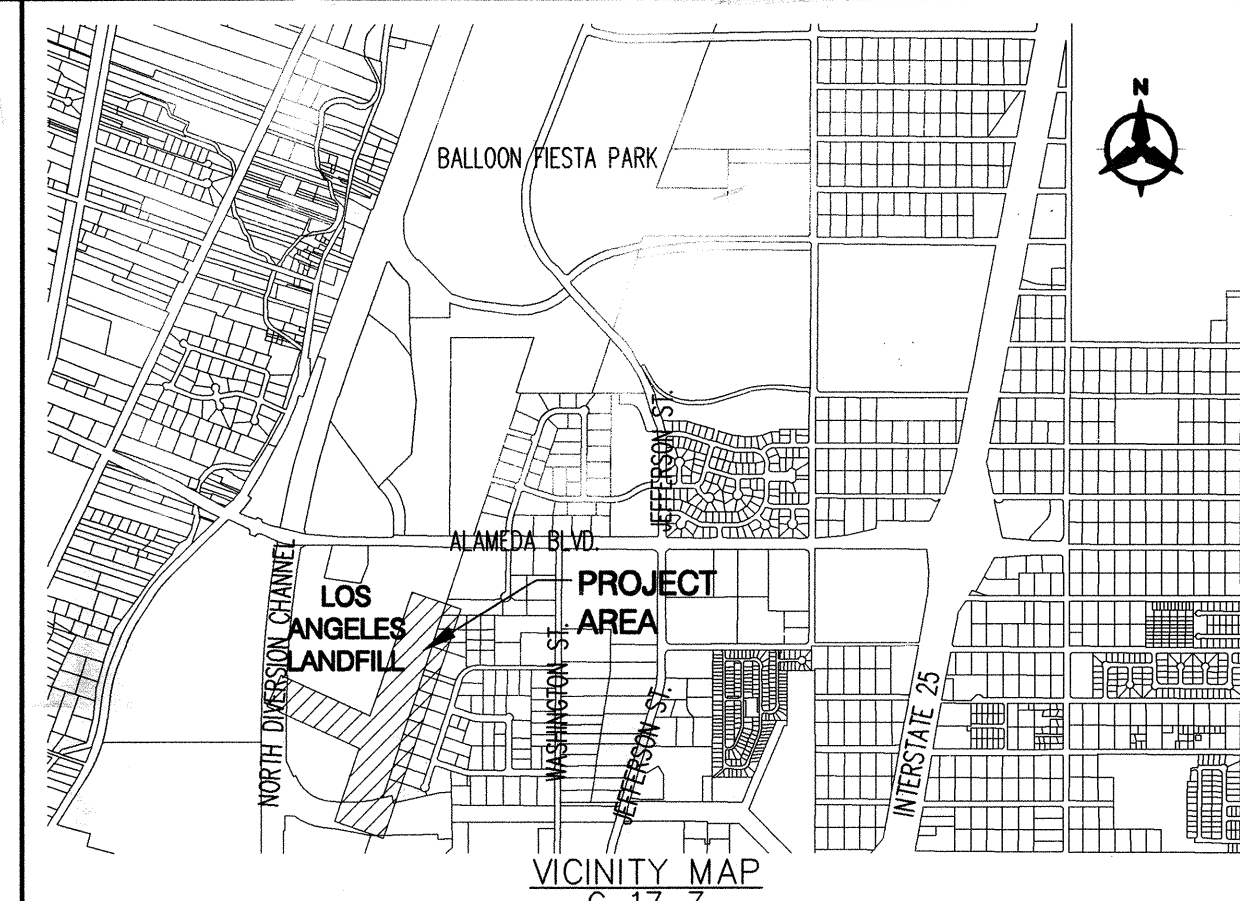


CONSTRUCTION PLANS FOR CLIFFORD CHANNEL REALIGNMENT AT FORMER LOS ANGELES LANDFILL ALBUQUERQUE, NEW MEXICO

CERTIFICATION
THE CHANGES SHOWN HEREON, MARKED BY AN
ASTERISK, ARE BASED UPON A FIELD SURVEY
CONDUCTED BY ME OR UNDER MY SUPERVISION AND
REFLECT THE LOCATIONS (VERTICAL AND HORIZONTAL)
TO THE BEST OF MY KNOWLEDGE AND BELIEF.



NOTICE TO CONTRACTORS

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #6.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION AND THE ENVIRONMENTAL HEALTH DEPARTMENT (768-2618) A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
5. ALL WORK EFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING, OR AS INDICATED BY THIS PLAN SET.
7. ALL PERMANENT SURVEY MONUMENTS WILL BE SHOWN ON THE CONSTRUCTION PLANS. THESE SURVEY MONUMENTS INCLUDE, BUT NOT LIMITED TO: PROPERTY OWNERS, AMAFCA BOUNDARY CORNERS, PUBLIC LAND SURVEY MONUMENTS, AND GEODETIC SURVEY CONTROL.
8. GEODETIC SURVEY MONUMENTS: THE CITY OF ALBUQUERQUE, GEODETIC SURVEY, SHALL BE NOTIFIED NOT LESS THAN THREE (3) WORKING DAYS PRIOR TO STARTING WORK THAT WILL IMPACT ANY EXISTING ACS GEODETIC SURVEY MONUMENTS. ALL REFERENCING AND REPLACEMENT OF ACS MONUMENTS SHALL BE DONE BY THE CITY OF ALBUQUERQUE GEODETIC SURVEY. ANY ACS MONUMENTS DAMAGED OR DESTROYED DUE TO THE FAILURE OF THE CONTRACTOR TO NOTIFY AS STATED ABOVE SHALL BE REPAIRED OR REPLACED BY THE CITY OF ALBUQUERQUE, GEODETIC SURVEY, AT THE CONTRACTOR'S EXPENSE.
9. B. ALL OTHER PERMANENT SURVEY MONUMENTS: CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) WORKING DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION 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 SECTION 4.4.1 OF THE GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986.
10. CONTRACTOR SHALL RECORD 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.
11. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
12. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION SEVEN (7) WORKING DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.
13. ALL WORK IN AMAFCA RIGHT-OF-WAY MUST BE COMPLETED BETWEEN OCTOBER 15 AND MAY 15. AT ALL OTHER TIMES THE LEVEE AND EMBANKMENT ARMORING MUST BE INTACT.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☐ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☐ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☐ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- ☐ THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

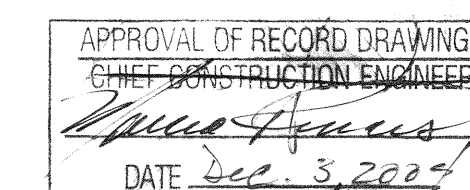
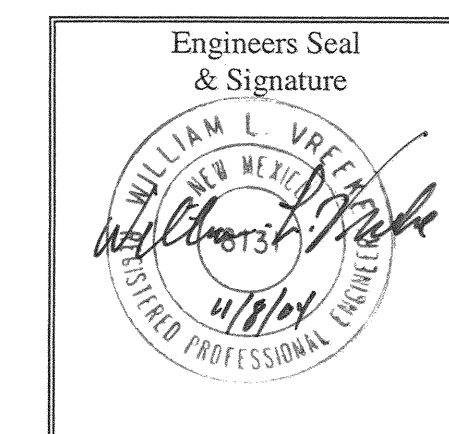
SHEET NUMBER

DESCRIPTION

- | | |
|----|---|
| 1 | COVER SHEET |
| 2 | SITE PLAN |
| 3 | CHANNEL PLAN AND PROFILE STA. 0+00.00 TO STA. 12+00.00 |
| 4 | CHANNEL PLAN AND PROFILE STA. 12+00.00 TO STA. 24+00.00 |
| 5 | DETAILED SITE PLAN |
| 6 | ASPHALT AND STORM DRAIN REMOVAL AND OUTLET PLAN |
| 7 | CLIFFORD CHANNEL GRADING PLAN AND PROFILE STA. 1+00.00 TO STA. 13+00.00 |
| 8 | MISCELLANEOUS DETAILS |
| 9 | CHANNEL AND MISCELLANEOUS WALL DETAILS |
| 10 | RETAINING WALL DETAILS AND SCHEDULES |
| 11 | CHANNEL AND MISCELLANEOUS WALL DETAILS |

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, William L. Vreeke, P.E., of the firm of Bohannon Huston, Inc., 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 (Clifford Channel Realignment at former Los Angeles Landfill, City Project No. 683301) 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 me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by the contractor, RMCI Inc. and their surveyor, Will Plotner, Jr., NMPS 14271.



Project Engineer

REFERENCES:

HOLMES AND NARVER, INC. "DRAINAGE & REMEDIATION REPORT FOR FORMER LOS ANGELES LANDFILL, PROJECT NO. 6166.91," MARCH 2001.

BOHANNAN HUSTON, INC. "CLIFFORD CHANNEL REALIGNMENT DESIGN ANALYSIS REPORT," JUNE 5, 2003.

HEALTH AND SAFETY NOTE

THIS PROJECT IS BEING PERFORMED ON AND/OR NEAR THE FORMER CITY OF ALBUQUERQUE (OWNED) AND/OR OPERATED LOS ANGELES LANDFILL. THIS FORMER LANDFILL CONTAINS LANDFILL GAS WHICH CONSISTS OF VOLATILE ORGANIC COMPOUNDS, SOME OF WHICH CAN BE HARMFUL TO HUMANS, AND METHANE WHICH CAN EXPLODE GIVEN THE CORRECT CONDITIONS. THE LANDFILL CURRENTLY HAS A LANDFILL GAS EXTRACTION SYSTEM, WHICH IS DESIGNED TO REMOVE THE LANDFILL GASES AND BURN THEM AT A GROUND FLARE. THE LANDFILL GAS EXTRACTION SYSTEM WILL CONTINUE TO OPERATE DURING CONSTRUCTION OF THIS PROJECT; HOWEVER, THE OWNER CANNOT GUARANTEE THAT THE LANDFILL GAS EXTRACTION SYSTEM WILL OPERATE CONTINUOUSLY DURING THE DURATION OF THIS PROJECT AND/OR EVEN WHEN OPERATING ALL THE LANDFILL GAS AT THE LANDFILL IS BEING COLLECTED BY THE EXTRACTION SYSTEM. THE LANDFILL GAS EXTRACTION SYSTEM MAY SHUTDOWN DUE TO NO FAULT BY THE OWNER. THE OWNER WILL MAKE EVERY ATTEMPT TO GET THE EXTRACTION SYSTEM OPERATING AS SOON AS POSSIBLE IF SHUT DOWN OCCURS. THE CONTRACTOR IS RESPONSIBLE FOR THE HEALTH AND SAFETY OF HIS/HER WORKERS. THE WORK DETAILED IN THIS PROJECT MAY REQUIRE THAT A HEALTH AND SAFETY PLAN BE PREPARED ACCORDING TO OSHA 1910.120.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION, INCLUDING WORKER HEALTH AND SAFETY ASPECTS, OF THESE IMPROVEMENTS.
2. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS, AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
3. DISPOSAL SITE FOR ALL EXCESS EXCAVATION MATERIAL AND UNSUITABLE MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE ENVIRONMENTAL HEALTH DEPARTMENT (768-2618). ALL COSTS INCURRED IN OBTAINING A FULLY REGULATED DISPOSAL SITE AND HAUL THERETO SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT, AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
4. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE ENVIRONMENTAL HEALTH DEPARTMENT (768-2618).
5. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY COSTS INCURRED FOR REPAIRS SHALL BE THE COST OF THE CONTRACTOR.
6. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL COORDINATE WITH ENVIRONMENTAL HEALTH DEPARTMENT (768-2618) THE LOCATION OF ALL CONSTRUCTION EQUIPMENT PARKING.
7. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADING, SURFACE DISTURBANCE).
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AT HIS EXPENSE ANY AND ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
9. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, PAVEMENT MARKINGS, CURB & GUTTER, DRIVE PADS, WHEELCHAIR RAMPS, AND SIDEWALK DURING CONSTRUCTION. APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS, AND SHALL REPAIR OR REPLACE PER COA STANDARDS, AT HIS OWN EXPENSE.
10. LOCATIONS OF UTILITIES ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL PERTINENT UTILITIES IN THE FIELD.
11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUPPORT ALL UTILITIES EXPOSED DURING CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR DAMAGE TO ALL UTILITIES, INCLUDING SERVICE LINES EXTRACTION PIPE, MONITORING AND EXTRACTION WELL HEADS, WELL VAULTS, CONDENSATION SUMPS, AND ISOLATION VALVE VAULTS.
12. MILLINGS GREATER THAN SIX INCHES IN THICKNESS, IMPACTED DURING GRADING, SHALL BE STOCKPILED IN AN AREA DESIGNATED BY THE ENVIRONMENTAL HEALTH DEPARTMENT (768-2618). AT THE END OF THE PROJECT ALL STOCKPILED MILLINGS WILL BE PROCESSED WITH HFE-150 OR HFE-300 EMULSION AS REQUIRED BY THE MANUFACTURER'S INSTRUCTIONS AND WILL BE PLACED BACK IN THEIR ORIGINAL LOCATION. MILLINGS LESS THAN SIX INCHES IN THICKNESS, IMPACTED DURING GRADING, SHALL BE LEFT IN PLACE, BUT SHALL BE SCARIFIED TO A MINIMUM OF 8" BEFORE PLACEMENT OF FILL.
13. IF LANDFILL MATERIAL IS ENCOUNTERED DURING THE GRADING AND/OR CONSTRUCTION OF THIS PROJECT, IMMEDIATELY NOTIFY THE ENVIRONMENTAL HEALTH DEPARTMENT (768-2618).
14. LIMIT HEAVY TRUCK OR SCRAPER TRAFFIC TO EXISTING ROADS, WORK AREAS AND DESIGNATED HOLDING AREAS LOCATED ON THE LANDFILL.
15. SEEDING WILL BE PERFORMED BY THE CITY PARKS AND RECREATION DEPARTMENT.
16. FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.
17. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
18. WHERE GRADING OCCURS WITHIN 15 FEET OF THE GAS EXTRACTION PIPING, COMPACTION IS TO BE ACHIEVED THROUGH NON-VIBRATORY MEANS ONLY.

DISCLOSURE STATEMENT:

THE SUBJECT PROPERTY IS LOCATED ON/NEAR A FORMER LANDFILL. DUE TO THE SUBJECT PROPERTY BEING ON/NEAR A FORMER LANDFILL, CERTAIN PRECAUTIONARY MEASURES MAY NEED TO BE TAKEN TO ENSURE THE HEALTH AND SAFETY OF THE PUBLIC. RECOMMENDATIONS MADE BY A PROFESSIONAL ENGINEER WITH EXPERTISE IN LANDFILLS AND LANDFILL 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 DEVELOPMENT OF THE SITE.

APPROVED FOR CONSTRUCTION

MARCIA PINCUS, P.E.
ENVIRONMENTAL HEALTH DEPARTMENT
CITY OF ALBUQUERQUE

Feb. 23, 2004
DATE

APPROVED FOR CONSTRUCTION WITHING AMAFCA R.O.W.

JOHN KELLY, P.E.
EXECUTIVE ENGINEER
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

2-23-04
DATE

Bohannon Huston
Court yard | 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 6833.01 0104

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		DATE		DATE	
		DRC Chairman	John Kelly	2-26-04	APPROVED FOR CONSTRUCTION City Engineer Date 2-26-04		
		Transportation	John Kelly	2-26-04			
		Water/Wastewater	John Kelly	2-26-04			
		Hydrology	John Kelly	2-26-04			
		Parks	John Kelly	2-26-04			
Const. Coord.		John Kelly	2-26-04				
City Project No.		6833.01		Sheet		Of	
				1		11	

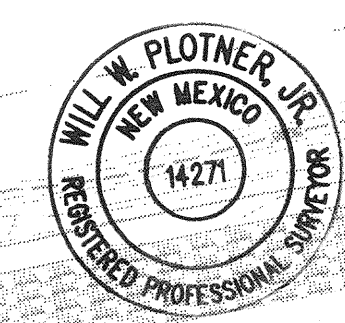
AMAFCA R.O.W. (BRAS. CAPS) POINTS TABLE

POINT #	MONUMENT	EAST
1	N4-15-1	152025.787 394375.0496
2	N4-15-2	152025.787 394311.8420
3	N4-15-3	152025.787 394220.6604
4	N4-15-4	152025.787 394168.4553
5	N4-15-5	152025.787 394178.4400
6	N4-14-1	1520650.5767 394164.8527
7	N4-14-2	1520320.7635 394164.7904
8	N4-14-3	1520171.2491 394235.9094
9	N4-14-4	1520162.6774 394239.1305
10	N4-14-5	1520171.7155 394262.4307
11	N4-14-6	1519913.6194 394599.9470
12	N4-19-4	1519902.1044 394709.3061
13	N4-19-5	1519899.5282 394816.6343
14	N4-19-6	1519922.2219 395057.8323
15	N4-19-7	1519966.3349 395263.1639

COORDINATES SHOWN ARE GRID COORDINATES BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE (NAD 1927).

CERTIFICATION
THE CHANGES SHOWN HEREON, MARKED BY AN
ASTERISK, ARE BASED UPON A FIELD SURVEY
CONDUCTED BY ME OR UNDER MY SUPERVISION AND
REFLECT THE LOCATIONS (VERTICAL AND HORIZONTAL)
TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Will Plotner Jr 9/9/04



AMAFCA CAP
STA. NDC 7"
N=1,522,635.84
E=394,094.80
TRIG. ELEV. = 5062.60
GROUND TO GRID
FACTOR = 0.99967075

LEGEND

- EXISTING
- NEW
- 5075 INDEX CONTOUR
- 5076 CONTOUR
- MANHOLE
- STORM DRAIN
- SANITARY SEWER
- LOS ANGELES LANDFILL
- PROPERTY BOUNDARY
- RV HOOKUPS
- METHANE WELL*
- GAS EXTRACTION PIPE
- EXISTING WATER LINE
- UNDERGROUND ELECTRIC CABLE
- GAS LINE
- TELEPHONE LINE
- TELEPHONE BOX
- ACCESS ROUTE

* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS
** INCLUDES SURVEYED LOCATIONS OF EXISTING FEATURES

NOTES

THE RV PARKING PLAN SHOWN HEREON IS CONCEPTUAL AND MAY BE SUBJECT TO CHANGE. THE PARKING PLAN IS SHOWN FOR REFERENCE PURPOSES ONLY AND IS NOT FOR CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA AND KEEPING EXISTING UTILITIES IN SERVICE UNLESS OTHERWISE NOTED.

