

APPENDIX D: Salt Creek Improvement Plan

GENERAL NOTES:

- ALL WORK SHALL BE COMPLETED PER THESE PLANS AND APPROVED REVISIONS. ALL CHANGES OR REVISIONS THERETO, MUST BE APPROVED BY THE CITY ENGINEER, IN WRITING, PRIOR TO ANY REQUEST FOR INSPECTION.
- THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITY PIPES AND STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN HEREON. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES OR STRUCTURES LOCATED AT THE WORK SITE. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE UNDERGROUND SERVICE ALERT (PHONE 1-800-422-4133) TWO (2) WORKING DAYS IN ADVANCE OF ANY EXCAVATION OF COMMENCEMENT OF WORK. FOR ANY QUESTIONS REGARDING THE MARK OUT OF UNDERGROUND UTILITIES, THE CONTRACTOR SHOULD CONTACT THE RESPECTIVE UTILITY COMPANY.

STREET LIGHT OR SIGNAL LIGHT CONDUIT	CITY OF CHULA VISTA	(619)397-6166
SEWER OR STORM DRAIN	CITY OF CHULA VISTA	
	VERIFICATION	(619)397-60DD
	NOTIFICATION	(619)397-60DD
GAS AND ELECTRIC	SAN DIEGO GAS & ELECTRIC	(619)23D-78DD
WATER	OTAY WATER DISTRICT	(619)67D-2222
	SAN DIEGO COUNTY WATER AUTHORITY	(858)522-69DD
TELEPHONE	PACIFIC BELL	(619)266-46B3
TELEVISION	COX CABLE OF SAN DIEGO	(619)263-9251
	ULTRONICS	(619)476-D177
- CITY OF CHULA VISTA INSPECTION NOTICE:
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM THE CITY ENGINEER 2 WORKING DAYS IN ADVANCE OF COMMENCEMENT OF WORK. PHONE: (619)397-612B.
 - THE CONTRACTOR SHALL GIVE 24 HOURS NOTICE (ONE WORKING DAY) NOTICE DN ALL CALLS FOR INSPECTION, PHONE: (619)397-612B.
 - ANY WORK PERFORMED WITHOUT BENEFIT OF INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL AT CONTRACTOR'S EXPENSE.
 - IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND WORK PRIOR TO THE EXCAVATION FOR INSTALLATION OF NEW UNDERGROUND WORK.

- NEITHER THE OWNER NOR THE ENGINEER OF WORK WILL ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS DURING CONSTRUCTION OPERATIONS
- ALL UTILITIES SHALL HAVE A MINIMUM OF 90% RELATIVE COMPACTION IN ALL TRENCH BACKFILL.
- THE DEVELOPER/CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LAND SURVEYOR MUST FIELD LOCATE, REFERENCE AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR TO ANY EARTHWORK OR PROPOSED IMPROVEMENTS; AND IF DESTROYED, A LAND SURVEYOR, OR A CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING SHALL REPLACE SUCH MONUMENTS WITH THE APPROPRIATE MONUMENTS. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT. IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF CHULA VISTA FIELD SURVEY SECTION MUST BE NOTIFIED, IN WRITING, AT LEAST (3) DAYS PRIOR TO THE CONSTRUCTION. THE DEVELOPER/CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF REPLACING ANY VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.
- AS-BUILT DRAWINGS: A SET OF BLUELINE PRINTS AND A SET OF SPECIFICATIONS SHALL BE KEPT AT ALL TIMES ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING ALL UTILITIES, ARE TO BE RECORDED.
- CONTRACTOR SHALL FURNISH TO THE ENGINEER OF WORK AS-BUILT PLANS FOR ALL NEW IMPROVEMENTS SHOWN ON THESE PLANS FOR SUBMITTAL TO THE CITY ENGINEER FOR APPROVAL.
- THE OWNER MUST OBTAIN AN EXCAVATION PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (D.O.S.H.) PRIOR TO THE START OF CONSTRUCTION.
- DUST GENERATED BY CONSTRUCTION ACTIVITIES SHALL COMPLY WITH THE LOCAL DUST CONTROL AND UNIFORM BUILDING CODE (UBC) REQUIREMENTS WHICH INCLUDE DUST CONTROL MEASURES FOR CONSTRUCTION SITES. DUST REDUCING MEASURES SHALL INCLUDE REGULAR WATERING OF GRADED SURFACES AND RESTRICTION OF ALL CONSTRUCTION VEHICLES AND EQUIPMENT TO TRAVEL ALONG ESTABLISHED AND REGULARLY WATERED ROADWAYS.

DIG ALERT NOTICE

SECTION 4216/4217 OF THE GOVERNMENT CODE REQUIRES THAT DIG ALERT IDENTIFICATION NUMBER BE ISSUED BEFORE A "PERMIT TO EXCAVATE" WILL BE VALID. FOR YOUR DIG ALERT I.D. NUMBER, CALL UNDERGROUND SERVICE ALERT TOLL FREE 1-800-422-4133 AT LEAST TWO WORKING DAYS BEFORE YOU DIG.

UNDERGROUND SERVICE ALERT

CALL: TOLL FREE
(800)422-4133 DR B11

TWO WORKING DAYS BEFORE YOU DIG

CAUTION REMEMBER THAT THE USA CENTER NOTIFIES ONLY THOSE UTILITIES BELONGING TO THE CENTER. THERE COULD BE OTHER UTILITIES PRESENT AT THE WORK SITE. THE CENTER WILL INFORM YOU OF WHOM THEY WILL NOTIFY.

AS BUILT

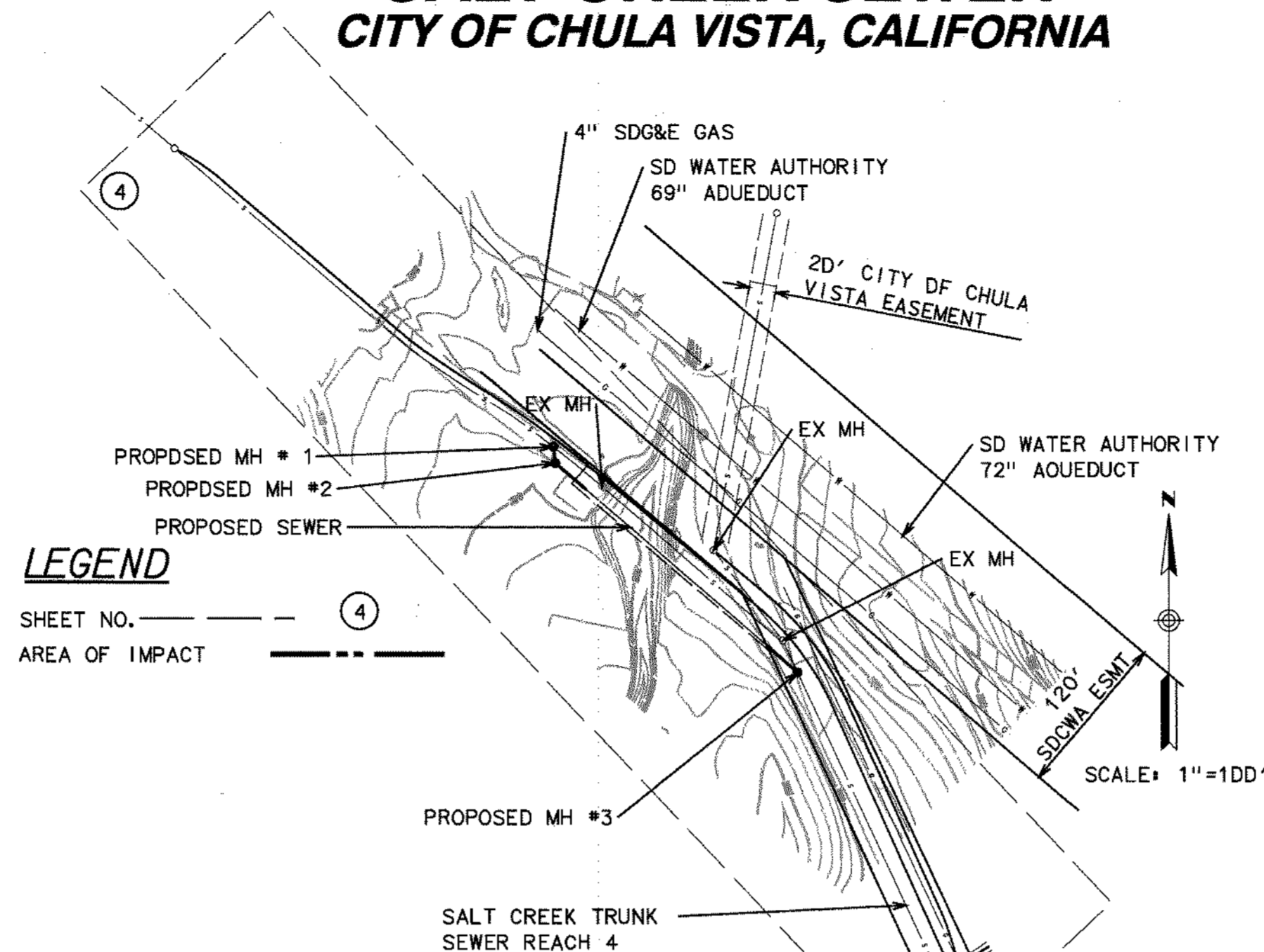
SIGNED _____ DATE: _____
 PRINT NAME: JOHN O. GODDARD, JR. P.E. NO. 33D37
 DISCIPLINE: CIVIL REGISTRATION EXPIRES: _____

RICK ENGINEERING COMPANY
 5620 FRIARS ROAD
 SAN DIEGO, CA 92110
 619.291.0707
 (FAX) 619.291.4165

J-16629M
rickengineering.com

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK
Contractor	ORW NO. 96-64					CITY CHULA VISTA VERTICAL CONTROL BENCHMARK, INDEX NO. 1750, DESCRIPTION: BRASS DISK IN WELL
Inspector						
Date Completed						

IMPROVEMENT PLANS FOR: SALT CREEK SEWER CITY OF CHULA VISTA, CALIFORNIA



ASSESSORS PARCEL 643-D70-10

SPECIAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE TO INSURE THAT ALL SLOPES AND UTILITIES ARE BUILT IN ACCORDANCE WITH THESE PLANS. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE ENGINEER OF WORK AT (619)291-0707 AND THE CITY INSPECTOR. CONTRACTOR SHALL ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT RESULT FROM CONTRACTOR'S OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, TEMPORARY DESILTING BASINS, SILT FENCES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE TOTAL PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER, AGENCY OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.
- CONTRACTOR WILL MAKE EXPLORATION EXCAVATIONS AND LOCATE EXISTING UNDERGROUND UTILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
- LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET (OR AVOIDED) BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE PLANS.
- BEFORE EXCAVATING FOR THIS CONTRACT, THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES, THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO OTHER EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS.
- CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS
- CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE ENGINEER AND THE CITY OF CHULA VISTA HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING THEREFROM LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER OR THE CITY OF CHULA VISTA.
- IF REQUIRED CONTRACTOR IS RESPONSIBLE FOR HAVING TRAFFIC CONTROL PLANS APPROVED BY THE CITY ENGINEER PRIOR TO COMMENCING ANY WORK IN THE PUBLIC RIGHT OF WAY.
- CONTRACTOR SHALL REPAIR ALL DESTROYED OR DAMAGED EXISTING SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
- ALL DEMOLISHED MATERIAL AND TRENCH SPOILS SHALL BE REMOVED FROM THE JOB SITE TO AN APPROVED DISPOSAL SITE.
- THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY ENGINEER.

OWNERS CERTIFICATE:

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS. IT IS FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE THE ENGINEER OF WORK MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS, WHICH THE ENGINEER OF WORK DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETION OF THE IMPROVEMENTS. ALL PLAN CHANGES SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION.

I FURTHER AGREE TO COMMENCE WORK ON ANY IMPROVEMENTS SHOWN ON THESE PLANS WITHIN EXISTING CITY RIGHT-OF-WAY WITHIN 60 DAYS AFTER ISSUANCE OF THE CONSTRUCTION PERMIT AND TO PURSUE SUCH WORK ACTIVELY ON EVERY NORMAL WORKING DAY UNTIL COMPLETED, IRRESPECTIVE AND INDEPENDENT OF ANY OTHER WORK ASSOCIATED WITH THIS PROJECT OR UNDER MY CONTROL.

NAME: SLF IV/McMILLIN MILLENIA JV, LLC
 ADDRESS: 2750 WHELE ROAD, SUITE 20D
 SAN DIEGO, CA 92106
 TEL: (619)477-4117
 FAX: (619)336-3010

BY: Don McMillin, SVP DATE: 3.12.14

ENGINEER OF WORK:

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE IMPROVEMENTS SHOWN ON THIS SET OF PLANS (SHEET 1 THROUGH 4) HAVE BEEN INSTALLED AND CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH SAID PLANS, APPROPRIATE STANDARDS AND ANY DISCRETIONARY APPROVAL(S) FOR THE PROJECT.

