

PUBLIC IMPROVEMENT PLANS
FOR
COTTONWOOD TRAILS
ALBUQUERQUE, NEW MEXICO

OCTOBER 2001

PREPARED FOR:
GARRETT GROUP, INC.
P.O. BOX 10285
ALBUQUERQUE, NM 87184

PREPARED BY:
ISAACSON & ARFMAN, P.A.
128 MONROE ST. NE
ALBUQUERQUE, NM 87108

INDEX TO DRAWINGS

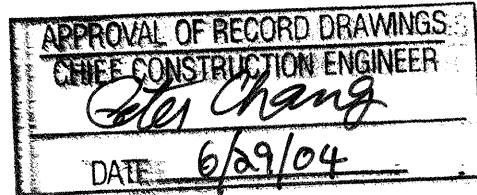
SHEET NO.	TITLE	SHEET NO.	TITLE
1	COVER SHEET		UTILITY PLAN & PROFILE SHEETS
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13	STORM DRAIN - FORCE MAIN (STA. 1+00 TO 7+00)		
14	STORM DRAIN - FORCE MAIN (STA. 7+00 TO END)		
15	CORRALES MAIN CANAL - FLOODWALL		

SURVEYOR'S CERTIFICATION

"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-built' surveys performed by me or under my supervision, that the 'as-built' information shown on these drawings was added by me or under my supervision, and that this 'as-built' information is true and correct to the best of my knowledge and belief." Aldrich Land Surveying is not responsible for any of the design concepts, calculations, engineering, or intent of the record drawings.

Timothy Aldrich, P.S. No. 7719

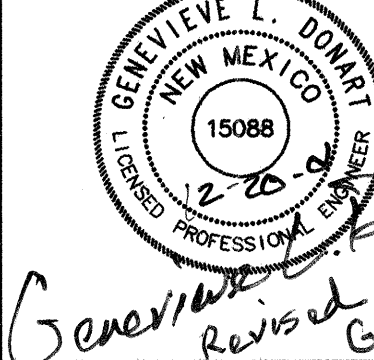
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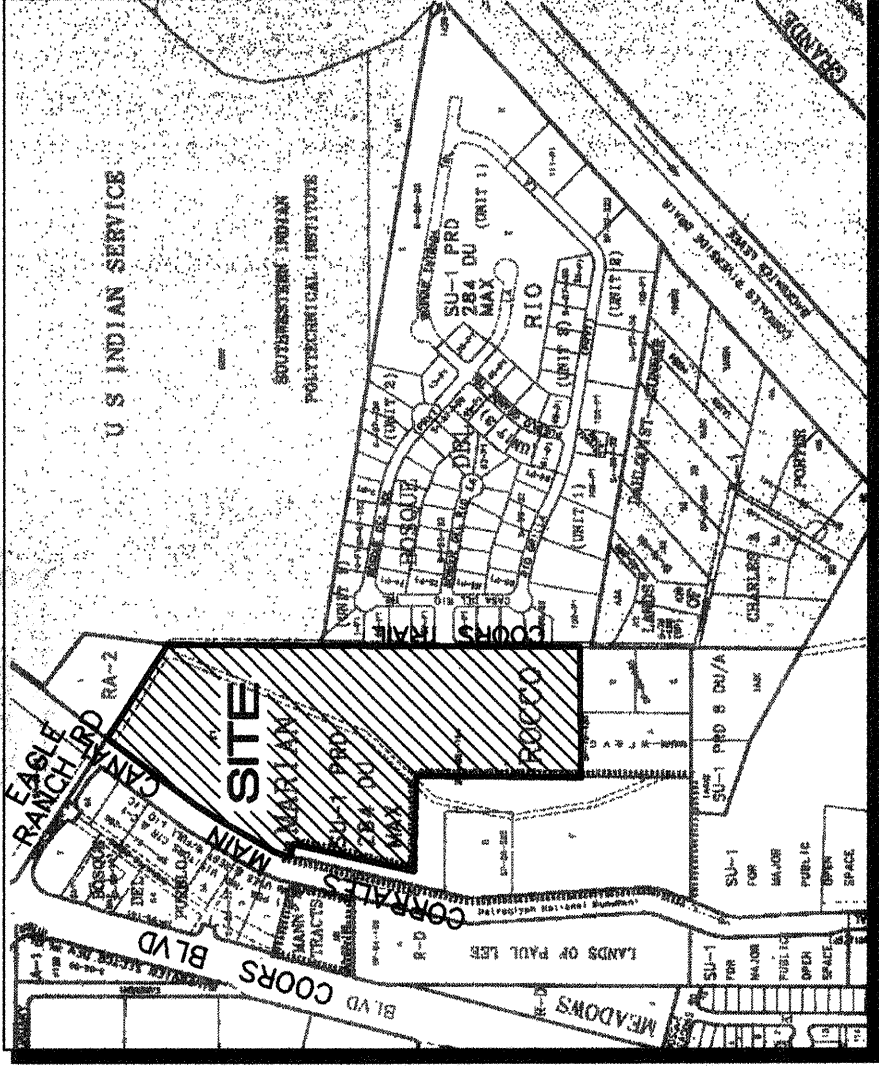
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26 67472 81 09

DRB NO.
1000493

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico 87102
147CVR.DWksh 12/20/01



REV.	SHEETS	CITY	ENGINEER	DATE	USER	DEPARTMENT	DATE	USER	DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER	DATE	*****				
		DRC Chairman		12-21-01	APPROVED FOR CONSTRUCTION					
		Transportation		12-20-01						
		Water/Wastewater		12/20/2001						
		Hydrology		12-20-01						
		AMAFCA		See sheets 6, 13, 14, 15						
		Constr. Mngmt.		12-21-01						
		Constr. Coord.		12-21-01						
		City Project No.		674781						
		Sheet		1	Of		23			



D-13

VICINITY MAP

1"=750'±

SUBDIVISION DATA / NOTES

1. Total Number of Existing Tracts: 1
2. Total Number of Lots created: 62
3. Total Number of Tracts created: 4
4. Gross Subdivision Acreage: 25.9395 Ac.
5. Total Mileage of Private Roadway Created: 0.49
6. Bearings are New Mexico State Plane Grid Bearings - Central Zone.
7. Distances are ground distances.
8. Bearings and distances in parenthesis are record.
9. Basis of boundary are the following plats (and documents) of record entitled:
"REPLAT OF TRACT E, MARIAN ROCCO SUBDIVISION" (5-31-88, C36-145),
"PLAT OF MARIAN ROCCO SUBDIVISION" (5-31-88, C36-145),
"PLAT OF MARIAN ROCCO SUBDIVISION" (5-31-88, C36-145),
"SUBDIVISION PLAT FOR STOUT SUBDIVISION" (3-1-84, C23-73),
"REPLAT OF TRACT 2, MAIN TRACTS" (5-31-88, C36-145),
all being records of Bernalillo County, New Mexico.
10. Field Survey performed by Aldrich Land Surveying October 2001.
11. Title Report by Rio Grande Title Co., Inc. File Number 02000586-COM effective 11/16/01
12. This property is apparently affected by reservations, restrictions and agreements contained within easements, documents and memorandums as listed within the above mentioned Title Report.
13. City Standard Utility Note is: "City of Albuquerque Water and Sanitary Sewer Service to subject property must be verified and coordinated with the Public Works Department, City of Albuquerque."
14. Centerline (in lieu of R/W) monumentation to be installed at all centerline PC's, PT's, angle points and street intersections prior to acceptance of subdivision street improvements and will consist of a standard four-inch (4") aluminum alloy cap stamped "City of Albuquerque", "Centerline Monumentation", "Survey Marker", "Do Not Disturb", "PLS #7719".
15. The roadways herein described are comprised of both public and private access easements (see Easement Notes).
16. Private access easements are to the benefit of the owners of Cottonwood Trails, Bosque del Rio and the Coors Trail neighbors only, as provided herein and by settlement agreement dated January 12, 1996. Tract PR is granted as a private easement to provide primary circulation to the Cottonwood Trails Subdivision and as a secondary emergency access to the benefit of the entire area surrounding the Cottonwood Trails Subdivision (Easement Note 4). Tract PR improvements will be the responsibility of the developers. The maintenance of Tract PR and Tract C improvements will become the responsibility of a homeowners association.
17. All open space requirements are met on the lot with the dwelling.

LEGAL DESCRIPTION

A tract of land lying and situate within Section 19, Township 11 North, Range 3 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico, being all of Tract E-1, of the Marian Rocco Subdivision, as the same is shown and designated on the plat thereof, filed in the Office of the County Clerk of Bernalillo County, New Mexico, on May 31, 1988, in Volume C36, Folio 145, being more particularly described as follows:

LEGAL DESCRIPTION CONTINUED ON SHEET 5 OF 5

DISCLOSURE STATEMENT

The intent of this plat is to subdivide the subject tract into 62 residential lots, to create a City of Albuquerque Open Space tract (Tract A), and three (3) Cottonwood Trails H.O.A. tracts as follows:
1) drainage tract (Tract B)
2) Coors Trail - a permanent access & utility easement (Tract C)
3) private roadway and public utility easement (Tract PR);
and to grant those easements necessary to serve the residential development.

FREE CONSENT AND DEDICATION

The subdivision shown hereon is with the free consent and in accordance with the desires of the undersigned Owner(s) and/or Proprietor(s) thereof and said Owner(s) and/or Proprietor(s) do hereby grant: all access, utility and drainage easements shown hereon including the right to construct, operate, inspect, and maintain facilities therein; and all public utility easements shown hereon for the common and joint use of gas, electrical power and communication services for overhead and/or buried distribution lines, conduits, and pipes for underground and/or overhead utilities where shown or indicated, and including the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. Said Owner(s) and/or Proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed.

OWNER
CITY OF ALBUQUERQUE

Joy J. Czar, C.A.O.
City of Albuquerque

ACKNOWLEDGMENT
STATE OF NEW MEXICO } SS
COUNTY OF BERNALILLO }

This instrument was acknowledged before me on _____
2001, by Joy J. Czar, as C.A.O. of the City of Albuquerque, a municipal corporation, on behalf of said corporation.

My Commission Expires: _____

Notary Public

14PPTL.DWGrev

12/10/01

Notary Public

Timothy Aldrich, P.S. No. 7719

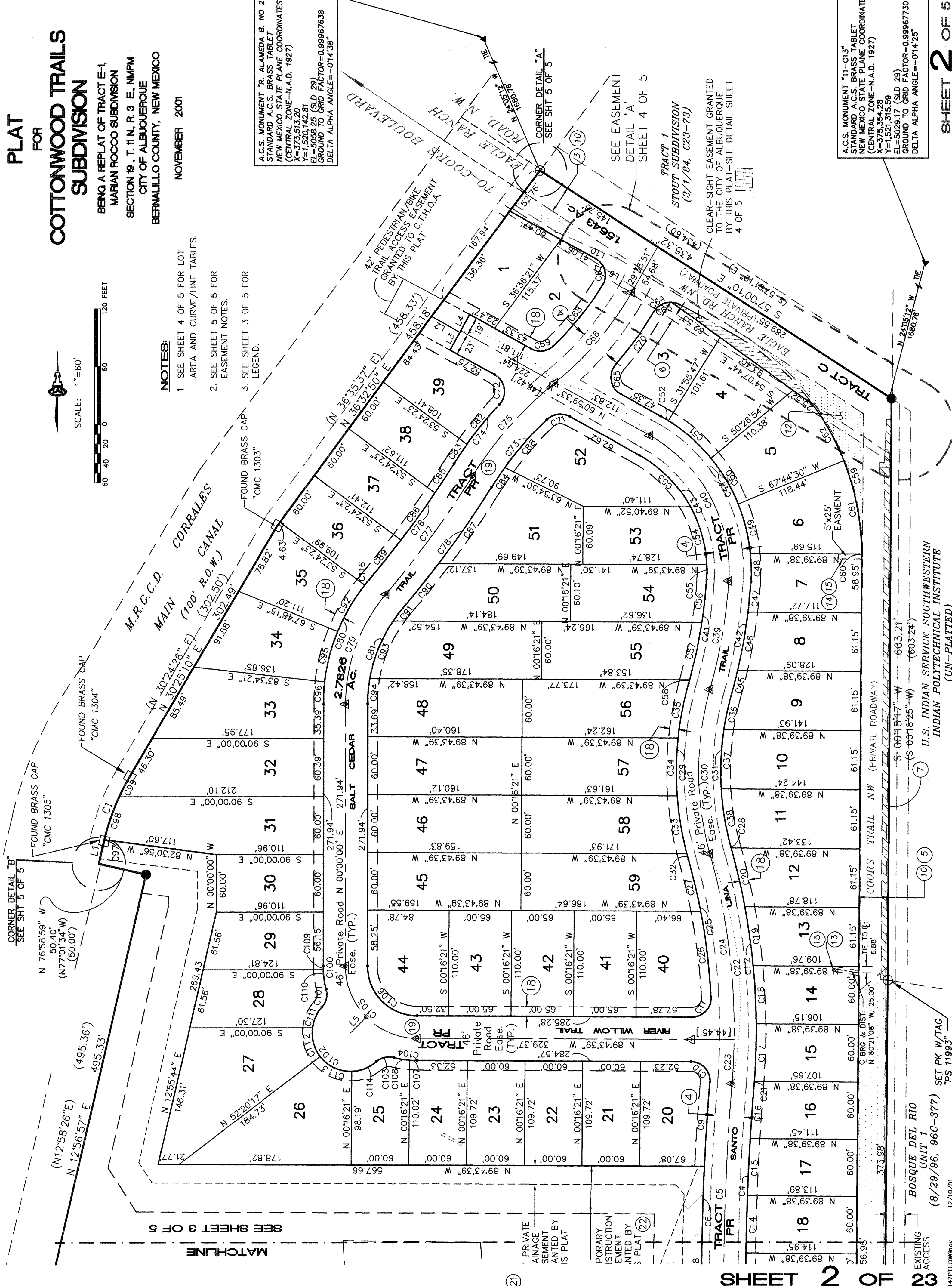
SHEET 1 OF 5

PLAT FOR COTTONWOOD TRAILS SUBDIVISION

BEING A REPLAT OF TRACT E-1,
MARIAN ROCCO SUBDIVISION
SECTION 19, T. 11 N. R. 3 E. NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER 2001

- NOTES:**
1. SEE SHEET 4 OF 5 FOR LOT AREA AND CURVE/LINE TABLES.
 2. SEE SHEET 5 OF 5 FOR EASEMENT NOTES.
 3. SEE SHEET 3 OF 5 FOR LEGEND.



SHEET 2 OF 23

14PPTL.DWGrev

12/10/01

EXISTING ACCESS

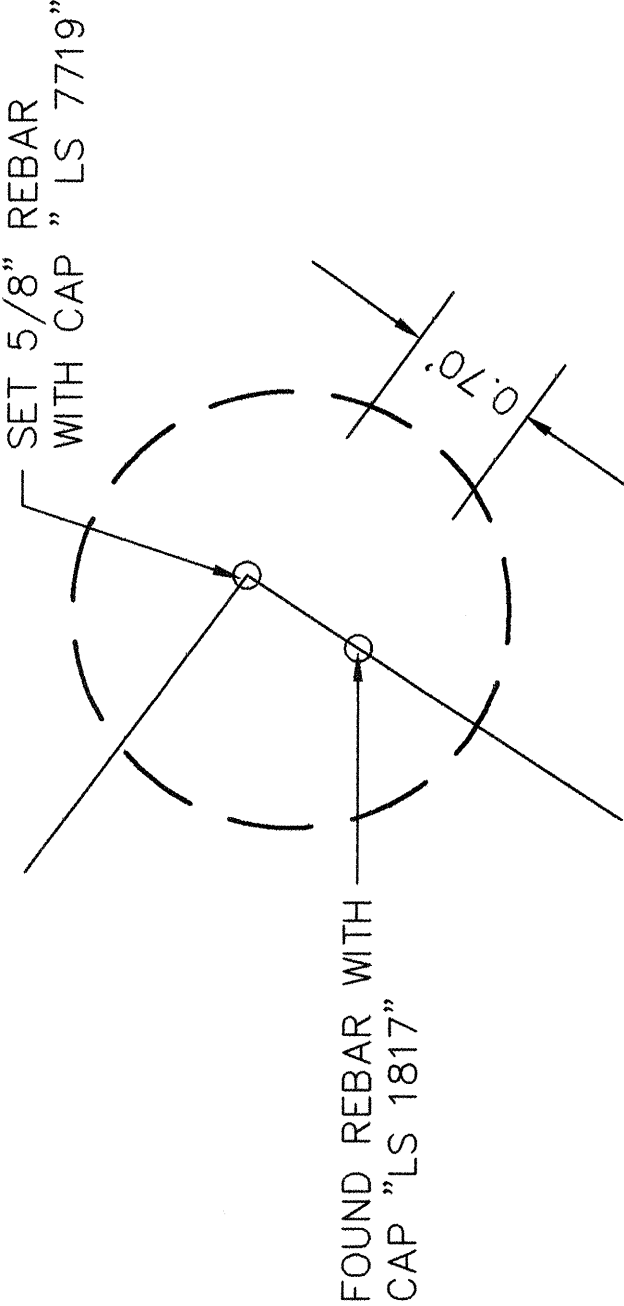
BOSQUE DEL RIO UNIT 1
(8/29/86, 96C-377)
SET PK W/TAG PS 1983

U.S. INDIAN SERVICE SOUTHWESTERN INDIAN POLYTECHNICAL INSTITUTE (UN-PLATTED)

SHEET 2 OF 5

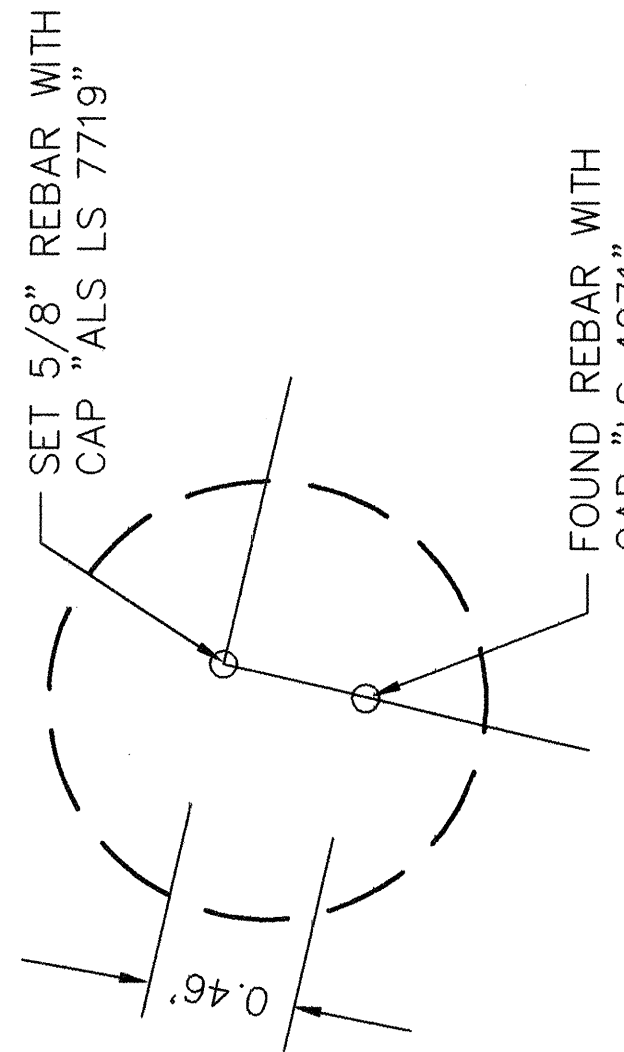
LEGAL DESCRIPTION (continued)

BEGINNING AT THE NORTHWEST CORNER OF SAID TRACT, LYING ON THE EAST RIGHT OF WAY LINE OF M.R.G.C.D. CORRALES MAIN CANAL, AND MARKED BY A SET NO. 5 REBAR WITH CAP "LS 7719", FROM WHENCE A TIE TO ACS MONUMENT "R. ALMEDA B-Z" BEARS N 24°05'12" W, A DISTANCE OF 680.76 FEET; THENCE LEAVING SAID EAST RIGHT OF WAY LINE S 57°00'10" E, A DISTANCE OF 436.32 FEET TO THE NORTHWEST CORNER OF SAID TRACT MARKED BY A FOUND 3/4" REBAR WITH CAP "LS 4071"; THENCE S 0°01'81" W, A DISTANCE OF 603.21 FEET TO AN ANGLE POINT MARKED BY A FOUND 2" PIPE WITH CAP "NO. 21"; THENCE S 0°21'23" W, A DISTANCE OF 1017.04 FEET TO THE SOUTHEAST CORNER OF SAID TRACT MARKED BY A FOUND 1/2" REBAR; THENCE N 89°44'47" W, A DISTANCE OF 500.96 FEET TO A FOUND 3/4" REBAR WITH CAP "LS 4071"; THENCE N 0°07'22" E, A DISTANCE OF 640.29' TO AN ANGLE POINT MARKED BY A FOUND 3/4" REBAR WITH CAP "LS 4071"; THENCE N 89°43'55" W, A DISTANCE OF 378.58 FEET TO AN ANGLE POINT MARKED BY A SET 5/8" REBAR WITH CAP "LS 7719"; THENCE N 1°25'56" E, A DISTANCE OF 485.33 FEET TO AN ANGLE POINT MARKED BY A FOUND 3/4" REBAR WITH CAP "LS 4071"; THENCE N 76°58'59" W, A DISTANCE OF 50.40 FEET TO A POINT LYING ON THE EAST RIGHT OF WAY LINE OF M.R.G.C.D. CORRALES MAIN CANAL, MARKED BY A SET 5/8" REBAR WITH CAP "LS 7719"; THENCE N 1°25'33" E, ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 23.99 FEET TO A POINT OF CURVATURE, MARKED BY A FOUND A.M.A.F.C.A. MONUMENT; THENCE ALONG AN ARC OF CURVE TO THE RIGHT, HAVING A RADIUS OF 236.50 FEET, A CENTRAL ANGLE OF 17°26'32", AN ARC LENGTH OF 72.00 FEET, A CHORD BEARING OF N 21°41'54" E, AND DISTANCE OF 71.72 FEET TO A POINT OF TANGENCY, MARKED BY A FOUND A.M.A.F.C.A. MONUMENT; THENCE N 30°25'10" E, A DISTANCE OF 302.49 FEET TO AN ANGLE POINT ON SAID EAST RIGHT OF WAY LINE, MARKED BY A FOUND BRASS CAP "CMC 1303"; THENCE N 36°39'50" E, A DISTANCE OF 468.18 FEET TO THE POINT OF BEGINNING CONTAINING 25.9395 ACRES MORE OR LESS.



