

COMMUNITY SCIENCES CORPORATION - CORRALES, NEW MEXICO - (505) 897-0000

17121 VPS COVER.DWG

GATEWAY

CITY OF RIO RANCHO, SANDOVAL COUNTY, NEW MEXICO

IMPROVEMENTS FOR

SANITARY SEWAGE PUMP STATION, FORCEMAIN

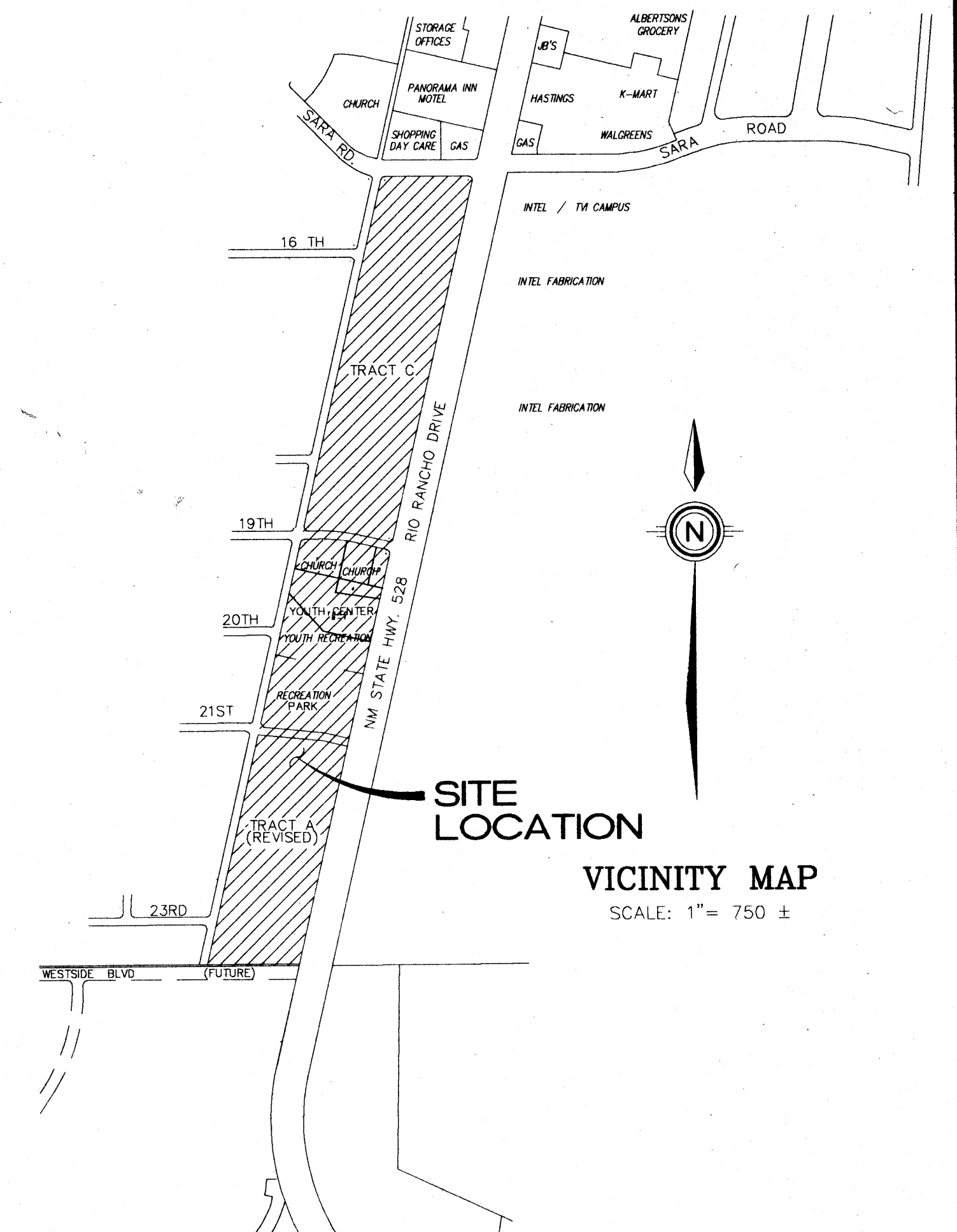
AND GRAVITY SEWER.

INDEX TO DRAWINGS

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16	LIFT STATION - STRUCTURAL
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GENERAL NOTES:

1. THE IMPROVEMENTS, AS SHOWN ON THESE PLANS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1987 EDITION, AS PREPARED BY THE NEW MEXICO CHAPTER, AMERICAN PUBLIC WORKS ASSOCIATION AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS FOR IMPROVEMENTS FOR THE GATEWAY NORTH AND SOUTH, DATED 1994.
2. STANDARD DRAWINGS NOTED HEREON REFER TO STANDARD DRAWINGS OF RIO RANCHO UTILITIES CORPORATION UNLESS OTHERWISE SHOWN HEREIN.
3. A COPY OF THE STANDARD SPECIFICATIONS, THE CONTRACT DOCUMENTS, AND THE PROJECT PLANS SHALL BE KEPT AT THE JOB SITE BY THE CONTRACTOR AT ALL TIMES.
4. THE CONTRACTOR SHALL HAVE THE SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ENGINEER, AND CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, ENGINEER, OR CITY.
5. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE DRAWINGS HAVE BEEN OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE DRAWINGS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DEPICTED LOCATION, OR THE EXISTENCE OR THE NON-EXISTENCE OF UTILITY LINES. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONARY MEASURES TO PROTECT UTILITY LINES SHOWN, AND ALL OTHER LINES LOCATED BY VERIFICATION OF LINE LOCATION IN THE FIELD PRIOR TO THE INSTITUTION OF THE ACTUAL PORTION OR WORK ATTRIBUTED TO THEIR LOCATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND EXISTENCE OF ALL UTILITY CONNECTION POINTS PRIOR TO STARTING CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY BEFORE PROCEEDING FURTHER.
6. THERE SHALL BE NO DEVIATIONS TO THESE PLANS WITHOUT THE WRITTEN APPROVAL OF THE OWNER AND THE ENGINEER. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION METHODS, OR TECHNIQUES OR FOR THE PROSECUTION OF THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR OTHER PERSONS PERFORMING ANY OF THE WORK OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
7. QUANTITIES SHOWN ON THESE PLANS ARE ESTIMATED QUANTITIES AND SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING BID PROPOSALS.



REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

ENGINEER'S SEAL REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO THOMAS T. MANN, JR. 3792 NEW MEXICO LAND SURVEYOR	DATE: JAN. 1994 SCALE: AS SHOWN DESIGNED: TTM, TLM DRAWN: SP5, TTM JOB NO.: 71-21-035	community sciences corporation APPROVED FOR CONSTRUCTION Alan W. O'Brien RIO RANCHO UTILITIES CORPORATION 3-7-94 DATE
PROJECT NO.		SHEET 1 OF 18

AS BUILT

CG → BG

BOOK #	7	DATE	11-15-93
SHEET #	2	BY	W. J. B. / J. B. B.
DATE	11-15-93	CHECKED	W. J. B. / J. B. B.
DATE	11-15-93	APPROVED	W. J. B. / J. B. B.

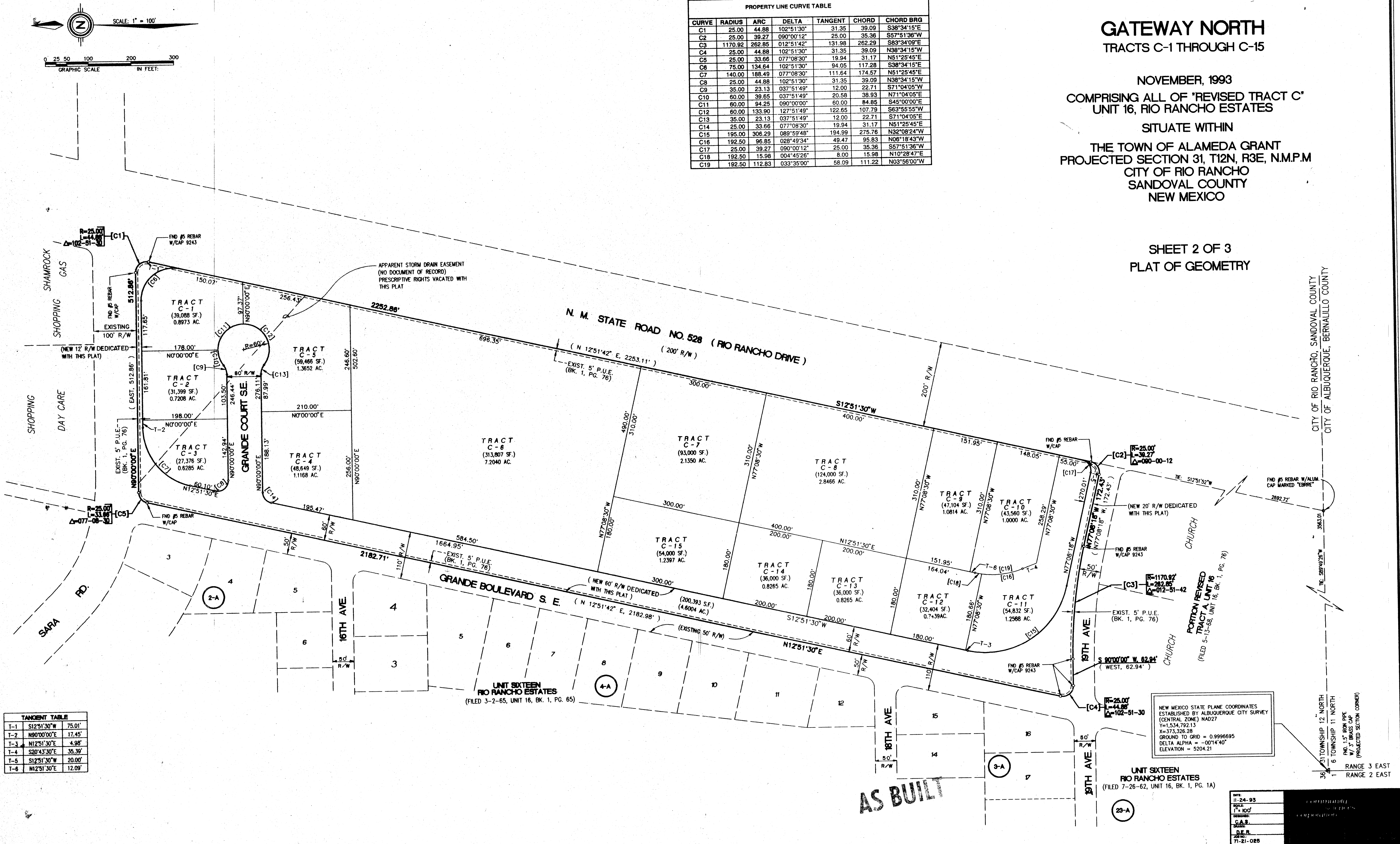
INSTRUMENT NO. _____

GATEWAY NORTH TRACTS C-1 THROUGH C-15

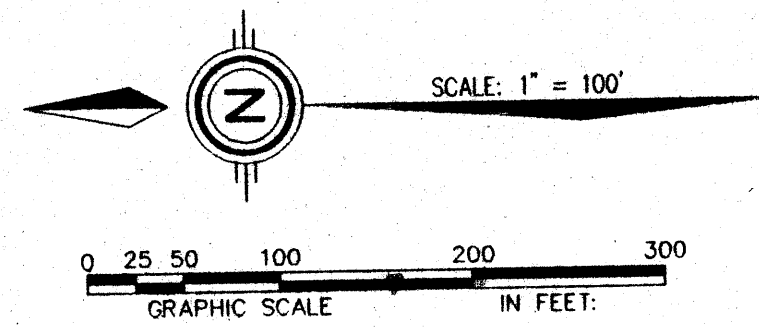
NOVEMBER, 1993
COMPRISING ALL OF "REVISED TRACT C"
UNIT 16, RIO RANCHO ESTATES
SITUATE WITHIN
THE TOWN OF ALAMEDA GRANT
PROJECTED SECTION 31, T12N, R3E, N.M.P.M
CITY OF RIO RANCHO
SANDOVAL COUNTY
NEW MEXICO

SHEET 2 OF 3
PLAT OF GEOMETRY

CURVE	RADIUS	ARC	DELTA	TANGENT	CHORD	CHORD BRG
C1	25.00	44.88	102°51'30"	31.35	39.09	S38°34'15"E
C2	25.00	39.27	090°00'12"	25.00	35.36	S57°51'36"W
C3	1170.92	262.85	012°51'42"	131.98	262.29	S83°34'09"E
C4	25.00	44.88	102°51'30"	31.35	39.09	N38°34'15"W
C5	25.00	33.66	077°08'30"	19.94	31.17	N51°25'45"E
C6	75.00	134.64	102°51'30"	94.05	117.28	S38°34'15"E
C7	140.00	188.49	077°08'30"	111.64	174.57	N38°34'15"W
C8	25.00	44.88	102°51'30"	31.35	39.09	N51°25'45"E
C9	35.00	23.13	037°51'49"	12.00	22.71	S71°04'05"W
C10	60.00	39.65	037°51'49"	20.58	38.93	N71°04'05"E
C11	60.00	94.25	090°00'00"	60.00	84.85	S45°00'00"E
C12	60.00	133.90	127°51'49"	122.65	107.79	S63°55'55"W
C13	35.00	23.13	037°51'49"	12.00	22.71	S71°04'05"E
C14	25.00	33.66	077°08'30"	19.94	31.17	N51°25'45"E
C15	195.00	306.29	089°59'48"	194.99	275.76	N32°08'24"W
C16	192.50	96.85	028°49'34"	49.47	95.83	N06°18'43"W
C17	25.00	39.27	090°00'12"	25.00	35.36	S57°51'36"W
C18	192.50	15.98	004°45'26"	8.00	15.98	N10°28'47"E
C19	192.50	112.83	033°35'00"	58.09	111.22	N03°56'00"W



#30A	#30B	#30C	#30D	#30E	#30F	#30G	#30H	#30I	#30J	#30K	#30L	#30M	#30N	#30O	#30P	#30Q	#30R	#30S	#30T	#30U	#30V	#30W	#30X	#30Y	#30Z
41	50																								
#70J	#70K	#70L	#70M	#70N	#70O	#70P	#70Q	#70R	#70S	#70T	#70U	#70V	#70W	#70X	#70Y	#70Z									



EASEMENTS:

The replat (reddivision) contained herein includes the location of existing easements and the grant of additional easements as further described below and as shown on the accompanying map. "Owner's" means and refers to the parties of interest to the real estate subdivided by this plat, including their successors and assigns. "Developer's" means and refers to the person or persons who have caused this instrument including all interests to the described real estate, including security interests. "Maintenance Association" means and refers to any association, trust, partnership, corporation or entity created pursuant to the covenants recorded with this plat that have as its primary purpose the installation, maintenance, irrigation, paving and replacement of landscaping, paving, walkways and street and both by the developer as the initial obligation of all owners.

As signatories to the approval of this plat, the utilities, governmental entities and parties herein named accept the grant of easements as hereby created and subscribe and agree to the location of certain portions of existing easements.

The easements created by this plat are as shown herein and are:

TYPE 1 EASEMENT: a Landscaping Easement and Drainage Easement GRANTED to the Owners, the Developer and to the Maintenance Association, including the right to landscape, irrigate, maintain and replace surface and subsurface facilities, including signage and lighting.

TYPE 2 EASEMENT: an underground Utility Easement GRANTED to the City of Rio Rancho, the Gas Company of New Mexico and to Rio Rancho Utilities for gas lines, water, sanitary sewer and drainage conduits including appurtenances.

TYPE 3 EASEMENT: an underground Easement for Electric Power, Telephones, Television and Security Communications GRANTED to the Public Service Company of New Mexico, AT&T, West, Tritel/Telecom Cable and other public and private service companies including the surface rights for transmission, pedestals, switch gear and appurtenances. The surface uses for communications and electric utilities is limited to placement on or not in violation with, and conflicting access, drainage or other easements granted to others.

TYPE 4 EASEMENT: a Landscaping Easement GRANTED to the Owners, the Developer and the Maintenance Association, including the right to landscape, irrigate, maintain and replace surface and subsurface facilities, including signage and lighting. See covenants for any restrictions and exceptions applicable to the easement areas. Surface and/or subsurface drainage infrastructure may cross through this easement.

TYPE 5 EASEMENT: a surface and/or underground Drainage Easement and a Reciprocal Access Easement GRANTED to the Owners, the Developer, the Maintenance Association and their assigns. Access provisions include all vehicles including truck, bus and delivery systems and for pedestrian and bicycle use.

TYPE 6 EASEMENT: a Landscaping, Non-Vehicular Access, and Drainage Easement GRANTED to the City of Rio Rancho for drainage and pedestrian and bicycle access purposes and to the Owners, the Developer and to the Maintenance Association, including the right to landscape, irrigate, maintain and replace surface and subsurface facilities, including signage and lighting and for "street furniture" and pedestrian facilities including benches, walls, bus stops and the like. The grant of certain uses and easement to the City of Rio Rancho include the right of the City as a "tenant and easement" party for the enforcement of any covenants which may be placed within the real estate for appearance, safety, maintenance, drainage and pedestrian and bicycle traffic functions.

TYPE 7 EASEMENT: a surface and/or underground Drainage Easement GRANTED to the Owners, the Developer and the Maintenance Association and their assigns, including the right to install, maintain and replace surface and subsurface drainage facilities including appurtenances.

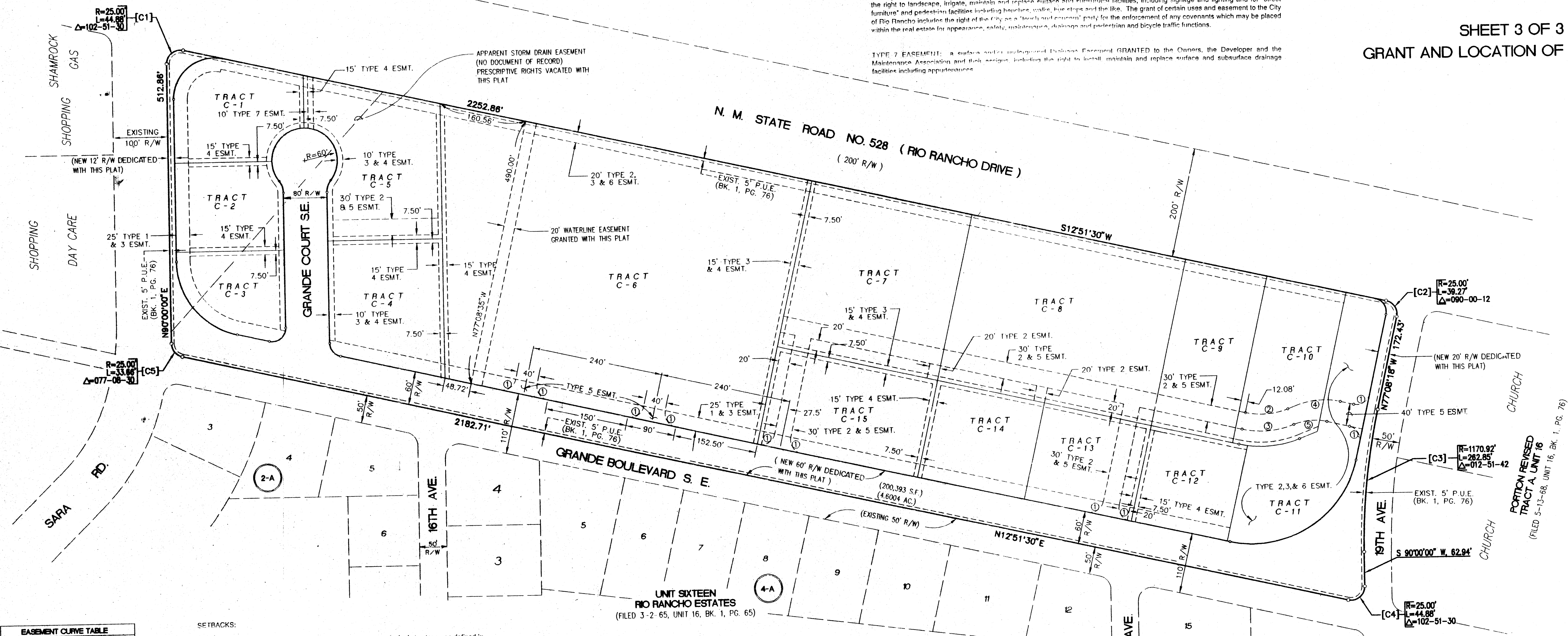
INSTRUMENT NO. _____

GATEWAY NORTH
TRACTS C-1 THROUGH C-15

NOVEMBER, 1993
COMPRISING ALL OF "REVISED TRACT C"
UNIT 16, RIO RANCHO ESTATES

SITUATE WITHIN
THE TOWN OF ALAMEDA GRANT
PROJECTED SECTION 31, T12N, R3E, N.M.P.M
CITY OF RIO RANCHO
SANDOVAL COUNTY
NEW MEXICO

SHEET 3 OF 3
GRANT AND LOCATION OF EASEMENTS



EASEMENT CURVE TABLE			
NO.	RAD.	ARC	DELTA
1	25.00'	39.27'	090-00-00
2	135.00'	79.13'	033-35-00
3	165.00'	96.70'	033-35-00
4	140.05'	82.10'	033-35-12
5	105.05'	61.58'	033-35-12

Abbreviations used on this plat are:

ESMT	Easement
R/W	Right-of-Way
Ac.	Acres
S.F.	Square Feet
FND.	Found

SETRACKS:

Setbacks from property lines and street rights-of-way lines to principal structures, as defined in the City of Rio Rancho Subdivision Ordinance, are the more restrictive of that Ordinance and the following, as hereby established:

(New) Grande Blvd	40 feet
Sara Road	40 feet
21st Avenue	40 feet
N.M.S.R. #528	40 feet
Cut-De-Sac	40 feet

Other, Interior Lot Lines created by this Replat (not encumbered by easements as shown hereon and/or modified by the Developer and their assigns).

