

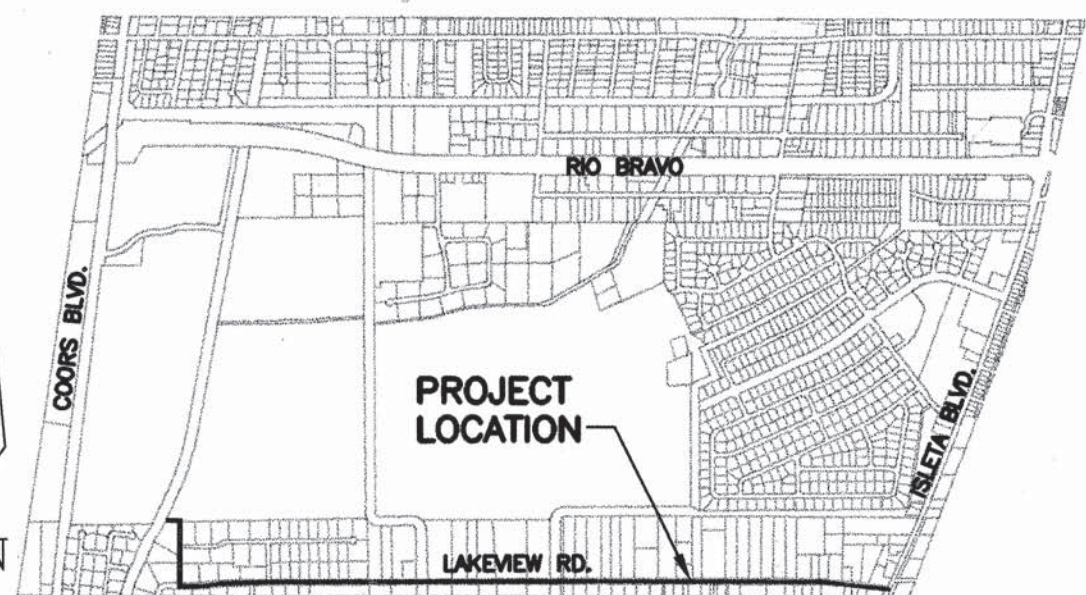


CITY OF ALBUQUERQUE
CONSTRUCTION PLANS
FOR

LAKEVIEW ROAD
SANITARY SEWER INTERCEPTOR
REHABILITATION

PROJECT NO. 6388.91
MAY 2000
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VICINITY MAP
(ZONE ATLAS MAPS P10, Q10, Q11, Q12)
NOT TO SCALE

APPROVAL OF RECORD DRAWINGS
CHIEF CONSTRUCTION ENGINEER
[Signature]
DATE 9-23-05

RECORD DRAWING
I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



8/16/01 AS-BUILTS

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER		DATE	
		DRC Chairman		<i>[Signature]</i>		6/1/00	
		Transportation		<i>[Signature]</i>		6/1/00	
		Water/Wastewater		<i>[Signature]</i>		6/1/00	
		Hydrology		<i>[Signature]</i>		6/1/00	
		C.I.P.		<i>[Signature]</i>		6/1/00	
		Constr. Mngmnt.		<i>[Signature]</i>		6/1/00	
		Constr. Coordinator		<i>[Signature]</i>		6/1/00	
		City Project No.		6388.91		Sheet 1 of 1	

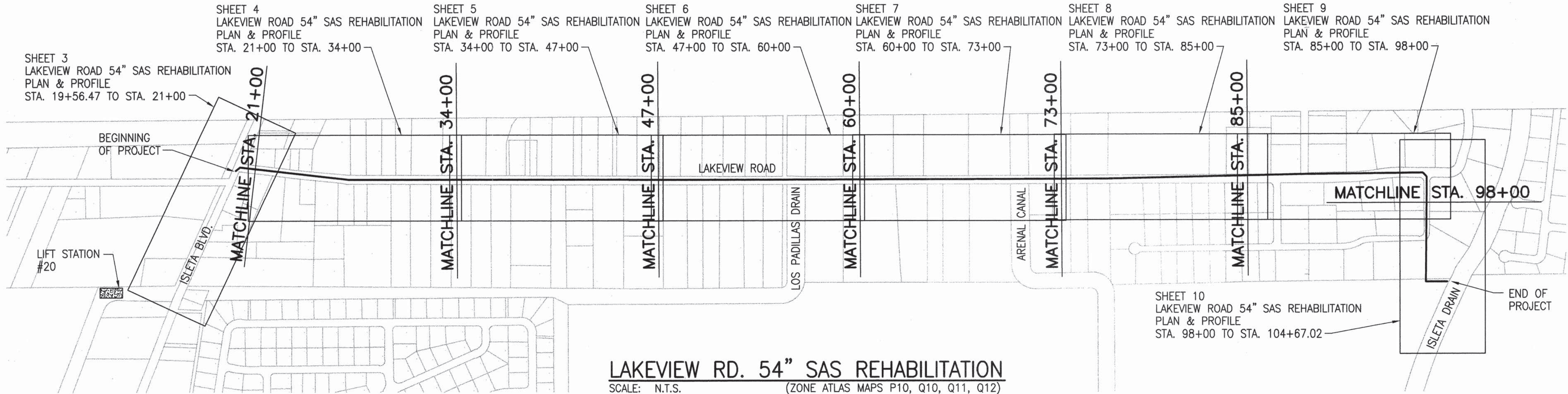
APPROVED FOR CONSTRUCTION
[Signature]
City Engineer Date 9/30/00
Bernillo County Date

13/14

SCANNED BY
MESA REPRO

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MESA REPRO



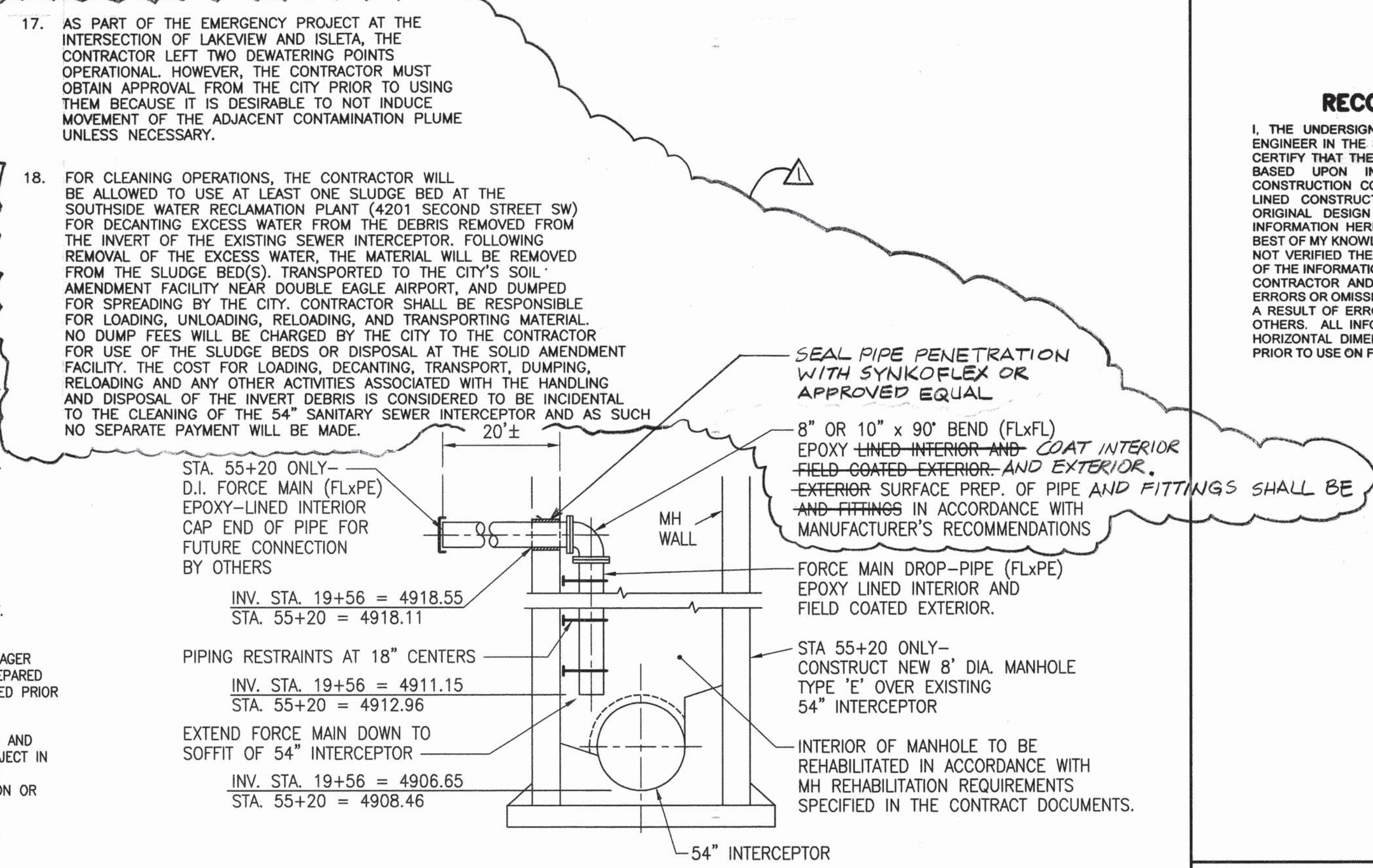
GENERAL NOTES

- TWO (2) 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".
- QUANTITIES SHOWN FOR THE VARIOUS BID ITEMS ARE FOR THE CONTRACTOR'S INFORMATION ONLY. PAYMENT SHALL BE BASED ON ACTUAL QUANTITIES AS CONSTRUCTED.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A 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.
- INFORMATION OF MANHOLE INVERT AND RIM ELEVATIONS WERE OBTAINED FROM CITY'S AS-BUILT DRAWINGS. THE HORIZONTAL DISTANCES BETWEEN MANHOLES WERE MEASURED IN THE FIELD. NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE CONTRACTOR SHALL VERIFY ALL HORIZONTAL AND VERTICAL DISTANCES PRIOR TO ANY WORK.
- CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE GEODETIC SURVEY NOT LESS THAN FIVE (5) WORKING DAYS PRIOR TO STARTING WORK THAT WILL IMPACT ANY EXISTING ACS GEODETIC SURVEY MONUMENTS. ALL REFERENCING AND REPLACEMENT OF ACS MONUMENTS SHALL BE DONE BY THE CITY OF ALBUQUERQUE GEODETIC SURVEY. ANY ACS MONUMENTS DAMAGED OR DESTROYED DUE TO THE FAILURE OF CONTRACTOR TO NOTIFY AS STATED ABOVE SHALL BE REPLACED BY THE CITY OF ALBUQUERQUE GEODETIC SURVEY AT CONTRACTOR EXPENSE.
- CONTRACTOR SHALL NOTIFY ENGINEER NO LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF ALL OTHER PERMANENT SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. ONLY THE ENGINEER SHALL DO REPLACEMENT. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT CONTRACTOR EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.
- ALL WATER VALVE BOXES AND SEWER MANHOLES WITHIN THE NEW PAVEMENT ARE TO BE ADJUSTED TO FINISH GRADE PER COA STANDARD DETAILS.
- ALL STREET STRIPING AND MARKING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO THE SAME LOCATION AS EXISTING OR AS INDICATED ON THE CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL MAINTAIN ALL TRENCHES IN A SAFE CONDITION PROTECTING THE WORKERS AND THE GENERAL PUBLIC. TRENCH PROTECTION SHALL BE IN ACCORDANCE WITH O.S.H.A. 29CFR 1926.650 SUBPART P. EXCAVATIONS SHALL BE SLOPED, BRACED OR SHORED 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 THEREFORE.
- 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 THESE 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 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.
- PAVEMENT REPLACEMENT**
A. **RESIDENTIAL STREET - FLEXIBLE PAVEMENT**
(LAKEVIEW ROAD, VALLEY GARDENS ROAD, HARRIS ROAD)
FOR PAVEMENT CUTS < 8 FEET WIDE, THE PAVEMENT SHALL BE REPLACED PER CITY STANDARD DRAWING NO. 2465 TO MATCH EXISTING PAVEMENT THICKNESS PLUS 2 INCHES.
B. **ARTERIAL/COLLECTOR STREET - FLEXIBLE PAVEMENT**
(ISLETA BOULEVARD)
FOR PAVEMENT CUTS < 8 FEET WIDE, THE PAVEMENT SHALL BE REPLACED PER CITY STANDARD DRAWING NO. 2465 TO MATCH EXISTING PAVEMENT THICKNESS PLUS 2 INCHES.
C. FOR PAVEMENT CUTS WITHIN 6 FEET OF THE GUTTER, THE PAVEMENT MUST BE REMOVED AND REPLACED TO THE GUTTER.

BERNALILLO COUNTY GENERAL NOTES

- PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 95-12 AND ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1500 FOR MORE INFORMATION.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL MANAGER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH NOTED REQUIREMENTS AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
- A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGER UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT OR THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGER.
- CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: HOSS FOSTER.
- THE CONTRACTOR SHALL FILE WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL MANAGER DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
- SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGPERSON AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC ON ALL AFFECTED ROADS. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL PRIVATE AND PUBLIC PROPERTY AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
- TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.
- THE CONTRACTOR SHALL NOTIFY THE BERNALILLO COUNTY 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.
- THE CONTRACTOR SHALL VERIFY THE PAVEMENT REPLACEMENT SECTIONS, SUBGRADE, BASE COURSE, AND ASPHALT WITH THE COMPACTION FOR THESE AREAS WITH THE COUNTY'S INSPECTOR AT TIME OF EXCAVATION. WHERE APPROPRIATE, MINIMUM WIDTH OF ASPHALT SHALL BE 24 FEET WIDE PER COUNTY STANDARDS.
- THE CONSTRUCTION PROCESS AND THE COMPLETED CONSTRUCTION MUST NOT CHANGE THE CURRENT DRAINAGE PATTERNS FOR THIS ROADWAY, ITS RIGHT OF WAY, AND ALL CONNECTING ROADWAYS AND RIGHTS OF WAY. THE CONSTRUCTION PROCESS AND THE COMPLETED CONSTRUCTION MUST NOT ADVERSELY AFFECT GRADING AND DRAINAGE FOR ADJACENT AND IMMEDIATELY SURROUNDING PROPERTIES.

- REFER TO WEST SIDE INTERCEPTOR-SECTION I PROJECT, AS-BUILT #07-037-62 FOR INFORMATION REGARDING THE EXISTING 54" SEWER AND APPURTENANCES. COPIES OF THESE AS-BUILTS ARE AVAILABLE FOR A NOMINAL FEE BY CONTACTING CITY MAPS & RECORDS AT 768-3608.



DETAIL 1 FORCE MAIN CONNECTION TO EXISTING MANHOLE IN LAKEVIEW ROAD
SCALE: N.T.S.

