

CALL NO. 332

CONTRACT ID. 241317

HARLAN COUNTY

FED/STATE PROJECT NUMBER FD51 048 0522 011-012

DESCRIPTION KY 522

WORK TYPE CULVERT REPLACEMENT

PRIMARY COMPLETION DATE 10/31/2025

### **LETTING DATE:** October 24,2024

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME October 24,2024. 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
- COMPACTION OPTION B
- SPECIAL NOTE(S) APPLICABLE TO PROJECT
- TREE REMOVAL
- TRAFFIC CONTROL PLAN
- CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES
- RIGHT OF WAY CERTIFICATION
- UTILITY IMPACT & RAIL CERTIFICATION NOTES
- PERMIT(S)

### PART II SPECIFICATIONS AND STANDARD DRAWINGS

- STANDARD AND SUPPLEMENTAL SPECIFICATIONS
- [SN-1I] PORTABLE CHANGEABLE MESSAGE SIGNS

### 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

HARLAN COUNTY FD51 048 0522 011-012

### Contract ID: 241317 Page 4 of 90

### **ADMINISTRATIVE DISTRICT - 11**

CONTRACT ID - 241317 FD51 048 0522 011-012

**COUNTY - HARLAN** 

PCN - DE04805222417 FD51 048 0522 011-012

KY 522 REPLACE CULVERT OVER BRIDGE BRANCH AT MP 12.75.CULVERT REPLACEMENT GEOGRAPHIC COORDINATES LATITUDE 36:50:50.00 LONGITUDE 83:12:17.00 ADT

### **COMPLETION DATE(S):**

COMPLETED BY 10/31/2025 APPLIES TO ENTIRE CONTRACT - SEE SPECIAL NOTE

150 CALENDAR Days BRIDGE - SEE SPECIAL 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 <a href="https://secure.kentucky.gov/sos/ftbr/welcome.aspx">https://secure.kentucky.gov/sos/ftbr/welcome.aspx</a> .

### 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 <a href="https://kytc.projectquestions@ky.gov">kytc.projectquestions@ky.gov</a>. 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 (<a href="www.transportation.ky.gov/construction-procurement">www.transportation.ky.gov/construction-procurement</a>). 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 state agency certifies that it is in compliance with the provisions of KRS 45A.150, "Access to contractor's books, documents, papers, records, or other evidence directly pertinent to the contract." The Contractor, as defined in KRS 45A.030, 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 agreement for

the purpose of financial audit or program review. 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. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the agreement and shall be exempt from disclosure as provided in KRS 61.878(1)(c).

### **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: 9/1/2024

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: 241317 Page 10 of 90

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.

### Contract ID: 241317 Page 11 of 90

### 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

HARLAN COUNTY FD51 048 0522 011-012

### Contract ID: 241317 Page 12 of 90

### OPTION B

Be advised that the Department will control and accept compaction of asphalt mixtures furnished on this project under OPTION B in accordance with Sections 402 and 403.

HARLAN COUNTY FD51 048 0522 011-012 Contract ID: 241317 Page 14 of 90 6: Depth

(6: Depth (3+3) Cl. 2 Asphalt Base 0.75D PG64-22

(1/2 Depth (12 Asphalt Surface 0.38D PG64-22

(2-20 LBS/SY Asphalt Seal God (Two Applications)

(20 LBS/SY Asphalt Seal Aggregate Size #8 (Two Applications)

(20 LBS/SY Asphalt Seal Aggregate Size #8 (Two Applications)

(4-20 LBS/SY Asphalt Seal Aggregate Size #8 (Two Applications) -3" Depth CL. 2 Asphalt Base 0.75D PG64-22 -11/2" Depth Cl. 2 Asphalt Surface 0.380 PG64-22 6 Depth (3+3) Cl. 2 Asphal+ Base 0.75D PG64-22 [1/2 Depth Cl. 2 Asphal+ Surface 0.38D PG64-22 Asphal+ Surface 0.38D PG64-22 [Apply at rafe 0.0.84 lbs per square yards between each asphal+ layer. 3 Depth CL 2 Asphalt Base 0.75D PG64-22 ITEM NO. —6'Dep†h CSB 6. Depth Traffic Lane Pavement Shoulder I' Pavement Detail "A" TYPICAL SECTIONS Asphalt Material for Tack, SSI-H Asphalt Material for Tack, SSI-H Asphalt Surface Asphalt Surface Asphalt Base Asphalt Base Asphalt Seal Asphalt Seal-CSB Wedge Guardrall If Required Asphalt Seal DRAWING TITLE: KY 522 RCBC OVER BRIDGE BRANCH TYPICAL SECTIONS — Guardrail if Required 3.-5. (1) Graded shoulders shall be widened to 3'-5' where guardrail is to be installed. Paved (2) See Cross Sections for slopes outside the limits of the shoulders. TYPICAL SECTION KY 522 TYPICAL SECTION 3 Asphalt Seal required from outside edge of payed shoulder to 3 a point 2' down the ditch or fill slope. Two Applications Required. EVERSOLE ROAD Paved Profile Grade-See Detail "A" Shoulder Ll'-6" COMMONWEALTH OF KENTUCKY KENNER DEPARTMENT OF HIGHWAYS See Detail "A"

### Page 15 of 90

ITEM NO.

## GENERAL NOTES

## DIVISION 100 -- GENERAL PROVISIONS

THE CONTRACTOR IS INSTRUCTED TO CALL 1-800-772-4607 TO REACH KY 8II, THE ONE-CALL SYSTEM FOR IM-FORMATION ON THE CLOCATION OF EXISTING WORKERGOROUN UTLITIES. THE CALL IS TO BE PLACED A MINIMAM OF TWO CANAN ON ONDER THAN TEN OR BUSINESS DAYS RIGHT OF EXCANALINE. THE CONTRACTOR SHOULD BE AMARE THAT OWNERS OF UNDERGROUND FAVILITIES ARE NOT REQUIRED TO BE MANIBLE OF THE CONTRACTOR SHOULD BE AMARE THAT OWNERS OF UNDERGROUND AND THAT OF THE CONTRACTOR MUST CORDIDARTE EXCANATION WITH THE UTLITY OWNERS, INCLUDING THOSE WOMEN OR DOTS CUBSCRIBE TO KY BILL IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE CONTRACTOR TO CONTRACTOR TO CONTRACT OR THE AREA.

EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BIO ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC, WILL LEE FALD AT THE LUMB SAM BID ROBLE TO "MAINTAIN AND CONTROL TRAFFIC," AS SET FORTH IN THE CONTROL STANDARD SECFICIALITIES REP ROAD AND BRIDGE CONSTRUCTION. THE LUMP SAM BID TO "MAINTAIN AND CONTROL TRAFFIC SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:

B. ALL TRAFFIC CONTROL DEVOICES SLICH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS AND VERTICAL PARKES, PLASTIC DIRANS SHILL NOT BE REMITITED THAT COMES MECESSARE FOR THE CORTROL AND PROTECTION OF VEHICLAR TRAFFIC AS SECFITED IN THESE NOTES. THE JALVAS, THE MUTCO ON THE REVISHER.

A. ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES.

ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF " CONTRACTOR WHEN NO LONGER NEEDED.

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.

MOT GENERAL NOTES

# DIVISION 400 -- ASPHALT PAVEMENTS

## COMPACTION OF ASPHALT MIXTURES

448

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

# DIVISION 600 -- STRUCTURES AND CONCRETE

THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCLLATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRIWKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

TOTAL EXCAVATION: 96 CY TOTAL EMBANKMENT: 23 CY

SPECIAL NOTES

풀

## 650

STANDARO DARNINGS ARE NOT ATTACKED TO THESE PLANS, A STANDARO DARNING BOOK AND THE HELDWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINSTRATIVE SERVICES IN FRANKORT, NY, 1620SEA, TAY, 1620SEA, DEPART BRANCH OF THE DEPARTMENT OF ADMINSTRATIVE SERVICES IN

CORROBIONS LES FOR HRRIZONIL CONTROL MESON CONTROL SON CONTROL LANGE FOR CONTROL OF THE RECORD CONTROL OF THE C

### BASIS OF ELEVATIONS

ELEVATIONS WERE ESTABLISHED BY REDUNDANT GPS OBSERVATIONS USING TRIMBLE RIZ GNSS RECIEVERS ON THE MANUAB VERTIOLA DATUM, GEODID BY ULILZING K-FOORS RIV SQUITIONS PARTED SEPTEMBER 21, 2022, AND WREE CHECKED BY CLOSED DIFFERENTIAL, LOOP BASED ON THE ELEVATIONS OF CPI-1, 488.19

## HARLAN COUNTY KY 522 OVER BRIDGE BRANCH

				_
	OFFSET	N/A	16,72′ RT	20,94' RT
	STATION	N/A	12+11.22	11+81,29
	ELEVATION (Z)	1,348.19	1,380.89	1,382.62
TROL POINTS	EASTING (X)	3,515,255.834 5,696,422.328	3,516,557.346 5,698,902.257	,516,542.921 5,698,875,695
COORDINATE ONTROL POINTS	NORTHING (Y)	3,515,255,834	3,516,557.346	3,516,542.921
	TYPE	MAG NIAL W/ SHINER	MAG SPIKE	R/R SPIKE IN POWER POLE
	CP NUMBER	-	2	BMI

# TAPERING OF OVERLAYS ON LOW SPEED FACILITIES (<45 MPH)

EXISTING PAVEMENT OR NEW PAVEMENT

1:120 TAPER

ASPHALT SURFACE --

TAPER LENGTH IN INCHES 120 X t (In.)

EDGE KEY
Work under this them spoil mode cutting out the existing aspiral surface and the control of the control of the existing surface. The control of the

	EASTING (X)	5,698,698,526	5,698,979,585	
522 CENTERLINE POINTS	NORTHING (Y)	3,516,499,142	3,516,604.051	
KY 522 CENTE	STATION	110+00.00	13+00,00	
	NAME	POB	POE	

DRAWING TITLE: KY 522 RCBC OVER BRIDGE BRANCH RIGHT OF WAY, COORDINATE CONTROL, AND GENERAL NOTES

HARLAN COUNTY Contract ID: 241317 FD51 048 0522 011-012 ≥\/o COUNTY OF HARLAN CUMBERLAND VALLEY ELECTRIC (606)-589-4421 15997 N. U.S 119 CUMBERLAND, KY 40823 CITY OF CUMBERLAND
WATER WORKS DEPARTMENT
(606)-589-4024
205 KINGDOM COME DRIVE
CUMBERLAND, KY 40823 Utility Owners SHEET NO. ITEM NO. Yard Sprinkler Water Valve Telephone Pedestal Water Line Marker Traffic Signal Junction Box Utility Pole Water Well Telephone Pole Traffic Signal Pole Traverse Point TV Junction Box Utility Test Hole Water Meter Water Spigot Water Valve Yard Light ard Sprinkler Traffic Ligh -□-□ \$-0 Sewer Alr Release Valve Right of Way Marker Right of Way Monument Sign Post (Single) Quarry RR Traffic Signal Pole Septic Tank Cleanout Sign with 2 posts Sign group (4) Point (Misc) Power Pole Random (Ground Shot) Railroad Mile Marker Railroad Spike Sanitary Cleanout Sanltary Manhole Satelite Dish Service Pole Station Stamp Survey Nall Swamp Telephone Booth Telephone Junction Box Survey Cross Notch Survey Splke Telephone Line Overhead Felephone Manhole Survey Curb Notch Survey Stone Marker Storm Manhole Stub Power Stub Telephone EMH FILE NAME: C:PWWORKINGJMTD0858980/22-00310-016\_LEGEND\_SHEET.DGN Electric Junction Box Force Main Sewer Valve Interstate Shleld Mag Nail PK Nail Crash Cushlon Electric Pole Headstone Iron Pin Monitoring Well Pedestrian Signal Existing Spring Electric Manhole Electric Pedestal Flag Pole Gas Monitoring Well Gas Well Guldewires & Anchors Mailbox Parking Meter Plns/Plpes Curb Box Inlet Curb Notch Combination Pole Delineator Post Drop Box Electric Meter Fire Hydrant Fuel Tank Inlet Fuel Tank Vent Gas Meter Gas Valve Gas Vent Mlle Marker Post Mineral Parcel Misc Location Point COMMONWEALTH OF KENTUCKY KENGER DRAWING TITLE: KY 5.22 RCBC OVER BRIDGE BRANCH DEPARTMENT OF HIGHWAYS Crash Cushion TY 6 D Crash Cushion TY 6 A Bike Lane Symbol Sewer Storm Marker Sink Hole Tree Line Bollard Sewer Sanltary Marker Sewer Sanitary Force Maln Marker Steam Line Marker Centerline Stationing Multi Utility Bank Marker Cable Guardrail Edge of Water Fence Hedge Flow Line/Thalweg/ Int. Stream or Ditch Guardrail Rallroad Shrub Line Wall (WSM or DSM) Blue Line Stream Lakes and Ponds Regulated Floodway RDZ Line ADA Ramp Anchor Pole Benchmark Centerline Control Monument Control Point Core Hole I T I ww >12 F OT(A) ---All Overhead Utility Lines Duct Underground Electric With Quality Levels Cable Underground Telephone With Quality Levels Main Water With Quality Levels Main Water Greater Than 12 With Quality Levels Cable Underground Fiber With Quality Levels Cable Underground TV With Quality Levels Main Gas With Quality Levels Sewer Sanitary Force Main With Quality Levels Oil Line Quality Levels Steam Line Quality Levels Right of Way Line Mineral Parcel Sewer Sanitary With Quality Levels Cable Underground Electric Marker Duct Underground Electric Marker Cable Underground Fiber Marker Cable Underground Telephone Marker Duct Underground Telephone Marker Corporate Limits Fence COA Property Line Sewer Storm With Quality Levels Multi Utility Bank Quality Levels

Page 16 of 90

Contract ID: 241317 Page 19 of 90

Traffic shall be maintained in accordance with the special note for the traffic control on bridge repair contracts.

CONSTRUCTION INCLUDES:

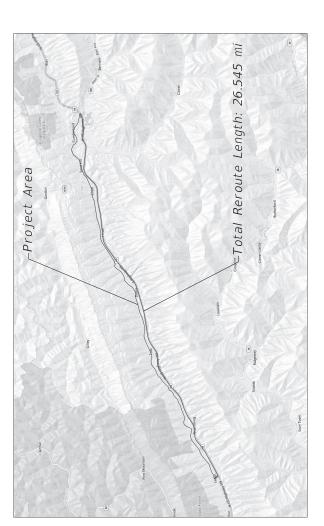
Phase 1

Maintenance of Traffic

Eastbound traffic shall be rerouted from KY 522 and KY 160 at mile marker 11.75 and Main Street onto US 119. Westbound traffic shall be rerouted at KY 2010 onto US 119.

Construction

- Remove existing culvert structure completely.
- Construct new culvert structure in its entierty. 2



COMMONWEALTH OF KENTUCKY KENTOKY DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 522 RCBC OVER BRIDGE BRANCH MAINTENANCE OF TRAFFIC

500,

STA 9+47.00 TO 13+34.00

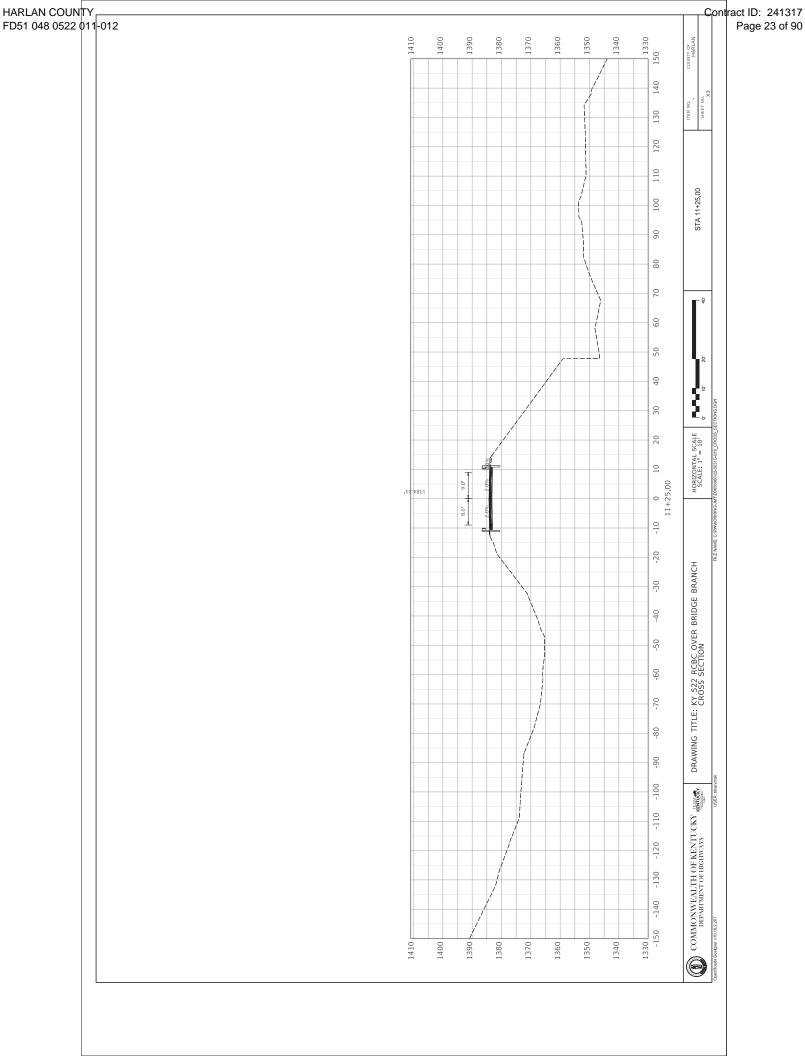
COUNTY OF HARLAN

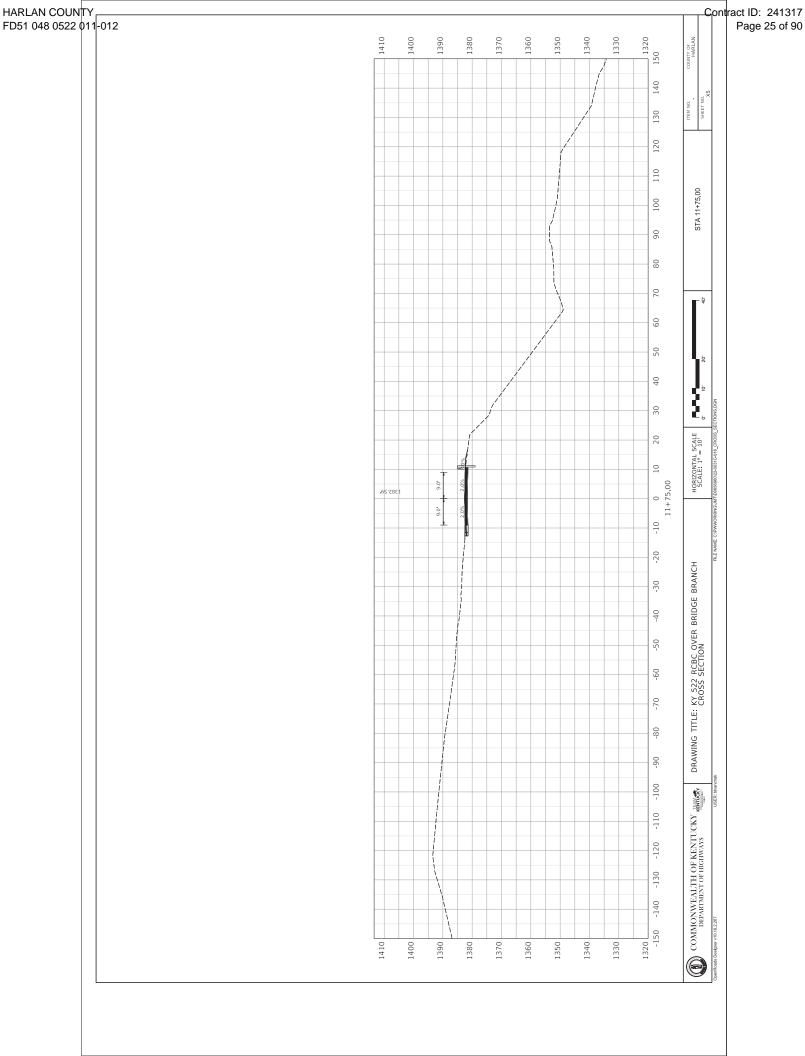
SHEET NO. ITEM NO.

