FILENET FORM FOR RECORD CENTER

SECURITY	☐ RESTRICTED OR UNRESTRICTED
PROJECT#	7337.81
PROJECT TITLE	Coors Blvd / Namaste Rd - Western Trail Traffic Signal Installation
ATLAS ZONE	F-11
DATE OF MAP & RECORD STAMP	4/8/2005
SERIES	7 6
NUMBER OF SHEETS	14

HOW TO FILL OUT THE FORM EXAMPLE

SECURITY	☐ RESTRICTED OR ☑ UNRESTRICTED
PROJECT#	6777.81
PROJECT TITLE	BLACK ARROYO MASTER STORM DRAIN
ATLAS ZONE	A-11, A-12
DATE OF MAP & RECORD STAMP	2/6/2003
SERIES	26
NUMBER OF SHEETS	13

CONSTRUCTION PLANS FOR

COORS BOULEVARD / NAMASTE ROAD-WESTERN TRAIL TRAFFIC SIGNAL INSTALLATION

ALBUQUERQUE, NEW MEXICO

INDEX

SHEET	NUMBER	DESCRIPTION	
	1	TITLE SHEET	
	2	CONTROL DATA PLAN	
	3	INTERSECTION PLAN	
	4	TRAFFIC SIGNAL NOTES & LEGEND	
	5	TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS & INCIDENTAL ITEMS	
	6	TRAFFIC SIGNAL ESTIMATED QUANTITIES	
	7	TRAFFIC SIGNAL PLAN	
	8-9	TRAFFIC SIGNAL CABLES & CONDUITS	
	10	TRAFFIC SIGNAL FUNCTIONS & DETECTORS	
	11	INTERSECTION LIGHTING PLAN	and the same of th
	12	SIGNING & STRIPING PLAN	.8/
	13	TRAFFIC CONTROL SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS	
	14	ATTROVERSION	REV. ENGINEER

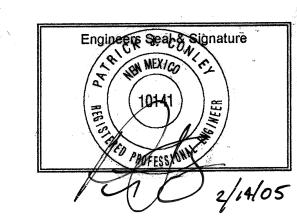
AS BUILT CERTIFICATION

I. DAVID VIGIL, DO HEREBY ATTEST TO THE FACT THAT THE AS-BUILT INFORMATION SHOWN HEREON IS THE RESULT OF A FIELD SURVEY PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NORTHSTAR SURVEYING



PATRICK J. CONLEY of the firm of SMITH ENGINEERING CO. A Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications, while someone from Smith Engineering Company was onsite, approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by DAVID VIGIL (Surveyor Name) NMPS number 8911 (PS#).



ENGINEERING A SPATIAL DATA A ADVANCED TECHNOLOGIES

/ICINITY MAP: NOT TO SCALE ZONE MAP NO. F-11

NOTICE TO CONTRACTORS

- AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK
- EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN
- MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE
- TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE GENERAL CONDITIONS
- 7. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED W/ PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO THE SAME LOCATION AS
- CONTRACTOR SHALL. AT HIS OWN EXPENSE. ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL
- CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAS BEEN RECORDED.
- 10. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR
- CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION SEVEN (7) DAYS PRIOR TO NEEDING VALVES TURNED ON OR OFF.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

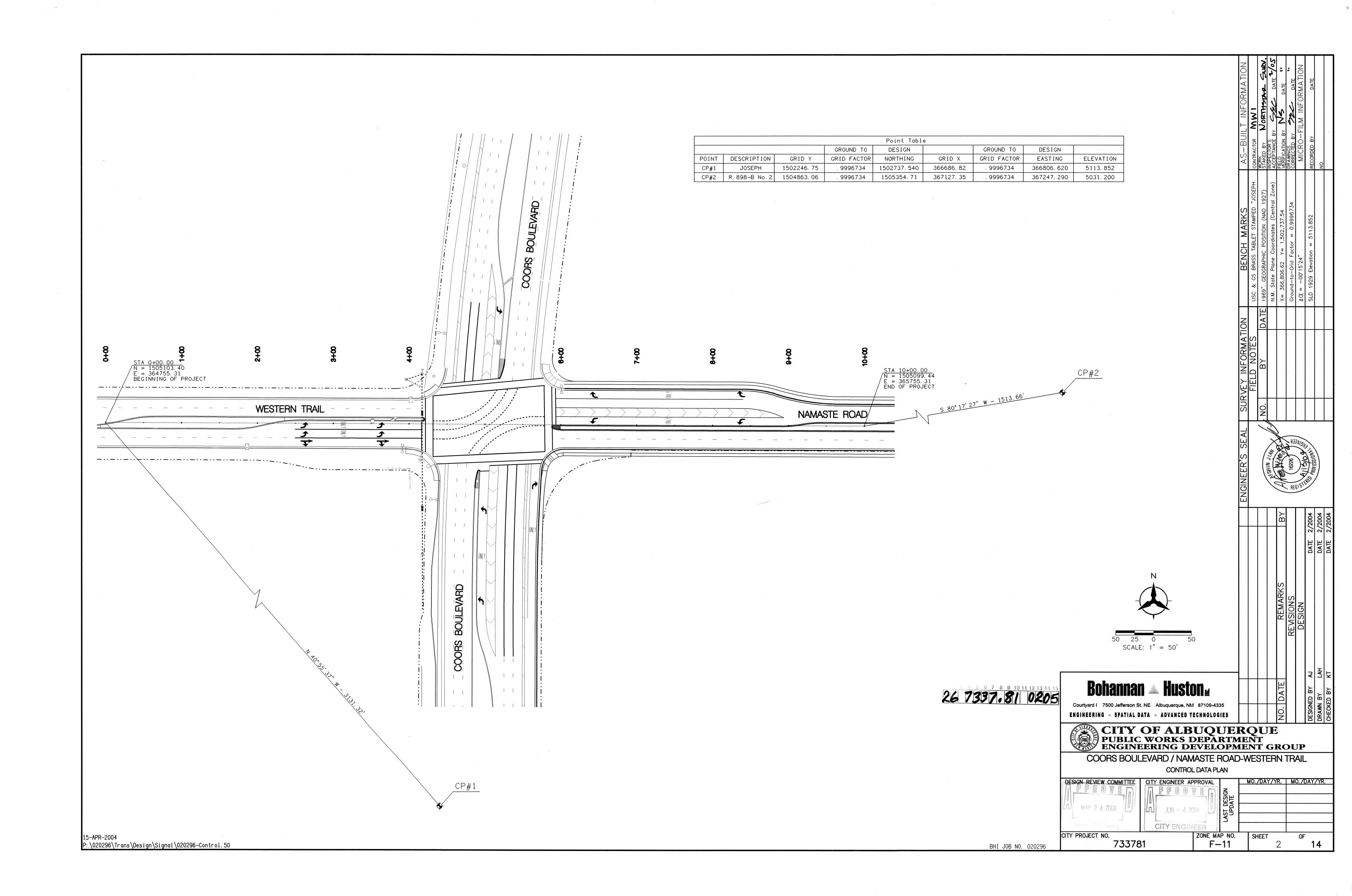
- ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- X BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER.
- SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- IF CURB IS DEPRESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
- X THE REQUESTOR OR DEVELOPER SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ALL CURB AND GUTTER OR SIDEWALK DAMAGED AFTER APPROVAL BY THE CITY ENGINEER OF WORK COMPLETED BY THE CONTRACTOR.

