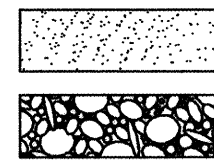


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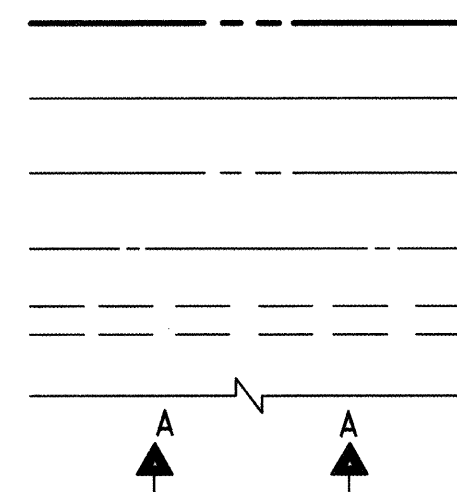
MATERIALS

CONCRETE
RIP-RAP



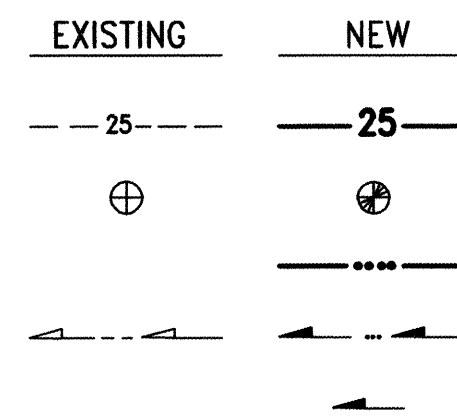
LINES

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



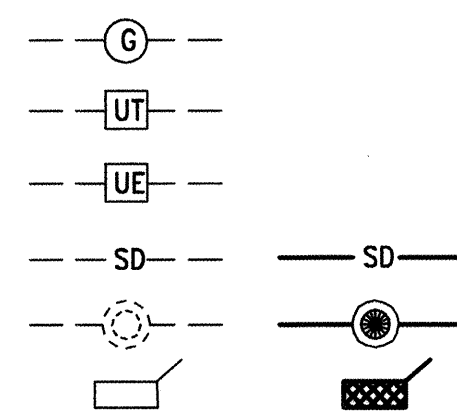
EARTHWORK

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



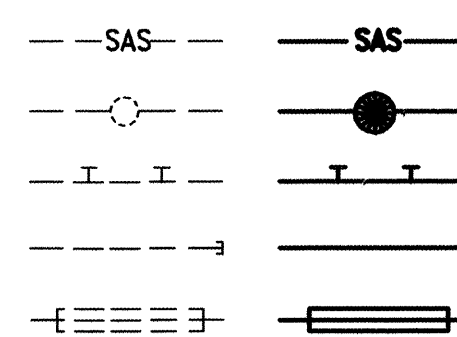
MISCELLANEOUS UTILITIES

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



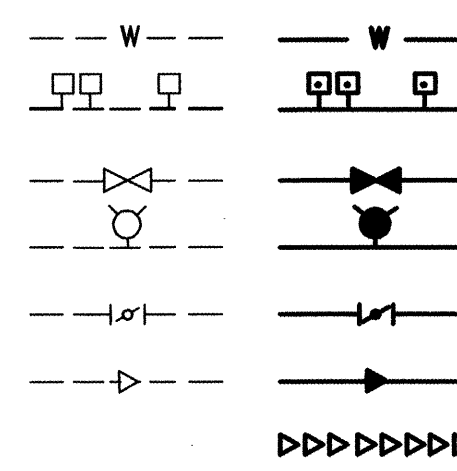
SANITARY SEWER

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



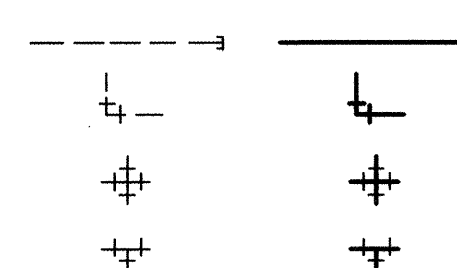
WATER

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



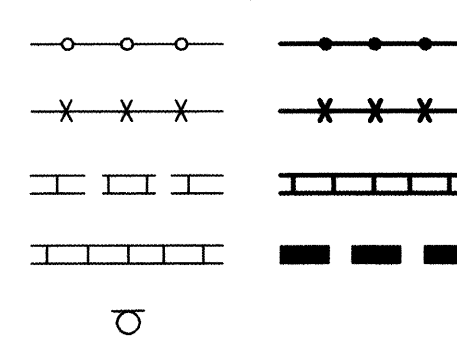
WATER FITTINGS

CAPS AND PLUGS
ELBOW
CROSS
TEE



MISCELLANEOUS

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



CONSTRUCTION PLANS

for

RIO GRANDE HIGH SCHOOL PUBLIC WATER LINE AND PRIVATE FIRE LINE INSTALLATIONS

ALBUQUERQUE, NEW MEXICO

AUGUST, 2002



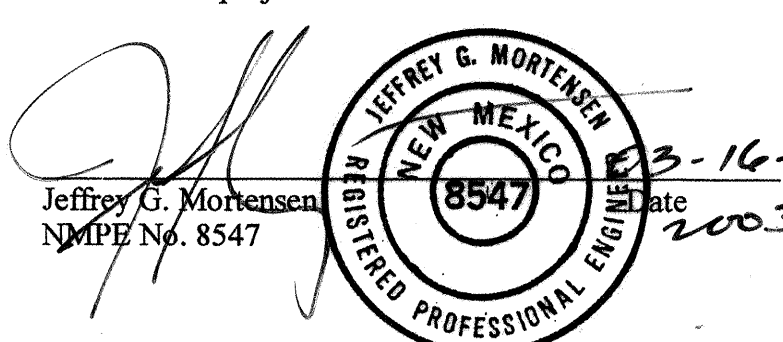
INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND AND INDEX OF DRAWINGS
2	SITE PLAN
3	SEQUENCING PLAN
4	ARENAL ROAD S.W. PUBLIC WATER LINE PLAN AND PROFILE (SEQUENCE #3)
5	PRIVATE WATER LINE PLAN, LINE 'A' (SEQUENCE #1)
6	PRIVATE WATER LINE PLAN, LINE 'B' (SEQUENCE #2)
7	SECTIONS AND DETAILS; WATER VALVE SHUTOFF PLAN
8	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
9	TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES

RECORD DRAWING

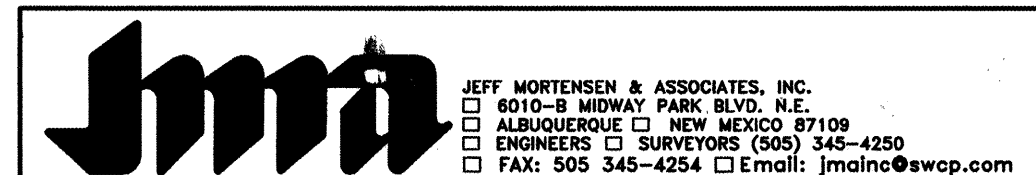
RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this Record Information was obtained by me or under my supervision and represents the record 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.



APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY OF ALBUQUERQUE
DATE: 8/16/03

990378



REV.	SHEETS	CITY ENGINEER	DATE	USER	DEPARTMENT	DATE	USER	DEPARTMENT	DATE
1-9	AS BUILT	8/16/03							
ENGINEERS STAMP & SIGNATURE									
APPROVALS									
TRANSPORTATION									
Water/Wastewater									
Hydrology									
Const. Coord.									
M.R.C.C.D.									
B.C.P.W.D.									
City Project No. 690981									
SHEET 1 OF 9									

GENERAL NOTES:

- ALL ONSITE 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-PUBLIC WORKS CONSTRUCTION-1986 - UPDATE NO. 6, OR BERNALILLO COUNTY STANDARDS, WHICHEVER ARE MORE STRINGENT.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING PUBLIC UTILITIES AND APS MAINTENANCE OPERATIONS (765-5950) FOR LOCATIONS OF EXISTING PRIVATE UTILITIES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITY LINES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- BACKFILL AND COMPACTION WITHIN COUNTY RIGHT-OF-WAY AND/OR EASEMENT SHALL BE 95% ASTM D-1557 FOR THE FULL DEPTH OF TRENCH PER COUNTY STANDARD DRAWING 2465.
- TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.
- ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- CONTRACTOR SHALL COORDINATE WITH THE WATER SYSTEM DIVISION FOR THE EXECUTION OF THE VALVE SHUT OFF PLAN, NOT LESS THAN SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL OPERATE EXISTING VALVES. REFER TO SECTION 18 OF THE SPECIFICATION. THE WATER SYSTEM DIVISION PHONE NUMBER IS 857-8200.
- CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE SPECIFICATIONS.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO BERNALILLO COUNTY TRAFFIC ENGINEERING A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE BERNALILLO COUNTY TRAFFIC ENGINEER. CONTRACTOR SHALL NOTIFY THE TRAFFIC ENGINEER (848-1504) PRIOR TO OCCUPANCY AN INTERSECTION.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED STRIPING BY CONTRACTOR TO EXISTING LOCATION OR AS INDICATED BY THIS PLAN SET.
- THIS PROJECT IS TO BE CONSTRUCTED UNDER, AND IS SUBJECT TO THE TERMS AND CONDITIONS OF THE MASTER UTILITY EASEMENT AND RIGHT-OF-WAY AGREEMENT ENTERED INTO BETWEEN THE COUNTY OF BERNALILLO AND THE CITY OF ALBUQUERQUE, EFFECTIVE DATE 8/20/90.
- CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.

