

NE 7-22-5

NOTES

- FINAL RIM ELEVATIONS REQUIRED TO BE SUBJECT TO FINAL GRADE AND THE REQUIREMENT FOR 20" MAXIMUM DIFFERENCE FROM RIM ELEVATION TO INSIDE CONE BREAK. SEE DETAIL S-27 ON SHEET 4/4 (TYP. ALL)
- VERIFY REMOVAL OF EXISTING HOUSE SEWER AND DISPOSE AS REQUIRED.
- MANHOLE ACCESS/OPENING SHALL BE ROTATED TO BE 3-FEET CLEAR OF THE CURB (TYP.)
- WORK AND INSTALLATION OF SEWER IN S 209TH PL SUBJECT TO SCVSD AND RIGHT OF WAY PERMIT TO BE OBTAINED PRIOR TO CONSTRUCTION.
- ALL SIDE SEWERS TO BE @ MINIMUM 2.00% SLOPE.
- IMPORTED STRUCTURAL FILL SHOULD CONSIST OF A WELL-GRADED, GRANULAR SOIL WITH A FINES CONTENT OF 5 PERCENT OR LESS. STRUCTURAL FILL SHOULD BE PLACED IN LOOSE LIFTS OF 12 INCHES OR LESS AND COMPACTED TO A RELATIVE COMPACTION OF 95 PERCENT, BASED ON THE LABORATORY MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D1557).

BENCHMARK

1 FOUND CONCRETE MONUMENT WITH PUNCHED-TRIANGLE IN 3" BRASS DISK IN MONUMENT CASE, COX NO. 7094, STAMPED: T22N R5E, 30' EAST OF CENTERLINE INTERSECTION OF 100TH AVE SE & S 208TH ST. NAVD 88 ELEV = 395.82

2 FOUND 4"x4" CONCRETE MONUMENT WITH PUNCHED 1/2" METAL ROD, DOWN 0.7' IN MONUMENT CASE, 0.2'S. X 0.2'E. OF CENTERLINE INTERSECTION OF S 208TH ST & 98TH PL. S. NAVD 88 ELEV = 360.04

DATUM: NAVD 88

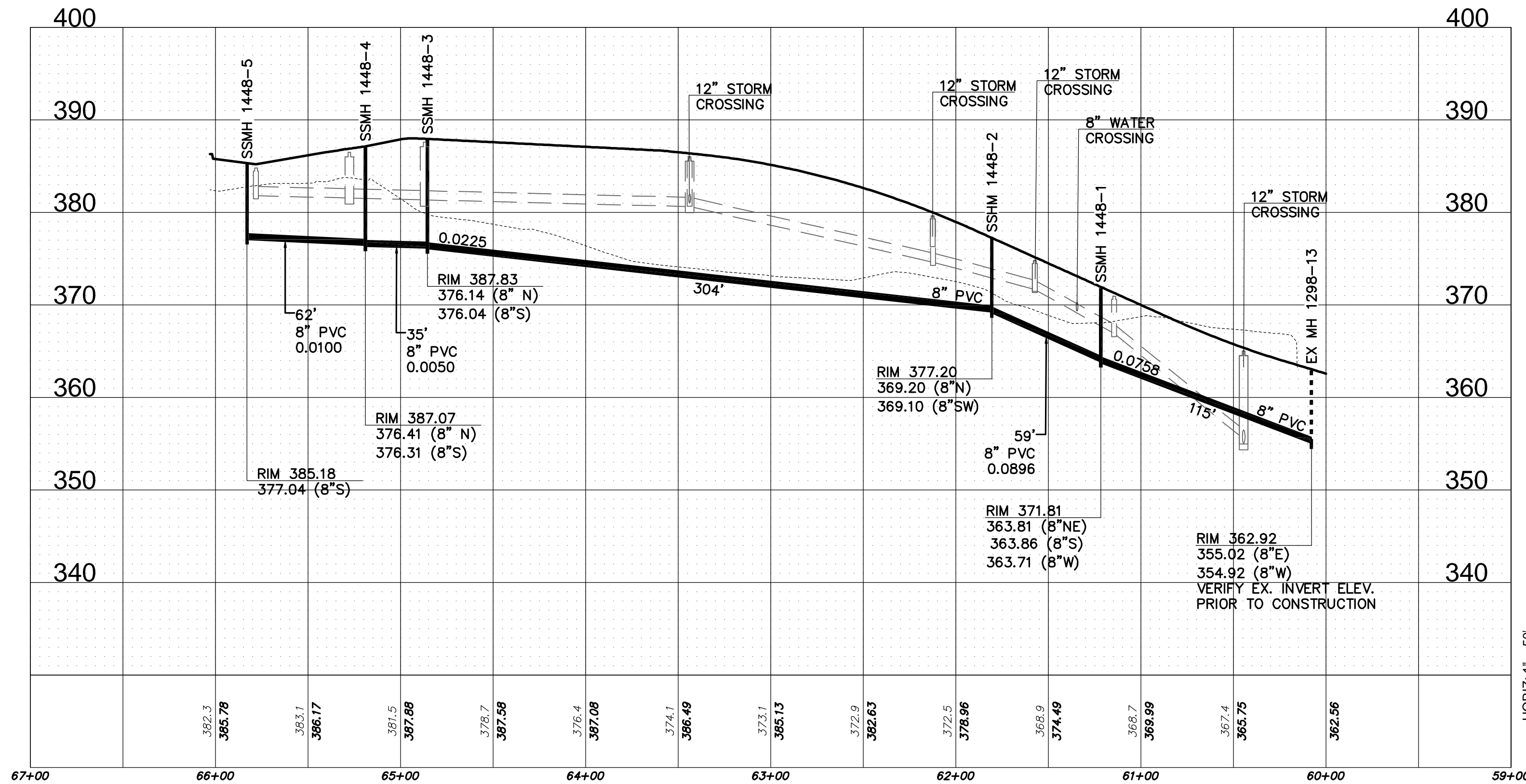
NAVD 88 PER CITY OF KENT VERTICAL CONTROL

NOTES

DEVELOPER/CONTRACTOR RESPONSIBLE TO REGRADE SITE AS REQUIRED TO PROVIDE GRAVITY SERVICE TO ALL LOTS AS SHOWN ON PLAN (REF: F.F. ELEVATIONS AND SEWER STUB INVERT ELEVATIONS)

