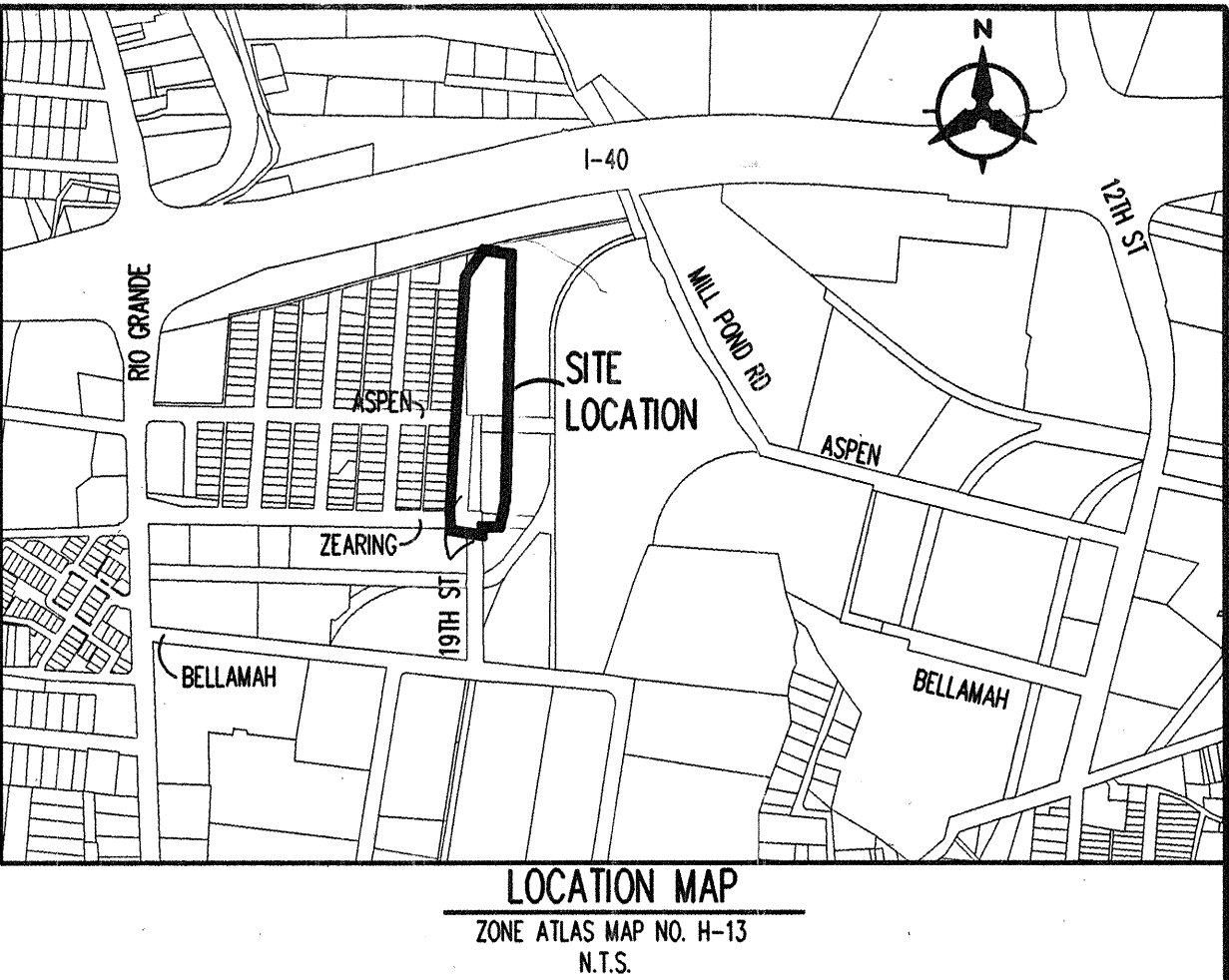


CONSTRUCTION PLANS
FOR
ARBOLERA DE VIDA
SUBDIVISION
ALBUQUERQUE, NEW MEXICO



INDEX	
SHEET NUMBER	DESCRIPTION
1	COVER SHEET
2a, 2b	PLAT
3	GRADING PLAN
4	OVERALL PAVING PLAN
5	NINETEENTH STREET PAVING PLAN
6	ZEARING AVENUE PAVING PLAN
7	OVERALL UTILITY PLAN
8	NINETEENTH STREET UTILITY PLAN
9	ZEARING AVENUE UTILITY PLAN
10	TRAFFIC CONTROL SHEET
11	TRAFFIC CONTROL SHEET (SIGNING)
12	IRRIGATION PLAN
13	PLANTING PLAN
14	IRRIGATION / PLANTING DETAILS

NOTES TO CONTRACTORS

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AND SHALL INCLUDE UPDATE No. 6
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- EXISTING WATERLINE LOCATION TAKEN FROM AVAILABLE RECORDS. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION OF EXISTING UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN ORDER TO RESOLVE IT WITH A MINIMUM AMOUNT OF DELAY.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION, REFER TO SECTION 19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED W/ PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
- CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
- ANY WORK WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

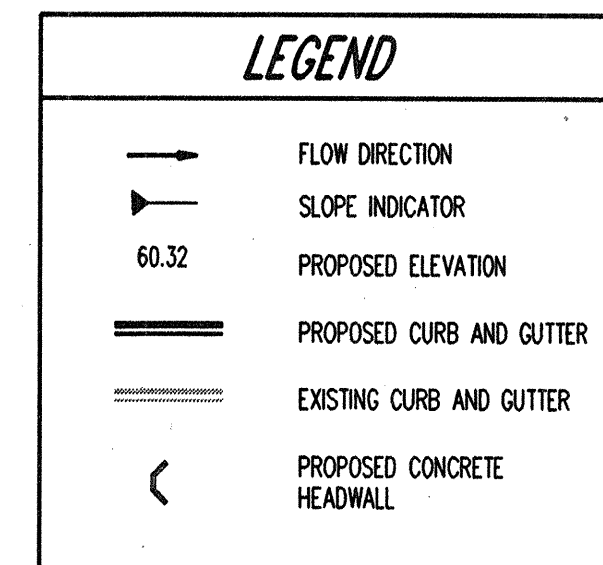
THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

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

APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
[Signature]
DATE 3/8/01


12, 13		1-27-00		1-27-00	
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		DATE	
		DRC Chairman		10-3-99	
		Transportation		8-19-99	
		Water/Wastewater		8-3-99	
		Hydrology		8-8-99	
		Parks		8-9-99	
City Project No. 617581		APPROVED FOR CONSTRUCTION		11/19/99	
		City Engineer		Date	
		Sheet 1		Of 14	

SCANNED BY SPANISH MESA REPRO




1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATION AS NOTED IN THE SOILS REPORT PREPARED BY VINEYARD & ASSOCIATES.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY.
5. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.

ENGINEER'S SEAL



Bohannon ▲ Huston

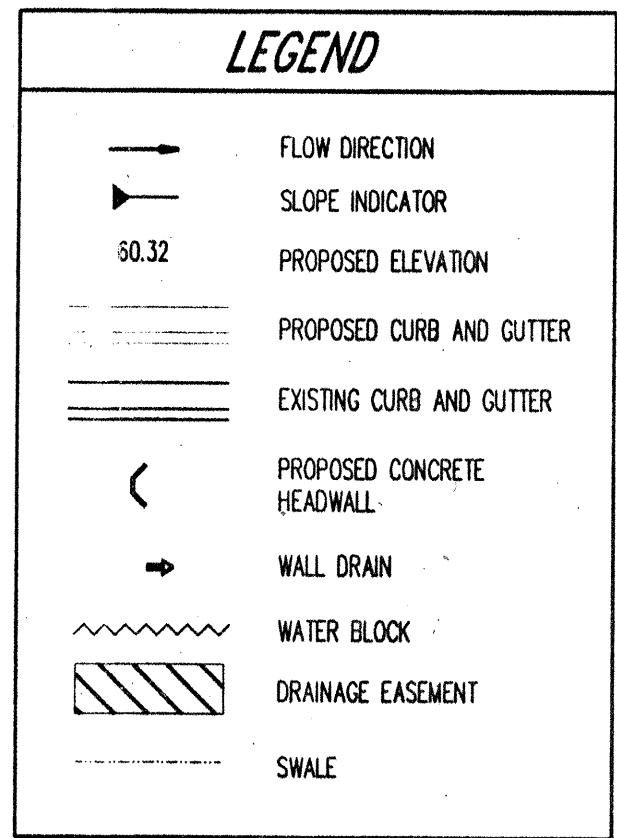
 Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

ARBOLERA DE VIDA - PHASE I
GRADING AND DRAINAGE PLAN

EPI JOB NO. 99256

Copyright Bohannon Huston 1999
Date: JUNE 8, 1999




1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATION AS NOTED IN THE SOILS REPORT PREPARED BY VINEYARD & ASSOCIATES.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY.
5. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.

SURVEY INFORMATION		FIELD NOTES		BENCH MARKS		AS-BUILT INFORMATION	
NO.	BY	DATE				CONTRACTOR	DATE
				ACS ALUMINUM TABLE STAMPED "M418-N4"		INSPECTED BY <i>C. A. Baker</i>	DATE
				GEOGRAPHIC POSITION (WD 1927)		ACCEPTANCE BY <i>M. S. Fickler</i>	DATE <i>7/60</i>
				N.M. STATE PLANE COORDINATES (CENTRAL ZONE)		INSPECTED BY <i>M. S. Fickler</i>	DATE <i>7/60</i>
				X= 365,023.21; Y= 1,692,725.31		DRAWINGS	DATE
				GROUND-TO-CRD FACTOR = 0.999567		<i>whalenaz</i>	<i>26/1</i>
				$\Delta OC = -071534''$		MICRO-FILM INFORMATION	
						RECORDED BY	DATE
						NO.	

A circular professional engineer seal for Richard Lynn Beltram, No. 10596, State of Michigan. The seal is stamped in black ink and features the text "RICHARD LYNN BELTRAM" around the top inner edge, "10596" in the center, and "PROFESSIONAL ENGINEER" around the bottom inner edge. The seal is crossed out with a large, bold, handwritten "X" in black ink.

A	12/14	REVISED GRADING PLAN	RLB
		FOR NEW LAYOUT AND PARK	
No.	Date	REMARKS	By
REVISIONS			
DESIGN			
Designed By: EES		DATE: 9/98	
Drawn By: JAJ		DATE: 9/98	
Checked By: RLB		DATE: 9/98	

Bohannon ▲ Huston

 Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

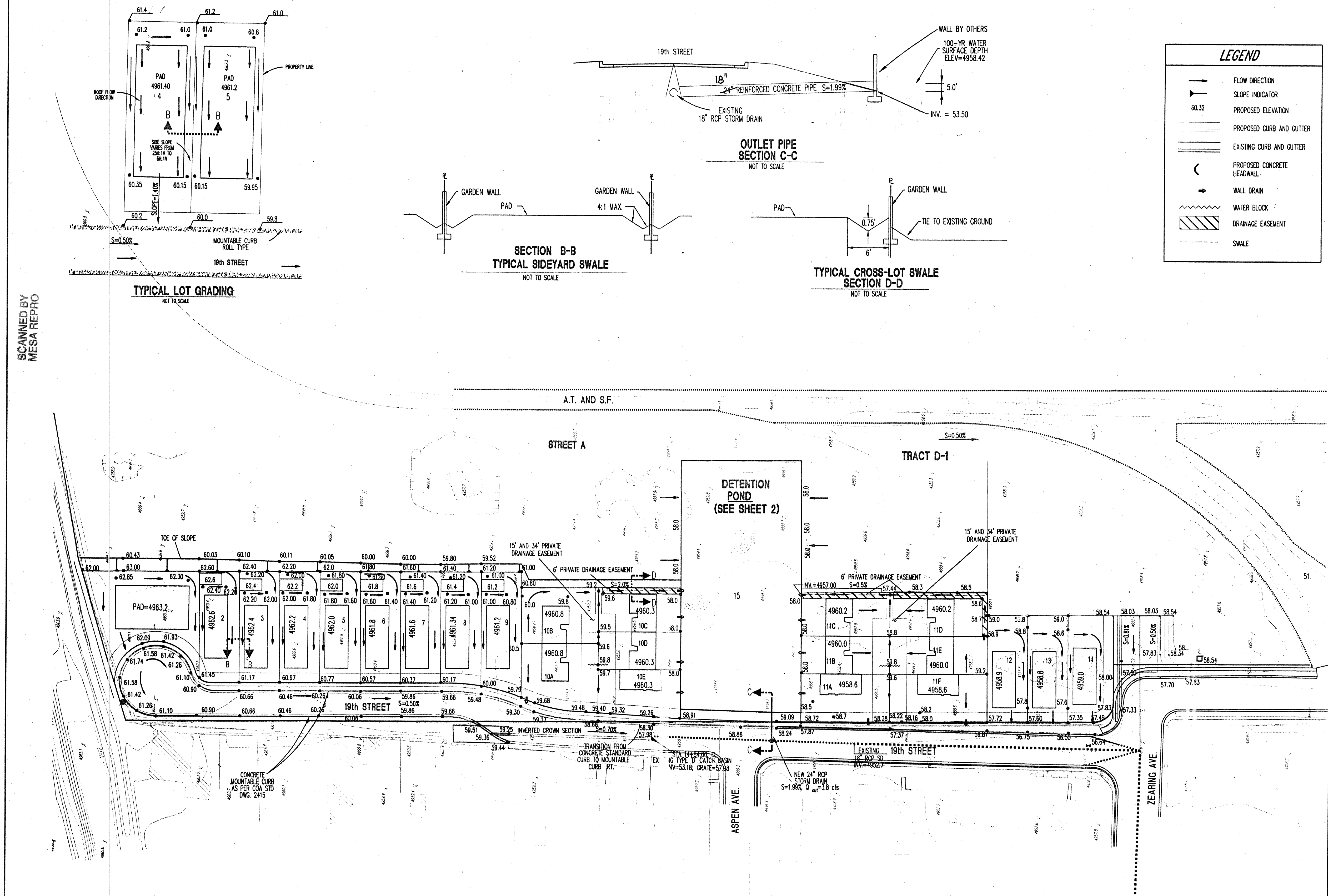
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA - PHASE I

GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

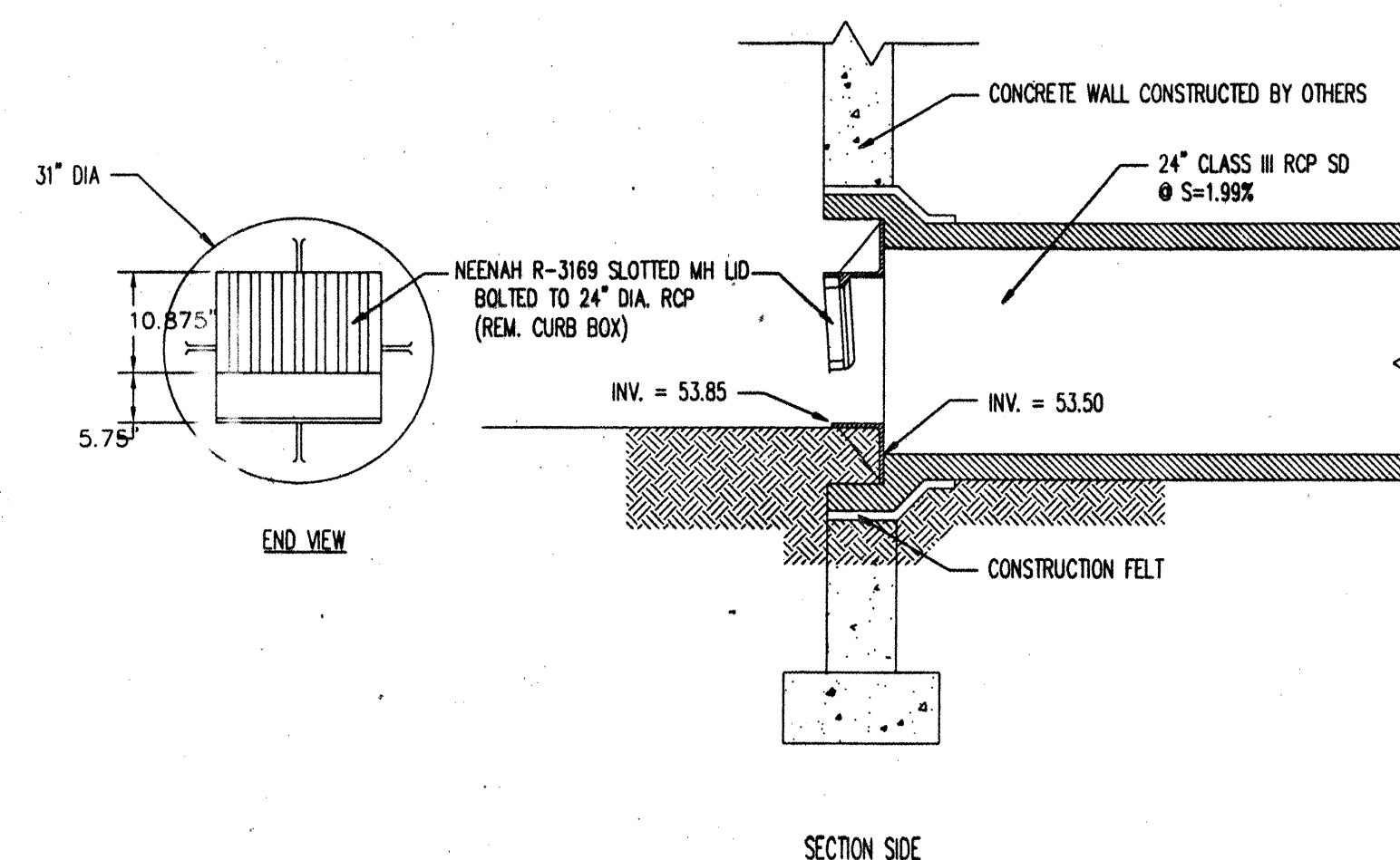
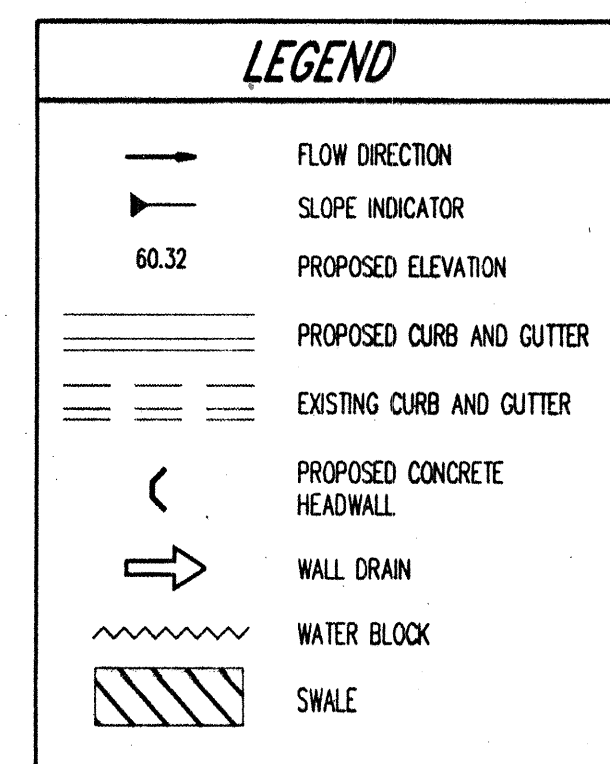
City	Project No.	Zone Map No.	Sheet	Of
	617581	H-13	3A	14



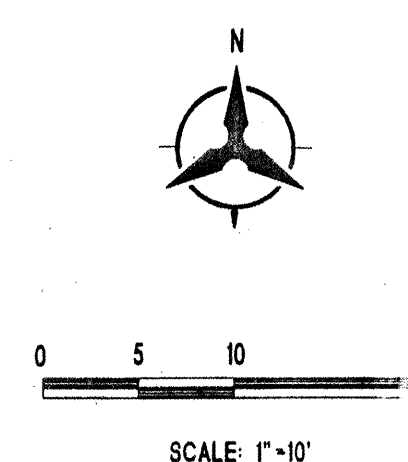
BHI-MAIN:[99256.CDP.DESIGN] 99256GRADING11-99.DWG

GENERAL NOTES:


1. GRADING PLAN ELEVATIONS INTENDED FOR MASS GRADING OF SITE. DETAILED GRADING AND LANDSCAPING IMPROVEMENTS BY OTHERS. LANDSCAPE IMPROVEMENTS SHOWN FOR INFORMATION PURPOSES. (NOT IN THIS CONTRACT)
2. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR IS TO REFER TO EARTHWORK SPECIFICATION AS NOTED IN THE SOILS REPORT PREPARED BY GEO-TEST, INC. DATED 10-13-94 & APRIL 13, 1994.
4. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE, AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
5. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AS PER DETAIL SHEET 3 AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
6. ALL SPOT ELEVATIONS A/E FINISHED GRADE OR TO FLOWLINE UNLESS OTHERWISE NOTED.
7. BOULDERS, GREATER THAN 3 FEET IN DIAMETER, EXCAVATED DURING GRADING ACTIVITIES SHALL BE STOCKPILED AND DISPOSED OF AT THE DISCRETION OF THE OWNER.



