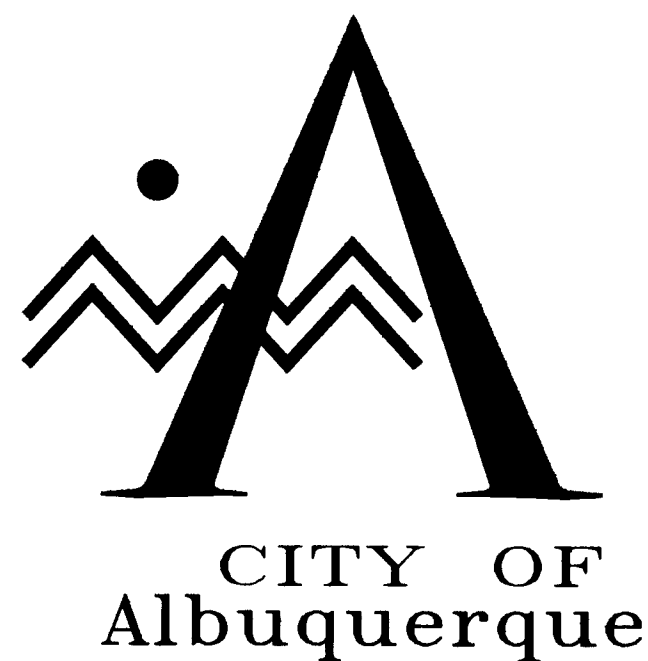




CITY OF ALBUQUERQUE

CONSTRUCTION PLANS FOR

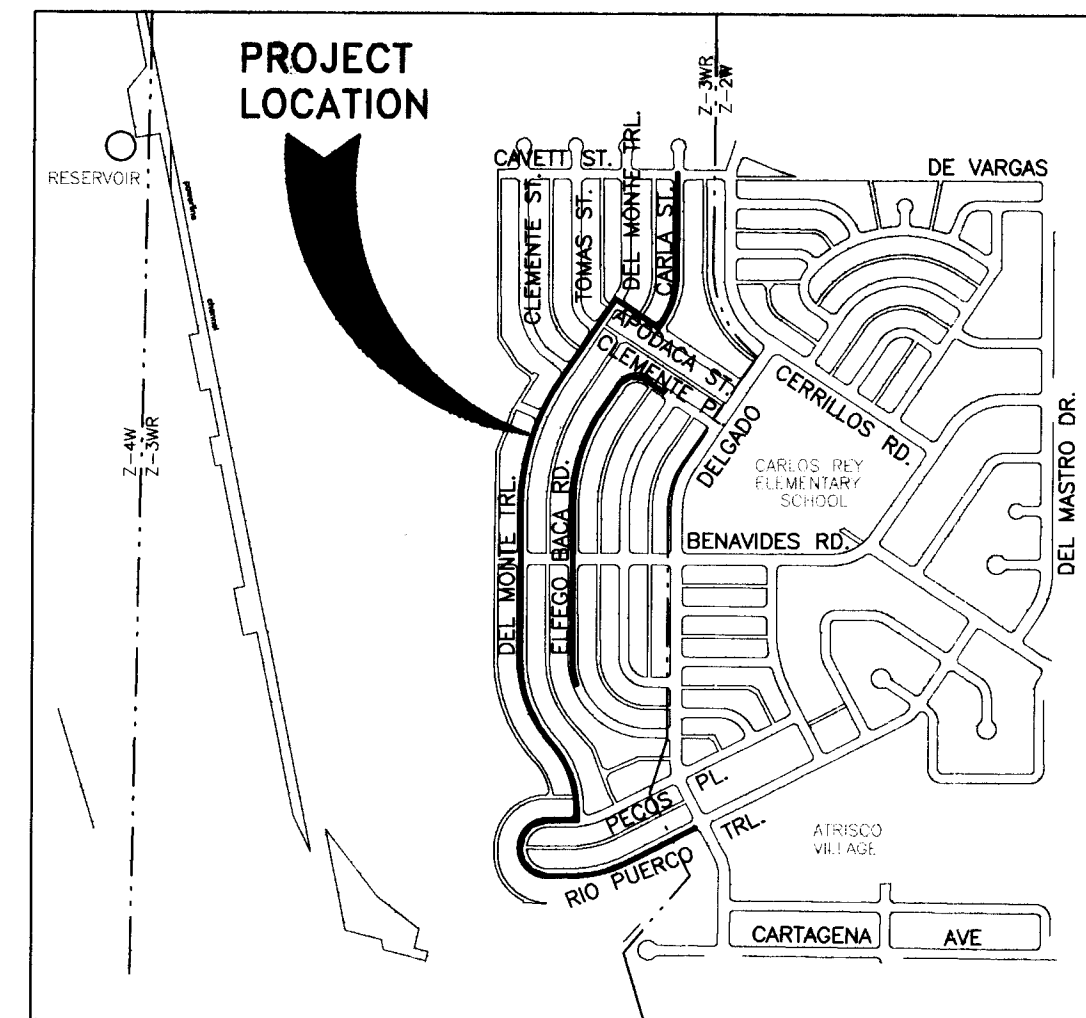
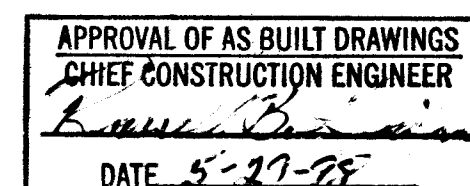
WESTGATE HEIGHTS WATER LINE REPLACEMENT PROJECT

MAY 1997

INDEX OF DRAWINGS

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3	WESTGATE HEIGHTS WATER LINE REPLACEMENT WATER VALVE SHUT OFF PLAN
4	WESTGATE HEIGHTS WATER LINE REPLACEMENT CARLA ST. & APODACA ST. PLAN & PROFILE STA. 10+20.00 TO 21+00.00
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6	WESTGATE HEIGHTS WATER LINE REPLACEMENT DEL MONTE TRL. PLAN & PROFILE STA. 32+00.00 TO 43+00.00
7	WESTGATE HEIGHTS WATER LINE REPLACEMENT DEL MONTE TRL. & PECOS PL. PLAN & PROFILE STA. 43+00.00 TO 54+00.00
8	WESTGATE HEIGHTS WATER LINE REPLACEMENT RIO PUERCO TRL. PLAN & PROFILE STA. 54+00.00 TO 64+35.00
9	WESTGATE HEIGHTS WATER LINE REPLACEMENT CLEMENTE PL. & EL FEGO BACA RD. PLAN & PROFILE STA. 10+00.00 TO 20+00.00
10	WESTGATE HEIGHTS WATER LINE REPLACEMENT EL FEGO BACA RD. PLAN & PROFILE STA. 20+00.00 TO 28+92.96
11	WESTGATE HEIGHTS WATER LINE REPLACEMENT PAVING DETAILS
12	WESTGATE HEIGHTS WATER LINE REPLACEMENT RESTRAINED JOINT DETAILS
13	COA SIGNING & CONSTRUCTION TRAFFIC CONTROL STANDARDS
14	COA TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)

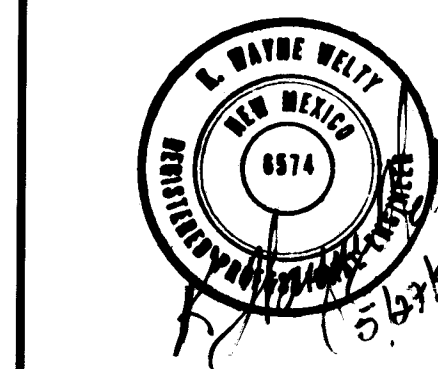
SCANNED BY
BY L. SON



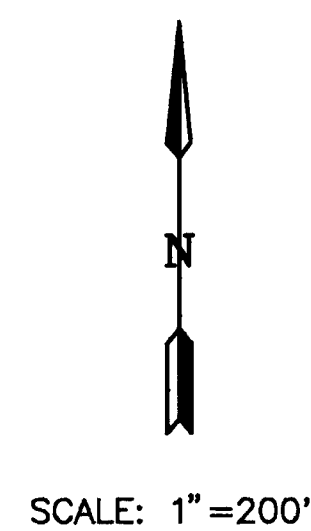
VICINITY MAP (M-8)
NOT TO SCALE

GENERAL NOTES

- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT N.M. ONE-CALL SYSTEM, INC., 260-1990, FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL ALSO CALL TRAFFIC ENGINEERING AT 857-8000 FOR LOCATION OF TRAFFIC INTERCONNECT WIRING AND OTHER TRAFFIC SIGNAL EQUIPMENT.
- 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 (AS AMENDED THROUGH UPDATE #6.) REFERENCED TO HEREIN AS THE "STANDARD SPECIFICATIONS".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF WATER SHUTOFF. AT LEAST (5) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION, 857-8200, TO INITIATE IMPLEMENTATION OF THE NON-PRESSURIZED CONNECTION PLAN.
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES HAS BEEN DETERMINED BY INFORMATION PROVIDED BY OTHERS, AND SHALL BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND SIZE OF ALL EXISTING UTILITY LINES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES RESULTING FROM FAILURE TO LOCATE ANY AND ALL UTILITIES.
- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL UTILITIES EXPOSED DURING TRENCHING AND OTHER CONSTRUCTION OPERATIONS. ALL CONSTRUCTION ACTIVITIES INVOLVING GAS, POWER, WATER, FIBER OPTIC, TRAFFIC SIGNAL EQUIPMENT, AND/OR OTHER UTILITY LINES SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY PRIOR TO ANY DISTURBANCE. NO UTILITY SERVICE SHALL BE DISRUPTED WITHOUT FIRST NOTIFYING ALL AFFECTED PARTIES 48 HOURS IN ADVANCE.
- THE CONTRACTOR SHALL NOTIFY WATER UTILITY DIVISION OF PUBLIC WORKS (PH. 857-8200) AND THE CITY OF ALBUQUERQUE FIRE DEPARTMENT AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OF ANY DAY THAT FIRE HYDRANTS WILL BE TAKEN OUT OF AND RETURNED TO SERVICE. REFER TO SECTION 18 (GENERAL CONDITIONS) OF THE SPECIFICATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY ALL WATERLINE CONNECTIONS TO EXISTING FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO ALLOW OBTAINING CORRECT ADAPTERS AND OTHER FITTINGS.
- THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING PAVEMENTS, PAVEMENT MARKINGS, CURB & GUTTER, DRIVE PADS, WHEEL CHAIR RAMPS, AND SIDEWALKS DURING CONSTRUCTION, APART FROM THOSE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE PER C.O.A. STANDARDS AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AND MAINTAINING ALL EXISTING MONUMENTATION CONTROLS. IN THE EVENT OF INADVERTENT DESTRUCTION OR ALTERATION, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE CITY CHIEF SURVEYOR.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS IN AN ENVIRONMENTALLY ACCEPTABLE MANNER. ALL SALVAGED MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH SECTION 801.15 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY WATER SERVICE IS TO BE PROVIDED FOR ANY RESIDENCE, SCHOOL OR BUSINESS WHICH WILL BE OUT OF SERVICE MORE THAN FOUR HOURS.
- ALL WATER SERVICE LINES ARE TO BE REPLACED FROM THE NEW MAIN TO THE METER WITH NEW SERVICE LINES OF THE SAME SIZE AS THE METER.
- NEW SERVICE LINES TO BE INSTALLED USING TRENCHLESS TECHNOLOGY, SUCH AS: THE GRICE SYSTEM, HOLE-HOG SYSTEM, OR EQUIVALENT.
- STREET CENTERLINE GRADES SHALL BE RESTORED BY THE CONTRACTOR TO THE EXISTING CENTERLINE GRADES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SMOOTH TRANSITIONS SHALL BE MADE BETWEEN EXISTING PAVEMENT WHICH REMAINS IN PLACE AND PAVEMENT WHICH IS BEING REPLACED.
- ALL WATER VALVE BOXES AND SEWER MANHOLES WITHIN THE NEW PAVEMENT ARE TO BE ADJUSTED TO FINISH GRADE PER COA STANDARD DETAILS.
- ALL WATERLINE REPLACEMENT SHALL HAVE A PAVEMENT CUT WIDTH LIMIT OF 9 FEET FOR PAYMENT OF PAVEMENT REMOVAL AND REPLACEMENT. NO PAYMENT SHALL BE MADE FOR PAVEMENT, OR CURB & GUTTER REMOVAL AND REPLACEMENT ASSOCIATED WITH THE REPLACEMENT OF WATER SERVICES.
- ALL STREET STRIPING AND MARKING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO SAME LOCATION AS EXISTING OR AS INDICATED IN THIS PLAN SET.
- ANY WORK WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY FOUR (24) HOUR CONSTRUCTION.
- THE CONTRACTOR SHALL MAINTAIN ALL TRENCHES IN A SAFE CONDITION PROTECTING THE WORKERS AND THE GENERAL PUBLIC. TRENCH PROTECTION SHALL BE ACCORDANCE WITH O.S.H.A. 29CFR 1926.650 SUBPART P. EXCAVATIONS SHALL BE SLOPED, BRACED OR SHEERED AS REQUIRED BY O.S.H.A. REGULATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY, AND FOR KNOWLEDGE AND COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS. NO ADDITIONAL COMPENSATION WILL BE MADE THEREFOR.