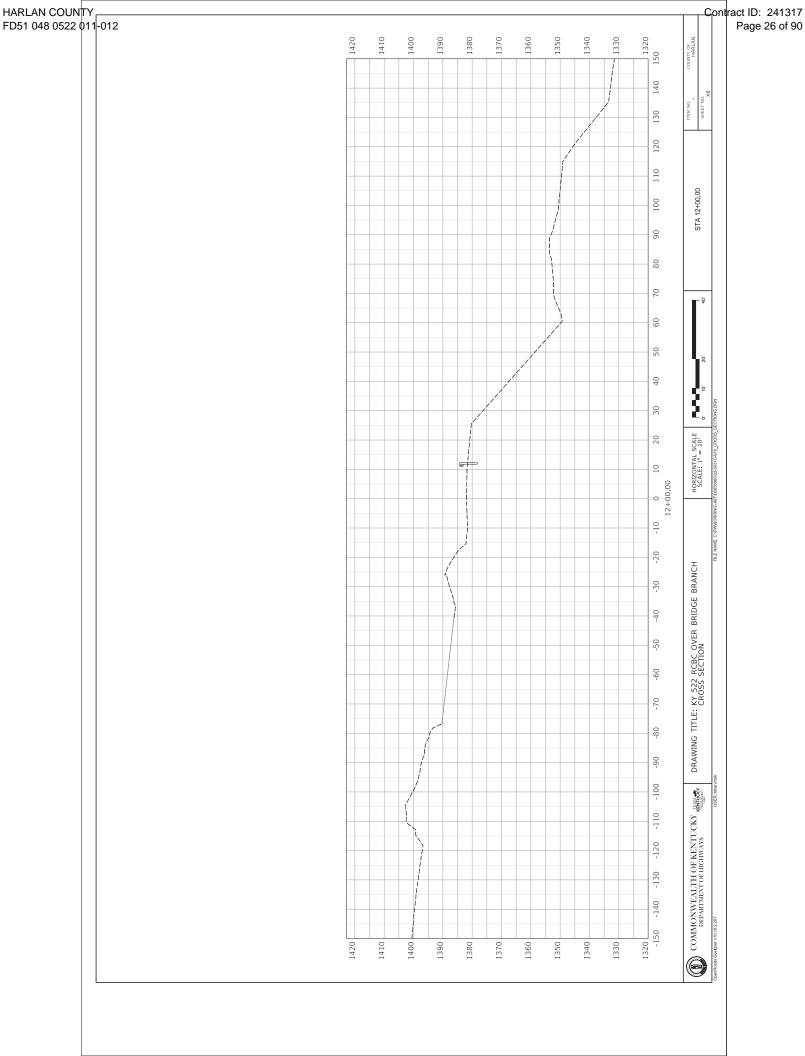
, o

HORIZONTAL SCALE SCALE: 1" = 50'

Page 20 of 90







HARLAN COUNTY FD51 048 0522 011-012 Contract ID: 241317 Page 27 of 90 2019 Standard Specifications for Road and Bridge Construction. 2020 AASHTO LRFD Bridge Design Specifications 9th Ed. HARLAN

PRAWING NUMBER

28906 STANDARD DRAWINGS SPECIAL PROVISIONS INDEX OF SHEETS SPECIFICATIONS SPECIAL NOTES 11-0000 sheet no. KY 522 L'S. С.Y. ۲. 9 BRIDGE BRANCH 13 QUANTITY 205.5 33571 TITLE TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS ESTIMATE OF QUANTITIES Structure Excavation Rock Foundation Preparation Class "A" Concrete KY 522 OVER BRIDGE BRANCH CONSTRUCTION NOTES: Temporary sheeting, shoring, cofferdams, and, or dewatering methods may be necessary for construction of the culvert, include all costs in the price bid for foundation Preparation Preparation. BID CODE 8003 8100 8150 VIEDDING FAUNDATION. Rock and boulders within 2 it of the design flowline the state excavated and backfilled with properly compacted soil to the base of the slab Payment for this work shall be included in the lump sum bid for Foundation Preparation. HARLAN COUNTY Station 11+37.00 Structural Design KY 552 Division of

SPECIFICATIONS: All references to the standard Specifications are to the current tedition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO are to the current edition of the AASHTO LINE OF the Design Specifications, with interims.

DESIGN LOAD: This structure is designed for HL-93 live load increased by 25% Fign. 18% increase is arrived by increasing the design truck or tandem and the design track or tandem and the

DESIGN METHOD: All reinforced concrete members are designed by the load factor method as specified in the current AASHTO Specifications.

MASONRY COATING: Masonry coating will not be required for this structure.

COMPLETION OF THE STRUCTURE: The Contractor is required to complete the structure in accordance with the plans and specifications. Abstractial abor or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include in the shoring excavations, backfulling, removal of all or parts of existing structures, phase construction, incidental materials, labor, or anything else required to complete the structure.

REINFORCEWEMT. Dimensions shown from the face of concrete to bars are to center or has unless otherwise shown. Spacing the sis Shom center to center of bars. Clear distance to face of concrete is 2 'unless otherwise moted. Any relinforting bars designated by suffix (e) in the Plans shall be percy coated in accordance with section 81.1.10 of the Sandard Specifications. Any relinforting bars esignated by suffix (s) in a Bill of Relinforcement shall be considered a stirrup for purposes of bench diameters.

DIMENSIONS: Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal measurements. BEVELED EDGES:All exposed edges shall be beveled 34" unless otherwise shown.

WEIGHT OF FILL MATERIALThe assumed weight of fill material **1**20 lbs per cubic foot.

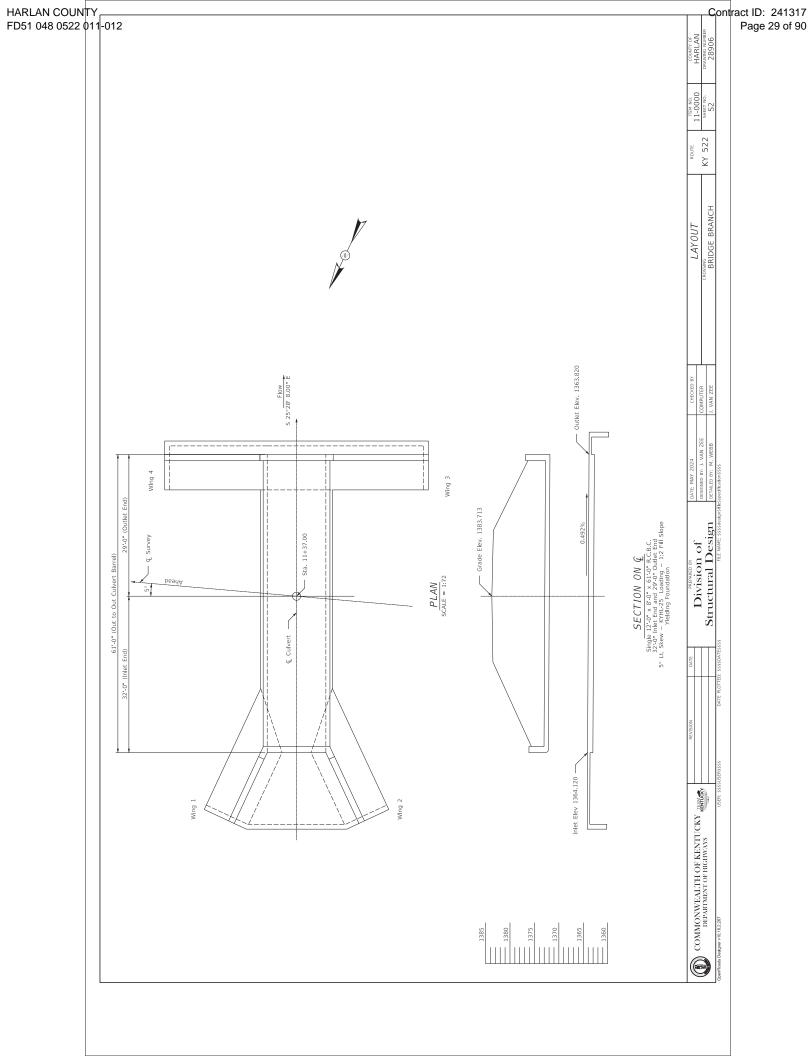
CONCRETE: Class "A" concrete shall be used throughout

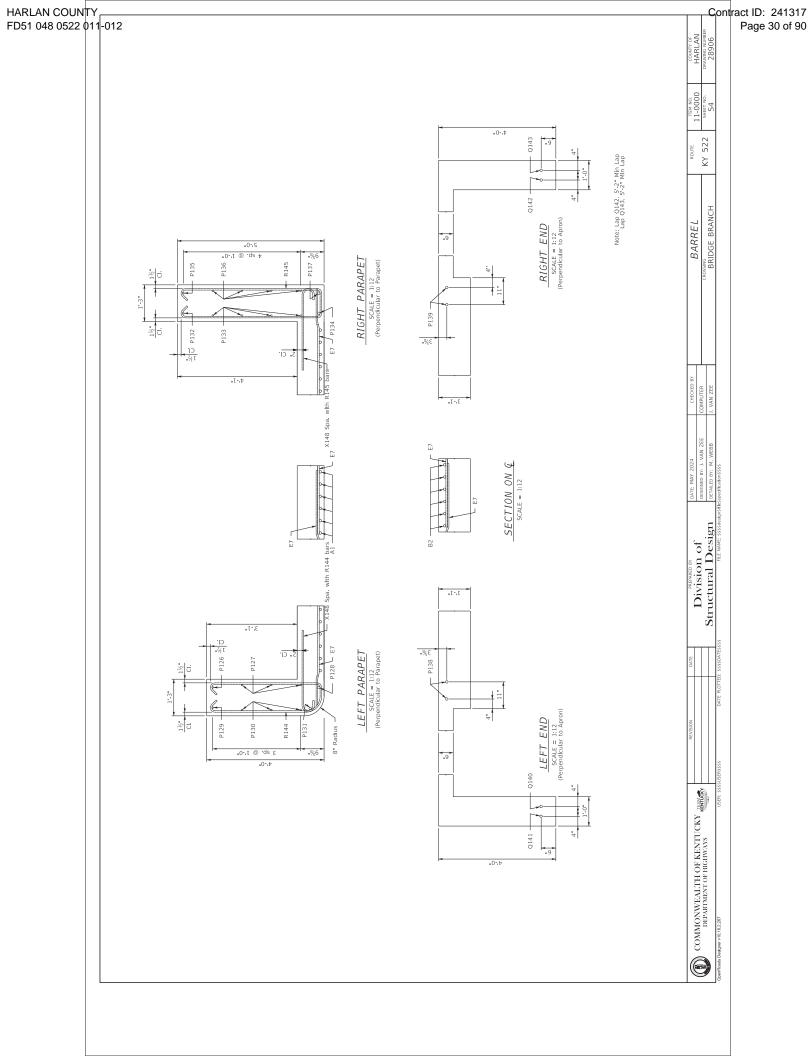
CONSTRUCTION JOINTS: Vertical construction joints shall be located in the filed, except that no construction joint shall be located in the barrel within as feet of the ends of the culvert.

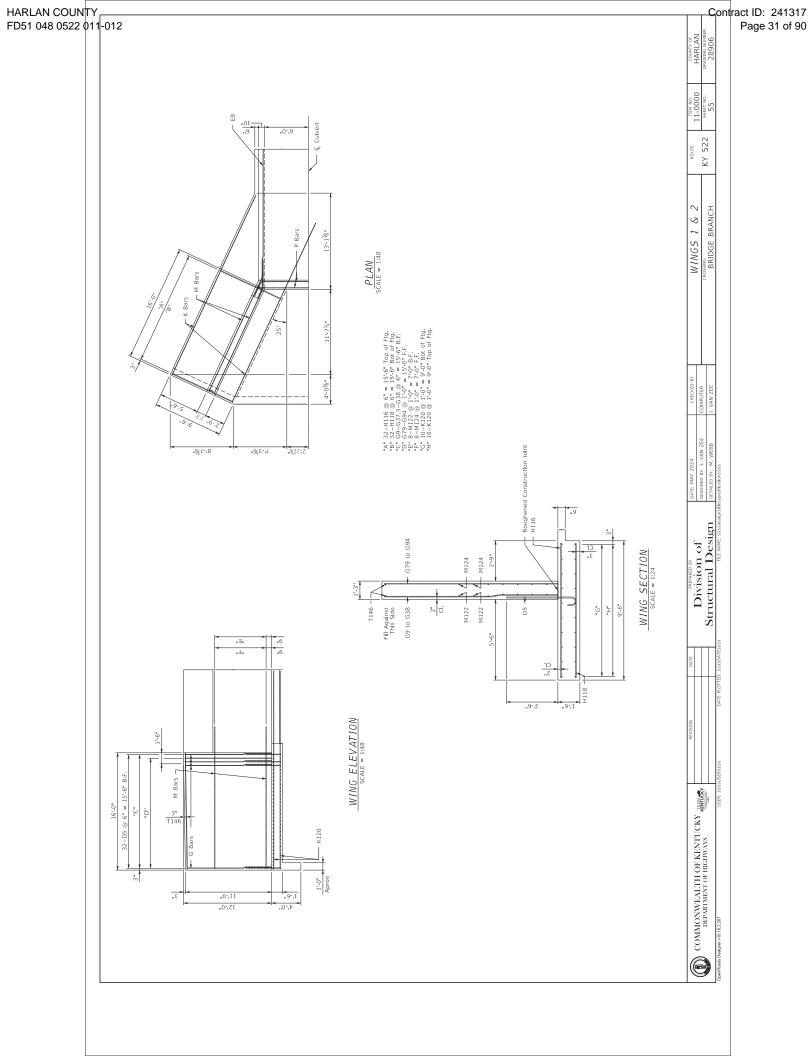
FOOTING PRESSURE: Foundation materials for barrel and wing footings shall resist a maximum bearing pressure 28989 PSF.

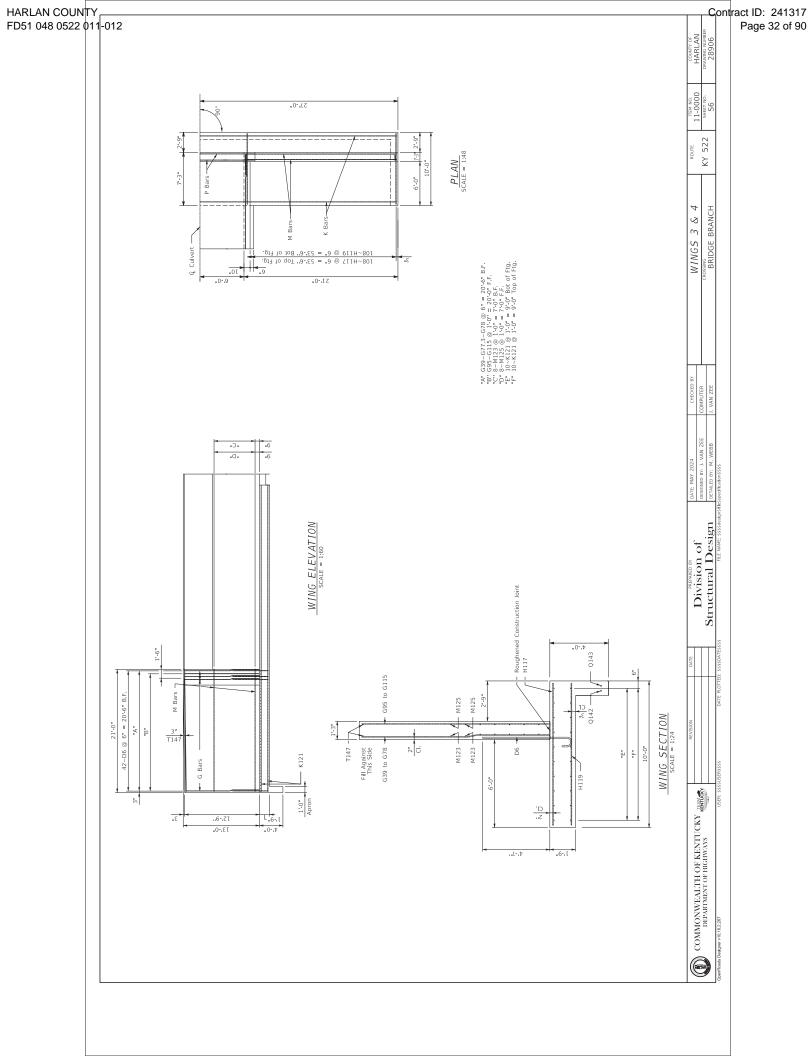
COMMONWEALTH OF KENTUCKY GENERAL DEPARTMENT OF HIGHWAYS

HARLAN COUNTY FD51 048 0522 011-012 Contract ID: 241317 Page 28 of 90 HARLAN
DRAWING NUMBER
28906 KY 522 BRIDGE BRANCH - G Culvert BARREL  $81 \sim C3 \oplus 9" = 60' \cdot 0"$  (Each Sidewall)  $81 \sim D4 \oplus 9" = 60' \cdot 0"$  (Each Sidewall) Flowline Reinforcement See General Notes. Tilt B Bars to Provide 3" Clearance to Bottom of Bottom Slab  $\,=\,$  E7 Division of Structural Design Keyed Construction Joint "A" 12~R144 & X148 @ 1·0" = 11·0"
"B" 12~R145 & X148 @ 1·0" = 11·0"
Minimum Lap Distance for E 7 Bars 26 in Minimum Lap Distance for E 8 Bars 21 in n ₹ TYPICAL BARREL SECTION 13~E7 @ 1:-0" = 12:-0" CI. COMMONWEALTH OF KENTUCKY REMIGEN DEPARTMENT OF HIGHWAYS ..... Ω ½ G 8~E8 @ 1'-0" = 7'-0"