STORM DRAIN PIPE AND HEADWALL DETAIL
NTS



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 Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA – PHASE1

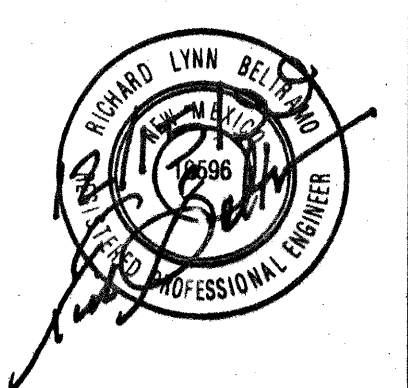
GRADING PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.			
City Project No.	DRB# 97-280	Zone Map No.	H-13	Sheet	3B	Of	14

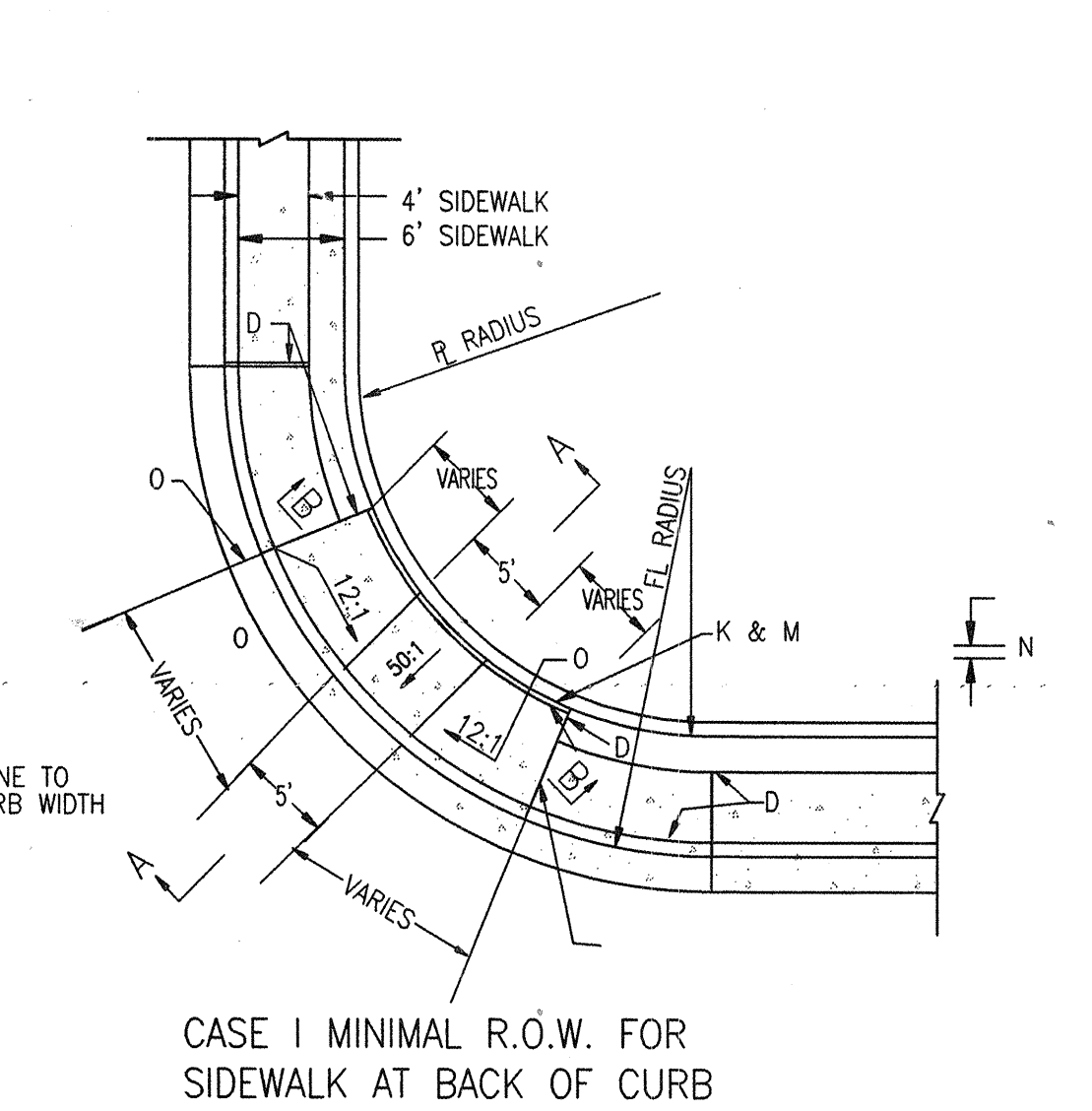
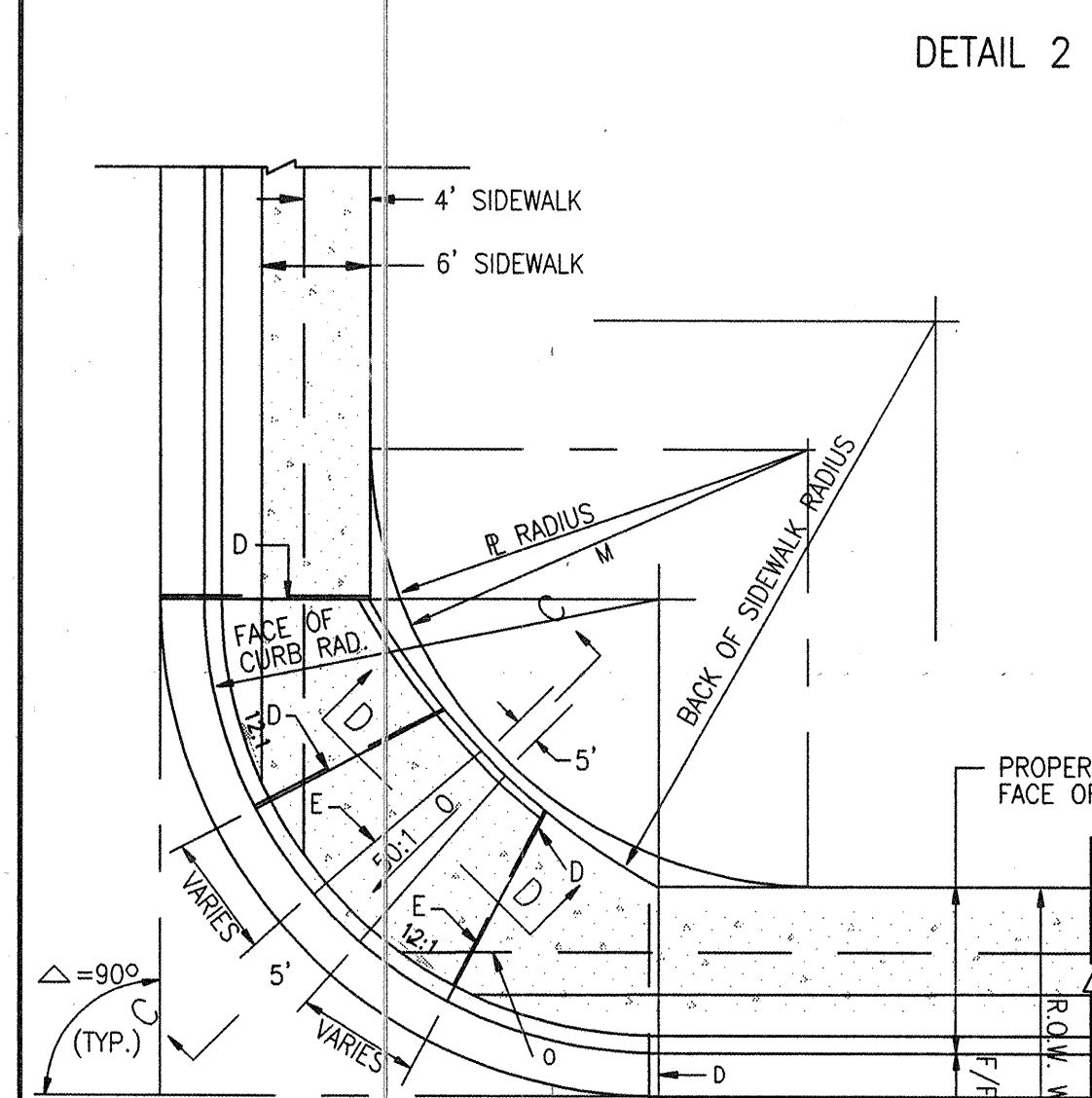
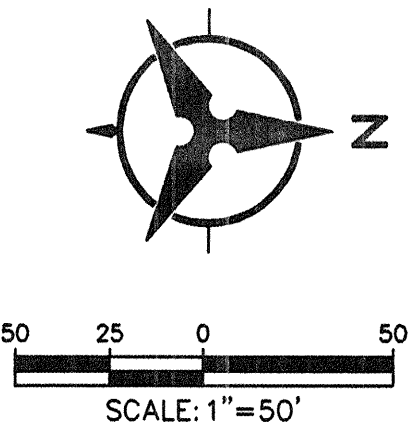
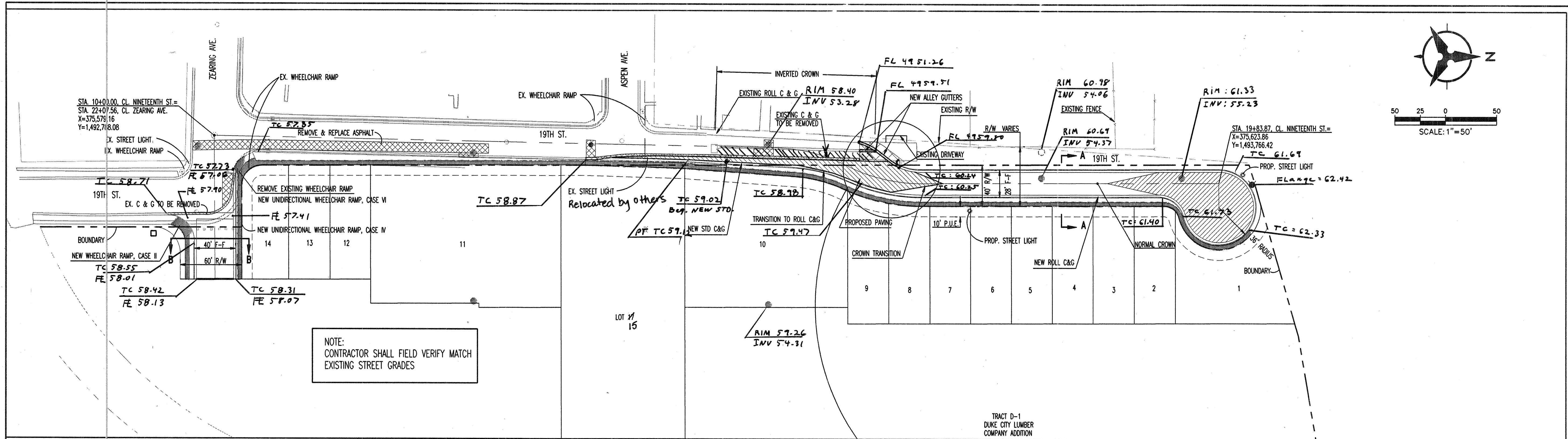
SHEET 2 OF 2 GRADING PLAN