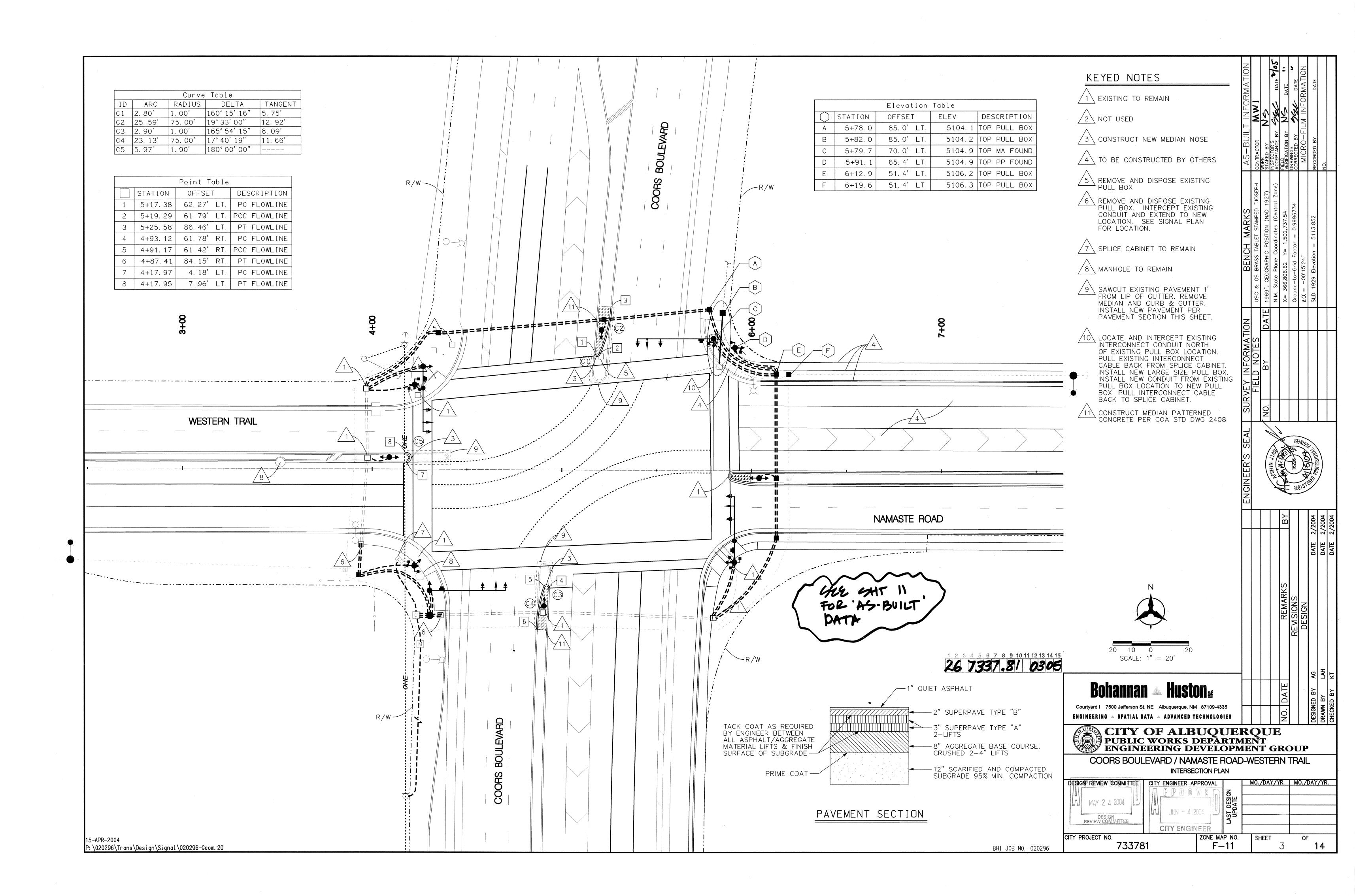
CITY ENGINEER DATE USER DEPARTMENT DATE USER DEPARTMENT APPROVALS ERS STAMP & SIGNATURE ENGINEER ORC Chairman APPROVED FOR CONSTRUCTION ransportation Water/Wastewater Lauy / Const. Coord.

RB CASE NUMBER

CITY PROJECT NO. 733781 XXXXXX

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SIGNAL NOTES

- 1. ALL WORK ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE CURRENT NATIONAL ELECTRIC CODE, THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS FOR ELECTRICAL WIRING AND APPARATUS AND THE CITY'S TRAFFIC ENGINEERING OPERATIONS THIRD DRAFT SPECIFICATIONS (JUNE 1994).
- 2. LOCATIONS OF CONDUITS, FOUNDATIONS, METER PEDESTALS, 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. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
- 3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
- 4. THE CONTRACTOR SHALL BORE, DRILL OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER
- 5. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS, SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
- 6. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
- 7. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS. STEEL COVERS. AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE
- 8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS (857-8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR, CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPEN.
- THE CONTRACTOR SHALL NOTIFY PNM 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK IS CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
- 11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
- 12. IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.
- 13. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
- 14. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
- 15. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
- 16. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULL BOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
- 17. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
- 18. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATIONG ALL EXISTING UTILITIES BY CONTACTING NM ONE CALL SYSTEM AT 260-1990. EXPLORATORY TRENCHING, IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES WILL BE COMPLETED AT THE DISCRETION OF THE CONTRACTOR. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY CONFLICTS IDENTIFIED THROUGH THIS PROCESS. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
- 19. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY LANDSCAPE AREAS OR MEDIANS WITH PATTERNED CONCRETE WHICH HAVE BEEN DAMAGED AS THE RESULT OF DIGGING, TRENCHING AND BORING FOR THE PURPOSE OF INSTALLING CONDUITS, PULL BOXES. MANHOLES, AND FOUNDATIONS FOR CABINETS, MASTARMS AND PEDESTAL POLES.

20. THE FOLLOWING CITY OF ALBUQUERQUE STANDARD DRAWINGS SHALL BE USED FOR THIS PROJECT: 2550 - TRAFFIC SIGNAL PULL BOX DETAILS 2551 - TRAFFIC SIGNAL MANHOLE DETAILS - TRAFFIC SIGNAL CONTROLLER CABINET & PEDESTRIAN FOUNDATION DETAILS TRAFFIC SIGNAL SPLICE CABINET GROUND MOUNT (LARGE) - TRAFFIC SIGNAL FOUNDATION DETAILS TYPE II AND TYPE III STANDARDS - TRAFFIC SIGNAL MISCELLANEOUS DETAIS 2562C - TRAFFIC SIGNAL MASTRM DETAILS, TYPE III STANDARD - TRAFFIC SIGNAL TYPE III STANDARD MISC. DETAILS - TRAFFIC SIGNAL MACHINE VISION VEHICLE DETECTOR SYSTEM - TRAFFIC SIGNAL OPTICAL DETECTOR INSTALLATION DETAILS - TRAFFIC SIGNAL ELECTRICAL SERVICE DETAILS

TRAFFIC SIGNAL LEGEND

2571 - TRAFFIC SIGNAL METER PEDESTAL DETAILS FOR SIGNAL

-	NEW	EXISTING	ITEM
-			PULL BOX
,			SERVICE POLE
	M		METER PEDESTAL
	<u>C</u>		CONTROLLER CABINET
-	Profession associations conclusions acceptant		CONDUIT RUN (SIGNALS)
			CONDUIT RUN (LIGHTING)
	←●		TRAFFIC SIGNAL PEDESTAL POLE
	1		CONDUIT RUN NUMBER (SIGNAL)
	<u>/sì</u>		CONDUIT RUN NUMBER (POWER SERVICE)
V			TYPE II STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
▼			TYPE III STANDARD WITH MASTARM TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
	•		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
	••		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
	SC	SC	SPLICE CABINET
			TRAFFIC MANHOLE
	•		VIDEO CAMERA

DEFINITIONS

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

Bohannan A Huston ENGINEERING A SPATIAL DATA A ADVANCED TECHNOLOGIES CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP COORS BOULEVARD / NAMASTE ROAD-WESTERN TRAIL

TRAFFIC SIGNAL **NOTES & LEGEND** DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL MO./DAY/YR. | MO./DAY/YR. MAY 2 4 2004

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CITY PROJECT NO.