RECORD DRAWING

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE:

LOCATION MAP AND GENERAL NOTES

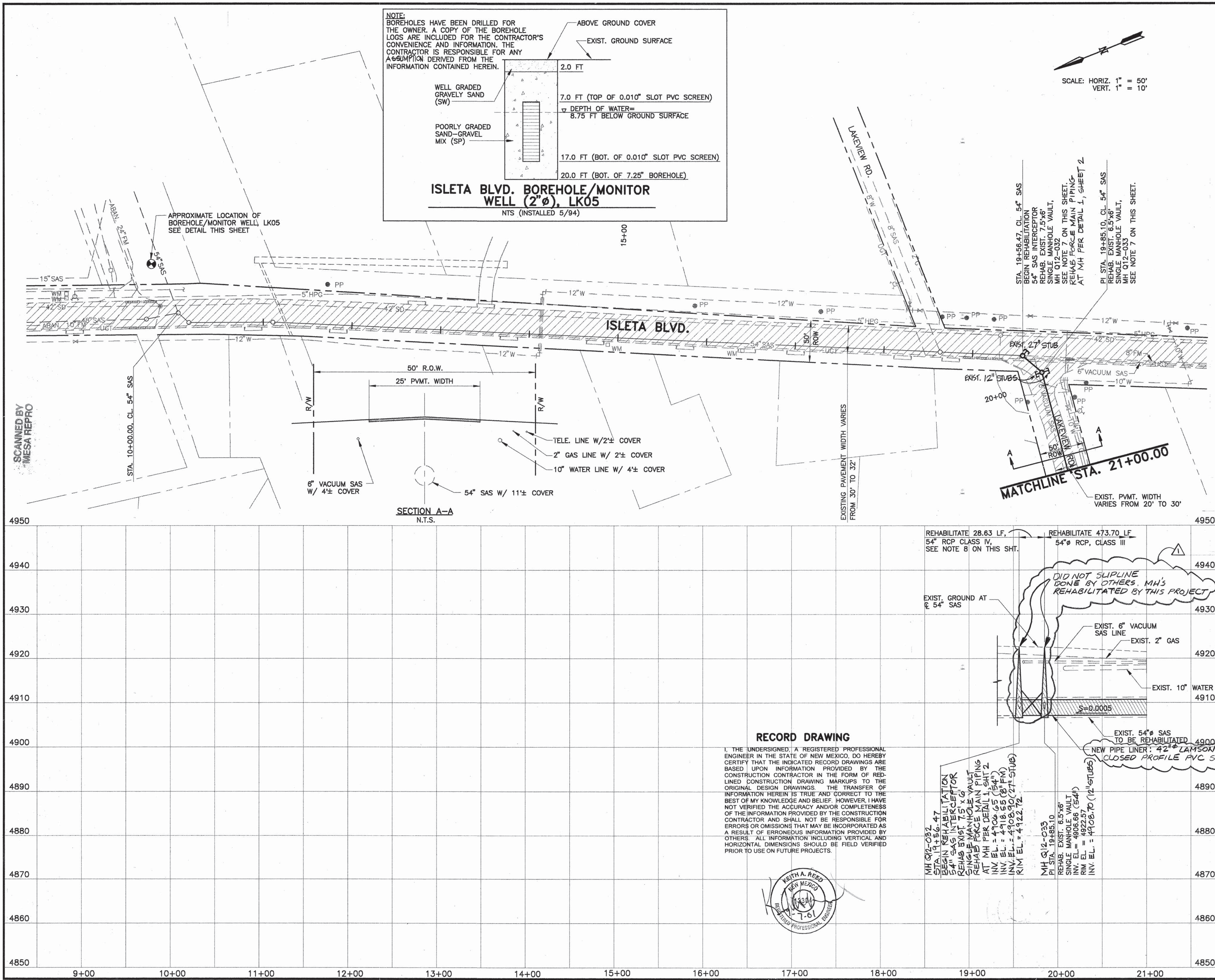
Design [Review] Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED JUN - 1 2000	APPROVED JUN - 1 2000		
City Project No. 6388.91	Zone Map No. P10, Q10, Q11, Q12	Sheet 2 of 1413	

FILE SPECIFICATION
D:\LAKEVIEW\SH14

PLOT SCALE
1"=50'

OPERATOR
ALTZ/MIKEY

PLOT DATE
11/29/95



NOTES:

- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2465. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
- TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54\"/>
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
- A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54\"/>
- GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE THIS SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
- CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNUAL SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
- NO EXCAVATION BELOW THE WATER TABLE WILL BE ALLOWED IN THIS INTERSECTION. NOR 500 LF WEST ON LAKEVIEW ROAD. ALL BYPASS PUMPING INCLUDING TEMPORARY DIVERSION OF THE 8\"/>
- PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54\"/>
- REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.
- SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

AS BUILT INFORMATION

CONTRACTOR	BARBARA CONST. CO.
INSPECTOR	BOYLE
DATE	11/29/95

BENCH MARKS

CONTROL STATION (9-P12) WITH HORIZONTAL & VERTICAL CONTROL - STATION IS A STANDARD AGS 3 1/4\"/>	DATE
CAP SET FLUSH WITH THE CURB. STATION IS STAMPED "9-P12, 1988".	NO. SURVEY WAS PERFORMED FOR THIS PROJECT

ENGINEERS SEAL

DATE	REMARKS
8/14/01	AS-BUILT
8/14/01	ADDED BY APPENDUM NO. 1

DESIGN REVISIONS

DATE	DESIGNED BY	DATE
	MHL, KAR	FEB 00
	MMW, CAM	FEB 00
	WWW	FEB 00

Boyle Engineering Corporation
CONSULTING ENGINEERS
Suite 600
4800 6th Ave. N.W.
(505) 962-7700

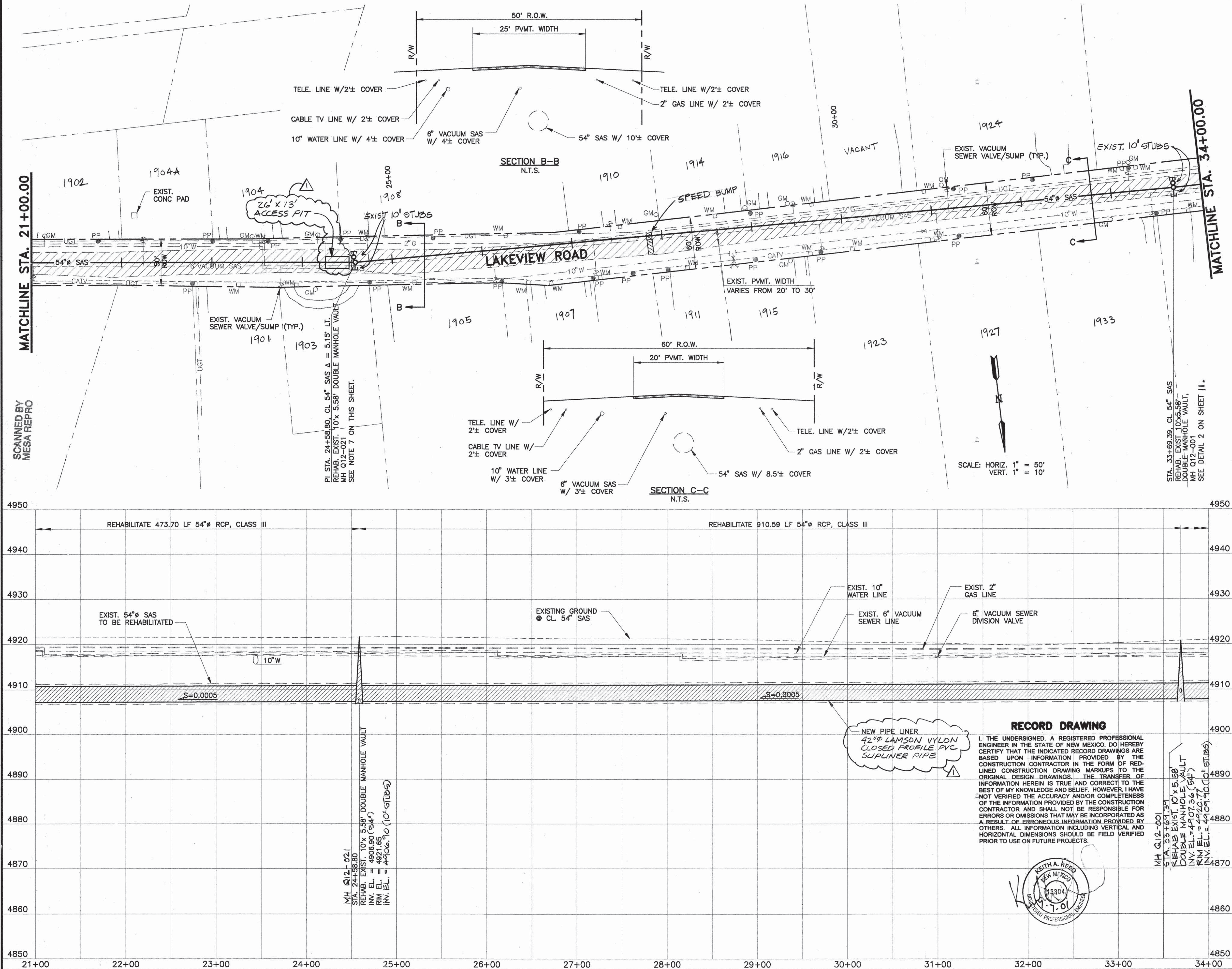
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: LAKEVIEW ROAD 54" SAS REHABILITATION FROM STA. 19+56.47 TO STA. 21+00.00

Design	Review	Committee	City Engineer	Approval
JAN - 1 2001	JAN - 1 2001			

City Project No. 6388.91 Zone Map No. Q-12 Sheet 3 of 1413

SCANNED BY
MESA REPRO



NOTES:

- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2485. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
- TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION. BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REHAB OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT ±2% PER ASTM D-1557.
- A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-92. TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
- GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE ADJACENT SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
- CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNULAR SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
- PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54" SEWER LINE REHABILITATION AS SUCH NO SEPARATE PAYMENT WILL BE MADE.
- REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.
- SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

AS BUILT INFORMATION

CONTRACTOR: **BOYLE ENGINEERING CORPORATION**

INSPECTOR'S FIELD VERIFICATION BY: **COA**

FIELD VERIFICATION BY: **COA**

CORRECTED BY: **BOYLE**

MICRO-FILM INFORMATION

RECORDED BY: **DATE**

NO.

ENGINEERS SEAL

DATE: **6/16/01**

NO. **AS-BUILT**

REMARKS

DESIGN

DESIGNED BY: **MHL, KAR**

DRAWN BY: **MMW, CAM**

CHECKED BY: **WWW**

DATE: **FEB 00**

DATE: **FEB 00**

DATE: **FEB 00**

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE:
LAKEVIEW ROAD 54" SAS REHABILITATION
FROM STA. 21+00.00 TO STA. 34+00.00

Design Review Committee City Engineer Approval

APPROVE

DESIGN REVIEW COMMITTEE

CITY ENGINEER

City Project No. **6388.91**

Zone Map No. **Q-12**

Sheet **41** of **1413**

NTS (INSTALLED 4/94)



1. THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
2. PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2465. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
3. TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER ~~REPAIR~~ OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
4. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
5. A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q1-022 TO MANHOLE Q1-010-9. IF REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
6. GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE THIS SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
7. PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54" SEWER LINE REHABILITATION AS SUCH NO SEPARATE PAYMENT WILL BE MADE.

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-INKED REVISION MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THAT ACCURATE INFORMATION WAS PROVIDED TO THE CONTRACTOR BY THE FIELD REPRESENTATIVE. THE CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION CONTAINED HEREIN IS FOR YOUR INFORMATION AND SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



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consulting engineers
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ALBUQUERQUE, NM, 87111
(505) 263-1100

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: LAKEVIEW ROAD 54" SAS REHABILITATION
FROM STA. 34+00.00 TO STA. 47+00.00

Design Review Committee APPROVED JUN - 1 2000 DESIGN REVIEW CITY PROJECT NO. 6388.91	City Engineer Approval APPROVED JUN - 8 2000 CITY ENGINEER Zone Map No. 0-11	City Design Update <table border="1"> <tr> <th>Mo./Day/Yr.</th> <th>Mo./Day/Yr.</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	Mo./Day/Yr.	Mo./Day/Yr.									Sheet 5 OF 1413
Mo./Day/Yr.	Mo./Day/Yr.												

SURVEY INFORMATION			BENCH MARKS		AS BUILT INFORMATION		
FIELD NOTES							
NO.		DATE			CONTRACTOR	WORK STORED BY	
	NO SURVEY WAS PERFORMED FOR THIS PROJECT		CONTROL STATION (9-P12) WITH HORIZONTAL & VERTICAL CONTROL - STATION IS A STANDARD ACS 3 1/4" ALUM. CAP SET FLUSH WITH THE CURB. STATION IS STAMPED "9-P12, 1988".		BARWARD CONST. CO.	BY ACCEPTANCE BY	
			TO REACH THE STATION FROM THE INTERSECTION OF RIO BRAVO BLVD. AND ISLETA BLVD., TRAVEL SOUTH ON ISLETA BLVD. ±0.7 MILES TO STATION ON THE EAST SIDE OF ISLETA APPROXIMATELY 5 MILES FROM DOWNTOWN		COA	FIELD CATION BY	
			SIDE OF ISLETA APPROXIMATELY 5 MILES FROM DOWNTOWN		BOYLE	CORRECTED BY	
			AIR/IDU/EROLF (ELEV = 4026.143)		MICRO-FILM INFORMATION	RECORDED BY	DATE
						NO.	

[illegible]

<div style="display: flex; justify-content: space-between;"> <div> <p>QUE</p> <p>TMENT</p> <p>ION</p> </div> <div> <p>REHABILITATION</p> <p>STA. 47+00.00</p> </div> </div>		
<p>Lost Design Update</p>	Mo./Day/Yr.	Mo./Day/Yr.
<p>1</p>	<p>Sheet</p>	<p>5</p> <p>Of 1413</p>

MATCHLINE STA. 47+00.00



NOTES:

1. THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
2. PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2465. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
3. TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REPAIR OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
4. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
5. A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-92. TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
6. GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE THIS SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.

8. REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.

9. SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.



RECORD DRAWING

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR. THE PRESENCE OF RED-CONSTRUCTION CONTRACTOR DRAWING MARKUPS TO THE LINED CONSTRUCTION DRAWINGS, THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED INTO THE CONSTRUCTION OF THE PROJECT BY THE CONTRACTOR. AS A RESULT OF ERRONEOUS INFORMATION INCORPORATED BY OTHERS, ALL INFORMATION ON HORIZONTAL, VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED FOR USE ON FUTURE PROJECTS.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: LAKEVIEW ROAD 54" SAS REHABILITATION
FROM STA. 47+00.00 TO STA. 60+00.00

Design Review Committee 		City Engineer Approval 		Last Design Update 	Mo./Day/Yr.	Mo./Day/Yr.
DESIGN REVIEW COMMITTEE		CITY ENGINEER				
City Project No. 6388.91		Zone Map No. Q-11		Sheet	6	Of 1413

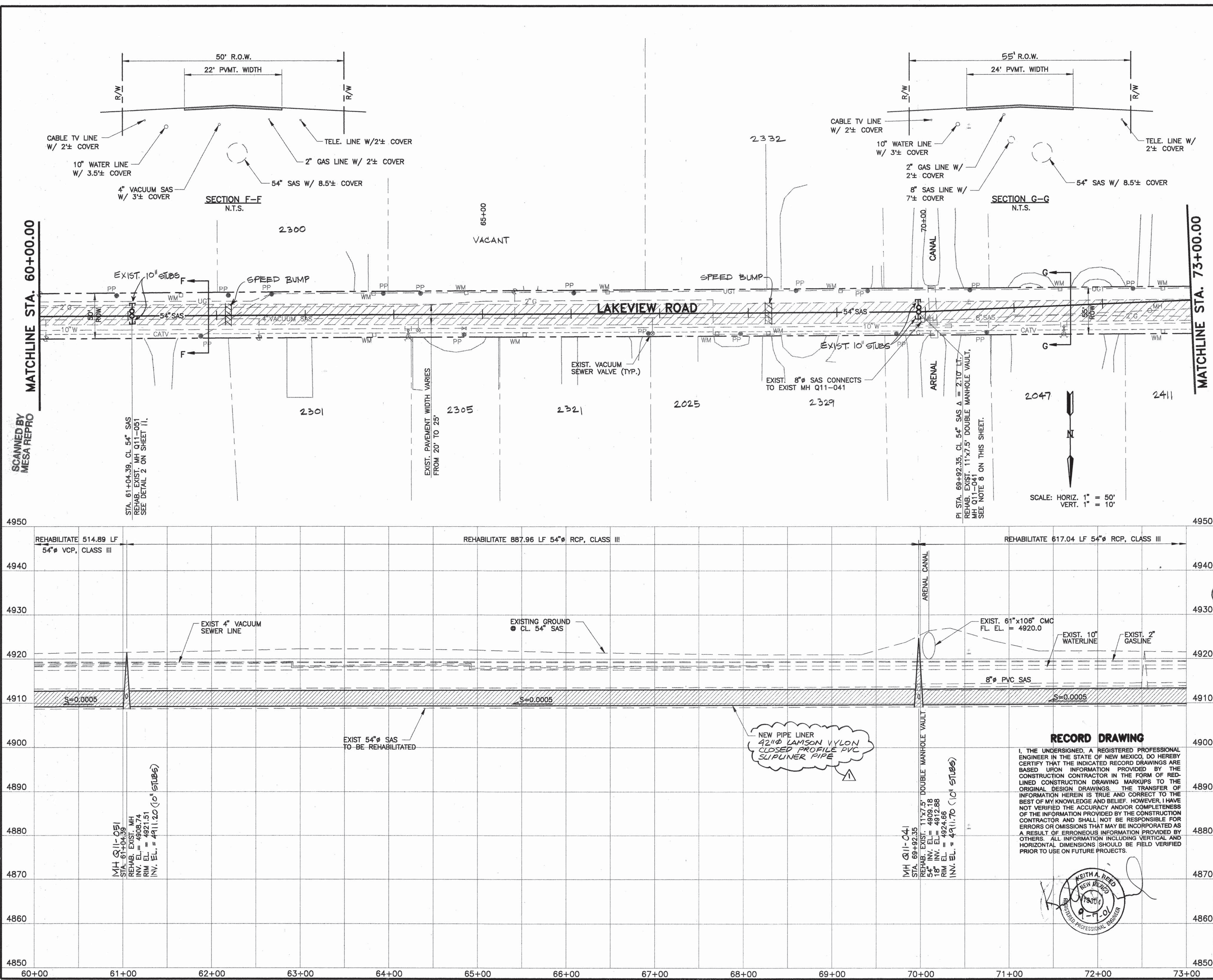
SURVEY INFORMATION		FIELD NOTES		BENCH MARKS	AS BUILT INFORMATION
NO.		DATE		CONTROL STATION (9-P12) WITH HORIZONTAL & VERTICAL CONTROL - STATION IS A STANDARD ACS 1 1/4" ALUM.	CONTRACTOR
	NO SURVEY WAS PERFORMED FOR THIS PROJECT			CAP SET FLUSH WITH THE CURB. STATION IS STAMPED "9-P12.1988".	WORK DONE BY INSPECTED BY ACCEPTANCE BY
				TO REACH THE STATION FROM THE INTERSECTION OF RIO BRAVO BLVD. AND ISLETA BLVD., TRAVEL SOUTH ON ISLETA BLVD. ±0.7 MILES TO STATION ON THE EAST SIDE OF ISLETA APPROXIMATELY 5 MILES FROM DOWNTOWN ALBUQUERQUE. (ELEV. = 4926.163)	VERIFICATION BY
					DRAWINGS CORRECTED BY
					RECORDED BY
					DATE
					NO.

