

CONSTRUCTION PLANS
FOR THE
DEVELOPMENT OF
**THE MASTERS
AT TANOAN**

ALBUQUERQUE, NEW MEXICO

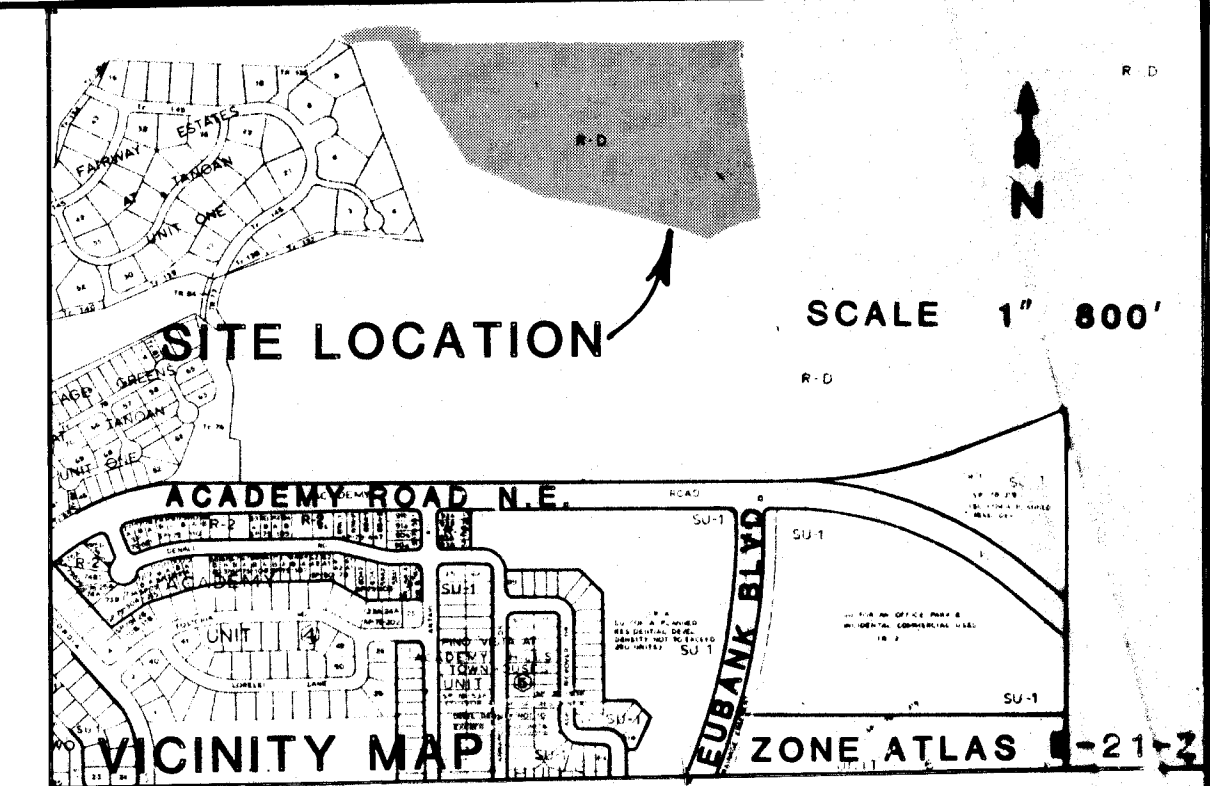
DECEMBER, 1983

- 1. TITLE SHEET
- 2. PLAT
- 3. GRADING PLAN
- 3A. GOLF COURSE GRADING PLAN
- 4. UTILITY SITE PLAN
- 5. PAVING PLAN & PROFILE
- 6. PAVING PLAN & PROFILE
- 7. WATER & SANITARY SEWER PLAN & PROFILE
- 8. WATER & SANITARY SEWER PLAN & PROFILE
- 9. WATER & SANITARY SEWER PLAN & PROFILE
- 10. LEGEND, GENERAL NOTES & DETAILS
- 11. DRAINAGE SWALE SECTIONS

PREPARED FOR:
AMDEC
6400 UPTOWN BLVD. N.E.
P.O. BOX 25000
ALBUQUERQUE, NEW MEXICO 87125

PREPARED BY:
MSM/SP GROUP
2601 WYOMING BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87112

PROJECT BENCHMARK:
The station mark is a standard ACS brass tablet, stamped "1-D21", set in top of a concrete post projecting 0.5 ft.
To reach the station from the intersection of Central Ave. and Wyoming Blvd., go north on Wyoming Blvd. 6.2 miles the intersection with San Antonio Dr. 1.5 miles to the station.
The station is located 9 miles north-east of downtown Albuquerque, within the right-of-way of an electric transmission line.
Elevation: 5637.38 Feet



- 1. New Mexico Standard Specifications for Public Works Construction - 1979 Edition will be referred to hereon as the "Standard Specification."
- 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 "Contract Documents for Public Works Contract No. 84-1."
- 3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
- 4. 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 or surveyor so that the conflict can be resolved with a minimum amount of delay.
- 5. All utilities and utility service lines shall be installed prior to paving.
- 6. Backfill compaction shall be 95% (ASDM D-1557) in streets.
- 7. All storm drainage facilities shall be completed prior to final acceptance.

CERTIFICATION
The undersigned does hereby certify that these drawings were revised in accordance with information furnished by:
Walker Surveying Co. (L.S. No. 6401) to reflect the record elevations and locations for sanitary sewer lines, sanitary sewer service stubouts and top of curb return elevations.
Greiner Engineering Sciences, Inc., to reflect the record location for water valves, fire hydrants, and fire hydrant flange elevations.
Daniel J. Thaddeus 8/7/84
GREINER ENGINEERING SCIENCES, INC. DATE

APPROVAL OF AS BUILT DRAWINGS
ASST. CITY ENGINEER - FIELD
W. J. McNamee
DATE 10/18/84

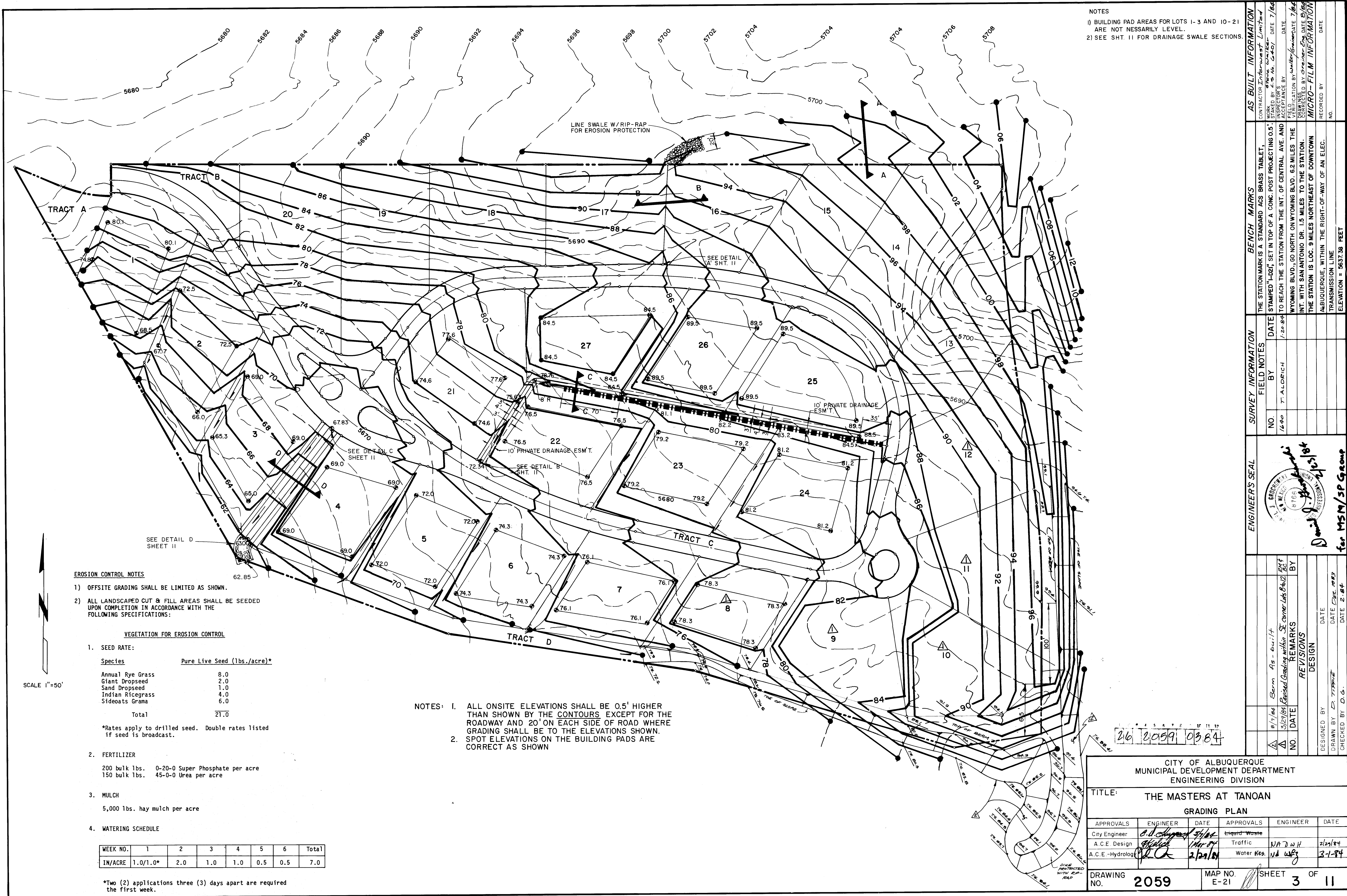
REV	SHEETS	CITY ENGR.	DATE	USER DEPT.	DATE	USER DEPT.	DATE

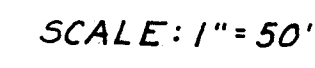
APPROVAL OF REVISIONS

<i>Daniel J. Thaddeus</i> for MSM/SP Group	MSM/SP Group CONSULTING ENGINEERS • SURVEYORS • PLANNERS 2601 Wyoming Blvd. N.E. Albuquerque, New Mexico 87112 (505) 292-1936	APPROVED FOR CONSTRUCTION <i>W. J. McNamee</i> C.E.
	2059	SHEET 1 OF 11

26 2059 1184

5023





NOTE: TURF TO BE REMOVED & REPLACED.

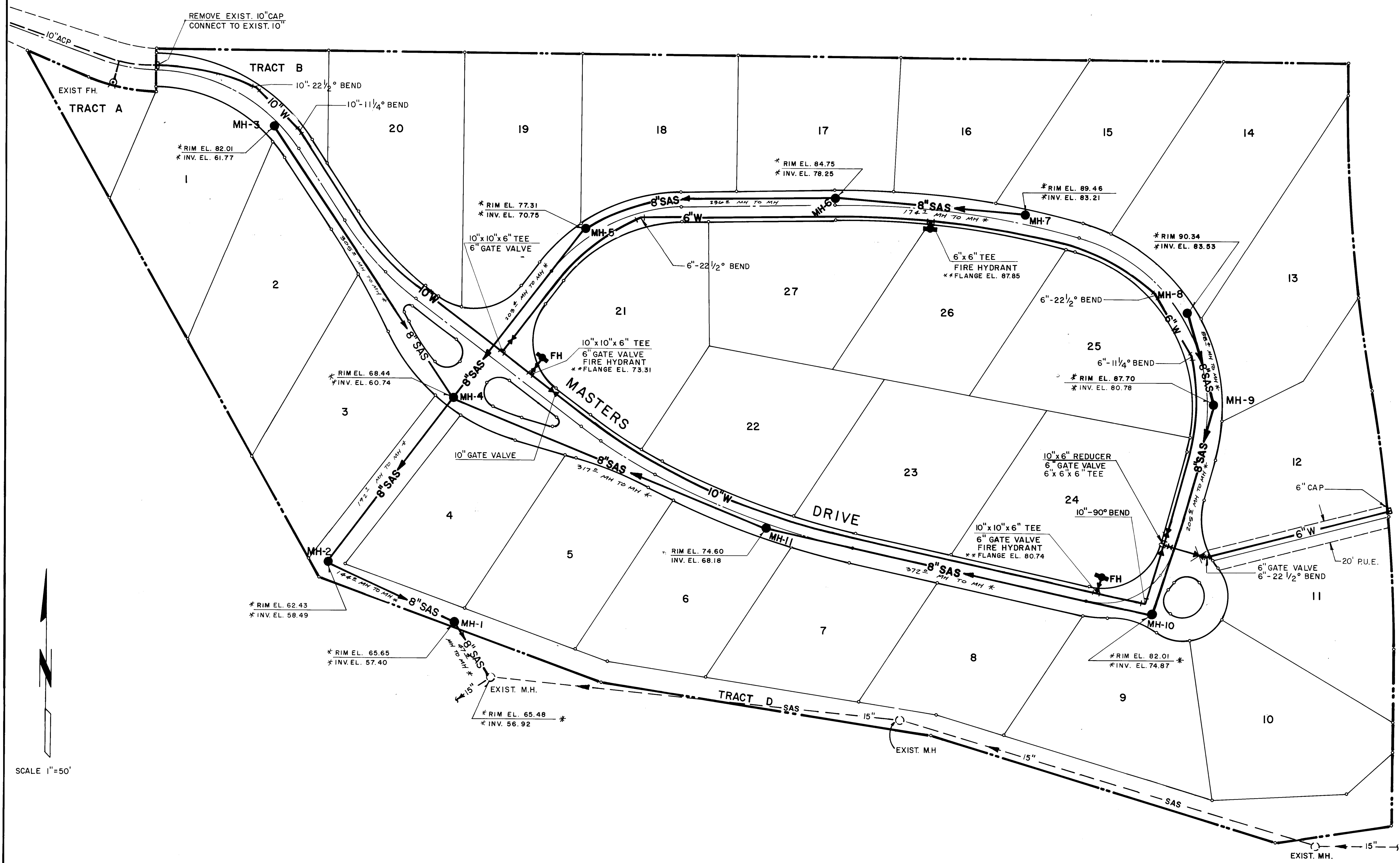
DRAINAGE SWALE DETAIL

SCALE : 1" = 4'

