

PLANS FOR THE CONSTRUCTION OF
STORM DRAIN RELOCATION
 BROOKHAVEN CLUB DRIVE

FOR
VITRUVIAN PARK - PHASE 1 - SOUTH
TOWN OF ADDISON, TEXAS
 PUBLIC WORKS # 2007-001

OWNER/DEVELOPER:

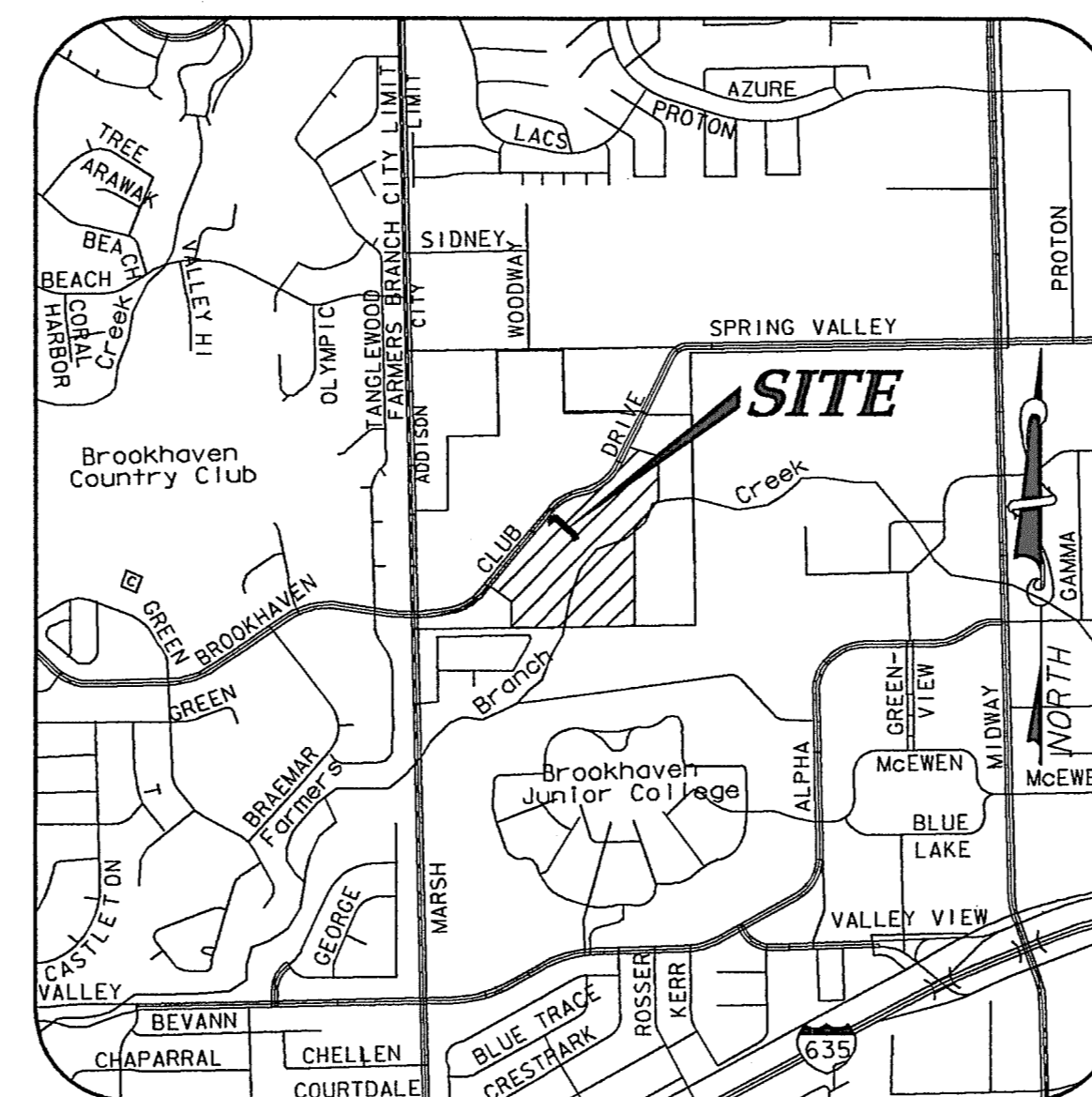
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VICINITY MAP

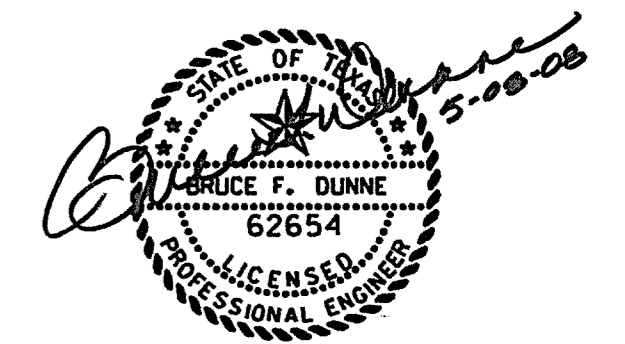
NOT TO SCALE
 (MAPSCO GRID 13 & 14)

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APPROVED FOR
 CONSTRUCTION
 Town of Addison
 Public Works Department
 APPROVED BY: *CURT BARNETT*
 DATE: 5-20-08

All responsibility for the adequacy of these plans remains with the Engineer who prepared them. In approving these plans, the Town of Addison makes no representation of adequacy of the work of the Design Engineer.



icon Consulting Engineers, Inc.
 Civil Engineers - Designers - Planners

MAY, 2008

PROJECT 5019-01

icon Consulting Engineers, Inc. Civil Engineers - Designers - Planners
 5/8/08
 2007-01
 STORM DRAIN RELOCATION - BROOKHAVEN CLUB DRIVE

LEGEND

	EXISTING	PROPOSED	FUTURE
PROPERTY LINE			N/A
BUILDING			
FINISH FLOOR ELEVATION	FFE=650.00	FFE=650.00	N/A
SPOT ELEVATION	x 650.50	x 650.50	N/A
CURB			
ASPHALT PAVEMENT			N/A
RIDGE LINE	N/A	RL	N/A
SWALE or VALLEY GUTTER			N/A
CONTOUR LINE	675	675	674
STORM DRAIN	21"SD	21"SD	
STORM DRAIN MANHOLE			
CURB INLET			
RECESSED CURB INLET			
GRATE INLET			N/A
WATER LINE	8"W	8"W	8"W
FIRE HYDRANT			N/A
WATER VALVE			N/A
WATER METER BOX			N/A
IRRIGATION METER	N/A		N/A
SANITARY SEWER LINE	8"SS	8"SS	8"SS
SANITARY SEWER MANHOLE	SSMH		
CLEANOUT	CO		
LIGHT POLE			N/A
POWER POLE	PP		N/A
DOWN GUY			N/A
SIGN			N/A
ACCESSIBLE PARKING			N/A
RETAINING WALL			N/A
WOOD FENCE			N/A
SCREEN WALL FENCE			N/A
CHAIN LINK FENCE			N/A
WIRE FENCE			N/A
TREE		N/A	N/A
OVERHEAD WRES	OHW	N/A	N/A
OVERHEAD ELECTRIC LINE	OHE	OHE	N/A
OVERHEAD TELEPHONE LINE	OHT	OHT	N/A
UNDERGROUND ELECTRIC LINE	UGE	UGE	N/A
UNDERGROUND TELEPHONE LINE	UGT	UGT	N/A
UNDERGROUND CABLE LINE	CATV	CATV	N/A
ELECTRIC METER	EM	EM	N/A
ELECTRIC TRANSFORMER	ET	ET	N/A
GAS METER	GM	GM	N/A
GAS LINE	G	G	N/A
AIR CONDITIONING UNIT	ACU	ACU	N/A

ABBREVIATIONS

APPROX	APPROXIMATELY	FW	FIRE WATER	OCEW	ON CENTER EACH WAY
ASPH	ASPHALT	G	GAS	OHE	OVERHEAD ELECTRIC
BC	BACK OF CURB	GI	GRATE INLET	R	RADIUS
B-B	BACK TO BACK OF CURB	GM	GAS METER	RCB	REINFORCED CONCRETE BOX
BM	BENCHMARK	HDPE	HIGH DENSITY POLYETHYLENE PIPE	RCI	RECESSED CURB INLET
BW	BOTTOM OF WALL	HDWL	HEADWALL	RCF	REINFORCED CONCRETE PIPE
CATV	CABLE TV	HMHC	HOT MIX ASPHALTIC CONCRETE	RCPC	REINFORCED CONCRETE CYLINDRICAL PIPE
CFS	CUBIC FEET PER SECOND	HORIZ	HORIZONTAL		
CI	CURB INLET	HP	HIGH POINT	REINF	REINFORCED
CMF	CORRUGATED METAL PIPE	HVAC	HEATING, VENTILATION AND AIR CONDITIONING	RL	RIDGE LINE
CO	CLEANOUT	IR	IRRIGATION	ROW	RIGHT OF WAY
CONC	CONCRETE	IRR	IRRIGATION	RT	RIGHT
CONST	CONSTRUCT	JB	JUNCTION BOX	SF	SQUARE FOOT
CL	CENTER LINE	JT	JOINT	SD	STORM DRAIN
DCO	DOUBLE CLEANOUT	LF	LINEAR FEET	SO	SQUARE
DIA	DIAMETER	LP	LOW POINT	SS	SANITARY SEWER
DIP	DUCTILE IRON PIPE	LT	LEFT	STA	STATION
DHW	DOMESTIC WATER	MH	MANHOLE	SY	SQUARE YARD
EL	ELEVATION	N/A	NOT APPLICABLE	T	TELEPHONE
EMH	ELECTRIC MANHOLE	NG	NATURAL GROUND (EXISTING)	TC	TOP OF CURB
EP	EDGE OF PAVEMENT	PC	POINT OF CURVATURE	TG	TOP OF GROUND
EX	EXISTING	PCC	POINT OF COMPOUND CURVATURE	TMH	TELEPHONE MANHOLE
FC	FACE OF CURB	PI	POINT OF INTERSECTION	TQB	TOP OF BANK
F-F	FACE TO FACE OF CURB	PIV	POST INDICATOR VALVE	TOS	TOP OF SLOPE
FFE	FINISHED FLOOR ELEVATION	PL	PROPERTY LINE	TP	TOP OF PAVEMENT
FH	FIRE HYDRANT	PP	POWER POLE	TW	TOP OF WALL
FM	FORCE MAIN	PRC	POINT OF REVERSE CURVATURE	TYP	TYPICAL
FIB	FIBER OPTICS	PROP	PROPOSED	UGE	UNDERGROUND ELECTRIC
FP	FINISHED PAD	PT	POINT OF TANGENCY	VCP	VITRIFIED CLAY PIPE
FPS	FEET PER SECOND	PVC	POLYVINYL CHLORIDE PIPE	W	WATER
FL	FLOW LINE	PVM	PAVEMENT	WV	WATER VALVE

GENERAL CONSTRUCTION NOTES

1. STANDARDS AND SPECIFICATIONS: ALL MATERIALS, CONSTRUCTION METHODS, WORKMANSHIP, EQUIPMENT, SERVICES AND TESTING FOR ALL PUBLIC IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' ORDINANCES, REGULATIONS, REQUIREMENTS, STATUTES, SPECIFICATIONS AND DETAILS, LATEST PRINTING AND AMENDMENTS THERETO, THE GOVERNING AUTHORITIES' PUBLIC WORKS AND WATER DEPARTMENT REGULATIONS, PLUMBING CODES, AND FIRE DEPARTMENT REGULATIONS FOR ALL PRIVATE IMPROVEMENTS WHERE APPLICABLE. ALL OTHER PRIVATE CONSTRUCTION, NOT REGULATED BY THE GOVERNING AUTHORITY, SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS - NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, LATEST PRINTING AND AMENDMENTS THERETO, EXCEPT AS MODIFIED OR AMENDED BY THE PROJECT CONTRACT DOCUMENTS.

2. EXAMINATION OF SITE: THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INVESTIGATED AND SATISFIED HIMSELF AS TO THE CONDITIONS AFFECTING THE WORK, INCLUDING BUT NOT RESTRICTED TO THOSE BEARING UPON TRANSPORTATION, DISPOSAL, HANDLING AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRIC POWER, ROADS AND UNCERTAINTIES OF WEATHER, OR SIMILAR PHYSICAL CONDITIONS AT THE SITE. THE CONTRACTOR ACKNOWLEDGES THAT HE HAS INSPECTED THE SITE OF THE WORK AND IS FAMILIAR WITH THE SOIL CONDITIONS TO BE ENCOUNTERED. ANY FAILURE BY THE CONTRACTOR TO ACCOUNT HIMSELF WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY OR COST OF SUCCESSFULLY PERFORMING THE WORK. THE DEVELOPER ASSUMES NO RESPONSIBILITY FOR ANY CONCLUSIONS OR INTERPRETATIONS MADE BY THE CONTRACTOR ON THE BASIS OF THE INFORMATION MADE AVAILABLE BY THE DEVELOPER.