[illegible]

JE
MENT
ON

REHABILITATION
STA. 60+00.00

Mo./Day/Yr.	Mo./Day/Yr.
Sheet	6 Of 413



NOTES:

- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2465. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
- TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REHAB OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
- A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-92. TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
- GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE ADJACENT SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
- THE SIZE OF MANHOLE Q11-051 WAS NOT AVAILABLE FROM MANHOLE INSPECTION REPORT OF 1990'S SEWER INTERCEPTOR REHABILITATION PHASE I.
- CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNULAR SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
- PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54" SEWER LINE REHABILITATION AS SUCH NO SEPARATE PAYMENT WILL BE MADE.
- REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.
- SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

ENGINEERS SEAL

REVISIONS

NO.	DATE	REMARKS
1	6/16/01	AS-BUILT

DESIGNED BY: MHL, KAR
DRAWN BY: MWM, CAM
CHECKED BY: WWM

DATE: FEB 00
DATE: FEB 00
DATE: FEB 00

Boyle Engineering Corporation
consulting engineers
Suite 600C
4400 University Blvd. N.E.
Albuquerque, NM 87110
(505) 883-7200

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE:
LAKEVIEW ROAD 54" SAS REHABILITATION
FROM STA. 60+00.00 TO STA. 73+00.00

Design/Review/Committee/City Engineer/Approval

City Project No. 6388.91
Zone Map No. Q-11
Sheet 7 of 1413

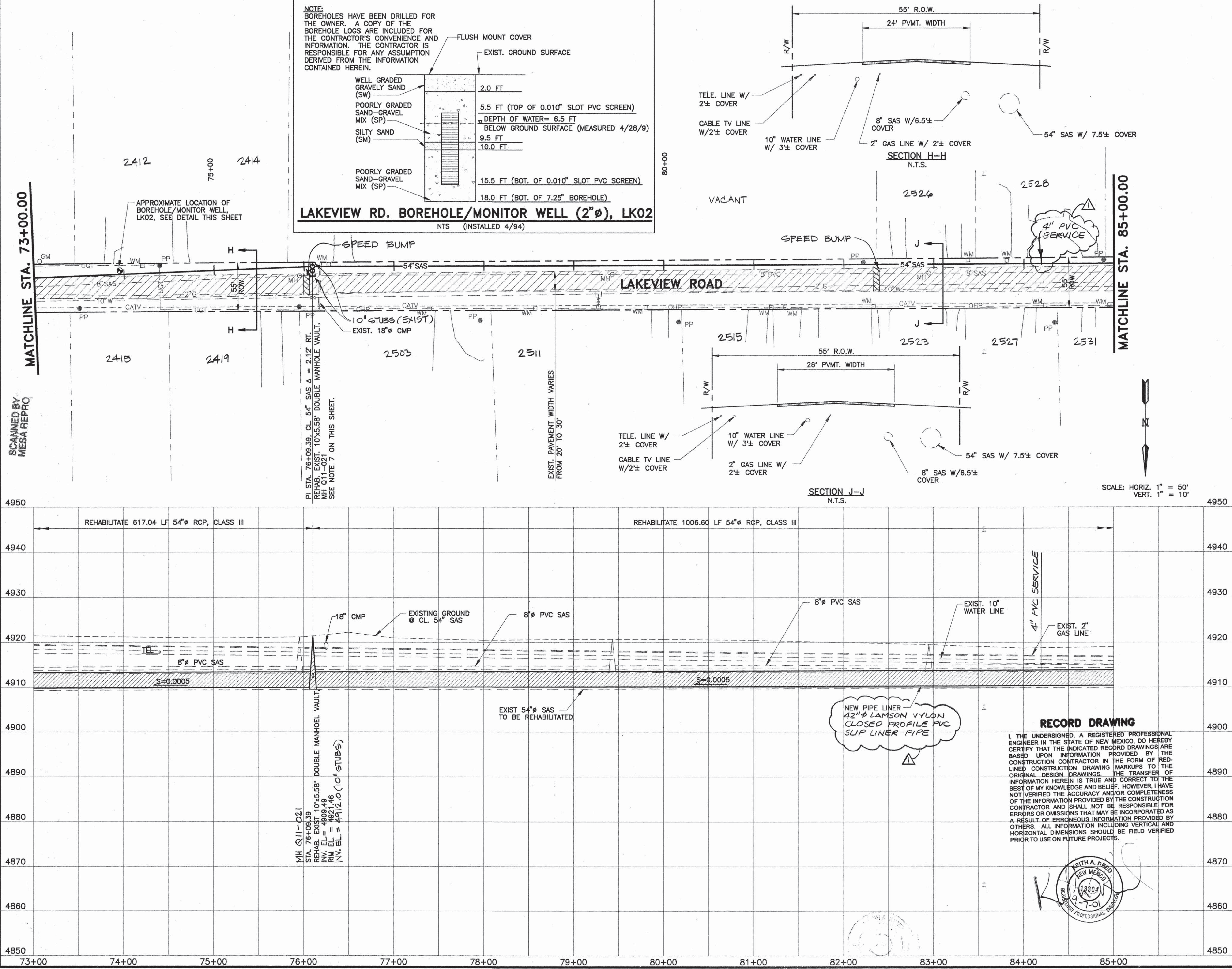
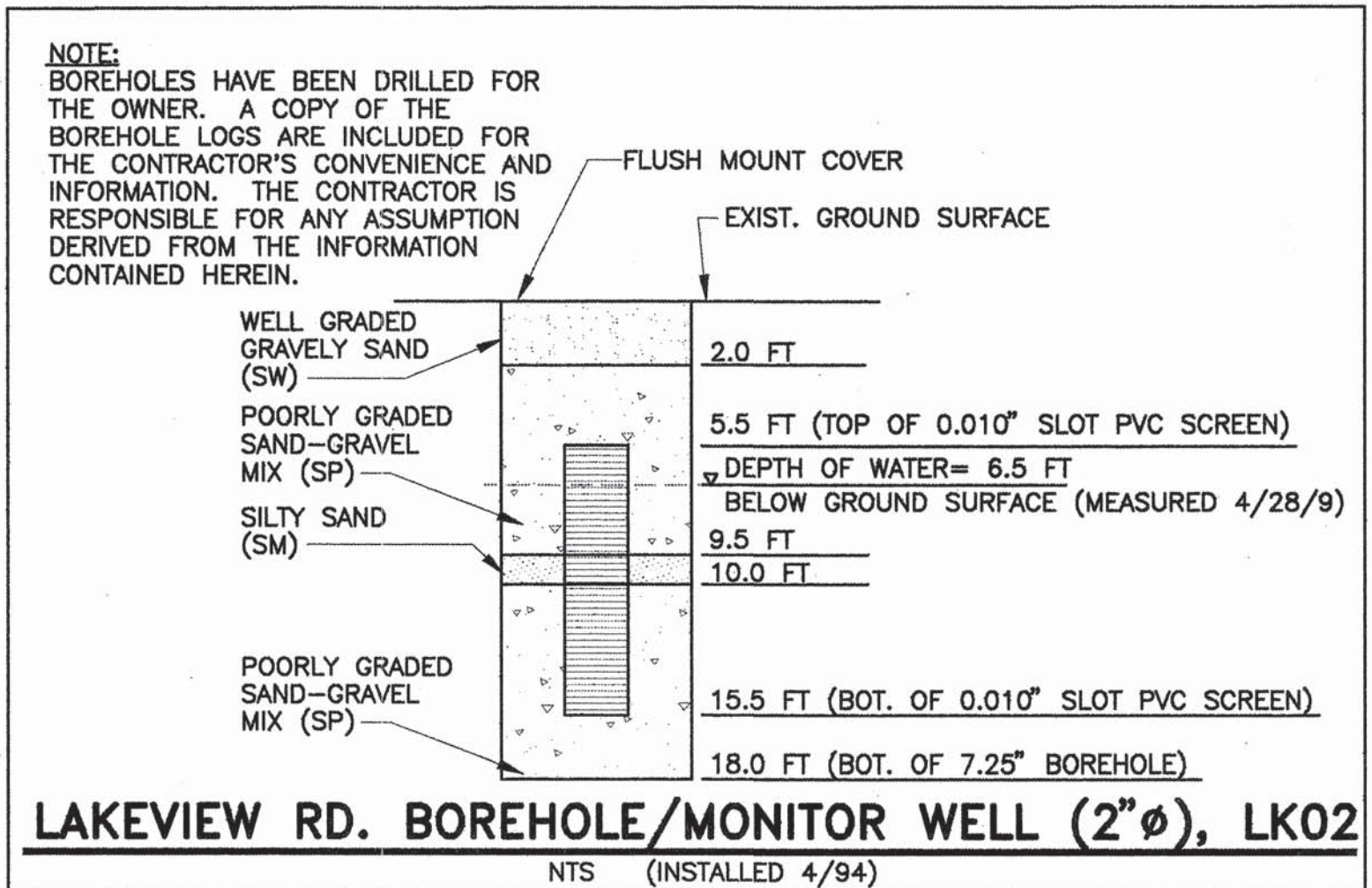
FILE SPECIFICATION
D:\LAKEVIEW\SH19

PLOT SCALE
1"=50'

OPERATOR
AL12/WMY

PLOT DATE
11/20/95 11:28

SCANNED BY
MESA REPRO



- NOTES:**
- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
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 - TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REHAB OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
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 - A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-82 TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
 - GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE THIS SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
 - CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNULAR SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
 - PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54" SEWER LINE REHABILITATION AS SUCH NO SEPARATE PAYMENT WILL BE MADE.
 - REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.
 - SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

RECORD DRAWING

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



ENGINEERS SEAL

DATE: 8/16/01
DESIGNED BY: MHL, KAK
DRAWN BY: WMM, CAM
CHECKED BY: WMM

REVISIONS

NO.	DATE	REMARKS
1	8/16/01	AS-BUILT

DESIGN

DATE	Mo./Day/Yr.
DESIGNED BY	FEB 00
DRAWN BY	FEB 00
CHECKED BY	FEB 00

Boyle Engineering Corporation
consulting engineers
Suite 602
4425 Camino Rio N.E.
Albuquerque, NM 87110
(505) 883-7700

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE:
LAKEVIEW ROAD 54" SAS REHABILITATION
FROM STA. 73+00.00 TO STA. 85+00.00

Design Review Committee City Engineer Approval
APPROVE JUN-17-00 APPROVE JUN-17-00
DESIGN REVIEWED BY: [Signature] CITY ENGINEER
City Project No. 6388.91 Zone Map No. Q-11 Sheet 8 of 1413

AS BUILT INFORMATION

CONTRACTOR: BARNARD CONST. CO.
WORK STAGED BY: [Signature]
ACCEPTANCE BY: CoA
FIELD ACCEPTANCE BY: [Signature]
DRAWINGS CORRECTED BY: Boyle
MICRO-FILM INFORMATION: [Signature]
RECORDED BY: [Signature]
DATE: [Signature]

BENCH MARKS

CONTROL STATION (9-P12) WITH HORIZONTAL & VERTICAL CONTROL - STATION IS A STANDARD ACS 3 1/4" ALUM.	DATE
CAP SET FLUSH WITH THE CURB. STATION IS STAMPED "9-P12, 1988". <td></td>	
TO REACH THE STATION FROM THE INTERSECTION OF RIO BRAVO BLVD. AND ISLETA BLVD., TRAVEL SOUTH ON ISLETA BLVD. ± 0.7 MILES TO STATION ON THE EAST SIDE OF ISLETA APPROXIMATELY 5 MILES FROM DOWNTOWN ALBUQUERQUE. (ELEV. = 4926.63)	

SURVEY INFORMATION

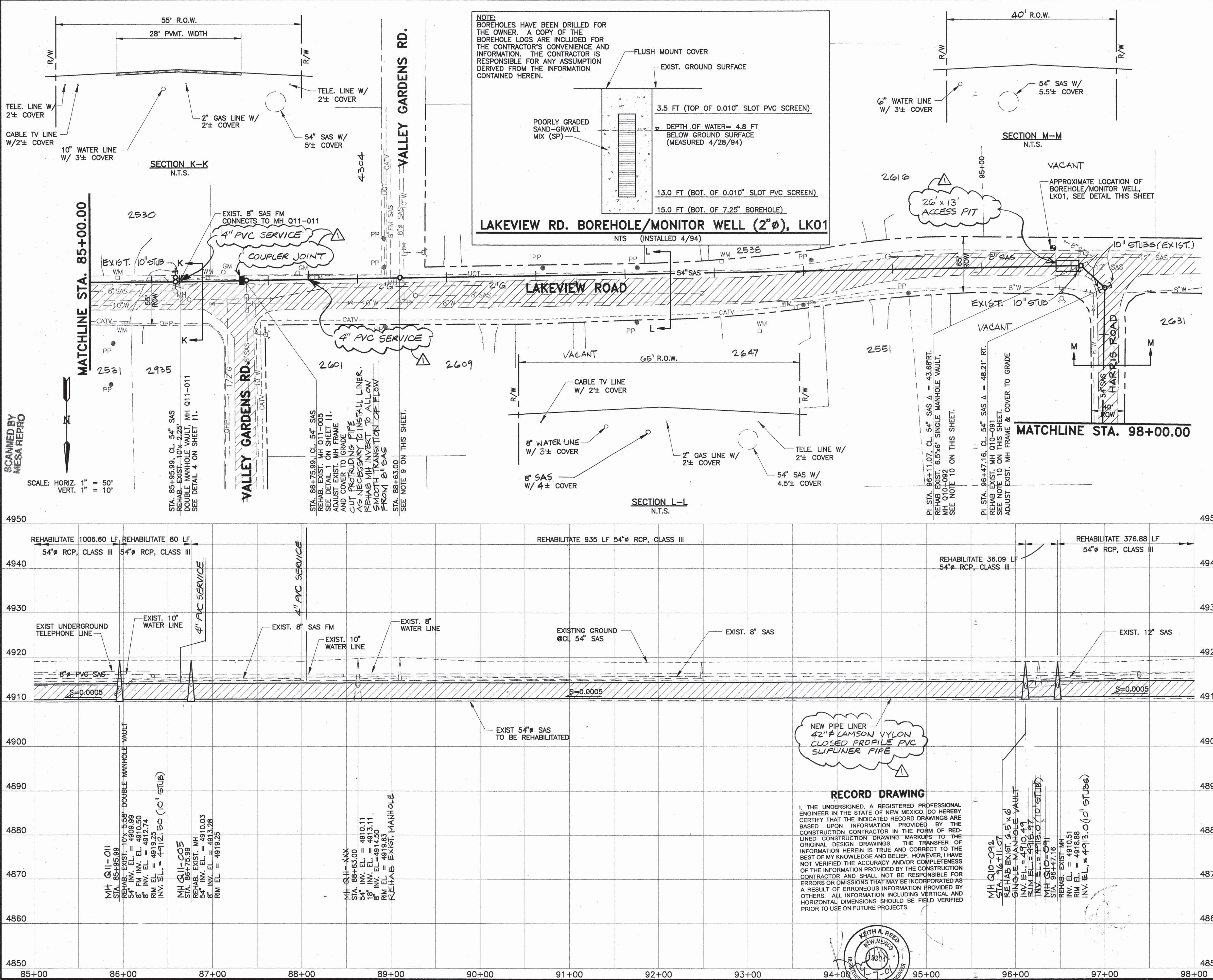
FIELD NOTES	DATE
NO SURVEY WAS PERFORMED FOR THIS PROJECT	

FILE SPECIFICATION
D:\LAKEVIEW\SH110

PLOT SCALE
1"=50'

OPERATOR
ALZ/ANKEE

PLOT DATE
11/20/95



NOTES:

- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2485. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
- TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REHAB OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
- ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
- A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-92. TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
- GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE THIS SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
- THE SIZES OF MANHOLE Q11-005 AND MANHOLE Q11-081 WERE NOT AVAILABLE FROM MANHOLE INSPECTION REPORT OF 1990'S SEWER INTERCEPTOR REHABILITATION PHASE I.
- PAVEMENT REMOVAL AND REPLACEMENT SHALL BE CONSIDERED INCIDENTAL TO 54" SEWER LINE REHABILITATION AS SUCH NO SEPARATE PAYMENT WILL BE MADE.
- FOR MANHOLE AT STATION 88+63.00, THE INTERCEPTOR LINER SHALL CONTINUE THROUGH THE MANHOLE. CONTRACTOR SHALL FOLLOW ALL THE MANHOLE REHABILITATION WORKS SHOWN ON DETAIL 1 OF SHEET 11 WITH THE ONLY EXCEPTION OF REHABILITATING THE MANHOLE WALL ABOVE NEW GROUT SHELVES.
- CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNULAR SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
- REFER TO TYPICAL EXISTING PIPE SECTION ON SHEET 11 FOR REHAB REQUIREMENTS.
- SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

