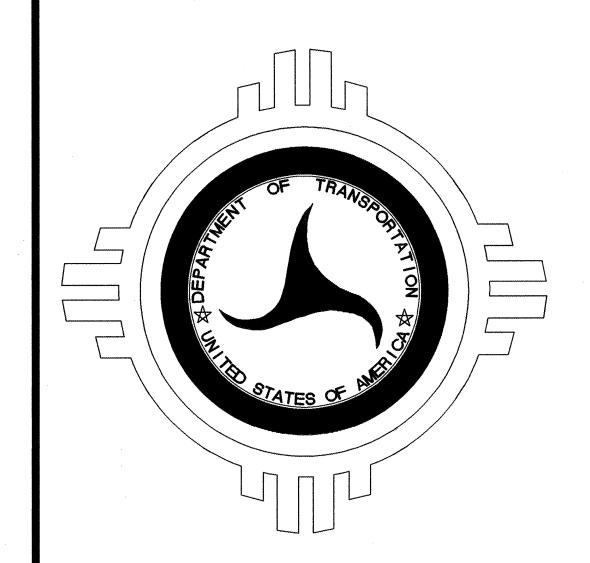
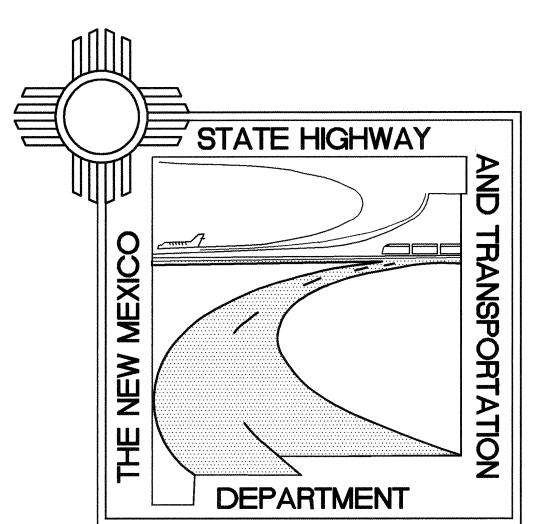
# CITY OF ALBUQUERQUE CONSTRUCTION PLANS

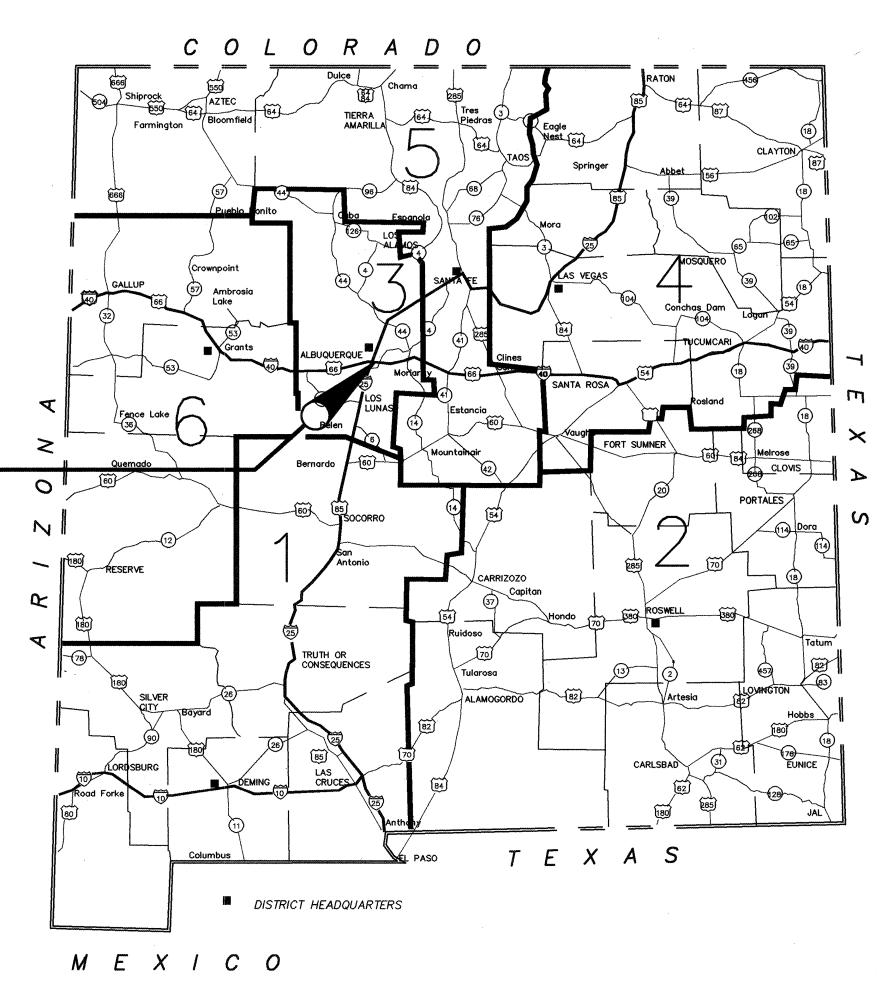
DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL SYSTEM EXPANSION

PHASE THREE A
CAQ 4054 (10) 01
Control Number 3485
CITY PROJECT NO. 5361





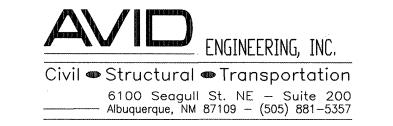
CAQ 4054 (10) 01
CN3485
CITY OF ALBUQUERQUE PROJECT NO. 5361
SIGNALIZATION (TRAFFIC COMPUTER SIGNAL SYSTEM), CURB & GUTTER WITH SIDEWALK, TRAFFIC CONTROL AND MISCELLANEOUS CONSTRUCTION



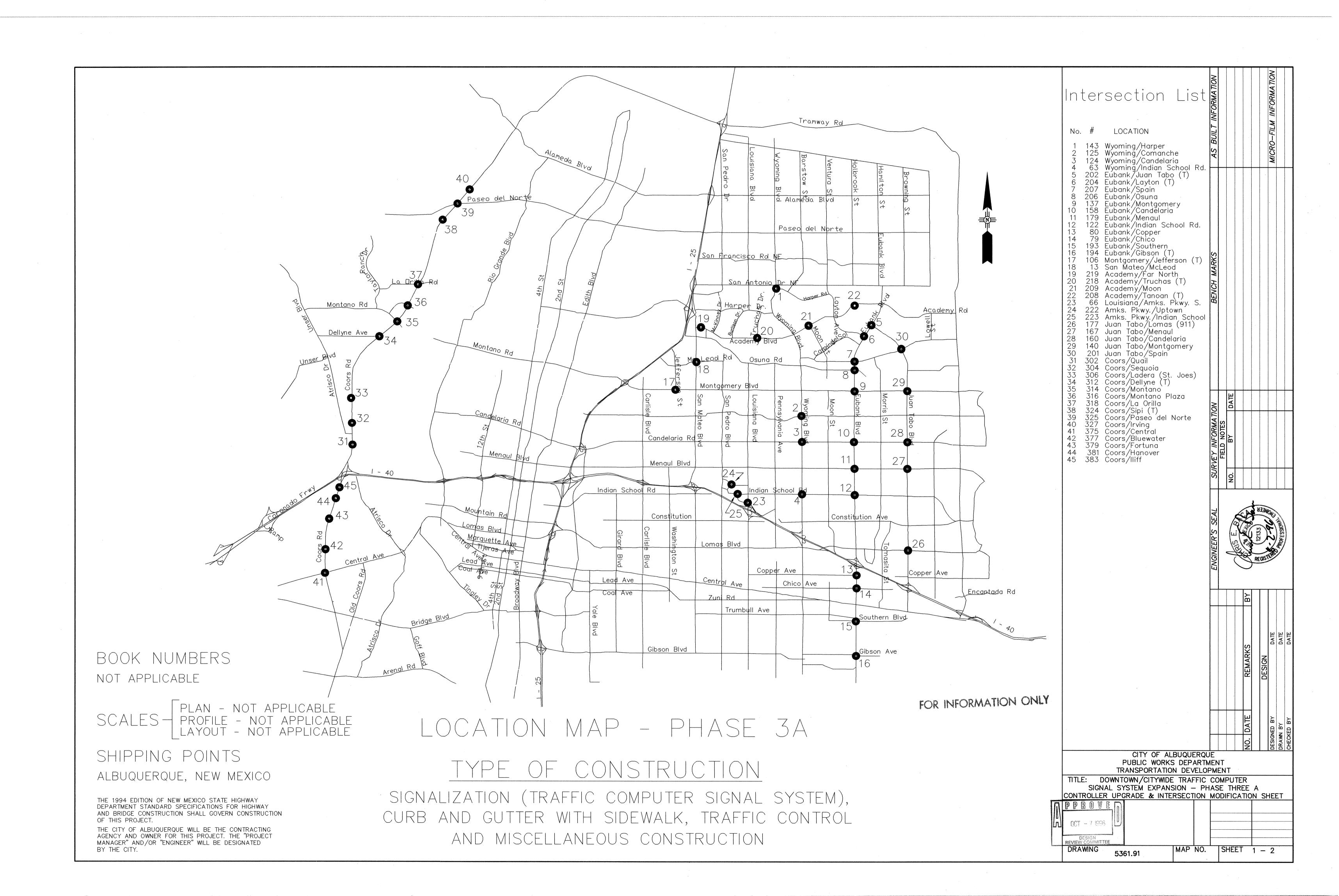


Albuquerque

FOR INFORMATION ONLY



r		•				***************************************					·
REV.	SHEETS	CITY ENG	INEER	DATE		USER DEPARTM	MENT	DATE		USER DEPARTMENT	DATE
ENGINE	ERS STAMP	& SIGNATURE	APPRO\	/ALS		ENGINEER	DA	TE	*	*****	***
	_ ,		DRC Chair	man	3	lle J. Loldy	10-7	-96	ΑF	PPROVED FOR CONSTR	UCTION
			Transport	ation '	Kon	Col Back	9-4	NP-0			,
	(\$ E.)	G <sub>a</sub> Q	Water/Wast	tewater	IK	THUK I	9-9	-96	_		
	(S) EN-MEN	XZ\	Hydrology		NI	4 Illurias	9/10/	196		Zan I	
Y	12177	for	Parks		(	7			S	conto DICA Nov 5,	1946
\	7 12133 3 12133		Constr. M	ngmt.		,			Ci	ity Engine <b>e</b> r /	Date(
,	18/2-5	IV.E/									
	PROFESSIO	MAL	PROJE(	CT NO	).		•		Sh	HEET	
						5361.	91	į		1-1	
							_				



# INDEX OF SHEETS

SHEET NO.	DESCRIPTION	REV.	DATE	SERIAL
1–1	TITLE SHEET			
1-2	VICINITY MAP			
1-3	INDEX OF SHEETS			
1-4	SUMMARY OF QUANTITIES			
1-5	GENERAL NOTES			
1-6	ENVIRONMENTAL REQUIREMENTS			
1-7				
1— /	SPECIAL PROVISIONS, SUPPLEMENTAL SPECIFICATIONS AND INCIDENTAL ITEMS			
	SUBTOTAL = 7 SHEETS			
2–1	MISCELLANEOUS DETAILS ( WHEELCHAIR RAMPS)			
	SUBTOTAL = 1 SHEET			
3–1	EQUIPMENT REQUIREMENTS AND NOTES			
3-2 TO 3-3	CONTROLLER UPGRADE AND INTERSECTION			
	MODIFICATION SHEETS			
3-4 TO 3-12	INTERSECTION PLANS			
3–13	FOUNDATION DETAILS			
3–14	FOUNDATION MODIFICATION DETAILS			
3–15	METER PEDESTAL PLANS			
3–16	PEDESTRIAN SIGNAL & PUSH BUTTON DETAILS			
3–17	PULL BOX DETAILS			
3–18	LOOP DETECTOR DETAILS			
3–19	TRAFFIC SIGNAL OPTICAL DETECTION INSTALLATION DETAILS			
3-20	TRAFFIC SIGINAL OPTICAL DETECTION PLAN: NORTH-SOUTH-EAST-WEST			
3-21	TRAFFIC SIGINAL OPTICAL DETECTION WIRING DETAILS NORTH-SOUTH			
3-22	TRAFFIC SIGINAL OPTICAL DETECTION WIRING DETAILS EAST-WEST			
3-23	TRAFFIC SIGINAL OPTICAL DETECTION WIRING DETAILS			
	SUBTOTAL = 24 SHEETS			
4-1	SPECIAL TRAFFIC CONTROL REQUIREMENTS			
4-2	TYPICAL TRAFFIC CONTROL PLAN			
4-3	SIGNING AND CONST. TRAFFIC CONTROL STANDARDS			
4-4	TYPICAL TRAFFIC CONTROL AND SIGNING EXAMPLES			
·	SUBTOTAL = 4 SHEETS			
	TOTAL = 36 SHEETS			

SHEET NO.	DESCRIPTION	REV. DATE	SERIAL
		·	
	·		
	·		

	AS BUILT INFOR	CONTRACTOR	WORK STAKED BY	INSPECTOR'S ACCEPTANCE BY	VERFICATION BY DRAWINGS	CORRECTED BY MICRO-FILM INFO		RECORDED BY	NO.
	BENCH MARKS								
	SURVEY INFORMATION	FIELD NOTES	NO. BY DATE						
	ENGINEER'S SEAL		L. Control of the con		BY CASE OF THE	REGS A	2 X TEN	A COLESSON IN	
FOR INFORMATION ONLY					REMARKS   E	DESIGN	DATE	DATE	DATE
ENGINEERING, INC.  Civil - Structural - Transportation  5801 OSUNA RD. NE - Suite 200  Albuquerque, NM 87109 - (505) 881-5357				-	NO.   DATE		DESIGNED BY RLB	>	CHECKED BY CP
CITY OF ALBUQUERQ PUBLIC WORKS DEPART ENGINEERING DEVELOPMENT  DOWNTOWN/CITYWIDE TRAFFIC SIGNAL SYSTEM EXPAN PHASE THREE A INDEX OF SHEETS	MEN T G C(ISIC	RC DMI DN	PU <sup>·</sup>	TEF		- MO	<u>/n</u>		YP
OCT - 7 1996  DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL  OCT - 7 1996  DESIGN REVIEW COMMITTEE  DRAWING NO. 5361.91  MAP NO.				ET		-3	./D/	<u> </u>	IK.

			ROAL	)WAY	1	RUCTION NING	1	ANENT NING	CONSTR ENGINE	RUCTION EERING	SIGNALI	ZATION	1	ROJECT OTALS
ITEM NO.	ITEM	UNIT	Estimated Quantity	Final	Estimated Quantity	Final	Estimated Quantity		Estimated Quantity		Estimated Quantity	Final	Estimated Quantity	Final
511000	STRUCTURAL CONCRETE	Cu. Yd.									4		4	
540060	REINFORCING BARS GRADE 60	LB									72		72	
601000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	1										1	
608004	SIDEWALK, 4"	Sq. Yd.	200										200	
608404	CONCRETE MEDIAN PAVEMENT 4" (COLORED AND PATTERNED)	Sq. Yd.	270										270	
609450	CONCRETE BARRIER CURB AND GUTTER TYPE B-8"X30"	Lin. FT.	750										750	
618000	TRAFFIC CONT. MANAGEMENT	LS							LS				LS	
618100	SPECIAL CITY TRAFFIC CONTROL REQUIREMENTS	LS							LS		1,		LS	
621000	MOBILIZATION	LS	LS										LS	
702800	TRAFFIC CONTROL PLAN	LS							10				1.0	
704212	REFLECTIVE PLASTIC PAVEMENT STRIPE - 12"	Lin. FT.					240		LS				LS 240	
704212	METER PEDESTAL (SIGNAL)	EACH									20		20	
707820	REM AND RESET TRAFFIC SIGNAL AND MASTARM	EACH									1	·,	1	
707020	THE THE PRESENT THAT THE STOTE AND THE PRESENT THE PRE													
709020	RIGID ELECTRICAL CONDUIT, 2" DIA.	Lin. FT.									150		150	
709030	RIGID ELECTRICAL CONDUIT, 3" DIA.	Lin. FT.									200		200	
710010	ELECTRICAL PULL BOX (LARGE)	EACH									6"		6	<u>/I\</u>
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,											0		0	
711005	MULTI CONDUCTOR CABLE 5	Lin. FT.									200		200	
711007	MULTI CONDUCTOR CABLE 7	Lin. FT.									200		200	
711020	MULTI CONDUCTOR CABLE 20	Lin. FT.									200		200	
711106	SINGLE CONDUCTOR 6	Lin. FT.									100		100	
711110	SINGLE CONDUCTOR 10	Lin. FT.									100	***************************************	100	
711512	COMMUNICATION CABLE 12 PAIR	Lin. FT.									100		100	
711525	COMMUNICATION CABLE 25 PAIR	Lin. FT.									100		100	
712200	PEDESTRIAN SIGNAL-NEON	EACH									2		2	
713010	LOOP VEHICAL DETECTOR	EACH									68		68	
713020	PUSH BUTTON STATION	EACH									344		344	
713030	LOOP DETECTOR WIRE	Lin. FT.									740		740	
713300	DETECTOR SAW CUT	Lin. FT.									316		316	***
713410	PHASE SELECTOR RACK, 1 CHANNEL	EACH									28		28	
713430	PHASE SELECTOR MODULE	EACH									46	,	46	
713511	OPTICAL DETECTOR 1 DIRECTION/1 CHANNEL	EACH									94		94	
713600	OPTICAL DETECTOR CABLE	Lin. FT.									17025		17025	
							·							
714000 A	TRAFFIC ACTUATED CONTROLLER—ECONOLITE	EACH									8		8	-
714000 B	TRAFFIC ACTUATED CONTROLLER-MULTISONICS	EACH									30		30	
714100 A	SYSTEM MASTER-ECONOLITE	EACH									2		2	
714280 A	8 PHASE DOUBLE RING CONTROLLER CABINET-ECONOLITE	EACH									8		8	
714280 B	8 PHASE DOUBLE RING CONTROLLER CABINET-MULTISONICS	EACH									9		9	
													-	
801000	CONSTRUCTION STAKING BY THE CONTRACTOR	LS				***************************************			LS				LS	

	AS BUILT	CONTRACTOR	WORK STAKED BY	INSPECTOR'S ACCEPTANCE BY	FIELD VERIFICATION BY	DRAWINGS CORRECTED BY	MICRO-FILM		RECORDED BY	NO.
	BENCH MARKS									
	NO!		DATE							
	SURVEY INFORMATION	FIELD NOTES	NO. BY							
	ENGINEER'S SEAL		S FI S			12133) pc	THE SHOP OF THE PARTY OF THE PA	No.	OFESSION	
	ENGINE			ONNECT		REG	#STF	MED	*/ 	
				URE INTERC	REMARKS BY		DESIGN	DATE	DATE	DATE
INC. ation te 200 t1-5357			٧	//   6-3-97 CONDUIT	NO.   DATE   R		IO	DESIGNED BY	DRAWN BY	СНЕСКЕD ВҮ

FOR INFORMATION ONLY

ENGINEERING, INC.

Civil Structural Transportation

SB01 OSUNA RD. NE — Suite 200
Albuquerque, NM 87109 — (505) 881–5357

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING DEVELOPMENT GROUP

DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL

SYSTEM EXPANSION

SUMMARY OF QUANTITIES

DEBG REVIEW COMMITTEE CITY ENGINEER APPROVAL

DESIGN

REVIEW COMMITTEE

DRAWING

NO. 5361.91

MAP NO. SHEET.

1—4

# GENERAL NOTES

### GENERAL NOTES

- 1. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH ALL PERTINENT CITY ORDINANCES, PARTICULARLY RELATED TO NOISE. THE ENVIRONMENTAL HEALTH DEPARTMENT MAY BE CONTACTED AT (505) 768—2600 FOR MORE INFORMATION.
- 2. DELETED.
- 3. EARTHWORK HAUL: THE EARTHWORK ON THIS PROJECT INCLUDING EXCAVATION, BORROW, EMBANKMENT, AND HAUL WILL BE CONSIDERED AS INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
- 4. PAVEMENT DROP-OFF POLICY: IF A PAVEMENT DROP-OFF IS CREATED DURING CONSTRUCTION, THE CONTRACTOR SHALL INITIATE PROTECTIVE ACTION IN ACCORDANCE WITH THE NMSHTD'S CURRENT DROP-OFF POLICY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
- 5. THE CONTRACTOR SHALL ADJUST CUT AND FILL SLOPES WHERE NECESSARY TO STAY WITHIN THE RIGHT-OF-WAY OR CONSTRUCTION EASEMENT LIMITS.
- 6. NO MATERIAL PITS HAVE BEEN DESIGNATED FOR THIS PROJECT. THE CONTRACTOR MAY OBTAIN SPECIFICATION BORROW OR SURFACING MATERIAL FROM ANY SOURCE APPROVED BY THE ENGINEER.
- 7. THE CONSTRUCTION CLEAR ZONE FOR THIS PROJECT IS 15 FEET FROM THE EDGE OF THE DRIVING LANE. THE CONTRACTOR SHALL NOT STORE EQUIPMENT OR MATERIAL WITHIN THE CONSTRUCTION CLEAR ZONE UNLESS THE EQUIPMENT OR MATERIAL IS PROPERLY SHIELDED UTILIZING CURRENT SAFETY DESIGN AND INSTALLATION METHODS. THE SAFETY DESIGN FOR SHIELDING SHALL BE PROVIDED BY THE CONTRACTOR AND MUST BE APPROVED BY THE ENGINEER BEFORE IMPLEMENTING. THIS WORK, INCLUDING DESIGN, INSTALLATION AND REMOVAL OF THE SHIELDING, SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.

# 8. DELETED.

- 9. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PROTECT HORIZONTAL AND VERTICAL CONTROL SURVEY MONUMENTS (MARK) FROM DAMAGE PRIOR TO INITIATING CONSTRUCTION. IF DURING THE COURSE OF CONSTRUCTION OPERATIONS, THE CONTRACTOR DISTURBS OR DESTROYS A MARK, THE CONTRACTOR WILL COMPENSATE THE CITY FOR THE COST OF REESTABLISHING A NEW MARK.
- 10.THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS REQUIRED TO COMPLETE THE PROJECT. ADDITIONAL REMOVALS NOT SHOWN ON THE PLANS WILL BE DESIGNATED BY THE ENGINEER. ALL REMOVALS WILL BE PAID UNDER THE APPLICABLE ITEMS AT THE CONTRACT UNIT PRICE.
- 11.SALVAGEABLE MATERIALS FROM THIS PROJECT ARE TO BE HAULED TO AND STOCKPILED AT ALBUQUERQUE CITY TRAFFIC ENGINEERING YARD, ON PINO RD. HAUL AND DELIVERY OF SALVAGED MATERIAL SHALL BE PERFORMED DURING NORMAL WORKING HOURS AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR UNDER ITEM #601000 REMOVALS OF STRUCTURES AND OBSTRUCTIONS. SEE SHEET 3-1 FOR ADDITIONAL REQUIREMENTS.
- 12.ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, UNSUITABLE CONSTRUCTION MATERIALS AND DEBRIS FROM REMOVAL OF STRUCTURES AND OBSTRUCTIONS, ARE TO BE PLACED IN AN ENVIRONMENTALLY SUITABLE DISPOSAL SITE DECIDED UPON AND COORDINATED BY THE CONTRACTOR, WITH THE APPROPRIATE REGULATORY AGENCIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF THE DETAILS OF DISPOSAL OPERATIONS. BORROW MATERIAL, ROCK WASTE, VEGETATIVE DEBRIS, ETC., SHALL NOT BE PLACED IN WETLAND AREAS OR AREAS WHICH MAY IMPACT ENDANGERED SPECIES OR ARCHAEOLOGICAL RESOURCES. AN ARCHAEOLOGICAL SURVEY AND ENVIRONMENTAL CLEARANCE SHALL BE OBTAINED BY THE CONTRACTOR BEFORE DISPOSAL SITES ARE ACCEPTED.
- 13.CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY FOR CONSTRUCTION.
- 14.THE CONTRACTOR SHALL BE REQUIRED TO CONFINE HIS WORK WITHIN THE CONSTRUCTION LIMITS AND/OR RIGHT-OF-WAY LIMITS. PARKING OF PRIVATE VEHICLES SHALL NOT BE ALLOWED ALONG CONSTRUCTION AREA THROUGHOUT CONSTRUCTION LIMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROHIBIT CONSTRUCTION RELATED VEHICLES AND EQUIPMENT FROM DRIVING UPON, ACCESSING OR TURNING ON PRIVATE PROPERTY ADJACENT TO PROJECT WORK AREAS.
- 15.ALL NEW SIGNS AND CODING WILL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS CURRENT EDITION, PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION.
- 16.EXACT LOCATION OF NEW SIGNAL MASTARMS, METER PEDESTAL AND CONTROLLER FOUNDATIONS ARE TO BE DETERMINED IN THE FIELD TO AVOID CONFLICTS WITH EXISTING UTILITIES. COORDINATE WITH CITY TRAFFIC ENGINEERS.

# CONTINUATION OF GENERAL NOTES

- 17.THE CONTRACTOR SHALL BE THE RESPONSIBLE PARTY FOR THE IMPLEMENTATION AND MAINTENANCE OF ALL TRAFFIC CONTROL PROCEDURES, DEVICES AND MATERIALS. THE CONTRACTOR SHALL HAVE PERSONNEL AVAILABLE 24 HOURS PER DAY, 7 DAYS PER WEEK TO INSPECT AND MAINTAIN DETOURS AND TRAFFIC CONTROL DEVICES AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE PAID FOR UNDER ITEM 618000.
- 18.INGRESS AND EGRESS: THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS TO LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE OF AND SCHEDULE ACCESS CLOSURES AT LEAST 24 HOURS IN ADVANCE, WITH PROPERTY OWNERS AND THE PROJECT MANAGER.
- 19.MAINTENANCE OF AS-BUILT PLANS: THE CONTRACTOR SHALL MAINTAIN AN UP-TO-DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLANS SHALL BE KEPT CURRENT, WITHIN TWO WEEKS, AT ALL TIMES AND SHALL BE SUBJECT TO REVIEW BY THE PROJECT MANAGER THROUGHOUT THE PROJECT AND WILL BE REVIEWED BY THE PROJECT MANAGER FOR ACCURACY AND COMPLETENESS AT LEAST ONCE EVERY 30 DAYS. THE FINAL AS-BUILT PLANS SHALL BE SUBMITTED TO THE PROJECT MANAGER PRIOR TO FINAL PAYMENT.
- 20.UTILITY LOCATIONS: THE LOCATION OF THE UTILITIES THAT ARE SHOWN ON THE PLANS HAVE BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATIONS PRIOR TO STARTING WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES, TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. THE CONTRACTOR SHALL CONTACT ONE CALL SYSTEM INC. (TELEPHONE NUMBER 260-1990) FOR LOCATING OF EXISTING UTILITIES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
- 21.DUST CONTROL: THE CONTRACTOR SHALL USE WATER TO CONTROL DUST DURING CONSTRUCTION. THERE SHALL BE NO DIRECT COMPENSATION FOR THIS WORK. THIS WORK WILL TAKE PRECEDENCE OVER ANY OTHER CONSTRUCTION OPERATION.
- 22.SITES: THE CONTRACTOR SHALL OBTAIN NEEDED CAMPSITES, STORAGE SITES, STOCKPILE SITES, AND OFFICE SITES AT LOCATIONS OUTSIDE THE LIMITS OF CITY RIGHT-OF-WAY.
- 23.NEWS MEDIA: THROUGHOUT THE LIFE OF THIS PROJECT, THE CONTRACTOR SHALL KEEP THE LOCAL NEWS MEDIA INFORMED OF LANE CLOSURES WHICH WILL RESTRICT THE NORMAL FLOW OF TRAFFIC. THERE WILL BE NO DIRECT MEASUREMENT OR PAYMENT MADE FOR THESE ADVISORIES.
- 24.PMBP OPERATIONS: THE CONTRACTOR SHALL SUBMIT A PROPOSED PLAN AND MIX DESIGNS FOR PMBP OPERATIONS FOR MINOR PATCHWORK, TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL, AT LEAST TWO (2) WEEKS PRIOR TO COMMENCING PMBP OPERATIONS. PMBP OPERATIONS SHALL NOT BEGIN UNTIL THE PLAN IS APPROVED BY THE PROJECT MANAGER.
- 25.EXISTING PULL BOXES, VALVE BOXES, AND MANHOLE COVERS LOCATED WITHIN THE AREA OF NEW WHEELCHAIR RAMPS OR SIDEWALK SHALL BE ADJUSTED TO MATCH GRADE OF NEW WHEELCHAIR RAMPS OR SIDEWALK. EXISTING CONDUITS WILL BE ADJUSTED ACCORDINGLY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFOR.
- 26.PROJECT MEETINGS SHALL BE HELD IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. APPROXIMATELY FIVE (5) INTERSECTIONS SHALL BE REVIEWED AT EACH MEETING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR 801000 CONSTRUCTION STAKING BY CONTRACTOR. THE PROJECT MANAGER, TRAFFIC ENGINEERING PERSONNEL, AND THE CONTRACTOR SHALL DETERMINE THE FOLLOWING:
  - A. THE EXACT ROUTING OF CABLE THROUGH NEW OR EXISTING CONDUITS AND IDENTIFICATION OF EXISTING CONDUITS TO BE USED, REPAIRED, OR REPLACED.
  - B. LOCATION OF NEW SIGNAL EQUIPMENT INCLUDING CONTROLLER CABINETS AND PULL BOXES.
  - C. WHEELCHAIR RAMP INSTALLATION INCLUDING EXACT LOCATION AND TYPE.
  - D. PULL BOX, VALVE BOX, OR MANHOLE COVER ADJUSTMENTS AND/OR REPLACEMENT.
  - E. TRAFFIC CONTROL STRATEGIES AND ANY CHANGES OR MODIFICATION TO TYPICAL TRAFFIC CONTROL PLANS WHICH ARE REQUIRED TO PERFORM THE PROPOSED CONSTRUCTION SAFELY.

