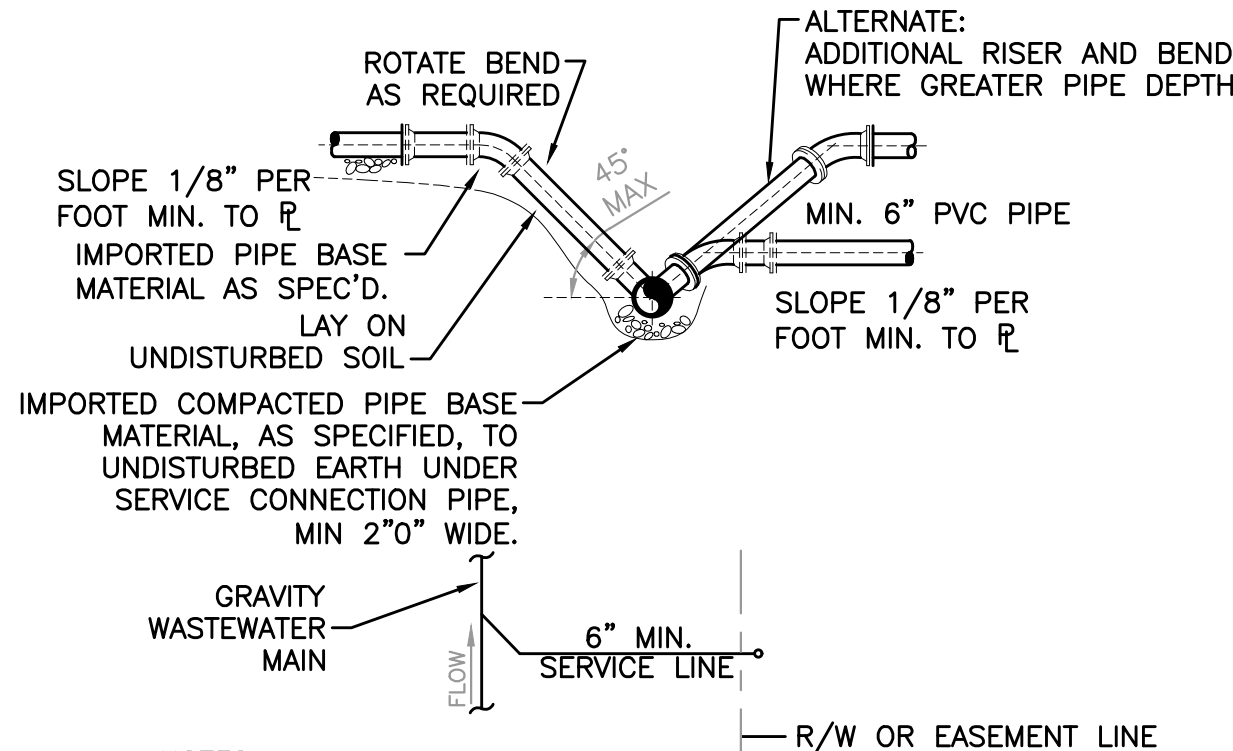
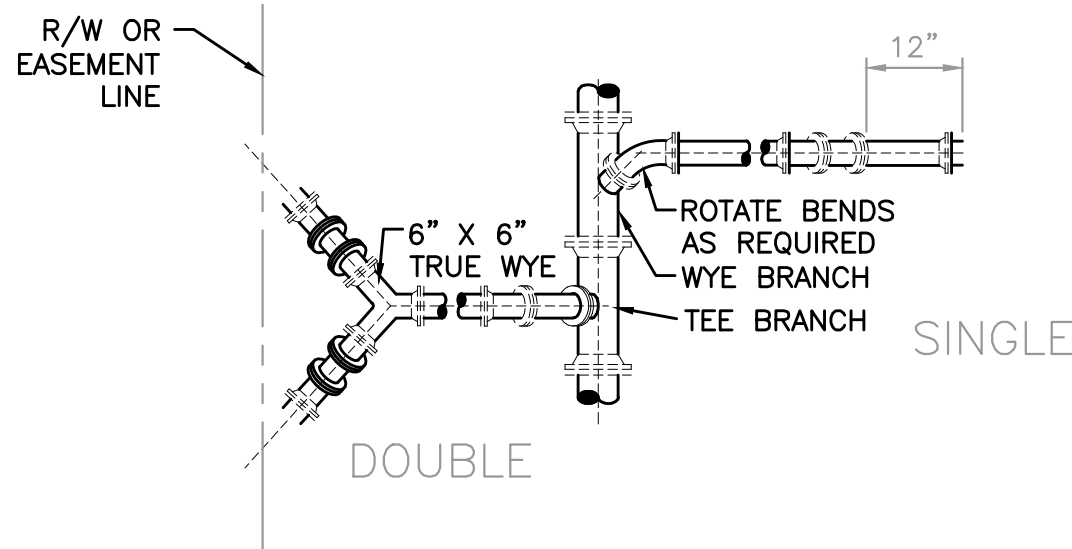