AS BUILT INFORMATION

CONTRACTOR: **BOYLE ENGINEERING CORPORATION**

WORK STACKED BY: **CSA**

ACCEPTANCE BY: **CSA**

FIELD ACTION BY: **BOYLE**

DRAWINGS CORRECTED BY: **BOYLE**

RECORDED BY: **BOYLE**

DATE: **11/20/95**

ENGINEERS SEAL

DATE: **11/20/95**

REVISIONS

NO.	DATE	REMARKS
1	11/20/95	AS-BUILT

DESIGNED BY: **MHL, KAR**

DRAWN BY: **MMW, CAM**

CHECKED BY: **WWW**

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

UTILITY DESIGN SECTION

LAKEVIEW ROAD 54" SAS REHABILITATION

FROM STA. 85+00.00 TO STA. 98+00.00

Design (Review) Committee City Engineer Approval

City Project No. **6388.91**

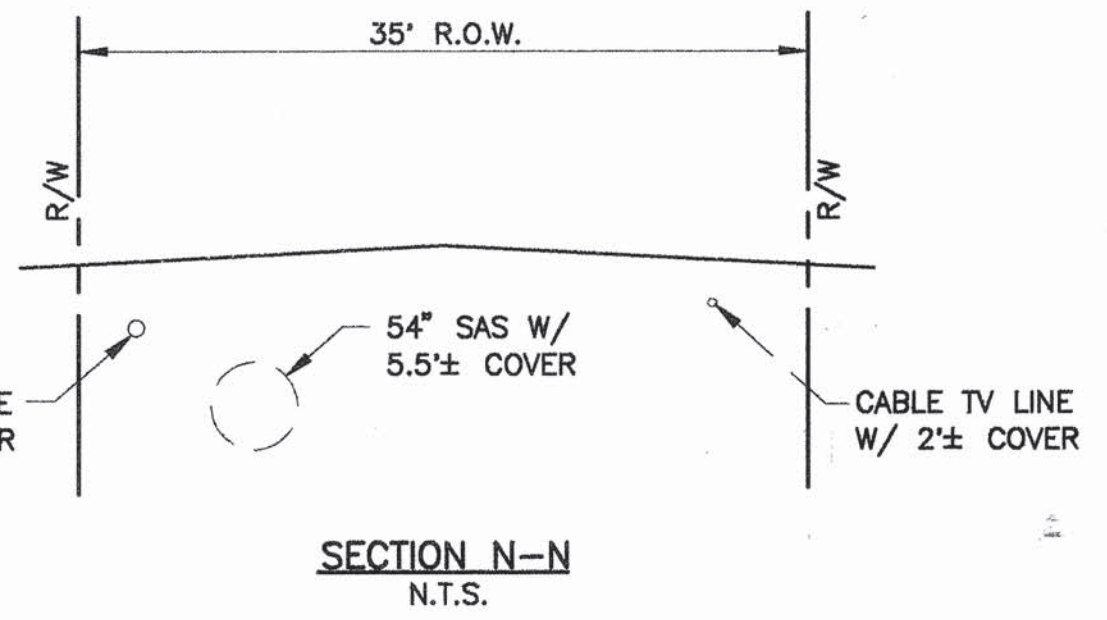
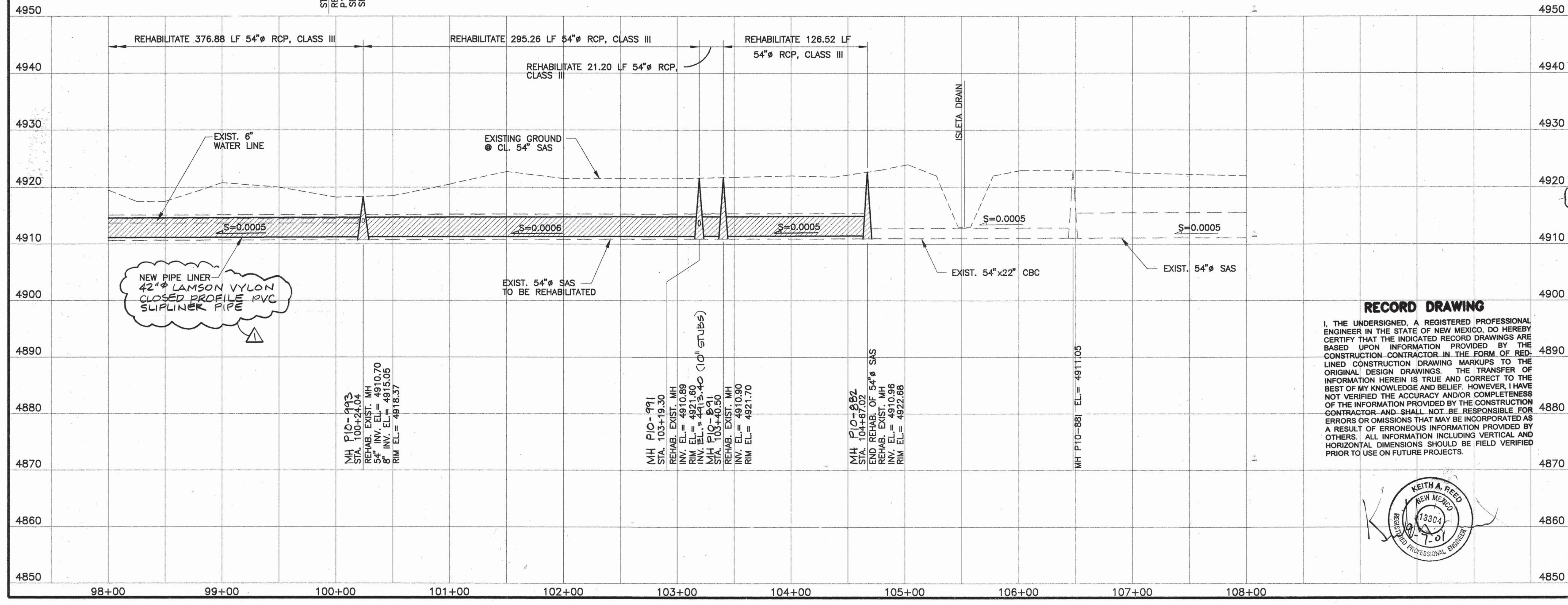
Zone Map No. **Q-10, Q-11**

Sheet **9** of **143**

FILE SPECIFICATION
D:\LAKEVIEW SHIT1
PLOT SCALE
1"=50'
OPERATOR
ALT/MLK/KEY
PLOT DATE
11/20/95

SCANNED BY
MESA REPRO

MATCHLINE STA. 98+00.00



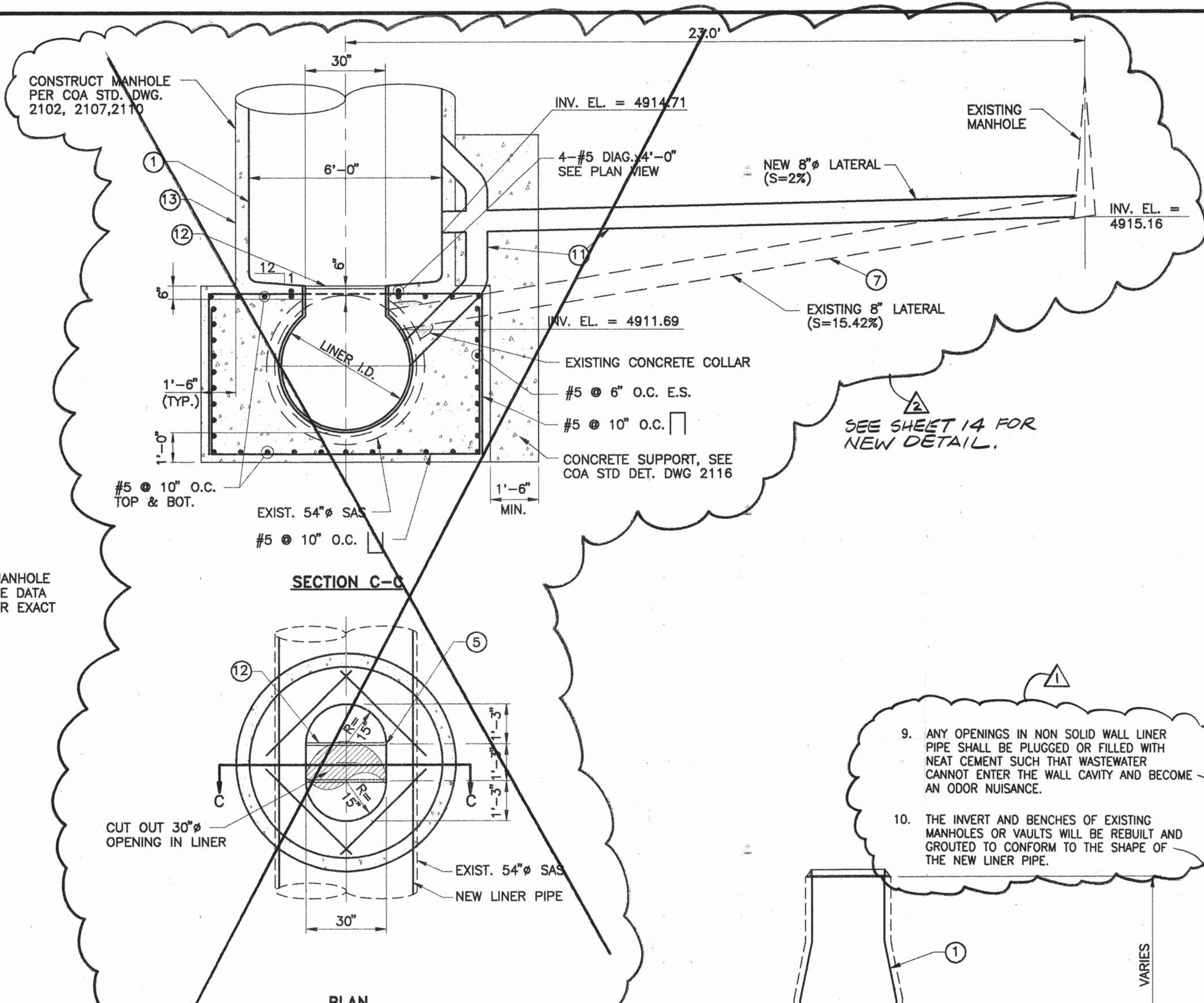
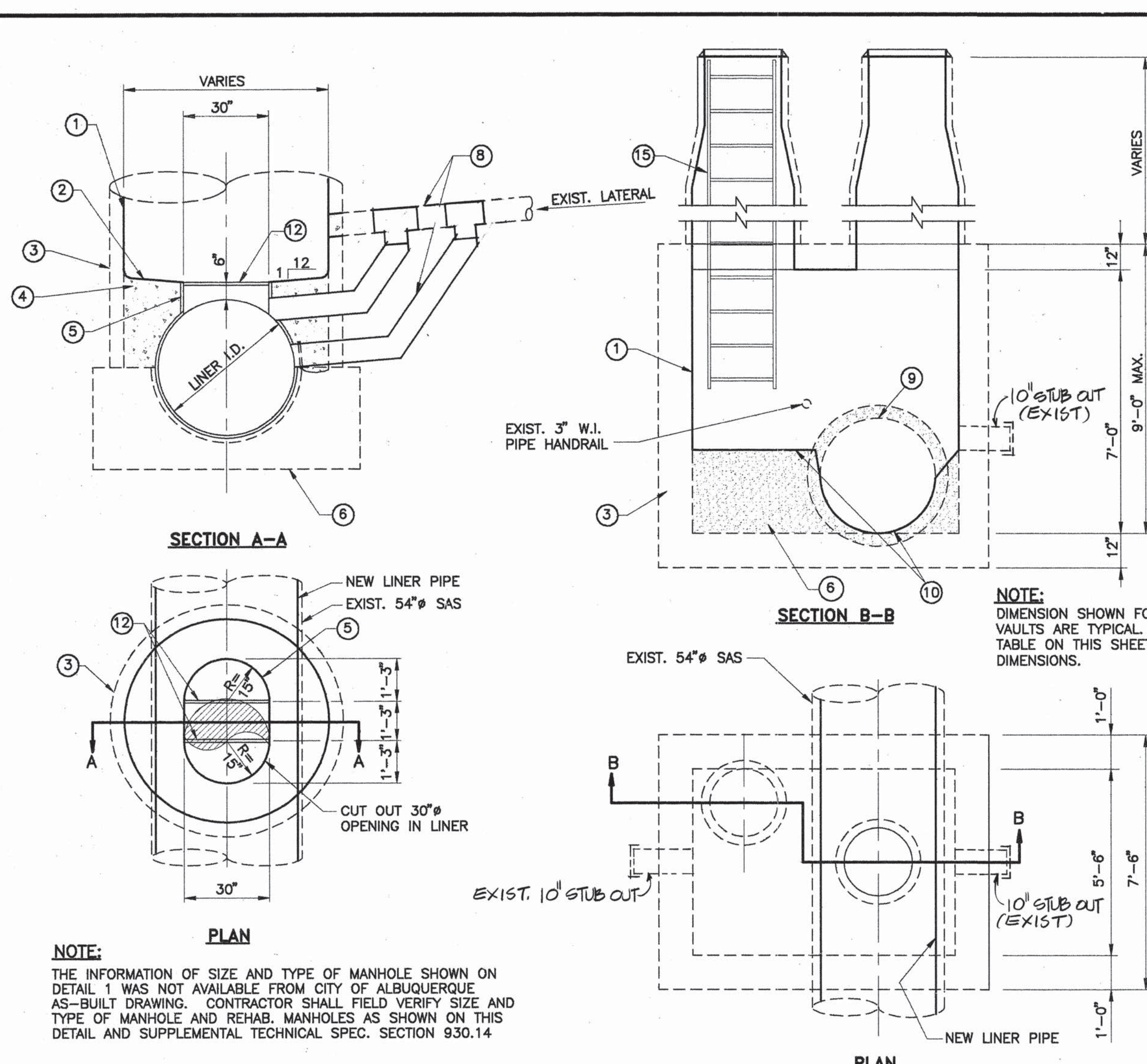
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'

RECORD DRAWING
I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



- NOTES:**
1. THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATIONAL ALL EXISTING UTILITIES AS REQUIRED. ALL COSTS ASSOCIATED WITH THE SHORING, BRACING AND/OR SUPPORT OF EXISTING UTILITIES FOR THE CONSTRUCTION OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
 2. TRENCH CUT WIDTHS FOR INSERTION PITS, GROUTING OPERATIONS OR OTHER REPAIRS SHALL BE THE MINIMUM WIDTHS REQUIRED FOR UTILITY INSTALLATION, BACKFILL & COMPACTION, AND COMPLIANCE WITH CURRENT AND APPLICABLE OSHA SAFETY REGULATIONS. ALL COSTS ASSOCIATED WITH INSERTION PIT EXCAVATIONS, BACKFILL & COMPACTION GROUTING OPERATIONS OR OTHER REPAIRS INCLUDING PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR THE 54" SEWER REHAB OF THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE.
 3. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 90% MINIMUM COMPACTION AT OPTIMUM MOISTURE CONTENT $\pm 2\%$ PER ASTM D-1557.
 4. A CCTV INSPECTION WAS PERFORMED IN OCTOBER 1990 FOR 54" INTERCEPTOR IN LAKEVIEW RD. WITHIN THE SEGMENTS SCHEDULED FOR REHABILITATION. THE CCTV INSPECTIONS ARE AVAILABLE FROM MANHOLE Q12-032 TO MANHOLE Q10-92. TO REVIEW A COPY OF THE TAPE PRIOR TO BIDDING, REFER TO SECTION 10, SPECIAL PROVISIONS OF THE SPECIFICATIONS.
 5. GROUNDWATER MAY BE ENCOUNTERED DURING INSERTION PIT EXCAVATIONS. ALL COSTS ASSOCIATED WITH DE-WATERING, IF REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT PRICE. SEE ADJACENT SHEET FOR BOREHOLE/MONITOR WELL INFORMATION.
 6. THE SIZES OF MH P10-893, P10-891, P10-891 AND P10-882 WERE NOT AVAILABLE FROM MANHOLE INSPECTION REPORT OF 1990'S SEWER INTERCEPTOR REHABILITATION PHASE I.
 7. REMOVAL OF GRAVEL ROAD SECTIONS ON HARRIS RD. FOR PIPE LINER INSERTION PIT SHALL BE REPLACED ACCORDING TO THE DETAIL ON SHEET 11.
 8. CONTRACTOR SHALL TERMINATE LINER PIPE AT MANHOLE INSIDE FACE AND INSTALL A BULKHEAD IN ASSOCIATION WITH ANNUAL SPACE GROUTING. SEE SUPPLEMENTAL TECHNICAL SPECIFICATION SECTION 930.14 FOR MANHOLE REHABILITATION.
 9. PAVEMENT REMOVAL AND REPLACEMENT AS REQUIRED FOR INSERTION PIT EXCAVATIONS, GROUTING OPERATIONS, OR OTHER REPAIRS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD DRAWING 2405 & 2445. ALL PAVEMENT CUT EDGES SHALL BE SAWCUT TO PRESENT AN EVEN LINE PRIOR TO REPLACEMENT OF PAVING MATERIALS.
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 12. SEE FLOATED PIPE DETAIL ON SHEET 14 FOR AS-BUILT CONDITION OF SOME SEGMENTS OF LINER PIPE.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEERS SEAL	
CONTRACTOR	BARNARD CORP. Co.	CONTROL STATION	(9-P12) WITH HORIZONTAL & VERTICAL	DATE			REVISIONS
WORK STACKED BY	CD	CONTROL	STATION IS A STANDARD ACS 3 1/4" ALUM.	NO.			
FIELD ACCEPTANCE BY	CD	CAP SET FLUSH WITH THE CURB. STATION IS STAMPED	"9-P12, 1988"	NO SURVEY WAS PERFORMED FOR THIS PROJECT			
DRAWINGS CORRECTED BY	BONLE	TO REACH THE STATION FROM THE INTERSECTION OF RIO BRAVO BLVD. AND ISLETA BLVD., TRAVEL SOUTH ON ISLETA BLVD. ± 0.7 MILES TO STATION ON THE EAST SIDE OF ISLETA APPROXIMATELY 5 MILES FROM DOWNTOWN ALBUQUERQUE. (ELEV. = 4926.163)					
				DESIGNED BY	MHL-KAR	DATE	FEB 00
				DRAWN BY	MMW, CAM	DATE	FEB 00
				CHECKED BY	WWW	DATE	FEB 00
TITLE: LAKEVIEW ROAD 54" SAS REHABILITATION FROM STA 98+00.00 TO STA. 104+67.02							
Design Review Committee		City Engineer Approval		Mo./Day/Yr.		Mo./Day/Yr.	
JUN - 1 1995		JUN - 1 1995					
DESIGN REVIEW COMMITTEE		CITY ENGINEER		Last Design Update			
City Project No.		Zone Map No.		Sheet		10 of 1413	
6388.91		P-10					



