

## SIDE SEWER SPECIFICATIONS

1. ALL PRIVATE SIDE SEWER CONSTRUCTION REQUIRES A PERMIT AND THE PAYMENT OF A FEE. THE PERMIT APPLICATION WILL REQUIRE THE COMPLETE LEGAL DESCRIPTION, ADDRESS, AND THE DIMENSIONS OF THE PROPERTY TO BE SERVED.
2. ALL CONSTRUCTION IN THE PUBLIC RIGHT-OF-WAY MUST BE DONE BY A LICENSED SEWER CONTRACTOR, AFTER PAYMENT OF ALL APPLICABLE FEES AND PERMITS ISSUED BY AGENCY OF JURISDICTION.
3. ALL HOUSE PLUMBING OUTLETS MUST BE CONNECTED TO THE SANITARY SEWER.
4. NO DOWNSPOUT, FLOOR DRAINS, OR STORM DRAINAGE MAY BE CONNECTED TO THE SANITARY SEWER.
5. MATERIAL PIPE -GASKET JOINTED PVC-SDR 35 OR ASTM D-3034  
-GASKET JOINTED DUCTILE IRON CLASS 50  
  
FITTINGS -GASKETED PVC ASTM D-3034  
-DUCTILE IRON MJ AWWA C153  
  
\*ALL FITTINGS MUST BE GASKETED
6. MINIMUM SLOPE: 4-INCH DIAMETER PIPE - 2% (1/4 INCH FALL PER FOOT)  
6-INCH DIAMETER PIPE - 1% MINIMUM GRADE  
  
MAXIMUM SLOPE: ALL PIPE 50%
7. PIPES SHALL BE LAID IN STRAIGHT LINE BETWEEN BENDS. MAKE ALL CHANGE IN LINE OR GRADE WITH LESS THAN OR EQUAL TO 45 DEGREES.
8. INCREASES IN PIPE SIZE SHALL BE MADE BY MANUFACTURED FITTINGS.
9. PIPE SHALL BE BEDDED FROM UNDISTURBED TRENCH WALL TO UNDISTURBED TRENCH WALL ON EACH SIDE OF THE PIPE AND FROM 2 INCHES BELOW TO 2 INCHES ABOVE THE PIPE WITH PEA GRAVEL.
10. THE SIDE SEWER SHALL BE INSPECTED BY DISTRICT STAFF PRIOR TO BACKFILLING. THE SIDE SEWER SHALL BE PLUGGED AND TESTED BY FILLING WITH WATER OR AIR. LEAKAGE RATE SHALL NOT EXCEED 0.31 GAL/HOUR FOR 4-INCH PIPE AND 0.47 GAL/HOUR FOR 6-INCH PIPE, PER 100 FEET OF PIPE FOR WATER OR MUST MAINTAIN 4 POUNDS OF PRESSURE FOR A MINIMUM OF FIFTEEN (15) MINUTES. A DISTRICT INSPECTOR SHALL OBSERVE REMOVAL OF THE PLUG.
11. SEWER LINES SHALL HAVE A DISTRICT APPROVED CLEANOUT INSTALLED AT EVERY COMBINATION OF FITTINGS TOTALING 90 DEGREES, AT LEAST EVERY 100 FEET, AT EVERY INCREASE/DECREASE IN PIPE SIZE, AND NO MORE THAN 3 FEET FROM THE FOUNDATION OF THE BUILDING.
12. A 6-INCH SIDE SEWER WILL BE ALLOWED TO SERVE A MAXIMUM OF SIX (6) SINGLE-FAMILY RESIDENCES.
13. A 4-INCH SIDE SEWER WILL BE ALLOWED TO SERVE ONLY ONE (1) SINGLE-FAMILY RESIDENCE.
14. PARALLEL WATER AND SEWER LINES SHALL BE SEPARATED BY 10 FEET HORIZONTALLY WHENEVER POSSIBLE. WATER AND SEWER LINES SHALL HAVE A VERTICAL SEPARATION OF 18 INCHES IF A CROSSING IS NECESSARY. THE SEWER LINE SHALL NOT CROSS OVER THE TOP OF A WATER LINE.
15. RIGHT-OF-WAY RESTORATION SHALL EQUAL OR EXCEED THE ORIGINAL CONDITION, AS APPROVED BY AGENCY OF JURISDICTION.
16. TRENCH BACKFILL UNDER PAVED AREA SHALL BE 5/8-INCH MINUS CRUSHED SURFACING TOP COURSE; FULL TRENCH DEPTHS COMPACTED IN 12-INCH LIFTS.
17. TEMPORARY REPAIRS OR ABANDONMENT OF A SIDE SEWER REQUIRE THE SIDE SEWER TO BE CUT AND CAPPED AT THE EASEMENT/PROPERTY LINE. CAP TO BE PVC PLAIN END PLUG OR OTHER APPROVED WATERTIGHT PLUG.
18. CONNECTION OF A SIDE SEWER TO AN EXISTING OR NEW STUB REQUIRES A CLEANOUT INSTALLED AT THE EASEMENT/PROPERTY LINE.



## OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS

STANDARD DETAIL

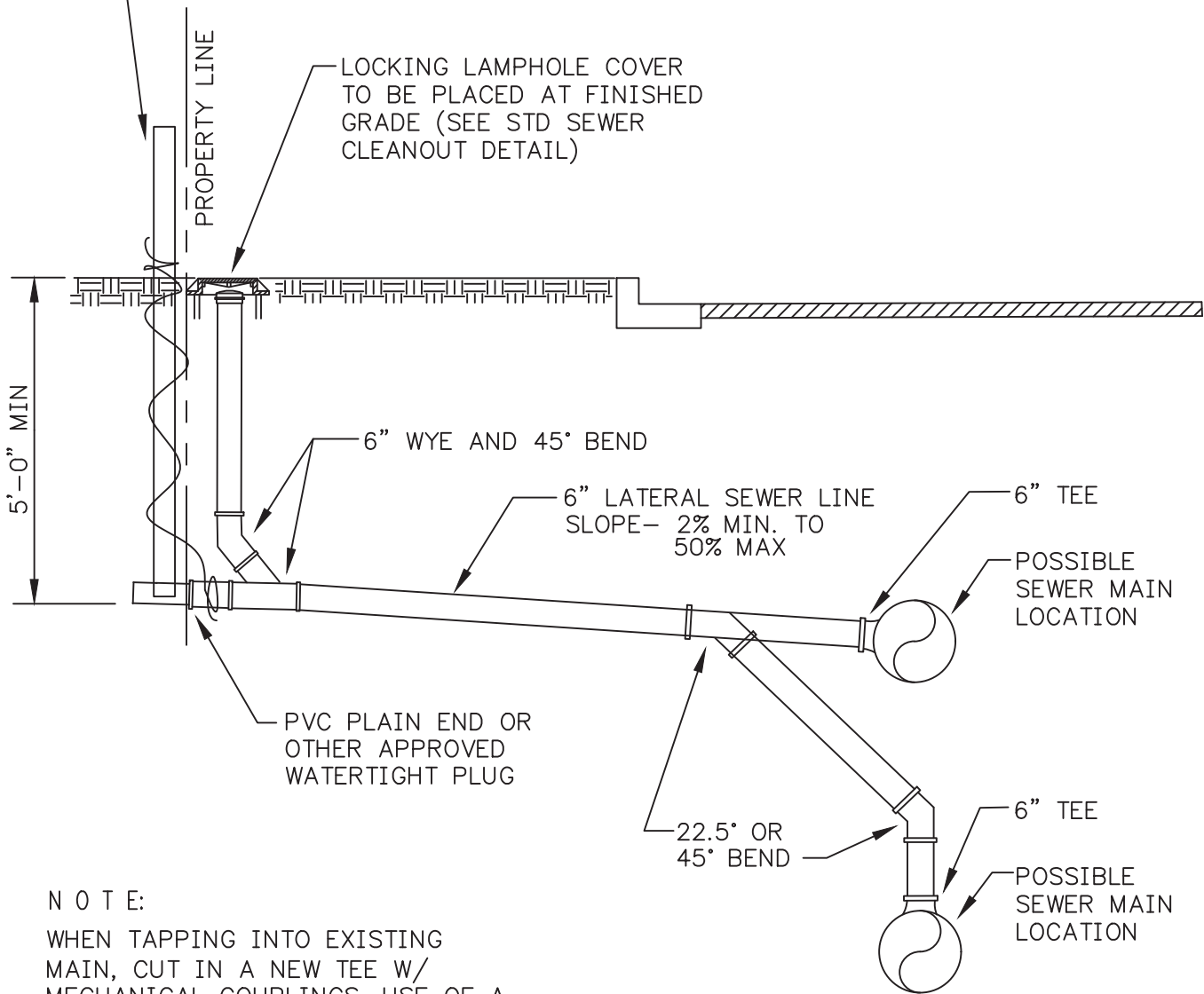
SIDE SEWER SPECIFICATIONS

DATE 10/25/18

SCALE NTS

DWG NO. S-1

(FOR FUTURE DEVELOPEMENT)  
 PLACE 2X4 AT END OF SIDE SEWER STUB AND CUT TO LENGTH TO INSURE 3 FEET EXTENDS ABOVE GRADE. PAINT TOP 18 INCHES WHITE. IN 3 INCH HIGH LETTERS STENCIL THE NUMBER OF EVEN FEET FROM GROUND ELEVATION TO THE SEWER STUB INVERT. 8 GAUGE WIRE TO BE DOUBLE WRAPPED AROUND PIPE AND 2X4 STAKE AT OR ABOVE FINISHED GRADE.

