

CALL NO. 413
CONTRACT ID. 244403

JEFFERSON COUNTY

FED/STATE PROJECT NUMBER 056GR24T012-FE04

DESCRIPTION VARIOUS ROUTES IN JEFFERSON COUNTY

WORK TYPE SIGNS-LIGHTING-SIGNALS

PRIMARY COMPLETION DATE 12/1/2024

LETTING DATE: July 18,2024

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME July 18,2024. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

TABLE OF CONTENTS

PART I SCOPE OF WORK

- PROJECT(S), COMPLETION DATE(S), & LIQUIDATED DAMAGES
- CONTRACT NOTES
- STATE CONTRACT NOTES
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- LIQUIDATED DAMAGES
- WASTE AND BORROW SITES
- COORDINATION OF WORK WITH OTHER CONTRACTS
- TRAFFIC CONTROL PLAN
- RIGHT OF WAY CERTIFICATION
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- MATERIAL SUMMARY
- DETAIL SHEET(S)

PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-11] PORTABLE CHANGEABLE SIGNS
- 2020 STANDARD DRAWINGS THAT APPLY

PART III EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

- LABOR AND WAGE REQUIREMENTS
- EXECUTIVE BRANCH CODE OF ETHICS
- KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978 LOCALITY / STATE
- PROJECT WAGE RATES / STATE FUNDED

PART IV INSURANCE

PART V BID ITEMS

PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 05

CONTRACT ID - 244403

056GR24T012-FE04

COUNTY - JEFFERSON

PCN - 0505609132401 FE04 056 0913 002-003

KY 913 (BLANKENBAKER PARKWAY) (MP 2.600) SIGNAL AT THE INTERSECTION OF KY 913 AND THE I-64 EB RAMP (MP 2.700), A DISTANCE OF 0.10 MILES.SIGNS-LIGHTING-SIGNALS GEOGRAPHIC COORDINATES LATITUDE 38:13:17.33 LONGITUDE 85:32:19.34 ADT 52,005

PCN - 0505610202401 FE04 056 1020 004-005

KY 1020 (NATIONAL TURNPIKE) (MP 4.200) SIGNAL AT THE INTERSECTION OF KY 1020 AND CS 1131F (TOLLS ROAD) (MP 4.300), A DISTANCE OF 0.10 MILES.SIGNS-LIGHTING-SIGNALS GEOGRAPHIC COORDINATES LATITUDE 38:08:08.26 LONGITUDE 85:45:08.34 ADT 25.718

PCN - 0505616942401 FE04 056 1694 000-001

KY 1694 (SLEEPY HOLLOW ROAD) (MP 0.590) SIGNAL AT THE INTERSECTION OF KY 1694 AND CS 2558C (NORTON COMMONS RD) (MP 0.620), A DISTANCE OF 0.03 MILES.SIGNS-LIGHTING-SIGNALS GEOGRAPHIC COORDINATES LATITUDE 38:19:27.65 LONGITUDE 85:33:40.79
ADT 11,187

COMPLETION DATE(S):

COMPLETED BY 12/01/2024 APPLIES TO ENTIRE PROJECT
COMPLETED BY 11/01/2024 SEE COMPLETION DATE NOTE
COMPLETED BY 10/01/2024 SEE COMPLETION DATE NOTE

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's electronic bidding software. The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/construction-procurement). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and

shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

BOYCOTT PROVISIONS

If applicable, the contractor represents that, pursuant to <u>KRS 45A.607</u>, they are not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade. **Note:** The term Boycott does not include actions taken for bona fide business or economic reasons, or actions specifically required by federal or state law.

If applicable, the contractor verifies that, pursuant to KRS 41.480, they do not engage in, and will not for the duration of the contract engage in, in energy company boycotts as defined by KRS 41.472.

LOBBYING PROHIBITIONS

The contractor represents that they, and any subcontractor performing work under the contract, have not violated the agency restrictions contained in <u>KRS 11A.236</u> during the previous ten (10) years, and pledges to abide by the restrictions set forth in such statute for the duration of the contract awarded.

The contractor further represents that, pursuant to <u>KRS 45A.328</u>, they have not procured an original, subsequent, or similar contract while employing an executive agency lobbyist who was convicted of a crime related to the original, subsequent, or similar contract within five (5) years of the conviction of the lobbyist.

Revised: 2/29/2024

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

10/26/2023

1.0 BUY AMERICA REQUIREMENT.

Follow the "Buy America" provisions as required by 23 U.S.C. § 313 and 23 C.F.R. § 635.410. Except as expressly provided herein all manufacturing processes of steel or iron materials including but not limited to structural steel, guardrail materials, corrugated steel, culvert pipe, structural plate, prestressing strands, and steel reinforcing bars shall occur in the United States of America, including the application of:

- · Coating,
- Galvanizing,
- Painting, and
- Other coating that protects or enhances the value of steel or iron products.

The following are exempt, unless processed or refined to include substantial amounts of steel or iron material, and may be used regardless of source in the domestic manufacturing process for steel or iron material:

- Pig iron,
- Processed, pelletized, and reduced iron ore material, or
- Processed alloys.

The Contractor shall submit a certification stating that all manufacturing processes involved with the production of steel or iron materials occurred in the United States.

Produce, mill, fabricate, and manufacture in the United States of America all aluminum components of bridges, tunnels, and large sign support systems, for which either shop fabrication, shop inspection, or certified mill test reports are required as the basis of acceptance by the Department.

Use foreign materials only under the following conditions:

- 1) When the materials are not permanently incorporated into the project; or
- 2) When the delivered cost of such materials used does not exceed 0.1 percent of the total Contract amount or \$2,500.00, whichever is greater.

The Contractor shall submit to the Engineer the origin and value of any foreign material used.

2.0 - BUILD AMERICA, BUY AMERICA (BABA)

Contractor shall comply with the Federal Highway Administration (FHWA) Buy America Requirement in 23 C.F.R. § 635.410 and all relevant provisions of the Build America, Buy America Act (BABA), contained within the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, §§ 70901-52 enacted November 15, 2021. The BABA requires iron, steel, manufactured products, and construction materials used in infrastructure projects funded by federal financial assistance to be produced in the United States. Comply with 2 C.F.R § 184.

BABA permits FHWA participation in the Contract only if domestic steel and iron will be used on the Project. To be considered domestic, all steel and iron used, and all products manufactured from steel and iron must be produced in the United States and all manufacturing processes, including application of a coating, for these materials must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. This requirement does not preclude a minimal use of foreign steel and iron materials, provided the cost of such materials does not exceed 0.1% of the total contract amount under the Contract or \$2,500.00 whichever is greater.

BABA permits FHWA participation in the Contract only if all "construction materials" as defined in the Act are made in the United States. The Buy America preference applies to the following construction materials

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

10/26/2023

incorporated into infrastructure projects: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); Fiber optic cable; optical fiber; lumber; engineered wood; and drywall. Contractor will be required to use construction materials produced in the United States on this Project. The Contractor shall submit a certification stating that all construction materials are certified to be BABA compliant.

Finally, BABA permits the continuation of FHWA's current general applicability waivers for manufactured products, raw materials, and ferryboat parts, but these waivers are subject to reevaluation, specifically the general applicability waiver for manufactured products.

The Contractor has completed and submitted, or shall complete and submit, to the Cabinet a Buy America/Build America, Buy America Certificate prior to the Cabinet issuing the notice to proceed, in the format below. After submittal, the Contractor is bound by its original certification.

A false certification is a criminal act in violation of 18 U.S.C. § 1001. The Contractor has the burden of proof to establish that it is in compliance.

At the Contractor's request, the Cabinet may, but is not obligated to, seek a waiver of Buy America requirements if grounds for the waiver exist under 23 C.F.R. § 635.410(c) or will comply with the applicable Buy America requirements if a waiver of those requirements is not available or not pursued by the Cabinet.

Please refer to the Federal Highway Administration's Buy America webpage for more information.

<u>Buy America - Construction Program Guide - Contract Administration - Construction - Federal Highway</u> Administration (dot.gov)

October 26, 2023 Letting

Contract ID: 244403 Page 10 of 81

SPECIAL NOTE – BUY AMERICA REQUIREMENTS AND BUILD AMERICA, BUY AMERICA (BABA) ACT

10/26/2023

BUY AMERICA / BUILD AMERICA, BUY AMERICA (ACT) MATERIALS CERTIFICATE OF COMPLIANCE

The Contractor hereby certifies that it will comply with all relevant provisions of the Build America, Buy America Act, contained within the Infrastructure Investment and Jobs Act, Pub. L. NO. 117-58, §§ 70901-52, the requirements of 23 U.S.C. § 313, 23 C.F.R. § 635.410 and 2 C.F.R § 184.

| Date Submitted: | |
|-----------------|---|
| Contractor: | _ |
| Signature: | |
| Printed Name: | |
| Title: | |

NOTE: THIS CERTIFICATION IS IN ADDITION TO ANY AND ALL REQUIREMENTS OUTLINED IN THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND/OR SPECIAL NOTES CONTAINED IN THE PROJECT PROPOSAL.

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

RECIPROCAL PREFERENCE TO BE GIVEN BY PUBLIC AGENCIES TO RESIDENT BIDDERS

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the electronic bidding software. Submittal of the Affidavit should be done along the bid in Bid Express.

April 30, 2018

Special Note for Radar Presence Detection Devices

INSTALL RADAR PRESENCE DETECTOR TYPE A

Install Radar Presence Detector Type A shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by the Contractor), and controller interface assembly. The Install Radar Presence Detector Type A bid item shall include all labor required to provide a functional detection system. Radar Presence Detector Type A shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the Contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The Contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The Contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The Contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others.

INSTALL RADAR ADVANCE DETECTOR TYPE B

Install Radar Advance Detector Type B shall consist of installation of a pole mounted radar presence sensor, sensor mounting bracket, sensor cables, interface boxes, lead-in cable, connectors (furnished by the Contractor), and controller interface assembly. The Install Radar Advance Detector Type B bid item shall include all labor required to provide a functional detection system. Radar Advance Detector Type B shall be installed and wired in accordance with the manufacturer's instructions. After the detector is installed and before the detector is powered on, the Contractor shall coordinate with District Traffic Division's representatives to schedule a time to perform the detector setup. The Contractor shall double check to verify that all wiring is correctly installed and connected before scheduling the setup work. Representatives from KYTC and/or the manufacturer or sales representative will assist with setup and calibration. The Contractor shall provide a bucket truck and operators at this time for final aiming of the sensors. The Contractor shall provide individuals capable of operating the setup software and learning the setup process so that future installations may be completed without assistance from others.

SPECIAL NOTES FOR COMPLETION DATES & LIQUIDATED DAMAGES

The ultimate fixed completion date for this project will be December 1, 2024. Liquidated Damages for failure to complete the project on time will be assessed following Section 108.09. Contrary to Section 108.09, Liquidated Damages will be assessed for the months of December through March.

Contrary to Section 108.09, Liquidated Damages will be assessed regardless of whether seasonal limitations prohibit the Contractor from performing work on the controlling operation. All liquidated damages will be applied accumulatively. All other applicable portions of Section 108 apply.

Contractor Shall Complete the Installations in the following order:

KY 1694 @ Stone School Road (Proposed Completion 10/01/2024)

KY 1931 @ 64 EB On Ramp (Proposed Completion 11/01/2024)

KY 1020 @ Tolls Lane (Proposed Completion 12/01/2024)

JEFFERSON COUNTY 056GR24T012-FE04

Contract ID: 244403 Page 14 of 81

SPECIAL PROVISION FOR WASTE AND BORROW SITES

Obtain U.S. Army Corps of Engineer's approval before utilizing a waste or borrow site that involves "Waters of the United States". The Corps of Engineers defines "Waters of the United States" as perennial or intermittent streams, ponds or wetlands. The Corps of Engineers also considers ephemeral streams, typically dry except during rainfall but having a defined drainage channel, to be jurisdictional waters. Direct questions concerning any potential impacts to "Waters of the United States" to the attention of the appropriate District Office for the Corps of Engineers for a determination prior to disturbance. Be responsible for any fees associated with obtaining approval for waste and borrow sites from the U.S. Army Corps of Engineer or other appropriate regulatory agencies.

1-296 Waste & Borrow Sites 01/02/2012

Contract ID: 244403 Page 15 of 81

COORDINATION OF WORK WITH OTHER CONTRACTS

Be advised, there may be an active project(s) adjacent to or within this project. The Engineer will coordinate the work of the Contractors. See Section 105.06.

 $\begin{array}{c} \hbox{1--3193 Coordination Contracts} \\ \hbox{01/02/2012} \end{array}$

TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications, Supplemental Specifications, and the Standard and Sepia Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic shall be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

Lane closures and mobile operations are permitted during the hours listed below for the KY 1020 and KY 913 locations:

- Sunday through Thursday nights 8:00 P.M. 6:00 A.M.
- Friday & Saturday nights 8:00 P.M. 7:00 A.M.

Lane closures and mobile operations are permitted during the hours listed below for the KY 1694 location:

• Daily 9:00 A.M. - 4:00 P.M.

Unless otherwise approved by the Engineer, lane closures will not be permitted on the following days:

Labor Day Weekend 3 pm Friday, August 30, 2024 – 8 pm Monday, September 2, 2024

Thanksgiving Holiday

Christmas Holiday

New Year's Day Holiday

3 pm Friday, August 30, 2024 – 8 pm Nonday, September 2, 2024

3 pm Wednesday, November 27, 2024 – 8 pm Sunday, December 1, 2024

7 am Tuesday, December 24, 2024 – 8 pm Wednesday, December 25, 2024

7 am Tuesday, December 31, 2024 – 8 pm Wednesday, January 1, 2025

For all traffic, maintain one lane of traffic in each direction at all times during construction. The Engineer may permit minor operations with lane closures outside of these hours, with prior approval.

At the discretion of the Engineer, additional days and hours may be specified when lane closures will not be allowed.

The Department will provide public notification regarding lane closures. The Contractor shall submit proposed lane closure days and times to the Engineer at least 14 calendar days in advance for approval. Liquidated Damages will be assessed for each hour or fraction of an hour that a lane closure is in place outside of an approved time period. See the Special Notes for Completion Dates & Liquidated Damages for details on the Liquidated Damages amount.

JEFFERSON COUNTY 056GR24T012-FE04 Contract ID: 244403 Page 17 of 81

Traffic Control Plan Page 2 of 8

LANE CLOSURES

Long term lane closures shall not be allowed; therefore, lane closures will not be measured for payment. Do not leave lane closures in place during non-working hours and prohibited periods

TEMPORARY SIGNS

Temporary signposts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Temporary signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term temporary signs (temporary signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term temporary signs (temporary signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

Two new (not used), trailer-mounted, Portable Changeable Message Signs, Model WANCO WTLMB(A), are to be purchased by the Contractor. **The Department will retain possession of the Portable Changeable Message Signs at the completion of the project.**

The Contractor will be required to undertake the placement and setup of the Portable Changeable Message Signs. The Engineer will determine placement locations and the messages to be displayed. Upon completion of the project, the Contractor shall deliver the Portable Changeable Message Signs to the KYTC Equipment Garage at 4334 Poplar Level Road, Louisville, KY 40218.

Relocation, installation, maintenance, and delivery of the Portable Changeable Message Signs at the completion of the project shall be incidental to the Bid Item: PORTABLE CHANGEABLE MESSAGE SIGN (Purchase and Supply).

Provide changeable message signs in advance of and within the project at locations determined by the Engineer. If work is in progress concurrently in both directions or if more than one lane closure is in place in the same direction of travel, provide additional changeable message signs as directed by the Engineer. Place changeable message signs approximately one mile in advance of the anticipated queue at each lane closure. As the actual queue lengthens and/or shortens, relocate or provide additional changeable message signs so that traffic has warning of slowed or stopped traffic at least one mile but not more than two miles before reaching the end of the actual queue. The Engineer may vary the designated locations as the work progresses. The Engineer will determine the messages to be displayed. In the event of damage or mechanical/electrical failure, repair or replace the Changeable Message Sign. If the damage or mechanical/electrical failure is identified during active work operations, repair or replace the Changeable Message Sign within 6 hours. If the damage or mechanical/electrical failure is identified when there are no active work operations on the project, repair or replace the Changeable Message Sign within 12 hours. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Changeable Message Signs only once for payment, regardless of how many times they are set, reset, removed, and/or relocated during the duration of the project. The

Contract ID: 244403 Page 18 of 81

Traffic Control Plan Page 3 of 8

Department will not measure for payment any replacements for damaged Changeable Message Signs or any changeable message signs the Engineer directs to be replaced due to poor condition or readability. Retain possession of the Changeable Message Signs upon completion of the work.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

TEMPORARY ENTRANCES

The Engineer will not require the Contractor to provide continuous access to farms, single family, duplex, or triplex residential properties during working hours; however, provide reasonable egress and ingress to each such property when actual operations are not in progress at that location. Limit the time during which a farm or residential entrance is blocked to the minimum length of time required for actual operations, not extended for the Contractor's convenience, and in no case exceeding six (6) hours. Notify all residents twenty-four hours in advance of any driveway or entrance closings and make any accommodations necessary to meet the access needs of disabled residents.

Except as allowed by the Phasing as specified above, maintain direct access to all side streets and roads, schools, churches, commercial properties, and apartments or apartment complexes of four or more units at all times. Access to fire hydrants must also be maintained at all times.

Traffic Control Plan Page 4 of 8

USE AND PLACEMENT OF CHANGEABLE MESSAGE SIGNS

The following policy is based upon current Changeable Message Signs (CMS) standards and practice from many sources, including the Federal Highway Administration (FHWA), other State Departments of Transportation, and Traffic Safety Associations. It is understood that each CMS installation or use requires individual consideration due to the specific location or purpose. However, there will be elements that are constant in nearly all applications. Accordingly, these recommended guidelines bring a level of uniformity, while still being open to regional experience and engineering judgment.

Application

The primary purpose of CMS is to advise the driver of unexpected traffic and routing situations. Examples of applications where CMS can be effective include:

- Closures (road, lane, bridge, ramp, shoulder, interstate)
- Changes in alignment or surface conditions
- Significant delays, congestion
- Construction/maintenance activities (delays, future activities)
- Detours/alternative routes
- Special events with traffic and safety implications
- Crash/incidents
- Vehicle restrictions (width, height, weight, flammable)
- · Advance notice of new traffic control devices
- Real-time traffic conditions (must be kept up to date)
- Weather /driving conditions, environmental conditions, Roadway Weather Information Systems
- Emergency Situations
- Referral to Highway Advisory Radio (if available)
- Messages as approved by the County Engineer's Office

CMS should not be used for:

- Replacement of static signs (e.g. ROAD WORK AHEAD), regulatory signage (e.g. speed limits), pavement markings, standard traffic control devices, conventional warning or guide signs.
- Replacement of lighted arrow board
- Advertising (Don't advertise the event unless clarifying "action" to be taken by driver e.g. Speedway traffic next exit)
- Generic messages
- Test messages (portable signs only)
- Describe recurrent congestion (e.g. rush hour)
- Public service announcements (not traffic related)

Traffic Control Plan Page 5 of 8

Messages

Basic principles that are important to providing proper messages and ensuring the proper operation of a CMS are:

- Visible for at least ½ mile under ideal daytime and nighttime conditions
- Legible from all lanes a minimum of 650 feet
- Entire message readable twice while traveling at the posted speed
- No more than two message panels should be used (three panels may be used on roadways where vehicles are traveling less than 45 mph). A panel is the message that fits on the face of the sign without flipping or scrolling.
- Each panel should convey a single thought; short and concise
- Do not use two unrelated panels on a sign
- Do not use the sign for two unrelated messages
- Should not scroll text horizontally or vertically
- Should not contain both the words left and right
- Use standardized abbreviations and messages
- Should be accurate and timely
- Avoid filler/unnecessary words and periods (hazardous, a, an, the)
- Avoid use of speed limits
- Use words (not numbers) for dates

Placement

Placement of the CMS is important to ensure that the sign is visible to the driver and provides ample time to take any necessary action. Some of the following principles may only be applicable to controlled access roadways. The basic principles of placement for a CMS are:

- When 2 signs are needed, place on same side of roadway and at least 1,000 feet apart
- Place behind semi-rigid/rigid protection (guardrail, barrier) or outside of the clear zone
- Place 1,000 feet in advance of work zone; at least one mile ahead of decision point
- Normally place on right side of roadway; but should be placed closest to the affected lane so that either side is acceptable
- Signs should not be dual mounted (one on each side of roadway facing same direction)
- Point trailer hitch downstream
- Secure to immovable object to prevent theft (if necessary)
- Do not place in sags or just beyond crest
- Check for reflection of sun to prevent the blinding of motorist
- Should be turned ~3 degrees outward from perpendicular to the edge of pavement
- Bottom of sign should be 7 feet above the elevation of edge of roadway
- Should be removed when not in use

Traffic Control Plan Page 6 of 8

Standard Abbreviations

The following is a list of standard abbreviations to be used on CMS:

| Word | Abbrev | Example |
|----------------------|------------|---|
| Access | ACCS | CRASH AHEAD/ USE ACCS RD NEXT RIGHT |
| Alternate | ALT | CRASH AHEAD/ USE ALT RTE NEXT RIGHT |
| Avenue | AVE | FIFTH AVE CLOSED/ DETOUR NEXT LEFT |
| Blocked | BLKD | FIFTH AVE BLKD/ MERGE LEFT |
| Boulevard | BLVD | MAIN BLVD CLOSED/ USE ALT RTE |
| Bridge | BRDG | SMITH BRDG CLOSED/ USE ALT RTE |
| Cardinal Directions | | N 175 CLOSED/ DETOUR EXIT 30 |
| | N, S, E, W | • |
| Center Commercial | COMM | CNTR LANE CLOSED/ MERGE LEFT OVRSZ COMM VEH/ USE 1275 |
| | COMM | • |
| Condition | COND | ICY COND POSSIBLE |
| Congested | CONG | HVY CONG NEXT 3 MI |
| Construction | CONST | CONST WORK AHEAD/ EXPECT DELAYS |
| Downtown | DWNTN | DWNTN TRAF USE EX 40 |
| Eastbound | E-BND | E-BND 164 CLOSED/ DETOUR EXIT 20 |
| Emergency | EMER | EMER VEH AHEAD/ PREPARE TO STOP |
| Entrance, Enter | EX, EXT | DWNTN TRAF USE EX 40 |
| Expressway | EXPWY | WTRSN EXPWY CLOSED/ DETOUR EXIT 10 |
| Freeway | FRWY, FWY | GN SYNDR FWY CLOSED/ DETOUR EXIT 15 |
| Hazardous Materials | HAZMAT | HAZMAT IN ROADWAY/ ALL TRAF EXIT 25 |
| Highway | HWY | CRASH ON AA HWY/ EXPECT DELAYS |
| Hour | HR | CRASH ON AA HWY/ 2 HR DELAY |
| Information | INFO | TRAF INFO TUNE TO 1240 AM |
| Interstate | 1 | E-BND 164 CLOSED/ DETOUR EXIT 20 |
| Lane | LN | LN CLOSED MERGE LEFT |
| Left | LFT | LANE CLOSED MERGE LFT |
| Local | LOC | LOC TRAF USE ALT RTE |
| Maintenance | MAINT | MAINT WRK ON BRDG/ SLOW |
| Major | MAJ | MAJ DELAYS 175/ USE ALT RTE |
| Mile | MI | CRASH 3 MI AHEAD/ USE ALT RTE |
| Minor | MNR | CRASH 3 MI MNR DELAY |
| Minutes | MIN | CRASH 3 MI/ 30 MIN DELAY |
| Northbound | N-BND | N-BND 175 CLOSED/ DETOUR EXIT 50 |
| Oversized | OVRSZ | OVRSZ COMM VEH/ USE 1275 NEXT RIGHT |
| Parking | PKING | EVENT PKING NEXT RGT |
| Parkway | PKWY | CUM PKWAY TRAF/ DETOUR EXIT 60 |
| Prepare | PREP | CRASH 3 MI/ PREP TO STOP |
| Right | RGT | EVENT PKING NEXT RGT |
| Road | RD | HAZMAT IN RD/ ALL TRAF EXIT 25 |
| Roadwork | RDWK | RDWK NEXT 4 MI/ POSSIBLE DELAYS |
| Route | RTE | MAJ DELAYS 175/ USE ALT RTE |
| Shoulder | SHLDR | SHLDR CLOSED NEXT 5 MI |
| Slippery | SLIP | SLIP COND POSSIBLE/ SLOW SPD |
| Southbound | S-BND | S-BND 175 CLOSED/ DETOUR EXIT 50 |
| Speed | SPD | SLIP COND POSSIBLE/ SLOW SPD |
| | | |

