

CONSTRUCTION PLANS

FOR

PAVING, SIGNAL, AND UTILITY IMPROVEMENTS

LA CUEVA TOWN CENTER

CITY OF ALBUQUERQUE
NEW MEXICO
JUNE 1999

FW

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TRAFFIC CONTROL NOTES

1. CONTRACTOR MUST MAINTAIN A MINIMUM OF ONE LANE IN EACH DIRECTION ON WYOMING BOULEVARD AT ALL TIMES.
2. CONTRACTOR MUST COORDINATE ALL WORK WITH OTHER ON-GOING WORK IN THE AREA. REQUEST FOR BARRICADE AND EXCAVATION PERMITS MAY BE DENIED IF THERE ARE CONFLICTS WITH OTHER WORK.

SURVEYOR'S CERTIFICATION

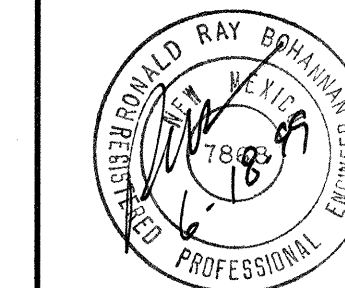
"I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that the 'as-built' information shown on these drawings was obtained from field construction and 'as-built' surveys performed by me or under my supervision, that the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

Timothy Aldrich 02-01-00
Timothy Aldrich, P.S. No. 7719 Date

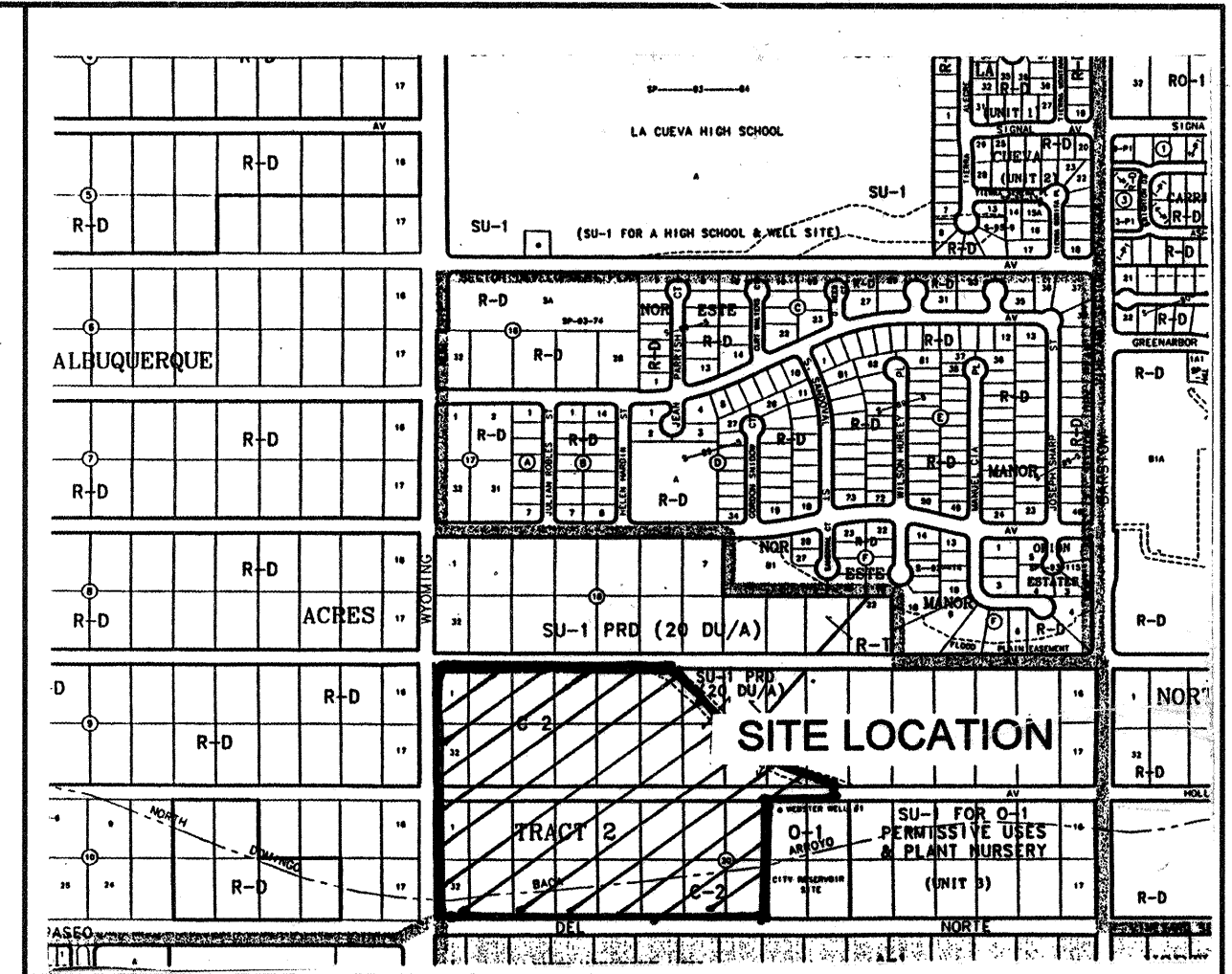
APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
John Chang
DATE 5/12/00

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OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS
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ANY MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED
TO ANY THIRD PARTY WITHOUT OBTAINING THE EXPRESS
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DEVELOPMENT MANAGEMENT SERVICES.

TIERRA WEST, LLC
4421 MCLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592



DRB CASE NO.
DRB-98-402
1/980012/9812TTL.DWG/BCG/6-10-99



VICINITY MAP ZONE ATLAS C-19-Z

SCALE NONE

NOTICE TO CONTRACTORS

1. 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 (UPDATE #6).
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES 24-HOUR CONSTRUCTION.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATIONS 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 STANDARD SPECIFICATIONS.
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE 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 COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS. ANY PERMANENT SURVEY MONUMENT LOCATED WITHIN 50' OF THIS PROJECT THAT IS NOT SHOWN ON THE PLAN AND IS DESTROYED DURING CONSTRUCTION WILL BE REPLACED AT THE DESIGNER'S EXPENSE.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

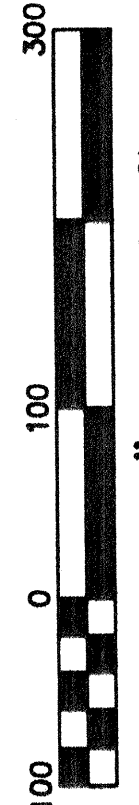
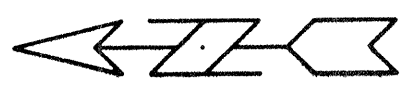
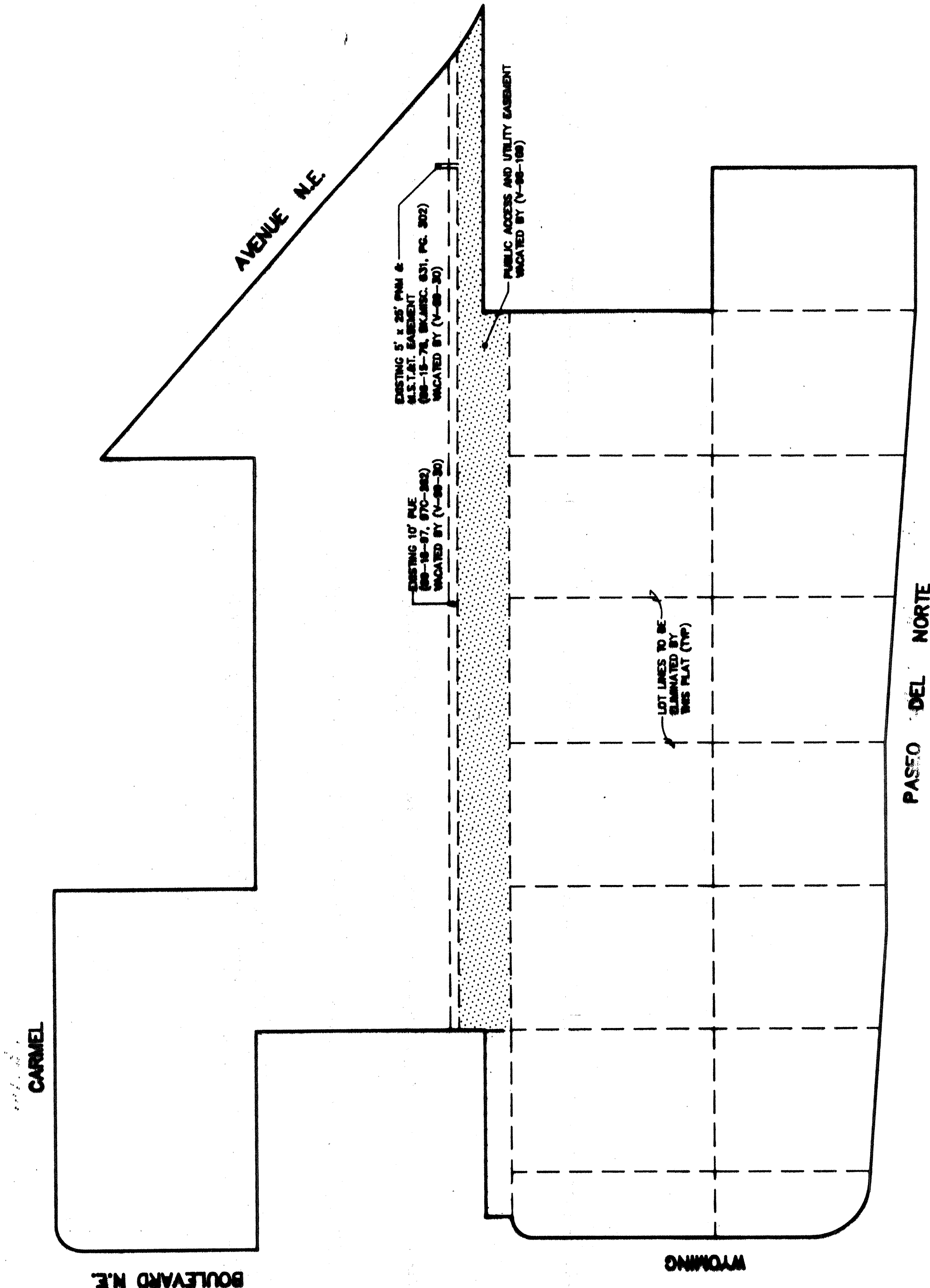
- ☒ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☐ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DEPRESSSED 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.

REV	SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	*****		
		DRC Chairman	<i>John B. Bhandari</i>	5-18-99	APPROVED FOR CONSTRUCTION		
		Transportation	<i>John B. Bhandari</i>	7-28-99			
		Water/Wastewater	<i>R.W. Kane</i>	6-30-99			
		Hydrology	<i>John Bhandari</i>	6-30-99			
		C.I.P.					
		Constr. Mngmt.	<i>John Bhandari</i>	7-6-99	<i>John Bhandari</i> 8/26/99 City Engineer Date		
		Constr. Coord.	<i>John Bhandari</i>	7-6-99			
		CITY PROJECT NO.		611081		SHEET 1 OF 26	

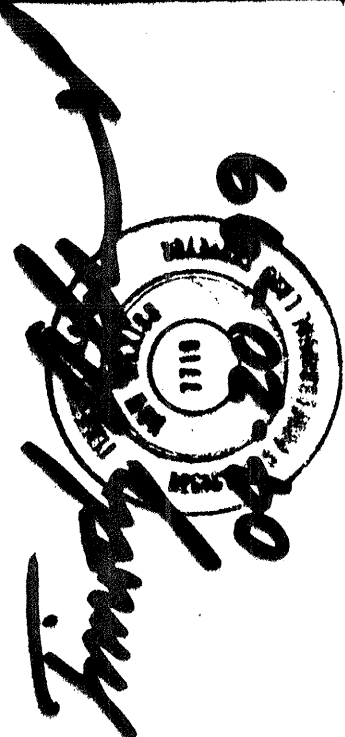
PLAT FOR
LA CUEVA TOWN CENTER

WITHIN THE
ELENA GALLEGOS GRANT
PROJECTED SECTION 18
TOWNSHIP 11 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1999

EASEMENT VACATION DATA



Scale 1" = 100 ft



ALDRICH LAND
SURVEYING

P.O. BOX 30701, ALBU., N.M. 87190
505-884-1990

Drawn By:	RJA	Date:	03-02-99
Checked By:	TA	Drawing Name:	98029PL3.DWG
Job No.:	98-029	Sheet:	3 of 6

EASEMENT DATA

THE PRIVATE SANITARY SEWER EASEMENT IS GRANTED BY THIS PLAT AND IS FOR THE BENEFIT OF ALL THE LOTS. THE MAINTENANCE WILL BE THE RESPONSIBILITY OF THE INDIVIDUAL LOTS IN WHICH THE PRIVATE SEWER LINE IS LOCATED AND IN ACCORDANCE WITH THE RESTRICTIVE COVENANTS.

SEE SHEET 6 OF 6
FOR LOT DATA.

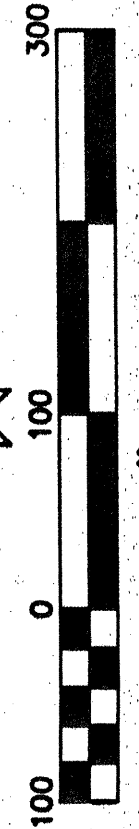
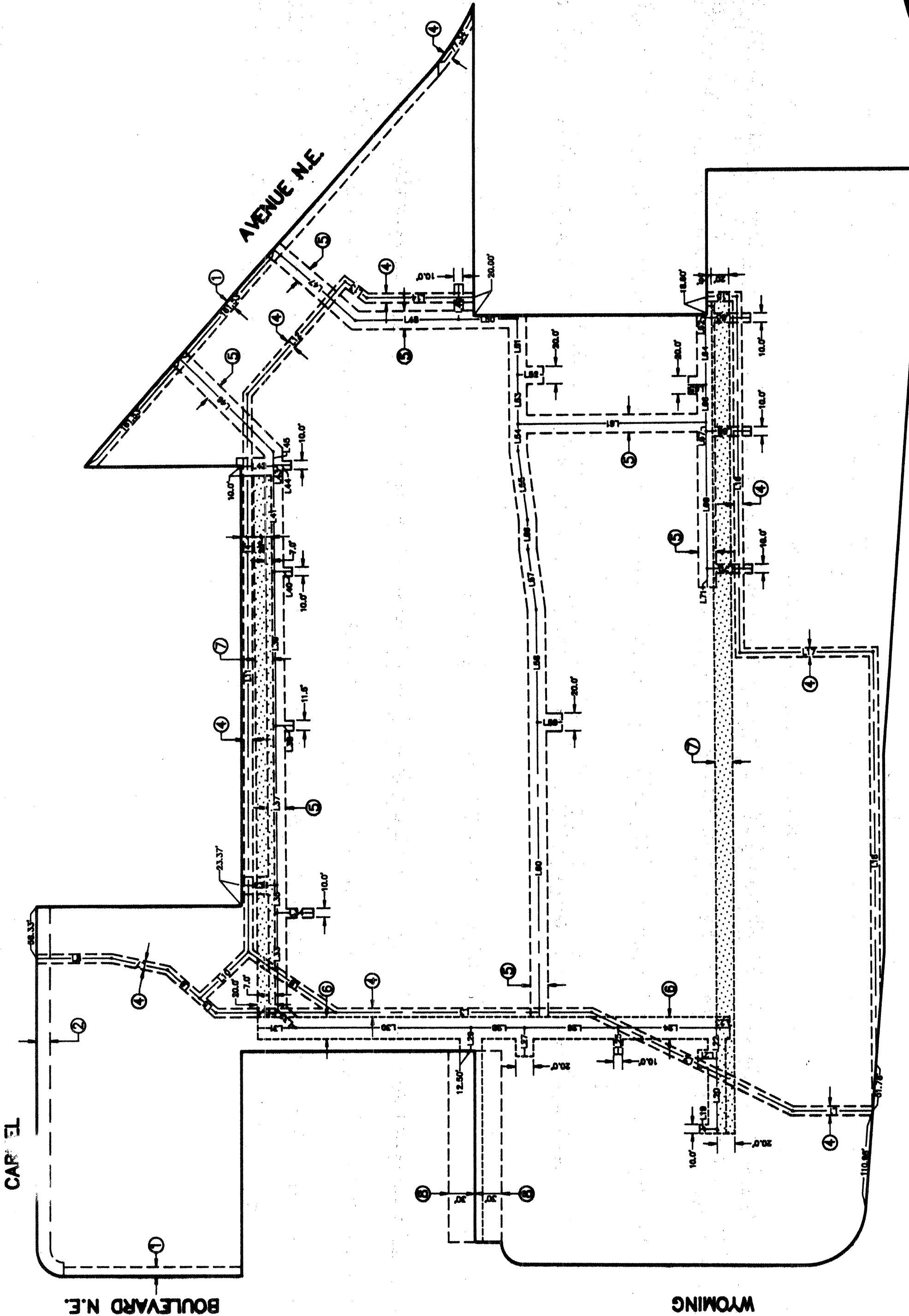
SEE SHEET 5 OF 6 FOR
FOR ADDITIONAL EASEMENTS

ACCESS TO PASO DEL NORTE SHALL BE IN
ACCORDANCE TO UTPPB APPROVED PASO-
DEL-NORTE ACCESS CONTROL POLICY.

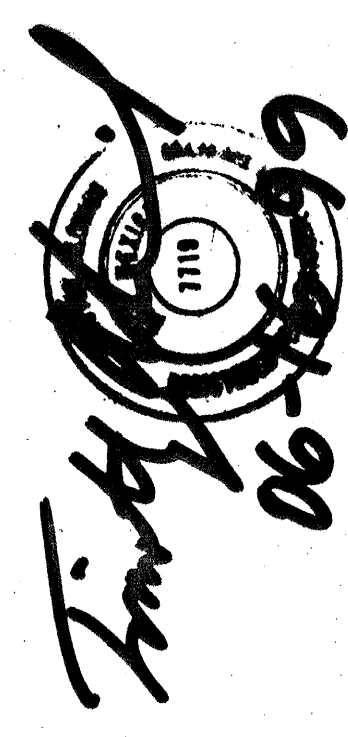
A CROSS-LOT DRAINAGE EASEMENT IS
GRANTED BY THIS PLAT FOR THE MUTUAL
BENEFIT OF ALL LOTS. THE MAINTENANCE
WILL BE THE RESPONSIBILITY OF THE
INDIVIDUAL LOTS IN WHICH THE DRAINAGE
FACILITY IS LOCATED.

CROSS-LOT ACCESS AND PARKING EASEMENTS
FOR THE MUTUAL BENEFIT AND USE OF ALL
LOTS AND IN ACCORDANCE WITH THE RESTRICTIVE
COVENANTS AND THE STATE PLAT UNDER 2-10-98
(GRANTED BY THIS PLAT)

PLAT FOR
LA CUEVA TOWN CENTER
WITHIN THE
ELENA GALLEGOS GRANT
PROJECTED SECTION 18
TOWNSHIP 11 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1999



Scale 1" = 100 ft



ALDRICH LAND
SURVEYING

P.O. BOX 30701, ALBU., N.M. 87190
505-884-1990

Drawn By:	RJA	Date:	03-16-99
Checked By:	TA	Drawing Name:	98029PL4.DWG
Job No.:	98-029	Sheet:	4 of 6

LINE	DIRECTION	DISTANCE
L1	N89°00'00"E	81.33
L2	N89°00'00"E	252.30
L3	N00°13'00"E	135.81
L4	N42°25'31"E	24.79
L5	N17°01'32"E	84.78
L6	N00°01'44"W	84.64
L7	S89°00'00"E	78.38
L8	S89°00'00"E	615.28
L9	S89°00'00"E	30.77
L10	S00°15'15"W	121.14
L11	S89°35'15"W	400.38
L12	S00°00'00"W	400.00
L13	S00°00'00"W	20.00
L14	N89°00'00"E	78.24
L15	N00°13'00"E	34.80
L16	N00°13'00"E	114.54
L17	N89°48'32"W	30.00
L18	N00°13'00"E	80.80
L19	N89°35'15"W	178.07
L20	N44°35'15"E	43.08
L21	S00°01'44"E	40.00
L22	N00°13'00"E	110.26
L23	N89°35'15"W	38.83
L24	N00°13'00"E	178.49
L25	N89°35'15"E	174.77
L26	N00°13'00"E	20.00
L27	N00°13'00"E	34.80
L28	N44°35'15"E	110.26
L29	S00°01'44"E	1.00
L30	N89°35'15"W	20.00
L31	N44°35'15"E	150.30
L32	S41°03'44"W	112.78
L33	S89°41'31"E	38.80
L34	S00°01'44"E	68.18
L35	S00°01'44"E	28.00
L36	S89°35'15"W	54.77
L37	S89°35'15"W	77.16
L38	S89°35'15"W	34.00
L39	S89°35'15"W	68.44
L40	S00°01'44"E	28.00
L41	S89°35'15"W	328.82
L42	S00°00'00"W	212.82
L43	N00°00'00"E	51.00
L44	N00°00'00"E	75.85
L45	N00°00'00"E	20.00
L46	N00°00'00"E	9.73
L47	N00°15'25"W	51.00
L48	N00°00'00"W	154.00
L49	S00°00'00"W	21.28

EASEMENT DATA

PLAT FOR
LA CUEVA TOWN CENTER
WITHIN THE
ELENA GALLEGOS GRANT
PROJECTED SECTION 18
TOWNSHIP 11 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1999

SEE SHEET 6 OF 6
FOR LOT DATA.

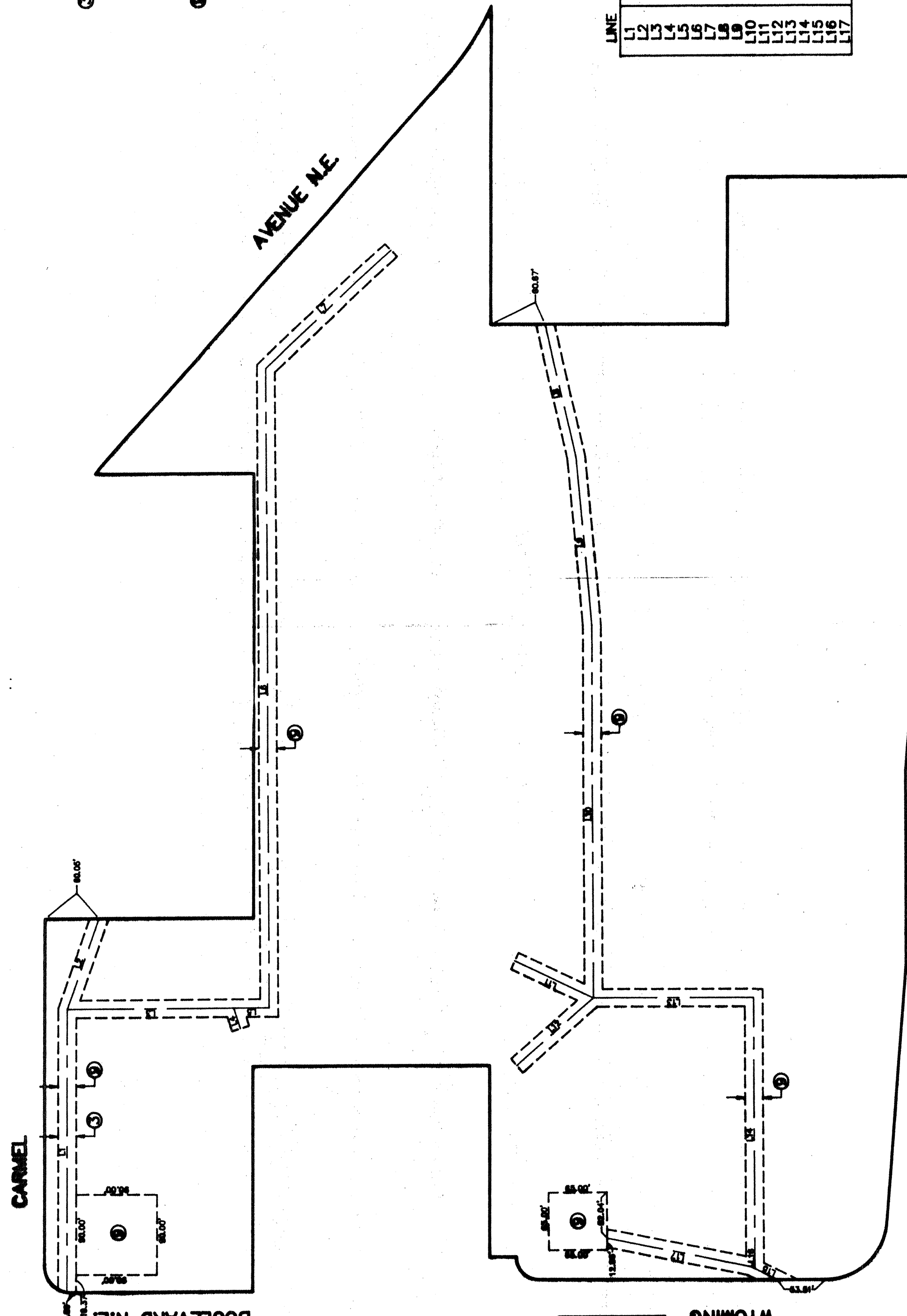
SEE SHEET 4 OF 6 FOR
FOR ADDITIONAL EASEMENTS

ACCESS TO PASEO DEL NORTE SHALL BE IN
ACCORDANCE TO UPPER APPROVED PASEO-
DEL-NORTE ACCESS CONTROL POLICY.

A CROSS-LOT DRAINAGE EASEMENT IS
GRANTED BY THIS PLAT FOR THE MUTUAL
BENEFIT OF ALL LOTS. THE MAINTENANCE
WILL BE THE RESPONSIBILITY OF THE
INDIVIDUAL LOTS IN WHICH THE DRAINAGE
FACILITY IS LOCATED.

CROSS-LOT ACCESS AND EASEMENTS
FOR THE MUTUAL BENEFIT OF ALL
LOTS AND IN ACCORDANCE WITH THE RESTRICTIVE
COVENANTS AND THE EASEMENT NUMBER 2-88-
(GRANTED BY THE PLAT)

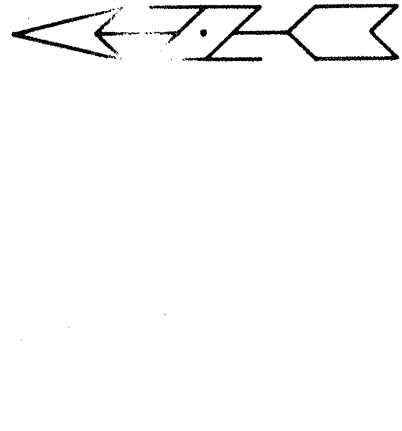
THE PRIVATE SANITARY SEWER EASEMENT IS GRANTED
BY THIS PLAT AND IS FOR THE BENEFIT OF ALL THE
LOTS. THE MAINTENANCE WILL BE THE RESPONSIBILITY
OF THE INDIVIDUAL LOTS IN WHICH THE PRIVATE SEWER
LINE IS LOCATED AND IN ACCORDANCE WITH THE RE-
STRUCTURE COVENANTS.



- EASEMENT
- ② A 20' PRIVATE STORM DRAINAGE EASEMENT FOR THE BENEFIT OF TRACTS DE AND F, LA CUEVA VILLAGE, UNIT 1 TO BE MAINTAINED BY LOT 4, LA CUEVA TOWN CENTER (GRANTED BY THIS PLAT)
 - ③ PRIVATE STORM DRAINAGE EASEMENT (GRANTED BY THIS PLAT)

LINE	DIRECTION	DISTANCE
L1	S89°30'10"E	316.75'
L2	S70°10'34"E	105.91'
L3	S00°00'00"W	185.42'
L4	S72°24'29"W	24.14'
L5	S00°00'00"W	24.14'
L6	S42°36'56"E	712.60'
L7	S42°36'56"E	181.45'
L8	S77°13'22"W	133.55'
L9	S85°34'12"W	47.02'
L10	S23°28'17"W	87.04'
L11	S41°30'06"E	114.44'
L12	S00°13'08"W	178.50'
L13	S00°00'00"W	153.77'
L14	S28°07'22"W	5.14'
L15	S28°07'22"W	5.14'
L16	N11°18'49"E	153.25'

PASEO DEL NORTE



Scale 1" = 100 ft

Drawn By:	RJA	Date:	03-16-99
Checked By:	TA	Drawing Name:	9802RPL5.DWG
Job No.:	98-029	Sheet:	5 of 6



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505-884-1990

LINE	DIRECTION	DISTANCE
L1	N00°00'30"E	318.40'
L2	N00°20'50"E	30.00'
L3	S89°39'10"E	214.70'
L4	N00°07'55"E	284.01'
L5	N88°39'10"W	252.01'
L6	N00°07'55"E	201.48'
L7	S89°39'10"E	386.88'
L8	S00°07'55"W	232.00'
L9	S89°39'10"E	485.00'
L10	N00°07'55"E	178.73'
L11	S48°17'35"E	571.96'
L12	N89°39'10"W	354.85'
L13	S00°15'35"W	283.77'
L14	S89°39'31"E	164.88'
L15	S00°13'27"W	234.27'
L16	N88°39'20"W	185.07'
L17	N85°32'11"W	185.00'
L18	N89°49'51"W	488.20'
L19	N88°31'19"W	290.20'

LINE	DIRECTION	DISTANCE
L20	S00°00'00"W	54.51'
L21	S89°39'10"E	34.00'
L22	N00°07'55"E	146.85'
L23	N00°07'55"E	181.34'
L24	S00°00'00"W	146.85'
L25	S00°00'00"W	44.51'
L26	S00°00'00"W	157.95'
L27	S00°00'00"W	135.00'
L28	S00°00'00"W	272.00'
L29	S00°00'00"W	186.87'
L30	S00°00'00"W	186.87'
L31	S00°00'00"W	284.27'
L32	S00°00'00"W	181.34'
L33	S00°00'00"W	103.85'
L34	S00°00'00"W	32.29'
L35	S00°00'00"W	63.79'
L36	S00°00'00"W	5.00'

PROPERTY CORNERS

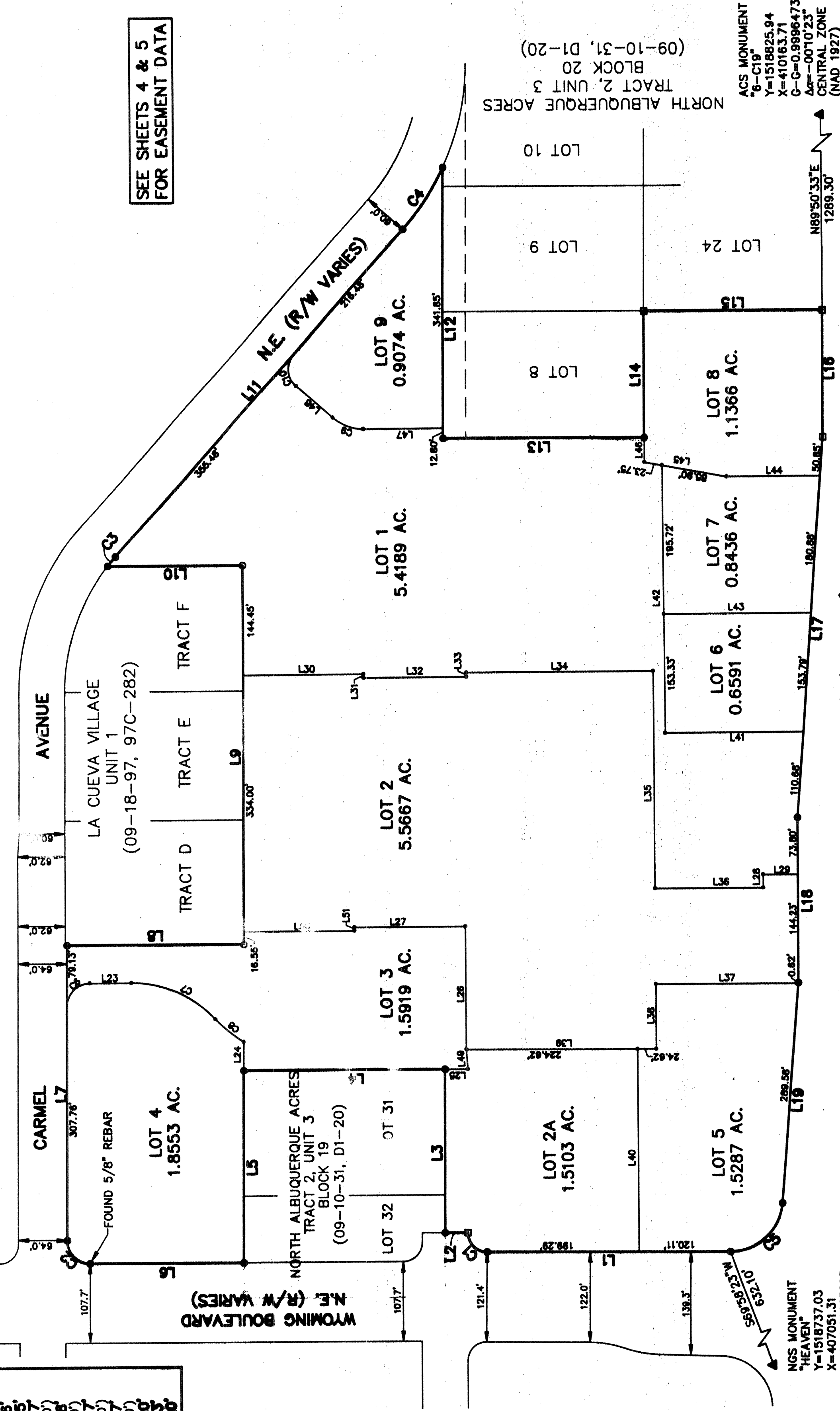
- SET 5/8" REBAR WITH CAP "ALS LS 7719" (TYP.)
- FOUND 5/8" REBAR WITH CAP "LS 11164" (TYP.)
- FOUND 5/8" REBAR WITH CAP "LS 10855" (TYP.)

CURVE	LENGTH	DELTA	RADIUS	TANGENT	DIRECTION	CHORD
C1	39.28' (39.27')	90°01'11" (90°00'35")	23.00'	23.01'	N45°20'15"E (N45°15'29"E)	35.36'
C2	47.24'	90°12'55"	30.00'	30.11'	N45°14'23"E (N45°14'22"E)	42.51'
C3	15.78'	03°20'57" (03°20'55")	270.00'	7.89'	S49°58'04"E	15.78'
C4	96.41'	18°44'20" (06°44'22")	330.00'	48.55'	S51°25'29"E	96.07'
C5	102.65' (102.66')	85°50'58"	68.51'	63.72'	N42°35'50"W	93.32'

CURVE	LENGTH	DELTA	RADIUS	TANGENT	DIRECTION	CHORD
C6	43.34'	80°31'24"	30.00'	28.80'	S44°50'27"E	42.29'
C7	47.04'	150.00'	65.34'	150.00'	S23°30'35"W	119.81'
C8	123.28'	41°12'24"	80.00'	22.86'	N20°51'12"E	42.72'
C9	47.12'	60°00'00"	30.00'	30.00'	N85°42'24"E	42.43'

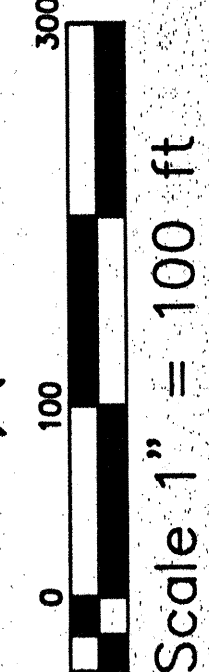
PLAT FOR
LA CUEVA TOWN CENTER
WITHIN THE
ELENA GALLEGOS GRANT
PROJECTED SECTION 18
TOWNSHIP 11 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
MARCH, 1999

SEE SHEETS 4 & 5
FOR EASEMENT DATA



NCS MONUMENT
"HEAVEN"
Y=1518737.03
X=407051.31
G-G=0.99865283
AD=00°10'45"
CENTRAL ZONE
(NAD 83/7245 1929)
ELEVATION=5376.79

ACS MONUMENT
8-C19
Y=1518625.94
X=407051.31
G-G=0.9986473
AD=00°10'23"
CENTRAL ZONE
(NAD 1927)

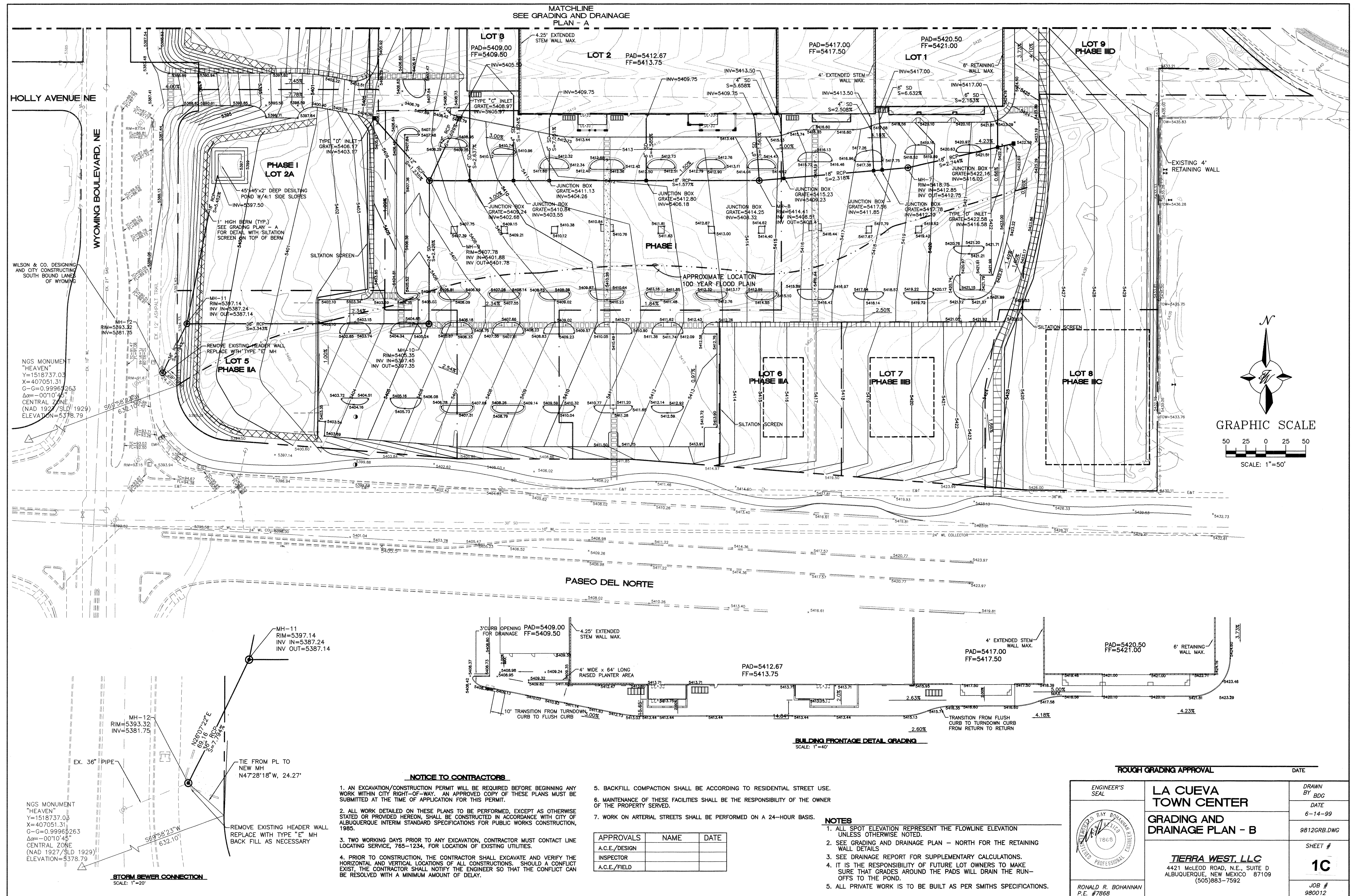


Scale 1" = 100 ft



Drawn By:	RJA	Date:	03-16-99
Checked By:	TA	Drawing Name:	9802RPL5.DWG
Job No.:	98-029	Sheet:	6 of 6

ALDRICH LAND
SURVEYING
P.O. BOX 30701, ALBUQ., N.M. 87190
505-884-1990



6+00

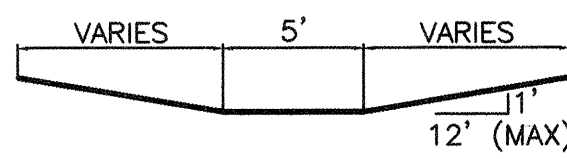
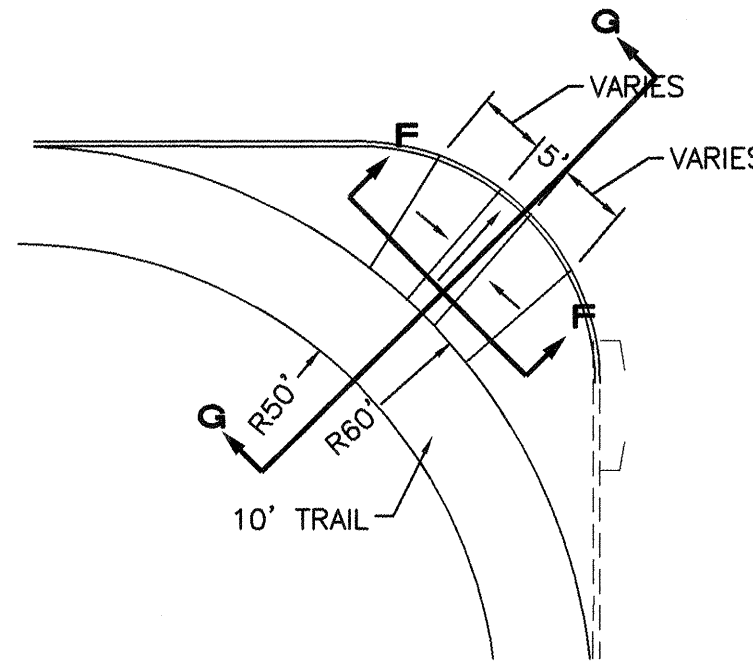
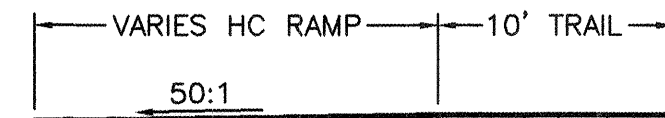
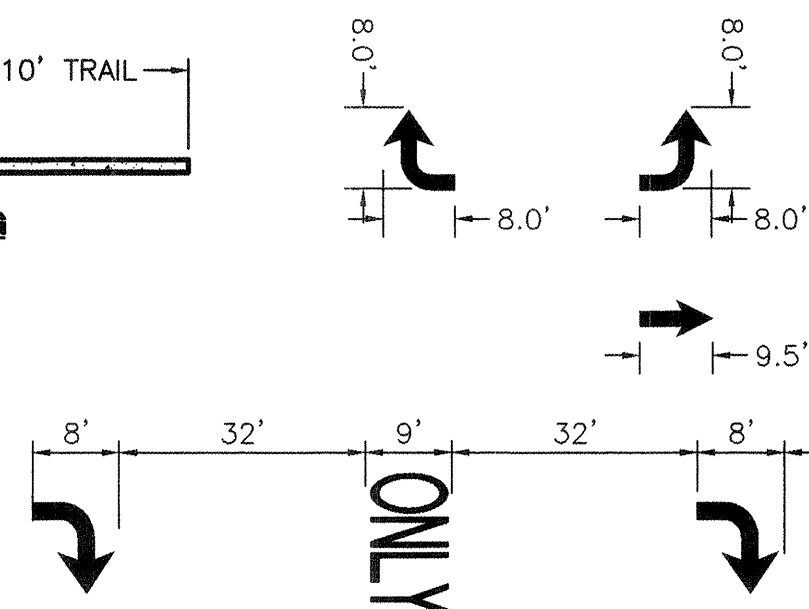
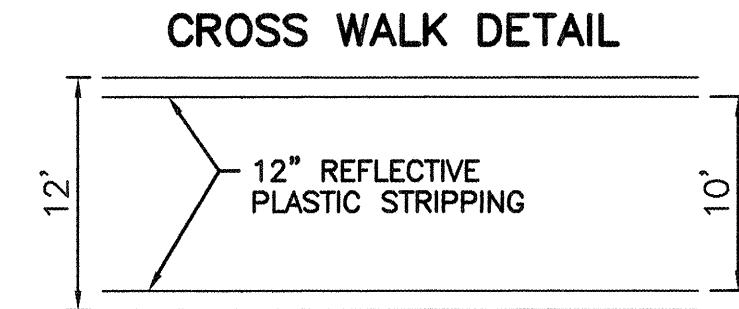
7+00

8+00

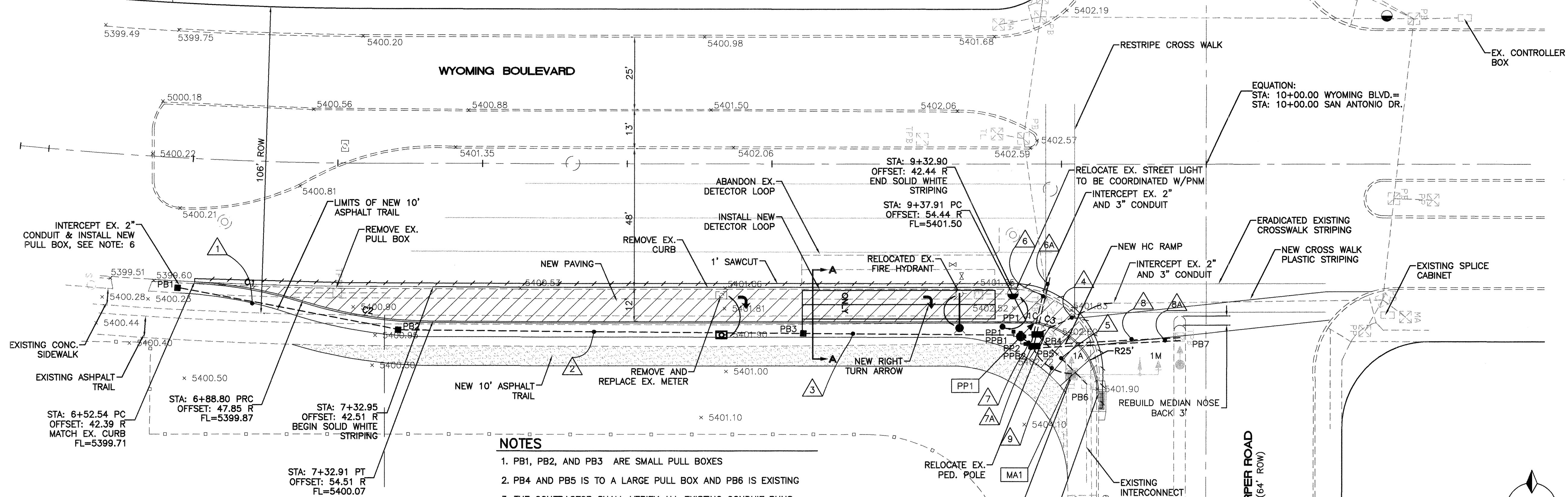
9+00

10+00

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1	38.02	150.00	14°31'19"
C2	45.76	150.00	17°28'47"
C3	39.26	25.00	89°59'20"

SECTION F-F
NTSWHEELCHAIR RAMP DETAIL (TYP.)
NTSSECTION G-G
NTSARROW DETAILS
NTS

CROSS WALK DETAIL



NOTES

- PB1, PB2, AND PB3 ARE SMALL PULL BOXES
- PB4 AND PB5 IS TO A LARGE PULL BOX AND PB6 IS EXISTING
- THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDUIT RUNS AND THE CABLES IN EACH CONDUIT THAT IS TO MODIFIED PRIOR TO ANY CONSTRUCTION
- SEE SHEET 2A FOR THE PROPOSED CONDUIT FILL TABLE
- ALL CONDUITS TO BE INTERCEPTED WITH AN EXISTING CONDUIT SHALL HAVE THE CABLES COMPLETELY REMOVED AND REPLACE WITH NEW CABLES.
- THE INTERCONNECT CABLES SHALL BE DISCONNECTED AT THE SPLICE CABINET, LOCATED IN THE NORTHEAST CORNER OF INTERSECTION, AND TO BE PULLED AND COILED AT PULL BOX #1. THE INTERCONNECT SHALL THEN BE RETHREAD THRU THE NEW CONDUITS BACK TO THE SPLICE CABINET. USE SAME METHOD FROM PB6
- DISCONNECTION AND RECONNECTION OF INTERCONNECT MUST BE COMPLETED WITHIN 24 HOURS OF DISCONNECTION.
- IF CABLES ARE CUT THE ENTIRE RUN OF CABLE SHALL BE REPLACED BY THE CONTRACTOR.
- PRIOR TO INSTALLATION OF NEW SIGNAL EQUIPMENT AND NEW MARKINGS, AFTER COMPLETING THE CONSTRUCTION STAKING IS INSTALLED, THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEER AT 897-8000 (ED TOLEDO) TO CONFIRM LOCATION OF EQUIPMENT IN THE FIELD.

