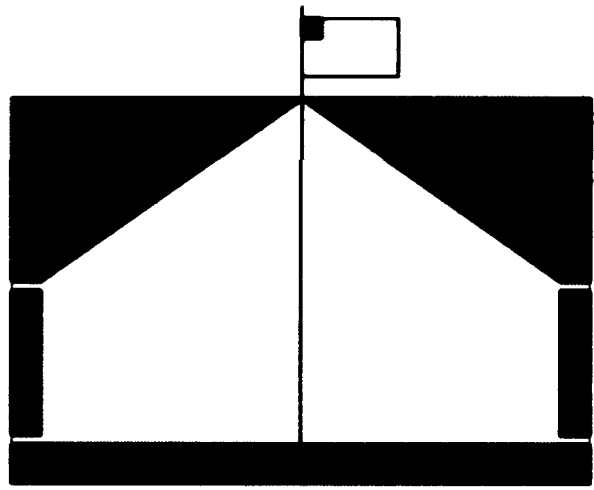


RECORD DRAWING
CONSTRUCTION PLANS

for
A.P.S. 1997 WATERLINE
EXTENSIONS

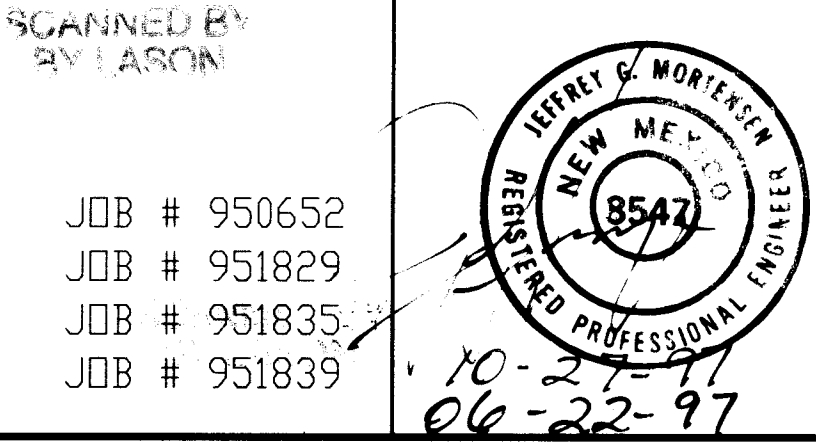


INDEX OF DRAWINGS

SHEET	CITY PROJECT NO.	DESCRIPTION
1	N/A	COVER SHEET, LEGEND AND INDEX OF DRAWINGS
2	N/A	A.P.S. 1997 WATERLINE EXTENSIONS LOCATION MAPS
3	N/A	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES
4	N/A	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
1-3	554781	KIT CARSON ELEMENTARY SCHOOL (BID LOT 3)
1-3	552781	MARK TWAIN ELEMENTARY SCHOOL (BID LOT 4)
1-4	560781	MISSION ELEMENTARY SCHOOL (BID LOT 1)
1-3	549881	MONTEZUMA ELEMENTARY SCHOOL (BID LOT 2)

20-554781-31 2019-12-10

REV.	SHEETS	CITY ENGINEER	DATE	USER	DEPARTMENT	DATE	USER	DEPARTMENT	DATE
APPROVAL OF REVISIONS									



SCANNED BY
BY: ARON

JOB # 950652
JOB # 951829
JOB # 951835
JOB # 951839

Jma JEFF MORTENSEN & ASSOCIATES, INC.
600-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS & SURVEYORS (505) 345-4250

PROJECT NOS. 554781, 552781
560781, 549881

APPROVED FOR
CONSTRUCTION

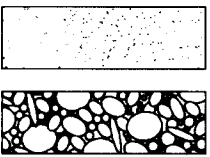
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SHEET 1 OF 17