RECORD DRAWING

Keyed Notes:

- Existing private F.H. removed and disposed of. Cost of repair exceeded cost of replacement.
- Existing private 6" waterline between Pt. A & Pt. B abandoned in place. Existing 6" waterline from Pt. A to private F.H. #3 removed and disposed.
- Existing 6" waterline from Pt. B to cap abandoned in place to preserve existing landscaping.

PORTABLES SUMMARY

BLDG. #	CON. TYPE	AREA (SF)	C	REQ. FIRE FLOW (GPM)
1	V-N	3600	1.5	1620
2	V-N	1680	1.5	1107
3	V-N	896	1.5	808
4	V-N	896	1.5	808
5	V-N	320	1.5	483
6	V-N	1680	1.5	1107
7	V-N	1680	1.5	1107
8	V-N	896	1.5	808
9	V-N	896	1.5	808
10	V-N	896	1.5	808
11	V-N	1680	1.5	1107
12	V-N	896	1.5	808
13	V-N	896	1.5	808
14	V-N	896	1.5	808
15	V-N	896	1.5	808
16	V-N	896	1.5	808
17	V-N	896	1.5	808
18	V-N	896	1.5	808
19	V-N	896	1.5	808
20	V-N	896	1.5	808
21	V-N	896	1.5	808
22	V-N	896	1.5	808
23	V-N	896	1.5	808

BUILDING SUMMARY

BUILDING NAME	CON. TYPE	SPRINKLERED	AREA (SF)	C	REQ. FIRE FLOW (GPM)
ADMINISTRATION	II-N	NO	33116	0.8	2620
BLDG. B	II-N	NO	11145	0.8	1520
BLDG. C-CD-D*	II-N	YES**	31949	0.8	2574
BLDG. E	II-N	NO	12675	0.8	1621
BLDG. F	V-N	YES	46046	1.5	2886
ANNEX B	II-N	NO	10339	0.8	1464
ANNEX C	II-N	NO	7206	0.8	1222
ANNEX D	II-N	NO	4027	0.8	914
GYMNASIUM	II-N	NO	56900	0.8	3435
MEDIA SCIENCE	II-1 HR	YES***	59751	0.6	2640
MUSIC	II-N	NO	11008	0.8	1511
PERFORMING ARTS CENTER	II-1 HR	YES-STAGE ONLY	12300	0.6	1198
SWIMMING POOL	II-N	NO	15226	0.8	1777
PROPOSED COMMONS	1-FR	YES	22738	0.6	814

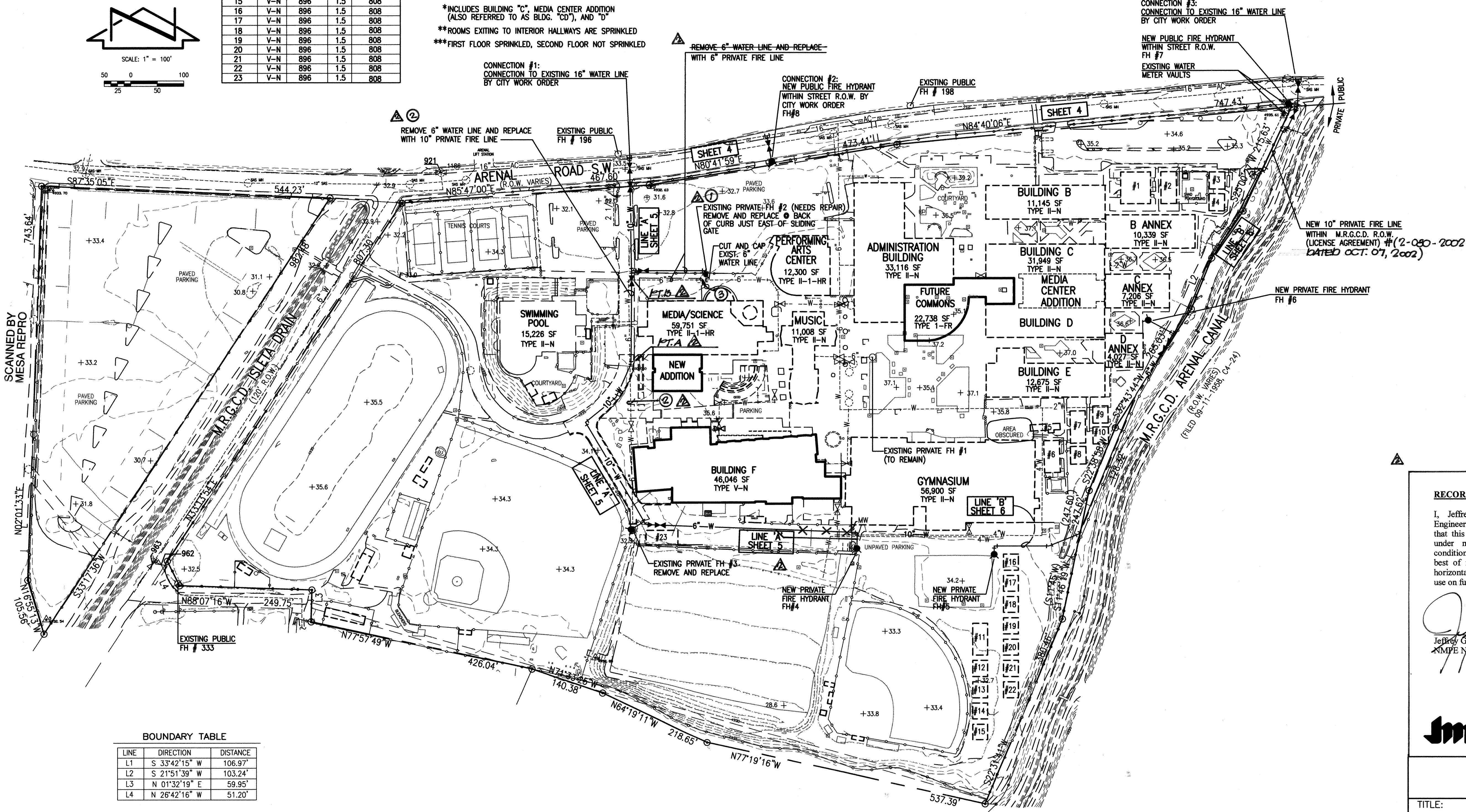
*INCLUDES BUILDING "C", MEDIA CENTER ADDITION (ALSO REFERRED TO AS BLDG. "CD"), AND "D"

**ROOMS EXITING TO INTERIOR HALLWAYS ARE SPRINKLED

***FIRST FLOOR SPRINKLED, SECOND FLOOR NOT SPRINKLED

NOTES:

- UTILITIES SHOWN ON THIS SHEET ARE BASED UPON INFORMATION OBTAINED FROM A.P.S. RECORD DRAWINGS AND FILES, LIMITED ON SITE EVIDENCE, AND ARE SHOWN IN AN APPROXIMATE MANNER ONLY.
- BUILDING CONSTRUCTION TYPES OBTAINED FROM KELLS+CRAIG ARCHITECTS PLAN DATED 11/16/01.



RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this Record Information was obtained by me or under my supervision and represents the record 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
N.M.P.E. No. 8547

NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
8547

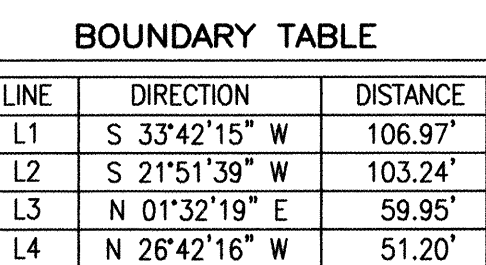
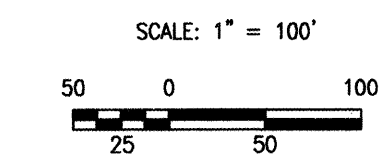
JMA
JEFF MORTENSEN & ASSOCIATES, INC.
6000 N. HIGHWAY PARK BLVD. NE
ALBUQUERQUE, NM 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX: (505) 345-4254 Email: jma@jma-inc.com

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: SITE PLAN
PUBLIC WATER LINE AND PRIVATE FIRE LINE INSTALLATIONS
RIO GRANDE HIGH SCHOOL

Design Review Committee	City Engineer Approval	City Engineer
AUG 20 2002	SEP 11 2002	
DESIGN REVIEW COMMITTEE	CITY ENGINEER	

City Project No. 690981 Zone Map No. M-11/M12 Sheet 2 of 9



File Path:	E:\DATA\ACAD14\990375\	Plot Date:	08-07-2002
File Name:	990375SQ.DWG	Plot Time:	09:26 am

JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250
☐ FAX: 505 345-4254 ☐ Email: jmainc@swcp.com

TITLE: SEQUENCING PLAN
PUBLIC WATER LINE AND PRIVATE FIRE LINE INSTALLATIONS
RIO GRANDE HIGH SCHOOL

City Project No.	690981	Zone Map No.	M-11/M12	Sheet	3	Of	9
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	BENCH MARKS
1	AN ACS 1 3/4" ALUMINUM DISK STAMPED "ACS BM 10-M12",
2	SET ON TOP OF THE NORTHWEST CORNER OF A CONCRETE
3	BASE OF A TRAFFIC LIGHT STANCHION, LOCATED IN THE
4	S.W. QUADRANT OF THE INTERSECTION OF ARENAL RD. AND
5	TAPIA BLVD. S.W.
6	ELEVATION = 4936.11 (NOV 1929)
7	
8	
9	
10	

ENGINEER'S SEAL

08-07-2002

PROFESIONAL ENGINEERS' SOCIETY OF MEXICO, STATE OF MEXICO

8547

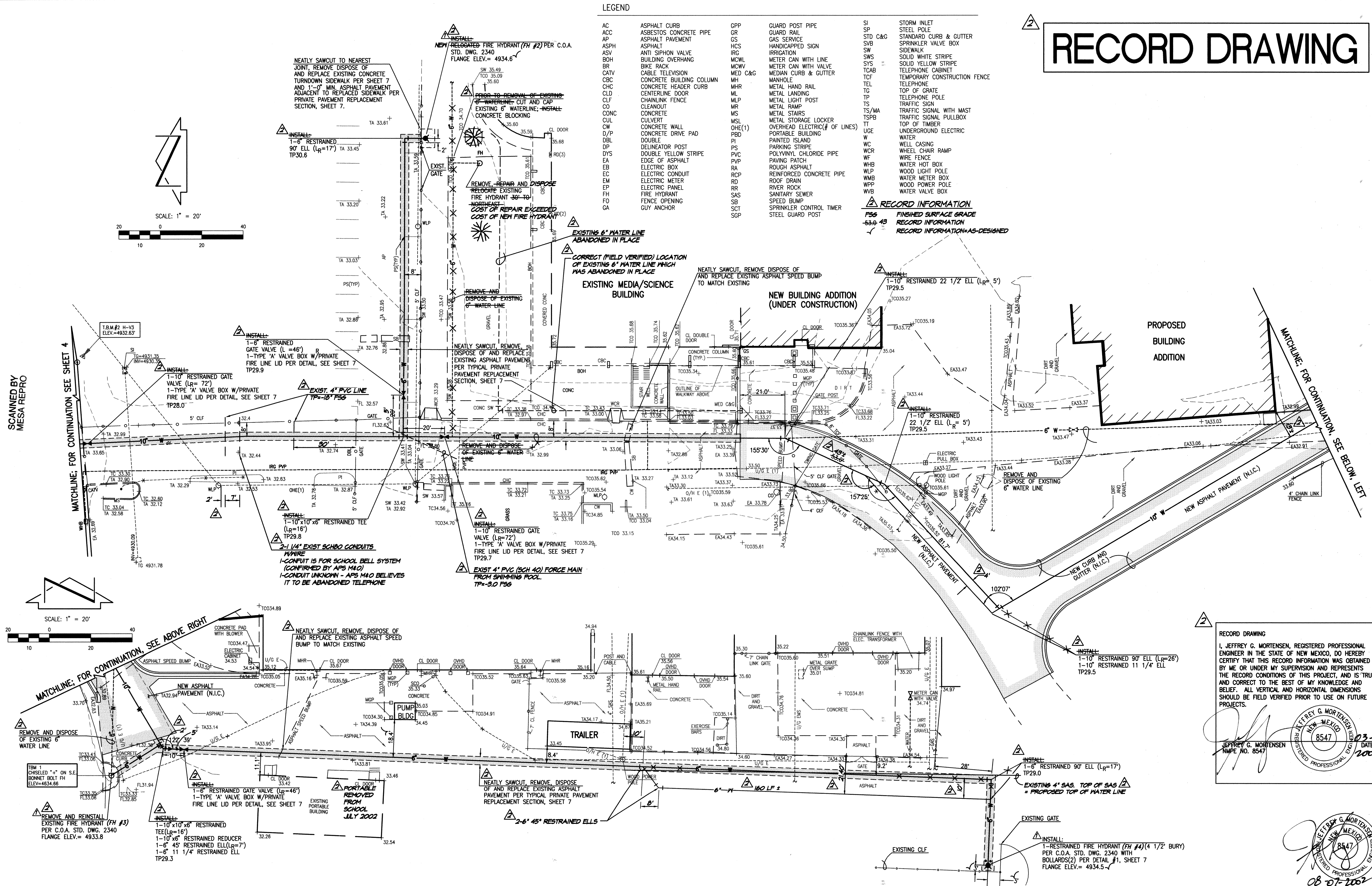
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RECORD DRAWING

LEGEND

AC	ASPHALT CURB	GPP	GUARD POST PIPE	SI	STORM INLET
ACC	ASBESTOS CONCRETE PIPE	GR	GUARD RAIL	SP	STEEL POLE
AP	ASPHALT PAVEMENT	GS	GAS SERVICE	STD C&G	STANDARD CURB & GUTTER
ASPH	ASPHALT	HCS	HANDICAPPED SIGN	SVB	SPRINKLER VALVE BOX
ASV	ANTI SIPHON VALVE	IRG	IRRIGATION	SW	SIDEWALK
BOH	BUILDING OVERHANG	MCWL	METER CAN WITH LINE	SWS	SOLID WHITE STRIPE
BR	BIKE RACK	MCWV	METER CAN WITH VALVE	SYS	SOLID YELLOW STRIPE
CATV	CABLE TELEVISION	MD C&G	MEDIAN CURB & GUTTER	TCAB	TELEPHONE CABINET
CBC	CONCRETE BUILDING COLUMN	MH	MANHOLE	TCF	TEMPORARY CONSTRUCTION FENCE
CHC	CONCRETE HEADER CURB	MHR	METAL HAND RAIL	TEL	TELEPHONE
CLD	CENTERLINE DOOR	ML	METAL LANDING	TG	TOP OF GRATE
CLF	CHAINLINK FENCE	MLP	METAL LIGHT POST	TP	TELEPHONE POLE
CO	CLEANOUT	MR	METAL RAMP	TS	TRAFFIC SIGN
CONC	CONCRETE	MS	METAL STAIRS	TS/MA	TRAFFIC SIGNAL WITH MAST
CUL	CULVERT	MSL	METAL STORAGE LOCKER	TS/PB	TRAFFIC SIGNAL PULLBOX
CW	CONCRETE WALL	OHE(1)	OVERHEAD ELECTRIC (# OF LINES)	TT	TOP OF TIMBER
D/P	DOUBLE	PBD	PORTABLE BUILDING	UGE	UNDERGROUND ELECTRIC
DBL	DOUBLE	PI	PAINTED ISLAND	W	WATER
DYS	DELINEATOR POST	PVC	POLYVINYL CHLORIDE PIPE	WC	WELL CASING
EA	EDGE OF ASPHALT	PVP	PAVING PATCH	WCR	WHEEL CHAIR RAMP
EB	ELECTRIC BOX	RA	ROUGH ASPHALT	WF	WIRE FENCE
EC	ELECTRIC CONDUIT	RCP	REINFORCED CONCRETE PIPE	WLB	WATER HOT BOX
EM	ELECTRIC METER	RD	ROOF DRAIN	WLP	WOOD LIGHT POLE
EP	ELECTRIC PANEL	RR	RIVER ROCK	WMB	WATER METER BOX
FEH	FIRE HYDRANT	SAS	SANITARY SEWER	WPP	WOOD POWER BOX
FO	FENCE OPENING	SB	SPEED BUMP	WVB	WATER VALVE BOX
GA	GUY ANCHOR	SCT	SPRINKLER CONTROL TIMER		
		SGP	STEEL GUARD POST		

RECORD INFORMATION
FSS FINISHED SURFACE GRADE
53.6 43 RECORD INFORMATION
RECORD INFORMATION=AS-DESIGNED



PRIVATE FIRE LINE PLAN - LINE 'A' PUBLIC WATER LINE AND FIRE LINE INSTALLATIONS RIO GRANDE HIGH SCHOOL

DESIGNED BY	C.J.S.	DATE	7/02	BY	C.J.S.	ADD FIRE HYDRANT #5
DRAWN BY	J.L.P.R.	DATE	01/03	BY	M.D.S.	RECORD DRAWING
APPROVED BY	J.G.M.	DATE		BY		
		DATE		BY		
		DATE		BY		

NO.	DATE	BY	REVISIONS
1	7/02	C.J.S.	ADD FIRE HYDRANT #5
2	01/03	M.D.S.	RECORD DRAWING

JOB NO.	990375
DATE	01-2003
SHEET	5 OF 9



JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (C000) 345-4250
FAX: 505 345-4254 E-MAIL: jmort@jma-inc.com