UTILITY COMPANY CONTACTS

BUSINESS	NAME	PHONE
PNM - ELECTRIC	ROBERT GARCIA	505-214-3490
PNM - GAS	KELLY BOUSKA	505-241-7752
AT&T	DAVID CROWL	505-842-2911
MCI WORLDWIDE	ANDY DARNELL	505-346-4476
COMCAST	RITA ERICKSON	505-761-6235
TIME WARNER TELECOM	ROYAL HARRISON	505-938-7339
E. SPIRE	JOHN MARES	505-998-2274
MCLEOD USA	RICK MUELLER	505-244-3161
CITYNET TELECOMMUNICATIONS	JOSHUA NELSON	505-217-0070
CITY OF ALBUQUERQUE	GREG OLSON	505-768-3629
QWEST/US WEST	DAVID MULLER	505-245-8706
GENUITY	TOM TURLEY	636-561-0339
AMAFCA	JERRY LOVATO	505-884-2215

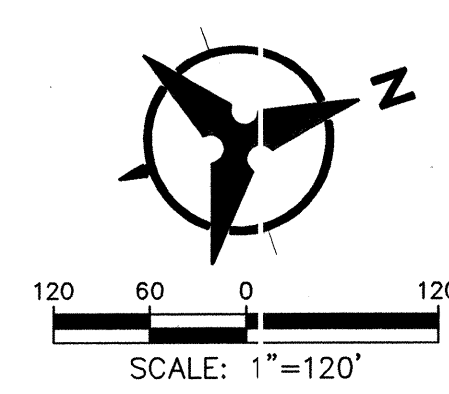
Bohannon & Huston

Courtyard I 7500 Jefferson St NE Albuquerque, NM 87109-4335
ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

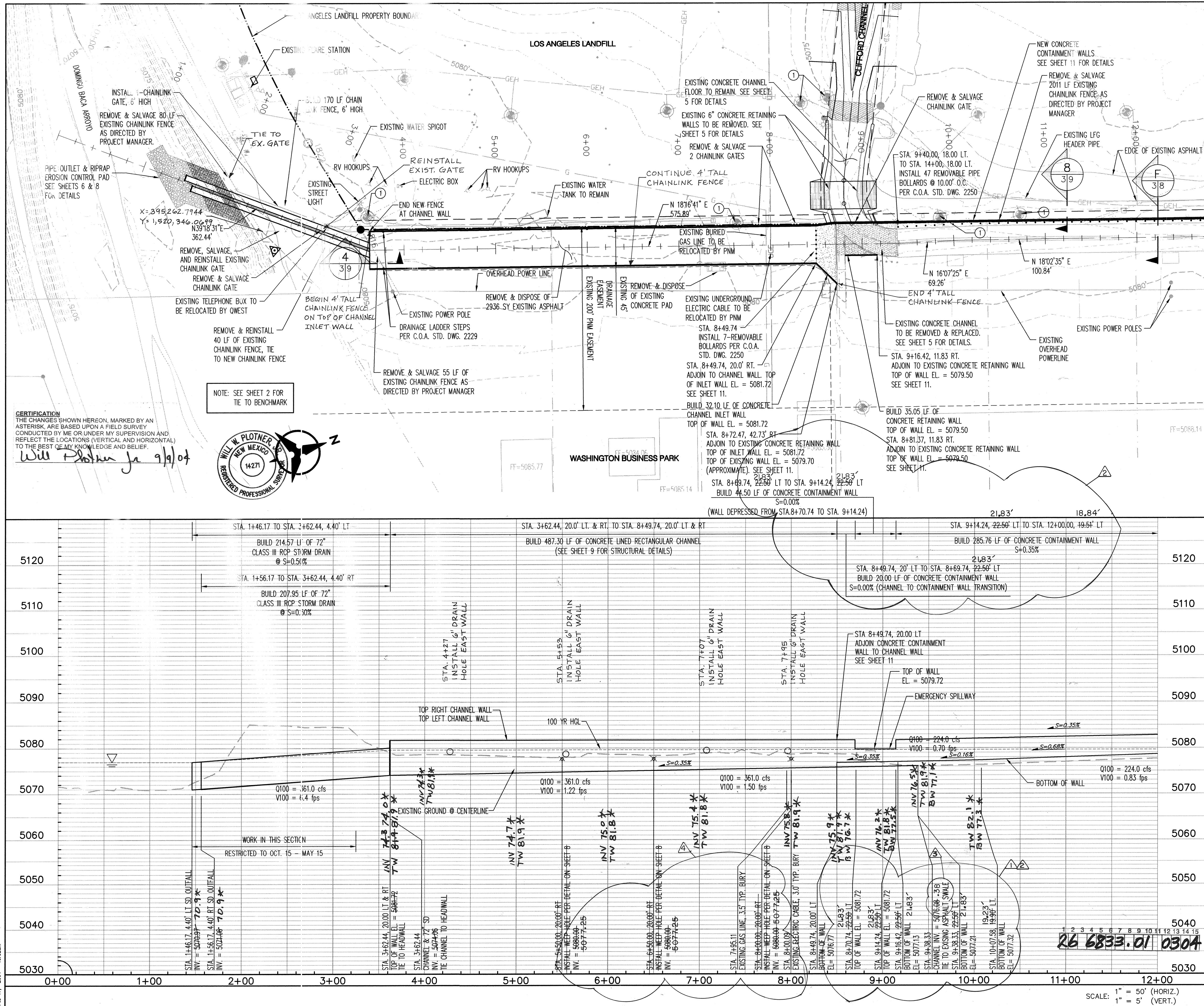
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

CLIFFORD CHANNEL REALIGNMENT
SITE PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
FEB 26 2004	FEB 26 2004		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
6833.01	C-17-Z	2	11



26 6833.01 0204



NOTES:

- STATIONING IS ALONG CENTERLINE OF STORM DRAIN, CHANNEL, AND EXISTING ASPHALT SWALE.
- ALL EXISTING WELLS, VALVES, SUMPS, ARE SURROUNDED BY BOLLARDS AND OR "TEE POSTS" WITH FLAGGING.
- CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO WELLS, SUMPS, EXHAUSTION PIPING AND/OR VALVES DUE TO HIS/HER NEGLIGENCE. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING THE INTEGRITY OF WELL VENTS AT ALL TIMES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA.
- ALL MANHOLE FRAMES AND COVERS SHALL BE PER CITY STANDARDS DRAWINGS 2110.
- LADDER RUNGS SHALL BE PER C.O.A. STD. DWG. 2229.

KEYED NOTES:

- THERE IS A 15-FOOT EXCLUSION ZONE AROUND THE FOLLOWING STRUCTURES:
 + ALL GAS EXTRACTION WELLS
 + ALL ISOLATION VALVES
 + ALL CONDENSATE SUMPS
 + ALL EXISTING MONITORING WELLS
 GRADING WITHIN THE 15-FOOT EXCLUSION ZONE MUST BE PERFORMED BY HAND, OR BY MEANS THAT SHALL NOT DAMAGE/DESTROY THESE STRUCTURES.
- IF EXISTING RV HOOKUPS ARE ENCOUNTERED DURING GRADING AND REQUIRE REMOVAL, THE CONTRACTOR SHALL REMOVE THE HOOKUP AND RECORD IT ON THE RECORD DRAWINGS. THE CONTRACTOR SHALL REMOVE HOOKUP IN SUCH A MANNER THAT THE REMAINING HOOKUPS CAN STILL BE ENERGIZED.

LEGEND **

EXISTING	NEW
---	5075
---	5076
---	INDEX CONTOUR
---	CONTOUR
---	MANHOLE
---	STORM DRAIN
---	SANITARY SEWER
---	LOS ANGELES LANDFILL PROPERTY BOUNDARY
---	RV HOOKUPS
---	METHANE WELL*
---	GAS EXTRACTION PIPE
---	EXISTING WATER LINE
---	UNDERGROUND ELECTRIC CABLE
---	GAS LINE
---	TELEPHONE LINE
---	TELEPHONE BOX

* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS
 ** INCLUDES SURVEYED LOCATION OF EXISTING FEATURES

DETAIL OR SECTION
 SHEET # ON WHICH
 DETAIL IS DRAWN
 SHEET # ON WHICH
 SECTION IS CUT

Bohannon & Huston
 Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
 ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

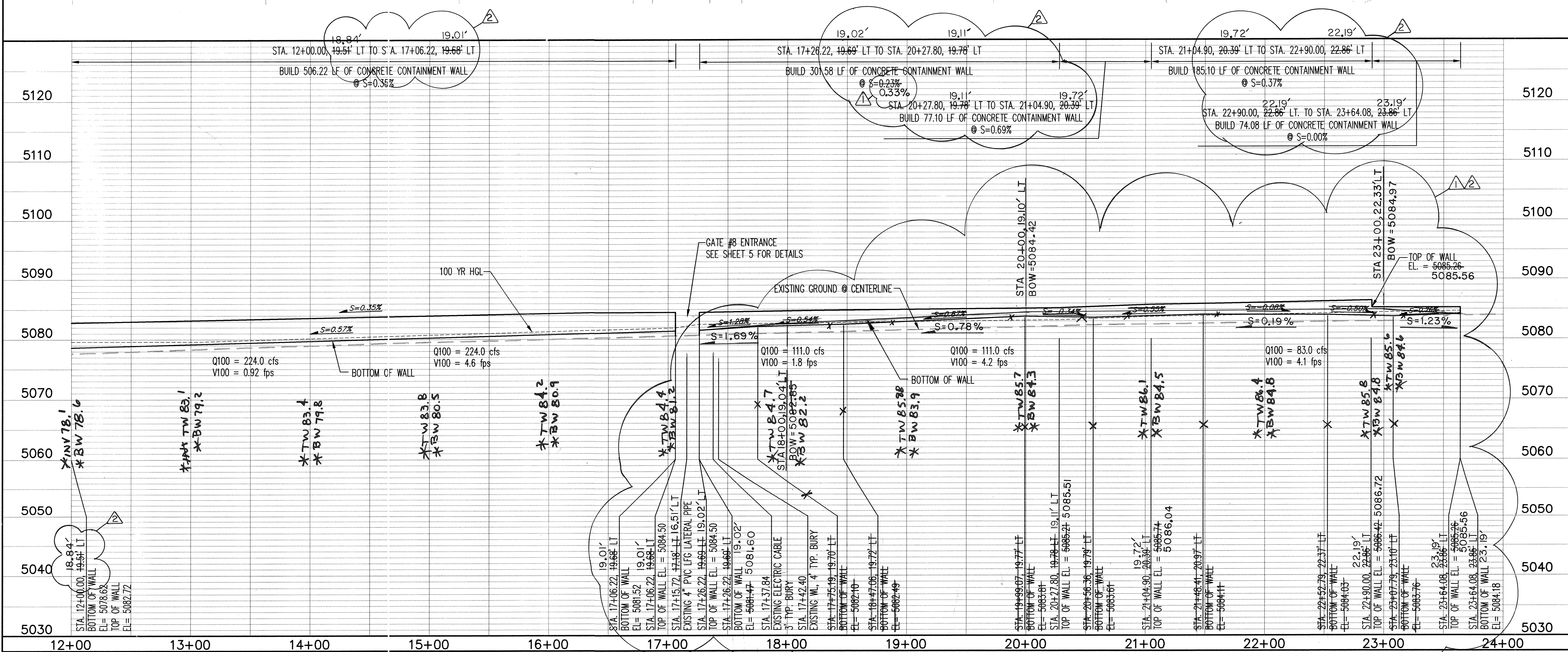
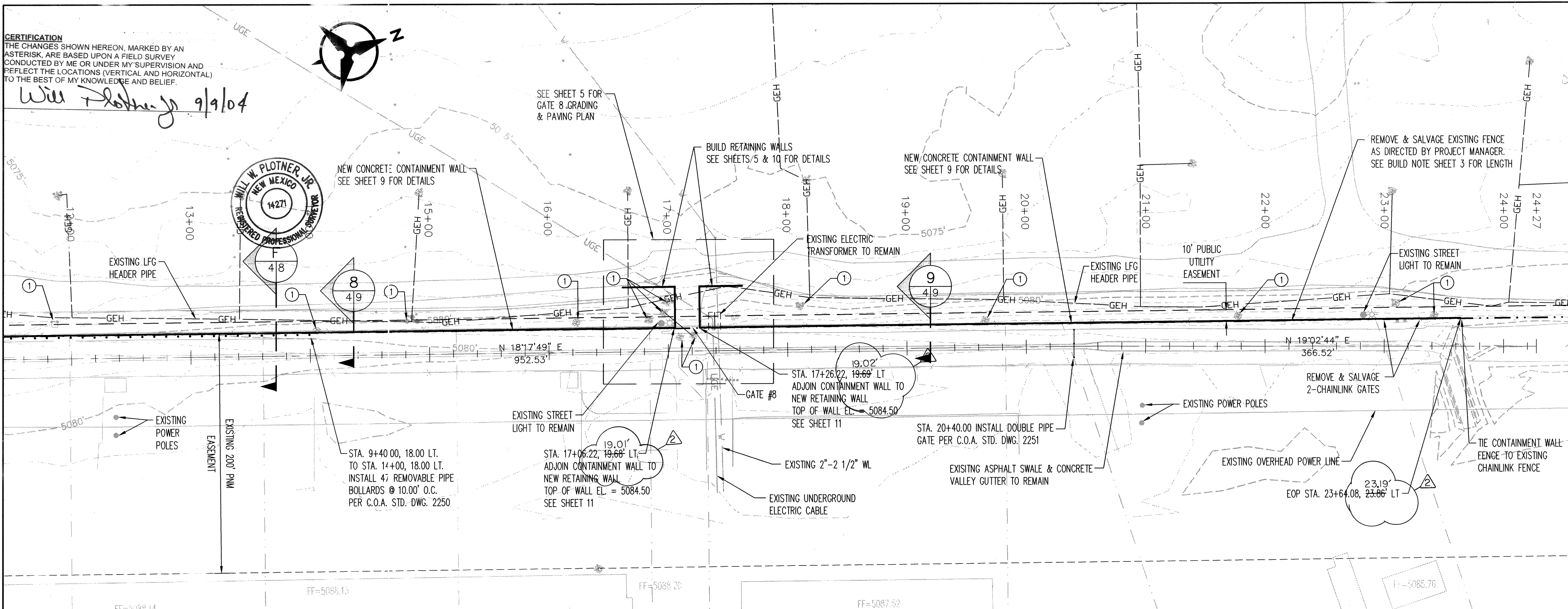
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

CLIFFORD CHANNEL REALIGNMENT
 CHANNEL PLAN AND PROFILE
 STA. 0+00.00 TO STA. 12+00.00

Design Review Committee	City Engineer Approval	Mo./Day/Yr.
City Project No. 6833.01	Zone Map No. C-17-Z	Sheet 3 of 11

BHI JOB NO. 030085.005.CWH Date: 02/10/04

Will Rothery 9/9/04



NOTES:

1. STATIONING IS ALONG CENTERLINE OF STORM DRAIN, CHANNEL, AND EXISTING ASPHALT SWALE.
2. ALL EXISTING WELLS, VALVES, SUMPS, ARE SURROUNDED BY BOLLARDS AND OR "TEE POSTS" WITH FLAGGING.
3. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO WELLS, SUMPS, EXTRACTION PIPING AND/OR VALVES DUE TO HIS/HER NEGLIGENCE. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING THE INTEGRITY OF WELL VENTS AT ALL TIMES.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA.
5. ALL MANHOLE FRAMES AND COVERS SHALL BE PER CITY STANDARDS DRAWINGS 2110.

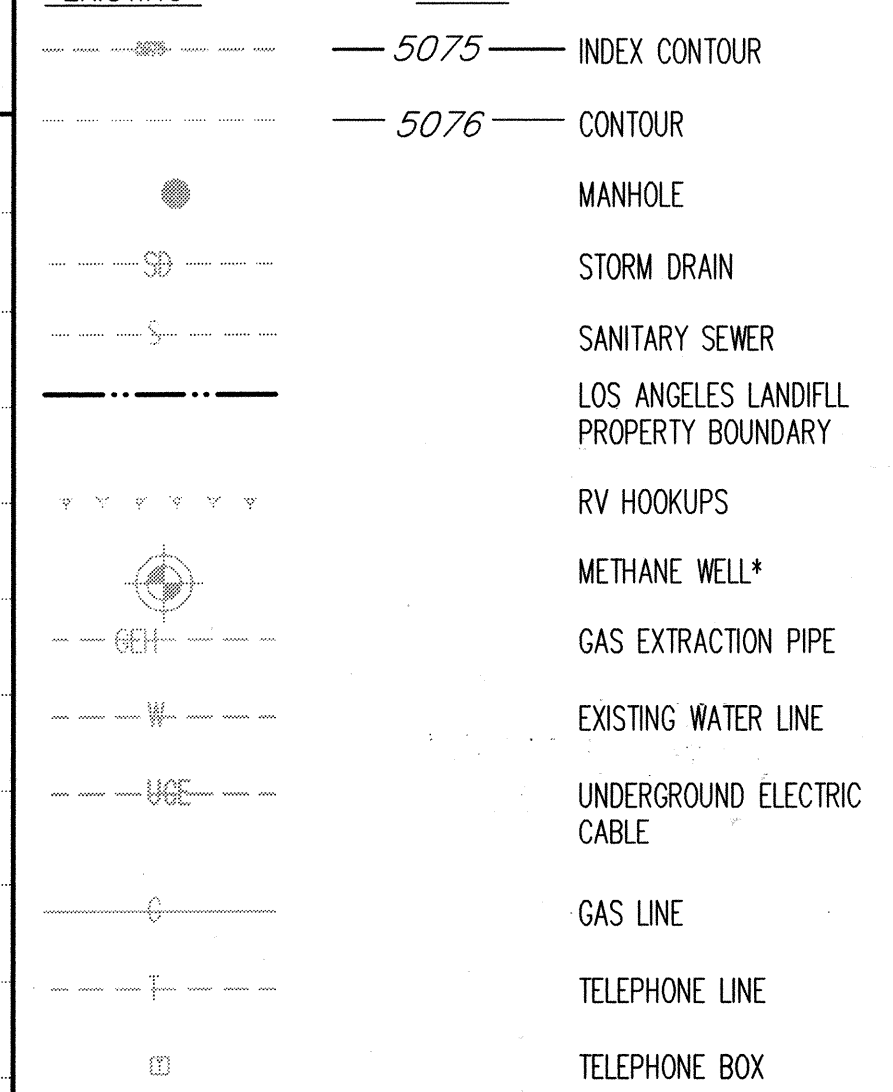
KEYED NOTES:

- ① THERE IS A 15-FOOT EXCLUSION ZONE AROUND THE FOLLOWING STRUCTURES:
- + ALL GAS EXTRACTION WELLS
 - + ALL ISOLATION VALVES
 - + ALL CONDENSATE SUMPS
 - + ALL EXISTING MONITORING WELLS
- GRADING WITHIN THE 15-FOOT EXCLUSION ZONE MUST BE PERFORMED BY HAND, OR BY MEANS THAT SHALL NOT DAMAGE/DESTROY THESE STRUCTURES.
- ② IF EXISTING RV HOOKUPS ARE ENCOUNTERED DURING GRADING AND REQUIRE REMOVAL, THE CONTRACTOR SHALL REMOVE THE HOOKUP AND RECORD IT ON THE RECORD DRAWINGS. THE CONTRACTOR SHALL REMOVE HOOKUP INSUCH A MANNER THAT THE REMAINING HOOKUPS CAN STILL BE ENERGIZED.