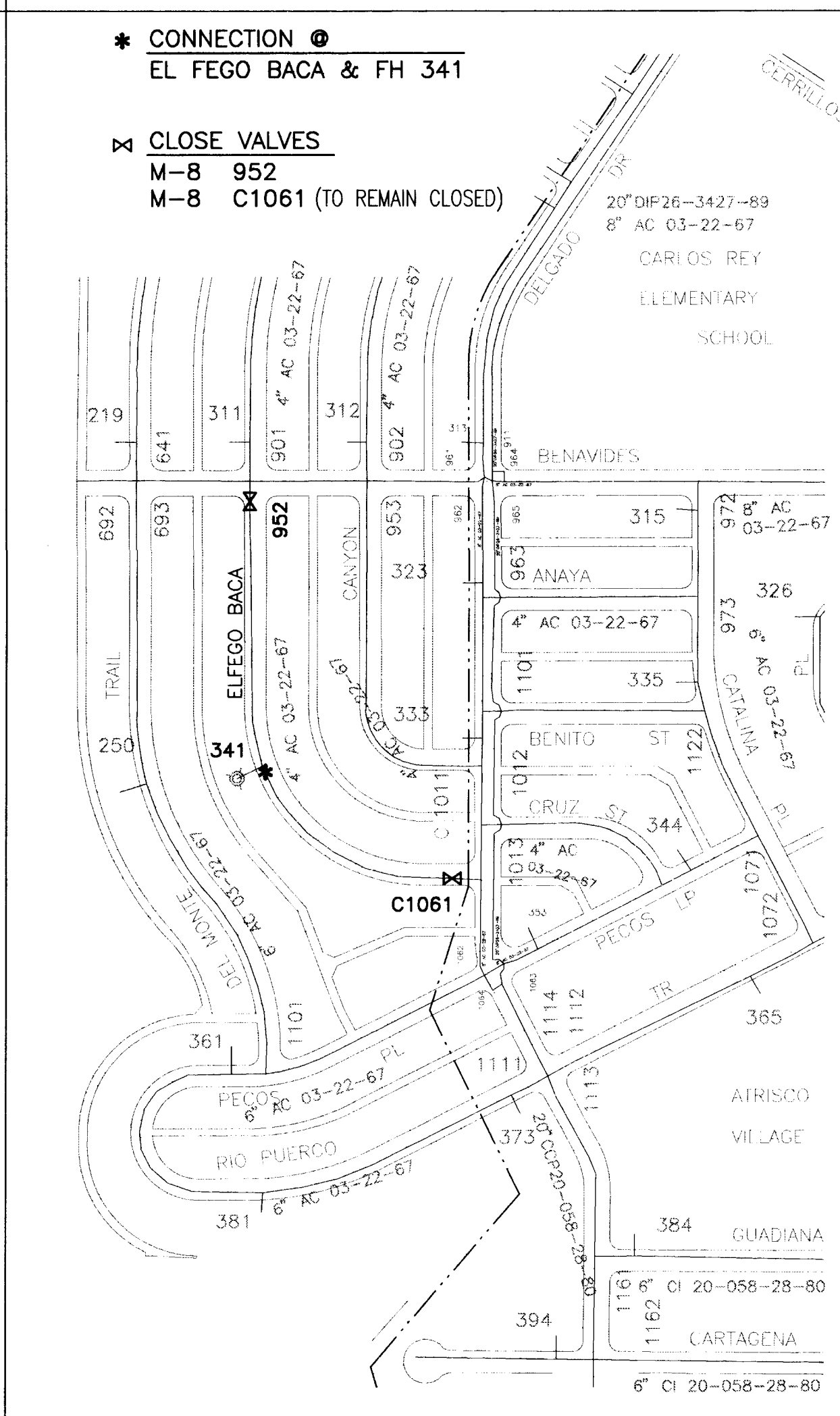
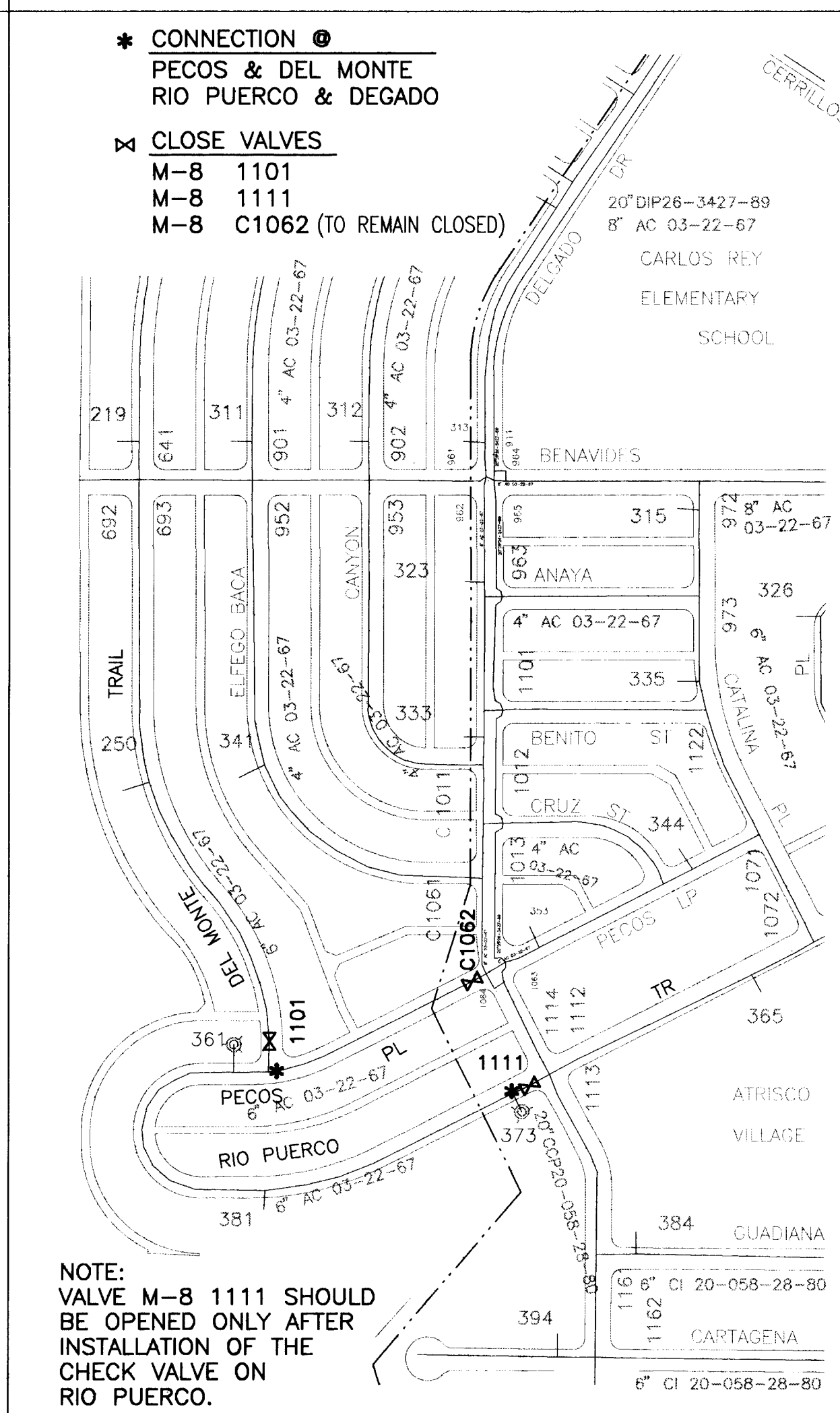
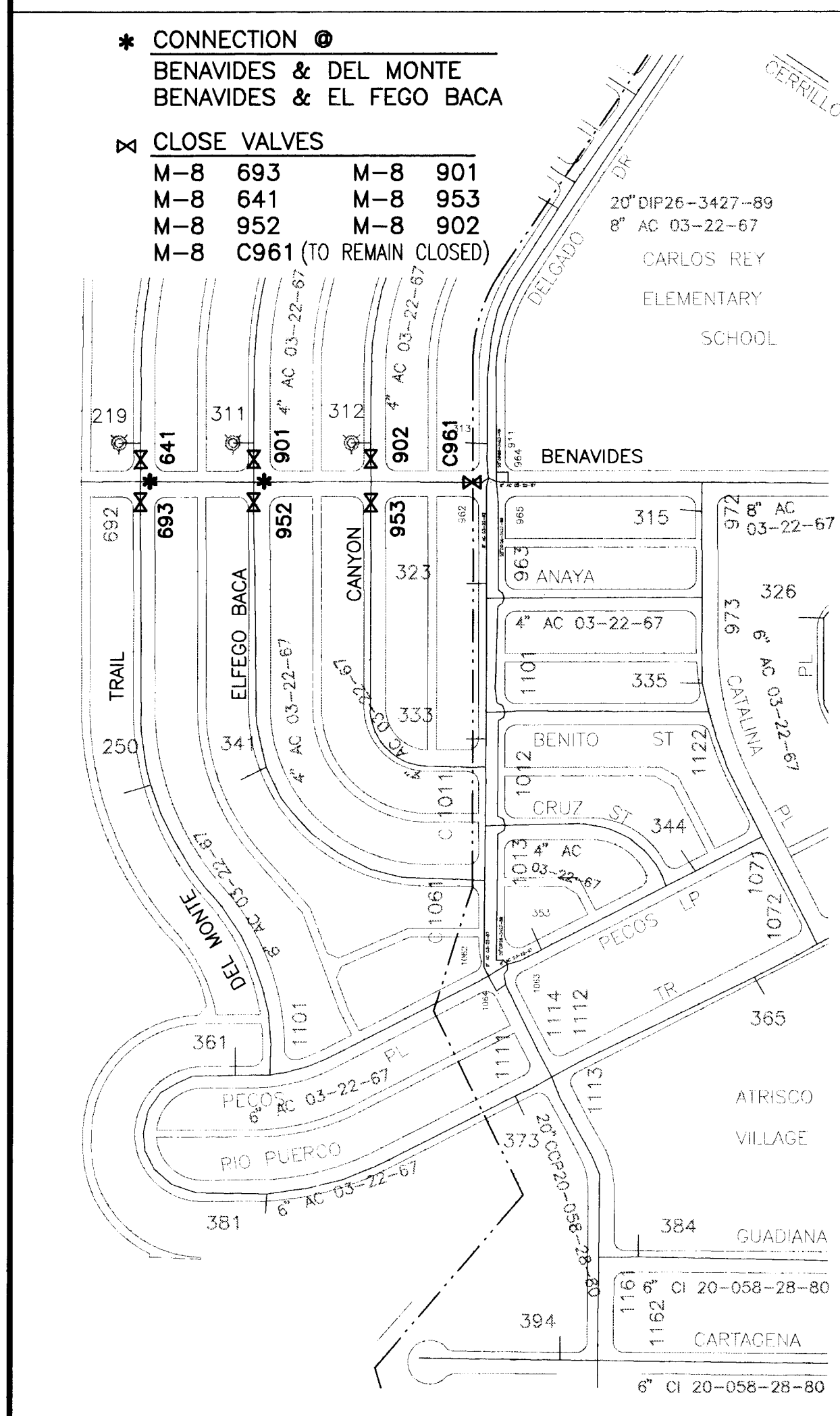
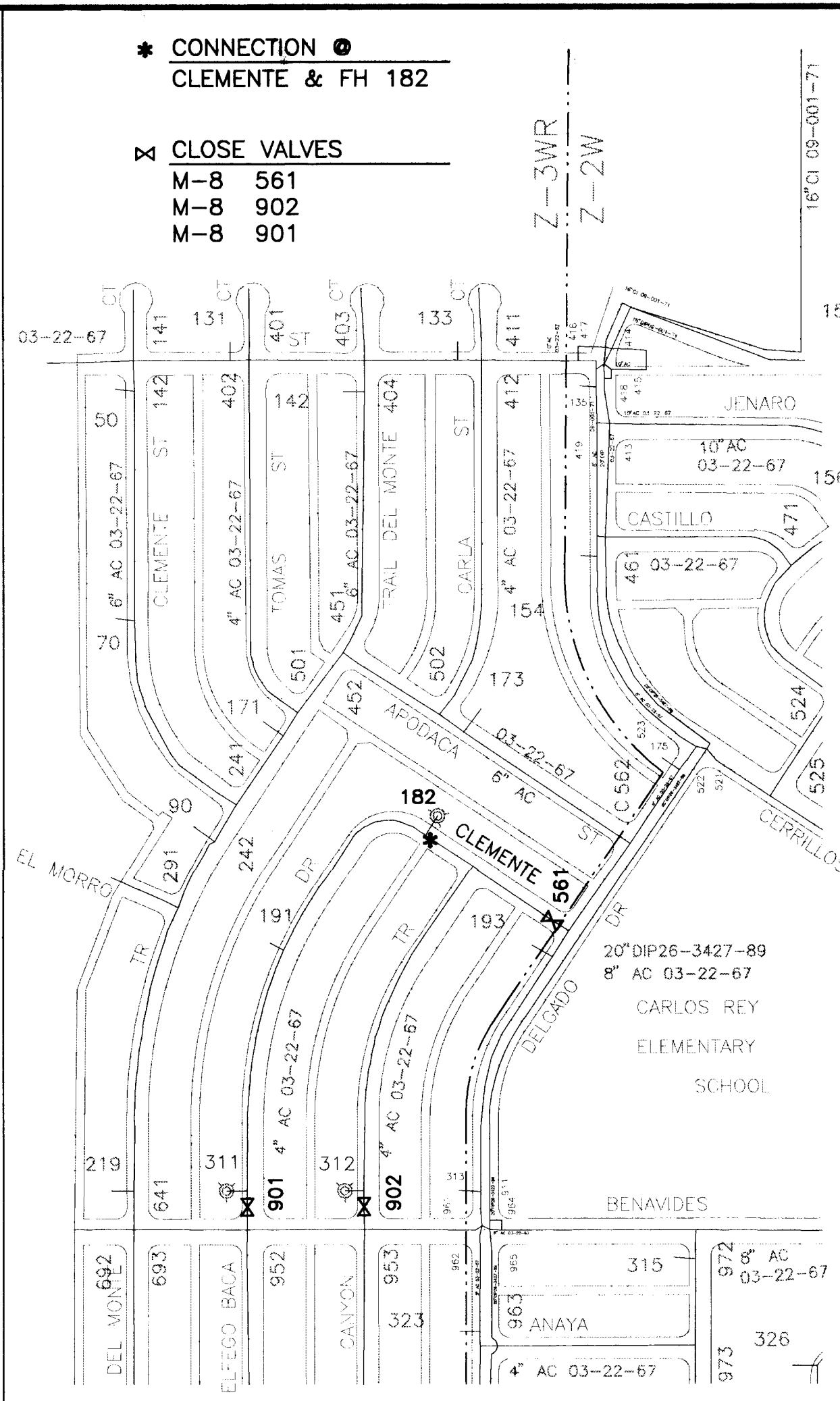
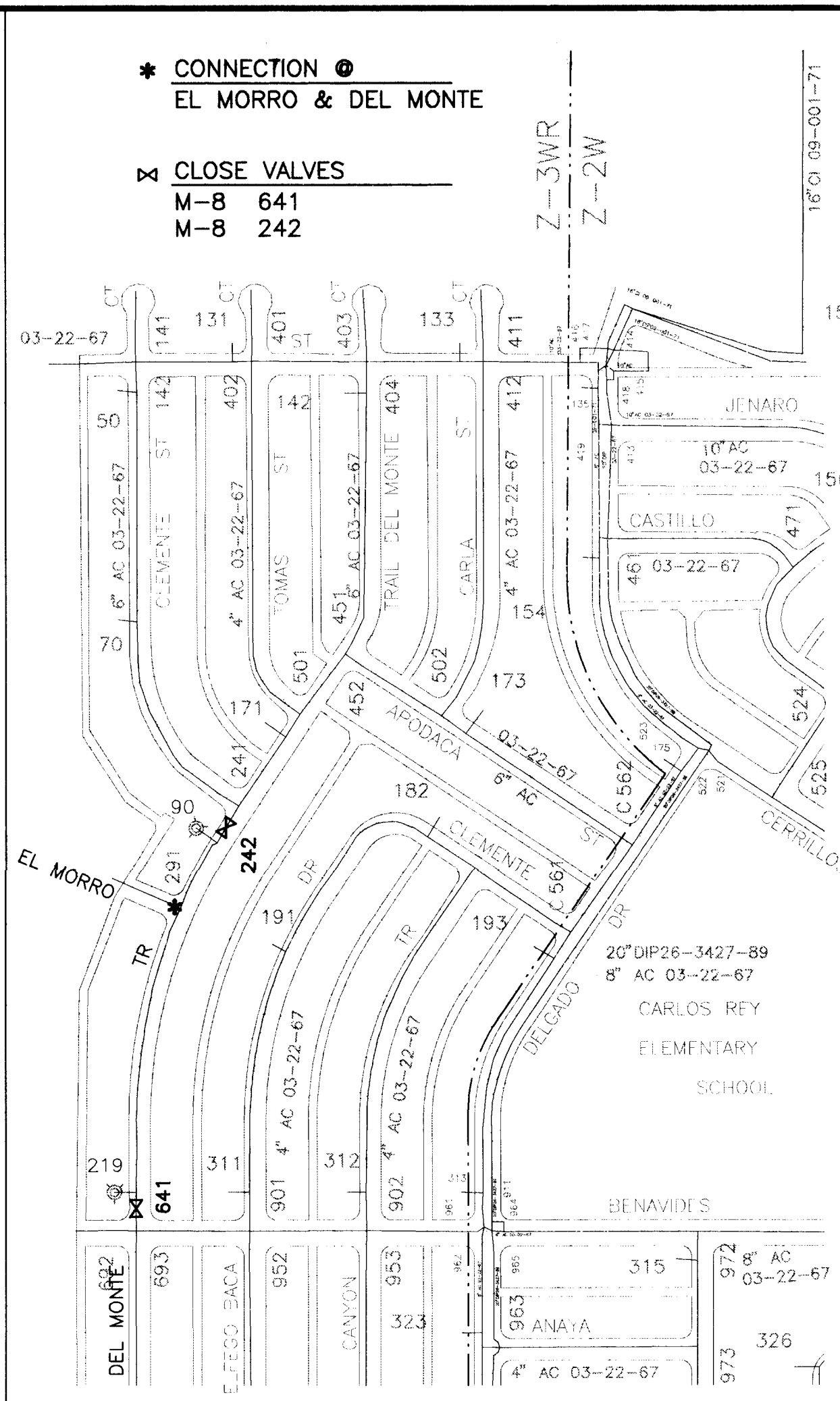
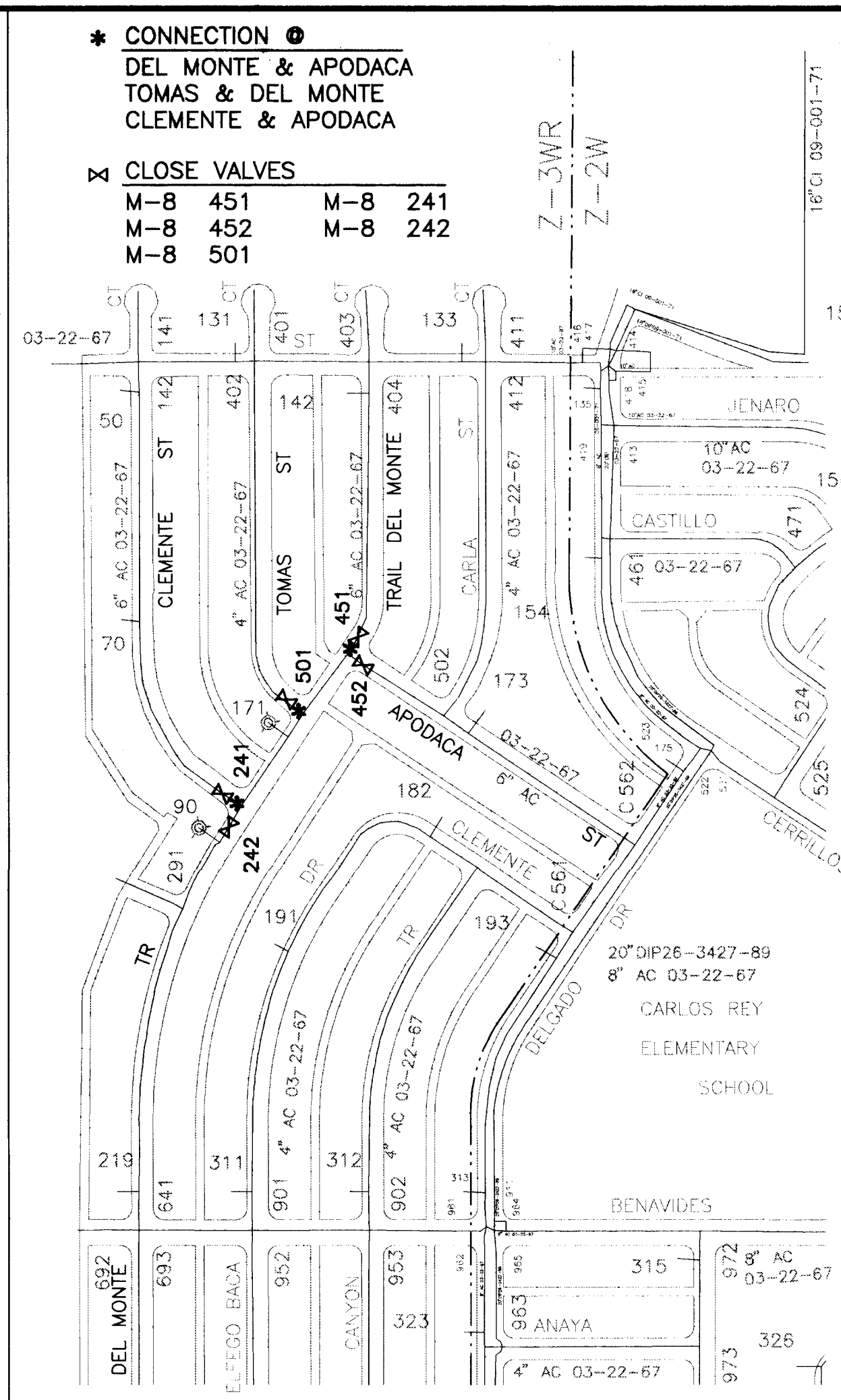
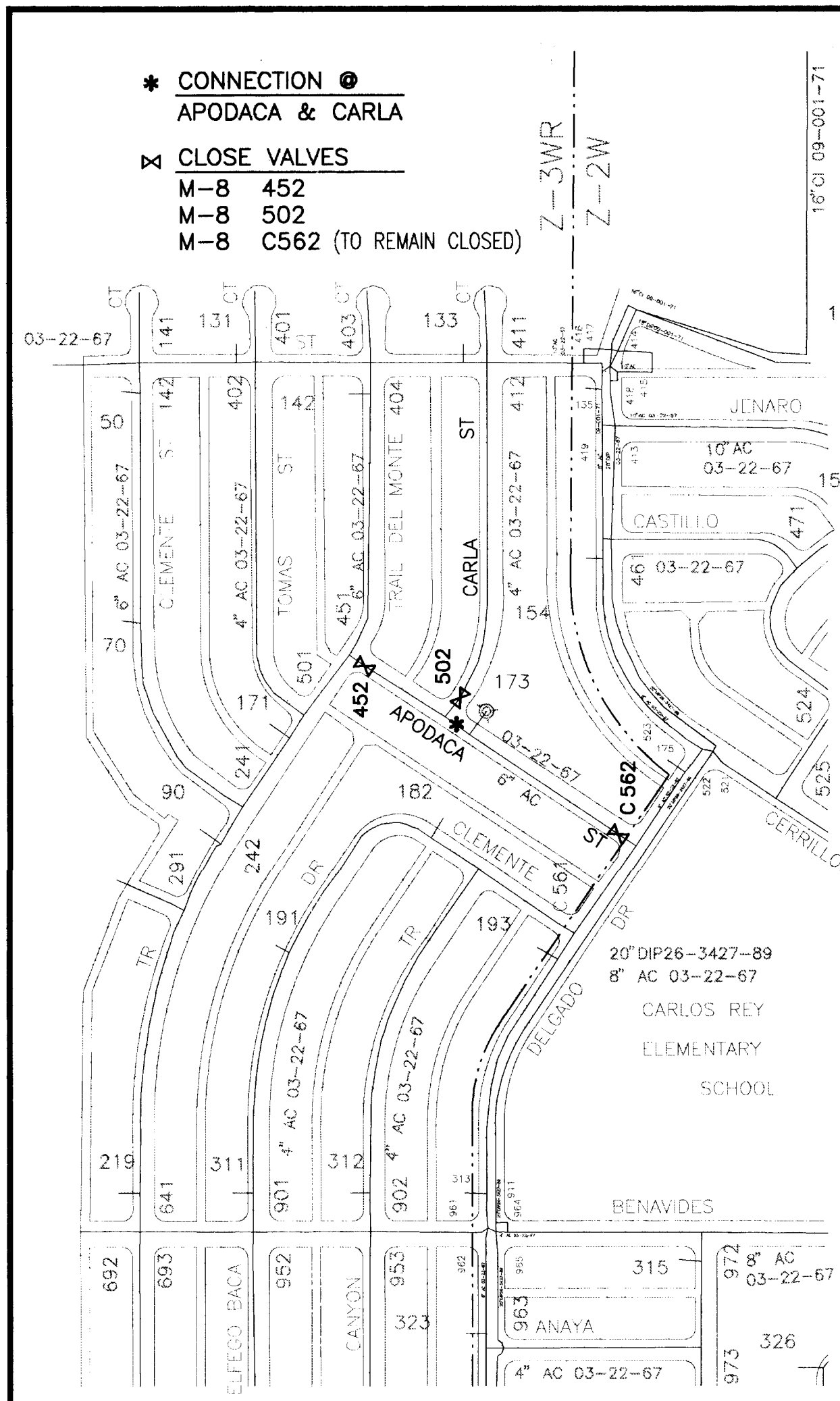


REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE	APPROVALS	ENGINEER	DATE	* * * * *	* * * * *		
	DRG Chairman	<i>[Signature]</i>	6-10-97	APPROVED FOR CONSTRUCTION			
	Transportation	<i>[Signature]</i>	6/10/97				
	Water/Wastewater	<i>[Signature]</i>	6/10/97				
	Hydrology	<i>[Signature]</i>	6/10/97				
	C.I.P.	<i>[Signature]</i>	6/10/97				
	Constr. Mngmt.	<i>[Signature]</i>	6/10/97				
	City Project No.	5431.93		Sheet	1	Of	14



PROPOSED	EXISTING	DESCRIPTION
NA	--- 8" SAS (CP) ---	SANITARY SEWER LINE W/ SIZE & MATERIAL
6" W	--- 6" W (ST) ---	WATER LINE W/ SIZE & MATERIAL
NA	--- (S) ---	SANITARY SEWER MANHOLE
	--- (V) ---	WATER LINE / GATE VALVE
	NA	WATER LINE W/ CHECK VALVE
	 MUELLER 1960	FIRE HYDRANT, MODEL & YEAR (FOR EXISTING ONLY)
	NA	REDUCER
		TEE
		CROSS
		BEND
	NA	CAP AND PLUGS
NA		POWER POLE
NA		SIGN
NA		LIGHT POLE
	NA	WATER METER BOX TO BE REHABILITATED
	NA	WATER METER BOX TO BE ADJUSTED TO GRADE
NA		GRAVEL/GRADED/UNPAVED ROAD
NA		PAVED ROAD
NA		GUTTER
		CURB
NA		BUILDING
NA		CONCRETE SIDEWALK OR DRIVEWAY
	NA	PIPE COUPLING
NA	--- UGT ---	UNDERGROUND TELEPHONE LINE
NA	--- G ---	UNDERGROUND GAS LINE
	NA	PLUGGED WATER LINE
NA	--- . . . ---	ZONE BOUNDARY
NA	--- ---	RIGHT OF WAY LINE

SCANNED BY
BY LASON



AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEERS SEAL	
CONTRACTOR	DATE	NO.	DATE	NO.	DATE	NO.	DATE
WCC	4/98						
INSPECTOR'S	W. M. E.						
ACCEPTANCE BY	W. M. E.						
VERIFICATION BY	W. M. E.						
COMMANDED BY	W. M. E.						
MICRO-FILM INFORMATION				RECORD BY			
				NO.			

SCALE: 1"=300'

Boyle Engineering Corporation
consulting engineers
5400 LUTHER BLVD. N.E.
ALBUQUERQUE, NM 87110
(505) 883-7700

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

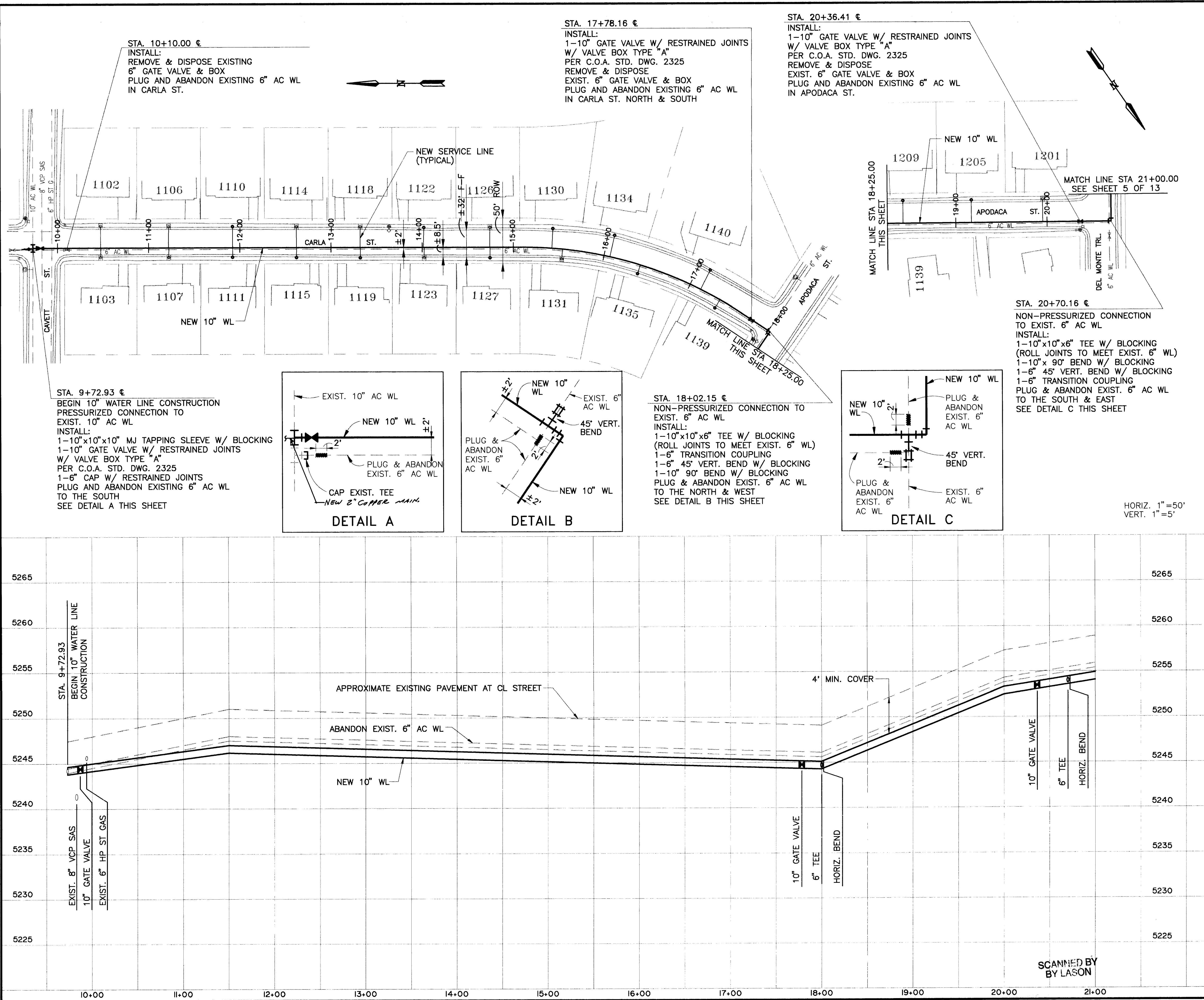
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WATER VALVE SHUT OFF PLAN

DESIGNED BY	RCF	DATE	3/97
DRAWN BY	CAM	DATE	3/97
CHECKED BY	KWW	DATE	3/97
REVISIONS			
NO.	DATE	REMARKS	DATE

City Project No. 5431.93 Zone Map No. M-8 Sheet 3 of 14

SCANNED BY
BY LASON

D:\WESTGATE\10-1.DWG 5-21-97



NOTES:

- PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
- ALL SERVICE LINES SHOWN SHALL BE REMOVED & REPLACED PER C.O.A. STD. DWG. 2362. SERVICE LINES SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL MATCH THE EXISTING METER SIZE (3/4" TYPICAL).
- EXISTING METER BOXES SHALL BE REHABILITATED OR ADJUSTED PER C.O.A. STD. DWG. 2360 PER THE FOLLOWING SCHEDULES:

REHABILITATED METER BOX	
1110	CARLA
1111	CARLA
1115	CARLA
1119	CARLA
1122	CARLA
1127	CARLA
1130	CARLA
1134	CARLA
1135	CARLA
1139	CARLA
1140	CARLA
1205	CARLA
1209	CARLA

ADJUST EXIST. METER BOX TO EXIST. GRADE	
1102	CARLA
1103	CARLA
1106	CARLA
1107	CARLA
1114	CARLA
1118	CARLA
1123	CARLA
1126	CARLA
1131	CARLA
1201	APODACA

4. ALL WATER LINE FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED PER DETAILS ON SHEET 12.

5. ALIGNMENT SHOWN SHALL BE MAINTAINED BY DEFLECTING JOINTS WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDATIONS.

6. PIPE SHALL LAID TO GRADE SHOWN ON THE PROFILE. CHANGES IN VERTICAL ALIGNMENT OF THE PIPE WHICH CREATE A HIGH POINT REQUIRE AN AIR RELEASE VALVE (C.O.A. STD. DWG. 2350) OR AN AIR RELEASE FIRE HYDRANT (C.O.A. STD. DWG. 2344) INSTALLED AT CONTRACTOR'S EXPENSE.

