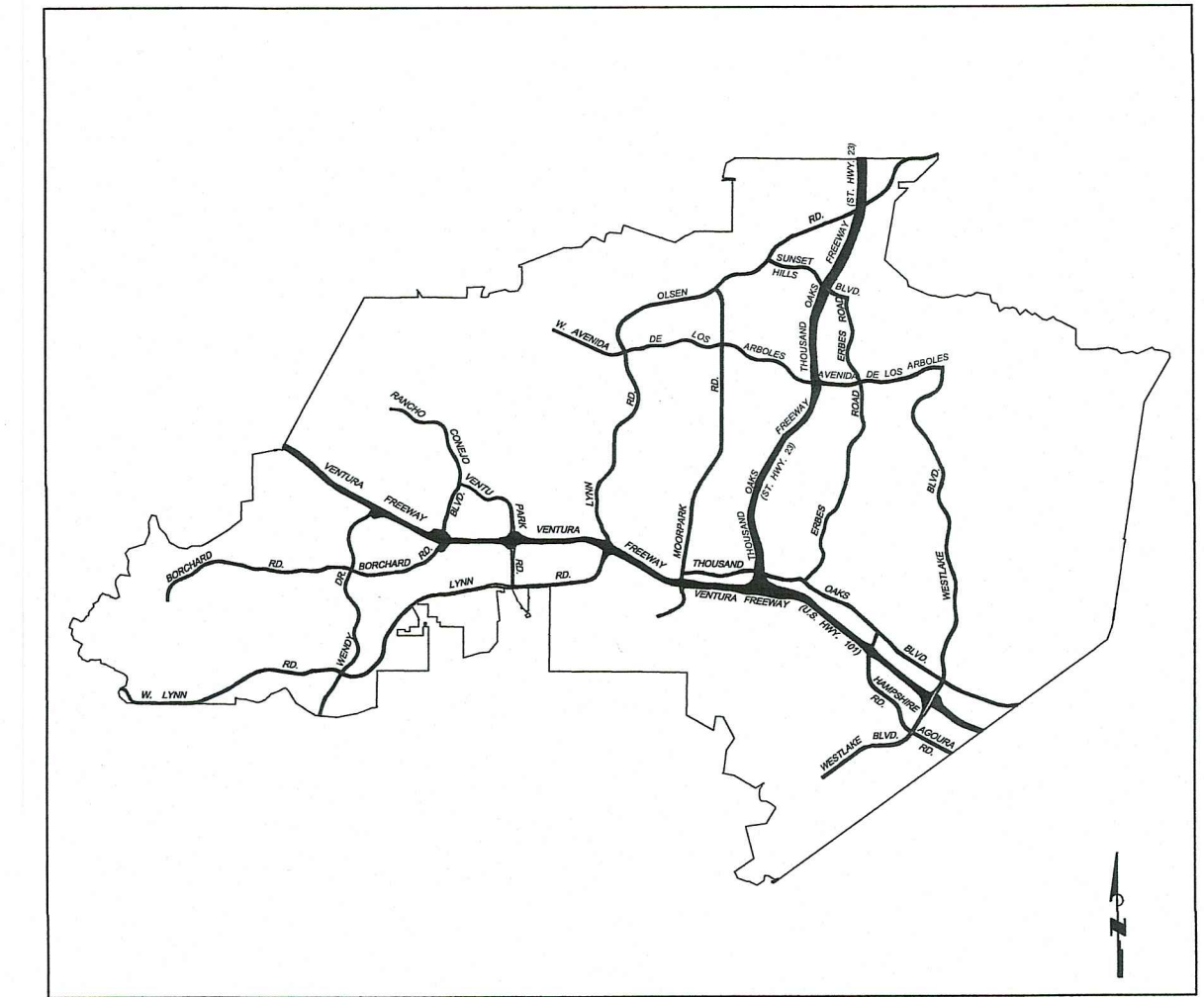




LOCATION MAP
SCALE: NTS



VICINITY MAP
SCALE:

CITY OF THOUSAND OAKS

PUBLIC WORKS DEPARTMENT

STORM DRAIN PLAN

CONEJO VALLEY CHURCH OF CHRIST
2525 E. HILLCREST DRIVE
SUP 1973-235 / SUMJ18-70166

PUBLIC UTILITY AUTHORIZATION FOR OPERATION

WATER: CALIFORNIA AMERICAN WATER, 2439 WEST HILLCREST DR., NEWBURY PARK, CA. 91320 (805) 498-1266

SEWAGE DISPOSAL: CITY OF THOUSAND OAKS, 2100 THOUSAND OAKS BLVD. THOU. OAKS, CA 91362 MOHAMMAD FATEMI (805) 449-2100

TELEPHONE: VERIZON, 201 FLYNN ROAD, CAMARILLO, 93010 LEHR (805) 388-2260

ELECTRIC: SOUTH CALIFORNIA EDISON COMPANY, 3589 FOOTHILL DR., THOU. OAKS, CA 91361 ALICIA PILLADO (805) 494-7076

GAS: SOUTH CALIFORNIA GAS COMPANY, 977 CHAMBERS LN., SIMI VALLEY, CA 93065 HANK MORALES (805) 520-2061

CABLE TV: ADELPHIA, 2323 TELLER ROAD, NEWBURY PARK, CA 91320 (800) 427-3731

DEVELOPER:
 NAME: CONEJO VALLEY CHURCH OF CHRIST
 ADDRESS: 2525 E. HILLCREST DRIVE, THOUSAND OAKS, CA 91362
 REPRESENTATIVE: STU WARFORD, DIRECTOR
 TELEPHONE: (805) 340-0501

DEVELOPER'S ENGINEER:
 NAME: RJR ENGINEERING, INC.
 ADDRESS: 2340 PALMA DR, SUITE 200, VENTURA, CA 93003
 REPRESENTATIVE: ROBERT ANDERSON, R.C.E. 58383
 TELEPHONE: (805) 485-3935

SOILS ENGINEER:
 NAME: EARTH SYSTEMS
 ADDRESS: 1731-A WALTER ST, VENTURA, CA 93003
 REPRESENTATIVE: TODD TRANBY, C.E.G. 2078
 TELEPHONE: (805) 642-6727
 DATES OF REPORTS:

BENCHMARK: VENTURA COUNTY BENCH: 4-54 RW-1X 1988 (VC P.I.D. 1383) AT THE SOUTHEAST CORNER OF THE INTERSECTION OF THOUSAND OAKS BOULEVARD AND PLEASANT WAY, 57.0 FEET SOUTHERLY FROM THE CENTER OF THOUSAND OAKS BOULEVARD, 22.5 FEET EASTERLY FROM THE CENTER OF PLEASANT WAY AND 6.0 FEET NORTHERLY FROM THE BEGINNING OF THE PLEASANT WAY CURB RETURN. ELEVATION: 860.15 FEET (NAVD 88 DATUM)

INDEX OF SHEETS

NO.	DESCRIPTION	CITY OF T.O. DWG. NO.
SD-1	STORM DRAIN COVER SHEET	85-43A
SD-2	STORM DRAIN NOTES	85-43A
SD-3	STORM DRAIN LINE PLAN & PROFILE	85-43A
SD-4	DETAILS	85-43A

PERMIT NUMBERS :

- ENTITLEMENT PERMIT NO. SUP 1973-235 / SUMJ 18-70166
- GRADING PERMIT NO. _____
- ENCROACHMENT PERMIT NO. 26039
- ON-SITE PAVING PERMIT NO. _____
- VENTURA COUNTY WATERSHED PROTECTION DISTRICT (V.C.W.P.D.) ENCROACHMENT PERMIT NO. _____
- CALTRANS ENCROACHMENT PERMIT NO. _____
- OAKLANDMARK TREE PERMIT NO. _____

CERTIFICATE OF "RECORD DRAWINGS"

I, Robert W. Anderson HEREBY CERTIFY, BASED ON MY FIELD OBSERVATION OR INFORMATION PROVIDED BY THE OWNER AND GENERAL CONTRACTORS THAT THE WORK ON SHEET NO'S SD-1 THROUGH SD-4, MARKED AS "RECORD DRAWING" HAS BEEN CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THESE PLANS, SPECIFICATIONS, REVISIONS, CHANGE ORDERS, AND FIELD CHANGES.

REGISTERED CIVIL ENGINEER (SIGNATURE) [Signature] DATE 9-5-18
 C-58383 RCE NUMBER 12-31-18 EXP. DATE

REVIEWED BY:
 VENTURA COUNTY FIRE DEPARTMENT
 DATE

REVIEWED FOR PERMIT ISSUANCE BY:
 CITY OF THOUSAND OAKS
[Signature] 135818 DATE

PLANNING DIVISION DATE
 <TRAFFIC ENGINEER> DATE
 <BLDG. DIVISION - ADA COMPLIANCE> DATE
 <COSCA> DATE

CITY OF THOUSAND OAKS
PUBLIC WORKS DEPARTMENT

COVER SHEET

CONEJO VALLEY CHURCH OF CHRIST
2525 E. HILLCREST DRIVE
SUP 1973-235/SUMJ18-70166

CITY OF THOUSAND OAKS DWG. NO. 85-43A SHEET SD-1 OF SD-4

NOTE: NOTIFY PUBLIC WORKS INSPECTOR A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

NOTE: CONTRACTOR SHALL TELEPHONE UNDERGROUND SERVICE ALERT (USA) 8 1 1 OR 1(800) 422-4133 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

REVIEWED IN ACCORDANCE WITH CITY'S POLICY CONDITIONS OF APPROVAL BY:

SIGNATURE DATE

R.C.E. NO. EXP. DATE

THIS PLAN HAS BEEN REVIEWED BY _____ AND APPEARS TO BE IN GENERAL CONFORMITY WITH THE GEOTECHNICAL RECOMMENDATIONS IN OUR REPORT(S) DATED _____ MAKES NO REPRESENTATION AS TO THE ACCURACY OF DIMENSIONS, MEASUREMENTS, CALCULATIONS OR ANY PORTION OF THE DESIGN OTHER THAN GEOTECHNICAL.