LEGEND **

EXISTING

NEW



* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS

** INCLUDES SURVEYED LOCATION OF EXISTING FEATURES

Bohannon  **Huston**^{INC.}

Courtyard | 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING  **SPATIAL DATA**  **ADVANCED TECHNOLOGIES**

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

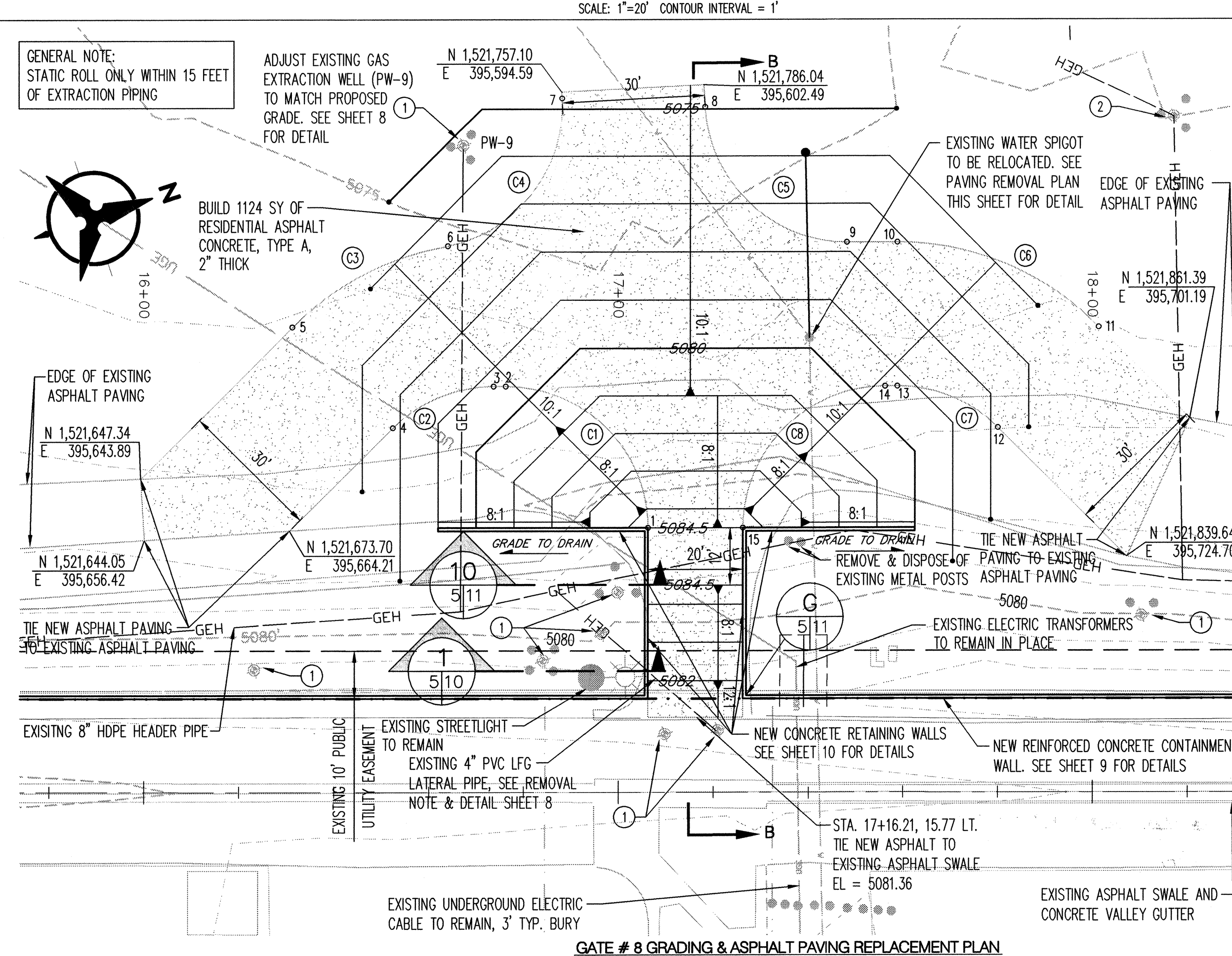
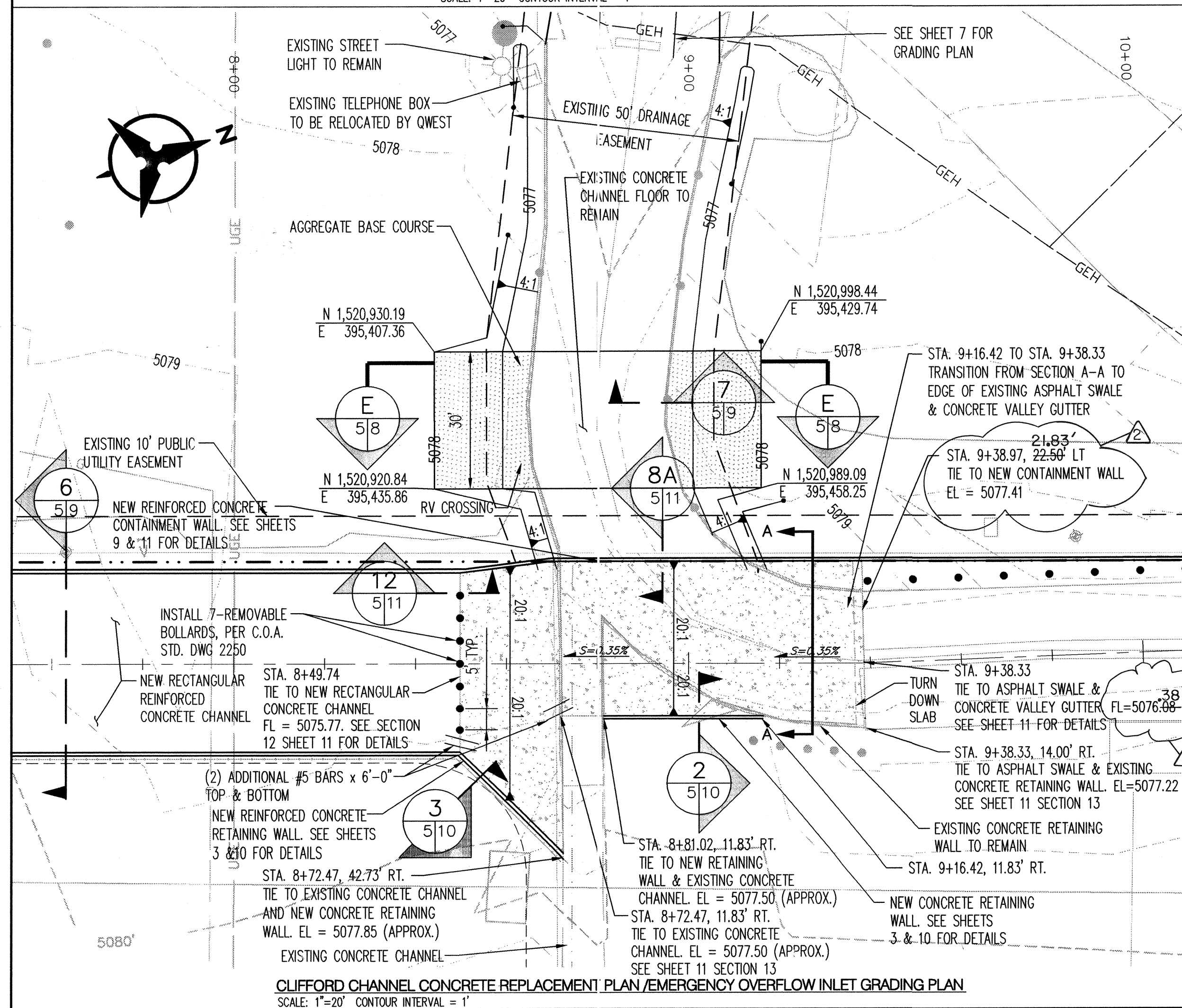
CLIFFORD CHANNEL REALIGNMENT
CHANNEL PLAN AND PROFILE
STA. 12+00.00 TO STA. 24+00.00

Design Review Committee	City Engineer - Approval	Mo./Day/Yr.	Mo./Day/Yr.
FEB 26 2004	FEB 26 2004		
REVIEW COMMITTEE	CITY ENGINEER		

City Project No.	6833.01	Zone Map No.	C-17-Z	Sheet	4	Of	11
------------------	---------	--------------	--------	-------	---	----	----

BHI JOB NO. 030085.005.CWH

Date: 02/10/04



KEYED NOTES:		SCALE: 1"=20' CONTOUR INTERVAL = 1'				PT & PC POINTS TABLE					
①	THERE IS A 15-FOOT EXCLUSION ZONE AROUND THE FOLLOWING STRUCTURES:					POINT	NORTHING	EASTING	POINT	NORTHING	EASTING
						1	1,521,745.64	395,687.36	9	1,521,804.30	395,643.55
*	ALL GAS EXTRACTION WELLS					2	1,521,726.57	395,649.47	10	1,521,814.38	395,646.88
						3	1,521,724.12	395,648.66	11	1,521,849.16	395,676.87
*	ALL ISOLATION VALVES					4	1,521,701.22	395,650.35	12	1,521,822.36	395,690.36
						5	1,521,687.73	395,623.55	13	1,521,804.97	395,675.37
*	ALL CONDENSATE SUMPS					6	1,521,724.15	395,617.87	14	1,521,802.53	395,674.56
						7	1,521,756.73	395,595.96	15	1,521,764.63	395,693.63
*	ALL EXISTING MONITORING WELLS					8	1,521,784.77	395,607.16			

NEW CONTAINMENT WALL. SEE SHEET 9 FOR DETAILS

EL = 5084.47

EL = 5079.50

EL = 5076.59

EL = 5077.13

NEW REINFORCED CONCRETE CHANNEL LINING 8" THICK

20'

11.83'

6" COMPACTED SOIL 95% PER ASTM D-1557

22.50' 21.83'

**SECTION A-A
(STA 9+16.42)**

**NEW REINF. CONCRETE SLAB
SEE SECTION 10 ON SHEET 11**

60'

28'

EXISTING GROUND

5075

5081

5083.15

5084.5

5084.5

5082

12"

7.71'

TIE TO EXISTING GROUND MAX SLOPE = 10:1

12" SUBGRADE SOIL R-VALUE=50 PLACED IN 2-6" COMPACTED LIFTS. 95% MIN. COMPACTION AT OPT. MOISTURE ±2% ASTM D-1557

4" TYP. BURY

TIE TO EXISTING ASPHALT SWALE EL = 5081.36

EXISTING 8" HDPE LFG HAIDER PIPE TO REMAIN

2" RESIDENTIAL ASPHALT CONCRETE TYPE "A" GRADATION

		CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
CLIFFORD CHANNEL REPAIR DETAILED SITE PLAN			
City Engineer Approval  FEB 26 2004 CITY ENGINEER	City Engineer Approval  FEB 26 2004 CITY ENGINEER	Last Design Update  FEB 26 2004 CITY ENGINEER	
City Project No. 6833.01		Zone Map No. C-17-	

[illegible]



* RIPRAP TO BE SCREENED OF ALL VEGETATION, TRASH, EARTH & DETRITUS.



LEGEND **

5075 INDEX CONTOUR

5076 CONTOUR

MANHOLE

STORM DRAIN

SANITARY SEWER

LOS ANGELES LANDFILL
PROPERTY BOUNDARY

RV HOOKUPS

METHANE WELL*

GAS EXTRACTION PIPE

EXISTING WATER LINE

UNDERGROUND ELECTRICAL
CABLE

GAS LINE

TELEPHONE LINE

TELEPHONE BOX

* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS

** INCLUDES SURVEYED LOCATION OF EXISTING FEATURES

KEYED NOTES:

- ① THERE IS A 15-FOOT EXCLUSION ZONE AROUND THE FOLLOWING STRUCTURES:

- + ALL GAS EXTRACTION WELLS
- + ALL ISOLATION VALVES
- + ALL CONDENSATE SUMPS
- + ALL EXISTING MONITORING WELLS

GRADING WITHIN THE 15-FOOT EXCLUSION ZONE MUST BE PERFORMED BY HAND OR BY MEANS THAT SHALL NOT DAMAGE/DESTROY THESE STRUCTURES.

- ② IF EXISTING RV HOOKUPS ARE ENCOUNTERED DURING GRADING AND REQUIRE REMOVAL, THE CONTRACTOR SHALL REMOVE THE HOOKUP(S) AND RECORD IT ON THE RECORD DRAWINGS. THE CONTRACTOR SHALL REMOVE HOOKUP(S) IN SUCH A MANNER THAT THE REMAINING HOOKUPS CAN STILL BE ENERGIZED.

 MILL EXISTING ASPHALT TO 8" BELOW FINISHED GRADE

NOTES:

1. ALL EXISTING WELLS, VALVES, SUMPS, ETC. ARE SURROUNDED BY BOLLARDS AND OR "TEE POSTS" WITH FLAGGING.
2. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO WELLS, SUMPS, EXTRACTION PIPING, AND/OR VALVES DUE TO HIS/HER NEGLIGENCE.
3. ALL FILL ON THE LANDFILL SITE SHALL BE PLACED IN NOT MORE THAN 8-INCH LOOSE LIFTS AND SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY AND $\pm 2\%$ OF OPTIMUM MOISTURE CONTENT AS PER ASTM D1557.
4. USE OF WATER ON THE LANDFILL SITE SHALL BE KEPT TO A MINIMUM. PONDING OF WATER ON THE LANDFILL SURFACE IS NOT ALLOWED.
5. IMPORTED FILL WITHIN THE LANDFILL SITE SHALL MEET THE FOLLOWING SPECIFICATIONS:
 - A. MATERIAL SHALL BE SC, SM, OR SC-SM, SC/SM AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM.
 - B. THE MATERIAL SHALL HAVE A MINIMUM OF 25%, BUT NOT MORE THAN 50%, PASSING THE NUMBER 200 SIEVE.
 - C. THE IMPORTED FILL SHALL HAVE 80% PASSING THE NUMBER 4 SIEVE.
 - D. THE CONTRACTOR SHALL VERIFY FOR THE ENVIRONMENTAL HEALTH DEPARTMENT THAT THE SOIL MEETS THE ABOVE SPECIFICATIONS AND SHALL DELIVER A SAMPLE ALONG WITH THE APPROPRIATE TEST RESULTS OF THE SOIL TO EHD (768-2618) FOR FINAL APPROVAL.
6. PRIOR TO PLACEMENT OF FILL, GRADED AREAS SHALL BE GRUBBED AND SCARIFIED TO A MINIMUM DEPTH OF 6".

Courtyard | 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING **SPATIAL DATA** **ADVANCED TECHNOLOGIES**

CLIFFORD CHANNEL REALIGNMENT

ASPHALT AND STORM DRAIN REMOVAL AND OUTLET PLAN

Design Review Committee 		City Engineer Approval 		Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 6833.01		Zone Map No. C-17-Z		Sheet 6	Of 11	

6833.01	C-17-Z	6	11
---------	--------	---	----

BHI JOB NO. 030085.005.CWH

Date: 02/10/04

NOTES:

1. THE COFFER DAM MUST BE ERECTED AND APPROVED BY THE AND AMAFCA PRIOR TO REMOVAL OF EXISTING RIPRAP FROM THE DOMINGO BACA ARROYO EMBANKMENT.
2. PRIOR TO PLACEMENT OF FILL, GRADED AREAS SHALL BE GRUBBED AND SCARIFIED TO A MINIMUM DEPTH OF 6".
3. ONCE THE 72-INCH PIPES ARE INSTALLED, THE ARROYO EMBANKMENT RIPRAP IS REPLACED, AND THESE IMPROVEMENTS ARE ACCEPTED BY THE CITY, THE COFFER DAM SHALL BE COMPLETELY REMOVED, AND THE ORIGINAL CONTOURS SHALL BE RESTORED.