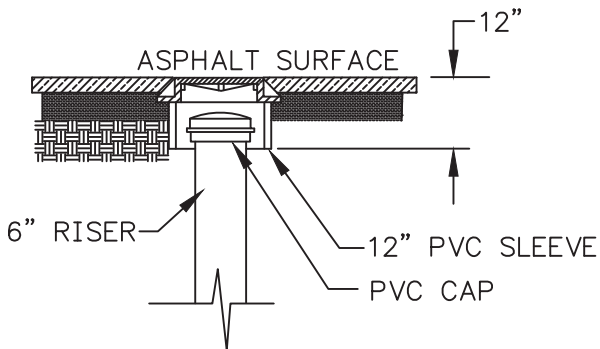
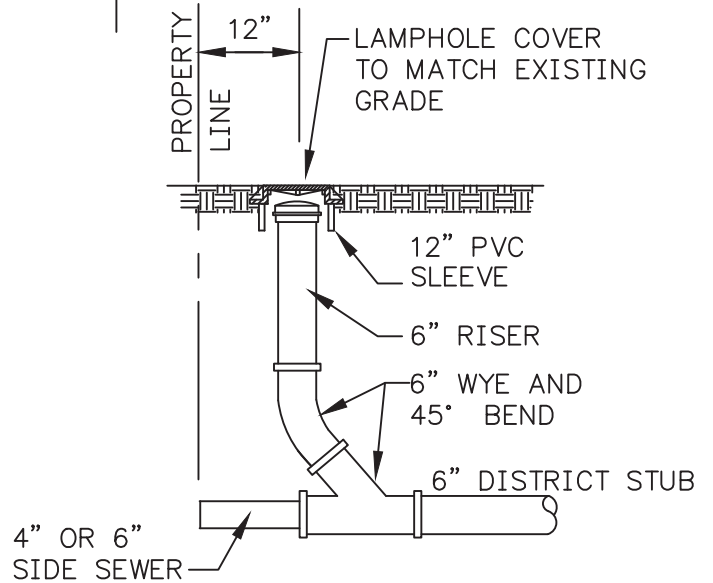
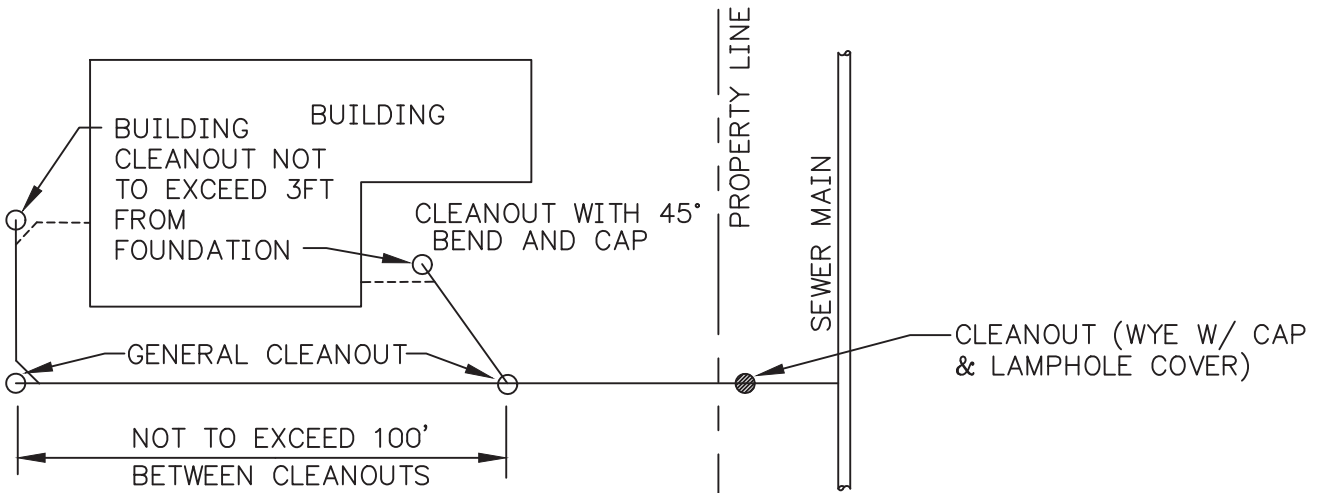


**NOTE:**  
 WHEN TAPPING INTO EXISTING MAIN, CUT IN A NEW TEE W/ MECHANICAL COUPLINGS. USE OF A SADDLE AND TAP IS ALLOWED ONLY ON PVC MAINS. PLACEMENT OF TEE SHALL DEPEND ON DEPTH OF SEWER MAIN. AS A MINIMUM, THE TEE SHALL BE PLACED AT A 45 DEGREE ANGLE.

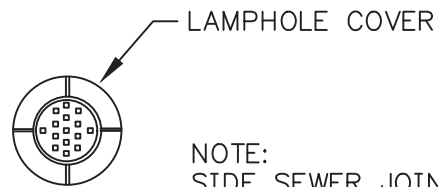


# OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS		STANDARD DETAIL		
		TYPICAL SIDE SEWER		
DATE	10/25/18	SCALE	NTS	DWG NO.
				S-2