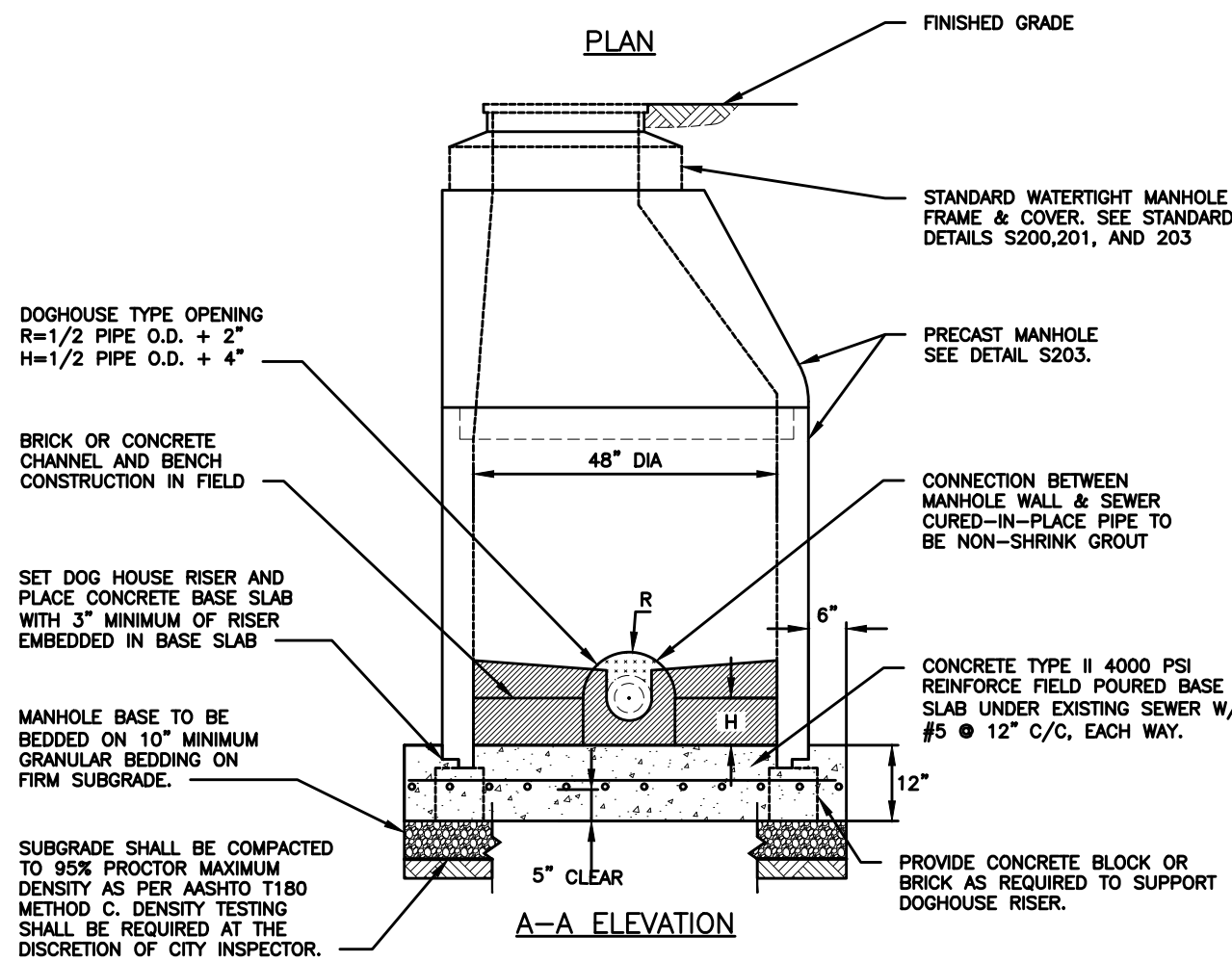
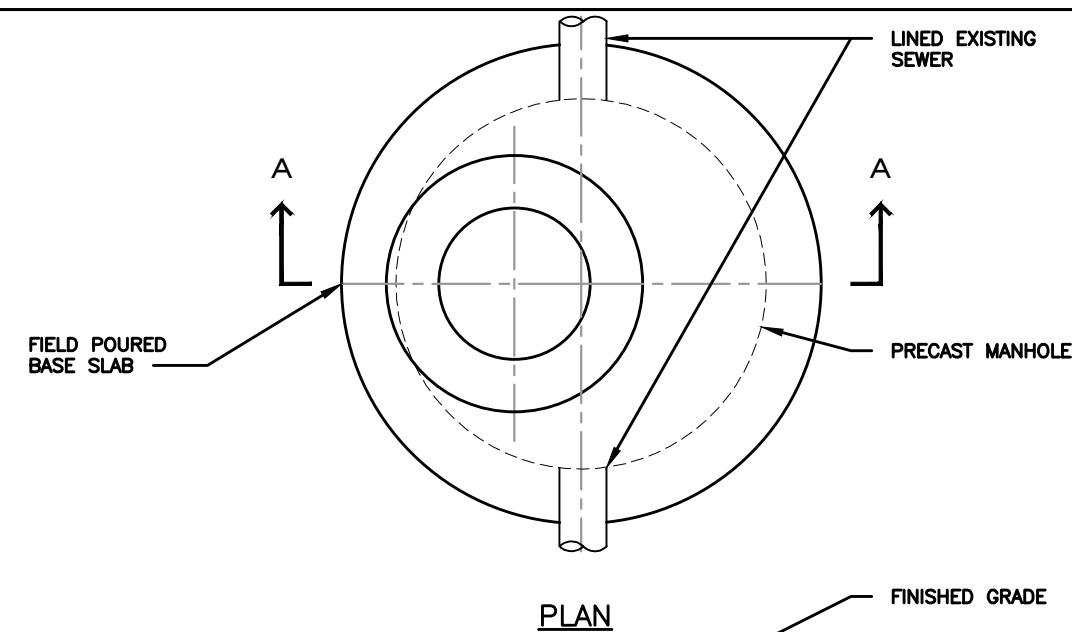