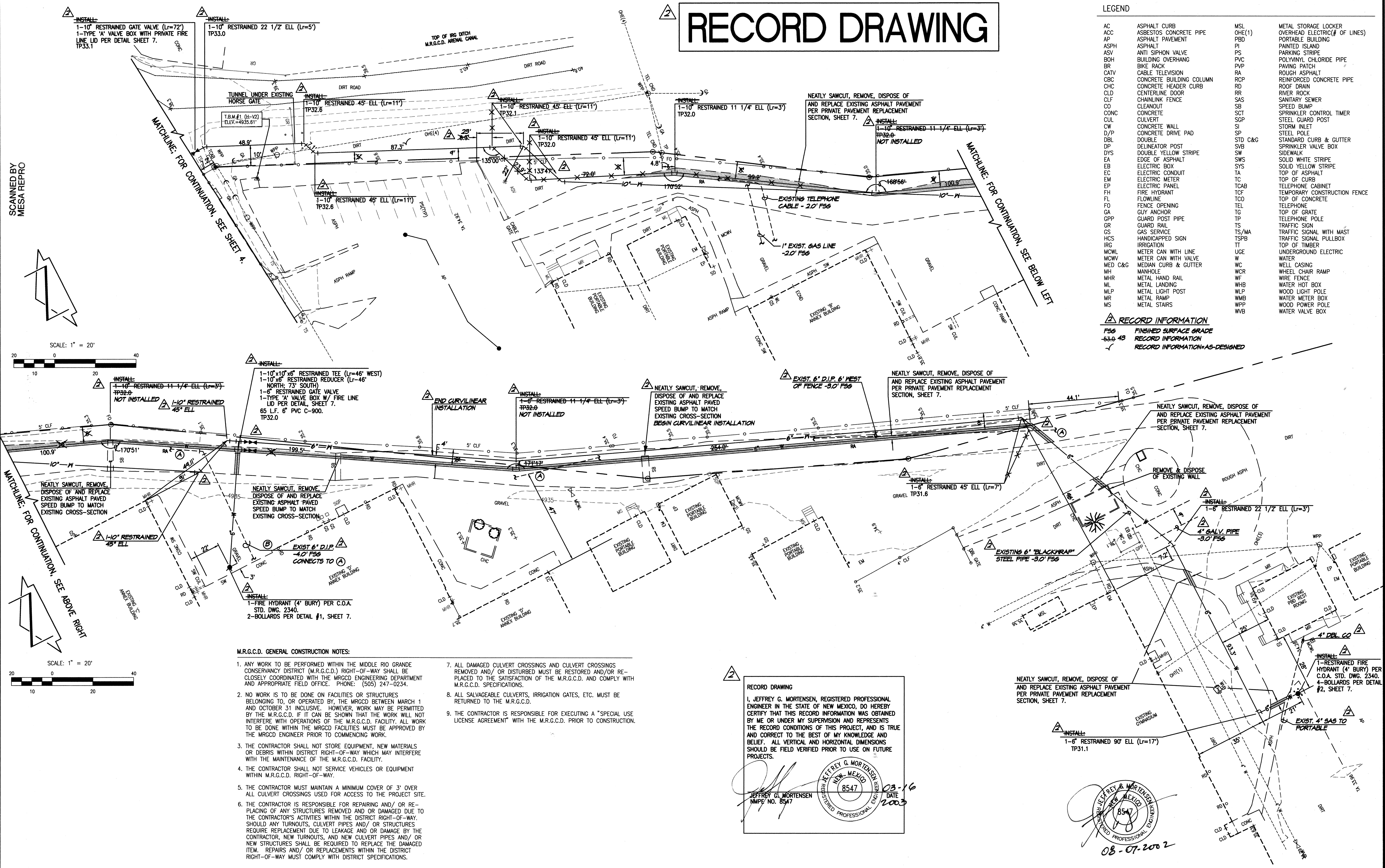
CITY PROJ. No. 690981

RECORD DRAWING

LEGEND

AC	ASPHALT CURB	MSL	METAL STORAGE LOCKER
ACC	ASBESTOS CONCRETE PIPE	OHE(1)	OVERHEAD ELECTRIC(# OF LINES)
AP	ASPHALT PAVEMENT	PBD	PORTABLE BUILDING
ASPH	ASPHALT	PI	PAINTED ISLAND
ASV	ANTI-SIPHON VALVE	PS	PARKING STRIPE
BOH	BUILDING OVERHANG	PVC	POLYVINYL CHLORIDE PIPE
BR	BIKE RACK	PVP	PAVING PATCH
CATV	CABLE TELEVISION	RA	ROUGH ASPHALT
CBC	CONCRETE BUILDING COLUMN	RCP	REINFORCED CONCRETE PIPE
CHC	CONCRETE HEADER CURB	RD	ROOF DRAIN
CLD	CENTERLINE DOOR	RR	RIVER ROCK
CLF	CHAINLINK FENCE	SAS	SANITARY SEWER
CO	CLEANOUT	SD	SPEED BUMP
CONC	CONCRETE	SC	SPRINKLER CONTROL TIMER
CUL	CULVERT	SGP	STEEL GUARD POST
CW	CONCRETE WALL	SI	STORM INLET
D/P	CONCRETE DRIVE PAD	SP	STEEL POLE
DBL	DOUBLE	STD C&G	STANDARD CURB & GUTTER
DP	DELINEATOR POST	SVB	SPRINKLER VALVE BOX
DYS	DOUBLE YELLOW STRIPE	SW	SIDEWALK
EA	EDGE OF ASPHALT	SWS	SOLID WHITE STRIPE
EB	ELECTRIC BOX	SYS	SOLID YELLOW STRIPE
EC	ELECTRIC CONDUIT	TA	TOP OF ASPHALT
EM	ELECTRIC METER	TC	TOP OF CURB
EP	ELECTRIC PANEL	TCAB	TELEPHONE CABINET
FB	FIRE HYDRANT	TCF	TEMPORARY CONSTRUCTION FENCE
FL	FLOWLINE	TCO	TOP OF CONCRETE
FO	FENCE OPENING	TEL	TELEPHONE
GA	GUAY ANCHOR	TG	TOP OF GRATE
GPP	GUARD POST PIPE	TP	TELEPHONE POLE
GR	GUARD RAIL	TS	TRAFFIC SIGN
GS	GAS SERVICE	TS/MA	TRAFFIC SIGNAL WITH MAST
HCS	HANDICAPPED SIGN	TSPB	TRAFFIC SIGNAL PULLBOX
IRG	IRRIGATION	TT	TOP OF TIMBER
MCWL	METER CAN WITH LINE	UGE	UNDERGROUND ELECTRIC
MCWV	METER CAN WITH VALVE	WC	WATER
WED C&G	WELL CASING	WCR	WHEEL CHAIR RAMP
MH	MANHOLE	WF	WIRE FENCE
MHR	METAL HAND RAIL	WHB	WATER HOT BOX
ML	METAL LANDING	WLP	WOOD LIGHT POLE
MLP	METAL LIGHT POST	WMB	WATER METER BOX
MR	METAL RAMP	WPP	WOOD POWER POLE
MS	METAL STAIRS	WVB	WATER VALVE BOX

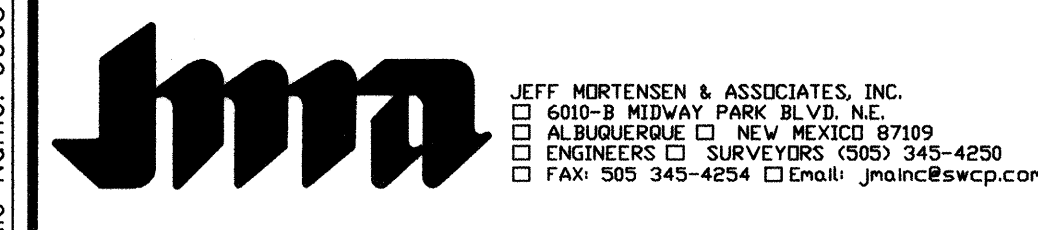
RECORD INFORMATION
F56 FINISHED SURFACE GRADE
53.6 43 RECORD INFORMATION
RECORD INFORMATION=AS-DESIGNED