BOUNDARY DETAIL 'A'

NTS



BOUNDARY DETAIL 'B'

NTS

PUBLIC UTILITY EASEMENTS

PUBLIC UTILITY EASEMENTS SHOWN ON THIS PLAT ARE GRANTED FOR THE COMMON AND JOINT USE OF:

1. THE PUBLIC SERVICE CO. OF NM--ELECTRIC SERVICES DIVISION FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF UNDERGROUND/OVERHEAD ELECTRICAL LINES, COMMUNICATION LINES, TRANSFORMERS, AND ANY OTHER EQUIPMENT, FIXTURES, STRUCTURES, AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICE.
2. QWEST FOR THE INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURIED COMMUNICATION LINES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES.
3. COMCAST FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF CABLE LINES, CABLES, AND EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICE.
4. THE PUBLIC SERVICE CO. OF NM--GAS SERVICES DIVISION FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH DISTRIBUTION AND SERVICE LINES AND FACILITIES REASONABLY NECESSARY TO PROVIDE GAS SERVICE.

INCLUDED IS THE RIGHT TO BUILD, REBUILD, CONSTRUCT, RECONSTRUCT, LOCATE, RELOCATE, CHANGE, REMOVE, MODIFY, RENEW, OPERATE, AND MAINTAIN FACILITIES FOR THE PURPOSES DESCRIBED ABOVE, TOGETHER WITH FREE ACCESS TO, FROM, AND OVER SAID EASEMENT, INCLUDING SUFFICIENT WORKING AREA SPACE FOR ELECTRIC TRANSFORMERS, WITH THE RIGHT AND PERMIT TO REMOVE TREES, SHRUBS, OR BUSHES WHICH INTERFERE WITH THE PROPOSED FACILITIES, AND TO CONSTRUCT, RECONSTRUCT, OR OTHER STRUCTURE SHALL BE ERECTED OR CONSTRUCTED ON SAID EASEMENTS, NOR SHALL ANY WELL BE DRILLED OR OPERATED THEREON. PROPERTY OWNERS SHALL BE SOLELY RESPONSIBLE FOR CORRECTING ANY VIOLATIONS OF NATIONAL ELECTRICAL SAFETY CODE CAUSED BY CONSTRUCTION OF POOLS, DECKING, OR ANY STRUCTURES ADJACENT TO OR NEAR EASEMENTS SHOWN ON THIS PLAT.

EASEMENTS FOR ELECTRIC TRANSFORMERS/SWITCHGEARS, AS INSTALLED, SHALL EXTEND TEN FEET (10') IN FRONT OF TRANSFORMER/SWITCHGEAR DOORS AND FIVE FEET (5') ON EACH SIDE.

In approving this plat, PNM Electric Services and Gas Services (PNM) did not conduct a title search of the properties shown herein. Consequently, PNM does not waive nor release any easement or easement rights to which it may be entitled.

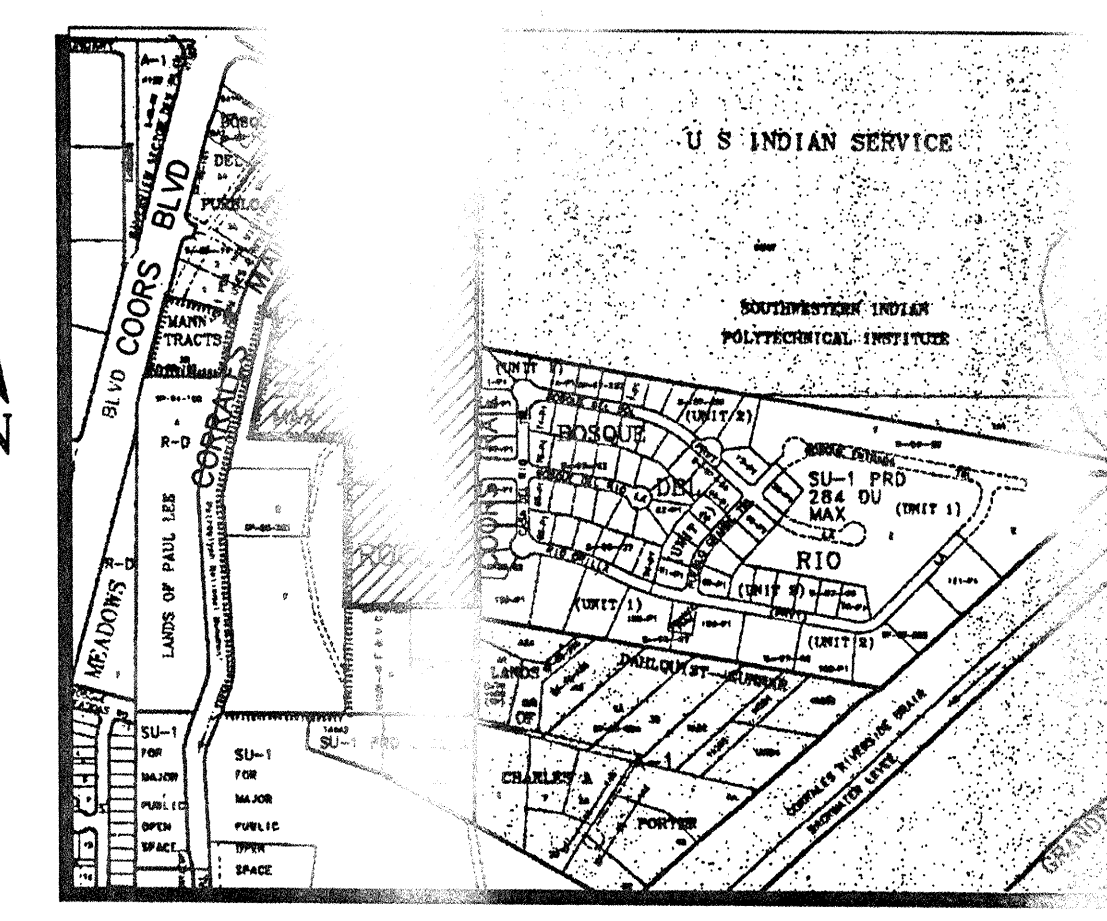
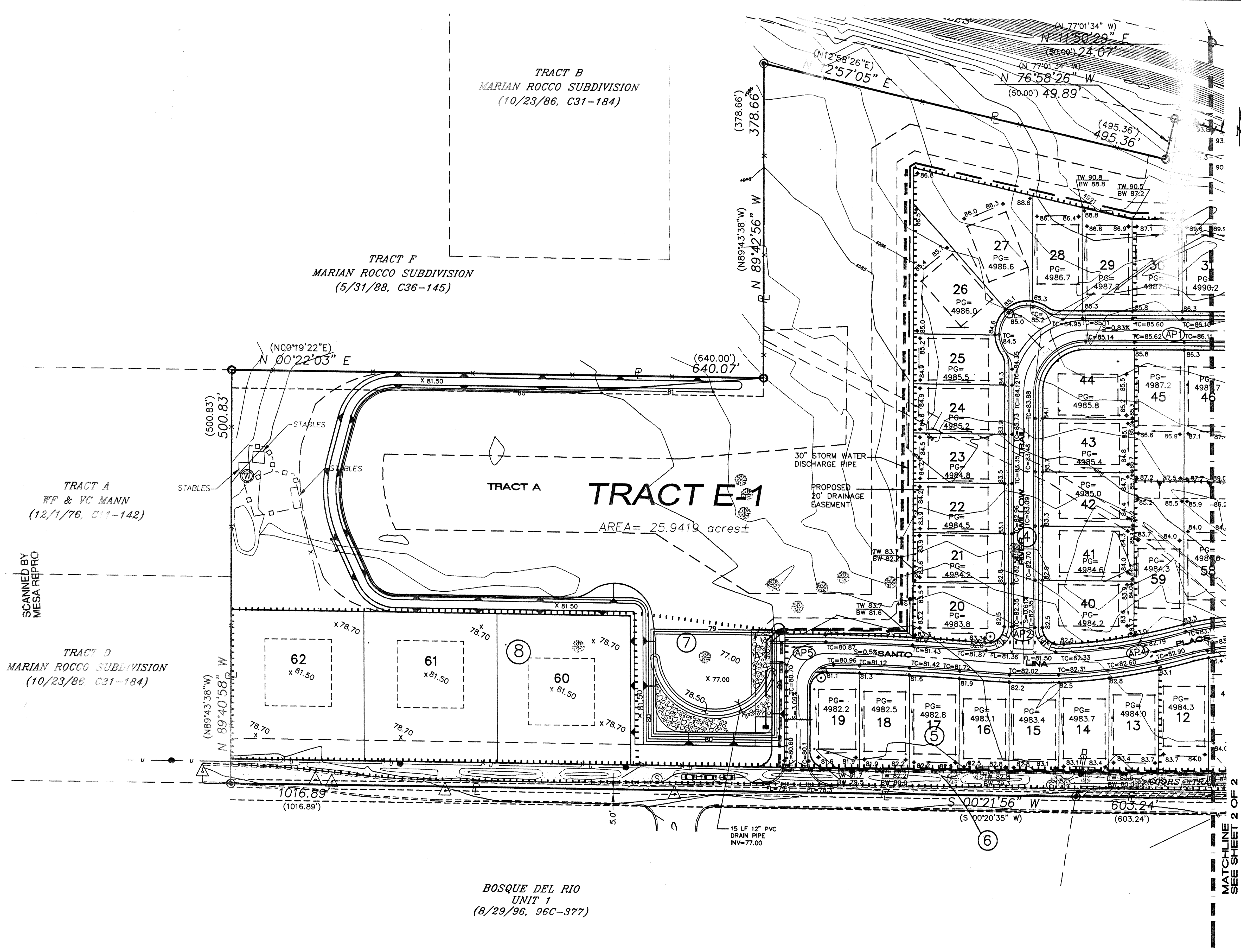
PLAT
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BEING A REPLAT OF TRACT E-1,
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SECTION 19, T. 11 N. R. 3 E. NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOVEMBER 2001

EASEMENT NOTES

1. Reservations contained in Patent from the United States of America, Recorded in Book 77, Page 186, records of Bernalillo County, New Mexico. (AFFECTS SUBJECT PROPERTY – NOT PLOTTABLE)
2. Any and all rights, liens claims, assessments, or equities in favor of the Middle Rio Grande Conservancy District which may affect the insured premises. (AFFECTS SUBJECT PROPERTY – NOT PLOTTABLE)
3. Thirty foot (30') wide public roadway easements granted to the United States of America by document recorded April 11, 1956 in Book D347, Page 586 as document no. 91736, records of Bernalillo County, New Mexico and as shown on those plats recorded in Map Book C26, folio 10 and Map Book C36, folio 145, records of Bernalillo County, New Mexico.
4. Easements, Covenants and Restrictions recorded as documents no. 96 099778 (09-06-96, BK. 96-24, PP. 5979-5982) records of Bernalillo County, New Mexico. Includes a condition that the final platted developments shall provide a twenty-eight foot (28') wide non-exclusive emergency access easement.
5. Grant of thirty foot (30') wide private access easement recorded as document no. 88 73457 (08-12-88, MS653A, pp. 909-910) records of Bernalillo County, New Mexico.
6. Seven foot (7') wide public utility easement granted to Public Service Company of New Mexico and Mountain States Telephone and Telegraph Company by document recorded as document no. 89 48624, records of Bernalillo County, New Mexico. (6/1/89, BK. 354A, Pg. 203)
7. Five foot (5') wide public utility easement granted to Public Service Company of New Mexico and Mountain States Telephone and Telegraph Company by document recorded in Book Misc. 407, Page 213 on 02-11-75, records of Bernalillo County, New Mexico.
8. Thirty foot (30') wide public sanitary sewer easement recorded as document no. 90 70738 (09-10-90, BK. 90-15, PP.926-933), records of Bernalillo County, New Mexico.
9. Thirty foot (30') wide public sanitary sewer easement recorded as document no. 90 74621 (04-10-97, BK. 97-9, PP. 8635-8642), records of Bernalillo County, New Mexico.
10. Grant of thirty foot (30') wide public water, sanitary sewer, storm drain and utility easement and Restrictive Covenants recorded as document no. 90 79554 (10-12-90, BK. 90-16, PP. 8598-8612), Bernalillo County, New Mexico.
11. Not used
12. Public access and utility easement Agreement and Dedication of Public Right of Way Easement recorded as document no. 96 099762 (09-06-96, BK. 96-24, PP. 5874-5878), records of Bernalillo County, New Mexico.
13. Five foot (5') wide public utility easement granted to Public Service Company of New Mexico by document recorded as document no. 97 035975 (04-10-97, BK. 97-9, PP. 8623-8625), records of Bernalillo County, New Mexico.
14. Five foot (5') wide public utility easement granted to Public Service Company of New Mexico by document recorded as document no. 97 035976 (04-10-97, BK. 97-9, PP. 8626-8628), records of Bernalillo County, New Mexico.
15. Five foot (5') wide public utility easement Grant recorded as document no. 97 035979 (04-10-97, BK. 97-9, PP. 8635-8642), records of Bernalillo County, New Mexico.
16. A portion of Tract A shall be encumbered by a private blanket drainage easement below ext. contour interval 4981. The City of Albuquerque open space tract is accessible via Tract F, Marian Rocco Subdivision, which is adjacent open space land.
17. Not used
18. Ten foot (10') wide public utility easement granted by this plat on Lots 60, 61 & 62.
19. Tract PR shall be deeded to and maintained by the Cottonwood Trails Homeowners' Association as a private access easement for the benefit of lots 1-62.
20. Tract B shall be deeded to and maintained by the Cottonwood Trails Homeowners' Association as a private drainage easement for the benefit of lots 1-62.
21. Private drainage easement to be granted to & maintained by the Cottonwood Trails Homeowner's Association to the benefit of Lots 1-62 by this plat.
22. Temporary construction easement granted to Garrett Group, Inc. for duration of 2 years from time of recording of Cottonwood Trails final plat.



