARANCE FROM RECLAIMED WATER MAINS.
5. THE CONTRACTOR SHALL PROVIDE ALL DEWATERING EQUIPMENT NECESSARY TO KEEP EXCAVATIONS DRY AND SHALL PROVIDE ALL SHORING, SHEETING, AND BRACING NECESSARY TO PROTECT WORKMEN, ADJACENT STRUCTURES, UTILITIES, EXISTING PAVEMENT, OR TO MINIMIZE TRENCH WIDTH AT NO ADDITIONAL COST TO THE CITY.
6. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER REGARDING SHUTTING DOWN WATER MAINS. PROPER AND ADEQUATE NOTIFICATION MUST BE MADE TO PROPERTY OWNERS, BUT IN NO CASE SHALL LESS THAN 24 HOURS WRITTEN NOTICE BE GIVEN.
7. THE OPENING AND/OR CLOSING OF EXISTING VALVES OR NEW VALVES INSTALLED IN PRESSURE PIPE SYSTEMS SHALL BE BY A CITY SANITARIAN AFTER COORDINATION WITH THE ENGINEER.
8. THE CONTRACTOR SHALL PROVIDE NECESSARY EQUIPMENT AND LABOR TO MAKE TAPS IN PRESSURE PIPE MAINS WHERE TAPPING SLEEVES AND VALVES ARE SHOWN ON THE PLANS.
9. ALL NEW DUCTILE IRON PRESSURE PIPE, FITTINGS, AND VALVE BODIES SHALL BE WRAPPED IN POLYETHYLENE IN ACCORDANCE WITH ANSI/AWWA C105.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING POTABLE AND RE-CLAIMED SERVICE LINES UNDER PAVEMENT OR ELSEWHERE IN THE CONSTRUCTION ZONE. REPLACE SERVICE LINES WHERE SHOWN OR DIRECTED BY THE ENGINEER. ALL RELOCATED SERVICE LINES SHALL BE RE-LOCATED SO THAT THE METER ASSEMBLY WILL NOT BE IN AN ALLEY, DRIVEWAY, OR OTHER VEHICULAR TRAVEL PATH.
11. ALL EXISTING POTABLE AND/OR RECLAIMED WATER SERVICE LINES SHALL BE TRANSFERRED TO THE NEW MAIN, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
12. MAINTAIN A MINIMUM COVER OF 36 INCHES UNDER ROADWAYS, ALLEYS, AND DRIVEWAYS. MAINTAIN A MINIMUM OF 30 INCHES OF COVER IN SODDED AND LANDSCAPED AREAS.
13. THRUST BLOCKING SHALL NOT BE USED, UNLESS ORDERED BY THE ENGINEER. HARNESSED PIPE JOINTS SHALL BE USED. THE LENGTH OF HARNESSED JOINTS SHALL BE AS SHOWN ON THE PLANS.
14. SANITARY SEWER FORCE MAINS SHALL NOT USE GREATER THAN 45° BENDS FOR OFFSETS OR REALIGN-MENT OF THE FORCE MAIN. THE 45° BENDS SHALL HAVE A MINIMUM OF 5 FEET BETWEEN THEM, WHEN POSSIBLE.



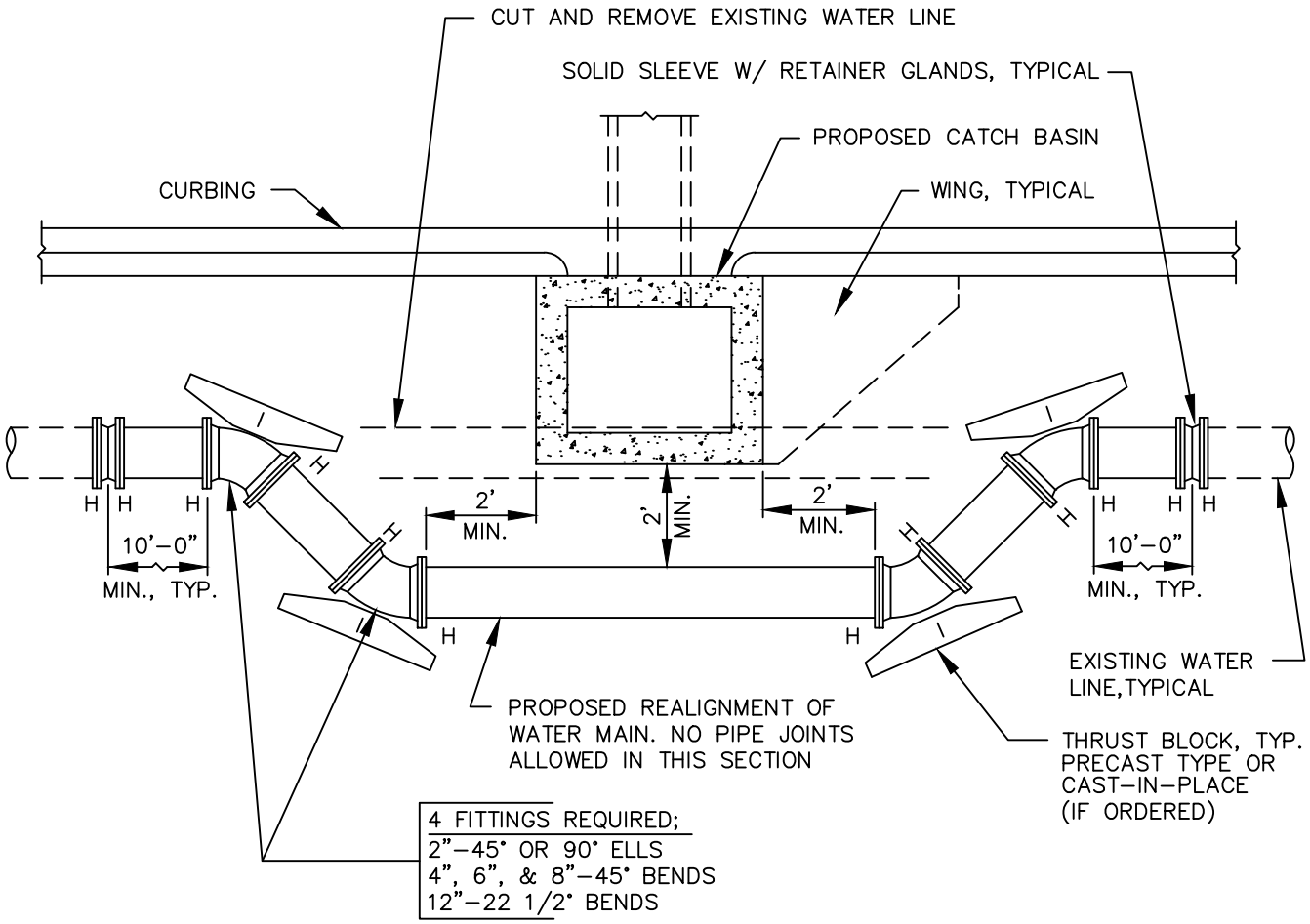
| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | NOTES FOR PRESSURE PIPE | DATE | 12/15/15 |
| | | INDEX | W-01 |
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |




NOTES:

1. FOR 2" THROUGH 12" WATER MAIN.
2. ALL PIPE SHALL BE CUT AND PARTIALLY ASSEMBLED PRIOR TO THE CITY AUTHORIZING SHUTDOWN OF EXISTING MAIN(S) FOR TIE-IN.
3. SHUTDOWN PERIOD SHALL NOT EXCEED THREE (3) HOURS.
4. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CITY CUSTOMERS PRIOR TO SHUTDOWN.
5. THE CONTRACTOR SHALL SWAB NEW PIPE AND FITTINGS WITH CHLORINE SOLUTION, AS DIRECTED.
6. H = HARNESSED JOINT. (MECHANICAL JOINT W/ D.I. RETAINER GLAND) (NOT APPLICABLE FOR 2" PIPE)
7. VERTICAL ADJUSTMENT MAY BE OVER AN OBSTRUCTION, IF MINIMUM PIPE COVER AND BOTTOM CLEARANCES ARE AVAILABLE.

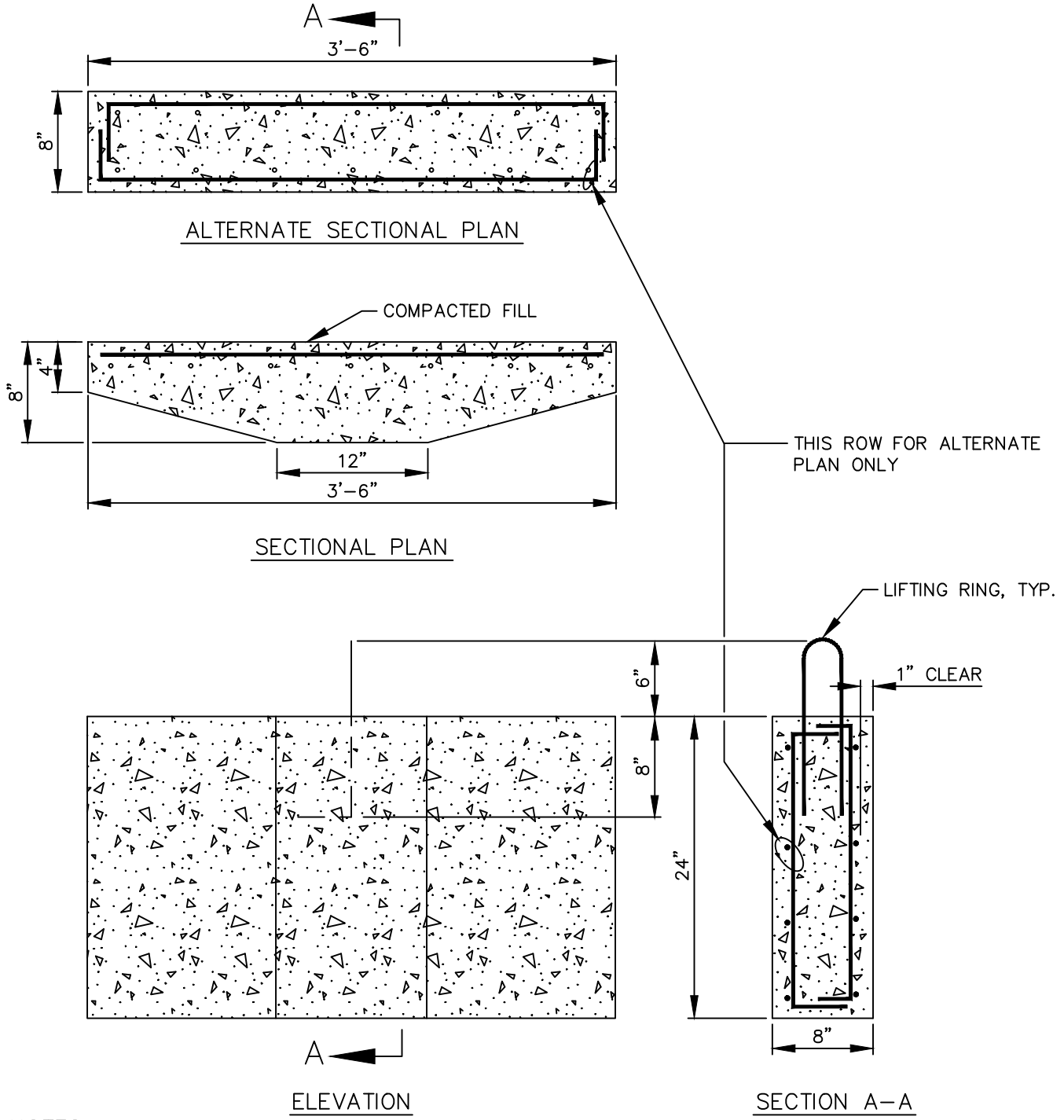
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | WATER MAIN VERTICAL ADJUSTMENT DETAIL | DATE 12/15/15<br>INDEX W-02<br>SCALE N.T.S. SHEET 1 OF 1 |
|---|---|---|




NOTES:

1. FOR WATER PIPELINES 2" THROUGH 12".
2. ALL PIPE SHALL BE CUT AND PARTIALLY ASSEMBLED PRIOR TO THE CITY AUTHORIZING SHUTDOWN OF EXISTING MAIN(S) FOR TIE-IN.
3. SHUTDOWN PERIOD SHALL NOT EXCEED THREE (3) HOURS.
4. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CITY CUSTOMERS PRIOR TO SHUTDOWN.
5. THE CONTRACTOR SHALL SWAB NEW PIPE AND FITTINGS WITH CHLORINE SOLUTION.
6. H = HARNESSED JOINT. (MECHANICAL JOINT W/ D.I. RETAINER GLAND) (NOT APPLICABLE FOR 2" PIPE)

| | | | |
|---|---|---|---|
| **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **WATER MAIN HORIZONTAL ADJUSTMENT DETAIL** | DATE: **12/15/15**<br>INDEX: **W-03**<br>SCALE: **N.T.S.** SHEET: **1 OF 1** | |




NOTES:

1. BLOCK MAY BE TAPERED OR STRAIGHT, AT THE CONTRACTOR'S OPTION.
2. REINFORCEMENT TO BE : # 4 @ 6" E/W.
3. FLAT SIDE OF THRUST BLOCK SHALL BE PLACED AGAINST SOIL COMPACTED TO 100 % DENSITY.
4. USE WHERE SPECIFIED AND/OR ORDERED. 4" THRU 10" PRESSURE PIPE ONLY.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PRECAST CONCRETE THRUST BLOCK DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-04 |
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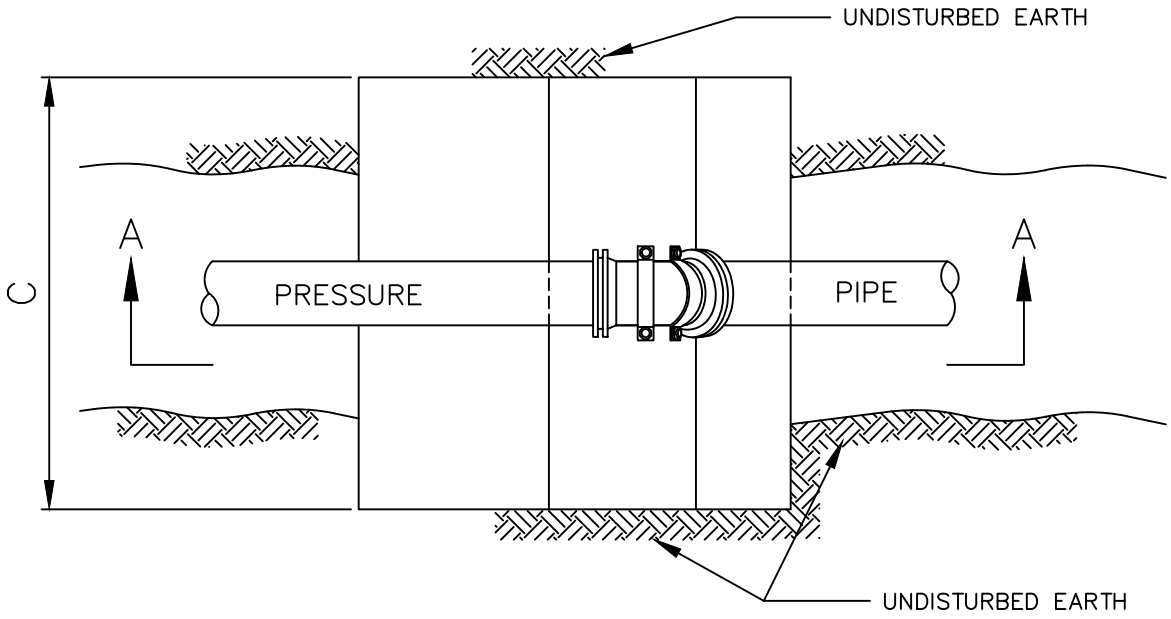
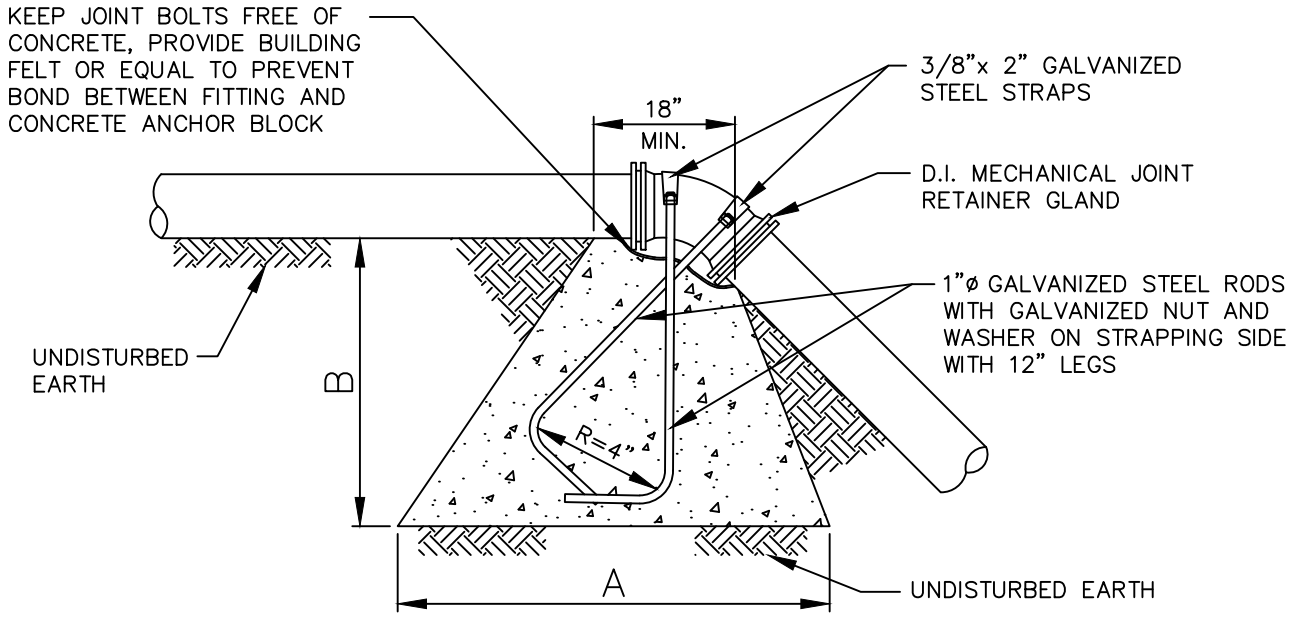



PLAN




SECTION A–A

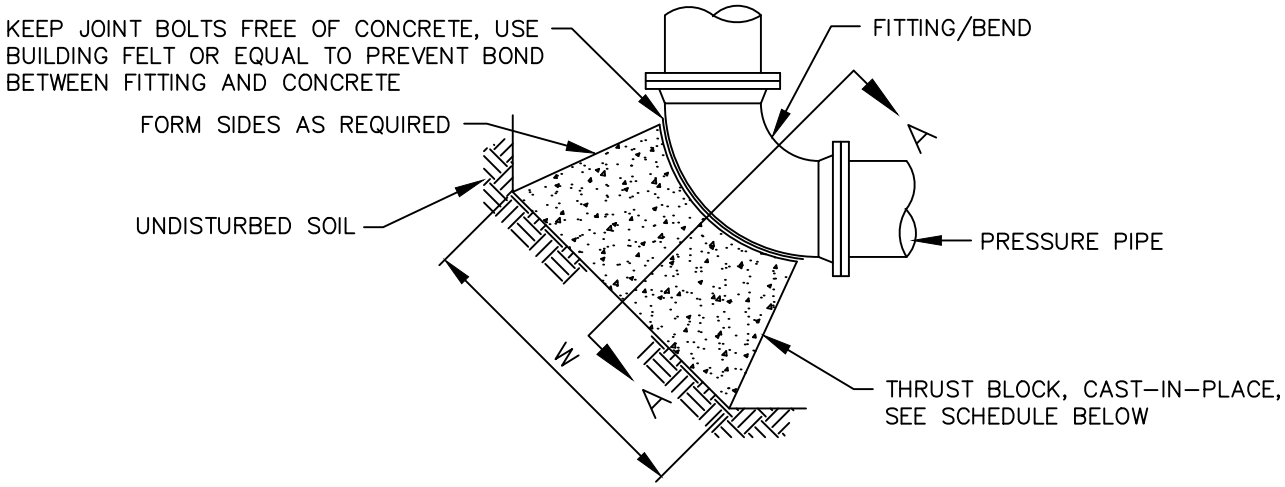
| 45° BEND | | | |
|---|---|---|---|
| | A | B | C |
| 6" | 42" | 28" | 48" |
| 8" | 54" | 36" | 54" |
| 12" | 66" | 42" | 66" |

# CITY OF TARPON SPRINGS

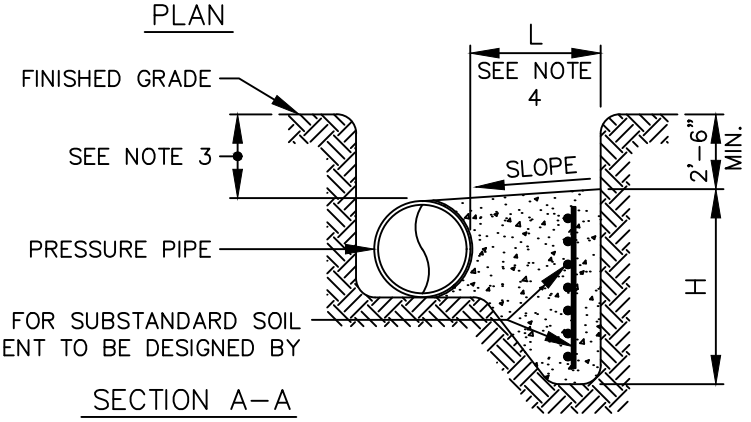
PINELLAS COUNTY, FLORIDA

## CAST-IN-PLACE VERTICAL THRUST ANCHOR DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-05 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




PLAN




REINFORCEMENT BAR MAT REQUIRED FOR SUBSTANDARD SOIL CONDITIONS. THE STEEL REINFORCEMENT TO BE DESIGNED BY THE ENGINEER.

SECTION A-A

| SCHEDULE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| PRESSURE PIPE SIZE | FITTING/BEND ANGLE | | | | | | | | TEE OR PLUG | |
| | 11-1/4° | | 22-1/2° | | 45° | | 90° | | | |
| | THRUST BLOCK DIMENSIONS | | | | | | | | | |
| | H | W | H | W | H | W | H | W | H | W |
| 6" | 1'-0" | 1'-0" | 1'-0" | 1'-6" | 1'-6" | 2'-6" | 2'-0" | 3'-6" | 1'-6" | 3'-0" |
| 8" | 1'-0" | 1'-6" | 1'-6" | 2'-6" | 2'-0" | 3'-6" | 3'-0" | 4'-0" | 2'-6" | 3'-6" |
| 10" | 1'-0" | 2'-0" | 1'-6" | 3'-0" | 2'-6" | 4'-0" | 3'-6" | 5'-0" | 3'-0" | 4'-6" |
| 12" | 1'-6" | 2'-6" | 2'-6" | 3'-6" | 3'-0" | 5'-0" | 4'-0" | 6'-6" | 3'-6" | 5'-6" |
| 16" | 2'-6" | 4'-0" | 3'-6" | 5'-6" | 5'-0" | 7'-0" | 6'-6" | 9'-0" | 5'-6" | 8'-0" |
| 20" | 3'-0" | 5'-6" | 4'-6" | 6'-6" | 6'-0" | 8'-6" | 7'-6" | 11'-0" | 6'-6" | 9'-6" |
| 24" | 3'-6" | 6'-0" | 5'-0" | 8'-0" | 7'-0" | 9'-6" | 9'-0" | 12'-6" | 7'-6" | 11'-6" |

NOTES:

1. TEST PRESSURE FOR 6" THROUGH 12" IS 100 psi.
2. TEST PRESSURE FOR 16" THROUGH 24" IS 150 psi.
3. THRUST BLOCKS ARE DESIGNED FOR A MINIMUM 3' OF COVER OVER THE PIPE. IF LESS COVER EXISTS, BLOCKS SHALL BE ENLARGED AS DIRECTED BY THE ENGINEER.
4. L = 3' MINIMUM, POUR TO UNDISTURBED SOIL.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**CAST-IN-PLACE HORIZONTAL THRUST BLOCK DETAIL**

| DATE | 12/15/15 |
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| INDEX | W-06 |
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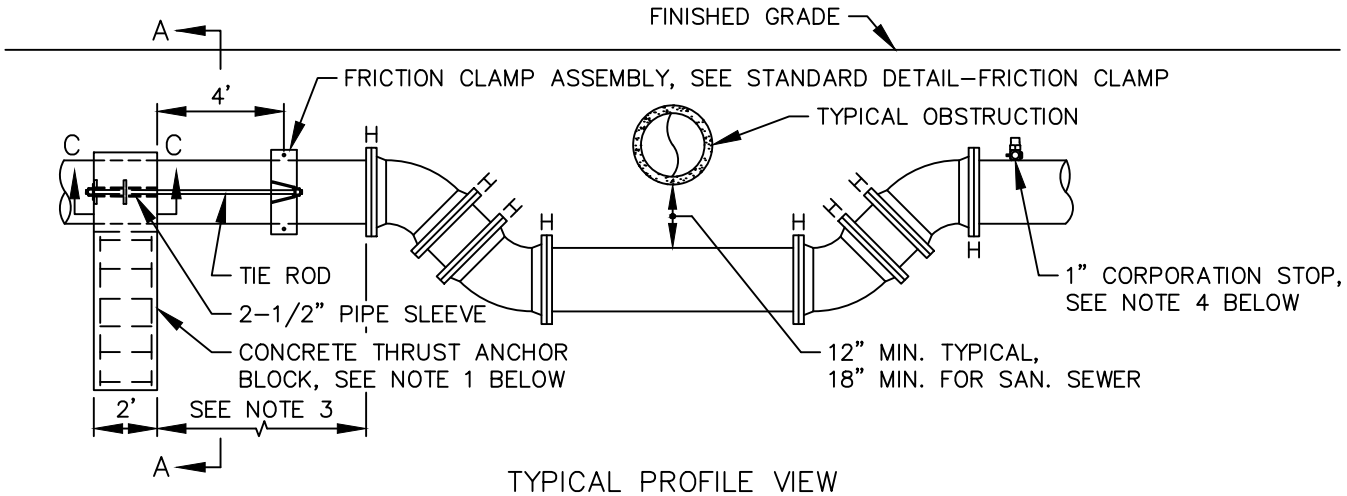
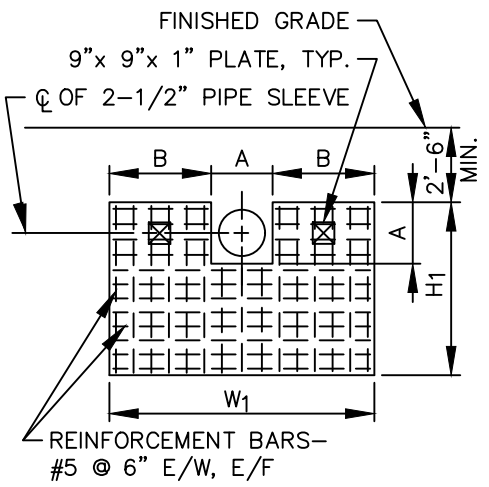
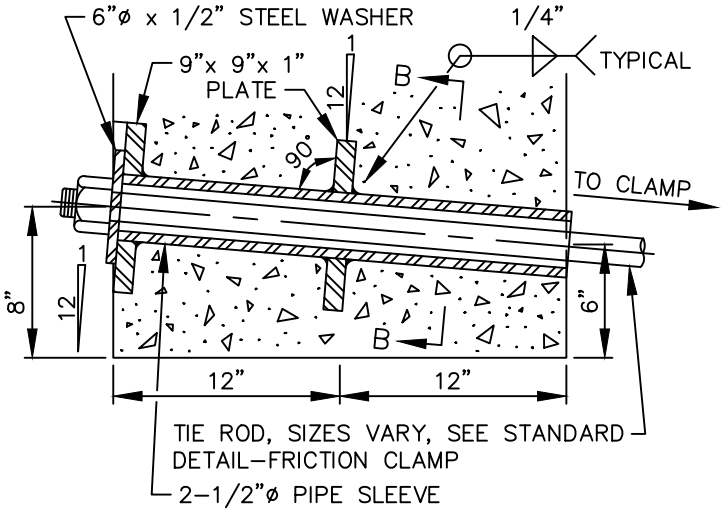


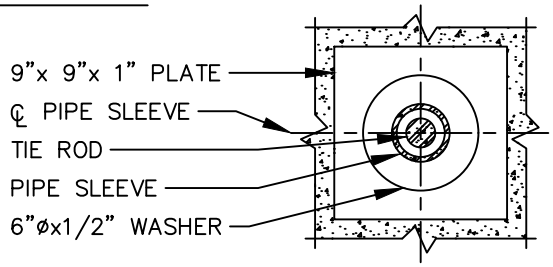

TYPICAL PROFILE VIEW




SECTION A–A

SECTION C–C




SECTION B–B

NOTES:

1. CONCRETE THRUST ANCHOR BLOCK SHALL BE USED ON BOTH SIDES OF OBSTRUCTION.
2. H = HARNESSED JOINT: MJ W/DI RETAINER GLAND.
3. HARNESS ALL JOINTS WITH–IN 20' OF THRUST ANCHOR BLOCK.
4. PROVIDE AIR RELEASE VALVE ON LOWEST SIDE.
5. ALL BOLTS, WASHERS, RODS, PLATES, PIPE SLEEVES, AND FRICTION CLAMP ASSEMBLIES SHALL BE HOT DIPPED GALVANIZED PRIOR TO INSTALLATION.
6. THE CONTRACTOR SHALL NOTIFY ALL AFFECTED CITY CUSTOMERS PRIOR TO SHUTDOWN.
7. FOR ADDITIONAL NOTES, SEE STANDARD DETAIL–FRICTION CLAMP.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | THRUST ANCHOR BLOCK FOR VERTICAL BENDS DETAIL | DATE | 12/15/15 |
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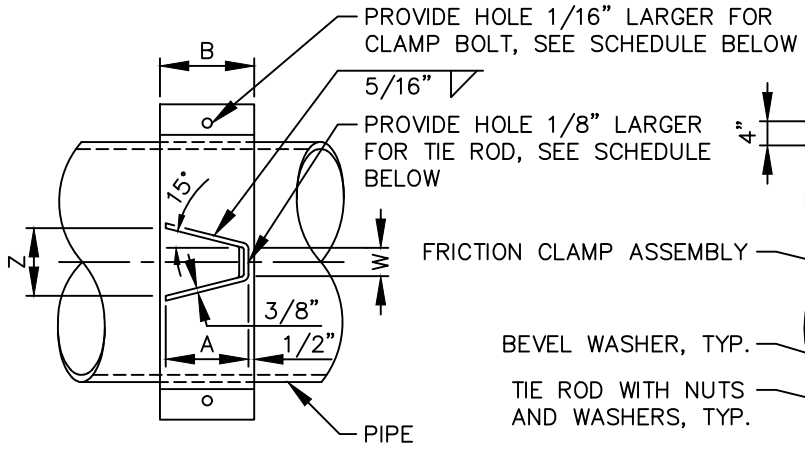
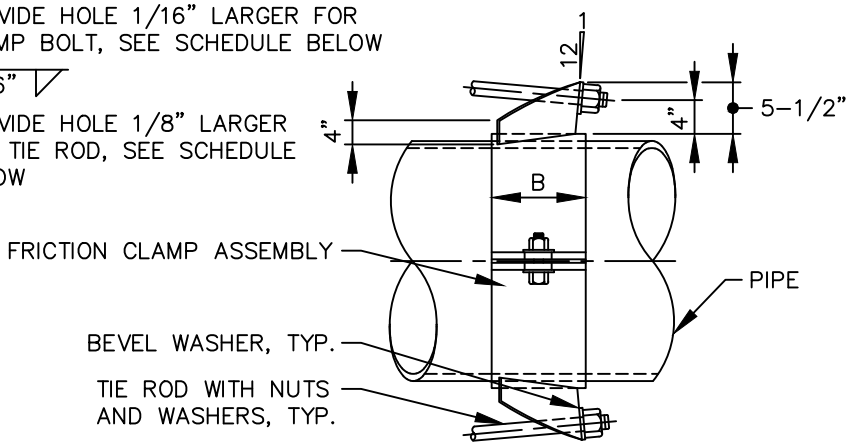
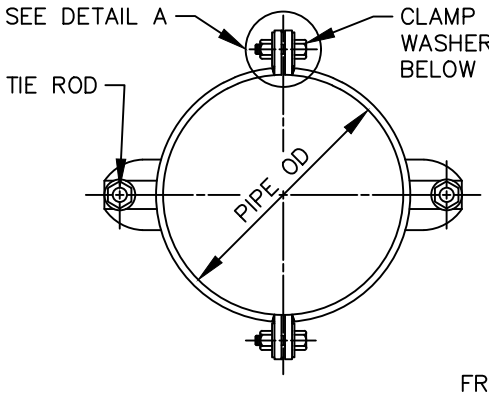


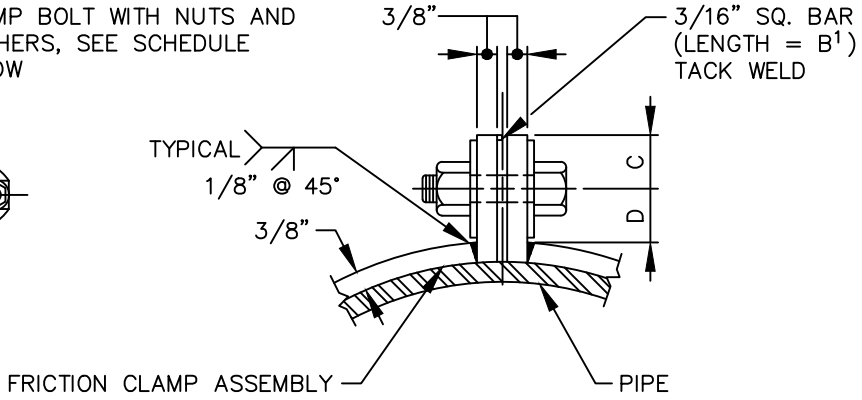

SIDE VIEW




PLAN




END VIEW




DETAIL A

| SCHEDULE | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TEST PRESSURE – 150 psi | | | | | | | | | | | | | | |
| PIPE SIZE | PIPE O.D. | ANCHOR DIMENSIONS | | | | TIE ROD DIA. | LUG | | | CLAMP | | | | CLAMP BOLT DIA. |
| | | $H_1$ | $W_1$ | A | B | | A | W | Z | B | $B_1$ | C | D | |
| 16" | 17.4" | 5'–6" | 8'–0" | 2'–0" | 3'–0" | 1" | 5–1/8" | 2–1/8" | 4–11/16" | 6" | 3" | 1–1/2" | 1" | 3/4" |
| 20" | 21.6" | 6'–6" | 9'–6" | 2'–4" | 3'–7" | 1–1/4" | 6–3/4" | 2–9/16" | 5–15/16" | 8" | 3" | 1–1/2" | 1" | 7/8" |
| 24" | 25.8" | 7'–6" | 11'–6" | 2'–8" | 4'–5" | 1–1/2" | 8–3/4" | 3" | 7–1/2" | 10" | 4" | 2" | 1–1/4" | 1" |

NOTES:

1. THE CLAMP BOLTS SHALL BE TIGHTENED TO DEVELOP FULL STRENGTH OF THE BOLT. FIRST TIGHTEN BOLT TO A SNUG POSITION, THEN AN ADDITIONAL 3/4 TURN OF NUT.
2. LUG AND CLAMP: SHALL BE PLATED HIGH STRENGTH STEEL CONFORMING TO ASTM A 242.
3. TIE ROD, CLAMP BOLTS, PLATES, AND WASHERS: SHALL BE HIGH STRENGTH STEEL SHALL CONFORMING TO ASTM A 325.
4. PIPE SLEEVE: SCHEDULE 80.
5. TIE ROD, CLAMP BOLTS, PIPE SLEEVES, AND WASHERS SHALL BE GALVANIZED AS PER ASTM A 153.
6. CLAMP, AND PLATES SHALL BE GALVANIZED AS PER ASTM A 123.
7. THE CONTRACTOR SHALL TOUCH–UP ANY MISSING GALVANIZING, PRIOR TO ACCEPTANCE AND BACK FILLING.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**FRICTION CLAMP DETAIL**