None, providing all buildings are either attached (common wall or minimum fire separation) or detached. Detached buildings must maintain a minimum separation of 20 feet between structures.

DATE: 11-24-93
SCALE: 1"=100'
DESIGNED: C.A.S.
DRAWN: D.E.R.
CHECKED: 71-21-025

community sciences corporation

INSTRUMENT NO. _____

GATEWAY SOUTH

TRACTS A-1 THROUGH A-13

NOVEMBER, 1993

COMPRISING A PORTION OF AMENDED TRACT A
UNIT 16, RIO RANCHO ESTATES

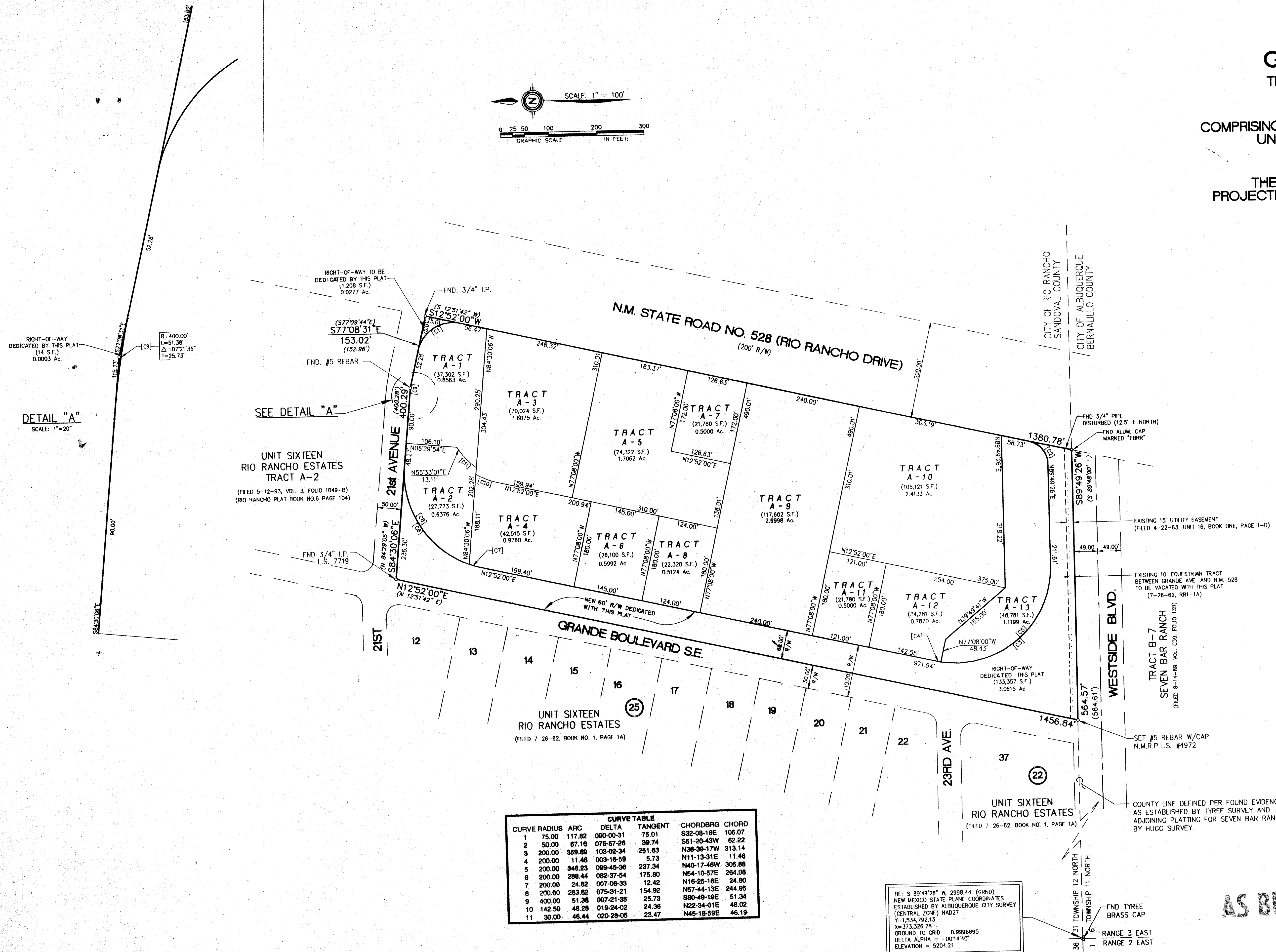
SITUATE WITHIN

THE TOWN OF ALAMEDA GRANT
PROJECTED SECTION 31 T12 N., R3 E. N.M.P.M.
CITY OF RIO RANCHO
SANDOVAL COUNTY
NEW MEXICO

SHEET 2 OF 3

PLAT OF GEOMETRY

(SEE SHEET 3 OF 3 FOR EASEMENTS)



UNIT SIXTEEN
RIO RANCHO ESTATES
TRACT A-2
(FILED 5-12-93, VOL. 3, FOLIO 1049-B)
(RIO RANCHO PLAT BOOK NO. 6 PAGE 104)

CURVE	RADIUS	ARC	DELTA	TANGENT	CHORD	CHORD
1	75.00	117.82	090-00-31	75.01	S32-08-16E	106.07
2	50.00	67.16	076-57-26	39.74	S51-20-43W	62.22
3	200.00	359.89	103-02-34	251.63	N38-39-17W	313.14
4	200.00	11.46	003-16-59	5.73	N11-13-31E	11.46
5	200.00	348.23	099-45-36	237.34	N40-17-49W	305.88
6	200.00	288.44	082-37-54	175.80	N54-10-57E	264.08
7	200.00	24.82	007-06-33	12.42	N16-25-16E	24.80
8	200.00	263.62	075-31-21	154.92	N57-44-13E	244.95
9	400.00	51.36	007-21-35	25.73	S80-49-19E	51.34
10	142.50	48.25	019-24-02	24.36	N22-34-01E	48.02
11	30.00	46.44	020-28-05	23.47	N45-18-59E	46.19

TIE: S 89°49'26" W, 2998.44' (GRID)
NEW MEXICO STATE PLANE COORDINATES
ESTABLISHED BY ALBUQUERQUE CITY SURVEY
(CENTRAL ZONE) NAD27
X=373,326.28
Y=1,534,792.13
GROUND TO GRID = 0.9996695
DELTA ALPHA = -00°14'40"
ELEVATION = 5204.21

AS BUILT

NOV. 24, 1993
1"=100'
C.A.S.
S.P.S.
71-21-025

PROJ. #	15
BOOK #	05
SHEET #	19
DATE	NOV 24, 1993
DRAWN BY	CAS
CHECKED BY	SPS
DATE	NOV 24, 1993
DATE	NOV 24, 1993
DATE	NOV 24, 1993
DATE	NOV 24, 1993

INSTRUMENT NO. _____

GATEWAY SOUTH

TRACTS A-1 THROUGH A-13

NOVEMBER, 1993
COMPRISING A PORTION OF AMENDED TRACT A
UNIT 16, RIO RANCHO ESTATES
SITUATE WITHIN
THE TOWN OF ALAMEDA GRANT
PROJECTED SECTION 31 T12 N., R3 E. N.M.P.M.
CITY OF RIO RANCHO
SANDOVAL COUNTY
NEW MEXICO

SHEET 3 OF 3

GRANT AND LOCATION OF EASEMENTS

SETBACKS:

Setbacks from property lines and street rights-of-way lines to principal structures, as defined in the City of Rio Rancho Subdivision Ordinance, are the more restrictive of that Ordinance and the following, as hereby established.

(New) Grande Blvd.	40 feet
Sara Road	40 feet
21st Avenue	40 feet
N.M.S.R. #528	40 feet
Cul-De-Sac	40 feet

Other, Interior Lot Lines created by this Replat (not encumbered by easements as shown hereon and/or modified by the Developer and their assigns).

None, providing all buildings are either attached (common wall or minimum fire separation) or detached. Detached buildings must maintain a minimum separation of 20 feet between structures.

EASEMENTS:

The replat (subdivision) contained herein includes the vacation of certain easements and the grant of additional easements as further described below and as shown on the accompanying map. "Owners" mean and refer to the parties of interest to the real estate subdivided by this plat, including their successors and assigns. "Developers" means and refers to the preparator (subdivider) of this instrument including all interests to the described real estate, including security interests. "Maintenance Association" means and refers to any association, trust, partnership, corporation or entity created pursuant to the covenants recorded with this plat that has as its primary obligation the installation, maintenance, irrigation, paving and replacement of landscaping, paving, walkways and areas set forth by the developer as the joint obligation of all owners.

As signatories to the approval of this plat, the utilities, governmental entities and parties herein named accept the grant of easements as hereby created and subscribe and agree to the Vacation of certain portions of existing easements.

The easements effected by this plat are as shown hereon and are:

TYPE 1 EASEMENT: a Landscaping Easement and Drainage Easement GRANTED to the Owners, the Developer and to the Maintenance Association, including the right to landscape, irrigate, maintain and replace surface and subsurface facilities, including signage and lighting.

TYPE 2 EASEMENT: an underground Utility Easement GRANTED to the City of Rio Rancho, the Gas Company of New Mexico and to Rio Rancho Utilities for gas lines, water, sanitary sewer and drainage conduits including appurtenances.

TYPE 3 EASEMENT: an underground Easement for Electric Power, Telephone, Television and Security Communications GRANTED to the Public Service Company of New Mexico, U.S. West, First/Newsweek Cable and other public and private service companies including the surface rights for transformers, pedestals, switch gear and appurtenances. The surface uses for communications and electric utilities is limited to placement so as not to interfere with and conflicting access, drainage or other easements granted to others.

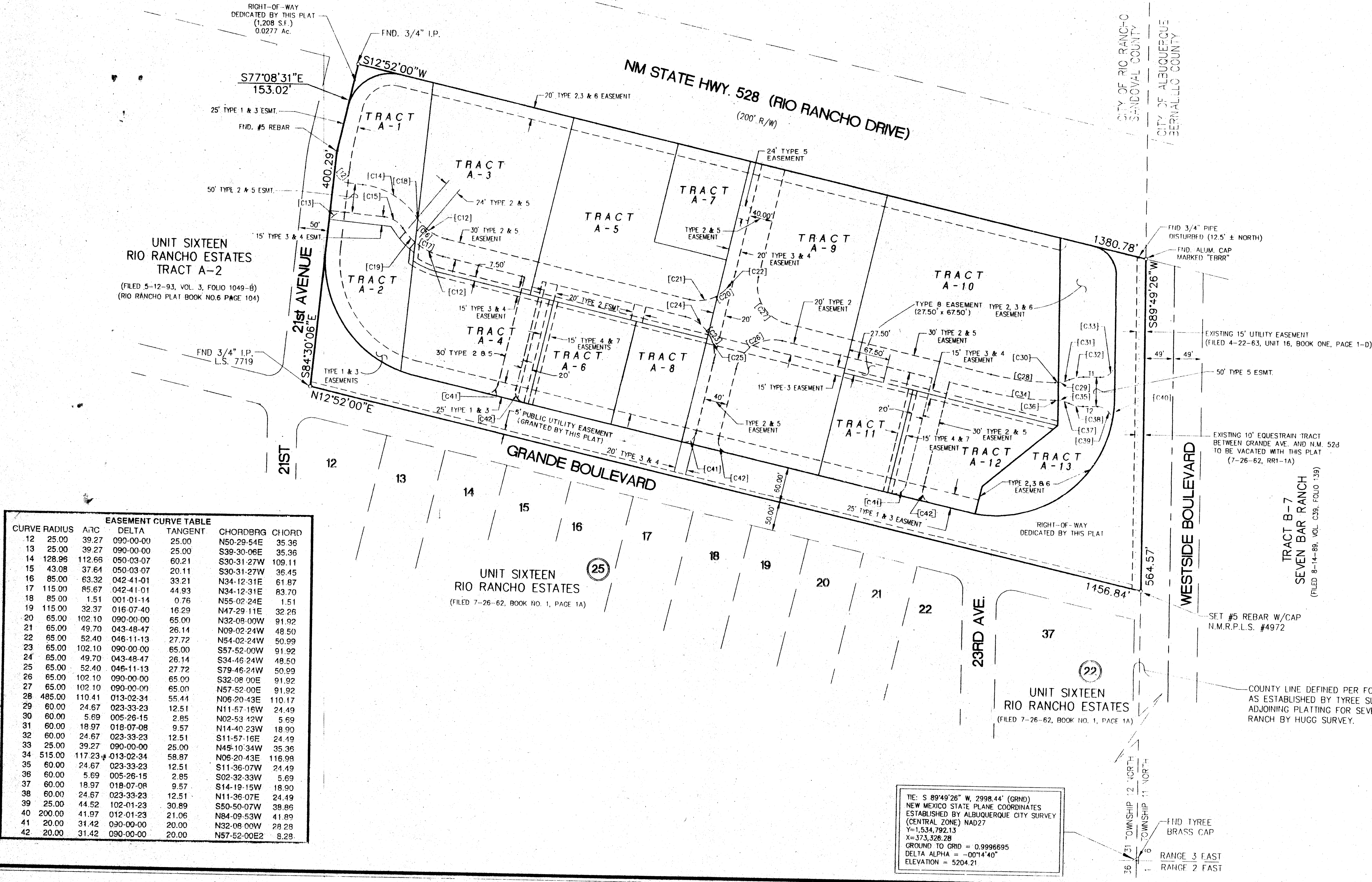
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TYPE 5 EASEMENT: a surface and/or underground Drainage Easement and a Reciprocal Access Easement GRANTED to the Owners, the Developer, the Maintenance Association and their assigns. Access provisions include all vehicles including truck, bus and delivery systems and for pedestrian and bicycle use.

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TYPE 7 EASEMENT: a surface and/or underground Drainage Easement GRANTED to the Owners, the Developer and the Maintenance Association and their assigns, including the right to install, maintain and replace surface and subsurface drainage facilities including appurtenances.

TYPE 8 EASEMENT: a Utility Easement GRANTED to Rio Rancho Utilities for a sewage lift station and related appurtenances.



EASEMENT CURVE TABLE				
CURVE RADIUS	ARC	DELTA	TANGENT	CHORD
12	25.00	39.27	090-00-00	25.00
13	25.00	39.27	090-00-00	25.00
14	128.96	112.66	050-03-07	60.21
15	43.08	37.64	050-03-07	20.11
16	85.00	63.32	042-41-01	33.21
17	115.00	85.67	042-41-01	44.93
18	85.00	1.51	001-01-14	0.76
19	115.00	32.37	016-07-40	16.29
20	65.00	102.10	090-00-00	65.00
21	65.00	49.70	043-48-47	26.14
22	65.00	52.40	046-11-13	27.72
23	65.00	102.10	090-00-00	65.00
24	65.00	49.70	043-48-47	26.14
25	65.00	52.40	046-11-13	27.72
26	65.00	102.10	090-00-00	65.00
27	65.00	102.10	090-00-00	65.00
28	485.00	110.41	013-02-31	55.44
29	60.00	24.67	023-33-23	12.51
30	60.00	5.69	005-26-15	2.85
31	60.00	18.97	018-07-08	9.57
32	60.00	24.67	023-33-23	12.51
33	25.00	39.27	090-00-00	25.00
34	515.00	117.23	013-02-34	58.87
35	60.00	24.67	023-33-23	12.51
36	60.00	5.69	005-26-15	2.85
37	60.00	18.97	018-07-08	9.57
38	60.00	24.67	023-33-23	12.51
39	25.00	44.52	102-01-23	30.89
40	200.00	41.97	012-01-23	21.06
41	20.00	31.42	030-00-00	20.00
42	20.00	31.42	090-00-00	20.00

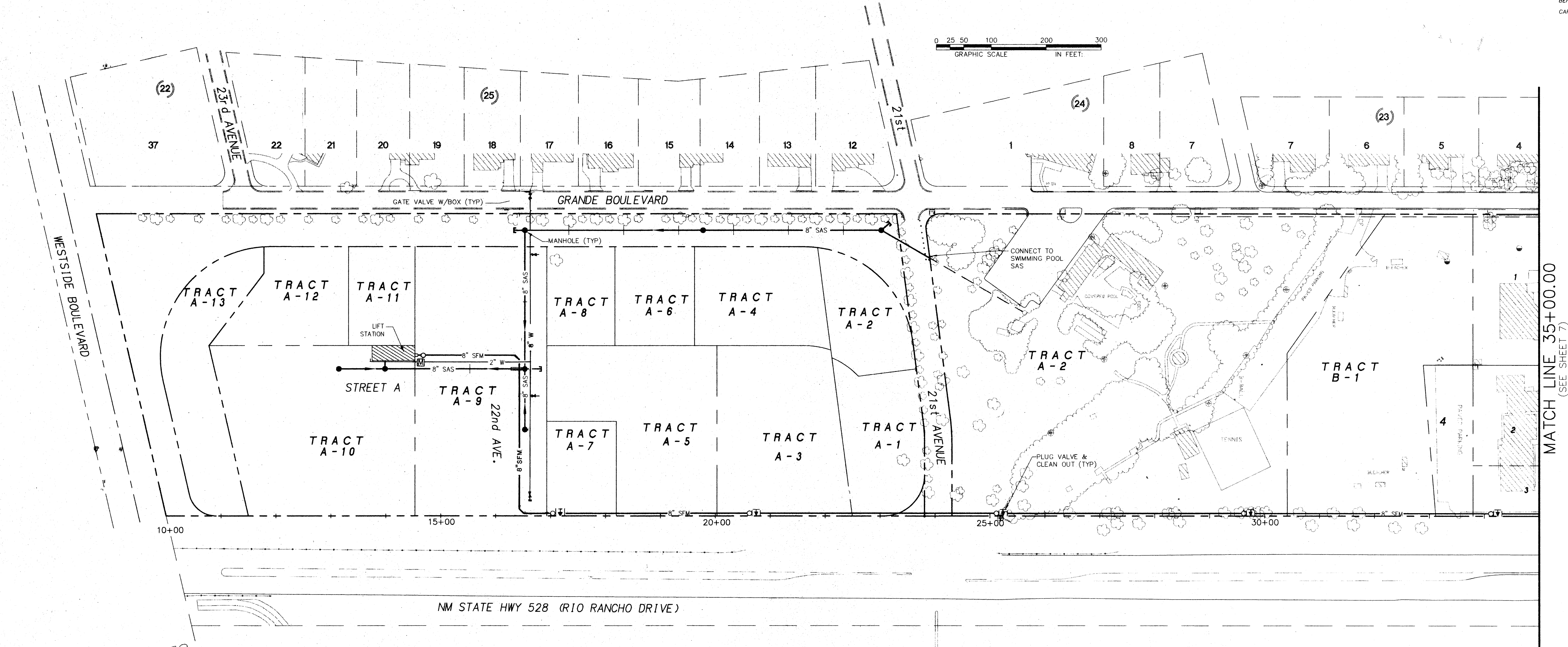
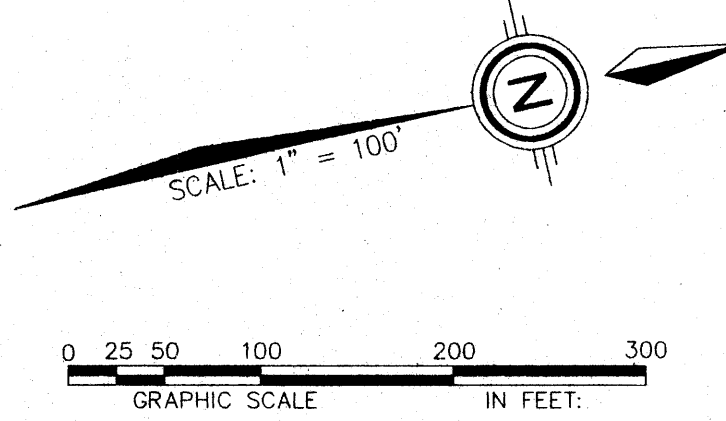
TIE: S 89°48'26" W, 2998.44' (GRND)
NEW MEXICO STATE PLANE COORDINATES
ESTABLISHED BY ALBUQUERQUE CITY SURVEY
(CENTRAL ZONE) NAD27
Y=1,534,792.13
X=373,326.28
GROUND TO GRID = 0.9996695
DELTA ALPHA = -00°14'40"
ELEVATION = 5204.21

AS BUILT

DATE	NOV 24, 1993
SCALE	1"=100'
DRAWN BY	CAS
CHECKED BY	SPS
DATE	NOV 24, 1993
DATE	NOV 24, 1993
DATE	NOV 24, 1993
DATE	NOV 24, 1993

10	50	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300	4400	4500	4600	4700	4800	4900	5000	5100	5200	5300	5400	5500	5600	5700	5800	5900	6000	6100	6200	6300	6400	6500	6600	6700	6800	6900	7000	7100	7200	7300	7400	7500	7600	7700	7800	7900	8000	8100	8200	8300	8400	8500	8600	8700	8800	8900	9000	9100	9200	9300	9400	9500	9600	9700	9800	9900	10000
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UTILITY LEGEND		
DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER LINE	8" SAS	8" SAS
ENCASEMENT	8" SFM	8" SFM
SANITARY SEWER MANHOLE	8" SFM	8" SFM
SANITARY FORCE MAIN	8" SFM	8" SFM
PLUG VALVE	8" SFM	8" SFM
CLEANOUT	8" SFM	8" SFM
WATER LINE	W-6"	W-6"
GATE VALVE	W-6"	W-6"
FIRE HYDRANTS	W-6"	W-6"
CROSSES	W-6"	W-6"
BENDS	W-6"	W-6"
CAPS & PLUGS	W-6"	W-6"



CITY OF RIO RANCHO
SANDOVAL COUNTY
CITY OF ALBUQUERQUE
BERNALILLO COUNTY

- WATERLINE NOTES:**
1. WATERLINES SHALL BE CONSTRUCTED WITH 4.0 FT. OF COVER MEASURED FROM FINISH GRADE TO THE TOP OF THE PIPE.
 2. FINISH GRADE FOR THE GATEWAY COMMERCIAL PROJECT SHALL BE THE SAME ELEVATION AS PRE-CONSTRUCTION CONDITIONS.
 3. PIPE FOR WATERLINES SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR18, PER AWWA C900.
 4. WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES A MINIMUM OF 10 FEET APART HORIZONTALLY WITH THE WATER LINE HIGHER IN ELEVATION THAN THE SEWER. IF HORIZONTAL SEPARATION IS LESS THAN 10 FEET, THE WATER LINE SHALL BE A MINIMUM OF 1.5 FEET IN ELEVATION HIGHER THAN THE SEWER. AT ALL CROSSINGS OF WATER AND SEWER LINES, THE WATERLINE SHALL BE A MINIMUM OF 3 FEET HIGHER THAN THE SEWER OR THE SEWER LINE SHALL BE OF DUCTILE IRON PIPE OR ENCASED IN CONCRETE A DISTANCE OF 10 FEET ON EACH SIDE OF THE WATERLINE, PER DETAIL SHOWN ON SHEET 17.
 5. THE CONTRACTOR SHALL NOTIFY RIO RANCHO UTILITIES CORPORATION, AT LEAST 24 HOURS PRIOR TO STARTING WORK ON THIS PROJECT.