LEGEND

- 4900 — EXISTING CONTOUR
- 78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- PG=4984.3 PAD GRADE ELEVATION
- TC 81.95 TOP OF CURB ELEVATION
- FL 81.45 FLOWLINE ELEVATION
- TW 88.2 TOP OF RETAINING WALL
- BW 86.4 BOTTOM OF RETAINING WALL
- ~~~~~ WATER BAR
- - - - - PROPOSED RETAINING WALL
- INV=77.0 INVERT ELEVATION
- AP1 ANALYSIS POINT
- ② BASIN ID
- ||||| BASIN BOUNDARY
- EROSION CONTROL BERM

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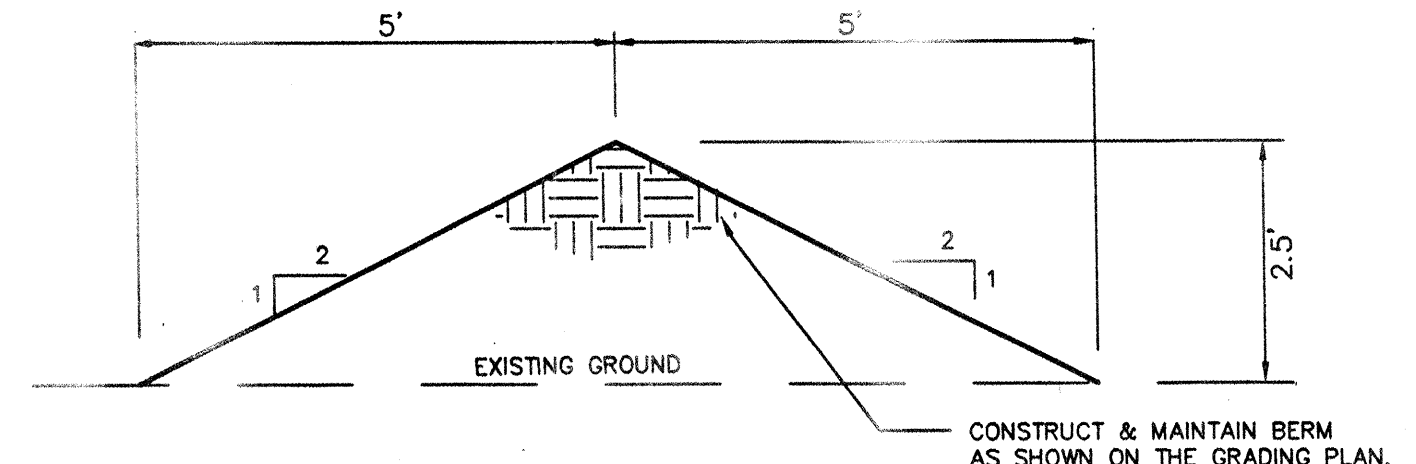
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **COTTONWOOD TRAILS SUBDIVISION
GRADING & DRAINAGE PLAN**

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DRB APPROVED 2-12-01			
City Project No. 674781	Zone Map No. D-13	Sheet 1	Of 2

AS-BUILT INFORMATION		BENCH MARKS	
CONTRACTOR	DATE	U.S. COE STA. "R. ALAMEDA B-2"	NW
STATED BY	DATE	COORDINATES (CENTRAL ZONE) BY ACS	
ACCEPTANCE BY	DATE	ELEV=5,085.25	
FIELD	DATE		
REVISIONS	DATE		
CHECKED BY	DATE		
RECORDED BY	DATE		
City Engineer's Seal		City Engineer's Signature	

$\Delta=17'26'14''$
 $R=236.50$ (R=36.50)
 $L=71.98$ (L=38)
 $T=36.27$
 $CH=N 21'4'' E$
7



EROSION CONTROL BERM
SCALE: 1"=2'

EROSION CONTROL

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO THE PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS (AS DETAILED ABOVE) AS SHOWN ON THE PLAN AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN PUBLIC RIGHT-OF-WAY.
3. SEE GRADING NOTES.

GRADING NOTES:

1. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
2. ALL SUBGRADE AND FILL SHALL BE COMPACTED TO A MINIMUM OF 90% ASTM D-1557.
3. EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
4. CONFORM TO ELEVATIONS AND DIMENSIONS SHOWN ON PLANS WITHIN A TOLERANCE OF 0.3± FEET.
5. SCARIFY AND COMPACT SUBGRADE FOR FILLS. PLACE FILL MATERIALS IN LAYERS NOT MORE THAN 8" IN LOOSE DEPTH. MOISTEN AS NECESSARY TO PROVIDE OPTIMUM MOISTURE (±2%) CONTENT.
6. UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLAN. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE, COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
7. MAXIMUM SLOPES SHALL BE 3:1 MINIMUM SLOPES SHALL BE 1%.
8. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.
9. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
10. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT ERODED AND WASHED DOWN THE STREET.
11. OWNER WILL PROVIDE SOIL TESTING AND INSPECTION SERVICES DURING EARTHWORK OPERATIONS. ALLOW TESTING SERVICE TO INSPECT AND APPROVE COMPACTED SUBGRADES AND FILL LAYERS BEFORE FURTHER CONSTRUCTION WORK IS DONE. SHALL COMPACTION TESTS INDICATE INADEQUATE DENSITY, CONTRACTOR SHALL PROVIDE ADDITIONAL COMPACTION AND TESTING AT NO ADDITIONAL EXPENSE.
12. OWNER HAS ESTABLISHED SUBDIVISION BOUNDARY CORNERS. CONTRACTOR SHALL PROVIDE ALL OTHER CONSTRUCTION STAKING INCLUDING TRACT CORNERS. CONTRACTOR SHALL LOCATE AND PRESERVE ALL BOUNDARY CORNERS AND REPLACE ANY LOST OR DISTURBED CORNERS.

LEGEND

- 4900 — EXISTING CONTOUR
- ◆ 78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- PG=4984.3 PAD GRADE ELEVATION
- TC 81.95 TOP OF CURB ELEVATION
- FL 81.45 FLOWLINE ELEVATION
- TW 88.2 TOP OF RETAINING WALL
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- ~~~~~ WATER BAR
- — — PROPOSED RETAINING WALL
- INV=77.0 INVERT ELEVATION
- (APT) ANALYSIS POINT
- (2) BASIN ID
- ||||| BASIN BOUNDARY
- ===== EROSION CONTROL BERM

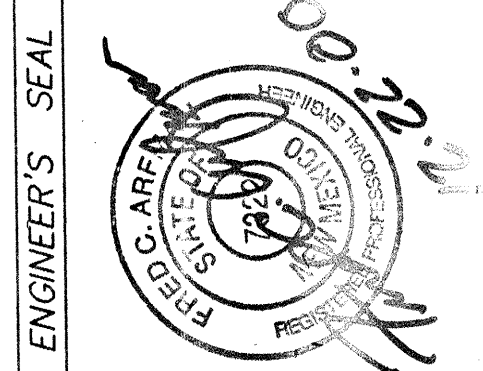
TRACT 1
STOUT SUBDIVISION
(3/1/84, C23-73)

U.S. INDIAN SERVICE
SOUTHWESTERN INDIAN
POLYTECHNICAL INSTITUTE
UN-PLATTED

AS-BUILT INFORMATION	
CONTRACTOR	ISAACSON & ARFMAN, P.A.
STAKED BY	ALIS
DATE	12/22/00
FIELD ACCEPTANCE	BY ALIS
DATE	12/22/00
REVISIONS	BY ALIS
DATE	12/22/00
CORRECTED BY	ALIS
DATE	12/22/00
RECORDED BY	ALIS
DATE	12/22/00

BENCH MARKS	
U.S. COE STA. "R. ALAMEDA B-2"	NM STATE PLANE
COORDINATES (CENTRAL ZONE) BY ACS	
ELEV=5,085.25	

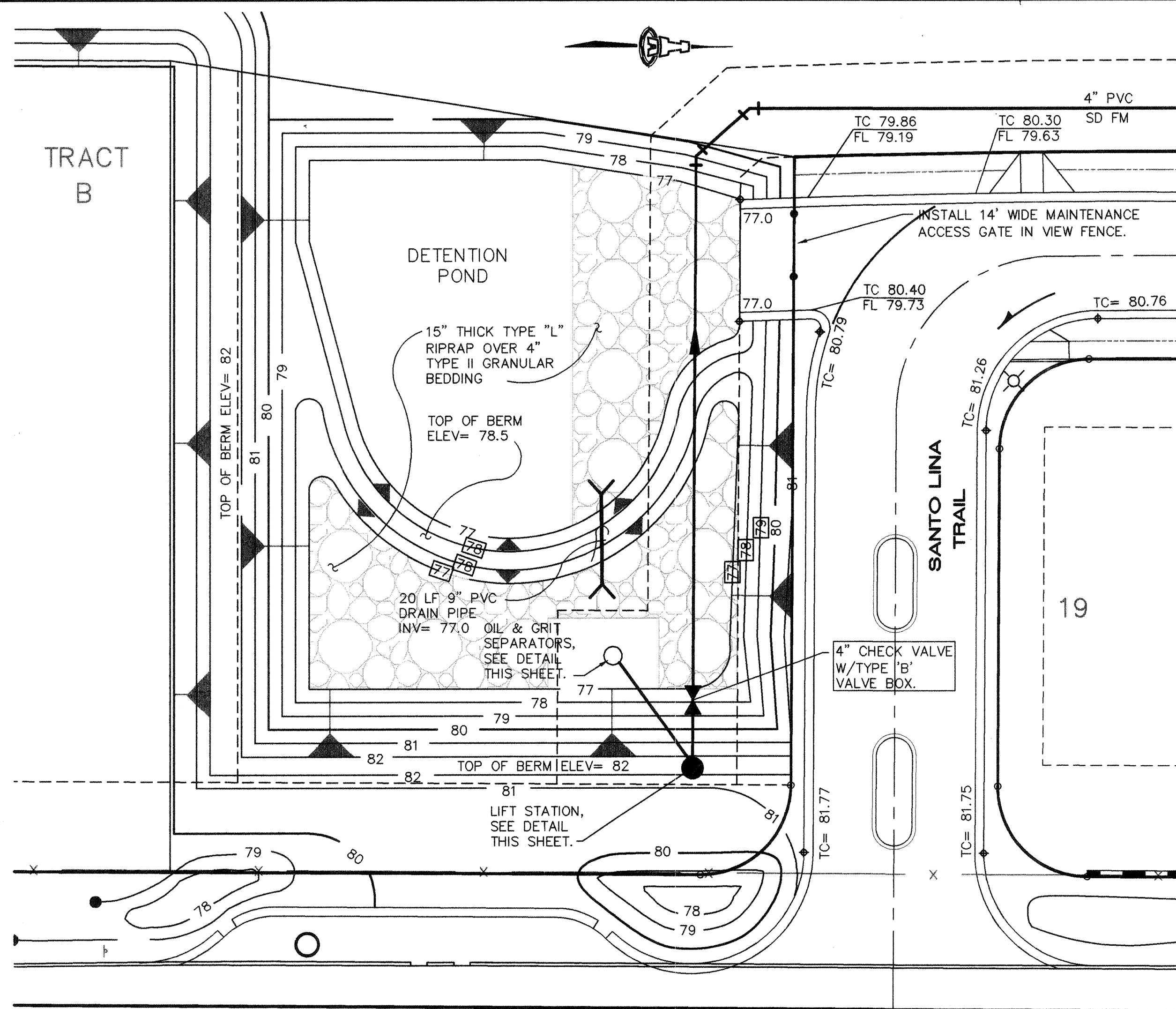
SURVEY INFORMATION	
FIELD NOTES	PRECISION SURVEYING 01/00
1.	



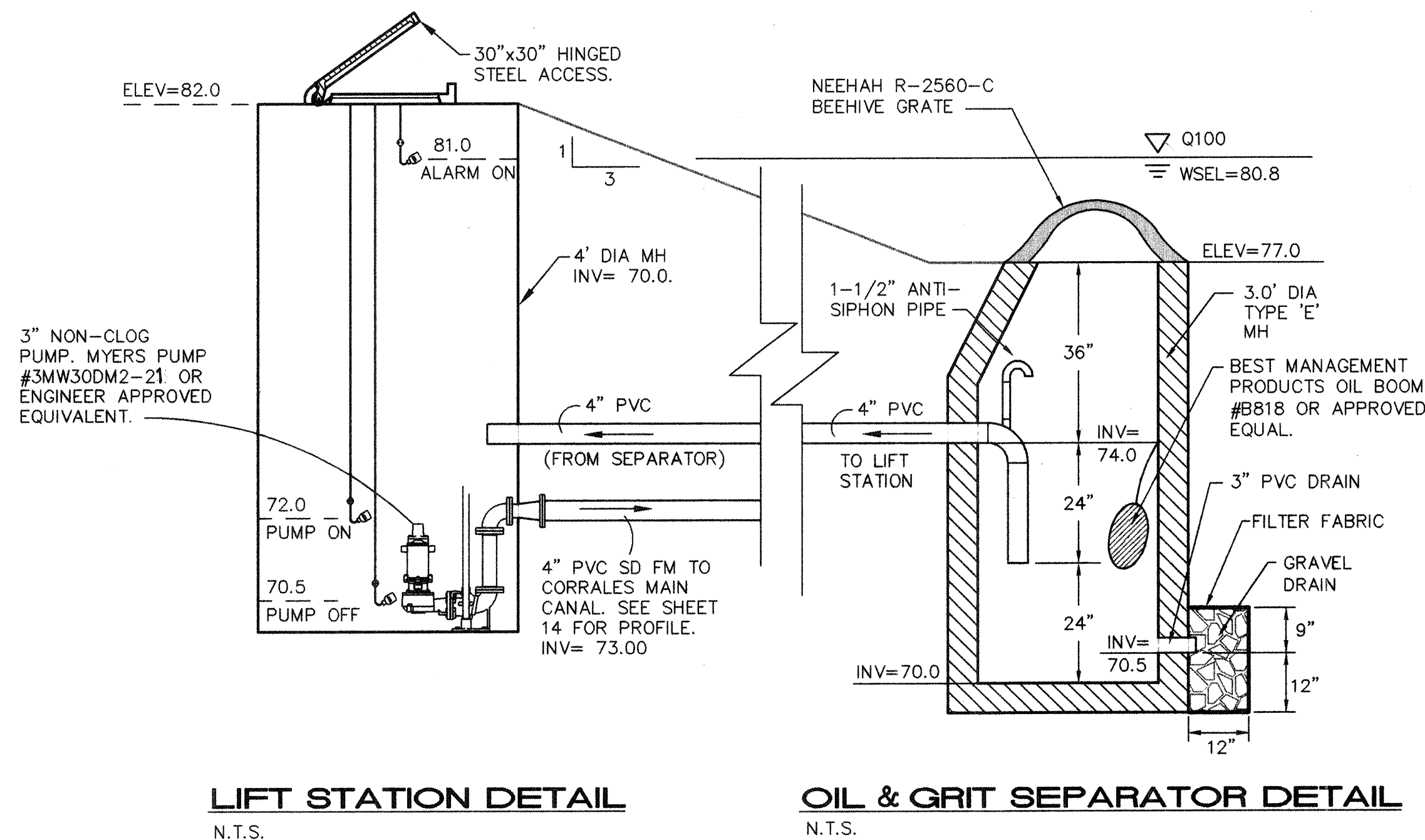
REMARKS	
NO.	DATE
1.	

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico
1476RD.DWG 12/22/00

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: COTTONWOOD TRAILS SUBDIVISION GRADING & DRAINAGE PLAN	
Design Review Committee	City Engineer Approval
DRB APPROVED 2-12-01	
City Project No. 674781	Zone Map No. D-3
Sheet 2	Of 2



**SANTO LINA TR. RUNDOWN AND
DETENTION POND DETAIL**



- NOTES:
1. AMAFCA Field Engineer shall be notified 48-hours prior to any work within the CORRALES MAIN CANAL R/W. Tel 884-2215 Jerry Lovato.
 2. No work will be performed in the CORRALES MAIN CANAL R/W between March 1st and October 31st without written permission from AMAFCA and the MRGCD.
 3. All subgrade, backfill and embankment shall be compacted to 95% (modified proctor) within the CORRALES MAIN CANAL R/W. Testing reports shall be provided to AMAFCA Field Engineer.
 4. AMAFCA Field Engineer Will be notified 48-hours prior to final inspection of any facilities within the CORRALES MAIN CANAL R/W.

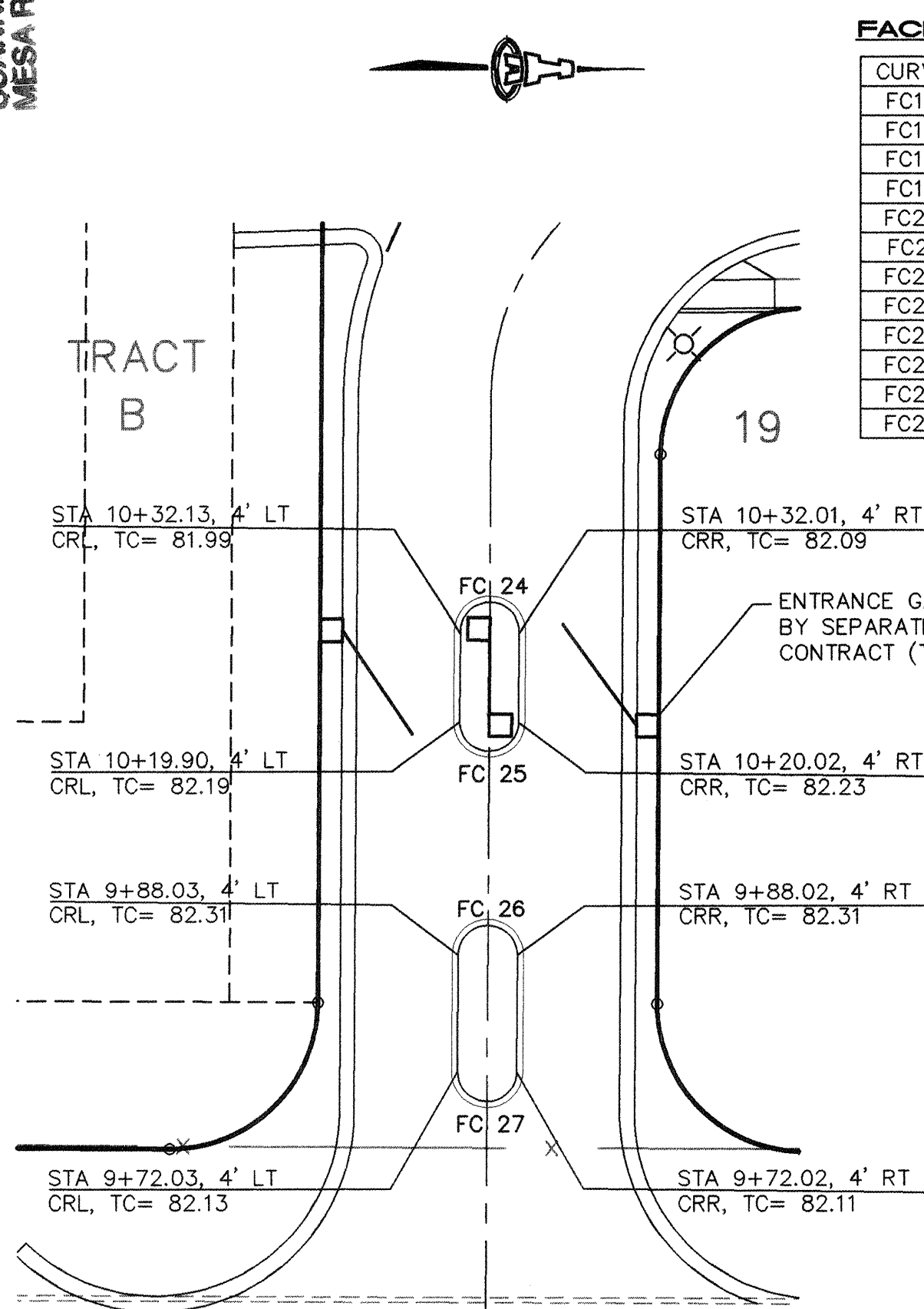
APPROVED FOR CONSTRUCTION WITHIN CORRALES MAIN
CANAL RIGHT-OF-WAY:

[Signature] 2-5-02
(for A.M.A.F.C.A.) DATE

MRGCD CONSTRUCTION NOTES