- NOTES:**
1. ALL NEW OR REPLACED SANITARY SEWER SERVICES SHALL BE SINGLE CONNECTIONS. TRUE WYE DOUBLE CONNECTIONS ARE NOT ALLOWED. THE ABOVE TRUE WYE DETAIL IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. FOR CASES WHEN A WYE ALREADY EXISTS AND THE SERVICE LINE IS NOT BEING REPLACED.
 2. WASTEWATER MAIN WYE BRANCH TO MATCH MAIN PIPE MATERIAL.
 3. NO 90° BENDS SHALL BE USED FOR WASTEWATER SERVICE AND CLEANOUT INSTALLATIONS.
 4. SERVICE LATERALS SHALL TERMINATE AT 12" INSIDE THE PROPERTY LINE AT A DEPTH OF 3 FEET EXCEPT WHERE A DEEPER INVERT IS REQUIRED BY EXISTING BUILDING CONDITIONS.

TYPICAL WASTEWATER SERVICE CONNECTION
N.T.S.



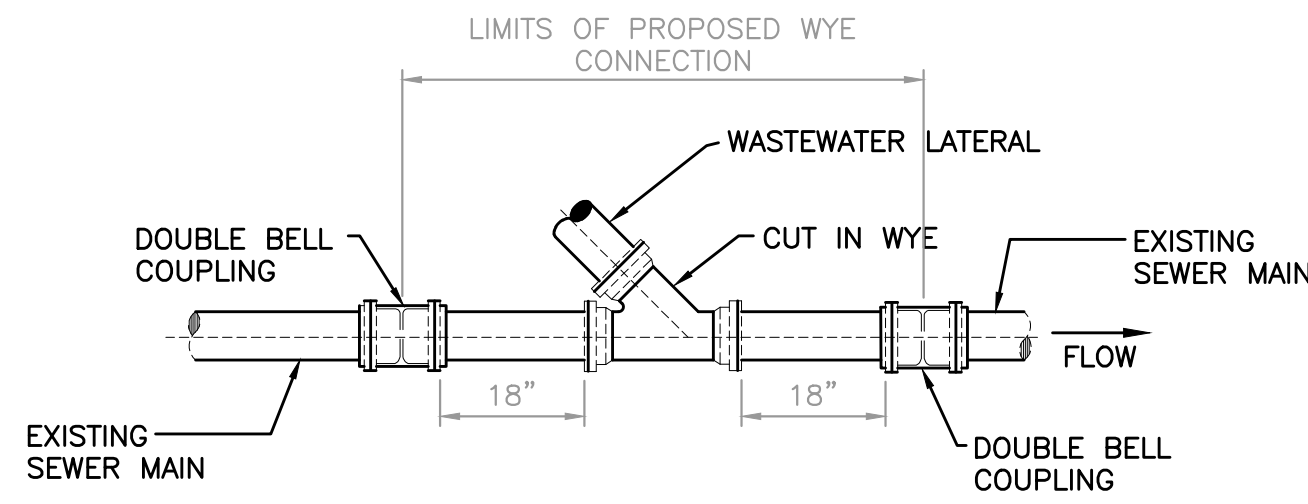
NOTES: INSTALLATION OF NEW PRECAST CONCRETE MANHOLE(S) BUILT OVER EXISTING CIP LINER.

1. ALL NEW MANHOLES MUST BE CONSTRUCTED PER STANDARD DETAIL S212 BY EXCAVATING TO HOST PIPE ELEVATION.
2. REMOVE HOST PIPE MATERIAL (E.G. VCP) FROM AREA OF NEW DOG HOUSE MANHOLE INSTALLATION.
3. CONTRACTOR SHALL NOT COMPROMISE STRUCTURAL INTEGRITY OF THE CIP LINER.
4. CONTRACTOR SHALL PROPERLY SEAL CONNECTIONS BETWEEN DOG HOUSE MANHOLE AND CIP LINER WITH NON-SHRINK GROUT TO AVOID INFILTRATION AND INFLOW CONTRIBUTION TO THE CITY'S COLLECTION SYSTEM PER STANDARD DETAIL S212.
5. MANHOLE BENCH SHALL BE CONSTRUCTED TO INCORPORATE THE BOTTOM HALF OF THE CIP LINER AS PART OF THE MANHOLE TROUGH.
6. UPON FINAL CONSTRUCTION AND CURING OF THE MANHOLE BENCH THE INSIDE OF THE MANHOLE SHALL BE LINED UTILIZING SPRAY APPLIED POLYMERIC (EPOXY AND URETHANE) RESINS. RAVEN LINING SYSTEMS, IET COATING (PAINTS AND COATINGS, INC.) OR APPROVED EQUAL MUST BE UTILIZED.
7. ALL NEW DOGHOUSE MANHOLE INSTALLATIONS MUST BE INSPECTED BY CITY INSPECTORS WHO SHALL WITNESS ALL PHASES OF CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE POST CCTV INSPECTION OF MAINLINE/ MANHOLE INTERCONNECTIONS.
9. QUALITY OF CCTV INSPECTION FILES MUST CLEARLY SHOW SUCH INTERCONNECTION IN ORDER TO EVALUATE AND APPROVE. CONTRACTOR SHALL SUBMIT A COPY OF CCTV FILE TO DSD AND PW ENGINEERING STAFF FOR REVIEW AND APPROVAL.