Traffic Control Plan Page 7 of 8

Standard Abbreviations (cont.)

| <u>Word</u> | <u>Abbrev</u> | <u>Example</u> |
|-------------|---------------|-------------------------------------|
| Street | ST | MAIN ST CLOSED/ USE ALT RTE |
| Traffic | TRAF | CUM PKWAY TRAF/ DETOUR EXIT 60 |
| Vehicle | VEH | OVRSZ COMM VEH/ USE 1275 NEXT RIGHT |
| Westbound | W-BND | W-BND 164 CLOSED/ DETOUR EXIT 50 |
| Work | WRK | CONST WRK 2MI/ POSSIBLE DELAYS |

Certain abbreviations are prone to inviting confusion because another word is abbreviated or could be abbreviated in the same way. DO NOT USE THESE ABBREVIATIONS:

| <u>Abbrev</u> | Intended Word | Word Erroneously Given |
|---------------|-------------------|-------------------------------|
| ACC | Accident | Access (Road) |
| CLRS | Clears | Colors |
| DLY | Delay | Daily |
| FDR | Feeder | Federal |
| L | Left | Lane (merge) |
| LOC | Local | Location |
| LT | Light (traffic) | Left |
| PARK | Parking | Park |
| POLL | Pollution (index) | Poll |
| RED | Reduce | Red |
| STAD | Stadium | Standard |
| TEMP | Temporary | Temperature |
| WRNG | Warning | Wrong |

Typical Messages

The following is a list of typical messages used on CMS. The list consists of the reason or problem that you want the driver to be aware of and the action that you want the driver to take.

| Reason/Problem | <u>Action</u> |
|------------------------------|---------------------|
| CRASH AHEAD | ALL TRAFFIC EXIT RT |
| CRASH/XX MILES | AVOID DELAY USE XX |
| XX ROAD CLOSED | CONSIDER ALT ROUTE |
| XX EXIT CLOSED | DETOUR |
| BRIDGE CLOSED | DETOUR XX MILES |
| BRIDGE/(SLIPPERY, ICE, ETC.) | DO NOT PASS |
| CENTER/LANE/CLOSED | EXPECT DELAYS |
| DELAY(S), MAJOR/DELAYS | FOLLOW ALT ROUTE |
| DEBRIS AHEAD | KEEP LEFT |
| DENSE FOG | KEEP RIGHT |
| DISABLED/VEHICLE | MERGE XX MILES |
| EMER/VEHICLES/ONLY | MERGE LEFT |
| EVENT PARKING | MERGE RIGHT |
| EXIT XX CLOSED | ONE-WAY TRAFFIC |
| FLAGGER XX MILES | PASS TO LEFT |
| | |

Traffic Control Plan

Page 8 of 8

Typical Messages (cont.)

Reason/Problem
FOG XX MILES
FREEWAY CLOSED
FRESH OIL
HAZMAT SPILL

ICE

INCIDENT AHEAD

LANES (NARROW, SHIFT, MERGE, ETC.)

LEFT LANE CLOSED LEFT LANE NARROWS LEFT 2 LANES CLOSED LEFT SHOULDER CLOSED

LOOSE GRAVEL

MEDIAN WORK XX MILES

MOVING WORK ZONE, WORKERS IN ROADWAY

NEXT EXIT CLOSED NO OVERSIZED LOADS

NO PASSING
NO SHOULDER
ONE LANE BRIDGE
PEOPLE CROSSING
RAMP CLOSED

RAMP (SLIPPERY, ICE, ETC.)
RIGHT LANE CLOSED
RIGHT LANE NARROWS
RIGHT SHOULDER CLOSED

ROAD CLOSED

ROAD CLOSED XX MILES ROAD (SLIPPERY, ICE, ETC.)

ROAD WORK

ROAD WORK (OR CONSTRUCTION) (TONIGHT, TODAY, TOMORROW, DATE)

ROAD WORK XX MILES

SHOULDER (SLIPPERY, ICE, SOFT, BLOCKED, ETC.)

NEW SIGNAL XX MILES

SLOW 1 (OR 2) - WAY TRAFFIC

SOFT SHOULDER

STALLED VEHICLES AHEAD

TRAFFIC BACKUP
TRAFFIC SLOWS

TRUCK CROSSING

TRUCKS ENTERING

TOW TRUCK AHEAD

UNEVEN LANES

WATER ON ROAD

WET PAINT

WORK ZONE XX MILES

WORKERS AHEAD

<u>Action</u>

PASS TO RIGHT PREPARE TO STOP REDUCE SPEED

SLOW

SLOW DOWN STAY IN LANE STOP AHEAD STOP XX MILES

TUNE RADIO 1610 AM

USE NN ROAD
USE CENTER LANE
USE DETOUR ROUTE
USE LEFT TURN LANE
USE NEXT EXIT
USE RIGHT LANE

WATCH FOR FLAGGER

JEFFERSON COUNTY 056GR24T012-FE04



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF RIGHT OF WAY & UTILITIES

RIGHT OF WAY CERTIFICATION

Page 24 of 81 TC 62-226

Contract ID: 244403

Rev. 01/2016 Page 1 of 1

| | Original | | Re-C | ertificatio | rtification RIGHT OF WAY CERTIFICATION | | | | |
|-----------------------|---------------------|-----------|-----------|---------------------------------|--|--------------------|--------------------------|----------------------------------|--|
| | ITEM # COUNTY | | PROJE | JECT # (STATE) PROJECT # (FEDER | | | | | |
| n/a | | Jefferson | <u> </u> | FE04 056 16 | 94 000-001 | n/a | | | |
| | PROJECT DESCRIPTION | | | | | | | | |
| Signa | als at the ir | ntersec | rtion o | f KY 1694 | (Sleepy Hollow Road) a | nd CS 2558C (N | orton Commons Blvo | 4) | |
| | No Additi | | | | | 114 65 25566 (14 | orton commons bive | ^/ | |
| | | | | | | he right of way v | vas acquired in accorda | nce to FHWA regulations | |
| | | | | | | | | Io additional right of way or | |
| reloc | ation assista | ance we | ere req | uired for th | is project. | | | | |
| | Condition | # 1 (A | dditio | nal Right | of Way Required and O | Cleared) | | | |
| | | | - | _ | ol of access rights when a | | · | | |
| | | | | | | | | e may be some improvements | |
| | | | | | | | | physical possession and the | |
| _ | | | | | | | | n paid or deposited with the | |
| | | | | | | | | ilable to displaced persons | |
| aueq | | | | | ance with the provisions of Way Poquired with | | WA directive. | | |
| Tho r | | - | | | of Way Required with | • • | s of way required for t | he proper execution of the | |
| | | | | | | | | n has not been obtained, but | |
| | | • | | • | | • | • . | s physical possession and right | |
| _ | - | | | | | • | | e court for most parcels. Just | |
| | | | | | be paid or deposited wit | | | | |
| | | | | | of Way Required with | | | | |
| The a | | | | | | | mplete and/or some pa | arcels still have occupants. All | |
| | • | _ | | | nt housing made availab | | | • | |
| reque | esting autho | rizatio | n to ad | vertise this | project for bids and to p | roceed with bid le | etting even though the | necessary right of way will not | |
| be fu | lly acquired | , and/o | r some | occupants | will not be relocated, an | d/or the just com | pensation will not be p | paid or deposited with the | |
| court | for some p | arcels ι | until aft | er bid letti | ng. KYTC will fully meet a | ll the requiremer | nts outlined in 23 CFR 6 | 35.309(c)(3) and 49 CFR | |
| 24.10 | 2(j) and wil | l exped | lite con | npletion of | all acquisitions, relocatio | ns, and full paym | ents after bid letting a | nd prior to | |
| | | | | ntract or fo | rce account construction | | | | |
| | lumber of Pare | | | 0 | EXCEPTION (S) Parcel # | ANTIC | IPATED DATE OF POSSESSIO | N WITH EXPLANATION | |
| | er of Parcels T | hat Have | Been Ac | quired | | | | | |
| Signed | | | | | | | | | |
| Signed | mnation ROE | | | | | | | | |
| | / Comments | (Use A | dditiona | I Sheet if ne | cessary) | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | ΙΡΔR | W Pro | ject Mana | ger | | Right of Way Su | nervisor | |
| Print | ed Name | | | jeet ivialia | 801 | Printed Name | Tracy Lovell for J | | |
| | nature | | | | | Signature | Tracyzovenion | | |
| | , Date | | | | | Date | 6/10/24 | ((| |
| Right of Way Director | | | | | or | | FHWA | | |
| Print | ed Name | 'ەיי | · · · | ., 2 | | Printed Name | | | |
| Sig | nature | | 1 | | Digitally signed by Kelly Divine | Signature | | | |
| | Date | -2 | un At | 1 /40 0 | Date: 2024.06.10 11:10:46 05'00' | Date | | | |

Date

JEFFERSON COUNTY 056GR24T012-FE04



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF RIGHT OF WAY & UTILITIES

RIGHT OF WAY CERTIFICATION

Page 25 of 81 TC 62-226

Contract ID: 244403

Rev. 01/2016 Page 1 of 1

| Or | iginal | | Re-Co | ertificatio | RIGHT OF WAY CERTIFICATION | | | | |
|--------------------------|--|----------|----------|---------------------------------------|--|--------------------|--|----------------------------------|--|
| | ITEM # COUNTY | | | PROJECT # (STATE) PROJECT # (FEDERAL) | | | | | |
| n/a | | | | Jefferson | | FE04 056 09 | 13 002-003 | n/a | |
| | PROJECT DESCRIPTION | | | | | | | | |
| | | | | | Name la sula alla su Danduras A | L C 4 ED D | | | |
| | | | | | Blankenbaker Parkway) | and I-64 EB Ra | mp ———————————————————————————————————— | | |
| | | | | Way Req | | | | . 5104/4 | |
| | | | | | | | | ance to FHWA regulations | |
| | | | | uired for th | | tions Policy Act (| of 1970, as amended. I | No additional right of way or | |
| | | | | | of Way Required and C | loarod) | | | |
| | | | | | ol of access rights when a | · · | noon acquired including | T logal and physical | |
| | | | - | _ | _ | | · | e may be some improvements | |
| | | | | | | | | physical possession and the | |
| _ | - | _ | - | | | | | n paid or deposited with the | |
| - | | - | | | · | | • | ilable to displaced persons | |
| | | | | | nce with the provisions o | | | | |
| | | | | | of Way Required with I | | | | |
| The right | of way h | as not | been f | fully acquire | ed, the right to occupy an | d to use all right | s-of-way required for t | he proper execution of the | |
| project ha | as been a | cquire | d. Son | ne parcels r | may be pending in court a | nd on other pard | cels full legal possessio | n has not been obtained, but | |
| right of er | ntry has b | been o | btaine | ed, the occu | ipants of all lands and imp | rovements have | vacated, and KYTC ha | s physical possession and right | |
| to remove | e, salvage | e, or de | emolis | h all impro | vements. Just Compensat | ion has been pai | d or deposited with the | e court for most parcels. Just | |
| Compensa | ation for | all per | nding p | parcels will | be paid or deposited with | the court prior | to AWARD of construct | ion contract | |
| Coi | ndition | # 3 (A | dditio | nal Right | of Way Required with | Exception) | | | |
| The acqui | sition or | right c | of occu | pancy and | use of a few remaining pa | rcels are not co | mplete and/or some pa | arcels still have occupants. All | |
| remaining | g occupar | nts hav | e had | replaceme | nt housing made available | e to them in acco | ordance with 49 CFR 24 | .204. KYTC is hereby | |
| requesting | g authori | ization | to adv | vertise this | project for bids and to pr | oceed with bid le | etting even though the | necessary right of way will not | |
| be fully ac | cquired, a | and/or | some | occupants | will not be relocated, and | I/or the just com | pensation will not be p | paid or deposited with the | |
| court for s | some par | rcels u | ntil aft | er bid lettir | ng. KYTC will fully meet al | I the requiremer | its outlined in 23 CFR 6 | 35.309(c)(3) and 49 CFR | |
| | | | | | all acquisitions, relocatior | is, and full paym | ents after bid letting a | nd prior to | |
| | | | | ntract or fo | rce account construction. | | | | |
| Total Numbe | | | | 0 | EXCEPTION (S) Parcel # | ANTIC | IPATED DATE OF POSSESSIO | N WITH EXPLANATION | |
| Number of I | Parcels Tha | at Have | Been Ac | quired | | | | | |
| Signed Deed | | | | | | | | | |
| Condemnati Signed ROE | ion | | | | | | | | |
| | mments (| Use Ad | ditiona | I al Sheet if ne | cessarv) | | | | |
| , | (| | | | ,,, | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | 47.5 | | | | D: 1: (14/ C | | |
| D 1 | LPA RW Project Manager Right of Way Supervisor | | | | | | | | |
| Printed N | lame | | | | | Printed Name | Tracy Lovell for | lom Boykin | |
| Signatu | ure | | | | | Signature | /reen Tan | . U | |
| Date | 9 | | | | | Date | 6/10/24 | ~ | |
| Right of Way Director | | | | | | | FHWA | | |
| Printed N | lame | | | · | | Printed Name | | | |
| Signatu | ıre | j |) | | | | | | |
| | | -1 | un of | | Digitally signed by Kelly Divine Date: 2024.06.10 07:55:00 -05'00' | Signature | | | |
| Date | ; | - Ja | | | | Date | | | |

Contract ID: 244403 Page 26 of 81



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF RIGHT OF WAY & UTILITIES

RIGHT OF WAY CERTIFICATION

TC 62-226 Rev. 01/2016 Page 1 of 1

| Original | | Re-Ce | rtificatio | n | RIGHT OF WAY CERTIFICATION | | | |
|---|------------|-----------|---------------|----------------------------------|----------------------------|-------------------------|-----------------------------------|--|
| ITEM | ITEM # | | | COUNTY | PROJE | ECT # (STATE) | PROJECT # (FEDERAL) | |
| n/a | | | Jefferson | | FE04 056 10 | 20 004-005 | n/a | |
| PROJECT DESCRIPTION | | | | | | | | |
| Signals at the intersection of KY 1020 (National Turnpike) and CS 1131F (Tolls Road) | | | | | | | | |
| No Additional Right of Way Required | | | | | | | | |
| | | | | | The right of way w | vas acquired in accord | dance to FHWA regulations | |
| Construction will be within the limits of the existing right of way. The right of way was acquired in accordance to FHWA regulations under the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. No additional right of way or | | | | | | | | |
| relocation assistance were required for this project. | | | | | | | | |
| Condition # 1 (Additional Right of Way Required and Cleared) | | | | | | | | |
| | | | | ol of access rights when | | | | |
| | | | | | | | re may be some improvements | |
| _ | _ | - | | | • | | s physical possession and the | |
| - | _ | | | • | | • | en paid or deposited with the | |
| | | | | nnce with the provisions | | | vailable to displaced persons | |
| | | | | of Way Required with | | vva directive. | | |
| | - | | | | | s-of-way required for | the proper execution of the | |
| | | | | | _ | | on has not been obtained, but | |
| · · | - | | - | | • | | as physical possession and right | |
| | | | | | | | he court for most parcels. Just | |
| Compensation for | or all pe | nding pa | arcels will | be paid or deposited wit | th the court prior | to AWARD of constru | ction contract | |
| Condition | n # 3 (A | ddition | nal Right | of Way Required with | Exception) | | | |
| • | _ | - | - | | | | parcels still have occupants. All | |
| | | | | nt housing made availab | | | | |
| | | | | | | | e necessary right of way will not | |
| | | | | | | | paid or deposited with the | |
| | | | | all acquisitions, relocations | | | 635.309(c)(3) and 49 CFR | |
| | | | | rce account construction | | ents after blu letting | | |
| Total Number of Par | | | 0 | EXCEPTION (S) Parcel # | | IPATED DATE OF POSSESSI | ON WITH EXPLANATION | |
| Number of Parcels T | hat Have | Been Acq | Ů | ., | | | | |
| Signed Deed | | | | | | | | |
| Condemnation | | | | | | | | |
| Signed ROE Notes/ Comments | /Uso As | lditional | Shoot if no | recessary) | | | | |
| Notes/ Comments | (USE AL | iuitionai | Sileet ii iie | cessal y) | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | 1040 | NA / D : | | | | D: 1: ()M C | | |
| Printed Name | | | | | Printed Name | Right of Way S | • | |
| | | | | | | Tracy Lovell fo | r i om Boykin | |
| Signature | | | | | Signature | Trum Day | ell/ | |
| Date | | | | | Date | 6/10/24 | -4 | |
| Right of Way Director | | | | | | FHWA | | |
| Printed Name | | | | | Printed Name | | | |
| Signature | |) | | Digitally signed by Kelly Divine | Signature | | | |
| Date | $ \lambda$ | us ht | | Pate: 2024.06.10 11:07:58 | | | | |
| Date | | | - | 03 00 | Date | | | |

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

GENERAL PROJECT NOTES ON UTILITIES

For all projects over 2000 linear feet, which are defined as a "Large Project" in KRS 367.4903(18), the awarded contractor shall initially mark the first 2000 linear feet minimally of proposed excavation or construction boundaries of the project to be worked using the procedure set forth in KRS 367.4909(9)(k). This temporary field locating of the project excavation boundary shall take place prior to submitting an excavation location request to the underground utility protection Kentucky Contact Center. For large projects, the awarded contractor shall work with the impacted utilities to determine when additional white lining of the remainder of the project site will take place. This provision shall not alter or relieve the awarded contractor from complying with requirements of KRS 367.4905 to 367.4917 in their entirety.

NOTE: The information presented in this Utility Note is informational in nature and the information contained herein is not guaranteed.

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his/her activities. The contractor will coordinate his/her activities to minimize and, where possible, avoid conflicts with utility facilities. Due to the nature of the work proposed, it is unlikely to conflict with the existing utilities beyond minor facility adjustments. Where conflicts with utility facilities are unavoidable, the contractor will coordinate any necessary relocation work with the facility owner and Resident Engineer. The Kentucky Transportation Cabinet maintains the right to remove or alter portions of this contract if a utility conflict occurs. The utility facilities as noted in the previous section(s) have been determined using data garnered by varied means and with varying degrees of accuracy: from the facility owners, a result of S.U.E., field inspections, and/or reviews of record drawings. The facilities defined may not be inclusive of all utilities in the project scope and are not Level A quality, unless specified as such. It is the contractor's responsibility to verify all utilities and their respective locations before excavating.

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. The contractor is instructed to contact KY 811 for the location of existing underground utilities. Contact shall be made a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY 811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom are to be contacted through their individual Protection Notification Center. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area. Non-compliance with these directives can result in the enforcement of penalties.

JEFFERSON COUNTY 056GR24T012-FE04 Contract ID: 244403 Page 28 of 81

UTILITIES AND RAIL CERTIFICATION NOTE

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

NOTE: DO NOT DISTURB THE FOLLOWING UTILITIES LOCATED WITHIN THE PROJECT DISTURB LIMITS

There are no known utility relocations within the project limits. If an unknown utility is encountered, the contractor will be responsible for arranging an on-site meeting with the utility owner/representative(s) and the Engineer to discuss potential impacts and solutions to either avoid the utility or relocate the utility. Depending on the solution selected, the Engineer will determine whether or not additional contract time is appropriate.

The Contractor is fully responsible for protection of all utilities listed above

THE FOLLOWING COMPANIES ARE RELOCATING/ADJUSTING THEIR UTILITIES WITHIN THE PROJECT LIMITS
AND WILL BE COMPLETE PRIOR TO CONSTRUCTION

None

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE COMPANY OR THE COMPANY'S SUBCONTRACTOR AND IS TO BE COORDINATED WITH THE ROAD CONTRACT

None

THE FOLLOWING COMPANIES HAVE FACILITIES TO BE RELOCATED/ADJUSTED BY THE ROAD CONTRACTOR AS INCLUDED IN THIS CONTRACT

None

RAIL COMPANIES HAVE FACILITIES IN CONJUNCTION WITH THIS PROJECT AS NOTED

No Rail Involvement □ Rail Involved □ Rail Adjacent

Jefferson County

Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.) FE04 056 1694 000-001

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

AREA UTILITIES CONTACT LIST AS PROVIDED BY KY 811

1. All Points Broadband DJ Anderson, Regional Operations Manager

148 Citizens Blvd Cell (502) 390-6806

Simpsonville, KY 40067 DAnderson@allpointsbroadband.com Vince West, Regional Operations Manager

Office (703) 554-6600

Cell (502) 321-5802

VWest@allpointsbroadband.com Facility Map Requests to DJ & Vince

2. Atmos Energy Jake Basham 105 Hudson Blvd Cell (270) 779-7381

Shelbyville, KY 40065 Jake.Basham@atmosenergy.com

2850 Russellville Rd. **Taylor Collins** Bowling Green, KY 42101 (270)-577-4582

> Facility Map Requests to Jake & Taylor taylor.collins@atmosenergy.com

3. AT&T KY Scott Roche

1340 E. John Rowan Blvd Office (502) 348-4528 Bardstown, KY 40004 Cell (502) 827-4703 SR8832@att.com

3719 Bardstown Road, Louisville, KY 40218 *Use this address for agreements

4. AT&T Legacy Bill Taggart, Sr. Tech Project Manager OH, MI, KY, WV

7555 E. Pleasant Valley Road, Suite 140

WT2462@att.com Independence, OH 44131 Office (614) 868-2511 Cell (614) 370-5414

AT&T Corporation, Long Haul Don Garr, Cell (502) 741-8374 DonGarr@outlook.com

Facility Map Requests to Don & Bill

5. Boardwalk Pipelines (See Texas Gas Transmission, LLC)

Jeff Donnelly, Transmission Department 6. Center Point Energy

2520 Lincoln Drive Office (812) 431-5670

Clarksville, IN 47129 <u>Jeff.Donnelly@centerpointenergy.com</u>

Chris Wood, Engineering Manager

Facility Map Requests to Publicproject@centerpointenergy.com

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

7. CenturyLink Communications, LLC (See Lumen Technologies Inc.)

8. Charter Communications Nathen L Howerton 4701 Commerce Crossings Drive Office (502) 357-4318

Louisville, KY 40229 Cell (502) 639-6838

Nathen.Howerton@charter.com

Kevin Mercer

Office (502) 357-4724 Cell (502) 817-5055

Kevin.Mercer@charter.com

Michael York

Facility Map Requests to Nathen-Kevin-Mike Cell (502) 548-1632

Michael.York@charter.com

9. City of Taylorsville Sewer & Water Harold Compton 70 Taylorsville Road, PO Box 279 (502) 477-3235

Taylorsville, KY 40071 Fax (502) 477-1310

HCompton@TaylorsvilleWater.org

Sisler & Maggard Kevin Sisler, Consultant 220 Reynolds Rd (859) 271-2978, (859) 50

220 Reynolds Rd (859) 271-2978, (859) 509-3799
Lexington, KY 40517 <u>Kevin.@SislerMaggard.com</u>
Steve Biven, City Clerk
(502) 477-3235 x106

CPivon@taylorcyillowa

SBiven@taylorsvillewater.org

10. Crown Castle Network Operations Mona Couch 10300 Ormsby Park Place, Suite 501 Office (317) 249-2029, Cell (317) 439-1578

Louisville, KY 40223 <u>Mona.Couch@crowncastle.com</u>
Lisa Clark, Construction Manager

(810) 223-3780

Lisa.Clark@crowncastle.com

Facility Map Requests to Mona, Lisa & Craig Craig Brown, Manager-Network Construction

Office (317) 819-8648, Cell (585) 402-8342

Craig.Brown@crowncastle.com

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

11. Crown Castle Fiber Lisa Clark, Construction Manager

3310 Ruckreigel Parkway (810) 223-3780

Jeffersontown, KY 40299 <u>Lisa.Clark@crowncastle.com</u>

Craig Brown, Manager-Network Construction Office (317) 819-8648, Cell (585) 402-8342

Craig.Brown@crowncastle.com

12. **Cogent Communications** Paul Becker, OSP Engineer

(815) 557-8416

PBecker@cogentco.com

13. Energy Transfer (See Mid-Valley Pipeline Company)

14. Fibertech (See Crown Castle Network Operation)

15. Indiana Gas Company Inc. (See Center Point Energy)

16. Insight Cablevision (See Charter Communications)

17. Indiana Utilities Corporation Scott Schmitt

 123 West Chestnut Street
 Office (812) 738-3235

 Corydon, Indiana 47112
 Cell (812) 972-0539

ScottS@indianautilitiescorp.com
Corey Thatcher, Field Technician

Office (812) 738-3235

Cell (812) 267-6936
CoreyT@indianautilitiescorp.com

Kevin Kinney Ron Timberlake

18. Intercarrier Networks, LLC

Subsidiary of Great Plains Communications

1600 Great Plains Center

PO Box 500 Blair, NE 68008

Finley Engineering Company, Inc.

