

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

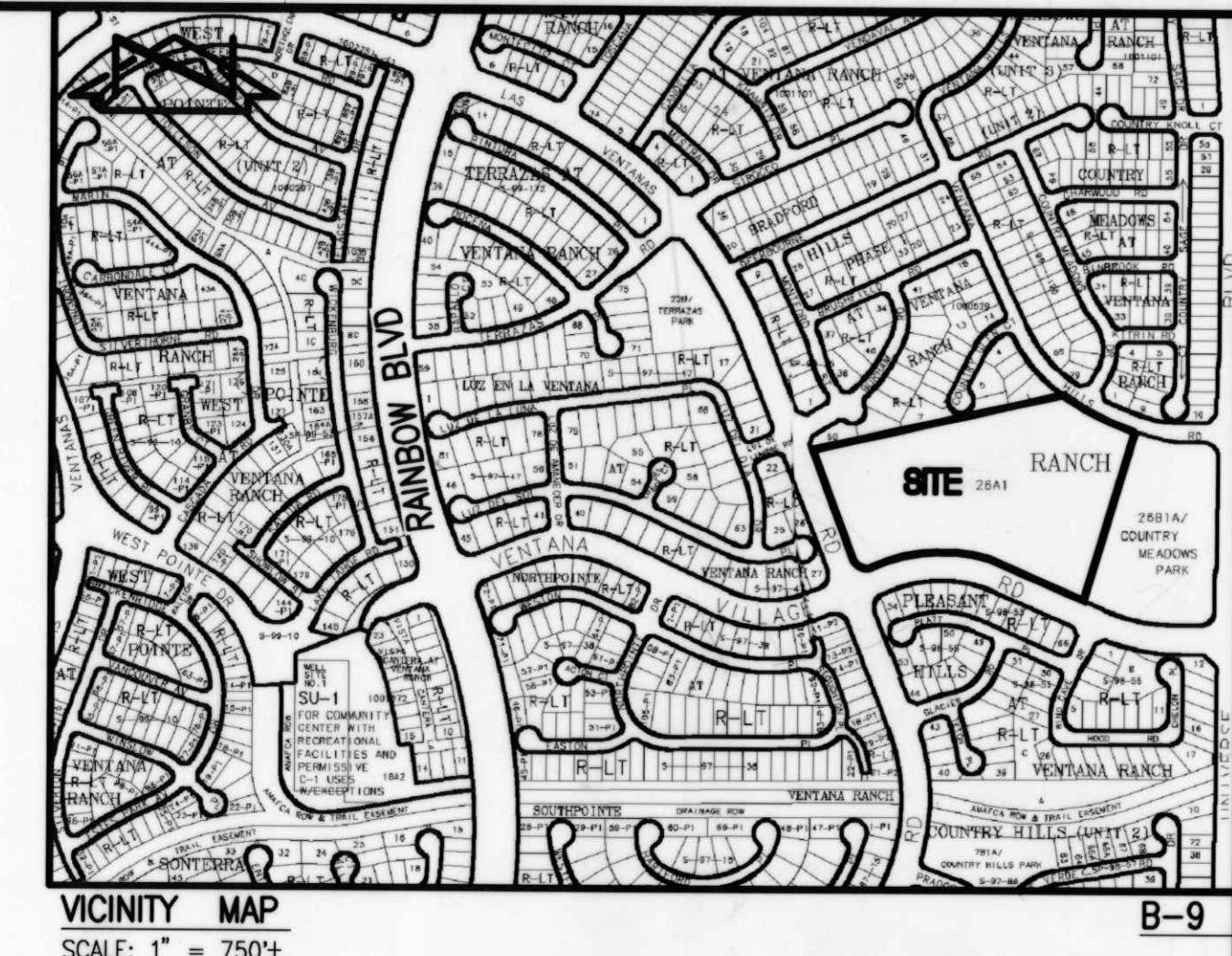
FIELD FENCE

COMMON YARD WALL

RETAINING WALL

POWER OR TELEPHONE POLE

CONSTRUCTION PLANS
for
VENTANA RANCH ELEMENTARY SCHOOL
FLASHING SCHOOL BEACON
ALBUQUERQUE, NEW MEXICO
AUGUST, 2004



CERTIFICATE OF SUBSTANTIAL COMPLIANCE

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM JEFF MORTENSEN & ASSOCIATES, INC., HEREBY CERTIFY THAT THE INFRASTRUCTURE CONSTRUCTED AS PART OF THIS PROJECT HAS BEEN INSPECTED BY ME OR PERSONNEL UNDER MY DIRECT SUPERVISION AND, TO THE BEST OF MY KNOWLEDGE AND BELIEF, HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AND THE ORIGINAL DESIGN INTENT OF THE CITY ENGINEER APPROVED PLANS. THE RECORD INFORMATION EDITED ONTO THIS ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS RECORD INFORMATION IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE DESIGN INTENT OF THIS PROJECT. THOSE RELYING ON THIS DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR ACCEPTANCE OF THE PROJECT BY THE CITY ENGINEER.

JEFFREY G. MORTENSEN, NMPE 8547

DATE 05-03-2005

JEFFREY G. MORTENSEN
NEW MEXICO
8547
REGISTERED PROFESSIONAL ENGINEER



RECORD DRAWING

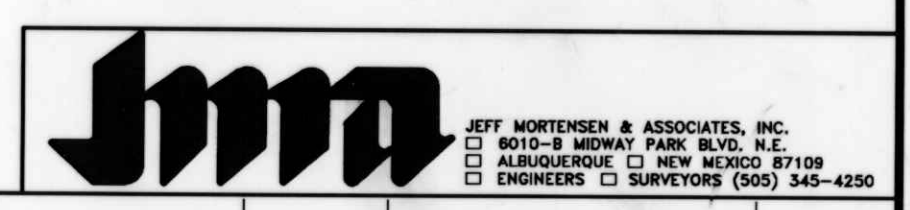
INDEX OF DRAWINGS

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APPROVED AS RECORD DRAWING
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
DATE 8-2-04

- GENERAL NOTES:
- 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. 7.
 - 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.
 - 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 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 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 COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
 - TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.
 - SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
 - 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.
 - 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 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 BARRICADING ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL.
 - 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.
 - CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.
 - ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
 - CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
 - WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

2003.084.5



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SIGNAL, STRIPING, AND SIGNAGE NOTES

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-OF-WAY.
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 OF 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 OFF.
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 DAVE HARMON, CITY TRAFFIC ENGINEERING OPERATIONS, PRIOR TO STRIPING AND SIGN INSTALLATION (857-8691).
24. ALL SIGNAGE SHALL COMPLY WITH THE M.U.T.C.D. (LATEST EDITION).
25. MINIMUM CONDUIT AND BORE DEPTH IS 30" UNLESS AUTHORIZED BY THE ENGINEER.

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.

⚠ 4. TIME CLOCK INSTALLED UNDER THIS CONTRACT, SHALL BE REMOVED BY CITY TRAFFIC ENGINEERING. FOR FUTURE REFERENCE, ELEMENTARY SCHOOL INSTALLATIONS SHALL DELETE THE STANDARD CLOCK AND INSTALL A MANUAL SWITCH ONLY FOR OPERATION BY THE CROSSING GUARDS.

TRAFFIC SIGNAL LEGEND

NEW	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (FLASHING BEACON)
		CONDUIT RUN NUMBER (POWER SERVICE)
		CONDUIT RUN NUMBER (INTERCONNECT)
		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)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		SPLICE CABINET
		TRAFFIC MANHOLE
		VIDEO CAMERA

DEFINITIONS

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

JEFF HORTENSEN & ASSOCIATES, INC.
600-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX: 505 345-4254 ESTABLISHED 1977

2003.084.5

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: VENTANA RANCH ELEMENTARY SCHOOL
FLASHING SCHOOL BEACON
TRAFFIC NOTES, LEGEND, EQUIPMENT REQUIREMENTS AND INCIDENTAL ITEMS

Design Review Committee
AUG 12 2003
DESIGN REVIEW COMMITTEE

City Engineer Approval
APPROVE
DEC - 7 2004
CITY ENGINEER

Last Design Update

Ms./Day/Yr.

Ms./Day/Yr.

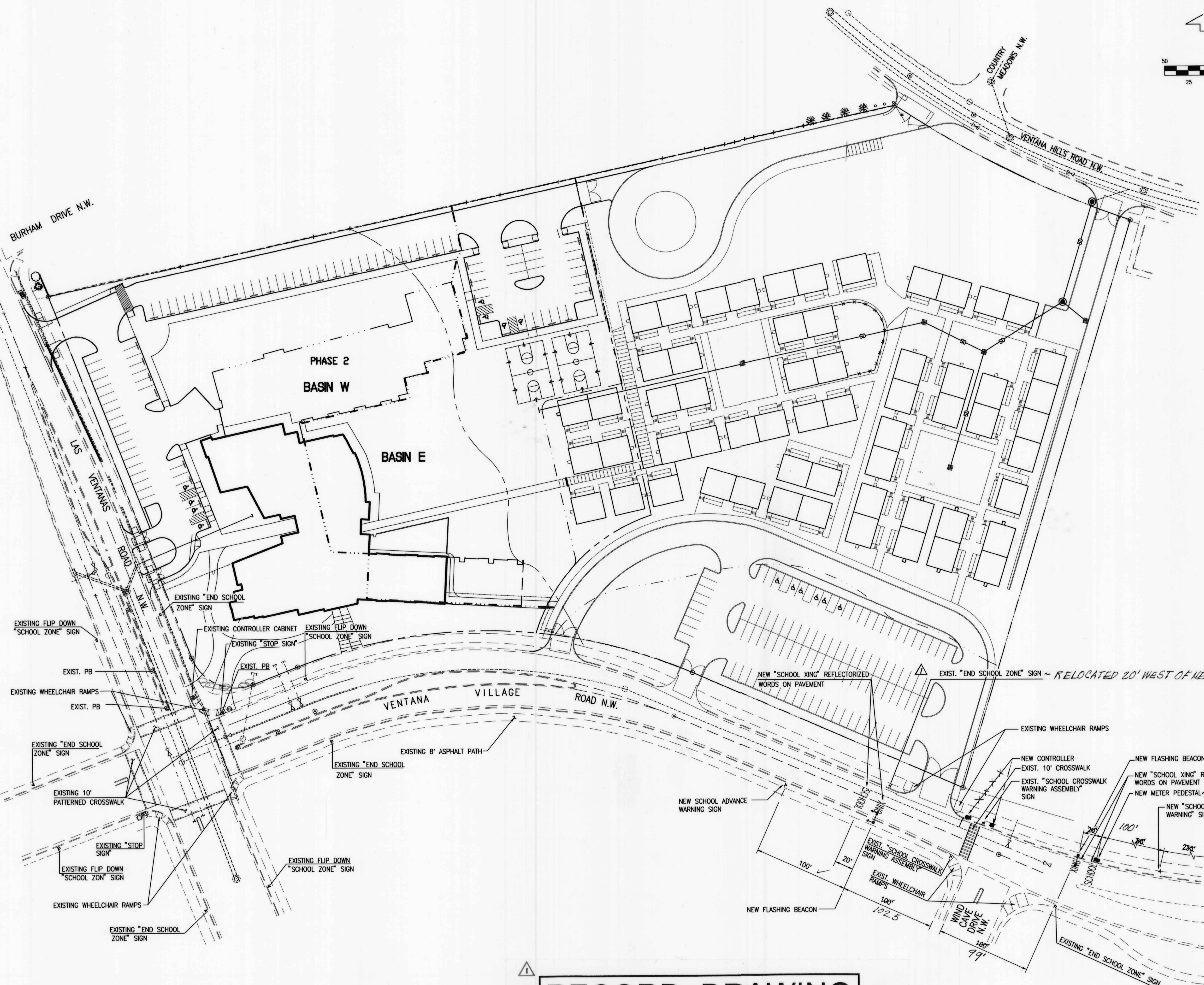
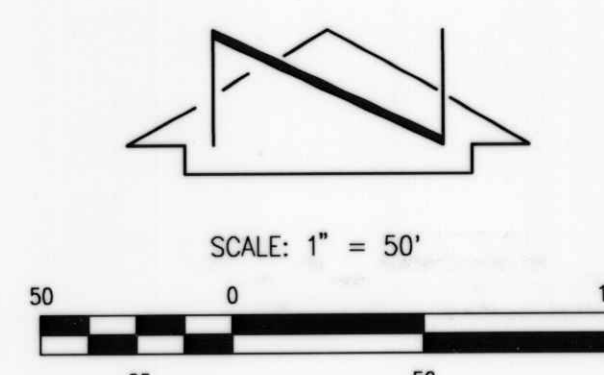
City Project No. 744481

