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APPROVED AS RECORD DRAWINGS  
DESIGN REVIEW SECTION  
CITY CONSTRUCTION ENGINEER  
DATE July 30, 2014

# CONSTRUCTION PLANS FOR LA ORILLA ROAD PAVING IMPROVEMENTS

CITY OF ALBUQUERQUE  
BERNALILLO COUNTY, NEW MEXICO  
SEPTEMBER, 2013

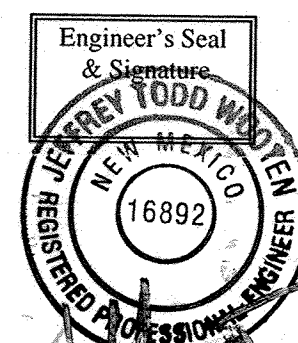
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## INDEX TO DRAWINGS

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2. LA ORILLA RD STRIPING PLAN
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6. MASTARM DETAILS, TYPE III STANDARD - B

### CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Jeffrey T. Wooten, of the firm of Tierra West LLC, 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 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 with survey information provided by Aldrich Land Surveying NMPLS# 7719



### UTILITY CONTACT INFORMATION

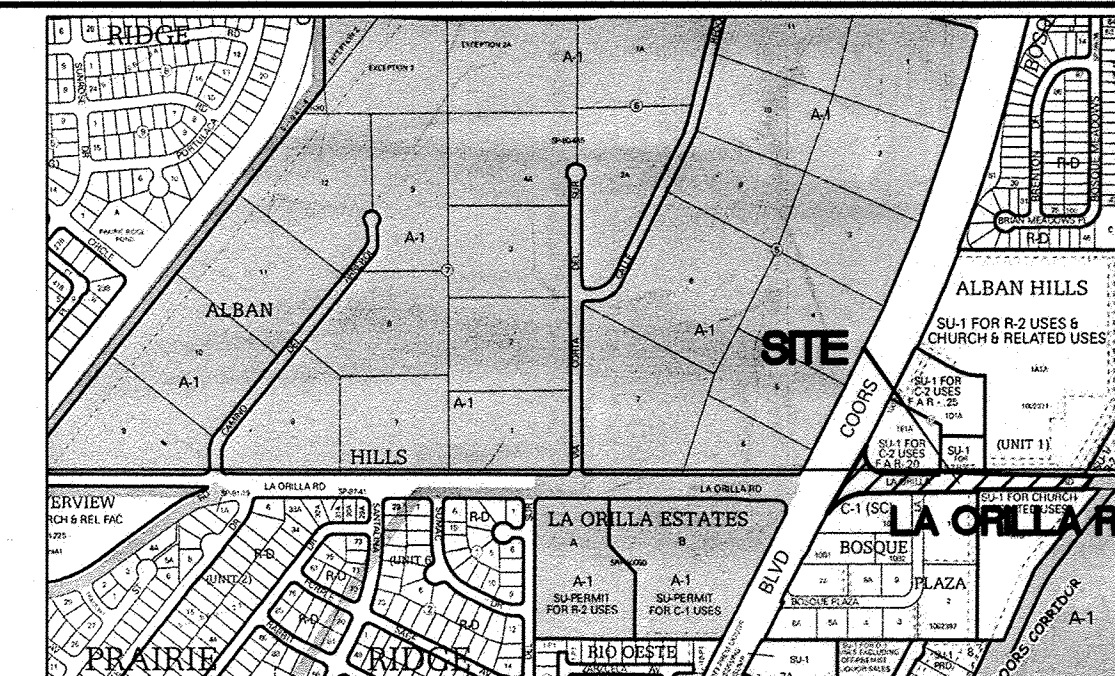
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ROSA KNIFFIN-QWEST  
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PETER CHANG-ALBUQUERQUE BERNALILLO COUNTY  
WATER UTILITY AUTHORITY  
768-2598  
PCHANG@ABCWUA.ORG



VICINITY MAP

E-122

NTS

### NOTICE TO CONTRACTORS

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION (UPDATE #8).
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES 24-HOUR CONSTRUCTION.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. SEVEN (7) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO NMDOT AND CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO(2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONST. COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO STANDARD SPECIFICATIONS.
6. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH HOT THERMOPLASTIC ONLY REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
7. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS. ANY PERMANENT SURVEY MONUMENT LOCATED WITHIN 50' OF THIS PROJECT THAT IS NOT SHOWN ON THE PLAN AND IS DESTROYED DURING CONSTRUCTION WILL BE REPLACED AT THE CONTRACTORS EXPENSE.
8. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
9. FOR STORM DRAIN CONSTRUCTION, RCP PIPE JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.
10. THE ALBUQUERQUE BERNALILLO COUNTY WATER UTILITY AUTHORITY (857-8200) WILL BE NOTIFIED BY THE CONTRACTOR SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK WHICH MAY AFFECT THE EXISTING PUBLIC WATER FACILITIES. REFER TO SECTION 18 OF THE STANDARD SPECIFICATIONS. ONLY ABCWUA PERSONNEL ARE ALLOWED TO OPERATE PUBLIC VALVES.
11. ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P AND COA STD DWG 2465.
12. ELECTRONIC MARKER SPHERES (EMS) WILL BE PLACED ACCORDING TO SECTION 170 OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #7.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY COA.