2456 Fortune Drive, Suite 105

Lexington, KY 40509

CWulf@gpcom.com

Nancye Allison, Consultant Office (859) 231-9831

Cell (502) 541-3442

N.Allison@finleyusa.com

Dustin Nobbe (812) 209-9012

DNobbe@gpcom.com

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

19. Jefferson County Public Schools (JCPS)

C B Young Building 6

3001 Crittenden Drive

Louisville, KY 40209

Jeff Hardy

Office (502) 485-7975 Cell (502) 379-9315

<u>Jeff.Hardy@Jefferson.kyschools.us</u>

JDHardy70@gmail.com

Scott McMahan (Team Fishel)

Office (502) 456-2900 Cell (502) 664-9312

20. Kentucky Data Link (See Windstream)

21. Kentucky Wired, KCNA

500 Mero Street - Suite 1-1 NC #59

Frankfort, KY 40601

Erick Johnson

Executive Advisor/Operations Project Manager

Office (502) 330-0679 Erick.Johnson@ky.gov

Ledcor, Service Provider

LTS Kentucky Managed Technical Services LLC

2008 Mercer Rd. 2nd floor Lexington, KY 40511 Nick Blake

Operations Manager Office (859) 286-8158 Cell (859) 447-0781

Nick.Blake@Ledcor.com

Facility Map Requests to KIH.Technical.Services@ledcor.com & KY.OSPTeam@ledcor.com

22. LG&E KU (Electric)

820 West Broadway Louisville, KY 40202

Louisville, KT 40202

LG&E Emergency Number (502) 589-1444

LG&E and KU Emergency Number 1-800-331-7370

Caroline Justice Office (502) 627-3708

Caroline.Justice@LGE-KU.com

23. LG&E (Gas)

820 West Broadway Louisville, KY 40202

Gas Emergency Number (502) 589-5511

LG&E and KU Emergency Number 1-800-331-7370

Caroline Justice Office (502) 627-3708

Caroline.Justice@LGE-KU.com

24. Level 3 (See Lumen Technologies Inc.)

25. Lightower (See Crown Castle Network Operation)

Jefferson County

Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.) FE04 056 1694 000-001

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

26. Louisville Water Company 550 South Third Street Louisville, KY 40202

Pat Howard, PE Office (502) 569-3615 Cell (502) 287-7568 PHoward@lwcky.com

lwcgisproducts@louisvillewater.com

27. Lumen Technologies Inc. 11857 Commonwealth Drive

Louisville, KY 40299

Facility Map Requests to relocations@lumen.com

Tim Sewell

Tim.Sewell@lumen.com

(502) 389-4812 / (502) 295-0940

Richard Compton (Last day 11/10/2023)

Richard.Compton@lumen.com Patrick Barkes (Lead Engineer) Patrick.Barkes@lumen.com

Cell (502) 389-4829 / Office (812) 341-7335

10/13/20, all utility relocation/conflicts inquiries and road project notifications to

elocations@lumen.com

28. MCI (See Verizon)

29. Marathon Pipeline, LLC

539 South Main Street, Room X-05-018

Findlay, OH 45840

or

20-C Industrial Drive Lexington, OH 44904

Facility Map Requests to Landon

Landon Morris

Senior Right of Way Specialist

Cell: (419) 957-7792

LrMorris@marathonpetroleum.com

Aron Velasquez Office (419) 421-3704

AdVelasquez@marathonpetroleum.com

30. Metro Network (See Lumen Technologies Inc.)

31. Metropolitan Sewer District 700 West Liberty Street Louisville, KY 40203-1911

Taylor Friesz

Office (502) 540-6163 Cell (502) 530 5192

Taylor.Friesz@louisvillemsd.org

Greg Powell

Greg.Powell@LouisvilleMSD.org

JEFFERSON COUNTY 056GR24T012-FE04

Contract ID: 244403 Page 34 of 81

UTILITIES AND RAIL CERTIFICATION NOTE

Jefferson County

Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.) FE04 056 1694 000-001

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

32. Mid - Valley Pipeline Company Richard (Todd) Calfee 4910 Limaburg Road Office (859) 371-4469 Burlington, KY 41005 Cell (859) 630-8271

Fax (866) 699-1185

Todd.Calfee@energytransfer.com

Justin White

Office (859) 371-4469 Cell (859) 630-1823

Justin.White@energytransfer.com

Phillip Noel

Facility Map Requests to Todd, Justin, & Phillip Phillip.Noel@energytransfer.com

33. National Fiber Optic Longhaul (See Lumen Technologies Inc.)

34. Ohio River Pipeline Corporation (See Center Point Energy)

35. Oldham County Environmental Authority (OECA, Sewer) (See MSD - Contacts pending 8/2020)

36. Quest Communication (See Lumen Technologies Inc.)

37. Shelby Energy Cooperative **Dylan Staples**

PO Box 311 Manager of Engineering, Cell (502) 663-1395

620 Old Finchville Road Dylan@shelbyenergy.com

Shelbyville, KY 40065 Jason Ginn

Cell (502) 643-2778

Jason@ShelbyEnergy.com Facility Map Requests to Dylan & Jason

38. Shelby Broadband (See All Points Broadband)

39. Spectrum (See Charter Communications)

40. Sprint (See T-Mobile)

41. SunocoLogistics (See Mid-Valley Pipeline Company)

Jefferson County

FE04 056 1694 000-001 Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.)

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

42. Texas Gas Transmission, LLC Howard K. Menser Jr., Area Manager

2332 Hwy 60 West Office (502) 491-0251 Hardinsburg, KY 40143 Cell (502) 396-2418

610 W 2nd Street <u>Howard.Menser@bwpipelines.com</u>

PO Box 20008 Kevin Carman
Owensboro, KY 42301 Cell (270) 779-3893

Kevin.Carman@bwpmlp.com

10327 Gaslight Way Amanda Isom Louisville, KY 40299 (270) 688-5854

(270) 231-7629

Parrott, Joy <Joy.Parrott@bwpipelines.com>

Facility Map Requests to Kevin/Amanda/Thomas/Joy <u>Amanda.lsom@bwpmlp.com</u>

43. Time Warner (See Charter Communications)

44. T-Mobile (Sprint) Fiber Optics Steven T. Hughes 3007 Tucumcari Dr. Office (513) 459-5796

Sardinia, OH 45171 Cell (814) 553-2300

Steven.Hughes1@T-Mobile.com

45. TRIMARC Todd Hood

Public Safety & Transportation Systems
Office (502) 290-7201
901 West Main Street
Cell (270) 307-7456
Louisville, KY 40202
Todd.Hood@peraton.com

47. Verizon Dean Boyers

46. Vectren Energy Delivery of Indiana, Inc. (See Center Point Energy)

730 West Henry Street Office (615) 777-7855 Indianapolis, IN 46225 Cell (615) 507-5287

<u>Dean.Boyers@verizon.com</u>

Verizon Jeffrey Tucker, Engr III Spec-Ntwk Eng & Ops

2421 Holloway Road Office (502) 830-1827 Louisville, KY 40299 Cell (502) 593-5585

Jeffrey.Tucker@verizon.com

Ronnie Kuerzi, Eng IV Spec-Ntwk Eng & Ops

Cell (502) 780-2748

Ronald.Kuerzi@verizon.com

Facility Map Requests to Ronnie/Jeff

Jefferson County

Signal at KY 1694 (Sleepy Hollow Rd) at CS 2558C (Norton Commons Blvd.) FE04 056 1694 000-001

FE04 056 0913 002-003 Signal at KY 913 (Blankenbaker Parkway) and I-64 EB On Ramp FE04 056 1020 004-005 Signal at KY 1020 (National Turnpike) and CS 1131F (Tolls Road)

48. W.U. TEL (See Verizon)

49. Windstream James Galvin

111 S. Main Street Office (270) 765-1818 Elizabethtown, KY 42701 Cell (270) 748-9249

> James.Galvin@windstream.com Steve Johnson, Sr Engineer OSP

Office (859) 357-6209 Windstream Steve Johnson, Sr Engineer OSP Cell (859) 321-2035

130 W New Circle Road, Suite 170 Steve.Johnson@windstream.com

Lexington, KY 40505 Ronald (Todd) Moore (502) 818-7605

Ronald.Moore@windstream.com

Facility Map Requests to James, Steve, Todd & WCI.OSP.PERMITS@windstream.com Agreement's address: Windstream Holdings II, LLC, PO Box 9001116, Louisville, KY 40290-116

50. Zayo Jeff Beggs

9209 Castlegate Drive Jeff.Beggs@zayo.com Indianapolis, IN 46256

zayo.relo.kentucky@zayo.com

765-655-3870

NOTE: The Utilities Contact List is provided as informational only, and may not be a complete list of all Utility Companies with facilities in the project area.

Contract ID: 244403 Page 37 of 81

MATERIAL SUMMARY

| CONTRACT ID: 244403 | 056GR24T012-FE04 | 0505609132401 |
|---------------------|------------------|---------------|
| | | |

KY 913 (BLANKENBAKER PARKWAY) SIGNAL AT THE INTERSECTION OF KY 913 AND THE I-64 EB RAMP SIGNS-LIGHTING-SIGNALS, A DISTANCE OF .1 MILES.

| Project Line No | Bid Code | DESCRIPTION | Quantity | Unit |
|--------------------|------------|---|----------|------|
| 0095 | 02562 | TEMPORARY SIGNS | 183.00 | SQFT |
| 0100 | 02650 | MAINTAIN & CONTROL TRAFFIC - (JEFFERSON KY 913) | 1.00 | LS |
| 0105 | 02775 | ARROW PANEL | 2.00 | EACH |
| 0110 | 04820 | TRENCHING AND BACKFILLING | 20.00 | LF |
| 0115 | 04844 | CABLE-NO. 14/5C | 320.00 | LF |
| 0120 | 04845 | CABLE-NO. 14/7C | 150.00 | LF |
| 0125 | 04886 | MESSENGER-15400 LB | 410.00 | LF |
| 0130 | 04932 | INSTALL STEEL STRAIN POLE | 2.00 | EACH |
| 0135 | 20188NS835 | INSTALL LED SIGNAL-3 SECTION | 2.00 | EACH |
| 0140 | 20266ES835 | INSTALL LED SIGNAL- 4 SECTION | 1.00 | EACH |
| 0145 | 20390NS835 | INSTALL COORDINATING UNIT | 1.00 | EACH |
| 0150 | 20408ES835 | INSTALL LED BEACON-12 IN | 3.00 | EACH |
| 0155 | 23157EN | TRAFFIC SIGNAL POLE BASE | 9.00 | CUYD |
| 0160 | 24901EC | PVC CONDUIT-2 IN-SCHEDULE 80 | 80.00 | LF |
| 0165 | 24908EC | INSTALL SIGNAL CONTROLLER-TY ATC | 1.00 | EACH |
| 0170 | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | 1.00 | EACH |
| 0175 | 02569 | DEMOBILIZATION | 1.00 | LS |

Contract ID: 244403 Page 38 of 81

MATERIAL SUMMARY

| CONTRACT ID: 244403 | 056GR24T012-FE04 | 0505610202401 |
|---------------------|------------------|---------------|
| | | |

KY 1020 (NATIONAL TURNPIKE) SIGNAL AT THE INTERSECTION OF KY 1020 AND CS 1131F (TOLLS ROAD) SIGNS-LIGHTING-SIGNALS, A DISTANCE OF .1 MILES.

| Project Line No | Bid Code | DESCRIPTION | Quantity | Unit |
|--------------------|------------|--|----------|------|
| 0180 | 02562 | TEMPORARY SIGNS | 183.00 | SQFT |
| 0185 | 02650 | MAINTAIN & CONTROL TRAFFIC - (JEFFERSON KY 1020) | 1.00 | LS |
| 0190 | 02775 | ARROW PANEL | 3.00 | EACH |
| 0195 | 04820 | TRENCHING AND BACKFILLING | 80.08 | LF |
| 0200 | 04845 | CABLE-NO. 14/7C | 2,450.00 | LF |
| 0205 | 04886 | MESSENGER-15400 LB | 375.00 | LF |
| 0210 | 04932 | INSTALL STEEL STRAIN POLE | 4.00 | EACH |
| 0215 | 20093NS835 | INSTALL PEDESTRIAN HEAD-LED | 4.00 | EACH |
| 0220 | 20188NS835 | INSTALL LED SIGNAL-3 SECTION | 6.00 | EACH |
| 0225 | 20266ES835 | INSTALL LED SIGNAL- 4 SECTION | 1.00 | EACH |
| 0230 | 20390NS835 | INSTALL COORDINATING UNIT | 1.00 | EACH |
| 0235 | 21743NN | INSTALL PEDESTRIAN DETECTOR | 4.00 | EACH |
| 0240 | 23157EN | TRAFFIC SIGNAL POLE BASE | 18.00 | CUYD |
| 0245 | 23222EC | INSTALL SIGNAL PEDESTAL | 2.00 | EACH |
| 0250 | 24528ED | TETHER WIRE | 375.00 | LF |
| 0255 | 24900EC | PVC CONDUIT-1 1/4 IN-SCHEDULE 80 | 60.00 | LF |
| 0260 | 24901EC | PVC CONDUIT-2 IN-SCHEDULE 80 | 80.08 | LF |
| 0265 | 24908EC | INSTALL SIGNAL CONTROLLER-TY ATC | 1.00 | EACH |
| 0270 | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | 3.00 | EACH |
| 0275 | 26120EC | INSTALL RADAR ADVANCE DETECTOR TYPE B | 2.00 | EACH |
| 0280 | 02569 | DEMOBILIZATION | 1.00 | LS |

Contract ID: 244403 Page 39 of 81

MATERIAL SUMMARY

| CONTRACT ID: 244403 | 056GR24T012-FE04 | 0505616942401 |
|---------------------|------------------|---------------|
| | | |

KY 1694 (SLEEPY HOLLOW ROAD) SIGNAL AT THE INTERSECTION OF KY 1694 AND CS 2558C (NORTON COMMONS RD) SIGNS-LIGHTING-SIGNALS, A DISTANCE OF .03 MILES.

| Project Line No | Bid Code | DESCRIPTION | Quantity | Unit |
|--------------------|------------|--|----------|------|
| 0005 | 02562 | TEMPORARY SIGNS | 183.00 | SQFT |
| 0010 | 02650 | MAINTAIN & CONTROL TRAFFIC - (JEFFERSON KY 1694) | 1.00 | LS |
| 0015 | 02671 | PORTABLE CHANGEABLE MESSAGE SIGN - (PURCHASE AND SUPPLY) | 2.00 | EACH |
| 0020 | 02775 | ARROW PANEL | 3.00 | EACH |
| 0025 | 04820 | TRENCHING AND BACKFILLING | 60.00 | LF |
| 0030 | 04845 | CABLE-NO. 14/7C | 2,300.00 | LF |
| 0035 | 04886 | MESSENGER-15400 LB | 850.00 | LF |
| 0040 | 04932 | INSTALL STEEL STRAIN POLE | 4.00 | EACH |
| 0045 | 20093NS835 | INSTALL PEDESTRIAN HEAD-LED | 8.00 | EACH |
| 0050 | 20188NS835 | INSTALL LED SIGNAL-3 SECTION | 10.00 | EACH |
| 0055 | 20390NS835 | INSTALL COORDINATING UNIT | 1.00 | EACH |
| 0060 | 21743NN | INSTALL PEDESTRIAN DETECTOR | 8.00 | EACH |
| 0065 | 23157EN | TRAFFIC SIGNAL POLE BASE | 17.00 | CUYD |
| 0070 | 23222EC | INSTALL SIGNAL PEDESTAL | 2.00 | EACH |
| 0075 | 24900EC | PVC CONDUIT-1 1/4 IN-SCHEDULE 80 | 60.00 | LF |
| 0080 | 24908EC | INSTALL SIGNAL CONTROLLER-TY ATC | 1.00 | EACH |
| 0085 | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | 2.00 | EACH |
| 0090 | 02569 | DEMOBILIZATION | 1.00 | LS |

JEFFERSON COUNTY 056GR24T012-FE04



COUNTY OF ITEM NO.

JEFFERSON N/A

KY 1694 (Sleepy Hollow Road) at CS 2558C (Norton Commons Blvd)





JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 Page 41 of 81 Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS TRAFFIC SIGNAL ESTIMATE OF OUANTITIES MEASUREMENT, CONST, AND MISC NOTES INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLICE MOUNTED, THE OLD MOUNT OF A SHORD MOUNTED BACKES, LEASH OF WOLKING BRACKES, ESKNOR GABLES, INTERFACE BOXES, LEASH OF MOUNTED BY INTERFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A SHOLTER SHALL CONTOLLER INTERFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A SHALL BE INTERFACE ASSEMBLY. RADAR PRESENCE DETECTION SYSTEM, RADAR PRESENCE DETECTION SYSTEM, RADAR MANUFACTURERS INSTRUCTIONS. AFTER THE DETECTOR IS INSTALLED AND BEFORE THE INTERPRESENTATIVES TO SCHEDULE OF SHALL CORROLANT WITH A SETTLE AND STALLE BY A THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTION BEFORE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND CONNECTION BEFORE CHECK TO VERIFY THAT ALL WIRING IS CORRECTLY INSTALLED AND OFFICE ABOUT SHALL PROPISE A BUSINES. THE CONTRACTOR SHALL PROPISE AND OPERATORS AT THIS TIME FOR FINAL AMINING OF THE SENSORS. THE CONTRACTOR SHALL PROPISE AND CALLIBATION. THE CONTRACTOR SHALL PROPISE AND CALLIBATION. THE CONTRACTOR SHALL PROPISE AND CALLIBATION. THE SETUP PROCESS SO THAT FUTURE INSTALLATIONS MAY BE COMPLETED WITHOUT ASSISTANCE FROM OTHERS. JTEM NO. **JEFFERSON** INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE OLDARITY AS EACH INDIVIDUAL INIT TINSTALLED. THE DEPARTMENT WILL NOT MEASURE THE CONGECTE BASE, MOUNTING THE CABIRT, CONNECTING THE SIGNAL AND DEFECTIONS. EXCANATION, BACKFILLIN, EXPONDER, ANY MECESSARY POLE MOUNTING HEADWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES, INVOLVING UTILITY SECONDARY-PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK, THE DEPARTMENT WILL ASS NOT MEASURE CONCELTION AND MOUNTION COPPERATION. THE STORY OF THE PREPARENT WILL ASSON OF MEASURE CHANGENAL OF HIS ITEM OF MOUNT OF FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM ON MOUNT AND MEASURE CHANGEN THE MASSING FOR THE MEASURE CHANGEN AND INTELLING ELECTRICAL SERVICE CONDUCTORS, AND CREATER BASE, FUSEDING AND WILL CONSIDER THAN INCIDENTAL TO THIS ITEM OF WORK. COUNTY OF COUNTY OF JEFFERSON BY: C WEITZEL WEASUREMENT NOTES THAT ARE IN ADDITION TO SECTION 723 OJECT ŝ SPACING OR PITCH (TIES OR SPIRAL BAR SIZE 03.12 WIRING INSTALLATION. SEE TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE ALL CHARTS FOR WIRING TO SHOW CHANGES FOR EQUIPMENT GROUNDING. .21 WARNING TAPE. REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33: PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS ROMOMINALITHICK. BARS CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723 VERTICAL SLOPE" | DEPTH (FEET) | CROUND SLOPE | 2:1 GROUND | SOIL | ROCK | SOIL | ROC THAT ARE CONTRARY TO SECTION 835 SUBSECTION: 03.02 POLES AND BASES INSTALLATION. B) REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING: DRILLED SHAFT DATA DJAMETER (JN.) MAXIMUM SERVICE FORCES NOTES MAX SERVICE MOMENT (FT-KJPS) SUBSECTION: REVISION: SUBSECTION: REVISION: MATERJAL L. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROLECT ENGINEER AND THE ELECTRICAL CONTRACTORS FOREAMS FOR WITH PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERY DECKER WITH THE DIVISION OF TRAFFLO DEPEATIONS BY PHONE GOZ-728-8994/502-728-5556) OR EMAL IN KIM STAMPERON, COVARERY, COCKERRY, COON, CREATON, CREATON, CREATON, COON, CREATON, CREATON THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT VITES DIVISION FO EDUPMENT WAREHOUSE VESTS MILLINGNO BOLLEVARD, FRANKFORT, KA WAS AN FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELEASE. FALLOWED FOR MATERIAL RELEASE. FALLOWED FOR MATERIAL RELEASE. DISTRIBUTE MATERIALS PROCEDURES MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON MARIYAL. ADD SENTENCE TO SECTION 835.17 ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501". THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BLD AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS, SUBMISSIONS OF A BLD WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED. INSTALL STEEL STRAIN POLE

INSTALL STEEL STRAIN POLE

INSTALL SIGNAL-3 SECTION LED

INSTALL COORDINATING UNIT

INSTALL PEDESTRAIN DETECTOR

TRAFIC SIGNAL POLE BASE

INSTALL SIGNAL PEDESTAL

PVC CONDIT - 11-A INH - SCHEDULE 80

INSTALL SIGNAL CONTROLLER-TY ATC

INSTALL SIGNAL CONTROLLER-TY ATC

INSTALL SIGNAL CONTROLLER-TY ATC THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT BEDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 723, AND 112 FOR MEASUREMENT AND OTHER DETALLS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING. MAINTAIN & CONTROL TRAFFIC (52) TRENCHING AND BACKFILLING ESTIMATE OF QUANTITIES DEMOBILIZATION (1.52) CABLE-NO. 14/7C MESSENGER-15400 LB ITEM DESCRIPTION FLASHING ARROW 2562 2569 2650 2775 2775 4845 4845 4932 20093NS335 2018NS335 2018NS335 2018NS335 2018NS335 23222EC 24900EC 24908EC 26119EC 23157EN CODE