ENGINEERS SEAL

REVISIONS

NO.	DATE	REMARKS
1		DESIGN
2		RCF
3		CAL/CAM
4		KWW

DESIGNED BY RCF
DRAWN BY CAL/CAM
CHECKED BY KWW

DATE 3/97
DATE 3/97
DATE 3/97

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

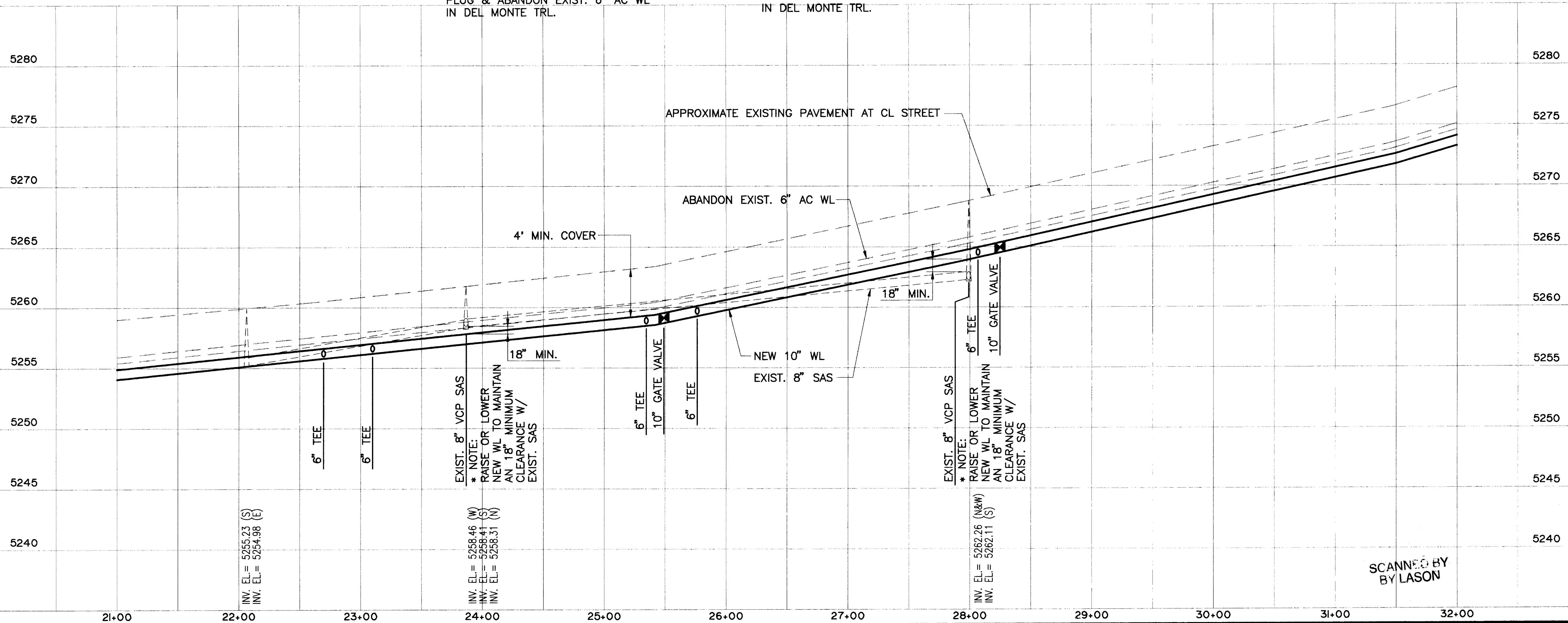
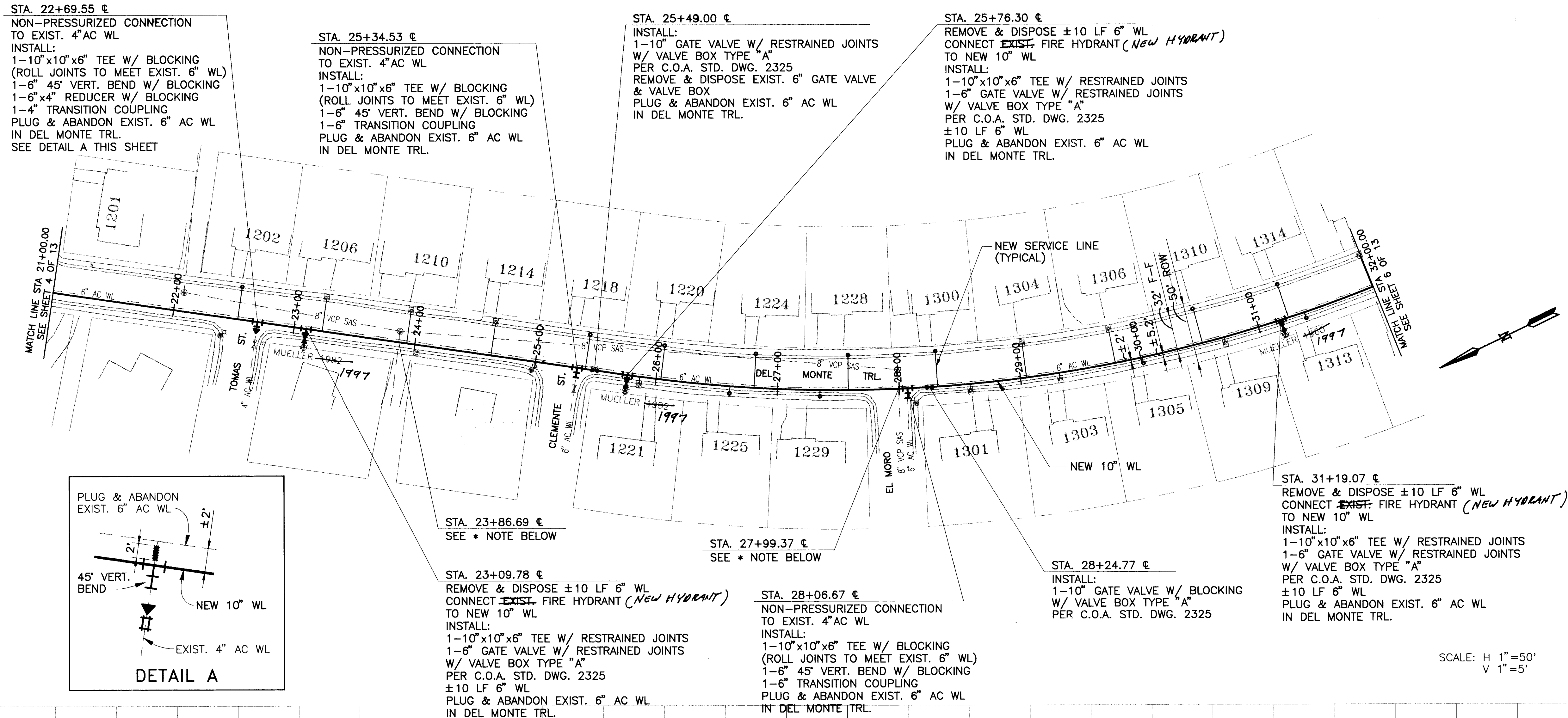
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CARLA ST. & APODACA ST. PLAN & PROFILE
STA. 9+72.93 TO STA. 21+00.00

Design Review Committee City Engineer Approval

Mo./Day/Yr. Mo./Day/Yr.

City Project No. 5431.93 Zone Map No. M-8 Sheet 4 of 14

D:\WESTGATE\10-2.DWG 5-21-97



- NOTES:
1. PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
 2. ALL SERVICE LINES SHOWN SHALL BE REMOVED & REPLACED PER C.O.A. STD. DWG. 2362. SERVICE LINES SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL MATCH THE EXISTING METER SIZE (3/4" TYPICAL).
 3. EXISTING METER BOXES SHALL BE REHABILITATED OR ADJUSTED PER C.O.A. STD. DWG. 2360 PER THE FOLLOWING SCHEDULES:

REHABILITATED METER BOX

1202 DEL MONTE TRL.
1218 DEL MONTE TRL.
1220 DEL MONTE TRL.
1224 DEL MONTE TRL.
1225 DEL MONTE TRL.
1228 DEL MONTE TRL.
1229 DEL MONTE TRL.
1300 DEL MONTE TRL.
1305 DEL MONTE TRL.
1310 DEL MONTE TRL.
1313 DEL MONTE TRL.
1314 DEL MONTE TRL.

ADJUST EXIST. METER BOX TO EXIST. GRADE

1206 DEL MONTE TRL.
1210 DEL MONTE TRL.
1214 DEL MONTE TRL.
1221 DEL MONTE TRL.
1301 DEL MONTE TRL.
1303 DEL MONTE TRL.
1304 DEL MONTE TRL.
1306 DEL MONTE TRL.
1309 DEL MONTE TRL.

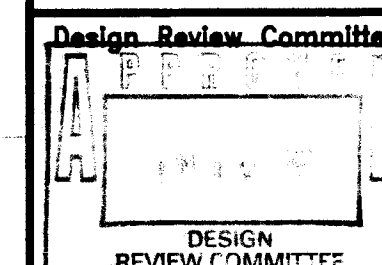
4. ALL WATER LINE FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED PER DETAILS ON SHEET 12.
5. ALIGNMENT SHOWN SHALL BE MAINTAINED BY DEFLECTING JOINTS WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDATIONS.
6. PIPE SHALL LAID TO GRADE SHOWN ON THE PROFILE. CHANGES IN VERTICAL ALIGNMENT OF THE PIPE WHICH CREATE A HIGH POINT REQUIRE AN AIR RELEASE VALVE (C.O.A. STD. DWG. 2350) OR AN AIR RELEASE FIRE HYDRANT (C.O.A. STD. DWG. 2344) INSTALLED AT CONTRACTOR'S EXPENSE.

2 3 4 5 6 7 8 9 10 11 12 13 14
26-793 10598



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT
DEL MONTE TRL. PLAN & PROFILE
STA. 21+00.00 TO STA. 32+00.00



City Engineer Approval

Last Design Update

City Project No.

5431.93

Zone Map No.

M-8

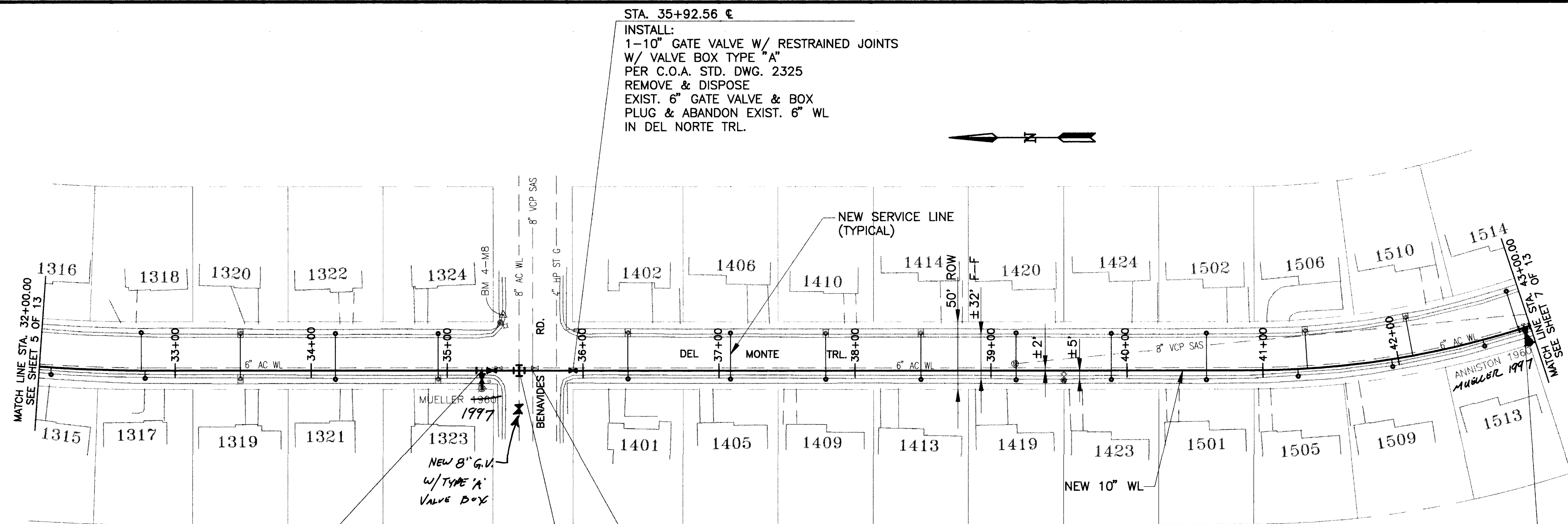
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or

14

AL-A01-147-00



STA. 35+25.51 €
 REMOVE & DISPOSE ±10 LF 6" WL
 CONNECT EXISTING FIRE HYDRANT (NEW HYDRANT)
 TO NEW 10" WL
 INSTALL:
 1-10"x10"x6" TEE W/ RESTRAINED JOINTS
 1-6" GATE VALVE W/ RESTRAINED JOINTS
 W/ VALVE BOX TYPE "A"
 PER C.O.A. STD. DWG. 2325
 ±10 LF 6" WL
 1-10" GATE VALVE W/ RESTRAINED JOINTS
 W/ VALVE BOX TYPE "A"
 PER C.O.A. STD. DWG. 2325
 REMOVE & DISPOSE
 EXIST. 6" GATE VALVE & BOX
 PLUG & ABANDON EXIST. 6" WL
 IN DEL NORTE TRL.

STA. 35+52.91 €
 NON-PRESSURIZED CONNECTION
 TO EXIST. 8" AC WL
 INSTALL:
 1-10"x10"x8"x8" CROSS
 4-8" 45° VERT. BENDS W/ BLOCKING
 2-8" TRANSITION COUPLINGS
 REMOVE EXIST. CROSS
 PLUG & ABANDON EXIST. 6" WL
 TO THE NORTH & SOUTH
 SEE DETAIL A THIS SHEET

STA. 42+95.41 €
 REMOVE & SALVAGE EXIST. FIRE HYDRANT,
 REMOVE & DISPOSE ±10 LF 6" WL
 6" GATE VALVE & BOX
 INSTALL:
 1-10"x10"x6" TEE W/ RESTRAINED JOINTS
 ±10 LF 6" WL
 1-6" GATE VALVE W/ RESTRAINED JOINTS
 W/ VALVE BOX TYPE "A"
 PER C.O.A. STD. DWG. 2325
 1-FIRE HYDRANT PER C.O.A. STD. DWG. 2340
 (BOTTOM OF FLANGE ELEV. = 5271.35)
 PLUG & ABANDON EXIST. 6" AC WL
 IN DEL MONTE TRL.

SCALE: H 1"=50'
 V 1"=5'

- NOTES:
- PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
 - ALL SERVICE LINES SHOWN SHALL BE REMOVED & REPLACED PER C.O.A. STD. DWG. 2362. SERVICE LINES SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL MATCH THE EXISTING METER SIZE (3/4" TYPICAL).
 - EXISTING METER BOXES SHALL BE REHABILITATED OR ADJUSTED PER C.O.A. STD. DWG. 2360 PER THE FOLLOWING SCHEDULES:

REHABILITATED METER BOX

1315 DEL MONTE TRL.
 1317 DEL MONTE TRL.
 1318 DEL MONTE TRL.
 1321 DEL MONTE TRL.
 1322 DEL MONTE TRL.
 1324 DEL MONTE TRL.
 1401 DEL MONTE TRL.
 1405 DEL MONTE TRL.
 1406 DEL MONTE TRL.
 1409 DEL MONTE TRL.
 1413 DEL MONTE TRL.
 1419 DEL MONTE TRL.
 1420 DEL MONTE TRL.
 1423 DEL MONTE TRL.
 1424 DEL MONTE TRL.
 1501 DEL MONTE TRL.
 1502 DEL MONTE TRL.
 1505 DEL MONTE TRL.
 1509 DEL MONTE TRL.
 1513 DEL MONTE TRL.
 1514 DEL MONTE TRL.

ADJUST EXIST. METER BOX TO EXIST. GRADE

1316 DEL MONTE TRL.
 1319 DEL MONTE TRL.
 1320 DEL MONTE TRL.
 1323 DEL MONTE TRL.
 1402 DEL MONTE TRL.
 1410 DEL MONTE TRL.
 1414 DEL MONTE TRL.
 1506 DEL MONTE TRL.
 1510 DEL MONTE TRL.