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DATE

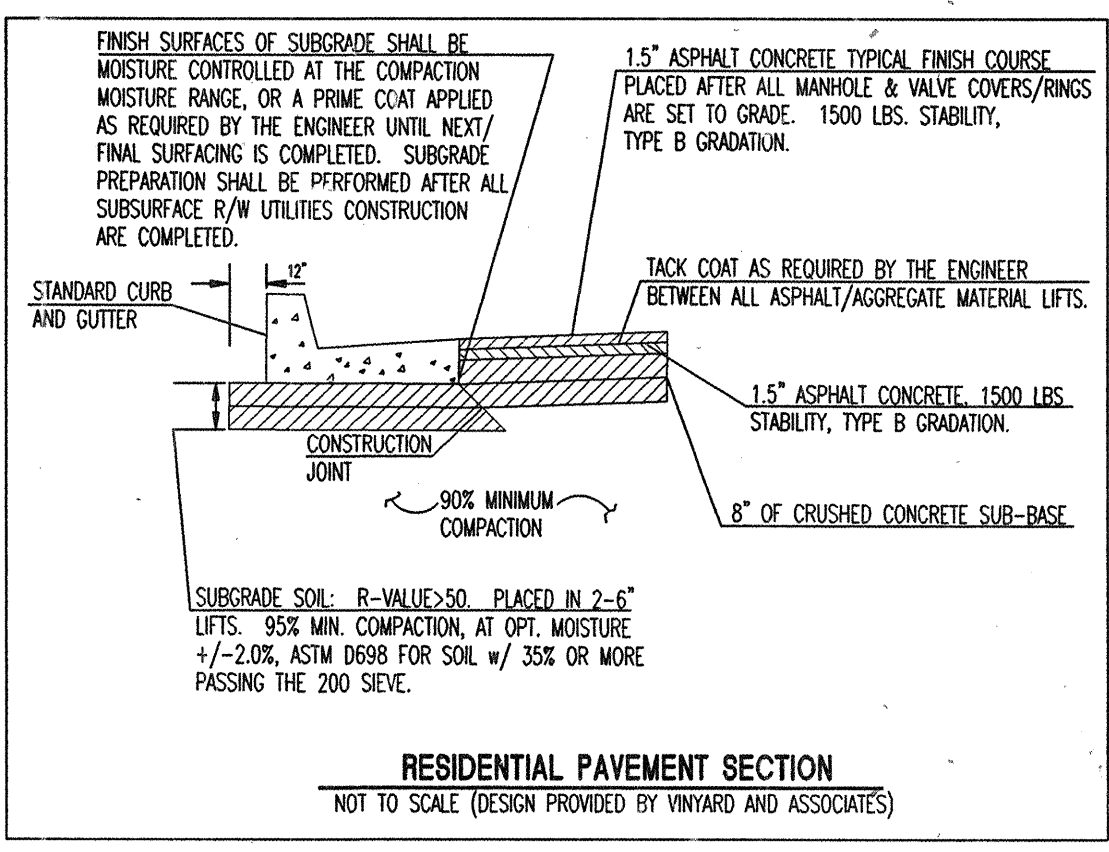
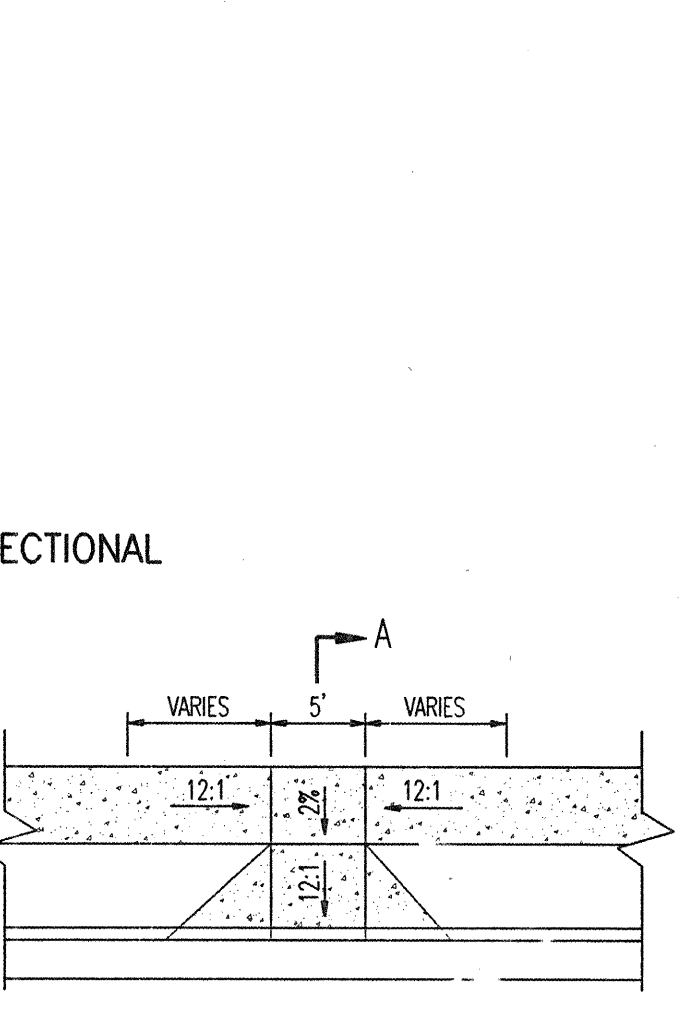
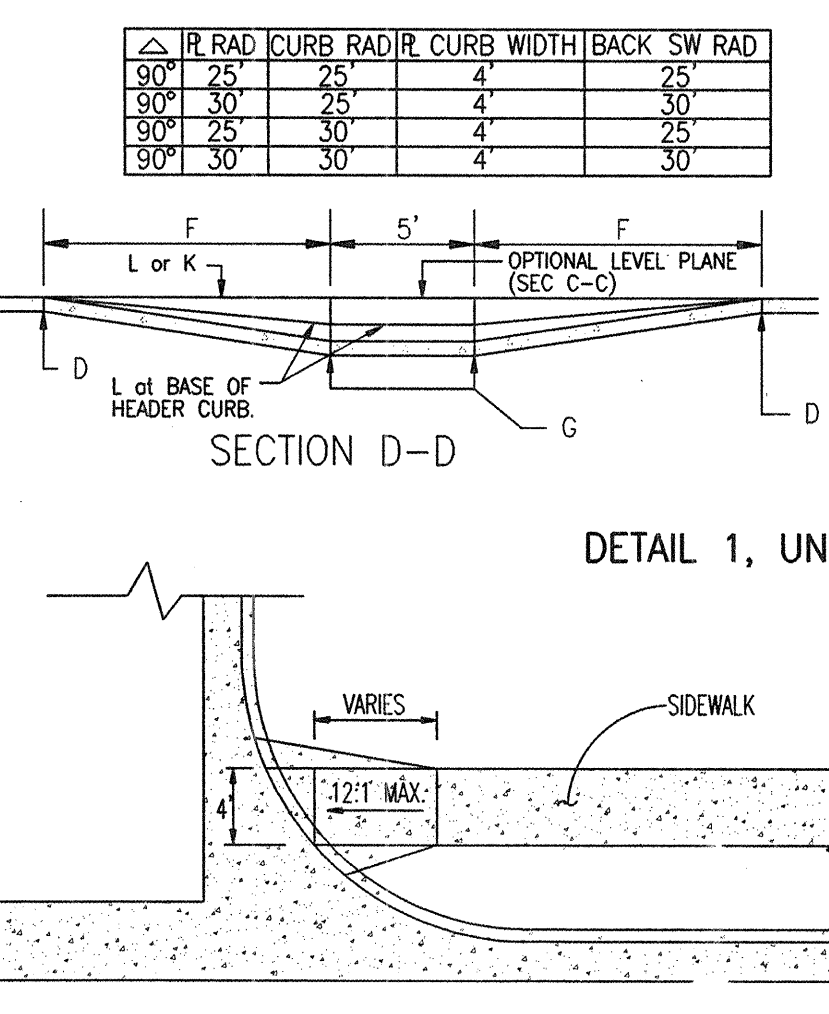
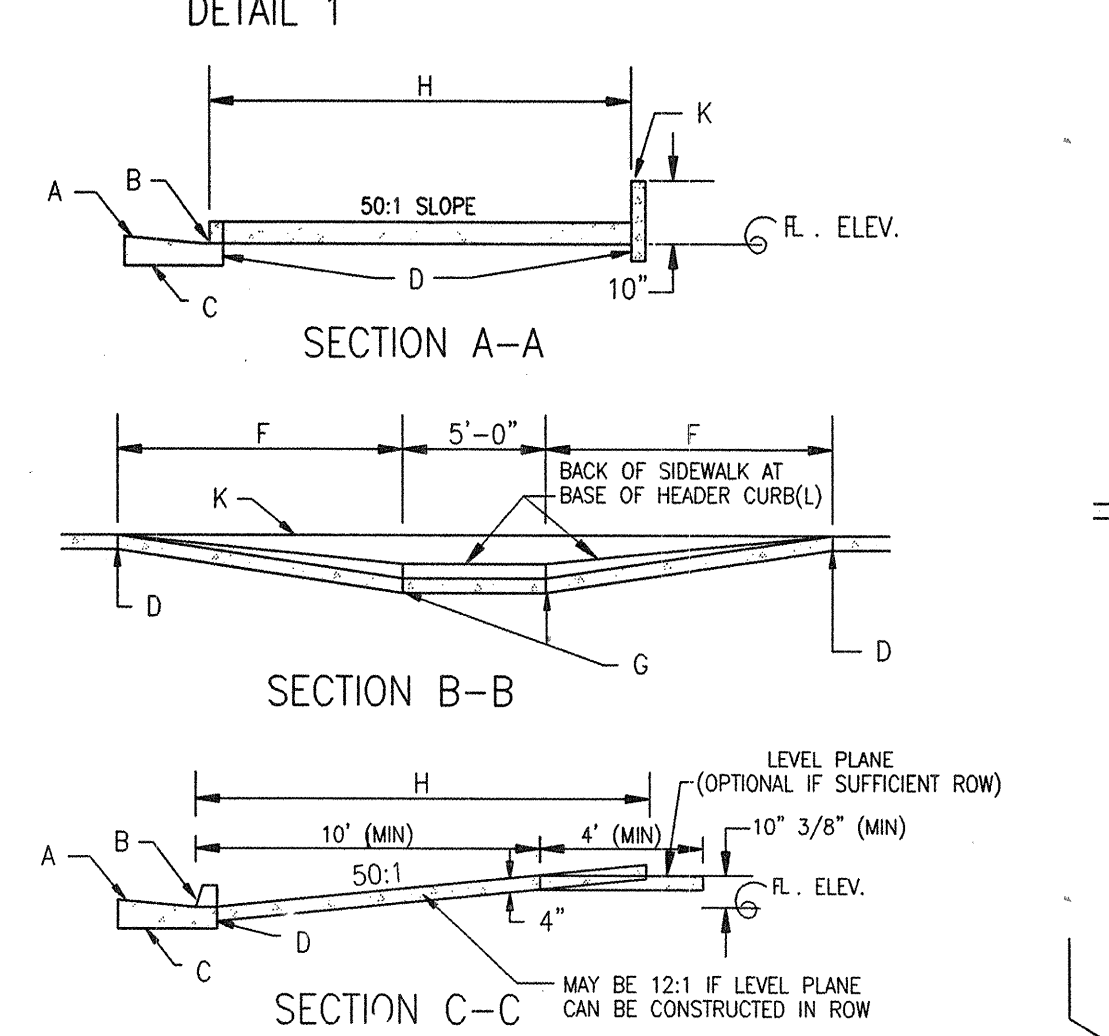
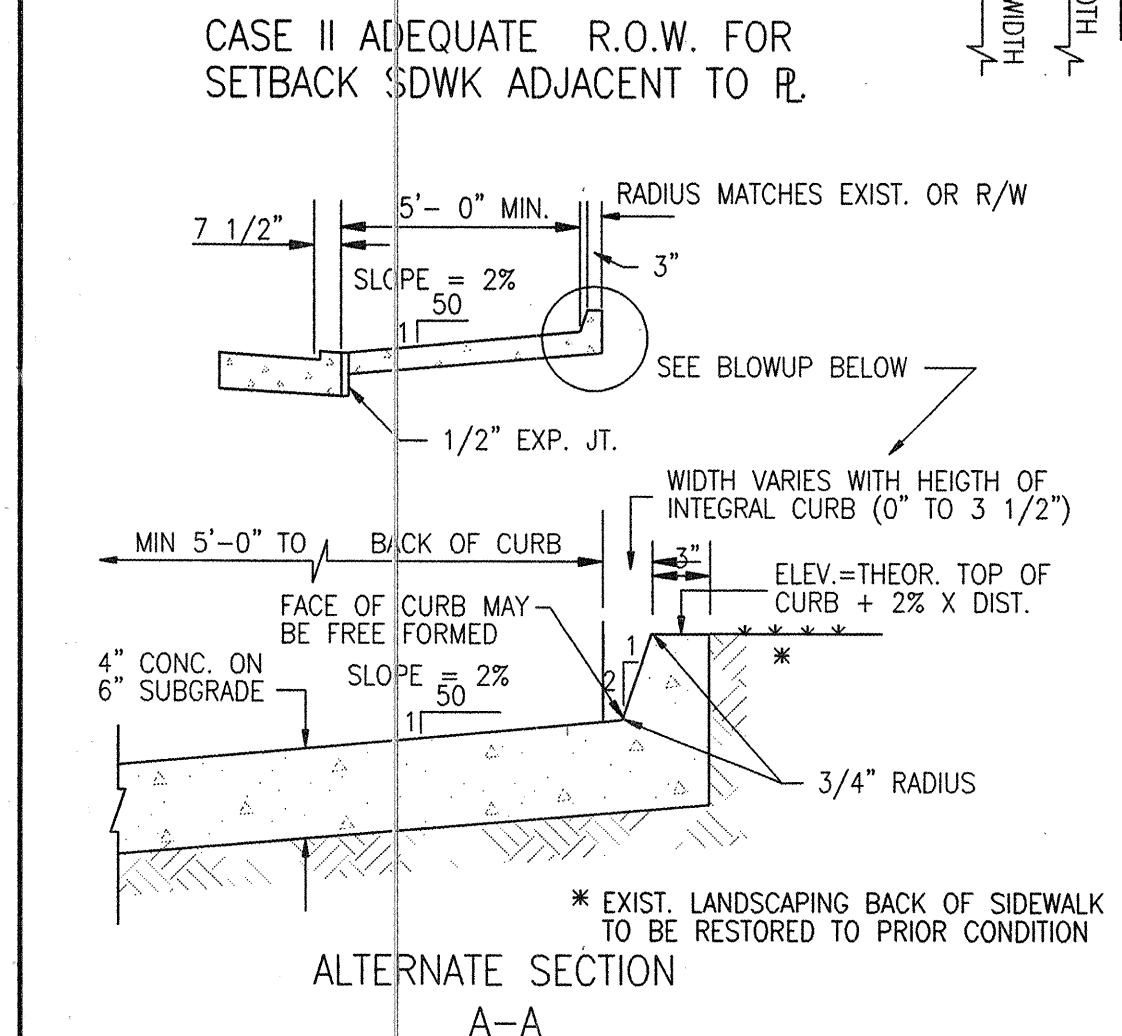
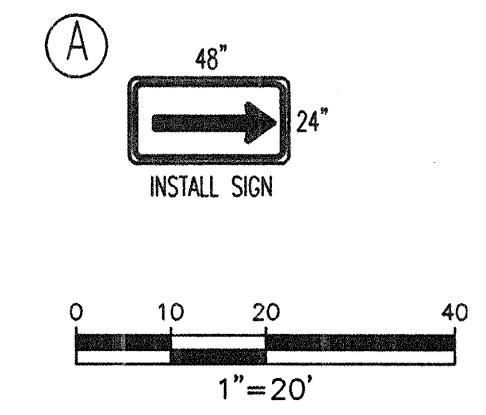
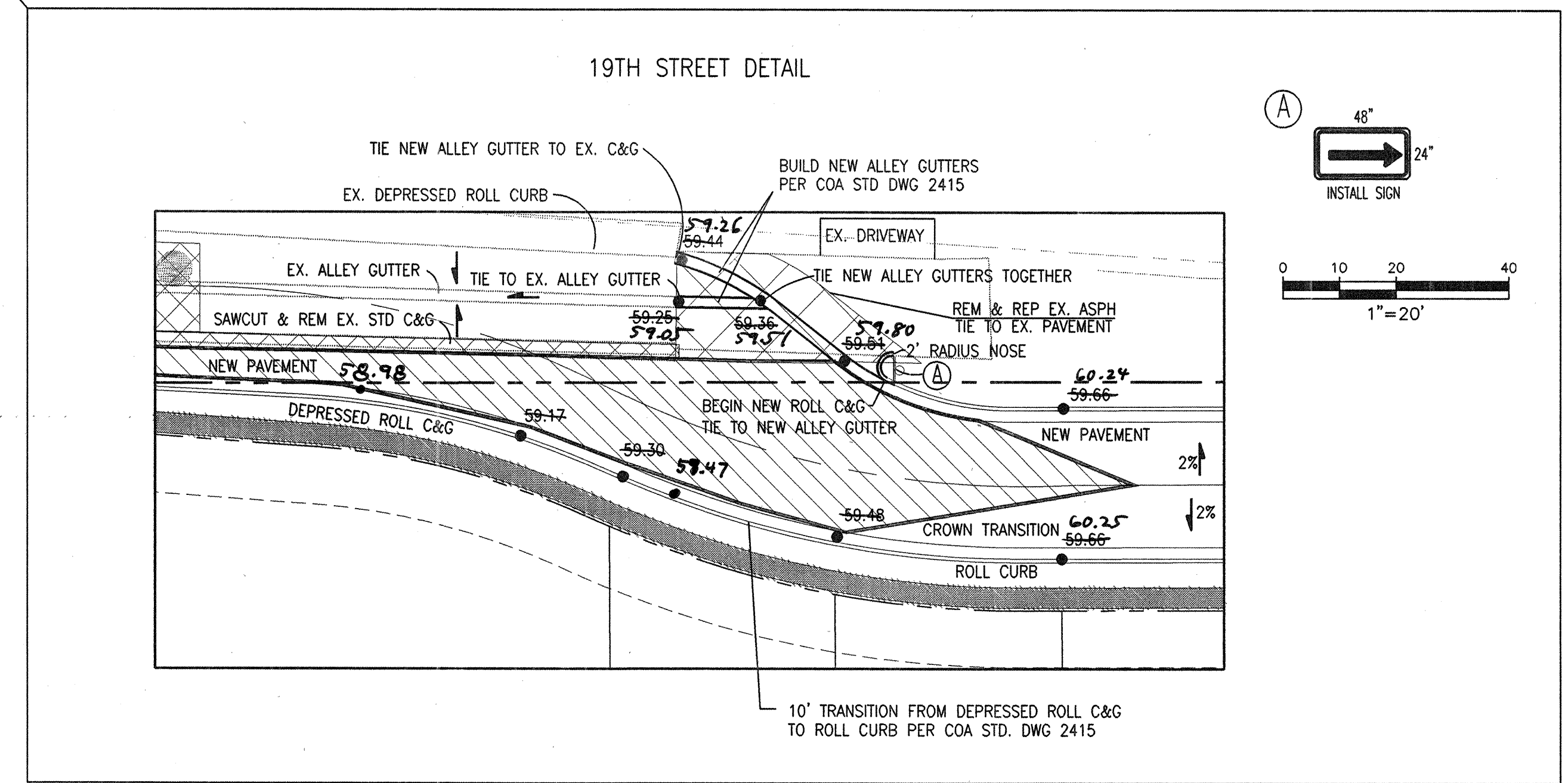
AS-BUILT INFORMATION	
CONTRACTOR <i>Caradoc</i>	DATE
WORKED BY <i>C.A.B.</i>	DATE <i>11/96</i>
SURVEYOR'S OFFICE	DATE <i>7/00</i>
ERECTOR BY <i>M. S. Feller</i>	DATE <i>7/00</i>
ERECTOR BY <i>M. S. Feller</i>	DATE <i>7/00</i>
CONNECTED BY <i>B. Canaan</i>	DATE <i>2/01</i>
MICRO-FILM INFORMATION	
RECORDED BY	DATE
10.	

[illegible]

12/14	REVISED GRADING PLAN	RLB
	FOR NEW LAYOUT AND PARK	
No.	Date	By
REVISIONS		
DESIGN		
Designed By:	EES	DATE: 1/12/99
Drawn By:	RAJ	DATE: 1/12/99
Checked By:	RLB	DATE: 1/12/99



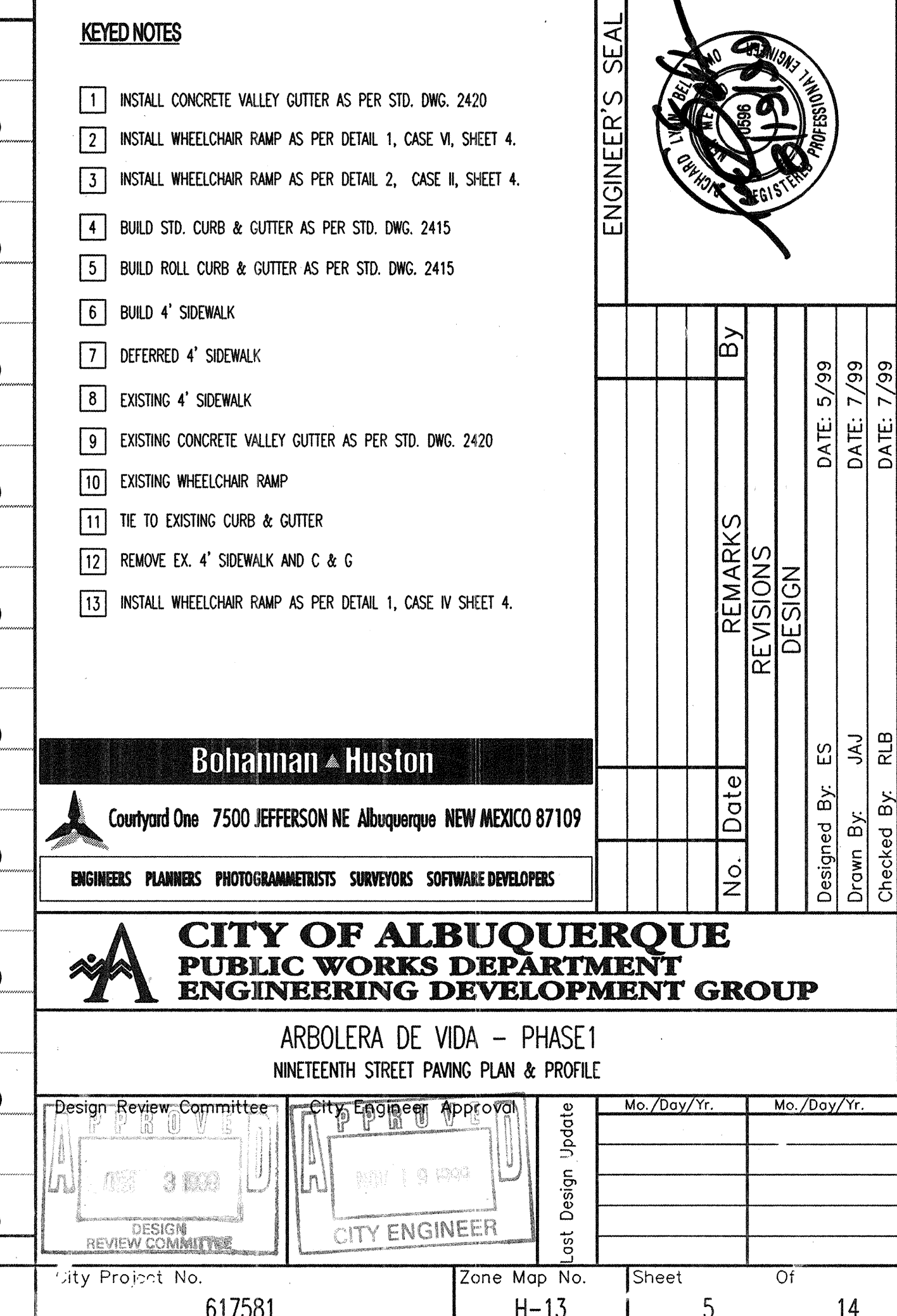
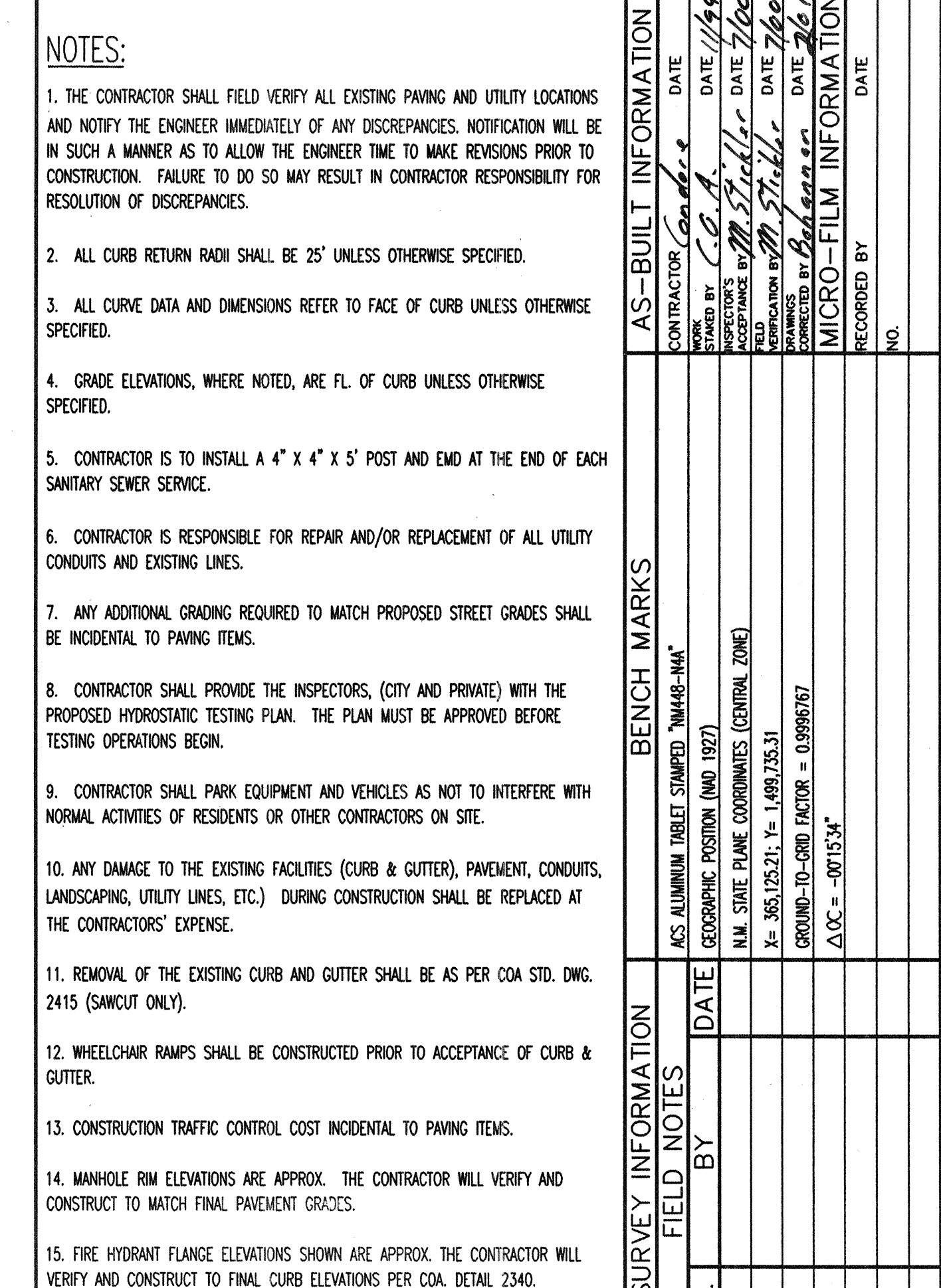
- GENERAL NOTES:**
- CURB ACCESS RAMPS ARE NORMALLY TO BE LOCATED AT THE CENTER OF THE RETURN OR AS DIRECTED BY THE CITY TRAFFIC ENGINEER.
 - SURFACE TEXTURE OF CURB ACCESS RAMPS SHALL BE OBTAINED BY HEAVY BROOMING (TEXTURE DEPTH .035"), TRANSVERSE TO THE SLOPE OF THE RAMP.
 - GUTTER FLOW-LINE PROFILE SHALL BE MAINTAINED THROUGH THE AREA OF THE RAMP. DRAINAGE CATCH BASIN STRUCTURES SHALL NOT BE PLACED IN LINE WITH RAMPS.
 - WIDTH OF SIDEWALK AND RAMP MUST BE MAINTAINED AT A MINIMUM OF 5'-0" THROUGH ENTIRE RAMP LENGTH.
- CONSTRUCTION NOTES:**
- SLOPE OF GUTTER DEPENDENT ON REQUIREMENTS FOR VALLEY GUTTER.
 - 1/4" UP ABOVE FLOW LINE (VERTICAL). SEE STD. DWG 2415
 - CURB & GUTTER (SEE STD. DWG 2415 - GUTTER AT THE CURB ACCESS RAMP).
 - 1/2" EXPANSION JOINT.
 - PARALLEL LINES - TOP AND BOTTOM OF RAMP.
 - 12:1 SLOPE AT FACE OF CURB. (SEE STD. DWG 2418)
 - CONTRACTION (DUMMY) JOINT.
 - VARIES WITH AVAILABLE R.O.W.
 - VARIABLE.
 - HEADER CURB, SEE DWG. 2415.
 - BACK OF SIDEWALK.
 - BACK OF SIDEWALK RADIUS TO BE ESTABLISHED SO AS TO MAINTAIN A 5'-0" RAMP WIDTH (MINIMUM) OR MORE THROUGHOUT. SEE STD. DWG 2440 (NOTE 5) IF LESS THAN 5'-0" IS AVAILABLE DUE TO UNTIMELY UNRESOLVABLE CONSTRAINTS.
 - 4 1/2" MAX.
 - 12:1 SLOPE MAXIMUM ON RAMP.
 - ANY PRIVATE LANDSCAPING AND OR IRRIGATION SHALL BE RESTORED TO ORIGINAL CONDITION. SHOULD ANY RPRIVATE IMPROVEMENT NEED TO BE REMOVED, OWNER MUST BE NOTIFIED.



