• 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 00000000 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

SEVEN BAR ELEMENTARY SCHOOL FLASHING SCHOOL BEACON

ALBUQUERQUE, NEW MEXICO DECEMBER, 2001

RECORD DRAWING

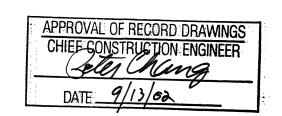


DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND AND INDEX OF DRAWINGS
2,3	PLAT (FOR REFERENCE)
. 4	GRADING PLAN (FOR REFERENCE)
5	TRAFFIC NOTES, LEGEND, EQUIPMENT REQUIREMENTS AND INCIDENTAL ITEMS
6	SITE PLAN
7	FLASHING BEACON DETAILS (MASTARM)
8	FLASHING BEACON DETAILS (PEDESTAL)
9	TRAFFIC SIGNAL MASTARM DETAILS, TYPE II STANDARD
10	FOUNDATION DETAILS, TYPE II AND TYPE III STANDARDS
11	TRAFFIC SIGNAL PULL BOX AND SCHOOL SIGN DETAILS
12	METER PEDESTAL DETAILS
13	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
14	TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES

DESCRIPTION

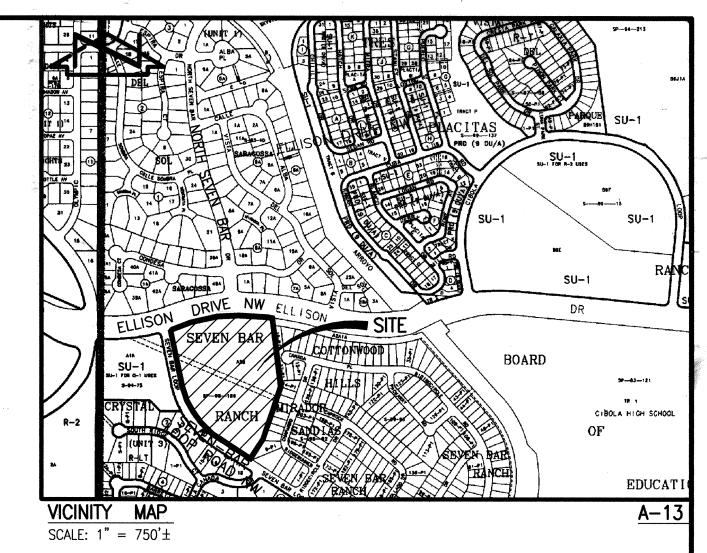
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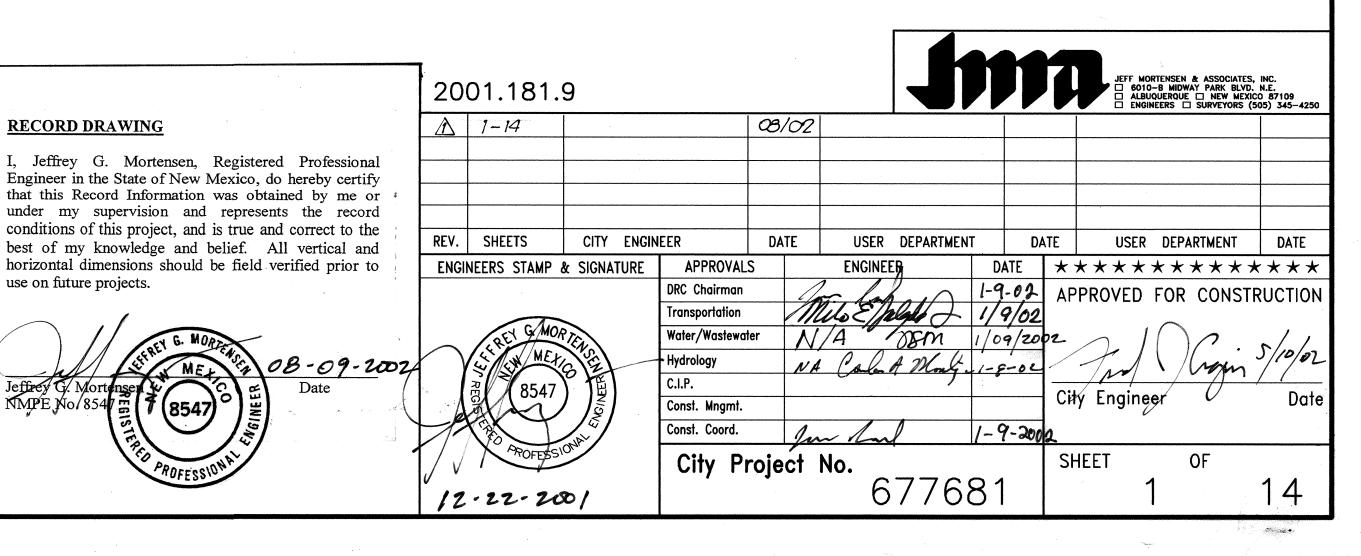
I, Jeffrey G. Mortensen, Registered Professional

RECORD DRAWING

use on future projects.



- 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986 - UPDATE NO. 6.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260– 1990, (ALBUQUERQUE AREA) 1–800–321–ALERT (2537) (STATEWIDE) FOR LOCATION OF EXISTING PUBLIC UTILITIES, AND APS MAINTENANCE & OPERATIONS (765–5950) FOR LOCATION OF EXISTING PRIVATE UTILITIES.
- 3. 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 ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING 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 UTILITIES, 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
- 4. 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
- 5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- 6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.
- 7. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING
- 8. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINE AND ACCESSORIES AS REQUIRED BY THE NEW MEXICO UTILITIES, INC. (NMUI) FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 9. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- 10. TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.
- 11. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN
- 12. IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- 13. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- 14. 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.
- 15. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL.
- 16. 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.
- 17. CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.
- 18. ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- 19. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.



70739

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Mary Herrera Bern. Co. PLRT R 17.6

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6/13/01 DATE

5-17-0/ DATE 4/13/01 DATE 7-06-01 DATE 6/13/01 DAT A.M.A.F.C

DATE DATE S ALBUQUE

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6/14/01 DATE

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JEFF MORTENSEN & ASSOCIATES, INC.

□ 6010-B MIDWAY PARK BLVD. N.E.

□ ALBUQUERQUE □ NEW MEXICO 87109

□ ENGINEERS □ SURVEYORS (505) 345

JOB #2001.180.1 PLAT

9 SHEET 1

#2001-170739

Rob Roberts a
Roberts a
es and/or PNM Gas Serv

JMA No. 2001.181.9 CITY PRJ. NO. 677681 SHEET 2 OF 14

RECORD DRAWING

SCHOOL

COMCAST CABLE VISION OF NEW MEXICO, INC. EASEMENT RELE. Comcast Cable Vision of New Mexico, Inc. does hereby release, and discharge its right, title and interest in the easements (grcreplat or document) shown to be vacated on this plat.

NEW MEXICO RIGHT OF WAY AND DOCUMENT EXECUTED ON 07-12-1995, **10 B·I+·95, BK. 95-19, Pq. 2592**, **Y**, INC. WATER LINE EASEMENT of FILED 09-01-1995, BOOK of #95089330

STATE OF NEW MEXICO

This instrument was exhowledged before me on this the day of the solution of Comcast Cable Vision of New Mexico, Inc., a corporation.

Notary Public

My commission expires

This instrument was exhowledged before me on this the commission of New Mexico, Inc., a corporation.

This instrument was exhibited as a complete of the commission expires and the commission of the commission of the commission of the commission expires.