- ALL WATER LINE FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED PER DETAILS ON SHEET 12.
- ALIGNMENT SHOWN SHALL BE MAINTAINED BY DEFLECTING JOINTS WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDATIONS.
- PIPE SHALL LAID TO GRADE SHOWN ON THE PROFILE. CHANGES IN VERTICAL ALIGNMENT OF THE PIPE WHICH CREATE A HIGH POINT REQUIRE AN AIR RELEASE VALVE (C.O.A. STD. DWG. 2350) OR AN AIR RELEASE FIRE HYDRANT (C.O.A. STD. DWG. 2344) INSTALLED AT CONTRACTOR'S EXPENSE.



CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 UTILITY DESIGN SECTION

TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT
 DEL MONTE TRL. PLAN & PROFILE
 STA. 32+00.00 TO STA. 43+00.00



City Engineer Approval

Mo./Day/Yr.	Mo./Day/Yr.
DESIGNED BY RCF	DATE 3/97
DRAWN BY CAL/CAM	DATE 3/97
CHECKED BY KWW	DATE 3/97

City Project No.

5431.93

Zone Map No.

M-8

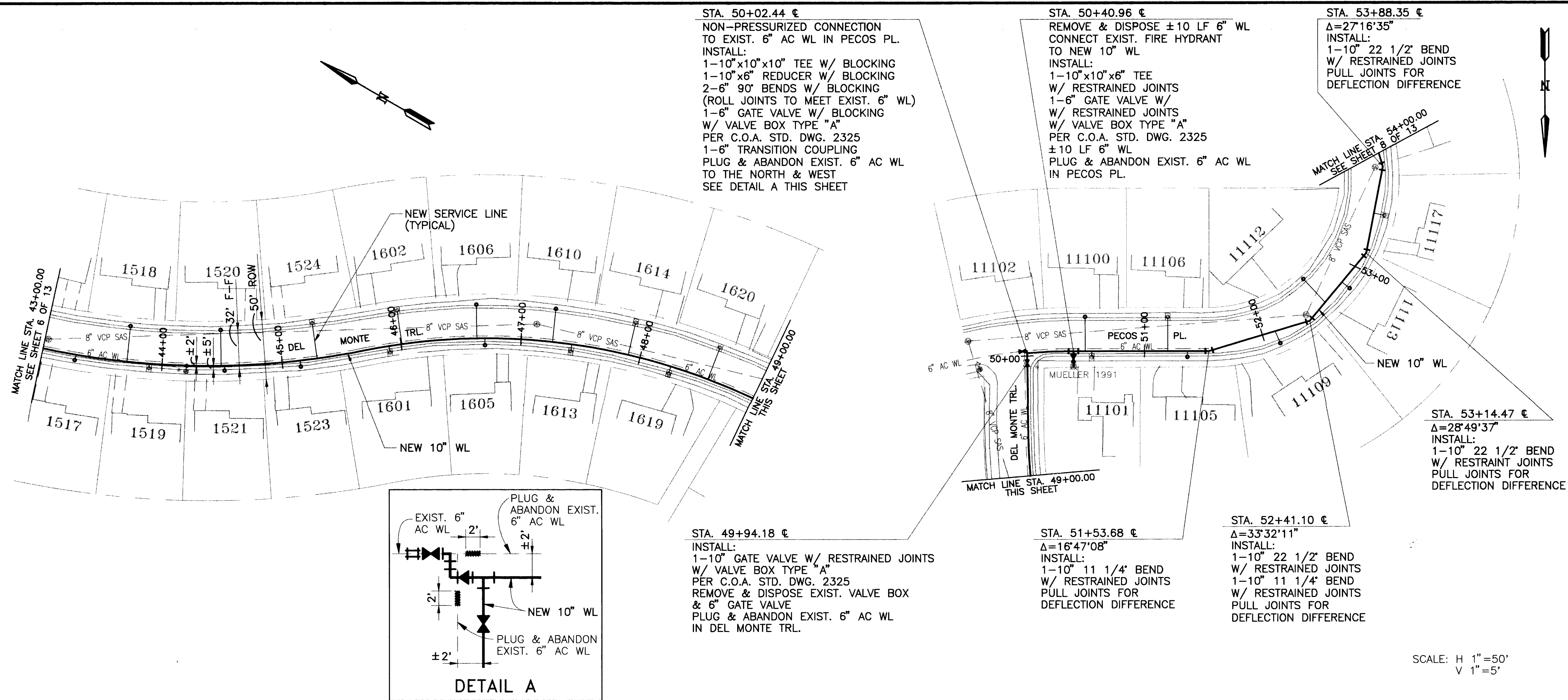
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of

14

D:\WESTGATE\10-4.DWG 5/21/97



- NOTES:
- PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
 - ALL SERVICE LINES SHOWN SHALL BE REMOVED & REPLACED PER C.O.A. STD. DWG. 2362. SERVICE LINES SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL MATCH THE EXISTING METER SIZE (3/4" TYPICAL).
 - EXISTING METER BOXES SHALL BE REHABILITATED OR ADJUSTED PER C.O.A. STD. DWG. 2360 PER THE FOLLOWING SCHEDULES:

REHABILITATED METER BOX

1517 DEL MONTE TRL.
1518 DEL MONTE TRL.
1520 DEL MONTE TRL.
1521 DEL MONTE TRL.
1523 DEL MONTE TRL.
1605 DEL MONTE TRL.
1606 DEL MONTE TRL.
1610 DEL MONTE TRL.
11100 PECOS PL.
11105 PECOS PL.
11109 PECOS PL.
11112 PECOS PL.
11113 PECOS PL.

ADJUST EXIST. METER BOX TO EXIST. GRADE

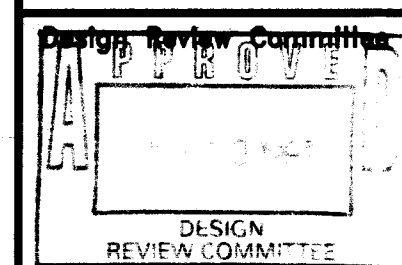
1519 DEL MONTE TRL.
1524 DEL MONTE TRL.
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1602 DEL MONTE TRL.
1613 DEL MONTE TRL.
1614 DEL MONTE TRL.
1619 DEL MONTE TRL.
1620 DEL MONTE TRL.
11101 PECOS PL.
11106 PECOS PL.
11117 PECOS PL.

- ALL WATER LINE FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED PER DETAILS ON SHEET 12.
- ALIGNMENT SHOWN SHALL BE MAINTAINED BY DEFLECTING JOINTS WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDATIONS.
- PIPE SHALL LAID TO GRADE SHOWN ON THE PROFILE. CHANGES IN VERTICAL ALIGNMENT OF THE PIPE WHICH CREATE A HIGH POINT REQUIRE AN AIR RELEASE VALVE (C.O.A. STD. DWG. 2350) OR AN AIR RELEASE FIRE HYDRANT (C.O.A. STD. DWG. 2344) INSTALLED AT CONTRACTOR'S EXPENSE.
- LOCATION OF EXISTING 6" AC WL AT THE WEST END OF PECOS PL. AND RIO PUERCO TRL. SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO NEW WATER LINE INSTALLATION. ANY POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO WATER LINE AND SERVICE LINE INSTALLATION.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT
DEL MONTE TRL. & PECOS PL. PLAN & PROFILE
STA. 43+00.00 TO STA. 54+00.00

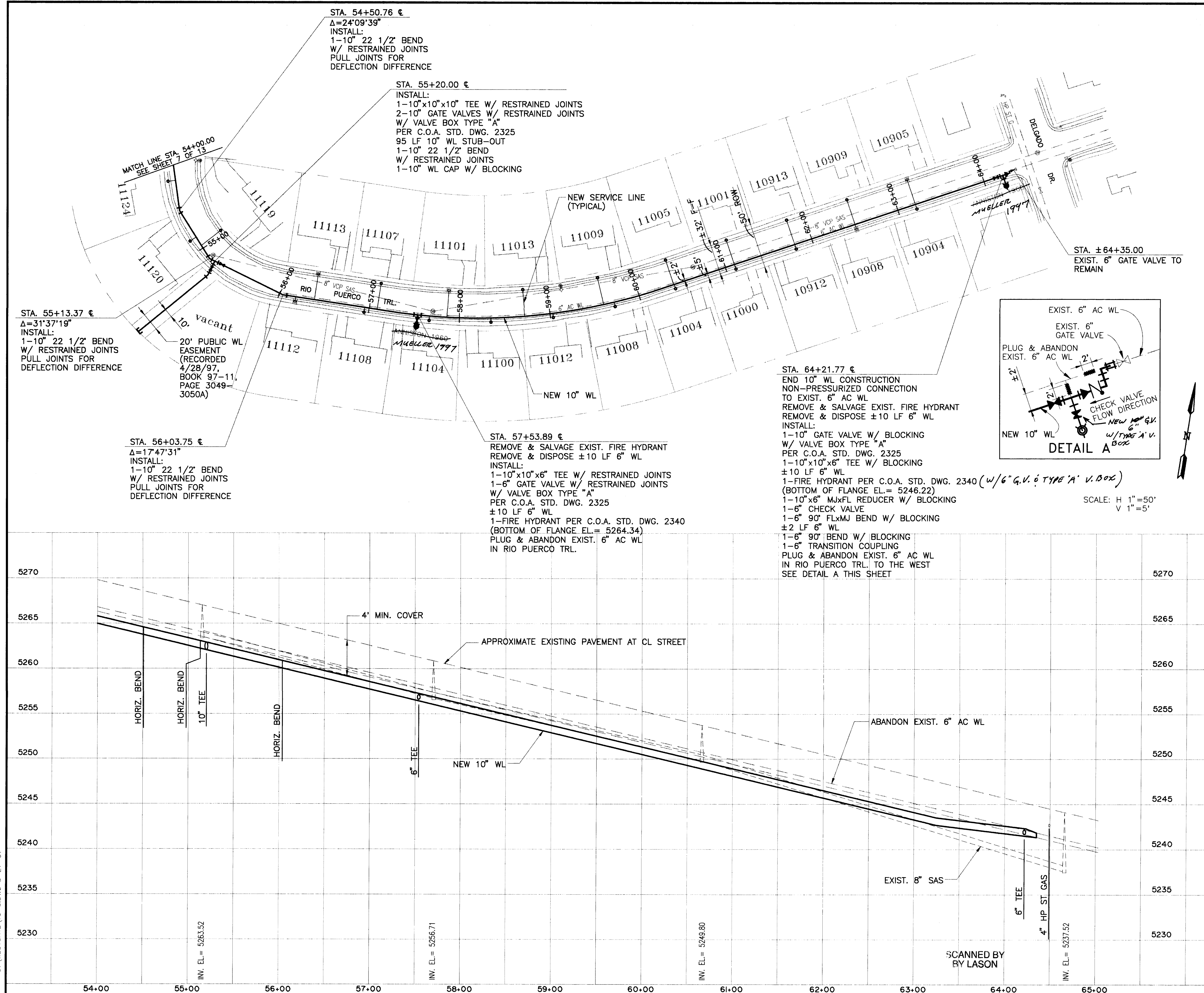


City Engineer Approval

Mo./Day/Yr. Mo./Day/Yr.

City Project No. 5431.92 Zone Map No. M-8 Sheet 7 of 13

AL-A01-147-00



NOTES:

- PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
- ALL SERVICE LINES SHOWN SHALL BE REMOVED & REPLACED PER C.O.A. STD. DWG. 2362. SERVICE LINES SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND SHALL MATCH THE EXISTING METER SIZE (3/4" TYPICAL).
- EXISTING METER BOXES SHALL BE REHABILITATED OR ADJUSTED PER C.O.A. STD. DWG. 2360 PER THE FOLLOWING SCHEDULES:

REHABILITATED METER BOX

10904	RIO PUERCO TRL.
10909	RIO PUERCO TRL.
10912	RIO PUERCO TRL.
10913	RIO PUERCO TRL.
11000	RIO PUERCO TRL.
11001	RIO PUERCO TRL.
11004	RIO PUERCO TRL.
11005	RIO PUERCO TRL.
11008	RIO PUERCO TRL.
11009	RIO PUERCO TRL.
11012	RIO PUERCO TRL.
11013	RIO PUERCO TRL.
11100	RIO PUERCO TRL.
11104	RIO PUERCO TRL.
11107	RIO PUERCO TRL.
11108	RIO PUERCO TRL.
11119	RIO PUERCO TRL.
11120	RIO PUERCO TRL.
11124	RIO PUERCO TRL.

ADJUST EXIST. METER BOX TO EXIST. GRADE

10905	RIO PUERCO TRL.
10908	RIO PUERCO TRL.
11101	RIO PUERCO TRL.
11112	RIO PUERCO TRL.
11113	RIO PUERCO TRL.

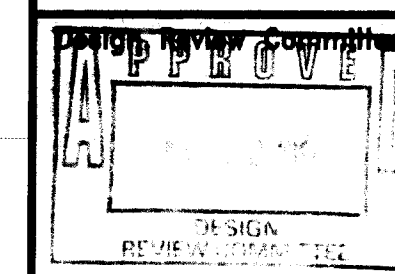
- ALL WATER LINE FITTINGS AND VALVES SHALL BE MECHANICALLY RESTRAINED PER DETAILS ON SHEET 12.
- ALIGNMENT SHOWN SHALL BE MAINTAINED BY DEFLECTING JOINTS WITHOUT EXCEEDING MANUFACTURER'S RECOMMENDATIONS.
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26-5431.93-14



CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPARTMENT
 UTILITY DESIGN SECTION

TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT
 RIO PUERCO TRL. PLAN & PROFILE
 STA. 54+00.00 TO STA. 64+35.00



City Engineer Approval

Mo./Day/Yr. Mo./Day/Yr.

City Project No.

5431.93

Zone Map No.