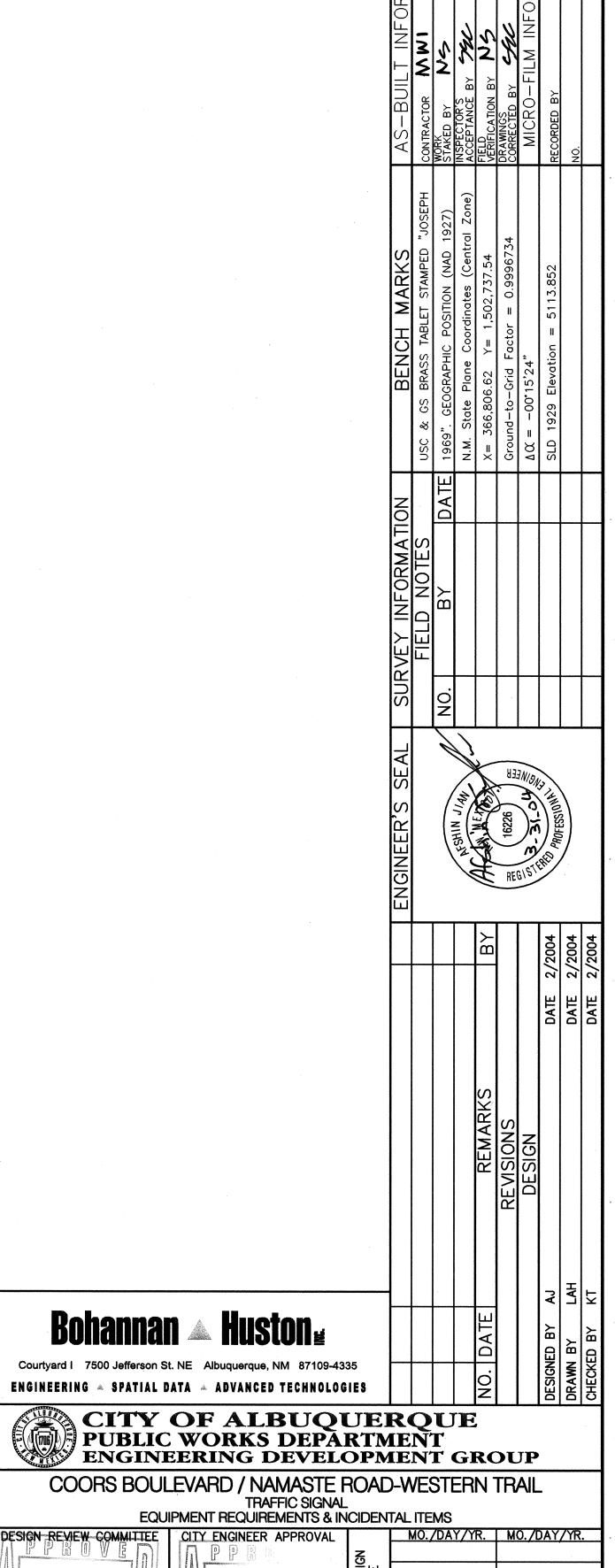
CITY ENGINEER ZONE MAP NO. SHEET 733781

TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

- 1. THIS PROJECT IS AN EXTENSION OF AN EXISTING SIGNAL SYSTEM. THEREFORE THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:
 - A. ALL TRAFFIC SIGNAL CONTROLLERS SUPPLIED FOR THIS PROJECT SHALL BE AS APPROVED BY THE CITY OF ALBUQUERQUE.
 - B. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SUPPLIED FOR THIS PROJECT SHALL BE EIGHT PHASE DUAL RING CABINETS WIRED FOR EIGHT PHASE SYSTEM OPERATION WITH TELEMETRY BOARD, IT TRANSIENT VOLTAGE SUPRESSOR AND ALL CONNECTING HARNESSES. THIS CABINET SHALL BE CAPABLE OF VIDEO DETECTION.
- 2. EMERGENCY VEHICLE PRE-EMPT EQUIPMENT SHALL BE 3M "OPTICOM" MODEL 562 OR LATEST MODEL PHASE SELECTORS MOUNTED ON 3M "OPTICOM" MODEL 560 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. OPTICAL DETECTORS SHALL BE 3M "OPTICOM" MODEL 711, ONE (1) CHANNEL, ONE (1) DIRECTION OR APPROVED EQUAL. OPTICAL DETECTOR CABLE SHALL BE 3M "OPTICOM" MODEL 138 OR EQUAL. A MANUFACTURER'S REPRESENTATIVE SHALL ASSIST THE CONTRACTOR IN THE FIELD AS WORK PROGRESSES TO COMPLETE THE INSTALLATION OF ALL PRE-EMPTION EQUIPMENT AND ASSIST IN SETTING UP, TURNING ON, PROGRAMMING AND FIELD TESTING PRE-EMPTION EQUIPMENT INCLUDING EMITTERS TO INSURE THAT THE EQUIPMENT IS OPERATIONAL.
- 3. THIS PROJECT INVOLVES THE INSTALLATION OF A VIDEO VEHICLE DETECTION SYSTEM. THEREFORE THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:
 - A. EITHER AN ECONOLITE SOLOPRO II, ITERIS VANTAGE PLUS, OR TRAFCOM VIDEO VEHICLE DETECTION SYSTEM UNIT, ALL NECESSARY CABLES. HARNESSES, MATERIALS, FITTINGS, AND MISCELLANEOUS COMPONENTS NECESSARY TO PROVIDE A COMPLETE AND OPERATING SYSTEM AND ONE (1) SIGNALIZED INTERSECTION.
- B. VIDEO CAMERAS WITH ZOOM LENSES.
- C. VIDEO POWER CABLE AS RECOMMENDED BY THE MANUFACTURER.
- 4. ALL SIGNAL INDICATORS AND PEDESTRIAN SIGNAL HEADS SHALL BE LED, AS APPROVED BY THE CITY. PEDESTRIAN SIGNALS SHALL BE COUNTDOWN AS APPROVED BY THE CITY.