3. SUBSURFACE INVESTIGATION: SUBSURFACE EXPLORATION TO ASCERTAIN THE NATURE OF SOILS, INCLUDING THE AMOUNT OF ROCK, IF ANY, IS THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE SUCH SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO DETERMINE THE NATURE OF THE MATERIAL TO BE ENCOUNTERED. SOME SUBSURFACE EXPLORATION HAS BEEN PERFORMED BY THE GEOTECHNICAL ENGINEER OF REHEAR, OR SIMILAR PROFESSIONAL ENGINEER FOR INFORMATIONAL PURPOSES. THE DEVELOPER AND ENGINEER DISCLAIM ANY RESPONSIBILITY FOR THE ACCURACY, TRUE LOCATION AND EXTENT OF THE SOILS INFORMATION THAT HAS BEEN PREPARED BY OTHERS. THE FURTHER DISCLAIM RESPONSIBILITY FOR INTERPRETATION OF THAT DATA BY THE CONTRACTOR, AS IN PROJECTING SOIL BEARING VALUES, ROCK PROFILES, SOIL STABILITY AND THE PRESENCE, LEVEL AND EXTENT OF UNDERGROUND WATER.

4. TOPOGRAPHIC SURVEY: TOPOGRAPHIC SURVEY INFORMATION SHOWN ON THE PLANS IS PROVIDED FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE INFORMATION SHOWN IS CORRECT, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY ERRORS, DISCREPANCIES OR OMISSIONS TO THE SURVEY INFORMATION PROVIDED. ANY COSTS INCURRED AS THE RESULT OF NOT CONFIRMING THE ACTUAL SURVEY SHALL BE BORNE BY THE CONTRACTOR.

5. COMPLIANCE WITH LAWS: THE CONTRACTOR SHALL FULLY COMPLY WITH ALL LOCAL, STATE AND FEDERAL LAWS, INCLUDING ALL CODES, ORDINANCES AND REGULATIONS APPLICABLE TO THIS CONTRACT AND THE WORK TO BE DONE THEREUNDER, WHICH EXIST OR MAY BE ENACTED LATER BY GOVERNMENTAL BODIES HAVING JURISDICTION OR AUTHORITY FOR SUCH ENACTMENT. ALL WORK REQUIRED UNDER THIS CONTRACT SHALL COMPLY WITH ALL REQUIREMENTS OF LAW, REGULATION, PERMIT OR LICENSE. IF THE CONTRACTOR FINDS THAT THERE IS A VARIANCE, HE SHALL IMMEDIATELY REPORT THIS TO THE DEVELOPER FOR RESOLUTION.

6. PUBLIC CONVENIENCE AND SAFETY: IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

MATERIALS STORED ON THE WORK SITE SHALL BE SO PLACED, AND THE WORK SHALL AT ALL TIMES BE SO CONDUCTED, AS TO CAUSE NO GREATER OBSTRUCTION TO THE TRAVELING PUBLIC THAN IS CONSIDERED ACCEPTABLE BY THE GOVERNING AUTHORITIES AND THE DEVELOPER. THE MATERIALS EXCAVATED SHALL BE PLACED SO AS NOT TO ENDANGER THE WORK OR PREVENT FREE ACCESS TO ALL FIRE HYDRANTS, WATER VALVES, GAS VALVES, MANHOLES, AND FIRE ALARM OR POLICE CALL BOXES IN THE VICINITY.

THE DEVELOPER RESERVES THE RIGHT TO REMEDY ANY NEGLECT ON THE PART OF THE CONTRACTOR WITH REGARDS TO THE PUBLIC CONVENIENCE AND SAFETY WHICH MAY COME TO THE DEVELOPER'S ATTENTION, AFTER 24 HOURS NOTICE IN WRITING TO THE CONTRACTOR. SAVE IN CASES OF EMERGENCY, WHEN THE DEVELOPER SHALL HAVE THE RIGHT TO REMEDY ANY NEGLECT WITHOUT NOTICE, AND, IN EITHER CASE, THE COST OF SUCH WORK DONE BY THE DEVELOPER SHALL BE DEDUCTED FROM THE MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE DEVELOPER AND THE GOVERNING AUTHORITIES WHEN ANY STREET IS TO BE CLOSED OR OBSTRUCTED; SUCH NOTICE SHALL BE GIVEN TO THE DEVELOPER AND THE GOVERNING AUTHORITIES. WHERE THE CONTRACTOR IS REQUIRED TO CONSTRUCT TEMPORARY BRIDGES OR TO MAKE OTHER ARRANGEMENTS FOR CROSSING OVER DITCHES OR STREAMS, HIS RESPONSIBILITY FOR ACCIDENTS SHALL INCLUDE THE ROADWAY APPROACHES AS WELL AS THE STRUCTURES OF SUCH CROSSINGS.

7. STORM WATER POLLUTION PREVENTION PLAN (SWP3): THE CONTRACTOR SHALL COMPLY WITH THE CONDITIONS OF THE SWP3 WHILE CONDUCTING HIS ACTIVITIES ON THE PROJECT, IN ADDITION TO CONSTRUCTING THOSE ITEMS INDICATED ON THE PLANS SHEETS. COMPLIANCE WITH THE SWP3 INCLUDES CONFORMANCE TO CERTAIN PRACTICES AND PROCEDURES (IDENTIFIED IN THE SWP3) DURING PROJECT CONSTRUCTION.

8. PERMITS AND LICENSES: THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND LICENSES NECESSARY FOR THE EXECUTION OF THE WORK AND SHALL FULLY COMPLY WITH ALL THEIR TERMS AND CONDITIONS. WHENEVER THE WORK UNDER THIS CONTRACT REQUIRES THE OBTAINING OF PERMITS FROM THE GOVERNING AUTHORITIES, THE CONTRACTOR SHALL FURNISH DUPLICATE COPIES OF SUCH PERMITS TO THE DEVELOPER BEFORE THE WORK COVERED THEREBY IS STARTED. NO WORK WILL BE ALLOWED TO PROCEED BEFORE SUCH PERMITS ARE OBTAINED.

9. IMPACT FEES: THE DEVELOPER WILL PAY ALL IMPACT FEES APPLICABLE TO THE PROJECT.

10. BONDS: PERFORMANCE, PAYMENT AND MAINTENANCE BONDS WILL BE REQUIRED FROM THE CONTRACTOR FOR ALL WORK CONSIDERED TO BE "PUBLIC" IMPROVEMENTS. BONDS SHALL BE IN THE FORM AND IN THE AMOUNTS AS REQUIRED BY THE GOVERNING AUTHORITIES.

11. VENDOR'S CERTIFICATION: ALL MATERIALS USED IN CONSTRUCTION SHALL HAVE A VENDOR'S CERTIFIED TEST REPORT. TEST REPORTS SHALL BE DELIVERED TO THE ENGINEER BEFORE PERMISSION WILL BE GRANTED FOR USE OF THE MATERIAL. ALL VENDOR'S TEST REPORTS SHALL BE SUBJECT TO REVIEW BY THE ENGINEER, AND SHALL BE SUBJECT TO VERIFICATION BY TESTING OF SAMPLES OF MATERIALS AS RECEIVED FOR USE ON THE PROJECT. IN THE EVENT ADDITIONAL TESTS ARE REQUIRED, THEY SHALL BE PERFORMED BY AN APPROVED INDEPENDENT TESTING LABORATORY AND SHALL BE PAID FOR BY THE CONTRACTOR.

12. TESTING: THE TESTING AND CONTROL OF ALL MATERIALS USED IN THE WORK SHALL BE DONE BY AN INDEPENDENT TESTING LABORATORY EMPLOYED AND DIRECTED BY THE DEVELOPER. THE CONTRACTOR SHALL FULLY COMPLY WITH THE TESTING AND CONTROL WITH THE PLANS AND SPECIFICATIONS. SUBSEQUENT TESTS NECESSARY TO DETERMINE THE ACCEPTABILITY OF MATERIALS OR CONSTRUCTION SHALL BE FURNISHED AND PAID BY THE CONTRACTOR AS DIRECTED BY THE DEVELOPER. PAYMENT WILL BE MADE BY DEDUCTION FROM PAYMENT DUE TO THE CONTRACTOR.

13. INSPECTION: INSPECTION OF THE PROPOSED CONSTRUCTION WILL BE PROVIDED BY THE GOVERNING AUTHORITIES AND/OR THE DEVELOPER. COSTS FOR INSPECTION SERVICES WILL BE PAID BY THE DEVELOPER. THE CONTRACTOR SHALL PROVIDE ASSISTANCE BY PROVIDING EXCAVATION TRENCH ACTIVITIES TO FACILITATE INSPECTION ACTIVITIES, AND SHALL GIVE SUFFICIENT NOTICE WELL IN ADVANCE OF PENDING CONSTRUCTION ACTIVITIES TO THE GOVERNING AUTHORITIES AND/OR DEVELOPER FOR SCHEDULING OF INSPECTION SERVICES.

14. SHOP DRAWINGS: THE CONTRACTOR SHALL PROVIDE, REVIEW, APPROVE AND SUBMIT ALL SHOP DRAWINGS, PRODUCT DATA AND SAMPLES REQUIRED BY THE GOVERNING AUTHORITIES AND THE PROJECT CONTRACT DOCUMENTS IN ACCORDANCE WITH ITEM 1.28 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, NORTH CENTRAL TEXAS - NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS.

15. SURVEYING: ALL SURVEYING REQUIRED FOR CONSTRUCTION STAKING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE DEVELOPER SHALL PROVIDE THE PROPERTY CORNERS AND TWO BENCHMARKS FOR USE AS HORIZONTAL AND VERTICAL DATUM. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL LAND SURVEYOR TO PERFORM ALL ADDITIONAL SURVEY, LAYOUT AND MEASUREMENT WORK NECESSARY FOR THE COMPLETION OF THE PROJECT.

16. PROTECTION OF PROPERTY CORNERS AND BENCHMARKS: THE CONTRACTOR SHALL PROTECT ALL PROPERTY CORNER MARKERS AND BENCHMARKS. ANY SUCH MARKERS OR MONUMENTS ARE IN DANGER OF BEING DISTURBED, THEY SHALL BE PROPERLY REFERENCED AND IF DISTURBED SHALL BE RESET BY A REGISTERED PUBLIC SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.

17. EXISTING STRUCTURES: THE PLANS SHOW THE LOCATION OF ALL KNOWN SURFACE AND SUBSURFACE STRUCTURES. HOWEVER, THE DEVELOPER AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS, OR TO SHOW THEM IN THEIR EXACT LOCATION. SUCH FAILURE SHALL NOT BE CONSIDERED SUFFICIENT BASIS FOR CLAIMS FOR ADDITIONAL COMPENSATION FOR EXTRA WORK OR FOR INCREASING THE PAY QUANTITIES IN ANY MANNER WHATSOEVER, UNLESS THE OBSTRUCTION ENCOUNTERED IS SUCH AS TO REQUIRE CHANGES IN THE LINES OR GRADES, OR REQUIRE THE CONSTRUCTION OF SPECIAL WORK, FOR WHICH PROVISIONS ARE NOT MADE IN THE PLANS.

18. PROTECTION OF EXISTING UTILITIES: AS REQUIRED BY "THE TEXAS UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT", TEXAS ONE CALL SYSTEM SHALL BE CONTACTED (800-244-4543) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION OPERATIONS BEING PERFORMED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT TEXAS ONE CALL SYSTEM.

THE LOCATION AND DIMENSIONS SHOWN ON THE PLANS RELATIVE TO EXISTING UTILITIES ARE BASED ON THE BEST RECORDS AND/OR FIELD INFORMATION AVAILABLE AND ARE NOT GUARANTEED BY THE DEVELOPER OR ENGINEER TO BE ACCURATE AS TO LOCATION AND DEPTH. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF HIS ACTIVITIES IN ORDER THAT HE MAY NEGOTIATE SUCH LOCAL ADJUSTMENTS AS NECESSARY IN THE CONSTRUCTION PROCESS TO PROVIDE ADEQUATE CLEARANCES.

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL EXISTING UTILITIES, SERVICES AND STRUCTURES ENCOUNTERED, WHETHER OR NOT THEY ARE INDICATED ON THE PLANS. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. TO AVOID UNNECESSARY INTERFERENCES OR DELAYS, THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVALS, REPLACEMENTS AND CONSTRUCTION WITH THE APPROPRIATE GOVERNING AUTHORITIES, THEN REQUEST WRITTEN AUTHORIZATION FROM THE ENGINEER. THE DEVELOPER WILL NOT BE LIABLE FOR DAMAGES DUE TO DELAY AS A RESULT OF THE ABOVE.

19. DAMAGE TO EXISTING FACILITIES: ALL UTILITIES, PAVEMENT, SIDEWALKS, WALLS, FENCES, ETC. NOT DESIGNATED TO BE REMOVED BUT THAT ARE DAMAGED DURING CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN THE SAME CONDITION AS GOOD AS OR BETTER THAN THE CONDITIONS PRIOR TO STARTING THE WORK, SOLELY AT THE EXPENSE OF THE CONTRACTOR.