M-8

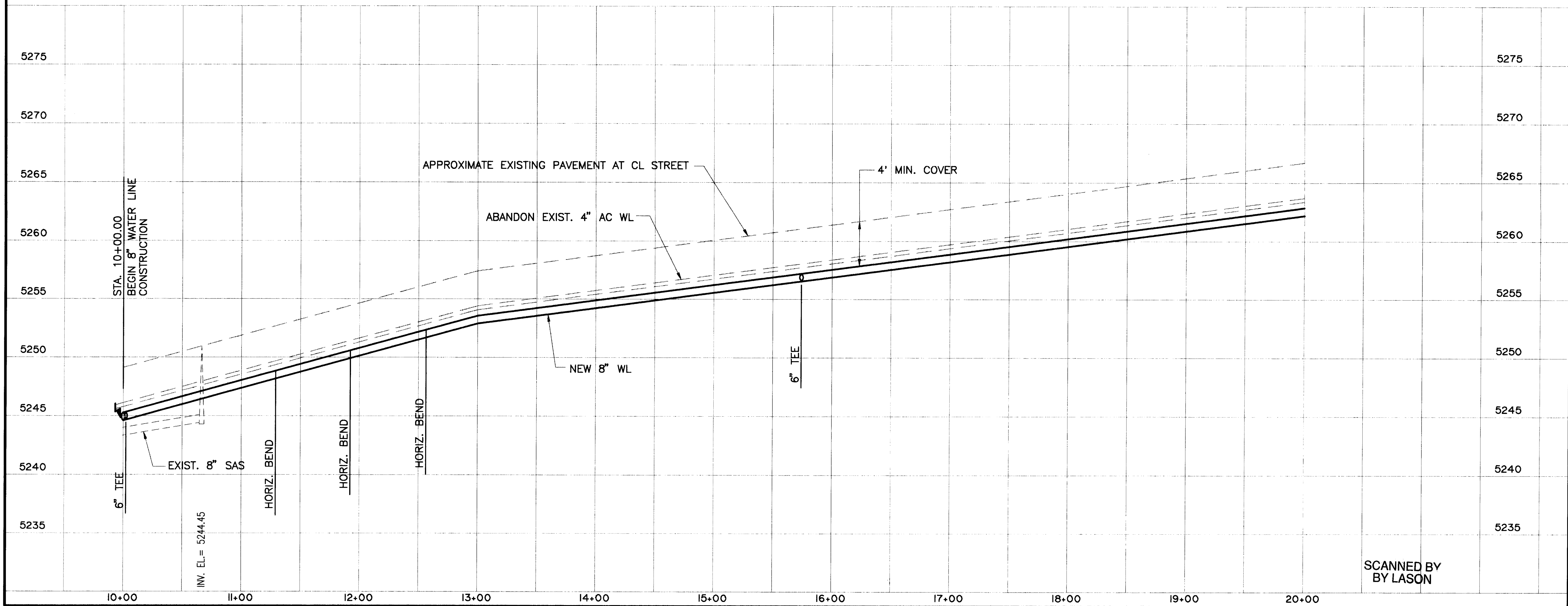
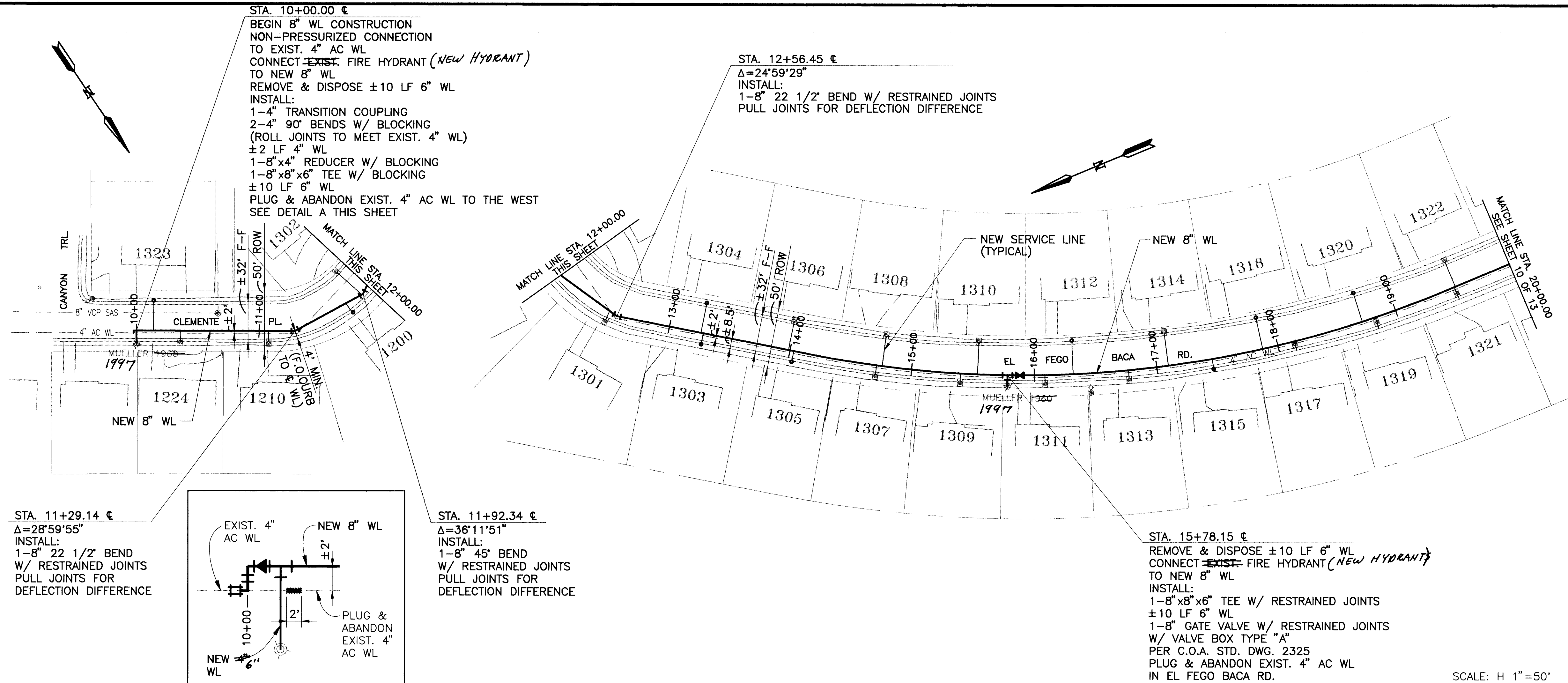
Sheet

Of

8

14

D:\WESTGATE\8-1.DWG 5-21-97



NOTES:

- PAVEMENT REMOVAL, REPLACEMENT, MILL, & OVERLAY DETAILS ARE SHOWN ON SHEET 11.
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REHABILITATED METER BOX

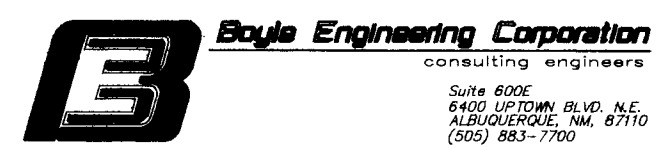
1323 CLEMENTE PL.
1200 EL FEGO BACA RD.
1303 EL FEGO BACA RD.
1304 EL FEGO BACA RD.
1305 EL FEGO BACA RD.
1312 EL FEGO BACA RD.
1315 EL FEGO BACA RD.
1318 EL FEGO BACA RD.
1320 EL FEGO BACA RD.

ADJUST EXIST. METER BOX TO EXIST. GRADE

1210 CLEMENTE PL.
1224 CLEMENTE PL.
1301 EL FEGO BACA RD.
1302 EL FEGO BACA RD.
1306 EL FEGO BACA RD.
1307 EL FEGO BACA RD.
1308 EL FEGO BACA RD.
1309 EL FEGO BACA RD.
1310 EL FEGO BACA RD.
1311 EL FEGO BACA RD.
1313 EL FEGO BACA RD.
1314 EL FEGO BACA RD.
1317 EL FEGO BACA RD.
1319 EL FEGO BACA RD.
1321 EL FEGO BACA RD.
1322 EL FEGO BACA RD.

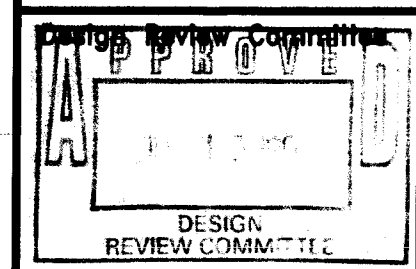
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- LOCATION OF EXISTING 4" AC WL AT THE WEST END OF CLEMENTE PL. SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO NEW WATER LINE INSTALLATION. ANY POTENTIAL CONFLICTS SHALL BE REPORTED TO THE ENGINEER PRIOR TO WATER LINE AND SERVICE LINE INSTALLATION.

24-5937-1-1013-14-10
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT
CLEMENTE PL. & EL FEGO BACA RD. PLAN & PROFILE
STA. 10+00.00 TO 20+00.00



City Engineer Approval

Mo./Day/Yr. Mo./Day/Yr.

City Project No.

5431.93

Zone Map No.

M-8

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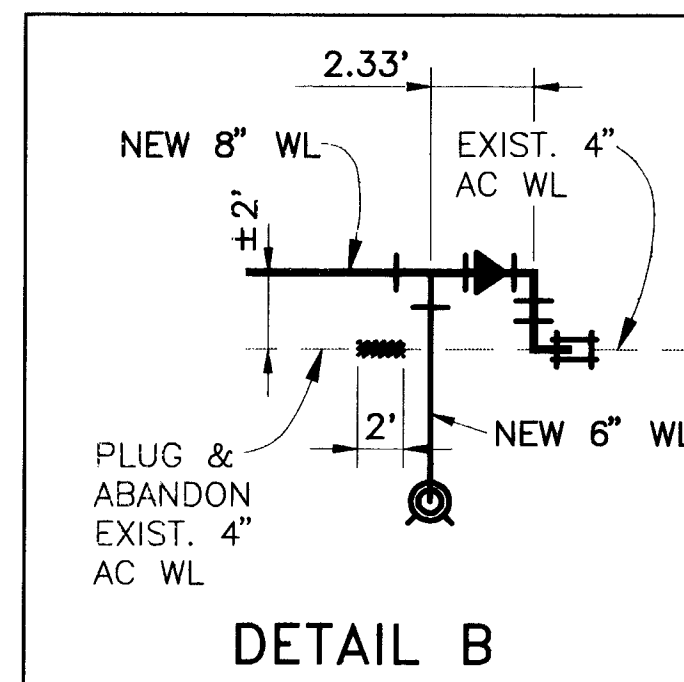
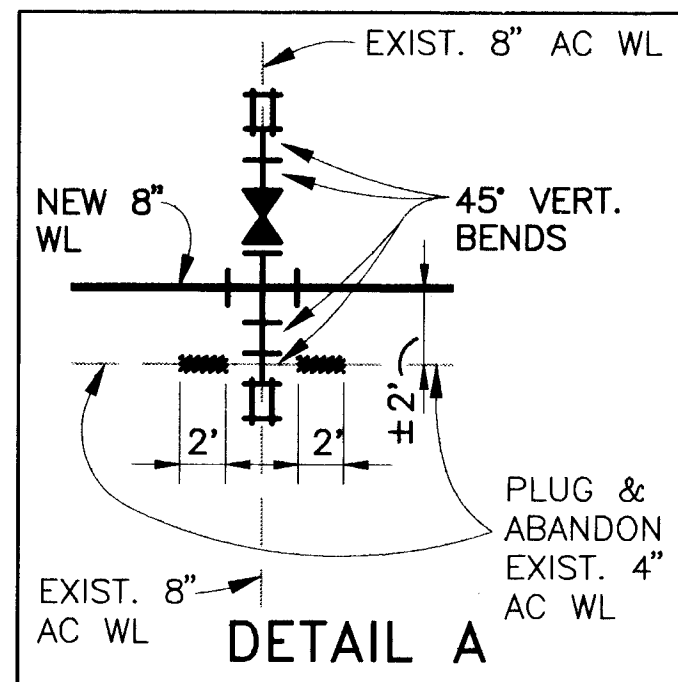
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STA. 21+93.40 €
CONNECT EXIST. FIRE HYDRANT (NEW HYDRANT)
TO NEW 8" WL
INSTALL:
1-8"x8"x6" TEE W/ RESTRAINED JOINTS
±10 LF 6" WL
1-8" GATE VALVE W/ RESTRAINED JOINTS
W/ VALVE BOX TYPE "A"
PER C.O.A. STD. DWG. 2325
REMOVE & DISPOSE
EXIST. 4" GATE VALVE & BOX
PLUG & ABANDON EXIST. 4" AC WL
IN EL FEGO BACA RD.

STA. 22+36.74 €
SEE * NOTE BELOW

STA. 22+68.46 €
INSTALL:
1-8" GATE VALVE W/ RESTRAINED JOINTS
W/ VALVE BOX TYPE "A"
PER C.O.A. STD. DWG. 2325
REMOVE & DISPOSE
EXIST. 4" GATE VALVE & BOX

STA. 22+26.24 €
NON-PRESSURIZED CONNECTION
TO EXIST. 8" AC WL
IN BENAVIDES RD.
INSTALL:
1-8"x8"x8"x8" CROSS W/ BLOCKING
1-8" GATE VALVE W/ BLOCKING
W/ VALVE BOX TYPE "A"
PER C.O.A. STD. DWG. 2325
4-8" 45° VERT. BENDS W/ BLOCKING
2-8" TRANSITION COUPLINGS
REMOVE EXIST. CROSS
PLUG & ABANDON EXIST. 4" AC WL
TO THE NORTH & SOUTH
IN EL FEGO BACA RD.
SEE DETAIL A THIS SHEET



29+52.96
STA. 28+92.96 €
END 8" WL CONSTRUCTION
REMOVE & SALVAGE EXIST. FIRE HYDRANT
REMOVE & DISPOSE ±10 LF 6" WL
NON-PRESSURIZED CONNECTION
TO EXIST. 4" AC WL IN EL FEGO BACA RD.
INSTALL:
1-8"x8"x6" TEE W/ RESTRAINED JOINTS
±10 LF 6" WL
1-FIRE HYDRANT
PER C.O.A. STD. DWG. 2340
(BOTTOM OF FLANGE ELEV.= 5266.98)
1-8"x4" REDUCER W/ BLOCKING
±2 LF 4" WL
2-4" 90° BENDS W/ BLOCKING
(ROLL JOINTS TO MEET EXIST. 4" AC WL)
1-4" TRANSITION COUPLING
PLUG & ABANDON EXIST. 4" AC WL
TO THE NORTH IN EL FEGO BACA RD.
SEE DETAIL B THIS SHEET

SCALE: H 1"=50'
V 1"=5'

- NOTES:
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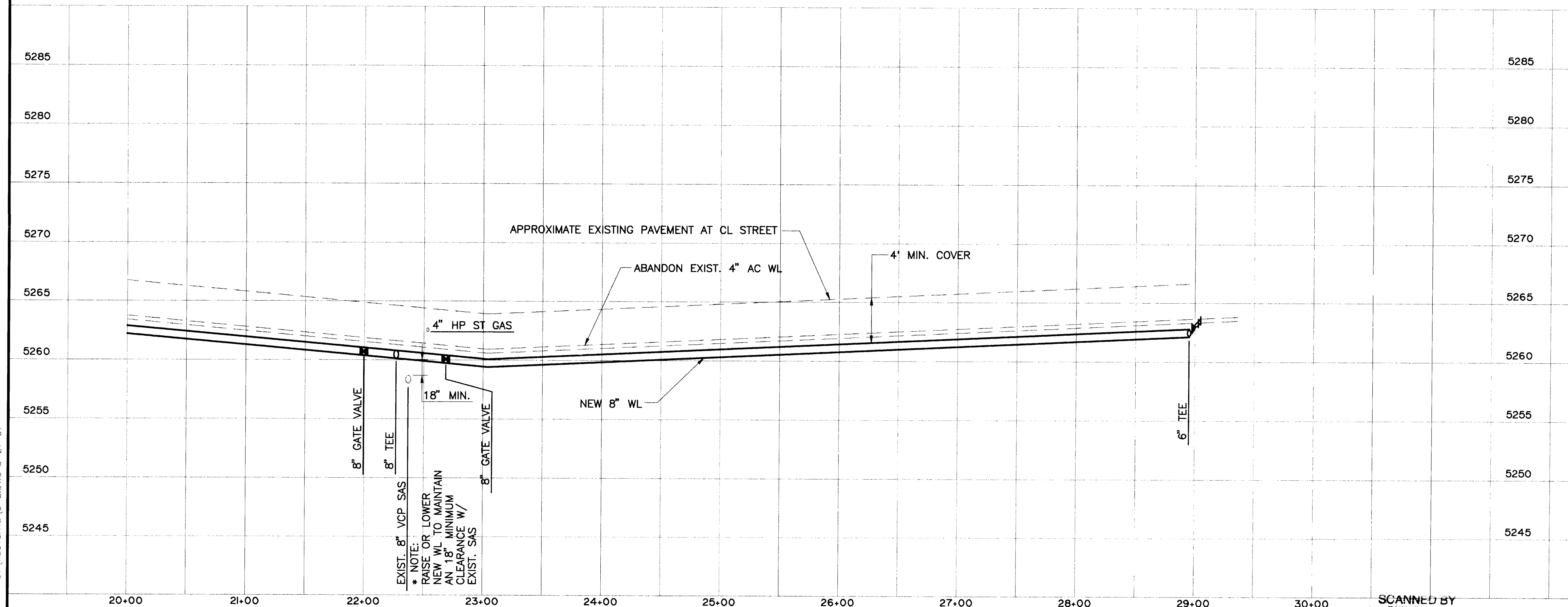
REHABILITATED METER BOX

1324 EL FEGO BACA RD.
1328 EL FEGO BACA RD.
1401 EL FEGO BACA RD.
1409 EL FEGO BACA RD.
1413 EL FEGO BACA RD.
1414 EL FEGO BACA RD.
1419 EL FEGO BACA RD.
1420 EL FEGO BACA RD.
1423 EL FEGO BACA RD.
1424 EL FEGO BACA RD.
1501 EL FEGO BACA RD.
1506 EL FEGO BACA RD.

