BUTLER COUNTY ENGINEER'S OFFICE

BCEO

GREGORY J. WILKENS, PE., PS. BUTLER COUNTY ENGINEER

October 2, 2023

Contract 2024-01
Cincinnati Dayton Road Bridge Rehabilitation, #12.532
Design-Build

Addendum #3

Attached electronic link to BRR files:

https://nam02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbceo1921-my.sharepoint.com%2F%3Af%3A%2Fg%2Fpersonal%2Fokuleyn_bceo_org%2FEoayZwK6wyBHnSbuSTUv_p8B66twF8P3zb9Jv51wJMx13w%3Fe%3DId6nki&data=05%7C01%7COkuleyN%40bceo.org%7C7a8cfc3978c94f2c6a4408dbaa5868e6%7Cd7df371192074adb83034196fda694e6%7C0%7C0%7C638291068929544808%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=n4u9LodIwulVRn425hmRJiH0jsX%2BBDWM1CpOIJzEg0E%3D&reserved=0

Update Note: Special - *"Contract Time Line"*
Description: This project will have a completion date of **October 18th, 2024,** with liquidated damages set in specification 108.07.
Contract Start Date: November 6th, 2023
Construction start date: June 3rd, 2024
Contract completion: October 18th, 2024

Update Exhibit B - "Butler County Engineer's Office – Approach Slab Standards" Revision Date: 09/01/23

Update Exhibit C - "Butler County Engineer's Office – County Bridge Concrete Standards" Revision Date: 09/18/23

Delete Item 690E20080 Special – Subsurface Investigations, Lump Sum
The work listed in Section 15.4B of the scope is not required.

Add Item 519E11101 Patching Concrete Surface, APP; 50 SF
This item is added to obtain a unit price to cover the work described in the Scope Section 15.2 K.

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Clarification(s):

Q1) Can the County confirm that the existing shoulder is structurally sufficient and smooth enough for use during MOT? Will edge strengthening with Item 411 be required in accordance with the same section of the TEM?
A1) The pavement composition for the shoulders is the same as the roadway. The shoulders are approved to be used for maintaining traffic. Edge strengthening utilizing CMS Item 411 will be required per Section 640-5 of the ODOT TEM along all uncurbed sections of roadway. At curbed sections of roadway, edge strengthening will not be required.

Q2) Please confirm that the limits of the mill/fill areas are to the furthest extent of the areas scarred by MOT striping, full width.
A2) Correct.

Q3) Please confirm that the scope does push us into the BD-1-11 bearings.
A3) Correct.

Q4) Is design of the intersection and truck turning analysis in accordance with L&D section 401.9 required? Will truck turn analysis per 401.9 be required for Middletown energy center driveway (consider heavy truck use)?
A4) Design per L&D section 401.9 is not required. Bidder should reference section 14.2 of the scope: "The proposed footprint for [the] intersections shall be made at least the size of existing, or greater."

Q5) Scope Section 15.2.A requires analysis of the existing structure capacity during MOT and lists the original design loading for comparison. The structure is currently posted for reduced capacity and the results are unlikely to meet original design loading. What actions will be required of the DBT for rating results that are less than original design loading? How will any of this be compensated as any work to the existing structure for MOT will not be known at the time of bid?
A5) The current bridge posting is the result of a singular box beam on the east side of the structure. This beam will be removed as part of Phase 1. The need for the updated load rating is due to the number of super loads that cross the structure. An updated load rating is needed so BCEO can analyze these vehicles for permitting purposes during the phased construction.

Q6) Scope Section 15.2.G.vii requires an evaluation of the capacity of existing substructures. Will strengthening of the existing structures be required if the results do not meet the necessary inventory results? If strengthening is required, how will it be compensated as this load rating analysis and possible solutions will not be known at the time of bid?
A6) Evaluation of the substructure is required. Increasing the strength of the substructure, if required will be handled as a change order.