HARLAN COUNTY FD51 048 0522 011-012 Contract ID: 241317 Page 33 of 90

| 0                | 12                                    | 2/2              |             |                  |                  |                  |                    |                  |                 |                   |              |                  |                  |                 |             |             |                  |                  |  |  |   |   |   |   |  |   | 2.2 0:11 131%   | 2.2<br>6.0<br>6.0<br>6.0<br>6.0<br>6.0<br>6.0   | 2.2 2.2 0.01<br>2.2 0.01 1.1%<br>2.2 0.0 0.11 1.1%   | 2.2 Coll 1-15%   
  | 2.2 2.2 0-0<br>2.2 2.2 0-0<br>2.2 2.2 0-0<br>3.2 2.2 0-0<br>3.2 2.3 0-0<br>3.2 0- | 2.2 Coll 1-156 2.3 Co | 2.2 0.1 日路<br>2.2 0.2 0.1 日路<br>2.2 0.2 0.1 日路<br>2.2 0.1 日路<br>2.2 0.1 日路<br>3.2 0.1 日路<br>3.2 0.1 日路<br>3.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1   | 2.2 0-11 1-15 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-0 0-   | 2.2 2-2 0-0 2-2 0-0 2-2 0-0 2-2 0-0 0-0 2-2 0-0 0-0   
   | 2.2 2 0-11 1-15 2 2-2 0-0 2 2 2 2 0-0 2 2 2 2 0-0 2 2 2 2   | 2.2 0-11 1-15% 2-2 0-01 1-15% 2-2 0-  | F. 2. 2. 2. 1. 1. 155 F. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.  | 2.2 0.11 1.15%<br>2.2 2.2 0.0 0<br>2.2 2.2 0.1 1.15%<br>2.2 2.2 0.1 1.15%<br>2.2 2.2 0.1 1.15%<br>2.2 2.2 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0  
  | 2.2 coll bliffs 2.2 coll bliffs 2.2 coll bliffs 3.2 coll bliff  | P. 2   | 2-2 Coll Lifts 2-2 Co  | 2-2 0-11 1-13   2-2 0-1   1-13   3-2  | 2.2 G.11 L156 2.2 C.11 L156 2.2 C.2.1 L156 2.2 C.2.2 C.0.0 2.2 S.2 C.2.2 C.0.0 2.1 D.0.00 2.2 S.2 S.2 C.2 2.3 S.2 S.2 S.2 C.0 2.1 S.2   | 2-2 0-11 1-13   2-2 0-1   1-13   2-2 0-1   1-13   2-2 0-1   1-13   2-2 0-1   1-13   2-2 0-1   2-2
0-1   2-2 0-1   2-  | 2-2 Coll Lifts 2-2 Co | 2.2 0-11 1-13% 2-2 0-10 1-13% 2-2 0-  | 2-2 Coll Lifts 2-2 Co | 2-2 0-11 1-13  | 2.2 Coll 1-155 2.2 Co | 2-2 0-11 1-13% 2-2 0-13 1-13% 2-3 0-10 1-13% 2-3 0-  | 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.3 0-10 1-15% 2.4 0-10 1-15% 2.5 0-10 1-15% 2.5 0-10 1-15% 2.5 0-10 1-15% 2.5 0-10
1-15% 2.5 0-10 1-15% 2.5 0-  | P. 2. 0-11 1-15% P. 2. 2. 2. 0-10 1-115% P. 2. 2. 2. 0-10 1-115% P. 2. 2. 2. 0-10 1-115% P. 2. 2. 2. 2. 0-10 1-115% P. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.   | 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.2 0-10 1-15% 2.3 0- | 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 3-2 3-2 0-0 3-3 2-3 1-15% 3-3 3-3 3-15%  | 2.2 0.11 1.15%<br>2.2 0.11 1.15%<br>2.2 0.11 1.15%<br>2.2 0.11 1.15%<br>2.3 0.10 1.15%<br>3.1 0.10%<br>3.1 0.10  | P. 2 O-11 1-11% P. 2 O-11 1-11% P. 2 O-11 1-11% P. 3 O-10 I-11% P. 4 O-10 I-11% P. 5 O-10 I-11% P. 6 O-10 I-11% P. 7 O-10 I-11  | F. 2. Co.11 1-13% F. 2. Co.12 1-13% F. 2. Co.13 | 2. 2   
   | P. 2. 0-11 1-13% P. 2. 2 0-11 1-13% P. 2. 2 0-11 1-13% P. 2. 2 0-10 1-13% P. 2. 3-2 0-10 P. 3. 2-32 1-10 P. 3. 3-10 P. 4. 3-32 P. 5. 3-30 P. 5. 3  | 2. 2   | 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-10 1-15% 2.3 0-10 1-15% 2.4 0-10 1-15% 2.5 0- | 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-3 0-10 1-15% 2-3 0-10 1-15% 2-4 0-10 1-15% 2-4 0-10 1-15% 2-5 0-10 1-15% 2-6 0-10 1-15% 2-7 0- | 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-10 1-15% 2.3 0-10 1-15% 2.4 0-10 1-15% 2.5 0-10 1-15%
2.5 0-10 1-15% 2.5 0- | 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-11 1-15% 2.2 0-10 1-15% 2.3 0-10 0-10 0-10 0-10 0-10 0-10 0-10 0-1  | 2.2 co.11 Lifts 2.2 co.12 Lifts 2.2 co.12 Lifts 2.2 co.13 Lifts 2.2 co.12 Lifts 2.2 co.13 Lifts 2.3 co.13 Lifts 2.3 co.13 Lifts 2.4 co.13 Lift | 2-2 0-11 1-13%<br>2-2 0-11 1-13%<br>2-2 0-10 1-13%<br>2-2 0-10 1-13%<br>2-3 0-10 1-13% | 2.2 0.11 1-13% 2.2 0.11 1-13% 2.2 0.10 1-13% 2.3 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-10 1-10 1-10 1-10 1-10 1-10 1-10   | 2-2 0-11 1-17 1-17 1-17 1-17 1-17 1-17 1-17   | 2.2 0.11 1-13% 2.2 0.11 1-13% 2.2 0.10 1-13% 2.3 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-13% 2.4 0.10 1-10 1-10 1-10 1-10 1-10 1-10 1-10   
   | 2-2 0-11 1-15   2-2 0-11 1-15   2-2 0-11 1-15   2-2 0-11 1-15   2-2 0-11 1-15   2-2 0-11 1-15   2-2 0-10 1-15   | 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-10 1-15% 3-2 % 2-3 0-0 3-3 | 2.2 0-11 1-15% 2.2 0-13 1-15% 2.2 0-13 1-15% 2.2 0-13 1-15% 2.2 0-13 1-15% 2.2 0-13 1-15% 2.2 0-13 1-15% 2.3 0-10 1-15% 2.3 0-10 1-15% 2.4 0-10 1-15% 2.5 0- | 2.2 0-11 1-13 13 13 13 13 13 13 13 13 13 13 13 13 1   | F. 2 Co.11 Lifts F. 2 Co.12 Lifts F. 2 C | 2-2 6-11 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-136 1-2 6-13 1-2
6-13 1-2 | F. 2. 2 0-11 1-15% F. 2. 2 0-11 1-15% F. 3. 2 0-11 1-15% F. 4. 2 0-11 1-15% F. 5. 4 0-10 1-15% F. 5. 5 0-10 1-15% F. 6. 6 0-10 1-15% F. 7. 8 8 8 3-10% F. 8 9 9 9 9 9 9 3-10% F. 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  | 2.2 0-11 1-15 1-15 1-15 1-15 1-15 1-15 1-15  | F. 2. 2. 0-11 1-156 F. 2. 2. 0-13 1-156 F. 3. 2. 3. 2. 0-10 F. 3. 2. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.   | 2-2 6-11 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6-13 1-136 2-2 6- | F. 2. 2. 0-11 1-13% F. 2. 2. 0-13 1-13% F. 2. 2. 0-13 1-13% F. 2. 3. 0-10 1-13% F. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.   
  | 2-2 0-11 1-13% 2-2 0-11 1-13% 2-2 0-11 1-13% 2-2 0-11 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-2 0-10 1-13% 2-3 0- | P. 2 0-11 1-15% P. 2 0-11 1-15% P. 2 0-11 1-15% P. 2 0-11 1-15% P. 2 0-12 1-15% P. 3 0-10% P. 3 0-10% P. 4 0-10% P. 5 0-10% P. 5 0-10% P. 5 0-10% P. 6 0-10% P. 7 0-10% P. 7 0-10% P. 7 0-10% P. 7 0-10% P. 8 34 1-15% P. 8 34 1-15% P. 8 34 1-15% P. 9 0-10% P. 1 0-10% | 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-10 1-15% 2-2 0- | 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-11 1-15% 2-2 0-10 1-15% 3-2 % 1-15% 3-2 % 1-15% 3-3 % 1-15% 3-4 % 1-15% 3-4 % 1-15% 3-5 % 1-15% 3-6 % 1-15% 3-7 %  |
|------------------|---------------------------------------|------------------|-------------|------------------|------------------|------------------|--------------------|------------------|-----------------|-------------------|--------------|------------------|------------------|-----------------|-------------|-------------|------------------|------------------|--|--|---|---|---|---|--|---|---|---|--
---|--|--|---
--	---	---
---	--	---
---	---	---
---	--	--
---	---	---
--	---	---
--	---	--
--	--	---
--	---	---
---	---	--
--	--	---
---	--	--
--	--	--
	A /E	-
  | 17. 55<br>20. 76, 70. 76<br>18. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10   | 17. 56<br>20. 78<br>18.106<br>19.106<br>19. 48, 10<br>10. 30, 10   | 17. %<br>20. %<br>18. 10/<br>18. 10/<br>19. 10/<br>10/<br>10/<br>10/<br>10/<br>10/<br>10/<br>10/<br>10/<br>10/ | 17. 5%<br>26. 7%<br>26. 7%<br>21. 34%<br>21. 34%<br>2 | 17. %<br>20. % | 17. 5%<br>20. 7%<br>20. 7%<br>21. 3. 4%<br>21. 4%<br>21. 5. 4%<br>21. 5. 4%<br>21. 5. 4%<br>21. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. | 17. %<br>20. %<br>20. %<br>20. %<br>20. %<br>20. %<br>10. 10. %<br>20. 10. % | 17. 5%<br>12. 10%<br>13. 4%<br>19. 10%<br>19. 10%<br>19. 10%<br>10. 10% | 17. %<br>20. %<br>18. 10. %<br>19. 10. %<br>10. %<br>10  | 17 25 27 28 28 28 28 28 28 28 28 28 28 28 28 28   | 17. %<br>10. %<br>10 | 17. 5%<br>20. 7%<br>19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10   
  | 17. 5%<br>19. 7%<br>19. 10%<br>19. 1  | 17. 5%<br>20. 7%<br>20. 7%<br>20. 7%<br>20. 10. 10. 10. 10. 10. 10. 10. 10. 10. 1   | 17. % 19. %   | 17. 5%<br>20. 7%<br>19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10   | 17. % 19. %
19. %   | 17. %  | 17. %<br>10. %<br>10 | 17. 5%<br>20. 7%<br>20. 7%<br>19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10   | 17. % 95 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 17. 5% 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.  
   | 17. 5% 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.  | 17. 5% 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.   | 17. 5% 10. 7% 10. 7% 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.   | 11.7 5% 11.7 5% 12.0 13% 12.0   | 17. 5% 20. 7% 20.
7% 20. 7% 20  | 11.7 5% 1 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2   | 17. 5% 10   | 112 5% 11 12 5% 12 12 12 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15   | 17. 5% 10. 7% 10. 5% 10. 10. 5%
10. 10. 5% 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% 10. 10. 5% | 17. 26. 36. 4 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | 17-2      | 17.5   | 17-2     | 17. 多数<br>17. 多数<br>18. 20. 20. 20. 20. 20. 20. 20. 20. 20. 20  
  | 12 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2   | 17.56   17.5  | 11.2 \$\frac{50}{36}\$ \$\frac{10}{36}\$ \$10   | 17.56   17.5  | 11.2 \$\frac{1}{2}\$ \$\frac{1}{2   | 17. 5% 19. 19. 19. 19. 19. 19. 19. 19. 19. 19.  
   | 12   12   13   14   15   15   15   15   15   15   15   | 17-2     | 17. 20<br>17. 3%<br>17. 3%<br>18. 19. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18   | 11   | 17. 30<br>17. 30<br>17. 30<br>18. 30<br>19. | 17   18   18   18   18   18   18   18  
   | 17. 30  | 12   12   12   13   13   13   13   13  | 17.   18     | 12 25 25 25 25 25 25 25 25 25 25 25 25 25  | 17. 5%<br>17. 5%<br>17. 5%<br>18. 18. 18. 18. 18. 18. 18. 18. 18. 18.  
   |  | 17   18   18   18   18   18   18   18  |
| OF REINFORCEMENT | NOTEVOOL                              | E.F. Wings 3 & 4 | Wings       | F.F. Wings 3 & 4 | F.F. Wings 3 & 4 | 8                | 8                  | F.F. Wings 3 & 4 | 8               | r.r. wings 5 or 4 | 9            | F.F. Wings 3 & 4 | F.F. Wings 3 & 4 | WINGS           |             |             | F.F. Wings 3 & 4 | E.F. Wings 3 & 4 | F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4 | F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4 | F.F. Wings 3 & 4 Tao Fro Wings 1 & 5 | Wings<br>Wings<br>Wings<br>Wings<br>Ftg Wing  | F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>F.F. Wings 3 & 4<br>Top Fig Wings 1 & 2<br>Top Fig Wings 1 & 2<br>Ref Fro Wings 1 & 2 | E.E. Wings 3 & 4 Top Ftg Wings 1 & 2 Top Ftg Wings 1 & 2 Bot Ftg Wings 1 & 2 Bot Ftg Wings 3 & 4 Bot Ftg Wings 3 & 4 | F.F. Wings 3 & 4 F.F. Wings 1 & 2 F.F. Wings 3 & 4 F.F. Wings 1 & 2 F.F. Wings 2 & 4 F.F. Wings 1 & 2 F.F. Wings 1 & 2 F.F. Wings 2 & 4 F.F. Wings 3 & 4 F.F. W | F.F. Wittings 3.6.4 Top Fig Wittings 1.6.2 Top Fig Wittings 3.6.4 Top Fig Wittings 3.6.4 Top Fig Wittings 3.6.4 Top Fig Wittings 3.6.4 Fig Wittings 3.6.4 Fig Wittings 3.6.4 Fig Wittings 3.6.4 | F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>Top Ftg Wings 1 6.2<br>Top Ftg Wings 1 6.2<br>Top Ftg Wings 3 6.4<br>Ftg Wings 3 6.4<br>Ftg Wings 3 6.4<br>Ftg Wings 3 6.4<br>Ftg Wings 6 6.4 | F. Vintors 3.6.4<br>F. Vintors 3.6.4<br>F. Vintors 3.6.4<br>F. Vintors 3.6.4<br>F. Vintors 3.6.4<br>Top Fig Vintors 3.6.4<br>Top Fig Vintors 3.6.4<br>Dor Fig Vintors 3.6.4<br>Fig V | F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4<br>Top Fig Wings 1 6.2<br>Top Fig Wings 1 6.2<br>Bot Fig Wings 1 6.2<br>Bot Fig Wings 1 8.2<br>Fig Wings 3 8.4<br>Erg Wings 3 8.4<br>Erg Wings 1 6.2<br>Fig Wings 1 6.2   | F. Vinnes 3 6.4<br>F. Vinnes 3 6.4<br>F. Vinnes 3 6.4<br>F. Vinnes 3 6.4<br>F. Vinnes 3 6.4<br>Top Fro Vinnes 1 6.2<br>Top Fro Vinnes 1 6.2<br>Box Fro Vinnes 1 6.2<br>Fro Vinnes 1 6.2 | F.F. Wings 3 6.4<br>F.F. Wings 3 8.4<br>Top Fig Wings 1 8.2<br>Top Fig Wings 1 8.2<br>Bot Fig Wings 3 6.4<br>Bot Fig Wings 3 6.4<br>Bot Fig Wings 3 6.4<br>E.F. Wings 1 6.2<br>F.F. Wings 3 6.4<br>F.F. Wings 3 6.4  | F. Winnes 3 6.4 F. Winnes 4 6.4 F. Winnes 5 6. | FF. Wings 3 6.4 FF. Wings 6 6.4 FF. Wings 3 6.4 FF. Wings 3 6.4 FF. Wings 3 6.4 FF. Wings 3 6.4 Top Fey Wings 1 6.2 Top Fey Wings 1 6.2 Top Fey Wings 3 6.4 Fey Wings 3 6.4 FF. Wings 1 6.2 FF. Wings 1 6.4 FF. Wings 1 6.4 FF. Wings 1 6.4 FF. Wings 1 6.4  
  | F. Vinnes 3 6.4 Top Fro Vinnes 3 6.4 Top Fro Vinnes 3 6.4 Top Fro Vinnes 3 6.4 Bot Fro Vinnes 3 6.4 Fr. Vinnes 4 6.6 Fr. Vinnes 4 6.6 Fr. Vinnes 4 6.6 Fr. Vinnes 5 6.4 Fr. Vinnes 6 6.4 Fr. Vinnes 6 6.4 Fr. Vinnes 1 6.6 Fr. Vinnes 1 6   | FF. Wings 3 6.4 FF. Wings 5 6.4 FF. Wings 5 6.4 FF. Wings 5 6.4 FF. Wings 3 6.4 FF. Wings 3 6.4 Top Fey Wings 1 6.2 Top Fey Wings 1 6.2 Top Fey Wings 3 6.4 Top Fey Wings 1 6.2 Top Fey Wings 2 6.4 Top Fey Wi  | FF. Winnes 3 & d. FF. Winnes 4 & d. FF. Winnes 5  | FF. Witness 2.6.4 FF. Witness 2.6.4 FF. Witness 3.6.4 FF. Witness 3.6.4 FF. Witness 3.6.4 Top Fey Witness 3.6.4 Top Fey Witness 3.6.4 Top Wi  | FF. Winnes 3 & d. FF. Franchet Lt. End 6 & FF. Winnes 3 & d. FF. Franchet Lt. End 6 & FF. Parapet Lt. End 6 & FF. Parape   | FF. Wings 3 6-4 FF. Wings 5 6-4 FF. Wings 5 6-4 FF. Wings 5 6-4 FF. Wings 3 6-4 Top FR Wings 1 6-2 Top FR Wings 1 6-2 Top FR Wings 1 6-2 Top FR Wings 3 6-4 Top FR Wings 3 6-4 Top Wings 1 6-2 Top FR Wings 1 6-  | FF. Winnes 3 6.4 Top Fro Winnes 3 6.4 Top Fro Winnes 3 6.4 Box Fro Winnes 3 6.4 Fro Winnes 3 6.4 Fro Winnes 3 6.4 Fro Winnes 1 6.2 Box Fro Winnes 1 6.2 Fro Winnes 1 6.2 Fro Winnes 3 6.4 Fro Winnes 1 6.2 Fro Winnes 3 6.4 Fro Winnes 3 6.4 Fro Winnes 1 6.2 Fro Winnes 3 6.4 Fro Winnes 1 6.2 Fro Winnes 2 6.4 Fro Winnes 2 6.4 Fro Winnes 1 6.2 Fro Winnes 1 6.2 Fro Winnes 2 6.4 Fro Winnes 1 6.2 Fro Winnes 1 6.2 Fro Winnes 2 6.4 Fro Win  | FF. Witness 2.6.4 FF. Witness 3.6.4 FF. Witness 3.6.4 FF. Witness 3.6.4 FF. Witness 3.6.4 Top Fey Witness 1.6.2 Top Fey Witness 1.6.2 Top Fey Witness 3.6.4 Top Fey Witness 3.6.4 Top Fey Witness 3.6.4 Top Fey Witness 3.6.4 Top Fey Witnes   | F.F. Winnes 2.6.4 F.F. Winnes 2.6.4 F.F. Winnes 3.6.4 F.F. Parapet I.L. End   | F.F. Wings 3 6.4 Top Fey Wings 1 6.2 Top Fey Wings 1 6.2 B.F. Wings 3 6.4 B.F. Wings 3 6.4 B.F. Wings 3 6.4 B.F. Wings 1 6.2 F.F. Wings 1 6.2 F.F. Wings 1 6.2 F.F. Parapet IL, End B.F. Parapet IL, End F.F. Parapet IL, End   
   | F.F. Wittings 3.6.4 T. DO F19 Wittings 3.6.4 DO F19 Wittings 4.6.7 DO F19 Wittings 5.6.4 DO F19 Wittings 4.6.7 DO F19 Wittings 5.6.4 DO F19 Wittings 6.6.4 DO F19 | F.F. Wings 3 6.4 Top Fey Wings 1 6.2 Top Pey Wings 1 6.2 Top Pey Wings 3 6.4 Top Pey Wings 3 6.4 Top Pey Wings 3 6.4 Top Pey Wings 1 6.2 Top Pey Wings 1 6  | F.F. Williams 3.6.4 F.F. Parapet IL. End F.F. Parapet II. End F.F. Parapet II. End F.F. Parapet III. End F.F. Parapet I | F.F. Wings 3 6.4 Top Rey Wings 1 6.2 Top Rey Wings 1 6.2 B.F. Wings 3 6.4 B.F. Wings 3 6.4 B.F. Wings 3 6.4 B.F. Wings 3 6.4 B.F. Wings 1 6.2 F.F. Wings 1 6.2 F.F. Wings 1 6.2 F.F. Wings 1 6.4 B.F. Parapet IL, End B.F. Parapet IL, End F.F.  | F.F. Wittings 3.6.4 F.F. Parappet IL. End F.F. Parappet III. End   | FF. Wittings 3 6.4 Top Feg Wittings 1 6.2 Top Feg Wittings 1 6.2 Top Feg Wittings 3 6.4 Top Feg Wittings 3 6.4 Top Feg Wittings 3 6.4 Top Feg Wittings 3 6.4 Top Feg Wittings  | F.F. Williams 3.6.4 F.F. Parapet II. End F.F. Parapet III. End F. | FF. Wittings 3 6.4 Top Frg Wittings 1 6.2 Top Frg Wittings 1 6.2 Bot Frg Wittings 3 6.4 Bot Frg Wittings 4   | F.F. Willings 3.6.4 F.F. Willings 3.6.4 F.F. Willings 3.6.4 F.F. Willings 3.6.4 T. OP ET WILL ET OF THE TOTAL TOTA  | F.F. Wittons 3.6.4 BOT FOR Wittons 1.6.2 BOT FOR Wittons 1.6.2 BOT FOR Wittons 3.6.4 B.F. Wittons 3.6.4 B.F. Wittons 3.6.4 B.F. Parappet IL. End B.F. Parappet II. End  | FF. Winnes 3 6. d TOP FRO Winnes 1 6. 2 BOX FRO Winnes 5 6. d BOX FRO Winnes 3 6. d FF. Winnes 3 6. d BOX FRO Winnes 1 6. d BOX FRO Winnes 3 6. d BOX FRO Winnes 3 6. d BOX FRO Winnes 3 6. d BOX FRO WINNES 1 6. d BO | FF. Wittings 3 6.4 BOT FRY Wittings 3 8.4 BF. Wittings 3 8.4 BF. Wittings 3 8.4 BF. Parapet IL. End BF. Parapet IL. End BF. Parapet IL. End BF. Parapet IL. End FF. Parapet IL. End BF. Parapet III. End   | FF. Winnes 3.6.4 TOP END Winnes 3.6.4 TOP END Winnes 3.6.2 BOX FFO   | F.F. Wittons 3.6.4 BOT FOR Wittons 3.6.4 B.F. Wittons 3.6.4 B.F. Wittons 3.6.4 B.F. Wittons 3.6.4 B.F. Parappet IL. End A.F. Mann Sib R.E. End A.F. Mann Sib R.E. End A.F. Mann R.E. End B.F. Mann R.E. End A.F. Mann R.E. End B.F. Mann R.E. End B.F. Mann R.E. End B.F. Manner R.E. End B.F  | FF. Winnes 3.6.4 TOP FRO Winnes 3.6.4 TOP FRO Winnes 3.6.2 BOX FRO Winnes 3.6.2 BOX FRO Winnes 3.6.2 FF. Winnes 3.6.4 FF. Winnes 3.6.4 FF. Winnes 3.6.4 BF. Parapet IL. End FF. Parapet III. End   | FF. Wittons 3 6.4 Top Frig Wittons 3 6.4 Top Frig Wittons 3 6.4 BOT FRY Wittons 3 6.4 BF.
Parapeet LL. End BF. Parapeet LL.   | Wings   | Wings  | Wings  | Wings  | Wings  | Wings | Wings  | Wings  | Wings | Wings   | Wing Wing Wing Wing Wing Wing Wing Wing   | Wings   | Wings | Wings  | Wings   | Wing Wing Wing Wing Wing Wing Wing Wing  | Wings  | Wing Wing Wing Wing Wing Wing Wing Wing   
                           | Wing Wing Wing Wing Wing Wing Wing Wing  | Wings | Wing Wing Wing Wing Wing Wing Wing Wing  | Wing Wing Wing Wing Wing Wing Wing Wing  |  | | | | | | | | | | | | | | | | | | | | | | | | | |
  |  |  |
| BILL 0           | NO SIZE LENGTH                        | 3 3              | 2 3 12-7    | 2 3 12-7         | 2 3 12-7         | 2 3 12-7         |                    | 2 3 12-8         |                 | 0 -71 - 0 - 7     | 0 - 7        | 2 3 12-8         | 2 3 12-9         | 2 3 12-9        | 2 3 12-9    |             | 6-71 2           | 2 3 12-9         | 000  | 2 3 12-9   | 2 3 12-9  | 2 3 12-9<br>2 3 12-10<br>64 9 9-2<br>08 9 9-2 | 2 3 12-9<br>54 9 9-2<br>08 9 9-8<br>64 5 9-8  | 2 3 12-9<br>54 9 9-2<br>08 9 9-8<br>64 5 9-8  | 2 3 12-9<br>64 9 9-2<br>08 9 9-8<br>64 5 9-2<br>40 5 27-0  | 2 3 12-9<br>34 9 9-2<br>08 9 9-8<br>54 5 9-2<br>68 5 27-0<br>20 5 53-8  | 2 3 12-9<br>34 9 12-10<br>36 9 9-8<br>36 5 9-8<br>08 5 9-8<br>08 5 27-0<br>00 5 53-0<br>10 5 19-7   |   | 2 2 3 12-9 664 9 9-2 100 100 100 100 100 100 100 100 100 10  |  
  |  |  |   |  
   |   |   |   
   |  |   |   |  
   |   |   |   | 2 2 3 17:0 9 6 17:0 9
17:0 9 1  | 2 3 12.0 9 12.0  |   | 2. 2. 3 17:0.0 (46.4) ( | 2 2 3 17.2 9 66 6 9 9 9 2 6 66 6 9 9 9 2 7 66 6 5 9 9 8 2 66 6 9 9 9 2 7 66 6 6 9 9 9 2 66 6 9 9 9 2 67 6 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 9 2 68 6 9 9 2 68 6 9 9 2 68 6 9 9 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 68 6 9 2 6   | 2
2 3 17:09 664 9 9 9 9 2 665 9 9 9 9 2 666 5 5 9 9 9 2 666 5 5 9 9 8 667 9 9 9 8 67 9 9 9 9 8 67 9 9 9 9 8 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 9 67 9 9 9 67 9 9 9 9 67 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 9 67 9 9 6 | 2 2 3 17.2 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6  | 2 3 17:0 0 18:0   | 2 3 17-20<br>66 9 9 9-2<br>66 9 9 9-2<br>66 9 9 9-2<br>66 9 9 9-2<br>67 9-2<br>67 9-2<br>68 9 9-2<br>9-2<br>9-2<br>9-2<br>9-2<br>9-2<br>9-2<br>9-2  | 2 3 17:0 0 18:0 0
18:0 0 18:0  | 2 2 3 17:20  2 3 17:20  2 4 9 9 8 2  2 5 9 9 8 2  3 10:20 | 2 3 17.2 9 3  | 2 3 17-20<br>66 9 9 9-2<br>66 9 9 9-2<br>66 9 9 9-2<br>67 9 9-2<br>60 5 9-8<br>60 5 9-8 | 2 3 17.0 9  14 9 9 9 0  15 17.0 9  16 18 9 9 9 9 0  16 18 9 9 9 9 0  17 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 9 9 9 9 0  18 18 18 9 9 9 9 0  18 18 18 9 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 9 0  18 18 18 9 0  18 18 18 18 9 0  18 18 18 18 18 18 18 18 18 18 18 18 18 1  | 2 3 17-20<br>64 9 9 9-2<br>64 9 9 9-2<br>65 9 9-2<br>66 5 9-8<br>60 5 9-8<br>6 | 2 3 17:0 9 64 9 9 9 7 65 9 9 7 65 9 9 9 7 65 9 9
7 65 9 9 7 65 9 9 7 65 9 9 7 65 9 9 7 65 9 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7   | 2 3 12.0 0 10.0 0 9 9 8 2 0 10.0 0 10.0 0 9 9 8 2 0 10.0 0 | 2 3 17:0 9 64 9 9 9 7 65 9 9 7 65 9 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7   | 2 3 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9 6 12.0 9  | 2 3 17.9 9  14 9 9 9 0  15 9 9 9 0  16 9 9 9 0  17 9 9 0  18 9 9 0  18 9 9 0  18 9 0   | 2 3 17.2 9  94 9 9 17.0 9  95 9 9 9 7  96 9 9 9 8 2  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 7  97 17.0 9 9 9 9 7  97 17.0 9 9 9 9 7  97 17.0 9 9 9 9 7  97 17.0 9 9 9 9 9 9 9 9  97 17.0 9 9 9 9 9 9 9 9 9 9  97 17.0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  
   | 2 2 3 17:0 0 10 10 10 10 10 10 10 10 10 10 10 10   | 2 3 17:0 0 16:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 2 3 17:29<br>66 9 9 9 2 6<br>66 5 9 9 8 2<br>66 5 9 8 2<br>66 5 5 22:00<br>66 5 5 22:00<br>66 5 5 22:00<br>67 5 5 22:00<br>68 5 5 22:00<br>69 6 9 8 2<br>60 7 8 2<br>60 8 9 9 8 2<br>60 8 9 8 2<br>60 8 9 8 2<br>60 8 9 8 2<br>60 8 9 8 2<br>60 9 9 9 9 9 8 2<br>60 9 9 9 9 9 8 2<br>60 9 9 9 9 9 9 8 2<br>60 9 9 9 9 9 9 9 8 2<br>60 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9   | 2 3 17:0 0 1 17:0 0 1 17:0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 2 3 17:0 9 6 9 9 7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  
   | 2 3 17:0 0 1 17:0 0 1 17:0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | 2 3 17.2 9  4 9 9 7  5 10.0 9 9 9 7  6 9 9 9 7  6 9 9 9 7  7 10.0 5 9 9 7  7 10.0 5 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  8 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 7  9 9 9 9   | 2 3 17:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 2 3 17.2 9  94 9 9 17.2 9  95 9 9 17.2 9  96 9 9 9 2.2 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 7  97 10.0 5 9 9 9 9 7  97 10.0 5 9 9 9 9 7  97 10.0 5 9 9 9 9 9 9 9 9 9  97 10.0 5 9 9 9 9 9 9 9 9 9 9 9 9  97 10.0 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  97 10.0 5 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9  
  | 2 3 17:0 0 10 0 10 0 10 0 10 0 10 0 10 0 10  | 2 3 17:0 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6   | 2 3 17:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | 2 3 172.9<br>94 9 9 7 7 17 9 17 9 17 9 17 9 1 9 1 9 1 9  | 2 3 17:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  
   | 2 3 112.9 6 12.9 | 2 3 17:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 2 3 17:0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   | 2 3 112.9 9 6 12.9 9 | New York   2   3   12-10   F.F. W   
  | 2 3 12.29 66 9 9 9.8 66 9 9 9.8 66 9 9 9.8 66 5 9.20 67 5 13.60 68 5 9.8 69 6 9 8 60 5 13.60 69 5 13.60 60 5 13.60 60 5 13.60 60 5 13.60 60 6 5 13.60 60 6 5 13.60 60 6 5 13.60 60 6 5 13.60 60 6 7 13.60 60 7 13 |
|                  | NA DV                                 | G96 Str.         | G97 Str. 2  | G99 Str. 2       | G100 Str. 2      | G101 Str. 2      | G102 Str. 2        | G103 Str. 2      | G104 Str. 2     | G105 SU. 2        | G100 SU. 2   | G107 Str. 2      | G108 Str. 2      | G109 Str. 2     | G110 SU. Z  | G111 Str. 2 | 6112 Str. 2      | 0113 STr. Z      | 6114 30. 2   | H116 Str. 2  |   | H117 Str 10                                   | H117 Str. 10  | H117 Str. 10<br>H118 Str. 64<br>H119 Str. 10  | H117 Str. 10<br>H118 Str. 64<br>H119 Str. 10<br>K120 Str. 40   | H118 Str. 10<br>H119 Str. 10<br>H119 Str. 10<br>K120 Str. 4C<br>K121 Str. 20  | H118 Str. 10<br>H118 Str. 6-6-<br>H119 Str. 10<br>K120 Str. 4-6<br>K121 Str. 4-6<br>K121 Str. 4-6<br>K121 Str. 4-6<br>K121 Str. 4-6   | H117 Str. 10<br>H118 Str. 10<br>H119 Str. 10<br>K120 Str. 20<br>K121 Str. 20<br>M122 8 16   | H117 Sr. 10<br>H118 Sr. 16<br>H119 Sr. 16<br>K120 Sr. 40<br>K121 Sr. 20<br>M122 8 10<br>M124 8 10  | H117 ST. 10<br>H118 ST. 66<br>H119 ST. 66<br>H119 ST. 67<br>K120 ST. 76<br>M122 ST. 76<br>M123 ST. 10<br>M123 S 16<br>M125 S 16  
  | H117 55.7 5 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | H117 ST. 10<br>H119 ST. 66<br>H119 ST. 66<br>K120 ST. 46<br>K121 ST. 67<br>M122 8 16<br>M123 8 16<br>M124 8 16   | H117 Str. 10<br>H118 Str. 10<br>H118 Str. 10<br>H120 Str. 24<br>H121 Str. 24<br>H121 Str. 24<br>H123 Str. 24<br>H123 Str. 24<br>H124 Str. 24<br>H125 Str. 24<br>H126  | H110 Str. 10<br>H119 Str. 66<br>H119 Str. 66<br>K121 Str. 24<br>K121 Str. 24<br>K122 Str. 24<br>K123 Str. 24<br>K123 Str. 24<br>K123 Str. 24<br>K123 Str. 24<br>M123 Str. 24<br>M124 Str. 24<br>M125 Str. 24<br>M125 Str. 24<br>M127   | H117 Str. 10<br>H118 Str. 10<br>H118 Str. 10<br>H120 Str. 24<br>H121 Str. 24<br>H123 Str. 24<br>H123 Str. 24<br>H123 Str. 24<br>H124 Str. 24<br>H125 T T 3  
   | H110 Str. 10 H119 Str. 6 H119 Str. 6 H119 Str. 6 H120 Str. 7 H121 Str. 7 H121 Str. 7 H122 Str. 7 H123 Str. 7 H123 Str. 7 H124 Str. 7 H125 Str. 7 H126 Str. 7 H127 Str. 7 H127 Str. 7 H128   | H117 Str. 10 H118 Str. 10 H118 Str. 10 H118 Str. 10 H121 Str. 24 H122 Str. 24 H123 Str. 24 H123 Str. 24 H124 Str. 24 H125 T   | H110 Str. 10<br>H118 Str. 16<br>H118 Str. 16<br>H118 Str. 16<br>H112 Str. 26<br>H121 Str. 26<br>H122 Str. 26<br>H123 Str. 26<br>H124 Str. 26<br>H125 Str. 26<br>H125 Str. 26<br>H125 Str. 26<br>H126 Str. 26<br>H127 T Str. 26<br>H127 T Str. 26<br>H127 T Str. 26<br>H128 T Str. 26<br>H1   | H117 STC 10<br>H118 STC 10<br>H118 STC 10<br>H118 STC 10<br>H120 STC 20<br>H121 STC 20<br>H123 B 10<br>H123 B 10<br>H124 B 10<br>H126 7 1<br>P126 7 1   | H1117 Size 10 Company (1972) Company  | H117 ST. 10 H118 ST. 10 H121 ST. 10 H122 ST. 10 H123 ST. 10 H124 ST. 10 H125 T. 1 H126 T. 1 H127 T. 1 H129 T. 1 H129 T. 1  