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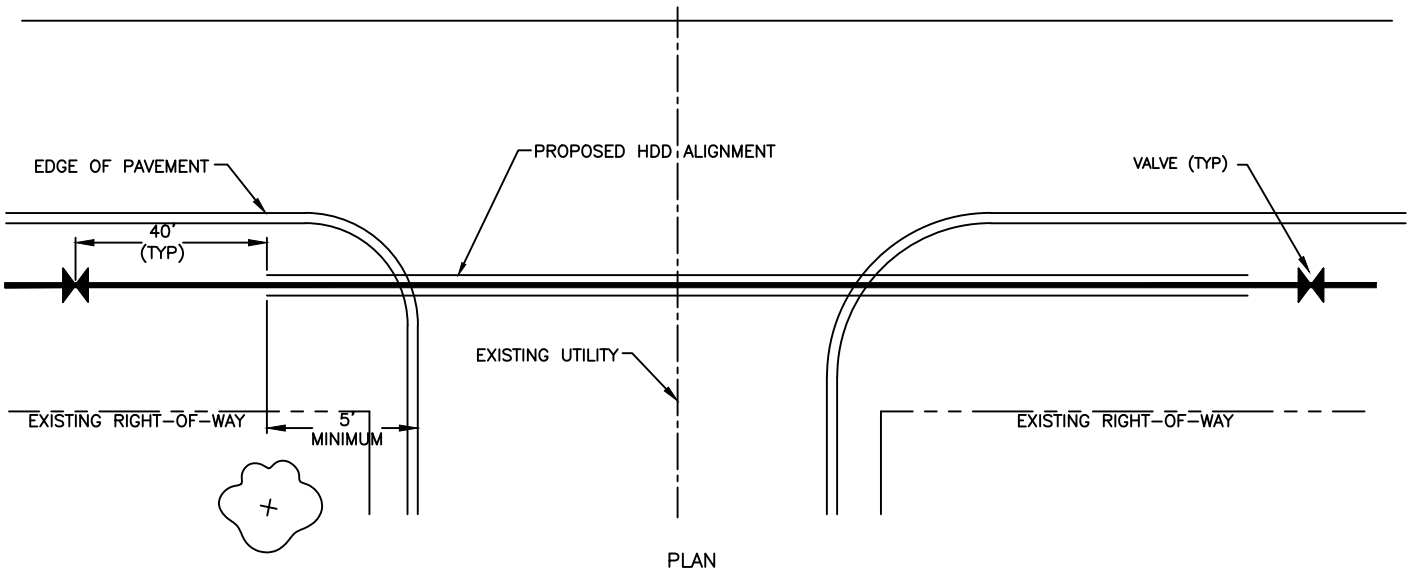
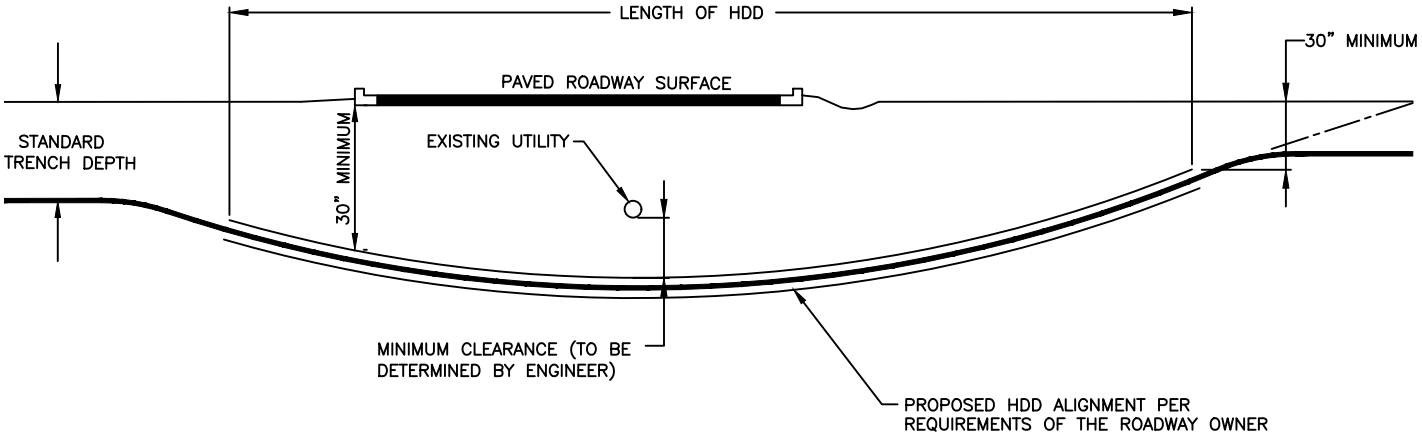



PLAN

## HORIZONTAL MINIMUM CLEARANCES




PROFILE

## VERTICAL MINIMUM CLEARANCES

HDD INSTALLATION NOTES:

1. ALL HDD INSTALLATION ACTIVITIES SHALL BE IN ACCORDANCE WITH THE FLORIDA D.O.T. UTILITY ACCOMMODATIONS MANUAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF AFFECTED AGENCIES AND COORDINATION WITH ALL UTILITIES PRIOR TO CONSTRUCTION.
3. ALL CONSTRUCTION MATERIALS, INCLUDING DRILLING FLUID, SHALL BE REMOVED FROM THE SITE PRIOR TO RESTORATION OF DISTURBED AREAS.
4. ALL RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROADWAY OWNER.
5. EXCAVATIONS SHALL BE RESTORED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ROADWAY OWNER.
6. NO SPACERS REQUIRED.
7. ALLOW 40' BETWEEN VALVE AND END OF CASING. DISTANCE LESS THAN 40' REQUIRES APPROVAL OF DEVIATION. THE 40' LENGTH SHALL NOT INCLUDE BRANCHES/TEES IN THE PIPING BETWEEN VALVE AND END OF CASING
8. VALVES AT EACH END OF THE HDD AND CASING FOR THE HDD ARE REQUIRED FOR NUMBERED COUNTY ROADS, STATE ROADS AND AT INTERSECTIONS WITH NUMBERED COUNTY ROADS AND STATE ROADS.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | TYPICAL HORIZONTAL DIRECTIONAL DRILL (HDD) UNDER A ROADWAY | DATE | 1/28/2015 |
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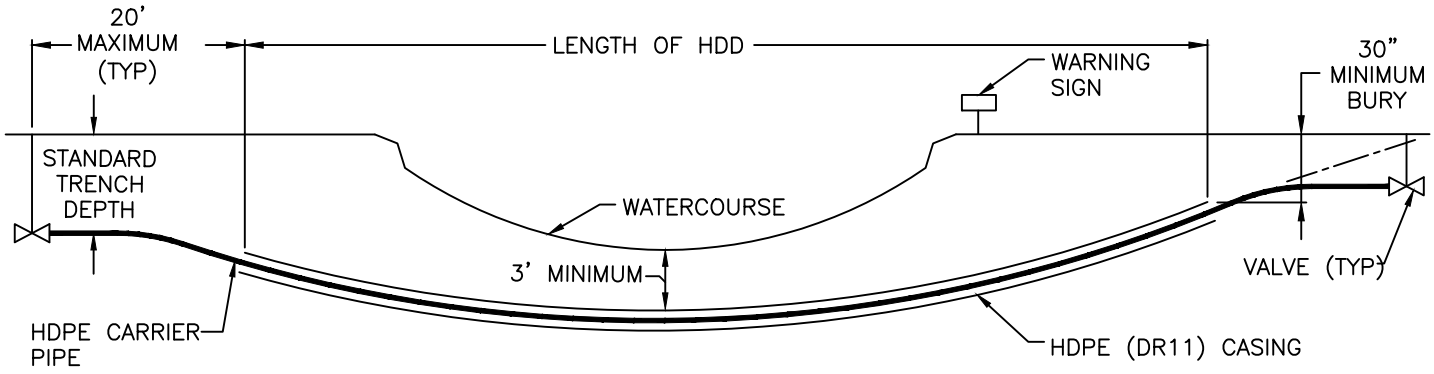



PROFILE

HDD INSTALLATION NOTES:

1. PROVIDE VALVES AT BOTH ENDS OF SUBAQUEOUS CROSSING. FOR WATER MAIN CROSSINGS, THE VALVE CLOSEST TO THE WATER SUPPLY SHALL BE IN A VAULT WITH PERMANENT TAPS ON EACH SIDE OF THE VALVE WITHIN THE VAULT.

2. FOR POTABLE WATER, PROVIDE VALVE VAULT FOR MAINS 12" OR LESS IN DIAMETER.

3. PROVIDE AIR RELEASE VALVES: ONE VALVE ON EACH SIDE OF CROSSING.

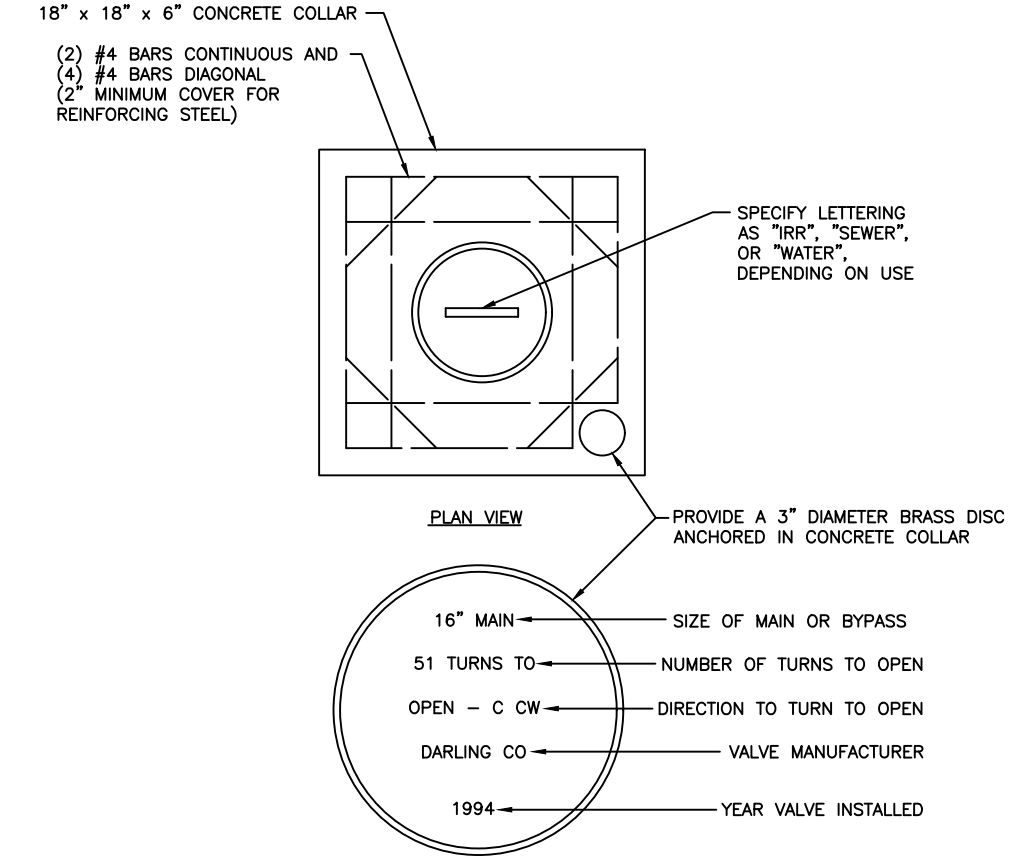
4. ALL SUBAQUEOUS CROSSINGS SHALL BE DISCUSSED AT A PLAN PRE-SUBMITTAL CONFERENCE WITH REPRESENTATIVES OF THE WATER OR WASTEWATER DEPARTMENTS. SUBAQUEOUS WATER MAINS SHALL REQUIRE APPROVAL BY THE WATER OR WASTEWATER DEPARTMENT.

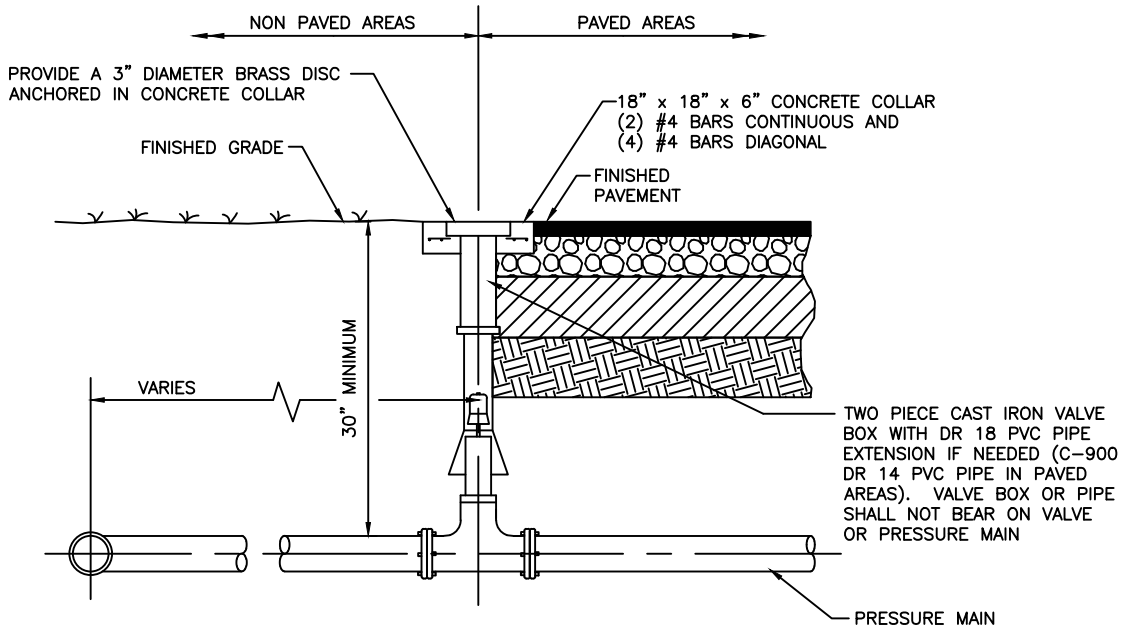
5. WARNING SIGN SHALL BE PLACED ALONG BANK OF WATERWAY TO CLEARLY IDENTIFY SUBAQUEOUS CROSSING. SIGN SHALL INDICATE TYPE OF PIPELINE AND DEPTH OF PIPELINE BELOW BOTTOM OF WATER BODY.

6. ALLOW 40' BETWEEN VALVE AND END OF CASING. DISTANCE LESS THAN 40' REQUIRES APPROVAL OF DEVIATION. THE 40' LENGTH SHALL NOT INCLUDE BRANCHES/TEES IN THE PIPING BETWEEN VALVE AND END OF CASING.

# TYPICAL SUBAQUEOUS HORIZONTAL DIRECTIONAL DRILL (HDD)

| | | | |
|---|---|---|---|
| | **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **TYPICAL SUBAQUEOUS HORIZONTAL DIRECTIONAL DRILL (HDD)** | DATE: 1/28/2015<br>INDEX: W-10<br>SCALE: N.T.S. / SHEET: 1 OF 1 |




ALL VALVES USED IN WATER DISTRIBUTION SYSTEMS SHALL BE OF THE RESILIENT SEAT TYPE IN ACCORDANCE WITH AWWA C-509

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## TYPICAL VALVE SETTING DETAIL

| | |
|---|---|
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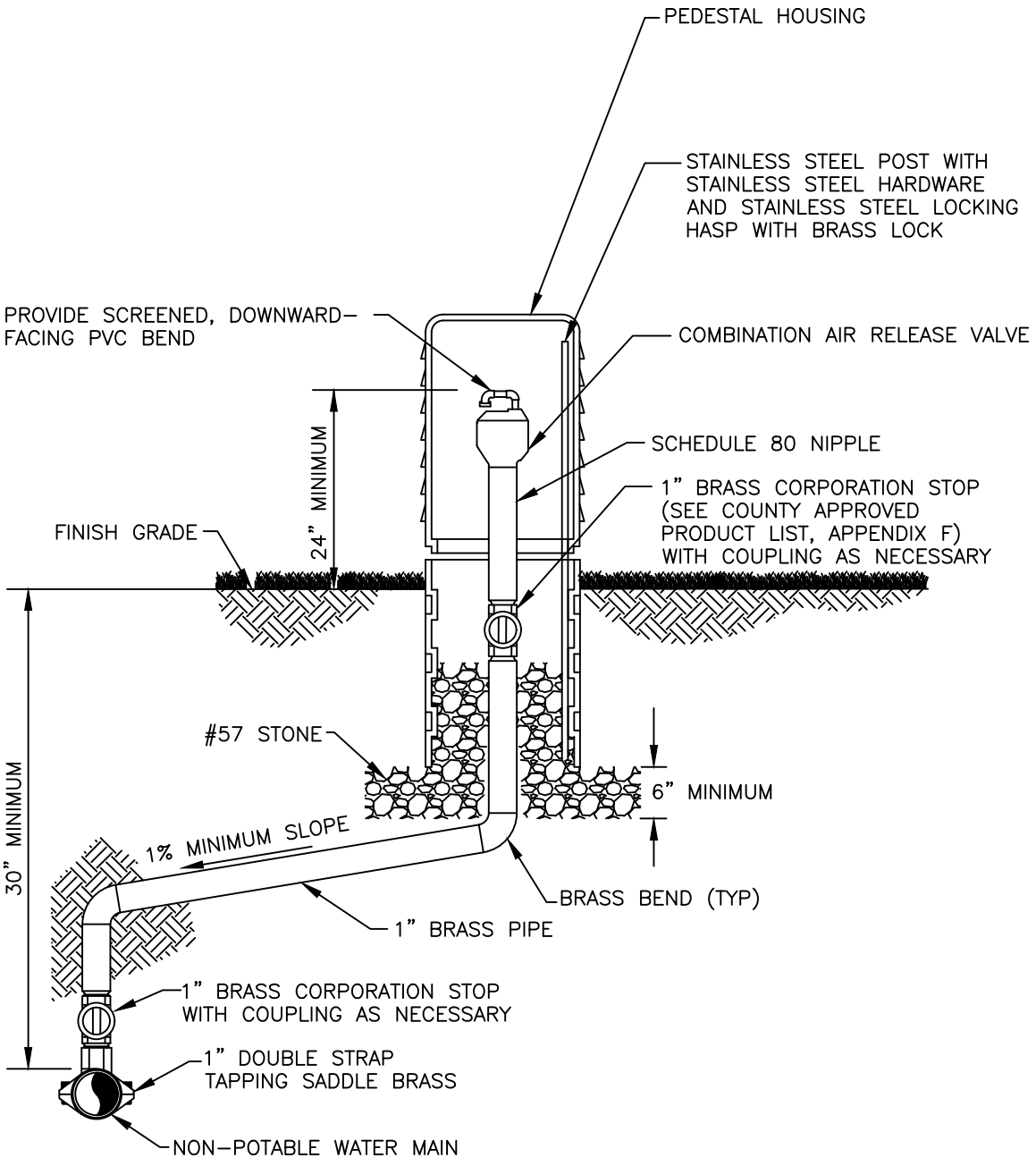




# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## RECLAIMED, RAW, AND SUPPLEMENTAL WATER AIR RELEASE VALVE DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
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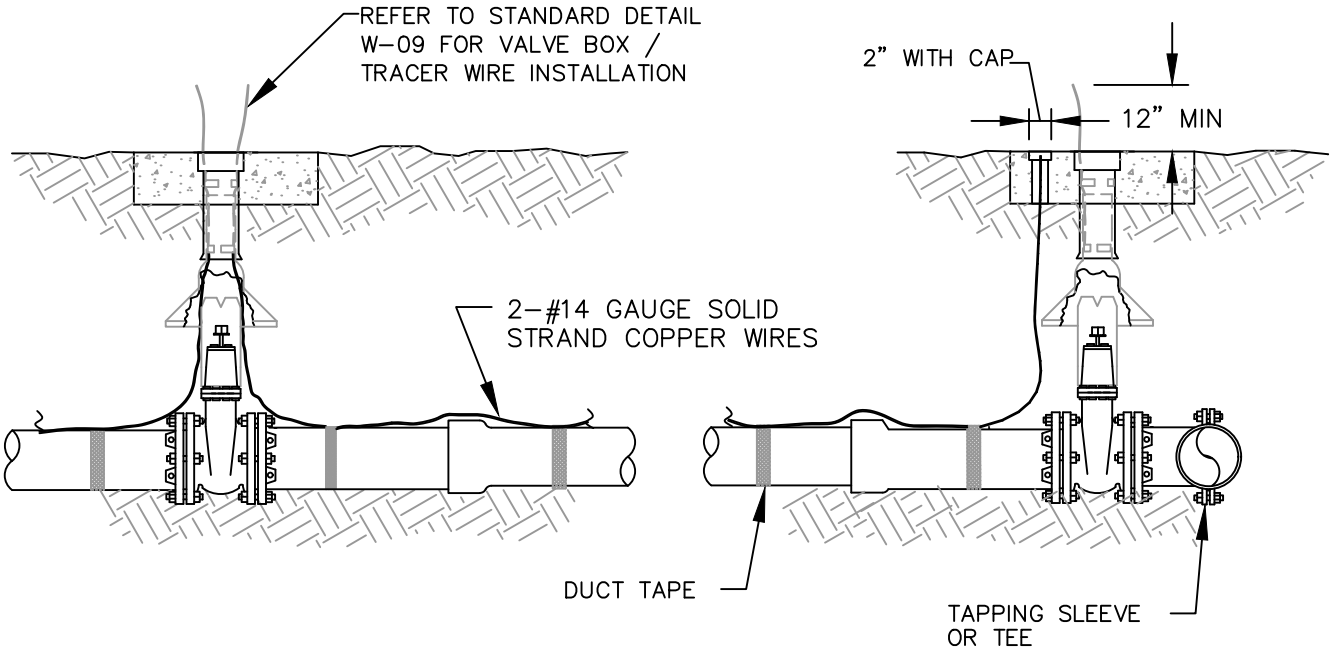
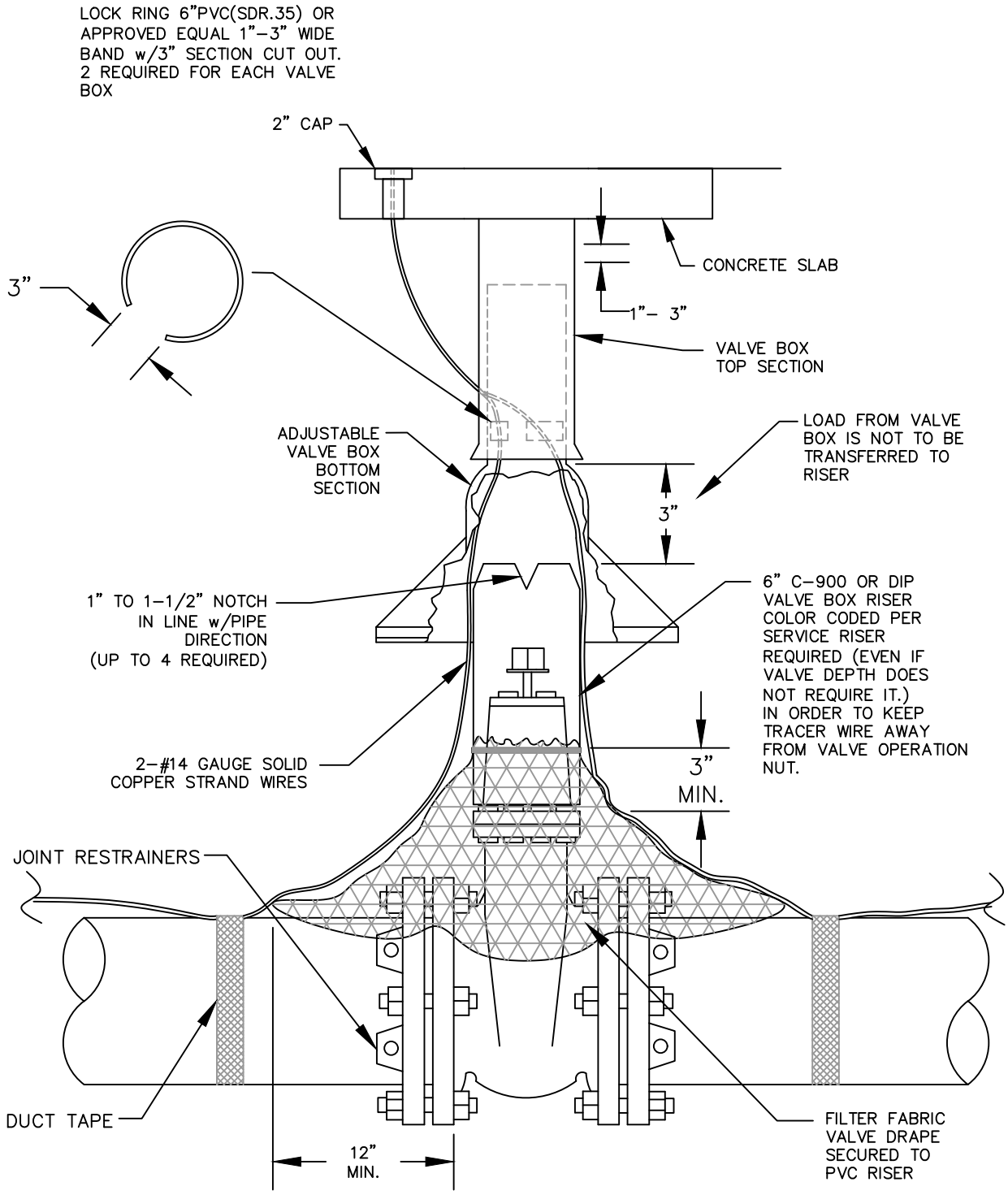



NOTES

1. USE 2. #14 GAUGE, SOLID COPPER STRAND WIRE WITH COLOR CODED INSULATION PER SERVICE.
2. THERE IS TO BE SUFFICIENT SLACK IN TRACER WIRE TO EXTEND A MIN. OF 12" ABOVE VALVE BOX.
3. WIRE IS TO CONTINUE THROUGH TEES ON MAIN LINE WHERE NO VALVES EXIST.
4. ATTACH WIRE TO TOP CENTER LINE OF MAIN USING DUCT TAPE OR APPROVED EQUAL @ 5'– 0" INTERVALS.
5. DUMMY BOXES ARE TO BE INSTALLED WHERE NEW CONSTRUCTION TIES INTO EXISTING, AND ON FIRE LINES WITH DOUBLE CHECK VALVE ASSEMBLIES WHERE MAIN ENTERS BUILDING IF NO VALVE IS INSTALLED.
6. DUMMY BOXES ARE TO CONSIST OF A TOP SECTION OF A VALVE BOX ASSEMBLY ENCASED IN A CONCRETE PAD PER STANDARD DETAIL W–05.

| | | | |
|---|---|---|---|
| | **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **TRACER WIRE INSTALLATION** | DATE **12/15/15**<br>INDEX **W-13**<br>SCALE **N.T.S.** SHEET **1 OF 1** |




# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

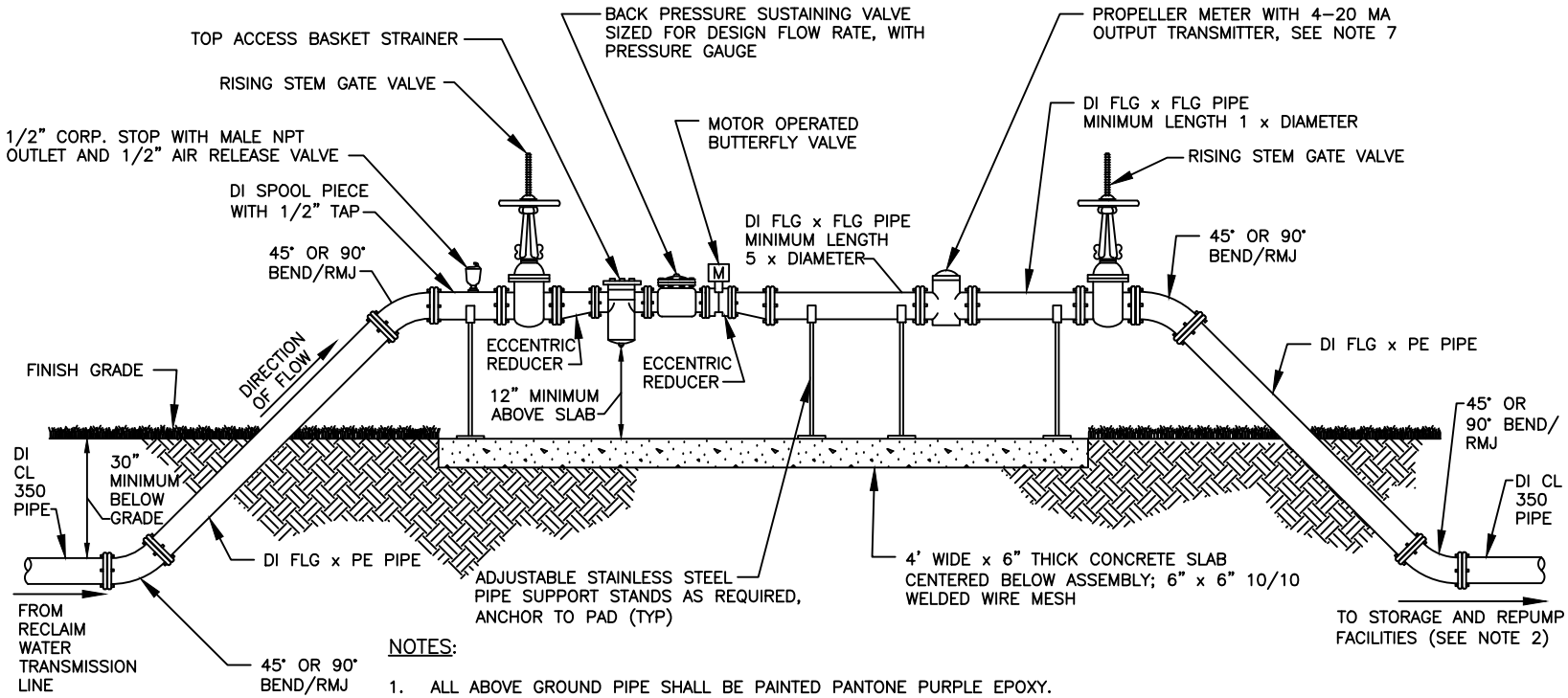
## VALVE BOX/TRACER WIRE INSTALLATION

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-14 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

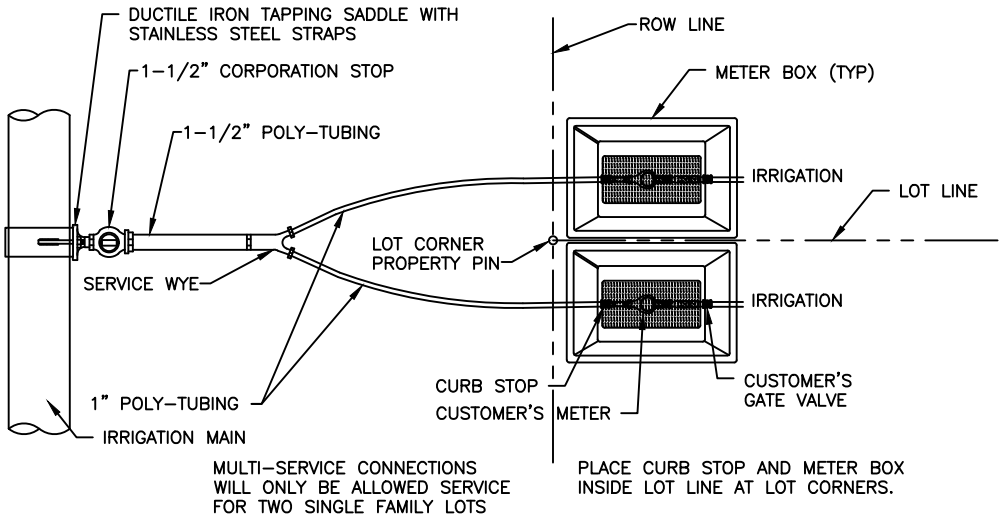
# STANDARD NON-POTABLE IRRIGATION METER ASSEMBLY SERVICE CONNECTION



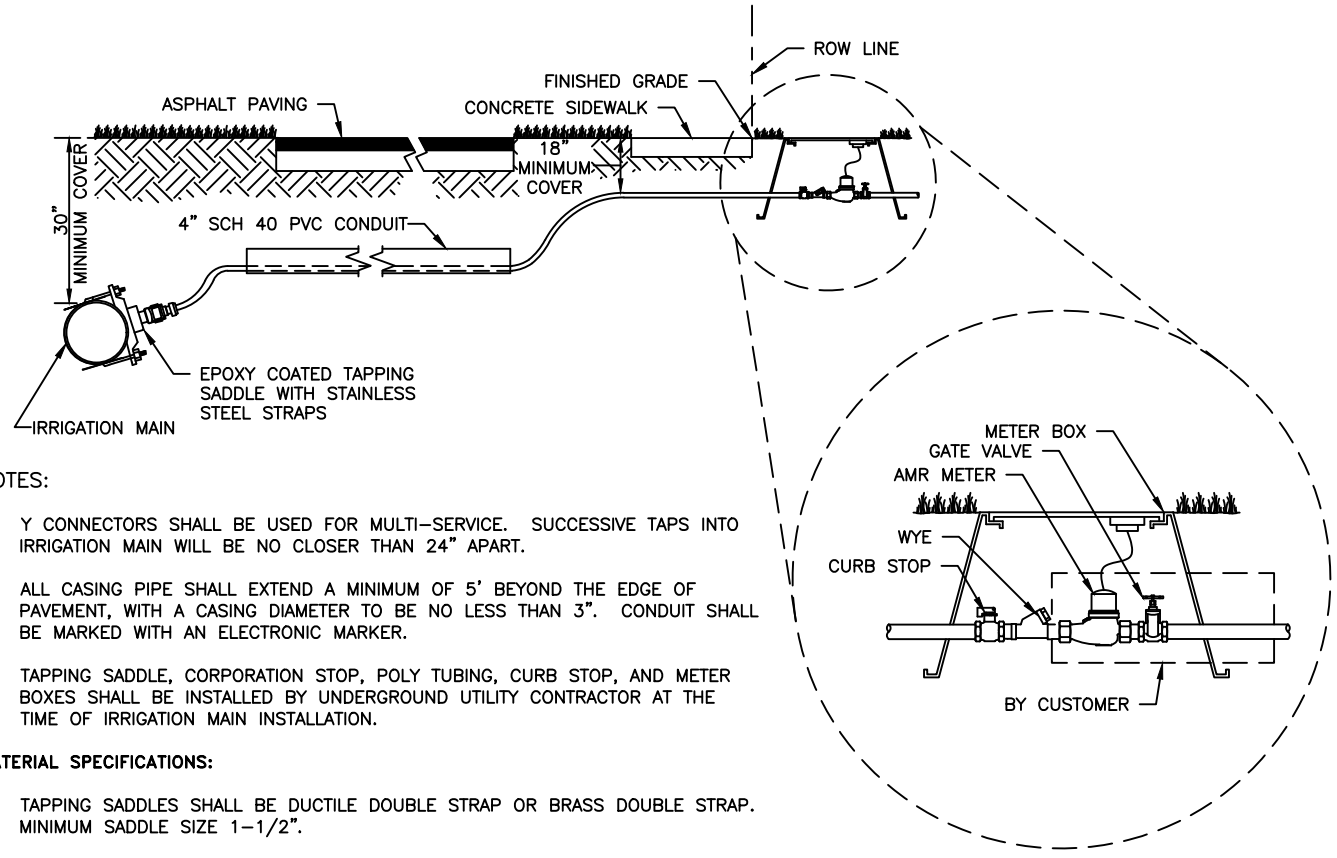

NOTES:

1. ALL ABOVE GROUND PIPE SHALL BE PAINTED PANTONE PURPLE EPOXY.
2. THIS INCLUDES ALL STORAGE AND REPUMP FACILITIES TO BE TURNED OVER AND DEDICATED TO THE CITY.
3. ALL ABOVE GROUND PIPES WILL BE FLANGED END. ALL NUTS & BOLTS SHALL BE STAINLESS STEEL.
4. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND METER. SUBMIT FOR REVIEW AND APPROVAL. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS.
5. ALL PLANTING SHALL BE A MINIMUM OF 3' FROM EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
6. ALL PIPES UNDER 3" SHALL BE BRASS.
7. METER ASSEMBLY SHALL BE LOCATED WITHIN C.U.E.
8. REFER TO NP-ELECTRICAL DETAILS FOR ADDITIONAL REQUIREMENTS AND CONDITIONS.

| DATE | INDEX | SCALE | SHEET |
|---|---|---|---|
| 12/15/15 | W-15 | N.T.S. | 1 OF 1 |




## MULTIPLE METER SERVICE CONNECTIONS




NOTES:

1. Y CONNECTORS SHALL BE USED FOR MULTI-SERVICE. SUCCESSIVE TAPS INTO IRRIGATION MAIN WILL BE NO CLOSER THAN 24" APART.

2. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 5' BEYOND THE EDGE OF PAVEMENT, WITH A CASING DIAMETER TO BE NO LESS THAN 3". CONDUIT SHALL BE MARKED WITH AN ELECTRONIC MARKER.

3. TAPPING SADDLE, CORPORATION STOP, POLY TUBING, CURB STOP, AND METER BOXES SHALL BE INSTALLED BY UNDERGROUND UTILITY CONTRACTOR AT THE TIME OF IRRIGATION MAIN INSTALLATION.

**MATERIAL SPECIFICATIONS:**

A. TAPPING SADDLES SHALL BE DUCTILE DOUBLE STRAP OR BRASS DOUBLE STRAP. MINIMUM SADDLE SIZE 1-1/2".

B. CORPORATION STOPS SHALL BE BALL TYPE AND MADE OF RED BRASS. OUTLET SHALL BE COMPRESSION TYPE POLYETHYLENE TUBE. COMPRESSION INSERT SHALL BE STAINLESS STEEL.