SIGNED: _____ DATE: _____
 PRINTED NAME: JOHN D. GODDARD JR. P.E. NO. 33D37
 DISCIPLINE: CIVIL MY REGISTRATION EXPIRES: 06/30/14

DECLARATION OF RESPONSIBLE CHARGE:

I HEREBY OBLIARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF CHULA VISTA IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR THE PROJECT DESIGN.

RICK ENGINEERING COMPANY
 5620 FRIARS ROAD
 SAN DIEGO, CA 92110
 BY: John D. Goddard Jr.
 JOHN D. GODDARD JR.
 R.O.E. 33037 EXP. 06/30/14

DATE: 3/4/14

WORK TO BE DONE:

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (MAY 2DD6) COMMONLY REFERRED TO AS THE "GREEN BOOK," SAN DIEGO REGIONAL SUPPLEMENT AMENOMENTS (2DD6), SAN DIEGO AREA REGIONAL STANDARD DRAWINGS (AUGUST 2D12), STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS (MAY 2D1D) AND STANDARD SPECIFICATIONS (MAY 2DD6), STATE OF CALIFORNIA MANUAL OF TRAFFIC CONTROLS (JAN 2D1D), DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF CHULA VISTA (2D10), AND CITY OF CHULA VISTA STANDARD SPECIAL PROVISIONS (2DD8), ALL AS ADOPTED BY THE CITY OF CHULA VISTA, ARE MADE PART OF THE SPECIFICATIONS. ANY CHANGES OR REVISIONS THEREFROM SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ANY REQUEST FOR INSPECTION.

LEGEND

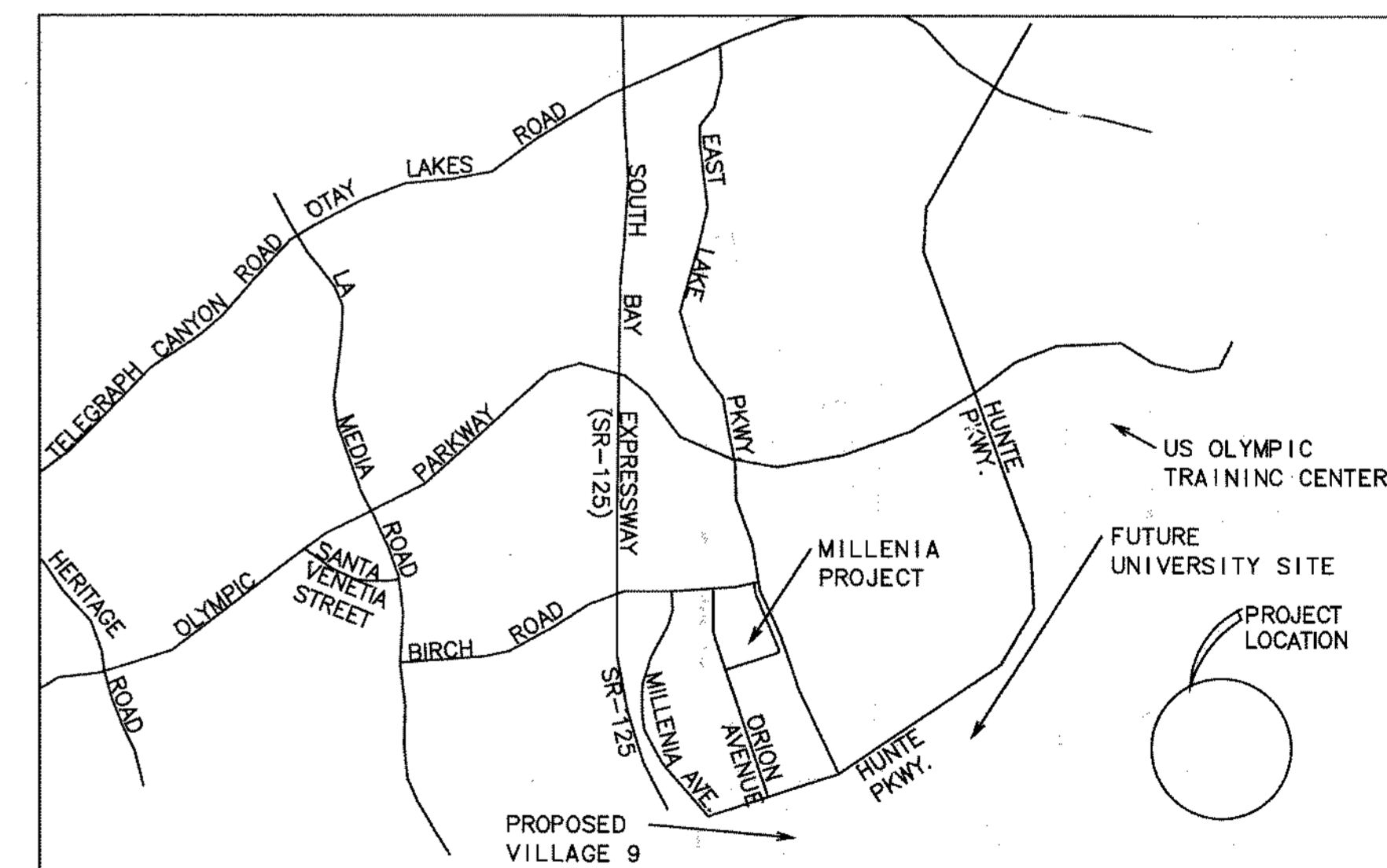
- 5' SEWER MANHOLE.....S.D.A.R.S.D. NOS. SM-2, SM-3, SM-4, SM-5, SM-7, M-4
- EXISTING SEWER MANHOLE MAIN.....AS SHOWN
- SEWER MAIN.....(SIZE, CLASS & TYPE PER PLAN).....S.D.R.S.D. NO. SP-2
- ENVIRONMENTALLY CLEARED FDDTPRINT.....
- SD&E RIGHT-OF-WAY LINE.....

SEWER NOTES:

- SEWER SHOWN ON THESE PLANS IS P.V.C. SEWER PIPE PER ASTM D-3034 TYPE C905, UNLESS OTHERWISE NOTED, WITH MINIMUM PIPE STIFFNESS OF 48 WHEN TESTED AT FIVE (5) PERCENT DEFLECTION. GRAVITY P.V.C. SEWER SHALL HAVE A 3/4-INCH MAXIMUM CRUSHED ROCK BACKFILL TO ONE FOOT ABOVE THE PIPE.
- AS AN ALTERNATE TO P.V.C. AN A.B.S. COMPOSITE SEWER PIPE CONFORMING TO ASTM D-268D WITH TYPE S.C. COUPLERS MAY BE USED IN SIZES EIGHT (8) INCHES AND ABOVE. FOUR (4) OR SIX (6) INCH PIPES SHALL BE ABS. SOLID WALL WITH F/DY NOT LESS THAN 150 PSI PER ASTM D-2751
- SEWER CONTRACTOR SHALL MAKE CERTAIN THAT ALL MANHOLES ARE CONSTRUCTED IN EXACT LOCATION SHOWN, AND WITH THE OFFSET CONE POSITIONED AWAY FROM SURVEY MONUMENT LOCATION ADJACENT THERETO.
- THE PIPE BEDDING SHALL BE IN ACCORDANCE WITH REGIONAL STANDARD DRAWING NO. S-4 (TYPE C).
- THE P.V.C. AND A.B.S. PIPE CONNECTIONS TO MANHOLES SHALL HAVE MANHOLE WATER STOP GASKETS AT EACH CONNECTION TO MANHOLES. THESE WATER STOP GASKETS SHALL BE CONSIDERED TO BE INCLUDED IN THE UNIT PRICE BID FOR MANHOLES.
- PIPE CONNECTION TO MANHOLE (MH) SHALL COMPLY WITH REGIONAL STANDARDS.

TRAFFIC CONTROL:

IF THE NEED FOR TRAFFIC CONTROL BECOMES APPARENT AFTER THE ISSUANCE OF A PERMIT OR START OF WORK, THE INSPECTION SECTION MAY REQUIRE THE PREPARATION OF SUCH A PLAN. IF SUCH A DETERMINATION IS MADE BY THE INSPECTION SECTION, UPON NOTIFICATION OF THE SUPERINTENDENT OF THE JOB IN QUESTION, WORK IN THE RIGHT OF WAY SHALL CEASE UNTIL SUCH TIME AS TRAFFIC CONTROL PLANS HAVE BEEN APPROVED BY TRAFFIC ENGINEERING.



REGISTERED PROFESSIONAL ENGINEER
 JOHN D. GODDARD JR.
 NO. 33037
 CIVIL
 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
 THOMAS E. ADLER
 No. 59804
 Exp. 6/30/14
 CIVIL
 STATE OF CALIFORNIA

VICINITY MAP
NO SCALE

TOTAL SHEETS = 4

SALT CREEK SEWER IMPROVEMENT PLAN

CITY OF CHULA VISTA	DEVELOPMENT SERVICES	Drawing No.
PLANS FOR THE IMPROVEMENT OF SEWER & TEMPORARY HI-LINE:		13045- 1
SALT CREEK SEWER		W.O.No. PC2232

MITIGATION MEASURES FROM EIR

MITIGATION MEASURE 4.7-4:

FOR ANY WORK PROPOSED TO BE INITIATED BETWEEN FEBRUARY 15 AND AUGUST 15, PRIOR TO ISSUANCE OF ANY LAND DEVELOPMENT PERMITS, INCLUDING CLEARING, GRUBBING, GRADING, AND CONSTRUCTION PERMITS ASSOCIATED WITH IMPROVEMENTS TO THE OFF-SITE SCSL, A PRECONSTRUCTION SURVEY FOR THE COASTAL CALIFORNIA GNATCATCHER MUST BE PERFORMED IN ORDER TO REAFFIRM THE PRESENCE AND EXTENT OF OCCUPIED HABITAT. THE PRE-CONSTRUCTION SURVEY AREA FOR THE COASTAL CALIFORNIA GNATCATCHER SHALL ENCOMPASS ALL HABITAT WITHIN THE PROJECT WORK ZONE AS WELL AS A 300-FOOT BUFFER EXTENDING FROM THE STUDY AREA AS DELINEATED ON FIGURE 5 OF THE HELIX BIOLOGICAL TECHNICAL REPORT.

THE PRE-CONSTRUCTION SURVEY MUST BE PERFORMED TO THE SATISFACTION OF THE ENVIRONMENTAL REVIEW COORDINATOR (ERC) BY A QUALIFIED BIOLOGIST FAMILIAR WITH THE CITY'S MSCP SUBAREA PLAN. THE RESULTS OF THE PRE-CONSTRUCTION SURVEY MUST BE SUBMITTED IN A REPORT TO THE ERC FOR REVIEW AND APPROVAL PRIOR TO THE ISSUANCE OF ANY LAND DEVELOPMENT PERMITS AND PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES. IF THE COASTAL CALIFORNIA GNATCATCHER IS DETECTED, A MINIMUM 300-FOOT BUFFER DELINEATED BY ORANGE BIOLOGICAL FENCING SHALL BE ESTABLISHED AROUND THE DETECTED SPECIES TO ENSURE THAT NO WORK SHALL OCCUR WITHIN THE OCCUPIED HABITAT FROM FEBRUARY 15 THROUGH AUGUST 15 AND ON-SITE NOISE REDUCTION TECHNIQUES SHALL BE INCORPORATED, AS APPROPRIATE. THE ERC SHALL HAVE THE DISCRETION TO MODIFY THE BUFFER WIDTH DEPENDING ON SITE-SPECIFIC CONDITIONS. IF THE RESULTS OF THE PRE-CONSTRUCTION SURVEY DETERMINE THAT THE SURVEY AREA IS UNOCCUPIED, THE WORK MAY COMMENCE AT THE DISCRETION OF THE ERC FOLLOWING THE REVIEW AND APPROVAL OF THE PRE-CONSTRUCTION REPORT.

MITIGATION MEASURE 4.7-5:

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING, GRUBBING, GRADING AND CONSTRUCTION PERMITS FOR THE OFF-SITE SCSL PROJECT, THE APPLICANT SHALL PROVIDE A REVEGETATION PLAN FOR 0.16 ACRE OF OREGAN COASTAL SAGE SCRUB TO THE SATISFACTION OF THE CITY'S ENVIRONMENTAL REVIEW COORDINATOR (ERC). THE REVEGETATION PLAN MUST BE PREPARED BY A QUALIFIED CITY-APPROVED BIOLOGIST FAMILIAR WITH THE CITY'S MSCP SUBAREA PLAN AND MUST INCLUDE, BUT NOT BE LIMITED TO, AN IMPLEMENTATION PLAN; APPROPRIATE SEED MIXTURES AND PLANTING METHOD; IRRIGATION METHOD; QUANTITATIVE AND QUALITATIVE SUCCESS CRITERIA; MAINTENANCE, MONITORING, AND REPORTING PROGRAM; ESTIMATED COMPLETION TIME; AND CONTINGENCY MEASURES. THE APPLICANT SHALL ALSO BE REQUIRED TO IMPLEMENT THE REVEGETATION PLAN SUBJECT TO THE DIVERSITY AND APPROVAL OF THE ERC.