TACK COAT AS REQUIRED BY THE ENGINEER BETWEEN ALL ASPHALT/AGGREGATE MATERIAL LIFTS.

2-1/2" ASPHALT CONCRETE, 1500 LBS. STABILITY, TYPE B GRADATION.

6" AGGREGATE BASE COURSE

FINISH SURFACE OF SUBGRADE SHALL BE MOISTURE CONTROLLED AT COMPACTION MOISTURE RANGE, OR PRIME COAT APPLIED AS REQUIRED BY THE ENGINEER UNTIL NEXT/FINAL SURFACE IS COMPLETED. SUBGRADE PREPARATION SHALL BE PERFORMED AFTER ALL SUBSURFACE R/W UTILITIES CONSTRUCTION IS COMPLETED.

1' SUBGRADE SOIL R-VALUE>50. PLACED IN 2-6" COMPACTED LIFTS. 95% MIN. COMPACTION, AT OPT. MOISTURE ± 2.0%, ASTM D1557, OR OPT. MOISTURE TO ± 4%, ASTM D698 FOR SOIL W/35% OR MORE MATERIAL PASSING THE NO. 200 SIEVE. SOIL NOT HAVING THE MIN. R-VALUE OF 50, SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED BY THE CONTRACTOR WITH SUITABLE MATERIAL OR A PAVEMENT SHALL BE DESIGNED BY TIERRA WEST, LLC ACCOMMODATING THE EXISTING R-VALUE PER C.O.A. STANDARD SPECIFICATIONS.

1-1/2" ASPHALT CONCRETE TYPICAL FINISH COURSE PLACED AFTER ALL MANHOLES, VALVES, COVERS/RINGS ARE SET TO GRADE. 1500 LBS. STABILITY TYPE B GRADATION.

STANDARD C&G PER C.O.A. STD DWG #2415

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

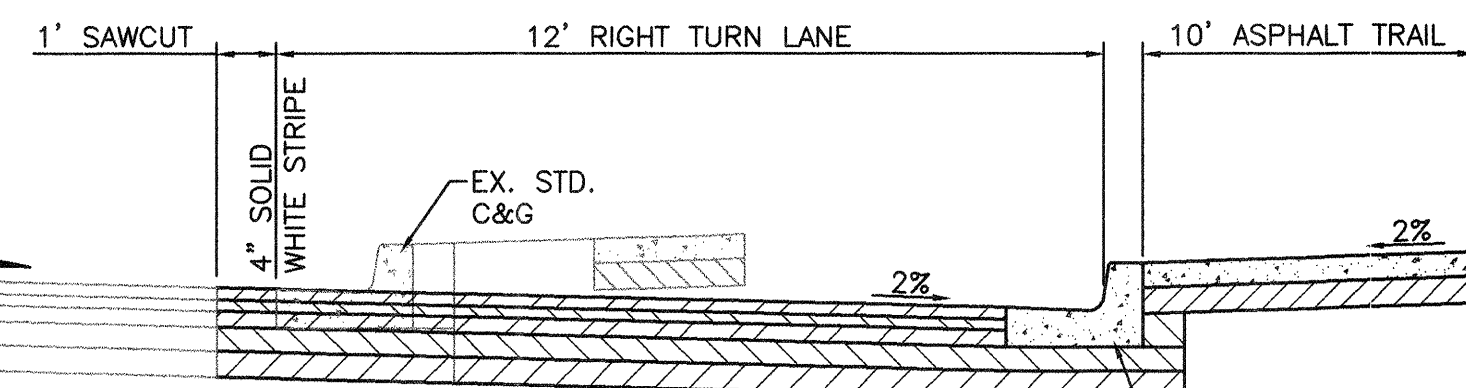
6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

6" AGGREGATE BASE COURSE

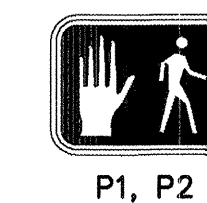
WYOMING PAVING SECTION

NTS (SECTION ACQUIRED FROM CITY PROJECT #1637)



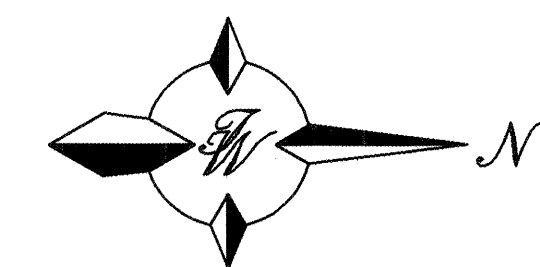
SECTION A-A

TYPICAL SIGNAL FACE LENS ARRANGEMENTS

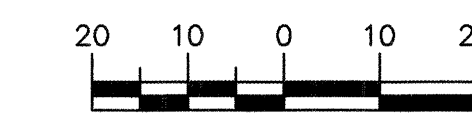


P1, P2

1C



GRAPHIC SCALE

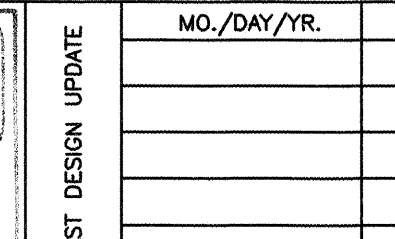
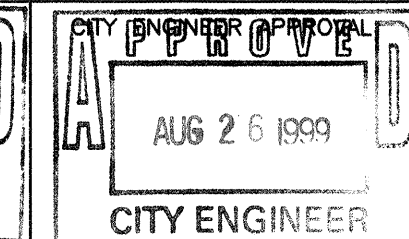


SCALE: 1"=20'

TIERRA WEST, LLC
4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
PAVING IMPROVEMENTS
INTERSECTION OF WYOMING AND SAN ANTONIO



CITY PROJECT NO.

611081

ZONE MAP NO.

C-19-Z

SHEET

2

OF

26

20/980012/SANANTON.DWB/BDG/7-28-99

AS BUILT INFORMATION			
CONTRACTOR	SUNDANCE	DATE	9/9/00
WORK	PAVING	DATE	9/9/00
INSPECTOR'S NAME	ALS	DATE	9/9/00
INSPECTOR'S FIELD	PAVING	DATE	9/9/00
INSPECTOR'S CORRECTION	ALS	DATE	9/9/00
INSPECTOR'S MICRO-FILM	ALS	DATE	9/9/00
RECORDED BY		DATE	
NO.		DATE	

BENCH MARKS			
NGS MONUMENT "HEAVEN"		DATE	
CENTRAL STATION DATA		DATE	
NM STATE PLANE COORDINATES		DATE	
Central Zone		DATE	
Y=1518737.03		DATE	
X=407051.31		DATE	
G-G=0.99965263		DATE	
DELTA=-00°10'45"		DATE	
ELEVATION=5378.79		DATE	

SURVEY INFORMATION			
FIELD NOTES	DATE	BY	
NO.		DATE	

ENGINEER'S SEAL			
NO.	DATE	REMARKS	BY
		DESIGN	
		BDG	
		DATE 1-99	
		DATE 1-99	
		DATE 1-99	

[illegible]

CC 6	COMMUNICATION CABLE-6 PAIR
CC 12	COMMUNICATION CABLE-12 PAIR
DLIC	DETECTOR LOOP LEAD IN CABLE
MLA	MASTARM
MCC	MULTI CONDUCTOR CABLE
PB	PULL BOX
PP	PEDESTAL POLE
PPB	PEDESTRIAN PUSH BUTTON
REC	RIGID ELECTRIC CONDUIT
SCC	SINGLE CONDUCTOR CABLE
CAM	VIDEO CAMERA
EX	EXISTING CONDUIT

NOTE:
MAIN CABLE RUNS ARE TO BE REPLACED FOR THE ENTIRE RUN FROM THE PB TO THE EXISTING CABINET IN THE NORTHWEST CORNER OF THE INTERSECTION. THIS SHOULD BE NEW CABLES.

1/980012/AbeccbIA.dwg/BDG/7-28-99

8+09

9+00

10+00

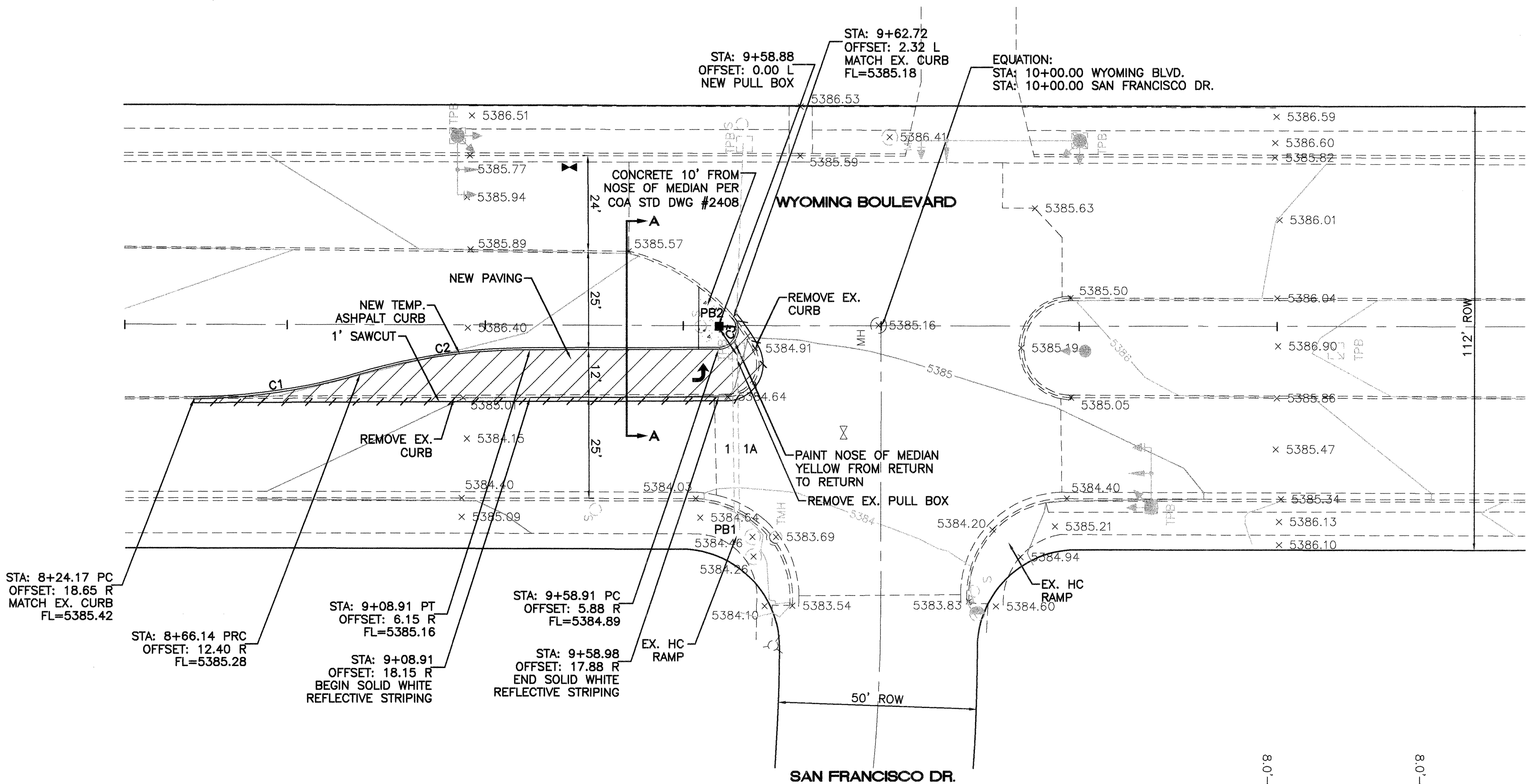
11+00

CONDUIT AND CONDUCTOR REQUIREMENTS

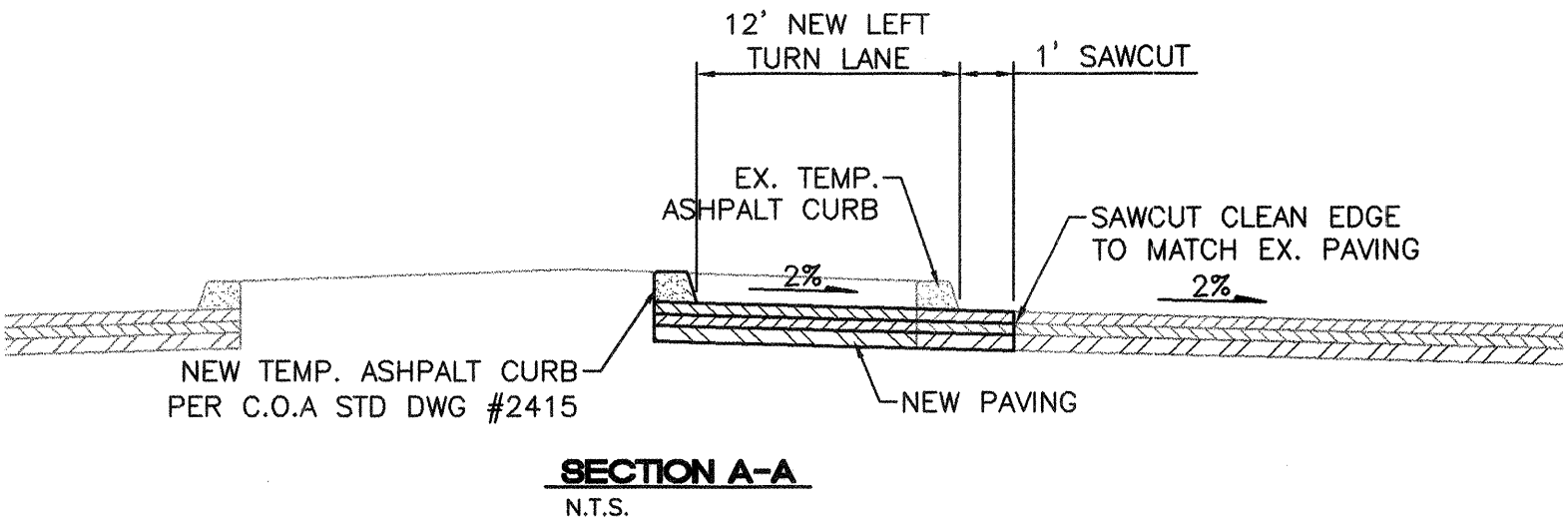
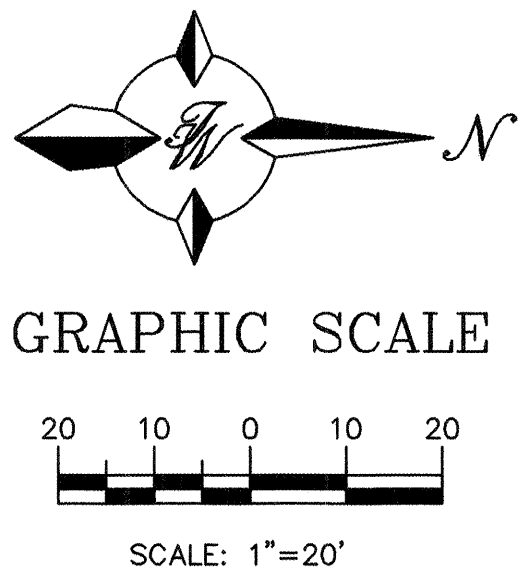
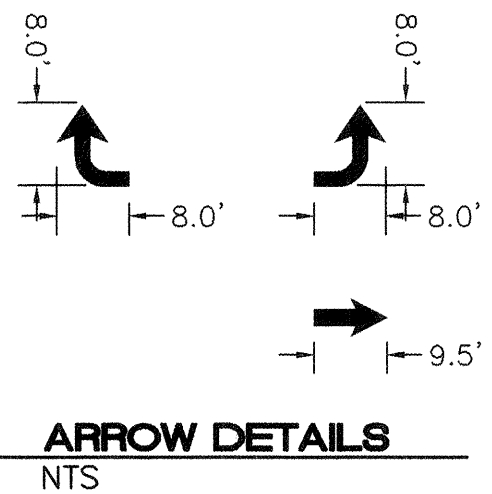
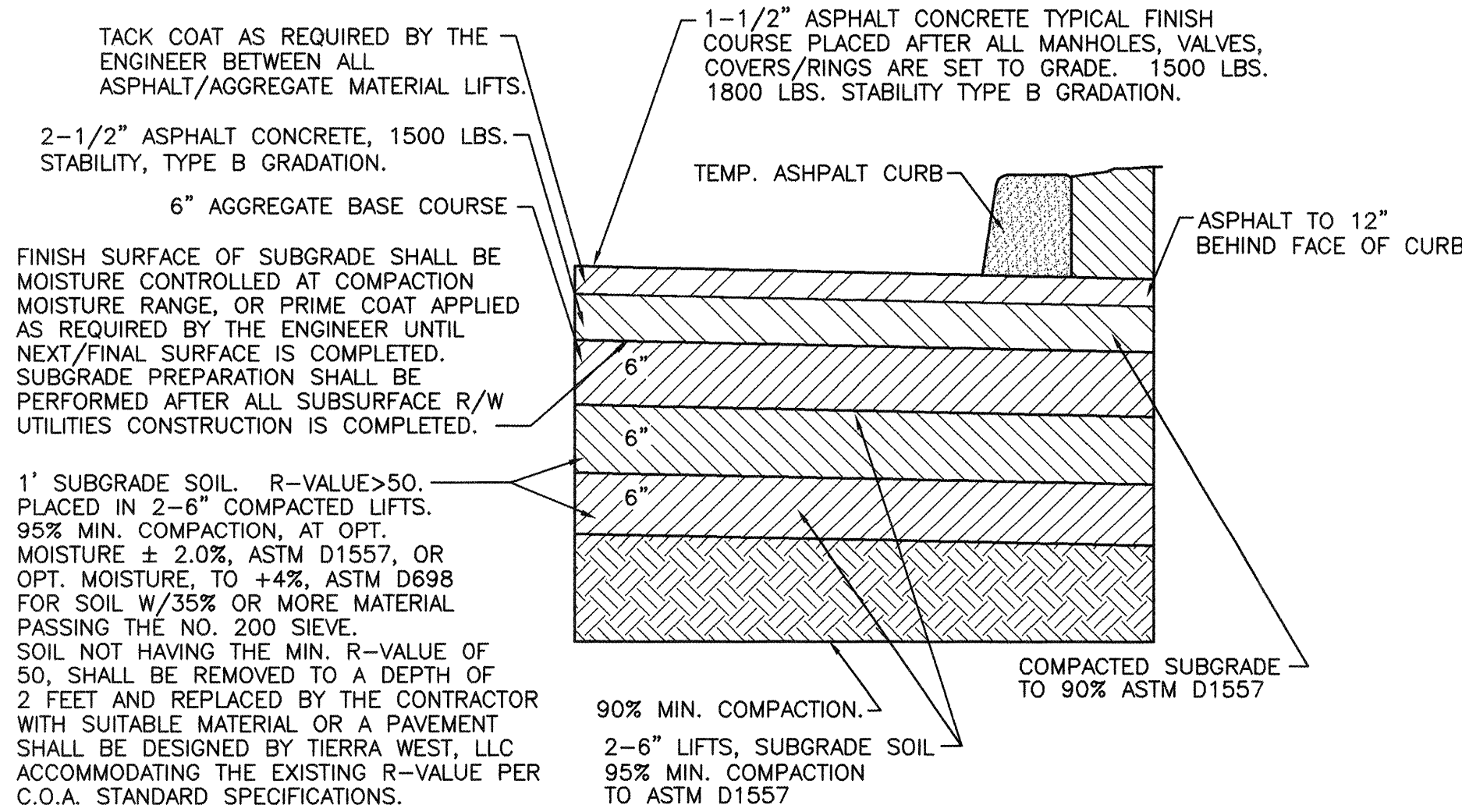
CONDUIT LENGTH, SIZE, AND TYPE

CONDUIT FILL BY CONTRACTOR LENGTH AND TYPE

RUN ID	SIZE/LENGTH			TYPE	REMARKS	MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC #8 (# @ FT)	DLLIC (# @ FT)	OPTICOM (# @ FT)
	1"	2"	3"								
1				EX	REC PB1 TO PB2	1 @ 50'		2 @ 50'			
1A				EX	REC PB1 TO PB2				1 @ 55'		2 @ 55'



CURVE TABLE				
CURVE	LENGTH	RADIUS	TANGENT	DELTA
C1	42.57	150.00	21.43	16°15'43"
C2	43.44	150.00	21.87	16°35'38"
C3	11.30	5.00	10.59	129°25'59"



TERRA WEST, LLC
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ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
PAVING IMPROVEMENTS
INTERSECTION OF WYOMING AND SAN FRANCISCO

DESIGN
REVIEW COMMITTEE
AUG 13 1999

CITY ENGINEER
AUG 26 1999

CITY PROJECT NO.

611081

ZONE MAP NO.
C-19-Z

SHEET **3** OF **26**

SIGNAL NOTES

1.

ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS, AND THE CITY'S TRAFFIC ENGINEERING OPERATIONS THIRD DRAFT SPECIFICATIONS (JUNE 1994).
2.

LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
3.

THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
4.

THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
5.

SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS. SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
6.

ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
7.

ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
8.

THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS(857-8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.
9.

THE CONTRACTOR SHALL NOTIFY PUBLIC SERVICE COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
10.

THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
11.

LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE CAPPED & SEALED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
12.

IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.
13.

FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
14.

THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
15.

EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
16.

EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PILLBOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
17.

CONTRACTOR SHALL COIL EXCESS INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BARS. IF MORE THAN ONE MANHOLE EXISTS BETWEEN SPLICE CABINETS OR CONTROL CABINETS WITH SPLICE BARS, THEN COILING IS ONLY REQUIRED AT ONE OF THE MANHOLES. THE FOLLOWING QUANTITIES OF COMMUNICATION CABLE SHALL BE COILED:

12 PAIR

— 50 FT.

25 PAIR

— 50 FT.

50 PAIR

— 25 FT.

75 PAIR

— 25 FT.
18.

THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
19.

ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
20.

THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER CABINETS, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE.
21.

CABINET AND CONTROLLER NEED TO BE I.D.C. 820A.

DEFINITIONS

1.

"ENGINEER" — FOR THE PURPOSES OF THIS PROJECT, THE TERM "ENGINEER" IS SYNONYMOUS WITH THE TERM "PROJECT MANAGER".

INCIDENTAL ITEMS *

1.

REMOVAL OF EXISTING PULL BOXES, CONDUITS, OR OTHER SIGNAL EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENT.
2.

CABLE TESTING AND DIAGRAMS.
3.

BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVEPADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, CURB & GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS), FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.
4.

LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
5.

DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHEILDING EQUIPMENT OR MATERIAL.
6.

APPRIISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.
7.

HAULING OF MATERIAL TO BE DISPOSED TO CITY LANDFILL.
8.

REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD.
9.

LEAN FILL FOR CONDUIT TRENCHES.
10.

PULL BOX ADJUSTMENT TO GRADE.
11.

OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL
12.

REMOVAL AND REPLACEMENT IN KIND OF BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.
13.

COST FOR PUBLIC SERVICE COMPANY TO PROVIDE ELECTRICAL SERVICE.

* ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS LIST DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS.

INCIDENTAL ITEMS *

1.

THIS PROJECT IS AN EXTENSION OF AN EXISTING SIGNAL SYSTEM. THEREFORE, THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:

A.

ALL TRAFFIC SIGNAL CONTROLLERS SUPPLIED FOR THIS PROJECT SHALL BE THE CITY OF ALBUQUERQUE

B.

ALL TRAFFIC SIGNAL CONTROLLERS CABINETS SUPPLIED FOR THIS PROJECT SHALL BE THE CITY OF ALBUQUERQUE
2.

SPLICE CABINETS SHALL BE AS DETAILED ON THE PLANS. LOW VOLTAGE SPLICE BLOCKS SHALL BE 50 UNITS TO THE FOOT, WITH EACH SPLICE BLOCK CAPABLE OF HANDLING 25 PAIR OF CABLE (NUMBER OF SPLICE BLOCKS IN EACH CABINET CAPABLE OF HANDLING NUMBER OF CONDUCTORS SHOWN ON PLANS). SPLICE BLOCKS SHALL BE BELL SYSTEMS PART #66B3-50 OR APPROVED EQUAL. ALL COMMUNICATION CABLE PAIRS SHALL BE TERMINATED AT THE SPLICE BLOCK INCLUDING INACTIVE PAIRS.
3.

INTERCONNECT CABLES SHALL COMPLY WITH REA SPECIFICATIONS PE-22. INTERCONNECT CABLE SHALL CONTAIN THE NUMBER OF WIRE PAIRS SHOWN ON THE PLANS AND THE INDIVIDUAL CONDUCTORS SHALL BE 19 AWG SOLID.
4.

EMERGENCY VEHICLE PRE-EMPT EQUIPMENT SHALL BE 3M "OPTICOM" MODEL 562 PHASE SELECTORS MOUNTED ON 3M "OPTICOM" MODEL 560 RACKS, OR APPROVED EQUAL. ALL RACKS SHALL BE CABLE OF PROVIDING FOUR CHANNELS OF DETECTION. PHASE SELECTOR MODULES SHALL BE CAPABLE OF TWO CHANNELS OF DETECTION EACH. OPTICAL DETECTORS SHALL BE 3M "OPTICOM" MODEL 511, 1 CHANNEL, 1 DIRECTION OR APPROVED EQUAL. OPTICAL DETECTOR CABLE SHALL BE 3M "OPTICOM" MODEL 592 WITH POWER SUPPLY, CABLE, AND SWITCHES, OR APPROVED EQUAL. A MANUFACTURERS REPRESENTIVE SHALL ASSIST THE CONTRACTOR IN THE FIELD AS WORK PROGRESSES TO COMPLETE THE INSTALLATION OF ALL PRE-EMPT EQUIPMENT AND ASSIST IN SETTING UP TURNING ON, PROGRAMMING AND FIELD TESTING PREEMPTION EQUIPMENT INCUDING EMITTERS TO INSURE THAT THE EQUIPMENT IS OPERATIONAL.
5.

THIS PROJECT INVOLVES THE INSTALLATION AND TESTING OF A MACHINE VISION VEHICLE DETECTION SYSTEM. THEREFORE THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:

A.

EITHER AN ECONOLITE "AUTOSCOPE" 2004 OR A PEEK VISION SYSTEM VIDEO TRAK-900 MACHINE VISION VEHICLE DETECTION SYSTEM UNIT, ALL NECESSARY CABLES, HARNESSSES, MATERIALS, FITTINGS, AND MISCELLANEOUS COMPONENTS NECESSARY TO PROVIDE A COMPLETE AND OPERATING SYSTEM AT ONE (1) SIGNALIZED INTERSECTION.

B.

FOUR (4) FIXED LENS VIDEO CAMERAS.

C.

MODEMS AND CABLES SHALL BE FURNISHED AND INSTALLED TO ALLOW REMOTE DETECTOR SET UP AND RETRIEVAL OF DATA IN THE VEHICLE VEHICLE DETECTION UNIT.

D.

COMPUTER SOFTWARE AND HARNESSSES TO CONNECT AND OPERATE THE NEW SYSTEM

E.

VIDEO POWER CABLE SHALL BE A THREE CONDUCTOR #12 AWG TWISTED POWER SERVICE CABLE.
- TRAFFIC SIGNAL LEGEND
- | NEW | EXISTING | ITEM |
|-----|----------|--|
| | | PULL BOX |
| | | SERVICE POLE |
| | | METER PEDESTAL |
| | | CONTROLLER CABINET |
| | | CONDUIT RUN (SIGNALS) |
| | | CONDUIT RUN (INTERCONNECT) |
| | | LOOP DETECTOR |
| | | TRAFFIC SIGNAL PEDESTAL POLE |
| | | CONDUIT RUN NUMBER (SIGNAL) |
| | | CONDUIT RUN NUMBER (POWER SERVICE) |
| | | CONDUIT RUN NUMBER (INTERCONNECT) |
| | | CONDUIT RUN NUMBER (WARNING BEACON) |
| | | TYPE III STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR |
| | | TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA |
| | | TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, |
| | | PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED) |
| | | PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED) |
| | | SPLICE CABINET |
| | | TRAFFIC MANHOLE |
| | | VIDEO CAMERA |
| | | OPTICAL DETECTOR |
| | | TRAFFIC BARRICADES |
6.

THE CONTRACTOR SHALL FURNISH TRAINING FOR THE MACHINE VISION VEHICLE DETECTION EQUIPMENT (2 DAYS). THE VIDEO HARDWARE SYSTEM (1 DAY). THE EMERGENCY VEHICLE PRE-EMPTION EQUIPMENT AND THE SYSTEM MASTER (1 DAY) THIS TRAINING SHALL BE PREFORMED WHEN THE EQUIPMENT IS FULLY OPERATIONAL. MANUFACTURER'S REPRESENTATIVES SHALL CONDUCT THE TRAINING IN ALBUQUERQUE FOR APPROXIMATELY 20 CITY TRAFFIC ENGINEERING PERSONNEL.

7.

ALL SIGNAL ASSEMBLIES, PEDESTRIAN SIGNALS, PEDESTRIAN PUSH BUTTONS, CABINETS AND FITTINS SHALL COMPLY WITH THE CITY OF ALBUQUERQUE TYPE AND COLOR REQUIREMENTS.
- | | |
|--|---|
| <div><div>TIERRA WEST, LLC</div><div>4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592</div></div> | |
| CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP | |
| TITLE: LA CUEVA TOWN CENTER
TRAFFIC SIGNAL
NOTES AND LEGEND | |
| DESIGN REVIEW COMMITTEE

CITY PROJECT NO. 611081 | CITY ENGINEER APPROVAL

CITY ENGINEER |
| LAST DESIGN UPDATE | MO./DAY/YR. MO./DAY/YR. |
| DESIGNED BY | DATE 3-99 |
| DRAWN BY | DATE 3-99 |
| CHECKED BY | DATE 3-99 |
| SHEET 4 OF 26 | |
- 1/980012/ABESGNT.DWG/BDG/5-8-99

LIGHTING NOTES

1. LOCATIONS OF CONDUITS, FOUNDATIONS, PULL BOXES, AND CONTROL CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE PROJECT MANAGER IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
2. ALL WIRE ON THIS PROJECT TO BE COPPER ONLY.
3. LIGHT STANDARDS SHALL HAVE DIRECT ANCHOR BASE.
4. ALL ROADWAY AND OVERHEAD SIGN LIGHTING CIRCUITS ON THIS PROJECT SHALL BE 240 VOLTS.
5. ALL PULL BOXES INSTALLED FOR ROADWAY, OVERHEAD SIGN STRUCTURES, OR PEDESTRIAN LIGHTING SHALL BE STANDARD.
6. EACH CIRCUIT FOR ROADWAY LIGHTING, PEDESTRIAN LIGHTING, OVERHEAD SIGN LIGHTING AND UNDERPASS LIGHTING SHALL BE INSTALLED IN SEPARATE CONDUITS UNLESS APPROVED OTHERWISE.
7. EACH TIME A ROADWAY LUMINAIRE, OVERHEAD SIGN LUMINAIRE, UNDERPASS LUMINAIRE OR ORNAMENTAL (PEDESTRIAN) LUMINAIRE IS TURNED ON OR OFF THE CONTRACTOR SHALL COORDINATE WITH THE FOLLOWING REPRESENTATIVES:

LOCAL POWER COMPANY
CITY OF ALBUQUERQUE

POWER SHALL NEITHER BE TURNED ON OR OFF UNTIL RESPONSIBLE PARTIES FOR EACH LIGHTING SYSTEM HAVE BEEN NOTIFIED.
8. RESPONSIBILITY AND MAINTENANCE OF LIGHTING SYSTEMS INSTALLED AS PART OF THIS PROJECT SHALL BE AS FOLLOWS:

A. ROADWAY LIGHTING SYSTEM INCLUDING MEDIAN AND RAMP LIGHTING SHALL BE ACCEPTED AND MAINTAINED BY CITY OF ALBUQUERQUE AND PNM, THE CONTRACTOR SHALL PROVIDE THE CITY OF ALBUQUERQUE AND PNM FIVE(5) WORKING DAYS NOTICE IN ADVANCE OF TURNING ON THE SYSTEM SO AS TO ALLOW THE CITY OF ALBUQUERQUE AND PNM TO INSPECT AND APPROVE THE SYSTEM BEFORE IT IS TURNED ON.

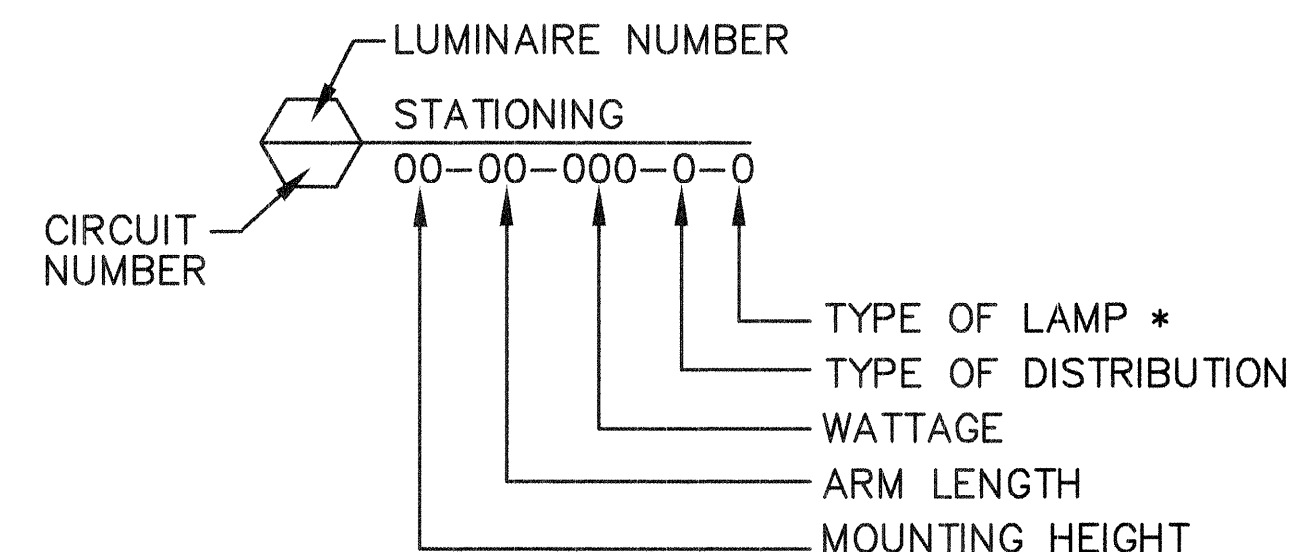
B. PEDESTRIAN LIGHTING SHALL BE ACCEPTED AND MAINTAINED BY THE CITY OF ALBUQUERQUE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND COST OF ENERGIZING ALL LIGHTING SYSTEM UNTIL SUCH TIME THAT THE APPROPRIATE OWNER AND MAINTAINING AGENCY ACCEPT THE RESPONSIBILITY FOR THEIR RESPECTIVE SYSTEMS.
9. CONTRACTOR SHALL COORDINATE WITH POLE MANUFACTURER TO MATCH BOLT PATTERN OF NEW TYPE V STANDARDS WITH THAT OF EXISTING FOUNDATIONS TO REMAIN.
10. ALL LUMINAIRES SHALL INCLUDE PHOTO ELECTRIC CELLS.
11. THE DESIGN IS BASED UPON TYPE (III), (400) WATT, (HIGH PRESSURE SODIUM), (FULL-CUT-OFF), (FLAT GLASS) LUMINAIRES WITH PHOTO CELLS. THE CONTRACTOR SHALL FURNISH AND INSTALL THIS TYPE OF FIXTURE.
12. LIGHTING IS TO BE SERVED BY METER PEDESTAL IN COMBINATION WITH TRAFFIC SIGNALS (SEE SIGNAL PLANS).
13. THE CONTRACTOR SHALL REMOVE EXISTING SERVICE RISERS, SERVICE POLES, CONTROL CABINETS, AND EXISTING WIRING AS REQUIRED BY PNM AND AS DIRECTED BY THE PROJECT MANAGER.
14. ANY LUMINAIRES DAMAGED DURING REMOVING AND RESETTING OF LIGHTING STANDARDS SHALL BE REPLACED IN KIND AT CONTRACTOR'S EXPENSE.
15. ALL LIGHTING CONTROL CABINETS SHALL BE TESCO (OR APPROVED EQUAL). THE CONTRACTOR SHALL SUBMIT A COPY OF THE LIGHTING PLANS TO THE MANUFACTURER. THE MANUFACTURER SHALL REVIEW PLANS AND MODIFY THE EQUIPMENT IN EACH CABINET AS NECESSARY TO ACCOMMODATE LIGHTING REQUIREMENTS AS SHOWN ON PLANS. THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS OF EACH CABINET TO THE PROJECT MANAGER AND PNM FOR REVIEW AND APPROVAL PRIOR TO MANUFACTURING OF CABINETS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CABINET AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
16. PNM WILL ASSIST WITH IDENTIFICATION OF EXISTING CIRCUITS. THE CONTRACTOR SHALL BE REQUIRED TO TIE THE NEW CIRCUITS INTO EXISTING CIRCUITS AS DIRECTED BY PROJECT MANAGER. THE CONTRACTOR SHALL USE APPROPRIATE CAUTION WHEN INTERCEPTING EXISTING CIRCUITS.
17. LIGHTS NEAR EXISTING OVERHEAD TRANSMISSION LINES MUST BE MAINTAIN A (X') VERTICAL CLEARANCE AND/OR A (X') HORIZONTAL CLEARANCE FROM THE PHASE CONDUCTOR. PNM WILL ASSIST IN MEASUREMENT AND DETERMINATION OF CLEARANCE.
18. LIGHTING WILL BE COMPLETED WITH CONSTRUCTION PHASING, REFER TO SECTION 6. NEW LIGHTING SHALL BE OPERATIONAL PRIOR TO OPENING ROADWAY TO TRAFFIC.

LIGHTING INCIDENTAL ITEMS

1. ANCHOR BOLTS FOR FOUNDATIONS.
2. GROUND RODS FOR FOUNDATIONS.
3. UNIVERSAL SUPPORT BRACKETS FOR SERVICE RISERS.
4. CONCRETE FOUNDATION FOR LIGHTING CONTROL CABINETS INCLUDING EXCAVATION, BACKFILL, CONCRETE, GROUND RODS, AND ANCHOR BOLTS.
5. REWIRING OF ANY EXISTING LUMINAIRES TO REMAIN OR BE RESET.
6. SINGLE CONDUCTOR #10 AWG COPPER WIRE CONNECTIONS FROM MAIN CIRCUIT TO LUMINAIRES.
7. REMOVAL OF EXISTING STANDARDS AND LUMINAIRES AND DELIVERY TO THE CITY OF ALBUQUERQUE.
8. SHOP DRAWING PREPARATION AND COORDINATION FOR LIGHTING CONTROL CABINETS.
9. ENERGY COST OF THE LIGHTING SYSTEM UNTIL ACCEPTANCE BY THE MAINTAINING AGENCY.