Attached Revised "Schedule Of Prices"

Please e-mail or call our office when you have received this Addendum.
taylorm@bceo.org
Melissa Taylor; 513-785-4115

Butler County Engineer's Office – County Bridge Concrete Standards

Current Revision Date: 9/18/2023

Bridge Superstructure Concrete Requirements:

CLASS QC3 CONCRETE, MISC.: SUPERSTRUCTURE, AS PER PLAN:
THIS ITEM SHALL CONFORM TO CMS 511 AS WELL AS THE CONCRETE MIX DESIGN REQUIREMENTS LISTED IN CMS 499 FOR CLASS QC2 CONCRETE WITH THE FOLLOWING CONDITIONS AND REVISIONS:

THE CLASS QC3 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:

- WATER/CEMENT RATIO = 0.40 MAXIMUM
- IN ADDITION TO THE REQUIREMENTS OF CMS 499, 511, 517, AND/OR 526, THE CONCRETE MIX SHALL CONTAIN 100% VIRGIN POLYPROPYLENE MICROFIBERS IN FIBRILLATED NETWORK FORM (1.25" LENGTH), MEETING ASTM C1116 TYPE III. THE APPLICATION RATE SHALL BE 2 POUNDS PER CUBIC YARD OF THE CONCRETE.
- IN ADDITION TO THE REQUIREMENTS OF CMS 499, 511, 517, AND/OR 526, THE CONCRETE MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR ADMIXTURE AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15.
- THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED.
- THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO 3/4 OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER, UNLESS A LARGER SIZE IS APPROVED BY THE ENGINEER.

THE CORROSION INHIBITOR DOSAGE RATE SHALL CONFORM TO THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST. THE ADDITION OF THE ADMIXTURE SHALL NOT DEGRADE THE CONCRETE STRENGTH OR ANY OTHER MATERIAL PROPERTIES OF THE CONCRETE. PAYMENT FOR MATERIAL, LABOR, EQUIPMENT, AND ANY MISCELLANEOUS APPURTENANCES REQUIRED FOR THIS ADMIXTURE SHALL BE INCLUDED IN THE RESPECTIVE CONCRETE ITEMS FOR PAYMENT.

THE FIBERS SHALL BE THOROUGHLY INCORPORATED INTO THE CONCRETE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. FIBERS SHALL BE ADDED AT THE BATCH PLANT PRIOR TO THE ADDITION OF ADMIXTURES IN ORDER TO MAXIMIZE THE CONCRETE MIXING TIME. INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, AND FIBERS PRIOR TO THE ADDITION OF WATER AND ADMIXTURES SHALL BE FOLLOWED. PROVIDE FIBERS THAT ARE INERT TO ALKALI ATTACK. STORE THE FIBERS ACCORDING TO THE MANUFACTURER'S RECOMMENDATION AND KEEP THE MATERIAL FREE FROM DUST, DIRT, AND MOISTURE. PLACING THE BAG THAT THE FIBERS COME IN INTO THE CONCRETE MIX IS NOT PERMITTED.

CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE ADDITION OF CORROSION INHIBITOR, FIBERS, AND ADMIXTURES TO THE CONCRETE MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, SLUMP, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIER'S CHOICE OF EACH CONCRETE MIX SUPPLEMENT DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS. THE

CONTRACTOR SHOULD BE ADVISED THAT SOME PRODUCTS AFFECT THE DELIVERED MIX PROPERTIES GREATLY WHILE OTHER PRODUCTS DO NOT. CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE DECK SURFACE SHALL BE FINISHED ACCORDING TO CMS 511.1. SAWED GROOVES SHALL MAINTAIN A MINIMUM CLEARANCE OF 9 INCHES TO A MAXIMUM OF 18 INCHES CLEARANCE TO THE FACE OF THE RAIL/CURB/BARRIER. APPROACH SLABS, END DIAPHRAGMS (CONCRETE THAT IS ABOVE THE BEARING SEAT), INTERMEDIATE DIAPHRAGMS, RAISED SIDEWALKS, AND BRIDGE RAILING CONCRETE (WHEN APPLICABLE) ARE TO USE THE SAME CONCRETE MIX DESIGN AS THE BRIDGE DECK.