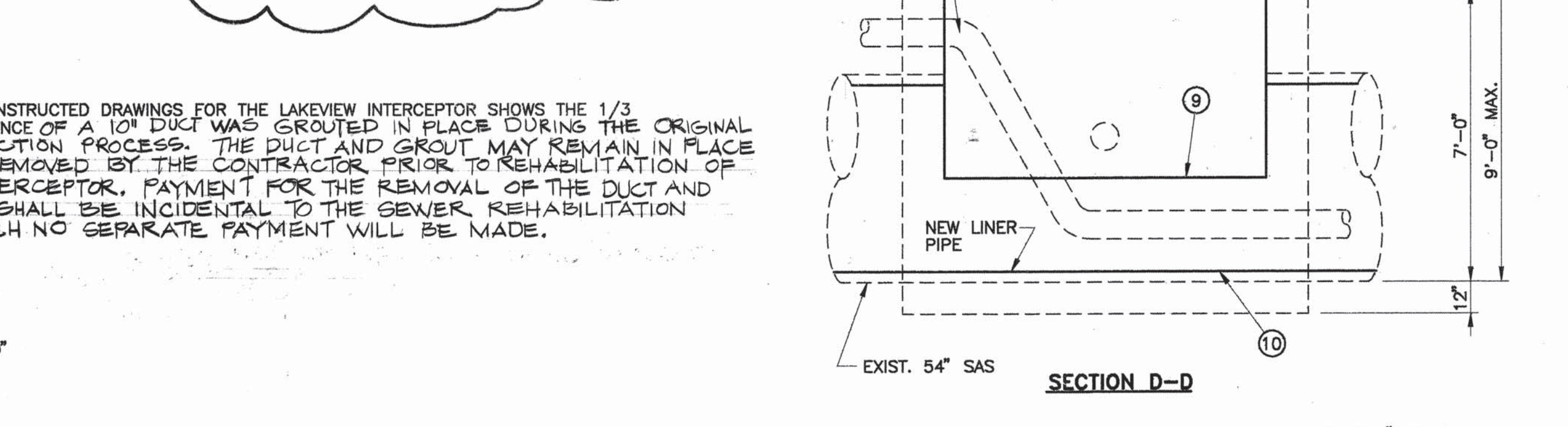
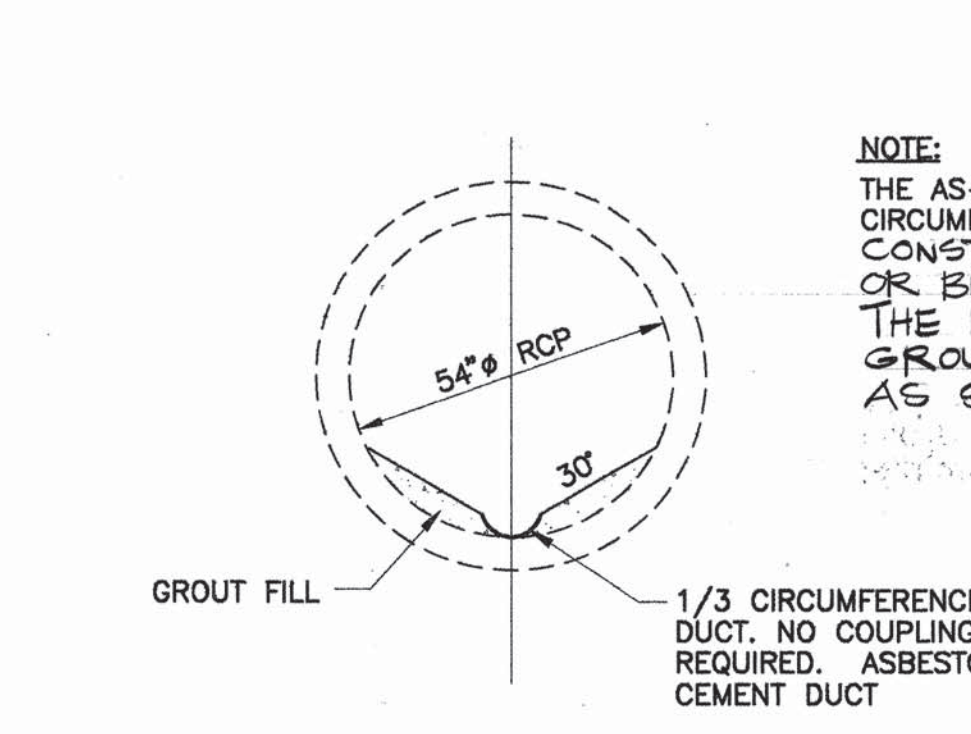
KEYED NOTES:	
1.	COAT INSIDE OF MANHOLE. REFER TO SUPPLEMENTAL TECHNICAL SPECIFICATIONS, SECTION 930.14.
2.	NEW CONCRETE BENCH.
3.	EXISTING MANHOLE
4.	NEW GROUT SHELVES TO THE TOP OF FIELD WELD CUTOFF RING.
5.	FIELD WELD CUTOFF RING TO LINER; RING SHALL BE SAME MATERIAL AS LINER.
6.	EXISTING BASE.
7.	REMOVE AND DISPOSE 23.0' OF EXISTING 8" GRAVITY SEWER LATERAL FROM EXISTING MH. TO THE 54" SAS. ALSO REMOVE CONCRETE COLLAR AT CONNECTION OF EXISTING LATERAL TO 54" SAS. REMOVAL OF LATERAL AND CONCRETE COLLAR SHALL BE BEFORE REHABILITATING THE EXISTING 54" SAS.
8.	CONTRACTOR SHALL FIELD DETERMINE THE CONNECTING ELEVATION OF THE EXISTING LATERAL AND USE ONE OF THE FOLLOWING CRITERIA TO RECONNECT THE EXISTING LATERAL TO THE SEWER SYSTEM: A) IF THE DIFFERENCE IN ELEVATION IS MORE THAN 3' BETWEEN THE SPRINGLINE OF THE EXISTING 54" SAS, A VERTICAL DROP AT THE MANHOLE SHALL BE CONSTRUCTED TO RECONNECT THE EXISTING LATERAL TO THE NEW LINER PIPE. THE VERTICAL DROP SHALL BE IN CONFORMANCE WITH C.O.A. STD. DETAIL DWG. 2116. B) IF THE DIFFERENCE IN ELEVATION IS LESS THAN 3' BETWEEN THE SPRINGLINE OF EXISTING LATERAL AND CENTERLINE OF EXISTING 54" SAS, CONTRACTOR SHALL REMOVE PORTION OF EXISTING LATERAL AS NECESSARY AND USE APPROPRIATE FITTINGS TO LOWER THE EXISTING LATERAL TO AN ELEVATION WHERE IT CAN BE CONNECTED TO EITHER THE WELD RING OF THE NEW LINER PIPE OR THE LINER PIPE. REMOVE SURFACE OF EXISTING MANHOLE IF NECESSARY AND PATCH W/ GROUTING MATERIAL. CORE DRILL THE NEW LINER PIPE AND CONNECT THE LATERAL PER LINER MANUFACTURER'S RECOMMENDATIONS.
9.	THROUGHOUT THE LENGTH OF THE MANHOLE, THE TOP OF THE LINER SHALL BE REMOVED BY CUTTING THE LINER AT SPRINGLINE ON BOTH SIDES OF PIPE.
10.	FILL ANNULAR SPACE BETWEEN EXISTING PIPE AND NEW LINER WITH GROUT TO MATCH EXISTING MANHOLE CONCRETE BENCH. IF EXISTING MANHOLE CONCRETE BENCH IS CRACKED AND/OR BROKEN, REMOVE EXISTING BENCH AND PLACE NEW CONCRETE BENCH.
11.	BUILD 23.0 LF OF PVC SEWER LATERAL WITH THE INVERT ELEVATIONS SHOWN ON DETAIL 3. RECONNECT THE NEW 8" SEWER LATERAL TO THE EXISTING UPSTREAM MANHOLE. RESHAPE THE INVERT AND BENCH OF EXIST. MANHOLE IF NECESSARY. BUILD A VERTICAL DROP AT THE NEW DOWNSTREAM MANHOLE IN CONFORMANCE WITH C.O.A. STD. DETAIL DWG. 2116. CONNECT THE NEW 8" SEWER LATERAL TO THE LINER PIPE AT THE NEW MANHOLE. CORE DRILL THE LINER PIPE AND CONNECT THE LATERAL PER LINER MFR'S. MANUFACTURER'S RECOMMENDATIONS. THE 8" LATERAL MUST REMAIN IN SERVICE DURING THE ENTIRE CONSTRUCTION PROCESS.
12.	1" PVC REMOVEABLE SPREADER BAR (TYP)
13.	PRECAST TYPE "E" MANHOLE
14.	EXISTING 8" FORCE MAIN TO BE REMOVED AND REPLACED DURING THE LINER CONSTRUCTION PROCESS. FORCE MAIN SHALL BE REPLACED IN LIKE CONDITION AT THE COMPLETION OF THE LINER INSTALLATION. 8" FORCE MAIN MUST REMAIN IN SERVICE DURING ENTIRE CONSTRUCTION PROCESS.
15.	REMOVE AND DISPOSE STEEL LADDER IN ALL MANHOLES.

DETAIL 1 REHABILITATED MANHOLE
SCALE: 3/8" = 1'-0"

DETAIL 2 TYP. REHABILITATED DOUBLE MH. VAULT
SCALE: 3/8" = 1'-0"

DETAIL 3 NEW DROP MANHOLE
SCALE: 3/8" = 1'-0"

SHT. NO.	STATION	MH NO.	MH SIZE	SEDIMENT DEPTH
3	19+56.47	Q12-032	7.5'x6' VAULT	*
3	19+56.10	Q12-035	6.5'x6' VAULT	14"
4	24+58.80	Q12-021	10'x5.58' VAULT	18"
4	33+69.39	Q12-001	10'x5.58' VAULT	*
5	42+81.39	Q11-091	10'x7' VAULT	14"
6	51+92.39	Q11-071	10'x6' VAULT	2"
7	61+04.39	Q11-051	*	*
7	69+92.35	Q11-041	11'x7.5' VAULT	16"
8	76+09.39	Q11-021	10'x5.58' VAULT	4"
9	85+95.99	Q11-011/015	10'x5.58' VAULT	16"
9	86+75.99	Q11-005	*	*
9	88+63.00	*	*	*
9	96+11.07	Q10-092	6.5'x8' VAULT	12"
9	96+47.16	Q10-091	*	*
10	100+24.04	P10-993	*	*
10	103+19.30	P10-991	*	*
10	103+40.50	P10-891	*	*
10	104+67.02	P10-882	*	*



RECORD DRAWING	
I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.	

NOTES:
1. MANHOLE SIZES, TYPES AND SEDIMENT DEPTHS WERE TAKEN FROM LAKEVIEW ROAD INTERCEPTOR MANHOLE INSPECTION REPORT OF CITY OF ALBUQUERQUE 1990'S SEWER INTERCEPTOR REHABILITATION PHASE I, PERFORMED IN 1990.
2. * DENOTES MANHOLE SIZES, TYPES AND SEDIMENT DEPTHS ARE NOT AVAILABLE FROM THE MANHOLE INSPECTION REPORT. SUBSEQUENT INFORMATION INDICATES AVERAGE SEDIMENT DEPTH IS 12" TO 16".

NOTE:
THE CONTRACTOR IS CAUTIONED THAT THE INSIDE OF THE 54" RCP IS UNSTABLE AND MAY COLLAPSE DURING CONSTRUCTION ACTIVITIES. ANY DAMAGE TO THE EXISTING 54" RCP CAUSED BY REMOVAL OF THE DUCT & GROUT INVERT AND/OR INSTALLATION OF THE REHAB LINER THAT REQUIRES A POINT REPAIR IN ORDER TO COMPLETE THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

THE REHAB LINER IS REQUIRED TO WITHSTAND ALL VERTICAL AND LATERAL LOADS, INCLUDING BUT NOT LIMITED TO, ANY SOIL, LIVE, AND HYDROSTATIC LOADS IN ACCORDANCE WITH SECTION 930 OF THE SUPPLEMENTAL TECHNICAL SPECIFICATIONS.
DUE TO THE EXISTING CONDITION OF THE 54" INTERCEPTOR, THE CONTRACTOR IS REMINDED THAT SAFETY IS THE CONTRACTOR'S RESPONSIBILITY IN ACCORDANCE WITH SECTION 6.11 OF THE GENERAL CONDITIONS.
MINIMUM REHAB LINER SIZE SHALL BE 41.5" INSIDE DIAMETER.

REVISIONS	
NO.	DATE
1	8/16/01
2	8/16/01

EXISTING MANHOLE/VAULT REHABILITATION TABLE

NOTE:
THE CONTRACTOR IS CAUTIONED THAT THE INSIDE OF THE 54" RCP IS UNSTABLE AND MAY COLLAPSE DURING CONSTRUCTION ACTIVITIES. ANY DAMAGE TO THE EXISTING 54" RCP CAUSED BY REMOVAL OF THE DUCT & GROUT INVERT AND/OR INSTALLATION OF THE REHAB LINER THAT REQUIRES A POINT REPAIR IN ORDER TO COMPLETE THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

DETAIL 4 REHABILITATED MH Q11-11
SCALE: 3/8" = 1'-0"

CITY OF ALBUQUERQUE	
PUBLIC WORKS DEPARTMENT	UTILITY DESIGN SECTION

CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.

2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPERATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.

3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.

4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.

5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.

8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.

9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.

10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.

11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.

12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.

15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.

16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.

17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.

18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.

19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.

22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.