INCIDENTAL ITEMS

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



DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL CITY PROJECT NO. 733781

CITY ENGINEER ZONE MAP NO. SHEET F-11

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BHI JOB NO. 020296

	TRAFFIC SIGNAL ESTIMATED	QUANTI	ITIES		
			COORS/NA	MASTE-WEST	TERN TRAIL
ITEM NO	ITEM DESCRIPTION	UNIT	SIGNAL	LIGHTING	TOTAL
0421. 005	SERVICE RISER (SIGNAL)	EACH	1		1
0421. 011	METER PEDESTAL (SIGNAL)	EACH	1		1
	METER TEDESTRE (STOWNE)	<u> </u>	1		1
422. 004	TRAFFIC SIGNAL PEDESTAL POLE, 15 FOOT	EACH	7		7
422. 019	TRAFFIC SIGNAL MASTARM, 35 FOOT ARM, TYPE III, TROMBONE	EACH	2		2
422. 021	TRAFFIC SIGNAL MASTARM, 40 FOOT ARM, TYPE III, TROMBONE	EACH	2		2
422. 030	STREET LIGHT STANDARD, SINGLE ARM, 30' (TYPE V DAVIT), CIP	EACH	2		2
423. 001	TRAFFIC SIGNAL FOUNDATION FOR PEDESTAL POLE	EACH	7		7
423. 002	TRAFFIC SIGNAL MASTARM FOUNDATION	EACH	4		4
423. 003	TRAFFIC CONTROLLER FOUNDATION (TYPE M & P CABINETS)	EACH	1		1
423. 020	LUMINAIRE FOUNDATION FOR LUMINAIRE HEIGHT OF 40' OR LESS, CIP	EACH	2		2
424. 006	RIGID ELECTRICAL CONDUIT, 2" INCLUDING TRENCH, BACKFILL, PATCHING, PUSHING, BORING & JACKING	LIN FT	1170	685	1855
424.011	RIGID ELECTRICAL CONDUIT, 3" INCLUDING TRENCH, BACKFILL,	LIN FT	1215		1215
	PATCHING, PUSHING, BORING & JACKING				
425. 002	ELECTRICAL PULL BOX, (STANDARD)	EACH		9	9
125. 003	ELECTRICAL PULL BOX, (LARGE)	EACH	7		7
125. 020	TRAFFIC SIGNAL MANHOLE	EACH	1		1
125. 101	ELECTRICAL PULL BOX, ANY SIZE, REMOVE AND DISPOSE	EACH	5		5
426. 001	SINGLE CONDUCTOR, 2	LIN FT	390	1490	1880
426. 004	SINGLE CONDUCTOR, 2	LIN FT	880	1490	880
426. 005	SINGLE CONDUCTOR, 8	LIN FT	000	100	
426. 010	MULTI-CONDUCTOR CABLE 5		0075	480	480
426. 011	MULTI-CONDUCTOR CABLE 3	LIN FT	2975		2975
426. 014	MULTI-CONDUCTOR CABLE /	LIN FT	140		140
426. 020	COMMUNICATION CABLE 6 PAIR	LINFT	1760		1760
		LIN FT	45		45
427. 002	3 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	20		20
127. 005	5 SECTION TRAFFIC SIGNAL ASSEMBLY	EACH	4		4
127. 031	3 SECTION BACKPLATE	EACH	8		8
428. 010	PEDESTRIAN PUSH BUTTON STATION	EACH	4		4
128. 071	PHASE SELECTOR MODULE, 2 CHANNEL	EACH	2		2
128. 075	OPTICAL DETECTOR 1D/1C	EACH	4		4
128. 078	OPTICAL DETECTOR CABLE	LIN FT	1195		1195
128. XXX	VIDEO DETECTION SYSTEM	EACH	1		1
128. 092	VIDEO COAXIAL CABLE	LIN FT	1225		1225
128. 093	VIDEO POWER CABLE	LIN FT	1225		1225
128. 094	VIDEO CAMERA	EACH	4		4
429. 001	TRAFFIC ACTUATED CONTROLLER	EACH	1		1
429. 021	EIGHT PHASE DUAL RING CONTROLLER CABINET	EACH	1		1
132. 002	ROADWAY LUMINAIRE, TYPE 400S	EACH	4		4
			I I		ı
450. 001	ALUMINUM PANEL SIGN	EACH	4		4
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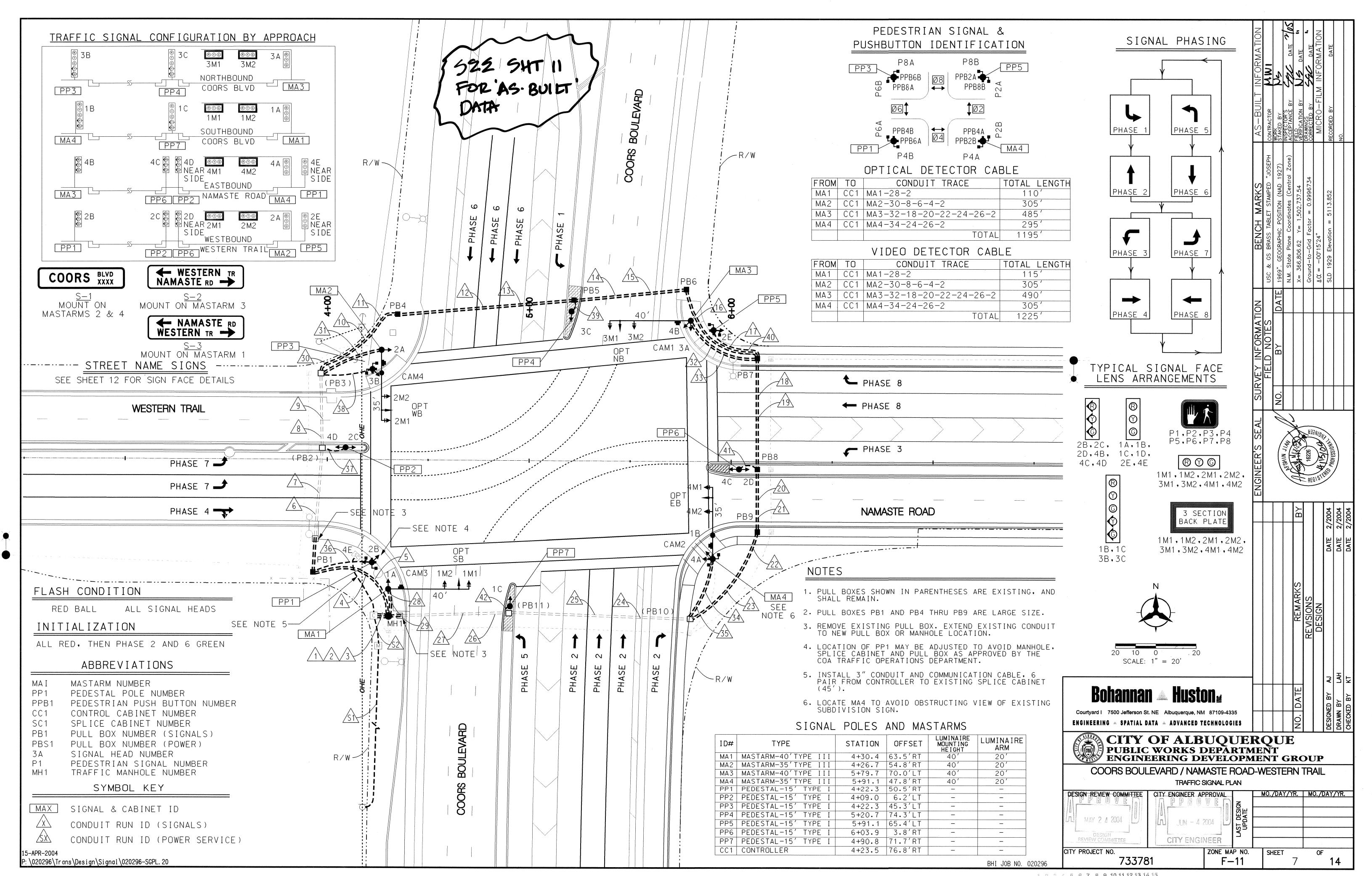
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BHI JOB NO. 020296