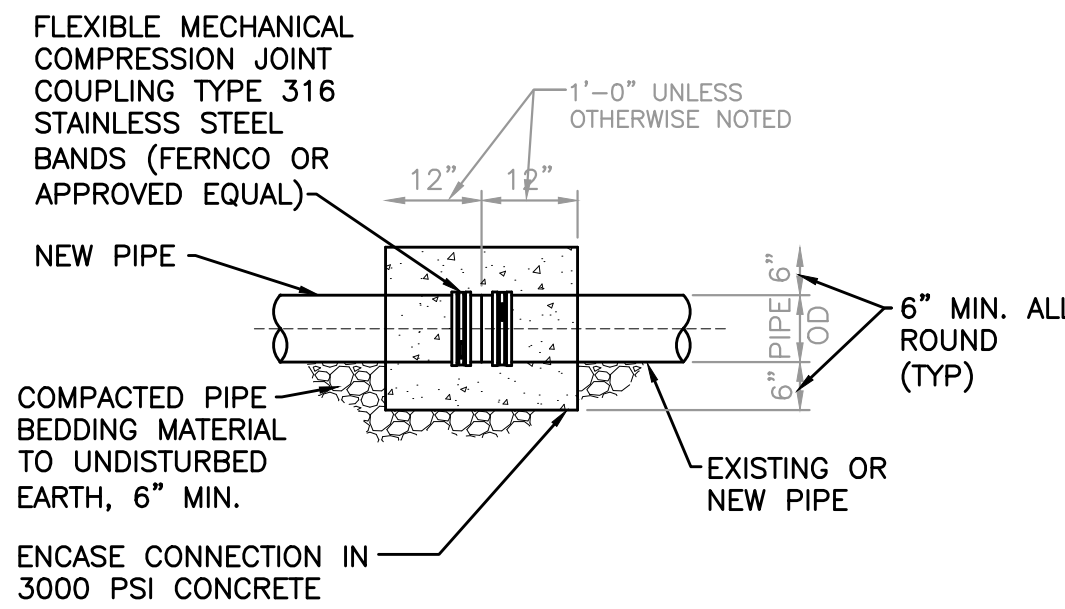
DSD = DEVELOPMENT SERVICES DEPARTMENT

PW = PUBLIC WORKS

PRECAST CONCRETE MANHOLE BUILT OVER EXISTING CURED IN PLACE LINED SEWER PIPE
N.T.S.



NEW LATERAL ON EXISTING GRAVITY WASTEWATER MAIN
N.T.S.



NOTE:

1. IN PLACE OF CONCRETE ENCASEMENT, WITH CITY'S ADVANCE APPROVAL, THE CONTRACTOR MAY USE SHEAR-RING COUPLINGS (FERNCO OR APPROVED EQUAL) PROVIDED THAT ALL METAL PARTS ARE SHOWN TO BE 316 STAINLESS STEEL.

JOINT FOR DISSIMILAR GRAVITY SEWER PIPE
N.T.S.