20. FIRE AND LIFE SAFETY SYSTEMS: CONTRACTOR SHALL NOT REMOVE, DISABLE OR DISRUPT EXISTING FIRE OR LIFE SAFETY SYSTEMS WITHOUT WRITTEN PERMISSION FROM THE GOVERNING AUTHORITY.

21. TRENCH SAFETY: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND MAINTAIN A Viable TRENCH SAFETY SYSTEM AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR IS DIRECTED TO BECOME KNOWLEDGEABLE AND FAMILIAR WITH THE STANDARDS AS SET BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND THE STATE OF TEXAS LAW CONCERNING TRENCHING AND SHORING. THE CONTRACTOR SHALL PROVIDE TRENCH SAFETY SYSTEM PLANS, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF TEXAS, FOR THE IMPLEMENTATION OF SAFETY CONTROL MEASURES, MEETING THE REQUIREMENTS OF THE GOVERNING AUTHORITIES, THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.

22. SAFETY RESTRICTIONS - WORK NEAR HIGH VOLTAGE LINES: THE FOLLOWING PROCEDURES WILL BE FOLLOWED REGARDING THE SUBJECT ITEM ON THIS CONTRACT:

A. A WARNING SIGN NOT LESS THAN FIVE INCHES BY SEVEN INCHES PAINTED YELLOW WITH BLACK LETTERS THAT ARE LEGIBLE AT 12 FEET SHALL BE PLACED INSIDE AND OUTSIDE VEHICLES SUCH AS CRANES, DERRICKS, POWER LINES, DRILLING RIGS, PILE DRIVERS, HOISTING EQUIPMENT OR SIMILAR APPARATUS. THE WARNING SIGN SHALL READ AS FOLLOWS: "WARNING - UNLAWFUL TO OPERATE THIS EQUIPMENT WITHIN SIX FEET OF HIGH VOLTAGE LINES."

B. EQUIPMENT THAT MAY BE OPERATED WITHIN TEN FEET OF HIGH VOLTAGE LINES SHALL HAVE AN INSULATING CAGE-TYPE OF GUARD ABOUT THE BOOM OR ARM, EXCEPT BACKHOES OR DIPPERS, AND INSULATOR LINKS ON THE LIFT HOOK CONNECTIONS.

C. WHEN NECESSARY TO WORK WITHIN SIX FEET OF HIGH VOLTAGE ELECTRIC LINES, NOTIFY THE POWER COMPANY WHO WILL ERECT TEMPORARY MECHANICAL BARRIERS, DE-ENERGIZE THE LINE OR RAISE OR LOWER THE LINE. THE WORK DONE BY THE POWER COMPANY SHALL BE AT THE EXPENSE OF THE CONTRACTOR. THE NOTIFYING DEPARTMENT SHALL MAINTAIN AN ACCURATE LOG OF ALL SUCH CALLS TO THE POWER COMPANY AND SHALL RECORD ACTION TAKEN IN EACH CASE.

D. THE CONTRACTOR IS REQUIRED TO MAKE ARRANGEMENTS WITH THE POWER COMPANY FOR THE TEMPORARY RELOCATION OR RAISING OF HIGH VOLTAGE LINES AT THE CONTRACTOR'S SOLE COST AND EXPENSE.

E. NO PERSON SHALL WORK WITHIN SIX FEET OF A HIGH VOLTAGE LINE WITHOUT PROTECTION HAVING BEEN TAKEN AS OUTLINED IN PARAGRAPH C. ABOVE.

23. TRAFFIC CONTROL: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DEVELOP AND SUBMIT FOR APPROVAL BY THE GOVERNING AUTHORITIES, A TRAFFIC CONTROL PLAN, PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS, OUTLINING TRAFFIC MANAGEMENT PROCEDURES TO BE PROVIDED DURING CONSTRUCTION. TRAFFIC CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE FOLLOWING ADDITIONAL REQUIREMENTS:

A. CONSTRUCTION OF SIGNING AND BARRICADES SHALL CONFORM WITH THE "2003 TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS CURRENTLY AMENDED, TEXAS DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION.

B. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH BARRICADES, FLARES, FLAGMEN, ETC., FOR THE PROTECTION OF THE PUBLIC, EMPLOYEES AND THE WORK.

C. THE CONTRACTOR SHALL PERFORM HIS WORK IN SUCH A MANNER AS TO CREATE A MINIMUM OF INTERRUPTION TO TRAFFIC ALONG ADJACENT ROADWAYS. TWO WAY TRAFFIC MUST BE MAINTAINED ON ALL ROADWAYS AT ALL TIMES THROUGHOUT CONSTRUCTION UNLESS WRITTEN PERMISSION IS GRANTED BY THE GOVERNING AUTHORITIES.

D. ALL SIGNAGE, MARKINGS, LIGHTING, BARRICADES, FLAGMEN AND OTHER DEVICES AND PERSONNEL REQUIRED FOR TRAFFIC CONTROL DURING CONSTRUCTION OF THE PROJECT WILL BE INCLUDED IN THE CONTRACT AMOUNT.

E. ALL TRAFFIC CONTROL DEVICES USED DURING NIGHTTIME SHALL BE REFLECTORIZED, ILLUMINATED FROM WITHIN OR EXTERNALLY ILLUMINATED.

F. THE CONTRACTOR SHALL NOT REMOVE ANY REGULATORY SIGN, INSTRUCTIONAL SIGN, WARNING SIGN, STREET NAME SIGN OR ANY SIGNAL, WHICH CURRENTLY EXISTS, WITHOUT THE CONSENT OF THE GOVERNING AUTHORITIES.

G. THE CONTRACTOR SHALL MAINTAIN AND REPLACE WHERE NECESSARY ALL SIGNS, LIGHTS, MARKINGS AND TEMPORARY PAVEMENT THROUGHOUT THE CONSTRUCTION PERIOD.

H. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL MEASURES AT THE END OF CONSTRUCTION AND RESTORE UNIMPROVED PAVEMENT AND OTHER DISTURBED AREAS TO THEIR ORIGINAL CONDITION.

24. ACCESS TO ADJACENT PROPERTIES: ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES UNLESS OTHERWISE DIRECTED BY THE GOVERNING AUTHORITIES AND/OR DEVELOPER.

25. ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS: ALL PRIVATE HAUL ROADS AND ACCESS ROUTES AND THE LOCATION OF ALL STAGING AREAS AND STORAGE AREAS SHALL BE SUBJECT TO THE APPROVAL OF THE DEVELOPER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REPAIRING ALL ROADS AND OTHER FACILITIES DURING CONSTRUCTION. UPON COMPLETION OF THE PROJECT, ALL HAUL ROADS, ACCESS ROUTES, STAGING AREAS AND STORAGE AREAS SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT AT THE TIME THE CONTRACTOR COMMENCES WORK ON THE PROJECT.

26. PARKING OF CONSTRUCTION EQUIPMENT: AT NIGHT AND DURING ALL OTHER PERIODS OF TIME WHEN EQUIPMENT IS NOT BEING ACTIVELY USED FOR THE CONSTRUCTION WORK, THE CONTRACTOR SHALL PARK THE EQUIPMENT AT LOCATIONS, WHICH ARE APPROVED BY THE DEVELOPER. DURING THE CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL COMPLY WITH THE PRESENT ZONING REQUIREMENTS OF THE GOVERNING AUTHORITIES IN THE USE OF VACANT PROPERTY FOR STORAGE PURPOSES. THE CONTRACTOR SHALL ALSO PROVIDE ADEQUATE BARRICADES, MARKERS AND LIGHTS TO PROTECT THE DEVELOPER, THE GOVERNING AUTHORITIES, THE PUBLIC AND THE OTHER WORK. ALL BARRICADES, LIGHTS, AND MARKERS MUST MEET THE REQUIREMENTS OF THE GOVERNING AUTHORITIES' REGULATIONS.

27. WATER FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR PURCHASING WATER FROM THE GOVERNING AUTHORITY FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THIS SERVICE SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

28. TEMPORARY ELECTRIC AND COMMUNICATIONS FOR CONSTRUCTION: THE CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR INSTALLATION AND PURCHASING OF TEMPORARY ELECTRIC AND COMMUNICATIONS SERVICES FROM THE GOVERNING AUTHORITIES FOR HIS USE ON THE PROJECT SITE. COSTS ASSOCIATED WITH THESE SERVICES SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

29. FENCES: ALL FENCES ENCOUNTERED AND REMOVED DURING CONSTRUCTION, EXCEPT THOSE DESIGNATED TO BE REMOVED OR RELOCATED, SHALL BE RESTORED TO THE ORIGINAL OR BETTER THAN ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT. WHERE WIRE FENCING, EITHER WIRE MESH OR BARBED WIRE, IS TO BE CROSSED, THE CONTRACTOR SHALL SET CROSS-BRACED POSTS ON EITHER SIDE OF THE CROSSING. TEMPORARY FENCING SHALL BE ERRECTED IN PLACE OF THE FENCING REMOVED WHENEVER THE WORK IS NOT IN PROGRESS, AND WHEN THE SITE IS VACATED OVERNIGHT AND/OR AT ALL TIMES TO PREVENT PERSONS AND/OR LIVESTOCK FROM ENTERING THE CONSTRUCTION AREA. THE COST OF FENCE REMOVAL, TEMPORARY CLOSURES AND REPLACEMENT SHALL BE INCLUDED IN THE CONTRACT.

30. DRAINAGE CHANNELS: WHERE EXISTING DRAINAGE CHANNELS ARE TEMPORARILY DISTURBED OR BLOCKED DURING CONSTRUCTION, IT SHALL BE RESTORED TO THE ORIGINAL CONDITION, GRADE AND CROSS SECTION AFTER CONSTRUCTION IS COMPLETED.

31. COORDINATION WITH OTHERS: IN THE EVENT THAT OTHER CONTRACTORS ARE DOING WORK IN THE SAME AREA SIMULTANEOUSLY WITH THE PROJECT, THE CONTRACTOR SHALL COORDINATE HIS PROPOSED CONSTRUCTION WITH THAT OF THE OTHER CONTRACTORS.

32. CONDITION OF SITE DURING CONSTRUCTION: DURING CONSTRUCTION OF THE WORK, THE CONTRACTOR SHALL, AT ALL TIMES, KEEP THE SITE OF THE WORK AND ADJACENT PREMISES AS FREE FROM MATERIAL, DEBRIS AND RUBBISH AS IS PRACTICABLE AND SHALL REMOVE SAME FROM ANY PORTION OF THE SITE IF, IN THE OPINION OF THE DEVELOPER, SUCH MATERIAL, DEBRIS OR RUBBISH CONSTITUTES A NUISANCE OR IS OBJECTIONABLE. IN CASE OF FAILURE ON THE PART OF THE CONTRACTOR UNDER HIS CONTRACT, OR WHEN SUFFICIENT CONTRACT FUNDS ARE UNAVAILABLE FOR THIS PURPOSE, THE CONTRACTOR OR HIS SURETY SHALL REIMBURSE THE DEVELOPER FOR ALL SUCH COSTS.

33. EXISTING ROADWAYS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE CLEANLINESS OF EXISTING PAVED ROADS. ALL COSTS ASSOCIATED WITH MAINTAINING THE CLEANLINESS OF EXISTING ROADS SHALL BE INCLUDED IN THE CONTRACT AMOUNT.

34. DUST CONTROL: THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO CONTROL DUST ON THE PROJECT SITE BY SPRINKLING OF WATER, OR ANY OTHER METHODS APPROVED BY THE GOVERNING AUTHORITIES, AND SHALL PROVIDE ALL EQUIPMENT AND PERSONNEL REQUIRED TO PREVENT DUST FROM BECOMING A NUISANCE TO THE ADJACENT PROPERTIES.

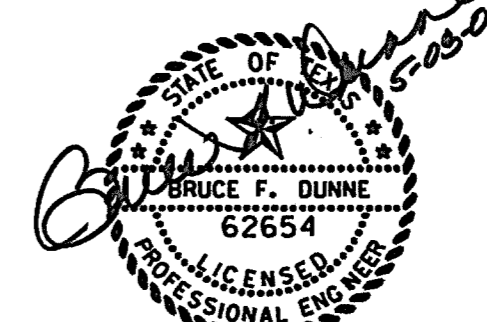
35. CLEAN-UP FOR FINAL ACCEPTANCE: THE CONTRACTOR SHALL MAKE A FINAL CLEAN UP OF ALL PARTS OF THE WORK BEFORE ACCEPTANCE BY THE DEVELOPER. THIS CLEAN UP SHALL INCLUDE REMOVAL OF ALL OBJECTIONABLE MATERIALS AND, IN GENERAL, PREPARING THE SITE OF THE WORK IN AN ORDERLY MANNER OF APPEARANCE.