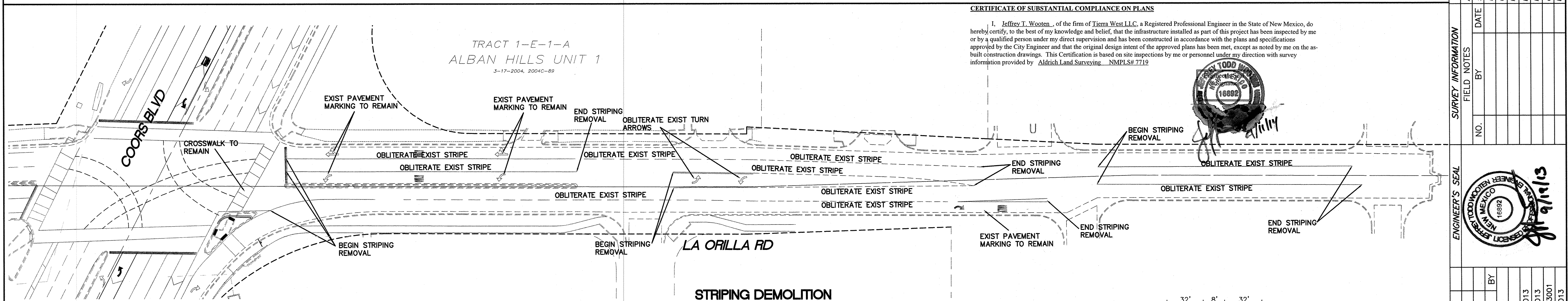
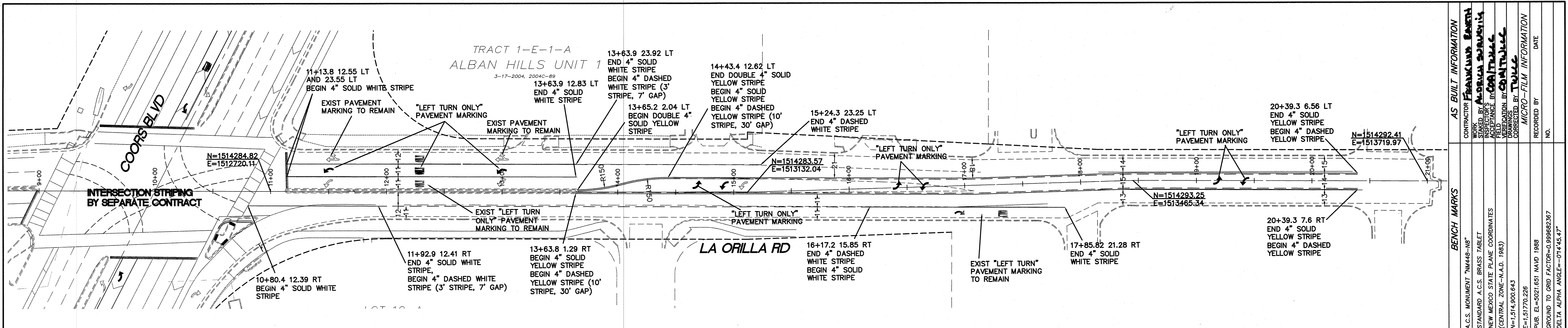
### THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☒ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☒ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE PROJECT ENGINEER.
- ☒ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DEEPENED 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.

**TIERRA WEST, LLC**  
5571 MIDWAY PARK PLACE NE  
ALBUQUERQUE, NEW MEXICO 87109  
(505) 858-3100  
www.tierrawestllc.com

REV	SHEETS	CITY ENGINEER	DATE	USER DEPT.	DATE	USER DEPT.	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER	DATE	*****	
		DRC Chairman		<i>[Signature]</i>	10/16/13	APPROVED FOR CONSTRUCTION	
		Transportation		<i>[Signature]</i>	09/19/13		
		Water/Wastewater		<i>[Signature]</i>	9-25-13		
		Hydrology		<i>[Signature]</i>	10/3/13		
		Traffic Engineer					
		Constr. Mngmt.					
		Berna. Cont. Public Works					
CITY PROJECT NO.				SHEET			
RONALD R. BOHANNAN P.E. #7868				562983 1 of 6			





