		Carlos Montoya
City Project	Manager:	Muhanned Adeeb
<u> </u>	ontractor:	Bixby Electric
	Surveyor:	NA
City Urban Program S	upervisor:	NA
City Construction	Engineer:	Logan Patz
Letter of Accept	ance Date:	May 1, 2021

# CITY OF ALBUQUERQUE CONSTRUCTION PLANS

APPROVED AS RECORD DRAWINGS DMD/CSD CITY CONSTRUCTION ENGINEER

> logan Patz DATE:\_ 6-15-2021

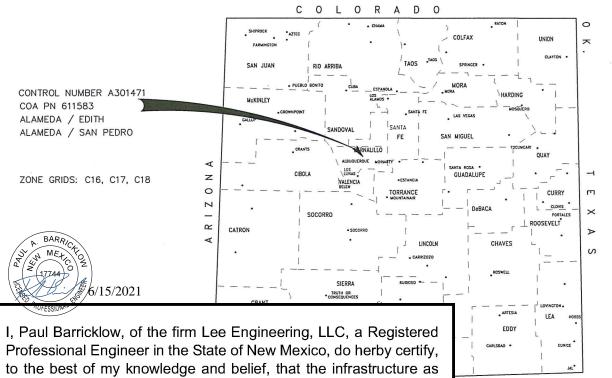
ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS

**100% PLANS** 

**BERNALILLO COUNTY** CONTROL NUMBER A301471 COA PROJECT NUMBER 611583







part of this project has been inspected by CABQ 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 drawings. The Certification is based on the site inspections by CABQ or personal under my direction in May 2021.

I, James Smouse, a licensed New Mexico Electrical contractor with Bixby Electric, lic #28568, do hereby certify that this As Built was performed in the month of May 2021, that is meets all requirements under the standard drawings and specifications and is true and correct to the best of my knowledge.



REV. SHEET NGINEERS STAMP & SIGN

8220 SAN PEDRO DRIVE NE SUITE 150

ALBUQUERQUE, NM 87113

505/338-0988

FAX 505/338-0989

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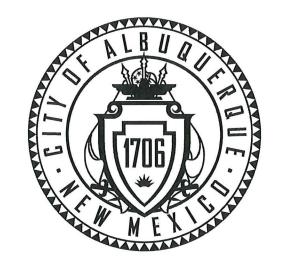
## CITY OF ALBUQUERQUE CONSTRUCTION PLANS

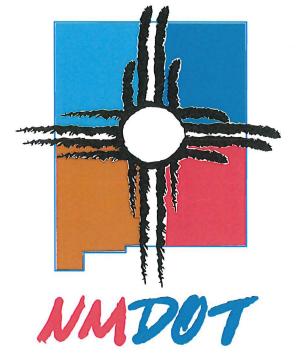
## ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS

505/338-0988 FAX 505/338-0989

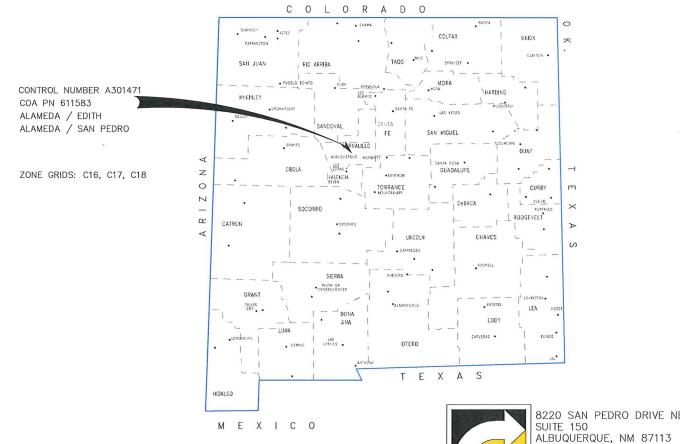
100% PLANS

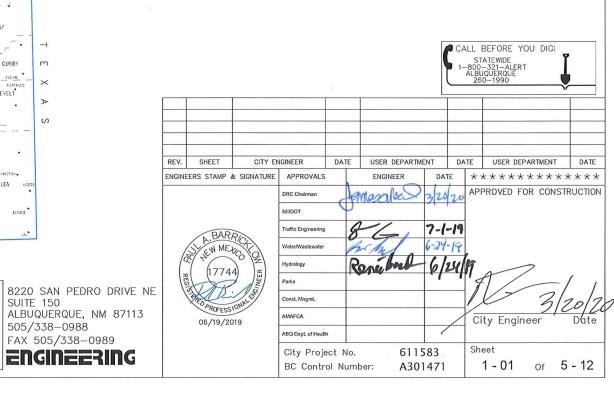
**BERNALILLO COUNTY** CONTROL NUMBER A301471 COA PROJECT NUMBER 611583



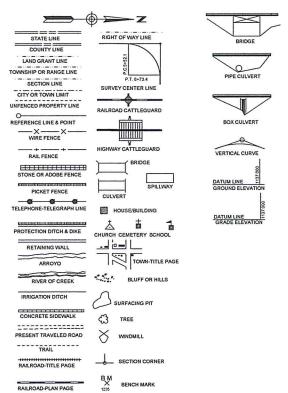








#### CONVENTIONAL SIGNS ON PLAN ON PROFILE



### SHIPPING POINTS

#### ALBUQUERQUE

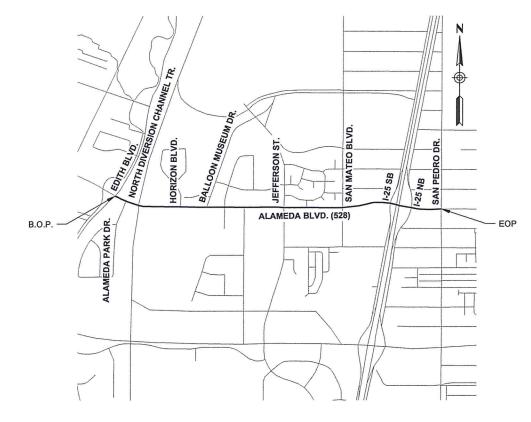
THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1986, UPDATE #9) SHALL GOVERN CONSTRUCTION OF THIS PROJECT.

### **LEGEND**

UNIMPROVEDPRIMITIVE	_
GRADED AND DRAINED	_
GRAVEL SURFACED	
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THIS CONTRACT	

## LENGTH OF PROJECT 1.67 MILES

THIS PROJECT IS IN SECTION 23 T11N R3E THIS PROJECT IS IN SECTION 20 T11N R4E



## **VICINITY MAP**

#### INTENT OF PROJECT

IMPLEMENTATION AND INSTALLATION OF ATSPM SIGNAL TIMING TO IMPROVE OPERATIONS WITHIN CORRIDOR BETWEEN EDITH BLVD. AND SAN PEDRO DR.

NO EARTH DISTURBING ACTIVITIES ARE ANTICIPATED.

#### **CONTACTS**

COA PROJECT MANAGER DEBBIE BAUMAN LEE ENGINEERING

PAUL BARRICKLOW

(505) 338-0988

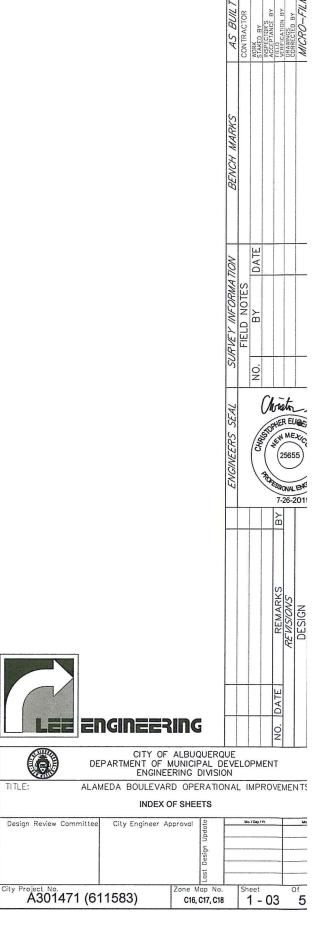


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Design Review Committe	e City Engineer Approval	ast Design Update		ula / Dey / Yr.		_

C16, C17, C18

A301471 (611583)

	INDEX OF SHEETS
SHEET NO.	DESCRIPTION
1 - 01	COVER SHEET
1 - 02	VICINITY MAP
1 - 03	INDEX OF SHEETS
1 - 04 TO 1 - 06	GENERAL AND ITS NOTES
1 - 07	TRAFFIC SIGNAL REQUIREMENTS AND INCIDENTAL ITEMS
	SUB-TOTAL 7 SHEETS
2X	NOT USED
3X	NOT USED
4X	NOT USED
	1101 0025
5 - 01	ITS QUANTITIES AND LEGEND
5-02	EQUIPMENT/CABINET DETAILS
5-02	CCTV DETAIL
5-03	
5 - 05 TO 5 -12	ITS TYPICAL INTERSECTION DETAILS
5-05105-12	ITS PLAN SHEEETS
	SUB-TOTAL 12 SHEETS
TC - 1	COA TEMPORARY TRAFFIC CONTROL CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2802
TC - 2	COA TEMPORARY TRAFFIC CONTROL CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2803
TC - 3	COA TEMPORARY TRAFFIC CONTROL CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2806
TC - 4	COA TEMPORARY TRAFFIC CONTROL CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2802
	SUB-TOTAL 4 SHEETS
6X	NOT USED
7X	NOT USED
8X	NOT USED
9X	NOT USED
	PROJECT TOTAL 23 SHEETS



Design Review Committee

#### **GENERAL NOTES**

- I. CITY OF ALBUQUERQUE GENERAL CONDITIONS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SHALL GOVERN CONSTRUCTION ADMINISTRATION. NMDOT SPECIFICATION CONCURRENCE FOR USE OF CITY OF ALBUQUERQUE STANDARDS AND SPECIFICATION APPROVED ON 2/8/19. ALL CONSTRUCTION FOR THIS PROJECT WILL BE COMPLETED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS AND SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REMOVALS AND DISPOSALS REQUIRED TO COMPLETE THIS PROJECT.
- 3. THE CONTRACTOR SHALL MAINTAIN AN UP-TO-DATE SET OF AS-BUILT PLANS FOR THE PROJECT. THESE PLAN 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. THE ABOVE IS INCIDENTAL TO THE PROJECT.
- 4. ALL DIMENSIONS ON PLANS ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ALL OTHER PERTINENT INFORMATION THAT MAY BE REQUIRED TO COMPLETE THE WORK.
- 5. THE CONTRACTOR SHALL HAVE PERSONNEL AVAILABLE 24 HOURS PER DAY, 7 DAYS A WEEK TO INSPECT AND MAINTAIN DETOURS AND TRAFFIC CONTROL DEVICES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADEQUATE PRECAUTIONS DURING INCLEMENT WEATHER SO THAT TRAFFIC IS NOT SUBJECT TO UNDUE DANGER.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LANDFILL DUMPING FEES AT NO ADDITIONAL COST TO THE OWNER.SALVAGEABLE MATERIALS FROM THIS PROJECT, INCLUDING SIGNAL CONTROLLERS, SPLICE CABINETS, ALL CABLING, AND CONTROL CABINETS, ARE TO BE HAULED AND STOCKPILED AT CITY TRAFFIC ENGINEERING YARD ON PIÑO ROAD NE. HAUL OF SUCH MATERIAL SHALL BE PERFORMED DURING NORMAL WORKING HOURS AS DIRECTED BY THE PROJECT MANAGER. ALL ELECTRICAL ITEMS TO BE SALVAGED, SUCH AS MODEMS, TERMINAL SERVERS, CONTROLLERS AND ANY OTHER ELECTRICAL COMPONENT SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PIÑO RD. NE. THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM TO BE REPLACED, FOR BID ITEMS. THIS WORK IS INCIDENTAL TO THE PROJECT.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPORTING AND CLEANUP OF SPILLS WHICH ARE 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 PROJECT MANAGER (OR TO THE PROPERTY OWNER). ANY UNREPORTED SPILLS IDENTIFIED AFTER CONSTRUCTION AND ASSOCIATED WITH THE PROJECT CONSTRUCTION SHALL BE CLEANED UP BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT. THE CONTRACTOR SHALL BEAR THE FULL COST OF CLEANUP OF SUCH UNREPORTED SPILLS.
- 8. THE CONTRACTOR SHALL PROVIDE INGRESS AND EGRESS AND MAINTAIN PEDESTRIAN ADA ACCESS TO ALL LOCAL BUSINESSES AND RESIDENCES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL ADVISE AND SCHEDULE ALL SIGNS AND ACCESS CLOSURES, AT LEAST 48 HOURS IN ADVANCE, WITH AFFECTED PROPERTY OWNERS AND WITH THE PROJECT MANAGER.
- THE CONTRACTOR SHALL KEEP THE PUBLIC APPRISED OF CONSTRUCTION OPERATIONS INVOLVING STREET AND LANE CLOSURES AND OTHER PERTINENT INFORMATION RELATING TO TRAFFIC MOVEMENT.
- LOCATION OF CONDUITS, FOUNDATIONS, CONTROL CABINETS, POLES, PULL BOXES, MANHOLES AND SPLICE CABINETS SHOWN ON THE PLANS ARE SCHEMATIC AND SHALL BE VERIFIED.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING IN KIND WITH CURRENT MODEL ANY DISTURBED MARKED AND LOCATED UTILITIES AND RESTORING SERVICE AT THE CONTRACTOR'S EXPENSE.
- EXISTING CONDUIT TO BE ABANDONED SHALL HAVE ALL WIRING REMOVED WITH EXCEPTION OF TRACER WIRE.
- SEVEN (7) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL SUBMIT TO DMD, CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLANS TO OBTAIN A BARRICADE PERMIT FROM THE DMD, CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADING ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION19 OF STANDARD SPECIFICATIONS.