# CONTINUATION OF GENERAL NOTES

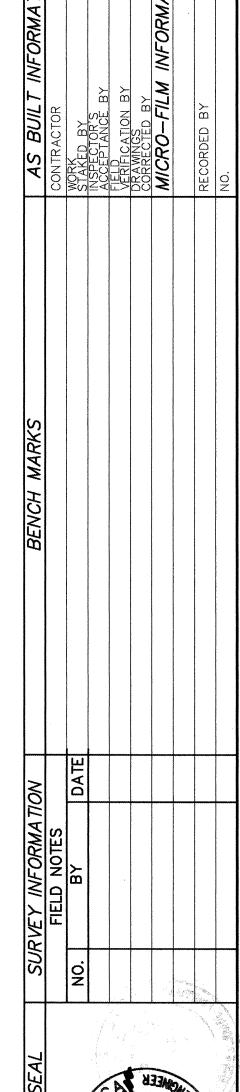
27.MEASUREMENT AND PAYMENT FOR ITEM 608004 — CONCRETE SIDEWALK — 4" WILL BE MADE ON THE FOLLOWING BASIS:

A. SIDEWALK REPLACEMENT TO THE NEAREST JOINT ADJACENT TO NEW PULL BOXES, TRAFFIC MANHOLES, AND EQUIPMENT FOUNDATIONS WILL BE CONSIDERED INCIDENTAL TO THE PULL BOX, MANHOLE, OR FOUNDATION.

B. SIDEWALK REPLACEMENT FOR THE INSTALLATION OF NEW RIGID ELECTRICAL CONDUITS WILL BE CONSIDERED INCIDENTAL TO THE CONDUIT.

C. SIDEWALK REPLACEMENT TO THE NEAREST JOINT FOR NEW WHEELCHAIR RAMPS WILL BE MEASURED AND PAID BY THE SQUARE YARD.

- 28.BORING, DRILLING, PUSHING, TRENCHING, AND PATCHING, INCLUDING REMOVAL AND REPLACEMENT OF ASPHALT AND CONCRETE PAVEMENT, SIDEWALKS, DRIVEPADS, VALLEY GUTTERS, CURB AND GUTTER, AND LANDSCAPING (INCLUDING SPRINKLERS) FOR THE INSTALLATION OF CONDUITS, PULL BOXES, TRAFFIC MANHOLES, AND EQUIPMENT FOUNDATIONS SHALL BE CONSIDERED INCIDENTAL TO THE CORRESPONDING CONTRACT ITEMS FOR CONDUITS, PULL BOXES, AND FOUNDATIONS.
- 29.ALL CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO NEW CONDUITS, PULL BOXES, CONTROLLER CABINETS, RELOCATED MASTARM AND PEDESTAL POLES OR OTHER EQUIPMENT SHALL BE LOCATED WITHIN THE EXISTING CITY RIGHT-OF-WAY.
- 30.THE CONTRACTOR SHALL ARRANGE TO HAVE AN OFF-DUTY POLICE OFFICER PRESENT TO DIRECT TRAFFIC WHENEVER POWER TO SIGNALS IS TURNED OFF. REIMBURSEMENT FOR THE OFF-DUTY POLICE OFFICER SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLATION OF NEW SIGNAL CONTROLLERS.
- 31.ALL CONCRETE TO BE USED FOR THIS PROJECT SHALL CONFORM TO THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, EDITION 1986, INCLUDING UPDATES ONE THROUGH SIX. PAID UNDER ITEM # 511000.
- 32.FOR THE PURPOSES OF THIS CONTRACT, THE TERMS "PROJECT MANAGER" AND "ENGINEER" ARE TO BE SYNONYMOUS.
- 33.THE CONTRACTOR SHALL COMPLY WITH THE CITY OF ALBUQUERQUE'S "ORANGE BARREL POLICY" PW-021, DATED AUGUST 1, 1994. SEE SHEET 4-1 FOR REQUIREMENTS. ALL COSTS TO CONFORM TO THIS POLICY SHALL BE INCLUDED IN THE CONTRACTOR'S LUMP SUM BID FOR ITEM 618100 SPECIAL CITY TRAFFIC CONTROL REQUIREMENTS.
- 34.MINIMUM TESTING REQUIREMENTS SHALL CONFORM TO THE CITY OF ALBUQUERQUE GUIDELINES.
- 35.ERADICATION OF CROSSWALK MARKINGS SHALL BE PERFORMED AS DIRECTED BY THE PROJECT MANAGER, PAYMENT SHALL BE UNDER ITEM # 601000.



ᅬ		4
ントイ	CH NEER	W)
と	0000	
<b>ENGINEER</b> N	S E S E S E S E S E S E S E S E S E S E	
T S C	PE GST	ENCO!
	J. S.	
- 1		

			REMARKS	DESIGN	DATE	DATE	DATE
					(LB	DS, DS	CP, RR
-			NO.   DATE		DESIGNED BY RLB		
			NO.		DESIGN	DRAWN BY	CHECKED BY
QU	E						

FOR INFORMATION ONLY

CITY OF ALBUQUERQUE	
PUBLIC WORKS DEPARTMENT	
ENGINEERING DEVELOPMENT GROUP	
DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SYSTEM EXPANS	NOIE
PHASE THREE A	

ENGINEERING, INC.

Civil Structural Transportation

5801 OSUNA RD. NE — Suite 200
Albuquerque, NM 87109 — (505) 881-5357

		PHASE	THREE	Α		
	GENE	RAL NOTES &	INCID	ENTAL	ITEMS	
	DESIGN REVIEW COMMITTEE OCT - 7 1996	CITY ENGINEER APF	PROVAL		MO./DAY/YR.	MO./DAY/YR.
	DESIGN REVIEW COMMITTEE					
En accession	DRAWING NO. 53	361.91	MAP	NO.	SHEET	1-5
			1			

### THE FOLLOWING ITEMS REQUIRE SPECIAL ATTENTION:

1. EARTH DISTURBANCE AND REMOVAL OF EXISTING VEGETATION TO BE CONFINED TO CONSTRUCTION LIMITS. CONTROL OF SEDIMENT AND REVEGETATION OF ALL DISTURBED AREAS SHALL CONFORM TO THE EROSION AND SEDIMENT CONTROL PLANS.

# BITUMINOUS MATERIAL WASTE DISPOSAL

2. THE CONTRACTOR SHALL PROPERLY HANDLE AND DISPOSE OF ALL ASPHALT PAVEMENT MATERIAL REMOVED ON THE PROJECT BY HAULING TO AN APPROVED LANDFILL IN ACCORDANCE WITH THE REGULATIONS OF THE NEW MEXICO SOLID WASTE ACT. PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR ITEM 601000

#### WASTE DISPOSAL REQUIREMENTS

3. ITEMS DESIGNATED FOR REMOVAL WITHOUT SALVAGE, UNSUITABLE CONSTRUCTION MATERIALS AND DEBRIS FROM CLEARING AND GRUBBING, ARE TO BE PLACED IN AN ENVIRONMENTALLY SUITABLE DISPOSAL SITE SECURED AND COORDINATED BY THE CONTRACTOR, WITH THE APPROPRIATE REGULATORY AGENCIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, OF THE DETAILS OF THE DISPOSAL OPERATIONS. BORROW MATERIAL, ROCK WASTE, VEGETATIVE DEBRIS, ETC., SHALL NOT BE PLACED IN WETLAND AREAS OR AREAS WHICH MAY IMPACT ENDANGERED SPECIES FOR ARCHAEOLOGICAL RESOURCES. AN ARCHAEOLOGICAL SURVEY AND ENVIRONMENTAL CLEARANCE SHALL BE OBTAINED BY THE CONTRACTOR BEFORE DISPOSAL SITES ARE ACCEPTED.

# HAZARDOUS SPILLS REQUIREMENTS

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING AND CLEANUP OF SPILLS ASSOCIATED WITH PROJECT CONSTRUCTION AND SHALL REPORT AND RESPOND TO SPILLS OF HAZARDOUS MATERIALS SUCH AS GASOLINE, DIESEL, MOTOR OILS, SOLVENTS, CHEMICALS, TOXIC AND CORROSIVE SUBSTANCES, AND OTHER MATERIALS WHICH MAY BE A THREAT TO PUBLIC HEALTH OR THE ENVIRONMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPORTING PAST SPILLS ENCOUNTERED DURING CONSTRUCTION AND OF CURRENT SPILLS NOT ASSOCIATED WITH CONSTRUCTION. REPORTS SHALL BE MADE IMMEDIATELY TO THE OWNER OR ENGINEER.

# WATER QUALITY

5. ALL WORK IN THE VICINITY OF LIVE STREAMS, WATER IMPOUNDMENTS, WETLANDS OR IRRIGATION SUPPLIES SHALL BE EFFECTED IN SUCH A MANNER AS TO MINIMIZE VEGETATION REMOVAL, SOIL DISTURBANCE AND EROSION. CROSSINGS OF LIVE STREAMS WITH HEAVY EQUIPMENT SHALL BE MINIMIZED, AS DETERMINED BY THE CONSTRUCTION PROJECT MANAGER. EQUIPMENT REFUELING, MAINTENANCE AND CEMENT DUMPING IN THE VICINITY OF WATER COURSES ARE STRICTLY PROHIBITED AND SHALL BE PERFORMED IN PROPER CONTAINMENT AREAS.

# REVEGETATION AND EROSION CONTROL

- 6. THE CONTRACTOR SHALL STRICTLY ADHERE TO THE REVEGETATION AND EROSION CONTROL PLAN AS SHOWN IN THIS PLAN SET. ALL DEVIATIONS FROM THIS PLAN MUST HAVE PRIOR APPROVAL OF THE ENGINEER: THE USE OF EROSION CONTROL MEASURES SHALL BE INCLUDED IN ACCORDANCE WITH THE NPDES GENERAL PERMIT COMPLIANCE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NEW MEXICO WATER QUALITY ACT AND APPLICABLE CLEAN WATER ACT PERMITS AND REGULATIONS.
- 7. THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY, INCLUDING THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEMS (NPDES) PROGRAM. FOR INFORMATION, CONTACT MR. LOREN MEINZ C.O.A. PUBLIC WORKS, HYDROLOGY DEPARTMENT, AT 768—3654.
- 8. THE AIR POLLUTION CONTROL REGULATION OF THE ALBUQUERQUE—BERNALILLO COUNTY AIR QUALITY CONTROL BOARD LIMIT EMISSIONS OF PARTICULATE MATTER AND THE USE OF CUT BACK ASPHALT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CLARIFY THESE RESTRICTIONS WITH THE ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO SUBMITTAL OF BIDS TO AVOID CONFLICT WITH THE REGULATIONS. CALL THE ENVIRONMENTAL HEALTH DEPARTMENT AT 768–2600.
- \* NO REVEGETATION AND EROSION CONTROLL PLANS ARE PROVIDED IN THIS PLANSET.

#### CONSTRUCTION MONITORING FOR PETROLEUM-IMPACTED SOILS

- 9. THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR FOUR (4) INTERSECTIONS PREVIOUSLY IDENTIFIED AND ASSESSED:
  - 1) WYOMING AND COMANCHE
  - 2) WYOMING AND CANDELARIA
  - 3) JUAN TABO AND CANDELARIA
  - 4) EUBANK AND INDIAN SCHOOL

IN ORDER TO DETERMINE WHETHER PLANNED EXCAVATION AREAS HAVE BEEN IMPACTED BY PETROLEUM HYDROCARBONS FROM NEIGHBORING SITES, THE CITY OR THEIR DESIGNATED ENVIRONMENTAL CONSULTANT SHALL PERFORM TARGETED CONSTRUCTION MONITORING. CITY PERSONNEL OR THE ENVIRONMENTAL CONSULTANT PERFORMING CONSTRUCTION MONITORING SHALL: 1) BE FAMILIAR WITH NEW MEXICO ENVIRONMENT DEPARTMENT (NMED) UNDERGROUND STORAGE TANK BUREAU (USTB) REGULATIONS AND REQUIREMENTS, 2) BE FAMILIAR WITH THE OPERATION OF PID OR FID EQUIPMENT, AND 3) BE TRAINED AS A HAZARDOUS MATERIALS SITE WORKER, HAVING SUCCESSFULLY COMPLETED AT LEAST THE 40-HOUR COURSE MANDATED BY OSHA REGULATION 1910.120. THE CITY OR THE ENVIRONMENTAL CONSULTANT SHALL USE A PHOTO-IONIZATION DETECTOR (PID) OR FLAME IONIZATION DETECTOR (FID), CALIBRATED TO 100 PPM ISOBUTYLENE. TO SCREEN SOIL SAMPLES FOR HYDROCARBON IMPACTS AT THE ABOVE-REFERENCED INTERSECTIONS. THE FIELD SCREENING METHODOLOGY SHALL BE THE JAR HEADSPACE METHOD, CODIFIED IN THE NMED USTB REGULATIONS (USTR) APPENDIX C.

IF IMPACTED SOILS ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL CEASE WORK IN THE AREA OF THE IDENTIFIED IMPACT AND NOTIFY THE ENGINEER. LIMITED CLEANUP OF THE IMPACTED AREA WILL BE REQUIRED PRIOR TO CONTINUANCE OF CONSTRUCTION ACTIVITIES, AND SHALL BE DIRECTED BY THE ENGINEER WITH CONCURRENCE FROM THE CITY AND THE ENVIRONMENTAL CONSULTANT. IF FIELD SCREENING INDICATES IMPACTS ABOVE REGULATORY LEVELS (100 PPM BY PID OR FID), IMPACTED SOILS WILL BE SEGREGATED, STAGED ON IMPERVIOUS PLASTIC LINERS OR 55 GALLON DOT-APPROVED DRUMS, AND MOVED TO A STORAGE SITE FOR LABORATORY ANALYSIS AND ULTIMATELY, APPROPRIATE DISPOSAL. DISPOSAL OF IMPACTED SOILS WILL BE DETERMINED FOLLOWING LABORATORY ANALYSIS. BUT WILL PROBABLY INVOLVE DISPOSAL AT A NMED-APPROVED LANDFARM. ALL WASTE MANIFESTS SHALL BE SIGNED BY EITHER A REPRESENTATIVE OF THE CITY, OR THE ENVIRONMENTAL CONSULTANT WITH EXPRESSED WRITTEN CONSENT OF THE CITY.

COSTS FOR HANDLING AND DISPOSING OF IMPACTED SOILS WILL BE APPROVED AS NEEDED BY THE CITY. NO EXPENDITURES FOR ASSESSMENT, CLEANUP, OR DISPOSAL WILL BE INCURRED WITHOUT PRIOR APPROVAL BY THE CITY.

ENVIRONMENTAL PROGRAM MANAGER

	AS BUILT INFORMA	CONTRACTOR	WORK STAKED BY INSPECTOR'S	ACCEPTANCE BY FIELD VERIFICATION BY	DRAWINGS CORRECTED BY	MICRO-FILM INFORM		RECORDED BY	NO.
	BENCH MARKS								
	SURVEY INFORMATION	FIELD NOTES	NO. BY DATE						
	ENGINEER'S SEAL		CASE DA		- Marks Age	AND CONTRACT OF STREET	るかが、メート	Secretary of the second	of Comme
				REMARKS BY		DESIGN	DATE	DATE	DATE
FOR INFORMATION ONLY  ENGINEERING, INC.  Civil Structural Transportation  5801 OSUNA RD. NE — Suite 200  Albuquerque, NM 87109 — (505) 881—5357  CITY OF ALBUQUERQUERQUERQUERQUERQUERQUERQUERQUERQUE				NO. DATE			DESIGNED BY	DRAWN BY	CHECKED BY
PUBLIC WORKS DEPARTI ENGINEERING DEVELOPMENT DOWNTOWN/CITYWIDE TRAFFIC COI SYSTEM EXPANSION PHASE THREE A ENVIRONMENTAL GENERAL OCT - 7 1996 CITY ENGINEER APPROVAL	T GI NPU N	ROU ITE ITE	R S				/DA	Y/\	ſŖ.
DRAWING NO. 5361.91 MAP NO.		Sŀ	HEE"	Γ	1-	-6			

#### INCIDENTAL ITEMS \*\*

- 1. EARTHWORK INCLUDING EXCAVATION, BORROW, HAUL AND EMBANKMENT. SEE GENERAL NOTE 3 ON SHEET 1-5.
- 2. PROTECTIVE ACTION ASSOCIATED WITH NMSHTD DROP OFF POLICY. SEE GENERAL NOTE 4 ON SHEET 1-5.
- 3. DESIGN, MATERIALS, INSTALLATION AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL. SEE GENERAL NOTE 7 ON SHEET 1-5.
- 4. HAULING OF MATERIAL TO BE DISPOSED OR SALVAGED. SEE GENERAL NOTE 10, 11 AND 12 ON SHEET 1-5.
- 5. MAINTENANCE OF "AS-BUILT" PLANS. SEE GENERAL NOTE 19 ON SHEET 1-5.
- 6. REMOVAL, SALVAGE AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD. SEE GENERAL NOTE 11 ON SHEET 1-5 AND TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS NOTE 3 ON SHEET 3-1.
- 7. CONTRACTOR COORDINATION WITH UTILITIES AND LOCATION OF UTILITY LINES INCLUDING EXPLORATORY TRENCHING. SEE GENERAL NOTE 20 ON SHEET 1-5.
- 8. APPRISING PUBLIC THROUGH THE LOCAL NEWS MEDIA. SEE GENERAL NOTE 23 ON SHEET 1-5.
- 9. IN-KIND REPLACEMENT OF PMBP SURFACING INCLUDING BASE COURSE AND SUBGRADE PREPARATION FOR WHEELCHAIR RAMP. PMBP PLAN AND MIX DESIGN. SEE GENERAL NOTE 24 ON SHEET 1-5.
- 10.ADJUSTMENTS OF MANHOLES AND PULL BOXES TO GRADE. SEE GENERAL NOT 25 ON SHEET 1-5.
- 11.BORING, DRILLING, PUSHING, TRENCHING, AND PATCHING INCLUDING SAWCUTTING, REMOVAL, AND REPLACEMENT OF ASPHALT AND CONCRETE PAVEMENT, SIDEWALKS, DRIVEPADS, VALLEY GUTTERS, WHEELCHAIR RAMPS, CURB & GUTTER AND LANDSCAPING (INCLUDING SPRINKLERS). FOR INSTALLATION OF CONDUITS, PULL BOXES, TRAFFIC MANHOLES, AND EQUIPMENT FOUNDATIONS, SEE GENERAL NOTES 27, 28, AND 29 ON SHEET 1-5.
- 12.0FF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL. SEE GENERAL NOTE 30 ON SHEET 1-5.
- 13.SUBMITTAL OF PROTOTYPE TRAFFIC SIGNAL CONTROLLER CABINETS FOR APPROVAL AND MODIFICATIONS OF CABINETS IF REQUIRED. SEE NOTE 17 ON SHEET 3-1.
- 14.MINOR CONTROLLER CABINET GROUNDING IMPROVEMENT. SEE NOTE 18 ON SHEET 3-1.
- 15.SPLICE BARS, LOAD SWITCHES AND CONFLICT MONITORS FOR TRAFFIC CONTROL CABINETS. SEE TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS. NOTE 1 ON SHEET 3-1.
- 16.EQUIPMENT MANUFACTURER'S FIELD ASSISTANCE, SET—UP, TESTING, AND TRAINING FOR THE EMERGENCY VEHICLE PRE—EMPTION EQUIPMENT. SEE TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS NOTE 2 ON SHEET 3-1.
- 17.CABLE TESTING AND DIAGRAMS.
- 18. TEST EMITTER FOR CITY TRAFFIC ENGINEERING.
- 19.METER PEDESTAL CONCRETE FOUNDATIONS INCLUDING EXCAVATION AND BACKFILL, CONCRETE, AND ANCHOR BOLTS COMPLETE IN PLACE SEE GENERAL NOTE 11 ON SHEET 3—15.

\*\*ITEMS LISTED ABOVE 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.

# TECHNICAL SPECIAL PROVISIONS

\*FOR DIVISION 100 - GENERAL PROVISIONS (6/1/95)

\*FOR CITY OF ALBUQUERQUE TRAFFIC CONTROL REQUIREMENTS. SECTION 618 (7-3-96)

\*FOR SECTION 702A - TRAFFIC CONTROL PLAN (3/28/95)

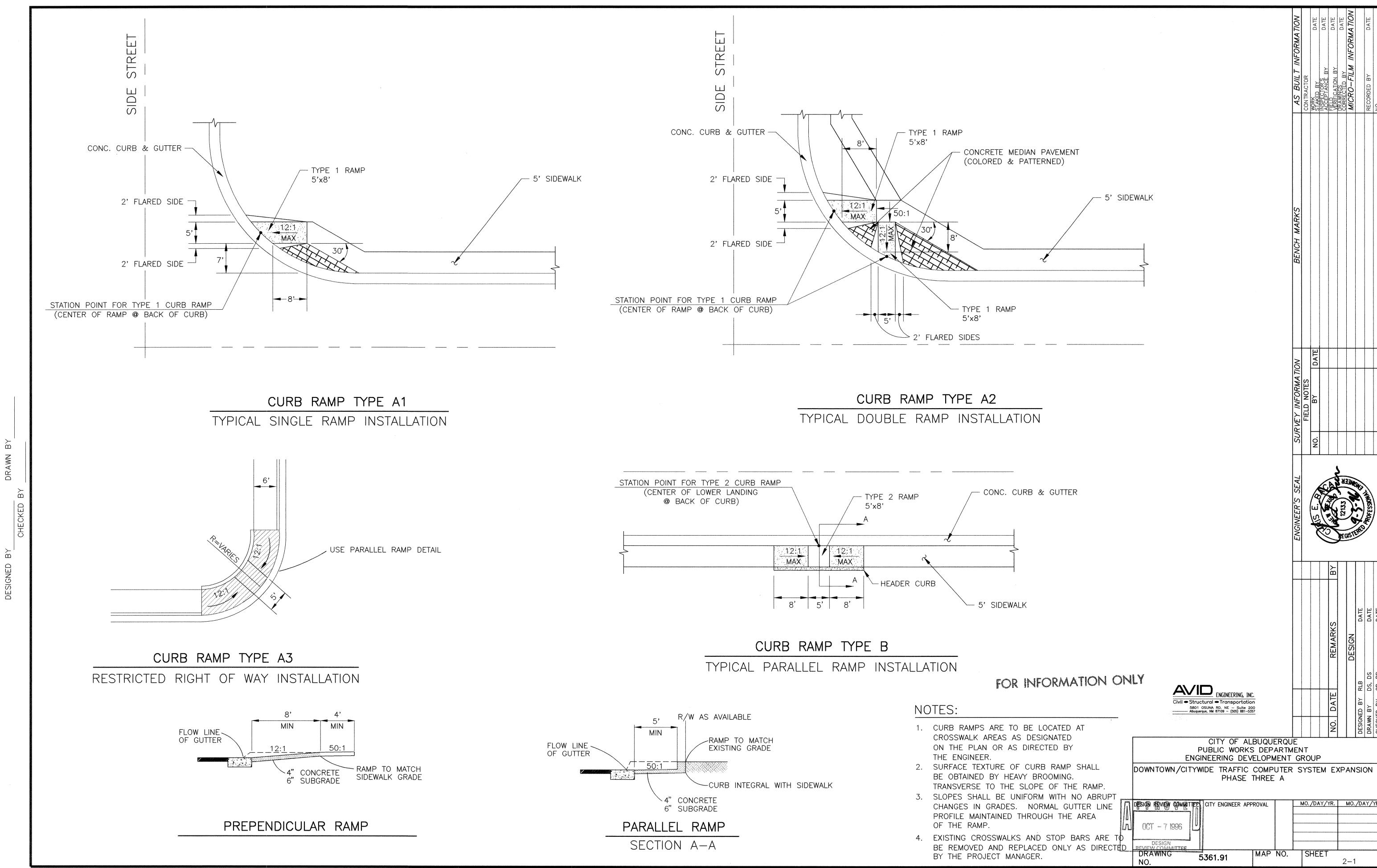
\*MODIFYING SECTION 714 - TRAFFIC SIGNAL CONTROLLERS (7/3/95)

\*THESE SPECIAL PROVISIONS WERE DEVELOPED SPECIFICALLY FOR THIS PROJECT AND SUPERCEDE OTHER STANDARD SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS.

SUPPLEMENTAL SPECIFICATON

SECTION 101 - PORTLAND CEMENT CONCRETE

		AS BILL T INFORMAT	CONTRACTOR		NOSEPTANCE BY FIELD VIERISCATION BY	DRAWINGS CORRECTED BY	MICRO-FILM INFORMA	RECORDED BY	NO.
		RENCH MARKS							
		CLIBVEY INFORMATION	FIELD NOTES	NO. BY DATE					
		ENICINIEED'S SEA!					STEP STEP		2003
FOR INFORMATION ON	LY				RFMARKS	_	DESIGN	DATE	DATE
ENGINEERING, IN  Civil - Structural - Transportal  5801 OSUNA RD. NE - Suite  Albuquerque, NM 87109 - (505) 881-	200 -5357	ERQUE			NO. DATE	-	DESIGNED BY		CHECKED BY
PUBLIC WORKS ENGINEERING DEVE  DOWNTOWN/CITYWIDE TRAISYSTEM EX SYSTEM EX SPECIAL PROVISIONS, AND INCIDEN  DESIGN REVIEW COMMITTEE CITY ENGINEER APPR  OCT - 7 1996  DESIGN	DEPA ELOPM FFIC XPAN: SUPP NTAL	ARTME  MENT (  COMPL  SION  LEMEN	INT GRO JTE	R:	SIGN		мо. /г	DAY/	<u>′YR.</u>
DRAWING NO. 5361.91	MAP	NO.		HE	ĒΤ	1 ·	<u>-7</u>		



E:\COASIG\planset\MD-CURB 5-24-96 11:54:39 AM MDT

# TRAFFIC SIGNAL NOTES

- 1. ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, AND THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS.
- 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 AMERICAN WITH DISABILITIES ACT (ADA). THE CONTRACTOR SHALL MEET WITH THE CITY 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. COLOR CODING FOR INDIVIDUAL CONTROLLERS WILL BE FURNISHED TO THE CONTRACTOR BY THE CITY. ALL COMMUNICATION CABLES SHALL BE TERMINATED BY THE CONTRACTOR. SPLICING FOR TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES.
- 6. 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.
- 7. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS (857-8000) TWO WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS ARE SHUT OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL CABINET DOOR IS OPENED.
- 8. 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.
- 9. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
- 10.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.
- 11.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.
- 12.FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES. THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER WIRE #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
- 13. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
- 14.EXISTING CONDUITS TO BE ABANDONED IN PLACE SHALL HAVE ALL WIRING REMOVED.
- 15.EXISTING CONDUITS SHALL BE REPAIRED AND/OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHEREVER ELECTRICAL PULL BOXES ARE INSTALLED, REPLACED, OR ADJUSTED TO GRADE. EXISTING SIGNAL CABLES ARE TO BE ADJUSTED BY THE CONTRACTOR AS APPROVED BY THE PROJECT MANAGER.
- 16.EXISTING ELECTRICAL PULL BOXES AND CONDUITS THAT ARE DAMAGED SHALL BE REMOVED AND/OR REPLACED AS DIRECTED BY THE PROJECT MANAGER. REMOVALS WILL BE CONSIDERED INCIDENTAL. NEW PULL BOXES AND CONDUITS WILL BE MEASURED AND PAID UNDER THE APPROPRIATE CONTRACT ITEMS.

17.PROTOTYPE "P" CONTROLLER CABINETS (WITH MONITORS, LOAD SWITCHES, DETECTORS, AND CONTROLLER) SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS SHOP ON PINO ROAD NE FOR REVIEW AND APPROVAL BEFORE MANUFACTURING STARTS ON THE REMAINING CABINETS. ANY MODIFICATIONS REQUIRED BY THE CITY DURING THE PROTOTYPE REVIEW WILL BE CONSIDERED INCIDENTAL AND NO CONTRACT PRICE INCREASE WILL BE ALLOWED. WHEN THE PROTOTYPE CABINETS ARE APPROVED, THE CONTRACTOR SHALL SCHEDULE DELIVERY OF APPROXIMATELY FIVE TO TEN CABINETS PER WEEK TO THE CITY FOR RANDOM TESTING. ONE CABINET OF EACH SIZE SHALL BE DELIVERED BY THE CONTRACTOR TO THE NMSHTD SIGNAL LABORATORY IN SANTA FE FOR TESTING. WHEN NMSHTD TESTING IS COMPLETE, THE CONTRACTOR SHALL PICK UP THE CABINETS IN SANTA FE AND DELIVER TO THE CITY TRAFFIC ENGINEERING SHOP ON PINO ROAD NE IN ALBUQUERQUE. THESE CABINETS SHALL BE RETAINED BY THE CITY FOR ADDITIONAL SHOP

- 18. THE EXISTING POWER SERVICE AND GROUNDING AT EACH LOCATION SCHEDULE FOR CONTROLLER CABINET REPLACEMENT SHALL BE REVIEWED BY THE CONTRACTOR AND THE CITY. MINOR ALTERNATIONS REQUIRES BY THE CITY WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT. MAJOR ALTERATIONS INCLUDING REMOVAL AND REPLACEMENT OF METER PEDESTALS, RISERS, CONDUITS, AND WIRING WILL BE MEASURED AND PAID UNDER THE APPROPRIATE CONTRACT ITEMS.
- 19.PEDESTRIAN PUSH BUTTON STATIONS ARE TO BE REPLACED FOR COMPLIANCE TO ADA REQUIREMENTS (MOUNTING HEIGHT AND PUSH STRENGTH) AND POSITIONED TO PROPER MOUNTING HEIGHT AS DIRECTED BY THE PROJECT MANAGER.
- 20. VEHICLE LOOP DETECTORS WHICH ARE NOT FUNCTIONING PROPERLY OR ARE DAMAGED DURING INSTALLATION OF NEW CURB RAMPS SHALL BE REPLACED. PAYMENT FOR THIS WORK SHALL BE UNDER APPROPRIATE ITEM NUMBERS.

# TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

1. THIS PROJECT IS AN EXPANSION OF EXISTING SIGNAL SYSTEMS. THEREFORE, THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:

# MULTISONICS EXPANSION

- A. ALL TRAFFIC SIGNAL CONTROLLERS SUPPLIED FOR THIS EXPANSION SHALL BE MULTISONICS 820A VMS WITH THE ABILITY TO INTERFACE WITH THE IVMS CENTRAL EQUIPMENT.
- CONTROLLER CABINETS SHALL BE MULTISONICS EIGHT PHASE "P" CABINETS WITH DETECTION AS INDICATED IN THE PLANS AND SPECIAL PROVISIONS. (SEE NOTE 17, THIS SHEET)
- C. SUPPORTING HARDWARE FOR THE VMS-
  - 2-VMS HARD COPY TERMINALS
  - a) PARALLEL PRINTER #E0446
  - b) ADDS TERMINAL MONITER # EO436 c) PARALLEL PRINTER CABLE #E0489
  - d) SERIAL PRINTER #007157-15
  - e) HIGH RESOLUTION COLOR SCANNER
  - SHALL BE INCIDENTAL TO CONTROLLER EQUIPMENT

# ECONOLITE EXPANSION

- A. ALL TRAFFIC SIGNAL CONTROLLERS SUPPLIED FOR THIS EXPANSION SHALL BE ECONOLITE ASC2-2100.
- B. CONTROLLER CABINETS SHALL BE ECONOLITE EIGHT PHASE "P" CABINETS WITH DETECTION AS INDICATED IN THE PLANS AND SPECIAL PROVISIONS. (SEE NOTE 17 THIS SHEET)
- C. SYSTEM MASTERS SHALL BE ECONOLITE ASC2/M
- D. SYSTEM SOFTWARE SHALL BE ECONOLITE ARIES CENTRAL SOFTWARE. SOFTWARE SHALL BE INCIDENTAL TO SYSTEM MASTERS

INCLUDED WITH SOFTWARE SHALL BE

- TRAINING 24HRS INITIAL/8HR FOLLOW UP BY ECONOLITE PERSONNEL
- INSTALLATION BY ECONOLITE PERSONNEL EXISTING DATA UPDATE / TRANSFER TO ARIES SYSTEM BY ECONOLITE PERSONNEL BYLINK VIDEO INTERFACE UNIT
- 2-COMPUTERS WORK STATIONS W/FURNITURE
- WORK STATIONS SHALL HAVE THE FOLLOWING:
- INTEL 266 MHz PENTIUM II PROCESSOR • 32 MB DRAM
- 256K INTERNAL CACHE
- 5 GB HARD DRIVE W/READ/WRITE CD BACKUP
- GRAPHIC ACCELERATOR
- 16 X CD ROM DRIVE
- 21" COLOR MONITOR SVGA HIGH DEFINITION SOUND CARD & PERIPHERAL OUTPUT DEVICES
- 104 ERGONOMIC KEYBOARD
- MS WINDOWS NT 4.0 OR LATEST OPERATING SYSTEM
- MS OFFICE 97 PROFESSIONAL EDITION • HIGH RESOLUTION COLOR LASER JET PRINTER

NOTE E. GPS RECEIVER AND SUPPORT EQUIPMENT INCIDENTAL TO SYSTEM MASTERS:

2-HAND HELD GPS RECEIVERS AND SUPPORT EQUIPMENT TO MEET THE FOLLOWING REQUIREMENTS:

- MINIMUM OF 10 ACTIVE CHANNELS
- MINIMUM 8 HOURS CONTINUOUS DATA STORAGE AT 1 SECOND INTERVALS
- CAPABLE OF TRACKING 8 SATELLITES MINIMUM
- MINIMUM 0.5 METER ACCURACY
- CAPABLE OF REFERENCING STATE PLANE COORDINATES MINIMUM OF 80 CHARACTERS PER ATTRIBUTE DATA LABEL
- DATA UPLOADING, INCLUDING ATTRIBUTE DATA, CAPABILITY
- CAPABLE OF RTCM AND POST PROCESSED DIFFERENTIAL CORRECTIONS
- RS232 PORT FOR DATA TRANSFER MINIMUM INTERNAL STORAGE OF 500 POSITIONS
- INCLUDE STANDARD CODE DIFFERENTIAL SOFTWARE SUB-METER ANTENNA KIT W/12 VOLT ADAPTER
- SUB-METER PROCESSING SOFTWARE
- CARTEGRAPH SYSTEMS SIGNALVIEW AND SIGNVIEW SOFTWARE - PC BASED (WINDOWS NT/95) SOFTWARE FOR PLANNING, PROCESSING AND OUTPUT TO GIS
- (ARCINFO FORMAT) OR CAD FORMATS
- 12 CHANNEL DGPS REFERENCE RECEIVER STATION W/MULTIPATH ANTENNA AND CABLING
- 2 HIGH RESOLUTION DIGITAL COLOR IMAGE CAPTURING DEVICES WITH MULTIPLE IMAGE STORAGE CAPABILITY AND DOWNLINK CABLING AND SOFTWARE
- PC WORKSTATION FURNITURE FOR STATION AND NECESSARY EXTERNAL POWER CABLES
- PC BASED (WINDOWS NT/95 SIGNAL PROCESSING AND CONTROL SOFTWARE 16 HOURS ON SITE TRAINING TO BE CONDUCTED AFTER VENDOR CERTIFIED INSTALLATION COMPLETE (WILL BE SCHEDULED BY TRAFFIC ENGINEERING PERSONNEL AND MAY BE BROKEN INTO 2 SESSIONS)
- ALL REQUIRED LICENSES AND WARRANTIES TO BE OBTAINED IN THE CITY OF ALBUQUERQUE'S NAME BY VENDOR CERTIFIED INSTALLING CONTRACTOR. ALL WARRANTIES AND LISCENSES IN THE CITY'S NAME
- TO BECOME EFFECTIVE NO SOONER THAN THE DATE THAT ACCEPTANCE OF GPS EQUIPMENT 90 DAYS UNLIMITED TELEPHONE SUPPORT FROM VENDOR OR APPROVED AGENT
- 2. 3M "OPTICOM" MODEL 562 PHASE SELECTORS, MOUNTED ON 3M "OPTICOM" MODEL 360 RACKS OR APPROVED EQUAL. ALL RACKS SHALL BE CAPABLE OF PROVIDING FOUR CHANNELS OF DETECTION. PHASE SELECTOR MODULES SHALL BE CAPABLE OF TWO CHANNELS OF DETECTION EACH. 3M "OPTICOM" MODEL 511 OPTICAL DETECTORS, SINGLE DIRECTION, SINGLE CHANNEL (1D/1C) OR APPROVED EQUAL "OPTICOM" MODEL 138 DETECTOR CABLE APPROVED EQUAL. 3M MANUFACTURER'S REPRESENTATIVES SHALL PROVIDE FIELD ASSISTANCE DURING INSTALLATION, SET-UP, TESTING, AND A ONE-DAY TRAINING SESSION FOR UP TO 20 CITY AND NMSHTD PERSONNEL. A TEST EMITTER AND CONNECTING CABLES SHALL BE FURNISHED TO THE CITY TRAFFIC ENGINEERING OPERATIONS COMPUTER BUILDING ON WYOMING BOULEVARD NE, (505-291-6220).
- 3. EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE SALVAGED AS FOLLOWS:
  - A. ALL EXISTING CONTROLLERS, CABINETS, LOAD SWITCHES, DETECTORS (SHELF AND RACK MOUNTED), INTERSECTION MONITORS, POLES, AND OTHER SIGNAL EQUIPMENT SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS YARD ON PINO ROAD NE.
  - B. THE CONTRACTOR SHALL PREPARE ITEMIZED DESCRIPTIONS OF ALL EQUIPMENT SALVAGED FOR CITY REVIEW APPROVAL AND RECORD KEEPING. THE CONTRACTOR SHALL CONTACT THE CITY'S TRAFFIC ENGINEERING OPERATIONS OFFICE AT 505-857-8000 TO MAKE APPOINTMENTS FOR SALVAGE EQUIPMENT DELIVERY.

# UTILITY OWNERS

PNM - JIM VANN 848-3426 GAS CO. - TIM CYNOVA 761-7775 JONES INTERCABLE - KAREN SHORE 761-6220 US WEST COMMUNICATIONS - MARY ANN REYES 245-6296 AT & T - ISHMAEL PANIOJA 842-2806 WATER AND SANITARY SEWER - 768-2718

			SURVEY INFORMATION	FIELD NOTES	NO. BY DATE							
			ENGINEER'S SEAL		T S I		CA CAST	(2) (2) (2) (3) (4)	THE STATE OF THE S	100 X 100 M	A SOSSON	
		-				CB	ВХ					
						ATE SPECIFCATIONS	REMARKS		DESIGN	DATE	DATE	DATE
ENGINEERING,  Civil Structural Transporte  5801 OSUNA RD. NE — Suit  Albuquerque, NM 87109 - (505) 88	ation					UPD	NO.   DATE			DESIGNED BY	DRAWN BY	CHECKED BY
CITY OF AL PUBLIC WORKS ENGINEERING DEV	S DEPA	RTM	IEN		UP	)						
	****	СОМ		***************************************			GN	AL	•			
PHASE	EXPANS THREE	Α										
SYSTEM E	EXPANS THREE L NOTE	Α		иО.,	/DA	Y/^	ſR.	<u> </u>	MO.,	/DA	<u>\Y/`</u>	YR.

OMANIEN MANIEN IN INSTANC	endgrammumananawa	and franciscos sons sons summinos menos menos consensamente menos consensamente menos menos menos consensamente	de de la company	t to the same and	analeenmanananananananananananananananananan	Б Б Б В Висиниятикального пинитенский пинистический пинис	ginaanin oo kaan oo ka	мининектопненняющиминентопненняющим	# # # ################################	sertte caernemmunummeraenurmen aurumme	y y generalise anno anno anno anno anno anno anno ann	decomensionementementementementementementementeme	erdfirmennumennumennumennumennumennumennumenn	economicanamente de la compania de l	en erannan namunan sakanan manan	CLEPRE-		ико о опинивання приказання принага пр	anunganannananannannannannannannannannannan
sumanamanamanama	andpasamanamanaa		Traffic A	Actuated	Contr	olle r	liganamin vanaminaminaminamine variane ammanina	mancamuran na mananan maranan na mananan na m	ally monamentaminamen	Nev	umanuperesures no conservante no conservante no conservante no conservante no conservante no conservante no co	anaansamuunin ka	and parameter and a second and a	Existing	and Nev		agunanaumananananananananananan K	enteranteranteranteranteranteranteranter	o Optical
Proj.	antzraananaonenaa		Cont	rollers	Cabine	ets (1)	Meters	Service	signamentemente en menominamentementementementemente	Curb Ran	nps (2)	nganannanananananananananananananan	one communication activities and activities activities and activities activities and activities activities and activities activities activities activities activities activities and activities activit	egonominaminaminaminaminaminamina L	Detecto	agamenanananananananananananananananananan	Mod	ules	Detector
Loc.	ICU		Existing	Replacement	Existing	New	Existing	New	NE	<b>NW</b> :	<b>SE</b>	SW	N BND	รี เป็นแบบเลงสมเดะเหตอบเลยแบบแบบเราะกรณะกล ใ	Mananananananananananananananananananan	WBND	น ใน ในการแบบเกรเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการเกาสายการ	NEW	naadhannaannaannaannaannaannaannaannaann
No.	#	LOCATION	Controller	Controller	Cabinet	Cabinet		REQ'D	Corner	Corner	Corner	Corner	NE Cor	SW Cor	SE Cor	NW Cor	Existing	gREQ'D	New-LF
anomanumanuma	1 143	Wyoming/Harper	MS 820	MS 820A	P	Existing	gapanananananananananananananananananana	Yes	and for the second seco	nee jaaristassa maanaan maasa sa sa sa maata sa	gangungan engananan ang ang ang ang ang ang ang ang	инический при	NEW	NEW	no n	NO	0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	300
	125	под по возната помном написаться выписанием написанием написанием на принценей по постоя на принценей на прин	MS 820	MS 820A	analpanimananinaninaninaninaninaninaninaninan	Existing	diga manasa m	Yes	ediponenenero en romanum municipa en contra anno en	and presidential and an analysis of the second analysis of the second analysis of the second and an analysis of the second ana	ullymmenenmonennennennennennen vo	algoomeronoonananoonananananananananananananana	NEW	NEW	NO	NO	0		300
шкининининкинини	unadpamennamanamaneere	Wyoming/Candelaria	MS 820	MS 820A	anakananaraanananananananananananananana	Existing	проминалиничным принципаличным принципаличным принципаличным принципаличным принципаличным принципаличным принц	Yes	นที่รูกเลของของเกาะเมาะเกาะ , มามาของของของของของของของของของของ ของของของของของของของของของของของของของข	on llanarennemenen en monamen en an monamen en e	Mynamississimmäännämääninenentaisissio	eggarana amana maramanaran maraman maraman Maraman maraman mar	NEW	NEW	NO	NO	0	aaligaanaaninnaannaannaanna 1	400
паантиштпишишт	63	они финасына мененин менени мененин менени мен	MS 820	MS 820A	,	Existing	Yes	No	algansansansansansansansansansansansansansa	ood gaacamas aas aas oo maan as aas oo maanaa oo caanaana	Myanasan aranaman aranan arana aran	ntganaumananan massanannanananannannan	NEW	NEW	NO	NO	0		400
taannanahunaassaanna.	andgarannananananan	Eubank/Juan Tabo (T)	MS 820	MS 820A	naadjuuna raasaassaana aan waxaa aa		Yes	No	Marianananananananananananananananananana	NEW	Manageria en	dynametraneonaunuwron canaunacenaea	NEW	NEW	NEW	NEW		nadiparamanananananananananananananananananan	
ankenmunikananananan	nadyninanananananana	Eubank/Layton (T)	MS 820	MS 820A			Yes	No	รู้ เป็นแบบเกาะเกาะเกาะเกาะเกาะเกาะเกาะเกาะเกาะเกาะ	ood iyaacaan waxaaaaa oo oo ahaan oo o	g ganaranganannananananananananananan ganaran	gginanunssamununununsversuununkevusu gginanunssamununununununununununununununununununun	NEW	NEW	NO	NO		:::::::::::::::::::::::::::::::::::::::	400
	andprovenenenenenenen	Eubank/Spain	MS 820	MS 820A	nadiparanamumininan	Existing	Yes	No	odlynamaninentumaniemaninimaninimaniemaniemaniemanieman	endligementriantitivasidisentriantinananasisispantas titisterianian	yanas samaanaa samaa aanaa	g ulfunnununununununununununununununununun	NEW	NEW	NO	NO			400
	aandyranaenaanaanaanaan	на учинация принамення на при	sulf ankanunganno, anasasunganannannunganannunganannunganannunganannungan kanasasungan salah salah salah salah	MS 820A MS 820A			egmana asa sananama kamanamanamana asa sa s	Yes	Мистопинического компинентического подательного подательного подательного подательного подательного подательного	ir džinamanininininininininamanininininininin	Infraesia a annoniminana annonimina a sa a I	g saanus saanus saanus rannamuu muun muun muun ka	NEW	NEW	NO	NO		amblyaanamananenenumenenenaan 1	400
aasannanaanamaanaan	and paravaranananan	Eubank/Osuna	MS 820	nad <sub>g</sub> amenaanan menanananananananananananananananananana	IVI P	tering of the second contract of the second c	lynamen area anno anno anno anno anno anno anno an	res Yes	galiganianian naraanian oraanian naraanian naraanian naraanian naraanian naraanian naraanian naraanian naraani	eadigeanneannannannannannannannannannannannan	ultuurin maanna aanaanaan aanaan aanaan aanaan aanaan	dipaneoneanarenarenarenarenarenarenaren	NEW	NEW	NEW	NEW	0	**************************************	675
	137		MS 820	MS 820A	nnakanannannannannannannannannannannanna	Existing	на вы		estignamentamanen oran monamentamanen oran oran oran oran oran oran oran ora	tem temperatura de la constitución de la constituci	ed jamen manuar na puna nuna nuna nuna nuna nuna nuna n	al jarannananananananananananananananananan				NO			400
истранкартичериял <i>ка</i> й	multpenennunununununun	Eubank/Candelaria	MS 820	MS 820A	makaaninamanananananananananananananananana	Existing	урогин сыгааны жанга	Yes	siljumaanun muoren vanun muun van van van van van van van van van va	nee kee	ett ganeravericinamannamannamannamannamannamannamanna	dipanananananananananananananananan	NEW	NEW	NO	Yananamamamamamamamamamamamamama Y	llannaanannaanannaananna 1	aadqamaaaaanaaaaaaaaaaaaaaaaaaaaaaaaaaaa	aantymaaniniminaaniniminaaniniminaaniniminaanininty
1° wanununununununununununununununununununu	undpaaninnaminamina	побринового поменения принципальний принципальной принципа	MS 820	MS 820A	annilipananamanannannamanananannannannannannann	Existing	урастын сантын тататын	Yes	dipunananinanananananananananananananananan	andigamanananananananananananananananananana	ullymanicommunicaminaminaminaminaminaminaminaminaminamin	dipanacananananananananananananananananana	NEW	NEW	Exist	NEW	lipanennonnamanamanamanaman	andigaanannamuunumuunumuunumu	600
катинизминитини	undgamanananana	Eubank/Indian School Rd.	MS 820	MS 820A	uudigaanaanaanaanaanaanaanaanaanaanaanaanaan	Existing	руминногнанногоониренскиенинажижескиеничанала	Yes	элүүнэнканыгыныныгыгыныныныгыгыныныныгы	NEW	Managamentanananananananananananananananananana	NEW	NEW	NEW	NO	NO Announcemental announcement of the NO	lponeumuman	andpronomenenenenenenenenen	400
13	malpananananananan	Eubank/Copper	MS 820	MS 820A	nuclijaan vanamaan een partii ka	Existing	Yes	No	allynavannevanavavavavavavavavavavavavavavav	oralizacioniminaminaminaminarionaminaminaminaminaminaminaminaminaminami	ulpanamenenenenenenenenenenenenen	dynaniananananananananananananananananana	NEW	NEW	NO	NO Igaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa		andimonanananananananananananananananananana	400
14 	uudgaanuummanam	Eubank/Chico	MS 820	MS 820A	malganomanananananananananananananananananan	Existing	Yes	No programme continuent and continuent and continuent and continuent and continuent and continuent and continuent	ulljunumenrarisens en ramarannum raara anaanaana	ard francesamineminimum manineminimum services via minimum.	gaaras en amananan manan manar en	allipsaanavaansassaanamannan vervaannemana	NEW	NEW	NO	NO	<b>0</b> 4 <sub>1</sub> 44444444444444444444444444444444444	uulganaeunaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	400
mamamananananananananananananananananan	193	ordipectiveerinevianaanamuununununununununununununverineviaseeseen toi	MS 820	MS 820A	M nondigares concensos ever consumuniminamino menina.	digunumumarennoungumumerennounerennouneren	นี้สุดเกษกระจายเกษารถเลงสายเราะเกษตรกระการการการการการการการการการการการการการก	Yes	NEW	NEW	NEW	NEW	NO	NO	NO	NO	0	0	งมปลุ่นแบบแบบแบบแบบแบบแบบแบบแบบแบบแบบแบบแบบแบบ
16	nandynamianananananan	nadipaanaanaanaanaanaanaanaanaanaanaanaanaan	MS 820	MS 820A	M 	<b>P</b>	Yes	No	NEW	ondiguumamamamamamamamamamamamamamamamamamam	udpanasaanaanaanaanaanaanaanaanaanaanaanaan	Mai em	NO	NO	NO	NO	dynamianianianianianianianianianianianianiani	0 	neutpanaanaanaanaanaanaanaanaanaanaanaanaana
17	' 106	Montgomery/Jefferson (T)	MS 820	MS 820A	M madipanas anemas caraminaman mananas a	P	Yes	No		sallamanamamamamamamamamamamamamamamamama	nee een	NEW	NO	NO	NEW	NEW	<b>0</b>		300
18	3 13	San Mateo/McLeod	MS 820	MS 820A	<b>P</b>	Existing	Yes	No garagamanarananananananananananananananananan	allijaanamaanamaanamaanamaanamaanamaanamaan	· Signizianianianananananianianisianianianianianianianianianianianianiani	Myanasasanaanunnunununununussasa	Mad 1984 algunummenenummunummenenummenenumm	NEW	NEW	NO	NO Gassasassasanananananananananananananana	<b>O</b> Garannananananananananananananananananan		400
19	2 19	Academy/Far North	MS 820	MS 820A	P	Existing	No	Yes	ul <sub>gener</sub> ummenen over ontennan sonten er over onten er over	ondynnymannananammunymynanan resurcinensia	adgravi o o o o o o o o o o o o o o o o o o o	dynorenamusenmuseneramonarenmu	NO	NO	NEW	NEW	<b>O</b>		300
20	218	Academy/Truchas (T)	MS 820	MS 820A	M madiganaaannaaannaannaannaannaannaannaanna	P	Yes	No	odiganisamininininininininininininininininininin	nankananananananananananananananananana	Mynamiserianiserianinininininininininininininininininin	<b>———</b>	NO	NO Germananananananananananananananananananan	NO	NO	<b>0</b>	<b>0</b>	<b>O</b>
2	1 209	Academy/Moon	MS 820	MS 820A	P.	Existing	Yes	No	ndynamennosamonosamonosamonosamonosamonosamonos	· · · · · · · · · · · · · · · · · · ·	ndponnesseenemmanammanammanammanaseen	aljacanananananananananananananananananana	NO	NO	NEW	NEW	0	1 	300
22	208	Academy/Tanoan (T)	MS 820	MS 820A	M madiguisananananananananananananananananananan	Parameter consistence and cons	Yes	No	adjaassaanasumismismismismismismismismismismismismism	NEW	allynessessessessessessessessessessessessess	NEW	NO	NO	NEW	NEW	0	<b>1</b>	300
23	66	Louisiana/Amks. Pkwy. S.	MS 820	MS 820A	P	Existing		Yes			was with		NEW	NEW	NEW	NEW	0	2	675
24	222	Amks. Pkwy./Uptown	MS 820	MS 820A	P	Existing	Yes	No	Marinaminaniana caree inna aries inna inne inna aries inna inne inna aries inna inne inna aries inna inne inna	· · · · · · · · · · · · · · · · · · ·	****	Market and the second	NO	NO	NO	NO	0	<b>0</b>	0
25	223	Amks. Pkwy./Indian School R	MS 820	MS 820A	Р	Existing		Yes			and solv		NO	NO	NO	NO	0	0	0
26	177	Juan Tabo/Lomas	MS 820	MS 820A	P	Existing	announen muunumuunumuunumuunen voivan maasuunum ————	Yes					NEW	NEW	NEW	NEW	0	2	675
27	' 167	Juan Tabo/Menaul	MS 820	MS 820A	P	Existing	Yes	No	eng panananananan ramanananananananananananananananananana		•		NEW	NEW	NEW	NEW	0	2	675
28	160	Juan Tabo/Candelaria	MS 820	MS 820A	P	Existing	Yes	No	AND PROGRAMMENT OF THE PROGRAMME	andjanisminiminiminiminiminiminiminiminiminim	algasistas vanavamuunikuunimukasa a-uk	ntymmusumummummummummummummummummummummummu	NEW	NEW	NO	NO	0	1	400
29	140	Juan Tabo/Montgomery	MS 820	MS 820A	P	Existing	િયુક્ત ભાગ છે. આ માનવાના મામાના માત્રા મ 	Yes	in generalitisticis, kontrantiari particolari internationalitica del contrationalitica del contrationalitica d	a edispontrumentumentumentumentumentumentumentument	ndgamuser-praviacius cumanus se-e-ca	Acornii raansessamuunii virsamuunii va	NEW	Exist	NEW	NEW	1	1	600
30	201	Juan Tabo/Spain	MS 820	MS 820A	nouthpaurannounumennounumennounumennounumen M	P	ที่กระการการกระกายสมมารถกอกการการกายสมมารถกายสมมารถกายสมมารถกายสมมารถกายสมมารถกายสมมารถกายสมมารถกายสมมารถกายสม 	Yes	general period de la company d	endigentamentenentenentenentenentenentenenten	en e		NEW	NEW	NO	NO	0		400
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 302	Coors/Quail	EconASC 2-2100	Existing	madigum camanamanum mumum manaman P	Existing	Yes	namenos en annameno manas en	офранцияння на положения положения на положения на положения на положения на положения на положения на положен 	and granning an arang sa manananan sa manananan arang sa mananan arang sa mananan arang sa mananan arang sa ma	ultypennerannennennummunannannennen	ollysiin aanuumossannaanisiin on aanaanisiin aa	NEW	NEW	NO	NO	diponennaminonnaminonnonnaminonin <b>O</b>	undipennacionicina 1	400
	304	Coors/Sequoia	EconASC 2-2100	Existing	nast <sub>panannamunu</sub>	Existing	Yes	No	adipammanananunanunanunanunanunanunanunanuna	NEW	NEW	NEW	NEW	NEW	NO	NO	<u>0</u>	ontoneauxaonanuanuanuanuan {}	300
anannen ananan annan anna	mindfinianianianianiania	Coors/Ladera (St. Joes)	EconASC 2-2100	Existing		Existing	дунактин электин каланын анын анын анын анын анын анын аны	Yes	NEW	NEW	NEW	NEW	NEW	NEW	NO	ndinaminananananananananananananananananan	0	andpanamanaerenaenenenenenen 1	400
enamennumannum	madipanamanamanaman	Coors/Dellyne (T)	EconASC 2-2100	Existing	mandigaanaanaanaanaanaanaanaanaanaanaanaanaan	финания на	Yes	No	adpuroumannumereneermannumereneemeneermena.	NEW	allyanananevarana vertamevanananananana veres	NEW	NEW	NEW	NO	NO	0	aculfururiururururururururururururururururur	300
*****************		Coors/Montano (Master)	EconASC 2-2100	Existing		Existing	Yes	No	NEW	NEW	NEW	NEW	NEW	NEW	NO	NO	0		300
	andposinonionionioni	Coors/Montano Plaza	EconASC 2-2100	Existing	nadiganosamananosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosamanosama	Existing	Yes	Mo	ntiguarenamenamen recenamenamen municiparen en e	NEW	NEW	NEW	NEW	NEW	niganiumiere enimaniumiumiumiumi NO	NO	0	aalhanaanaaneenaanaenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneenaaneen 1	400
nationalination and a second	nantpananunununununun	Coors/La Orilla	KMC 8000	EconASC 2-2100	manipanananananananananananananananananan	P	Yes	No	alkpeuraneeranarunsurrannaanaenineerianaansunaan	sodjannomnamunimenamovnamanamovama	adjuanissi seemisaanin aanasiin siisistee oo	alganianianianianianianianianianianianiania	NEW	NEW	NO	NO	0	uudgaannunnnaannannaannaanna 1	400
	randlynesconsecrences	Coors/Sipi (T)	EconASC 2-2100	Existing	madiguarini mamani m M		Yes	No	and president and the second and the	and dimensional and an extension of the state of the stat	NEW	alinemenaanneenneenneenneenneenneen	NEW	NEW	NO	NO	genanamaanaananananananan O	andipenasinanennumummesainene	400
namasananananananan		Coors/Paseo del Norte	KMC 8000	EconASC 2-2100	P	Existing	Yes	No			ellerane, en en anamanana en antena en a	**************************************	NEW	NEW	NO	NO		nadigarearen en e	750
nasaannasaannaannaannaan	nandjarannananananan	Coors/Irving	KMC 8000	EconASC 2-2100		Existing	бурнын алган он	Yes	gggggggggggggggggggggggggggggggggggggg	NEW	adipanan na nauto natananan anna na na na na na na na na na n	iligananananananananananananananananananan	NEW	NEW	NO ·	NO			400
umannennumumumumu	mantipanananananananananan h	Coors/Central (Master)	EAGLE EPAC	EconASC 2-2100	endigaaras assauras rumamaanaanaanaana P	P	Yes	No	ooffinameer variatis and variat	n ollaniarian en entre un en		รู้ เมื่อสะเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเลยเกลเล **********************************	NEW	NEW	NEW	NEW		maljunummennum viennemennen.	675
annamanamannaman	naalfamaanannaanaan	Coors/Bluewater	EAGLE EPAC	EconASC 2-2100			Yes	No	dipperantaminarantamina	andiguennumannumannumannumannumannumannum	galganamannamannamannamannamannama	ggan manananananananananananananananananan	NEW	NEW	NO	NO			300
TRUTONIAN ON PROPERTIES PROPERTIE	omallyerimoniminiminimini Y	на выправления на применения в	en la printinamentaminente antinaminaminaminente antinaminente de la compania de la compania de la compania de La compania de la co	andlynaminiminiminiminiminiminiminiminiminimi	t nasdiganisaniannannaransuuminananananana t	P	у Зурангангания кананананы кананан канананы кан У	g penanancusananananananananananananananan penanancusananananananananananananananananananan		्रात्व । । । । । । । । । । । । । । । । । । ।	g ammericaniamianiamianiamianiamianiamia	у на настранительной применентичной применения применения применения применения применения применения применен	NEW NEW	NEW	NO NO	NO	hamasannaarumumseenaanum. A	g andymumicmenenenuminaenenumina g	300
samuausmennemboulo	mandyanamanananananan	Coors/Fortuna	EAGLE EPAC	EconASC 2-2100	wasaliyaanxannaaressaanaanaanaaniminaanaanaa		รู้ เมื่อสมเสนาะยนเขาและและและและและเกลสาลาะยนเขาและเลยเลี้ เมื่อสมเสนาะยนเขาและและและเลยเลยเลยเลยเลยเลยเลยเลยเลยเลยเลยเลยเลยเ	Yes	Mananumeranaran eranananumeraneranaranan.	en lija sama vanan saaseen aras aras aras aras aras aras aras ara	gulgannasamennamennasaanaasaaraan	o Generalisan meneralisan meneralisan meneralisan meneralisan meneralisan meneralisan meneralisan meneralisan me	and premium anno anno anno anno anno anno anno ann	t Louinnanananananananananananananananan Louinnanananananananananananananananananan	religious anno en error anno association en	NO NO	tananananananananananananananananananan	nuntgaamuunmuranraanaanaanaanaan L	300 300 300
peraneaneaneaneaneaneaneaneaneaneaneaneanea	nanlpinininanininininin	Coors/Hanover	EAGLE EPAC	EconASC 2-2100	กลายที่สุดแบบสมาณาคลายความกลายสมานสมานสมานสมานสมานสมานสมานสมานสมานสมาน	Myannananuvermananananuvermen ramerananana	ing distribution and an analysis and the contraction of the contractio	Yes	——————————————————————————————————————	en liggen variante naturatura anethen november et est en en en	adjensove e e e e e e e e e e e e e e e e e e	dyna a o namanama ura anna vasanamana	NEW	NEW NEW	NO	Vicencenamenramentamentamenramenramenramenramenramenramenramenr	z Zanananananananananananananananananan L	andgamananananananananananan L	amidipanaanaannummaanaanaanaanaanaanaanaanaanaanaana
45	) 383 	Coors/Iliff	EAGLE EPAC	EconASC 2-2100	P wasigariin raannaan ayaa mariin ahaa ahaa ahaa ahaa ahaa ahaa ahaa a	P	ii ii ii ii ii ii ii ii ii ii ii ii ii	Yes	NEW	malfenerumanenenenenenenenenenenenenenenenenen	uliganen en	alipmanennamanonamanonennamanonen	NEW	NEW	NO	NO	0	I I I I	300