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 Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109
 ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

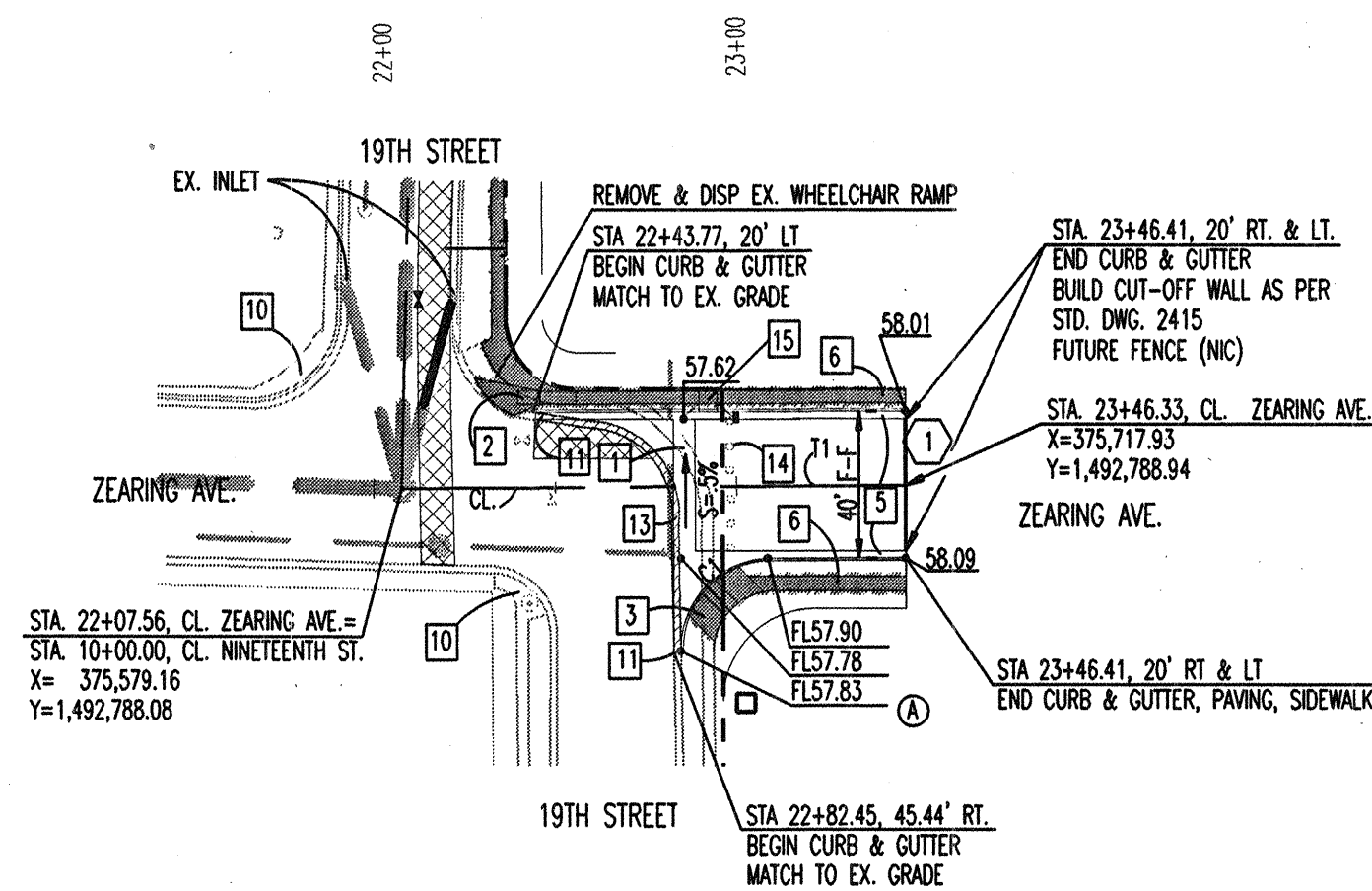
CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DEVELOPMENT GROUP

ARROLERA DE VIDA		OVERALL PAVING PLAN	
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	CITY ENGINEER	Last Design Update	
City Project No. 617581	Zone Map No. H-13	Sheet 4	Of 14





W20-4
B/O,R/B



FL

1	57.83
2	57.85
3	57.87
4	57.88
5	57.90

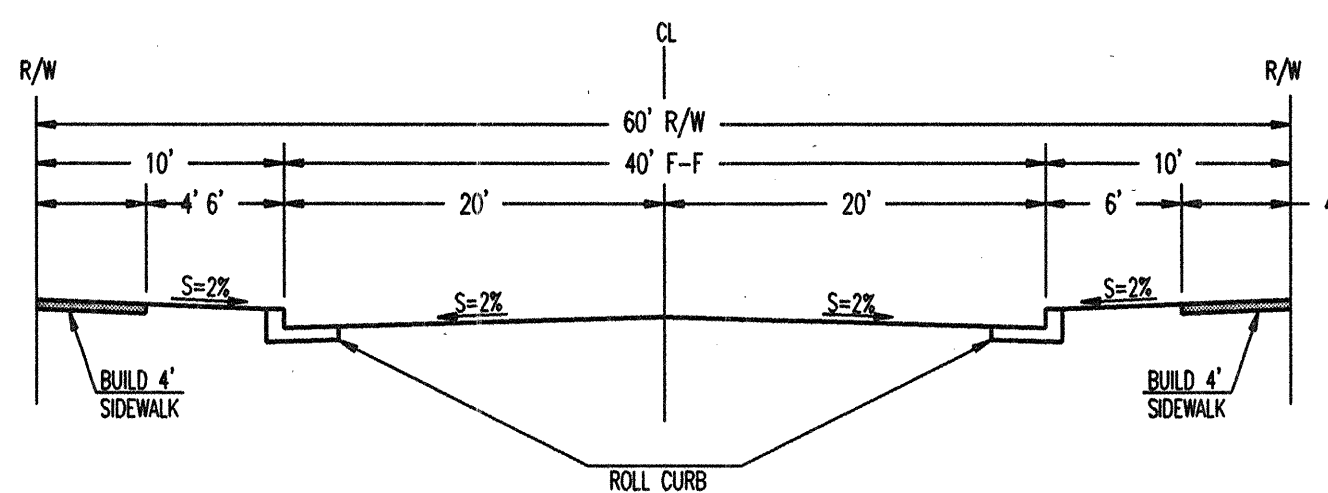
D=90°16'03"
L=39.39'
R=25.0'

CENTERLINE TANGENT DATA

No.	BEARING	TANGENT DATA
T1	N89°38'44"E	138.77'

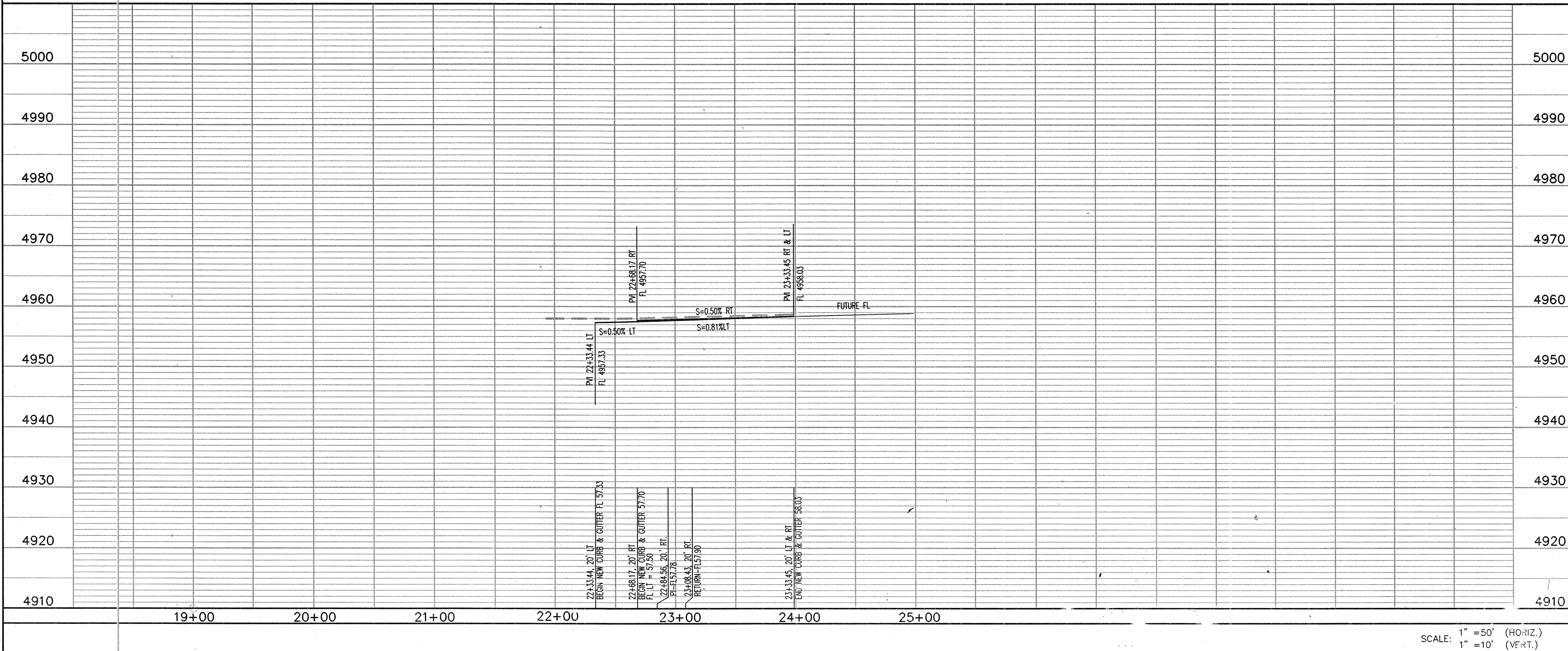
CURVE DATA TABLE

CURVE #	RADIUS	ARC	TANGENT	DELTA
C1	25.00'	39.22'	24.95'	89°52'44"



ZEARING AVENUE
TYPICAL STUB STREET SECTION B-B
NOT TO SCALE

ZEARING AVENUE



NOTES:

1. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PAVING AND UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. NOTIFICATION WILL BE IN SUCH A MANNER AS TO ALLOW THE ENGINEER TIME TO MAKE REVISIONS PRIOR TO CONSTRUCTION. FAILURE TO DO SO MAY RESULT IN CONTRACTOR RESPONSIBILITY FOR RESOLUTION OF DISCREPANCIES.
2. ALL CURB RETURN RADII SHALL BE 25' UNLESS OTHERWISE SPECIFIED.
3. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
4. GRADE ELEVATIONS, WHERE NOTED, ARE FL. OF CURB UNLESS OTHERWISE SPECIFIED.
5. CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND END AT THE END OF EACH SANITARY SEWER SERVICE.
6. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
7. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
8. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
9. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
10. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
11. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAWCUT ONLY).
12. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.
13. CONSTRUCTION TRAFFIC CONTROL COST INCIDENTAL TO PAVING ITEMS.
14. MANHOLE RIM ELEVATIONS ARE APPROX. THE CONTRACTOR WILL VERIFY AND CONSTRUCT TO MATCH FINAL PAVEMENT GRADES.
15. FIRE HYDRANT FLANGE ELEVATIONS SHOWN ARE APPROX. THE CONTRACTOR WILL VERIFY AND CONSTRUCT TO FINAL CURB ELEVATIONS PER COA. DETAIL 2340.

KEYED NOTES

1. INSTALL CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
2. INSTALL UNIDIRECTIONAL WHEELCHAIR RAMP AS PER DETAIL 1, CASE VI SHEET 4.
3. INSTALL WHEELCHAIR RAMP AS PER DETAIL 2, SHEET 4.
4. BUILD STD. CURB & GUTTER AS PER STD. DWG. 2415
5. BUILD ROLL CURB & GUTTER AS PER STD. DWG. 2415
6. BUILD 4' SIDEWALK
7. DEFERRED 4' SIDEWALK
8. EXISTING 4' SIDEWALK
9. EXISTING CONCRETE VALLEY GUTTER AS PER STD. DWG. 2420
10. EXISTING WHEELCHAIR RAMP TO REMAIN.
11. TIE TO EXISTING CURB & GUTTER
12. REMOVE AND REPLACE ASPHALT AS PER STD. DWG. 2465
13. SAWCUT, REMOVE AND DISPOSE EX. CURB & GUTTER, SIDEWALK
14. REMOVE AND DISPOSE EX. WOODEN BARRICADE, STREET SIGNS
15. INSTALL UNIDIRECTIONAL WHEELCHAIR RAMP AS PER DETAIL 1, CASE IV SHEET 4.

Bohannon & Huston

Courtyard One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

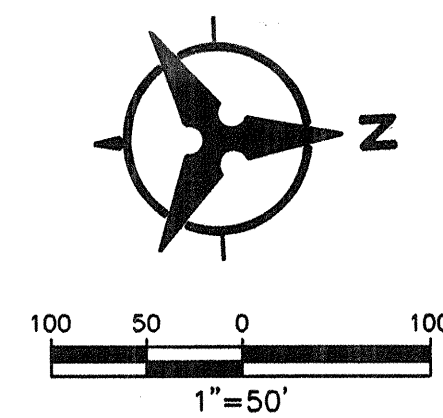
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA - PHASE I
ZEARING PAVING PLAN & PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	APPROVED		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
Last Design Update			

City Project No.	Zone Map No.	Sheet	Of
617581	H-13-Z	6	14

SCANNED BY
MESA REPRO



LEGEND	
PROPOSED BOUNDARY	---
PROPOSED SANITARY SEWER LINE	SAS
PROPOSED SANITARY SEWER MANHOLE	●
PROPOSED SANITARY SERVICE	---
EXISTING SANITARY SEWER LINE	SAS
EXISTING SANITARY SEWER MANHOLE	●
PROPOSED WATERLINE	W
PROPOSED GATE VALVE	+
PROPOSED FIRE HYDRANT	+
PROPOSED WATER METER SERVICE	W
EXISTING WATERLINE	W
EXISTING GATE VALVE	+
EXISTING FIRE HYDRANT	+
PROPOSED STORM DRAIN	SD
PROPOSED STORM DRAIN MANHOLE	⊙
PROPOSED STORM DRAIN INLET	SD
EXISTING STORM DRAIN LINE	SD
PWM TRANSFORMER	■

RESTRAINED JOINT TABLE			
MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS FROM EACH SIDE OF MJ LISTED (ft)		
11.25' H BEND	2'	3'	1'
22.50' H BEND	4'	5'	3'
45' H BEND	8'	11'	6'
90' H BEND	20'	26'	14'
GATE VALVE	55'	72'	55'
BITELY VALVE	---	---	---
REDUCER (8"x6")	30'	30'	---
CAP	55'	72'	27'

- NOTE:
- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
 - THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MJ SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE)
 - THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANTS JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.
 - ALL CAPS SHALL UTILIZE PCC BLOCKING (INCIDENTAL TO WATERLINE CONSTRUCTION)

WATER SHUT-OFF REQUIREMENTS:
CONTRACTOR WILL BE RESPONSIBLE FOR THE TIMING AND COORDINATION OF THE WATER SHUT-OFF REQUIREMENTS IN CONJUNCTION WITH THE COMPLETION OF THE PROJECT.

AT LEAST FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT PWD/WATER SYSTEMS DIVISION (857-8200) TO INITIATE IMPLEMENTATION OF THIS WATER SHUT-OFF PLAN. CONTRACTOR SHALL NOT OPERATE CITY VALVES.

WATER SHUT-OFF PLAN:	
FOR CONNECTION	CLOSE VALVE (S)
TO EXIST. 8" IN ZEARING & 19TH ST.	892, 895, 896, 893 & 847
TO REMOVE 6" CI & 6" PVC LINE	1111, 843 & 893

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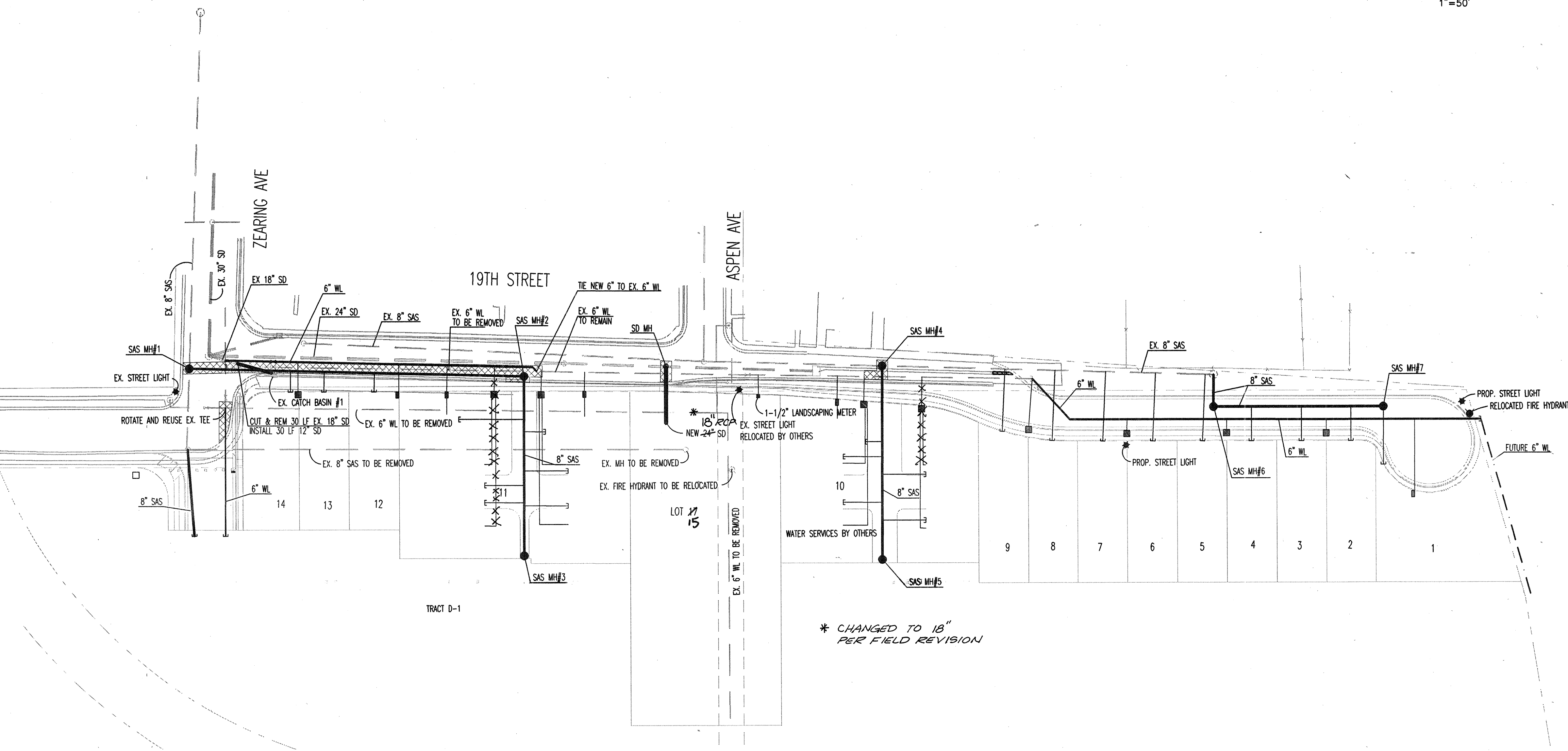
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