CERTIFICATION
THE CHANGES SHOWN HEREON, MARKED BY AN
ASTERISK, ARE BASED UPON A FIELD SURVEY
CONDUCTED BY ME OR UNDER MY SUPERVISION AND
REFLECT THE LOCATIONS (VERTICAL AND HORIZONTAL)
TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Will Plotner Jr. 9/9/04



LEGEND **

EXISTING

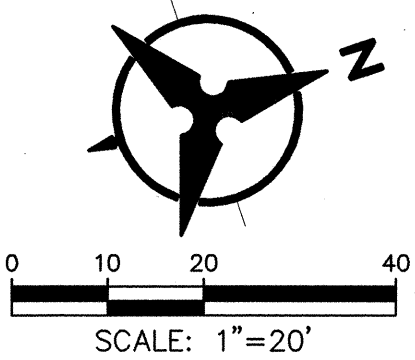
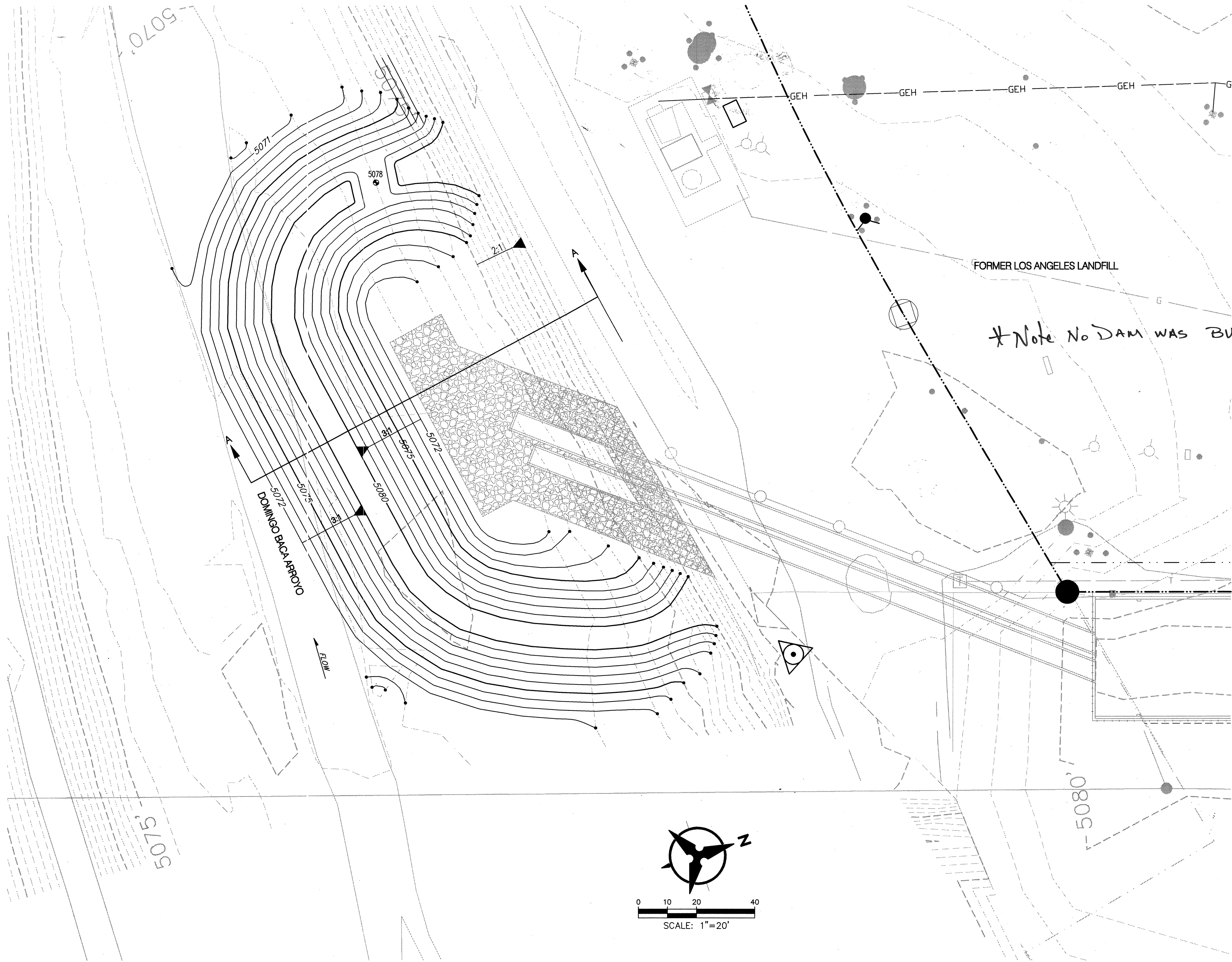
NEW

- 5075 --- INDEX CONTOUR
- 5076 --- CONTOUR
- MANHOLE
- SD --- STORM DRAIN
- S --- SANITARY SEWER
- LOS ANGELES LANDFILL PROPERTY BOUNDARY
- RV HOOKUPS
- METHANE WELL*
- GEH --- GAS EXTRACTION PIPE
- W --- EXISTING WATER LINE
- UGE --- UNDERGROUND ELECTRIC CABLE
- G --- GAS LINE
- T --- TELEPHONE LINE
- ☐ --- TELEPHONE BOX

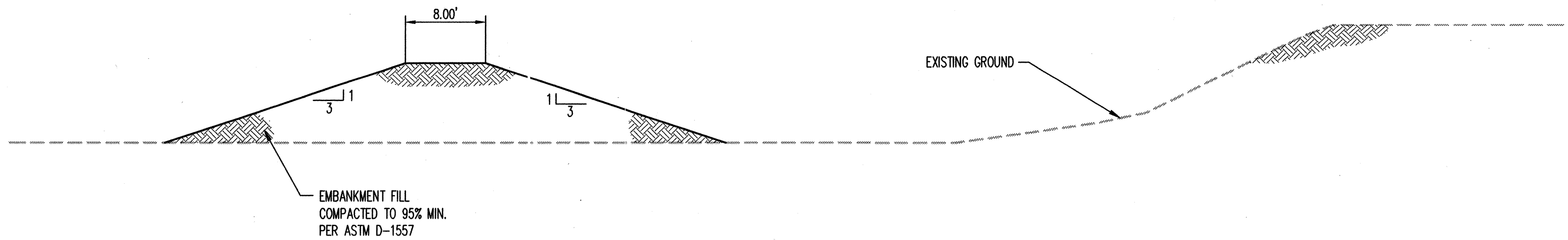
* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS

** INCLUDES SURVEYED LOCATION OF EXISTING FEATURES

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN	
CONTRACTOR	DATE	THE STATION IS AN ACS 3 1/4" ALUMINUM	NO.	BY	DATE	SEAL	REMARKS	No.	Date	By	Date
BY CARLETON SURVEY INC.	7/04	CAP SET FLUSH IN THE CONCRETE BRIDGE									
ACCEPTANCE BY	DATE	ADJUSTMENT AND IS STAMPED "15-DIG, 1991"									
BY B.H.I.	7/04	X=393,935.48 Y=1,588,833.52									
DRAWINGS	DATE	ELEVATION = 5070.808									
BY CARLETON SURVEY INC.	7/04	GROUND TO GRID FACTOR = 0.9967379									
REVISIONS	DATE	ΔΔ = -007'16"									
BY B.H.I.	7/04										
RECORDED BY	DATE										
NO.											



COFFER DAM PLAN VIEW

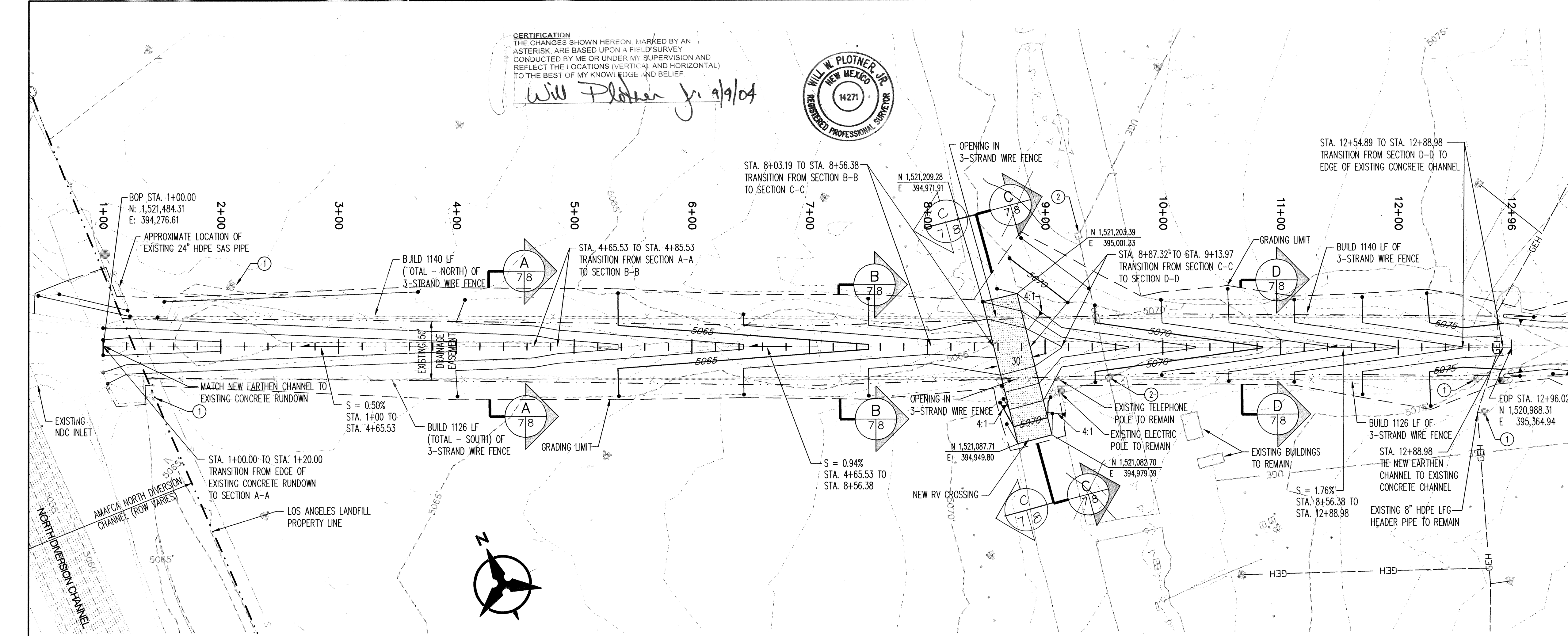


SECTION A-A TYPICAL CROSS SECTION
SCALE: 1"=10'

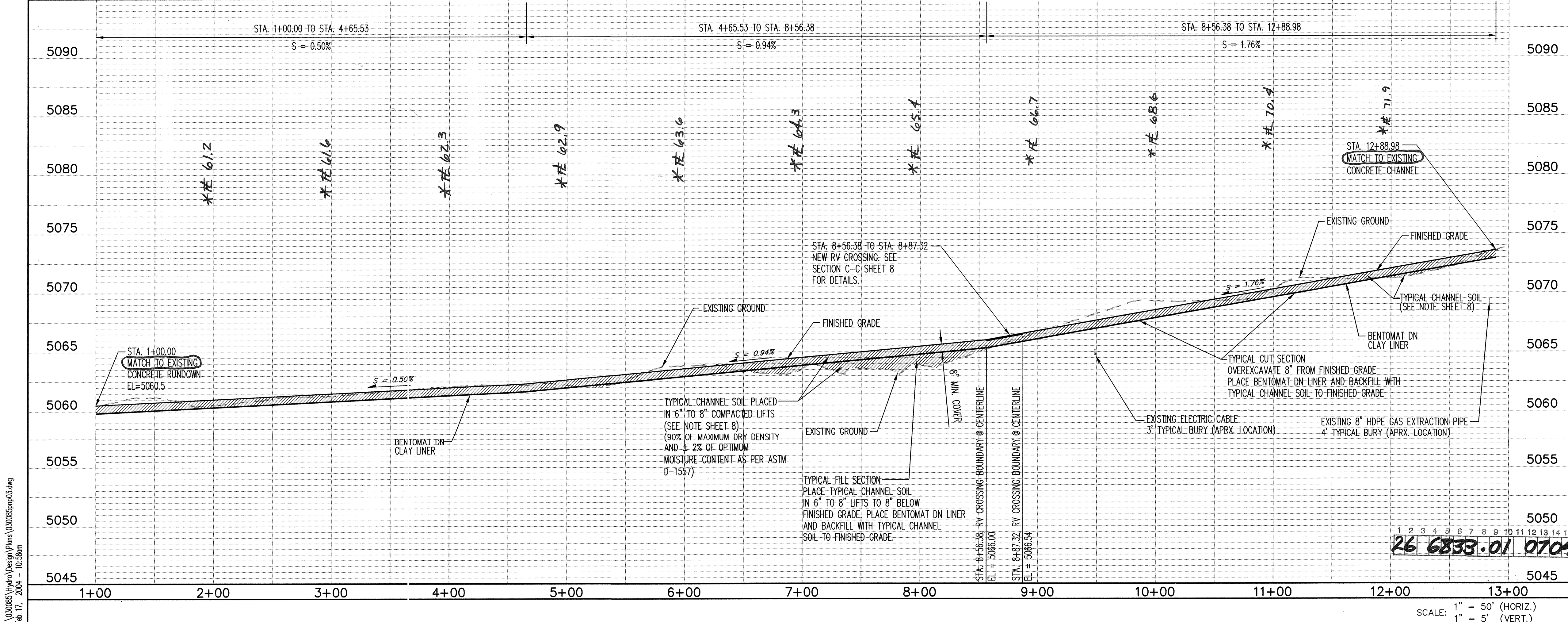
Bohannon & Huston
Courtney I 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**
**CLIFFORD CHANNEL REALIGNMENT
DOMINGO BACA ARROYO COFFER DAM GRADING PLAN**

APPROVED DESIGN REVIEW COMMITTEE NOV 19 2004	APPROVED CITY ENGINEER NOV 19 2004	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 6833.01	Zone Map No. C-17-Z	Sheet 6A	Of 11



CLIFFORD CHANNEL



NOTES:

- ALL EXISTING WELLS, VALVES, SUMPS, ETC. ARE SURROUNDED BY BOLLARDS AND OR "TEE POSTS" WITH FLAGGING.
- CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO WELLS, SUMPS, EXTRACTION PIPING, AND/OR VALVES DUE TO HIS/HER NEGLIGENCE.
- ALL FILL ON THE LANDFILL SITE SHALL BE PLACED IN NOT MORE THAN 8-INCH LOOSE LIFTS AND SHALL BE COMPACTED TO 90% OF MAXIMUM DRY DENSITY AND $\pm 2\%$ OF OPTIMUM MOISTURE CONTENT AS PER ASTM D1557.
- USE OF WATER ON THE LANDFILL SITE SHALL BE KEPT TO A MINIMUM. PONDING OF WATER ON THE LANDFILL SURFACE IS NOT ALLOWED.
- IMPORTED FILL WITHIN THE LANDFILL SITE SHALL MEET THE FOLLOWING SPECIFICATIONS:
A. MATERIAL SHALL BE SC, SM, OR SC-SM, SC/SM AS DEFINED BY THE UNIFIED SOIL CLASSIFICATION SYSTEM.
B. THE MATERIAL SHALL HAVE A MINIMUM OF 25%, BUT NOT MORE THAN 50% PASSING THE NUMBER 200 SIEVE.
C. THE IMPORTED FILL SHALL HAVE 80% PASSING THE NUMBER 4 SIEVE.
D. THE CONTRACTOR SHALL VERIFY FOR THE ENVIRONMENTAL HEALTH DEPARTMENT THAT THE SOIL MEETS THE ABOVE SPECIFICATIONS AND SHALL DELIVER A SAMPLE ALONG WITH THE APPROPRIATE TEST RESULTS OF THE SOIL TO EHD (768-2618) FOR FINAL APPROVAL.
- PRIOR TO PLACEMENT OF FILL, GRADED AREAS SHALL BE GRUBBED AND SCARIFIED TO A MINIMUM DEPTH OF 6".

KEYED NOTES:

① THERE IS A 15-FOOT EXCLUSION ZONE AROUND THE FOLLOWING STRUCTURES:

- ALL GAS EXTRACTION WELLS
- ALL ISOLATION VALVES
- ALL CONDENSATE SUMPS
- ALL EXISTING MONITORING WELLS

GRADING WITHIN THE 15-FOOT EXCLUSION ZONE MUST BE PERFORMED BY HAND OR BY MEANS THAT SHALL NOT DAMAGE/DESTROY THESE STRUCTURES.

② IF EXISTING RV HOOKUPS ARE ENCOUNTERED DURING GRADING AND REQUIRE REMOVAL, THE CONTRACTOR SHALL REMOVE THE HOOKUP(S) AND RECORD IT ON THE RECORD DRAWINGS. THE CONTRACTOR SHALL REMOVE HOOKUP(S) IN SUCH A MANNER THAT THE REMAINING HOOKUPS CAN STILL BE ENERGIZED.

LEGEND **

EXISTING: --- INDEX CONTOUR, --- CONTOUR

NEW: --- 5075 INDEX CONTOUR, --- 5076 CONTOUR

STORM DRAIN, SANITARY SEWER, LOS ANGELES LANDFILL PROPERTY BOUNDARY, RV HOOKUPS, METHANE WELL*, GAS EXTRACTION PIPE, EXISTING WATER LINE, UNDERGROUND ELECTRIC, TELEPHONE LINE, TELEPHONE BOX.

* SYMBOLS REPRESENT APPROXIMATE LOCATION METHANE WELLS
** INCLUDES SURVEYED LOCATION OF EXISTING FEATURES

6" AGGREGATE BASE COURSE

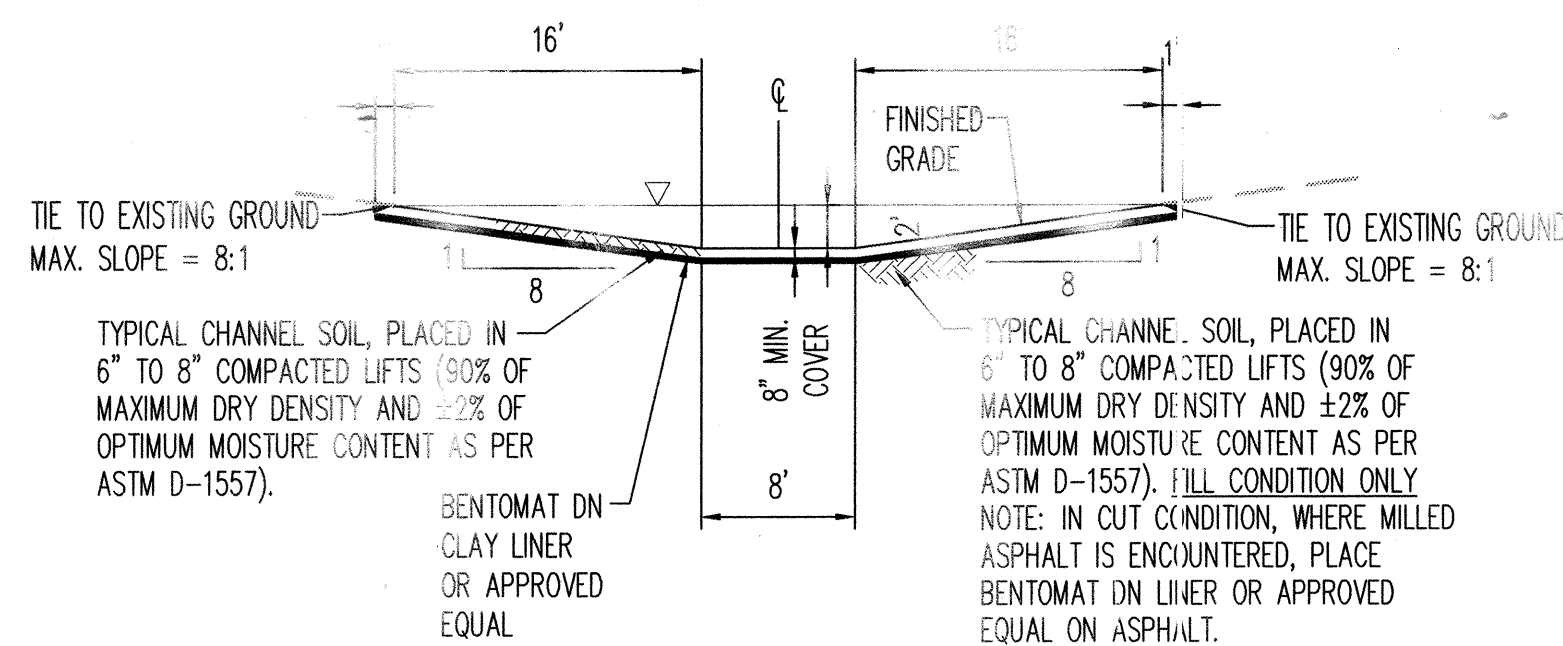
Bohannon & Huston
Court yard | 7500 Jefferson St. NE | Albuquerque, NM 87109-4335
ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