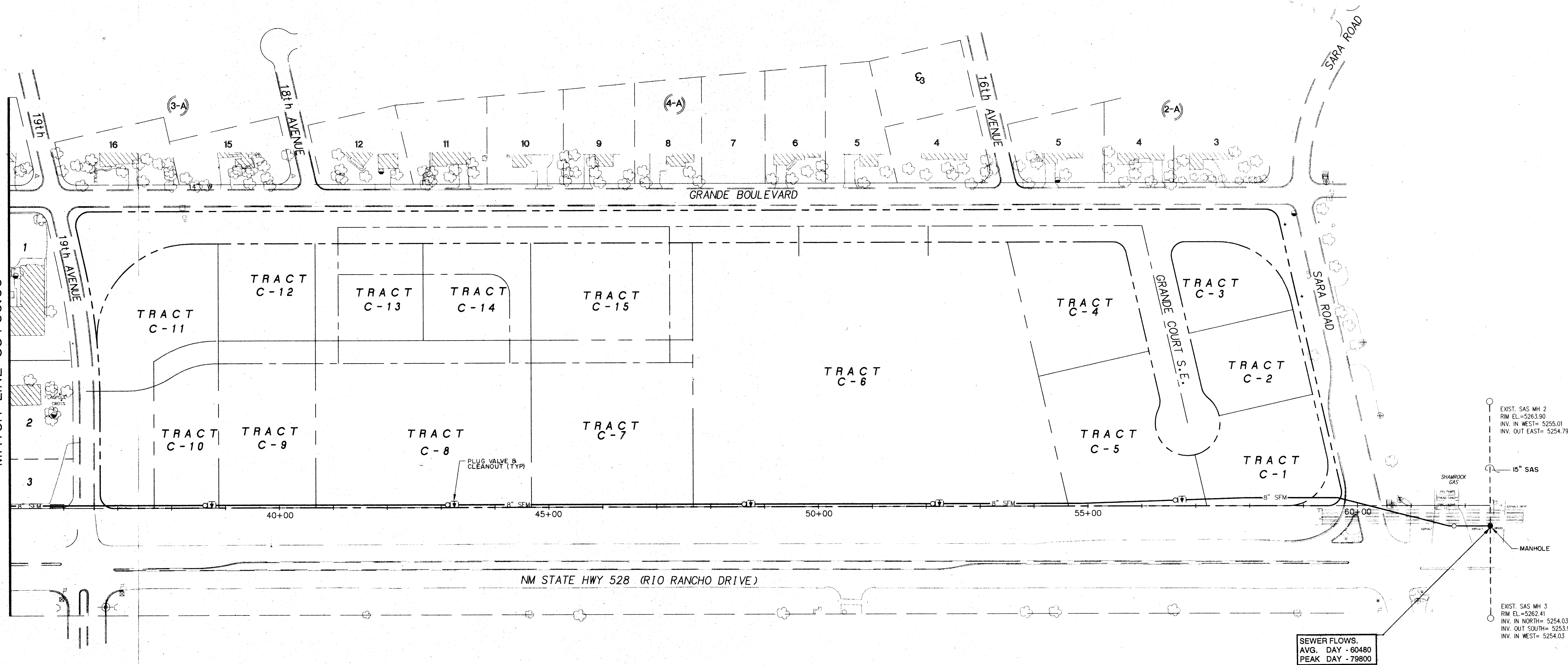
- SANITARY SEWER NOTES:**
1. SEWER LINE DISTANCES SHOWN IN PROFILE ARE MEASURED IN A HORIZONTAL LINE BETWEEN CENTERLINES OF MANHOLES. THE DISTANCES BETWEEN MANHOLES IS REDUCED BY ONE HALF THE MANHOLE DIAMETERS TO CALCULATE SLOPE.
 2. PIPE FOR SEWER GRAVITY LINES AND LATERALS SHALL BE POLYVINYL CHLORIDE CONFORMING TO ASTM D3034, SDR35.
 3. STANDARD DETAILS FOR SEWER PLANS ARE CONTAINED ON SHEET 17.
 4. WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES A MINIMUM OF 10 FEET APART HORIZONTALLY, WITH THE WATER LINE HIGHER IN ELEVATION THAN THE SEWER. IF HORIZONTAL SEPARATION IS LESS THAN 10 FEET, THE WATER LINE SHALL BE A MINIMUM OF 1.5 FEET IN ELEVATION HIGHER THAN THE SEWER. AT ALL CROSSINGS OF WATER AND SEWER LINES, THE WATER LINE SHALL BE A MINIMUM OF 3 FEET HIGHER THAN THE SEWER OR THE SEWER LINE SHALL BE OF DUCTILE IRON PIPE OR ENCASED IN CONCRETE A DISTANCE OF 10 FEET ON EACH SIDE OF THE WATER LINE, PER DETAIL SHOWN ON SHEET 17.
 5. PIPE FOR THE SEWER FORCE MAIN SHALL BE POLYVINYL CHLORIDE (PVC) PIPE SDR18 PER AWWA C900. ALL FITTINGS SHALL BE RESTRAINED IN ACCORDANCE WITH STANDARD DRAWINGS "W-5". VALVES SHALL BE RESTRAINED IN ACCORDANCE WITH STANDARD DRAWING "W-3".

AS BUILT



GATEWAY COMPOSITE UTILITY PLAN		SHEET 6 OF 18	
DATE	JAN. 1994	SCALE	AS SHOWN
DESIGNED	T.L.M.	CHECKED	S.P.S.
IN CHARGE	T.L.M.	DATE	1-21-94

(SEE SHEET 6)
MATCH LINE 35+00.00



UTILITY LEGEND		
DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER LINE	8" SAS	8" SAS
ENCASEMENT		
SANITARY SEWER MANHOLE	8" SFM	8" SFM
SANITARY FORCE MAIN	8" SFM	8" SFM
PLUG VALVE		
CLEANOUT		
WATER LINE	W-6"	W-6"
GATE VALVE		
FIRE HYDRANTS		
CROSSES		
BENDS		
CAPS & PLUGS		

SEWER FLOWS
AVG. DAY - 60480
PEAK DAY - 79800

EXIST. SAS MH 2
RM EL. = 5263.90
INV. IN WEST = 5255.01
INV. OUT EAST = 5254.79

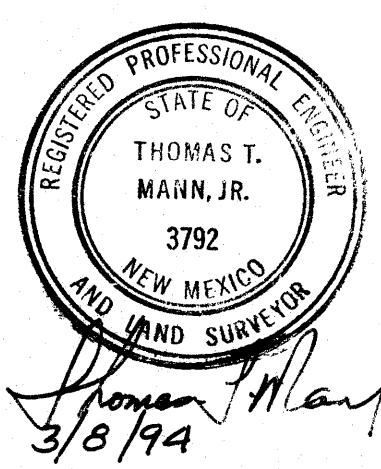
15" SAS

SHAMROCK GAS

MANHOLE

EXIST. SAS MH 3
RM EL. = 5262.41
INV. IN NORTH = 5254.03
INV. OUT SOUTH = 5253.98
INV. IN WEST = 5254.03

AS BUILT

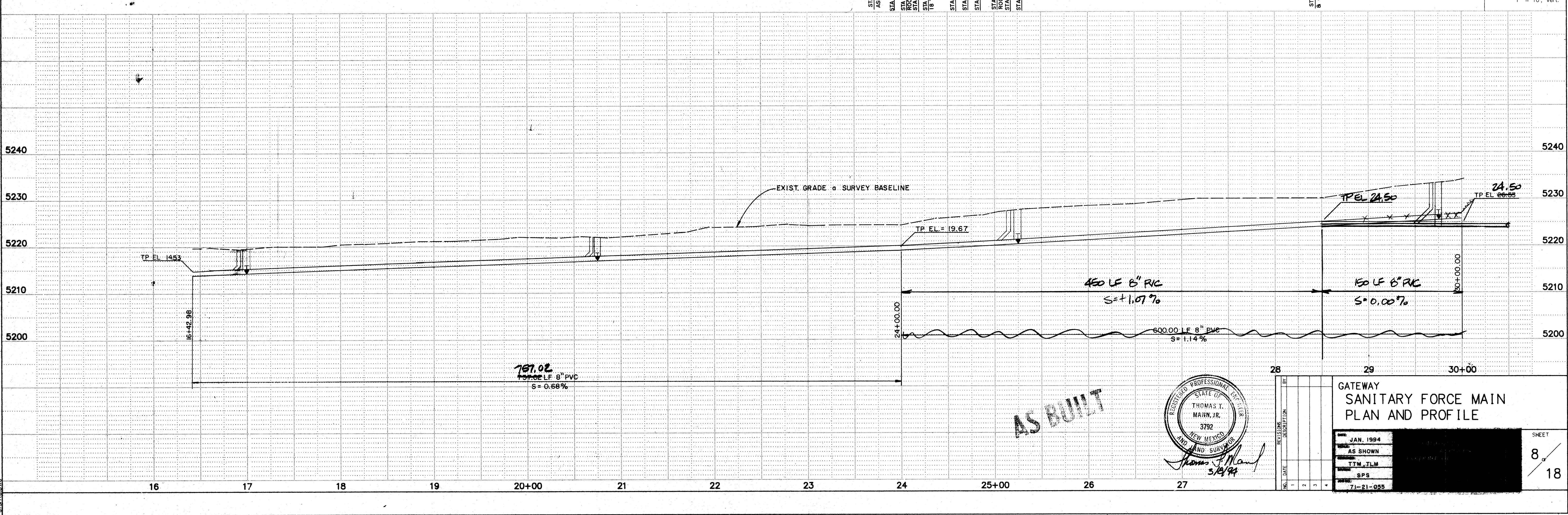
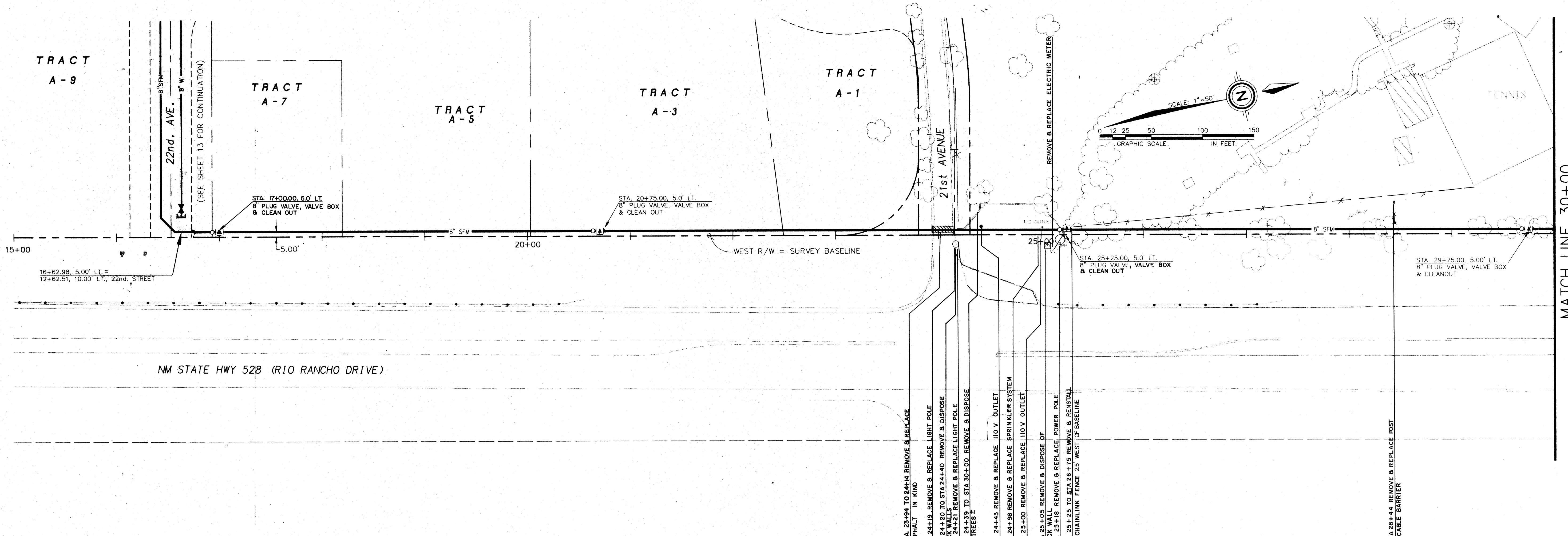


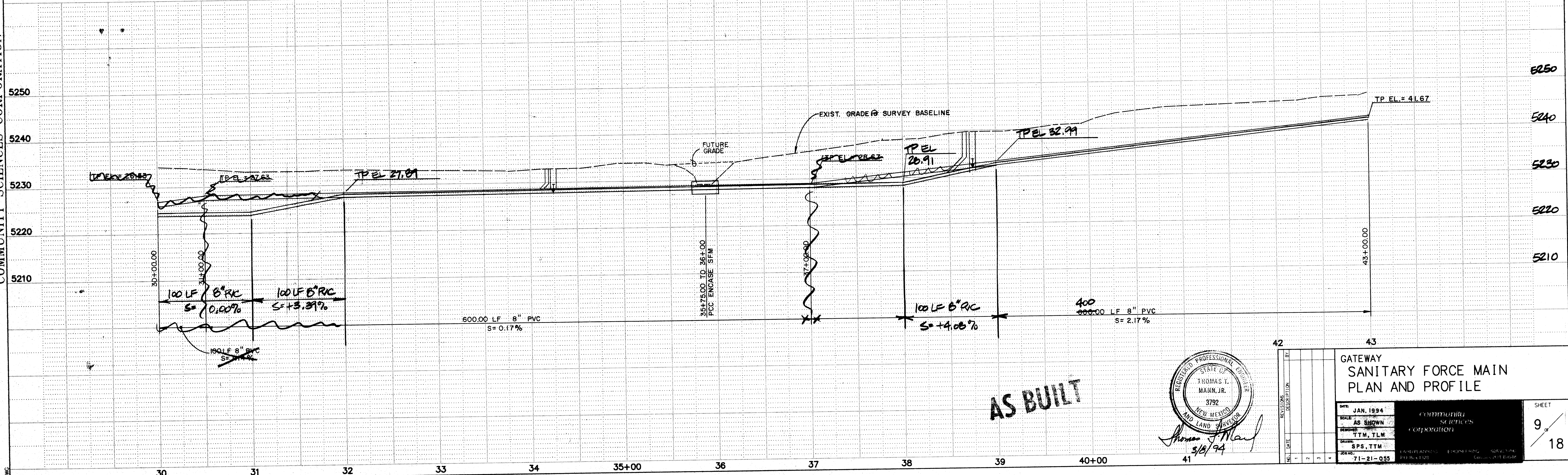
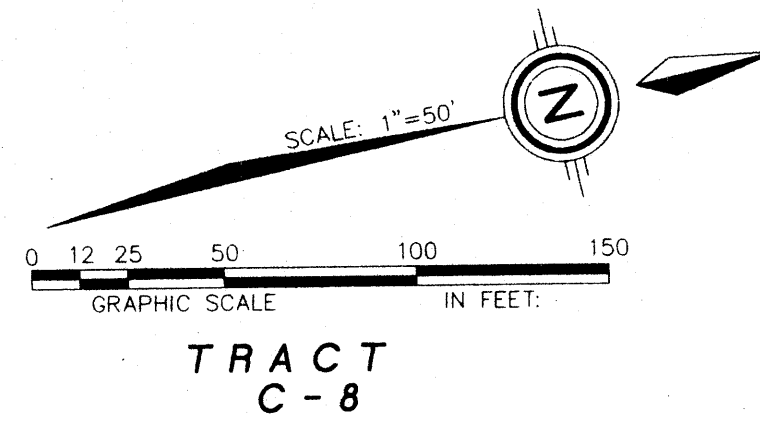
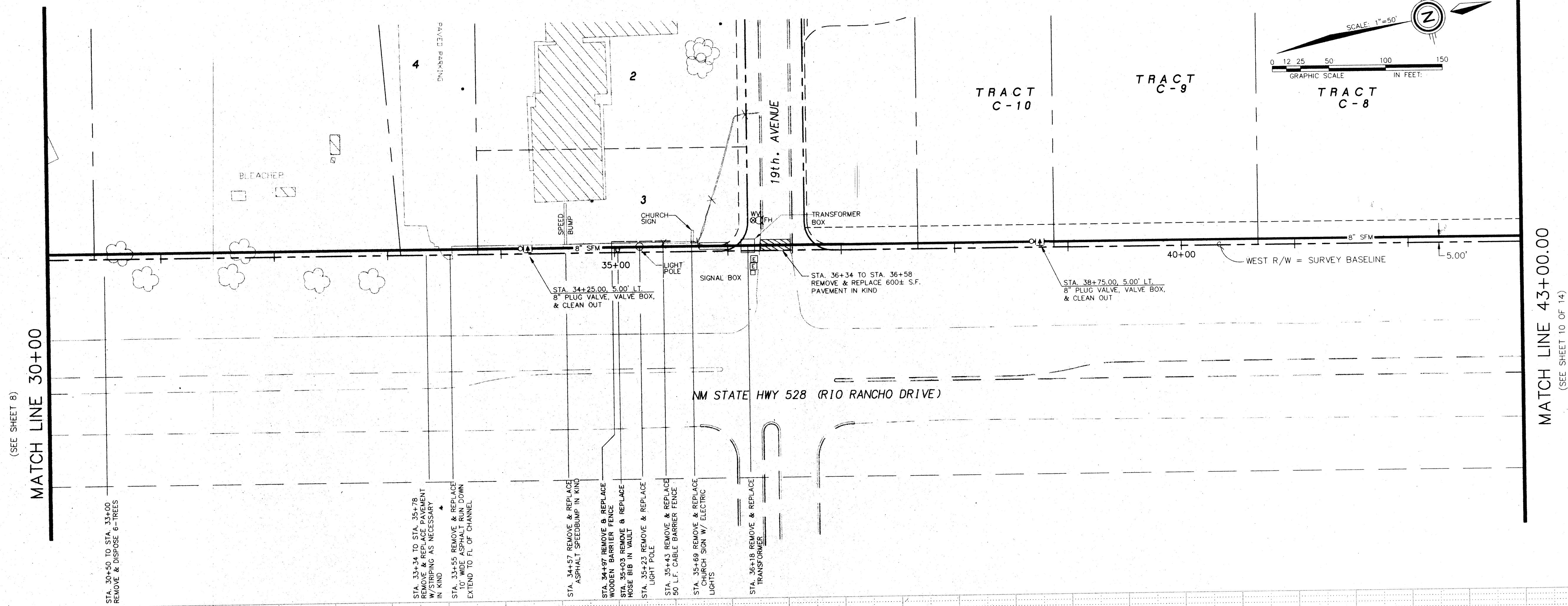
REVISIONS		DATE		BY	

GATEWAY COMPOSITE UTILITY PLAN	
DATE: JAN. 1994	
AS SHOWN	
T.T.M., TLM	
SPS	
11-21-055	

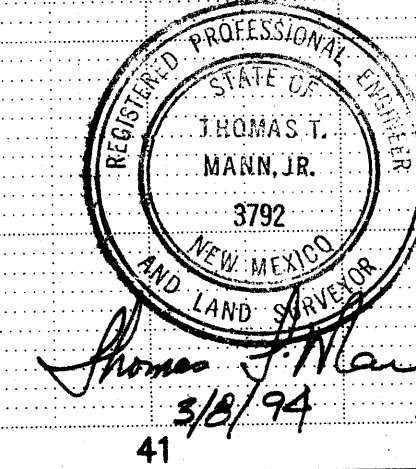
SHEET	7
18	

74	55	11-31-02	11-31-02
74	55	11-31-02	11-31-02
74	55	11-31-02	11-31-02
74	55	11-31-02	11-31-02