36. REMOVAL OF DEFECTIVE AND UNAUTHORIZED WORK: ALL WORK WHICH HAS BEEN REJECTED OR CONDEMNED SHALL BE REPAIRED, OR IT CANNOT BE REPAIRED SATISFACTORILY, IT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. DEFECTIVE MATERIALS SHALL BE IMMEDIATELY REMOVED FROM THE WORK SITE. WORK DONE BEYOND THE LINE OR NOT IN CONFORMITY WITH THE GRADES SHOWN ON THE DRAWINGS OR AS PROVIDED, WORK DONE WITHOUT REQUIRED INSPECTION, OR ANY EXTRA OR UNCLASSIFIED WORK DONE WITHOUT WRITTEN AUTHORITY AND PRIOR AGREEMENT IN WRITING AS TO PRICES, SHALL BE AT THE CONTRACTOR'S RISK, AND WILL BE CONSIDERED UNAUTHORIZED, AND AT THE OPTION OF THE DEVELOPER MAY NOT BE MEASURED AND PAID FOR AND MAY BE ORDERED REMOVED AT THE CONTRACTOR'S EXPENSE. UPON FAILURE OF THE CONTRACTOR TO REPAIR SATISFACTORILY OR TO REMOVE AND REPLACE, IF SO DIRECTED, REJECTED, UNAUTHORIZED OR CONDEMNED WORK OR MATERIALS IMMEDIATELY AFTER RECEIVING NOTICE FROM THE DEVELOPER, THE DEVELOPER WILL, AFTER GIVING WRITTEN NOTICE TO THE CONTRACTOR, HAVE THE AUTHORITY TO CAUSE DEFECTIVE WORK TO BE REMOVED OR REPAIRED, OR TO CAUSE UNAUTHORIZED WORK TO BE REMOVED AND TO DEDUCT THE COST THEREOF FROM ANY MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR.

37. DISPOSITION AND DISPOSAL OF EXCESS AND UNSUITABLE MATERIALS: ALL MATERIALS TO BE REMOVED FROM THE SITE INCLUDING BUT NOT LIMITED TO EXCESS MATERIAL AND UNSUITABLE MATERIALS SUCH AS LARGE ROCKS, REFUSE, AND OTHER DEBRIS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE PROJECT AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL ALSO COMPLY WITH ALL APPLICABLE LAWS GOVERNING SPILLAGE OF DEBRIS WHILE TRANSPORTING TO A DISPOSAL SITE.

38. SEEDING: THE CONTRACTOR SHALL PROVIDE SEEDING, WATERING, FERTILIZING AND REQUIRED MAINTENANCE FOR THE GRASSING OF ALL UNPAVED AREAS OF DEDICATED RIGHT-OF-WAY, EASEMENTS, AND ALL OTHER DISTURBED AREAS OF CONSTRUCTION NOT COVERED BY THE LANDSCAPE PLAN FOR THE PROJECT. SEEDING SHALL ALSO BE PROVIDED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN IN ORDER TO ESTABLISH A GRASS COVER ON DISTURBED AREAS SUBJECT TO THE EROSION OF THE SOIL SURFACE.

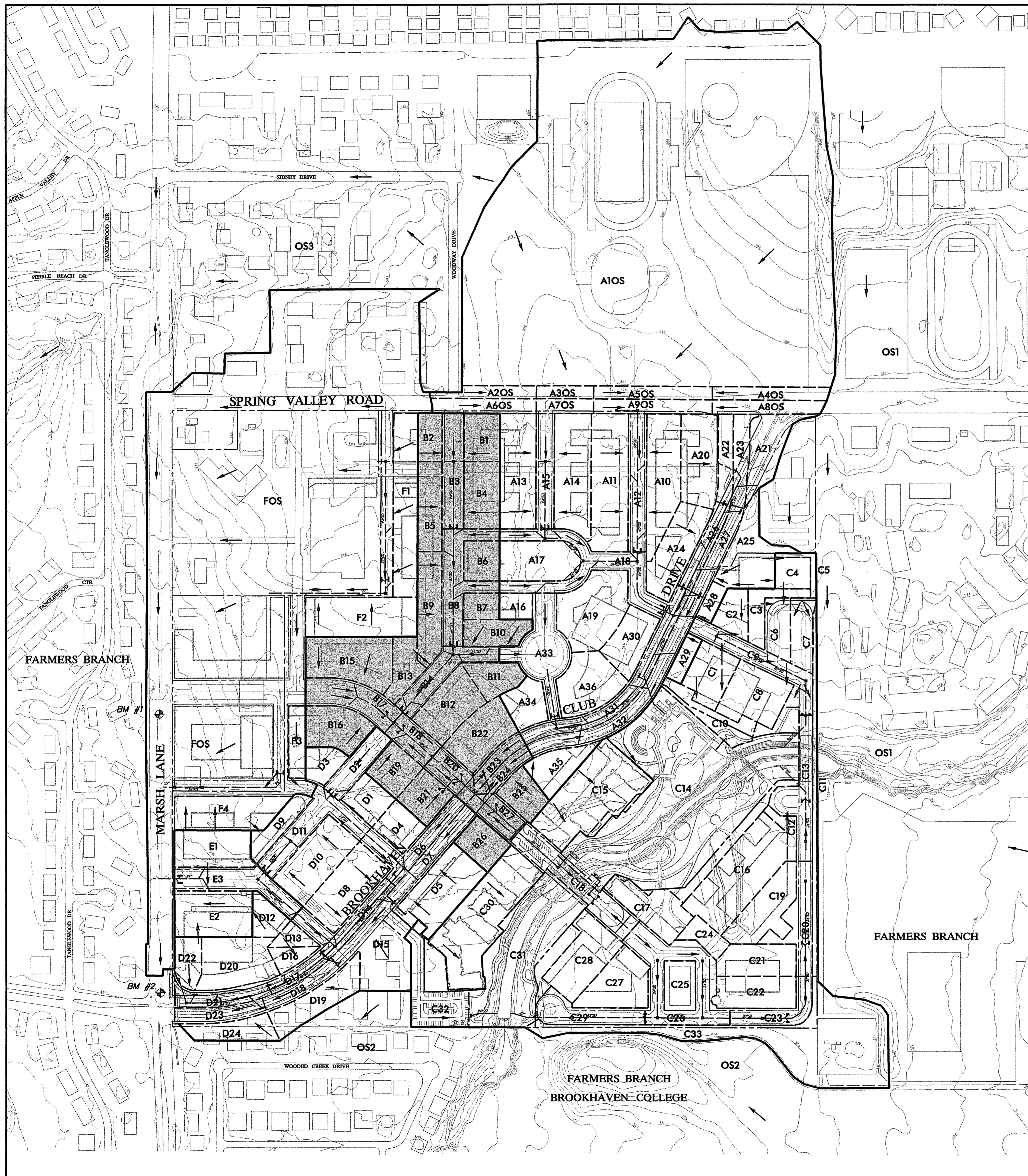
39. RECORD DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF ALL MATERIALS AND SYSTEMS COVERED BY THE PROJECT CONTRACT DOCUMENTS. THESE RECORD PRINTS WILL BE REVIEWED BY THE DEVELOPER EACH MONTH PRIOR TO THE PRELIMINARY REVIEW OF CONTRACTOR'S REQUEST FOR PAYMENT. IF THE DRAWINGS ARE NOT COMPLETE, ACCURATE AND UP-TO DATE, THE DEVELOPER WILL NOT ACCEPT THE PAYMENT REQUEST. THE COMPLETED SET OF "RECORD" DRAWINGS MUST BE DELIVERED TO THE DEVELOPER BEFORE REQUESTING FINAL PAYMENT.



NO.	REVISION	BY	DATE

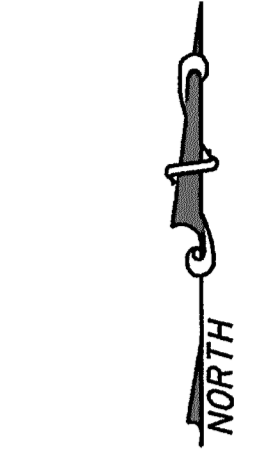
TOWN OF ADDISON
 DALLAS COUNTY, TEXAS
STORM DRAIN RELOCATION
 BROOKHAVEN CLUB DRIVE
GENERAL CONSTRUCTION NOTES,
LEGEND & ABBREVIATIONS

icon Consulting Engineers, Inc. Civil Engineers - Designers - Planners					
250 W. Southlake Blvd					



LEGEND

- A17 DRAINAGE AREA DESIGNATION
- MAJOR DRAINAGE AREA DIVIDE
- MINOR DRAINAGE AREA DIVIDE
- DIRECTION OF FLOW



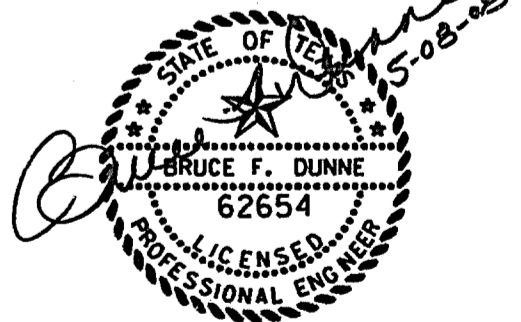
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 SCALE: 1"=200'

DRAINAGE AREA CALCULATIONS - PROPOSED																	
AREA NO	AREA (acres)	RUNOFF COEFF	CA	Tc (min)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Q15 (cfs)	Q20 (cfs)	Q25 (cfs)	Q30 (cfs)	Q40 (cfs)	Q50 (cfs)	Q60 (cfs)	Q70 (cfs)	COLLECTION POINT	
B1	0.60	0.90	0.54	10.0	5.2	2.8	5.9	3.2	6.5	3.5	7.4	4.0	8.2	4.4	8.9	4.8	Future Storm Drain
B2	0.40	0.90	0.36	10.0	5.2	1.9	5.9	2.1	6.5	2.3	7.4	2.7	8.2	2.9	8.9	3.2	Future Storm Drain
B3	0.80	0.95	0.76	10.0	5.2	4.0	5.9	4.5	6.5	4.9	7.4	5.7	8.2	6.2	8.9	6.7	Future Storm Drain
B4	0.80	0.90	0.72	10.0	5.2	3.8	5.9	4.2	6.5	4.7	7.4	5.4	8.2	5.9	8.9	6.4	Future Storm Drain
B5	0.70	0.90	0.63	10.0	5.2	3.3	5.9	3.7	6.5	4.1	7.4	4.7	8.2	5.1	8.9	5.6	Future Storm Drain
B6	0.50	0.40	0.20	10.0	5.2	1.0	5.9	1.2	6.5	1.3	7.4	1.5	8.2	1.6	8.9	1.8	Future Storm Drain
B7	0.30	0.90	0.27	10.0	5.2	1.4	5.9	1.6	6.5	1.8	7.4	2.0	8.2	2.2	8.9	2.4	Future Storm Drain
B8	1.20	0.95	1.14	10.0	5.2	6.0	5.9	6.7	6.5	7.4	7.4	8.5	8.2	9.3	8.9	10.1	Future Storm Drain
B9	0.90	0.90	0.81	10.0	5.2	4.2	5.9	4.8	6.5	5.3	7.4	6.0	8.2	6.6	8.9	7.2	Future Storm Drain
B10	0.60	0.90	0.54	10.0	5.2	2.8	5.9	3.2	6.5	3.5	7.4	4.0	8.2	4.4	8.9	4.8	Future Storm Drain
B11	0.50	0.90	0.45	10.0	5.2	2.4	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.7	8.9	4.0	Future Storm Drain
B12	1.00	0.90	0.90	10.0	5.2	4.7	5.9	5.3	6.5	5.8	7.4	6.7	8.2	7.3	8.9	8.0	Future Storm Drain
B13	0.50	0.90	0.45	10.0	5.2	2.4	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.7	8.9	4.0	Future Storm Drain
B14	0.80	0.95	0.76	10.0	5.2	4.0	5.9	4.5	6.5	4.9	7.4	5.7	8.2	6.2	8.9	6.7	Future Storm Drain
B15	1.30	0.90	1.17	10.0	5.2	6.1	5.9	6.9	6.5	7.6	7.4	8.7	8.2	9.5	8.9	10.4	Future Storm Drain
B16	0.80	0.90	0.72	10.0	5.2	3.8	5.9	4.2	6.5	4.7	7.4	5.4	8.2	5.9	8.9	6.4	Future Storm Drain
B17	0.90	0.95	0.86	10.0	5.2	4.5	5.9	5.0	6.5	5.5	7.4	6.4	8.2	7.0	8.9	7.6	Future Storm Drain
B18	0.50	0.95	0.48	10.0	5.2	2.5	5.9	2.8	6.5	3.1	7.4	3.5	8.2	3.9	8.9	4.2	Future Storm Drain
B19	0.60	0.90	0.54	10.0	5.2	2.8	5.9	3.2	6.5	3.5	7.4	4.0	8.2	4.4	8.9	4.8	Future Storm Drain
B20	0.50	0.95	0.48	10.0	5.2	2.5	5.9	2.8	6.5	3.1	7.4	3.5	8.2	3.9	8.9	4.2	Future Storm Drain
B21	0.60	0.90	0.54	10.0	5.2	2.8	5.9	3.2	6.5	3.5	7.4	4.0	8.2	4.4	8.9	4.8	Future Storm Drain
B22	0.90	0.90	0.81	10.0	5.2	4.2	5.9	4.8	6.5	5.3	7.4	6.0	8.2	6.6	8.9	7.2	Future Storm Drain
B23	0.30	0.95	0.29	10.0	5.2	1.5	5.9	1.7	6.5	1.8	7.4	2.1	8.2	2.3	8.9	2.5	Future Storm Drain
B24	0.30	0.95	0.29	10.0	5.2	1.5	5.9	1.7	6.5	1.8	7.4	2.1	8.2	2.3	8.9	2.5	Future Storm Drain
B25	0.50	0.90	0.45	10.0	5.2	2.4	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.7	8.9	4.0	Future Storm Drain
B26	0.50	0.90	0.45	10.0	5.2	2.4	5.9	2.6	6.5	2.9	7.4	3.3	8.2	3.7	8.9	4.0	Future Storm Drain
B27	0.50	0.95	0.48	10.0	5.2	2.5	5.9	2.8	6.5	3.1	7.4	3.5	8.2	3.9	8.9	4.2	Future Storm Drain
	17.8				5.2	84.0		94.4		104.2		119.5		131.0		142.6	