LEGEND

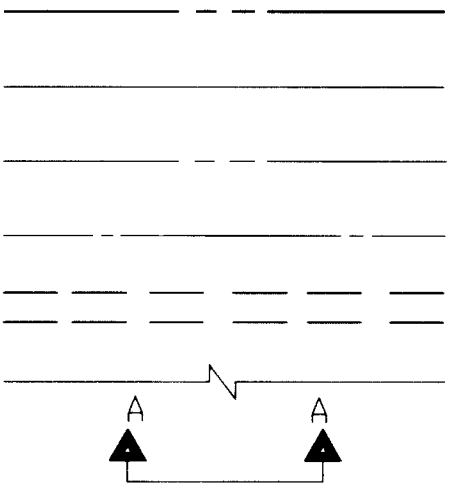
MATERIALS

CONCRETE
RIP-RAP



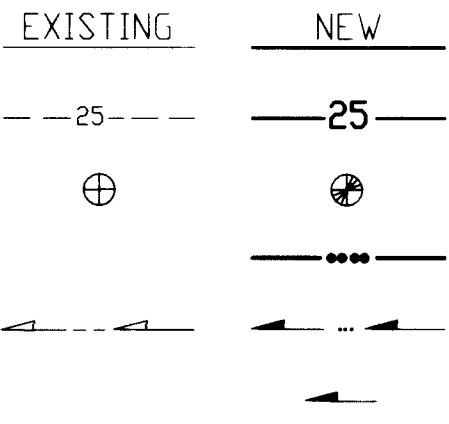
LINES

SUBDIVISION BOUNDARY
PROPERTY LINE (PLAN)
PROPERTY LINE (SECTION)
CENTERLINE
EASEMENT LINE
MATCH LINE
SECTION CUT LINE



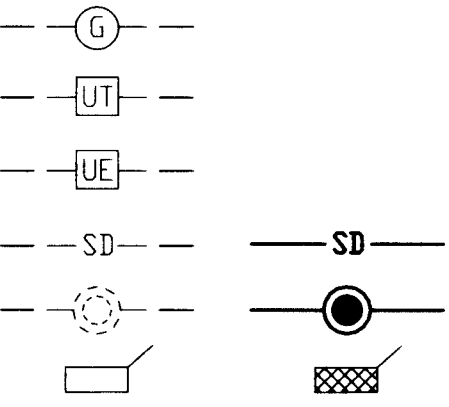
EARTHWORK

CONTOUR LINE
SPOT ELEVATION
PROJECT / PHASE BOUNDARY
FLOWLINE
DIRECTION OF FLOW



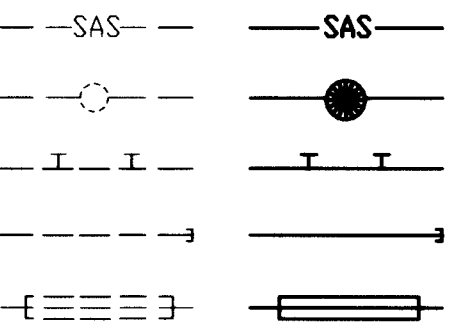
MISCELLANEOUS UTILITIES

GAS LINE
UNDERGROUND TELEPHONE
UNDERGROUND ELECTRICAL
STORM DRAIN
STORM DRAIN MANHOLE
STORM DRAIN INLET



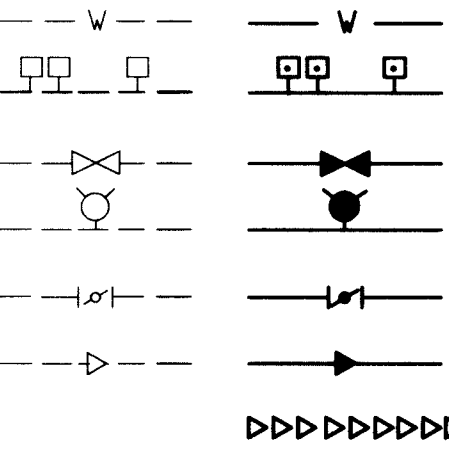
SANITARY SEWER

SANITARY SEWER LINE
SANITARY SEWER MANHOLE