### PERMANENT SIGNING AND STRIPING NOTES:

- ALL REGULATORY, WARNING, SPECIAL, AND GUIDE SIGNS SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:
- ONLY 0.125 INCHES THICK ALUMINUM PANEL SIGNS ARE PERMITTED FOR WARNING AND REGULATORY SIGNS.
- ANTI-GRAFFITI COATING SHALL BE APPLIED ON ALL REGULATORY, WARNING, GUIDE, AND OTHER SPECIAL SIGNS.
- QUANTITIES MAY VARY AS FIELD CONDITIONS DICTATE. THE CONTRACTOR WILL BE PAID FOR ACTUAL QUANTITIES USED.
- ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH NM STANDARDS SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION (LATEST EDITION) AND ANY APPLICABLE SPECIAL PROVISION AND/OR SUPPLEMENTAL SPECIFICATION. ALSO THE DEVICES SHALL COMPLY WITH THE CURRENT EDITION, WITH REVISION, OF THE MUTCD.
- EACH SIGN FACE SHOWN ON PLANS SHALL MEET THE SPECIFICATIONS IN THE STANDARD HIGHWAY SIGNS MANUAL (CURRENT EDITION) FOR PROPER ARRANGEMENT, SPACING OF LETTERS, LETTER HEIGHT, SYMBOLS AND BORDERS FOR THE SPECIFIED SIZE AND MESSAGE AS SHOWN ON PLANS.
- POST LENGTHS ARE BASED ON A MINIMUM OF 5 FT FOR RURAL ROADWAY SECTIONS TO A MINIMUM OF 7 FT FOR URBAN AND INTERSTATE ROADWAY SECTIONS. THE LENGTHS ARE MEASURED FROM THE BOTTOM OF THE SIGN TO NEAR EDGE OF THE DRIVING LANE.
- THE LATERAL CLEARANCE OF SIGNS SHALL BE NO CLOSER THAN THE 6 FT FROM THE EDGE OF SHOULDER OR 12 FT FROM THE EDGE OF TRAVELED WAY FOR RURAL AREAS AND NO CLOSER THAN 2 FT FROM FACE OF CURB FOR URBAN AREAS.
- ALL SIGNING HARDWARE, INCLUDING BRACKETS, (FOR MOUNTING ALL STREET NAME SIGNS, W1-8-18 BACK TO BACK MOUNTING, ETC.) ARE CONSIDERED INCIDENTAL TO SIGN INSTALLATION. THEREFORE, NO PAYMENT WILL BE MADE.
- THREE 4 LB/FT SIGN POST INSTALLATION APPROVED ONLY IF THE SPAN BETWEEN THE OUTER POSTS EXCEEDS 84" (SIGN WIDTH OF 96" OR GREATER).
- 3"-6" BASE POST ARE REQUIRED FOR ALL SMALL SIGN POST. SEE STANDARD SERIAL DRAWING 701-02-1/3 FOR DETAILS.
- SIGN POST SHALL BE SQUARE TUBING AS APPROVED BY THE PROJECT MANAGER OR THE DISTRICT TRAFFIC ENGINEER.
- CONTRACTOR SHALL FIELD VERIFY ALL SIGNING INFORMATION, TEXT, AND LOCATIONS PRIOR TO FABRICATION AND INSTALLATION. NEW SIGN LOCATIONS SHALL BE APPROVED BY THE PROJECT MANAGER OR THE DISTRICT TRAFFIC ENGINEER.
- HOT THERMOPLASTIC PAVEMENT MARKINGS SHALL TO BE USED ON ALL STRIPING (LONG LINES, CROSSWALKS, LEGENDS, SYMBOLS, ETC.) THE THERMOPLASTIC PAINT SHALL BE APPLIED AT A THICKNESS OF 120 MIL.
- WATER BLASTING IS THE ONLY APPROVED METHOD OF EXISTING STRIPE REMOVAL WITHIN DISTRICT THREE. THE USE OF BLACK PAINT AS A METHOD OF REMOVING OR COVERING EXISTING STRIPING IS STRICTLY PROHIBITED.

### GENERAL NOTES:

- OBLITERATE ALL EXISTING STRIPING AND PAVEMENT MARKING UNLESS OTHERWISE SPECIFIED
- EXISTING MARKINGS IDENTIFIED TO BE REMOVED SHALL BE COMPLETELY OBLITERATED TO A MAXIMUM DEPTH OF 0.25" AND FOR A WIDTH EQUAL TO TWO TIMES THE WIDTH OF THE STRIPE OR MARKING TO BE REMOVED, PER COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 443.3.2. WATER BLASTING SHALL BE USED FOR ALL STRIPING ERADICATION.
- ALL SIGNS SHALL BE MADE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.
- ALL STRIPING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.

### LEGEND

=====	EXISTING CURB & GUTTER
=====	PROPOSED CURB & GUTTER
-----	BOUNDARY LINE
-----	EXISTING BOUNDARY LINE
-----	CENTERLINE
-----	RIGHT-OF-WAY
-----	4" DASHED WHITE LINE
-----	4" SOLID WHITE STRIPE

### CAUTION:

ALL EXISTING UTILITIES SHOWN WERE OBTAINED FROM RESEARCH, AS-BUILTS, SURVEYS OR INFORMATION PROVIDED BY OTHERS. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO AND INCLUDING ANY EXCAVATION, TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS, PRIOR TO STARTING THE WORK. ANY CHANGES FROM THIS PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE ENGINEER.

### PERMANENT SIGNING AND STRIPING NOTES:

SIGN	SIGN CODE	COLOR	LETTER SHEETING	BACKGROUND SHEETING
STOP	R1-1	(W/RED)	TYPE VII OR IX	TYPE XI
YIELD	R1-2	(W/RED)	TYPE VII OR IX	TYPE XI
DO NOT ENTER	R5-1	(W/RED)	TYPE VII OR IX	TYPE XI
WRONG WAY SCHOOL BUS STOP	R5-1A S3-1	(W/RED) (BLK/FLUORESCENT YELLOW GREEN)	TYPE VII OR IX	TYPE XI
SCHOOL BUS X-ING	S1-1	(BLK/FLUORESCENT YELLOW GREEN)	TYPE VII OR IX	TYPE XI
PEDESTRIAN X-ING	W11-2	(BLK/FLUORESCENT YELLOW GREEN)	TYPE VII OR IX	TYPE XI
BIKE X-ING	W11-1	(BLK/FLUORESCENT YELLOW GREEN)	TYPE VII OR IX	TYPE XI
ALL SCHOOL/PED/BIKE SUPPLEMENTAL PLAQUES		(BLK/FLUORESCENT YELLOW GREEN) WHEREVER BLK/YELLOW IS SPECIFIED COLOR IN MUTCD	TYPE VII OR IX	TYPE XI
ALL OTHER WARNING SIGNS AND SUPPLEMENTAL PLAQUES		(BLK/FLUORESCENT YELLOW GREEN) WHEREVER BLK/YELLOW IS SPECIFIED COLOR IN MUTCD	TYPE VII OR IX	TYPE XI
GUIDE & DESTINATION SIGNS INCLUDES EXTRUDED & NON-EXTRUDED (OVERHEAD & GROUND MOUNTED)	ALL	(W/GREEN) EXCEPT WHERE SPECIFIED OTHERWISE IN THE MUTCD	TYPE VII OR IX	TYPE XI
E-CODE SIGNS	E11-1, 1A 1B, 1C	(BLK/YELLOW)	TYPE VII OR IX	TYPE XI
RECREATIONAL & CULTURAL INTEREST	ALL	(W/BROWN)	TYPE VII OR IX	TYPE XI
GENERAL SERVICES	ALL	(W/BLUE)	TYPE VII OR IX	TYPE XI
SPECIFIC SERVICES	ALL	(W/BLUE)	TYPE VII OR IX	TYPE XI
ALL OTHER PERMANENT SIGNS		(BLK/WHITE) EXCEPT WHERE SPECIFIED OTHERWISE IN THE MUTCD	TYPE IV	TYPE XI