REGISTERED GEOLOGIST NO. DATE SOILS ENGINEER NO. DATE

DESIGNED BY:
 RET 6/26/18 DATE
 DRAWN BY:
 RET 6/26/18 DATE
 CHECKED BY:
 RWA 6/26/18 DATE



PREPARED BY:
RJR ENGINEERING GROUP
 Planning-Civil Engineering-Flood Control/Hydrology
 Storm Water Management-Land Planning/Entitlements
 2340 Palma Drive, Suite 200, Ventura, CA 93003
 (805) 485-3935
 E-mail: rjr@rjreng.com
 DATE: 9-5-18
 EXP. 12/31/18



811 DIAL TOLL FREE
 8 1 1
 Know what's below. Call before you dig.
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV. SYMBOL DESCRIPTION OF CHANGE R.C.E. DATE P.D.E. DATE

STD. PLAN	TITLE
110-2	DRIVEWAY APPROACH
322-2	MANHOLE PIPE TO PIPE (LARGE SIDE INLET)
380-4	CONCRETE COLLAR FOR RCP 300mm (12") THROUGH 1800mm (72")

GENERAL STORM DRAIN NOTES

- STATIONS SHOWN ON STORM DRAIN DRAWINGS ARE ALONG CENTER LINE OF STRUCTURE, UNLESS OTHERWISE SHOWN.
- STATIONS AND INVERT ELEVATIONS OF PIPE INLETS SHOWN ON THE PROFILES ARE THE INSIDE FACE OF THE STRUCTURE, UNLESS OTHERWISE SHOWN.
- INLETS IN STREETS SHALL BE PER APWA STANDARD PLANS AS SHOWN. LENGTH IS AS SHOWN ON THE PLANS.
- CURVED STORM DRAINS SHALL BE CONSTRUCTED WITH 8 FEET LENGTHS OF R.C.P. WITH ONE END BEVELED FOR 90 FEET RADIUS, OR WITH 8 FEET LENGTHS OF R.C.P. WITH BOTH ENDS BEVELED FOR 45 FEET RADIUS, OR WITH 4 FEET LENGTHS OF R.C.P. WITH BOTH ENDS BEVELED FOR 22.5 FEET RADIUS.
- STORM DRAIN PIPE SHALL BE D-1900 R.C.P., UNLESS OTHERWISE SHOWN.
- DRAINAGE STRUCTURES SHALL CONFORM TO APWA STANDARD PLANS, EXCEPT AS NOTED ON THE PLANS. RCP JOINTS SHALL CONFORM TO SPPWC 306-7.3.2
- ALL MANHOLE FRAMES AND COVERS SHALL HAVE A MINIMUM OF 30" IN DIAMETER CLEAR ACCESS OPENING.
- WORK ZONE SAFETY STANDARDS - TRAFFIC CONTROL PLANS WILL BE PROVIDED FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY. TRAFFIC CONTROL PLANS SHALL CONFORM TO THE REQUIREMENTS OF MUTCD -MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL PLAN MUST BE SUBMITTED TO THE CITY ENGINEER 20 DAYS PRIOR TO IMPLEMENTATION OF THE TRAFFIC CONTROL. THE CITY ENGINEER'S WRITTEN APPROVAL MUST BE OBTAINED PRIOR TO IMPLEMENTATION OF THE TRAFFIC CONTROL.
- NO DEVIATIONS FROM THESE PLANS SHALL BE MADE UNLESS A CHANGE ORDER IS APPROVED BY THE CITY ENGINEER.
- ALL CONTRACTORS AND SUB-CONTRACTORS SHALL POSSESS A VALID CITY OF THOUSAND OAKS BUSINESS TAX LICENSE AND A VALID CALIFORNIA STATE CONTRACTOR'S LICENSE PRIOR TO COMMENCING WORK.
- APPROVAL OF THESE PLANS BY THE CITY OR ITS AGENTS DOES NOT RELIEVE THE DEVELOPER'S ENGINEER AND THE APPLICANT OF THE RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS DISCOVERED DURING CONSTRUCTION. ALL APPROPRIATE PLAN REVISIONS SHALL BE PROMPTLY SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL, PRIOR TO CONTINUANCE OF CONSTRUCTION OF THE AFFECTED IMPROVEMENTS.
- ALL WORK SHALL BE PERFORMED DURING CITY WORKING HOURS AND SUBJECT TO INSPECTION BY THE PUBLIC WORKS DEPARTMENT. WHERE OVERTIME INSPECTION IS NEEDED, SUBJECT TO THE AVAILABILITY OF AN INSPECTOR AND APPROVED BY THE CITY ENGINEER, THE CONTRACTOR WILL BE BILLED FOR SAID INSPECTION SERVICES AS PROVIDED IN THE MOST RECENTLY ADOPTED RESOLUTION WHICH ESTABLISHES THE FEES FOR SUCH SERVICES.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER BEFORE THE COMMENCEMENT OR CONTINUANCE OF WORK.
- UTILITY LOCATIONS AND DEPTHS SHOWN HEREON HAVE BEEN PLOTTED IN ACCORDANCE WITH DATA FURNISHED BY THE UTILITY COMPANIES. NEITHER THE CITY NOR THE ENGINEER ASSUME RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION RECEIVED FOR EACH COMPANY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY, INsofar AS IT MAY BE AFFECTED BY THESE OPERATIONS. ALL COSTS FOR PROTECTING, REMOVING, AND RESTORING EXISTING IMPROVEMENTS SHALL BE BORNE BY THE CONTRACTOR.
- EROSION & SEDIMENT CONTROL MEASURES SHALL BE PROVIDED FOR ALL WORK IN CONFORMANCE WITH NPDES REQUIREMENTS YEAR-ROUND. THE SWPPP AND EROSION CONTROL PLANS MUST BE REVISED ANNUALLY AND SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL NO LATER THAN SEPTEMBER 1 OF EACH YEAR.
- "AS-BUILT" DRAWING PLANS SHALL BE SUBMITTED PRIOR TO FINAL WALK-THROUGH INSPECTION AND ACCEPTANCE OF THE IMPROVEMENTS BY THE CITY.
- THESE PLANS SHALL REMAIN VALID FOR A PERIOD OF TWO YEARS FROM THE DATE OF THE CITY ENGINEER'S SIGNATURE. IF WORK HAS NOT BEEN INITIATED AND DILIGENTLY PURSUED WITHIN SUCH PERIOD, THE PLANS SHALL BE SUBJECT TO A NEW REVIEW FOR COMPLIANCE WITH THEN CURRENT STANDARDS AND POLICIES.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING PROPERTIES FROM DAMAGE. ACCESS TO PROPERTIES ADJACENT TO ALL AREAS OF WORK SHALL BE MAINTAINED AT ALL TIMES
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) TOLL FREE AT 1-(800) 227-2600, AT LEAST 48 HOURS PRIOR TO ANY WORK.
- WRITTEN RIGHTS OF ENTRY FROM ALL PROPERTY OWNERS WHO'S PROPERTY ARE ENCRoACHED UPON BY THE DRAINAGE FACILITY, WATER DISCHARGED BY THE DRAINAGE FACILITY, CONSTRUCTION EQUIPMENT, SPOILS OR MATERIALS, WILL BE PROVIDED TO THE CITY ENGINEER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY CONSTRUCTION SURVEYING TO COMPLETE THE WORK. REFERENCE POINTS SHALL BE LOCATED NO MORE THAN 50 FEET APART AND SHALL BE MARKED WITH ALL INFORMATION PERTINENT TO THE FACILITY BEING CONSTRUCTED. EACH STRUCTURE SHALL BE PROVIDED WITH NO LESS THAN 2 REFERENCE POINTS
- ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" AND SUPPLEMENTS THERETO.
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL SAFETY REQUIREMENTS.
- NO CONCRETE SHALL BE PLACED UNTIL THE FORMS AND REINFORCING STEEL HAVE BEEN PLACED, INSPECTED AND APPROVED BY THE CITY. THE CONTRACTOR SHALL NOTIFY THE CITY AT LEAST 48 HOURS IN ADVANCE FOR INSPECTION. FAILURE TO PROCURE INSPECTION WILL REQUIRE REMOVAL OF UN-INSPECTED IMPROVEMENTS.

- CONCRETE BACKFILL IS REQUIRED WHEN THE PIPE HAS LESS THAN ONE FOOT OF COVER. THE CONCRETE BACKFILL SHALL CONSIST OF 335-E-114P PORTLAND CEMENT CONCRETE POURED FROM WALL TO WALL OF TRENCH AND FROM BOTTOM OF TRENCH TO A MINIMUM OF 4 INCHES OVER THE TOP OF THE PIPE. ADDITIONAL MEASURES WILL BE REQUIRED IF PIPE MAY EXPERIENCE EXCESSIVE LOADS.
- ALL PIPES SHALL BE PLACED IN TRENCHES IN NATURAL GROUND AND/OR COMPACTED FILL. THE GROUND LEVEL BEFORE THE TRENCHING SHALL BE AT LEAST 3 FEET ABOVE THE TOP OF THE PIPE ELEVATION, OR AT FINISH SURFACE ELEVATION, WHICHEVER IS LESS.
- ALL BACKFILL AND FILLS OUTSIDE OF STREET RIGHT-OF-WAY SHALL BE COMPACTED TO THE GEOTECHNICAL ENGINEERS RECOMMENDATIONS, OR AT LEAST 90 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY A.S.T.M. SOIL COMPACTION TEST D 1557, LATEST ED., METHOD "D". THIS SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER.
- ALL BACKFILL AND FILLS WITHIN STREET RIGHT-OF-WAY SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 306-1.3 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL NOTIFY THE INSPECTOR AT LEAST 24 HOURS IN ADVANCE OF SOIL TESTING OR AS REQUIRED.
- PIPE SHALL BE EMBEDDED A MINIMUM OF 5 INCHES INTO ALL STRUCTURES INCLUDING INLET AND OUTLET HEADWALLS, UNLESS OTHERWISE SPECIFIED.
- UNLESS OTHERWISE SPECIFIED IN THE PROFILE ON THESE PLANS, THE PIPE SHALL BE MANUFACTURED WITH A MINIMUM CONCRETE COVER OVER THE STEEL IN THE INVERT OF 0.75 INCHES FOR RCP UP TO 96 INCHES IN DIAMETER AND 1.25 INCHES FOR PIPE GREATER THAN 96 INCHES IN DIAMETER.
- THE CONTRACTOR SHALL PROVIDE A DRAINAGE SYSTEM FOR CONTRIBUTORY FLOODS THAT WILL BE OPERABLE AT ALL TIMES UNTIL THE STORM DRAIN SYSTEM IS ACCEPTED FOR MAINTENANCE BY THE CITY.
- EXISTING UTILITIES SHALL BE MAINTAINED IN PLACE BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
- ALL OPENINGS RESULTING FROM THE CUTTING OR PARTIAL REMOVAL OF EXISTING CULVERTS, PIPES OR SIMILAR STRUCTURES SHALL BE SEALED WITH 8 INCHES OF BRICK AND MORTAR OR A MINIMUM OF 6 INCHES OF CONCRETE, UNLESS OTHERWISE SHOWN.
- ALL ABOVE GROUND CONCRETE DRAINAGE STRUCTURES SHALL BE OMAHA TAN COLORED CONCRETE, AS APPROVED BY THE DIRECTOR OF COMMUNITY DEVELOPMENT, AND TO THE EXTENT POSSIBLE, SHALL INCORPORATE NATURAL STRUCTURE AND LANDSCAPE TO REDUCE THEIR VISIBILITY.
- ALL SUBDRAINS SHALL CONNECT DIRECTLY TO DRAIN INLET STRUCTURES AND SHALL BE LOCATED IN THE DRAIN STRUCTURE FOR CONVENIENT ACCESS AND TESTING.
- WORKING HOURS: WORKING HOURS SHALL BE DETERMINED BY THE CITY PERMIT. CONTRACTOR'S OVERTIME TO BE INCLUDED IN CONTRACT PRICE UNLESS ALTERNATIVELY AGREED UPON BY THE OWNER AT TIME OF CONTRACT FORMATION.
- WORKING HOURS: WORKING HOURS SHALL BE DETERMINED BY THE CITY PERMIT. CONTRACTOR'S OVERTIME TO BE INCLUDED IN CONTRACT PRICE UNLESS ALTERNATIVELY AGREED UPON BY THE OWNER UPON CONTRACT FORMATION.
- ALL SAWCUTTING SHALL BE COMPLETED IN STRAIGHT LINES PERPENDICULAR TO THE STREET CENTERLINE AND/OR PER THE CITY OF THOUSAND OAKS STANDARDS.

