

BEGIN Project 1-40 40

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## I-40/Donelson Pike

CNW-181 Davidson Co. Pre-Bid Meeting April 19, 2022

#### Agenda

#### Introduction

- Contract Requirements
- Special Provision 108B

#### Soil & Groundwater Management Plan

- Background & Summary
- Health & Safety Plan
- Construction & Documentation Requirements

#### Design Information

- Adjacent MNAA TARI Project
- Traffic Control Phasing
- Utility Relocations
- Tract 23 Building & Diesel Tank Removal
- BNA Airport Operations Area (AOA)
- FAA 7460-1 Applications & Approvals
- Rock Blasting Approvals Required
- Upcoming Revisions
- MNAA Coordination
- Closing
  - RFI's & Primary Point of Contact



#### CNW 181 Davidson Co.

- Letting Date: May 13, 2022
- Completion Date: August 31, 2027

DAVIDSON COUNTY (Contract No.CNW181) Call No. 021 Project No. NH-I-40-5(146), 19008-3195-44 (PIN 116896.00) The grading, drainage, construction of bridges, retaining walls and paving on I-40 (MM 216) at the Donelson Pike interchange (includes relocation of Donelson Pike from the taxiway bridges over Donelson Pike to I-40).

Project Length - 1.302 miles Completion Time - On or before 8/31/2027 (See Special Provision 108B) The DBE goal for this contract is 11%.



#### **Contract Requirements**

- Prequalification Requirements
- Mandatory Pre-Bid Attendance
- Standard Prequalification Applies
- Make sure your TDOT prequalification is currently valid
- Contractors with an expired prequalification that has surpassed the 90 days grace period will not be authorized to bid.
- Prospective bidders must have filed their standard prequalification questionnaire at least 14 days prior to the date of the letting.



#### **Contract Requirements**

- Meeting attendance does not guarantee bid authorization.
- All prime/joint venture contractors pre-qualified by the Department must obtain authorization to bid through the standard bid authorization procedure. BID AUTHORIZATION MUST BE OBTAINED PRIOR TO 4:00 P.M. CST ON THE DAY PRECEDING THE LETTING.
- Review the Instruction to Bidders to ensure you meet all qualification/requirements.
- Important to submit all required documentation into the Department timely after the letting for review. Required for review prior to an early award.



### **Special Provision 108B**

 Temporary lane closures except for blasting shall be permitted during off-peak hours 8:00 PM – 5:00 AM in which at least one lane in each direction is required to remain open at all times. For each hour, or portion thereof, in which a lane is closed to traffic outside of these restrictions, the contractor will be charged \$2,500 per hour per lane, not as penalty, but as liquidated damage.

 Rolling roadblocks for beam erection shall be permitted on I-40 for intervals not to exceed 20 minutes on Sundays between the hours of 5:00 AM and 10:00 AM. After each pacing interval, the traffic shall resume normal flow before beginning another rolling roadblock. For each 20 minutes, or portion thereof, that a pacing interval exceeds 20 minutes, the sum of \$1,000 shall be deducted from the monies due the contractor, not as a penalty, but as liquidated damages.



### **Special Provision 108B**

 A blasting plan shall be submitted for approval by MNAA and Colonial Pipeline prior to any blasting. Blasting shall be allowed Monday through Saturday 9:00 A.M. to 2:00 P.M. Any rolling roadblocks necessary for blasting shall be no more than 20 minutes and approved by the Engineer prior. For each 20 minutes, or portion thereof, that a pacing interval exceeds 20 minutes, the sum of \$1,500 shall be deducted from the monies due the contractor, not as a penalty, but as liquidated damages.

 Work shall be complete for Phases 1, 2, and 3A no later than August 31, 2026. For each day, or portion thereof, in which Phases 1, 2, and 3A are not complete outside of these restrictions, the contractor shall be charged \$4,000 per day, not as penalty, but as liquidated damage.