### STRIPING DEMOLITION

1. OBLITERATE ALL EXISTING STRIPING AND PAVEMENT MARKING UNLESS OTHERWISE SPECIFIED

2. EXISTING MARKINGS IDENTIFIED TO BE REMOVED SHALL BE COMPLETELY OBLITERATED TO A MAXIMUM DEPTH OF 0.25" AND FOR A WIDTH EQUAL TO TWO TIMES THE WIDTH OF THE STRIPE OR MARKING TO BE REMOVED, PER COA STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, SECTION 443.3.2. WATER BLASTING SHALL BE USED FOR ALL STRIPING ERADICATION.

3. ALL SIGNS SHALL BE MADE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.

4. ALL STRIPING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE M.U.T.C.D. (CURRENT EDITION) SPECIFICATIONS.

### GENERAL NOTES:

1. Jeffrey T. Wooten, of the firm of Tierra West LLC, 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 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 with survey information provided by Aldrich Land Surveying NMPLS# 7719

### STRIPING PLAN

LA ORILLA RD - 11+00 TO 21+25

DESIGN REVIEW COMMITTEE: APPROVED OCT 18 2013

CITY ENGINEER APPROVAL: APPROVED OCT 31 2013

DESIGNED BY: JW

DRAWN BY: pm

DRAWN NAME: 2013001 La Orilla.dwg

CHECKED BY: RRB

CITY PROJECT NO. 562963

ZONE MAP NO. E-12-Z

SHEET # 2 of 6



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, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES, AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE ADJUSTED IN THE FIELD TO MAXIMIZE CLEAR SPACE AVAILABLE FOR PEDESTRIANS AND WHEELCHAIRS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CONTRACTOR SHALL MEET WITH THE CITY'S TRAFFIC ENGINEERING OPERATIONS PERSONNEL IN THE FIELD AT ALL LOCATIONS TO SPOT EQUIPMENT BEFORE BEGINNING THE WORK. ALL SUCH EQUIPMENT SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY.
3. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
4. THE CONTRACTOR SHALL BORE, DRILL, OR PUSH WHEN CROSSING EXISTING PAVEMENTS AND ANY DRIVEWAYS FOR SIDE STREET CROSSINGS. BEFORE CONDUIT CAN BE BORED, DRILLED, OR PUSHED THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES. THE CONTRACTOR SHALL LOCATE AND EXPOSE GAS LINES WHICH CROSS ANY PROPOSED BORES. THESE EXCAVATIONS SHALL REMAIN OPEN UNTIL AFTER THE BORE IS COMPLETE. CONTRACTOR SHALL REMOVE AND REPLACE IN KIND ANY SIDEWALK OR PAVEMENT REQUIRED TO EXPOSE SUCH LINES. THE CONTRACTOR MAY CUT, TRENCH, AND REPLACE EXISTING PAVEMENT ONLY WHEN APPROVED BY THE PROJECT MANAGER.
5. SPLICING OF COMMUNICATIONS CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATIONS CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS OR CONTROLLER CABINETS WITH SPLICE BARS. SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE WILL NOT BE PERMITTED FROM THE MASTARM BASE TO THE CONTROLLER CABINET. SPLICING OF OPTICAL DETECTOR CABLE WILL NOT BE PERMITTED FROM THE DETECTOR TO THE CONTROLLER CABINET.
6. ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER. ALL VIDEO DETECTION COAXIAL AND POWER CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY CAMERA NUMBER AND LOCATION. ALL OPTICAL DETECTOR CABLE SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH BY DIRECTION AND LOCATION.
7. ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, STEEL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
8. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS(857-8000) THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON SIGNALS, LIGHTING, AND POWER SERVICES. TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL ASSIST THE CONTRACTOR IN FIELD LOCATION OF EQUIPMENT, COLOR CODING OF WIRING, AND MUST BE PRESENT WHEN SIGNALS AND LIGHTING ARE SHUT-OFF OR TURNED ON. THE CONTRACTOR SHALL ALSO NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS EACH TIME A TRAFFIC SIGNAL CONTROL DOOR IS OPENED.
9. THE CONTRACTOR SHALL NOTIFY PUBLIC SERVICE COMPANY 30 DAYS IN ADVANCE OF ANTICIPATED POWER SERVICE CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WITH PUBLIC SERVICE COMPANY TO ESTABLISH ELECTRICAL SERVICE IN THE CITY'S NAME. THE CONTRACTOR SHALL PAY THE LOCAL POWER COMPANY ALL COSTS TO PROVIDE ELECTRICAL SERVICE. THIS WORK WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
10. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING SIGNING AND DELIVER TO THE CITY TRAFFIC ENGINEERING YARDS WHEN TRAFFIC SIGNALS ARE PUT INTO OPERATION.
11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE.
12. IF TRENCH WIDTHS LESS THAN 12" ARE PROPOSED BY THE CONTRACTOR, APPROVED COMPACTION METHODS SHALL BE USED DURING BACKFILL TO PREVENT LATENT TRENCH FAILURES. THE CONTRACTOR SHALL USE GROUT OR LEAN FILL AS APPROVED BY THE PROJECT MANAGER IN LIEU OF EARTH BACKFILL.
13. FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATIONS CABLES, THE REQUIREMENTS FOR A SINGLE CONDUCTOR BARE COPPER #8 AWG MAY BE WAIVED WHERE PERMITTED BY THE NATIONAL ELECTRIC CODE.
14. THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM TRAFFIC SIGNAL CONTROLLERS.
15. EXISTING CONDUITS TO BE REMOVED OR ABANDONED SHALL HAVE ALL WIRING REMOVED.
16. EXISTING CONDUITS SHALL BE REPAIRED, ADJUSTED, OR REPLACED AS DIRECTED BY THE PROJECT MANAGER WHERE ELECTRICAL PULLBOXES OR TRAFFIC MANHOLES ARE INSTALLED OR REPLACED.
17. CONTRACTOR SHALL COIL EXCESS INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPLICE CABINET OR CONTROL CABINETS WITH SPLICE BARS. IF MORE THAN ONE MANHOLE EXISTS BETWEEN SPLICE CABINETS OR CONTROL CABINETS WITH SPLICE BARS, THEN COILING IS ONLY REQUIRED AT ONE OF THE MANHOLES. THE FOLLOWING QUANTITIES OF COMMUNICATION CABLE SHALL BE COILED:  
12 PAIR - 50 FT.  
25 PAIR - 50 FT.  
50 PAIR - 25 FT.  
75 PAIR - 25 FT.
18. THE CONTRACTOR SHALL PROVIDE OFF-DUTY POLICE OFFICERS TO DIRECT TRAFFIC WHEN SIGNALS ARE TURNED OFF.
19. ALL DATA SHOWN HEREIN CONCERNING EXISTING UTILITIES HAS BEEN OBTAINED FROM "AS-BUILT" DRAWINGS AND FROM FIELD OBSERVATIONS WHICH MAY OR MAY NOT BE ACCURATE. THE CONTRACTOR WILL BE RESPONSIBLE FOR EXPLORATORY TRENCHING. IF NECESSARY, TO MORE SPECIFICALLY LOCATE UTILITY LINES. COST OF LOCATING UTILITY LINES INCLUDING EXPLORATORY TRENCHING WILL BE CONSIDERED INCIDENTAL TO CONSTRUCTION.
20. THE CONTRACTOR SHALL VIDEO TAPE THE EXISTING TRAFFIC SIGNAL EQUIPMENT IN VHS FORMAT AND REVIEW THE TAPE WITH CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL PRIOR TO BEGINNING ANY REMOVALS OF SIGNAL EQUIPMENT. THE TAPE SHALL BECOME THE PROPERTY OF THE CITY AND MAY BE USED TO RESOLVE ANY QUESTIONS RELATED TO THE ORIGINAL CONDITION AND QUALITY OF EXISTING EQUIPMENT. THE EXISTING TRAFFIC SIGNAL EQUIPMENT INCLUDING POLES, CONTROLLER CABINETS, CONFLICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE.
21. CABINET AND CONTROLLER NEED TO BE I.D.C. 820A.