- THE PROJECT CONSERVATION PLANS WILL INCORPORATE BEST MANAGEMENT PRACTICE (BMP'S) APPLICABLE TO THE DEVELOPMENT TO THE REVIEW AND SATISFACTION OF THE CITY ENGINEER. BMP'S FOR THIS PROJECT WILL INCLUDE (BUT ARE NOT LIMITED TO THE FOLLOWING):
 - ALL STORM DRAIN INLETS SHALL BE LABELED "DON'T DUMP DRAINS TO THE ARROYO"
 - NO VEHICLE MAINTENANCE SHALL BE ALLOWED ON THE SITE.
 - ALL AREAS SHALL BE MAINTAINED FREE OF LITTER AND DEBRIS TO PREVENT THE ACCUMULATION OF LITTER AND DEBRIS FROM ENTERING THE STORM DRAIN OR BEING BLOWN OFF THE SITE. NO CLEANING AGENT OR OTHER POLLUTANT SHALL BE DISCHARGED INTO THE STORM DRAIN SYSTEM. IF ANY CLEANING AGENT OR DEGREASER IS USED, WASH WATER SHALL NOT BE DISCHARGED TO THE STORM DRAIN OR DISCARDED ON SITE. WASH WATER SHALL BE COLLECTED BY VACUUM OR OTHER SUCH APPROPRIATE METHOD AND DISCARDED AT AN APPROVED DISPOSAL LOCATION.
 - ALL STORM DRAINS SHALL BE CLEANED, USING APPROPRIATE METHODS AND TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE.
- PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION/GRADING PERMIT AND/OR THE COMMENCEMENT OF ANY CLEARING, GRADING OR EXCAVATION, THE DEVELOPER SHALL ALSO SUBMIT A NOTICE OF INTENT (NOI) TO THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD, STORM WATER PERMIT UNIT IN ACCORDANCE WITH THE NPDES CONSTRUCTION GENERAL PERMIT (NO. CAS00002). DEVELOPER SHALL COMPLY WITH ALL REQUIREMENTS OF THIS GENERAL PERMIT INCLUDING PREPARATION OF A STORM WATER POLLUTION PREVENTION PLANS (SWPPP). THE DEVELOPER SHALL SUBMIT A COPY OF THE NOTICE OF INTENT (NOI) TO THE CITY ENGINEERS OFFICE AS PROOF OF PERMIT APPLICATION.
- DEVELOPER SHALL EMPLOY A FULL-TIME SUPERINTENDENT FOR NPDES COMPLIANCE. THE NPDES SUPERINTENDENT SHALL BE PRESENT, ON THE PROJECT SITE MONDAY THROUGH FRIDAY AND ON ALL OTHER DAYS WHEN THE PROBABILITY OF RAIN IS 40% OR HIGHER AND PRIOR TO THE START OF AND DURING ALL GRADING OR CLEARING OPERATIONS UNTIL THE RELEASE OF GRADING BONDS. THE NPDES SUPERINTENDENT SHALL HAVE FULL AUTHORITY TO HIRE PERSONNEL, BIND THE DEVELOPER IN CONTRACTS, RENT EQUIPMENT AND PURCHASE MATERIALS TO THE EXTENT NEEDED TO EFFECTUATE BEST MANAGEMENT PRACTICES. IN ADDITION, THE NPDES SUPERINTENDENT SHALL BE EMPLOYED TO ASSUME NPDES COMPLIANCE DURING THE CONSTRUCTION OF STREETS, STORM DRAINAGE SYSTEMS, ALL UTILITIES, BUILDINGS AND FINAL LANDSCAPING OF THE SITE.
- CONTRACTOR SHALL PROVIDE FULL TIME STREET SWEEPER DURING ALL CONSTRUCTION ACTIVITY. THE NPDES SUPERINTENDENT SHALL BE PRESENT, ON THE PROJECT SITE MONDAY
- CONTRACTOR SHALL ENSURE ALL RUNOFF AND DEBRIS ARE CONTAINED LOCALLY AND DOES NOT EXTEND OFFSITE OR TO THE CITY/ COUNTY MS4 DRAINS.

ADDITIONAL GEOTECHNICAL NOTES

- ALL STORM DRAIN EXCAVATIONS MUST BE INSPECTED AND APPROVED BY THE CONSULTING GEOLOGIST AND SOILS ENGINEER PRIOR TO THE PLACING OF STEEL OR CONCRETE.
- ROUGH GRADING, AS IT RELATED TO THE PROPOSE STORM DRAIN, MUST BE APPROVED BY A FINAL ENGINEERING GEOLOGY AND SOILS ENGINEERING REPORT. AN AS-BUILT GEOTECHNICAL MAP MUST BE INCLUDED IN THE FINAL REPORT. A FINAL STATEMENT MUST BE PROVIDED THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE REPORT RECOMMENDATION AND CODE PROVISIONS (SECTION 3318.1). THE FINAL REPORT(S) MUST BE SUBMITTED TO THE GEOTECHNICAL AND MATERIALS ENGINEERING DIVISION FOR REVIEW AND APPROVAL.

PRIVATE ENGINEERS NOTICE TO CONTRACTORS

- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THIS MAP. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR SHOWN ON THIS DRAWING.
- THE CONTRACTOR SHALL CONDUCT A THOROUGH POT HOLE PLAN INVESTIGATION TO IDENTIFY ALL UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR'S QC - CONCRETE PLACEMENT, SAMPLES AND TESTING SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE (ACI) FOR STRUCTURAL CONCRETE.
 - AT LEAST ONE COMPOSITE SAMPLE FOR EVERY 100 CU.YDS. OF CONCRETE PLACED EACH DAY (ASTM C172).
 - COMPRESSION TESTING PER ASTM C31.
 - COMPACTION STRENGTH TESTING PER ASTM C39.
- SHOP DRAWINGS MUST BE SUBMITTED FOR ALL CURVED RCP SECTIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE ALL EXCAVATIONS ARE CONSTRUCTED AND SHORED IN ACCORDANCE WITH CALOSHA AND APPROPRIATE SHORING PLANS SIGNED AND SEALED BY A CALIFORNIA REGISTERED CIVIL ENGINEER EXPERIENCED IN UTILITY SHORING. ONLY THE CIVIL/ SHORING ENGINEER SHALL APPROVE ANY PLAN DEVIATIONS IN WRITING BEFORE IMPLEMENTATION.
- CONTRACTOR SHALL PROVIDE FULL TIME TRAFFIC CONTROL DURING CONSTRUCTION IN THE STREET. A TRAFFIC CONTROL PLAN SHALL BE PREPARED IN ACCORDANCE WITH CALTRANS TRAFFIC STANDARDS AND APPROVED BY A CALIFORNIA REGISTERED CIVIL ENGINEER, EXPERIENCED IN TRAFFIC CONTROL PLANS. ONLY THE TRAFFIC/ CIVIL ENGINEER SHALL APPROVE ANY PLAN DEVIATION PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR SHALL SUBMIT FOR ENGINEER'S APPROVAL:
 - SCHEDULE/ SEQUENCING
 - TRAFFIC CONTROL PLAN
 - ALL MATERIALS
 - PIPES
 - STEEL/ REBAR
 - PLAN DEVIATIONS

NPDES GENERAL NOTES

- CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH A CONDITION THAT AN ANTICIPATED STORM OR CONSTRUCTION ACTIVITY DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.
- DISCHARGES OF MATERIAL OTHER THAN STORM WATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES, AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATENED OF CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 & 302.
- POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS, FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS, OILS, LUBRICANTS, AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS, VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHINGS.
- DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- DEWATERING OF CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION, IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQUIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE OF WATER QUALITY CONTROL BOARD.
- ALL ACTIVITIES WILL CONFORM TO VENTURA COUNTY WIDE STORM WATER QUALITY MANAGEMENT PROGRAM NPDES PERMIT NO. CAS004002 AND CALIFORNIA STORM WATER BEST MANAGEMENT PRACTICES HANDBOOK.

