

**ADDENDUM NO. 1
INVITATION FOR BID
I-25 EAST FRONTAGE ROAD RECONSTRUCTION PROJECT**

Date: March 16, 2023

Contracting Agency: City of Raton
224 Savage Avenue
Raton, New Mexico 87740
(575) 445-9551

Issued By: Karen Stearns, P.E. *Karen M. Stearns*

Solicitors are instructed to incorporate the following clarifications/revisions into their bid for the above referenced Invitation for Bid.

Bid Document	Page	Section	Clarification / Revision
Bid Form	BF-4	Base Bid Unit Price Items Table	Please use the attached revised bid form, dated 3/16/23. The revisions to the bid form include changing the quantities to the base bid unit price items.
Agreement	C-520 p. 3	Base Bid Unit Price Items Table	The base bid unit price items are revised to match those in the revised bid form.
Technical Specifications	TS-5, 6, 8, 9, 10		The revised technical specifications are attached.
Drawings	Sheet C-1.01	Plan View	The Contractor shall protect in place the existing monitoring well, which is located at approximately Station 10+99, Offset 21.4' Right.
Drawings	Sheet C-1.04	Plan View	Prior to construction, Raton Public Service Co. will install a power pole on the west/left side of the Frontage Road so that the lighting conduit will not cross the Frontage Rd at Stations 30+74 and 30+85. Contractor to build a 3'X3'X4" equipment pad for the future pedestal with conduit penetrations to the north, south and west (to be paid under sidewalk line item).
Drawings	Sheet E-5.0	Light Base Detail	Stamped plan attached—no other changes were made.

**BID FORM
CITY OF RATON
I-25 EAST FRONTAGE ROAD RECONSTRUCTION PROJECT**

ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to the Owner:

**City of Raton
224 Savage Avenue
P.O. Box 910
Raton, NM 87740
Scott Berry, City Manager
Work: (575) 445-9551**

The Bid deadline is:

March 21, 2023 by 3:00 PM

- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- 1.03 The Owner reserves the right to increase or decrease any or all quantities as in the best interest of the Owner.
- 1.04 The Owner reserves the right to reject any or all bids, to waive any informalities, or to accept any portion of the bid as is in the best interest of the Owner.
- 1.05 The Owner shall consider and apply provisions of NMSA 13-4-2 regarding Certified New Mexico Resident Contractor and NMSA 13-1-21/ 13-1-22 regarding Certified Veterans Preference in this procurement.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
1	3/16/2023
_____	_____
_____	_____
_____	_____

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports, if any, of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder’s safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.

- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.
- K. Bidder agrees to execute the standard form of contract and to furnish Performance Bond in the amount of One Hundred Percent (100%) of the total bid amount, Payment Bond in the amount of One Hundred Percent (100%) of the total bid amount and Certificates of Insurance within fifteen (15) days following receipt of Notice of Award, and failing to do so, to forfeit the accompanying bid bond to the Owner as liquidated damages, and the Owner may proceed to award the contract to others.
- L. In accordance with NMSA 13-4-13.1.1., the contractor or subcontractor(s) for a public works project that is subject to the Public Works Minimum Wage Act [13-4-10 NMSA 1978], serving as a prime contractor or not, shall be registered with the Labor and Industrial Division of the Labor Department in order to submit a bid valued at more than sixty thousand dollars (\$60,000). Sealed bids received that are not compliant with this provision shall be subject to rejection by the Owner.

ARTICLE 4 – BIDDER’S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. “fraudulent practice” means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 – BASIS OF BID

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

A. For all Work other than Unit Price Work, an amount equal to the sum of Lump Sums:

Base Bid Lump Sum Bid Items		
Item No.	Description	Amount Bid
1	Mobilization, Demobilization, and General Requirements	\$
Subtotal of Base Bid Lump Sum Item 1, Excluding New Mexico Gross Receipts Tax⁽¹⁾		\$

Bidder to include in other Bid item(s) the other costs (if any) associated with accepting such assignment and administering the assigned contract.

B. For all Work as Unit Price Work, an amount equal to the sum of extended prices:

Base Bid Unit Price Items					
Item No.	Description	Units	Estimated Quantity	Unit Bid Price	Extended Price
2	Pavement Widening - (Includes HMA, Base Course, Subgrade Preparation)	SY	835	\$	\$
3	Earthwork - Cut Roadside Ditch and Fill Slopes	MILE	1.16	\$	\$
4	Pavement Patch, Full Depth	SY	500	\$	\$
5	Pavement Fabric	SY	8580	\$	\$
6	Tack Coat	SY	8580	\$	\$
7	2-Inch-Thick Asphalt Pavement Overlay	SY	8580	\$	\$
8	Manhole Cover Adjustment	EA	2	\$	\$
9	Water Valve Cover Adjustment	EA	1	\$	\$
10A	Curb and Gutter NMDOT Type "B"- 6"X24"	LF	5426	\$	\$
10B	Mountable Curb – Estate Type	LF	25	\$	\$
11	Concrete Drivepad, 6-inches Thick	SY	781	\$	\$
12	Concrete Sidewalk, 4-foot Wide	SF	9102	\$	\$
13	ADA Parallel Curb Ramp	EA	4	\$	\$
14	Concrete Rundown Flume	EA	8	\$	\$
15	Sidewalk Culvert with Steel Plate	EA	15	\$	\$