#### **GENERAL NOTES (CON'T)**

- 14. THE CONTRACTOR SHALL ARRANGE TO HAVE OFF-DUTY POLICE OFFICERS PRESENT TO DIRECT TRAFFIC WHENEVER POWER TO SIGNALS IS TURNED OFF. REIMBURSEMENT FOR THE OFF-DUTY POLICY OFFICERS SHALL BE CONSIDERED INCIDENTAL TO BID ITEM 19.010 AND NO SEPARATE MEASUREMENT OR PAYMENT WILL BE MADE THEREFORE.
- FOR THE PURPOSES OF THIS CONTRACT, THE TERMS "PROJECT MANAGER" AND "ENGINEER" ARE TO BE SYNONYMOUS.
- MINIMUM TESTING REQUIREMENTS SHALL CONFORM TO THE CITY OF ALBUQUERQUE GUIDELINES
- 17. THE CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. THE CONTRACTOR SHALL REMOVE ANY AND ALL GRAFFITI FROM ALL EQUIPMENT WHETHER PERMANENT OR TEMPORARY WITHIN 24 HOURS.
- 18. INSTALLATION OF ALL NEW COMMUNICATION CABLE SHALL INCLUDE THE TERMINATION OF NEW OR EXISTING TWISTED PAIRS TO TERMINAL BLOCKS INSIDE ALL NEW OR EXISTING SPLICE CABINETS ALONG ROUTE OR NEW CABLE.
- 19. CONTRACTOR SHALL COORDINATE ANY IMPACTS TO BUS ROUTES AND/OR BUS STOPS WITH ABQ RIDE. IF NECESSARY, ABQ RIDE WILL SET UP TEMPORARY BUS STOP LOCATIONS. ABQ RIDE: 243-7433
- THE GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING STANDARD SIGNS AND DETOURS FOR ALL BICYCLE LANE AND SIDEWALK CLOSURES.

#### TRAFFIC SIGNAL NOTES

- 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, THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (UPDATED IN JULY 2003).
- 2. THE CONTRACTOR IS WARNED THAT EXISTING CONDUITS MAY CONTAIN AC POWER AND CAUTION SHALL BE EXERCISED IN INTERCEPTING OR INSTALLING CABLE IN EXISTING CONDUIT.
- ALL PULL BOXES SHALL BE REINFORCED POLYMER MORTAR HEAVY DUTY TYPE WITH REINFORCED POLYMER MORTAR HEAVY DUTY COVERS. CONCRETE COVERS, METAL COVERS, AND CONCRETE PULL BOXES WILL NOT BE ACCEPTABLE.
- 4. WATERTIGHT SPLICING OF TRAFFIC SIGNALS MULTI-CONDUCTOR CABLE WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES. SPLICING OF VIDEO DETECTION COAXIAL CABLE AND PREEMPTION DETECTOR CABLE WILL NOT BE PERMITTED FROM THE FIELD UNIT TO THE CONTROLLER CABINET.
- 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 CLOSURES. SPLICING OF TRAFFIC SIGNALS MCC WILL BE PERMITTED IN LARGE PULL BOXES INCLUDING LARGE MEDIAN PULL BOXES.
- ALL LOOP LEAD-IN CABLES SHALL BE TAGGED AT THE CONTROL CABINET TO IDENTIFY EACH CABLE BY PHASE AND LOOP NUMBER.
- ALL CONDUIT GROUNDS SHALL BE INSULATED GREEN #6 AWG CONDUCTORS IN LIEU OF THE SPECIFIED BARE COPPER.
- THE CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS THREE WORKING DAYS IN ADVANCE OF ANY ANTICIPATED WORK ON TRAFFIC SIGNALS. TRAFFIC ENGINEERING OPERATIONS PERSONNEL AND AN OFF-DUTY POLICE OFFICER 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.
- CONTRACTOR SHALL COIL EXCESS COPPER INTERCONNECT CABLE AT ALL NEW OR EXISTING TRAFFIC MANHOLES BETWEEN SPLICE CABINETS 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 COPPER COMMUNICATION CABLE SHALL BE COILED:

12 PAIR - 50 FT 50 PAIR - 25 FT 25 PAIR - 50 FT 75 PAIR - 25 FT

- FIBER CABLING SHALL BE COILED IN PULL BOXES (20 FT). AT SPLICE VAULTS AND MANHOLE SPLICE LOCATIONS THE FIBER CABLING SHALL BE COILED 50FT FOR EACH CABLE ENTRY INTO THE VAULT, REGARDLESS OF WHETHER THERE IS A PROPOSED SPLICE CLOSURE AT THE LOCATION.
- 11. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MAST ARM POLES AND PEDESTAL POLES. ALL SUCH UNUSED CONDUCTORS SHALL BE DISCONNECTED AT THE LARGE PULL BOX ADJACENT TO THE POLE, CAPPED AND WATERPROOFED.

#### TRAFFIC SIGNAL NOTES (CON'T)

- 12. 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.
- 13. ANY EXISTING CABLES (INCLUDING SINGLE CONDUCTORS, NEUTRALS, MULTI CONDUCTORS, AND LOOP LEAD-IN CABLES) USED TO PULL NEW INTERCONNECT OR PREEMPTION CABLES SHALL BE REPLACED IN-KIND WITH NEW CABLE. WHERE EXISTING CONDUIT FILLS EXCEED 60% NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS FOR DETERMINATION WHETHER OR NOT ALL CABLES ARE TO BE REPLACED AND/OR ADDITIONAL CONDUITS ARE TO BE INSTALLED. CONTRACTOR SHALL PROVIDE UPDATED TIMING AND COORDINATION PLANS TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL. THE CITY OF ALBUQUERQUE TRAFFIC SIGNAL CONTROLLERS.
- FIBER OPTIC CABLE SHALL NOT BE INSTALLED IN THE SAME CONDUIT AS SIGNAL OR FLASHER CONDUCTORS, EXCEPT WHERE SHOWN ON THE PLANS.
- 15. LIVE UNUSED CONDUCTORS WILL NOT BE ALLOWED AT MASTARM POLES AND PEDESTAL POLES. ALL UNUSED CONDUCTORS SHALL BE CAPPED AND WATER PROOFED WITH CRIMPED ON NYLON WIRE CAPS.
- 16. ALL COPPER SPLICES SHALL USE SILICONE GEL FILLED WIRE NUTS.
- THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS PERSONNEL WILL PROVIDE ALL TRAFFIC SIGNAL TIMING PLANS AND WILL PROGRAM ALL TRAFFIC SIGNAL CONTROLLERS.
- 18. ANY TRAFFIC SIGNAL EQUIPMENT REMOVED AND NOT RELOCATED SHALL BE SALVAGED BY THE CONTRACTOR AND DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE WITH PROPER DOCUMENTATION (LETTER OF TRANSMITTAL).
- THE CONTRACTOR SHALL TAKE DIGITAL PHOTOS OF EXISTING TRAFFIC SIGNAL EQUIPMENT PRIOR TO ANY REMOVALS OF SIGNAL EQUIPMENT AND ALL SIGNAL EQUIPMENT AFTER CONSTRUCTION. THE PICTURES SHALL BE PROVIDED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS IN .JPG FORMAT AND PLACED ON A CD-ROM. THE CD-ROM 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. ALL REMOVED EXISTING TRAFFIC SIGNAL EQUIPMENTS INCLUDING BUT NOT LIMITED TO POLES, SIGNAL HEADS, CONTROLLER CABINETS, CONFICT MONITORS, AND DETECTORS SHALL BE DELIVERED TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE WITH PROPER DOCUMENTATION (LETTER OF TRANSMITTAL).

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	CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOP ENGINEERING DIVISION
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GENERAL NOTES 1 OF 2

GENERAL NOTES 1 OF 2

Design Review Committee	City Engineer A	Approval	Last Design Update	Mo. I Day I'Yr.	lla.
City Project No. A301471 (61	1583)	Zone M C16,	ap No. C17, C18	1 - 04	of 5

#### SPECIAL TRAFFIC CONTROL REQUIREMENTS

- . 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.
- THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IN WRITING OF ANY DENIED OR DELAYED PERMITS THAT WILL AFFECT THE CONSTRUCTION SCHEDULE. DENIALS AND DELAYS WILL BE CONSIDERED FOR ADDITIONAL CONSTRUCTION TIME AS NECESSARY.
- 3. BARRICADING OF CONSTRUCTION SITES SHALL BE PLACED NO EARLIER THAN ONE HOUR PRIOR TO STARTING.
- 4. 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.
- THE CONTRACTOR SHALL REVIEW HIS OPERATION PRACTICES AND PROCEDURES ON A DAILY BASIS TO EXPEDITE THE WORK AND CLEAR THE RIGHT-OF-WAY AS SOON AS POSSIBLE.
- 6. THE CONTRACTOR'S COST 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, REMOVE AND RESETTING OF TRAFFIC CONTROL DEVICES, ETC. SHALL BE INCLUDED IN THE LUMP SUM BID FOR ITEM 19.010 CONSTRUCTION TRAFFIC CONTROL AND BARRICADING.
- ONLY SINGLE LANE CLOSURES WILL BE ALLOWED FOR CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL WORK CONTINUOUSLY 24-HOURS PER DAY, WHEN TRAFFIC LANES ARE CLOSED TO TRAFFIC UNLESS THE WORK VIOLATES THE CITY'S NOISE ORDINANCE.
- 9. IF THE CONTRACTOR IS NOT ALLOWED TO WORK AT NIGHT DUE TO NOISE ORDINANCE VIOLATIONS, THE CONTRACTOR SHALL OPEN ALL TRAFFIC LANES TO TRAFFIC WITH THE PROPER USE OF TRENCH PLATES.
- CONTRACTOR IS REQUIRED TO SEQUENCE TRAFFIC CONTROL TO KEEP ACCESS FOR PEDESTRIANS OPEN ON 3 LEGS OF EACH SIGNALIZED INTERSECTION AT ALL TIMES.
- 12. ALL TRAFFIC CONTROL WILL NEED TO SAFELY ACCOMMODATE BICYCLES THROUGHOUT THE PROJECT LIMITS. BIKE LANES SHALL REMAIN OPEN AT ALL

#### MISCELLANEOUS NOTES:

- ALL EXCAVATION, TRENCHING, AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA CFR 1926.650 SUBPART P.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL CONSTRUCTION SIGNING UNTIL PROJECT HAS BEEN ACCEPTED BY THE COA.
- THE CONTRACTOR SHALL ASSIST THE ENGINEER IN THE CONSTRUCTION OF AS-BUILT DRAWINGS.
- 4. TWO WEEKS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHOULD NOTIFY THE TRANSIT DEPARTMENT OF ANY IMPACT THE PROPOSED PROJECT WILL HAVE ON THE TRANSIT SYSTEM SUCH AS CAUSING A DETOUR, OR CAUSE THE CLOSING OR RELOCATION OF A BUS STOP. THE CONTACT PERSON IS DOUGLAS GOFF, OFFICE PHONE (505)-206-0151, AND E-MAIL DGOFF@CABQ.GOV.
- CONTRACTOR SHALL USE THE MANUFACTURED SUPPLIED CONNECTORS FOR THE INSTALLATION OF ALL CCTV CAMERAS.
- 6. 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 REQUESTS.