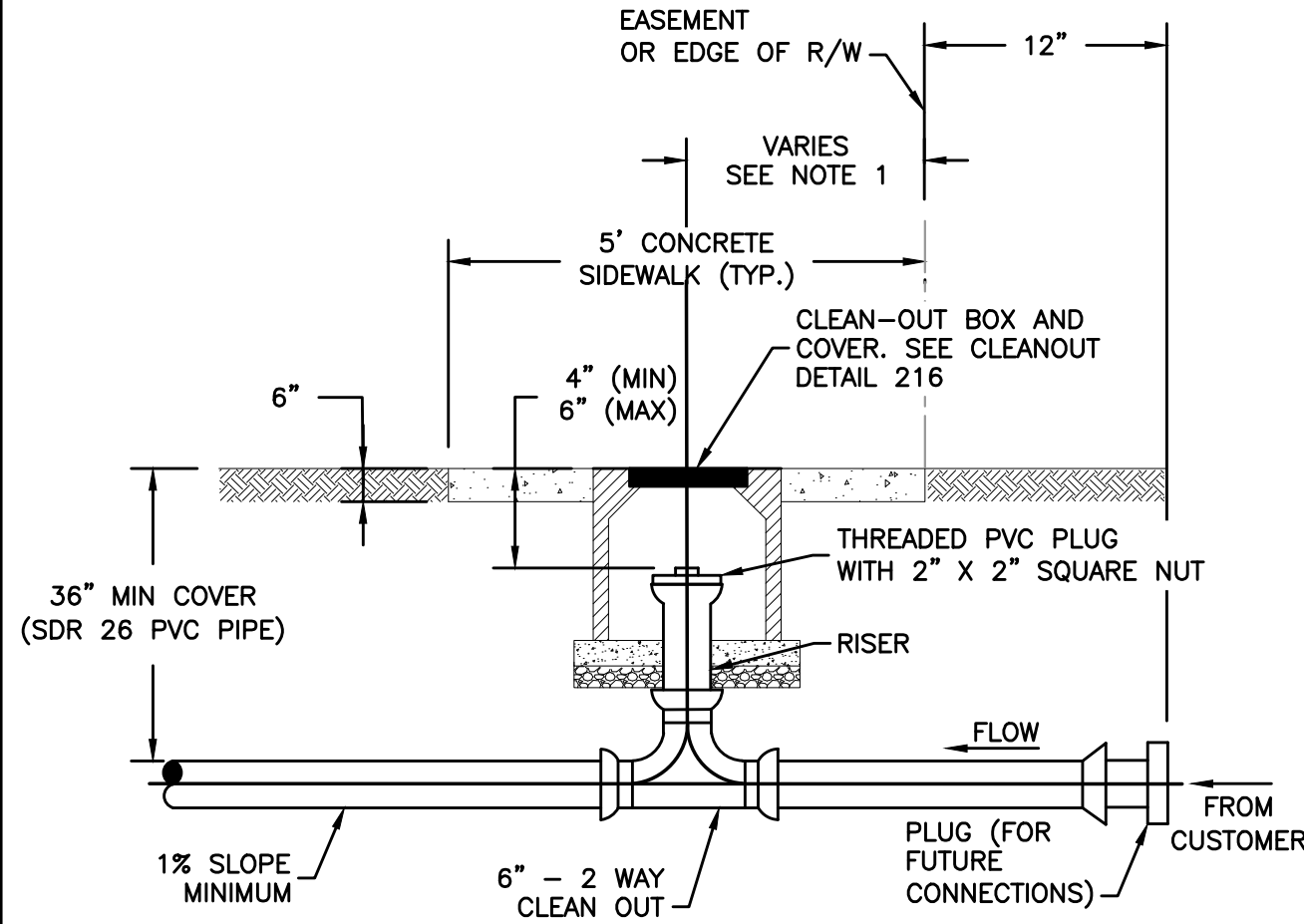
SEWER SYSTEM NOTES

ABANDONMENT OF EXISTING WASTEWATER SERVICE CONNECTIONS.

1. EXISTING SEWER LATERAL CONNECTIONS TO BE ABANDONED AS PART OF NEW CONSTRUCTION AND TO BE REPLACED WITH NEW CONNECTIONS MUST BE SEALED OFF USING SECTIONAL CURED-IN PLACE (CIP) LINERS.
2. CIP LINER CONTRACTOR MUST BE DULY LICENSED BY BROWARD COUNTY, FLORIDA AND CERTIFIED BY THE EQUIPMENT MANUFACTURER AND/OR ITS AUTHORIZED REPRESENTATIVE TO PERFORM SUCH INSTALLATIONS.

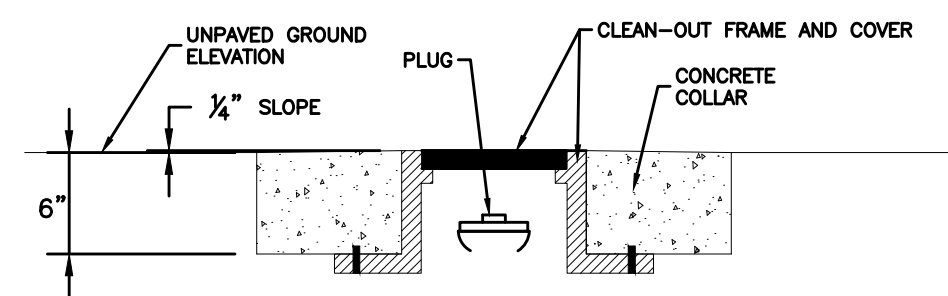
INSTALLATION OF NEW WASTEWATER SERVICE CONNECTIONS

3. NEW SERVICE CONNECTIONS TO COMPLY WITH STANDARD DETAIL 208.
4. NEW WASTEWATER SERVICE CONNECTIONS TO LINED GRAVITY SEWER SHALL BE CONSTRUCTED BY INSTALLING A LMT(TM) (LINED MAIN TAP) SADDLE INSTALLATION SYSTEM ENGINEERED TO CONNECT A LATERAL SERVICE PIPE TO A LINER INSIDE A REHABILITATED MAINLINE (LMK TECHNOLOGIES OR APPROVED EQUAL). TO BE INSTALLED PER MANUFACTURER INSTRUCTIONS.
5. CLEANOUT MUST BE PROVIDED PER STANDARD DETAIL S213.
6. CONTRACTOR SHALL PERFORM POST CCTV INSPECTION FOR NEW WASTEWATER SERVICE CONNECTION. SUBMIT COPY OF CCTV FILE TO CITY'S DSD AND PW ENGINEERING STAFF FOR INSPECTION OF DEFECTS OR DISTORTION TO MAINLINER.



1. THE PROPOSED CLEANOUT SHALL BE INSTALLED WITHIN THE PUBLIC RIGHT-OF-WAY OR EASEMENT. IT SHALL BE INSTALLED IN THE MIDDLE OF THE SIDEWALK IF A SIDEWALK EXISTS ADJACENT TO THE PROPERTY LINE. THIS DIMENSION WILL VARY DEPENDING UPON THE WIDTH OF THE SIDEWALK. IF SIDEWALKS DO NOT EXIST, THE CLEAN OUT SHALL BE INSTALLED 2.5' (MIN.) - 3.0' (MAX) FROM THE RIGHT-OF-WAY LINE.
2. A NEW SECTION OF SIDEWALK SHALL BE POURED AROUND THE CLEAN-OUT BOX WHEN WORKING IN AN AREA WITH EXISTING SIDEWALKS. IF TRENCHLESS METHOD IS USED FOR CLEANOUT INSTALLATION, WHERE A PORTION OF THE CONCRETE SIDEWALK IS REMOVED BY CORE CUTTING, THE CIRCULAR CONCRETE CORE SURROUNDING THE CLEANOUT MAY BE RESTORED WITHOUT REPLACING THE ENTIRE SIDEWALK SLAB, AS LONG AS NO OTHER CRACKS AND/OR DEFECTS EXIST ON THE SLAB. IF CRACKS AND/OR DEFECTS EXIST ON THE SLAB, THE ENTIRE SLAB MUST BE REPLACED.
3. IN UNPAVED AREAS INSTALL 24-INCH-SQUARE OR 24-INCH-DIAMETER CONCRETE COLLAR (3,000 PSI AT 28 DAYS), FORMED UP TO AND AROUND THE CLEAN-OUT BOX AND HAVING A DEPTH OF 6-INCHES. THE COMPLETED CONCRETE COLLAR SHALL BE BROOM-FINISHED AND LEVEL WITH THE CLEAN-OUT BOX COVER AND FINISHED GRADE ELEVATION OF SURROUNDING GRASS, MULCH, GRAVEL, OR OTHER. SLOPE COLLAR FROM CENTER TO EDGE 1/4-INCH PER DETAIL S213A.
4. SEE DETAILS 213 THROUGH 216 FOR ADDITIONAL CLEANOUT DETAILS AND NOTES.