LIGHTING LEGEND



LAMP TYPES *

H = MERCURY
M = METAL HALIDE
S = SODIUM

TIERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592		DATE	DESIGNED BY	DRAWN BY	CHECKED BY
		NO.			
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: LA CUEVA TOWN CENTER TRAFFIC SIGNAL LIGHTING NOTES AND LEGEND					
	CITY ENGINEER APPROVAL 	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.	
CITY PROJECT NO.		ZONE MAP NO.	SHEET	OF	
611081		C-19-Z	5		26

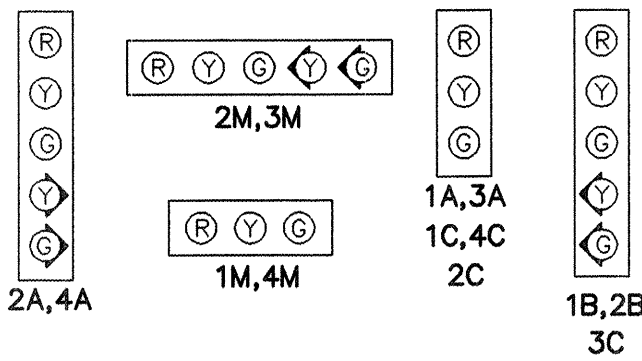
FLASH CONDITION *

RED HEADS 1A,1B,1C,1M
3A,3B,3C,3M
2A,2B,2C,2M
4A,4B,4C,4M

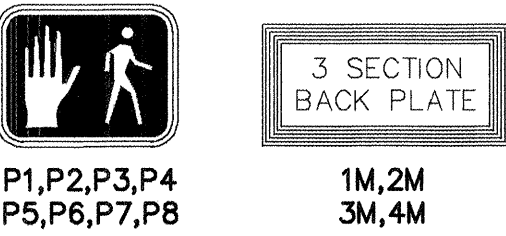
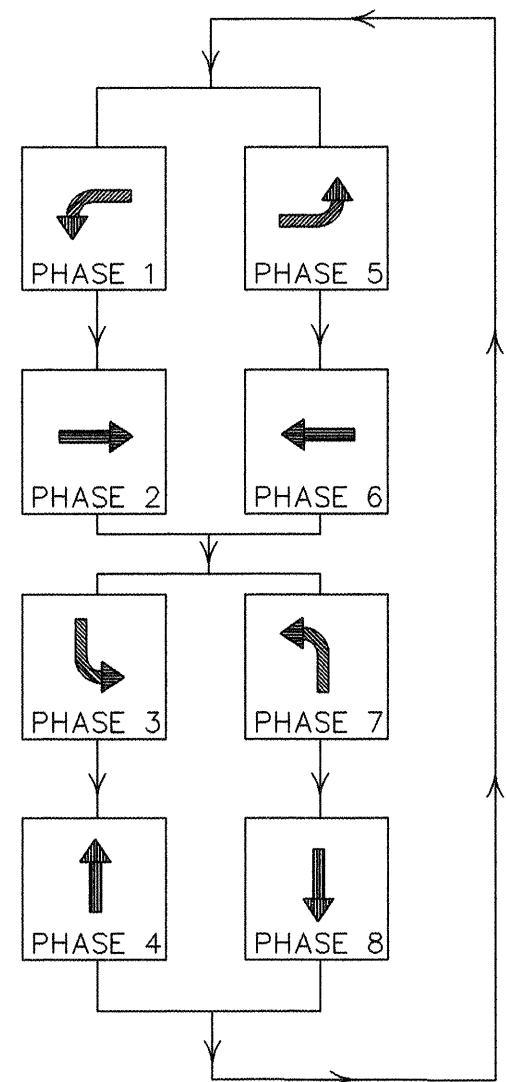
INITIALIZATION

ALL RED, THEN PHASE 2 AND 6 GREEN

TYPICAL SIGNAL FACE LENS ARRANGEMENTS

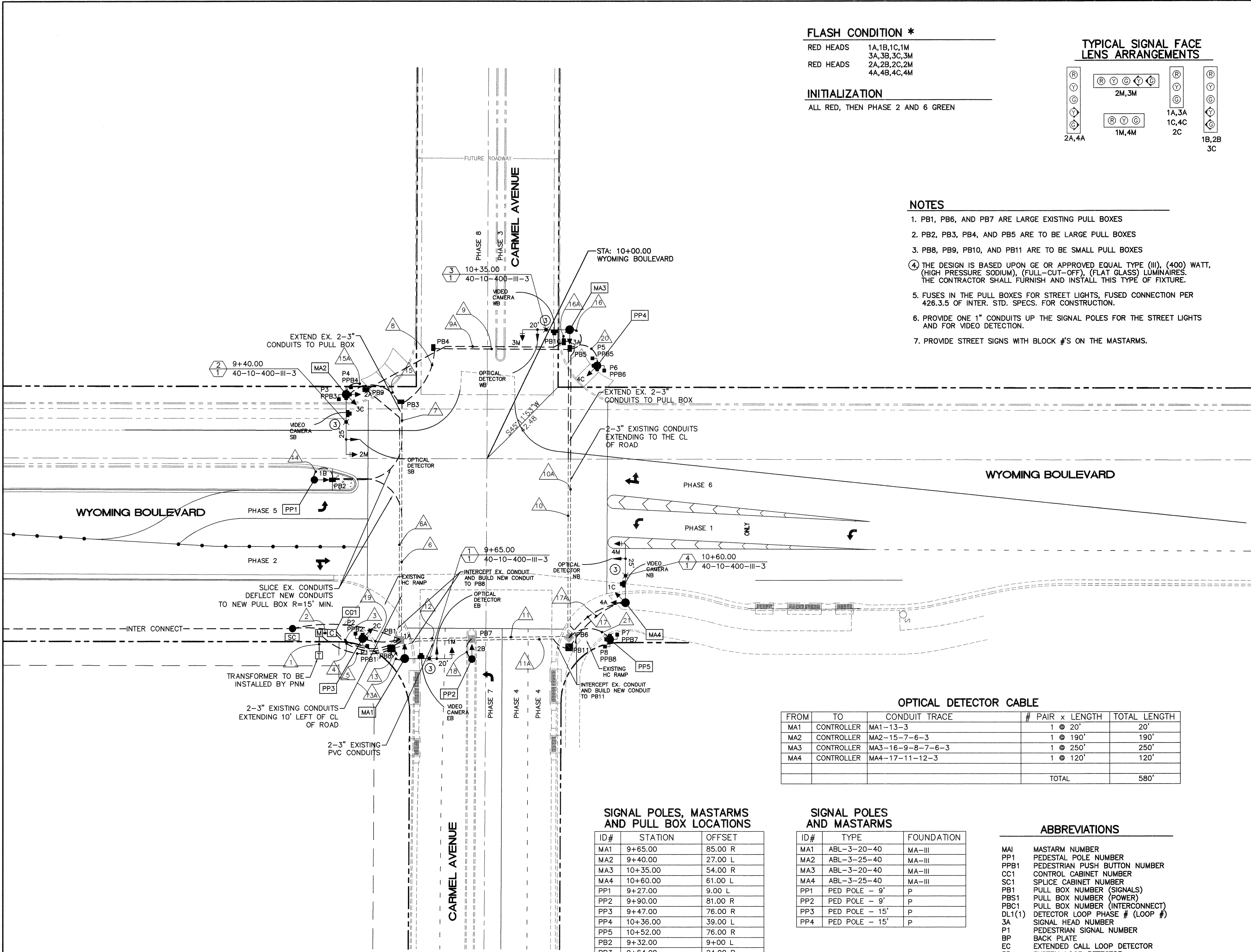


SIGNAL PHASING



NOTES

- 1. PB1, PB6, AND PB7 ARE LARGE EXISTING PULL BOXES
- 2. PB2, PB3, PB4, AND PB5 ARE TO BE LARGE PULL BOXES
- 3. PB8, PB9, PB10, AND PB11 ARE TO BE SMALL PULL BOXES
- 4. THE DESIGN IS BASED UPON GE OR APPROVED EQUAL TYPE (II), (400) WATT, (HIGH PRESSURE SODIUM), (FULL-CUT-OFF), (FLAT GLASS) LUMINAIRES. THE CONTRACTOR SHALL FURNISH AND INSTALL THIS TYPE OF FIXTURE.
- 5. FUSES IN THE PULL BOXES FOR STREET LIGHTS, FUSED CONNECTION PER 426.3.5 OF INTER. STD. SPECS. FOR CONSTRUCTION.
- 6. PROVIDE ONE 1" CONDUITS UP THE SIGNAL POLES FOR THE STREET LIGHTS AND FOR VIDEO DETECTION.
- 7. PROVIDE STREET SIGNS WITH BLOCK #S ON THE MASTARMS.



OPTICAL DETECTOR CABLE

FROM	TO	CONDUIT TRACE	# PAIR x LENGTH	TOTAL LENGTH
MA1	CONTROLLER	MA1-13-3	1 @ 20'	20'
MA2	CONTROLLER	MA2-15-7-6-3	1 @ 190'	190'
MA3	CONTROLLER	MA3-16-9-8-7-6-3	1 @ 250'	250'
MA4	CONTROLLER	MA4-17-11-12-3	1 @ 120'	120'
TOTAL				580'

SIGNAL POLES, MASTARMS AND PULL BOX LOCATIONS

ID#	STATION	OFFSET
MA1	9+65.00	85.00 R
MA2	9+40.00	27.00 L
MA3	10+35.00	54.00 R
MA4	10+60.00	61.00 L
PP1	9+27.00	9.00 L
PP2	9+90.00	81.00 R
PP3	9+47.00	76.00 R
PP4	10+36.00	39.00 L
PP5	10+52.00	76.00 R
PB2	9+32.00	9+00 L
PB3	9+64.00	24.00 R
PB4	9+77.00	46.00 R
PB5	10+35.00	49.00 R

SIGNAL POLES AND MASTARMS

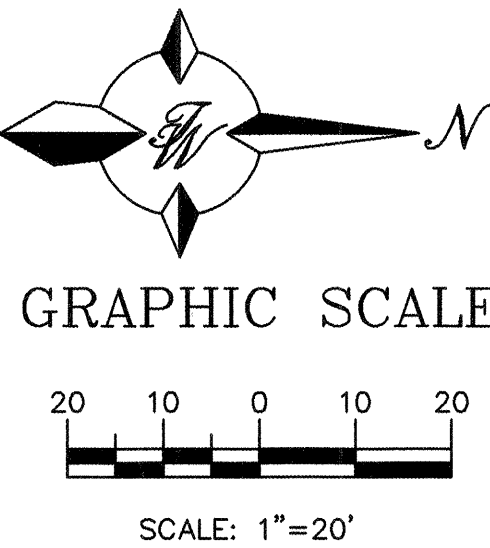
ID#	TYPE	FOUNDATION
MA1	ABL-3-20-40	MA-III
MA2	ABL-3-25-40	MA-III
MA3	ABL-3-20-40	MA-III
MA4	ABL-3-25-40	MA-III
PP1	PED POLE - 9'	P
PP2	PED POLE - 9'	P
PP3	PED POLE - 15'	P
PP4	PED POLE - 15'	P

ABBREVIATIONS

MA1 MASTARM NUMBER
PP1 PEDESTAL POLE NUMBER
PPB1 PEDESTRIAN PUSH BUTTON NUMBER
CC1 CONTROL CABINET NUMBER
SC1 SPLICE CABINET NUMBER
PB1 PULL BOX NUMBER (SIGNALS)
PBS1 PULL BOX NUMBER (POWER)
PBC1 PULL BOX NUMBER (INTERCONNECT)
DL1(1) DETECTOR LOOP PHASE # (LOOP #)
3A SIGNAL HEAD NUMBER
P1 PEDESTRIAN SIGNAL NUMBER
BP BACK PLATE
EC EXTENDED CALL LOOP DETECTOR
SD SYSTEM LOOP DETECTOR
MH1 TRAFFIC MANHOLE NUMBER

SYMBOL KEY

MA1 SIGNAL & CABINET ID
93 CONDUIT RUN ID



TIERRA WEST, LLC
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ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
SIGNAL PLAN

DESIGNED BY: BDC
DRAWN BY: BDC
CHECKED BY: RRB

DATE: 3-99
DATE: 3-99
DATE: 3-99

REVISIONS
NO. DATE BY

APPROVE
AUG 13 1999
DESIGN REVIEW COMMITTEE

APPROVE
AUG 26 1999
CITY ENGINEER

MO./DAY/YR.
MO./DAY/YR.

ZONE MAP NO. 611081
C-19-Z

SHEET 6 OF 26

[illegible]

CC 6	COMMUNICATION CABLE-6 PAIR
CC 12	COMMUNICATION CABLE-12 PAIR
DLIC	DETECTOR LOOP LEAD IN CABLE
MA	MASTARM
MCC	MULTI CONDUCTOR CABLE
PB	PULL BOX
PP	PEDESTAL POLE
PPB	PEDESTRIAN PUSH BUTTON
REC	RIGID ELECTRIC CONDUIT
SCC	SINGLE CONDUCTOR CABLE
CAM	VIDEO CAMERA
EX	EXISTING CONDUIT

TERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592									DATE	DESIGNED BY	DRAWN BY	CHECKED BY
									NO.			
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP												
TITLE: LA CUEVA TOWN CENTER <i>INTERSECTION OF WYOMING AND CARMEL CABLES AND CONDUITS</i>												
DESIGN REVIEW COMMITTEE DESIGN REVIEW COMMITTEE			CITY ENGINEER APPROVAL CITY ENGINEER			LAST DESIGN UPDATE	MO./DAY/YR.		MO./DAY/YR.			
CITY PROJECT NO. 611081						ZONE MAP NO. C-19-Z		SHEET 7		OF 26		

[illegible]

CC 6	COMMUNICATION CABLE--6 PAIR
CC 12	COMMUNICATION CABLE--12 PAIR
DLLIC	DETECTOR LOOP LEAD IN CABLE
MA	MASTARM
MCC	MULTI CONDUCTOR CABLE
PB	PULL BOX
PP	PEDESTAL POLE
PPB	PEDESTRIAN PUSH BUTTON
REC	RIGID ELECTRIC CONDUIT
SCC	SINGLE CONDUCTOR CABLE
CAM	VIDEO CAMERA

<i>TERRA WEST, LLC</i>										DATE		DESIGNED BY		DRAWN BY		CHECKED BY	
4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592										NO.							
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP																	
TITLE: <i>LA CUEVA TOWN CENTER</i> <i>INTERSECTION OF WYOMING AND CARMEL</i> <i>CABLES AND CONDUITS</i>																	
DESIGN REVIEW COMMITTEE APPROVAL AUG 13 1999 DESIGN REVIEW COMMITTEE						CITY ENGINEER APPROVAL AUG 26 1999 CITY ENGINEER						LAST DESIGN UPDATE		MO./DAY/YR.		MO./DAY/YR.	
CITY PROJECT NO. 611081						ZONE MAP NO. C-19-Z		SHEET		OF		7A		26			

FUNCTION CHART – 115 VOLT CIRCUIT						
CONDUCTOR			RING 1 – MULTI CONDUCTOR CABLE 20		RING 2 – MULTI CONDUCTOR CABLE 20	
CONDUCTOR NUMBER	BASE COLOR	TRACER	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION
1	BLACK	–	SPARE	SPARE	SPARE	SPARE
2	WHITE	–	SPARE	SPARE	SPARE	SPARE
3	RED	–	PHASE 1 RED	SPARE	PHASE 5 RED	SPARE
4	GREEN	–	PHASE 1 GREEN	GREEN LEFT TURN ARROW 1B, 2M, 2C	PHASE 5 GREEN	GREEN LEFT TURN ARROW 4M, 4C
5	ORANGE	–	PHASE 1 YELLOW	YELLOW LEFT TURN ARROW 1B, 2M, 2C	PHASE 5 YELLOW	YELLOW LEFT TURN ARROW 4M, 4C
6	BLUE	–	SPARE	SPARE	SPARE	SPARE
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE
8	RED	BLACK	PHASE 2 RED	RED BALL 4A, 4M, 4C	PHASE 6 RED	RED BALL 2M, 2A, 2C
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 4A, 4M, 4C	PHASE 6 GREEN	GREEN BALL 2M, 2A, 2C
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 4A, 4M, 4C	PHASE 6 YELLOW	YELLOW BALL 2M, 2A, 2C
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P1, P8	PHASE 6 WALK	PEDESTRIAN WALK P4, P5
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P1, P8	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P4, P5
13	RED	WHITE	PHASE 3 RED	SPARE	PHASE 7 RED	SPARE
14	GREEN	WHITE	PHASE 3 GREEN	GREEN LEFT TURN ARROW 2B, 1C	PHASE 7 GREEN	GREEN LEFT TURN ARROW 3M, 3C
15	BLUE	WHITE	PHASE 3 YELLOW	YELLOW LEFT TURN ARROW 2B, 1C	PHASE 7 YELLOW	YELLOW LEFT TURN ARROW 3M, 3C
16	BLACK	RED	PHASE 4 RED	RED BALL 3M, 3A, 3C	PHASE 8 RED	RED BALL 1M, 2B, 1A, 1C
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 3M, 3A, 3C	PHASE 8 GREEN	GREEN BALL 1M, 2B, 1A, 1C
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 3M, 3A, 3C	PHASE 8 YELLOW	YELLOW BALL 1M, 2B, 1A, 1C
19	BLUE	RED	PHASE 4 WALK	PEDESTRIAN WALK P6, P7	PHASE 8 WALK	PEDESTRIAN WALK P2, P3
20	RED	GREEN	PHASE 4 DON'T WALK	PEDESTRIAN DON'T WALK P6, P7	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P2, P3

FUNCTION CHART – 24 VOLT CIRCUIT			
MULTI CONDUCTOR CABLE 5			
CONDUCTOR NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION
1	BLACK	PHASE 2 PPB	PPB2 & PPB7
2	WHITE	COMMON	PPB1 THRU PPB8
3	RED	PHASE 4 PPB	PPB5 & PPB8
4	GREEN	PHASE 6 PPB	PPB3 & PPB6
5	ORANGE	PHASE 8 PPB	PPB1 & PPB4

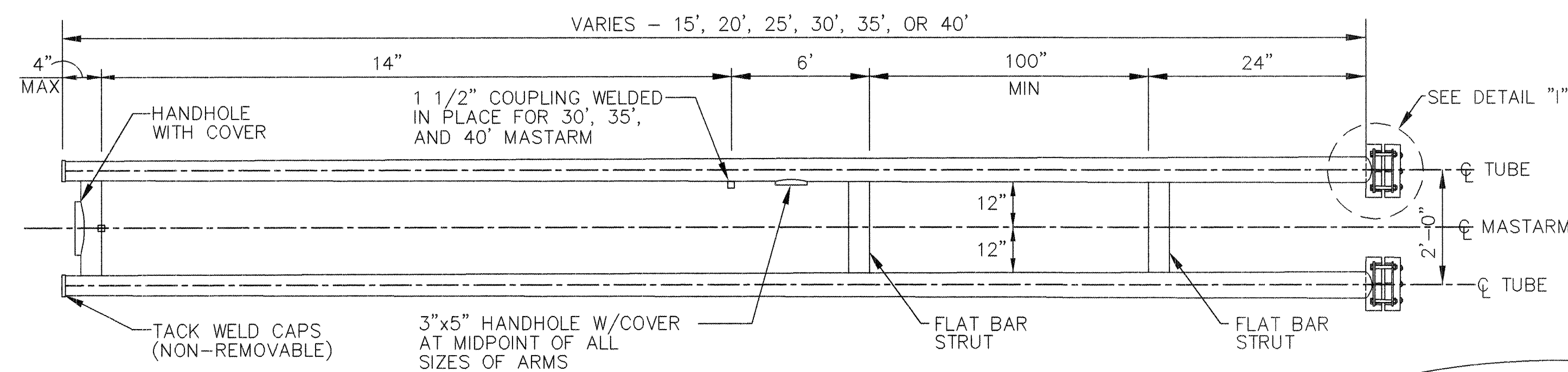
ABBREVIATIONS

DL – DETECTOR LOOP
EC – EXTENDED CALL LOOP
L – DETECTOR LOOP LENGTH
W – DETECTOR LOOP WIDTH
S – SAW CUT LOOP TO CURB
T – TERMINAL LENGTH
QP – QUADRAPOLE LOOP
SDWBA – SYSTEM DETECTOR WEST BOUND APPROACH
SDWBD – SYSTEM DETECTOR WEST BOUND DEPARTURE
SDEBA – SYSTEM DETECTOR EAST BOUND APPROACH
SDEBD – SYSTEM DETECTOR EAST BOUND DEPARTURE
SDNBA – SYSTEM DETECTOR NORTH BOUND APPROACH
SDNBD – SYSTEM DETECTOR NORTH BOUND DEPARTURE
SDSBA – SYSTEM DETECTOR SOUTH BOUND APPROACH
SDSBD – SYSTEM DETECTOR SOUTH BOUND DEPARTURE

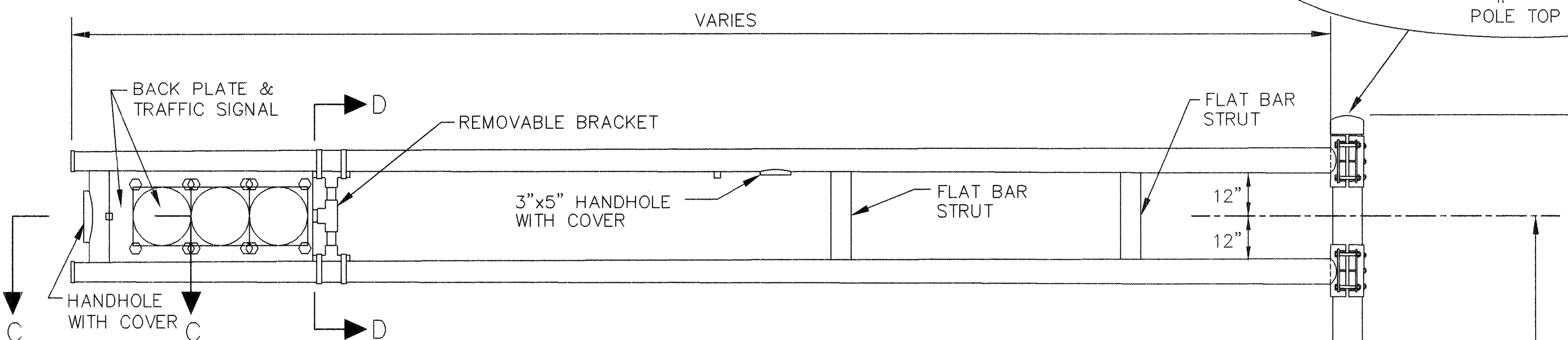
NOTES:

- 1/ IDENTIFY CONDUCTORS LISTED AS "115 VOLTS"
- 2/ WRAP RING 2 CABLE AT EACH SPLICE POINT WITH COLORED ELECTRICAL TAPE. THE IDENTIFICATION MARKING SHALL BE PROVIDED ON EACH RING 2 CABLE AT EACH SPLICE BOX AND LOCATED 6" BACK FROM THE END.
- 3/ IDENTIFY CONDUCTORS LISTED AS "PPB – LOW VOLTAGE" AT EACH SPLICE POINT. FIVE (5) CONDUCTOR CABLE SHALL BE 24 VOLTS AND USED FOR PUSH BUTTONS ONLY.

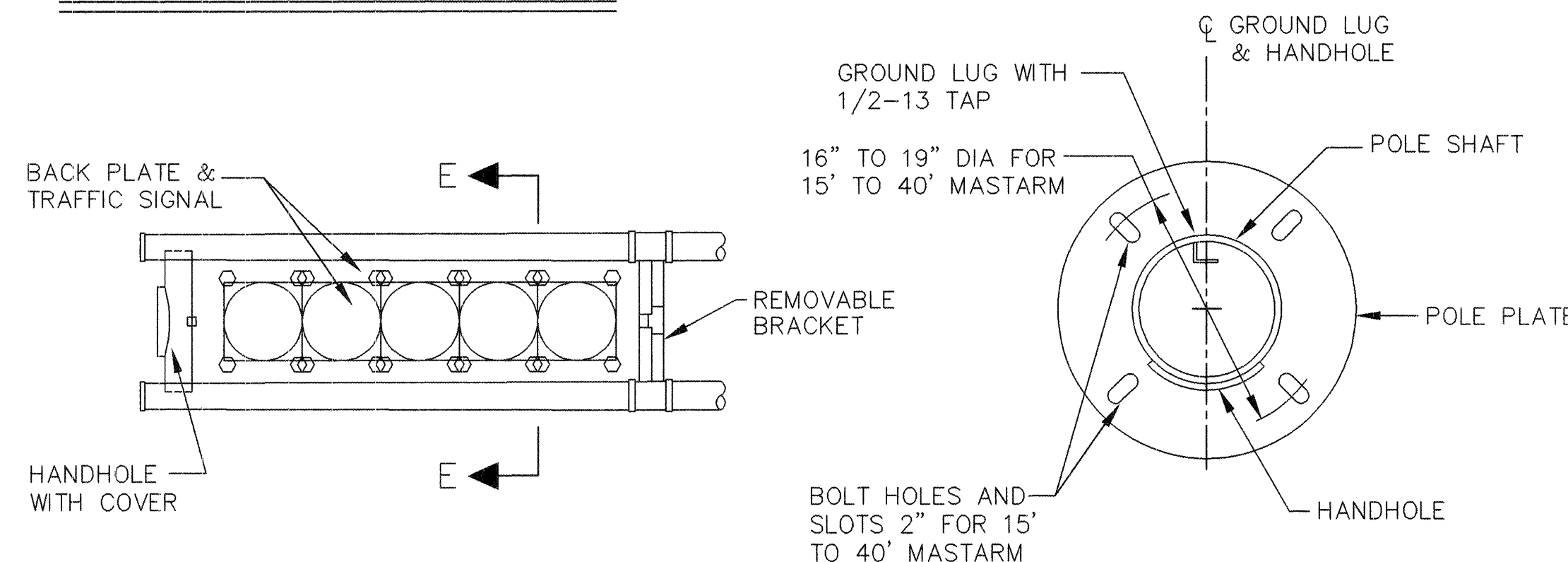
TIERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: LA CUEVA TOWN CENTER INTERSECTION OF WYOMING AND CARMEL FUNCTIONS	
DESIGN REVIEW COMMITTEE APPROVE AUG 13 1999 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL APPROVE AUG 26 1999 CITY ENGINEER
CITY PROJECT NO. 611081	ZONE MAP NO. C-19-Z
SHEET 8 OF 26	



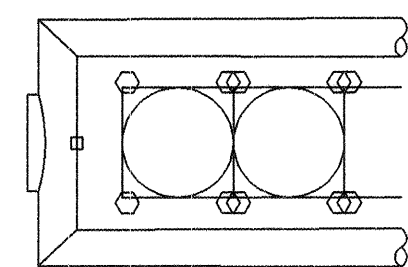
TYPICAL MASTARM DETAIL



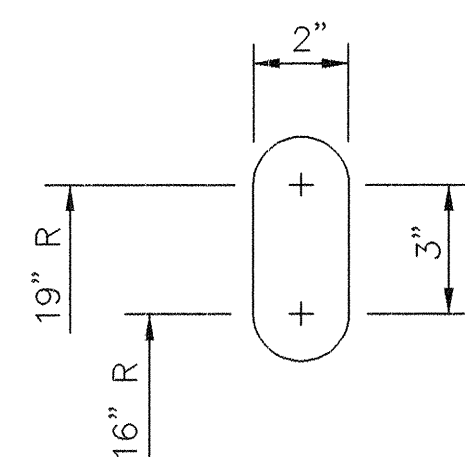
3-SECTION TRAFFIC SIGNAL



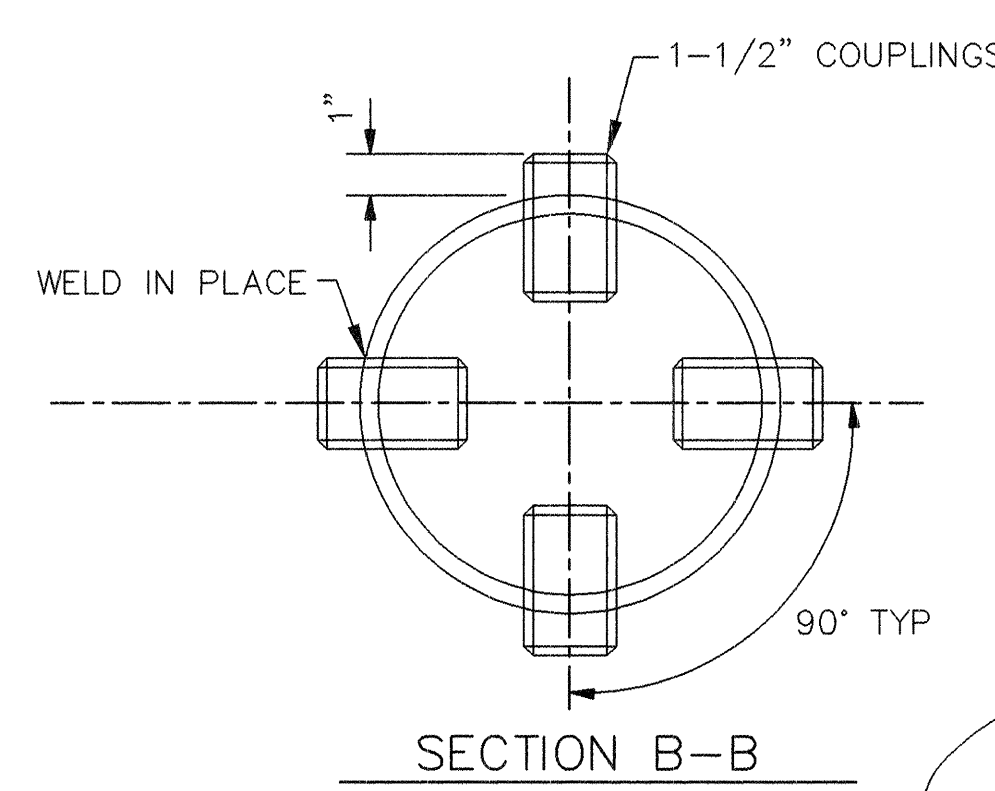
5-SECTION TRAFFIC SIGNAL



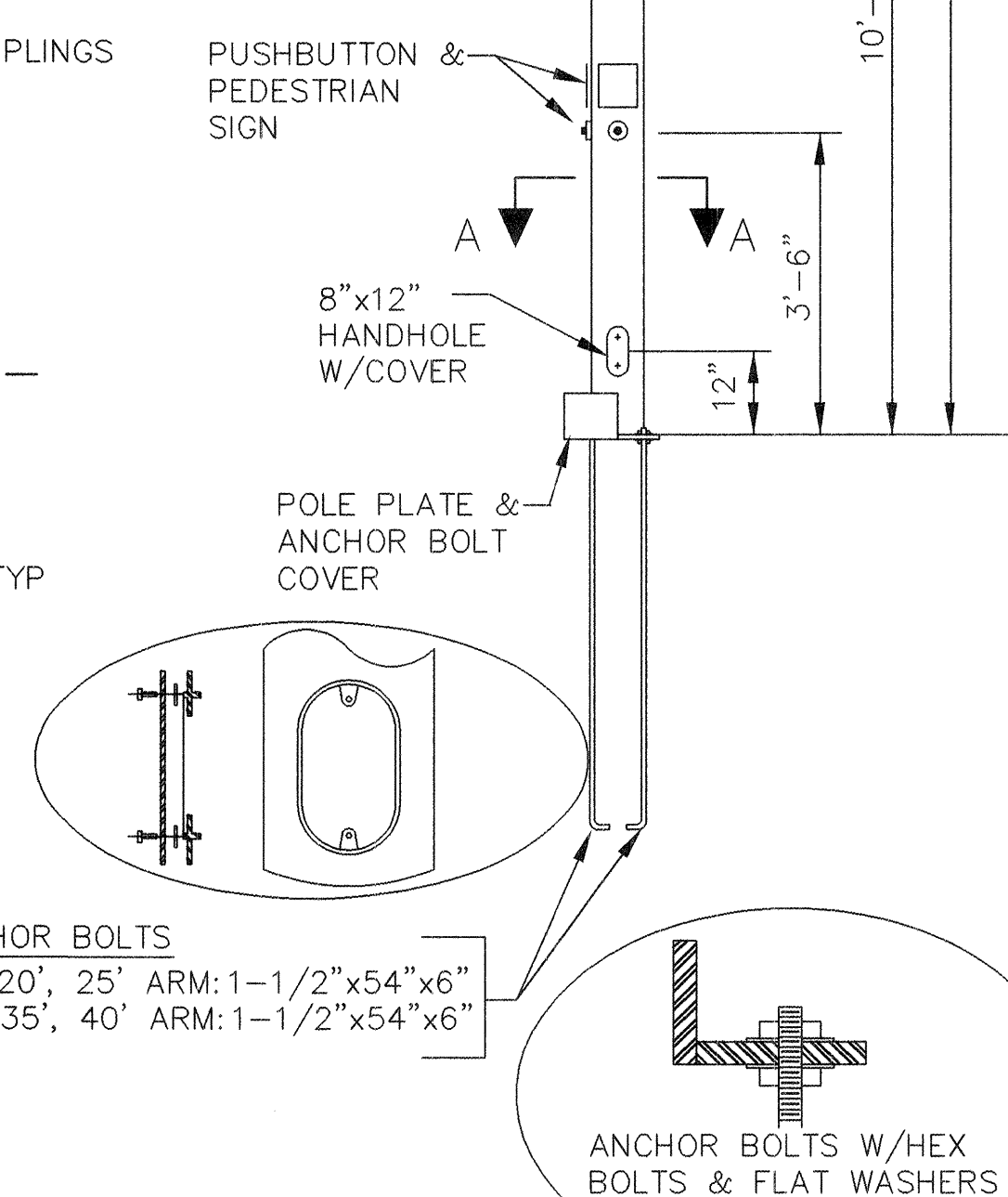
MITERED ARM END (OPTIONAL)



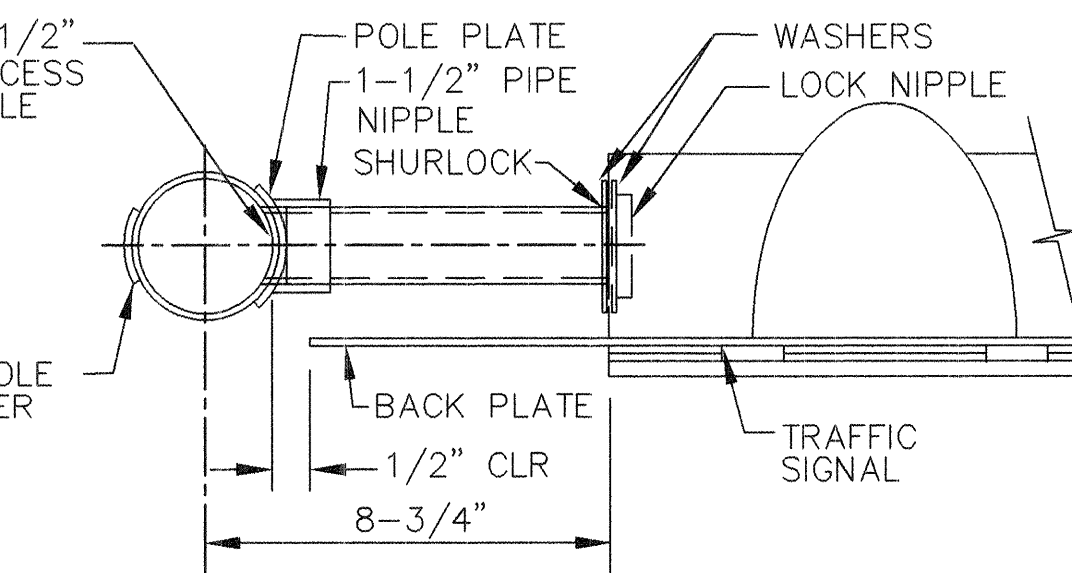
POLE PLATE SLOT DETAIL



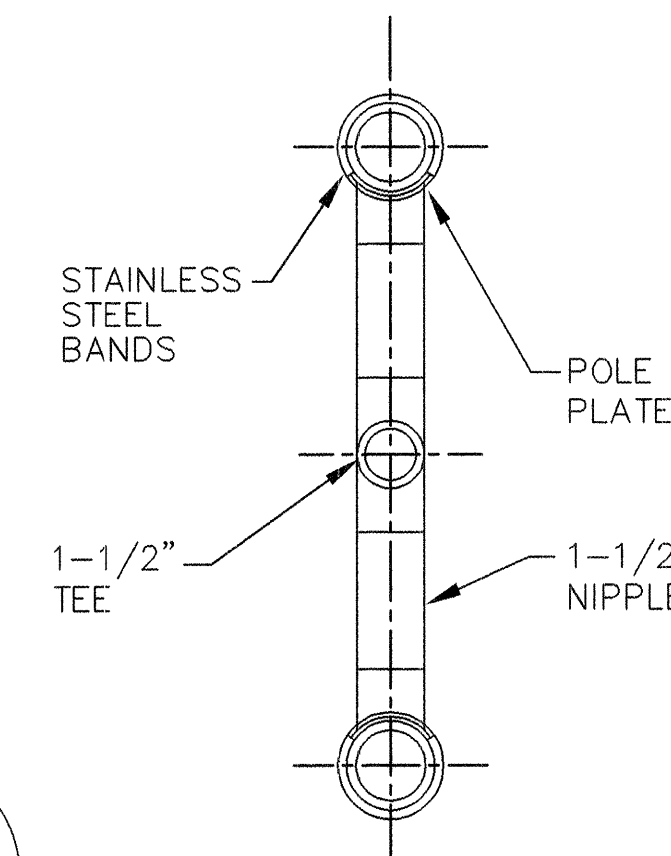
SECTION B-B



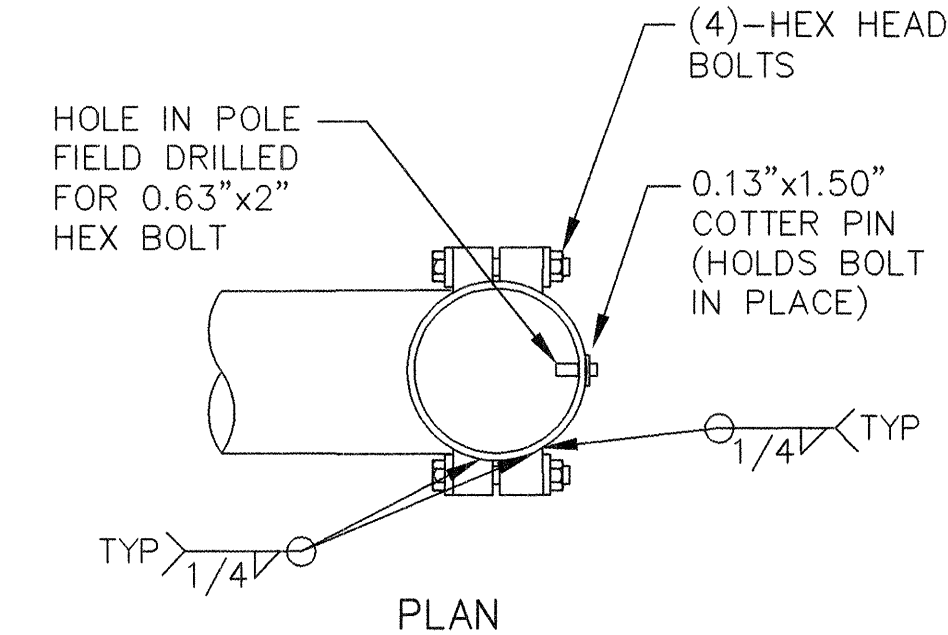
SECTION F-F



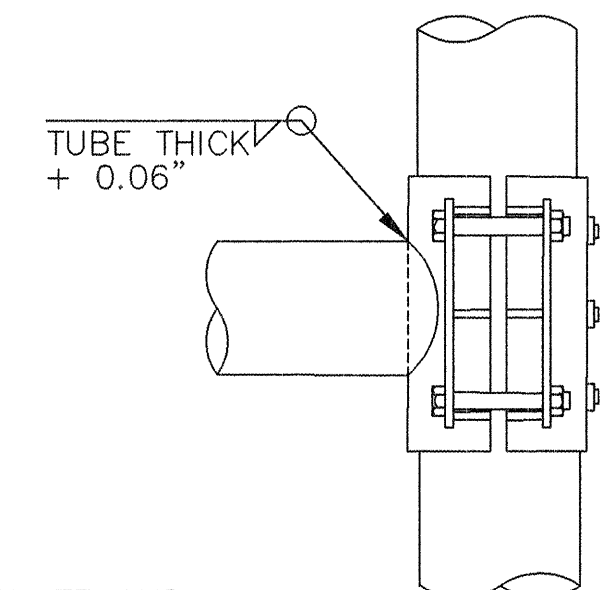
SECTION C-C



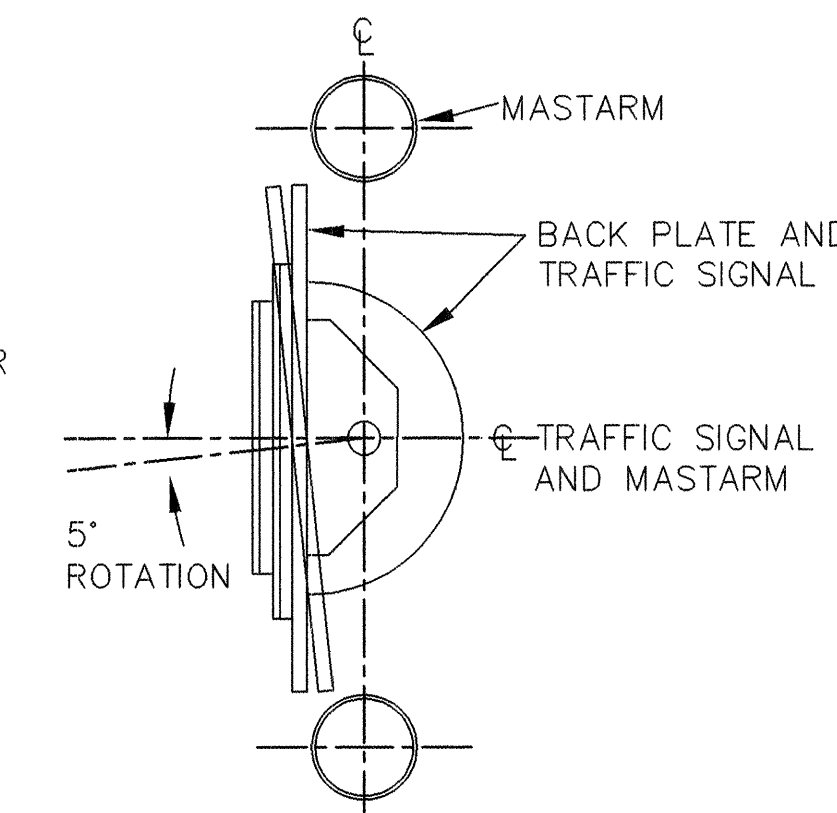
SECTION D-D



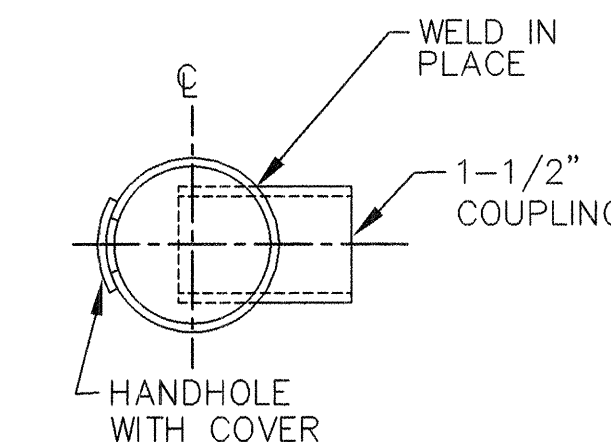
PLAN



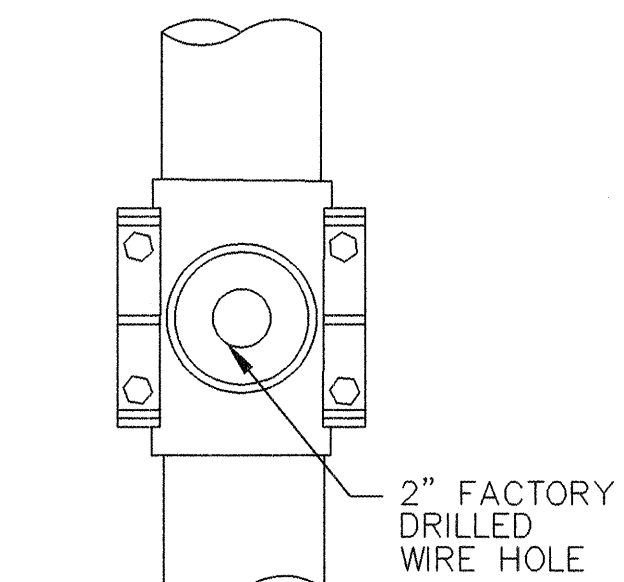
ELEVATION



SECTION E-E



SECTION G-G



SECTION DETAIL I

NOTE:
ONE SIZE ARM CLAMP FOR
15' TO 25' MASTARMS AND
ONE SIZE FOR 30' TO 40'
MASTARMS WILL BE ALLOWED

FINISH:

☐ GALVANIZED
☐ POWDER COATED
COLOR _____

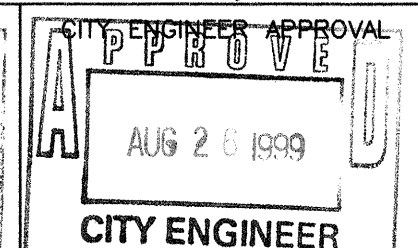
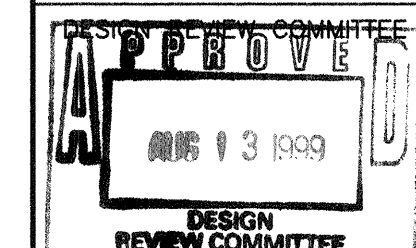
TRAFFIC SIGNAL MASTARM NOTES:

- DESIGN IN ACCORDANCE WITH 1985 AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS FOR AN 80 MPH WIND ZONE.
- POLES AND MASTARMS SHAFTS SHALL CONFORM TO ASTM A-595 GRADE A (MIN YIELD 55 KSI)
- BASE PLATE AND SIGNAL ARM CLAMP SHALL BE ASTM A-36 (MIN YIELD 36 KSI).
- ANCHOR BOLTS SHALL BE ASTM A-36 MOD 55 (MIN YIELD 55 KSI)
- SIGNAL ARM CONNECTING BOLTS SHALL BE ASTM A-325.
- WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS AWS D1.1. LATEST EDITION. ALL WELDS SHALL BE FREE FROM CRACKS, EXCESSIVE UNDERCUT, AND POROSITY. ANY WELD DEFECTS SHALL BE REPAIRED BY REMOVING THE DEFECTIVE MATERIAL AND REPLACING IT WITH SOUND WELD MATERIAL.
- ALL HOLES SHALL BE DRILLED AND DEBURRED.
- ALL POLES, MASTARMS, AND BOLTS SHALL BE GALVANIZED TO ASTM A-123 & A-153.
- MASTARM SHALL BE MARKED TO DESCRIBE WHICH IS TOP AND WHICH IS BOTTOM. POLE PLATE COVER SHALL BE MARKED IN MATED PAIRS. POLE SHAFTS SHALL BE MARKED "ALB" "15-25" OR "30-40", AND DATE OF FABRICATION (MONTH/YEAR).
- DETAILS SHOWN ARE FOR STEEL POLES. ALUMINIUM POLES MAY BE USED ONLY WHEN PRE-APPROVED BY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS DIVISION.
- BOLTS FOR TYPE III EXTENSIONS SHALL BE FURNISHED BY THE MANUFACTURER FOR ALL POLES INCLUDING TYPE II STANDARDS WITH NO EXTENSIONS.