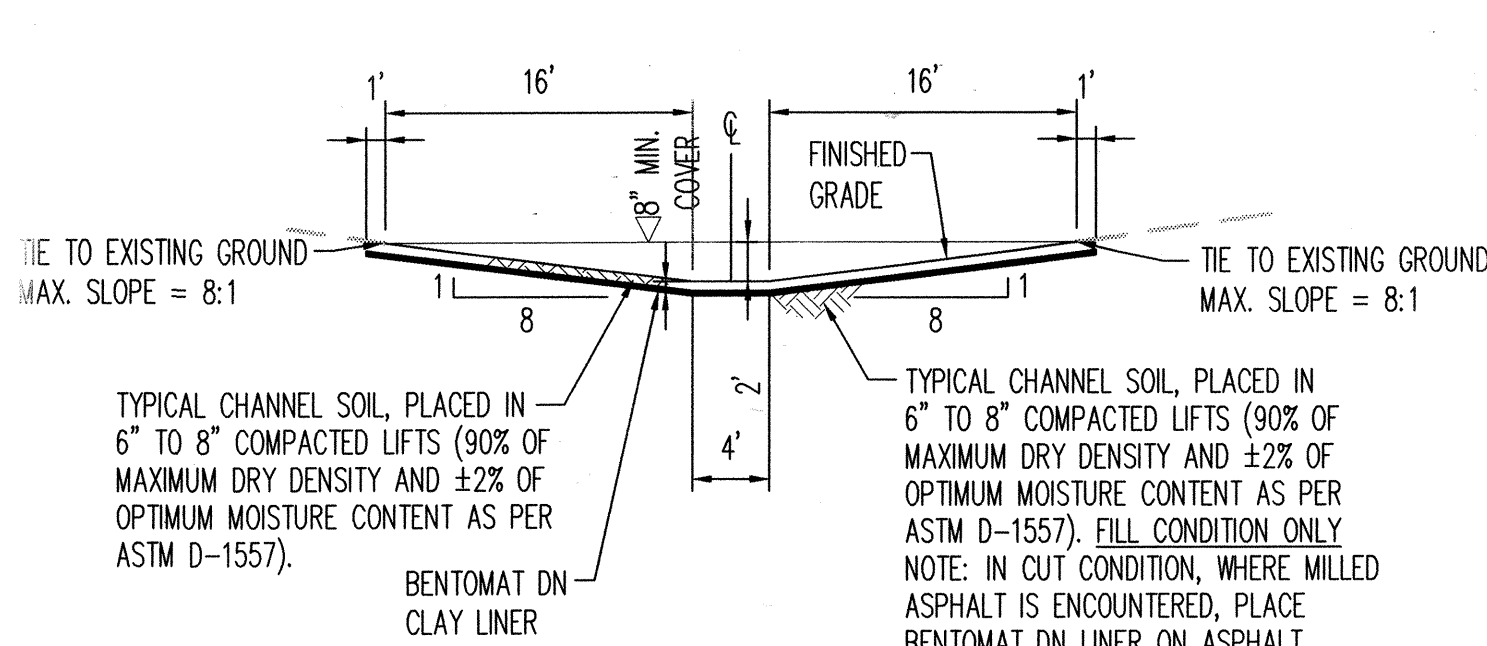
**CLIFFORD CHANNEL REALIGNMENT
CLIFFORD CHANNEL GRADING
PLAN AND PROFILE STA. 1+00.00 TO STA. 13+00.00**

Design Review Committee: *APPROVED* FEB 26 2004
City Engineer: *APPROVED* FEB 26 2004

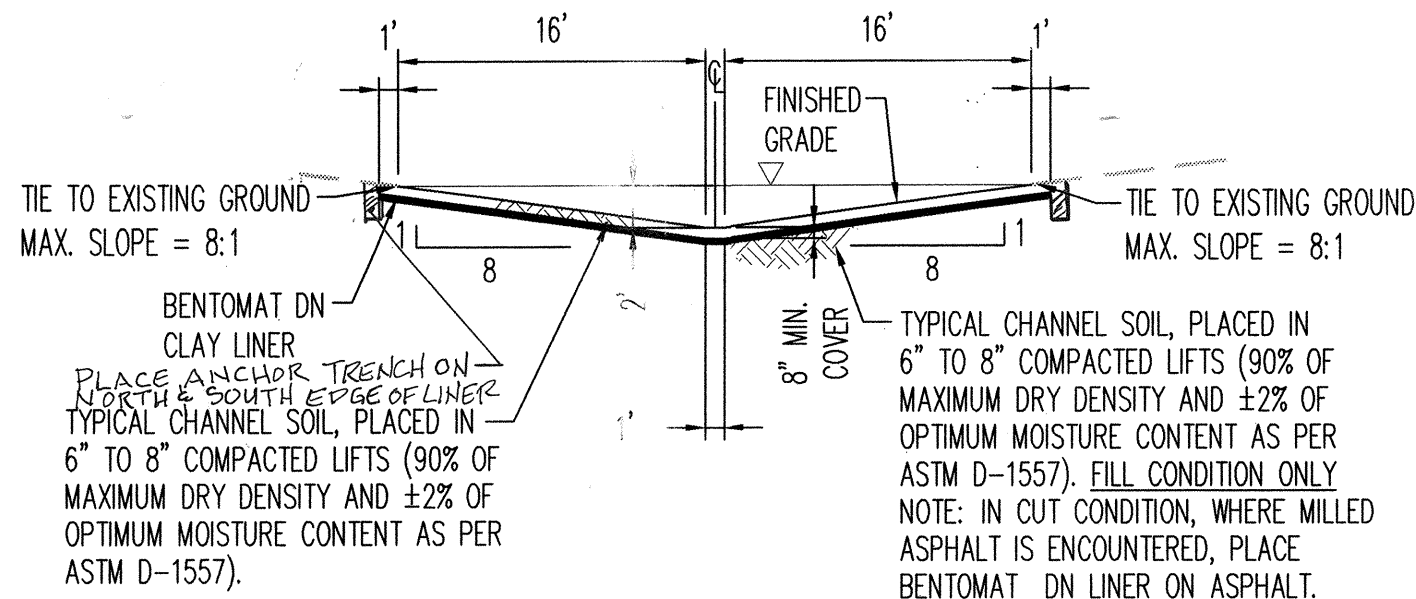
City Project No. 6833.01, Zone Map No. C-17-Z, Sheet 7 of 11



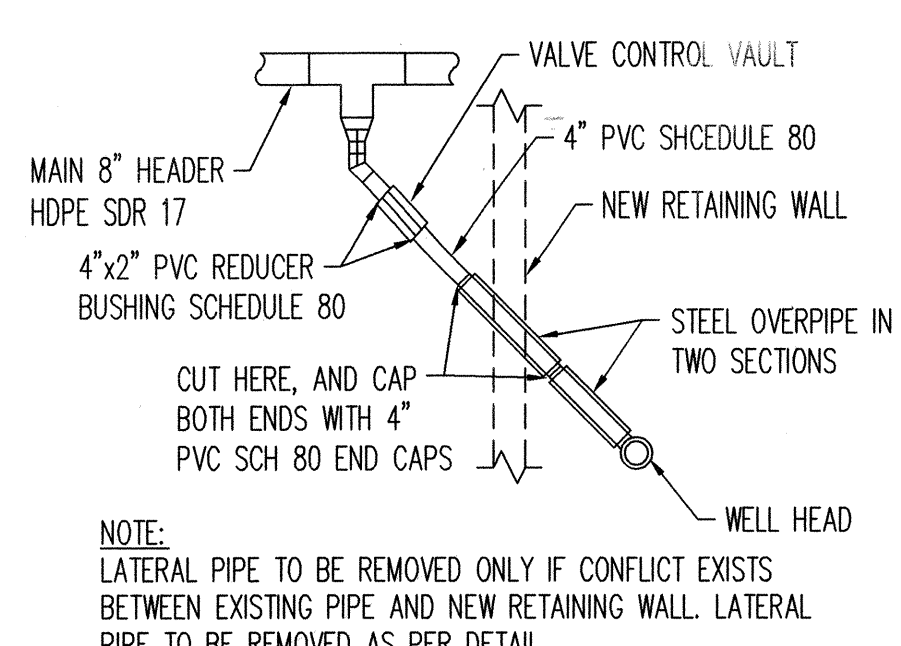
A CHANNEL CROSS SECTION
7/8 N.T.S.



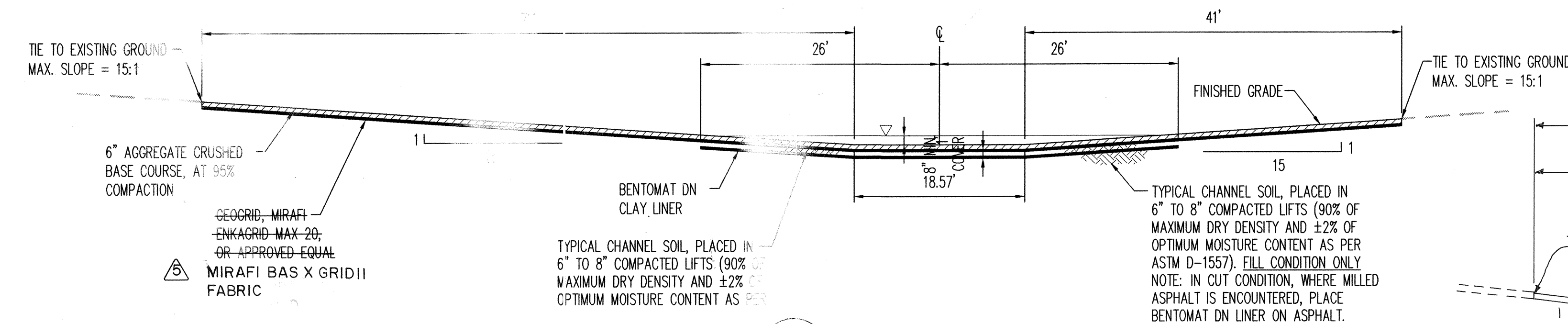
B CHANNEL CROSS SECTION
7/8 N.T.S.



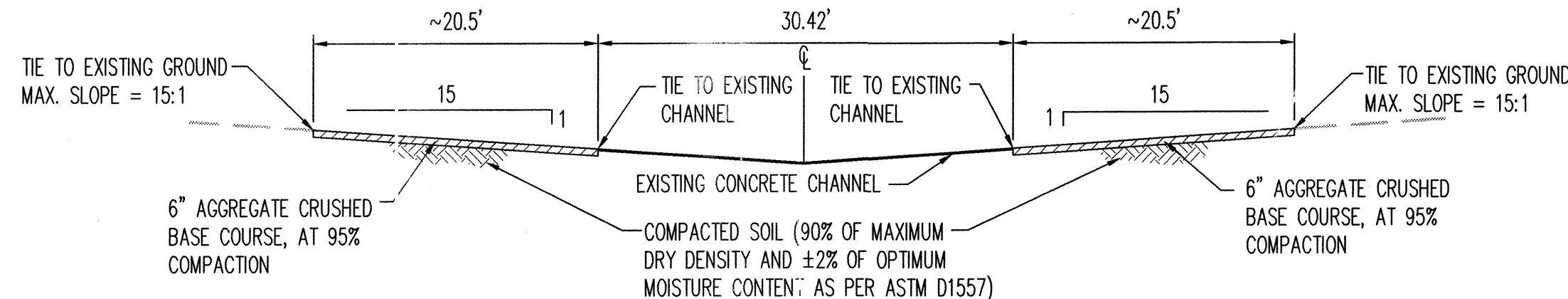
D CHANNEL CROSS SECTION
7/8 N.T.S.



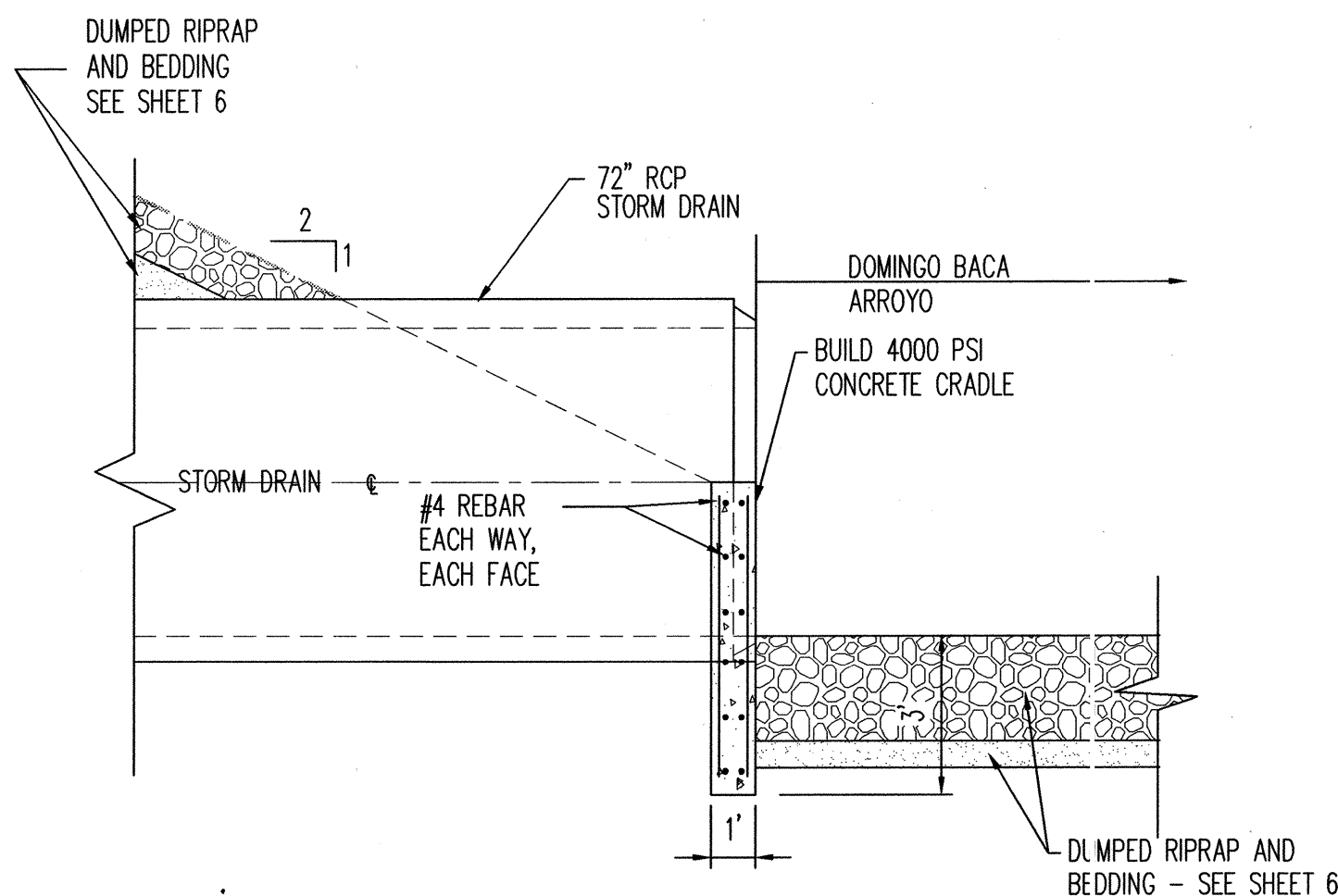
4' LFG LATERAL PIPE REMOVAL DETAIL
N.T.S.