   | H1170 Size 10 C C C C C C C C C C C C C C C C C C   | H117 STC 10 H118 STC 10 H118 STC 10 H118 STC 10 H120 STC 20 H121 STC 10 H123 STC 10 H124 STC 10 H125 STC 10 H125 STC 10 H126 STC 10 H127 T 3 H127 T 3 H129 T 1 H129 T 1 H129 T 1  | H1170 ST. 10. H1180 ST. 10. H1181 ST. 10. H1181 ST. 10. H1121 ST. 24. H1122 ST. 24. H1123 ST. 24. H1124 ST. 24. H1124 ST. 24. H1124 ST. 24. H1125 T. 24. H1126 T. 24. H126 T. 24. H127 T. 3 H128 T. 3 H129 T. | H117 STC 10 H118 STC 10 H118 STC 10 H118 STC 10 H120 STC 10 H121 STC 10 H122 STC 10 H123 STC 10 H124 STC 10 H126 T 1 H126 T 1 H126 T 1 H127 T 1 H129 T 1 H129 T 1 H130 T 1 H131 T 1 H131 STC 1  | H1170   Str.   D.     H1180   Str.   D.     H1181   Str.   D.     H1181   Str.   D.     H1221   Str.   24     H1232   Str.   24     H1232   Str.   D.     H124   Str.   D.     H125   T.   D.     H125   T.   D.     H126   T.   D.     H127   T.   D.     H129   T.   D.     H129   T.   D.     H120   T.     H120   T.   D.     H120   T.      | H117 ST. 10 H118 ST. 10 H121 ST. 10 H122 ST. 10 H123 ST. 10 H126 7 1 H127 7 3 H129 7 1 H129 7 1 H129 7 1 H131 7 1 H131 7 1 H131 ST. 1  
  | H1170 STC 100 H1180 STC 100 H1 | H117 ST. 10 H118 ST. 10 H118 ST. 10 H118 ST. 10 H118 ST. 10 H112 ST. 10 H123 ST. 10 H124 ST. 10 H125 T. 10 H126 T. 10 H127 T. 1 H127 T. 1 H128 T. 10 H129 T. 1 H129 T. 1 H129 T. 1 H129 T. 1 H130 T. 1 H130 ST. 1 H130 ST. 1   | H1170   Str.   D.     H1180   Str.   D.     H1181   Str.   D.     H1182   Str.   Str   | H117   S11.   O     H118   S17.   O     H128   S17.   O     H129   7   1     H120   7   1     H120   7   1     H121   7   1     H122   S17.   O     H131   7   1     H132   S17.   O     H131   7   1     H132   S17.   O     H131   S17.   O     H131   S17.   O     H132   S17.   O     H133   S17.   O     H134   S17.   O     H135   S17.   O     H136   S17.   O     H137   S17.   O     H138   S17.   O     H139   S17.   O     H130   S17.   O     H130   S17.   O     H130   S17.   O     H130   S17.   O     H131   S17.   O     H131   S17.   O     H132   S17.   O     H133   S17.   O     H134   S17.   O     H135   S17.   O     H136   S17.   O     H137   O     H138   S17.   O     H139   S17.   O     H130   S1  | H117   Str.   10     H118   Str.   10     H118   Str.   10     H123   Str.   24     H124   Str.   24     H125   Str.   24     H125   Str.   24     H126   T   | H1170   Str.   10     H1180   Str.   10     H1180   Str.   10     H1181   Str.   10     H1181   Str.   10     H1182   Str.   10     H1184   Str.   10     H1284   Str.   10     H1286   7   11     H1297   7   3     H1291   7   11     H1391   Str.   10     H1392   Str.   10     H1393   Str.   10     H1394   Str.   10     H1395   Str.   10     H1397   Str.   10     H1397   Str.   10     H1398   Str.   10     H1399   Str.   10     H1399   Str.   10     H1390   Str.   10     H1391   Str.   10     H1391   Str.   10     H1392   Str.   10     H1393   Str.   10     H1394   Str.   10     H1395   Str.   10     H1396   Str.   10     H1397     | H117   Str.   10     H118   Str.   10     H118   Str.   10     H118   Str.   10     H123   Str.   24     H124   Str.   24     H125   Str.   24     H126   T   
  | H117   Size   11     H118   Size   16     H118   Size   16     H118   Size   16     H112   Size   16     H122   Size   16     H123   Size   16     H124   Size   Size   16     H125   T  | H1170   Str.   10.     H1180   Str.   10.     H1181   Str.   10.     H1182   Str.   10.     H1123   Str.   24.     H1124   Str.   24.     H125   Str.   24.     H126   T.   24.     H127   T.   24.     H128   T.   11.     H129   T.   24.     H129   Str.   24.     H139   Str.   24.     H130   Str.   25.     H130   Str.   26.     H131   Str.   26.     H131   Str.   26.     H132   Str.   26.     H133   Str.   26.     H134   Str.   26.     H135   Str.   26.     H136   Str.   26.     H137   Str.   26.     H138   Str.   26.     H139   Str.   26.     H130   Str.   26.     H131   Str.   26.     H132   Str.   26.     H133   Str.   26.     H134   Str.   26.     H135   Str.   26.     H136   Str.   26.     H137   Str.   26.     H138   Str.   26.     H139   Str.   26.     H130   Str.   26.     H131   Str.   26.     H132   Str.   26.     H133   Str.   26.     H134   Str.   26.     H135   Str.   26.     H136   Str.   26.     H137   Str.   26.     H138   Str.   26.     H139   Str.   26.     H130   Str.   26.   | H1170   S15.   O2     H1180   S16.   O2     H1181   S16.   O2     H1181   S16.   O2     H1182   S16.   O3     H1182   S16.   O3     H1182   S16.   O3     H1182   S16.   O3     H1181   S16.   O3     H1181   O3     H1181   O3     H1181   O3     H1182   O3     H1184   O3     H1186   O3     H1186   O3     H1186   O3     H1196   O3   | H117   Size   Discovery   H118   Size   Discovery   H118   Size   Discovery   H118   Size   Discovery   H118   Size   Discovery   Size   Discovery   Size   Discovery   Size   Discovery   Size   Discovery   Size   Discovery   Discove  | H1170   STC.   D.     H1180   STC.   D.     H1181   STC.   D.     H1181   STC.   D.     H1182   STC.   STC.   STC.   STC.     H1122   STC.   | H117   Str.   10     H118   Str.   10     H118   Str.   10     H122   Str.   24     H123   Str.   24     H124   Str.   24     H125   Str.   24     H126   Str.   24     H127   Str.   24     H128   Str.   24     H136   Str.   25     H136   Str.   26     H136   Str.   26     H136   Str.   27     H146   Str.   27     H147   H147   H147     H148   Str.   27     H148   Str.   27     H149   Str.   27     H149   Str.   27     H140   |  | H117   Sir   Display   H118   Sir   Display   H119   Sir   Display   H119   Sir   Display   H119   Sir   Display   H118   Sir   Display   H129   Sir   Display   H129   Sir   Display   H129   H126    |  
   | H117   Size   Display   H118   Size   Display   H119   Size   Display   H119   Size   Display   H118   Size   Display   H123   Size     | H1170   STC   D   H118   STC   D   H112   STC   D   H124   STC   D   H126   STC   D   H12  | H1170   Str.   D.     H1180   Str.   D.     H1181   Str.   D.     H1181   Str.   D.     H1182   Str.   D.     H1281   Str.   Str.   D.     H1282   Str.   D.     H1283   Str.   D.     H1384   Str.   D.     H128   Str.   D.     H1387   Str.   D.     H1388   Str.   D.     H1481      | H117   Str.   15     H118   Str.   10     H118   Str.   10     H129   Str.   12     H130   Str.   12     H130   Str.   13     H131   Str.   13     H132   Str.   14     H134   Str.   15     H135   Str.   16     H136   Str.   17     H136   Str.   17     H136   Str.   18     H146   Str.   18     H147   Str.   18     H146   Str.   18     H147   Str.   18     H147   Str.   18     H148   Str.   18     H148   Str.   18     H149   Str.   18     H140   Str.   18     H140   Str.   18     H141   Str.   18     H145   Str.   18     H146   Str.   18     H147   Str.   18     H147   Str.   18     H148   Str.   18     H148   Str.   18     H149   Str.   18     H149   Str.   18     H141   Str.   18     H141   Str.   18     H142   Str.   18     H144   Str.   18     H145   Str.   18     H145   Str.   18     H146   Str.   18     H147   Str.   18     H148   Str.   18     H149   Str.   18     H140  | H1170   Str.   10     H1180   Str.   10     H1180   Str.   10     H1181   Str.   10     H1181   Str.   10     H1182   Str.   24     H1182   Str.   24     H1182   Str.   24     H128   Str.   24     H129   Str.   24     H129   Str.   24     H129   Str.   24     H129   Str.   25     H120   Str.   26     H120   Str.   27      | H117   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   H122   Size   Display   H123   Size   Display   H124   Size   Display   H124   Size   Display   Di  | H117   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   Siz  | H117   Size   Display   H118   Size   Display   H119   Size   Display   H119   Size   Display   H119   Size   Display   H129   Size   Display   H129   Size   Display   H129   Size   Display   H129   Display   H129   Display   H129   Display   Size   Display   Display   Size   Display   | H1170   Str.   10     H1180   Str.   10     H1181   Str.   10     H1181   Str.   10     H1181   Str.   10     H1182   Str.   24     H1182   Str.   24     H128   Str.   24     H128   Str.   24     H129   Str.   25     H129   Str.   26     H129   Str.   27     H120   Str.   27       | H117   Sir.   10     H118   Sir.   10     H119   Sir.   10     H118   Sir.   10     H123   Sir.   24     H124   Sir.   24     H125   Sir.   24     H126   Sir.   24     H127   7   3     H128   7   1     H128   7   1     H129   Sir.   24     H129   Sir.   24     H129   Sir.   24     H120   7   1     H121   Sir.   24     H122   Sir.   24     H123   Sir.   25     H124   Sir.   26     H125   Sir.   27     H126   Sir.   27     H127   7   1     H128   Sir.   27     H129   Sir.   27     H129   Sir.   27     H120   Sir.   27     H121   Sir.   27     H122   Sir.   27     H124   Sir.   27     H125   Sir.   27     H126   Sir.   27     H127   Sir.   27     H128   Sir.   27     H129   Sir.   27     H129   Sir.   27     H129   Sir.   27     H129   Sir.   27     H120     | H117   Sir.   10     H118   Sir.   10     H118   Sir.   10     H118   Sir.   10     H112   Sir.   24     H123   Sir.   24     H124   Sir.   24     H125   Sir.   24     H125   Sir.   24     H126   7   1     H127   7   3     H128   Sir.   24     H129   Sir.   25     H129   Sir.   26     H129   Sir.   27     H120   Sir.   2  | H1170   Str.   10     H1180   Str.   10     H1181   Str.   10     H1181   Str.   10     H1182   Str.   24     H1182   Str.   24     H1184   Str.   24     H1184   Str.   24     H1284   Str.   24     H1284   Str.   24     H1285   Str.   24     H1387   Str.   24     H1387   Str.   24     H1387   Str.   24     H1387   Str.   25     H1481   Str.   26     H1482   Str.   26     H1484   H1881   H1881     H1485   H1885     H1485     H148   | H1170   Size   Display   H118   H118   Size   Display   H118   H118   Size   Display   H118   H18   H   | H1170   Str.   Display   H118   Str.   Display   H128   Str.   Str.   Display   H128   Str.   Display   H128   Str.   Display   H128   Str.   Display   H128   Str.   Display   Displa  | H117   Size   11     H118   Size   16     H112   Size   16     H124   Size   17     H125   Size   17     H126   7   1     H127   7   3     H128   Size   1     H129   Size   1     H120   Size   1        | H117   Sitt   H118   Sitt     | H117   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   H118   Size   Display   Display   Size   Display   Displa   | H117   Site   H118   Site      | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4   
  | 48 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4  | 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5/0              |                                       | 2)               |             |                  |                  |                  |                    |                  |                 |                   |              |                  |                  |                 |             |             |                  |                  |  |  |   |   |   |   |  |   |   |   |  |  
  |  |  |   |  
   |   |   |   
   |  |   |   |  
   |   |   |   |   
   |  |   |  |  |    
   |   |   |   |   
  |  |   |   |   
   |  |   |  |  |  
   |  |   |  |  |                      
  |   |   |   |  
  |  |   |  |  
   |   |  |   |  |   
  |  | A CONCORD BY   | и дахана   | CHECKED BY   |
|                  | NOTEVOO                               | . 2              | Wings 1 & 2 | Wings 1 & 2      | Wings 1 & 2      | Wings 1 & 2      | Wings 1 & 2        | Wings 1 & 2      | Wings 1 & 2     | WINGS 1 & Z       | Wings 1 or 2 | Wings 1 & 2      | Wings 1 & Z      | Wings 1 oz 2    | Wings 1 & 2 | Wings 1 & 2 | Wings 1 & Z      | Wings 3 & 4      | Willy 5 & 4  | Wings 3 & 4  | Winds 3 & 4   | - 5000  | Winds 3 & 4   | Wings 3 & 4<br>Wings 3 & 4  | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4  | Wings 3 & 4 Wings 3 & 4 Wings 3 & 4 Wings 3 & 4   | Wings 3 & 4   | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4   | Wings 3 & 4  | Wings 3 & 4<br>Wings 3 & 4  | Wings 3 & 4<br>Wings 3 & 4  | Wings 3 & 4<br>Wings 3 & 4   | Wings 3 & 4<br>Wings 3 & 4  | Wings 3 & 4<br>Wings 3 & 4   | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings 3 & 6  | Wings 3 & 4<br>Wings 3 & 4   | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings   | Wings 3 & 4<br>Wings 3 & 4   | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Wings 3 & 4<br>Wings | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings  | MINGS 3 & 4<br>MINGS | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Wings 3 & 4 Wings | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Minna 3 & 4 a a Minna 3 & 4 a a Minna 3 & 4 a a a Minna 3 & 4 a a a Minna 3 & 4 a a a A a a a a a a a a a a a a a a a  | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Wings 3 & 4 Wings  | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings  | Wings 3 & 4 Wings  | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 2 & 4<br>Wings 2 & 6<br>Wings 3 & 6<br>Wings | Wings 3 & 4 Wings | Minngs 3 & 4 a a Minngs 3 & 4 a a a a a a a a a a a a a a a a a a   | Wings 3 & 4 Wings  | Wings 3 & 4<br>Wings | Wings 3 & 4 Wings 3 & 4 Wings 3 & 4 Wings 3 & 4 Wings 3 & 5 &   | Minngs 3 & 4 a Minngs 3 & 4 a Minngs 3 & 4 a Minngs 3 & 5 a a Minngs 3 & 5 a a a a a a a a a a a a a a a a a a  | Wings 3 & 4 Wings  | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Wings 3 & 4 Wings  | Mings 3 & 4 Mings  | Wings 3 & 4 Wings  | Wings 3 & 4 Wings 3 & 5 & 5 & 4 Wi | Wings 3 & 4 Wings | Wings 3 & a wild wings  | Wings 3 & 4 wings  | Wings 3 & 4 Wings | Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 6<br>Wings | Mings 3 & 4<br>Wings 3 & 5<br>Wings 3 & 4<br>Wings 3 & 5<br>Wings 3 & 4<br>Wings 3 & 5<br>Wings | Wings 3 & 4<br>Wings 3 & 5<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 5<br>Wings 3 & 4<br>Wings 3 & 4<br>Wings 3 & 5<br>Wings | Wings 3 & 4 Wings | Wings 3 & a A Wi | Wings 3 & 4<br>Wings | Wings 3 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 &  | Wings 3 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 4 Wings 3 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 & 5 &  | Wings 3 & 4 wings 3 wings 3 & 4 wings 3 wings 3 wings 3 wings 3 & 4 wings 3 wings   | Wings 3 & 4 & 4 Wi | Wings 3 & 4 wings 3 wings | Wings 3 & 4 Wings 3 & 4 & 4 Wings 3 &  | Wings 3 & 6 a wi | Wings 3 & 4 Wings  | Wings 3 & 4 a Wings 3 & 5 a a a a a wings 3 & 5 a a a a a wings 3 & 5 a a a a a wings 3 & 5 a a a a a a wings 3 & 5 a a a a a a a a a a a a a a a a a a  | Wings 3 & 4 a Wi | Wings 3 & 4 wings  |
|                  | CIZE LENGTH                           | 11-8 B.F         | 5 11-8 B.F  | 5 11-8 B.F       | 5 11-8 B.F       | 5 11-8 B.F       | 5 11-9 B.F         | 5 11-9 B.F       | 11-9 6.T        | D II-9 D.T        | 11-9 D.T     | 5 11-9 B.F       | 5 II- 9 B.F      | D - 11 - 0      | 11-9 B.H    | 5 11-9 B.F  | 1.1-10 B.F       | 1.2- / B.F.      | J.O 7 -21 C  | 5 12-7 B.F   | 12-7  |   | 5 12-7 BF   | 5 12-7 8.F  | 5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F   | 5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F  | 5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F  | 5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F  | 5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F<br>5 12-7 8.F   | 12-7   8.F   12-  | 5 112-7 8 F F F F F F F F F F F F F F F F F F  
   | 5 5 112-7 8 F F F F F F F F F F F F F F F F F F  | 5 12.7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 5 5 12.2 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8   
             | 5 5 12.2 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 5 5 12.2 7 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  | 5 5 12.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 7 8 18.2 8 18  | 5 5 12.2 7 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8  
  | 5 12.2 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0  | S   S   S   S   S   S   S   S   S   S   | 5   12   7   6   6   6   6   6   6   6   6   6   | 12   7   12   7   13   14   15   15   15   15   15   15   15  
   | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 12   7   12   7   13   14   15   15   15   15   15   15   15  | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 12   7   12   7   13   14   15   15   15   15   15   15   15  
  | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 12   7   12   7   13   14   15   15   15   15   15   15   15   | 5   5   12   7   6   6   6   6   6   6   6   6   6   | S   S   S   S   S   S   S   S   S   S  
               | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 5   12   7   0   0   0   0   0   0   0   0   0  | 5   5   12   7   6   6   6   6   6   6   6   6   6   | 5   12   7   6   6   6   6   6   6   6   6   6   
   | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 5   12   7   0   0   0   0   0   0   0   0   0  | 5   5   12   7   6   6   6   6   6   6   6   6   6  | 5   12   7   6   6   6   6   6   6   6   6   6  
  | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 5   12   7   6   6   6   6   6   6   6   6   6   | 5   12   7   12   7   13   14   15   15   15   15   15   15   15   | 5   12   7   6   6   6   6   6   6   6   6   6   | 5   12   7   12   13   14   15   15   15   15   15   15   15  
  | 5   12   7   6   6   6   6   6   6   6   6   6  | 5   5   5   5   5   5   5   5   5   5  | 5   12   7   12   13   14   15   15   15   15   15   15   15   | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 5
  12   7   12   13   14   15   15   15   15   15   15   15  | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 5   17   2   2   2   2   2   2   2   2   2  | 5   12   7   12   13   14   15   15   15   15   15   15   15   
   | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 5   12   7   12   13   14   15   15   15   15   15   15   15   | 5   12   7   12   13   14   15   15   15   15   15   15   15   | 5   12   7   12   13   14   15   15   15   15   15   15   15  
   | 5   17   2   2   2   2   2   2   2   2   2   | 5   12   7   12   13   14   15   15   15   15   15   15   15  | 12   2   3   3   3   3   3   3   3   3   | 5   5   5   5   5   5   5   5   5   5  | 5   172   7   18   18   18   18   18   18   18   
   | 5   12   7   0   0   0   0   0   0   0   0   0   | 5   12-7   6   6   6   6   6   6   6   6   6   | Str. 2   Str. 2   Str. 4   Str. 4   Str. 5   Str. 4   Str. 5   Str. 4   Str. 5   Str. 4   Str. 5   S   |
|                  | A A A A A A A A A A A A A A A A A A A | Str. 2           | G23 Str. 2  | G25 Str. 2       | G26 Str. 2       | G27 Str. 2       | G28 Str. 2         | G29 Str. 2       | 630 Str. 2      | 651 SU. 2         | G52 SU. 2    | G33 Str. 2       | 634 Str. 2       | G35 Str. 2      | 150 Stf. 2  | G37 Str. 2  | 638 Str. 6       | 0.39 Str. 2      | 040  | G41 Str. 2   | G43 Str 2   | G44 Str 2                                     |   | G45 Str. 2  | G45 Str. 2<br>G46 Str. 2   | G45 Str. 2<br>G46 Str. 2<br>G47 Str. 2  | G45 Str. 2<br>G46 Str. 2<br>G47 Str. 2<br>G48 Str. 2  | 645 Str. 2<br>646 Str. 2<br>647 Str. 2<br>648 Str. 2<br>649 Str. 2  | 645 Str. 2<br>646 Str. 2<br>647 Str. 2<br>647 Str. 2<br>649 Str. 2<br>649 Str. 2   | G45 Str. 2<br>G46 Str. 2<br>G47 Str. 2<br>G47 Str. 2<br>G48 Str. 2<br>G50 Str. 2<br>G50 Str. 2   
  | G45   Str.   2   G46   Str.   2   G46   Str.   2   G48   Str.   2   G48   Str.   2   G48   Str.   2   G49   Str.   2   G55  | (45) Str. 2<br>(46) Str. 2<br>(47) Str. 2<br>(48) Str. 2<br>(49) Str. 2<br>(50) Str. 2  | (45) Str. 2<br>(546) Str. 2<br>(548) Str. 2<br>(548) Str. 2<br>(548) Str. 2<br>(549) Str. 2<br>(551) Str. 2<br>(551) Str. 2<br>(553) Str. 2<br>(553) Str. 2<br>(553) Str. 2<br>(553) Str. 2<br>(554) Str. 2<br>(554) Str. 2<br>(554) Str. 2<br>(554) Str. 2<br>(555) Str. 2<br>(556) Str. 2<br>(557) Str. 2<br>(558)  | Section   Sect   | (645 Str. 2 2 (646 Str. 2 2 (648 Str. 2 2 (658 Str. 2 (658 Str. 2 2 (658 Str. 2 (658 Str  | Section   Sect  | Section   Sect  | 2   
  | Street   S  | 2   2   2   2   2   2   2   2   2   2   | Section   Sect   | State   | Color   Colo  | State   Stat  | Geo.   | State  
   | Color   Colo  | State  | Color   Colo   | State  | Section   Sect  | State   | State  
  | State  | Section   Sect   | State   | State   | State   | State  
   | State   | State  | State  | State   
  | State  | State   | State  | State  | State   
   | State   | State   | State   | State   
   | State  | 2   | State  | State   Stat   | State  
  | State   Stat   | State   | State   Stat   | State  |  |  |   
  |  |
| C/G D/H          | 5                                     | 13- 4            | 0-8 14-4    | 0-5 3-0          | 0-7 4-9          | 0-8 6-1          |                    |                  |                 |                   |              |                  |                  |                 |             |             |                  |                  |  |  |   |   |   |   |  |   |   |   |  |  
  |  |  |   |  
   |   |   |   
   |  |   |   |  
   |   |   |   |   
   |  |   |  |  |    
   |   |   |   |   
  |  |   |   |   
   |  |   |  |  |  
   |  |   |  |  |                      
  |   |   |   |  
  |  |   |  |  
   |   |  |   |  |   
  |  | AV6  | DAME TO THE PART OF THE PART O | THAG   |
|                  | A/E B/C                               |                  |             | 2- 9% 0-10       | 4-5% 1-2         | 5-9 1-3          |                    |                  |                 |                   |              |                  |                  |                 |             |             |                  |                  |  |  |   |   |   |   |  | j   | Ĺ   |   | S C  | B  
  | B  | B  | A Harris A Harri A Harris A Harris A Harri A Harris A Harris A Harris A Har  | TYPE 4  
  | APE 4   | APE 4   | YPE 4   | A PEE 4  
   | YPE 4   | A PE 4  | YPE 4  | APE 4  
  | A PER 4   | APE 4   | YPE 4   | A PER 4  
   | A P P P P P P P P P P P P P P P P P P P   | _   _   _   _   _     _   _     _     _     _   _     _   _     _   _     _                  | ~      _   ш   | ~      _   ш  
  | т     _   ш   | т     _   ш       √   ∞   | ~      _   ш  | т  | ~   
  | ~   | ~      _   ш  | ~      _   ш  | ~      _   ш   
   | ~   | ~  | ĬIJIJIJIJIJIJIJIJIJIJij  | `  | `    _   ш   
   | ~       -   ш   | <del>&lt;</del>  | ~       -  | ~   
   | ~       -   |   | Ĭ I _ I Ш   |   | ~     -   ш   
  |   | ~       -  | ~       _   ω  | ~  
  | ~       -  | ~   | ~  | ~  | Ĭ     _   ш   
  | Ĭ∥- ш    ⊲ ∞    <del>&lt; -&gt; - </del>   | ĬIJŢĬijŢĬijŢĬijŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢĬŢ   |  | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|                  | NOTATION                              | Top Slab         | Bottom Slab | Sidewalls        |                  | B.F. Wings 3 & 4 | Top & Bottom Slabs | Sidewalls        | B.F Wings I & 2 |                   |              | B.F Wings 1 & 2  | WIngs            | B.F Wings 1 & 2 | wings       | Wings       | B.F Wings 1 & 2  | WINGS            | WINGS  | B.F Wings 1 & 2  | 200   |   |   |   |  |   |   |   | Я  |  
  |  | A S  |   |  
   |   |   |   
   |  |   |   |  
   |   |   |   | <del>  1</del>  
   |  |   | <del>                                </del>  |  |    
   |   |   |   |   
  |  |   |   |   
   |  |   |  |  |  
   |  |   |  |  |                      
  |   |   |   |  
  |  |   |  |  
   |   |  |   |  |   
  |  |  |  |  |
|                  | CIZE LENGTH                           | +                |             | 5 3-8            | 7 5-8            | 8 7-0            | 5 31-5             | 4 31-3           | / -II - /       | /-!!              | ) II-/       | 5 11-7           | / II- /          | 111-7           | ) II-/      | 5 11-7      | 11-7             | 11-7             | 0 11-0   | U 11 00  |   |   |   |   |  | j   | <u> </u>  |   |  | B  
  | N N N N N N N N N N N N N N N N N N N  | B D D  |   | A A A A A A A A A A A A A A A A A A A  
   |   |   | | |
   |  |   |   |  
   |   |   |   |   
   |  |   | 1 1 1  |  |    
   |   |   | 1   |   
  | 1  | 1   1   | "   | "   
   | 3  | 3   | 3  |  | | | | | | | | | | | | | | | | | | | | | | | | | | |
   |  |   |  |  |                      
  |   |   |   |  
  |  |   |  |  
   |   |  |   |  |   
  | TYPE 11  | TYPE 1   | TYPE 1  TYPE 1  TYPE 1  TYPE 1  TYPE 11  | THOP KEST  |
|                  | NO TYDE                               | 1 140            | 1 140       | 4 162            | 4 64             | 4 84             | Str. 56            | Str. 32          | Str. 2          | 2 . nc            | 20. Z        | Str. 2           | 5tr. 2           | 202             | Str. 2      | Str. 2      | 2 T. Z           | Str. 2           | 2 . 100  | Str. 2   | 3   |   |   |   |  | 7   | Ţ   |   | T g  |  
  | 8  | 8  | 8   | 8  
   | 8   |   | 8   
   |  | 8   |   | |
   |   |   |   |   
   |  |   |  |  |    
   |   |   |   |   
  |  |   |   |   
   |  |   |  |  |  
   |  |   |  |  |                      
  |   |   |   |  
  |  |   |  |  
   |   |  |   |  |   
  |  |  | COMMONW  | COMMONW  |