1. Any work to be performed within the Middle Rio Grande Conservancy District (M.R.G.C.D.) Right-of-Way shall be closely coordinated with the M.R.G.C.D. Engineering Department and appropriate field office. Phone: (505) 247-0234.
2. No work is to be done on facilities or structures belonging to, or operated by, the M.R.G.C.D. between March 1 and October 31 inclusive. However, work may be permitted by the M.R.G.C.D. if it can be shown that the work will not interfere with operations of the M.R.G.C.D. facility. All work to be done within the M.R.G.C.D. facilities must be approved by the M.R.G.C.D. Engineer prior to commencing work.
3. The Contractor shall not store equipment, new materials or debris within District right-of-way which may interfere with operations and maintenance of the M.R.G.C.D. facility.
4. The Contractor shall not service vehicles or equipment within M.R.G.C.D. Right-of-Way.
5. Seeding of disturbed areas within M.R.G.C.D. Right-of-Ways is required per the M.R.G.C.D. seeding specifications.
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7. The Contractor is responsible for repairing and or replacement of any structures removed and or damaged due to the Contractors activities within the Districts right-of-way. Should any turnouts, culvert pipes and or structures require replacement due to leakage and or damage by the Contractor, new turnouts, and new culvert pipes and or new structures shall replace the damaged item. Repairs and or replacements within the Districts right-of-way must comply with the Districts specifications.
8. All damaged culvert crossings and culvert crossings removed and or disturbed must be restored and/or replaced to the satisfaction of the M.R.G.C.D. and comply with M.R.G.C.D. specifications.
9. All salvageable culverts, irrigation gates, etc. must be returned to the M.R.G.C.D.
10. The Contractor is responsible for executing a "Special Use License Agreement" with the M.R.G.C.D. prior to construction.

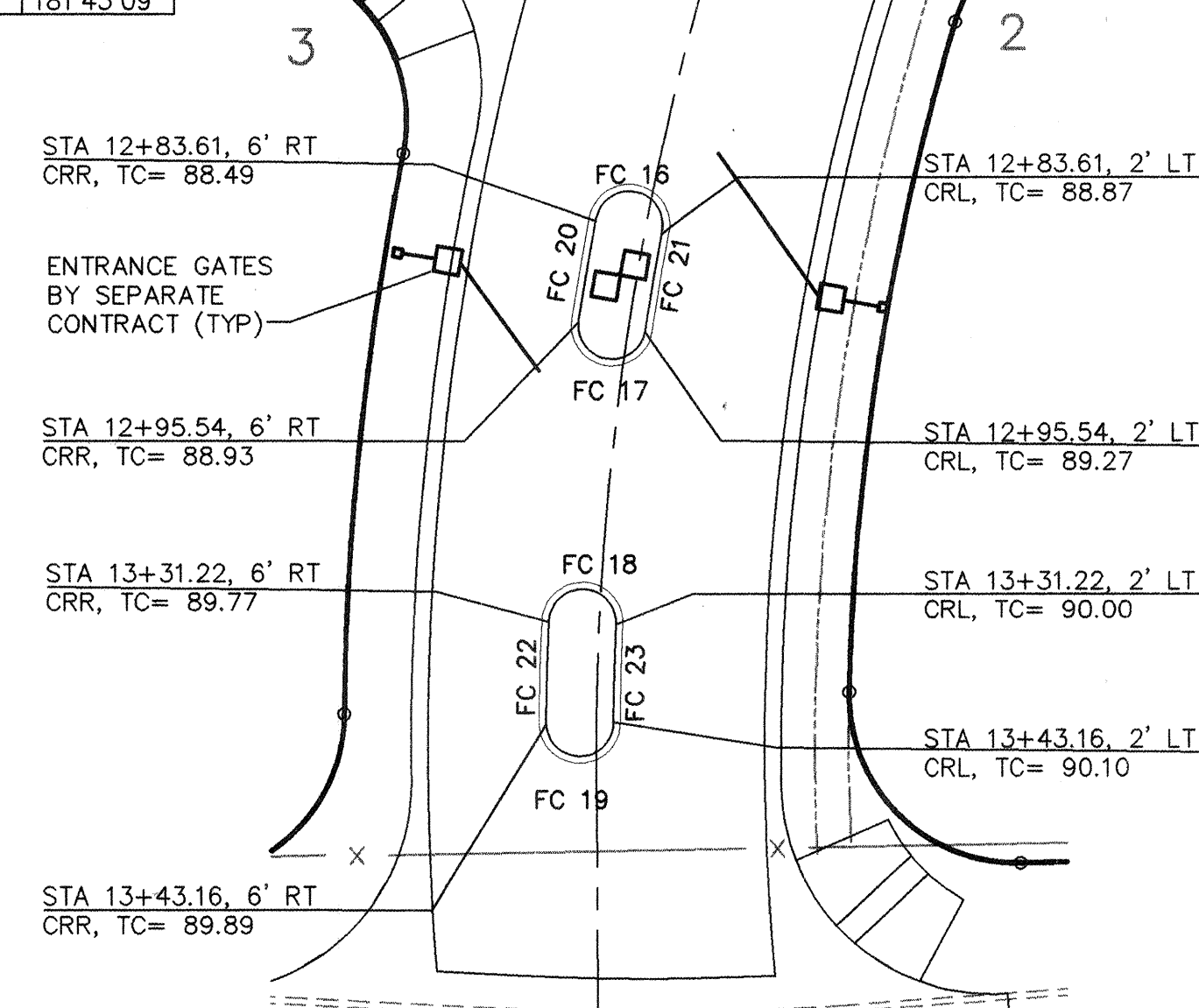
SCANNED BY
MESA REPRO



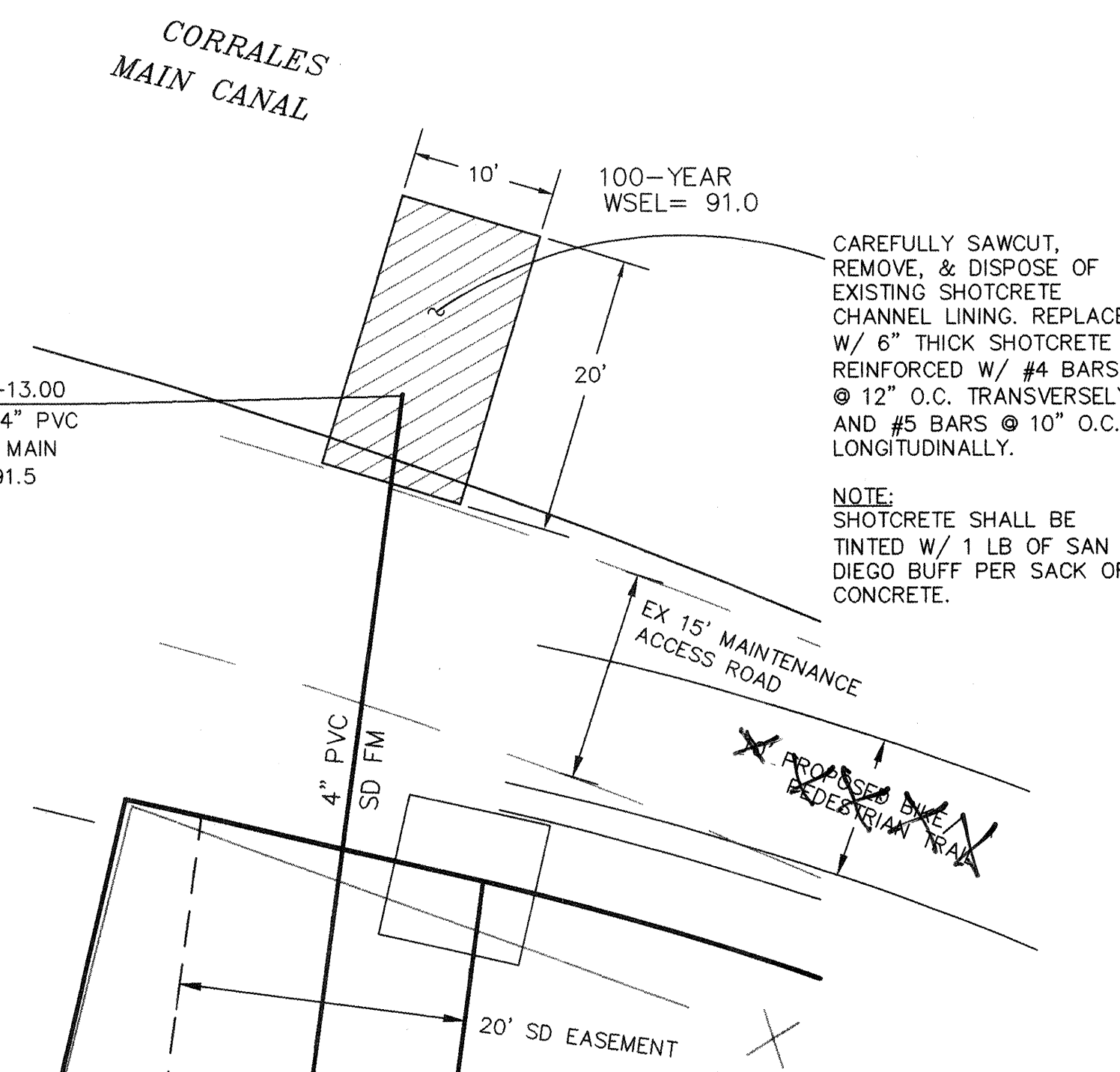
SANTO LINA ENTRANCE MEDIAN DETAIL

FACE OF CURB CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
FC16	12.57	4.00	180°00'00"
FC17	12.57	4.00	180°00'00"
FC18	12.57	4.00	180°00'00"
FC19	12.57	4.00	180°00'00"
FC20	12.15	335.81	02°04'24"
FC21	11.86	327.81	02°04'24"
FC22	12.16	335.81	02°04'27"
FC23	11.87	327.81	02°04'27"
FC24	12.56	4.00	179°53'17"
FC25	12.56	4.00	179°54'47"
FC26	12.45	4.00	178°16'51"
FC27	12.69	4.00	181°43'09"



SALT CEDAR ENTRANCE MEDIAN DETAIL



STORM DRAIN OUTLET DETAIL

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147DRD.L.D.W.G.N.V.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **COTTONWOOD TRAILS SUBDIVISION
DRAINAGE & PAVING DETAILS**

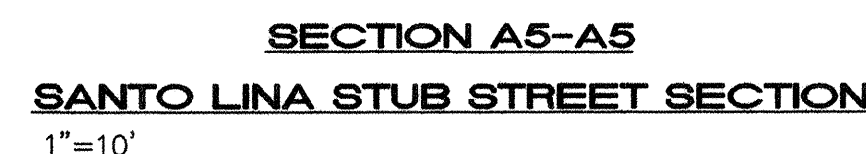
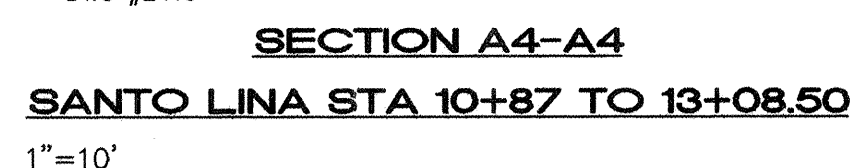
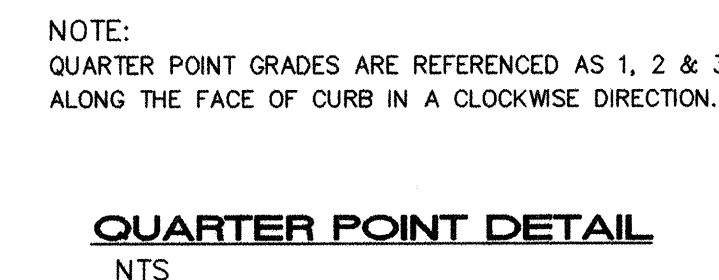
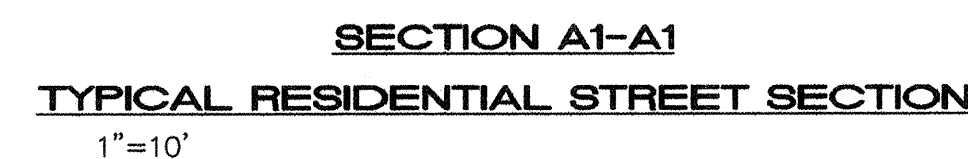
Design Review Committee City Engineer Approval
APPROVED
JAN 28 2002
DESIGN REVIEW COMMITTEE
CITY ENGINEER

City Project No. 674781 Zone Map No. D-13

Mo./Day/Yr. Mo./Day/Yr.
DESIGNED BY GLD DATE 10/01
DRAWN BY KSH DATE 10/01

Sheet 6 Of 23

[illegible]



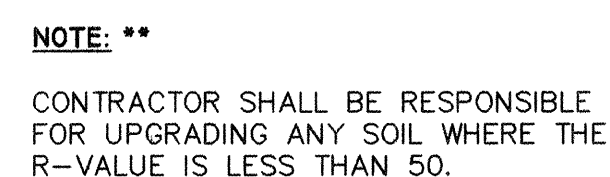
1. CAREFULLY REMOVE AND DISPOSE OF 122 LF EXISTING STANDARD CURB & GUTTER. THE CONTRACTOR SHALL REMOVE EXISTING CURB & GUTTER SO AS TO PREVENT DAMAGE TO EXISTING ASPHALT. THE CITY INSPECTOR MUST APPROVE THE ASPHALT CONDITION PRIOR TO PLACING NEW CONCRETE. IF THE CITY INSPECTOR DOES NOT APPROVE, 1' WIDTH OF EXISTING ASPHALT MUST BE SAWCUT, REMOVED & REPLACED.
2. 125 SY PAVEMENT PER MAJOR LOCAL PAVING SECTION ON THIS SHEET. MATCH EXISTING PAVEMENT.
3. STANDARD CURB & GUTTER PER COA STD DWG #2415.
4. 4' WIDE CURB CUT.
5. 11 LF, 4" WIDE SOLID WHITE THERMOPLASTIC STRIPING.

NOTE:
STATIONING IS PER SANTO LINA TR.

FACE OF CURB CURVE TABLE			
CURVE	RADIUS	LENGTH	DELTA
C1	25.00	19.25	44°07'38"
C2	18.00	14.10	44°52'48"
C3	18.00	13.89	44°11'54"
C4	25.00	58.56	134°13'06"

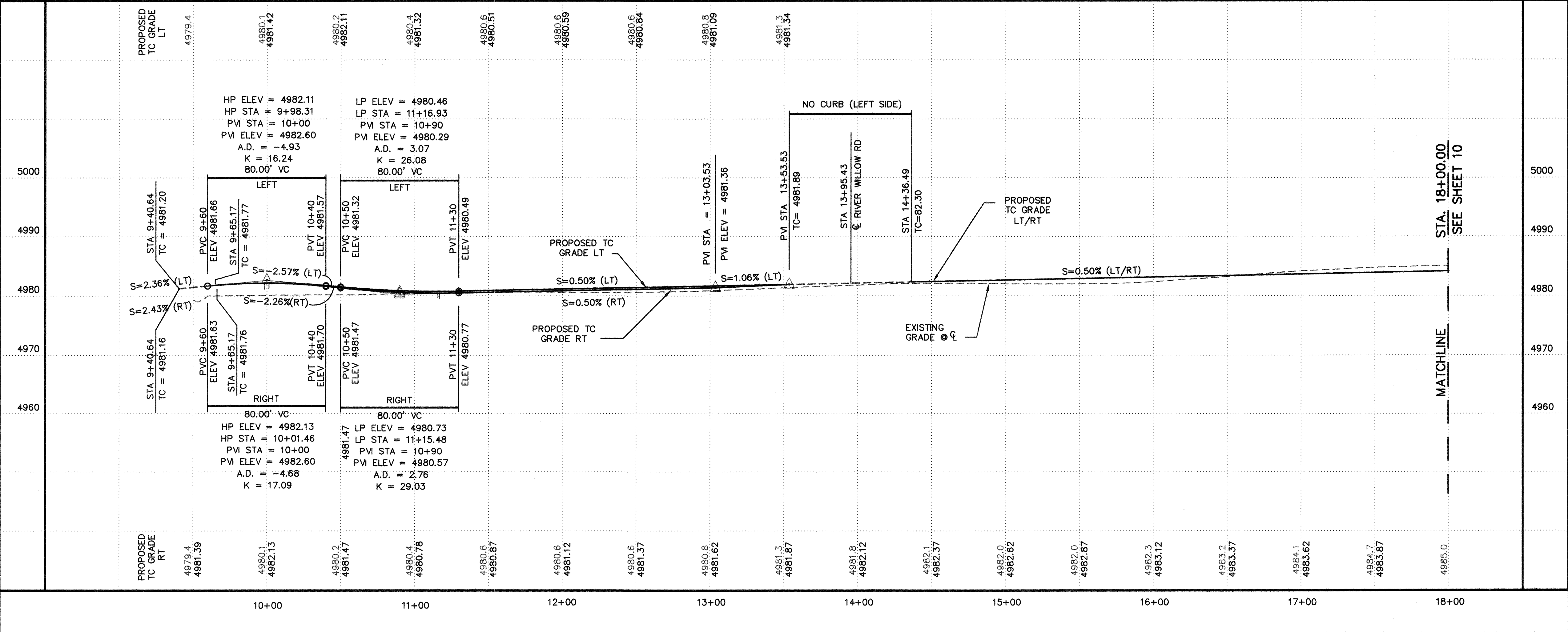
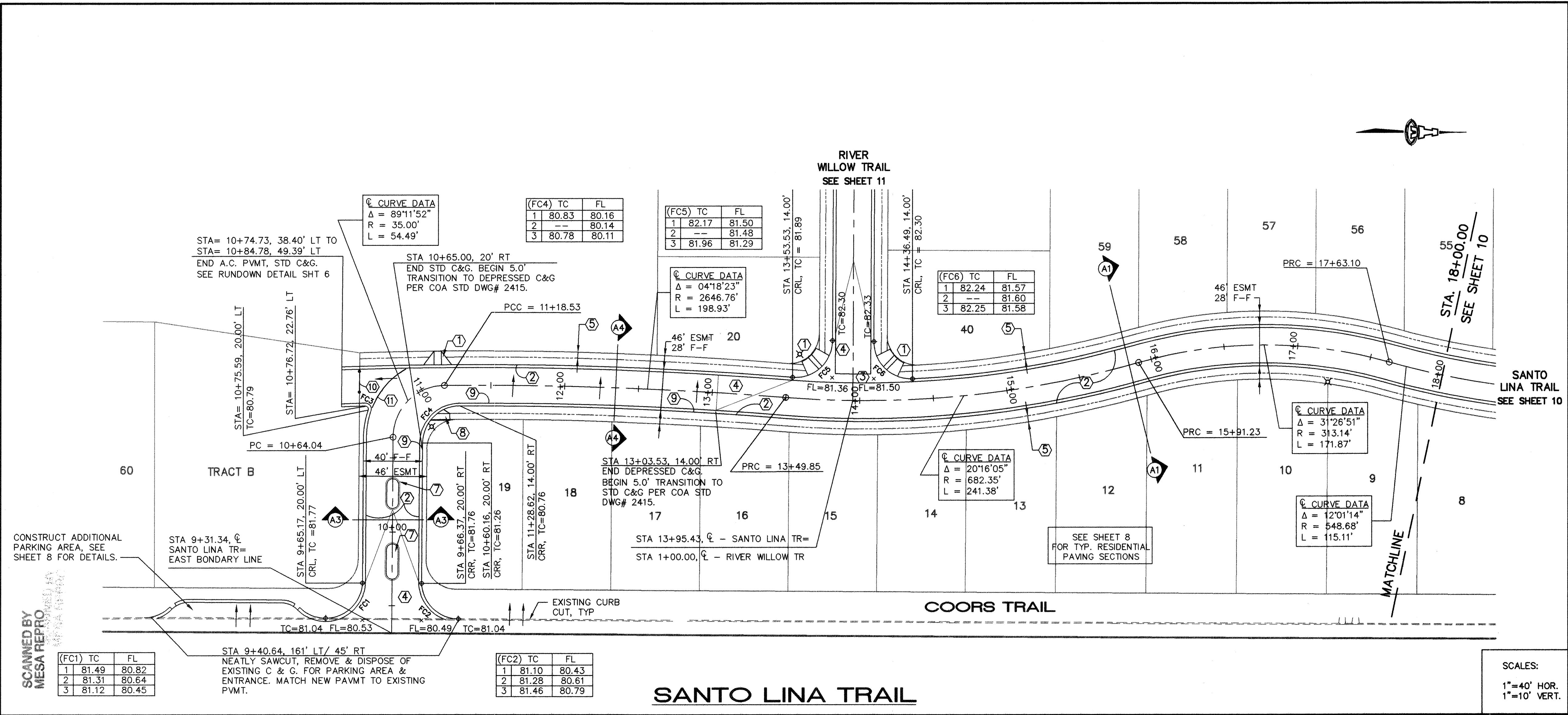
NOTE: **

CONTRACTOR SHALL BE RESPONSIBLE
FOR UPGRADING ANY SOIL WHERE THE
R-VALUE IS LESS THAN 50.



RESIDENTIAL PAVING SECTION
SCALE: 1"= 1'-0" (PER COA STD. DWG. No. 2405)

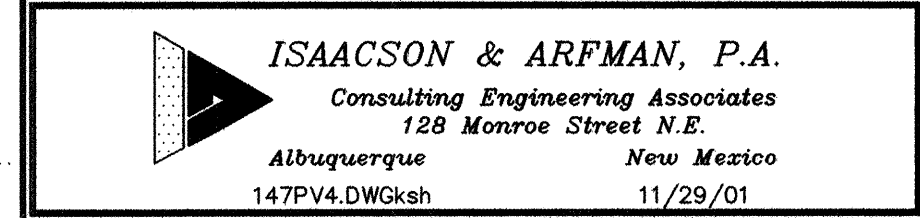
[illegible]





FACE OF CURB CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
FC7	31.46	25.00	72°06'30"
FC8	45.63	25.00	104°34'17"
FC9	44.96	25.00	103°02'53"
FC10	31.26	25.00	71°38'31"



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

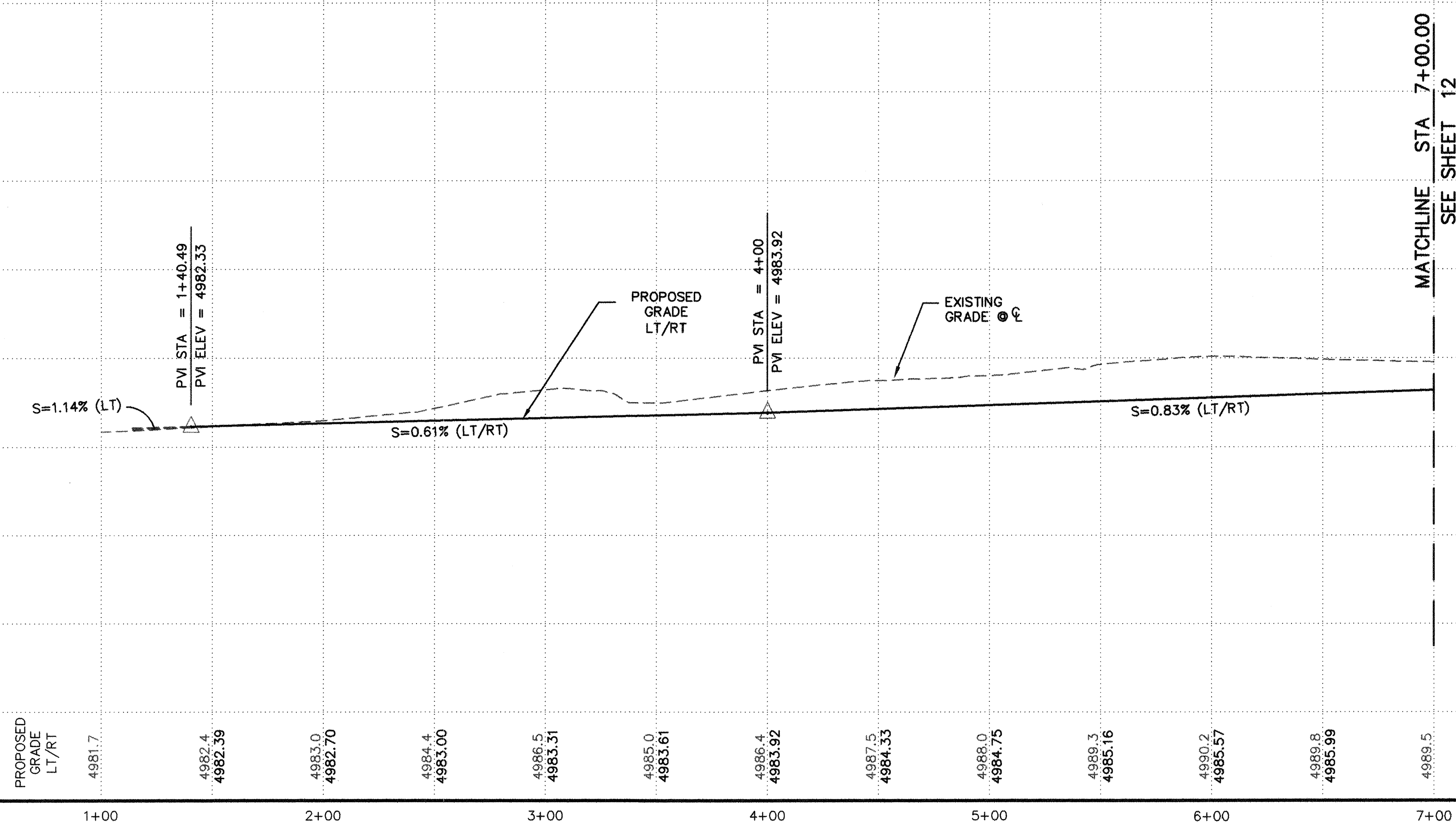
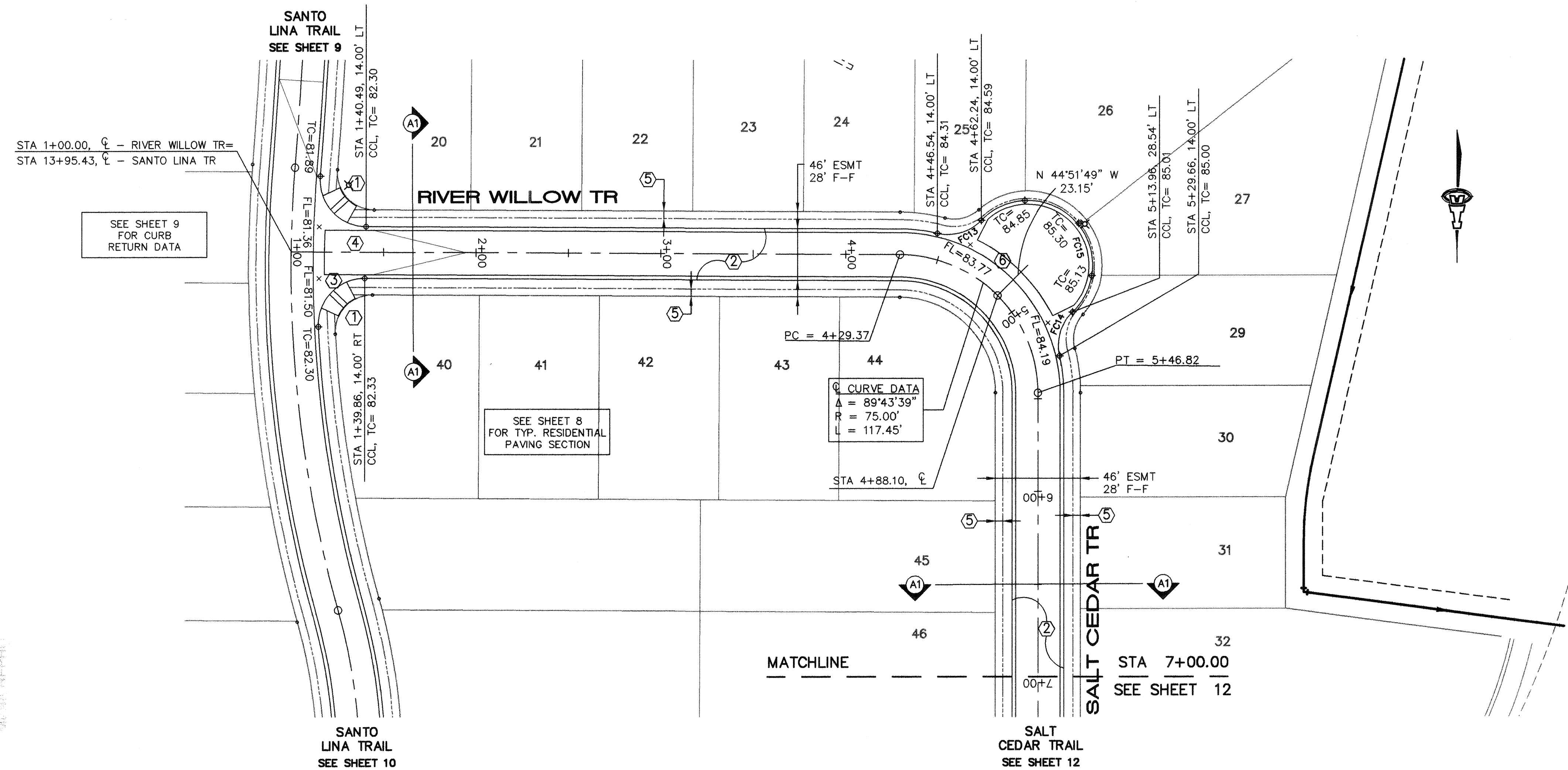
TITLE: COTTONWOOD TRAILS SUBDIVISION
SANTO LINA TRAIL
STA 18+00 TO END
PAVING PLAN & PROFILE

Design Review Committee APPROVED DEC 21 2001 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED FEB 15 2002 CITY ENGINEER	Last Design Update
--	---	---------------------------

City Project No.

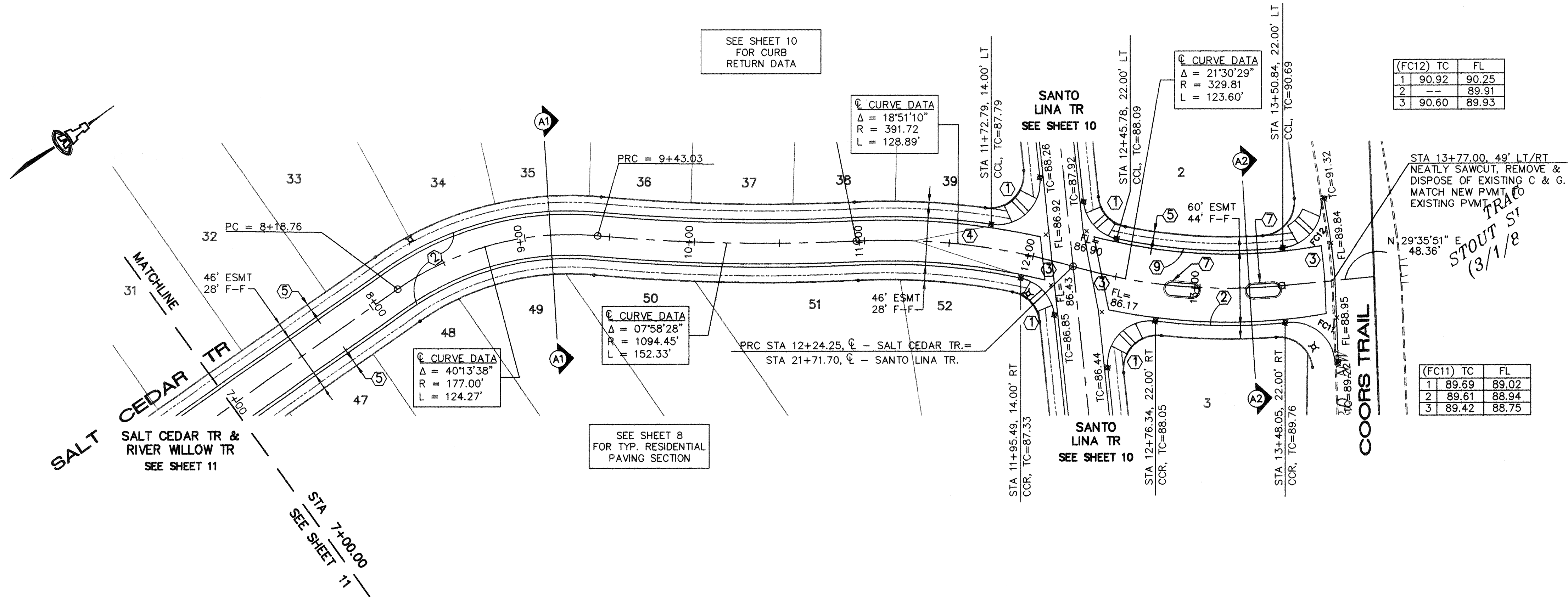
Zone Map No.
D-13

Sheet 10 Of 23



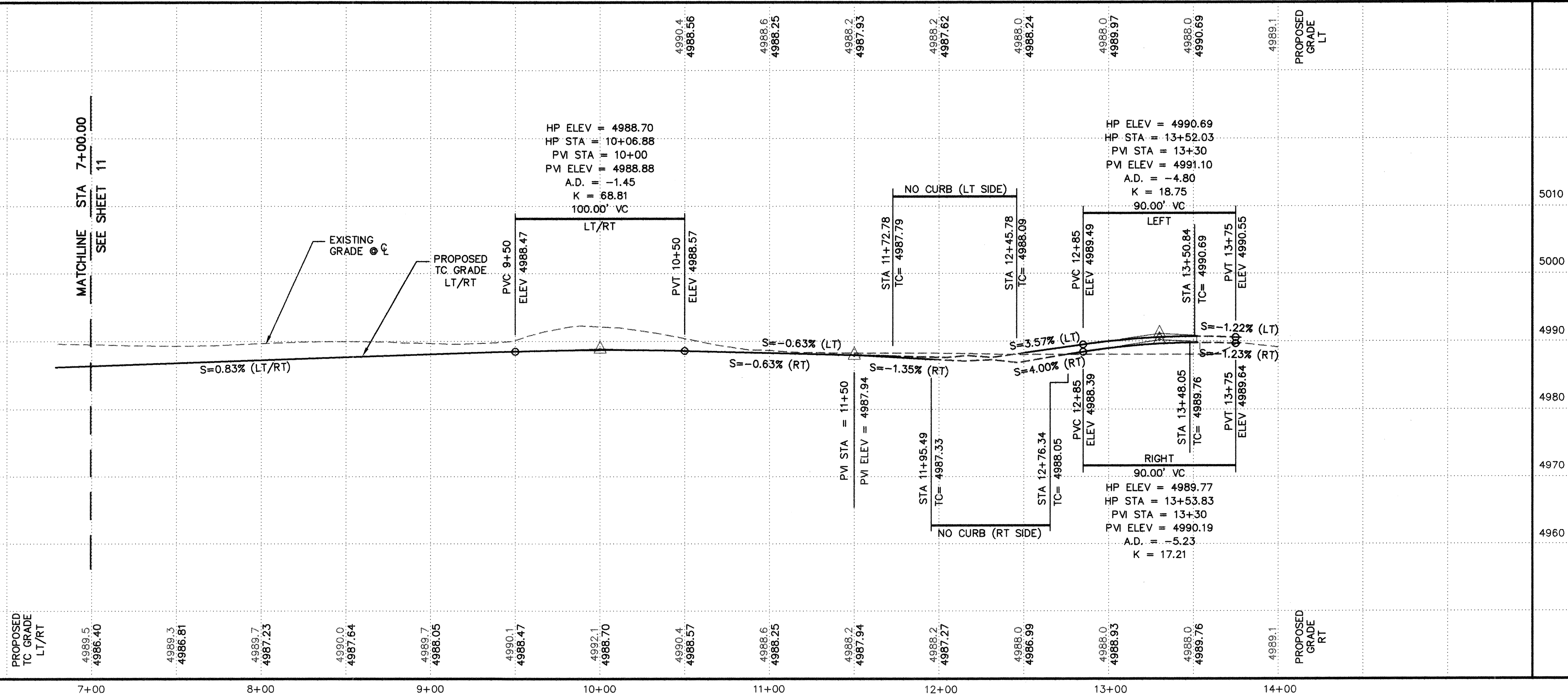
KEYED CONSTRUCTION NOTES

SCANNED BY
MESA REPRO



SALT CEDAR TRAIL

SCALES:
1"=40' HOR.
1"=10' VERT.



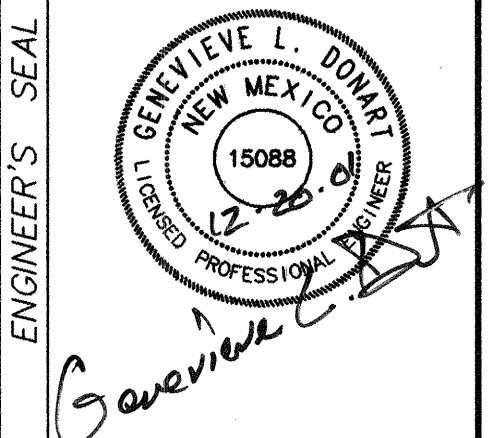
KEYED CONSTRUCTION NOTES

- CONSTRUCT HANDICAP RAMP PER COA STD DWG# 2441, CASE II.
- STANDARD CURB & GUTTER PER COA STD DWG #2415.
- CONSTRUCT PCC VALLEY GUTTER 6' WIDE, 1-1/2" INVERT PER COA STD DWG #2420.