16A	Install New CMP Culvert – 15"x21"	LF	411	\$	\$
16B	Install New CMP Culvert – 20"x28"	LF	45	\$	\$
16C	Install New CMP Culvert – 24"x35"	LF	44	\$	\$
17	Culvert Pipe End Section	EA	4	\$	\$
18A	Panel Signs	SF	28	\$	\$
18B	Steel Posts & Base Posts for Aluminum Panel Signs	LF	63	\$	\$
19	Delineator	EA	16	\$	\$
20	Pavement Striping, 4" (Painted Length)	LF	7263	\$	\$
21	Concrete Light Base (30" DIA, 6' depth)	EA	17	\$	\$
22	2" Electrical Conduit, Trenched and Installed	LF	3340	\$	\$
23	RipRap	CY	204	\$	\$
Subtotal of All Base Bid Unit Price Bid Items 2 to 23, Excluding New Mexico Gross Receipts Tax⁽¹⁾					\$

Total Base Bid Price = Subtotal of Lump Sum and Unit Price Bid Items 1 to 23 ⁽¹⁾ = \$

Notes:

- 1) The basis for award of the Bid shall be the lowest responsive Base Bid Price amount without New Mexico Gross Receipts Tax (NMGRT). NMGRT shall be applied during invoicing throughout the project payment period.
- 2) Bidder acknowledges that: (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are submitted with and made a condition of this Bid:
- A. Bid Form (mandatory);
 - B. Required Bid Security (mandatory);

- C. Bidder's List of Subcontractors and Suppliers (mandatory for compliance with the Subcontractors Fair Practices Act);
- D. Campaign Contribution Disclosure Form (mandatory);
- E. New Mexico Resident Veterans Preference Certification No.: _____ (if applicable);
- F. New Mexico Resident Business Preference Certification No.: _____ (if applicable);
- G. List of Project References (preferred);
- H. New Mexico CRS No.: _____ (mandatory);
- I. New Mexico Contractor's License No. and Classification: _____
[or] Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids (mandatory);
- J. New Mexico Labor Department Labor Enforcement Registration No.: _____ (mandatory);
- K. Contractor's Federal I.D. No.: _____ (mandatory);
- L. Bidder Qualification Statement with supporting data (preferred); and
- M. A copy of the first page of each Addendum issued (preferred).

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and E-Mail Address: _____

TECHNICAL SPECIFICATIONS

General

All work shall be performed in accordance with Project Drawings, Specifications, and Contract Documents. Work not covered by Project Drawings, Specifications and Contract Documents shall be performed in accordance with New Mexico Department of Transportation Standard Specifications for Highway and Bridge Construction (current edition, including Addenda, Special Provisions, and Supplemental Documents; hereinafter called NMDOT Specifications). Work not covered by Project Drawings, Contract Documents, or NMDOT Specifications shall be performed in accordance with New Mexico Standard Specifications for Public Works Construction, 2006 edition, published by the American Public Works Association (hereinafter called APWA Specifications).

Where differences, conflicts, or discrepancies that occur between Project Drawings, Specifications, Contract Documents, NMDOT Specifications and APWA Specifications; the Project Specific Drawings, Specifications and Contract Documents shall take precedence and apply to work. Quantities are given only as a guide to the Contractor; the Contractor must satisfy and inform themselves of required quantities by field verification before submitting their bid. The Owner reserves the right to make alterations in the work as may be necessary to complete the work as originally intended.

The Contractor shall supply all labor, equipment, tools, supervision, materials, parts and appurtenances, whether or not specifically required or detailed by Project Drawings, Specifications, or Contract Documents, to complete a fully functional project. Where applicable, material manufacturer's recommendations or specifications shall be submitted by the Contractor to the Owner's Project Representative and shall receive written approval for incorporation into the work. If approved, manufacturer's recommendations or specifications shall be fully complied with. The Contractor is required to supply qualified and competent labor and supervision capable of completing the required work in a timely manner and the necessary equipment in safe and good working condition suitable for the required work. Necessary work, materials, equipment and appurtenances needed to complete the project for which there is no bid item shall be considered as Incidental.

Utilities

Due to insufficient or conflicting information, not all existing utilities are shown on the Drawings. Existing utilities known to be present within the project boundaries include, but are not limited to, water, sanitary sewer, storm sewer, electrical, natural gas, telephone, cable, and fiber optic. The existing conditions on the plans do not reflect changes made after the survey or mapping, such as recent construction projects or City repairs or maintenance.

The Contractor shall coordinate the work with any affected public or private utility owner with facilities, structures, lines, wires, pipes or other fixtures and appurtenances in the project area. The Contractor shall reasonably protect existing utilities, request locations and spots of utilities in a timely manner prior to excavation or disturbance, and shall cooperate with utility owners if relocation or adjustment is necessary.

The Contractor shall supply, at his own expense with no additional payment by the Owner, all necessary incidental fees and costs related to waste disposal, electricity, construction water, sewer, telephone, cleanup, hauling, replacement of damaged property, staging, claims, fines, etc. Construction utilities,

utility coordination and protection are incidental and no direct payment will be made outside the scope of Bid Items 8 and 9 for Manhole Cover Adjustment and Water Valve Cover Adjustment, respectively.

Construction Sequencing, Safety and Traffic Control

Safety and traffic control shall conform to OSHA and the Manual of Uniform Traffic Control Devices, respectively and are to be the sole responsibility of the Contractor; no direct payment will be made. The Contractor shall prepare and submit a Traffic Control Plan and a Construction Sequence Plan that will ensure reasonable access to residents and businesses. Construction and/or demolition activities shall be scheduled so as to minimize disturbance and disruption to area residents, businesses, and traffic. Street closures resulting in obstruction of service to residences or businesses shall be limited to a maximum 8-hour period. The Contractor is responsible to provide adequate notification to all affected persons prior to street closures. A Construction Sequence Plan, including public notification plans, shall be submitted by the Contractor to the Owner's Project Representative prior to construction and/or demolition activities. The Construction Sequence Plan shall include provisions to ensure that sufficient material and trucks are provided that the pavement is able to be laid without stopping during day time operations. The plans for traffic control and sequencing of construction must be approved by the Owner's Project Representative prior to commencement of the work. Safety and Traffic Control are incidental and no direct payment will be made. Necessary work, materials, equipment and appurtenances needed to complete the project for which there is no bid item shall be considered as Incidental.