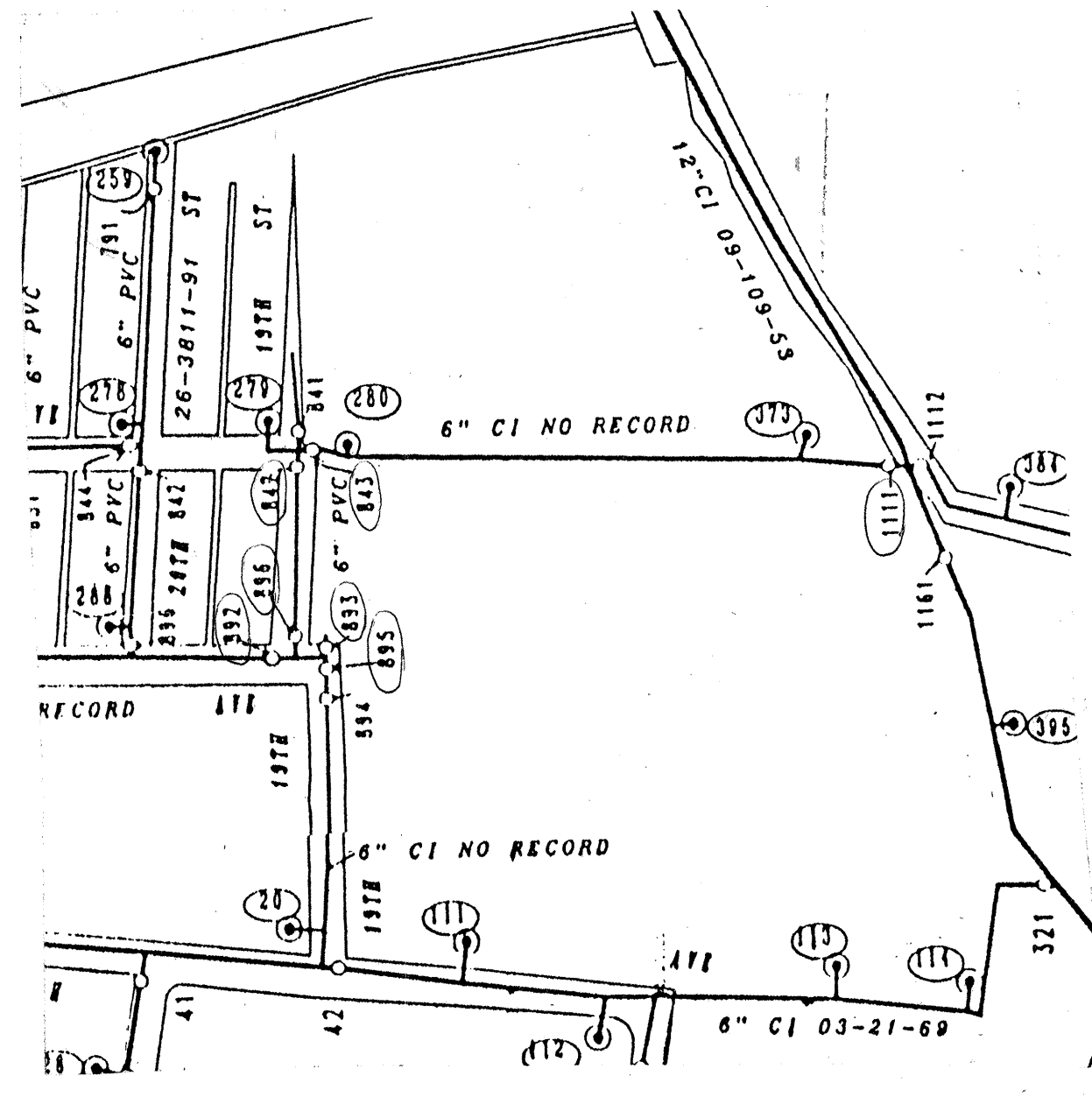
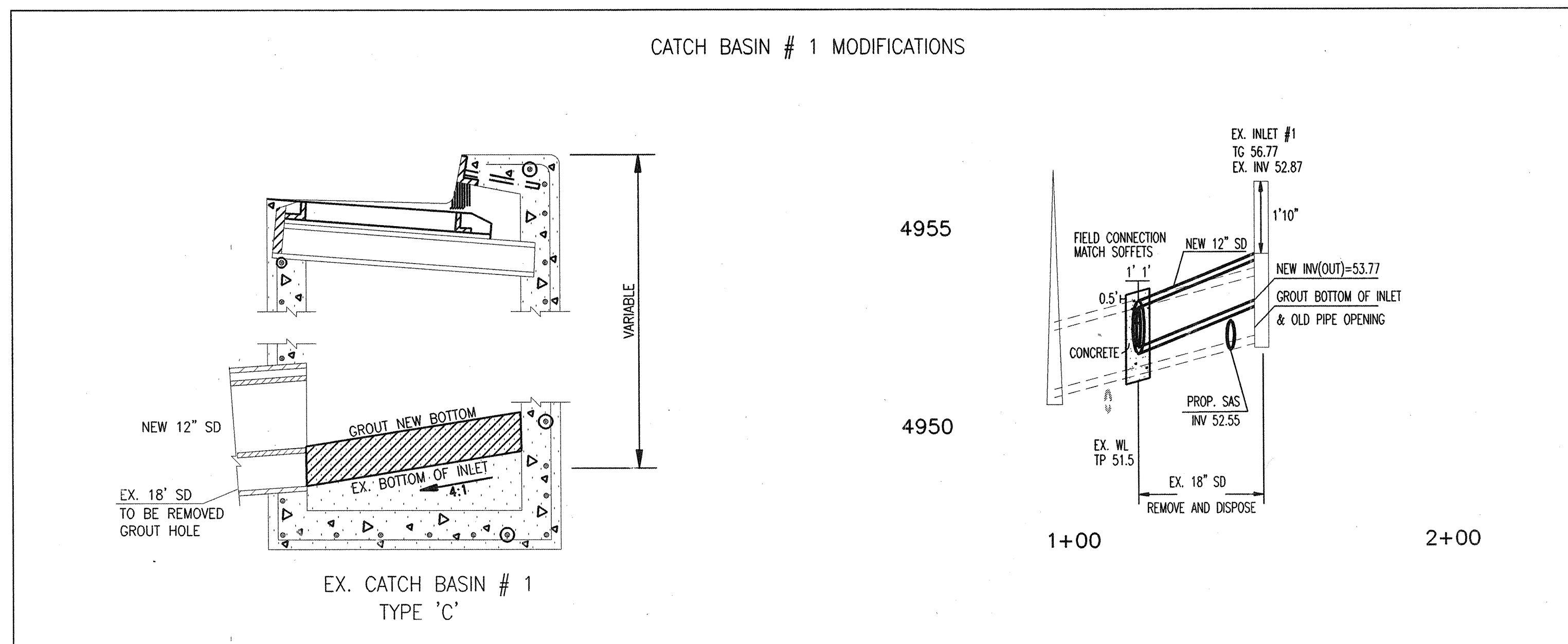
ARGOLERA DE VIDA

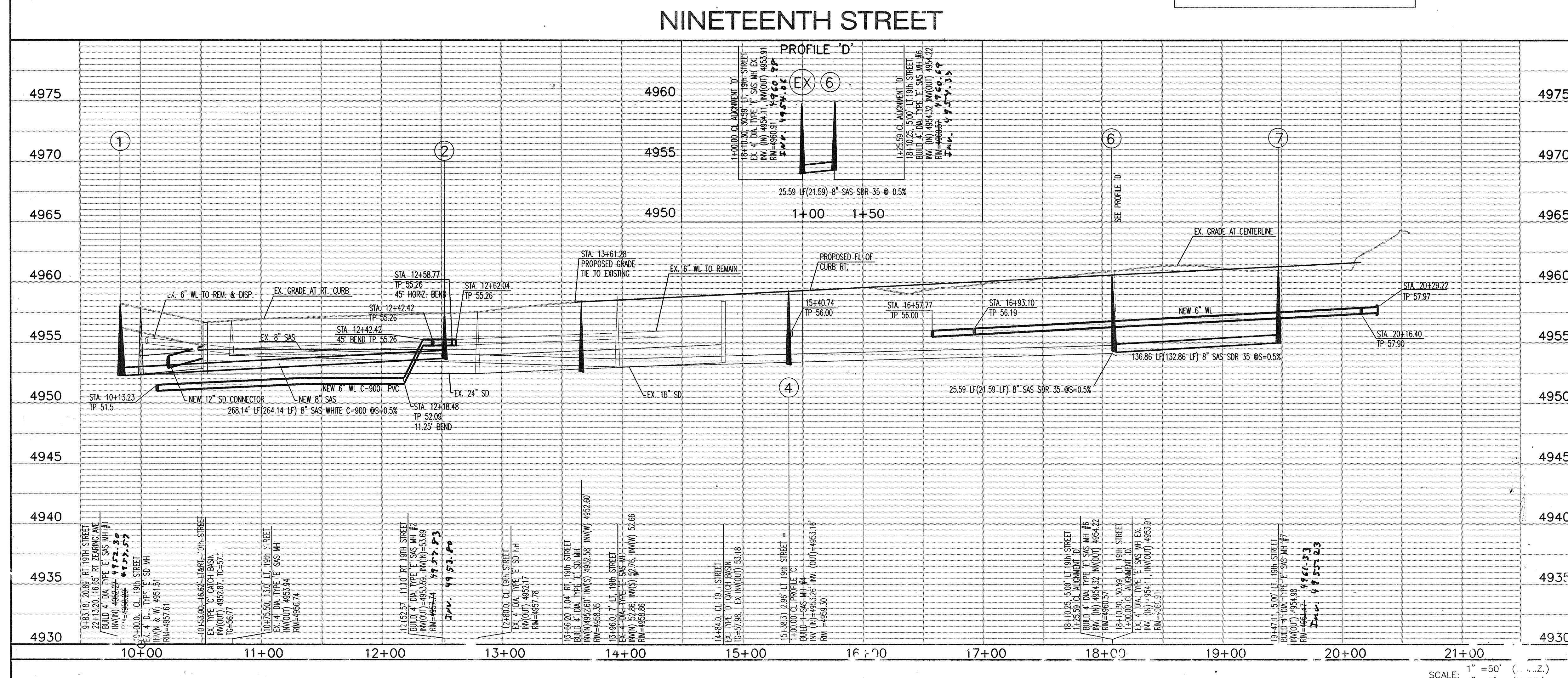
OVERALL UTILITY PLAN

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED OCT 3 1999 DESIGN REVIEW COMMITTEE	APPROVED OCT 19 1999 CITY ENGINEER		
City Project No. 017581	Zone Map No. H-13	Sheet 7	Of 14



CATCH BASIN # 1 MODIFICATIONS








NOTE:

1. ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
2. THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS, AND ALL JOINTS WITHIN 20 LF OF A MJ SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ABOVE. (SEE NOTE 2 ABOVE)
4. THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.
5. ALL CAPS SHALL UTILIZE PCC BLOCKING (INCIDENTAL TO WATERLINE CONSTRUCTION)

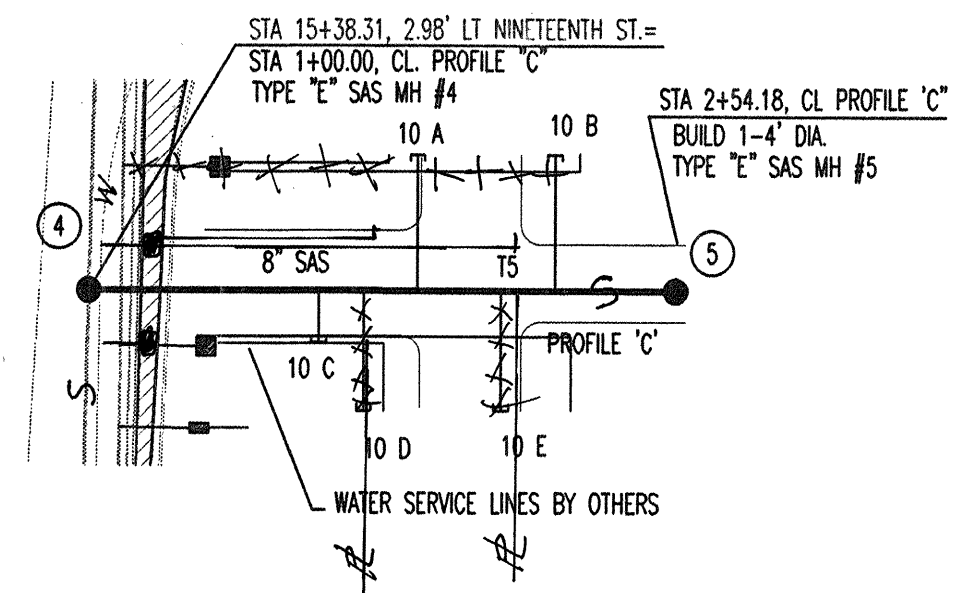
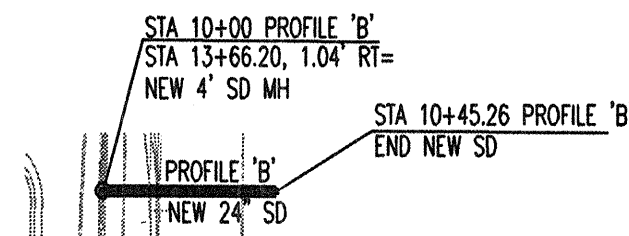
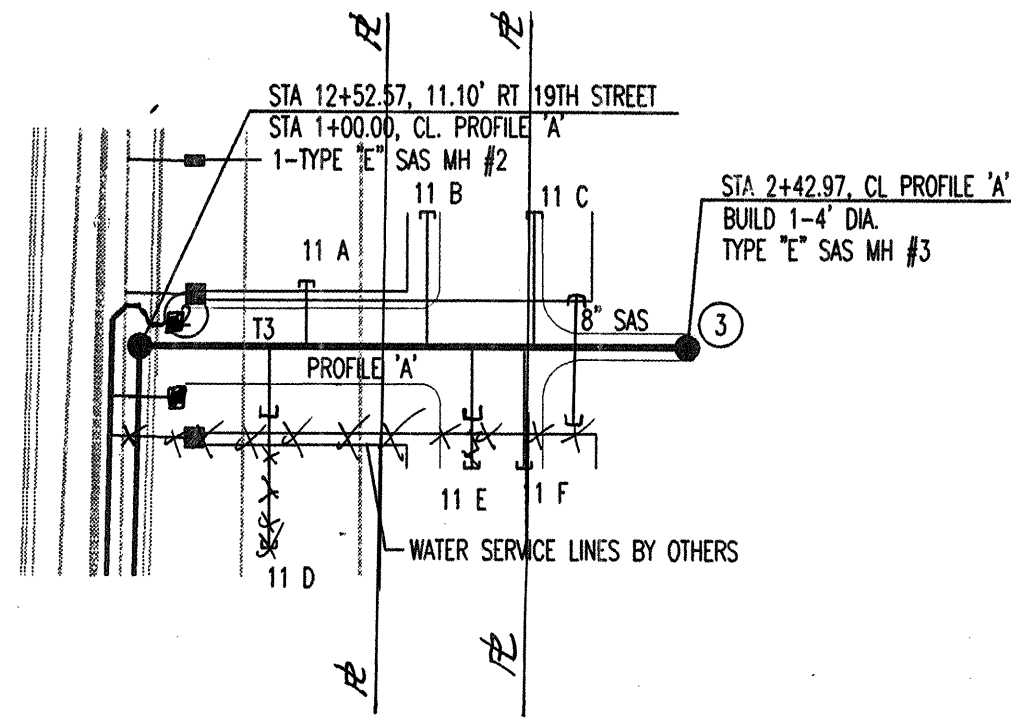
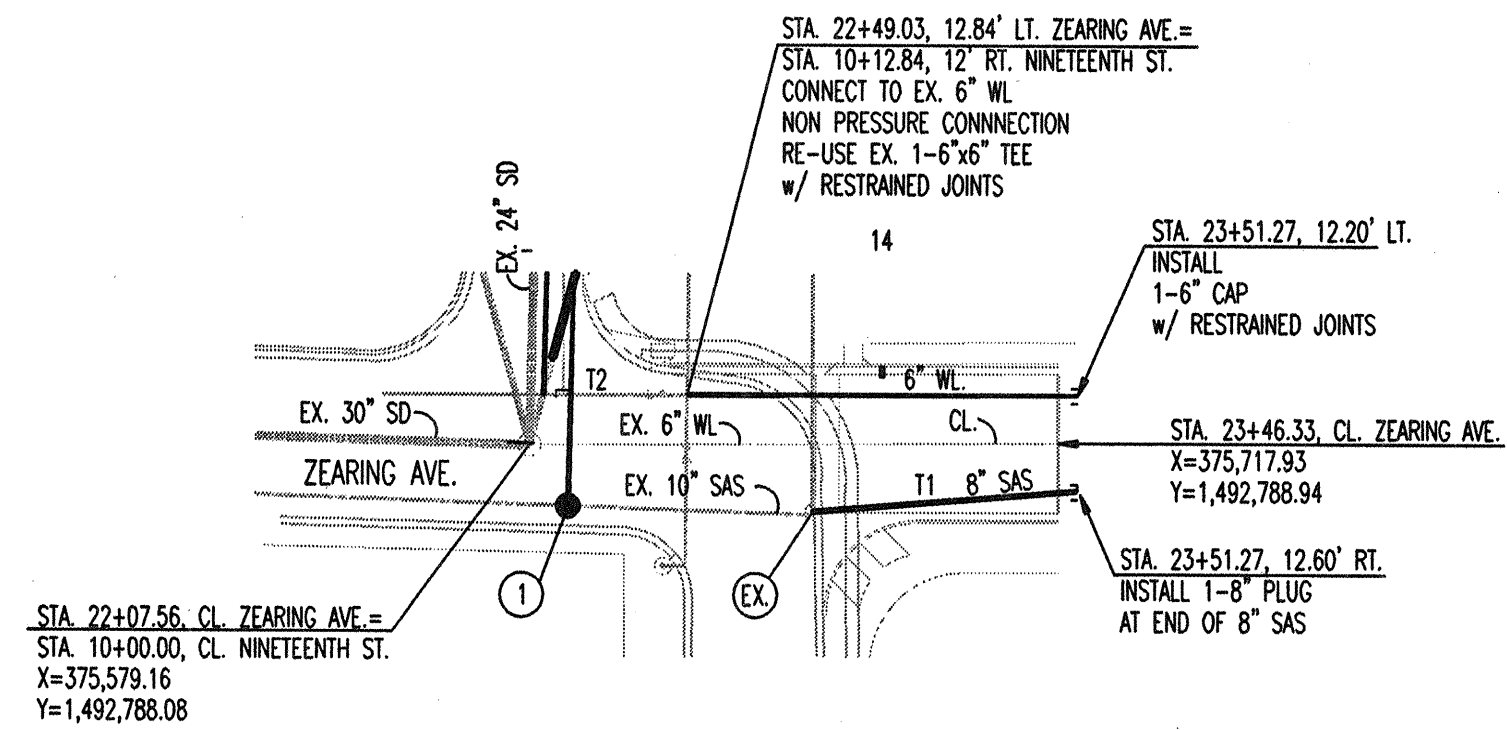
OWNER TO COORDINATE REMOVAL,
CLEARING, AND GRUBBING OF THIS
WITH ADJACENT LAND OWNERS

NOTE:
CONTRACTOR SHALL FIELD VERIFY LOCATION
OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.