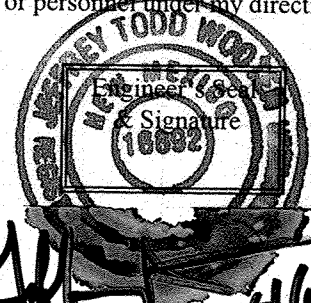
INCIDENTAL ITEMS \*

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, DRIVEPADS, 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 NON SALVAGEBLE MATERIAL TO BE DISPOSED TO CITY LANDFILL.
8. REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY TRAFFIC ENGINEERING OPERATIONS YARD.
9. LEAN FILL FOR CONDUIT TRENCHES.
10. PULL BOX ADJUSTMENT TO GRADE.
11. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL
12. REMOVAL AND REPLACEMENT IN KIND OR BETTER OF LANDSCAPING INCLUDING SPRINKLERS, FOR INSTALLATION OF PULL BOXES, CONDUITS AND SIGNAL FOUNDATIONS.
13. COST FOR PUBLIC SERVICE COMPANY TO PROVIDE ELECTRICAL SERVICE.

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

CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Jeffrey T. Wooten, of the firm of Tierra West LLC, 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 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 with survey information provided by Aldrich Land Surveying NMPLSH 7719



DEFINITIONS

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

TRAFFIC SIGNAL LEGEND

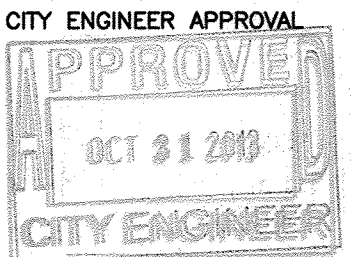
NEW	EXISTING	ITEM
		PULL BOX
		SERVICE POLE
		METER PEDESTAL
		CONTROLLER CABINET
		CONDUIT RUN (SIGNALS)
		CONDUIT RUN (INTERCONNECT)
		LOOP DETECTOR
		TRAFFIC SIGNAL PEDESTAL POLE
		CONDUIT RUN NUMBER (SIGNAL)
		CONDUIT RUN NUMBER (POWER SERVICE)
		CONDUIT RUN NUMBER (INTERCONNECT)
		CONDUIT RUN NUMBER (WARNING BEACON)
		TYPE II STANDARD WITH MASTARM, TRAFFIC SIGNAL, BACK PLATE, AND OPTICAL DETECTOR
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE, AND VIDEO CAMERA
		TRAFFIC SIGNAL, BACK PLATE, OPTICAL DETECTOR, LUMINAIRE,
		PEDESTRIAN PUSH BUTTON (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		PEDESTRIAN SIGNALS (MOUNTED TO SIDE OF POLE WHERE INDICATED)
		SPLICE CABINET
		TRAFFIC MANHOLE
		VIDEO CAMERA