SAS SERVICE CONNECTIONS
SAS CAP OR PLUG
ENCASEMENT



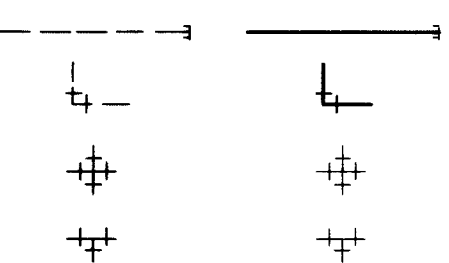
WATER

WATER LINE
WATER SERVICE CONNECTIONS
GATE VALVE
FIRE HYDRANT
BUTTERFLY VALVE
REDUCER
WATER PRESSURE ZONE BOUNDARY



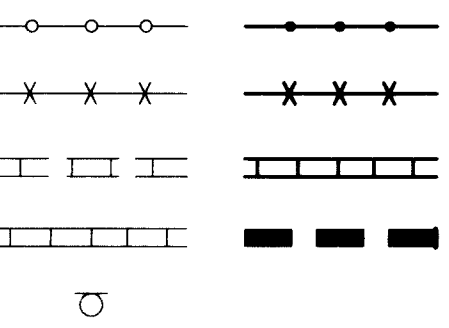
WATER FITTINGS

CAPS AND PLUGS
ELBOW
CROSS
TEE

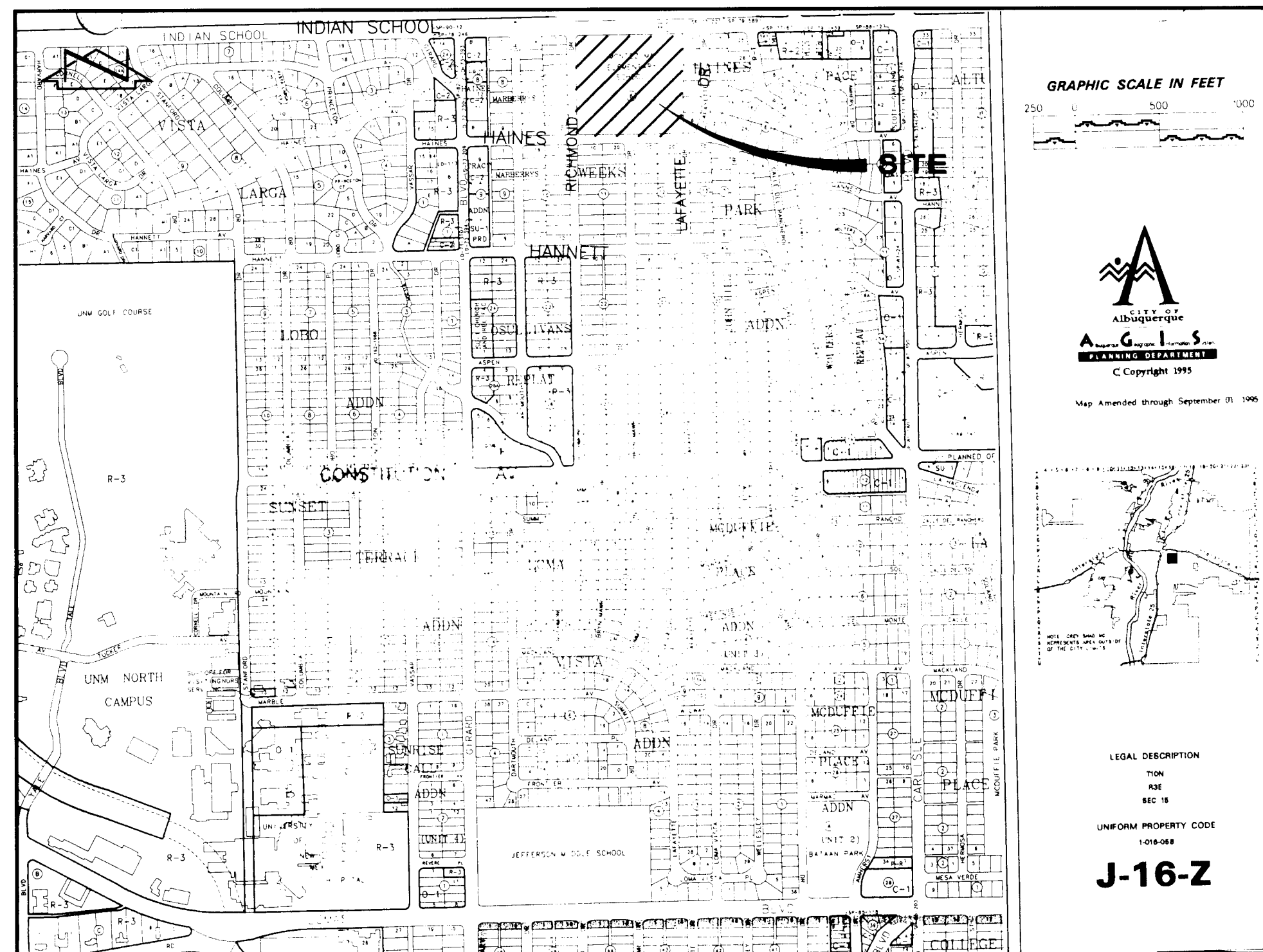


MISCELLANEOUS

CHAINLINK FENCE
FIELD FENCE
COMMON YARD WALL
RETAINING WALL
POWER OR TELEPHONE POLE

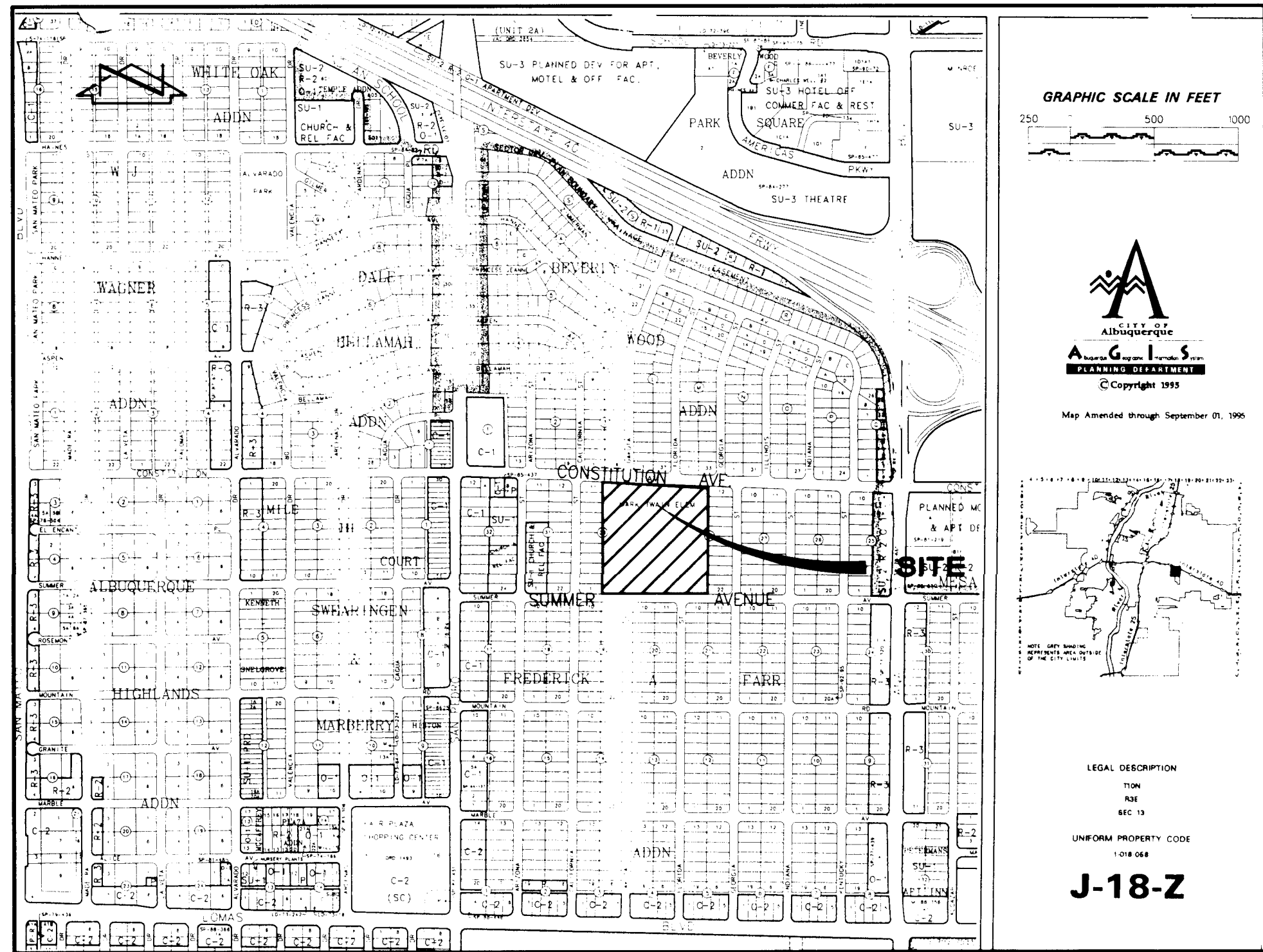


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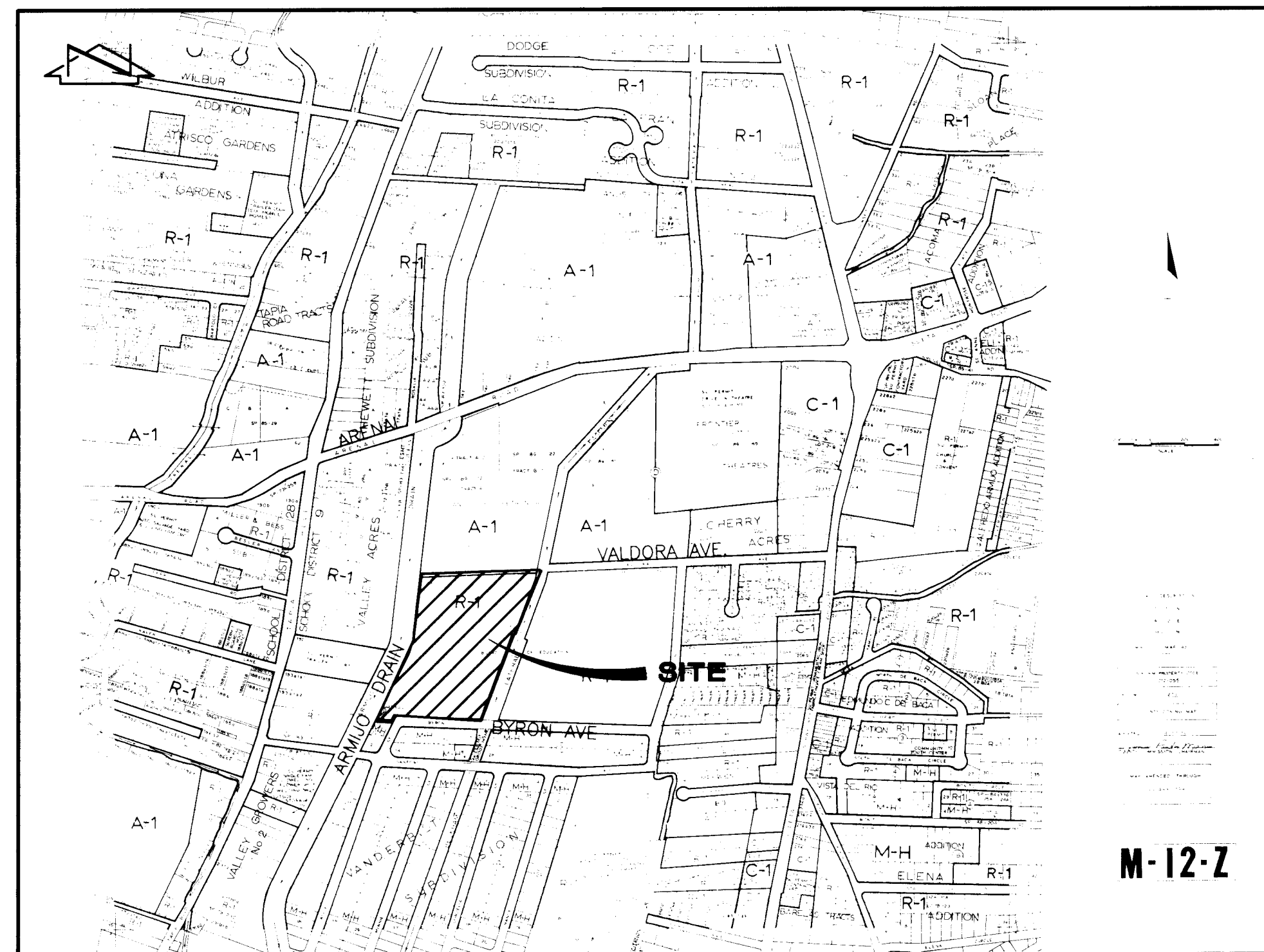
MONTEZUMA ELEMENTARY SCHOOL
C.O.A. PROJECT # 549881