- CROWN TO NO CROWN TRANSITION 50' MIN. LENGTH PER COA STD DWG #2401.
- FUTURE 4' WIDE GRAVEL SIDEWALK.
- CONSTRUCT PCC VALLEY GUTTER 4' WIDE, PER COA STD DWG# 2421.
- BUILD MEDIAN CURB & GUTTER PER COA STD DWG# 2415. REFER TO SHEET 6 FOR CONSTRUCTION DATA.
- CONSTRUCT HANDICAP RAMP PER COA STD DWG #2426.
- BUILD DEPRESSED CURB & GUTTER PER COA STD DWG# 2415.
- INSTALL 14' WIDE MAINTENANCE ACCESS GATE IN VIEW FENCING.
- 4" WIDE SOLID WHITE THERMOPLASTIC STRIPING.

FACE OF CURB CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
FC11	40.67'	25.00	93°12'44"
FC12	40.99'	25.00	93°56'02"

AS-BUILT INFORMATION	BENCH MARKS	SURVEY INFORMATION	FIELD NOTES
CONTRACTOR: <u>ISAACSON & ARFMAN, P.A.</u> WORK: <u>DESIGN & CONSTRUCTION</u> DATE: <u>12/29/01</u> BY: <u>ISAACSON & ARFMAN, P.A.</u> CHECKED BY: <u>ISAACSON & ARFMAN, P.A.</u> DATE: <u>12/29/01</u> RECORDED BY: <u>ISAACSON & ARFMAN, P.A.</u> DATE: <u>12/29/01</u>	USCE BRASS TABLET STAMPED "MPCGD, BM 5007.11, 6-D13" SET IN TOP OF CONCRETE POST 0.6 FT ABOVE GROUND. LOCATED ON COORS ROAD 0.3 MILE SOUTHWEST OF THE ENTRANCE TO THE INDIAN POLY TECHNICAL INSTITUTE -NM STATE PLANE COORDINATES (CENTRAL ZONE-NAD-1983) ELEV=5007.22 (NGVD 1929)	PRECISION SURVEYING 01/00 ALDRICH SURVEYING 10/01	1. PRECISION SURVEYING 01/00 2. ALDRICH SURVEYING 10/01



ENGINEER'S SEAL	REVISIONS	DESIGN	DATE
NO.	DATE	DESIGNED BY	DATE
1	10/01	GKD	10/01
2	10/01	GKD	10/01

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147PV6.DWGksh 11/29/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **COTTONWOOD TRAILS SUBDIVISION
RIVER WILLOW TR & SALT CEDAR TR
STA 7+00 TO END
PAVING PLAN & PROFILE**

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE DEC 21 2001	CITY ENGINEER FEB 15 2002		

City Project No. **674781** Zone Map No. **D-13** Sheet **12** Of **23**

MRGCD CONSTRUCTION NOTES

- Any work to be performed within the Middle Rio Grande Conservancy District (M.R.G.C.D.) Right-of-Way shall be closely coordinated with the M.R.G.C.D. Engineering Department and appropriate field office. Phone: (505) 247-0234.
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STORM DRAIN - FORCE MAIN

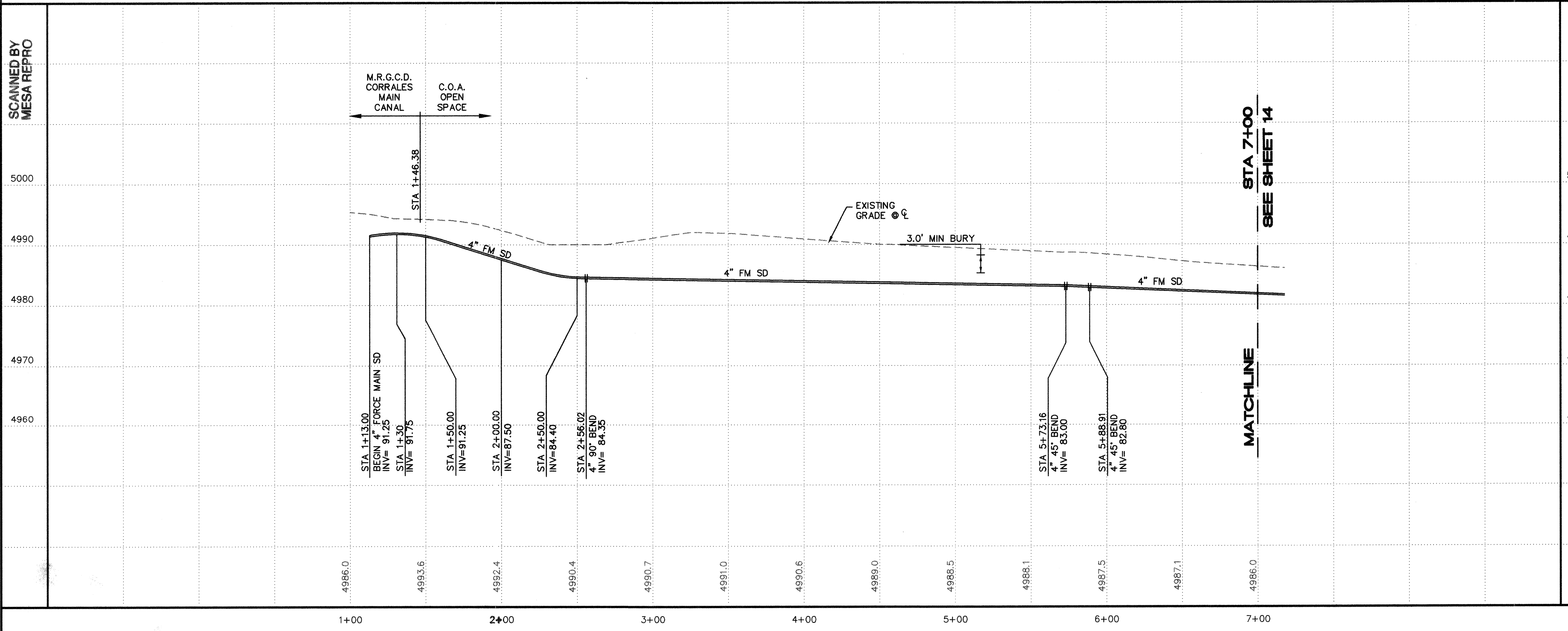
SCALES:
1"=40' HOR.
1"=10' VERT.

- GENERAL NOTES**
- STORM DRAIN STATIONING FOLLOWS CENTERLINE OF SD PIPE.
 - REFER TO SHEET 6 FOR DRAINAGE DETAILS.

- EASEMENT NOTES:** ○
- A. 20' PRIVATE DRAINAGE EASEMENT, DEDICATED BY FINAL PLAT.

SD CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C1	45.13'	200.00'	12°55'44"



- NOTES:
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 - AMAFCA Field Engineer Will be notified 48-hours prior to final inspection of any facilities within the CORRALES MAIN CANAL R/W.

APPROVED FOR CONSTRUCTION WITHIN CORRALES MAIN CANAL RIGHT-OF-WAY:

[Signature] 12-20-01
(for A.M.A.F.C.A.) DATE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147PV2.DWG Date: 12/18/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

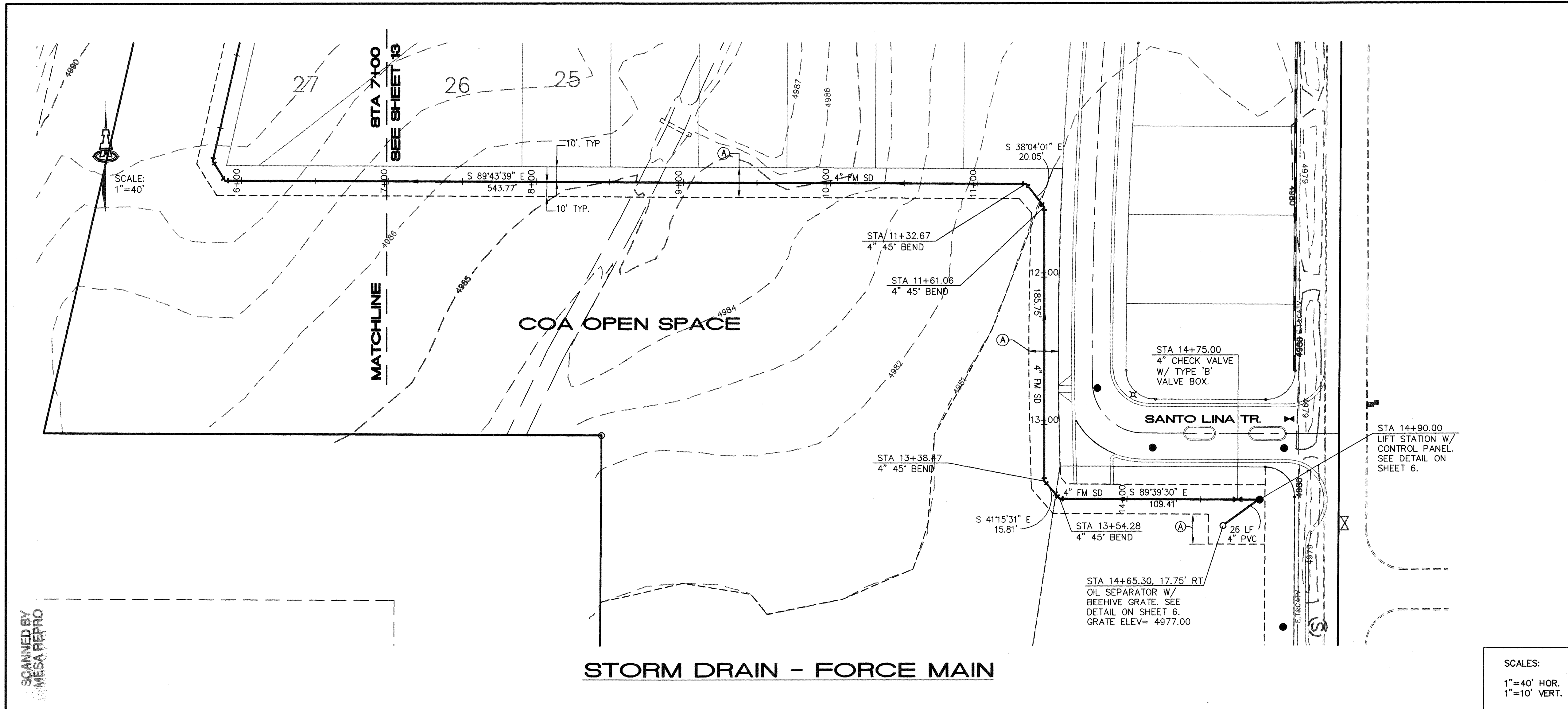
TITLE: **COTTONWOOD TRAILS SUBDIVISION
STORM DRAIN - FORCE MAIN
STA 1+00 TO STA 7+00
DRAINAGE PLAN & PROFILE**

Design Review Committee: *[Stamp]* City Engineer Approval: *[Stamp]*

DESIGN REVIEW COMMITTEE CITY ENGINEER

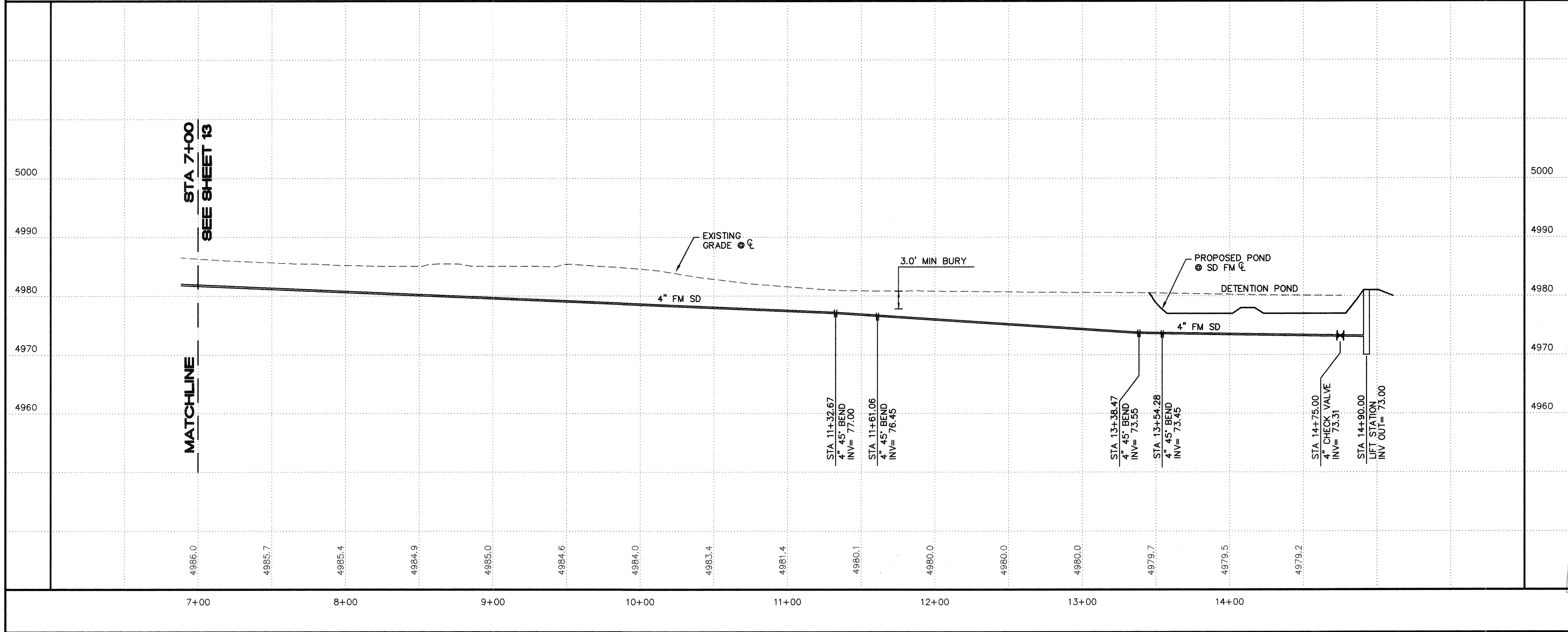
City Project No. **674781** Zone Map No. **D-13**

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	WORK	USCE BRASS TABLET STAMPED "MRGCD BM 5007.11, 6-D13"	PRECISION SURVEYING	1. PRECISION SURVEYING	12-17-01		REVISIONS
INSPECTOR	DATE	SET IN TOP OF CONCRETE POST, 0.6 FT ABOVE GROUND.	2. ALDRICH SURVEYING	10/01			
ACCEPTANCE BY	DATE	LOCATED ON COORS ROAD 0.3 MILE SOUTHWEST OF THE ENTRANCE TO THE INDIAN POLY TECHNICAL INSTITUTE					
VERIFICATION BY	DATE	-NM STATE PLANE COORDINATES (CENTRAL ZONE - NAD 1983) ELEV=5007.22 (NGVD 1929)					
MICRO-FILM INFORMATION		RECORDED BY		DATE		DESIGNED BY	DATE
						GLD	10/01
						DRAWN BY	DATE
						KSH	10/01
						CHECKED BY	DATE
						GLD	10/01



STORM DRAIN - FORCE MAIN

SCALES:
1"=40' HOR.
1"=10' VERT.



GENERAL NOTES

1. STORM DRAIN STATIONING FOLLOWS CENTERLINE OF SD PIPE.
2. REFER TO SHEET 6 FOR DRAINAGE DETAILS.

EASEMENT NOTES:

- A. 20' PRIVATE DRAINAGE EASEMENT, DEDICATED BY FINAL PLAT.

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APPROVED FOR CONSTRUCTION WITHIN CORRALES MAIN CANAL RIGHT-OF-WAY:

[Signature]
(for A.M.A.F.C.A.)

12-20-01
DATE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque New Mexico
147PV2.DWG Date: 12/18/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

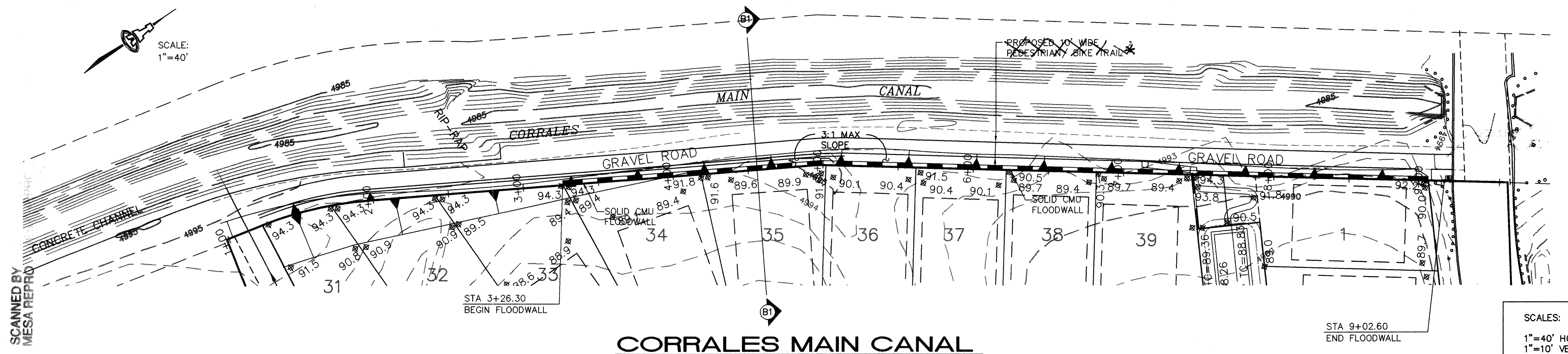
TITLE: COTTONWOOD TRAILS SUBDIVISION
STORM DRAIN - FORCE MAIN
STA 7+00 TO END
DRAINAGE PLAN & PROFILE

Design Review Committee City Engineer Approval
DEC 21 2001
DESIGN REVIEW COMMITTEE CITY ENGINEER

City Project No. 674781 Zone Map No. D-13

ENGINEER'S SEAL		FIELD NOTES		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
				1. PRECISION SURVEYING	01/00	USE BRASS TABLET STAMPED "MRGD BM 5007.11, 6-D13"		CONTRACTOR	5 J. J

3. Any work to be performed within the Middle Rio Grande Conservancy District (M.R.G.C.D.) Right-of-Way shall be closely coordinated with the M.R.G.C.D. Engineering Department and appropriate field office. Phone: (505) 247-0234.