C. CURB STOPS SHALL BE BALL TYPE AND MADE OF RED BRASS. INLET SHALL BE COMPRESSION JOINT. OUTLET SHALL BE SWIVEL NUT FOR METER CONNECTION.

D. AUTOMATIC METER READER (AMR) METER BOXES SHALL HAVE CAST IRON READ LID.

# CITY OF TARPON SPRINGS

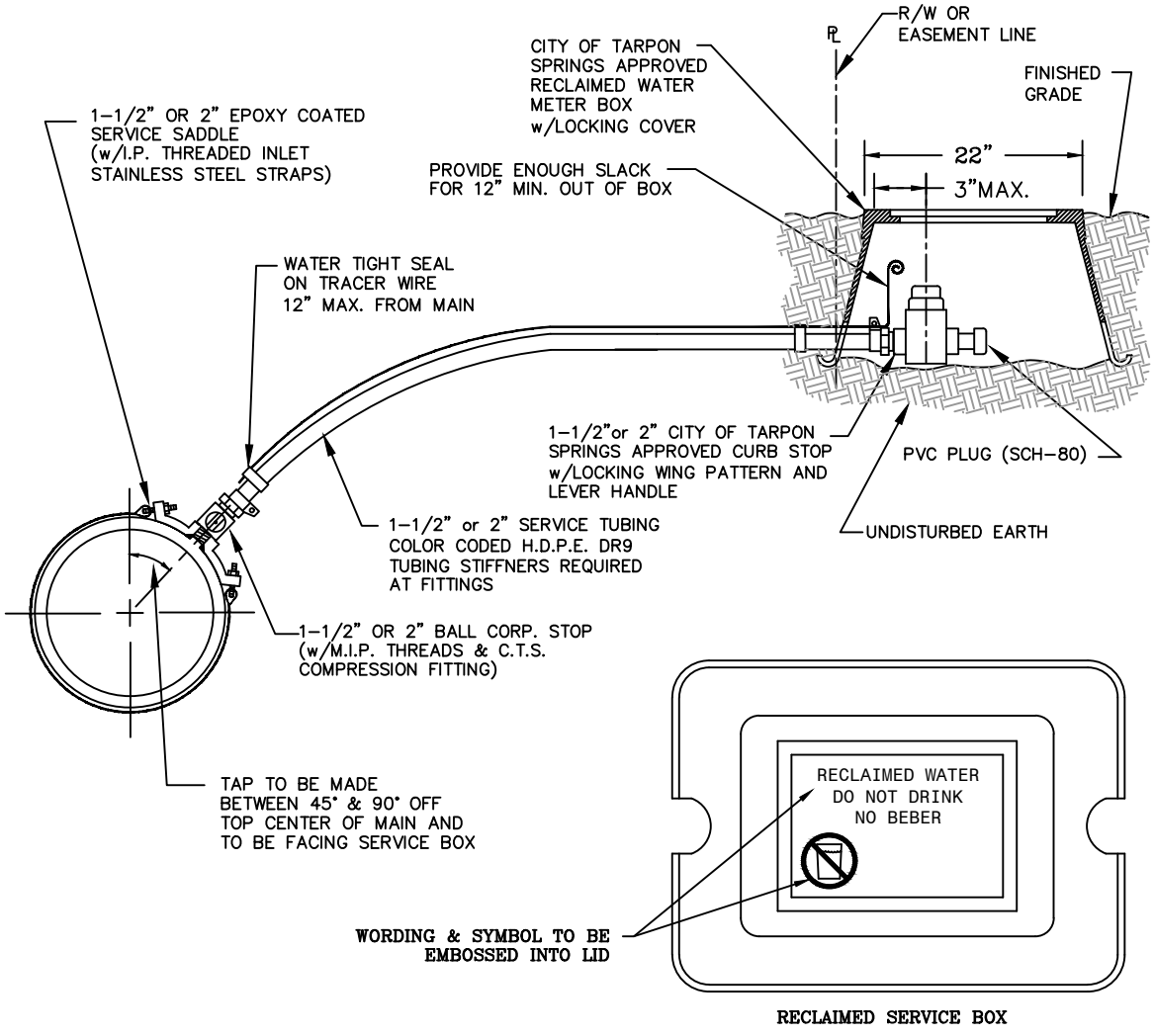
PINELLAS COUNTY, FLORIDA

## TYPICAL IRRIGATION SERVICE METER SETTING DETAIL FOR CONNECTION TO IRRIGATION MAIN

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-16 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

NOTES:

1. ALL CORPORATION STOPS TO BE FOR USE WITH DR 9 (C.T.S.) H.D.P.E. TUBING.
2. SERVICE SADDLE REQUIRED FOR ALL TAPS.
3. METER ONLY, TO BE FURNISHED BY CITY OF TARPON SPRINGS. (IF REQUIRED)
4. SERVICE BOXES SHALL BE PER CITY OF TARPON SPRINGS APPROVED MATERIAL SPECIFICATIONS.
5. ALL SERVICE BOXES LOCATED WITHIN VEHICULAR AREAS SHALL BE H–20 LOADING. ALL OTHERS SHALL BE H–10 LOADING.
6. TRACER WIRE ONLY REQUIRED ON SERVICES OVER 40' IN LENGTH




RECLAIMED SERVICE BOX



# CITY OF TARPON SPRINGS

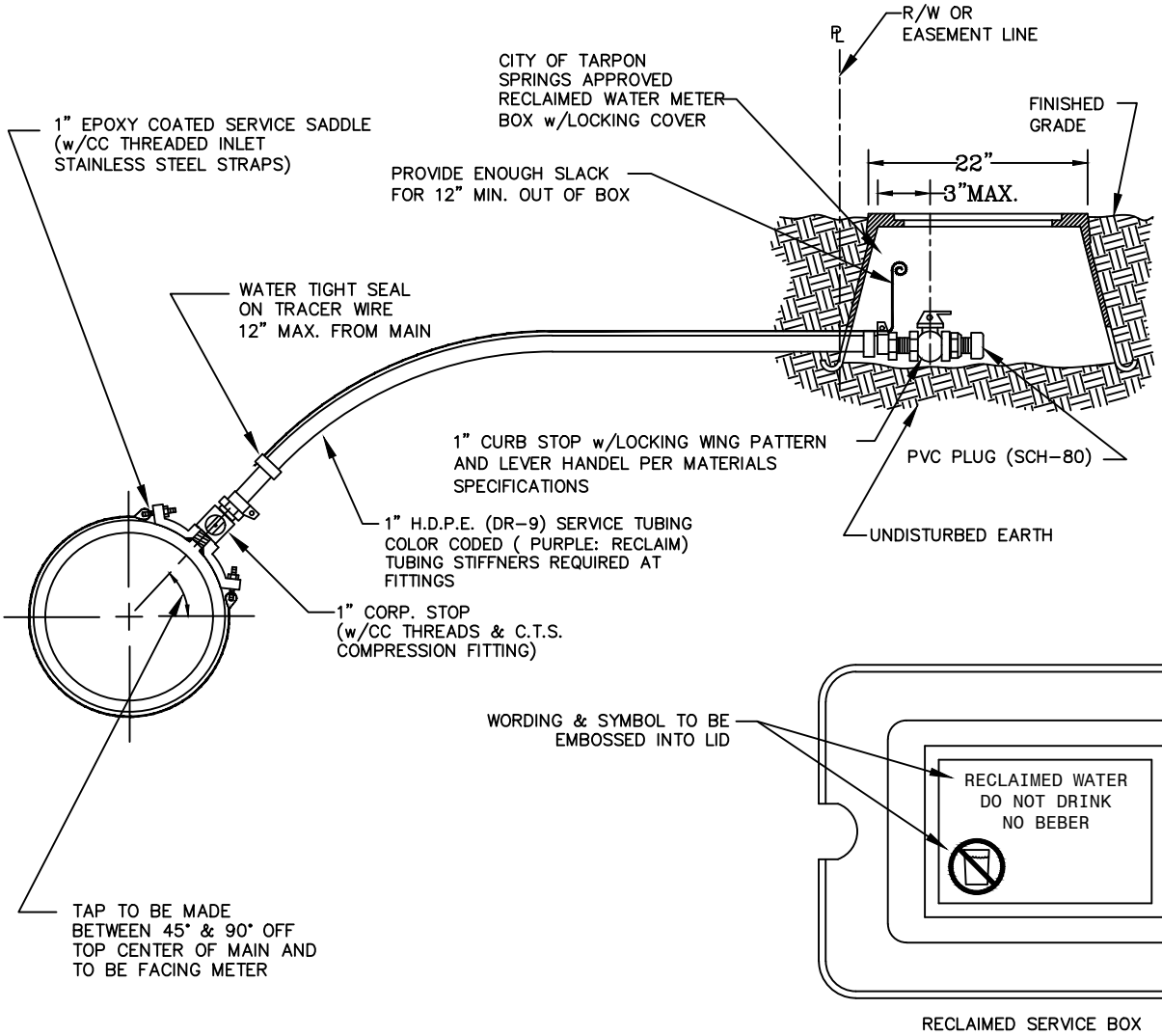
PINELLAS COUNTY, FLORIDA

## 1½" OR 2" METERED RECLAIM WATER SERVICE

| | |
|---|---|
| DATE | 10/16/17 |
| INDEX | W-17 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

NOTES:

1. ALL CORPORATION STOPS TO BE FOR USE WITH DR 9 (C.T.S.) H.D.P.E. TUBING.
2. SERVICE SADDLE REQUIRED FOR ALL TAPS.
3. METER ONLY, TO BE FURNISHED BY CITY OF TARPON SPRINGS (IF REQUIRED).
4. METER BOXES SHALL BE PER CITY OF TARPON SPRINGS APPROVED MATERIAL SPECIFICATIONS WITH LOCKING LIDS.
5. ALL METER BOXES LOCATED WITHIN VEHICULAR AREAS SHALL BE H-20 LOADING. ALL OTHERS SHALL BE H-10 LOADING.
6. TRACER WIRE ONLY REQUIRED ON SERVICES OVER 40' IN LENGTH.
7. 1" SERVICE LINES OVER 60' SHALL BE INSTALLED USING 1-1/2" TUBING.







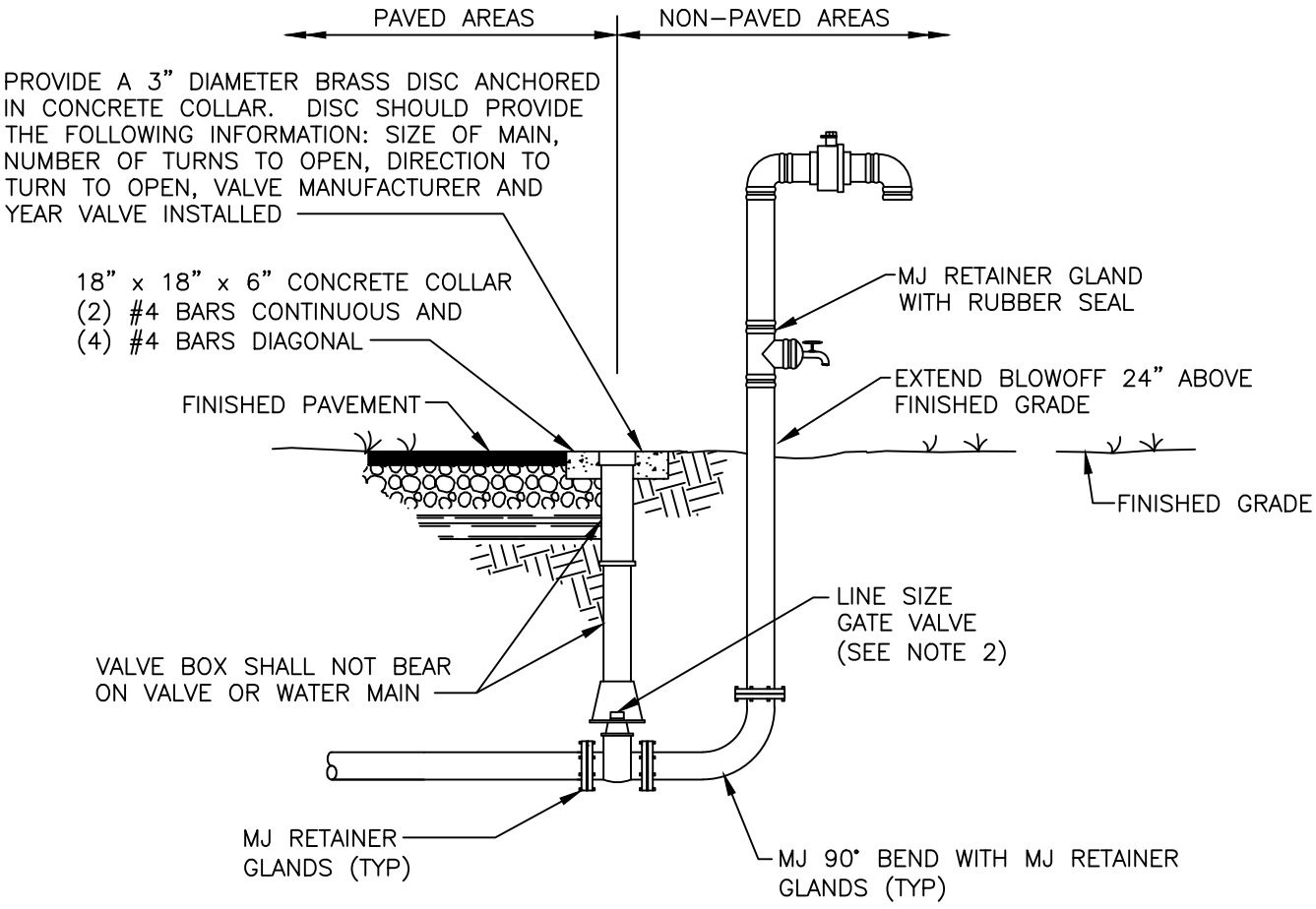
RECLAIMED SERVICE BOX

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## 1" METERED RECLAIM WATER SERVICE

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-18 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

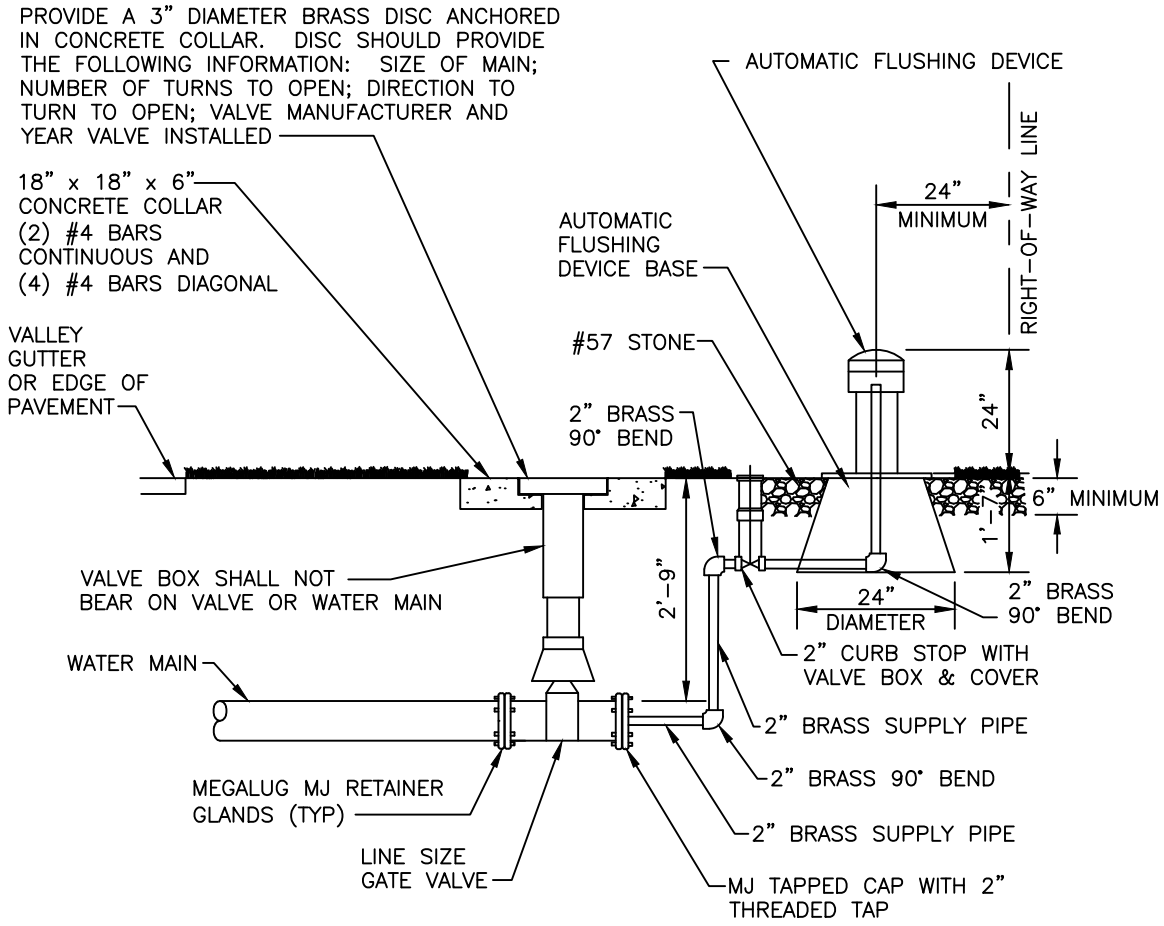



SIDE VIEW

NOTES:

1. MJ TAPPED CAP WITH HOSE BIBB IS TO BE REMOVED AFTER INITIAL BACTERIOLOGICAL CLEARANCE AND PRIOR TO WATER MAIN ACCEPTANCE.
2. SEE TECHNICAL SPECIFICATIONS SECTION 331200 FOR GATE VALVE AND VALVE BOX REQUIREMENTS.
3. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | TEMPORARY BLOWOFF ASSEMBLY WITH BACTERIAL SAMPLE POINT DETAIL | DATE 12/15/15<br>INDEX W-19<br>SCALE N.T.S. / SHEET 1 OF 1 | |




NOTES:

1. PIPING SHALL BE INSTALLED UP TO 2" CURB STOP WITH VALVE BOX AND COVER AT TIME OF MAIN INSTALLATION.
2. AUTOMATIC FLUSHING DEVICE SHALL BE SHUT OFF UNTIL MAIN LINE HAS BEEN BACTERIOLOGICALLY TESTED.
3. ALL THREAD HARD PIPING SHALL BE BRASS.
4. CITY OF TARPON SPRINGS TECHNICAL SPECIFICATIONS SECTION 331200 FOR GATE VALVE AND VALVE BOX REQUIREMENTS.
5. AT TIME OF ACCEPTANCE, WATER DEPARTMENT WILL INSTALL 2" METER.
6. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.



# CITY OF TARPON SPRINGS

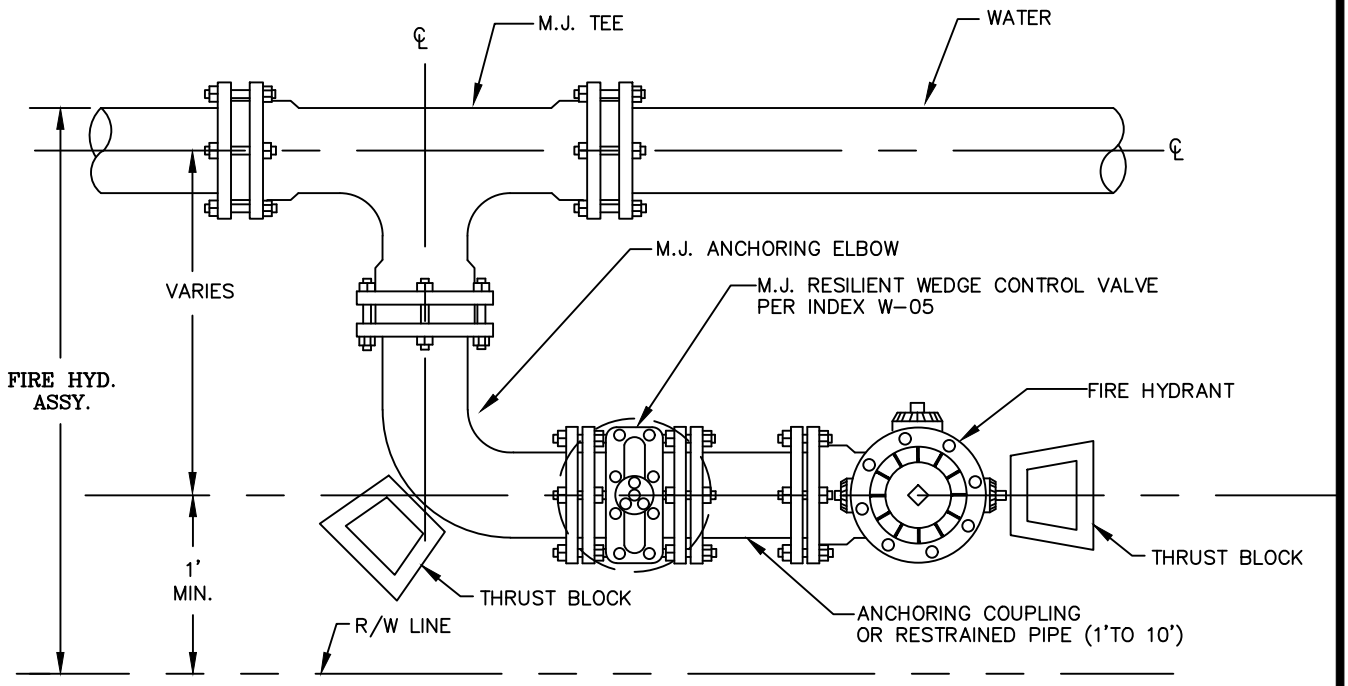
PINELLAS COUNTY, FLORIDA

## AUTOMATIC WATER MAIN FLUSHING DEVICE DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-20 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |

NOTES:

1. ALL BOLTED FITTINGS ARE TO BE POLYETHYLENE WRAPPED, COLOR CODED PER SERVICE.
2. IF FIRE HYDRANT IS TO BE LOCATED WITHIN 10 FT. OR LESS OF A VEHICULAR TRAVELED AREA, GUARD POSTS MAY BE REQUIRED UNLESS OTHERWISE APPROVED BY CITY OF TARPON SPRINGS ENGINEERING OR THEIR AUTHORIZED REPRESENTATIVE.
3. IF DISTANCE BETWEEN VALVE AND HYDRANT IS 10 FT. OR GREATER, AN ADDITIONAL VALVE IS TO BE INSTALLED FOR CONTROL OF HYDRANT UNLESS OTHERWISE APPROVED BY CITY OF TARPON SPRINGS ENGINEERING OR THEIR APPROVED REPRESENTATIVE.
4. HYDRANT IS TO BE INSTALLED PLUMB
5. HYDRANT TO BE PAINTED UPON INSTALLATION PER CITY OF TARPON SPRINGS APPROVED PRODUCTS AND COLORS.




1. TEE MAY BE ROTATED TO OBTAIN PROPER BURY ON FIRE HYD.
2. ANCHORING ELBOW MAY BE SWITCHED (LONG vs. SHORT END) AND ROTATED TO SET FIRE HYD. IN OPPOSITE DIRECTION.
3. ANCHORING COUPLINGS MAY BE REPLACED WITH RESTRAINED PIPE (1' TO 10').

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PARALLEL FIRE HYDRANT

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-21 |
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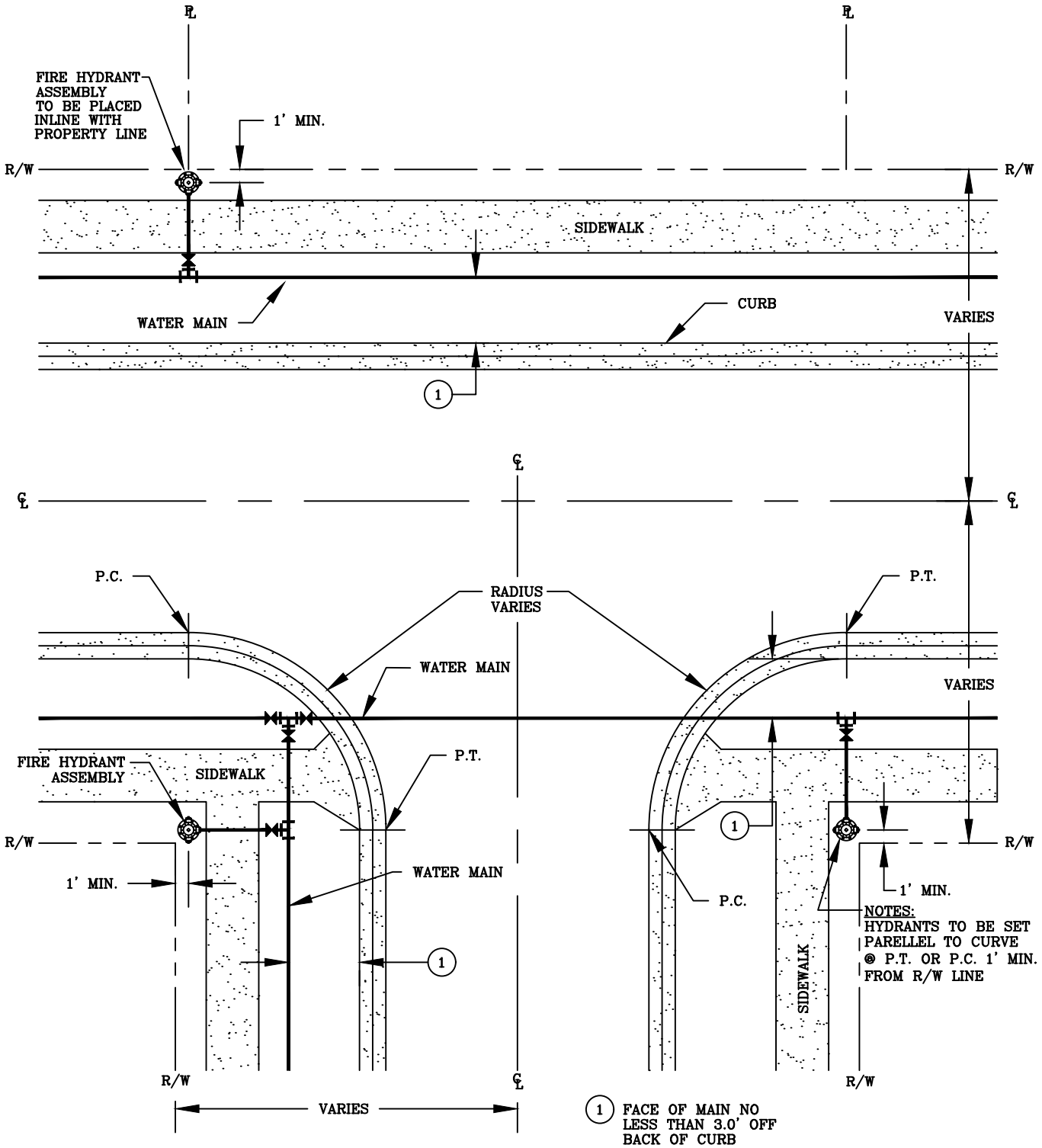


# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## TYPICAL FIRE HYDRANT LOCATIONS

| | |
|---|---|
| DATE | 12/15/15 |
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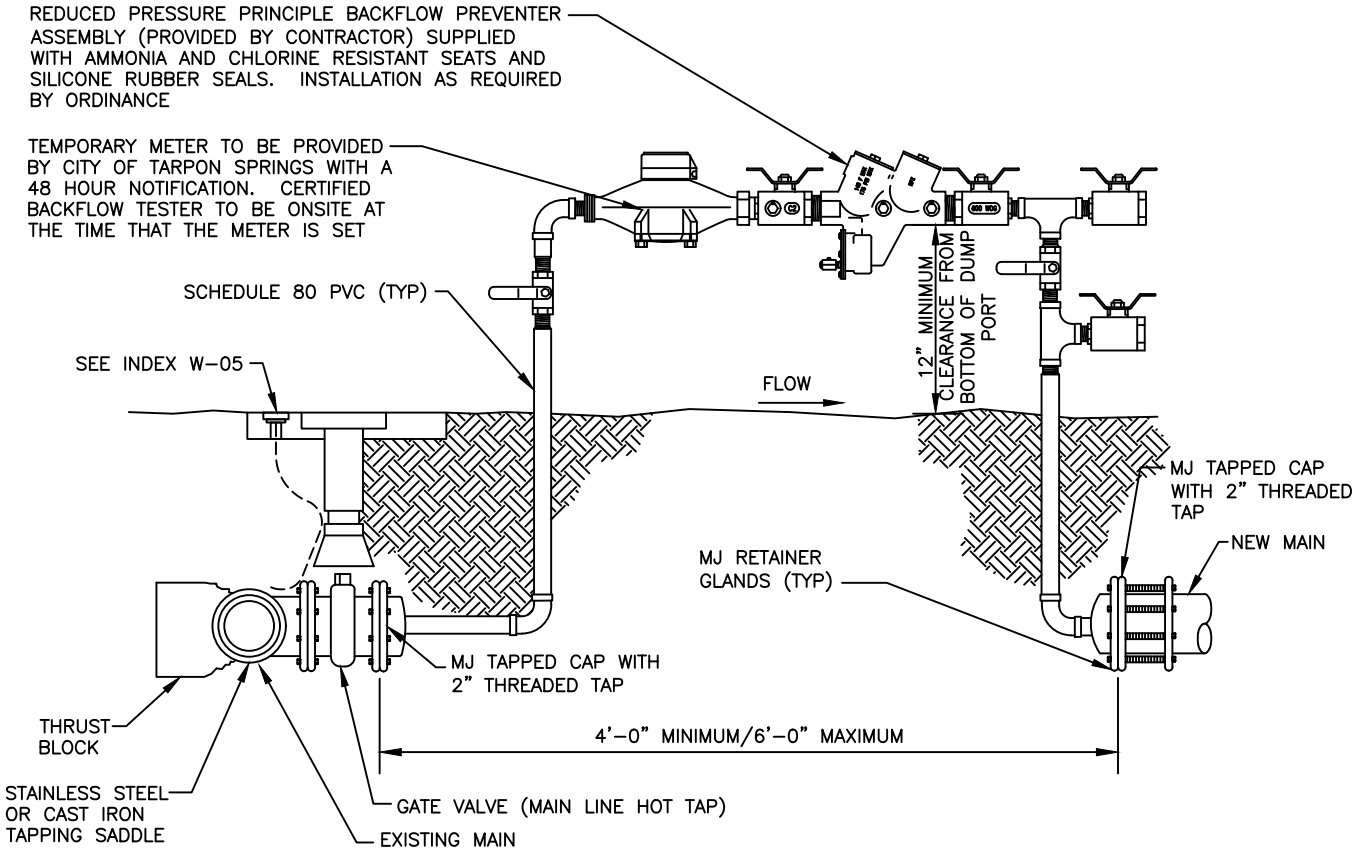


NOTES:

1. FINAL CONNECTION TO BE WITNESSED BY CITY OF TARPON SPRINGS WATER DISTRIBUTION.
2. MJ TAPPED CAPS TO BE PROPERLY RESTRAINED.
3. INSTALL JUMPER TAP SYSTEM FOR TEMPORARY METER DOWNSTREAM OF BLIND FLANGE FOR CONSTRUCTION WATER.
4. TAPPING SADDLES SHALL BE STAINLESS STEEL. ALL TAPPING SADDLES FOR ASBESTOS CEMENT PIPE SHALL BE STAINLESS STEEL.
5. JUMPER ASSEMBLY MUST BE MINIMUM OF 18" ABOVE FINISHED GRADE.
6. BACKFLOW ASSEMBLY REQUIRES INITIAL CERTIFICATION BY CERTIFIED BACKFLOW TESTER.
7. THIS ASSEMBLY SHALL ONLY BE USED IF NO COMBUSTIBLES WILL BE ON SITE. IF COMBUSTIBLES ARE BROUGHT ON SITE, THEN THE TEMPORARY BACKFLOW PREVENTERS AND FIRE PROTECTION METER TIE-IN ASSEMBLY SHALL BE USED.
8. THIS ASSEMBLY IS NOT APPROVED TO PROVIDE FIRE PROTECTION WATER TO THE SITE DURING CONSTRUCTION. ASSEMBLY NOT TO BE REMOVED AND SPOOL PIECE INSTALLED FOR FINAL CONNECTION UNTIL AFTER TESTING, BACTERIAL CLEARANCE, FINAL INSPECTION AND COUNTY ACCEPTANCE.
9. GAP CONFIGURATION TO BE INSTALLED WITHIN 24 HOURS OR LESS AT THE DISCRETION OF THE WATER DISTRIBUTION DEPARTMENT.
10. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | CONNECTION TO EXISTING WATER MAIN DETAIL (GAP CONFIGURATION) | DATE | 12/15/15 |
| | | INDEX | W-23 |
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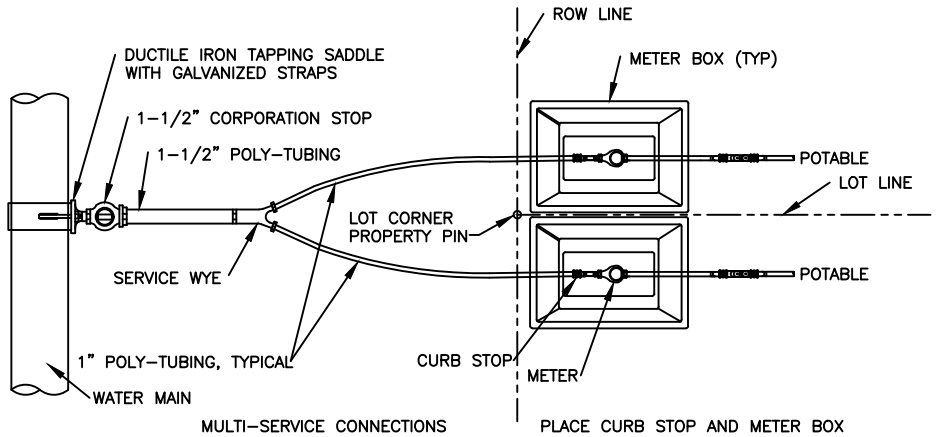
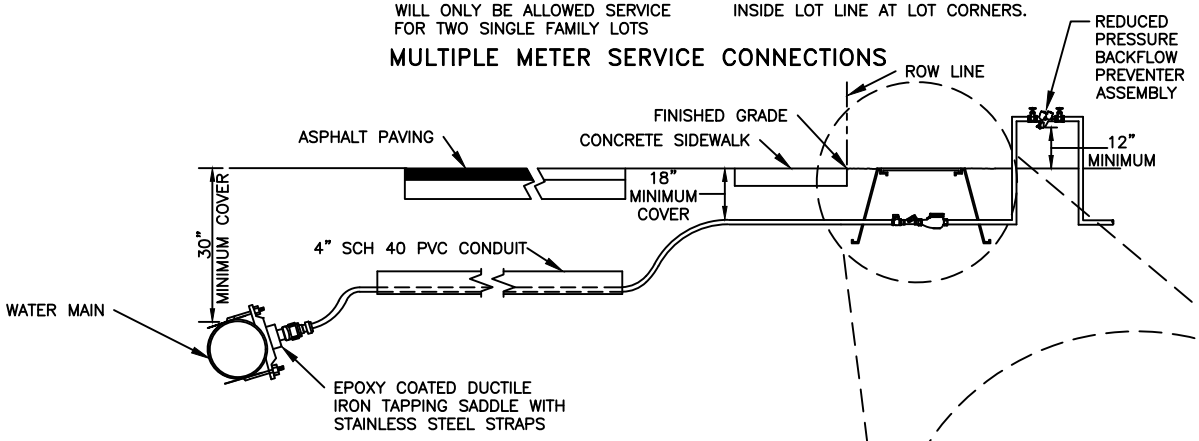
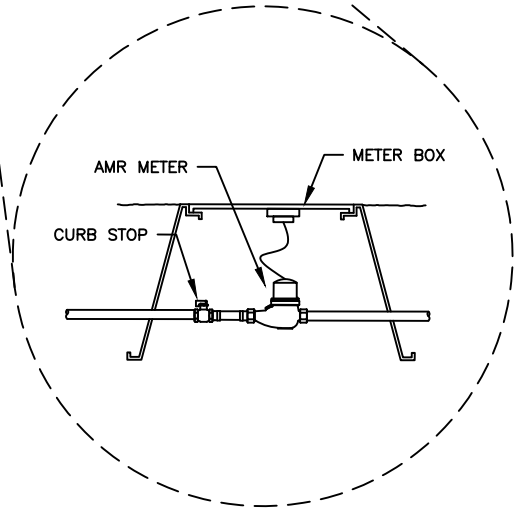



MULTI–SERVICE CONNECTIONS WILL ONLY BE ALLOWED SERVICE FOR TWO SINGLE FAMILY LOTS

PLACE CURB STOP AND METER BOX INSIDE LOT LINE AT LOT CORNERS.