20.017 75.88° 9.84° 10.00° 9.84° 181.89° 54.00° 7.17° 7.17° 7.17° 7.17° 20.38° 95.02° 20.00°

This instrument was acknowledged before me on this 2001, by Anthery Colorado Corporation. - 12/22 04 Notary Public My commission

CHORD BEARING CHORD DELTA
N 26'02'31" W 20.00' 01'51'37"
N 18'21'22" W 144.93' 13'30'41"



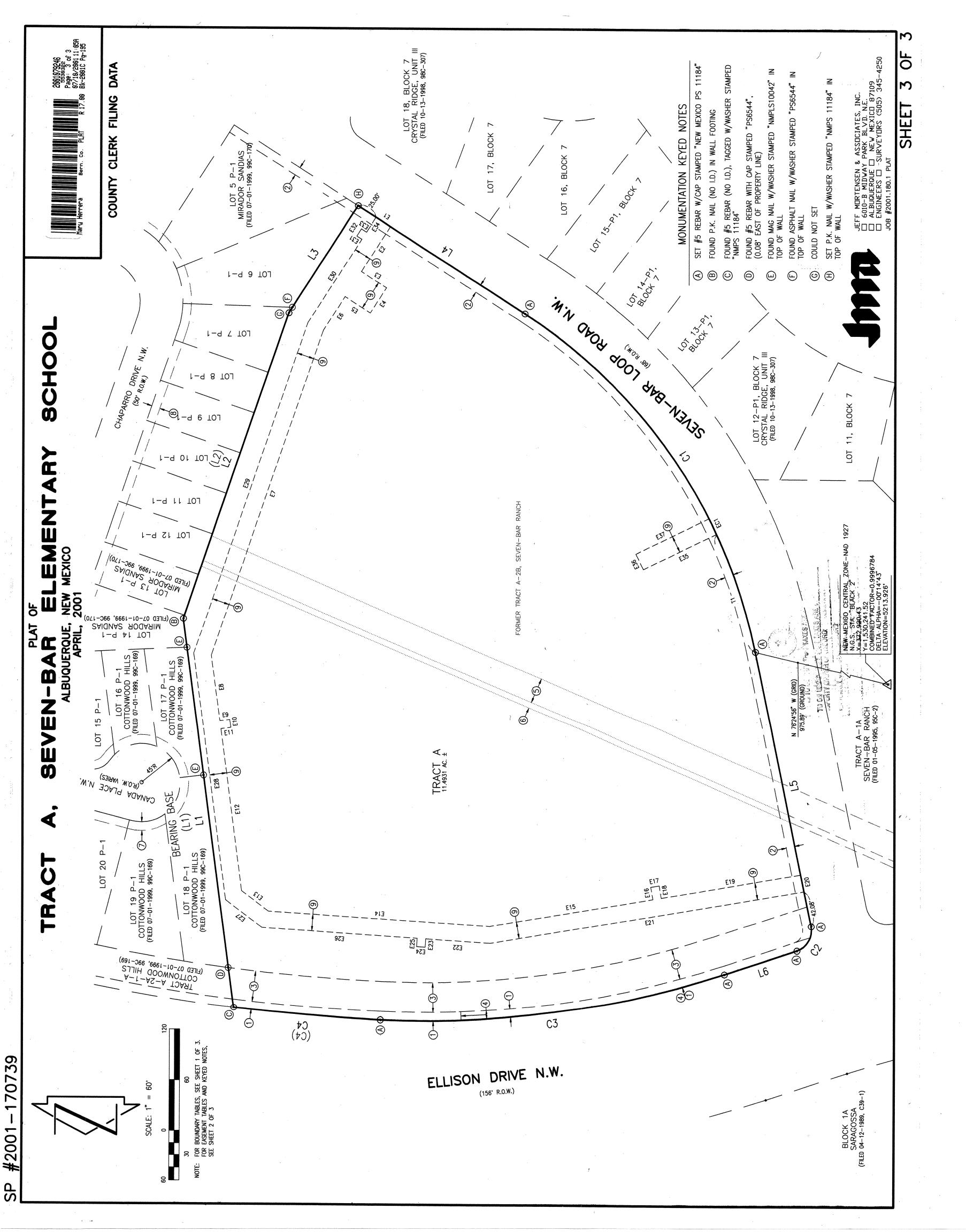
JEFF MORTENSEN & ASSOCIATES, INC.

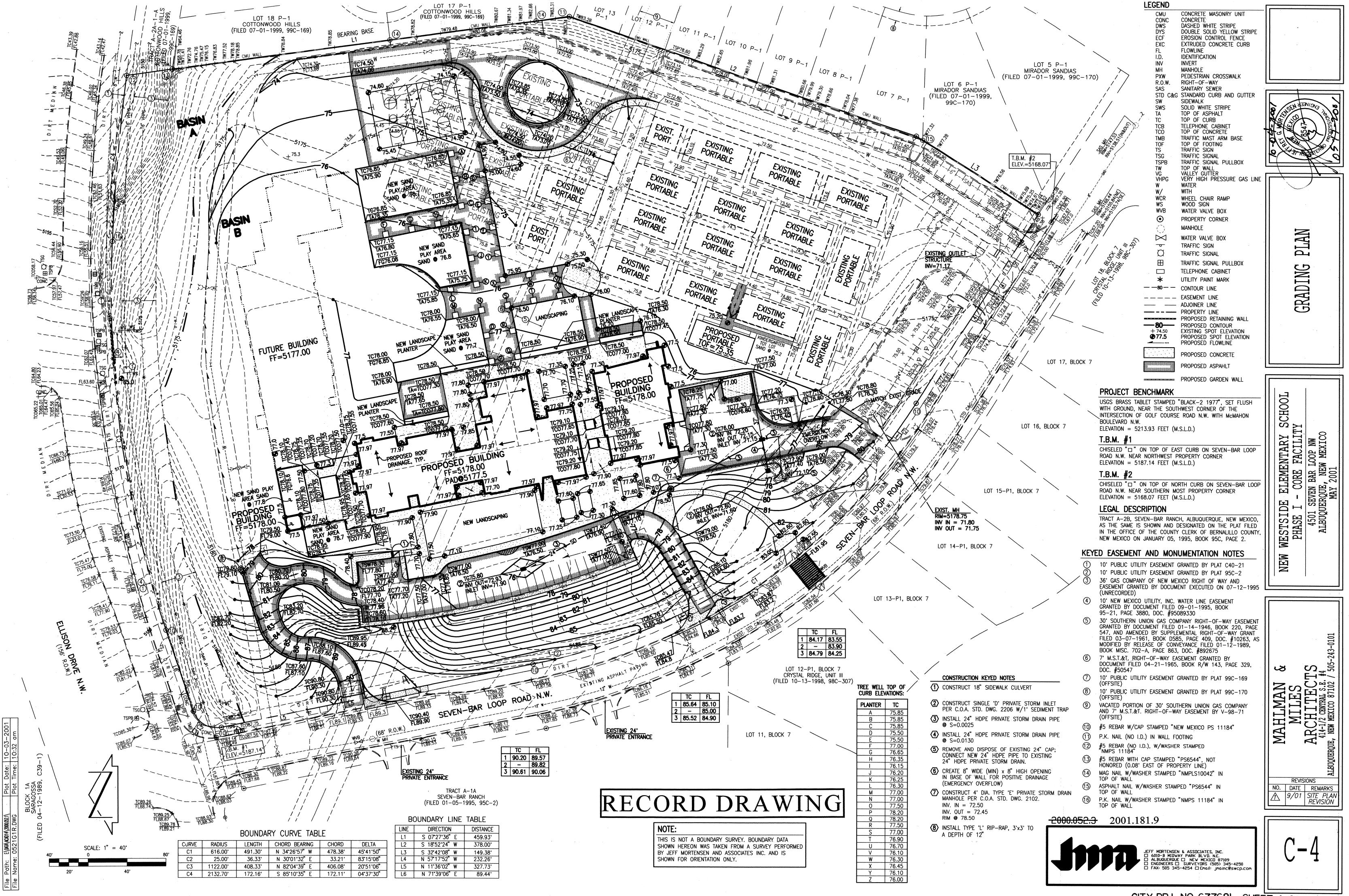
□ 6010-B MIDWAY PARK BLVD. N.E.