#### CITY OF ALBUQUERQUE ENVIRONMENTAL REQUIREMENTS

#### REPORTING CLEANUP AND SPILLS:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPORTING AND CLEANUP OF SPILLS WHICH ARE 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 PROJECT MANAGER, (OR TO THE PROPERTY OWNER).
- d. ANY UNREPORTED SPILLS IDENTIFIED AFTER CONSTRUCTION AND ASSOCIATED WITH THE PROJECT CONSTRUCTION SHALL BE CLEANED UP BY THE CONTRACTOR IN ACCORDANCE WITH THE CONTRACT.
- e. THE CONTRACTOR SHALL BEAR THE FULL COST OF CLEANUP OF SUCH UNREPORTED SPILLS.

#### 2. NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEMS:

- a. THE CONTRACTOR SHALL COMPLY WITH ALL REGULATIONS OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY, INCLUDING THE NPDES PROGRAM AGENCY. FOR INFORMATION CONTACT THE HYDROLOGY DEPARTMENT AT (505) 768-2778
- b. THE CONTRACTOR IS REQUIRED TO PROVIDE PROTECTION AROUND ALL DROP INLETS DURING CONSTRUCTION.

#### AIR QUALITY:

THE AIR POLLUTION CONTROL REGULATIONS OF THE ALBUQUERQUE BERNALILLO COUNTY AIR QUALITY CONTROL BOARD LIMIT EMISSION 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 (505) 768-2638.

- 4. MONITORING FOR PETROLEUM IMPACTED SITES:
  - c. THE ENVIRONMENTAL DOCUMENTS AND ASSOCIATED PROJECT COMMITMENTS REQUIRE MONITORING FOR VOC'S AT EIGHT (8) PROJECT SITES (SEE SHEET 6).
  - d. THE CONTRACTOR SHALL PROVIDE AN APPROVED ENVIRONMENTAL CONSULTANT TO PERFORM THE TARGETED ENVIRONMENTAL CONSTRUCTION MONITORING.
  - e. ENVIRONMENTAL CONSTRUCTION MONITORING SHALL BE INCIDENTAL TO INSTALLED ITEMS AND NO FURTHER PAYMENT SHALL BE MADE.

THE CONTRACTOR SUPPLIED ENVIRONMENTAL CONSULTANT PERFORMING CONSTRUCTION MONITORING SHALL:

- a. BE FAMILIAR WITH NEW MEXICO ENVIRONMENTAL DEPARTMENT (NMED)
  UNDERGROUND STORAGE TANKS BUREAU (USTB) REGULATIONS AND
  REQUIREMENTS.
- BE FAMILIAR WITH THE OPERATION OF PHOTO-IONIZATION DETECTOR (PID) OR FLAME IONIZATION DETECTOR (FID) EQUIPMENT, AND
- c. BE TRAINED AS A HAZARDOUS MATERIALS SITE WORKER HAVING SUCCESSFULLY COMPLETED AT LEAST THE 40 HOUR COURSE MANDATED BY OSHA REGULATIONS 1910.120. THE CITY OR THE ENVIRONMENTAL CONSULTANT SHALL USE A PID OR FID CALIBRATED TO 100 PPM ISOBUTYLENE TO SCREEN SOIL SAMPLES FOR HYDROCARBON IMPACTS.
- I. THE FIELD SCREENING METHODOLOGY SHALL BE THE JAR HEADSPACE METHOD CODIFIED IN THE NMED USTB REGULATIONS, APPENDIX C.
- e. ALL WASTE MANIFESTS SHALL BE SIGNED BY EITHER A REPRESENTATIVE OF THE CITY OR THE ENVIRONMENTAL CONSULTANT WITH EXPRESS WRITTEN CONSENT OF THE CITY. COSTS FOR HANDLING AND DISPOSAL 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.

#### 5. NOISE:

THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT CITY AND COUNTY ORDINANCES PARTICULARLY RELATIVE TO NOISE. THE CITY PERMIT REVIEW ENGINEER MAY BE CONTACTED AT (505) 768-7637 FOR MORE INFORMATION.

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## **ENVIRONMENTAL COMMITMENTS CN A301471**

THE CONTRACTOR SHALL REFER TO SECTION 107 OF THE 2019 EDITION OF THE STANDARD SPECIFICATIONS, MAKING SPECIAL NOTE OF SUB-SECTION 107.14: CONTRACTOR'S RESPONSIBILITIES FOR ENVIRONMENTAL AND CULTURAL RESOURCE PROTECTION.

NO ADDITIONAL PROJECT SPECIFIC ENVIRONMENTAL REQUIREMENTS APPLY

NMDOT ENVIRONMENTAL BUREAU MANAGER

6-25-19

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#### TRAFFIC SIGNAL EQUIPMENT REQUIREMENTS

- 1. THE CONTRACTOR SHALL FURNISH AND INSTALL THE FOLLOWING:
  - A. ALL TRAFFIC SIGNAL CONTROLLERS SUPPLIED FOR THIS PROJECT SHALL BE ECONOLITE COBALT. ALL TRAFFIC SIGNAL CONTROLLER CABINETS SUPPLIED FOR THIS PROJECT SHALL BE TYPE "P" OR TYPE "M" CABINETS.
- 2. ALL SIGNAL ASSEMBLIES, PEDESTRIAN SIGNALS, PEDESTRIAN PUSH BUTTONS, AND FITTINGS SHALL COMPLY WITH THE CITY OF ALBUQUERQUE TYPE AND COLOR (BLACK) FINISH PEOLUPEMENTS.
- 3. MAINTAIN A MINIMUM OF 48" WIDE PEDESTRIAN SIDEWALK WIDTH WHEN TRAFFIC SIGNAL EQUIPMENT PLACED ADJACENT TO PEDESTRIAN PATHWAY.

#### TRAFFIC SIGNAL INCIDENTAL ITEMS\*

- 1. 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. THIS SHALL BE INCIDENTAL TO BID ITEM 19.010.
- MINOR GROUNDING IMPROVEMENT FOR CONTROL CABINETS. THE EXISTING POWER SERVICE AND GROUNDING AT EACH LOCATION SCHEDULED FOR CONTROLLER CABINET REPLACEMENT SHALL BE REVIEWED BY THE CONTRACTOR AND THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING DEPARTMENT. THIS SHALL BE INCIDENTAL TO BID ITEM 429.010.
- CONTRACTOR WILL BE RESPONSIBLE FOR CLEANING OUT ANY CONDUITS THAT NEW WIRE WILL BE PULLED THROUGH. THIS SHALL BE INCIDENTAL TO BID ITEM 426.003.
- REMOVAL OF EXISTING CONDUCTORS OR OTHER SIGNAL EQUIPMENT FOR INSTALLATION OF NEW SIGNAL EQUIPMENTS EXCEPT AS NOTED IN PLANS. THIS SHALL BE INCIDENTAL TO BID ITEM 426 003
- 5. IN-KIND REPLACEMENT OF CABLES USED TO PULL NEW INTERCONNECT CABLES IN EXISTING CONDUITS. ANY EXISTING CABLES (INCLUDING SINGLE CONDUCTORS, NEUTRALS MULTI CONDUCTORS AND LOOP LEAD-IN CABLES) USED TO PULL NEW INTERCONNECT OR PREEMPTION CABLES SHALL BE REPLACED IN-KIND WITH NEW CABLE. WHERE EXISTING CONDUIT FILLS EXCEED 60% NOTIFY THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING OPERATIONS FOR DETERMINATION WHETHER OR NOT ALL CABLES ARE TO BE REPLACED AND/OR ADDITIONAL CONDUITS ARE TO BE INSTALLED. THIS SHALL BE INCIDENTAL TO BID ITEM 426 003
- 6. ANY MONUMENTS DISTURBED OR DESTROYED SHALL BE REPLACED BY A NM LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE. CITY SURVEYOR SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY MONUMENT PLACEMENT. THIS SHALL BE INCIDENTAL TO BID ITEM 426.003.
- 7. CABLE TESTING AND DIAGRAMS. THIS SHALL BE INCIDENTAL TO BID ITEM 429.010.
- 8. DESIGN, MATERIALS, INSTALLATION, AND REMOVAL OF SAFETY BARRIER FOR SHIELDING EQUIPMENT OR MATERIAL. THIS SHALL BE INCIDENTAL TO BID ITEM 435.203.
- REMOVAL, SALVAGE, AND TRANSPORTATION OF EXISTING SIGNAL EQUIPMENT TO THE CITY OF ALBUQUERQUE TRAFFIC ENGINEERING YARD ON PINO ROAD NE. THIS SHALL BE INCIDENTAL TO BID ITEM 427.003, 427.101, 428.102, 428.210, 429.010, 429.300, 435.702, 435.831, 435.703, AND 435.835
- 10. OFF-DUTY POLICE OFFICER FOR TRAFFIC CONTROL. THIS SHALL BE INCIDENTAL TO BID ITEM 19.010.
- 11. CAMERA MOUNTING HEIGHT ADJUSTMENT ARM. THIS SHALL BE INCIDENTAL TO BID ITEM 428.210.
- \* ITEMS LISTED ARE ONLY A GENERAL DESCRIPTION OF THE REQUIRED WORK AND MATERIALS, AND MAY NOT BE COMPLETE. THIS DOES NOT INCLUDE ANY INCIDENTAL WORK OR MATERIALS REQUIRED BY THE SPECIAL PROVISIONS SERIALS (STANDARD DETAILS), SUPPLEMENTAL SPECIFICATIONS, OR THE STANDARD SPECIFICATIONS.

#### TRAFFIC INCIDENTAL ITEMS CONTINUED

- 12. ALL PATCH CABLES BETWEEN NETWORK SWITCHES AND TRAFFIC SIGNAL CABINET EQUIPMENT, INCLUDING BUT NOT LIMITED TO TRAFFIC SIGNAL CONTROLLER, CONFLICT MONITOR, OPTICALDETECTOR CARDS, VEHICLE DETECTOR CARDS, WIRELESS DEVICES. THIS SHALL BE INCIDENTAL TO BID ITEM 428 102
- ANY AND ALL SOFTWARE SETUP AND CONFIGURATION FOR MANAGED FIELD ETHERNET SWITCHES, RADAR DETECTION SYSTEMS, DSRC RADIO/BLUETOOTH DEVICES, ON-BOARD UNITS, CCTV SHALL BE INCIDENTAL TO BID ITEM 427.003, 427.101, 428.102, 428.210, 429.010, 429.300, 435.702, 435.831, 435.703, AND 435.835.
- 14. CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING EXISTING LOOP DETECTION EQUIPMENT AND WIRING IS NOT DAMAGED DURING CABINET INSTALLATIONS. THIS SHALL BE INCIDENTAL TO BID ITEM 435 835

#### TRAFFIC SIGNAL INTERCONNECT REQUIREMENTS

- PER PLAN, EXISTING COPPER OR FIBER OPTIC INTERCONNECT SHALL BE MAINTAINED OR PROVIDED FOR SIGNAL CONSTRUCTION. THIS SHALL INCLUDE BUT NOT LIMITED TO INSTALLING SPLICE CABINETS, SPLICE VAULTS, SPLICE CLOSURES, INTERCONNECT CONDUIT AND CABLE, CCTV CAMERA INSTALLATION, AND APPROPRIATE SIGNAL CONTROLLER INTERFACES (FIELD SWITCH, TERMINAL SERVERS ETC.)
- 2. SIGNAL CONDUCTORS SHALL NOT SHARE CONDUIT OR PULL BOXES WITH FIBER OPTIC COMMUNICATIONS CABLE. FIBER OPTIC CABLE SHALL BE INSTALLED IN SEPARATE CONDUIT AND PULL BOXES.
- 3. SPLICING OF COMMUNICATION CABLE WILL NOT BE PERMITTED IN PULL BOXES. SPLICING OF COMMUNICATION CABLE (CONNECTIONS) WILL BE PERMITTED ONLY AT SPLICE CABINETS, SPLICE VAULTS WITH SPLICE CLOSURES, OR CONTROLLER CABINETS WITH SPLICE BLOCKS.
- FOR CONDUITS CONTAINING ONLY LOW VOLTAGE COMMUNICATION CABLES OR FIBER OPTIC CABLE, AN INSULATED SINGLE CONDUCTOR COPPER #6 AWG WILL BE USED AS A TRACER WIRE.

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# RECORD DRAWING Date

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.

Bid Item Item ID No.

Item Description

19.010 CONSTRUCTION TRAFFIC CONTROL & BARRICADING

7 427.101 TRAFFIC SIGNAL ASSEMBLY, ANY TYPE, REMOVE & SALVAGE, COMPL.