(1) All controller cabinets shall be "P" rack mounted and shall match the required signal controller for the intersection. (2) Curb Ramps shall be paid for under items #608004 Sidewalk, #608404 Concrete Median Pavement (Colored and Patterned) and #609450 Concrete Barrier Cub and Gutter. FOR INFORMATION ONLY Civil 

Structural 

Transportation

5801 Osuna Rd. NE — Suite 200

Albuquerque, NM 87109 — (505) 881-5357 CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP DOWNTOWN/CITYWIDE TRAFFIC COMPUTER
SIGNAL SYSTEM EXPANSION — PHASE THREE A
CONTROLLER UPGRADE & INTERSECTION MODIFICATION SHEET TITLE: MO./DAY/YR. MO./DAY/YR. CITY ENGINEER APPROVAL

SHEET

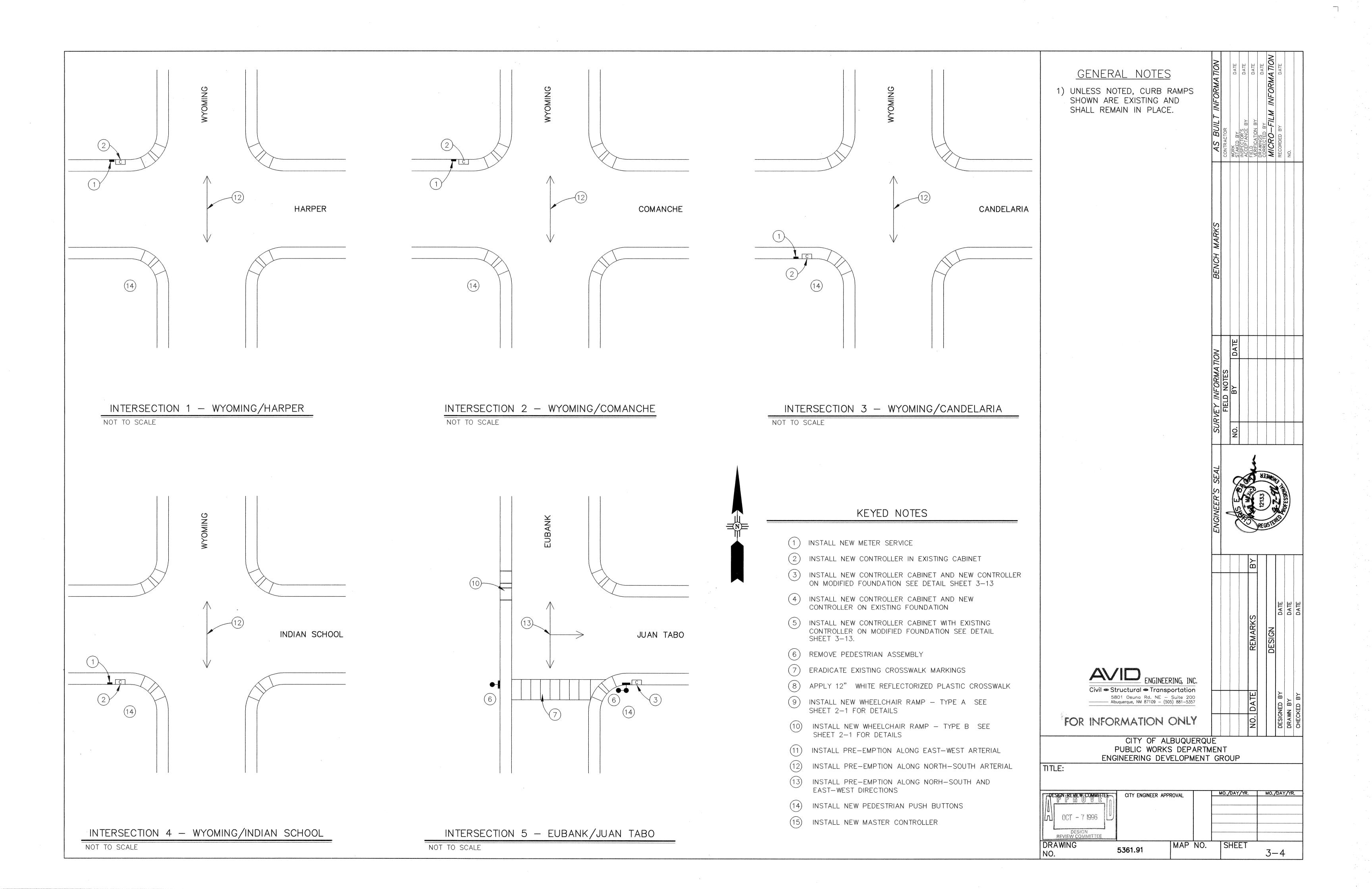
3-2

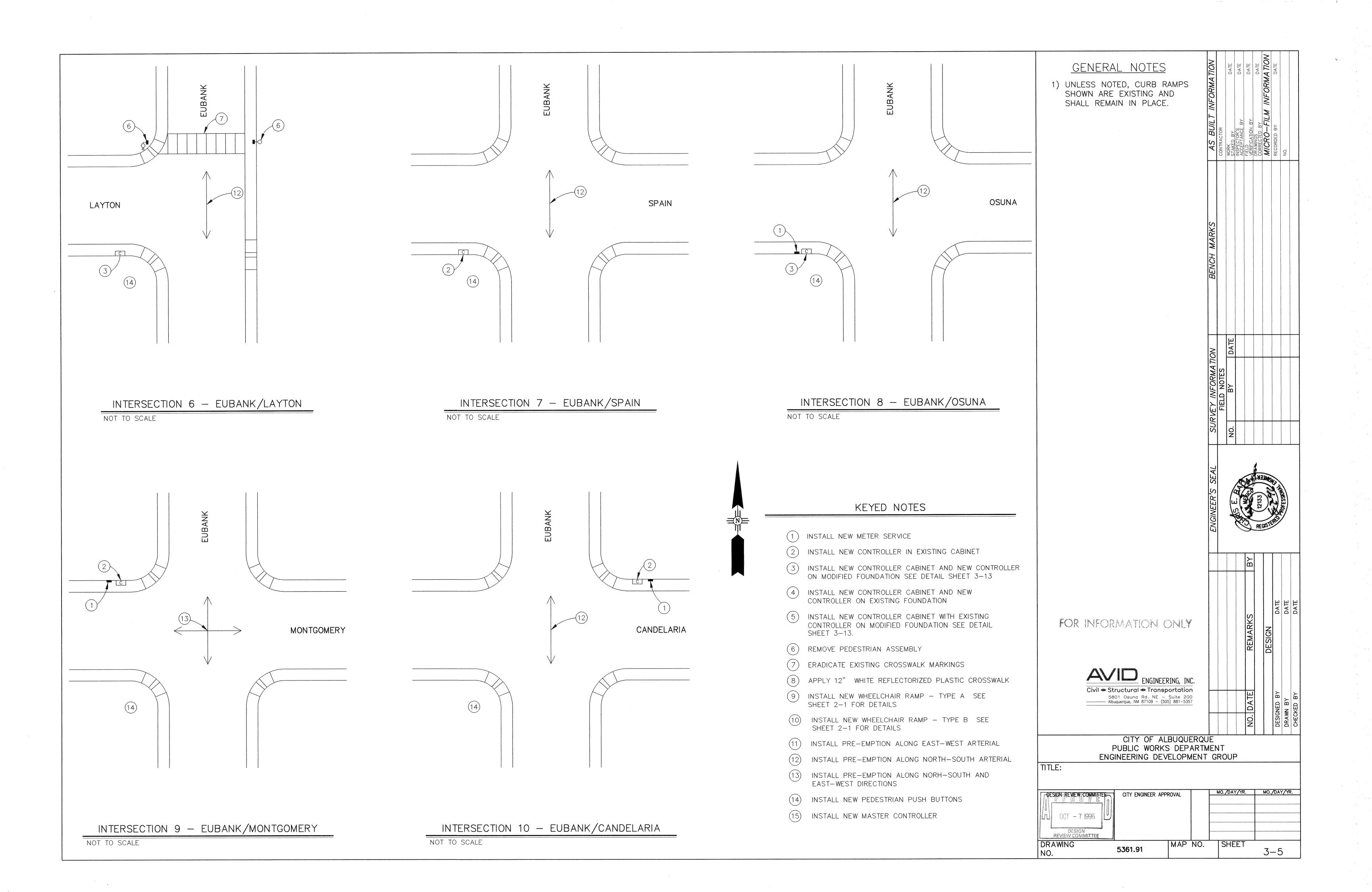
MAP NO.

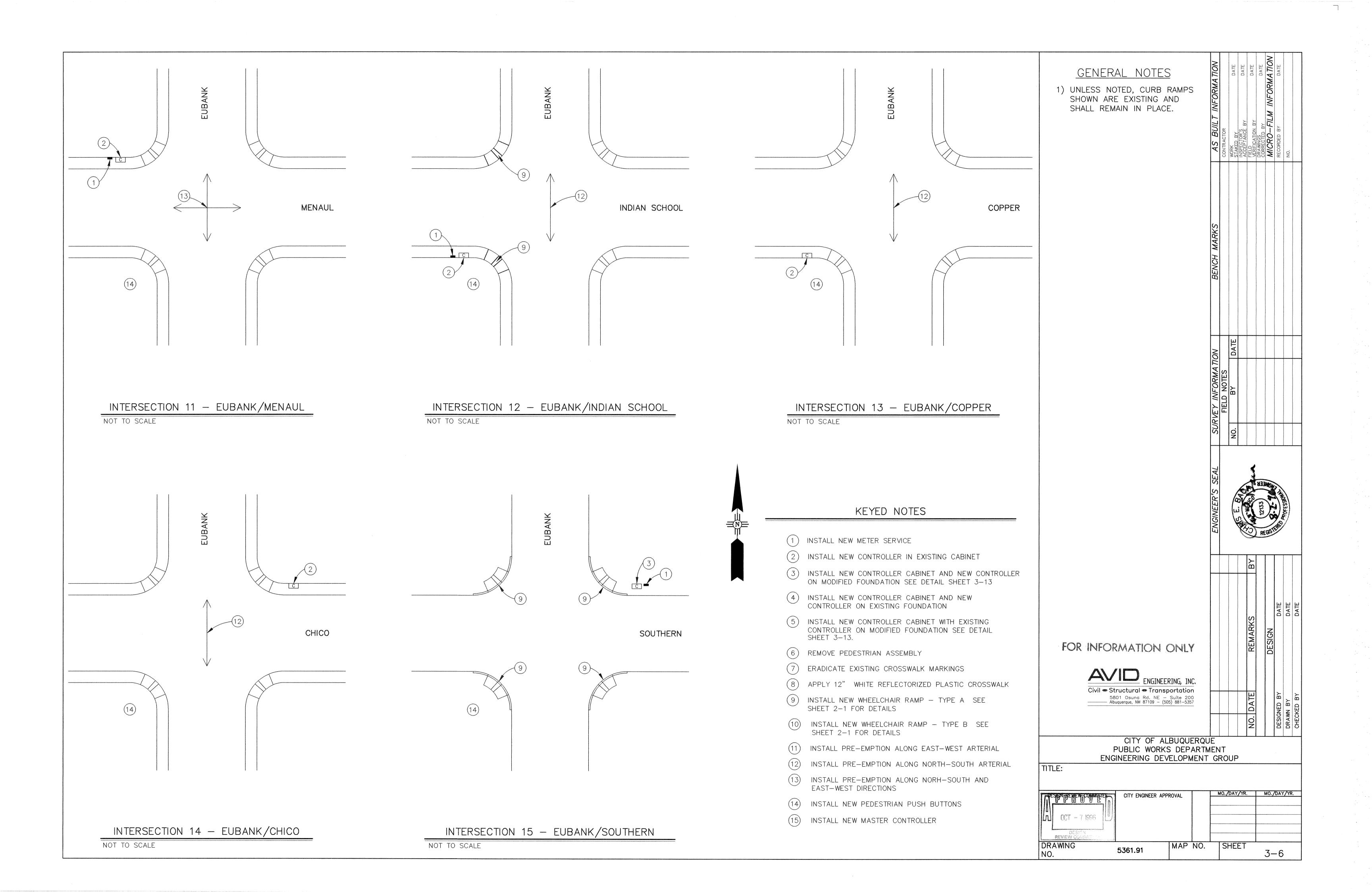
5361.91

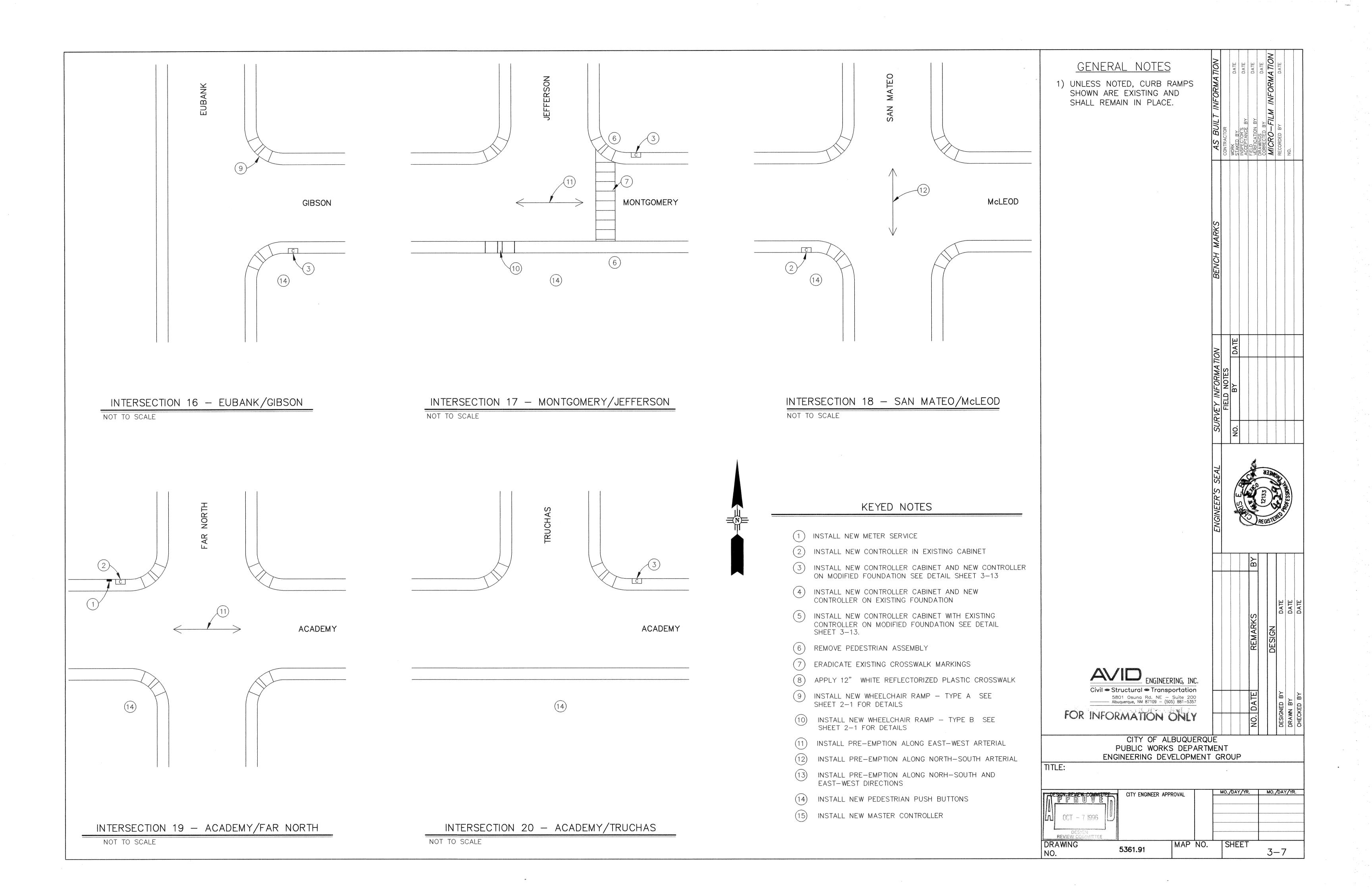
nanamananan dan kanamanan dan dan dan dan dan dan dan dan dan										REMOVALS / OBSTRUCTIONS
Accesses and accesses and a								ত বিষয়ে বিষয় ব		\$
oj.				DESTRIAN	ndidos do desenta de estado de			STRIAN		
oc. IC	រកពិតការខាតិការការការក្នុងក		NORTH	กรายการการการการการการการการการการการการการก	#0.4###################################	WEST	เลงกลุ้นระเครายการครายการครายการการการการการการการการการการการการการก	UTTONS		
O. #	#	LOCATION	E to W	WtoE	N to S	S to N		LARGE		
1 12	43				es georgeonological contractiva de la c		0	8		
destatisticism of sections of	Destablishers soeral can	Wyoming/Comanche		વ્યવસ્થાન સ્ટામાં ભાગવાન વાસ માનવા ધનવામાં ભાગવાના ધનવાન સ્ટામાં ભાગના સાથે માનવા સ્ટામાન સ્ટામ	કર્યું કર્યુ 		ncent per manuscritari can canana can canana can canana can can	8		
neerranaria increases en	onnannormania d	Wyoming/Candelaria				ក្រុម នៃ ខេត្ត ខេត្ត ខេត្ត ខេត្ត ខេត ប្រជាពលរដ្ឋាភិបាល ខេត្ត ខេត	nana dana dana dana dana dana dana dana	ательно по поставлений при поставлений по		
100000000000000000000000000000000000000	เลลลลลลลลลลลล	Wyoming/Indian School Rd.	1999 180-28-18-18-18-18-18-18-18-18-18-18-18-18-18	447883333343333333333333333333333333333	***************************************	**************************************	14400 \$100,100,100,100,100,100,100,100,100,100	. <b>8</b>		
\$159818279\$2825222779		Eubank/Juan Tabo (T)		Remove			. 0	6	Remove Pedestrian Signals	s & Button South Wto F
เลลกละเลลลลลาสรุการการเลกละเล	นกลอกคอกกลาสู่น	Eubank/Layton (T)	Remove	เหลืองการเลยเปล่าการเลยเกลาการเลยเปล่าการเลยเปล่าการเลยเปล่าการเลยเปล่าการเลยเปล่าการเลยเปล่าการเลยเปล่าการเลย เกลา	, ค่อราชการการการการการการการการการการการการการก			<u> </u>	Remove Pedestrian Signal	
uuunuuuun een een aan aan aan aan aan aan aan aa	energia de cuel de	Eubank/Spain	ત્રને કાર્યા હોય છે. તે કે સ્વત્ર કે લાગ કે લાગ કુંચા હોય કે તે	વાલ કરવામાં પ્રવાસન લગ્ન સ્વાસન લગ્ન સામાં મહાના મહાના મહાના પ્રવાસન મહાના મેળ તેને તેને તેને તેને તેને તેને તેને તે	કુકાના કુકાર હતા રહ્યા જાતા ત્યાર હતા કુકાર હતા ક 	કર્યું કરવા ત્યાર કરવાન હોતા ને પાસ એ પાસ એ આ પાસ એ પાસ એ આ પાસ એ		aa aa keessa ka		place Sign/SWComer Remove and Relocate MA to back of sidewalk
entropistas instructions	************	Eubank/Osuna	કું			***************************************	O	8		
*************	entriales este en especiales	Eubank/Montgomery					0	<del>8</del>		
<u>หลดสสคคอดสส</u> ติศสตสอดสก	านกลุกกกกกกกกกกกุ้	Eubank/Candelaria	191379   1913   1914   1915   1915   1915   1915   1915   1915   1915   1915   1915   1915   1915   1915   191	ng panambanan nanananan anan anananan anananan ananan an	จากอาการกรรองการกรอดการกรอกการกรอดการกรร	ลกการคลอดกฤกษาการคลอดการการคลากการคลากการค	มลอกสิจที่สุดหลากสากครายกรายกลากกรายกลากกรายกลากกรายกลากสากสากสากกรายกลากกรายกลากกรายกลากกรายกลากกรายกลากกรายก	100 3000 3000 3000 3000 3000 3000 3000	200000000000000000000000000000000000000	1 $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$ $1$
	นอนนอนเลยเลยไล	Eubank/Menaul						Dag sekantusakkia bahakatententententak hakatelakkia kakatelakkia kakatelakkia 8		
กรคากรถสารทางการ การสารคายการ	กระเครายกระเกล	Eubank/Indian School Rd.	one de la compansión de l	ลงกับการเกราะเกราะเกราะเกราะเกราะเกราะเกราะเก	นมา ของสมาคมสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเลยสมาสเกรเ	งานใส่เกลากระยะเลสเกลากลากเลลากลากสะเลสเกลากระยะเลสเกล	0	8	SE Comer Remove and Re	olace Manhole
utilakististististä kittitiisia	10 20 10 70 20 10 10 70 70 70 70 70 70 70 70 70 70	Eubank/Copper					0	8		
	44444444444	***************************************	100 mm				0	8	NWComer Remove and Re	nlace Sian
nannanana fananana	14 14 14 14 14 14 14 14 14 14 14 14 1 <u>4 1</u> 4	Eubank/Chico			જ્યાર કાંગ્રહન નામ લગ્ન સ્થાપ સંસ્થા સ્થાપન ત્યાર સ્થાપન સ્થાપન સ્થાપન સ્થાપન સ્થાપન સ્થાપન સ્થાપન સ્થાપન સ્થા		นนานสี่สาวเกาะหนานหนานหนานหนานหนานหนานหนานหนานหนานหน	स्वतः स्	NWand SWComers Remove	
स्त्र प्रस्तित स्त्र स्त्र स्त्र प्रस्तित स्त्र	वत्रवत्रत्रत्रवत्रवत्रव्यक्ति	Eubank/Southem  Eubank/Cibaan (D)	अस्त्रमस्य <mark>चुनावस्य स्थापनास्य स्थापनास्य स्थापनास्य स्थापनास्य स्थापनास्य स्थापनास्य स्थापनास्य स्थापनास्य स्</mark>	કર્યું સામારાત્રાપુરા ભારતમાં ભાગ સામારાત્રા માત્રા માત્ર	१५५४ स्थानकारामध्यस्य स्थानकार्यस्य स्थानकार्यस्य स्थानकार्यस्य स्थानकार्यस्य स्थानकार्यस्य स्थानकार्यस्य स्था		0 स्वतान्त्रं वर्णवानः वत्त्वत्वानः वत्त्वत्वानः वत्त्वत्वानः वत्त्ववानः वत्त्वत्वानः वत्त्वत्वानः वत्त्वत्वानः व	8 		
ลลลลลลลลลลลลลลลลลลลลลลล	กลากการกลากการที่	Eubank/Gibson (T)	<u>.</u> 		1024 naansaataan oo ah ahaan ahaa ah a	000738888888888888888888888888888888888	มลลากรู้และละจากรายเนตสอดลายเหตุดอกจากเลข 	6 104 44411111111111111111111111111111111		
nammannifammanna		Montgomery/Jefferson (T)	saanah menantuhungan antuhungan dan beratuhungan dan beratuhungan dan beratuhungan dan beratuhungan dan beratu Beratuhungan beratuhungan dan beratuhungan beratuhungan beratuhungan beratuhungan beratuhungan beratuhungan be	ны вааканникинананивыганыны бавыны цавысыны	Remove	nad homananan nomananan an mananan an mananan manan mana	oponti nenonanenononononononononononononononono	6	Remove Pedestrian Signal	S and Buttons East N to 5
	eunnienennien f	San Mateo/McLeod	નનાગામાં મુખ્ય પ્રવાસન્ય વાલવાના વાલવા	ત્રમાં સમ્યાગમાં ભાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગમાં આપ્યાગ	ત્રમાં - ત્રમાં મામ ત્રમાં મામ ત 	ાનાન તાલ્યા વાલવાના માત્રા ભાગાના ભાગાના વાલવાના માત્રા ભાગાના વાલવાના ભાગાના ભાગાના ભાગાના ભાગાના ભાગાના ભાગાન	0 સરાયમાં મામાના સામાના સામાન	<b>8</b>		
пичнининининининининининин	HINNHAMININKEMIN	Academy/Far North	રામાત્રાન પ્રતાસના ભાગમાં આવેલા સાથે જેવા છે. જેવા જેવા જેવા જેવા છે. જેવા જેવા જેવા જેવા જેવા જેવા જેવા જેવા	ны выничноминичноминичноминичноминичноминичн	વરાને વાંતવાતાનામાં મામાં	ни принавання при принавання принавання принавання принавання принавання принавання принавання принавання прин	опенны помоторования помоторо	8 and market coloridate acceptation and acceptation ac		
41414744	Possossossos	Academy/Truchas (T)	ogganianianianianianianianianianianianiania		***************************************			6		
ะเกลเลสาสสาสสาสสา	หลุดทางกระทางกระทำ	Academy/Moon			naranananananananananananananananananan		0 เหลองสู่ทองออกกล่าวจองกลอกกล่าวจองกลอกกลอกกลอกกลอกกลอกกลอกกลอกกลอกกลอกกล	8		
	**************	Academy/Tanoan (T)	political international intern		ann an ann an ann an ann ann ann ann an			6		
เลคระหนดลอดเคลร์ผู้รถเคลรกรษณ	กลกกลกกลกลกลู้ใ	Louisiana/Amks. Pkwy. S.	กระบารสารสารสารสารสารสารสารสารสารสารสารสารสา	เหติ สามารถสายสายสายสายสายสายสายสายสายสายสายสายสายส	ให้ประชากับเปลี่ยนการเกล่าการเก	กอบนั้นสาทอนสอนสาคทอนสอนสอนทางนักสอนสาคทอนสอนสอน		8 		
*********************	una mana mana mana mana mana mana mana m	Amks. Pkwy./Uptown	ા પ્રકાર કર્યો કર્યા ત્રામાં જ પ્રદેશ તેમાં ત્રામાં જ પ્રદેશ પ્રકાર કર્યા છે. જ પ્રદેશ પ્રકાર કર્યા હોય પ્રદેશ પ્રકાર પ્રક પ્રકાર પ્રક પ્રકાર	મારું કેન્દ્રામાં પ્રાથમ કરાય કરેલા કરતા કરતા કરતા કરતા કરતા કરતા કરતા કરત	ના તાલું તુલાકાર તાલું જ અને જ સારા જ સ્તારા સ્તારા સાથે જ સ	ત્રમાં કું કારા જન્મ ભાગ જિલ્લા માત્ર જાત કું તે તે જ જ જ જ જ જ જ જ જ જ જ જ જ જ જ જ જ		8		
**************	พหนหหหหหหหห	Amks. Pkwy./Indian School Rd.	મન્ત્રમાં ત્યારે કુલામાં પાત્રમાં ત્યારે માત્રમાં ભાગમાં ભાગમાં ભાગમાં ભાગમાં ભાગમાં ભાગમાં પ્રાથમિક પ્રાથમિક	त्राच्या स्टब्स्टर्स्टर्स्टर्स्टर्स्टर्स्टर्स्टर्	ત્વન ત્વન ત્વન ત્વન ત્વન ત્વન ત્વન ત્વન	રમાત્ર સારાયમાં માત્રાયમાં સામાય	<b>0</b>	8		
***************************************	in the term to the term of the	Juan Tabo/Lomas			નલ નહું કરાના હત્યા છે. તેમ છે. તેમ છે. તેમ છે. જે			<b>8</b>		
***************************************	annananananan a	Juan Tabo/Menaul		**************************************	,	***************************************				
		Juan Tabo/Candelaria	ndadada nda daga katari na kanana kanana kanana kanana da		pen kanangangangangangangangangangangan	ner flertarda en	0	8		
กลทองเกลเกลเกรากรุ้นกลเกลเกร	กระกระกระกระ	Juan Tabo/Montgomery	ารากสุดสลูใหล่งและเลกเกลกกลาดสากสุดกลาดสากสุดกลาดสากสุดกลาดสิดกลาดสิดกลิดกลิดกลิดกลิดกลิดกลิดกลิดกลิดกลิดกล	สสที่ ชักรับสิทธิสทย์สมบัตรบัตรเคลาของสลกลากเรลากลากลากเรลา	สารที่สารทางกรายการเกิดเหลือสากคลายการเกิดสารทาง	นละเลกกระสนแลงกาสคาครถหลากกระสนกลากกระสนกลา	inanatumananananananananananananananananananan	<b>8</b>		
เพลรายสกาหกรรการใหกกรรกกร	เกกสากสากสากการ	Juan Tabo/Spain	ાત્રમાં ત્રાપ્તાના સામાત્રમાં સામાત્ર માત્ર માત્	પ્રતાસ્ત્રાના સંસ્થાન સ્થાન સાથે ના સ્થાન સ્ 	માનામાં સામાના માના માના માના માના માના માના મા	મના માનાસમાદાવાલનાસના સ્થાના સ્થાપના સ		<b>8</b>		
***************	uununnunuud	Coors/Quail	તમારા પ્રદેશી તમારા મારા સ્થાન સ		ત્તાના ત્યારા પ્રાથમ સ્થાપન	aner actuarione anne anne anne anne anne anne anne a	O construction and the constru	8		
****************		Coors/Sequoia	सम्बद्धाः	માં આ માના માના માના માના માના માના માના મા	ana ananananananananananananananananana	<del>ક્ષ્મ</del> વ્યવસાય મામ મામ મામ મામ મામ મામ મામ મામ મામ મ	O O	<b>8</b>		
***************************************	Secondadadadadadadadadadadadadadadadadadada	Coors/Ladera (St. Joes)	ananan dan anan an		anni sabaaranahahahahahahahahahahahahahah	រសុស ពួកការការការការការការការការការការការការការ		8		
***************************************	ก็คยรครครครครครค ไ	Coors/Dellyne (T)	122.00   120.00   120.00   120.00   120.00   120.00   120.00   120.00   120.00   120.00   120.00   120.00   120	370 370 370 370 370 370 370 370 370 370	*************************************	************************************	<b>0</b>	6	200,000,000,000,000,000,000,000,000,000	
anceceantenentenenena	ineengasusessaa	Coors/Montano	inanannananannanananananananananananana	naranananananananananananananananananan	полительна по правода по при	nanananananananananananananananananana	<b>0</b>	8		Remove and Replace Pull Box
กทา <i>ก</i> กระเกลากา	เล่าคนเหนาคณะนน	Coors/Montano Plaza	างการเล่น	เล็กสารสายสายสายสายสายสายสายสายสายสายสายสายสายส	เการรักและกรายกรายการการสากกรายการการการการการการการการการการการการการก	กลาย เลยการกลายสายการกลายสายการกลายสายการกลาย	O O O O O O O O O O O O O O O O O O O	<b>8</b>	NE, SE, NW, SWCorners -	Remove and Replace Pull Box
		Coors/La Orilla	ત્રુપાલના વાલ્યા કર્યા છે. ત્રુપાલના સ્થાપ સ્થળ સ્થળ સ્થળ સ્થળ સ્થળ સ્થળ સ્થળ સ્થળ	વર્ષ કુલા કુલાવા કુલાવા કુલાવા કુલાવા કુલા	પ્રાથમ મામ મામ મામ મામ મામ મામ મામ મામ મામ	તાનામાં દ્વારા જના પાપાસમાં અને અપાસના અને સામના સામના સામના અપાસના અને સામના સામના સામના સામના સામના સામના સ	<b>O</b>	<b>8</b>		
		Coors/Sipi (T)	and all the second control of the second con				O	6		
***********	ekkakkiskisisis	Coors/Paseo del Norte			andra anticataria anticataria de descritaria de descritaria de descritaria de descritaria de descritaria de de		O	8		
enteriore de la consecuencia	nnahaanaanaad	Coors/Irving			***************************************		0	8		9,000 - 20,00
41 3	375	Coors/Central	нателенальная спатальная остальная спатальная в полительная в полительна	en e	nanananananananananananananananananana	nanananananananananananananananananana	<b>O</b>	8		1000000000000000000000000000000000000
42 3	377	Coors/Bluewater	กรรมการที่ คือสามารถการสามาสามาสามาสามาสามาสามาสามาสามาสามาสา	iaan aanaan aanaan aan aan aan aan aan a	เท่าย หม่อกส่นที่สิทธิเกิดกระลกลากลากลากลากลากลา	วะเยาย เกราะเกราะเกราะเกราะเกราะเกราะเกราะเกราะ	0			
**********	*********	Coors/Fortuna					0	8		
		Coors/Hanover				***************************************	0	8		
45 3	383	Coors/Iliff					0	8		
izvarnandusvanananananan	वराद्यद्यम्बरम्बरम्बरम्बरम्बर						वर्गनाथको स्थानको वर्षा स्थानको वर्षा स्थानको स्थानको स्थानको स्थानको स्थानको स्थानको स्थानको स्थानको स्थानको स			
**Configuration			hintonicamonada	Course de consecuencia	111201111111111111111111111111111111111			CALLEGERISTICS CONTROL	TOTAL DELL'ARTER DELL'	