□ ALBUQUERQUE □ NEW MEXICO 87109

□ ENGINEERS □ SURVEYORS (505) 345

JOB #2001.180.1 PLAT





- 1. ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS, AND THE CITY'S TRAFFIC ENGINEERING OPERATIONS THIRD DRAFT SPECIFICATIONS (JUNE 1994).
- 2. LOCATIONS OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-
- 3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
- 4. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
- 5. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS. SPLICING ÒF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
- 6. ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
- 7. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE
- 8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS(857—8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.
- 9. THE CONTRACTOR SHALL NOTIFY PUBLIC SERVICE COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
- 11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
- 12 IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL
- 13. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
- 14. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
- 15. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
- 16. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULL BOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
- 17. CONTRACTOR SHALL COIL EXCESS INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BARS. IF MORE THAN ONE MANHOLE EXISTS BETWEEN SPLICE CABINETS OR CONTROL CABINETS WITH SPLICE BARS, THEN COILING IS ONLY REQUIRED AT ONE OF THE MANHOLES. THE FOLLOWING QUANTITIES OF COMMUNICATION CABLE SHALL BE COILED:

12 PAIR - 50 FT. 25 PAIR - 50 FT. 50 PAIR - 25 FT. 75 PAIR – 25 FT.

- 18. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED
- 19. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES, COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 20. THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER CABINETS, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE.
- 21. STRIPING BY CONTRACTOR WILL BE REQUIRED PRIOR TO THE FINAL ACCEPTANCE.
- 22. STRIPING ERADICATION, IF REQUIRED, SHALL BE ACCOMPLISHED BY WATER BLASTING OR SURFACE PLANING OF THE ROADWAY TO A MAXIMUM DEPTH OF 0.25 INCHES AND FOR A WIDTH EQUAL TO TWO TIMES THE WIDTH OF THE STRIPE OR MARKING TO BE REMOVED.
- 23. CONTRACTOR SHALL CONTACT EDWARD TOLEDO, CITY TRAFFIC ENGINEERING OPERATIONS, PRIOR TO STRIPING AND SIGN INSTALLATION (857-8000).
- 24. ALL SIGNAGE SHALL COMPLY WITH THE M.U.T.C.D. (LATEST EDITION).

INCIDENTAL ITEMS *

- 1. REMOVAL OF EXISTING PULL BOXES, CONDUITS, OR OTHER SIGNAL EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENT.
- 2. CABLE TESTING AND DIAGRAMS.
- 3. BORING, DRILLING, PUSHING, AND TRENCHING, INCLUDING REMOVAL AND REPLACEMENT OF PAVEMENT, SIDEWALKS, DRIVE PADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, CURB & GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS). FOR INSTALLATION OF PULL BOXES, CONDUITS, AND SIGNAL FOUNDATIONS, EXCEPT AS NOTED ON THE PLANS.
- 4. LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING AND EXPOSING OF GAS LINES WHEN BORING.
- 5. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL.
- 6. APPRISING PUBLIC THROUGH THE LOCAL NEWS MEDIA.
- 7. HAULING OF MATERIAL TO BE DISPOSED TO CITY LANDFILL
- 8. REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE TRAFFIC ENGINEERING OPERATIONS YARD.
- 9. LEAN FILL FOR CONDUIT TRENCHES.
- 10. PULL BOX ADJUSTMENT TO GRADE.
- 11. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL
- 12. REMOVAL AND REPLACEMENT IN KIND OR BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.
- 13. COST FOR PUBLIC SERVICE COMPANY TO PROVIDE ELECTRICAL SERVICE.

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

14. NO. 8 AWG COPPER CONDUCTOR (BARE) INSTALLED IN CONNECTION WITH NON METALLIC CONDUIT (SEE SEC 424.3.2 OF STANDARD SPECIFICATIONS)

*TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

- 1. THIS PROJECT IS AN EXTENSION OF AN EXISTING SIGNAL SYSTEM. THEREFORE THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:
 - A. ALL CONTROLLERS SUPPLIED FOR THIS PROJECT SHALL
 - BE MANUFACTURED BY ECONOLITE. B. ALL TRAFFIC PULL BOXES USED ON THIS PROJECT SHALL BE LARGE SIZE.
- 2. ALL SIGNAL ASSEMBLIES, PEDESTRIAN SIGNALS, CABINETS AND FITTINGS SHALL COMPLY WITH THE CITY OF ALBUQUERQUE TYPE AND COLOR REQUIREMENTS.
- 3. CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL, A MATERIAL SUBMITTAL FOR THE FLASHING BEACON CONTROLLER PRIOR TO THE SUBMISSION OF THE WORK ORDER PACKAGE TO THE CITY OF ALBUQUERQUE.

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	ITEM
	\boxtimes	PULL BOX
4.7	$\overline{\bigcirc}$	SERVICE POLE
M	M	METER PEDESTAL
C	C	CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
←●	4-0	TRAFFIC SIGNAL PEDESTAL POLE
1	1	CONDUIT RUN NUMBER (FLASHING BEACON)
<u>\$1</u>	S1	CONDUIT RUN NUMBER (POWER SERVICE)
<u></u>	<u>c</u> 1	CONDUIT RUN NUMBER (INTERCONNECT)
	\$\frac{1}{2}	TYPE II STANDARD WITH MASTARM TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
•		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
•	400	PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
SC	SC	SPLICE CABINET
•	\oslash	TRAFFIC MANHOLE
		VIDEO CAMERA

DEFINITIONS

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

City Project No.