The Contractor shall arrange for traffic control within the project area to be in effect at all times during the construction phase and should conform to the Manual on Uniform Traffic Control Devices (MUTCD). Traffic control devices and methods shall be in compliance with section 702 of the NMDOT Standard Specifications. A detour route must be arranged to accommodate any and all road closures. The Contractor shall submit a Traffic Control Plan to the Owner's Project Representative, and the Traffic Control Plan must be approved prior to the commencement of work. Complete road closures shall be kept to a minimum, and shoulder work shall allow for at least one lane of traffic at all times.

Construction Staging Area

Contractor shall coordinate with the City to determine possible equipment storage locations during construction. The City of Raton is not responsible for securing the Contractor's equipment or cleaning up any contamination caused by the Contractor's staff or equipment/property.

Dust Control

Contractor is responsible for job site dust control. Dust must be controlled at all times as directed by the Owner's Project Representative. The Contractor is responsible for obtaining all necessary construction water and all costs associated with construction water or other utilities necessary for the completion of the work or appurtenant usages. Dust Control is incidental and no direct payment will be made.

Ponding of Surface Water

Ponding of surface water will not be permitted at any time during construction.

Demolition and Removals

The Contractor shall provide all necessary tools, equipment and materials to cut, demolish, and remove all areas of existing concrete or asphalt pavement or structures as indicated on the Drawings. The limits of the demolition shall be neatly saw cut. The area outside the demolition shall be protected in place. Sawcut may not be necessary if the limits of demolition coincide with a construction joint. Contractor can stockpile demolished concrete and asphalt at the designated City maintenance yard on Hereford Avenue,

as long as the concrete and asphalt are separated and “clean” from other construction debris. No direct payment will be made for demolition and removals. Work associated with demolition and removals shall be paid under the associated work item, such as Base Bid Items 2, 3, 4, 8, 9, 10, 16, and 17.

Specification for Portland Cement Concrete

Standard Portland Cement Concrete (PCC) shall conform to the requirements of Sections 509 and 510 of the NMDOT Specifications. Class A (3,000 psi) shall be used for cast-in-place sidewalks, ADA ramps, curb/gutter, sign mounts, and utility collars. Class AA (4,000 psi) shall be used for cast-in-place valley gutters and drive pads. Concrete shall have a maximum slump of 5 inches and shall be air-entrained with an air content of 4% to 8%. Full documentation of the approved mix design submittal shall be filed with the Owner's Project Representative. White pigmented curing compound shall be used on all new concrete. All forms shall be inspected and approved by the Owner's Project Representative prior to concrete placement. Concrete shall be properly cured and protected from temperature extremes in accordance with ACI Specifications 305 and 306.

Specification for Asphalt Pavement

Asphalt pavement shall conform to Section 423, NMDOT Specifications for Hot Mix Asphalt (HMA). Pavement placement shall be SP-III or SP-IV per NMDOT Specifications Section 423. Placement shall be completed in accordance with Placement Operations requirements in Section 423 of the NMDOT Specifications and shall be roller compacted to no less than 92 percent or greater than 97 percent of the theoretical maximum density, with a target compaction of 95 percent. Final compaction of pavement less than 92 percent may be considered acceptable for a bid price reduction comparable to that outlined in Table 416.3.3.2.1.1:1 of the NMDOT Standard Specifications, Price Adjustments for Density. Lift thicknesses must meet the requirements of Table 416.3.1.2.1.1:5 HMA/WMA Lift Thickness, NMDOT Specification Section 416. Pavement with a thin or feathered edge is not acceptable – Contractor shall transition the pavement to existing surfaces, such as existing pavement, gutters and drive pads, per the details provided in the Drawings. Pavement shall not be placed unless the chill factor is at least 40 degrees F and rising for HMA.

Requirement for Pre-Construction Meeting

The Project Engineer shall schedule a Pre-Construction Meeting for the purpose of discussion of requirements for construction. The Contractor shall provide all supervisory staff, equipment operators, and other skilled personnel for mandatory attendance at the Pre-Construction Meeting for instruction by the Project Engineer in project requirements. The Pre-Construction Meeting shall provide opportunity for the Engineer and Owner to clarify its requirements and the Contractor's obligations under the Contract. All replacement personnel beginning work on the project following Pre-Construction Meeting shall be required to attend project requirement training.

Submittals

The following submittals will be required and submitted to the Owner's Project Representative.

1. Asphalt Mix Design
2. Concrete Mix Design (NMDOT Type A and Type AA)
3. Construction Sequencing Plan and Safety Plan
4. Traffic Control Plan with maps if detours are proposed
5. ADA Detectable Warning Pad (ADA Ramps)
6. Traffic Signs and Mounts
7. Traffic Paint Material Specifications

8. Pavement Fabric
9. Sidewalk Culvert
10. Riprap sample

Materials testing performed by Contractor or Contractor's agents for the purpose of preparation of a mix design or any required submittal information for approval of material for incorporation into the project will not be paid or reimbursed. Submission of test data, reports or documentation on similar material previously utilized on NMDOT projects may be utilized for acceptance of material, however, no payment shall be made.

Materials Testing

Owner will furnish and pay for two soil proctor tests, nuclear density testing for eight site visits (soil and HMA), and up to four site visits for field concrete testing. The Contractor will pay for any re-tests required due to failed tests performed by the Owner's Consultant. The Contractor is responsible for providing a schedule for materials testing and a minimum of 48 hours' notice to the Owner and Engineer when testing furnished by the Owner is required. Contractor shall provide adequate samples required for proctor testing with no additional payment. All other testing required in the Drawings and Specifications shall be the responsibility of the Contractor.