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CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

**COORS BLVD AND LA ORILLA ROAD**

SIGNAL NOTES



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

CITY PROJECT NO. 562983

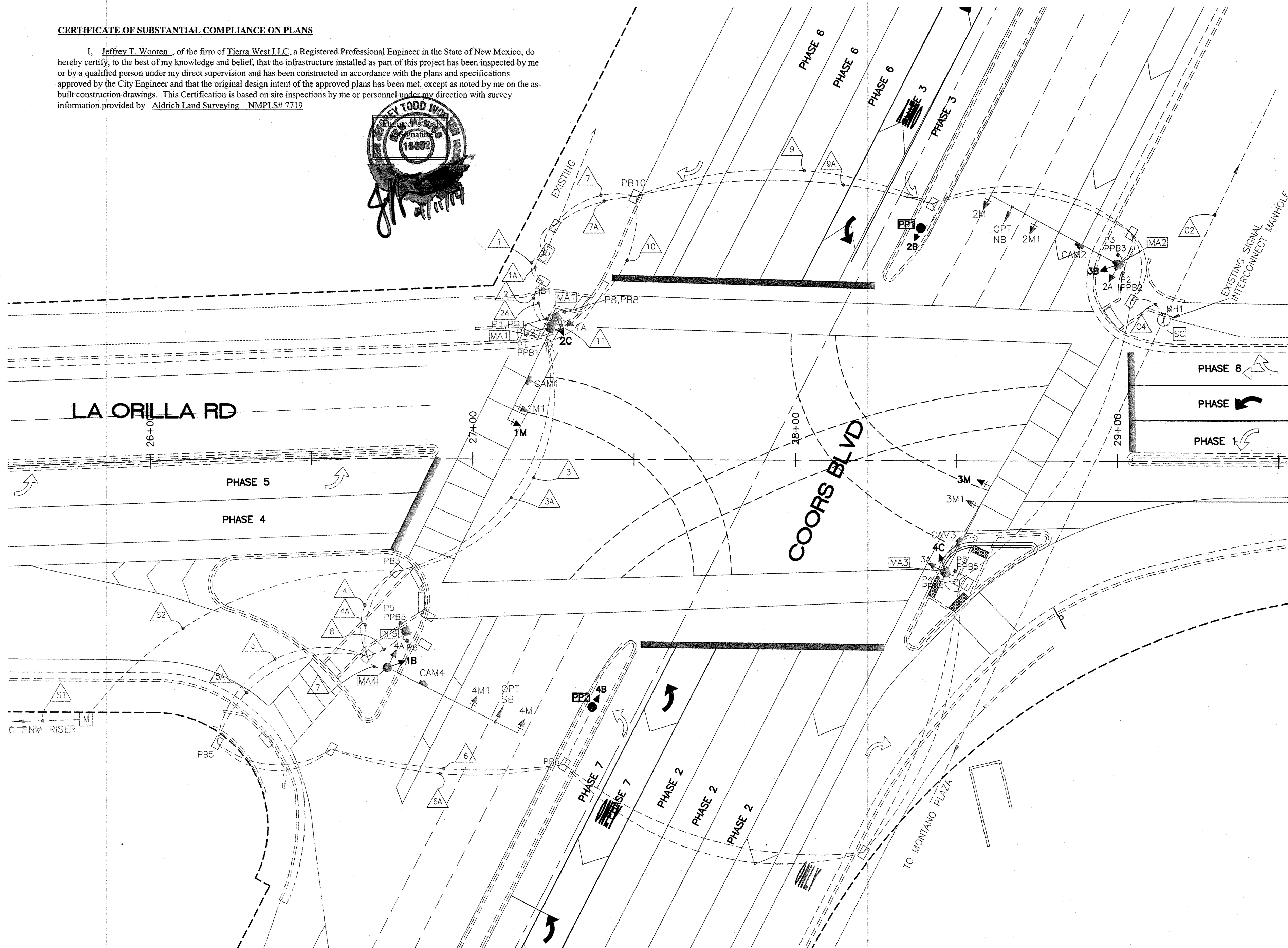
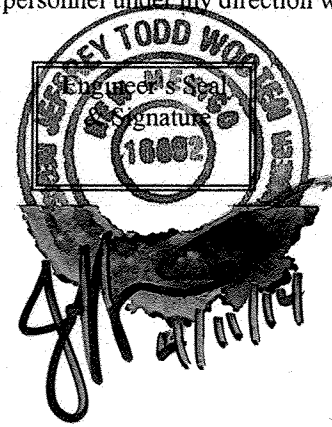
ZONE MAP NO. E-12-Z

SHEET # 3 of 6



**CERTIFICATE OF SUBSTANTIAL COMPLIANCE ON PLANS**

I, Jeffrey T. Wooten, of the firm of Tierra West LLC, 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 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 with survey information provided by Aldrich Land Surveying - NMPLS# 7719