HARLAN COUNTY FD51 048 0522 011-012 Contract ID: 241317 Page 34 of 90 1340 1350 1350 1350 Profile Scale: Vertical I' = 10' Horizontal not to scale HARLAN
RAWING NUMBER
28906 Plan Scale 1" = KY 522 SUBSURFACE DATA BRIDGE BRANCH N=101 A-1-b(0), GC-GM, S+C=23(19+5) N=101 N=2 N=19J A-2-4(0), SM, S+C=25(17+7) 0.26 Ξ 21 **%** 3,449 D50 (mm) ✓€ Culver1 DATA SUBSURY SZZ KY SZ KY KY SZ KY K Datum 1001 1.424 5 0 | N=26| A-1-br00, CM, S+C=14(9-5)
0.330 6 0 | N=270| A-2-4(0), SM, S+C=16(11+5)
0.350 6 0 | N=470, 20; A-2-4(0), SM, S+C=16(11+5)
0.350 6 0 | N=270, N=270; N=27 Division of Structural Design £ KY 522 Sta. 11+37.00 = Channel Lined Stilling Basin & Inlet 1001 11+34.10 7.5′L†. 1383.6 = ,×, COMMONWEALTH OF KENTUCKY KENNOCK DEPARTMENT OF HIGHWAYS D<sub>50</sub> Hole No. Station Offset Elev. (NAVD 88 datum) 1380 1370 1350 1350 1330

