D12 - BH FY2017 Major Deck Sealing
170342 PID - 99952 Contract Proposal Available @ www.
Dist 12 5/11/2017 Contracts.dot.state.oh.us/home

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LOCATION MAP

LATITUDE: 41°24'54" LONGITUDE: -81°36'54"

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

D12 BH FY2017 MAJOR DECK SEALING

REFERENCE STRUCTURE NUMBER	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	CITY/TOWNSHIP
1	CUY-71-1016R	1804685	CLEVELAND
2	CUY-71-1016L	1804650	CLEVELAND
3	CUY-71-1791R	1805371	CLEVELAND
4	CUY-77-0950N	1806173	INDEPENDENCE
5	CUY-77-1457N	1806726	CLEVELAND
6	CUY-90-0758N	1808567	LAKEWOOD
7	CUY-90-1372N	1807870	CLEVELAND
8	CUY-90-1532L	1809431	CLEVELAND
9	CUY-480-0647N	1812831	FAIRVIEW PARK
10	CUY-490-0100N	1811991	CLEVELAND
11	CUY-6-0738N	1800639	ROCKY RIVER
12	CUY-6-1456	1800930	CLEVELAND
13	CUY-42-1457N	1803271	CLEVELAND
14	CUY-8-0226N	1801244	BEDFORD
15	CUY-10-0869N	1801325	FAIRVIEW PARK
16	CUY-10-1613N	1801503	CLEVELAND
17	CUY-176-1229N	1810189	CLEVELAND
18	CUY-176-1334N	1805436	CLEVELAND
19	ERI-6-1770N	2201984	HURON
20	ERI-60-0227N	2202476	FLORENCE TWP
21	LAK-90-2342L	4304969	LEROY TWP
22	LAK-90-2342R	4304993	LEROY TWP
23	LOR-254-0090N	4706250	SHEFFIELD

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF SEALING THE DECKS OF 20 MAJOR BRIDGES THROUGHOUT D-12 IN CUYAHOGA AND LAKE COUNTIES AND 3 MAJOR BRIDGES IN D-3 USING NON-EPOXY SEALER.

PROJECT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EARTH DISTURBED AREA: N/A (MAINTENANCE PROJECT)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2016 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT AS NOTED ON SHEET 8, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

INDEX OF SHEETS:

DESIGN EXCEPTIONS

NONE

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764
(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE 1-800-925-0988

PLAN PREPARED BY:
ODOT - DISTRICT 12
PLANNING AND ENGINEERING
5500 TRANSPORTATION BLVD.
GARFIELD HEIGHTS, OH 44125

ENGINEERS SEAL:

STATE OF OHIO — Richard Walters E-46950 — REGISTERED PROFESSIONAL ENGINEER

SIGNED: [signature]
DATE: 1-9-2017

STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
MT-95.30	7/15/16	TC-41.20	10/18/13			800	1/20/17	
MT-95.31	7/18/14	TC-42.20	10/18/13			821	4/20/12	
MT-95.32	7/18/14	TC-52.10	10/18/13			832	1/17/14	
MT-95.60	7/19/13	TC-52.20	7/15/16			921	4/20/12	
MT-95.61	7/19/13							
MT-98.10	7/18/14							
MT-98.11	7/18/14							
MT-98.20	7/18/14							
MT-98.22	7/18/14							
MT-98.28	7/18/14							
MT-99.20	7/19/13							
MT-99.60	7/15/16							
MT-105.10	7/19/13							

APPROVED [signature] DISTRICT DEPUTY DIRECTOR
DATE 01-09-17

APPROVED [signature] DIRECTOR, DEPARTMENT OF TRANSPORTATION
DATE

FEDERAL PROJECT NO. NON-FEDERAL
PID NO. 99952
CONSTRUCTION PROJECT NO.
RAILROAD INVOLVEMENT NONE
D12 BH FY2017 MAJOR DECK SEALING
1/11