15 435.835 WAVETRONIX ADVANCE RADAR VEHICLE DETECTION SYSTEM (PER APPROACH) CIP

11 429.300 REMOVE AND REPLACE TRAFFIC SIGNAL CONTROLLER CABINET TYPE 'P', CIP

3 426.010 MULTI-CONDUCTOR CABLE, #5, CIP 4 426.011 MULTI-CONDUCTOR CABLE, #7, CIP.

5 426.014 MULTI CONDUCTOR CABLE, #20. CIP. 6 427.003 4 SECTION TRAFFIC SIGNAL ASSEMBLY, CIP

8 428.102 REMOVE AND SALVAGE CCTV (PTZ) CAMERA, CIP 9 428.210 INSTALL CCTV (PTZ) CAMERA INCLUDING MOUNT, CIP

10 429.010 TRAFFIC ACTUATED CONTROLLER COBALT W/ CVCP

12 435.702 MANAGED FIELD ETHERNET SWITCH (FS) 13 435.831 DSRC RADIO/BLUETOOTH, CIP WITH CABLING

16 435.703 MANAGED MID-LEVEL ETHERNET SWITCH (MLS)

19 ALLOW PULLBOX RECONDITIONING AND REPAIR

17 621.4.1 MOBILIZATION (NOT TO EXCEED 5% OF SUBTOTAL 1)

14 435.832 ON BOARD UNITS FOR DSRC

18 ALLOW PROJECT SIGN SCREENS

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LF 2000 LF 1200	EXISTING CONDUIT	sc		SPLICE CABINET	AS CONTR WORK STAKED	NICA MICA
LF 4200 60 lf				TRAFFIC SIGNAL CABINET/ NODE CABINET		
EA 7 7 7	EXISTING PULL BOX OR MANHOLE	V		SPLICE VAULT		
EA 7 8 4	EXISTING TRAFFIC SIGNAL CABINET			PULLBOX	KS	
EA 8 8 5	EXISTING TRAFFIC SIGNAL POLE			POWER METER PEDESTAL	MARK	
EA 8 8 6	EXISTING SPLICE VAULT	4+O		TRAFFIC SIGNAL PEDESTAL POLE	NCH	
EA 8 8 8 7 7	DENOVE AND ANNAGE EVICTING ENERGENCY	# #		STANDARD WITH MASTARM, TRAFFIC SIGNAL, AND OPTICAL DETECTOR	BE	
EA 16 16 2 8	INSTALL EQUIPMENT SEE SHEET 5-02	Q		PEDESTAL PUSH BUTTON		
LS 1 9	INSTALL CCTV CAMERA	\$Ç		PEDESTAL SIGNAL		
LS 1 (	INOTALL TRAFFIC CIONAL CARINET CEE			SIGNAL OR SERVICE CONDUIT INTERCONNECT CONDUIT	4 TION	
10	MOTALL ACCOMONAL LIFAD METHEL AND NO			R.O.W.	OTES	
11	INSTALL 4-SECTION SIGNAL HEAD WITH FLASHING YELLOW ARROW			NEW CABLING AND/OR WIRING	D N	
(12)	INSTALL CCTV CABLING				PIE	
(13)	EXISTING NODE CABINET				SS. NO.	
14)	INSTALL ADVANCE RADAR DETECTION EQUIPMENT				76	Objector
15)	INSTALL ADVANCE RADAR DETECTION CABLING				155	ONER EUGEN STAN MEXICO
16	INSTALL DSRC RADIO / BLUE TOOTH EQUIPMENT				ENGINEERS CHRIS	3
17	INSTALL DSRC RADIO CABLING				El	7-26-2019
18)	EXISTING CCTV POLE	RECORD DRA				B
(19)	REMOVE & SALVAGE EXISTING CCTV	Date <u>May 2021</u>				
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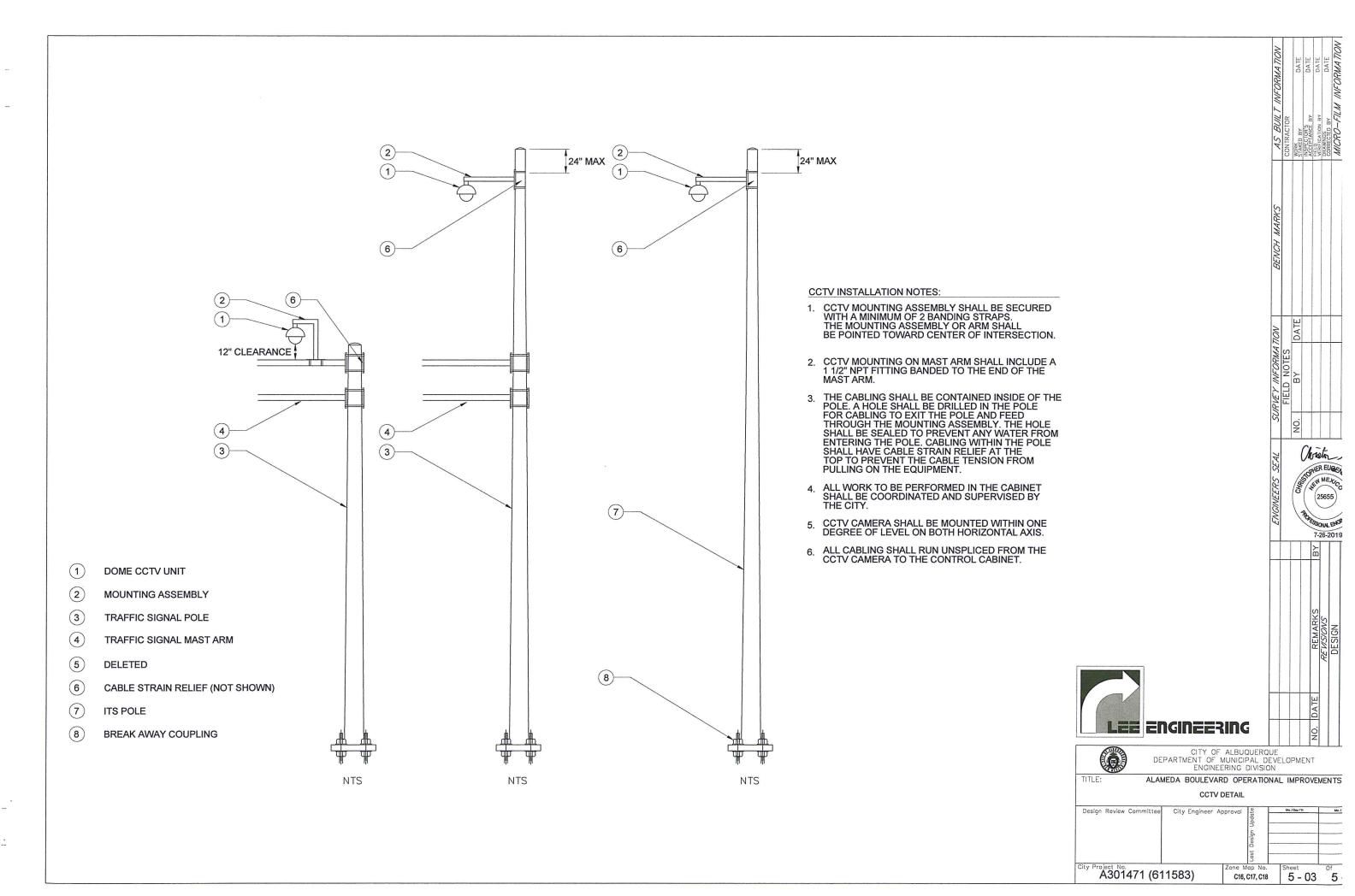
				SIGNAL CABINET	REPLACEMENT	
CAB.#	SHEET#	CORRIDOR	LOCATION	CORNER	EX. CABINET	COMMENT
1	5-05	ALAMEDA BLVD	ALAMEDA PARK DR	SOUTHWEST	P	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
2	5-06	ALAMEDA BLVD	HORIZON BLVD	NORTHEAST	P	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
3	5-07	ALAMEDA BLVD	BALLOON MUSEUM DR	NORTHEAST	P	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
4	5-08	ALAMEDA BLVD	JEFFERSON ST	NORTHEAST	P	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
5	5-09	ALAMEDA BLVD	SAN MATEO BLVD	NORTHWEST	P	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
6	5-10	ALAMEDA BLVD	I-25 SOUTHBOUND OFF RAMP	NORTHEAST	Р	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
7	5-11	ALAMEDA BLVD	I-25 NORTHBOUND OFF RAMP	NORTHEAST	Р	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET
8	5-12	ALAMEDA BLVD	SAN PEDRO DR	NORTHEAST	Р	REMOVE AND REPLACE EXISTING CABINET WITH NEW TYPE 'P' CABINET

			CCTV LOCATIONS			
CCTV#	SHEET	CORRIDOR	LOCATION	SIDE	MOUNT/POLE#	EXTENSION
1	5-05	ALAMEDA BLVD	ALAMEDA PARK DR	SOUTHWEST	MASTARM/POLE	YES
2	5-06	ALAMEDA BLVD	HORIZON BLVD	SOUTHEAST	MASTARM/POLE	YES
3	5-07	ALAMEDA BLVD	BALLOON MUSEUM DR	NORTHWEST	MASTARM/POLE	YES
4	5-08	ALAMEDA BLVD	JEFFERSON ST	SOUTHWEST	EXIST TYPE III	YES
5	5-09	ALAMEDA BLVD	SAN MATEO BLVD	SOUTHEAST	MASTARM/POLE	YES
6	5-10	ALAMEDA BLVD	I-25 SOUTHBOUND OFF RAMP	NORTHWEST	MASTARM/POLE	YES
7	5-11	ALAMEDA BLVD	I-25 NORTHBOUND OFF RAMP	SOUTHEAST	MASTARM/POLE	YES
8	5-12	ALAMEDA BLVD	SAN PEDRO DR	NORTHEAST	MASTARM/POLE	YES

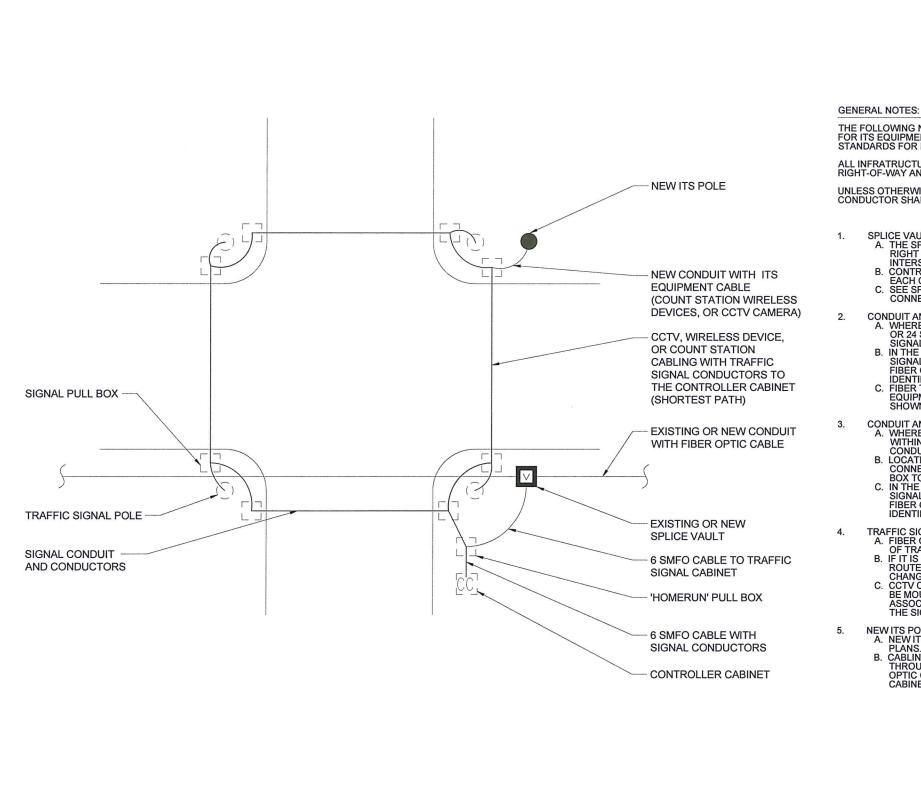
		INDEX OF COMMUNICATION EQUIPMENT				
SHEET	CORRIDOR	LOCATION	FIELD	SIGNAL	DSRC	NODE
OHEE		ECOATION	SWITCH	CONTROLLER	RADIO	SWITCH
5-05	ALAMEDA BLVD	ALAMEDA PARK DR	1	1 .	1	
5-06	ALAMEDA BLVD	HORIZON BLVD	1	1	1	
5-07	ALAMEDA BLVD	BALLOON MUSEUM DR	1	1	1	
5-08	ALAMEDA BLVD	JEFFERSON ST	1	1	1	
5-09	ALAMEDA BLVD	SAN MATEO BLVD	1	1	1	
5-10	ALAMEDA BLVD	I-25 SOUTHBOUND OFF RAMP	1	1	1	
5-11	ALAMEDA BLVD	I-25 NORTHBOUND OFF RAMP	1	1	1	
5-11	ALAMEDA BLVD	NODE #9 CABINET				1
5-12	ALAMEDA BLVD	SAN PEDRO DR	1	1	1	
N/A	ALAMEDA BLVD	NODE #8 CABINET 0.28 MILES WEST OF COTTONWOOD DR				1

