

GENERAL WASTEWATER NOTES

- CONTRACTOR SHALL NOTIFY THE CITY FIVE (5) DAYS PRIOR TO COMMENCING CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM TO CITY SEWERAGE DESIGN & CONSTRUCTION STANDARDS ADOPTED AND AS AMENDED.
- PIPES INSTALLED SHALL BE:
 - POLYVINYL CHLORIDE (PVC) GRAVITY SEWER PIPE AND FITTINGS, CONFORMING TO THE REQUIREMENTS OF ASTM D3034, S.D.R. 35 LATEST REVISION; OR
 - DUCTILE IRON (DI) PIPE AND FITTINGS SHALL CONFORM TO AWWA C151 AND C110, RESPECTIVELY, WITH MINIMUM PRESSURE CLASS OF 350 FOR PIPE SIZES UP TO AND INCLUDING 12-INCHES IN DIAMETER. FOR PIPE SIZE DIAMETERS LARGER THAN 12-INCHES, THE PIPE CLASS SHALL BE APPROVED BY THE ENGINEER. JOINTS SHALL BE MECHANICAL OR PUSH-ON, EXCEPT WHERE NOTED; OR
 - UNLESS OTHERWISE APPROVED, ALL POLYETHYLENE HDPE, DR-17 PIPE AND FITTINGS SHALL CONFORM TO THE QUALITY AND STRENGTH REQUIREMENT OF ASTM D1248, TYPE III AND PPI RECOMMENDED DESIGNATION OF HDPE 3406. THE PIPE MATERIAL SHALL CONTAIN INGREDIENTS TO PROVIDE PROTECTION AGAINST ULTRAVIOLET DEGRADATION DURING PROCESSING AND SUBSEQUENT WEATHER EXPOSURE. THE APPROVED METHOD OF JOINING PIPE AND FITTINGS TO ONE ANOTHER SHALL BE BY THE THERMAL BUTT FUSION SYSTEM. ALL FUSION MUST BE DONE BY PERSONNEL TRAINED AND CERTIFIED BY THE PIPE SUPPLIER, OR OTHER QUALIFIED PERSON, USING APPROVED TOOLS. ALSO, A QUALIFIED PERSON MUST "REAM" THE INSIDE OF THE PIPE AFTER JOINING TO REMOVE THE BEADS CREATED ON THE INSIDE. IN ADDITION, PIPE LENGTHS, FITTINGS AND FLANGED CONNECTIONS TO BE USED SHALL BE OF THE SAME TYPE, GRADE AND CLASS OF PE COMPOUND AND SUPPLIED BY THE SAME RAW MATERIAL SUPPLIER. PIPE CLASS OR THICKNESS SHALL BE THE HIGHER OF THE MANUFACTURER'S RECOMMENDATIONS OR AS REQUIRED BY CITY. PIPE SHALL INCLUDE A WHITE OR LIGHT GRAY COLORED LINING FOR ENHANCED VIDEO INSPECTION. PIPE SHALL BE PHILLIPS DRISCOPE "OPTICORE," CSR "GREENVIEW" OR APPROVED EQUAL.
- THE CONTRACTOR SHALL INSTALL THE SAME TYPE PIPE BETWEEN MANHOLES. NO COMBINATION OF PIPE TYPE WILL BE ALLOWED. IF PVC PIPE IS USED, ONLY CLASS I, II, OR III ASTM BEDDING MATERIAL HAVING A MINIMUM IN-PLACE RELATIVE COMPACTION OF 90 PERCENT SHALL BE UTILIZED.
