ABBREVIATIONS A = AIR LINEAD = AREA DRAINAIP = ABANDONED IN PLACE BLDG = BUILDINGBM = BENCHMARKCATV = CABLE TELEVISION LINE CIP = CAST IRON PIPE CMP = CORRUGATED METAL PIPE CMPA = CORRUGATED METAL PIPE ARCH CO = CLEANOUT COA = CITY OF ALBUQUERQUE CONC = CONCRETECL = CENTERLINE DIA = DIAMETER DIP = DUCTILE IRON PIPE DTL = DETAIL DWG = DRAWINGEG = EXISTING GRADE ELEC. = ELECTRIC ELEV = ELEVATION EX = EXISTINGFF = FINISHED FLOOR ELEVATION FG = FINISHED GRADE FH = FIRE HYDRANT FL = FLOW LINEG = GAS PIPEGM = GAS METERGV = GATE VALVEHI PT = HIGH POINT INV = INVERT ELEVATION LF = LINEAL FEET LP = LIGHT POLEL/S = LANDSCAPINGMH = MANHOLENG = NATURAL GROUND OE = OVERHEAD ELECTRIC LINE OT = OVERHEAD TELEPHONE LINE PB = ELECTRICAL PULL BOX PCC = PORTLAND CEMENT CONCRETE PP = POWER POLE PROP = PROPOSEDPVC = POLYVINYL CHLORIDE PIPE RCP = REINFORCED CONCRETE PIPE R/W = RIGHT-OF-WAYS = SLOPESAS = SANITARY SEWER

 $\mathsf{SCANNED}_\mathsf{BY}$ PLANNING

2 3 4 6 6 7 8 9 10 11 12 13 14 15

SBS, LLC WATER AND SEWER EXTENSIONS

CITY OF ALBUQUERQUE,

I, Jean J. Bordenave, of the firm of Bordenave designs, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to The best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direct supervision and survey information provided NMPS number 5110



INDEX TO DRAWINGS

SHEET NO.	DESCRIPTION				
1	COVER SHEET AND INDEX TO DRAWINGS				
2	PLAN AND DETAILS				
3	BENTON ME PLUG DEMIL				
4	WATER & SEWER P&P				

APPROVED AS RECORD DRAWINGS DESIGN REVIEW SECTION CITY CONSTRUCTION ENGINEER DATE: 2/14/2007

DISCLOSURE

THE PLANS PREPARED BY LAWRENCE EARTH ENGINEERING MUST BE INCORPORATED INTO THE PLANS MADE BY LARRY READ & ASSOCIATES. Inc.

THE SUBJECT PROPERTY IS ON A FORMER LANDFILL. DUE TO THE SUBJECT PROPERTY BEING ON A FORMER LANDFILL. CERTAIN PRECAUTIONARY MEASURES MAY NEED TO BE TAKEN TO ENSURE HEALTH AND SAFETY OF THE PUBLIC. RECOMMENDATIONS MADE BY A PROFESSIONAL ENGINEER WITH EXPERTISE IN LANDFILL AND GAS ISSUES (AS REQUIRED BY THE MOST CURRENT VERSION OF THE "INTERIM GUIDELINES FOR DEVELOPMENT WITHIN 1000-FEET OF LANDFILLS") SHALL BE CONSULTED PRIOR TO THE DEVELOPMENT OF THE SITE.

ALL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) GUIDELINES SHALL BE MET. ALL MATERIAL SAFETY DATA SHEETS SHALL BE MAINTAINED ON SITE BY THE GENERAL CONTRACTOR OR PROJECT SUPERINTENDENT.

ENVIRONMENTAL APPROVAL THESE PLANS ARE HEREBY APPROVED AS NOTED: TY OF ALBUQUERQUE

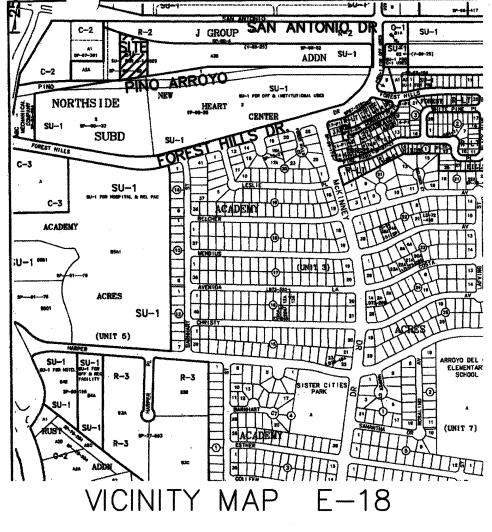
NOTICE TO CONTRACTOR:

REFER TO SHEET ENV-3, DETAIL 1 PREPARED LAWRENCE EARTH ENGINEERING FOR THE REQUIREMENTS OF LAND FILL GAS ABATMENT SYSTEM.