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(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
MASTARM DETAILS, TYPE III STANDARD



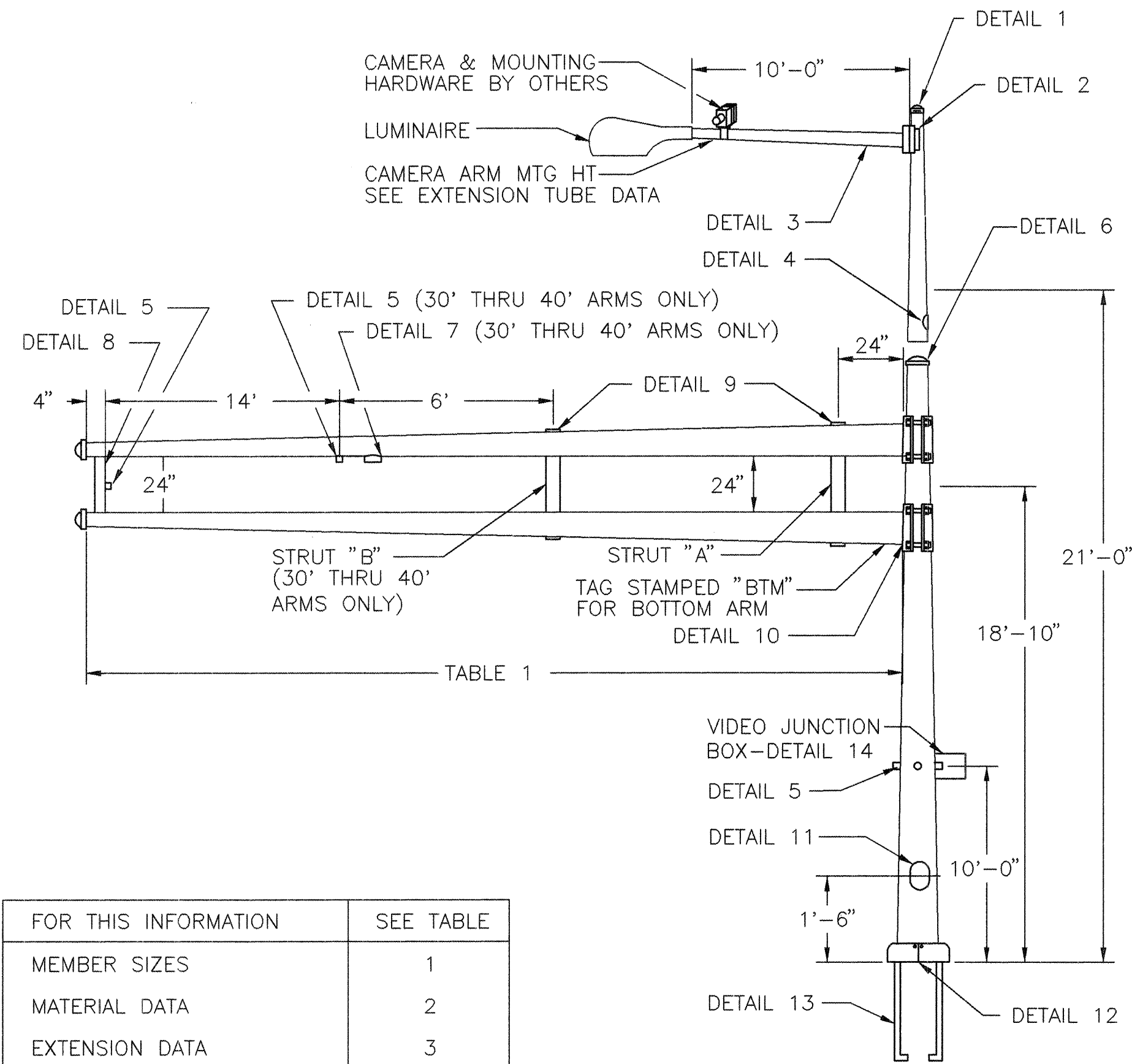
CITY PROJECT NO.

611081

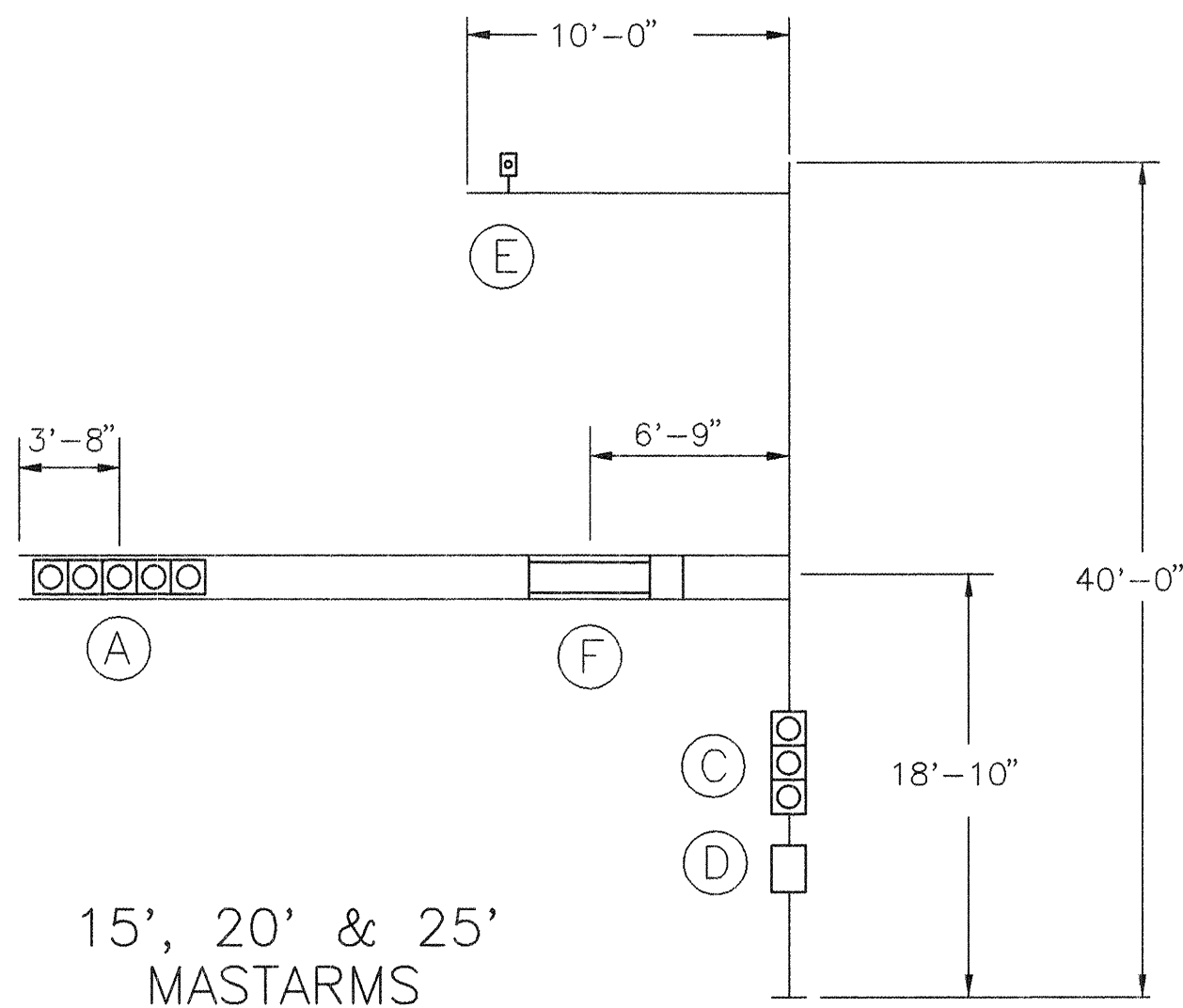
ZONE MAP NO.
C-19-Z

SHEET **9** OF **26**

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	WORK	DATE	NCS MONUMENT	DATE	CENTRAL STATION DATA	DATE	FIELD NOTES	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
STAKED BY	DATE	INSPECTED BY	DATE	HEAVEN	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
FIELD ADJUSTED BY	DATE	ADJUSTED BY	DATE	STATE PLANE COORDINATES	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	Central Zone	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	Y=1518737.03	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	X=407051.31	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	G-G=0.99965263	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	DELTA=-001045"	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.
ADJUSTED BY	DATE	ADJUSTED BY	DATE	ELEVATION=5378.79	DATE	ALB	DATE	NO.	DATE	BY	NO.	ENGINEER'S SEAL	DATE	BY	NO.



ALBUQUERQUE, NM POLE SERIES



DEVICE	DESCRIPTION	PROJ AREA (FT ²)	WEIGHT (LBS)
(A)	12"-5 SEC. SIGNAL WITH BACK PLATE	13.33	75
(B)	12"-3 SEC. SIGNAL WITH BACK PLATE	8.67	50
(C)	DUAL 12"-3 SEC. SIGNAL WITHOUT BACK PLATES	8.20	100
(D)	DUAL PEDESTRIAN SIGNAL & VIDEO JUNCTION BOX	3.00	60
(E)	VIDEO CAMERA	1.00 EPA	35
(F)	FREE SWINGING STREET NAME -96" X 16"	3.00 EPA	35

30, 35' & 40' MASTARMS

DESIGN CRITERIA:

1985 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS.

WIND VELOCITY:

80 MPH ISOTACH

LOADING INFORMATION

TABLE 1: POLE AND MASTARM SCHEDULE

DESIGNATION (SEE EXAMPLE ABOVE)				POLE DATA				BASE PLATE DATA				ANCHOR BOLT DATA				MASTARM DATA				ARM ATTACHMENT DATA				
POLE SERIES	POLE TYPE	SIGNAL ARM SPAN (FT)	CAMERA MOUNTING HEIGHT 0=NO CAMERA	BASE DIA	TOP DIA	LENGTH	GA	CIRCLE "C"	THK "G"	BC RANGE		BOLT CIRCLE	DIAMETER "K"	LENGTH "J"	HOOK "H"	FIXED END DIA	FREE END DIA	GA	LENGTH (FT)	"A"	"B"	"C"	"D"	"E"
										BC1	BC2													
ALB	2	15	0, 30, 35, 40	10.00"	7.06"	21'–0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	5.80"	3.70"	11	15	7.25"	9.44"	10.81"	10.38"	1.00"–8UNC X 8.00"
ALB	2	20	0, 30, 35, 40	10.00"	7.06"	21'–0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	6.50"	3.70"	11	20	7.25"	9.44"	10.81"	10.38"	1.00"–8UNC X 8.00"
ALB	2	25	0, 30, 35, 40	10.00"	7.06"	21'–0"	7	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	7.00"	3.50"	11	25	7.25"	9.44"	10.81"	10.38"	1.00"–8UNC X 8.00"
ALB	2	30	0, 30, 35, 40	12.00"	9.06"	21'–0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	7.72"	3.52"	7	30	9.25"	11.44"	13.81"	12.38"	1.00"–8UNC X 9.00"
ALB	2	35	0, 30, 35, 40	12.00"	9.06"	21'–0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	8.30"	3.40"	7	35	9.25"	11.44"	13.81"	12.38"	1.00"–8UNC X 9.00"
ALB	2	40	0, 30, 35, 40	12.00"	9.06"	21'–0"	5	23.00"	1.50"	16.00"	19.00"	16.00"	1.50"	54"	6"	9.00"	3.40"	7	40	9.25"	11.44"	13.81"	12.38"	1.00"–8UNC X 9.00"

TABLE 2: MATERIAL DATA

COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)	COMPONENT	ASTM DESIGNATION	MIN. YIELD (KSI)
POLE TUBE	A595 GR A	55	SIGNAL ARM CLAMP	A36	36
BASE PLATE	A36	36	SIGNAL ARM CONN BOLTS	A325 *	
MAST ARM TUBE	A595 GR A	55	CAMERA ARM PLATES	A36	36
CAMERA ARM TUBE	A595 GR A	55	GALVANIZING	A123 & A153	
POLE EXTENSION	A595 GR A	55			
ANCHOR BOLTS AASHTO M314 GR. 55					
* LUBRICATE IN FIELD IF NECESSARY IN LIEU OF THE REQUIREMENT IN A325					

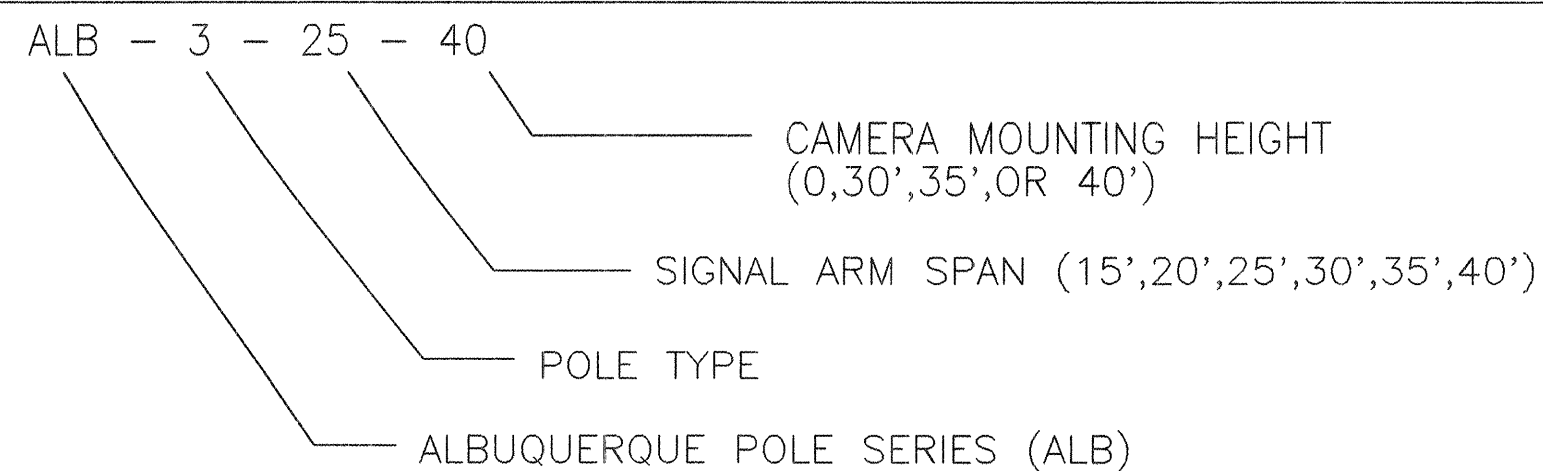
TABLE 3: EXTENSION TUBE DATA

MASTARM LENGTH (FT)	CAMERA MTG HT (FT)	EXTENSION TUBE			
		BASE DIA	TOP DIA	LENGTH (FT)	GAUGE
15-20	30	7.00	5.74	9.0	11
	35	7.00	5.04	14.0	11
	40	7.00	4.34	19.0	11
30-40	30	9.00	7.74	9.0	11
	35	9.00	7.04	14.0	11
	40	9.00	6.34	19.0	11

FINISH:

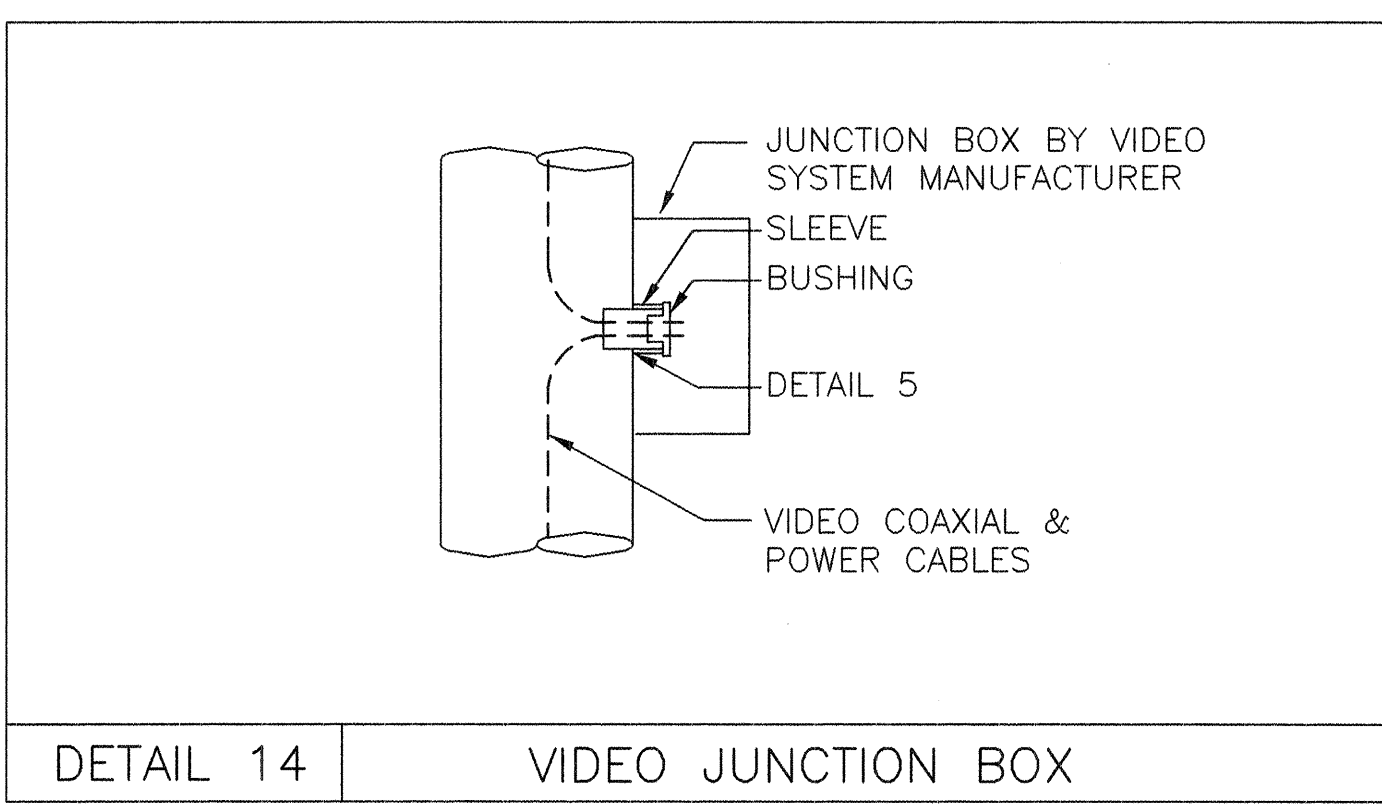
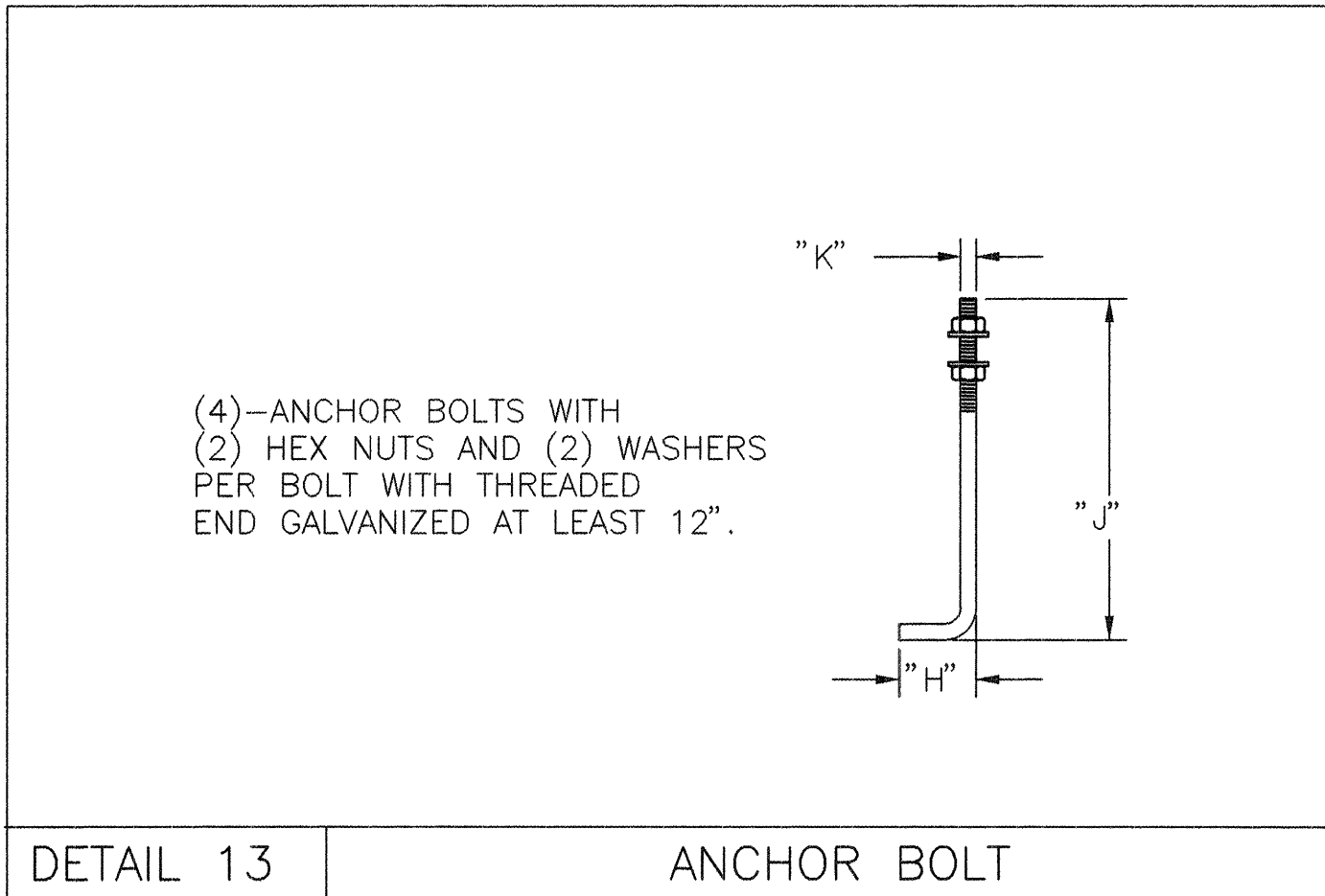
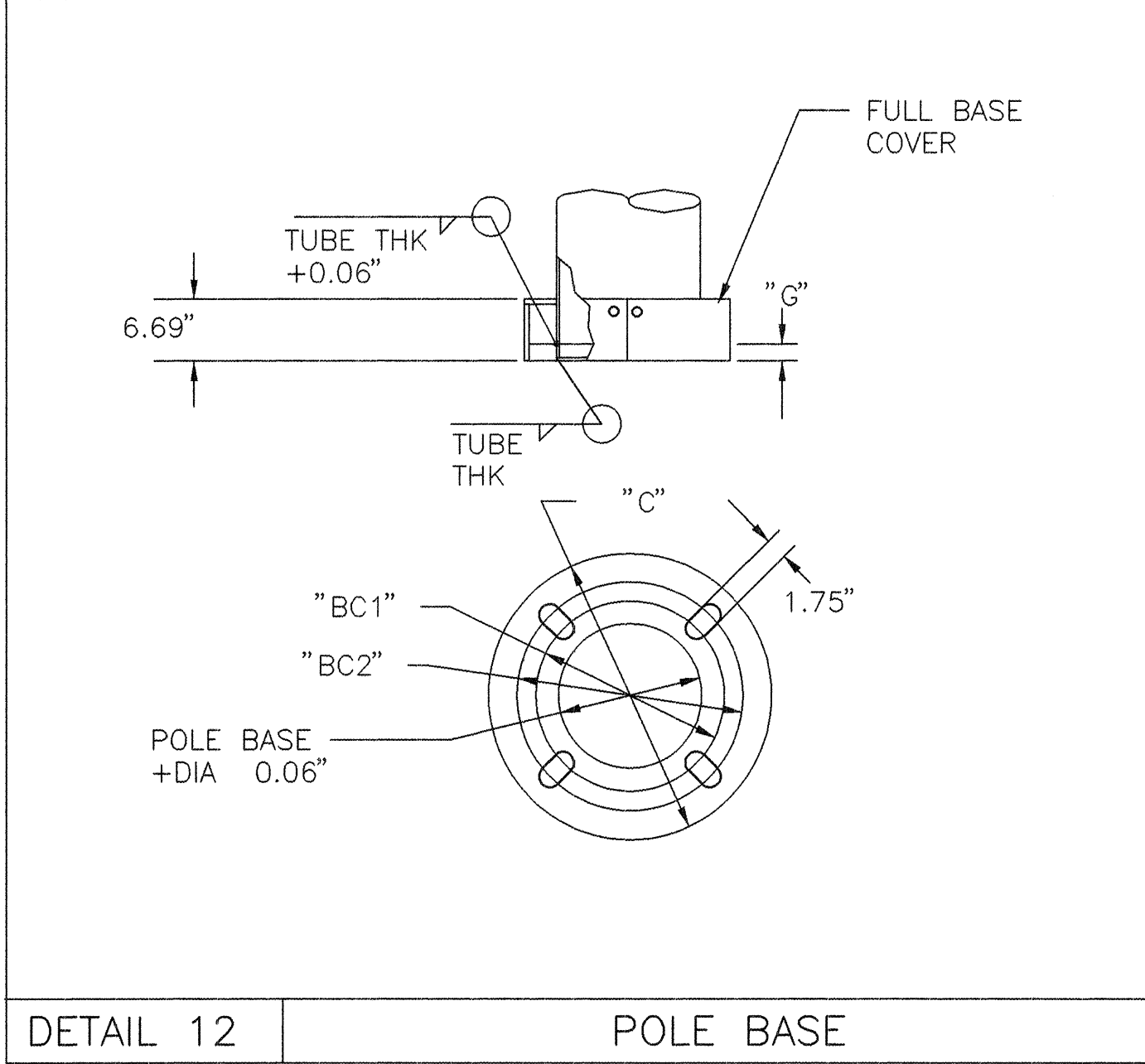
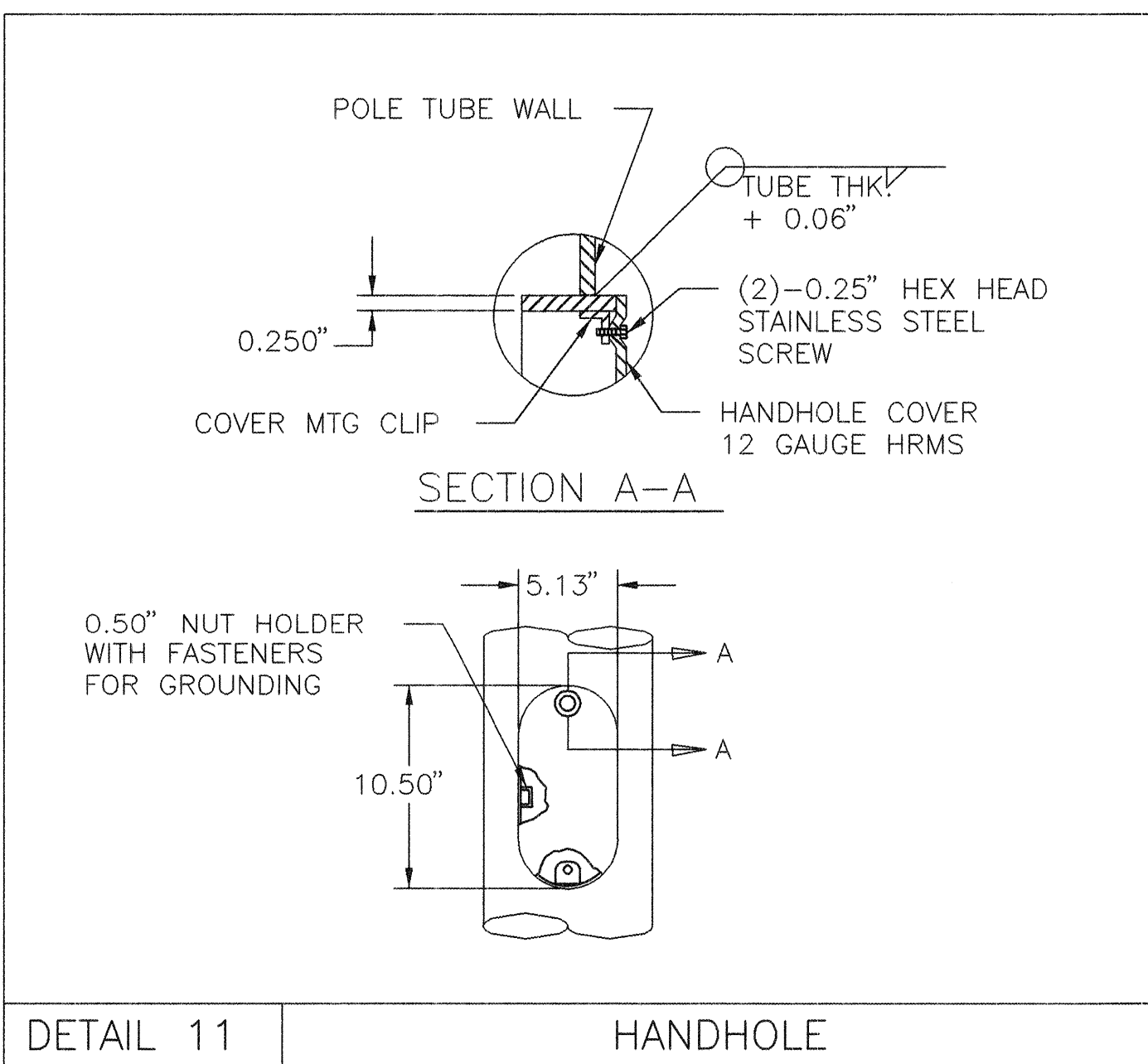
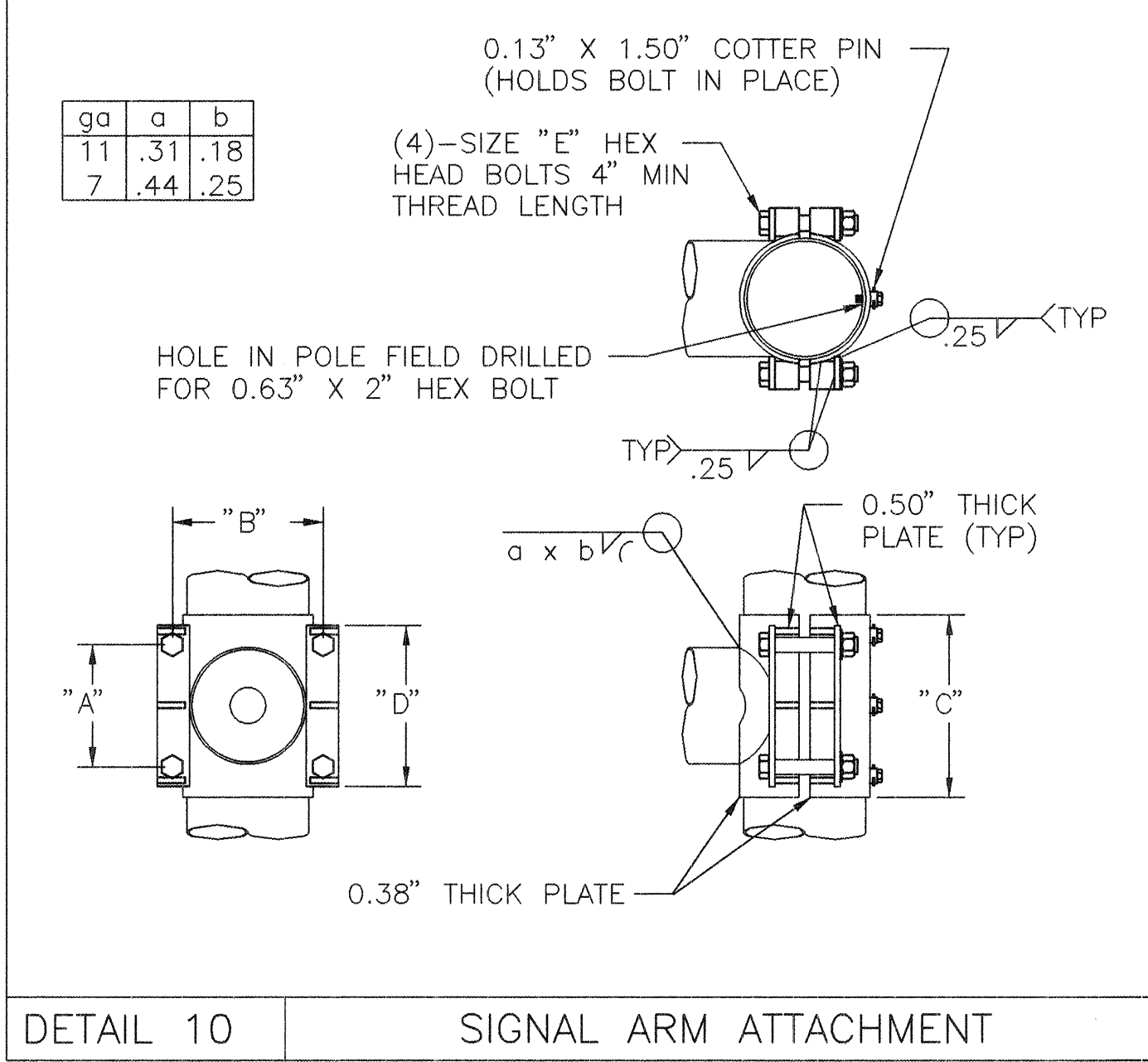
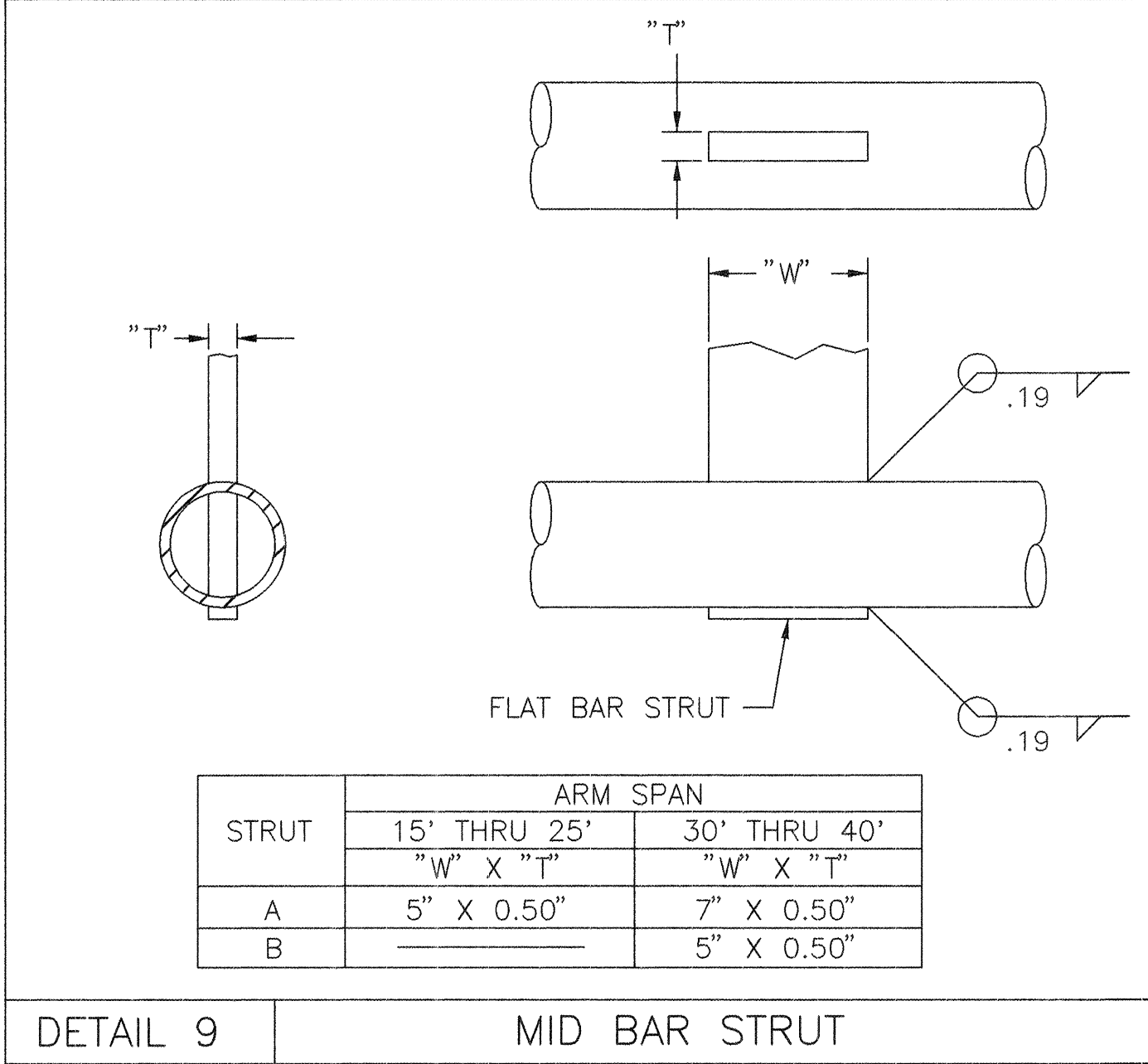
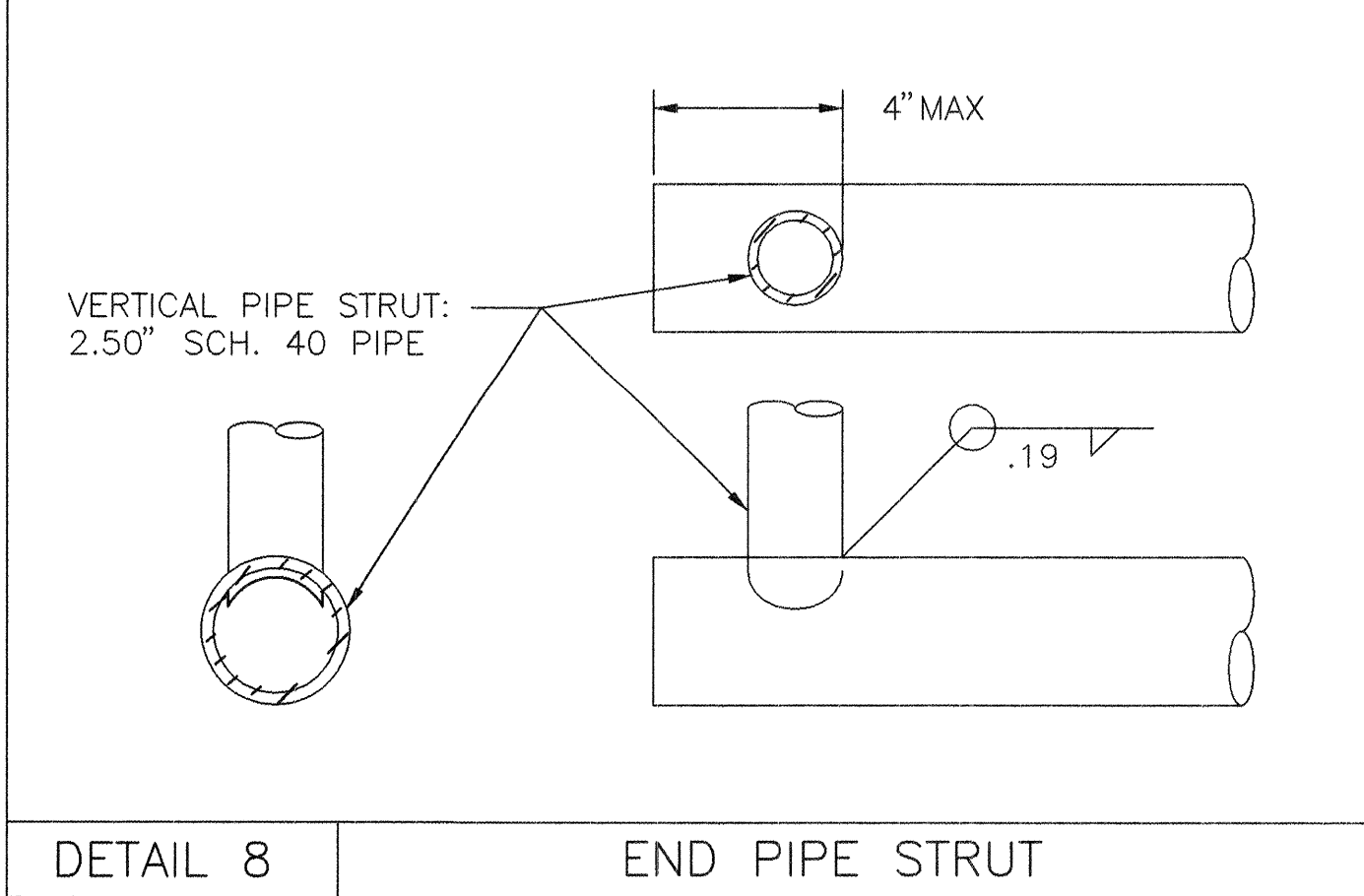
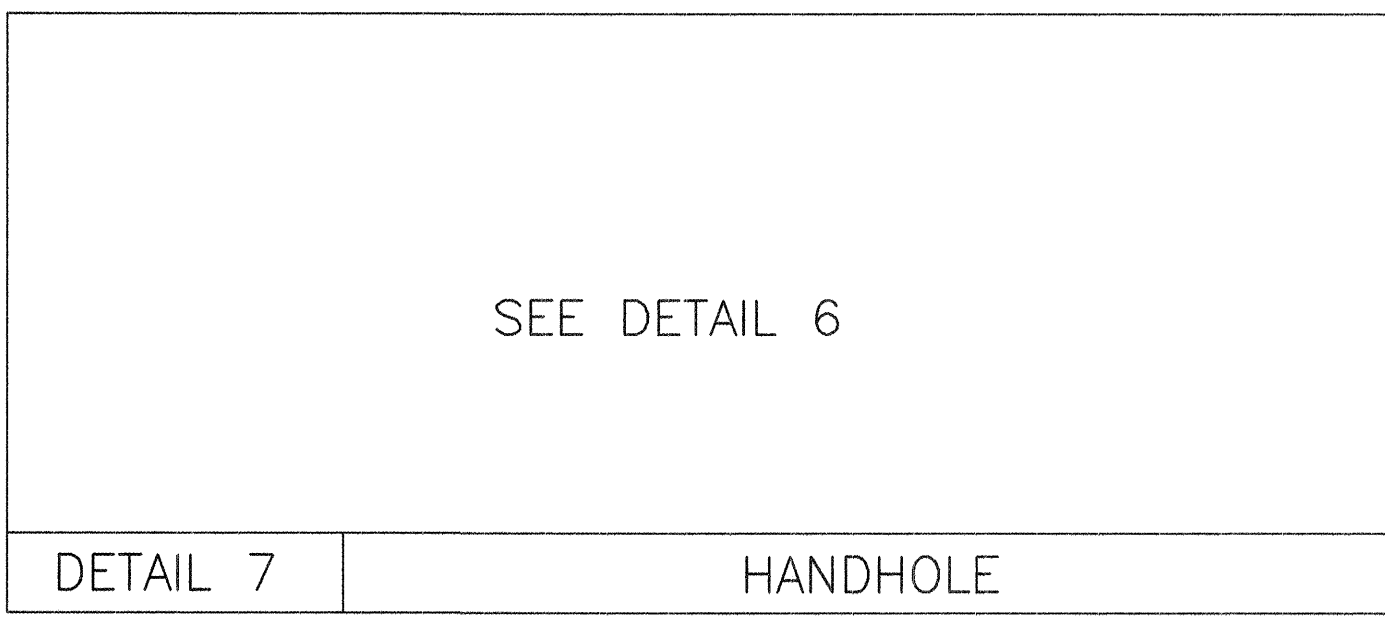
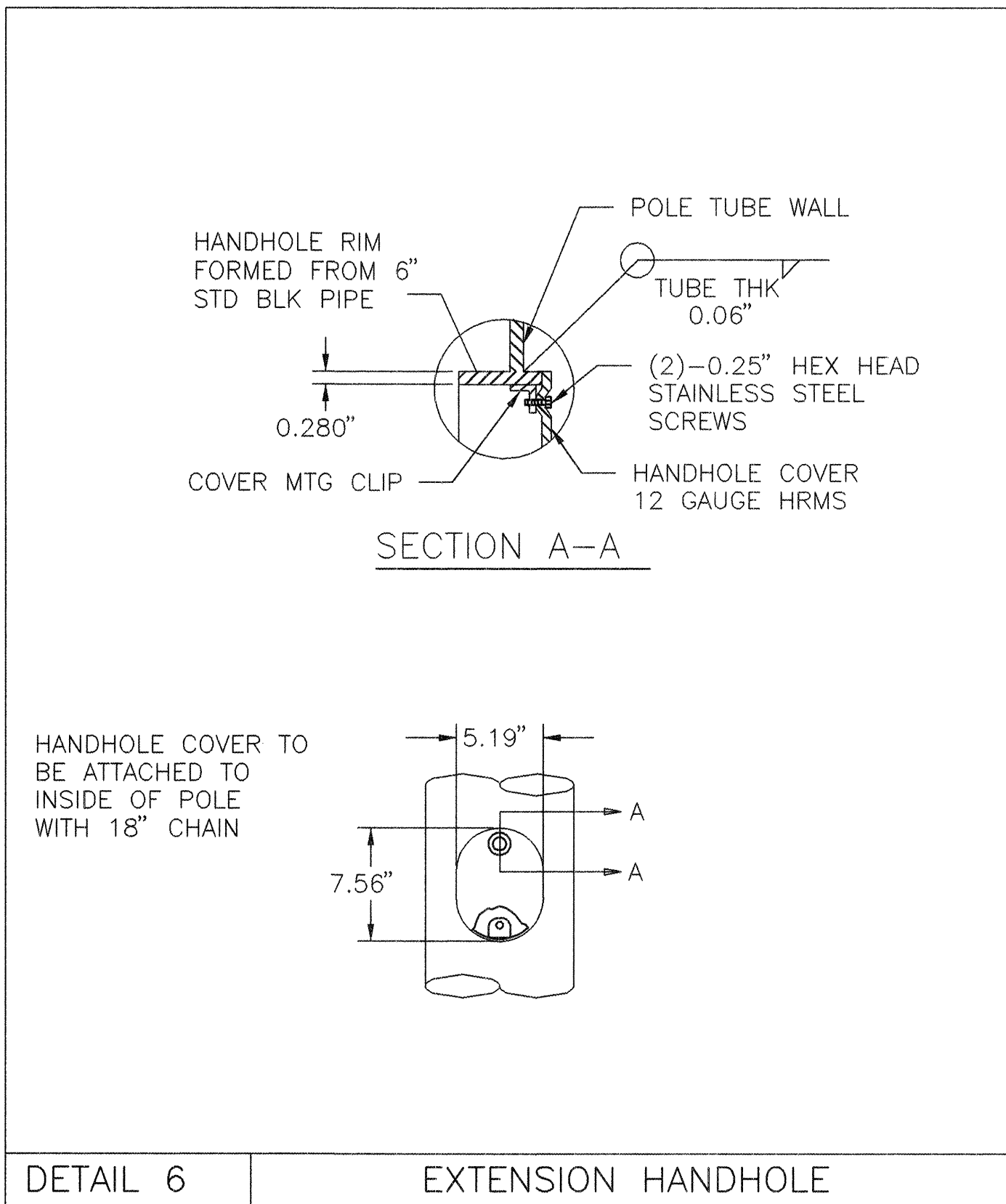
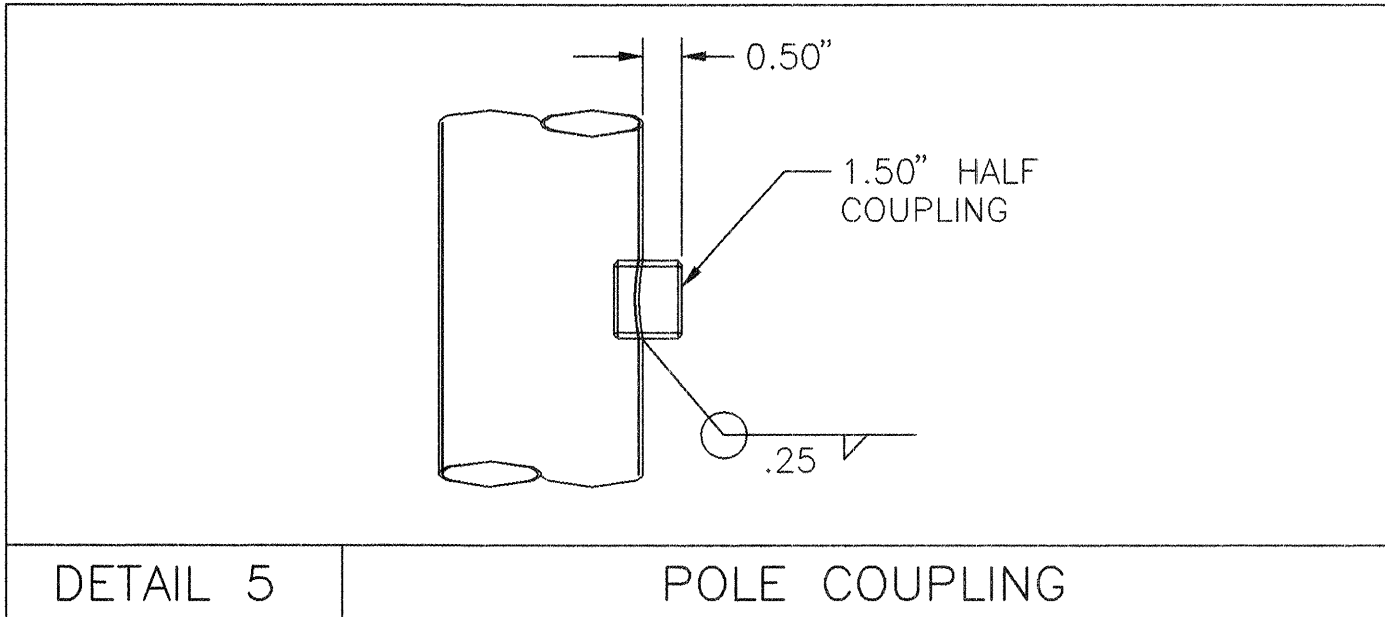
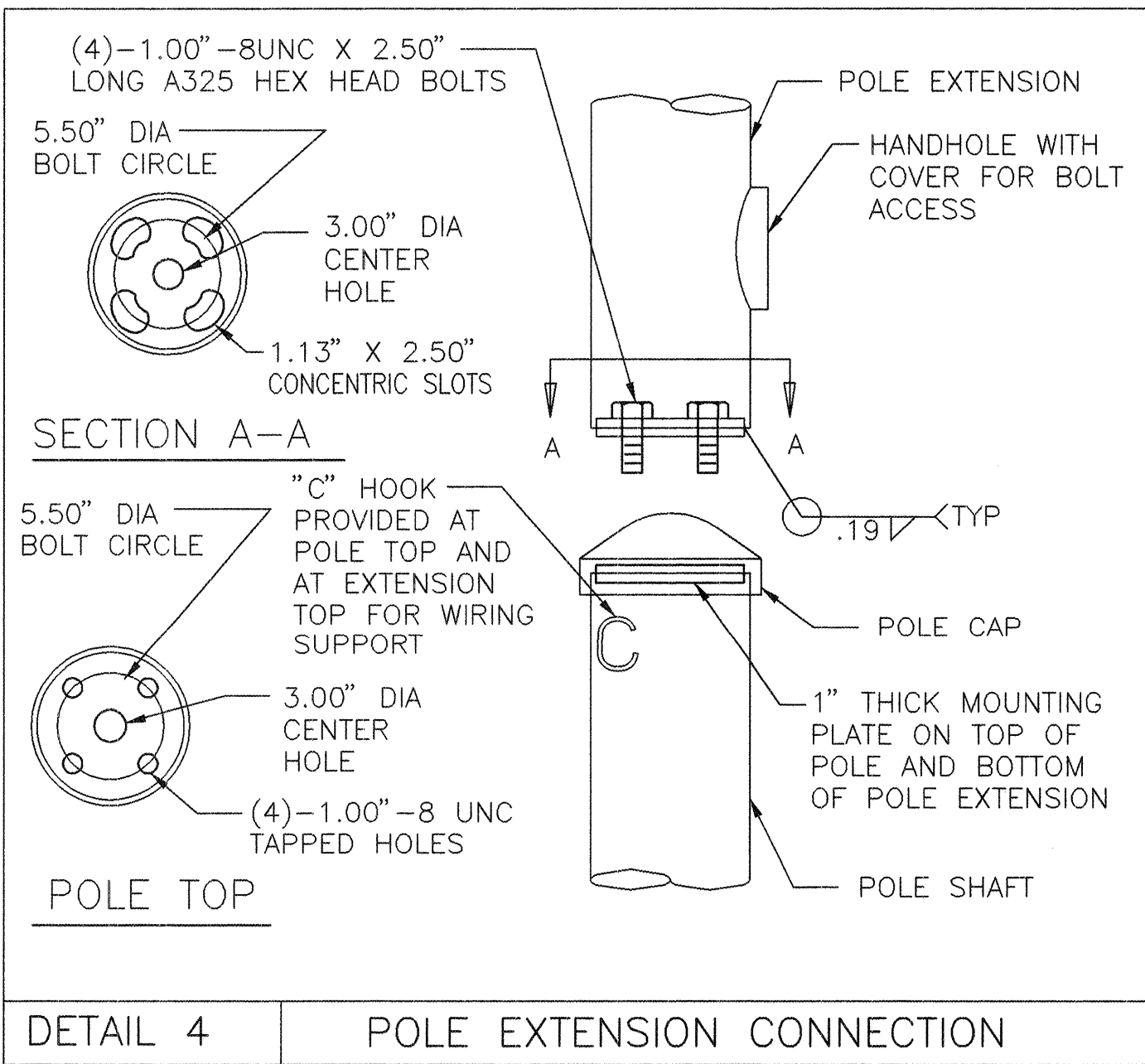
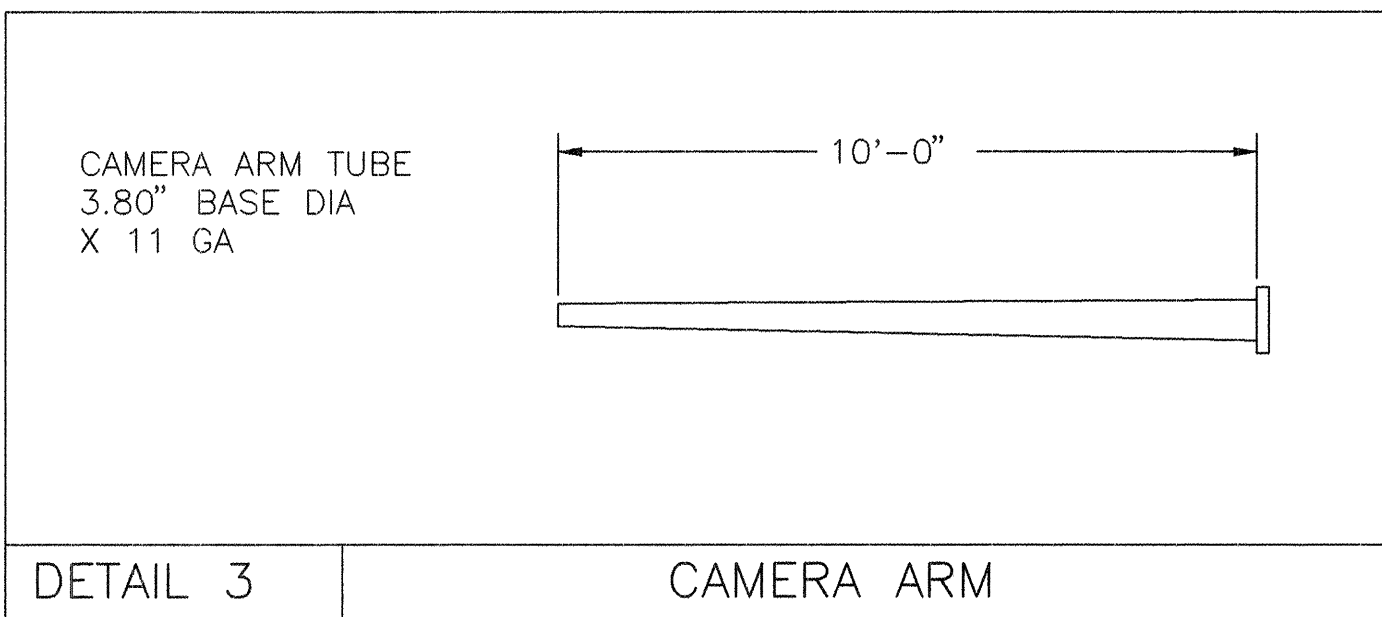
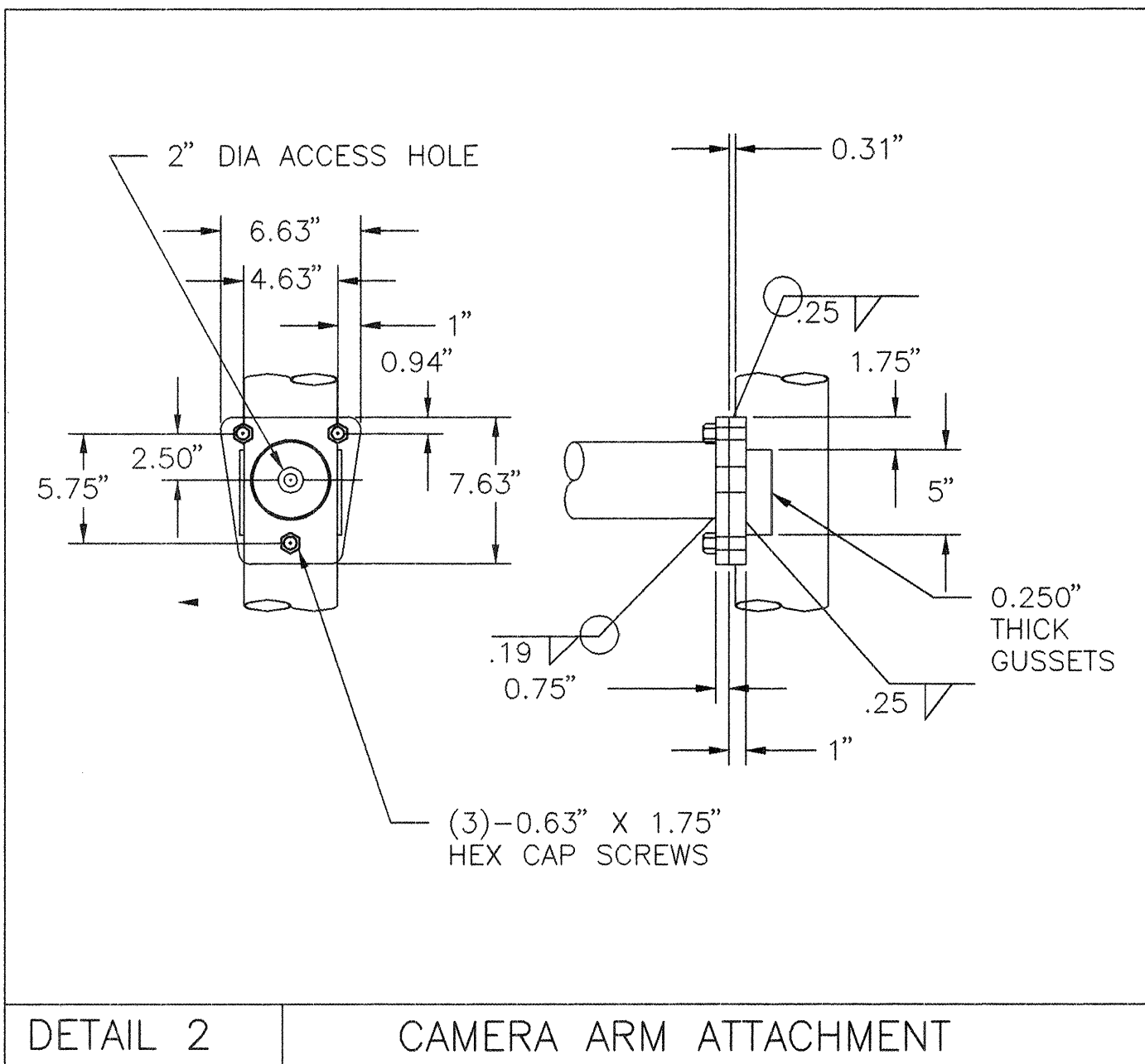
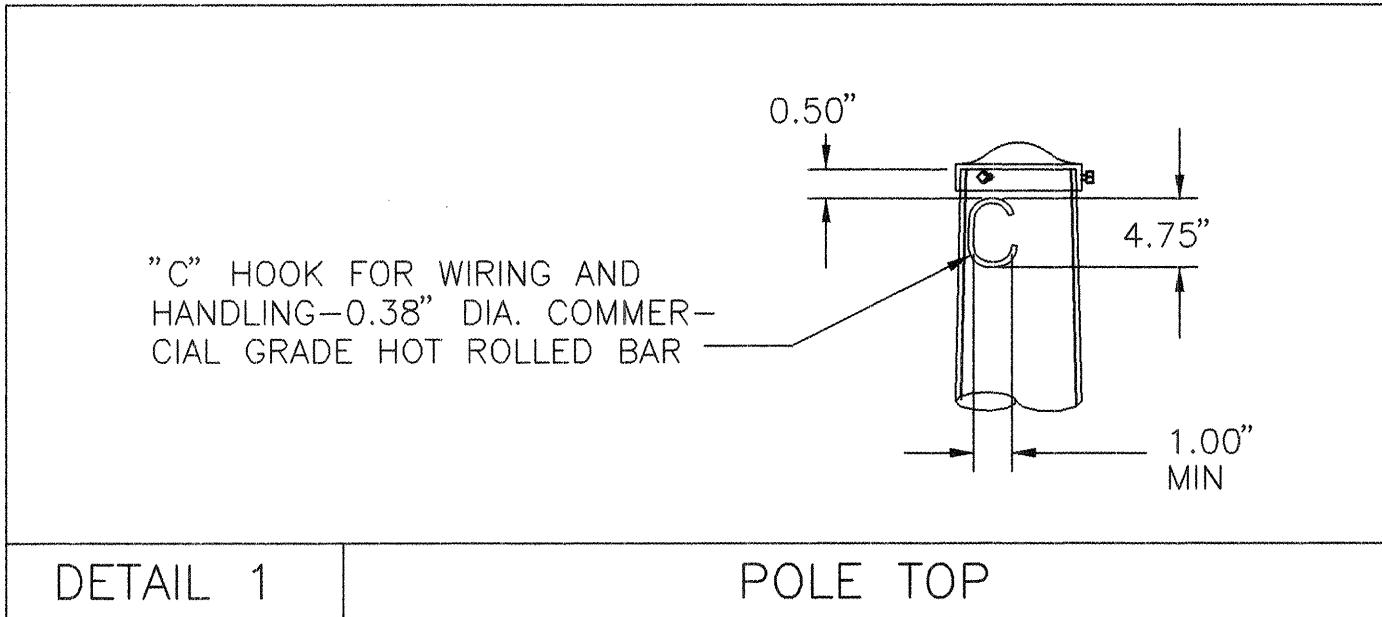
☐ GALVANIZED