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9. All salvageable culverts, irrigation gates, etc. must be returned to the M.R.G.C.D.
10. The Contractor is responsible for executing a "Special Use License Agreement" with the M.R.G.C.D. prior to construction.



1. STA 1+00 IS THE SOUTHWEST CORNER OF TRACT A AND CONTINUES NORTH ALONG THE EAST R/W LINE OF THE CORRALES MAIN CANAL.

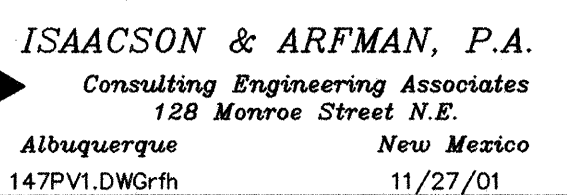
* TRAIL SHALL NOT BE CONSTRUCTED, UNDER THIS WORK ORDER, UNLESS MARGO ISSUES A TRAIL LICENCE.

NOTES:

1. AMAFCA Field Engineer shall be notified 48-hours prior to any work within the CORRALES MAIN CANAL R/W. Tel 884-2215 Jerry Lovato.
2. No work will be performed in the CORRALES MAIN CANAL R/W between March 1st and October 31st without written permission from AMAFCA and the MRCCD.
3. All subgrade, backfill and embankment shall be compacted to 95% (modified proctor) within the CORRALES MAIN CANAL R/W. Testing reports shall be provided to AMAFCA Field Engineer.
4. AMAFCA Field Engineer Will be notified 48-hours prior to final inspection of any facilities within the CORRALES MAIN CANAL R/W.

APPROVED FOR CONSTRUCTION WITHIN CORRALES MAIN
CANAL RIGHT-OF-WAY:

Lynn M. Mason 12-20-01
(for A.M.A.F.C.A.) DATE



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COTTONWOOD TRAILS SUBDIVISION
FLOOD WALL & TRAIL

DRAINAGE PLAN PROFILE

Design Review Committee	City Engineer Approval	☐
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APPROVED	APPROVED	Approved	
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SEC 2 | 200

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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DESIGN CITY ENGINEER

VIEWING COMMITTEE		CITY ENGINEER		J	
CITY OF DENVER		7		M	

City Project No. **671781** Zone Map No. **D-18**

6/4/81	D-13
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[illegible]

EASEMENT NOTES

- A. PROPOSED PRIVATE 20' DRAINAGE EASEMENT.
B. PROPOSED PRIVATE BLANKET DRAINAGE EASEMENT BELOW EXISTING CONTOUR INTERVAL 4981.
C. PROPOSED PRIVATE BLANKET DRAINAGE EASEMENT (WIDTH VARIES).
D. PROPOSED TEMPORARY CONSTRUCTION EASEMENT.
E. PROPOSED 20' PUBLIC SAS EASEMENT.

WATER SHUT-OFF PLAN

SHUT-OFF VALVES 1 & 2 TO PROVIDE NON-PRESSURE CONNECTION AT THE INTERSECTION OF SALT CEDAR TRAIL AND COORS TRAIL. SHUT-OFF VALVES 3 & 4 FOR CONNECTION AT THE INTERSECTION OF SANTO LINA TRAIL AND COORS TRAIL. SHUT-OFF VALVE 5 FOR WATER LINE CONNECTIONS TO LOTS 60 - 62. (10' WL ENDS APPROX. 950 FT SOUTH OF VALVE 5)

THE CONTRACTOR SHALL CONTACT WATER SYSTEMS DIVISION (857-8200) 5 WORKING DAYS PRIOR TO SHUT-OFF OR TURN-ON AT VALVES. ONLY CITY PERSONNEL ARE ALLOWED TO OPERATE VALVES.

TRACT F
MARIAN ROCCO SUBDIVISION
(5/31/88, C36-145)

TRACT A
COA OPEN SPACE

TRACT B
SAS MH #12
4" SD FORCE MAIN
SAS MH #14
8" SAS
SAS MH #13

BOSQUE DEL RIO
UNIT 1
(8/29/96, 96C-377)

U.S. INDIAN SERVICE
SOUTHWESTERN INDIAN
POLYTECHNICAL INSTITUTE
UN-PLATTED

RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:
DEPTH OF BURY: 3.0 FT. MINIMUM
FACTOR OF SAFETY: 1.25
MATERIAL: PVC PIPE
SOIL TYPE: GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.
TEST PRESSURE: 150 PSI
TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH. MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

DIFFERENT CRITERIA (E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC.) WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.

SIZE	HORIZ. BENDS					VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°		
12	30	12	6	3		85
10	26	11	5	3		72
8	22	9	4	2		60
6	17	7	3	2		46
4	12	5	2	1		32

SIZE	RESTRAINED JOINT LENGTHS, L _r , FOR REDUCERS, (FT.)			SIZE	RESTRAINED JOINT LENGTHS, L _r , FOR REDUCERS, (FT.)	
	LARGE SIDE	SMALL SIDE			LARGE SIDE	SMALL SIDE
12x10	25	30		10x6	44	73
12x8	45	68		10x4	58	141
12x6	62	121		8x6	25	33
12x4	74	213		8x4	43	83
10x8	24	30		6x4	24	35

RESTRAINED JOINT LENGTHS, L _r , FOR TEES, (FT.)			RESTRAINED JOINT LENGTHS, L _r , FOR TEES, (FT.)		
ALL JOINTS AT THE TEE MUST BE RESTRAINED.			SIZE	RUN	BRANCH
12x12x12	15	17	12x12x10	10	18
12x12x8	6	19	12x12x6	3	19
12x12x4	1	19	10x10x10	12	18
10x10x8	8	15	10x10x6	4	16
10x10x4	2	4	8x8x8	9	20
8x8x8	2	15	8x8x6	2	15
8x8x4	6	20	6x6x4	2	20

GENERAL NOTES

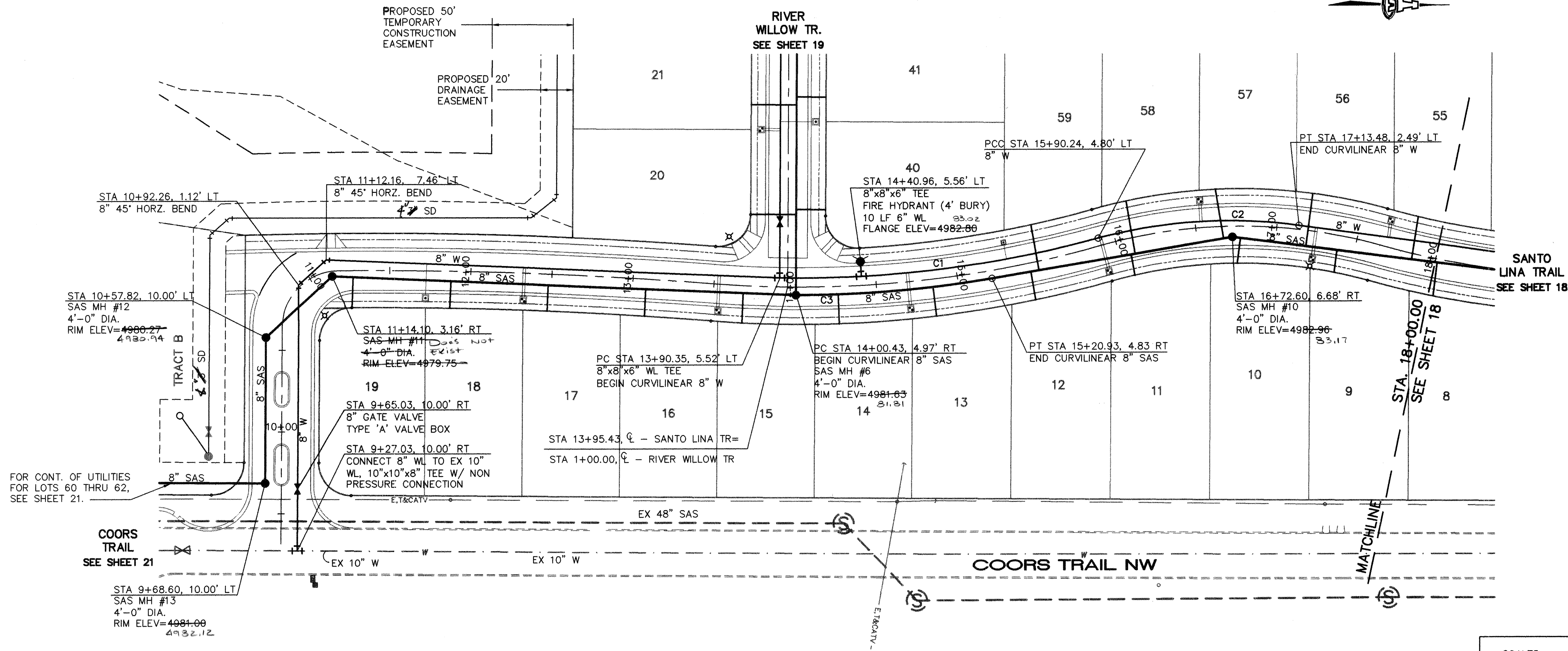
- CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
- CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
- SEE SHEET 16 FOR WATER SHUT-OFF PLAN.
- SEE SHEET 16 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
- CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER COA STD DWG #2340.
- SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

LEGEND

- SINGLE WATER METER & BOX
- DOUBLE WATER METER & BOX
- GATE VALVE W/ BOX
- FIRE HYDRANT
- SAS MANHOLE
- WATER LINE W/ TEE
- EXISTING SAS MANHOLE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147UMSTR.DWGksh 12/20/01

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: COTTONWOOD TRAILS SUBDIVISION UTILITY MASTERPLAN	
Design Review Committee	City Engineer Approval
Mo./Day/Yr.	Mo./Day/Yr.
Zone Map No. D-13	Sheet 16 Of 23



- GENERAL NOTES**
1. CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
 2. CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
 3. SEE SHEET 16 FOR WATER SHUT-OFF PLAN.
 4. SEE SHEET 16 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