ADJUST EXIST. METER BOX TO EXIST. GRADE

1323 EL FEGO BACA RD.
1325 EL FEGO BACA RD.
1326 EL FEGO BACA RD.
1327 EL FEGO BACA RD.
1402 EL FEGO BACA RD.
1405 EL FEGO BACA RD.
1406 EL FEGO BACA RD.
1410 EL FEGO BACA RD.
1502 EL FEGO BACA RD.
1505 EL FEGO BACA RD.
1509 EL FEGO BACA RD.
1514 EL FEGO BACA RD.

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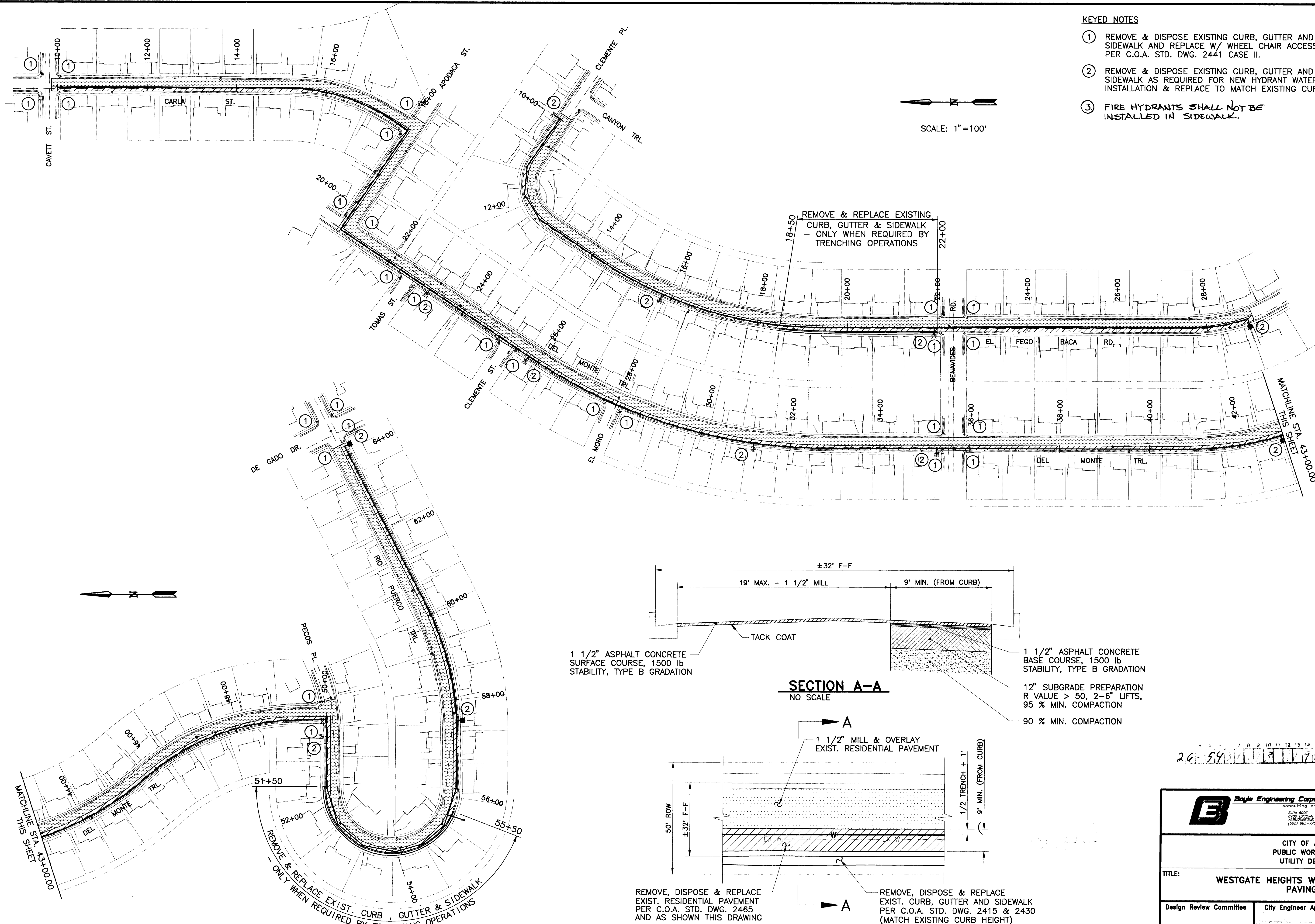


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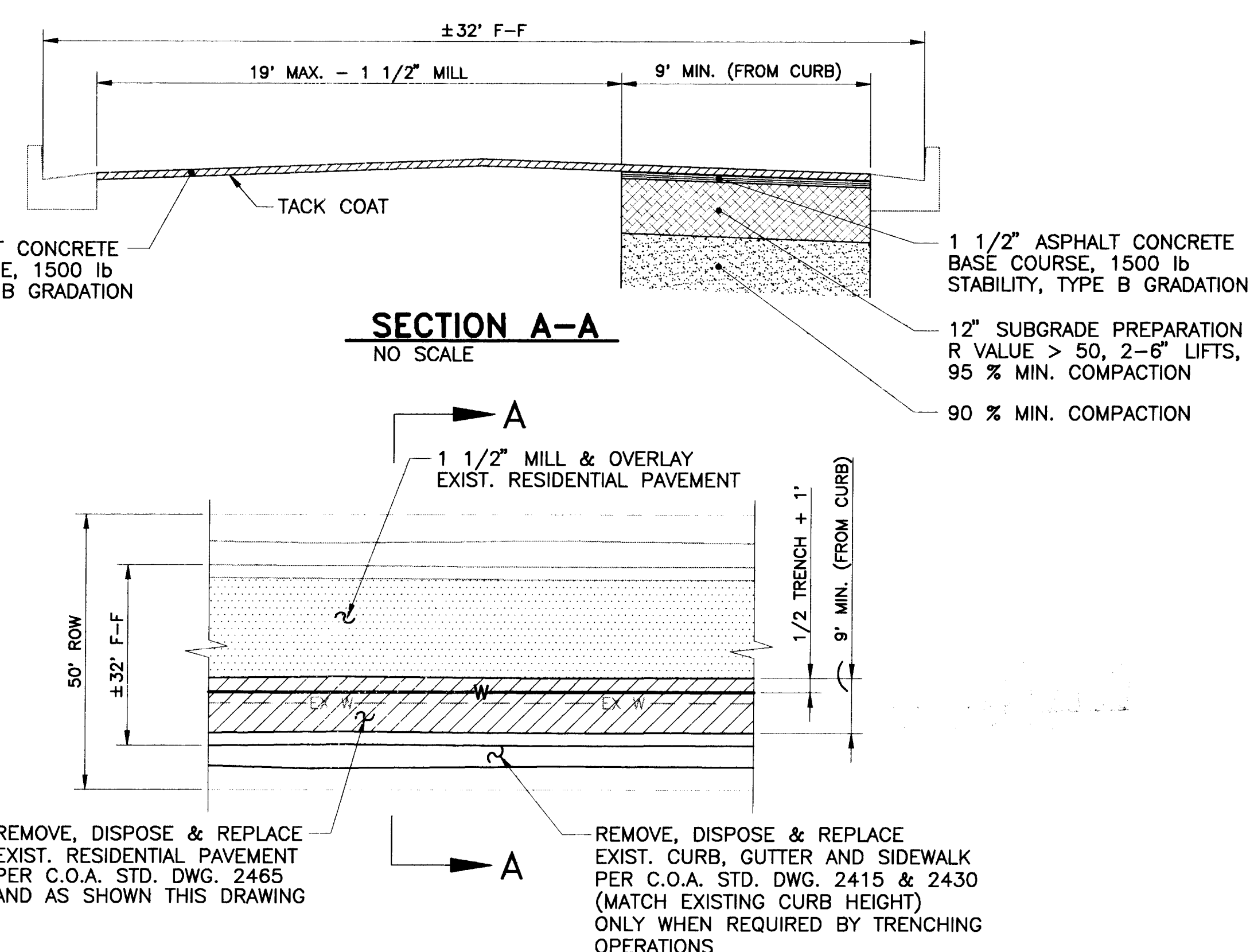


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT UTILITY DESIGN SECTION			
TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT EL FEGO BACA RD. PLAN & PROFILE STA. 20+00.00 TO STA. 28+92.96			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE			
City Project No. 5431.93	Zone Map No. M-8	Sheet 10	Of 14

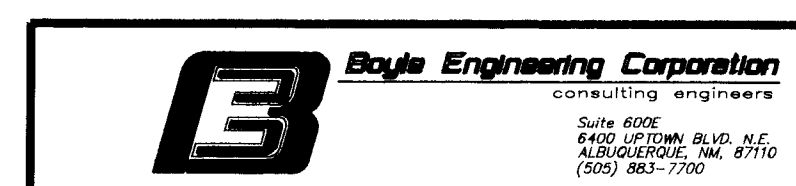
AL-A01-147-00



- KEYED NOTES**
- ① REMOVE & DISPOSE EXISTING CURB, GUTTER AND SIDEWALK AND REPLACE W/ WHEEL CHAIR ACCESS RAMP PER C.O.A. STD. DWG. 2441 CASE II.
 - ② REMOVE & DISPOSE EXISTING CURB, GUTTER AND SIDEWALK AS REQUIRED FOR NEW HYDRANT WATER LINE INSTALLATION & REPLACE TO MATCH EXISTING CURB HEIGHT.
 - ③ FIRE HYDRANTS SHALL NOT BE INSTALLED IN SIDEWALK.



PAVEMENT DETAIL
NO SCALE



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT UTILITY DESIGN SECTION			
TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT PAVING DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 5431.93	Zone Map No. M-8	Sheet 11	Of 14

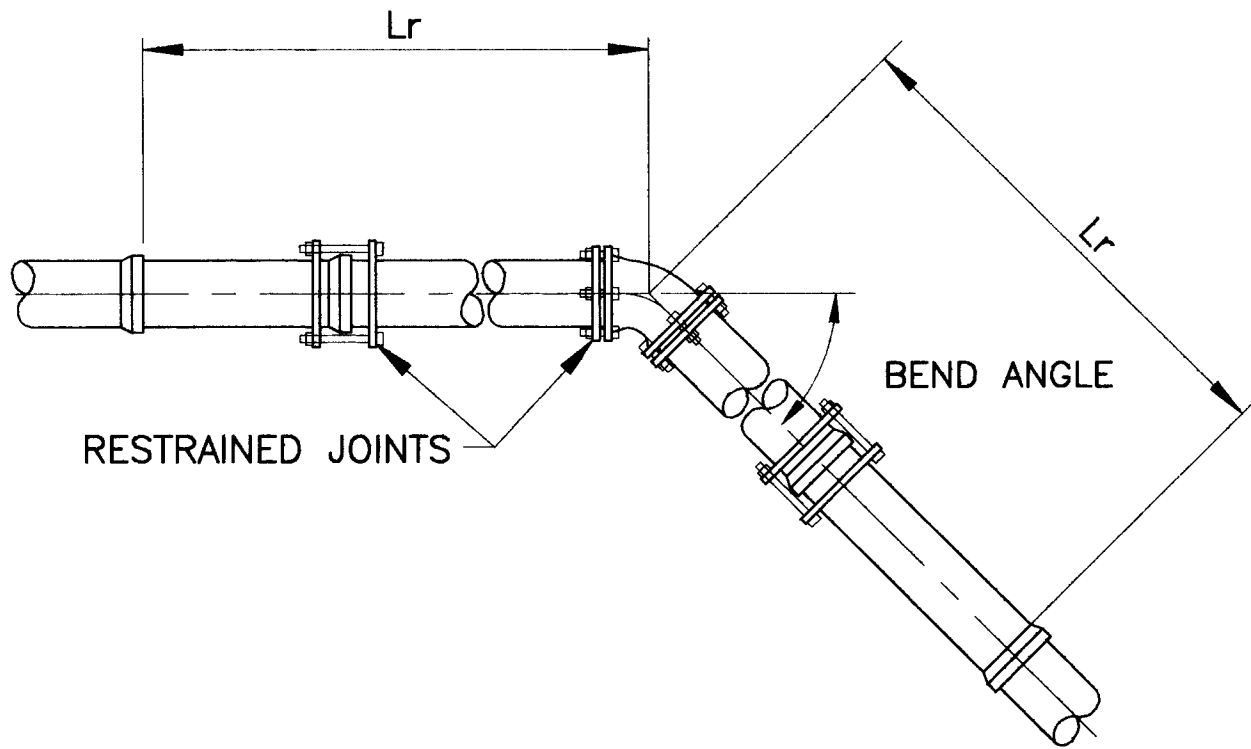
ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		DATE		CONTRACTOR	
		NO.		DATE		INSPECTOR	
REVISIONS		REVISIONS		REVISIONS		REVISIONS	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
DESIGNED BY RCF	DATE 3/97	DESIGNED BY RCF	DATE 3/97	DESIGNED BY RCF	DATE 3/97	DESIGNED BY RCF	DATE 3/97
DRAWN BY CAM	DATE 3/97	DRAWN BY CAM	DATE 3/97	DRAWN BY CAM	DATE 3/97	DRAWN BY CAM	DATE 3/97
CHECKED BY KWW	DATE 3/97	CHECKED BY KWW	DATE 3/97	CHECKED BY KWW	DATE 3/97	CHECKED BY KWW	DATE 3/97

RESTRAINED JOINTS FOR SMALL DIAMETER PVC WATER LINES

1. HORIZONTAL BEND

BEND ANGLE	Lr				
	PIPE SIZE				
90°	4"	6"	8"	10"	12"
45°	14'	20'	26'	31'	36'
22 1/2°	6'	8'	11'	13'	15'
11 1/4°	3'	4'	5'	6'	7'
	1'	2'	3'	3'	4'

Lr = LENGTH OF PIPE TO BE RESTRAINED



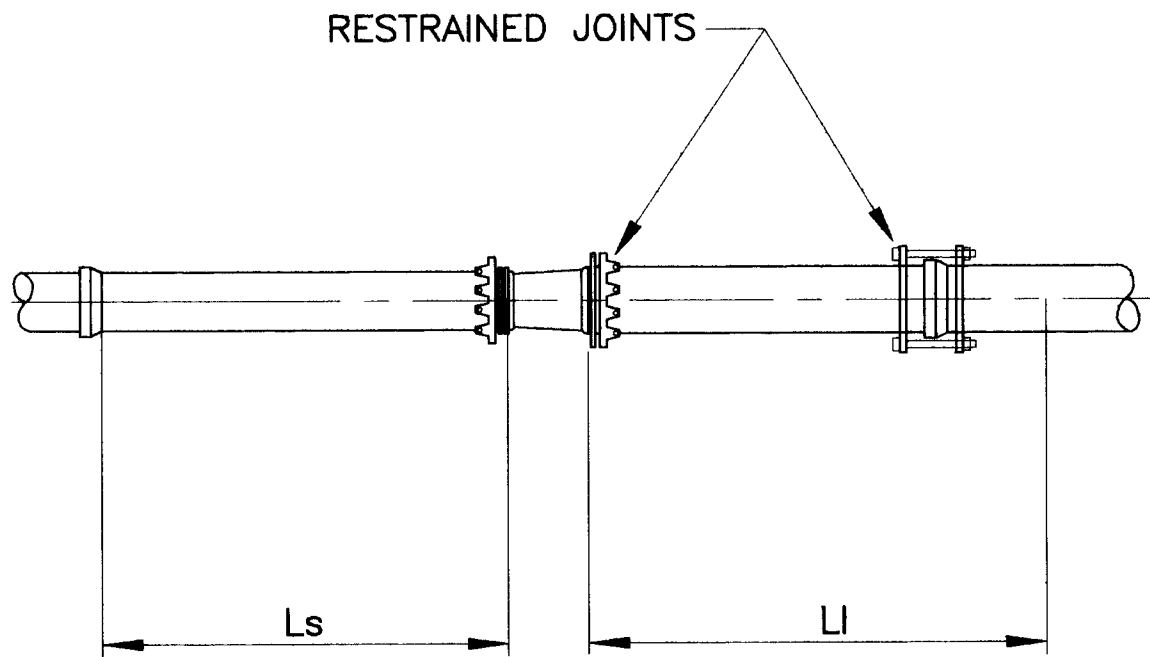
4. REDUCER

SMALL END	Ls/LI			
	LARGE END			
	6"	8"	10"	12"
4"	42'/28'	100'/52'	169'/70'	256'/88'
6"		39'/30'	87'/53'	146'/74'
8"			36'/29'	81'/54'
10"				36'/30'
12"				

NOTE: IF THE SMALLER SIDE OF THE REDUCER IS UN-OBSTRUCTED (FREE OF BENDS, VALVES, TEES OR OTHER FITTINGS) FOR A MINIMUM LENGTH OF Ls, THEN NO RESTRAINT IS REQUIRED; OTHERWISE THE PIPE MUST BE RESTRAINED FOR A LENGTH OF LI, ON THE LARGER SIDE OF THE REDUCER.