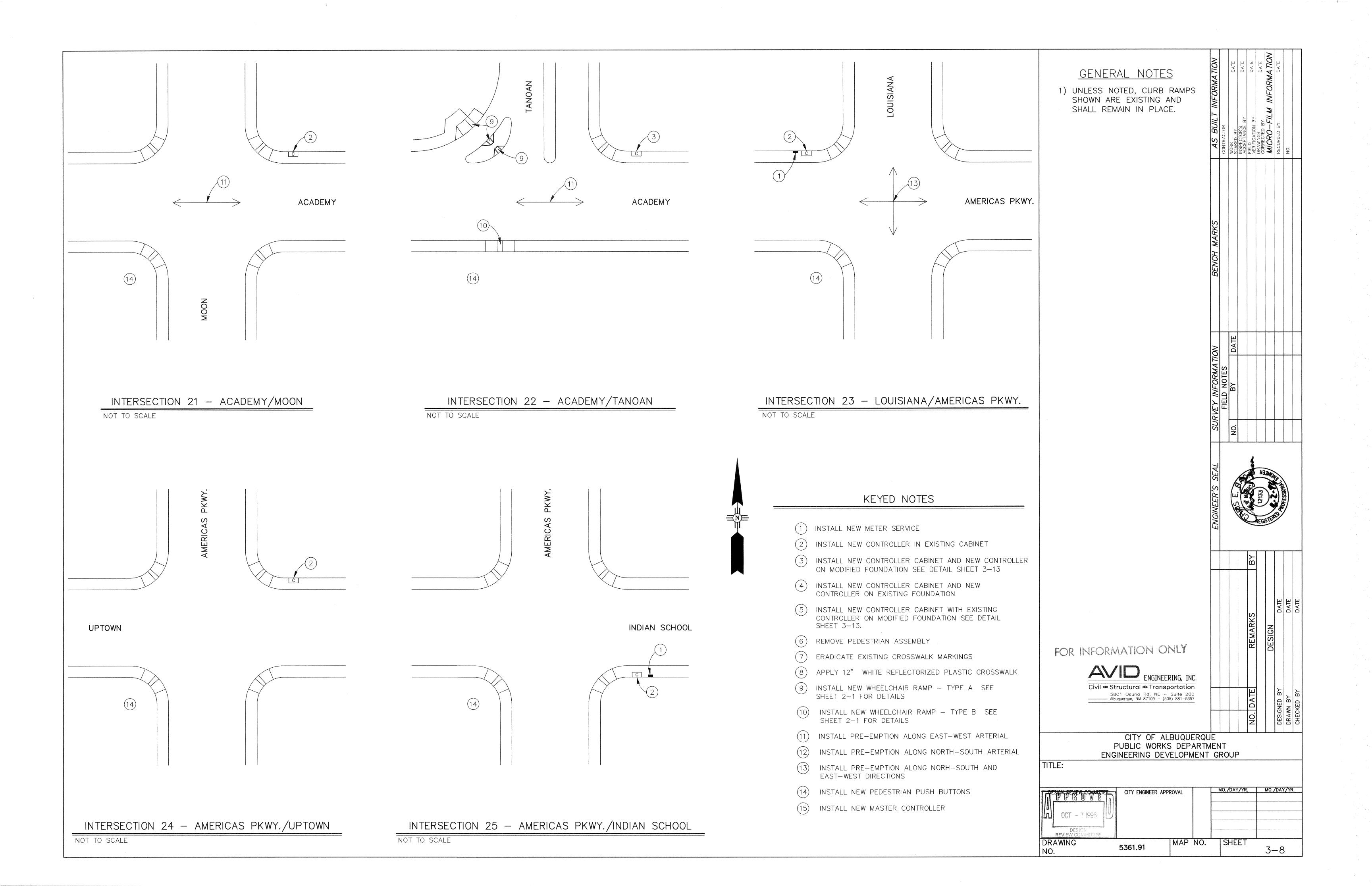
	INFORMA TI		D/O	/Q	/O	/a	M INFORMA	/Δ		
	AS BUILT	CONTRACTOR	WORK STAKED BY	INSPECTOR'S ACCEPTANCE BY	FIELD VERIFICATION BY	DRAWINGS CORRECTED BY	MICRO-FILM	RECORDED BY	NO.	
	BENCH MARKS									
	SURVEY INFORMATION	FIELD NOTES	NO. BY DATE							
	ENGINEER'S SEAL		L	ACIS E. S.A.		(12133)	33Me		"UPESSON"	
FOR INFORMATION ONLY					REMARKS BY		DESIGN	DATE	DATE	DATE
ENGINEERING, INC.  Civil Structural Transportation  5801 Osuna Rd. NE — Suite 200  Albuquerque, NM 87109 — (505) 881-5357					NO. DATE RE	Torrest to the second s	DE	DESIGNED BY	DRAWN BY	снескер ву
CITY OF ALBUQUERO PUBLIC WORKS DEPAR ENGINEERING DEVELOPMEN  TITLE:  DOWNTOWN/CITYWIDE TRA SIGNAL SYSTEM EXPANSION CONTROLLER UPGRADE & INTERSEC  CITY ENGINEER APPROVAL  DESIGN REVIEW COMMITTEE	TMEN NT G NFFIC - PH	RC CC HAS	IMC SE ODI	PU TH	IRE CAT	E	N S	SHE /DAY		

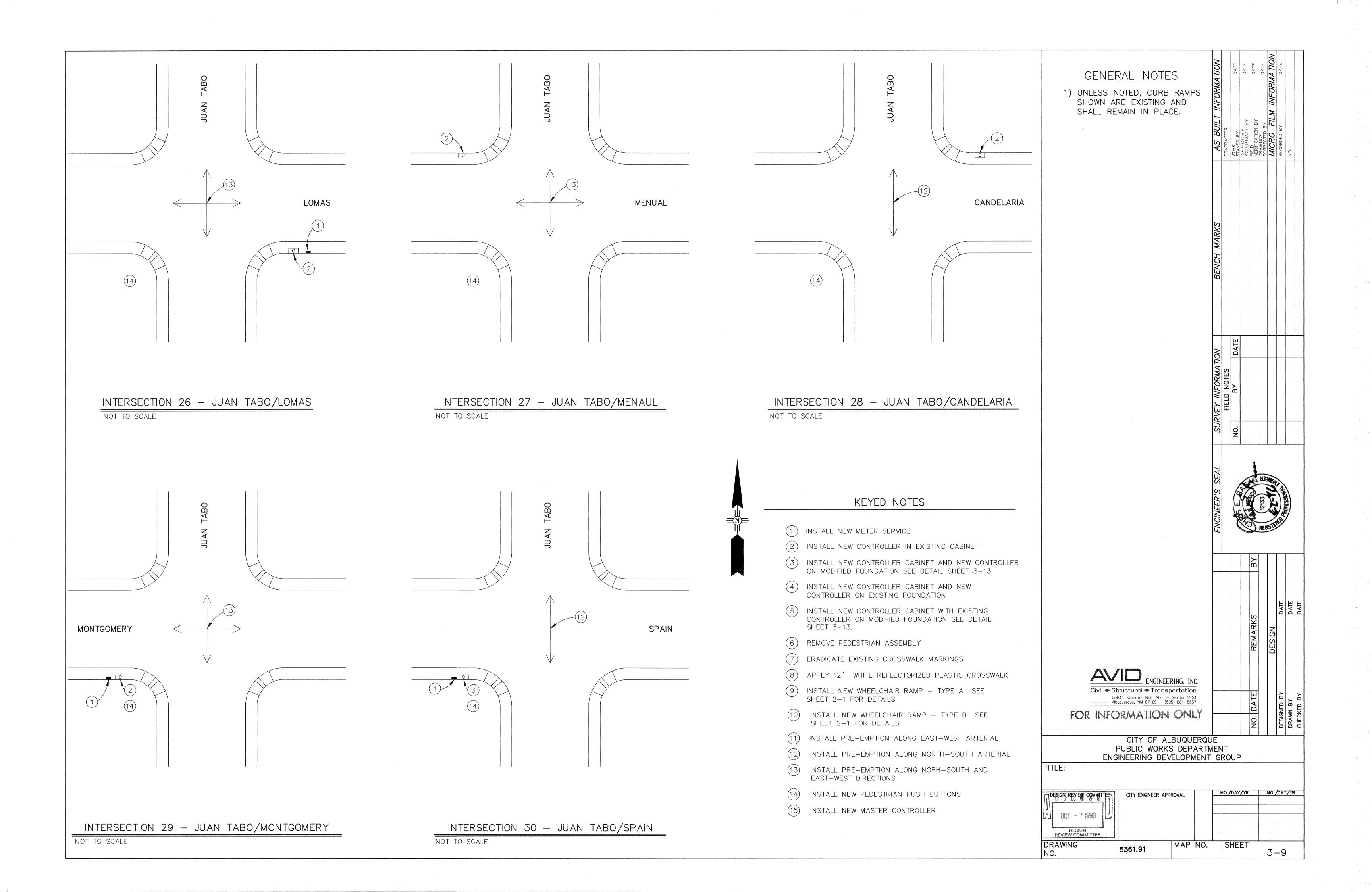


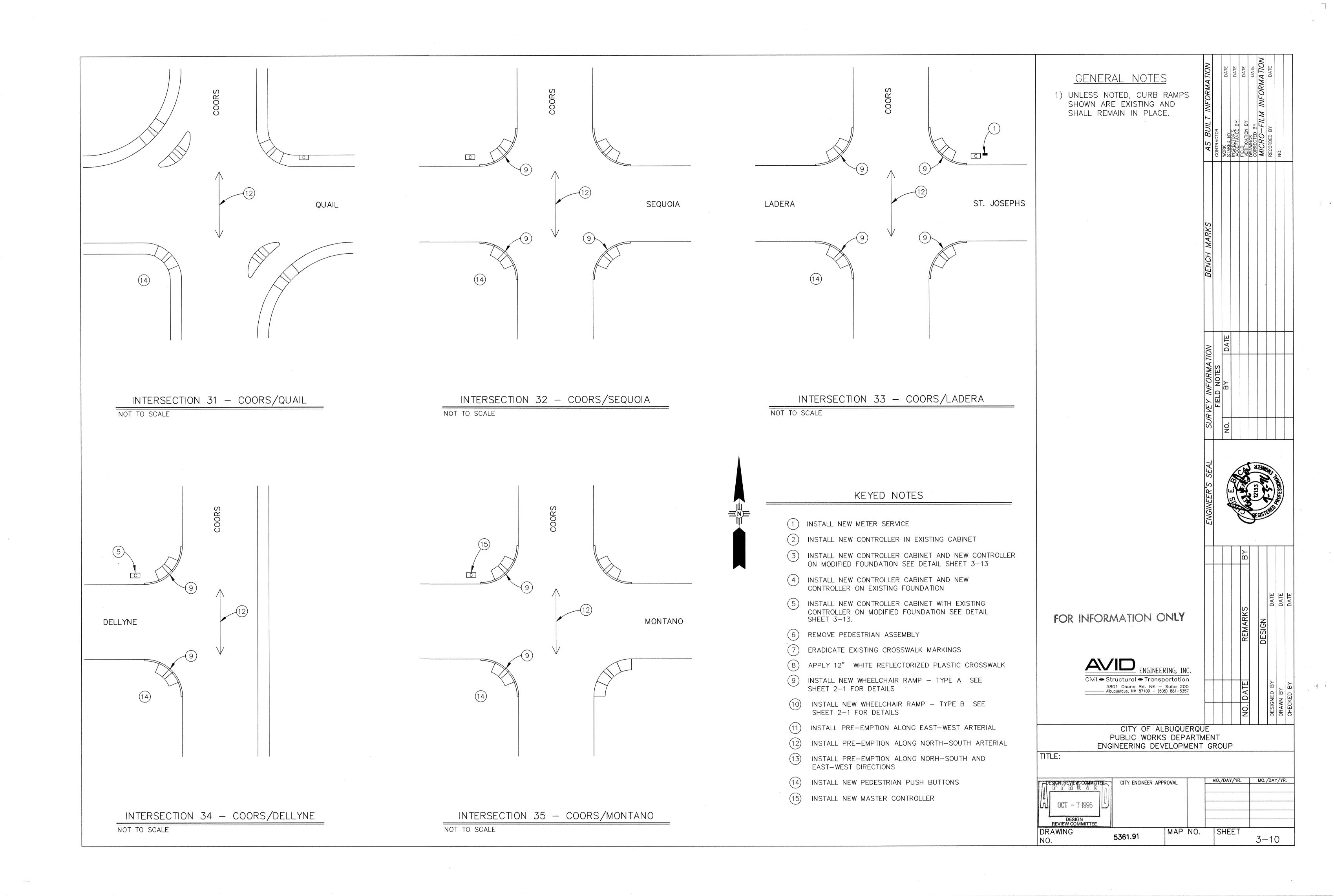


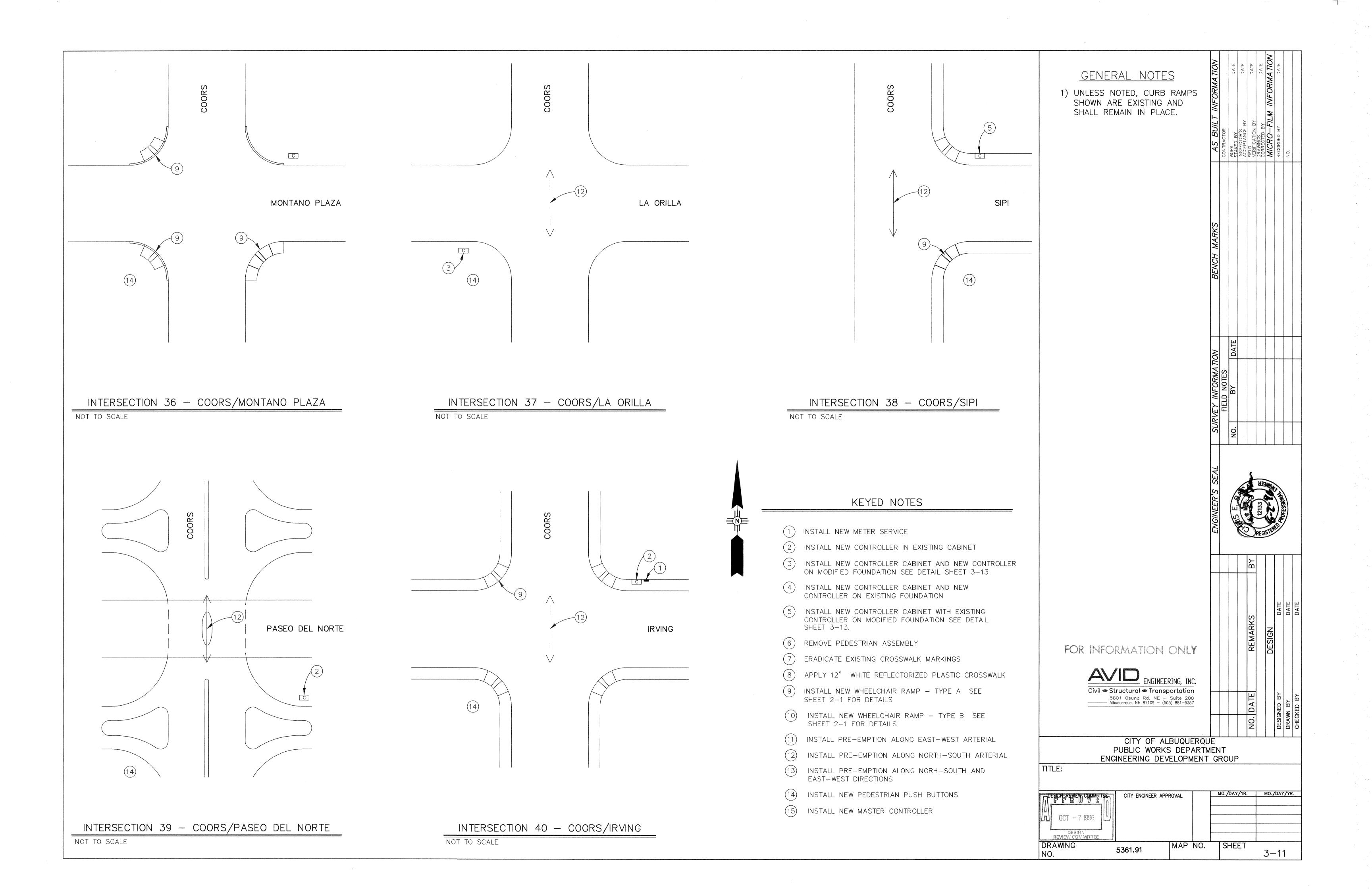


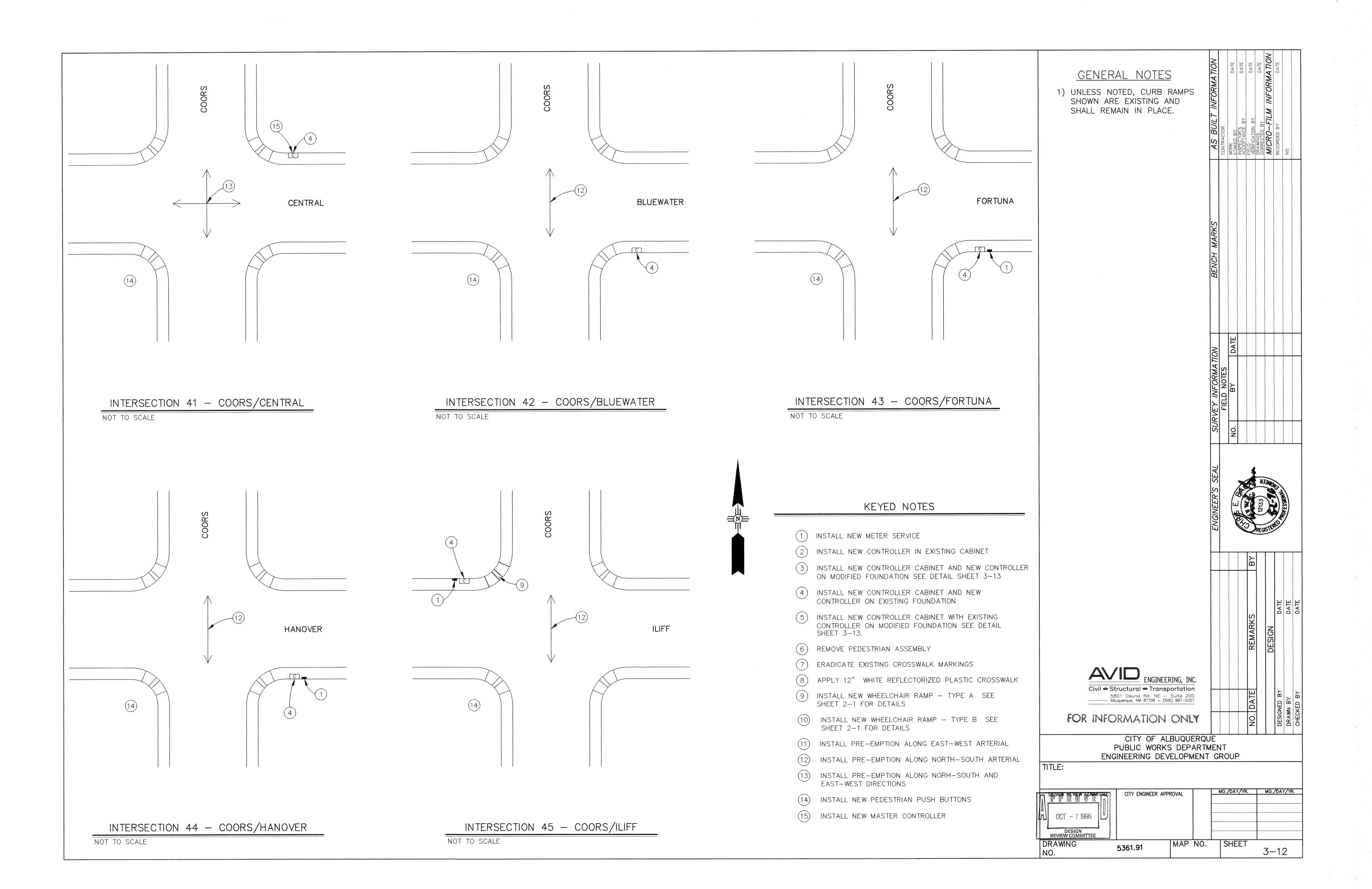


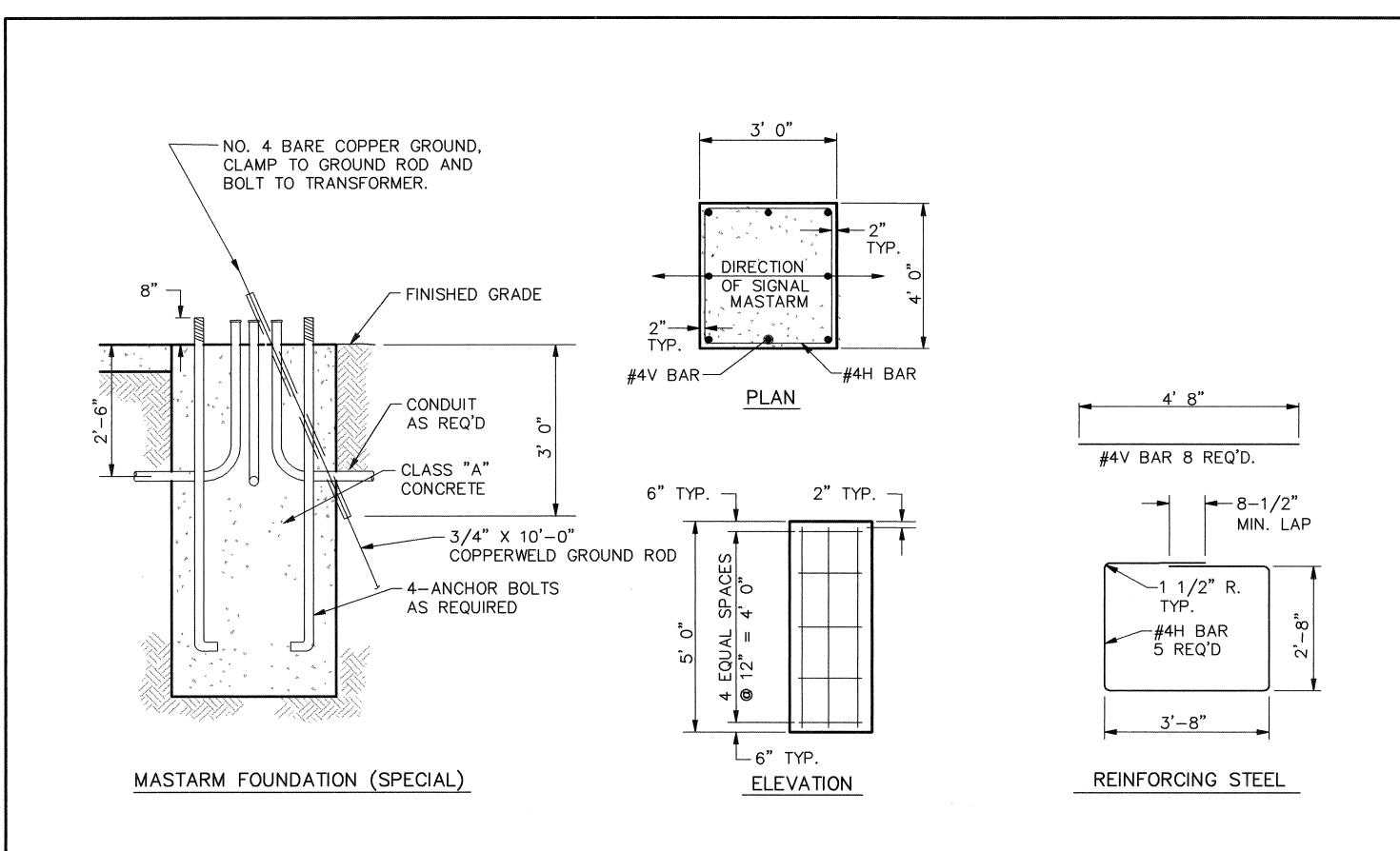






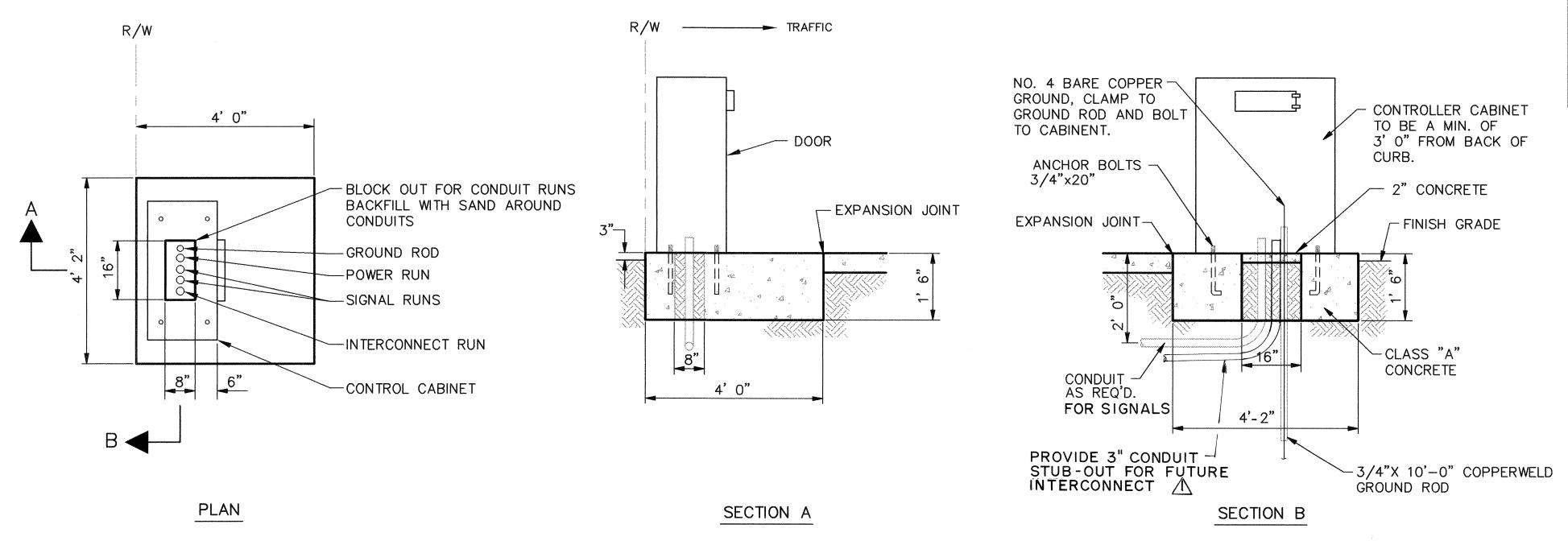


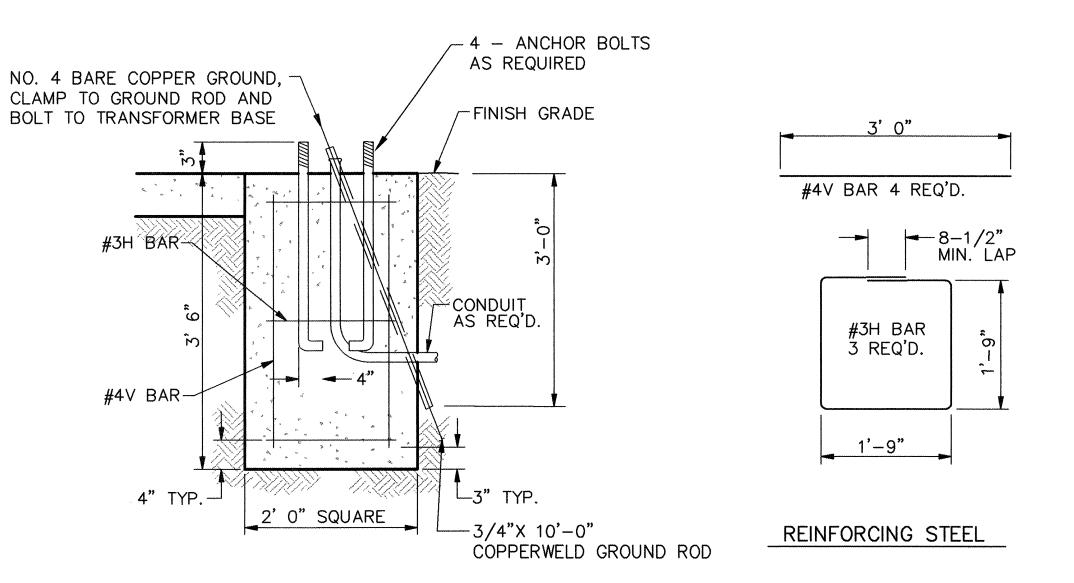




# MASTARM FOUNDATION DETAILS-TYPE II & TYPE III STANDARDS

TYPES II & III - 15' TO 40' MASTARM LENGTH





# PEDESTAL FOUNDATION DETAILS-TYPE | STANDARD

# NOTES

- 1. ALTERNATE DESIGNS FOR STANDARD FOUNDATIONS TO BE SUBMITTED TO THE BRIDGE ENGINEER FOR APPROVAL.
- 2. ALL GROUND RODS SHALL BE  $3/4^{\circ}$  X  $10^{\circ}-0^{\circ}$  . ALL SIGNAL FOUNDATIONS SHALL INCLUDE COPPERWELD GROUND RODS AS SHOWN WHICH SHALL BE CONSIDERED INCIDENTAL TO THE COMPLETION OF THE FOUNDATION. NO PRICE OR PAYMENT SHALL BE MADE THEREFOR.
- 3. FINISHED GRADE FOR ALL FOUNDATIONS TO BE DETERMINED BY THE PROJECT ENGINEER. THE TOP OF STANDARD FOUNDATIONS SHALL BE FLUSH WITH ADJACENT SIDEWALK OR PAVED AREAS.