CON	IDUIT LENGTH,	SIZE, AND TYPE			CONDUIT	FILL BY C	ONTRACTOR	LENGTH /	AND TYPE		
RUN ID	SIZE/LENGTH 1" 2" 3"	PE REMARKS	MCC 5 (# @ FT)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC #2 (# @ FT)	SCC #8 (# @ FT)	PS (# @ FT)	OPTICOM (# @ FT)	VIDEO POWER (# @ FT)	VIDEO CO
S1	100 RE	C TRANSFORMER TO METER				3 @ 105					
		C METER TO CC1		·		3 @ 25					
1		C CC1 TO MH1	1 @ 30		2 @ 30		1 @ 30				
2		C CC1 TO MH1 C CC1 TO MH1	1 @ 30		2 @ 30		1 @ 30		4 @ 30	4 @ 30	4 @ 3
3 4		C MH1 TO PB1	1 @ 30		2 @ 30		1 @ 30		1 @ 60	1 @ 60	1 @ 6
5		C MH1 TO PB1	1 @ 60		2 @ 60		1 @ 60		1 0 00		
6		C PB1 TO (PB2)							1 @ 70	1 @ 70	1 @ 7
7		C PB1 TO (PB2)	1 @ 70		2 @ 70		1 @ 70		4 0 50	1 0 50	4 0 5
8		C (PB2) TO (PB3) C (PB2) TO (PB3)	1 @ 50		2 @ 50		1 @ 50		1 @ 50	1 @ 50	1 @ 5
10		C (PB3) TO PB4			2 9 30		1 6 30				
1 1	68 55 RE	C (PB3) TO PB4	1 @ 60		2 @ 60		1 @ 60				
12	95 RE	C PB4 TO PB5						1 @ 100			
13 14		C PB4 TO PB5 C PB5 TO PB6	1 @ 100		2 @ 100		1 @ 100	1 @ 70			
15		C PB5 TO PB6	1 @ 70		2 @ 70		1 @ 70	1 @ 70			
16		C PB6 TO PB7					1 0 / 0				
17		C PB6 TO PB7	1 @ 60		2 @ 60		1 @ 60				
18		C PB7 TO PB8	4 0 05						1 @ 65	1 @ 65	1 @ 6
19 20		C PB7 TO PB8 C PB8 TO PB9	1 @ 65		2 @ 65	·	1 @ 65		1 @ 45	1 @ 45	1 @ 4
21		C PB8 TO PB9	1 @ 45		2 @ 45		1 @ 45		1 9 43	1 9 43	1 6 4
22		C PB9 TO (PB10)							1 @ 65	1 @ 65	1 @ 6
23	48 6€ RE	C PB9 TO (PB10)	1 @ 65		2 @ 65		1 @ 65				
24		C (PB10) TO (PB11)	1 0 105		0 0 105				2 @ 105	2 @ 105	2 @ 10
25 26		C (PB10) TO (PB11) C PB11 TO MH1	1 @ 105		2 @ 105		1 @ 105		2 @ 70	2 @ 70	2 @ 7
27		C PB11 TO MH1	1 @ 70		2 @ 70		1 @ 70		2 4 70	2 9 70	/
28		C MA1 TO MH1							1 @ 25	1 @ 25	1 @ 2
29		C MA1 TO MH1	3 @ 25								
30		C MA2 TO (PB3) C MA2 TO (PB3)	3 @ 45						1 @ 45	1 @ 45	1 @ 4
32	33 45 RE	C MA3 TO PB7	3 9 43						1 @ 50	1 @ 50	1 @
33	33.45 RE	C MA3 TO PB7 C MA3 TO PB7	4 @ 50						1 0 00		
34		C MA4 TO (PB10)							1 @ 40	1 @ 40	1 @ 4
35		C MA4 TO (PB10)	8 @ 40								
36 37		C PP1 TO PB1 C PP2 TO (PB2)	6 @ 40 1 @ 20	1 @ 20							
38		C PP3 TO (PB3)	5 @ 35	1 6 20							
39	S is RE	C PP4 TO PB5		1 @ 20							
40		C PP5 TO PB7	5 @ 30								
41		C PP6 TO PB8 C PP7 TO (PB11)	1 @ 20	1 @ 20							
42	714 12	C PP / TO (PBII)		1 @ 20							
							·				

ABBREVIATIONS

CC 6 COMMUNICATION CABLE-6 PAIR CC 12 COMMUNICATION CABLE-12 PAIR DLLIC DETECTOR LOOP LEAD IN CABLE MASTARM MULTI CONDUCTOR CABLE PULL BOX PEDESTAL POLE PPB PEDESTRIAN PUSH BUTTON RIGID ELECTRIC CONDUIT

SCC SINGLE CONDUCTOR CABLE

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-	AS-BUILT IN	CONTRACTOR	WORK STAKED BY	INSPECTOR'S ACCEPTANCE BY	FIELD VERIFICATION BY	DRAWINGS CORRECTED BY	MICRO-FILM	RECORDED BY	NO.	
	BENCH MARKS	USC & GS BRASS TABLET STAMPED "JOSEPH	DATE 1969" GEOGRAPHIC POSITION (NAD 1927)	N.M. State Plane Coordinates (Central Zone)	X= 366,806.62 Y= 1,502,737.54	Ground-to-Grid Factor = 0.9996734	$\Delta \Omega = -00^{\circ}15'24$ "	SLD 1929 Elevation = 5113.852		
	SURVEY INFORMATION	11 11	ВҮ							,
	S	·	NO.							
	ENGINEER'S SEAL			WEST NINSTA	大学人	833 (92391) REV	ANION HOLES	AND PRIESCIONAL CO.	option)	
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 26 7337.8/ 0805

Bohannan A Huston ENGINEERING A SPATIAL DATA A ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

COORS BOULEVARD / NAMASTE ROAD-WESTERN TRAIL
TRAFFIC SIGNAL
CARLES & CONDUITS

	CABLES 8	CONDUITS			
ESIGN REVIEW COMMITTEE	CITY ENGINEER AF	PROVAL	MO./DAY/Y	R. MO./DAY	/YR.
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A Proposition of the Control of the	BECOMMENT OF THE PROPERTY OF T	ESI TE			
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CORPORATION CONTRACTOR		AST			
DESIGN REVIEW COMMITTEE	CITY ENGIN	F. E. R			
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TY PROJECT NO.		ZONE MAP NO.	SHEET	OF	
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CON	DUIT L	ENGTH,	SIZE, AND TYPE				CONDUIT	FILL BY	CONTRACTO	R LENGTH	AND TYPE		
RUN ID	SIZE/LE	NGTH 2" 3"	YPE REMARKS	MCC 5 (# @ F1	5 Γ)	MCC 7 (# @ FT)	MCC 20 (# @ FT)	SCC #2 (# @ FT)	SCC #8 (# @ FT)	PS (# @ FT)	OPTICOM (# @ FT)	VIDEO POWER (# @ FT)	VIDEO C (# @ F
MA1			BASE TO 1A	1 @	15								
MA 1			BASE TO 1M1		60								
MA 1			BASE TO 1M2		50								
MA1			BASE TO CAM3									1 @ 60	1 @
MA1			BASE TO OPTICOM SB	·							1 @ 55		
				1 0	4 =								
MA2			BASE TO 2A		15								
MA2			BASE TO 2M1 BASE TO 2M2		55 45								
MA2			BASE TO CAM4	1 👺	40							1 @ 60	1 @
MA2			BASE TO OPTICOM WB								1 @ 50		1 6
MA3			BASE TO 3A	1 @	15								
MA3			BASE TO 4B	1 @	15								
МАЗ			BASE TO 3M1	1 @	60								
МАЗ			BASE TO 3M2	1 @	50								
MA3			BASE TO CAM1									1 @ 60	1 @
MA3			BASE TO OPTICOM NB								1 @ 55		
MA4			BASE TO 4A	1 @	15								
MA4			BASE TO 1B			1 @ 15							
MA4			BASE TO 4M1	1 @	55								
MA4	V 1 mm. (10 mm		BASE TO 4M2	1 @	45								
MA4			BASE TO P4A, P2B	2 @	15								
MA4			BASE TO PPB4A, PPB2B	2 @	5								
MA4			BASE TO CAM2									1 @ 60	1 @
MA4			BASE TO OPTICOM EB	,							1 @ 50		
PP1			BASE TO 2B		15								
PP1			BASE TO 4E		15								
PP1			BASE TO P4B, P6A		15								
PP1			BASE TO PPB4B, PPB6A	2 @	5								
PP2			BASE TO 2C	1 @	1.5								
PP2			BASE TO 4D		15								
PP3		Principles (Principles and Principles and Principles and Principles and Principles and Advanced and Principles	BASE TO 3B			1 @ 15						·	
PP3			BASE TO P6B, P8A	2 @	15								
PP3			BASE TO PPB6B, PPB8A	2 @	5								
PP4			BASE TO 3C			1 @ 15							
1 1 T						1 8 10							
PP5			BASE TO 2E	1 @	15								,
PP5			BASE TO P2A, P8B	2 @	15								
PP5			BASE TO PPB2A, PPB8B	2 @	5								
PP6			BASE TO 4C	1 @	15								
PP6			BASE TO 2D		15								
PP7			BASE TO 1C			1 @ 15		The second secon					
TOTAL	0 11	70 975		29	975	140	1760	390	880	170	1195	1225	12
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ABBREVIATIONS