7-25-2022

wer inRoads v8.II.9.397 E-SHEET NAME:

DATE PLOTTED: July 26, 2023

TRAFFIC SIGNAL

TOTAL UNITS

SO FT LP SUM LP SUM

3 60 2,300 850

EACH

EACH

EACH LIN FT EACH EACH

FILE NAME: C:/PWWORK/KYTC.CHARLES.WEITZEL/D225i200/ALL SIGNAL STANDARDS.DGN

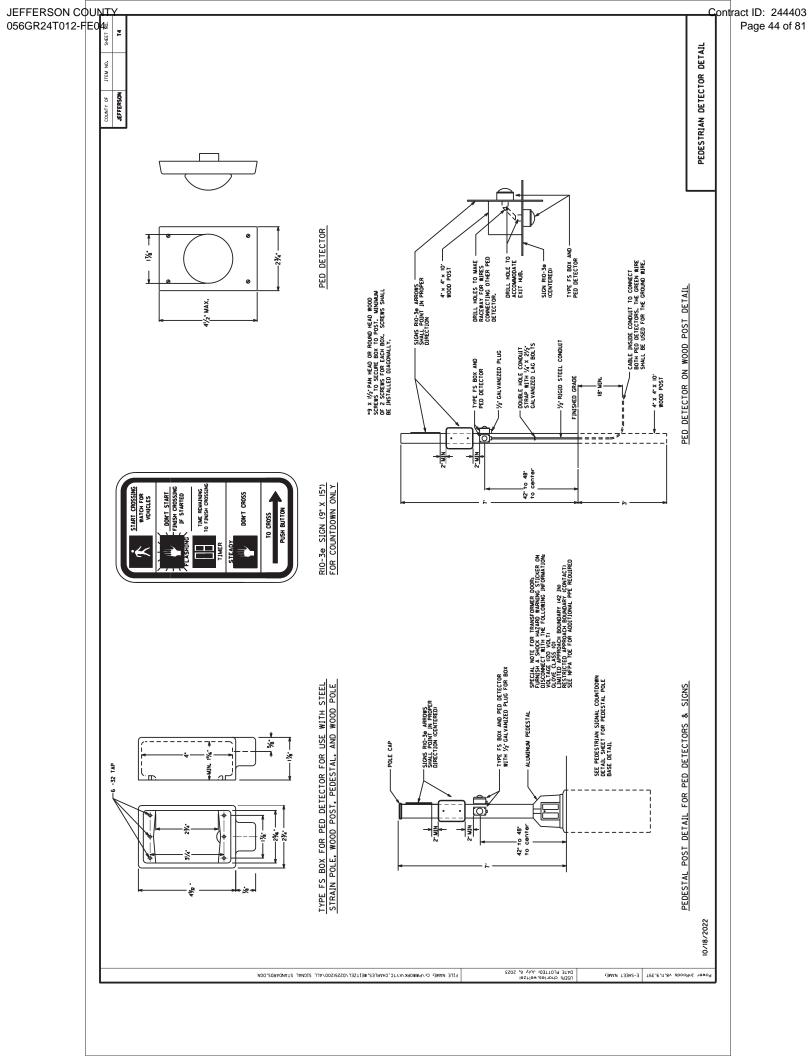
EACH EACH EACH EACH CU YD

2 - 8 - 2 - 2

Page 42 of 81

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 DETAILS 3. OR 6. FROM BOTTOM FINISHED GRADE TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT (ITEM NO. COUNTY OF JEFFERSO JUNCTION BOX INSTALLATION FOR Þ .92 ξ JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS 50. 52. · × JUNCTION BOX DIMENSIONS 27. 2 30 MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED
JUNCTION BOX 24-23. è .96 GRADATION SIZE — NO. 57 AGGREGATE GRADATION SIZE — NO. 57 AGGREGATE TYPE A TYPE B TYPE C 9" OR 12" FROM FIBER FABRIC TYPE IV BOTTOM JUNCTION BOX FIBER FABRIC TYPE IV BUSHINGS 3. OR 6. FROM BOTTOM CONCRETE CABLE MARKERS JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING CKT "I CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL GROUNDING DETAIL DEPTHS SHOWN FOR CONDUIT AND OUTGE CABLE ARE MINIMUMAS. CONTRACTOR SHALL FLACE AND CONTRACTOR SHALL IN SHAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER, CONDUCTOR INSTALLATIONS
CONDUIT SMALL BE EXPOSED
FROM BOTTOM OF BOX AND
SNALL BE AT LEAST B INCHES
FROM THE BOTTOM OF THE
JUNCTION BOX LID. RJGJD STEEL CONDUJT GRADATION SIZE --NO. 57 AGGREGATE JUNCTION BOX 4 AWG SOLID BARE COPPER CONDUCTOR EARTH CONDUITS) AND COVER PLATE WITH
-- WEATHER RESISTANT
GASKET DUCTED CABLE ARNING TAPE CABLE, TRENCH **^** BACKFILL CONDUIT ABOYC GROUND BOX SALLE BE FABRICATED FROM MINIMAL IZ CALIGE STEEL AND CALIAMETER CALIAME Ò ABOVE GROUND BOX SPARE PLUG(FOR TEST/PIPE PLUG (FOR SPARE CONDUITS)-CAPPED ON BOTH ENDS FJNJSHED GRADE TEST/PIPE FOUR (4) SCREWS MINIMUM FJNJSHED GRADE 3/13/2017 FILE NAME: C:\PWWORK\KYTC.CHARLES.WEITZEL\D2251200\ALL SIGNAL STANDARDS.DGN USER; charles, weltzel DATE PLOTTED; July 6, 2023 FELG. 11.8v aboodn 1 - 9woq

Page 43 of 81



JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 -(6) = 6 VERTICAL REINFORCING BARS EQUALLY SPACED - 3 TIE OR SPIRAL BARS TO BE 12-ON CENTER STUB HEIGHT MEASUREMENT NU I ELDESTAL BASE DOOR SHALL HAVE
A 4 BY 6 SHOCK HAZAROW MANNIO, STICKER
IF SMALLER TRANSFORMER BASE 15 INSTALLED
TOO BY A 2 F 8 TINSTEALS, INSTALLED
TOP OF THE DOOR. HE STICKER SHALL BE
TOO FT HE DOOR. HE STICKER SHALL BE
OFF CARROW THE STICKER SHALL BE
WITH AGOT THICKNESS, WITH UW WHITH
WIS 3T PRESSURE SENSITIVE ADHESINE
INCIDENTAL FOOT HIS SHALL BE
INCIDENTAL FOOT HE SANCH BE
INCIDENTAL FOOT HE SANCH BE
INCIDENTAL TO THE PROJECT.
FUNNIS A SHOCK HAZARO WARNING
FOLLOWING INFORMATION
CLUSE CLASS (10)
CLOVE CLASS (10)
CLUNE CLASS (10)
THE STICKER ON UT)
SEE INFORMATION THE HEST
CLOVE CLASS (10)
FRESTRICTED APPROACH BOUNDARY (CONTACT)
SEE NFPA 70E FOR ADDITIONAL PPE REQUIRED DETAIL 2 BENDING DETAIL FOR *3 TIE BARS GROUND LINE - 3° CLR PEDESTRIAN SIGNAL COUNTDOWN ITEM NO. STUB OF TRANSFORMER BASE USE 15-DJAMETER BASE JF KYTC SUPPLIES A SMALLER PEDESTAL TRANSFORMER BASE THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE. 1-3-COUNTY OF JEFFERSO PEDESTAL POLE BASE DETAIL -GROUND ROD FOR PEDESTAL POLE 4" MAX. V.-SPARE RIGID STEEL
COMOUNT, STUBBED OUT
THREADED NAM CAPPED
ON BOTH ENDS.
N.-SCHEDULE 80 PVC.
N.-SCHEDULE 80 PVC.
SCHEDULE 80 PVC.
SCHEDULE 80 PVC.
PVC.
SCHEDULE 80 PVC.
COMOUNT STEEL
COMOUNT STEE -GROUNDING CONDUCTOR - I' CHAWFER CONCRETE 9 SUPPORT SPECIAL NOTE FOR THE TRANSFORMER BASE: FUSED CONNECTOR KITS SHALL BE INSTALLED FOR ALL IZO VOLY WIRNG INARGROMER BASES. THEN WILL OWLY BE NEEDED FOR PEDESTRAIN HEADS AND SIGNALS HEADS. PEDESTRAIN DETECTORS DO NOT REQUIRE FLUSED CONNECTOR KITS. CONTRACTOR CAN USE ONE KIT FOR A COMMON NEUTRAL FOR ALL DEVICESIN THE TRANSFORMER BASE. THERE SHALL BEA METAL LUG INSTALLED IN THE NEUTRAL WIRE KIT INSTEAD OF A FUSE ASSE. -15 or 2'— - ½ × 4 STAINLESS STEEL
LAG BOLTS (2 REOUJRED)
& STAINLESS STEEL
BANDING TAPE
3 = 4 × . O3*
(2 REOUJRED) BREAKAWAY YLINE CABLES THE WOOD POLE SHALL BE INSTALLED SO THAT EACH BUTTON IS NO WORE THAN 10° FROM THE PAVED SIDEWALK OR SHOULDER. CONNECTOR SCREW 3- CLR PED DETECTOR STAINLESS STEEL WITH 1/2 GALV, SCREWS FOR PLUG FOR BOX THE ATTACHBENT OF THE FS BOX. MSTALL 10' SECTIONS OF 3' RIGID STEEL CONDUIT FOR SIGN WOUNTING, USE FOUR "14 X 3' STAINLESS STEEL ROUND HEAD WOOD SCREWS MACHING COMOUNTS FOR WOUNTING SIGN TO POLE. WOOD POLE DETAIL FOR PED DETECTORS AND PED SIGNALS "Y" TYPE RUBBER INSULATOR SIDEWALK/SHOULDER RECEPTACLE HOUSING 1/2- RIGID STEEL CONDUIT SIGNS RIO-36 ARROWS SHALL POINT IN PROPER DIRECTION (CENTERED) - Bracket Shall Be Positioned in order to avoid damage From Vehicles LOAD SIDE ASSEMBLY BREAKAWAY POINT LINE SIDE ASSEMBLY TYPE HEB-JW-RYC CONNECTOR SHOWN *9 x 1/2* STAINLESS STEEL PAN HEAD OR ROLMD HEAD WOOD SCREWS SHALL BE USED TO SECURE TYPE FS BOX TO POLE. A MINIMAM OF 2 SCREWS PER BOX, INSTALED DIACOMALIT, SMALL BE USED. 1/4" RIGID STEEL CONDUIT DETAILS OF TYPE HEB-JW-RYC CONNECTOR BREAKAWAY FUSE CONNECTOR KIT WOOD POLE ¥o. 6 AMPIGAGO VAC) CARTRIDGE FUSE **-(O)** 2- MIN. FINAL GRADE to 48" center \$ ¢ LOAD TERMINAL (SCREW TYPE) INSTALL DOUBLE HOLE-CONDUIT STRAP WITH /4 x 2½-6 CALV. LAG BOLTS. MAXIMUM SPACING SHALL NOT EXCEED 4. THE PEDESTAL SHALL BE INSTALLED SO THAT EACH BUTTON IS NO MORE THAN 10-FROM THE PAVED SIDEWALK OR SHOULDER. LOAD CABLE THERE SHALL BE AT LEAST A FEET OF MEABLE SIDEMAKE IF A PORTION OF THE PEDESTAL BASE IS INSTALLED IN ALLE SIDEMAK. F. INSTALLED IN A SIDEMAK, THE PEDESTAL BASE SHALL BE INSTALLED ITHE PEDESTAL BASE SHALL BE INSTALLED IFLUSH WITH THE GRADE. INSTALL TWO STAINLESS STEEL SCREWS FOR THE ATTACHMENT OF THE FS BOX. SIGNS RIO-36 ARROWS
SHALL POINT IN PROPER
DIRECTION CENTERED).
INSTALL TWO STAINLESS
SIEEL SCREWS FOR EACH
PEDESTRIAN SIGN. LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. PERESTAL POLE CROUND - GROUND WIRE SHALL COME FROM THE GROUND INDOMESTING TO A THE GROUND INDOMESTING TO A THE GROUND INDOMESTING TO A THE TRANSFORMER BASE AND THEN TO EACH RIGID SELECT GROUND SOSSIALL BE 24 FROM THE CONCRETE POLE BASE. ALL GROUND FOODS SHALL BE 24 FROM THE CONCRETE POLE BASE. CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO THE TRANSFORMER BASE. ALUMINUM PJPE SIDEWALK/SHOULDER PED SIGNALS TYPE FS BOX & PED DETECTOR WITH 1/2 CALV. —PLUG FOR BOX CONTRACTOR SMALL DRILL HOLES IN THE PIPE AND THE TYPE ES BOX NOT EXCEDING V₂Y, HOAPETER. CONTRACTOR SMALL USE A ROUND FILE TO REMOVE ALL BURNS AND SHARD FOLDS FROM THE HOLES, MIRES SMALL BE PROTECTED MITH REAT SHEMIN CHANNING OF VINT. THE WHERE THEY PASS THROUGH THE HOLES. PEDESTAL POLE DETAIL
FOR PED DETECTORS
AND PED SIGNALS
GROUNDING REQUIREMENTS: SEE PEDESTAL POLE BASE DETAIL FOR CONCRETE BASE DETAIL AND GROUNDING DETAILS MAX. 42" to 48" to center FINAL GRADE STAIL TWO
STAIL TWO
STAILESS STEEL
SCREWS FOR
THE ATTACHMENT
OF THE FS BOX. ALL GROUNDING AND SPARE CONDUIS THAT ARE INSTALLED IN THE COMPRETE PEDESTAL POLE BASE ARE INCIDENTAL TO BID ITEM "23222EC: THAIS INCIDENTS AUTHORING A MINIMAR OF A HORGE OF CONDUIT PASST THE IDGG OF THE CONGRETE BASE. AN ARROW SHALL BE ETICHED INTO THE TOP THE PUBLISH BASE TO SHOW LOCATION AND DIRECTION OF THE SPARE (CONDUIT.) SIGNS RIO-36 ARROWS SHALL POINT IN PROPER DIRECTION CENTERED. — INSTALL TWO STAINLESS STEEL SCREWS FOR EACH PEDESTRIAN SIGN. THE POLE SHALL BE INSTALLED SO THAT EACH BUTTON IS NO MORE THAN 10*FROM THE PAVED SIDEWALK OR SHOULDER. SIDEWALK/SHOULDER THERE SHALL BE A 2.5' (MJN.) X 4' (MJN.) CLEAR SPACE AT ALL PEDESTRIAN BUTTONS PER SECTION OF PROWAG REQUIREMENTS. STAINLESS STEEL BANDING TAPE %-x .03" PED SJGNALS STAINLESS STEEL BANDING TAPE % x .03 'C REOUIRED) TYPE FS BOX & PED DETECTOR WITH 1/2 GALV. PLUG FOR BOX. STEEL STRAIN POLE DETAIL
FOR PED DETECTORS
AND PED SIGNALS MAX \Box 42" to 48" to center CRADE 10/18/2022 USER; charles, weltzel DATE PLOTTED; July 6, 2023 FELLINGUA TERROR VB.II.9.397 E-SHEET NAME: FILE NAME: C:\PWWORK\KYTC.CHARLES.WEITZEL\D22Si200\ALL SIGNAL STANDARDS.DGN

Page 45 of 81

Page 46 of 81

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 POLE MOUNTED CONTROLLER 1,25* PVC SCHEDULE 80 IUNLESS OTHERWISE NOTED) PEDESTRIAN PUSH BUTTON VIDEO DETECTION ZONE D5 WILL PROVIDE RADAR DETECTION EQUIPMENT. CONTACT DAVID HUBER FOR PICKUP & 1F ASSISTANCE IS NEEDED WITH INSTALLATION. CELL PHONE; 802-580-8883 STEEL STRAIN POLE PEDESTRIAN HEAD TRAFFIC SIGNAL PLAN SHEET KY 1694 @ NORTON COMMONS / STONE SCHOOL ROAD MAX TETHER TENSION (LBS) 3258 2428 VIDEO CAMERA 2132 A TETHER CABLE SHALL BE INSTALLED BETWEEN ALL POLES, THE BOTTOM OF ALL SIGNAL HEADS SHALL BE ATTACHED TO THE TETHER CABLE, SJGNAL HEAD PEDESTAL LEGEND ALL MESSENGER IS 15,400 LB COUNTY OF JEFFERSON 0 X ⊚ 1 \bigcap_{1} Q M CALC, SERV, MOMENT 158 kip-ft ß æ 183 kip-f† 205 kip-ft 171 kip-f† 28' 30' 27' 30.5' 30' 30' 28.5' INSTALL STEEL STRAIN POLE 18".
NATALL I HADAR DETECTOR 192".
ON POLE 18".
INSTALL PEDESTRIAN PEDETAL 18".
INSTALL 2 PED HEADS & 2 PED DETECTORS
ON PED POLE 18". C-B C-D D-A HISTALL STREAN POLE "A"
HISTALL TYPE ATT CONTROLLER IN
HORDEL 33P POLE MONT CABINET
HISTALL ROUTER, ANTEWA,
HISTALL ROUTER, ANTEWA,
HISTALL ROUTER, ANTEWA,
HISTALL STALLON SHEETS
HISTALL PEDGSTRIAN PEDETAL
HISTALL PEDGSTRIAN PEDGTAL
HIST 35, POLE LOCATIONS NORTON COMMONS 1 OUTPUT FILE CONNECTION FOR FYA ON PHASE 7 FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS 13 ©4 @4 @4 OUTPUT FILE CONNECTION FOR FYA ON PHASE J PHASE 1 RED PHASE 1 YELLOW PHASE 1 GREEN -INSTALL STEEL STRAIN POLE "C" ON POLE "C". INSTALL 2 PED HEADS & 2 PED DETECTORS ON POLE "C" **€** 7-CONDUCTOR THREE-SECTION FYA HEADS -INSTALL STEEL STRAIN POLE 'D'
-INSTALL I RADAR DETECTOR 'RI'
ON POLE 'D'
-INSTALL 2 PED HEADS & 2 PED DETECTORS
ON POLE 'D' RED ARROW R
STEADY YELLOW ARROW O
FLASHING YELLOW ARROW B
NOT USED
NEUTRAL
NEUTRAL
NOT USED
NOT USED
NOT USED STONE SCHOOL RD CONNECTION 1 1 COMMECTING
SH 7.8 28
SH 7.8 28
SH 8.48
SH 5.8 48
SH 5.8 48
SH 6.8 9PED DETECTOR
PH 7.8 1 PED DETECTOR ALL COUNTDOWN
PEDESTRIAN SIGNALS SIGNAL HEADS RADAR DETECTION SCHEDULE

DOP PHASE SLOT CHANNEL SIZE STOP BAR 66 WIRING SCHEDULE 12×30 HEAD = 2A, 2B, 4A 4B, 6A, 6B, 8A, 8 8B **(** CONTROLLER
CONTROLLER PHASE SLOT 4 4 8 8 9 4 8 USER: charles, weltzel DATE PLOTTED: July 26, 2023 FILE NAME: C:PWWORKKYTC_CHARLES:WEITZEL/D2251200/ALL SIGNAL STANDARDS.DGN

Page 47 of 81

Contract ID: 244403 Page 48 of 81

Tim Tharpe - Director Phone (502) 564-3020 FAX (502) 564-7759

DIVISION OF TRAFFIC OPERATIONS

PROJECT MATERIALS RELEASE FORM FOR SIGNAL AND LIGHTING

Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.

Item Number: n/a
County: Jefferson

Description: Signals: KY 1694 at Norton Commons/ Stone School Rd

| Cabinets | Master code | |
|----------|--------------|--|
| | 1 T-01-0010 | Pole Mounted 336 Cabinet |
| | 1 T-01-0105 | ATC Controller |
| | 1 T-01-0106 | 1C w/Maxtime (this should go with item ATC controller) |
| | 1 T-01-0501 | Conflict Monitor, Model 2018 |
| | 3 T-01-0510 | Isolator, Model 242 (1 for 2070, plus for ped detector and railroad) |
| | 10 T-01-0700 | Load Switches |

| Signals | | |
|---------|-----------|-----------------------------|
| 10 | T-02-0009 | Siemens 3 Section Signal |
| 10 | T-02-0032 | Siemen 3 section backplate |
| 8 | T-02-0090 | Pedestrian signal housing |
| 2 | T-02-0300 | LED Module 12" red arrow |
| 4 | T-02-0310 | LED Module 12" yellow arrow |
| 8 | T-02-0330 | LED Module 12" red ball |
| 8 | T-02-0340 | LED Module 12" yellow ball |
| 8 | T-02-0350 | LED Module 12" green ball |

| Special items | Special items | | |
|---------------|---------------|---|--|
| 1 | | Radar (PROVIDED BY D5) | |
| 1 | T-02-0504 | Router (this includes power supply/antenna/cabling) | |
| 2 | T-02-0660 | Pedstl.top mntg.bkt Two-way | |
| 1 | T-02-0670 | Pedestal | |
| 8 | T-06-0710 | Ped Detector Pole Mount FSA Box | |
| 8 | T-06-0730 | Ped Button w/o Plunger | |
| 8 | T-17-0015 | 9 X 15 Countdown Ped Sign DBL Sided | |

| Poles | |
|-------------|---------------------------------|
| 4 T-04-0030 | Steel Strain Pole 32 foot |
| 0 T-02-0330 | LED Module 12" red ball |
| 0 T-02-0340 | LED Module 12" yellow ball |
| 0 T-02-0350 | LED Module 12" green ball |
| 0 T-02-0365 | LED Countdown Pedestrian Module |

| Special items | | |
|---------------|---|--------------------------|
| 0 T-02-0400 | Video Detection System Camera Detector, SP | # of left turns put here |
| 0 T-02-0401 | Camera Mounting System | |
| 0 T-02-0500 | MDS Radios 9810 | |
| 0 T-02-0504 | Router (this includes power supply/antenna/cabling) | |
| 0 T-02-0507 | Ethernet/Serial Data Radio | |
| 0 T-02-0510 | Antenna 6 db omni | |
| 0 T-02-0520 | Antenna 10 db yagi | |
| 0 T-02-0530 | Antenna 9 db omni | |
| 0 T-03-0230 | Jumper 3' N-N RG-58 | |
| 0 T-03-0240 | Jumper 60' N-N RG-213 | |
| 0 T-06-0800 | Surge Protector for Radio | |
| 0 T-09-0410 | Sign Hanger for 48" signs | |
| 0 T-09-0415 | 30 X 36 through 36 X 36 sign hanger (New) | |
| 0 T-02-0650 | Pedstl.top mntg.bkt One-way | |
| 0 T-02-0660 | Pedstl.top mntg.bkt Two-way | |
| 0 T-02-0661 | Post Top for Pedestal (each) | |
| 0 T-02-0670 | Pedestal | |
| 0 T-06-0710 | Ped Detector Pole Mount FSA Box | |
| 0 T-06-0730 | Ped Button w/o Plunger | |
| 0 T-17-0015 | 9 X 15 Countdown Ped Sign DBL Sided | |

Contract ID: 244403 Page 49 of 81

Tim Tharpe - Director Phone (502) 564-3020

DIVISION OF TRAFFIC OPERATIONS

| Poles | |
|-------------|---------------------------|
| 0 T-04-0010 | Steel Strain Pole 28 foot |
| 0 T-04-0020 | Steel Strain Pole 30 foot |
| 0 T-04-0030 | Steel Strain Pole 32 foot |
| 0 T-04-0040 | Steel Strain Pole 34 foot |
| 0 T-04-0051 | Steel Strain Pole 36 foot |
| 0 T-04-0054 | Steel Strain Pole 38 foot |
| 0 T-04-0055 | Steel Strain Pole 40 foot |

| 0 1-04-0054 | Steel Strain Pole 36 100t | | |
|---------------------------------------|---|--------------------|-------------------|
| 0 T-04-0055 | Steel Strain Pole 40 foot | | |
| | | | |
| REQUIRED | | | |
| | | | |
| Electrical Contractor Name | | | |
| | | | |
| Electrical Contractor Supervisor | | Contact numb | er for Supervisor |
| | | | |
| Project Engineer | | Contact number for | Project Engineer |
| , 3 | | | <u></u> |
| Project Engineer attests that the men | tioned contractor is the actual electrical contractor on th | is project | |
| , , | | | |
| Signature of Project E | ingineer or Decignee | | |
| Signature of Project E | ingineer or Designee | | |

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS JEFFERSON COUNTY

COUNTY OF ITEM NO.