SANITARY SERVICE CONNECTION AT PROPERTY LINE OR EASEMENT LINE (PROFILE)
N.T.S.

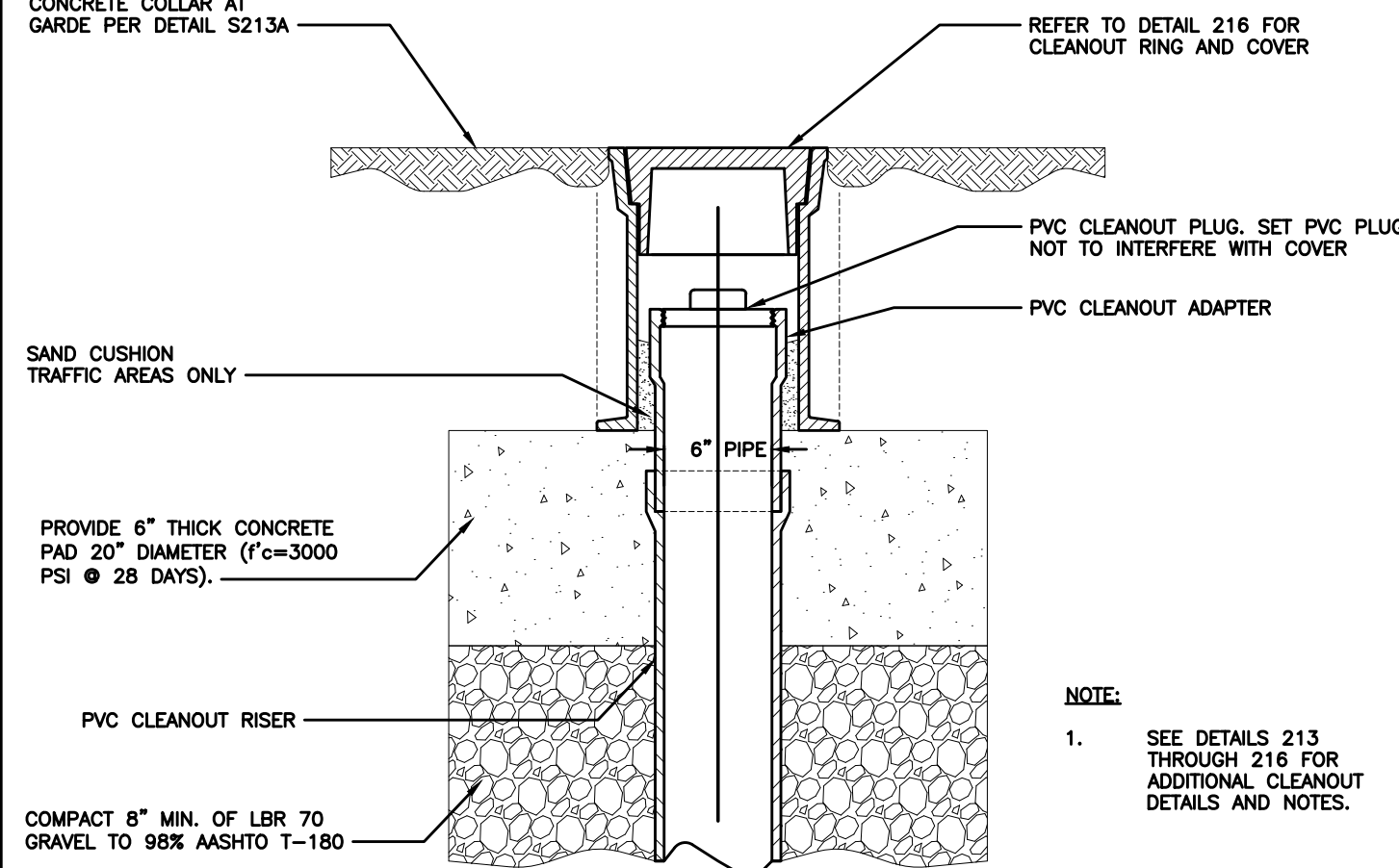


CONCRETE COLLAR FOR CLEANOUTS IN UNPAVED AREAS
N.T.S.