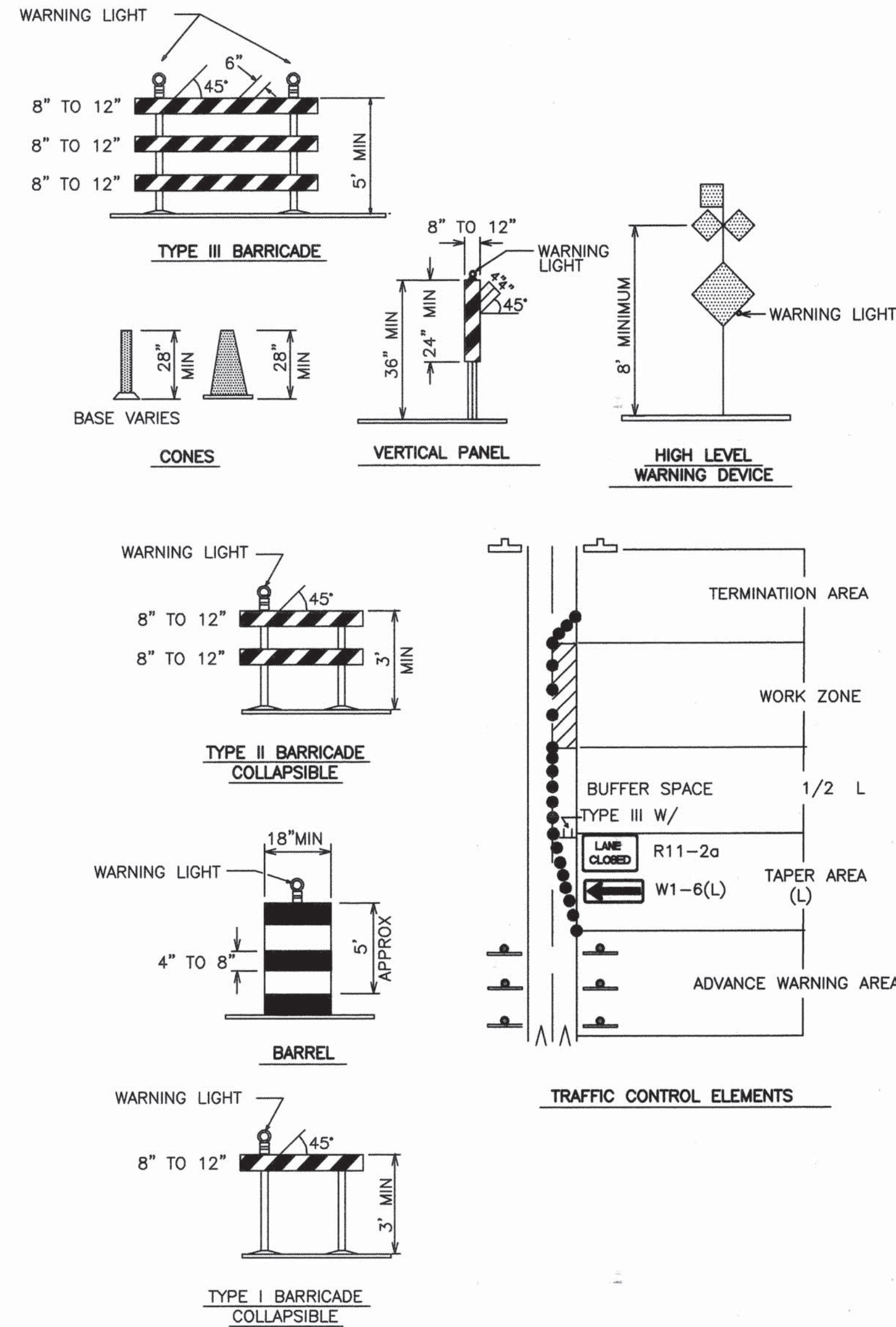
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.

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

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

26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

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



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 STREET LIMIT OF THE STREET
- TAPER LENGTH - SEE CHART BELOW

THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

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

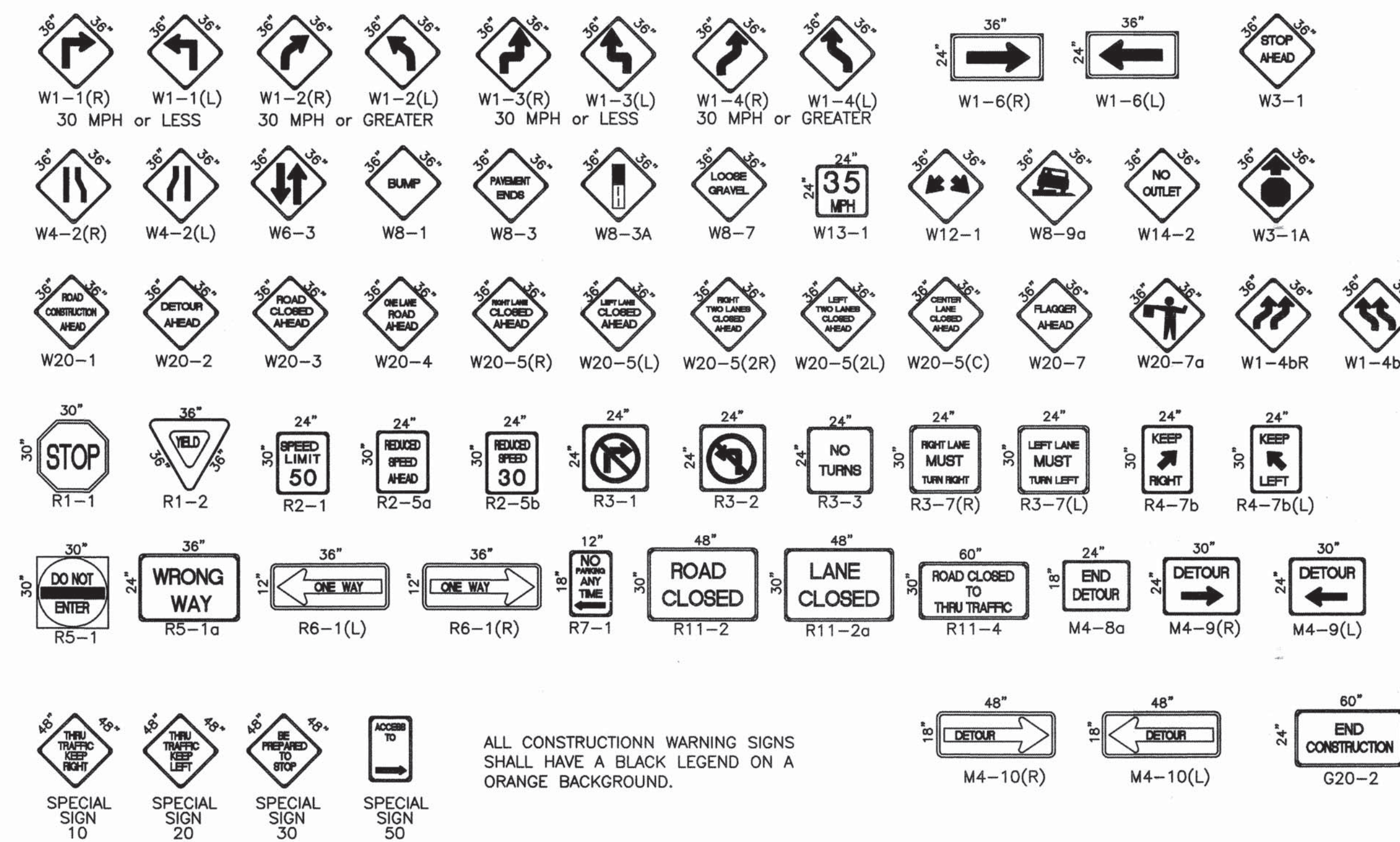
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: TRAFFIC CONTROL
SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA	STP		

CITY PROJECT NO. 6388.91
ZONE MAP NO. P10, Q10, Q11, Q12
SHEET 12 OF 14-13

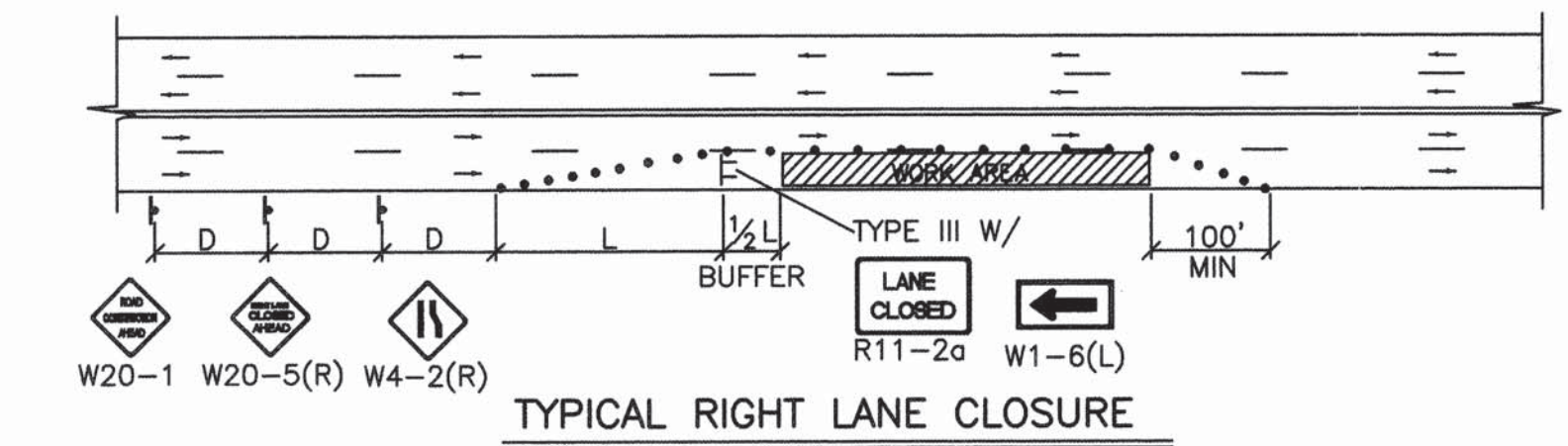
SCANNED BY
MESA REPRO

\\BH-MAN\PROJECTS\91717\TRANS\DESIGN\SIGN\TRAFFIC\DWG

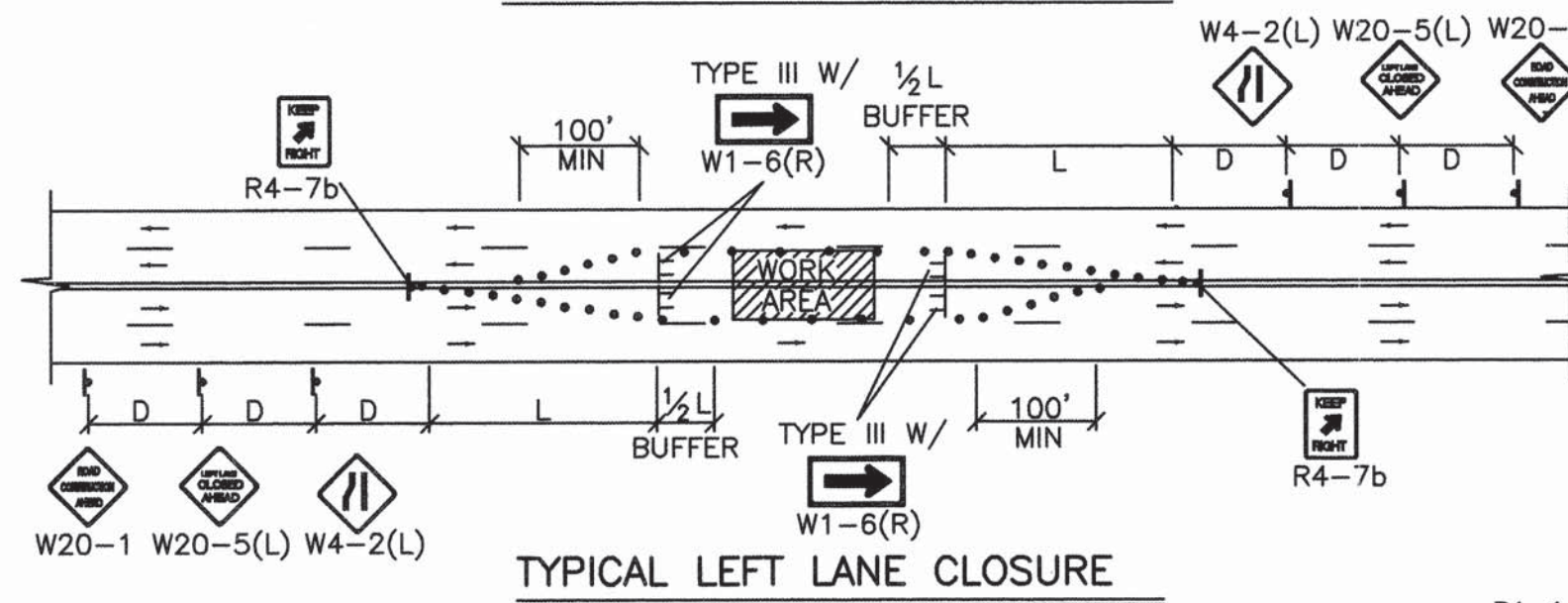
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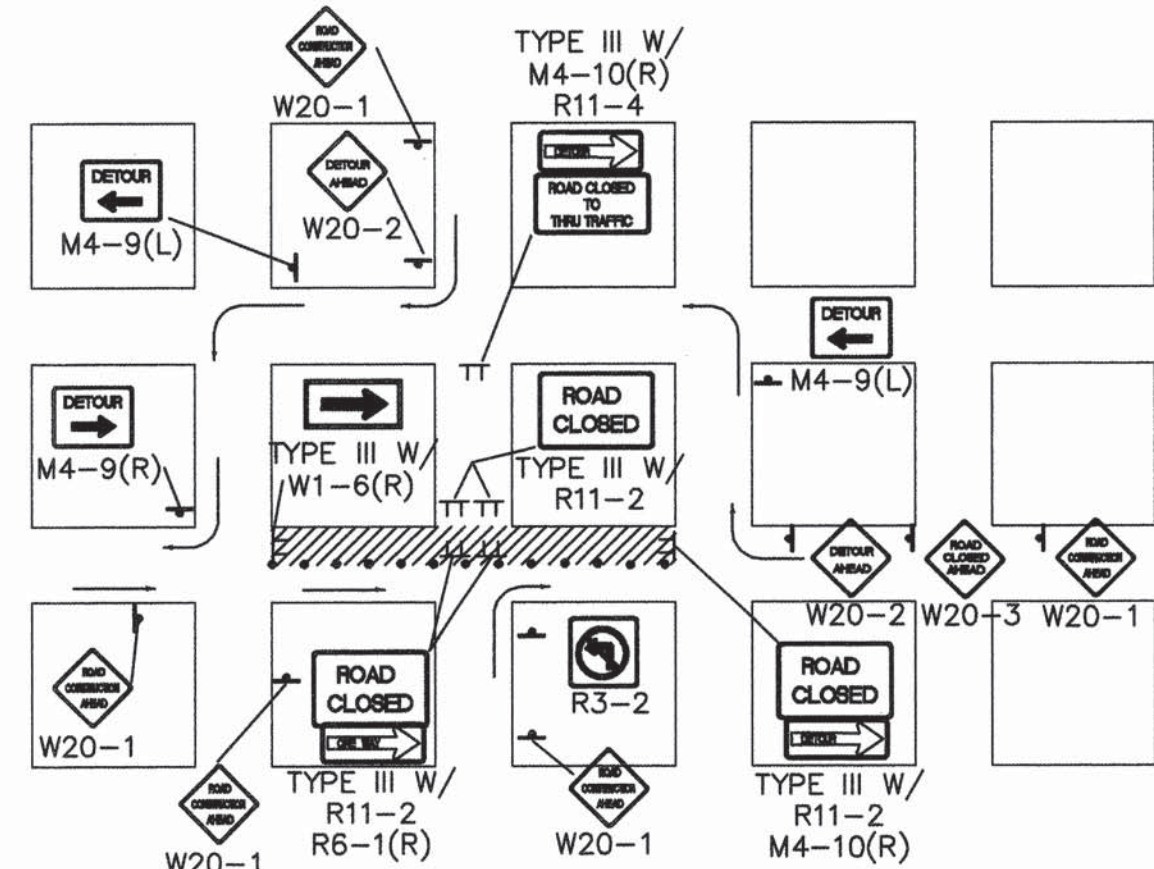
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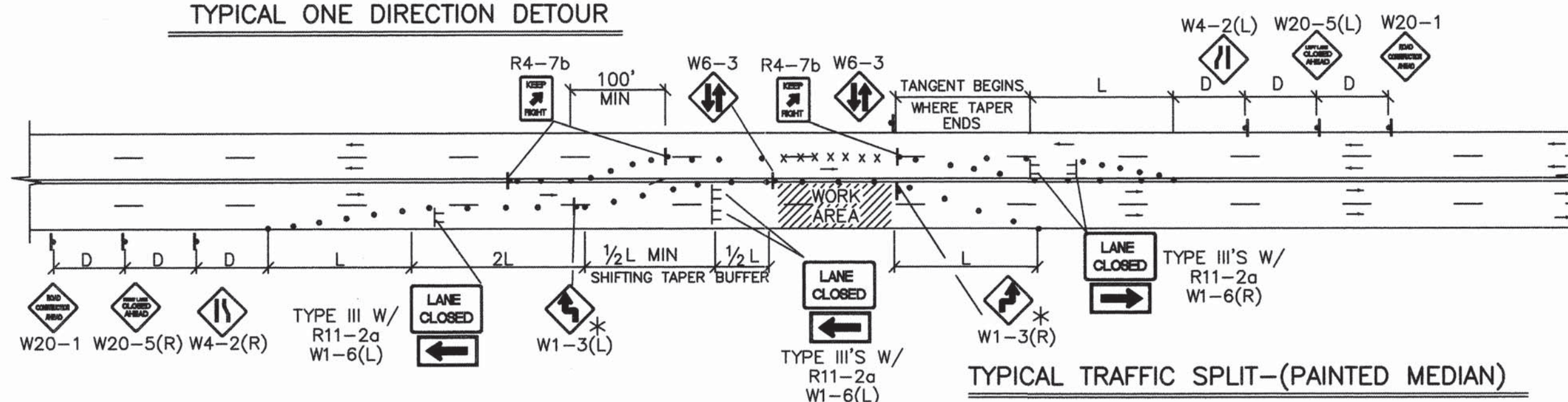
TYPICAL RIGHT LANE CLOSURE



