

SANITARY SEWER SERVICE NOTES:

- AN "S", "V" OR "M" SHALL BE STAMPED IN CURB WHERE SEWER SERVICE VALVE OR MANHOLE IS LOCATED IN ACCORDANCE WITH THE TOWN OF LONGBOAT KEY CODE. A MEASUREMENT FROM THE EDGE OF CURB, TAKEN BY THE CONTRACTOR, SHALL BE SHOWN ON THE "AS BUILT" PLANS FOR REFERENCE IN LOCATING SERVICE, VALVE, OR MANHOLE.
- ON UNCURBED STREETS, THE LOCATION FOR EACH INSTALLED SERVICE VALVE OR MANHOLE SHALL BE MARKED BY USING AN ALUMINUM DISC LABELED SEWER AS SUPPLIED BY NATIONAL BAND AND TAG CO. THE HORIZONTAL DISTANCE TO THE SERVICE VALVE OR MANHOLE IS TO BE ENGRAVED ON THE TAG AND THE TAG SHALL BE MOUNTED IN THE PAVEMENT, WITHIN 6" FROM THE EDGE.
- METALLIC IDENTIFICATION TAPE SHALL EXTEND FROM WYE CONNECTION TO THE END OF THE SERVICE AND TERMINATE TWELVE INCHES (12") ABOVE GROUND AT THE LOCATION STAKE. IN ADDITION THE CONTRACTOR SHALL BURY A TWO FOOT (2') LONG #3 REBAR AT THE END OF THE SERVICE PARALLEL TO THE SURFACE FOR ELECTRONIC LOCATION PURPOSES. COST OF TAPE AND REBAR TO BE INCLUDED IN THE COST FOR SERVICE PIPE INSTALLATION.
- WHERE SERVICE WYE CONNECTIONS EXCEED EIGHT FEET IN DEPTH, THE WYE AND SERVICE PIPE SHALL BE ENCASED IN CONCRETE. WHEN THE SERVICE PIPE GRADE IS 10% OR GREATER, THE ENCASEMENT SHALL EXTEND FROM THE WYE TO A POINT WHERE THE SERVICE PIPE GRADE IS LESS THAN 10% AS SHOWN. CONCRETE SHALL BE 3000 PSI @ 28 DAYS, MINIMUM 6" THICK.
- WHERE A HOUSE OR OTHER CONNECTION TERMINATES, THE CONTRACTOR SHALL PROVIDE AND INSTALL 2" x 4" STAKE WITH A MINIMUM OF FOUR (4) FEET ABOVE GROUND AND TWO (2) FEET BELOW GROUND. THE TOP TWELVE INCHES (12") ARE TO BE PAINTED GREEN.

SANITARY MANHOLE NOTES:

- LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED. ALL OPENINGS SHALL BE SEALED AND WATERPROOFED AS SPECIFIED AND DIRECTED BY THE ENGINEER.
- MANHOLES SHALL COMPLY WITH A.S.T.M. SPECIFICATION C-478, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS", EXCEPT AS EXCEEDED BY THE DETAILS AND SPECIFICATIONS.
- CEMENT SHALL BE TYPE II.
- CONCRETE SHALL BE 4000 P.S.I. @ 28 DAY MINIMUM STRENGTH, UNLESS OTHERWISE NOTED.
- MORTAR SHALL BE TWO (2) PARTS CLEAN SAND AND ONE (1) PART CEMENT WITH NO MORE THAN 1/4 PART HYDRATED LIME.
- MORTAR JOINTS SHALL BE FULL AND STRUCK FLUSH.
- DROP CONSTRUCTION SHALL BE PROVIDED FOR A WASTEWATER PIPE ENTERING A MANHOLE AT AN ELEVATION OF TWENTY FOUR INCHES (24") OR MORE ABOVE THE DISCHARGE CHANNEL FLOW LINE.
- NO STEPS SHALL BE USED.
- PROVIDE SIX (6) INCH MINIMUM BASE SLAB LIP AS SHOWN IN DETAIL. FOR MANHOLE DEPTHS GREATER THAN 13', CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS, BASED ON THE CALCULATIONS, ADDITIONAL CONCRETE BALLAST OR A BASE SLAB LIP IN EXCESS OF 6" MAY BE REQUIRED.
- HAVING THE RUBBER GASKET SEAL INTEGRALLY POURED INTO MANHOLE SECTIONS AT A NON-PLAN POSITION SHALL BE CAUSE FOR THAT SECTION TO BE REJECTED. IT IS IMPORTANT FOR MANUFACTURERS OF PRECAST MANHOLES TO BE INFORMED BY THE CONTRACTOR OF THE REJECTION POSSIBILITY.
- MANHOLE RING AND COVER SHALL BE AS SPECIFIED.
- MANHOLE RINGS AND COVERS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SURFACES INCLUDING SLOPE IF ANY. ALL ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID. NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE OWNER. MANHOLES IN GRASSED AREAS SHALL BE SET 0.1" ABOVE FINISHED GROUND.