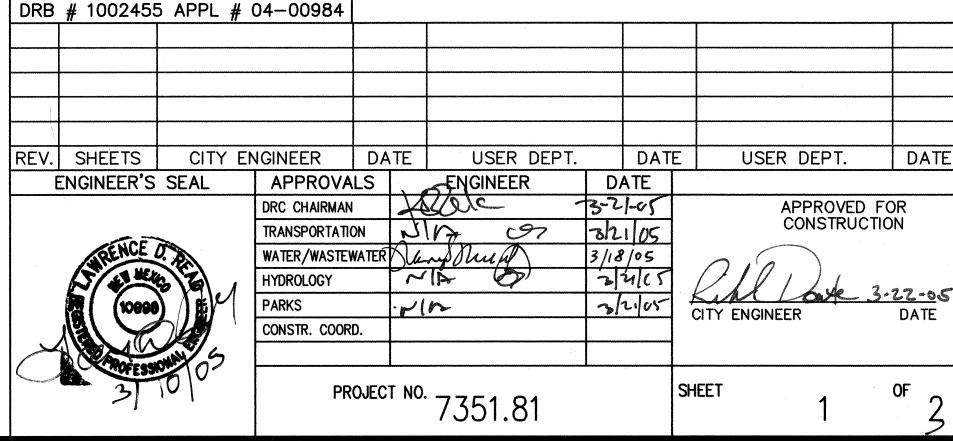
			LEGEND		
	NEW CURB AND GUTTER & SIDEWALK	S	EX SAS MANHOLE	—8" SAS—	PROPOSED SANITARY SEWER LINE
	EX CURB AND GUTTER & SIDEWALK	S	PROP SAS MANHOLE		EX SANITARY SEWER LINE
ď,	PROP FIRE HYDRANT		PROP WATER METER	—NEW 6" W—	PROPOSED WATER LINE
M	PROP WATER VALVE		PROPOSED SANITARY SEWER SERVICE	8"W	EX WATER LINE
	PROPERTY LINE	(S 83*39'25" W)	RECORD BEARING AND DISTANCES	N 0007'27" W	MEASURED BEARING AND DISTANCES

GENERAL NOTES

- 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION THROUGH MOST RECENT UPDATE AND WILL BE REFERRED TO HEREIN AS "STANDARD SPECIFICATIONS".
- 2. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY OR EASEMENTS MUST BE DONE FROM APPROVED WORK ORDER DOCUMENTS FROM THE CITY.
- 3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4. CONTRACTOR AGREES THAT HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD HARMLESS THE OWNER AND ENGINEER FROM ANY AND ALL LIABILITY REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR
- 5. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE ACCOMPLISHED IN ACCORDANCE WITH OSHA 29CFR 1926.650 SUBPART P.
- 6. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 7. CONTRACTOR SHALL SECURE A "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION (IF REQUIRED BY CITY OF ALBUQUERQUE PUBLIC WORKS).
- 8. PERMIT REQUESTS MAY BE DENIED OR DELAYED DUE TO CONFLICTS WITH OTHER PROJECTS IN THE AREA.
- 9. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. ONLY THE CITY SURVEYOR SHALL REPLACE SURVEY MONUMENTS. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO STANDARD SPECIFICATIONS SECTION 4.4.
- 10. CONTRACTOR SHALL COORDINATE WITH WATER SYSTEMS DIVISION (857-8200) SEVEN (7) WORKING DAYS PRIOR TO ANY WORK THAT MAY AFFECT EXISTING CITY PUBLIC WATER OR SEWER UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF WATER SHUTOFF. EXISTING CITY VALVES TO BE OPERATED BY CITY PERSONNEL ONLY.
- 11. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF STANDARD SPECIFICATIONS.
- 12. CONTRACTOR SHALL DETERMINE IN ADVANCE OF HIS CONSTRUCTION IF OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC. ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY OWNER TO REMOVE OR SUPPORT THE UTILITY OBSTRUCTION. ANY COST ASSOCIATED WITH THIS EFFORT SHALL BE THE RESPONSIBILITY OF CONTRACTOR.
- 13. PNM WILL PROVIDE AT NO COST TO THE CITY OR THE CONTRACTOR THE REQUIRED PERSONNEL FOR INSPECTION OR OBSERVATION DEEMED NECESSARY BY PNM WHILE THE CONTRACTOR IS EXPOSING PNM'S CABLES. HOWEVER, THE CONTRACTOR SHALL BE CHARGED THE TOTAL COST ASSOCIATED WITH REPAIRS TO ANY DAMAGED CABLES OR FOR ANY COST ASSOCIATED WITH SUPPORTING OR RELOCATING THE POLES AND CABLES DURING CONSTRUCTION.
- 14. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- 15. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL PERTINENT EXISTING UTILITIES AND/OR OBSTRUCTIONS. SHOULD A CONFLICT EXIST. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 16. EXISTING UTILITY LINE LOCATION ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.
- 17. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES.
- 18. CONTRACTOR SHALL SUPPORT ALL EXISTING, UNDERGROUND UTILITY LINES WHICH, BECOME EXPOSED DURING CONSTRUCTION. PAYMENT FOR SUPPORTING WORK SHALL BE INCIDENTAL TO WATERLINE AND/OR SEWER LINE COSTS.