- M.R.G.C.D. GENERAL CONSTRUCTION NOTES:**
- ANY WORK TO BE PERFORMED WITHIN THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT (M.R.G.C.D.) RIGHT-OF-WAY SHALL BE CLOSELY COORDINATED WITH THE MRGCD ENGINEERING DEPARTMENT AND APPROPRIATE FIELD OFFICE. PHONE: (505) 247-0234.
 - NO WORK IS TO BE DONE ON FACILITIES OR STRUCTURES BELONGING TO, OR OPERATED BY, THE MRGCD BETWEEN MARCH 1 AND OCTOBER 31 INCLUSIVE. HOWEVER, WORK MAY BE PERMITTED BY THE M.R.G.C.D. IF IT CAN BE SHOWN THAT THE WORK WILL NOT INTERFERE WITH OPERATIONS OF THE M.R.G.C.D. FACILITY. ALL WORK TO BE DONE WITHIN THE MRGCD FACILITIES MUST BE APPROVED BY THE MRGCD ENGINEER PRIOR TO COMMENCING WORK.
 - THE CONTRACTOR SHALL NOT STORE EQUIPMENT, NEW MATERIALS OR DEBRIS WITHIN DISTRICT RIGHT-OF-WAY WHICH MAY INTERFERE WITH THE MAINTENANCE OF THE M.R.G.C.D. FACILITY.
 - THE CONTRACTOR SHALL NOT SERVICE VEHICLES OR EQUIPMENT WITHIN M.R.G.C.D. RIGHT-OF-WAY.
 - THE CONTRACTOR MUST MAINTAIN A MINIMUM COVER OF 3' OVER ALL CULVERT CROSSINGS USED FOR ACCESS TO THE PROJECT SITE.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND/OR REPLACING OF ANY STRUCTURES REMOVED AND OR DAMAGED DUE TO THE CONTRACTOR'S ACTIVITIES WITHIN THE DISTRICT RIGHT-OF-WAY. SHOULD ANY TURNOUTS, CULVERT PIPES AND/OR STRUCTURES REQUIRE REPLACEMENT DUE TO LEAKAGE AND OR DAMAGE BY THE CONTRACTOR, NEW TURNOUTS, AND NEW CULVERT PIPES AND/OR NEW STRUCTURES SHALL BE REQUIRED TO REPLACE THE DAMAGED ITEM. REPAIRS AND/OR REPLACEMENTS WITHIN THE DISTRICT RIGHT-OF-WAY MUST COMPLY WITH DISTRICT SPECIFICATIONS.
 - ALL DAMAGED CULVERT CROSSINGS AND CULVERT CROSSINGS REMOVED AND/OR DISTURBED MUST BE RESTORED AND/OR REPLACED TO THE SATISFACTION OF THE M.R.G.C.D. AND COMPLY WITH M.R.G.C.D. SPECIFICATIONS.
 - ALL SALVAGEABLE CULVERTS, IRRIGATION GATES, ETC. MUST BE RETURNED TO THE M.R.G.C.D.
 - THE CONTRACTOR IS RESPONSIBLE FOR EXECUTING A "SPECIAL USE LICENSE AGREEMENT" WITH THE M.R.G.C.D. PRIOR TO CONSTRUCTION.

RECORD DRAWING
I, JEFFREY G. MORTENSEN, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THIS RECORD INFORMATION WAS OBTAINED BY ME OR UNDER MY SUPERVISION AND REPRESENTS THE RECORD 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
NMPE NO. 8547
03-16
2003

RECORD DRAWING
JEFFREY G. MORTENSEN
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
8547
08-07-2002