### **Special Provision 108B**

- Any delay to the work specified in Phase 3B that is a result of the MNAA TARI project shall be considered as a non-compensable delay. There will not be compensation for mobilization, demobilization, inefficiencies, etc. due to this project.
- Construction of the temporary S.R. 255 transfer shall begin immediately following the transfer of all communications into the duct bank. Once work begins on the S.R. 255 transfer it shall be a continuous operation until complete.



- Background Information
- Health & Safety Concerns
- Contaminated Media
- Soil Management Plan
- Engineering Controls
- Groundwater Management Plan
- Documentation











#### Background Information

- Gasoline pipeline damaged during drilling by third party.
- Estimated 14,000 gallons of product released during the spill.

#### Health and Safety Concerns

- Contractor responsible for development of Health and Safety Plan (HASP) that will be required to be provided to TDEC.
- HASP should include site-specific awareness training for all workers that enter the former Area of Investigation (AOI) covering the following topics.
  - Health and safety information on petroleum hydrocarbons present in soil and groundwater
  - Engineering controls and work practices to minimize exposure of personnel.
  - Decontamination requirements, if necessary



#### Contaminated Media

- Contaminated soils may be encountered along the pipeline location (bedding material) and immediately downgradient from the spill area, along the spill pathway.
- Likely contaminated groundwater (perched) may be encountered at the soil/bedrock interface and the interface between weathered bedrock and competent formation rock.



#### Soil Management Plan

- TDOT will provide an Environmental Professional (EP) during any excavation activities within the AOI as required under the SGMP.
- The EP will provide field screening of soils using visual, olfactory and photoionization detector (PID) to determine what category the excavated soils are placed in.

#### • Field Screening

- Field screening will be required at each 100 cubic yard interval.
- <25 ppm PID will require soils to be managed as potentially reusable. These soils will be stockpiled with the intent to potentially reuse on the site.
- >25 ppm PID will require soil to be managed as potentially impacted and segregated from soils that are potentially reusable.



#### Stockpile Management

- Stockpiles will be limited to approximately 240 cubic yards as required.
- Stockpiles will be required to be covered with poly sheeting daily and provided with any sediment or erosion controls necessary to prevent runoff.
- Testing of each 240 cubic yard stockpile will be conducted as they are created.
- Testing is required on both potentially impacted and potentially reusable stockpiles.
- Stockpiles that test less than EPA Regional Screening Levels for Industrial Soil (RSLs for Industrial) can be used for beneficial reuse if approved by TDEC.
- Additional requirements for beneficial reuse mentioned in the SGMP are still under consideration (18-inch limitation).



#### Transportation

- BMPs are required to prevent migration of contaminants from the stockpiles, during loading and transportation activities.
- Trucks will need to be cleaned of any surface spillage during loading prior to leaving the site.
- Loaded dump trucks, roll-offs or dump trailers will need to be appropriately lined, covered and properly manifested in accordance with local, state and federal regulations.



#### • Engineering Controls

 Contractor will use control measures during excavation, grading, stockpiling, loading, and transporting potentially impacted soils.

#### Stormwater Run-off

– Silt fences, hay bales, material covering, access control.

#### Dust Control

- Mitigative measures to prevent airborne release of contaminants such as water trucks or soil amendments.
- Vehicle Tracking



#### Groundwater Management Plan

#### Free Product or Petroleum Odor

- Remove and contain in appropriate containers such as drums, totes or tanks depending on the volume of impacted water encountered.
- EP will assist contractor in determining appropriate containers.
- Any dewatering activities in the AOI will need to be reviewed by the EP prior to water removal.