- 19. CONTRACTOR IS TO SUPPORT AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC CABLES AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST TO THE OWNER. CABLE IS TO BE SUPPORTED AT A MAXIMUM OF EVERY FIFTEEN (15) FEET. CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER.
- 20. CONTRACTOR SHALL ASSIST THE ENGINEER/INSPECTOR IN THE RECORDING OF DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 21. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- 22. ALL FINAL BACKFILL FOR TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 90% MAXIMUM DENSITY PER ASTM D-1557 AND AS DIRECTED BY STANDARD SPECIFICATIONS SECTION 701.14.2 AND STANDARD DRAWING NUMBER 2315.
- 23. CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR PRIVATE ROADWAY EASEMENTS SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET OR INTO ANY PUBLIC DRAINAGE
- 24. REMOVALS SHALL BE DISPOSED OF OFF-SITE AT AN NMED APPROVED AND PERMITTED FACILITY AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 25. CONTRACTOR SHALL DISPOSE OF ALL UNSUITABLE MATERIAL IN AN ENVIRONMENTALLY ACCEPTABLE MANNER AT A LOCATION APPROVED AND PERMITTED BY NMED AND AS ACCEPTABLE TO THE PROJECT MANAGER. TRANSPORTATION OF ANY UNSUITABLE MATERIAL MUST BE BY A NMED APPROVED LICENSED HAULER. THERE WILL BE NO DIRECT COMPENSATION FOR THIS WORK.
- 26. CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER WHICH WILL MINIMIZE INTERFERENCE WITH LOCAL TRAFFIC.
- 27. ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR (24) HOURS OF
- 28. ALL EXISTING SIGNS, MARKERS, DELINEATORS, ETC., WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, STORED AND RE-SET BY THE CONTRACTOR.
- 29. WHEN ABUTTING EXISTING PAVEMENT TO NEW, SAW CUT EXISTING PAVEMENT TO A STRAIGHT EDGE AND AT A RIGHT ANGLE. OR AS APPROVED BY THE FIELD ENGINEER. REMOVAL OF BROKEN OR CRACKED PAVEMENT WILL ALSO BE REQUIRED.
- 30. REMOVAL OF EXISTING CURB AND GUTTER OR SIDEWALK SHALL BE TO THE NEAREST JOINT OR SAW CUT.
- 31. AT HIS OWN EXPENSE, CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, HANDICAP RAMPS, AND SIDEWALK DURING CONSTRUCTION APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE, PER STANDARD SPECIFICATIONS.
- 32. ALL STREET STRIPING, ALTERED OR DESTROYED, SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY CONTRACTOR TO SAME LOCATION AS EXISTING, OR AS INDICATED BY THIS PLAN SET.
- 33. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.



LARRY READ & ASSOCIATES, Inc.