### **SPECIAL NOTE**

### FOR SEDIMENT PREVENTION AND EROSION CONTROL

### FOR IMPACT REGARDLESS OF SIZE OF THE DISTRUBED AREA

Potential impacts to gray bat foraging habitat and habitat for federally listed fish and mussel species will be minimized by implementing erosion prevention and sediment control measures.

As required under Section 213 of the KYTC Standard Specifications, prior to onsite activities a **site-specific** *Erosion Control Plan* **including BMPs** to ensure continuous erosion control throughout the construction and post construction period. The plan will identify individual Disturbed Drainage Areas (DDA) where storm water from the construction area will be discharged off site or into waters of the Commonwealth.

Should the Contractor fail to create a BMP Plan or provide and maintain the necessary erosion control, Liquidated Damages will apply at the rate specified in the contract. If no rate is specified, Liquidated Damages will be applied at the rate specified in Section 108 of the Standard Specifications.

The erosion prevention and sediment controls proposed are presented below.

- The location of the individual erosion prevention/sediment control measures will be identified by the Resident Engineer and Contractor. The Contractor will place erosion control devices as identified in the site-specific BMP Plan prior to beginning work.
- Mulch will be placed, during grade and drain activities, across all areas where no work will be conducted for a period of 14 consecutive days.
- Tree clearing within the riparian zone will be minimized. Trees to be removed will be determined by the resident engineer and the contractor prior to disturbance. (Note: Any "Special Note for Tree Clearing Restrictions" must be adhered to.)
- Silt fence, or other approved method as appropriate, will be installed at the edge of waters within the project corridors to eliminate the deposition of rock and debris in the streams during construction activities. In the unforeseen event that unintended debris does enter the streams, the resident engineer will halt the contributing activity until appropriate remedial actions have been implemented.
- To the maximum extent plausible, construction activities will take place during low-flow periods.
- Equipment staging and cleaning areas will be located to eliminate direct inputs to waters of the Commonwealth. These areas will be located such that effluent will be filtered through vegetated areas and appropriate sediment controls prior to discharge offsite.

- Concrete will be poured in a manner to avoid spills into the streams. In the unforeseen event that a spill does occur, the USFWS will be notified, and the resident engineer will immediately halt the activity until remedial measures have been implemented.
- KYTC proposes to stabilize areas disturbed during construction activities through vegetation establishment and placement of riprap and geotextile fabric. Re-vegetation of the disturbed areas will allow thermoregulation of water within the streams, establish long-term, regenerative stabilization of the stream banks, and provide nutrients to the aquatic macroinvertebrate community through inputs of organic material.
- Areas disturbed during construction and not stabilized with rip rap and erosion blanket
  will be seeded using a standard seed mix. Depending on project slope and project
  location, application rates and seed mix types will vary. The Contractor shall perform all
  final seeding and protection, in accordance with the plans and Section 212 of KYTC
  Standard Specifications.
- Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 221 of KYTC Standard Specifications. The Engineer's inspections shall be performed a minimum of once per month and within seven (7) days after a storm of ½ inch or greater. Copies of the Engineer's inspections shall not be provided to the Contractor unless improvements to the BMPs are required. The Contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within five (5) days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance. If corrections are not made within the five (5) days specified, the liquidated damages will apply at the rate specified in the Liquidated Damages note in the contract.
- Contrary to Sections 212.05 and 213.05, unless listed in the proposal, bid items for temporary BMPs and items for permanent erosion control will not be measured for payment and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.
- The Contractor shall be responsible for applying "good engineering practices." The Contractor may use any temporary BMPs and permanent BMPs that fall within the guidance of the current Standard Specifications, KYTC's Best Management Practices manual, and with the approval of the KYTC Engineer.

### FOR IMPACT GREATER THAN 1.0 ACRE

When the total disturbed area for a project, including laydown and waste/borrow areas, is greater than 1.0 acre, the Contractor shall be responsible for filing the Kentucky Pollution discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW). The Contractor will be responsible for following the KPDES requirements of local Municipal Separate Storm Sewer System (MS4) programs with jurisdiction. Required NOI shall name the Contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference. For grouped contracts with more than one structure, each structure will be treated independently in regard to disturbed area unless another structure is within 0.25 mile of

the structure. For structures within 0.25 mile of each other, the total disturbed area will be the sum of the combined disturbed areas. The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 Program that has jurisdiction. The NOT shall be filed after the Engineer agrees the project is stabilized or the project has been formally accepted.

The Contractor shall perform all temporary erosion/sediment control functions including providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP Plan documents as construction progresses, and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on August 1, 2009, or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of the KYTC current Department of Highways, Standard Specifications for Road and Bridge Construction (Standard Specifications).

The Contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control. The Contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The KYR10 web page, which includes the General Permit and eNOI application is here: <a href="https://eec.ky.gov/Environmental-">https://eec.ky.gov/Environmental-</a>
Protection/Water/PermitCert/KPDES/Documents/KYR10PermitPage.pdf

If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone (502) 564-7250.

## **SPECIAL NOTE**

## For Additional Environmental Commitments

IN ADDITION TO OTHER ENVIRONMENTAL COMMITMENTS LISTED IN THIS CONTRACT, THE FOLLOWING COMMITMENTS ALSO APPLY, AS THIS IS A FEDERALLY FUNDED UNDERTAKING AS DEFINED IN SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, 36 CFR 800.16(Z):

1) The KYTC has completed a Phase 1 archaeological survey for a site-specific area surrounding the bridge. The cleared area is shown as "Archaeologically Cleared Area" or "Environmentally Cleared Area" on the concept plans and/or the map attached to this note or included elsewhere in the proposal. Likewise, any areas that must be avoided have been labeled "Do Not Disturb."

If the Contractor deems it necessary to use additional areas outside the Archaeologically/ Environmentally Cleared Area for <a href="mailto:any">any</a> purposes—e.g., laydown yards, vehicle parking, parking cranes, delivering beams, borrow areas, waste areas, etc.—the Contractor must first get a written agreement with the landowner (assuming the additional area is outside the right-of-way). Then the Contractor shall seek approval of the use of the site—whether within or outside the right-of-way—by both the KYTC Section Supervisor and the GEC Environmental Lead at <a href="mailto:tspringer@qk4.com">tspringer@qk4.com</a>. The Contractor shall provide a map of the area(s) to be used, including access points, and property-owner agreements. The Environmental Team will complete initial field investigations for archaeological, historical, ecological, and other environmental clearances. If any potentially significant site or resources are found, the KYTC has the right to deny the use of the proposed site. The maps and property owner agreements are to be submitted at least ten (10) business days prior to the Preconstruction Conference, or sixty (60) days prior to the Contractors access to the site, for coordination and review by the KYTC District and Bridging Kentucky Team.

A <u>Liquidated Damage of \$50,000</u> will be assessed whenever the Contractor has used any restricted areas. The fee will be assessed on a *per bridge* basis, whether the contract involves bridge bundles or a single bridge. In addition, all fines, fees, penalties, remediation costs, and other damages related to breaches of Threatened and Endangered Species Act Section 7, National Historic Preservation Act Section 106, Clean Water Act Sections 401 and 404, Kentucky General Permit for Stormwater Discharges KYR10, Environmental Protection Agency requirements, State Historic Preservation Office requirements, and other related permitting agencies will be paid by the Contractor, including all associated costs and burdens placed upon the Kentucky Transportation Cabinet.

2) If human remains are encountered during project activities, all work should be immediately stopped in the area. The area should be cordoned off, and, in accordance with KRS

72.020, the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to Nicolas Laracuente at the Kentucky Heritage Council at (502) 892-3614, George Crothers at the Office of State Archaeology at (859) 257-1944, and KYTC DEA archaeologists at (502) 564-7250.

For guidance regarding inadvertent discovery and treatment of human remains, refer to the KYTC's <u>Right of Way Guidance Manual</u> (Section ROW-1202), and the Advisory Council on Historic Preservation's (ACHP) <u>Policy Statement Regarding Treatment of Human Remains and Grave Goods</u> (adopted by ACHP February 23, 2007).