Zone Map No. B-9

Sheet 2 of 11


Designed By J.G.M.
Date 06-2004
Drawn By S.G.H.
Date 06-2004
Checked By J.G.M.
Date 08-2004

RECORD DRAWING



RECORD DRAWING
SEE SHEET 1 FOR CERTIFICATION

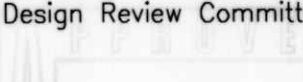


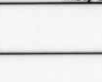
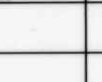
FOR ENLARGED PLAN, SEE SHEET 4

ENGINEER'S SEAL 05-03-2005  08-10-2004		SURVEY INFORMATION FIELD NOTES NO. BY DATE 2001,182,1 JMA 10-2001		BENCH MARKS PROJECT BENCHMARK STATION IS A STANDARD US&GS BRASS TABLET STAMPED, "UNION 1989", CEMENTED IN A DRILL HOLE IN LAVA ROCK. THE STATION IS LOCATED ON THE NORTHEAST SIDE OF THE SOUTHERN UNION GAS CO. PIPELINE DIRT ROAD APPROXIMATELY A HALF MILE NORTH OF THE SOUTHERN BOUNDARY OF THE TOWN OF ALAMEDA GRANT LINE. ELEVATION = 5522.15 FEET (M.S.L.D.-1929)		AS BUILT INFORMATION CONTRACTOR <i>B&D ELEC.</i> WORK SHOWN BY <i>JMA</i> DATE <i>4/05</i> FIELD INSPECTION BY <i>JMA</i> DATE <i>4/05</i> VERIFICATION BY <i>JMA</i> DATE <i>4/05</i> CORRECTED BY <i>JMA</i> DATE <i>4/05</i> MICRO-FILM INFORMATION RECORDED BY NO. DATE	
DESIGNED BY T.P.K. Date 06-2004 DRAWN BY S.G.H. Date 06-2004 CHECKED BY J.G.M. Date 08-2004		NO. DATE 4/05 RECORD DRAINING REMARKS Revisions DESIGN		BY <i>TRW</i>			

Jma

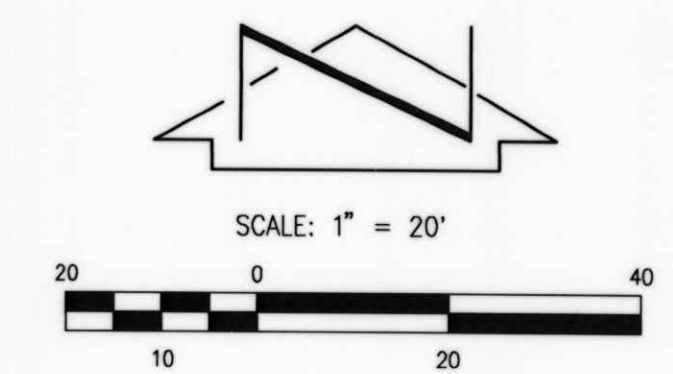
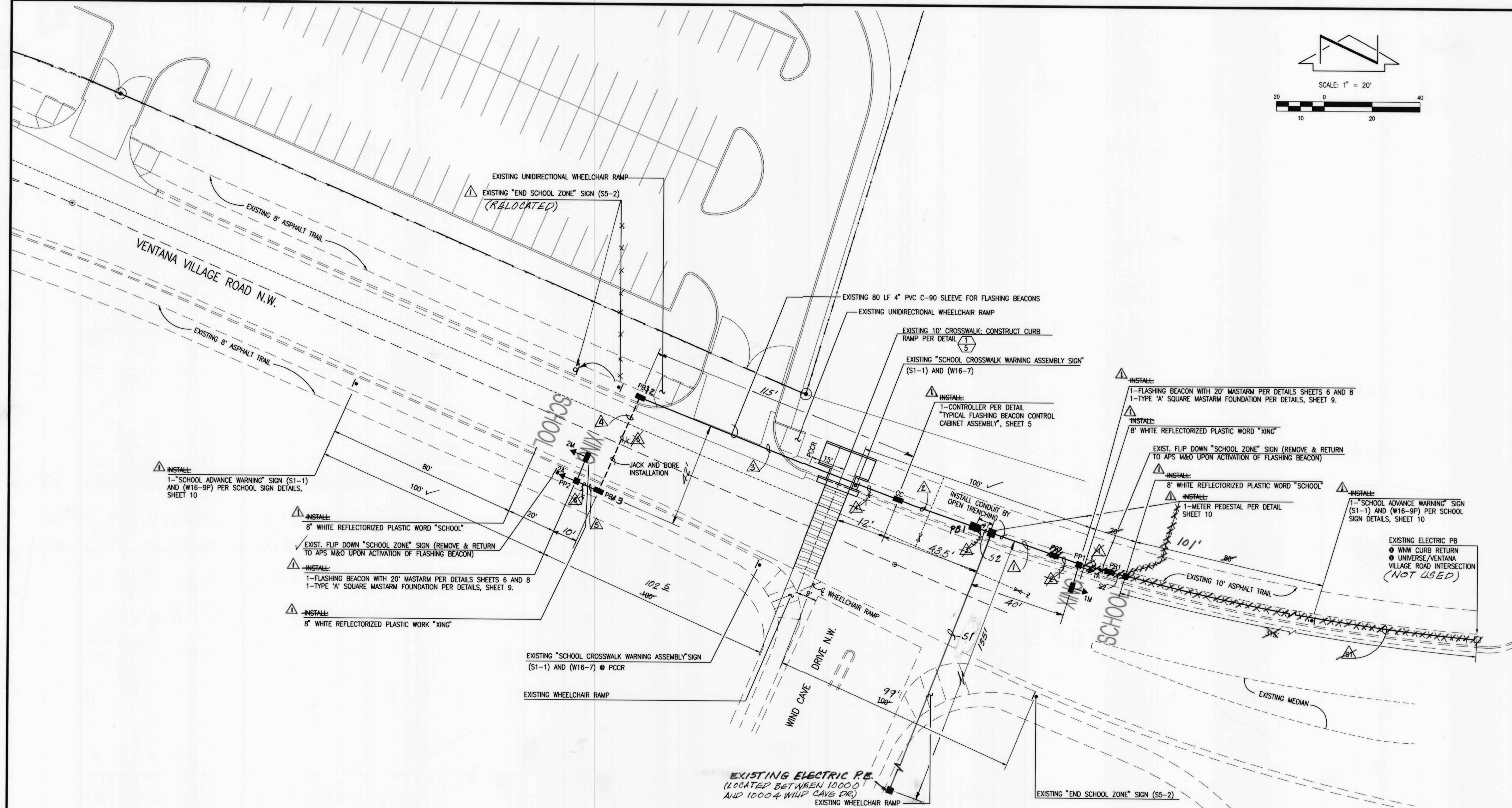
JEFF MORTENSEN & ASSOCIATES, INC.
☐ 6010-B MIDWAY PARK BLVD. N.E.
☐ ALBUQUERQUE ☐ NEW MEXICO 87109
☐ ENGINEERS ☐ SURVEYORS (505) 345-4250
☐ FAX: 505 345-4254 ☐ ESTABLISHED 1977

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE:	VENTANA RANCH ELEMENTARY SCHOOL FLASHING SCHOOL BEACON SITE PLAN

Design Review Committee 		City Engineer Approval 		Last Design Update 	MS/DESIGN/17 	MS/DESIGN/17 
City Project No. 744481		Zone Map No. B-9		Sheet 3	Of 11	

File Path:	E:\DATA\2001A\20030845\	Plot Date:	08-09-2004
File Name:	30845SP.DWG	Plot Time:	2:06 pm

Plot Date: 08-09-2004
Plot Time: 08:51 am
File Name: 3084501.DWG



FUNCTION CHART - 115 VOLT CIRCUIT MULTI-CONDUCTOR CABLE 5			
CONDUCTOR NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION
1	BLACK	SPARE	
2	WHITE	NEUTRAL	1M 1A
3	RED	CIRCUIT 1	
4	ORANGE	CIRCUIT 2	2M 2A
5	GREEN	GROUND	

NOTE: IDENTIFY CONDUCTORS LISTED AS 115 VOLTS AT EACH SPLICE POINT

PB1 TO CC
CC TO PB2
PB2 TO PB3
PB3 TO PP2

CONDUIT AND CONDUCTOR REQUIREMENTS					
RUN ID	CONDUIT LENGTH, SIZE AND TYPE			CONDUIT FILL BY LENGTH AND TYPE	
	SIZE/LENGTH	TYPE	REMARKS	MCC5	SCCG
S1	315	REC	POWER TO M	1 @ 320	140
S2	10	REC	M TO PB1	1 @ 15	10
1	8	REC	PB1 TO PP1	1 @ 18	45
2	10	REC	PP1 TO PB2	1 @ 15	50
3	10	REC	PB2 TO CC	1 @ 15	50
4	10	REC	CC TO PB3	1 @ 25	120
5	10	REC	PB3 TO PB4	1 @ 120	47
6	10	REC	PB4 TO PP2	1 @ 45	15
7	15	REC	PP2 TO 1M	1 @ 20	
8	15	REC	BASE TO 2M	1 @ 45	
TOTAL	580			375	335
	370			367	150

RECORD DRAWING

SEE SHEET 1 FOR CERTIFICATION

- LEGEND
- CC CONTROLLER CABINET
 - PB PULL BOX
 - M ELECTRIC METER
 - PP PEDESTAL POLE
 - 1M HORIZONTAL TRAFFIC SIGNAL ASSEMBLY
 - 1A VERTICAL TRAFFIC SIGNAL ASSEMBLY
 - MCC MULTI CONTROL CALBE
 - SCC SINGLE CONDUCTOR CABLE
 - REC RIGID ELECTRICAL CONDUIT

JMA
2003.084.5
JEFF MORTENSEN & ASSOCIATES, INC.
6000 N. MURRAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
(505) 345-4250
FAX: (505) 345-4254
ESTABLISHED 1977

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: VENTANA RANCH ELEMENTARY SCHOOL FLASHING SCHOOL BEACON ENLARGED SITE PLAN	
Design Review Committee APR 12 2003	City Engineer Approval DEC 7 2004 CITY ENGINEER
City Project No. 744481	Zone Map No. B-9
Sheet 4	Of 11

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	B&D ELEC	PROJECT BENCHMARK	STATION IS A STANDARD USCARB BRASS TABLET STAMPED, "UNION 1968", CEMENTED IN A DRILL HOLE IN LAVA ROCK. THE STATION IS LOCATED ON THE NORTHEAST SIDE OF THE SOUTHERN UNION GAS CO. PIPELINE DIRT ROAD APPROXIMATELY A HALF MILE NORTH OF THE SOUTHERN BOUNDARY OF THE TOWN OF ALAMEDA GRANT LINE. ELEVATION = 5522.15 FEET (M.S.L.D.-1929)	FIELD NOTES	NO. 2001.182.1	DATE	10-20-2001
INSPECTOR	N/A	DATE	4/05	BY	JMA	DATE	4/05
VERIFIED BY	JMA	DATE	4/05	NO.		DATE	
RECORDED BY	JMA	DATE	4/05	NO.		DATE	
NO.		DATE		NO.		DATE	

REVISIONS

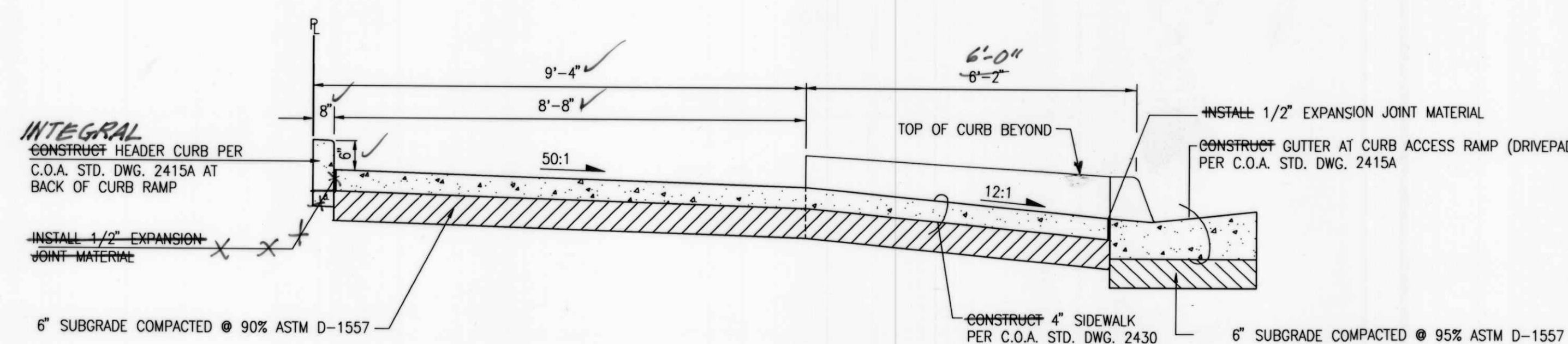
NO.	DATE	REVISIONS
1	05-20-2004	DESIGN
2	05-20-2004	DESIGN
3	08-20-2004	DESIGN

DESIGNED BY: T.P.K.
DRAWN BY: S.C.H.
CHECKED BY: J.C.M.