MAP J-16
SCALE: 1" = 750'±



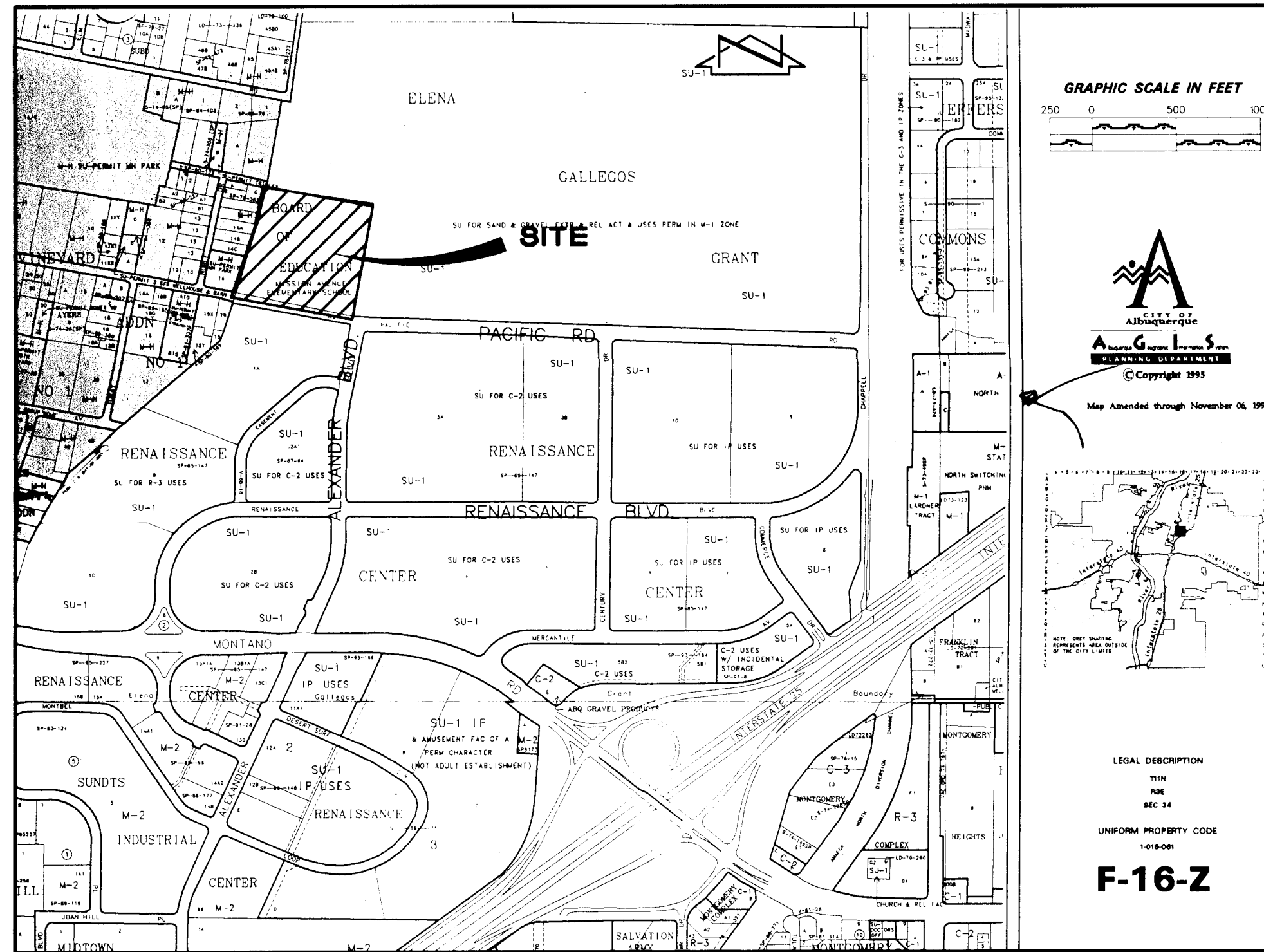
MARK TWAIN ELEMENTARY SCHOOL
C.O.A. PROJECT # 552781

MAP J-18
SCALE: 1" = 750'±



KIT CARSON ELEMENTARY SCHOOL
C.O.A. PROJECT # 554781

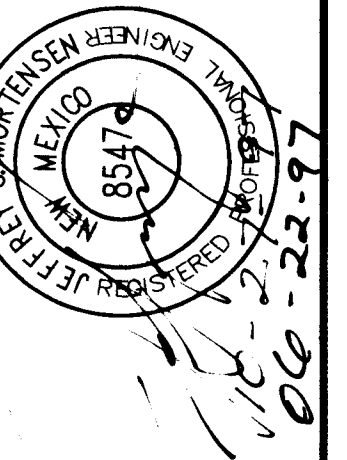
MAP M-12
SCALE: 1" = 750'±



MISSION ELEMENTARY SCHOOL
C.O.A. PROJECT # 560781

MAP F-16
SCALE: 1" = 750'±

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REMARKS		DESIGN		REVISIONS		DATE		DATE		DATE		DATE	
CONTRACTOR	RODGER'S PLUMBING & HEATING	WORK	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE
WORK	J.M.A.	N/A	08/97		N/A																
ACCEPTANCE BY	M.D.S.		10/97																		
FIELD VERIFICATION BY	M.D.S.		10/97																		
CORRECTED BY	M.D.S./J.M.A.		10/97																		
RECORDED BY																					
NO.																					