- ALL DUCTILE IRON PIPES AND FITTINGS SHALL HAVE LINING AND COATING PER AWWA C104, EXCEPT THE LINING SHALL BE POLYURETHANE. PROVIDE POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH ANSI/AWWA A21.5/C105.
- EXCEPT WHERE DESIGNATED ON THE PLANS, PIPING SHALL BE INSTALLED PER CITY STANDARD PLAN NO. SV 40-30 AND SV 40-35.
- WARNING: CONNECTION TO EXISTING WASTEWATER LINES SHALL BE PERFORMED ONLY IN THE PRESENCE OF A CITY INSPECTOR.
- THE LOCATION OF, AND EXISTENCE OR NONEXISTENCE OF, UNDERGROUND UTILITIES HAS BEEN DETERMINED TO THE BEST OF THE CITY INSPECTOR'S ABILITY, BUT IT SHALL BE THE SOLE DUTY OF THE CONTRACTOR TO VERIFY THE LOCATION OF THE EXISTING UTILITIES AND TO TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO THESE UTILITIES. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR ANY DAMAGE DONE TO EXISTING UTILITIES DURING CONSTRUCTION.
- ALL SEWER STATIONING SHALL BE ALONG THE CENTERLINE OF THE SEWER LINE.
- VERTICAL TRENCH SHORING SHALL CONFORM WITH THE ORDERS OF THE STATE OF CALIFORNIA, CAL/OSHA GUIDE FOR CONSTRUCTION SAFETY.
- IF GROUNDWATER IS ENCOUNTERED, SEWER CONSTRUCTION SHALL NOT BEGIN OR CONTINUE UNTIL THE EXCAVATION IS DEWATERED. PROVISIONS FOR CONTINUOUS DRAINAGE OF THE SEWER TRENCH SHALL BE MADE IN ORDER TO KEEP THE TRENCH FREE OF GROUNDWATER.
- SEWER LATERALS SHALL BE CONSTRUCTED AS NEARLY AS POSSIBLE TO THE LOCATION SHOWN ON THE PLANS, WITH MINIMUM CLEARANCE OF WATER MAINS AND LATERALS TO CONFORM TO CITY STANDARD PLAN NO. SV 40-10.
- THE CONTRACTOR SHALL KEEP A STRICT AND ACCURATE RECORD OF THE TYPES OF PIPE MATERIAL USED AND THE LOCATION OF ALL WYES, TEES, LATERALS, AND STUBS TO BE SHOWN ON THE RECORD DRAWINGS ("AS-BUILT") PLANS. FINAL LOCATIONS OF SEWER LATERALS SHALL BE SHOWN ON THE RECORD DRAWINGS ("AS-BUILT") PLANS AND SHALL BE MARKED ON THE CURB WITH "S" 2-INCHES HIGH AND A MINIMUM OF 1/8-INCH DEEP CHISELED INTO CURB FACE.
- ALL UNDERGROUND UTILITIES AND SERVICE LATERALS SHALL BE PLACED PRIOR TO THE CONSTRUCTION OF CURBS, GUTTERS, SIDEWALKS, AND PAVEMENTS.
- LIST OF STANDARD PLATES OF THE CITY SEWER MANUAL TO BE ADHERED TO:

TITLE OF STANDARD PLAN	PLAN NUMBER
PIPE TRENCH DETAIL FOR EXISTING STREET	SV 40-30
PIPE TRENCH DETAIL FOR PROPOSED STREET	SV 40-35
TYPICAL HOUSE CONNECTION	SV 40-180
HOUSE LATERAL CONNECTION (DEEP CUT) - SLOPES OVER 30%	SV 40-210
STANDARD 4' & 5' DIAMETER PRECAST MANHOLE	SV 40-100
TERMINAL CLEANOUT STRUCTURE DETAIL - TYPE A	SV 40-160
SEPARATION REQUIREMENTS FOR WATER AND WASTEWATER LINES	SV 40-10

- A BACKWATER VALVE IN ACCORDANCE WITH STANDARD PLAN NO. SV 40-240, IS REQUIRED IN STRUCTURES WHERE ANY FINISH FLOOR ELEVATION IS LESS THAN 6-INCHES ABOVE THE NEXT UPSTREAM MANHOLE RIM. AN ELEVATION OVERFLOW DEVICE SHALL BE INSTALLED AT THE BUILDING SEWER OUTLET FOR THE ABOVE CONDITION.
- SEPARATION BETWEEN WASTEWATER AND WATER LINES SHALL BE IN ACCORDANCE WITH STANDARD PLAN NO. SV 40-10.
- ALL TRENCH BACKFILL AND COMPACTION IN PUBLIC RIGHT-OF-WAY ABOVE THE PIPE ZONE WILL BE UNDER THE SUPERVISION OF CITY.
- ALL LATERALS TO NEW SEWER MAIN PIPELINES ARE TO BE TIED INTO THE MAIN LINES THROUGH USE OF WYES OR OTHER APPROVED FITTINGS. CUT-IN SADDLES ARE NOT ALLOWED.
- THE HOUSE LATERALS SHALL BE EXTENDED BEYOND THE STREET RIGHT-OF-WAY TO EDGE OF P.S.E. (PUBLIC SERVICE EASEMENT).
- AFTER THE PIPE HAS BEEN LAID, BACKFILLED, ROAD BASE MATERIAL PLACED, AND COMPACTION TO 95% RELATIVE COMPACTION PER THE PROJECT SOILS REPORT, AN AIR TEST SHALL BE MADE ON EACH SECTION OF PIPE LINE BETWEEN MANHOLES. THIS TEST SHALL BE PERFORMED AFTER THE MANDREL TEST AND IN CONFORMANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 306-1.4.
- APPROVAL OF PLANS SHALL REMAIN EFFECTIVE FOR TWO (2) YEARS AFTER THE DATE OF SIGNATURE BY THE ENGINEER.

23. PIPE DIAMETER RING DEFLECTION TEST (MANDREL TEST PER SSPWC SECTION 306-1.2.12):

UPON COMPLETION OF THE BACKFILL AND ROAD BASE PAVING (IF APPLICABLE), AND PRIOR TO VIDEO TAPING AND FINAL PAVING (CAP) AND ACCEPTANCE OF THE AIR TEST, EACH MAIN PIPELINE SHALL BE CHECKED FOR RING DEFLECTION BY PULLING A TEMPLATE OR MANDREL THROUGH THE MAIN PIPELINE. THIS TEST SHALL BE PERFORMED NO SOONER THAN FOUR DAYS AFTER BACKFILLING OPERATIONS ARE COMPLETED BUT BEFORE FINAL PAVING OCCURS. THIS MANDREL SHALL BE CYLINDRICAL IN SHAPE WITH A DIAMETER AS FOLLOWS:

NOMINAL DIAMETER	MINIMAL MANDREL SIZE	MINIMUM BARREL LENGTH
6"	5.619"	6"
8"	7.524"	8"
10"	9.405"	10"
12"	11.191"	12"

- PRIOR TO FINAL PAVING (CAP), THE CONTRACTOR SHALL PROVIDE THE CITY, FOR REVIEW AND ACCEPTANCE, A VIDEO TAPE OF THE ENTIRE SEWER SYSTEM. THE CONTRACTOR SHALL NOTIFY THE SANITATION STAFF AT (805) 583-6447 A MINIMUM OF 48-HOURS PRIOR TO VIDEO TAPING.
- CONTRACTOR SHALL BE REQUIRED TO INSTALL AND MAINTAIN SAND TRAPS IN MANHOLES AT THE DOWNSTREAM END OF PROJECT. PRIOR TO REMOVAL OF THE SAND TRAPS, THE LINES AND MANHOLES SHALL BE CLEANED OF ALL DEBRIS. THE SAND TRAPS SHALL NOT BE REMOVED UNLESS AUTHORIZED BY THE CITY AND IN THE PRESENCE OF THE PROJECT'S INSPECTOR.
- CONTRACTOR SHALL SUBMIT DIGITAL FILES (AUTOCAD) OF SIGNED IMPROVEMENT PLANS PRIOR TO PRE-CONSTRUCTION MEETING AND ISSUANCE OF PERMITS.
- "RECORD DRAWING" PLANS SHALL BE SUBMITTED PRIOR TO FINAL WALK-THROUGH INSPECTION AND ACCEPTANCE OF THE IMPROVEMENTS BY THE CITY.
- CONTRACTOR SHALL SUBMIT DIGITAL FILES (ARC INFORMATION OR DXF FORMAT COMPATIBLE WITH THE CITY'S GIS DATABASE) OF "RECORD DRAWINGS" PRIOR TO FINAL ACCEPTANCE OF THE PROJECT.