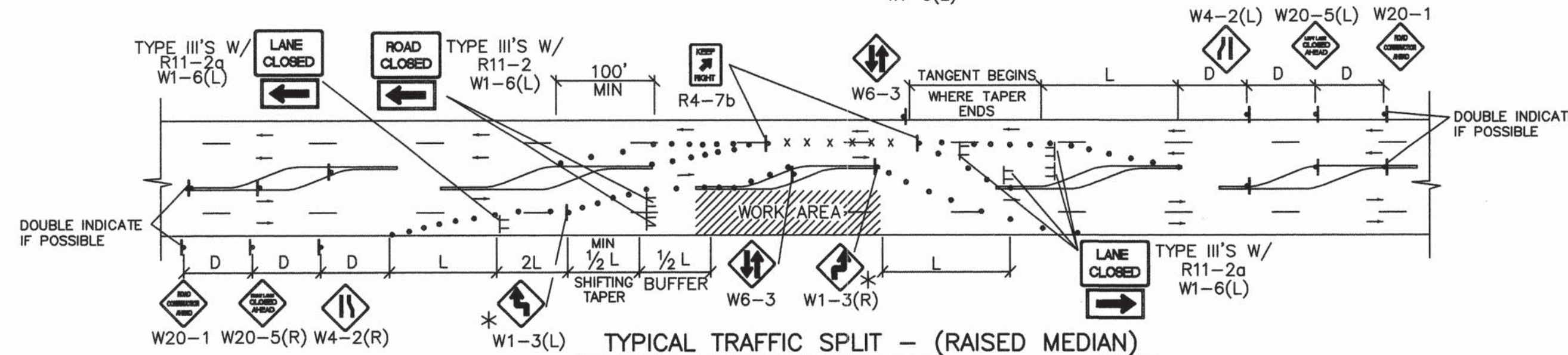
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR



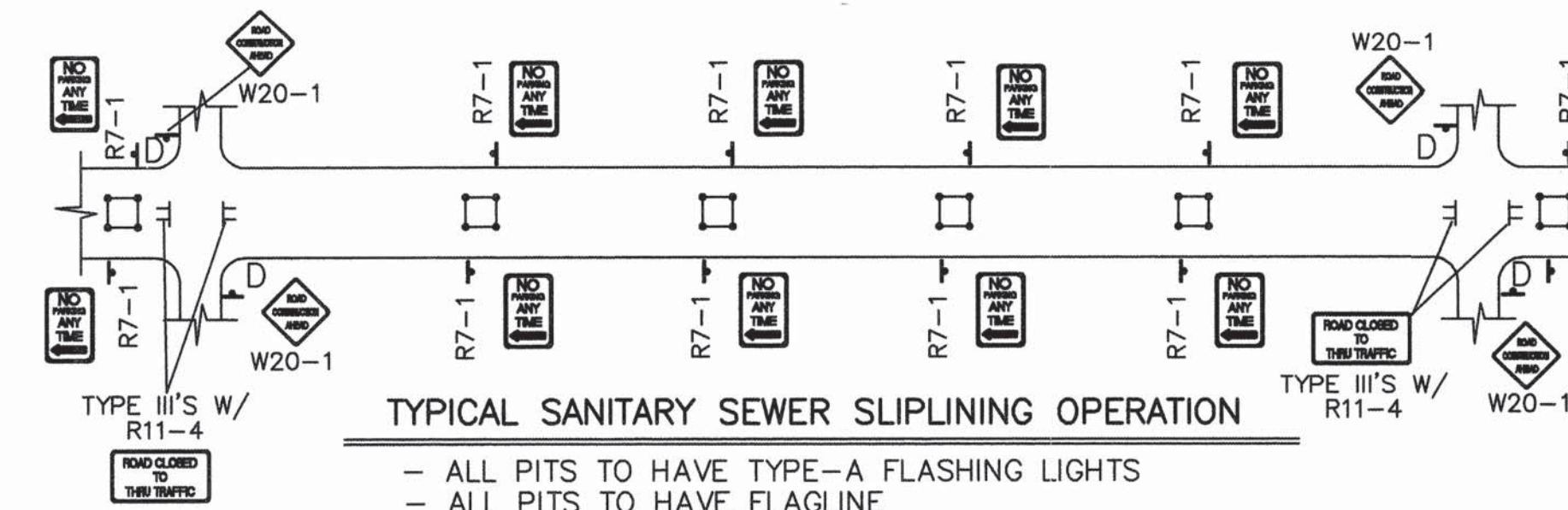
TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

TRAFFIC SPLIT NOTES:

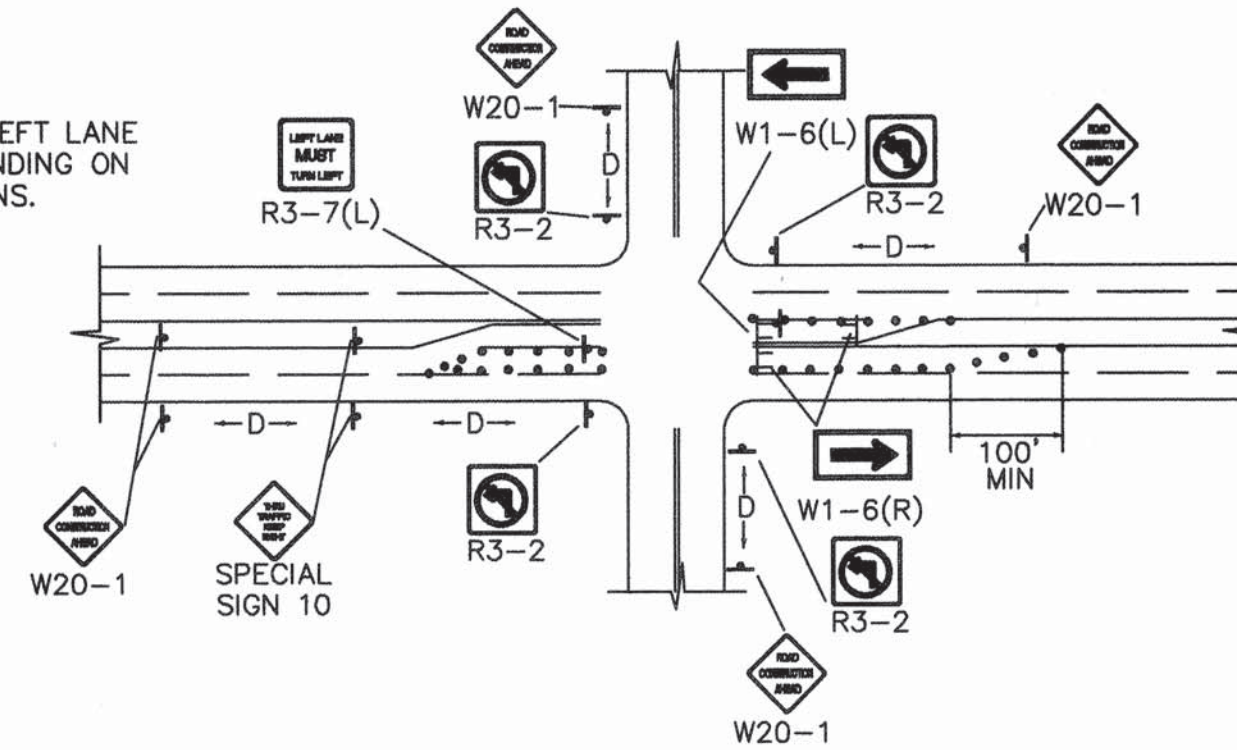
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



TYPICAL SANITARY SEWER SLIPLINING OPERATION

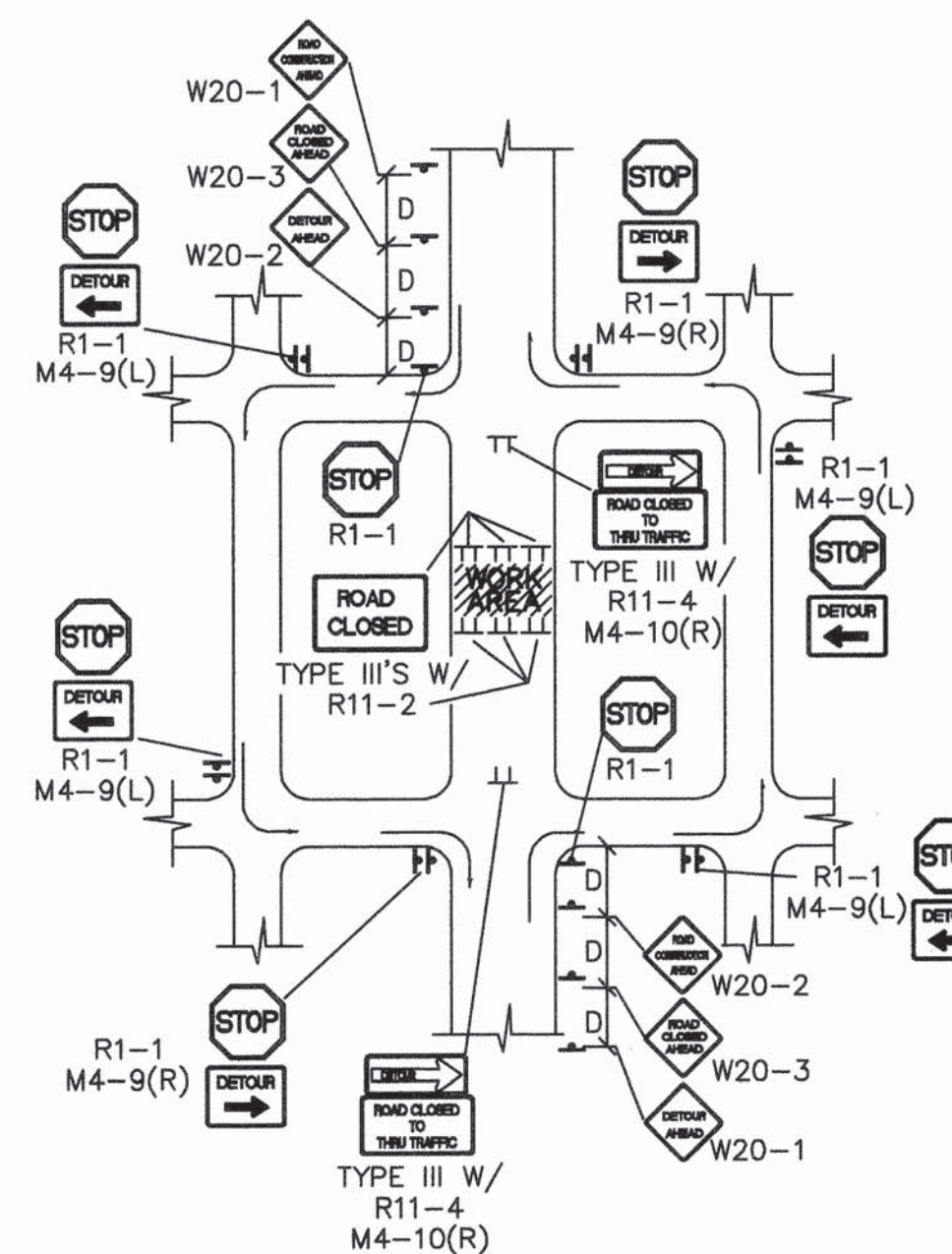
- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

NOTE:
MAY REQUIRE LEFT LANE
CLOSURE DEPENDING ON
FIELD CONDITIONS.



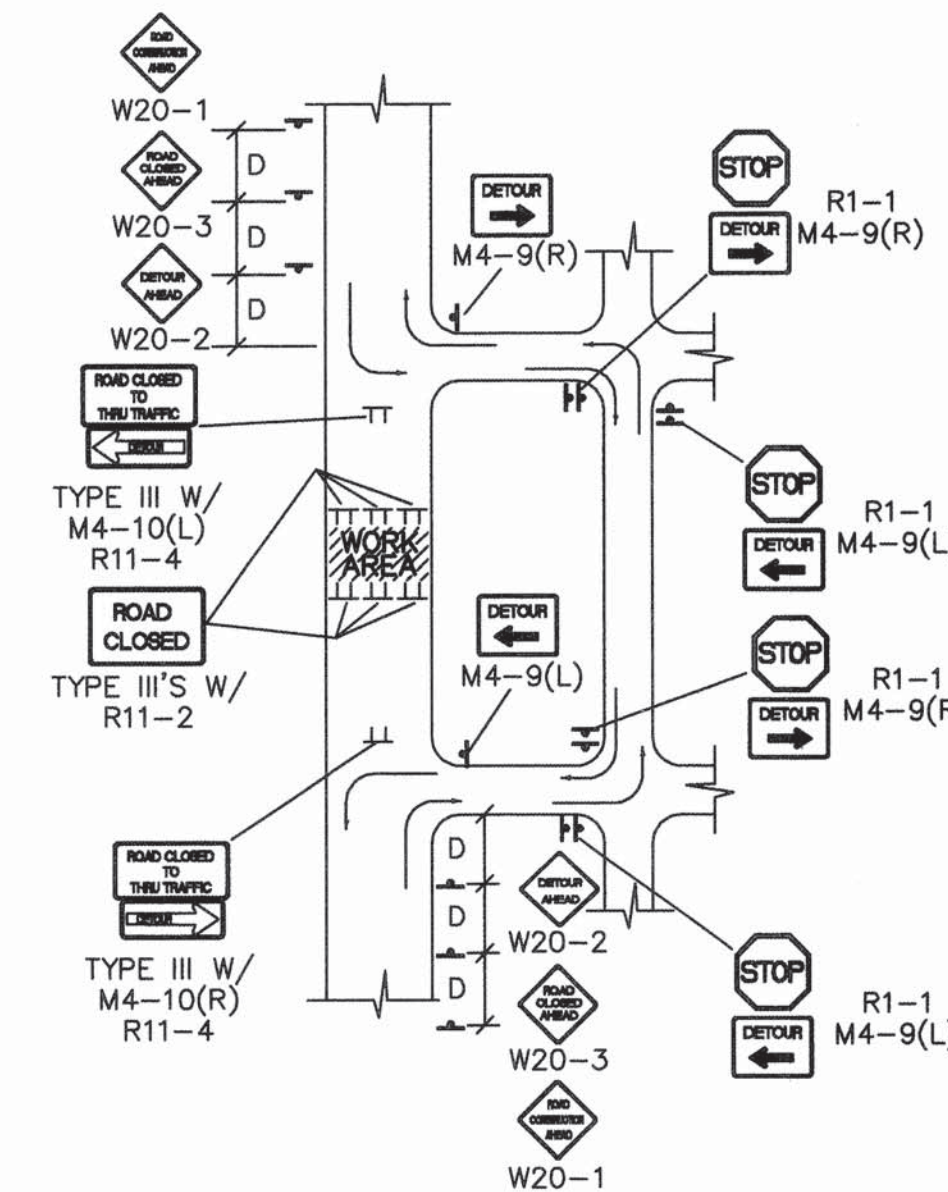
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION.