# ESTIMATED QUANTITIES

FOUNDATION	CONCRETE CUBIC YARDS	REINFORCING BARS POUNDS
MASTARM - TYPES II & III (FOR 15 FOOT TO 40 FOOT MASTARM)	2.22	72
PEDESTAL POLE TYPE I	0.52	17
CONTROLLER CABINET TYPE P&R	0.88	
SPLICE CABINET	0.52	17

# (FOR CONTRACTORS INFORMATION ONLY)

PAID FOR UNDER ITEMS 511000 STRUCTURAL CONCRETE AND 540060 REINFORCING BARS

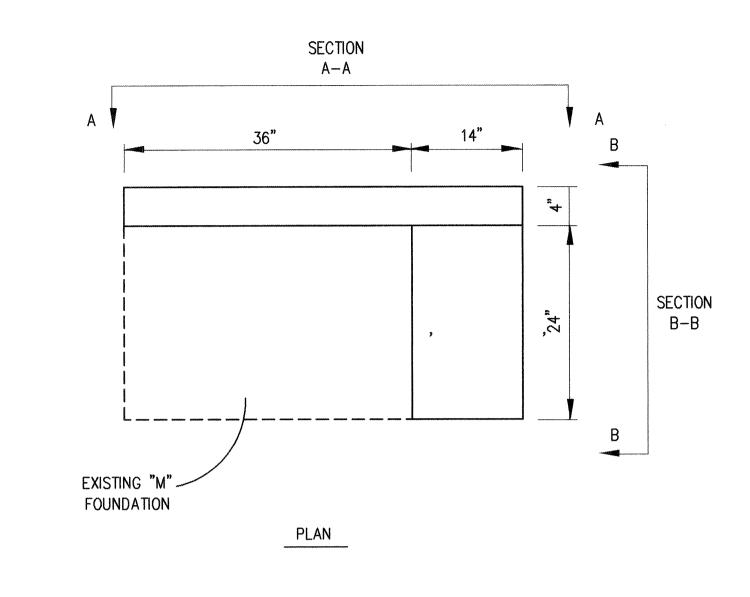
FOR INFORMATION ONLY ENGINEERING, INC. Civil Structural Transportation 5801 Osuna Rd. NE — Suite 200 — Albuquerque, NM 87109 — (505) 881-5357

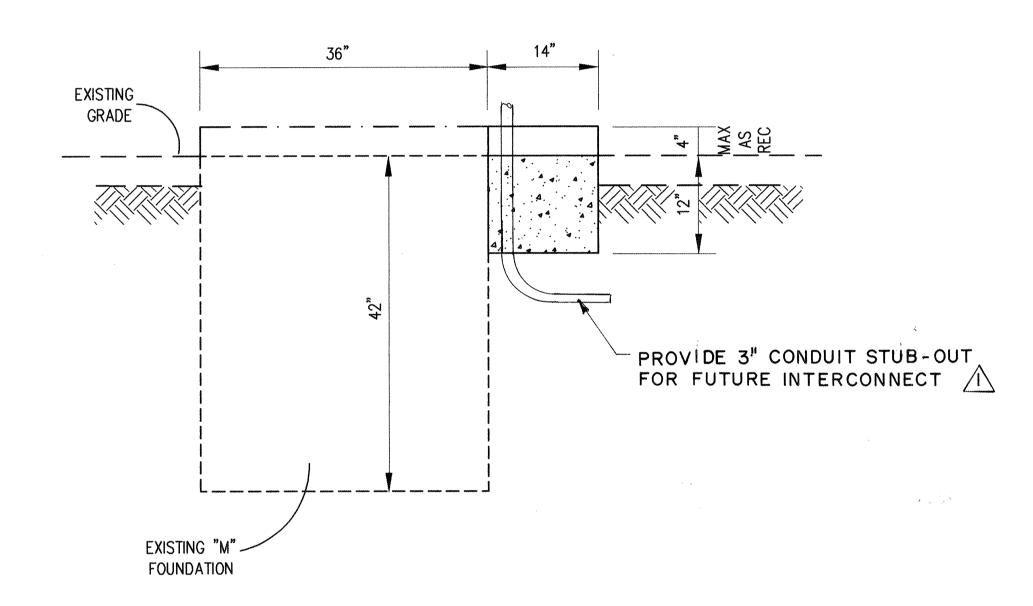
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL SYSTEM EXPANSION PHASE THREE A FOUNDATION DETAILS

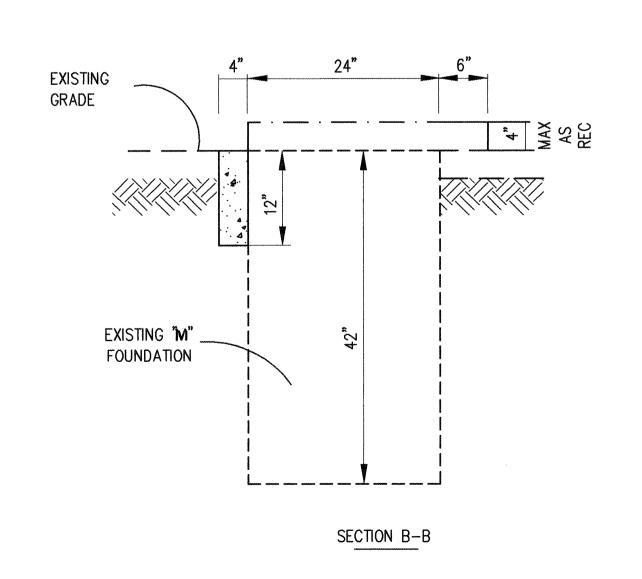
ESTON DE WOODWIEGE OITY ENGINEER APPROVAL MO./DAY/YR. MO./DAY/YR **OCT** - 7 1996 MAP NO. SHEET 5361.91 L15,16&17 3-13

# CONTROLLER FOUNDATION DETAIL

IN THE EVENT THE SUPPLIED CABINET WOULD OVERLAP THE SIDES OF ABOVE FOUNDATION. THE FOUNDATION SHALL BE INCREASED IN SIZE AS DIRECTED BY THE ENGINEER.



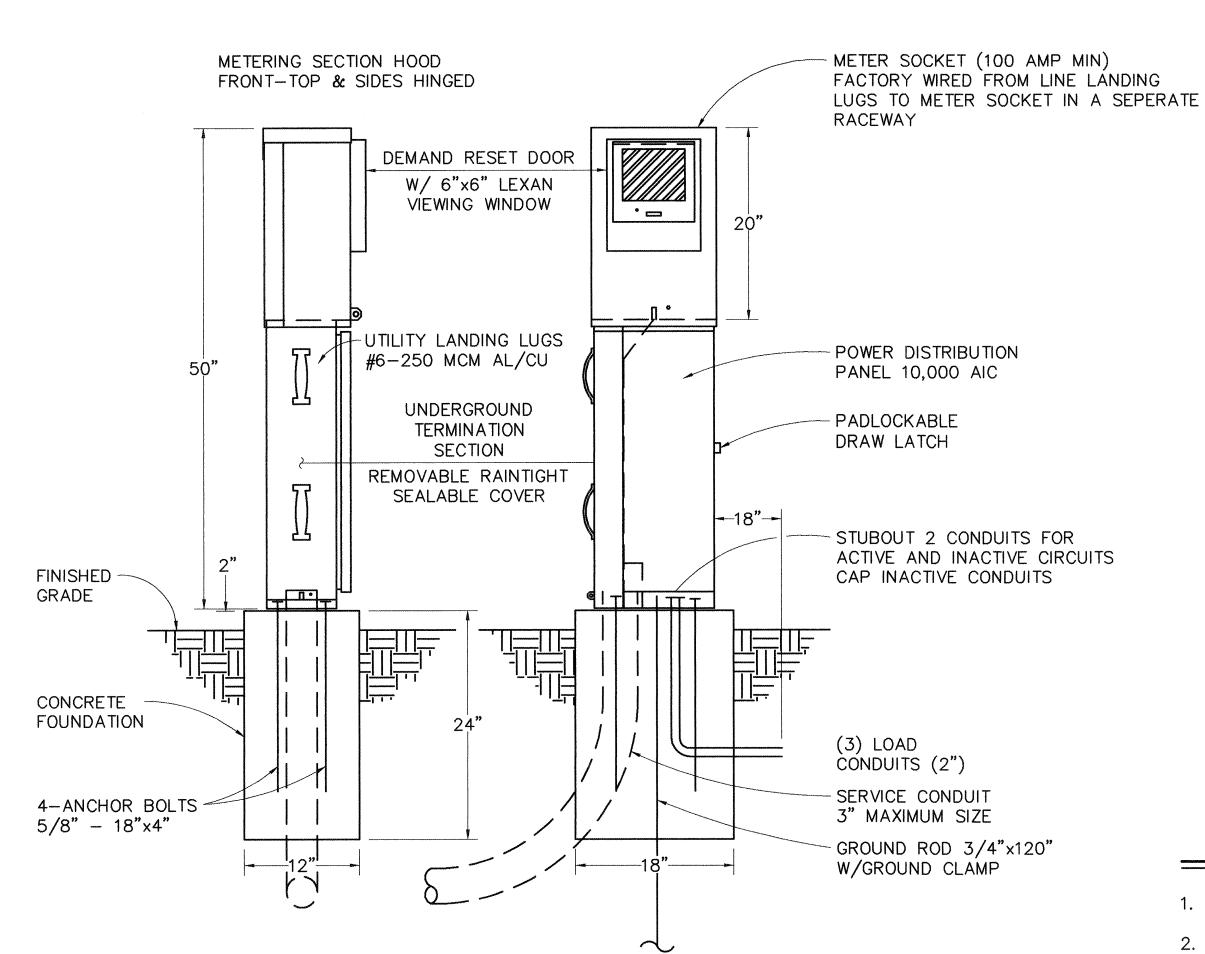




SECTION A-A

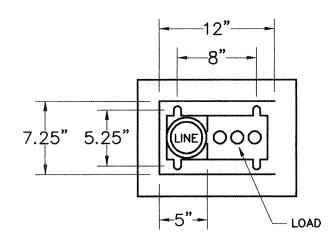
	TIMATED QUANTITIES F	
CABINET	SIZE	511000 STRUCTURAL CONCRETE
CONVERTING "M" CABINET TO "P" CABINET	24"X24"X36"(EXISTING) 14'X28'X12' (NEW) 4'X36'X12' (NEW)	0.138 CY
e de la companya de l		y

FOR INFORMATION ONLY Civil Structural Transportation
5801 Osuna Rd. NE — Suite 200
Albuquerque, NM 87109 — (505) 881-5357 CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP DOWNTOWN/CITYWIDE TRAFFIC COMPUTER
SIGNAL SYSTEM EXPANSION
PHASE THREE A
FOUNDATION MODIFICATION PESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL MO./DAY/YR. MO./DAY/YR DESIGN
BEVIEW COMMITTEE
DRAWING
NO. MAP NO. | SHEET | L15,16&17 3-14

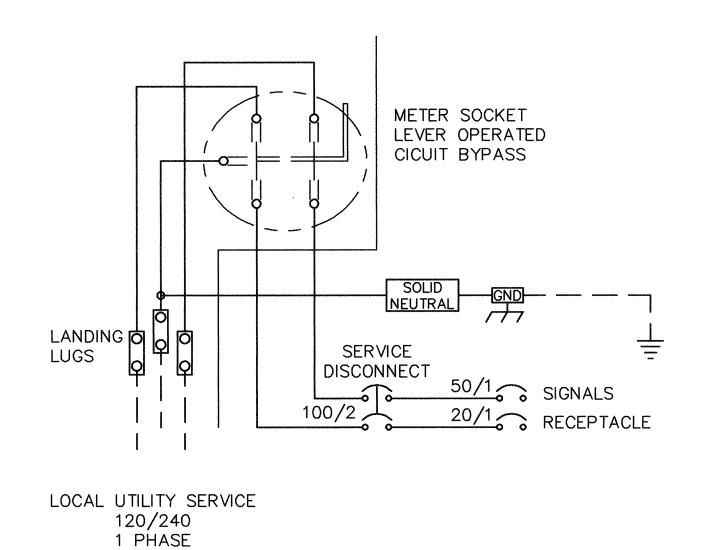


LEFT SIDE

FRONT VIEW



BASE PLAN



SERVICE EQUIPMENT WIRING DIAGRAM "A"

# **ENCLOSURE CONSTRUCTION NOTES**

- 1. SERVICE PEDESTAL SHALL BE UL LISTED "INDUSTRIAL CONTROL PANEL" PER UL 508.
- 2. SERVICE PEDESTAL SHALL MEET THE ELECTRIC UTILITY SERVICE EQUIPMENT REQUIRMENTS COMMITTEE (EUSERC) GUIDELINES.
- 3. CONSTRUCTION SHALL BE NEMA 3R AND 12, RAINTIGHT AND DUST TIGHT. ELECTRICALLY WELDED AND REINFORCED WHERE REQUIRED.
- 4. ALL NUTS, BOLTS, SCREWS AND HINGES SHALL BE STAINLESS STEEL.
- 5. NUTS, BOLTS & SCREWS SHALL NOT BE VISIBLE FROM OUTSIDE OF ENCLOSURE.
- 6. PHENOLIC NAMEPLATES SHALL BE PROVIDED AS REQUIRED.

3 WIRE

- 7. 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. ENCLOSURE SHALL BE FACTORY WIRED AND CONFORM TO REQUIRED NEMA STANDARDS.
- 10. ALL POWDER COATED CABINETS 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. INHIBITED 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 AND BACKFILL, CONCRETE, AND ANCHOR BOLTS, COMPLETE IN PLACE, WILL BE CONSIDERED INCIDENTAL TO THE METER PEDESTAL. ITEM # 706200

# CONSTRUCTION MATERIALS AND FINISH 12 GA HD GALV STEEL POWDER COATED 14 GA #304 S/S SHEET POWDER COATED COLOR NATURAL 0.125" ALUMINUM SHEET POWDER COATED COLOR ANODIZED POWDER COAT COLORS

☐ RANCH GREEN

OTHER \_\_\_\_\_

0CT - 7 1996

5361.91

WHITE

CAMEL

☐ MINT GREEN

ENGINEERING, INC.

Civil Structural Transportation

5801 Osuna Rd. NE — Suite 200

Abuquerque, NM 87109 — (505) 881-5337

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPARTMENT

ENGINEERING DEVELOPMENT GROUP

DOWNTOWN/CITYMIDE TRAFFIC COMPUTER

SIGNAL SYSTEM EXPANSION

PHASE THREE A

METER PEDESTAL DETAILS

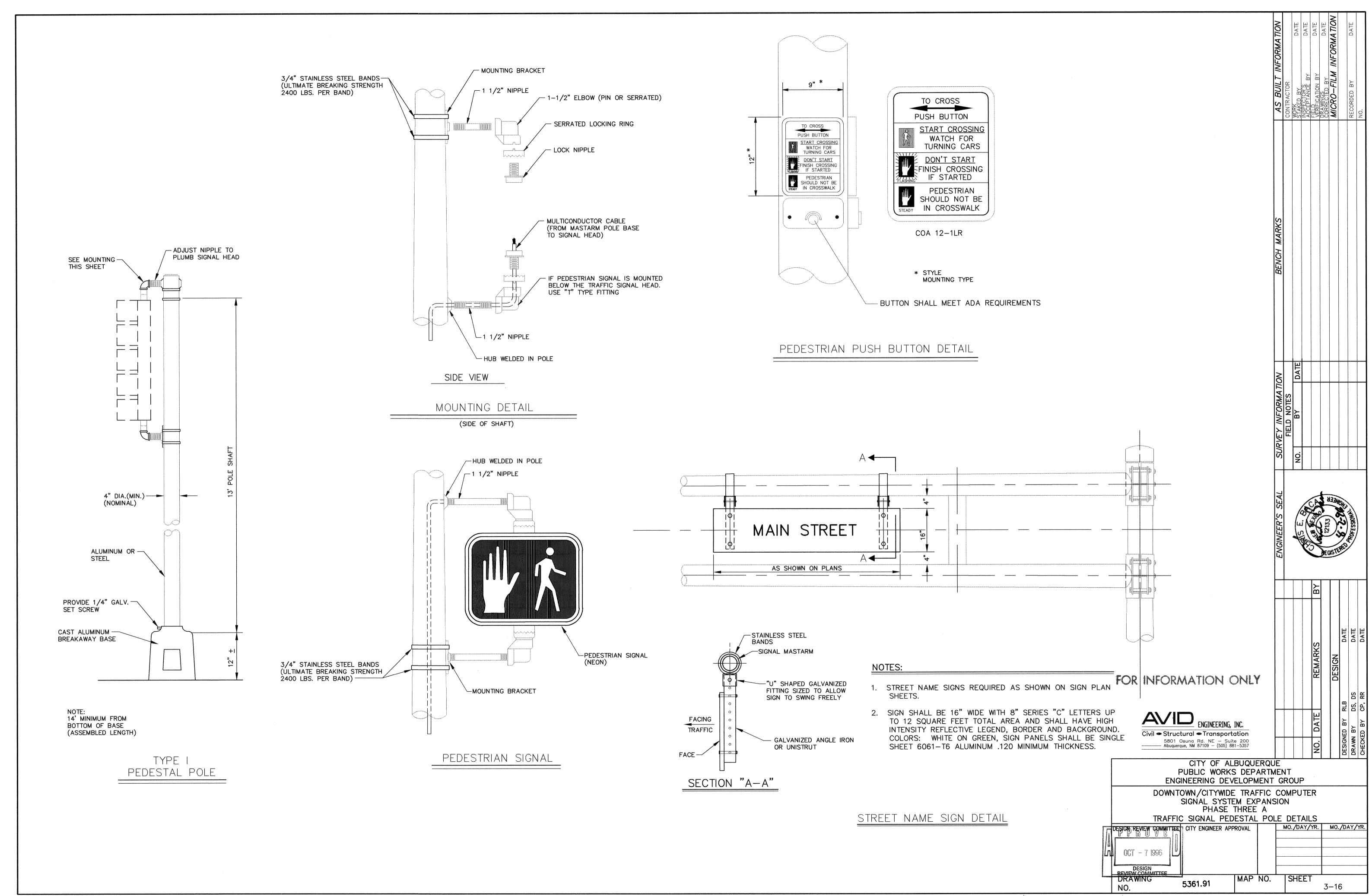
DESIGN. REVIEW COMMITTEE CITY ENGINEER APPROVAL

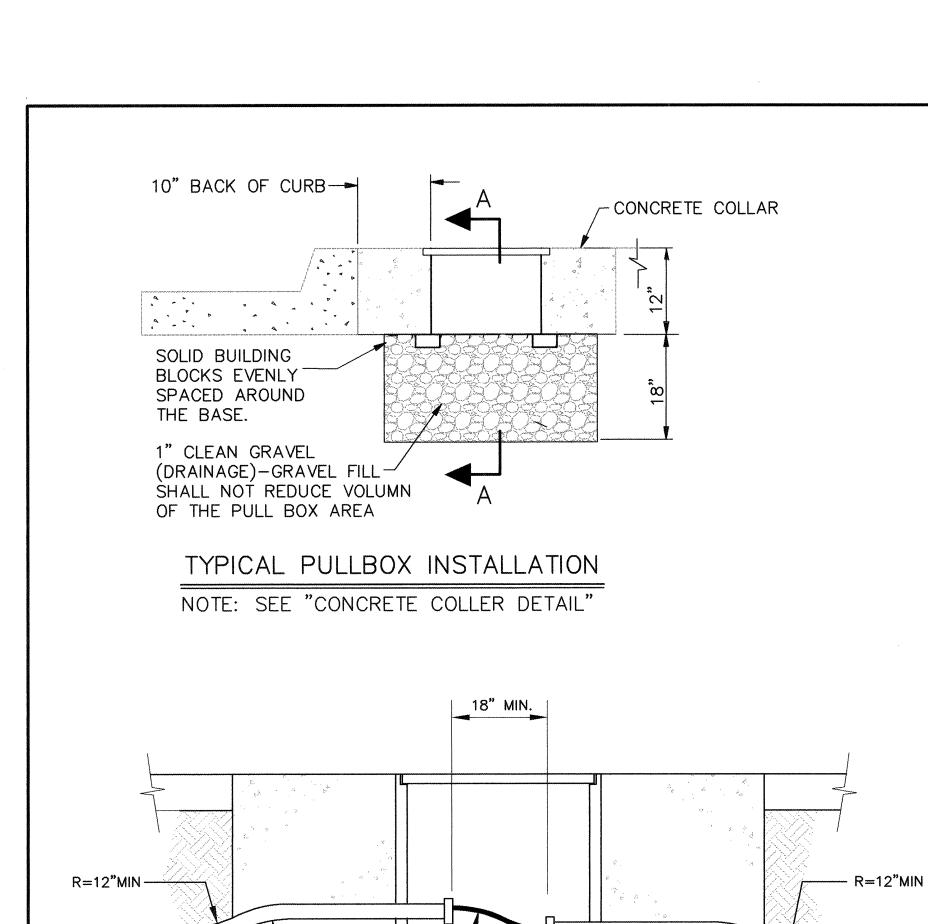
MO./DAY/YR. MO./DAY/YR. MO./DAY/YR.

MAP NO.

SHEET

3-15





NEW RIGID ELECTRICAL CONDUIT

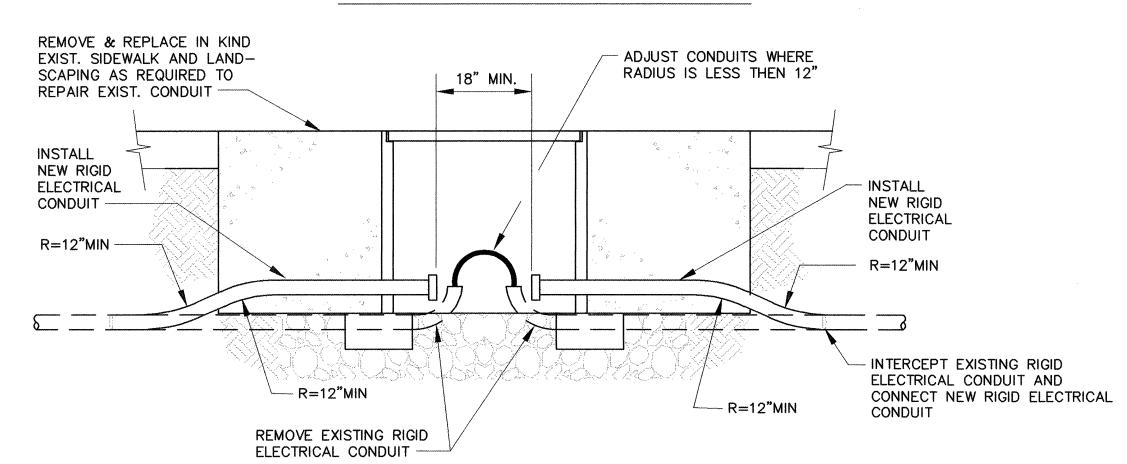
# TRAFFIC SIGNAL PULL BOX (TYPICAL) NEW CONDUIT INSTALLATION

CURVATURE RADIUS
SHALL EXCEED R=12"

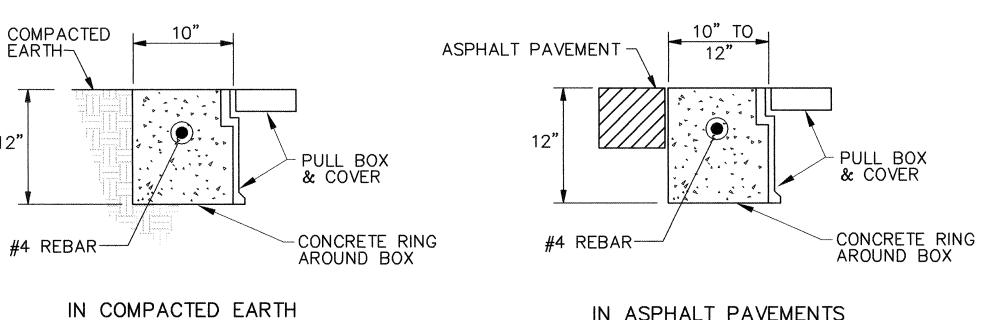
-NEW RIGID

ELECTRICAL

CONDUIT



TRAFFIC SIGNAL PULL BOX (TYPICAL) RETROFIT INSTALLATION



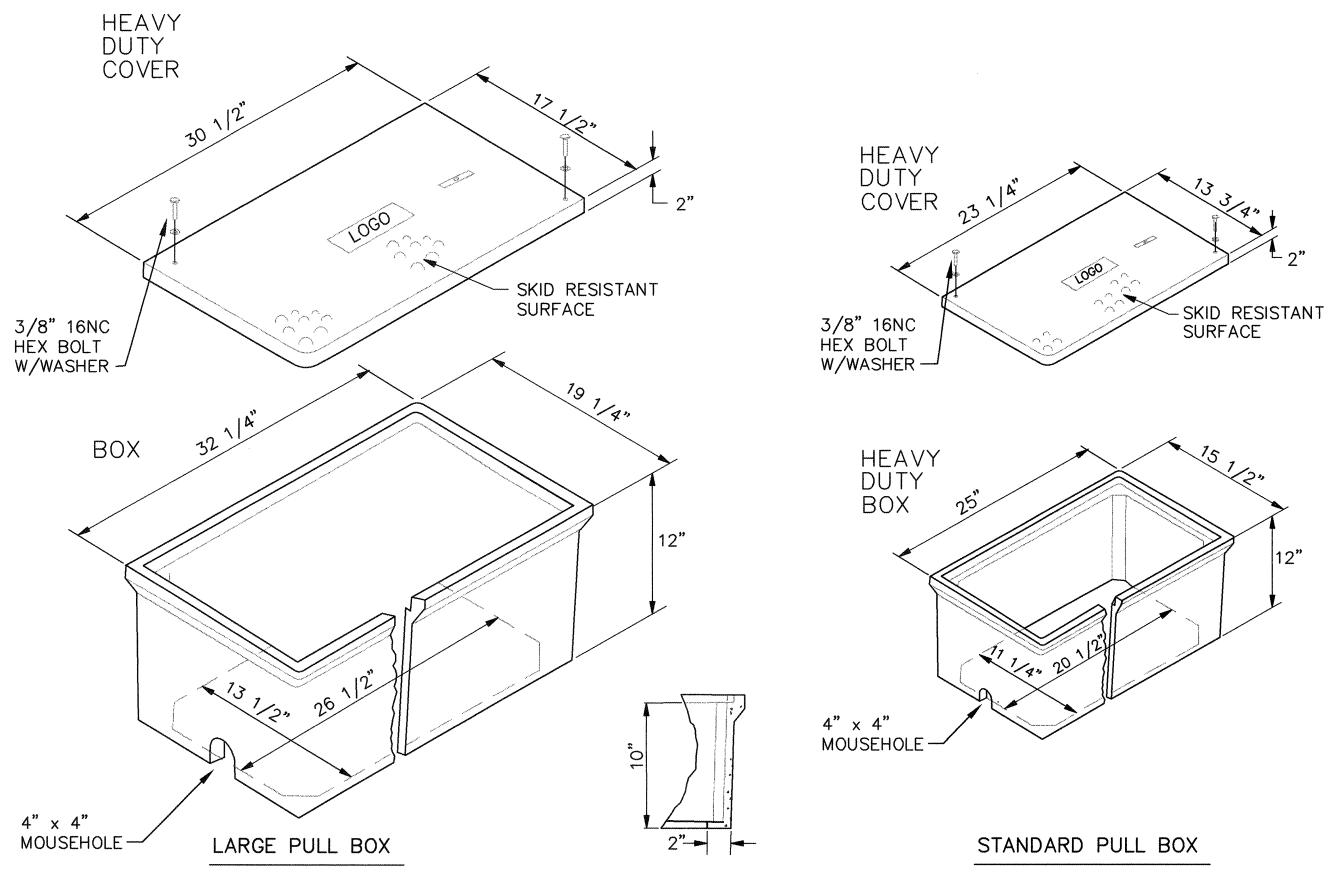
# IN ASPHALT PAVEMENTS

# CONCRETE PAVEMENT-\* COVER -CONCRETE RING AROUND BOX #4 REBAR-

# IN CONCRETE PAVEMENTS

# CONCRETE COLLAR DETAIL

NOTE: THE CONCRETE COLLAR FOR THE PULL BOXES WILL BE CONSIDERED INCIDENTAL TO THE PULL BOX BID ITEM.