Include the Following Notes for Design-Build Projects:
FOR DESIGN-BUILD PROJECTS, "SUPERSTRUCTURE CONCRETE" SHALL BE DEFINED AS ALL CONCRETE FOR ELEMENTS OF THE BRIDGE ABOVE THE BEARING SEAT. THIS DEFINTION INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: ABUTMENT BACKWALLS, PRESTRESSED CONCRETE BEAMS, SEMI-INTEGRAL END DIAPHRAGMS, INTEGRAL END DIAPHRAGMS, CONCRETE END DIAPHRAGMS, CONCRETE INTERMEDIATE DIAPHRAGMS, BEAM CLOSURE POUR CONCRETE, APPROACH SLAB CONCRETE, BEAM HAUNCH CONCRETE, DECK CONCRETE, SLAB CONCRETE, RAISED SIDEWALK CONCRETE (ATTACHED TO BRIDGE OR APPROACH SLAB), RAISED CURB CONCRETE (ATTACHED TO BRIDGE OR APPROACH SLAB), BARRIER WALL CONCRETE (ATTACHED TO BRIDGE OR APPROACH SLAB).

Also Include the Following Notes for Decks that Feature a Concrete Barrier and/or a Raised Sidewalk:
USE SELF-COMPACTING CONCRETE ON DECORATIVE RAILING SIMILAR TO TEXAS RAILING AND MACRO-SYNTHETIC CONCRETE PER THIS SPECIFICATION ON TRADITIONAL CONCRETE RAILING WHEN APPLICABLE.

THE BRIDGE DECK CONSTRUCTION JOINTS SHALL BE CONSTRUCTED WITH A WATERSTOP AS DESIGNATED IN THE PLANS. THE WATERSTOP SHALL BE A STRIP TYPE WATERSTOP EMBEDDED CONTINUOUSLY ALONG THE CONCRETE CONSTRUCTION JOINT CREATING A CONTINUOUS BARRIER TO WATER MIGRATION. PRIOR TO ORDERING THE WATER- STOP, THE PROPOSED PRODUCT SHALL BE SUBMITTED TO THE COUNTY AND THE ENGINEER FOR APPROVAL. THE COST OF THE WATERSTOP SHALL BE INCLUDED IN THE BID PRICE FOR CLASS QC3 CONCRETE, MISC.: SUPERSTRUCTURE, AS PER PLAN AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK.

General Bridge Concrete Requirements:

GENERAL BRIDGE CONCRETE REQUIREMENTS:
IN ADDITION TO THE REQUIREMENTS OF CMS 511, 515, 517, 526, 706.05, 706.051, AND/OR 706.052, ALL CONCRETE MIXES FOR THE AFFOREMENTIONED CMS ITEMS, SHALL INCLUDE AN APPROVED MIGRATING CORROSION INHIBITOR ADMIXTURE FROM THE ODOT QUALIFIED PRODUCT LIST, AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THIS ADMIXTURE REQUIREMENT SHALL APPLY FOR PRECAST AND CAST-IN-PLACE CONCRETE CONSTRUCTION METHODS.

THE CORROSION INHIBITOR DOSAGE RATE SHALL CONFORM TO THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST. THE ADDITION OF THE ADMIXTURE SHALL NOT DEGRADE THE CONCRETE STRENGTH OR ANY OTHER MATERIAL PROPERTIES OF THE CONCRETE. THE PAYMENT FOR MATERIAL, LABOR, EQUIPMENT, AND ANY MISCELLANEOUS APPURTENANCES REQUIRED FOR THIS ADMIXTURE SHALL BE INCLUDED IN THE RESPECTIVE CONCRETE ITEMS FOR PAYMENT.

Superstructure Concrete Test Slab Requirements:

CONCRETE, MISC.: CONCRETE DECK TEST SLAB:
AT LEAST THREE DAYS BEFORE PLACING THE PROPOSED CONCRETE DECK, INCLUDING THE TEST SLAB, THE CONTRACTOR SHALL SUBMIT THE MIX DESIGN AND BATCHING SEQUENCE TO THE ENGINEER. THE ENGINEER WILL REVIEW THE MIX DESIGN FOR CONFORMANCE TO THE PROPORTION REQUIREMENTS.