CC 6 COMMUNICATION CABLE-6 PAIR
CC 12 COMMUNICATION CABLE-12 PAIR
DLLIC DETECTOR LOOP LEAD IN CABLE
MA MASTARM MULTI CONDUCTOR CABLE PULL BOX PP PEDESTAL POLE
PPB PEDESTRIAN PUSH BUTTON RIGID ELECTRIC CONDUIT SINGLE CONDUCTOR CABLE

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Bohannan A Huston		DATE		ED BY	ВУ	ED BY
Courtyard I 7500 Jefferson St. NE Albuquerque, NM 87109-4335 ENGINEERING SPATIAL DATA ADVANCED TECHNOLOGIES		NO.		DESIGNED	DRAWN	CHECKED
CITY OF ALBUQUI PUBLIC WORKS DEPART ENGINEERING DEVELOP	ERQ	UE T T GRO	OUP			
COORS BOULEVARD / NAMASTE ROA	AD-WE	STERN	TRAIL			

TRAFFIC SIGNAL

	CABLES & CONDU	ITS		
IGN REVIEW COMMITTEE PPROVE	CITY ENGINEER APPROVAL P P R P V E JUN - 4 2004	AST DESIGN UPDATE	MO./DAY/	YR.
DESIGN REVIEW COMMITTEE	CITY ENGINEER			
PROJECT NO.	ZONE MA	AP NO.	SHEET	0

/33/81

DETECTOR RACK ASSIGNMENTS

	.			
UNIT NUMBER -	POWER SUPPLY	16	17	18
CHANNEL 1 -		PED ISO	OPTICOM 1	OPTICOM 3
CHANNEL 2		0 L A T I O N	OPTICOM 2	OPTICOM 4
DETECTOR MODULE REQUIRED	*	✓	✓	✓

* INCIDENTAL TO CONSTRUCTION

NOTES:

- 1/ IDENTIFY CONDUCTORS LISTED AS "115 VOLTS"
- 2/ WRAP RING 2 CABLE AT EACH SPLICE POINT WITH COLORED ELECTRICAL TAPE. THE IDENTIFICATION MARKING SHALL BE PROVIDED ON EACH RING 2 CABLE AT EACH SPLICE BOX AND LOCATED 6" BACK FROM THE END.
- 3/ IDENTIFY CONDUCTORS LISTED AS "PPB LOW VOLTAGE" AT EACH SPLICE POINT. FIVE (5) CONDUCTOR CABLE SHALL BE 24 VOLTS AND USED FOR PUSH BUTTONS ONLY.

VIDEO DETECTION IS

REQUIRED FOR

THIS INTERSECTION

				HART – 115 VOLT			
CONDUCTOR			RING 1 - MULTI C	ONDUCTOR CABLE 20	RING 2 - MULTI CONDUCTOR CABLE 20 2		
CONDUCTOR BASE TRACER FUNCTION		FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION		
1	BLACK	_	SPARE	SPARE	SPARE	SPARE	
2	WHITE		SPARE	SPARE	SPARE	SPARE	
3	RED		PHASE 1 RED	RED LEFT TURN ARROW 1B, 1C	PHASE 5 RED	RED LEFT TURN ARROW 3B, 3C	
4	GREEN		PHASE 1 GREEN	GREEN LEFT TURN ARROW 1B, 1C	PHASE 5 GREEN	GREEN LEFT TURN ARROW 3B, 3C	
5	ORANGE		PHASE 1 YELLOW	YELLOW LEFT TURN ARROW 1B, 1C	PHASE 5 YELLOW	YELLOW LEFT TURN ARROW 3B, 3C	
6	BLUE		SPARE	SPARE	SPARE	SPARE	
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE	
8	RED	BLACK	PHASE 2 RED	RED BALL 3A, 3M1, 3M2	PHASE 6 RED	RED BALL 1A, 1M1, 1M2	
9	GREEN	BLACK	PHASE 2 GREEN	GREEN BALL 3A, 3M1, 3M2	PHASE 6 GREEN	GREEN BALL 1A, 1M1, 1M2	
10	ORANGE	BLACK	PHASE 2 YELLOW	YELLOW BALL 3A, 3M1, 3M2	PHASE 6 YELLOW	YELLOW BALL 1A, 1M1, 1M2	
11	BLUE	BLACK	PHASE 2 WALK	PEDESTRIAN WALK P2A, P2B	PHASE 6 WALK	PEDESTRIAN WALK P6A, P6B	
12	BLACK	WHITE	PHASE 2 DON'T WALK	PEDESTRIAN DON'T WALK P2A, P2B	PHASE 6 DON'T WALK	PEDESTRIAN DON'T WALK P6A, P6B	
13	RED	WHITE	PHASE 3 RED	RED LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 RED	RED LEFT TURN ARROW 4B, 4C, 4D, 4E	
14	GREEN	WHITE	PHASE 3 GREEN	GREEN LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 GREEN	GREEN LEFT TURN ARROW 4B, 4C, 4D, 4E	
15	BLUE	WHITE	PHASE 3 YELLOW	YELLOW LEFT TURN ARROW 2B, 2C, 2D, 2E	PHASE 7 YELLOW	YELLOW LEFT TURN ARROW 4B, 4C, 4D, 4E	
16	BLACK	RED	PHASE 4 RED	RED BALL 4A, 4M1, 4M2	PHASE 8 RED	RED BALL 2A, 2M1, 2M2	
17	WHITE	RED	PHASE 4 GREEN	GREEN BALL 4A, 4M1, 4M2	PHASE 8 GREEN	GREEN BALL 2A, 2M1, 2M2	
18	ORANGE	RED	PHASE 4 YELLOW	YELLOW BALL 4A, 4M1, 4M2	PHASE 8 YELLOW	YELLOW BALL 2A, 2M1, 2M2	
19	BLUE	RED	PHASE 4 WALK	PEDESTRIAN WALK P4A, P4B	PHASE 8 WALK	PEDESTRIAN WALK P8A, P8B	
20	RED	GREEN	PHASE 4 DON'T WALK	PEDESTRIAN DON'T WALK P4A, P4B	PHASE 8 DON'T WALK	PEDESTRIAN DON'T WALK P8A, P8B	

FUNCTION CHART — 24 VOLT CIRCUIT							
		RING 1 - MULTI CONDUCTOR CABLE 5 RING 2 - MULTI CONDUCTOR CABLE					
CONDUCTOR NUMBER	BASE COLOR	FUNCTION	FIELD CONNECTION	FUNCTION	FIELD CONNECTION		
1	BLACK	PHASE 2 PPB	PPB2A, PPB2B	SPARE			
2	WHITE	COMMON	PPB 2A,2B,4A,4B	COMMON	PPB 6A,6B,8A,8B		
3	RED	PHASE 4 PPB	PPB4A, PPB4B	SPARE			
4	GREEN	SPARE		PHASE 6 PPB	PPB6A, PPB6B		
5	ORANGE	SPARE		PHASE 8 PPB	PPB8A, PPB8B		

Bohannan Huston:

Courtyard 1 7500 Jefferson St. NE Albuquerque, NM 87109-4335

ENGINEERING SPATIAL DATA ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

COORS BOULEVARD / NAMASTE ROAD-WESTERN TRAIL
TRAFFIC SIGNAL
FUNCTIONS & DETECTORS

DESIGN REVIEW COMMITTEE

CITY ENGINEER APPROVAL

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JUN - 4 2004

CITY ENGINEER

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CITY PROJECT NO.