CLEAN-OUT NOTES:

- CLEANOUTS ARE REQUIRED ON ALL SERVICES.
- CLEAN-OUTS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SURFACES. ALL ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID. NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE OWNER.

TRENCH NOTES:

- WHERE WATER AND SEWER MAINS CROSS WITH LESS THAN EIGHTEEN INCHES (18") VERTICAL CLEARANCE, THE SEWER SHALL BE A MINIMUM OF TWENTY FEET (20") OF DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING. WHEN A WATER MAIN PARALLELS A WASTEWATER MAIN, HORIZONTALLY, A SEPARATION OF AT LEAST TEN FEET (10') SHOULD BE MAINTAINED. BOTH WATER AND SEWER LINES SHALL BE DUCTILE IRON PIPE WHEN SEPARATED BY LESS THAN 10' FEET (10') HORIZONTALLY, THE HORIZONTAL SEPARATION FROM A REUSE MAIN IS FIVE FEET (5').
- TRENCH SHALL BE BRACED OR SHORED IN ACCORDANCE WITH THE "FLORIDA TRENCH & SAFETY ACT".
- WIDTH OF TRENCH BOTTOM SHALL BE OUTSIDE DIAMETER OF PIPE PLUS TWELVE INCHES (12") EACH SIDE MAXIMUM.
- CONTRACTOR SHALL PLACE METALLIC BURIAL IDENTIFICATION TAPE WITHIN 18" DIRECTLY ABOVE SEWER LINES IN CONFORMANCE WITH COUNTY CODE.
- ALL WELL POINT HOLES SHALL BE FILLED WITH COARSE SAND OR OTHER SATISFACTORY GRANULAR MATERIAL AT TIME WELL POINTS ARE PULLED.
- DISCHARGE FROM DE-WATERING OPERATION SHALL BE DISPOSED OF IN SUCH A MANNER THAT IT SHALL NOT INTERFERE WITH THE NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED. CREATE A PUBLIC NUISANCE OR FORM PONDING. THE OPERATIONS SHALL NOT CAUSE INJURY TO ANY PORTION OF THE WORK COMPLETED, OR IN PROGRESS, OR TO THE SURFACE OF STREETS, OR TO PRIVATE PROPERTY.
- THE PROPOSED DE-WATERING METHOD(S) AND SCHEDULE SHALL BE COORDINATED WITH THE UTILITY AND/OR THE ENGINEER. RECORD AND OTHER NECESSARY REGULATORY AGENCIES PRIOR TO CONSTRUCTION. ADDITIONALLY, WHERE PRIVATE PROPERTY SHALL BE INVOLVED, ADVANCE PERMISSION SHALL BE OBTAINED BY THE CONTRACTOR AND/OR DEVELOPER.

WASTEWATER COLLECTION GENERAL NOTES:

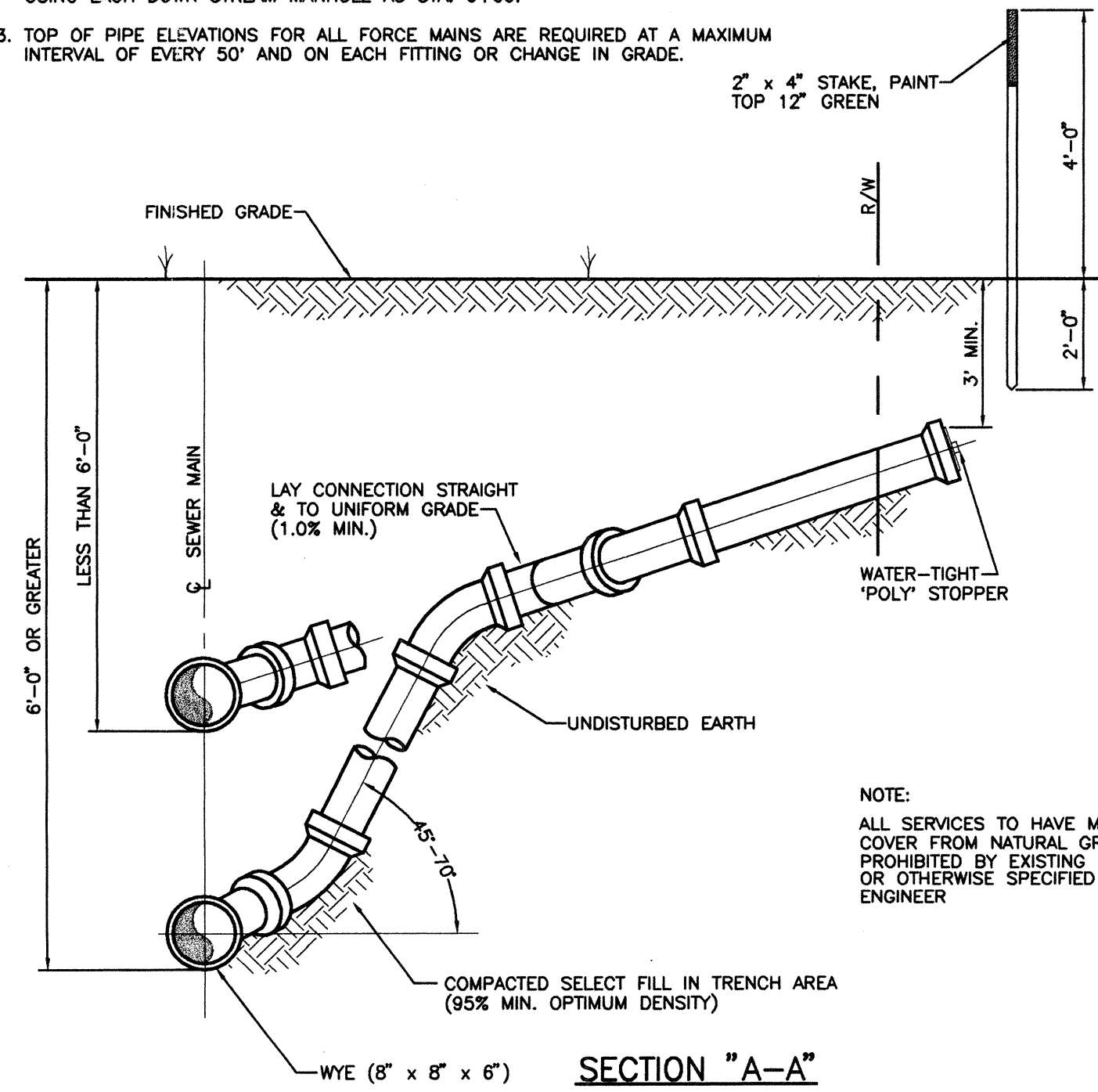
- THE FOLLOWING NOTES ARE INTENDED AS A SUPPLEMENT TO THE PROJECT SPECIFICATIONS AND ARE NOT INTENDED TO SUPERSEDE THE SPECIFICATIONS.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE TOWN OF LONGBOAT KEY CODE OR ORDINANCES, LATEST REVISIONS, AND EXCEED THE REQUIREMENTS OF THAT ORDINANCE WHERE INDICATED ON THESE CONSTRUCTION DRAWINGS OR IN THE PROJECT SPECIFICATIONS.
 - ELEVATIONS SHOWN ON THE PLANS FOR FLOWLINES OF PROPOSED WASTEWATER MAINS SHALL BE ADHERED TO. IN MOST CASES THE DESIGN GRADES ARE CRITICAL AND ADJUSTMENTS CAUSED BY MIS-ALIGNMENT OR IMPROPER GRADES ARE IMPRACTICAL. COST TO RELAY MAIN, IF NECESSARY, SHALL BE BORNE BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL INVESTIGATE AND VERIFY OR HAVE VERIFIED THE LOCATION OF EXISTING UTILITIES AND ANY OTHER SUBSURFACE FACILITIES BEFORE STARTING WORK. HE SHALL BE LIABLE FOR ANY EXPENSE RESULTING FROM DAMAGE TO SAME. ANY CONFLICTS WITH EXISTING UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AS SOON AS POSSIBLE.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE TOWN OF LONGBOAT KEY, UTILITY COMPANIES AND THE ENGINEER 48 HOURS PRIOR TO ANY WORK AT SITE AND 48 HOURS PRIOR TO ANY TESTING.
 - THE CONTRACTOR SHALL COORDINATE HOLDING OF POLES WITH UTILITY COMPANIES IN ADVANCE SO UNNECESSARY DELAYS OF PROJECT SHALL NOT BE INCURRED. THE COST FOR THE HOLDING OF THE POWER POLES SHALL BE INCLUDED IN THE WASTEWATER MAIN UNIT COST ITEMS CONTAINED IN THE PROPOSAL.
 - ALL DISTURBED AREAS IN EXISTING LAWNS SHALL BE REPLACED WITH SOD EQUAL TO OR BETTER THAN EXISTING AND OF THE SAME TYPE. SWALE SLOPES AND BOTTOMS SHALL BE SODDED TO ELIMINATE EROSION. RESTORATION DUE TO EROSION OCCURRING PRIOR TO GRASS ROOTING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL WATER AS NECESSARY ALL SODDED AREAS UNTIL GRASS ROOTS.
 - DUE TO THE PROXIMITY OF EXISTING DRAINAGE STRUCTURES, ROADWAY PAVEMENT, PATHS, CURBS, CULVERTS, RESIDENTIAL STRUCTURES, MAILBOXES, ETC., THE CONTRACTOR SHALL USE EXCAVATING METHODS WHICH SHALL PREVENT ANY DAMAGE TO SAME UNLESS REMOVAL IS REQUIRED. THE COST OF ANY DAMAGE AND THE REPLACEMENT OF ALL PRIVATE PROPERTY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE BORNE BY THE CONTRACTOR.
 - RESTORATION OF ALL EXISTING ROADWAYS TO FDOT STANDARDS AND THE REPLACEMENT OF EXISTING CULVERTS AND DRIVEWAYS ETC., SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE SEWER MAIN ITEMS.
 - FOR PAINTING AND SURFACE FINISHING REQUIREMENTS, REFER TO APPROPRIATE DIVISION OF THE PROJECT SPECIFICATIONS.
 - PIPE AND FITTINGS FOR P.V.C. GRAVITY PIPE SHALL MEET THE REQUIREMENTS OF A.W.W.A. C-900 (SDR 18) COLOR CODED GREEN.
 - FORCE MAINS SHALL BE THRUST BLOCKED IN ACCORDANCE WITH THE WATER MAIN DETAILS UNLESS OTHERWISE SPECIFIED.
 - ALL IRON PIPE AND FITTINGS WATER AND WASTE WATER SHALL BE WRAPPED IN BLACK 8 MIL. PLASTIC FOR CORROSION PROTECTION.