## MULTIPLE METER SERVICE CONNECTIONS




NOTES:

1. CONNECTORS Y SHALL BE USED FOR MULTI–SERVICE. SUCCESSIVE TAPS INTO WATER MAIN WILL BE NO CLOSER THAN 24" APART.
2. ALL CASING PIPE SHALL EXTEND A MINIMUM OF 5' BEYOND THE EDGE OF PAVEMENT, WITH A CASING DIAMETER TO BE NO LESS THAN 4". CONDUIT SHALL BE MARKED WITH A ELECTRONIC MARKER.
3. TAPPING SADDLE, CORPORATION STOP, POLY TUBING, CURB STOP, AND METER BOXES SHALL BE INSTALLED BY UNDERGROUND UTILITY CONTRACTOR AT THE TIME OF WATER MAIN INSTALLATION.
4. MATERIAL SPECIFICATIONS:
   A. TAPPING SADDLES SHALL BE DUCTILE DOUBLE STRAP OR BRASS DOUBLE STRAP. MINIMUM SADDLE SIZE 1–1/2".
   B. CORPORATION STOPS SHALL BE BALL TYPE AND MADE OF RED BRASS. OUTLET SHALL BE COMPRESSION TYPE POLYETHYLENE TUBE. COMPRESSION INSERT SHALL BE STAINLESS STEEL.
   C. CURB STOPS SHALL BE BALL TYPE AND MADE OF RED BRASS. INLET SHALL BE COMPRESSION JOINT. OUTLET SHALL BE SWIVEL NUT FOR METER CONNECTION.
   D. TUBING SHALL BE POLYETHYLENE, PE3408, (AWWA C–901, SDS 9–200) AND BLUE IN COLOR; SIZES SHALL BE 1–1/2" UP TO WYE AND 1" AFTER WYE FOR LONG AND SHORT SIDE SERVICES.
   E. AUTOMATIC METER READER (AMR) METER BOXES SHALL HAVE CAST IRON READ LID.
   F. POLYETHYLENE PIPE (PE) SHALL MEET THE REQUIREMENTS OF AWWA C–901.
5. ALL PLANTINGS SHALL BE A MINIMUM 1.5' FROM METER BOX, AND SHALL PROVIDE A 3' ACCESS OPENING.
6. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

# TYPICAL SHORT AND LONG SIDE WATER SERVICE METER SETTING DETAIL

| | |
|---|---|
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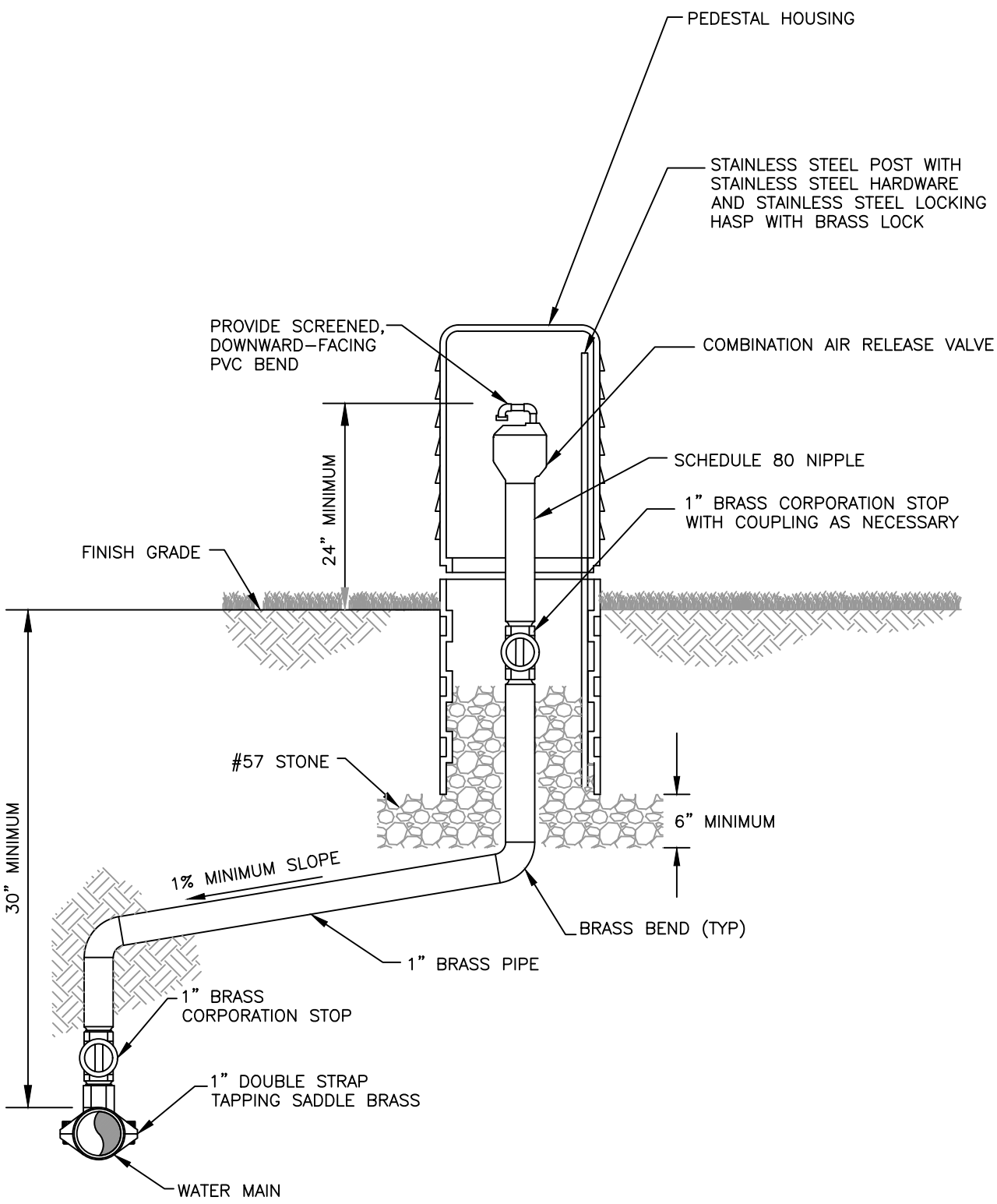


# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## POTABLE WATER AIR RELEASE VALVE DETAIL

| | |
|---|---|
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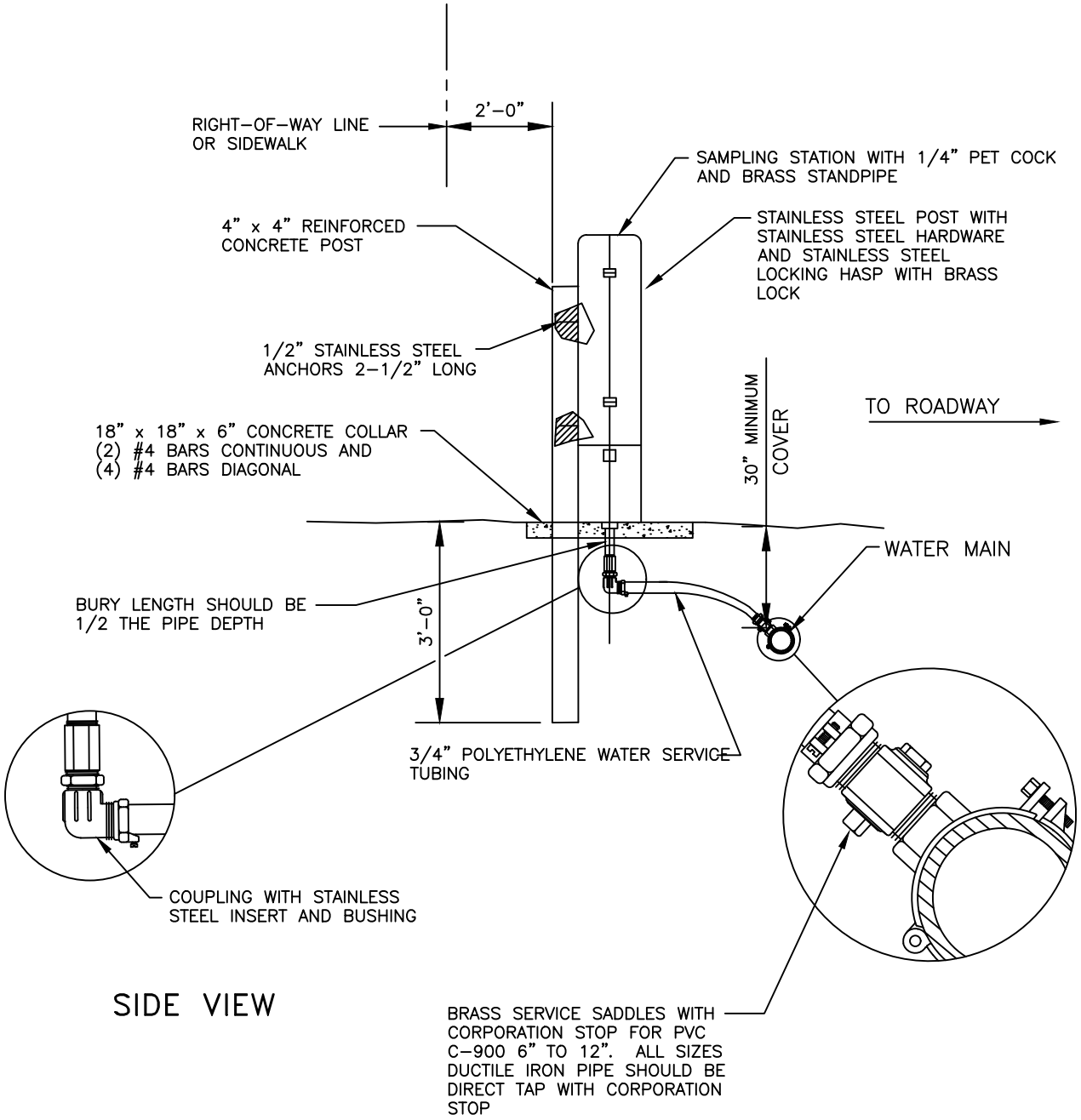


SIDE VIEW

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PERMANENT BACTERIAL SAMPLE POINT DETAIL

| | |
|---|---|
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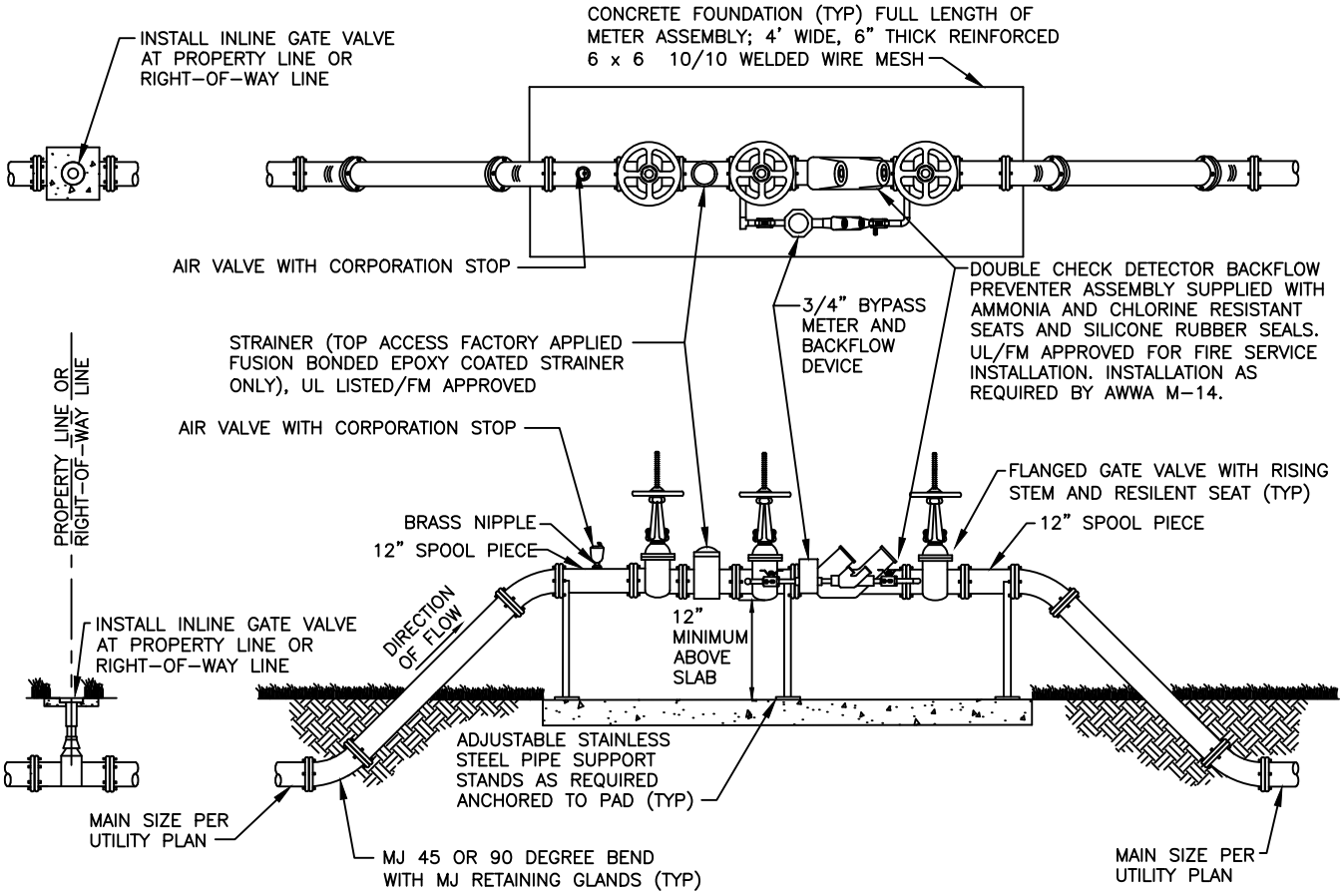


NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND ASSEMBLY. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. AS THIS UNIT WILL REQUIRE PERIODIC TESTING, FACILITIES REQUIRING CONTINUOUS WATER SERVICE MAY WISH TO INSTALL PARALLEL UNITS TO PREVENT SERVICE INTERRUPTIONS.
4. ASSEMBLY WILL BE OWNED AND MAINTAINED BY PROPERTY OWNER, STARTING AFTER THE INLINE GATE VALVE AT THE PROPERTY LINE OR RIGHT-OF-WAY LINE.
5. CITY OF TARPON SPRINGS WILL REQUIRE DEDICATION OF MATERIAL UP TO AND INCLUDING THE INLINE GATE VALVE FROM THE FROM THE CITY'S WATER MAIN.
6. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER.
7. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
8. THIS ASSEMBLY SHALL BE PAINTED WITH RED EPOXY PAINT.
9. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
10. A REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE USED WHEN HIGH HAZARDS, AS DEFINED BY AWWA M-14 (e.g., RISK OF CHEMICAL ADDITION, MEDICAL FACILITIES, INDUSTRIAL FACILITIES, PROPERTIES USING RECLAIMED WATER, ETC.), EXIST.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | FIRE SYSTEM ASSEMBLY DETAIL | DATE | 12/15/15 |
| | | INDEX | W-27 |
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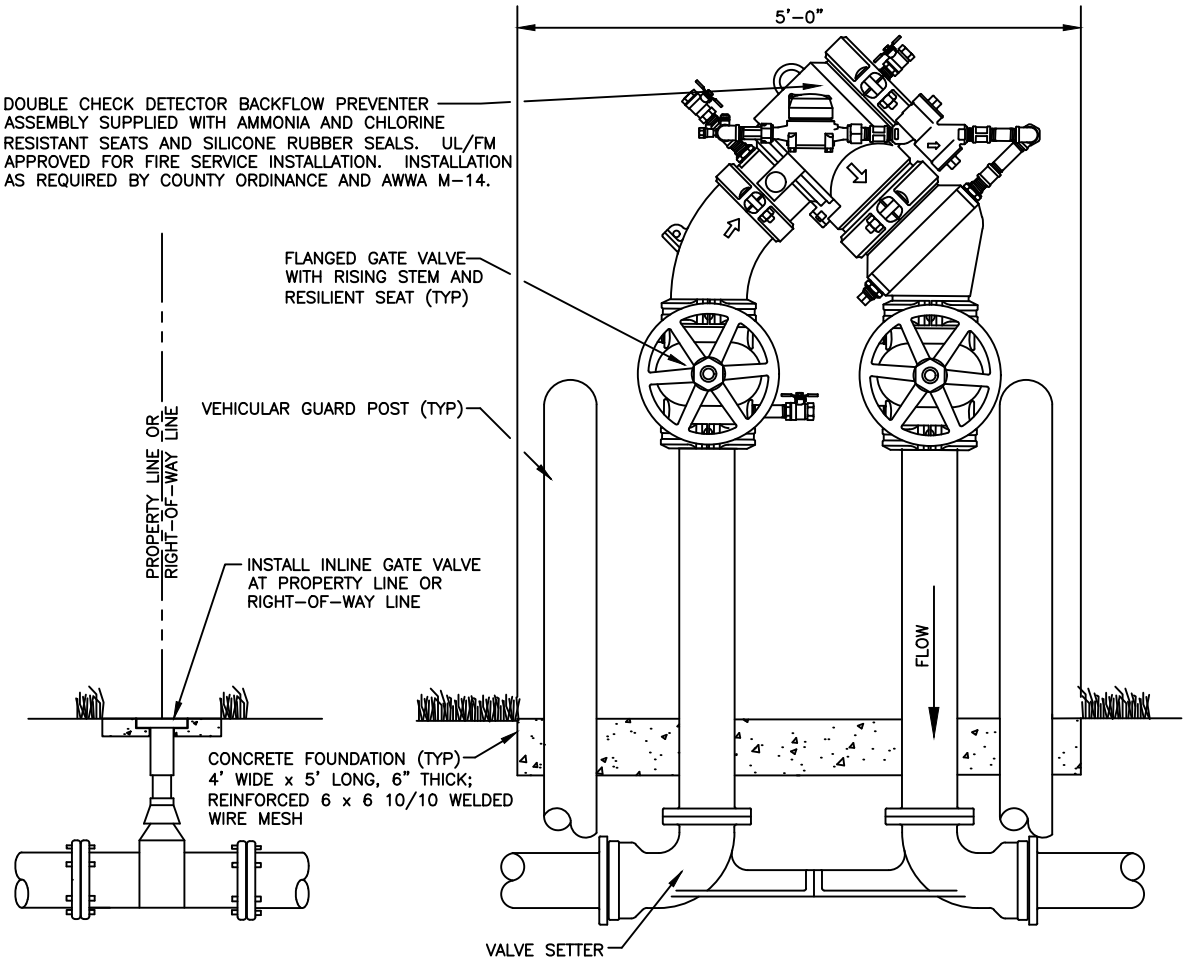


4" THROUGH 10" ONLY COMPACT FIRE SYSTEM
DETECTOR CHECK ASSEMBLY DETAIL
NTS

NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND ASSEMBLY. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. AS THIS UNIT WILL REQUIRE PERIODIC TESTING, FACILITIES REQUIRING CONTINUOUS WATER SERVICE MAY WISH TO INSTALL PARALLEL UNITS TO PREVENT SERVICE INTERRUPTIONS.
4. ASSEMBLY WILL BE OWNED AND MAINTAINED BY PROPERTY OWNER, STARTING AFTER THE INLINE GATE VALVE AT THE PROPERTY LINE OR RIGHT-OF-WAY LINE.
5. CITY OF TARPON SPRING WILL REQUIRE DEDICATION OF MATERIAL UP TO AND INCLUDING THE INLINE GATE VALVE FROM THE CITY OF TARPON SPRING'S WATER MAIN.
6. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER.
7. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
8. THIS ASSEMBLY SHALL BE PAINTED WITH RED EPOXY PAINT.
9. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
10. A REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE USED WHEN HIGH HAZARDS, AS DEFINED BY AWWA M-14 (e.g., RISK OF CHEMICAL ADDITION, MEDICAL FACILITIES, INDUSTRIAL FACILITIES, PROPERTIES USING RECLAIMED WATER, ETC.), EXIST.



# CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

## 4" THROUGH 10" COMPACT FIRE SYSTEM ASSEMBLY

| | |
|---|---|
| DATE | 12/15/15 |
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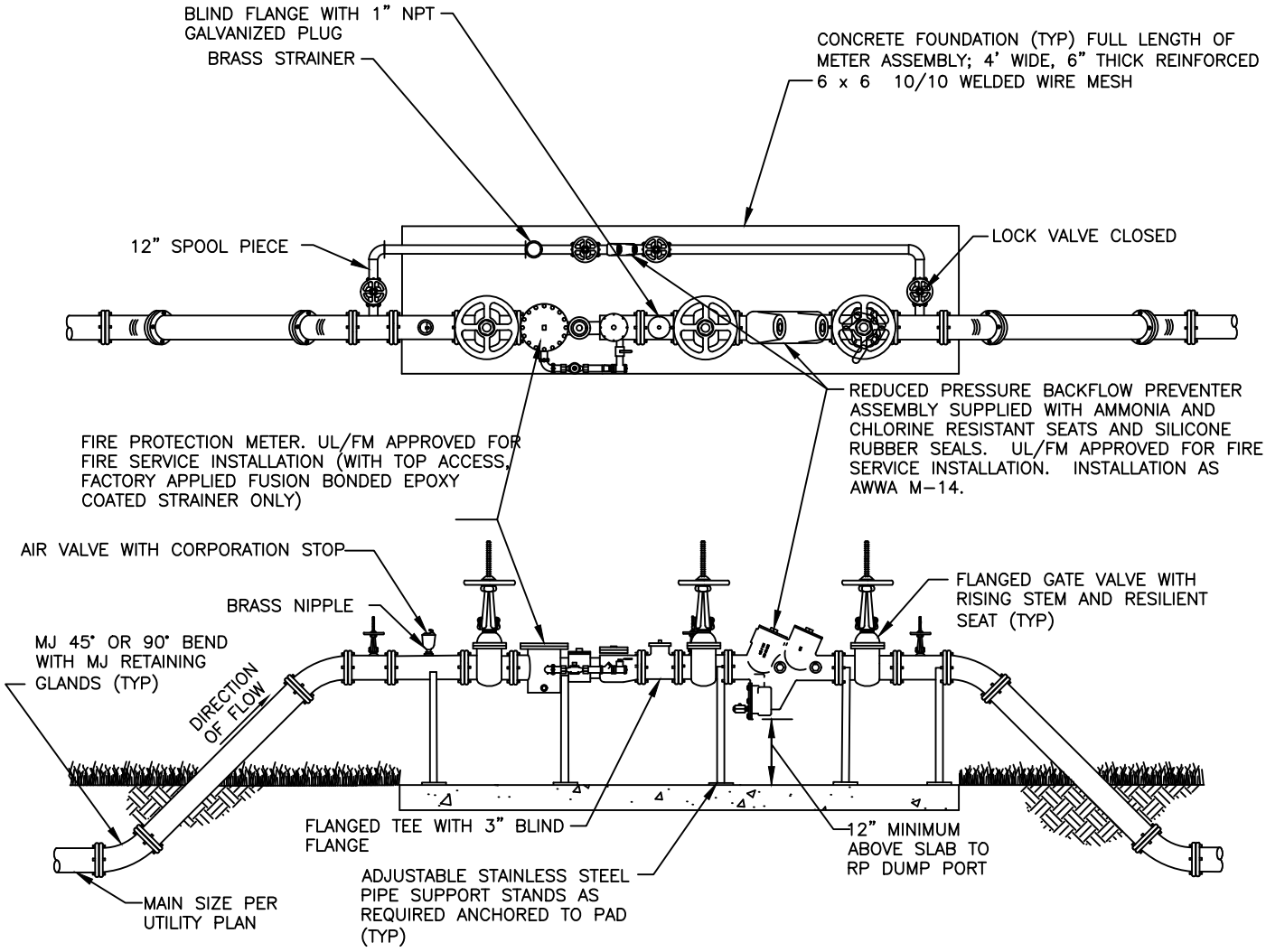
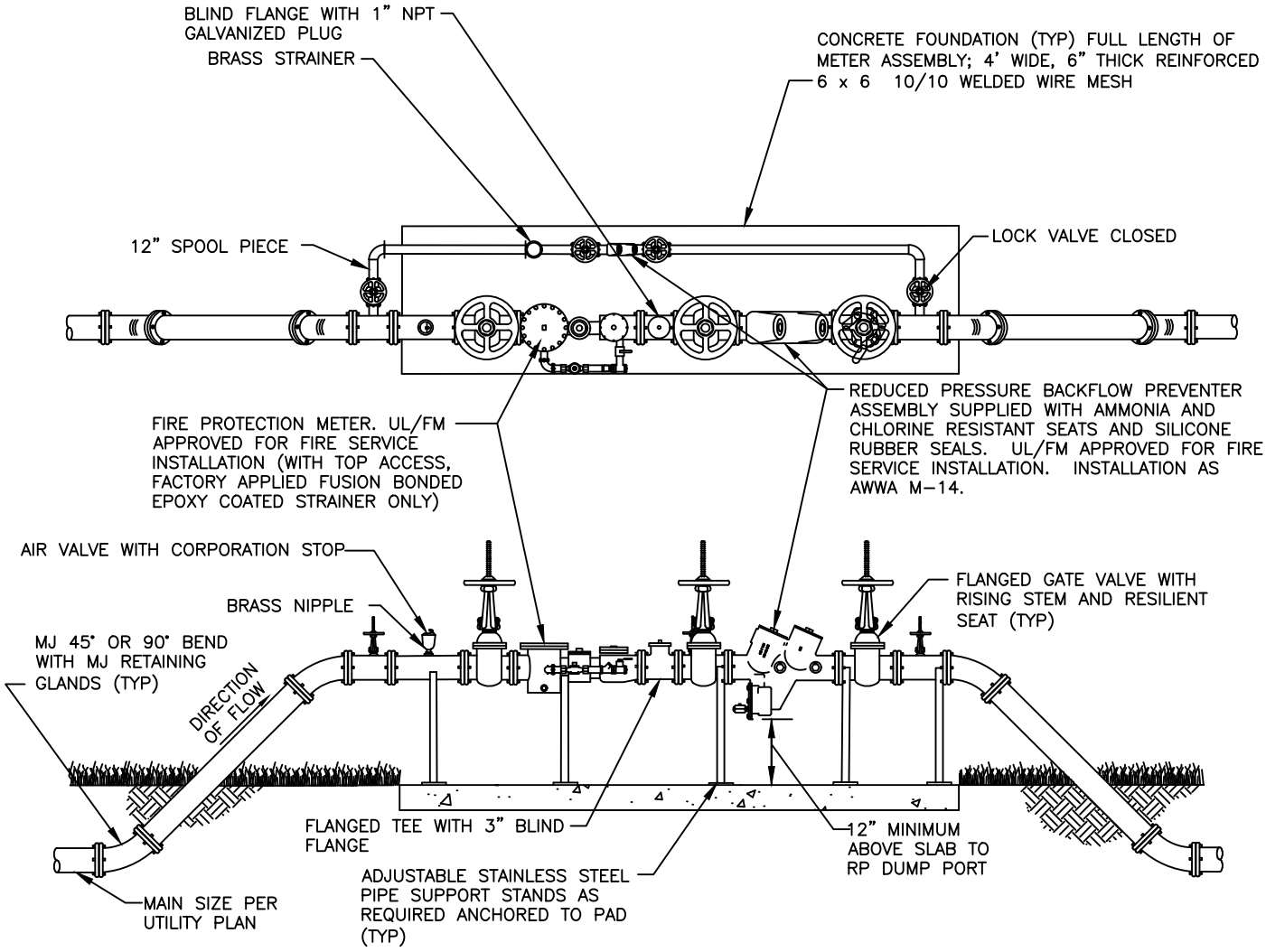



NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND METER. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. THIS ASSEMBLY IS PERMITTED FOR COMBINATION FIRE AND POTABLE WATER SERVICE.
4. AS THIS UNIT WILL REQUIRE PERIODIC TESTING, FACILITIES REQUIRING CONTINUOUS WATER SERVICE SHALL PROVIDE PARALLEL UNITS OR FULL SIZE BYPASSES TO PREVENT SERVICE INTERRUPTIONS.
5. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER.
6. CITY OF TARPON SPRINGS REQUIRES DEDICATION OF ALL ABOVE GROUND MATERIAL AND EQUIPMENT FROM THE METER ASSEMBLY BACK TO THE CITY OF TARPON SPRINGS MAIN.
7. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
8. STRAINER SHALL HAVE FUSION-BONDED EPOXY COATING.
9. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

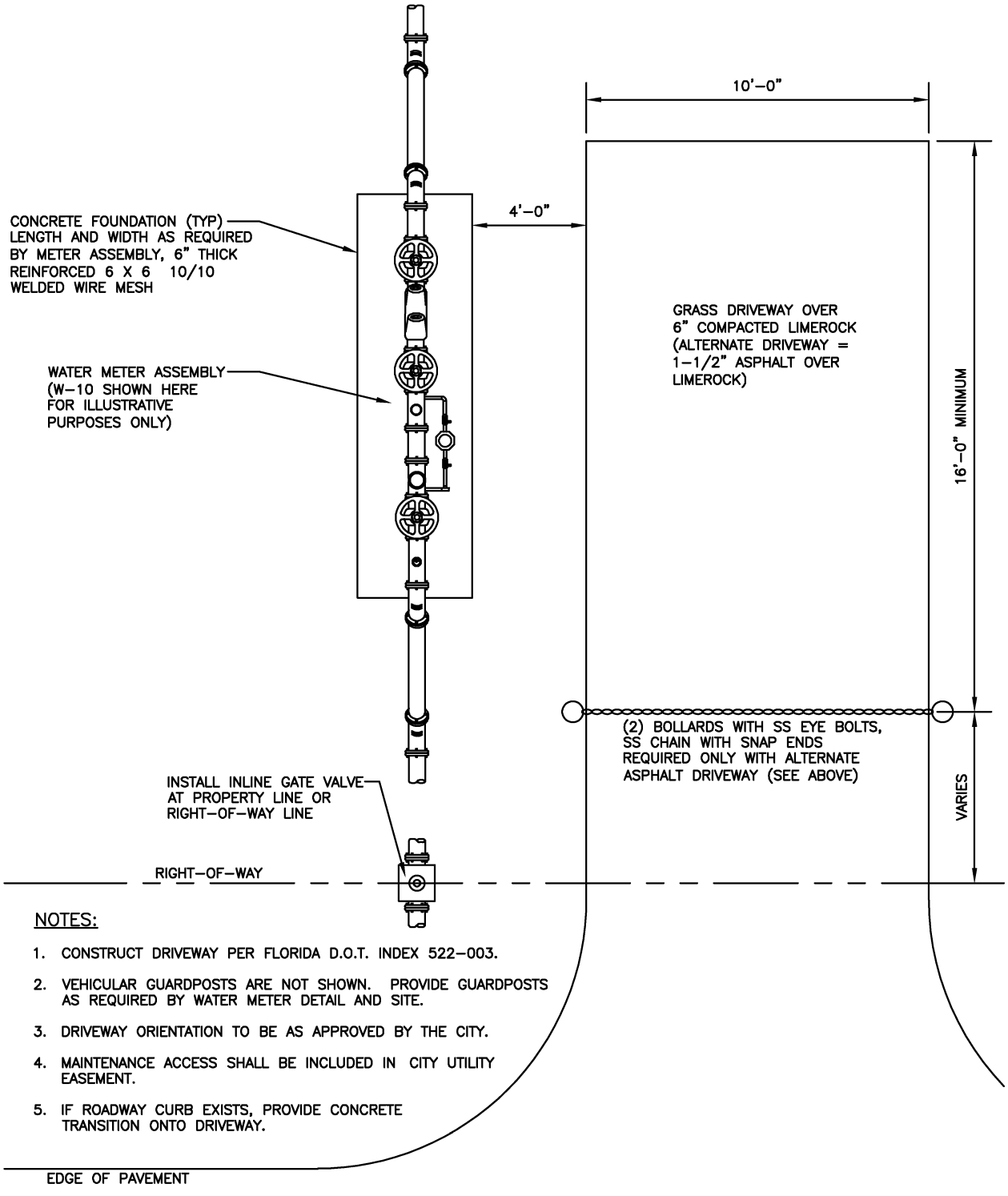
| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | 3" AND OVER POTABLE WATER FIRE AND DOMESTIC METER ASSEMBLY DETAIL | DATE 12/15/15<br>INDEX W-29<br>SCALE N.T.S. / SHEET 1 OF 1 | |




NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND METER. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. THIS ASSEMBLY IS PERMITTED FOR COMBINATION FIRE AND POTABLE WATER SERVICE.
4. AS THIS UNIT WILL REQUIRE PERIODIC TESTING, FACILITIES REQUIRING CONTINUOUS WATER SERVICE SHALL PROVIDE PARALLEL UNITS OR FULL SIZE BYPASSES TO PREVENT SERVICE INTERRUPTIONS.
5. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER WITH RESULTS SUBMITTED TO THE CITY OF TARPON SPRINGS BLDG./DEV. DEPARTMENT.
6. CITY OF TARPON SPRINGS REQUIRES DEDICATION OF ALL ABOVE GROUND MATERIAL AND EQUIPMENT FROM THE METER ASSEMBLY BACK TO THE CITY OF TARPON SPRINGS MAIN.
7. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
8. STRAINER SHALL HAVE FUSION-BONDED EPOXY COATING.
9. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | 4" AND OVER POTABLE WATER FIRE AND DOMESTIC METER ASSEMBLY DETAIL | DATE 12/15/15<br>INDEX W-30<br>SCALE N.T.S. / SHEET 1 OF 1 | |




NOTES:

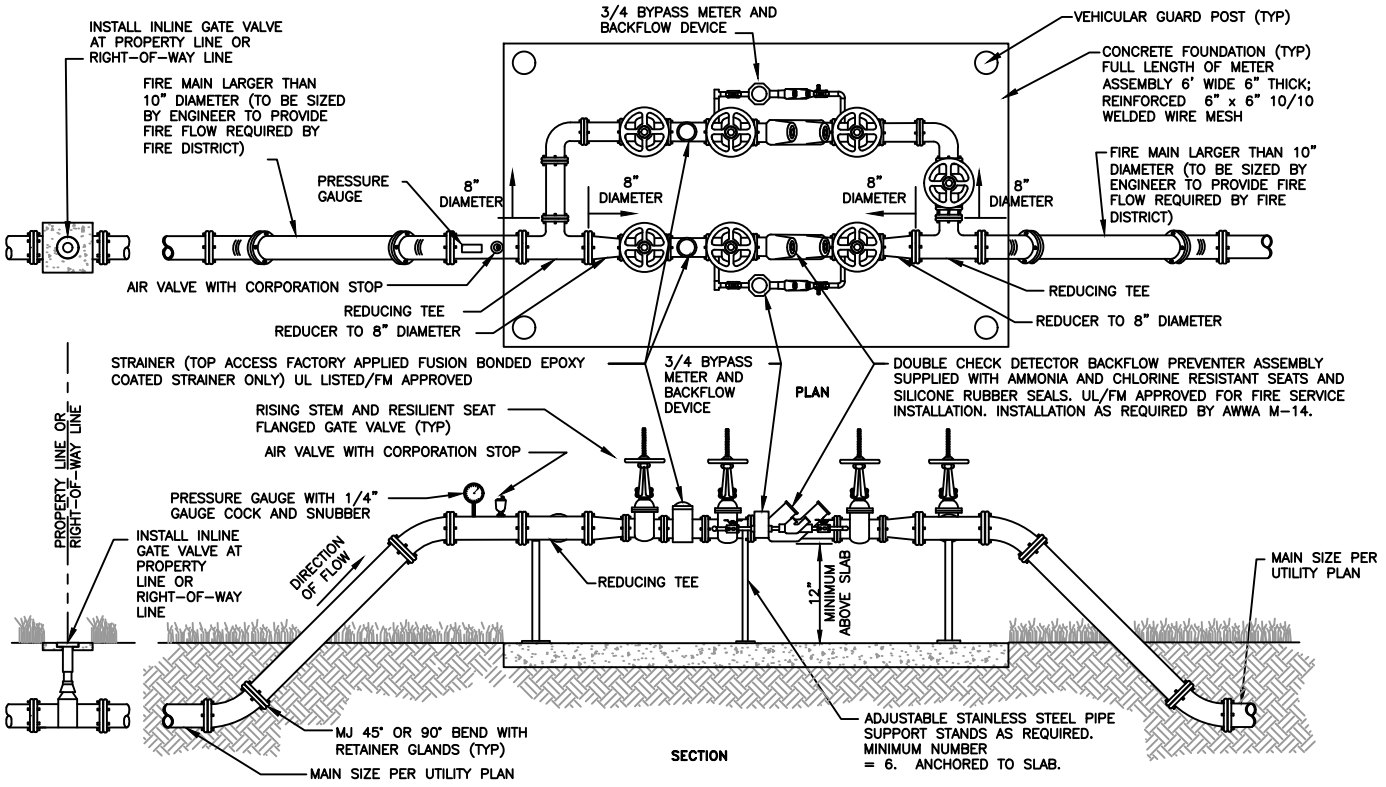
1. CONSTRUCT DRIVEWAY PER FLORIDA D.O.T. INDEX 522–003.
2. VEHICULAR GUARDPOSTS ARE NOT SHOWN. PROVIDE GUARDPOSTS AS REQUIRED BY WATER METER DETAIL AND SITE.
3. DRIVEWAY ORIENTATION TO BE AS APPROVED BY THE CITY.
4. MAINTENANCE ACCESS SHALL BE INCLUDED IN CITY UTILITY EASEMENT.
5. IF ROADWAY CURB EXISTS, PROVIDE CONCRETE TRANSITION ONTO DRIVEWAY.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## MAINTENANCE DRIVEWAY FOR WATER METERS 3" AND LARGER