**TYPICAL CLEANOUT UNDER ASPHALT**

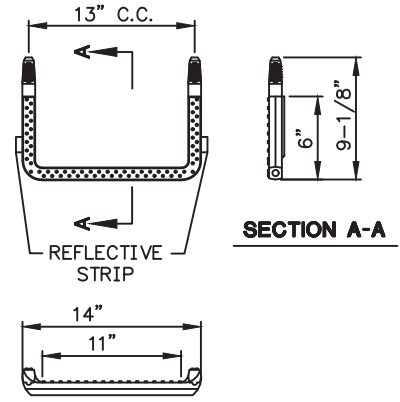
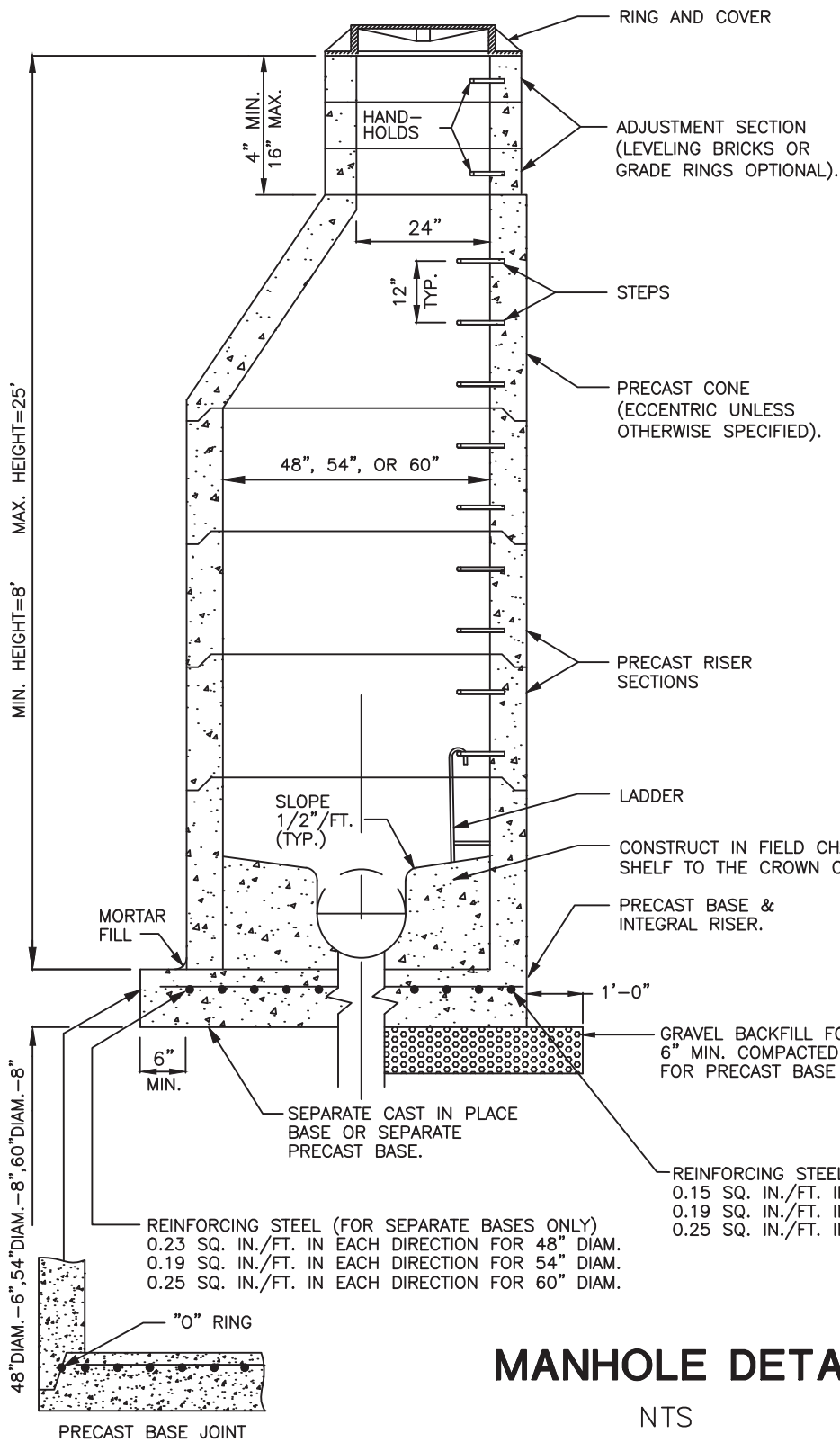


NOTE:  
SIDE SEWER JOINTS SHALL BE GASKETED



# OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS		STANDARD DETAIL		
		SEWER CLEANOUT DETAIL		
DATE	10/25/18	SCALE	NTS	DWG NO. S-3



- NOTES:**
1. STEPS TO BE POLYPROPYLENE.
  2. DRILL (2) 1-1/8" OR 1-1/4" HOLES, 3-1/2" DEEP, APPLY EPOXY IN THE HOLE AND AROUND THE BARBS OF THE STEP. PUSH THE STEP INTO THE HOLES ALLOWING THE EPOXY TO FLOW OUT TO THE SQUARE SHOULDER OF THE STEP.

## MANHOLE STEPS

NTS

## MANHOLE DETAIL

NTS



# OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS		STANDARD DETAIL		
		MANHOLE DETAIL		
DATE	10/25/18	SCALE	NTS	DWG NO.
				S-4A