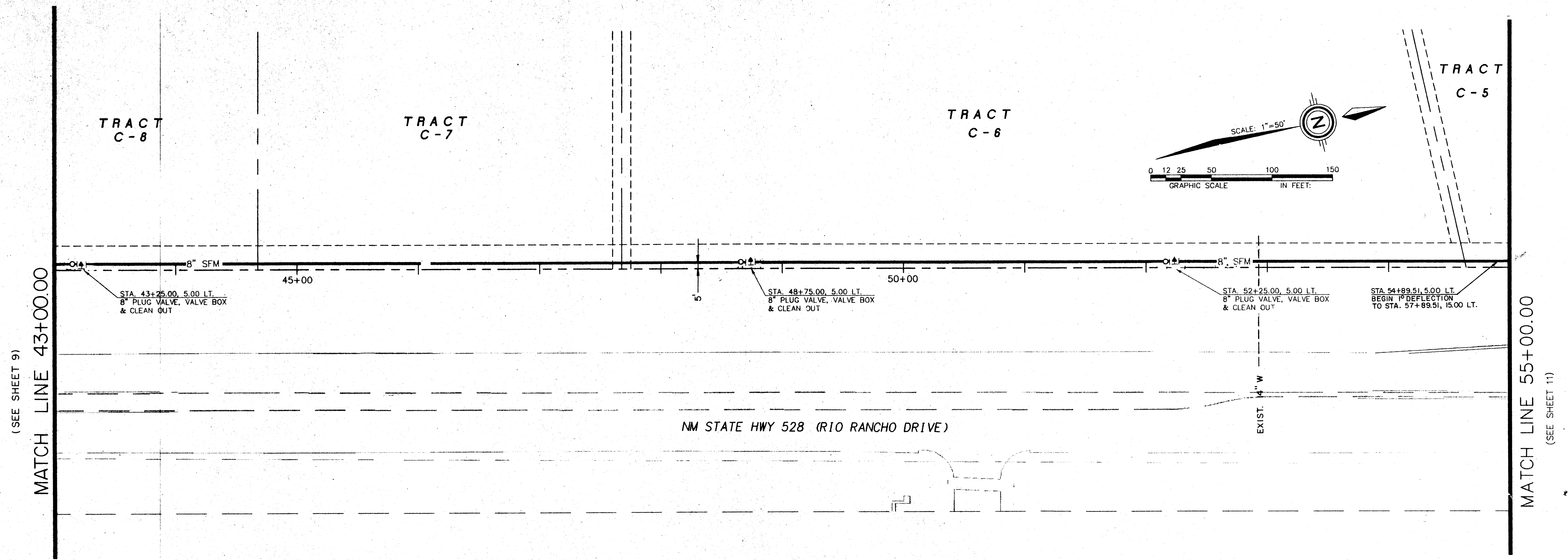
AS BUILT



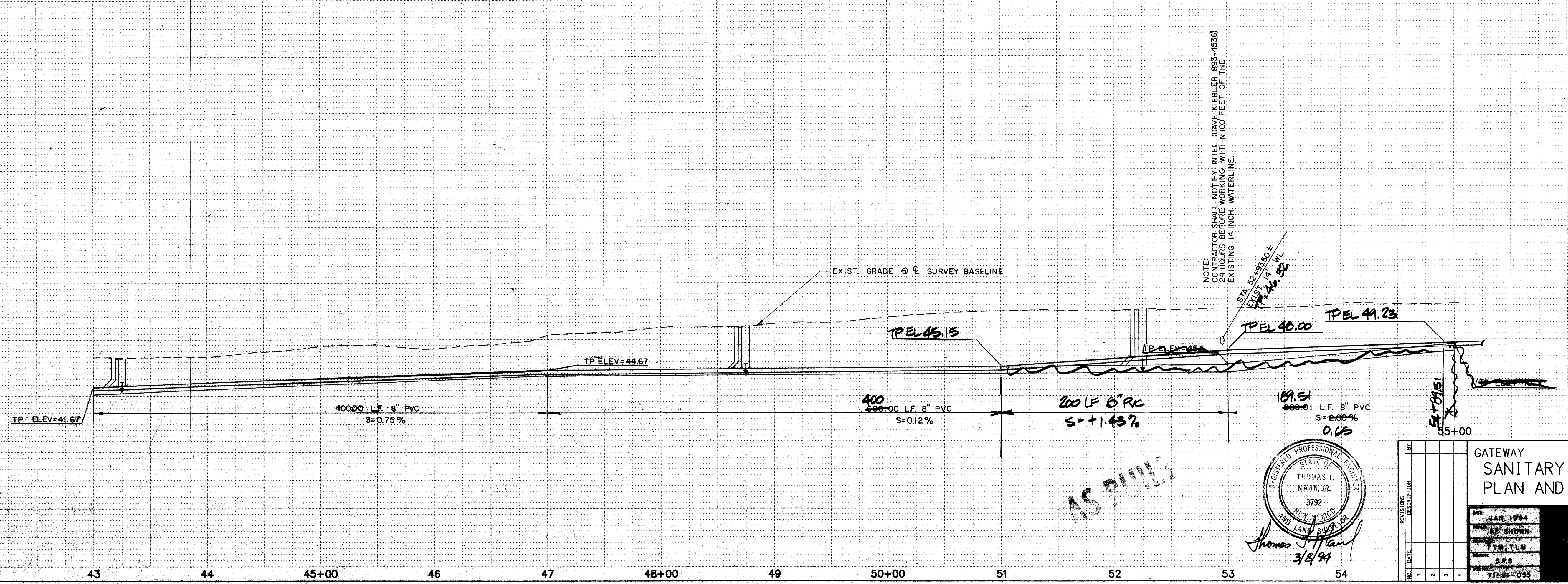
GATEWAY SANITARY FORCE MAIN PLAN AND PROFILE		SHEET 9 18	
DATE:	JAN. 1994	SCALE:	AS SHOWN
DRAWN:	SPS, TTM	DESIGNED:	TTM, TLM
CHECKED:	SPS, TTM	APPROVED:	THOMAS T. MANN, JR.
PROJECT NO.:	71-21-035	DATE:	3/6/94

C6

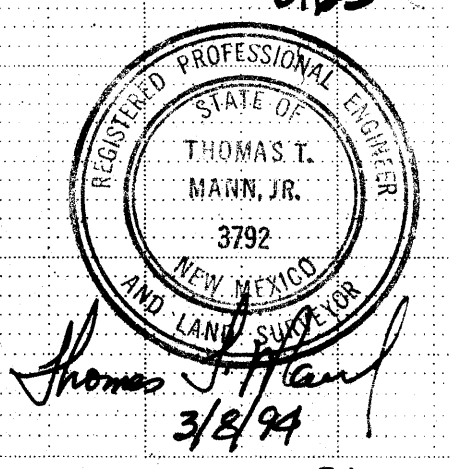
PROJECT	Sanitary Force Main
LOCATION	Tracts C-5, C-6, C-7, C-8
DATE	1/11/94
BY	SPS
CHECKED	SPS
APPROVED	SPS
SCALE	1"=50'



SCALE: 1" = 50', Horiz.
1" = 10', Vert.

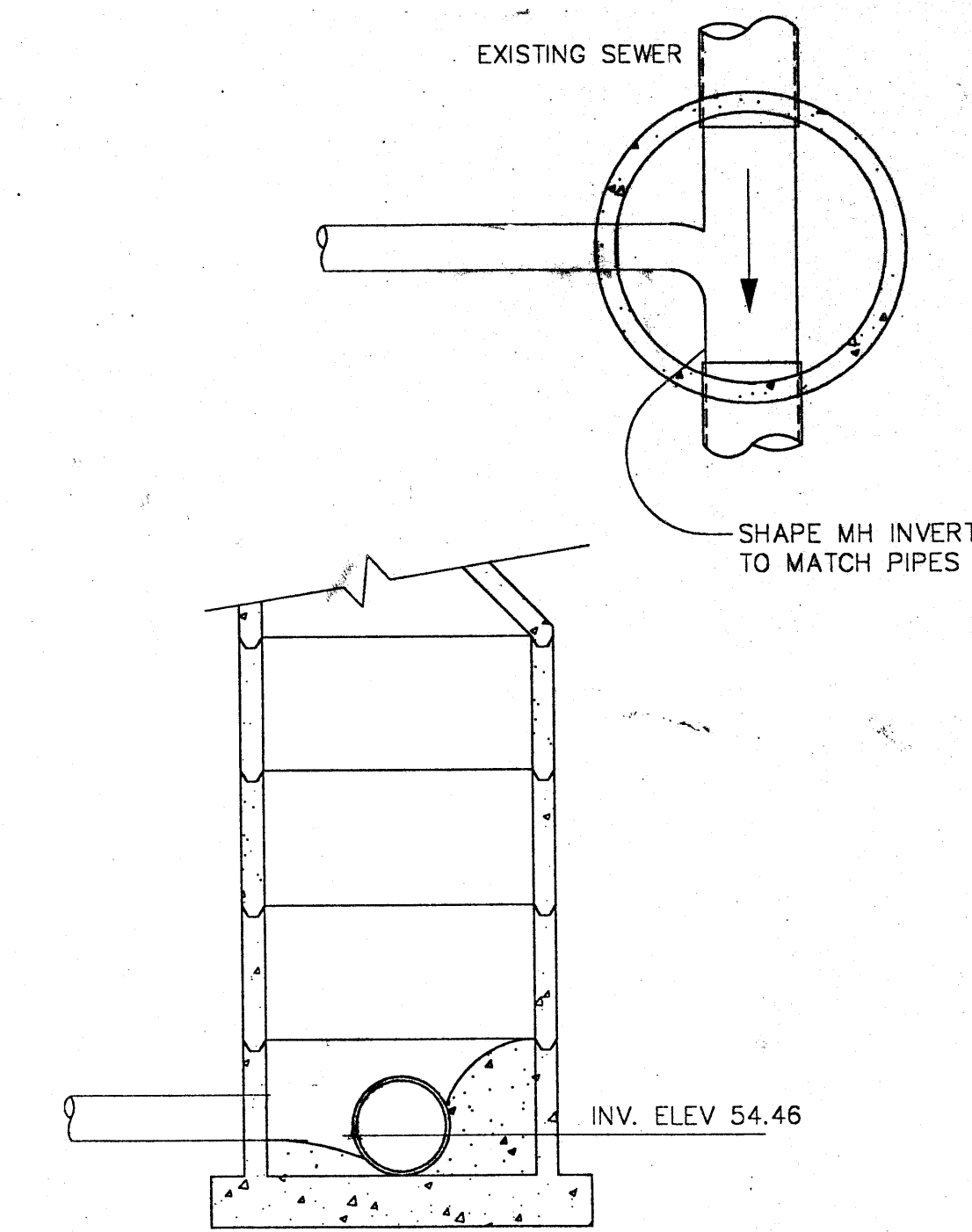
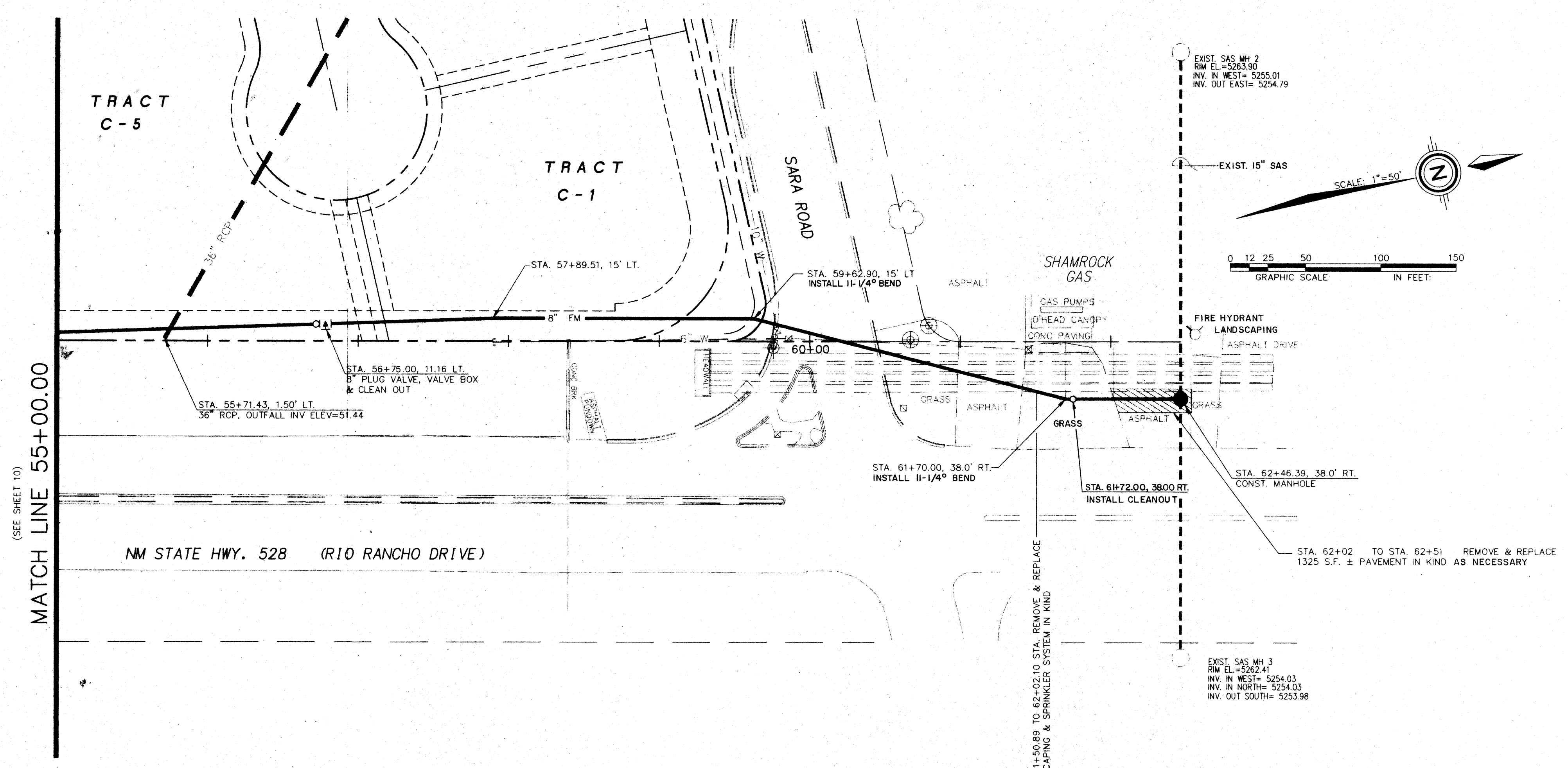


AS SHOWN



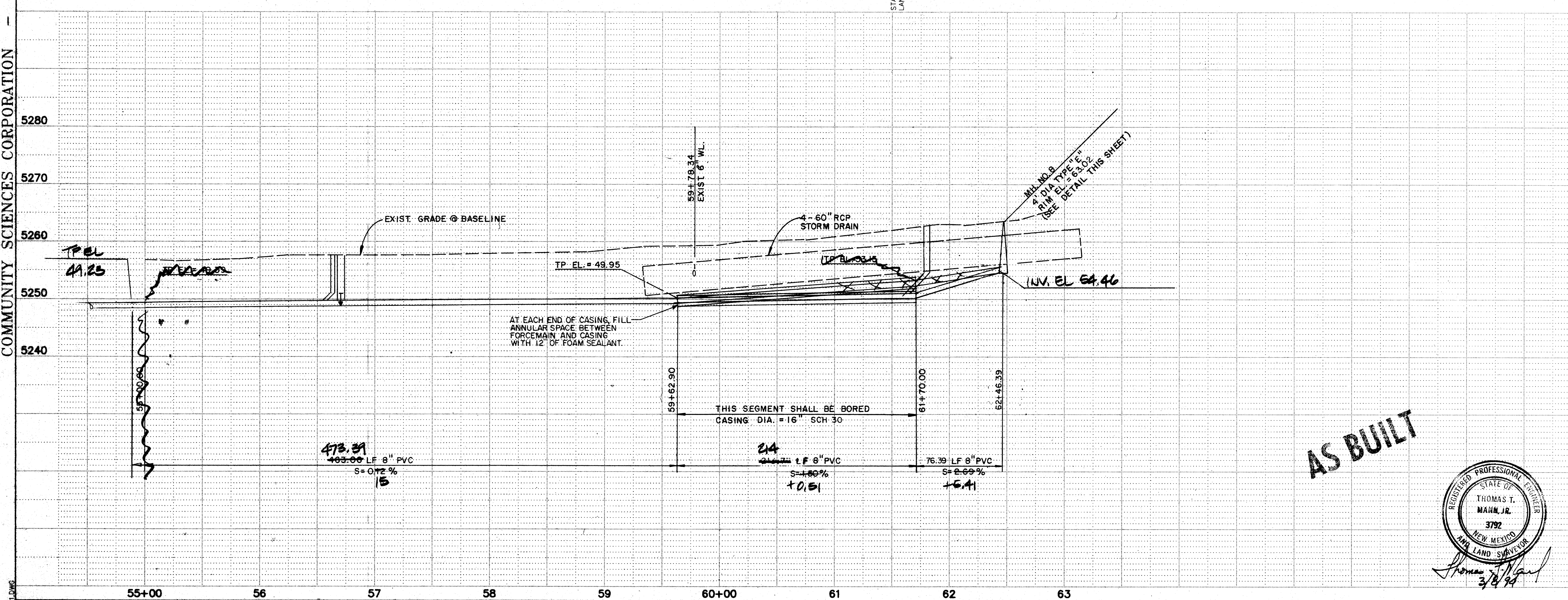
GATEWAY SANITARY FORCE MAIN PLAN AND PROFILE		SHEET 10 18
DATE JAN 1994	BY SPS	

76	55	11
76	55	11
76	55	11

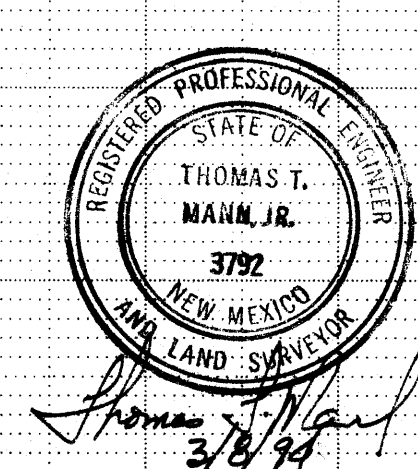


NOTES:
1. SEE STANDARD DRAWING S-2 ON DETAIL SHEET 16

SCALE: 1" = 50', Horiz.
1" = 10', Vert.



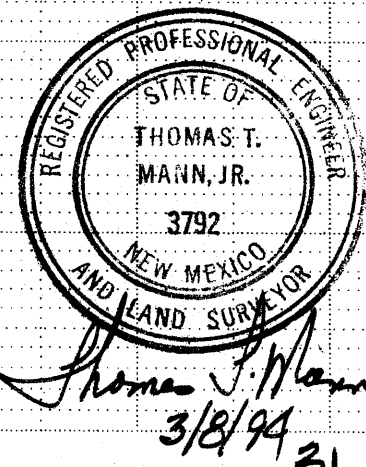
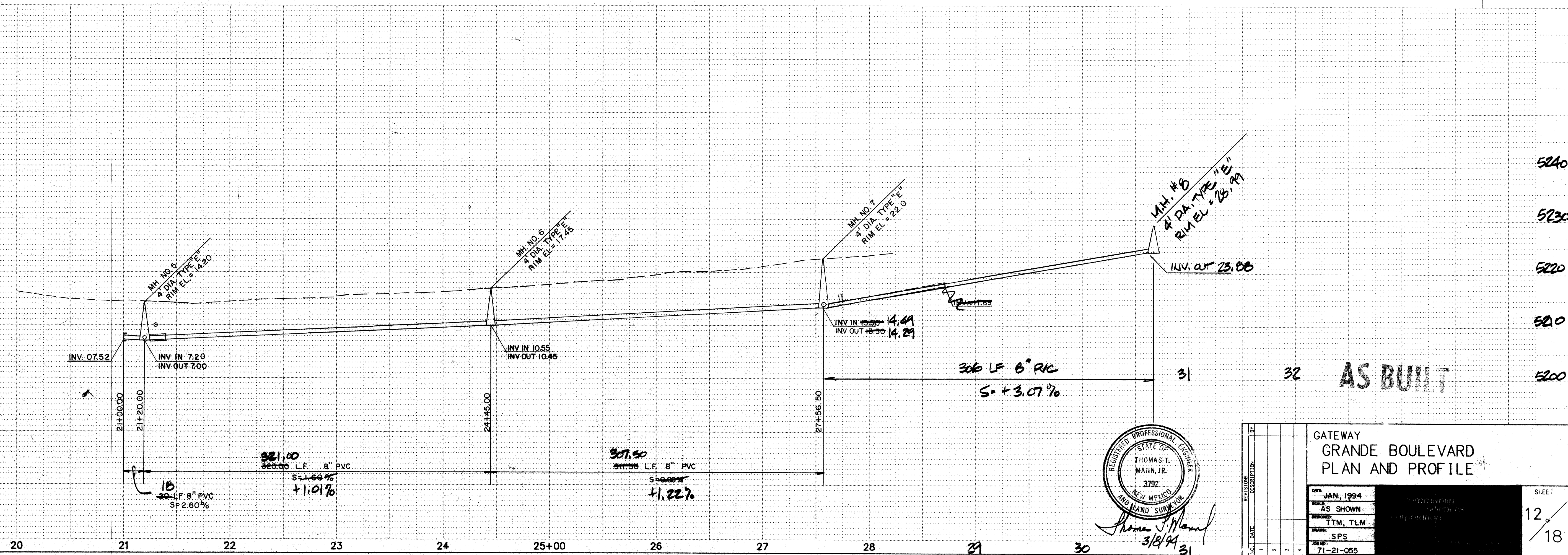
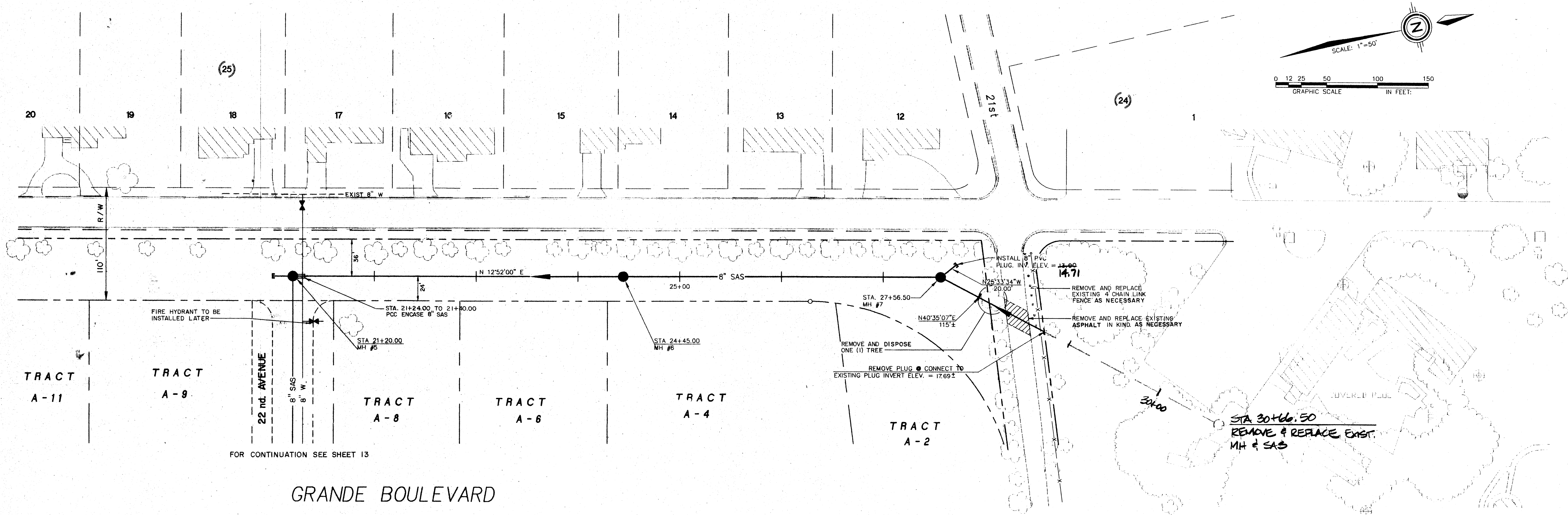
AS BUILT