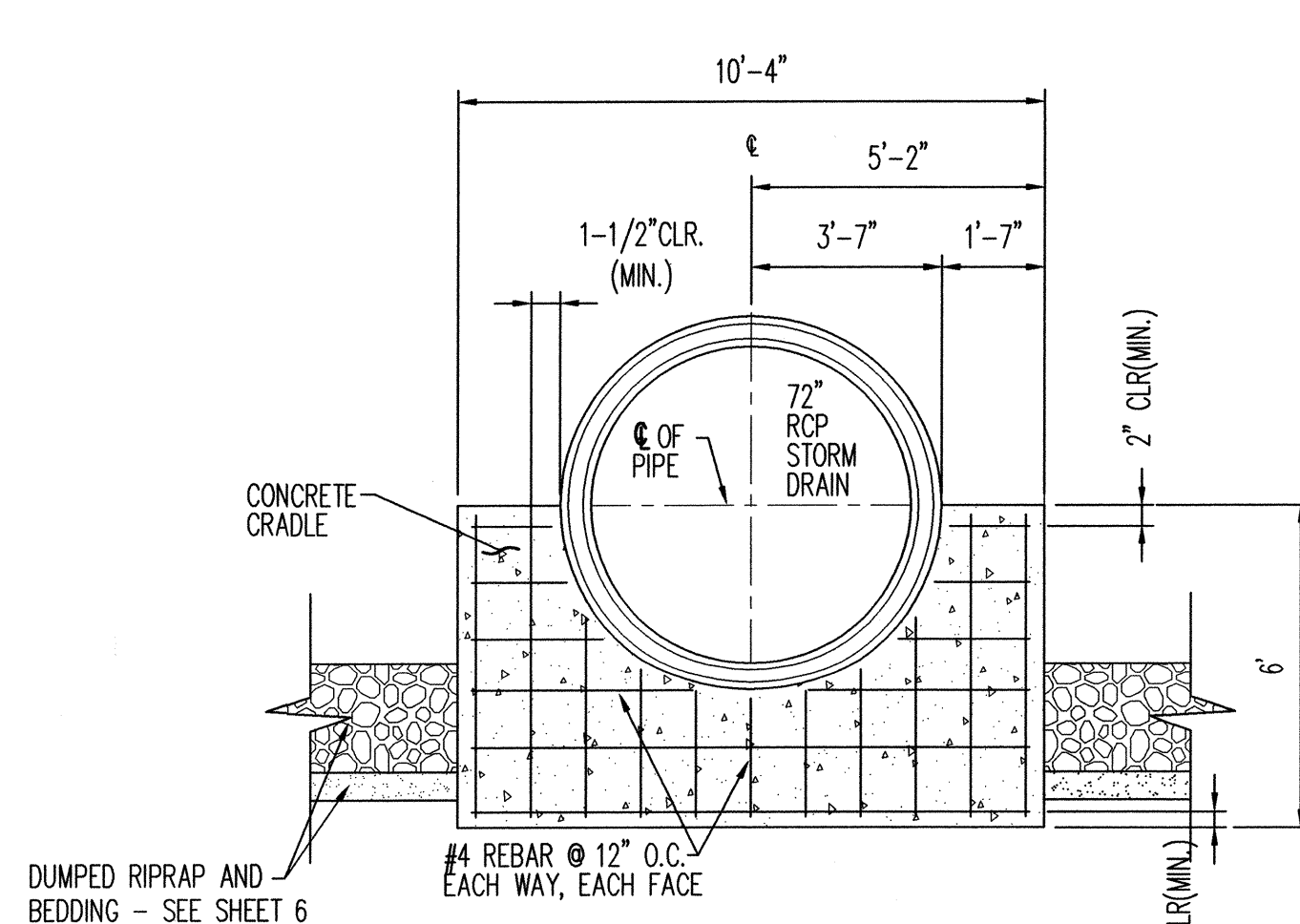
C CHANNEL CROSS SECTION (RV CROSSING)
7/8 N.T.S. STA. 8+56.38 TO STA. 8+87.32



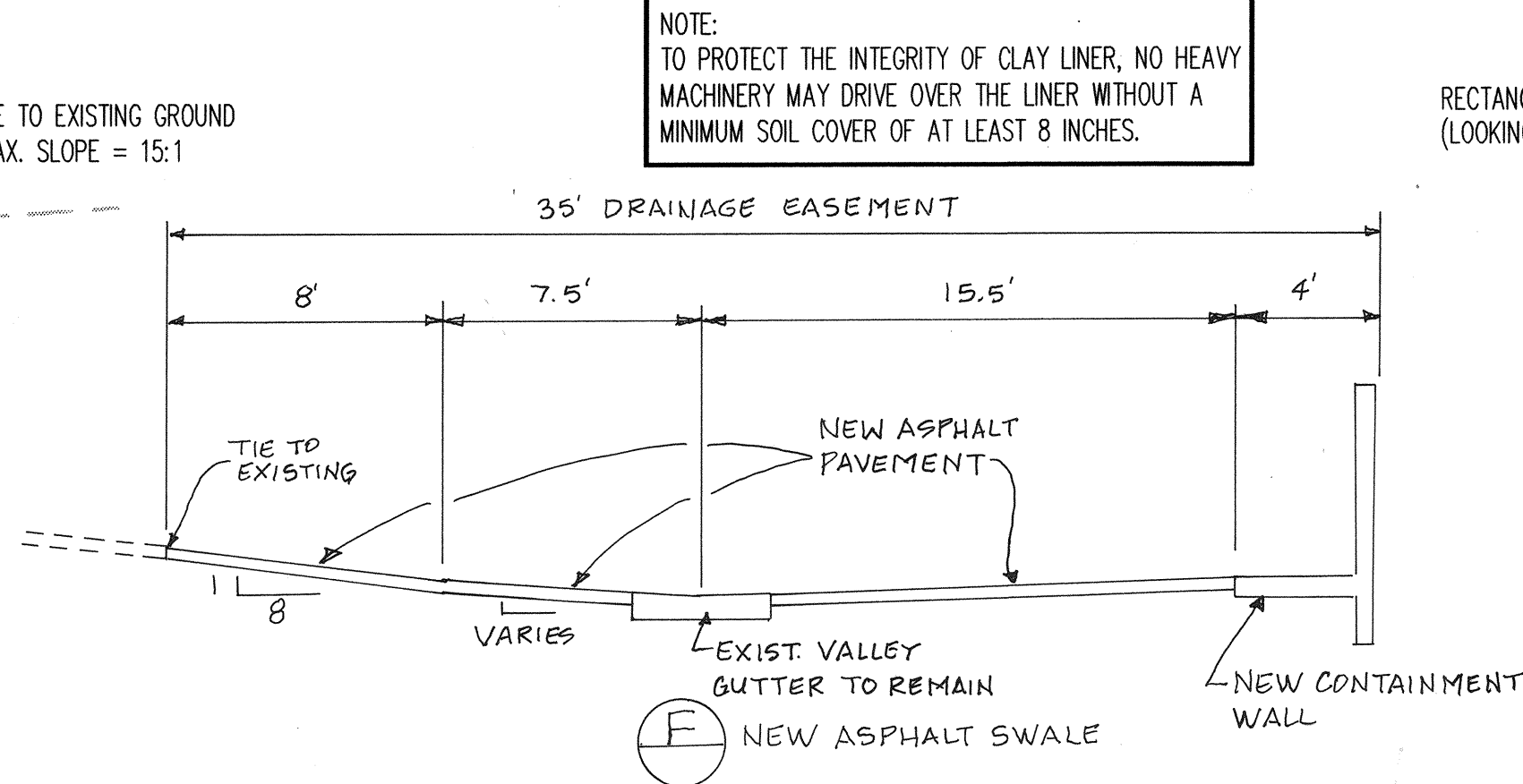
E CHANNEL CROSS SECTION (RV CROSSING)
5/8 N.T.S.



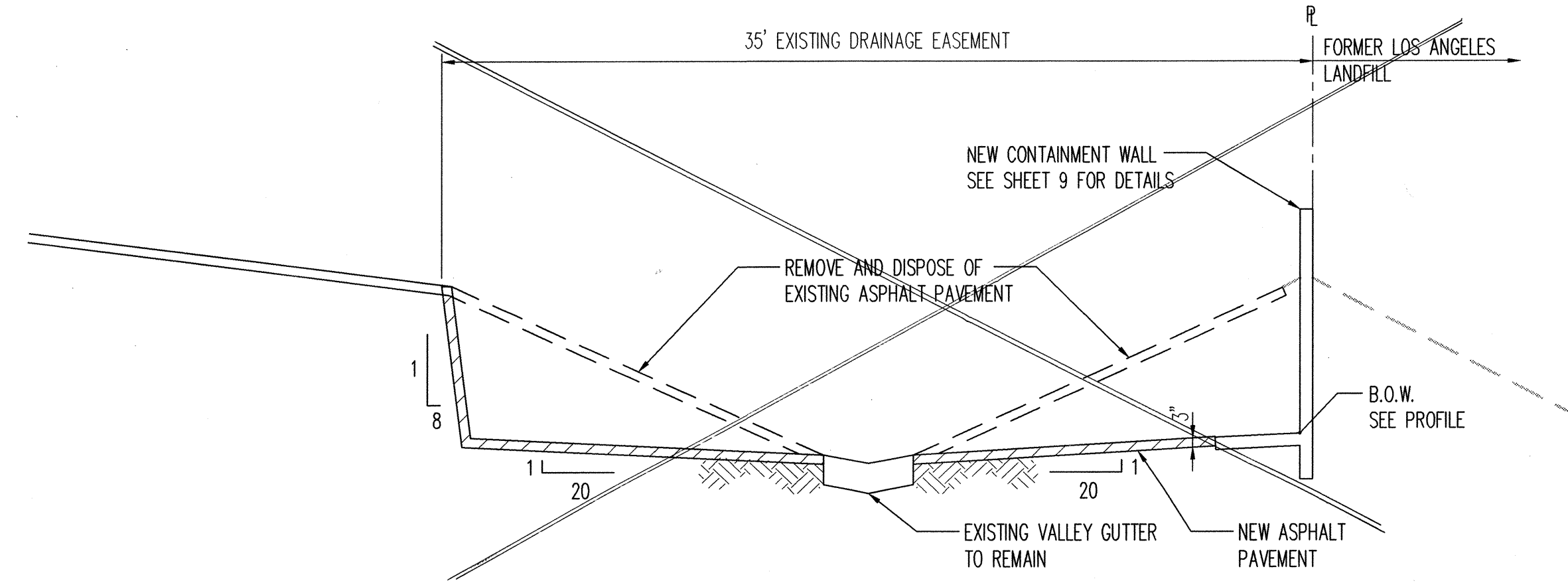
REINFORCED CONCRETE PIPE CRADLE
N.T.S.



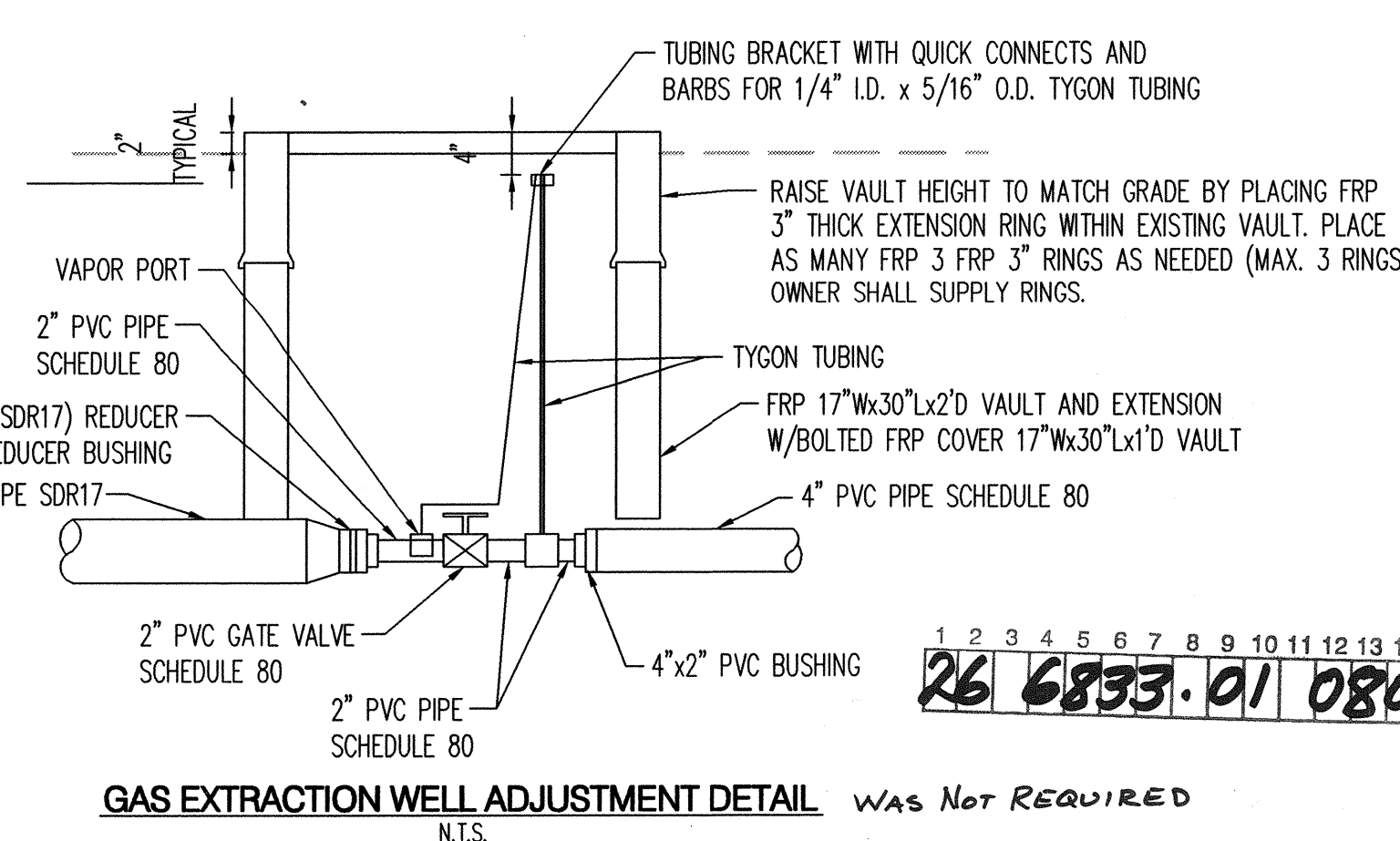
REINFORCED CONCRETE PIPE CRADLE FOR CONCRETE PIPE
N.T.S.



F NEW ASPHALT SWALE CROSS SECTION (LOOKING DOWNSTREAM)
3/8 N.T.S. (STA. 9+38.33 TO STA. 16+50)



F NEW ASPHALT SWALE CROSS SECTION (LOOKING UPSTREAM)
3/8 N.T.S. (STA. 9+38.33 TO STA. 16+50)



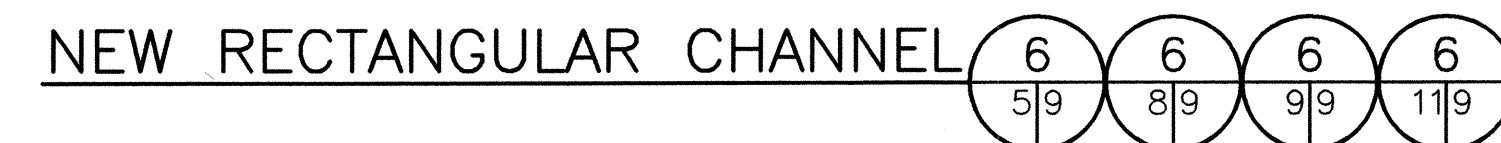
GAS EXTRACTION WELL ADJUSTMENT DETAIL
N.T.S.

Bohannon & Huston
Court yard 1 7500 Jefferson St NE Albuquerque, NM 87109-4335
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
CLIFFORD CHANNEL REALIGNMENT
MISCELLANEOUS DETAILS

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
6833.01	C-17-Z	8	11

AS-BUILT INFORMATION	BENCH MARKS	SURVEY INFORMATION	ENGINEER'S SEAL
CONTRACTOR: BHCT DATE: 7/04 WORK: CLIFFORD CHANNEL REALIGNMENT DATE: 7/04 APPROVED BY: BHCT DATE: 7/04 DRAWING: CLIFFORD CHANNEL REALIGNMENT DATE: 7/04 RECORDED BY: BHCT DATE: 7/04	THE STATION IS AN AS 3 1/4" ALUMINUM CAP SET FLUSH IN THE CONCRETE BRIDGE ADJUTMENT AND IS STAMPED "15-016, 1991" X=393,935.48 Y=1,518,833.52 ELEVATION = 5070.808 GROUND TO GRID FACTOR = 0.9997379 ZDA = -0072.6"	DATE: 02/10/04 BY: J.M.G. NO. 16183 2/17/04	NEW MEXICO 16183 2/17/04 REGISTERED PROFESSIONAL ENGINEER



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
26	6	8	3	3	.	0	1			0	9	0	4	

Bohannon  **Huston** 

Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING  **SPATIAL DATA**  **ADVANCED TECHNOLOGIES**

 **CITY OF ALBUQUERQUE**
PUBLIC WORKS DEPARTMENT

CLIFFORD CHANNEL REALIGNMENT CHANNEL AND MISCELLANEOUS WALL DETAILS

[illegible]

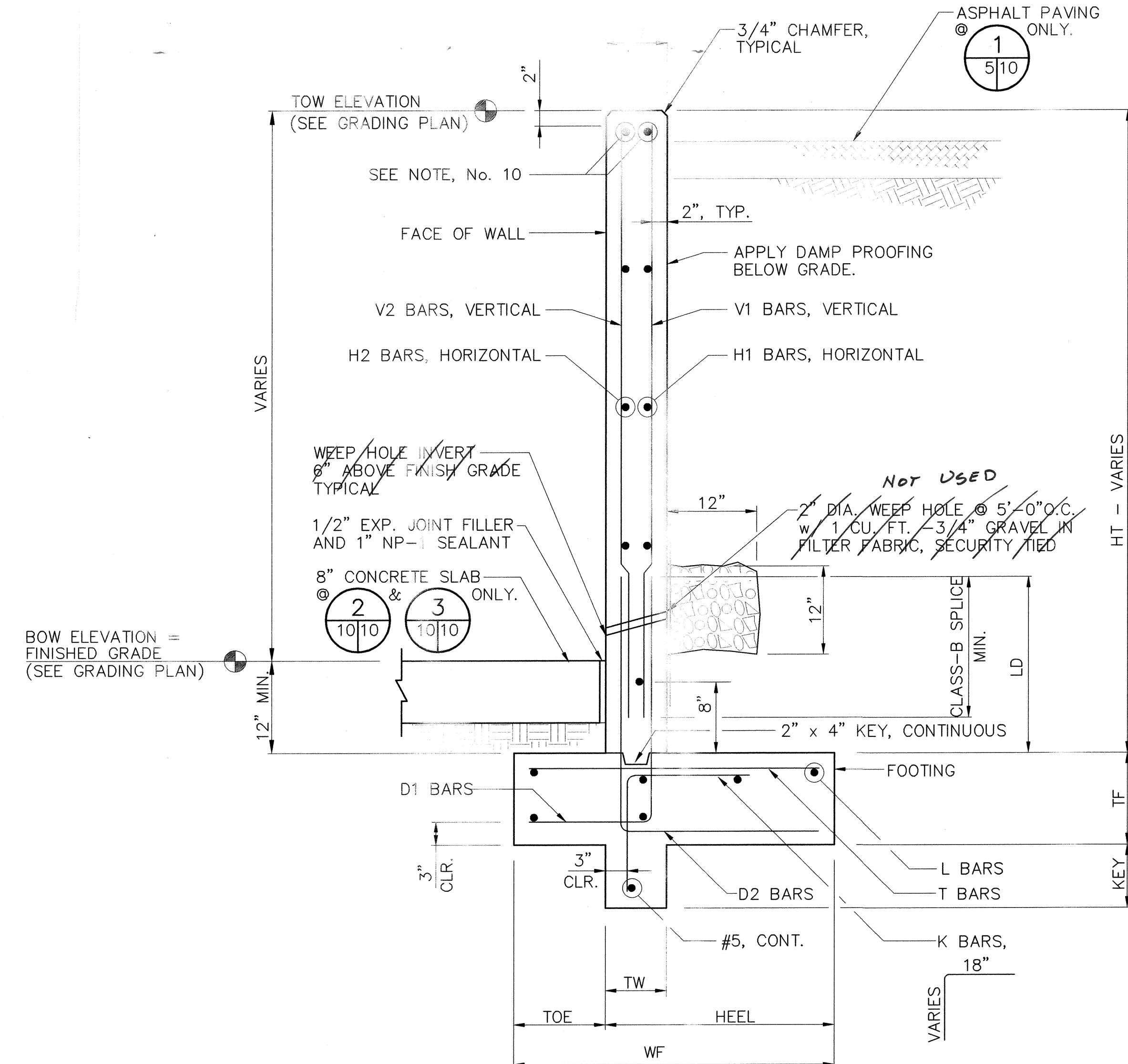
City Project No.	6833.01	Zone Map No.	C-17-Z	Sheet	9	Of	11
------------------	---------	--------------	--------	-------	---	----	----