RECORD DRAWING

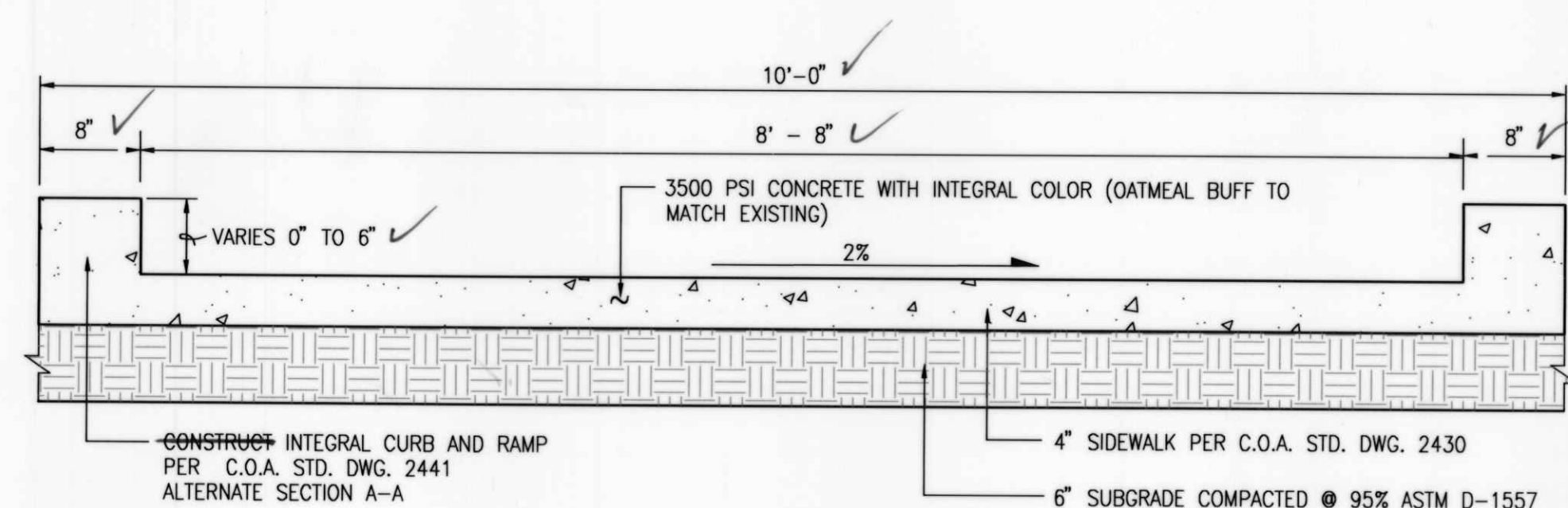
05-03-2005

05-10-2004

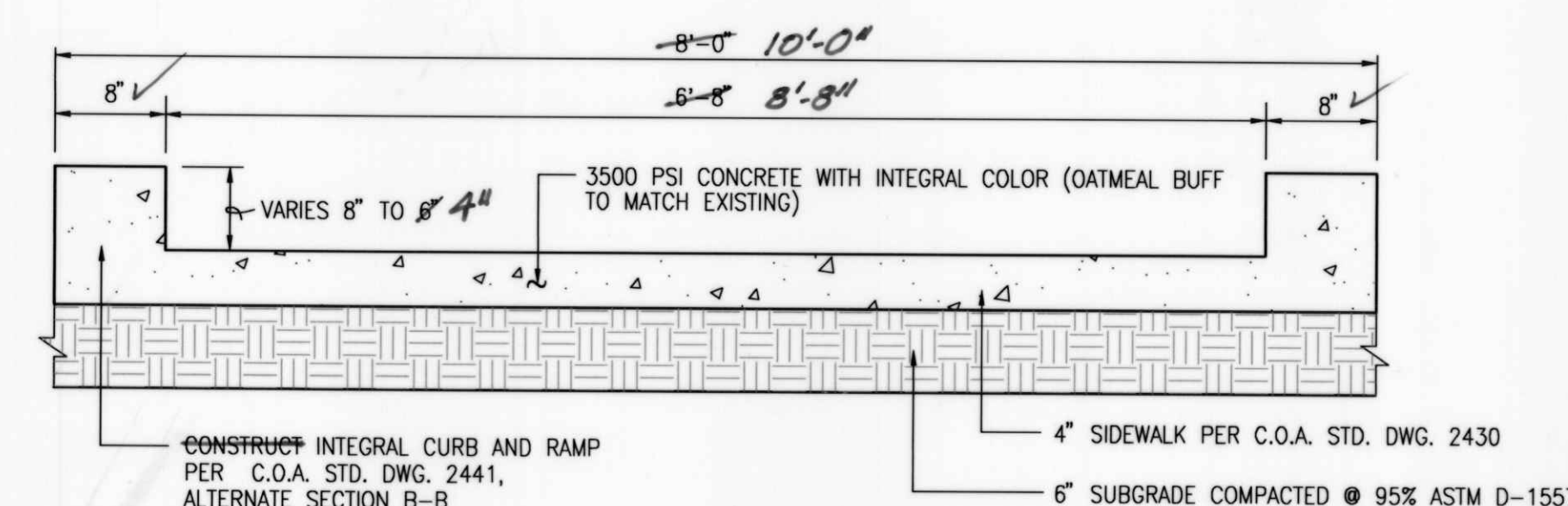


NOTE: ALL CONCRETE SHALL BE PROVIDED WITH
INTEGRAL COLOR (OATMEAL BUFF TO MATCH EXISTING)

SECTION A-A
SCALE: 1" = 2'-0"



SECTION B-B
SCALE: 1" = 1'



SECTION C-C
SCALE: 1" = 1'

ENGINEER'S SEAL	SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
	FIELD NOTES		PROJECT BENCHMARK		CONTRACTOR	
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				CEMENTED IN A SMALL HOLE IN JAW ROCK. THE STATION IS LOCATED ON THE		DATE
				NORTHEAST SIDE OF THE SOUTHERN UNION GAS CO. PIPELINE DIRT ROAD		DATE
REMARKS		BY	APPROXIMATELY A HALF MILE NORTH OF THE SOUTHERN BOUNDARY OF THE		VERIFICATION BY	
DESIGN			TOWN OF ALAMEDA GRANT LINE. ELEVATION = 5522.15 FEET (M.S.L.D. - 1929)		DATE	
Designed By	T.P.K.	Date	05-2004	RECORDED BY		DATE
Drawn By	S.G.H.	Date	05-2004	NO.		DATE
Checked By	J.G.M.	Date	08-2004			



2003.084.5

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE:	VENTANA RANCH ELEMENTARY SCHOOL FLASHING SCHOOL BEACON CURB RAMP DETAILS
--------	--