SHEET INDEX

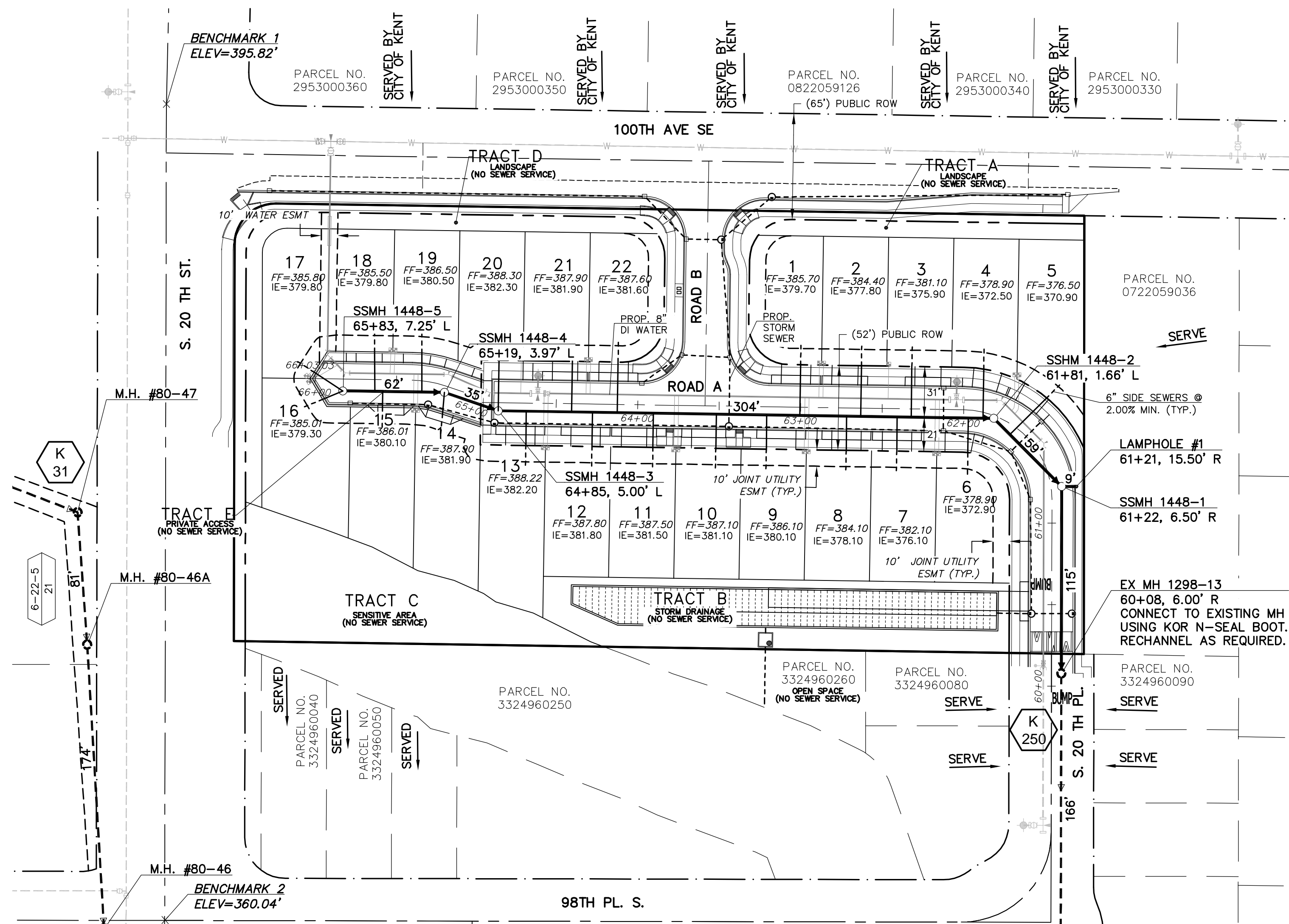
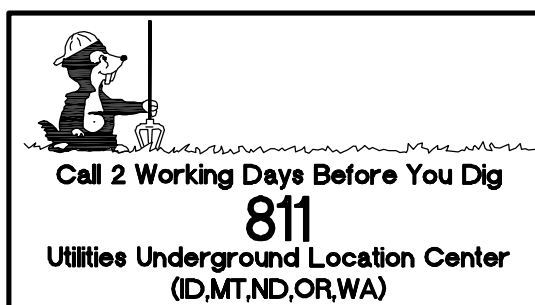
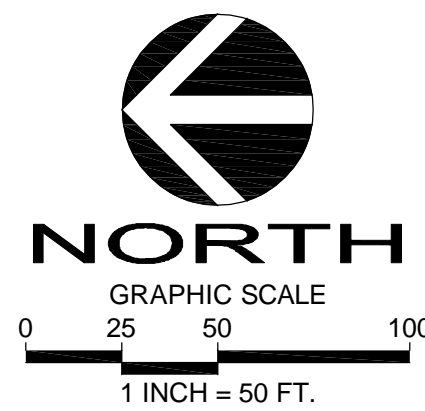
SHEET 1	OF 4	SEWER PLAN, PROFILE AND NOTES
SHEET 2	OF 4	CONSTRUCTION PROVISIONS
SHEET 3	OF 4	MATERIALS AND SURFACE RESTORATION
SHEET 4	OF 4	STANDARD DETAILS



HORIZ: 1" = 50'  
VERT: 1" = 10'

SIDE SEWER SERVICE TABLE

LOT	SIZE	LENGTH	SLOPE	I.E. AT MAIN	STATION FROM DOWNSTREAM MANHOLE
2	6" PVC	22.3 LF	22.0%	396.54	3+41
3	6" PVC	34.4 LF	13.9%	396.20	2+98
4	6" PVC	10.9 LF	40.1%	395.89	2+53
5	6" PVC	9.6 LF	51.9%	395.47	2+06
6	6" PVC	9.7 LF	50.0%	395.14	1+65
7	6" PVC	9.7 LF	48.2%	394.79	1+21
8	6" PVC	9.7 LF	46.8%	394.47	0+81
9	6" PVC	9.8 LF	45.4%	394.15	0+41
10	6" PVC	19.3 LF	7.3%	393.87	0+06
11	6" PVC	25.3 LF	19.0%	393.12	1+61
12	6" PVC	25.4 LF	18.4%	393.44	2+02
13	6" PVC	25.4 LF	18.9%	393.75	2+42
14	6" PVC	84.2 LF	7.3%	396.07	2+83
15	6" PVC	60.1 LF	8.0%	396.46	3+31

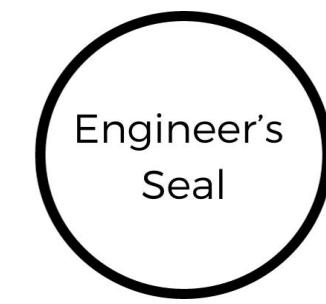


STANDARD BLOCKS

- PROPOSED SEWER MANHOLE
- EXISTING SEWER MANHOLE
- PROPOSED SEWER MANHOLE W/ARROW
- EXISTING SEWER MANHOLE W/PROPOSED SEWER ARROW
- PROPOSED FLOW ARROW
- EXISTING FLOW ARROW
- EASEMENT BLOCK WITH ATTRIBUTES

SEWER GENERAL NOTES: (REVISED 05/16/11)