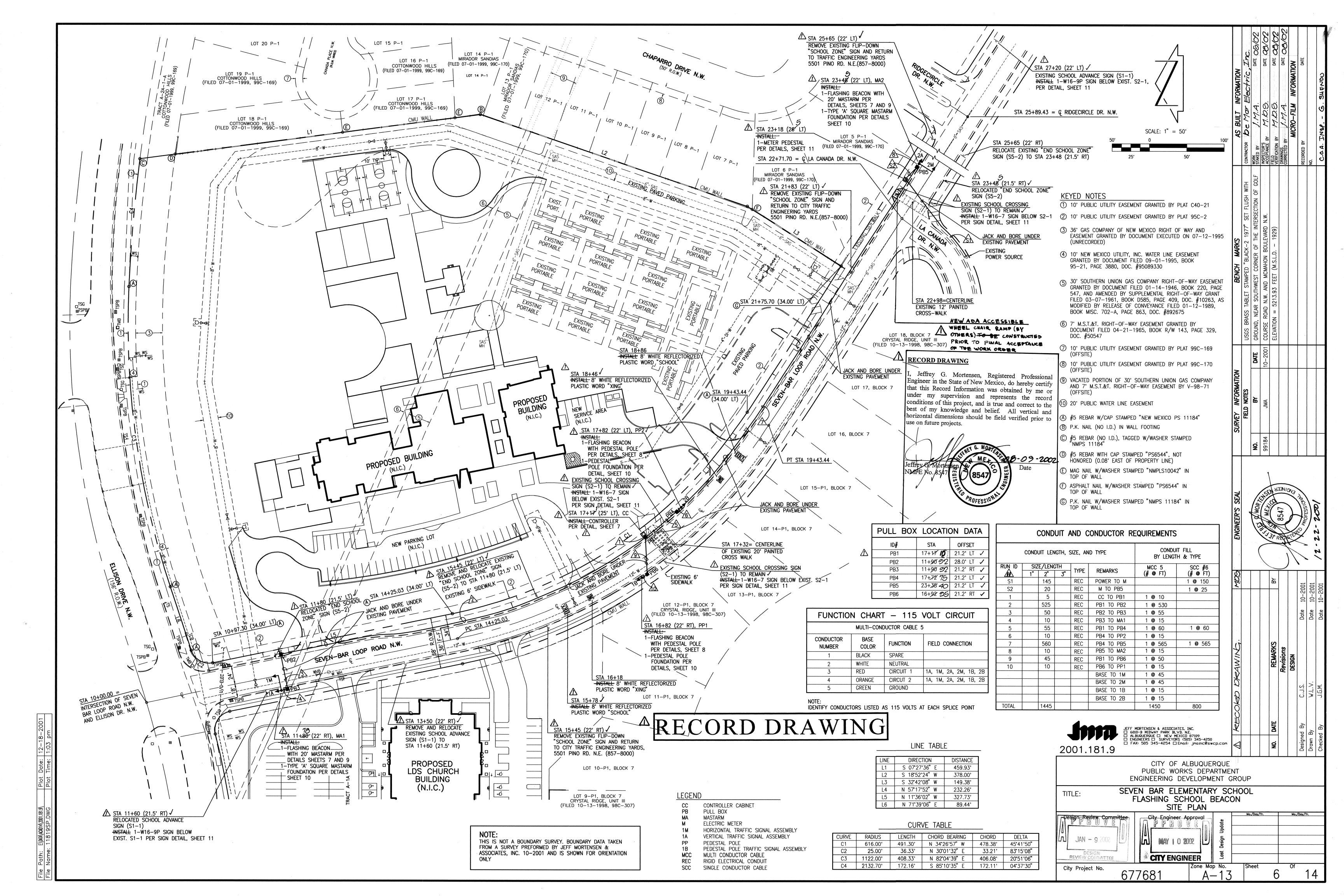
	ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS
			FIELD NOTES		USGS BRASS TABLET STAMPED "BLACK-2 1977" SET FLUSH WITH
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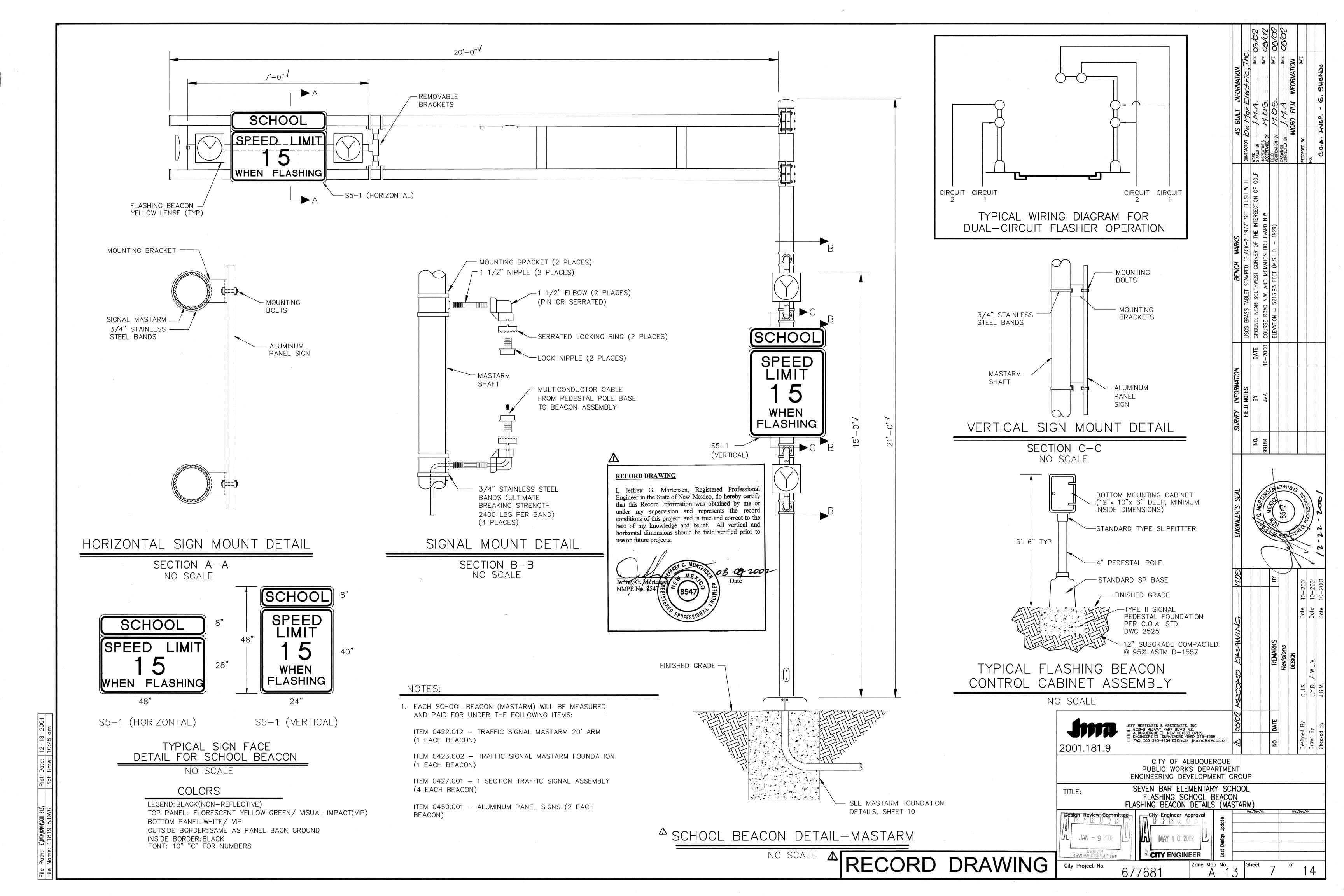
(ORD DRAWING	A Company of the Comp		KEC		C,J.S,	J.Y.R.	J.G.M.
	JEFF MURTENSEN & ASSUCIATES, INC. 6010-B MIDWAY PARK BLVD. N.E. ALBUQUERQUE NEW MEXICI 87109 ENGINEERS SURVEYURS (505) 345-4250 FAX: 505 345-4254 Email: jmainc@swcp.com			△ 30/02 NO. DATE	-	Designed By	Drawn. By	Checked By
	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT G		UP					
	TITLE: SEVEN BAR ELEMENTARY SC FLASHING SCHOOL BEACO TRAFFIC NOTES, LEGEND, EQUIPMENT REQUIREMENT	N		INCID	ENTAL	ITI	EMS	S
	Design Review Committee Approval		Mo./Da	y/Yr.	Mo	./Day/\	r.	