MITIGATION MEASURE 4.7-6:

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING OR GRUBBING AND GRADING AND/OR CONSTRUCTION PERMITS FOR THE OFFSITE SCSL, THE APPLICANT SHALL INSTALL FENCING IN ACCORDANCE WITH CVMC 17.35.030. PROMINENTLY COLORED, WELL-INSTALLED FENCING AND SIGNAGE SHALL BE IN PLACE WHEREVER THE LIMITS OF GRADING ARE ADJACENT TO SENSITIVE VEGETATION COMMUNITIES OR OTHER BIOLOGICAL RESOURCES, AS IDENTIFIED BY THE QUALIFIED MONITORING BIOLOGIST. FENCING SHALL REMAIN IN PLACE DURING ALL CONSTRUCTION ACTIVITIES. ALL TEMPORARY FENCING SHALL BE SHOWN ON GRADING PLANS FOR THE OFF-SITE SCSL. PRIOR TO RELEASE OF GRADING AND/OR IMPROVEMENT BONDS, A QUALIFIED BIOLOGIST SHALL PROVIDE EVIDENCE THAT WORK WAS CONDUCTED AS AUTHORIZED UNDER THE APPROVED LAND DEVELOPMENT PERMIT AND ASSOCIATED PLANS.

MITIGATION MEASURE 4.7-7:

A BIOLOGICAL MONITOR SHALL ATTEND ALL PRE-CONSTRUCTION MEETINGS AND BE PRESENT DURING THE REMOVAL OF ANY VEGETATION ASSOCIATED WITH THE MODIFICATIONS TO THE OFF-SITE SCSL. PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING OR GRUBBING AND GRADING AND/OR CONSTRUCTION PERMITS FOR THE SCSL PROJECT, THE APPLICANT SHALL PROVIDE WRITTEN CONFIRMATION THAT A CITY-APPROVED BIOLOGICAL MONITOR HAS BEEN RETAINED AND SHALL BE ON-SITE DURING CLEARING, GRUBBING, AND/OR GRADING ACTIVITIES TO ENSURE THAT THE APPROVED LIMITS OF DISTURBANCE ARE NOT EXCEEDED AND PROVIDE PERIODIC MONITORING OF THE IMPACT AREA INCLUDING, BUT NOT LIMITED TO, TRENCHES, STOCKPILES, STORAGE AREAS, AND FENCING. THE BIOLOGICAL MONITOR SHALL ALSO BE ON-SITE DURING THE PLACEMENT AND REMOVAL OF THE PROPOSED HIGH LINE TO ENSURE THAT REMOVAL OR DAMAGING OF NATIVE VEGETATION DOES NOT OCCUR. THE BIOLOGICAL MONITOR SHALL BE AUTHORIZED TO HALT ALL ASSOCIATED PROJECT ACTIVITIES THAT MAY BE IN VIOLATION OF THE CITY'S MSCP SUBAREA PLAN.

MITIGATION MEASURE 4.7-8:

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, AND PRIOR TO CONSTRUCTION ACTIVITIES OCCURRING IN AREAS CONTAINING SENSITIVE BIOLOGICAL RESOURCES WITHIN THE OFF-SITE SCSL, ALL WORKERS SHALL BE EDUCATED BY A CITY-APPROVED BIOLOGIST TO RECOGNIZE AND AVOID THOSE AREAS WHICH HAVE BEEN MARKED AS SENSITIVE BIOLOGICAL RESOURCES.

MITIGATION MEASURE 4.7-12 (SEE "PERMIT NOTE")

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING, GRUBBING, GRADING AND CONSTRUCTION PERMITS FOR THE OFF-SITE SCSL, THE APPLICANT SHALL PROVIDE THE CITY WITH WRITTEN CONFIRMATION TO THE SATISFACTION OF THE CITY'S ENVIRONMENTAL REVIEW COORDINATOR THAT THE RESOURCE AGENCIES HAVE BEEN NOTIFIED OF THE SCSL GRADING. THE APPLICANT SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL APPLICABLE REGULATORY PERMITS, SUCH AS THOSE REQUIRED UNDER SECTION 404 OF THE FEDERAL CLEAN WATER ACT, SECTION 1600 OF THE CALIFORNIA DEPARTMENT OF FISH AND GAME CODE, AND PORTER COLOGNE WATER QUALITY ACT. IN ADDITION, PRIOR TO ISSUANCE OF ANY GRADING PERMITS ASSOCIATED WITH THE OFF-SITE SCSL, THE APPLICANT SHALL PREPARE A FRAC-DUT CONTINGENCY PLAN (FCP) TO THE SATISFACTION OF THE CITY ENGINEER AND THE CITY'S ERC. THE FCP SHALL ESTABLISH OPERATIONAL PROCEDURES AND RESPONSIBILITIES FOR THE PREVENTION OF CONTAMINATION, NOTIFICATION, AND CLEAN-UP OF THE INADVERTENT RELEASE OF DRILLING FLUID (FRAC-DUT) THAT COULD POTENTIALLY OCCUR WITH THE PROPOSED DIRECTIONAL DRILLING UNDER SALT CREEK. ISSUES ADDRESSED IN THE PLAN SHALL INCLUDE BUT NOT BE LIMITED TO:

1. SPILL STOCKPILE MANAGEMENT;
2. HAZARDOUS MATERIALS STORAGE AND SPILL CLEANUP;
3. SITE-SPECIFIC EROSION AND SEDIMENT CONTROL;
4. PROCEDURES FOR TIMELY DETECTION OF FRAC-OUTS; AND

ANY OTHER BMPs TO ENSURE PROTECTION OF SENSITIVE BIOLOGICAL RESOURCES IN THE ADJACENT PRESERVE AREAS AND MINIMIZE WATER QUALITY IMPACTS AS DESCRIBED IN THE SWPPP.

IF A FRAC-OUT EVENT WERE TO OCCUR DURING THE BORING AND JACKING PROCESS, WORK SHOULD CEASE IMMEDIATELY, AND MEASURES SHOULD BE TAKEN TO CONTAIN THE FRAC-OUT SLURRY IN AS SMALL AN AREA AS POSSIBLE. THE BIOLOGICAL MONITOR SHALL CONTACT THE CITY AND APPROPRIATE RESOURCE AGENCIES WITHIN 24 HOURS OF THE FRAC-DUT AND PROVIDE AN INITIAL ASSESSMENT OF IMPACTS TO NATIVE VEGETATION. MITIGATION FOR THE IMPACTS WILL BE COORDINATED IN CONJUNCTION WITH THE CITY AND RESOURCE AGENCIES.

MITIGATION MEASURE 4.7-9:

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING OR GRUBBING AND GRADING AND/OR CONSTRUCTION PERMITS FOR THE EUC PROJECT SITE (INCLUDING THE OFF-SITE SCSL), THE APPLICANT SHALL PROVIDE WRITTEN CONFIRMATION THAT MITIGATION MEASURE 4.9.2 (HYDROLOGY AND DRAINAGE), REQUIRING A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP), HAS BEEN FULFILLED TO THE SATISFACTION OF THE CITY ENGINEER.

MITIGATION MEASURE 4.7-10:

PRIOR TO ISSUANCE OF LAND DEVELOPMENT PERMITS, INCLUDING CLEARING OR GRUBBING AND GRADING AND/OR CONSTRUCTION PERMITS FOR THE OFFSITE SCSL, THE APPLICANT SHALL INSTALL TEMPORARY ORANGE BIOLOGICAL FENCING ALONG THE LIMITS OF GRADING IN AREAS ADJACENT TO SENSITIVE BIOLOGICAL RESOURCES TO AVOID IMPACTS ON SUCH RESOURCES. ALL FENCING, INCLUDING TEMPORARY FENCING, SHALL BE SHOWN ON THE PROJECT GRADING PLANS. PRIOR TO AND DURING CONSTRUCTION, THE CITY'S MITIGATION MONITOR SHALL VERIFY THAT BIOLOGICAL FENCING IS PROPERLY INSTALLED AND MAINTAINED.

MITIGATION MEASURE 4.7-13:

TO AVOID ANY DIRECT IMPACTS TO RAPTORS AND/OR ANY MIGRATORY BIRDS, REMOVAL OF HABITAT THAT SUPPORTS ACTIVE NESTS ON THE PROPOSED AREA OF DISTURBANCE (WITHIN THE EUC PROJECT SITE, SCSL, OR SSA) SHOULD OCCUR OUTSIDE OF THE BREEDING SEASON FOR THESE SPECIES (JANUARY 15 TO AUGUST 31). IF REMOVAL OF HABITAT ON THE PROPOSED AREA OF DISTURBANCE (WITHIN THE EUC PROJECT SITE, SCSL, OR SSA) MUST OCCUR DURING THE BREEDING SEASON, THE APPLICANT SHALL RETAIN A CITY-APPROVED BIOLOGIST TO CONDUCT A PRE-CONSTRUCTION SURVEY TO DETERMINE THE PRESENCE OR ABSENCE OF NESTING BIRDS ON THE PROPOSED AREA OF DISTURBANCE. THE PRE-CONSTRUCTION SURVEY MUST BE CONDUCTED WITHIN 10 CALENDAR DAYS PRIOR TO THE START OF CONSTRUCTION. THE RESULTS OF WHICH MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES. IF NESTING BIRDS ARE DETECTED, A LETTER REPORT OR MITIGATION PLAN AS DEEMED APPROPRIATE BY THE CITY, SHALL BE PREPARED AND INCLUDE PROPOSED MEASURES TO BE IMPLEMENTED TO ENSURE THAT DISTURBANCE OF BREEDING ACTIVITIES IS AVOIDED. THE REPORT OR MITIGATION PLAN SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL AND IMPLEMENTED TO THE SATISFACTION OF THE CITY. THE CITY'S MITIGATION MONITOR SHALL VERIFY AND APPROVE THAT ALL MEASURES IDENTIFIED IN THE REPORT OR MITIGATION PLAN ARE IN PLACE PRIOR TO AND/OR DURING CONSTRUCTION.

MITIGATION MEASURE 4.9-1:

PRIOR TO ISSUANCE OF EACH GRADING PERMIT FOR THE EUC SPA PLAN, THE SSA, THE SALT CREEK SEWER LATERAL IMPROVEMENT, AND THE PODGI CANYON SEWER IMPROVEMENT AREA OR ANY LAND DEVELOPMENT PERMIT, INCLUDING CLEARING AND GRADING, THE PROJECT APPLICANT(S) SHALL SUBMIT A NOTICE OF INTENT (NOI) AND OBTAIN COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR CONSTRUCTION ACTIVITY FROM THE STATE WATER RESOURCES CONTROL BOARD (SWRCB). THE PERMIT REQUIRES DEVELOPMENT OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND MONITORING PLAN THAT SHALL BE SUBMITTED TO THE CITY ENGINEER AND THE DIRECTOR OF PUBLIC WORKS. THE SWPPP SHALL BE INCORPORATED INTO THE GRADING AND DRAINAGE PLANS AND SHALL PROVIDE FOR IMPLEMENTATION OF CONSTRUCTION AND POST-CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs) ON SITE TO REDUCE THE AMOUNT OF SEDIMENTS AND POLLUTANTS IN CONSTRUCTION AND POST-CONSTRUCTION SURFACE RUNOFF BEFORE IT IS DISCHARGED INTO OFF-SITE STORM WATER FACILITIES. THE BMPs SHALL INCLUDE MEASURES TO MITIGATE POTENTIALLY SIGNIFICANT INDIRECT IMPACTS TO THE JURISDICTIONAL FEATURE APPROXIMATELY 300 FEET DOWNSTREAM OF THE OFF-SITE SOILS STOCKPILING AREA. THE GRADING PLANS SHALL NOTE THE CONDITION REQUIRING A SWPPP AND MONITORING PLANS.

MITIGATION FOR INDIRECT IMPACTS (BIOLOGICAL TECHNICAL REPORT, 7-2)

7.2 MITIGATION FOR INDIRECT IMPACTS

THE PROJECT IS A MODIFICATION OF A PLANNED FACILITY AND IS SUBJECT TO THE CITY'S ADJACENCY MANAGEMENT ISSUES (SECTION 7.5.2 OF THE CITY'S SUBAREA PLAN). THE FOLLOWING MEASURES WILL BE IMPLEMENTED TO MITIGATE POTENTIAL INDIRECT IMPACTS BOTH ON SITE AND WITHIN THE OFF SITE MITIGATION PARCELS FOR THE EASTERN DTAY RANCH DRAINAGE FACILITIES PROJECT, HUNTE PARKWAY PROJECT, AND DTAY RANCH VILLAGE 11 PROJECT RESULTING FROM THE PROJECT.

SIGNAGE: APPLICANT WILL INSTALL BARRIERS AND SIGNAGE WHERE NECESSARY TO DIRECT PUBLIC ACCESS AWAY FROM SENSITIVE RESOURCES WITHIN THE PROJECT AREA DURING CONSTRUCTION AND FOLLOW UP RESTORATION OF THE SITE.