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SPECIFICATIONS OF SOOS CREEK WATER AND SEWER DISTRICT, ALSO REFERRED TO HEREINAFTER AS "DISTRICT".
- THE DEVELOPER SHALL FURNISH THE DISTRICT A COPY OF THE COMMERCIAL AND/OR SUBDIVISION PLANS APPROVED BY THE GOVERNING AGENCY PRIOR TO ANY SEWER MAIN CONSTRUCTION.
- PRIOR TO CONSTRUCTING ANY SEWER MAINS, THE APPROPRIATE STREETS AND LOTS SHALL BE CLEARED, GRADED, AND STAKED BY THE DEVELOPER/CONTRACTOR AND ALL EXISTING UTILITIES SHALL BE LOCATED.
- FOLLOWING SEWER MAIN CONSTRUCTION, ANY REVISION OF ROADWAY OR EASEMENT GRADES REQUIRING THE MAINS TO BE RECONSTRUCTED SHALL BE MADE AT THE DEVELOPER'S/CONTRACTOR'S EXPENSE.
- RECONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF THE DISTRICT. ALL COSTS FOR INSPECTING SUCH RECONSTRUCTION SHALL BE CHARGED TO THE DEVELOPER IN ADDITION TO THE STANDARD CHARGES, AND SHALL BE PAID BEFORE ACCEPTANCE BY THE DISTRICT.
- NO SIDE SEWER CONNECTIONS SHALL BE MADE TO THE EXISTING SYSTEM UNTIL COMPLETION OF THE BILL OF SALE AND ALL EASEMENTS. OBTAIN SIDE SEWER PERMIT FROM THE DISTRICT FOR EACH SIDE SEWER CONNECTION PRIOR TO MAKING CONNECTION. BILL OF SALE WILL NOT BE PROCESSED UNTIL PUGET SOUND ENERGY HAS EITHER PROVIDED A WORK SKETCH OR INSTALLED THEIR VAULTS, HAND HOLES AND LIGHT STANDARDS, OR THE DEVELOPER HAS PROVIDED A SIGNED HOLD HARMLESS AGREEMENT (FORM SUPPLIED BY THE DISTRICT).
- ALL COSTS OF SEWER MAIN RE-STAKING SHALL BE PAID BY THE DEVELOPER/CONTRACTOR.
- PROPERTY CORNERS SHALL BE PINNED WITH REFERENCE TACK ON CURBS BY THE DEVELOPER/CONTRACTOR.
- THE DEVELOPER/CONTRACTOR SHALL NOTIFY THE DISTRICT AT (253) 630-9900 TO SCHEDULE A PRE-CONSTRUCTION MEETING AT THE DISTRICT OFFICE. AFTER THE PRE-CONSTRUCTION MEETING, THE DEVELOPER/CONTRACTOR SHALL NOTIFY THE DISTRICT'S FIELD REPRESENTATIVE AT LEAST 48 HOURS (REGULAR WORKING DAYS) BEFORE STARTING WORK.
- THE DEVELOPER/CONTRACTOR SHALL OBTAIN ALL REQUIRED FINAL INSPECTIONS TO MEET PERMIT REQUIREMENTS. INSPECTIONS MUST BE SCHEDULED AT LEAST 48 HOURS IN ADVANCE.
- CONNECTION TO EXISTING SEWER MAINS SHALL BE MADE ONLY WITH THE WRITTEN APPROVAL OF THE DISTRICT AND ONLY AFTER AT LEAST 48 HOURS (TWO REGULAR WORKING DAYS) ADVANCE NOTICE.
- EXISTING SEWERS TO REMAIN IN SERVICE AT ALL TIMES.
- ALL WATER AND/OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM NEW SEWERS AND SHALL NOT BE PERMITTED TO ENTER THE EXISTING SYSTEM.
- EXISTING MANHOLE #1298-13 SHALL BE CORE-DRILLED AND RE-CHANNELLED AS REQUIRED TO RECEIVE INCOMING FLOW FROM THE NEW SEWER.



DATE APPROVED	KP	NO.	123450
PRINCIPAL APPROVAL	KP	NO.	
DESIGN	KP	NO.	
DRAWN	BD	NO.	
CHECKED	KP	NO.	
JOB NO.	123450		

SOOS CREEK WATER & SEWER DISTRICT  
SEWER MAIN EXTENSION  
PROJECT NAME  
SEWER PLAN, PROFILE AND NOTES

BASE MAP	H-1
SHEET	1 OF 4
DRAWING	K-255

# CONSTRUCTION PROVISIONS (Revised 05-16-11)

## 1. STANDARD SPECIFICATIONS

ALL WORK, MATERIALS AND TESTING SHALL CONFORM TO THE STANDARDS OF SOOS CREEK WATER & SEWER DISTRICT AND THE "STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION", CURRENT EDITION, AS PREPARED BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, AND HEREINAFTER REFERRED TO AS THE "STANDARD SPECIFICATIONS," EXCEPT AS HEREIN MODIFIED.

## 2. TRENCH EXCAVATION, BEDDING AND BACKFILL

ALL WORK WITHIN THE RIGHT-OF-WAY SHALL COMPLY WITH ALL PERTINENT PERMITS, THE GOVERNING AGENCY'S CURRENT ROAD STANDARDS, AND THE STANDARD SPECIFICATIONS. ALL MATERIAL FROM CLEARING AND GRUBBING SHALL BE HAULED TO AN APPROVED WASTE DISPOSAL SITE PROVIDED BY THE DEVELOPER/CONTRACTOR.

WHEN TRENCHING THROUGH EXISTING PAVEMENT, THE PAVEMENT SHALL BE CUT ON A NEAT-LINE BY SAW CUTTING. TRENCH SIDES SHALL BE KEPT AS VERTICAL AS POSSIBLE GIVEN THE SOIL CONDITIONS. COMPACTION AND RESTORATION SHALL BE DONE AS DETAILED BELOW AND IMMEDIATELY AFTER THE TRENCH BACKFILL IS PLACED, SO AS TO CAUSE THE LEAST DISRUPTION TO TRAFFIC. ALL PAVEMENT SHALL BE CUT 1 FOOT OUTSIDE THE EDGE OF THE TRENCH ON EACH SIDE.

ANY TRENCH EXCEEDING FOUR FEET IN DEPTH SHALL BE PROVIDED WITH ADEQUATE SAFETY SYSTEMS MEETING THE REQUIREMENTS OF THE WASHINGTON STATE INDUSTRIAL SAFETY AND HEALTH ACT (WISHA), CHAPTER 49.17 RCW, AND ALL REGULATIONS ADOPTED PURSUANT THERETO. THE DEVELOPER/CONTRACTOR SHALL HAVE A STRUCTURAL ENGINEER REVIEW AND STAMP ANY AND ALL SHORING PLANS AND CALCULATIONS. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR WORKER SAFETY AND THE DISTRICT AND THE DISTRICT'S ENGINEER ASSUME NO RESPONSIBILITY.

WHEN NATIVE MATERIAL AT THE TRENCH BOTTOM IS SUITABLE FOR PIPE BEDDING, THE BOTTOM SHALL BE HAND FINISHED TO GRADE SO THAT THE PIPE WILL HAVE UNIFORM SUPPORT ALONG THE BARREL AND BELL. AFTER THE PIPE IS IN PLACE, ADDITIONAL HAND SELECTED NATIVE MATERIAL MEETING THE REQUIREMENTS FOR BEDDING MATERIAL SHALL BE PLACED AND TAMPED AROUND THE PIPE FOR A MINIMUM OF 4 INCHES ABOVE THE CROWN OF THE PIPE.

WHEN NATIVE MATERIAL AT THE TRENCH BOTTOM IS STONY OR OTHERWISE NON-UNIFORM, THE TRENCH SHALL BE OVER-EXCAVATED A MINIMUM OF 6 INCHES BELOW THE SPECIFIED GRADE AND A LAYER OF PIPE BEDDING MATERIAL SHALL BE FURNISHED AND PLACED TO THE SPECIFIED GRADE. AFTER THE PIPE IS IN PLACE, ADDITIONAL HAND SELECTED NATIVE MATERIAL MEETING THE REQUIREMENTS FOR BEDDING MATERIAL SHALL BE PLACED AND TAMPED AROUND THE PIPE FOR A MINIMUM OF 4 INCHES ABOVE THE CROWN OF THE PIPE.

IF THE NATIVE MATERIAL AT THE TRENCH BOTTOM IS UNSUITABLE FOR FOUNDATION PURPOSES OR WILL HAVE DIFFICULTY PROVIDING UNIFORM BEARING FOR THE PIPE, SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH A MINIMUM OF 6 INCHES OF COMPACTED FOUNDATION MATERIAL.

THE BEDDING MATERIAL SHALL BE CARRIED UP EVENLY ON BOTH SIDES OF THE PIPE SIMULTANEOUSLY IN APPROXIMATELY 6-INCH LAYERS AND EACH LAYER THOROUGHLY COMPACTED WITH APPROPRIATE TOOLS IN SUCH MANNER AS TO AVOID INJURING OR DISTURBING THE COMPLETED PIPELINE. ALL BEDDING AND NATIVE MATERIAL SHALL BE STORED AWAY FROM THE EDGES OF EXCAVATION AND OFF THE PAVED ROADWAY AND SHOULDER.