SEWER TESTING:

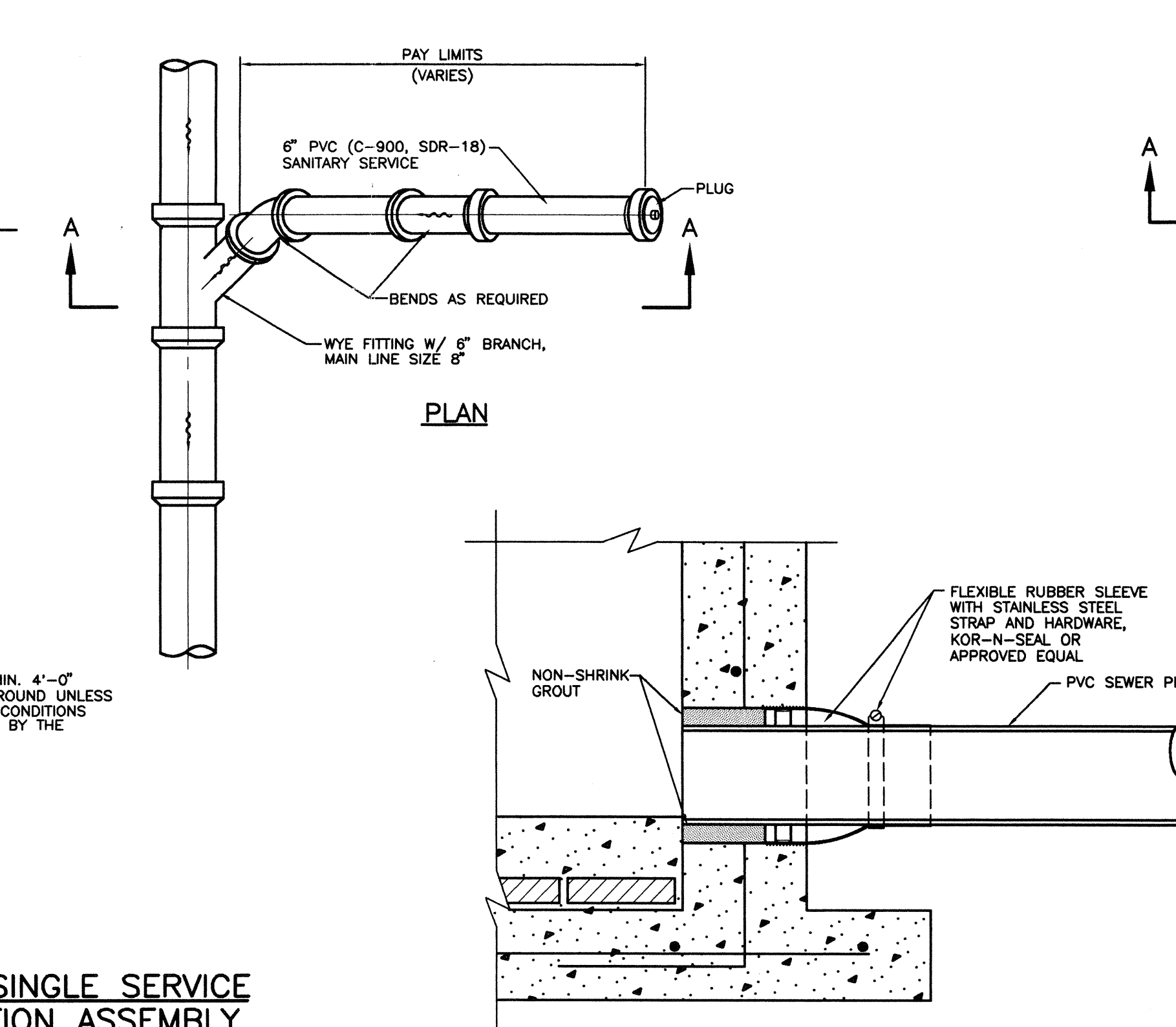
- TESTING SHALL BE IN CONFORMANCE WITH THE TOWN OF LONGBOAT KEY CODE OF ORDINANCES, OR THE SPECIFICATIONS, WHICHEVER IS MORE STRICT.
- THE CONTRACTOR SHALL INCLUDE IN HIS COST FOR THE VARIOUS ITEMS CONTAINED IN THE BID SCHEDULE, THE ADDITIONAL COSTS INVOLVED WITH LAMPING THE NEWLY LAID SEWER PIPE, EXFILTRATION OR INFILTRATION TESTING AND PIPE DEFLECTION TESTS.
- THE CONTRACTOR SHALL HAVE THE NEW SEWER SYSTEM T.V. INSPECTED.