Civil Engineers 4800-C Juan Tabo Blvd. NE Albuquerque, New Mexico 87111 (505) 237-8421

UE = UNDERGROUND ELECTRIC UT = UNDERGROUND TELEPHONE

W = WATER

TA = TOP OF ASPHALT PAVEMENT

TC = TOP OF CONCRETE SLAB (PAVEMENT)

TAC = TOP OF ASPHALT CURB

TCC = TOP OF CONCRETE CURB

TS = TOP OF SIDEWALK

TW = TOP OF WALL

TYP = TYPICAL

= WATER METER

SD = STORM DRAIN

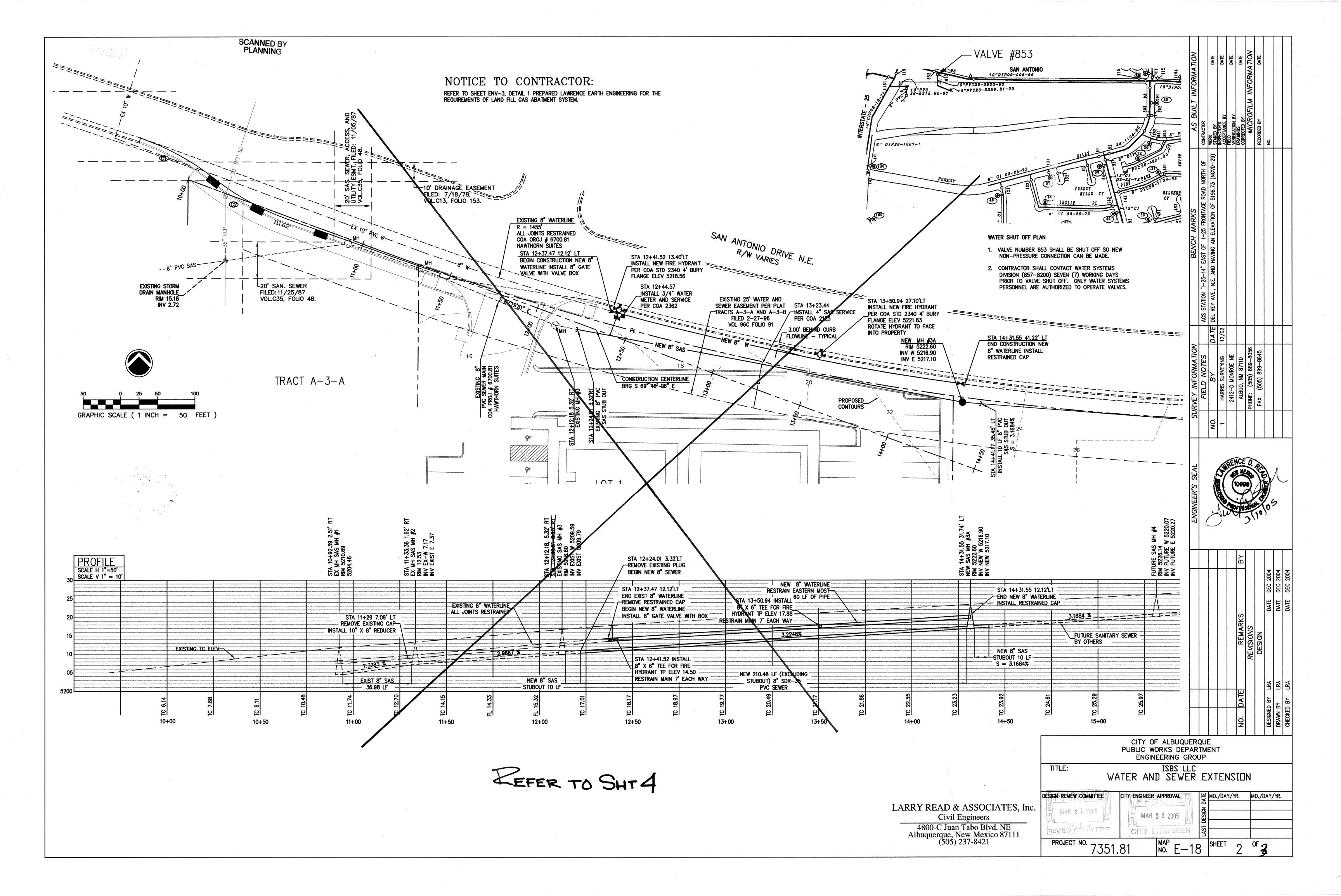
STA = STATION

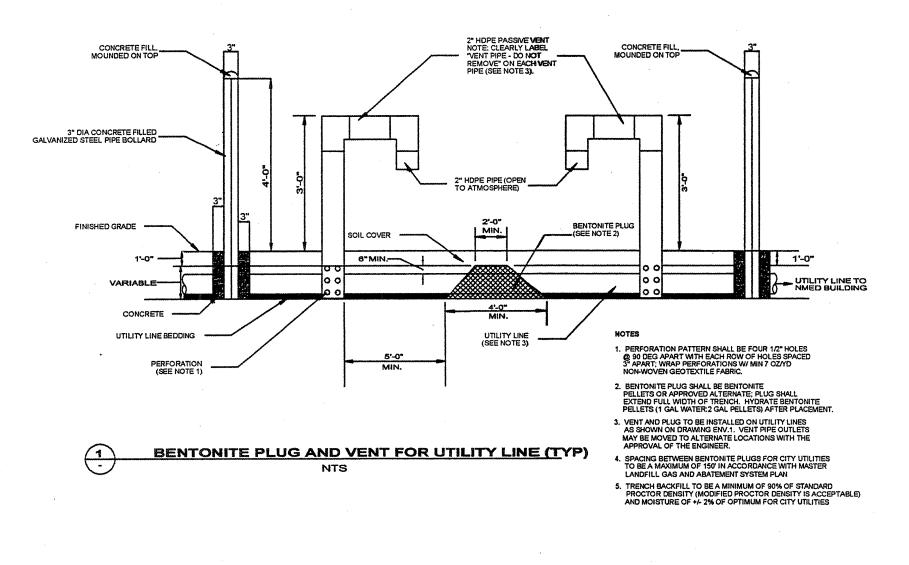