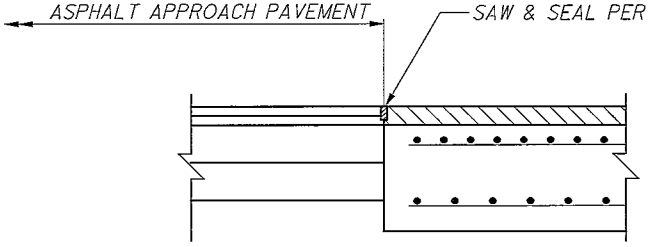
THE CONTRACTOR SHALL PRODUCE A TRIAL BATCH OF A MINIMUM OF 6 CUBIC YARDS OF CONCRETE CONFORMING TO THE MIX DESIGN FOR THE SUPERSTRUCTURE CONCRETE. ENSURE THAT THE TRIAL BATCH IS WORKABLE AND ABLE TO BE FINISHED.

PLAN AN 8 FT X 4 FT X 1 FT TEST SLAB WHEN THE ATMOSPHERIC CONDITIONS APPROXIMATE THE CONDITIONS ANTICIPATED FOR PLACING THE SUPERSTRUCTURE CONCRETE. FINISH AND TEXTURE THE TEST SLAB AS PER THE CMS EXCLUDING SAWING THE GROOVES.

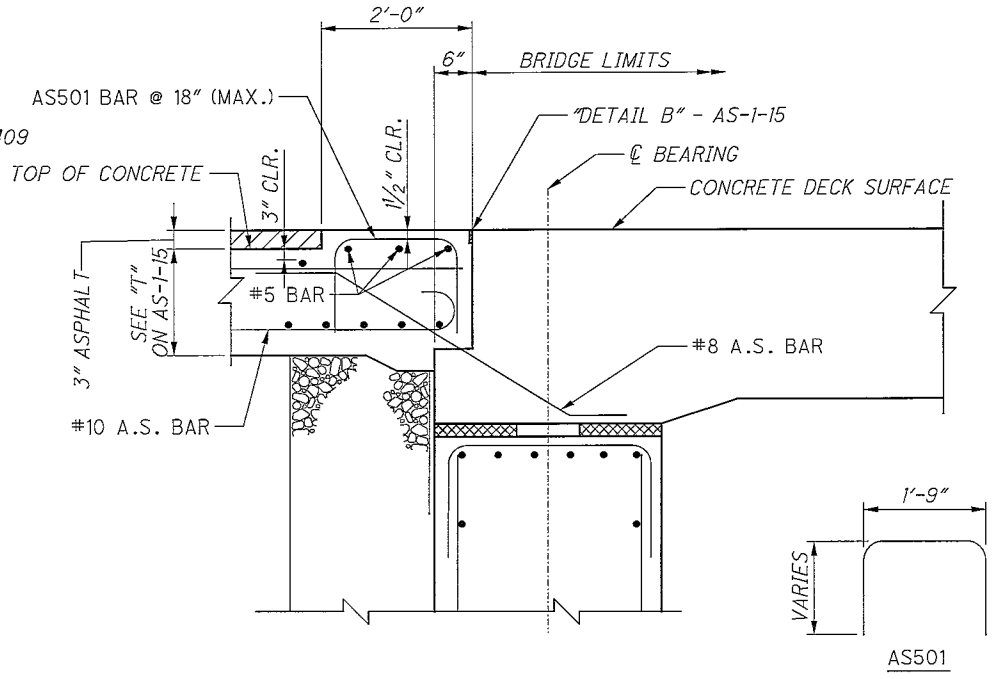
IF THE ENGINEER DETERMINES THAT THE TRIAL BATCH IS NOT WORKABLE OR NOT ABLE TO BE PROPERLY FINISHED, MODIFY THE MIX DESIGN OR THE BATCHING SEQUENCE. SUBMIT THE REVISED MIX DESIGN AND BATCHING SEQUENCE TO THE ENGINEER AND PERFORM ANOTHER TEST SLAB. REPEAT THE SUBMITTAL AND TEST PROCESS UNTIL PRODUCING A TRIAL BATCH THAT IS BOTH WORKABLE AND ABLE TO BE FINISHED. DO NOT PLACE ANY SUPERSTRUCTURE CONCRETE UNTIL THE ENGINEER ACCEPTS THE TEST SLAB.