AS-BUILTS:

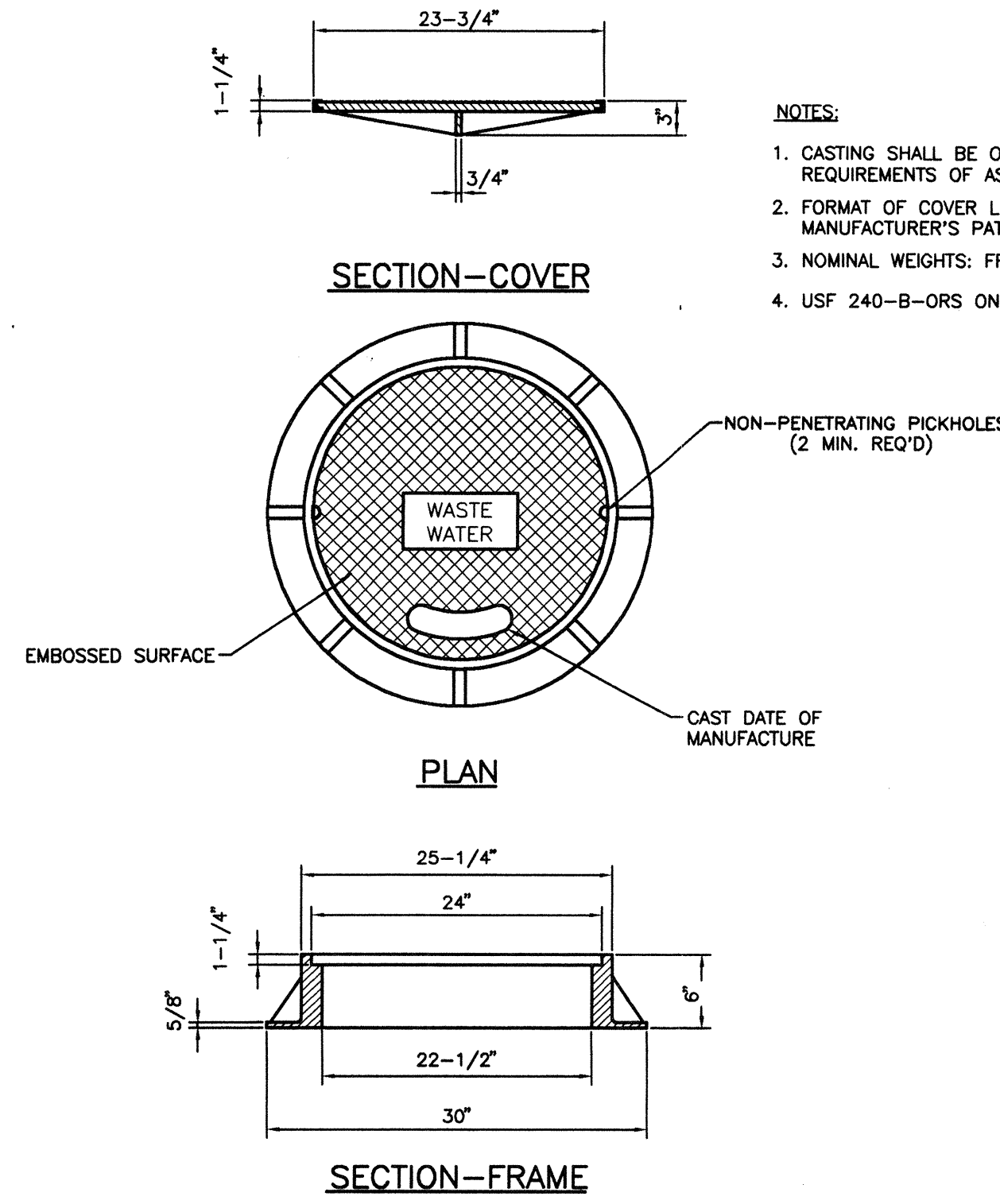
- THE CONTRACTOR SHALL LOCATE MANHOLES, SERVICES, ETC. BY USING A TWO (2) POINT SWING MEASUREMENT FROM PERMANENT PHYSICAL FEATURES THAT CAN READILY BE FOUND ON THE DRAWING AND IN THE FIELD. THESE MEASUREMENTS SHALL BE SHOWN ON THE AS-BUILT DRAWING BY THE CONTRACTOR.