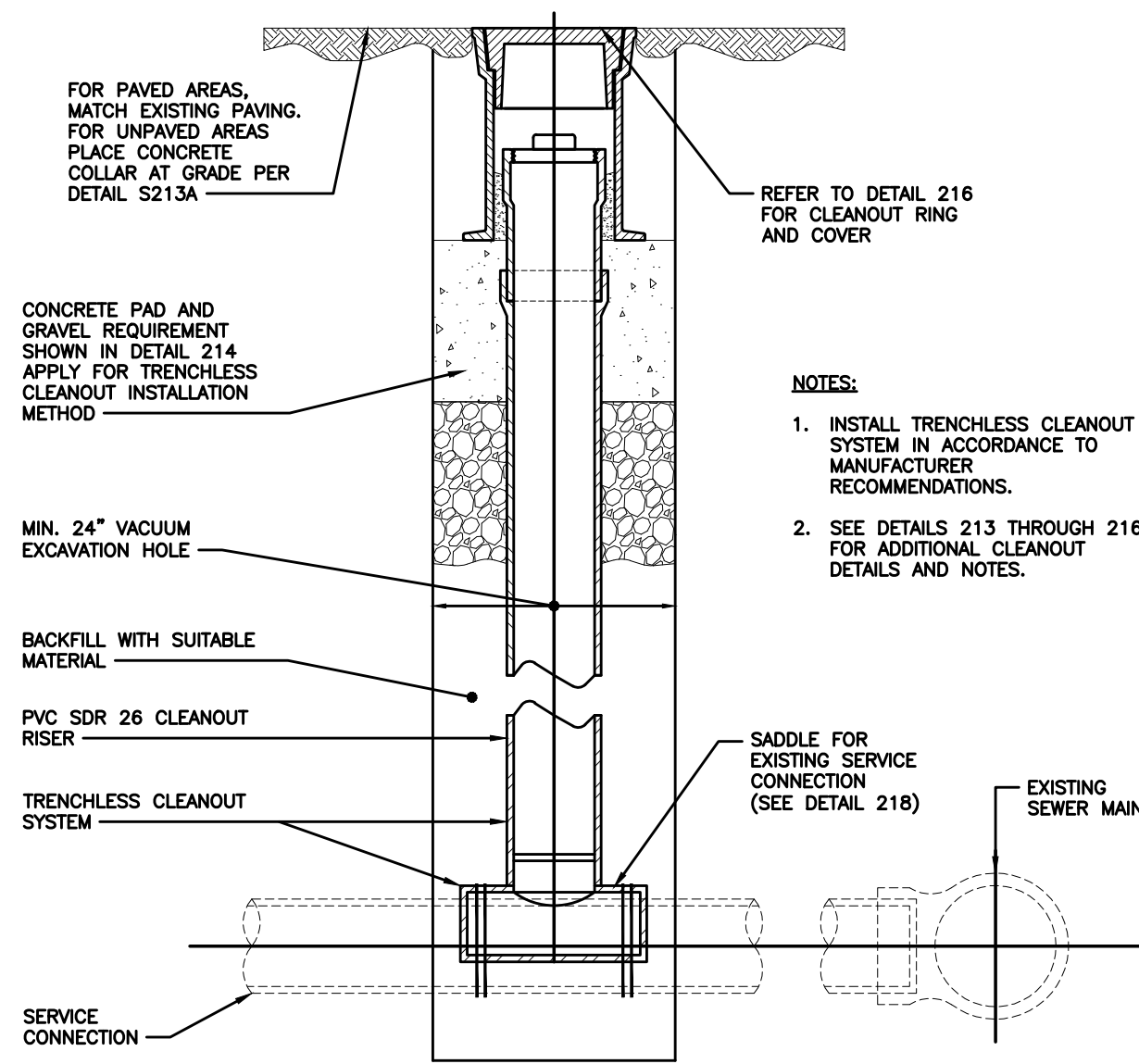
EXPANSION PLUG NOTES:

1. EXPANSION PLUG SHALL NOT INTERFERE WITH LID.
2. PLUG FLANGE SHALL BE LARGER THAN PIPE I.D.
3. THREADED COMPONENTS SHALL BE FLATTENED OR STAKED TO PREVENT DISASSEMBLY.

FOR PAVED AREAS, MATCH EXISTING PAVING. FOR UNPAVED AREAS PLACE CONCRETE COLLAR AT GARDE PER DETAIL S213A



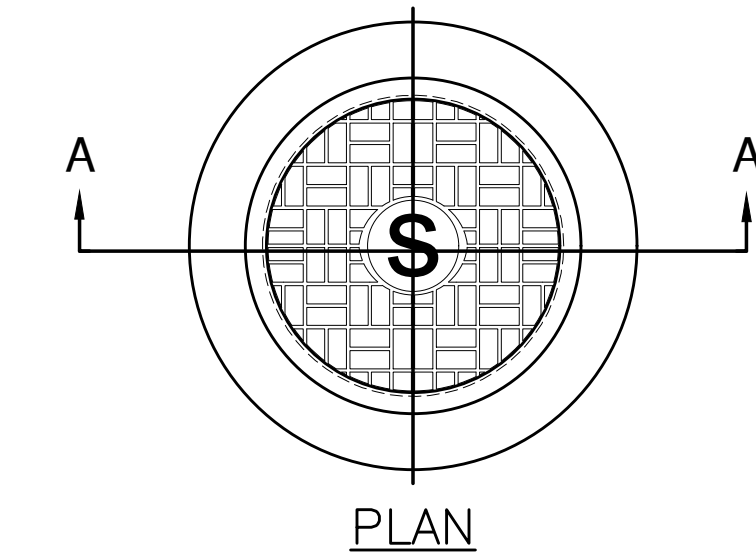
CLEAN-OUT COVER ASSEMBLY FOR 6-INCH CLEANOUTS
N.T.S.