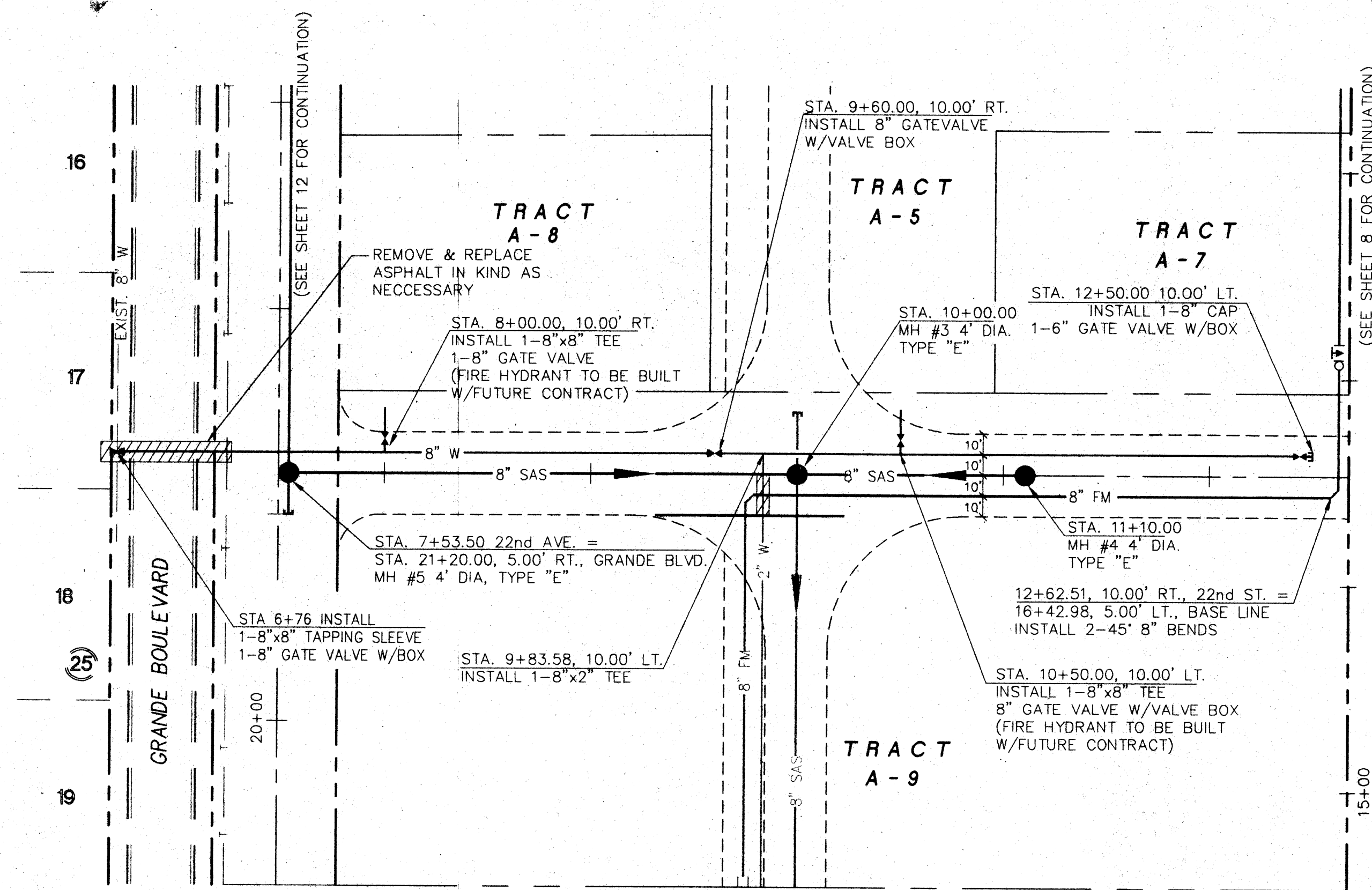


REVISIONS		DESCRIPTION		DATE	
1					
2					
3					
4					

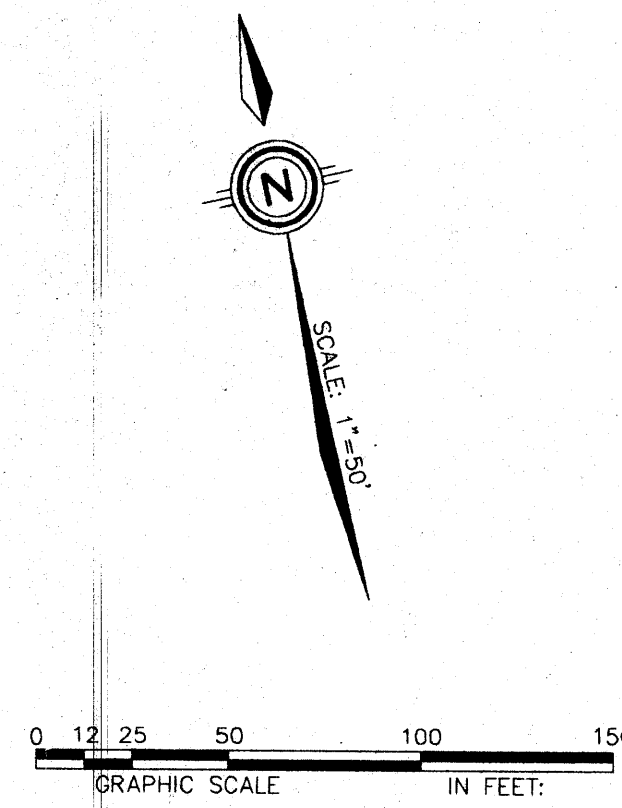
GATEWAY SANITARY FORCE MAIN PLAN AND PROFILE		SHEET 11 18
DATE	AS SHOWN	
DATE	TTM: TLM	
DATE	SPS	
DATE	71-21-055	

DATE 1-1-94	PROJECT GATEWAY	SCALE 1"=50'	SHEET 12 OF 18
DESIGNED BY T.M.	CHECKED BY T.M.	APPROVED BY T.M.	DATE 1-1-94

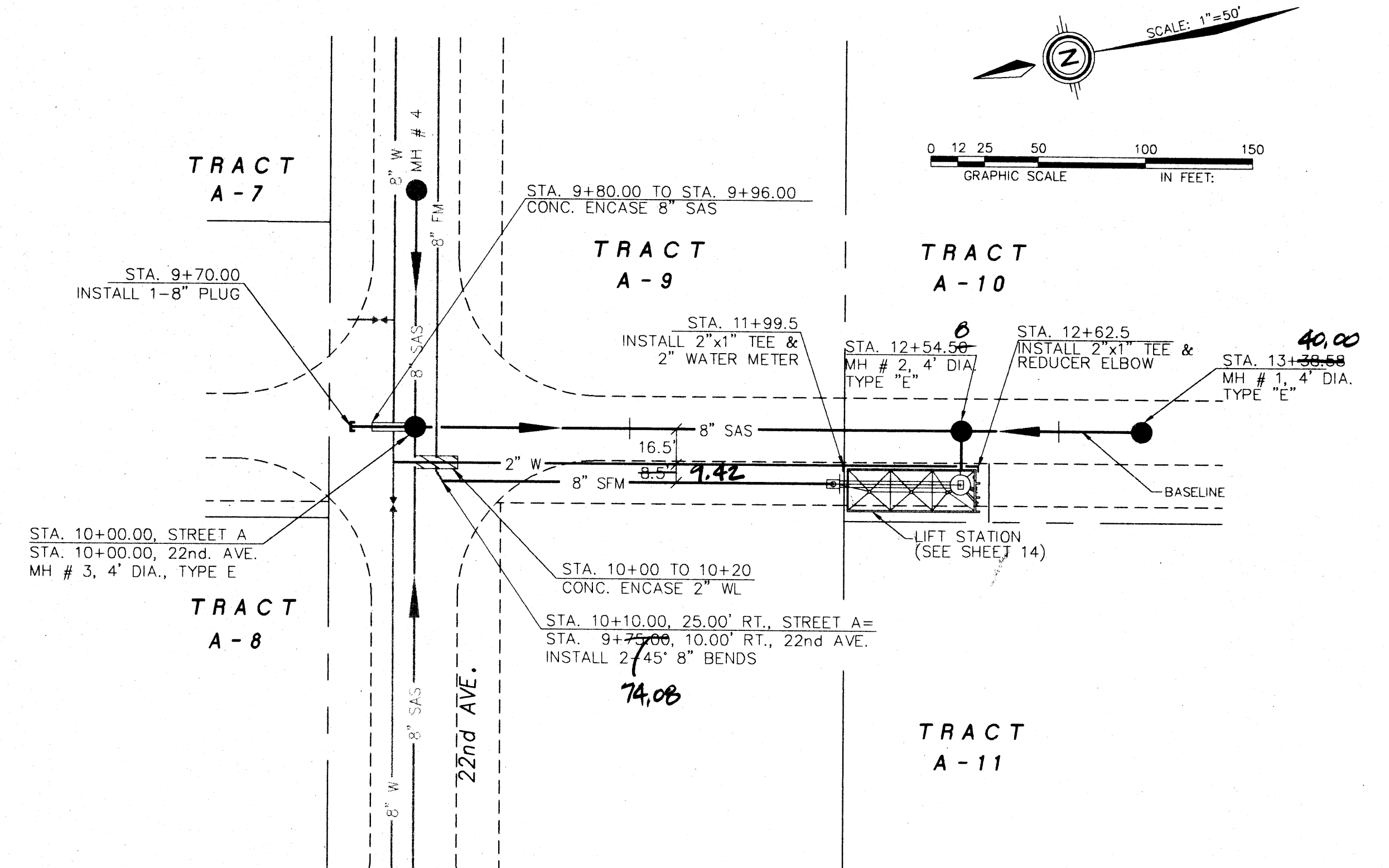




22nd AVENUE

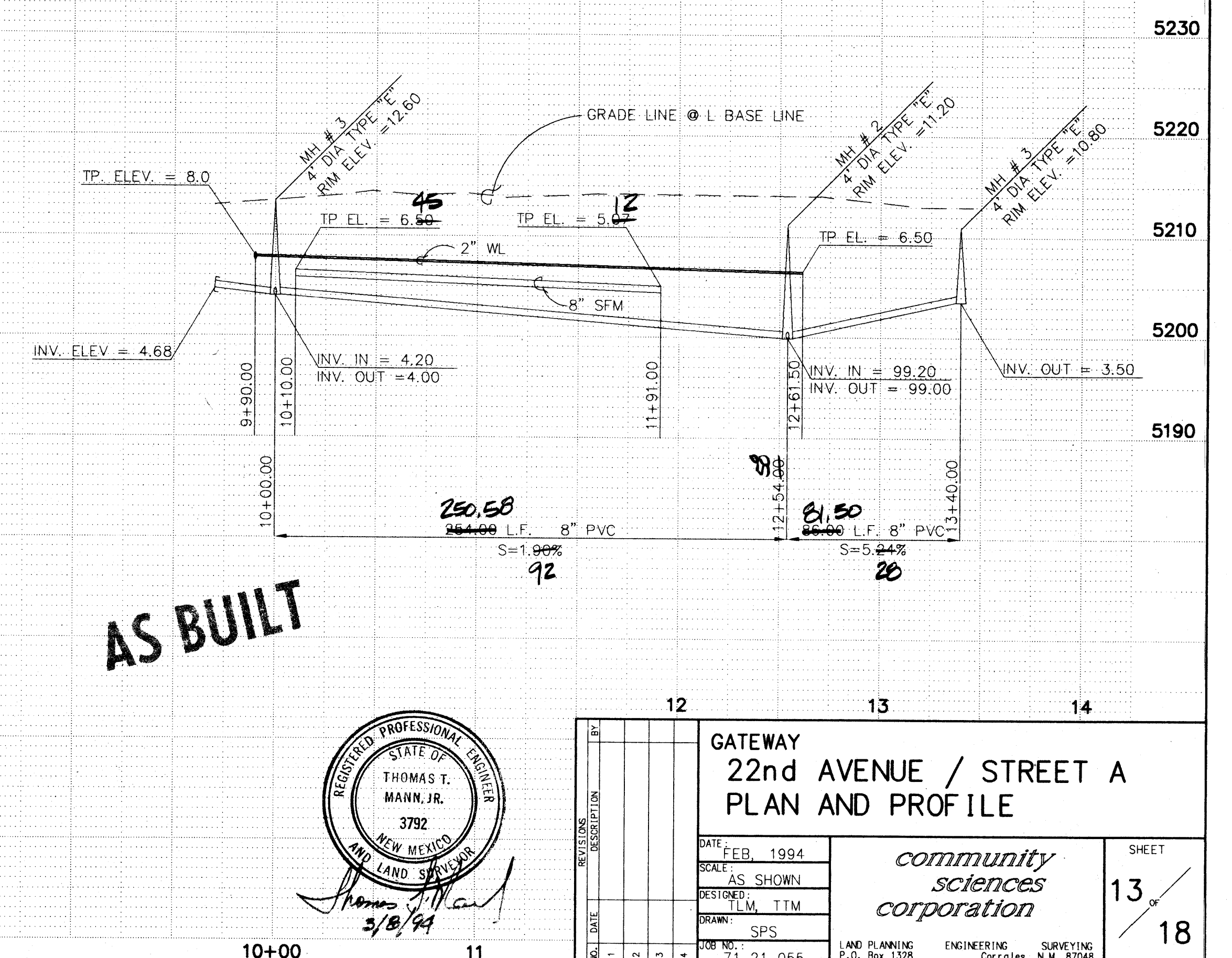
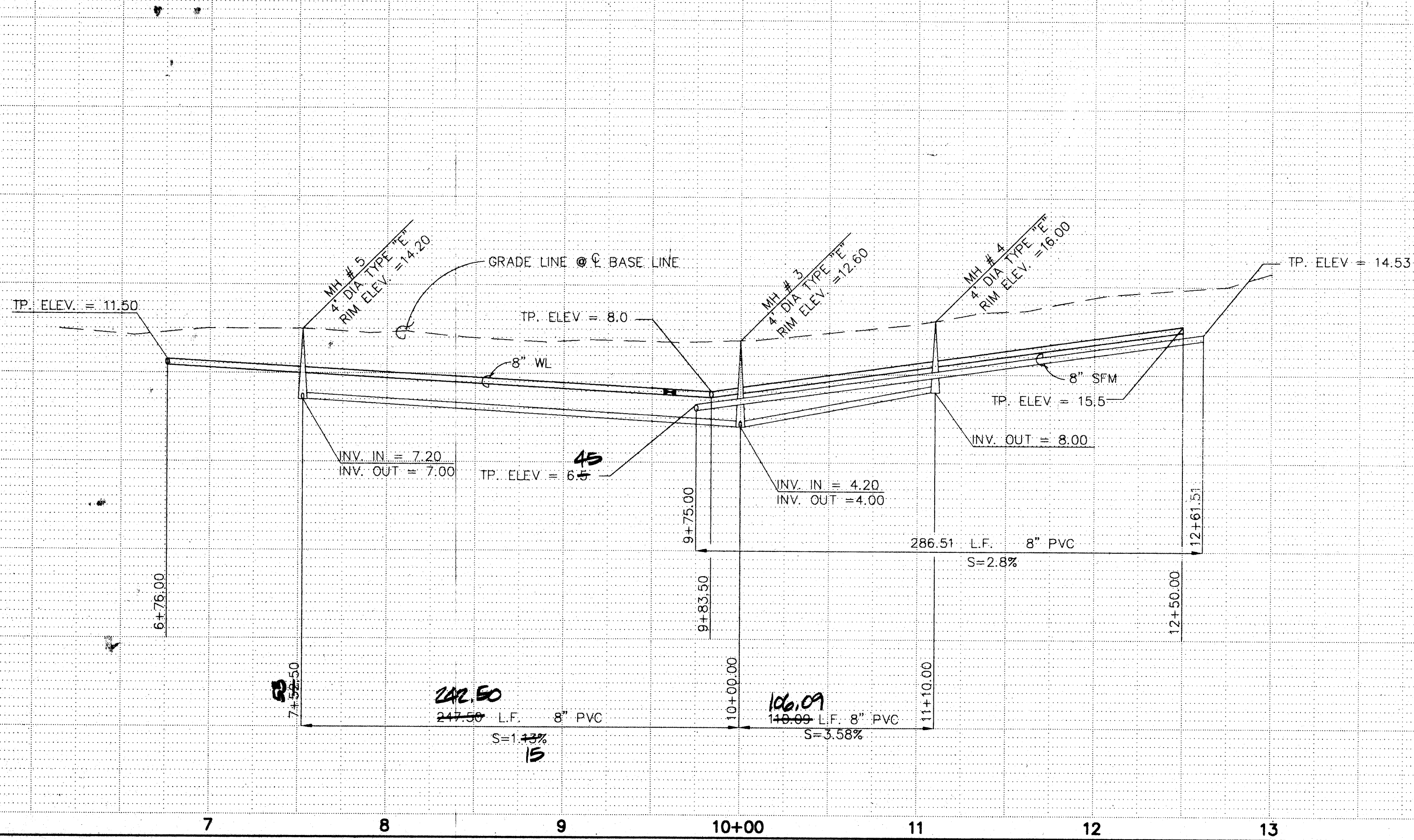


NM STATE HWY 528 (RIO RANCHO DRIVE)

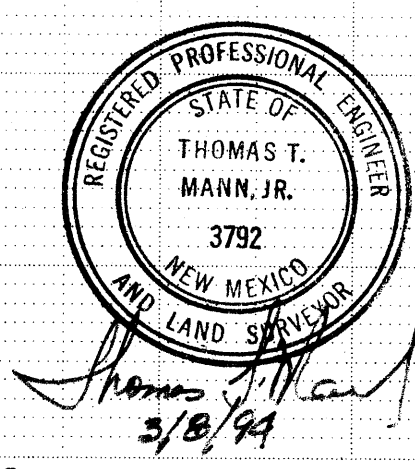


STREET A

SCALE: 1" = 50', Horiz.
1" = 10', Vert.