- THE CONTRACTOR SHALL FURNISH "AS-BUILT" STATIONING OF SEWER WYES USING EACH DOWN STREAM MANHOLE AS STA. 0+00.
- TOP OF PIPE ELEVATIONS FOR ALL FORCE MAINS ARE REQUIRED AT A MAXIMUM INTERVAL OF EVERY 50' AND ON EACH FITTING OR CHANGE IN GRADE.



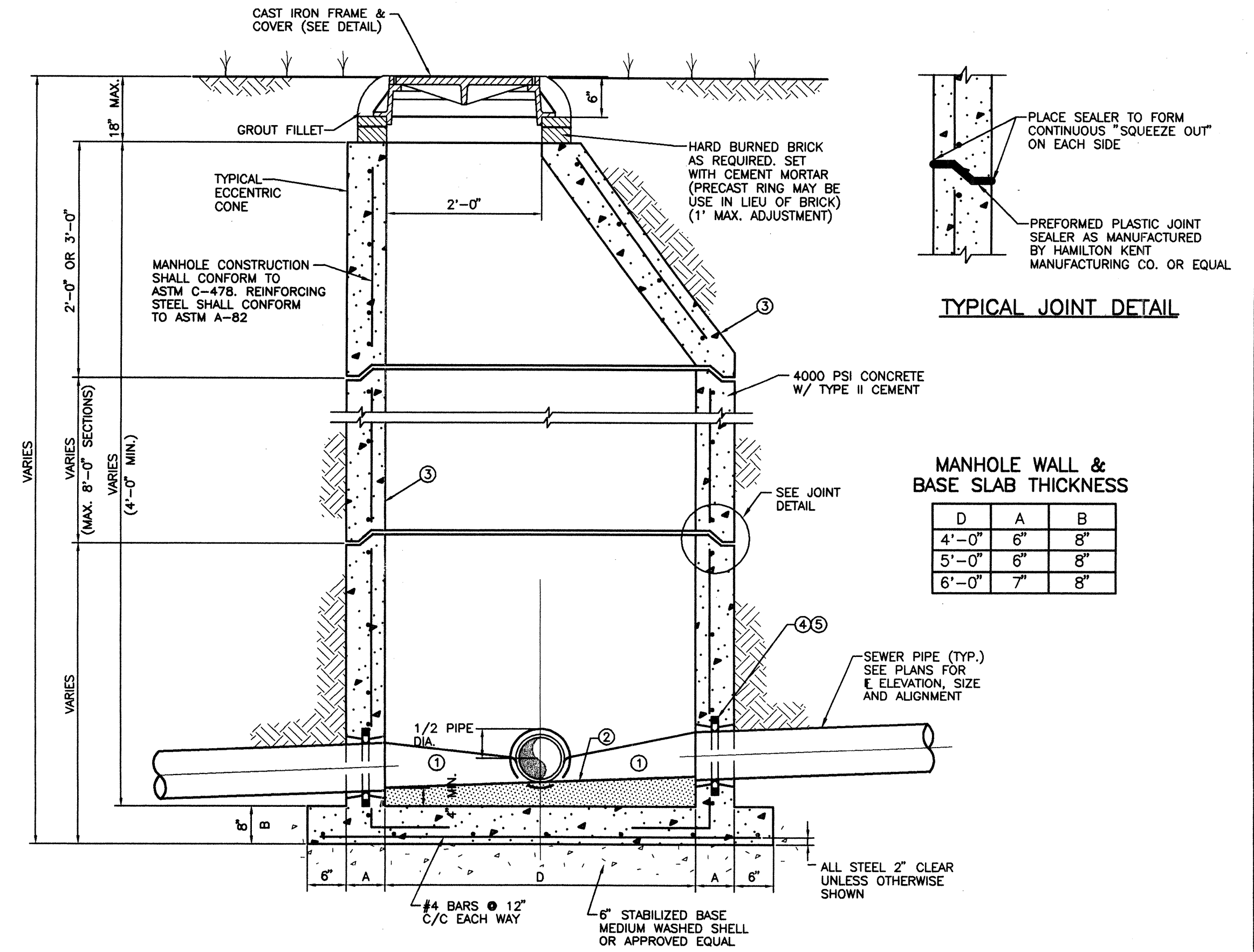
TYPICAL SINGLE SERVICE CONNECTION ASSEMBLY
S-5009 N.T.S.