DESCRIPTION OF BID ITEMS

BASE BID ITEMS

ITEM 1: MOBILIZATION, DEMOBILIZATION AND GENERAL REQUIREMENTS

The Contractor shall mobilize all necessary tools, equipment and materials to complete the project. Payment under Item 1 shall include all associated costs with mobilization and demobilization of equipment and tools, material delivery, protection and storage of materials and equipment, temporary labor boarding, bonding and permitting, and all general requirements not included in other payment items. Payment under this item shall be paid for at the contract lump sum price for mobilization, demobilization and general requirements.

ITEM 2: PAVEMENT WIDENING, ~~2'-WIDE~~ (INCLUDES HMA, BASE COURSE, & SUBGRADE PREPARATION)

Work under this item shall consist of regrading the roadside edge to prepare for a widened pavement section, including excavation or backfilling, if necessary, placement and compaction of basecourse, and placement and compaction of asphalt pavement to establish a ~~2-foot~~-wider pavement edge or new paved area like at Kiowa Ave. Contractor shall provide all necessary tools, labor and materials to ~~extend-widen~~ the current pavement by 2-feetas shown on the Drawings; as well as all the tools necessary to regrade the present soil adjacent to the existing pavement and place new base course in accordance with the Drawings. Asphalt pavement shall conform to the Specifications for Asphalt Pavement provided herein and shall be placed in a single course over the reconstructed road bed at a final compacted lift depth of 2 inches minimum.

Existing subgrade shall be scarified and recompacted to at least 95% of the Modified Proctor (ASTM D-1557) and within 2% of the optimum moisture content. Additional fill (as necessary) shall be provided, placed and compacted by the Contractor to create a sufficient widened road edge. Backfill material shall be a structural fill and shall be approved by the Engineer. Type I or II NMDOT base course shall be used directly below the pavement layer as a drainage course and shall be compacted to 95% of the Standard Proctor (ASTM D-698) and within 2% of the optimum moisture content.

All materials and labor to fully complete a widened pavement section shall be included in this Bid Item and no additional payment will be made by the Owner. Measurement and payment for this bid item shall be at the contract unit price per square yard of ~~2-foot wide~~, pavement widening constructed by the Contractor.

ITEM 3: EARTHWORK – CUT ROADSIDE DITCH AND BACKFILL SLOPES (BOTH SIDES)

The work under this bid item shall consist of establishing a roadside ditch along both sides of the roadway for the entire length of the project, as well as providing and placing backfill at the required slopes on the Drawings along the road side. Contractor shall provide all necessary tools, equipment, labor and materials to excavate, backfill, moisture condition and compact the required grading in accordance with the proposed roadway sections on the Drawings. Backfill material shall be approved by the Owner and Engineer. Backfill shall be free of debris, vegetation, frozen material, and rocks larger than 6-inches in any dimension. The new roadside ditch shall be in accordance to the Drawing plans and cross sections.

Measurement and payment for this bid item shall be at the contract unit price per linear mile of roadside grading, excavation and backfill completed in place by the Contractor.

ITEM 4: PAVEMENT PATCH, FULL DEPTH

The work under this section shall consist primarily of sawcutting the perimeter of the area to be patched, removing and disposing of the existing damaged asphalt and other materials to the depth of the patch, reconditioning and compacting the subgrade, placing and compacting base course and asphalt to the thicknesses in the typical pavement patching detail of the Drawing set (Sheet D-1.02). Pavement shall be SP-III or SP-IV and conform to the Hot Mix Asphalt Specification herein. The asphalt placed for patching shall be placed in two layers in accordance with the NMDOT Specifications.

Subgrade shall be scarified, moisture conditioned, and recompacted to not less than 95 percent of the maximum density as determined by the modified proctor (ASTM D-1557). Moisture content shall be at optimum moisture content plus or minus two percent (+/-2%) as determined by ASTM D-1557.

The Contractor shall provide, haul, place, grade, water and compact Base Course material. Base Course material shall conform to Section 303 of the NMDOT Standard Specification for Base Course, Type I or Type II. All Base Course material shall be compacted to a minimum of 95 percent maximum dry density and at moisture content of plus or minus two percent (+/-2%) of optimum moisture in accordance with the standard proctor (ASTM D-698).

Measurement and payment for this bid item shall be at the contract unit price per square yard of pavement patching completed in place by the Contractor. Patching areas will be evaluated with the Owner and Engineer at the time of construction start.

ITEM 5: PAVEMENT FABRIC

Pavement reinforcing system shall be provided for the full pavement width that is to be overlaid with asphalt, including the widened pavement section. The pavement surface shall be swept clean, cleared of debris, and inspected by the Owner and/or Engineer prior to placement of tack coat, pavement fabric, or asphalt overlay. Pavement reinforcing fabric shall be Petromat 4598 or approved equal, and shall be installed according to the manufacturer's recommendations. Pavement fabric shall be placed in conjunction with tack coat on the existing pavement to ensure the fabric sticks to the existing surface. The Contractor shall take care to avoid creases, bubbles, or folds in the pavement fabric before and during pavement operations. Pavement fabric shall only be placed as far in advance of paving operations as the Contractor can achieve in the same day (i.e., large sections of exposed fabric overnight will not be accepted by the Engineer.)

Work under this item shall include, but is not limited to, preparations, materials, equipment and installation of pavement fabric in compliance with Specifications herein and manufacturer recommendations. Measurement and payment for this bid item shall be at the contract unit price per square yard of pavement fabric provided and placed by the Contractor.