■ DENOTES AREA CONTRIBUTING TO PROPOSED STORM DRAIN RELOCATION

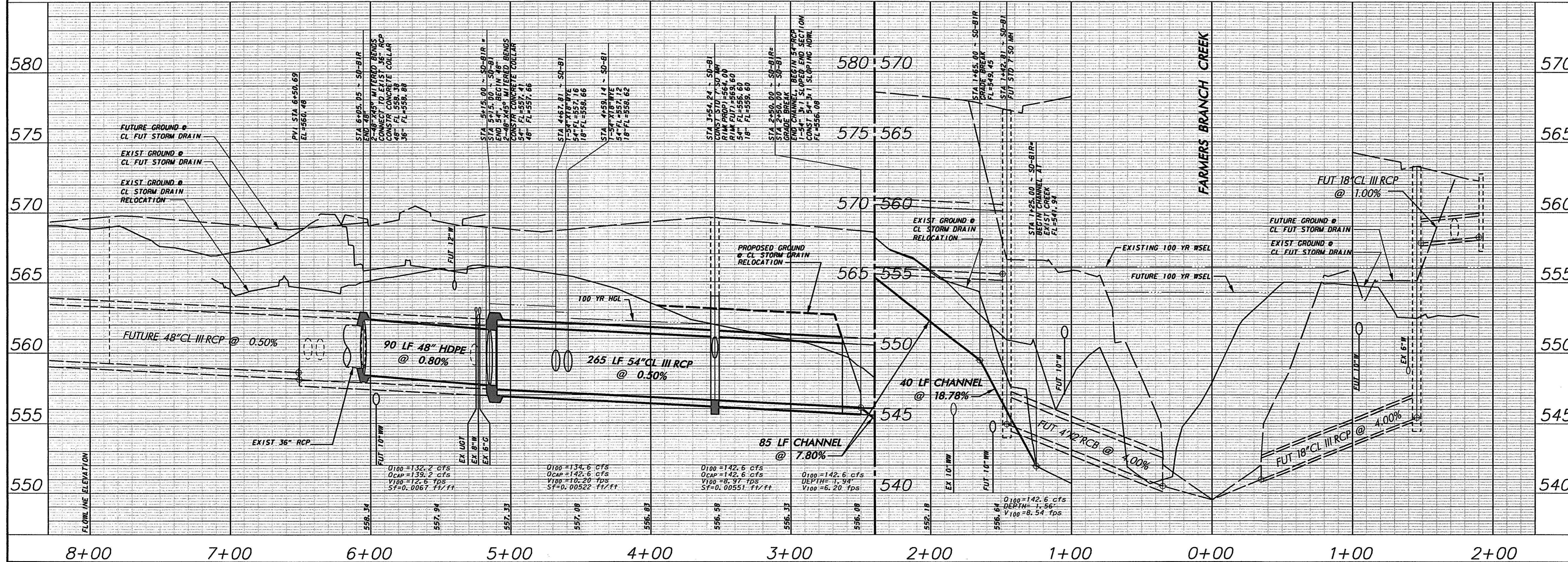
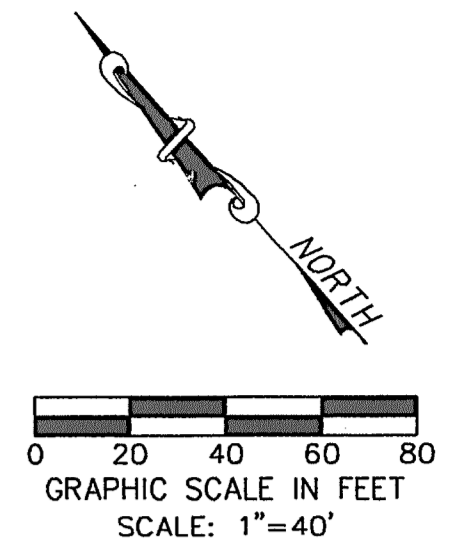
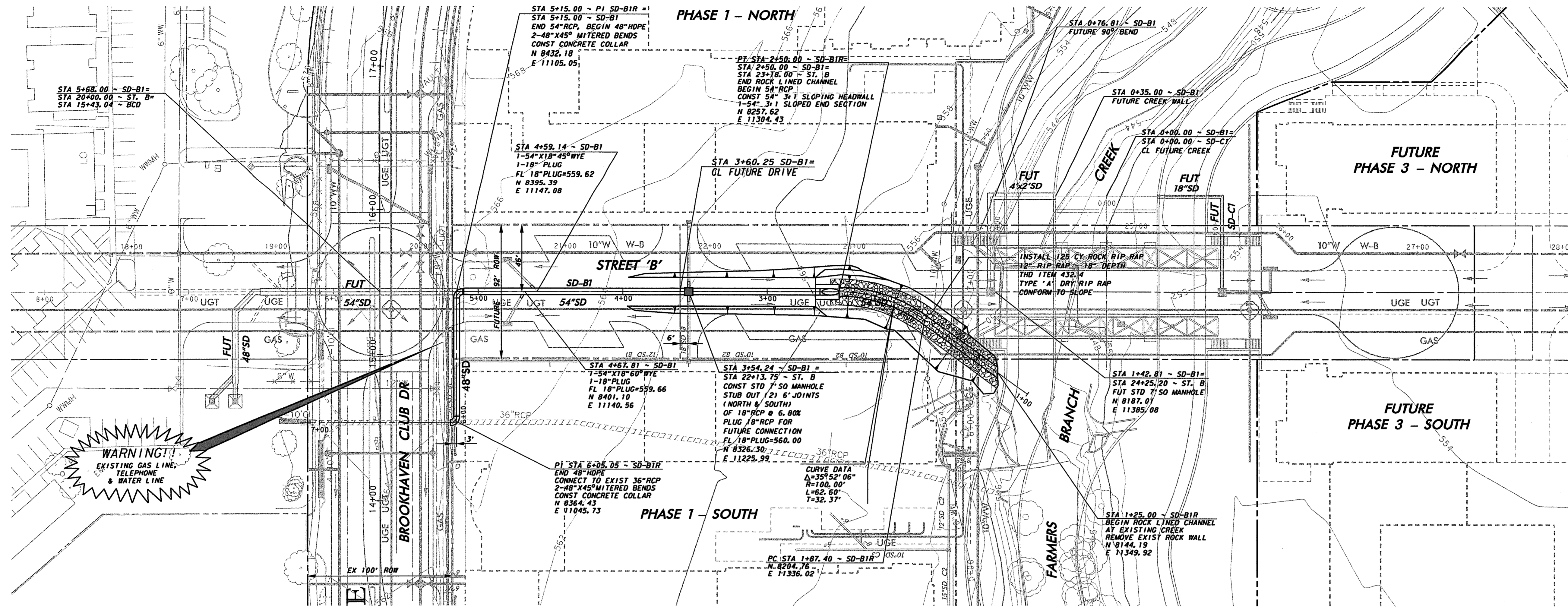
WARNING
 CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4643) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF BROOKHAVEN CLUB DRIVE.
 BM #2 REF. ELEVATION = 547.84
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF BROOKHAVEN CLUB DRIVE AND MARSH LANE.



NO.	REVISION	BY	DATE
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
STORM DRAIN RELOCATION BROOKHAVEN CLUB DRIVE			
DRAINAGE AREA MAP & DRAINAGE CALCULATIONS			
icon Consulting Engineers, Inc. 250 W. Southlake Blvd., Suite 117 Civil Engineers - Designers - Planners Southlake, Tx 76092 (817) 552-6210			
PROJECT	DESIGN	DRAWN	DATE
5019-01	JAM	SAM	MAY 8, 2008
FILE	SHEET		
FW # 2007-001	3		

STORM DRAIN RELOCATION - BROOKHAVEN CLUB DRIVE

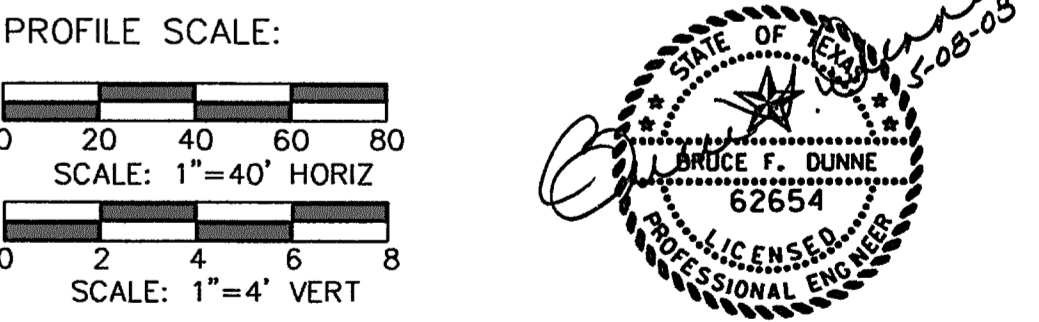


WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
 SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF BROOKHAVEN CLUB DRIVE.

BM #2 REF. ELEVATION = 547.84
 SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF BROOKHAVEN CLUB DRIVE AND MARSH LANE.



NO.	REVISION	BY	DATE

TOWN OF ADDISON
 DALLAS COUNTY, TEXAS

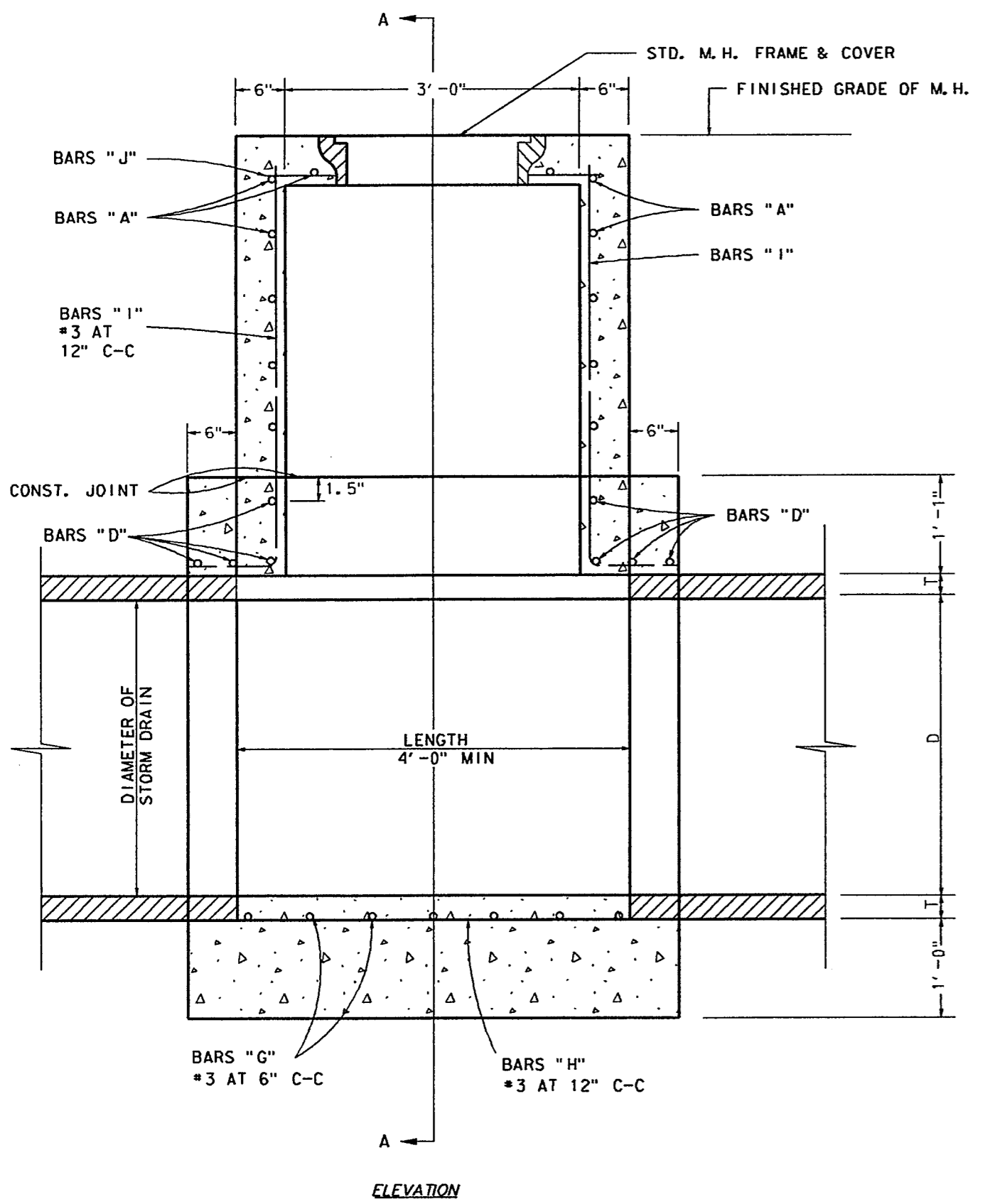
STORM DRAIN RELOCATION
 BROOKHAVEN CLUB DRIVE