PUBLIC UTILITIES SERVICES

CABLE TV: TIME WARNER 2525 KNOLL DRIVE VENTURA, CA 93003 (805) 477-4439
 TELEPHONE: AT&T (FORMERLY: SBC / PACIFIC BELL) 2250 WARD AVE. SIMI VALLEY, CA 93065 (805) 583-6500 MAINTENANCE SUPER. (818) 879-6372
ELECTRIC: EDISON INTERNATIONAL CO. 3589 FOOTHILL DR. THOUSAND OAKS, CA. 91361 (805) 494-7040
 VERIZON BUSINESS ONE CALL CENTER (800) 624-9675
GAS: SO. CALIFORNIA GAS CO. 977 CHAMBERS LANE SIMI VALLEY, CA 93065 EMERGENCY: (800) 427-2200 x1
 WATER: VENTURA CO. WATERWORKS DIST. NO.8 600 W. LOS ANGELES AVE. SIMI VALLEY, CA 93065 (805) 583-6469
SEWER: CITY OF SIMI VALLEY, SANITATION DIV. 500 W. LOS ANGELES AVE. SIMI VALLEY, CA 93063 (805) 583-6455
 GOLDEN STATE WATER CO. 4680 LOS ANGELES AVE, UNIT H SIMI VALLEY, CA 93063 (805) 527-9393
 CALLEGUAS MUNICIPAL WATER DISTRICT 2100 OLSEN ROAD THOUSAND OAKS, CA. 91360-6800 (805) 526-9323

LEGEND

- PROPOSED SEWERLINE
- EXISTING SEWERLINE
- W--- EXISTING WATERLINE
- T--- TELEPHONE LINE
- G--- GAS LINE
- SD--- STORM DRAIN

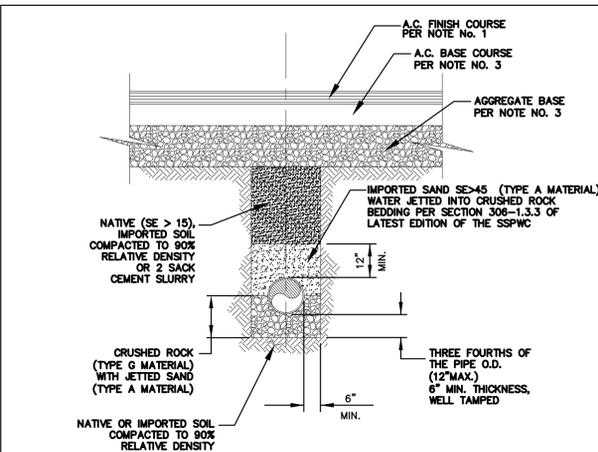


INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION	DWG. NO.

QUANTITY TABLE

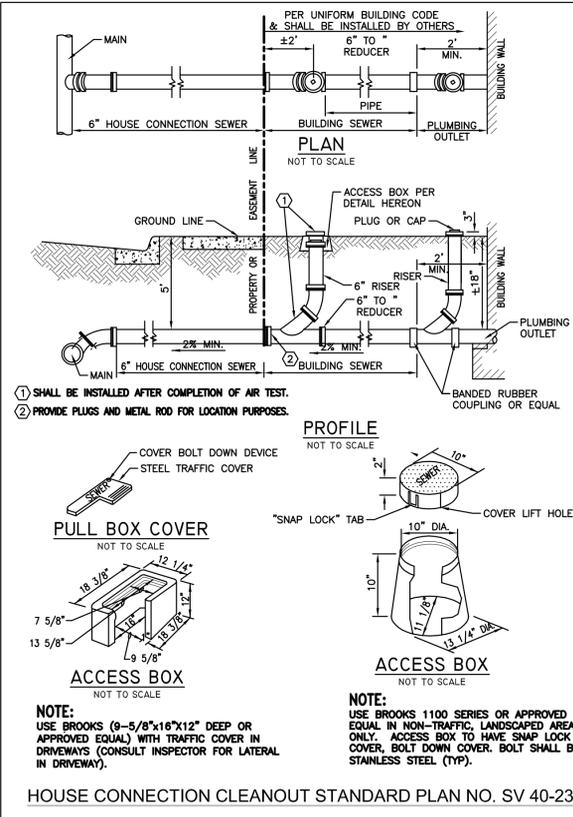
DESCRIPTION	QTY.