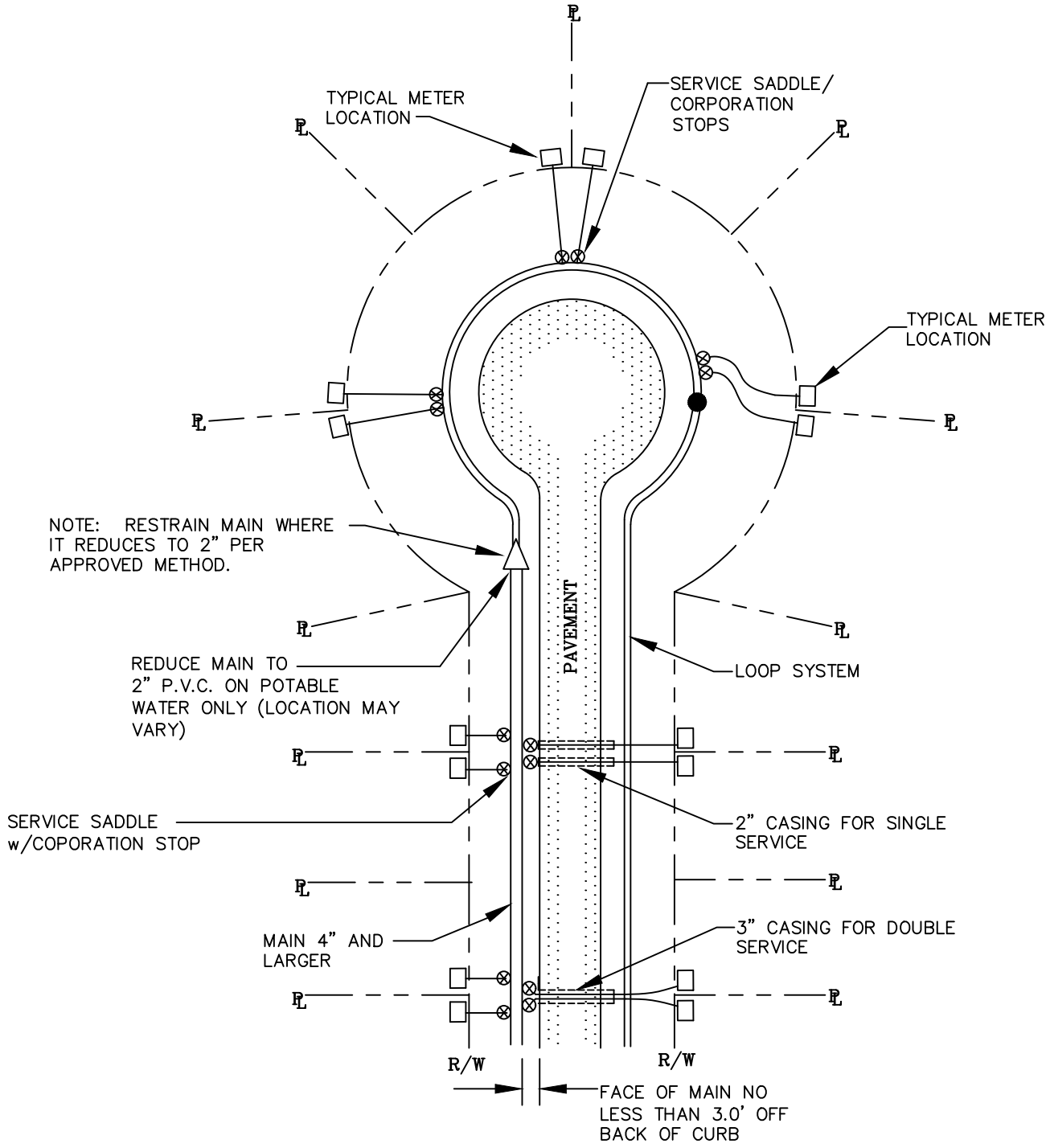
| | |
|---|---|
| DATE | 09/30/20 |
| INDEX | W-31 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




NOTES:

1. ALL ABOVE GROUND PIPE WILL HAVE FLANGED END DUCTILE IRON PIPE, PRESSURE CLASS 350. ALL NUTS AND BOLTS SHALL BE STAINLESS STEEL.
2. (4) VEHICULAR GUARD POSTS TO BE INSTALLED AROUND ASSEMBLY. CONFIGURATION TO BE ILLUSTRATED ON CONSTRUCTION DOCUMENTS SUBMITTED FOR REVIEW AND APPROVAL.
3. ASSEMBLY WILL BE OWNED AND MAINTAINED BY PROPERTY OWNER, STARTING AFTER THE INLINE GATE VALVE AT THE PROPERTY LINE OR RIGHT-OF-WAY LINE.
4. CITY WILL REQUIRE DEDICATION OF MATERIAL UP TO AND INCLUDING THE INLINE GATE VALVE FROM THE CITY'S WATER MAIN.
5. BACKFLOW DEVICE REQUIRES INITIAL CERTIFICATION BY AN APPROVED CERTIFIED TESTER.
6. ALL PLANTING SHALL BE A MINIMUM OF 1.5' FROM THE EDGE OF SLAB, AND SHALL PROVIDE A 3' ACCESS OPENING.
7. THIS ASSEMBLY SHALL BE PAINTED WITH RED EPOXY PAINT.
8. ALL COMPONENTS THAT COME INTO CONTACT WITH DRINKING WATER SHALL CONFORM TO NSF STANDARD 61.
9. A REDUCED PRESSURE DETECTOR BACKFLOW ASSEMBLY SHALL BE USED WHEN HIGH HAZARDS, AS DEFINED BY AWWA M-14 (E.G., RISK OF CHEMICAL ADDITION, MEDICAL FACILITIES, INDUSTRIAL FACILITIES, PROPERTIES USING RECLAIMED WATER, ETC.), EXIST.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | FIRE SERVICE DUAL METER ASSEMBLY OVER 10" FIRE MAIN (DUAL 8" METERS) | DATE 12/15/15<br>INDEX W-32<br>SCALE N.T.S. SHEET 1 OF 1 | |




NOTE:

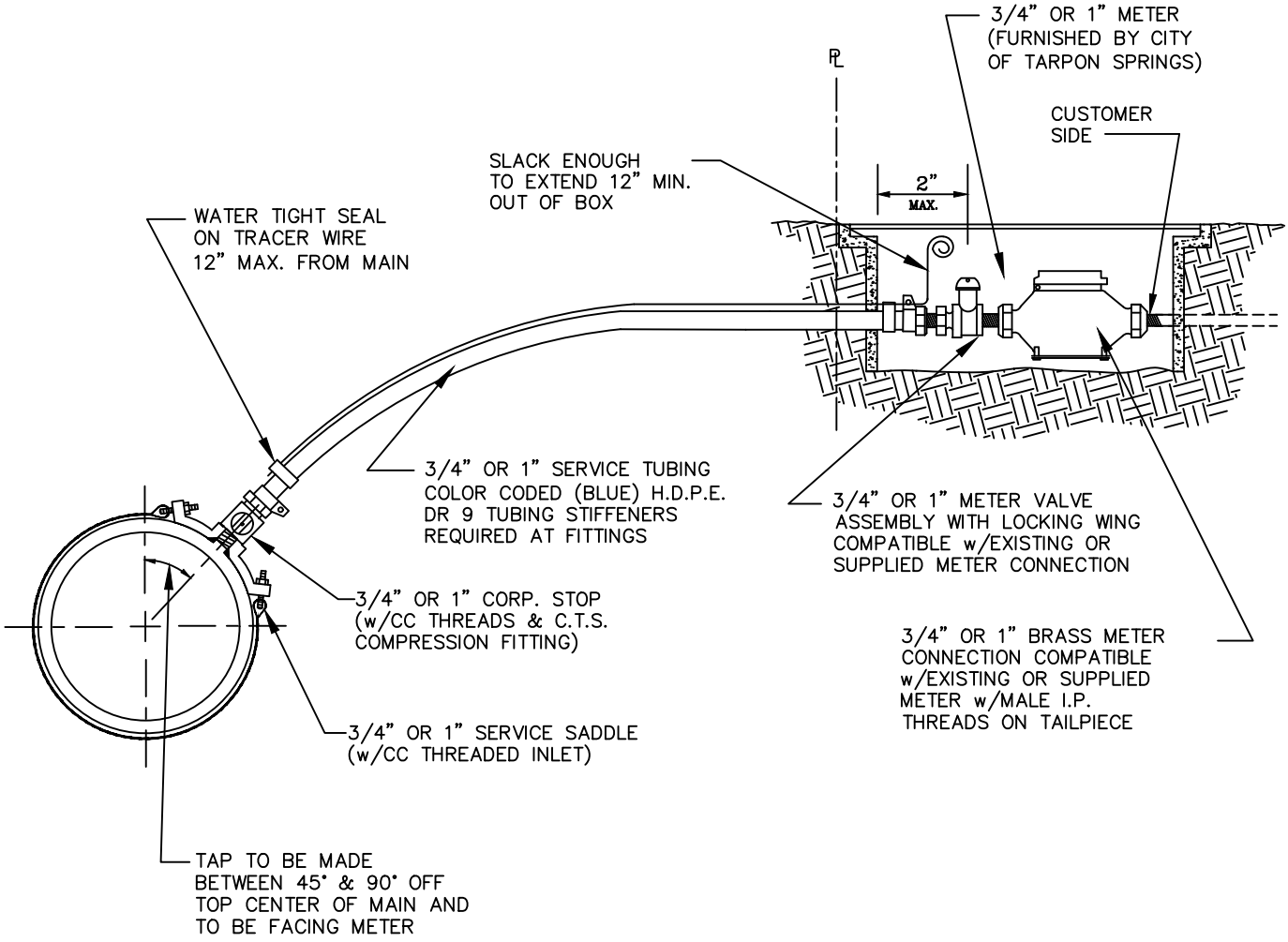
1. CASINGS TO BE EXTENDED BEYOND E.P. OR B.O.C.
2. CASING TO BE COLORED CODED PER SERVICE

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## CUL-DE-SAC LAYOUT POTABLE WATER

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-33 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




NOTES:

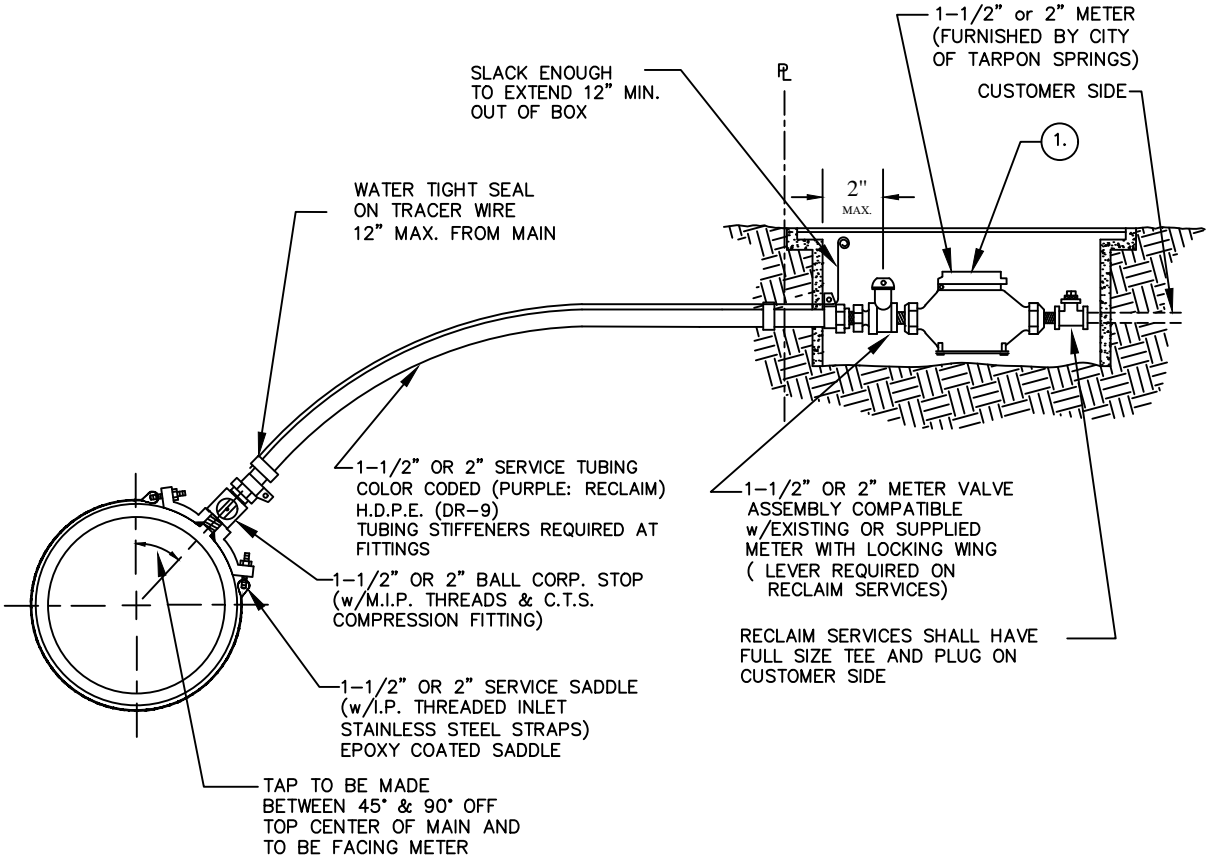
1. ALL CORPORATION STOPS TO BE FOR USE WITH DR 9 (C.T.S.) H.D.P.E. TUBING.
2. SERVICE SADDLE REQUIRED FOR ALL TAPS.
3. METER ONLY TO BE FURNISHED BY CITY OF TARPON SPRINGS.
4. METER BOXES SHALL BE PER CITY OF TARPON SPRINGS APPROVED MATERIAL SPECIFICATIONS.
5. ALL METER BOXES LOCATED WITHIN VEHICULAR TRAVEL AREAS SHALL BE H-20 LOADING. ALL OTHERS SHALL BE H-10 LOADING.
6. TRACER WIRE ONLY REQUIRED ON SERVICES OVER 40' IN LENGTH.
7. 1" SERVICE TUBING SHALL BE USED FOR ALL 3/4" SERVICES OVER 60' IN LENGTH.

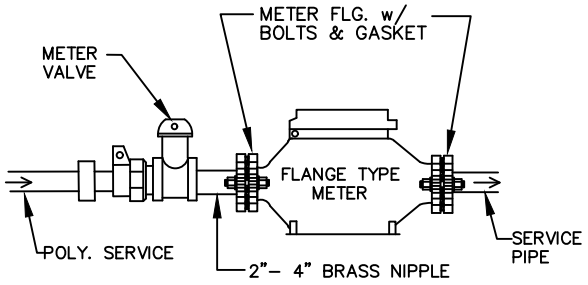
# CITY OF TARPON SPRINGS

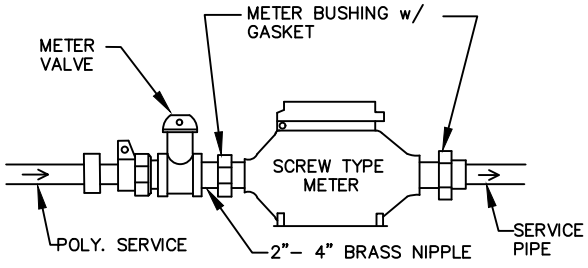
PINELLAS COUNTY, FLORIDA

## ¾" OR 1" POTABLE WATER SERVICE CONNECTION

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | W-34 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




NOTES:

1. ALL CORPORATION STOPS TO BE FOR USE WITH DR 9 (C.T.S.) H.D.P.E. TUBING.
2. SERVICE SADDLE REQUIRED FOR ALL TAPS.
3. METER ONLY, TO BE FURNISHED BY CITY OF TARPON SPRINGS.
4. METER BOXES SHALL BE PER CITY OF TARPON SPRINGS APPROVED MATERIAL SPECIFICATIONS.(ALL RECLAIMED BOXES SHALL HAVE LOCKING LIDS)
5. ALL METER BOXES LOCATED WITHIN VEHICULAR TRAVEL AREAS SHALL BE H-20 LOADING. ALL OTHERS SHALL BE H-10 LOADING.
6. TRACER WIRE ONLY REQUIRED ON SERVICES OVER 40' IN LENGTH.

***W-19, POTABLE WATER IS ABOVE GROUND**

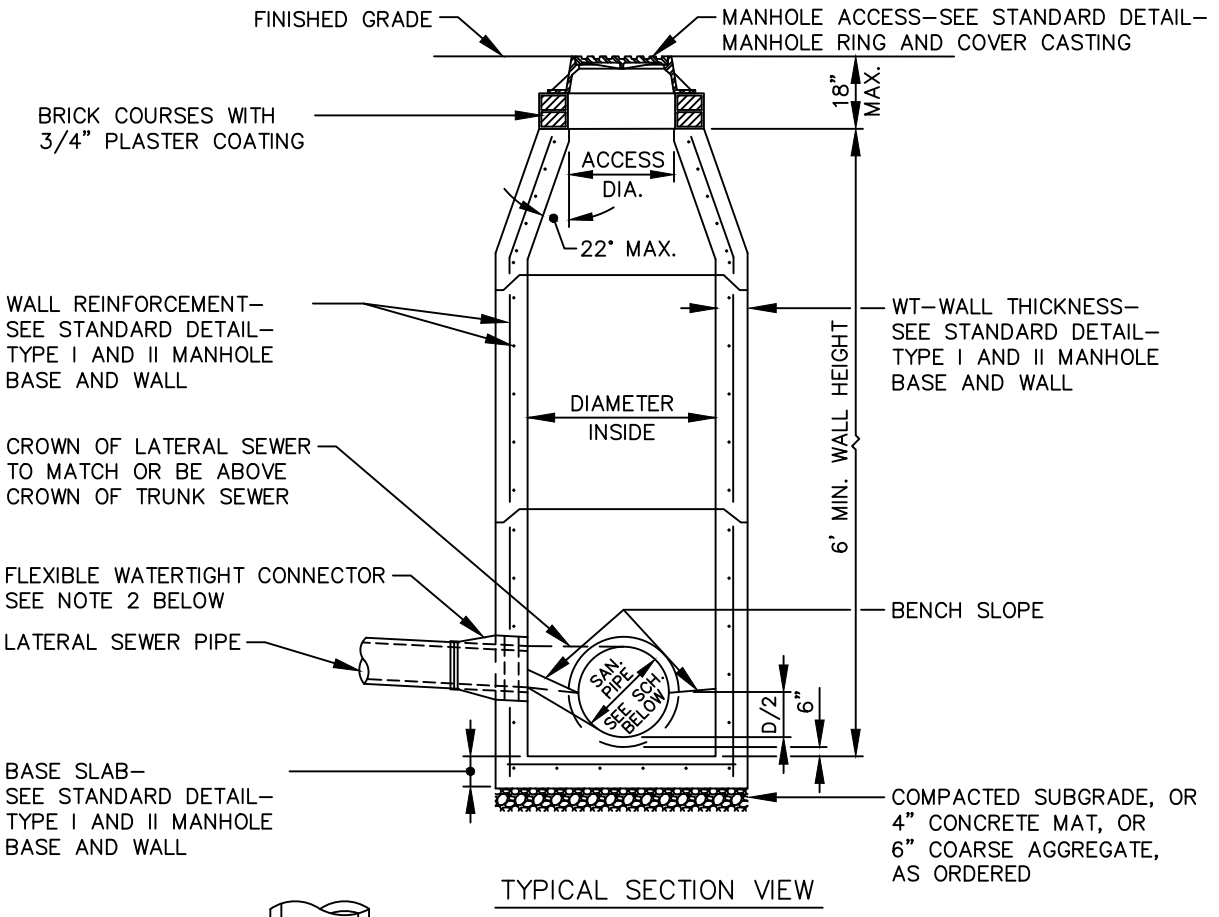
| | | | |
|---|---|---|---|
| **CITY OF TARPON SPRINGS**<br>PINELLAS COUNTY, FLORIDA | **1½" OR 2" METERED RECLAIM WATER * SERVICE CONNECTION** | DATE: **10/16/17**<br>INDEX: **W-35**<br>SCALE: **N.T.S.** SHEET: **1 OF 1** | |

# NOTES FOR SANITARY STRUCTURES

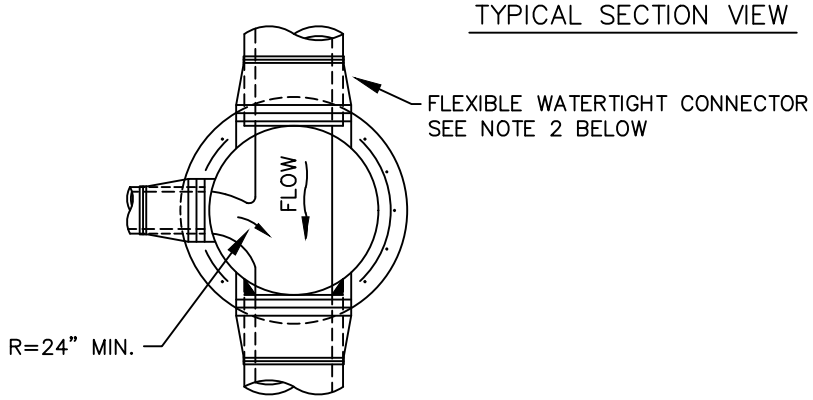
1. ALL MANHOLES SHALL BE PRECAST CONCRETE OR FIBERGLASS REINFORCED POLYESTER (FRP), UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER.
2. ALL PIPE STUBS FROM PRECAST MANHOLES, FOR FUTURE CONNECTIONS, SHALL BE INSTALLED WITH REMOVABLE WATERTIGHT PLUGS, PLACED FROM WITHIN THE MANHOLE.
3. ALL TYPE I CONE SECTIONS SHALL BE CONCENTRIC WITH RING CASTING CENTERED IN STRUCTURE, UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER.
4. THE CONE SECTION OF TYPE I PRECAST MANHOLE SHALL BE PRECAST.
5. NO PIPE SHALL BE IN THE MANHOLE CONE SECTION.
6. ALL MANHOLES WITH SLAB TOP SHALL BE TYPE II, SEE STANDARD DETAIL–TYPE II MANHOLE TOP SLAB.
7. A DROP MANHOLE SHALL BE REQUIRED WHEN THE INVERT OF ANY INCOMING PIPE IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. ALL DROP PIPE SHALL BE ON THE OUTSIDE OF THE MANHOLE.
8. PRIOR TO PRECASTING STRUCTURES THE PRECASTER SHALL SUBMIT SITE SPECIFIC INDIVIDUAL SHOP DRAWINGS FOR APPROVAL. SHOP DRAWINGS SUBMITTED FOR NONSTANDARD STRUCTURES OR STRUCTURES THAT DEVIATE FROM THE STANDARD DETAILS MUST BE DESIGNED AND CERTIFIED BY A REGISTERED FLORIDA PROFESSIONAL ENGINEER.
9. PRECAST MANHOLES SHALL CONSIST OF A MINIMUM NUMBER OF SECTIONS, AS APPROVED BY THE ENGINEER.
10. ALL PRECAST STRUCTURES SHALL HAVE AN INTEGRAL FLOOR AND BASE RISER SECTION, SEE STANDARD DETAIL–TYPE I AND II MANHOLE BASE AND WALL.
11. FOR PRECAST STRUCTURE JOINT, SEE STANDARD DETAIL–PRECAST STRUCTURE JOINT ASSEMBLY.
12. ALL EXPOSED EDGES TO HAVE A 3/4" CHAMFER.
13. FOR THE APPLICABLE RING AND COVER, SEE STANDARD DETAIL–MANHOLE RING AND COVER CASTING.
14. PRECAST BASE SECTION SHALL BE INSTALLED ON A CONCRETE MAT WITHIN 2 HOURS OF PLACEMENT OF THE MAT.
15. ALL BRICK SHALL BE CLAY BRICK AND SHALL HAVE A MINIMUM 3/4" CEMENT PLASTER ON ALL SURFACES.
16. BENCH SHALL SLOPE @ 1:12 MINIMUM.
17. A PROTECTIVE COATING SHALL BE APPLIED TO THE INSIDE AND OUTSIDE SURFACES OF STRUCTURES, EXCEPT FRP'S. THE PROTECTIVE COATING SHALL COVER THE COMPLETE EXTERIOR AND INTERIOR SURFACE OF THE STRUCTURE, (INCLUDING CONE SECTIONS, RISERS, AND INVERT) FROM THE BOTTOM SLAB TO THE GROUND SURFACE EXCLUDING THE COVER CASTING, LID, AND THE HORIZONTAL PLANE OF THE PIPE PENTRATIONS OR CUT OPENINGS. THE UNDERSIDE OF THE BOTTOM SLAB MAY ALSO BE EXCLUDED AT THE CONTRACTORS OPTION. 2 COATS OF THE PROTECTIVE COATING SHALL BE APPLIED TO THE INSIDE, AND 1 SHALL BE APPLIED TO THE OUTSIDE. THE COATING SHALL BE OF TAR EPOXY, KOP–COAT BITUMASTIC 300–M OR APPROVED EQUAL. EACH COATING SHALL YIELD A FINAL DRY FILM 9 mils IN THICKNESS.
18. PRIOR TO MANUFACTURING OF FRP MANHOLE, MANUFACTURER SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS FOR THE DESIGN OF INVERT AND BENCH AREA, PIPE CONNECTIONS, FABRICATION DETAILS AND INSTALLATION METHODS FOR APPROVAL.
19. FOR FRP MANHOLES A FIBERGLASS ENCLOSED INVERT AND BENCH MAY BE INSTALLED BY THE MANUFACTURER OR CONCRETE MAY BE USED FOR THE BENCH AREA AND INVERT, AS DIRECTED BY THE ENGINEER.
20. FRP STIFFENING RIBS ARE REQUIRED AT 10' DEPTH OR MORE.



| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | SANITARY STRUCTURE NOTES | DATE | 12/15/15 |
| | | INDEX | SS-01 |
| | | SCALE: N.T.S. | SHEET: 1 OF 1 |




TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | |
|---|---|---|
| PIPE SIZES | DIA. INSIDE | ACCESS DIA. |
| 8" TO 18" | 4' | 24" |
| 21" TO 30" | 5' | 32" |

NOTES:

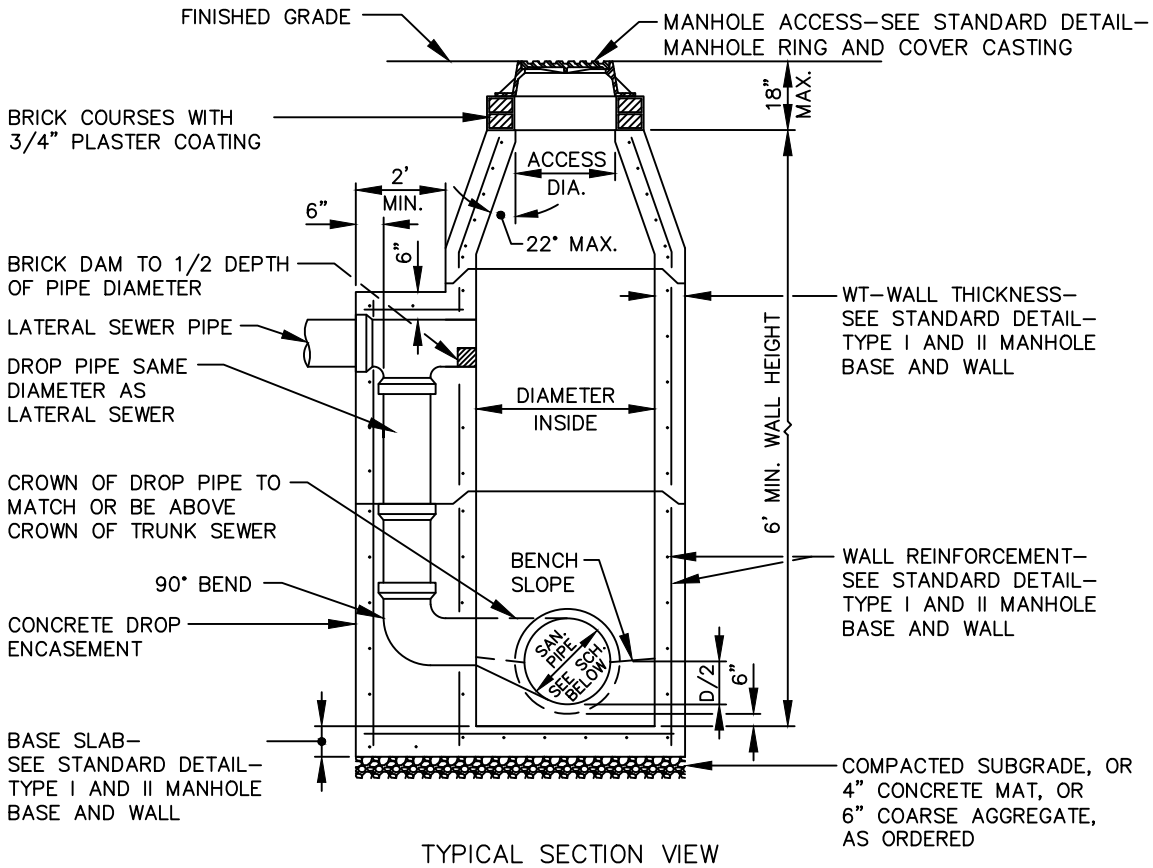
1. SEE GENERAL NOTES, STANDARD DETAIL–SANITARY MANHOLE NOTES.
2. FLEXIBLE WATERTIGHT CONNECTORS SHALL BE "KWIK SEAL" OR "PSX: POSITIVE SEAL GASKET SYSTEM" AS MANUFACTURED BY THE PRESS SEAL GASKET CORPORATION, OR APPROVED EQUAL, OR "KOR–N–SEAL" I CONNECTORS FOR PIPE SIZES UPTO 15" AND "KOR–N–SEAL" II CONNECTORS FOR PIPE SIZES 18" TO 30", AS MANUFACTURED BY THE NPC INC., OR APPROVED EQUAL.

# CITY OF TARPON SPRINGS

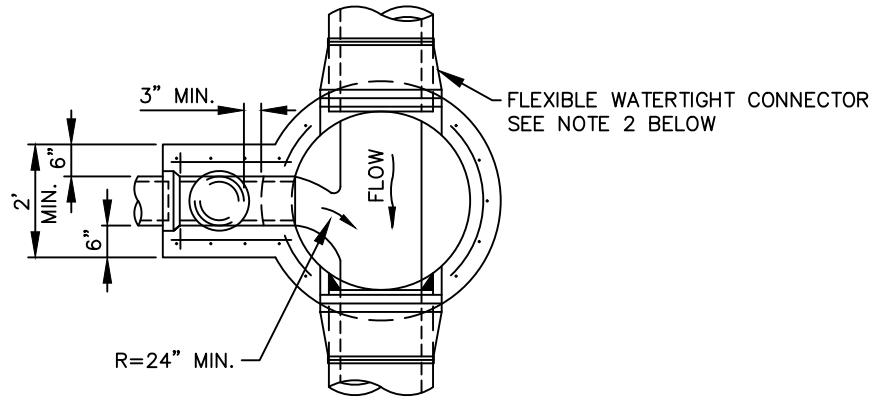
PINELLAS COUNTY, FLORIDA

## SANITARY PRECAST MANHOLE TYPE I

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | SS-02 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | |
|---|---|---|
| PIPE SIZES | DIA. INSIDE | ACCESS DIA. |
| 8" TO 18" | 4' | 24" |
| 21" TO 30" | 5' | 32" |

NOTES:

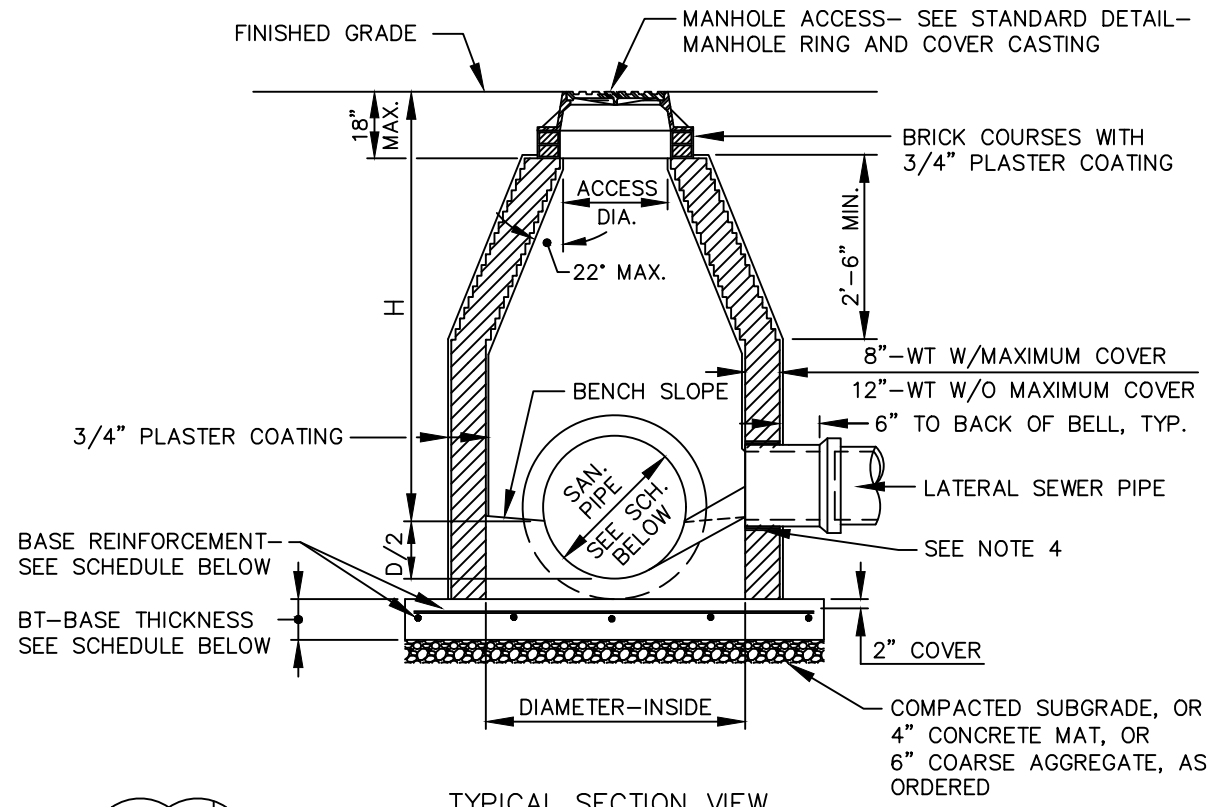
1. SEE GENERAL NOTES, STANDARD DETAIL–SANITARY MANHOLE NOTES.
2. FLEXIBLE WATERTIGHT CONNECTORS SHALL BE "KWIK SEAL" OR "PSX: POSITIVE SEAL GASKET SYSTEM" AS MANUFACTURED BY THE PRESS SEAL GASKET CORPORATION, OR APPROVED EQUAL, OR "KOR–N–SEAL" I CONNECTORS FOR PIPE SIZES UPTO 15" AND "KOR–N–SEAL" II CONNECTORS FOR PIPE SIZES 18" TO 30", AS MANUFACTURED BY THE NPC INC., OR APPROVED EQUAL.

# CITY OF TARPON SPRINGS

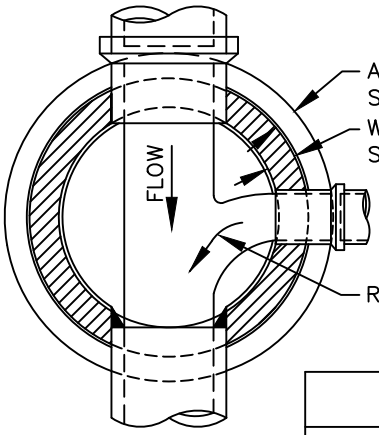
PINELLAS COUNTY, FLORIDA

## SANITARY PRECAST DROP MANHOLE TYPE I

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | SS-03 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PIPE SIZES | DIA. INSIDE | ACCESS DIA. | BASE DIA. W/ 8" WALL | BASE DIA. W/ 12" WALL | H MAX. | BT MIN. | ANTI–FLOAT. LIP | BASE REINFORCEMENT |
| 8" TO 18" | 4' | 24" | 6'–4" | 7'–0" | 6' | 8" | 6" | #6 @ 12" EW |
| 21" TO 30" | 5' | 32" | 7'–4" | 8'–0" | 8' | 8" | 6" | #6 @ 9" EW |

NOTES:

1. FOR GENERAL NOTES SEE, STANDARD DETAIL–SANITARY MANHOLE NOTES.
2. NO INLET PIPE SHALL BE INSTALLED IN THE CONE SECTION.
3. BRICK SHALL BE SOLID CLAY.
4. GROUTING RING CONNECTORS SHALL BE "WS SERIES" WATER STOP GROUTING RING AS MANUFACTURED BY THE PRESS–SEAL GASKET CORPORATION, OR APPROVED EQUAL.