Design Review Committee

AUG 12 2003

DESIGN REVIEW COMMITTEE

City Engineer Approval

APPROVED

DEC - 7 2004

CITY ENGINEER

Fast Design Update

Mo./Day/

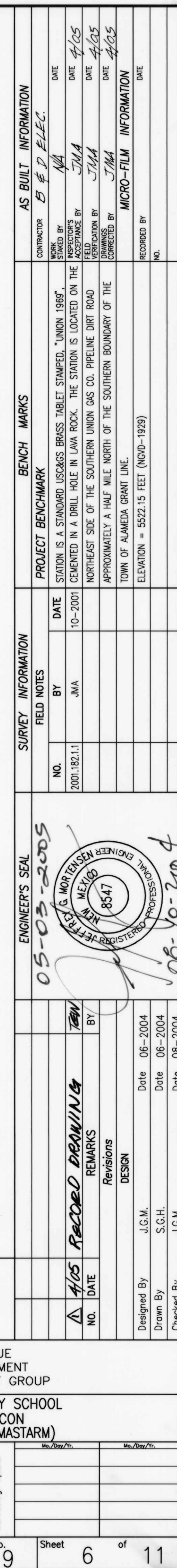
City Project No. 744481

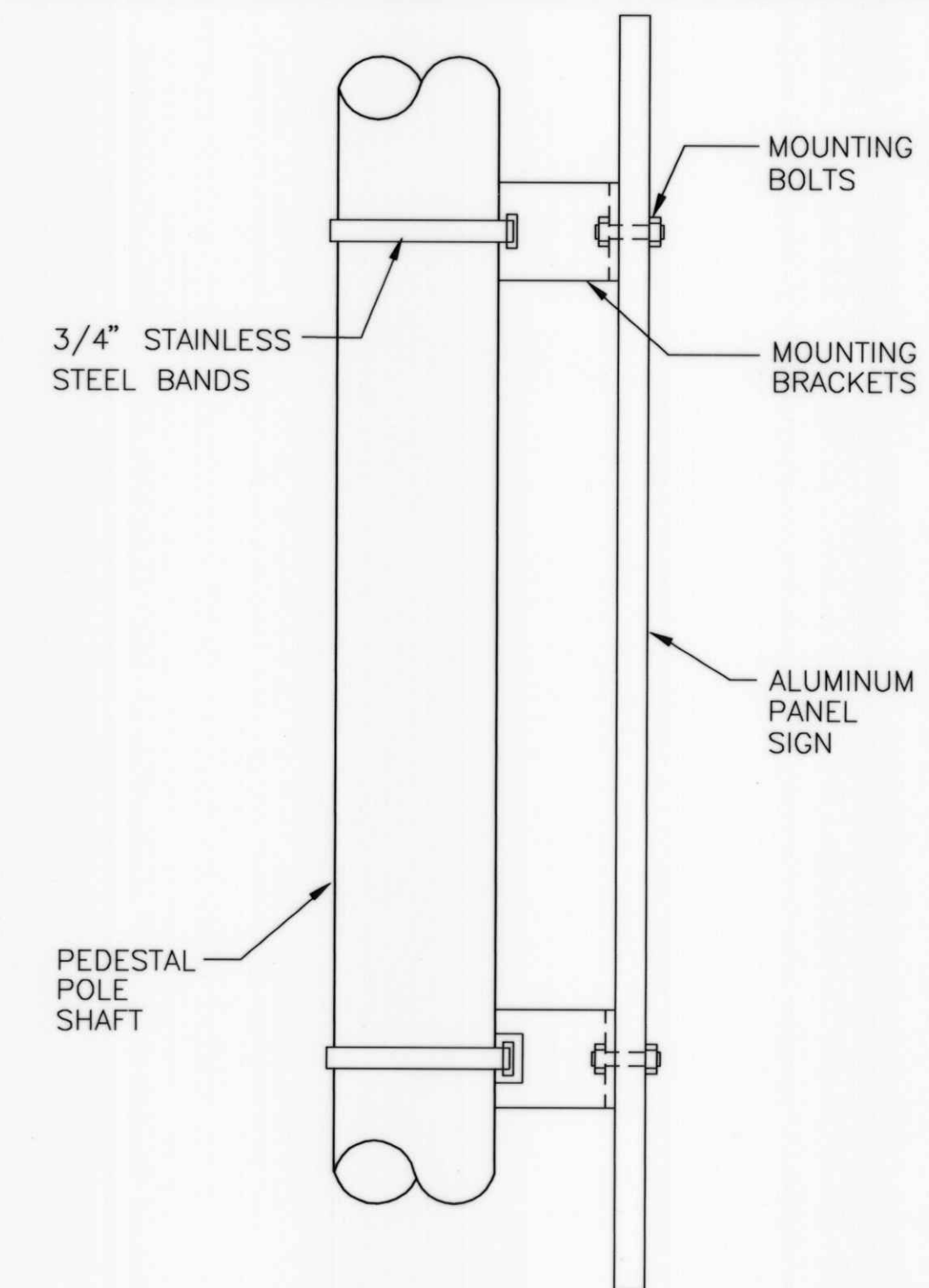
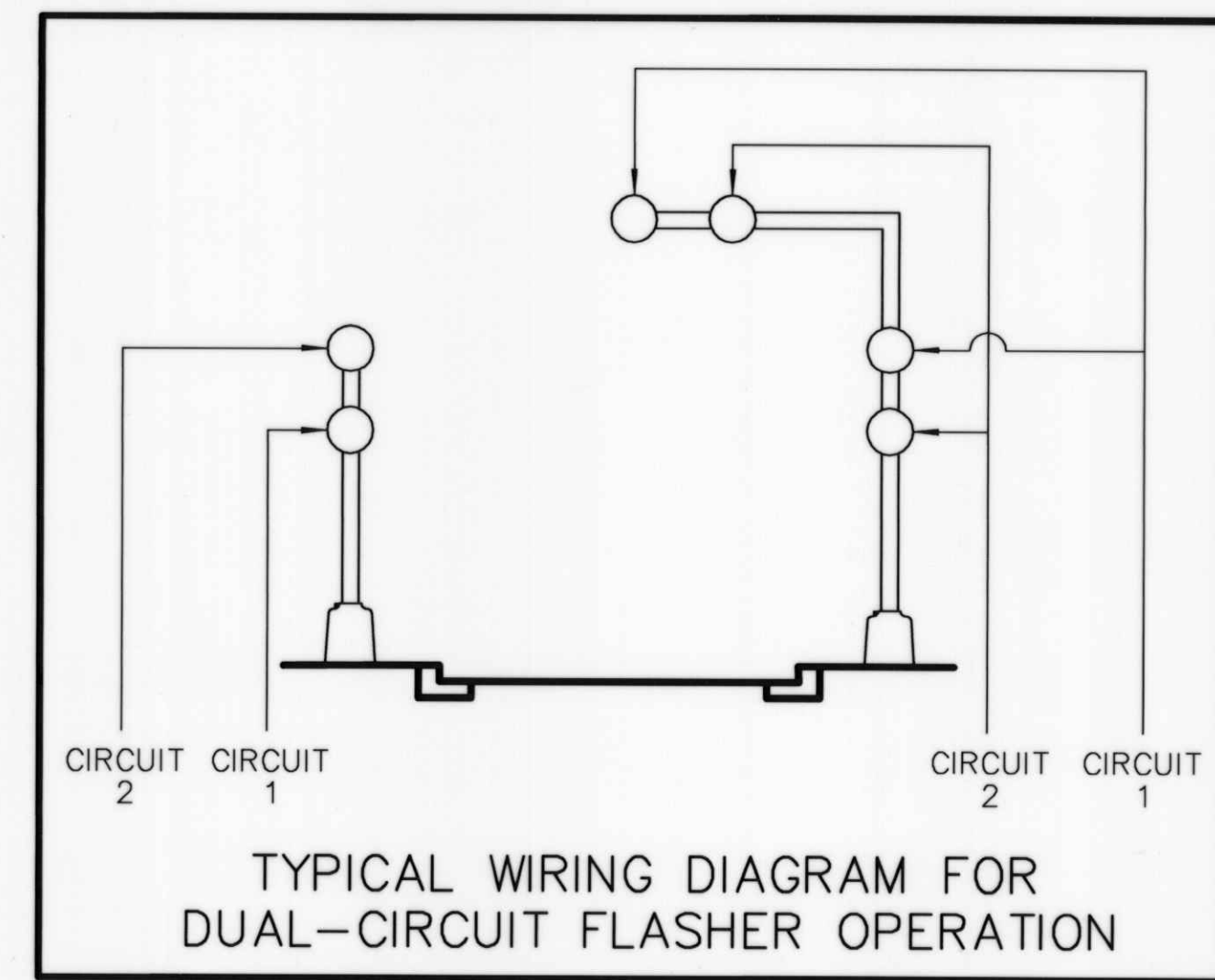
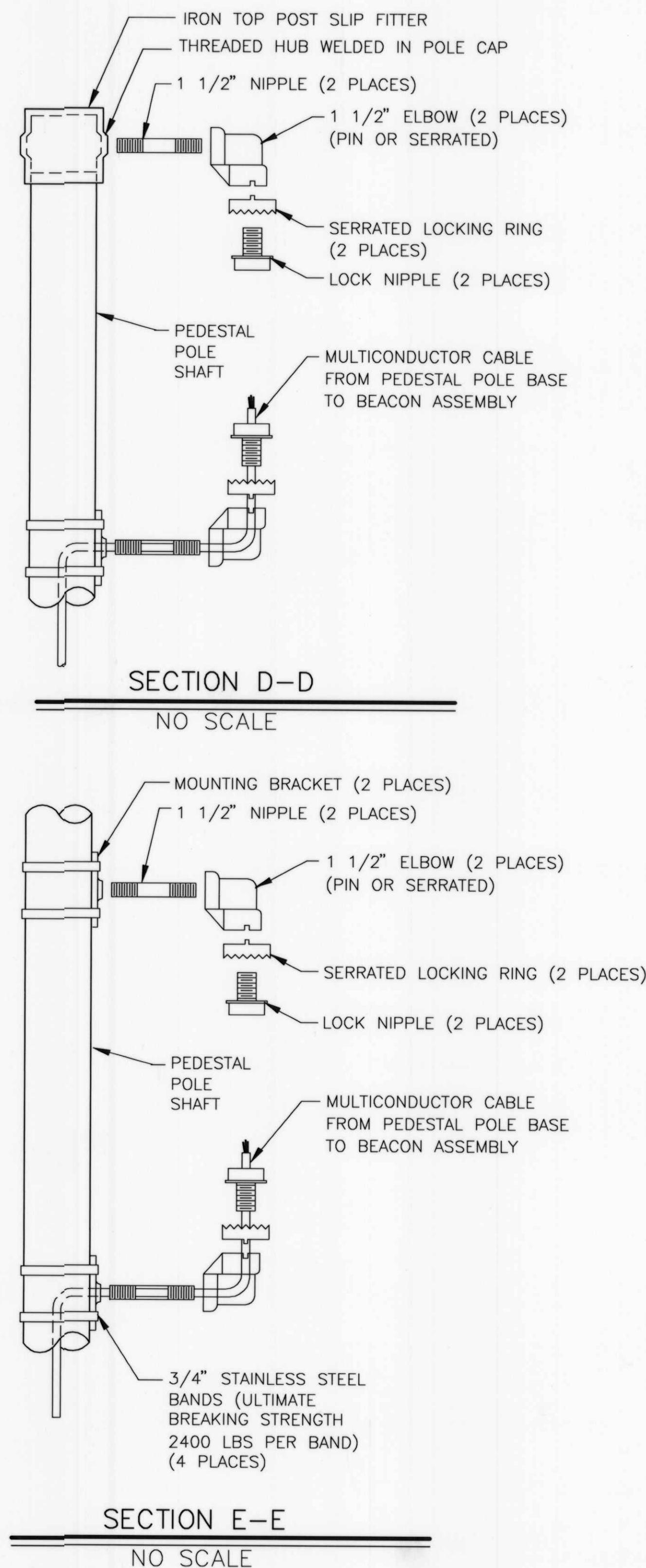
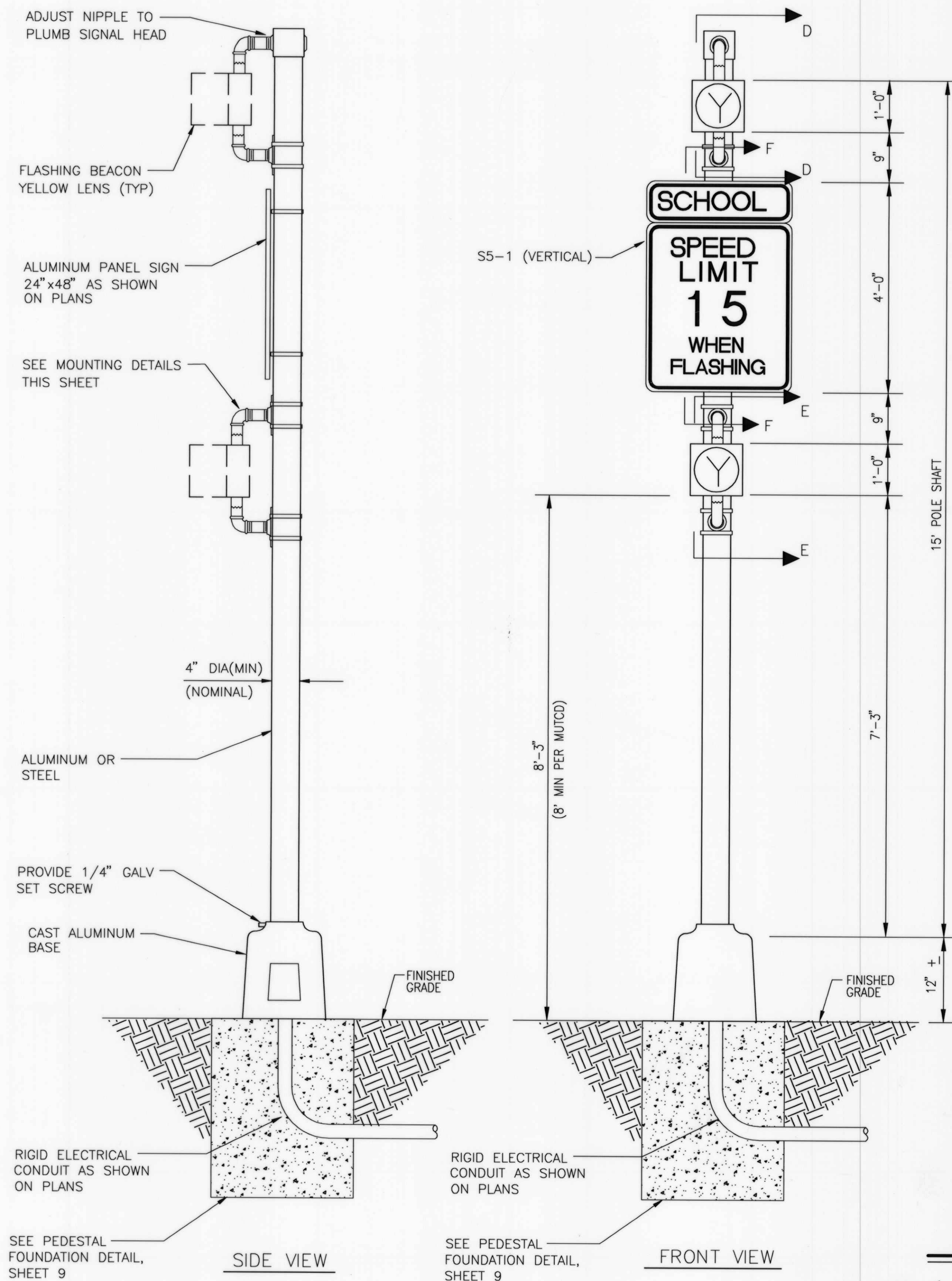
Zone Map No.
B-9

Sheet	5	Of	11
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RECORD DRAWING

SEE SHEET 1 FOR CERTIFICATION





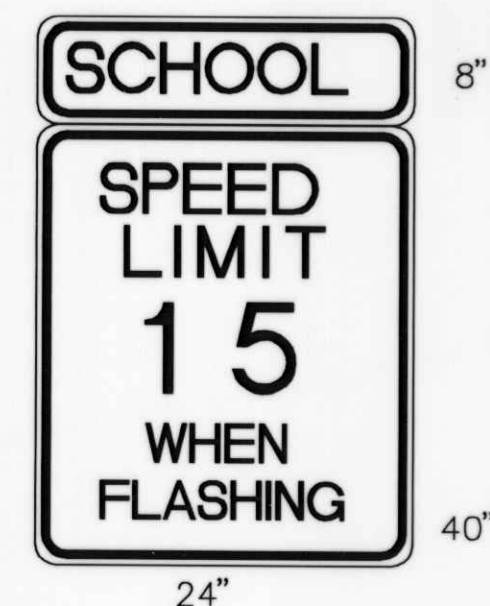
SECTION F-F

NO SCALE

COLORS

LEGEND:BLACK(NON-REFLECTIVE)
TOP PANEL:FLORESCENT YELLOW GREEN / VISUAL IMPACT (VIP)
BOTTOM PANEL:WHITE
OUTSIDE BORDER:WHITE / VIP
INSIDE BORDER:BLACK

RECORD DRAWING



S5-1 (VERTICAL)

TYPICAL SIGN FACE
DETAIL FOR SCHOOL BEACON

NO SCALE

NOTES:

- EACH SCHOOL BEACON (PEDESTAL) WILL BE MEASURED AND PAID FOR UNDER THE FOLLOWING ITEMS:
 - ITEM 0422.004 - TRAFFIC SIGNAL PEDESTAL POLE 15' (1 EACH BEACON)
 - ITEM 0423.001 - TRAFFIC SIGNAL FOUNDATION FOR PEDESTAL POLE (1 EACH BEACON)
 - ITEM 0427.001 - 1 SECTION TRAFFIC SIGNAL ASSEMBLY (2 EACH BEACON)
 - ITEM 0450.001 - ALUMINUM PANEL SIGNS (1 EACH BEACON)

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	PROJECT	DATE	NO.	DATE	NO.	DATE
B & D ELEC.	4/05	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	06-2004	2003.084.1	05-03-2005	2003.084.5	08-10-2004
WORK BY	DATE	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	DATE	NO.	DATE	NO.	DATE
JMA	4/05	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	06-2004	2003.084.1	05-03-2005	2003.084.5	08-10-2004
INSPECTED BY	DATE	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	DATE	NO.	DATE	NO.	DATE
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VERIFIED BY	DATE	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	DATE	NO.	DATE	NO.	DATE
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RECORDED BY	DATE	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	DATE	NO.	DATE	NO.	DATE
JMA	4/05	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	06-2004	2003.084.1	05-03-2005	2003.084.5	08-10-2004
NO.	DATE	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1968".	DATE	NO.	DATE	NO.	DATE
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JMA

2003.084.5

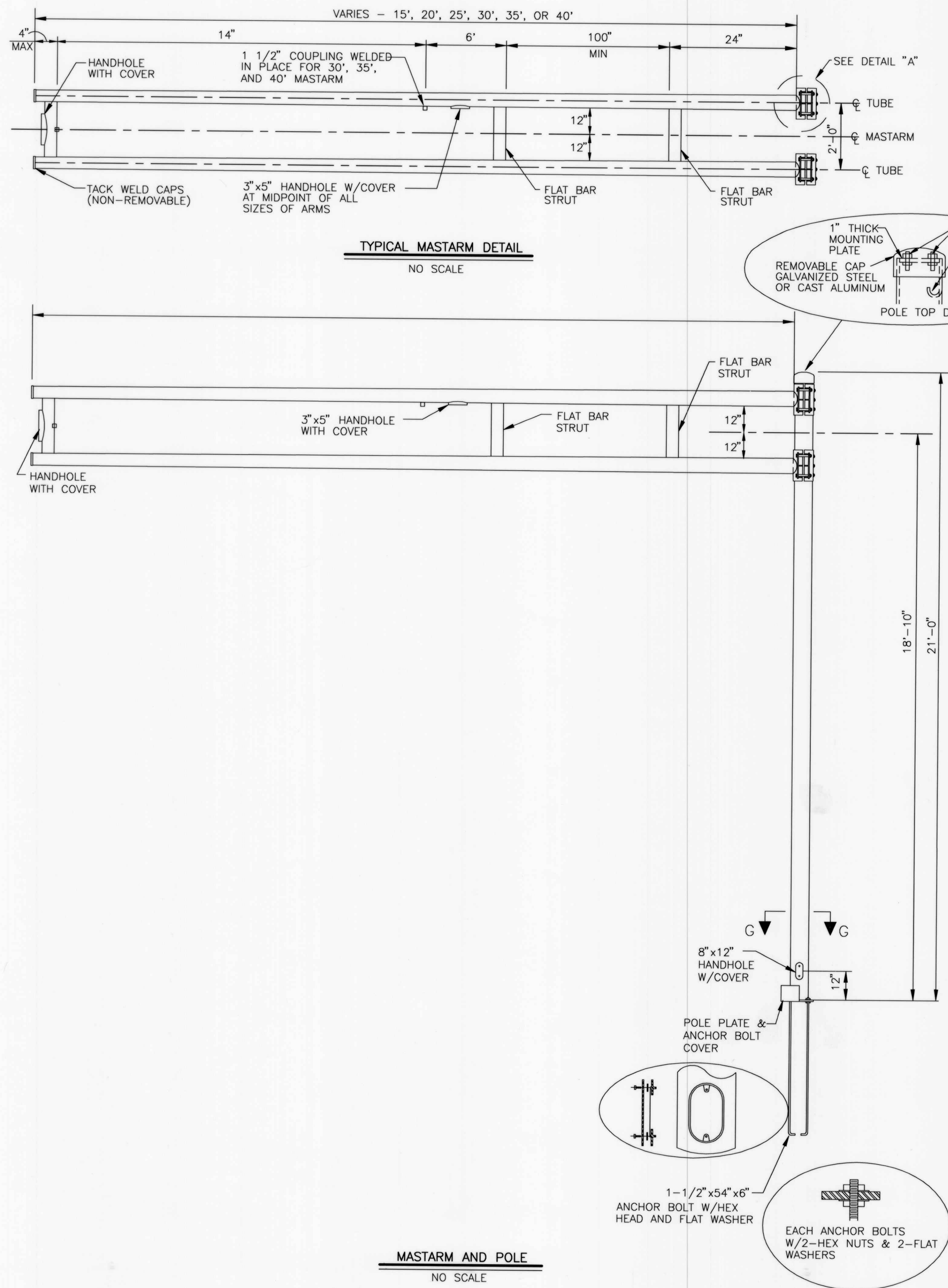
JEFF MORTENSEN & ASSOCIATES, INC.
6000-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, NM 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX: (505) 345-4254

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: VENTANA RANCH ELEMENTARY SCHOOL
FLASHING SCHOOL BEACON
SCHOOL BEACON DETAILS (PEDESTAL)

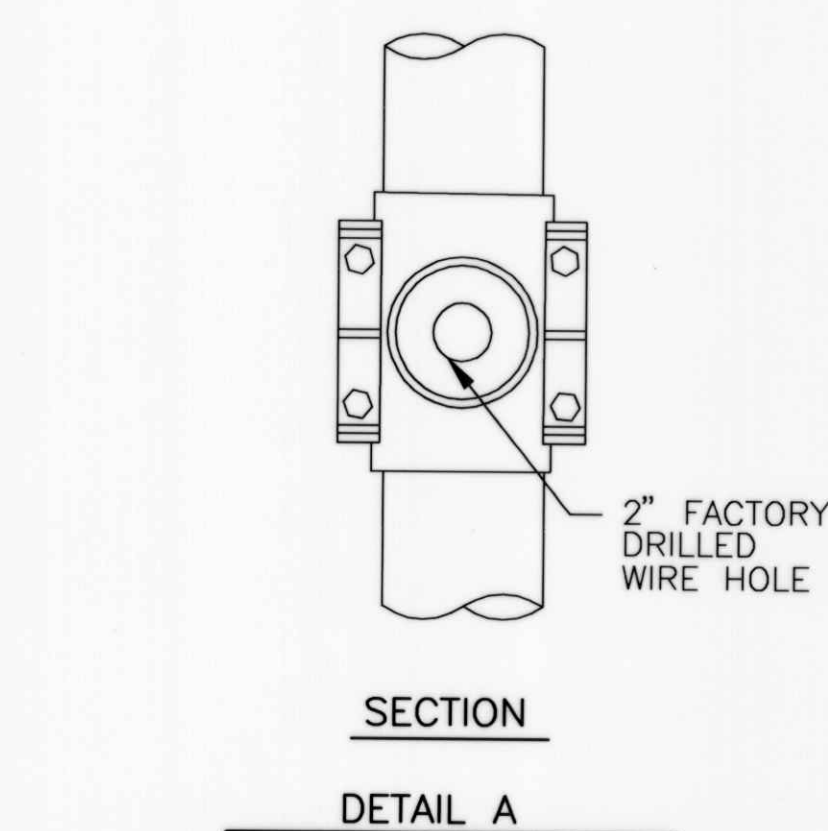
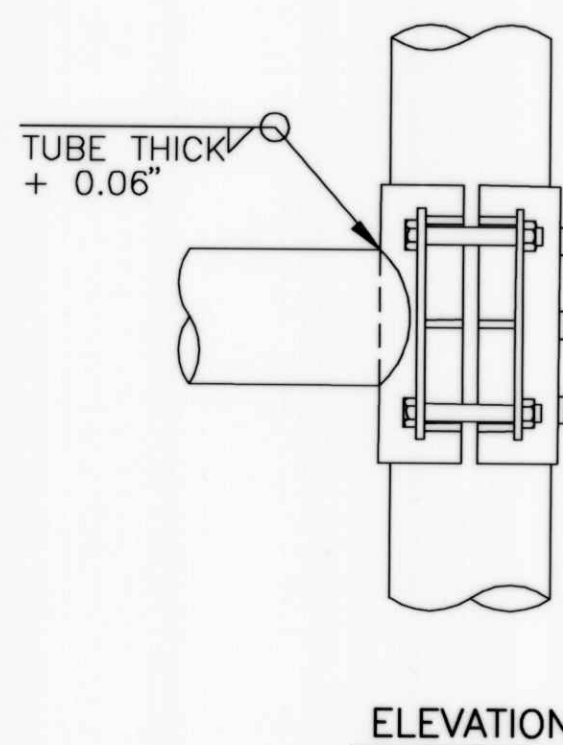
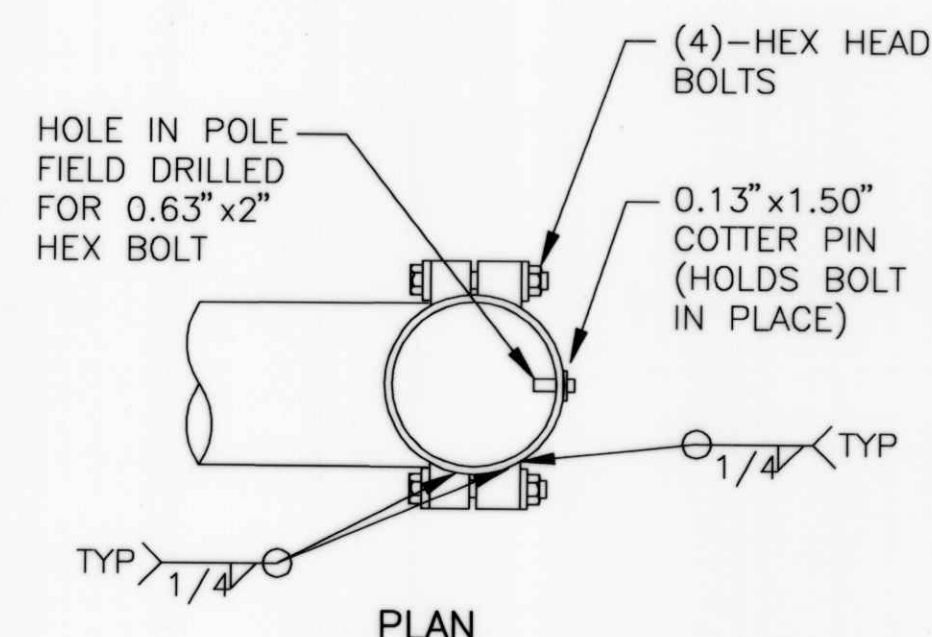
Design Review Committee
CITY ENGINEER APPROVAL
APPROVE
DEC - 7 2004
CITY ENGINEER

City Project No. 744481
Zone Map No. B-9
Sheet 7 of 11



TRAFFIC SIGNAL MASTARM NOTES:

- DESIGN IN ACCORDANCE WITH 1985 AASHTO SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS FOR AN 80 MPH WIND ZONE.
- POLES AND MASTARMS SHAFTS SHALL CONFORM TO ASTM A-595 GRADE A (MIN YIELD 55 KSI)
- BASE PLATE AND SIGNAL ARM CLAMP SHALL BE ASTM A-36 (MIN YIELD 36 KSI).
- ANCHOR BOLTS SHALL BE ASTM A-36 MOD 55 (MIN YIELD 55 KSI)
- SIGNAL ARM CONNECTING BOLTS SHALL BE ASTM A-325.
- WELDING SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN WELDING SOCIETY SPECIFICATIONS AWS D1.1. LATEST EDITION. ALL WELDS SHALL BE FREE FROM CRACKS, EXCESSIVE UNDERCUT, AND POROSITY. ANY WELD DEFECTS SHALL BE REPAIRED BY REMOVING THE DEFECTIVE MATERIAL AND REPLACING IT WITH SOUND WELD MATERIAL.
- ALL HOLES SHALL BE DRILLED AND DEBURRED.
- ALL POLES, MASTARMS, AND BOLTS SHALL BE GALVANIZED TO ASTM A-123 & A-153.
- MASTARM SHALL BE MARKED TO DESCRIBE WHICH IS TOP AND WHICH IS BOTTOM. POLE PLATE COVER SHALL BE MARKED IN MATED PAIRS. POLE SHAFTS SHALL BE MARKED "ALB" "15-25" OR "30-40", AND DATE OF FABRICATION (MONTH/YEAR).
- DETAILS SHOWN ARE FOR STEEL POLES. ALUMINIUM POLES MAY BE USED ONLY WHEN PRE-APPROVED BY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS DIVISION.
- BOLTS FOR TYPE III EXTENSIONS SHALL BE FURNISHED BY THE MANUFACTURER FOR ALL POLES INCLUDING TYPE II STANDARDS WITH NO EXTENSIONS.