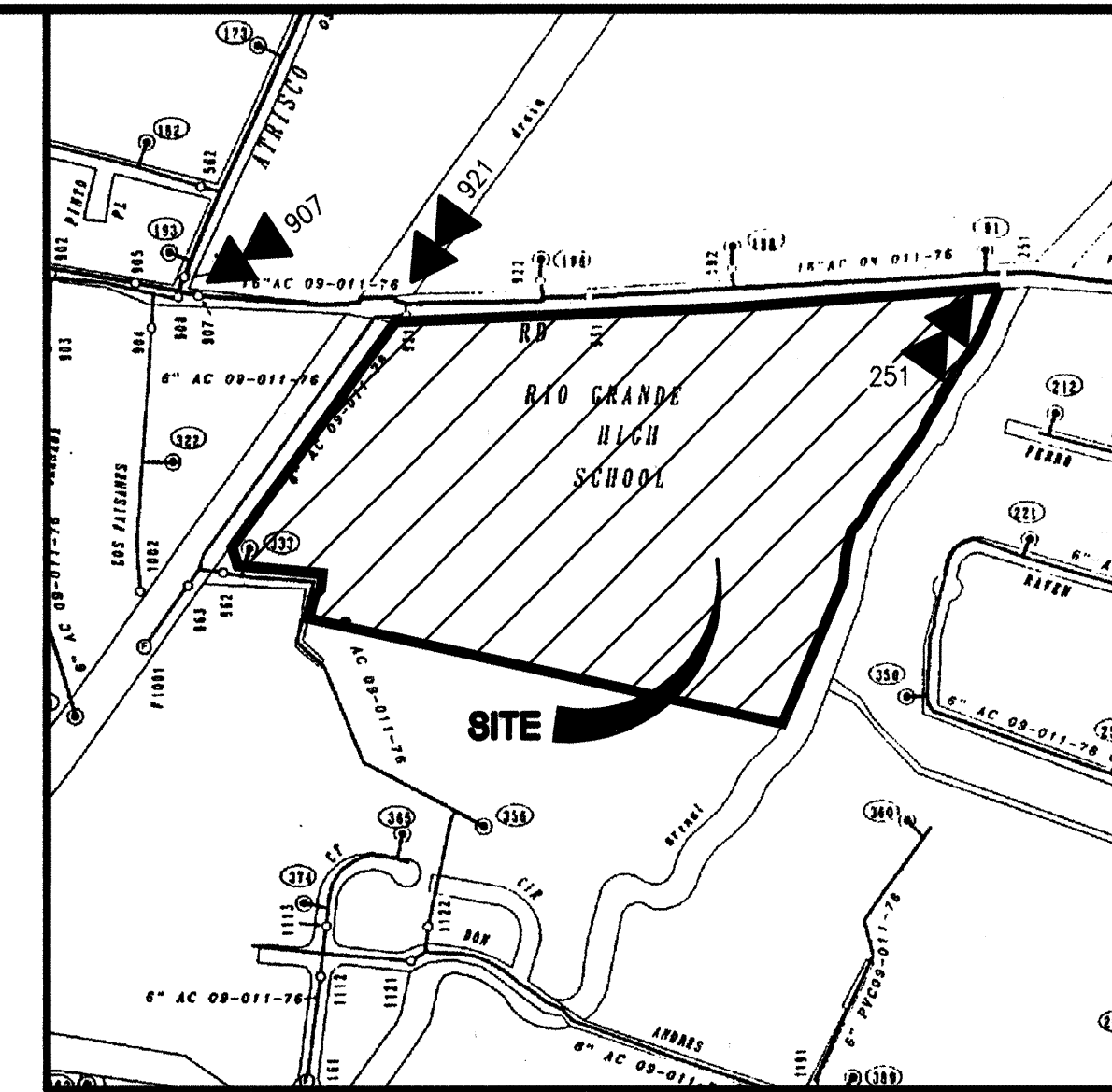
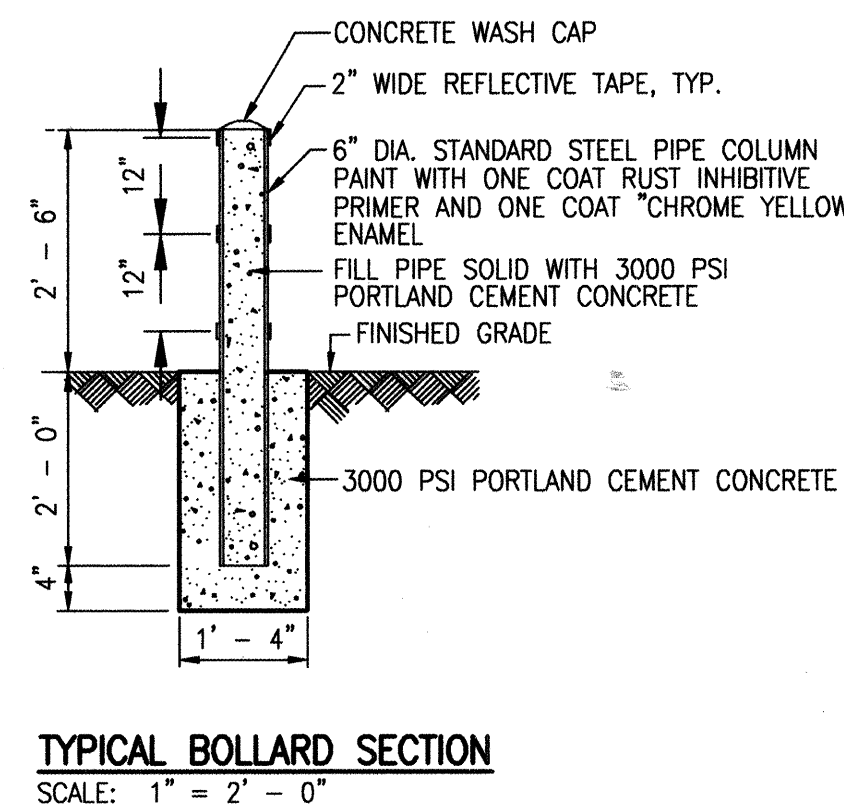
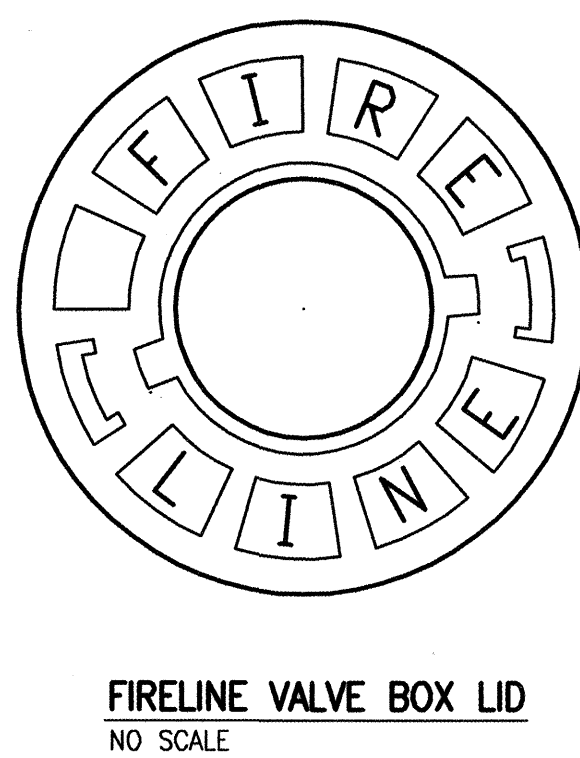
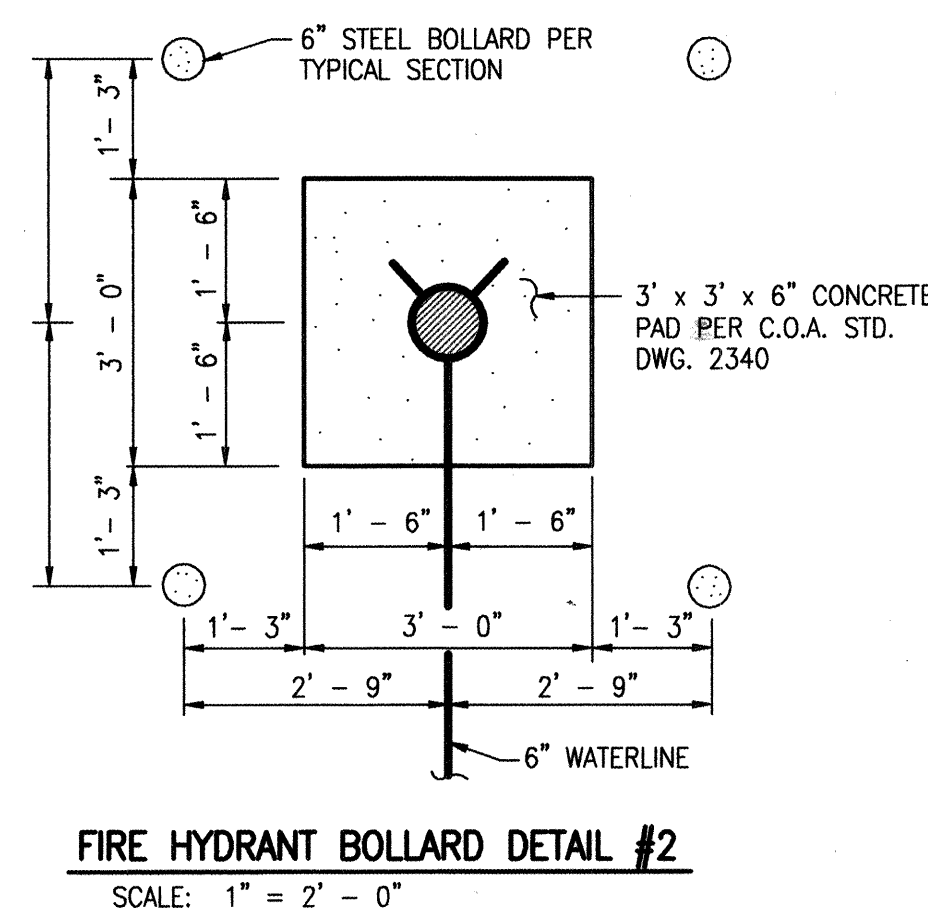
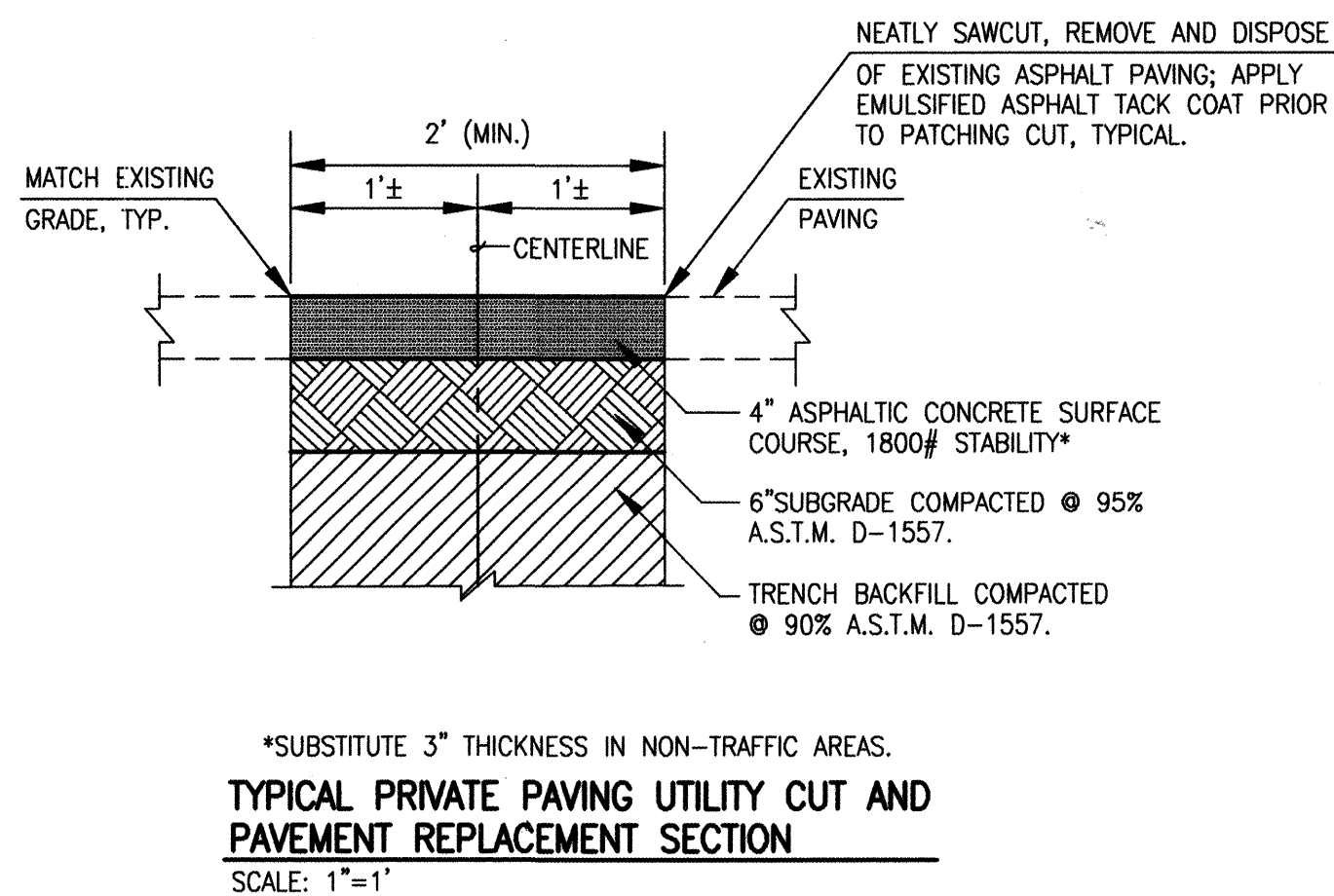
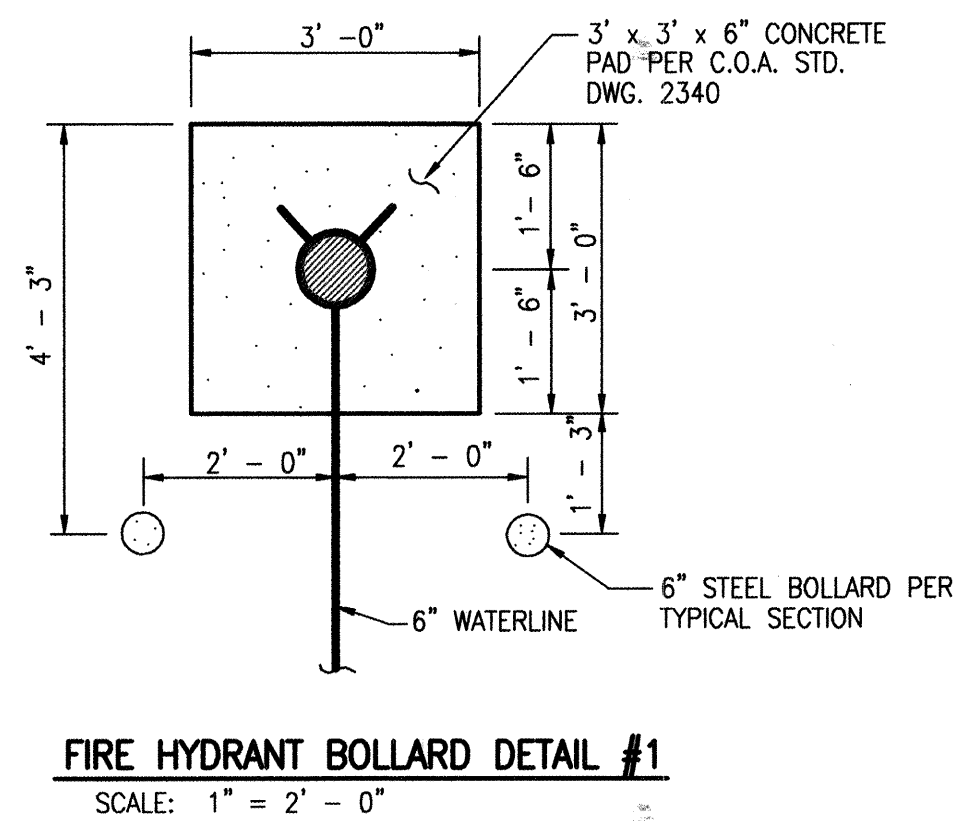
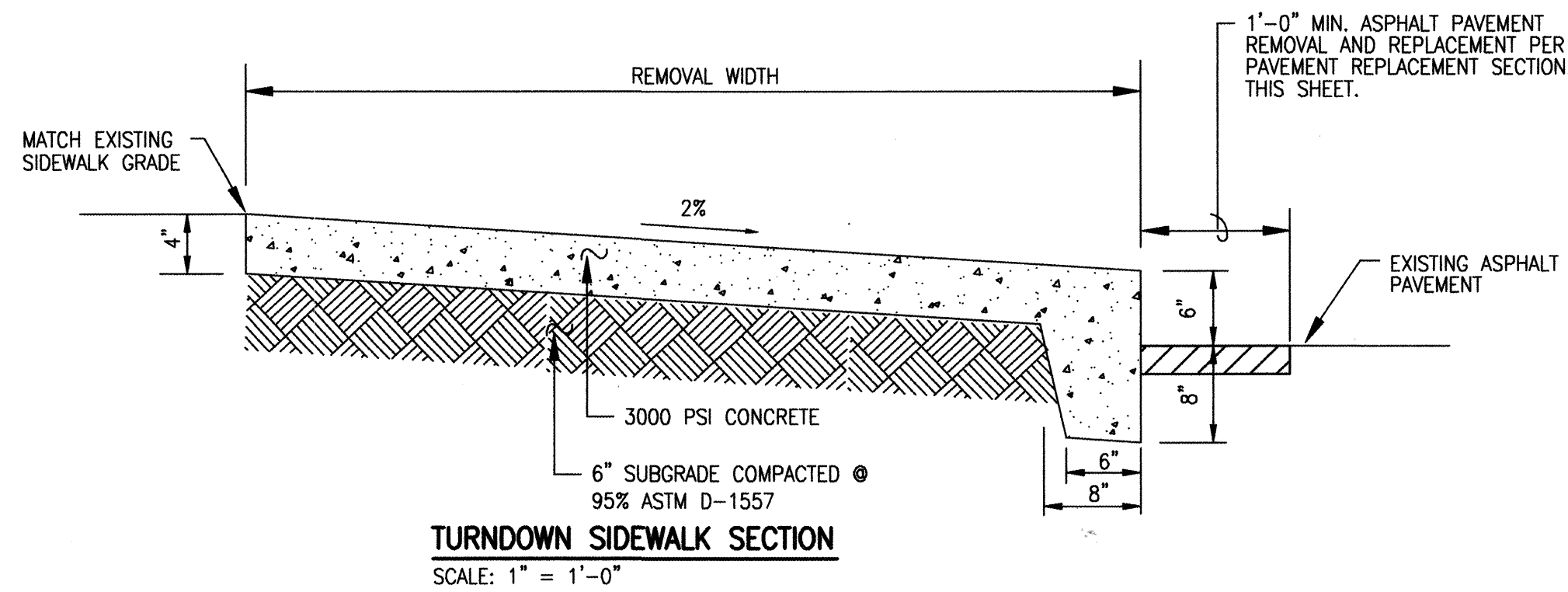