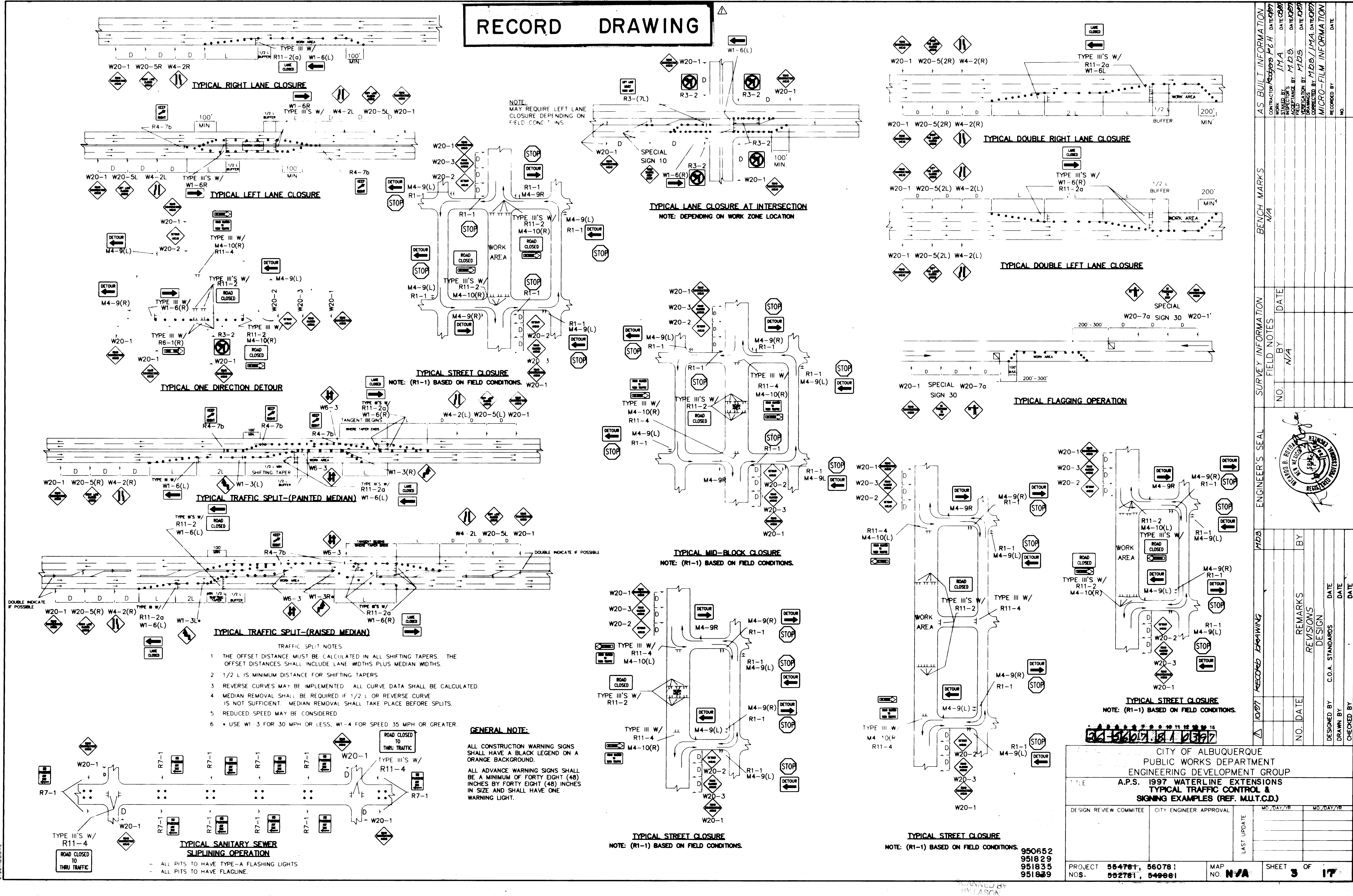
26-560781-01

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: A.P.S. 1997 WATERLINE EXTENSIONS LOCATION MAPS	
Design Review Committee	City Engineer Approval
Last Design Update	
City Project No. 554781, 552781, 560781, 549881	
Zone Map No. SEE ABOVE	Sheet 2 of 17

950652
951829
951835
951839

SCANNED BY
JASON

RECORD DRAWING



CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

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

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

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

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

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

6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVE 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 SERVICE 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 MULTIPLE 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 TWICE THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A.4.

11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 7:00 A.M. OR END WORK AFTER 7:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.

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

13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 10 FEET OF A TRAVELLED TRAFFIC LANE DURING NON-WORKING HOURS WITHIN 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 REITERATION OF ANY EXISTING 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 BUSINESS LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH WHITE RAUQUE 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 IN A BUSINESS SHOPPING CENTER, 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. 24 HOURS PRIOR TO OCCUPANCY OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.

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

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

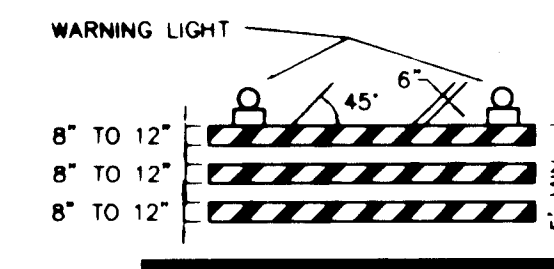
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC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

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

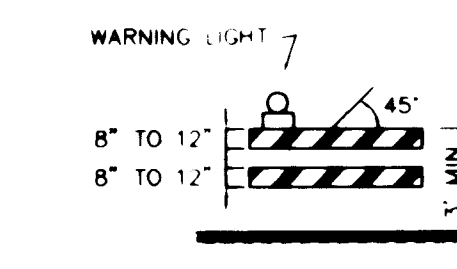
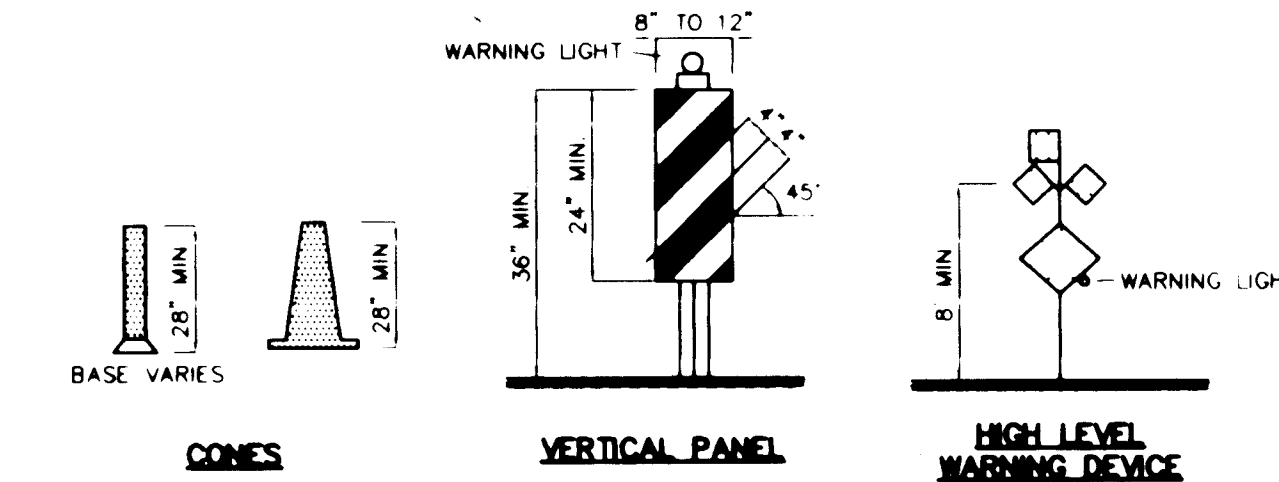
24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO ITS PLACEMENT AND MAINTENANCE.

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

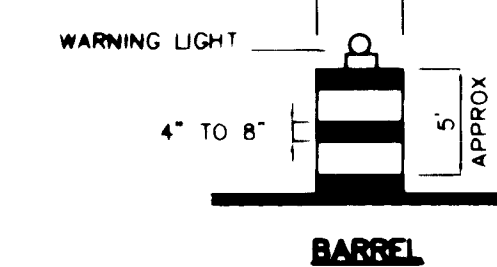
26. ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING GRADE SHEETING OR BETTER.