JEFFERSON N/A

KY 913 (Blankenbaker Parkway) at I-64 Eastbound On-Ramp





JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 Page 51 of 81 Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS TRAFFIC SIGNAL ESTIMATE OF OUANTITIES MEASUREMENT, CONST, AND MISC NOTES

| TRAF | F.IC 5.16 | MAL LOIM | IRAFFIC SIGNAL ESTIMATE OF COANTITIES | <u>_</u> | KI WID (BLANKE | |
|-------|------------------|------------|--|----------|----------------|-----------------------------|
| TOTAL | TOTAL UNITS CODE | CODE | ITEM DESCRIPTION | | | |
| 183 | SO FT | 2562 | SIGNS | | | |
| - | LP SUM | 2569 | DEMOBILIZATION (1,5%) | | | |
| - | LP SUM | 2650 | MAINTAIN & CONTROL TRAFFIC (52) | | MEASUREMENT | MEASUREMENT NOTES THAT ARE |
| 2 | EACH | 2775 | FLASHING ARROW | | | |
| 20 | LIN FI | 4820 | TRENCHING AND BACKFILLING | | INSTALL SIGN | NSTALL SIGNAL CONTROLLER |
| 320 | LIN FT | 4844 | CABLE-NO, 1475C | | MFASURE THE | MEASURE THE CONCRETE BASE. |
| 150 | LIN FT | 4845 | CABLE-NO. 14/7C | | AND DETECTO | IND DETECTORS, EXCAVATION, |
| 410 | LIN FI | 4886 | MESSENGER-15400 LB | | MOUNTING HA | MOUNTING HARDWARE, ELECTRIC |
| 2 | EACH | 4932 | INSTALL STEEL STRAIN POLE | | REOUIRED BUI | REQUIRED BUILDING FEES INVO |
| 2 | EACH | 20188NS835 | INSTALL SIGNAL-3 SECTION LED | | DEDADIMENT AND | PATMENI AND WILL CONSIDER |
| _ | EACH | 20266ES835 | INSTALL SIGNAL-4 SECTION LED | | AMPLIFIERS. | PEDESTRIAN ISC |
| _ | EACH | 20390NS835 | INSTALL COORDINATING UNIT | | FOR PAYMENT | OR PAYMENT AND WILL CONSI |
| 2 | EACH | 20408ES835 | INSTALL LED BEACON-12 IN | | WORK, THE DE | VORK, THE DEPARTMENT WILL |
| 6 | CU YD | 23157EN | TRAFFIC SIGNAL POLE BASE | | ELECTRICAL S | LECTRICAL SERVICE CONDUCTO |
| 8 | LIN FT | 2490IEC | PVC CONDUIT - 2 INCH - SCHEDULE 80 | | AND WILL CO | AND WILL CONSIDER THEM INC. |
| _ | EACH | 24908EC | INSTALL SIGNAL CONTROLLER-TY ATC | | אום שור כס | NOTICE THEM THE |
| _ | FACH | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | | INSTALL RAD | INSTALL RADAR PRESENCE DETE |

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT 110N, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS SPECIAL SEE SECTION 706, 123, AND 112 FOR MASSINEMENT AND OTHER DETALLS, SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING.

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILLARIZED WITH EXISTING CONDITIONS, SUBMISSIONS, OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED. FILE NAME: C:\PWWORX\KYTC_CHARLES.WEITZEL\D2258381\ALL SIGNAL STANDARDS.DGN

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT WITS DIVISION FOR EDUPMENT MAREHOUS US WILLKINON BOLLEVARO, FRANKFORT, KA WAGEZ, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELAKE. FALLOWET TO FOLLOWED FOR SELVEN FOR METERIAL TO FOLLOW THE FOLLOWED MAY RESULT IN LONG DELAYS OR REFUSAL TO DISTRIBUTE MATERIALS UPON ARRIVAL.

L. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTORS FOREAMN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFLO COPERATIONS BY PROME G20-782-6934/502-782-5536 OR WITH THE DIVISION OF TRAFFLO COPERATIONS ON PROME G30-782-6936 OR WITH THE DIVISION OF TRAFFLO COPERATIONS ON PROME G30-782-6936 OR WALL CAND. THE MATERIALS.

CONTRACTOR SHALL EARLY THE PRODUCT THE WARFHOUSE OF MATERIALS.

CONTRACTOR SHALL EARLY THE WARFHOUSE AT KIM STAMPERROW'S GOV AND SHALL KIM, STAMPERROW'S GOV AT LEAST THO (2) WORKING DAYS PRIOR TO ARRIVAL THE WARFHOUSE OF THE MATERIALS OF THE MATERIAL STAMPERROW'S GOV AT THE SIGNAL SYSTEM BRANCH OF THE DIVISION OF TRAFFLO POPERATIONS ON THE MATERIAL AS CONTACT THE SIGNAL SYSTEM BRANCH OF THE DIVISION OF TRAFFLO POPERATIONS OF PHONE G30-782-543/502-782-543/708-787 OR EMAIL

ARRIVAL TO FALLITATE PROGRAMMING OF ROUTERS.

AL CONTRACTOR SHALL ARRIVE AT THE PREARRANGED DAYS THE FOR MATERIAL ARRIVAL THE FROUMENCE AT THE PREARRANGED DAYS THE FOR MATERIAL SHALL RAYS OF THE FREAKRANGED DAYS THE FROUMENCE DAYS THE FREAKRANGED DAYS THE FREAKRANGED DAYS THE FOR MATERIAL SHALL RAYS OF THE FREAKRANGED DAYS THE FREAK

ADD SENTENCE TO SECTION 835.17 ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0500". wer inRoads v8.II.9.397 E-SHEET NAME:

E IN ADDITION TO SECTION 723

JTEM NO.

COUNTY OF JEFFERSON

RAMP

Z 0

I-64EB

0

PKWY)

ENBAKER

LER TYPE ATC. THE DEPARTMENT WILL MEASURE
ASE, MOUNTING THE CABINET, CONNECTING THE SIGNAL
MOUNTING THE CABINET, CONNECTING THE SIGNAL
DIA BACKFILLING, ARSTORATION, ANY MECESSARY POLE
TIRIC SERVICE, ELECTRICAL INSPECTION FEES, AND
MACASURE COUNCETING THE INDUCTION TOPP
DER THEM INCIDENTAL TO THIS JIEM OF WORK, THE
SISOLATORS, LAAD SMITCHES, MODEL AGO MODEM CARD
SISOLATORS, CONDISTS, MICHORES, MODEL AND HIS JIEM OF
LIL ALSO NOT MEASURE THRMISHING AND INSTALLING
THEM ALSO MOUNTS, ANCHORES, METER BASE, FUSED
WINTORS, CONDUITS, AND CROUND WIRES FOR PAYMENT
MICHORATAL TO THIS TIEM OF WORK.

INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLICE MOUNTED RADAR PRESENCE SENOSM WOUTHING BRACKE, SENOSM CABLES, INTERFACE BOADS PRESENCE SENOSM WOUTHING BRACKE, SENOSM CABLES, INTERFACE BOAD THE SHALL. COMMETCHOS GUNNING BRACKE, SENOSM CABLES, INTERFACE BOAD THE SHALL. CADAR PRESENCE DETECTOR TYPE A SHALL SHALL SHALL SHALL SHALL DETECTOR THE A BUD ITHEN SHALL INCLUDE ALL LAGOR REQUIRED TO PROVIDE A ENGTITIONAL DETECTION SYSTEM, RADAR PRESENCE DETECTOR TYPE A SHALL BE WESTALLED AND REED IN COROPRACE THE DETECTOR TO SHALL BE WESTALLED AND REFORE THE DETECTOR TO SHALL SHALL CORORINATE WITH DISTRICT TRAFFIC INSTALLED AND REFORMENTATIVES IN CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRNO IS CORRECTLY INSTALLED AND CONNECTED BEFORE CHECOLUDING THE SELVEN PORK. REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OR SALES REPRESENTATIVE TO CONTRACTOR SHALL PROVIDE A BUCKTET TRUCK AND DEPARTOR SHALL PROVIDE A BUCKTET TRUCK SHALL PROVIDE A BUCKTET SHALL PROVIDE A BUCKTET SHALL SHA

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723

SUBSECTION: 03.02 POLES AND BASES INSTALLATION. B) REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING: MAXIMUM SERVICE

| | TIES | ᆫ | SIZE | 44444444444444444444444444444444444444 |
|--------------------|--------------|--|-----------|--|
| | | CAL BAF | TOTAL | 000000000000000000000000000000000000000 |
| | | VERTIC | SIZE | เมเนเนเนเนเนเนเนเนเนเนเนเนเน |
| | EET) | < 211 GROUND SLOPE 211 GROUND SLOPE" VERTICAL BARS | ROCK | กก ณ ว่าวาของององององ |
| 1 | | 2:1 GR0 | SOIL | 000-00-00-00-00-00-00-00-00-00-00-00-00 |
| ORILLED SHAFT DATA | DEPTH (FEET) | JND SLOPE | ROCK | nn n 1-1-1000000000000000000000000000000000 |
| DRILLED | | | SOIL | ო-ფიავე≕ <u>ეჳო</u> ⊏ფ <u>ე</u> ყეე ი იოა ი ი _ო |
| | | DIAMETER | (IN.) | ᡊᠣᡎᠣᡎᠣᡎᠣᡎᠣᡎᠣᡎᠣᡎ |
| FORCES | MAX SERVICE | MOMENT | (FT-KJPS) | C-CVANATO CONTOCO CONT |

03.2 WIRDLO INSTALLATION.
CHETTS TRAFFIC OPERATIONS WEBSITE FOR WORD DOCUMENT TO REPLACE ALL CHETTS FOR WIRDLO SHOW CHANGES FOR EQUIPMENT GROUNDING.

JEFFERSON COUNTY OF

> MATERIAL NOTES THAT ARE CONTRARY TO SECTION 835 SUBSECTION: REVISION:

.21 WARNING TAPE. REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33. PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (WOMINALITHICK.

7-25-2022

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 DETAILS 3. OR 6. FROM BOTTOM FINISHED GRADE TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT (ITEM NO. COUNTY OF JEFFERSO JUNCTION BOX INSTALLATION FOR Þ .92 ξ JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS 50. 52. · × JUNCTION BOX DIMENSIONS 27. 2 30 MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED
JUNCTION BOX 24-23. è .96 GRADATION SIZE — NO. 57 AGGREGATE GRADATION SIZE — NO. 57 AGGREGATE TYPE A TYPE B TYPE C 9" OR 12" FROM FIBER FABRIC TYPE IV BOTTOM JUNCTION BOX FIBER FABRIC TYPE IV BUSHINGS 3. OR 6. FROM BOTTOM CONCRETE CABLE MARKERS JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING CKT "I CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL GROUNDING DETAIL DEPTHS SHOWN FOR CONDUIT AND OUTGE CABLE ARE MINIMUMAS. CONTRACTOR SHALL FLACE AND CONTRACTOR SHALL IN 9 WAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER, CONDUCTOR INSTALLATIONS
CONDUIT SMALL BE EXPOSED
FROM BOTTOM OF BOX AND
SNALL BE AT LEAST B INCHES
FROM THE BOTTOM OF THE
JUNCTION BOX LID. RJGJD STEEL CONDUJT GRADATION SIZE --NO. 57 AGGREGATE JUNCTION BOX 4 AWG SOLID BARE COPPER CONDUCTOR EARTH CONDUITS) AND COVER PLATE WITH
-- WEATHER RESISTANT
GASKET DUCTED CABLE ARNING TAPE CABLE, TRENCH **^** BACKFILL CONDUIT ABOYC GROUND BOX SALLE BE FABRICATED FROM MINIMAL IZ CALIGE STEEL AND CALIAMETER CALIAMETER CALIAMETER AND CALIAMETER CAL Ò ABOVE GROUND BOX SPARE PLUG(FOR TEST/PIPE PLUG (FOR SPARE CONDUITS)-CAPPED ON BOTH ENDS FJNJSHED GRADE TEST/PIPE FOUR (4) SCREWS MINIMUM FJNJSHED GRADE 3/13/2017 FILE NAME: C:/PWWORK/KYTC_CHARLES.WEITZEL/D2258381/ALL SIGNAL STANDARDS.DGN USER; charles, weltzel DATE PLOTTED; July 26, 2023 FELS. 11.8v aboods 19.397 F. SHEET NAME:

Page 53 of 81

Page 54 of 81

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 BASE MOUNTED CONTROLLER TRAFFIC SIGNAL PLAN SHEET KY 913 (BLANKENBAKER PKWY) @ I-64 EB ON RAMP RADAR DETECTION ZONE ### 668° 668° STEEL STRAIN POLE D5 WILL PROVIDE RADAR DETECTION EDUIPMENT. CONTACT DAVID HUBER FOR PICKUP & FOR ANY ASSISTANCE NEEDED WITH INSTALLATION. CELL PHONE: 862-568-8883 RADAR SENSOR ALL INDICATIONS LE.D. ALL SIGNAL HEADS SHALL HAVE REFLECTIVE BACKPLATES SCALE 1" = 20 SIGNAL HEADS LEGEND COUNTY OF JEFFERSON HEAD . *** (** 0 A **(**5) (\gg) MAX TETHER TENSION (LBS) 2462 2462 A TETHER CABLE SHALL BE ATTACHED BETWEEN POLES. THE BOTTOM OF ALL SIGNAL HEADS SHALL BE ATTACHED TO THE TETHER CABLE S 55 CALC. SERV. MOMENI 240 kip-f† ALL MESSENGER IS 15,400 LB 234 klp-ft STEEL STRAIN POLES AII. HI. SPAN A-B - TO PROPOSED UTILITY SERVICE (ONLY UNDERGROUND CONDUIT) - RIGID STEEL CONDUIT BETWEEN METER AND DISCONNECT - 200 AMP METER EIGHI 36° CONCRETE BASE FOR Pole A 0 1 RIGIO STEEL CONDUIT INTO—CONTROLLER CABINET RIGID STEEL CONDUIT FOR SERVICE GROUNDING 60 AMP DISCONNECT SOUARE POST STRUCTURE POLE LOCATIONS ~@ .@ . 913 OUTPUT FILE CONNECTION FOR FYA ON PHASE 5 ΚY PHASE 5 RED
PHASE 5 YELLOW
PHASE 5 GREEN
PED YELLOW PHASE 6
WHJTE EDUPPENT GROUND GREEN
NOT USED
NOT USED
CONNECTOR SHALL CONNECT THE CONNECTOR LABELED '2PY APY BPY TO
CONNECTOR O'VO LISAGALE BERNOT THE CONNECTOR LABELED '2PY APY BPY TO
CONNECTOR O'VO LISAGALE BERNOT THE CONNECTOR LABELED '2PY APY CABINET
CONNECTOR O'VO LISAGALE BERNOT THE CONNECTOR O'COETHER
TO COETHER
T **⊕**4 分分 @4 FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REQUIREMENTS CONNECTING SH 1 SH 2A & 2B SH 6A, 6B, & 6C OUTPUT FILE CONNECTION FOR FYA ON PHASE I PHASE I RED PHASE I YELLOW PHASE I GREEN PED YELLOW PHASE 2 WHJTE RADAR DETECTION SCHEDULE.

DIST. FROM

OOP PHASE SLOT CHANNEL SIZE STOP BAR 1-64EB ON RAMP -INSTALL STEEL STRAIN POLE '8' -INSTALL I RADAR DETECTOR 'RI' ON POLE '8'. WIRING SCHEDULE ENDING SH 1 SH 2B SH 6A SIZE 6x30 BLUE PEG WHJTE WHJ GREEN WHJTE/TRACER ORIGIN CONTROLLER CONTROLLER CONTROLLER 7-CONDUCTOR FOUR-SECTION FYA HEADS CONNECTION CO RED ARROW RE STEADY YELLOW ARROW OR FLASHING YELLOW ARROW BL GREEN ARROW BL CABLE 1-*14/7C 1-*14/5C 1-*14/5C USER: charles weltzel DATE PLOTTED: October 24, 2023 FILE NAME: C:PWWORKKYTC_CHARLES:WEITZEL/D2258381/ALL SIGNAL STANDARDS.DGN E-SHEET NAME: 795.9.11.8v absoAnl nawo9

Page 55 of 81

Tim Tharpe - Director Phone (502) 564-3020 FAX (502) 564-7759

DIVISION OF TRAFFIC OPERATIONS

PROJECT MATERIALS RELEASE FORM FOR SIGNAL AND LIGHTING

Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.

Item Number: n/a
County: Jefferson

Description: Signals: KY 913 (BLANKENBAKER PKWY) @ I-64EB ON RAMP

| Cabinets | Master code | |
|----------|-------------|--|
| | 1 T-01-0020 | Base Mounted 332 Cabinet |
| | 1 T-01-0105 | ATC Controller |
| | 1 T-01-0106 | 1C w/Maxtime (this should go with item ATC controller) |
| | 1 T-01-0501 | Conflict Monitor, Model 2018 |
| | 1 T-01-0510 | Isolator, Model 242 (1 for 2070, plus for ped detector and railroad) |
| | 4 T-01-0700 | Load Switches |

| Signals | |
|-------------|---|
| 3 T-02-0001 | 1-section beacon backplate |
| 2 T-02-0009 | Siemens 3 Section Signal |
| 2 T-02-0032 | Siemen 3 section backplate |
| 1 T-02-0033 | Siemen 4 secton 12" signal (poly) |
| 1 T-02-0043 | Siemen 4-sec. straight signal backplate |
| 3 T-02-0080 | 12 inch red/yellowbeacon |
| 1 T-02-0300 | LED Module 12" red arrow |
| 2 T-02-0310 | LED Module 12" yellow arrow |
| 4 T-02-0320 | LED Module 12" green arrow |
| 2 T-02-0330 | LED Module 12" red ball |
| 2 T-02-0340 | LED Module 12" yellow ball |
| 2 T-02-0350 | LED Module 12" green ball |

| Special items | | | |
|---------------|-----------|---|--|
| 1 | | Radar (PROVIDED BY D5) | |
| 1 | T-02-0504 | Router (this includes power supply/antenna/cabling) | |

| Poles | |
|-------------|---------------------------------|
| 2 T-04-0051 | Steel Strain Pole 36 foot |
| 0 T-02-0320 | LED Module 12" green arrow |
| 0 T-02-0330 | LED Module 12" red ball |
| 0 T-02-0340 | LED Module 12" yellow ball |
| 0 T-02-0350 | LED Module 12" green ball |
| 0 T-02-0365 | LED Countdown Pedestrian Module |

| 0 | T-02-0400 | Video Detection System Camera Detector, SP | # of left turns put here |
|---|-----------|---|--------------------------|
| | T-02-0401 | Camera Mounting System | - I" |
| 0 | T-02-0500 | MDS Radios 9810 | |
| 0 | T-02-0504 | Router (this includes power supply/antenna/cabling) | |
| 0 | T-02-0507 | Ethernet/Serial Data Radio | |
| 0 | T-02-0510 | Antenna 6 db omni | |
| 0 | T-02-0520 | Antenna 10 db yagi | |
| 0 | T-02-0530 | Antenna 9 db omni | |
| 0 | T-03-0230 | Jumper 3' N-N RG-58 | |
| 0 | T-03-0240 | Jumper 60' N-N RG-213 | |
| 0 | T-06-0800 | Surge Protector for Radio | |
| 0 | T-09-0410 | Sign Hanger for 48" signs | |
| 0 | T-09-0415 | 30 X 36 through 36 X 36 sign hanger (New) | |
| 0 | T-02-0650 | Pedstl.top mntg.bkt One-way | |
| 0 | T-02-0660 | Pedstl.top mntg.bkt Two-way | |
| 0 | T-02-0661 | Post Top for Pedestal (each) | |
| 0 | T-02-0670 | Pedestal | |
| 0 | T-06-0710 | Ped Detector Pole Mount FSA Box | |
| 0 | T-06-0730 | Ped Button w/o Plunger | |
| 0 | T-17-0015 | 9 X 15 Countdown Ped Sign DBL Sided | |

Contract ID: 244403 Page 57 of 81

Tim Tharpe - Director Phone (502) 564-3020

DIVISION OF TRAFFIC OPERATIONS

| Poles | |
|-------------|---------------------------|
| 0 T-04-0010 | Steel Strain Pole 28 foot |
| 0 T-04-0020 | Steel Strain Pole 30 foot |
| 0 T-04-0030 | Steel Strain Pole 32 foot |
| 0 T-04-0040 | Steel Strain Pole 34 foot |
| 0 T-04-0051 | Steel Strain Pole 36 foot |
| 0 T-04-0054 | Steel Strain Pole 38 foot |
| 0 T-04-0055 | Steel Strain Pole 40 foot |

| 0 T-04-0054 | Steel Strain Pole 38 foot | | |
|--|---|--------------------|--------------------|
| 0 T-04-0055 | Steel Strain Pole 40 foot | | |
| · | | | |
| REQUIRED | | | |
| | ' | | |
| Electrical Contractor Name | | | |
| | | - | |
| Electrical Contractor Supervisor | | Contact numb | per for Supervisor |
| Electrical Contractor Supervisor | | . Oontaot namb | |
| Project Engineer | | Contact number for | Project Engineer |
| i Toject Engineer | | Contact number for | 1 Toject Engineer |
| Project Engineer attests that the men | tioned contractor is the actual electrical contractor on th | is project | |
| 1 Toject Engineer attests that the men | inoried contractor is the actual electrical contractor on the | iis project | |
| | | | |
| Signature of Project E | ingineer or Designee | | |

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS JEFFERSON COUNTY

COUNTY OF ITEM NO.

JEFFERSON N/A

KY 1020 (National Turnpike) at CS 1131F (Tolls Lane)





JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS NOTES .i6.09 SIGNAL TETHER STRANDLINK PROVIDE A STRANDLINK THAT IS A SPLICE FOR 1/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GLS5600 OR APPROVED E0UAL. .21 WARNING TAPE, REPLACE FIRST SENTENCE WITH THE FOLLOWING IN 834.33; PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS NOMMALNINGON. I.G. OT SIGNAL TETHER CABLE. THAT CONSISTS OF CLASS A. ZINC-COATED. COMMON GADE STEEL AND ESTRA CALVANIZED PER ASIM 475-03.