'AS-BUILT' CERTIFICATION
 BASED ON MY FIELD VERIFICATION AND/OR INSPECTION, I CERTIFY THAT THE WORK HAS BEEN CONSTRUCTED IN COMPLIANCE WITH THESE PLANS, SPECIFICATIONS, REVISIONS AND FIELD CHANGES.
 ENGINEER: *[Signature]* (SIGNATURE)
 RCE NO. C-58383 DATE 9-5-18

NOTE: NOTIFY PUBLIC WORKS INSPECTOR A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

NOTE: CONTRACTOR SHALL TELEPHONE UNDERGROUND SERVICE ALERT (USA) 8 1 1 OR 1(800) 227-2600 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

REVIEWED IN ACCORDANCE WITH CITY'S POLICY CONDITIONS OF APPROVAL BY:	THIS PLAN HAS BEEN REVIEWED BY _____ AND APPEARS TO BE IN GENERAL CONFORMITY WITH THE GEOTECHNICAL RECOMMENDATIONS IN OUR REPORT(S) DATED _____ MAKES NO REPRESENTATION AS TO THE ACCURACY OF DIMENSIONS, MEASUREMENTS, CALCULATIONS OR ANY PORTION OF THE DESIGN OTHER THAN GEOTECHNICAL.
SIGNATURE _____ DATE _____	REGISTERED GEOLOGIST NO. _____ DATE _____ SOILS ENGINEER NO. _____ DATE _____

REVIEWED FOR PERMIT ISSUANCE BY: CITY OF THOUSAND OAKS	DATE 135818
DEVELOPMENT ENGINEER <i>[Signature]</i>	
PLANNING DIVISION	DATE
<TRAFFIC ENGINEER>	DATE
<BLDG. DIVISION - ADA COMPLIANCE>	DATE
<COSCA>	DATE

**CITY OF THOUSAND OAKS
PUBLIC WORKS DEPARTMENT**

STORM DRAIN NOTES

CONEJO VALLEY CHURCH OF CHRIST
2525 E. HILLCREST DRIVE
SUP 1973-235/SUMJ18-70166

CITY OF THOUSAND OAKS DWG. NO. 85-43A SHEET SD-2 OF SD-4

REV. SYMBOL	DESCRIPTION OF CHANGE	R.C.E.	DATE	P.D.E.	DATE

DESIGNED BY: RET 8/26/18 DATE

DRAWN BY: RET 8/26/18 DATE

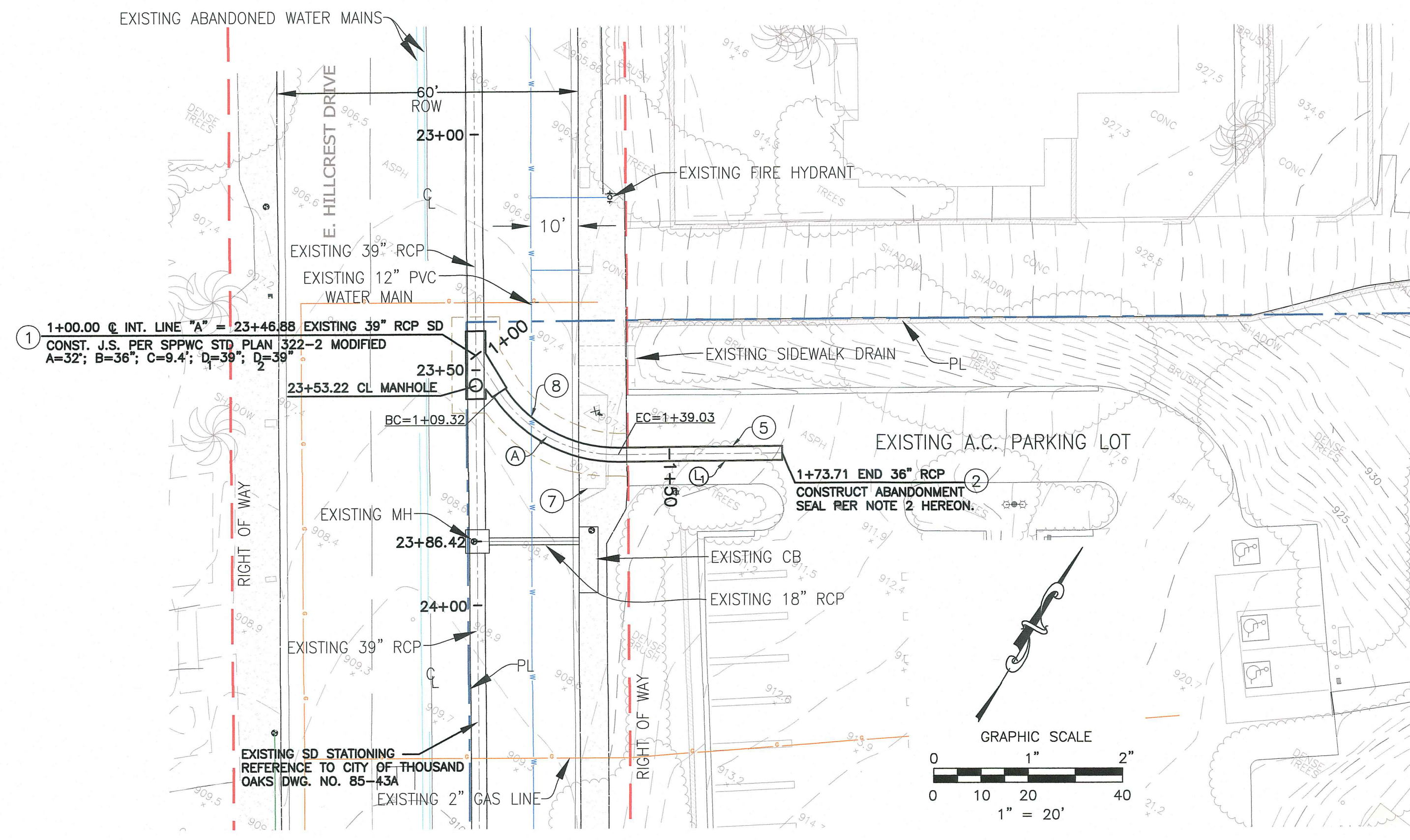
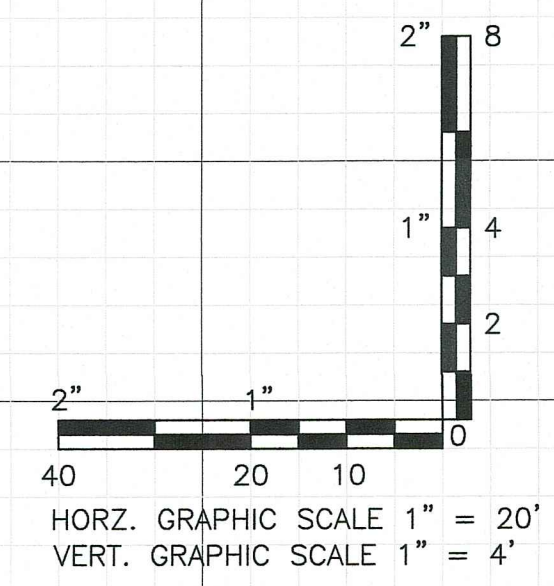
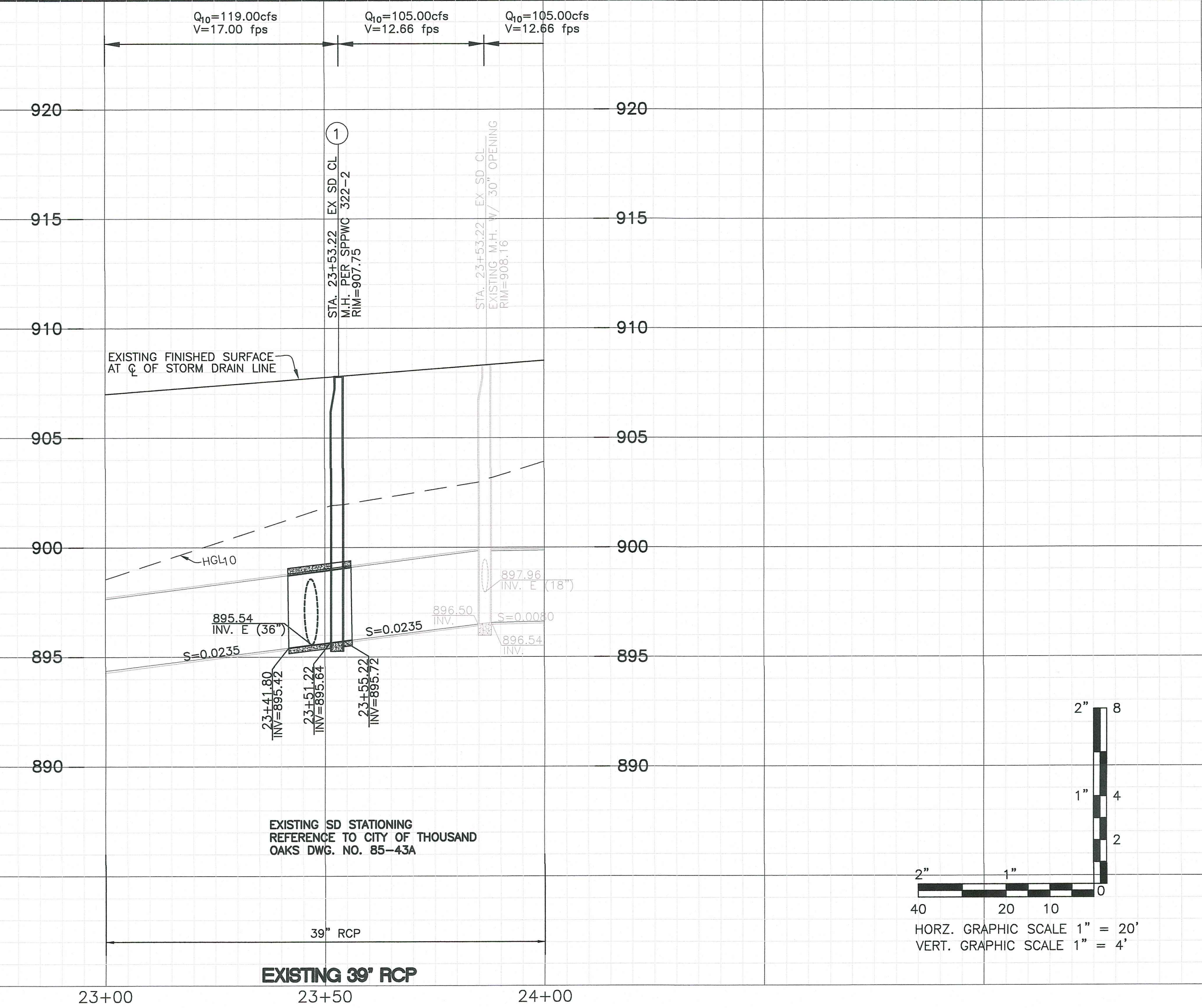
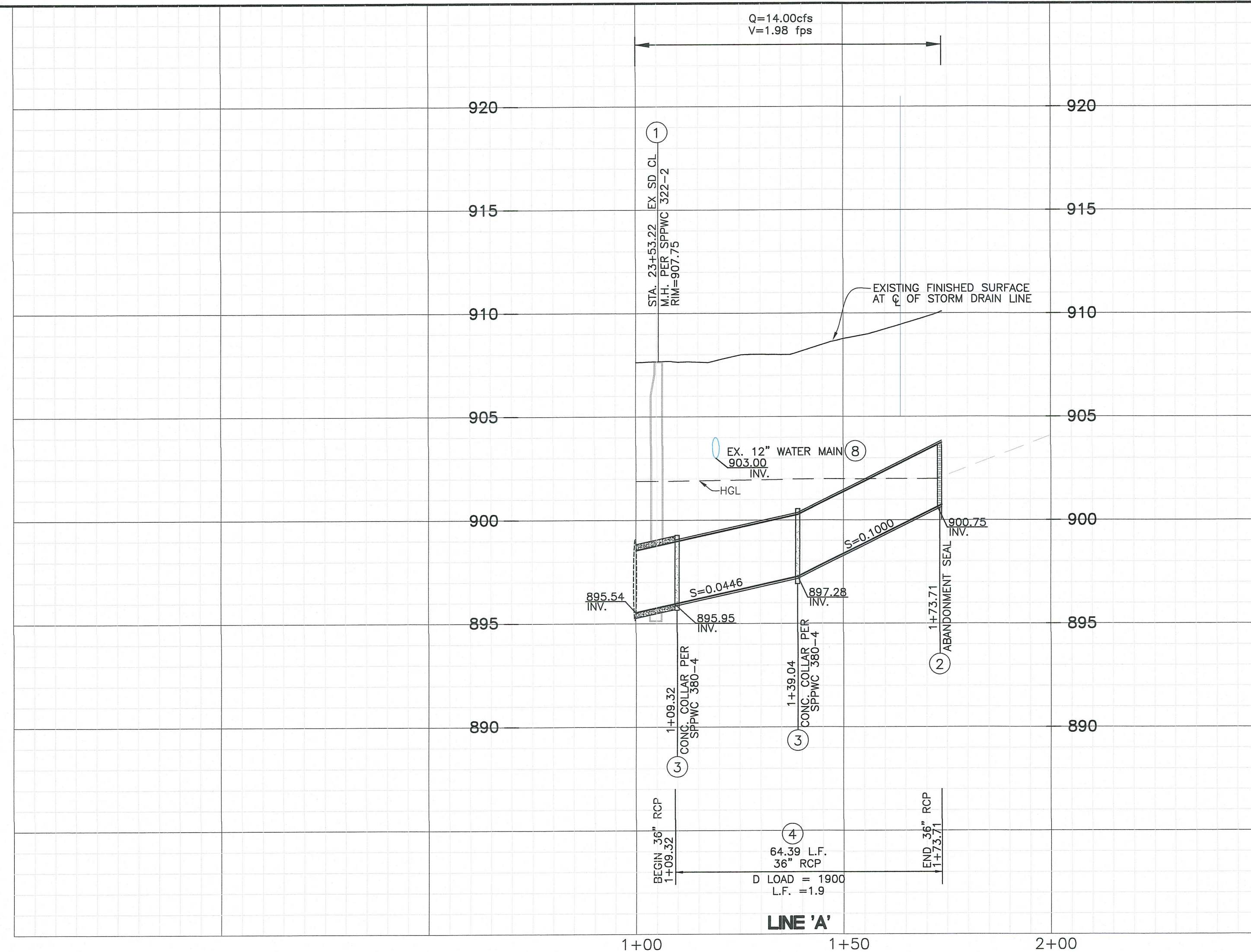
CHECKED BY: RWA 8/26/18 DATE