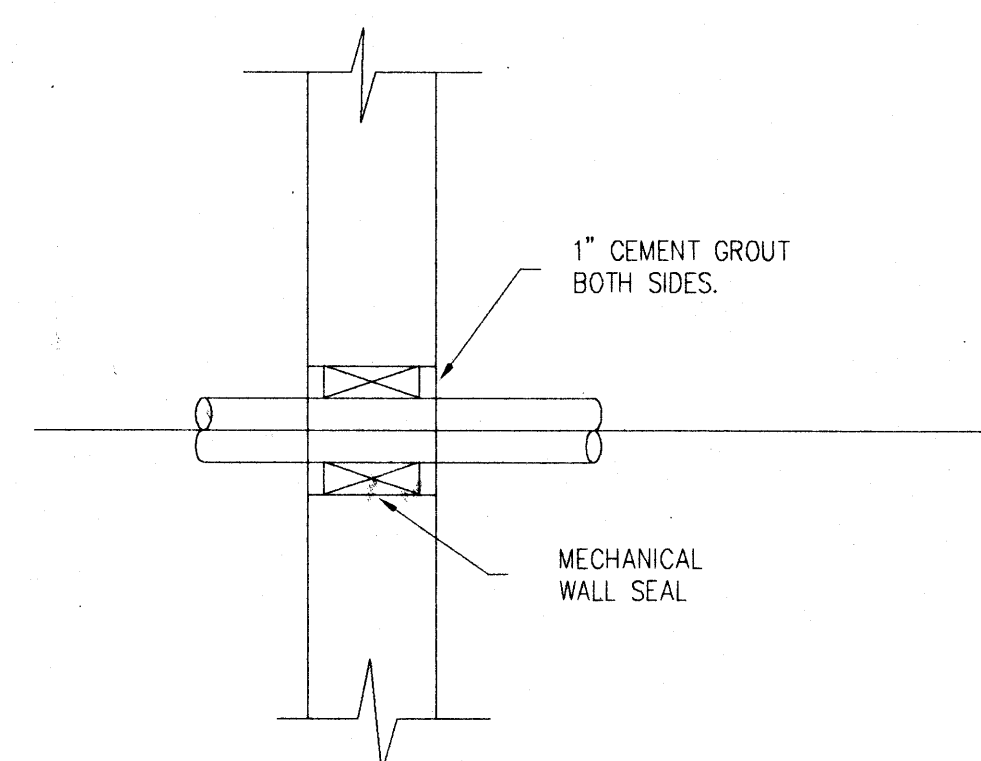
AS BUILT



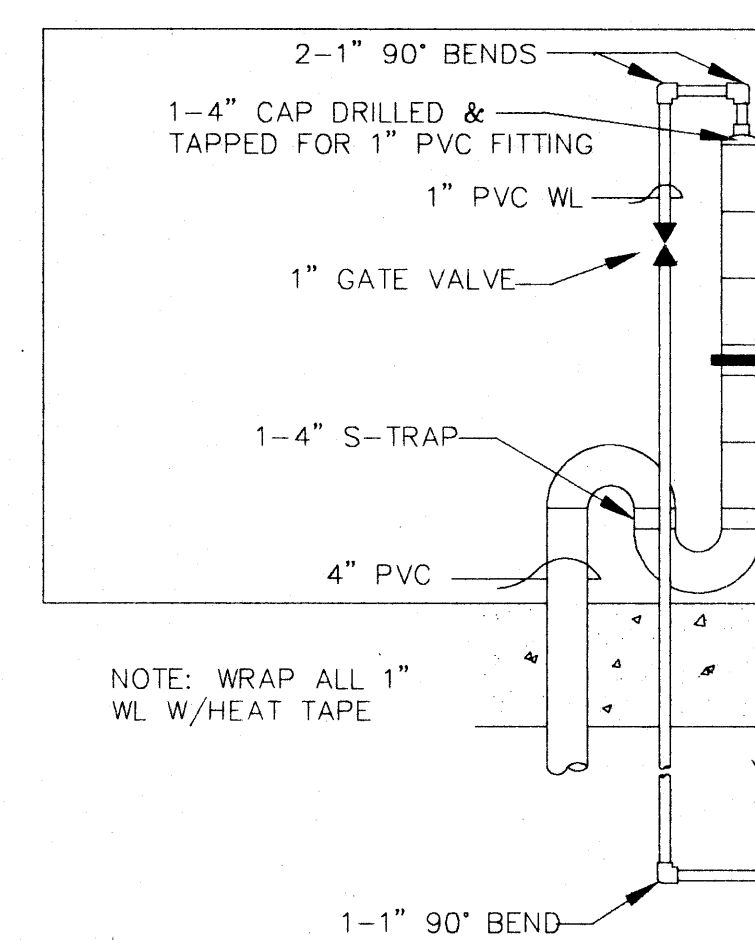
REVISIONS		DESCRIPTION	
1	DATE	2	DATE
3	DATE	4	DATE
5	DATE	6	DATE
7	DATE	8	DATE
9	DATE	10	DATE
11	DATE	12	DATE
13	DATE	14	DATE
15	DATE	16	DATE
17	DATE	18	DATE
19	DATE	20	DATE
21	DATE	22	DATE
23	DATE	24	DATE
25	DATE	26	DATE
27	DATE	28	DATE
29	DATE	30	DATE
31	DATE	32	DATE
33	DATE	34	DATE
35	DATE	36	DATE
37	DATE	38	DATE
39	DATE	40	DATE
41	DATE	42	DATE
43	DATE	44	DATE
45	DATE	46	DATE
47	DATE	48	DATE
49	DATE	50	DATE
51	DATE	52	DATE
53	DATE	54	DATE
55	DATE	56	DATE
57	DATE	58	DATE
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69	DATE	70	DATE
71	DATE	72	DATE
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75	DATE	76	DATE
77	DATE	78	DATE
79	DATE	80	DATE
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87	DATE	88	DATE
89	DATE	90	DATE
91	DATE	92	DATE
93	DATE	94	DATE
95	DATE	96	DATE
97	DATE	98	DATE
99	DATE	100	DATE

GATEWAY
22nd AVENUE / STREET A
PLAN AND PROFILE

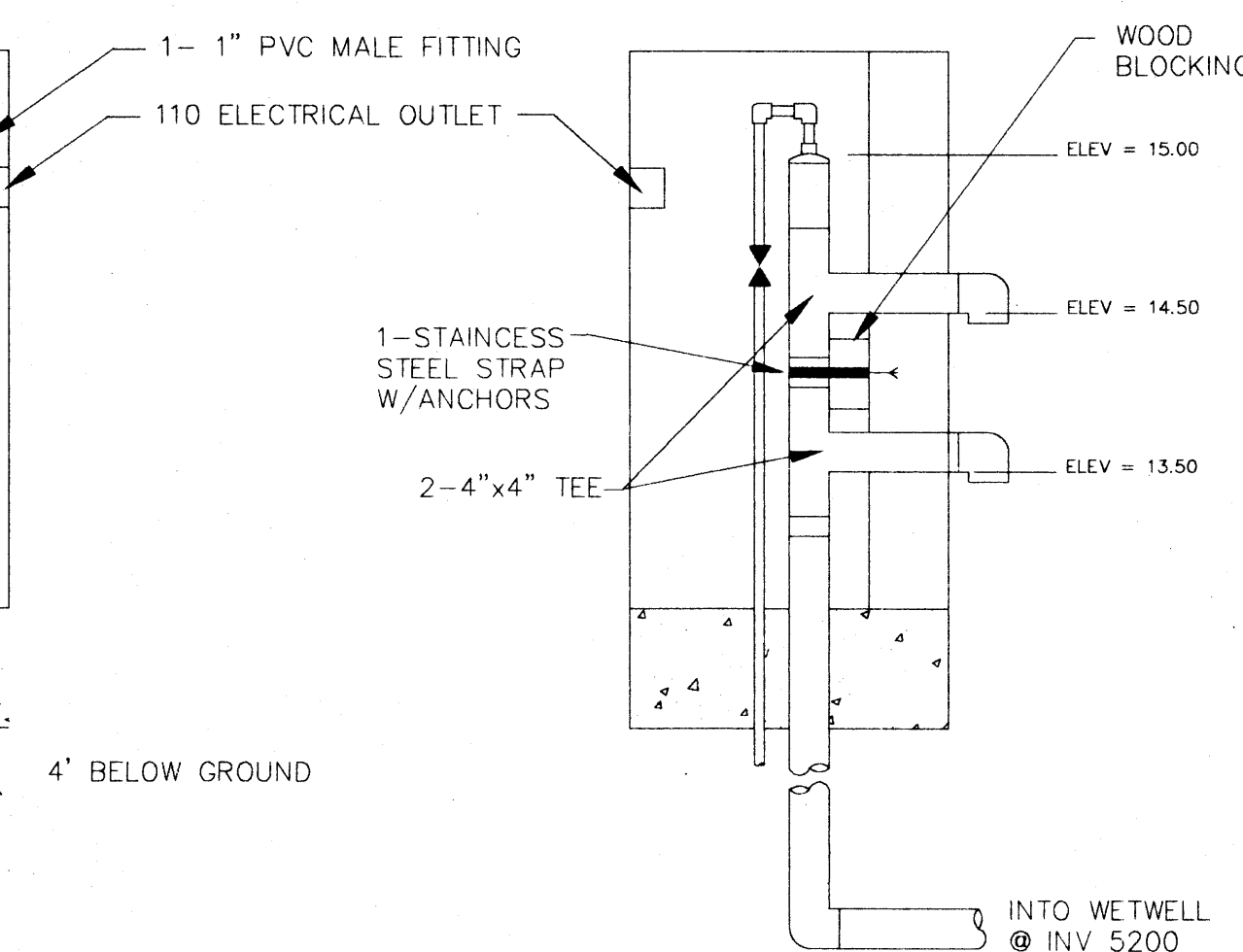
DATE: FEB, 1994
SCALE: AS SHOWN
DESIGNED: TTM
DRAWN: SPS
JOB NO.: 71-21-055
P.O. Box 1328
ENGINEERING
Corrales, N.M. 87046
SURVEYING
SHEET
13 OF 18



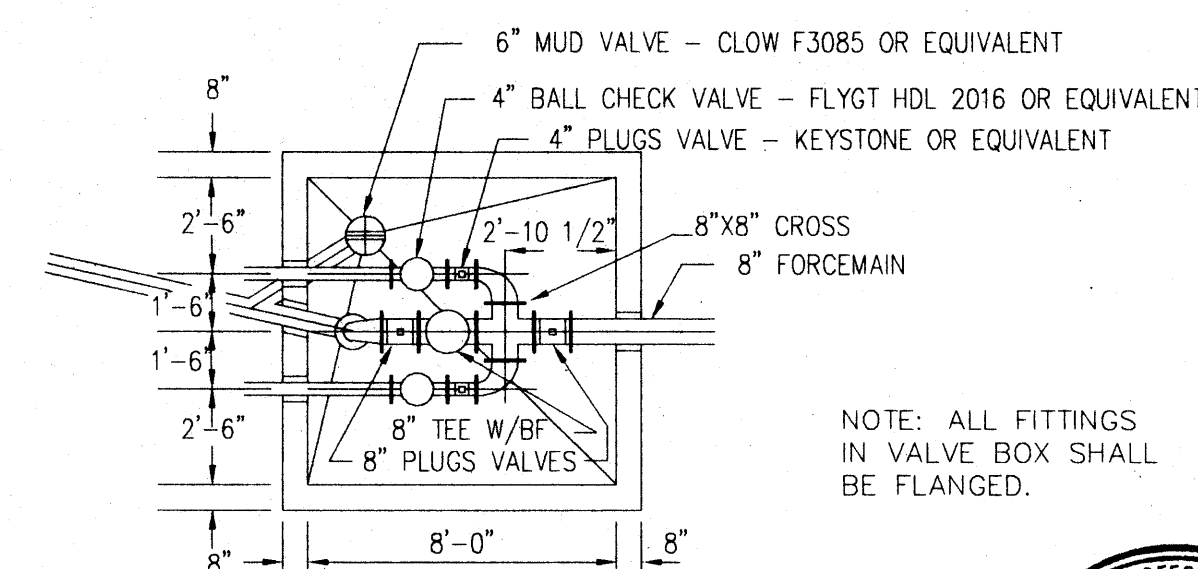
SCALE: NTS



3 SECTION
— SCALE: NTS

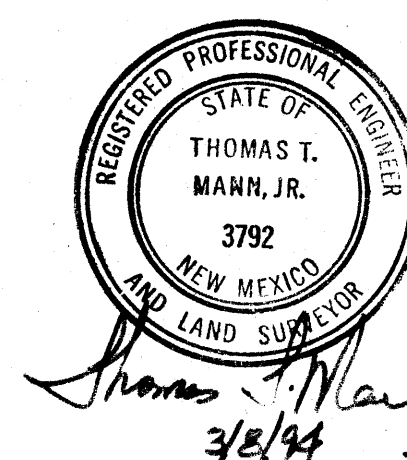


4 SECTION
SCALE: NTS



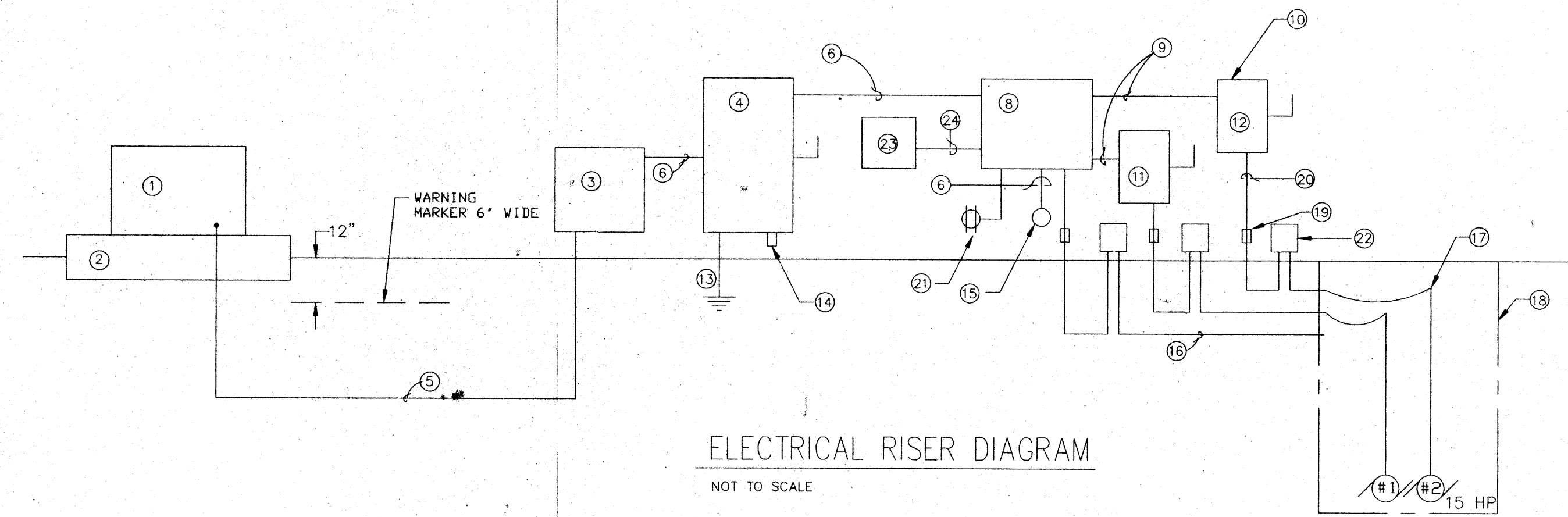
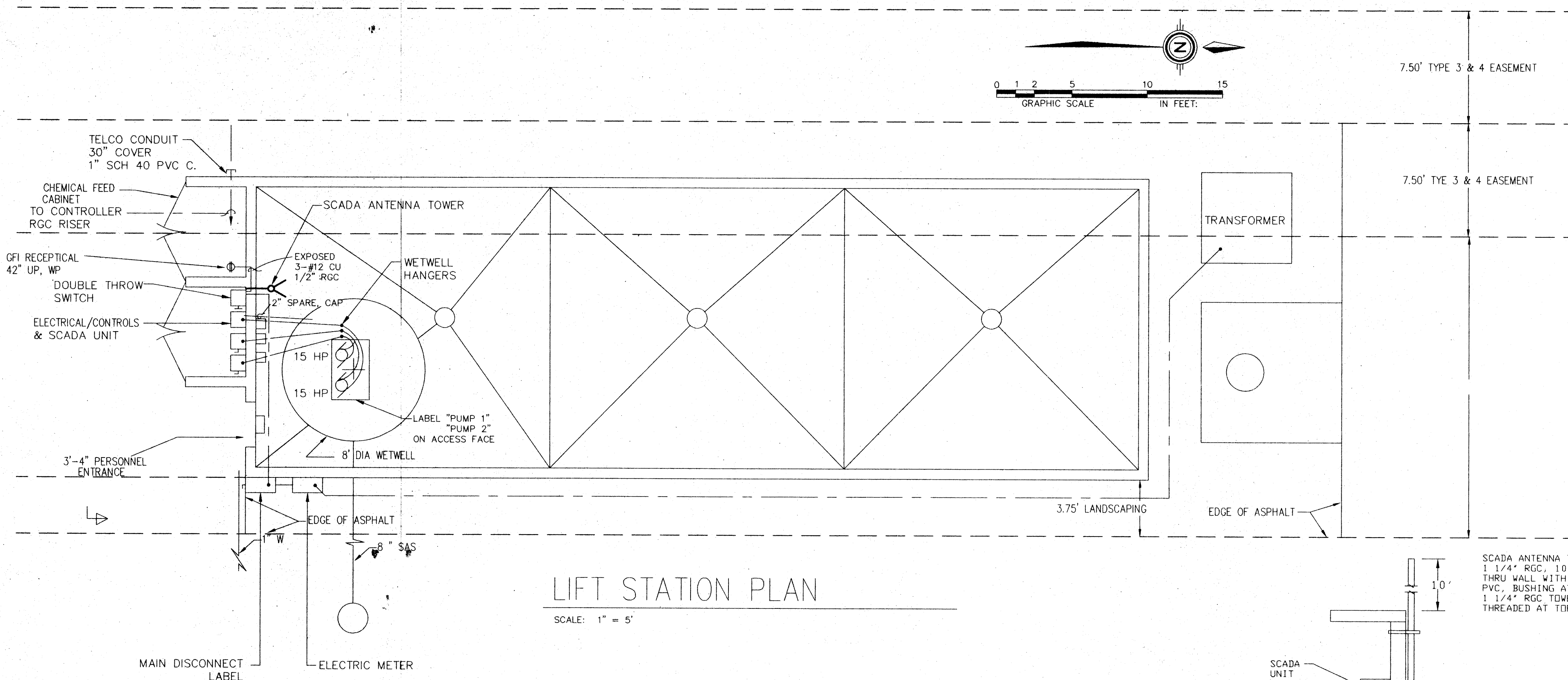
SCALE: 1" = 5'

AS BUILT

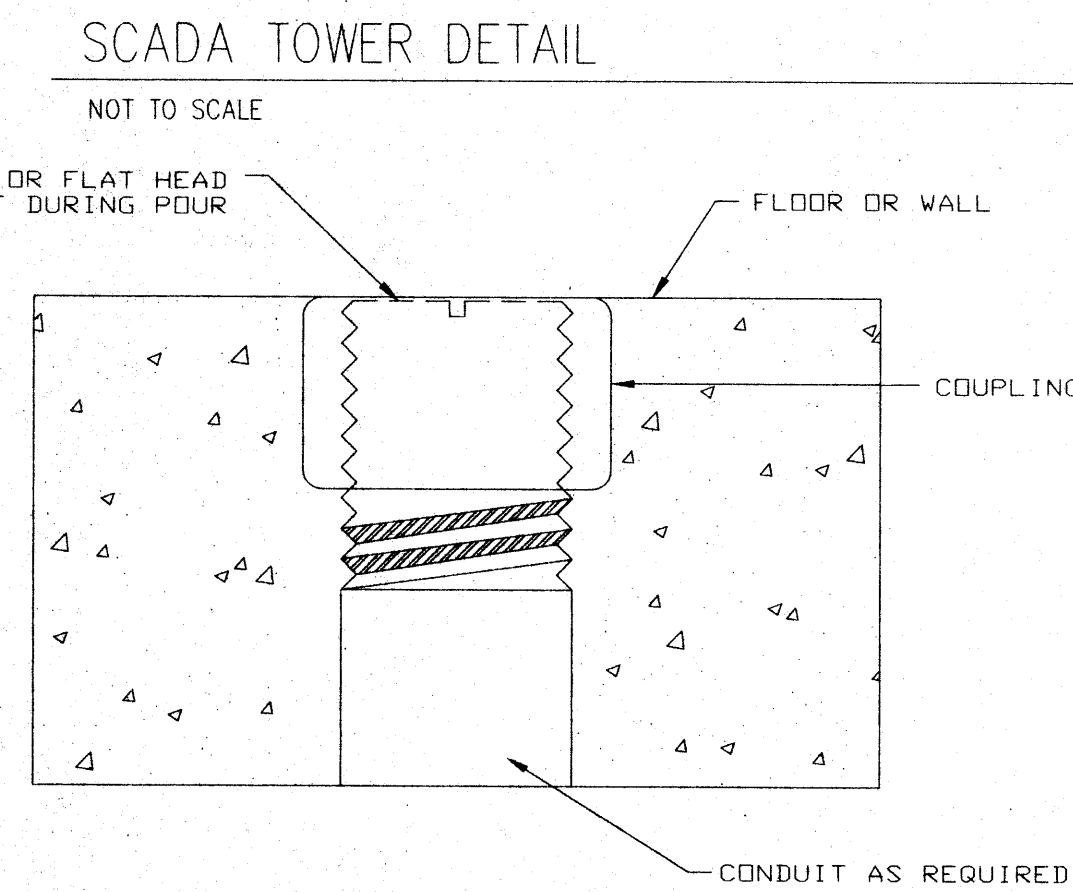
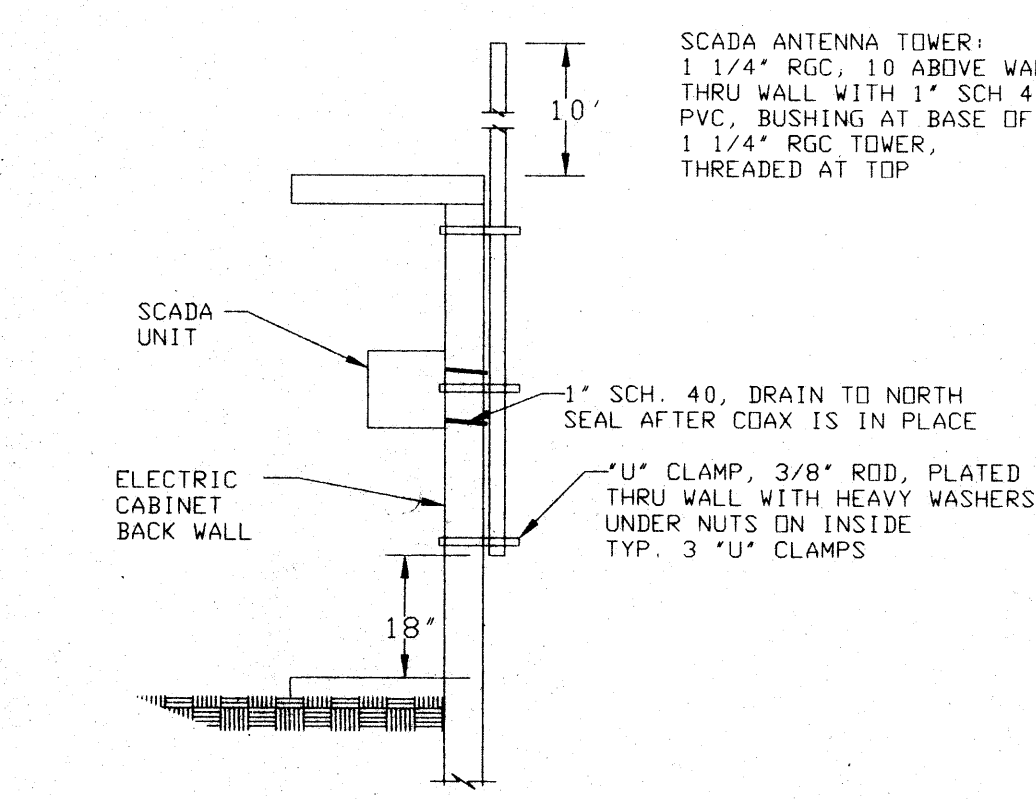


REV. NO.		REV. DATE		REV. DESCRIPTION		REV. BY	
1							
2							
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4							