STD = STANDARD

SW = SIDEWALK

T = TELEPHONE

WV = WATER VALVE

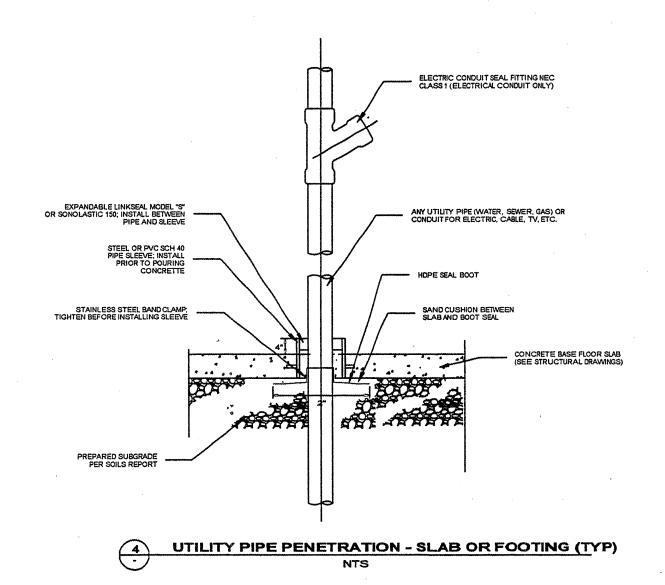


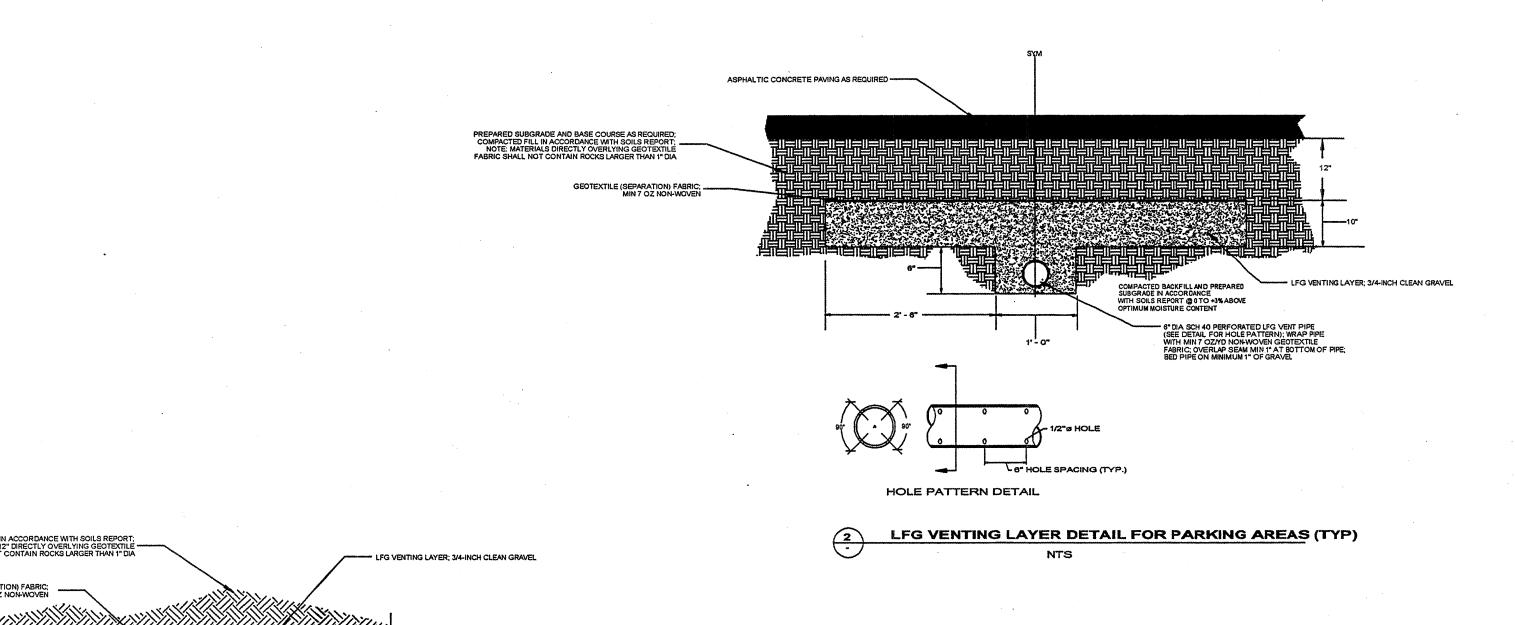


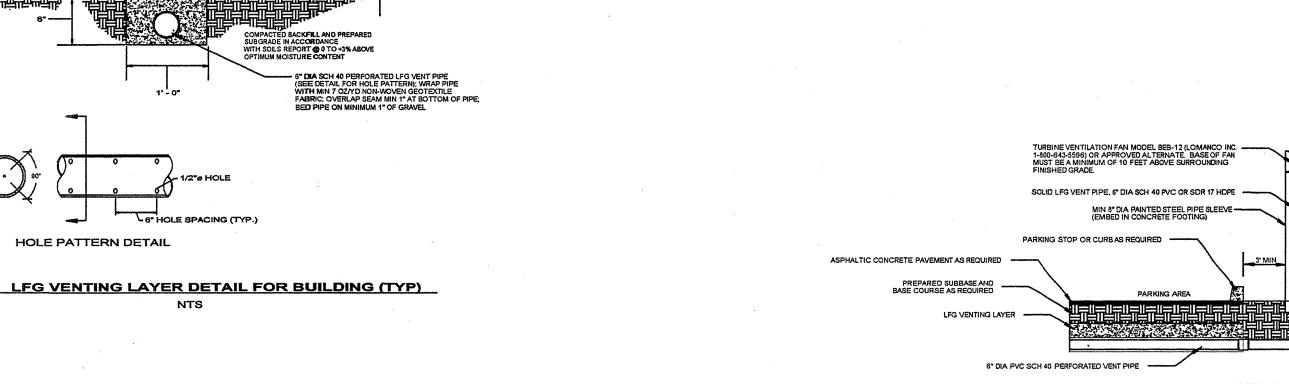
6" HOLE SPACING (TYP.)