☐ POWDER COATED
COLOR _____



** POLE SHAFTS SHALL BE MARKED "ALB" "15-25" OR "30-40", AND DATE OF FABRICATION (MONTH/YEAR).

TIERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: LA CUEVA TOWN CENTER INTERSECTION OF WYOMING AND CARMEL TYPE III STANDARD-MISCELLANEOUS DETAILS	
DESIGNED BY: LA CUEVA TOWN CENTER	CITY ENGINEER APPROVAL AUG 26 1999 CITY ENGINEER
MO./DAY/YR.	MO./DAY/YR.
DESIGNED BY: BDG	DATE: 3-99
DRAWN BY: BDG	DATE: 3-99
CHECKED BY: RRB	DATE: 3-99
CITY PROJECT NO. 611081	ZONE MAP NO. C-19-Z
SHEET 10 OF 26	



TERRA WEST, LLC
4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
TYPE III STANDARD-MISCELLANEOUS DETAILS

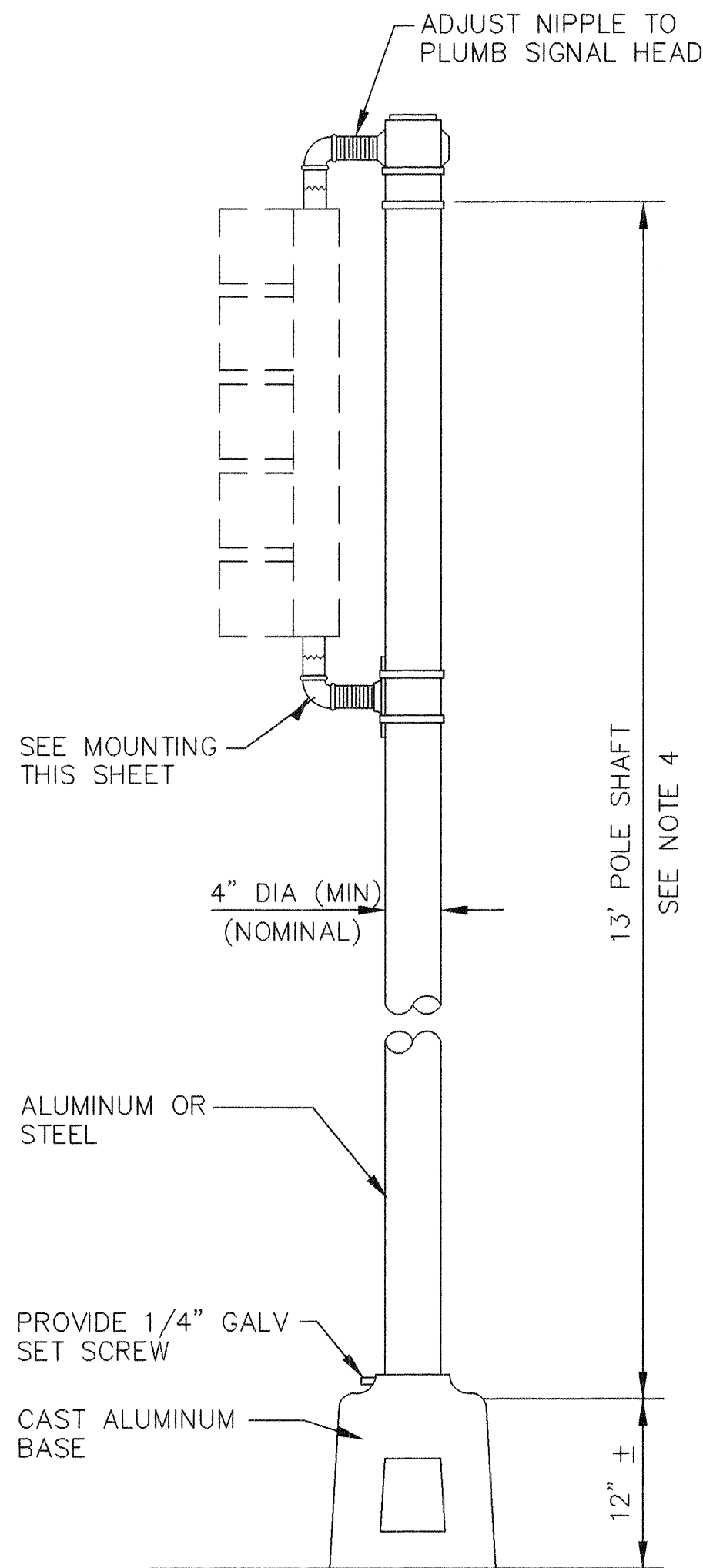
APPROVED
DESIGN REVIEW COMMITTEE
AUG 13 1999

APPROVED
CITY ENGINEER
AUG 21 1999

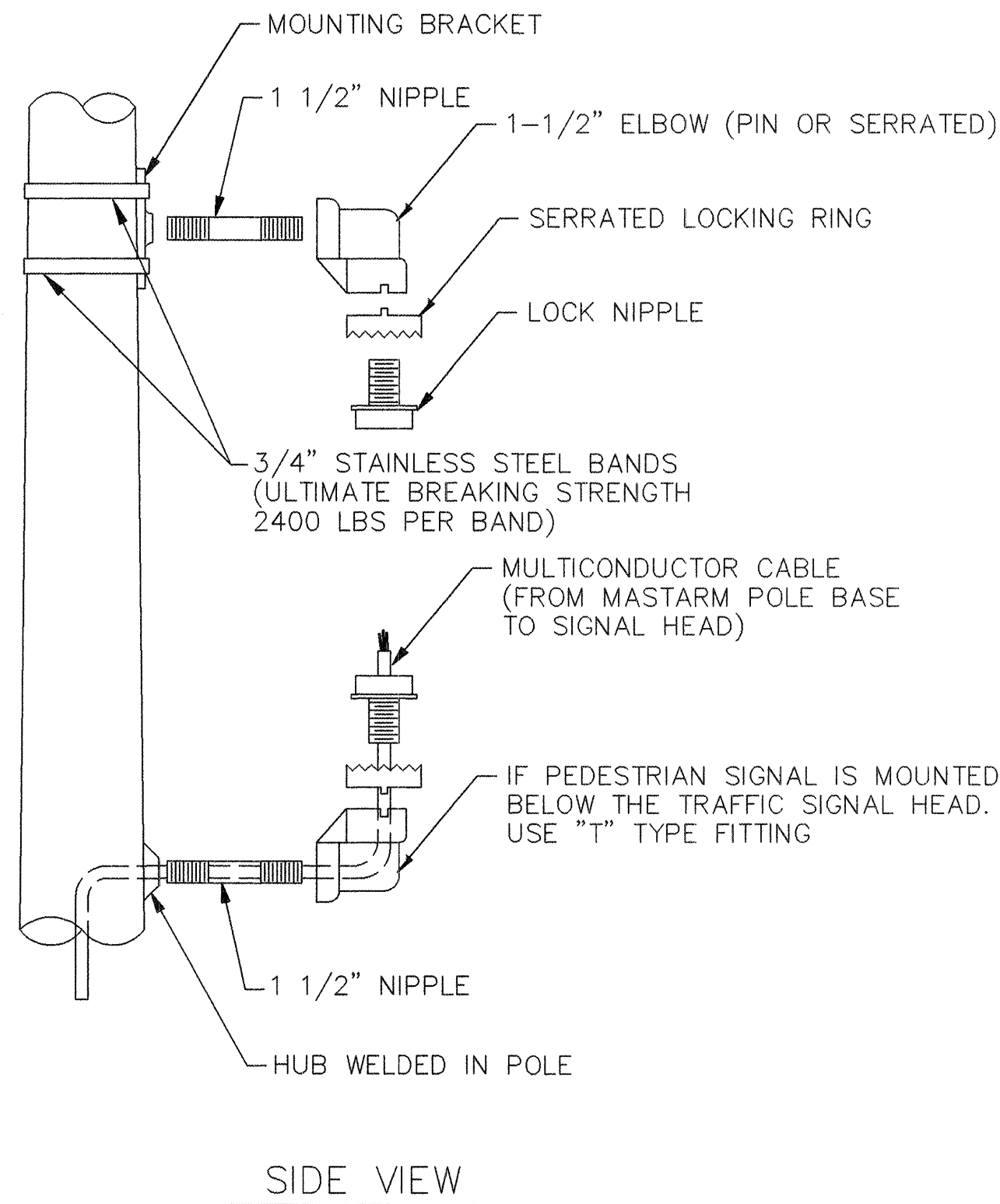
DESIGNED BY: BDG
DRAWN BY: BDG
CHECKED BY: RRB

REVISIONS
DATE: 3-99
DATE: 3-99
DATE: 3-99

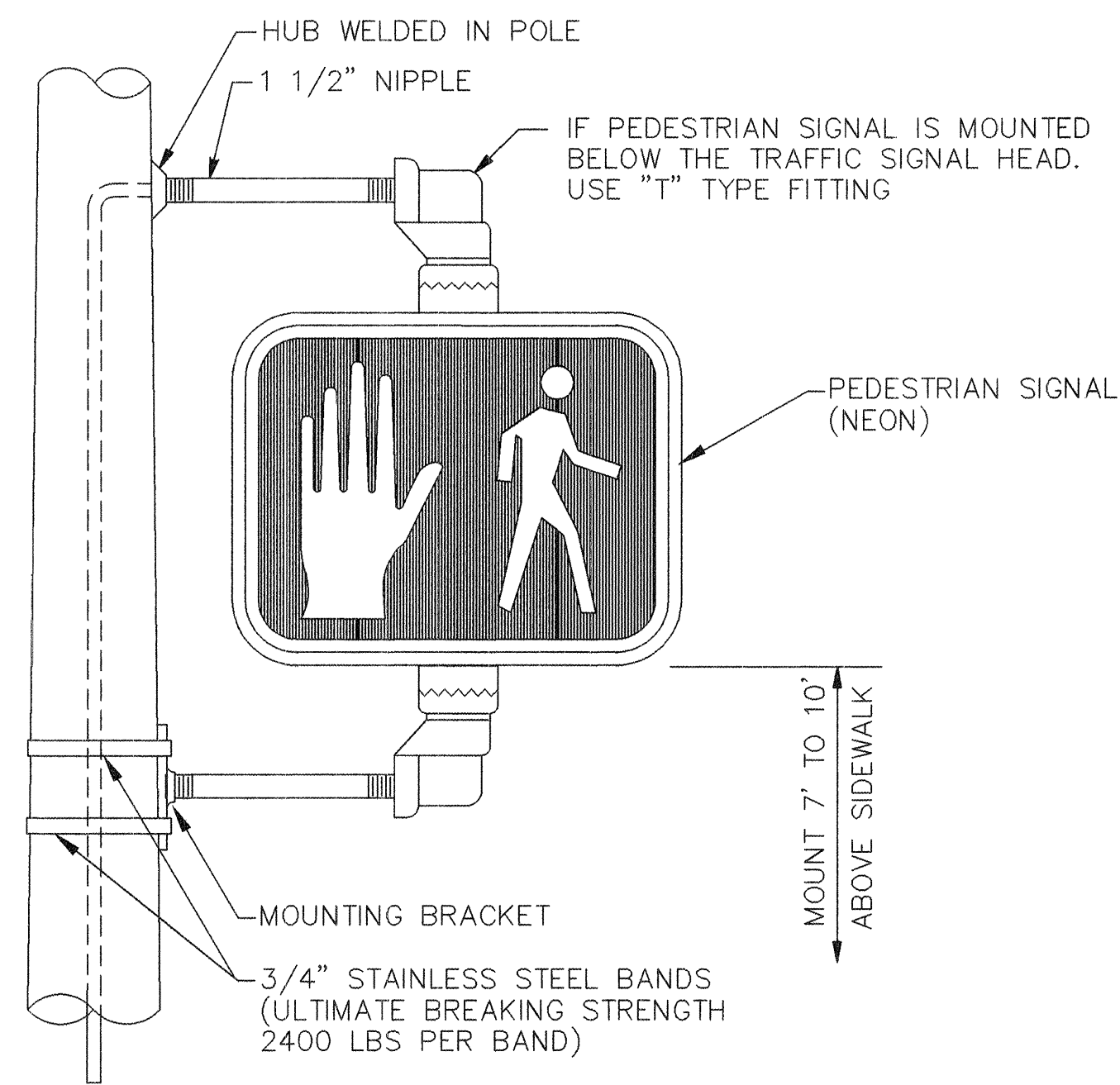
CITY PROJECT NO. 611081
ZONE MAP NO. C-19-Z
SHEET 11 OF 26



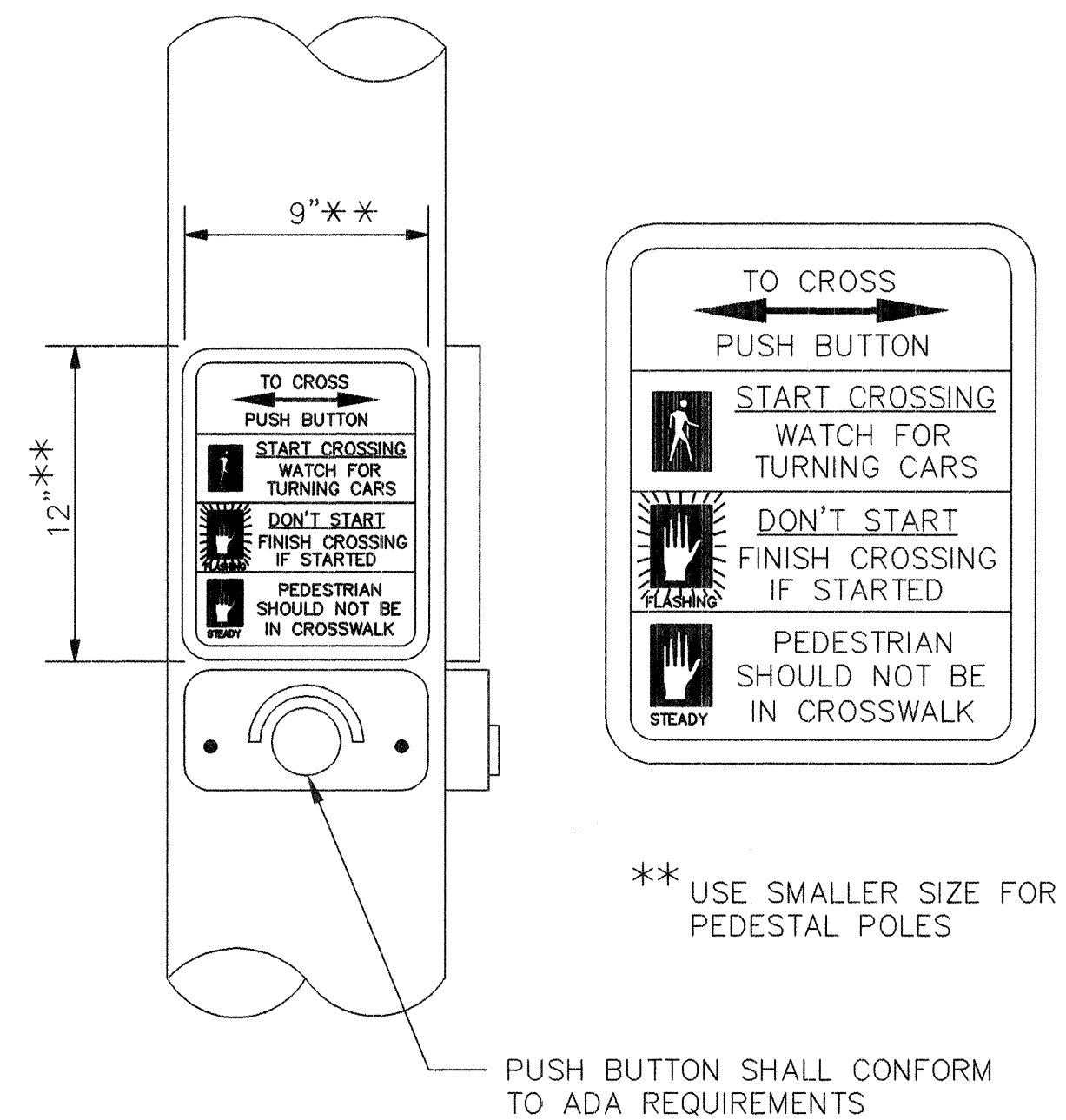
PEDESTAL POLE DETAILS



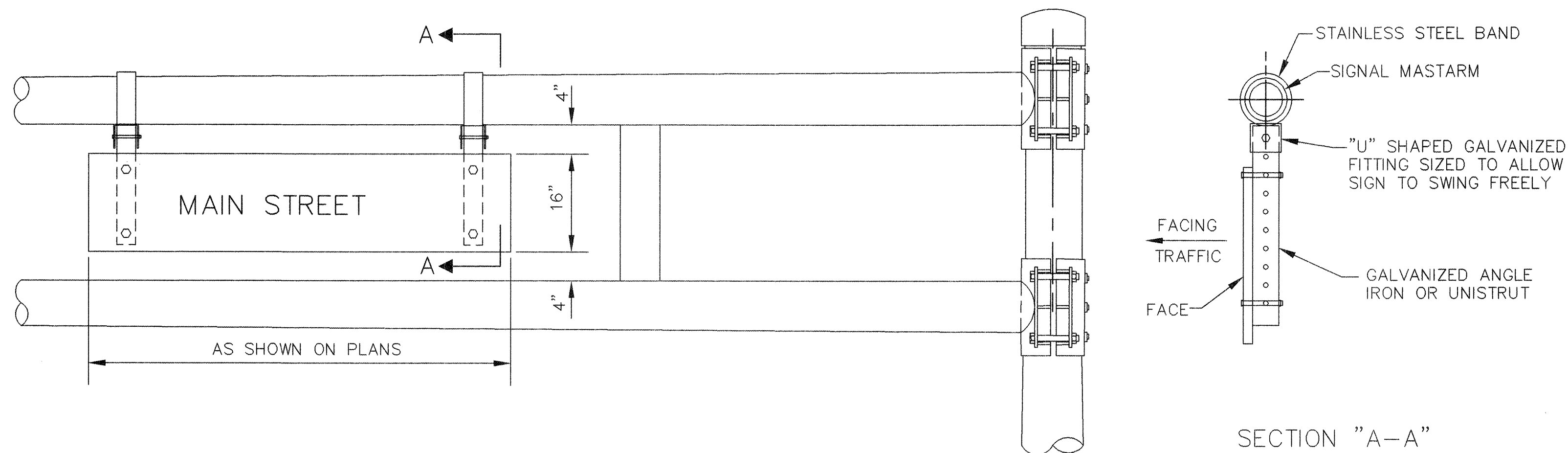
MOUNTING DETAIL



PEDESTRIAN SIGNAL DETAILS



PUSH BUTTON DETAIL



STREET NAME SIGN DETAILS

NOTES:

- STREET NAME SIGNS REQUIRED AS SHOWN ON PLANS.
- STREET NAME SIGN SHALL BE 16" WIDE WITH 8" SERIES "C" LETTERS. SIGN SHALL BE NO MORE THAN 12 SQUARE FEET TOTAL AREA AND SHALL HAVE HIGH INTENSITY REFLECTIVE LEGEND, 1" BORDER AND BACKGROUND COLORS: WHITE ON GREEN. SIGN PANELS SHALL BE SINGLE SHEET 6061-T6 ALUMINUM .120 MINIMUM THICKNESS.
- PEDESTRIAN ACTUATED CROSSING SHALL BE A MAXIMUM OF 42" (1065 mm) ABOVE THE FINISHED PUBLIC SIDEWALK. A STABLE, FIRM, AND SLIP-RESISTANT AREA - 30"x48" (915 mm x 1220 mm) - SHALL BE PROVIDED TO ALLOW FOR A FORWARD OR A PARALLEL APPROACH TO THE CONTROLS. WHERE A PARALLEL IS PROVIDED, CONTROLS SHALL BE WITHIN 10" (255 mm) HORIZONTALLY OF AND CENTERED ON THE CLEAR GROUND SPACE.
- FOR INSTALLATIONS WITH ONLY PEDESTRIAN SIGNALS, CUT SHAFT TO 9'. USE 15' SHAFT FOR PEDESTAL POLES REQUIRING BOTH 5-SECTION SIGNAL ASSEMBLIES AND PEDESTRIAN SIGNALS.

FINISH:

- ☐ GALVANIZED
- ☐ POWDER COATED
- COLOR _____

TERRA WEST, LLC
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ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
MISCELLANEOUS DETAILS

DESIGN REVIEW COMMITTEE
APPROVE
AUG 13 1999
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
APPROVE
AUG 26 1999
CITY ENGINEER

LAST DESIGN UPDATE
MO./DAY/YR.
MO./DAY/YR.