NOTE:
ONE SIZE ARM CLAMP FOR
15' TO 25' MASTARMS AND
ONE SIZE FOR 30' TO 40'
MASTARMS WILL BE ALLOWED

FINISH:

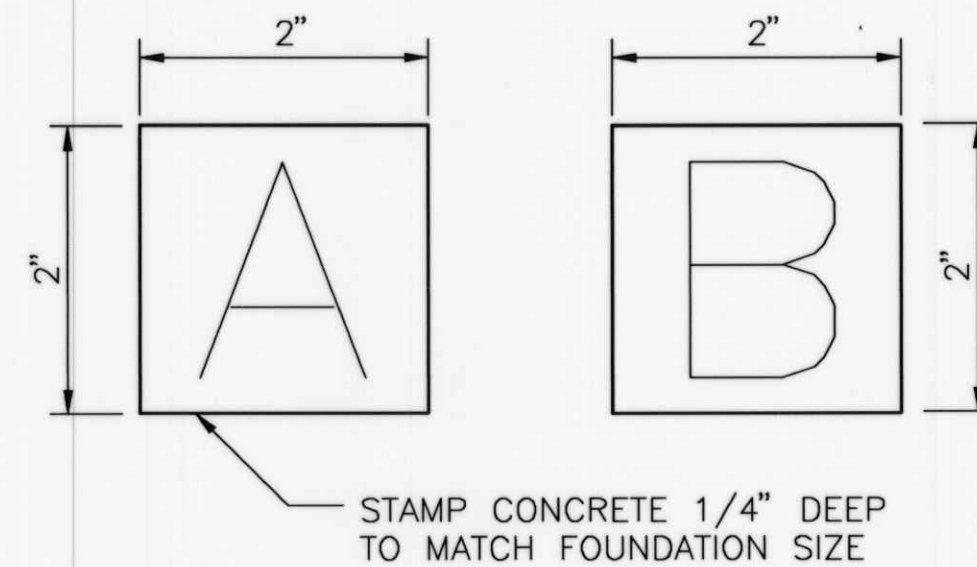
- ☒ GALVANIZED
- ☐ POWDER COATED
- COLOR _____

Jma
2004.180.5

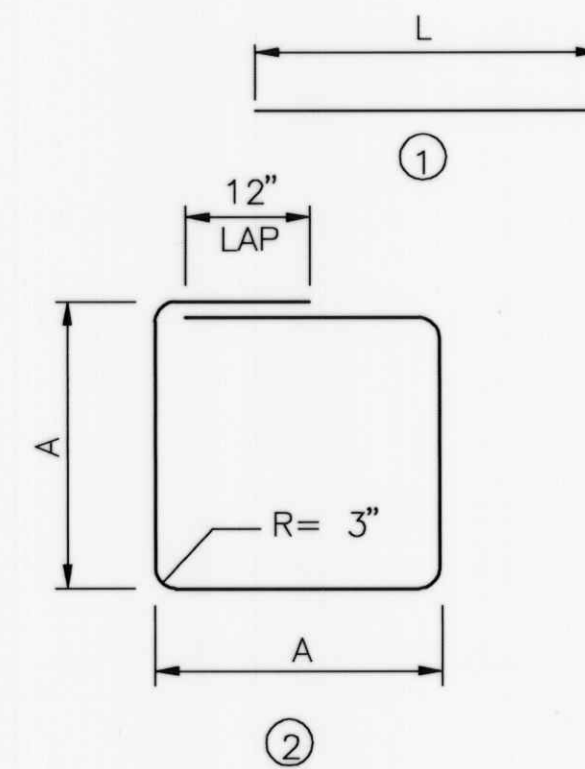
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP	
TITLE: VENTANA RANCH ELEMENTARY SCHOOL FLASHING SCHOOL BEACON TRAFFIC SIGNAL MASTARM DETAILS, TYPE II STANDARD	
Design Review Committee APPROVED JUL 12 2003 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED DEC - 7 2004 CITY ENGINEER
City Project No. 744481	Zone Map No. B-9
Sheet 8	of 11

RECORD DRAWING

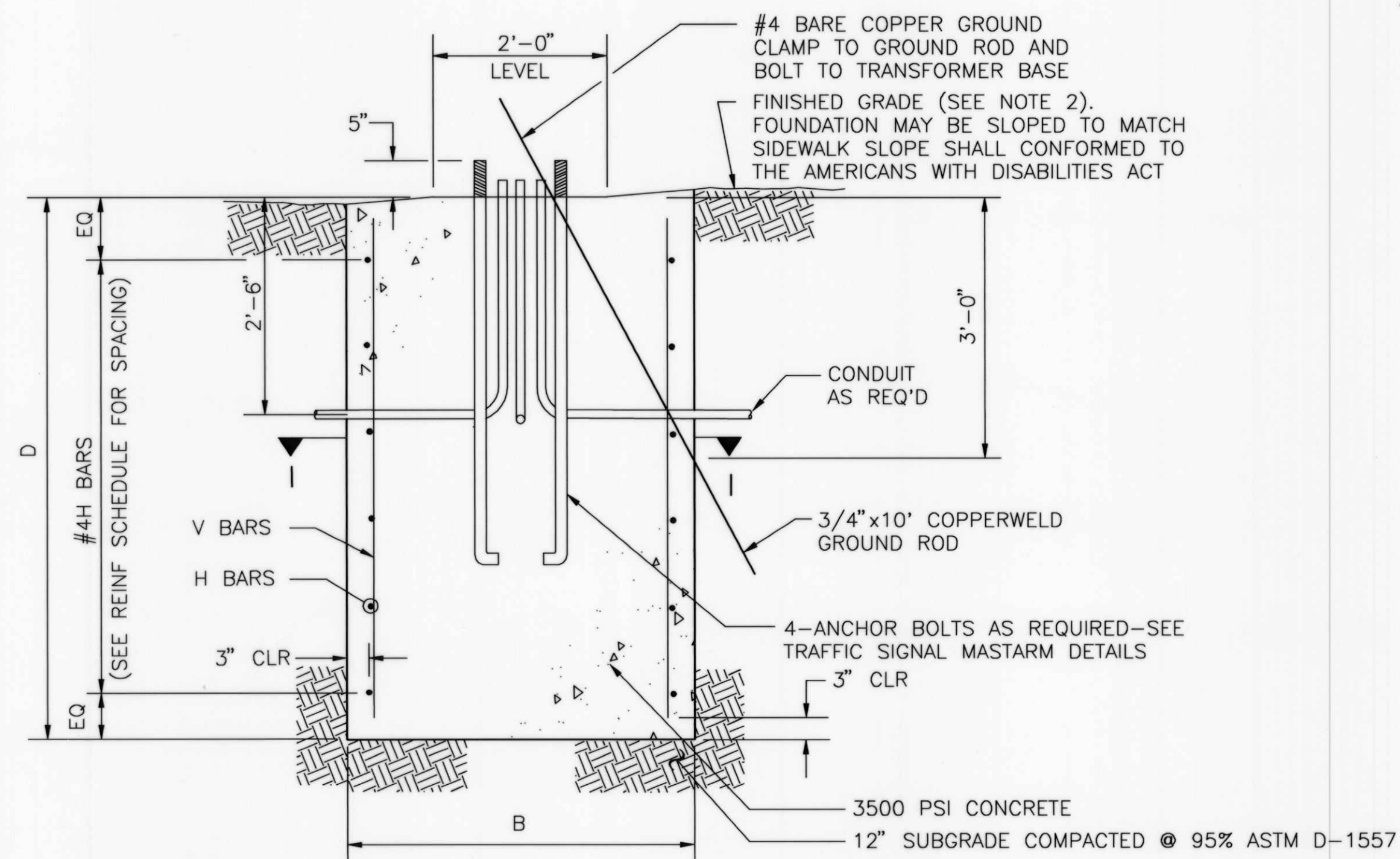
PLAN VIEW (SQUARE)
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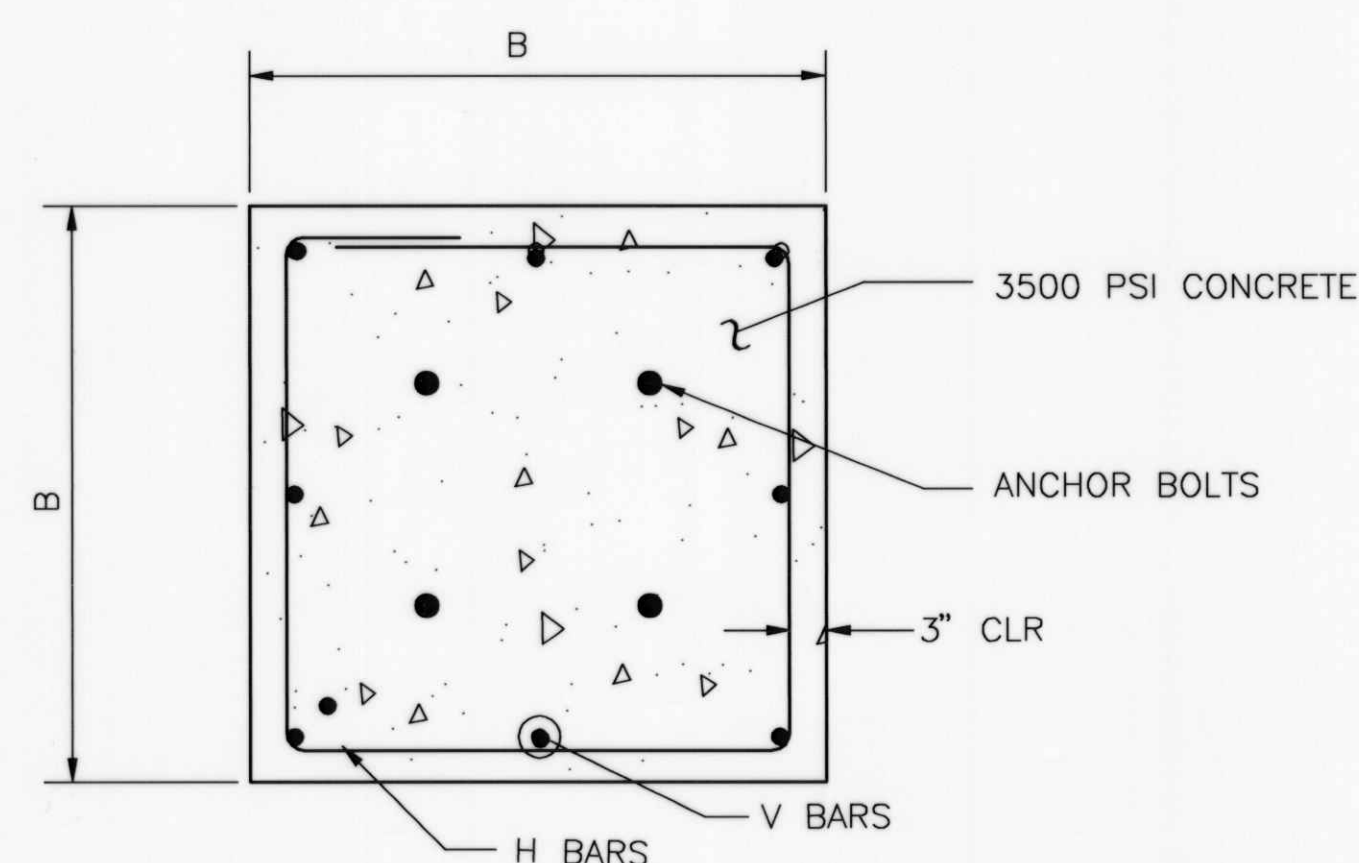
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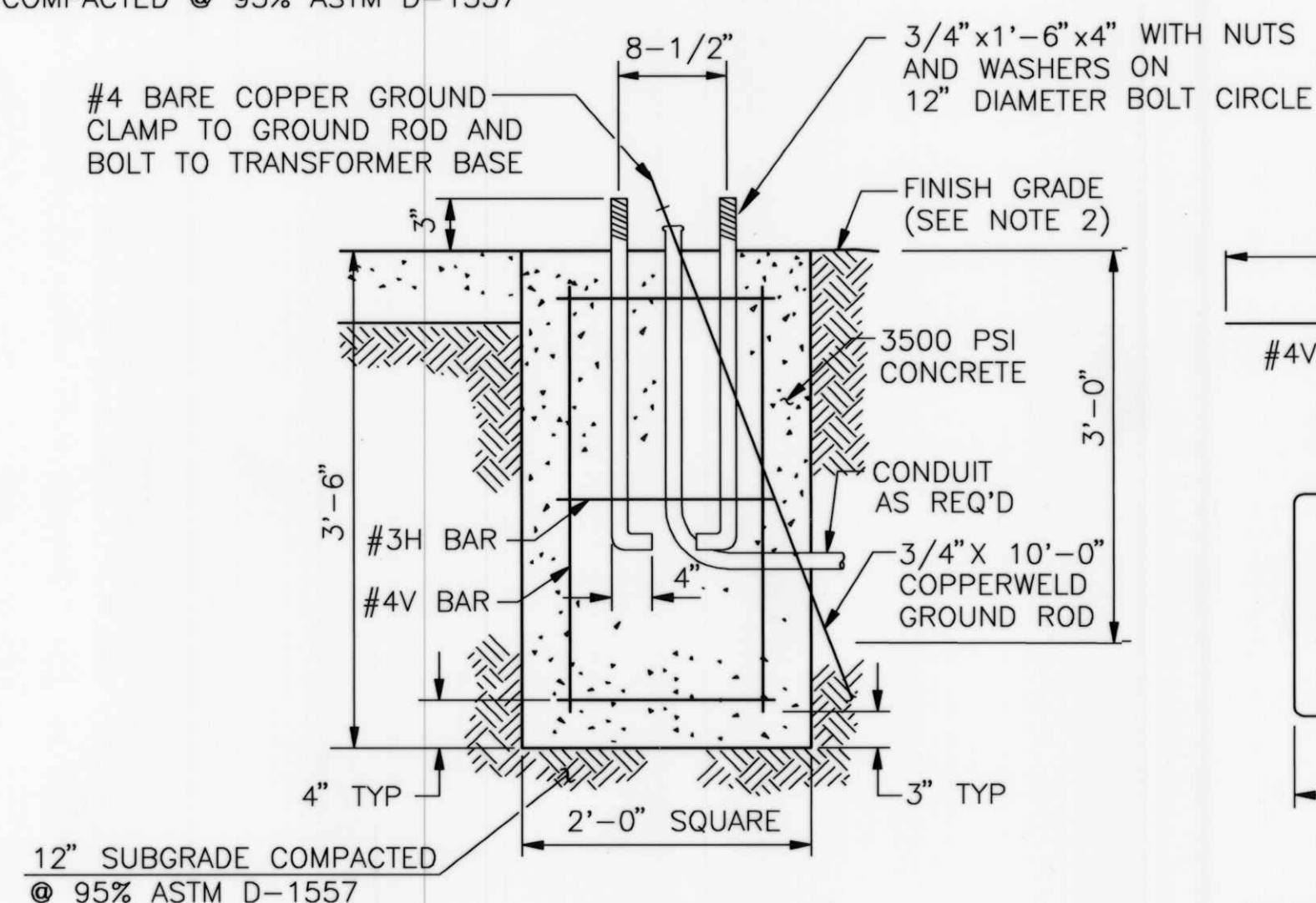
BAR BENDING DIAGRAM