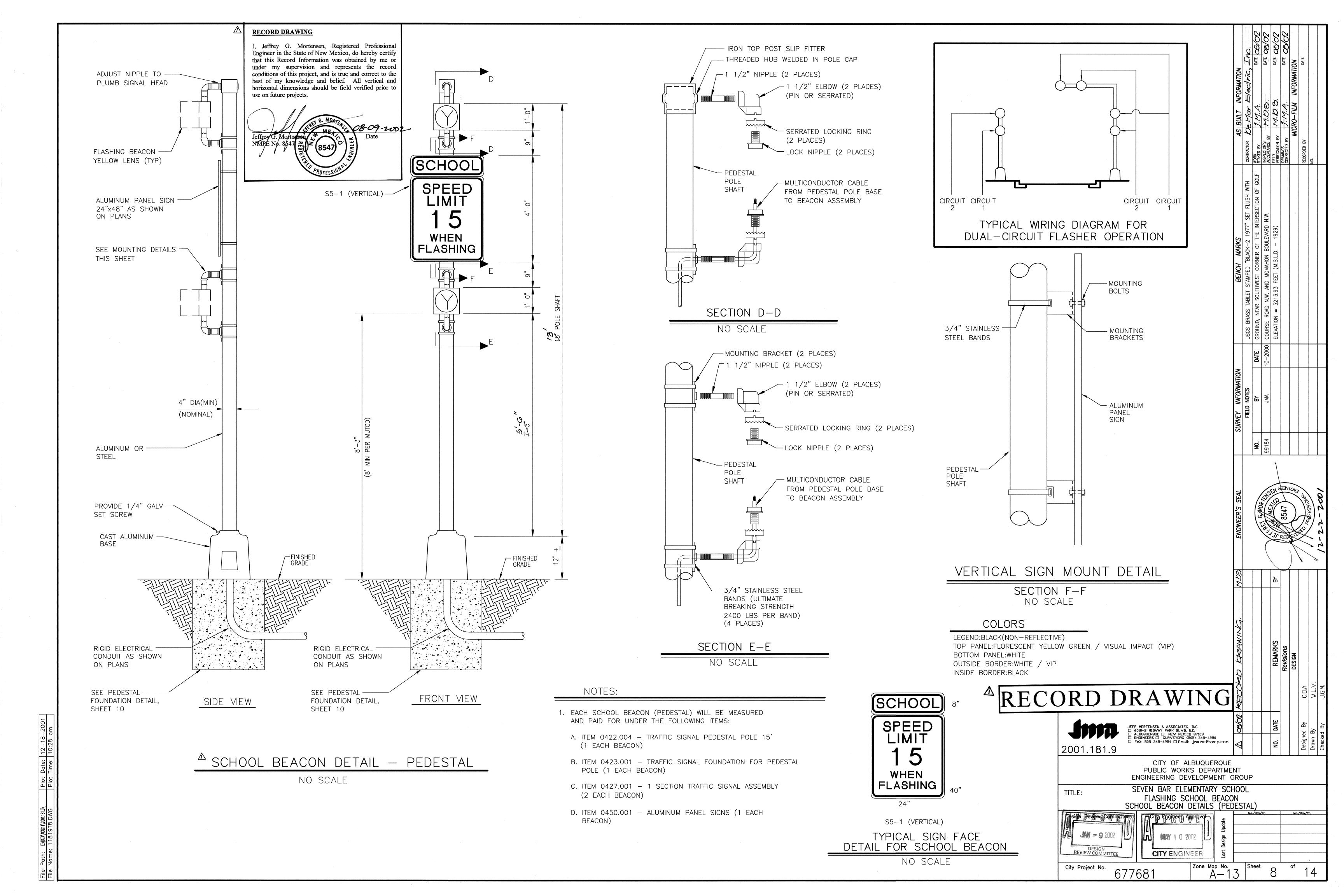
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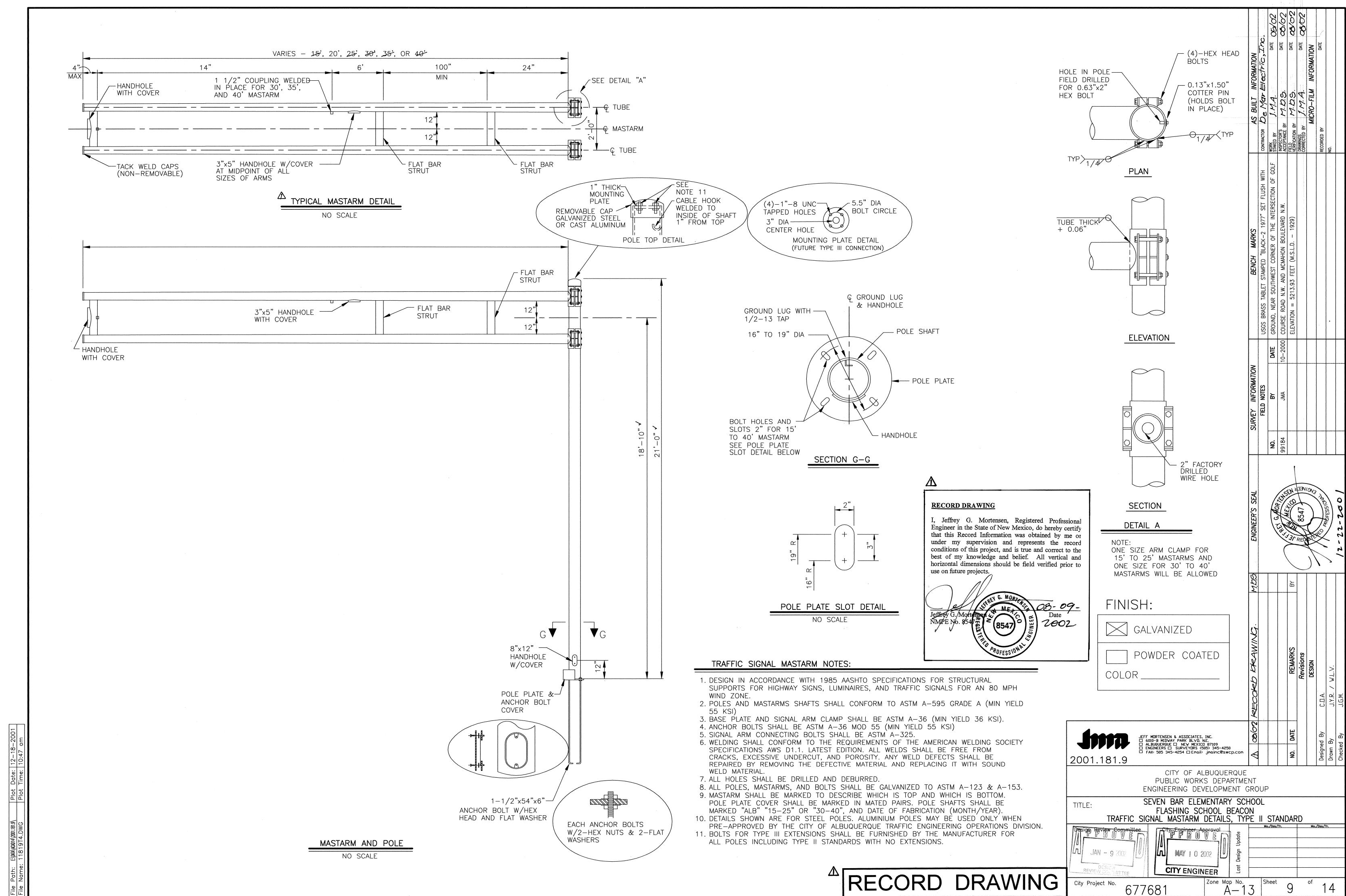
CITY ENGINEER

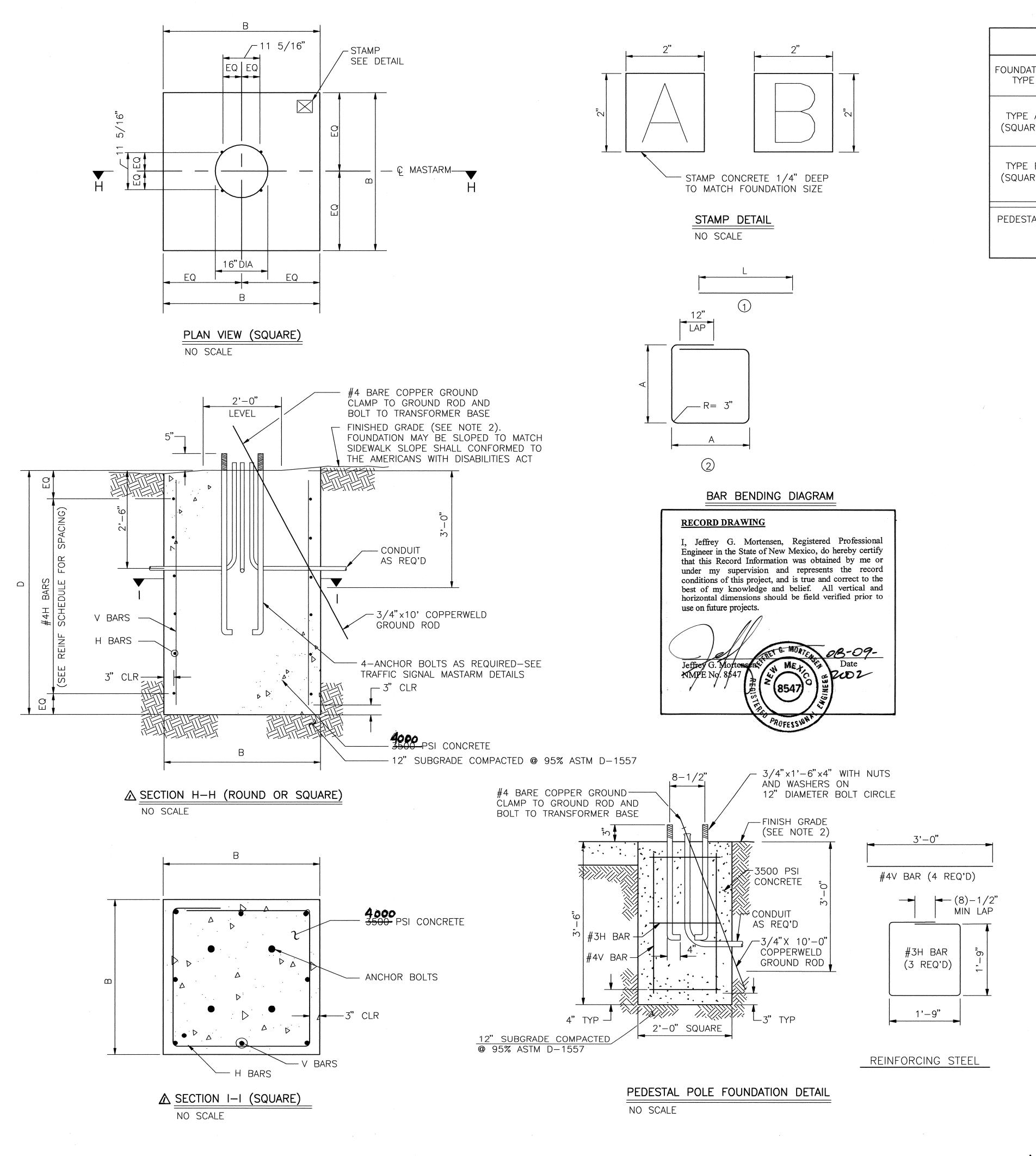
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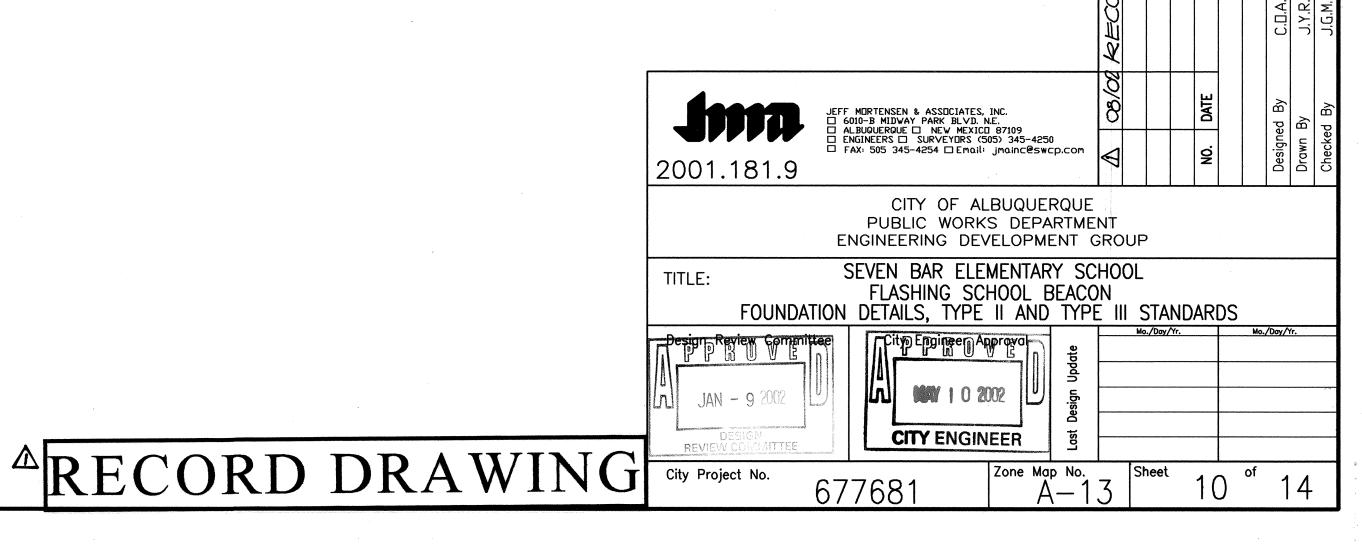