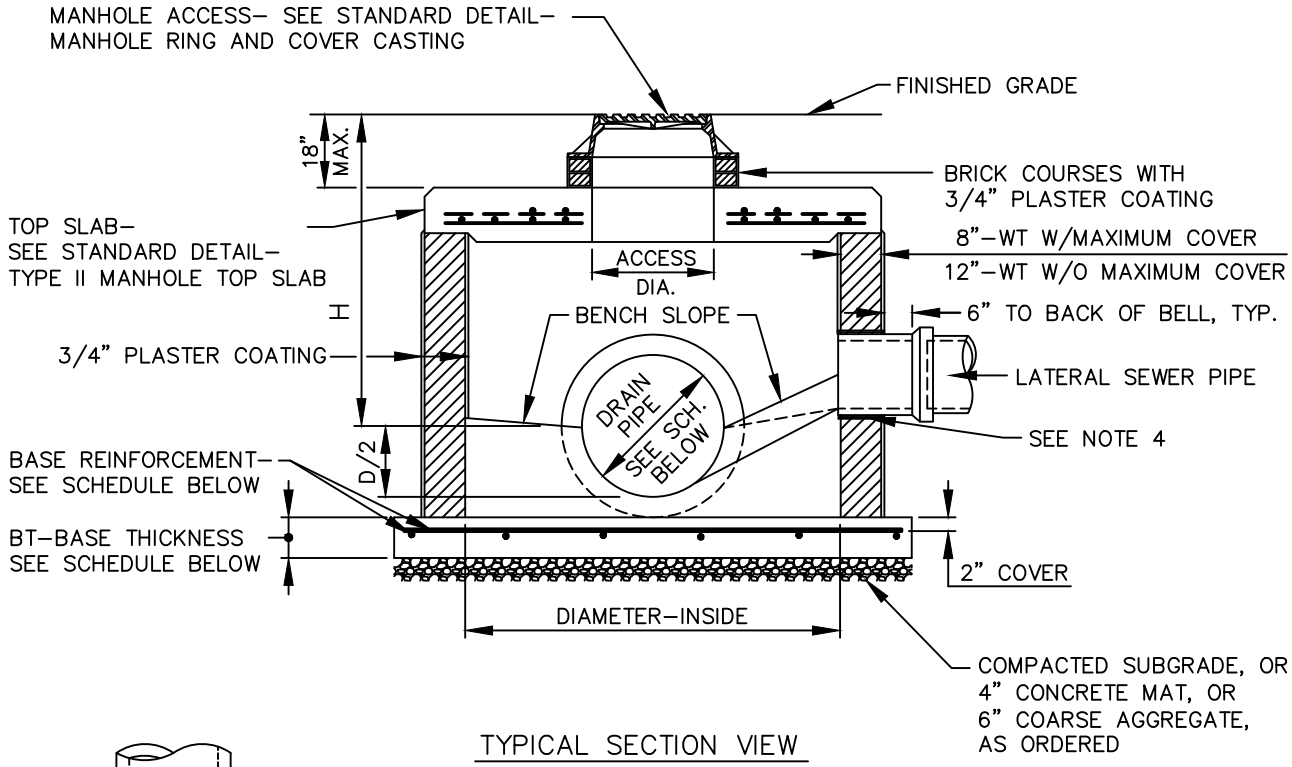


# CITY OF TARPON SPRINGS

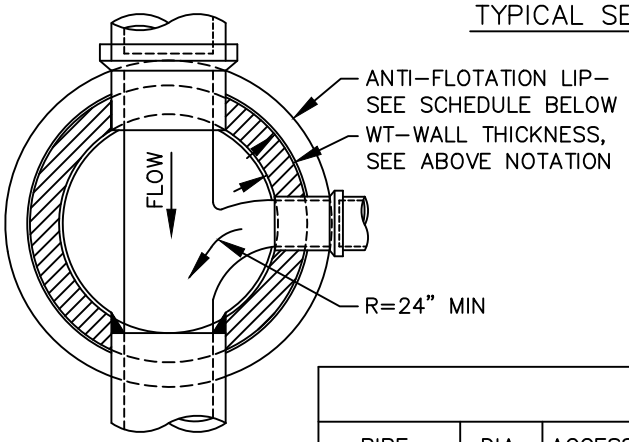
PINELLAS COUNTY, FLORIDA

## SANITARY BRICK MANHOLE TYPE I

| | |
|---|---|
| DATE | 12/15/15 |
| INDEX | SS-04 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




TYPICAL SECTION VIEW




PLAN VIEW

| SCHEDULE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PIPE SIZES | DIA. INSIDE | ACCESS DIA. | BASE DIA. W/ 8" WALL | BASE DIA. W/ 12" WALL | H MAX. | BT MIN. | ANTI–FLOAT. LIP | BASE REINFORCEMENT |
| 8" TO 18" | 4' | 24" | 6'–4" | 7'–0" | 6' | 8" | 6" | #6 @ 12" EW |
| 21" TO 30" | 5' | 32" | 7'–4" | 8'–0" | 8' | 8" | 6" | #6 @ 9" EW |

NOTES:

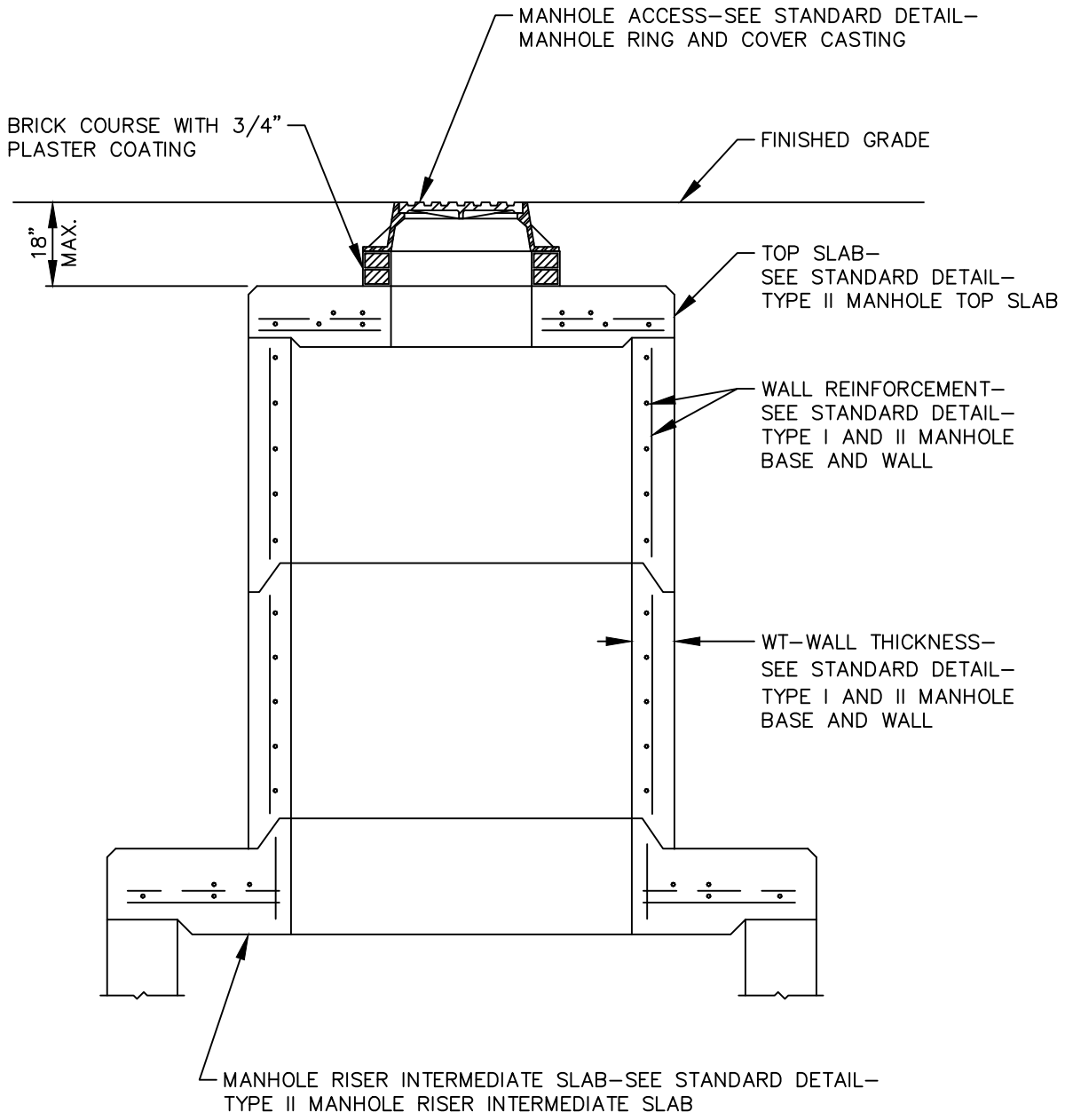
1. FOR GENERAL NOTES SEE, STANDARD DETAIL–SANITARY MANHOLE NOTES.
2. NO INLET PIPE SHALL BE INSTALLED IN THE CONE SECTION.
3. BRICK SHALL BE SOLID CLAY.
4. GROUTING RING CONNECTORS SHALL BE "WS SERIES" WATER STOP GROUTING RING AS MANUFACTURED BY THE PRESS–SEAL GASKET CORPORATION, OR APPROVED EQUAL.



**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**SANITARY BRICK MANHOLE TYPE II**

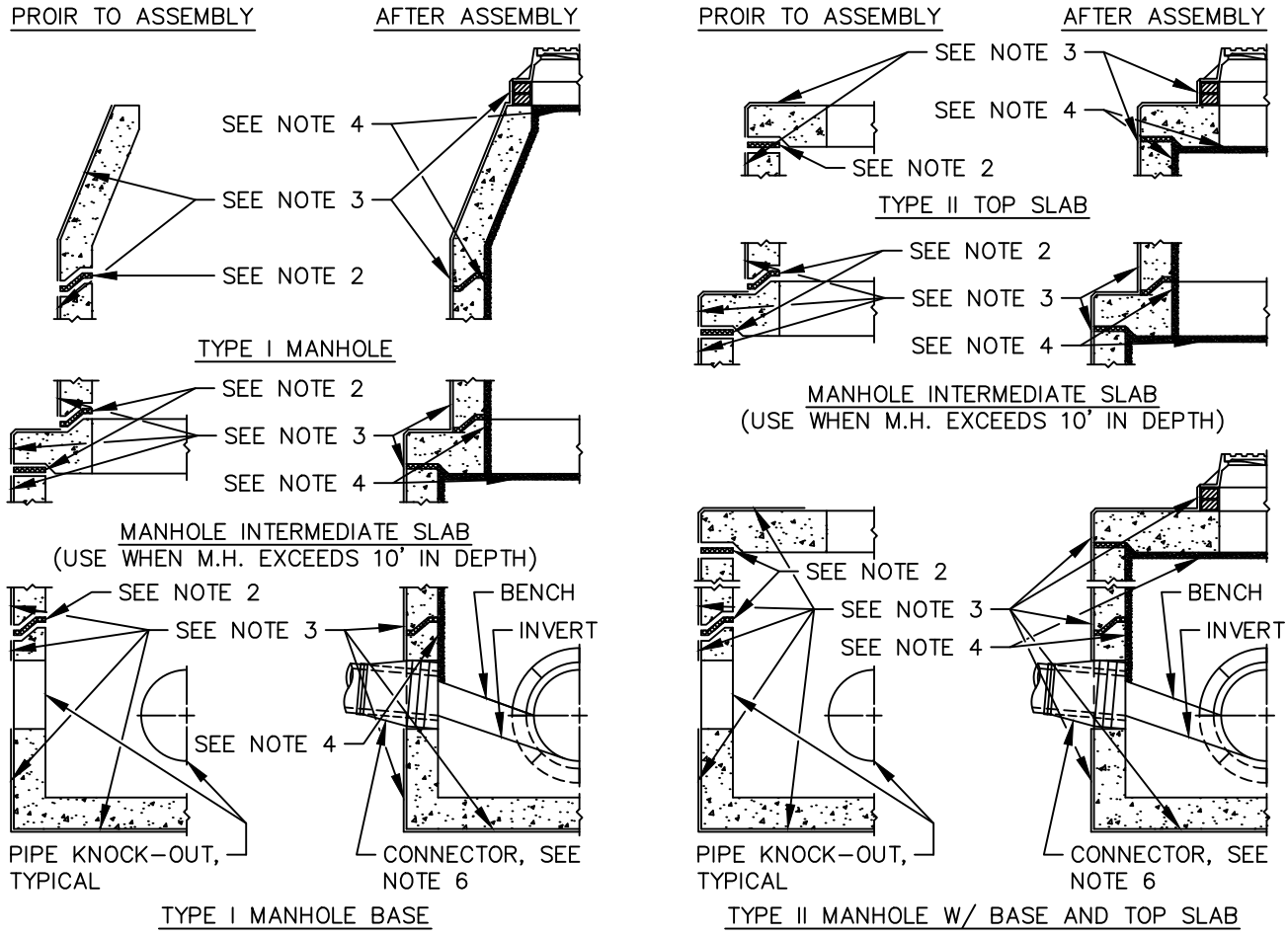
| DATE | 12/15/15 |
|---|---|
| INDEX | SS-05 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




NOTE:

1. GENERAL NOTES, SEE STANDARD DETAIL–SANITARY STRUCTURE NOTES.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | PRECAST MANHOLE RISER | DATE | 12/15/15 |
| | | INDEX | SS-06 |
| | | SCALE | N.T.S. |
| | | SHEET | 1 OF 1 |

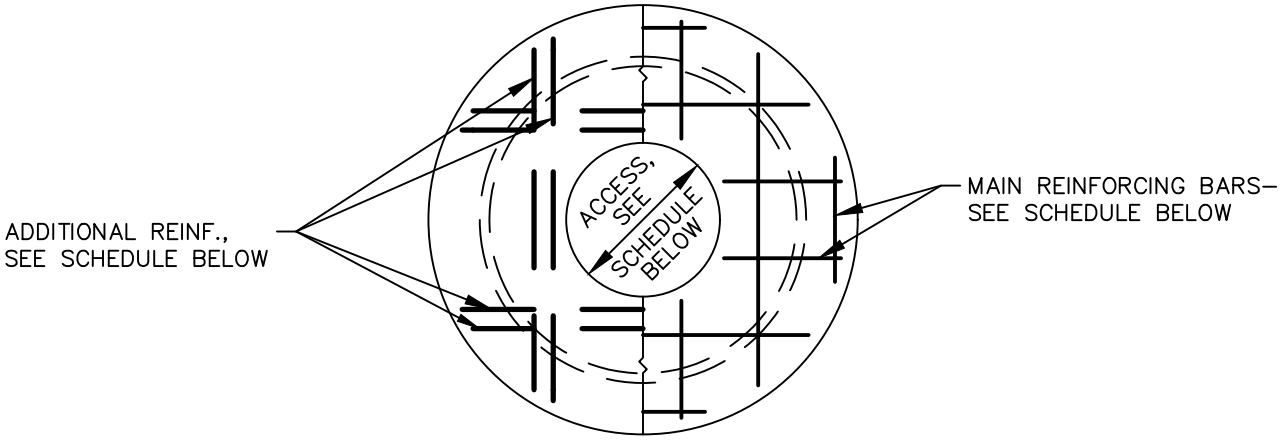



## TYPICAL PRECAST JOINT ASSEMBLIES

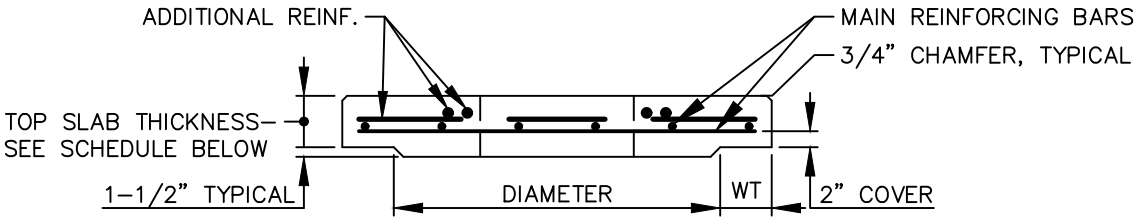
NOTES:

1. JOINTS SHALL CONFORM TO ASTM C443.
2. A LAYER OF PREFORMED JOINT SEALING COMPOUND SUCH AS "RAM-NEK" SHALL BE INSTALLED AT ALL PRECAST STRUCTURE JOINTS AND STRUCTURE TOPS FOR TOP SLAB PRIOR TO ASSEMBLY.
3. ONE COAT OF PROTECTIVE SEALER SHALL BE APPLIED TO THE EXTERIOR OF ALL PRECAST, CAST-IN-PLACE, AND BRICK STRUCTURES. THE EXTERIOR COATING SHALL COVER FROM THE BOTTOM OF THE BASE UPTO AND INCLUDING THE BRICK GRADE RINGS FOR THE COVER CASTING, THE BOTTOM SLAB MAY ALSO BE EXCLUDED AT THE CON-TRACTORS OPTION.
   THE CONTRACTOR SHALL TOUCH UP THOSE PLACES DISTURBED DURING ASSEMBLY AND THOSE CAST-IN-PLACE STRUCTURES PRIOR TO ACCEPTANCE AND BACK FILLING.
   THE SEALER SHALL BE COAL TAR EPOXY SUCH AS "CARBOLINE" 300-M OR APPROVED EQUAL, WITH A DRY FILM THICKNESS OF 9 mils.
4. ONE COAT OF 100% PURE-FUSED CALCIUM ALUMINATE CEMENTITIOUS LINING SHALL BE APPLIED TO THE INTERIOR SURFACES OF ALL STRUCTURES, WITH A FINAL DRY THICKNESS OF 1/2" MINIMUM.
   IF LINER IS APPLIED PRIOR TO ASSEMBLY, THE LINER SHALL COVER THE KEY WAYS, FROM THE EXTERIOR TO THE INTERIOR OF THE STRUCTURE, INADDTION TO THOSE LIMITS DESCRIBED ABOVE.
5. RESTORATION OF THE PROTECTIVE SEALER AND LINER DUE TO CONNECTIONS TO EXISTING STRUCTURES, MADE BY APPROVED METHODS, SHALL MATCH THE EXISTING MATERIALS THAT ARE DISTURBED AND OR DAMAGED, AT NO ADDITIONAL COST TO THE CITY.
6. FLEXIBLE WATERTIGHT CONNECTORS SHALL BE "KWIK SEAL" OR "PSX: POSITIVE SEAL GASKET SYSTEM" AS MANUFACTURED BY THE PRESS SEAL GASKET CORPORATION, OR APPROVED EQUAL, OR "KOR-N-SEAL" I CONNECTORS FOR PIPE SIZES UPTO 15" AND "KOR-N-SEAL" II CONNECTORS FOR PIPE SIZES 18" TO 30", AS MANUFACTURED BY THE NPC INC., OR APPROVED EQUAL.
7. FOR ADDITIONAL NOTES, SEE STANDARD DETAIL-SANITARY STRUCTURE NOTES.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | PRECAST STRUCTURE JOINT ASSEMBLY AND STRUCTURE SEALING | DATE | 12/15/15 |
| | | INDEX | SS-07 |
| | | SCALE | N.T.S. |
| | | SHEET | 1 OF 1 |




PLAN VIEW




TYPICAL SECTION VIEW

| SCHEDULE | | | | | | |
|---|---|---|---|---|---|---|
| TYPE | DIAMETER | WT WALL THICKNESS | TOP SLAB THICKNESS | ACCESS DIAMETER | MAIN REINFORCEMENT | ADDITIONAL REINFORCEMENT |
| PRECAST | 4' | 6" | 8" | 24" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 5' | 8" | 8" | 32" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 6' | 8" | 8" | 32" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 7' | 8" | 8" | 32" | #6 @ 10" EW | 2–#8 @ 3" OC |
| | 8' | 8" | 8" | 32" | #6 @ 10" EW | 2–#8 @ 3" OC |
| BRICK | 4' | 8" | 8" | 24" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 5' | 8" | 8" | 32" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 6' (3) | 8" | 8" | 32" | #6 @ 12" EW | 2–#8 @ 3" OC |
| | 6' (3) | 12" | 8" | 32" | #6 @ 10" EW | 2–#8 @ 3" OC |

NOTES:

1. FOR GENERAL NOTES, SEE STANDARD DETAIL–SANITARY STRUCTURE NOTES.
2. OPENING SHALL BE CENTERED IN TOP SLAB, UNLESS OTHERWISE NOTED, OR SHOWN.
3. SEE BRICK MANHOLE DETAIL FOR OTHER CONDITIONS.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**TYPE II MANHOLE TOP SLAB**

| | |
|---|---|
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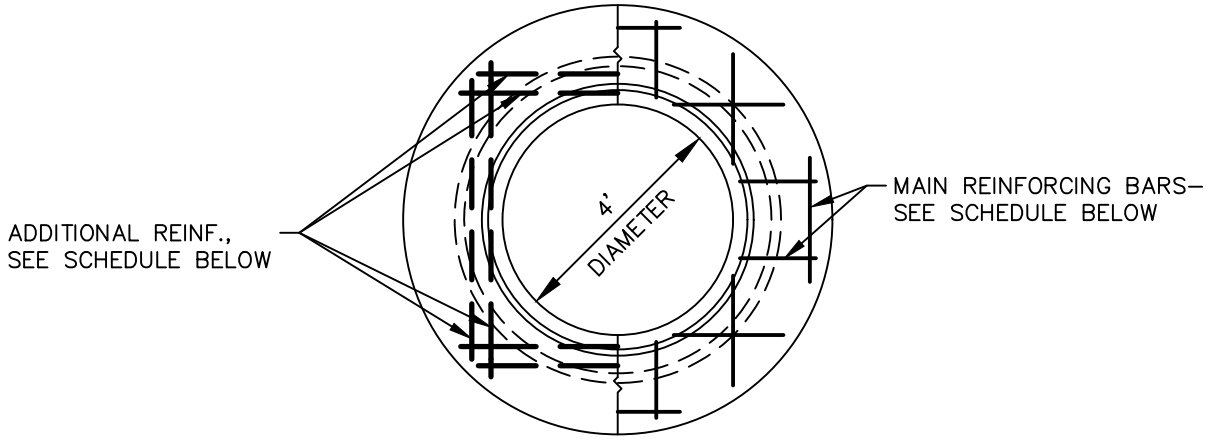
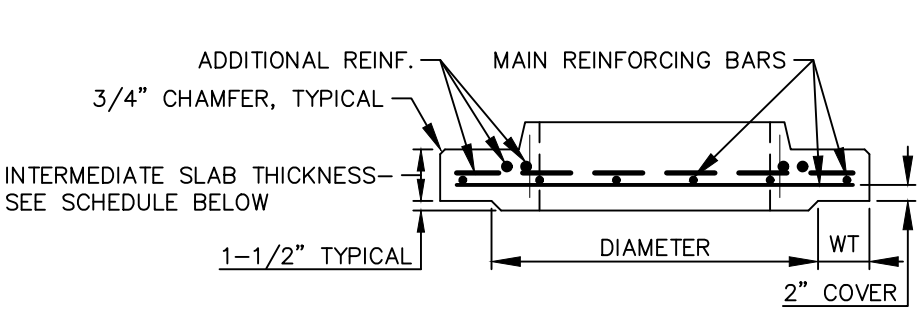
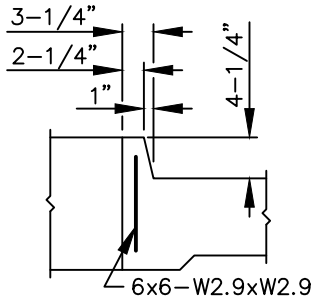



PLAN VIEW




TYPICAL SECTION VIEW




KEY WAY DETAIL

| SCHEDULE | | | | |
|---|---|---|---|---|
| DIAMETER | WT WALL THICKNESS | INTERMEDIATE SLAB THICKNESS | MAIN REINFORCEMENT | ADDITIONAL REINFORCEMENT |
| 6' | 8" | 8" | #6 @ 12" EW | 2–#8 @ 3" OC |
| 7' | 8" | 8" | #6 @ 10" EW | 2–#8 @ 3" OC |
| 8' | 8" | 8" | #6 @ 10" EW | 2–#8 @ 3" OC |

NOTES:

1. FOR USE WITH MANHOLES DEEPER THAN 10', FROM RIM TO INVERT.
2. FOR GENERAL NOTES, SEE STANDARD DETAIL–SANITARY STRUCTURE NOTES.
3. OPENING SHALL BE CENTERED IN TOP SLAB, UNLESS OTHERWISE NOTED, OR SHOWN.
4. NOT ALLOWED WITH BRICK MANHOLES.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**TYPE II MANHOLE RISER INTERMEDIATE SLAB**

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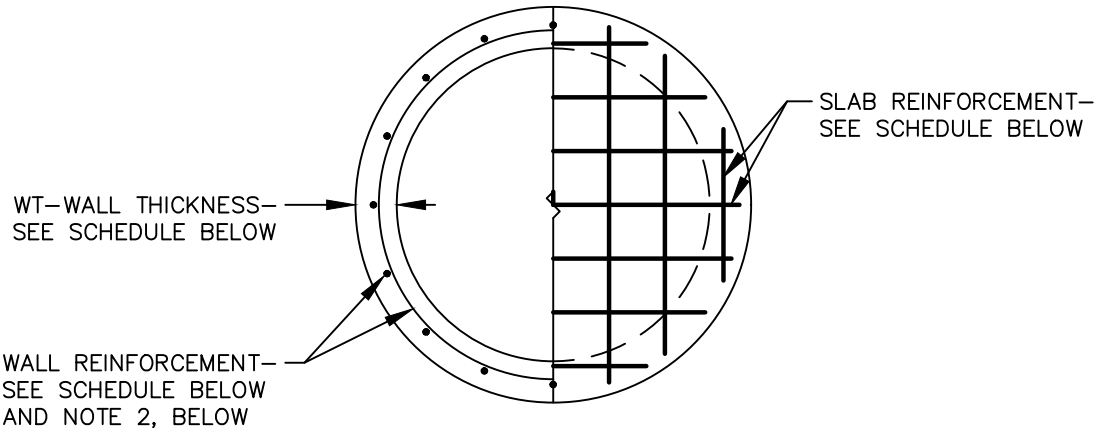
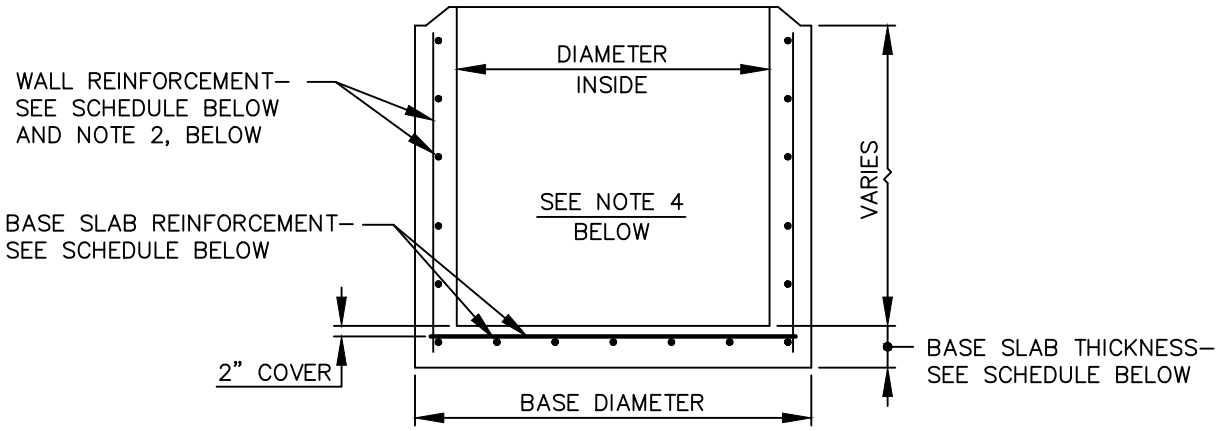



PLAN VIEW




TYPICAL SECTION

| S C H E D U L E | | | | | |
|---|---|---|---|---|---|
| DIAMETER INSIDE | BASE DIAMETER | WT WALL THICKNESS | WALL REINFORCMENT | BASE SLAB THICKNESS | BASE SLAB REINFORCEMENT |
| 4' | 5'–0" | 6" | #4 @ 12" EW | 8" | #6 @ 12" EW |
| 5' (3) | 6'–4" | 8" | #4 @ 12" EW | 8" | #6 @ 12" EW |
| 6' | 7'–4" | 8" | #4 @ 12" EW | 8" | #6 @ 12" EW |
| 7' | 8'–4" | 8" | #4 @ 12" EW | 8" | #6 @ 10" EW |
| 8' | 9'–4" | 8" | #4 @ 12" EW | 10" | #6 @ 10" EW |

NOTES:

1. FOR GENERAL NOTES, SEE STANDARD DETAIL–SANITARY STRUCTURE NOTES.
2. OPTIONAL WALL REINFORCEMENT MAY BE WELDED WIRE AS PER ASTM C–478 OR ASTM C–76, CLASS III, B WALL, WITH WHERE THE REINFORCEMENT CAGE IN THE CENTER 1/3 OF THE WALL.
3. MAXIMUM SIZE ALLOWED FOR TYPE I MANHOLE. 6', 7', AND 8' DIAMETER SHALL BE TYPE II MANHOLE.
4. ADD 2 #4 REINFORCING BARS AT 3" CENTERS AT THE TOP AND SIDES OF ALL WALL OPENINGS.

**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**TYPE I AND II MANHOLE BASE AND WALL**

| | |
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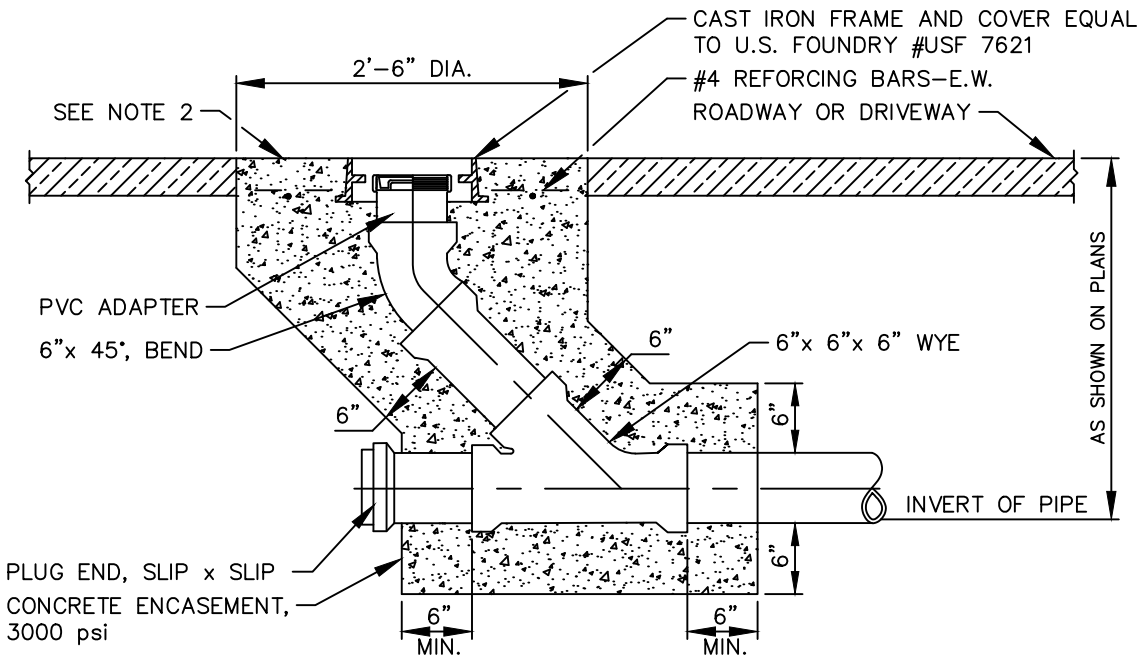
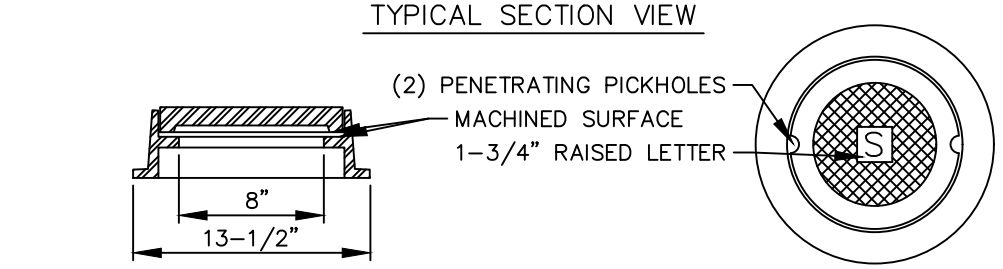
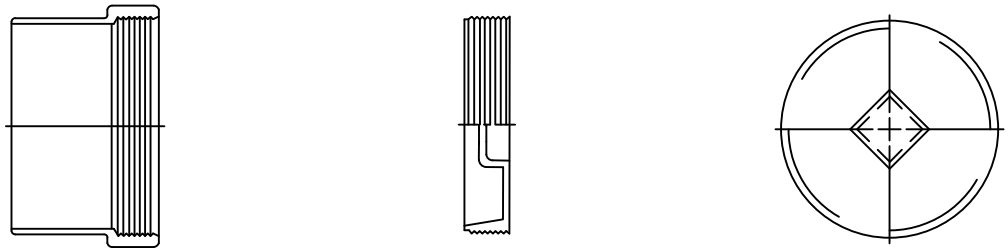



TYPICAL SECTION VIEW




FRAME AND COVER SECTION
SECTION VIEW

COVER
PLAN VIEW



PVC ADAPTER
SLIP x THREAD

PLUG
SECTION VIEW

PLUG
PLAN VIEW

NOTES:

1. THIS SANITARY CLEAN OUT IS TO BE USED IN ALL TRAFFIC AREAS, INCLUDING THE PARKWAY FROM CURB TO PROPERTY LINE OR SIDEWALK
2. IN ASPHALTIC PAVEMENT AREAS CONCRETE COLLAR SHALL BE LOWERED 3" FROM GRADE TO ALLOW FOR THE ASPHALT TO BE AROUND COLLAR. COLLAR IS 5" THICK IN THESE AREAS.
3. PLUG SHALL CONFORM TO THE SPECIFICATIONS AND SHALL HAVE A GASKET.
4. WYE SHALL CONFORM TO ASTM D-3034, & NSF STANDARD #14.