STORM DRAIN PLAN & PROFILE-LINE B1
 STA 0+00.00 - 6+50.69

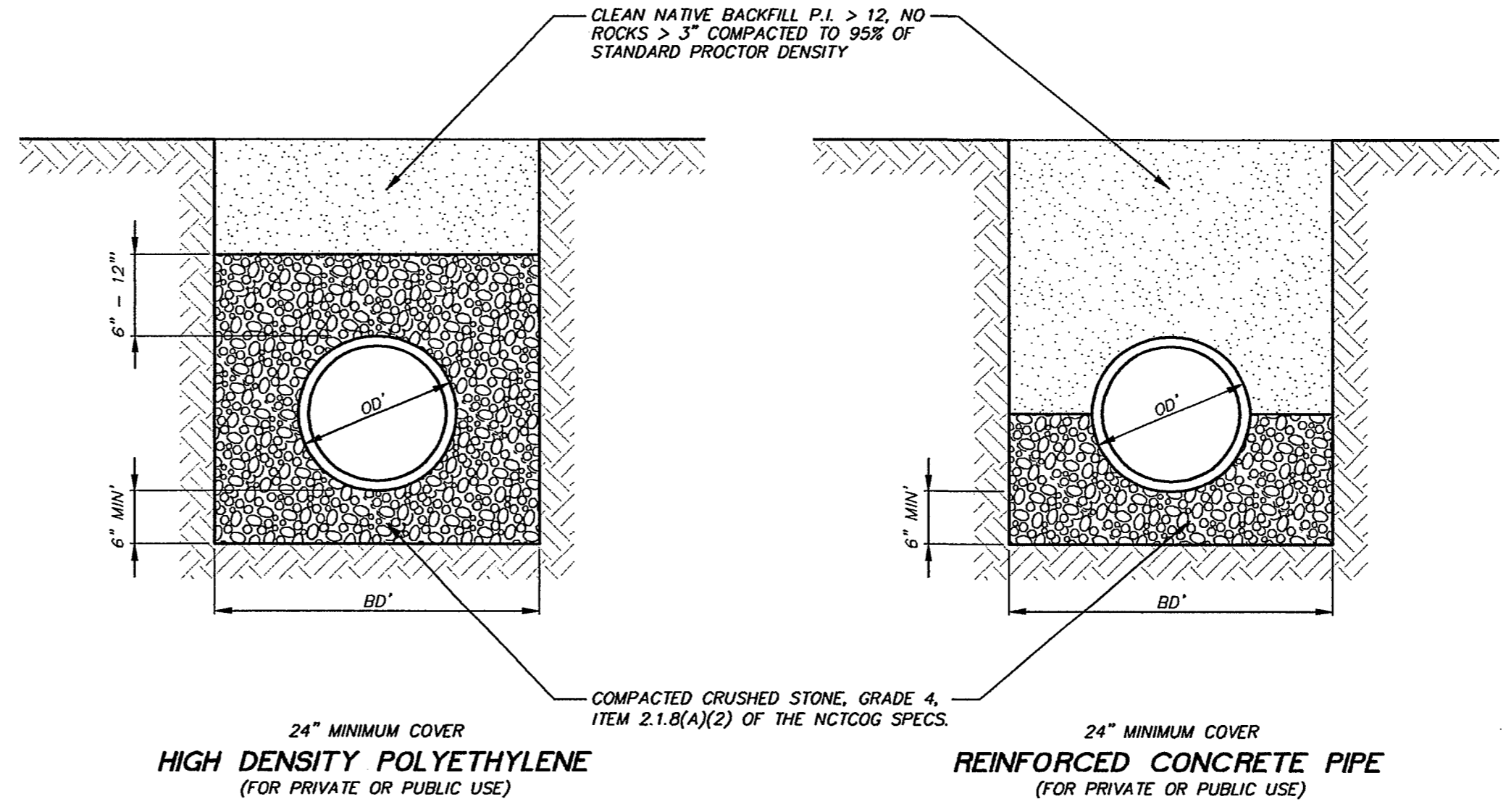
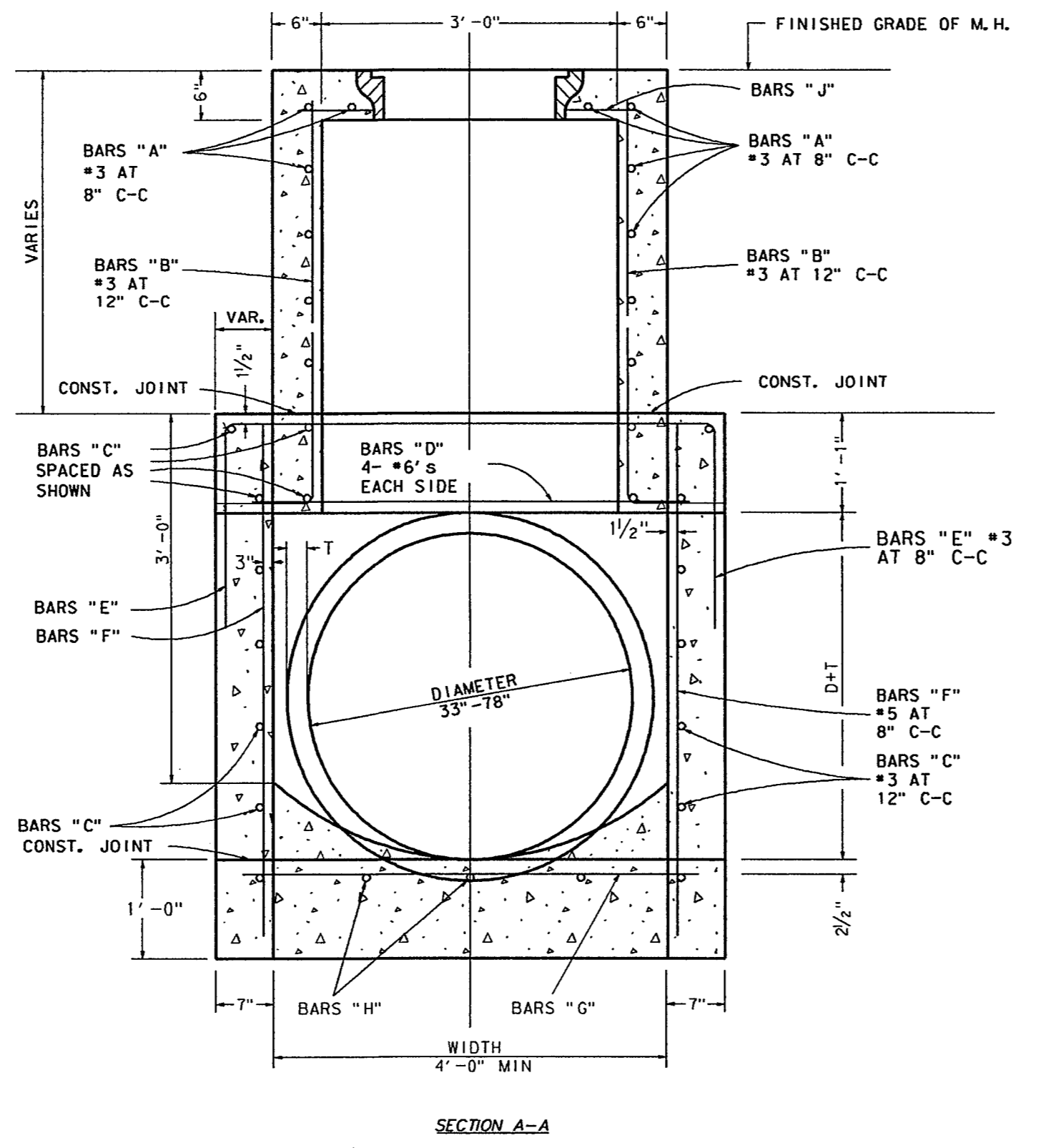
icon Consulting Engineers, Inc.
 Civil Engineers - Designers - Planners
 250 W. Southlake Blvd., Suite 117
 Southlake, TX 76092 (817) 552-6210

PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5019-01	JAM	SAM	MAY 8, 2008	PW # 2007-001	4

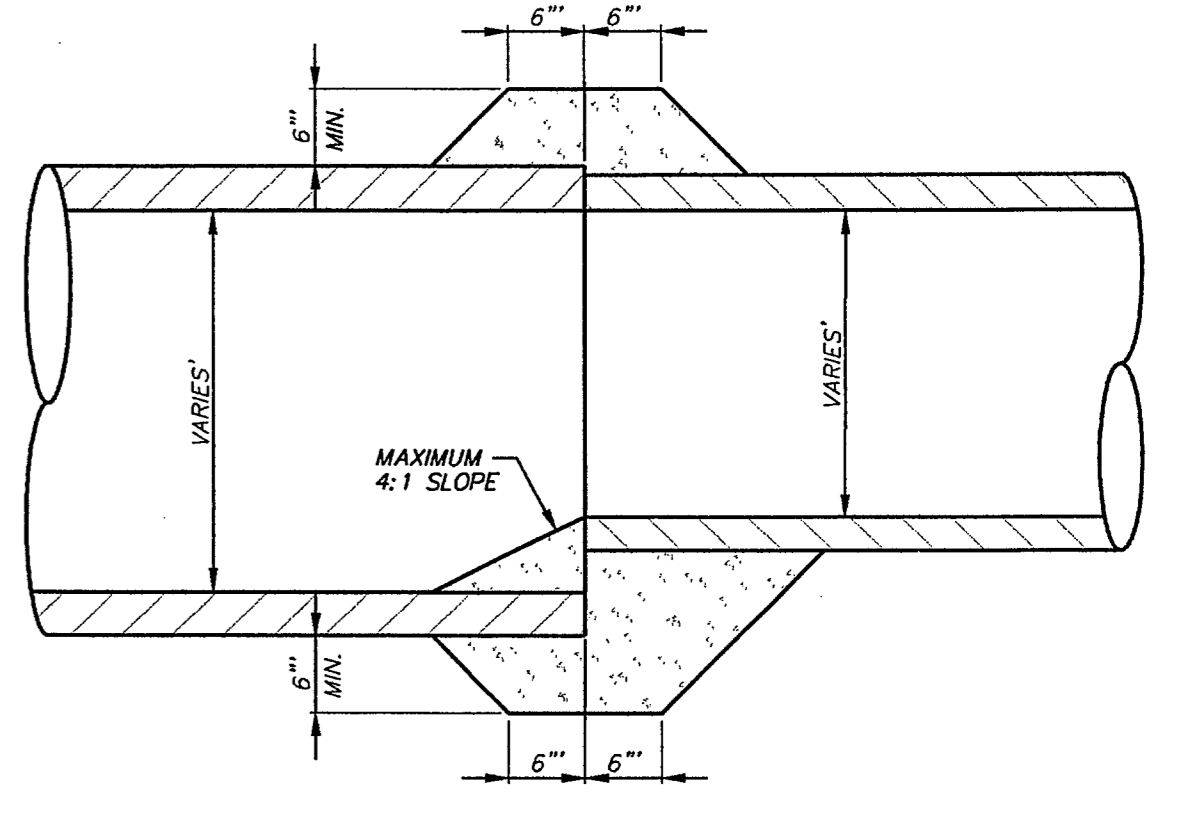
STORM DRAIN RELOCATION - BROOKHAVEN CLUB DRIVE