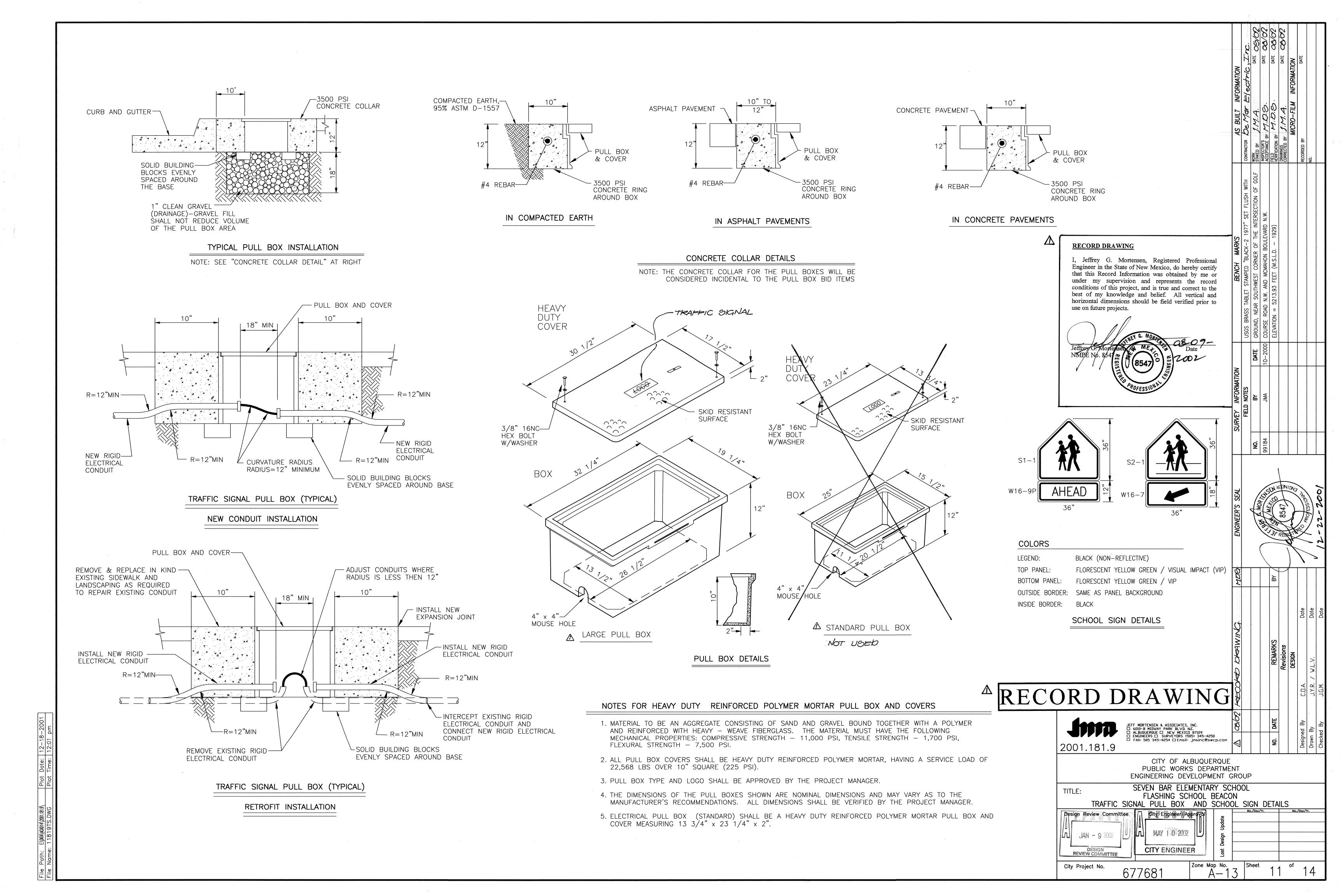
	FOUN	DATIC	D NC	IMEN	SIONS	S AN	D QUAN	TITIES
FOUNDATION TYPE	SIGNAL ARM SPAN(FT)	DIMEN B (WIDTH)	SION D (DEPTH)	REINFO V BARS	H BARS	REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS	NOTES
TYPE A	15 20	3'-6"	5'-0"	#4V2	#3H2	49.1 •	2.27	
(SQUARE)	25	,,	"	**	**		"	
TYPE B (SQUARE)	30 35 40	4'-0"	6'-3"	#5V1 "	#3H1 " "	82.6	3.70	
PEDESTAL	_	2'-0"	3'-6"	#4∨	#3H	17	0.52	