ITEM 6: TACK COAT

The Contractor shall provide all labor, materials, tools and equipment necessary for furnishing and applying bituminous tack coat material to an existing pavement surface to provide bond for a new asphalt surface course. Contractor shall provide work in accordance with the requirements of Section 407, NMDOT Specifications. The tack coat shall be uniformly applied with a pressure distributor at a rate of at least 0.04 to 0.08 gallons per square yard. A hot applied tack coat that complies with NMDOT Section 407.2 shall be used, unless otherwise approved by Engineer. The tack coat shall be applied in such a manner as to offer the least inconvenience to traffic, to permit one-way traffic without pick-up or tracking of the asphalt material, and to avoid damage to structures, property, cars, etc. The tack coat shall be

applied only as far in advance of the next course placement as is necessary to obtain its proper condition of tackiness. Until the surface course is placed, the Contractor shall protect the tack coat from damage.

Measurement and payment for this item shall be at the contract unit price per square yard of Tack Coat constructed by the Contractor.

ITEM 7: 2-INCH-THICK ASPHALT PAVEMENT OVERLAY

Contractor shall provide all necessary tools and materials to cover the roadway with a 2-inch-thick surface course in accordance with the Drawings. Asphalt pavement shall be SP-III or SP-IV hot mix asphalt and shall conform to the Specifications provided herein and shall be placed in a single course over the reconstructed road bed and existing pavement at a final compacted lift depth of 2 inches minimum. It shall be noted that the existing asphalt pavement to be overlain does not have a consistent grade, and contains surface depressions and/or local high points which may result in varying overlay thickness. It is the responsibility of the contractor to reshape the road crown as indicated on the Drawings, and still maintain a minimum thickness of 2-inches for the pavement overlay. Pavement overlay shall be constructed within 24-hours of tack coat application. Transitions to existing surfaces shall comply with Specifications herein and shall be considered as incidental to this payment item.

Measurement and payment for this bid item shall be at the contract unit price per square yard of 2-inch minimum depth hot mix asphalt pavement constructed by the Contractor.

ITEM 8: MANHOLE COVER ADJUSTMENT

Existing manholes within the street section shall be adjusted accordingly to match the grade and elevation of the final paved surface. The Contractor is responsible for coordinating with the appropriate utility companies to identify any and all manhole lids that are required to be protected in place and raised to grade. Manhole lids shall be set in place with an octagonal concrete collar per NM APWA DWG 2461, included in the unit price. In areas where the grade is raised or where concrete collars are damaged, existing concrete collars (if present) shall be removed and replaced and the manhole shall be protected in place during construction. Concrete collars shall be placed per Section 662 of the NMDOT Specifications.

Work under this item shall include, but is not limited to, saw cutting pavement for collar limits, removal and disposal of debris, manhole adjustment rings or bricks to raise the cover frame, and a concrete collar. Work under this item shall be measured and paid for at the contract unit price per each existing manhole lid adjusted to grade with new concrete collar.

ITEM 9: WATER VALVE COVER ADJUSTMENT

Existing valve boxes within the street section shall be adjusted accordingly to match the grade and elevation of the final paved surface. The Contractor is responsible for coordinating with the appropriate utility companies to identify any and all valve lids that are required to be protected in place and raised to grade. Valve box lids shall be set in place with an octagonal concrete collar per NM APWA DWG 2461, included in the unit price. In areas where the grade is raised or where concrete collars are damaged, existing concrete collars (if present) shall be removed and replaced and the valve box shall be protected in place during construction. Concrete collars shall be placed per Section 662 of the NMDOT Specifications.

Work under this item shall include, but is not limited to, saw cutting pavement for collar limits, removal and disposal of debris, adjustment of the valve can/lid and installation of a new concrete collar. Work

under this item shall be measured and paid for at the contract unit price per each existing valve lid adjusted to grade with new concrete collar.

ITEM 10A: CURB & GUTTER NMDOT TYPE "B" – 6"X24"

The Contractor shall provide all necessary tools, equipment, materials, and labor to construct Type "B" (6"X24") concrete curb and gutter in accordance with NMDOT Standard Drawing No. 609 and Section 609 of the NMDOT Specifications. This item shall also include any necessary grading operations to prepare a sufficient surface for curb and gutter construction, which may include soil excavation or backfill. In some areas, saw cutting the existing pavement edge may be necessary to provide a straight line for new curb and gutter construction. All preparations for curb and gutter, including saw cutting and removal of existing pavement, shall be included within this bid item. All curb and gutter shall also be constructed with a base course bed to be a minimum of 4-inches thick, which shall be incidental to this bid item. Adjacent structures, utilities, and landscaping areas shall be protected in place. Curb height shall transition smoothly to existing curbs when present. Curb and gutter along new ADA curb ramps shall be excluded from this item and included under the ADA ramp bid item.

Work under this item shall include, but not limited to, protection of existing surfaces to remain, saw cutting as necessary, removal, disposal, subgrade preparation, installation of new curb and gutter (~~exi~~cluding new sloped curb and gutter along new ADA ramps), bituminous expansion joint and contraction joints. Measurement and payment will be made on a unit price basis per linear foot of Type "B" curb and gutter constructed in place.

ITEM 10B: MOUNTABLE CURB – ESTATE TYPE

The Contractor shall provide all necessary tools, equipment, materials, and labor to construct a concrete mountable curb, estate type (31.5" wide) in accordance with NM APWA Standard Drawing No. 2415A and Section 609 of the NMDOT Specifications. This item shall also include any necessary grading operations to prepare a sufficient surface for curb construction, which may include soil excavation or backfill. In some areas, saw cutting the existing pavement edge may be necessary to provide a straight line for new curb and gutter construction. All preparations for curb, including saw cutting and removal of existing pavement, shall be included within this bid item. All curb and gutter shall also be constructed with a base course bed to be a minimum of 4-inches thick, which shall be incidental to this bid item. Adjacent structures, utilities, and landscaping areas shall be protected in place.