			ADVANCE RADAR VEHICLE DETECTION		
VD#	SHEET	CORRIDOR	LOCATION	TYPE OF DETECTION	TRAFFIC DIRECTION
1	5-05	ALAMEDA BLVD	ALAMEDA PARK DR	ADVANCE RADAR	EB, WB
2	5-06	ALAMEDA BLVD	HORIZON BLVD	ADVANCE RADAR	EB, WB
3	5-07	ALAMEDA BLVD	BALLOON MUSEUM DR	ADVANCE RADAR	EB, WB
4	5-08	ALAMEDA BLVD	JEFFERSON ST	ADVANCE RADAR	EB, WB
5	5-09	ALAMEDA BLVD	SAN MATEO BLVD	ADVANCE RADAR	EB, WB
6	5-10	ALAMEDA BLVD	I-25 SOUTHBOUND OFF RAMP	ADVANCE RADAR	EB, WB
7	5-11	ALAMEDA BLVD	I-25 NORTHBOUND OFF RAMP	ADVANCE RADAR	EB, WB
8	5-12	ALAMEDA BLVD	SAN PEDRO DR	ADVANCE RADAR	EB, WB

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THE FOLLOWING NOTES IDENTIFY TYPICAL INSTALLATION INFORMATION FOR ITS EQUIPMENT AROUND THE INTERSECTION TO CONFORM TO CITY STANDARDS FOR ITS INSTALLATION.

ALL INFRATRUCTURE SHALL BE INSTALLED WITHIN THE CITY RIGHT-OF-WAY AND AS SHOWN ON THE PLANS.

UNLESS OTHERWISE NOTED, ALL EXISTING SIGNAL WIRING AND CONDUCTOR SHALL REMAIN IN PLACE.

- SPLICE VAULT:
  A. THE SPLICE VAULT SHALL BE INSTALLED WITHIN THE CITY RIGHT OF WAY WITHIN CLOSE PROXIMITY TO THE
- INTERSECTION.

  B. CONTRACTOR SHALL PROVIDE 50 FEET OF CABLE SLACK FOR EACH CABLE ENTERING OR EXISTING THE VAULT.

  C. SEE SPLICE DIAGRAMS FOR FIBER OPTIC CABLE

- CONDUIT AND FIBER TRUNK FIBER CABLE:

  A. WHERE POSSIBLE. THE TRUNK FIBER OPTIC CABLE (96 SMFO OR 24 SMFO) SHOULD NOT BE MIXED WITH THE TRAFFIC SIGNAL CONDUIT AND CONDUCTORS.

  B. IN THE EVENT THAT THE FIBER OPTIC CABLE AND THE TRAFFIC SIGNAL CONDUCTORS EXIST IN THE SAME CONDUIT, THE FIBER OPTIC CABLE SHALL BE CLEARLY LABELED AND IDENTIFIED IN EACH PULL BOX.

  C. FIBER TRUNK CABLES MAY BE MIXED WITH OTHER ITS EQUIPMENT CABLES (CCTV OR COUNT STATION CABLING) AS SHOWN IN THE DESIGN.

- CONDUIT AND BRANCH FIBER CABLE:

  A. WHERE POSSIBLE, THE 6 SMFO CABLE SHALL BE CONTAINED WITHIN ITS OWN CONDUIT, SEPARATE FROM TRAFFIC SIGNAL CONDUCTORS.

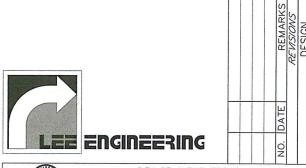
  B. LOCATIONS WHERE THIS IS NOT POSSIBLE MAY INCLUDE CONNECTIONS FROM THE 'HOMERUN' TRAFFIC SIGNAL PULL BOX TO THE CONTROLLER CABINET.

  C. IN THE EVENT THAT THE FIBER OPTIC CABLE AND THE TRAFFIC SIGNAL CONDUCTORS EXIST IN THE SAME CONDUIT, THE FIBER OPTIC CABLE SHALL BE CLEARLY LABELED AND IDENTIFIED.
- TRAFFIC SIGNAL POLES:

  A. FIBER OPTIC CABLES SHALL NOT RUN THROUGH THE BASES OF TRAFFIC SIGNAL POLES UNDER ANY CIRCUMSTANCES.

  B. IF IT IS FOUND THAT EXISTING COMMUNICATION CABLE IS ROUTED THROUGH THE TRAFFIC SIGNAL POLE, A DESIGN CHANGE WILL NEED TO BE MADE.

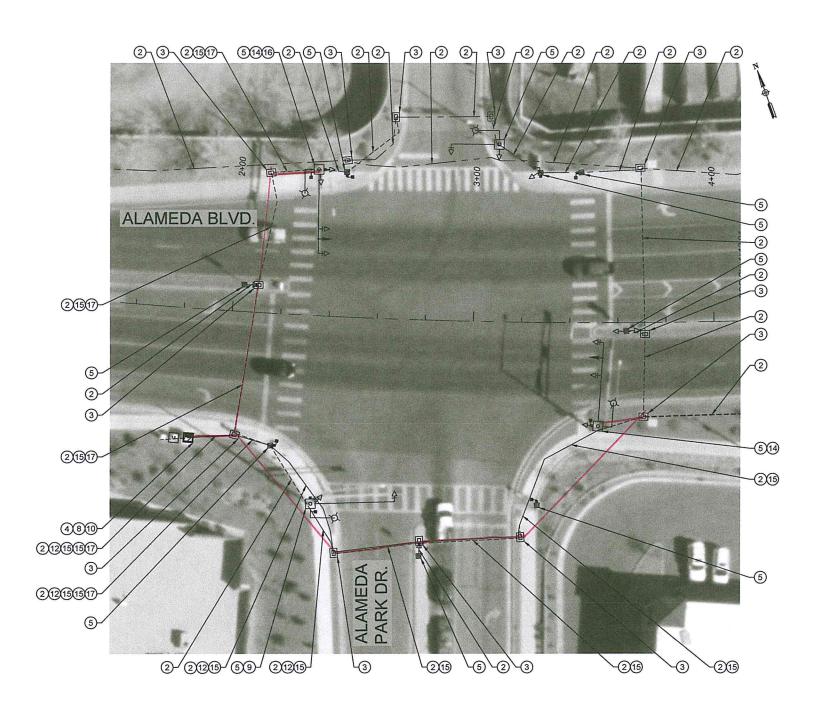
  C. C. CTV CAMERA OR WIRELESS COMMUNICATION DEVICES MAY BE MOUNTED TO EXISTING TRAFFIC SIGNAL POLES. CABLES ASSOCIATED WITH THESE DEVICES CAN BE RUN THROUGH THE SIGNAL CONDUIT TO THE CONTROLLER CABINET. THE SIGNAL CONDUIT TO THE CONTROLLER CABINET.
- NEW ITS POLES (CCTV OR COUNT STATION):
  A. NEW ITS POLES SHALL BE INSTALLED AS SHOWN ON THE PLANS.
  - B. CABLING ASSOCIATED WITH THE ITS DEVICES MAY RUN THROUGH EXISTING TRAFFIC SIGNAL CONDUIT OR FIBER OPTIC CONDUIT (SHORTEST PATH) BACK TO THE CONTROLLER CABINET.



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FIELD

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#### Installed per plans except as noted

#### KEY NOTE CALLOUTS

- 2 EXISTING CONDUIT
- (3) EXISTING PULL BOX OR MANHOLE
- EXISTING TRAFFIC SIGNAL CABINET

**INSTALL EQUIPMENT SEE SHEET 5-02** 

- EXISTING TRAFFIC SIGNAL POLE
- INSTALL CCTV CAMERA
- INSTALL TRAFFIC SIGNAL CABINET, SEE
- **√** 12 INSTALL CCTV CABLING
- INSTALL ADVANCE RADAR DETECTION EQUIPMENT
- INSTALL ADVANCE RADAR DETECTION CABLING
- INSTALL DSRC RADIO / BLUE TOOTH EQUIPMENT
- INSTALL DSRC RADIO CABLING

## RECORD DRAWING

Date May 2021

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.