ALL TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED TO 95% OF THE MAXIMUM DENSITY WITHIN THE RIGHT-OF-WAY AND IN ALL AREAS (PAVED AND UNPAVED) WHERE STREETS, ROADWAY SHOULDERS, DRIVEWAYS, SIDEWALKS, OR PARKING LOTS WILL BE CONSTRUCTED OR RECONSTRUCTED OVER THE TRENCH EXCEPT FOR TRENCHES OVER 8 FEET IN DEPTH. WHEN THE TRENCH DEPTH EXCEEDS 8 FEET, TRENCH BACKFILL UP TO 4 FEET FROM THE TOP OF THE TRENCH SHALL BE MECHANICALLY COMPACTED TO 90% OF THE MAXIMUM DENSITY. THE REMAINING TOP 4 FEET OF THE TRENCH SHALL THEN BE MECHANICALLY COMPACTED TO 95% OF THE MAXIMUM DENSITY. IN UNPAVED AREAS AND OTHER AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, TRENCH BACKFILL FROM THE PIPE TO WITHIN 3 FEET OF THE SURFACE SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY. THE UPPER 3 FEET SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY.

ALL DENSITIES SHALL BE DETERMINED BY TESTING PER THE MODIFIED PROCTOR METHOD, ASTM D1557. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DENSITY TEST REPORTS CERTIFIED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. A MINIMUM OF ONE TEST SHALL BE TAKEN WITHIN EVERY 500 FEET OF TRENCH LENGTH AND AT DEPTHS UP TO 50% OF TRENCH DEPTH, OR AS DIRECTED BY THE DISTRICT'S FIELD REPRESENTATIVE OR THE GOVERNING ROAD AGENCY. COMPACTION OF LATERALS OR SERVICE LINE TRENCHES SHALL BE TESTED WHERE DIRECTED BY THE DISTRICT'S FIELD REPRESENTATIVE OR THE GOVERNING ROAD AGENCY. TESTING OF CDF, WHEN USED AS REQUIRED BY THE GOVERNING ROAD AGENCY, SHALL BE IN ACCORDANCE WITH ASTM 04832.

TRENCH BACKFILL SHALL BE PLACED IN UNIFORM LOOSE LAYERS NO MORE THAN 12 INCHES THICK AND MECHANICALLY COMPACTED AS SPECIFIED. IN ANY TRENCH WHERE THE SPECIFIED COMPACTION CANNOT BE ACHIEVED WITH NATIVE BACKFILL, THE TOP 4 FEET SHALL BE REPLACED AND COMPACTED TO 95% OF THE MAXIMUM DENSITY WITH IMPORTED BANK RUN GRAVEL. THE DISTRICT'S FIELD REPRESENTATIVE RESERVES THE RIGHT TO REQUEST A COMPACTION TEST AT ANY TIME ON THE BACKFILL MATERIAL.

IN CUTS TRANSVERSE TO THE ROAD ALIGNMENT AND AT ALL UTILITY CROSSINGS, THE ENTIRE TRENCH SHALL BE BACKFILLED WITH CRUSHED SURFACING. BACKFILL SHALL BE PLACED AND MECHANICALLY COMPACTED IN 12-INCH MAXIMUM LIFTS.

AFTER BACKFILL AND COMPACTION, AN IMMEDIATE COLD MIX PATCH SHALL BE PLACED AND MAINTAINED IN A MANNER ACCEPTABLE TO THE GOVERNING ROAD AGENCY UNTIL REPLACED WITH PERMANENT SURFACING.

ALL PIPE AND FITTINGS SHALL BE LAID "IN THE DRY" UNLESS OTHERWISE APPROVED BY ENGINEER. TRENCH EXCAVATIONS SHALL BE DEWATERED BY USING WELL POINT SYSTEMS, SUMPS WITH PUMPS OR OTHER METHODS APPROVED BY THE DISTRICT. DEWATERING SYSTEMS SHALL BE USED IN ACCORDANCE WITH GOOD STANDARD PRACTICE AND SHALL BE EFFICIENT ENOUGH TO LOWER THE WATER LEVEL IN ADVANCE OF THE EXCAVATION AND MAINTAIN IT CONTINUOUSLY TO KEEP THE TRENCH BOTTOM AND SIDES FIRM AND DRY. DEVELOPER/CONTRACTOR SHALL SUBMIT THE DEWATERING PLAN TO THE DISTRICT FOR REVIEW AT LEAST 10 DAYS PRIOR TO COMMENCING ANY DEWATERING WORK. ALL DEWATERING EFFLUENT SHALL BE ROUTED THROUGH A DEWATERING POND PRIOR TO RELEASE.

GROUNDWATER SHALL BE CONTROLLED SUCH THAT SOFTENING OF THE BOTTOM OF EXCAVATIONS OR FORMATION OF QUICK-CONDITIONS OR BOILS+ DURING EXCAVATION SHALL BE PREVENTED AND NO SOIL SHALL BE ERODED INTO THE EXCAVATION FROM THE SIDES OF EXCAVATION. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PREVENT REMOVAL OF THE NATURAL SOILS. THE DEVELOPER/CONTRACTOR SHALL AT ALL TIMES HAVE ON HAND SUFFICIENT PUMPING EQUIPMENT AND MACHINERY IN GOOD WORKING CONDITION FOR ALL ORDINARY EMERGENCIES, INCLUDING POWER OUTAGES, AND SHALL HAVE AVAILABLE AT ALL TIMES COMPETENT WORKERS FOR THE OPERATION OF SAID EQUIPMENT.

DEVELOPER/CONTRACTOR SHALL CONTROL SURFACE RUNOFF SO AS TO PREVENT ENTRY OR COLLECTION OF WATER IN EXCAVATIONS AND SHALL MAINTAIN THE UNDISTURBED STATE OF THE FOUNDATION SOILS AND ALLOW THE PLACEMENT OF ANY BACKFILL TO THE REQUIRED DENSITY. THE RELEASE OF GROUNDWATER TO ITS STATIC LEVEL SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE UNDISTURBED STATE OF THE NATURAL FOUNDATION SOILS, PREVENT DISTURBANCE OF COMPACTED BACKFILL, AND PREVENT FLOTATION OR MOVEMENT OF STRUCTURES AND PIPELINES.

DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL PERMIT REQUIREMENTS AND PROVISIONS FOR MONITORING AND MANAGING WATER DISCHARGED FROM THE EXCAVATION.

## 3. CONNECTION TO EXISTING SEWER SYSTEM

CONNECTIONS TO EXISTING LINES SHALL BE MADE ONLY WITH THE WRITTEN APPROVAL OF SOOS CREEK WATER & SEWER DISTRICT. THE DEVELOPER/CONTRACTOR SHALL NOTIFY THE DISTRICT'S FIELD REPRESENTATIVE AND OTHER UTILITIES AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION AND MAKE THE NECESSARY ARRANGEMENTS WITH THE DISTRICT'S FIELD REPRESENTATIVE FOR THE CONNECTION TO THE EXISTING SEWER SYSTEM. THE DEVELOPER/CONTRACTOR SHALL FURNISH ALL MATERIAL, EQUIPMENT AND LABOR NECESSARY FOR MAKING THE CONNECTION UNDER THE SUPERVISION OF THE DISTRICT. THE 48-HOUR NOTICE REQUIREMENT SHALL NOT COUNT SATURDAYS, SUNDAYS, AND HOLIDAYS.

WORK SHALL NOT BE STARTED UNTIL ALL OF THE MATERIAL, EQUIPMENT AND LABOR NECESSARY TO PROPERLY COMPLETE WORK IS ASSEMBLED ON THE SITE. ONCE WORK IS STARTED ON A CONNECTION, IT SHALL PROCEED CONTINUOUSLY WITHOUT INTERRUPTION AND AS RAPIDLY AS POSSIBLE UNTIL THE CONNECTION IS COMPLETED. BEFORE ORDERING MATERIALS FOR ANY CONNECTION TO AN EXISTING MANHOLE, DEVELOPER/CONTRACTOR SHALL EXCAVATE THE MANHOLE AND VERIFY OUTSIDE DIAMETER OF ALL PIPES FOR DETERMINING TYPES OF FITTINGS TO BE USED. ALL WORK SHALL BE COORDINATED WITH THE DISTRICT'S FIELD REPRESENTATIVE. THE EXISTING SEWERS SHALL REMAIN IN SERVICE AT ALL TIMES.