#### Documentation

- Disposal Approval Documents
- Disposal Manifests
- Soil Stockpile Locations
- Field Screening Reports
- Laboratory Reports



### **Design Information**

- Adjacent MNAA TARI Project
- Traffic Control Phasing
- Utility Relocations
- Tract 23 Building & Diesel Tank Removal
- FAA 7460-1 Applications & Approvals
- Rock Blasting Approvals Required
- Upcoming Revisions



## Adjacent MNAA – TARI Project





#### **Traffic Control – Objectives**

- I-40
  - Maintain 8 Lanes of Traffic ( 4 Travel Lanes in Each Direction)
  - Reduced Lane Widths 3 @ 11' , 1 @ 12' with 2' Shoulder Min.
- S.R. 255 (Donelson Pike)
  - Maintain 4 Lanes of Traffic ( 2 Travel Lanes in Each Direction)
  - Reduced Lane Widths 4 @ 11' with 2' Shoulder Min.
- MNAA TARI Project
  - Minimize Impact to Traffic Accessing the Airport
  - Consider Phasing Opportunities to accommodate simultaneous construction to reduce duration of impact to the public.



#### **Traffic Control – Phase 1**

Department of Transportation



#### **Traffic Control – Phase 2**





#### Traffic Control – S.R. 255 Transfer





#### **Traffic Control – Phase 3**

#### • I-40

- Traffic restored to existing configuration
- Completion of CD Road
   excavation
- Terminal Drive Ramp connection
- S.R. 255 (Donelson Pike)
  - Interchange & New Alignment
     open to traffic
  - Remove Temporary Transfer & complete construction





#### **Traffic Control – Phase 3B**





#### **Utility Relocations**





#### **Utility Relocations**





#### Tract 23 – Building & Diesel Tank Removal





#### **BNA Airport Operations Area (AOA)**

- Special Notes Sheets 2D thru 2D2
  - Special Conditions associated with working adjacent to and within the AOA.

#### CONSTRUCTION ADJACENT TO AN ACTIVE RUNWAY:

(1) DUE TO THE PROXIMITY OF BNA RUNWAY 2R/20L TO THE PROPOSED ALIGNMENT OF S.R. 255 (DONELSON PIKE), THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH SPECIAL CONDITIONS SET FORTH BY THE FEDERAL AVIATION ADMINISTRATION (FAA) AND METRO NASHVILLE AIRPORT AUTHORITY (MNAA). THE FOLLOWING NOTES IN THE *MNAA AIRFIELD GENERAL NOTES* AND *MNAA AIRFIELD SAFETY NOTES* PROVIDE ADDITIONAL INFORMATION ON WHEN, WHERE AND HOW THE CONTRACTOR SHOULD EXPECT THE SPECIAL CONDITIONS. THE LABOR, MATERIALS, SUBMITTALS, TRAFFIC CONTROL DEVICES, TRAINING AND ESCORTING ASSOCIATED WITH THE AIRFIELD REQUIREMENTS WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.





#### 7460-1 Notice of Proposed Construction or Alteration

- Required for any object that is not shielded by existing permanent structures (e.g., below existing poles):
  - Within a 100 to 1 imaginary slope within 20,000 ft of runway
  - Within a 50 to 1 imaginary slope within 10,000 ft of runway





- Online Application
- Point Based Submittals (LAT/LONG/Elevation)
- Equipment Height
- Type of Work (Temporary Construction)
- Duration of Work (Start & End Date) 18 mon. max.
- Traditional Construction submitted as Rectangles
- 1A Accuracy Certification
  - Signed & Sealed Letter confirming survey grade information
  - Guaranteed to "save time" on review process





SMITH AND PARTNERS

S.R. 255 RE-ALIGNMENT AND I-40 INTERCHANGE August 17, 2018 Page 2

Location 9 Lat: N 36° 08' 04.53" Long: W 86° 39' 42.89" Existing Ground Elevation: 527.73 Proposed Ground Elevation: 538.26

Location 11 Lat: N 36° 08' 13.86" Long: W 86° 39' 38.57" Existing Ground Elevation: 529.19 Proposed Ground Elevation: 526.27

Location 13 Lat: N 36° 08' 19.49" Long: W 86° 39' 35.64" Existing Ground Elevation: 475.65 Proposed Ground Elevation: 504.58

Location 15 Lat: N 36° 08' 24.62" Long: W 86° 39' 34.28" Existing Ground Elevation: 468.07 Proposed Ground Elevation: 505.15

Location 17 Lat: N 36° 08' 25.83" Long: W 86° 39' 31.69" Existing Ground Elevation: 456.99 Proposed Ground Elevation: 494.23

The horizontal datum (coordinates) are in terms of the North American Datum of 1983 (NAD 83) and expressed as degrees, minutes, and seconds. The vertical datum (elevations) are in terms of the North American Vertical Datum of 1988 (NAVD 88) and expressed as elevations above mean sea level (MSL).