ENGINEER'S SEAL: REGISTERED PROFESSIONAL ENGINEER ROBERT W. ANDERSON CIVIL ENGINEER C-058383 EXP. 12-31-18 STATE OF CALIFORNIA

PREPARED BY: **RJR ENGINEERING GROUP**
 Planning-Civil Engineering-Flood Control/Hydrology
 Geotechnical Engineering-Geology-Water Resources-Water Quality
 2340 Palms Drive, Suite 200, Ventura, CA 93003
 (805) 485-3935
 E-mail: rj@rjeng.com

[Signature]
REGISTERED ENGINEER

C-58383 RCE NUMBER



STORM DRAIN ϕ CURVE DATA				
NO.	R	Δ	L	T
(A)	30.00'	56°44'50"	29.71'	16.20'

STORM DRAIN ϕ DATA		
NO.	Δ	L
(L)	N 58°46'29" E	34.73'

NOTE TO CONTRACTOR: NO TRENCH SHALL BE PERMITTED TO REMAIN OPEN OVERNIGHT WHEN CONSTRUCTION ACTIVITIES ARE NOT IN PROGRESS. EACH TRENCH SHALL BE BACKFILLED TO THE SURFACE. THE CONTRACTOR SHALL NOT OPEN MORE TRENCHES THAN CAN BE SUCCESSFULLY COMPLETED AND BACKFILLED IN ONE DAY. IF IMPRACTICABLE, THE CONTRACTOR SHALL BRIDGE WITH STEEL PLATES. BRIDGING WITH TWO OR MORE PLATES SHALL REQUIRE TACK WELDING AT EACH CORNER TO REDUCE MOVEMENT AND SHALL BE PLACED TO PERMIT AN UNOBSTRUCTED FLOW OF TRAFFIC. ADVANCED WARNING SIGNS SHALL BE REQUIRED WHEN TRENCHES AND OTHER EXCAVATIONS ARE BRIDGED IN THE TRAVEL WAY. SURFACE OF STEEL PLATES SHALL BE ROUGHENED, TAPED OR COATED TO PROVIDE A NON-SKID SURFACE. A 16-INCH WIDE TAPER OF PREMIX OR COLD MIX ASPHALT CONCRETE SHALL BE PLACED AT ALL EDGES OF STEEL PLATE.

NOTE TO CONTRACTOR: ALL UTILITIES SHOWN ON THESE PLANS ARE BASE ON AVAILABLE RECORDS, LOCATIONS AND DEPTHS MAY VARY. CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS, CONTRACTOR TO PERFORM POT HOLE PROGRAM PRIOR TO START OF CONSTRUCTION TO VERIFY UTILITY LOCATION PER PROVIDED COVER SHEET NOTE 2. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY UTILITIES AND SHALL REPAIR/ REPLACE TO CITY/ UTILITY OWNERS STANDARDS.

NOTE TO CONTRACTOR: CONTRACTOR SHALL OBTAIN ENCROACHMENT PERMIT AND PROVIDE AN APPROVED TRAFFIC CONTROL PLAN PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES PER PROVIDED COVER SHEET NOTE 6.

- CONSTRUCTION NOTES:**
- REMOVE EXISTING 39" RCP PIPE SECTIONS AND CONSTRUCT NEW CAST IN PLACE JUNCTION STRUCTURE WITH MAN HOLE PER SPPWC 322-2. A=32'; B=36"; C=9.4'; D₁=39"; D₂=42". USE 3,250psi CONCRETE MIN.
 - CONSTRUCT ABANDONMENT SEAL AT END OF 36" RCP USING TWO ROWS OF BRICK AND TWO-SACK SLURRY. CUT WINDOWS WITHIN PIPE AT PIPE CROWN TO VERIFY SEAL THICKNESS. BRICK AND SLURRY SECTION SHALL BE REMOVED DURING FUTURE STORM DRAIN CONNECTION PER SEPARATE PLANS.
 - INSTALL CONCRETE COLLAR PER SPPWC 380-4.
 - INSTALL 36" RCP, D-LOAD=1900. LOAD FACTOR = 1.9 WITH TYPE 2 INSTALLATION PER DETAIL D/SD-4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PIPE CURVE SEGMENT TO PROJECT ENGINEER FOR REVIEW PRIOR TO ORDERING.
 - SAWCUT AND GRIND EXISTING A.C. PAVEMENT AND CONCRETE APRON FOR PIPE TRENCH PER DETAIL (A).
 - BACKFILL TRENCH WITH 2 SACK SLURRY UP TO BOTTOM OF BASE MATERIAL (MIN. 48 HRS CURE TIME BEFORE PLACEMENT OF ASPHALT). BASE MATERIAL SHALL BE CLASS II AGGREGATE AND SHALL MATCH EXISTING ROAD SECTION. SOIL SPOILS MAY BE PLACED ONSITE AT REAR OF PROPERTY.
 - REPLACE CONCRETE APRON WITH 3250psi CONCRETE PER SPPWC 110-2.
 - EXISTING 12" PVC WATER MAIN TO BE PROTECTED IN PLACE. PROPOSED 36" RCP STORM DRAIN TO CROSS BENEATH.

'AS-BUILT' CERTIFICATION
 BASED ON MY FIELD VERIFICATION AND/OR INSPECTION, I CERTIFY THAT THE WORK SHOWN ON THESE PLANS WAS CONSTRUCTED IN COMPLIANCE WITH THESE PLANS, SPECIFICATIONS, REVISIONS AND FIELD CHANGES.
 ENGINEER: [Signature]
 RCE NO. C-58383 DATE 9-5-18

811
 Know what's below. Call before you dig.
 DIAL TOLL FREE 8 1 1
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REV.	SYMBOL	DESCRIPTION OF CHANGE	R.C.E.	DATE	P.D.E.	DATE

DESIGNED BY:
 .RET 6/26/18
 DATE

DRAWN BY:
 .RET 6/26/18
 DATE

CHECKED BY:
 .RWA 6/26/18
 DATE

PREPARED BY:
RJR ENGINEERING GROUP
 Planning, Civil Engineering, Flood Control/Hydrology, Geotechnical Engineering, Geology, Water Resources, Water Quality
 2340 Palms Drive, Suite 200, Ventura, CA 93003
 (805) 485-3935
 E-mail: rjr@rjeng.com