PRIVATE WATER LINE PLAN PUBLIC WATER LINE AND PRIVATE FIRE LINE INSTALLATIONS RIO GRANDE HIGH SCHOOL

DESIGNED BY	C.J.S.	NO.	DATE	BY	REVISIONS	JOB NO.
DRAWN BY	J.L.P.R.	1	01/03	M.D.S.	RECORD DRAWING	9903757
APPROVED BY	J.G.M.					DATE
						01-2003
						08-2002
						SHEET
						6 OF 9

CITY PROJ. No. 690981

SCANNED BY
MESA REPRO



WATER VALVE SHUTOFF PLAN
1" = 600'

WATER VALVE SHUTOFF PLAN NOTES:

1. PRESSURE CONNECTIONS TO THE EXISTING 16" WATERLINE WITHIN ARENAL RD. S.W. SHALL BE UTILIZED ON THIS PROJECT. HOWEVER, IN THE EVENT THAT ISOLATION OF THE EXISTING 16" WATER LINE WITHIN ARENAL RD. S.W. IN THE PROXIMITY OF THE PROPOSED CONNECTIONS IS REQUIRED AT A MINIMUM, THE FOLLOWING VALVES, SHALL BE CLOSED: #251, #907, #921.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO WATER SYSTEMS (857-8250) A DETAILED CONSTRUCTION SCHEDULE OF WORK ANTICIPATED TO REQUIRE WATER VALVE SHUTOFFS. THE CONTRACTOR SHALL MAINTAIN WEEKLY CONTACT WITH WATER SYSTEMS AS REQUIRED TO UPDATE AND/OR VERIFY THE SCHEDULE.
3. WATER SYSTEMS PERSONNEL SHALL PERFORM ALL SHUTOFFS. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES THAT MAY AFFECT SYSTEM OPERATION.
4. WATER SYSTEMS WILL NOT BE RESPONSIBLE FOR ANY PROJECT DELAYS ATTRIBUTABLE TO THE SCHEDULING OF WATER VALVE SHUTOFFS.
5. THE CONTRACTOR SHALL REQUEST A WATER SHUTOFF IN WRITING, A MINIMUM OF SEVEN (7) DAYS IN ADVANCE PER STANDARD CITY OF ALBUQUERQUE PROCEDURES.
6. WITHIN FIVE (5) DAYS AFTER RECEIPT OF CONTRACTOR'S SHUTOFF REQUEST, TRIAL SHUTOFFS WILL BE CONDUCTED. CITY TO FURNISH LABOR AND APPURTENANCES NECESSARY TO VERIFY COMPLETENESS OF SHUTOFFS.
7. THE CONTRACTOR SHALL HAVE ALL FITTINGS, MATERIALS AND EQUIPMENT ON SITE PRIOR TO VALVE SHUTOFF. ALL EXCAVATION SHALL BE COMPLETE EXCEPT AS NECESSARY TO MAINTAIN SAFE SYSTEM OPERATION WHILE UNDER PRESSURE.
8. THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT ALL NECESSARY SHUTOFFS AND CONNECTIONS.
9. EXISTING WATER VALVE AND WATER LINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE FACILITIES MAP M-11.
10. AT THE TIME OF WATER SHUTOFF APPLICATION, THE CONTRACTOR SHALL REQUEST THAT WATER SYSTEM DIVISION NOTIFY ALL AFFECTED PROPERTY OWNERS AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF THE RESPECTIVE SHUTOFFS.

JMA
JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NM 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX: 505 345-4254 EMail: jma@jma-inc.com

990375 1

RECORD DRAWING

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: RIO GRANDE HIGH SCHOOL SECTIONS AND DETAILS; WATER VALVE SHUTOFF PLAN	
Design Review Committee APPROVED AUG 20 2002 REVIEW COMMITTEE	City Engineer Approval SEP 11 2002 CITY
City Project No. 690981	Zone Map No. M-11/M-12
Sheet 7	Of 9

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 (M.U.T.C.D.) 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 5A 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 PLACES 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, HOSPITAL, TRANSIT AUTHORITY, BUSINESSES AN/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 PATCHES 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 SPECIFICATIONS.

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.

SUPPLEMENTAL NOTES FOR WORK WITHIN THE COUNTY

28. FOR THE PURPOSES OF THIS PROJECT, "CONSTRUCTION COORDINATION" SHALL BE REPLACED WITH "TRAFFIC CONTROL MANAGER"

29. THE PARKING OF CONSTRUCTION EQUIPMENT OR VEHICLES WITHIN PUBLIC RIGHT-OF-WAY SHALL NOT BE PERMITTED.

30. PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1500 FOR MORE INFORMATION.

31. 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 M.U.T.C.D. REQUIREMENTS AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.

32. 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.