ROUGH A MINIMUM I/4 INFO IDAMETER AND ? STRANDS WITH MINIMUM BREAKING STRENGTH I,300 POUNDS. .IG.OB SIGNAL TETHER STRANDVISE PROVIDE A STRANDVISE THAT HAS AN AUTOMATIC JAW TYPE DEAD-END FOR I/4 INCH GALVANIZED STEEL MESSENGER. USE HUBBELL GDESZOOL O PAPROVED EOUAL TRAFFIC SIGNAL ESTIMATE OF QUANTITIES MEASUREMENT, CONST, AND MISC ITEM NO. **JEFFERSON** COUNTY OF COUNTY OF JEFFERSON. ARE CONTRARY TO SECTION 835 ROJECT -MATERIAL NOTES THAT ij SPACING OR PITCH TIES OR SPIRAL SUBSECTION: REVISION: SUBSECTION: REVISION: SUBSECTION: REVISION: SUBSECTION: REVISION: BAR 44444444444444 ALL INSTALL RADAR PRESENCE DETECTOR TYPE A SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR MOUNTUING BRACKET, SENSOR CABLES, INTEFFACE BOXES, LEAD, TO CABLE, CONNECTORS FURNISHED BY CONTRACTOR, AND CONTROLLER INTEFFACE ASSEMBLY. RADAR PRESENCE DETECTOR TYPE A BUT ITHE SHALL INCLUDE ALL LABOR REQUIRED TO PROVIDE A FUNCTIONAL DETECTION SYSTEM, RADAR PRESENCE DETECTION SYSTEM, RADAR MANIFACTURERS INSTRUCTIONS, AFTER THE DETECTOR IS INSTALLED AND BEFORE THE DETECTOR TYPE A SHALL BE INSTALLED AND WIRED IN ACCORDANCE THE DETECTOR IS POWERED ON COORDING. AFTER THE DETECTOR IS INSTALLED AND REFORE THE DETECTOR IS INSTALLED AND REFORENTIATIVE THE CONTRACTOR SHALL DOUBLE CHECK TO VERIFY THAT ALL WIRNN IS CORRECTLY INTALLED AND CALLEBATION. THE CONTRACTOR SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FIALL AND SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FIALL AND SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FIALL AND SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FIALL AND SHALL PROVIDE A BUCKET TRUCK AND OPERATORS AT THIS TIME FOR FIALL AND SHALL PROVIDE A BUCKET TRUCK AND PROVIDE INSTALLED WITHOUT ASSISTANCE FROM PHOCESS SO THAT FUTURE INSTALLATIONS MAY BE COMPLETED WITHOUT ASSISTANCE FROM PHORES. 03.12 WIRING INSTALLATION. SEE TRAFFIC OPERATIONS WASSITE FOR WORD DOCUMENT TO REPLACE CHARTS FOR WIRING 10 SHOW CHANGES FOR EQUIPMENT GROUNDING. VERTICAL BARS CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723 INSTALL RADAR ADVANCE DETECTOR TYPE B SHALL CONSIST OF INSTALLATION OF A POLE MOUNTED RADAR PRESENCE SENSOR, ENTOR WOUNTING BRACKT, SENSOR CABLES, UNDIVING BRACKT, SENSOR CABLES, UNDIVING BRACKT, SENSOR CABLES, UNDIVINGUED BRIDGEN THE BID THE MADAR ADVANCE DETECTOR TYPE BID THE MADAR ADVANCE DETECTOR TYPE BID THE MADAR ADVANCE DETECTOR TYPE BID THE MADAL BENEFICED BY RECORDING SHALL DEPENDENCE WITH THE MADAR ADVANCE DETECTOR SYSTEM, RADAR ADVANCE DETECTOR SYSTEM, RADAR ADVANCE DETECTOR IS NOWINGUED ON THE CONTRACTOR SHALL CORDINARY MITH DISTRICT TRAFFIC DETECTOR IS POWERED ON. THE CONTRACTOR SHALL CORDINARY MITH DISTRICT TRAFFIC DIVISIONS REPRESENTATIVES TO SCHEDULE A TIME TO PERFORM THE DETECTOR STALL DOUBLE CHECK TO VERFIC THAT ALL WIRTHN IS CORRECTLY FINANCE AND CONNECTED BEFORE SCHEDULING THE STITP WORK, REPRESENTATIVES FROM KYTC AND/OR THE MANUFACTURER OF SALLE REPRESENTATIVES INSTALL SIGNAL CONTROLLER TYPE ATC. THE DEPARTMENT WILL MEASURE THE OUANTITY AS EACH INDIVIDUAL UNIT TRAILED. THE DEPARTMENT WILL NOT MEASURE THE CONNECTENT CONNECTING THE SIGNAL AND DETECTORS, EXCHAINION, BACKFILLION, EXESTORATION, ANY INCESSARY POLE MOUNTING HEADWARE, ELECTRIC SERVICE, ELECTRICAL INSPECTION FEES, AND REQUIRED BUILDING FEES, INVOLVING UTILITY SECONDARY-PRIMARY SERVICE FOR PAYMENT AND WILL CONSIDER THEM INCIDENTAL TO THIS ITEM OF WORK, THE DEPARTMENT WILL ALSO NOT MEASURE CONDUCTION THE INDUCTION OF DEPARTMENT WILL ALSO NOT MEASURE CHENCISH, MODEL 400 MODEL AND MODER THEM INCIDENTAL TO THIS ITEM ON MODE AND MODEL CONSIDER THEM INCIDENTAL TO THIS ITEM OF MORE CELETRICAL SERVICE CONDUCTORS, CONDUITS, MACHORS, METER BASE, FUSED AND MILL ALSO NOT MEASURE FURNISHING AND INSTALLING CLUTH, TSEES, GROUND FRODS, GROUND FORDS, GROUND FORDS, GROUND FORDS, GROUND FORDS, GROUND WIRES FOR PARMENT AND WILL ALSO SHOUND FORDS, GROUND SLOPE" SUBSECTION: 03.02 POLES AND BASES INSTALLATION. B) REVISION: REPLACE ENTIRE TABLE WITH THE FOLLOWING: C 2:1 GROUND SLOPE | 2:1 DRILLED SHAFT DATA DIAMETER (IN.) MAXIMUM SERVICE FORCES MAX SERVICE MOMENT (FT-KIPS) SUBSECTION: REVISION: 1. CONTRACTOR SHALL SECURE THE SIGNATURES OF KYTC'S PROJECT ENGINEER AND THE ELECTRICAL CONTRACTORS SPORMAN ON THE PROJECT MATERIALS RELEASE FORM. IF THE RELEASE FORM IS NOT IN THE PROPOSAL, CONTACT KIM STAMPER OR KERRY DECKER WITH THE DIVISION OF TRAFFIC OPERATIONS OF PROME STATES.

E. CONTRACTOR SHALL CANAL CONTACT THE WAREHOUSE TO PEREARMORE DETK UP OR MATERIALS. CONTRACTOR SHALL EASIL TEAML THE PROJECT MATERIALS RELEASE FORM WITH REQUIRED STOWNERS OF THE WAS TABLED STANDING OF THE STANDING STANDING DATE STANDING ST THE CONTRACTOR SHALL BE RESPONSIBLE FOR PICKING UP MATERIALS FOR INSTALL ITEMS AT VITYCS DIVISION OF COUPARN. IN MREHOUSE, 1039 MILKINON BOULEVENT, FRANKFORF, NAT 40621, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED FOR MATERIAL RELAKE. FALLOWED FOR MATERIAL RELAKE. FOLLOWED FOR PREFIXEN TO FOLLOW THE FOLLOWED MATERIALS DIVININIALLY AND MARIVAL. ADD SENTENCE TO SECTION 835.17: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0500: THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS, SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED. THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 706, 123, AND 112 FOR MEXSUBEMENT AND OTHER DETALLS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING. INSTALL PEDESTRIAN DETECTOR
TRAFFE STOAM, DELE BASE
INSTALL STOAM, PEDESTAL
PVC CONDUIT - 11/4 INCH - SCHEDULE 80
PVC CONDUIT - 11/4 INCH - SCHEDULE 80
INSTALL STOAM, CONTROLLER-TY ATC
INSTALL RADAR PRESENCE DETECTOR TYPE A
INSTALL RADAR Advance DETECTOR TYPE B
TEHER WIRE 10 (5%) MESSENGER-15400 LB
INSTALL STEEL STRAIN POLE
INSTALL PEDESTRIAN HEAD LED
INSTALL SIGNAL-3 SECTION LED
INSTALL SIGNAL-4 SECTION LED MAINTAIN & CONTROL TRAFFIC FLASHING ARROW TRENCHING AND BACKFILLING CABLE-NO, 14/7C INSTALL COORDINATING UNIT ESTIMATE OF QUANTITIES DEMOBILIZATION (1.5%) TEM DESCRIPTION 2562 2569 2650 2775 4820 4885 4886 4932 20093NS835 20188NS835 20266ES835 20390NS835 23157EN 23222EC 24900EC 24901EC 24908EC 26120EC 24528ED 26119EC 21743NN TRAFFIC SIGNAL LP SUM LIN II EACH EACH EACH EACH CU YD EACH LIN FT EACH EACH EACH LIN FT SO FT UNITS EACH EACH 3 80 2,450 1-10-2023 375

Page 59 of 81

2 60 80

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 Page 60 of 81 SPECIAL NOTE FOR THE CABINET:
TURNISH A MARNING STICKER NO FORMATION.
CABINET WITH THE FOLLOWING INCREME NO ACT LASH THE FOLLOWING INCREMENT TO BOOK FLASH THE REQUIRED PER NEPA TOE VOLTAGE TEON TO FOR ADDITIONAL PPER EQUIRED SEE NEPA TOE FOR ADDITIONAL PPE REQUIRED SEE NEPA TOE FOR ADDITIONAL PPE REQUIRED. 72 ROUTER INSTALLATION (REAR OF CABINET) CONTROLLER CABINET AND ANTENNA/ROUTER DETAIL 4- 2" MIN.) SCHEDULE 80 PVC CONDUITS
10 POLE BASE WITH RID BELL BUSHING.
CONTRACTOR SHALL MODIFY OLUMITIY
CONTRACTOR SHALL MODIFY OLUMITY
SPARE CONDUIT AND COMPLY WITH
NEC REQUIREMENTS HERNET CABLE ITEM NO. FERNET I'R S CONDUIT FOR TELEPHONE (IF NECESSARY) •0 "R S CONDUIT FOR SERVICE 0 JEFFERSON COUNTY OF SECURE TO RACK I'RIGID STEEL (R S) SERVICE AND TELEPHONE CONDUITS — 4 - 2" SCHEDULE BO PVC CONDUITS WITH END BELL BUSHINGS FOR SIGNAL AND LOOP WIRES. 4" MIN. PAD MOUNT ENCLOSURE opopy, **©** 0 TOP VIEW 36. <u>:</u> .9 36" ION A-A •0 24. ANCHOR BOLT (TYP.) ENCLOSURE BASE GROUNDING -THE OUTS. 1/4. SPARE SCHEDULE BO PVC CONDUIT STUBBED WITH END BELL BUSHING, GROD AND CAPPED AT BOTH ENDS. A RANDOW SHALL BE ECHÉD BOTH IN THE TOP OF THE CABINET BASE TO SHOW THE CABINET BASE TO SHOW THE CABINET BASE TO SHOW THE SPARE CONDUIT. POLE. SPARE 11/4" SCHEDULE 80
PVC CONDUIT STUBBED
WITH END BELL BUSHING,
AND CAPPED AT BOTH ENDS. THROUGH SERVICE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROOT THROUGH THE PVY COROUNT, COMPETING TO THE DISCOMECT AND WEN'N TO EACH REIGN STEEL AS SUFFRONDENING BUSHING, IF GROUND WIRE IS RAIN ON THE INSIDE OF THE REPORT IS RAIN ON THE INSIDE OF THEY SHALL BE RANDING AT DISCOMECT AND POLE CUT OF THEY SHALL BE INCIDENIAL TO BID ITEM 4931. ¾ SCHEDULE 80 PVC GROUNDING CONDUIT — WITH END BELL BUSHING. CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF CROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNECT, CABINET OR I DRAIN ANCHOR BOLT (TYP.) GROUND ROD T BUS. FINISH GRADE TO AWAY FROM ENCLO %* SCHEDULE 80 PVC CONDUIT WITH END BELL BUSHING FOR GROUNDING CONDUCTOR(S) LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. THE I' CHAMFER -. BE R OF GROUND ROD FOR CABINET'
INSTALLED BELOW GROUND
(LEAVE TOPS EXPOSED FOR
ELECTRICAL INSPECTION) GROUND ROD SPECIAL NOTE FOR THE DISCONNECT

VOLTANMENT HE DISCONNECT HE OTHER STORE OF THE ZO

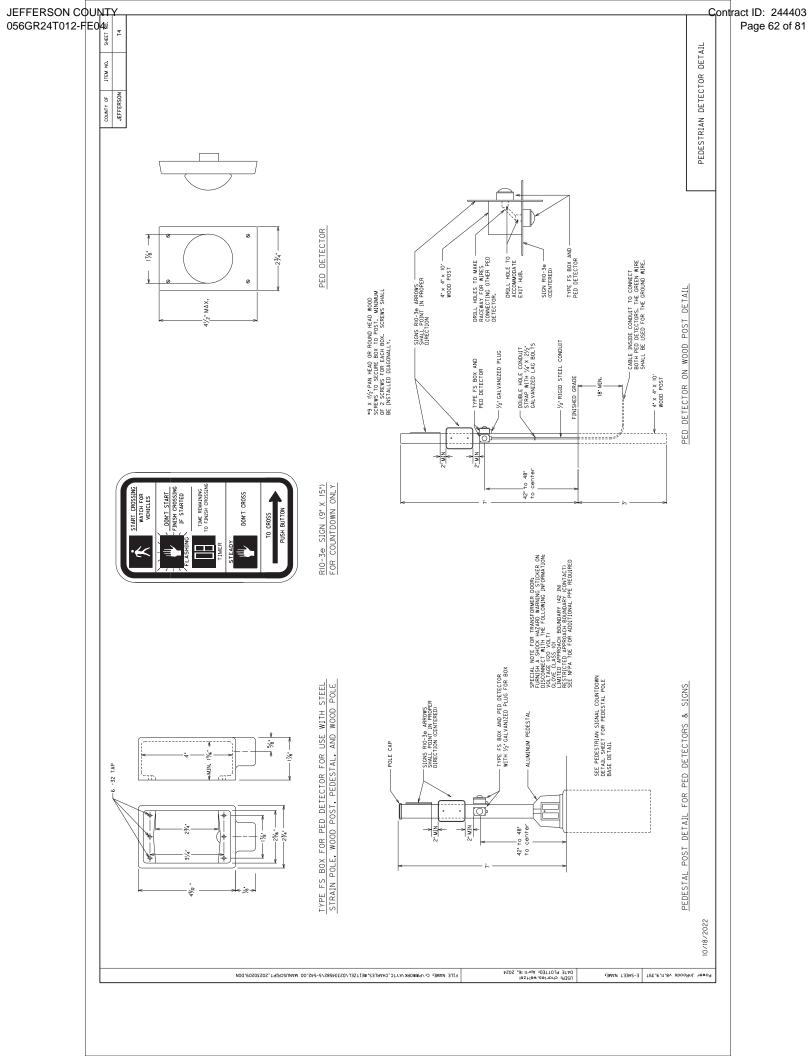
BUT NOT FEED DOWN TO THE DISCONNECT.

BUT NOT FEED DOWN TO THE DISCONNECT.

FLENSISH A SHOCK HAZARD WARRDISCONNECT THIS THE FOLLOWING STORER ON DISCONNECT WITH THE FOLLOWING STORER ON DISCONNECT WITH THE FOLLOWING INCOMING INCOMING THAT OF THE STORE OF THE ST CABINET GROUND - GROUND WIRE SHALL COME FROM THE OTHE PVC CONDUIT, CONNECTING TO THE CABINET GROUND BADE STYLE ANTENNAM AND POLITION PRIVALATION PRESTALL ON THE THE BACKSIEG OF THE CABINET OF THE CABINET OF THE CABINET OF THE CABINET SHALL BE THE STATE THE AND THE CABINET SHALL BE THE STATE THE CABINET SHALL BE THE STATE OF THE CABINET SHALL BE INSTALLED ON THE PROVIDED SHELF IN THE BACK OF THE CABINET. COMOUTS USED FOR THE TELEPHONE, GROUDING, SPARES, AND SERVICE JUDING FLEX COMOUT IF TITS NAW INSIDE THE PRESENT THAT AND THAT LED ON THE FOLE AND ON THE COLDINE I BASE ARE INCIDENTAL BID THEW 4931. THE JUDINGS PROVIDING A MINIMUM OF 24 INCHES COMOUT FAST IN FEED OF THE CONGERTE PAD. ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT. SERVICE WRIEE FOR DAILS CHANNETS AND THE INSTALLED THE INSTALLED THE INSTALLED CONDUIT FROM THE DISCONMECT TO THE ITRICIS STEEL CONDUIT THIS SIDE THE PROPER TO THE PROPER CONNECTIONS FOR TRANSISTION FROM ELEXIBLE CONDUIT TO R S CONDUIT. FALSIBLE CONDUIT THE STALL NOT BOTCOST THE MAD FOLE OR THE ABILITY TO ACCESS THE GROUNDING SYSTEM. - GROUNDING BUSHING -LB CONDULET CABINET HOUSING -R S CONDUIT POLE MOUNTED CABINETS.
2- Z. WIMAN R. S. CONDILITS.
SIGNAL, WIRES. CONTRACTOR
SHALL MOUNT SIZE/COLANTITY
OF CONDILITS IN ORDER 10 PROVIDE I
SPARE CONDILIT AND COMPLY WITH
NE REQUIREMENTS. LOCKNUT (TYP) (BOTH SIDES) GROUNDING REQUIREMENTS: SERVICE POLE WITH METER BASE
AND SERVICE DISCONNECT (SEE
SECTION 835 OF THE STANDARD
SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION) CONDUIT STRAP (TYP.) 48" 0.C. / POLE MOUNT ENCLOSURE 000001 ALL (INCL INST. TO B SPECIAL ORDEROYS SAFETY SWITCH AND WEIER BASE SHALL BLU AREID FOR COMMERCIAL USE. SOLICIES IS SAFETY SWITCH AND WEIER BASE DISCONNECTS IS SAFETY SWITCH AND WEIER BASE DISCONNECTS IS SAFETY SWITCH AND WEIER BASE SHALL BE RESPONSIBLE TO CALCULATED THE WAXIMAN WAXILABLE FAIL CHRENEY FOR THE SENDIFFICATION SHALL SWITCH CHRENEY FOR SHALL SWITCH SHALL SWITCH SHALL SWITCH SHALL SWITCH SHALL SWITCH SHALL BLU SHALL BLU SWITCH SHALL BLU SHALL BLU SHALL BLU SHALL BLU SHALL BLU SHALL BLU SHALL SWITCH SHALL BLU SHALL SWITCH SHALL BLU SHALL SHALL SWITCH SHALL BLU SHALL SHALL SHALL SWITCH SWI STEEL %* SCHEDULE 80 PVC CONDUIT WITH END BELL BUSHING FOR GROUNDING CONDUCTOR r RIGID STEEL (R S) CONDUIT FOR TELEPHONE — SERVICE/SERVICE (IF NECESSARY) MOUNTING BRACKET (TYP.) FR S CONDUIT FOR SERVICE CONDUCTORS MOUNTING STRAP (TYP.) FOR UNDERGROUND SERVICE FEEDS, USE 1'R S CONDUIT TO METER BASE ON EXTERIOR OF POLE EXTERIOR CONDUIT MAY BE USED FOR EITHER OR BOTH (THE FOLLOWING CONDITIONS: FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE ¾* SCHEDULE 80 PVC DETAIL SHEET DETAILS. LOCKNUT (TYP) (BOTH SIDES) R S CONDUIT POLE WALL BUSHING -AND LUG POLE BASE CROUNDING 8-18-2022 띯 USER: charles, weltzel DATE PLOTTED: April 16, 2024 Power InRoads v8.11.9.397 E-SHET NAME: FILE NAME: C:/PWWORK/KYTC_CHARLES.WEITZEL/D2334582/5-542.00 MANUSCRIPT_20230209.DGN

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 DETAILS 13 3. OR 6. FROM BOTTOM FINISHED GRADE ITEM NO. TRAFFIC SIGNAL AND ROADWAY LIGHTING JUNCTION BOX AND CONDUIT COUNTY OF JEFFERSON JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING 3 <u>.</u>5 BOX INSTALLATION FOR 50. 25. 13/4. . JUNCTION BOX DIMENSIONS 27* 2 30 MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED
JUNCTION BOX 24" 4 Ė 23. .8 36" GRADATION SIZE — NO. 57 AGGREGATE GRADATION SIZE --NO. 57 AGGREGATE TYPE A TYPE B TYPE C JUNCTION BOX FIBER FABRIC TYPE IV 9' OR 12" FROM FIBER FABRIC TYPE . BOTTOM BUSHINGS BEFORE THE INSTALLATION OF THE "57 AGGREGATE AND JUNESTICATION BOX. HE CONTRACTOR SALL INSTALL CANDITION BOX. HE CONTRACTOR SALL INSTALL CANDITION ON THE UPOF "HE LID FOR "HE FABRIC STALL BE TO WHIT AND "HE FABRIC STALL BE MOUTED." HE FABRIC STALL BE MOUTED. HE CANDITION SALL BE MOUTED. HE CANDITION SALL BE MOUTED. HE DID HEAD SALL BE MOUTED. HE DID HE WAS ABLE SOME SALL BE MOUTED. HE DID HEAD SALL BE MOUTED. HE DID HE MOUTED. HE DID HEAD SALL BE MOUTED. HE WAS ABLE SALL BE MOUTED. 3-OR 6-FROM BOTTOM CONCRETE CABLE MARKERS JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING LIGHTING CKT *1 CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL DETAIL CONDUCTOR INSTALLATIONS
CONDUCTOR INSTALLE EXPOSED
FROM BOTTOM OF BOX AND
STALL B AT I LEAST 8 INCHES
FROM THE BOTTOM OF THE
JUNCTION BOX LID. GROUNDING DEPTHS SHOWN FOR CONDUIT AND
OUCED CABLE ARE MINIMAMAS.
CONTRACTOR SHALL PLACE AND
COMPACT BACKELL IN 9 WAXIMMM
LIFTS AND RETORE DISTURBED AREA
TO THE SATISFACTION OF THE UNGINEER, GRADATION SIZE — NO. 57 AGGREGATE JUNCTION BOX 4 AWG SOLID BARE COPPER CONDUCTOR CONDUITS) AND COVER PLATE WITH WEATHER RESISTANT GASKET DUCTED CABLE WARNING TAPE CABLE, TRENCH (D) -BACKFILL -CONDUIT ABONE GONDO BOX SALE E FEBEGLATED
FROM WINNIAM IZ CAUGE STEEL AND
GOLVANZEGE ATTRE RESIDENT TOW.
BOXES SHALL HANG NO SWORGOUTS
BOXES SHALL HANG NO SWORGOUTS
FALS STATIC SERVES BY ALT ALCHING
FOUR STORMES BY ALT ALCHING
FOUR STATIC CASKET BY ALT ALCHING
CASKET FALL WE PROVIDE
CASKET FOR ALCHING SHALL BE PROVIDE
FOR CASKET BY ALT BY SHALL BY SHA CONDUÍT, DÚCTÉD AND WARNING TAPE 800 SPARE ABOVE GROUND Œ PLUG(FOR TEST/PIPE PLUG (FOR SPARE CONDUITS) CAPPED ON BOTH ENDS FINISHED GRADE TEST/PIPE FOUR (4) SCREWS MINIMUM FINISHED GRADE 3/13/2017 USER; charles, weltzel DATE PLOTTED; April 16, 2024 Faman T33H2-3 T6č.6.II.8v aboogni newo9 FILE NAME: C:\PWWORK\KYTC_CHARLES.WEITZEL\D2334582\5-542.00 MANUSCRIPT_20230209.DGN