DRAINAGE ISSUES: NO RELEASE OF TOXINS, CHEMICALS, PETROLEUM PRODUCTS, EXOTIC PLANT MATERIALS OR OTHER ELEMENTS THAT MIGHT HARM OR DEGRADE THE NATURAL ECOSYSTEM OF THE PRESERVE SHALL BE ALLOWED; THE APPLICANT WILL INCORPORATE BEST MANAGEMENT PRACTICES (BMP) STANDARDS AS OEFINED BY THE CITY'S STANFORD URBAN STORM MITIGATION PLAN (SUSMP).

TOXIC SUBSTANCES: THE PROPOSED PROJECT IS A SEWER BY-PASS AND NO TOXIC SUBSTANCES FROM AGRICULTURAL AND/OR RECREATIONAL WILL BE RELEASED INTO THE PRESERVE.

NOISE: THE PROJECT MAY HAVE INDIRECT EFFECTS (INDISE) ON NESTING BIRDS. IF CONSTRUCTION, INCLUDING PUMPING ASSOCIATED WITH THE HIGH LINE, IS TO TAKE PLACE DURING GNATCATCHER NESTING SEASON (FEBRUARY 15 THROUGH AUGUST 15), THE APPLICANT WILL CONDUCT A NESTING BIRD SURVEY PRIOR TO ANY GROUND CLEARING AND/OR GROUND DISTURBING ACTIVITIES. ACTIVE NEST WILL BE FLAGGED AND NOISE REDUCTION TECHNIQUES WILL BE INCORPORATED TO REDUCE NOISE LEVELS TO BELOW SIGNIFICANT LEVELS. NO RESTRICTIONS ARE PLACED ON TEMPORARY CONSTRUCTION NOISE OUTSIDE THE BIRD BREEDING SEASONS).

INVASIVES: NO INVASIVE NON-NATIVE PLANT SPECIES WILL BE INTRODUCED INTO THE PRESERVE BY THIS PROJECT.

WITH IMPLEMENTATION OF THE MITIGATION MEASURES OUTLINED ABOVE, ALL IMPACTS TO BIOLOGICAL RESOURCES WILL BE MITIGATED TO BELOW A LEVEL OF SIGNIFICANCE.

PERMIT NOTE

PER THE SALT CREEK SEWER LATERAL BIOLOGICAL TECHNICAL REPORT PREPARED BY HELIX ENVIRONMENTAL PLANNING INC, DATED JANUARY 5, 2009, NO AGENCY PERMITS (INCLUDING ACDE 404 PERMIT, CDFW 1602 PERMIT OR A RWCO 4D1 PERMIT) ARE REQUIRED FOR THIS PROJECT

CONSTRUCTION NOTES

1. GROUNDWATER MAY BE HIGH AND SEASONALLY VARIABLE AT EXCAVATIONS. DEWATERING SYSTEMS SHALL EFFECTIVELY INTERCEPT AND REMOVE WATER FROM THE SURROUNDING STRATA AND THUS PREVENT ITS ENTRY INTO THE EXCAVATION. THE EMPLOYMENT OF ANY OF THE AVAILABLE ALTERNATIVES TO ACHIEVE THIS OBJECTIVE MAY BE REQUIRED. RELIANCE SHALL NOT BE PLACED SOLELY ON SHEETING TO PROTECT WORK AREAS. THE ALTERNATIVE USE OF INTERLOCKING SHEET PILING WITH BRACES OR ANCHORAGE SUPPLEMENTED BY DEWATERING MEASURES OR OTHER MEANS WHICH MAY BE SUITABLE, SHALL BE PERMITTED THROUGH THE APPROPRIATE GOVERNING AGENCY.
2. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL USE DEWATERING MEASURES OR OTHER MEANS WHICH MAY BE SUITABLE. DEWATERING SHALL BE PERMITTED THROUGH THE APPROPRIATE GOVERNING AGENCIES.
3. IF FEASIBLE THE CONTRACTOR SHALL OBTAIN AUTHORIZATION FROM THE CITY OF CHULA VISTA SEWER DEPARTMENT PRIOR TO DISCHARGING GROUNDWATER INTO THE ADJACENT SEWER SYSTEM.
3. SITE WILL BE ACCESSED BY EXISTING DIRT AND PAVED ROADS.

HIGH LINE SEWER NOTES

1. CONTRACTOR SHALL SUBMIT A SEWER BYPASS HIGH LINE PLAN TO THE CITY ENGINEER FOR APPROVAL PRIOR TO PRE-CONSTRUCTION MEETING. SEWER BYPASS HIGH LINE PLAN SHALL INCLUDE LOCATIONS OF PUMPS, BACKUP PUMPS, HIGH LINES, FAILURE PROTECTION FACILITIES, ANY NECESSARY EROSION CONTROL MEASURES, LOCATION OF ALL HABITAT AND MITIGATION LIMITS, AND SIZE AND LOCATION OF JACKING AND RECEIVING PITS OR ANY OTHER INFORMATION OR FACILITIES AS REQUIRED BY RESIDENT ENGINEER.
2. CONTRACTOR SHALL DETERMINE THE FLOAT LEVELS FOR BYPASS PUMPING. THE PUMP STARTS AT THE HIGH WATER LEVEL (HWL), SHUTS OFF AT THE LOW WATER LEVEL (LWL). THE HIGH, HIGH WATER LEVEL (HHL) SHALL BE SIGNIFICANTLY BELOW THE RIM OF THE MANHOLE TO GIVE THE CONTRACTOR ENOUGH TIME TO REMEDY THE PROBLEM.
3. CONTRACTOR SHALL HAVE ONE OPERATIONAL PUMP AND ONE STANDBY PUMP AT ALL TIMES IN THE MANHOLE.
4. THE PROJECT FALLS UNDER CAL-OSHA JURISDICTION AND THE CONTRACTOR SHALL MAKE HIS PERSONNEL AWARE THAT THEY WILL BE EXPOSED TO RAW WASTEWATER DURING THIS CONSTRUCTION PROJECT. THE CONTRACTOR SHALL TAKE THE NECESSARY HEALTH PRECAUTIONS TO GUARD AGAINST CONTACT WITH THE RAW WASTEWATER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREVENT ANY SPILL OF RAW WASTEWATER AS A RESULT OF HIS OPERATIONS.
5. THE NEW SEWER MUST BE PRESSURE TESTED BEFORE BYPASSING INTO A NEW MANHOLE CAN COMMENCE. ONCE THE NEWLY INSTALLED SEWER HAS PASSED, BYPASSING CAN BEGIN.
6. SEWER HIGH LINE WILL BE LAID ON GROUND SURFACE AND NOT INVOLVE ANY EXCAVATION OF SURFACE DISTURBANCE.
7. SEWER HIGH LINE WILL BE BRIDGED ACROSS CHANNEL WHERE NEEDED.

GROUT NOTES AND SPECIFICATIONS

MATERIALS

- A. GROUT. THE GROUT MATERIALS SHALL CONSIST OF PORTLAND CEMENT (PORTLAND CEMENT AND FLY ASH) AND/OR ADJUSTERS.
- B. COMPRESSIVE STRENGTH. THE GROUT SHALL HAVE A MINIMUM PENETRATION RESISTANCE OF 100 PSI IN 24 HOURS WHEN TESTED IN ACCORDANCE WITH ASTM C 403 AND A MINIMUM COMPRESSIVE STRENGTH OF 300 PSI IN 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C 495 AND C 109.

C. PERFORMANCE REQUIREMENTS. THE GROUTING SYSTEM SHALL HAVE SUFFICIENT GAUGES, MONITORING DEVICES, AND TESTS TO DETERMINE THE EFFECTIVENESS OF THE GROUTING OPERATION AND TO ENSURE COMPLIANCE WITH THE PIPE SPECIFICATIONS AND DESIGN PARAMETERS.

D. MIX DESIGNS. ONE OR MORE MIXES SHALL BE DEVELOPED TO COMPLETELY FILL THE ANNULAR SPACE BASED ON THE FOLLOWING REQUIREMENTS.

1. SIZE OF THE ANNULAR VOID.
2. SUFFICIENT STRENGTH AND DURABILITY TO PREVENT MOVEMENT OF THE CARRIER PIPE.
3. PROVIDE ADEQUATE RETARDATION.
4. PROVIDE LESS THAN 1 PERCENT SHRINKAGE BY VOLUME.

E. DENSITY. THE CONTRACTOR SHALL DESIGN A GROUT MIX WITH A DENSITY TO MEET THE REQUIREMENTS TO PREVENT FLOATING OF THE PIPE. THE APPARENT VISCOSITY SHALL NOT EXCEED 35 SECONDS IN ACCORDANCE WITH ASTM C 939.

EXECUTION

A. QUALIFICATIONS

THE CONTRACTOR SHALL PROVIDE REFERENCES OF PREVIOUS PROJECTS DEMONSTRATING TO THE ENGINEER ITS CAPABILITIES OF FILLER THE ANNULAR SPACE AND PERFORMING WORK IN CONFORMANCE WITH THE PLANS AND THE SPECIFICATIONS.

B. GROUTING EQUIPMENT

THE MATERIALS SHALL BE MIXED IN EQUIPMENT OF SUFFICIENT SIZE AND CAPACITY TO PROVIDE THE DESIRED AMOUNT OF GROUT MATERIAL FOR EACH STAGE IN A SINGLE OPERATION. THE EQUIPMENT SHALL BE CAPABLE OF MIXING THE GROUT AT DENSITIES REQUIRED FOR THE APPROVED PROCEDURE AND SHALL ALSO BE CAPABLE OF CHANGING DENSITY AS DICTATED BY FIELD CONDITIONS ANY TIME DURING THE GROUTING OPERATION.

C. INJECTION PROCEDURE AND PRESSURE

THE GAUGED PUMPING PRESSURE SHALL NOT EXCEED THE LINER PIPE MANUFACTURER'S APPROVED RECOMMENDATIONS.

PUMPING EQUIPMENT SHALL BE OF A SIZE SUFFICIENT TO INJECT GROUT AT VELOCITY AND PRESSURE RELATIVE TO THE SIZE OF THE ANNULAR SPACE. GAUGES TO MONITOR GROUT PRESSURE SHALL BE ATTACHED IMMEDIATELY ADJACENT TO EACH INJECTION PORT. THE GAUGE SHALL CONFORM TO AN ACCURACY OF NO MORE THAN ONE-HALF PERCENT ERROR OVER THE FULL RANGE OF THE GAUGE. THE RANGE OF THE GAUGE SHALL NOT BE MORE THAN 100 PERCENT GREATER THAN THE DESIGN GROUT PRESSURE. PRESSURE GAUGES SHALL BE INSTRUMENT OIL FILLED AND ATTACHED TO A SAOOLE-TYPE DIAPHRAGM SEAL (GAUGE SAVER) TO PREVENT CLOGGING WITH GROUT. ALL GAUGES SHALL BE CERTIFIED AND CALIBRATED IN ACCORDANCE WITH ANSI B40, GRADE 2A.

D. ON-SITE TEST EQUIPMENT

DENSITY SHALL BE VERIFIED BY ASTM C 138. VISCOSITIES SHALL BE CHECKED WITH A FLOWCONE PROVIDED BY THE CONTRACTOR AND TESTED PER ASTM C 939.

E. TEST SECTION

THE CONTRACTOR MAY BE REQUIRED TO PERFORM AN ABOVE-GROUND TEST ON EACH TYPE OF GROUT AND GROUT SYSTEM PROPOSED TO BE USED. THE TEST SECTION TO BE GROUTED AND THE SIZE OF THE ANNULAR SPACE CONSIDERED FOR EACH TYPE OF GROUT SYSTEM SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE DISTRICT.