CONNECTIONS TO SANITARY SEWER MANHOLES SHALL BE MADE USING A SAND COLLAR, A CONCRETE COUPLING OR A KOR-N-SEAL BOOT. THE PIPE TO MANHOLE CONNECTION SHALL BE WATERTIGHT. ANY LEAKS IN THE COUPLINGS OR OTHER AREAS CREATED WHILE CONNECTING TO THE EXISTING MANHOLE SHALL BE SEALED WITH STRATA TECH ST-520 INJECTION RESIN OR APPROVED EQUAL.

DEVELOPER/CONTRACTOR SHALL RE-CHANNEL EXISTING MANHOLES AS NECESSARY TO SMOOTHLY DIRECT THE FLOW INTO THE EXISTING SYSTEM.

ALL WATER AND/OR CONSTRUCTION DEBRIS SHALL BE REMOVED FROM NEW SEWERS AND NOT BE PERMITTED TO ENTER THE EXISTING SYSTEM. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR FLUSHING OUT AND CLEANING ANY EXISTING SEWERS INTO WHICH GRAVEL, ROCKS OR OTHER DEBRIS HAS ENTERED AS A RESULT OF THE DEVELOPER'S/CONTRACTOR'S OPERATIONS, AND SHALL PAY FOR REPAIR TO LIFT STATIONS OR OTHER FACILITIES DAMAGED BY SUCH DEBRIS. ALL FLUSHING WATER SHALL BE PUMPED FROM UPSTREAM MANHOLES OR SEWER LINES AND SHALL NOT BE ALLOWED TO ENTER THE EXISTING SEWER.

## 4. SEPARATION OF UTILITIES

MINIMUM SEPARATION BETWEEN SEWER AND WATER MAINS SHALL CONFORM TO SECTION C1-9.1 OF THE "CRITERIA FOR SEWAGE WORKS DESIGN" CURRENT EDITION, AS PUBLISHED BY THE DEPARTMENT OF ECOLOGY. MINIMUM SEPARATION BETWEEN OTHER UTILITIES SHALL BE 6 INCHES WITH A SAND CUSHION.

PUGET SOUND ENERGY VAULTS, HAND HOLES AND LIGHT STANDARDS SHALL BE LOCATED NO CLOSER THAN 10 FEET FROM ANY SEWER MAINS AND STUB SERVICES. DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF VAULTS, HAND HOLES, AND LIGHT STANDARDS WITH THE SEWER STUB SERVICES. NO CONSTRUCTION SHALL START UNTIL THE DEVELOPER/CONTRACTOR HAS FURNISHED THE DISTRICT WITH A WORK SKETCH FROM PUGET SOUND ENERGY OR A SIGNED HOLD HARMLESS AGREEMENT (FORM SUPPLIED BY THE DISTRICT) IS PROVIDED..

## 5. THRUST BLOCKING

WHEN DIGGING NEAR FITTINGS ON EXISTING PIPELINES, TEMPORARY BLOCKING SHALL BE INSTALLED TO PREVENT BLOWOUTS. BLOCKING SHALL ALLOW FOR ANY CONNECTIONS TO THE FITTING TO BE REMOVED WITHOUT DAMAGING THE FITTING. THRUST BLOCKING SHALL CONFORM TO THE STANDARD DETAILS. WHERE UNFAVORABLE GROUND CONDITIONS ARE ENCOUNTERED, SPECIAL BLOCKING MAY BE REQUIRED AS DIRECTED BY THE DISTRICT IN THE FIELD.

## 6. SEWER MAIN TESTING

GRAVITY SEWERS AND APPURTENANCES SHALL BE TESTED AFTER BACKFILLING BY THE LOW-PRESSURE AIR METHOD IN ACCORDANCE WITH SECTION 7-17.3(2) OF THE STANDARD SPECIFICATIONS, EXCEPT WHERE THE GROUND WATER TABLE IS SUCH THAT THE DISTRICT MAY REQUIRE THE INFILTRATION TEST. FINAL ACCEPTANCE OF THE SEWER MAIN INSTALLATION WILL BE SUBJECT TO THE DISTRICT'S RESOLUTION NO. 1904-S, WHICH ALLOWS A MAXIMUM PONDING DEPTH OF 3/4-INCH. IN THE EVENT OF CONFLICTS BETWEEN THE STANDARDS ESTABLISHED IN RESOLUTION NO. 1904-S AND THE STANDARDS SPECIFIED IN SECTION 7-17.3(2) OF THE STANDARD SPECIFICATIONS, THE STANDARDS OF THE RESOLUTION WILL TAKE PRECEDENCE.

## 7. REPAIR OF PIPELINE FAILURES

BROKEN OR OTHERWISE DEFECTIVE PIPE SHALL BE REMOVED AND REPLACED. REPAIR BANDS OR CLAMPS SHALL NOT BE USED TO REPAIR BROKEN PIPE.

## 8. JACKED CROSSING

AT LOCATIONS AS REQUIRED BY THE DISTRICT OR GOVERNING ROAD AGENCY, OR AS PROPOSED BY THE DEVELOPER/CONTRACTOR, SEWER MAIN CROSSINGS OF ARTERIAL STREETS SHALL BE MADE BY JACKING, DRIVING, OR AUGURING A STEEL CASING PIPE BENEATH THE SURFACE. ALIGNMENT AND GRADE OF CASINGS FURNISHED SHALL BE SUCH THAT NO ADDITIONAL FITTINGS ARE NECESSARY TO MAKE THE CONNECTION. IF THE CASING DOES NOT MEET THIS REQUIREMENT, IT SHALL BE ABANDONED BY FILLING THE CASING WITH MOIST SAND AND A NEW CASING INSTALLED TO MEET THE LINE AND GRADE REQUIREMENTS. NO OPEN EXCAVATION SHALL BE MADE CLOSER THAN 6 FEET FROM THE EDGE OF PAVEMENT.

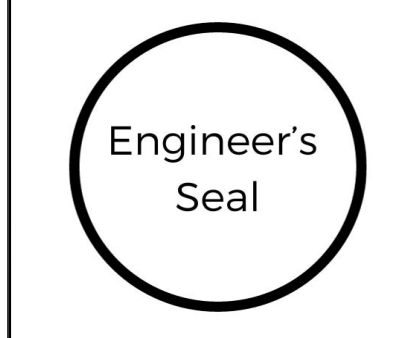
DIAMETER OF CASING PIPE SHALL BE SUFFICIENT TO ALLOW INSTALLATION OF THE SEWER. WALL THICKNESS SHALL BE SUFFICIENT TO WITHSTAND INSTALLATION FORCE AND HIGHWAY LOADING WITH A MINIMUM THICKNESS OF 1/4-INCH. AFTER THE SEWER MAIN HAS BEEN ADJUSTED TO GRADE, MOIST SAND SHALL BE TAMPED INTO THE CASING PIPE SO THAT ALL VOIDS WILL BE FILLED. MANUFACTURED CASING SPACERS THAT PROHIBIT MOVEMENT OF THE PIPE IN ANY DIRECTION WITHIN THE CASING MAY BE USED IN LIEU OF FILLING THE VOID BETWEEN THE SEWER MAIN AND THE CASING WALL WITH SAND.

## 10. EXISTING UTILITIES

EXISTING UTILITIES SHOWN ON ANY REFERENCE DRAWINGS PROVIDED BY THE DISTRICT HAVE BEEN PLOTTED FROM THE BEST INFORMATION AVAILABLE TO THE DISTRICT. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES WELL ENOUGH IN ADVANCE OF THE EXCAVATION TO PREVENT DAMAGE DURING CONSTRUCTION. THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS OPERATIONS ON THE PROJECT.