IN ADDITION TO THE ABOVE REQUIREMENTS, THE CONTRACTOR SHALL HAVE A TESTING CONSULTANT (ON ODOT'S APPROVED LIST) PRESENT AT THE TIME OF THE TEST SLAB. THE CONSULTANT SHALL TAKE AIR, SLUMP, TEMPERATURE, YIELD TEST, TAKE SAMPLES, AND PREPARE FOUR (4) TEST CYLINDERS AND TWO (2) BEAMS. RESULTS OF THE CYLINDER AND BEAM BREAKS SHALL BE SENT TO THE ENGINEER.

ALL COSTS FOR LABOR, MATERIAL, EQUIPMENT, AND INCIDENTALS ARE INCLUDED IN THE LUMP SUM PRICE.



APPROACH SLAB SECTION AT END



APPROACH SLAB SECTION AT ABUTMENT

NOTES:

1. SEE STD. DWG. AS-1-15 FOR DETAILS NOT SHOWN.
2. ASPHALT PAVEMENT MAKEUP ON APPROACH SLABS SHALL CONSIST OF: NON-TRACKING TACK COAT, 1½" ASPHALT CONCRETE INTERMEDIATE COURSE, NON-TRACKING TACK COAT, AND 1½" ASPHALT CONCRETE SURFACE COURSE.
3. APPROACH SLAB CONCRETE SHALL BE CLASS QC3. SEE BCEO COUNTY BRIDGE CONCRETE STANDARDS.
4. ALL REINFORCING STEEL SHALL BE EPOXY COATED.

BCEO APPROACH SLAB STANDARD - TYPICAL DETAILS

BUTLER COUNTY

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ADDENDUM #3						
Contract CINCINNATI DAYTON ROAD BRIDGE REHABILITATION, #12.532 - DESIGN-BUILD - Schedule of Prices						
Report Date: 10/2/2023						
Line	Number	Description	Unit	Quantity	Bid Unit Price	Bid Total
1-MISC						
1	100E99010	SPECIAL - PROFESSIONAL LIABILITY INSURANCE	LUMP	1		
2	103E99010	SPECIAL - PREMIUM FOR CONTRACT PERFORMANCE BOND AND FOR PAYMENT BOND	LUMP	1		
3	107E99000	SPECIAL - UTILITY COORDINATION	LUMP	1		
4	108E99100	SPECIAL - CPM PROGRESS SCHEDULE FOR SHORT DURATION PROJECTS	LUMP	1		
33	690E20010	SPECIAL - AS-BUILT CONSTRUCTION PLANS	LUMP	1		
35	690E20040	SPECIAL - PRELIMINARY DESIGN	LUMP	1		
36	690E20050	SPECIAL - FINAL DESIGN	LUMP	1		
37	690E20060	SPECIAL - FINAL PLAN SUBMISSION	LUMP	1		
39	690E20200	SPECIAL - PRELIMINARY PLANS FOR DESIGN-BUILD	LUMP	1		
40	690E20210	SPECIAL - FINAL PLANS FOR DESIGN-BUILD	LUMP	1		
41	690E20220	SPECIAL - CONSTRUCTION PLANS	LUMP	1		
44	802E00003	CONTINGENCIES The Contractor shall enter $1.00 in the unit price column and $210,000.00 in the total column. If the Contractor neglects to enter the correct figure(s), the Contractor's bid will be corrected and the process for "Mistake in Bid" shall follow. This item will be used in the event that there are change orders in the Contract. No work will be paid or recognized under this item unless agreed upon in writing by an authorized representative of the Butler County Engineer's Office.	EA	210,000		
					TOTAL: MISC	
2-EROSION CONTROL						
47	832E15000	STORM WATER POLLUTION PREVENTION PLAN This item includes all costs associated with the development, implementation, inspection and the required documentation of a Storm Water Pollution Prevention Plan for the Project described in this Contract. all of the specifications and requirements of ODOT supplemental specification 832 shall apply.	LS	1		
48	832E15002	STORM WATER POLLUTION PREVENTION INSPECTIONS	LS	1		
49	832E15010	STORM WATER POLLUTION PREVENTION INSPECTION SOFTWARE	LS	1		
50	832E30000	EROSION CONTROL This item is for the installation of Storm Water BMPS as defined in appendix "F" of ODOT supplemental specifications 832. The Contractor shall enter $1.00 in the unit price column and $3,825.00 in the total column. If the Contractor neglects to enter the correct figure(s) the Contractors bid will be corrected and the process for "Mistake in Bid" shall follow. No work will be recognized or paid under this item unless agreed upon and approved by an authorized representative of the Butler County Engineer's Office.	EACH	3,825		
					TOTAL: EROSION CONTROL	
3-ROADWAY						
5	201E99000	SPECIAL - CLEARING AND GRUBBING	LUMP	1		
6	202E99000	SPECIAL - STRUCTURE REMOVED	LUMP	1		
7	202E99020	SPECIAL - PAVEMENT REMOVED	LUMP	1		
8	203E99000	SPECIAL - EARTHWORK	LUMP	1		
9	304E99000	SPECIAL - AGGREGATE BASE	LUMP	1		
10	448E99000	SPECIAL - FLEXIBLE PAVEMENT	LUMP	1		