LOCATION MAP FOR LOCATIONS 1-2, 6, 9, 11 & 15

LOCATION MAP FOR LOCATIONS 3-5, 7-8, 10, 12-13 & 16-18

NOTES

1. FOR COORDINATES OF EACH LOCATION SEE SHEET 4 OF 11.

CALCULATED DAB
CHECKED RHW

LOCATION MAPS

D12 BH FY2017
MAJOR DECK SEALING

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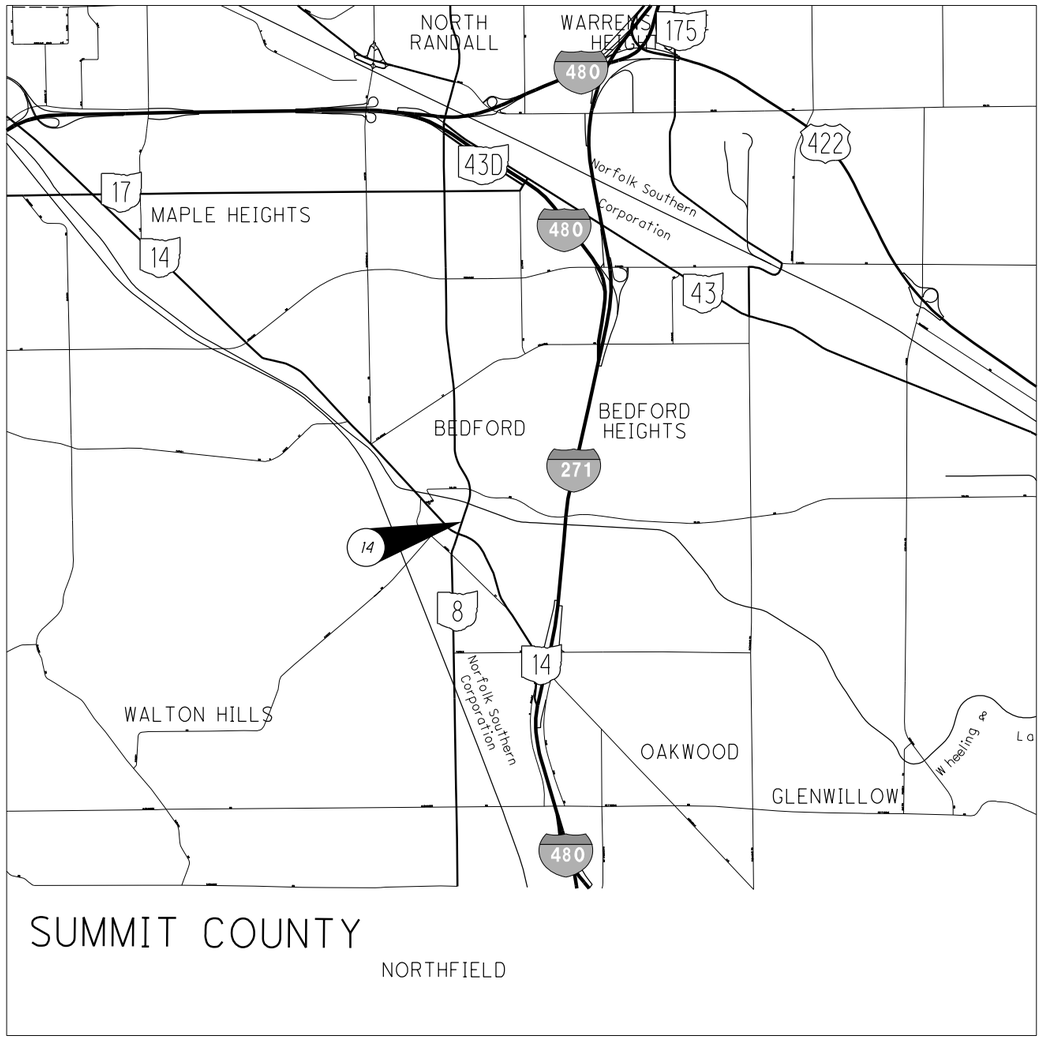
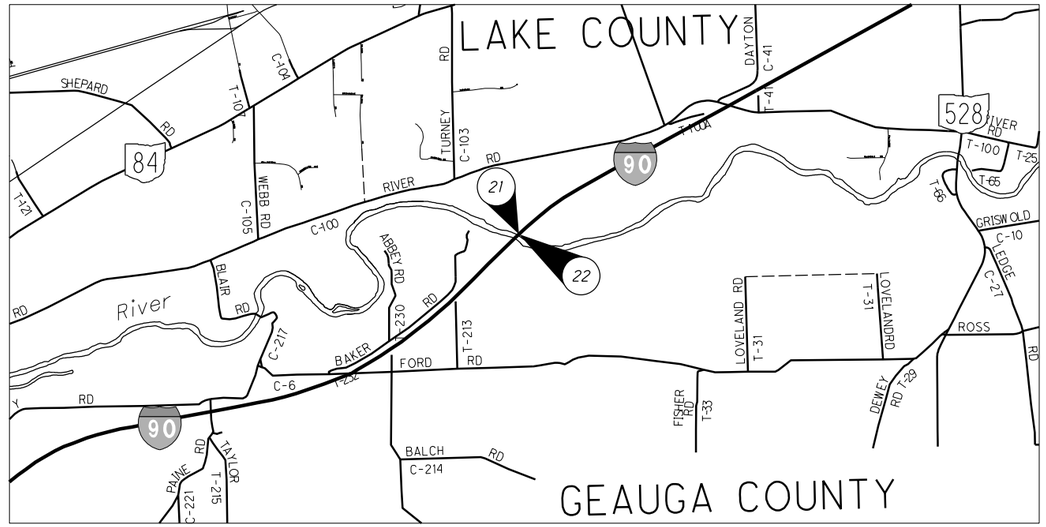
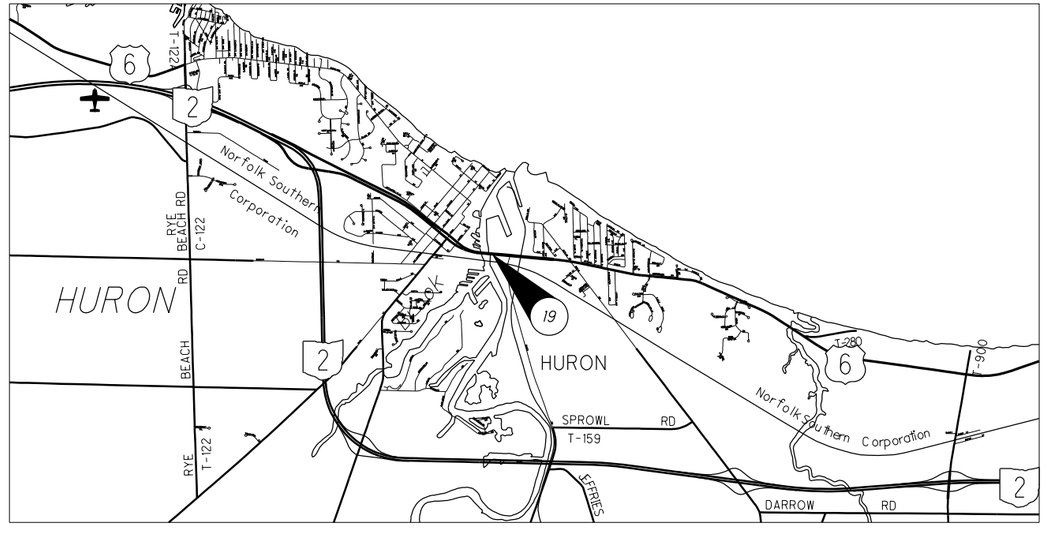