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | SANITARY SEWER CLEAN OUT FOR TRAFFIC AREAS DETAIL | DATE | 12/15/15 |
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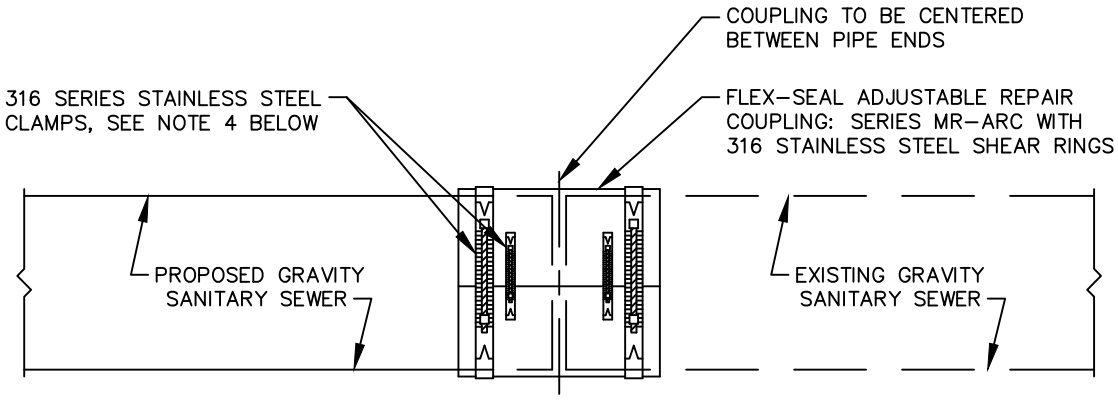


NOTES:

1. THE SPACE BETWEEN PIPE ENDS SHALL NOT EXCEED 1–INCH. PIPE ENDS SHALL BE EVEN AND CLEAN.
2. THE NOMINAL DIAMETER OF THE PROPOSED PIPE SHALL BE EQUAL TO THE NOMINAL DIAMETER OF THE EXISTING PIPE.
3. FLEX–SEAL ADJUSTABLE REPAIR CLAMP SHALL BE MANUFACTURED BY THE MISSION RUBBER COMPANY, OR APPROVED EQUAL.
4. FOR APPLICATIONS OF 24" DIAMETER AND LARGER, USE 316 SERIES, WIDE, T–BOLT CLAMPS.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## DISSIMILAR PIPE COUPLING DETAIL

| | |
|---|---|
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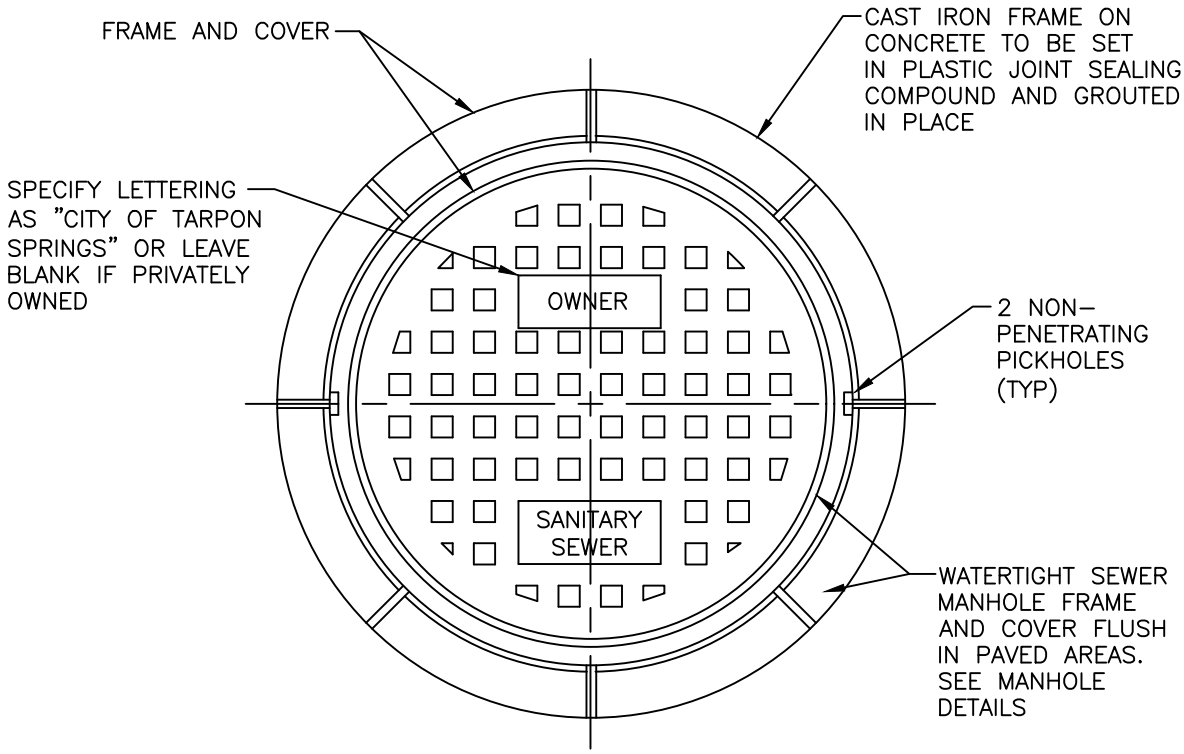
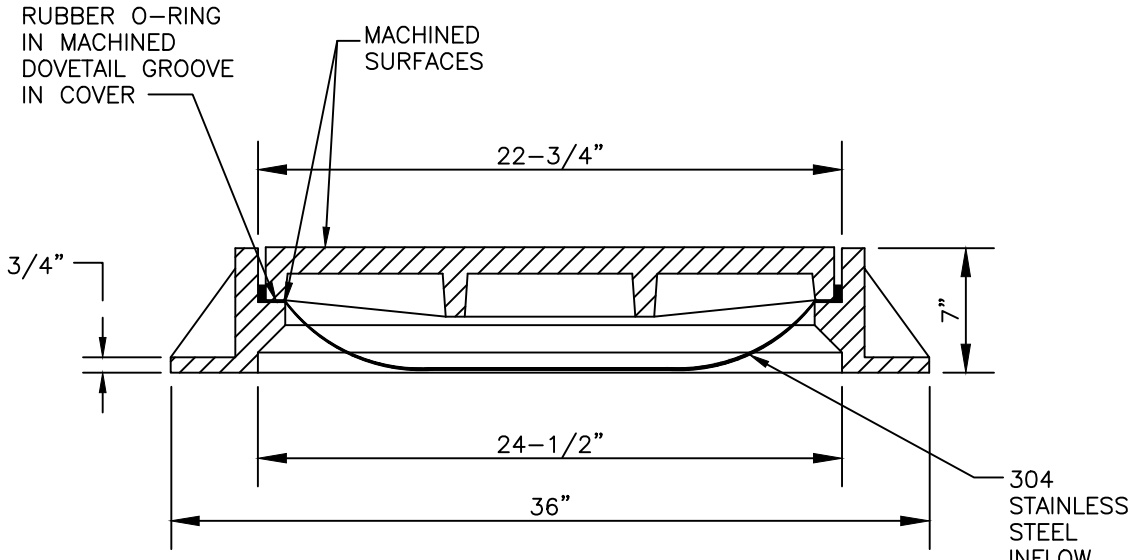



PLAN




SECTION



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## MANHOLE RING AND COVER DETAIL

| | |
|---|---|
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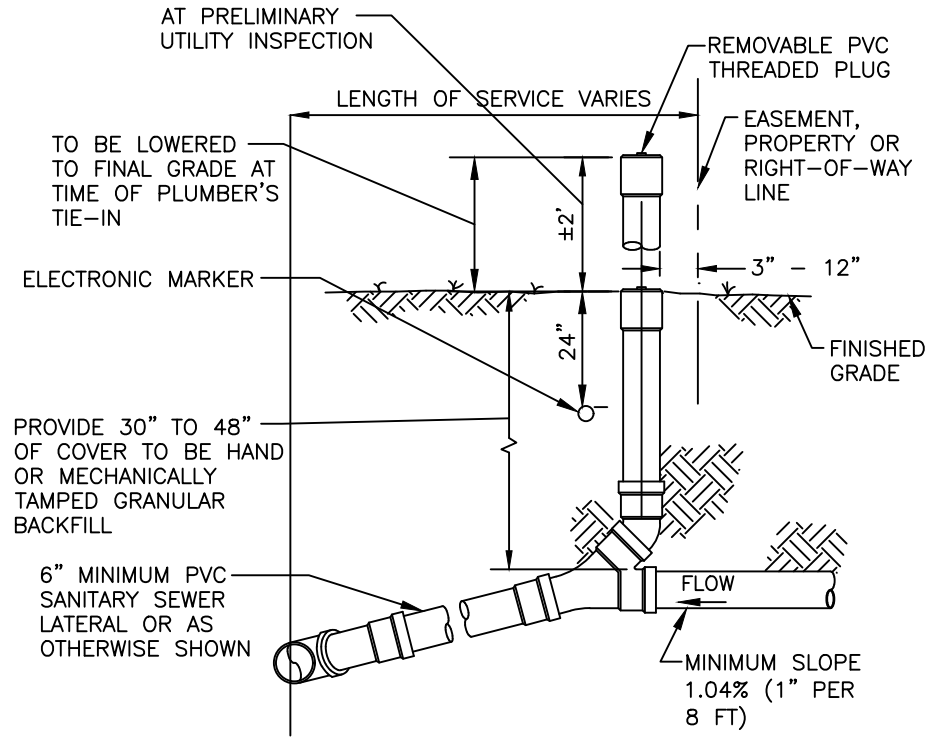
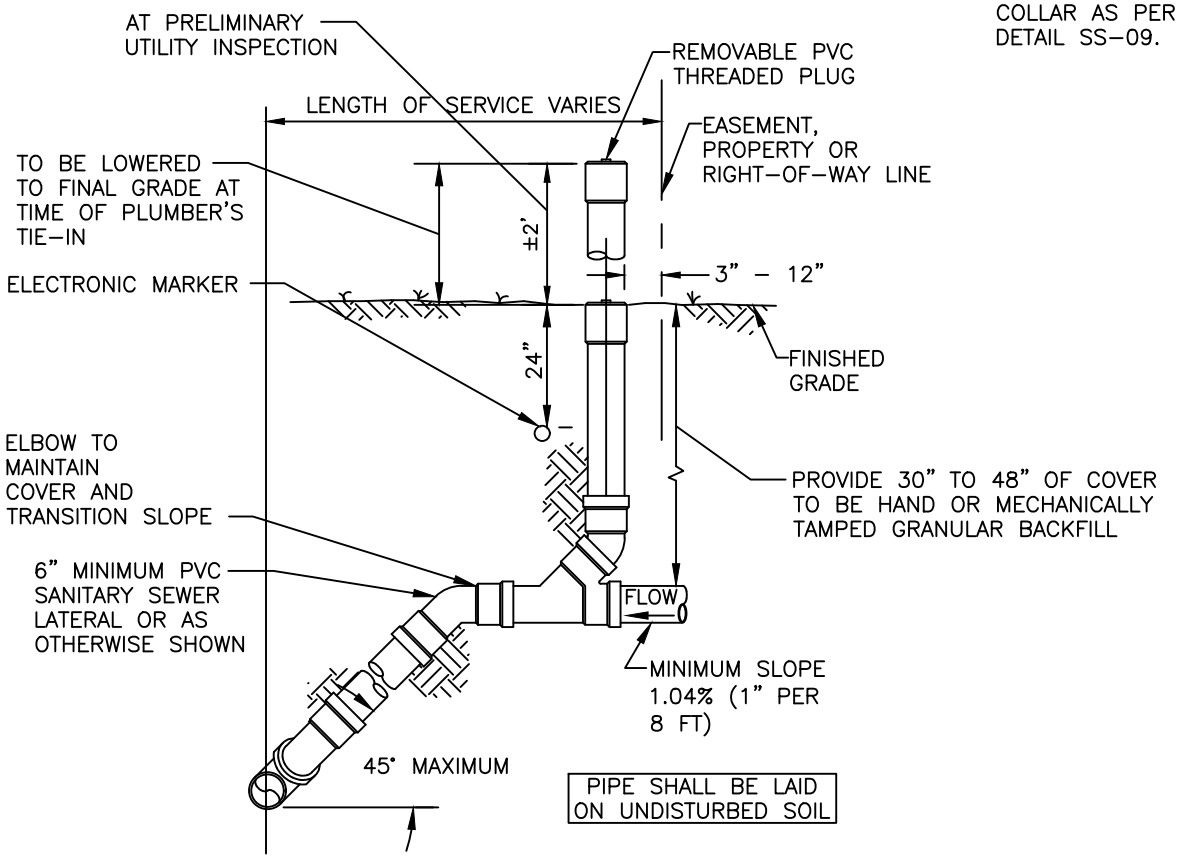



SECTION: DEPTH LESS THAN 8'

NOTE:

AT TIME OF PLUMBER'S TIE-IN, ADD CONCRETE COLLAR AS PER DETAIL SS-09.




SECTION: DEPTH 8' AND OVER

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## SEWER CONNECTION DETAILS PROPERTY, RIGHT-OF-WAY OR EASEMENT LINE

| | |
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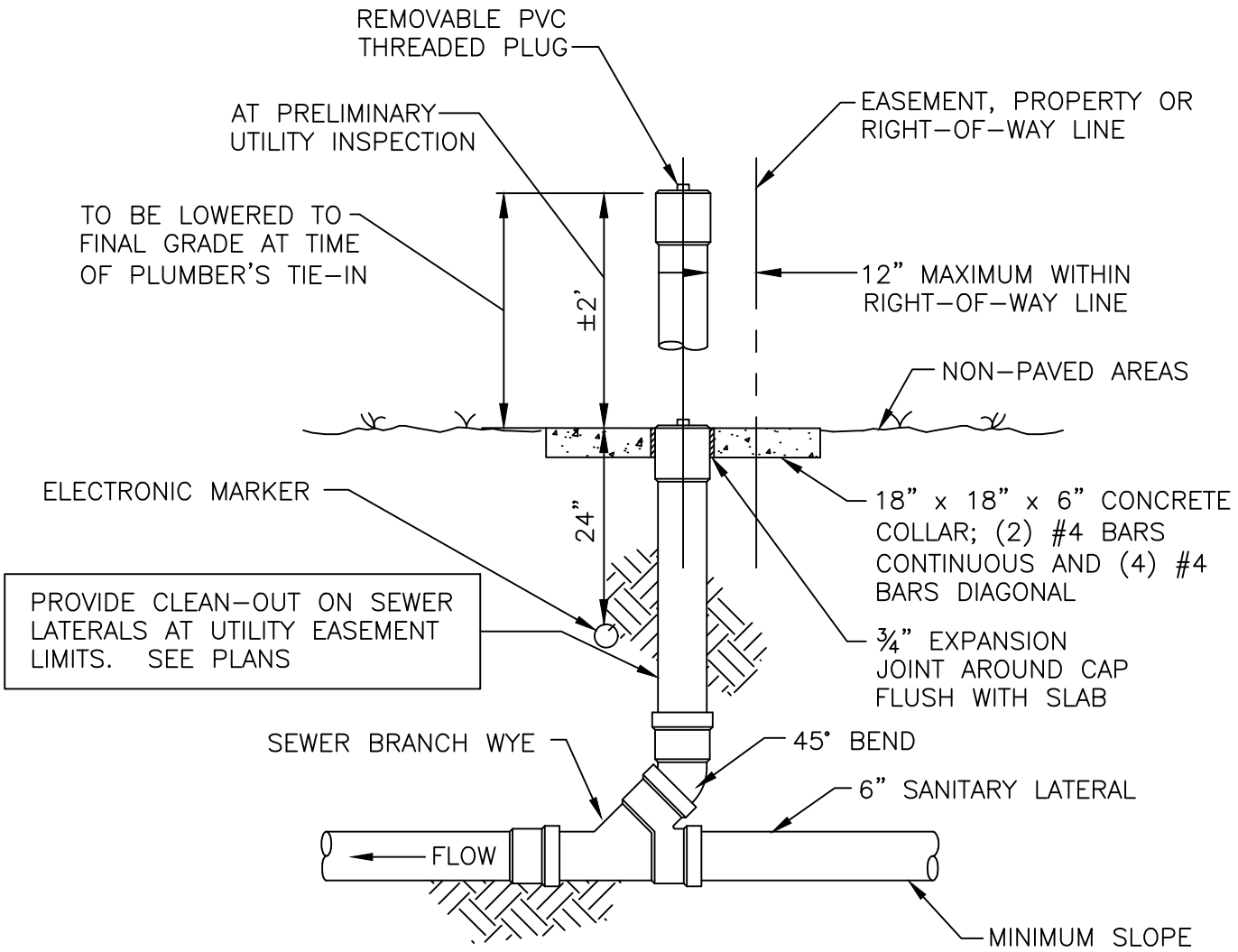


ELEVATION

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## SEWER CLEAN-OUT DETAIL NON PAVED AREAS

| | |
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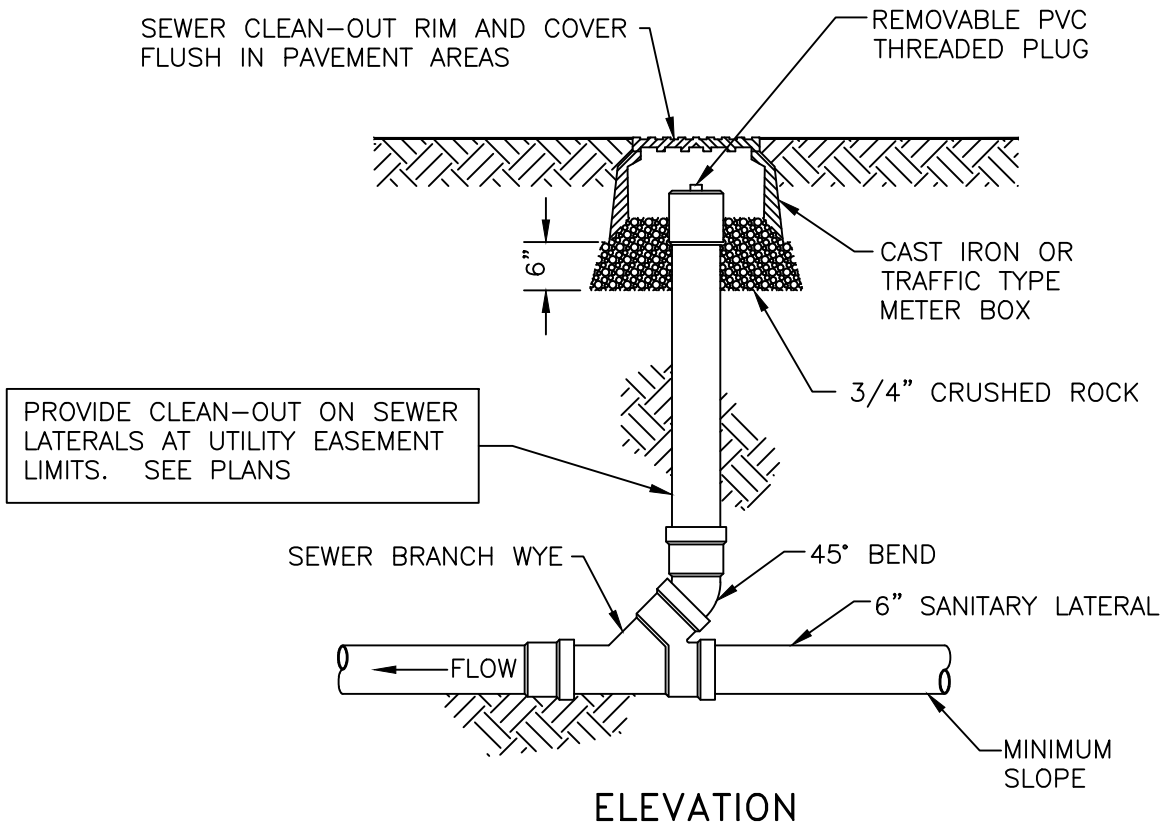


ELEVATION

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## SEWER CLEAN-OUT DETAIL PAVED AREAS

| | |
|---|---|
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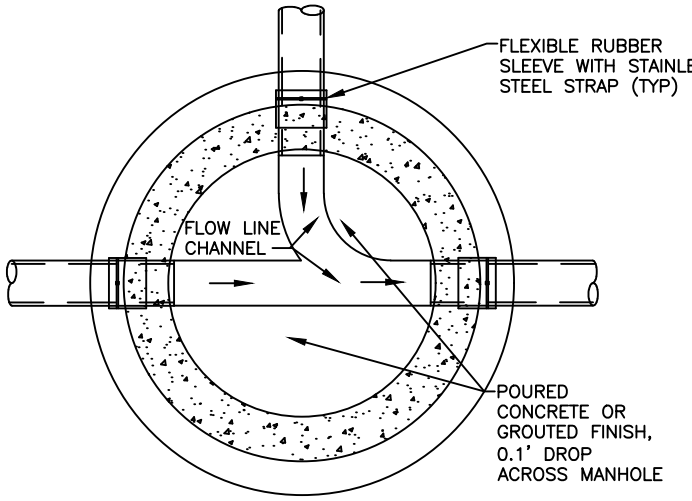
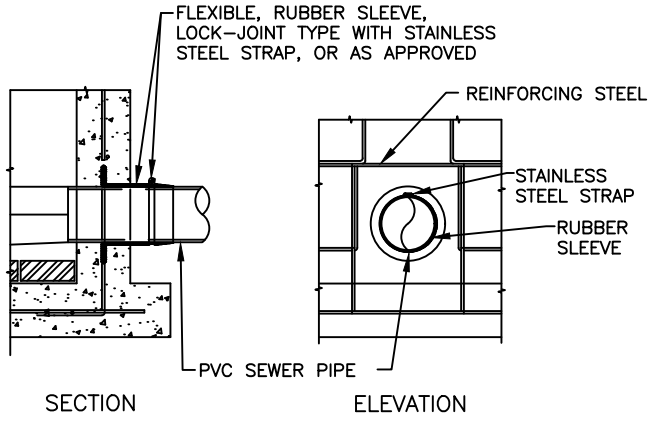
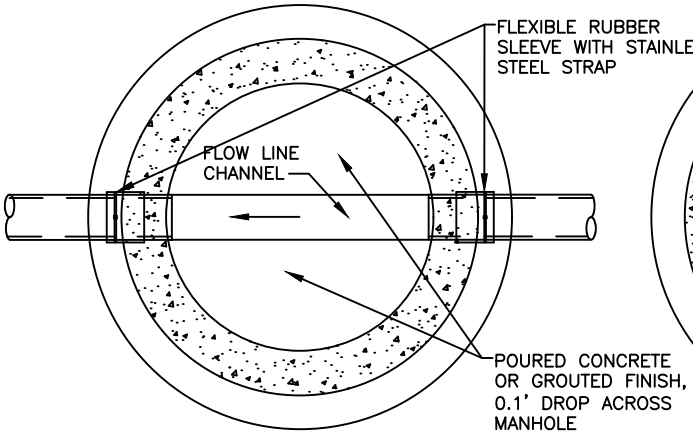
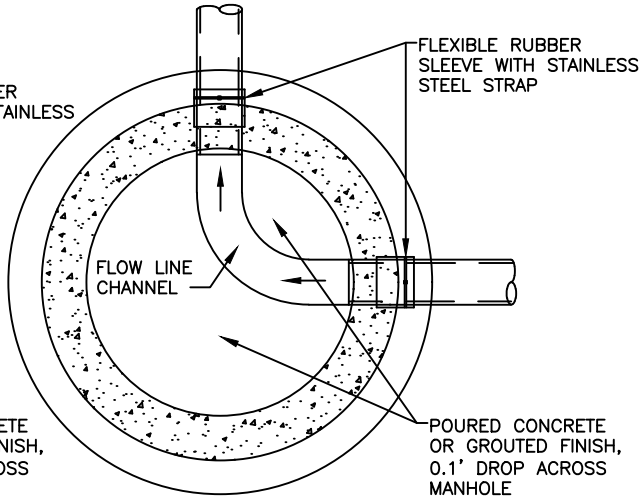



FLOW LINE CHANNELS SHALL BE CLAY BRICK HAVING A MINIMUM OF 2" POURED CONCRETE OR 2" GROUTED 0.1' DROP ACROSS MANHOLE




# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## TYPICAL FLOW LINE CHANNELS DETAILS

| | |
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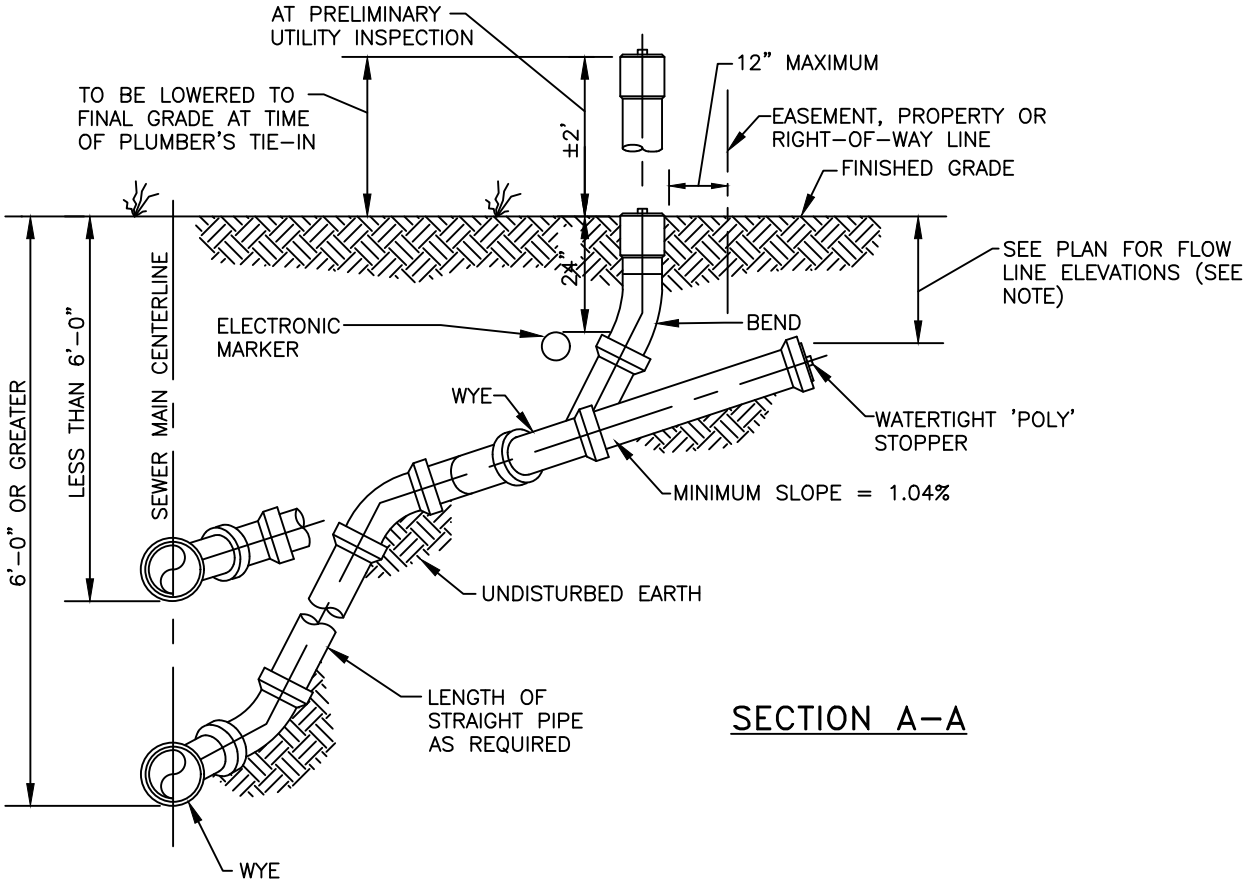
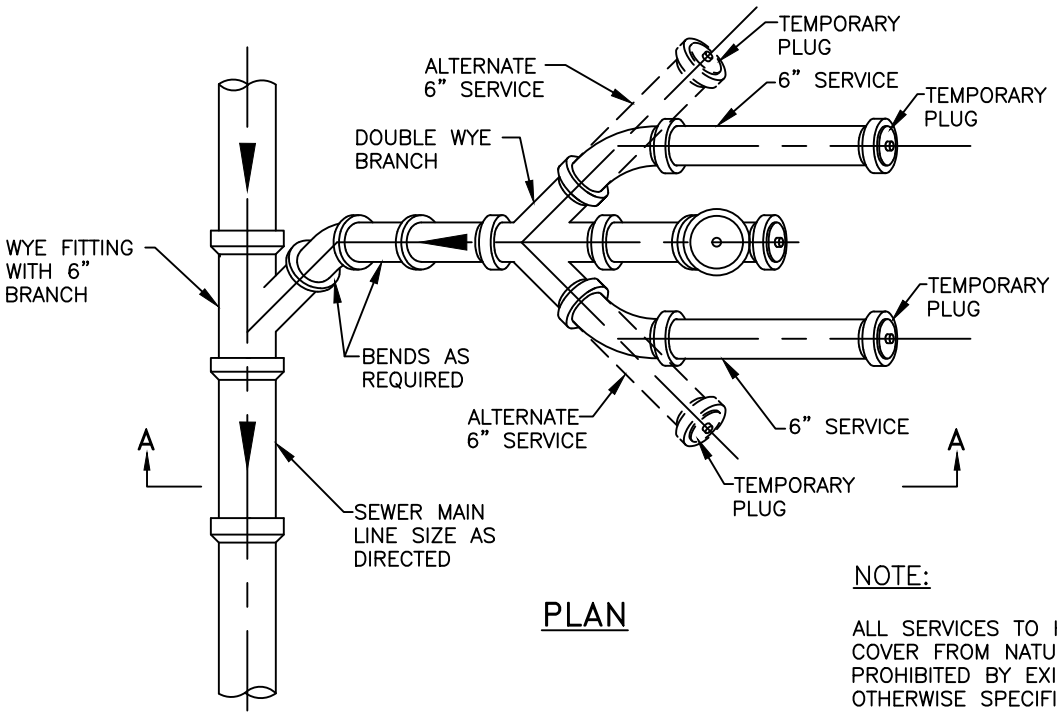



SECTION A–A




6" ONLY

PLAN

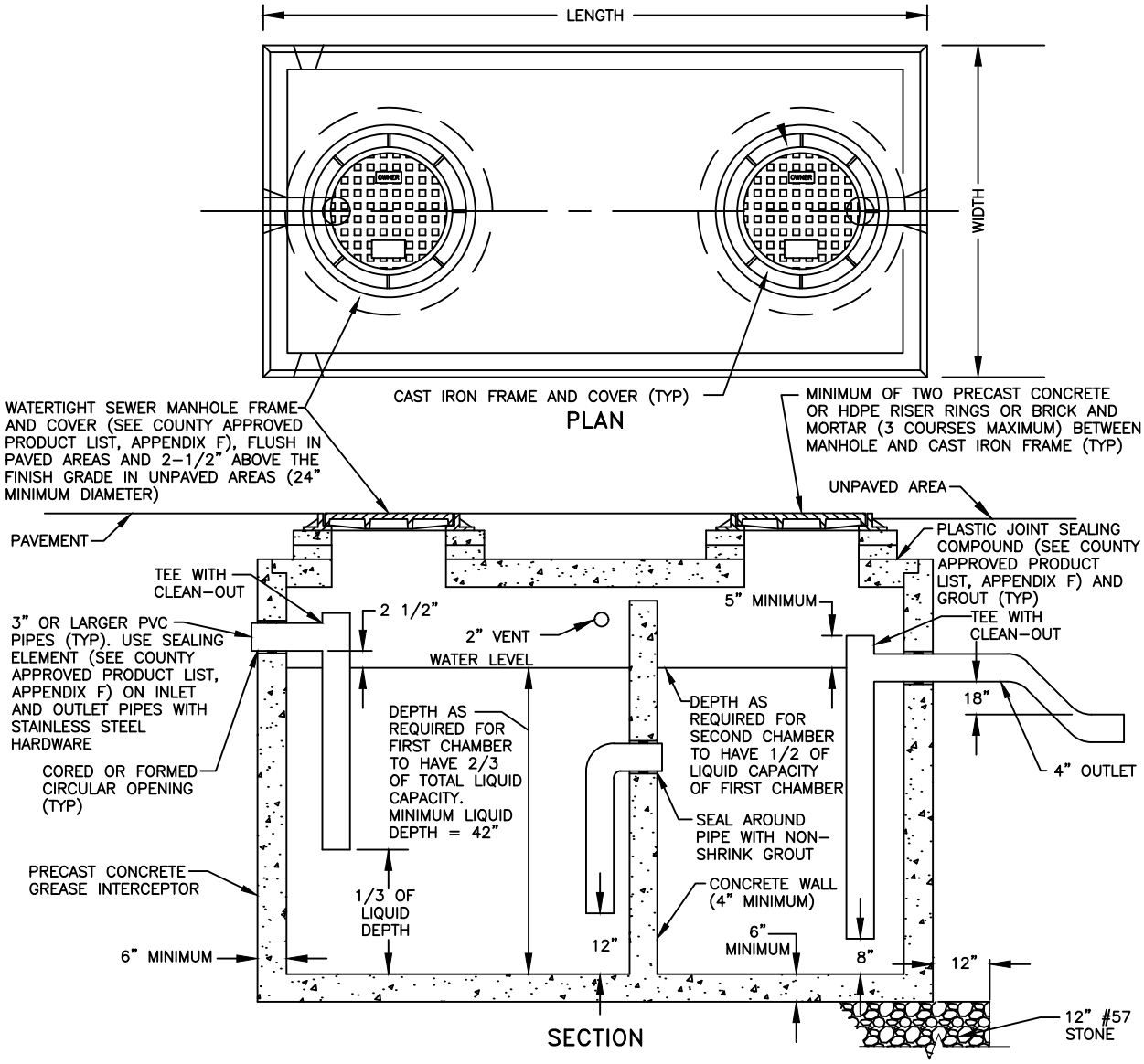
NOTE:

ALL SERVICES TO HAVE MINIMUM 4'–0" COVER FROM NATURAL GROUND UNLESS PROHIBITED BY EXISTING CONDITIONS OR OTHERWISE SPECIFIED BY THE ENGINEER

## DOUBLE SEWER CLEAN–OUT DETAIL

NTS

| | | | |
|---|---|---|---|
| CITY OF TARPON SPRINGS<br>PINELLAS COUNTY, FLORIDA | DOUBLE SEWER CLEAN-OUT DETAIL | DATE 12/15/15<br>INDEX SS-18<br>SCALE N.T.S. / SHEET 1 OF 1 | |




NOTES:

1. GREASE INTERCEPTOR SHALL COMPLY WITH STRUCTURAL REQUIREMENTS APPLICABLE TO SEPTIC TANKS EXCEPT THAT THE INLET INVERT SHALL DISCHARGE A MINIMUM 2–1/2 INCHES ABOVE THE LIQUID LEVEL LINE AND THE OUTLET PIPE SHALL HAVE A TEE WITH A MINIMUM DIAMETER OF FOUR (4) INCHES THAT EXTENDS TO WITHIN 8 INCHES OF THE BOTTOM OF THE TANK.
2. INTERCEPTOR MUST BE LOCATED SO AS TO PROVIDE EASY ACCESS FOR ROUTINE INSPECTION AND CLEANING.
3. WHERE A GREASE INTERCEPTOR IS REQUIRED, ONLY KITCHEN WASTEWATER SHALL FIRST PASS THROUGH THE INTERCEPTOR AND THEN BE DISCHARGED INTO THE FIRST COMPARTMENT OF A SEPTIC TANK OR OTHER APPROVED SYSTEM.
4. SIZING OF GREASE INTERCEPTORS SHALL BE BASED ON THE DETAIL WW–18A EQUATIONS. THE MINIMUM VOLUME OF ANY GREASE INTERCEPTOR SHALL BE 750 GALLONS AND THE MAXIMUM VOLUME OF A SINGLE GREASE INTERCEPTOR SHALL BE 1250 GALLONS. WHEN THE REQUIRED EFFECTIVE CAPACITY OF THE GREASE INTERCEPTOR IS GREATER THAN 1250 GALLONS, INSTALLATION OF GREASE TRAPS IN SERIES IS REQUIRED.
5. KEYED JOINT SEALED WITH BUTYL RUBBER.



# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## GREASE INTERCEPTOR DETAIL

| | |
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| SIZING FORMULA FOR RESTAURANTS, COUNTRY CLUBS AND ASSISTED LIVING FACILITIES | | |
|---|---|---|
| (S) x (GS) x (HR/12) x LF | = | EFFECTIVE CAPACITY OF GREASE INTERCEPTOR IN GALLONS |

WHERE:

S = NUMBER OF SEATS IN DINING AREA.