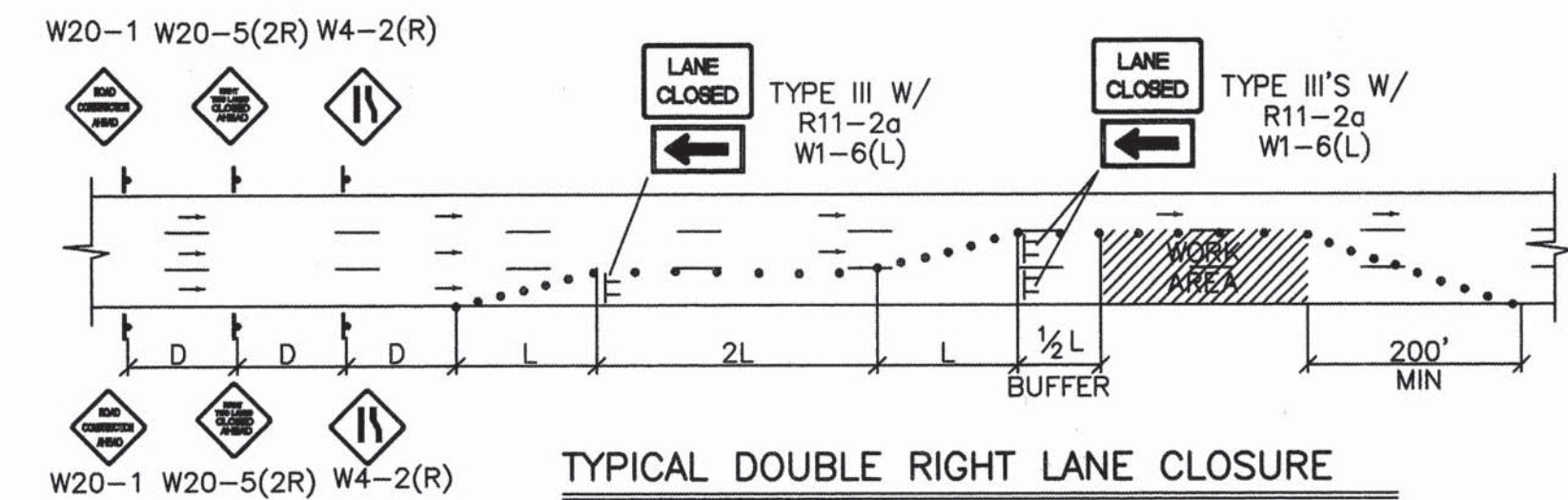
TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

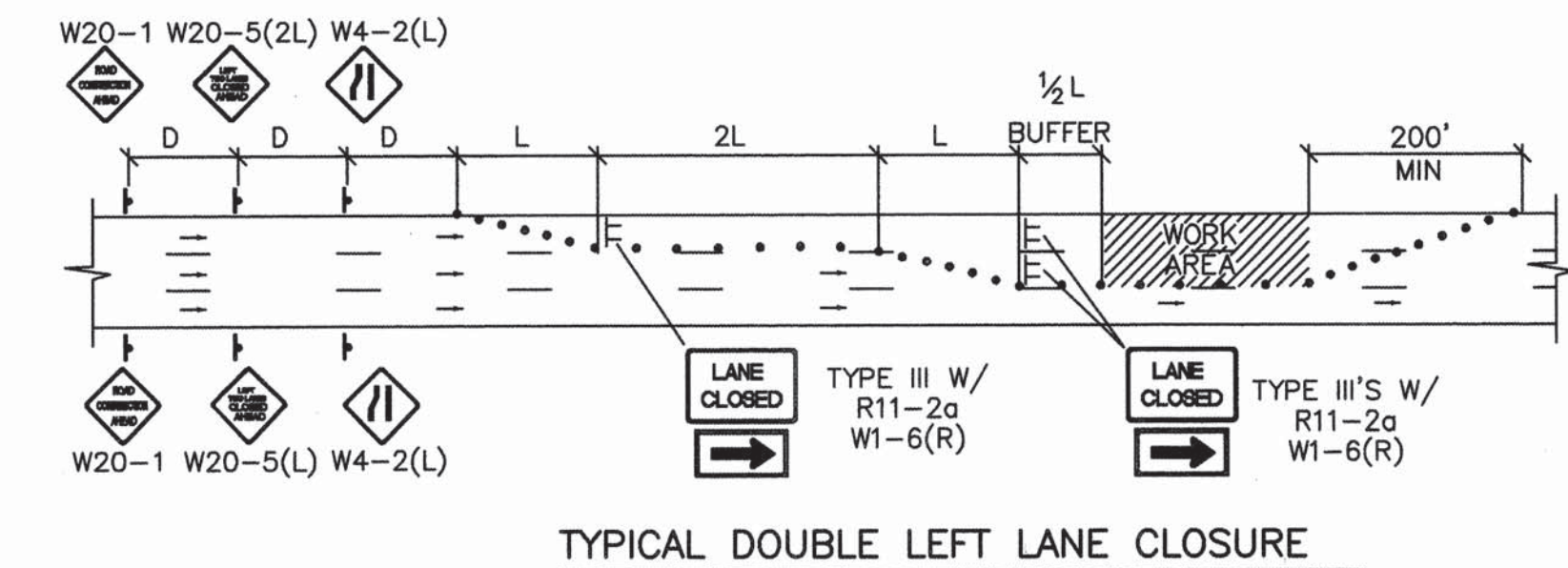


TYPICAL STREET CLOSURE

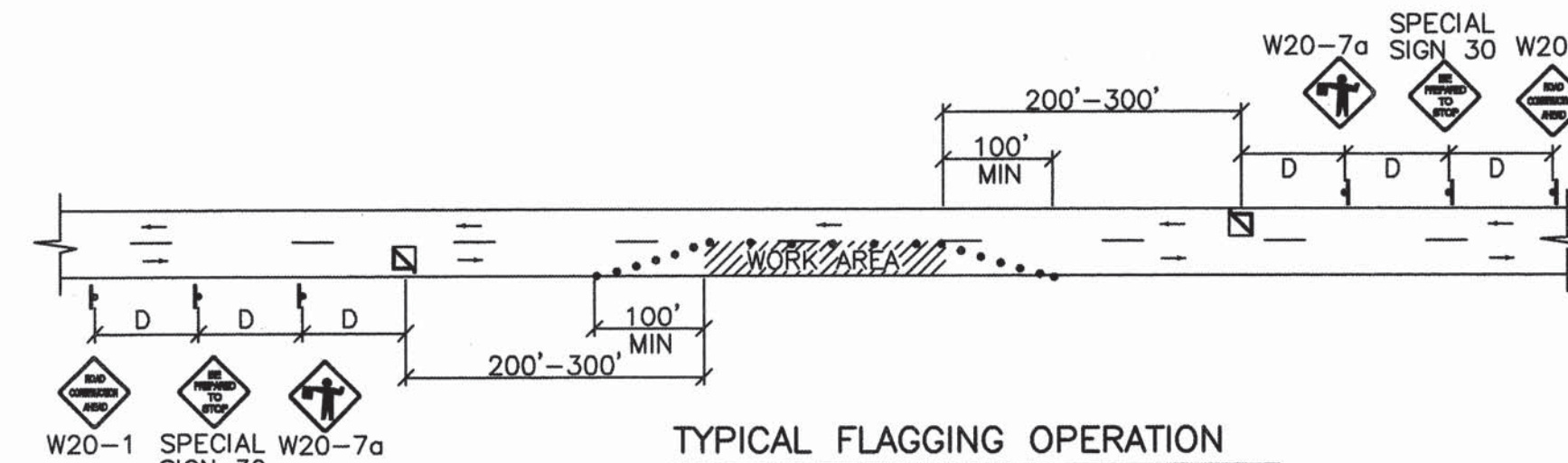
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



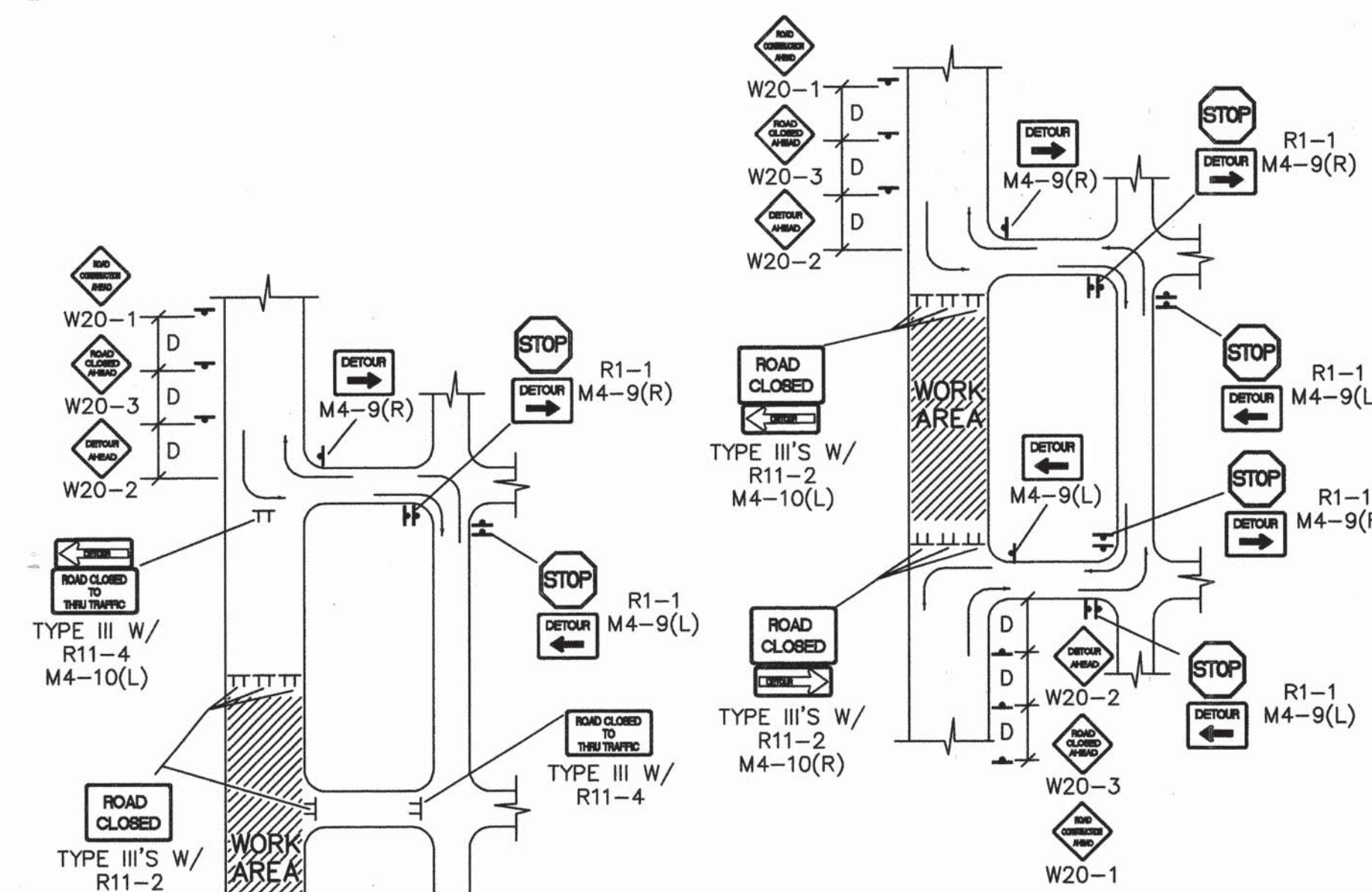
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: TYPICAL TRAFFIC CONTROL
& SIGNING EXAMPLES (REF MUTCD)

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
COA	STD.		

CITY PROJECT NO. 6388.91 ZONE MAP NO. P10, Q10, Q11, Q12 SHEET 13 OF 1413

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	DATE	NO.	DATE	NO.	DATE
BOHANNAN	COA						
ACCEPTANCE BY	DATE						
VERIFICATION BY	DATE						
DRAWINGS	DATE						
CONDUCTED BY	DATE						
MICRO-FILM INFORMATION	DATE						
RECORDED BY	DATE						
NO.							

COA
STD.
N/A

ADDED NEW SHEET

REMARKS

DESIGN

REVISIONS

DESIGNED BY BOHANNAN HUSTON

DRAWN BY BOHANNAN HUSTON

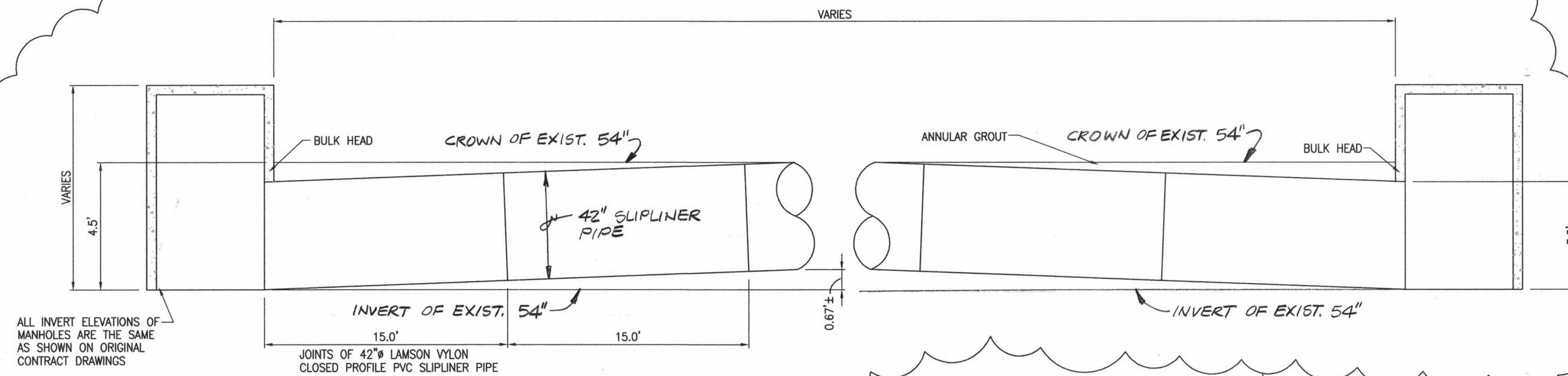
CHECKED BY BOHANNAN HUSTON

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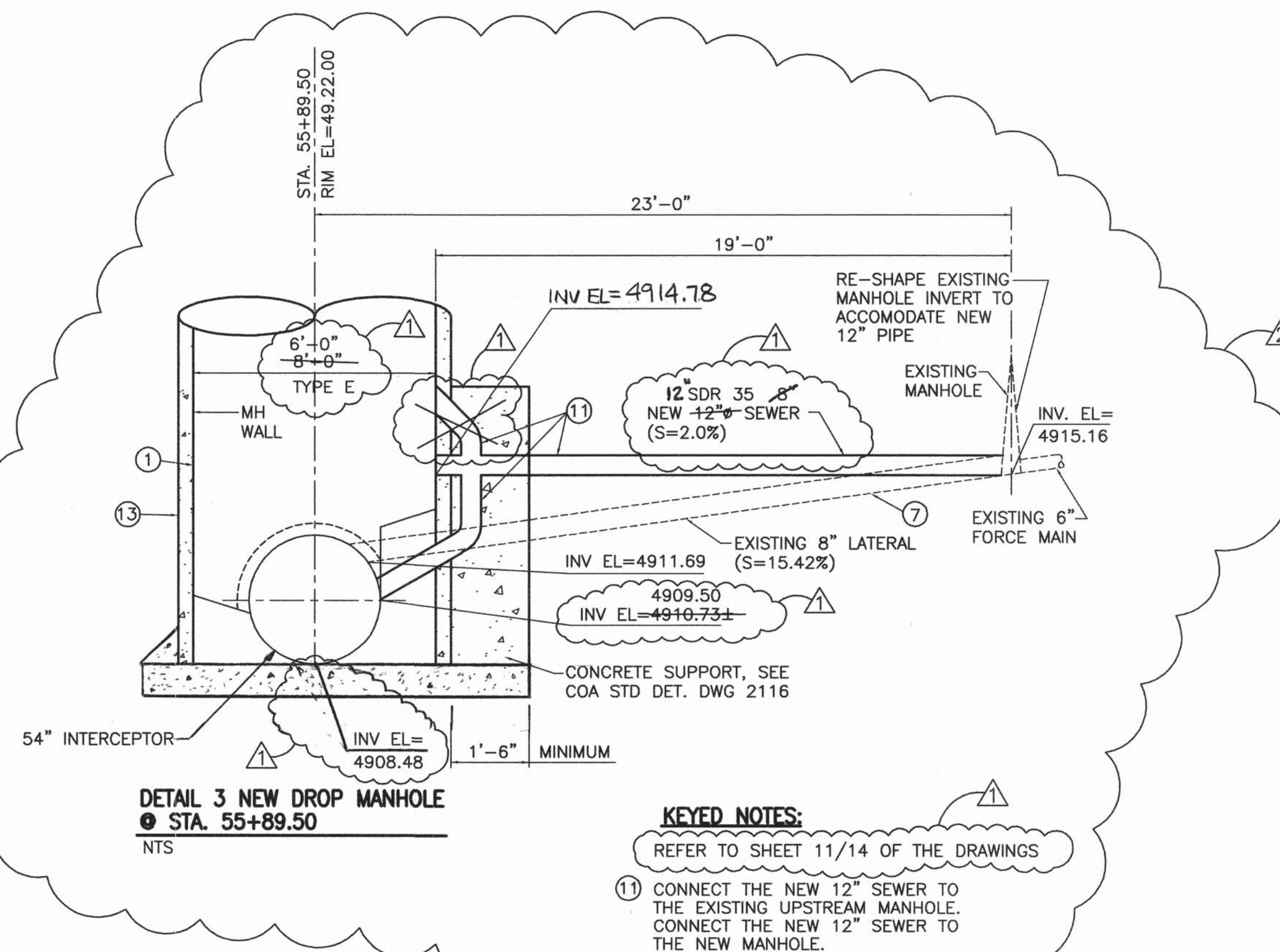
APPLIES TO THE FOLLOWING RUNS OF PIPE
RUNS OF PIPE NOT LISTED ARE AS SHOWN WITHIN THESE DRAWINGS

STARTING MANHOLE	ENDING MANHOLE
Q12-033	Q12-021
Q12-021	Q12-001
Q12-001	Q11-091
Q12-091	Q11-071
Q12-071	STA. 55+89.50
STA. 55+89.50	Q11-051
Q11-051	Q11-041
Q11-041	Q11-021
Q11-021	Q11-011
Q11-XXX	Q10-092
Q10-091	P10-993
P10-993	P10-991



ALL INVERT ELEVATIONS OF-
MANHOLES ARE THE SAME
AS SHOWN ON ORIGINAL
CONTRACT DRAWINGS

SCANNED BY
MESA REPRO



I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE ORIGINAL DESIGNER/CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE ORIGINAL DESIGNER/CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHER INFORMATION SOURCES. INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
UTILITY DESIGN SECTION

TITLE: LAKEVIEW ROAD 54" SAS REHABILITATION
MISCELLANEOUS DETAILS

Design Review Committee		City Engineer Approval		Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No.		6388-91		Zone Map No.	—	
				Sheet	Of 14 14	

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