REGISTERED ENGINEER
 C-58383
 RCE NUMBER

REVIEWED FOR PERMIT ISSUANCE BY:
 CITY OF THOUSAND OAKS

[Signature] 13 SEP 18
 DEVELOPMENT ENGINEER DATE

PLANNING DIVISION DATE

<TRAFFIC ENGINEER> DATE

<BLDG. DIVISION - ADA COMPLIANCE> DATE

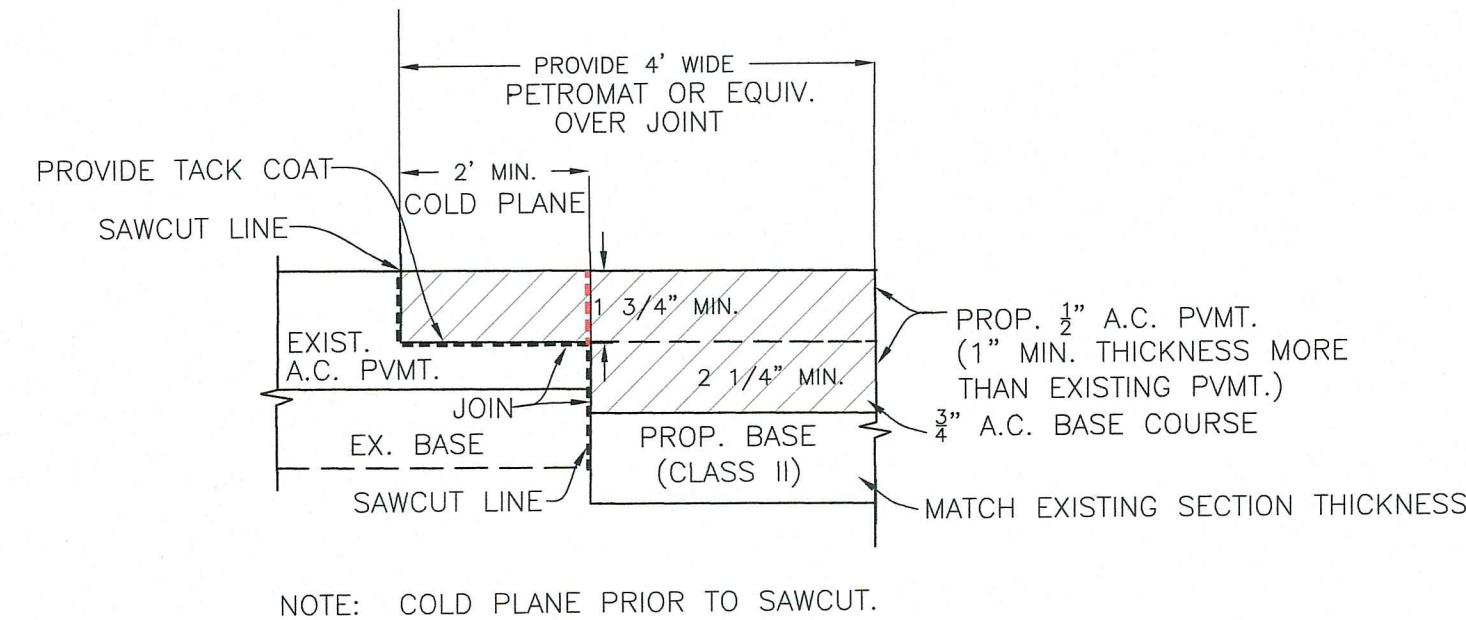
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CITY OF THOUSAND OAKS
 PUBLIC WORKS DEPARTMENT

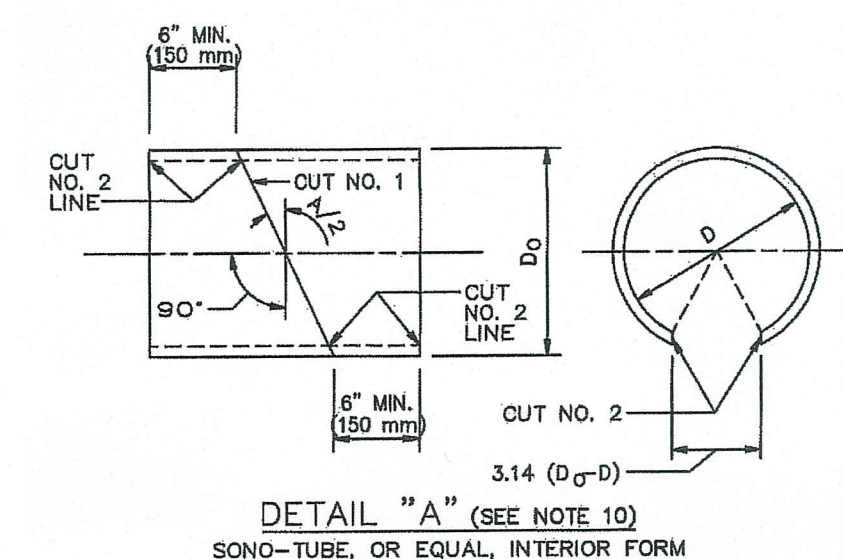
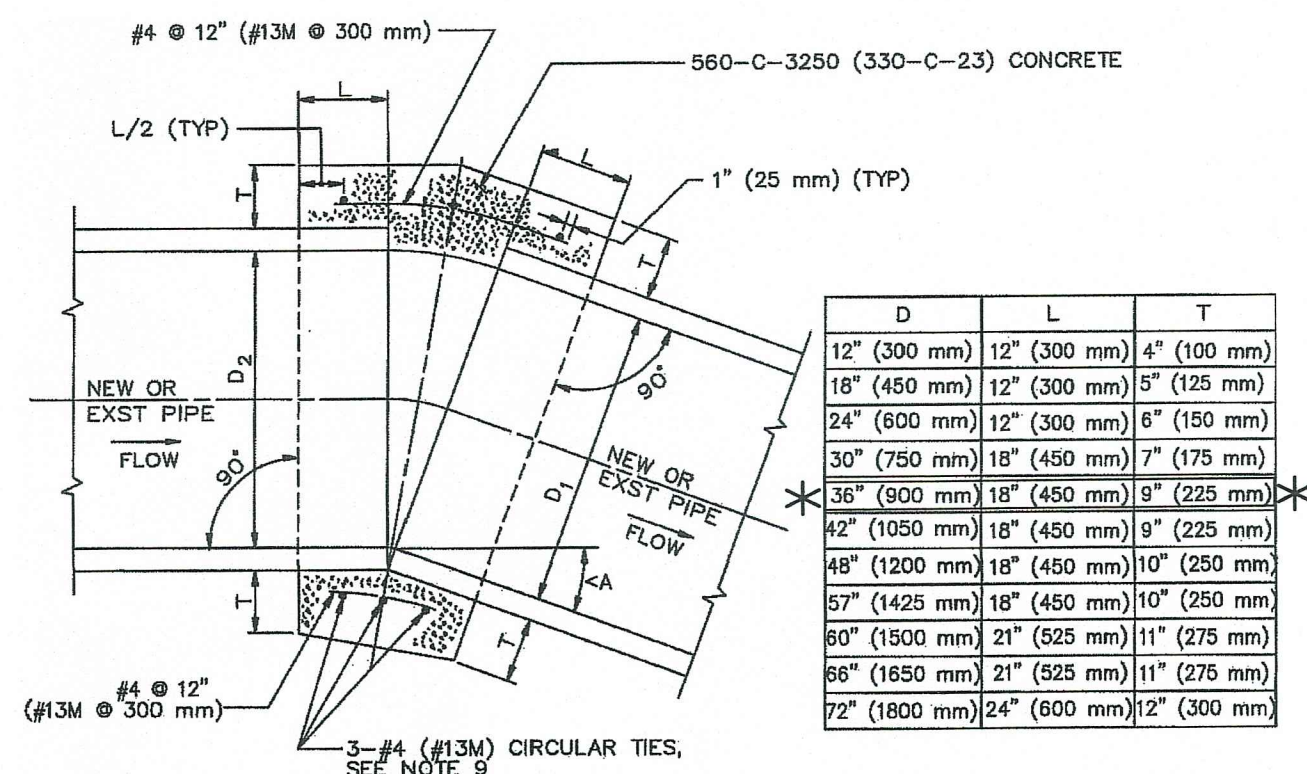
STORM DRAIN NOTES

CONEJO VALLEY CHURCH OF CHRIST
 2525 E. HILLCREST DRIVE
 SUP 1973-235/ SUMJ18-70166

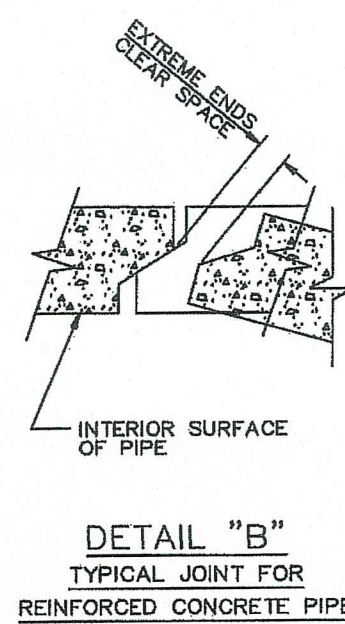
CITY OF THOUSAND OAKS DWG. NO. 85-43A SHEET SD-3 OF SD-4