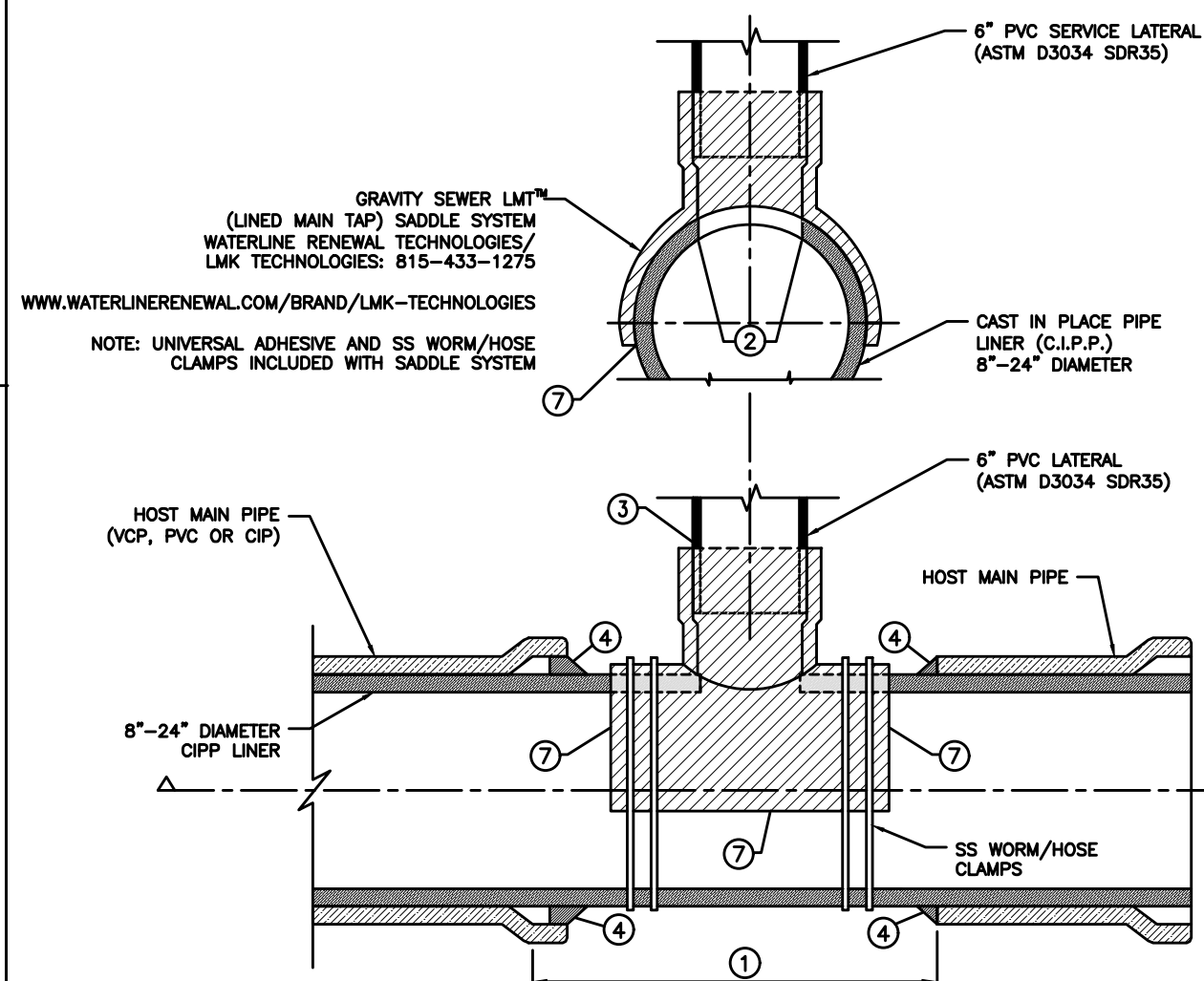
TRENCHLESS CLEANOUT SYSTEM FOR INSTALLATION ON 4-INCH AND 6-INCH SANITARY SERVICE CONNECTIONS
N.T.S.

NOTES:

1. USF 7610 HANDHOLE RING AND FC COVER OR EQUAL TO BE USED.
2. CLEANOUT COVER TO BE MARKED WITH A "S".
3. FOR UNPAVED AREAS, CENTER CLEANOUT COVER IN CONCRETE COLLAR (SEE DETAIL 213A).



CLEANOUT RING AND COVER
N.T.S.



LEGEND

- ① CUT & REMOVE SECTION OF HOST PIPE WHERE SERVICE CONNECTION IS TO BE MADE WITHOUT DAMAGING CIPP LINER.
- ② CUT HOLE FOR LATERAL WITH DIAMETER EQUAL TO INSIDE DIAMETER OF THE PVC LATERAL IN MAIN SEWER LINER WITH POWER TOOL.
- ③ CONNECT 6" PVC SEWER LATERAL BY LMT(LINED MAIN TAP) SADDLE SYSTEM.
- ④ SEAL THE PIPE CUTS WITH HYDRAULIC CEMENT.
- ⑤ IF NEW LATERAL SERVICE CONNECTION IS BEING CONSTRUCTED SEE TYPICAL WASTEWATER SERVICE CONNECTION DETAIL 208.
- ⑥ IF A NEW CLEAN-OUT COVER ASSEMBLY MUST BE INSTALLED SEE STANDARD DETAILS 213, 213A, 214, 215 AND 216 FOR REFERENCE
- ⑦ UNIVERSAL ADHESIVE TO BE ON THE INSIDE OF SADDLE TO FORM WATER TIGHT SEAL BETWEEN LINER AND HOST PIPE. SEE MANUFACTURE'S SPECIFICATIONS FOR MORE APPLICATION INSTRUCTIONS.

SADDLE TEE FASTENED TO LINED GRAVITY MAIN
N.T.S.

ENGINEER:
#Name
#Date
#Date

DRAWN BY: DATE: MM/DD/YY
DESIGNED BY: SCALE:
CHECKED BY:

FIELD BOOK:

TEL: #Tel
FAX: #Fax

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE



100 North Andrews Avenue, Fort Lauderdale, Florida 33301

NO.	DATE	BY	CHK'D	DESCRIPTION	UPDATE FOR I&I PROGRAM
1	03/04/21	H&S	AT		
2	2/22/2024		RB		

REVISIONS

PROJECT # P0000

PROJECT NAME

DESCRIPTION

SHEET

PLACE PROJECT ADDRESS

SHEET NO.

SSWR02

TOTAL: 0

CAD FILE: FTLAUD-SSWR02

DRAWING FILE NO. 4-XXX-XX