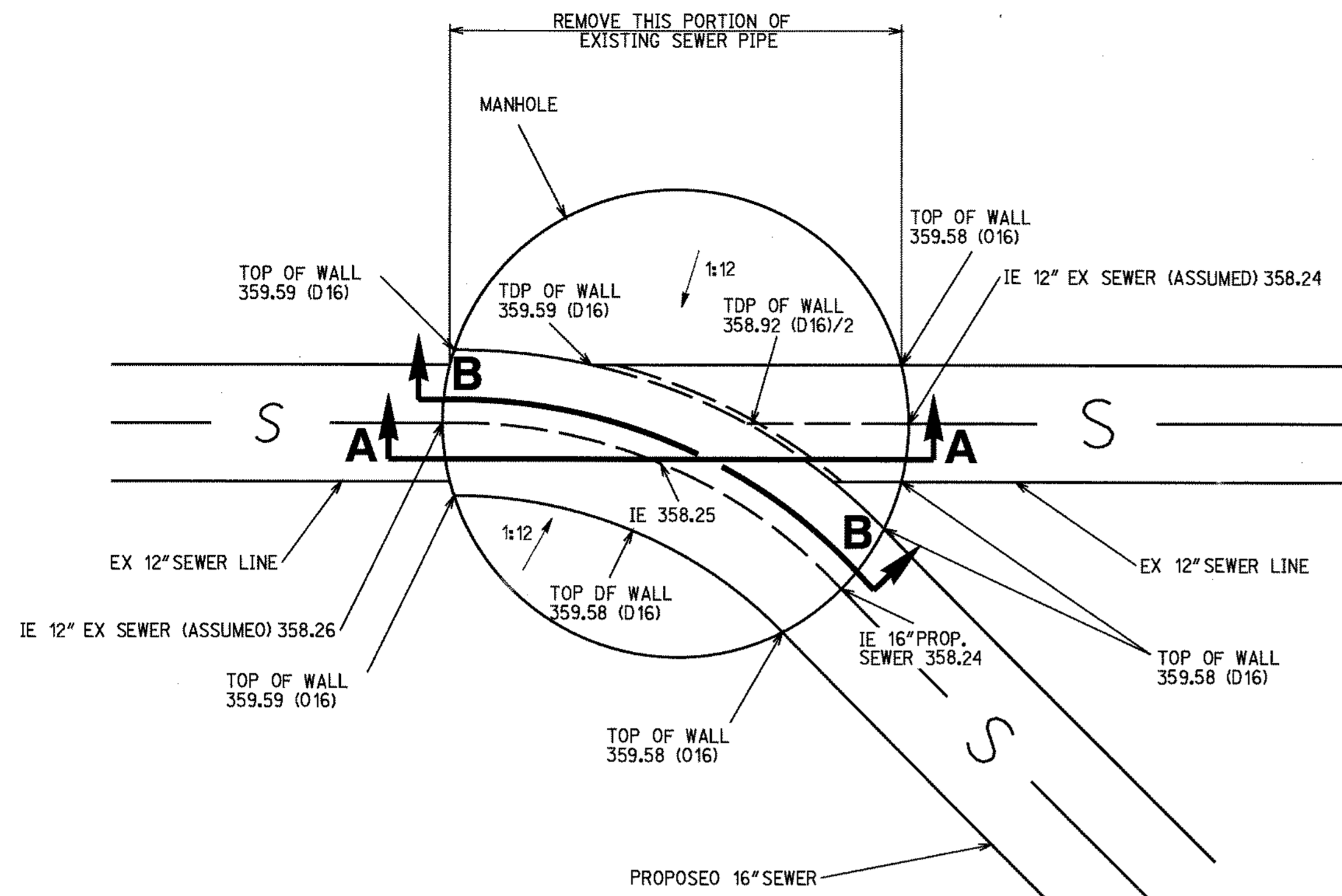
AS BUILT
 SIGNED _____ DATE _____
 PRINT NAME : JOHN D. GODDARD, JR. P. E. NO. 33037
 DISCIPLINE : CIVIL REGISTRATION EXPIRES :

RICK 5620 FRIARS ROAD J-16629M
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 rickengineering.com

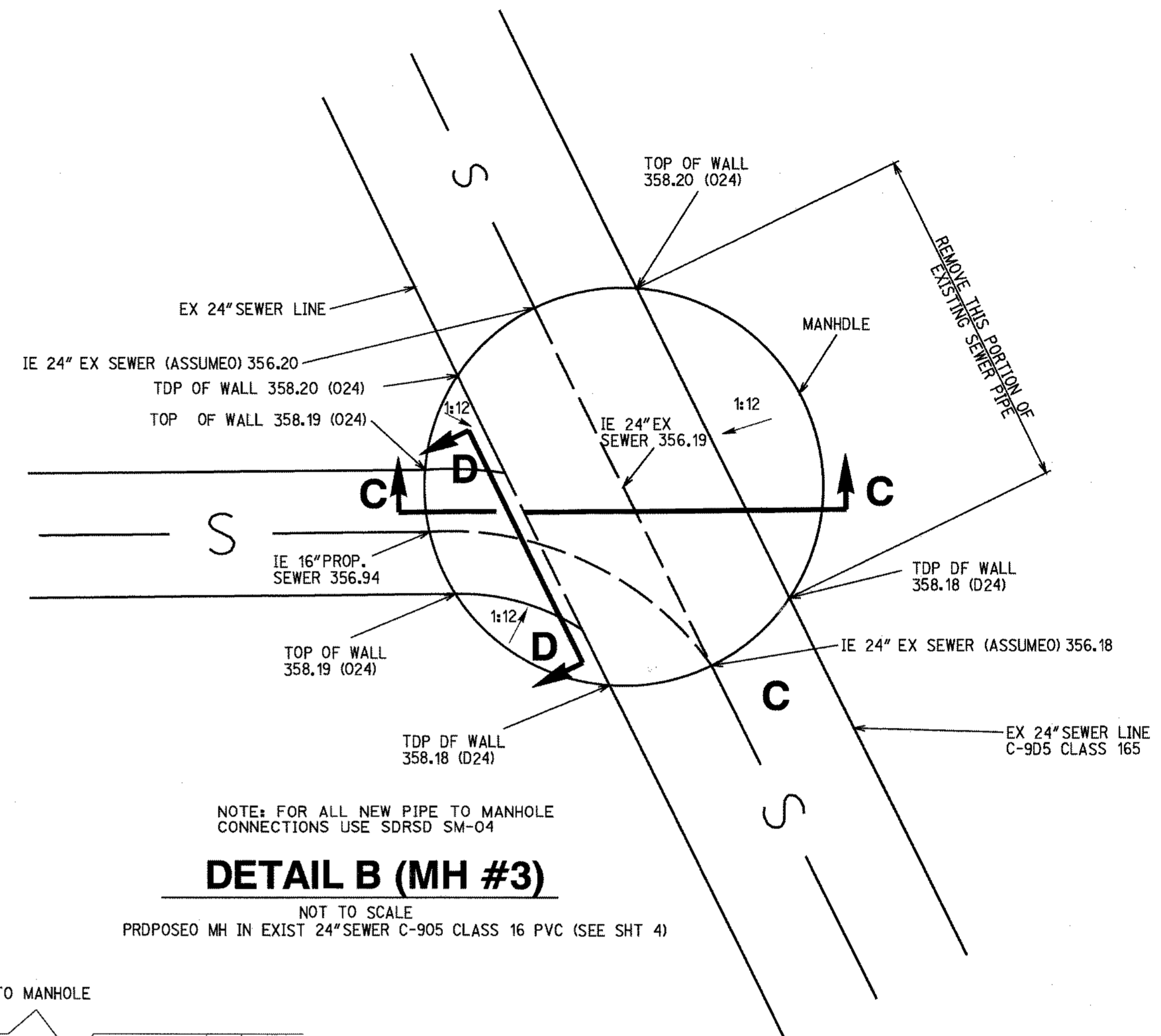
CONTRACTOR	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF CHULA VISTA	DEVELOPMENT SERVICES	Drawing No.
Inspector	DRW NO. 96-64					CITY CHULA VISTA VERTICAL CONTROL BENCHMARK, INBOX NO. 1750, DESCRIPTION: BRASS DISK IN WELL	Horizontal AS SHOWN	PT	PT	JDG	3/18/14	3/19/14	PLANS FOR THE IMPROVEMENT OF SEWER & TEMPORARY HI-LINE:		
Date Completed							Vertical	Pls	Under Supervision Of			By	SALT CREEK SEWER		13045- 2
							NA	ENGINEER	Date	R. C. E. No.	Office SH	Principal Civil Engineer			W.O. No. PC2232



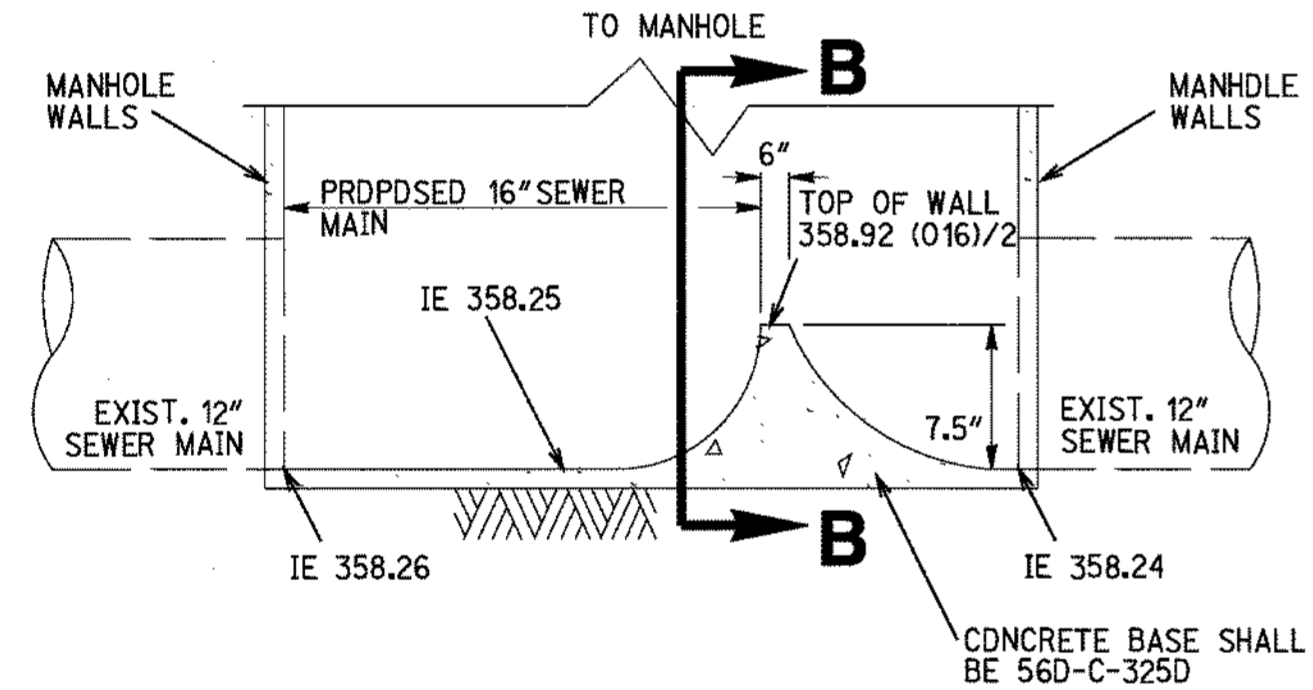
SALT CREEK SEWER IMPROVEMENT PLAN



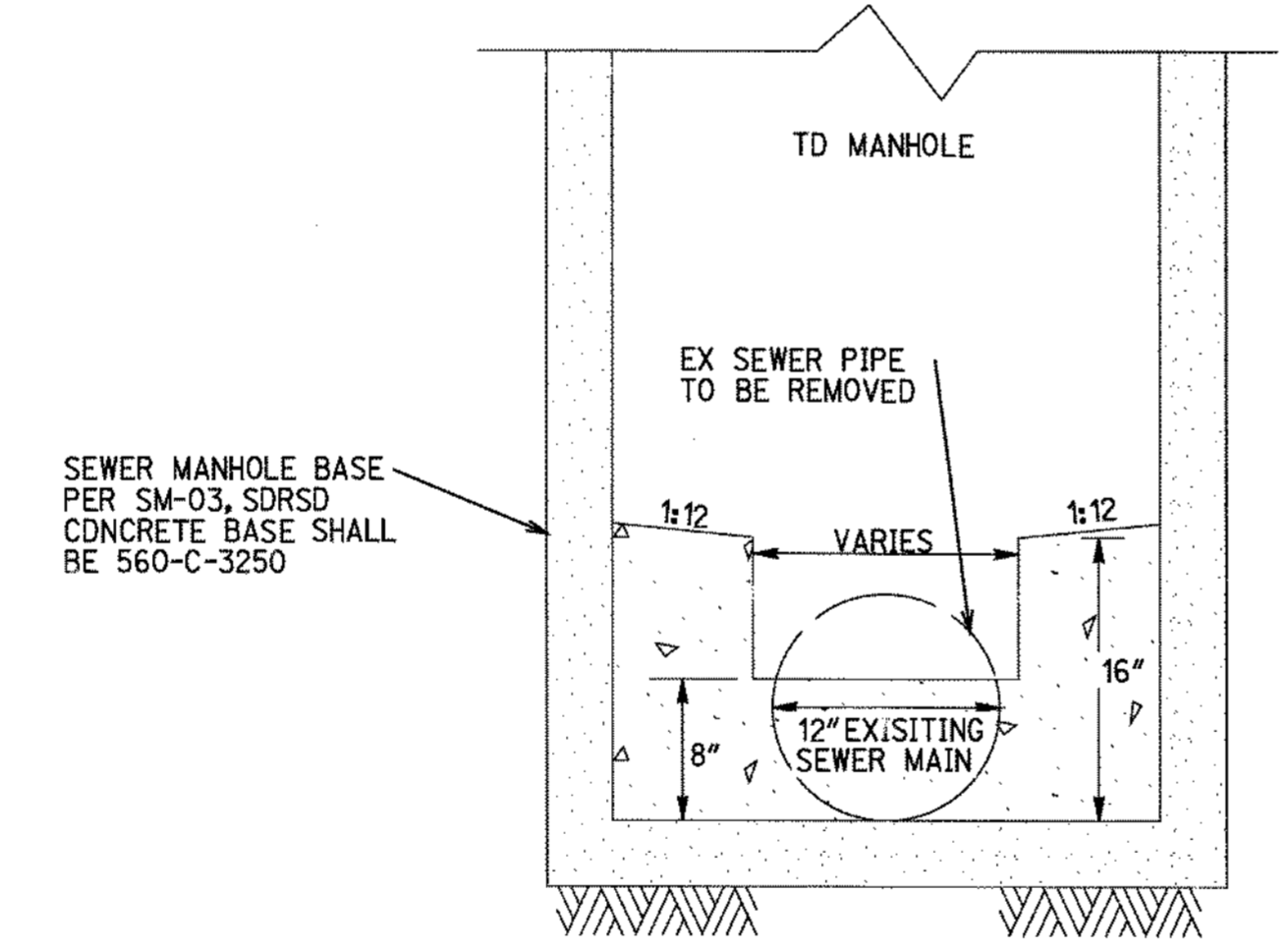
NOTE: FOR ALL NEW PIPE TO MANHOLE CONNECTIONS USE SDRSD SM-04
DETAIL A (MH #1)
 NOT TO SCALE