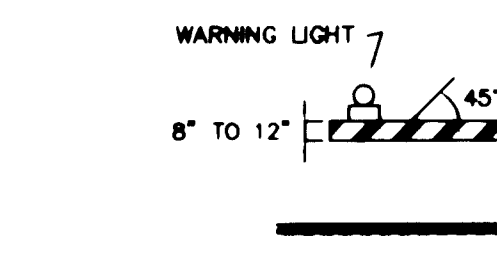
TYPE III BARRICADE



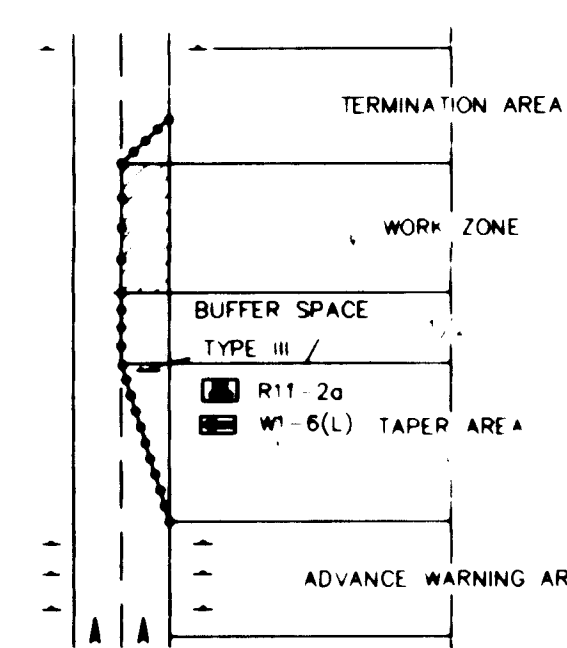
TYPE II BARRICADE COLLAPSIBLE



BARREL



TYPE I BARRICADE COLLAPSIBLE



TRAFFIC CONTROL ELEMENTS

LEGEND

- WORK AREA
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET
- TAPER LENGTH - SEE CHART BELOW
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (L) (FEET)			MINIMUM NUMBER OF DEVICES FOR TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET	
	BETWEEN SIGNS	FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

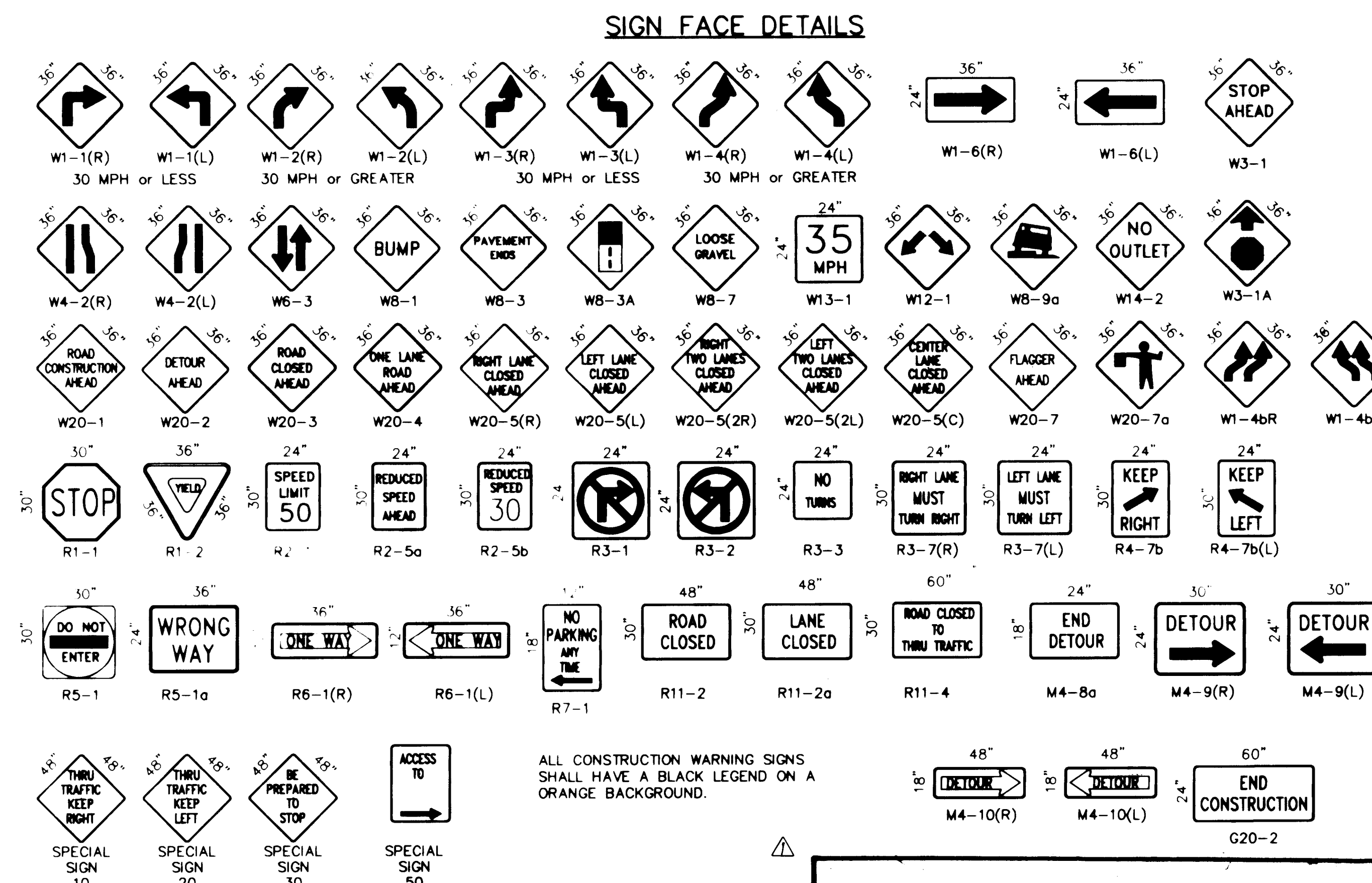
TAPER CRITERIA

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

TAPER LENGTH COMPUTATION

SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$
W = TAPER LENGTH	
W = WIDTH OF OFFSET IN FEET	
S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH	

2015-10-27-2017-04-27



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

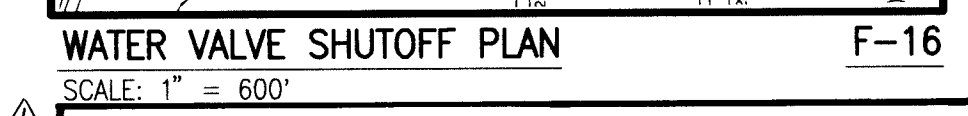
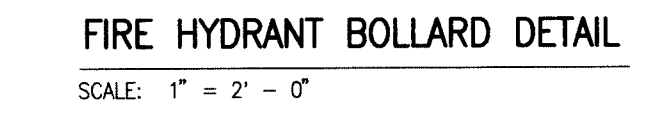
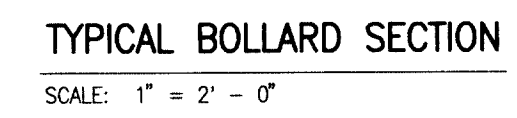
RECORD DRAWING