NTS

HOLE PATTERN DETAIL



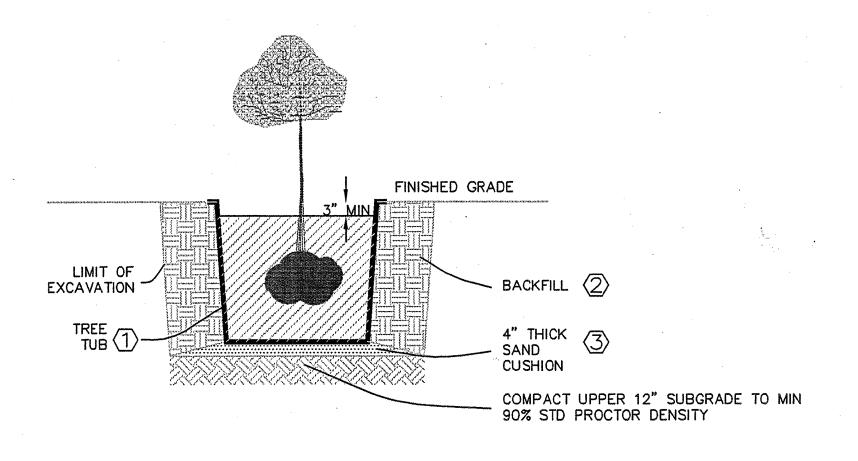




NOTE: SEE DETAIL 2 THIS SHEET FOR DIMENSIONS 3 LFG VENTING LAYER OUTLET DETAIL FOR PARKING AREAS (TYP)

NTS

6" DIA SCH 40 PVC RISER

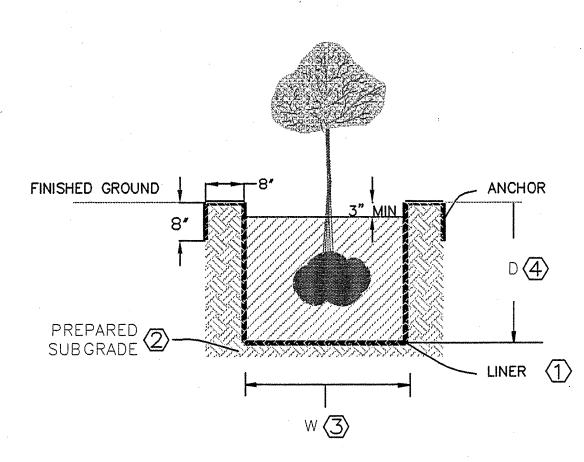


6 LINED TREE PLANTER DETIAL - OPTION A

NTS

KEYED NOTES;

- The big planters.com (1-800-262-3296) or approved equal. Size to be determined by Landscape contractor/ professional.
- 2- SELECT BACKFILL W/ NO ROCKS LARGER THAN 1" DIA. HAND TAMP BACKFILL FIRM IN LIFTS NO GREATER THAN 6" LOOSE. BACKFILLING SHALL NOT PROCEED AHEAD OF FILLING INSIDE THE TREE TUB.
- (3)- CLEAN SILICA SAND OR ROUNDED PEA GRAVEL



7 LINED TREE PLANTER DETIAL - OPTION B
NTS

KEYED NOTES:

- PLANTER LINER. 45-mil THICK EPDM. NO SEAMS INSIDE PLANTER. PREPARE SIDES OF EXCAVATION PRIOR TO PLACEMENT OF LINER BY REMOVING ALL SHARP OR PROTRUDING OBJECTS SUCH AS ROCKS, ROOTS, STICKS, DEBRIS, OR OTHER OBJECTS THAT COULD PUNCTURE LINER.
- 2- PREPARE SUBGRADE BENEATH LINER BY COMPACTING UPPER 12" TO MIN 90% STD PROCTOR DENSITY. REMOVE ALL SHARP OBJECTS IN UPPER 6" AS IN (1) ABOVE OR PLACE 4" SAND CUSHION BETWEEN PREPARED SUBGRADE AND LINER (SAND CUSHION SHALL BE CLEAN SILICA SAND OR ROUNDED PEA GRAVEL).
- PLANTER WIDTH IS DETERMINED BY LANDSCAPE CONTRACTOR/PROFESSIONAL, BUT NOT TO EXCEED 72 INCHES.
- 4- PLANTER DEPTH AS DETERMINED BY LANDSCAPE CONTRACTOR/PROFESSIONAL, BUT NOT TO EXCEED 38 INCHES.

23 Jun 2004 REVISIONS 1 1/12/05 INTERA COMMENTS 10/20/04 2 3/17/05 ADD NOTES 4,5 OF DETAIL I

RQU AIL. TEM S SY

ABATEMENT AR 3 ONME