7	8	9	10	11	12
26	20	59	03	18	4

TITLE:	THE MASTERS AT TANOAN GOLF COURSE GRADING PLAN
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DRAWING NO.	2059	MAP NO.	E-21	SHEET	3A	OF	11
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SCALE 1"=50'

NOTES:
SEE SHEET 10 FOR NOTES PERTAINING TO WATER AND SANITARY SEWER.

AS BUILT INFORMATION
CONTRACTOR: Interwest Limited
DATE: 3/7/84
BY: [Signature]
CHECKED BY: [Signature]
DATE: 3/18/84

SURVEY INFORMATION
FIELD NOTES
DATE: 1/20/84
BY: T. ALDRICH
NO. 1460

ENGINEER'S SEAL
[Seal]
Don P. [Signature]
2/13/84
for M219/28 sewer

REVISIONS
DESIGN
DATE: DEC 1983
DRAWN BY: [Signature]
CHECKED BY: [Signature]
DATE: 2-84

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: THE MASTERS AT TANOAN
UTILITY SITE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[Signature]	3/7/84	Liquid Waste		
A.C.E. Design	[Signature]	1/14/84	Traffic	WA DWH	2/27/84
A.C.E.-Hydrology	[Signature]	2/29/84	Water Res.	[Signature]	2-27-84

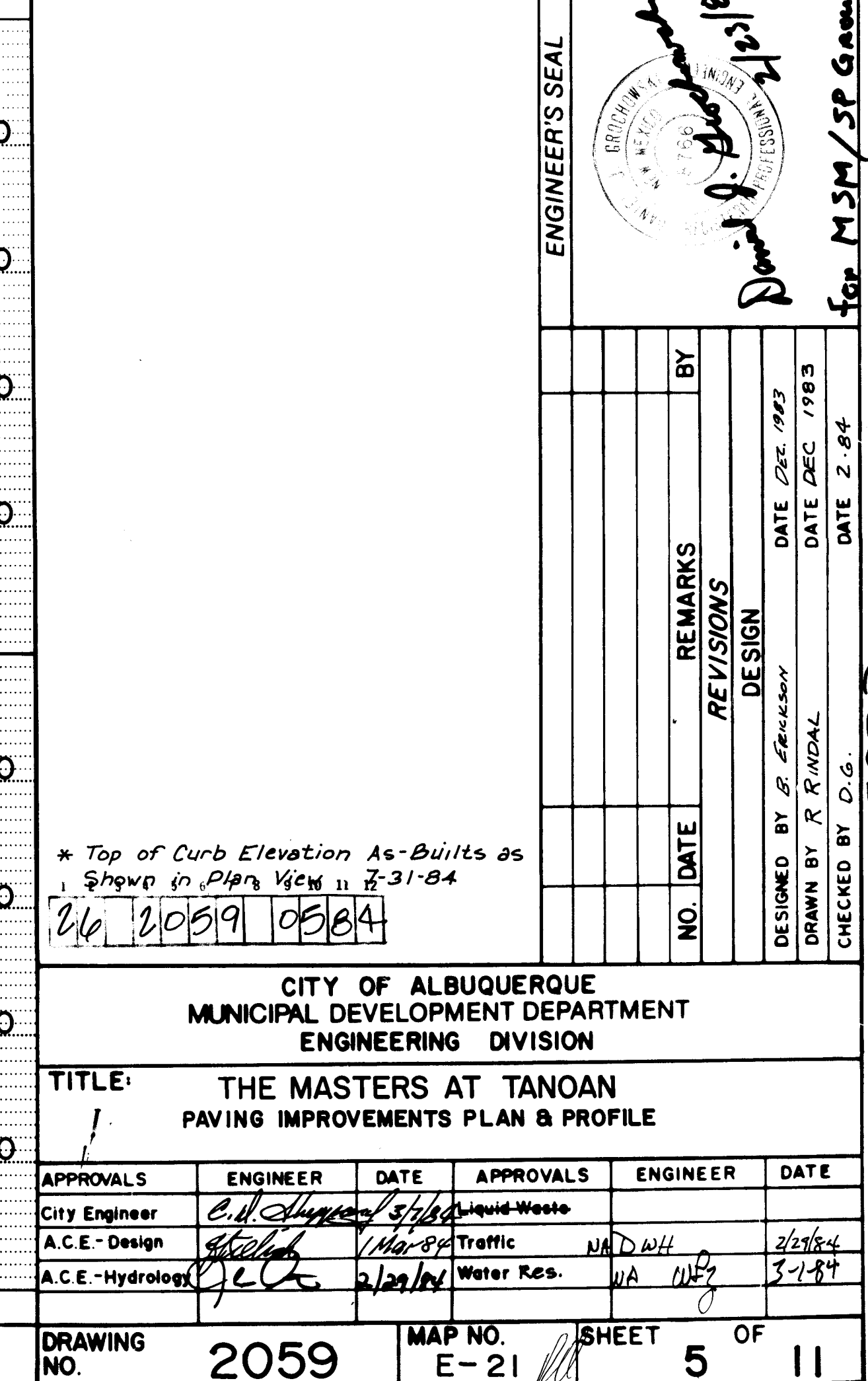
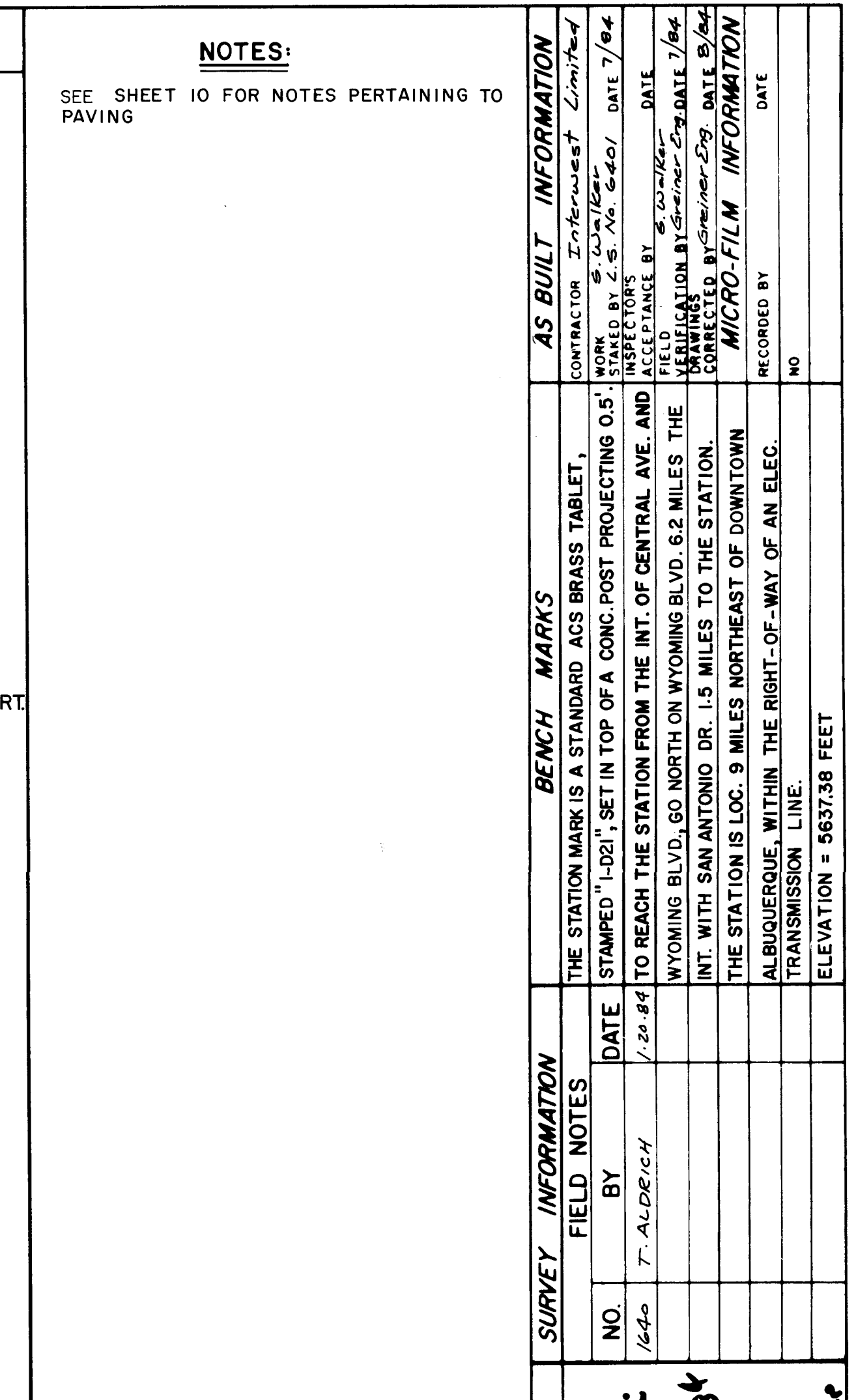
DRAWING NO. 2059