WATER & SANITARY SEWER SERVICES						
LOT #	WL STATION & OFFSET	WL TYPE	S/S STATION & OFFSET	S/S LENGTH	TOP OF PIPE PLUS (W/RS)	
1	19+72.14, 5.08' RT	SINGLE	19+47.11, 5.00' LT	45.95'	4957.00 (-)	
2	19+00.74, 5.05' RT	DOUBLE	19+20.71, 4.77' LT	26.77'	4956.46 (-)	
3			18+40.71, 4.85' LT	26.85'	4956.26 (-)	
4	18+20.74, 5.02' RT	DOUBLE	18+40.71, 4.94' LT	26.94'	4956.07 (-)	
5			18+03.54, 3.18' LT	52.83'	4956.63 (-)	
6	17+40.74, 4.99' RT	DOUBLE	17+63.59, 30.78' LT	53.93'	4956.46 (-)	
7			17+23.64, 32.97' LT	55.03'	4956.28 (-)	
8	16+58.72, 24.54' LT	DOUBLE	16+79.56, 33.84' LT	55.96'	4956.07 (-)	
9			16+31.18, 25.38' LT	49.41'	4955.70 (-)	
10 C	15+02.63, 5.77' SINGLE		SEE SHEET 9	----	----	
10 A	15+21.10, 5.24' RT	DOUBLE	SEE SHEET 9	----	----	
10 B	15+21.10, 5.24' RT	DOUBLE	SEE SHEET 9	----	----	
10 D	15+24.00, 5.63' RT	DOUBLE	SEE SHEET 9	----	----	
10 E			SEE SHEET 9	----	----	
11 B	12+66.24, 6.95' RT	DOUBLE	SEE SHEET 9	----	----	
11 C			SEE SHEET 9	----	----	
11 E			SEE SHEET 9	----	----	
11 F	12+28.08, 3.69' RT	DOUBLE	SEE SHEET 9	----	----	
11 A	13+04.82, 6.80' RT	SINGLE	SEE SHEET 9	----	----	
11 D	11+90.67, 3.65' RT	SINGLE	SEE SHEET 9	----	----	
12	11+51.83, 3.63' SINGLE		11+32.43, 10.84' RT	15.02'	4954.32 (-)	
13			10+92.43, 10.75' RT	15.99'	4954.14 (-)	
14	10+71.17, 3.56' RT	DOUBLE	10+65.20, 10.69' RT	16.65'	4954.02 (-)	

 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT	
ARBOLERA DE VIDA – PHASE 1 NINETEENTH STREET UTILITY PLAN & PROPOSED	
Design Review Committee 	City Engineer Approval 
City Project No. 047504	Zone Map No. N 100

[illegible]



TRACT 10 PRIVATE SAS

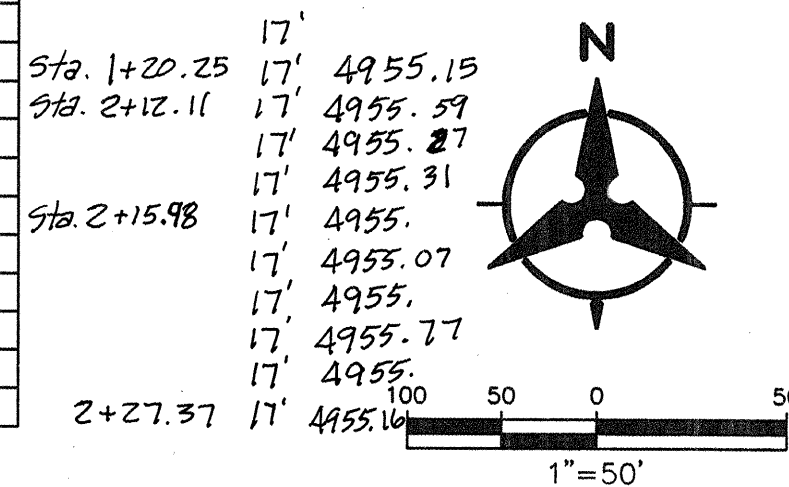
8" SAS TANGENT DATA		
NUMBER	BEARING	LENGTH
15	S 89°57'34" E	154.18'

8" SAS TANGENT DATA		
NUMBER	BEARING	LENGTH
13	N 90°00'00" W	142.97'

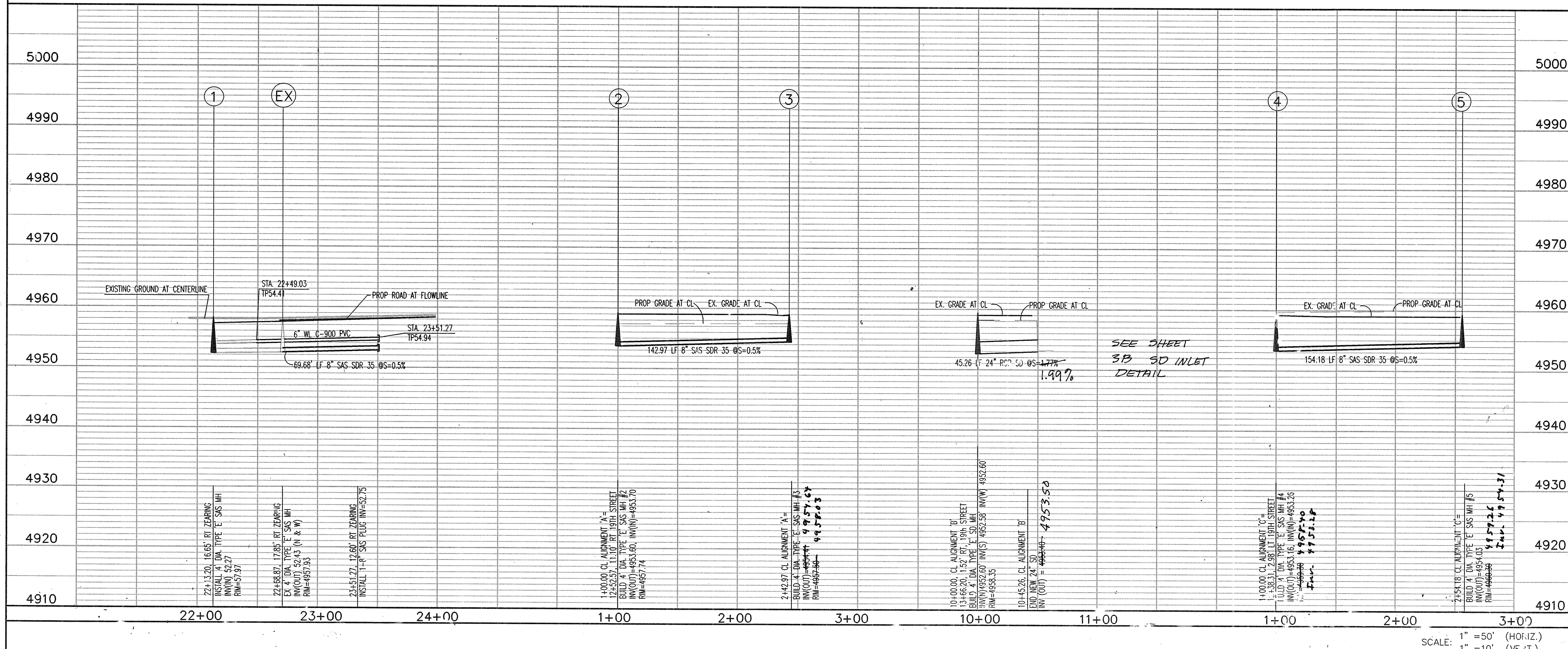
6" WL TANGENT DATA		
NUMBER	BEARING	LENGTH
12	N 89°59'56" E	102.36'

8" SAS TANGENT DATA		
NUMBER	BEARING	LENGTH
11	N 85°32'30" E	69.68'

WATER & SANITARY SEWER SERVICES			
LOT #	STATION & OFFSET	SAS LENGTH	TOP OF PIPE AT PLUG (W/RISER)
11 A	SEE SHEET 8	1+43.90, CL	4955.28 (-)
11 B	SEE SHEET 8	4+75.25, CL	4955.81 (-)
11 C	SEE SHEET 8	2+02.91, CL	4955.05 (-)
11 D	SEE SHEET 8	1+34.27, CL	4955.97 (-)
11 E	SEE SHEET 8	1+86.90, CL	4955.80 (-)
11 F	SEE SHEET 8	2+00.48, CL	4955.87 (-)
10 A	SEE SHEET 8	1+86.26, CL	4955.43 (-)
10 B	SEE SHEET 8	2+22.63, CL	4955.61 (-)
10 C	SEE SHEET 8	1+60.07, CL	4954.84 (-)
10 D	SEE SHEET 8	1+72.00, CL	4955.28 (-)
10 E	SEE SHEET 8	2+08.37, CL	4955.45 (-)



ZEARING AVENUE /PRIVATE ALIGNMENT 'A' /PRIVATE ALIGNMENT 'B' /PRIVATE ALIGNMENT 'C'



NOTES:

- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PAVING AND UTILITY LOCATIONS AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. NOTIFICATION WILL BE IN SUCH A MANNER AS TO ALLOW THE ENGINEER TIME TO MAKE REVISIONS PRIOR TO CONSTRUCTION. FAILURE TO DO SO MAY RESULT IN CONTRACTOR RESPONSIBILITY FOR RESOLUTION OF DISCREPANCIES.
- ALL CURB RETURN RADI SHALL BE 30' UNLESS OTHERWISE SPECIFIED.
- ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
- GRADE ELEVATIONS, WHERE NOTED, ARE FL OF CURB UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR IS TO INSTALL A 4" X 4" X 5' POST AND END AT THE END OF EACH SANITARY SEWER SERVICE.
- CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
- ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
- CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
- CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
- ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
- REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAW CUT ONLY).
- WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.
- CONSTRUCTION TRAFFIC CONTROL COST INCIDENTAL TO PAVING ITEMS.
- MANHOLE RIM ELEVATIONS ARE APPROX. THE CONTRACTOR WILL VERIFY AND CONSTRUCT TO MATCH FINAL PAVEMENT GRADES.
- FIRE HYDRANT FLANGE ELEVATIONS SHOWN ARE APPROX. THE CONTRACTOR WILL VERIFY AND CONSTRUCT TO FINAL CURB ELEVATIONS PER COA. DETAIL 2340.

RESTRAINED JOINT TABLE			
MECHANICAL JOINTS	LENGTH OF RESTRAINED JOINTS FROM EACH SIDE OF MJ LISTED (6")		
	(6")	(8")	(10")
11.25" H BEND	2'	3'	1'
22.50" H BEND	4'	5'	3'
45" H BEND	8'	11'	6'
90" H BEND	20'	26'	14'
GATE VALVE	55'	72'	55'
BITTERLY VALVE	---	---	---
REDUCER (8"x6")	30'	30'	20'
CAP	55'	72'	27'

NOTE:

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- ALL CAPS SHALL UTILIZE PCC BLOCKING (INCIDENTAL TO TO WATERLINE CONSTRUCTION)

Bohannon & Huston

Courtesy One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA -- PHASE1
ZEARING UTILITY PLAN & PROFILE

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	CITY ENGINEER		
City Project No.	Zone M. No.	Sheet	Of
617581	H-13	9	14

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 SEPARATE 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 TRAVELLED 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.

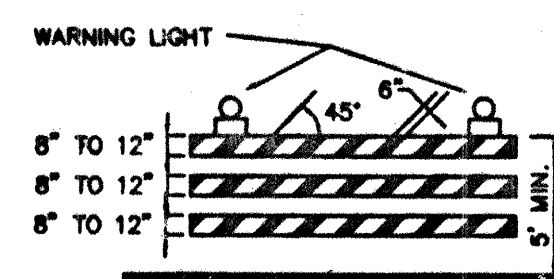
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

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

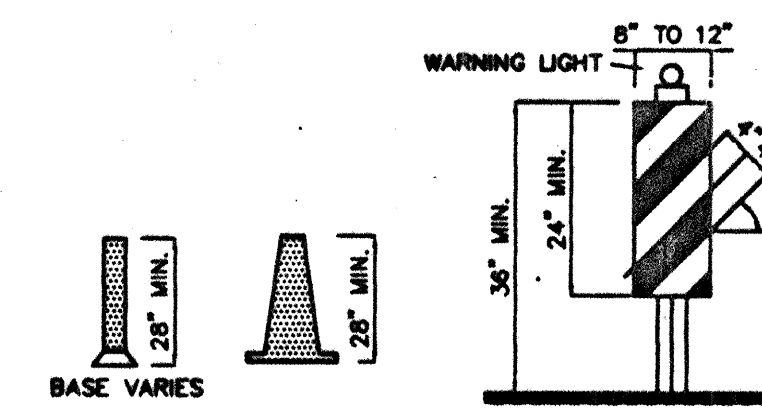
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

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.



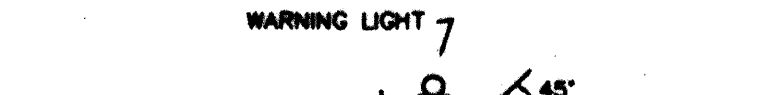
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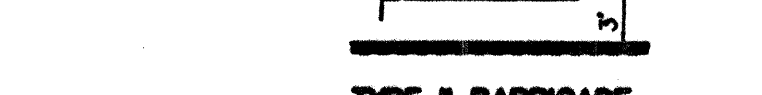
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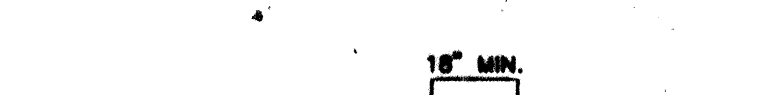
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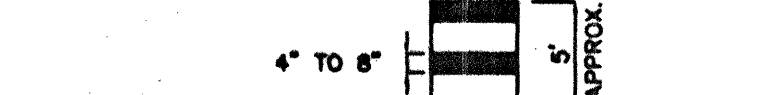
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TYPE I BARRICADE



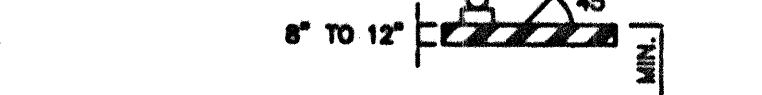
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TYPE I BARRICADE



TYPE I BARRICADE



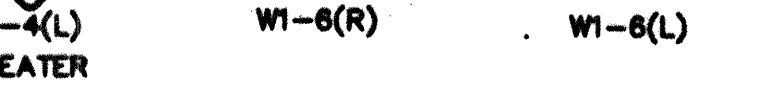
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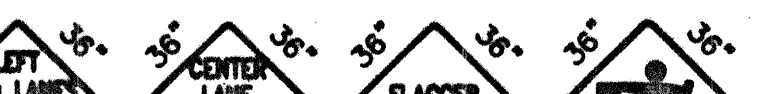
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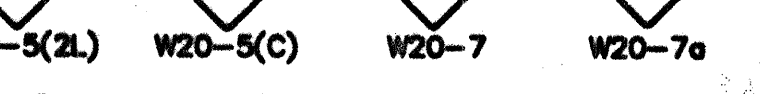
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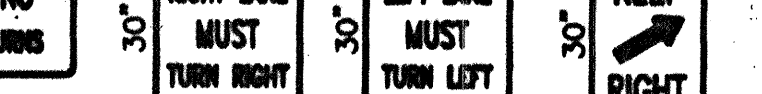
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TYPE I BARRICADE



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TYPE I BARRICADE



TYPE I BARRICADE



TYPE I BARRICADE



TYPE I BARRICADE



TYPE I BARRICADE

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
TAPER LENGTH - SEE CHART BELOW
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

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 IN FEET	
	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

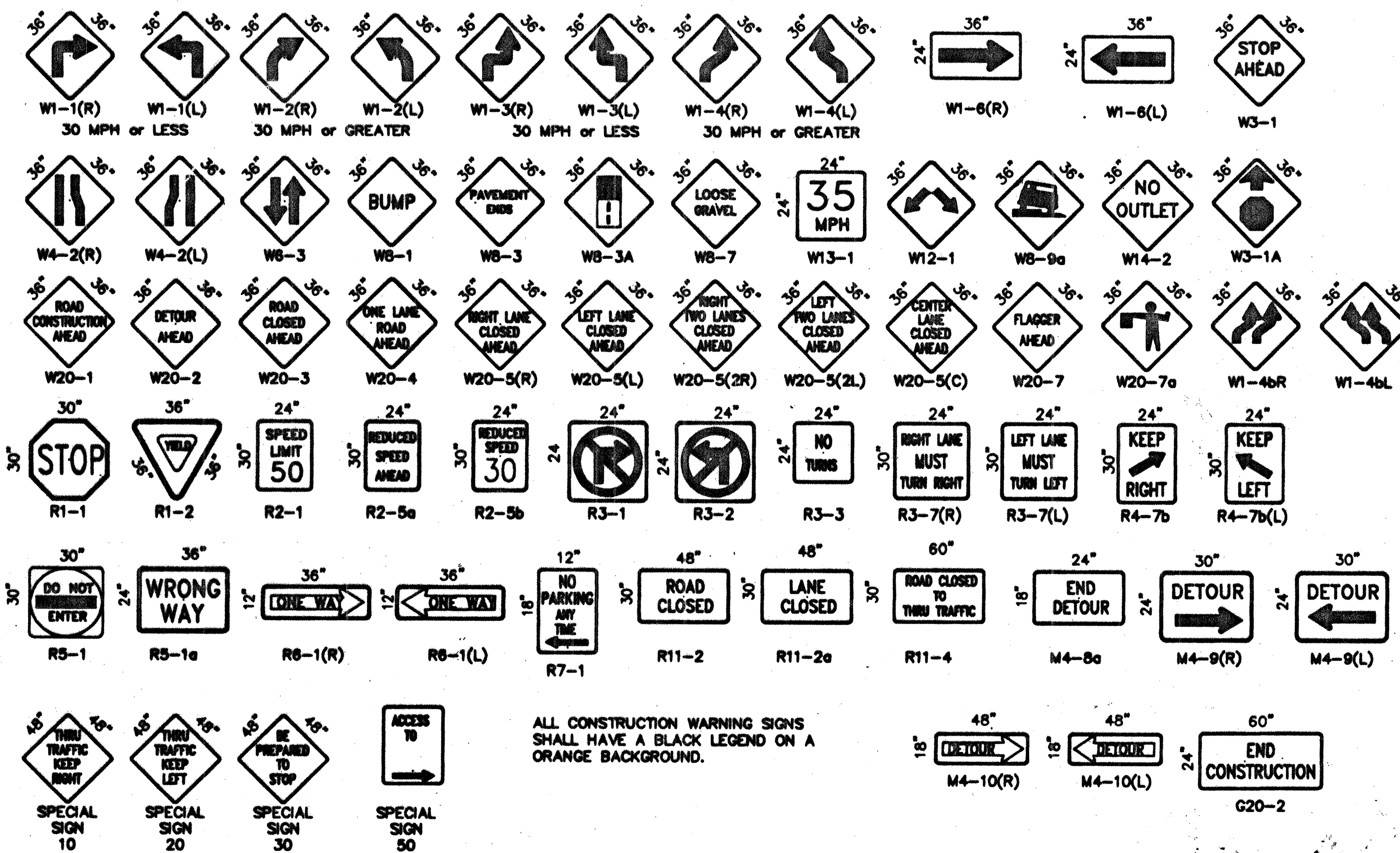
TAPER CRITERIA

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	$L = \frac{WS^2}{60}$
45 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 OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: **SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS**

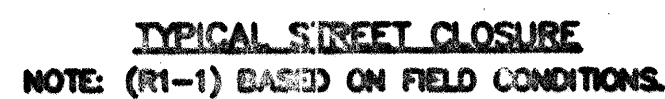
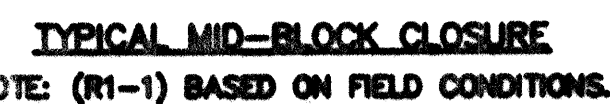
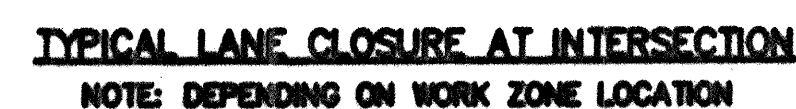
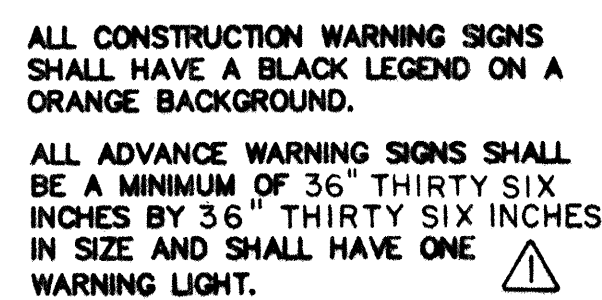
DESIGN REVIEW COMMITTEE: **CON STD**