NOTES:

- FINAL A.C. FINISH COURSE (CAP) SHALL BE A MINIMUM OF 1-1/2 INCH THICK.
- COMPACTION TESTING IS REQUIRED FOR ALL NATIVE/IMPORTED SOILS.
- A.C. AND AGGREGATE BASE COURSE THICKNESS PER CITY APPROVED PAVEMENT SECTION.
- TYPE G MATERIAL CORRESPONDS TO SSPWC TABLE 200-1.2 A 3/4 INCH.
- THIS STANDARD PLAN IS ONLY APPLICABLE FOR THE FOLLOWING CONDITIONS:
 - TRENCH WIDTHS UNDER 40 INCHES (SEE STANDARD PLAN SV 40-20),
 - PIPES UP TO AND INCLUDING 15 INCHES IN DIAMETER,
 - APPROVED PIPES MATERIALS,
 - DEPTH OF COVER SHALL NOT EXCEED 30 FEET.
 CONDITIONS OTHER THAN THE ABOVE MENTIONED REQUIRE SPECIAL APPROVAL.
- STANDARD DEPTH OF COVER IS 7 FEET. COVER DEPTHS LESS THAN 7 FEET REQUIRE SPECIFIC DETAIL AND APPROVAL AS DETERMINED BY THE CITY.
- SEE SECTIONS 3.6 AND 3.7 AND CITY OF SIMI VALLEY STANDARD PLAN SV 40-20 FOR PIPE TRENCH MATERIAL AND DETAILS.
- HAND SHAPE BEDDING FOR PIPE CURVATURE.
- ASPHALT CONCRETE (A.C.) BASE COURSE SHALL BE TYPE III B3-AR-4000/8000. ASPHALT CONCRETE FINISH COURSE SHALL BE TYPE III C2-AR-4000/8000.
- BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 306.1.3 OF LATEST EDITION OF THE SSPWC.

PAVEMENT & TRENCH DETAIL STANDARD PLAN NO. SV 40-35 FOR PROPOSED STREET



HOUSE CONNECTION CLEANOUT STANDARD PLAN NO. SV 40-230

LOCATION MAP
N.T.S.

PROJECT INDEX MAP
1"=XXX'

BENCHMARK

STANDARD BENCHMARK NO. _____
 DESCRIPTION: _____
 ELEVATION: _____

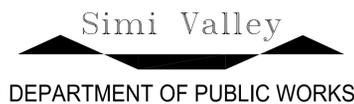
RECORD DRAWING CERTIFICATE

"I HEREBY CERTIFY* THAT THE WORK SHOWN ON DRAWINGS NO.(S) _____ TO _____ AND MARKED "RECORD DRAWING" HAS BEEN CONSTRUCTED IN CONFORMANCE WITH LINES AND GRADES AS SHOWN ON SAID DRAWINGS AND REFERENCED SPECIFICATIONS."

*BUSINESS AND PROFESSIONAL CODE SECTION 6735.5 CERTIFICATION IS A PROFESSIONAL OPINION NOT A WARRANTY.

ENGINEER: _____
 R.C.E. No: _____ EXPIRATION DATE: _____
 DATE: _____

CITY OF SIMI VALLEY/SANITATION



PREPARED UNDER THE SUPERVISION OF:

SEWER IMPROVEMENTS COVER SHEET

PROJECT NAME
PROJECT NAME

SHEET NUMBER	DRAWING NUMBER
SEWER PLAN SET	(CITY OF SIMI VALLEY)
X OF X	2007-XXX
IMPROVEMENT PLAN SET	
OF	

NO.	REVISION	PREP.	APPV.D.	DATE

REVIEWED: PROJECT ENGINEER _____ DATE _____

DATE _____