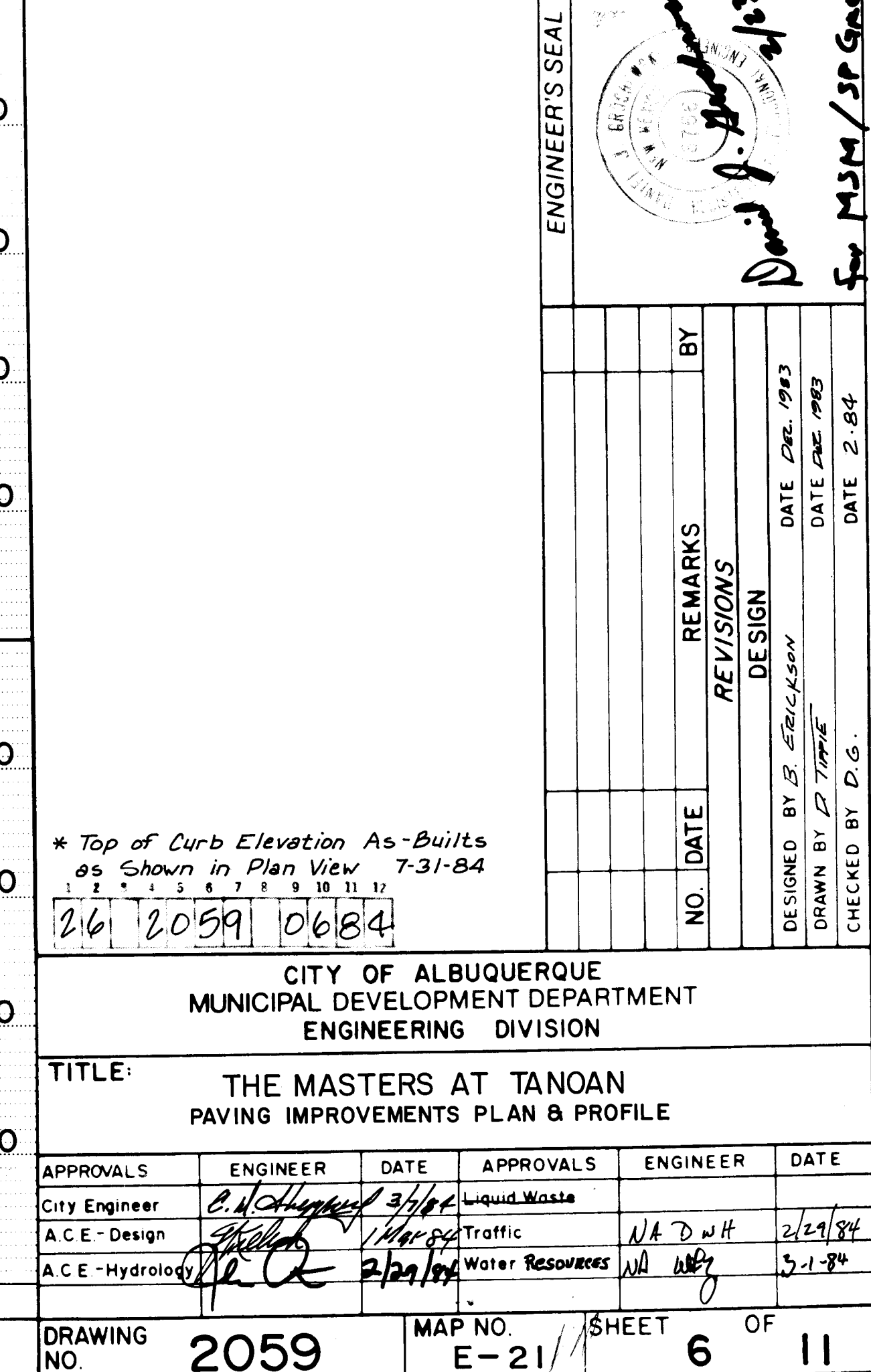
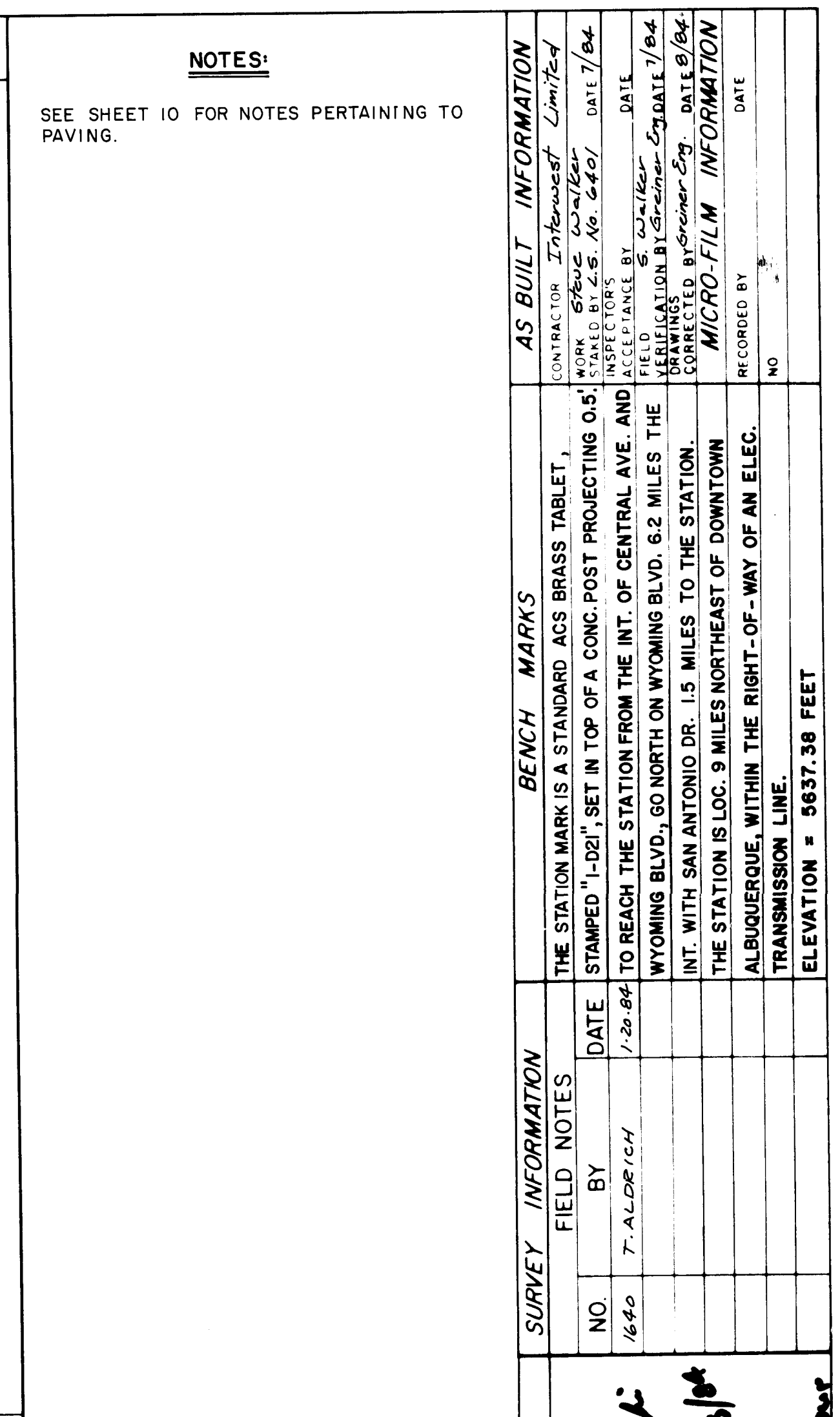
MAP NO. E-21

SHEET 4 OF 11

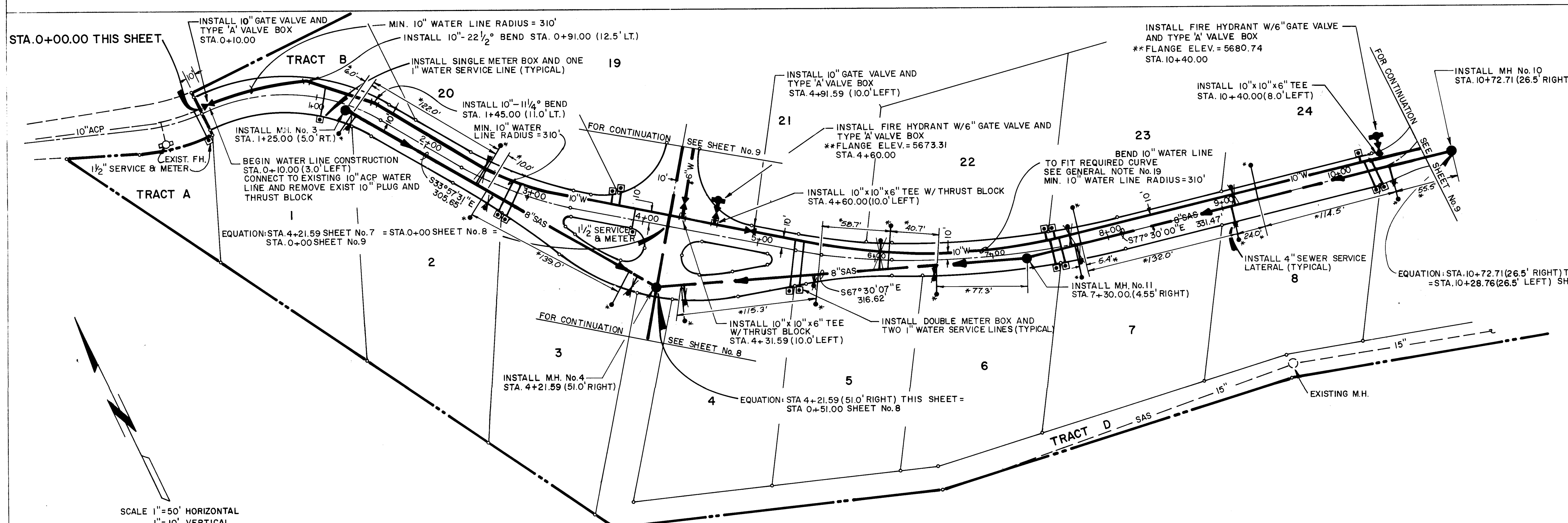
0205

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HECKED BY D.G



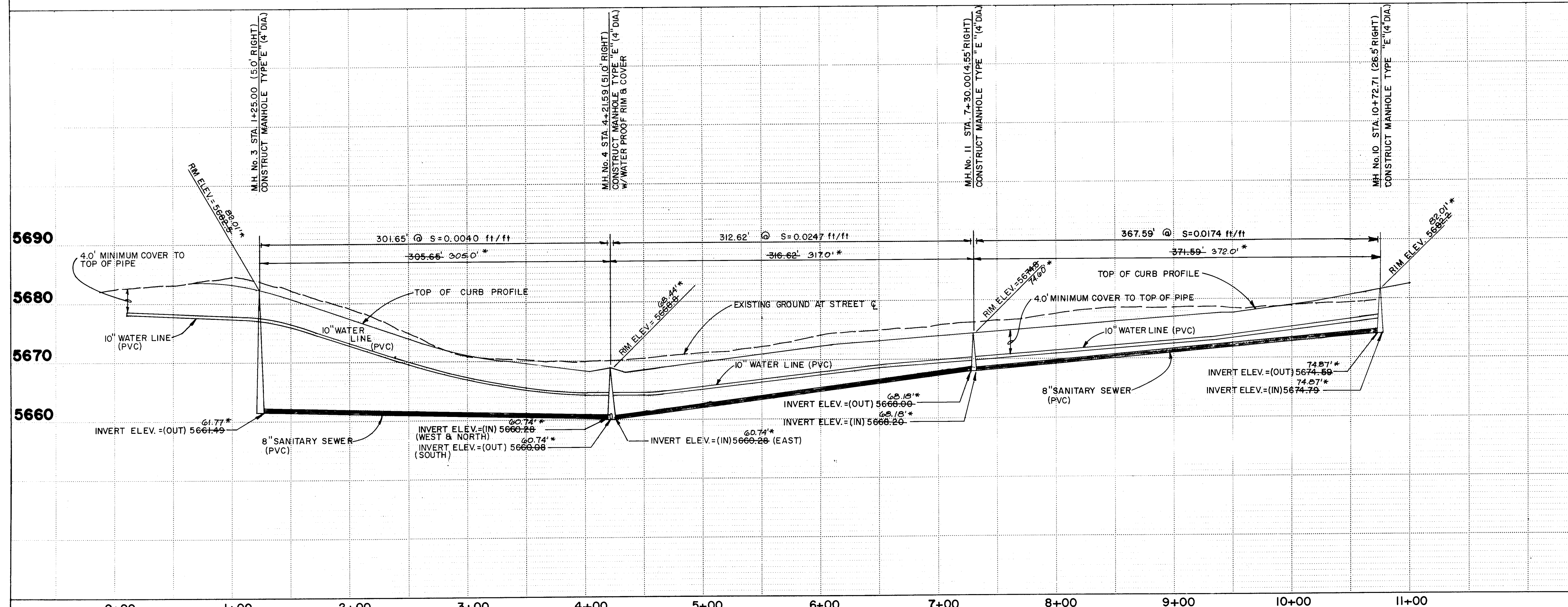
LOCATION OF SEWER SERVICE LATERALS			
LOT	STATION	LENGTH	INVERT @ PROPERTY LINE
1	1+30	26'	62.3
2	2+69	26'	61.8
3	4+10	31'	61.4
4	4+45	29'	61.8
5	5+56	34'	64.4
6	6+58	24'	67.1
7	7+73	28'	69.6
8	9+08	29'	72.0
9	10+46	28'	74.5
10	2+60	44'	63.9
21	6+10	39'	66.3
22	7+70	31'	69.7
23	9+12	29'	72.2

NOTES:
SEE SHEET 10 FOR NOTES PERTAINING TO WATER AND SANITARY

ALL WATER SERVICES AND METERS SHALL BE 1" EXCEPT WHERE INDICATED OTHERWISE, 3/4" AND 1" SERVICES SHALL BE PER CITY OF ALBUQUERQUE STD. DWGS. W-10-2, W-14-1, W-15-2, W-16 AND W-18. 1 1/2" SERVICES SHALL BE PER CITY OF ALBUQ. STD. DWGS. W-11-1, W-18 AND W-18.