ADDENDUM #3						
Contract CINCINNATI DAYTON ROAD BRIDGE REHABILITATION, #12.532 - DESIGN-BUILD - Schedule of Prices						
Report Date: 10/2/2023						
Line	Number	Description	Unit	Quantity	Bid Unit Price	Bid Total
11	512E99000	SPECIAL - SEALING OF CONCRETE	LUMP	1		
12	512E72500	SPECIAL - TEST PATCH	LUMP	1		
13	517E99000	SPECIAL, RAILING	LUMP	1		
14	526E99000	SPECIAL - REINFORCED CONCRETE APPROACH SLABS, AS PER CONCEPTUAL DOCUMENTS	LUMP	1		
16	530E99010	SPECIAL - SUBSTRUCTURE	LUMP	1		
17	530E99020	SPECIAL - SUPERSTRUCTURE	LUMP	1		
20	606E99000	SPECIAL - GUARDRAIL	LUMP	1		
22	606E99100	SPECIAL - IMPACT ATTENUATOR	LUMP	1		
23	614E99000	SPECIAL - MAINTAINING TRAFFIC	LUMP	1		
24	616E99000	SPECIAL - DUST CONTROL	LUMP	1		
25	619E99000	SPECIAL - FIELD OFFICE	LUMP	1		
26	623E99000	SPECIAL - CONSTRUCTION LAYOUT STAKES AND SURVEYING	LUMP	1		
27	624E99000	SPECIAL - MOBILIZATION	LUMP	1		
28	626E99000	SPECIAL - BARRIER REFLECTORS	LUMP	1		
29	630E99000	SPECIAL - SIGNS AND SUPPORTS	LUMP	1		
30	630E99100	SPECIAL, REMOVAL OF SIGNS AND SUPPORTS	LUMP	1		
31	646E99000	SPECIAL - PAVEMENT MARKING	LUMP	1		
32	659E99000	SPECIAL - PERMANENT EROSION CONTROL	LUMP	1		
34	690E20020	SPECIAL - FIELD SURVEYS	LUMP	1		
42	690E20240	SPECIAL - ROADWAY	LUMP	1		
51	530E99040	SPECIAL - STRUCTURES	LS	1		
52	611E97800	SPECIAL - DRAINAGE	LS	1		
53	640E99000	SPECIAL - PAVEMENT MARKING	LS	1		
54	519E11101	PATCHING CONCRETE STRUCTURE, AS PER PLAN	SF	50		
					TOTAL: ROADWAY	
					TOTAL BID	