 5. CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER COA STD DWG #2340.
 6. SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

UTILITY SERVICE TABLE

LOT NO./BLOCK	STATION		SAS INV @ RW
	WATER, LENGTH	SAS, LENGTH	
9	17+23.92, 17.1'	17+40.13, 14.0'	79.32
10	16+75.51, 15.8'	16+75.51, 15.8'	79.00
11	16+06.76, 13.1'	16+06.76, 13.1'	78.65
12	15+44.34, 17.7'	15+44.34, 17.7'	78.34
13	14+84.52, 18.2'	14+84.52, 18.2'	78.04
14	14+26.35, 18.1'	14+26.35, 18.1'	77.75
15	13+68.27, 18.4'	13+68.27, 18.4'	77.46
16	13+08.41, 16.8'	13+08.41, 16.8'	77.16
17	12+47.84, 16.1'	12+47.84, 16.1'	76.86
18	12+32.70, 17.8'	11+87.30, 16.9'	76.56
19 (S)	11+72.16, 18.9'	11+26.55, 19.0'	76.25
55	17+83.38, 27.0'	17+83.38, 27.0'	79.54
56	17+67.24, 10.6'	17+19.10, 32.8'	79.22
57	16+63.10, 30.8'	16+63.10, 30.8'	78.94
58	16+53.82, 10.6'	16+11.41, 33.1'	78.68
59 (S)	15+33.72, 12.9'	15+51.22, 28.5'	78.38

ALL WATER SERVICES ARE DOUBLE EXCEPT WHERE NOTED AS (S) SINGLE.

WL CURVE TABLE

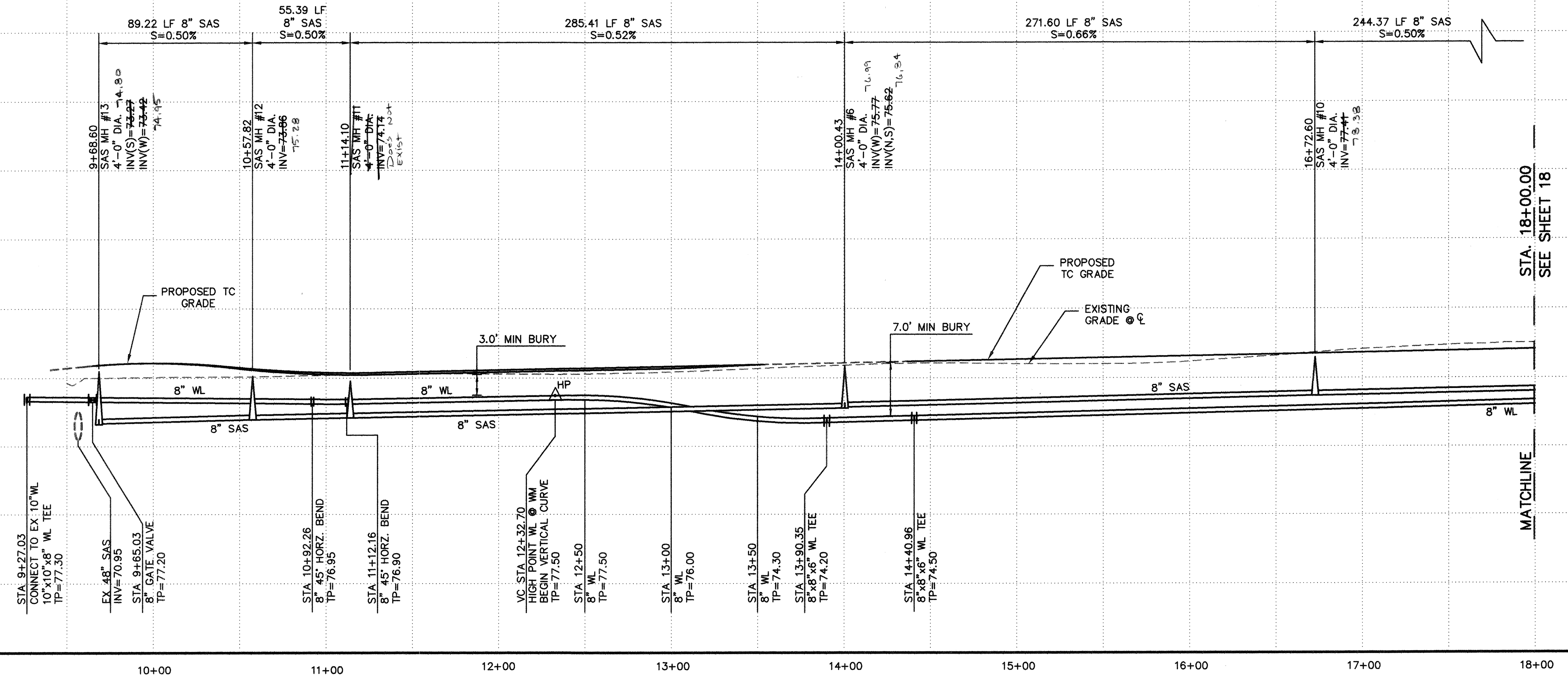
CURVE	LENGTH	RADIUS	DELTA
C1	198.33'	705.00'	16°07'06"
C2	124.71'	310.00'	23°02'58"

SAS CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C3	121.36'	715.00'	09°43'30"

SCALES:
1"=40' HOR.
1"=10' VERT.

SANTO LINA TRAIL



LEGEND

- [Symbol] SINGLE WATER METER & BOX
- [Symbol] DOUBLE WATER METER & BOX
- [Symbol] GATE VALVE W/ BOX
- [Symbol] FIRE HYDRANT
- [Symbol] SAS MANHOLE
- [Symbol] WATER LINE W/ TEE
- [Symbol] EXISTING SAS MANHOLE

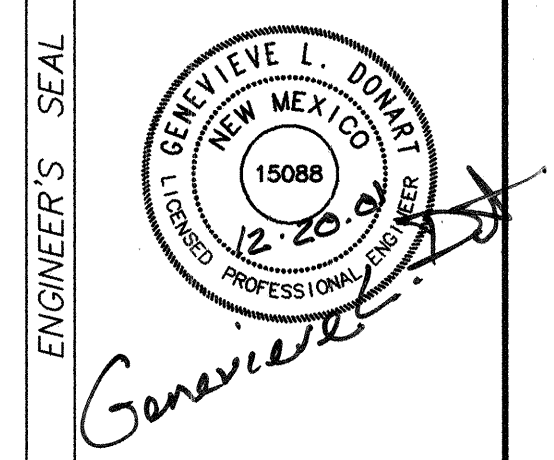
ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147012.DWGksh 11/29/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

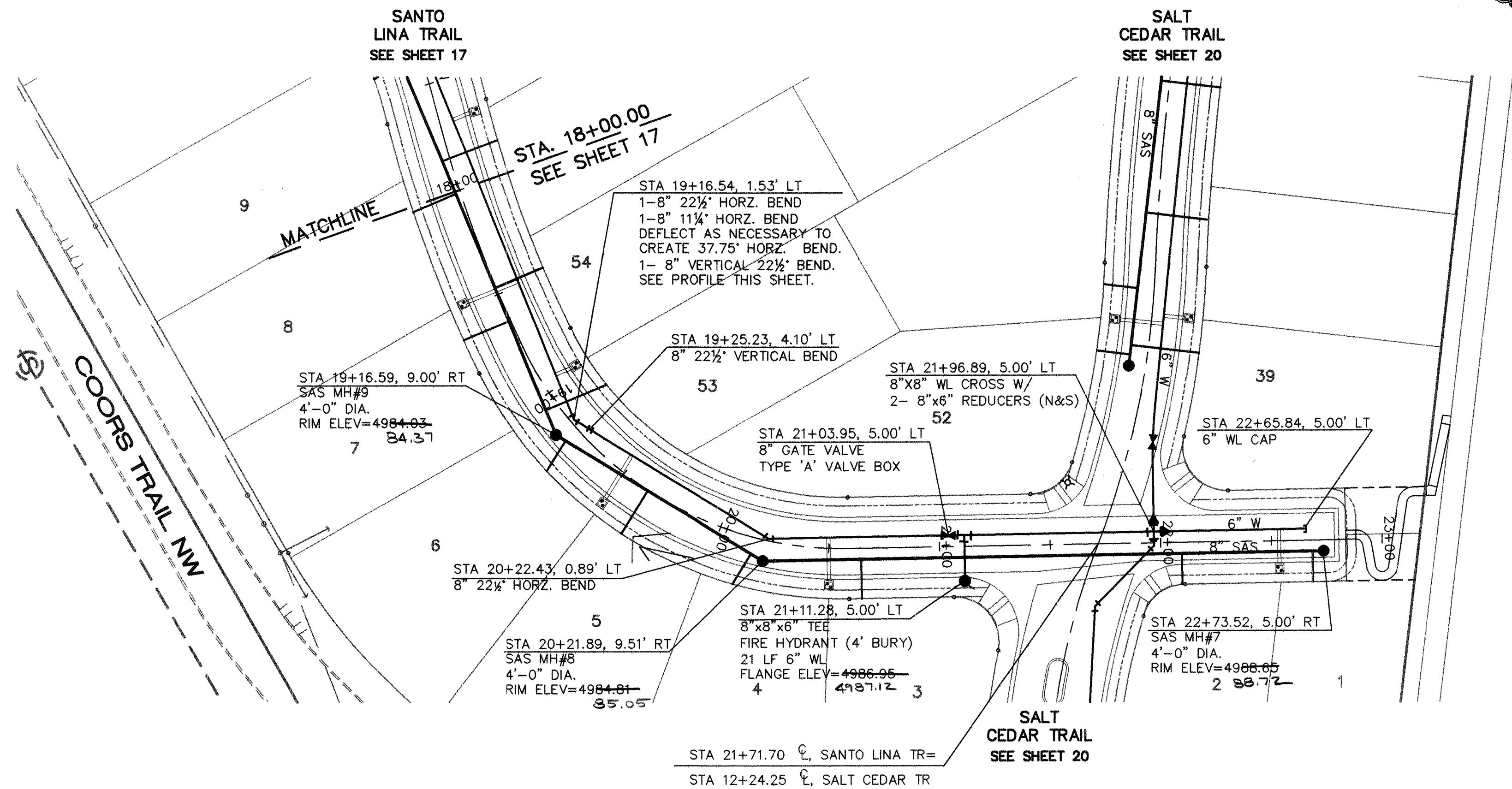
TITLE: **COTTONWOOD TRAILS SUBDIVISION
SANTO LINA TRAIL
STA 9+62 TO STA 18+00
UTILITY PLAN & PROFILE**

Design Review Committee: [Signature] City Engineer Approval: [Signature]
Last Design Update: [Date]

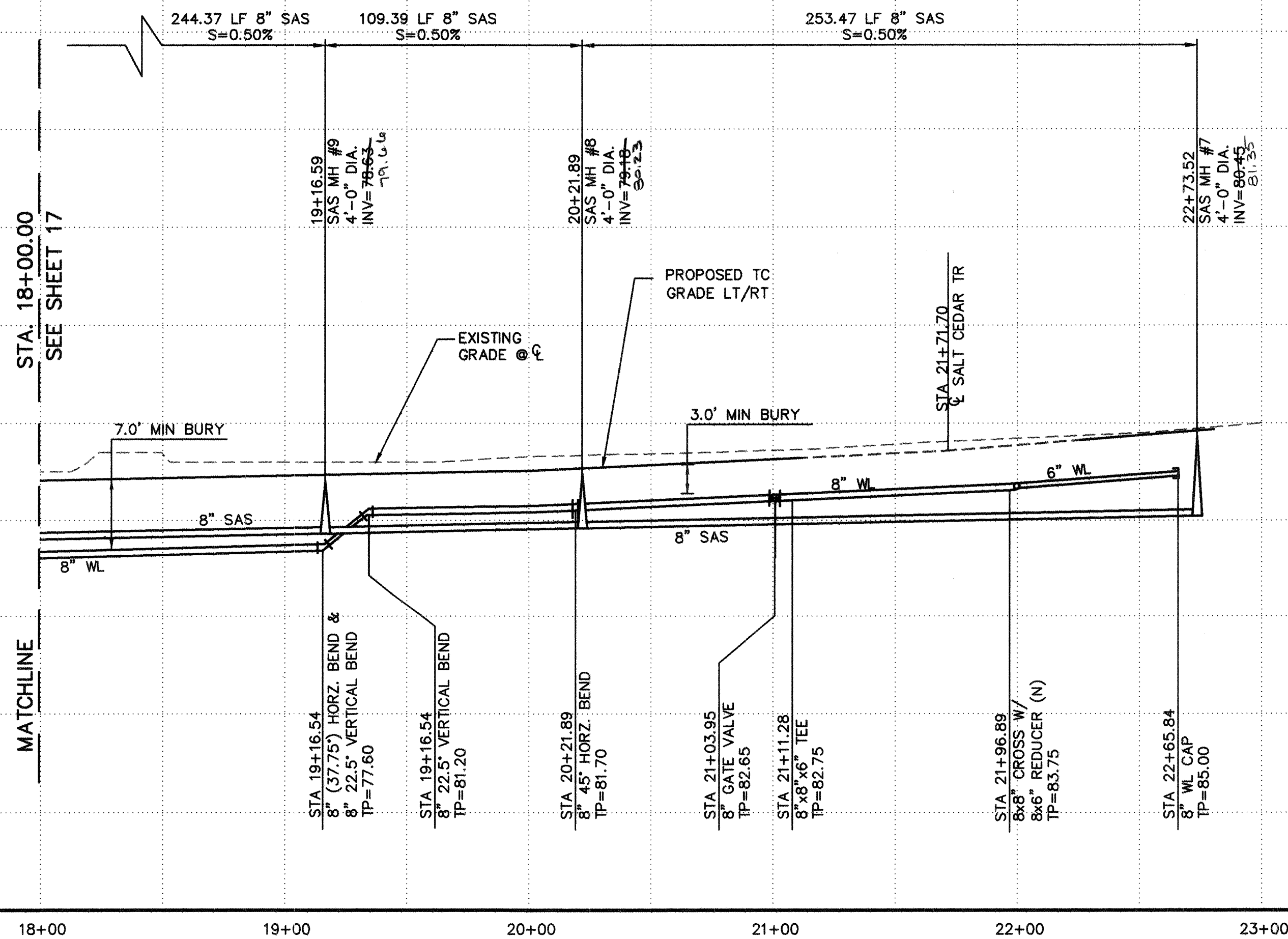
City Project No. **674781** Zone Map No. **D-13** Sheet **17** Of **23**



NO.	DATE	REVISIONS	BY
DESIGNED BY	GLD	DATE	10/01
DRAWN BY	KSH	DATE	10/01
CHECKED BY	GLD	DATE	10/01



SANTO LINA TRAIL



GENERAL NOTES

1. CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
2. CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
3. SEE SHEET 16 FOR WATER SHUT-OFF PLAN.
4. SEE SHEET 16 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
5. CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER COA STD DWG #2340.
6. SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

UTILITY SERVICE TABLE

LOT NO.	STATION		SAS INV @ RW
	WATER, LENGTH	SAS, LENGTH	
1	22+54.05, 15.6'	22+68.52, 14.0'	84.62
2	22+09.48, 14.0'	22+09.48, 14.0'	83.44
3	20+64.55, 18.0'	20+64.55, 18.0'	81.39
4	20+12.13, 16.0'	20+12.13, 16.0'	80.77
5	19+63.84, 22.8'	19+63.84, 22.8'	80.44
6	19+50.70, 23.3'	19+25.25, 16.2'	80.25
7	18+62.43, 22.1'	18+62.43, 22.1'	79.73
8	18+48.03, 24.9'	18+02.87, 20.9'	79.63
53	19+13.63, 29.8'	19+13.63, 29.8'	80.69
54	18+96.00, 10.5'	18+47.01, 24.4'	80.36

ALL WATER SERVICES ARE DOUBLE EXCEPT WHERE NOTED AS (S) SINGLE.

SCALES:
1"=40' HOR.
1"=10' VERT.

LEGEND

- SINGLE WATER METER & BOX
- DOUBLE WATER METER & BOX
- GATE VALVE W/ BOX
- FIRE HYDRANT
- SAS MANHOLE
- WATER LINE W/ TEE
- EXISTING SAS MANHOLE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87102
147UT3.DWGksh 11/29/01

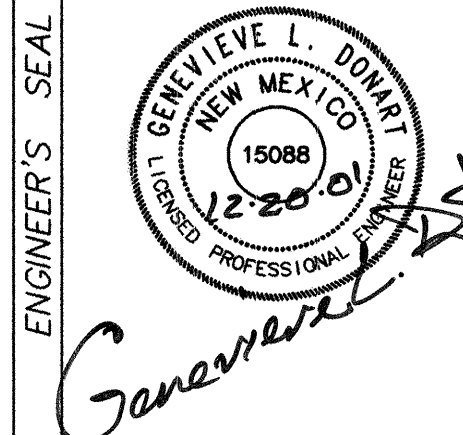
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COTTONWOOD TRAILS SUBDIVISION
SANTO LINA TRAIL
STA 18+00 TO END
UTILITY PLAN & PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED DEC 21 2001 DESIGN REVIEW COMMITTEE	APPROVED CITY ENGINEER	Lost Design Update	

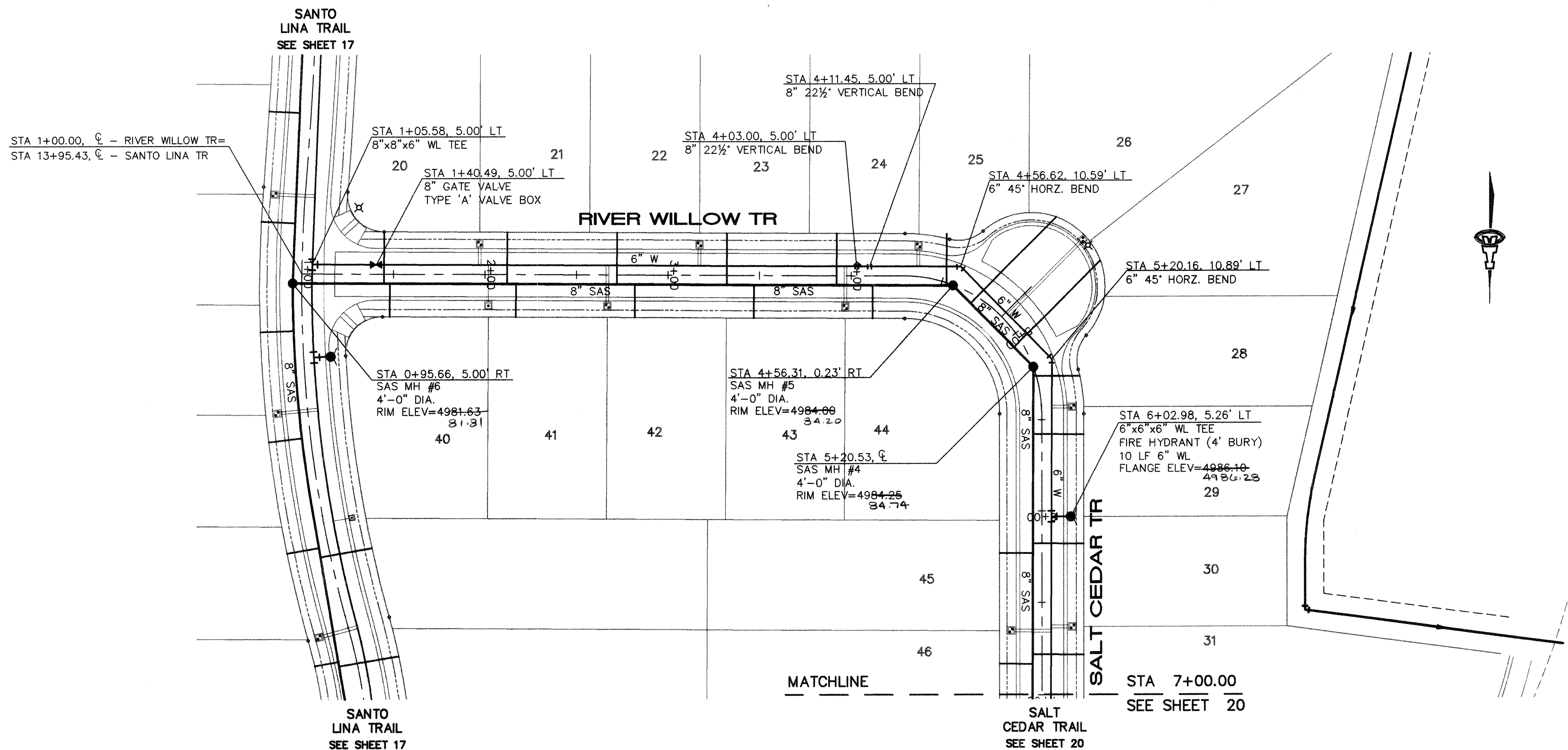
City Project No. 674781 Zone Map No. D-13

Sheet 18 Of 23



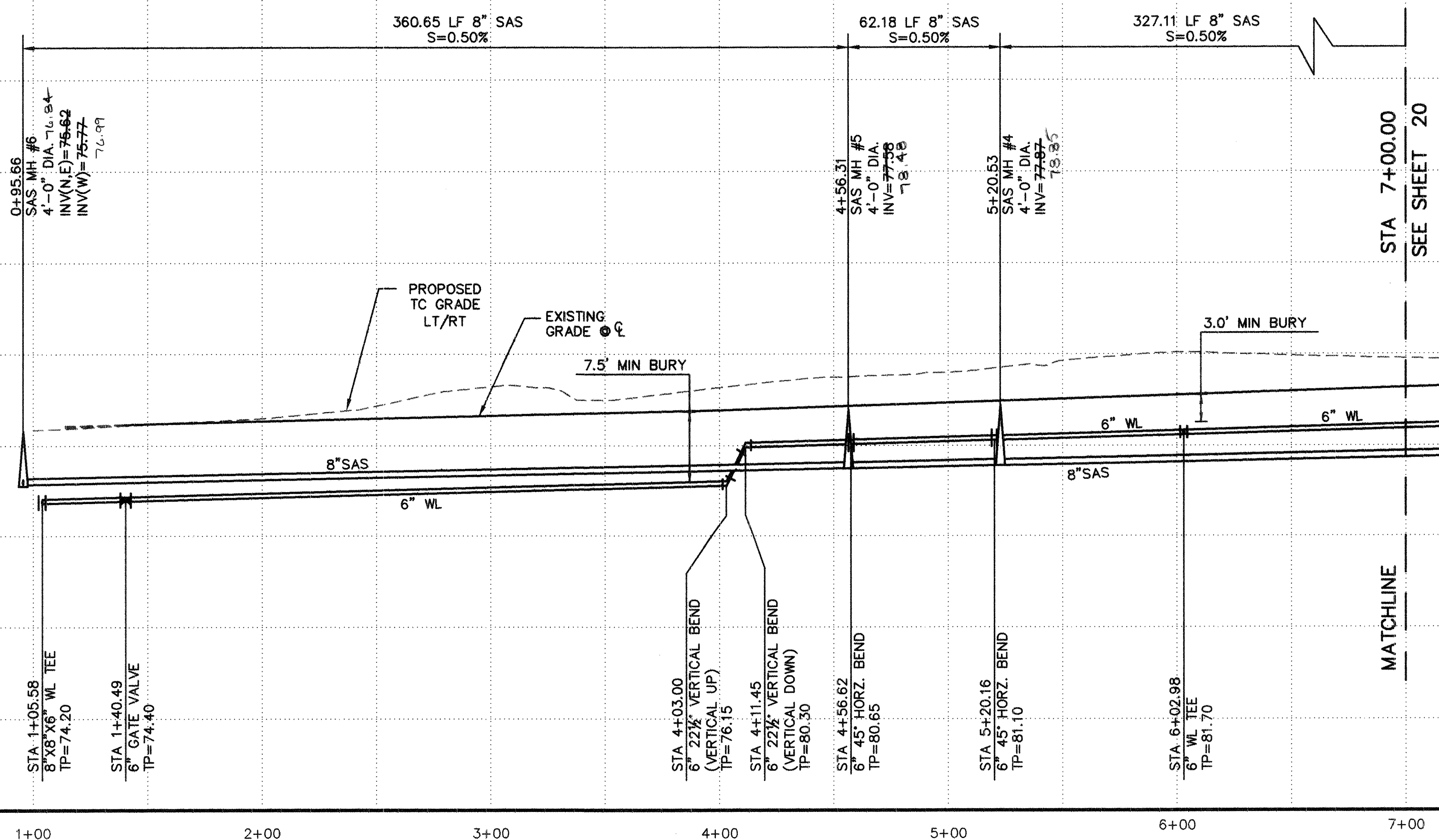
REVISIONS	DATE	BY
DESIGN	10/01	
DRAWN BY	10/01	
CHECKED BY	10/01	

SCANNED BY:
MESA REPRO



RIVER WILLOW TR & SALT CEDAR TR

SCALES:
1"=40' HOR.
1"=10' VERT.



GENERAL NOTES

1. CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
2. CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
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4. SEE SHEET 16 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
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6. SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

UTILITY SERVICE TABLE

LOT NO./ BLOCK	STATION		SAS INV @ RW
	WATER, LENGTH	SAS, LENGTH	
20	1+97.04, 11.6'	1+44.81, 28.0'	77.86
21		2+12.04, 28.0'	78.27
22		2+72.04, 28.0'	78.64
23	3+17.04, 11.6'	3+32.04, 28.0'	79.00
24		3+92.04, 28.0'	79.37
25	4+35.23, 11.3'	4+46.42, 28.0'	79.05
26		4+78.62, 66.2'	80.07
27	4+89.02, 57.6'	4+97.31, 66.4'	80.72
28	5+43.88, 11.2'	5+30.87, 25.4'	80.14
29		5+57.98, 27.6'	80.65
30	6+62.98, 11.5'	6+17.98, 27.7'	81.50
31		6+77.98, 27.9'	81.72
40 (S)	2+01.87, 21.6'	1+47.95, 18.0'	77.88
41		2+16.87, 18.0'	78.30
42	2+66.87, 21.6'	2+81.87, 18.0'	78.70
43		3+46.87, 18.0'	79.09
44	3+96.87, 21.6'	4+11.87, 18.0'	79.52
45		6+23.07, 18.3'	81.26
46	6+65.07, 21.7'	6+83.07, 18.1'	81.76

ALL WATER SERVICES ARE DOUBLE EXCEPT WHERE NOTED AS (S) SINGLE.

LEGEND

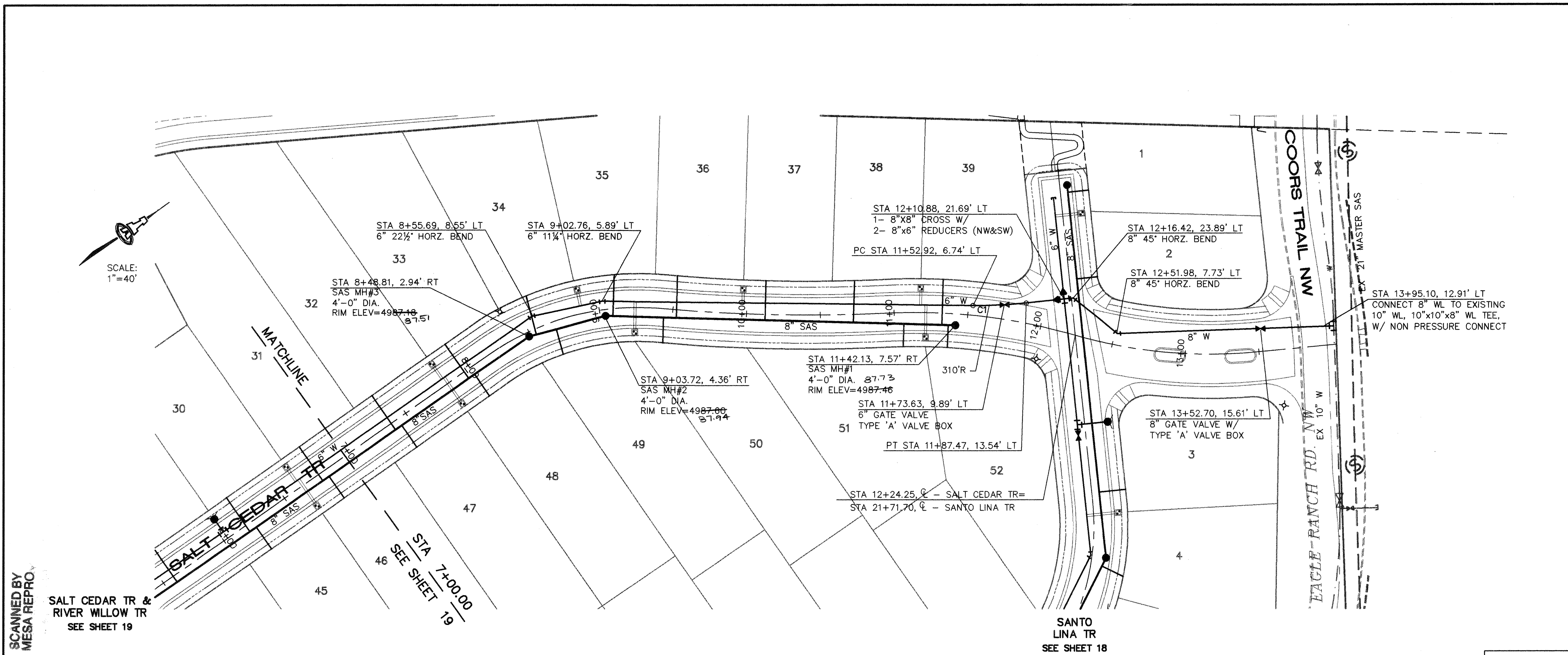
- SINGLE WATER METER & BOX
- DOUBLE WATER METER & BOX
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147UT4.DWGksh 11/29/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

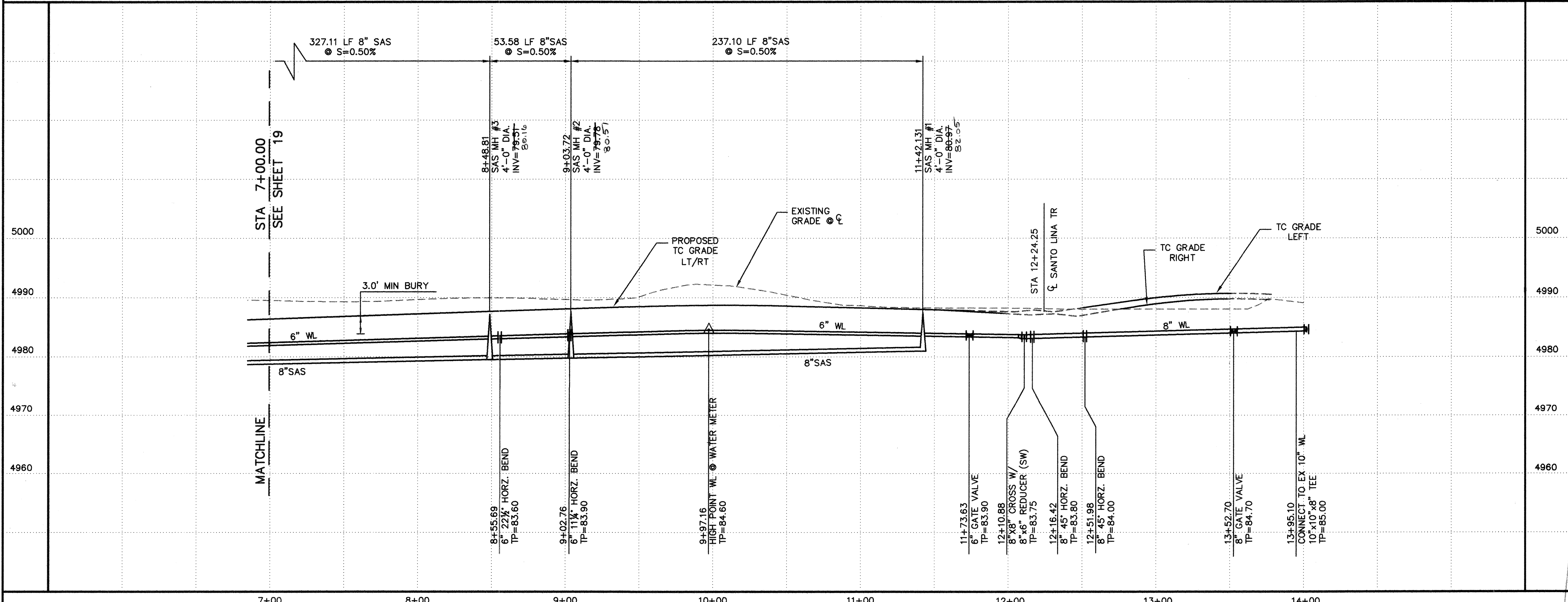