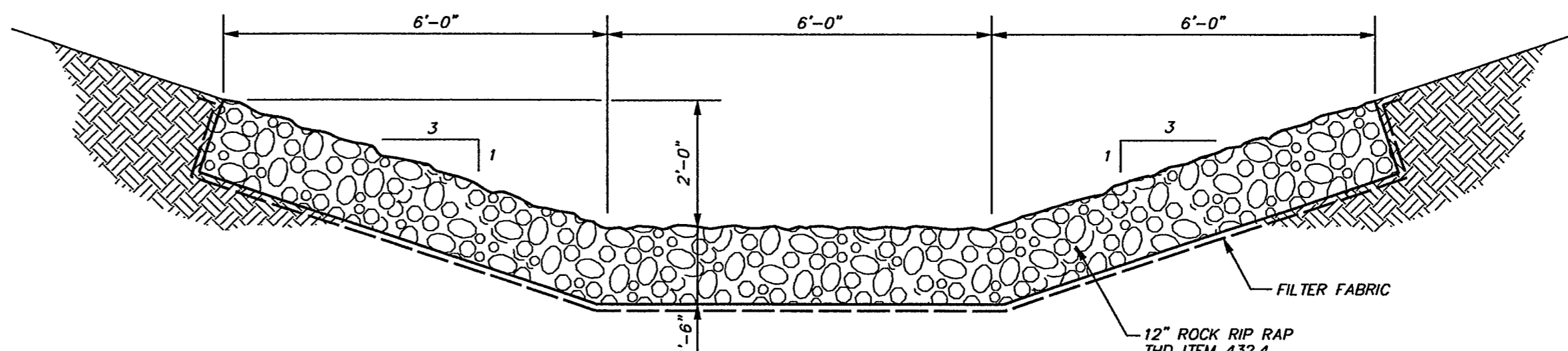
TYPE B STORM DRAIN MANHOLE
(FOR PIPE 33" TO 78" IN DIAMETER)



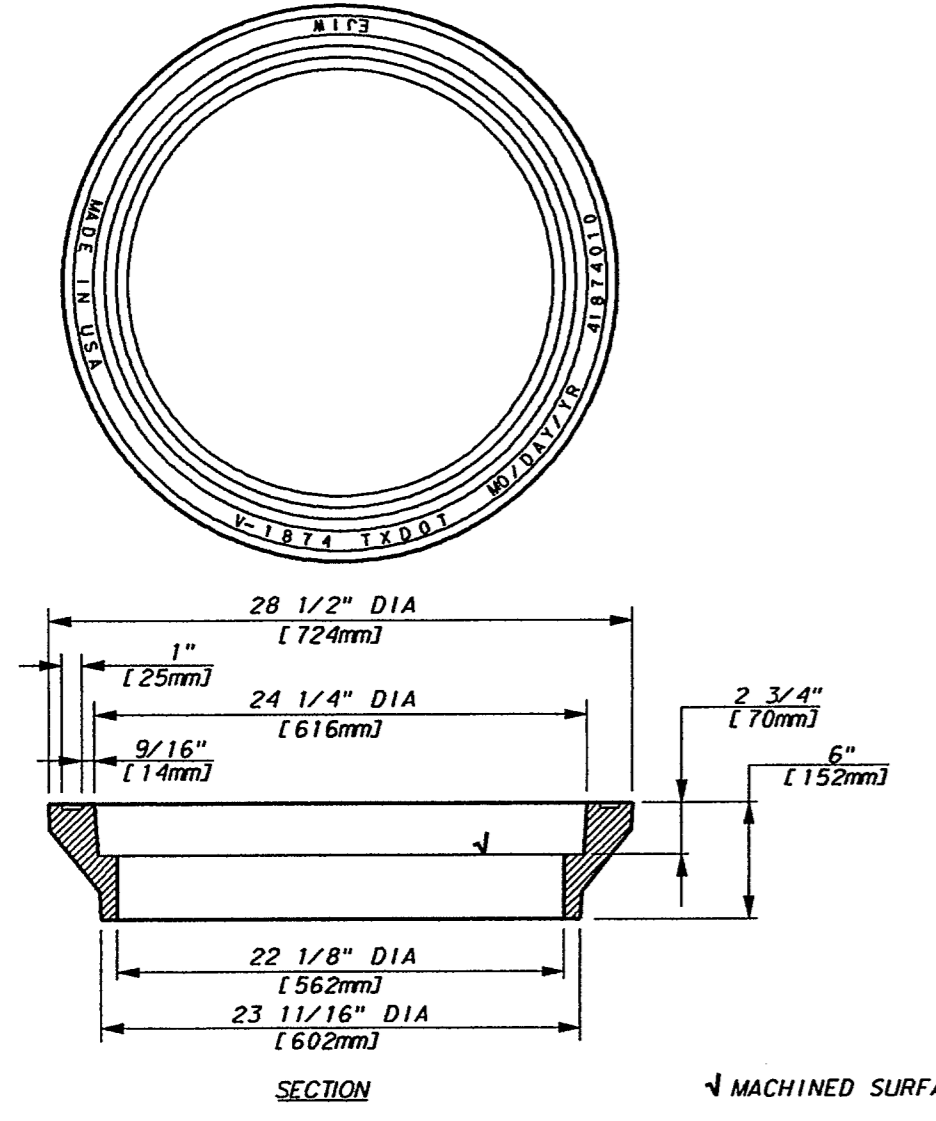
STORM DRAIN EMBEDMENT
NOT TO SCALE



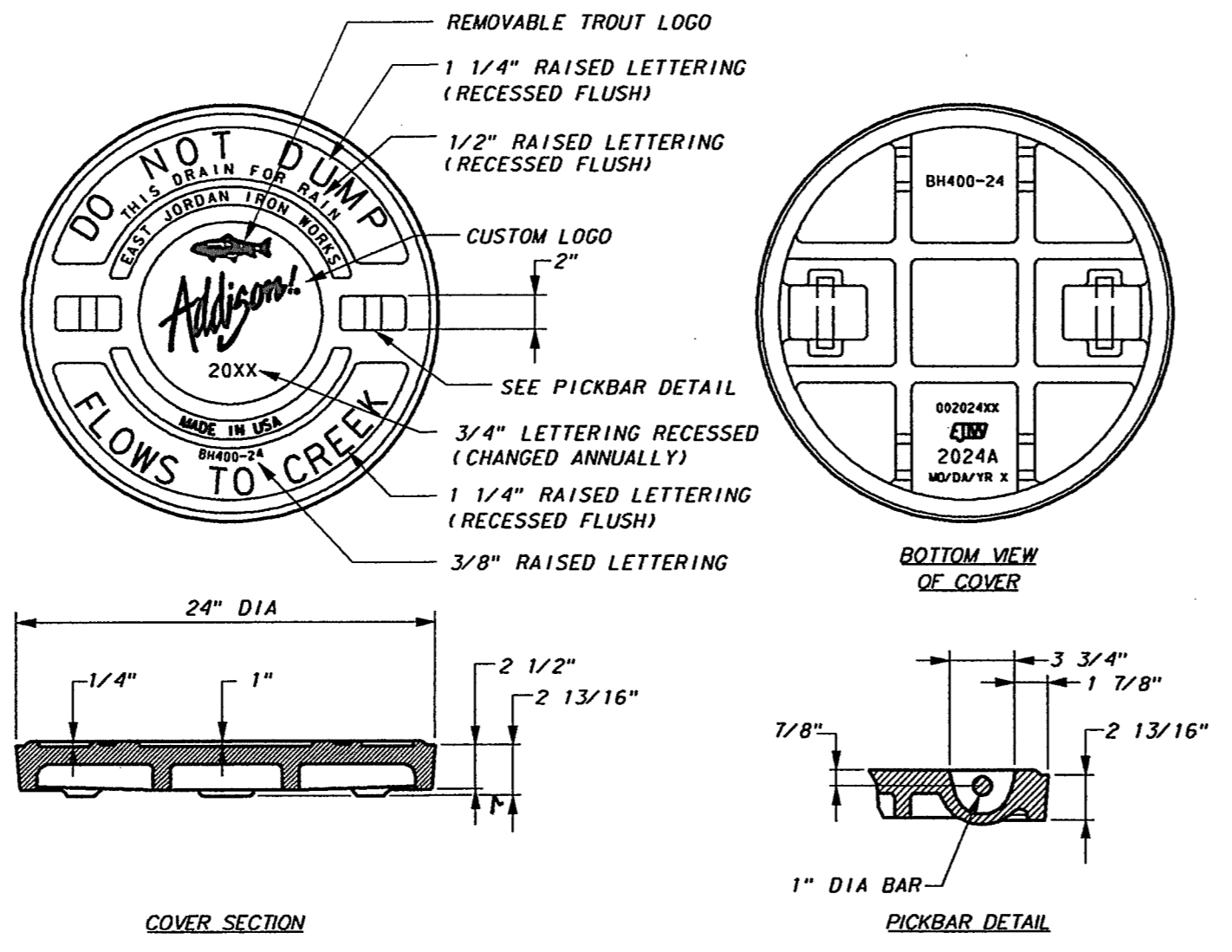
CONCRETE COLLAR
NOT TO SCALE



ROCK LINED CHANNEL SECTION
TYPICAL
NOT TO SCALE

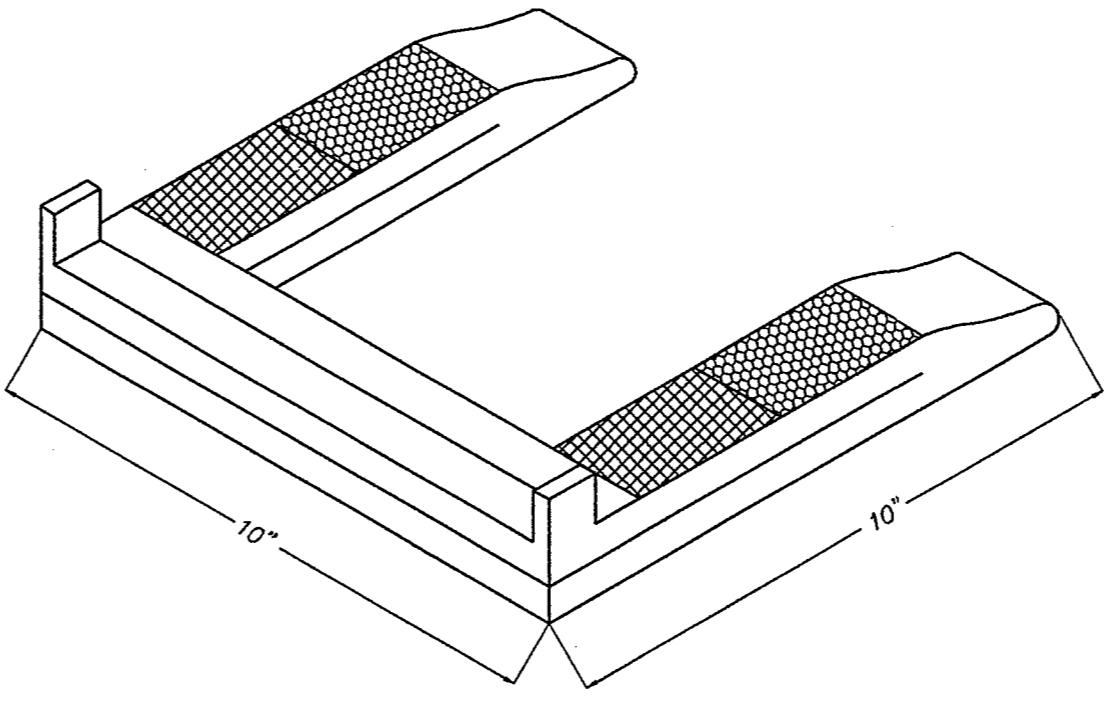


SECTION

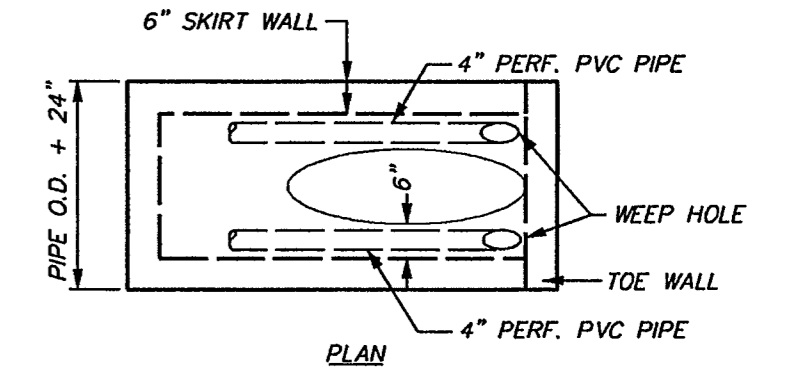


COVER SECTION

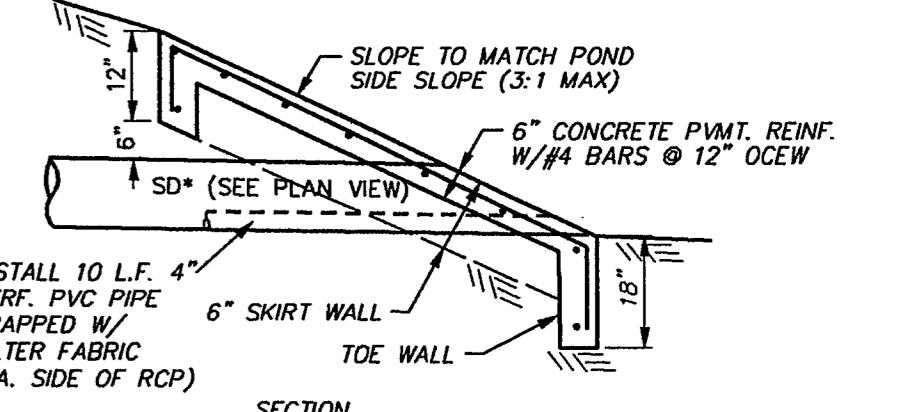
PICKBAR DETAIL



MANHOLE STEP DETAIL
PLASTIC COATED STEEL
NEOPRENE COATED STEEL OR EQUAL



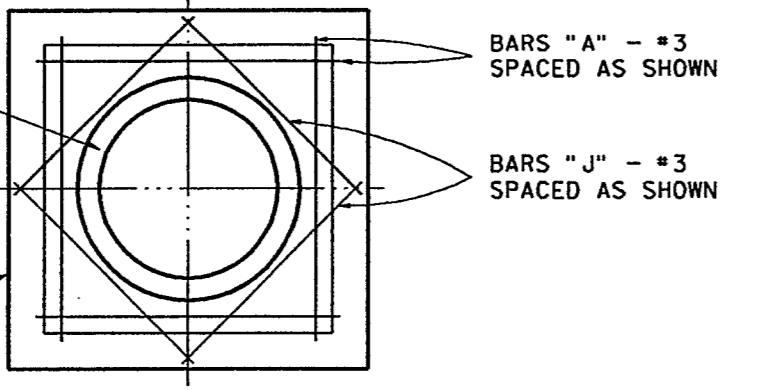
PLAN



SECTION

SLOPED HEADWALL
NOT TO SCALE

NOTE: FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS CATALOG NO. V-1874 AND 2024A OR EQUAL AND SHALL BE OF GRAY CAST IRON CONFORMING TO ASTM A-48 CL 35.