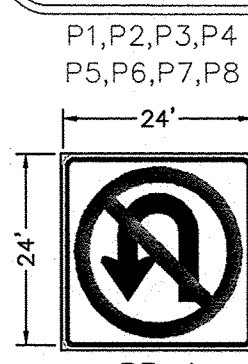
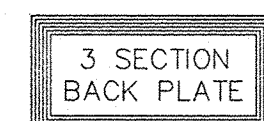
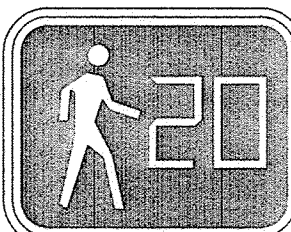


**CONDUCTOR REQUIREMENTS**

RUN	MCC 5 (#@FT)
BASE TO 1B	1 @ 15'
BASE TO 2C	1 @ 15'
BASE TO 3B	1 @ 15'
BASE TO 4C	1 @ 15'

**SYMBOL KEY**

- SIGNAL & CABINET ID
- NEW CONDUIT RUN ID
- CONDUIT RUN ID (POWER SERVICE)
- CONDUIT RUN ID (INTERCONNECT)



**NOTES**

- ALL INDICATORS ARE TO BE LED
- DISRUPTION OF POWER MUST BE COORDINATED WITH TRAFFIC OPERATIONS AND PNM. DOWNTIME SHALL BE MINIMIZED

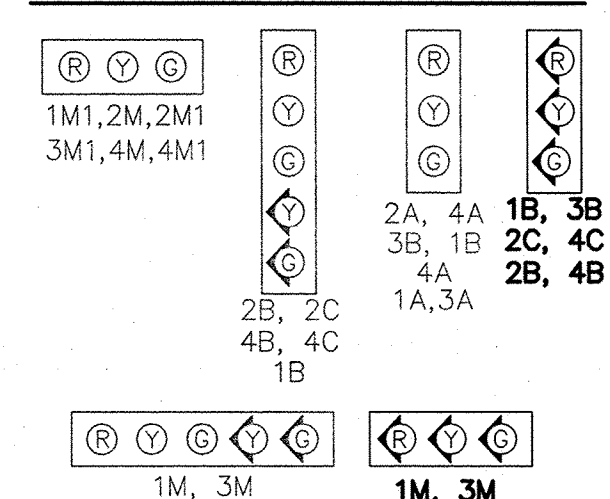
**ABBREVIATIONS**

- MA1 MASTARM NUMBER
- PP1 PEDESTAL POLE NUMBER
- PPB1 PEDESTRIAN PUSH BUTTON NUMBER
- CC1 CONTROL CABINET NUMBER
- PB1 PULL BOX NUMBER (SIGNALS)
- PBS1 PULL BOX NUMBER (POWER)
- PBC1 PULL BOX NUMBER (INTERCONNECT)
- DL1(1) DETECTOR LOOP PHASE # (LOOP #)
- 3A SIGNAL HEAD NUMBER
- P1 PEDESTRIAN SIGNAL NUMBER
- BP BACK PLATE
- EC EXTENDED CALL LOOP DETECTOR
- SD SYSTEM LOOP DETECTOR
- MH1 TRAFFIC MANHOLE NUMBER
- M METER

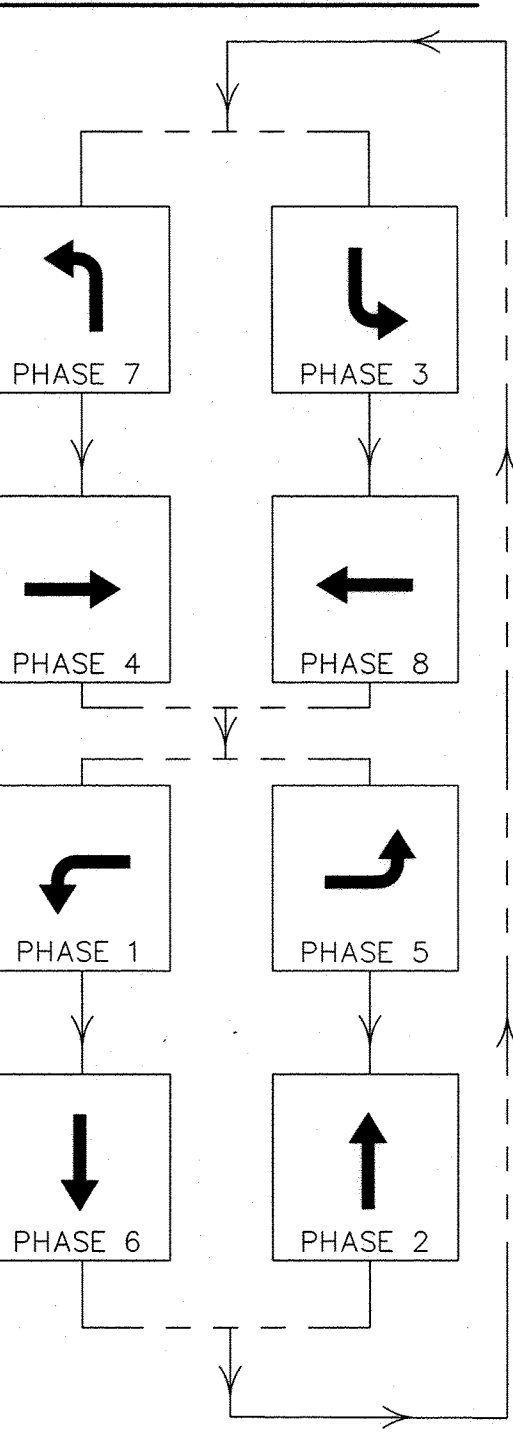
**SIGNAL POLES AND MASTARMS**

ID#	TYPE	STATION	OFFSET	LUMINAIRE MOUNTING HEIGHT	LUMINAIRE ARM
MA1	MASTARM 35' TYPE III	27+26	43' LT	40'	20'
MA2	MASTARM 40' TYPE III	29+00	60' LT	40'	20'
MA3	MASTARM 30' TYPE III	28+47	35' RT	40'	20'
MA4	MASTARM 40' TYPE III	26+74	65' RT	40'	20'
CC1	CONTROLLER	27+22	63' LT	-	-
PP1	PED POLE	28+39	71' LT	-	-
PP2	PED POLE	27+37	77' RT	-	-
PP3	PED POLE	29+00	60' LT	-	-
PP5	PED POLE	28+47	35' RT	-	-
M	METER PEDESTAL	25+77	79' RT	-	-