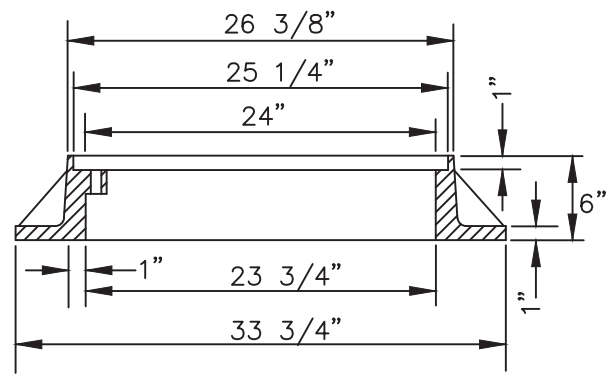
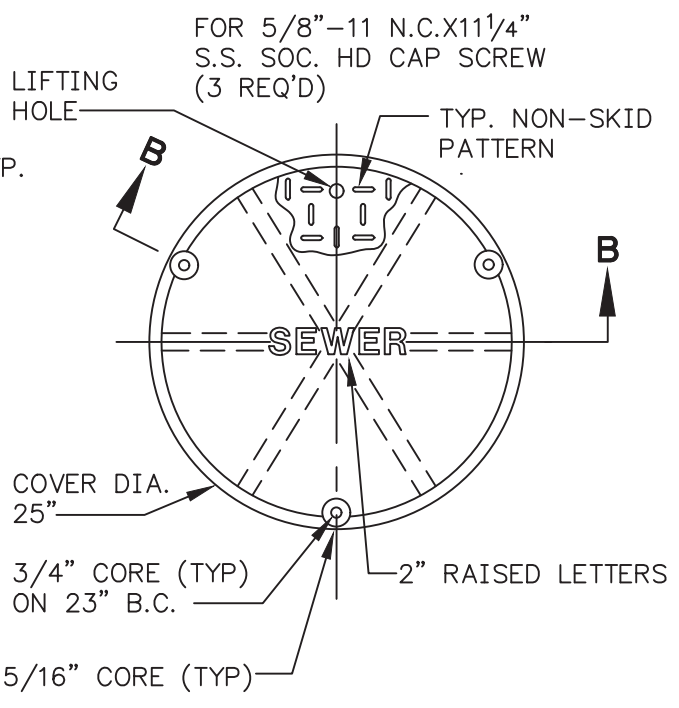
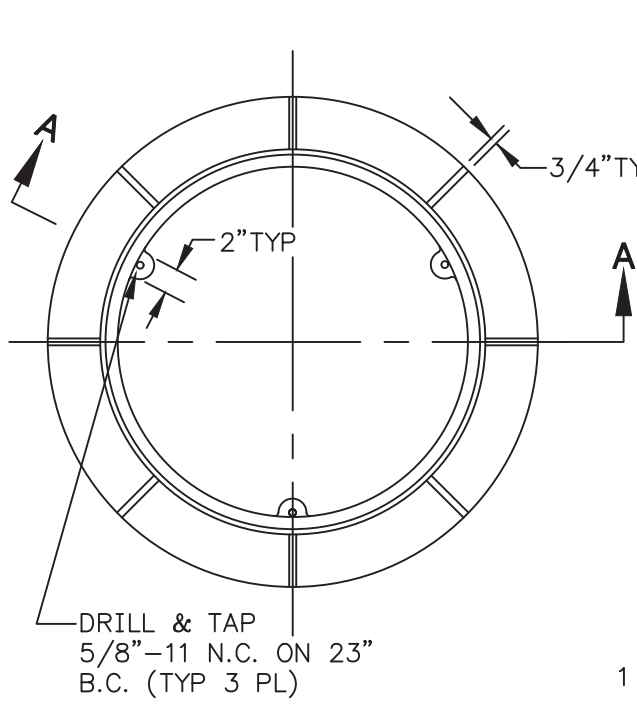
NOTES:

1. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M199 UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN THE WSDOT/APWA STANDARD SPECIFICATIONS.
2. HANDHOLDS IN ADJUSTMENT SECTION SHALL HAVE 3" MIN. CLEARANCE. STEPS IN MANHOLE SHALL HAVE 6" MIN. CLEARANCE. SEE DWG. NO. 2-011, "MANHOLE DETAILS." HANDHOLDS SHALL BE PLACED IN ALTERNATING GRADE RINGS OR LEVELING BRICK COURSE WITH A MIN. OF ONE HAND HOLD BETWEEN THE LAST STEP AND THE TOP OF THE MANHOLE.
3. ALL REINFORCED CAST-IN-PLACE CONCRETE SHALL BE CLASS 4000. ALL PRECAST CONCRETE SHALL BE CLASS 4000. NON-REINFORCED CONCRETE IN CHANNEL AND SHELF SHALL BE CLASS 3000.
4. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE WALL THICKNESS OF 2" MIN. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT. PIPES SHALL BE INSTALLED ONLY IN FACTORY KNOCKOUTS UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. KNOCKOUT OR CUTOUT HOLE SIZE SHALL EQUAL PIPE OUTER DIAM. PLUS MANHOLE WALL THICKNESS. MAX. HOLE SIZE SHALL BE 36" FOR 48" MANHOLE, 42" FOR 54" MANHOLE, 48" FOR 60" M.H. MIN. DISTANCE BETWEEN HOLES SHALL BE 8".
6. MANHOLE RINGS AND COVERS SHALL MEET THE STRENGTH REQUIREMENTS OF CURRENT FEDERAL AND STATE SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
7. ALL BASE REINFORCING STEEL SHALL HAVE A MIN. YIELD STRENGTH OF 60,000 PSI AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MIN. CLEARANCE.
8. FOR HEIGHTS OF 12' OR LESS, MIN. SOIL BEARING VALUE SHALL EQUAL 3,300 POUNDS PER SQUARE FOOT. FOR HEIGHTS OVER 12', MIN. SOIL BEARING VALUE SHALL EQUAL 3,800 POUNDS PER SQUARE FOOT.
9. NEW MANHOLES SHALL NOT HAVE METAL RISERS INSTALLED TO MEET FINAL GRADE.