## 11. WARRANTY PERIOD

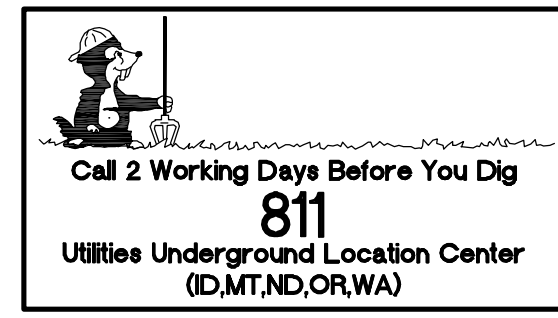
THE DEVELOPER MAKING THE APPLICATION FOR A LINE EXTENSION SHALL BE RESPONSIBLE FOR THE MATERIALS AND FOR SATISFACTORY OPERATION OF THE FACILITY FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE COMPLETED PROJECT AND THE BILL OF SALE TO THE DISTRICT.



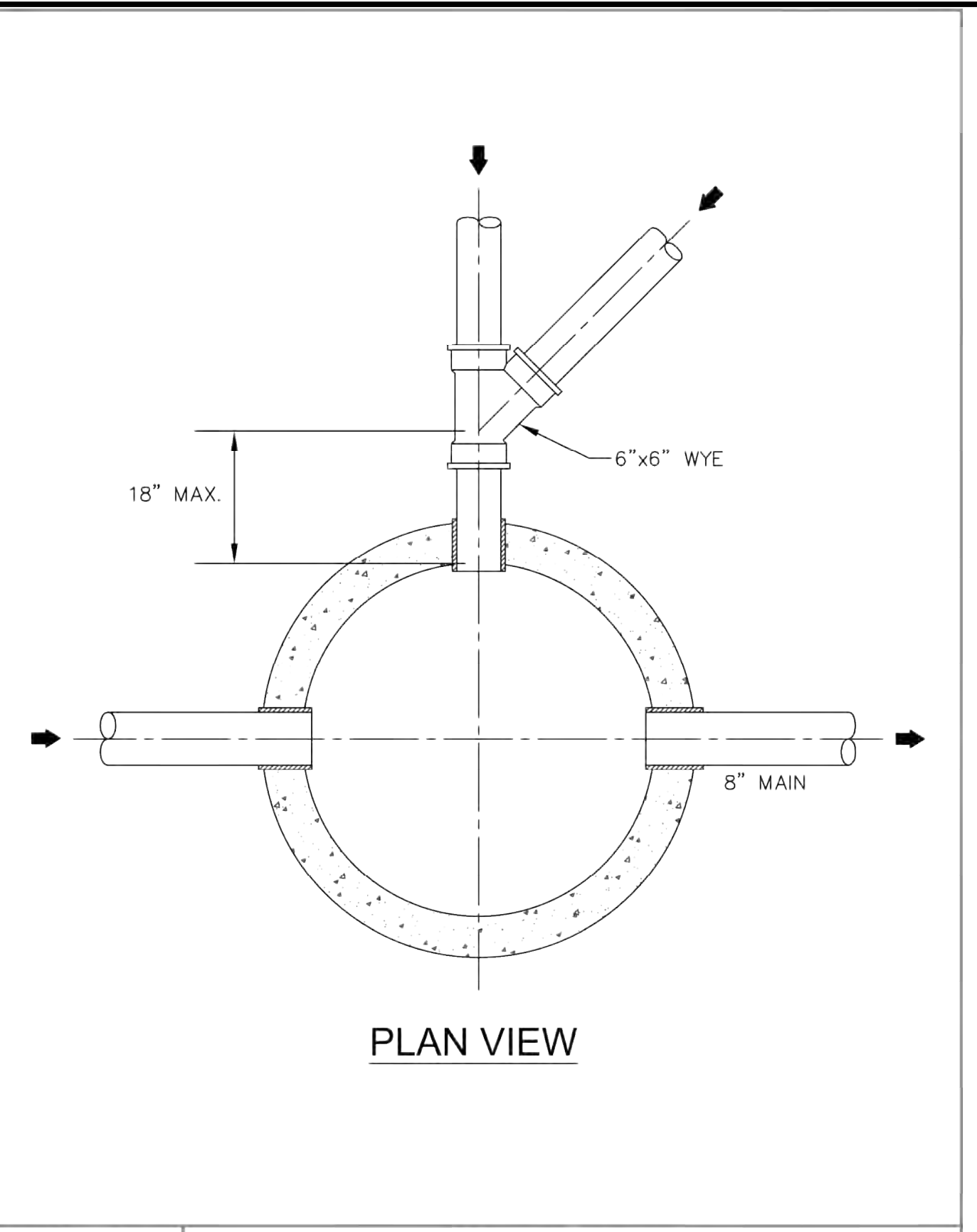
DATE APPROVED	PRINCIPAL APPROVAL	DESIGN	DRAWN	CHECKED	JOB NO.
	KP	KP	BD	KP	128450
<b>Engineer Logo</b> Engineer Company Name Engineer Company Address Engineer Company Phone/Email					CST.FLD.BK. NO. PG.
SCALE HORIZ. VERT.					DES.FLD.BK. NO. PG.