Sincerely, Bentin Q. Laber

Ben Coles, P.E.



Location 12 Lat: N 36° 08' 18:54" Long: W 86° 39' 35:95" Existing Ground Elevation: 483:31 Proposed Ground Elevation: 506:87

Location 14 Lat: N 36° 08' 23.85" Long: W 86° 39' 37.61" Existing Ground Elevation: 478.95 Proposed Ground Elevation: 515.40

Location 16 Lat: N 36° 08' 25.42" Long: W 86° 39' 32.63" Existing Ground Elevation: 457.80 Proposed Ground Elevation: 497.07

OF TENS

08-17-18



Figure 2 - CAT 330C with Boom Extended

East Main



- Current Approvals:
  - Permanent Roadway Surface
  - Permanent Roadway Features (Light, Signal & CCTV Pole and Signs)
  - Grading Equipment (40' Tall) Parallel to BNA Runway 2R/20L
    - Expires December 4, 2022
    - Can be extended 18 months to June 4, 2024
- Pending Approvals:
  - Cranes for Bridge Construction
    - 105' Boom for Temporary Transfer Structure
    - 150' Boom for Bridge 1, 2 & 3 Locations



- Review Duration (45 Day Minimum)
  - 26 Points for Geotech = 35 working days / 8 weeks
  - 3 Points for Geotech = 82 working days / 16 weeks
  - 5 Points for Temp. Equipment = 52 working days / 10 weeks
  - 59 Points for Roadway Features = 33 working days / 7 weeks
  - 15 Points for Geotech = 119 working days / 26 weeks
    - Cancelled by MNAA due to Runway Closure
  - 17 Points for Roadway = 163 working days / 35 weeks
    - ATCT Line of Sight Delay
- Determination
  - No Objection Proceed with given criteria and notify control tower
  - No Objection based on weather conditions:
    - VMC vs IMC No Construction during low visibility conditions
  - Objection Not acceptable with an active runway.



 Recent Determination

 Use of L-810 LED Red Obstruction Lights on Temp. Signal Poles



Source: pr-tech.com



#### **Rock Blasting – Approvals Required**

- MNAA Property
  - Plan Review a Minimum of 7 Days Prior
  - Public Outreach & Social Media
- Colonial Pipeline
  - Within 200' of Proposed and Existing Pipeline Easements



### **Upcoming Plans Revision**

- Earthwork
  - Embankment Comp. In Place (203-10) converted to Excavation Unclassified (203-01) & Borrow (203-03).
  - Excavation Inside Contamination AOI measured separately
- AOI in S&GW Management Report Added to Plans
- Temporary Transfer Structures
  - Bridgecor Steel Arch Structures Separated into two LS items.
- FAA 7460-1 Determinations
  - L-810 Red Obstruction Lights Notes & Location Provided
  - Revised Roadside Sign 19 Location Pending Approval
- Proposed TVA Tower 134B Location Revised
- Separate Item for Electrical Service Connection to Signal 2 (I-40 WB / S.R. 255) intersection.





#### Airport Coordination

- Safety / Security is top priority
- Preferred haul routes
- Airfield is restricted unless coordinated with MNAA



- Please submit RFIs by email to <u>Ryan.Sweeney@tn.gov</u>
- Please submit with subject line as, "CNW181 Davidson RFI"
- RFIs will be accepted up until Friday, May 6th, at 4:00 p.m. CDT.

Ryan Sweeney, HQ Construction (615) 393-3174





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# I-40/Donelson Pike Questions?