Work under this item shall include, but is not limited to, protection of existing surfaces to remain, saw cutting as necessary, removal, disposal, subgrade preparation, installation of new curb (excluding new sloped curb and gutter along new ADA ramps), bituminous expansion joint and contraction joints. Measurement and payment will be made on a unit price basis per linear foot of mountable curb, estate type constructed in place.

ITEM 11: CONCRETE DRIVEPAD, 6-INCHES THICK

The Contractor shall provide all tools and materials necessary to construct a new concrete driveway apron as indicated on the Drawings and in accordance with NMDOT Standard Drawing No. 608-001-9 (type specified on Drawings). Concrete shall be a minimum of 6-inches thickness throughout the entire drive pad, including the angled wings and sidewalk within the driveway width. Concrete shall contain control joints with a maximum spacing of 10 feet between joints or as indicated by the Project Engineer. Concrete drivepads shall be placed per Section 608 of the NMDOT Specifications. 6-inch-thick concrete at drivepads shall be measured and paid as drivepad and not as sidewalk or curb and gutter.

The unit price for this item shall include materials, excavation, backfilling and compaction, and removal and proper disposal of existing concrete as needed. Subgrade below existing drive pad or valley gutter to be replaced shall be scarified, moisture conditioned, and re-compacted to a minimum of 95% of the maximum dry density in accordance with ASTM D1557 at plus or minus two percent (+/-2%) of the optimum moisture content. A basecourse drainage layer shall also be placed directly below the new concrete with a minimum thickness of 4-inches. Basecourse shall meet the specifications of an NMDOT Type I or Type II and shall be placed and compacted to at least 95% of the Standard Proctor (ASTM D698) and within 2% of the optimum moisture content.

Work under this item shall include, but not limited to, protection of existing surfaces to remain, saw cutting as necessary, removal, disposal, subgrade preparation, installation of concrete drivepad and associated curb returns, ~~and gutter~~ and sidewalk, bituminous expansion joint and contraction joints. Work under this item shall be measured and paid for at the contract unit price per square yard of 6-inch concrete drive pad constructed by the Contractor.

ITEM 12: CONCRETE SIDEWALK, 4-FEET WIDE

The Contractor shall provide all tools and materials necessary to construct 4" thick gray concrete sidewalk with joints in accordance with the Drawings and in compliance with NMDOT Standard Drawing 608. Subgrade below existing sidewalk to be replaced shall be scarified, moisture conditioned, and re-compacted to a minimum of 90% of the maximum dry density in accordance with ASTM D1557 at plus or minus two percent (+/-2%) of the optimum moisture content. The unit price for this item shall include materials, excavation, backfilling and compaction, and removal and proper disposal of existing sidewalk debris as needed. Concrete sidewalk shall be placed per Section 608 of the NMDOT Specifications. Sidewalk at driveways within the thickened concrete area shall be paid as drivepad and not as sidewalk.

Work under this item shall include, but not be limited to, protection of existing surfaces to remain, saw cutting as necessary, removal, disposal, subgrade preparation, set and meet ADA grades, installation of new sidewalk, bituminous expansion joint and contraction joints. Measurement and payment will be made on a unit price basis per square foot of 4" thick concrete sidewalk constructed in place.

ITEM 13: ADA PARALLEL CURB RAMP

The Contractor shall provide all tools and materials necessary to construct an ADA compliant curb ramp in accordance with NMDOT Standard Drawing 608-001-3. This item shall include all work required to completely construct a new concrete ADA ramp at the locations shown on the Drawings. Contractor shall provide and install required detectable markings with color selected by Owner under this payment item (yellow is typical). Each ADA parallel curb ramp shall include the sloped curb and gutter immediately adjacent to the curb ramp within its unit price.

Work under this item shall include, but is not limited to, subgrade preparation and grading, setting and meeting ADA grades, construction of ADA ramp with detectable warning pad, and bituminous expansion joint and contraction joints. Measurement and payment will be made on a unit price basis for each concrete ADA ramp constructed in place by the Contractor.

ITEM 14: CONCRETE RUNDOWN FLUME

The contractor shall provide all materials, equipment, labor, and tools required to completely construct a concrete rundown flume in accordance with the Drawings and NMDOT Specifications. Type I concrete

rundown flumes shall be constructed in accordance with Detail Sheet D-1.04 and NMDOT Standard Drawings 515-02 and 512-03 with riprap as an erosion control pad at the bottom.

The concrete rundown shall transition to match the adjacent curb and gutter sections on the upstream end. Riprap shall be provided and placed at the bottom of the rundown flume in accordance with the details on Sheet D-1.04 of the Drawings. Riprap shall be paid separately under Bid Item 23. This item shall include any necessary regrading (including backfill or excavation) associated with the rundown, and all work associated with constructing a concrete rundown.

Care shall be taken to protect existing structures during excavations and grading necessary to construct the new concrete rundown. Measurement and payment will be made on a unit price basis per each complete concrete rundown flume constructed in place by the Contractor.

ITEM 15: SIDEWALK CULVERT WITH STEEL PLATE

The Contractor shall provide all necessary materials, equipment, labor, and tools required to completely construct a concrete sidewalk culvert (24" wide opening) with steel plate top and riprap channel in accordance with Sheet D-1.03 of the Drawings and per NM APWA 2236. Riprap shall be paid separately under Bid Item 23. The cover plate shall be ADA compliant and have the ability to be removed for cleaning if necessary. Concrete sidewalk culverts shall drain away from the street per the typical section. When multiple sidewalk culverts are used in series, they shall be built in accordance to a "Double" sidewalk culvert as indicated on NM APWA 2236.