**SOOS CREEK WATER & SEWER DISTRICT**  
**SEWER MAIN EXTENSION PROJECT NAME**  
**CONSTRUCTION PROVISIONS**

BASE MAP	
SHEET	2 OF 4
DRAWING	

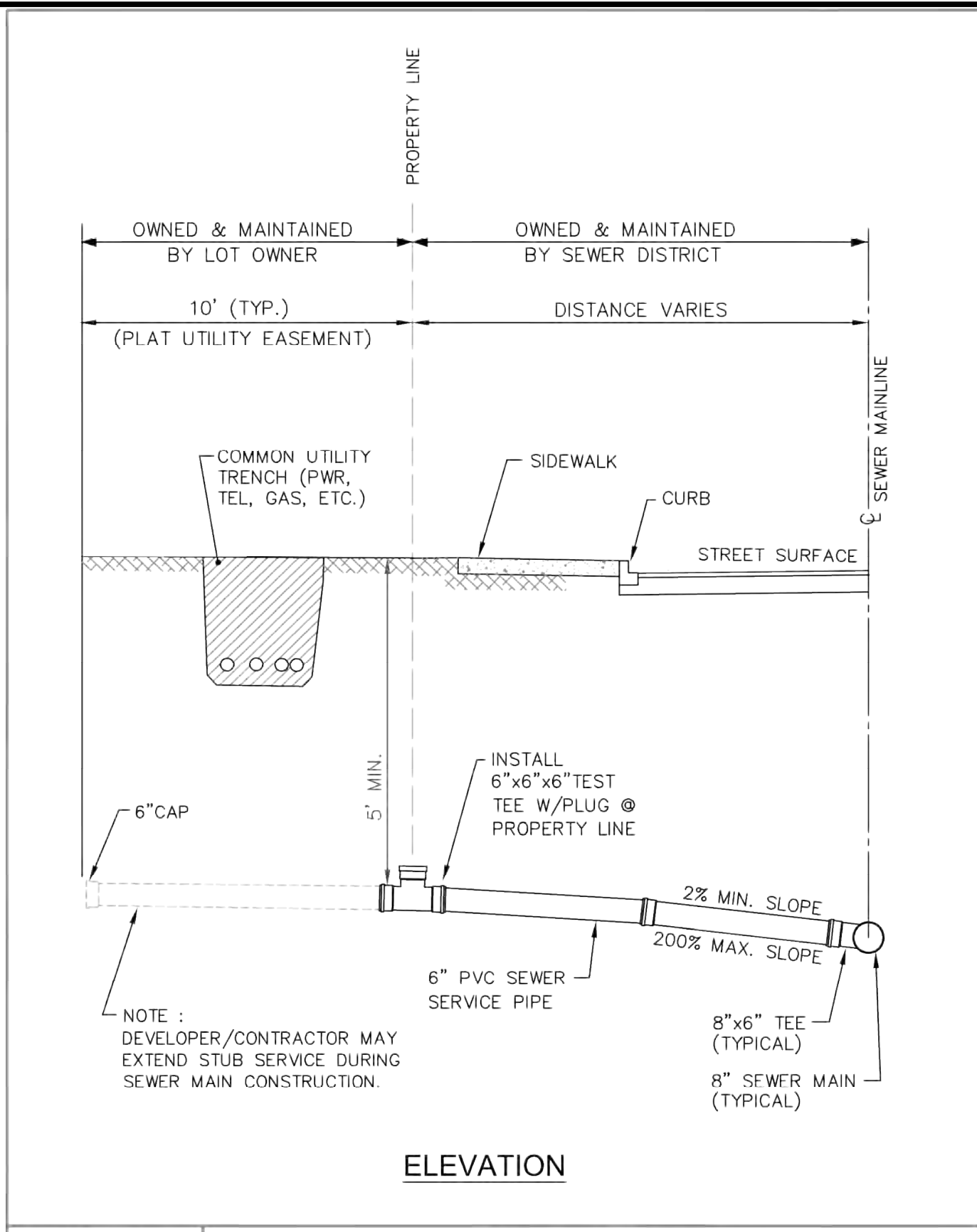






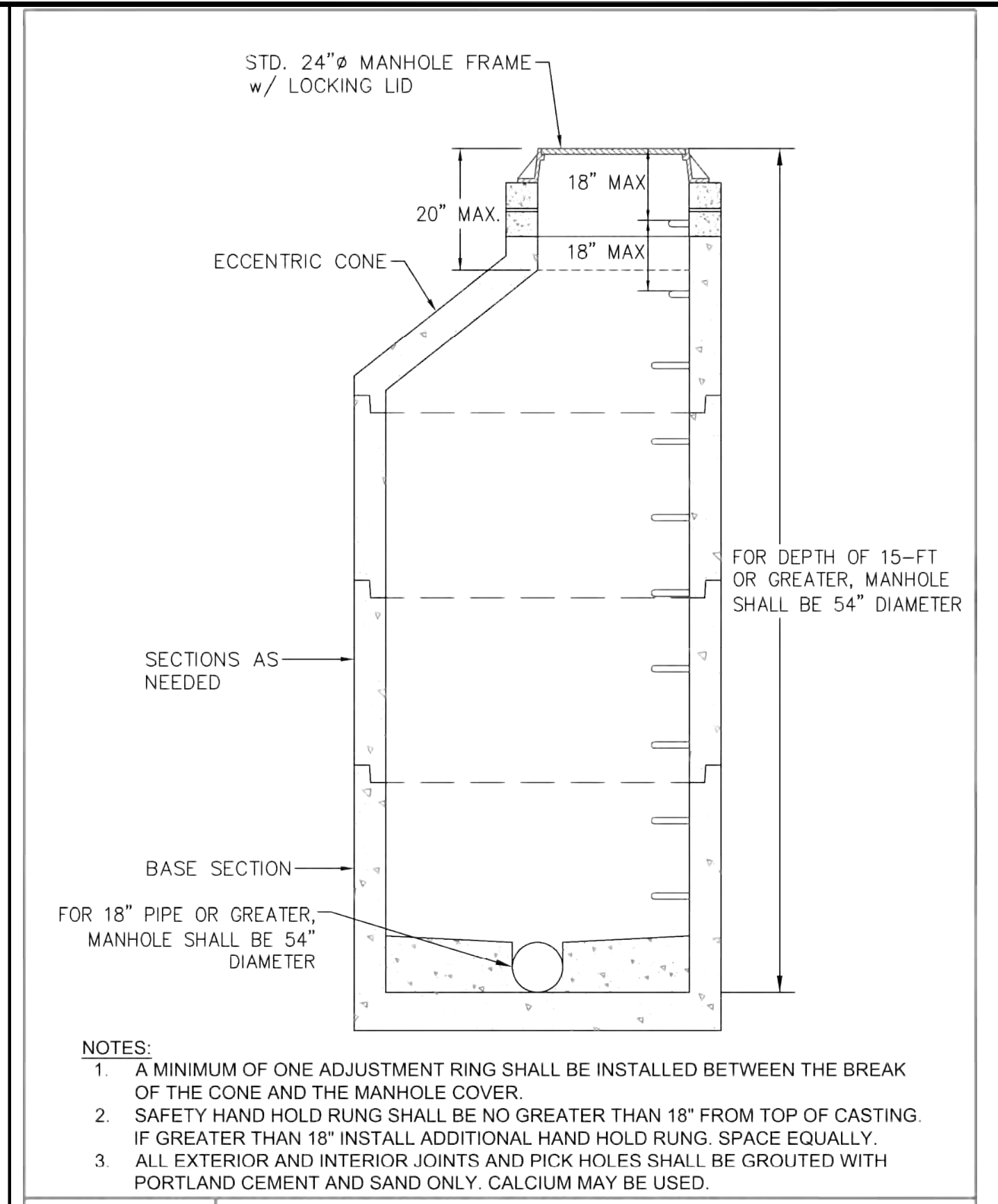
**MANHOLE DETAIL**

REVISION DATE	MAY 17, 2011	SCALE	NTS	DISTRICT APPROVAL	Gregory G. Hill, P.E.	DATE APPROVED	APRIL 18, 2023
FILE NAME	S-2.DWG	DWG. NO.	S-2				