GATEWAY		LIFT STATION - CIVIL	
DATE: FEB., 1994		<i>community sciences corporation</i>	
SCALE: AS SHOWN			
DESIGNED: TTM			
DRAWN: SPS			
JOB NO.: 11-21-055		14 of 1 LAND PLANNING P.O. Box 1328 Corrales, N.M. 87048 ENGINEERING SURVEYING Corrales, N.M. 87048	

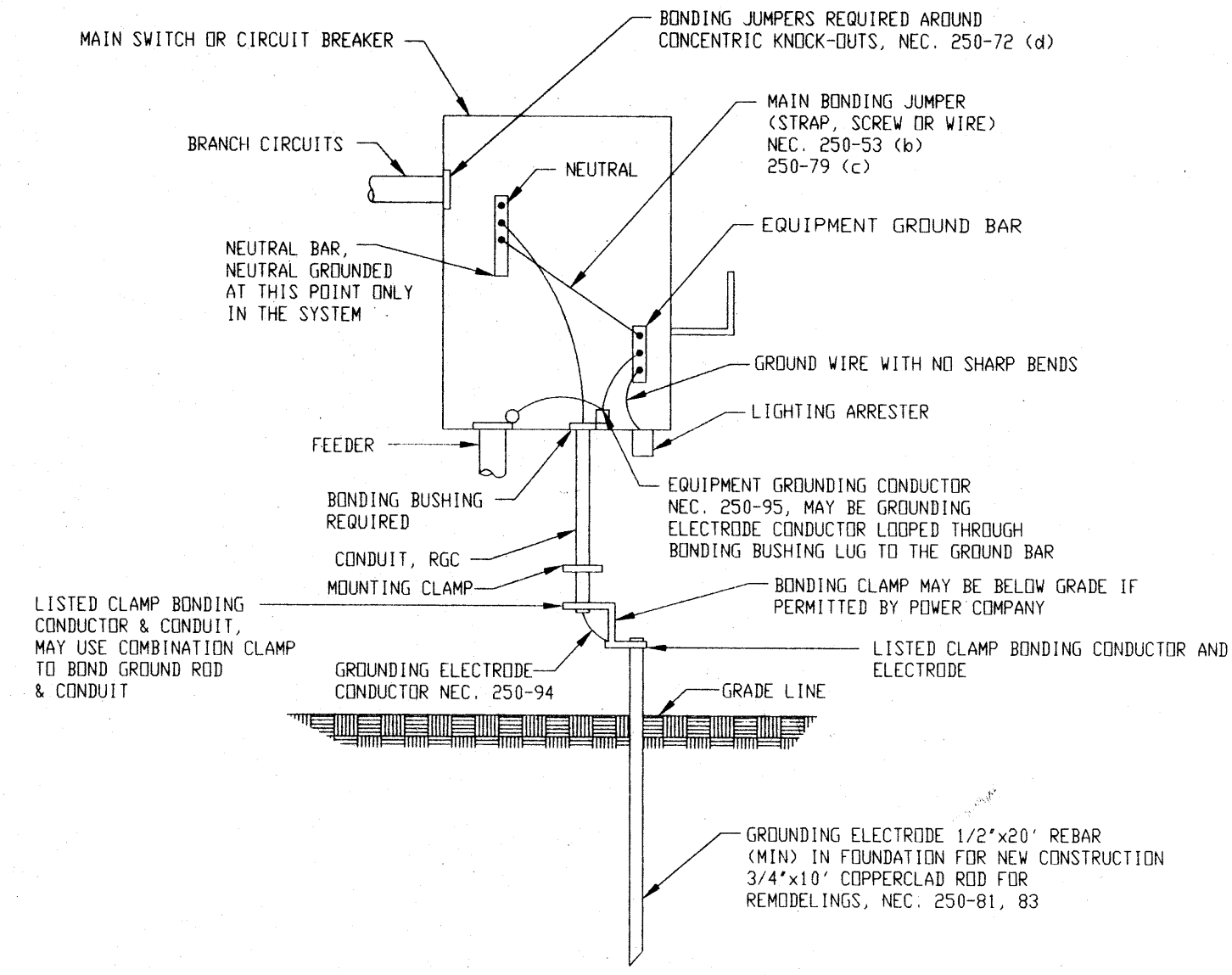


- KEYED NOTES**
- | | | |
|---|--|---|
| 1 TRANSFORMER BY POWER COMPANY | 10 MOTOR DISCONNECT SW (2) 60 A, 480 V, 3P, GND BAR NON-FUSED NEMA 3R ENC. | 20 3-# 8 THW CU 1-# 6 AWG CU GND 1" PVC COATED 40 MIL RGC |
| 2 TRANSFORMER PAD BY CONTRACTOR TO PNM DWG NO. DS-7-16.7 | 11 PUMP NO. 1 - LABEL | 21 GFI RECEPTICAL, WP 2-#12 THW CU, 1-#12 AWG CU GND 1/2" RGC |
| 3 METER BASE BY CONTRACTOR TO PNM DS-19-11.4 | 12 PUMP NO. 2 - LABEL | 22 J-BOX 12"x12"x6" NEMA 3R 42" UP |
| 4 MAIN DISCONNECT 100 A, 480 V, 3P S/N, GND BAR, HEAVY DUTY FUSED, 100 A, FRN, NEMA 3R ENC. | 13 1-#6 AWG CU GND, 1/2" RGC 3/4"x10" COPPERCLAD GROUND ROD | 23 SCADA CONTROLLER, 120V FROM PUMP CONTROLLER |
| 5 4-# 2 THW CU, 1-#6 AWG CU GND 1 1/2" SCH 40 W/RGC RISERS & ELLS | 14 LIGHTNING ARRESTER | MONITORS: MOTOR FAIL (EA, MOTOR) ON/OFF (EA, MOTOR) HIGH WATER AUXILIARY CONTACTS TO BE PROVIDED IN PUMP CONTROLLER |
| 6 4-# 2 THW CU 1-# 6 AWG CU GND 1 1/2" RGC | 15 1-1/2" PVC COATED 40 MIL RGC 100 A, 480 V, 3 P, 4 W WP RECEPTACLE | 24 3/4" RGC, WIRE AS NECESSARY |
| 7 NOT USED | 16 1-2" PVC COATED 40 MIL RGC CONTROL WIRE CONDUIT | |
| 8 DUPLEX PUMP CONTROLLER, WITH TRANSFER SWITCH | 17 HANGERS BY PUMP MFR. INSTALL BY CONTRACTOR | |
| 9 3-# 8 THW CU 1-# 10 AWG CU GND 1" RGC | 18 WET WELL | |
| | 19 EYS SEAL (3) | |



THE CONTRACTOR SHALL VERIFY THE SERVICE CONFIGURATION AND ARRANGE SERVICE WITH THE POWER COMPANY WITHIN 10 DAYS OF AWARD OF CONTRACT AND PRIOR TO ORDERING MATERIAL OR BEGINNING OF CONSTRUCTION.

THE CONTRACTOR SHALL VERIFY THE TELEPHONE SYSTEM CONFIGURATION AND COORDINATE INSTALLATION OF THE SYSTEM WITH THE TELEPHONE COMPANY WITHIN 10 DAYS OF AWARD OF CONTRACT AND PRIOR TO ORDERING MATERIAL OR BEGINNING OF CONSTRUCTION.



SERVICE GROUNDING SYSTEM DETAIL (TYP)
NOT TO SCALE

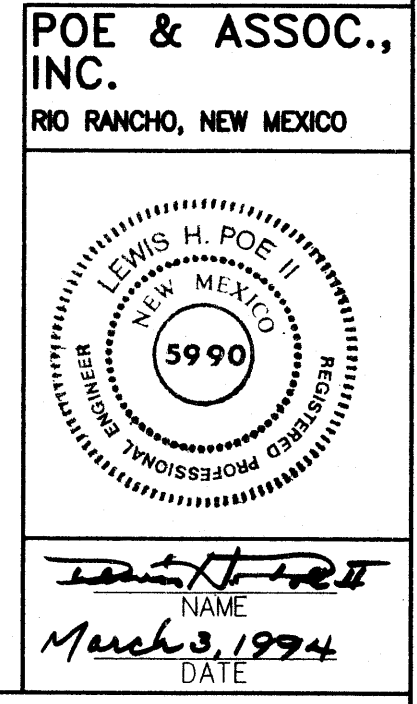
- GENERAL NOTES:**
- ALL RISERS AND STUB-UPS TO BE RIGID METAL CONDUIT.
 - NO CONDUCTOR OTHER THAN THOSE USED FOR SIGNALING OR COMMUNICATIONS SHALL BE LESS THAN #12 AWG, COPPER.
 - WIRE CONNECTIONS FOR #12 AND #10 AWG WIRE SHALL BE OF CRIMP OR WIRE LOCK WITH AN APPROVED INSULATING CAP, FRICTION TWIST DEVICES WITHOUT WIRE LOCK ARE NOT ACCEPTABLE.
 - PVC CONDUIT UNDERGROUND TO HAVE RIGID STEEL RISERS AND EL'S AT BENDS UNLESS ENCASED IN CONCRETE.
 - PULL WIRE TO BE INSTALLED IN COMMUNICATION CONDUIT, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
 - PROPER SIZE LUGS SHALL BE PROVIDED TO ACCOMMODATE THE FEEDERS USED.
 - DISCONNECTS SHALL BE CLEARLY LABELED AS TO THE LOAD SERVED.
 - BOND AROUND KNOCKOUTS AND ATTACH WITH APPROVED CLAMPS.
 - DEFORMED OR CRUSHED CONDUIT SHALL BE REMOVED FROM THE INSTALLATION, CONDUIT ROUTING IS NOT TO INTERFERE WITH THE INTENDED PURPOSE OR FUNCTION OF OTHER EQUIPMENT, AND THE INSTALLATION IS TO BE NEAT IN APPEARANCE.
 - FIRMLY MOUNT ALL BOXES-CONDUIT IS NOT TO PROVIDE SUPPORT FOR ANY BOX.
 - WIRE AND CABLE ROUTING: THE NEUTRAL CONDUCTOR SHALL BE ROUTED WITHIN THE SAME CONDUIT AND ENCLOSURE WITH THE ASSOCIATED "HOT" CONDUCTOR (S) AND WILL NOT BE ROUTED THROUGH ANY OTHER CONDUIT OR ENCLOSURE.
 - RIGID STEEL CONDUIT TO BE HOT-DIPPED GALVANIZED.
 - ROUTE FEEDERS AS SHOWN - BRANCH ROUTING IS SHOWN SYMBOLICALLY.
 - CONDUIT 1 1/4" TRADE SIZE OR GREATER - USE LONG EL'S UNLESS INDICATED OTHERWISE.
 - GROUND NEUTRAL ONLY AT THE SERVICE EQUIPMENT AND AT NO OTHER POINT IN THE SYSTEM.
 - GROUND WIRE IS REQUIRED IN ALL BRANCH CONDUITS.
 - MAIN DISCONNECT (S) AND CONTROLLERS EACH REQUIRE A GROUND BAR.
 - THE ELECTRICAL CONTRACTOR IS TO VERIFY THAT MECHANICAL EQUIPMENT NAMEPLATE RATINGS FOR THE EQUIPMENT RECEIVED MATCH AMPACITY OF BRANCH CIRCUITS SHOWN ON THE DRAWINGS.

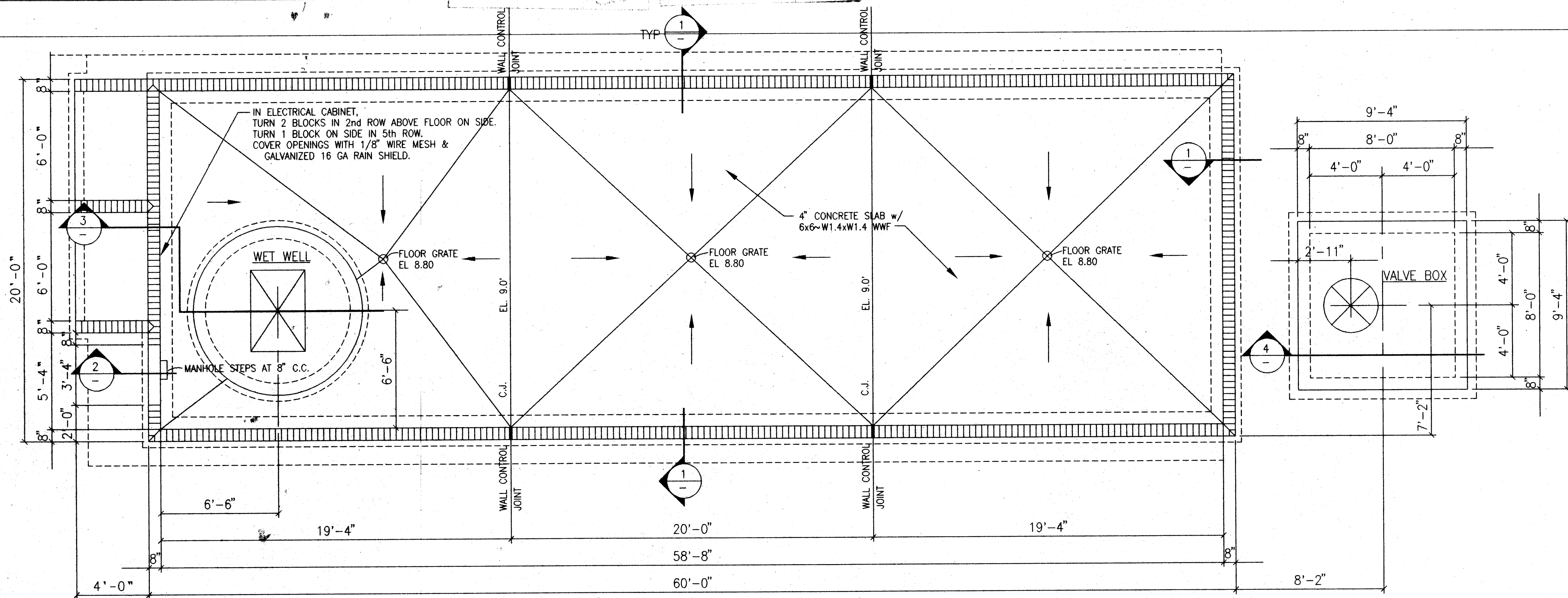
AS BUILT

GATEWAY LIFT STATION
RIO RANCHO, NM

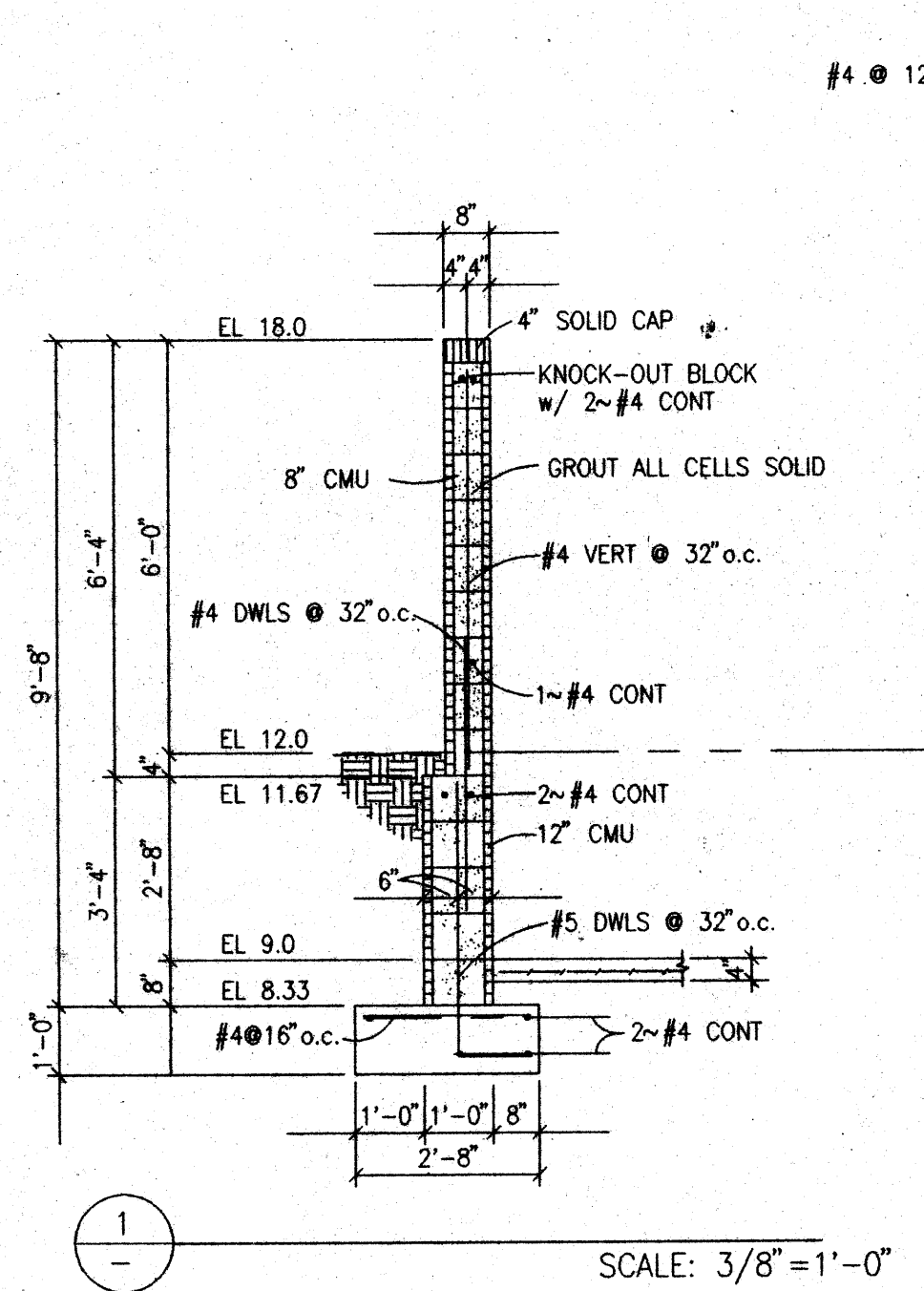
SERVICE CHARACTERISTICS:
277/480 V, 100 A, 3P, 4 W
TOTAL LOAD CONNECTED LOAD: 47 KVA (56 A) FUTURE
LOAD WITH DEMAND PER NEC ART. 220 METHOD B
51 KVA (61 A) WITH FUTURE INJECTOR PUMPS,
AVAILABLE FAULT CURRENT RMS SYMMETRICAL:
LESS THAN 5000 AMPERES AT PANELBOARDS
LESS THAN 5000 AMPERES AT SERVICE

GATEWAY LIFT STATION-ELECTRICAL		DATE: FEB 9, 1994 SCALE: 1" = 5' DESIGNED: DRAWN: S.P.S. JOB NO. 71-21-055	community sciences corporation LAND PLANNING P.O. Box 1328 ENGINEERING Corrales, N.M. 87048 SURVEYING	SHEET 15 of 18
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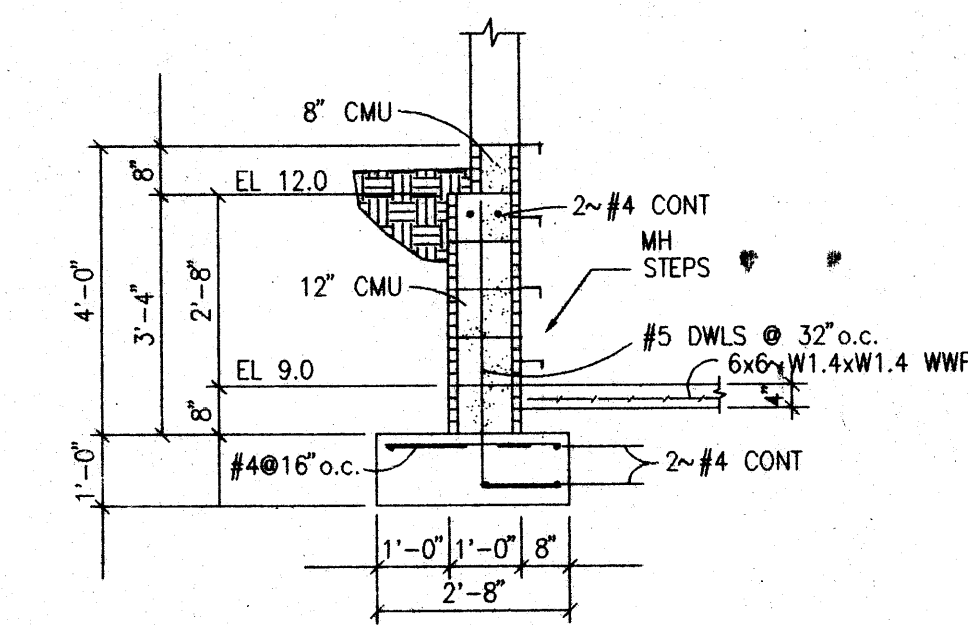