VERTICAL ALIGNMENT OF WATER LINES SHALL BE BY REFERENCE TO TOP OF CURB.

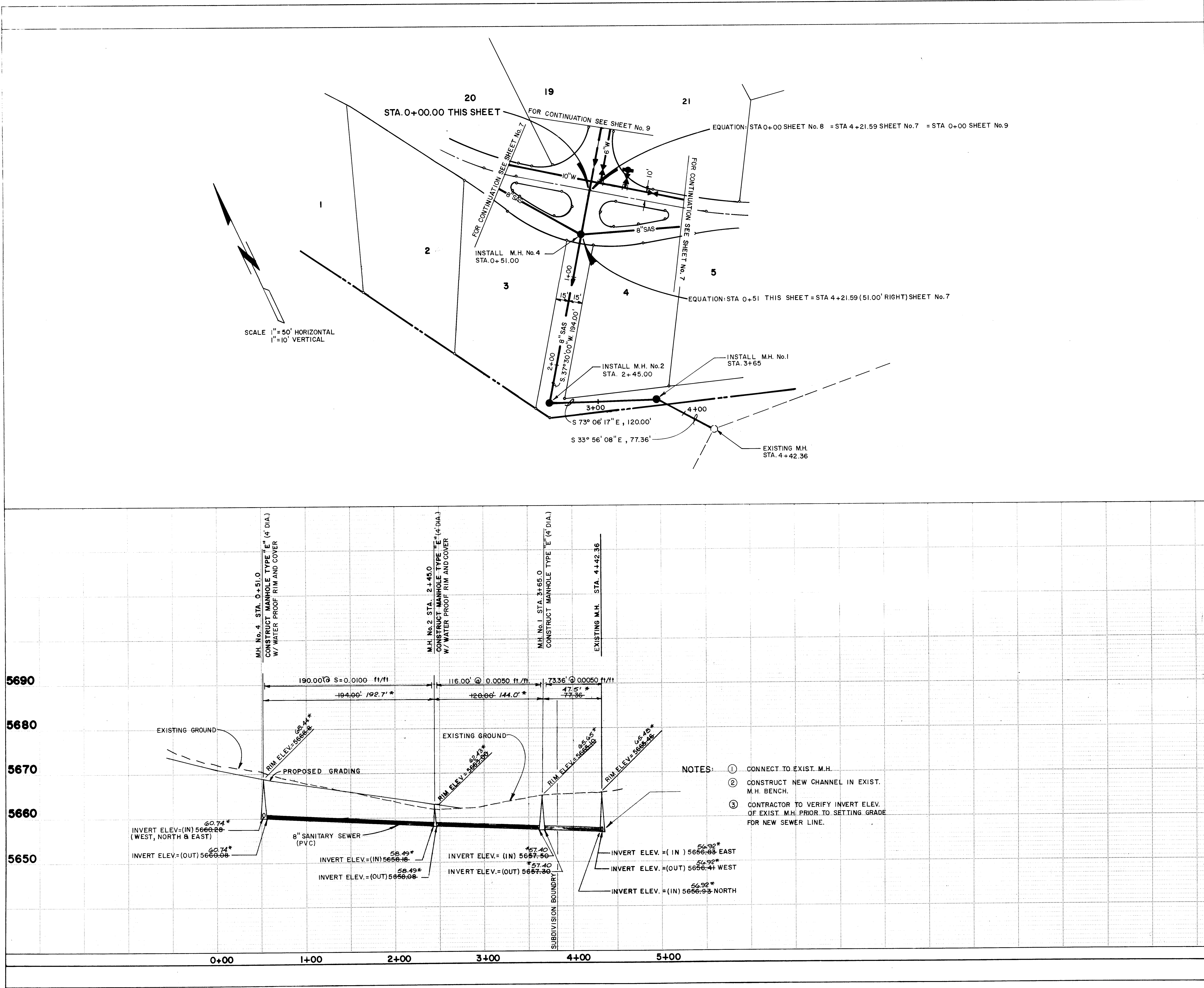
* LOCATION OF SEWER SERVICE LATERALS			
LOT	STATION	LENGTH	INVERT @ P.L.
1		20.5	63.05
2		26.9	64.92
3		32.5	64.07
4		30.6	63.91
5		25.4	67.09
6		24.8	69.10
7		27.5	71.03
8		29.0	73.68
9		29.4	75.66
10		39.0	68.19
21		36.6	70.31
22		32.4	72.91
23		29.8	75.12



* As-Built for Sewer Service Sub-outs, MH Inverts & Rim Elev. Distance Between MH's: 7.31-84
** As-Built FH Flange Elev.

26 2059 0784

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: THE MASTERS AT TANOAN UTILITY IMPROVEMENTS PLAN & PROFILE MASTERS DRIVE (STA. 0+00 TO STA. 10+60)					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	3/1/84	Liquid Waste		
A.C.E. Design	<i>[Signature]</i>	2/21/84	Traffic	NA DWI	2/21/84
A.C.E. Hydrology	<i>[Signature]</i>	2/21/84	Water Res.	WPS	3-1-84
DRAWING NO.	2059	MAP NO.	E-21	SHEET	7 OF 11



NOTES:

SEE SHEET 10 FOR NOTES PERTAINING TO WATER AND SANITARY SEWER.

ALL WATER SERVICES AND METERS SHALL BE 1" EXCEPT WHERE INDICATED OTHERWISE. 3/4" AND 1" SERVICES SHALL BE PER CITY OF ALBUQUERQUE STD. DWGS. W-10-2, W-14-1, W-15-2, W-16 AND W-18. 1 1/2" SERVICES SHALL BE PER CITY OF ALBUQUERQUE STD. DWGS. W-11-1, W-17 AND W-18.

VERTICAL ALIGNMENT OF WATER LINES SHALL BE BY REFERENCE TO TOP OF CURB.

AS BUILT INFORMATION

DATE: 2/29/84
BY: [Signature]
CHECKED BY: [Signature]
ELEVATION: 9637.38 FEET

ENGINEER'S SEAL

26 2059 0884

* Distance Between M.H.'s, Eim & Invert Elev. As-built as shown in Profile 7-31-84

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: THE MASTERS AT TANOAN
UTILITY IMPROVEMENTS PLAN & PROFILE
SEWER EASEMENT (STA. 0+00 TO STA. 4+31.49)

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[Signature]	2/29/84	City Engineer	[Signature]	2/29/84
A.C.E. - Design	[Signature]	2/29/84	A.C.E. - Design	[Signature]	2/29/84
A.C.E. - Hydrology	[Signature]	2/29/84	A.C.E. - Hydrology	[Signature]	2/29/84

DRAWING NO. 2059 MAP NO. E-21 SHEET 8 OF 11

2022

5020

LEGEND

- MATERIALS -

- CONCRETE
- ASPHALT (PLAN)
- ASPHALT (SECTION)
- RIP-RAP
- GUNITED
- GRAVEL
- UNDISTURBED EARTH (SECTION)
- COMPACTED SUBGRADE (SECTION)
- COMPACTED SUBBASE (SECTION)

- LINES -

- CENTERLINE
- SUBDIVISION BOUNDARY
- PROPERTY LINE (PLAN)
- PROPERTY LINE (SECTION)
- EASEMENT LINE
- MATCH LINE
- SECTION CUT LINE

- EARTHWORK -

- EXISTING CONTOUR
- PROPOSED CONTOUR
- SWALE
- DIRECTION OF FLOW
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- SIDE SLOPE

- UTILITIES -

- STORM DRAIN
- STORM SEWER MANHOLE
- GAS LINE

- SANITARY SEWER -

- SEWER LINE
- SEWER ENCASED IN CONCRETE
- SEWER MANHOLE
- SERVICE LATERALS (4" TYPICAL)
- SEWER PLUG
- SINGLE CLEANOUT
- DOUBLE CLEANOUT

- WATER -

- WATER LINE
- GATE VALVE & VALVE BOX
- BUTTERFLY VALVE
- PRESSURE REDUCING VALVE
- REDUCER
- FIRE HYDRANT

- WATER FITTINGS -

- CAP
- CROSS
- TEE
- ELBOW
- WATER SERVICES (1" TYPICAL)

- MISCELLANEOUS -

- TREES & SHRUBS
- POWER POLE
- TELEPHONE POLE
- CHAINLINK FENCE
- FIELD FENCE
- COMMON YARD WALL
- RETAINING WALL
- NO CROWN AREA & NO CROWN TRANSITION

GENERAL NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH THE "STANDARD SPECIFICATION" AND THE CITY OF ALBUQUERQUE "CONTRACT DOCUMENTS FOR PUBLIC WORKS CONTRACT NO. 84-1."
- THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES BY CALLING 765-1234 48 HOURS BEFORE COMMENCING WORK IN AREAS NEAR UNDERGROUND UTILITY LINES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES. THE ENGINEER SHALL BE PROMPTLY NOTIFIED OF ANY PROBLEMS OR CONFLICTS THAT ARE ENCOUNTERED.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- THE CONTRACTOR WILL BE REQUIRED TO CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS AND/OR RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.

STREET PAVING IMPROVEMENTS

- ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON CENTERLINE STATIONING, EXCEPT CUL-DE-SACS WHICH, STARTING AT THE P.C. OF THE RETURN, SHOW STATIONS AND CORRESPONDING SLOPES BASED ON TRUE DISTANCE ALONG THE FACE OF CURB.
- WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- WHEN ABUTTING NEW PAVEMENT TO EXISTING, THE CONTRACTOR SHALL CUT BACK EXISTING PAVING TO A STRAIGHT LINE AND AT A RIGHT ANGLE, OR AS APPROVED BY THE PROJECT ENGINEER, TO REMOVE ANY BROKEN OR CRACKED PAVEMENT. NO SEPARATE PAYMENT SHALL BE MADE BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- ALL DIMENSIONS AND RADII OF CURB AND CURB RETURNS ARE SHOWN TO FACE OF CURB.