3) If, during the implementation of The Project, a previously unidentified historic/ archaeological property is discovered or a previously identified historic/archaeological property is affected in an unanticipated manner, the contractor shall (1) call KYTC DEA archaeologists at (502) 564-7250, (2) call SHPO archaeologists at (502) 892-3614, and (3) ensure that all work within a reasonable area of the discovery shall cease until such time as a treatment plan can be developed and implemented.

09/29/2023

#### FEDERAL EMERGENCY MANAGEMENT AGENCY

Contract ID: 241317 Page 40 of 90

REC-01

11:09:12

#### RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-04-KY-4663-PW-00191

Title: 686265 - Harlan County KY522 MP 12.75 Culvert

#### **NEPA DETERMINATION**

Non Compliant Flag: No EA Draft Date: EA Final Date:

EA Public Notice Date: EA Fonsi Level: CATEX

EIS Notice of Intent EIS ROD Date:

Comment

SOW: KY DEPARTMENT OF TRANSPORTATION. Harlan Co KY 522 MP 12.75 - Culvert. GPS:

36.95022, -83.08901. Cat. C. Work to be Completed. Cost: \$1,542,463.27

The applicant will replace the Harlan County KY522 MP 12.75 Culvert. The new 12x3 single RCBC will replace the two existing RCBC with the same size opening.

opiace the two externing recoordinates arms size opening.

HMP: The Applicant will replace the two existing reinforced concrete box with a single reinforced concrete box.

- Ibaugha1 - 03/31/2023 17:49:32 GMT

#### **CATEX CATEGORIES**

Catex Category Code	Description	Selected
*n9	(*n9) Federal Assistance for Flood Hazard Reduction Actions. Federal assistance for drainage, berm, water crossing, and detention, retention, or sediment pond projects which have the primary purpose of addressing flood hazards and: (a) Do not affect more than 25 acres, (b) Do not result in adverse flood risk effects to downstream communities, (c) Do not result in any increase of flood levels within the community during the occurrence of the base flood discharge if the action takes place within the regulatory floodway, and (d) Wher the effect of the proposed project when combined with other existing or reasonably foreseeable development will not increase water surface elevation of the base flood more than one foot at any point within the community if the action takes place in a floodplain with no regulatory floodway. This CATEX covers minor flood control actions as identified in Sections 1366 and 1361 of the National Flood Insurance Act (NFIA). Actions that are not covered in Sections 1366 and 1361 of the NFIA, such as dikes, levees, seawalls, groins, and jetties are excluded from this CATEX.	re of n

#### **EXTRAORDINARY**

Extraordinary Circumstance Code Description Selected ?

No Extraordinary Circumstances were selected

#### **ENVIRONMENTAL LAW / EXECUTIVE ORDER**

Environmental Law/ Executive Order	Status	Description	Comment
Clean Air Act (CAA)	Completed	Project will not result in permanent air emissions - Review concluded	
Clean Water Act (CWA)	Completed	Project would affect waters, including wetlands, of the U.S.	CWA: See attachment - Ibaugha1 - 03/31/2023 18:12:16 GMT*** Please disregard previous comment. CWA: Applicant has provided documentation of

HARLAN COUNTY FD51 048 0522 011-012

09/29/2023

#### FEDERAL EMERGENCY MANAGEMENT AGENCY

Contract ID: 241317 Page 41 of 90

REC-01

11:09:12

## RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-04-KY-4663-PW-00191

Title: 686265 - Harlan County KY522 MP 12.75 Culvert

Environmental Law/ Executive Order	Status	Description	Comment use and compliance of NWP for this work Ibaugha1 - 09/28/2023 12:14:44 GMT
	Completed	Project may require Section 404/401 or Section 9/10 (Rivers and Harbors Act) permit, including qualification under Nationwide Permits - Review concluded	
Executive Order 11988 - Floodplains	Completed	No effect on floodplain/flood levels and project outside floodplain - Review concluded	EO 11988: Project is located in an un-shaded X zone per Harlan County, FIRM Panel: 21095CO155E. effective on 3/16/2015 - lbaugha1 - 03/31/2023 18:16:37 GMT
Executive Order 11990 - Wetlands	Completed	No effects on wetlands and project outside wetlands - Review concluded	EO 11990: Project is not located in wetlands per review of USFWS National Wetlands Inventory (NWI) mapper, accessed 03/31/2023 - Ibaugha1 - 03/31/2023 18:19:08 GMT
Executive Order 12898 - Environmental Justice for Low Income and Minority Populations	Completed	No Low income or minority population in, near or affected by the project - Review concluded	FEMA has determined that the following types of activities: culvert repairs, have limited or no potential to affect minority or low-income populations and FEMA has no further EO 12898 responsibilities with regards to them Ibaugha1 - 03/31/2023 18:19:41 GMT
Endangered Species Act (ESA)	Completed	Listed species and/or designated critical habitat present in areas affected directly or indirectly by the federal action	ESA: Per review of IPAC website listing of threatened and endangered species for Harlan County accessed 03/31/23 - Ibaugha1 - 03/31/2023 18:00:29 GMT
	Completed	No effect to species or designated critical habitat (See comments for justification) - Review concluded	
Farmland Protection Policy Act (FPPA)	Completed	Project does not affect designated prime or unique farmland - Review concluded	
Fish and Wildlife Coordination Act (FWCA)	Completed	Project does not affect, control, or modify a waterway/body of water - Review concluded	
Migratory Bird Treaty Act (MBTA)	Completed	Project located within a flyway zone	
	Completed	Project does not have potential to take migratory birds - Review concluded	
Magnuson-Stevens Fishery Conservation and Management Act (MSA)	Completed	Project not located in or near Essential Fish Habitat - Review concluded	

09/29/2023

#### FEDERAL EMERGENCY MANAGEMENT AGENCY

Contract ID: 241317 Page 42 of 90

REC-01

11:09:12

#### RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-04-KY-4663-PW-00191

Title: 686265 - Harlan County KY522 MP 12.75 Culvert

Environmental Law/ Executive Order	Status	Description	Comment
National Historic Preservation Act (NHPA)	Completed	Applicable executed Programmatic Agreement (enter date in comments).	NHPA: FEMA has determined that this project will result in No Historic Properties Affected with Conditions (see conditions). SHPO concurrence with this determination was received, dated 08/29/2023. No other responses were received. mrival - 09/08/2023 15:50:56 GMT
	Completed	No properties in the project area are 50 years or older or listed on the National Register - Review concluded	
	Completed	Project affects undisturbed ground	
	Completed	Project area has potential for presence of archeological resources	
	Completed	Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence attached) - Review concluded	
Wild and Scenic Rivers Act (WSR)	Completed	Project is not along and does not affect Wild and Scenic River - Review concluded	

#### **CONDITIONS**

#### Special Conditions required on implementation of Projects:

All ground disturbing activities will be monitored by an SOI qualified archaeologist..

SHPO will be notified prior to project activities if the approved scope of work changes.

Source of condition: National Historic Preservation Act (NHPA)

Source of condition: National Historic Preservation Act (NHPA) Monitoring Required: No No root balls will be removed without supervision.

Source of condition: National Historic Preservation Act (NHPA) Monitoring Required: No Heavy machinery will be staged on hard topped surfaces.

Source of condition: National Historic Preservation Act (NHPA) Monitoring Required: No Work will cease immediately if human remains or intact archaeological features are identified during construction.

Source of condition: National Historic Preservation Act (NHPA) Monitoring Required: No

NOTE: All times are GMT using a 24-hour clock.

Page 3 of 4

No

Monitoring Required:

HARLAN COUNTY FD51 048 0522 011-012

> 09/29/2023 11:09:12

#### FEDERAL EMERGENCY MANAGEMENT AGENCY

Contract ID: 241317 Page 43 of 90

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project PA-04-KY-4663-PW-00191

Title: 686265 - Harlan County KY522 MP 12.75 Culvert

#### **Standard Conditions:**

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

#### Contract ID: 241317 Page 44 of 90

## **SPECIAL NOTE**

## Seasonal Tree Clearing Restriction

DUE TO THE RECOVERY PLAN FOR ENDANGERED BATS, NO TREE CLEARING IS PERMITTED FROM MAY 15 THROUGH JULY 31.

If there are any questions regarding this note, please contact Danny Peake, Director, Division of Environmental Analysis, 200 Mero Street, Frankfort, KY 40601, Phone (502) 564-7250.

#### SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS

#### I. TRAFFIC CONTROL GENERAL

Except as provided herein, traffic shall be maintained in accordance with the current standard specifications, section 112. The contractor will be responsible for developing and implementing the maintenance of traffic details with guidance through standard drawings and the MUTCD current editions. The developed traffic control plan must be approved by the Engineer prior to implementation. The contractor is expected to provide at a minimum the items listed in this note; however this note does not relieve the contractor of other items that may be necessary to comply with current standards. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will 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 new condition, at the beginning of the work and maintained in like new condition until completion of the work.

The contractor must notify the engineer and public information officer at least 14 calendar days prior to the beginning work. Please see the Special Note for Liquidated Damages for additional information.

#### II. TRAFFIC COORDINATOR

Furnish a traffic coordinator as per section 112. The traffic coordinator shall inspect the project maintenance of traffic, at least three times daily, or as directed by the engineer, during the contractor's operations and at any time a bi-directional lane closure or road closure is in place. The personnel shall have access on the project to a radio or telephone to be used in case of emergencies or accidents. The traffic coordinator shall report all incidents throughout the work zone to the engineer on the project. The contractor shall furnish the name and telephone number where the traffic coordinator can be always contacted.

#### III. SIGNS

The contractor is responsible for all signage during construction. The contractor shall adhere to the standard drawings and manual on uniform traffic control devices (MUTCD) for guidance. If, at any time, the engineer requests a change in the maintenance of traffic signage, the contractor shall implement the change within 8 hours. Failure to implement these changes within the required eight hours will result in liquidated damages of \$5,000 per day.

The contractor shall provide all detour signing needed for the bridge closure, if allowed in the contract documents. All signing required will be incidental to the lump sum bid item "Maintain and Control Traffic".

The department will not measure installation, maintenance, or removal for payment of any detour signage or standard construction signage, and will consider these incidental to "Maintain and Control Traffic"

Closure signs, detour signs, and bi-directional lane closure signs should be placed no sooner than two weeks prior to the closing of the bridge (when applicable) or placing lane closures. Wayfinding detour signs should be placed a maximum of 2 miles apart unless specified by the engineer. Signs shall be covered or removed within 24 hours of opening the bridge to traffic.

Road closed signs (when applicable) should be double signed and placed a minimum of 1500', 1000', and 500' in advance of the closure, in addition to signage required by the MUTCD and standard drawings.

#### IV. TEMPORARY PAVEMENT STRIPING

For projects where road closures are allowed in the contract documents, it is not anticipated that temporary pavement striping will be needed since the bridge will be closed. However, if the contractor's means and methods allow for need for temporary striping, conflicting pavement marking will be covered with 6" black removable tape. However, for bi-directional lane closures or if the plans call for a diversion, temporary striping will be required per the plans and MUTCD. Contrary to the standard specifications, no direct payment will be made for any temporary striping, pavement striping removal, or any other temporary striping item. If temporary striping is used, the contractor shall replace any temporary striping that becomes damaged or fails to adhere to the pavement before dark on the day of the notification. Liquidated damages shall be assessed to the contractor at a rate of \$500 per day for failing to replace temporary striping within this time limit.

#### V. PROJECT PHASING & CONSTRUCTION PROCEDURES

Project phasing shall be as directed by the plans, special notes, and the approved Traffic Control Plan prepared by the contractor. Maintain traffic over the bridge as long as possible. Once work on the structure begins that impacts traffic, ensure work progresses to minimize the effected time to the public. All materials that must be made specific for the project should be ordered and made prior to closure of the bridge or implementation of bi-directional lane closures so that delivery does not delay progress of the work, unless approved by the Engineer. If the bridge is reopened prior to safety devices being in place, an approved protective barrier wall shall be placed in accordance with the standard drawings.

For projects which require an on-site diversion to be constructed to maintain traffic, the traffic control plan and project schedule prepared by the contractor shall include provisions such that traffic is not switched to the diversion until all materials that must be made specific for the project are ordered and made so that use of the diversion is minimized, unless approved by the Engineer.

#### VI. PAVEMENT DROP-OFF

Less than two inches - no protection required. Warning signs should be placed in advance and throughout the drop-off area.

Two to four inches - plastic drums, vertical panels or barricades every 100 feet on tangent sections for speeds of 50 mph or greater. Cones may be used in place of plastic drums, panels, and barricades during daylight hours. For tangent sections with speeds less than 50 mph and curves devices should be placed every 50 feet. Spacing of devices on tapered sections should be in accordance with the manual on uniform traffic control devices, current edition.

Greater than four inches - positive separation or wedge with 3:1 or flatter slope needed. If there is five feet or more distance between the edge of the pavement and the drop-off, then drums, panel, or barricades may be used. If the drop-off is greater than 12 inches, positive separation is strongly encouraged. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations.

For temporary conditions, drop-offs greater than four inches may be protected with plastic drums, vertical panels, or barricades for short distances during daylight hours while work is being done in the drop-off area.

#### VII. VARIABLE MESSAGE SIGNS AND TEMPORARY TRAFFIC SIGNALS

At the direction of the Engineer, the contractor is expected to provide up to four (4) message boards for use at locations determined by the Engineer. These message boards are expected to be in place one week prior to the closure of the roadway and remain in place for the duration of the closure. The message boards will be paid for as per the standard specifications.

For projects that involve the use of lane closures, all lane closures shall be bi-directional. The contractor shall provide temporary traffic signals and all labor, materials, and incidentals needed to maintain bi-directional traffic for the project. For short term bi-directional lane closures, the use of flaggers in lieu of temporary traffic signals may be acceptable if approved by the Engineer.

#### VIII. BARRICADES

For projects which allow full closure, ensure a minimum of (4) type III barricades are used at each end of the bridge for a total of (8) type III barricades. Contrary to the standard specifications, no direct payment will be made for barricades, but they will be included in the lump sum price for "Maintain and Control Traffic".

#### VIII. DETOUR AND ON-SITE DIVERSIONS

For projects which allow a full closure of the bridge, or if necessary to detour trucks, the traffic control plan proposed by the contractor shall include a signed detour route for the road closure. The traffic control plan along with the proposed detour plan will be delivered to the engineer 7

days prior to the pre-construction meeting. The proposed detour route shall meet the following requirements:

- 1) Detour routes must remain at minimum on the same classification of roadway (i.e. AA, AAA, state, county, etc.) Unless written approval is obtained through the owner of the facility.
- 2) The contractor must coordinate with other projects along the detour route to avoid ongoing construction projects along those routes.
- 3) It may be determined that two detour routes would be needed if the first selected route cannot accommodate truck traffic. If this occurs, the contractor is expected to sign both detours per the standard drawings and MUTCD. Additional clarification signage between the detours may be needed at points where they diverge.
- 4) For projects that involve the use of bi-directional lane closures and the temporary lane width per the plans or as proposed by the contractor is less than 10 feet, the contractor shall be required to provide a signed detour for oversized vehicles.

The traffic control plan must be submitted and approved to allow for coordination of the public information officer with the closure notification. The public must be notified of the proposed detour route when they are notified of the closure, 2 weeks before closure. All time and expenses necessary for the development of the detour plan(s) will be incidental to the lump sum bid item "Maintain and Control Traffic".

For projects with an on-site diversion included in the construction, the preparation of traffic control plans for a detour and implementation of a detour will not be required, unless specified in the plans.

#### IX. PAYMENT

Unless listed as a bid item in the contract documents, payment will only be made for the following items:

- 1. Maintain and Control Traffic Lump Sum
- 2. Concrete Barrier Wall Type 9T Linear Feet
- 3. Crash Cushions Each
- 4. Portable Changeable Message Boards Each

The quantities for barrier wall and crash cushions include initial placement only. Barrier wall will be paid per linear foot as detailed in the plans for wall placed up to the quantity specified in the plans. Any relocation or additional wall required will not be paid for directly but will be considered incidental to Maintain and Control Traffic.

All other items needed to maintain traffic in accordance with these contract documents and the approved traffic control plan shall be considered incidental to Maintain and Control Traffic. These items include but are not limited to traffic signals, signs, temporary guardrail, temporary pavement striping, barrier wall delineators, guardrail delineators, cones, barrels, flaggers, etc.

# SPECIAL NOTE FOR CONTRACT COMPLETION DATE AND LIQUIDATED DAMAGES ON BRIDGE REPAIR CONTRACTS

#### I. COMPLETION DATE.

Upon Notice to Proceed, the Contractor has the option of selecting the Begin Work date. Once selected, notify the Department in writing of the date selected at least two weeks prior to beginning work and provide a proposed project schedule. All work is to be completed by the specified contract completion date. The Contractor is allotted 150 calendar days once the bridge is closed to complete all work to safely reopen the structure with no lane closures. At a minimum, prior to reopening the bridge to traffic, all strength requirements and curing for materials used shall be completed per Division 600 of the Standard Specifications. Guardrail shall be installed to the satisfaction of the Engineer prior to reopening the bridge to traffic unless prior approval is obtained from the engineer for use of temporary railing.

The Engineer will begin charging calendar days for a structure on the day the Contractor closes the structure to traffic, regardless of holidays or seasonal weather limitations.

## II. LIQUIDATED DAMAGES.

Liquidated damages will be assessed to the Contractor in accordance with the Transportation Cabinet, Department of Highway's current Standard Specifications for Road and Bridge Construction, Section 108.09, when either the allotted number of calendar days or the specified completion date is exceeded.

-Contrary to the Standard Specifications, liquidated damages will be assessed to the Contractor during the months of December, January, February and March when the contract time has expired on any individual bridge. Contract time will be charged during these months. All construction must be completed in accordance with the weather limitations specified in Section 606 and/or Section 601 as applicable. No extension of Contract time will be granted due to inclement weather or temperature limitations that occur due to starting work on the Contract or a structure late in the construction season.

Any approval of cold weather plans or allowance of construction operations to occur outside Section 606 and/or Section 601 does not alleviate the 150-day maximum bridge closure. In the event the closure lasts longer than 150 calendar days as specified, liquidated damages will apply to all excess days regardless of weather limitations.