# PULL BOX DETAILS

# NOTES FOR HEAVY DUTY REINFORCED POLYMER MORTAR PULL BOX AND COVERS

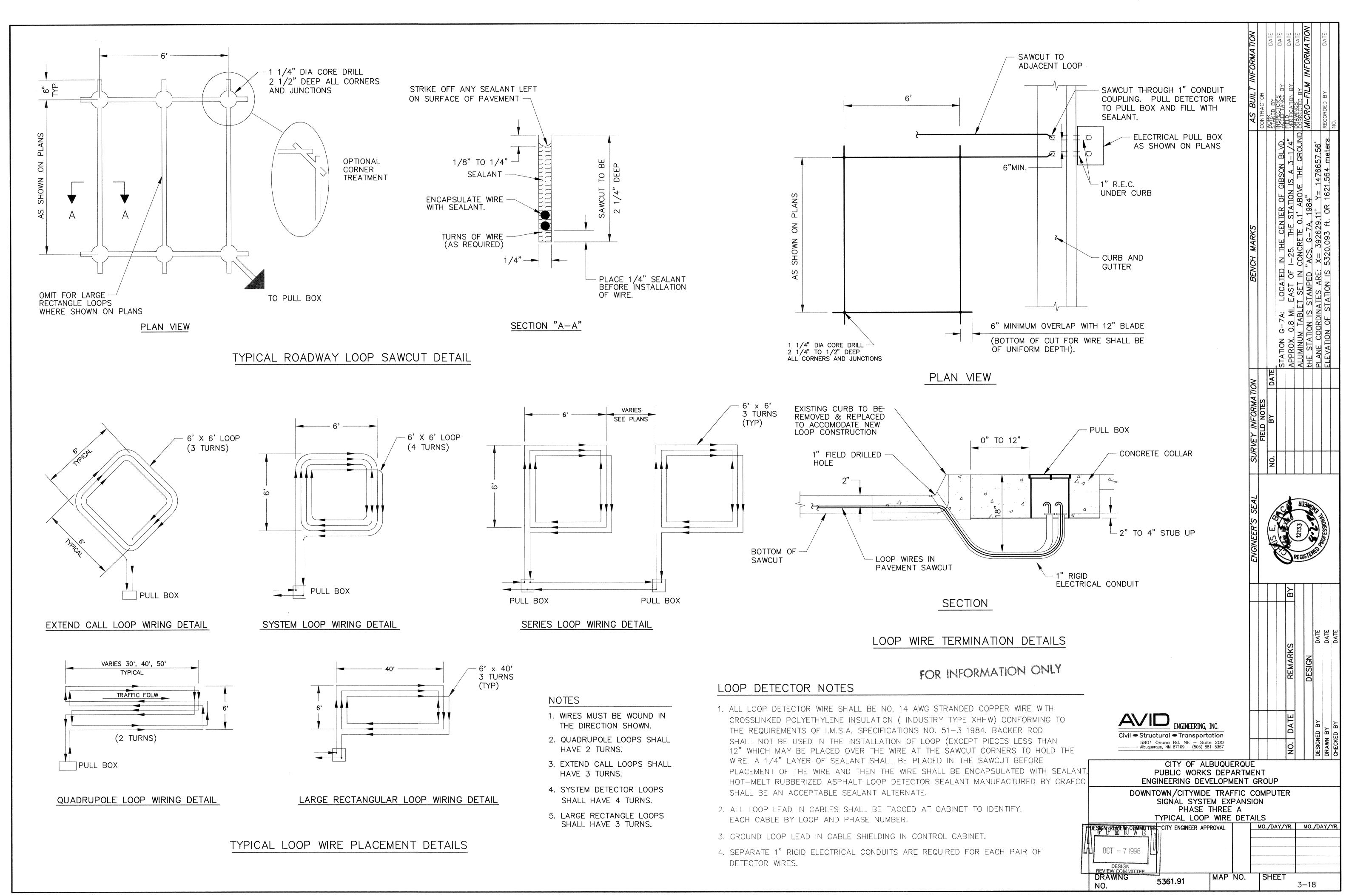
- 1. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS .. THE MATERIAL MUST HAVE THE FOLLOWING MECHANICAL PROPERTIES: COMPRESSIVE STRENGTH - 11,000 PSI, TENSILE STRENGTH - 1700 PSI, FLEXURAL STRENGTH - 7500 PSI.
- 2. ALL PULL BOX COVERS SHALL BE HEAVY DUTY REINFORCED POLYMER MORTAR, HAVING A SERVICE LOAD OF 22,568 LBS. OVER A 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 RECOMENDATIONS. 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".

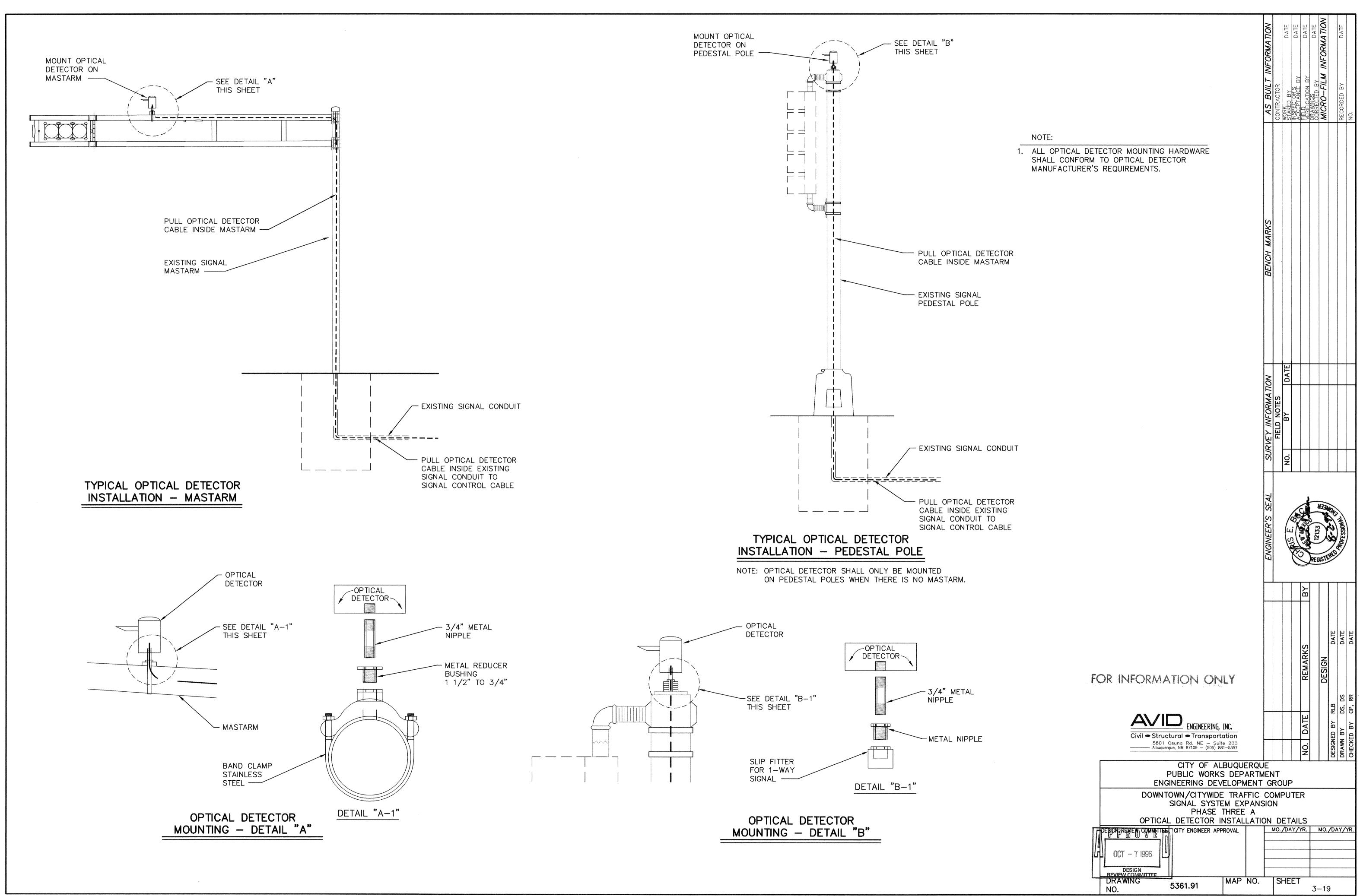
FOR INFORMATION ONLY ENGINEERING, INC. Civil - Structural - Transportation

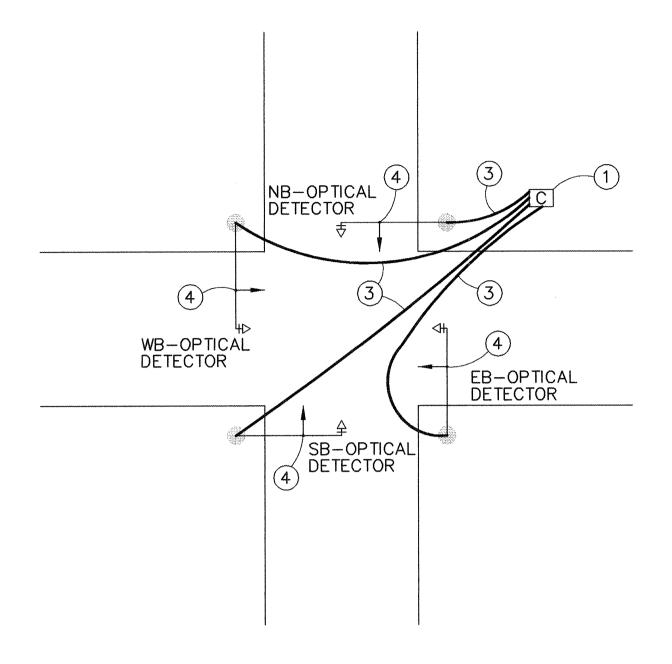
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL SYSTEM EXPANSION PHASE THREE A PULLBOX DETAILS DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

5801 Osuna Rd. NE — Suite 200 Albuquerque, NM 87109 — (505) 881-5357

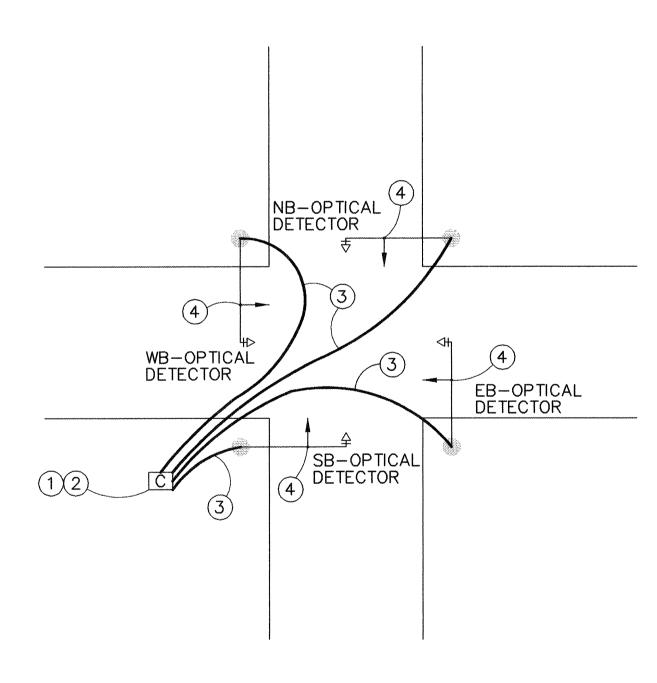
MO./DAY/YR. MO./DAY/YR. **OCT** - 7 1996 DESIGN MAP NO. SHEET 5361.91 3-17



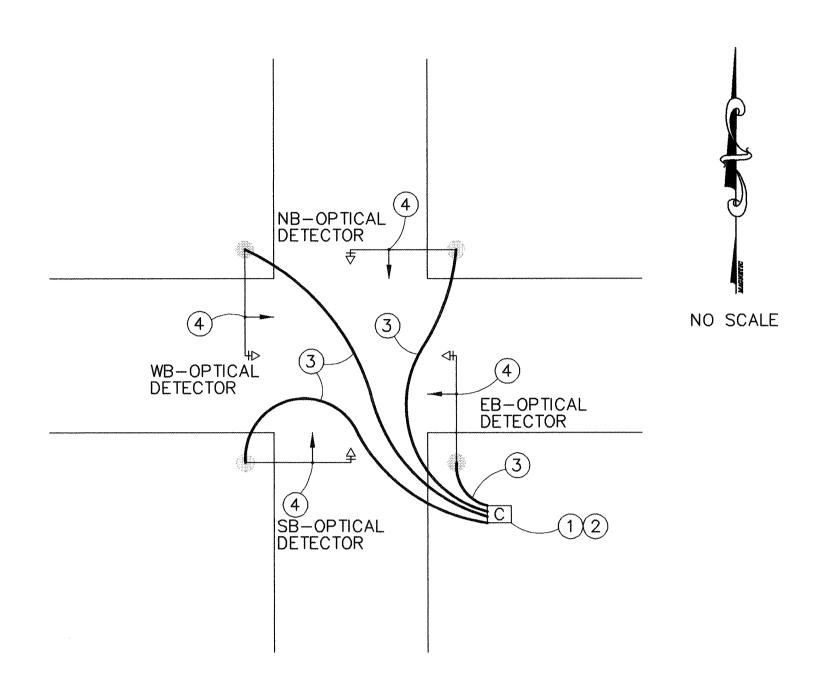




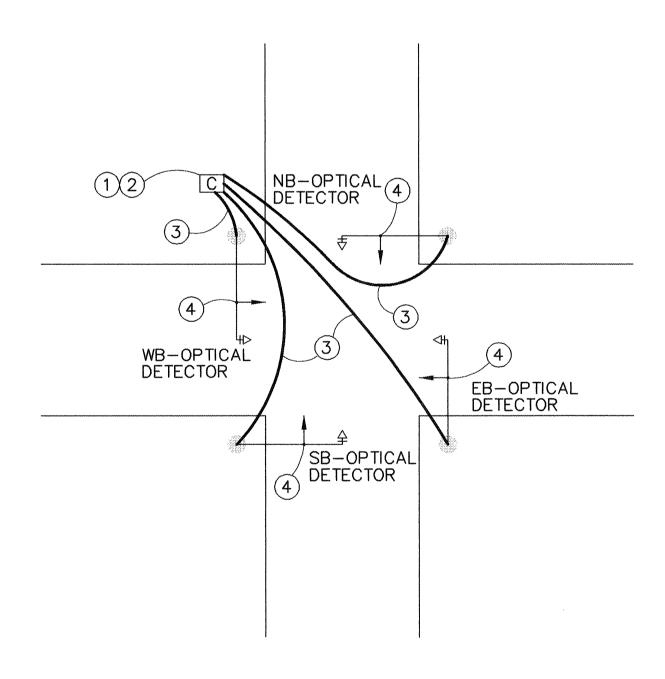
DETAIL EWNS #1 \* EAST-WEST NORTH-SOUTH DETECTION CONTROLLER ON NE CORNER



DETAIL EWNS #3 \* EAST-WEST NORTH-SOUTH DETECTION CONTROLLER ON SW CORNER



DETAIL EWNS #2 \* EAST-WEST NORTH-SOUTH DETECTION CONTROLLER ON SE CORNER



DETAIL EWNS #4 \* EAST-WEST NORTH-SOUTH DETECTION CONTROLLER ON NW CORNER

TYPICAL EMERGENCY VEHICLE OPTICAL DETECTION PLAN (SCHEMATIC)

# KEY NOTES

- INSTALL PHASE SELECTOR RACK
   INSIDE EXISTING CONTROL CABINET
- 2 INSTALL PHASE SELECTOR MODULE (S) INSIDE EXISTING CONTROL CABINET
- 3 INSTALL OPTICAL DETECTOR CABLE IN EXISTING SIGNAL CONDUITS
- (4) INSTALL OPTICAL DETECTOR, SINGLE DIRECTION, SINGLE CHANNEL (ID/IC) ON EXISTING SIGNEL MASTARM

# ESTIMATED LENGTH OF OPTICAL DETECTOR CABLE

DETAIL	ALL DIRECTIONS
EWNS #1	675
EWNS #2	675
EWNS #3	675
EWNS #4	675
L	<u> </u>

BOTH OPTICAL DETECTOR SHOWN MAY NOT BE REQUIRED. INTERSECTION. IF ONLY ONE DETECTOR IS TO BE INSTALLED DURING THIS PHASE THEN WIRING IS ONLY REQUIRED TO THAT MASTARM.

# ABBREVIATIONS

EB — EASTBOUND WB — WESTBOUND NB — NORTHBOUND SB - SOUTHBOUND NE - NORTHEAST NW - NORTHWEST SE - SOUTHEAST

SW - SOUTHWEST

FOR INFORMATION ONLY

AVID ENGINEERING, INC. Civil 

Structural 

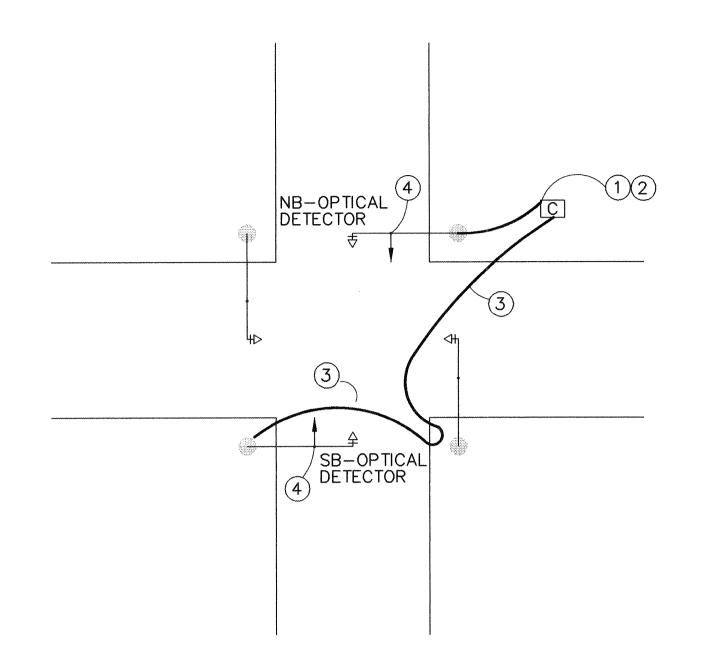
Transportation

5801 Osuna Rd. NE — Suite 200

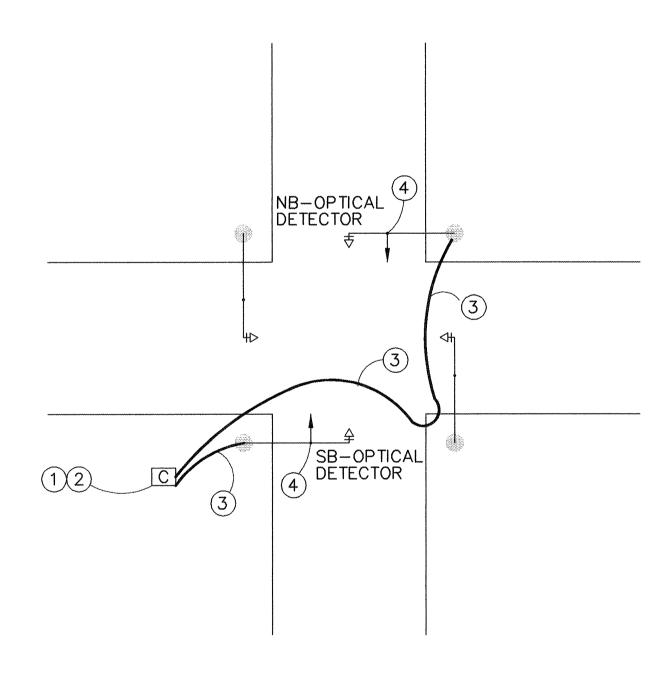
Albuquerque, NM 87109 — (505) 881-5357

PUBLIC WORKS	S DEP	ARTMEN		
SIGNAL SYSTE PHASE	EM EXI THREE	PANSIO A	N	
DESIGN REVIEW COMMETTEE CITY ENGINEER APPORTUNITIES COMMETTEE	PROVAL		MO./DAY/YR.	MO./DAY/
DRAWING NO. 5361.91	1		SHEET	3-20
	PUBLIC WORKS ENGINEERING DEV  DOWNTOWN/CITYWIDE SIGNAL SYSTE PHASE OPTICAL DET  OCT - 7 1996  DESIGN REVIEW COMMITTEE  DRAWING  1	PUBLIC WORKS DEP ENGINEERING DEVELOPM DOWNTOWN/CITYWIDE TRAISIGNAL SYSTEM EXTENSION OPTICAL DETECTION OF THE PROPERTY OF THE P	DOWNTOWN/CITYWIDE TRAFFIC CONSIGNAL SYSTEM EXPANSION PHASE THREE A OPTICAL DETECTION PLANT CITY ENGINEER APPROVAL  DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL  DESIGN REVIEW COMMITTEE DRAWING 5361 91 MAP NO.	PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP  DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL SYSTEM EXPANSION PHASE THREE A OPTICAL DETECTION PLAN  OCT - 7 1996  DESIGN REVIEW COMMITTEE  DRAWING  PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP  DOWNTOWN/CITYWIDE TRAFFIC COMPUTER SIGNAL SYSTEM EXPANSION PHASE THREE A OPTICAL DETECTION PLAN  MO./DAY/YR.  MO./DAY/YR.  DESIGN REVIEW COMMITTEE  DRAWING  FIG. 01  MAP NO. SHEET

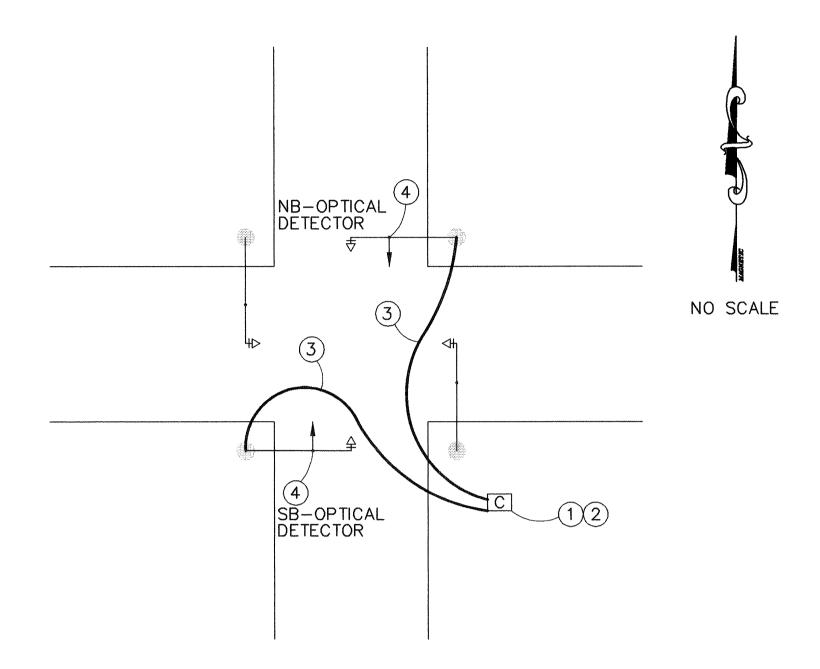
EAST-WEST NORTH-SOUTH



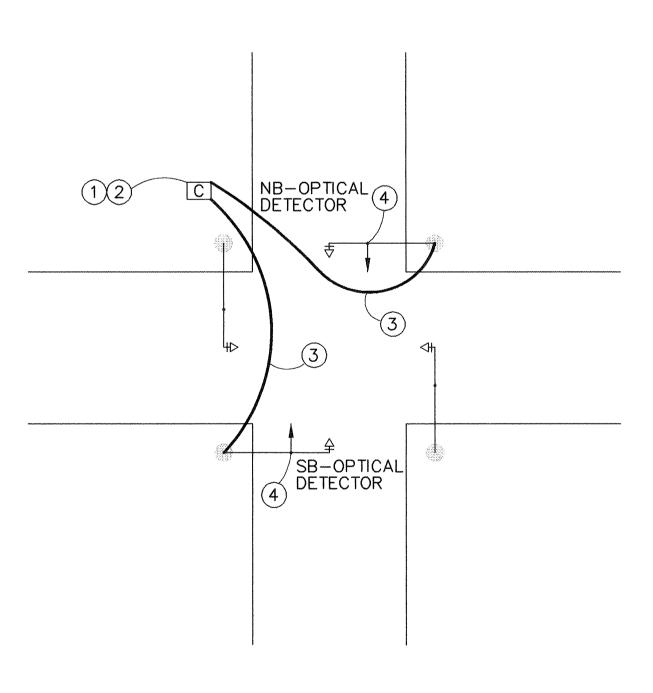
DETAIL NS #1 \*
NORTH-SOUTH DETECTION
CONTROLLER ON NE CORNER



DETAIL NS #3 \*
NORTH-SOUTH DETECTION
CONTROLLER ON SW CORNER



DETAIL NS #2 \*
NORTH-SOUTH DETECTION
CONTROLLER ON SE CORNER



DETAIL NS #4 \*
NORTH-SOUTH DETECTION
CONTROLLER ON NW CORNER

TYPICAL EMERGENCY VEHICLE
OPTICAL DETECTION PLAN (SCHEMATIC)
EAST—WEST NORTH—SOUTH

# KEY NOTES

- INSTALL PHASE SELECTOR RACK
   INSIDE EXISTING CONTROL CABINET
- 2 INSTALL PHASE SELECTOR MODULE (S) INSIDE EXISTING CONTROL CABINET
- (3) INSTALL OPTICAL DETECTOR CABLE IN EXISTING SIGNAL CONDUITS
- (4) INSTALL OPTICAL DETECTOR, SINGLE DIRECTION, SINGLE CHANNEL (ID/IC) ON EXISTING SIGNEL MASTARM

# ESTIMATED LENGTH OF OPTICAL DETECTOR CABLE

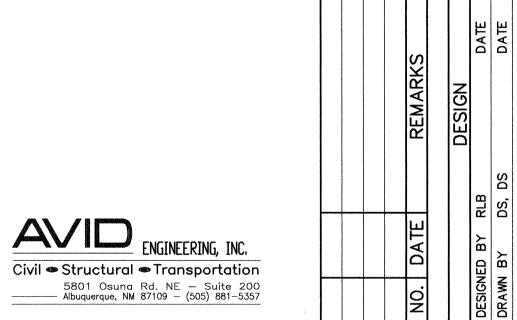
DETAIL	NB	SB	вотн
NS #1	100	300	400
NS #2	150	150	300
NS #3	300	100	400
NS #4	150	150	300

\* NOTE:
BOTH OPTICAL DETECTOR SHOWN MAY NOT BE REQUIRED.
REFER TO PLANS FOR REQUIRED DETECTOR AT EACH
INTERSECTION. IF ONLY ONE DETECTOR IS TO BE
INSTALLED DURING THIS PHASE THEN WIRING IS ONLY
REQUIRED TO THAT MASTARM.

# ABBREVIATIONS

EB - EASTBOUND
WB - WESTBOUND
NB - NORTHBOUND
SB - SOUTHBOUND
NE - NORTHEAST
NW - NORTHWEST
SE - SOUTHEAST
SW - SOUTHWEST

FOR INFORMATION ONLY



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

DOWNTOWN/CITYWIDE TRAFFIC COMPUTER
SIGNAL SYSTEM EXPANSION
PHASE THREE A
OPTICAL DETECTION PLAN NORTH—SOUTH

OF THE CITY ENGINEER APPROVAL

MO./DAY/YR. MO./DAY

PHASE THREE A
OPTICAL DETECTION PLAN NORTH—SOUTH

PRICE FOR THE CITY ENGINEER APPROVAL

OCT - 7 1996

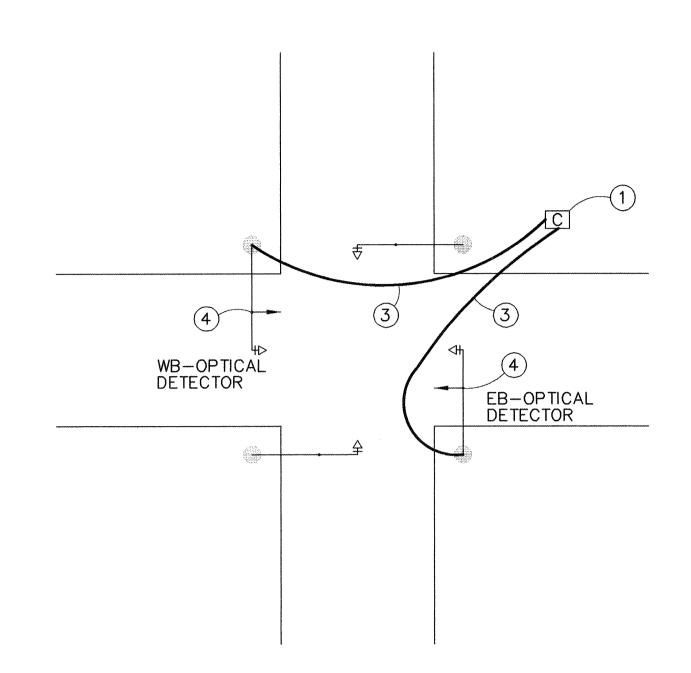
DESIGN
REVIEW COMMITTEE

DRAWING
NO.