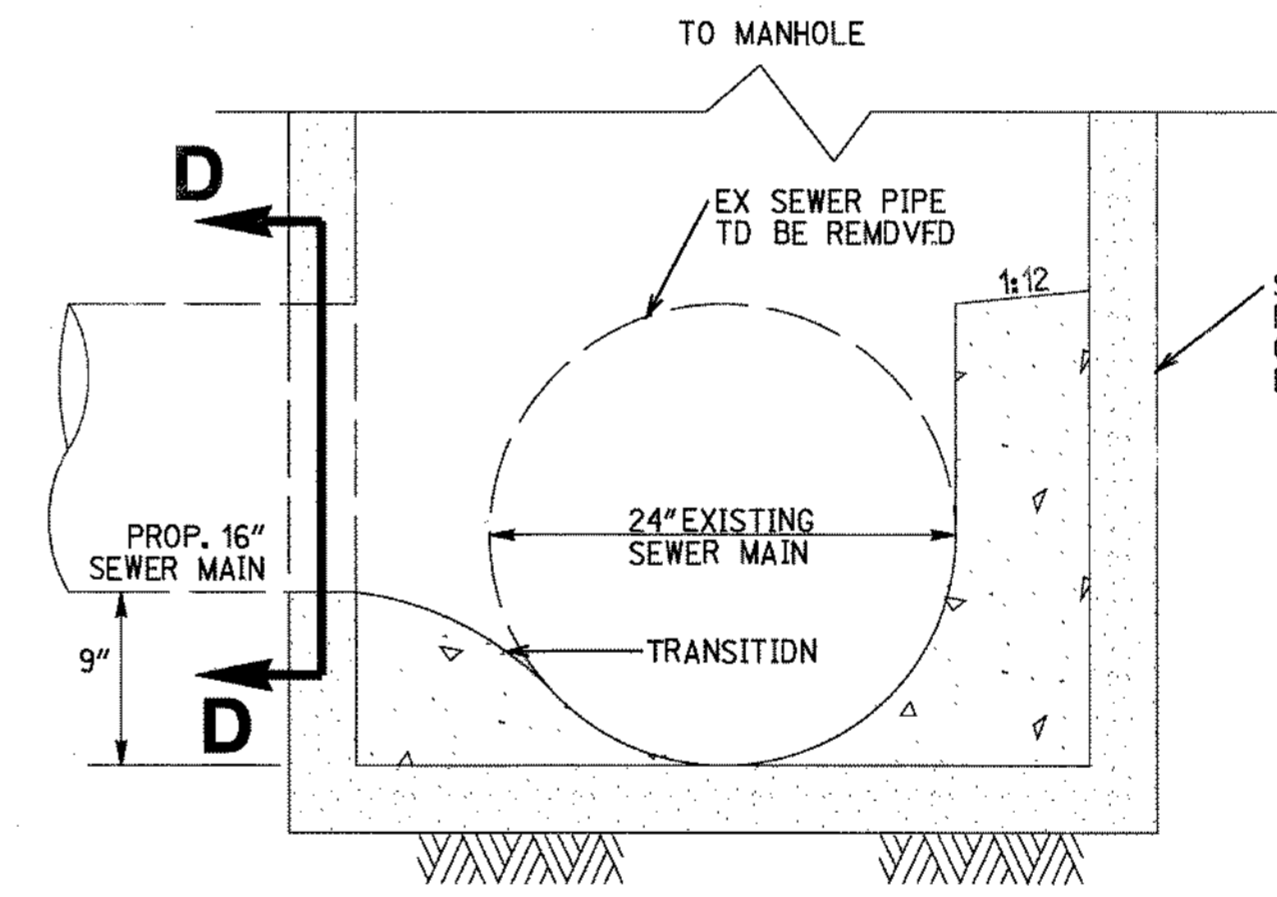
NOTE: FOR ALL NEW PIPE TO MANHOLE CONNECTIONS USE SDRSD SM-04
DETAIL B (MH #3)
 NOT TO SCALE
 PROPOSED MH IN EXIST 24" SEWER C-905 CLASS 16 PVC (SEE SH 4)



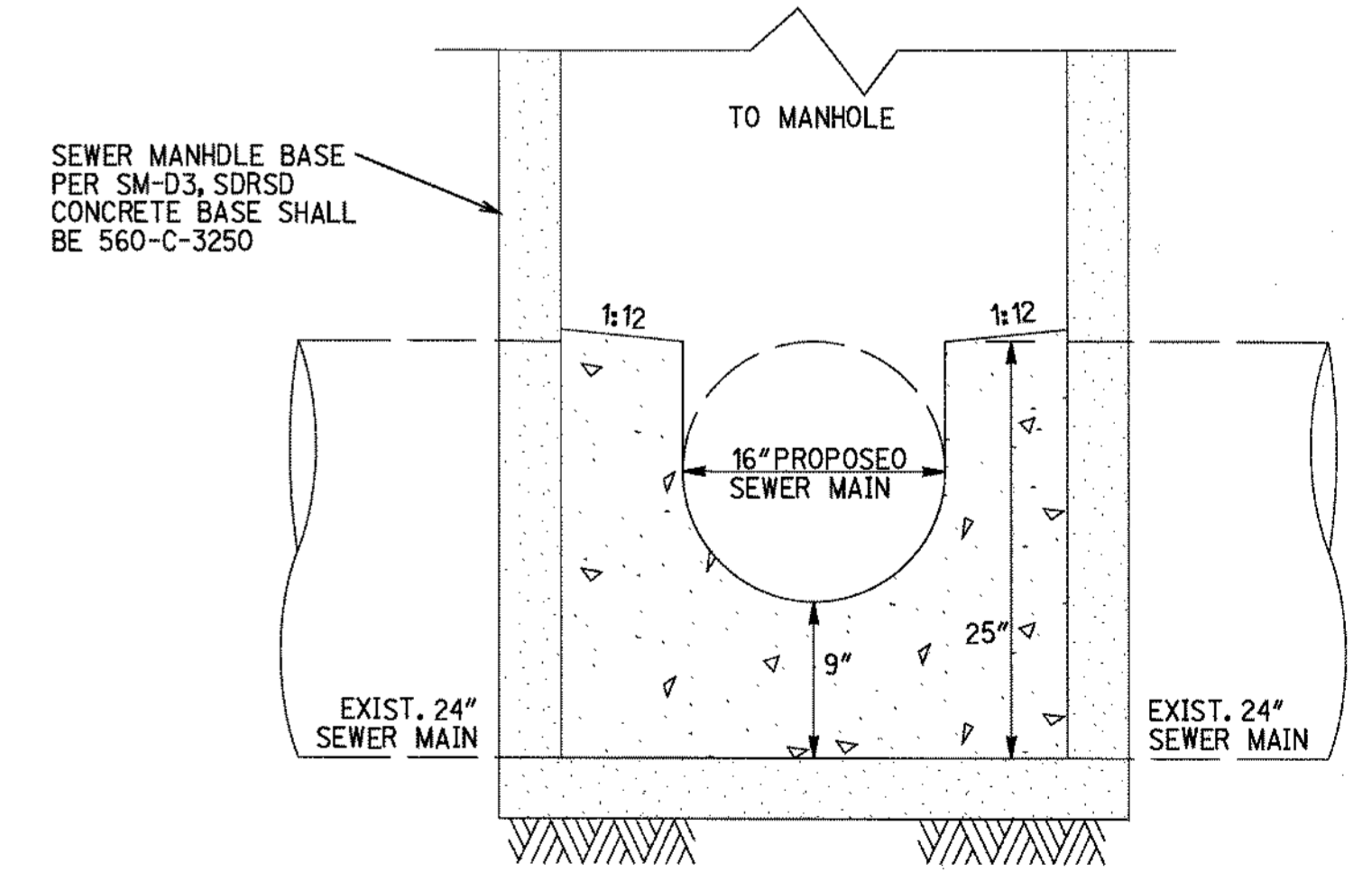
CROSS SECTION A-A
 NOT TO SCALE



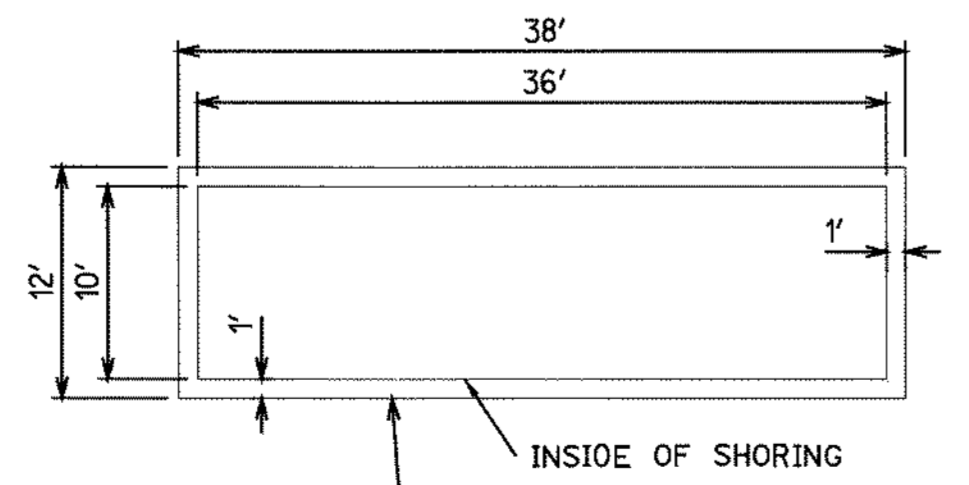
CROSS SECTION B-B
 NOT TO SCALE



CROSS SECTION C-C
 NOT TO SCALE



CROSS SECTION D-D
 NOT TO SCALE



NOTE: JACK AND BORE PIT DIMENSIONS MAY VARY. AUGER IS IN 10' LENGTHS. PIT LENGTH IS BORE MACHINE PLUS WORK ROOM PLUS MULTIPLES OF 10'. RECEIVING PIT IS BIG ENOUGH TO MAKE TIE WELD.
JACK AND BORE PIT DETAIL
 NOT TO SCALE