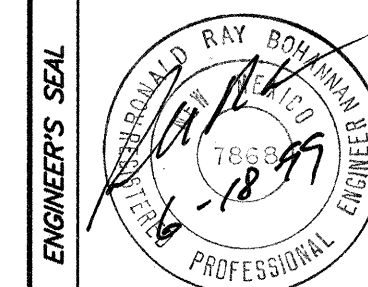
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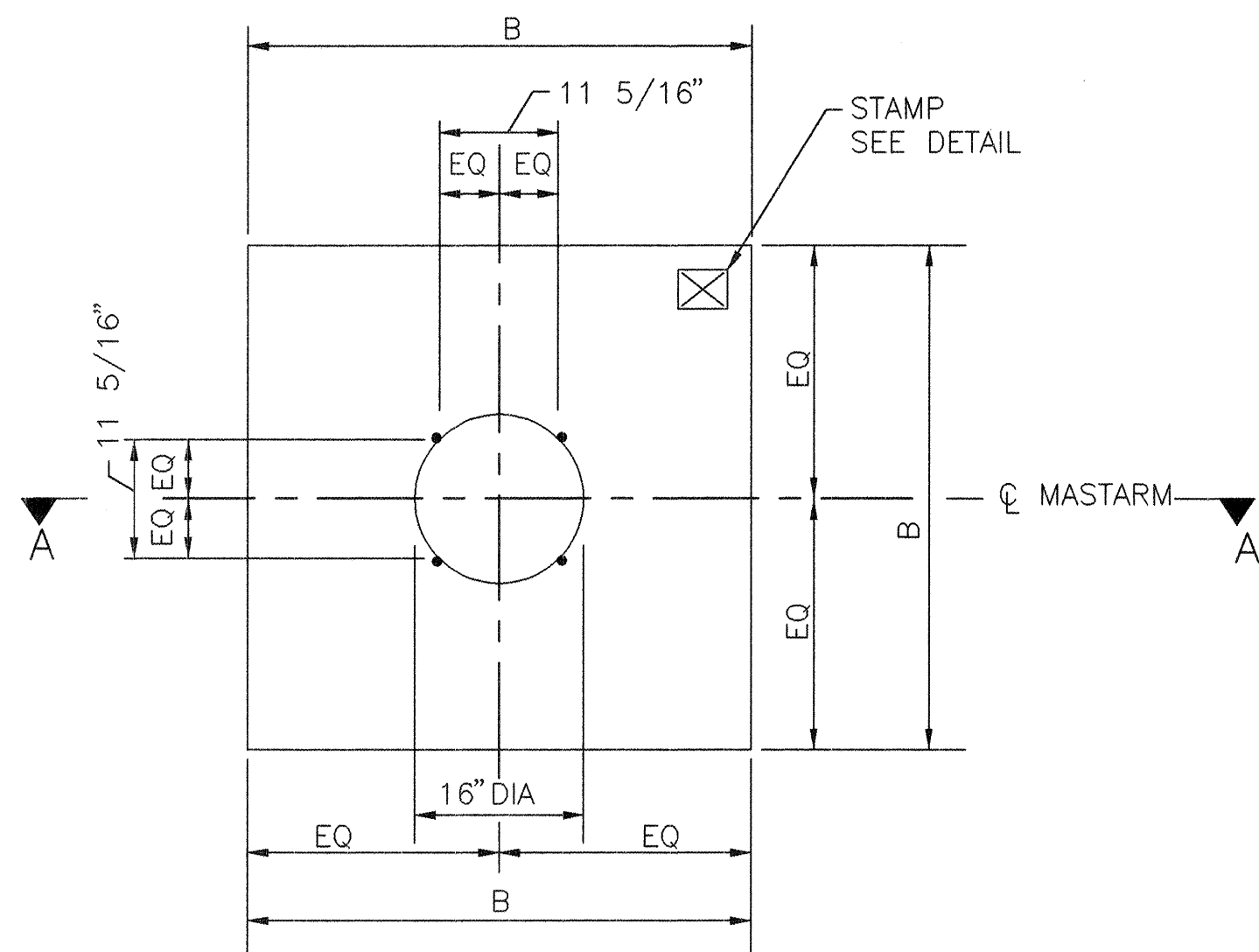
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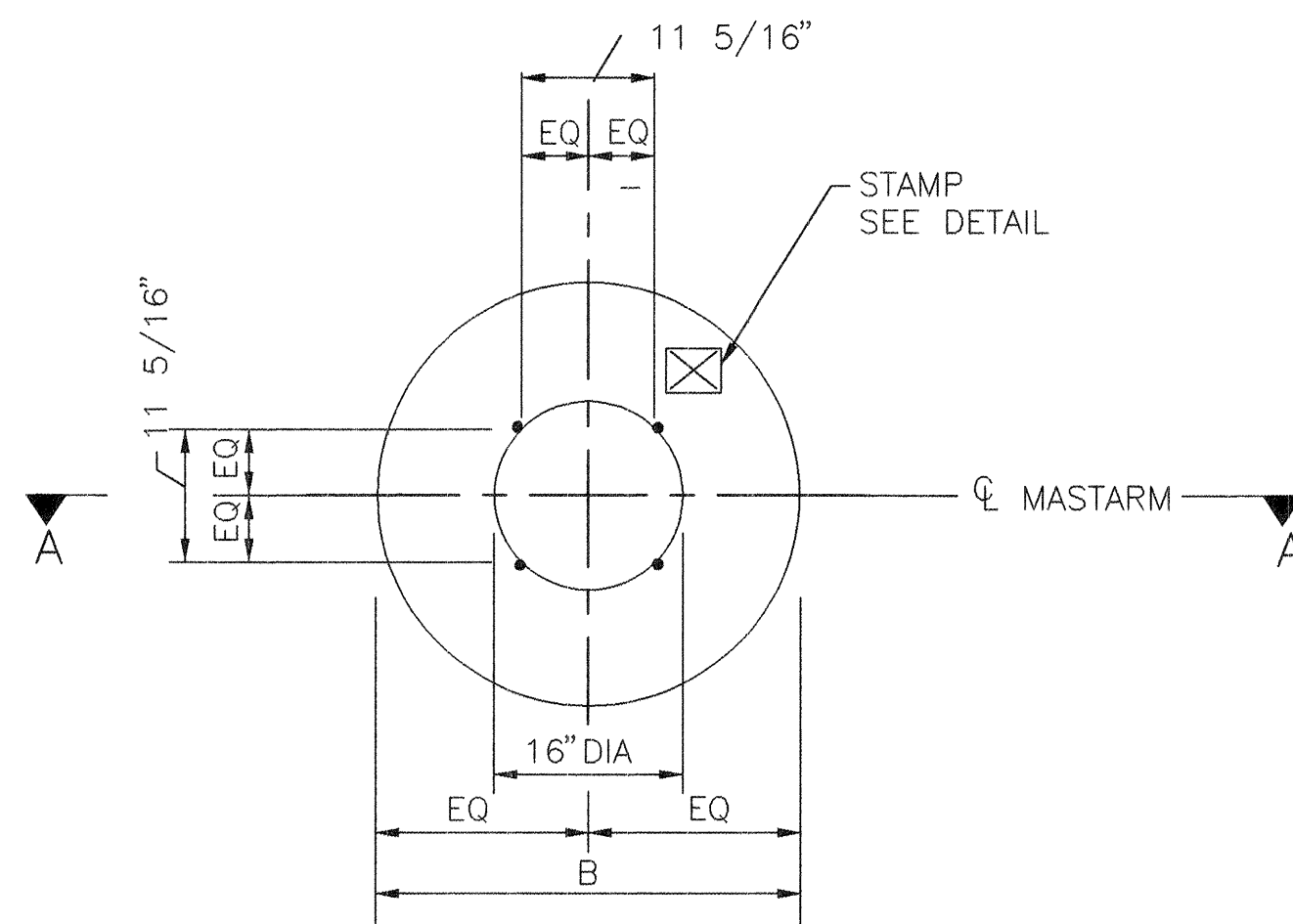
C-19-Z

SHEET 12 OF 26

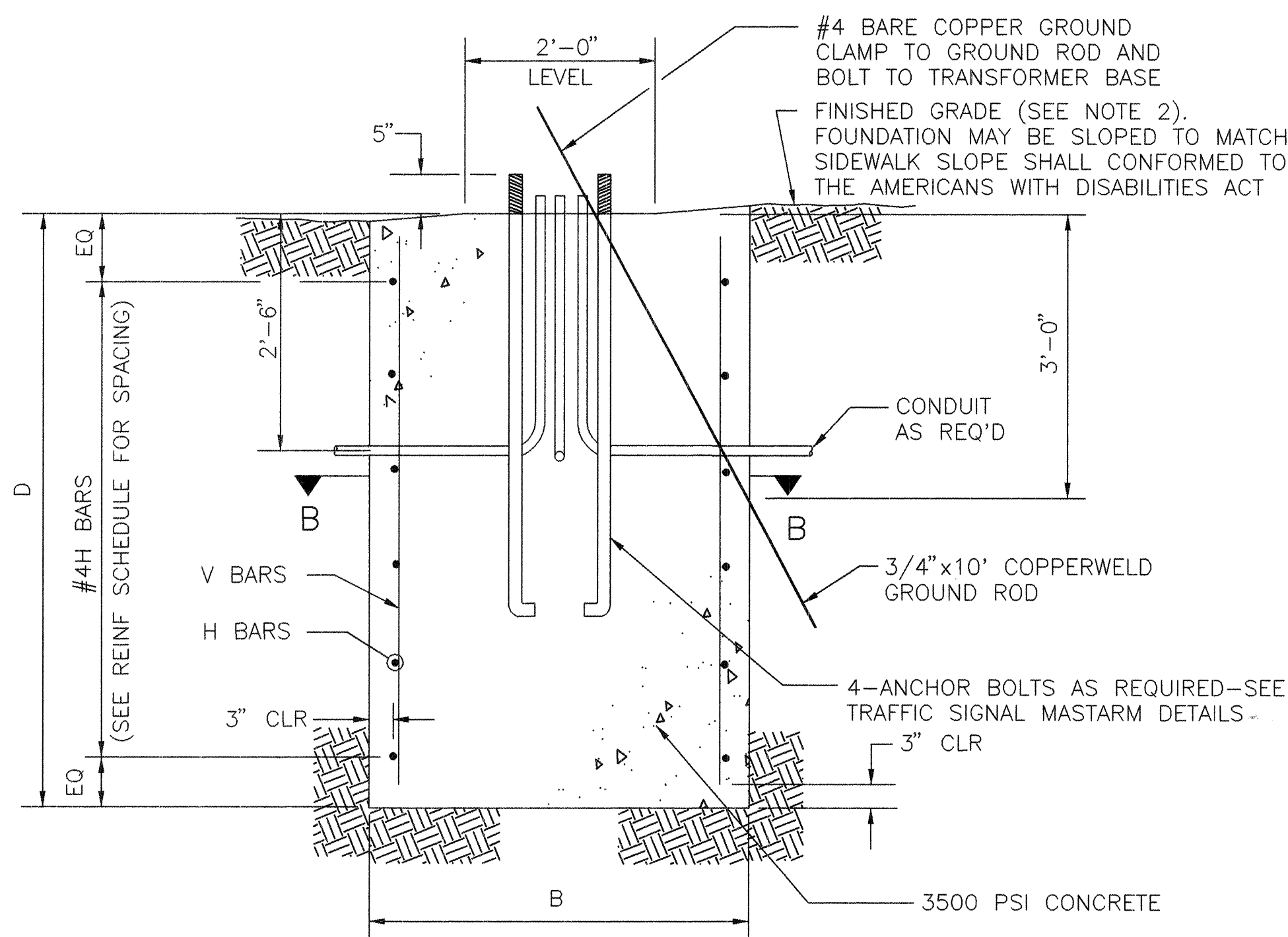




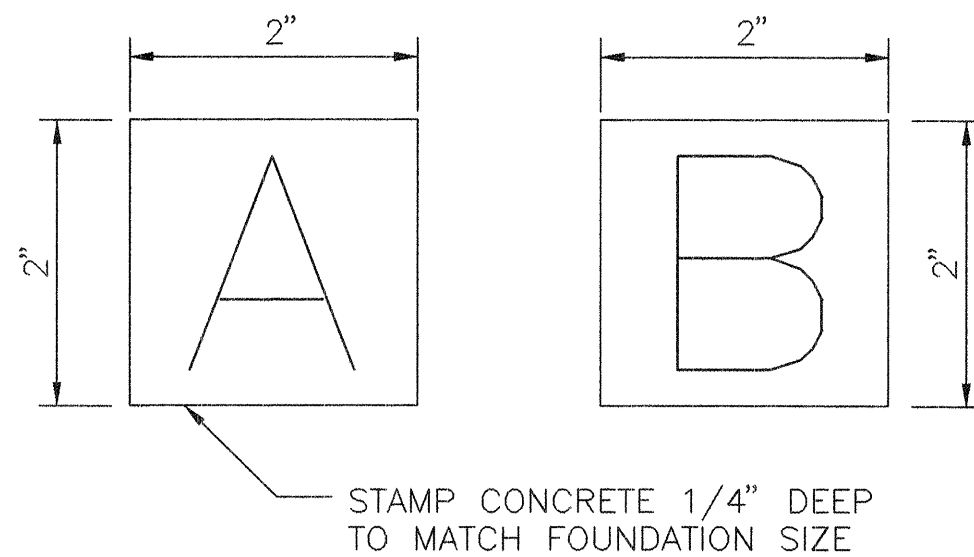
PLAN VIEW (SQUARE)
NO SCALE



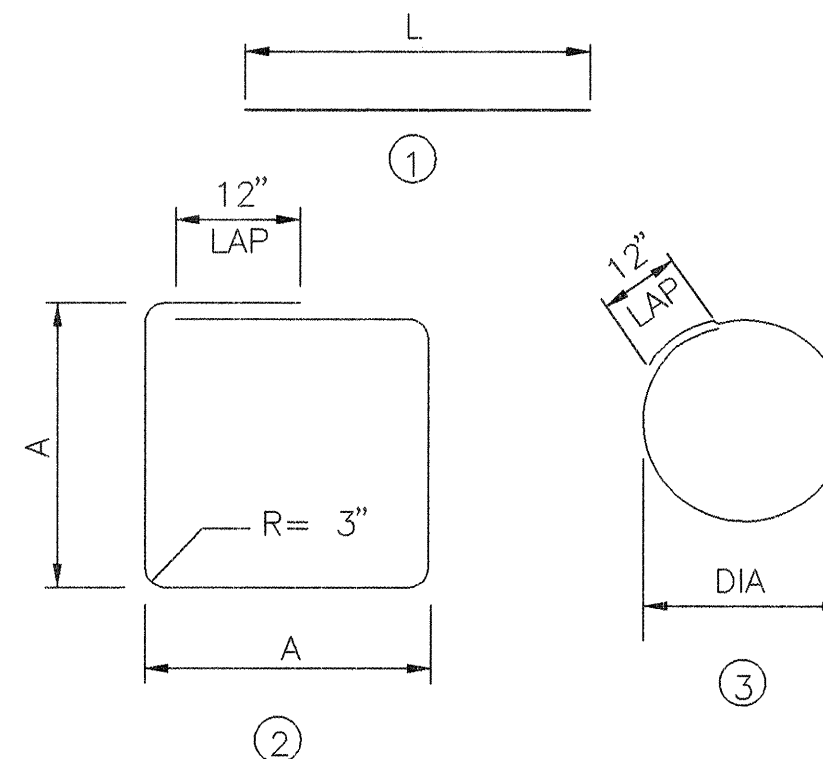
PLAN VIEW (ROUND)
NO SCALE



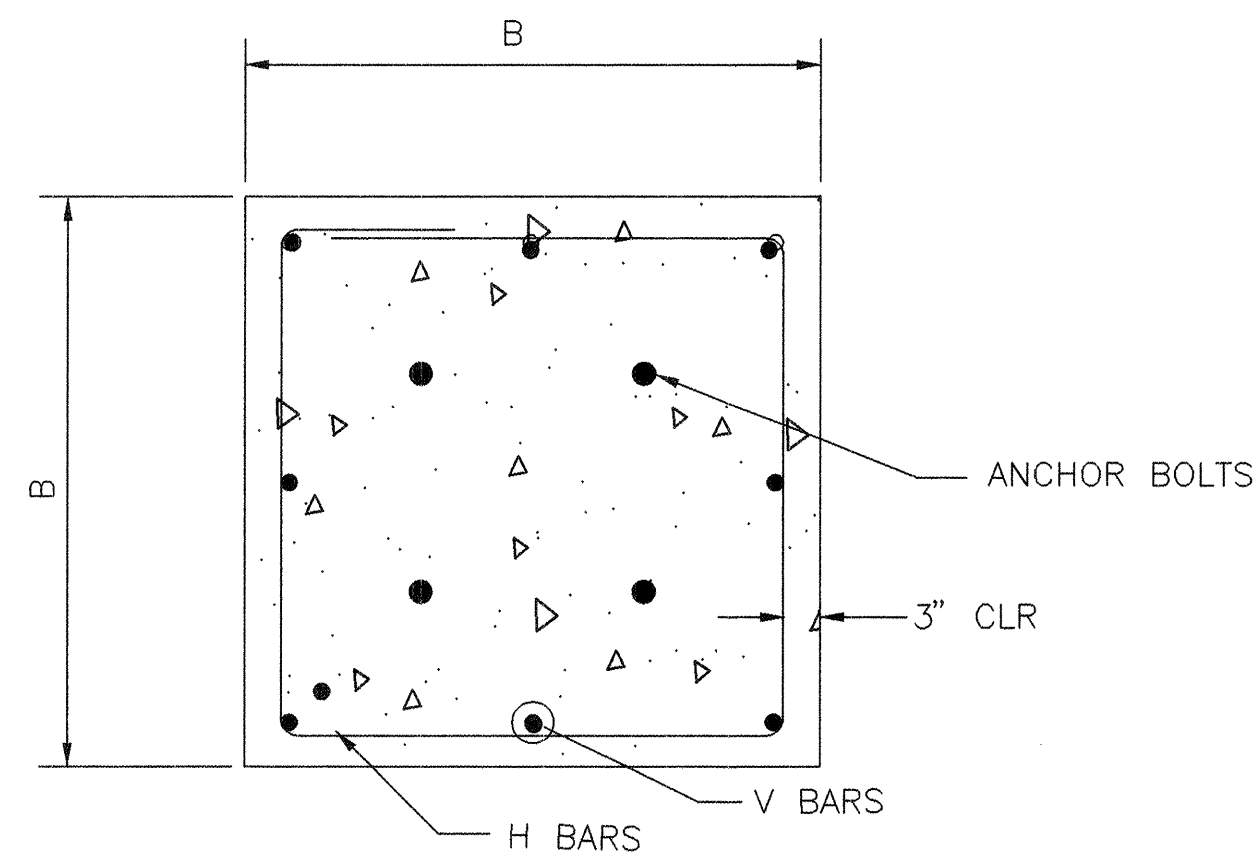
SECTION A-A (ROUND OR SQUARE)
NO SCALE



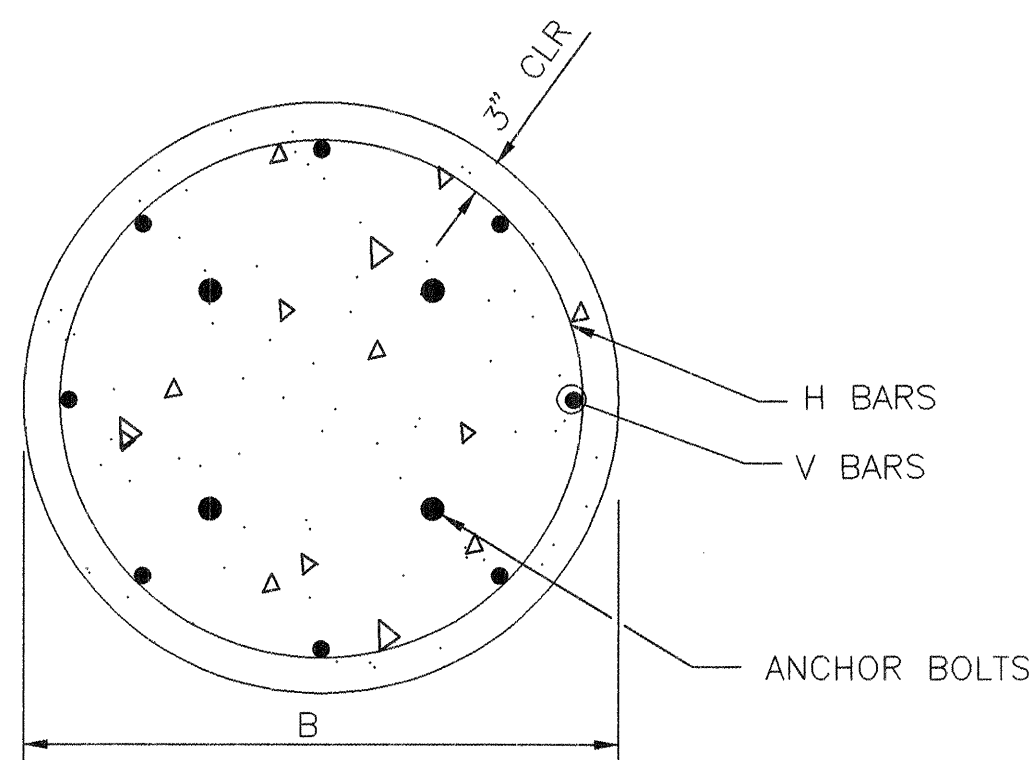
STAMP DETAIL
NO SCALE



BAR BENDING DIAGRAM



SECTION B-B (SQUARE)
NO SCALE



SECTION B-B (ROUND)
NO SCALE

FOUNDATION DIMENSIONS AND QUANTITIES							
FOUNDATION TYPE	SIGNAL ARM SPAN(FT)	DIMENSION		REINFORCING		REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS
		B (WIDTH)	D (DEPTH)	V BARS MARK	H BARS MARK		
TYPE A (SQUARE)	15	3'-6"	5'-0"	#4V2	#3H2	49.1	2.27
	20	"	"	"	"	"	"
	25	"	"	"	"	"	"
TYPE B (SQUARE)	30	4'-0"	6'-3"	#5V1	#3H1	82.6	3.70
	35	"	"	"	"	"	"
	40	"	"	"	"	"	"
TYPE A (ROUND)	15	2'-6"	8'-6"	#6V4	#3H4	98.1	1.55
	20	"	"	"	"	"	"
	25	"	"	"	"	"	"
TYPE B (ROUND)	30	3'-0"	11'-9"	#7V3	#3H3	179.7	3.08
	35	"	"	"	"	"	"
	40	"	"	"	"	"	"

ROUND SHAPE TO BE USED ONLY WHERE SPECIFICALLY NOTED ON PLANS OR WHEN APPROVED BY THE PROJECT MANAGER.

REINFORCING SCHEDULE (GRADE 60 BARS)					
MARK	QUANT	TYPE	SIZE	LENGTH	COMMENTS
#5V1	8	1	5	5'-9"	
#4V2	8	1	4	4'-6"	
#7V3	6	1	7	11'-3"	
#6V4	6	1	6	8'-0"	
#3H1	6	2	3	15'-4"	A = 42", TIES AT 14" OC
#3H2	5	2	3	13'-4"	A = 36", TIES AT 12" OC
#3H3	12	3	3	9'-3"	DIA = 30", TIES AT 12" OC
#3H4	9	3	3	7'-8"	DIA = 24", TIES AT 12" OC

TRAFFIC SIGNAL MASTARM FOUNDATION NOTES

- REFER TO THE PLANS FOR LOCATIONS OF TRAFFIC SIGNAL MASTARM FOUNDATIONS.
- FINISHED GRADE FOR THE FOUNDATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE PROJECT MANAGER.
- THE FOUNDATIONS SHOWN HERE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT REVISION.
- CONCRETE SHALL BE 3500 PSI FOR EXTERIOR STRUCTURES. REFER TO TABLE 101.C OF THE SPECIFICATIONS.
- REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60.
- THE TOP 6 INCHES OF THE FOUNDATION PEDESTAL SHALL BE FORMED TO THE DIMENSIONS SHOWN ON THIS SHEET TO FORM NEAT LINES. CONCRETE BELOW 6 LINES MAY BE CAST AGAINST THE EARTH.
- THE CONCRETE SHALL GAIN 80% OF THE DESIGN STRENGTH PRIOR TO INSTALLING THE TRAFFIC SIGNAL MASTARM.
- ALL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS. ALL GROUND RODS SHALL BE 3/4" DIA X 10'-0" AND WILL BE CONSIDERED INCIDENTAL TO THE FOUNDATIONS BID ITEMS.
- ALL FOUNDATIONS SHALL BE STAMPED EITHER "A" OR "B" TO SHOW TYPE CONSTRUCTED (SEE STAMP DETAIL).

TIERRA WEST, LLC
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ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
FOUNDATION DETAILS, TYPE II AND TYPE III STANDARD

DESIGN REVIEW COMMITTEE
APPROVE
AUG 13 1999
DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL
APPROVE
AUG 26 1999
CITY ENGINEER

CITY PROJECT NO.

611081

ZONE MAP NO.

C-19-Z

SHEET 13 OF 26

CONTRACTOR SLIP/CHANGE		DATE 09/01/00
INSPECTOR'S SIGNATURE	DATE 09/01/00	DATE 09/01/00
FIELD ENGINEER'S SIGNATURE	DATE 09/01/00	DATE 09/01/00
REVISIONS	DATE 09/01/00	DATE 09/01/00
DESIGN	DATE 09/01/00	DATE 09/01/00
DESIGNED BY	DATE 09/01/00	DATE 09/01/00
DRAWN BY	DATE 09/01/00	DATE 09/01/00
CHECKED BY	DATE 09/01/00	DATE 09/01/00



☐	12 GA HD GALVANIZED SHEET STEEL ☐ POWDER COATED
☐	14 GA #304D STAINLESS STEEL SHEET ☐ POWDER COATED COLOR: ☐ NATURAL
☐	0.125" ALUMINUM SHEET ☐ POWDER COATED COLOR: ☐ ANODIZED

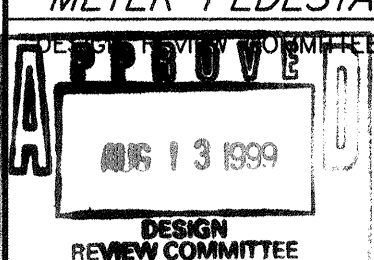
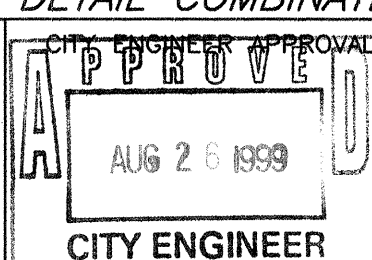
☐ WHITE ☐ RANCH GREEN

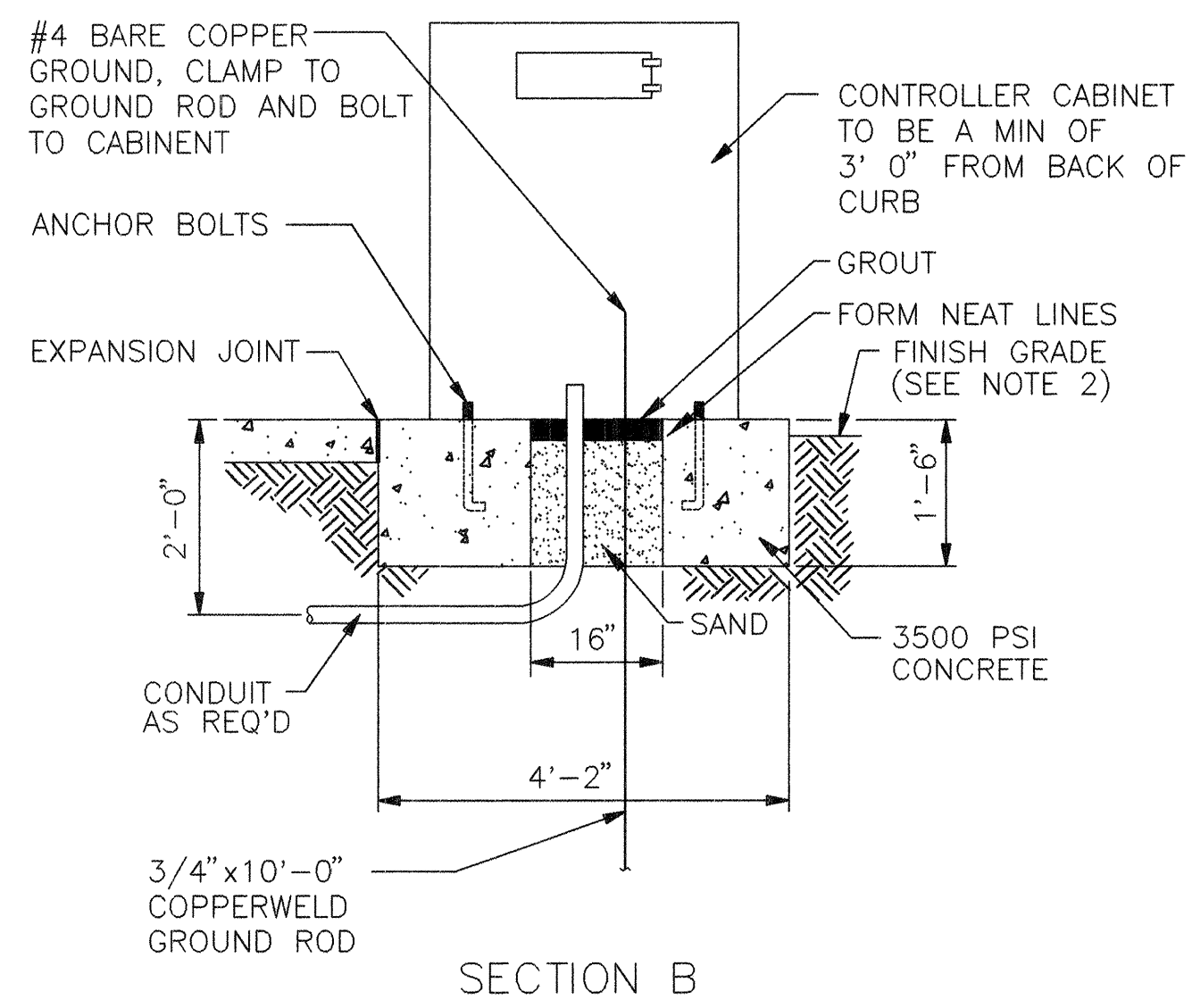
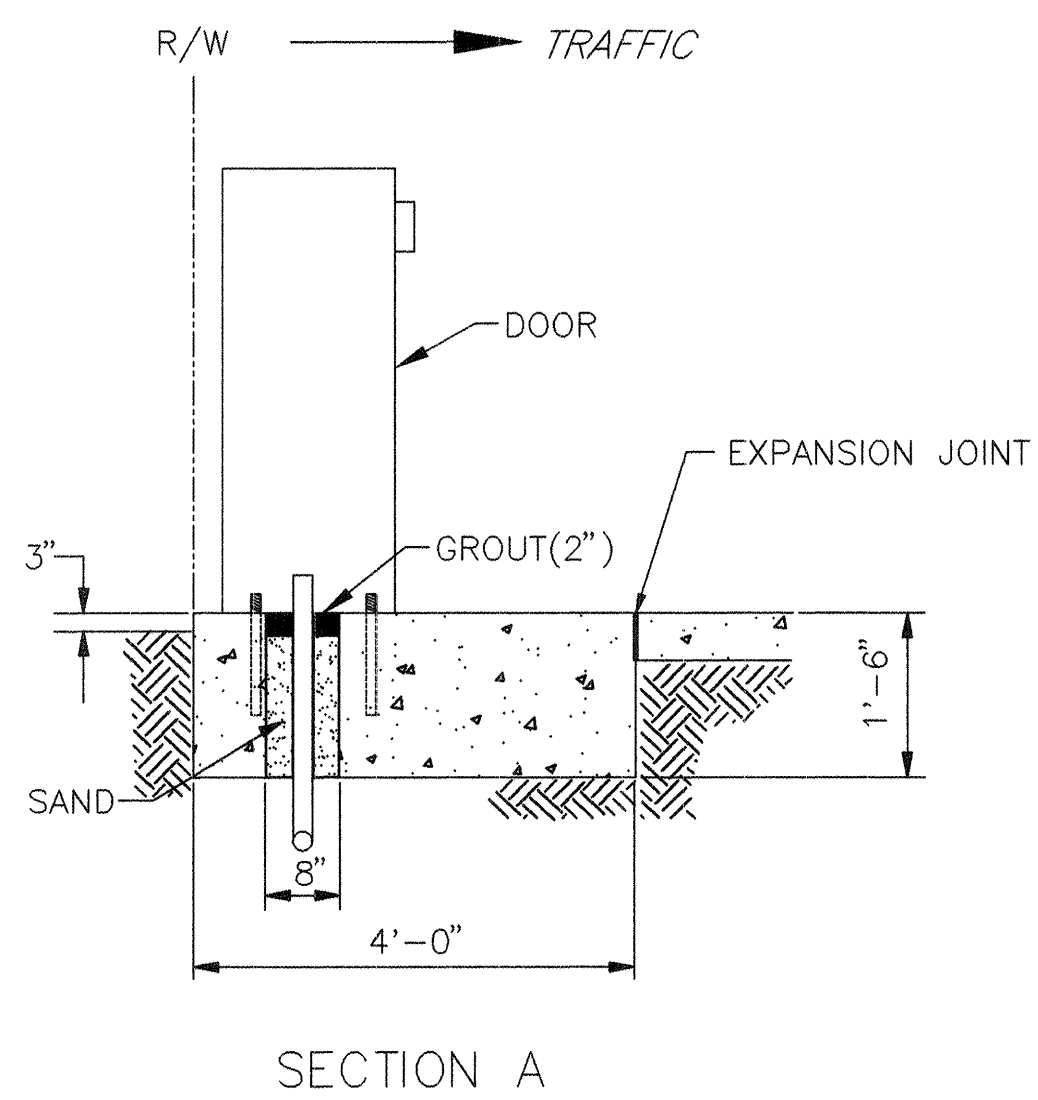
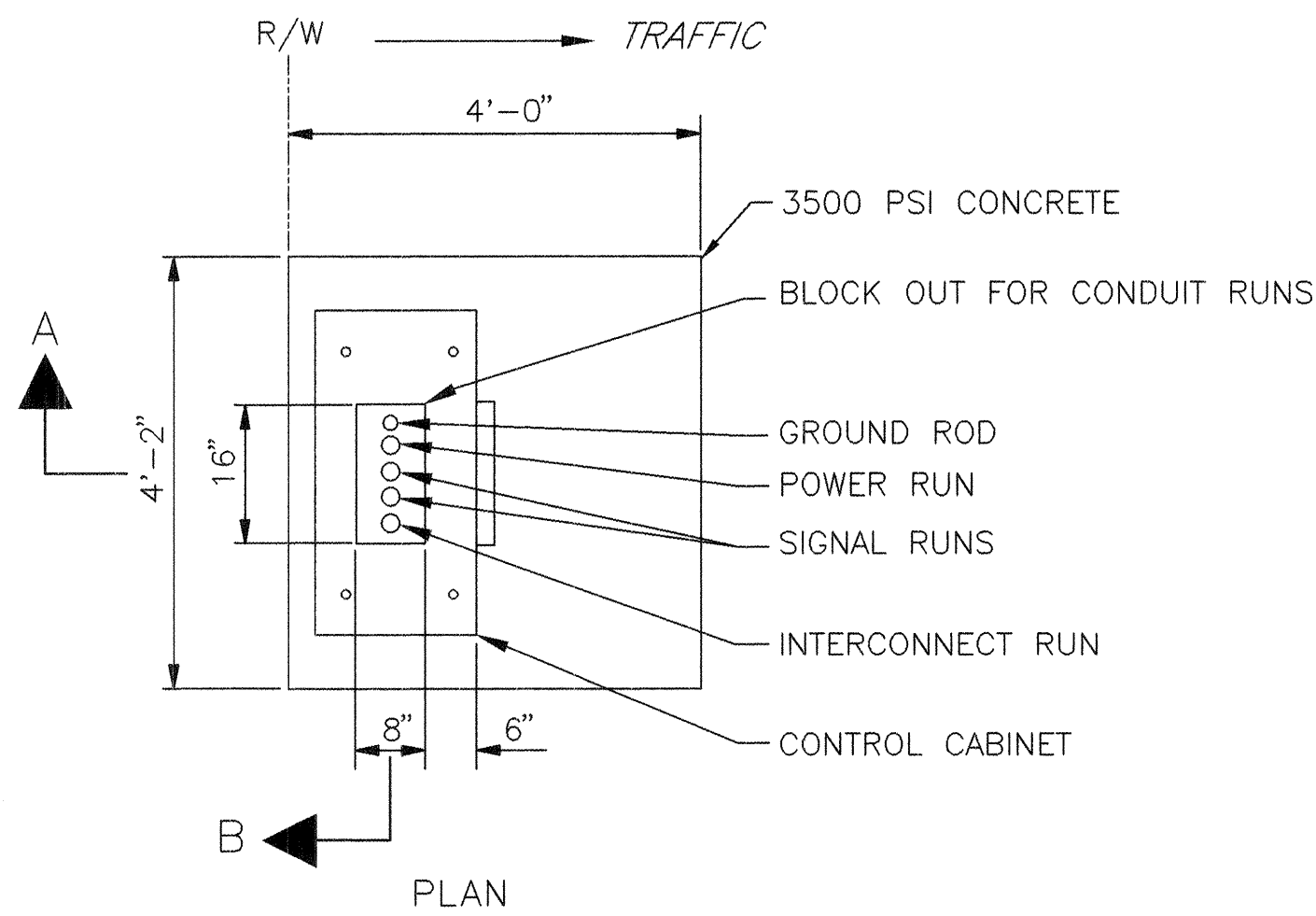
☐ MINT GREEN ☐ OTHER _____

☐ CAMEL

☐ ON LIGHT POLE
☐ IN SERVICE CABINET

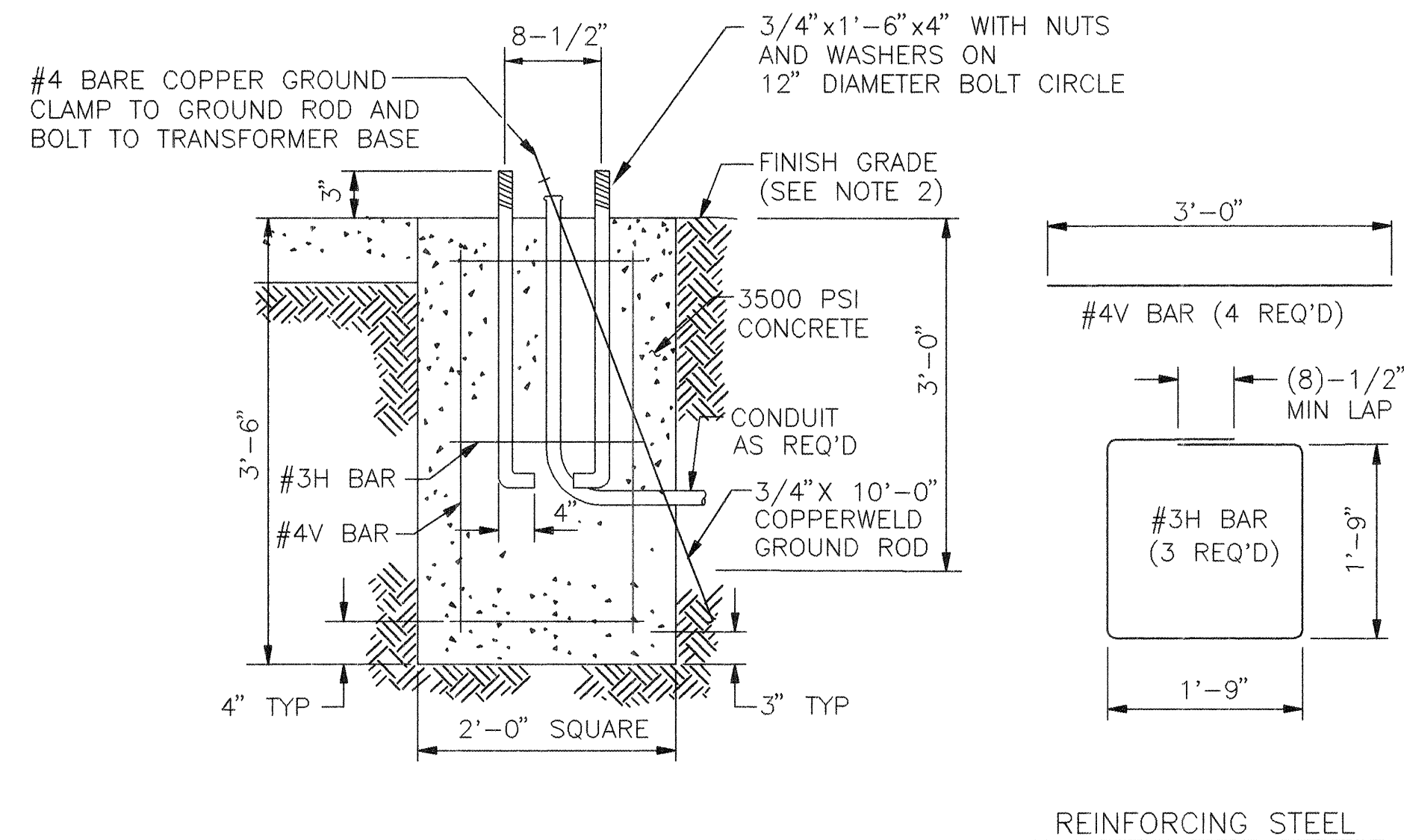
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DIMENSIONS ARE - #.###" INCHES, (###) MILLIMETER

TIERRA WEST, LLC 4421 MCLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592		DATE: _____		DESIGNED BY _____	
		NO. _____		DRAWN BY _____	
				CHECKED BY _____	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP					
TITLE: LA CUEVA TOWN CENTER INTERSECTION OF WYOMING AND CARMEL METER PEDESTAL DETAIL COMBINATION, SIGNALS AND LIGHTING					
				LAST DESIGN UPDATE	
				MO./DAY/YR.	
CITY PROJECT NO.		ZONE MAP NO.		SHEET	
611081		C-19-Z		14 OF 26	

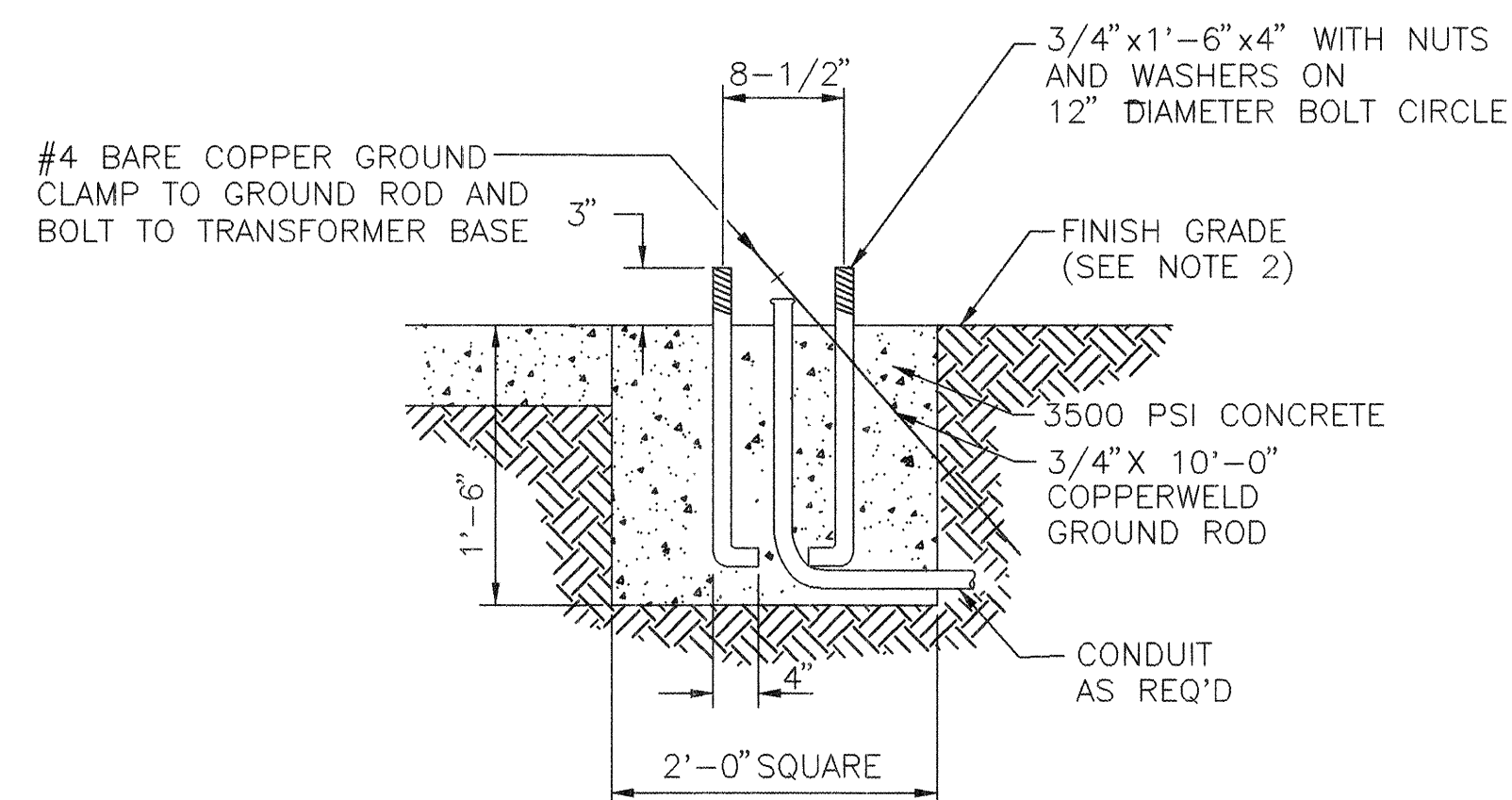


CONTROLLER FOUNDATION DETAIL

IN THE EVENT THE SUPPLIED CABINET WOULD OVERLAP THE SIDES OF ABOVE FOUNDATION, THE FOUNDATION SHALL BE INCREASED IN SIZE AS DIRECTED BY THE ENGINEER.



PEDESTAL FOUNDATION DETAIL



SPLICE CABINET FOUNDATION DETAIL

TRAFFIC SIGNAL FOUNDATION NOTES

1. ALL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS. ALL GROUND RODS SHALL BE 3/4"X10'-0" AND WILL BE CONSIDERED INCIDENTAL TO THE FOUNDATION BID ITEMS.
2. FINISHED GRADE FOR ALL FOUNDATIONS TO BE DETERMINED IN THE FIELD BY THE PROJECT ENGINEER. FOUNDATIONS MAY BE SLOPED TO MATCH SIDEWALKS. SLOPES SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS.

ESTIMATED QUANTITIES

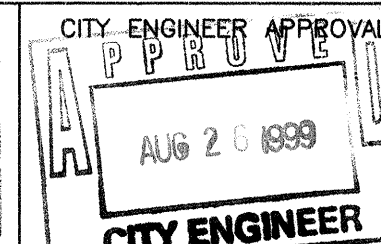
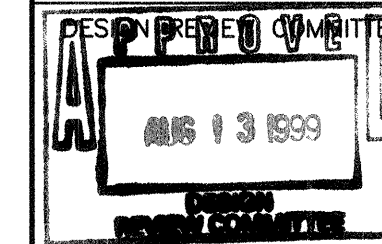
FOUNDATION TYPE	3500 PSI CONCRETE CU YD	REINFORCING BARS POUNDS
PEDESTAL FOUNDATION	0.52	17
CONTROLLER FOUNDATION (TYPE M & P)	0.88	--
SPLICE CABINET FOUNDATION	0.13	--

(FOR CONTRACTORS INFORMATION ONLY)

TIERRA WEST, LLC
4421 McLEOD ROAD, N.E., SUITE D
ALBUQUERQUE, NEW MEXICO 87109
(505)883-7592

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
CONTROLLER CABINET AND PEDESTAL FOUNDATION DETAILS



MO./DAY/YR.	MO./DAY/YR.