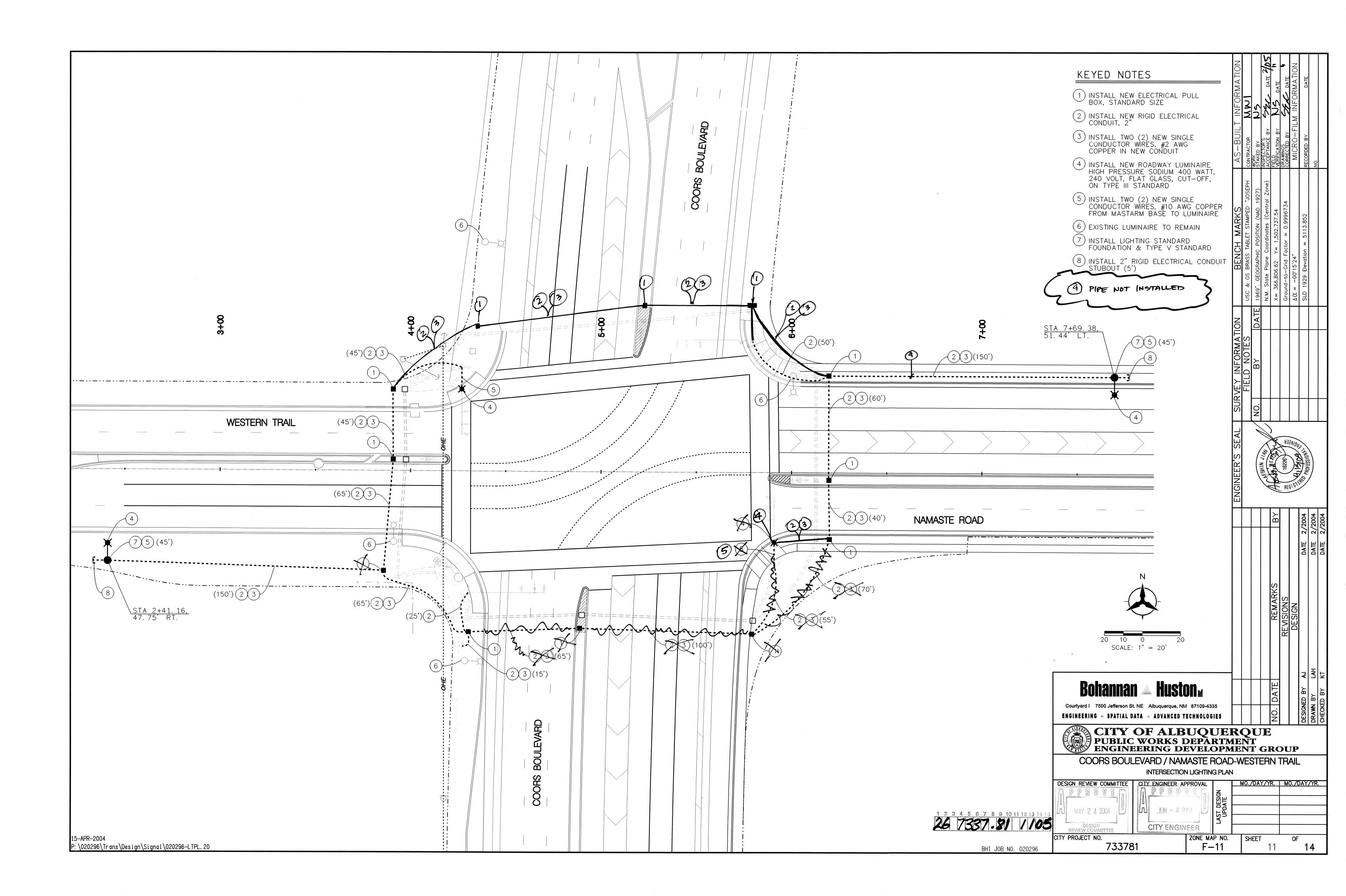
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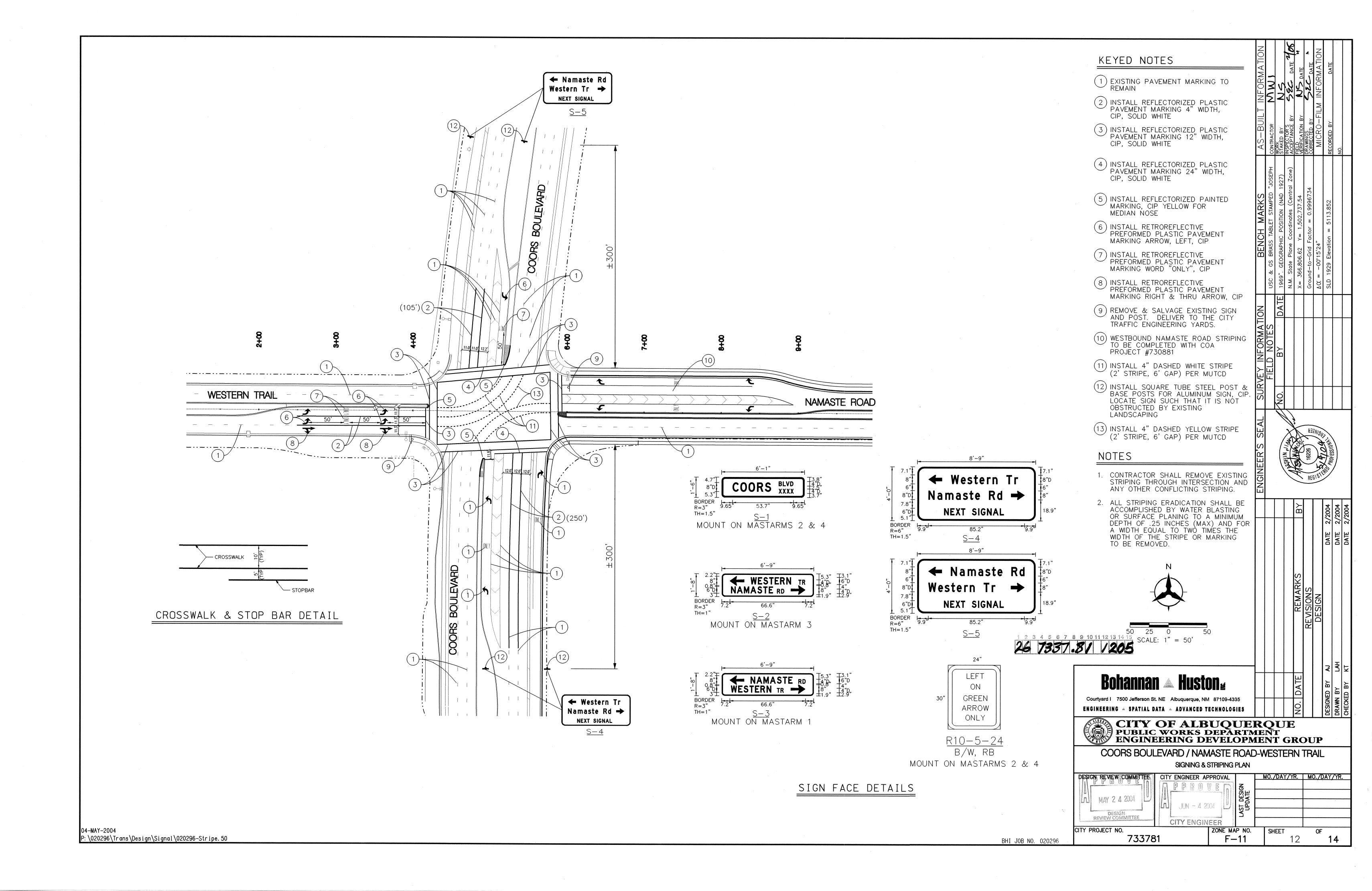
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CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

- 1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITH THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
- 2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
- 3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
- 4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
- 5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
- 6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, 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 WORK SITE 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 TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
- 14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
- 15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
- 16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
- 17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
- 18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
- 19. 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.