950652
951829
951835
951839

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: A.R.S. 1997 WATERLINE EXTENSIONS SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	NO. 2017/17	
LAST UPDATE		NO. 2017/17	
PROJECT NOS. 554781, 560781		SHEET 4 OF 17	
MAP NO. N/A		SHEET 4 OF 17	

BID LOT 1

1. INSTALL FIRE HYDRANT #1 AND ASSOCIATED WATERLINE EXTENSION AND APPURTENANCES.
2. INSTALL FIRE HYDRANT #2 AND ASSOCIATED WATERLINE EXTENSION AND APPURTENANCES.
3. INSTALL FIRE HYDRANT #3 AND ASSOCIATED WATERLINE EXTENSION AND APPURTENANCES.



1. AS A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE PROPOSED CONNECTIONS:
 - A.) FH #1: 181, 185
 - B.) FH #3: 23, 62, 152, 162, 252, 253
2. THE CONTRACTOR SHALL NOTIFY WATER SYSTEMS FIVE (5) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING WATERLINE; ALL SHUTOFFS SHALL BE PERFORMED BY THE WATER SYSTEM DIVISION PERSONNEL (857-8200).
3. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT THE NECESSARY SHUTOFFS AND CONNECTIONS.
4. EXISTING WATER VALVE AND WATERLINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE AUTOMATED WATER DISTRIBUTION SYSTEM SECTIONAL MAPS, PLATE F-16.
5. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT THE WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
2	6	-	5	6	0	7	.	8	1			0	6	9	7

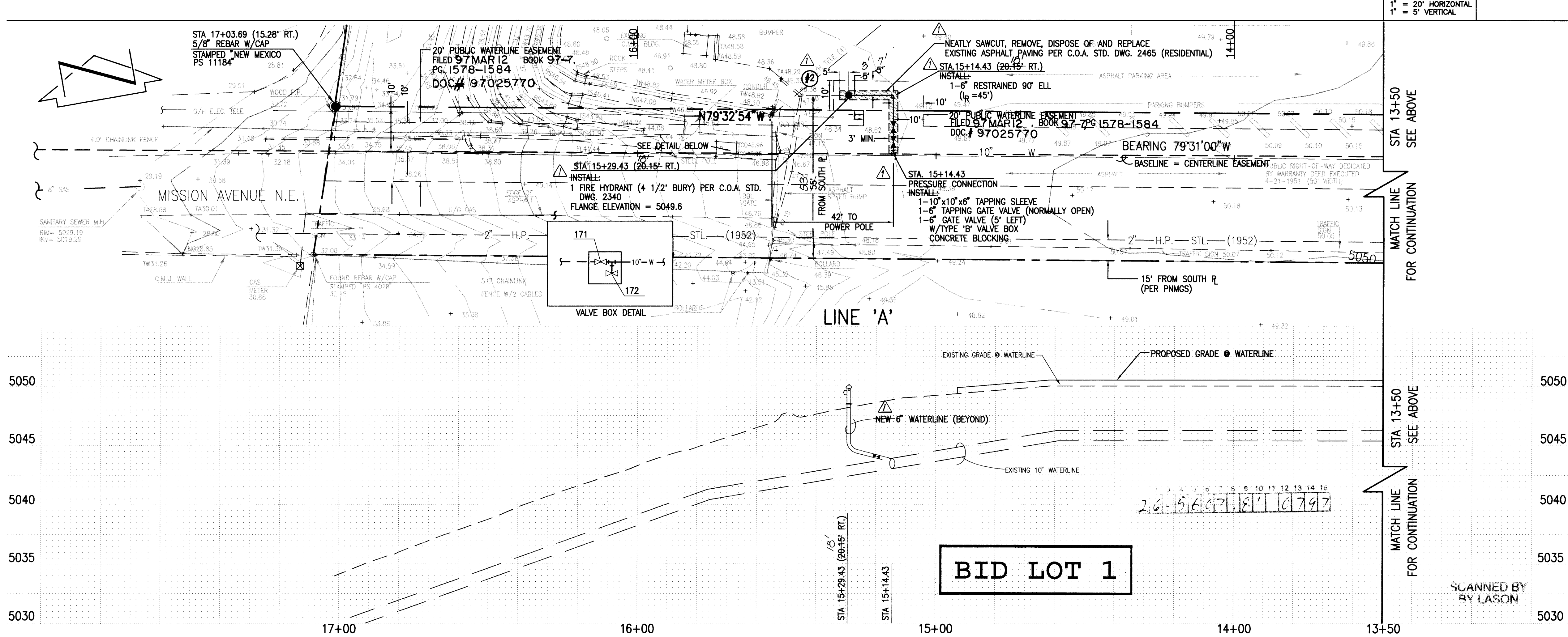
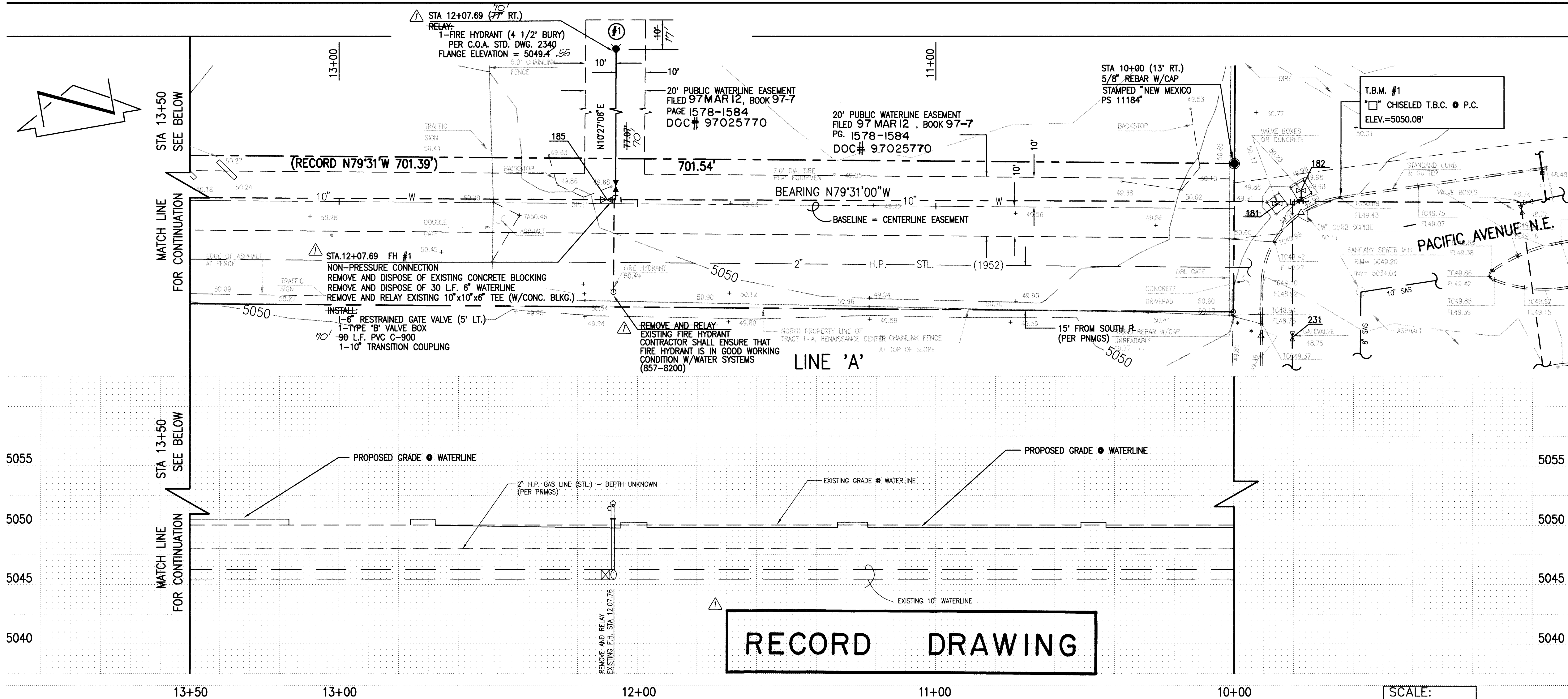
JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250