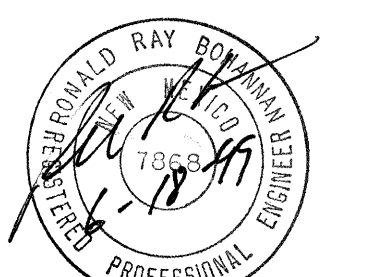
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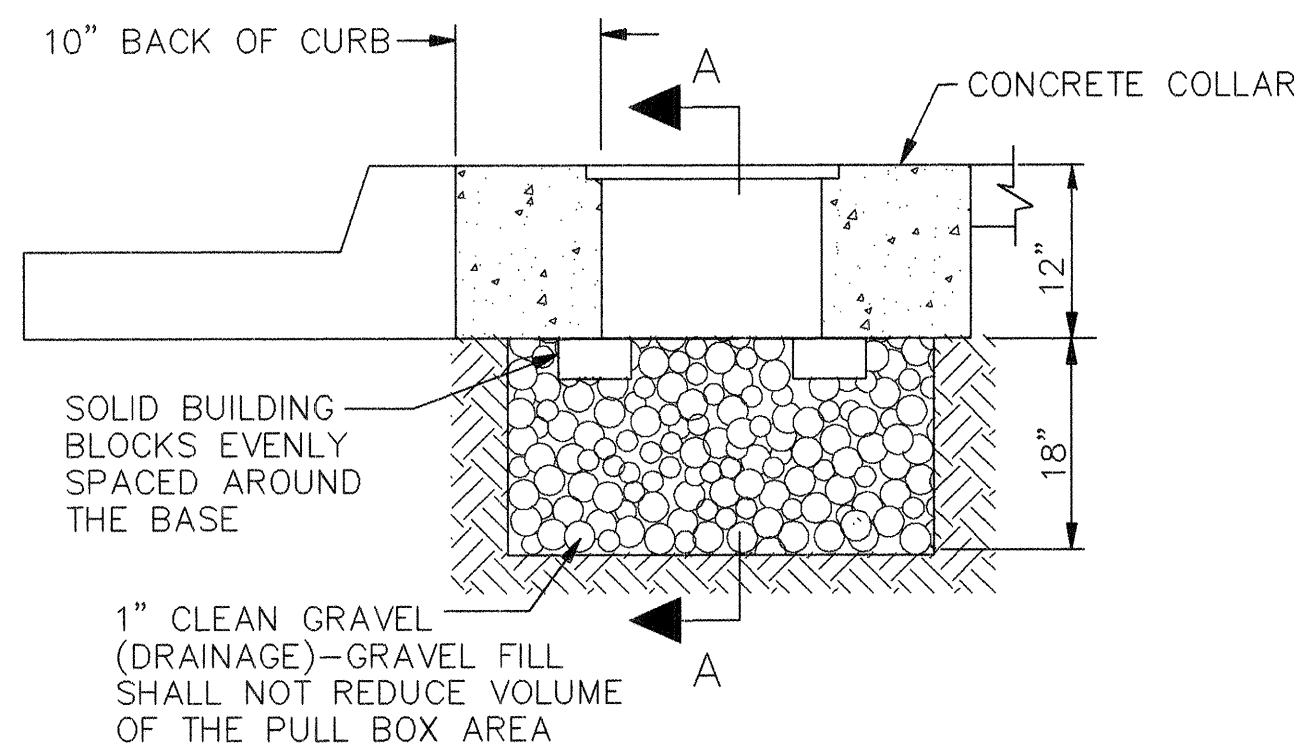
611081

ZONE MAP NO.
C-19-Z

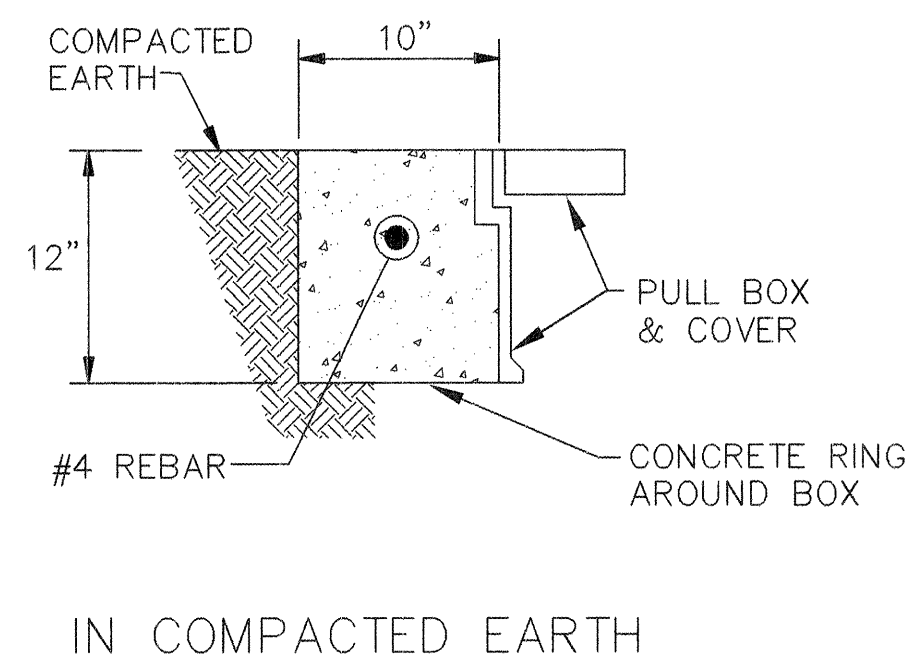
SHEET **15** OF **26**

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR	SL/100/ALICE	NGS MONUMENT "HEAVEN"	DATE	FIELD NOTES	NO.
WORK STARTED BY	ALS	CENTRAL STATION DATA	DATE	BY	DATE
WORK STOPPED BY	S. Moya	NM STATE PLANE COORDINATES	DATE		
FIELD INSPECTION BY	ALS	Central Zone	DATE		
REVISIONS BY	ALS	Y=1518737.03	DATE		
CORRECTED BY	ALS	X=407051.31	DATE		
RECORDED BY		G-G=0.99965263	DATE		
NO.		DELTA=-00'10'45"	DATE		
		ELEVATION=5378.79	DATE		

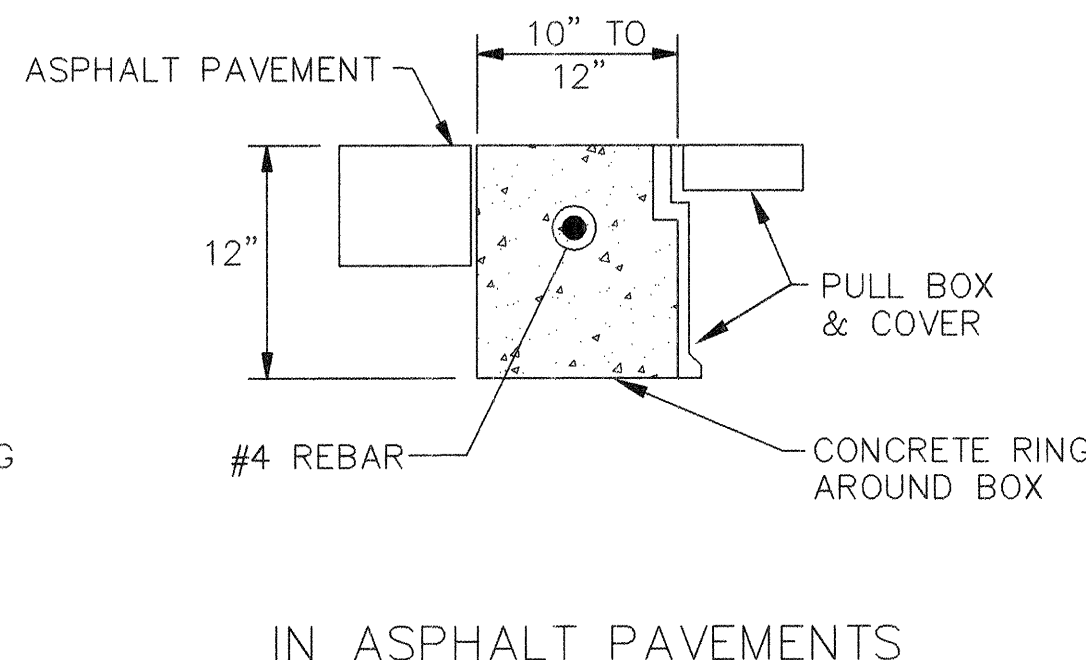




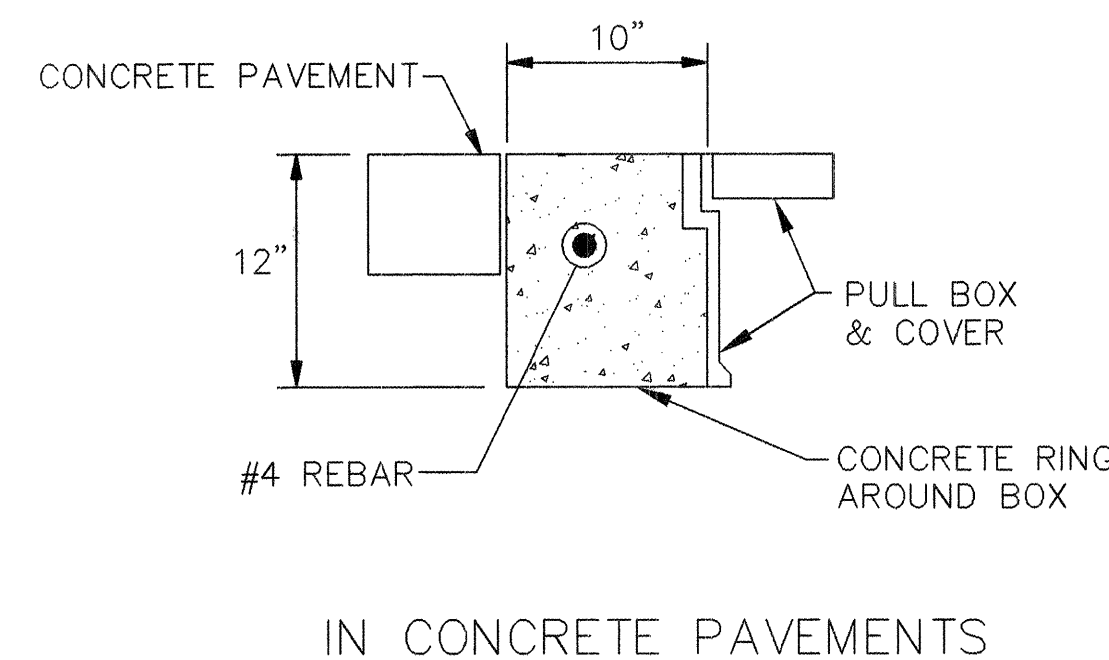
TYPICAL PULL BOX INSTALLATION
NOTE: SEE "CONCRETE COLLAR DETAIL"



IN COMPACTED EARTH



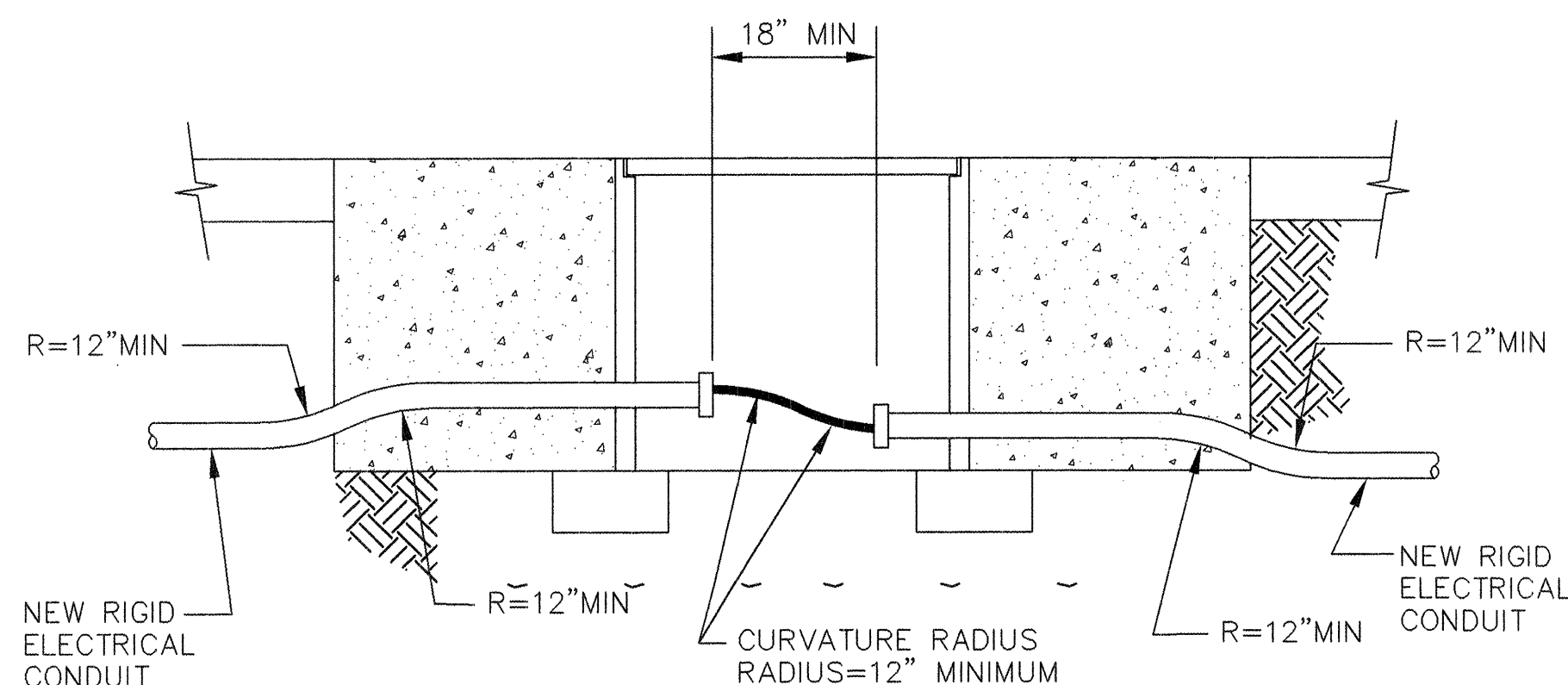
IN ASPHALT PAVEMENTS



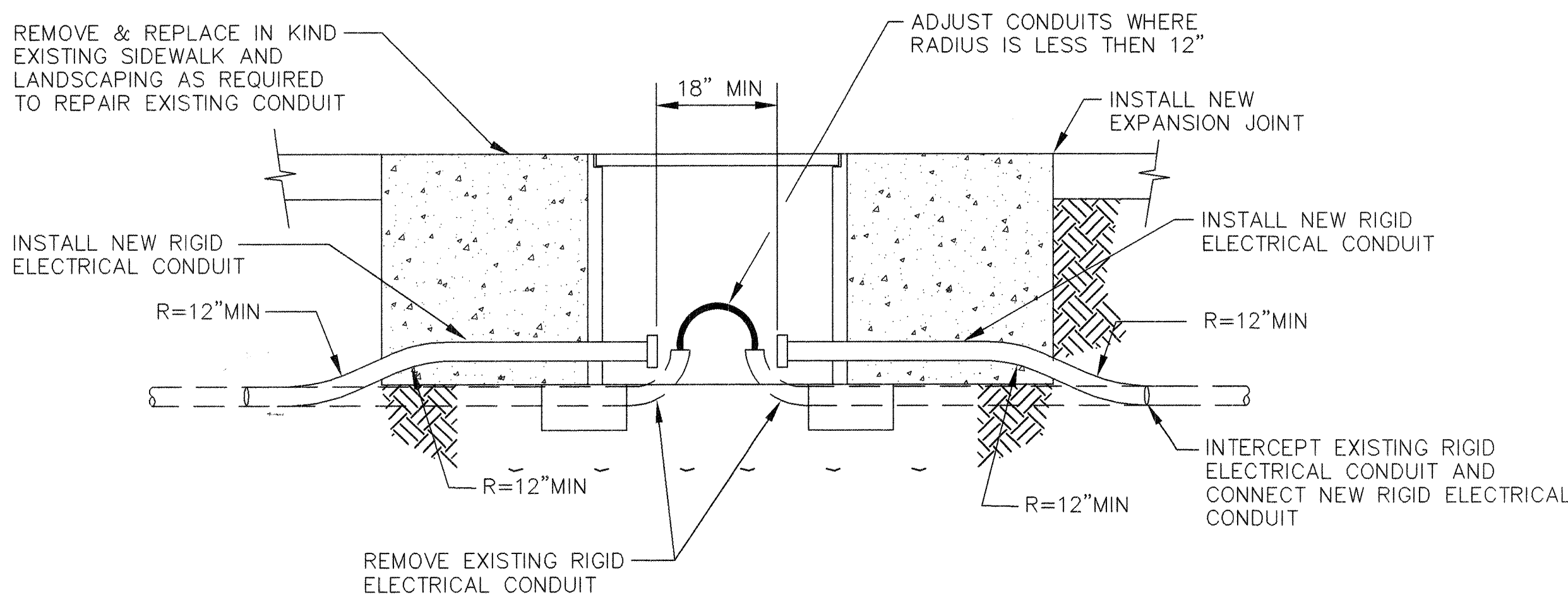
IN CONCRETE PAVEMENTS

CONCRETE COLLAR DETAILS

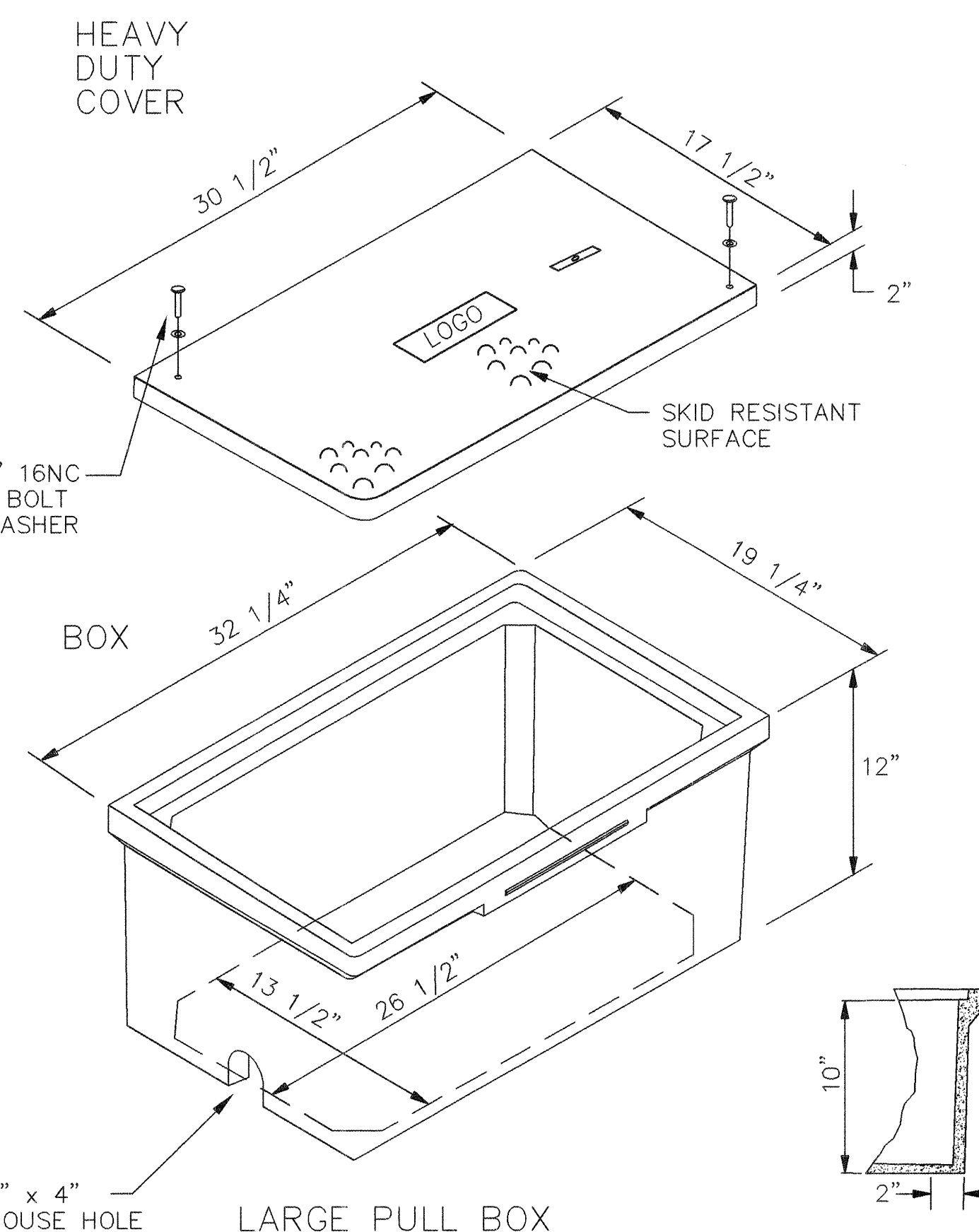
NOTE: THE CONCRETE COLLAR FOR THE PULL BOXES WILL BE CONSIDERED INCIDENTAL TO THE PULL BOX BID ITEMS



TRAFFIC SIGNAL PULL BOX (TYPICAL)
NEW CONDUIT INSTALLATION

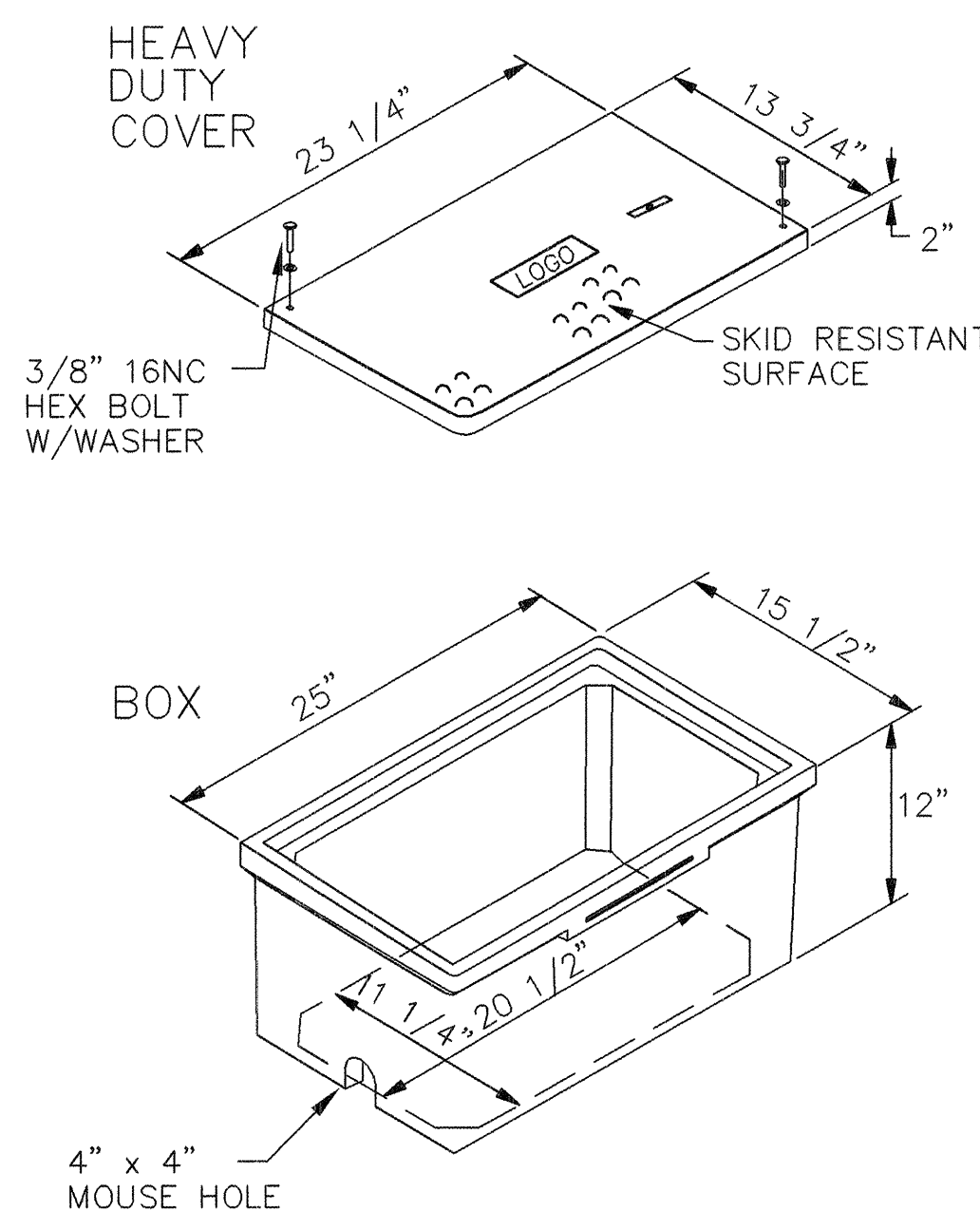


TRAFFIC SIGNAL PULL BOX (TYPICAL)
RETROFIT INSTALLATION



LARGE PULL BOX

PULL BOX DETAILS



STANDARD PULL BOX

NOTES FOR HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVERS

1. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1,700 PSI, FLEXURAL STRENGTH - 7,500 PSI.
2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF 22,568 LBS OVER 10" SQUARE (225 PSI).
3. PULL BOX TYPE AND LOGO SHALL BE APPROVED BY THE PROJECT MANAGER.
4. THE DIMENSIONS OF THE PULL BOXES SHOWN ARE NOMINAL DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER.
5. ELECTRICAL PULL BOX (STANDARD) SHALL BE A HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVER MEASURING 13 3/4" x 23 1/4" x 2".

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ENGINEERING GROUP

TITLE: **LA CUEVA TOWN CENTER**
INTERSECTION OF WYOMING AND CARMEL
PULL BOX DETAILS

DESIGN REVIEW COMMITTEE
APPROVE
AUG 13 1999
CITY ENGINEER

CITY ENGINEER APPROVAL
APPROVE
AUG 20 1999
CITY ENGINEER

LAST DESIGN UPDATE
MO./DAY/YR.
MO./DAY/YR.

CITY PROJECT NO.

611081

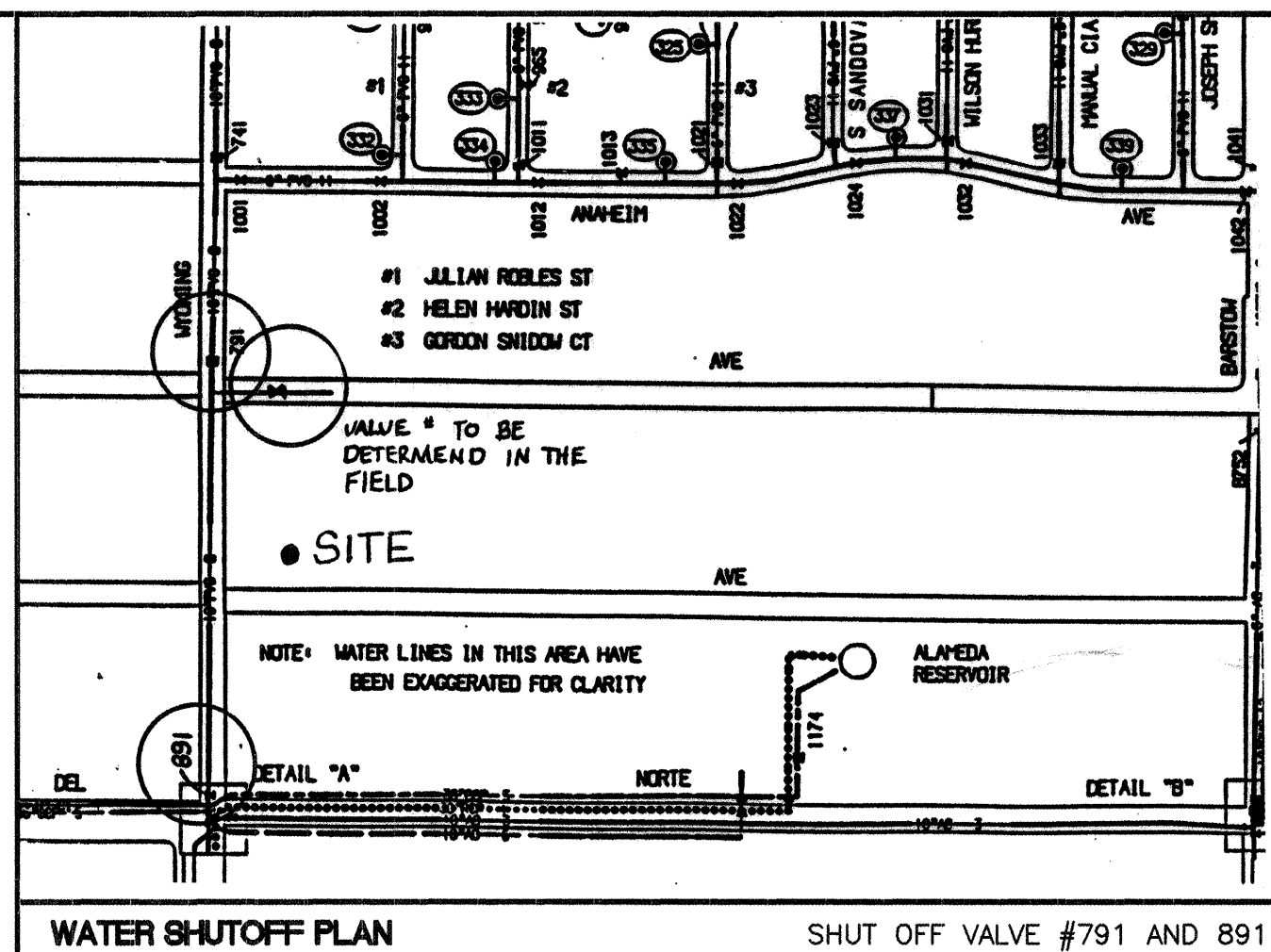
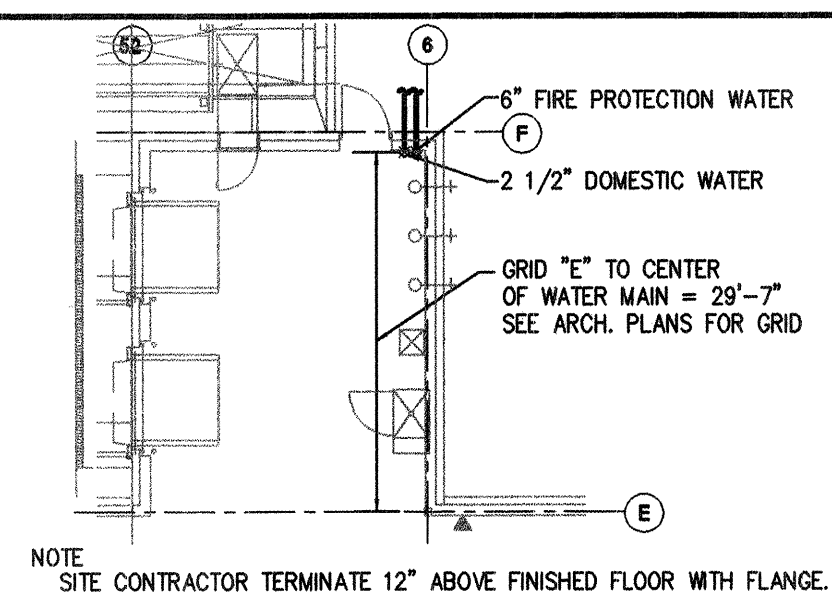
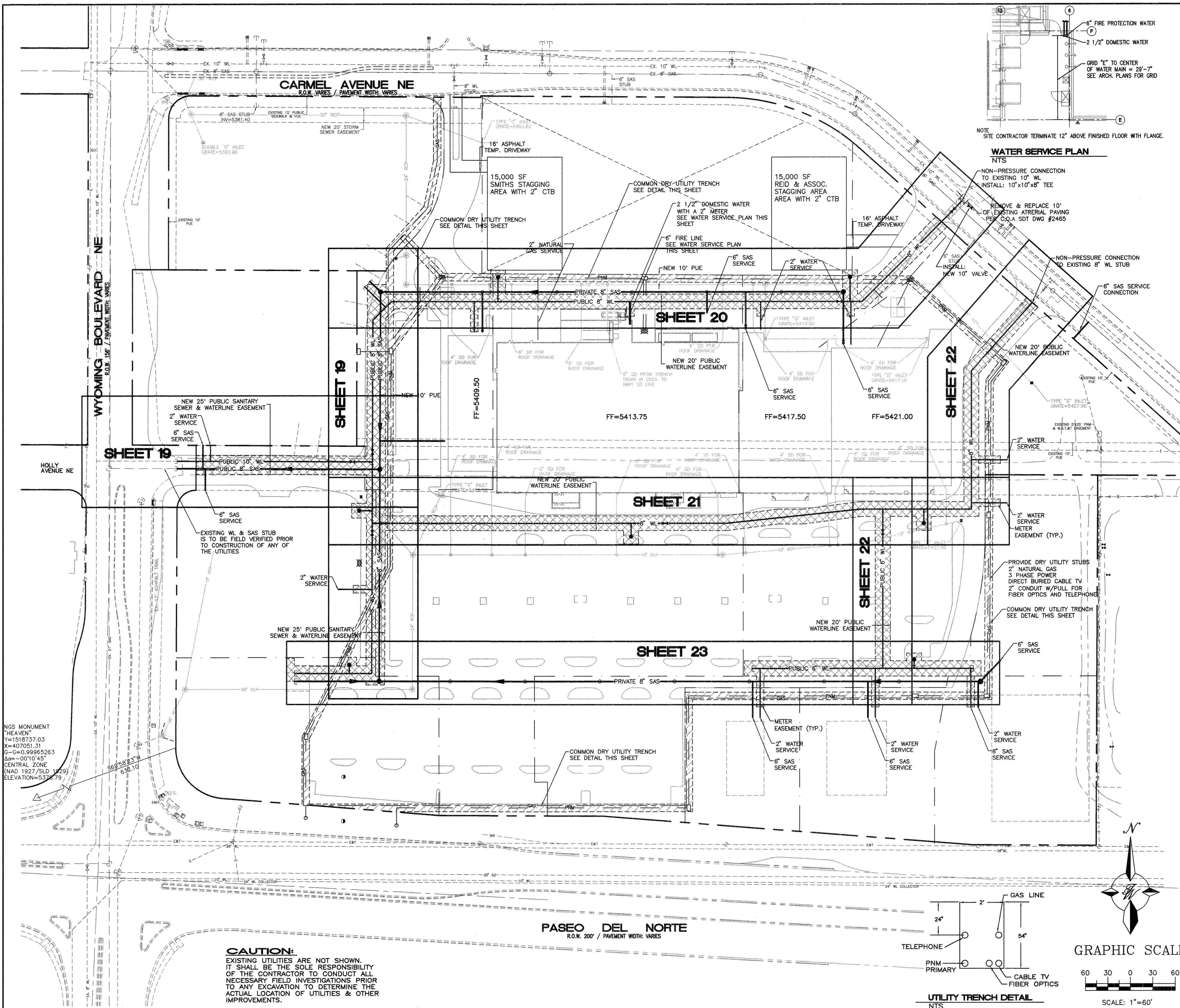
ZONE MAP NO.
C-19-Z

SHEET 16 OF 26

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	SL/D/DA/VE	NGS MONUMENT	"HEAVEN"	FIELD NOTES	NO.	ENGINEER'S SEAL	NO.
WORK STATION	DATA	CENTRAL STATION	DATA	DATE	DATE	DATE	DATE
STAKED BY	ALS	NM STATE PLANE COORDINATES					
ASSIGNED BY	S. Moya	Central Zone					
FIELD VERIFICATION	ALS	Y=1518737.03					
DATE	08	X=407051.31					
CORRECTED BY	ALS	G-G=0.99965263					
DATE	08	DELTA=-00'10.45"					
RECORDED BY		ELEVATION=5378.79					
NO.							

ENGINEER'S SEAL
RAY BOWEN
PROFESSIONAL ENGINEER
1000
1000

REVISIONS	DATE	BY
DESIGN	3-99	
EDG	3-99	
EDG	3-99	
RRB	3-99	



- NOTES:
1. ONLY WATER SYSTEMS PERSONNEL ARE AUTHORIZED TO OPERATE VALVES.
 2. NOTIFY CITY OF ALBUQUERQUE, WATER SYSTEMS DIVISION (PHONE 857-8200) FIVE (5) WORKING DAYS IN ADVANCE OF NEEDING EXECUTION OF THE WATER SHUT OFF PLAN
 3. APPROXIMATE SHUT OFF TIME WILL BE 24 HOURS.
 4. SHUTOFF THE VALVES INDICATED IN THE ABOVE PLAN

NOTICE TO CONTRACTORS

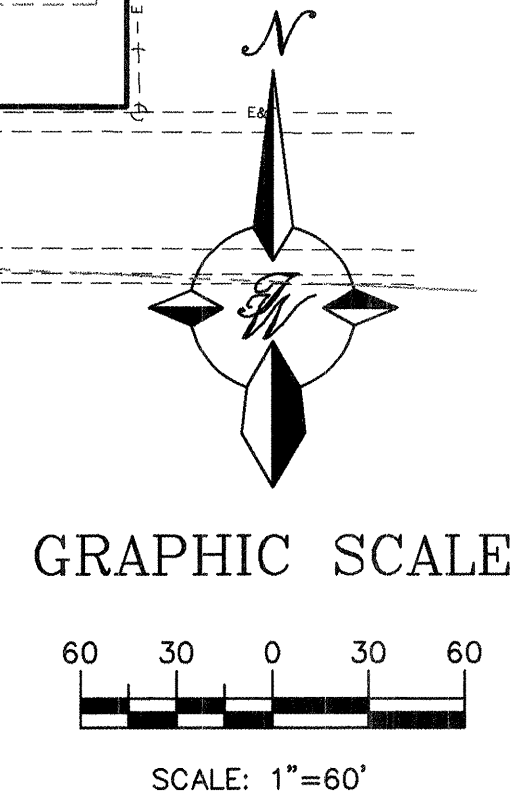
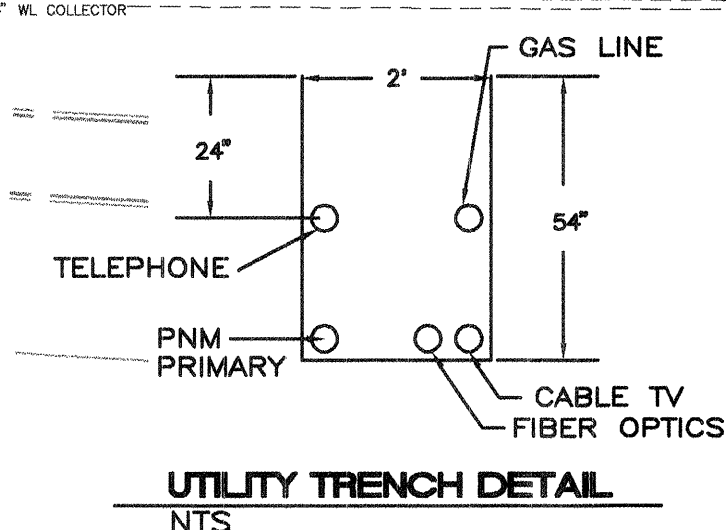
1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1985.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
7. WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE UTILITY STUBS 5' FROM BUILDING

GENERAL NOTES:

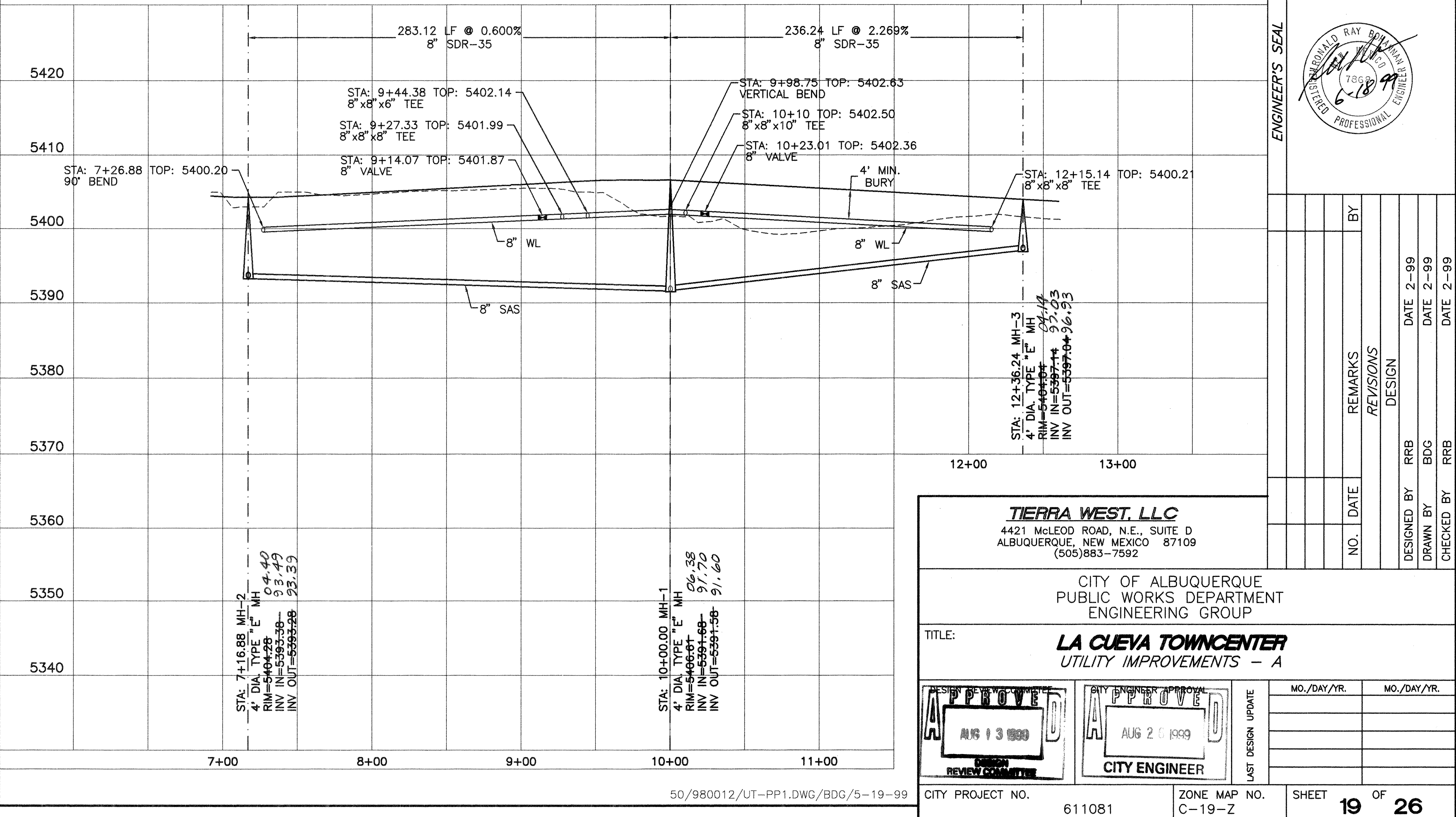
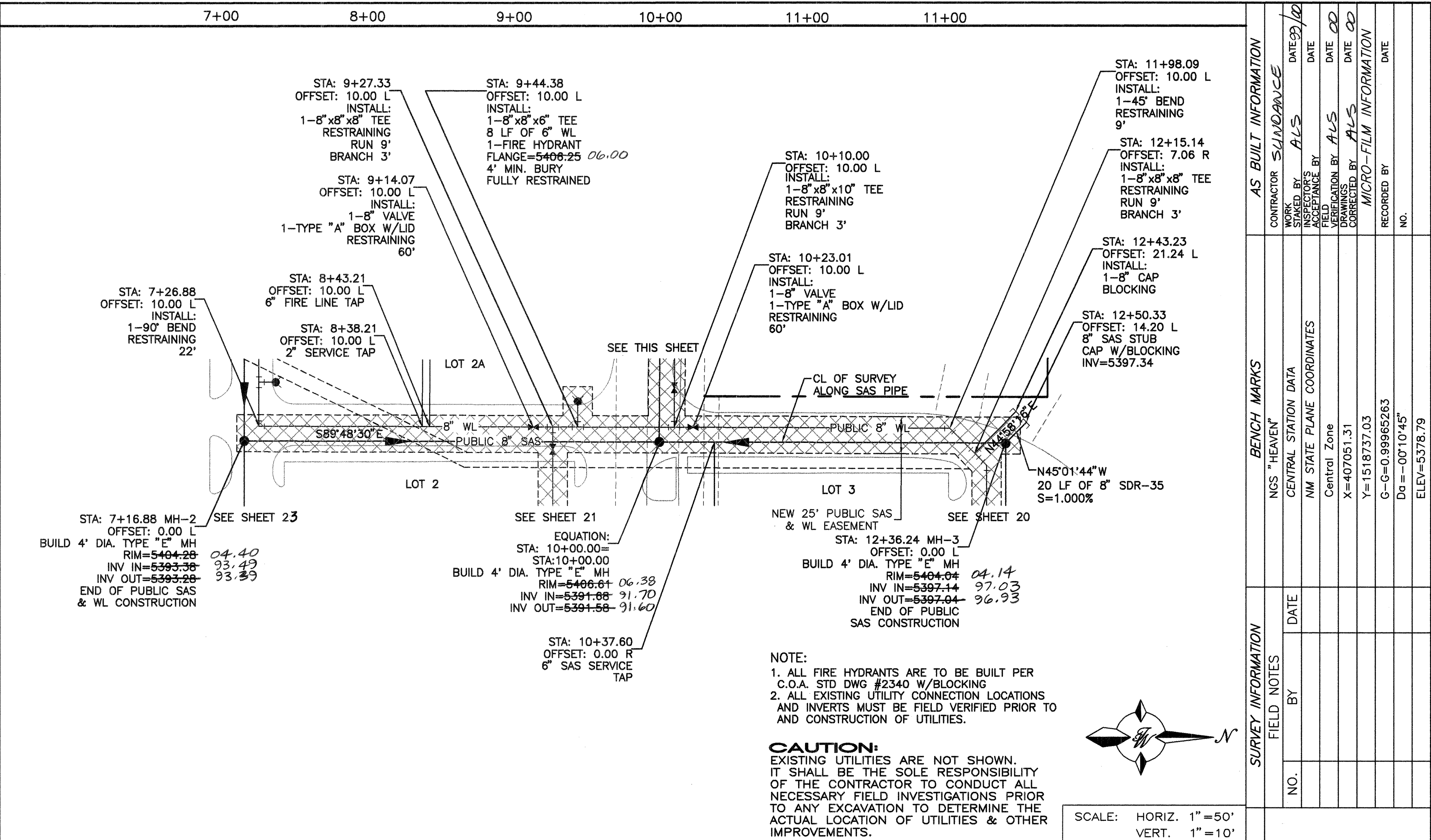
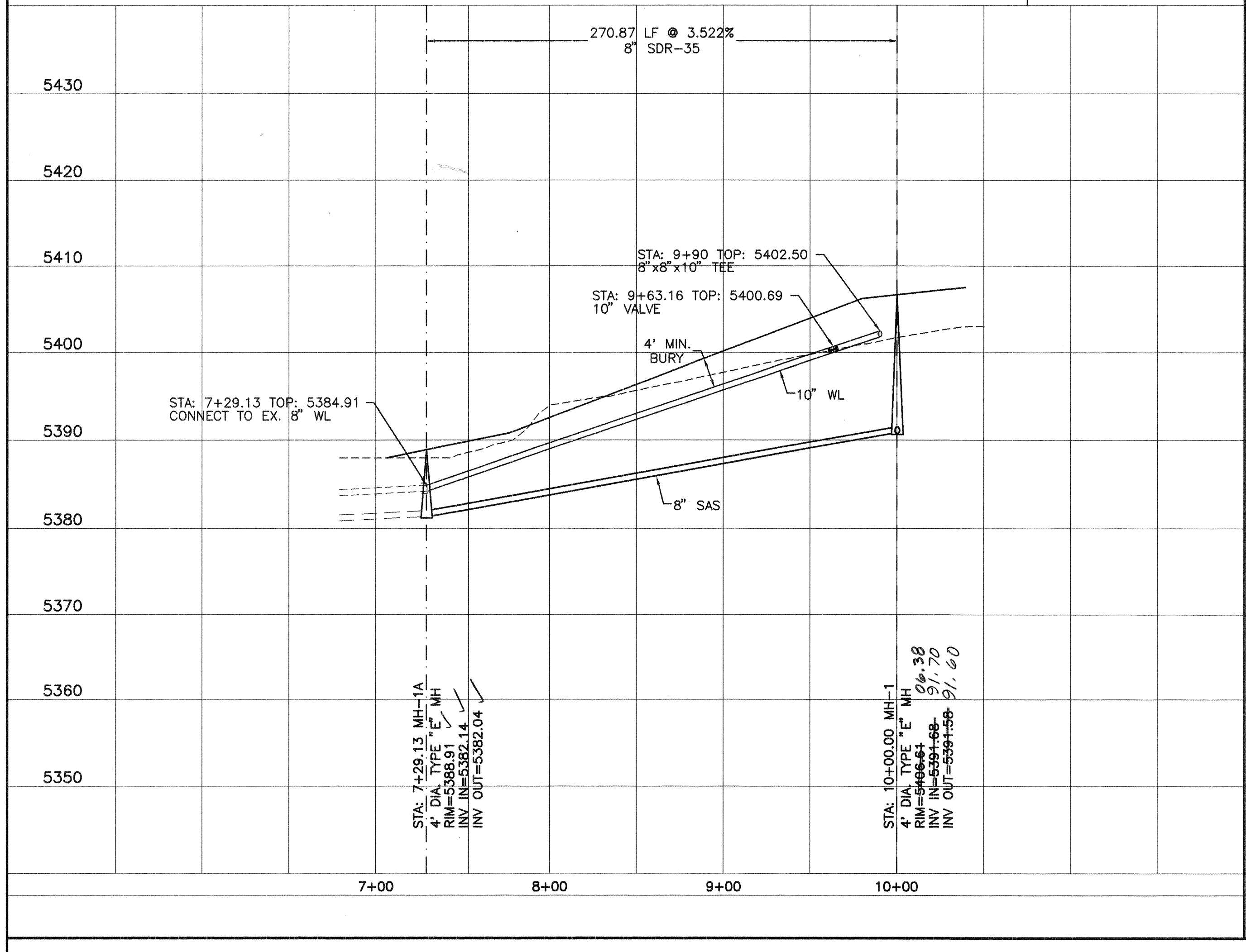
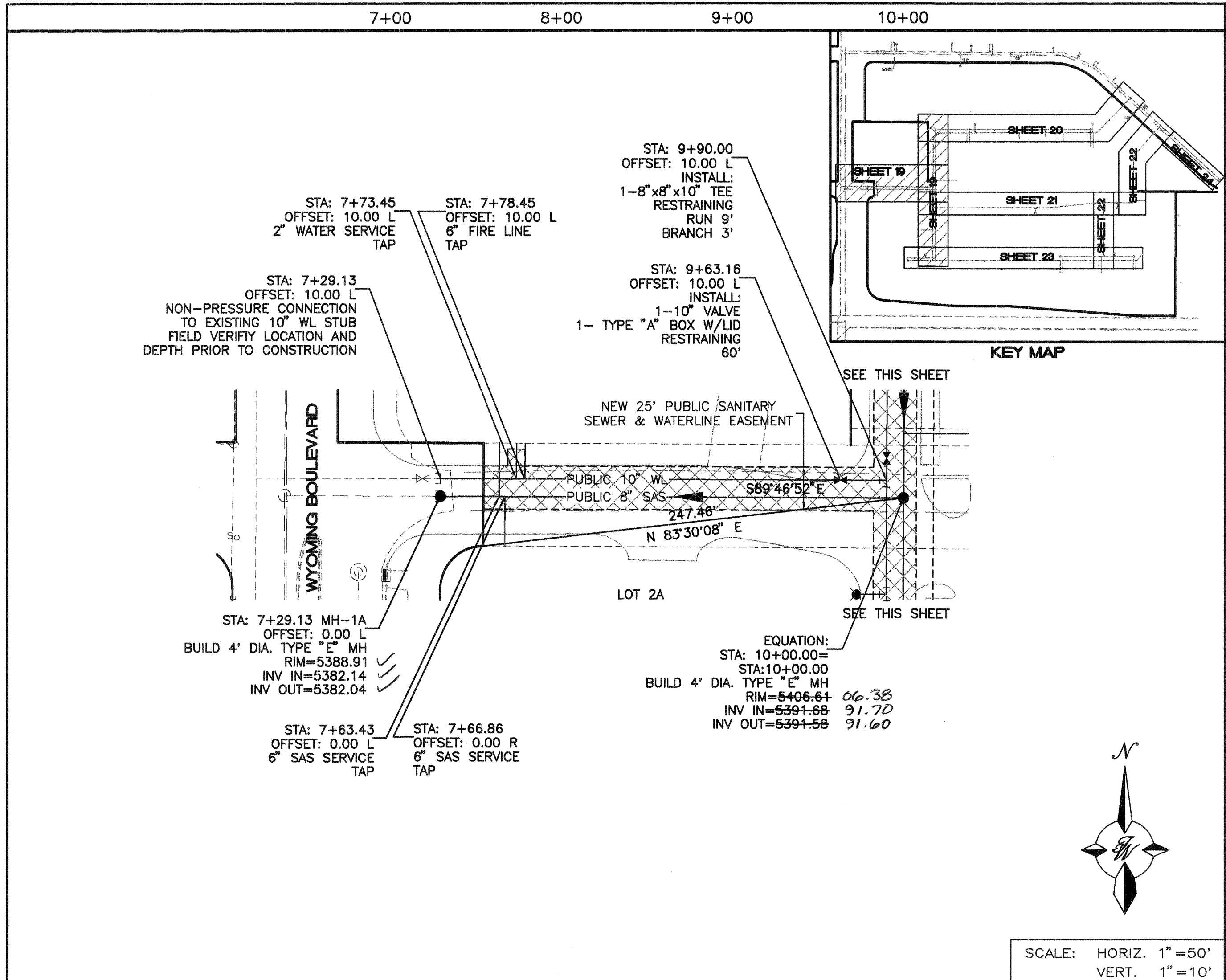
1. 4" MINIMUM BURY REQUIRED FOR ALL UTILITIES UNLESS OTHERWISE NOTED.
2. REFERENCE ARCHITECTURAL PLANS FOR WATER LINE RISER LOCATIONS.
3. CLEAN OUTS ARE TO BE BUILT PER UNIFORM PLUMBING CODE STANDARDS.
4. ALL BLOCKING IS PER CITY OF ALBUQUERQUE STANDARD DWG. 2320.
5. ALL PIPE MATERIAL TO BE USED PER UPC.
6. THERE WILL BE A BLANKET DRAINAGE ESMT. ACROSS THE SITE FOR CROSS LOT DRAINAGE PURPOSES.
7. ALL PRIVATE WORK IS TO BE BUILT AS PER SMITHS SPECIFICATIONS.
8. SEE MASTER STORM SEWER PLAN FOR THE CONSTRUCTION DATA.

LEGEND

○	PROPOSED CLEAN OUT
---	EXISTING SANITARY SEWER LINE
---	EXISTING WATER LINE
---	EXISTING CURB & GUTTER
---	PROPOSED SANITARY SEWER LINE
---	PROPOSED SANITARY SEWER LINE
---	PROPOSED WATERLINE
---	BOUNDARY LINE
---	EASEMENT
---	CITY OF ALBUQ. EASEMENT
---	DRY UTILITY EASEMENT (PUE)



ENGINEER'S SEAL RONALD R. BOHANNAN P.E. #7868	LA CUEVA TOWN CENTER	DRAWN BY BGG
	MASTER UTILITY PLAN	DATE 5-12-99
	TERRA WEST, LLC 4421 McLEOD ROAD, N.E., SUITE D ALBUQUERQUE, NEW MEXICO 87109 (505)883-7592	9812MU.DWG
		SHEET # 18 OF 26 JOB # 980012



TIERRA WEST, LLC
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: **LA CUEVA TOWNCENTER**
UTILITY IMPROVEMENTS - A

DESIGNER APPROVAL

AUG 13 1999

DESIGNER

BUY ENGINEER APPROVAL

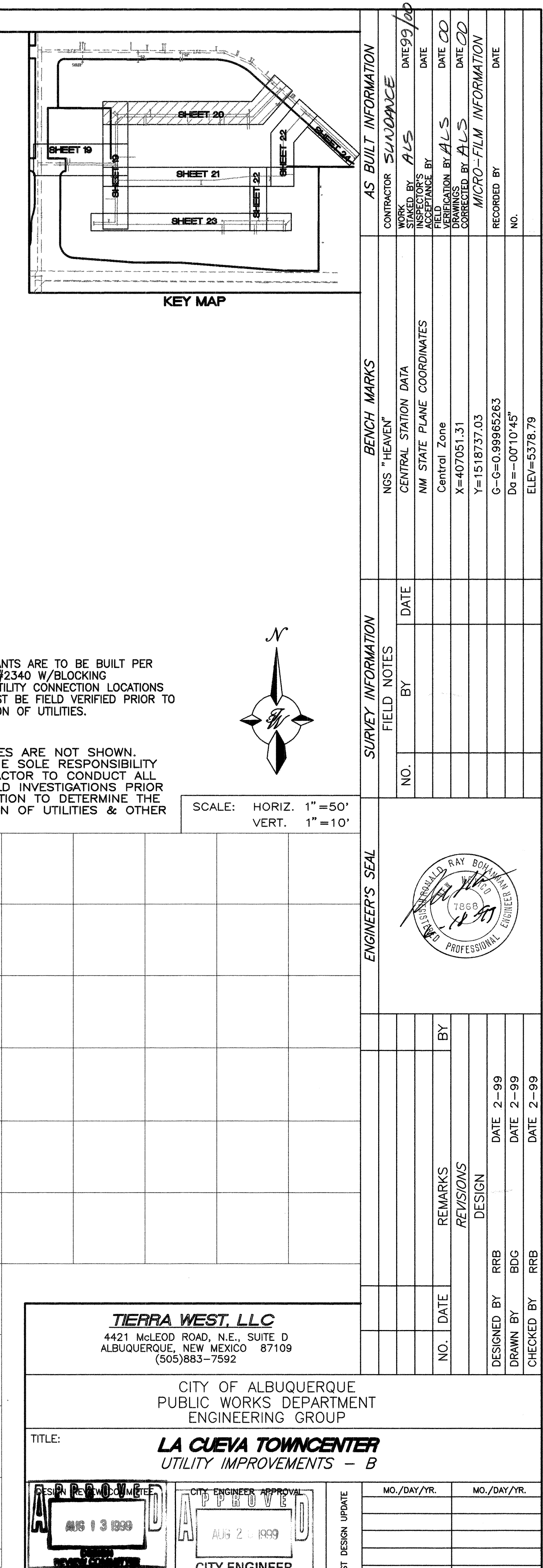
AUG 26 1999

CITY ENGINEER

LAST DESIGN UPDATE

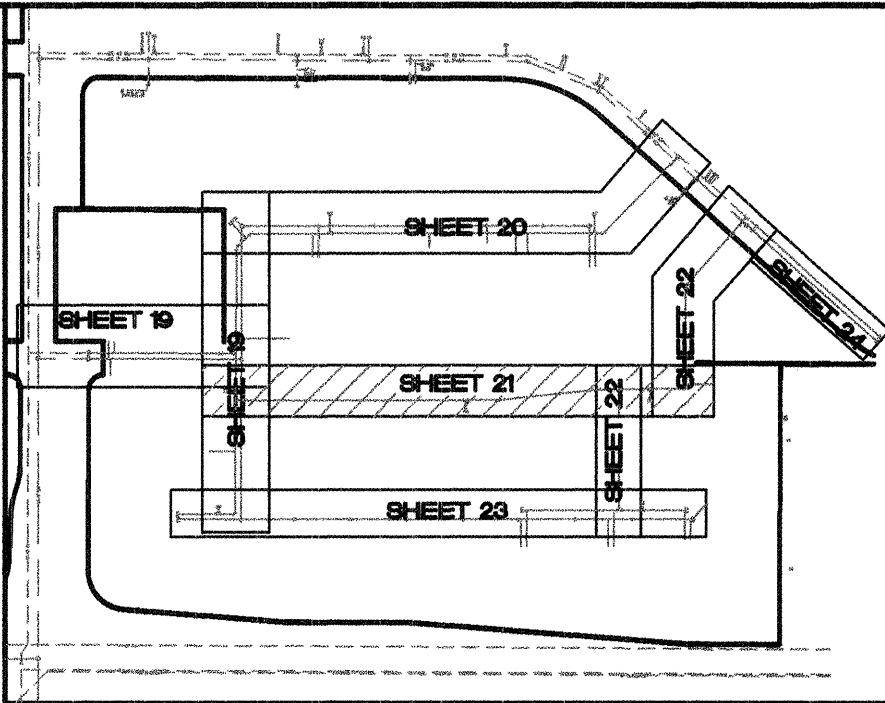
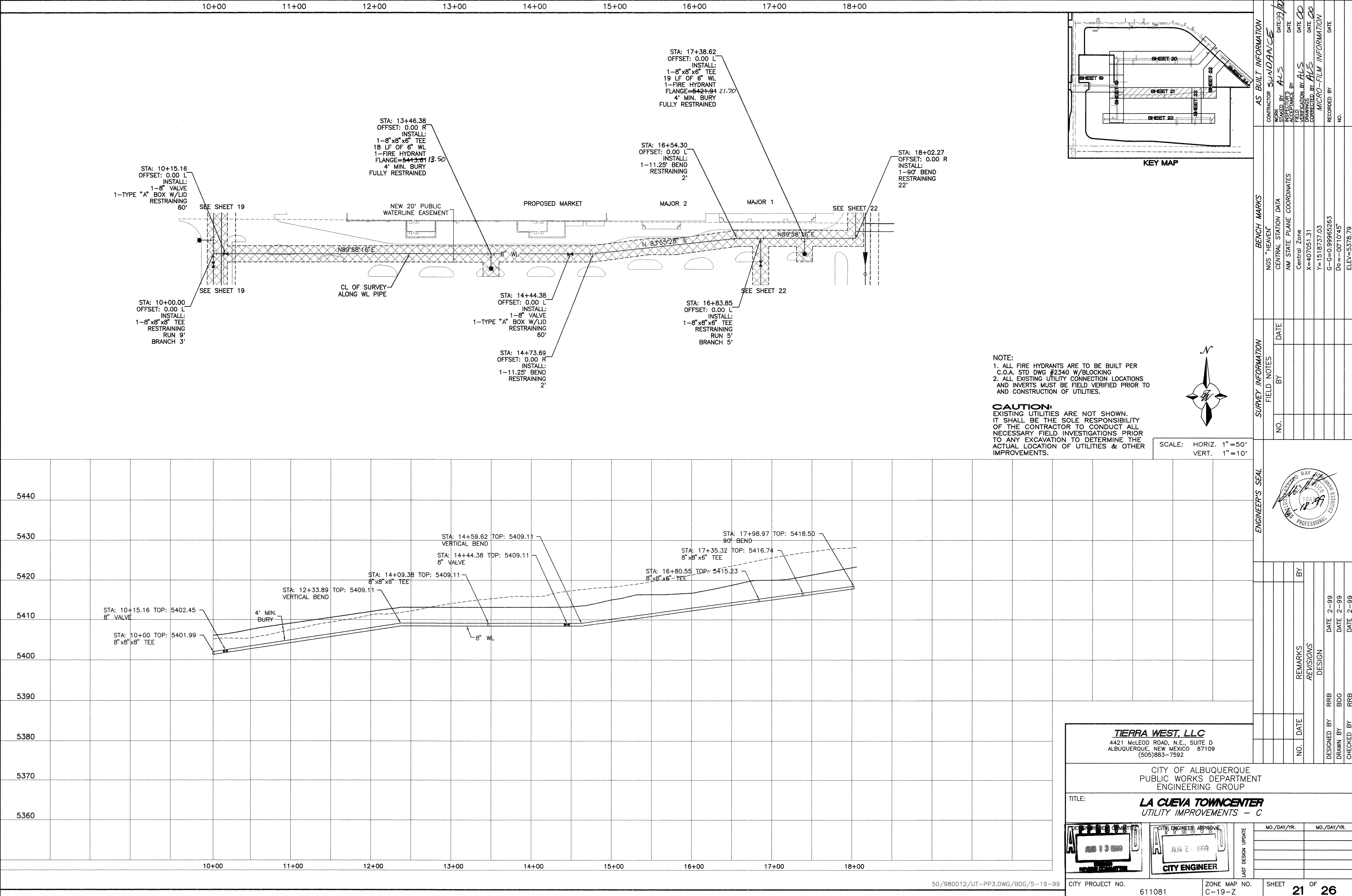
MO./DAY/YR. MO./DAY/YR.

CITY PROJECT NO. 611081 ZONE MAP NO. C-19-Z SHEET 19 OF 26



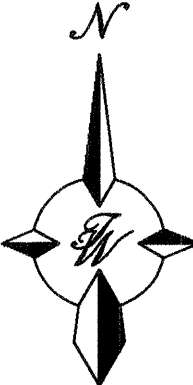
SCALE: HORIZ. 1"=50'
 VERT. 1"=10'

50/980012/UT-PP2.DWG/BDG/5-26-99

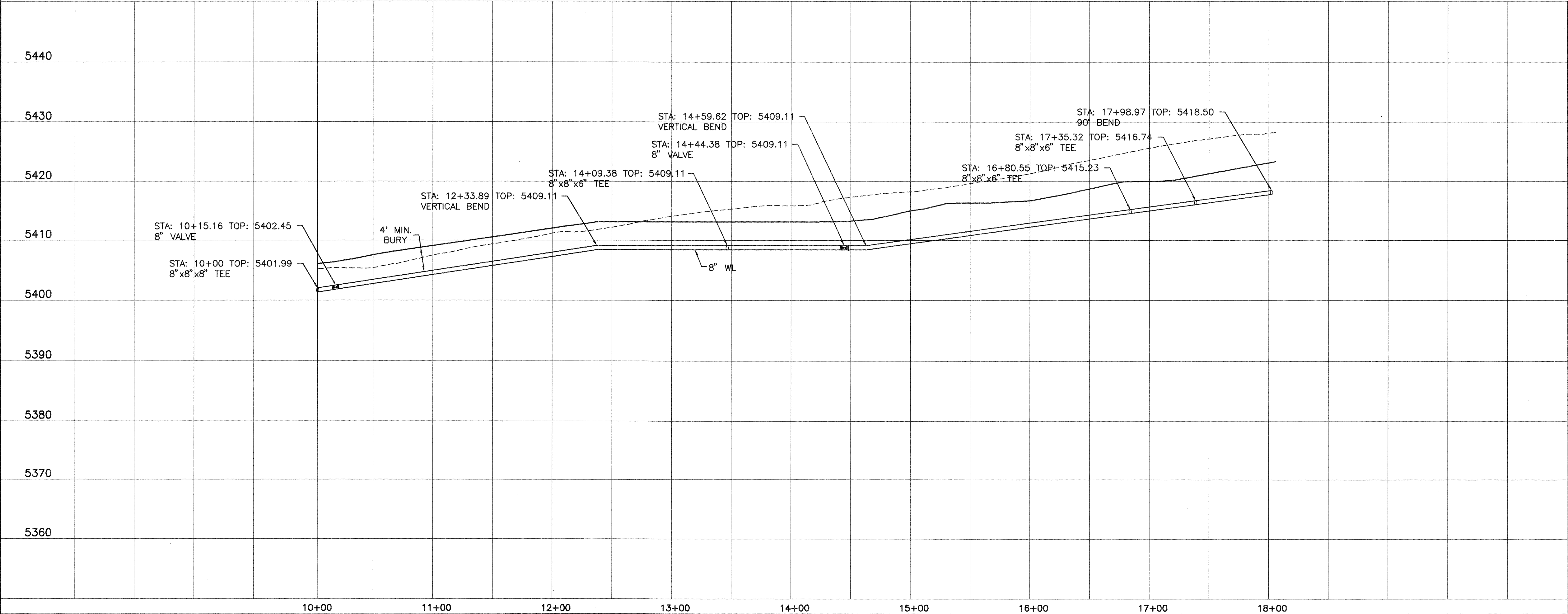


NOTE:
1. ALL FIRE HYDRANTS ARE TO BE BUILT PER C.O.A. STD DWG #2340 W/BLOCKING
2. ALL EXISTING UTILITY CONNECTION LOCATIONS AND INVERTS MUST BE FIELD VERIFIED PRIOR TO AND CONSTRUCTION OF UTILITIES.

CAUTION:
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



SCALE: HORIZ. 1"=50'
VERT. 1"=10'



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:
LA CUEVA TOWNCENTER
UTILITY IMPROVEMENTS - C

DESIGNED BY: RRB
DRAWN BY: BDG
CHECKED BY: RRB

DATE: 2-99
DATE: 2-99
DATE: 2-99

DESIGNED BY: RRB
DRAWN BY: BDG
CHECKED BY: RRB

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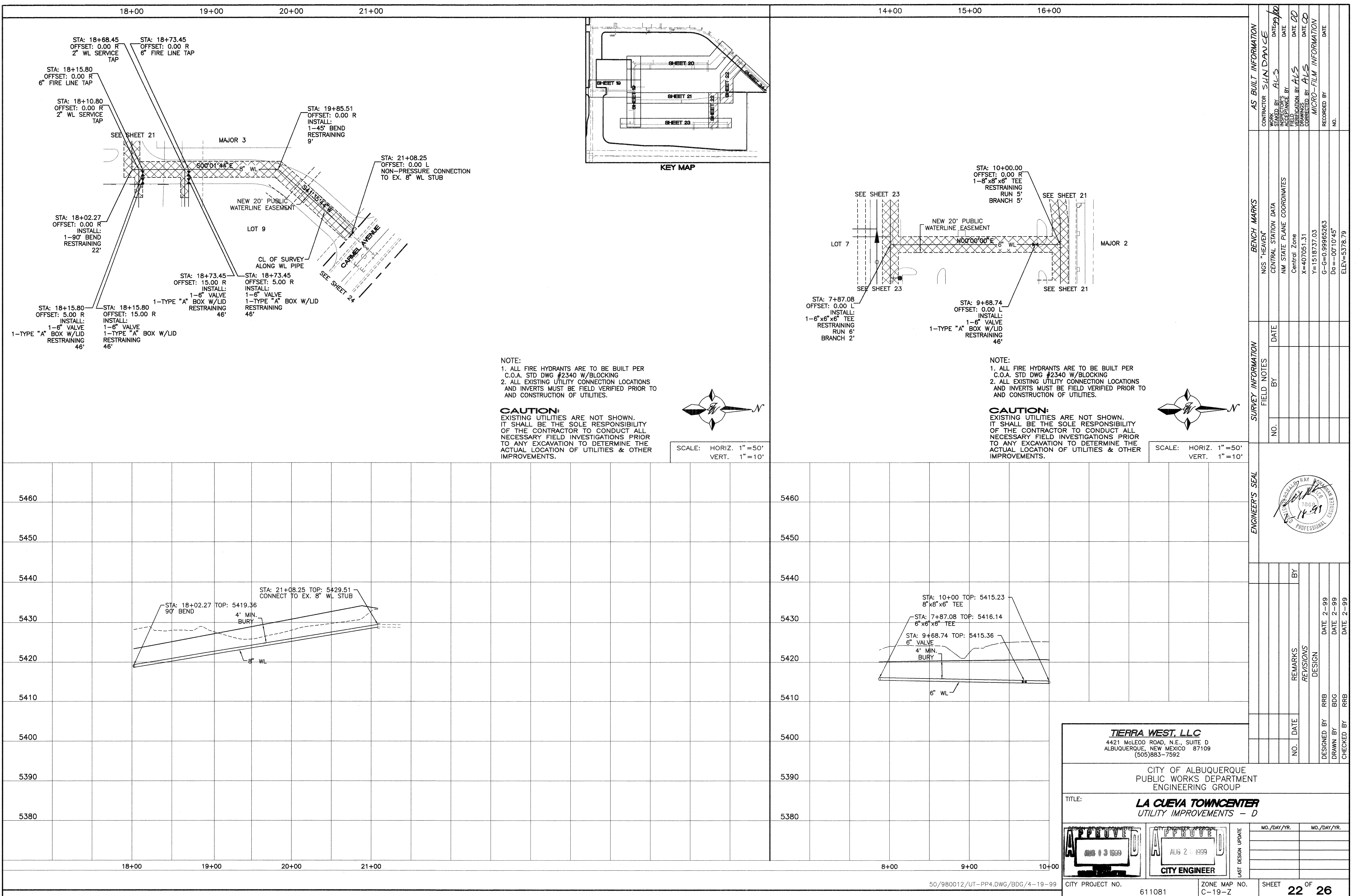
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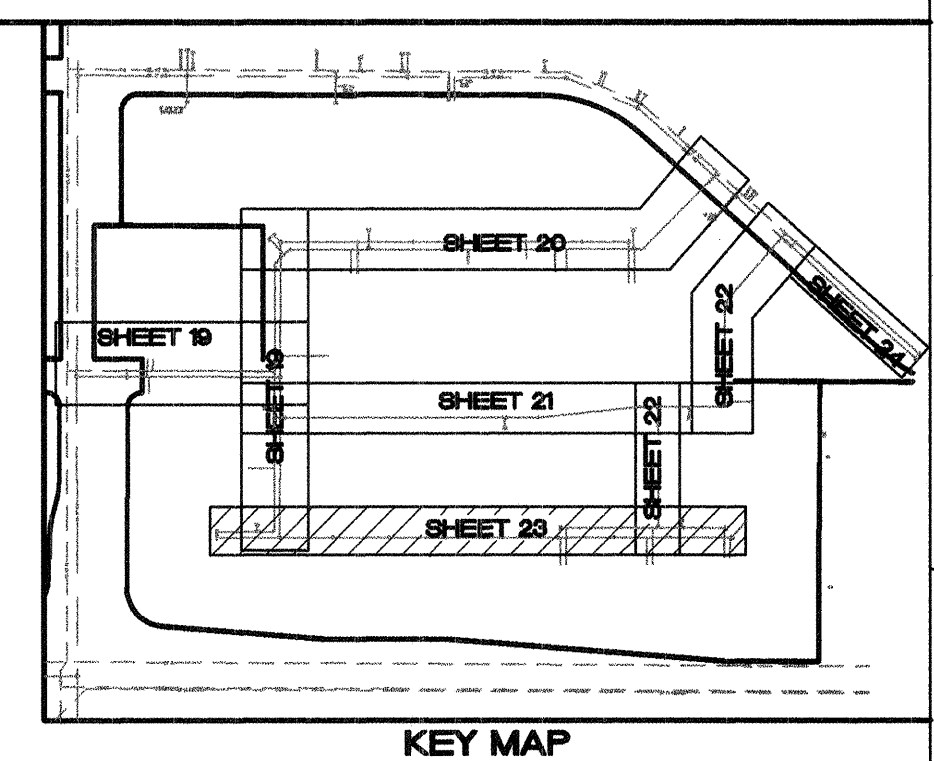
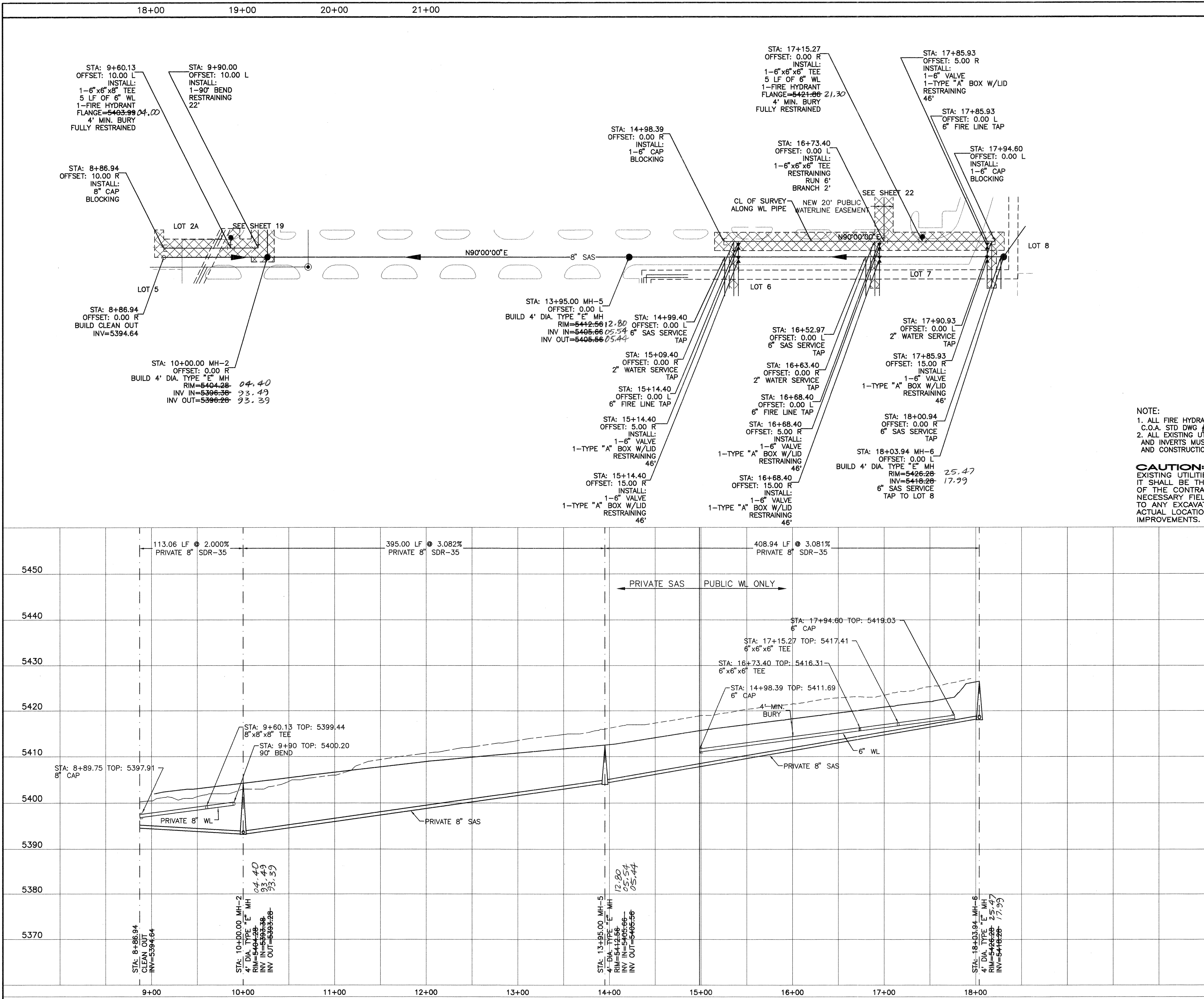
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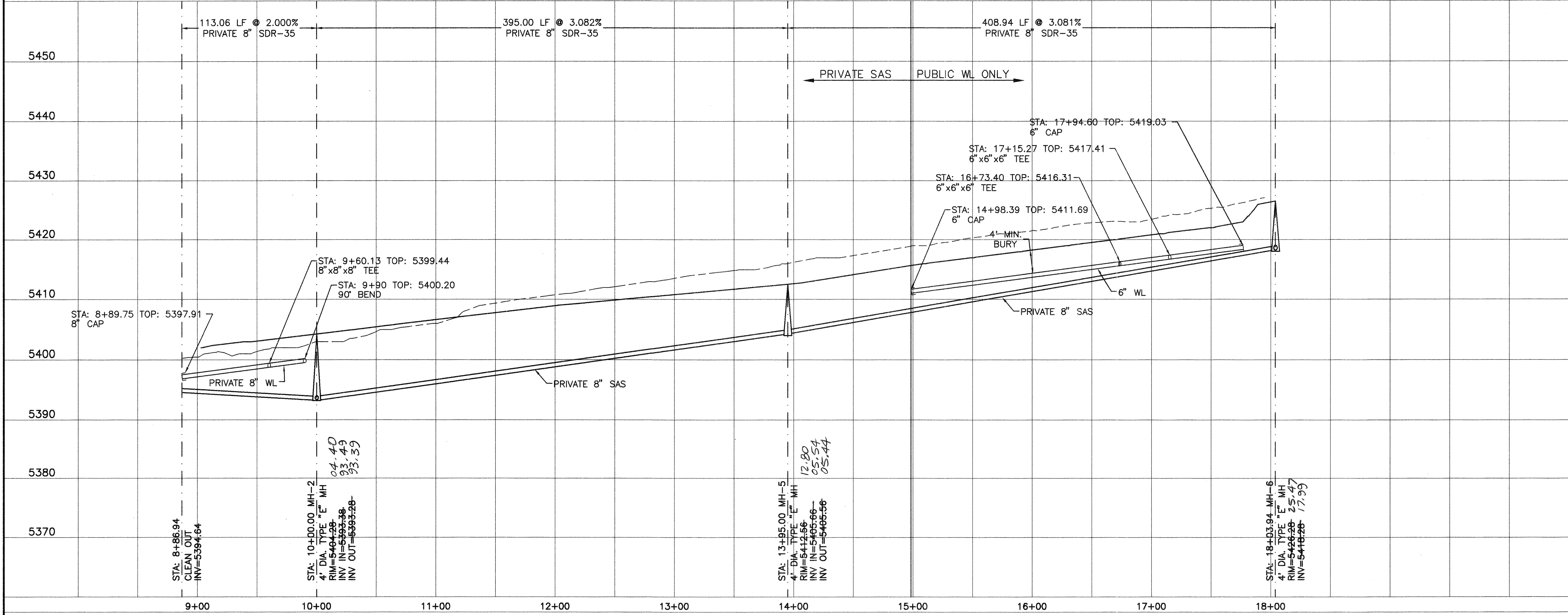
DATE: 2-99
DATE: 2-99
DATE: 2-99





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1. ALL FIRE HYDRANTS ARE TO BE BUILT PER C.O.A. STD DWG #2340 W/BLOCKING
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

LA CUEVA TOWNCENTER
UTILITY IMPROVEMENTS - E

APPROVE
AUG 13 2009

APPROVE
AUG 2 2009
CITY ENGINEER

LAST DESIGN UPDATE

MO./DAY/YR.

MO./DAY/YR.

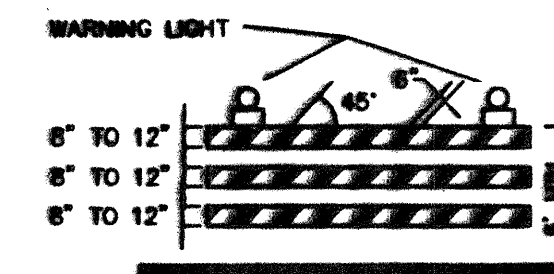
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				FIELD NOTES		NCS "HEAVEN"		CENTRAL STATION DATA		CONTRACTOR		SURVANCE			
				NO.	BY	DATE	INSPECTOR'S	DATE	STAKED BY	DATE					
							FIELD	DATE							
							VERIFICATION	DATE							
							BY	DATE							
							DRAWINGS	DATE							
							CONTRIBUTED	DATE							
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CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

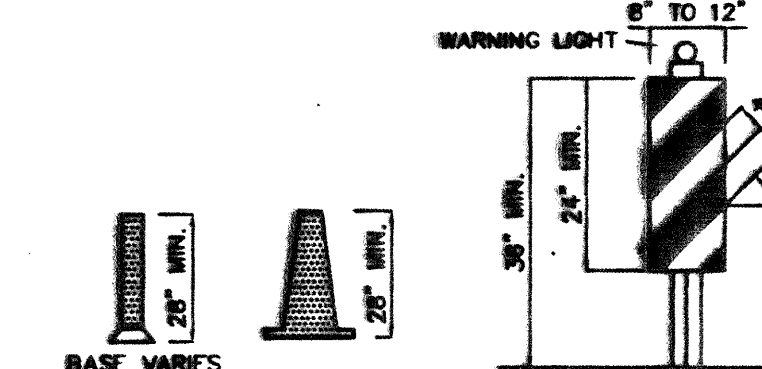
- CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- 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.
- 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.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24-HOUR PER DAY BASIS UNTIL COMPLETED.
- 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.
- 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.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 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.
- 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.
- 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.
- ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

- 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.
- CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
 - STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
 - SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- 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.
- ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.
- TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.

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



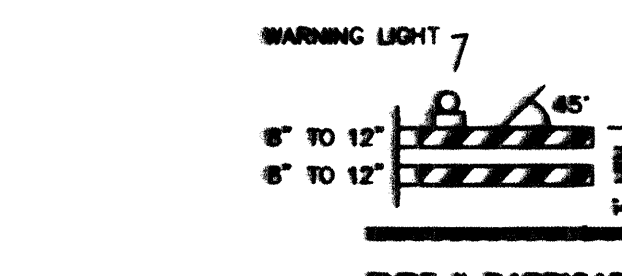
TYPE II BARRICADE



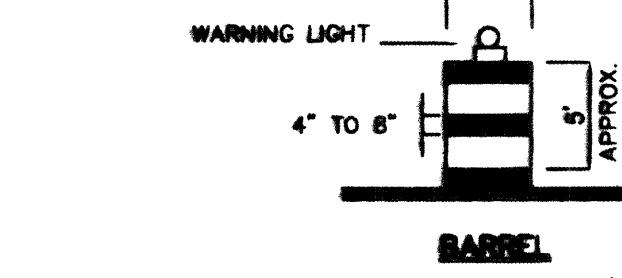
VERTICAL PANEL



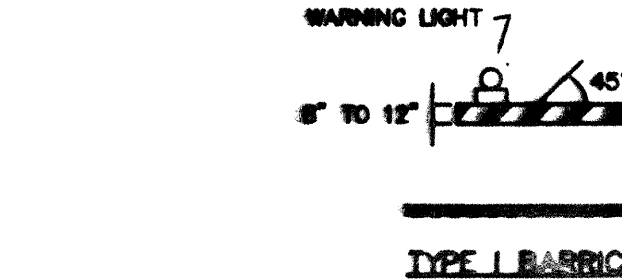
CONES



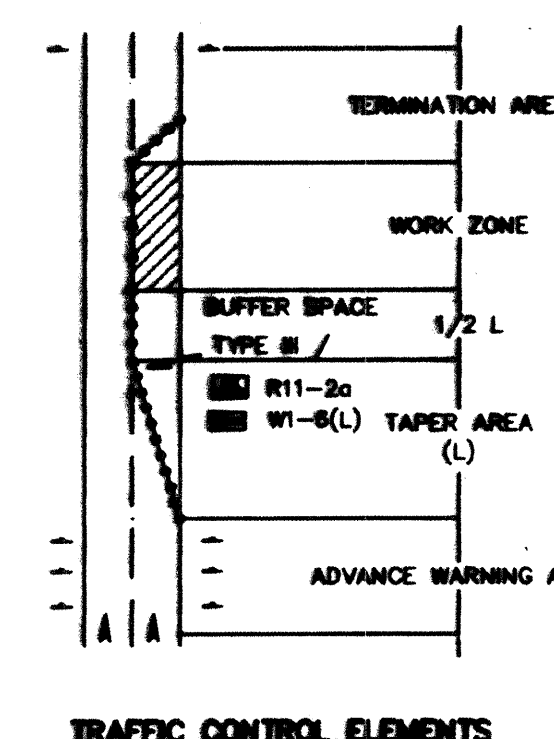
TYPE I BARRICADE



BARREL



TYPE I BARRICADE



TRAFFIC CONTROL ELEMENTS

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 LIMIT (MPH)	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

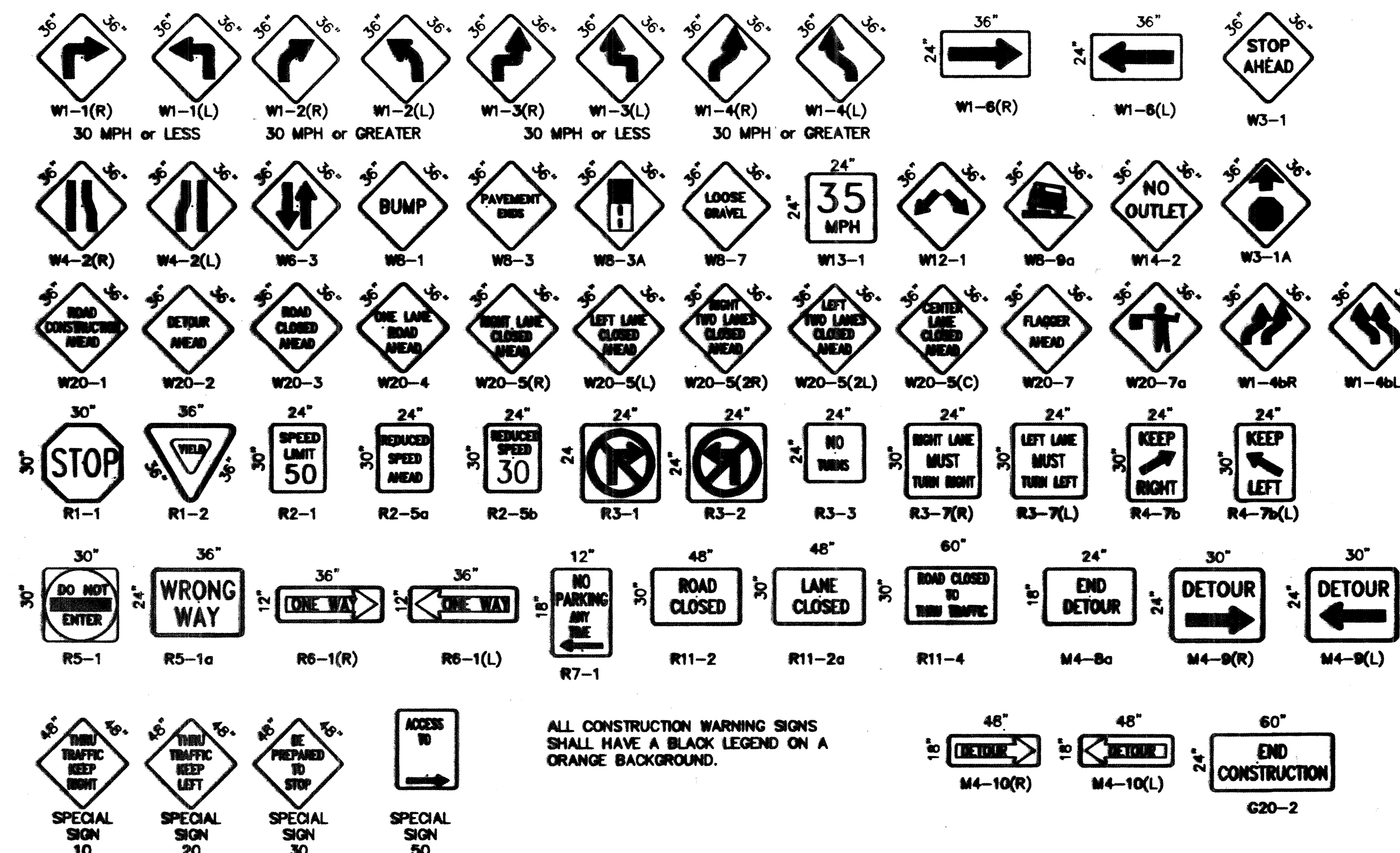
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	L =
40 MPH OR LESS	$L = \frac{W^2}{S}$
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.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
CONSTRUCTION SUPERVISOR	DATE	NO.	BY	DATE	J.D.L.	J.D.L.	J.D.L.	BY	REMARKS
CONTRACTOR	DATE								DESIGN
PROJECT NO.		MAP NO.		SHEET 26 OF 26					