NOTES FOR CAST IN PLACE RETAINING WALLS, RECTANGULAR CHANNEL, & CONTAINMENT WALLS

1. WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
2. STRUCTURAL CAST-IN-PLACE CONCRETE: 4000 PSI FOR HYDRAULIC STRUCTURES PER SECTION 510 (REF. TABLE 101) OF THE REFERENCED SPECIFICATIONS. INCORPORATE TYPE F FLY ASH AT 1 TO 4 RATIO.
3. REINFORCING STEEL: STEEL REINFORCEMENT AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATIONS. AND SHALL CONFORM TO ASTM A615, GRADE 60. ALL LAP SPLICES SHALL BE AS SHOWN ON THE PLANS.
4. OVER EXCAVATE A MINIMUM OF 2 FEET BELOW BOTTOM OF FOOTING ELEVATIONS AND A MINIMUM OF 2 FEET HORIZONTALLY BEYOND THE EDGES OF FOOTINGS, EXCEPT WHERE PROHIBITED BY SITE BOUNDARY. CAST FOOTINGS ON COMPACTED STRUCTURAL FILL CONSISTING OF SOIL APPROVED BY THE GEOTECHNICAL ENGINEER, PLACED IN CONTROLLED COMPACTED LAYERS AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D-1557 TEST METHOD. CONTRACTOR SHALL REFERENCE REPORT NO. 1-21109 PREPARED BY GEO-TEST, INC.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SAFE AND ADEQUATE SHORING FOR ALL PARTS OF THE WALL AND ANY ADJACENT STRUCTURES DURING CONSTRUCTION, AS WELL AS WORKER SAFETY AND COMPLIANCE WITH OSHA OR OTHER AGENCY SAFETY GUIDELINES.
6. HORIZONTAL REBAR SHALL BE LAPPED AND CONTINUOUS EXCEPT WHERE NOTED.
7. VERTICAL EXPANSION JOINTS SHALL BE PLACED AT 60'-0" O.C. VERTICAL CONTRACTION JOINTS SHALL BE PLACED AT 15'-0" O.C. AND AT STEPS IN THE TOP OF THE WALL.
8. THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE CONCRETE FOOTING PLACEMENT, FOR THE INSPECTION OF COMPACTION UNDER THE FOOTING, FOOTING DEPTH AND WIDTH, THE WALL STEEL SPACING. FINAL INSPECTION OF THE FOOTING AND WALL WILL BE REQUIRED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CODE ADMINISTRATION APPROVAL AND FEES ASSOCIATED WITH IT.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO SEE THAT ALL REBAR IS PROPERLY ALIGNED AND TIED IN PLACE BEFORE PLACING CONCRETE. ALL STEEL SHALL BE ACCURATELY LOCATED AND SECURED IN PLACE SO THAT IT REMAINS IN POSITION DURING THE PLACEMENT OF THE CONCRETE. ANY REBAR IMPROPERLY INSTALLED SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.
11. THE CONTRACTOR SHALL CLEAN ALL CONSTRUCTION DEBRIS FROM THE AREA.
12. NOT USED.
13. NOT USED.
14. DAMP PROOFING SHALL CONSIST OF ONE APPLICATION OF AN EMULSIFIED ASPHALT COMPOUND, HYDROCID 700B OR APPROVED EQUAL.
15. TOP BARS, H1 & H2, SHALL RUN PARALLEL TO THE TOP OF THE WALL. SPACING BETWEEN TOP BARS AND ADJACENT HORIZONTAL BARS BELOW SHALL VARY.

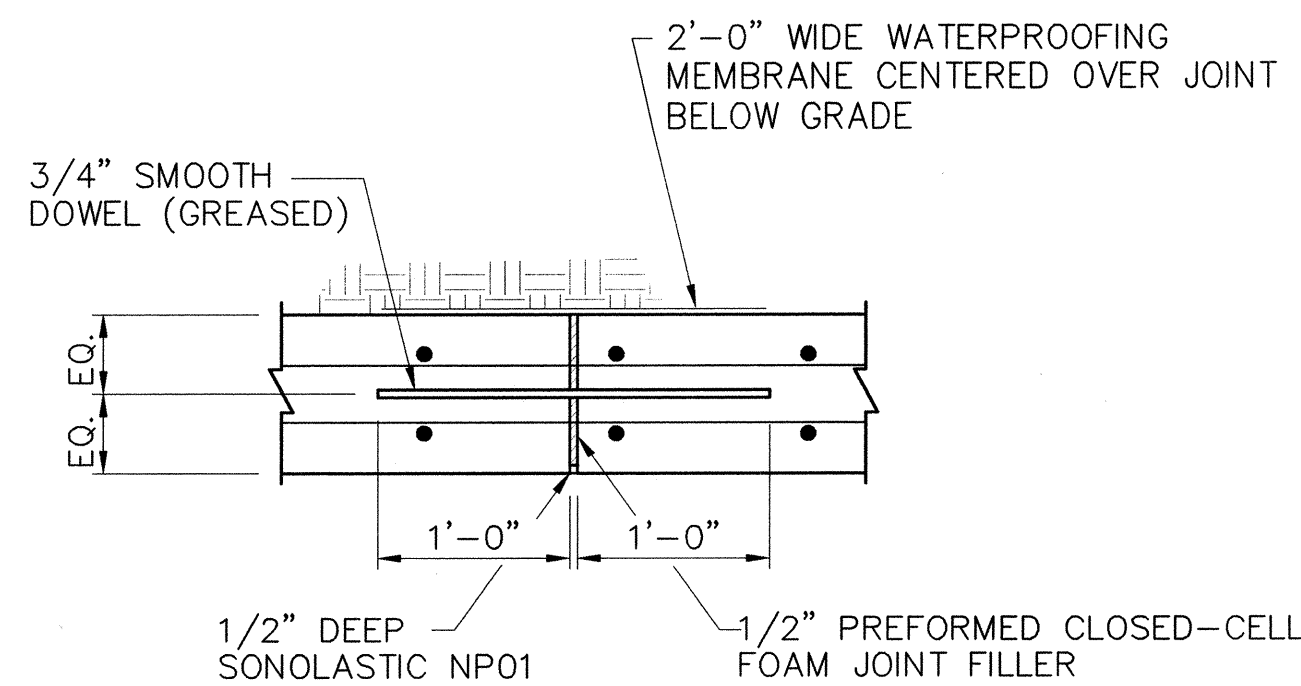
DESIGN LOADS

EFP (ACTIVE)	= 35 PCF
EFP (PASSIVE)	= 325 PCF
TWO FOOT SURCHARGE	= 220 PSF
SOIL UNIT WEIGHT	= 110 PCF
ALLOWABLE BEARING PRESSURE	= 2000 PSF
COEFFICIENT OF FRICTION FOR SLIDING	= 0.40



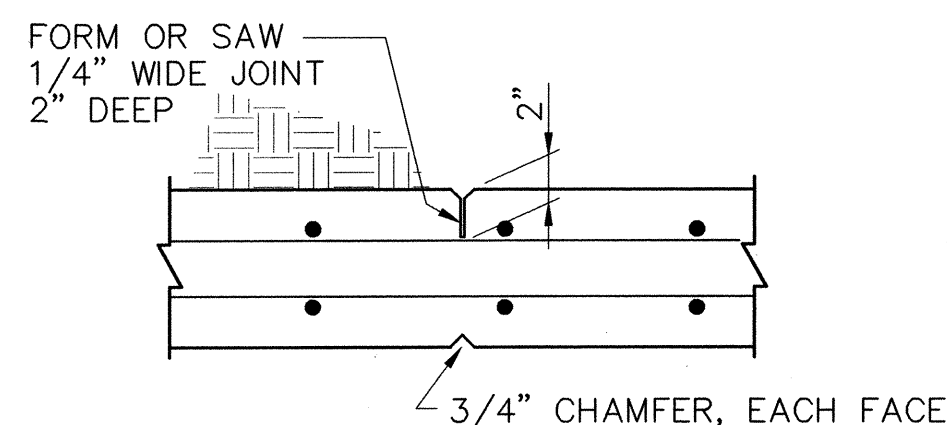
RETAINING WALL SECTIONS

NO SCALE



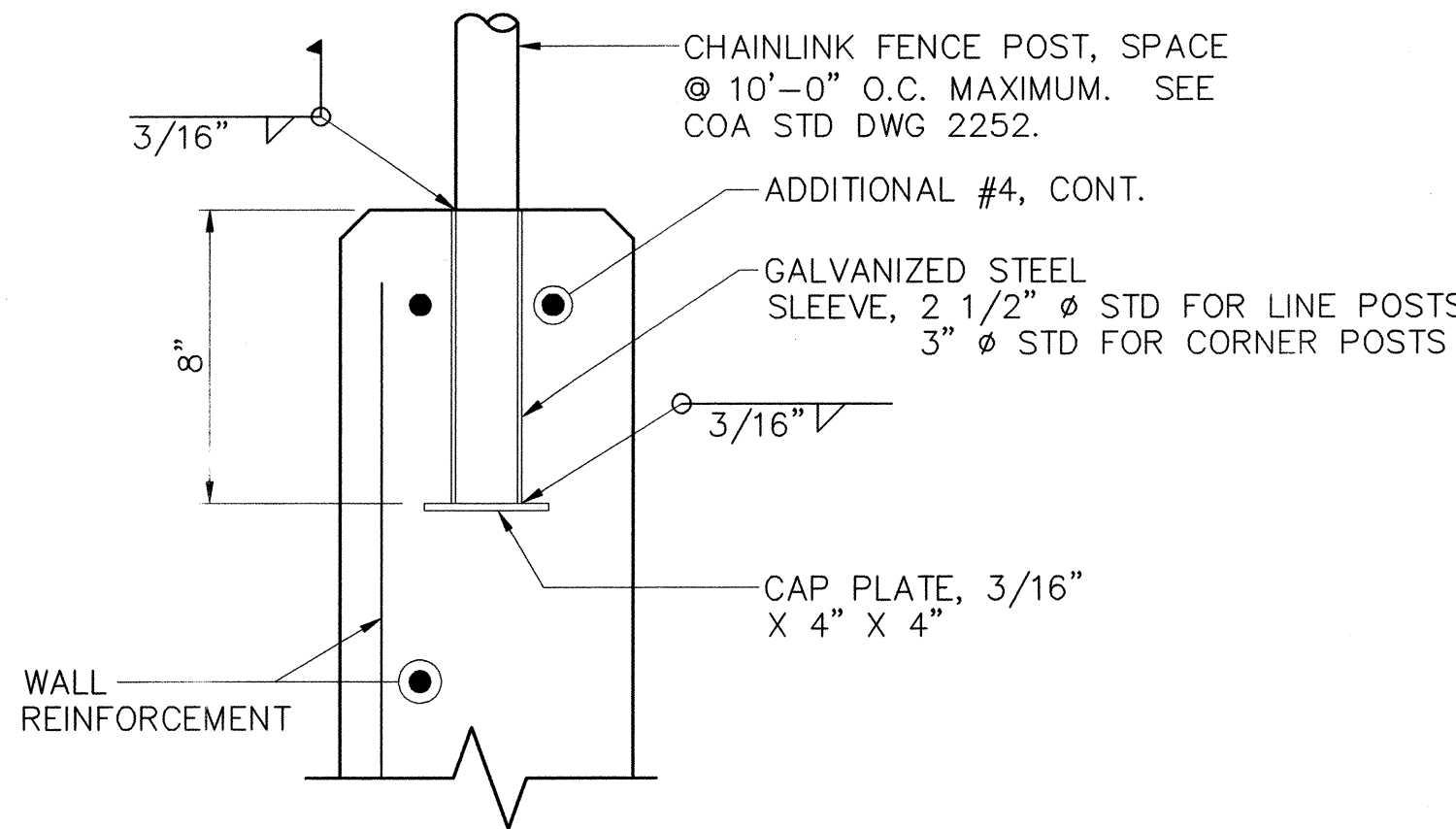
VERTICAL EXPANSION JOINT PLAN DETAIL (SEE NOTE 7)

NO SCALE



VERTICAL CONTRACTION JOINT PLAN DETAIL (SEE NOTE 7)

NO SCALE

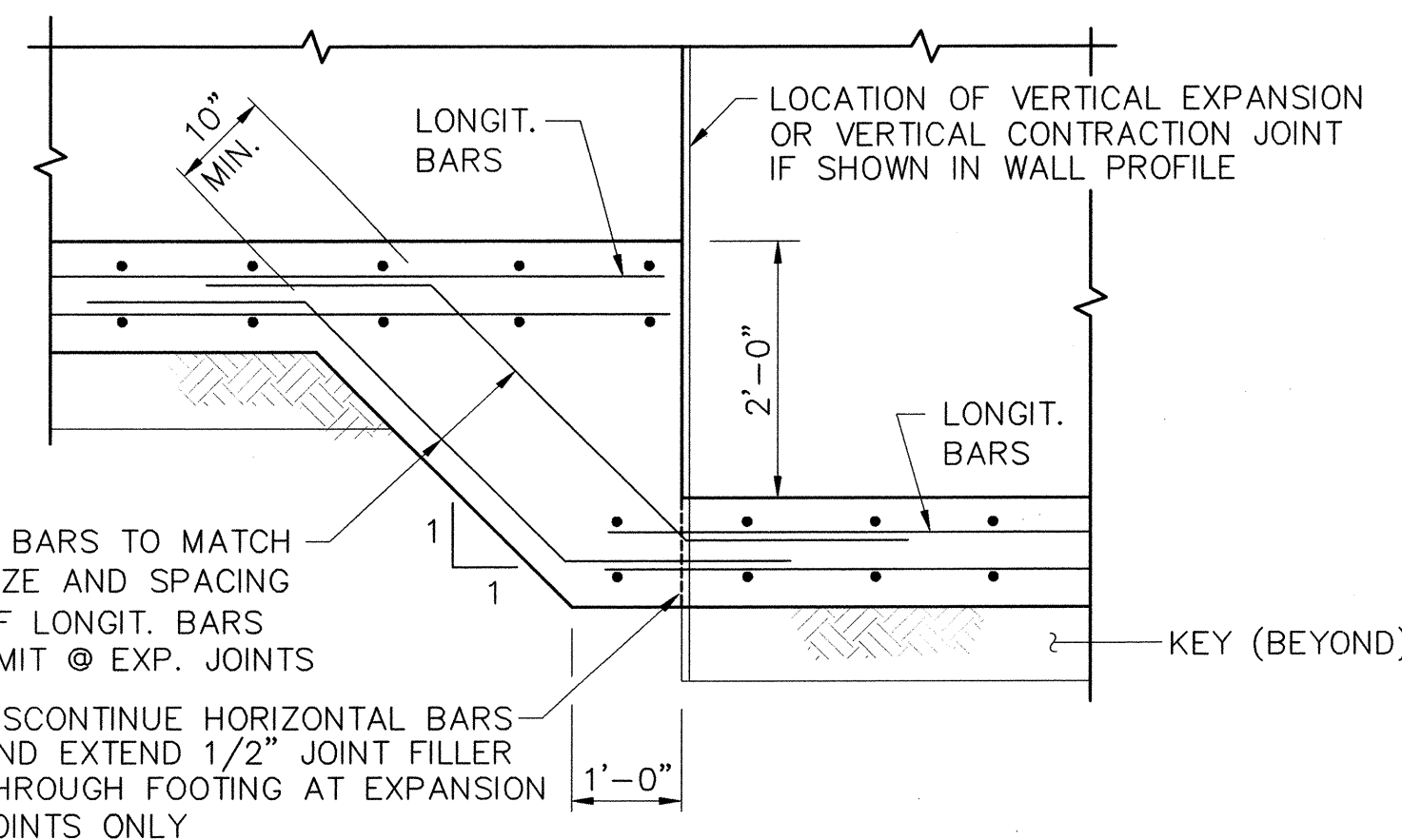


CHAINLINK FENCE POST SLEEVE DETAIL

D 10/10

CONTAINMENT WALL FENCE SCHEDULE

FROM		TO		HEIGHT
STATION	OFFSET	STATION	OFFSET	
8+49.74	20.33' LT.	17+05.88	20.01' LT.	3.0'
17+05.88	19.63' LT.	17+05.88	55.48' LT.	4.0'
17+26.55	19.68' LT.	17+26.55	55.49' LT.	4.0'
17+26.55	20.02' LT.	18+00.69	20.04' LT.	3.5'
18+00.69	20.04' LT.	19+01.72	20.08' LT.	4.0'
19+01.72	20.08' LT.	21+95.88	21.94' LT.	4.5'
21+95.88	21.94' LT.	22+90.00	23.20' LT.	4.0'
22+90.00	23.20' LT.	23+64.03	24.19' LT.	5'



STEP FOOTING DETAIL

NO SCALE

NOT REQUIRED

C 10/10

LAP SPLICES-CLASS B

BAR	LENGTH (IN)
4	25
5	31
6	37
7	54
8	62

DIMENSIONS								
WALL SECTION	HT MAX.	TF (IN)	TW (IN)	TOE (IN)	HEEL (IN)	WF (IN)	KEY (IN)	LD (IN)
1	7'-6"	12	8	24	32	56	8	31
2	4'-0"	10	8	14	22	36	-	25
3	9'-0"	12	10	38	48	86	-	31

REINFORCING																		
WALL SECTION	D1		D2		V1		V2		H1		H2		L		T		K	
	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	SPACE	SIZE	NO. REQ'D	SIZE	SPACE	SIZE	SPACE
1	5	12	—	—	5	12	—	—	4	12	—	—	4	6	5	18	—	—
2	4	12	—	—	4	12	—	—	4	10	—	—	4	4	4	18	—	—
3	5	18	5	9	5	18	5	18	4	12	4	12	5	6	5	18	—	—