**TYPICAL SIGNAL FACE LENS ARRANGEMENTS**

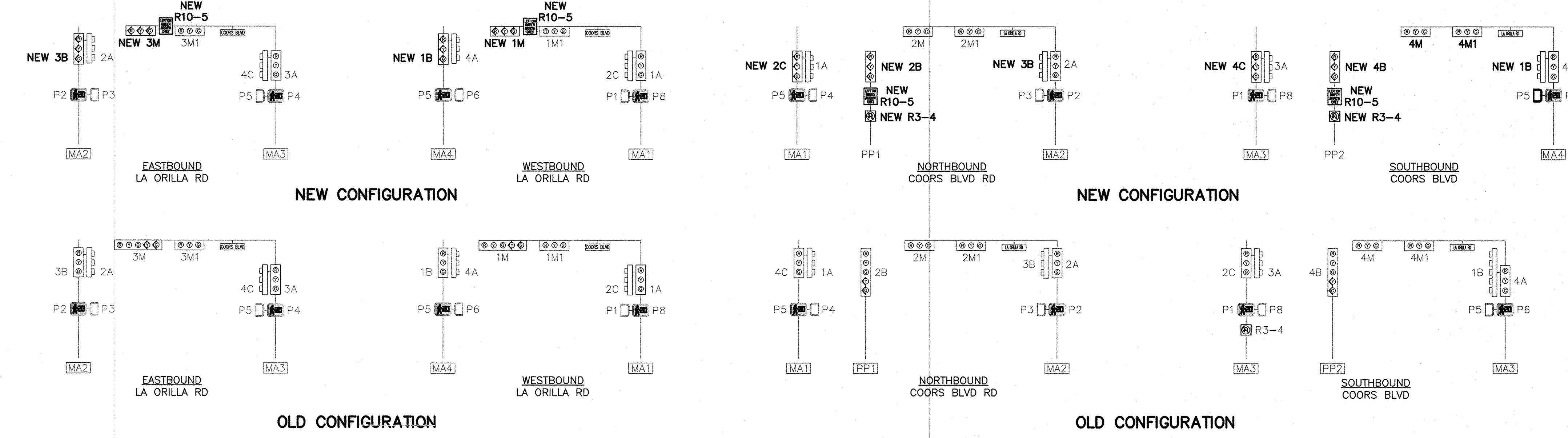


**SIGNAL PHASING**



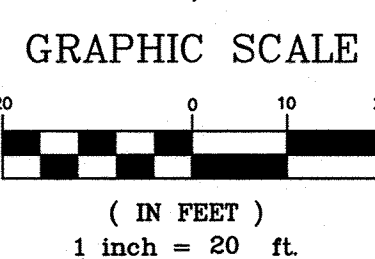
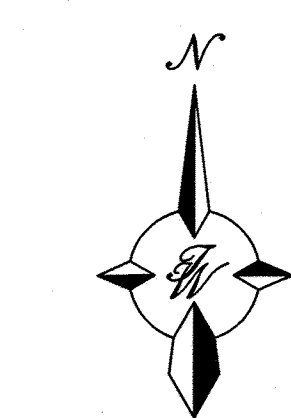
**NOTE**

USE EXISTING CABLES, IF POSSIBLE, FOR LENS HEADS



**TRAFFIC SIGNAL CONFIGURATION BY APPROACH**

NTS

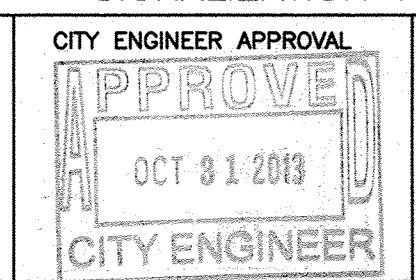


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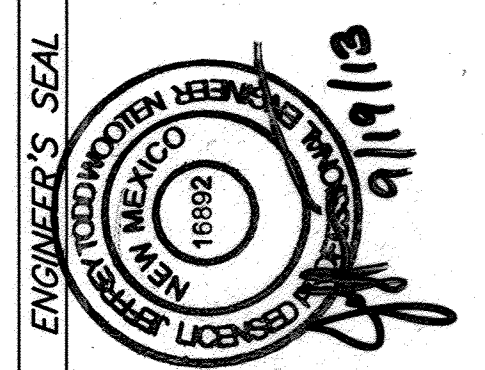
**SIGNALIZATION PLAN**



CITY PROJECT NO. 562983

ZONE MAP NO. E-12-Z

SHEET # 4 of 6



DESIGNED BY:	aj
DRAWN BY:	pm
CHECKED BY:	rrb
DATE:	Sep. 2013
JOB NO.:	2013001
DATE:	Sep. 2013

CONTRACTOR	TIERRA WEST, LLC
WORK ORDER NO.	2013
DATE	2013
INSPECTOR'S NAME	Jeffrey T. Wooten
DATE	2013
VERIFICATION DATE	2013
DATE	2013
RECORDED BY	TIERRA WEST, LLC
DATE	2013
NO.	