SANITARY SEWER SYSTEM

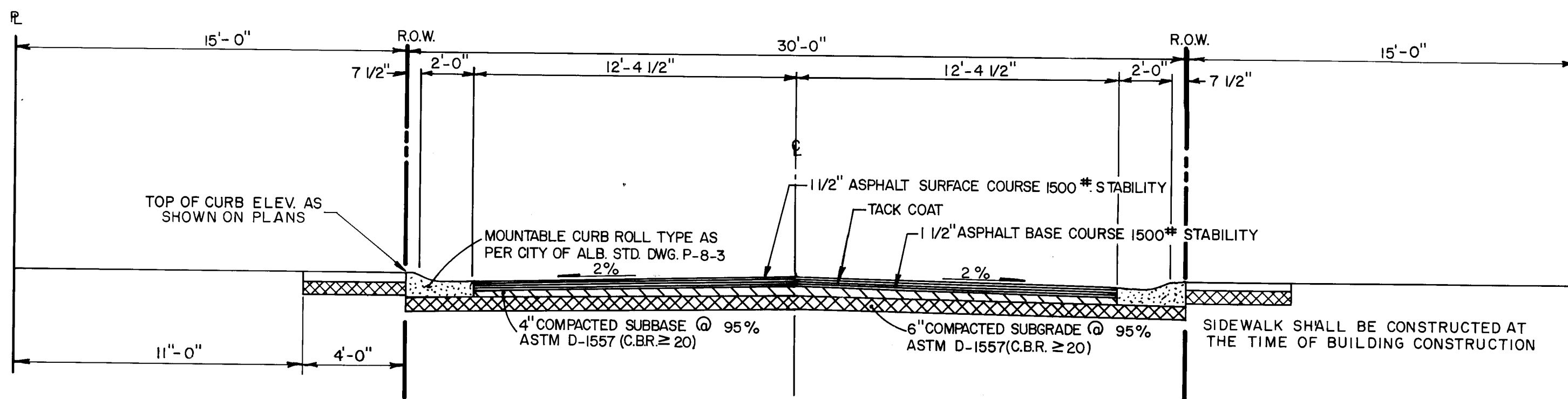
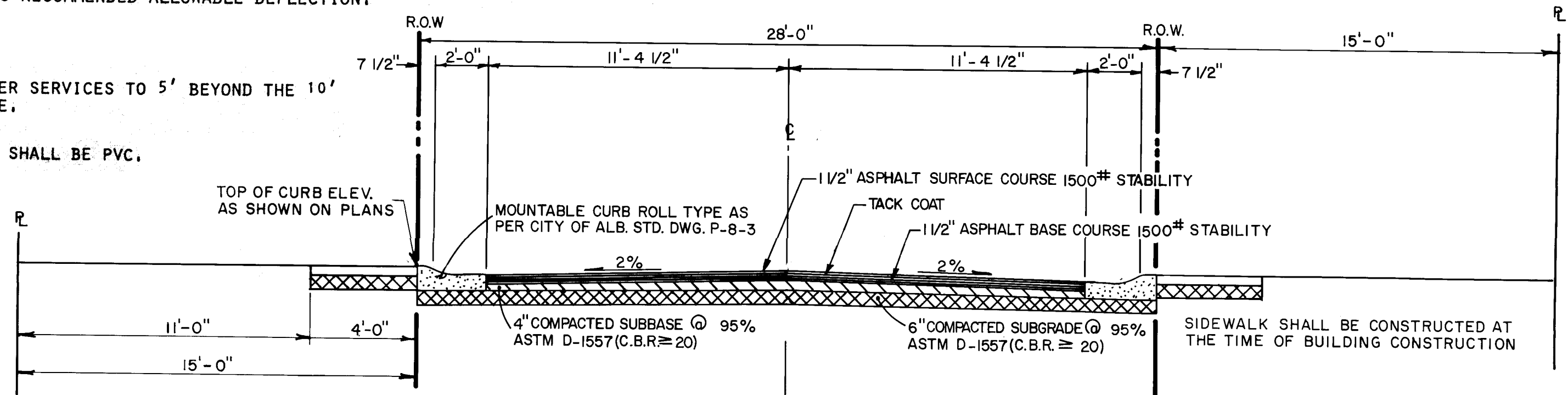
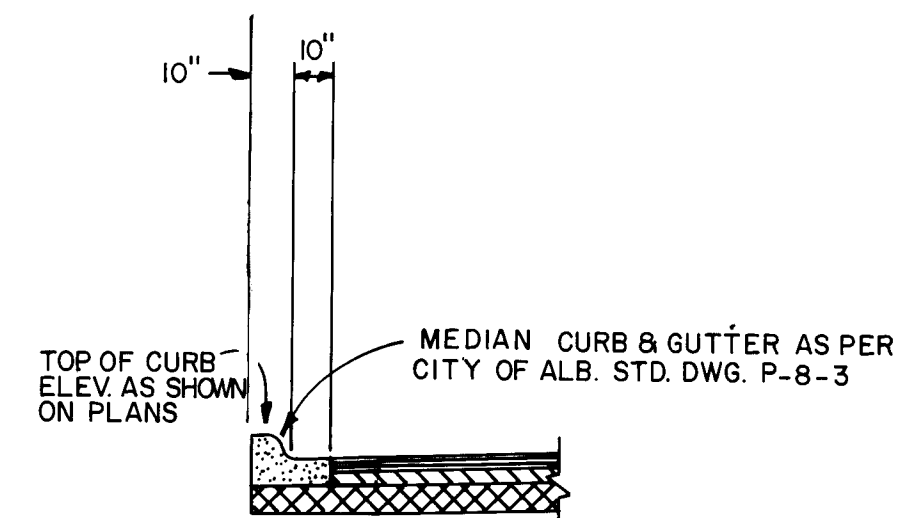
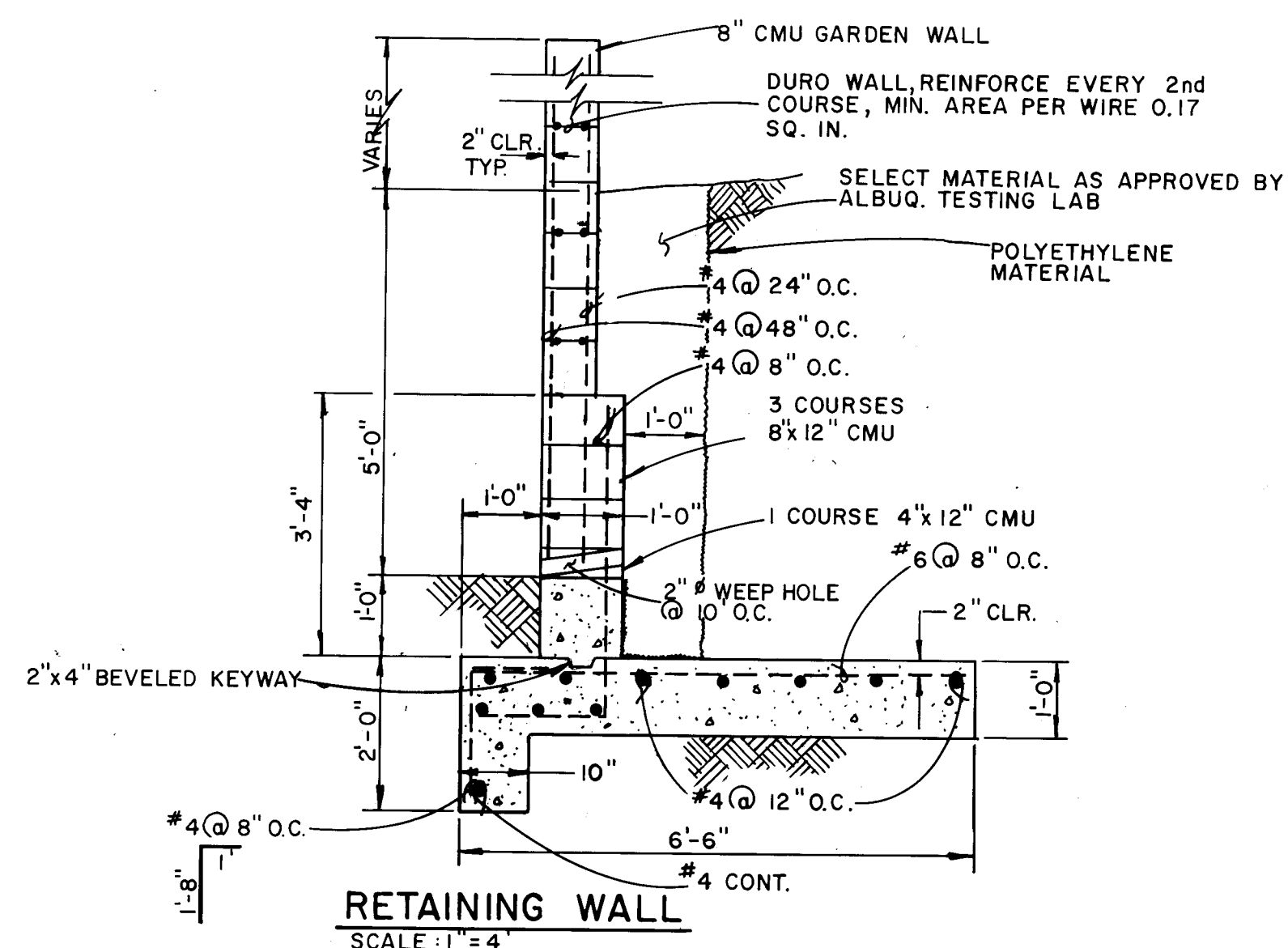
- ALL STATIONING IS BASED ON STREET CENTERLINE, AND IN SOME CASES IS DIFFERENT THAN THE STATIONING FOR THE STREET PAVING IMPROVEMENTS.
- SLOPES SHOWN ON THE PROFILES ARE BASED ON TRUE DISTANCES, NOT CENTERLINE STATIONING. LENGTHS SHOWN ON PROFILES ARE TRUE DISTANCES FROM EDGE OF MANHOLE TO EDGE OF MANHOLE.
- ALL MANHOLES SHALL BE 4-FOOT DIAMETER TYPE 'E' AS PER CITY OF ALBUQUERQUE STANDARD DRAWING S-2-3 UNLESS OTHERWISE NOTED.
- SEWER SERVICE LATERALS SHALL BE PROVIDED WITH ELECTRONIC MARKER DISKS AS PER CITY OF ALBUQUERQUE STANDARD DRAWING S-9. EMD SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 131 OF THE CITY OF ALBUQUERQUE "CONTRACT DOCUMENTS FOR PUBLIC WORKS CONTRACT NO. 84-1."
- WHERE SEWER AND WATER LINES CROSS, IF VERTICAL CLEARANCE DOES NOT EXCEED 1'-6", CONTRACTOR SHALL ENCASE SEWER PIPE IN CONCRETE, 10 FEET EACH SIDE OF WATER LINE. (NOTE THE POLICY ON THE PROXIMITY OF WATER AND SEWER LINES IN THE CONTRACT DOCUMENTS FOR PUBLIC WORKS CONTRACT NO. 84-1.)
- WHERE THE SEWER LINE IS TO BE DEFLECTED, MAXIMUM ALLOWABLE DEFLECTION SHALL BE TWO-THIRDS (2/3) OF THE MANUFACTURER'S RECOMMENDED ALLOWABLE DEFLECTION.

WATER DISTRIBUTION SYSTEM

- WATER LINE SHALL HAVE A MINIMUM COVER OF 4'-0" FOR 10" WATER TRANSMISSION LINES AND A MINIMUM COVER OF 3'-0" FOR 6" WATER DISTRIBUTION LINES
- ELECTRONIC MARKER DISKS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 131 OF THE CITY OF ALBUQUERQUE "CONTRACT DOCUMENTS FOR PUBLIC WORKS CONTRACT NO. 84-1."
- ALL STATIONING IS BASED ON STREET CENTERLINE, AND IN SOME CASES IS DIFFERENT THAN THE STATIONING FOR THE STREET PAVING IMPROVEMENTS.
- WHERE THE WATER LINE IS TO BE DEFLECTED, MAXIMUM ALLOWABLE DEFLECTION SHALL BE TWO-THIRDS (2/3) OF THE MANUFACTURER'S RECOMMENDED ALLOWABLE DEFLECTION.

WATER AND SANITARY SEWER

- EXTEND ALL WATER AND SANITARY SEWER SERVICES TO 5' BEYOND THE 10' UTILITY AND SIDEWALK EASEMENT LINE.
- ALL WATER AND SANITARY SEWER PIPE SHALL BE PVC.