GS = GALLONS OF WASTE WATER PER SEAT
(USE 25 GALLONS FOR RESTAURANTS WITH CHINA DISHES AND/OR AUTOMATIC DISHWASHER)
(USE 10 GALLONS FOR RESTAURANTS WITH PAPER OR BASKETS AND NO DISHWASHER)

HR = NUMBER OF HOURS RESTAURANT IS OPEN

LF = LOADING FACTOR
(USE 2.00 INTERSTATE HIGHWAY; 1.50 OTHER FREEWAYS; 1.25 RECREATIONAL AREA; 1.00 MAIN HIGHWAY; 0.75 OTHER HIGHWAY)

| SIZING FORMULA FOR SCHOOLS AND OTHER ESTABLISHMENTS WITH COMMERCIAL KITCHENS (NO DISHWASHER) | | |
|---|---|---|
| (M) x (GM) x (LF) | = | EFFECTIVE CAPACITY OF GREASE INTERCEPTOR IN GALLONS |

WHERE:

M = MEALS PREPARED PER DAY

GM = GALLONS OF WASTE WATER PER MEAL
(USE 5 GALLONS)

LF = LOADING FACTOR
(USE 1.00 WITH DISHWASHING MACHINE AND 0.75 WITHOUT DISHWASHING MACHINE)

| NO COMMERCIAL DISHWASHER, NO CHINA OR DISPOSAL CHINA ONLY CAPACITY OF GREASE TRAPS | |
|---|---|
| TOTAL FLOW-THROUGH RATING (GPM) | GREASE RETENTION CAPACITY (POUNDS) |
| 4 | 8 |
| 6 | 12 |
| 7 | 14 |
| 9 | 18 |
| 10 | 20 |
| 12 | 24 |
| 14 | 28 |
| 15 | 30 |
| 18 | 36 |
| 20 | 40 |
| 25 | 50 |
| 35 | 70 |
| 50 | 100 |



**CITY OF TARPON SPRINGS**
PINELLAS COUNTY, FLORIDA

**GREASE INTERCEPTOR TABLES**

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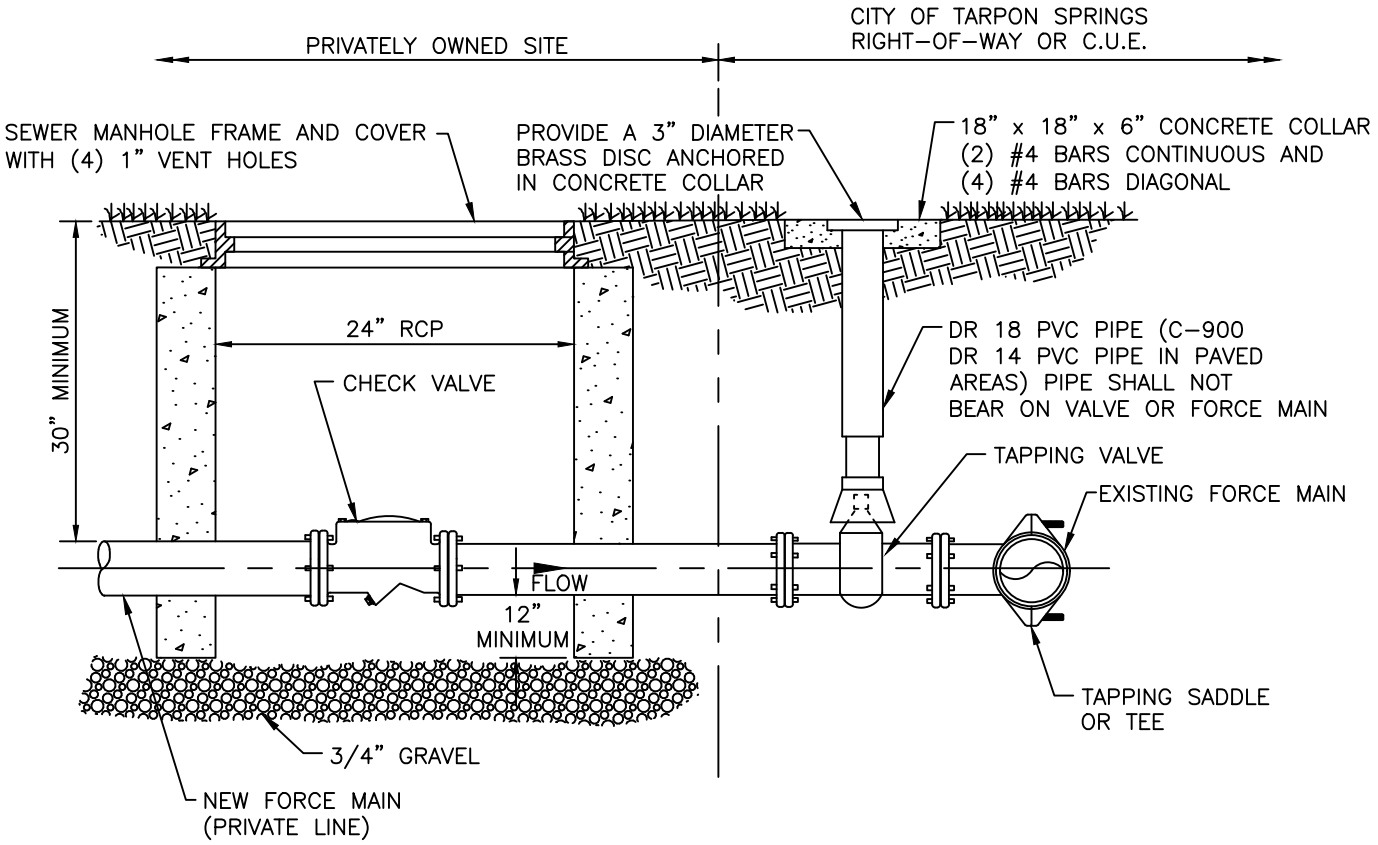


# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PRIVATE FORCE MAIN CONNECTION TO CITY FORCE MAIN

| | |
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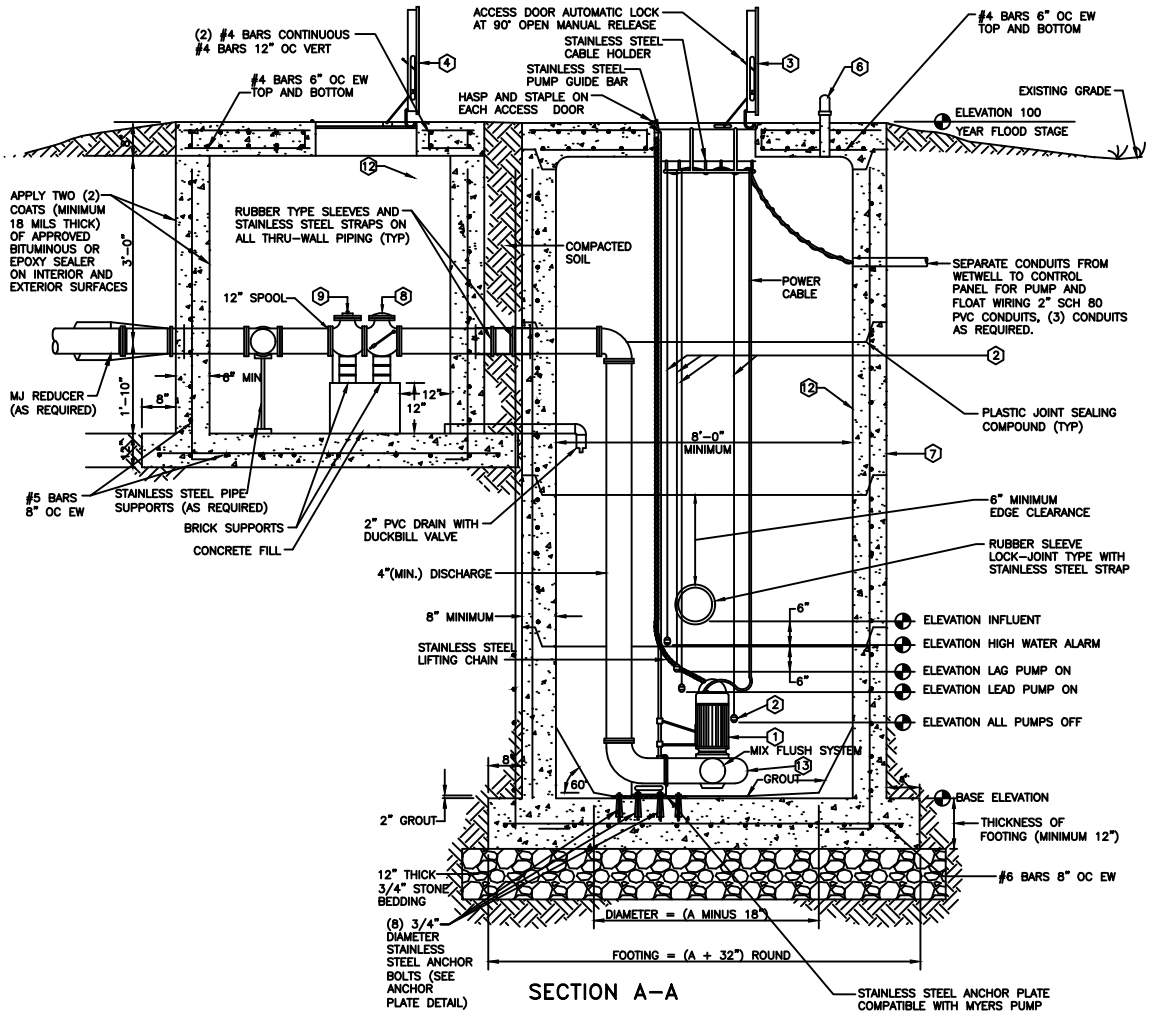


| MARK | QTY. | EQUIPMENT SPECIFICATION |
|---|---|---|
| 1 | 2 | DUPLEX – INCH DISCHARGE MYERS SUBMERSIBLE SEWAGE PUMPS EQUIPPED WITH 230/460 VOL MOTORS. EACH PUMP SHALL HAVE THE CAPACITY AND RANGE SET FORTH ON THIS SHEET AS THE "REQUIRED PUMP PERFORMANCE CURVE" OR APPROVED EQUAL. PUMP PERFORMANCE DATA WILL BE REQUIRED AS SET FORTH IN THE SPECIFICATIONS. CONTRACTOR SHALL VERIFY LOCAL VOLTAGE PRIOR TO PLACEMENT OF PUMP ORDER. PUMP MODEL SHALL BE APPROVED BY THE CITY. |
| 2 | 4 | LIQUID LEVEL REGULATORS, EACH PROVIDED WITH 50 FEET OF ELECTRICAL CABLE. PRIMARY SYSTEM SHALL BE BLUE RIBBON BIRD CAGE TRANSDUCER (MODEL BC001); BACK UP SYSTEM SHALL BE ANCHOR SCIENTIFIC, INC. ROTO-FLOAT (TYPE S) UNITS(40' CABLE LENGTH MIN.) |
| 3 | 1 | ACCESS FRAME WITH HINGED AND HASP EQUIPPED COVER, TWO UPPER GUIDE HOLDERS, CHAIN HOLDERS AND CABLE HOLDERS. ACCESS FRAMES SHALL BE ALUMINUM & INCLUDE FALL PROTECTION, MATCH FRAME SIZE TO PUMPS FRAME TO BE USF FABRICATION UNITS. |
| 4 | 1 | ACCESS FRAME WITH HINGED AND HASP EQUIPPED COVER. ACCESS FRAME SHALL BE ALUMINUM, H-20 LOADING. |
| 5 | 1 | PUMP CONTROL PANEL WITH ALL COMPONENTS FOR OPERATING TWO PUMPS AND LIQUID LEVEL REGULATORS; GENERATOR RECEPTACLE AND ANGLE ADAPTOR, AND NEMA 3R STAINLESS STEEL ENCLOSURE. |
| 6 | 1 | 4" PVC VENT PIPE WITH VANDAL PROOF HOODED VENT CAP "JASAM" MODEL J26706 |
| 7 | 1 | WETWELL, REINFORCED CONCRETE PIPE CONFORMING TO TABLE II, WALL B OF ASTM C-76, O-RING JOINTS SHALL CONFORM TO ASTM C-443 OR APPROVED EQUAL WETWELL CONSTRUCTION. APPLY TWO COATS OF APPROVED BITUMINOUS OR EPOXY SEALER ON EXTERIOR SURFACES OF THE WETWELL. |
| 8 | 2 | CHECK VALVE, (K") IRON BODY, FLANGED, BRONZE MOUNTED WITH BRONZE FACED DISC. WEIGHT AND LEVER TYPE HORIZONTAL SWING CHECK VALVE. (AMERICAN AVK – 250 PSI) |
| 9 | 1 | PLUG VALVE, (K") FULL PORT DUCTILE IRON (AMERICAN AVK – 250 PSI) SHALL BE COMPLETE WITH WRENCH. |
| 10 | 1 | 3-WAY PLUG VALVE (K") – 3 PORT, FLANGED, LEVEL ACTIVATED. VALVE SHALL BE MOUNTED SO THAT THE THIRD PORT IS ON TOP. |
| 11 | 1 | 3" QUICK-COUPLING UNIT COMPLETE. CONNECT TO THIRD PORT OF 3-WAY VALVE WITH A 4" SS 316 CAMLOCK ADAPTER TYPE F AND COUPLER (PART DC). |
| 12 | 3 | ALL PUMP STATION INTERIORS SHALL HAVE INTERNAL PROTECTION. |
| 13 | 1 | THE IMPELLER SHALL BE A SINGLE VANE, NON-CLOG DESIGN, CAPABLE OF PASSING 3 INCH SOLIDS, FIBROUS MATERIAL, AND HEAVY SLUDGE, AND CONSTRUCTED WITH A LONG THROUGHWAY WITH NO ACUTE TURNS AS SET FORTH IN THE SPECIFICATIONS. |

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PUMP STATION PROFILE

| | |
|---|---|
| DATE | 12/15/15 |
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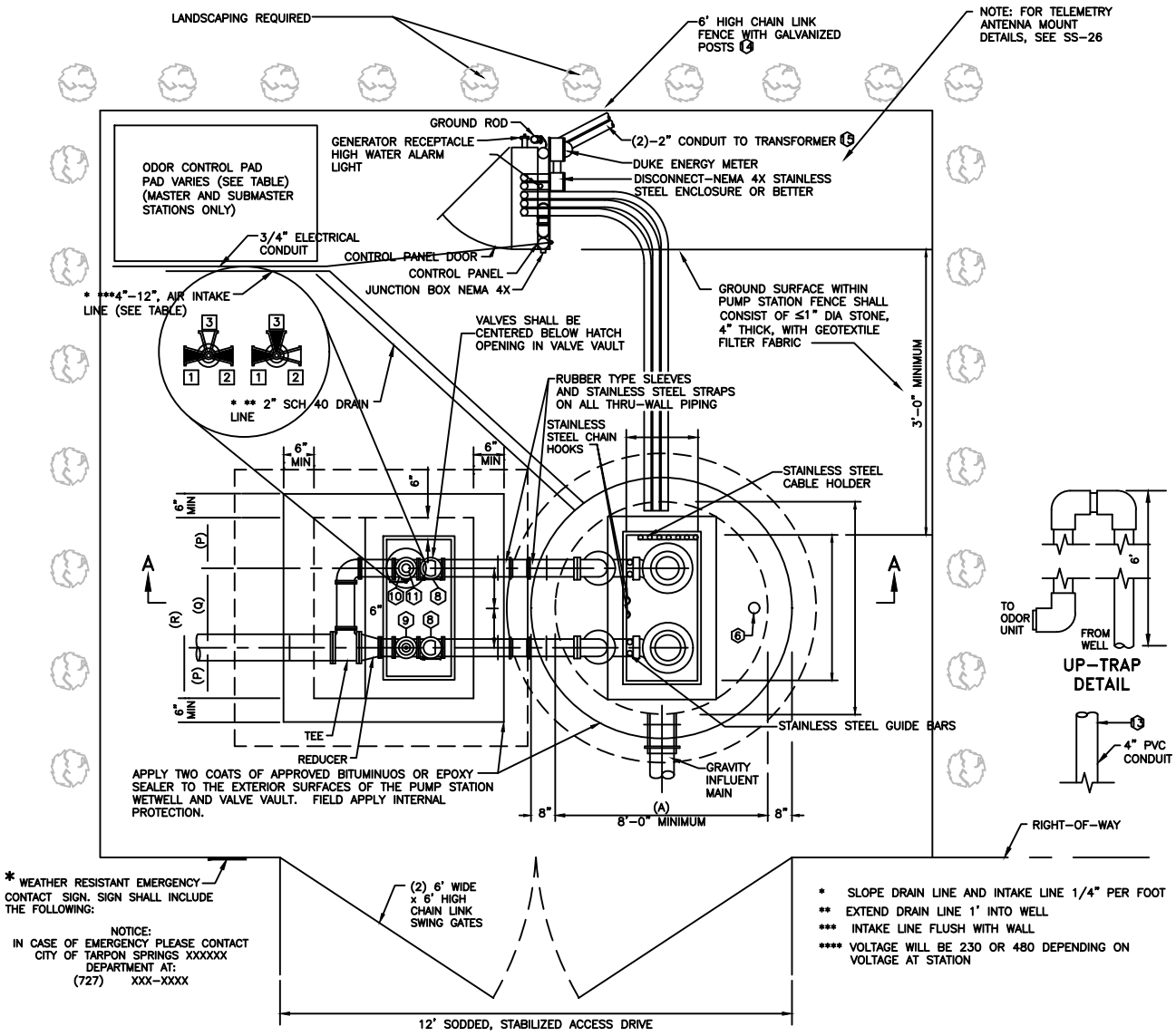
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |




## PLAN

## EQUIPMENT SPECIFICATIONS

| MARK | QTY | |
|---|---|---|
| (1) | 2 | DUPLEx ____ INCH DISCHARGE MYERS SUBMERSIBLE SEWAGE PUMPS EQUIPPED WITH 230/460 VOLT MOTORS. EACH PUMP SHALL HAVE THE CAPACITY AND RANGE SET FORTH ON THIS SHEET AS THE "REQUIRED PUMP PERFORMANCE CURVE" OR CITY APPROVED EQUAL. PUMP PERFORMANCE DATA WILL BE REQUIRED AS SET FORTH IN THE SPECIFICATIONS. CONTRACTOR SHALL VERIFY LOCAL VOLTAGE PRIOR TO PLACEMENT OF PUMP ORDER. |
| (2) | 4 | LIQUID LEVEL REGULATORS PROVIDED WITH A MINIMUM OF 50 FEET OF ELECTRICAL CABLE. |
| (3) | 1 | ACCESS FRAME WITH HINGED AND HASP EQUIPPED COVER, TWO UPPER GUIDE HOLDERS, CHAIN HOLDERS AND CABLE HOLDERS. ACCESS FRAMES SHALL BE ALUMINUM. |
| (4) | 1 | ACCESS FRAME WITH HINGED AND HASP EQUIPPED COVER. ACCESS FRAME SHALL BE ALUMINUM. |
| (5) | 1 | PUMP CONTROL PANEL: SEE SS-25. |
| (6) | 1 | 4" PVC VENT PIPE WITH 4" VANDAL-PROOF HOODED VENT CAP "JASAM" MODEL J26706 DIAMETER DRILLED HOLES FOR VENTILATION |
| (7) | 1 | WETWELL: REINFORCED CONCRETE PIPE CONFORMING TO TABLE II, WALL B OF ASTM C-76. O-RING JOINTS SHALL CONFORM TO ASTM C-443 OR CITY APPROVED EQUAL. WETWELL CONSTRUCTION: APPLY TWO COATS OF APPROVED BITUMINOUS OR EPOXY SEALER ON EXTERIOR SURFACES OF THE WELL. |
| (8) | 2 | CHECK VALVE, (K") IRON BODY, FLANGED, BRONZE MOUNTED WITH BRONZE FACED DISC. WEIGHT AND LEVER TYPE HORIZONTAL SWING CHECK VALVE. (AMERICAN AVK-250 PSI) |
| (9) | 1 | PLUG VALVE, (K") FULL PORT DUCTILE IRON (AMERICAN AVK-250 PSI) SHALL BE COMPLETE WITH WRENCH. |
| (10) | 1 | 3-WAY PLUG VALVE, (K") - 3 PORT, FLANGED, LEVEL ACTIVATED. VALVE SHALL BE MOUNTED SO THAT THE THIRD PORT IS ON TOP. |
| (11) | 1 | 3" QUICK-COUPLING UNIT COMPLETE. CONNECT TO THIRD PORT OF 3-WAY VALVE WITH 4" SS 316 CAMLOK ADAPTER TYPE F AND COUPLER (PART DC). |
| (12) | 3 | ALL PUMP STATION INTERIORS SHALL HAVE INTERNAL PROTECTION. |
| (13) | 1 | IN CASES WHERE A PUMP STATION REQUIRES AN ODOR CONTROL UNIT AND IS ON THE OPPOSITE SIDE OF THE STREET FROM A WATER MAIN, A 4" PVC CONDUIT SHALL BE INSTALLED FROM THE NEAREST LOT CORNER ON OPPOSITE OF STREET TO A POINT 5 FOOT BEYOND BACK OF SIDEWALK ON SAME SIDE OF STREET AS PUMP STATION |
| (14) | 1 | CHAIN LINK FENCE SHALL BE NEW, HOT DIP GALVANIZED AFTER FABRICATION WITH MINIMUM 1.2 OUNCES PER SQUARE FOOT OF ZINC COATING. FENCE FABRIC SHALL BE WOVEN #9 GAUGE WIRE WITH 2 INCH DIAMOND MESH AND KNUCKLED SELVAGES. FENCE SHALL HAVE TOP RAIL AND BOTTOM TENSION WIRE WITH TIE CLIPS AT MAX 24 INCH SPACING. FENCE SHALL HAVE WEATHER-TIGHT POST CAPS ON EACH POST. GATE FRAMES SHALL BE CONSTRUCTED OF TUBULAR MEMBERS WELDED AT ALL CORNERS. GATE POSTS SHALL BE EMBEDDED IN CONCRETE (30" MINIMUM EMBEDMENT). INSTALLATION SHALL MEET ASTM F567. |
| (15) | 1 | ALL DUKE ENERGY TRANSFORMERS SHALL BE INSTALLED OUTSIDE OF PUMP STATION FENCE LINE |

ODOR CONTROL UNITS - U.S. FILTER ZABOCS

| UNIT | CFM SIZE | INTAKE LINE | PAD SIZE |
|---|---|---|---|
| ZB-8000 | 1500 | 12" | 10'x13' |
| ZB-7000 | 1150 | 12" | 9'x12' |
| ZB-6000 | 850 | 10" | 8'x11' |
| ZB-5000 | 500 | 8" | 7'x9.5' |
| ZB-4000 | 350 | 6" | 6'x8.5' |
| ZB-42 | 140 | 4" | 5'x5' |
| ZB-30 | 70 | 4" | 4'x4' |
| | | | |

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PUMP STATION PLAN

| | |
|---|---|
| DATE | 12/15/15 |
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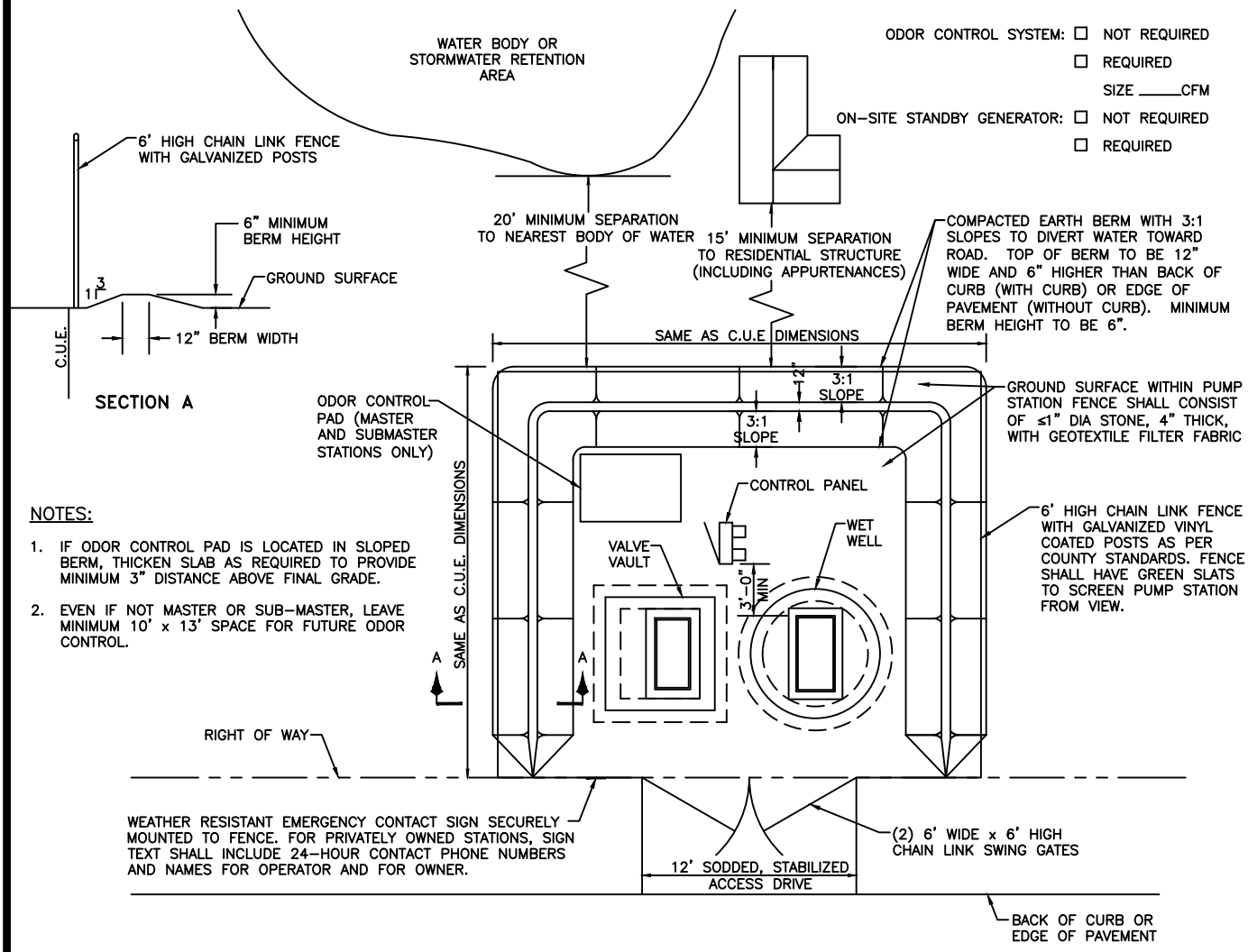


NOTES:

1. IF ODOR CONTROL PAD IS LOCATED IN SLOPED BERM, THICKEN SLAB AS REQUIRED TO PROVIDE MINIMUM 3" DISTANCE ABOVE FINAL GRADE.
2. EVEN IF NOT MASTER OR SUB-MASTER, LEAVE MINIMUM 10' x 13' SPACE FOR FUTURE ODOR CONTROL.

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PUMP STATION DETAIL SITE PLAN AND GENERAL REQUIREMENTS

| | |
|---|---|
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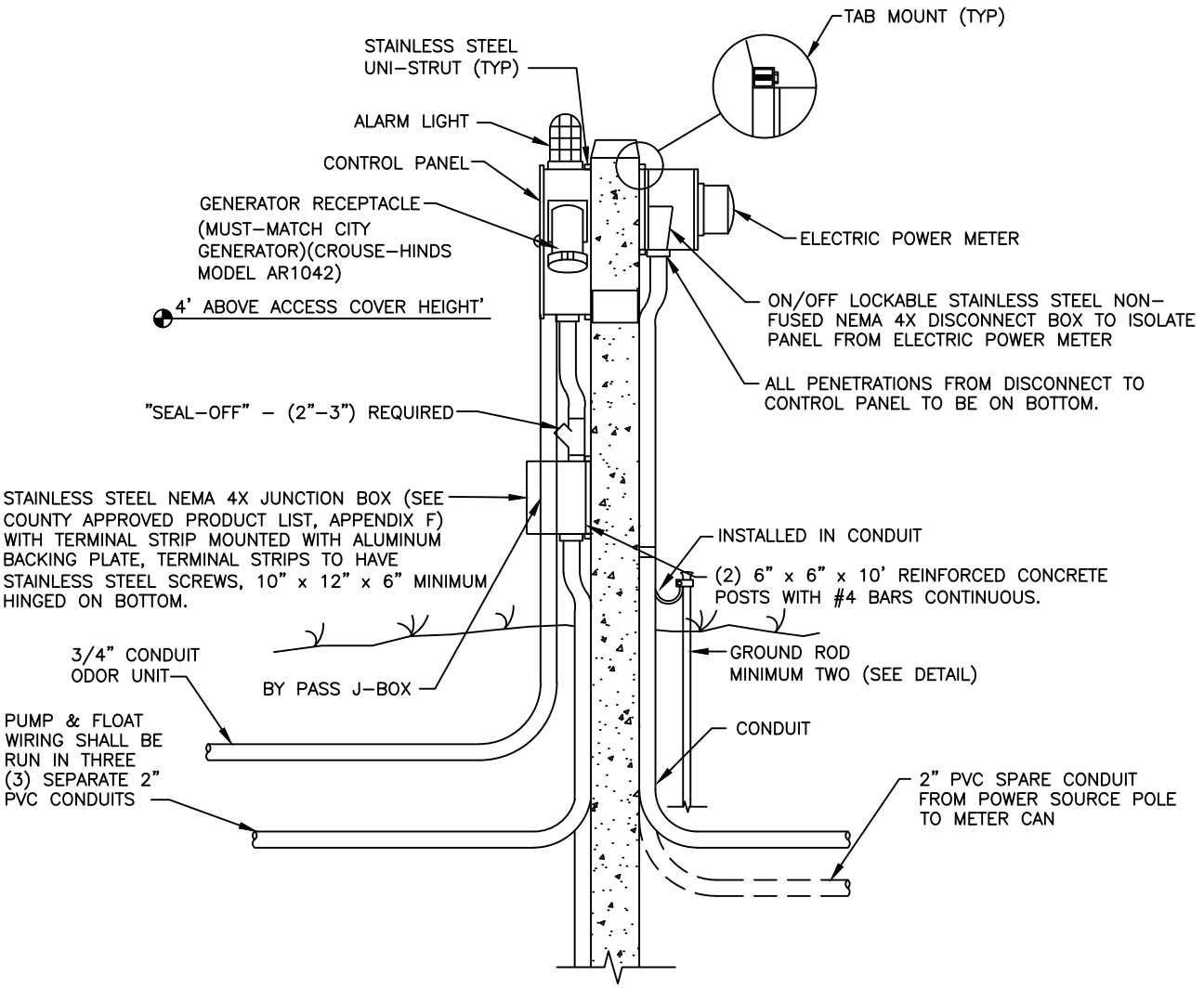
| SHEET | 1 OF 1 |

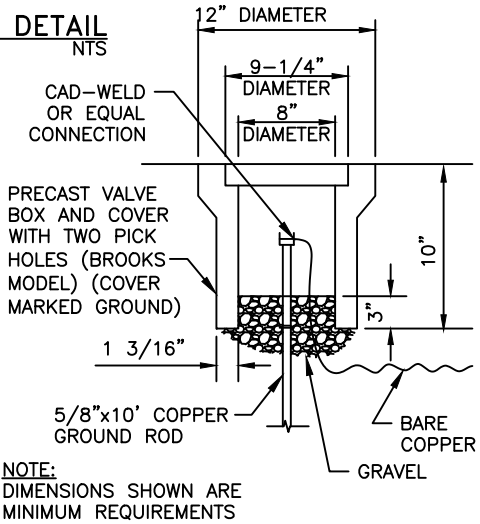



## PUMPING STATION CONTROL PANEL DETAIL

NTS

NOTES:

1. #10 STRAND MINIMUM FROM CONTROL PANEL TO J-BOX.
2. LIGHTNING ARRESTER MUST BE INSTALLED EXTERNALLY ON LOAD SIDE OF DISCONNECT BETWEEN DISCONNECT AND MAIN BREAKER. THE PENETRATION THROUGH THE DISCONNECT MUST BE MADE BELOW THE WORKING MECHANISM OF THE DISCONNECT.
3. PUMP CONTROL PANEL WITH ALL COMPONENTS FOR OPERATING TWO PUMPS AND LIQUID LEVEL REGULATORS; GENERATOR RECEPTACLE AND ANGLE ADAPTER AND NEMA 4X STAINLESS STEEL ENCLOSURE.
4. STATION SHALL ALSO INCLUDE A NEMA 4X 316 STAINLESS STEEL ENCLOSURE WITH TELEMETRY CONTROL UNIT (TCU) FROM DATA FLOW SYSTEMS PROGRAMMED TO THE SPECIFIC FREQUENCY ASSIGNED TO THE CITY OF TARPON SPRINGS TO INCLUDE ALL FCC LICENSING REQUIREMENTS. IN CERTAIN INSTANCES, THE TCU SHOULD BE ABLE TO PERFORM WITH ALTIVAR 61 VARIABLE FREQUENCY DRIVES.
5. SEE DETAIL SS-26 FOR ANTENNA MOUNT DETAIL.
6. GROUND WIRE FROM SERVICE SHALL BE INSTALLED IN CONDUIT.




NOTE:
DIMENSIONS SHOWN ARE MINIMUM REQUIREMENTS

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## PUMP STATION CONTROL PANEL DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
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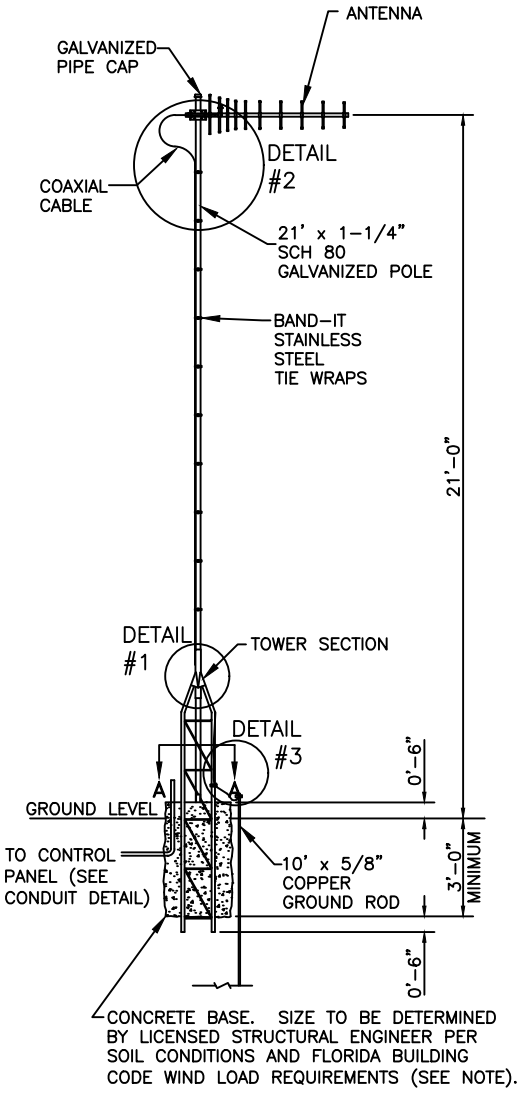
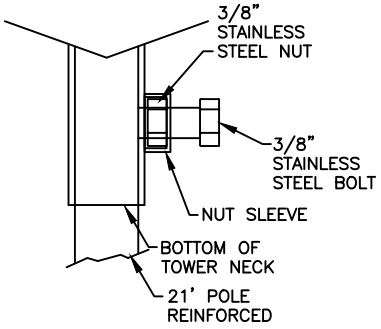
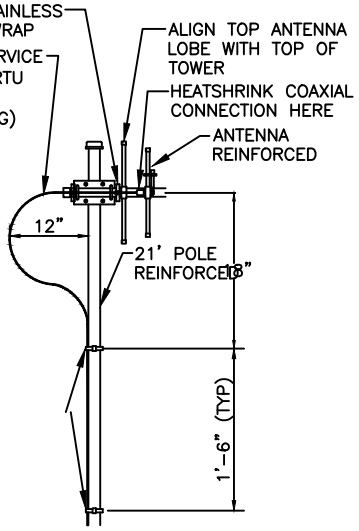
| SHEET | 1 OF 1 |

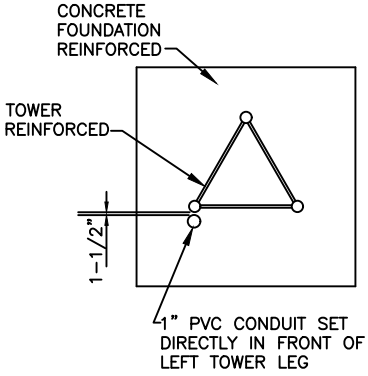


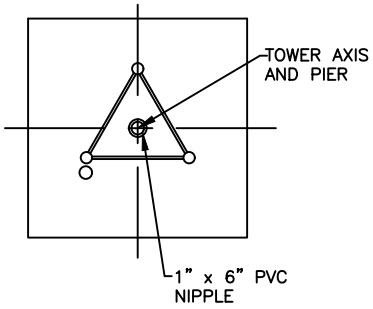

DETAIL #1
POLE SWIVEL BOLT
SIDE VIEW




DETAIL #2
COAXIAL MOUNTING
AND ROUTING



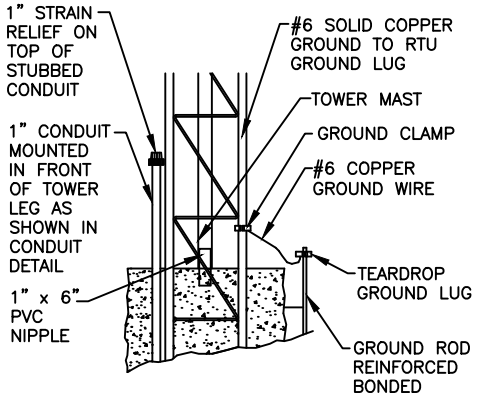

CONDUIT DETAIL
TOP VIEW




SECTION A-A

NOTES:

1. TOWER/ANTENNA ASSEMBLY AND FOUNDATION CONSTRUCTION MUST MEET CURRENT EDITION FLORIDA BUILDING CODE WIND LOAD REQUIREMENTS. PROVIDE STRUCTURAL CERTIFICATION BY FLORIDA REGISTERED LICENSED PROFESSIONAL ENGINEER.
2. TELEMETRY SYSTEM TO BE COMPATIBLE WITH CITY (DATA FLOW SYSTEMS).




DETAIL #3
GROUNDING DETAIL

# CITY OF TARPON SPRINGS

PINELLAS COUNTY, FLORIDA

## TELEMETRY ANTENNA MOUNT DETAIL

| | |
|---|---|
| DATE | 12/15/15 |
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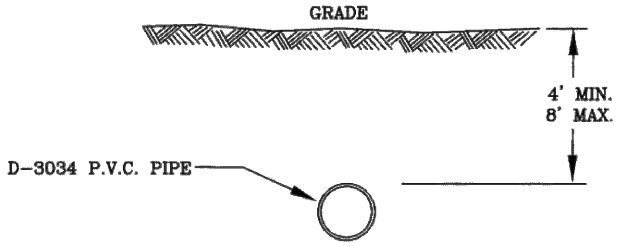
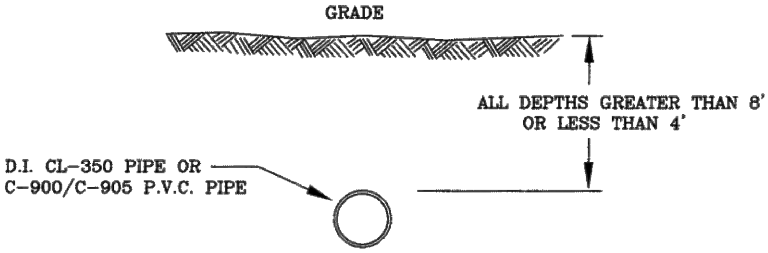
| SHEET | 1 OF 1 |

NOTE:
1. ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST P.C.U. APPROVED MATERIAL SPECIFICATION MANUAL.






# CITY OF TARPON SPRINGS
PINELLAS COUNTY, FLORIDA

## DEPTH LIMITATIONS OF SANITARY SEWER PIPE DETAIL

| | |
|---|---|
| DATE | 10/16/17 |
| INDEX | SS-27 |
| SCALE | N.T.S. |
| SHEET | 1 OF 1 |