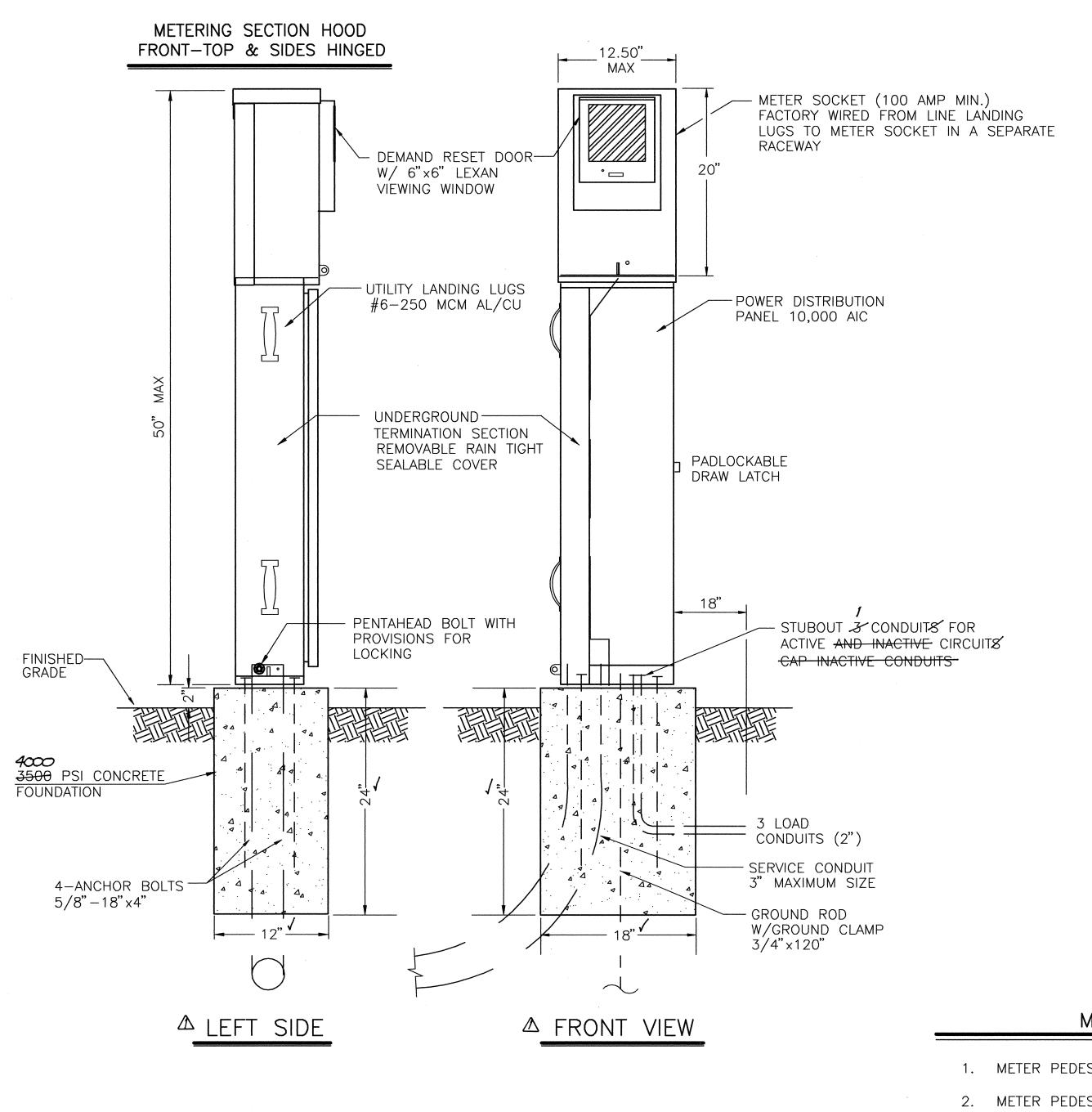
	RE			G SCI	HEDULE ARS)
MARK	QUANT	TYPE	SIZE	LENGTH	COMMENTS
#5V1 #4V2 #7V3 #6V4 #3H1 #3H2 #3H3 #3H4	8 8 6 6 6 5 12 9	1 1 1 1 2 2 2 3	5 4 7 6 3 3 3	5'-9" 4'-6" 11'-3" 8'-0" 15'-4" 13'-4" 9'-3" 7'-8"	A = 42", TIES AT 14" QC A = 36", TIES AT 12" OC DIA = 30", TIES AT 12" OC DIA = 24", TIES AT 12" OC

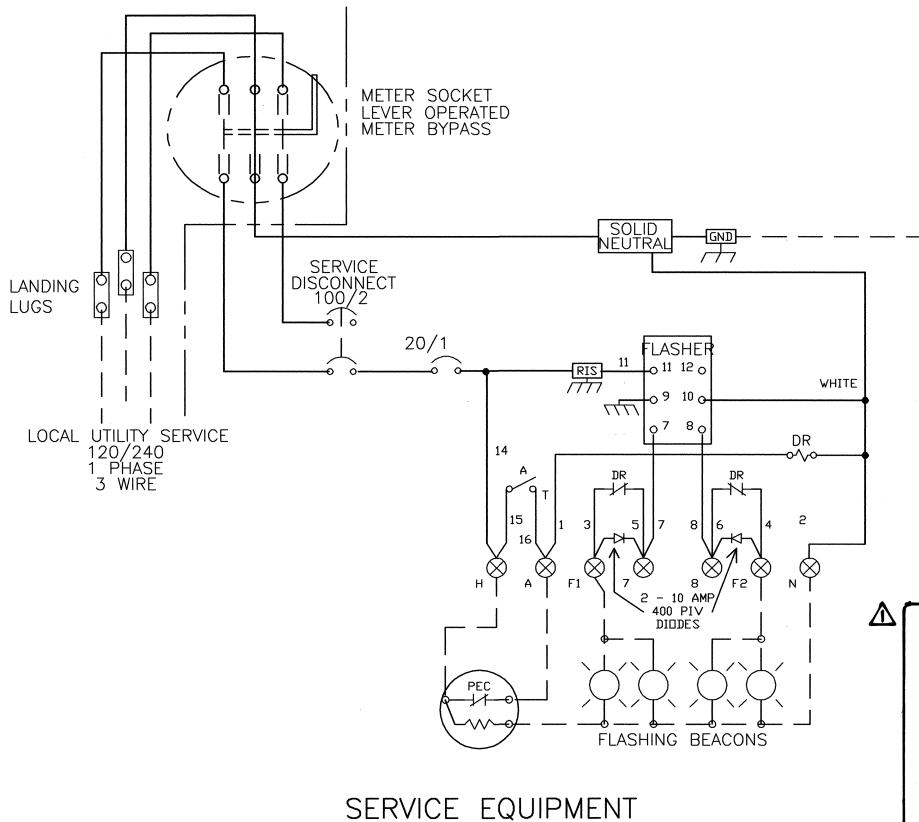
TRAFFIC SIGNAL FOUNDATION NOTES

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









WIRING DIAGRAM "WB-M"

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.

RECORD DRAWING

CONSTRUCTION MATERIALS AND FINISH

- 12 GA HD GALVANIZED SHEET STEEL POWDER COATED
- 14 GA #304D STAINLESS STEEL SHEET powder coated color: ☐ NATURAL
- O.125" ALUMINUM SHEET POWDER COATED COLOR:
- ☐ ANODIZED

POWDER COAT COLORS

 WHITE RANCH GREEN

☐ MINT GREEN ☐ OTHER CAMEL

		MECOX		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	JLPJR
Jun	JEFF M□RTENSEN & ASS□CIATES, INC. □ 6010-B MIDWAY PARK BLVD. N.E. □ ALBUQUERQUE □ NEW MEXICO 87109	20/80	DATE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1 >
	☐ ENGINEERS ☐ SURVEYORS (505) 345-4250 ☐ FAX: 505 345-4254 ☐ Email: jmainc@swcp.com		S	Designed	Drawn
2001.181.9	CITY OF ALBUQUERQUE				

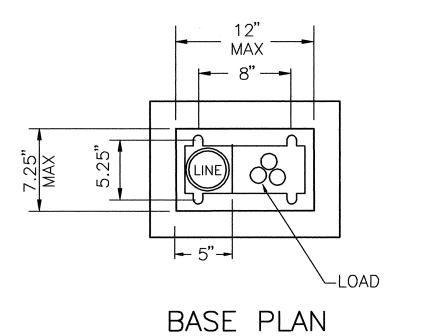
PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

CITY ENGINEER

SEVEN BAR ELEMENTARY SCHOOL TITLE: FLASHING SCHOOL BEACON METER PEDESTAL DETAILS

The property of the control of the c Design Review Committee 10 2002 JAN - 9 2002

RECORD DRAWING City Project No.