PIPE TO MANHOLE CONNECTION
S-5006 N.T.S.



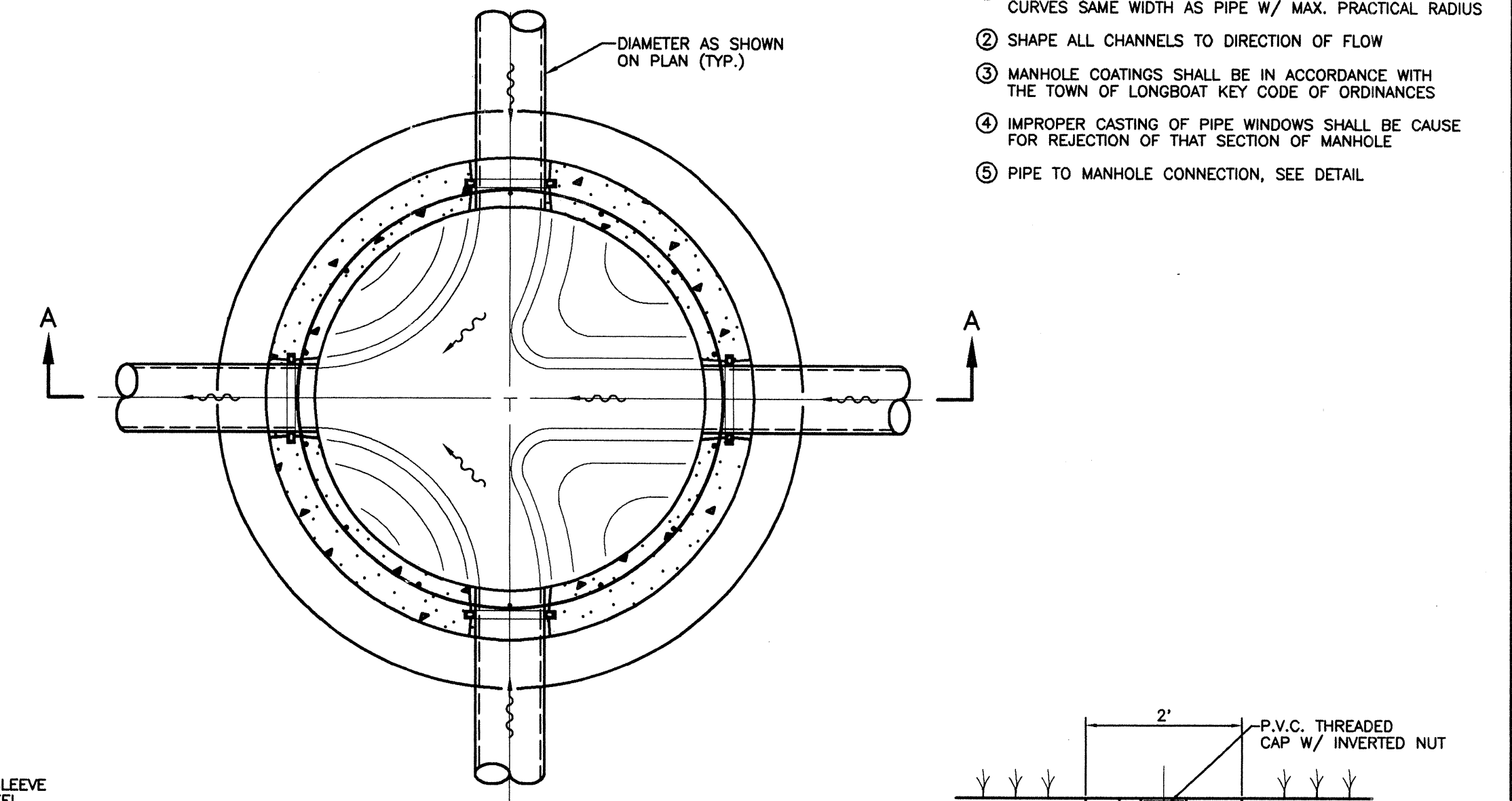
MANHOLE FRAME AND COVER
S-5011 N.T.S.