Measurement and payment will be made on a unit price basis per each complete concrete sidewalk culvert constructed in place by the Contractor.

ITEMS 16A, 16B & 16C: INSTALL NEW CMP CULVERT

The Contractor shall provide all necessary tools, equipment, materials, and labor to remove and replace, or install a new CMP culvert with a 12-gage galvanized steel, ½" deep corrugated, arch pipe culverts by Contech or approved equal, as indicated on the Drawings. Connections between CMP pipe sections (if necessary) shall be made with HUGGER type Joints by Contech, ~~to~~ approved equal. New culverts shall be installed at the slopes indicated on the Drawings, with adequate drainage and ditch transition into and out of the culvert.

Minimum cover above new culverts shall meet the requirements of NMDOT Standard Drawing 206-04. Culvert pipes shall be backfilled with approved Pipe Bedding Material and Granular Base within the "Pipe Zone", as designated on NMDOT Standard Drawing 206-07. Backfill material shall conform to Section 206 of the NMDOT Standard Specifications. Backfill material shall be free of rocks or debris larger than 2" in any dimension.

The bid price for this item shall include sawcutting existing pavement (as necessary); demolition, excavation and disposal of existing culvert and debris (as necessary); protection of existing buried utilities; scarify and recompact existing subgrade; supply, place and compact backfill material; and patching of removed area with new asphalt pavement per the typical pavement patching detail on the Drawings (as necessary). Adjacent structures, utilities, and landscaping areas shall be protected in place. The existing drainage channel shall be regraded accordingly for a smooth ~~tie-in~~ transition and adequate drainage through the new pipe culvert.

Measurement and payment will be made on a unit price basis per linear foot of new CMP culvert pipe installed in place by the Contractor.

ITEM 17: CULVERT PIPE END SECTION

The Contractor shall provide all necessary tools, equipment, materials, and labor to install a new CMP culvert end section. End sections shall be, at a minimum, 12-gage galvanized steel by Contech or approved equal. End sections shall be mitered to closely match the backfill slopes indicated on the Drawings.

Measurement and payment will be made on a unit price basis per each new CMP end section provided and installed in place by the Contractor.

ITEMS 18A & 18B: TRAFFIC SIGNS (NEW PANELS, NEW POSTS, AND EXISTING SIGNS)

The contractor shall provide new traffic signs, bases, and posts as specified in the Drawings and per the referenced standard details, which are in agreement with the NMDOT Specifications, Section 701. This bid item shall include all materials and labor necessary to construct and install the traffic signs as shown on the Drawings and per the details. Signs shall comply with the dimensions and color requirements indicated and per the Manual on Uniform Traffic Control Devices (MUTCD current version).

All new sign panels shall be aluminum with high intensity sheeting and shall be mounted with a minimum of two (2) bolts per sign. Sign posts shall be standard galvanized steel 2-inch square tubing posts with breakaway systems or "U" channel posts where allowed in accordance with the NMDOT standards and as indicated on the Sign Schedule. Sign posts shall be set in a cast-in-place concrete foundation with the minimum size and embedment lengths as shown on NMDOT Standard Drawing 701. New signs located within existing concrete or asphalt shall have the mounting hole drilled through the pavement surface with the minimum hole diameter met. Multi-directional slip bases shall be used at the locations that require such base per NMDOT Specification Section 701, (i.e., intersections, medians, or other locations likely to experience multidirectional traffic).

Existing signs to be removed shall include all tools, materials, and labor necessary to salvage the existing sign and mount and set it at a new location if indicated on the Drawings. These Bid Items shall also include, removal and disposal of old sign mount, backfilling or patching the previous sign location hole (as necessary), and furnishing a new base and post if the existing sign components are damaged during removal.

Measurement and payment for these bid items shall be at the contract unit price per square foot of High Intensity Sheeting Traffic Sign Panel (Bid Item 18A), and per linear foot of Steel Mounting Post (Bid Item 18B). Any costs associated with mounting bases shall be inclusive to Bid Item 18B.

ITEM 19: DELINEATOR

The contractor shall provide new traffic markers as specified in the Drawings and per the referenced standard details, which are in agreement with the NMDOT Specifications, Section 703. This bid item shall include all materials and labor necessary to construct and install the traffic markers, such as the U-channel mounting posts and effort to install the posts. Traffic markers shall be delineators with C1 type reflectors (single white reflector) in accordance with NMDOT Standard Drawing 703-01-1/3. Delineators shall be installed in accordance with NMDOT Standard Drawing 703 to mark the end of each new culvert installed within the project limits.

Measurement and payment for this bid item shall be at the contract unit price per each Delineator provided and installed in place by the Contractor.

ITEM 20: PAVEMENT STRIPING, 4-INCH WIDE (PAINTED LENGTH)

The Contractor shall provide all necessary tools, equipment, materials, and labor to construct painted traffic pavement markings as indicated on the Drawings. Painted pavement markings shall be traffic grade with reflectorized glass beads in accordance with NMDOT Standard Specification Section 704. This item shall include the application of two (2) coats of painted pavement markings.

Installation procedures and painted marking requirements shall comply with NMDOT Standard Specification 704. The finished pavement surface shall be cleaned prior to paint application and shall meet the required ambient and surface temperatures by the manufacturer or NMDOT Specifications, whichever is more stringent. This bid item applies all required pavement markings in accordance with the Drawings.

Measurement and payment will be made on a unit price basis per linear foot of 4" wide painted pavement markings constructed in place by the Contractor as indicated on the Drawings.