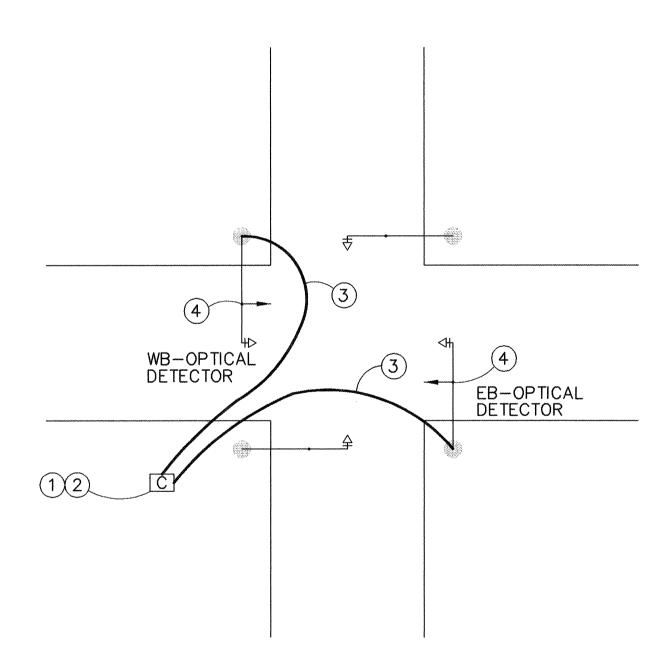
5361.91

MAP NO.
L15,16&17

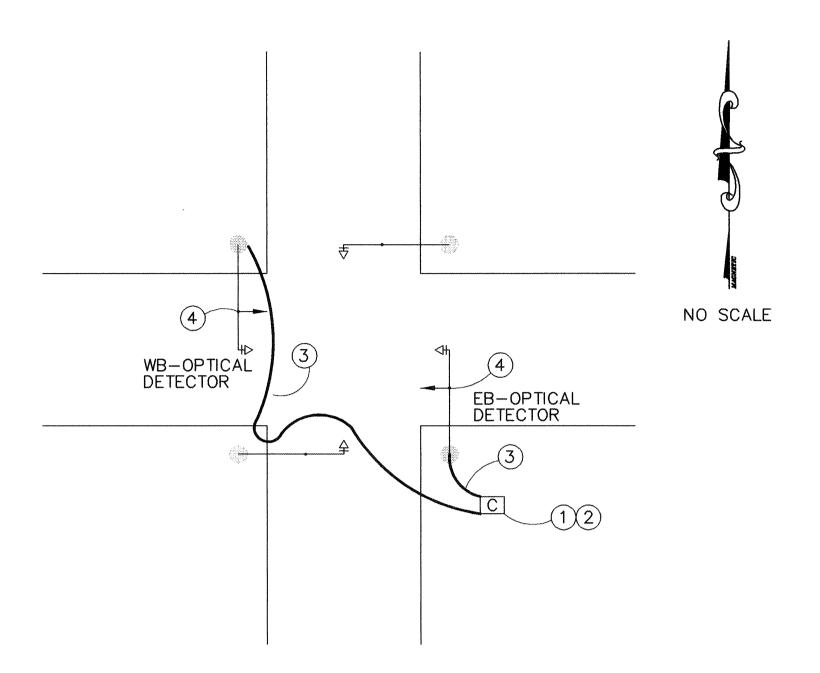
3-21



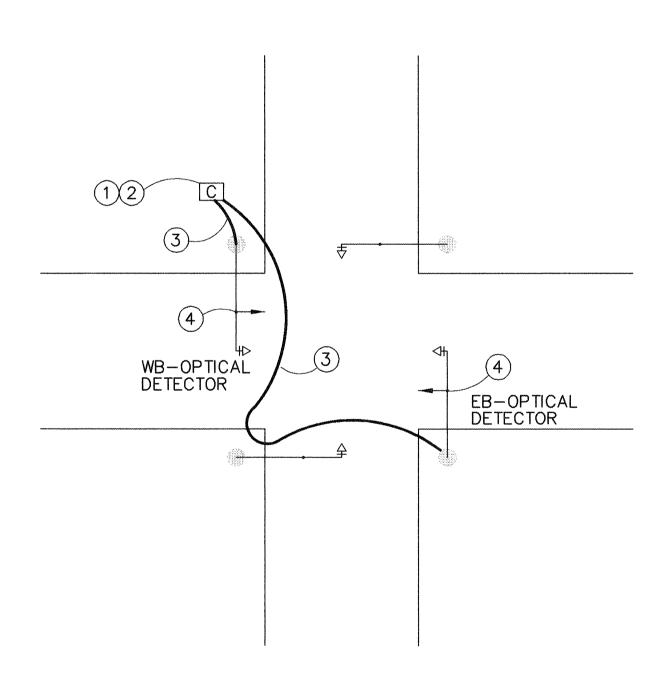
DETAIL EW #1 \*
EAST-WEST DETECTION
CONTROLLER ON NE CORNER



DETAIL EW #3 \*
EAST-WEST DETECTION
CONTROLLER ON SW CORNER



DETAIL EW #2 \*
EAST-WEST DETECTION
CONTROLLER ON SE CORNER



DETAIL EW #4 \*
EAST-WEST DETECTION
CONTROLLER ON NW CORNER

TYPICAL EMERGENCY VEHICLE
OPTICAL DETECTION PLAN (SCHEMATIC)
EAST—WEST NORTH—SOUTH

# KEY NOTES

- INSTALL PHASE SELECTOR RACK INSIDE EXISTING CONTROL CABINET
- (2) INSTALL PHASE SELECTOR MODULE (S) INSIDE EXISTING CONTROL CABINET
- 3 INSTALL OPTICAL DETECTOR CABLE IN EXISTING SIGNAL CONDUITS
- 4 INSTALL OPTICAL DETECTOR, SINGLE DIRECTION, SINGLE CHANNEL (ID/IC) ON EXISTING SIGNEL MASTARM

# ESTIMATED LENGTH OF OPTICAL DETECTOR CABLE

	·	·	Market 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997
DETAIL	EB	WB	вотн
EW #1	150	150	300
EW #2	100	300	400
EW #3	150	150	300
EW #4	300	100	400

\* NOTE:
BOTH OPTICAL DETECTOR SHOWN MAY NOT BE REQUIRED.
REFER TO PLANS FOR REQUIRED DETECTOR AT EACH
INTERSECTION. IF ONLY ONE DETECTOR IS TO BE
INSTALLED DURING THIS PHASE THEN WIRING IS ONLY
REQUIRED TO THAT MASTARM.

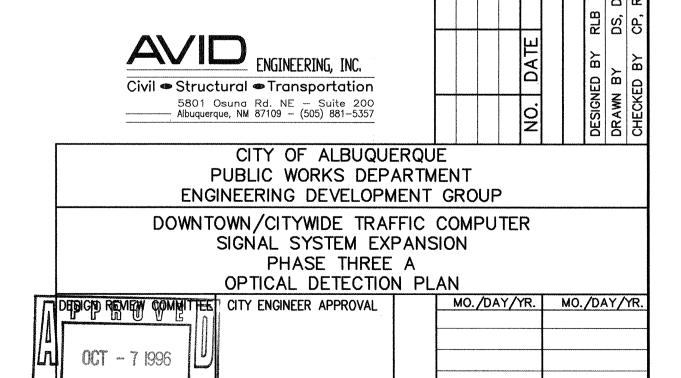
# ABBREVIATIONS

EB - EASTBOUND
WB - WESTBOUND
NB - NORTHBOUND
SB - SOUTHBOUND
NE - NORTHEAST
NW - NORTHWEST
SE - SOUTHEAST
SW - SOUTHWEST

FOR INFORMATION ONLY

DESIGN REVIEW COMMITTEE

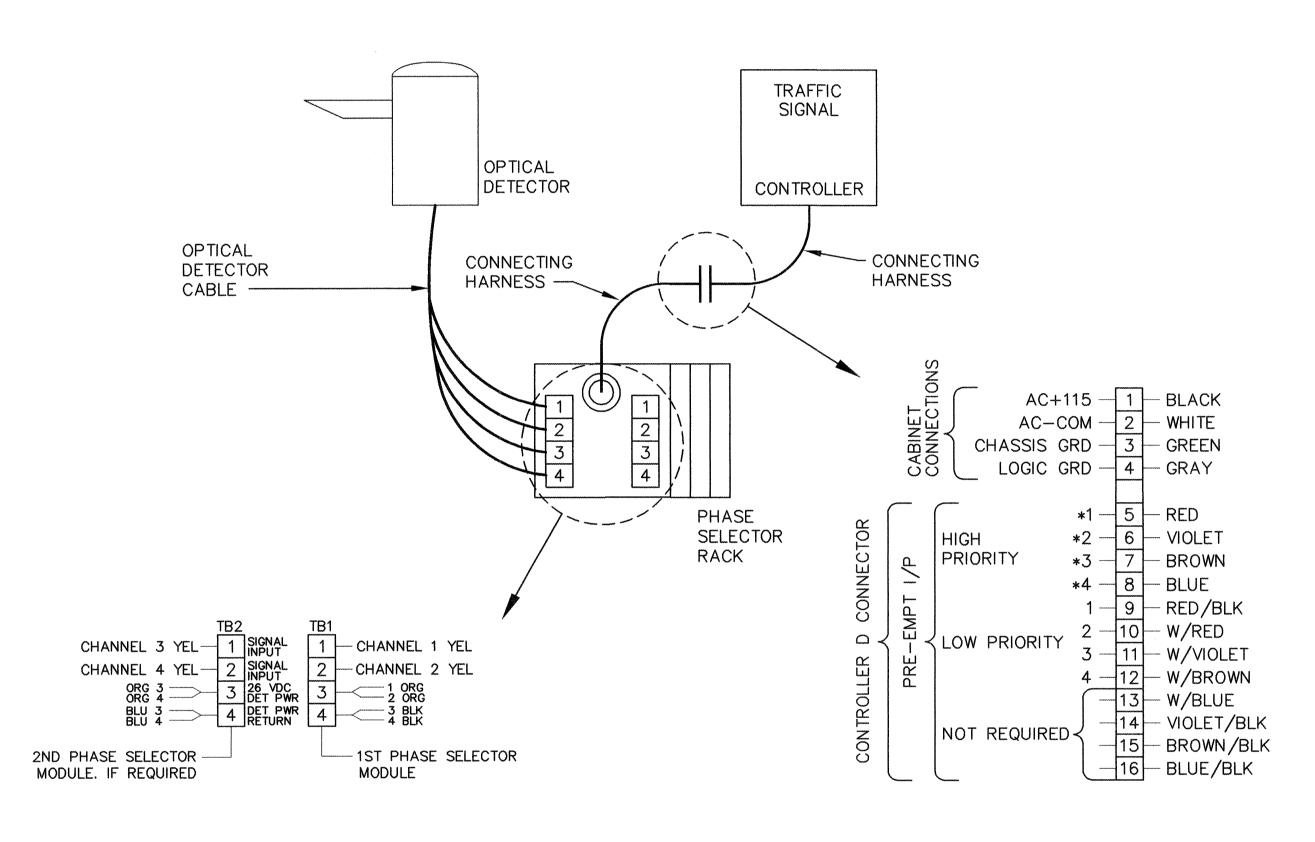
DRAWING NO.



MAP NO. | SHEET | L15,16&17

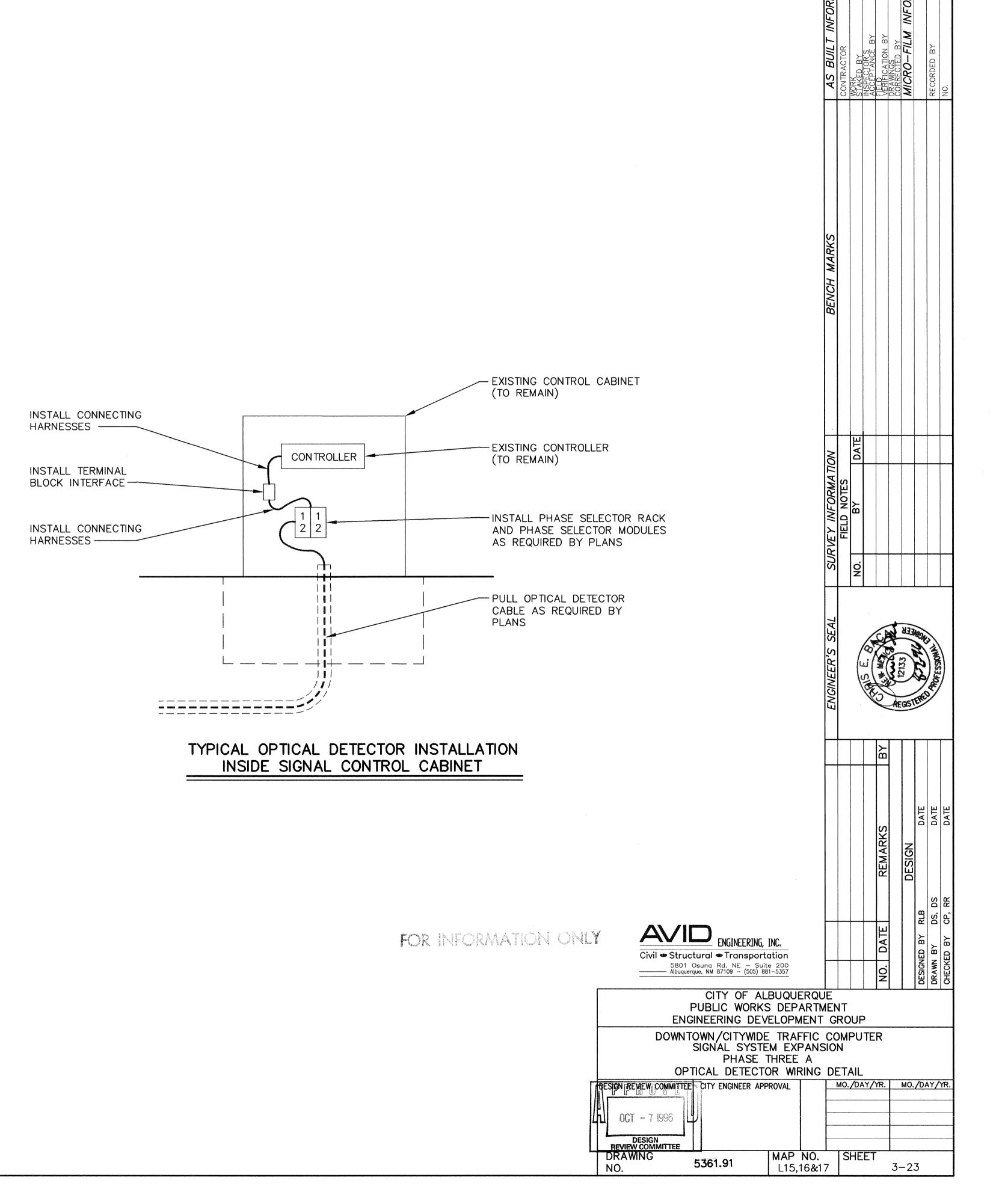
3-22

E:\COASIG\PLANSET\3-22 6-4-96 8:29:09 am EST



TERMINAL BLOCK INTERFACE

# OPTICAL DETECTION SYSTEM SCHEMATIC



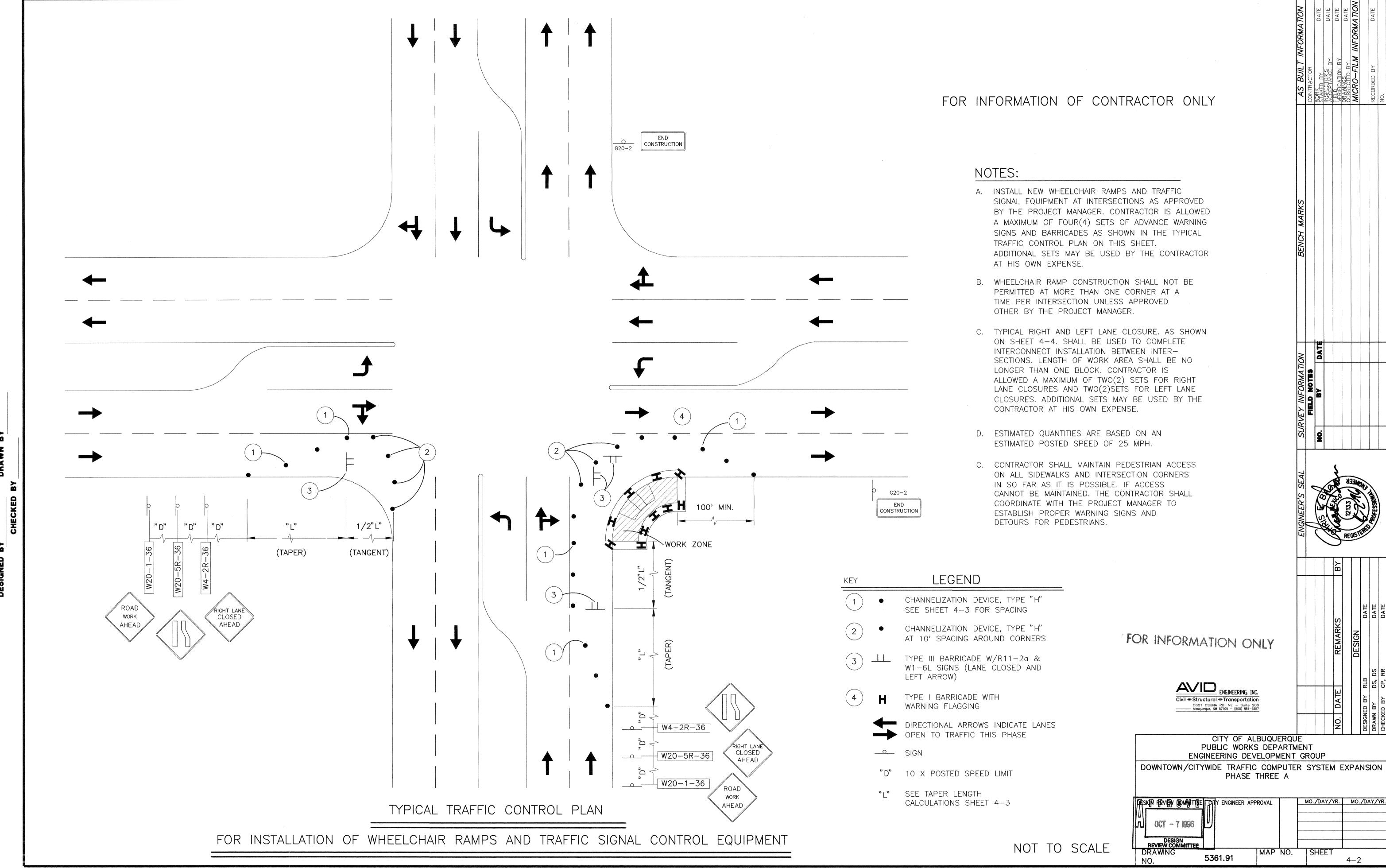
MO PUSTIS ALAS ESTANDINO MAI DINO MAI D

# CITY OF ALBUQUERQUE SPECIAL TRAFFIC CONTROL REQUIREMENTS

# PROJECT REQUIREMENTS

- 1. SEPARATE PERMITS WILL BE REQUIRED FOR EVERY LANE CLOSURE. EACH PERMIT SHALL BE CLEARED BY THE CONSTRUCTION COORDINATION DIVISION OF THE CITY OF ALBUQUERQUE FOR INTERFERENCE WITH OTHER CONSTRUCTION PROJECTS. THE CONTRACTOR SHALL ALLOW ENOUGH TIME BETWEEN HIS PERMIT REQUEST AND CONSTRUCTION BEFORE SCHEDULING CREWS AND EQUIPMENT.
- 2. ALL LANES INCLUDING PARKING LANES SHALL BE OPEN FROM 6:30 AM TO 6:30 PM, MONDAY THROUGH FRIDAY, UNLESS APPROVED OTHERWISE BY THE CITY'S CONSTRUCTION COORDINATION DIVISION.
- 3. CONTRACTOR SHALL COORDINATE WITH THE CITY'S CONSTRUCTION DIVISION TO INSURE THAT PROJECT MONITORING PERSONNEL ARE ON DUTY DURING THE PROPOSED WORK SCHEDULE.
- 4. THE CONTRACTOR SHALL WORK ONLY AT NIGHT AND ON SATURDAYS, SUNDAYS, AND HOLIDAYS (EXCEPT WHEN RESTRICTED BY SPECIAL EVENTS) AS DIRECTED BY THE CITY'S CONSTRUCTION COORDINATION DIVISION.
- 5. ALL EXCAVATIONS ARE TO BE BACKFILLED, FINISHED, PLATED, OR PATCHED AND OPEN TO VEHICULAR AND PEDESTRIAN TRAFFIC FROM 6:30 AM TO 6:30 PM, MONDAY THROUGH FRIDAY AND DURING SPECIAL EVENTS AS DIRECTED BY THE CITY'S CONSTRUCTION COORDINATION DIVISION. BARRICADING OF CONSTRUCTION SITES SHALL BE PLACED NO EARLIER THAN ONE HOUR PRIOR TO STARTING WORK AND SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A BARRICADE PICKUP TO COINCIDE WITH THE COMPLETION OF CLEARING THE ROADWAY.
- 6. THE CONTRACTOR SHALL USE HIGH EARLY STRENGTH CONCRETE AS REQUIRED TO CONFORM TO THESE TRAFFIC CONTROL REQUIREMENTS. MIX DESIGNS FOR HIGH EARLY STRENGTH CONCRETE SHALL BE APPROVED IN ADVANCE OF ANTICIPATED USE.
- 7. WORK AREAS SHALL BE LIMITED TO A MAXIMUM OF 5 INTERSECTIONS AND 5 CONNECTING BLOCKS AT ONE TIME. WORK SHALL BE SCHEDULED TO MINIMIZE DISRUPTION AND CONTINUE OPERATIONS TO A SMALL AREA.
- 8. THE CONTRACTOR SHALL REVIEW HIS OPERATIONAL PRACTICES AND PROCEDURES ON A DAILY BASIS TO EXPEDITE THE WORK AND CLEAR THE RIGHT-OF-WAY AS SOON AS POSSIBLE.
- 9. THE CONTRACTOR SHALL PREPARE A DETAILED CRITICAL PATH PROJECT SCHEDULE FOR THE PROJECT BEFORE BEGINNING CONSTRUCTION. THIS SCHEDULE SHALL BE SUBMITTED TO THE PROJECT MANAGER FOR REVIEW, COMMENTS, AND APPROVAL. THE SCHEDULE WILL BE USED FOR ESTABLISHING MAJOR CONSTRUCTION OPERATIONS AND FOR DETERMINING THE PROGRESS OF THE WORK. SHOULD IT BECOME APPARENT TO THE PROJECT MANAGER OR THE CONTRACTOR THAT THE CONTRACTOR WILL NOT BE ABLE TO MEET THE REQUIREMENTS OF THE SCHEDULE, THE CONTRACTOR SHALL SUBMIT A REVISED SCHEDULE REFLECTING THE ACTUAL AUTHORIZED TIME LEFT FOR REVIEW AND APPROVAL. REQUESTS FOR TIME EXTENSIONS SUBMITTED BY THE CONTRACTOR WILL BE COMPARED TO THE CRITICAL PATH AND APPROVED OR DENIED ON THIS BASIS. THE CONTRACTOR SHALL UPDATE THE SCHEDULE MONTHLY AND SUBMIT WITH THE MONTHLY PAYMENT REQUEST.
- 10. THE CONTRACTOR'S COSTS TO COMPLY WITH THE "SPECIAL CITY TRAFFIC CONTROL REQUIREMENTS" INCLUDING, BUT NOT LIMITED TO, ADDITIONAL COORDINATION, PREPARATION OF CRITICAL PATH PROJECT SCHEDULE, SCHEDULING OF WORK, WORKING DURING OFF—HOURS, PLATING, PATCHING, USE OF HIGH—EARLY STRENGTH CONCRETE, REMOVING AND RESETTING OF TRAFFIC CONTROL DEVICES, ETC. SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 618100 SPECIAL CITY TRAFFIC CONTROL REQUIREMENTS.

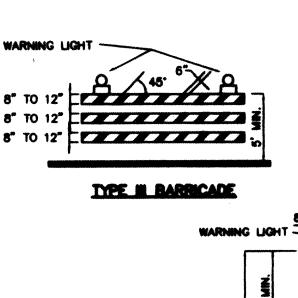
	AS BUILT INFORMATION	CONTRACTOR	WORK DATE		VERIFICATION BY DATE	DRAWINGS DATE CORRECTED BY	MICRO-FILM INFORMATION		RECORDED BY DATE	NO.
	BENCH MARKS									
	SURVEY INFORMATION	FIELD NOTES	NO. BY DATE							
	ENGINEER'S SEAL		THE OF THE PERSON OF THE PERSO	A CONTRACTOR OF THE PARTY OF TH		XEG.   XEG.	THE STATE OF THE S	100 11-7- N.W.	* Social Parties	
FOR INFORMATION ONLY					REMARKS BY		DESIGN	DATE	DATE	DATE
ENGINEERING, INC.  Civil Structural Transportation  5801 OSUNA RD. NE — Suite 200 Albuquerque, NM 87109 — (505) 881–5357  CITY OF ALBUQUERQUERQUERQUERQUERQUERQUERQUERQUERQUE	MEN G	RO			NO.   DATE			DESIGNED BY	DRAWN BY	CHECKED BY
SYSTEM EXPANSION SPECIAL TRAFFIC CONTROL RE  PESON DEVINOCOMMETER CITY ENGINEER APPROVAL  DESIGN REVIEW COMMITTEE  DRAWING NO. 5361.91  MAP NO.	EQL	JIRI MO.	EM /DA		TS R.	A	мо. —1		NY/	YR.



# CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

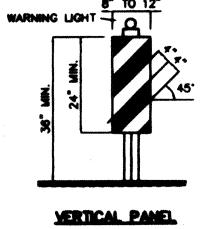
- CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT 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.
- CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- 6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
- 8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
- 9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
- 10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
- 11. CONTRACTOR SHALL NOT BEGIN WORK BEFORE 7:00 A.M. OR END WORK AFTER 7:00 P.M. WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY 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 TRAVELLED 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. 24 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
- 20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

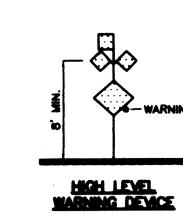
- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING: STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- 23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- 24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION. WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
- 25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.
- 26. ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING GRADE SHEETING OR BETTER.



BASE VARIES

COMES





# **LEGEND**

WORK AREA BARRICADE - TYPE I, TYPE II, OR BARREL

BARRICADE - TYPE III

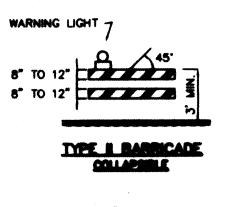
VERTICAL PANEL

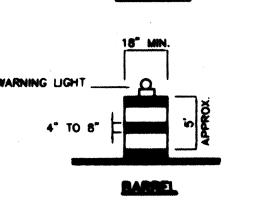
DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET

SPACING BETWEEN BARRICADES- A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED LIMIT OF THE STREET

TAPER LENGTH - SEE CHART BELOW

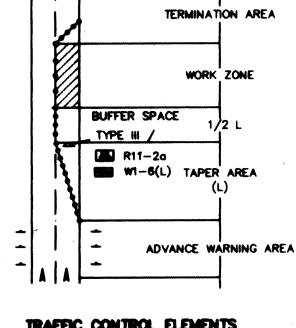
THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.





8" TO 12"

COLLAPSIBLE



TRAFFIC CONTROL ELEMENTS

# TAPER REQUIREMENTS

SPEED LIMIT	TAP	ER LENGT (FEET)	ዝ (L)	MINIMUM NUMBER		DEVICE IN FEET
(MPH)	10' LANE	11' LANE	12' LANE	OF 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 MINIMUM DISTANCE IN SECT

SPEED	EED MINIMUM DISTANCE 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	L MINIMUM					
SHIFTING TAPER	1/2 L MINIMUM					
SHOULDER TAPER	1/2 L MINIMUM					
TWO-WAY TRAFFIC TAPER						
DOWNSTREAM TAPERS	100 FEET PER LAN					

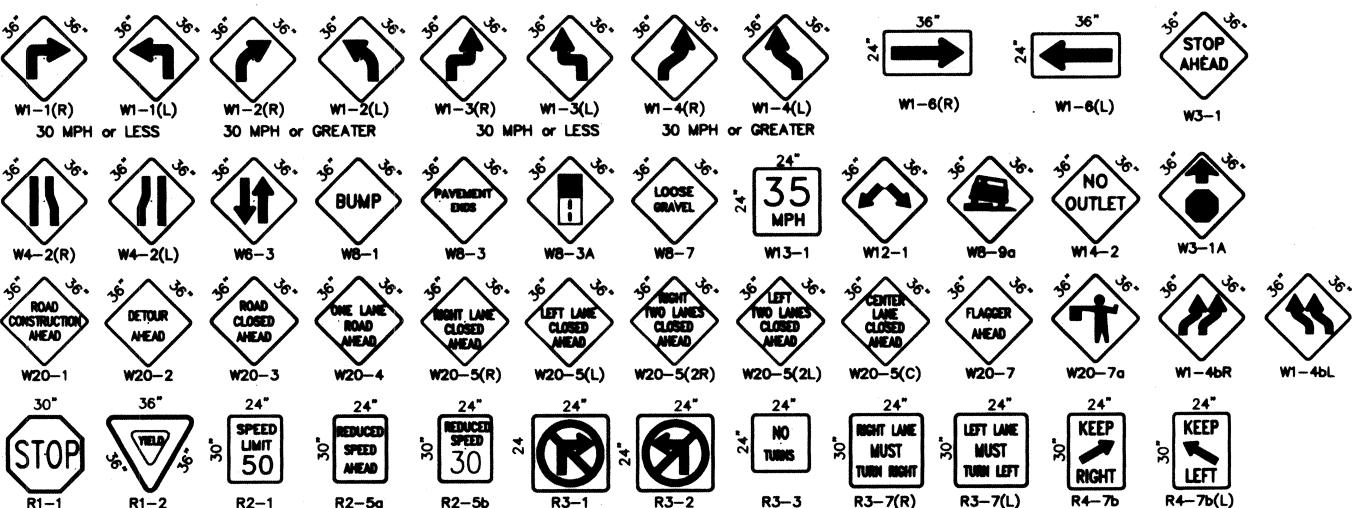
SPEED LIMIT	_
40 MPH, OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR GREATER	$L = W \times S$

FOR MYSC

CCO CIMIT					7	ĭ. il		ľ	
MPH OR LESS $L = \frac{WS^2}{60}$					SEI	2		SOS	
MPH OR GREATER L = W x S								STANDARDS	
TAPER LENGTH								STA	,
= WDTH OF OFFSET IN FEET = POSTED SPEED OR OFF-PEAK				~ W.				C.O.A.	
85-PERCENTILE SPEED IN MPH	H	_	+	ш			_	ن	
PAATIONIONLY .				DATE			ED BY	B	ED BY
				NO.			DESIGNED	DRAWN	CHECKED
CITY OF ALBUQUERG	) IF							1	-
PUBLIC WORKS DEPART		NT					ď		
TODEIC WOINS DELAIN									

•	CITY OF ALPUBLIC WORKS NEERING DEV	S DEP	ART	MENT	
LE:					
SIGNING AND C	ONSTRUCTION	TRAFFI	C CO	NTROL STA	NDARDS
SIGN REVIEW COMMITEE	CITY ENGINEER APPROVAL		1.1	MO./DAY/YR.	MO./DAY/YR.
			UPDATE		
			. J		
			AST		
OJECT ).	5361.91	MAP NO.		SHEET	<b>OF</b> 3

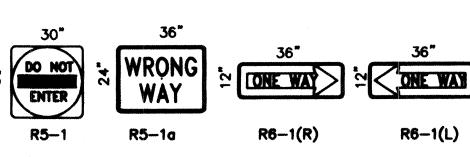
# SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS

ORANGE BACKGROUND.

SHALL HAVE A BLACK LEGEND ON A



THERU TRAFFIC IGEP

PREPARED

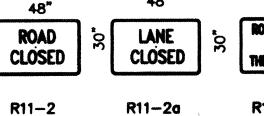
SPECIAL

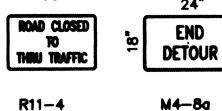


ACCESS TO

SPECIAL

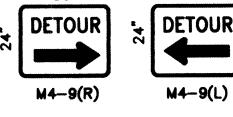
SIGN 50











END

CONSTRUCTION

G20-2