Ls = UN-OBSTRUCTED STRAIGHT RUN LENGTH AVAILABLE ON THE SMALLER SIDE OF REDUCER

LI = LENGTH OF PIPE TO BE RESTRAINED ON THE LARGER SIDE OF REDUCER

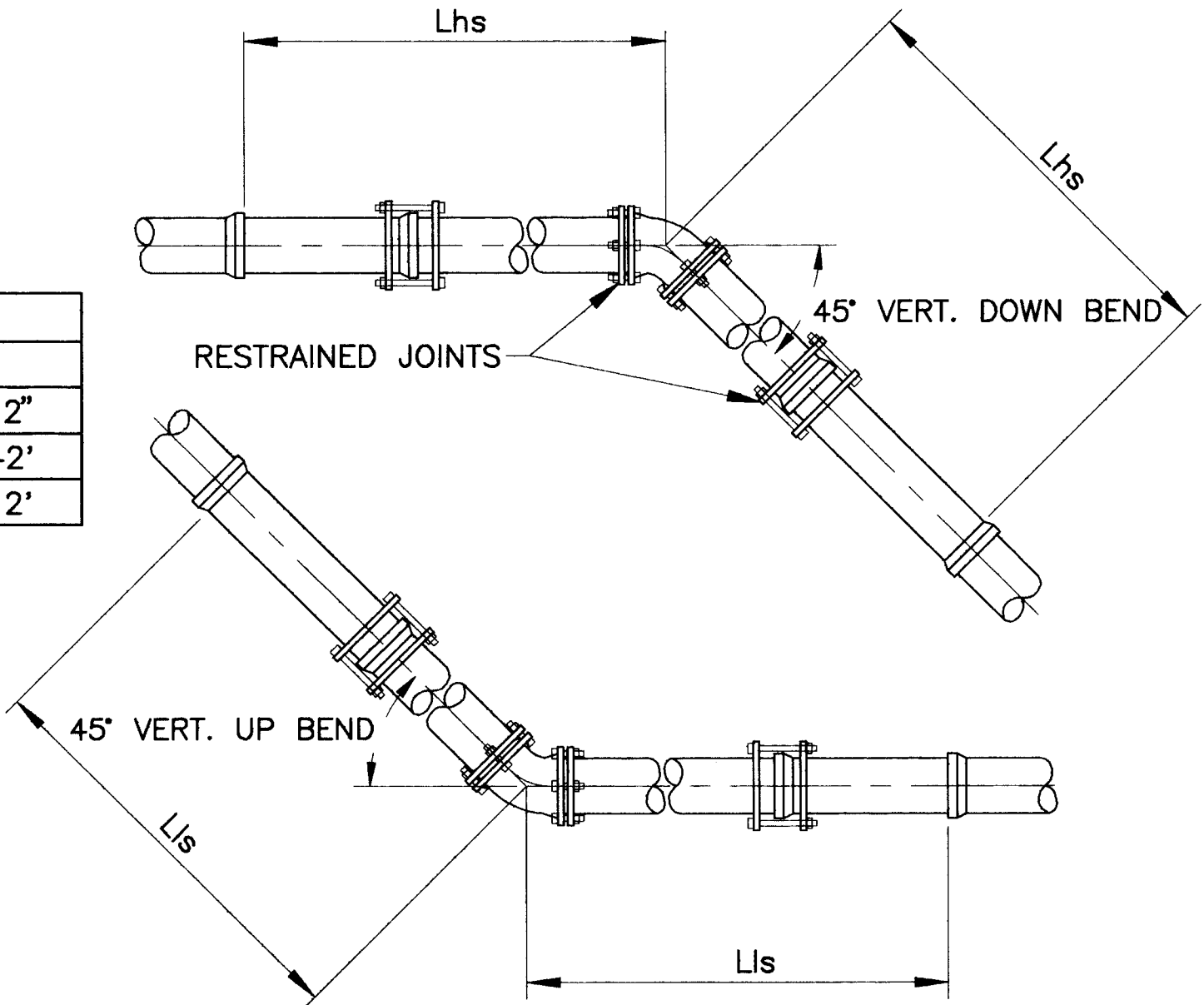


2. VERTICAL OFFSET (45°)

	Lhs & Lis				
	PIPE SIZE				
	4"	6"	8"	10"	12"
Lhs	16'	23'	30'	36'	42'
Lis	5'	6'	8'	10'	12'

Lhs = LENGTH OF PIPE TO BE RESTRAINED ON VERTICAL DOWN BENDS

Lis = LENGTH OF PIPE TO BE RESTRAINED ON VERTICAL UP BENDS

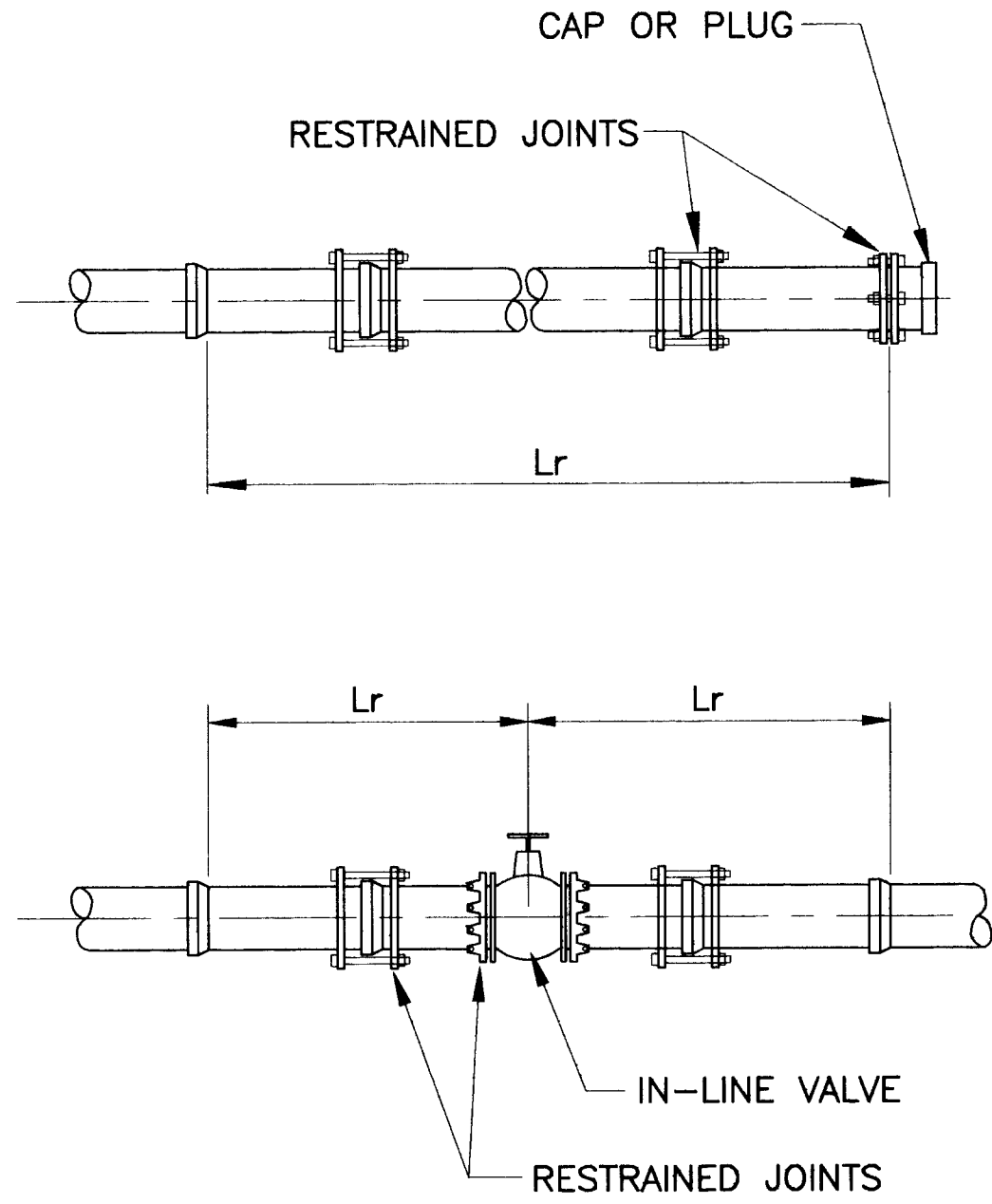


5. IN-LINE VALVES & DEAD ENDS

Lr	PIPE SIZE				
	4"	6"	8"	10"	12"
Lr	39'	55'	72'	86'	102'

NOTE: VALVES SHALL BE RESTRAINED ON BOTH SIDES.

Lr = LENGTH OF PIPE TO BE RESTRAINED



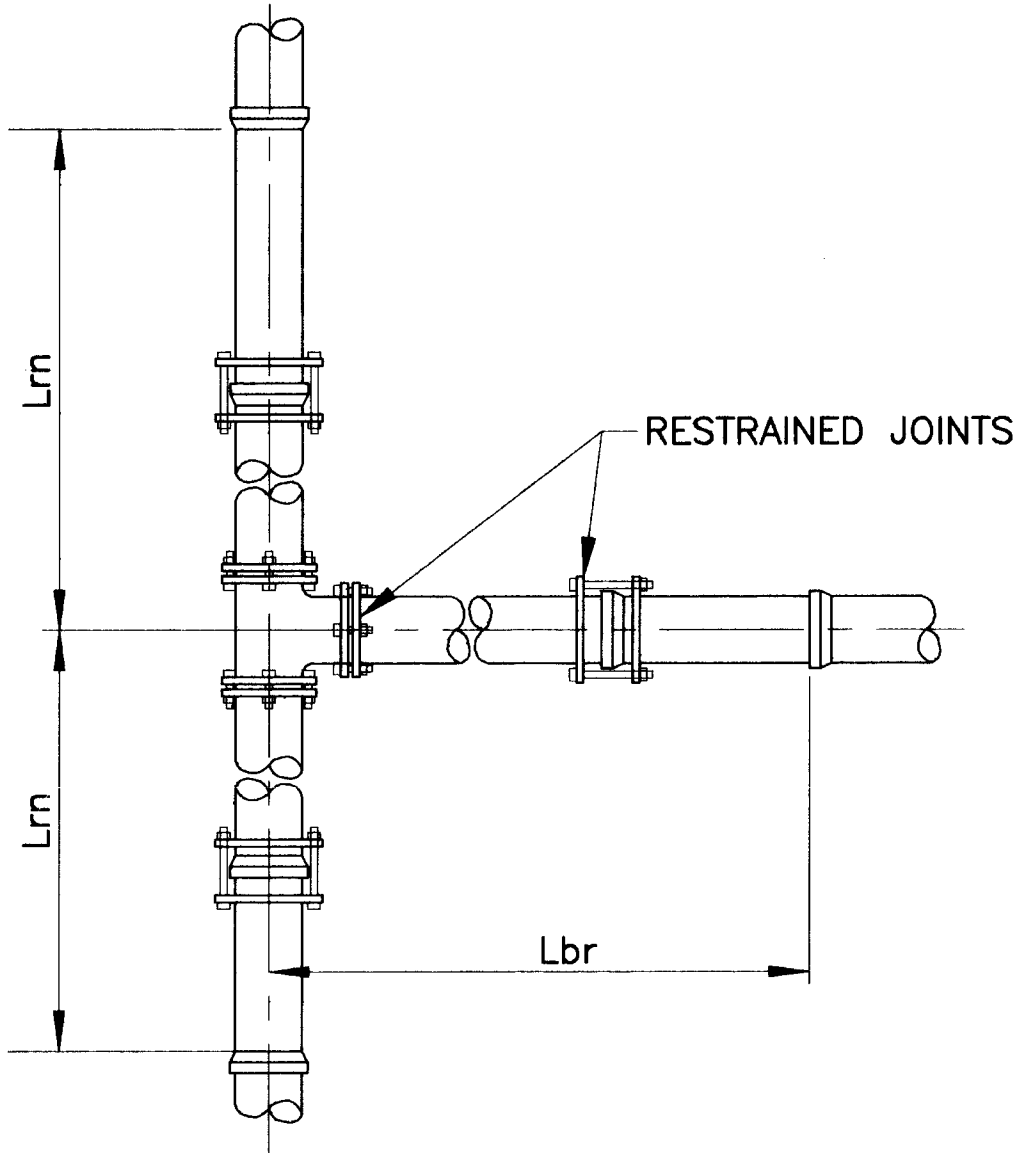
3. TEE

BRANCH SIZE	Lbr (Lrn=0.5') / Lbr (Lrn=10')				
	RUN SIZE				
	4"	6"	8"	10"	12"
4"	36'/FO	35'/FO	34'/FO	32'/FO	31'/FO
6"		52'/3'	51'/FO	50'/FO	49'/FO
8"			69'/19'	69'/5'	68'/FO
10"				84'/33'	83'/21'
12"					99'/47'

NOTE: IF Lrn > 20', THEN ALL TEE SIZES NEED TO BE RESTRAINED AT THE FITTING ONLY (FO).

Lrn = SHORTEST LENGTH OF PIPE RESTRAINED ON EITHER SIDE OF THE TEE

Lbr = LENGTH OF PIPE TO BE RESTRAINED ON THE BRANCH

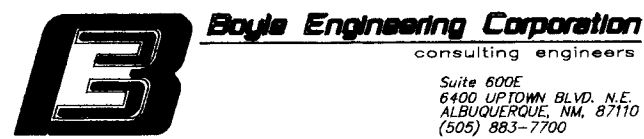


NOTES:

- ALL JOINTS AND FITTINGS WITHIN THE SPECIFIED RESTRAINED LENGTH, MUST BE RESTRAINED.
- ALL LENGTHS ARE IN FEET.
- ALL RESTRAINED JOINT LENGTHS ARE BASED ON THE CONDITIONS NOTED UNDER "BASIS OF DESIGN". ANY CHANGES TO THESE CONDITIONS MUST BE NOTED AND LENGTHS RECALCULATED AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL NOTE THE LOCATION, TYPE AND EXTENT OF ALL RESTRAINED JOINTS INSTALLED ON THIS PROJECT AS PART OF THE RECORD DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT THRUST RESTRAINT DESIGN FOR PIPE THAT IS NOT THE SIZE OR MATERIAL TYPE SHOWN IN THESE DETAILS.

BASIS OF DESIGN

- PIPE MATERIAL = PVC
- TEST PRESSURE = 150 PSI
- SOIL TYPE = "SM" (ASTM STANDARD D24870)
- TRENCH TYPE & BEDDING = TYPE 4, (ANSI/AWWA C150/A21.50)
- PIPE COVER = 3' MINIMUM



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT UTILITY DESIGN SECTION	
TITLE: WESTGATE HEIGHTS WATER LINE REPLACEMENT RESTRAINED JOINT DETAILS	
Design Review Committee	City Engineer Approval
Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE	DESIGN REVIEW COMMITTEE
City Project No. 5431.93	Zone Map No. N/A
Sheet 12	Of 14

SCANNED BY
BY LASON