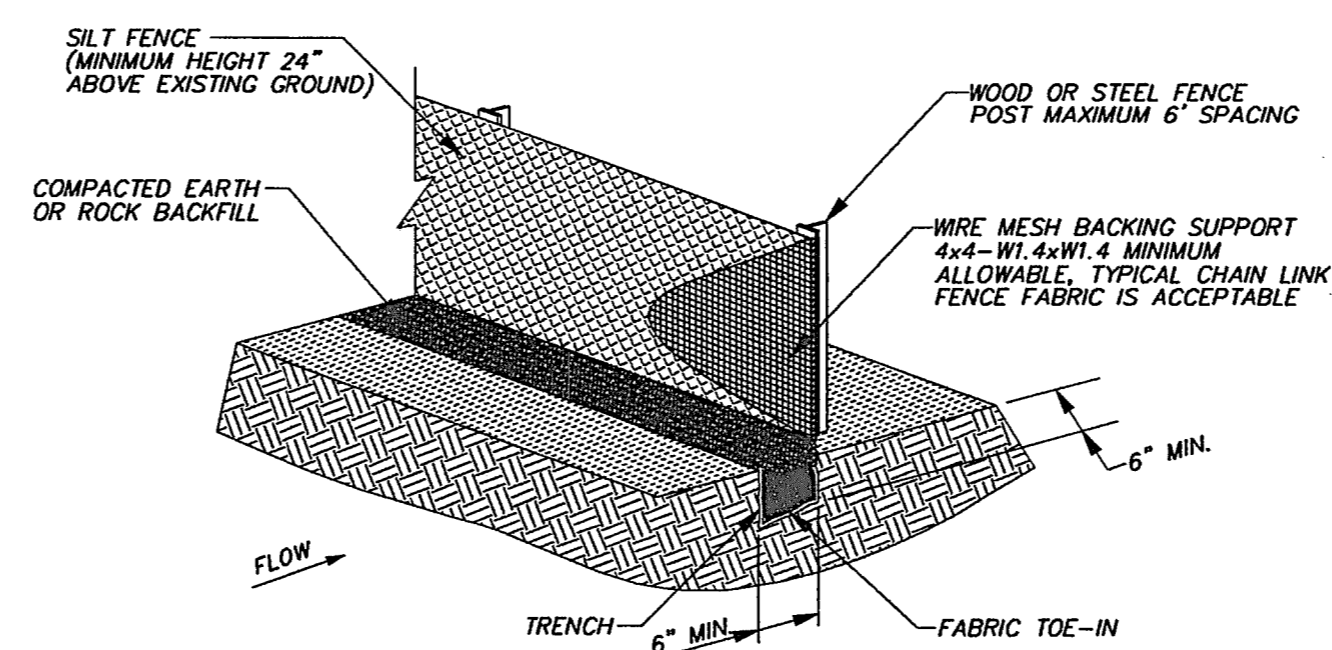
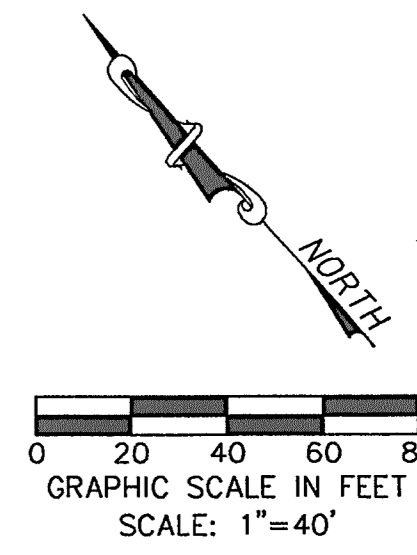
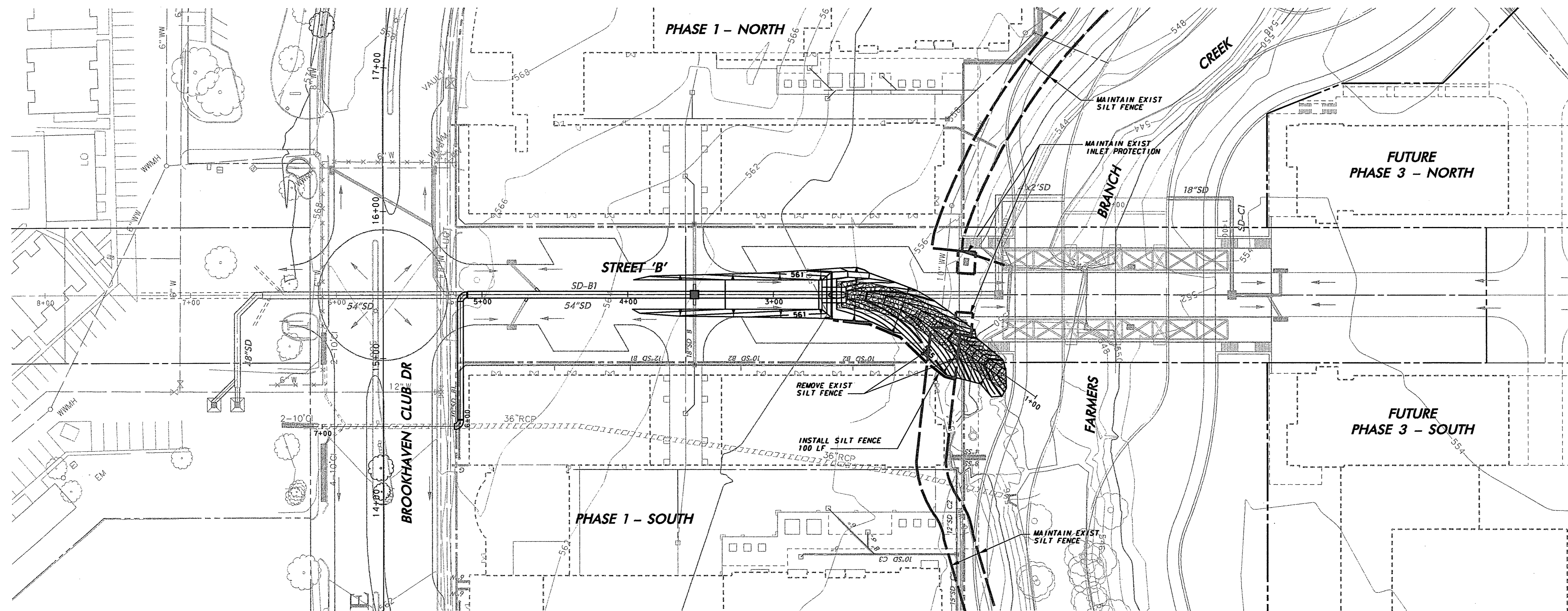
TYPE A & TYPE B
STORM DRAIN MANHOLE
NOTE: MAX. PIPE SIZE 78"

- NOTES: APPLICABLE TO ALL MANHOLES
1. PREFABRICATED MANHOLES OF EQUIVALENT STRENGTH AND DESIGN MAY BE SUBSTITUTED WITH THE APPROVAL OF AN ENGINEER.
 2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 LBS. PER SQUARE INCH AT 28 DAYS.
 3. MANHOLES SHALL BE BUILT ON THE MAIN SEWER LINE. LATERAL PIPES MAY ENTER MANHOLES AT ANY LOCATION.
 4. MANHOLES WILL BE MEASURED AND PAID FOR AT THE CONTRACT UNIT PRICE PER EACH REGARDLESS OF MANHOLE DEPTH.
 5. CYLINDRICAL SHAPED MANHOLES MAY BE USED AS DIRECTED BY ENGINEER IN LIEU OF MANHOLE DESIGN SHOWN ON THIS PAGE.
 6. CONCRETE FOR PAVEMENT BLOCKOUTS SHALL BE CLASS HAND FINISH CONCRETE (4500 P.S.I.).

NOTE: PLASTIC COATED STEEL, NEOPRENE COATED STEEL STEPS OR EQUAL SHALL BE PLACED SECURELY INTO MANHOLE WALLS ON 15\"/>

NO.	REVISION	BY	DATE		
TOWN OF ADDISON DALLAS COUNTY, TEXAS					
STORM DRAIN RELOCATION BROOKHAVEN CLUB DRIVE					
STORM DRAIN DETAILS					
icon Consulting Engineers, Inc. Civil Engineers - Designers - Planners 250 W. Southlake Blvd., Suite 117 Southlake, TX 76092 (817) 552-6210					
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5019-01	JAM	SAM	MAY 8, 2008	PW # 2007-001	5

STORM DRAIN RELOCATION - BROOKHAVEN CLUB DRIVE



- NOTE:**
- WOOD OR STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. THE POSTS MUST BE EMBEDDED A MINIMUM OF ONE FEET FOR STEEL OR TWO FEET FOR WOOD.
 - THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON THE UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
 - THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
 - SILT FENCE SHALL BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL SUPPORT POST. THERE SHALL BE A 6 INCH DOUBLE OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
 - INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 - SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
 - ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHED A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
 - CONTRACTOR SHALL PROVIDE TRIANGULAR SEDIMENT FILTER DIKE WHERE SILT FENCE IS REQUIRED BUT NOT INSTALLABLE.

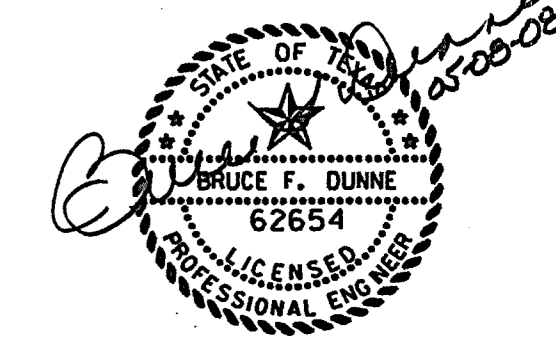
SILT FENCE
NOT TO SCALE

WARNING

CONTRACTOR IS TO CONTACT TEXAS ONE-CALL SYSTEM (1-800-245-4545) OR OTHER UTILITY LOCATING SERVICES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITIES. ICON CONSULTING ENGINEERS, INC. IS NOT RESPONSIBLE FOR KNOWING ALL EXISTING UTILITIES IN THE PROJECT AREA NOR FOR DEPICTING THE EXACT LOCATIONS OF UTILITIES ON THESE DRAWINGS.

BM #1 REF. ELEVATION = 559.47
SQUARE CUT IN TOP OF CURB, SOUTH MEDIAN END NOSE, MARSH LANE 1127' NORTH OF BROOKHAVEN CLUB DRIVE.

BM #2 REF. ELEVATION = 547.84
SQUARE CUT IN TOP OF CURB, NORTH MEDIAN END NOSE, AT INTERSECTION OF BROOKHAVEN CLUB DRIVE AND MARSH LANE.



NO.	REVISION	BY	DATE

TOWN OF ADDISON
DALLAS COUNTY, TEXAS

STORM DRAIN RELOCATION
BROOKHAVEN CLUB DRIVE

GRADING AND EROSION & SEDIMENT
CONTROL PLAN & DETAILS

icon Consulting Engineers, Inc.		250 W. Southlake Blvd., Suite 117			
Civil Engineers - Designers - Planners		Southlake, Tx 76092 (817) 552-6210			
PROJECT	DESIGN	DRAWN	DATE	FILE	SHEET
5019-01	JAM	SAM	MAY 8, 2008	PW # 2007-001	6

STORM DRAIN RELOCATION - BROOKHAVEN CLUB DRIVE