METER PEDESTAL DETAILS

NO SCALE

METER PEDESTAL CONSTRUCTION NOTES

- 1. METER PEDESTAL SHALL BE UL LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
- 2. METER PEDESTAL SHALL MEET THE ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) GUIDELINES.
- 3. METER PEDESTAL CONSTRUCTION SHALL BE NEMA 3R AND 12, RAIN TIGHT AND DUST TIGHT. ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
- 4. ALL NUTS, BOLTS, SCREWS AND HINGES SHALL BE STAINLESS STEEL.
- 5. NUTS, BOLTS, AND SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF METER PEDESTAL.
- 6. PHENOLIC NAME PLATES SHALL BE PROVIDED AS REQUIRED.
- CIRCUIT BREAKERS SHALL BE CABLE IN-CABLE OUT WITH LINE ON TOP & LOAD ON THE BOTTOM. HANDLE POSITION UP="ON", MIDDLE="TRIPPED", DOWN="OFF".
- 8. A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
- 9. METER PEDESTAL SHALL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA STANDARDS.
- 10. ALL POWDER COATED METER PEDESTALS SHALL HAVE A CORROSION RESISTANT COATING WHICH INCLUDES A FIVE STEP DIP TANK METAL PREPARATION PROCESS:
 - A. ALKALINE CLEANER 160° F.
 - B. CLEAR WATER RINSE. C. IRON PHOSPHATE APPLICATION 150°.
 - D. CLEAR WATER RINSE.
 - E. INHIBITIVE RINSE TO SEAL PHOSPHATED SURFACES 120°.

FINISHED WITH AN ELECTROSTATICALLY APPLIED DRY POLYESTER POWDER COATING THEN BAKED @ 380° TO CURE.

11. CONCRETE FOUNDATIONS INCLUDING EXCAVATION, BACKFILL COMPACTED @ 95% ASTM D-1557, CONCRETE, AND ANCHOR BOLTS, COMPLETE-IN PLACE, SHALL BE CONSIDERED INCIDENTAL TO THE METER PEDESTAL.

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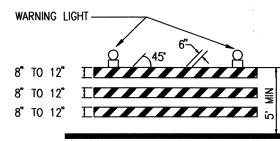
DESIGN REVIEW COMMITTEE

- 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 SIGHS 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
- 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.

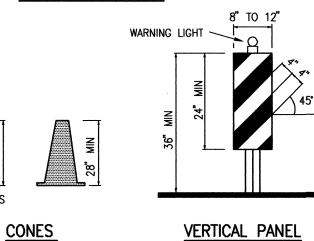
26. ADVANCE WARNING SIGNS SHALL BE 36"x36" MIN. WITH SUPER ENGINEERING GRADE SHEETING OR BETTER. MOUNTING HEIGHT AT TOP OF SIGN SHALL BE THE SAME AS FOR A 48" SIGN AS INDICATED IN THE M.U.T.C.D.

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



BASE VARIES

TYPE III BARRICADE



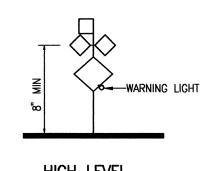
BARREL

TYPE I BARRICADE

COLLAPSIBLE

8" TO 12" I

WARNING LIGHT -



HIGH LEVEL WARNING DEVICE

LEGEND

WORK AREA

BARRICADE - TYPE I, TYPE II OR BARREL

BARRICADE - TYPE Ⅲ

VERTICAL PANEL

WARNING SIGN

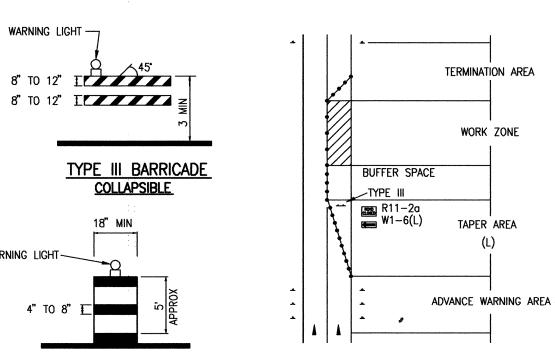
DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET

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



TRAFFIC CONTROL ELEMENTS

TAPER REQUIREMENTS

SPEED LIMIT	TAPE	R LENGTH (FEET)	(L)	MINIMUM NUMBER OF	MAXIMUM SPACING	DEVICE IN FEET
(MPH)	10' LANE	11' LANE	12' LANE	DEVICES FOR TAPER	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	MINIMUM DIST	ANCE IN FEET
MILES PER HOUR	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

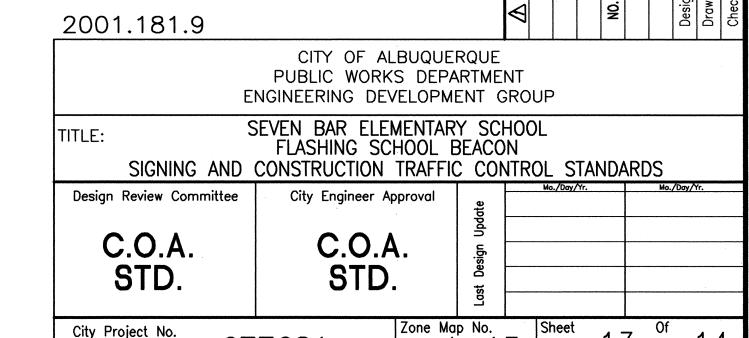
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER	
MERGING TAPER SHIFTING TAPER SHOULDER TAPER TWO-WAY TRAFFIC TAPER	L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM 100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPLITATION

TAPER LENGTH COMPUTATION	NC.
SPEED LIMIT	
40 MPH OR LESS	WS ²
45 MPH OR GREATER	$L = W \times S$
L = TAPER LENGTH W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK	

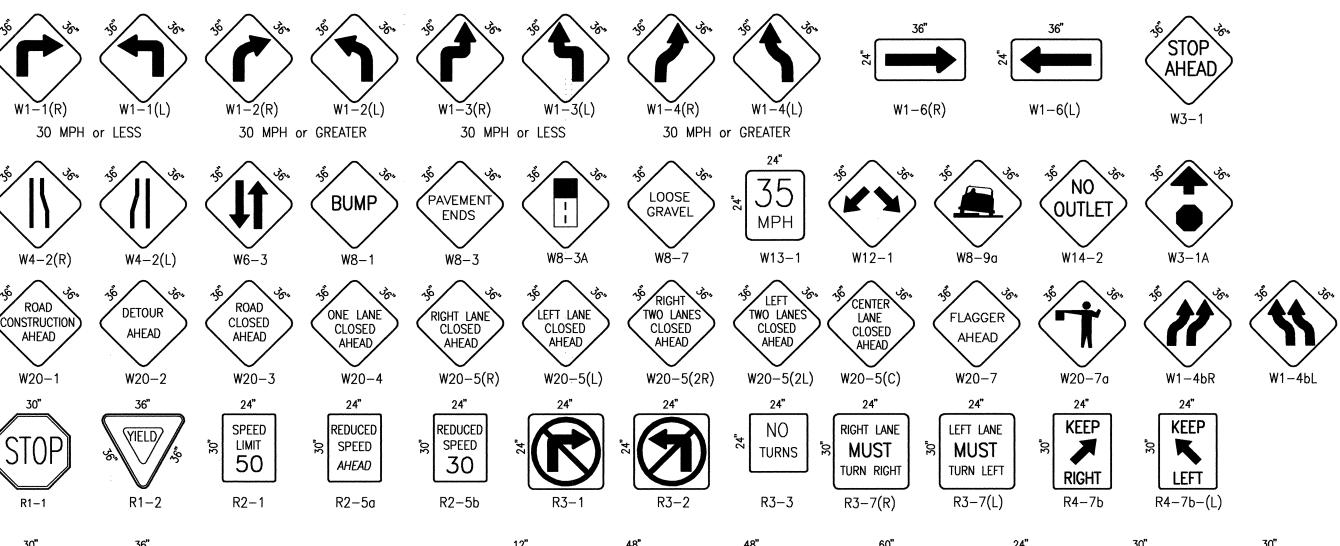
RECORD DRAWING

85 PERCENTILE SPEED IN MPH



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SIGN FACE DETAILS



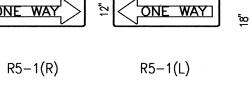
WRONG WAY

TRAFFIC KEEP

SPECIAL

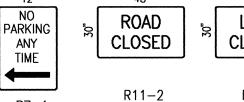
SIGN

THRU TRAFFIC KEEP



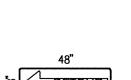
TO

SIGN



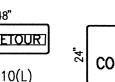




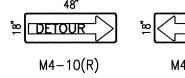


END

DETOUR



DETOUR



THRU TRAFFIC

DETOUR

SPECIAL SIGN SIGN

PREPARED

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

M4-10(L)

END CONSTRUCTION G20-2

DETOUR

M4 - 9(L)