Page 61 of 81



JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 -(6) *6 VERTICAL REINFORCING BARS EQUALLY SPACED #3 TIE OR SPIRAL BARS TO BE 12" ON CENTER STUB HEIGHT MEASUREMENT NOTE: DESTAL BASE DOOR SHALL HAVE
A 4 BY 6 SHOCK HAZADO WANNION CSTICKER
IF SMALLER TRANSFORMER BASE IS INSTALLED
USE A 2 PT 87 INSTALLE INSTALLE INSTALLED
USE A 2 PT 87 INSTALLE INSTALLE INSTALLED
USE A 2 PT FOR SOFT WERE
WITH JOOT HICKRESS, WITH UV WHITE
WITH JOOT HICKRESS, WITH UV WHITE
WITH JOOT HICKRESS, WITH UV WHITE
WITH JOOT HICKRESS, WITH UN WHITE
WITH JOOT HICKRESS, WITH UN WHITE
WITH JOOT HICK SHALL BE
INCIDENTAL FOR SHALL BE
INCIDENTAL FOR SHALL BE
INCIDENTAL FOR HE RANSFORMER BASE;
FELSAL ON SECONDER, WITH THE
FOLLOWING JINFORMATION;
GLOVE CLASS (0)

GLOVE CLASS (0)

RESINGED APPROACH BOUNDARY (CONTACT)
SEE NEPA 70E FOR ADDITIONAL PPE REQUIRED PEDESTRIAN SIGNAL COUNTDOWN DETAIL 15 BENDING DETAIL FOR #3 TIE BARS GROUND LINE 3" CLR ITEM NO. STUB OF TRANSFORMER BASE USE 15' DIAMETER BASE IF KYTC SUPPLIES A SMALLER PEDESTAL TRANSFORMER BASE THE ANCHOR BOLTS AND CONDUITS SHALL NOT BE PROJECTED MORE 4 INCHES ABOVE A GROUND LINE BETWEEN THE STRADDLING WHEELS OF A VEHICLE. 1'-3' LAP COUNTY OF JEFFERSON PEDESTAL POLE BASE DETAIL -GROUND ROD FOR PEDESTAL POLE 4" MAX. V., SPARE RICID STEEL
COMOUNT, STUBBED OUT
THREADED NAW CAPPED
ON BOTH ENVIR CAPPED
AY, SCHEDULE 80 PVC.
COMOUNT WITH FOR BELL
BUSHING, BOTH READEN
COMOUNTOR.
COMOUNTOR.
POLIC SCHOOL STEEL
COMOUNTOR.
POLIC SCHOOL SCHOOL STEEL
COMOUNTOR.
POLIC SCHOOL -GROUNDING CONDUCTOR - 1" CHAMFER CONCRETE **a** .09 SUPPORT SPECIAL NOTE FOR THE TRANSFORMER BASE: FUSED CONNECTOR KITS SHALL BE INSTALLED FOR ALL IZO VOL'N WIRNO. IN TRANSFORMER BASES. THIS WILL ONLY BE WEEDED FOR PEDESTRAIN HEADS AND SIGNALS HEADS. PEDESTRAIN DETECTORS DO NOT REQUIRE FLUSED CONNECTOR KITS. CONTRACTOR CAN USE ONE KIT FOR A COMMON NEUTRAL FOR ALL DEVICESIN THE TRANSFORMER BASE. THERE SHALL BEA METAL LUG INSTALLED IN THE NEUTRAL WIRE KIT INSTEAD OF A FUSE. 15° or 2'-=4 - ½* x 4* STAINLESS STEEL
LAG BOLTS (2 REQUIRED)
& STAINLESS STEEL
BANDING TAPE
3*4* x, 03*
(2 REQUIRED) BREAKAWAY CABLES THE WOOD POLE SHALL BE INSTALLED SO THAT EACH BUTTON IS NO MORE THAN 10° FROM THE PAVED SIDEWALK OR SHOULDER. YLINE -LINE CONNECTOR SCREW 3° CLR TYPE FS BOX & INSTALL TWO PED DETECTOR STAINLESS STEEL WITH 1/2 GALV, SCREWS FOR PLUG FOR BOX THE FS BOX. WOOD POLE DETAIL FOR PED DETECTORS AND PED SIGNALS STEEL Ay RIGID SECTIONS OF AY RIGID SECT CONDUIT FOR SIGN MOUNTING. USE FOUR *14 X 3" STAINLESS STE ROUND HEAD WOOD SCREWS THROUGH CONDUITS FOR MOUNTING SIGN TO POLE. "Y" TYPE RUBBER INSULATOR-SIDEWALK/SHOULDER 1/2" RIGID STEEL CONDUIT RECEPTACLE HOUSING - BRACKET SHALL BE POSITIONED IN ORDER TO AVOID DAMAGE FROM VEHICLES SIGNS RIO-30 ARROWS SHALL POINT IN PROPER DIRECTION (CENTERED) *9 X 1/2. STAINLESS STEEL PAN HEAD OR ROUND HEAD BOX DOOD SCERKY SHALL BE USED TO SECURE TYPE FS BOX TO POLE. A MINIMUM OF 2 SCREWS PER BOX, INSTALLED DIAGONALLY, SHALL BE USED. LOAD SIDE ASSEMBLY BREAKAWAY POINT LINE SIDE ASSEMBLY 1/4" RIGID STEEL CONDUIT CONNECTOR SHOWN CONNECTOR BREAKAWAY FUSE CONNECTOR KIT WOOD POLE HEB-JW-RYC ¥ ¥ M ¥ 1 6 AMP(480 VAC) CARTAIDGE FUSE

1. TYPE RUBBE INSULATOR TYPE HEB-JW-RYC -[O] 2. MIN. FINAL GRADE 48" ter FUSE HOLDER ±2+ DETAILS LOAD TERMINAL (SCREW TYPE) INSTALL DOUBLE HOLE-CONDUIT STRAP WITH (Ax 2½-5cAL). LAG BOLTS. MAXIMUM SPACING SHALL NOT EXCEED 4. THE PEDESTAL SHALL BE INSTALLED SO THAT EACH BUTTON IS NO MORE THAN 10° FROM THE PAVED SIDEWALK OR SHOULDER. LOAD CABLE THERE SHALL BE AT LEAST 4 FEET OF USABLE SIDEMALK A POPTION OF THE PEDESTAL BASE IS INSTALLED IN A SIDEMALK. IT INSTALLED IN A SIDEMALK, IT IN FEDERALK BASE SHALL BE INSTALLED IN A FILE DIN HE GRADE. INSTALL TWO STAINLESS STEEL SCREWS FOR THE ATTACHMENT OF THE FS BOX. SIGNS RIO-36 ARROWS SHALL POINT IN PROPER DIRECTION CENTERED. INSTALL TWO STAINLESS SIEEL SCREWS FOR EACH PEDESTRIAN SIGN. LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. PERESTAL POLE CROUND - GROWN PIRE SWALL COME FROM THE GROWN FOO THROUGH THE PIPE CHOULT CONNECTING TO A GROWN LIC ON THE TRANSFORMER BASE AND THEN TO ELCH RIGID STELL CHORONDO BOSING. ALL GROWN FOOS SHALL BE 24 FROM THE CONCRETE POLE BASE. CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO THE TRANSFORMER BASE. PIPE LUMINUM SIDEWALK/SHOULDER PED SIGNALS TYPE FS BOX & PED DETECTOR WITH 1/2" CALV. -PLUG FOR BOX CONTRACTOR SHALL DRILL HOLES IN THE PIPE AND THE TYPEE SO BOX NOT EXCEDING V/5 HOUNETER A ROUND FILE TO REMOVE ALL USES A ROUND FILE TO REMOVE ALL BURRSA MAY SHAPE DIGES FROM THE HOLES, WIRES SHALL BE PROTECTED WITH HEAT SHERM TUBING OR VINNE TAPE WHERE THEY PASS THROUGH THE HOLES. SEE PEDESTAL POLE BASE DETAIL FOR CONCRETE BASE DETAIL AND GROUNDING DETAILS DETAIL PEDESTAL POLE DETAI FOR PED DETECTORS AND PED SIGNALS MAX. GROUNDING REQUIREMENTS. 48" i + er 42° to 48 FINAL GRADE THERE SHALL BE AT LEAST 4 FEET OF USABLE SIDEWALK IF A PORTION OF THE POLE BASE IS INSTALLED IN THE SIDEWALK. IF INSTALLED IN A SIDEWALK. THE PEDESTAL BASE SHALL BE INSTALLED FLUSH WITH THE CRADE. THE POLE SHALL BE INSTALLED SO THAT EACH BUTTON IS NO MORE THAN 10° FROM THE PAVED SIDEWALK OR SHOULDER. ALL GROUNDING AND SPARE CONDUITS THAT ARE INSTALLED IN THE CONCRETE BEDESTAL FOLD LABSE ARE NUBENDENTAL IN DBI INEU YSSZECT. HIS INFLUES PROVIDING A MINIMAM OF 24 INCHES OF CONDUIT PAST THE EDGE OF THE CONCRETE BASE, AN ARROW SHALL BE ETCHED INTO THE TOP OF THE PRESENTAL BASE TO SHOW LOCATION AND DIRECTION OF THE SPARE COMMULIE. SIDEWALK/SHOULDER THERE SHALL BE A 2.5' (MIN.) X 4' (MIN.) CLEAR SPACE AT ALL PEDESTRIAN BUTTONS PER SECTION OF PROWAG REQUIREMENTS. STAINLESS STEEL BANDING TAPE %x x .03" (2 REQUIRED) PED SIGNALS CONTRACTOR SAAL, DALL, HOLES, IN THE STEEL, STRAIN POLLE MY THE TES BOX NOT EXCREDING V, IN DAMETER, CONTRACTOR SAALL LUSE A ROUND FLE TO REMOVE ALL BURRS AND SHAPE DEES FORM THE HOLES. WHEES SAALL BE PROFICED WITH ALL SHIPKY LUBING WINNE, TARE WHERE THEY PASS THROUGH THE HOLES. STAINLESS STEEL BANDING TAPE %x x .03* (2 REQUIRED) TYPE FS BOX &
-PED DETECTOR
WITH 1/2" GALV.
PLUG FOR BOX. STRAIN POLE DETAIL FOR PED DETECTORS
AND PED SIGNALS POLE BASE DETAIL SHEET CONCRETE BASE DETAIL GROUNDING DETAILS PA A X \odot to 48" center STEEL GRADE SEE FOR AND 45° 10/18/2022 USER: charles, weltzel DATE PLOTTED: April 16, 2024 Faman T33H2-3 T6č.6.II.8v aboogni newo9 FILE NAME: C:/PWWORK/KYTC_CHARLES.WEITZEL/D2334582/5-542.00 MANUSCRIPT_20230209.DGN

Page 63 of 81

JEFFERSON COUNTY 056GR24T012-FE0 Contract ID: 244403 V. SPARE SCHOULE BO PVC
CONDULT. STUBBED OUT WITH
CAPPED AT BOTH ENDS. AN
ARROW SNALL BE ETCHED
ON HE TOP FHE BASE
ON HE TOP DIBECTION OF THE SPARE
CONDULT. 72' REFLECTIVE TAPE (JF SPECIFIED), 9 LOUVERS (TYP.) CABINET GROUND ROD DEPTH VARIES SEE SECTION 723.03.02 DETAILS CONNECT GROWN STAYLPED HEADS, CONNECT GREEN WIRE FROM SCYTZ IMSA CABLE TO CONNECT OR THAT WILL BE INSTALLED WINGSTONE OF THE TREE TO ASSEMBLY THAT CONNECTS THE HEADS. STUD MASSEMBLY THAT CONNECTS THE HEADS. BRAFEL FOR THIS CONNECTION. TH SERVICE, POLE, GROUNDING DETAIL ITEM NO. BACKPLATE DETAIL POLE BASE/SIGNAL HEAD 11111 (VELLOW) GREEN JEFFERSON COUNTY OF ED: E CONTRACTOR SHALL
CONFORM TO "SPECIAL
NOTE IIC FOR DRILLED
SHAFTS" ů E BASE WIT CABINET G STRAND VISE RING. FOR EQUIPMENT GROUND:

"4 AWG BARE COPPER AT BULL RI
THE GROUNDING LUG SHALL BE
BRONEE TYPE.

MESSENGER CABLE
(TYP.) BULL Anchor Bolts.
OUANITY AS STEEL STRAIN POLE RECOMMENDED BY STEEL STRAIN POLE MANUACTURERAND POLE MOUNTED (MIN. 0F 4) THE CONTRACTOR SHALL INSTALL SPACERS
ON HE POLE MARE CAGES, TOOK BOTTON, A
STALL SPACERS SHALL CONFORM TO "FEEDLE"
IC. A "STAFFALE ON POPE"
COMOUNT FOR SERVICE
NOT SERVICE LOCATION ONLY
SERVICE LOCA PORE
FOR EQUIPMENT GROUND:
FOR EQUIPMENT GROUND:
CONNECT STAM WHE TO POLE WITH
A ANK DARE COPPER.
LUG SHALL BE BROWNE TYPE, REGOUNDER
BE AT REAT 1.5 TOOT OF BARE COPPER.
BETWEEN EACH LUG. AERIAL CORNER DETAIL VISE JOHNNYBALLS OR STRAIN ISOLATORS SHALL NOT BE USED ON THE ATTACHMENT OF THE SPAN WIRE TO THE POLE. INSTALL MESSENGER THROUGH STRAND AND BEND MESSENGER AT EXIT POINT. THERE SHALL BE A SEPARATE COLLAR USED FOR EACH SPAN, CONCRETE INSTALL MESSENGER THROUGH STRAND VISE AND BEND MESSENGER AT EXIT POINT. MESSENGER SHALL EXTEND 8" TO 10" BEYOND THE STRAND VISE YOKE. MESSENGER SHALL EXTEND 8°TO 10° BEYOND THE STRAND VISE YOKE, FOR UNDERGROUND SERVICE FEEDS, USE 1'RIGID STEEL CONDUIT TO METER BASE ON EXTERIOR OF POLE DROP BOX CONNECT EACH STRAND VISE TO BULL RING AT AERIAL CORNER. AS EXTERIOR CONDUIT MAY BE REQUIRED USED FOR EITHER OR BOTH 18 BY MFR THE FOLLOWING CONDITIONS: SERVICE GROUND RODS-POLE GROUND ROD -VERTICAL REINFORCING BARS EQUALLY SPACED (SIZE AND NUMBER VARY) FOR EXTERIOR SERVICE GROUNDING (OPTIONAL), USE ¾* SCHEDULE 80 PVC #4 TJE OR SPIRAL BARS TO BE 12" ON CENTER -NOTE: INSTALL TWO BOLTS TOWARD CURB SIDE. 241/2" MAX, DIAMETER BOLT CIRCLE OUTSIDE OF FOUNDATION 3" CLR MAXIMUM DIAMETER OF ANCHOR BOLTS SHALL BE 21/4* NOT POLE JI.

JF ANCHOR BOLTS ARE STRAIGHT N
BEND, THE METAL TEMPLATE SHALL
BE INSTALLED FOR STRUCTURAL
INTECRITY. HEX NUT, WASHER, AND LOCK WASHER ABOVE BASE PLATE (TYPICAL) TOP OF FOUNDATION MUST BE LEVEL CLEARANCE OF ONE BOLT DIAMETER CURB SIDE -MESSENGER CABLE STRAND VISE SPAN WIRE DETAIL CARVED LOCATION →
/DIRECTION OF SPARE
CONDUIT. CONTRACTOR SHALL PROVIDE A MINIMUM OF 6 INCHES OF GROUND WIRE FOR TESTING PRIOR TO CONNECTING THE WIRE TO ANY DISCONNEC CABBINT OR POLE. LEAVE TOP OF GROUND RODS EXPOSED FOR ELECTRICAL INSPECTION. Ή POLE GROUND - GROUND WIRE SHALL COME FROM THE GROUND ROD THROUGH THE PVC COMDUIT, CONNECTING TO THE POLE AND THEN TO EACH RIGID STEEL GROUNDING BUSHING. PROVIDE SAG IN WIRES TO PREVENT WATER IN WEATHERHEAD ESCHA NOTE FOR POLE DODGE VENTER OF STICKER ON TOTAL ACT THE FOLLOWING INFORMATION VOL.1 ACE 1720 VOL.1). THE FOLLOWING INFORMATION VOL.1 ACE 1720 VOL.1). THE FOLLOWING INFORMATION VOL.1 ACE 1720 VOL.1). THE FOLLOWING INFORMATION VOL.2 ACE INTER A PREPROACH BOUNDARY (AZ IN). THE STIFTED A PROPROACH BOUNDARY (AZ IN). THE ST ALL GROUND RODS SHALL BE 24" FROM CONCRETE POLE BASE. BENDING DETAIL FOR TIE BARS CONCRETE GROUNDING REQUIREMENTS: AMMOS STORMS SHALL PURK 114E.
ADD A FOCADIGC CORRUGATED STELL
ADD A FOCADIGC CORRUGATED STELL
ADD A FOCADIGC CORRUGATED STELL
ADD A FELT CRAINER TO GENTER FROM
THE EXISTING POLE BASE. IF
THE CHAINER TO CONTRIBE TO
THE CHAINER STALLE TO
THE EXISTING POLE WITH
THE INSTALL BE NOTIONAL TO
THE PROVINCENT APPROVAL. TO
THE PR 1/4: SPARE SHEDULE 80 PVC CONDUIT: STUBBED OUT WITH END BELL BUSHING AND CAPPED AT BOTH ENDS. HEX NUT AND WASHER— UNDER BASE PLATE FOR PLUMBING OR RAKING POLE (TYP) 3. GALVANIZED CABLE
RINGS - 18* MAX. SPACING.
THE CABLE RINGS SHALL BE
INSTALLED ACROSS THE
WHOLE LENGTH OF THE SPAN. A MINIMUM OF TWO — BOLT THREADS SHALL EXTEND ABOVE THE NUT CONCRETE 1'-8" LAP CIAMP ASSEMBLY SPECIFCATIONS

CLAMP ASSEMBLIS MAST BE DESIGNED IN ACCORDANCE
TO THE ASSEMBLIS MAST BE DESIGNED IN ACCORDANCE
TO THE ASSEMBLIS SHAFT BE DESIGNED IN THE MAST STANDARD SPECIFICATIONS FOR THE ASSEMBLIA DESIGN BROWNES SEED IN THE ASSEMBLIA DESIGN BROWNES SEED IN THE ASSEMBLIA DESIGNED FROM THE ASSEMBLIES SHAFT CONFIGURATIONS TOR HIGHMAY TO SECTION 835, OT OLAND ASSEMBLIES SHAFT CONFIGURATION THE STANDARD.

THE STANDARD.

THE STANDARD.

AND A HE STANDARD. NOTE:
THE STEEL STRAIN DOOR SHALL HAVE
THE STEEL STRAIN DOOR SHALL HAVE
INSTALL 3 FROM THE TOP OF THE DOOR.
THE STROKES SHALL BE MEST CARAFT
PLY 655 PREM STALLARME, LARGE, MITH
POLY CARBONATE, MATERIAL, AND WITH
POLY CARBONATE, MATERIAL, AND WITH
OR STRAIN SHALL BE SHALL BE CHARLY ONE SHALL
OR APPROVED EDUAL, THIS SHALL BE
MICHERIAL OF THE PROJECT STEEL STRAIN POLE BASE WITH POLE GROUND DETAIL ** CLAMP/CLEVIS- ASTM A36 (GRADE 36)/ASTM A572 (GRADE 50) BOLTS (EXCEPT U- BOLTS)- HIGH STRENGTH ASTM A325, ASTM A449, OR ASTM A490 BOLTS- MINIMUM ASTM A36 Detail ASTM A153 STEEL SALVANIZING-%* SCHEDULE 80 PVC CONDUIT WITH END BELL BUSHING FOR POLE GROUNDING CONDUCTOR Clamp Assembly Alt. GROUNDING -GROUND ROD -FOR POLE Threaded Bolt-Cotter Pin-Nut-Lock Masher-Detail 3 OVERHEAD SERVICE WIRES SHALL BE INSTALLED ON THE EXTERIOR OF THE POLE IN A I' TRAGIO STEEL COMOUIT WITH WEATHERHEAD, OR ON THE INSIDE THE STEEL STRAIN POLE IN FLEXIBLE BOOWLIT. Threaded Bolt T Cotter Pin Nut Lock Washer SPARE, AND SERVICE THAT ARE 1 ITEM '23157EN', THIS INCLUDES T THE EDGE OF THE CONCRETE POLE Detail FOR POLE BASE DEPTH SEE CHART IN SECTION 723 OF THE KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. PROVIDE 2 FOOT COIL IN SIGNAL CABLES TO PREVENT WATER ACCESS TO WEATHERHEADS FOR EACH SIGNAL HEAD. UNDERCROUND SERVICE WIRES SHALL BE INSTALLED IN PRIGID STEEL CONDUIT SHOWN ON THE CONTROLLER CABINET DETAIL SHEET. Detail 2 Masher -Lock Masher -Nut -Cotter Pin-Threaded Boit -ALL CONDUITS SHALL BE INSTALLED BETWEEN 4 TO 6 INCHES ABOVE THE CONCRETE PAD, AND THEY CANNOT EXCEED THE 6 INCH HEIGHT. 17' - 19' & CONFORM TO FIGURE 4D-1 MUTCD LATEST EDITION SPAN DETAIL TELEPHONE, GROUNDING, SI ARE INCIDENTAL TO BID I Clamp Assembly Alt. AI+. Assembly ALL CONDUITS USED FOR THE INSTALLED IN THE POLE BASE PROVIDING A MINIMUM OF 24 I BASE. 5% MIN. SAG FOR ALL SPANS OR OTHERWISE NOTED Clamp 6/21/2023 USER: charles, weltzel DATE PLOTTED: April 16, 2024 Power InRoads v8.11.9.397 E-SHET NAME: FILE NAME: C:/PWWORK/KYTC_CHARLES.WEITZEL/D2334582/5-542.00 MANUSCRIPT_S0230209.DGN

Page 64 of 81

JEFFERSON COUNTY 056GR24T012-FE04 Contract ID: 244403 POLE MOUNTED CONTROLLER .25 PVC SCHEDULE 80 UNLESS OTHERWISE NOTED) MAX TETHER TENSION (LBS) RADAR DETECTION ZONE 5767 3306 2982 5671 TRAFFIC SIGNAL PLAN SHEET KY 1020 (NATIONAL TURNPIKE) @ TOLLS LN PEDESTRIAN DETECTOR STEEL STRAIN POLE ITEM NO. PEDESTRIAN HEAD POLE LOCATIONS RADAR SENSOR SIGNAL HEAD PEDESTAL SCALE 1" = 20 A TETHER CABLE SHALL BE INSTALLED BETWEEN ALL POLES, THE BOTTOM OF ALL SIGNAL HEADS SHALL BE ATTACHED TO THE TETHER CABLE. LEGEND SAG 5% COUNTY OF JEFFERSON ∢ CALC, SERV, MOMENT ALL MESSENGER IS 15,400 LB 205 kip-f† \bigcirc (3) 147 klp-f† 183 kip-f† ◁ **○** 101 kip-f† P STEEL STRAIN POLES 27. 27. 27. 28. 32. 32. -INSTALL STEEL STRAIN POLE 'D'
-INSTALL HADAR SENSOR 'R2'
ON POLE 'D'
-INSTALL PEDESTRIAN PEDESTAL 'A'
-INSTALL 2 PED HEADS & 2 PED DETECTORS
ON PED POLE 'A' 1,5,00 NATIONAL TURNPIKE INSTALL STEEL STRAND FOLE "WINSTALL THE BIT CONTROLLER IN
MODEL 322 BASE MOUNTED GABNET
INSTALL STEEL AND GABLAN
POWER SUPPLY AND CABLAN
POWER SUPPLY AND CABLAN
POWER WINSTALL THE DI REDUX SHEETS
ON POLE "WON POLE "WON POLE "WON POLE "WON POLE "WON POLE "W-D5 WILL PROVIDE RADAR DETECTION EQUIPMENT. CONTACT DAVID HUBER FOR PICKUP CELL PHONE: 502-550-0803 •• CONTACT DAVID HUBER FOR DETECTION ZONE PLACEMENT FOR ADVANCED RADAR SENSORS R3 AND R5 <u>`</u>(₽): (1) X (C) 1 @ ·@:(5) DETECTION SCHEDULE