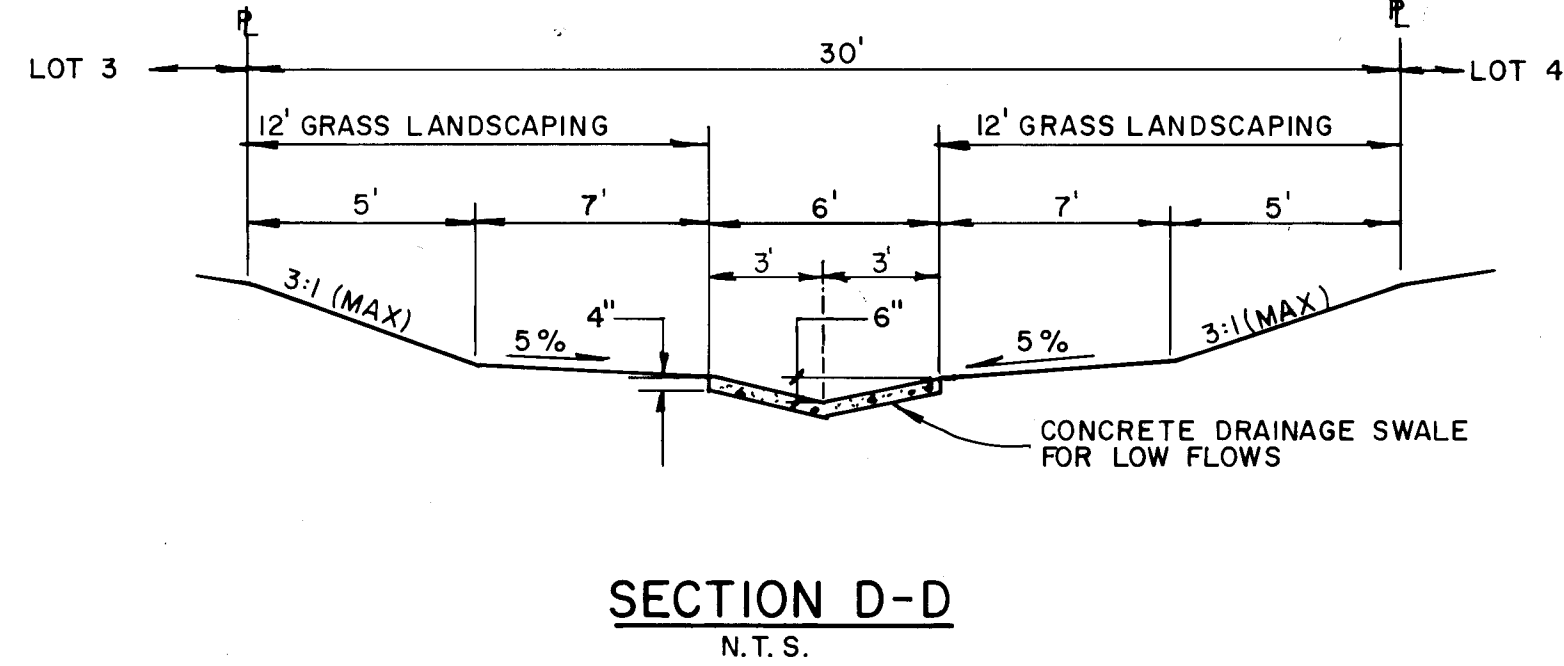
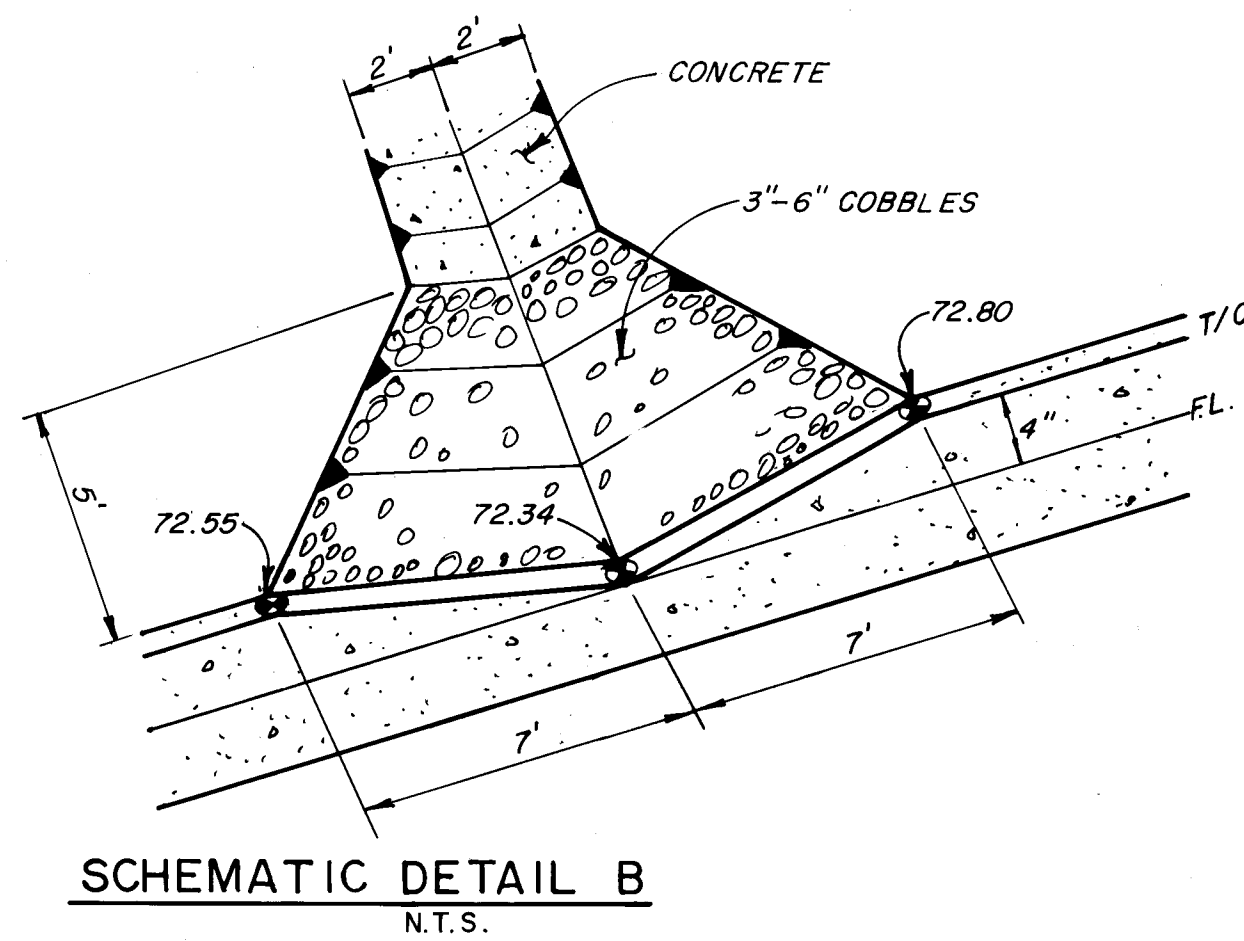
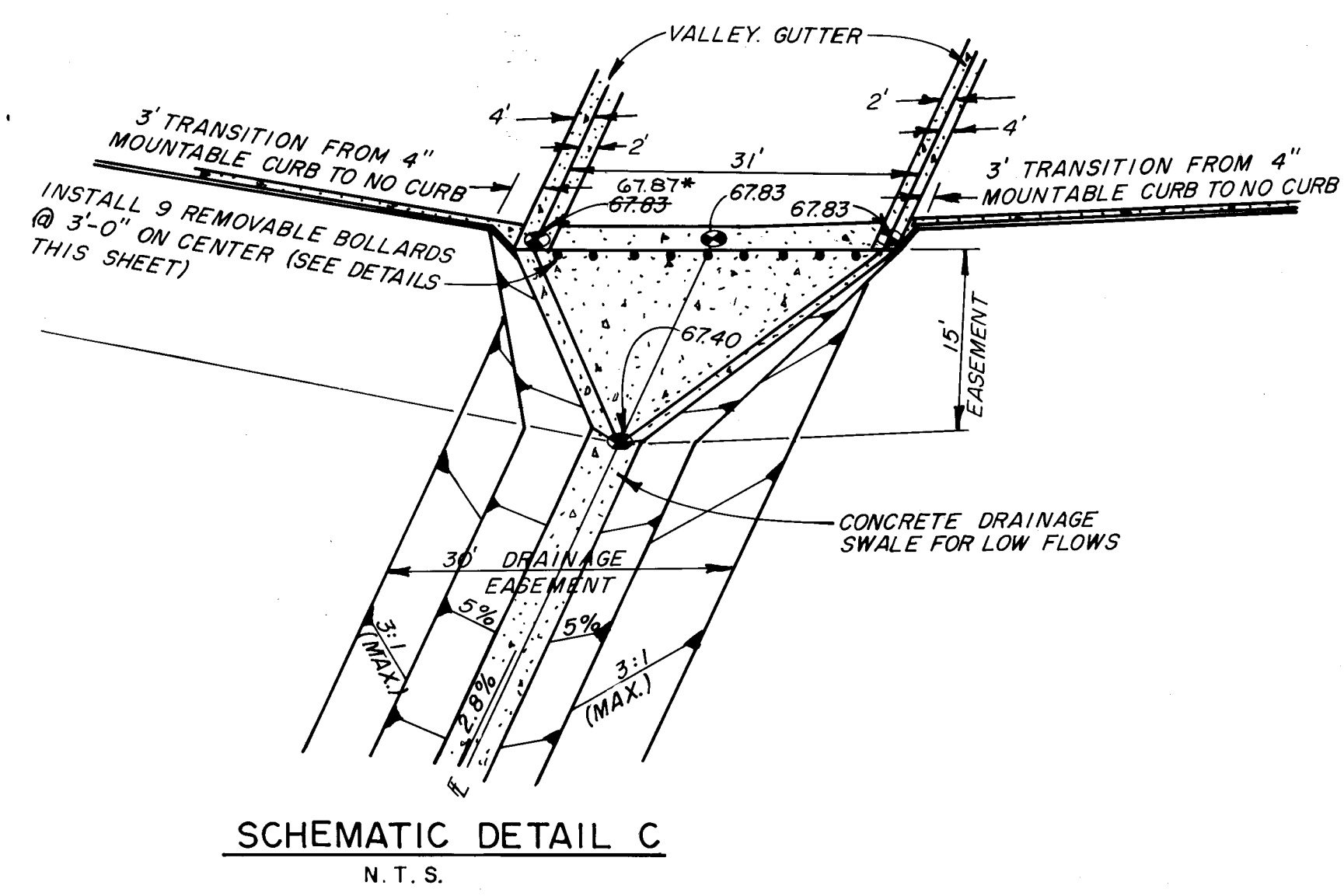
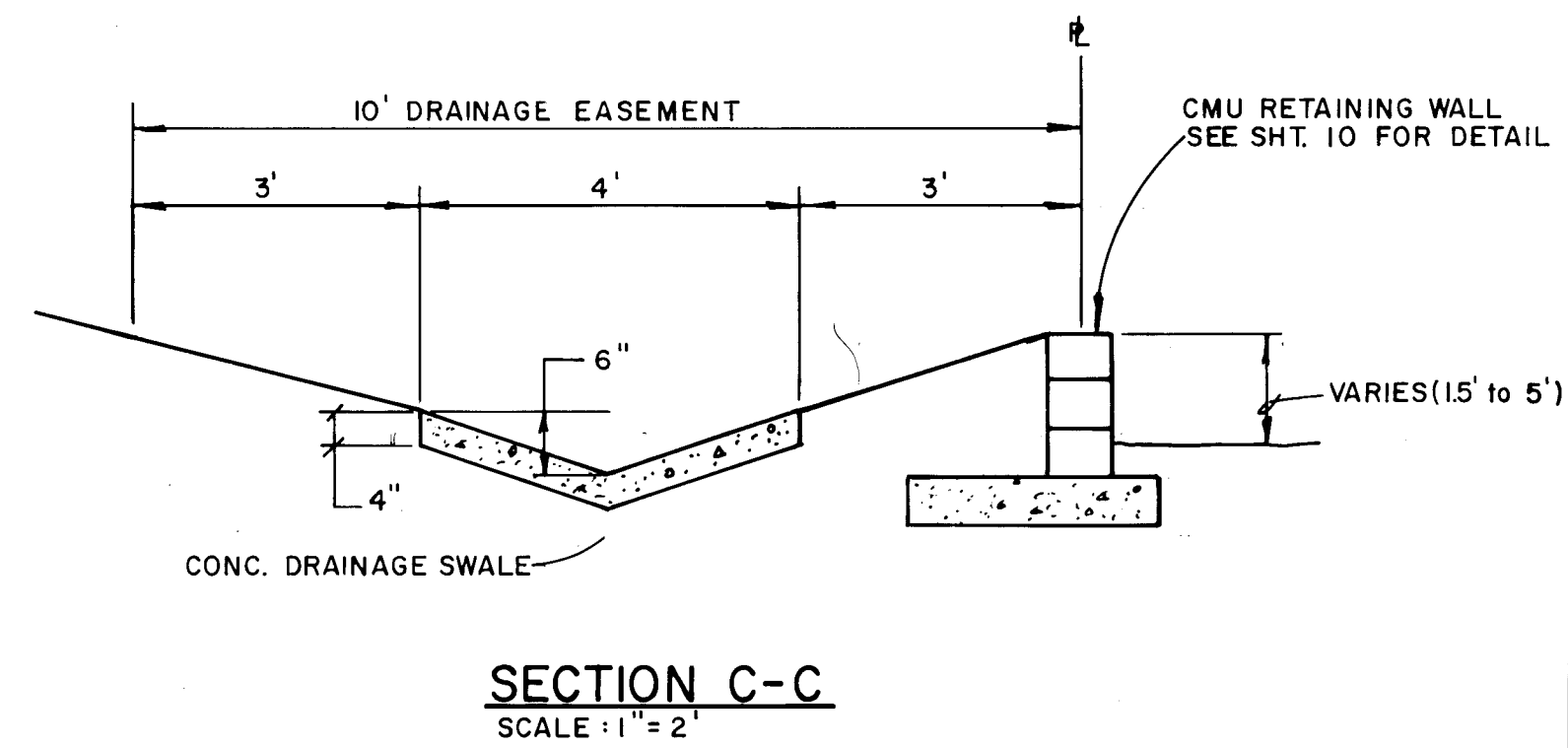
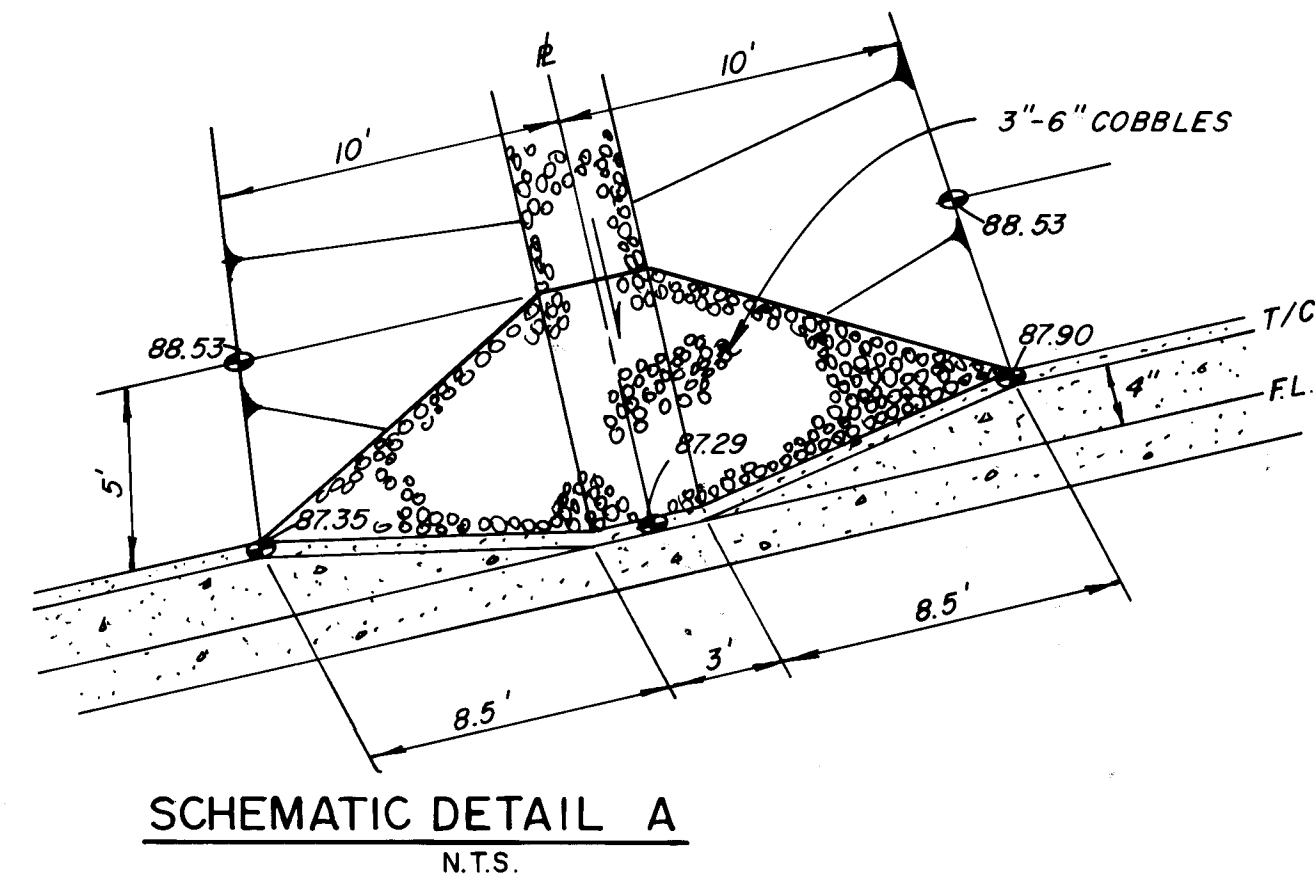
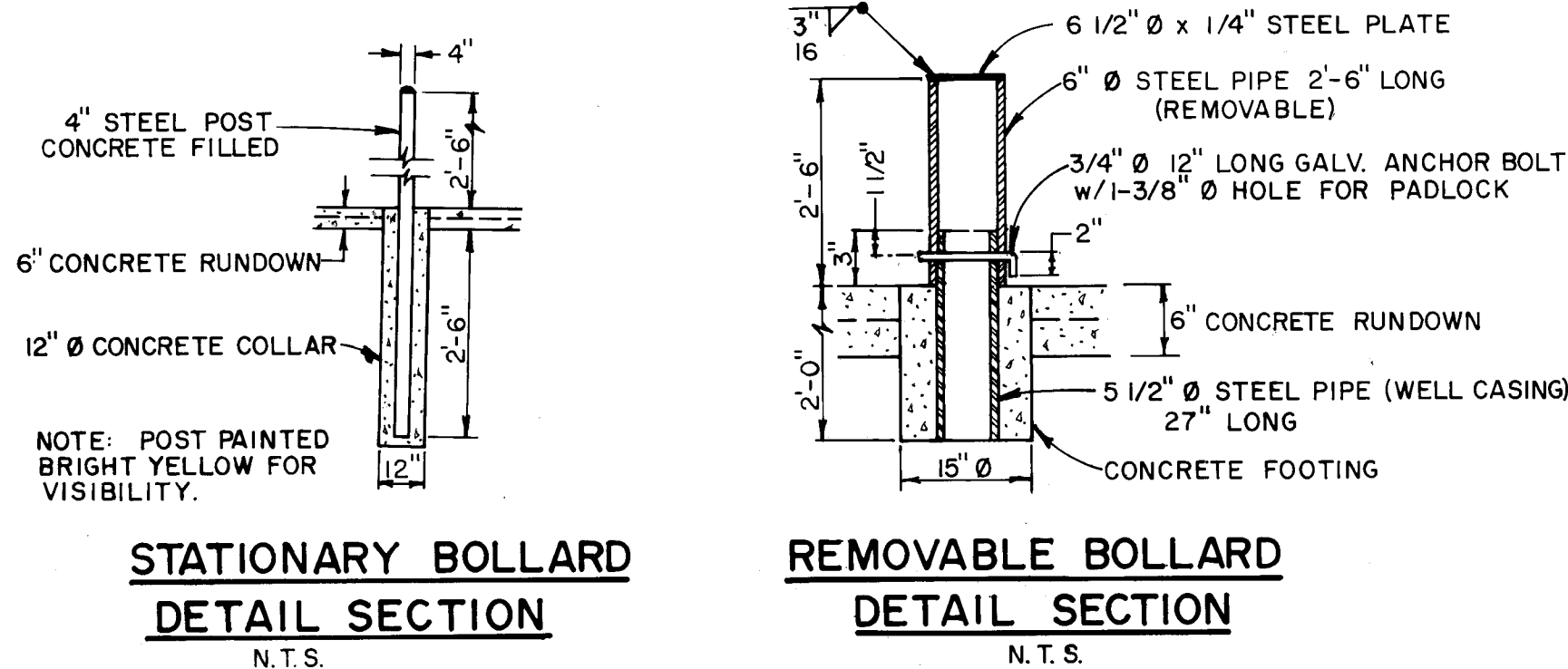
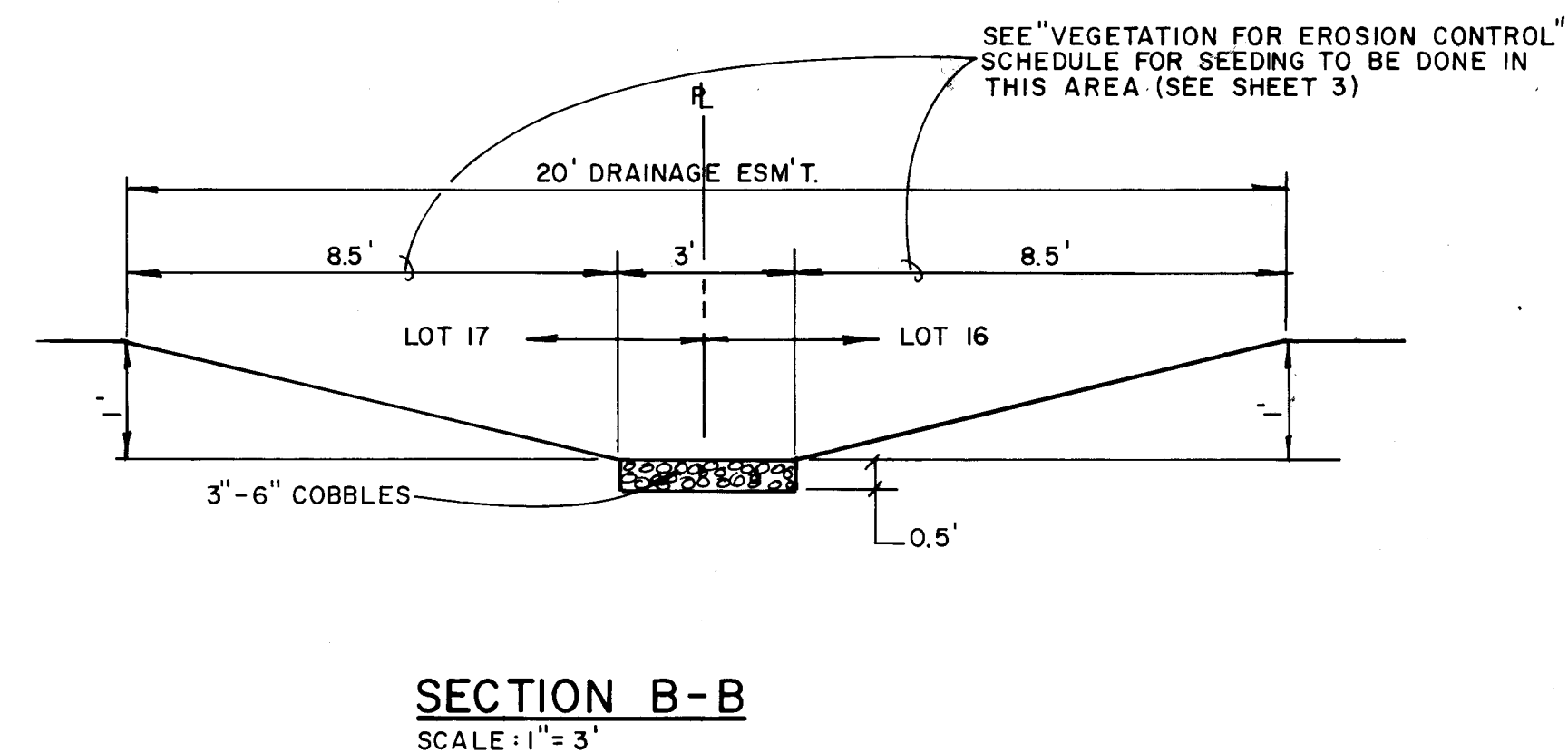
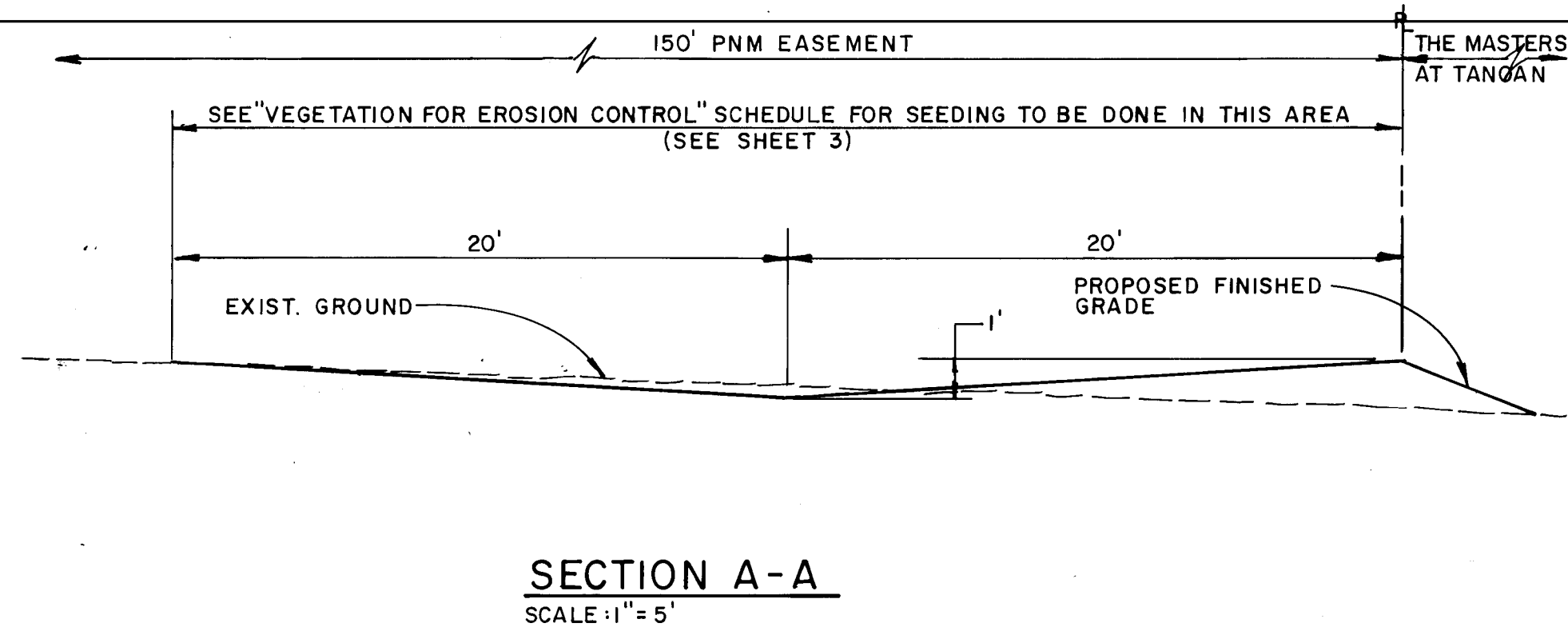
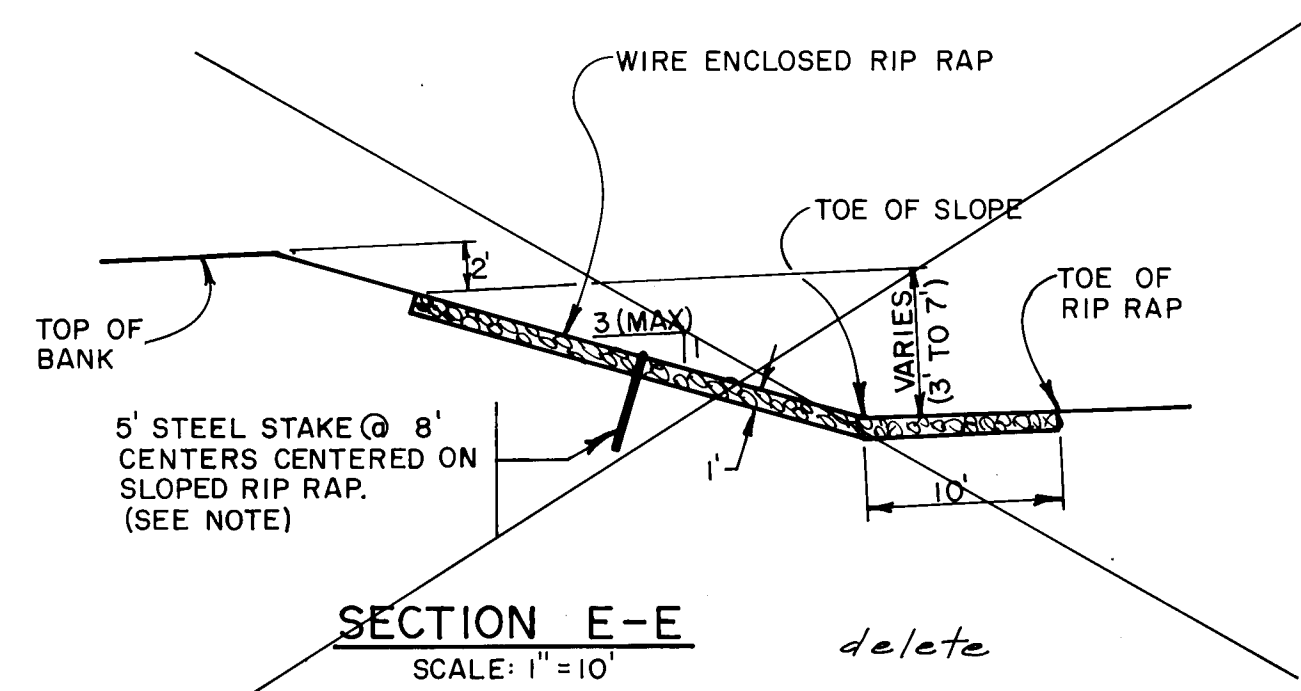
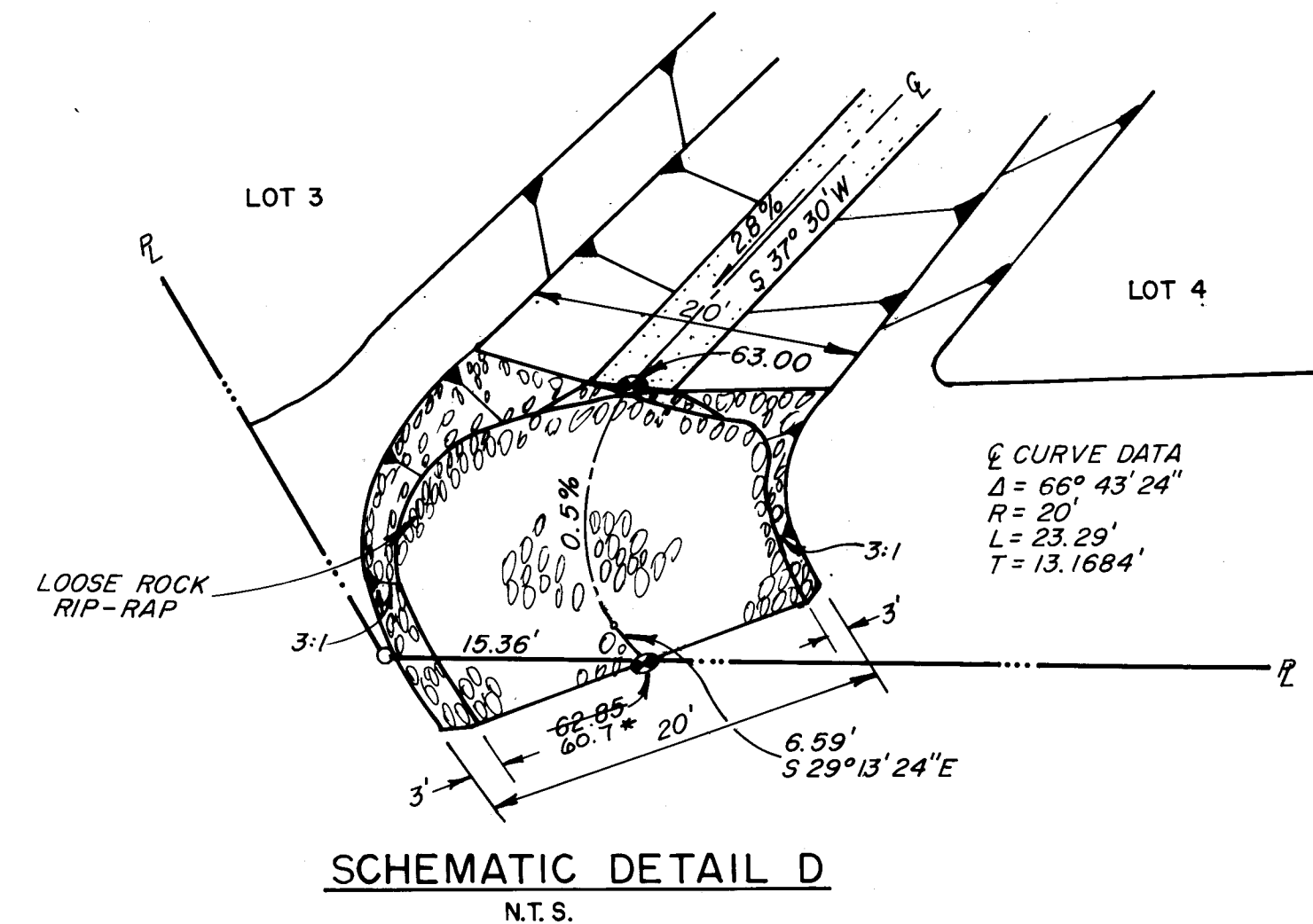
NOTES:

- All Concrete Shall Have a 28 Day Strength of 3000 psi. Concrete Shall Have a Max. 4" Slump And 5-7% Air Entrainment by Volume.
- All Reinforcing Steel Shall be Grade 40 Unless Otherwise Noted.
- All Masonry Units Shall be Manufactured ASTM C-90.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		APPROVALS	
CONTRACTOR	DATE	STATION	MARK	NO.	BY	DATE	SEAL	NO.	DATE	ENGINEER	DATE
CONTRACTOR: [Signature]	DATE: 7/84	STATION: 16+00	MARK: 1/2" x 1/2" x 1/2"	NO. 1	BY: T. ALDERICH	DATE: 1/20/84	SEAL: [Signature]	NO. 1	DATE: 1/20/84	ENGINEER: [Signature]	DATE: 1/20/84
THE STATION MARK IS A STANDARD ACS BRASS TABLET STAMPED "1-121" SET IN TOP OF A CONC. POST PROJECTING 0.5' TO REACH THE STATION FROM THE INT. OF CENTRAL AVE. AND WYOMING BLVD. GO NORTH ON WYOMING BLVD. 6.2 MILES. THE INT. WITH SAN ANTONIO DR. 1.5 MILES TO THE STATION. THE STATION IS LOC. 9 MILES NORTHEAST OF DOWNTOWN ALBUQUERQUE, WITHIN THE RIGHT-OF-WAY OF AN ELEC. TRANSMISSION LINE. ELEVATION = 5637.36 FEET											
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION TITLE: THE MASTERS AT TANOAN LEGEND, GENERAL NOTES & MISC. DETAILS											
APPROVALS			ENGINEER			DATE			APPROVALS		
City Engineer			[Signature]			DATE: 1/20/84			Liquid Waste		
A.C.E. Design			[Signature]			DATE: 1/20/84			Traffic		
A.C.E.-Hydrology			[Signature]			DATE: 1/20/84			Water Res.		
DRAWING NO.			2059			MAP NO.			E-2		
SHEET			10			OF			11		