SECTION H-H (ROUND OR SQUARE)
NO SCALE



SECTION 1-1 (SQUARE)
NO SCALE



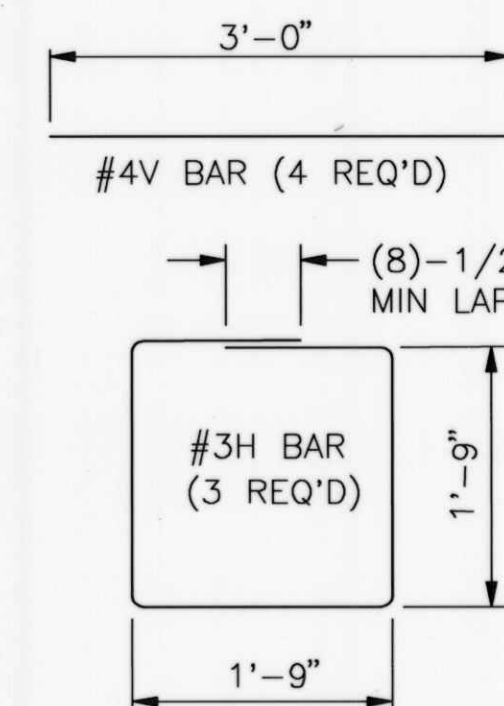
PEDESTAL POLE FOUNDATION DETAIL
NO SCALE

FOUNDATION DIMENSIONS AND QUANTITIES								
FOUNDATION TYPE	SIGNAL ARM SPAN(FT)	DIMENSION		REINFORCING		REBAR POUNDS	3500 PSI CONCRETE CUBIC YARDS	NOTES
		B (WIDTH)	D (DEPTH)	V BARS MARK	H BARS MARK			
TYPE A (SQUARE)	15	3'-6"	5'-0"	#4V2	#3H2	49.1 •	2.27	
	20	"	"	"	"		"	
	25	"	"	"	"		"	
TYPE B (SQUARE)	30	4'-0"	6'-3"	#5V1	#3H1	82.6	3.70	
	35	"	"	"	"		"	
	40	"	"	"	"		"	
PEDESTAL	—	2'-0"	3'-6"	#4V	#3H	17	0.52	

REINFORCING SCHEDULE (GRADE 60 BARS)					
MARK	QUANT	TYPE	SIZE	LENGTH	COMMENTS
#5V1	8	1	5	5'-9"	
#4V2	8	1	4	4'-6"	
#7V3	6	1	7	11'-3"	
#6V4	6	1	6	8'-0"	
#3H1	6	2	3	15'-4"	A = 42", TIES AT 14" OC
#3H2	5	2	3	13'-4"	A = 36", TIES AT 12" OC
#3H3	12	3	3	9'-3"	DIA = 30", TIES AT 12" OC
#3H4	9	3	3	7'-8"	DIA = 24", TIES AT 12" OC

TRAFFIC SIGNAL FOUNDATION NOTES


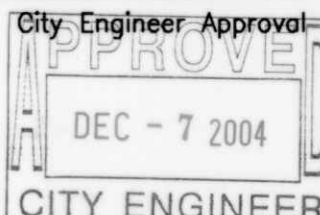
1. REFER TO THE PLANS FOR LOCATIONS OF TRAFFIC SIGNAL FOUNDATIONS.
2. FINISHED GRADE FOR THE FOUNDATIONS SHALL BE ESTABLISHED IN THE FIELD BY THE PROJECT MANAGER.
3. THE FOUNDATIONS SHOWN HERE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 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).

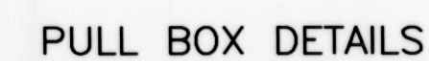
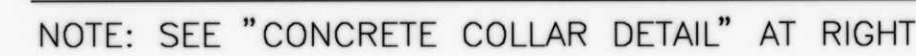


REINFORCING STEEL

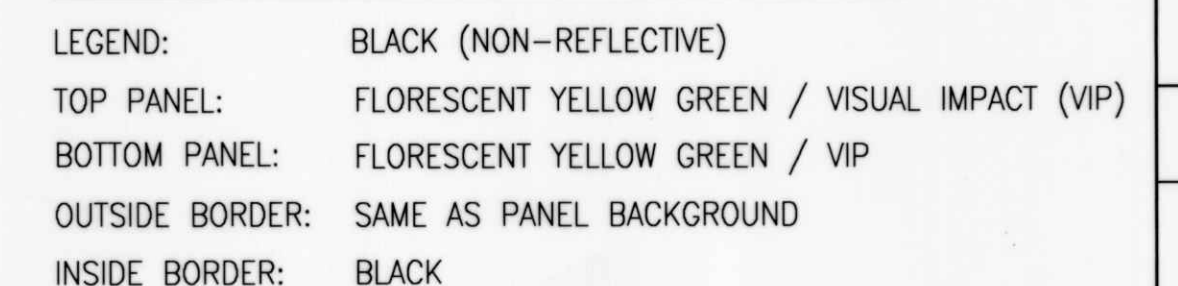
RECORD DRAWING

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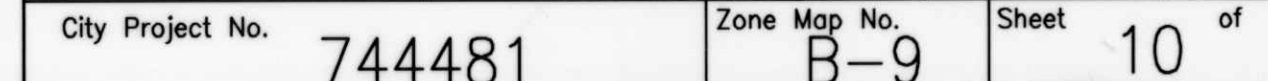
	JEFF NORTENSEN & ASSOCIATES, INC. <input type="checkbox"/> 8000-B MIDWAY PARK BLVD. NE ALBUQUERQUE, NM NEW MEXICO 87109 <input type="checkbox"/> ENGINEERS <input type="checkbox"/> SURVEYORS (LS) 345-4258 <input type="checkbox"/> FAX: 505 345-4254 <input type="checkbox"/> ESTABLISHED 1977	#63 DATE	DESIGNED BY	DRAWN BY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
2004.180.5	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP		TITLE: VENTANA RANCH ELEMENTARY SCHOOL FLASHING SHOE BEACON FOUNDATION DETAILS, TYPE II AND TYPE III STANDARDS		Design Review Committee	City Engineer Approval 	Last Design Update	Mon./Day/Year	Mon./Day/Year	Sheet	of	11																																																																																												
City Project No. 744481	Zone Map No.	B-9																																																																																																						



1. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH HEAVY - WEAVE FIBERGLASS. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1,700 PSI, FLEXURAL STRENGTH - 7,500 PSI.
2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF 22,568 LBS OVER 10" SQUARE (225 PSI).
3. PULL BOX TYPE AND LOGO SHALL BE APPROVED BY THE PROJECT MANAGER.
4. THE DIMENSIONS OF THE PULL BOXES SHOWN ARE NOMINAL DIMENSIONS AND MAY VARY AS TO THE MANUFACTURER'S RECOMMENDATIONS. ALL DIMENSIONS SHALL BE VERIFIED BY THE PROJECT MANAGER.
5. ELECTRICAL PULL BOX (STANDARD) SHALL BE A HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVER MEASURING 13 3/4" x 23 1/4" x 2".