CITY ENGINEER APPROVAL: **STD**

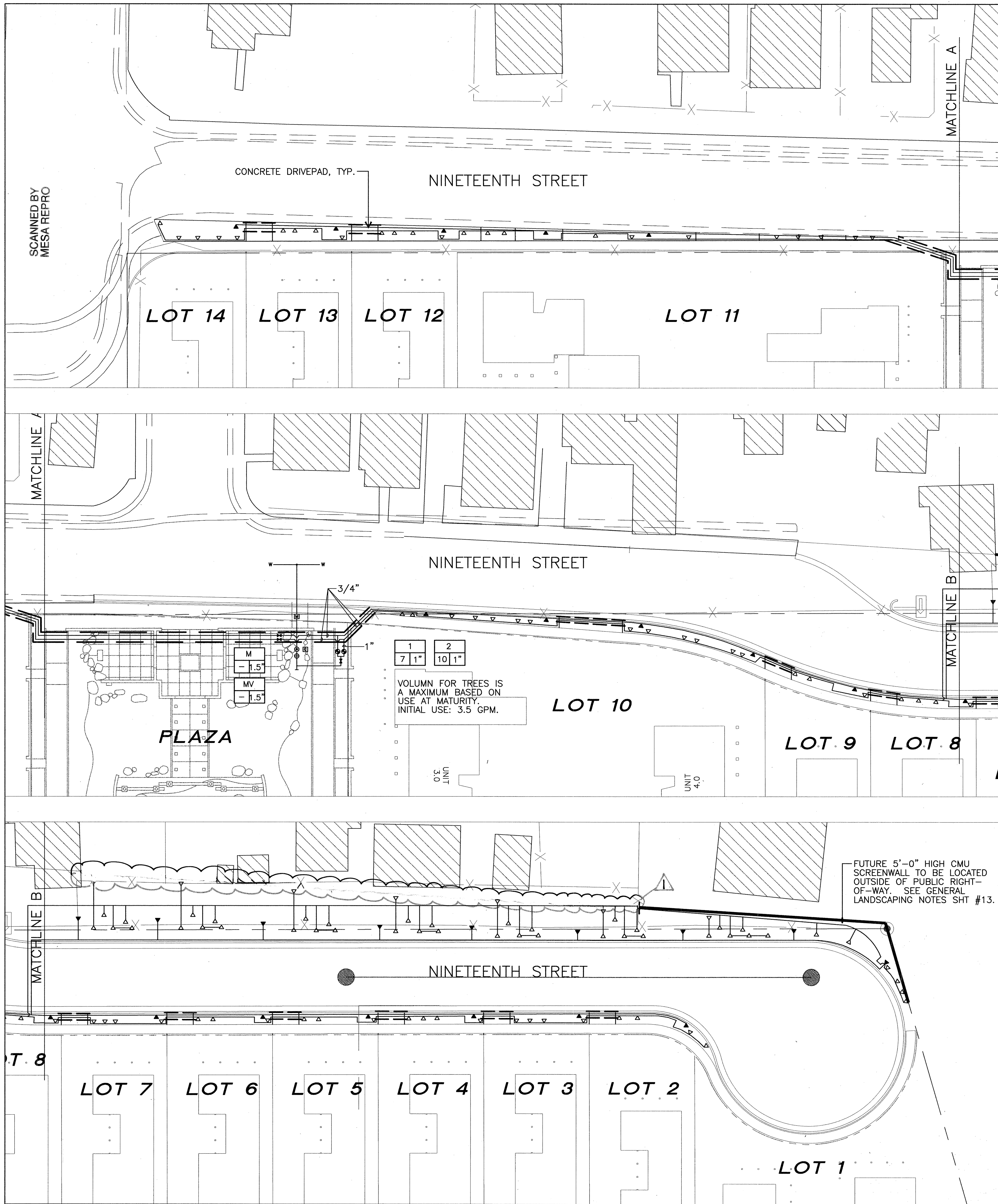
PROJECT NO. 617581

MAP NO. H 13

SHEET 10 OF 14



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP				
TITLE: TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)				
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		NO./DAY/YR. NO./DAY/YR. NO./DAY/YR. NO./DAY/YR. NO./DAY/YR.
COA		STD		LAST UPDATE
PROJECT NO. 617581		MAP NO. H 13		SHEET 11 OF 14



IRRIGATION SYMBOL	SCHEDULE TYPE	MODEL	MANUFACT.	DESCRIPTION	NOTES
C	IRRIGATION CONTROLLER, PED-16LX+ CONCRETE PAD	ESP-16LX+ PED-DD16	RAINBIRD	16 STATION INDOOR/OUTDOOR CONTROLLER SUITABLE FOR LOW VOLUME DRIP APPLICATORS. PEDestal ENCLOSURE FOR CONTROLLER.	TEMPORARILY LOCATE IN PLAZA AREA AS INDICATED. INSTALL PER DETAIL 7, SHT. 14.
⊙	1 1/2" BACKFLOW PREVENTER HEATED ENCLOSURE CONCRETE SLAB	825YA	FEBCO		INSTALL PER COA DETAIL 2701, DETAIL 1, SHT. 14.
⊗	ISOLATION VALVE & BOX			ISOLATION VALVE IN BOX	INSTALL PER COA DETAIL 2707, DETAIL 3, SHT. 14.
⊕	1 1/2" MASTER VALVE & BOX	PEB SERIES	RAINBIRD	ELECTRIC REMOTE CONTROL MASTER VALVE IN BOX	INSTALL PER COA DETAIL 2701, DETAIL 1, SHT. 14.
⊖	1" ZONE VALVE & BOX	PEB SERIES	RAINBIRD	ELECTRIC REMOTE CONTROL ZONE VALVE IN BOX	INSTALL PER COA DETAIL 2703, DETAIL 2, SHT. 14.
⌵	MULTI-OUTLET EMITTER & BOX FOR SHRUBS	X BD-80	RAINBIRD	MULTI-OUTLET EMITTER IN BOX	INSTALL PER DETAIL 4, SHT. 14.
⌵	MULTI-OUTLET EMITTER & BOX FOR TREES	X BD-80	RAINBIRD	MULTI-OUTLET EMITTER IN BOX	INSTALL PER DETAIL 4, SHT. 14.
---	LATERAL LINE	SCH.40 PVC			SIZE AS INDICATED
---	MAIN LINE	SCH.40 PVC			
≡≡≡	SLEEVE	SCH.200 PVC			SIZE TWO TIMES LARGER THAN PIPE SIZE. ONE SLEEVE PER PIPE. PROVIDE SEPARATE PIPE FOR WIRE.
—W—	EXISTING WATER LINE				
M	WATER METER	1 1/2" WATER METER			
STATION NUMBER					
GALLONS PER MINUTE					
WATER METER					

VALVE NO.	VALVE SIZE	TOTAL GPM	HEAD TYPE	PRECIP. RATE	RUN TIME/ MINUTES
MV	1 1/2"	13.5		NA	
1	1"	3.5	Rainbird Drip Multi-outlet	NA	1 Hour
2	1"	10	Rainbird Drip Multi-outlet	NA	1 Hour

RAINBIRD XERIBIRD XBD-80 8-OUTLET THREADED EMITTER ON RISER IN BOX
INSTALL WITH:
RAINBIRD DT-025 1/4" VINYL DISTRIBUTION TUBING
RAINBIRD DBC-025 BLUE CAP
NDS-108 BC-S SAND COLORED VALVE BOX WITH SCREW IN LID
RAINBIRD XERIBUG XB-20 EMITTERS FOR SHRUBS (UNLESS NOTED OTHERWISE) ONE XBD-80 PER 6-8 SHRUBS AND ONE XBD-80 PER TREE.
RAINBIRD RYB-100-200MX-1" WYE FILTER, 200 MESH AND RAINBIRD PSI-MAX-100 INLINE PRESSURE REGULATOR, INSTALLED UPSTREAM OF ZONE VALVE.

COMMENTS ON IRRIGATION DESIGN

The irrigation infrastructure for streetscape landscaping that is to be installed during Phase 1 construction, is designed to accommodate streetscape and plaza landscaping that will occur during subsequent phases. Estimates of future irrigation needs are based on the following assumptions:

- Future streetscape landscaping will be similar in design to Phase 1 landscaping.
- Plaza landscaping shall be irrigated primarily with drip irrigation, except for the central turf panel in the detention basin, which will be irrigated with matched precipitation rate spray heads.
- The water supply for the Plaza fountain will be a part of this system.
- The landscaping of individual lots will not be irrigated from this system.
- The Park landscaping will not be irrigated from this system.

GENERAL IRRIGATION NOTES

- The proposed controller location illustrated on the plan is approximate. The Owner's representative in the field shall determine the actual location of the controller.
- The proposed controller location illustrated on the plan is temporary. Controller is to be moved to the NE corner of the detention basin/Plaza at the beginning of Plaza construction.
- The location of all piping is illustrative. All lateral lines shall be located adjacent to or sidewalk edges wherever possible. All lateral pipe to be 3/4" diameter unless otherwise noted.
- Irrigation emitters shall be located uphill from all plant material. Emitters for shrubs, perennials, accent plants, ground covers and vines shall be located no more than 12" from the center of the plant. Emitters for trees shall be located no more than 6" from the edge of the root ball.
- The estimated static water pressure at the tap location is 80-90 p.s.i. The Contractor shall verify the actual static water pressure prior to construction and inform the Owner's representative of the results.
- The backflow preventer and master valve, other valves and the controller are to be located within the areas illustrated on the plan. The intent is to locate these elements at appropriate grades and in future planter beds, so that adjustments will not need to be made during the construction of the Plaza. It is also the design intent to screen these elements from the street by hiding them behind the proposed Plaza screen wall that will be located along the edge of the sidewalk.
- All valve boxes shall be installed in planting beds at a minimum of 12" from adjacent walls, paving, curbs etc.
- All valve boxes shall be supported by cinder blocks (minimum 4 per valve box). Install boxes in a manner which will prevent contact with piping, wires, valves etc. Install boxes per Std. COA Detail #2703.
- Mark all 24-volt wire ends with 3M STD-09 wire marker tape at the valve box and controller locations.
- All 24-volt wire shall be marked with 3" wide red marker tape and marked "warning-electrical". Lay marker tape in the wire trench, 6" above wire.
- 24-volt wire shall be in common trench with main line and shall have separate sleeve where crossing under all rigid surfaces and structures.
- Contractor shall tape closed all sleeve pipe openings using duct tape to prevent debris from entering sleeve.
- Contractor shall extend 120-volt AC from existing power to proposed controller and backflow preventer locations. All electrical work shall be per local codes and N.E.C. standards.
- The backflow preventer enclosure shall be beige in color as provided by Hotbox.
- Contractor shall be responsible for costs associated with the installation of the water meter, including, but not limited to, materials and installation of water meter per water purveyor's most recent standards, pressure tap, saw cuts, pavement removal, pavement replacements, meter, meter box, concrete collars and other charges, complete in place. The new meter shall be located in the sidewalk.
- The Sawmill Community Land Trust shall be responsible for payment of the utility expansion charges.
- The Contractor shall install manual drains on the lateral and main line piping to ensure complete drainage of the piping. Contractor shall install one manual drain per zone, minimum.
- The Contractor shall coordinate with the Sawmill Community Land Trust regarding the exact placement of irrigation emitters and lines, and plant material on the west side of Nineteenth Street.

SCALE: 1"=20'-0" NORTH

DESIGNWORKSHOP
901 Rio Grande NW
Suite E130
Albuquerque, NM 87104
(Tel.) 505.243.8333
(Fax) 505.243.8337

Bohannon Huston
Court yard One 7500 JEFFERSON NE ALBUQUERQUE NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

1.21.00 REVIEW OF MAIL

REVISIONS
No. Date
By

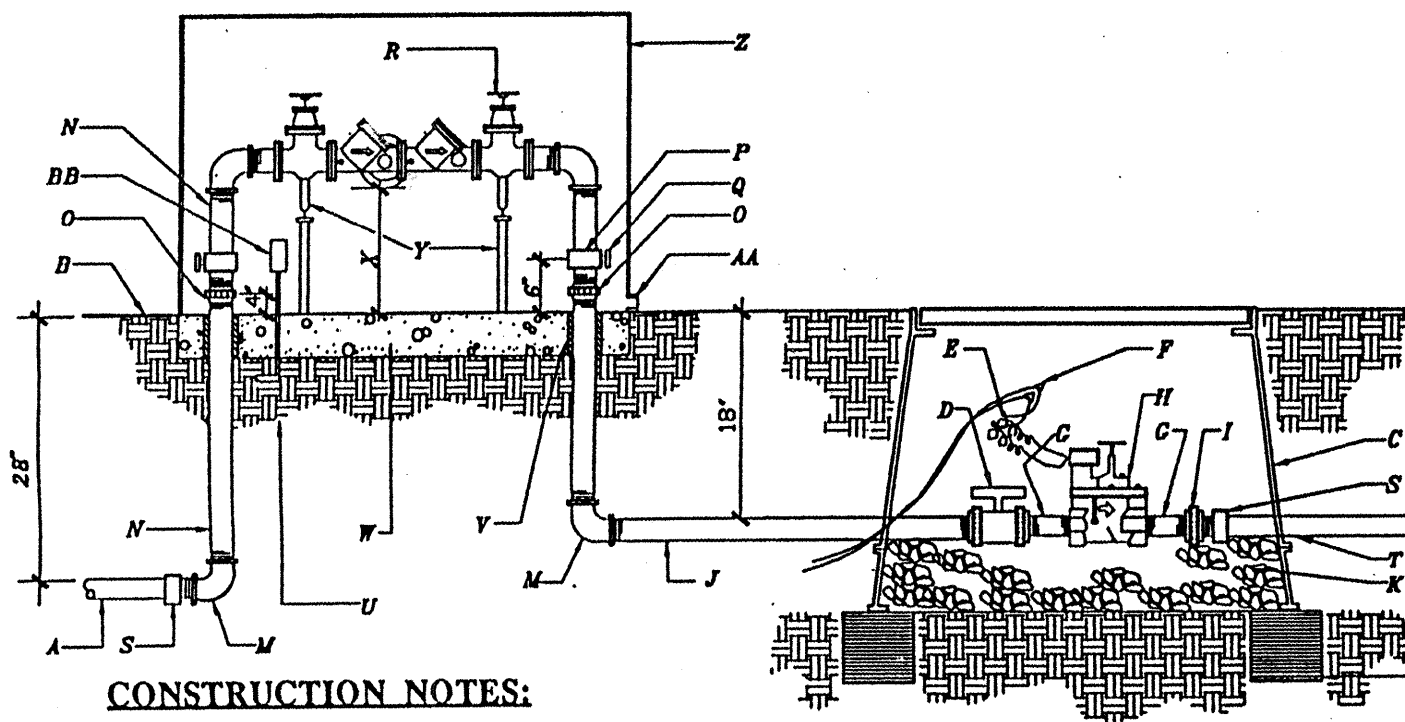
DESIGNED BY: MB DATE: 5-99
DRAWN BY: WBT DATE: 5-99
CHECKED BY: WSP DATE: 5-99

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA - PHASE1
IRRIGATION PLAN

Design Review Committee: OCT 3 1999
City Engineer Approval: NOV 19 1999
Last Design Update: Mo./Day/Yr. Mo./Day/Yr.

City Project No. 617581 Zone Map No. H 13 Sheet 12 Of 14



CONSTRUCTION NOTES:

- A. SERVICE LINE TO WATER METER, NO OUTLETS ALLOWED.
- B. FINISH GRADE, MATERIAL VARIES REFERENCE PLANS.
- C. BROOKS PRODUCTS INC., 1730 PB-18 BODY (ABS) VALVE BOX W/ BOLT DOWN COVER (ABS) AND ONE 8" EXTENSION.
- D. SPEARS TRUE UNION SCHEDULE 80 PVC BALL VALVE.
- E. 24" WIRE EXPANSION COIL.
- F. 3M SCOTCHLOK.
- G. SCHEDULE 80 PVC 4" NIPPLE.
- H. ELECTRIC VALVE (REFERENCE DRAWINGS FOR SIZE).
- I. SPEARS SCHEDULE 80 PVC UNION.
- J. SCHEDULE 80 PVC NIPPLE 3" MIN.
- K. 1" DIAMETER WASHED ROCK.
- L. 8"X8"X16" SOLID CMU BLOCK.
- M. GALVANIZED ELL.
- N. GALVANIZED NIPPLE.
- O. GALVANIZED UNION (MIN. 4" ABOVE GRADE).
- P. GALVANIZED TEE.
- Q. BALL DRAIN, CHAMPION DV050 1/2".
- R. RPBA BACKFLOW PREVENTER (REFERENCE DRAWINGS).
- S. PVC MIP ADAPTER.
- T. NON-CONSTANT PRESSURE IRRIGATION MAINLINE.
- U. COMPACTED SUBGRADE.
- V. ADEQUATE SLEEVING & INSULATION (MIN. 1" THICK).
- W. MIN. 4" CONCRETE SLAB.
- X. 30" MAX., 12" MIN. (FROM LOWEST POINT OF ASSEMBLY TO TOP OF SLAB).
- Y. PROVIDE METALLIC OR REIN. CONCRETE SUPPORTS ON UNITS GREATER THAN 2".
- Z. PROTECTIVE ENCLOSURE, SEE CITY STANDARD DWG. 2389 FOR CRITERIA.
- AA. DRAIN, SIZE TO HANDLE FULL DISCHARGE OF RELIEF VALVE.
- BB. ELECTRIC OUTLET FOR HEATED PROTECTIVE ENCLOSURE.

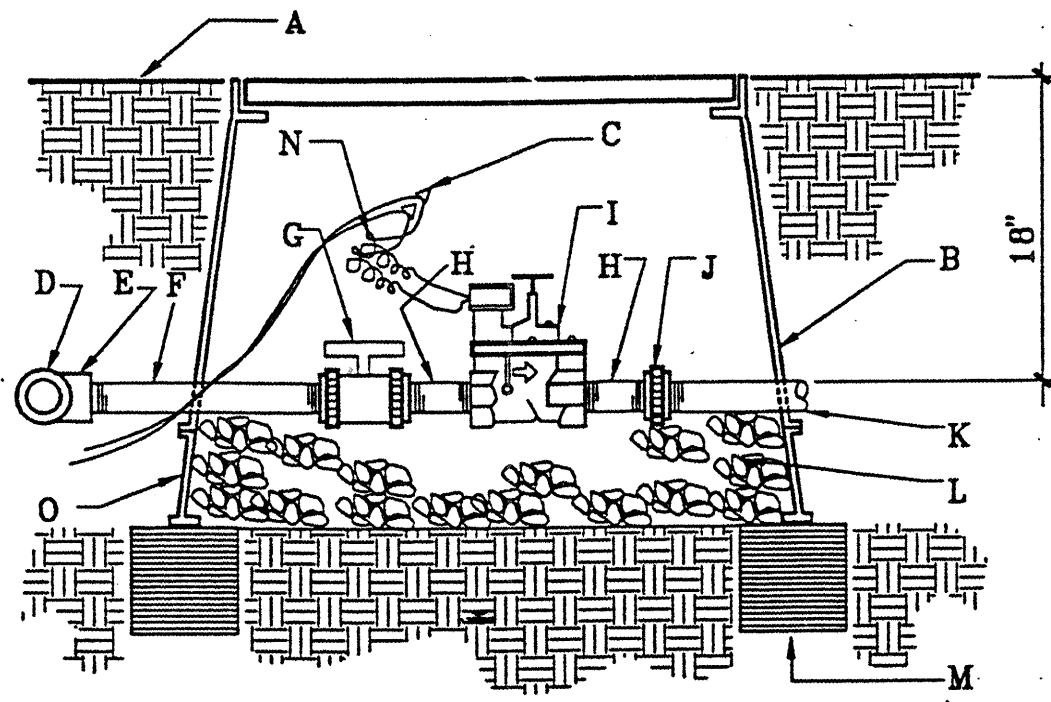
CITY OF ALBUQUERQUE
STANDARD DETAIL No. 2701

Master Valve with RPBA

Not to Scale

GENERAL NOTES:

1. HORIZONTAL RPBA INSTALLATION REQ'D.
2. ABOVE GRADE RPBA INSTALLATION REQ'D.
3. WATER LINE PRESSURE AND TEMP. MUST NOT EXCEED RATED CAPACITY OF RPBA.
4. PROTECT FROM FREEZING WITH POSITIVE HEAT SOURCE AND INSULATION.
5. MIN. RPBA SIZE MUST BE THE BLDG. SERVICE LINE SIZE.
6. DO NOT INSTALL IN FLOOD PRONE AREAS.
7. INSTALL WATER HAMMER ARRESTORS & THERMO EXPANSION PROTECTION AS NECESSARY.
8. METALLIC RISER PIPING REQ'D.
9. JOINTS TO BE ADEQUATELY RESTRAINED.
10. DEVIATION FROM THESE SPECIFICATIONS MUST HAVE PRIOR WRITTEN APPROVAL FROM THE ADMINISTRATIVE AUTHORITY.
11. CONCRETE MOW STRIP SHALL BE INSTALLED AROUND THE ENTIRE PERIMETER OF THE MASTERVALVE AND RPBA ASSEMBLY. MOWSTRIP SHALL BE A MIN OF 12" FROM PIPING AND VALVE BOX. (OPTIONAL, DEPENDING ON APPLICATION).



GENERAL NOTES:

1. INSTALL AN 8"X8"X16" SOLID CMU BLOCK AT EACH END OF THE VALVE BOX.
2. WASH ROCK SHALL BE INSTALLED FLUSH WITH BOTTOM OF PIPE AND VALVE.