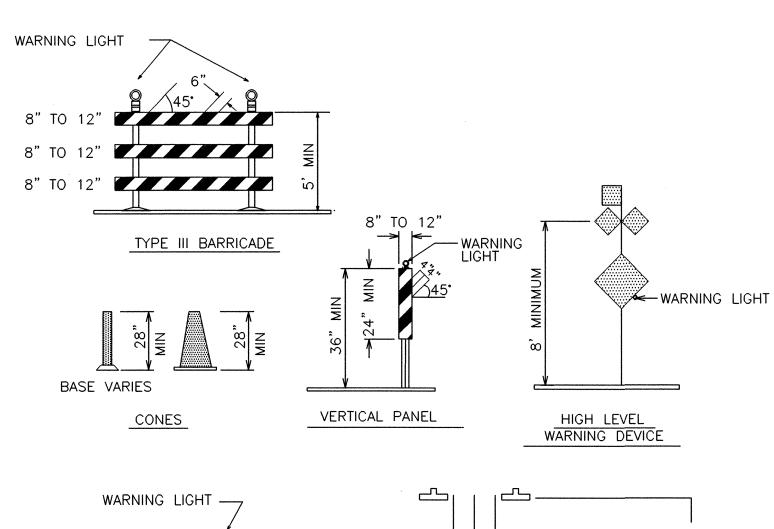
- 21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
- 22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING: 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION. 3. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
- 23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
- 24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW-CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
- TRAFFIC CONTROL PLANS ARE NOT SPECIFIC. 26. ADVANCE WARNING SIGNS SHALL BE 36"x36" WITH SUPER ENGINEERING

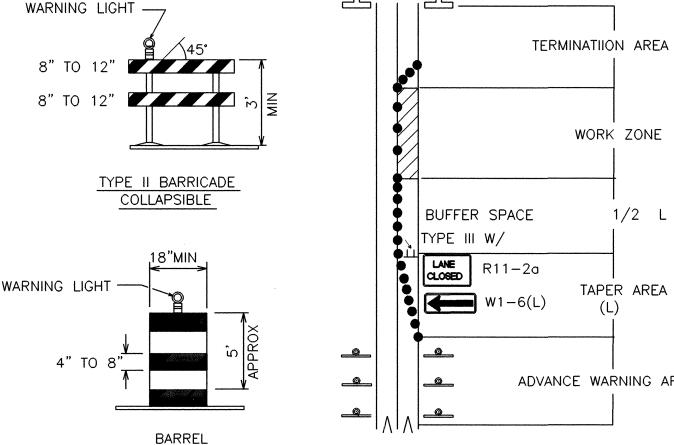
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION

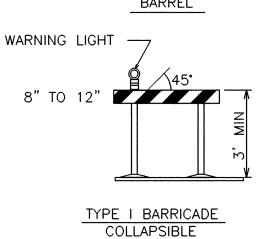
SPECIAL PROJECT TRAFFIC CONTROL NOTES

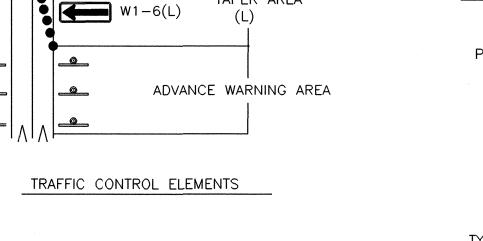
GRADE SHEETING OR BETTER.

- 1. ALL CONDUITS MUST BE PUSHED OR BORED ACROSS COORS BLVD. NO OPEN CUTS WILL BE ALLOWED.
- 2. ONLY SINGLE LANE CLOSURES IN EACH DIRECTION WILL BE ALLOWED ON COORS BLVD.
- CLOSURES OF THROUGH TRAFFIC LANES ON COORS BLVD. WILL NOT BE ALLOWED, IN ANY DIRECTION, FROM 6:00 AM TO 9:00 AM, AND FROM 3:00 PM TO 6:00 PM, MONDAY THROUGH FRIDAYS. IF THROUGH LANE CLOSURES ON COORS BLVD. MUST REMAIN DUE TO SAFETY CONCERNS, THEN THE CONTRACTOR SHALL WORK CONTINUOUSLY, 24-HOURS PER DAY UNTIL ALL LANES ARE OPEN TO TRAFFIC.
- 4. ARTERIAL/COLLECTOR ROAD USEAGE FEES OF \$0.01 PER SQUARE FOOT OF BARRICADED AREA PER DAY WILL BE ASSESSED ON BOTH COORS BLVD. AND WESTERN TRAIL.

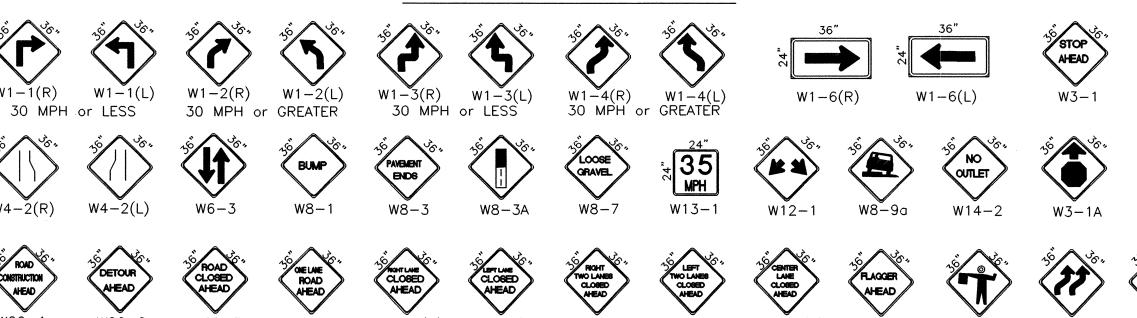


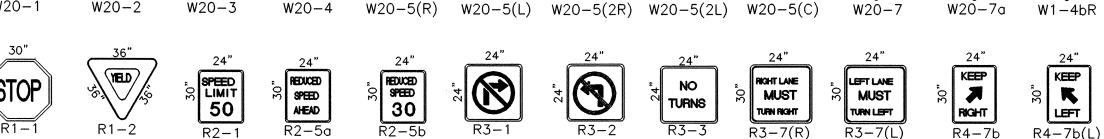






SIGN FACE DETAILS



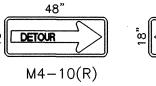


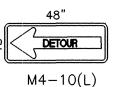




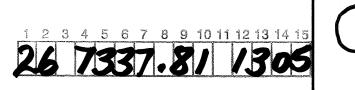


ALL CONSTRUCTIONN WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.









LEGEND

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

BARRICADE - TYPE III VERTICAL PANEL

WARNING SIGN

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

FLAGMAN POSITION

SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET

EQUAL TO THE STREET LIMIT OF THE STREET TAPER LENGTH - SEE CHART BELOW

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

TAPER REQUIREMENT

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

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED		MINIMU	JM DIS	TANCE	E IN FEET
MILES	BETWEEN				FROM LAST
PER HOUR	SIGNS			,	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	SPFFD	LIMIT	10	X SPEED LIMIT

TAPER CRITERIA

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

TAPER LENGTH COMPUTATION

 $L = W \times S$

SPEED LIMIT 40 MPH OR LESS

40 MPH OR GREATER

L = TAPER LENGTHW = WIDTH OF OFFSET IN FEET

S = POSTED SPEED OR OFF-PEAK 85-PERCENTILE SPEED IN MPH

> **Bohannan Huston** ENGINEERING A SPATIAL DATA A ADVANCED TECHNOLOGIES

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DEVELOPMENT GROUP

COORS BOULEVARD / NAMASTE ROAD-WESTERN TRAIL TRAFFIC CONTROL

SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS MO./DAY/YR. | MO./DAY/YR. DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL

CITY PROJECT NO. ZONE MAP NO. SHEET OF 733781 F-11 BHI JOB NO. 020296

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