WALL SCHEDULE

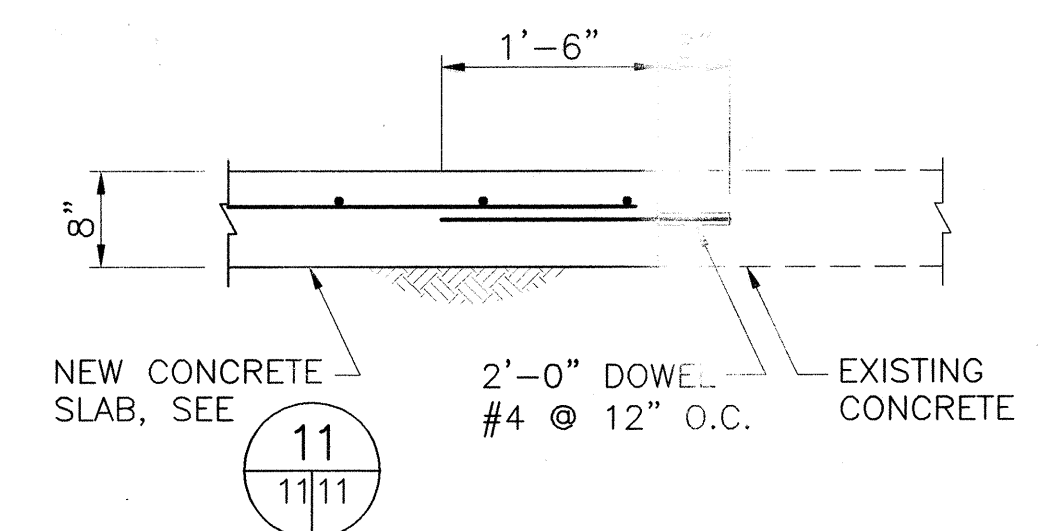
26 6833.01 1004

Bohannon & Huston
Court yard 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

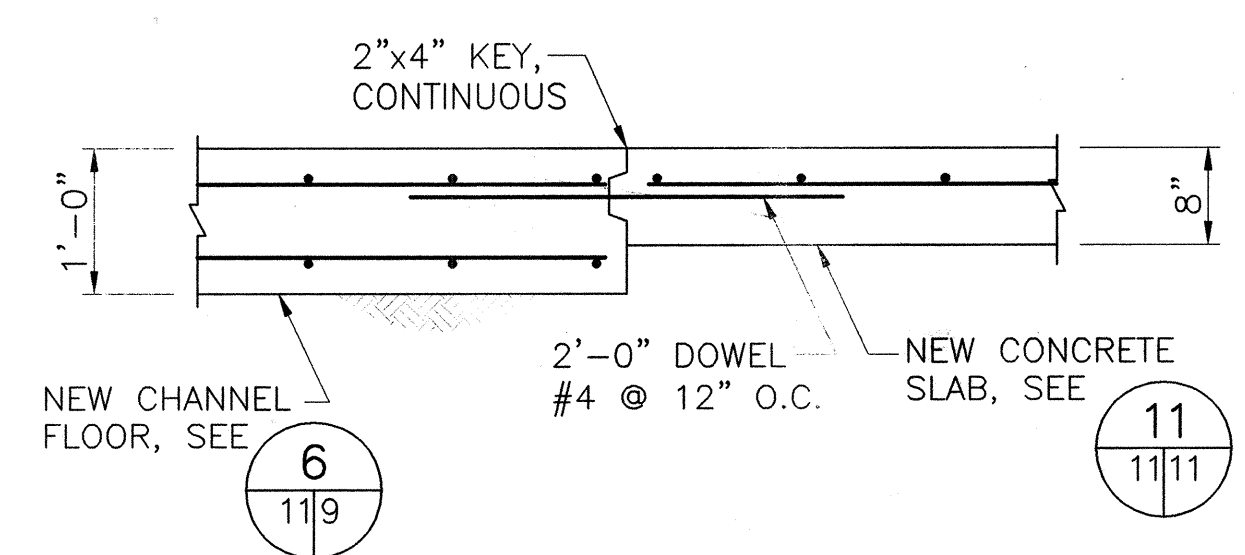
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

CLIFFORD CHANNEL REALIGNMENT
RETAINING WALL DETAILS AND SCHEDULES

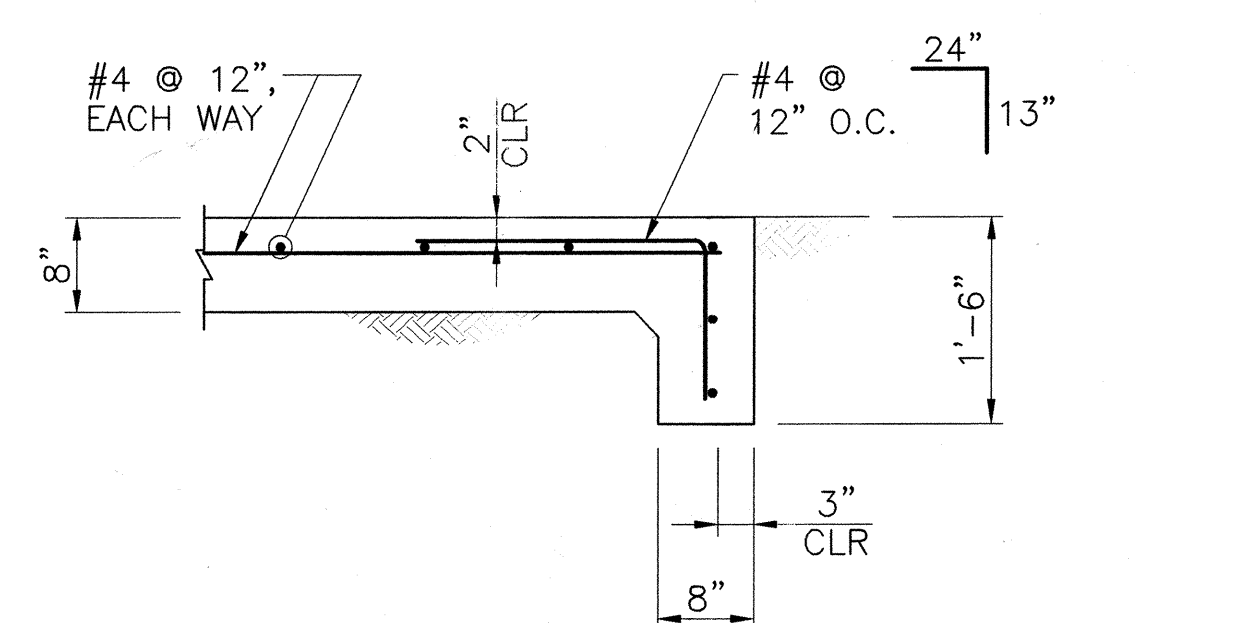
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED FEB 26 2004	APPROVED FEB 26 2004		
City Project No.	Zone Map No.	Sheet	Of
6833.01	C-17-Z	10	11



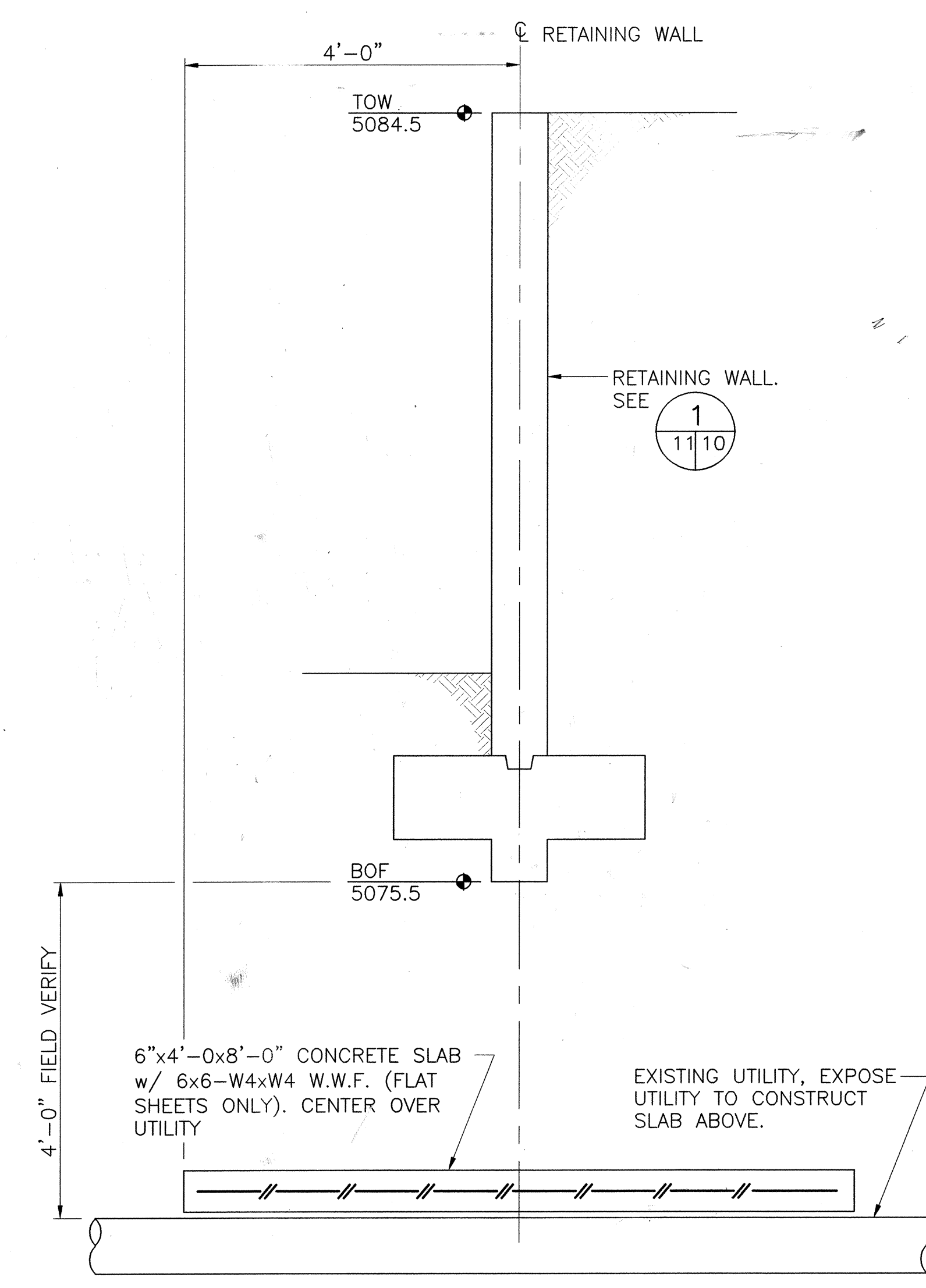
ADJOINING NEW TO EXISTING SLAB TYPICAL SECTION 13/5/11



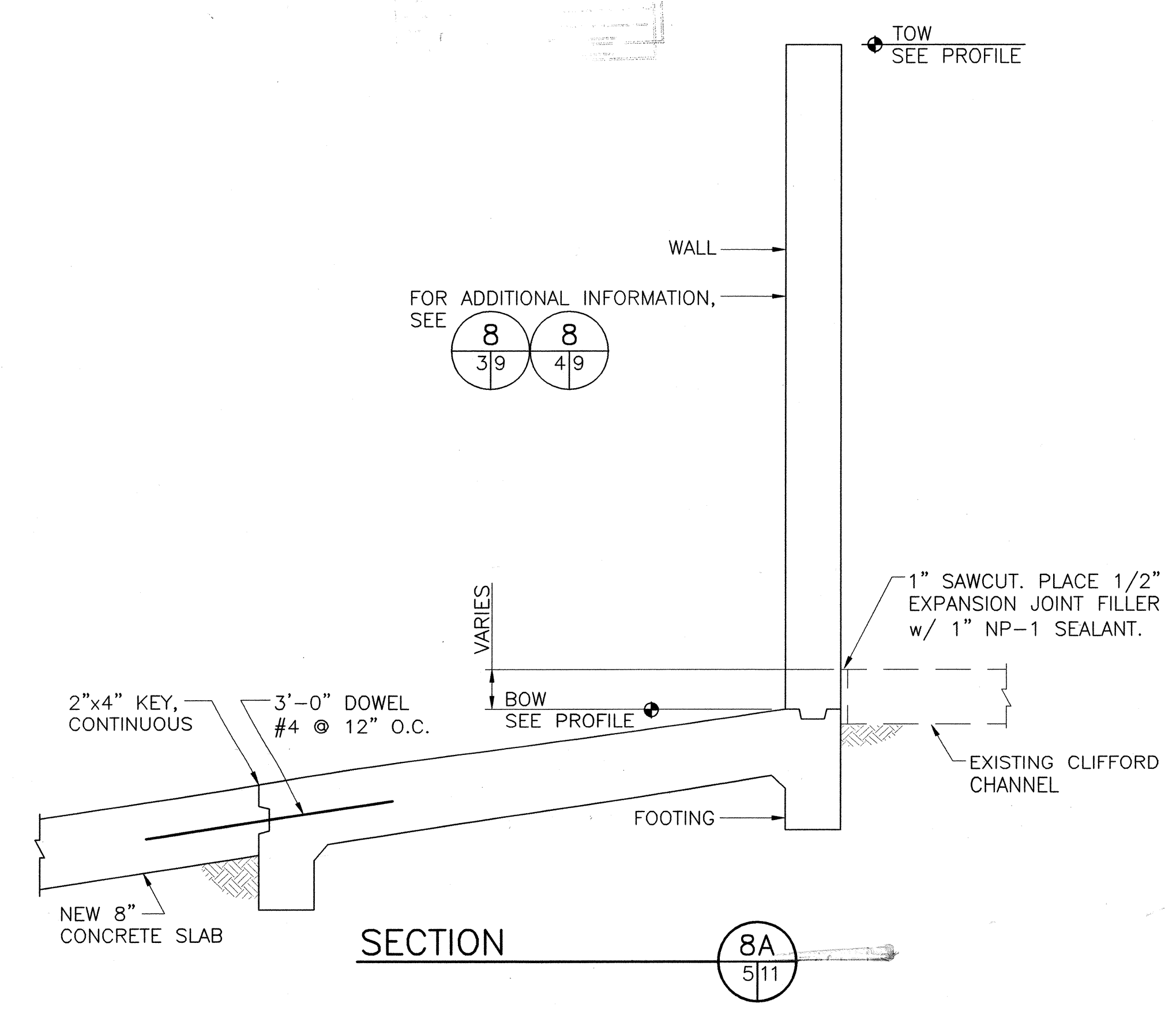
SECTION 12/5/11



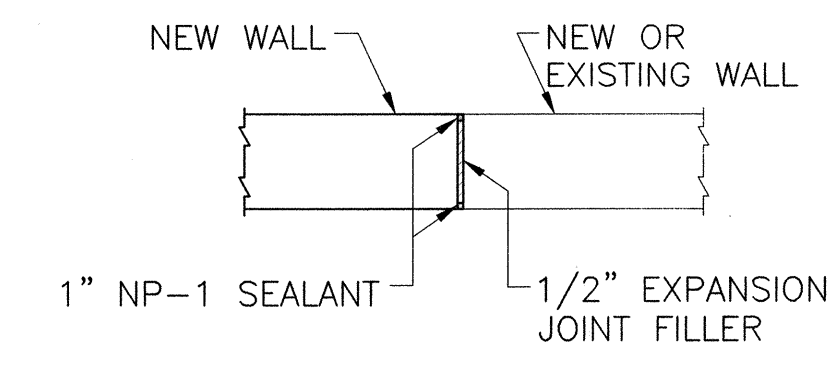
CONCRETE SLAB TURNDOWN 11/5/11 11/11/11



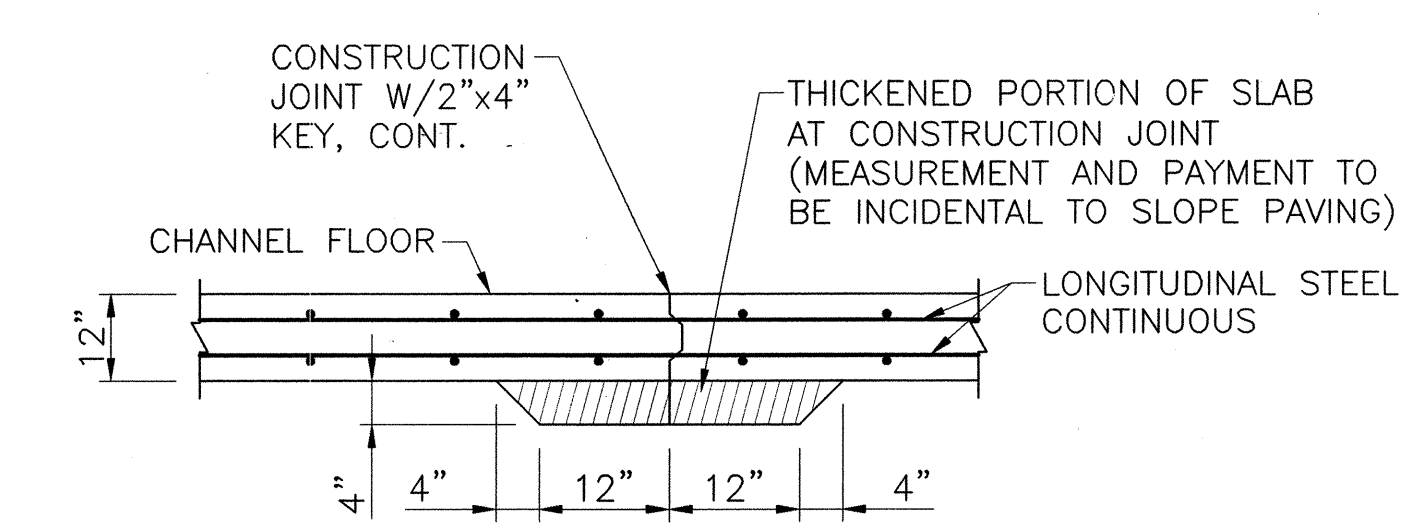
SECTION 10/5/11



SECTION 8A/5/11



ADJOINING NEW TO NEW OR EXISTING WALL PLAN TYPICAL DETAIL G/5/11



TYPICAL TRANSVERSE CONSTRUCTION JOINT DETAIL FOR CHANNEL FLOOR E/9/11

Bohannon & Huston
Court yard 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335
ENGINEERING & SPATIAL DATA & ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
CLIFFORD CHANNEL REALIGNMENT CHANNEL AND MISCELLANEOUS DETAILS	
Design Review Committee APPROVED FEB 26 2004	City Engineer Approval APPROVED FEB 26 2004 CITY ENGINEER
City Project No. 6833.01	Zone Map No. C-17-Z
Sheet 11	Of 11

AS-BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	DATE	DATE	THE STATION IS AN ACS 3 1/4" ALUMINUM	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY
STAMPED BY: BHI	2/26/04	2/26/04	2/26/04	CAP SET FLUSH IN THE CONCRETE BRIDGE											
ACCEPTANCE BY: BHI				ADJUSTMENT AND IS STAMPED "13-016, 1991"											
FIELD DRAWINGS	DATE	DATE	DATE	X=393,932.49 Y=1,518,933.32											
CORRECTED BY: BHI	2/26/04	2/26/04	2/26/04	ELEVATION = 5070.888											
RECORDED BY: BHI				GROUND TO GRID FACTOR = 0.99967379											
				ΔX = -0.07716"											