NOTE:
ALL SECTIONS AND DETAILS ON THIS SHEET ARE TAKEN FROM SHEET 3.

NOTE ON STEEL STAKES:
STEEL STAKES MAY BE RAILROAD RAILS WEIGHING NOT LESS THAN 30 LBS. PER YARD, 4" O.D. STANDARD STRENGTH GALVANIZED STEEL PIPE OR 4" x 4" x 3/8" STEEL ANGLES. STEEL STAKES SHALL PROJECT 6" ABOVE TOP OF RIP RAP. STEEL STAKES ARE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE WORK AND NO DIRECT MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.



AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	INTEGRITY LIMITED	DATE	THE STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "10-21" SET IN TOP OF A CONC. POST PROJECTING 0.5' TO REACH THE STA. FROM THE INTX. OF CENTRAL AVE. TO WYOMING BLVD. 60 NORTH ON WYOMING 6.2 MILES TO THE INTX. OF SAN ANTONIO DR. 1.5 MILES TO THE STA. LOCATED 9 MILES NORTHEAST OF DOWNTOWN ALBUQ, WITHIN THE RIGHT-OF-WAY OF AN ELEC. TRANSMISSION LINE.	NO.	DATE	NO.	BY	NO.	DATE	REMARKS	DESIGN
WORKED BY	Steve Coulter	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84
INSPECTED BY	Steve Coulter	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84
ACCEPTANCE BY	Steve Coulter	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84
VERIFICATION BY	Steve Coulter	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84
RECORDED BY	Steve Coulter	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84
NO.	563736	DATE	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84	1/20/84

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* Spot Elevation As-Built 7-31-84

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: THE MASTERS AT TANOAN					
DRAINAGE SWALE SECTIONS & DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	Steve Coulter	1/20/84	Liquid Waste	NA DWH	2/29/84
A.C.E. Design	Steve Coulter	1/20/84	Traffic	NA DWH	2/29/84
A.C.E.-Hydrology	Steve Coulter	1/20/84	Water	NA DWH	2/29/84
DRAWING NO.	2059	MAP NO.	E-21	SHEET	11 OF 11