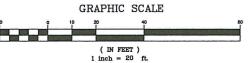


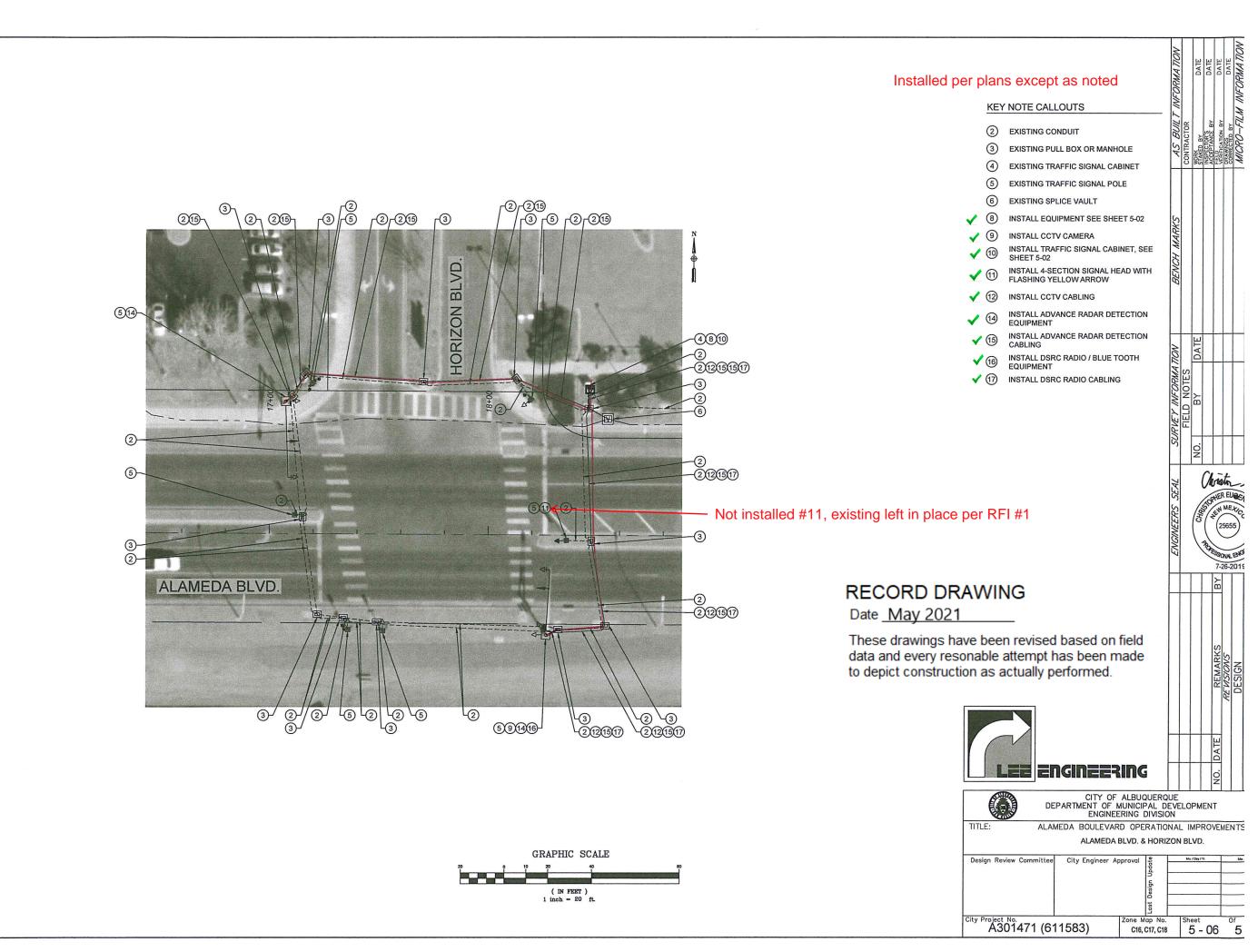
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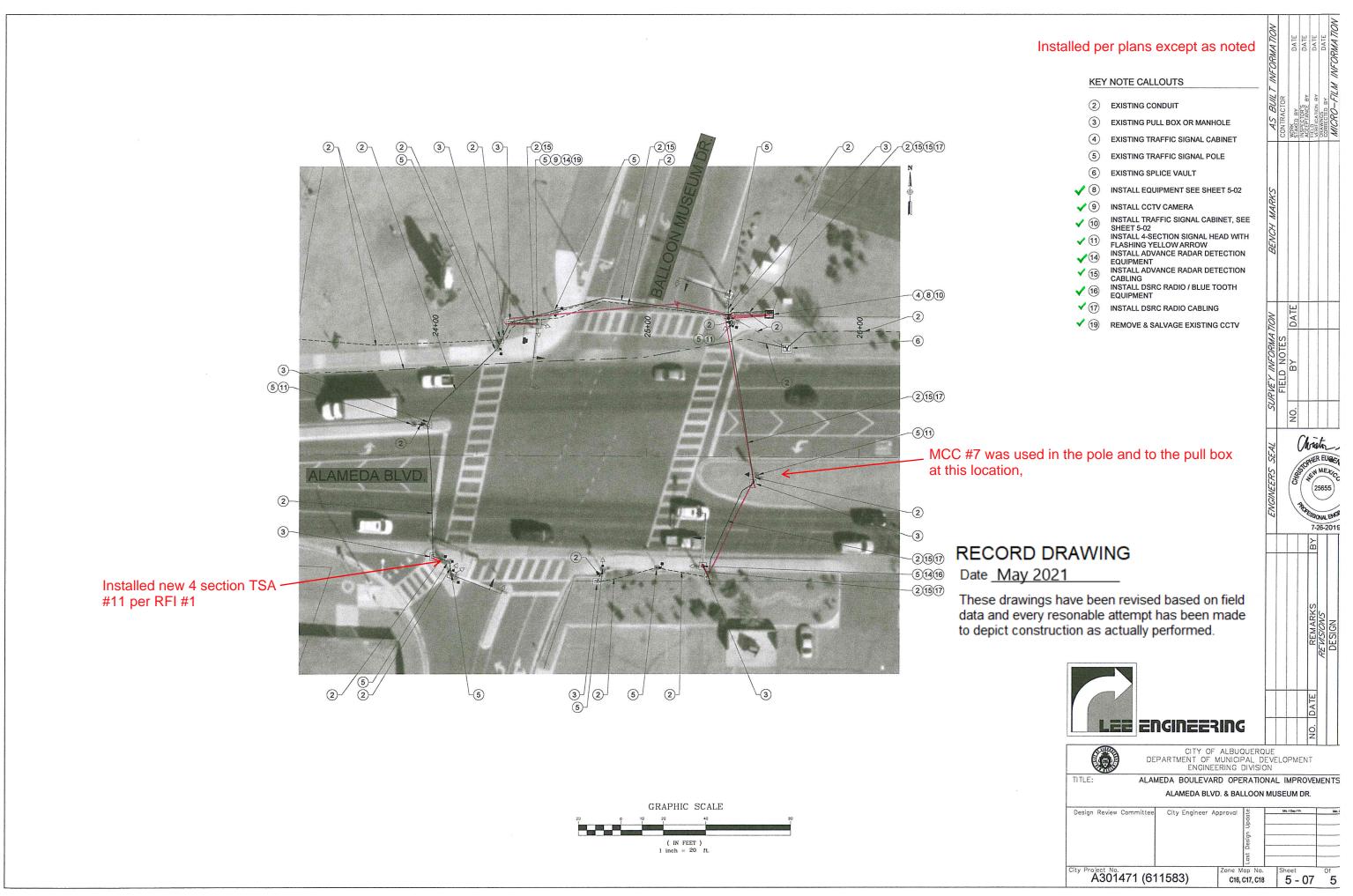
ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS

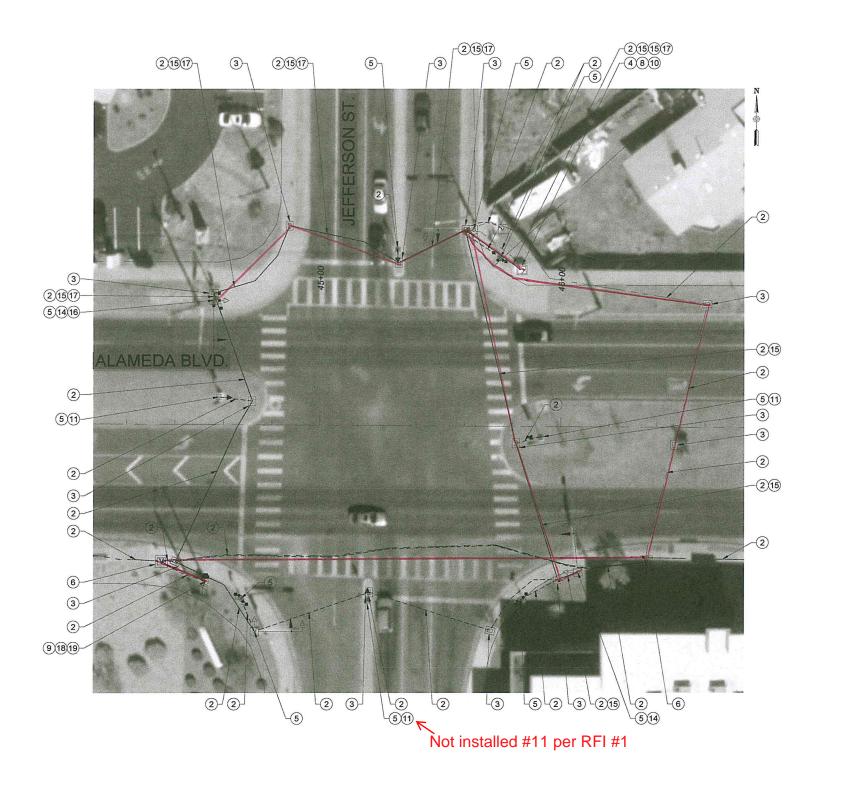
ALAMEDA & ALAMEDA PARK DR.

Design Review Committee City Engineer Approval City Project No. A301471 (611583) One Map No. Sheet Of 5 - 05 5









#### Installed per plan except as noted

#### KEY NOTE CALLOUTS

- 2 EXISTING CONDUIT
- 3 EXISTING PULL BOX OR MANHOLE
- (4) EXISTING TRAFFIC SIGNAL CABINET
- 5 EXISTING TRAFFIC SIGNAL POLE
- 6 EXISTING SPLICE VAULT
- REMOVE AND SALVAGE EXISTING EMERGENCY PREEMPTION EQUIPMENT
- √(8) INSTALL EQUIPMENT SEE SHEET 5-02
- 9 INSTALL CCTV CAMERA
- ✓ 10 INSTALL TRAFFIC SIGNAL CABINET, SEE SHEET 5-02
- ✓ ① INSTALL 4-SECTION SIGNAL HEAD WITH FLASHING YELLOW ARROW
- INSTALL ADVANCE RADAR DETECTION EQUIPMENT
- ✓ (5) INSTALL ADVANCE RADAR DETECTION CABLING
- INSTALL DSRC RADIO / BLUE TOOTH
- ✓ (17) INSTALL DSRC RADIO CABLING
- ✓ (18) EXISTING CCTV POLE
- ✓ 19 REMOVE & SALVAGE EXISTING CCTV

## RECORD DRAWING

Date May 2021

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.





CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION

Objeto

E: ALAMEDA BOL

ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS ALAMEDA BLVD. & JEFFERSON ST.

Design Review Committee City Engineer Approval Street No.

City Project No.

A301471 (611583)

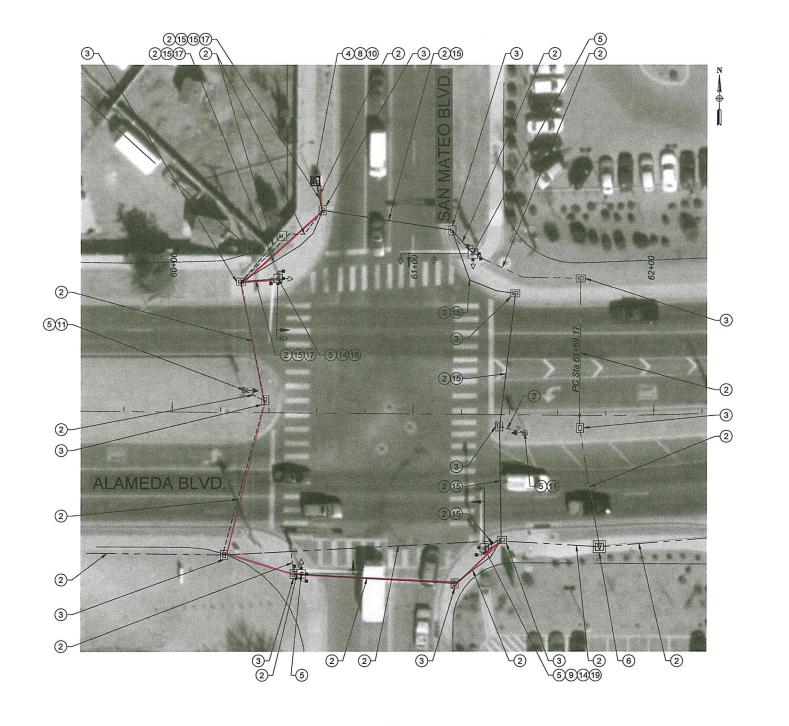
Zone Map No.
C16, C17, C18

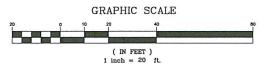
Sheet Of 5 - 08 5

GRAPHIC SCALE

O 10 20 40 8

( IN FEET )
1 inch = 20 ft.





### Installed per plans except as noted

#### **KEY NOTE CALLOUTS**

- 2 EXISTING CONDUIT
- (3) EXISTING PULL BOX OR MANHOLE
- (4) EXISTING TRAFFIC SIGNAL CABINET
- 5 EXISTING TRAFFIC SIGNAL POLE
- 6 EXISTING SPLICE VAULT
- REMOVE AND SALVAGE EXISTING EMERGENCY PREEMPTION EQUIPMENT
- (8) INSTALL EQUIPMENT SEE SHEET 5-02
- ✓ 10 INSTALL TRAFFIC SIGNAL CABINET, SEE SHEET 5-02
- ✓ 11 INSTALL 4-SECTION SIGNAL HEAD WITH FLASHING YELLOW ARROW
- INSTALL ADVANCE RADAR DETECTION EQUIPMENT
- ✓ 15 INSTALL ADVANCE RADAR DETECTION CABLING
- ✓16 INSTALL DSRC RADIO / BLUE TOOTH EQUIPMENT
- ✓ 19 EQUIPMENT

  ✓ 17 INSTALL DSRC RADIO CABLING
- √ (19) REMOVE & SALVAGE EXISTING CCTV

## RECORD DRAWING

Date May 2021

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.





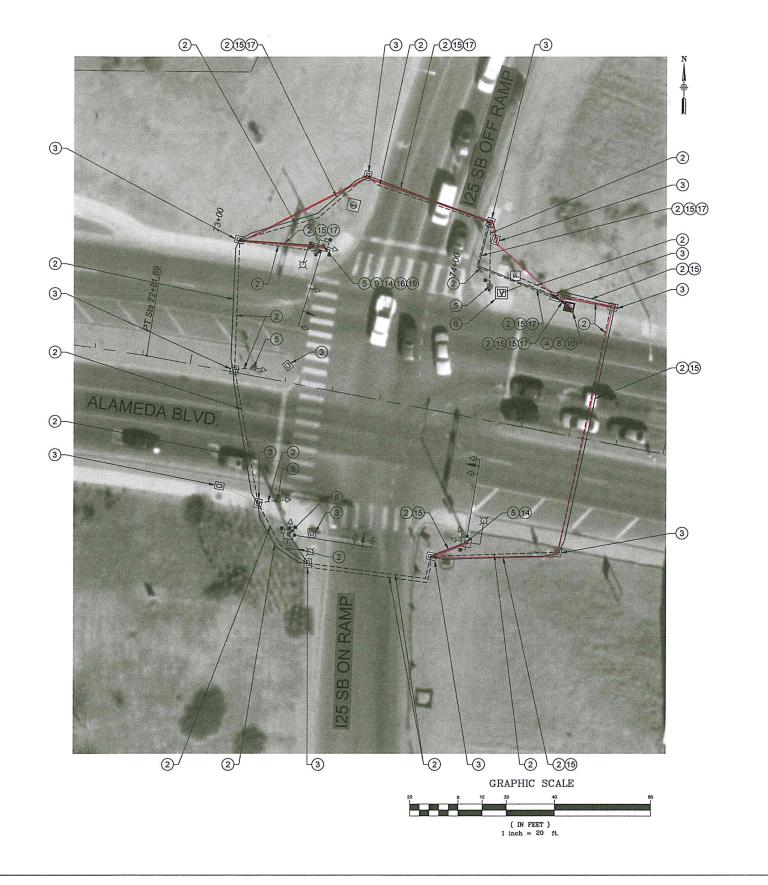
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION

TITLE:

ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS
ALAMEDA BLVD. & SAN MATEO BLVD.