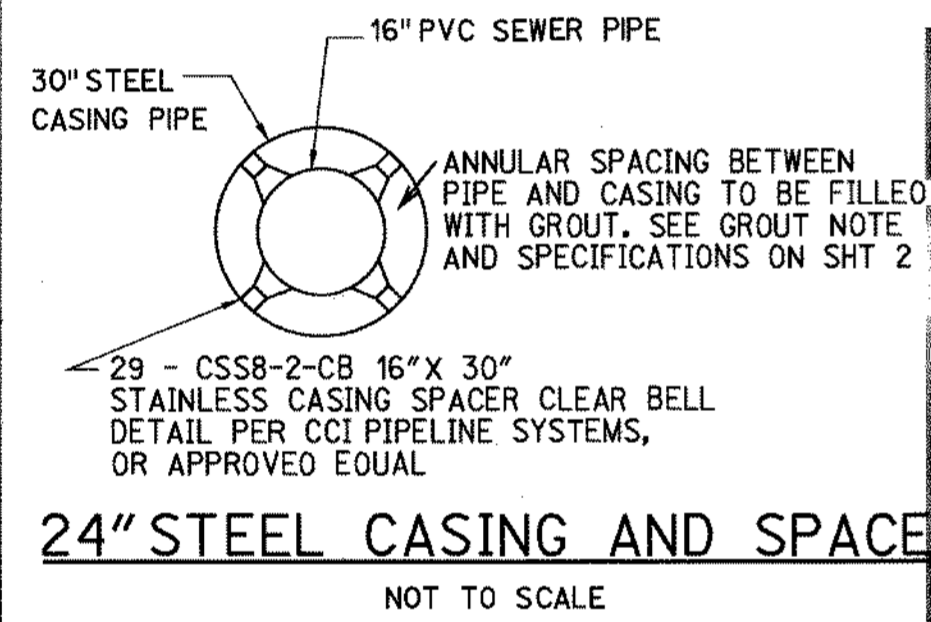
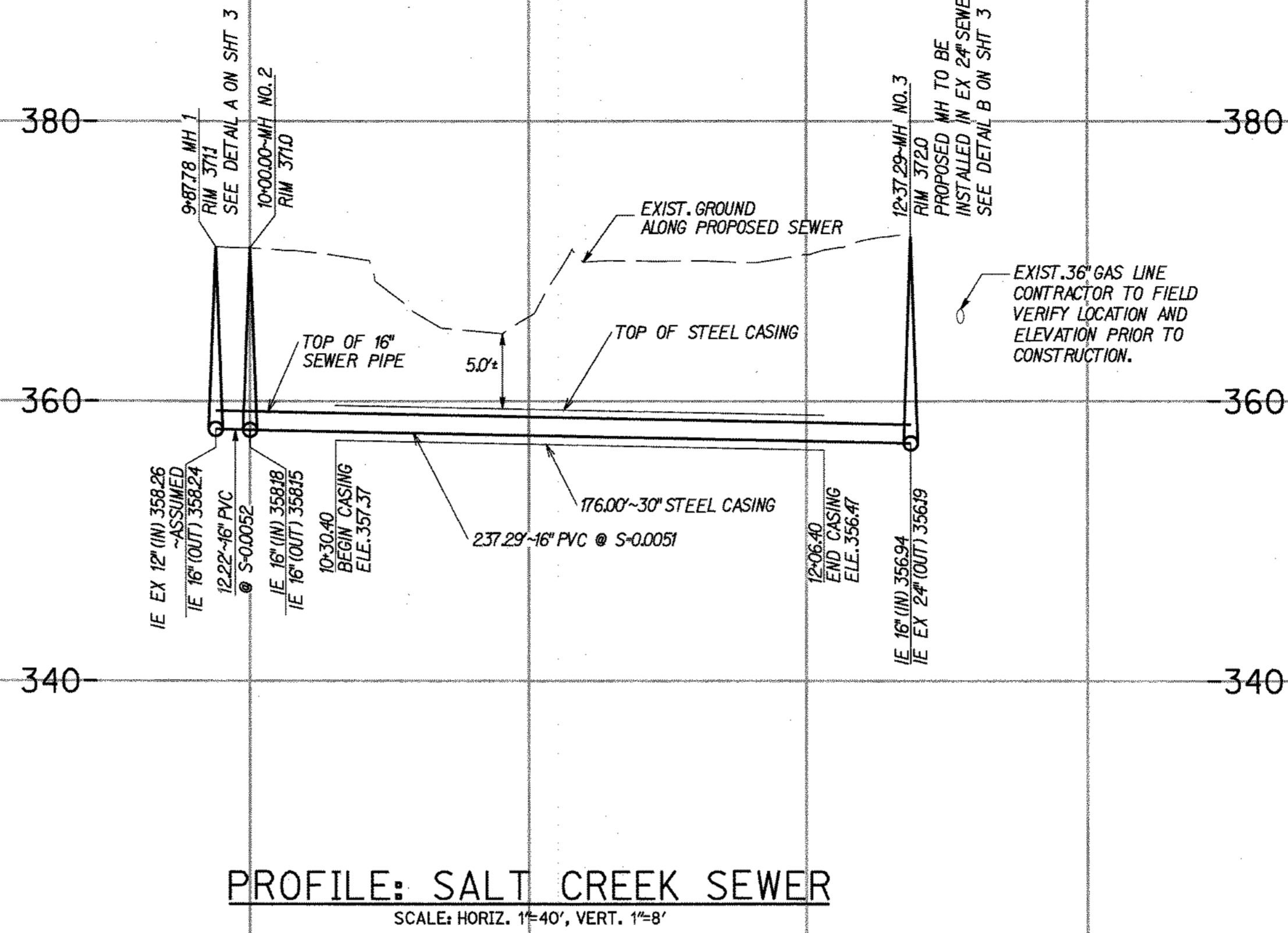
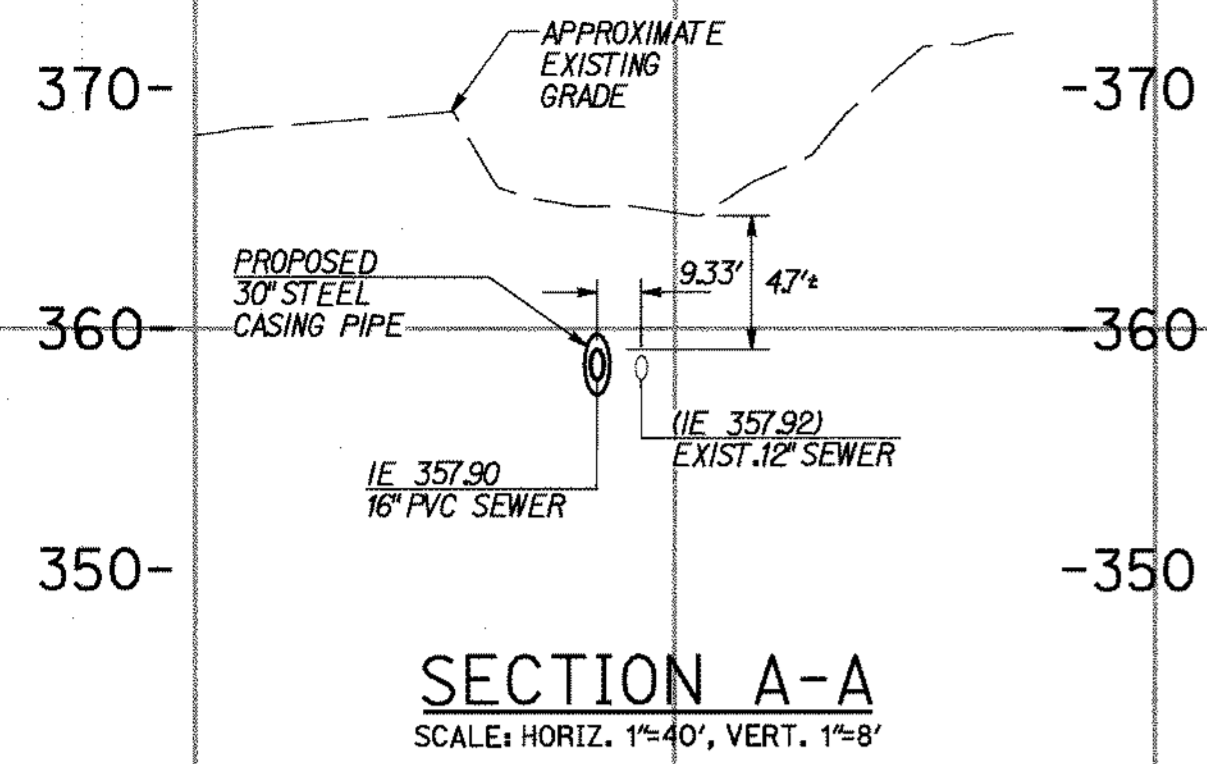
AS BUILT
 SIGNED _____ DATE _____
 PRINT NAME: JOHN D. GODDARD, JR. P.E. NO. 33037
 DISCIPLINE: CIVIL REGISTRATION EXPIRES: _____

RICK ENGINEERING COMPANY
 5620 FRIARS ROAD
 SAN DIEGO, CA 92110
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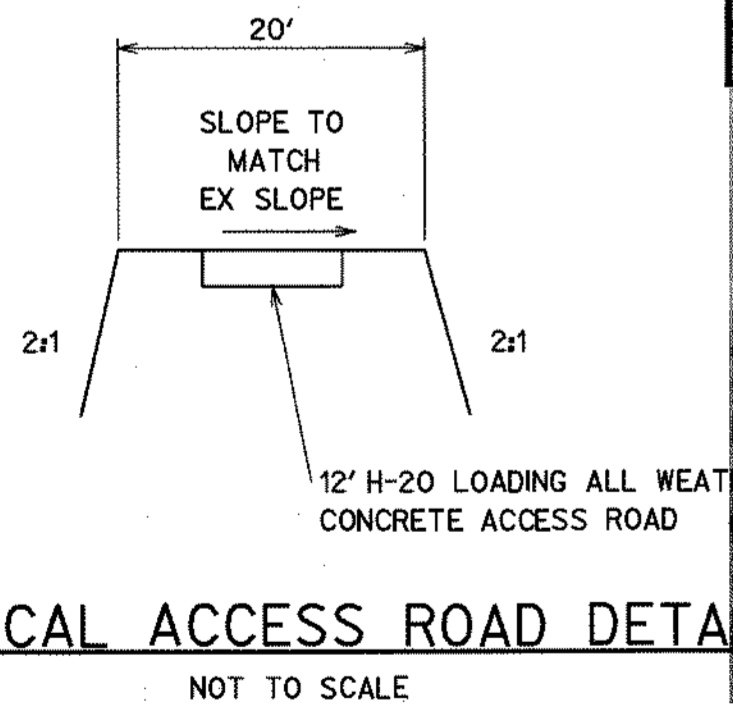


CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF CHULA VISTA	DEVELOPMENT SERVICES	Drawing No.
	DRW NO. 96-64					CITY CHULA VISTA VERTICAL CONTROL BENCHMARK, INDEX NO. 1750, DESCRIPTION: BRASS DISK IN WELL	Horizontal AS SHOWN	PT	PT	JOG	3/18/14	3/19/14	PLANS FOR THE IMPROVEMENT OF SEWER & TEMPORARY HI-LINE:		
Inspector							Vertical	Plans	Under Supervision Of		By	By	SALT CREEK SEWER		13045- 3
Date Completed							NA	ENGINEER	Date	R.C.E. No.	Office	Principal Civil Engineer			W.D.No. PC2232

SALT CREEK SEWER IMPROVEMENT PLAN



24" STEEL CASING AND SPACER
NOT TO SCALE



TYPICAL ACCESS ROAD DETAIL
NOT TO SCALE



SEWER DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N06°39'20"W		12.22'	16" PVC C905
2	N49°12'09"W		237.29'	16" PVC C905

TEMPORARY SEWER HI-LINE 1 DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
3	Δ=42°07'21"	200.00'	42.32'	X
4	N49°36'49"W		176.25'	X
5	Δ=03°14'36"	995.00'	56.33'	X
6	Δ=07°42'57"	600.00'	80.80'	X
7	N50°14'39"W		176.67'	X
8	Δ=24°51'23"	203.00'	88.07'	X
9	N24°20'46"W		198.38'	X
10	Δ=16°36'44"	200.00'	57.99'	X

CASING PIPE DATA			
NO.	DELTA OR BRG.	LENGTH	REMARKS
11	N49°12'09"W	176.00'	30" STEEL (0.5" THICK WALL)

TEMPORARY SEWER HI-LINE 2 DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
12	N50°14'39"W		53.88'	X
13	Δ=24°51'23"	214.20'	92.93'	X
14	N24°20'46"W		169.67'	X
15	Δ=24°10'40"	211.20'	89.12'	X

- NOTES:
- ALL ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES ON THIS PLAN ARE APPROXIMATE AND BASED ON EXISTING PLANS (SALT CREEK INTERCEPTOR, A PORTION OF REACH 4 & S, APPROVED ON 8/8/96).
 - CONTRACTOR TO VERIFY ALL EXISTING UTILITY ELEVATIONS AND CONNECTION POINTS BEFORE CONSTRUCTION.
 - CONTRACTOR TO ENSURE SEWER BEARING BASED ON FIELD SURVEY OF SEWER MH CONNECTION POINTS BEFORE COMMENCING JACK AND BORE WORK.
 - STANDARD J&B DOES NOT INVOLVE FRACKING TECHNOLOGY AND SHALL NOT BE PERMITTED.
 - CONTRACTOR TO REPLACE ANY DAMAGED ACCESS ROAD IN KIND. CONCRETE ACCESS ROAD TO BE REPLACED PER TYPICAL DETAIL THIS SHEET.