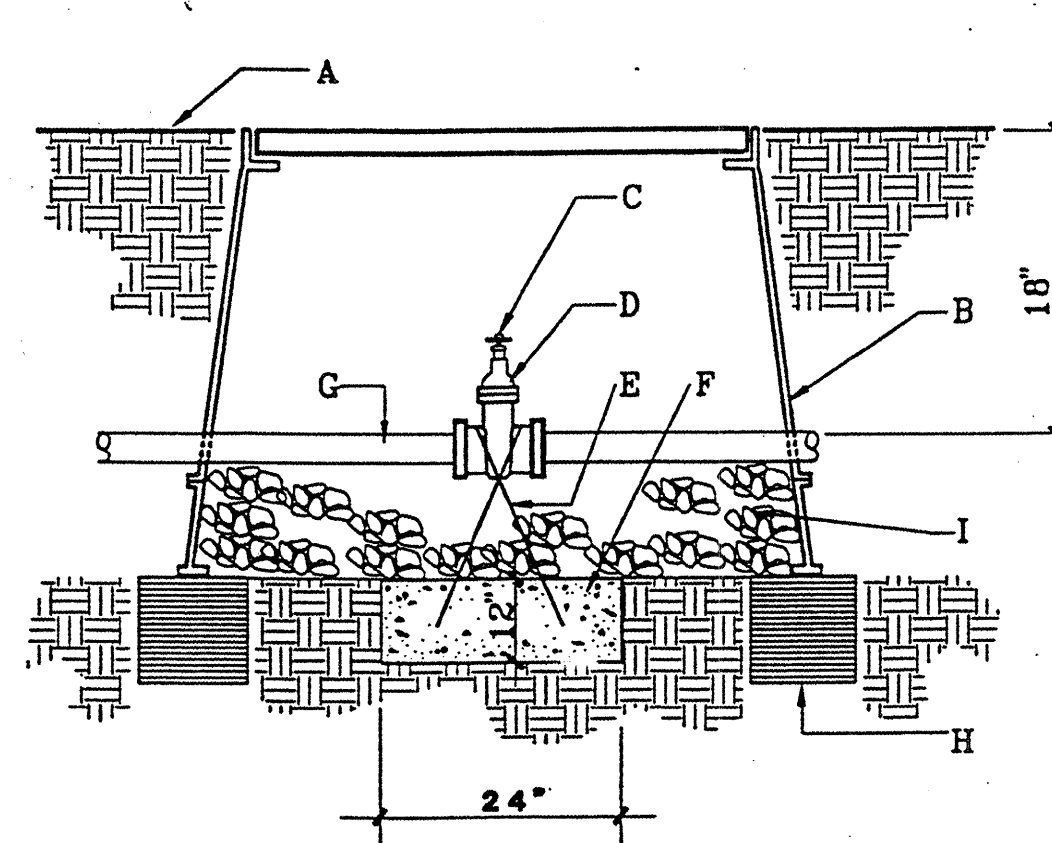
CONSTRUCTION NOTES:

- A. FINISH GRADE.
- B. BROOKS PRODUCTS INC., 1730 PB-18 BODY (ABS) VALVE BOX WITH 1730 BOLT DOWN COVER (ABS) AND ONE 8" EXTENSION.
- C. 3M SCOTCHLOK CONNECTORS.
- D. IRRIGATION MAINLINE.
- E. IRRIGATION MAINLINE SERVICE TEE OR ELL.
- F. SCHEDULE 80 PVC 12" NIPPLE.
- G. SPEARS TRUE UNION SCHEDULE 80 PVC BALL VALVE.
- H. SCHEDULE 80 PVC 4" NIPPLE.
- I. ELECTRIC VALVE. REFERENCE THE DRAWING FOR SIZE.
- J. SPEARS SCHEDULE 80 PVC UNION.
- K. LATERAL LINE.
- L. 1" DIAMETER WASHED ROCK.
- M. 8"X8"X16" SOLID CMU BLOCK.
- N. 24" WIRE EXPANSION COIL.

CITY OF ALBUQUERQUE
STANDARD DETAIL No. 2703

Electric Irrigation Valve

Not to Scale



GENERAL NOTES:

1. INSTALL AN 8"X8"X16" CMU BLOCK AT EACH CORNER OF THE VALVE BOX.

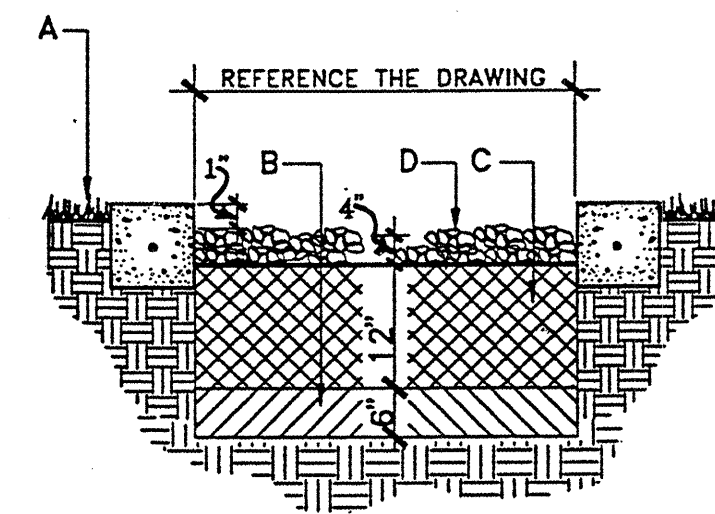
CONSTRUCTION NOTES:

- A. FINISH GRADE.
- B. BROOKS PRODUCTS INC., 1730 PB-18 BODY (ABS) VALVE BOX WITH 1730 BOLT DOWN COVER (ABS) AND ONE 8" EXTENSION.
- C. 2" OPERATING NUT.
- D. PEGLER "O" RING GASKET VALVE 708 A (LINE SIZE).
- E. NO. 4 REBAR.
- F. THRUST BLOCK-4000 PSI CONCRETE PLACED AGAINST UNDISTURBED SOIL.
- G. IRRIGATION MAINLINE.
- H. 8"X8"X16" CMU BLOCK.
- I. 1" DIAMETER WASHED ROCK.

CITY OF ALBUQUERQUE
STANDARD DETAIL No. 2707

Isolation Valve

Not to Scale



GENERAL NOTES:

1. EXISTING SOIL WITHIN THE FLOWER BED SHALL BE REMOVED AND REPLACED WITH THE SPECIFIED PLANTING SOIL MIXTURE.

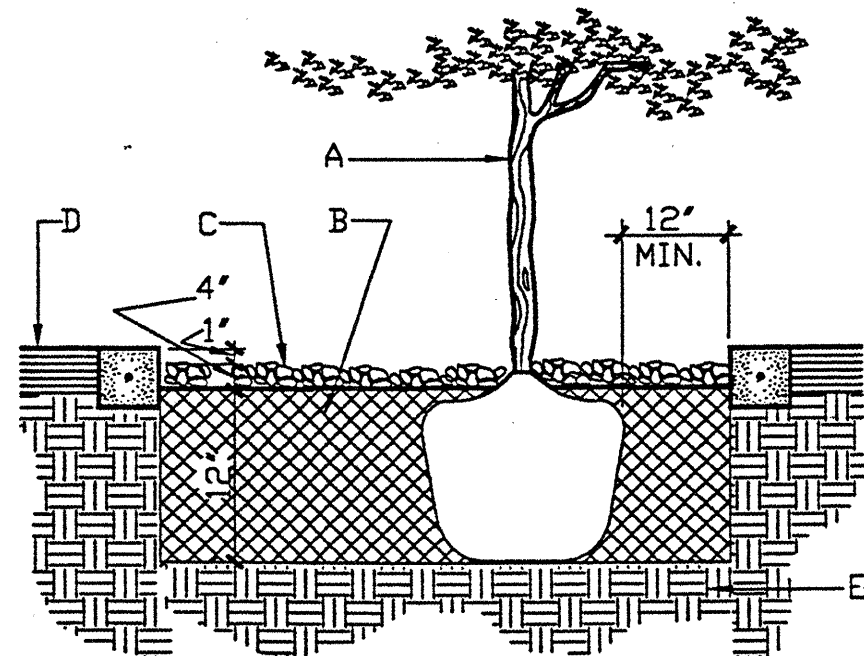
CONSTRUCTION NOTES:

- A. MATERIAL VARIES (REFERENCE THE DRAWINGS).
- B. LOOSEN SOIL TO DEPTH OF 6".
- C. PLANTING SOIL MIXTURE (REFERENCE THE SPECIFICATIONS).
- D. BARK MULCH.

CITY OF ALBUQUERQUE
STANDARD DETAIL No. 2718

Shrub Bed

Not to Scale



GENERAL NOTES:

1. EXISTING SOIL WITHIN THE SHRUB & TREE PLANTER SHALL BE REMOVED AND REPLACED WITH THE SPECIFIED PLANTING SOIL MIXTURE.
2. ROOTBALL SHALL BE PLACED ON UNDISTURBED SOIL TO PREVENT TREE FROM SETTLING.
3. TOP OF ROOTBALL INDICATES LEVEL AT WHICH TREE WAS GROWN AND DUG; THIS REPRESENTS THE LEVEL AT WHICH THE TREE SHOULD BE INSTALLED; THAT LEVEL MAY BE EXCEEDED BY ONLY A ONE INCH LAYER OF SOIL.
4. PRIOR TO BACKFILLING TREE, ALL WIRE, ROPE AND SYNTHETIC MATERIALS SHALL BE REMOVED FROM THE TREE AND THE PLANTING PIT.
5. PRIOR TO BACKFILLING, ALL BURLAP SHALL BE CUT AWAY EXCEPT FROM BOTTOM OF THE ROOTBALL.

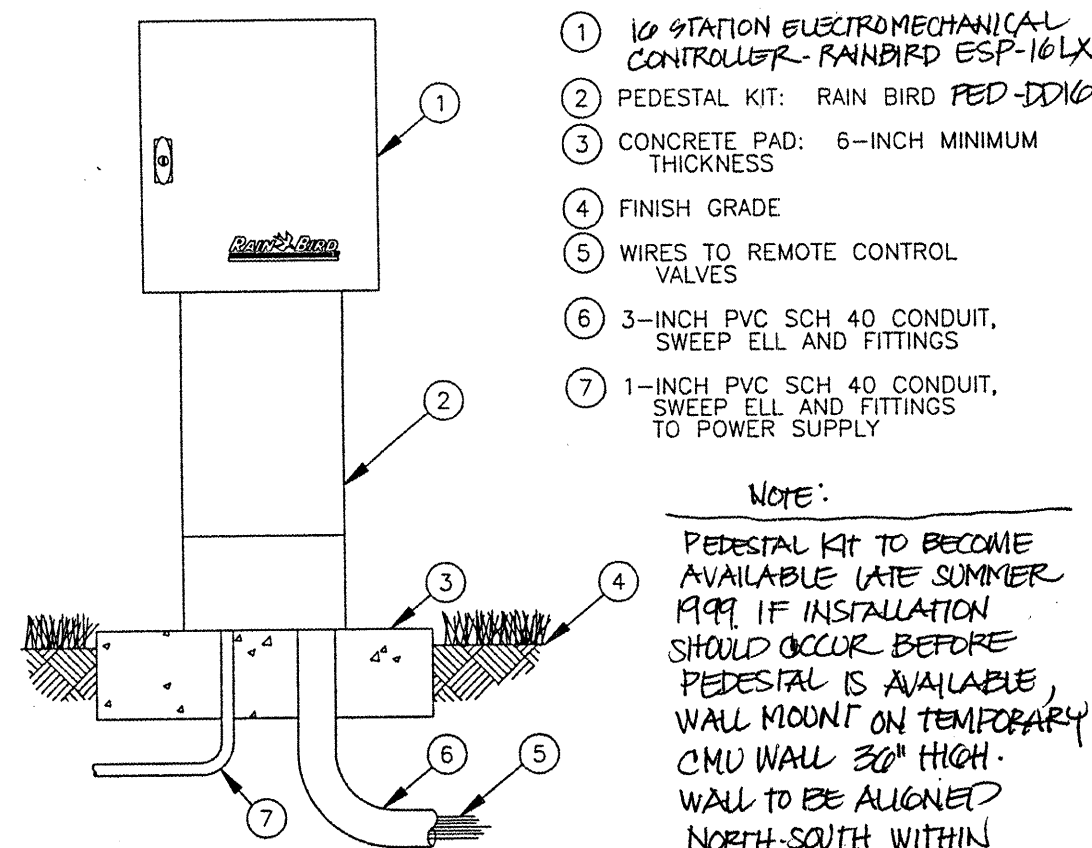
CONSTRUCTION NOTES:

- A. TREE.
- B. PLANTING SOIL MIXTURE. (REFERENCE THE SPECIFICATION).
- C. 4" DEPTH OF BARK MULCH.
- D. MATERIAL VARIES (REFERENCE THE DRAWING).
- E. UNDISTURBED SOIL.

CITY OF ALBUQUERQUE
STANDARD DETAIL No. 2715

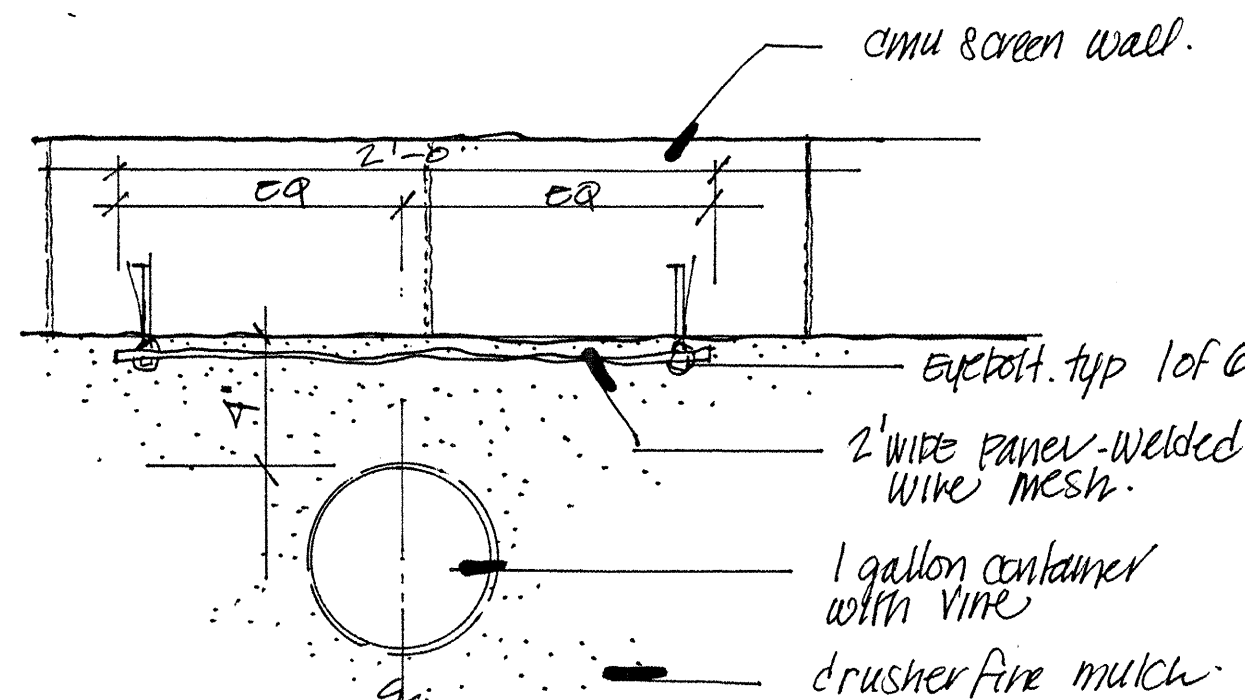
Tree in Planter

Not to Scale



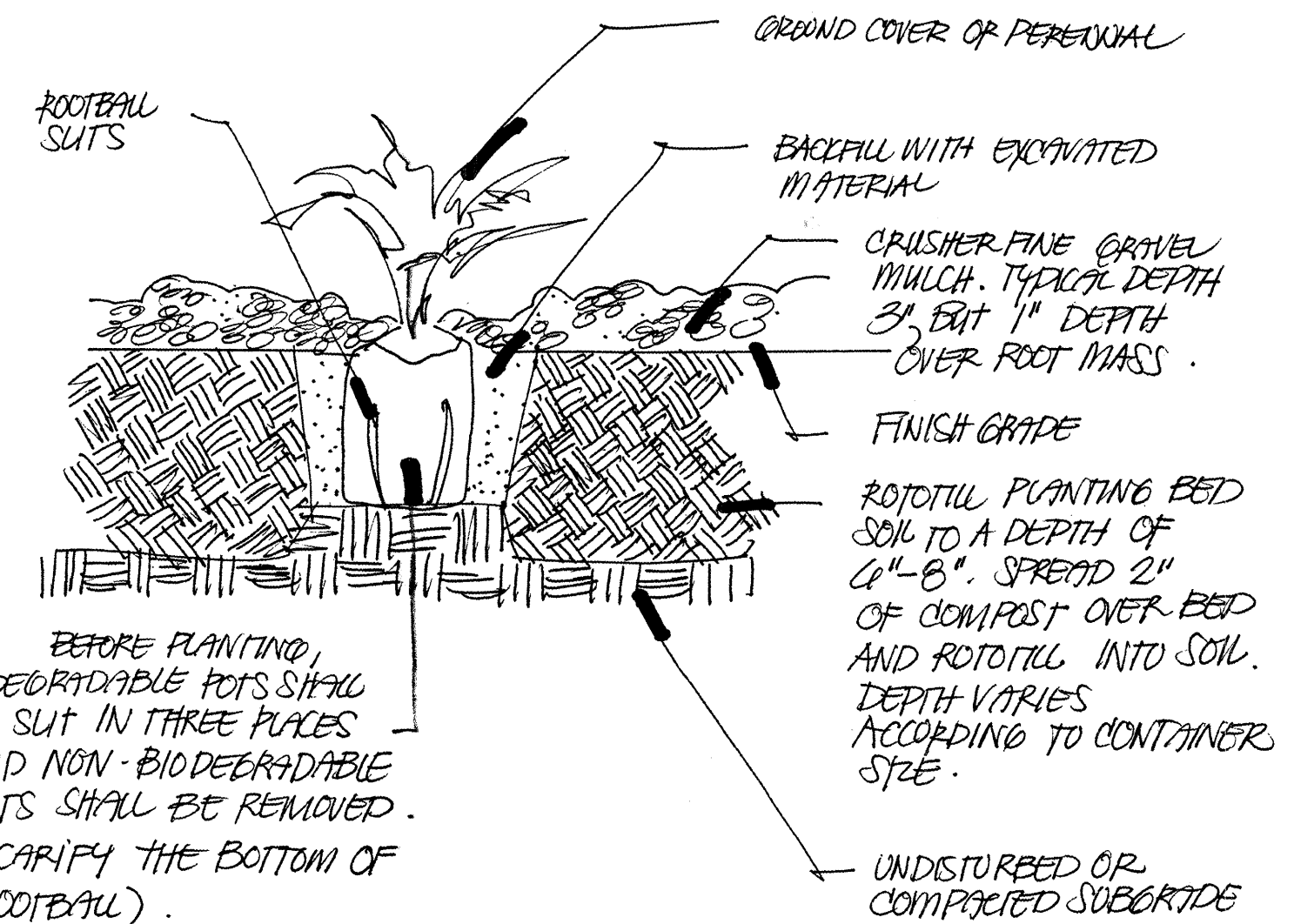
Electromechanical Controller

Not to Scale



Vine Installation

Scale as Shown



Groundcover/Perennial Planting

Not to Scale

DESIGNWORKSHOP

901 Rio Grande NW
Suite E130
Albuquerque, NM 87104
(Tel.) 505.243.8333
(Fax) 505.243.8337

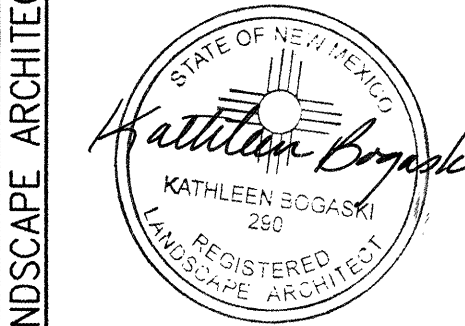
Bohannon & Huston

Courtyard One 7500 JEFFERSON NE. Albuquerque NEW MEXICO 87109
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

ARBOLERA DE VIDA - PHASE1 IRRIGATION/PLANTING DETAILS

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED OCT 3 1999 DESIGN REVIEW COMMITTEE	APPROVED NOV 19 1999 CITY ENGINEER		
City Project No.	Zone Map No.	Sheet	Of
_617581	-H 13	14	14



REMARKS	By	Date
DESIGN		
REVISIONS		
DESIGNED BY: DATE: 5-99		
DRAWN BY: DATE: 5-99		
CHECKED BY: DATE: 5-99		

SCANNED BY
MESA REPRO