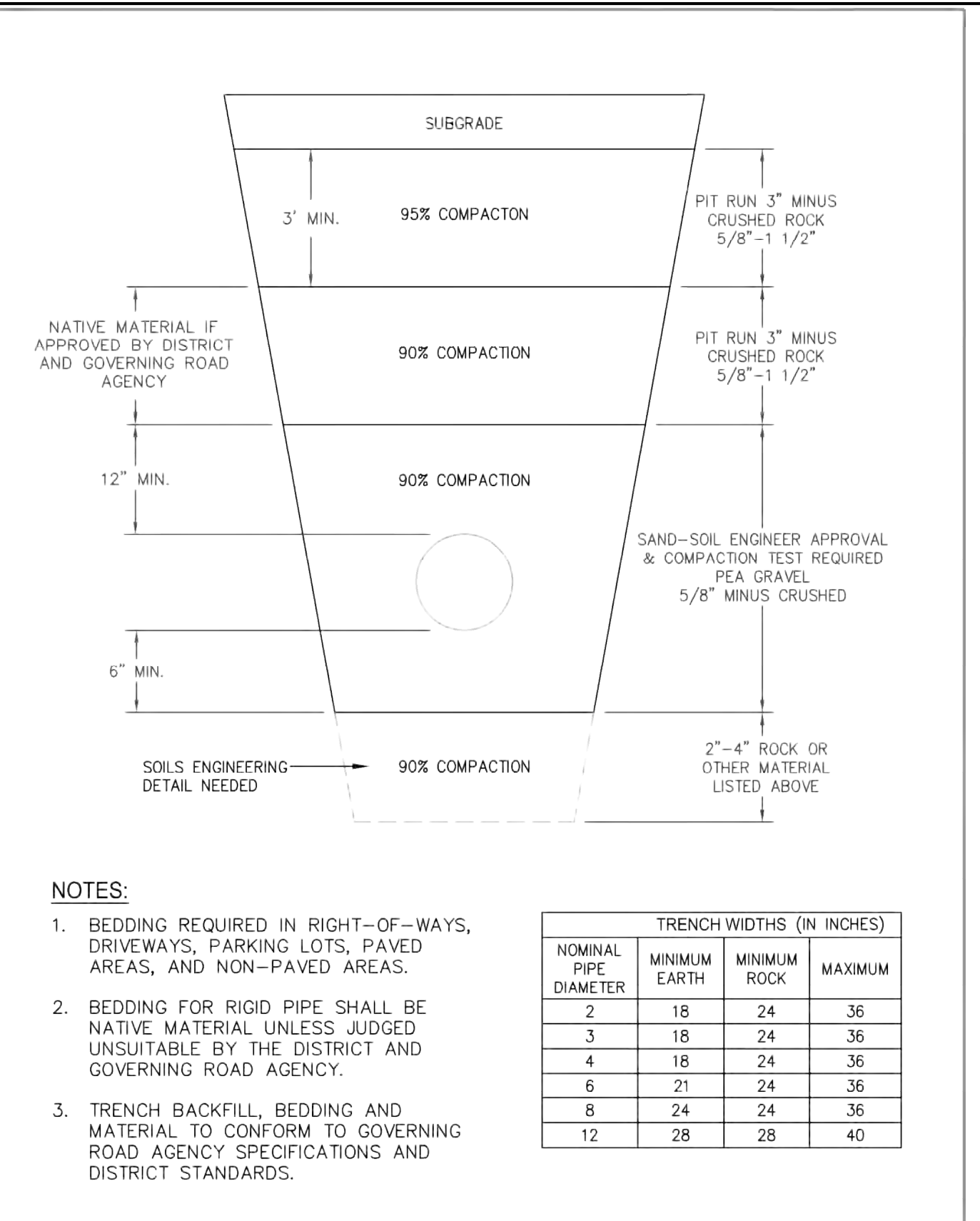
**STUB SERVICE CONSTRUCTION DETAIL**

REVISION DATE	MAY 17, 2011	SCALE	NTS	DISTRICT APPROVAL	Gregory G. Hill, P.E.	DATE APPROVED	APRIL 18, 2023
FILE NAME	S-4.DWG	DWG. NO.	S-4				



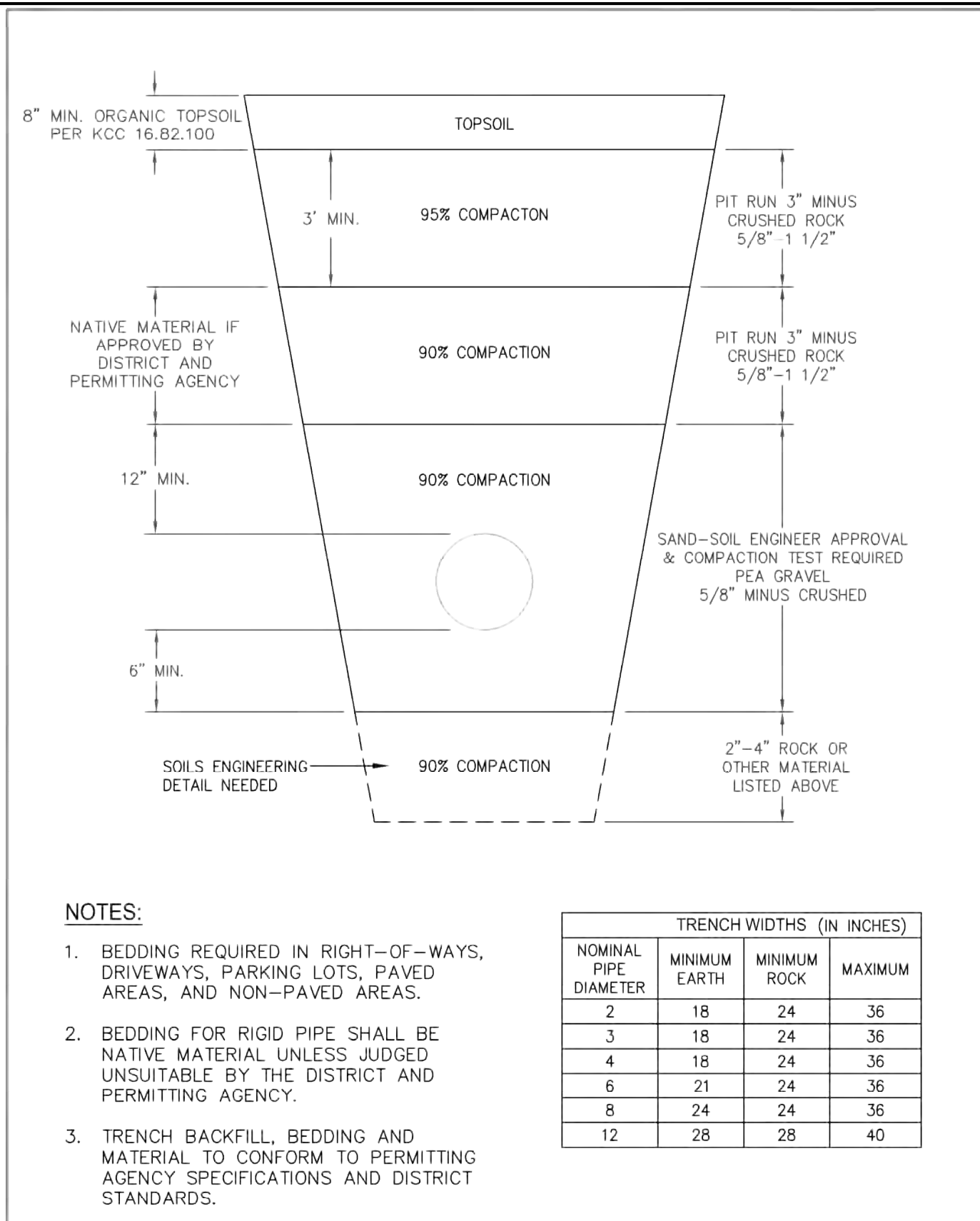
**STANDARD MANHOLE DETAIL**

REVISION DATE	APRIL 13, 2023	SCALE	NTS	DISTRICT APPROVAL	Gregory G. Hill, P.E.	DATE APPROVED	APRIL 18, 2023
FILE NAME	S-27.DWG	DWG. NO.	S-27				



**TYPICAL TRENCH DETAIL**

REVISION DATE	MAY 17, 2011	SCALE	NTS	DISTRICT APPROVAL	Gregory G. Hill, P.E.	DATE APPROVED	APRIL 18, 2023
FILE NAME	S-28.DWG	DWG. NO.	S-28				



**TYPICAL TRENCH DETAIL (OUTSIDE ROADWAY)**

REVISION DATE	MAY 17, 2011	SCALE	NTS	DISTRICT APPROVAL	Gregory G. Hill, P.E.	DATE APPROVED	APRIL 18, 2023
FILE NAME	S-29.DWG	DWG. NO.	S-29				

DATE APPROVED	PRINCIPAL APPROVAL	DESIGN	DRAWN	CHECKED	JOB NO.	123450
	KP	KP	BD	KP		
<b>Engineer's Seal</b>						
UPDATE DISTRICT DETAILS	5.3.23	YLP	3	REVISIONS PER DISTRICT COMMENTS	4.21.23	YLP
REVISIONS PER DISTRICT COMMENTS	03.06.23	YLP	1	REVISIONS PER DISTRICT COMMENT (10.31.22)		
NO. BY	DATE	DESCRIPTION	REVISIONS			

**SOOS CREEK WATER & SEWER DISTRICT**

**SEWER MAIN EXTENSION PROJECT NAME**

**STANDARD DETAILS**

**Engineer Logo**  
 Engineer Company Name  
 Engineer Company Address  
 Engineer Company Phone/Email

SCALE	HORIZ:	VERT:

DES.FLD.BK.	NO.	PG.

CST.FLD.BK.	NO.	PG.

BASE MAP SHEET 4 OF 4 DRAWING