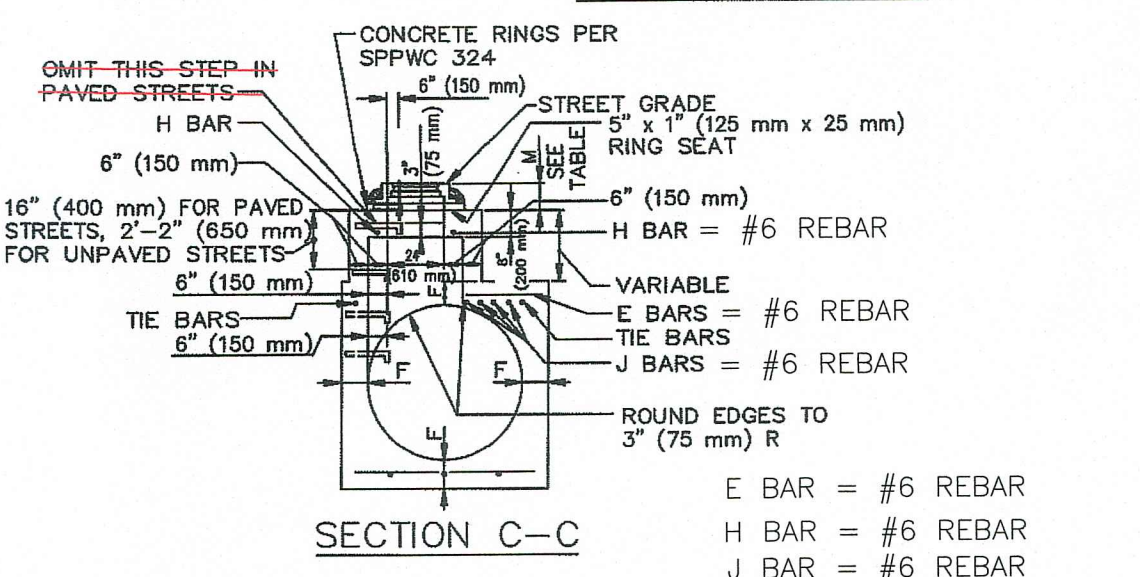
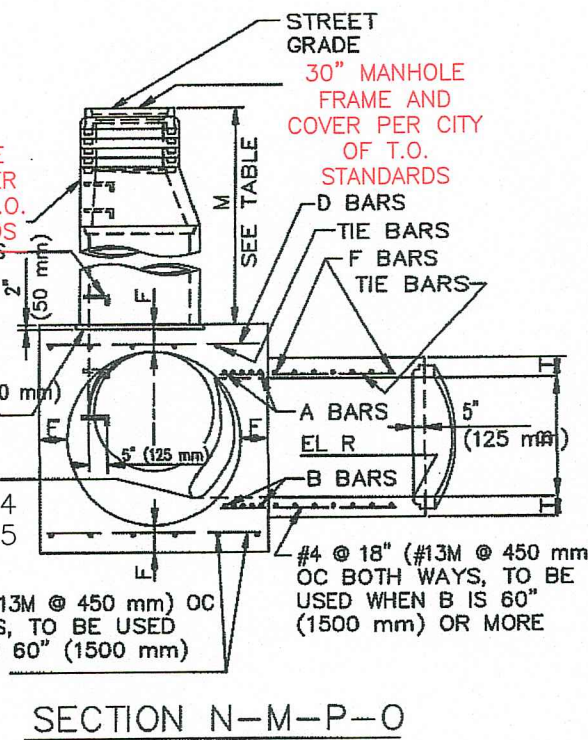
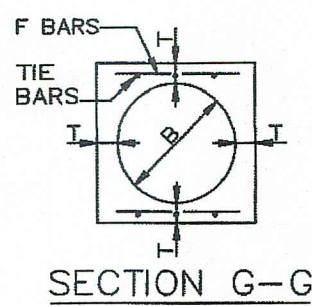
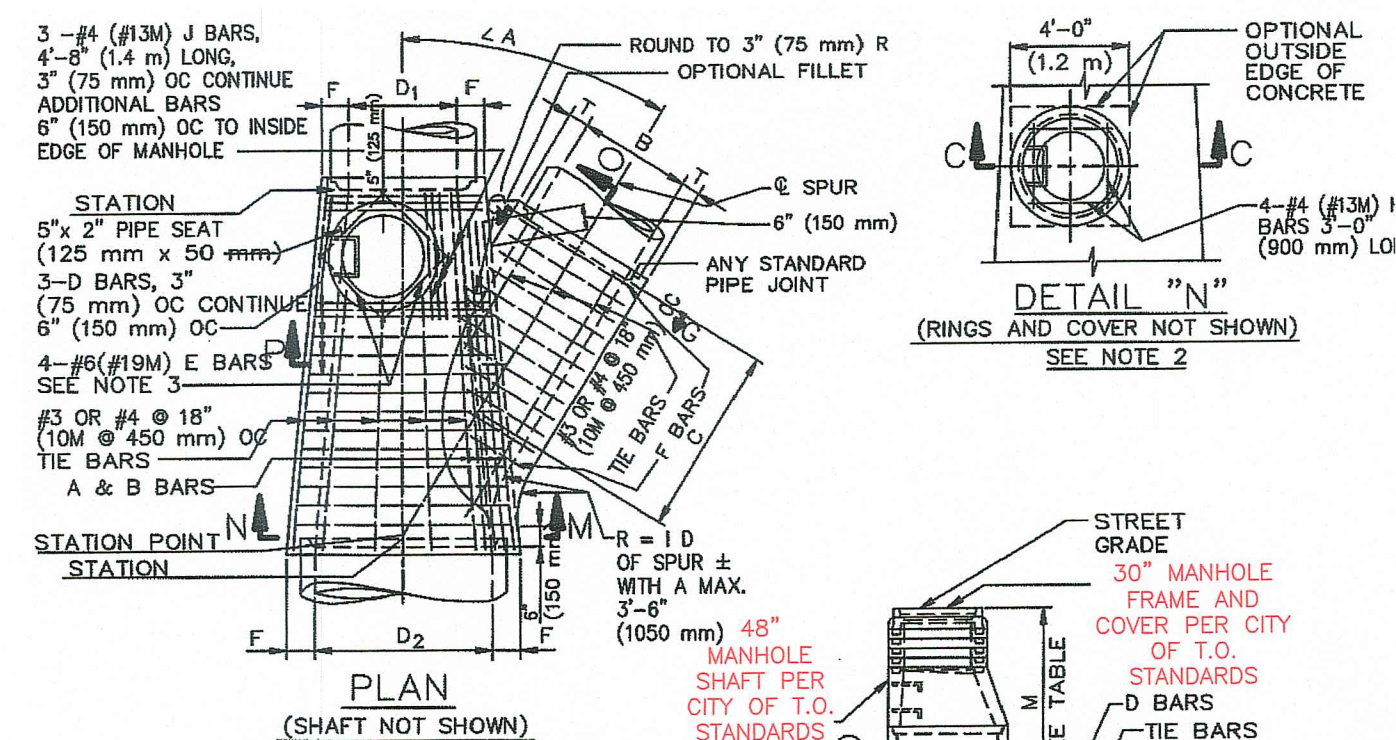
PAVEMENT INTERFACE DETAIL
N.T.S.



CUT NO. 1: SAW THE TUBE AT AN ANGLE OF A/2 WITH THE TRANSVERSE PLANE. REVERSE ONE SECTION AND TAPE BOTH SECTIONS TOGETHER FORMING THE DEFLECTION ANGLE A.
CUT NO. 2: SAW THE TUBE LONGITUDINALLY REMOVING A STRIP 3/4 (DσD) WIDE ON THE SIDE OPPOSITE THE OPEN JOINT. BEND THE ENDS OF THE CUT TOGETHER AND INSERT THE TUBE IN THE PIPE.



CONCRETE COLLAR
SPPWC 380-4 N.T.S.



NOTES

- A CONCRETE COLLAR IS REQUIRED WHERE THE CHANGE IN GRADE EXCEEDS 10'.
 - FOR CURVE JOINTS (SEE DETAIL B, SHEET 1) IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS GREATER THAN 1" (25 mm), BUT IS LESS THAN 3" (75 mm) A CONCRETE COVER IS REQUIRED IN ACCORDANCE WITH SPPWC 306-12.4. IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS EQUAL TO OR GREATER THAN 3" (75 mm), BUT LESS THAN 6" (150 mm), A CONCRETE COLLAR IS REQUIRED. IF THE CLEAR SPACE IS 6" (150 mm) OR GREATER, A TRANSITION STRUCTURE IS REQUIRED.
 - CONCRETE COLLAR SHALL NOT BE USED FOR A SIZE CHANGE ON THE MAIN LINE.
 - CONNECTOR PIPES
 - WHERE PIPES OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, L AND T SHALL BE THOSE OF THE LARGER PIPE, D=D₁ OR D₂, WHICHEVER IS GREATER.
 - WHEN L IS EQUAL TO OR LESS THAN D₂, JOIN INVERTS AND WHEN D₁ IS GREATER THAN D₂, JOIN SOFFITS.
 - FOR PIPE LARGER THAN 72" (1800 mm) SPECIAL COLLAR DETAILS ARE REQUIRED.
 - FOR PIPE SIZE NOT LISTED USE NEXT SIZE LARGER.
 - REINFORCEMENT SHALL CONFORM TO ASTM A 615 (A 615 M) GRADE 40 (300).
 - WHERE REINFORCING IS REQUIRED THE DIAMETER OF THE CIRCULAR TIES SHALL BE D+(2X WALL THICKNESS) + 1.
 - REINFORCING SHALL BE USED WHERE THE PIPE DIAMETER IS GREATER THAN 6" (150 mm) AND ON ALL PIPES WHERE THE SPACES BETWEEN THE EXTREME OUTER ENDS IS 3" (75 mm) OR LARGER.
- | PIPE DIAMETER | NO. OF CIRCULAR TIES |
|--------------------------------|----------------------|
| 21" (525 mm) OR LESS | 3 |
| 24" (600 mm) TO 30" (750 mm) | 3 |
| 33" (825 mm) TO 57" (1425 mm) | 4 |
| 60" (1500 mm) TO 72" (1800 mm) | 5 |
- WHERE THE SPACE BETWEEN PIPE ENDS EXCEEDS 3" (75 mm), THE NUMBER OF CIRCULAR TIES SHALL BE INCREASED TO MAINTAIN AN APPROXIMATE SPACING OF 6" (150 mm) O.C.
10. WHERE THE PIPE IS 21" (525 mm) OR LESS IN DIAMETER AN INTERIOR FORM OF UNSEALED SONO-TUBE OR EQUAL SHALL BE USED TO PROVIDE A SMOOTH INTERIOR JOINT. THE PAPER FORM MAY BE LEFT IN PLACE (SEE DETAIL A). WHEN THE PIPE IS 24" (600 mm) OR LARGER A REMOVABLE INTERIOR FORM SHALL BE USED OR THE INTERIOR JOINT SHALL BE COMPLETELY FILLED WITH MORTAR AND NEATLY POINTED.