AS BUILT
 SIGNED _____ DATE _____
 PRINT NAME • JOHN D. GODDARD, JR. P.E. NO. 33037
 DISCIPLINE • CIVIL REGISTRATION EXPIRES _____

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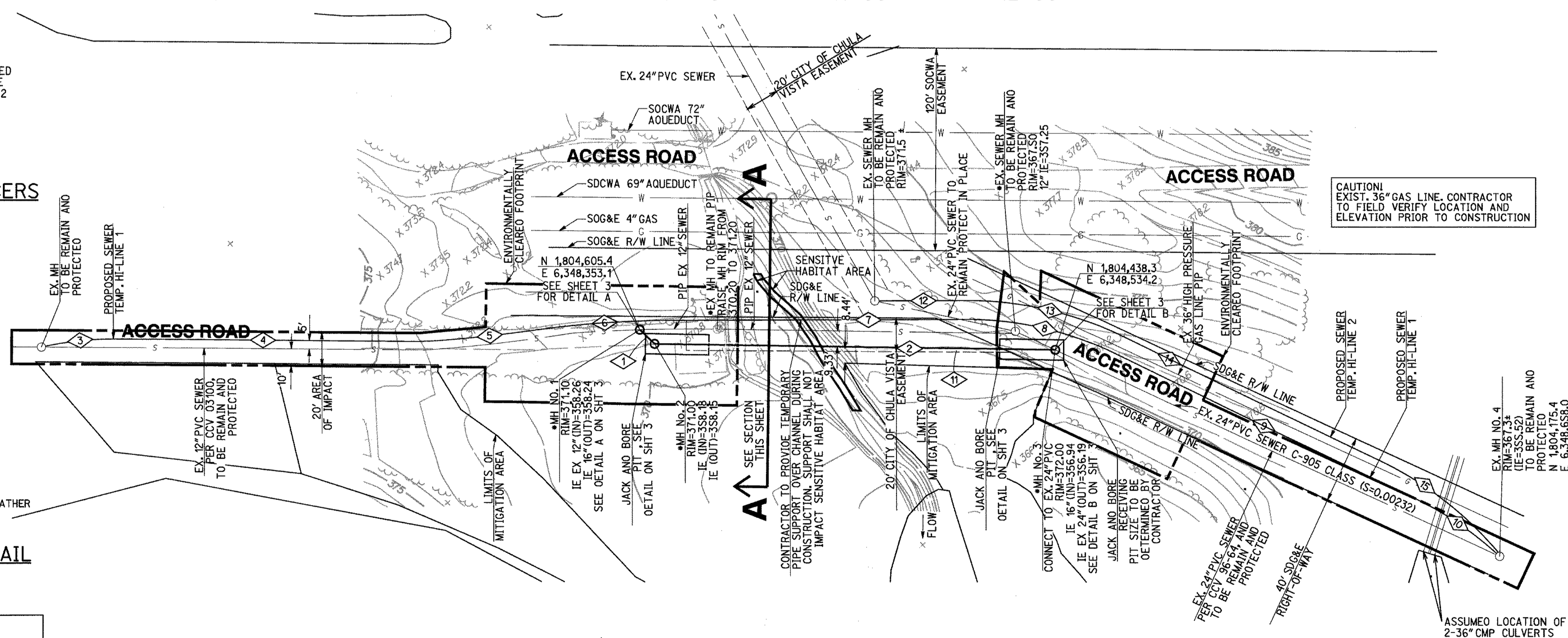
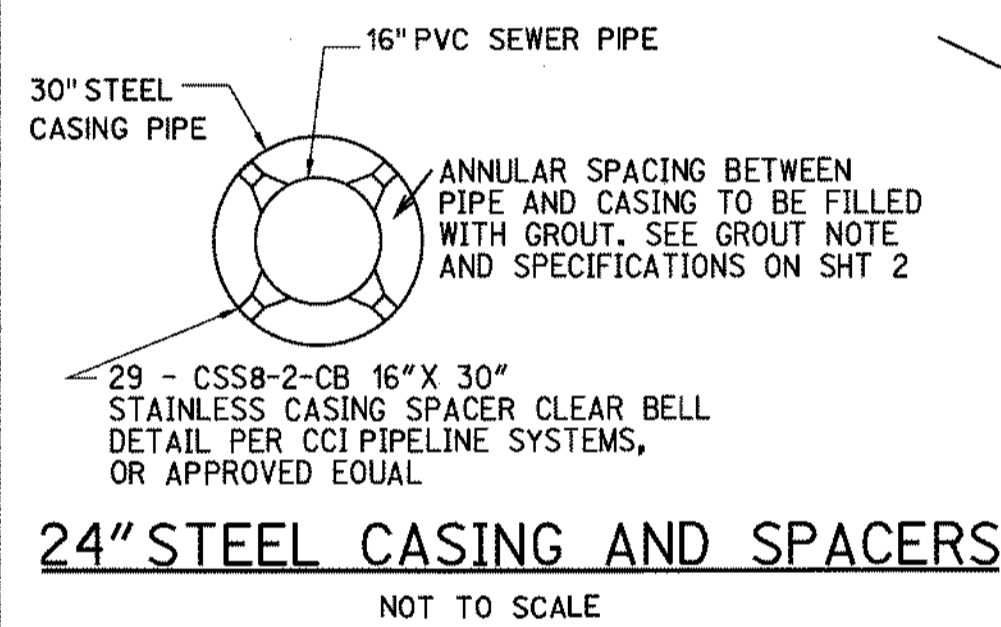
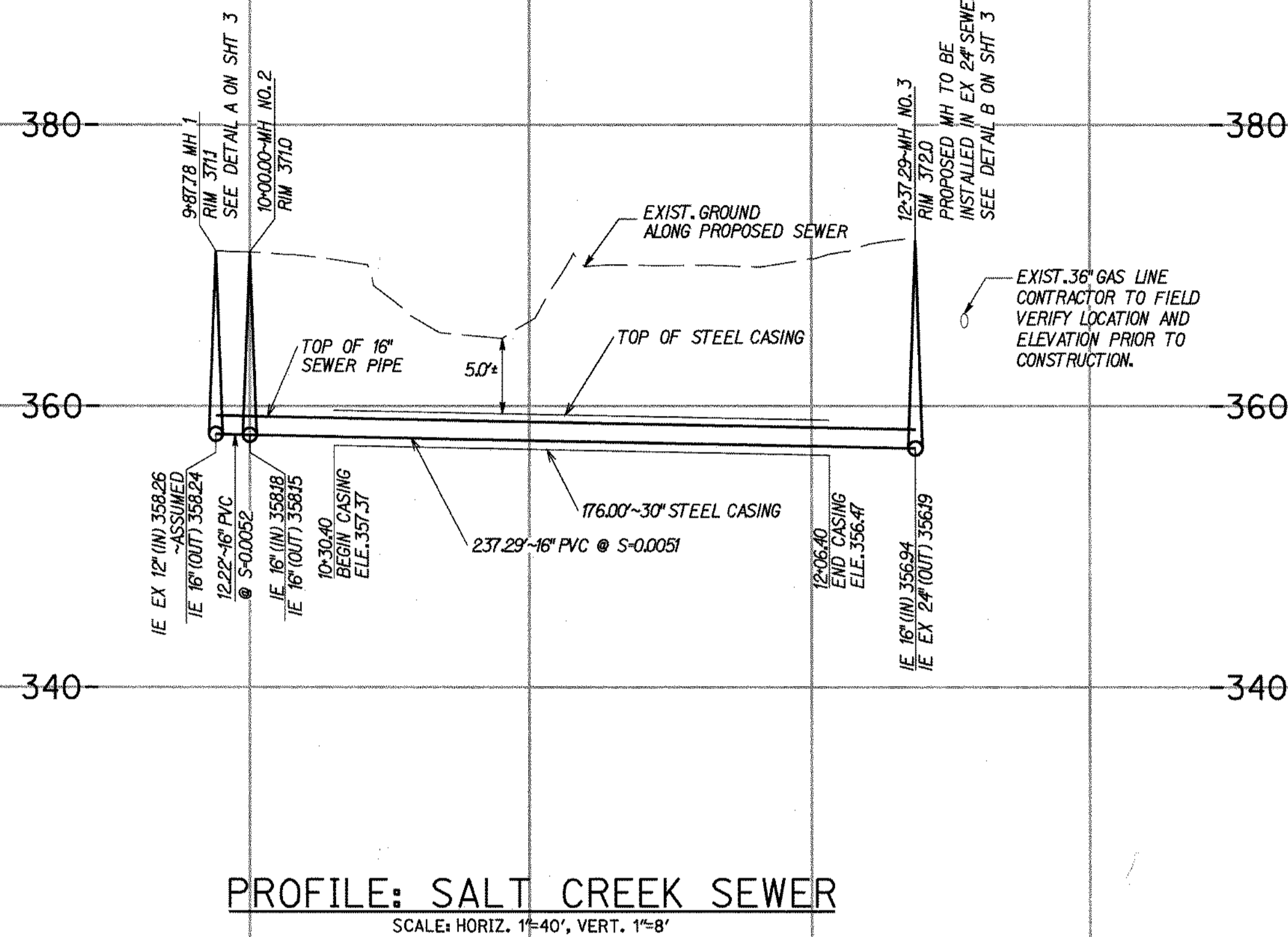
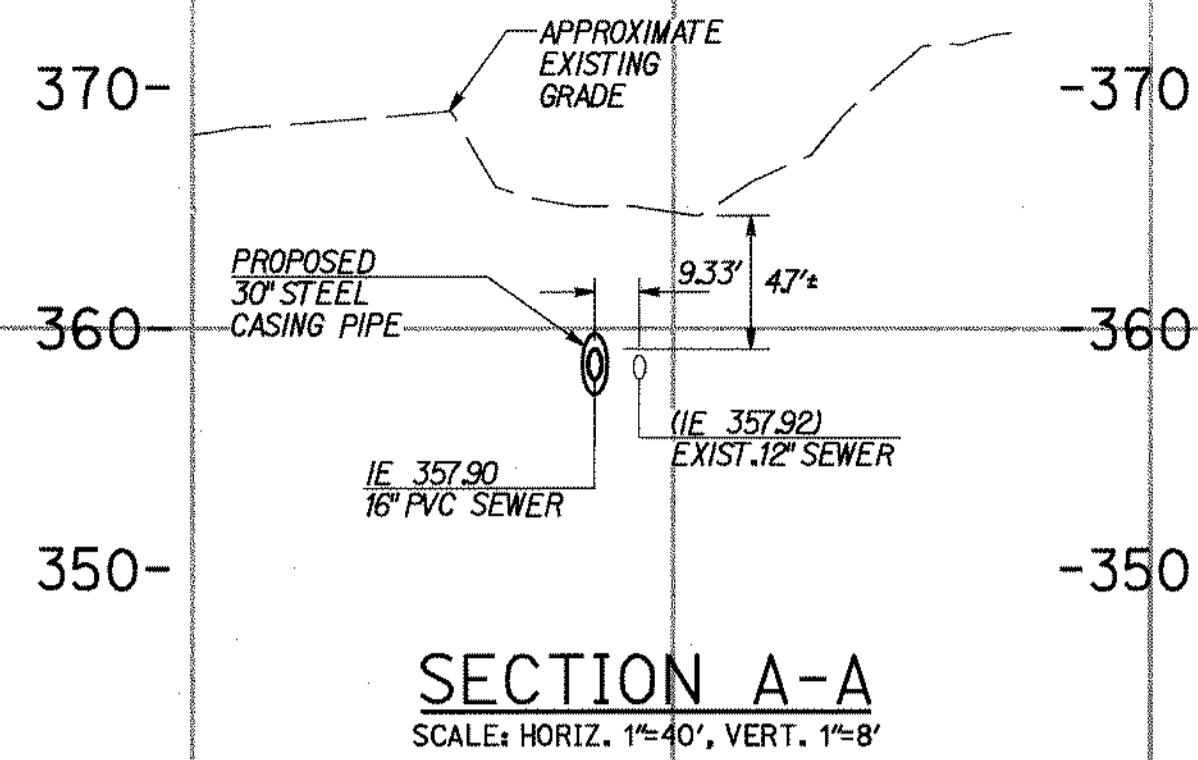
SPECIAL NOTE:
 PRE CONSTRUCTION INSPECTION DIVISION APPROVAL NEEDED, SEE SHEET 2 FOR HIGH LINE SEWER NOTES



• EPOXY WARREN SEAL MANHOLES AND LIDS (S TOTAL) MANHOLE LIDS LOCKING DEVICE PER SDR50 M-4

CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date	App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF CHULA VISTA DEVELOPMENT SERVICES	Drawing No.
Contractor	ORW NO. 96-64					CITY CHULA VISTA VERTICAL CONTROL BENCHMARK, INDEX NO. 1750, DESCRIPTION: BRASS DISK IN WELL	Horizontal AS SHOWN Vertical NA	PT	PT	JDG	3/18/14	3/11/14	PLANS FOR THE IMPROVEMENT OF SEWER & TEMPORARY HI-LINE: SALT CREEK SEWER	13045- 4
Inspector														W.O.Nc. PC232
Date Completed														

SALT CREEK SEWER IMPROVEMENT PLAN



SEWER DATA				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
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* EPOXY WARREN SEAL MANHOLES AND LIDS (5 TOTAL) MANHOLE LIDS LOCKING DEVICE PER SDRSO M-4

AS BUILT
 SIGNED _____ DATE: _____
 PRINT NAME: JOHN D. GODOARD, JR. P.E. NO. 33037
 DISCIPLINE: CIVIL REGISTRATION EXPIRES: _____

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 J-16629M

SPECIAL NOTE:
 PRE CONSTRUCTION INSPECTION DIVISION APPROVAL NEEDED, SEE SHEET 2 FOR HIGH LINE SEWER NOTES

PLAN: SALT CREEK SEWER
 GRAPHIC SCALE 1" = 40'



CONSTRUCTION RECORD	REFERENCES	By	REVISIONS	Date App'd	BENCH MARK	SCALE	Designed By	Drawn By	Checked By	Submitted	Approved	CITY OF CHULA VISTA	DEVELOPMENT SERVICES	Drawing No.
Contractor	ORW NO. 96-64				CITY CHULA VISTA VERTICAL CONTROL BENCHMARK, INDEX NO. 3150, DESCRIPTION BRASS DISK IN WELL.	Horizontal AS SHOWN Vertical NA	PT	John D. Godoard	Jog	3/18/14	3/19/14	PLANS FOR THE IMPROVEMENT OF SEWER & TEMPORARY HI-LINE: SALT CREEK SEWER		13045- 4
Inspector											By Tom Adler			W.O.No. PC2232
Date Completed											Principal Civil Engineer			

SALT CREEK SEWER IMPROVEMENT PLAN