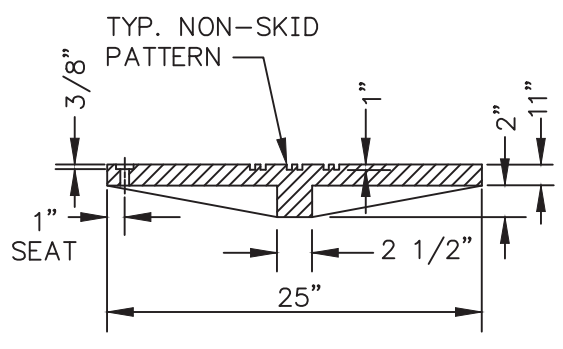


## OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS	STANDARD DETAIL		
	MANHOLE SPECIFICATIONS		
	DATE 10/25/18	SCALE NTS	DWG NO. S-4B



**SECTION A-A**



**SECTION B-B**

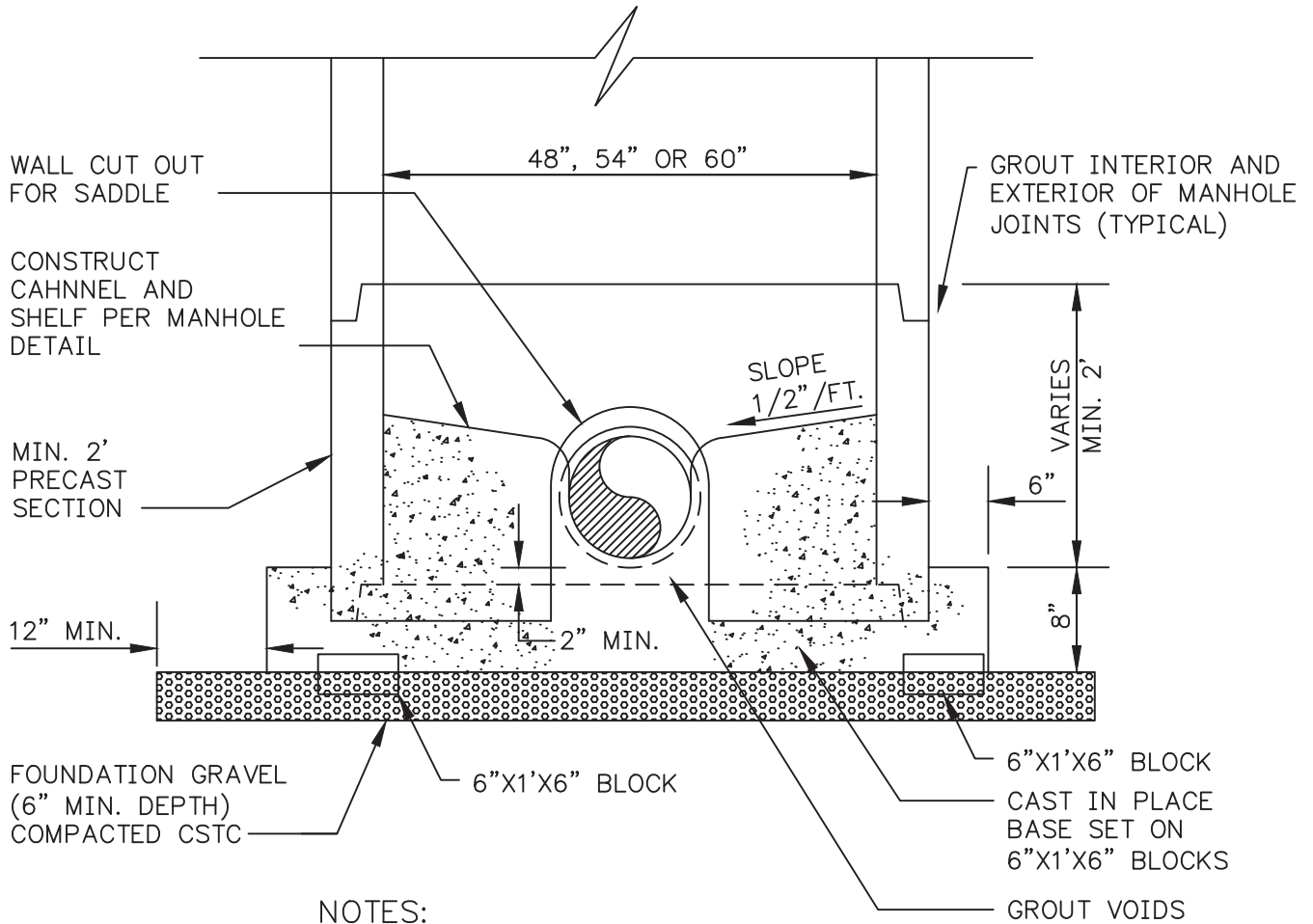
NOTES:

1. DRILL LUG HOLES FULL DEPTH
2. BOLT COVER TO LUGS IN RING
3. PROVIDE 1" DIA. LIFTING HOLE
4. DUCTILE IRON COVER, CAST IRON FRAME
5. FRAME AND COVER PER DISTRICT APPROVED MATERIALS LIST



**OLYMPIC VIEW WATER & SEWER DISTRICT**

REVISIONS		STANDARD DETAIL		
		MANHOLE FRAME AND COVER		
DATE	10/25/18	SCALE	NTS	DWG NO. S-5



**NOTES:**

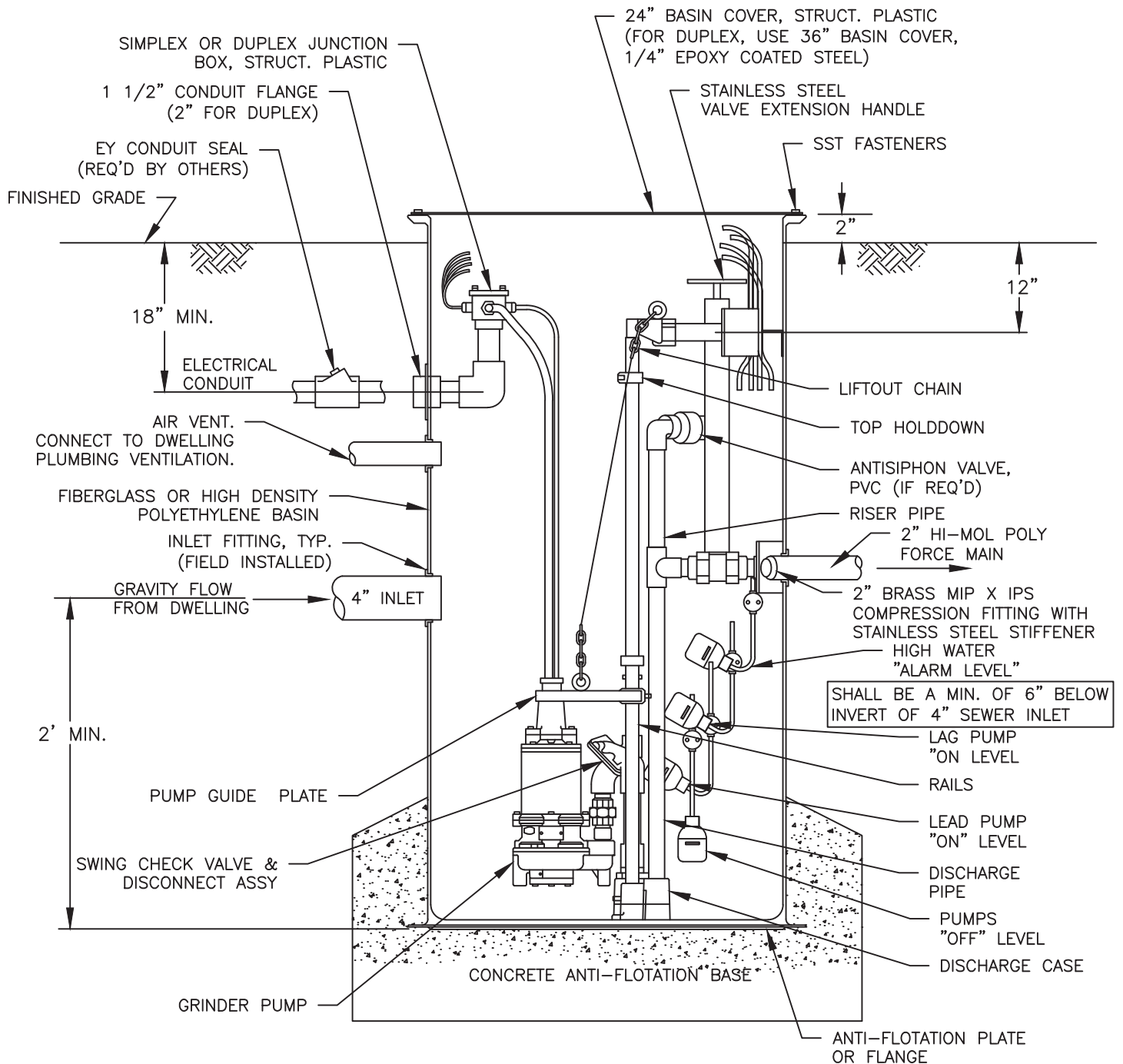
1. SEWER MAIN TO REMAIN IN SERVICE THROUGHOUT CONSTRUCTION PERIOD.
2. DO NOT CUT INTO SEWER MAIN UNTIL REMAINDER OF EXTENSION IS READY FOR SERVICE AND AUTHORIZED BY DISTRICT.



# OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS		STANDARD DETAIL	
		SADDLE TYPE DROP-IN MANHOLE	
DATE	10/25/18	SCALE	NTS
		DWG NO.	S-6





DISTRICT INSPECTION REQUIRED  
PRIOR TO BACKFILL

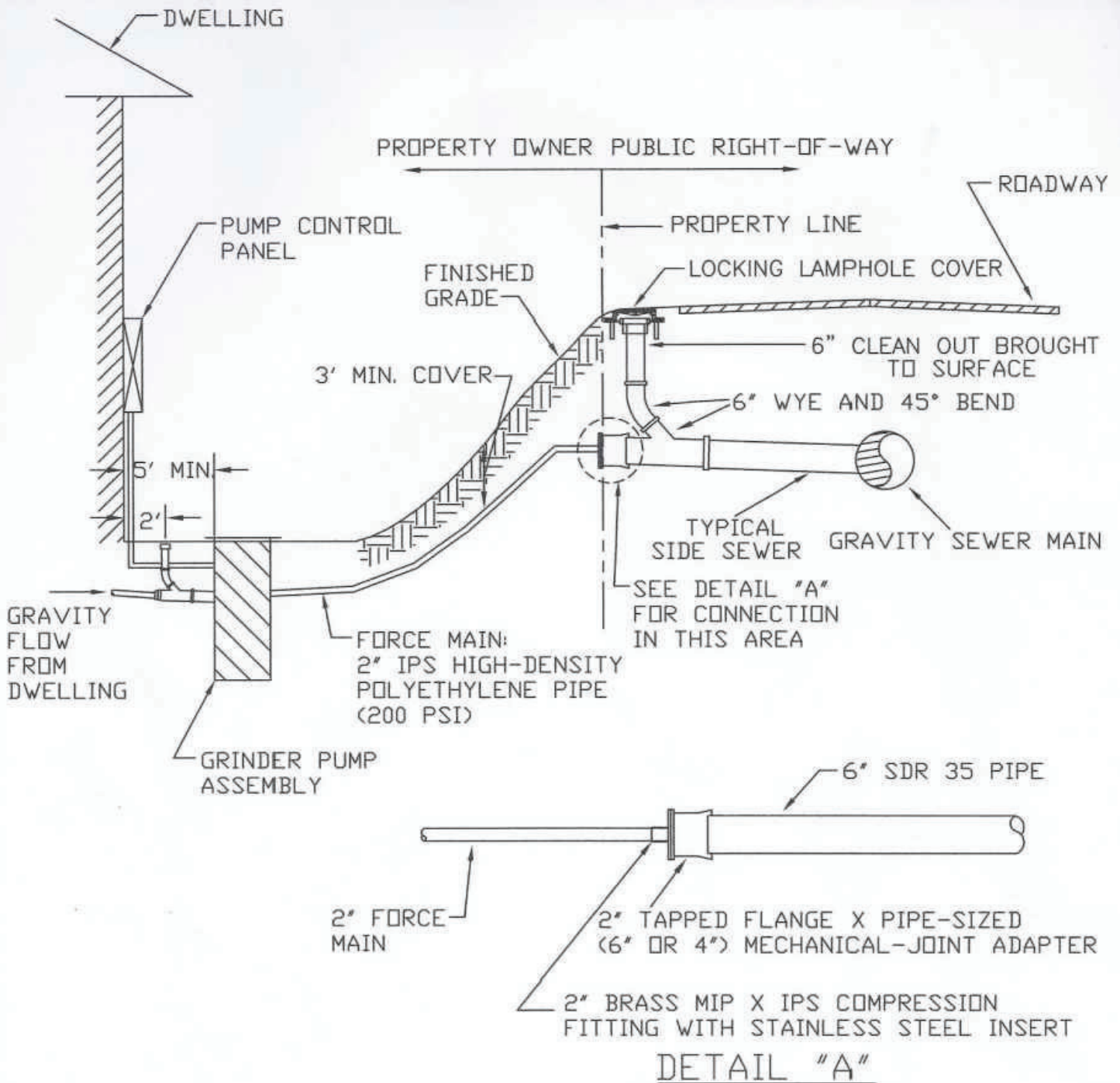
- NOTES:
1. INSTALLATION REQUIRES PREMISE ISOLATION VIA A RPBA INSTALLED IN AN INSULATED BOX AFTER POTABLE WATER METER.
  2. INSTALLED LOCATION OF A GRINDER PUMP MUST BE PART OF THE STRUCTURE IT SERVES.
  3. ALL ALARMS TO BE TESTED W/DISTRICT STAFF PRESENT.



# OLYMPIC VIEW WATER & SEWER DISTRICT

REVISIONS		STANDARD DETAIL	
		SIMPLEX OR DUPLEX GRINDER PUMP	
DATE	10/25/18	SCALE	NTS
		DWG NO.	S-7





**GRINDER PUMP SERVICE LINE NOTES**

1. ATTACH 12 GAUGE TRACER WIRE AND TAPE EVERY 10' TO THE FORCE MAIN.
2. GRINDER PUMP VENTILATION SHALL BE CONNECTED TO THE HOUSE.
3. DISTRICT INSPECTION REQUIRED PRIOR TO BACKFILL.
4. GRINDER PUMP MUST BE PART OF STRUCTURE SERVED, IE WITHIN THE STRUCTURE OR UNDER INTEGRAL COVER.
5. IF GRINDER PUMP IS UTILIZED, WATER SERVICE MUST INCORPORATE PREMISE ISOLATION VIA RPBA.



**OLYMPIC VIEW WATER & SEWER DISTRICT**

REVISIONS		STANDARD DETAIL	
		GRINDER PUMP CONNECTION TO GRAVITY SEWER	
DATE	10/25/18	SCALE	NTS
		DWG NO.	S-8