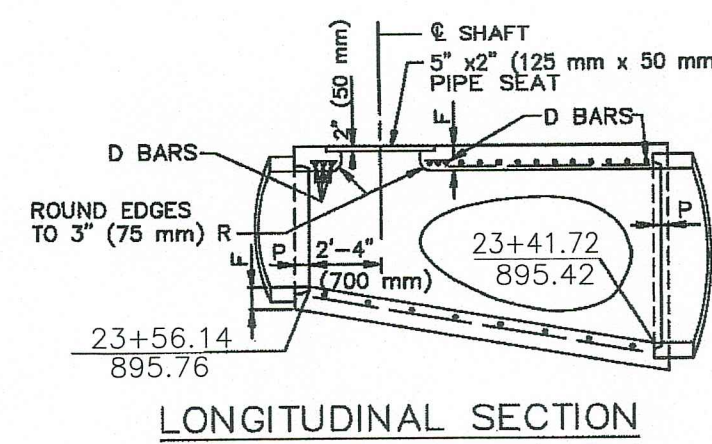


TABLE OF BARS SIZES

D ₁ OR B	A & B	D OR F
12" (300 mm)-39" (975 mm)	#5 @ 3" (#16M @ 75 mm)	#4 @ 6" (#13M @ 150 mm)
42" (1050 mm)-84" (2100 mm)	#6 @ 3" (#19M @ 75 mm)	#5 @ 6" (#16M @ 150 mm)
90" (2250 mm)-144" (3600 mm)	#7 @ 3" (#22M @ 75 mm)	#6 @ 6" (#19M @ 150 mm)

TABLE OF VALUES FOR M (SEE NOTE 2)

SECTION	MAX	MIN	MAX	MIN
N-M-P-O	2'-10 1/2" (867 mm)	3'-6" (1060 mm)		
C-C	11" (282 mm)	8 1/2" (217 mm)	16" (410 mm)	15" (380 mm)

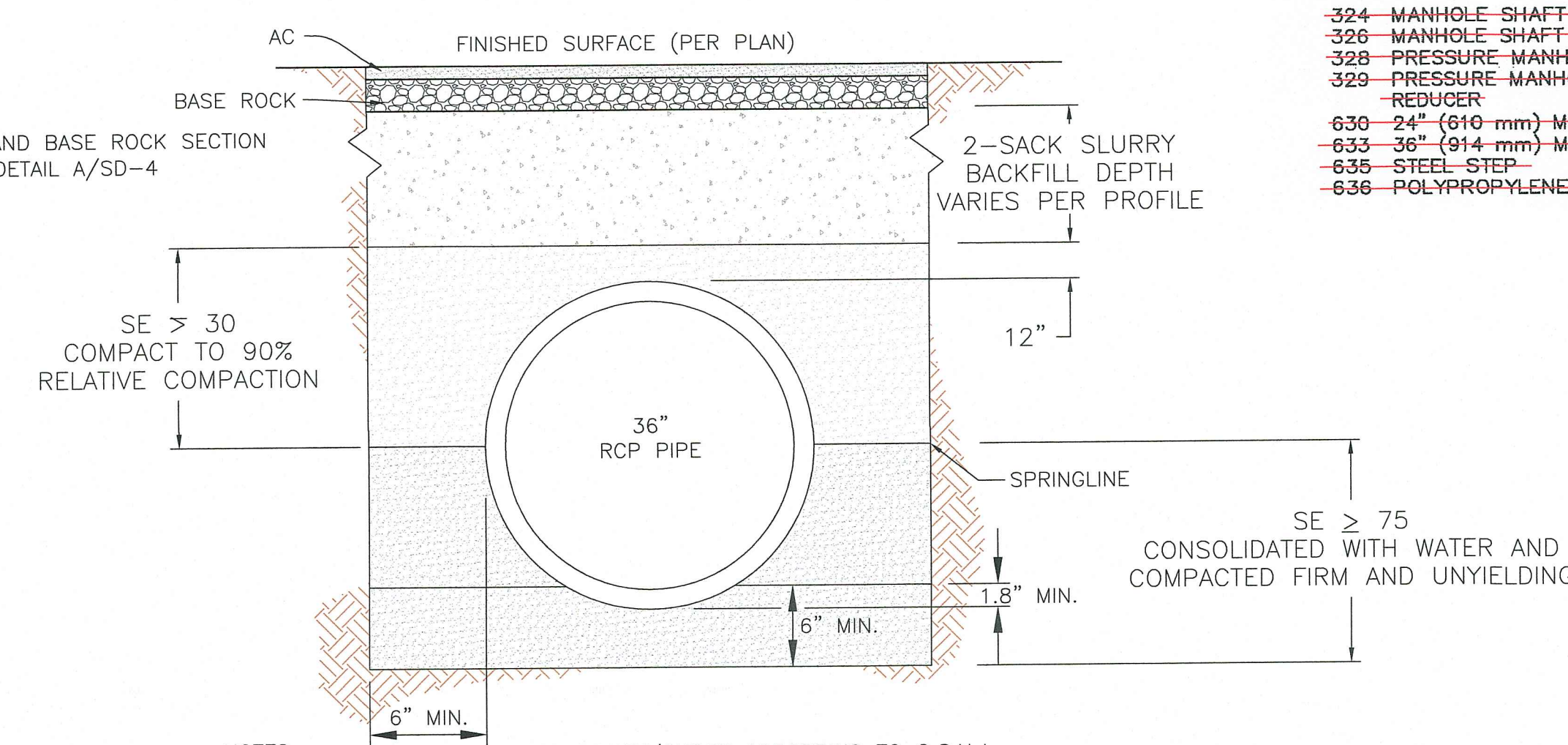
TABLE OF VALUES FOR F

D ₂	F
36" (900 mm)	6 1/2" (165 mm)
39" (975 mm)	7" (178 mm)
42" (1050 mm)	7 1/2" (190 mm)
48" (1125 mm)	7 3/4" (195 mm)
48" (1200 mm)	8" (205 mm)
51" (1275 mm)	8 1/2" (215 mm)
54" (1350 mm)	9" (230 mm)
57" (1425 mm)	9 1/4" (235 mm)
60" (1500 mm)	9 1/2" (240 mm)
63" (1575 mm)	10" (255 mm)
66" (1650 mm)	10 1/4" (260 mm)
69" (1725 mm)	10 3/4" (275 mm)
72" (1800 mm)	11" (280 mm)
78" (1950 mm)	11 3/4" (300 mm)
84" (2100 mm)	12 1/2" (320 mm)
90" (2250 mm)	13 1/4" (335 mm)
96" (2400 mm)	14" (355 mm)
102" (2550 mm)	15 1/2" (395 mm)
108" (2700 mm)	16 1/2" (420 mm)
114" (2850 mm)	17" (430 mm)
120" (3000 mm)	17 1/2" (445 mm)
132" (3300 mm)	17 1/2" (445 mm)
138" (3450 mm)	17 1/2" (445 mm)
144" (3600 mm)	18" (455 mm)

TABLE OF VALUES FOR T

B	T
12" (300 mm)	4" (100 mm)
15" (375 mm)	4 1/4" (110 mm)
18" (450 mm)	4 1/2" (115 mm)
21" (525 mm)	5" (125 mm)
24" (600 mm)	5 1/4" (135 mm)
27" (675 mm)	5 1/2" (140 mm)
30" (750 mm)	6" (150 mm)
33" (825 mm)	6 1/4" (160 mm)
36" (900 mm)	6 1/2" (165 mm)
39" (975 mm)	7" (180 mm)
42" (1050 mm)	7 1/2" (190 mm)
48" (1125 mm)	7 3/4" (195 mm)
48" (1200 mm)	8" (205 mm)
51" (1275 mm)	8 1/2" (215 mm)
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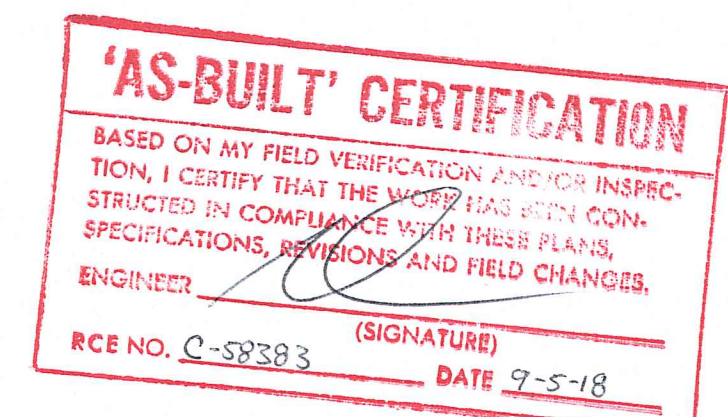
MANHOLE PIPE-TO-PIPE JUNCTION STRUCTURE
SPPWC 322-2 N.T.S.



NOTES: THE CONTRACTOR SHALL EXCAVATE/SHORE ACCORDING TO O.S.H.A. SPECIFICATIONS FOR TYPE 'B' SOIL. A SHORING PLAN SHALL BE SUBMITTED FOR APPROVAL PRIOR TO EXCAVATION.

- PIPE BEDDING SHALL BE TESTED AND APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACING SLURRY IN ACCORDANCE WITH PROJECT ENGINEER'S NOTE 5.
- ASPHALT/BASE SECTION SHALL BE REPLACED IN KIND OR AS REQUIRED BY THE CITY OF THOUSAND OAKS.

TYPE II PIPE BEDDING
N.T.S.



NOTE: NOTIFY PUBLIC WORKS INSPECTOR A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

NOTE: CONTRACTOR SHALL TELEPHONE UNDERGROUND SERVICE ALERT (USA) 8 1 1 OR 1(800) 422-4133 A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.

REVIEWED IN ACCORDANCE WITH CITY'S POLICY CONDITIONS OF APPROVAL BY:	THIS PLAN HAS BEEN REVIEWED BY _____ AND APPEARS TO BE IN GENERAL CONFORMITY WITH THE GEOTECHNICAL RECOMMENDATIONS IN OUR REPORT(S) DATED _____ MAKES NO REPRESENTATION AS TO THE ACCURACY OF DIMENSIONS, MEASUREMENTS, CALCULATIONS OR ANY PORTION OF THE DESIGN OTHER THAN GEOTECHNICAL.
SIGNATURE _____ DATE _____	REGISTERED GEOLOGIST NO. _____ DATE _____
R.C.E. NO. _____ EXP. DATE _____	SOILS ENGINEER NO. _____ DATE _____

PREPARED BY: **RJR ENGINEERING GROUP**
Planning - Civil Engineering - Flood Control/Hydrology
Geotechnical Engineering - Geology - Water Resources - Water Quality
2340 Palma Drive, Suite 200, Ventura, CA 93003
(805) 485-3935
E-mail: rj@reng.com

REGISTERED ENGINEER

REVIEWED FOR PERMIT ISSUANCE BY: CITY OF THOUSAND OAKS

DEVELOPMENT ENGINEER: _____ DATE: 135E118

PLANNING DIVISION: _____ DATE: _____

<TRAFFIC ENGINEER>: _____ DATE: _____

<BLDG. DIVISION - ADA COMPLIANCE>: _____ DATE: _____

<COSCA>: _____ DATE: _____

CITY OF THOUSAND OAKS
PUBLIC WORKS DEPARTMENT

STORM DRAIN DETAILS

CONEJO VALLEY CHURCH OF CHRIST
2525 E. HILLCREST DRIVE
SUP 1973-235/ SUMJ18-70166

CITY OF THOUSAND OAKS DWG. NO. 85-43A SHEET SD-4 OF SD-4



REV.	SYMBOL	DESCRIPTION OF CHANGE	R.C.E.	DATE	P.D.E.	DATE