ITEM 21: CONCRETE LIGHT BASE, 30" DIA, 6' DEPTH

The Contractor shall provide all necessary tools, equipment, materials, and labor to construct a drilled pier concrete base foundation for a street light standard as indicated on the Drawings. This bid item shall also include cast in place bolts set in the concrete light base in accordance with the appropriate light standard to be installed. The light bases shall be constructed of reinforced concrete with rebar and anchor bolts installed per NMDOT Standard Detail 707L-07-9/10. The light standards and wiring will be installed by others, but coordination with the Owner may be required for anchor bolt/plate ordering.

This bid item shall also include the necessary conduit cast into the base, and backfill material to meet the grading requirements indicated on the Drawings. A minimum backfill platform of 15-feet on each side of the light base along the road shall be constructed. A minimum 2-foot-wide soil bench on each side of the light base shall be constructed perpendicular to the road. Backfill slope from the light base soil bench to match the existing grade shall be placed with a maximum slope of 2:1. This item shall also include grounding rod installation tied to the concrete reinforcement as necessary (coordinate with Owner).

Care shall be taken to protect existing structures and utilities in place during excavations necessary to construct the new concrete light base. Measurement and payment will be made on a unit price basis per each complete concrete light base constructed in place by the Contractor.

ITEM 22: 2" ELECTRICAL CONDUIT, TRENCHED AND INSTALLED

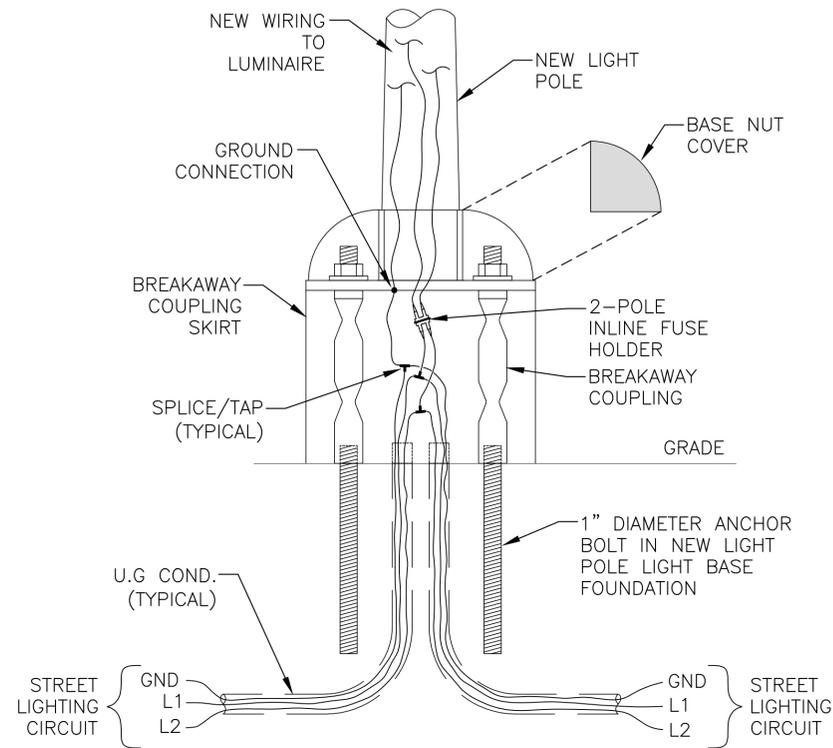
The Contractor shall provide all necessary tools, equipment, materials, and labor to trench, install, and backfill 2" diameter SCH 40 PVC electrical conduit as indicated on the Drawings. PVC conduit shall consist of belled joints that shall be glued together. This item shall include all fittings and bends, including those that go into the proposed concrete light standard bases. This item shall also include 2" wide marker tape labeled with "CAUTION – BURIED ELECTRICAL" that shall be placed at least 12-inches above the electrical conduit.

Measurement and payment will be made on a unit price basis per linear foot of 2" electrical conduit trenched, installed, and backfilled in place by the Contractor.

ITEM 23: RIPRIP

The Contractor shall provide all necessary tools, equipment, materials, and labor to deliver and place riprap rock that meets the requirements of the described NMDOT material. Riprap shall either be Class "A" material (4" wire enclosed) or Class "G" material (4"-8" minimum dimension rock plating) as indicated in Section 602 of the NMDOT Standard Specifications. Riprap placement shall be in accordance with the site plans and details of the Drawings. Minimum riprap thickness shall be 12-inches at any location.

Measurement and payment will be made on a unit price basis per cubic yard of riprap delivered and installed in place by the Contractor.



LIGHT BASE WIRING & BREAKAWAY COUPLING DETAIL

SCALE: N.T.S.

NOTES: (LIGHT BASE WIRING & BREAKAWAY COUPLING DETAIL)

1. INSTALL BREAKAWAY LIGHT BASES WITH "VALMONT" BREAKAWAY COUPLING AND ALUMINUM SKIRT. LEX CAT. NO. 5VBC8-10- BREAKAWAY COUPLING 8-10" BASE- SATIN. **NO SUBSTITUTIONS.**
2. PROVIDE 2-POLE INLINE FUSE HOLDER AND (2) 2AMP MIDGET FUSES. FUSE HOLDER: LITTELFUSE CAT. NO. LEXYYC5. FUSES: LITTELFUSE CAT NO. OKLK002T.



James E. Belk
2/23/23

REVISIONS		
Revision	Date	Description
0	2/21/23	RELEASED FOR CONSTRUCTION

Designed by: Engineering Analytics, Inc.
219 S. 2nd Street
Raton, NM 87740
(505) 445-7192

Designed by: TLD
Approved by: KMS

I-25 E. FRONTAGE ROAD RECONSTRUCTION PROJECT

LIGHT BASE DETAIL

Project Number: 141013
Date: February 21, 2023
Sheet: E-5.0