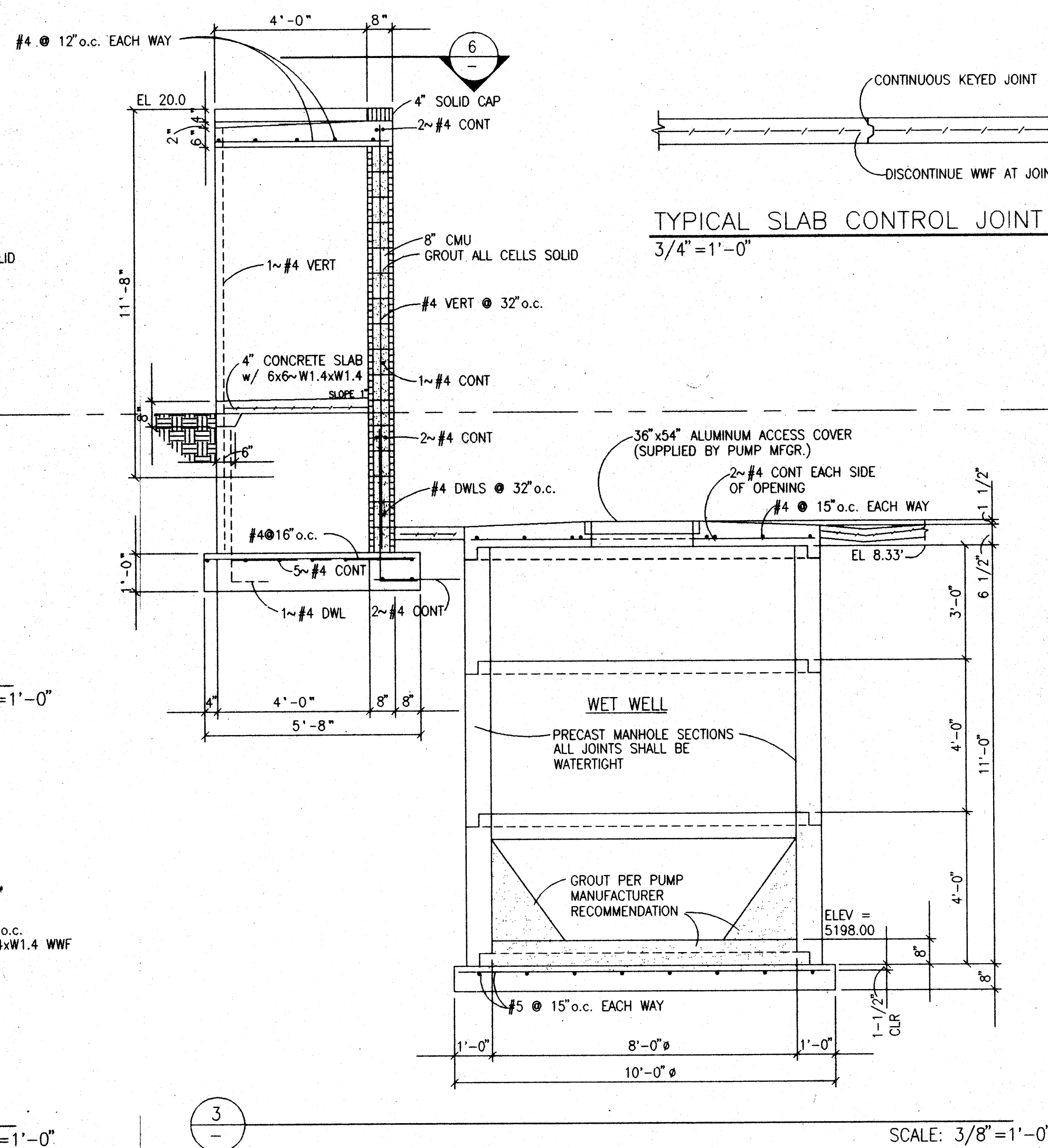
FOUNDATION PLAN
SCALE: 1/4"=1'-0"



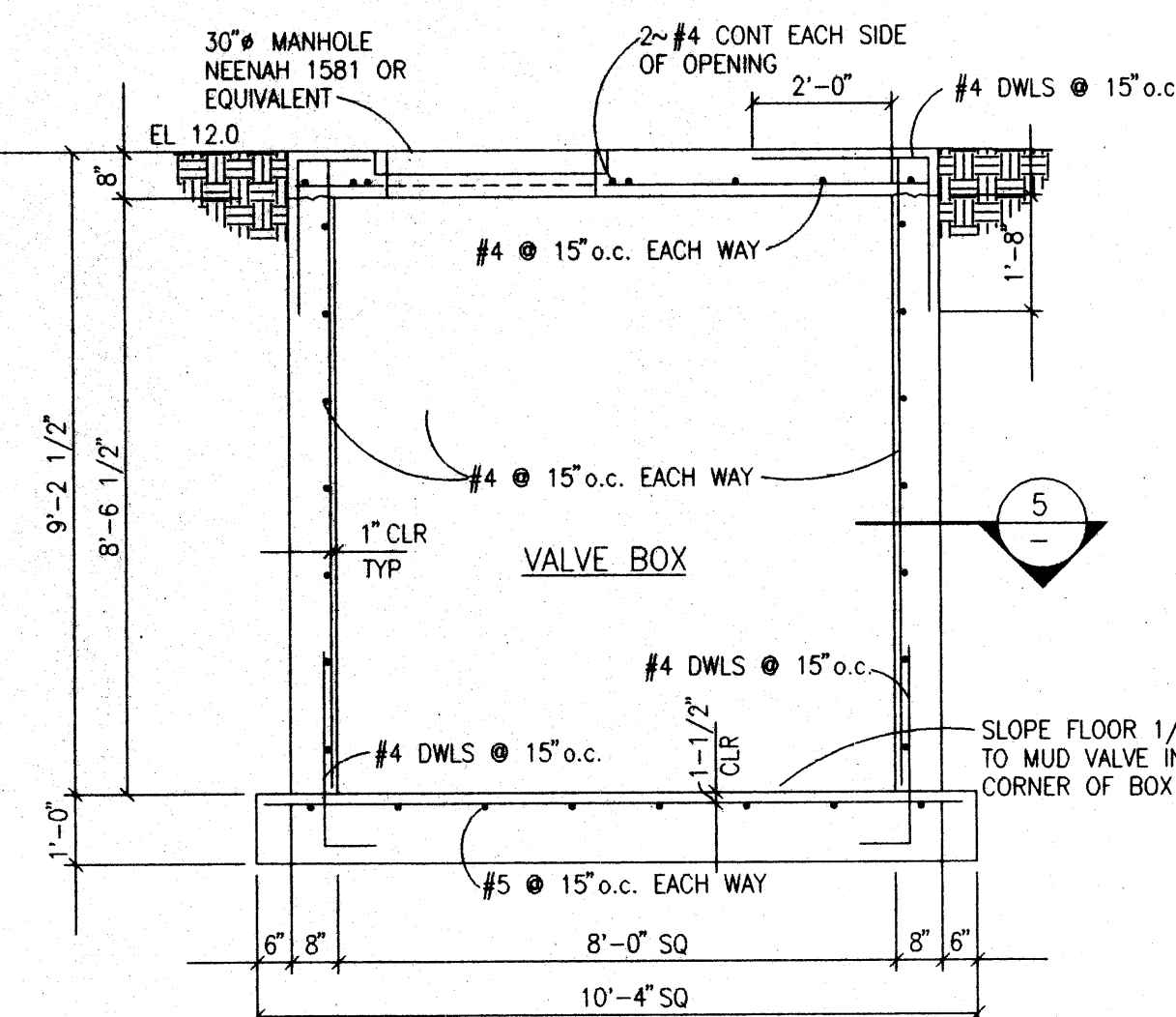
SCALE: 3/8"=1'-0"



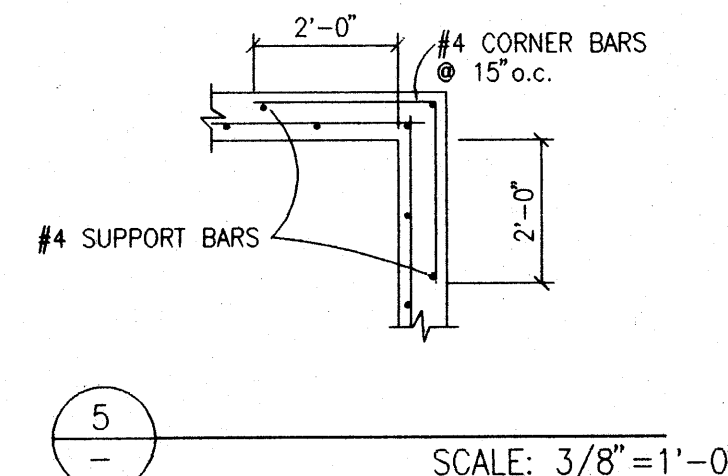
SCALE: 3/8"=1'-0"



TYPICAL SLAB CONTROL JOINT (C.J.)
3/4"=1'-0"



SCALE: 3/8"=1'-0"



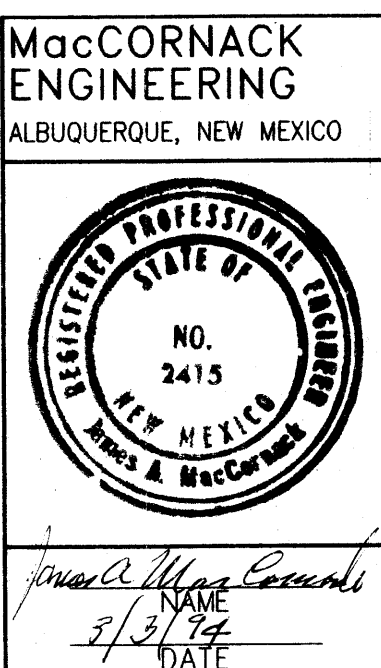
SCALE: 3/8"=1'-0"

6 PLAN DETAIL AT TOP OF WALL
SCALE: 1/4"=1'-0"

GENERAL STRUCTURAL NOTES

1. CODES AND MANUALS:
Uniform Building Code, 1991 Edition
ACI 318-83 (Revised 1986)
PCI Design Handbook, 1978, 2nd Edition
2. DESIGN LOADS:
A. Vertical:
1. Roof Live Load = 20 psf
2. Wetwell & Valve Box Roof = 250 psf
B. Horizontal:
1. Equivalent Fluid Pressure = 35 psf
2. Seismic: $F_p = Z I C_p W_p$
Zone 2B
Importance Factor $I = 1.0$
Coefficient $C_p = 0.75$
3. WIND: METHOD 2: $P = C_e C_q q s I$
BASIC WIND SPEED = 80 mph
Combined Height, Exposure & Gust Factor $C_e = 1.06 [0'-15']$
Pressure Coefficients: $C_q = 1.4$
Wind Stagnation Pressure $q_s = 16.4$ psf
Allowable 1/3 stress increase for combined gravity and lateral loading.
C. Maximum allowable soil bearing pressure: 2,000 psf.
3. GENERAL:
A. The Contractor shall verify all dimensions in the field.
B. Shop drawings shall be furnished for review before any fabrication and erection is started. Poorly executed shop drawings shall be rejected and resubmitted.
C. The Contractor shall be responsible for providing safe and adequate shoring for all parts of the structure during construction.
D. All trades shall coordinate and verify all openings in floor, roof and walls with the General Contractor.
4. MATERIALS:
A. Cast-in-place Concrete:
1. Hardrock Concrete (Unit Wt.=150 pcf)
a. 4,000 psi @ 28 days (air entrained) - All exterior concrete.
2. The sides of all footings shall be FORMED. The use of earth forms is not allowed.
B. Reinforcing Steel:
1. All reinforcing steel shall conform to ASTM A615 Grade 60, except stirrups and ties shall be Grade 40.
2. Reinforcing steel shall be fabricated and placed in accordance with the Building Code Requirements for Reinforced Concrete (ACI 318-83) and the Standard Manual (ACI 315-80).
3. Welded smooth wire fabric shall conform to ASTM A185 specification for welded wire fabric for concrete reinforcement. Provide in flat sheets only.
4. Bar supports and spacers for rebar shall be provided in accordance with ACI 315-80. Chairs with 22 ga. sand plates shall be provided for all rebar in slabs on ground.
5. Where lapped splices in reinforcing occur, the minimum lap shall be made as follows:
a. Vertical reinforcing: 30 bar dia. or 18" minimum.
b. Horizontal reinforcing: 30 bar dia. or 18" minimum.
c. Horizontal corner bars: 30 bar dia. or 18" minimum.
6. Concrete cover for reinforcing shall be as follows:
a. Concrete cast against and permanently exposed to earth 3"
b. Concrete exposed to earth or weather
1. Bars larger than No. 5 2"
2. Bars No. 5 or smaller 1 1/2"
- B. Reinforcing Steel:
7. The Contractor shall be responsible to see that all rebar is properly aligned and tied in place before placing concrete. All column, wall dowels and vertical steel shall be accurately located and secured in place so that it remains in the position during the concrete placing operation. Any rebar found to be improperly installed shall be removed at no additional cost to the Owner.
8. All horizontal reinforcing in footings, walls and beams shall be continuous around corners or have corner bars of the same size and spacing as the horizontal bars and lap a minimum of 30 bar diameters or 18" minimum.
9. Form ties shall be either of the threaded or snap off type so that no metal will be left within 1" of the surface of the wall. Following removal of the form ties, recesses are to be carefully filled with mortar.
- C. Masonry:
1. All masonry units shall be Type I, Grade N units with an average gross area compressive strength of 1,350 psi @ 28 days.
2. All mortar shall be Type S with a strength of 1800 psi @ 28 days.
3. Grout shall have a minimum compressive strength of 2500 psi @ 28 days.
4. All hollow masonry or brick to be reinforced shall be marked with keel at the bottom of the wall at the cells where dowels occur or rebar is to be placed and grouted.
5. Cells containing rebar shall be grouted solid from the bottom to the top of the wall in accordance with UBC regulation. Cleanouts shall be provided at the bottom of walls at all cells to be grouted where the grout pour exceeds 4' in height.
6. Lap all bars 40 diameters or 2'-0" minimum unless otherwise noted.
5. SITE GRADING AND EARTHWORK
A. Foundation Preparation:
Building areas shall be completely stripped of vegetation, pavements, existing construction and debris, and soft or muddy areas.
(1) Foundations:
The exposed bottoms of excavations shall be scarified to a depth of 8", moistened within optimum moisture (+/- 3%), and compacted to a minimum of 95% Modified Proctor Density.
(2) Slab on Grade:
Prior to placing slabs, all existing fill shall be removed. The natural soils shall be stripped of vegetation, scarified to a depth of eight inches, and moistened to a near optimum (+/- 3%) moisture content. The exposed soils shall then be compacted to a minimum of 95% of maximum density as determined by ASTM D-1557.
B. Backfills:
All backfills should be thoroughly mixed within optimum moisture (+/- 3%), placed in thin horizontal lifts (8" max. loose depth), and compacted to a minimum of 95% of Modified Proctor Density (ASTM D1557).
C. Site Drainage:
Provide positive surface drainage away from foundation excavations during construction.

AS BUILT



REVISIONS		GATEWAY		LIFT STATION-STRUCTURAL	
NO.	DATE	BY	DESCRIPTION	DATE	DESCRIPTION
1	FEB. 1994	AS SHOWN	DESIGNED BY TLM	16	
2	SPS		DRAWN BY SPS	18	
3	71-21-055		LAND PLANNING P.O. Box 1328		
4			ENGINEERING Corrales, N.M. 87048		
5			SURVEYING		

NOTES:

1. INSTALL NEOPRENE "O" RING ON PVC PIPE AND MORTAR TO MANHOLE FOR TIGHT SEAL.
2. FOR PRESSURE TYPE MANHOLE COVER USE SAME AS SHOWN WITH EIGHT (8) 1/2" X 2" BOLTS AND NEOPRENE GASKET. BOLT HOLES SHALL BE PREDRILLED IN COVER AND TAPPED IN FRAME.

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
STANDARD CONCRETE MANHOLE
Date: JULY, 1991 STANDARD DRAWING S-2

"d" DIAMETER	NO. OF #4 BARS	"x" THICKNESS	Y1	Y2
6"	2	4"	8"	8"
8"	4	4"	10"	10"
10"	4	6"	12"	12"
12"	4	7"	15"	15"
15"	5	9"	18"	18"
18"	5	10"	22"	22"
21"	6	12"	26"	26"
24"	6	13"	28"	28"

NOTES:

1. EXTEND BOTH ENDS OF CRADLE OR ENCASEMENT TO A POINT ONE INCH SHORT OF FIRST PIPE JOINT BEYOND LOCATIONS SPECIFIED ON PLAN.
2. APPLY FORM OIL, THIN PLASTIC SHEET, OR OTHER ACCEPTABLE MATERIAL TO PIPE, TO PREVENT BOND BETWEEN PIPE AND CONCRETE.

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
CRADLING AND ENCASEMENT
Date: JULY, 1991 STANDARD DRAWING S-8

NOTES:

1. BEDDING MATERIALS SHALL BE CLASSED AS DEFINED IN ASTM D-2321

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
PIPE BEDDING
Date: JULY, 1991 STANDARD DRAWING S-3

NOTES:

1. CAST IRON COVER SHALL BE MARKED WITH THE WORD "SEWER"
2. CAST IRON FRAME AND COVER SHALL BE NEENAH CAT. NO. R-1791-A OR APPROVED EQUAL
3. CAST IRON COVER SHALL BE ATTACHED TO THE FRAME WITH 18" OF 3/8" GALVANIZED CHAIN AND 1/2" BOLTS

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
CLEAN OUT
Date: JULY, 1991 STANDARD DRAWING S-10

NOTES:

1. CONSTRUCT SEWER LATERAL AT THE STATION OR LOCATION BY DIMENSION AS SHOWN ON PLANS.
2. ALL SEWER LATERALS SHALL BE MARKED WITH AN "S" CUT INTO THE CURB DIRECTLY OVER THE LATERAL.
3. MULTI-FAMILY SERVICES:
NO. OF UNITS PER SERVICE SERVICE SIZE
1 TO 2 DWELLING UNITS 4" SERVICE LINE
3 TO 4 DWELLING UNITS 6" SERVICE LINE
OVER 4 DWELLING UNITS CONTACT RIO RANCHO UTILITIES CORP.
4. SEWER LATERAL DEPTH AT THE PROPERTY LINE SHALL BE A MINIMUM OF 5 FEET UNLESS OTHERWISE SHOWN ON THE PLANS

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
TYPICAL SEWER LATERAL CONNECTION
Date: JULY, 1991 STANDARD DRAWING S-5

NOTES:

1. THE CHIMNEY BASE SHALL BE A MAIN LINE SIZE BY 6" D.I.M.J. TEE SUPPORTED BY 3,000 P.S.I. POURED CONCRETE BASE AS SHOWN.
2. THE UPPER END OF THE CHIMNEY PIPE SHALL BE AT LEAST 8' BELOW THE GRADE OF THE LOWER CURB.
3. THE CHIMNEY PIPE SHALL BE PVC PIPE WITH MECHANICAL COMPRESSION JOINTS.
4. NO CONNECTION SHALL BE MADE DIRECTLY TO TOP OF CHIMNEY PIPE.
5. WHERE ONE HOUSE LATERAL IS TO BE JOINED TO THE CHIMNEY PIPE, USE A SINGLE WYE AND FACE WYE TOWARDS PROPERTY TO BE SERVED.
6. WHERE TWO OR MORE HOUSE LATERALS ARE TO BE JOINED TO THE CHIMNEY PIPE, INSTALL WYE BRANCHES AS FOLLOWS:
A. TWO LATERALS, ONE SERVING EACH SIDE OF STREET, USE DOUBLE WYE BRANCH.
B. TWO LATERALS, BOTH ON SAME SIDE OF STREET, USE TWO SINGLE WYES STACKED WITH BRANCHES FACING THE PROPERTIES BEING SERVED.
C. THREE OR FOUR LATERALS, USE ONE DOUBLE AND ONE SINGLE WYE STACKED, OR TWO DOUBLE WYES, STACKED

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
CHIMNEY PIPE AND BASE
Date: JULY, 1991 STANDARD DRAWING S-10

KEY NOTES:

1. HOSE CONNECTION
2. SHUT-OFF VALVE
3. THROTTLE VALVE
4. PRESSURE REDUCTION VALVE
5. GAGE COCK
6. MONITORING PRESSURE GAGE - 0-15 PSI
7. DELICATE PRESSURE GAGE - 0-5 PSI

NOTE:

1. ALL LINES ARE TO BE FLUSHED WITH BALL, SOLID PIG OR FLUTED PIG WITH ROPE FROM MANHOLE TO MANHOLE, AS APPROVED BY RIO RANCHO UTILITIES CORP.

TEST PROCEDURES

1. THE SECTION OF LINE TO BE TESTED SHALL BE PLUGGED AT EACH END AND AT ALL LATERALS, WYES AND BRANCHES.
2. ONE PLUG SHALL HAVE AN INLET TAP FOR CONNECTING AN AIR HOSE.
3. SUPPLY AIR TO THE PIPE SECTION. MONITOR AIR PRESSURE SO THAT PRESSURE INSIDE PIPE DOES NOT EXCEED 5.0 PSIG.
4. WHEN PRESSURE REACHES 4.0 PSIG, THROTTLE AIR SUPPLY SO THAT INTERNAL AIR PRESSURE IS MAINTAINED BETWEEN 3.5 PSIG AND 4.0 PSIG FOR AT LEAST 10 MINUTES. (THE 10 MINUTE DELAY ALLOWS AIR TEMPERATURE TO STABILIZE)
5. SHUT OFF AIR SUPPLY AND ALLOW AIR PRESSURE TO DECREASE TO 2.5 PSIG. THE TIME REQUIRED FOR A LOSS OF 1.0 PSIG AT AN AVERAGE PRESSURE OF 3.0 PSIG SHALL BE USED TO COMPUTE THE RATE OF AIR LOSS.
6. IF THE TEST TIME IS LESS THAN THE ALLOWABLE TIME COMPUTED FROM THE ALLOWABLE UNIT TIME TABLE SHOWN HEREON, THE LINE SHALL BE REJECTED.
7. A HYDROSTATIC TEST APPROVED BY RIO RANCHO UTILITIES CAN BE USED AS AN ALTERNATIVE TO THE AIR TEST.

SIZE	T
4"	0.17
6"	0.39
8"	0.70
10"	1.09
12"	1.57
15"	2.50
18"	3.50

WHERE:
T = ALLOWABLE TIME IN SECONDS
I = UNIT TIME FROM TABLE
L = LENGTH OF LINE BEING TESTED, IN FEET

RIO RANCHO UTILITIES CORP. RIO RANCHO, NEW MEXICO
STANDARD AIR TEST FOR SEWER MAINS
Date: JULY, 1991 STANDARD DRAWING S-6

AS BUILT

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
THOMAS T. MANN, JR.
3792
AND LAND SURVEYOR

3/8/94

GATEWAY	
MISCELLANEOUS SEWER DETAILS	
DATE: JAN. 1994	SHEET 17/18
SCALE: AS SHOWN	
REVISION: TTM TLM	
DATE: SPS	
JOB NO: 71-21-055	