Objety

Design Review Committee	City Engineer App	o o Last Design Update	Mo. I Day I Yr.	U
City Project No. A301471 (61	1583)	Zone Map No. C16, C17, C18		Of 5



#### KEY NOTE CALLOUTS

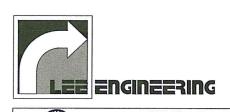
- 2 EXISTING CONDUIT
- EXISTING PULL BOX OR MANHOLE
- EXISTING TRAFFIC SIGNAL CABINET
- EXISTING TRAFFIC SIGNAL POLE
- EXISTING SPLICE VAULT
- REMOVE AND SALVAGE EXISTING EMERGENCY PREEMPTION EQUIPMENT
- INSTALL EQUIPMENT SEE SHEET 5-02
- INSTALL CCTV CAMERA
- INSTALL COTY CAMERA
  INSTALL TRAFFIC SIGNAL CABINET, SEE
  SHEET 5-02
  INSTALL ADVANCE RADAR DETECTION
  EQUIPMENT
  INSTALL ADVANCE RADAR DETECTION
  CABLING
  INSTALL DSRC RADIO / BLUE TOOTH
  EQUIPMENT

- INSTALL DSRC RADIO CABLING
- REMOVE & SALVAGE EXISTING CCTV

## RECORD DRAWING

Date May 2021

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.





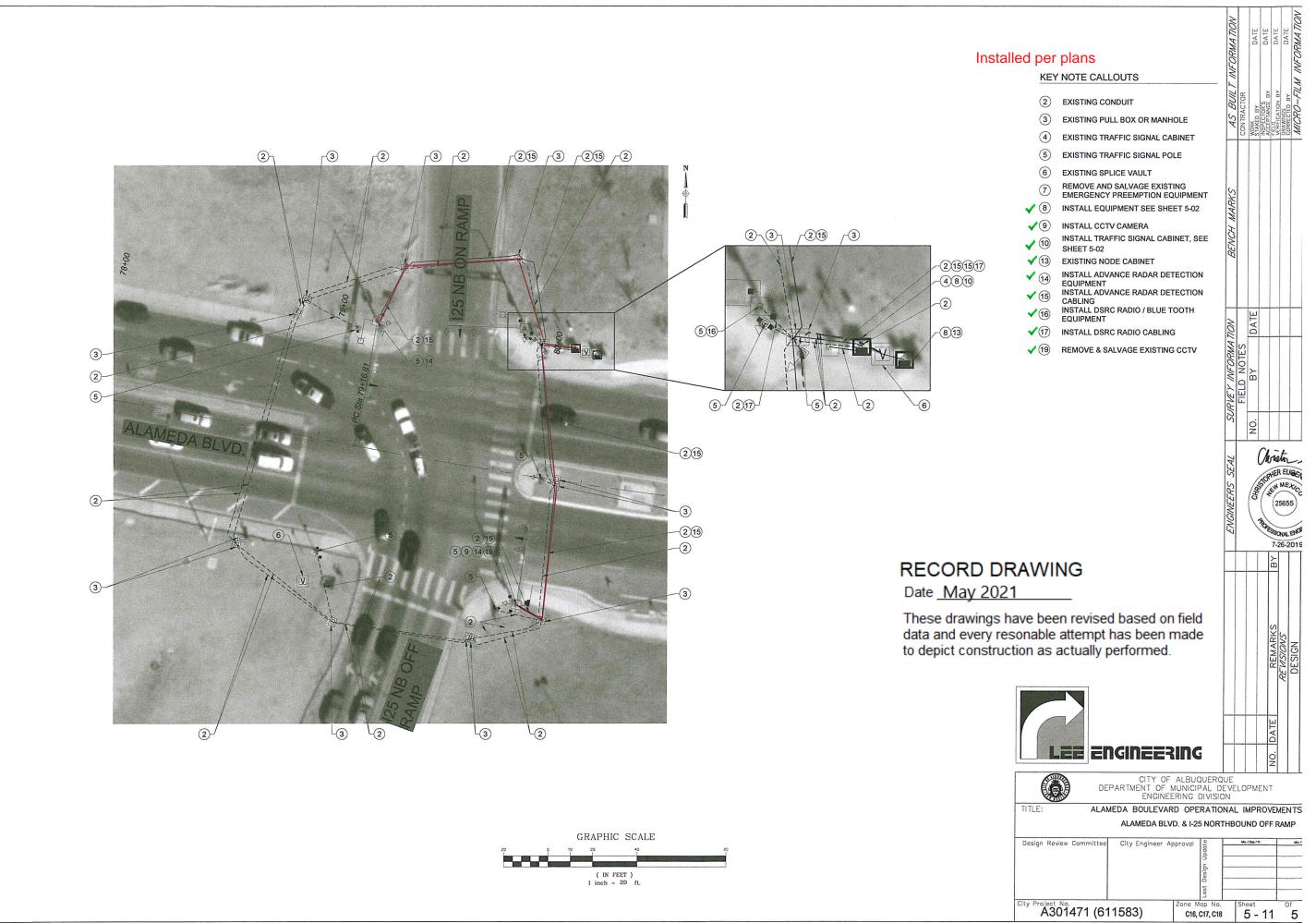
CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION

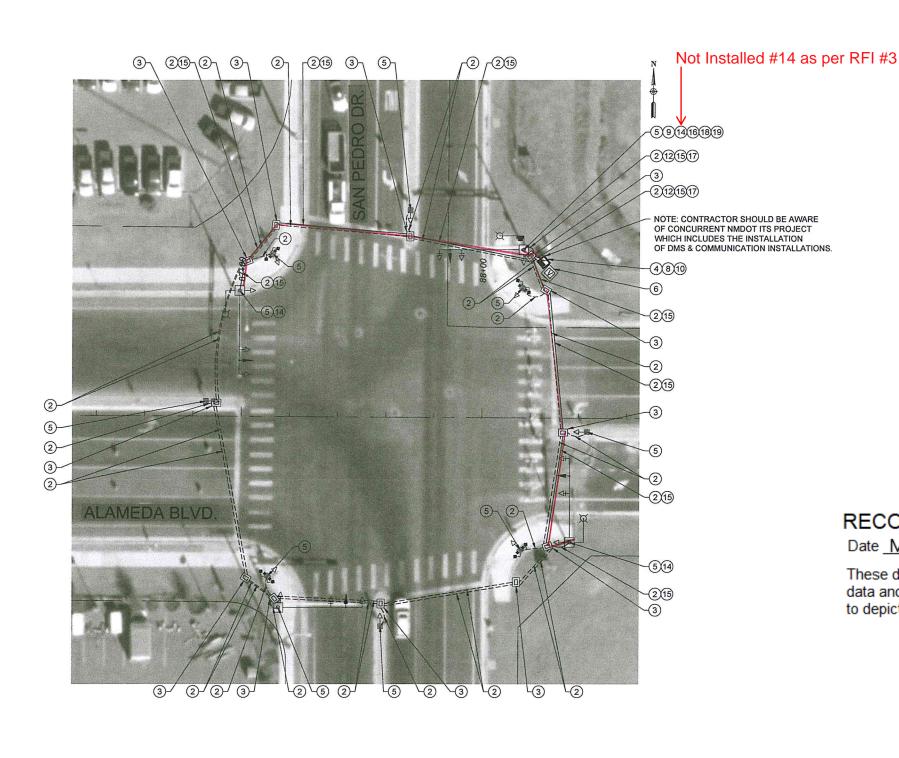
TITLE:

ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS ALAMEDA BLVD. & I-25 SOUTHBOUND OFF RAMP

Zone Map No. C16, C17, C18 5 - 10 5

City Project No. A301471 (611583)





#### Installed per plans except where noted

#### KEY NOTE CALLOUTS

- 2 EXISTING CONDUIT
- (3) EXISTING PULL BOX OR MANHOLE
- (4) EXISTING TRAFFIC SIGNAL CABINET
- 5 EXISTING TRAFFIC SIGNAL POLE
- (6) EXISTING SPLICE VAULT
- REMOVE AND SALVAGE EXISTING EMERGENCY PREEMPTION EQUIPMENT
- (8) INSTALL EQUIPMENT SEE SHEET 5-02
- √
  (9) INSTALL CCTV CAMERA
- INSTALL TRAFFIC SIGNAL CABINET, SEE
- SHEET 5-02
- √ 12 INSTALL CCTV CABLING
- install advance radar detection equipment
- ✓ 15 INSTALL ADVANCE RADAR DETECTION CABLING
- INSTALL DSRC RADIO / BLUE TOOTH EQUIPMENT
- / 17 INSTALL DSRC RADIO CABLING
- ✓ 18 EXISTING CCTV POLE
- ✓ (19) REMOVE & SALVAGE EXISTING CCTV
- 28) INSTALL CCTV CAMERA

### RECORD DRAWING

Date May 2021

These drawings have been revised based on field data and every resonable attempt has been made to depict construction as actually performed.