Design Review Committee	City Engineer Approval	Last Design Update
<div data-bbox="2429 1847 2560 1853" style="border: 1px solid black; padding: 5px; text-align: center;"> APPROVED JUL 29 1997 DESIGN REVIEW COMMITTEE </div>		

City Project No.	560781	Zone Map No.	F-16	Sheet	2	Of	4
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[illegible]

12-2496



- WATERLINE CONSTRUCTION NOTES:
1. ALL STATIONING IS BASED ON EASEMENT CENTERLINE UNLESS INDICATED OTHERWISE.
 2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC.
 3. FOR ALL LINES 14" AND LARGER, WATER MAIN SHALL BE DUCTILE IRON OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. CONCRETE CYLINDER IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF DUCTILE IRON.
 4. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 5. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
 6. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
 7. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
 8. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
 9. JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE HYDRANT LEGS FROM TEE TO FIRE HYDRANT INCLUDING THE TEE AND FIRE HYDRANT.
 10. FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED.
 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
 13. IF 18 INCHES OF VERTICAL CLEARANCE DOES NOT EXIST WHERE WATER AND SANITARY LINES CROSS, THE SANITARY SEWER LINE SHALL BE CONCRETE ENCASED FOR A DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING.
 14. IF THE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK AND/OR PAVING IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. WHEN ABUTTING NEW PAVEMENT TO EXISTING, THE CONTRACTOR SHALL CUT BACK THE EXISTING PAVING TO A STRAIGHT LINE IN ORDER TO REMOVE ANY BROKEN OR CRACKED PAVEMENT. CURB AND GUTTER AND/OR PAVEMENT SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT AND WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen
Professional Engineer
No. 8547
Date 10-27-97

NOTE:
SCREENED TOPOGRAPHIC INFORMATION IS BASED UPON A TOPOGRAPHIC SURVEY PERFORMED BY JEFF MORTENSEN & ASSOCIATES DATED AUGUST, 1995.



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ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (505) 243-4250

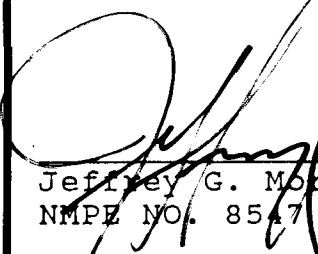
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: MISSION AVENUE ELEMENTARY WATERLINE EXTENSIONS LINE 'A'	
Design Review Committee APPROVED JUL 29 1997 DESIGN REVIEW COMMITTEE	City Engineer Approval Ms./Rev./Yr. Ms./Rev./Yr.
City Project No. 560781	Zone Map No. F-16
Sheet 3	Of 4



1. ALL STATIONING IS BASED ON EASEMENT CENTERLINE UNLESS INDICATED OTHERWISE.
2. FOR ALL LINES 12" AND SMALLER, WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. DUCTILE IRON IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF PVC.
3. FOR ALL LINES 14" AND LARGER, WATER MAIN SHALL BE DUCTILE IRON OR AS APPROVED BY THE CITY OF ALBUQUERQUE CITY ENGINEER. CONCRETE CYLINDER IS AN ACCEPTABLE PIPE MATERIAL IN LIEU OF DUCTILE IRON.
4. WATERLINE SHALL HAVE A MINIMUM COVER OF 4'0" (FINISHED GRADE TO TOP OF PIPE). EXTRA DEPTH TRENCHING, IF REQUIRED, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
5. ELECTRONIC MARKER DISCS (EMD) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
6. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS" REQUIRED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18" ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
7. VALVE STEM AND FIRE HYDRANT EXTENSIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. THE COST OF EACH EXTENSION SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
8. JOINT RESTRAINT SHALL BE CONSIDERED INCIDENTAL TO WATERLINE CONSTRUCTION THEREFORE NO SEPARATE PAYMENT WILL BE MADE.
9. JOINT RESTRAINT SHALL BE PROVIDED ON ALL JOINTS OF FIRE HYDRANT LEGS FROM TEE TO FIRE HYDRANT INCLUDING THE TEE AND FIRE HYDRANT.
10. FOR THE PURPOSES OF THIS PROJECT, ALL RESTRAINED JOINTS AND JOINT RESTRAINT SHALL BE MECHANICALLY RESTRAINED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING APPROPRIATE MEANS AND METHODS TO EXCAVATE AND TRENCH AND INSTALL PIPE SO AS TO NOT EXCEED RIGHT-OF-WAY OR EASEMENT LIMITS, AND SO AS NOT TO INTERFERE WITH OTHER UTILITIES. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING, SUPPORTING AND REPLACING, IF DAMAGED, ALL OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO TRENCHING, THEREFORE, NO SEPARATE PAYMENT WILL BE MADE.
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RECORD DRAWING

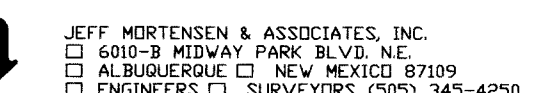
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Jeffrey G. Mortensen
NMPE No. 8547


10-2-7-97
Date

NOTE:
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AUGUST, 1995.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT

TITLE:	MISSION AVENUE ELEMENT WATERLINE EXTENSION LINE 'B'
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Design Review Committee 	City Engineer Approval	Last Design Update
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City Project No.	560781	Zone Map No.	F-16
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951839	City Project No.	560781	Zone Map No.	F-16	Sheet	4	Of	4
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