Date

Contract ID: 241317 Page 50 of 90



## KENTUCKY TRANSPORTATION CABINET Department of Highways **DIVISION OF RIGHT OF WAY & UTILITIES**

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

### **RIGHT OF WAY CERTIFICATION**

	Original		Re-C	Certification RIGHT OF WAY CERTIFICATION			ON	
ITEM #			COUNTY	PROJE	CT # (STATE)	PROJECT # (FEDERAL)		
0				Harlan		FD51 1300 1	742001C	FEMA 686265
PRO	JECT DESCR	IPTIO	N					
				idway On k	Y 522 at MP 12.75 Eve	nt DR4663		
	No Additio	onal R	ight of	Way Requ	uired			
Cons	truction will	be witl	hin the	limits of the	e existing right of way. Th	e right of way w	as acquired in accorda	ance to FHWA regulations
						ions Policy Act o	of 1970, as amended. N	lo additional right of way or
reloc	ation assista							
					of Way Required and Cl	•		
posserema rema right cour	ession. Trial on the storemove, t. All relocation	or appe right-c salvag ons ha	eal of cof- of-way, e, or de ve bee	ases may be but all occu emolish all in n relocated	pants have vacated the lamprovements and enter of	al possession has ands and improv on all land. Just C ary housing or th	s been obtained. There ements, and KYTC has Compensation has bee nat KYTC has made ava	e may be some improvements physical possession and the n paid or deposited with the illable to displaced persons
					of Way Required with E			
proje right to re	The right of way has not been fully acquired, the right to occupy and to use all rights-of-way required for the proper execution of the project has been acquired. Some parcels may be pending in court and on other parcels full legal possession has not been obtained, but right of entry has been obtained, the occupants of all lands and improvements have vacated, and KYTC has physical possession and right to remove, salvage, or demolish all improvements. Just Compensation has been paid or deposited with the court for most parcels. Just Compensation for all pending parcels will be paid or deposited with the court prior to AWARD of construction contract							
		•			of Way Required with E	•	O AWARD OF CONSTRUCT	ion contract
The acquisition or right of occupancy and use of a few remaining parcels are not complete and/or some parcels still have occupants. All remaining occupants have had replacement housing made available to them in accordance with 49 CFR 24.204. KYTC is hereby requesting authorization to advertise this project for bids and to proceed with bid letting even though the necessary right of way will not be fully acquired, and/or some occupants will not be relocated, and/or the just compensation will not be paid or deposited with the court for some parcels until after bid letting. KYTC will fully meet all the requirements outlined in 23 CFR 635.309(c)(3) and 49 CFR 24.102(j) and will expedite completion of all acquisitions, relocations, and full payments after bid letting and prior to AWARD of the construction contract or force account construction.								
	Number of Parce				EXCEPTION (S) Parcel #	ANTICI	PATED DATE OF POSSESSIO	N WITH EXPLANATION
Numb	er of Parcels Th	at Have	Been Ac	quired				
	d Deed							
	mnation							
Notes/ Comments (Text is limited. Use additional sheet if necessary.)  #4663 - JULY 2022 FLOOD EVENT - FEMA WILL REIMBURSE THE CABINET 75% OF THE PROJECT COST Way and 2 consent and release areas.  Work will be performed on existing Right of								
LPA RW Project Manager			Right of Way Supervisor					
Printed Name			Printed Name	G	reg Combs			
Signature			Signature	Grad Cam	Digitally signed by Greg Combs			
Date			Date	Greg Com	Digitally signed by Greg Combs Date: 2024.08.16 08:35:48 -04'00'			
		Righ	nt of W	/ay Directo	r		FHWA	
Prin	ted Name	0	23		0240016	Printed Name	No Signature Rec	quired
Si	gnature	///	/ 0	11 1	2024.08.16	Signature	as per FHWA-K	

Signature

Date

**Current Stewardship Agreement** 

Contract ID: 241317 Page 51 of 90

#### UTILITIES AND RAIL CERTIFICATION NOTE

## HARLAN COUNTY, 4663-DR 686265 EMERGENCY REPAIR – ROADWAY FLOOD DAMAGE KY 522 MP 12.75

Utility coordination efforts conducted by the project sponsor have determined that no significant utility relocation work is required to complete the project. Any work pertaining to these utility facilities is defined in the bid package and is to be carried out as instructed by the Kentucky Transportation Cabinet. The contractor will be responsible for any coordination or adjustments that are discussed or quantified in the proposal.

, ,		
THE FOLLOWING RAI	L COMPANIES HAVE FACILITIES IN CONJUNC	TION WITH THIS PROJECT AS NOTED
☑ No Rail Involved	☐ Minimal Rail Involved (See Below)	☐ Rail Involved (See Below)

#### UNDERGROUND FACILITY DAMAGE PROTECTION – BEFORE YOU DIG

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.

#### SPECIAL CAUTION NOTE – PROTECTION OF UTILITIES

The contractor will be responsible for contacting all utility facility owners on the subject project to coordinate his activities. The contractor will coordinate his 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

## **UTILITIES AND RAIL CERTIFICATION NOTE**

## HARLAN COUNTY, 4663-DR 686265 EMERGENCY REPAIR – ROADWAY FLOOD DAMAGE KY 522 MP 12.75

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.

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

## **AREA UTILITIES CONTACT LIST**

<u>Utility Company/Agency</u> <u>Contact Name</u> <u>Contact Information</u>

AT&T	Jeff Jackson	<u>Jj3739@att.com</u>	606 499
			1745
Black	Bob Platt		606 573
Mountain			1277
Utilities			
Cawood	Pete Dean		606 573
Water			3744
City of	Carolyn		606 589
Cumberland	Elliot		2107
City of Evarts	Eddie	cityofevarts@windstream.net	606 505
	Manning		5448
CVE	Mark Abner	Mark.abner@cumberlandvalley.coop	606 546
			9295
KU	John	John.alderson@lge-ku.com	606 337
	Alderson		0321
Windstream	Ronald	Ronald.coots@windstream.com	270 765
	Coots		1812

# N O T I C E

## DEPARTMENT OF THE ARMY CORPS OF ENGINEERS NATIONWIDE #3 PERMIT AUTHORIZATION KENTUCKY DIVISION OF WATER 401 WQC

8-14-2024

**PROJECT:** Harlan County Culvert Replacement on KY 522 over Bridge Branch.

The Section 404 & 401 activities for this project have been previously permitted under the authority of the Department of the Army Nationwide Permit No. 3 "Maintenance" & Division of Water General Water Quality Certification. In order for these authorizations to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Permit & General WQC in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

Station 11+50

Replace a double 3'X6' concrete box culvert with a single 12'x3' concrete box culvert. The work will impact a **perennial** stream and will have impacts below the normal high water mark. The estimated area of impact to Bridge Branch is **30** linear feet and **0.02** acres.

This project involves work near and/or within Jurisdictional Waters of the United States as defined by the United States Army Corps of Engineers and therefore requires a Nationwide 3 General 404 Permit. The Division of Water certified this General Permit with several conditions (See attached). One that should be brought to your attention is regarding the use of heavy equipment in the stream channel. If there is need to cross the stream channel with heavy equipment or conduct work from within the stream channel a working platform or temporary crossing is authorized. This should be constructed with clean rock and sufficient pipe to allow stream flow to continue unimpeded (see attached typical drawing).

In order for this authorization to be valid, the attached conditions must be followed. The contractor shall post a copy of this Nationwide Approval in a conspicuous location at the project site for the duration of construction and comply with the general conditions as required.

To more readily expedite construction, the contractor may elect to alter the design or perform the work in a manner different from what was originally proposed and specified. Prior to

Contract ID: 241317 Page 54 of 90

commencing such alternative work, the contractor shall obtain **written** permission from the Division of Construction and the Division of Environmental Analysis. If such changes necessitate further permitting then the contractor will be responsible for applying to the Army Corps of Engineers and the Kentucky Division of Water (KDOW). A copy of any request to the Corps of Engineers or the KDOW to alter this proposal and subsequent responses shall be forwarded to the Division of Environmental Analysis, DA Permit Coordinator, for office records and for informational purposes.

## Nationwide Permit 3 - Maintenance

Effective Date: February 25, 2022; Expiration Date: March 14, 2026 (NWP Final Notice, 86 FR 73522)

Nationwide Permit 3 - Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

- (b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.
- (c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows.

After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

<u>Note</u>: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

#### 2021 Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. **Navigation**. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from

the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

- 2. <u>Aquatic Life Movements</u>. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
- 3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
- 7. **Water Supply Intakes.** No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. <u>Management of Water Flows</u>. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-

construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. **Equipment**. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. **Removal of Temporary Structures and Fills.** Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The affected areas must be revegetated, as appropriate.
- 14. **Proper Maintenance**. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

- (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.
- 17. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and

designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

- (d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.
- (e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete preconstruction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.
- (g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world

wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

- 19. <u>Migratory Birds and Bald and Golden Eagles</u>. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.
- 20. <u>Historic Properties</u>. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the

historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

- (d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
- (e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. <u>Discovery of Previously Unknown Remains and Artifacts</u>. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.
- 23. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- (d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental

effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

- (e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.
- (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual

and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).
- (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine

credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. <u>Safety of Impoundment Structures</u>. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. <u>Water Quality</u>. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.
- (b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.
- (c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual

coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

- 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
- (a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- (b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.
- 29. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

/T ( )	 	 
(Transferee)		
(Date)		

- 30. <u>Compliance Certification</u>. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.
- 32. <u>Pre-Construction Notification</u>. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a preconstruction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete.

The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse

environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

- (ii) For linear projects where one or more single and complete crossings require preconstruction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.
- (iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the

name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

- (8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;
- (9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and
- (10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the preconstruction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.
- (c) Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.
- (d) *Agency Coordination*: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- (2) Agency coordination is required for: (i) all NWP activities that require preconstruction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

- (3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### 2021 Further Information

- 1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- 4. NWPs do not authorize any injury to the property or rights of others.
- 5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

Contract ID: 241317 Page 73 of 90



ANDY BESHEAR GOVERNOR REBECCA W. GOODMAN

ANTHONY R. HATTON
COMMISSIONER

## ENERGY AND ENVIRONMENT CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

300 SOWER BOULEVARD FRANKFORT, KENTUCKY 40601

#### **General Certification--Nationwide Permits (NWP)**

NWP 3 – Maintenance
NWP 5 – Scientific Measurement Devices
NWP 7 – Outfall Structures and Associated Intake Structures
NWP 23 – Approved Categorical Exclusions
NWP 25 – Structural Discharges
NWP 30 – Moist Soil Management for Wildlife
NWP 31 – Maintenance of Existing Flood Control Facilities
NWP 45 – Repair of Uplands Damaged by Discrete Events
NWP 46 – Discharges in Ditches
NWP 59 – Water Reclamation and Reuse Facilities

This General Certification is issued **December 18, 2020**, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this General Certification and all General Certifications of Nationwide Permits (NWP), the term 'surface water' is defined pursuant to 401 KAR Chapter 10, Section 1(72): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the Commonwealth.

As required by 40 CFR Part 121 – State Certification of Activities Requiring a Federal License or Permit, all conditions include a statement explaining why the condition is necessary to assure that any discharge authorized under the general permit will comply with water quality requirements and a citation to federal, state, or tribal law that authorizes the condition. The statements and citations are included with each condition. The



statements are written entirely at the end of the certification under the section *Statements* of *Necessity*.

The Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 303, 306 and 307 of the CWA, will not be violated for the activities covered by the above listed Nationwide Permits, provided that the conditions in this General Certification are met. Activities that do not meet the conditions of this General Certification require an Individual Section 401 Water Quality Certification.

- Activities occurring within surface waters assessed by the Kentucky Division of Water as designated Outstanding State Resource Waters, National Resource Waters, Cold Water Aquatic Habitat, Exceptional Waters, or identified as candidate Outstanding State Resource Waters or candidate Exceptional Waters are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(1), Section 1(2), & Section 1(3); and 401 KAR 10:031, Section 4(2) & Section 8]
- Activities impacting surface waters assessed by the Kentucky Division of Water as impaired for warm water or cold water aquatic habitat where the parameter or source is related to habitat\* are not authorized under this General Certification and require an Individual Certification. [Statement B and citations KRS 224.70-110 and 401 KAR 10:031, Section 2 & Section 4]

\*These include waters impaired by the parameter 'habitat assessment', 'combined biota/habitat bioassessment' or any parameter from the parameter group 'habitat alterations, and/or waters where the parameter identified as a cause of impairment has a source from the source group 'habitat impacts'.

- 3. Activities impacting surface waters assessed by the Kentucky Division of Water as full support for warm water or cold water aquatic habitat are not authorized under this General Certification and require an Individual Certification. [Statements A and B and citations KRS 224.70-110 and 401 KAR 10:031, Section 2 & Section 4]
- The activity will not occur within surface waters identified as perpetually-protected mitigation sites (e.g., deed restriction or conservation easement). [Statement C and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3); and 40 C.F.R. 230.97]
- Activities with cumulative temporary and permanent impacts greater than 1/2 acre
  of wetland or 300 linear feet of surface waters are not authorized under this
  General Certification and require an Individual Certification. [Statement A and
  citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and
  401 KAR 10:031, Section 2 & Section 4]

- 6. Stream relocation, realignment, straightening, and/or widening are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 7. The use of creek rock for bank stabilization; grouted rip-rap; unformed, poured grout; unformed, poured concrete; poured asphalt; or asphalt pieces is not authorized under this General Certification and requires an Individual Certification. Poured concrete or grout will be authorized under this General Certification when contained by tightly sealed forms or cells. Equipment shall not discharge waste washwater into surface waters at any time without adequate wastewater treatments. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 8. New stormwater detention/ retention basins constructed in surface waters or modifications to stormwater detention/ retention basins resulting in the reduction in reach or that cause impairment of flow of surface waters are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 9. Erosion and sedimentation pollution control plans and Best Management Practices (BMPs) must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 10. Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 11. Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering surface waters. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

- 12. Removal of riparian vegetation shall be limited to that necessary for equipment access. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 13. To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 14. Heavy equipment (e.g., bulldozers, backhoes, and draglines), if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 15. Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 16. If domestic water supply intakes are located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done prior to construction. [Statement E and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 17. Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling (800) 928-2380. [Statement A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 18. The Kentucky Division of Water requires submission of a formal application for any federal applicant that is not required to submit a Preconstruction Notification that would typically be required of any non-federal applicant. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
- 19. The Kentucky Division of Water may require submission of a formal application for an Individual Certification for any project that has been determined to likely have a significant adverse effect upon water quality or degrade surface waters so that

existing uses of the water body or downstream waters are precluded. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

20. If the final issued General Permit for Nationwide Permits 3, 5, 7, 23, 25, 29, 30, 31, 39, 42, 45, 46, 51, or E changes significantly, the Division of Water may opt to deny certification for this permit. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

#### Statements of Necessity:

- A. This condition is necessary to protect waters categorized under the anti-degradation policy to protect the designated and existing uses and to maintain the associated water quality criteria necessary to protect these water resources.
- B. This condition is necessary to protect existing uses and the level of water quality necessary to protect those existing uses shall be assured in impaired water.
- C. This condition is necessary for long-term protection of compensatory mitigation sites.
- D. This condition is necessary to provide for the prevention, abatement, and control of all water pollution and to conserve water resources for legitimate uses, safeguard from pollution the uncontaminated waters, prevent the creation of any new pollution, and abate any existing pollution.
- E. This condition is necessary to protect domestic water supply use.
- F. This condition is necessary to evaluate, develop, and improve best-management practices in conservation plans, compliance plans, and forest stewardship management plans; establish statewide and regional agriculture water quality plans; and otherwise promote soil and water conservation activities that protect surface waters from the adverse impacts of agriculture operations within the Commonwealth.

Violation of Kentucky state water quality standards may result in civil penalties and remediation actions.

For assistance contact the Kentucky Division of Water, Water Quality Certification Section by email (401WQC@ky.gov) or by phone (502)-564-3410.

## 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: <a href="http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx">http://transportation.ky.gov/Construction/Pages/Kentucky-Standard-Specifications.aspx</a>

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.
- 9) 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

#### Contract ID: 241317 Page 83 of 90

#### **PART III**

#### EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

#### Contract ID: 241317 Page 84 of 90

### 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: <a href="https://www.eProcurement.ky.gov">https://www.eProcurement.ky.gov</a>.

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.
- $\bullet$  Some state laws provide greater employee protections; employers must comply with both.
- $\bullet$  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: 241317

Page 87 of 90

#### **PART IV**

#### **INSURANCE**

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

current edition

#### **PART V**

#### **BID ITEMS**

Contract ID: 241317 Page 90 of 90

#### 241317

#### **PROPOSAL BID ITEMS**

Report Date 10/1/24

Page 1 of 1

#### Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0010	00003		CRUSHED STONE BASE	157.00	TON		\$	
0020	00100		ASPHALT SEAL AGGREGATE	3.00	TON		\$	
0030	00103		ASPHALT SEAL COAT	1.00	TON		\$	
0040	00221		CL2 ASPH BASE 0.75D PG64-22	82.00	TON		\$	
0050	00301		CL2 ASPH SURF 0.38D PG64-22	78.00	TON		\$	
0060	00356		ASPHALT MATERIAL FOR TACK	1.00	TON		\$	
0070	02677		ASPHALT PAVE MILLING & TEXTURING	58.00	TON		\$	

#### Section: 0002 - ROADWAY

LINE	<b>BID CODE</b>	ALT DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	<b>AMOUNT</b>
0080	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	4.00	EACH		\$	
0090	02014	BARRICADE-TYPE III	2.00	EACH		\$	
0100	02200	ROADWAY EXCAVATION	96.00	CUYD		\$	
0110	02351	<b>GUARDRAIL-STEEL W BEAM-S FACE</b>	206.25	LF		\$	
0120	02360	<b>GUARDRAIL TERMINAL SECTION NO 1</b>	2.00	EACH		\$	
0130	02371	<b>GUARDRAIL END TREATMENT TYPE 7</b>	2.00	EACH		\$	
0140	02545	CLEARING AND GRUBBING (401 SQUARE YARDS)	1.00	LS		\$	
0150	02585	EDGE KEY	54.00	LF		\$	
0160	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0170	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0180	02726	STAKING	1.00	LS		\$	
0190	02731	REMOVE STRUCTURE	1.00	LS		\$	
0200	06514	PAVE STRIPING-PERM PAINT-4 IN	1,600.00	LF		\$	
0210	21415ND	EROSION CONTROL	1.00	LS		\$	

#### Section: 0003 - BRIDGE - RCBC OVER BRIDGE BRANCH

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0220	00071		CRUSHED AGGREGATE SIZE NO 57	1,613.00	TON		\$	
0230	02603		FABRIC-GEOTEXTILE CLASS 2	1,016.00	SQYD		\$	
0240	08002		STRUCTURE EXCAV-SOLID ROCK	13.00	CUYD		\$	
0250	08003		FOUNDATION PREPARATION	1.00	LS		\$	
0260	08018		RETAINING WALL	500.00	SQFT		\$	
0270	08100		CONCRETE-CLASS A	205.50	CUYD		\$	
0280	08150		STEEL REINFORCEMENT	33,571.00	LB		\$	

#### Section: 0004 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	<b>UNIT PRIC</b>	FP	AMOUNT
0290	02568		MOBILIZATION	1.00	LS		\$	
0300	02569		DEMOBILIZATION	1.00	LS		\$	