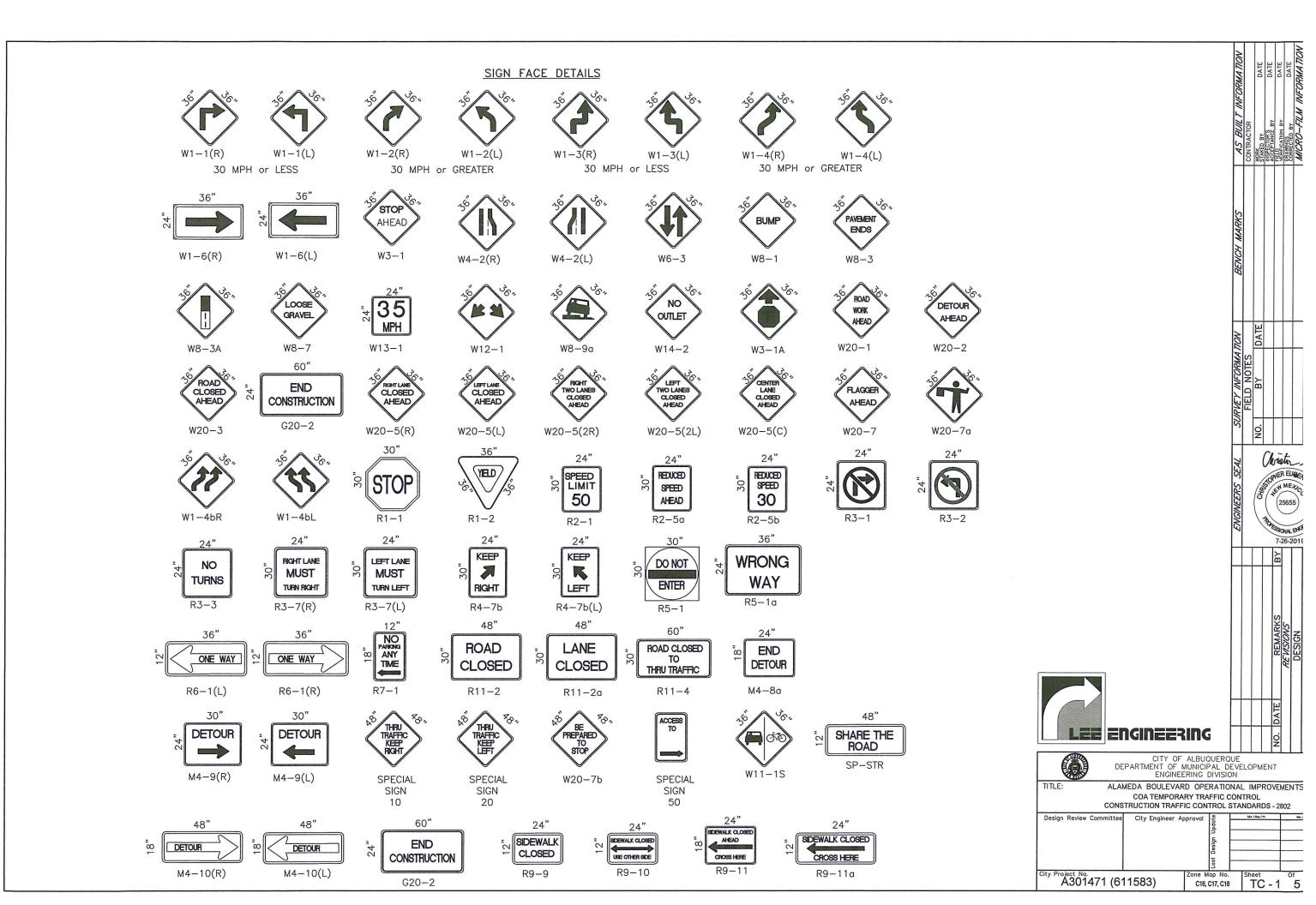


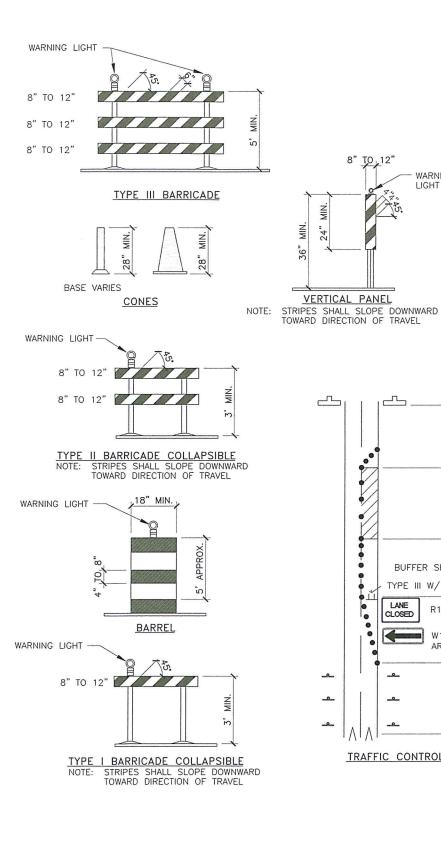
CITY OF ALBUQUERQUE
DEPARTMENT OF MUNICIPAL DEVELOPMENT
ENGINEERING DIVISION

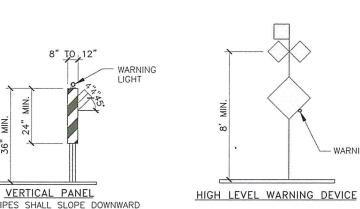
TITLE:

ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS
ALAMEDA BLVD. & SAN PEDRO DR.

		C	RAPHI	C SCALE	
20	Ů	10	20	40	80
			( IN 1 1 inch =	FEET ) = 20 ft.	





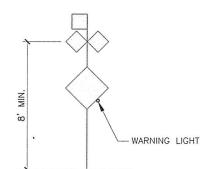


BUFFER SPACE TYPE III W/ LANE CLOSED

TRAFFIC CONTROL ELEMENTS

R11-2a

■ W1-6(L) OR



BARRICADE - TYPE I, TYPE II, VERTICAL PANEL, 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 D

**LEGEND** 

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.

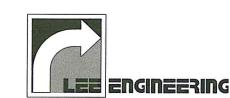
#### TAPER REQUIREMENT

SPEED	TAI	PER LENGTH(	(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

#### TAPER CRITERIA

TYPE OF TAPER	TAPER LENGTH	RECOMME ADVANCE	ENDED SIGN SPACING(D) FOR WARNING SIGN SERIES
UPSTREAM TAPER: MERGING TAPER SHIFTING TAPER SHOULDER TAPER	L MINIMUM 1/2 L MINIMUM 1/2 L MINIMUM	SPEED MILES PER HOUR	MINIMUM DISTANCE IN FEET BETWEEN FROM LAST SIGNS SIGN TO TAPER
TWO-WAY TRAFFIC TAPER DOWNSTREAM TAPERS	100 FEET MAXIMUM 100 FEET PER LANE	0-20 25-30 30-35	10 X SPEED LIMIT
TAPER LENGTH CON SPEED LIMIT 40 MPH OR LESS	$L = \frac{WS}{2}$	40-45 50-60	10 X SPEED LIMIT 10 X SPEED LIMIT 10 X SPEED LIMIT 10 X SPEED LIMIT
40 MPH OR GREATER	60 L = W x S		

L = TAPER LENGTH



CITY OF ALBUQUERQUE DEPARTMENT OF MUNICIPAL DEVELOPMENT ENGINEERING DIVISION
 ALAMEDA BOLLEVARD OPERATIONAL IMPROVE

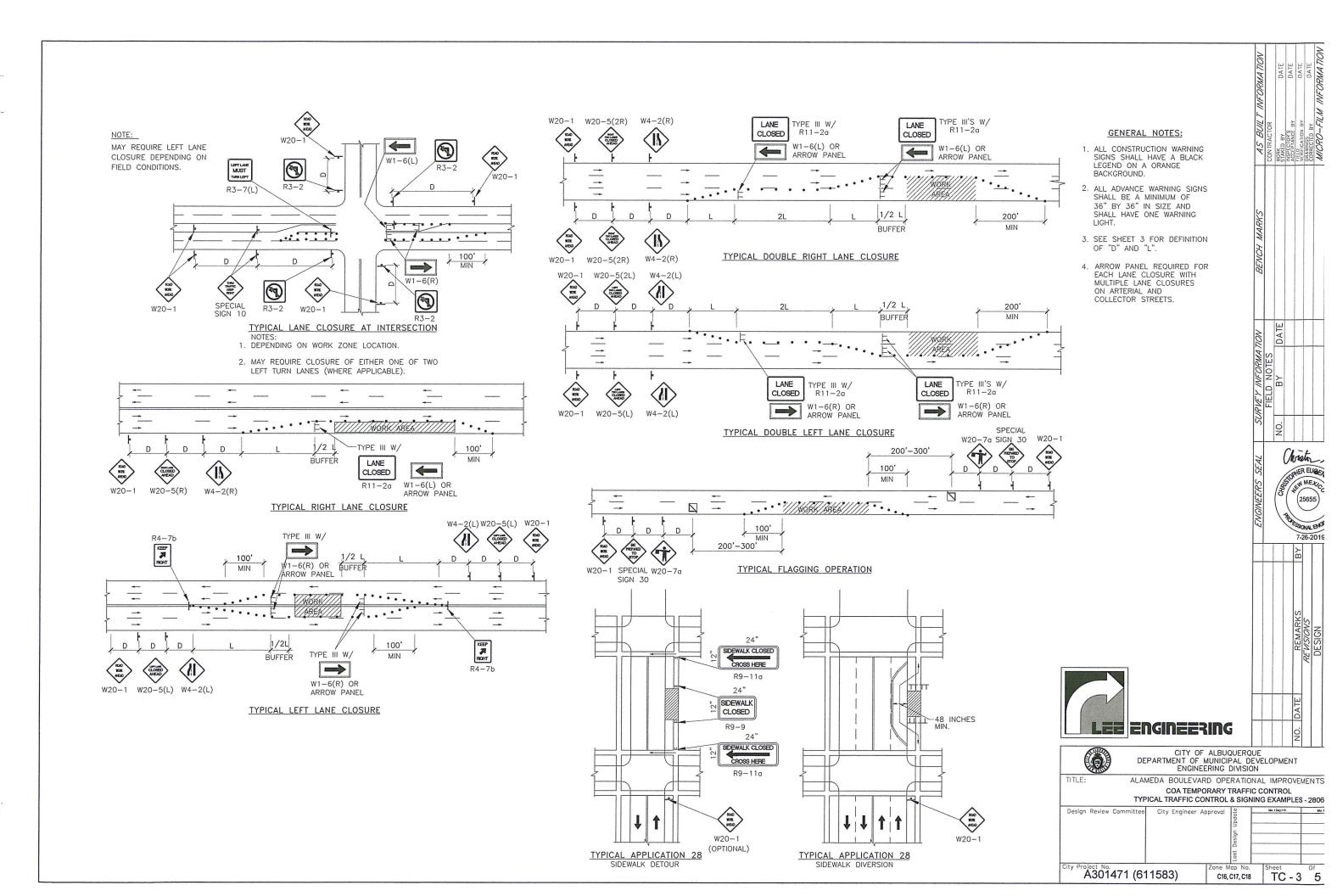
TIONAL IMPROVEMENTS COA TEMPORARY TRAFFIC CONTROL CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2803

Design Review Committee City Engineer Approval A301471 (611583) C16, C17, C18 TC - 2 5

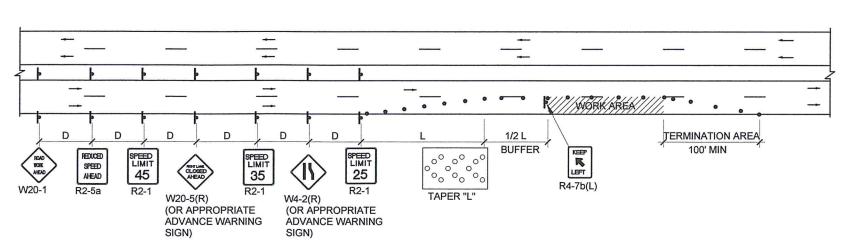
TITLE:

W = WIDTH OF OFFSET IN FEET S = POSTED SPEED OR OFF-PEAK

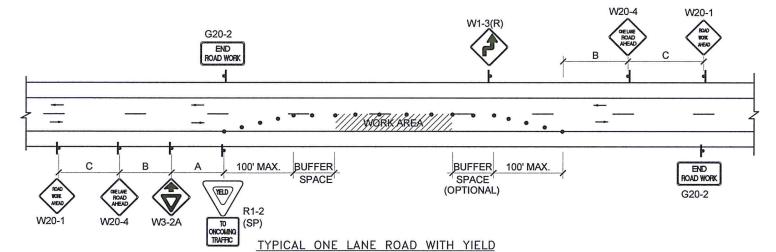
<sup>85-</sup>PERCENTILE SPEED IN MPH

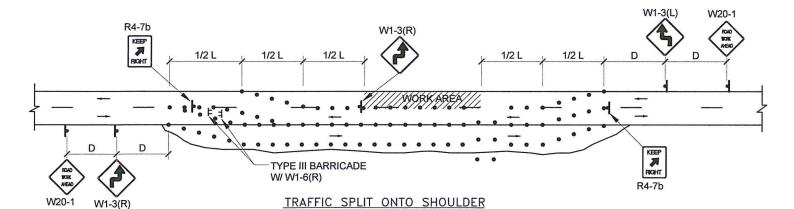


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#### TYPICAL "REDUCED SPEED AHEAD" SET UP





#### NOTES:

- SHOULDER AREA MUST BE GRADED, LEVEL AND SURFACED PER SECTION 1200.5.6
- 2. LANE WIDTHS SHALL BE MAINTAINED AT 11 FEET MINIMUM.
- SHOULDER MUST HAVE ADEQUATE "CLEAR ZONE".
- TRAFFIC SPLITS ONTO SHOULDERS SHALL NOT EXCEED THREE DAYS.

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	Α	В	С
URBAN (LOW SPEED)	200	200	200
URBAN (HIGH SPEED)	350	350	350
RURAL	500	500	500
EXPRESSWAY/FREEWAY	1,000	1,600	2,600

SUGGESTED ADVANCE WARNING SIGN SPACING

NO. DATE SUBUSESING

	CITY OF ALBUQUERQ DEPARTMENT OF MUNICIPAL D ENGINEERING DIVISIO	EVEL	OPMENT
TITLE:	ALAMEDA BOULEVARD OPERATIO	NAL	IMPROVE

TLE: ALAMEDA BOULEVARD OPERATIONAL IMPROVEMENTS

COA TEMPORARY TRAFFIC CONTROL

CONSTRUCTION TRAFFIC CONTROL STANDARDS - 2802

CON	ISTRUCTION TR				- 2802
Design Review Committee	City Engineer	Approval	Last Design Update	Ma. / Cay / YY.	
A301471 (61	1583)		Map No. C17, C18	TC - 4	Of 5

#### **GENERAL NOTE:**

- ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.
- ALL ADVANCE WARNING SIGNS SHALL BE A MINIMUM OF 36" BY 36" IN SIZE AND SHALL HAVE ONE WARNING LIGHT.
- 3. SEE DWG 2803 FOR DEFINITION OF "D" AND "L".