TITLE: COTTONWOOD TRAILS SUBDIVISION
RIVER WILLOW TR & SALT CEDAR TR.
STA 1+00 TO STA 7+00
UTILITY PLAN & PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
674781	D-13	19	23



SALT CEDAR TRAIL

SCALES:
1"=40' HOR.
1"=10' VERT.



- GENERAL NOTES**
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 6. SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

UTILITY SERVICE TABLE

LOT NO. / BLOCK	STATION		SAS INV @ RW
	WATER, LENGTH	SAS, LENGTH	
32	7+83.37, 11.9'	7+37.98, 28.1'	82.71
33		7+98.37, 28.3'	83.21
34	8+88.32, 11.3'	8+57.49, 27.0'	83.70
35		9+11.97, 28.3'	84.15
36	9+97.16, 9.2'	9+51.16, 28.6'	84.48
37		10+12.48, 27.0'	84.70
38		10+73.76, 27.7'	84.42
39	11+18.00, 9.4'	11+32.17, 30.9'	83.60
47		7+43.07, 17.9'	82.26
48	7+85.07, 21.4'	8+03.07, 17.8'	82.75
49		8+66.80, 17.7'	83.28
50	9+23.90, 20.6'	9+45.18, 17.0'	83.93
51		11+05.68, 15.2'	82.92
52	11+21.61, 19.8'	11+37.54, 15.0'	82.48

ALL WATER SERVICES ARE DOUBLE EXCEPT WHERE NOTED AS (S) SINGLE.

WL CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C1	36.10'	310.00'	06°40'22"

LEGEND

- SINGLE WATER METER & BOX
- DOUBLE WATER METER & BOX
- GATE VALVE W/ BOX
- FIRE HYDRANT
- SAS MANHOLE
- WATER LINE W/ TEE
- EXISTING SAS MANHOLE

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128 Monroe Street N.E.
Albuquerque New Mexico 87102
147UTS.DWGksh 11/29/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COTTONWOOD TRAILS SUBDIVISION
RIVER WILLOW TR & SALT CEDAR TR
STA 7+00 TO END
UTILITY PLAN & PROFILE

Design Review Committee City Engineer Approval
APPROVED DEC 21 2001
APPROVED FEB 15 2002
CITY ENGINEER

CONTRACTOR	AS-BUILT INFORMATION	WORK BY	DATE	1/2/02
INSPECTOR	DATE	1/2/02	DATE	1/2/02
VERIFICATION BY	DATE	1/2/02	DATE	1/2/02
RECORDED BY	DATE	1/2/02	DATE	1/2/02
NO.	DATE	1/2/02	DATE	1/2/02

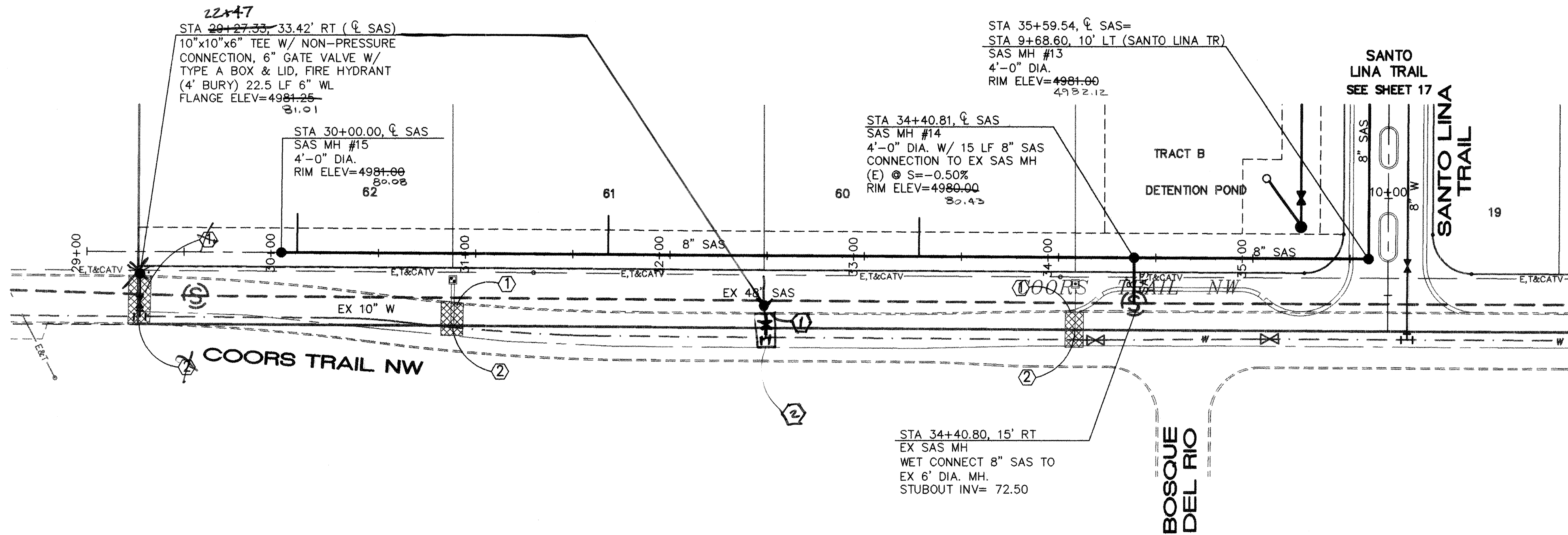
USCE BRASS TABLE STAMPED "MRGD BM 5007.11, 6-D13" SET IN TOP OF CONCRETE POST 0.6 FT ABOVE GROUND. LOCATED ON COORS ROAD 0.3 MILE SOUTHWEST OF THE ENTRANCE TO THE INDIAN POLY TECHNICAL INSTITUTE. NM STATE PLANE COORDINATES (CENTRAL ZONE NAD-1983) ELEV=5007.22 (NGVD 1929)

ENGINEER'S SEAL
GENEVIEVE L. DOMIT
NEW MEXICO
15088
PROFESSIONAL ENGINEER

REVISIONS
NO. DATE BY
DESIGN
DESIGNED BY GLD DATE 10/01
DRAWN BY KSH DATE 10/01
CHECKED BY GLD DATE 10/01

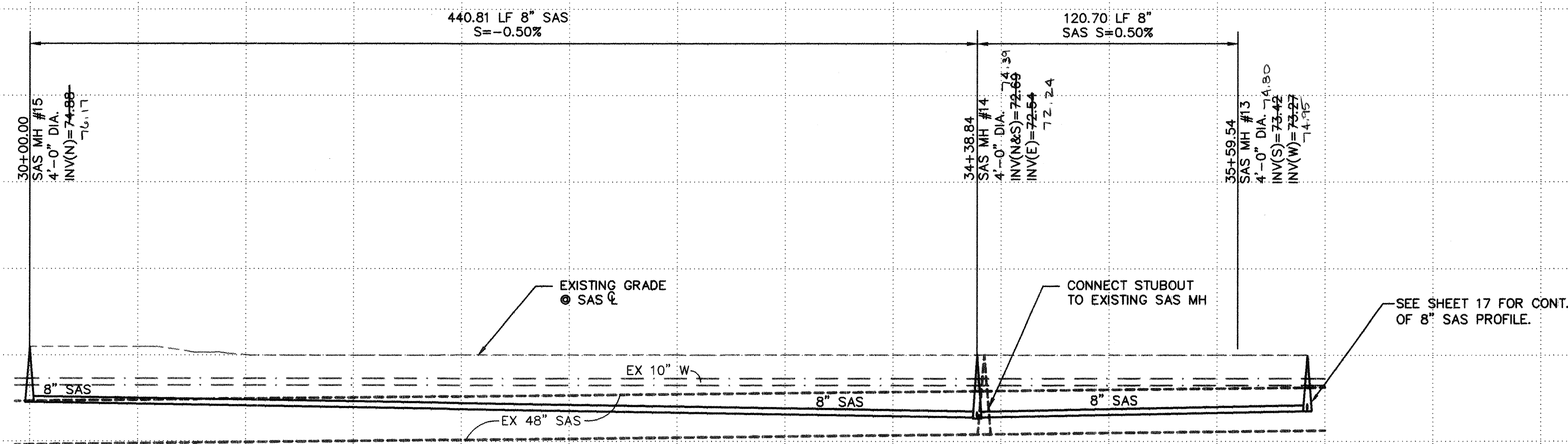
City Project No. 674781
Zone Map No. D-13
Sheet 20 of 23

SCANNED BY
MESA REPRO



COORS TRAIL NW

SCALES:
1"=40' HOR.
1"=10' VERT.



GENERAL NOTES

- CONSTRUCT SAS SERVICES PER COA STD DWG #2125.
- CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2363.
- SEE SHEET 16 FOR WATER SHUT-OFF PLAN.
- SEE SHEET 16 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
- CONSTRUCT FIRE HYDRANTS PER DESIGNATED DEPTHS & LENGTHS PER COA STD DWG #2340.
- SEE COA STD DWG #2328 FOR VALVE RING & COVER DETAIL.

UTILITY SERVICE TABLE

LOT NO.	STATION		SAS INV @ RW
	WATER, LENGTH	SAS, LENGTH	
60 (S)	34+08.71, 20.8'	33+28.20, 20.0'	76.00
61	30+88.29, 20.1'	31+68.20, 20.0'	76.00
62	30+08.20, 20.0'	30+08.20, 20.0'	76.00

ALL WATER SERVICES ARE DOUBLE EXCEPT WHERE NOTED AS (S) SINGLE.

CONSTRUCTION NOTES

- SAWCUT, REMOVE & REPLACE EXISTING STANDARD CURB & GUTTER PER COA STD DWG #2415.
- SAWCUT, REMOVE & REPLACE EXISTING PAVEMENT WITH 2" ADDITIONAL THICKNESS AS PER COA STD DWG #2465.

LEGEND

- SINGLE WATER METER & BOX
- DOUBLE WATER METER & BOX
- GATE VALVE W/ BOX
- FIRE HYDRANT
- SAS MANHOLE
- WATER LINE W/ TEE
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147UTL.DWGksh 11/29/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COTTONWOOD TRAILS SUBDIVISION
COORS TRAIL - LOTS #60-62
UTILITY PLAN & PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DEC 21 2001	FEB 15 2002		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No. 674781	Zone Map No. D-13	Sheet 21	Of 23

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPERATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.
21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

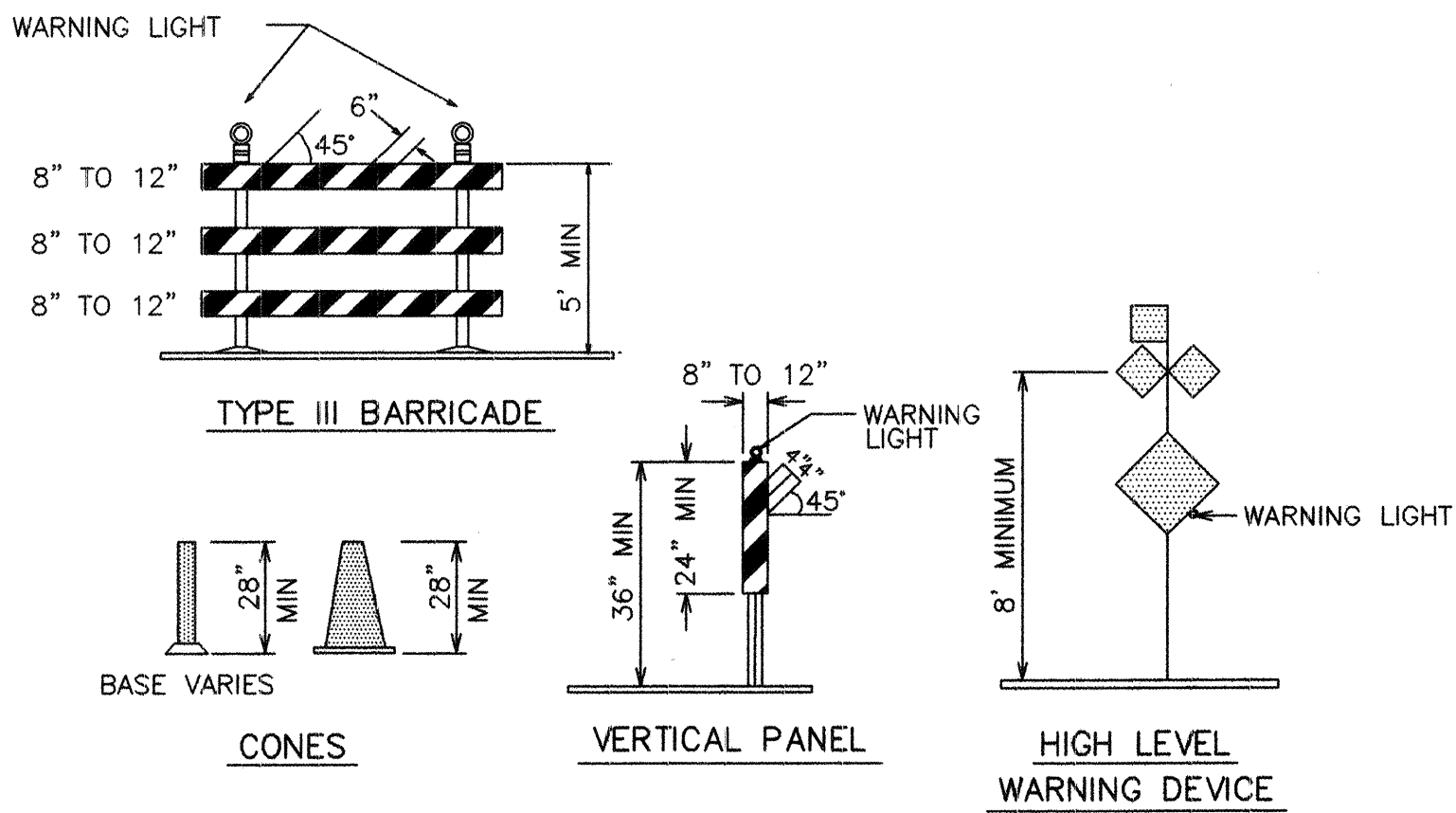
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.

25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

27. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORKSITE. ALL GRAFFITI SHALL BE PROMPTLY REMOVED FROM ALL EQUIPMENT, BOTH PERMANENT AND TEMPORARY.



LEGEND

WORK AREA

BARRICADE - TYPE I, TYPE II, OR BARREL

BARRICADE - TYPE III

VERTICAL PANEL

WARNING SIGN

DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET

FLAGMAN POSITION

SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET

L TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT

40 MPH OR LESS $L = \frac{WS^2}{60}$

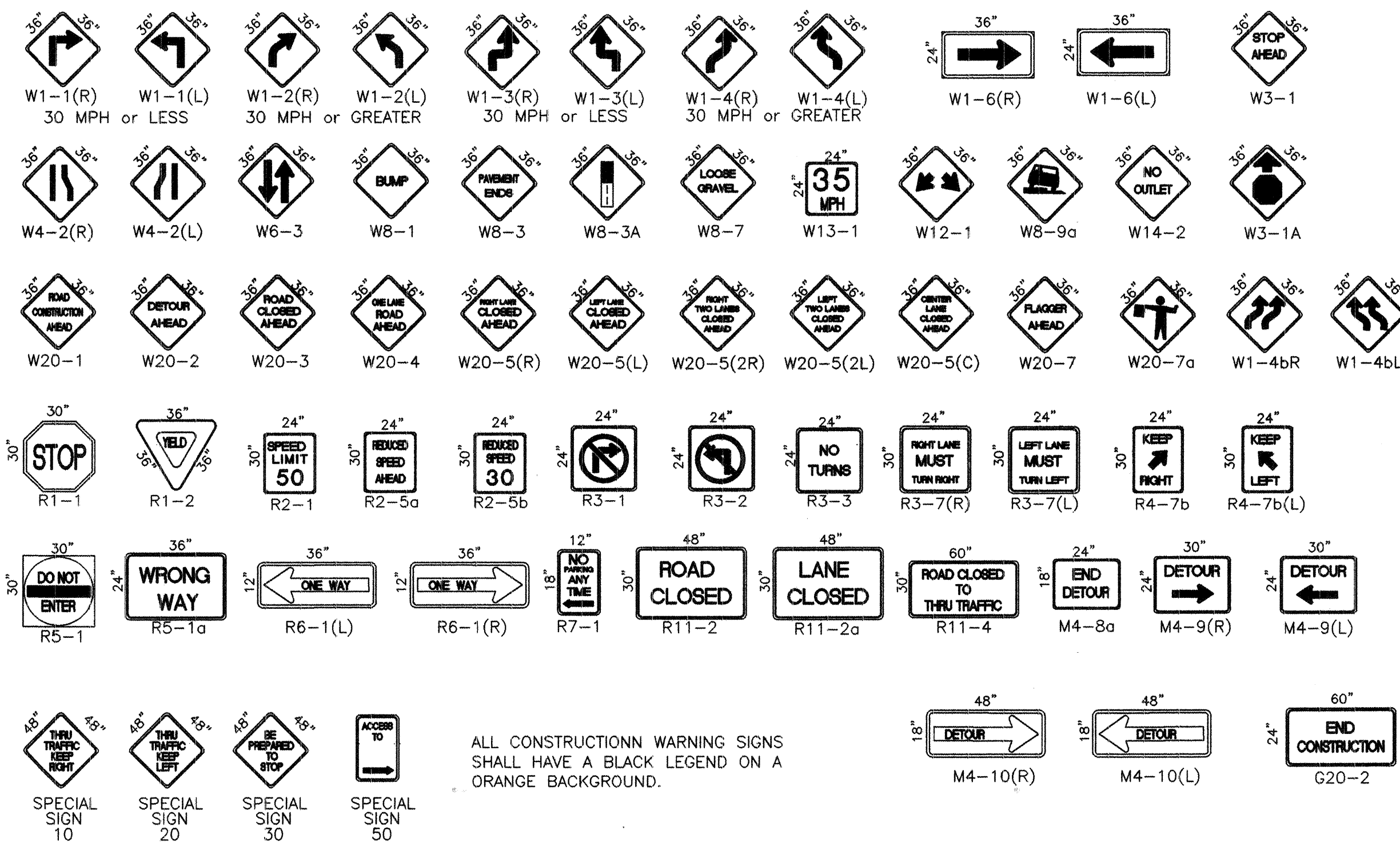
40 MPH OR GREATER $L = W \times S$

L = TAPER LENGTH

W = WIDTH OF OFFSET IN FEET

S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

CITY STANDARD DRAWING

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1471RF1.DWG 11/18/01

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: COTTONWOOD TRAILS SUBDIVISION
TRAFFIC CONTROL
SIGNING & CONSTRUCTION TRAFFIC CONTROL STANDARDS

Design Review Committee City Engineer Approval
Last Design Update

City Project No. 674781 Zone Map No. D-13

Ms./Day/Yr. Ms./Day/Yr.
DESIGNED BY G.D. 10/01
DRAWN BY KSH 10/01
CHECKED BY G.D. 10/01