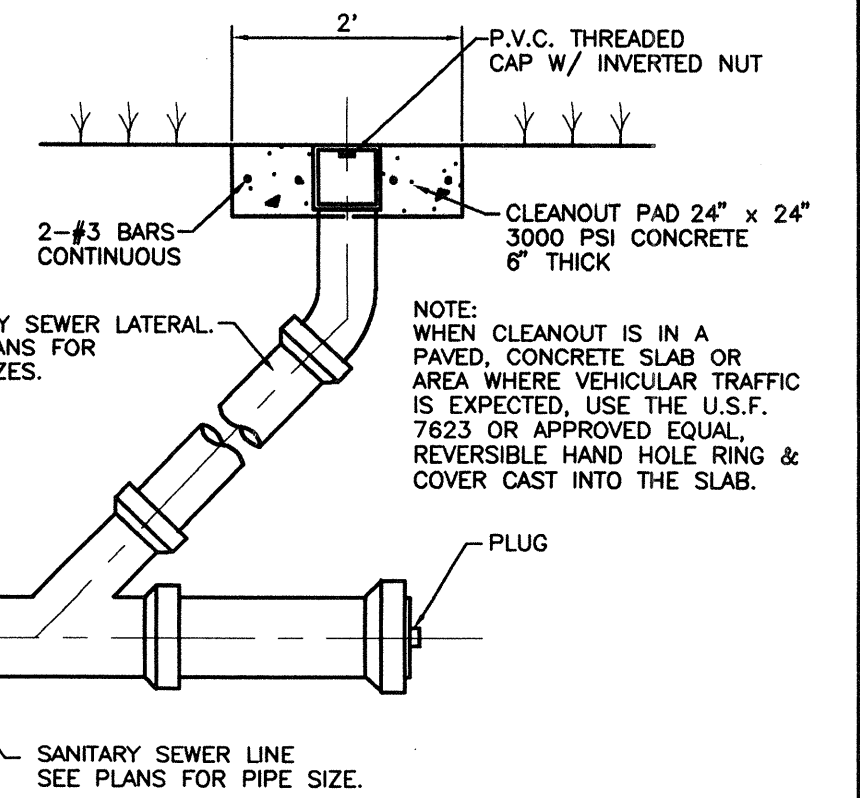
MANHOLE WALL & BASE SLAB THICKNESS

D	A	B
4'-0"	6"	8"
5'-0"	6"	8"
6'-0"	7"	8"

SECTION "A-A"



TYPICAL PIPE ARRANGEMENT STANDARD PRECAST MANHOLE
S-5007 N.T.S.



CLEANOUT DETAIL
S-5001 N.T.S.

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1	REV. WASTEWATER GENERAL NOTE 10, SERVICE CONNECTION DETAIL	10/19/00	RJL/140B		

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CLIENT: LAURELTON MERRICK CORPORATION
PROJECT: EN PROVENCE

DATE: 4/00
HORIZONTAL SCALE: AS SHOWN
VERTICAL SCALE: AS SHOWN
SHEET NO.: 17 OF 365 17E

TITLE: WASTEWATER COLLECTION CONSTRUCTION DETAILS

CROSS REFERENCE FILE NO.: 03317-000-000030

PROJECT NUMBER: 03317-000-000-FLPCP

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