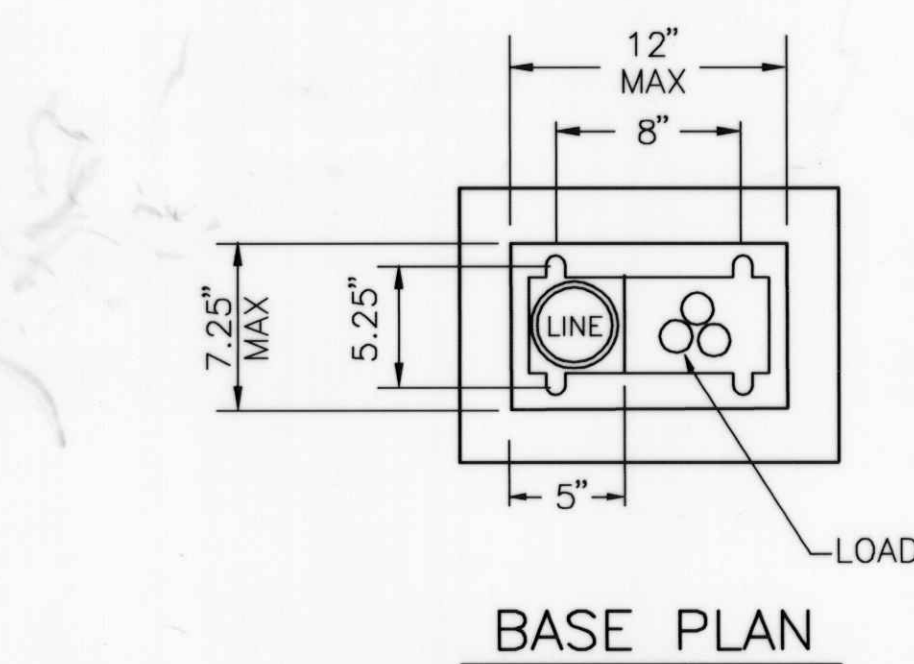
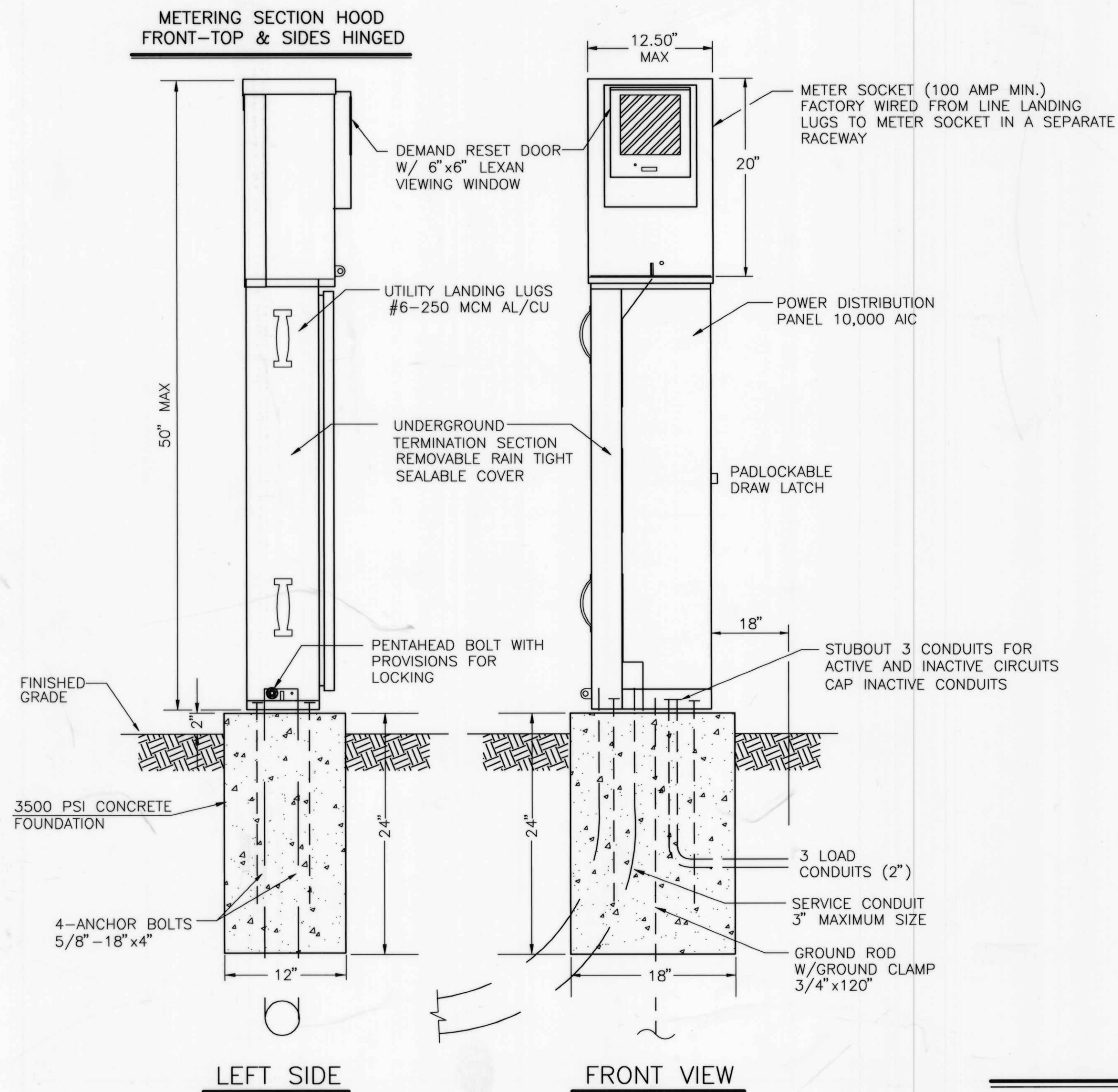


SCHOOL SIGN DETAILS

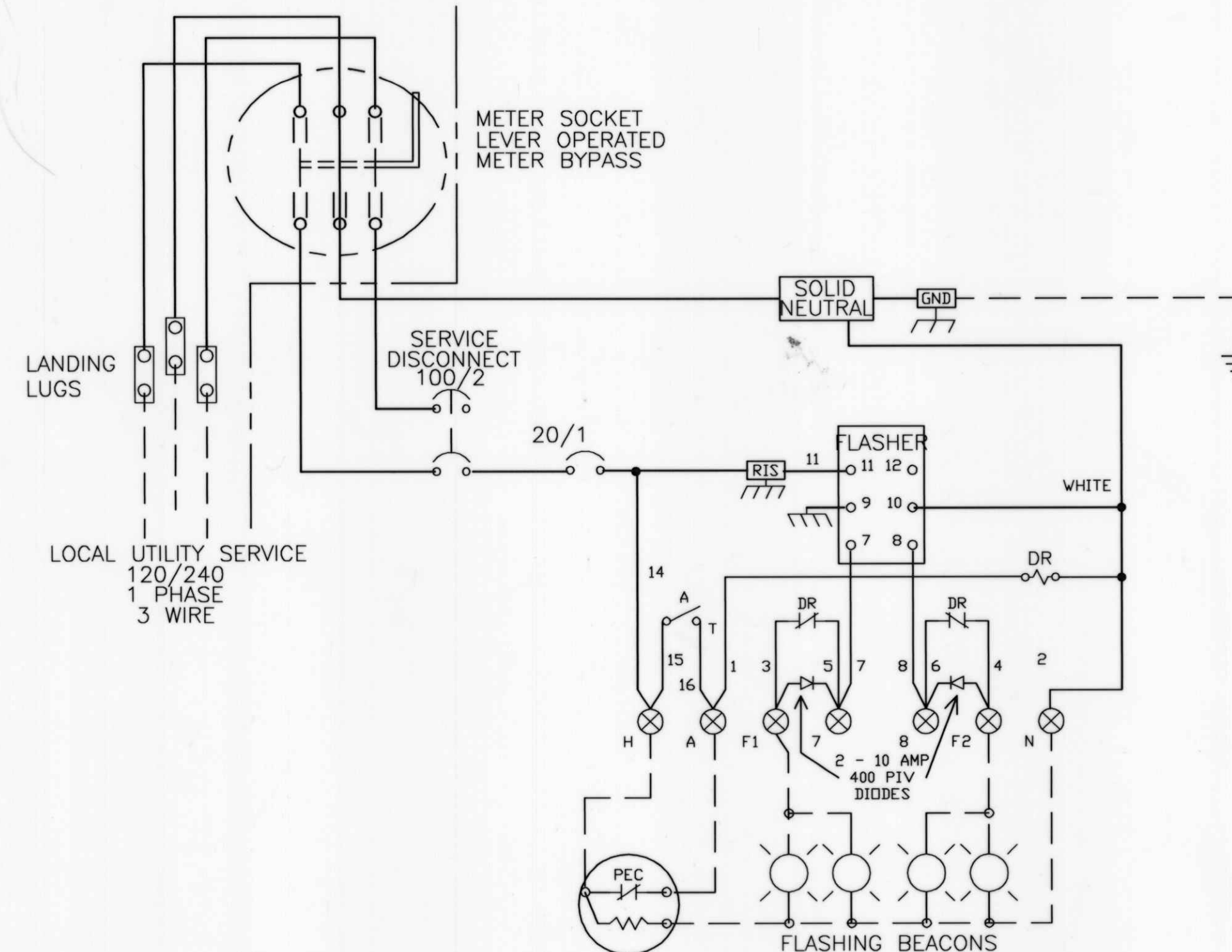


RECORD DRAWING

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METER PEDESTAL DETAILS
NO SCALE



SERVICE EQUIPMENT
WIRING DIAGRAM "WB-M"

METER PEDESTAL CONSTRUCTION NOTES

- METER PEDESTAL SHALL BE UL LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
- METER PEDESTAL SHALL MEET THE ELECTRIC UTILITY SERVICE EQUIPMENT REQUIREMENTS COMMITTEE (EUSERC) GUIDELINES.
- METER PEDESTAL CONSTRUCTION SHALL BE NEMA 3R AND 12, RAIN TIGHT AND DUST TIGHT. ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
- ALL NUTS, BOLTS, SCREWS AND HINGES SHALL BE STAINLESS STEEL.
- NUTS, BOLTS, AND SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF METER PEDESTAL.
- 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".
- A PLASTIC COVERED WIRING DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE FRONT DOOR.
- METER PEDESTAL SHALL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA STANDARDS.
- ALL POWDER COATED METER PEDESTALS SHALL HAVE A CORROSION RESISTANT COATING WHICH INCLUDES A FIVE STEP DIP TANK METAL PREPARATION PROCESS:
 - ALKALINE CLEANER 160° F.
 - CLEAR WATER RINSE.
 - IRON PHOSPHATE APPLICATION 150°.
 - CLEAR WATER RINSE.
 - INHIBITIVE RINSE TO SEAL PHOSPHATED SURFACES 120°.
 FINISHED WITH AN ELECTROSTATICALLY APPLIED DRY POLYESTER POWDER COATING THEN BAKED @ 380° TO CURE.
- 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.

CONSTRUCTION MATERIALS AND FINISH

<input type="checkbox"/>	12 GA HD GALVANIZED SHEET STEEL
<input type="checkbox"/>	POWDER COATED
<input checked="" type="checkbox"/>	14 GA #304D STAINLESS STEEL SHEET
<input checked="" type="checkbox"/>	POWDER COATED COLOR:
<input type="checkbox"/>	NATURAL
<input type="checkbox"/>	0.125" ALUMINUM SHEET
<input type="checkbox"/>	POWDER COATED COLOR:
<input type="checkbox"/>	ANODIZED

POWDER COAT COLORS

<input checked="" type="checkbox"/> WHITE	<input type="checkbox"/> RANCH GREEN
<input type="checkbox"/> MINT GREEN	<input type="checkbox"/> OTHER
<input type="checkbox"/> CAMEL	

JMA
2003.084.5

JEFF MORTENSEN & ASSOCIATES, INC.
6600-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (505) 345-4250
FAX: 505-345-4254 (ESTABLISHED 1977)

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: VENTANA RANCH ELEMENTARY SCHOOL
FLASHING SCHOOL BEACON
METER PEDESTAL DETAILS

Design Review Committee	City Engineer Approval	Ms./Date/7/1	Ms./Date/7/1
APPROVED AUG 12 2003 DESIGN REVIEW COMMITTEE	APPROVED DEC - 7 2004 CITY ENGINEER		
City Project No. 744481	Zone Map No. B-9	Sheet 11 of 11	

RECORD DRAWING

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION	
CONTRACTOR	WORK	PROJECT BENCHMARK	DATE	FIELD NOTES	NO.
5# D ELEC.	NA	STATION IS A STANDARD USCAR'S BRASS TABLET STAMPED, "UNION 1969".	10-2001	BY JMA	2001:182.1.1
DATE 4/05	DATE 4/05	CEMENTED IN A DRILL HOLE IN LAVA ROCK. THE STATION IS LOCATED ON THE			
DATE 4/05	DATE 4/05	NORTHEAST SIDE OF THE SOUTHERN UNION GAS CO. PIPELINE DIRT ROAD			
DATE 4/05	DATE 4/05	APPROXIMATELY A HALF MILE NORTH OF THE SOUTHERN BOUNDARY OF THE			
DATE 4/05	DATE 4/05	TOWN OF ALAMEDA GRANT LINE.			
DATE 4/05	DATE 4/05	ELEVATION = 5822.15 FEET (NGVD-1929)			

ENGINEER'S SEAL
05-03-2005
JEFF MORTENSEN
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
18547

REVISIONS	DATE	BY
1	08-10-2004	JMA
2	08-10-2004	JMA
3	08-10-2004	JMA
4	08-10-2004	JMA
5	08-10-2004	JMA
6	08-10-2004	JMA
7	08-10-2004	JMA
8	08-10-2004	JMA
9	08-10-2004	JMA
10	08-10-2004	JMA
11	08-10-2004	JMA
12	08-10-2004	JMA
13	08-10-2004	JMA
14	08-10-2004	JMA
15	08-10-2004	JMA
16	08-10-2004	JMA
17	08-10-2004	JMA
18	08-10-2004	JMA
19	08-10-2004	JMA
20	08-10-2004	JMA

Designed By	Date	Drawn By	Date	Checked By	Date
C.D.A.	06-2004	S.G.H.	08-2004	J.G.M.	