DIST. FROM
SLOT CHANNEL SIZE STOP BAR Ŕ NATIONAL TURNPIKE INSTALL STEEL STRAIN POLE 'C'
NUTALL 2 RADRA SENSORS 'R3' 8' R4'
ON POLE 'C'
-INSTALL PEDESTRIAN PEDESTAL 'B'
-INSTALL I PED HEAD & PED DETECTOR
ON PED POLE 'B' SIZE 6x30 6x30 6x6 6x6 6x30 6x30 6x6 6x6 6x6 -INSTALL STEEL STRAIN POLE '8"
-INSTALL I RADAR SENSOR 'R5"
ON POLE '8". RADAR 2A 2B 2C 2D 2D 5 5 6B 6B 6C 6D OUTPUT FILE CONNECTION FOR FYA ON PHASE 5 PHASE 5 RED
PHASE 5 YELLOW
PHASE 5 GREEN
PED YELLOW PHASE 6 THE CONTRACTOR SHALL CONNECT THE CONNECTOR LABELED "2PY 4PY 6PY 8PY TO MOMECTOR "CONNECTOR" TO A STAGEN BEHIND THE OUTPUT TO SHALE CABINET (SIEMENS) ONLY. HAYE 2 CONNECTORS WHICH SIMPLY NEED TO BE CONNECTED TOGETHER. PH 4A & 1PED DETECTOR PH 4B & 1PED DETECTOR PH 6A & 1PED DETECTOR PH 6B & 1PED DETECTOR FLASHING YELLOW ARROW SIGNAL WIRING AND SPECIAL REOUJREMENTS CONNECTING SH 24 & 28 SH 5 SH 64 & 68 SH 84 & 88 OUTPUT FILE CONNECTION FOR FYA ON PHASE 1 PHASE I RED PHASE I YELLOW PHASE I GREEN PED YELLOW PHASE 2 WHITE ALL COUNTDOWN PEDESTRIAN SIGNALS PED POLE A PED POLE B POLE A PED POLE A WIRING SCHEDULE ENDING SH 2A SH 5 SH 6B SH 8A BLUE PEL WHITE WH GREEN WHITE/TRACER SIGNAL HEADS * $(\gray \}$ ORIGIN CONTROLLER CONTROLLER CONTROLLER CONTROLLER CONTROLLER CONTROLLER CONTROLLER CONTROLLER FLASHING YELLOW ARROW BLACK GREEN ARROW BLUE COLOR RED 7-CONDUCTOR FOUR-SECTION FYA HEADS STEADY YELLOW ARROW EDUIPMENT GROUND (**5** ()CONNECTION RED ARROW NOT USED CABLE |-#14/7C |-#14/7C |-#14/7C |-#14/7C 1-#14/7C 1-#14/7C 1-#14/7C 1-#14/7C NEUTRAL DATE PLOTTED: April 16, 2024

Page 65 of 81

Tim Tharpe - Director Phone (502) 564-3020 FAX (502) 564-7759

DIVISION OF TRAFFIC OPERATIONS

PROJECT MATERIALS RELEASE FORM FOR SIGNAL AND LIGHTING

Note: Email form with signatures to KYTC's warehouse (kim.stamper@ky.gov) at least two (2) days prior to arrival for pickup. Ensure Contractor's delivery driver has a copy of form with signatures. Failure to do either may result in long delays or refusal to distribute materials upon arrival.

Item Number: n/a
County: Jefferson

Description: Signals: KY 1020 (NATIONAL TURNPIKE) @ TOLLS LN

| Cabinets | Master code | | |
|----------|-------------|---|------|
| | 1 T-01-0020 | Base Mounted 332 Cabinet | |
| | 1 T-01-0105 | ATC Controller | |
| | 1 T-01-0106 | 1C w/Maxtime (this should go with item ATC controller) | |
| | 1 T-01-0501 | Conflict Monitor, Model 2018 | |
| | 3 T-01-0510 | Isolator, Model 242 (1 for 2070, plus for ped detector and railro | oad) |
| | 7 T-01-0700 | Load Switches | |

| Signals | | |
|---------|-----------|---|
| 6 | T-02-0009 | Siemens 3 Section Signal |
| 6 | T-02-0032 | Siemen 3 section backplate |
| 1 | T-02-0033 | Siemen 4 secton 12" signal (poly) |
| 1 | T-02-0043 | Siemen 4-sec. straight signal backplate |
| 4 | T-02-0090 | Pedestrian signal housing |
| 1 | T-02-0300 | LED Module 12" red arrow |
| 2 | T-02-0310 | LED Module 12" yellow arrow |
| 1 | T-02-0320 | LED Module 12" green arrow |
| 6 | T-02-0330 | LED Module 12" red ball |
| 6 | T-02-0340 | LED Module 12" yellow ball |
| 6 | T-02-0350 | LED Module 12" green ball |
| 4 | T-02-0365 | LED Countdown Pedestrian Module |

| Special items | | | | | | | |
|---------------|-----------|---|-----|--|--|--|--|
| 1 | T-02-0504 | Router (this includes power supply/antenna/cabling) | | | | | |
| 1 | T-02-0650 | Pedstl.top mntg.bkt One-way | | | | | |
| 1 | T-02-0660 | Pedstl.top mntg.bkt Two-way | | | | | |
| 2 | T-02-0670 | Pedestal | | | | | |
| 4 | T-06-0710 | Ped Detector Pole Mount FSA Box | | | | | |
| 4 | T-06-0730 | Ped Button w/o Plunge | r | | | | |
| 4 | T-17-0015 | 9 X 15 Countdown Ped Sign DBL Sided | | | | | |
| 1 | | Radar (SUPPLIED BY | D5) | | | | |

| Poles | | |
|---------------|---|--------------------------|
| 1 T-04-0030 | Steel Strain Pole 32 foot | |
| 3 T-04-0040 | Steel Strain Pole 34 foot | |
| Special items | | |
| 0 T-02-0400 | Video Detection System Camera Detector, SP | # of left turns put here |
| 0 T-02-0401 | Camera Mounting System | |
| 0 T-02-0500 | MDS Radios 9810 | |
| 0 T-02-0504 | Router (this includes power supply/antenna/cabling) | |
| 0 T-02-0507 | Ethernet/Serial Data Radio | |
| 0 T-02-0510 | Antenna 6 db omni | |
| 0 T-02-0520 | Antenna 10 db yagi | |
| 0 T-02-0530 | Antenna 9 db omni | |
| 0 T-03-0230 | Jumper 3' N-N RG-58 | |
| 0 T-03-0240 | Jumper 60' N-N RG-213 | |
| 0 T-06-0800 | Surge Protector for Radio | |
| 0 T-09-0410 | Sign Hanger for 48" signs | |
| 0 T-09-0415 | 30 X 36 through 36 X 36 sign hanger (New) | |
| 0 T-02-0650 | Pedstl.top mntg.bkt One-way | |
| 0 T-02-0660 | Pedstl.top mntg.bkt Two-way | |
| 0 T-02-0661 | Post Top for Pedestal (each) | |
| 0 T-02-0670 | Pedestal | |
| 0 T-06-0710 | Ped Detector Pole Mount FSA Box | |
| 0 T-06-0730 | Ped Button w/o Plunger | |
| 0 T-17-0015 | 9 X 15 Countdown Ped Sign DBL Sided | |

Contract ID: 244403 Page 67 of 81

Tim Tharpe - Director Phone (502) 564-3020

DIVISION OF TRAFFIC OPERATIONS

| Poles | |
|-------------|---------------------------|
| 0 T-04-0010 | Steel Strain Pole 28 foot |
| 0 T-04-0020 | Steel Strain Pole 30 foot |
| 0 T-04-0030 | Steel Strain Pole 32 foot |
| 0 T-04-0040 | Steel Strain Pole 34 foot |
| 0 T-04-0051 | Steel Strain Pole 36 foot |
| 0 T-04-0054 | Steel Strain Pole 38 foot |
| 0 T-04-0055 | Steel Strain Pole 40 foot |

| 0 1-04-0054 | Steel Strain Pole 38 foot | | |
|---------------------------------------|--|--------------------|--------------------|
| 0 T-04-0055 | Steel Strain Pole 40 foot | | |
| | | | |
| REQUIRED | | | |
| | | | |
| Electrical Contractor Name | | | |
| | | • | |
| Electrical Contractor Supervisor | | Contact numb | per for Supervisor |
| - | | , | • |
| Project Engineer | | Contact number for | Project Engineer |
| , 0 | | • | , |
| Project Engineer attests that the mer | ntioned contractor is the actual electrical contractor on th | is project | |
| | | | |
| Signature of Project E | Engineer or Designee | | |
| Gigilature of Froject L | inginical of Designee | | |

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

STANDARD SPECIFICATIONS

Any reference in the plans or proposal to previous editions of the Standard Specifications for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2019 and Standard Drawings, Edition of 2020.

SUPPLEMENTAL SPECIFICATIONS

The contractor shall use the Supplemental Specifications that are effective at the time of letting. The Supplemental Specifications can be found at the following link: http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx

1I

SPECIAL NOTE FOR PORTABLE CHANGEABLE MESSAGE SIGNS

This Special Note will apply when indicated on the plans or in the proposal.

1.0 DESCRIPTION. Furnish, install, operate, and maintain variable message signs at the locations shown on the plans or designated by the Engineer. Remove and retain possession of variable message signs when they are no longer needed on the project.

2.0 MATERIALS.

2.1 General. Use LED Variable Message Signs Class I, II, or III, as appropriate, from the Department's List of Approved Materials.

Unclassified signs may be submitted for approval by the Engineer. The Engineer may require a daytime and nighttime demonstration. The Engineer will make a final decision within 30 days after all required information is received.

2.2 Sign and Controls. All signs must:

- Provide 3-line messages with each line being 8 characters long and at least 18 inches tall. Each character comprises 35 pixels.
- Provide at least 40 preprogrammed messages available for use at any time.
 Provide for quick and easy change of the displayed message; editing of the message; and additions of new messages.
- 3) Provide a controller consisting of:
 - a) Keyboard or keypad.
 - b) Readout that mimics the actual sign display. (When LCD or LCD type readout is used, include backlighting and heating or otherwise arrange for viewing in cold temperatures.)
 - c) Non-volatile memory or suitable memory with battery backup for storing pre-programmed messages.
 - d) Logic circuitry to control the sequence of messages and flash rate.
- 4) Provide a serial interface that is capable of supporting complete remote control ability through land line and cellular telephone operation. Include communication software capable of immediately updating the message, providing complete sign status, and allowing message library queries and updates.
- 5) Allow a single person easily to raise the sign to a satisfactory height above the pavement during use, and lower the sign during travel.
- 6) Be Highway Orange on all exterior surfaces of the trailer, supports, and controller cabinet.
- 7) Provide operation in ambient temperatures from -30 to + 120 degrees Fahrenheit during snow, rain and other inclement weather.
- 8) Provide the driver board as part of a module. All modules are interchangeable, and have plug and socket arrangements for disconnection and reconnection. Printed circuit boards associated with driver boards have a conformable coating to protect against moisture.
- Provide a sign case sealed against rain, snow, dust, insects, etc. The lens is UV stabilized clear plastic (polycarbonate, acrylic, or other approved material) angled to prevent glare.
- 10) Provide a flat black UV protected coating on the sign hardware, character PCB, and appropriate lens areas.
- 11) Provide a photocell control to provide automatic dimming.

1**I**

- 12) Allow an on-off flashing sequence at an adjustable rate.
- 13) Provide a sight to aim the message.
- 14) Provide a LED display color of approximately 590 nm amber.
- 15) Provide a controller that is password protected.
- 16) Provide a security device that prevents unauthorized individuals from accessing the controller.
- 17) Provide the following 3-line messages preprogrammed and available for use when the sign unit begins operation:

 $/KEEP/RIGHT/\Rightarrow\Rightarrow\Rightarrow/$ /MIN/SPEED/**MPH/ /ICY/BRIDGE/AHEAD/ /ONE /KEEP/LEFT/< LANE/BRIDGE/AHEAD/ /LOOSE/GRAVEL/AHEAD/ /ROUGH/ROAD/AHEAD/ /RD WORK/NEXT/**MILES/ /MERGING/TRAFFIC/AHEAD/ /TWO WAY/TRAFFIC/AHEAD/ /NEXT/***/MILES/ /PAINT/CREW/AHEAD/ /HEAVY/TRAFFIC/AHEAD/ /REDUCE/SPEED/**MPH/ /SPEED/LIMIT/**MPH/ /BRIDGE/WORK/***0 FT/ /BUMP/AHEAD/ /MAX/SPEED/**MPH/ /TWO/WAY/TRAFFIC/ /SURVEY/PARTY/AHEAD/

*Insert numerals as directed by the Engineer.

Add other messages during the project when required by the Engineer.

2.3 Power.

- Design solar panels to yield 10 percent or greater additional charge than sign consumption. Provide direct wiring for operation of the sign or arrow board from an external power source to provide energy backup for 21 days without sunlight and an on-board system charger with the ability to recharge completely discharged batteries in 24 hours.
- **3.0 CONSTRUCTION.** Furnish and operate the variable message signs as designated on the plans or by the Engineer. Ensure the bottom of the message panel is a minimum of 7 feet above the roadway in urban areas and 5 feet above in rural areas when operating. Use Class I, II, or III signs on roads with a speed limit less than 55 mph. Use Class I or II signs on roads with speed limits 55 mph or greater.

Maintain the sign in proper working order, including repair of any damage done by others, until completion of the project. When the sign becomes inoperative, immediately repair or replace the sign. Repetitive problems with the same unit will be cause for rejection and replacement.

Use only project related messages and messages directed by the Engineer, unnecessary messages lessen the impact of the sign. Ensure the message is displayed in either one or 2 phases with each phase having no more than 3 lines of text. When no message is needed, but it is necessary to know if the sign is operable, flash only a pixel.

When the sign is not needed, move it outside the clear zone or where the Engineer directs. Variable Message Signs are the property of the Contractor and shall be removed from the project when no longer needed. The Department will not assume ownership of these signs.

4.0 MEASUREMENT. The final quantity of Variable Message Sign will be

1I

the actual number of individual signs acceptably furnished and operated during the project. The Department will not measure signs replaced due to damage or rejection.

5.0 PAYMENT. The Department will pay for the Variable Message Signs at the unit price each. The Department will not pay for signs replaced due to damage or rejection. Payment is full compensation for furnishing all materials, labor, equipment, and service necessary to, operate, move, repair, and maintain or replace the variable message signs. The Department will make payment for the completed and accepted quantities under the following:

CodePay ItemPay Unit02671Portable Changeable Message SignEach

Effective June 15, 2012

2020 STANDARD DRAWINGS THAT APPLY

TRAFFIC ~ TEMPORARY ~ TRAFFIC CONTROL

| LANE CLOSURE TWO-LANE HIGHWAY | TTC-100-05 |
|--|------------|
| LANE CLOSURE MULTI-LANE HIGHWAY CASE I | TTC-115-04 |
| SHOULDER CLOSURE | TTC-135-03 |

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

Contract ID: 244403 Page 75 of 81

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

- I. Application
- II. Nondiscrimination of Employees (KRS 344)

I. APPLICATION

- 1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.
- 2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.
- 3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (forty and above); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age forty (40) and over. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, except that such a notice or advertisement may indicate a preference, limitation, or specification based on religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, when religion, national origin, sex, or age forty (40) and over, or because the person is a qualified individual with a disability, is a bona fide occupational qualification for employment.

- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual because of his race, color, religion, national origin, sex, disability or age forty (40) and over, in admission to, or employment in any program established to provide apprenticeship or other training.
- 4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

Revised: January 25, 2017

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (7) provides:

No present or former public servant shall, within six (6) months following termination of his office or employment, accept employment, compensation, or other economic benefit from any person or business that contracts or does business with, or is regulated by, the state in matters in which he was directly involved during the last thirty-six (36) months of his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, or for which he received, prior to his state employment, a professional degree or license, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved during the last thirty-six (36) months of his tenure in state government. This subsection shall not prohibit the performance of ministerial functions, including but not limited to filing tax returns, filing applications for permits or licenses, or filing incorporation papers, nor shall it prohibit the former officer or public servant from receiving public funds disbursed through entitlement programs.

KRS 11A.040 (9) states:

A former public servant shall not represent a person or business before a state agency in a matter in which the former public servant was directly involved during the last thirty-six (36) months of his tenure, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, 1025 Capital Center Drive, Suite 104, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Revised: May 23, 2022

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information*, *Standard Attachments and General Terms* at the following address: https://www.eProcurement.ky.gov.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

EMPLOYEE RIGHTS UNDER THE FAIR LABOR STANDARDS ACT

THE UNITED STATES DEPARTMENT OF LABOR WAGE AND HOUR DIVISION

FEDERAL MINIMUM WAGE

\$7.25

BEGINNING JULY 24, 2009

OVERTIME PAY

At least $1\frac{1}{2}$ times your regular rate of pay for all hours worked over 40 in a workweek.

CHILD LABOR

An employee must be at least **16** years old to work in most non-farm jobs and at least **18** to work in non-farm jobs declared hazardous by the Secretary of Labor.

Youths **14** and **15** years old may work outside school hours in various non-manufacturing, non-mining, non-hazardous jobs under the following conditions:

No more than

- 3 hours on a school day or 18 hours in a school week;
- 8 hours on a non-school day or 40 hours in a non-school week.

Also, work may not begin before **7 a.m.** or end after **7 p.m.**, except from June 1 through Labor Day, when evening hours are extended to **9 p.m.** Different rules apply in agricultural employment.

TIP CREDIT

Employers of "tipped employees" must pay a cash wage of at least \$2.13 per hour if they claim a tip credit against their minimum wage obligation. If an employee's tips combined with the employer's cash wage of at least \$2.13 per hour do not equal the minimum hourly wage, the employer must make up the difference. Certain other conditions must also be met.

ENFORCEMENT

The Department of Labor may recover back wages either administratively or through court action, for the employees that have been underpaid in violation of the law. Violations may result in civil or criminal action.

Employers may be assessed civil money penalties of up to \$1,100 for each willful or repeated violation of the minimum wage or overtime pay provisions of the law and up to \$11,000 for each employee who is the subject of a violation of the Act's child labor provisions. In addition, a civil money penalty of up to \$50,000 may be assessed for each child labor violation that causes the death or serious injury of any minor employee, and such assessments may be doubled, up to \$100,000, when the violations are determined to be willful or repeated. The law also prohibits discriminating against or discharging workers who file a complaint or participate in any proceeding under the Act.

ADDITIONAL INFORMATION

- Certain occupations and establishments are exempt from the minimum wage and/or overtime pay provisions.
- Special provisions apply to workers in American Samoa and the Commonwealth of the Northern Mariana Islands.
- Some state laws provide greater employee protections; employers must comply with both.
- The law requires employers to display this poster where employees can readily see it.
- Employees under 20 years of age may be paid \$4.25 per hour during their first 90 consecutive calendar days of employment with an employer.
- Certain full-time students, student learners, apprentices, and workers with disabilities may be paid less than the minimum wage under special certificates issued by the Department of Labor.



Contract ID: 244403

Page 78 of 81

PART IV

INSURANCE

Refer to *Kentucky Standard Specifications for Road and Bridge Construction*,

current edition

PART V

BID ITEMS

244403

PROPOSAL BID ITEMS

Contract ID: 244403 Page 81 of 81

Page 1 of 1

Report Date 6/13/24

Section: 0001 - ROADWAY

| LINE | BID CODE | ALT | DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|----------|-----|--|----------|------|------------------|----|--------|
| 0010 | 02562 | | TEMPORARY SIGNS | 549.00 | SQFT | | \$ | |
| 0020 | 02650 | | MAINTAIN & CONTROL TRAFFIC (JEFFERSON KY 1020) | 1.00 | LS | | \$ | |
| 0030 | 02650 | | MAINTAIN & CONTROL TRAFFIC (JEFFERSON KY 1694) | 1.00 | LS | | \$ | |
| 0040 | 02650 | | MAINTAIN & CONTROL TRAFFIC (JEFFERSON KY 913) | 1.00 | LS | | \$ | |
| 0050 | 02671 | | PORTABLE CHANGEABLE MESSAGE SIGN (PURCHASE AND SUPPLY) | 2.00 | EACH | | \$ | |
| 0060 | 02775 | | ARROW PANEL | 8.00 | EACH | | \$ | |

Section: 0002 - SIGNALIZATION

| LINE | BID CODE | ALT DESCRIPTION | QUANTITY | UNIT | UNIT PRIC | FP | AMOUNT |
|------|------------|--|----------|------|------------------|----|--------|
| 0070 | 04820 | TRENCHING AND BACKFILLING | 160.00 | LF | | \$ | |
| 0800 | 04844 | CABLE-NO. 14/5C | 320.00 | LF | | \$ | |
| 0090 | 04845 | CABLE-NO. 14/7C | 4,900.00 | LF | | \$ | |
| 0100 | 04886 | MESSENGER-15400 LB | 1,635.00 | LF | | \$ | |
| 0110 | 04932 | INSTALL STEEL STRAIN POLE | 10.00 | EACH | | \$ | |
| 0120 | 20093NS835 | INSTALL PEDESTRIAN HEAD-LED | 12.00 | EACH | | \$ | |
| 0130 | 20188NS835 | INSTALL LED SIGNAL-3 SECTION | 18.00 | EACH | | \$ | |
| 0140 | 20266ES835 | INSTALL LED SIGNAL- 4 SECTION | 2.00 | EACH | | \$ | |
| 0150 | 20390NS835 | INSTALL COORDINATING UNIT | 3.00 | EACH | | \$ | |
| 0160 | 20408ES835 | INSTALL LED BEACON-12 IN | 3.00 | EACH | | \$ | |
| 0170 | 21743NN | INSTALL PEDESTRIAN DETECTOR | 12.00 | EACH | | \$ | |
| 0180 | 23157EN | TRAFFIC SIGNAL POLE BASE | 44.00 | CUYD | | \$ | |
| 0190 | 23222EC | INSTALL SIGNAL PEDESTAL | 4.00 | EACH | | \$ | |
| 0200 | 24528ED | TETHER WIRE | 375.00 | LF | | \$ | |
| 0210 | 24900EC | PVC CONDUIT-1 1/4 IN-SCHEDULE 80 | 120.00 | LF | | \$ | |
| 0220 | 24901EC | PVC CONDUIT-2 IN-SCHEDULE 80 | 160.00 | LF | | \$ | |
| 0230 | 24908EC | INSTALL SIGNAL CONTROLLER-TY ATC | 3.00 | EACH | | \$ | |
| 0240 | 26119EC | INSTALL RADAR PRESENCE DETECTOR TYPE A | 6.00 | EACH | | \$ | |
| 0250 | 26120EC | INSTALL RADAR ADVANCE DETECTOR TYPE B | 2.00 | EACH | | \$ | |

Section: 0003 - DEMOBILIZATION

| LINE | BID CODE | LT DESCRIPTION | QUANTITY | 10 | TIV | UNIT PRIC | FP | AMOUNT |
|------|----------|----------------|----------|----|-----|------------------|----|--------|
| 0260 | 02569 | DEMOBILIZATION | 1.00 | 0 | LS | | \$ | |