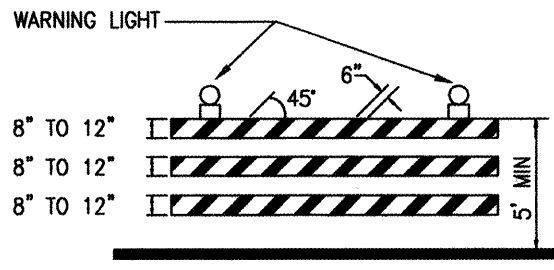
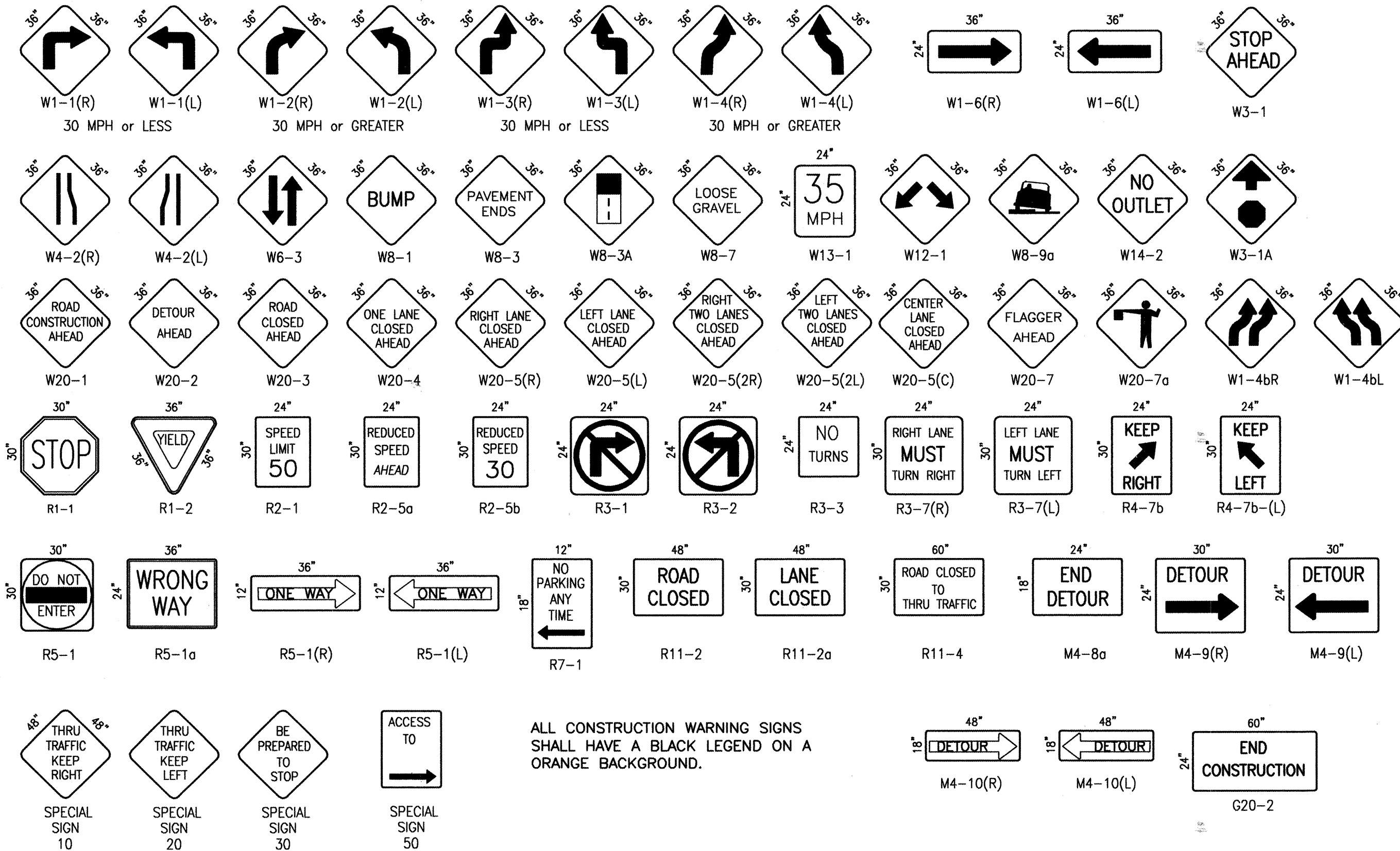
33. CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: TRAFFIC ENGINEERING MANAGER.

34. 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.

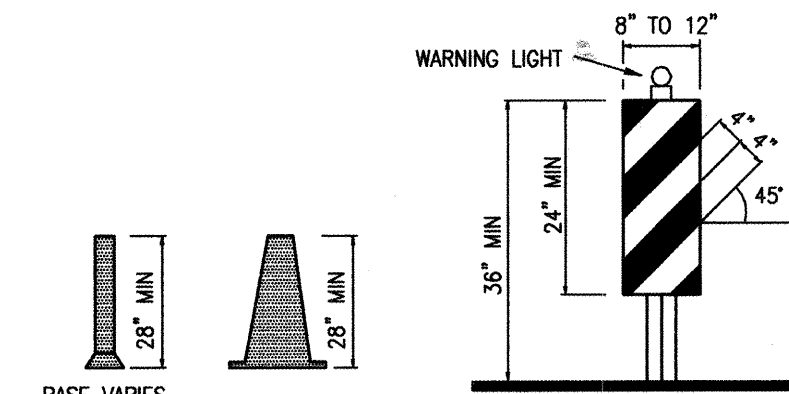
35. SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC ON ALL AFFECTED ROADS. THE CONTRACTOR 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.

36. 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.

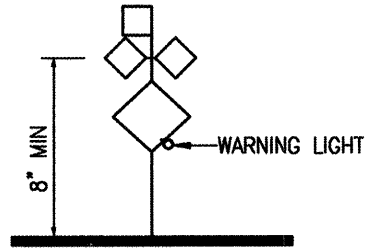
SIGN FACE DETAILS



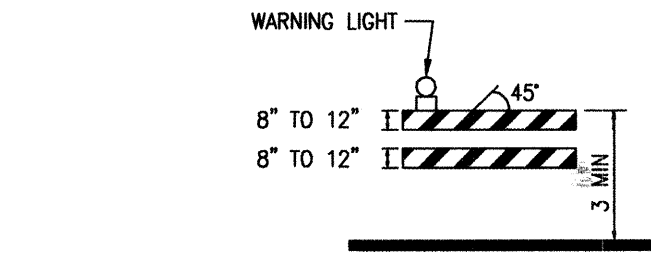
TYPE III BARRICADE



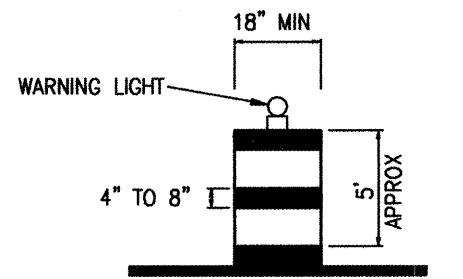
VERTICAL PANEL



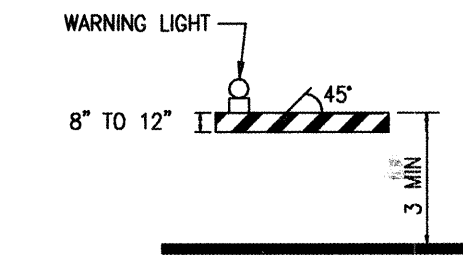
HIGH LEVEL WARNING DEVICE



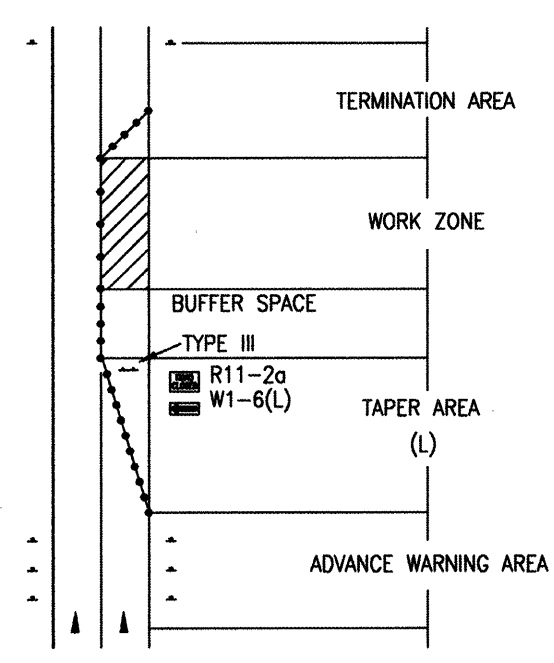
TYPE III BARRICADE COLLAPSIBLE



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
DOWNSIDE TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

SPEED LIMIT _____

40 MPH OR LESS $WS^2/60$

45 MPH OR GREATER $L = W \times S$

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

RECORD DRAWING

990378

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP			
TITLE: RIO GRANDE HIGH SCHOOL PUBLIC WATER LINE AND PRIVATE FIRE LINE INSTALLATIONS SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS			
Design Review Committee	City Engineer Approval	Last Design Update	
C.O.A. STD.	C.O.A. STD.		
City Project No. 690981	Zone Map No. M11/M12	Sheet 8	Of 9

SCANNED BY
MESA REPRO

Plot Date: 08-07-2002
Plot Time: 10:13 am
File Path: E:\JMM\11\990378
File Name: TRAFFIC.DWG