LOCATION MAP FOR LOCATION 14



LOCATION MAP FOR LOCATIONS 21-22



LOCATION MAP FOR LOCATION 19

NOTES

1. FOR COORDINATES OF EACH LOCATION SEE SHEET 4 OF 11.

LOCATION MAPS

CALCULATED DAB
CHECKED RHW

D12 BH FY2017
MAJOR DECK SEALING

3
11

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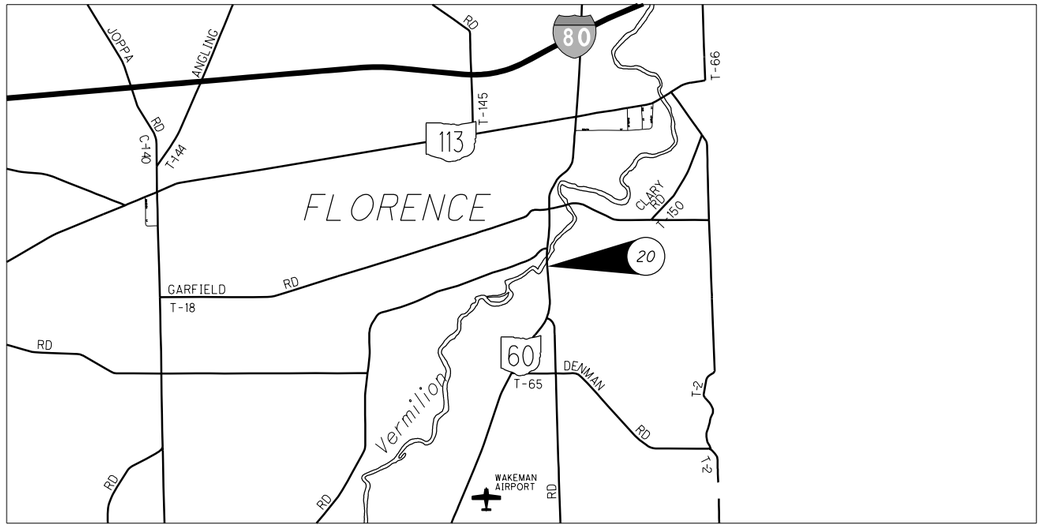
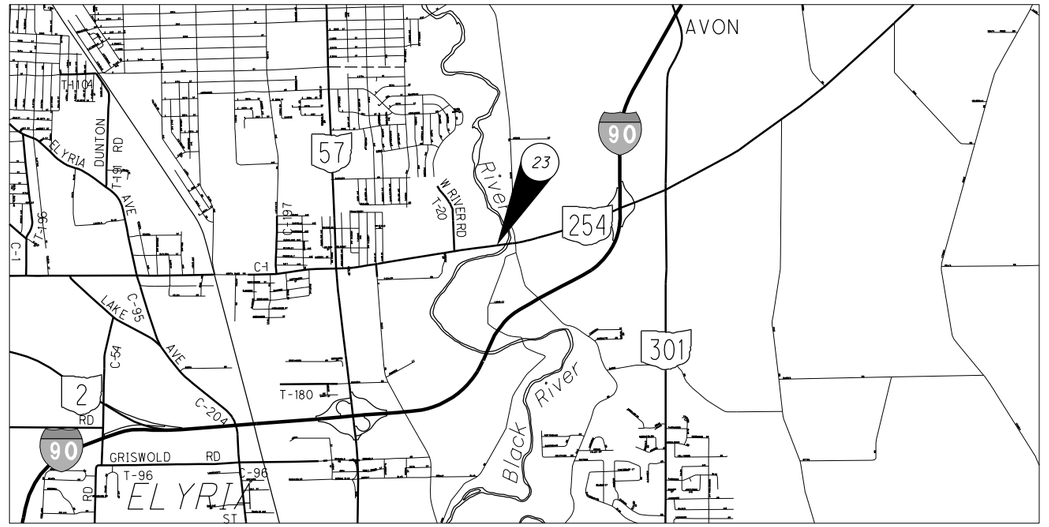


LOCATION MAP FOR LOCATION 20



LOCATION MAP FOR LOCATION 23

REFERENCE STRUCTURE NUMBER	BRIDGE NUMBER	STRUCTURAL FILE NUMBER	DESCRIPTION	LATITUDE	LONGITUDE
1	CUY-71-1016R	1804685	IR-71 OVER NSC RR & RTA91	41° 25′ 19.12″ N	81° 49′ 11.65″ W
2	CUY-71-1016L	1804650	IR-71 OVER NSC RR, RTA91 & AIRPORT FREEWAY	41° 25′ 18.89″ N	81° 49′ 12.39″ W
3	CUY-71-1791R	1805371	IR-71 OVER SR-176	41° 27′ 35.18″ N	81° 41′ 41.16″ W
4	CUY-77-0950N	1806173	IR-77 OVER CUYAHOGA RIVER, SR-17, CANAL RD & CSX RR	41° 24′ 50.93″ N	81° 38′ 36.77″ W
5	CUY-77-1457N	1806726	IR-77 OVER KINGSBURY RUN, RTA38 & NSC RR	41° 29′ 01.82″ N	81° 39′ 46.56″ W
6	CUY-90-0758N	1808567	IR-90 OVER ROCKY RIVER VALLEY	41° 28′ 18.72″ N	81° 49′ 28.74″ W
7	CUY-90-1372N	1807870	IR-90 OVER NSC RR & TRAIN AVE	41° 28′ 27.31″ N	81° 42′ 37.69″ W
8	CUY-90-1532L	1809431	IR-90 OVER CUYAHOGA RIVER VALLEY & RTA45	41° 28′ 59.37″ N	81° 41′ 32.39″ W
9	CUY-480-0647N	1812831	IR-480 OVER ROCKY RIVER	41° 25′ 28.06″ N	81° 51′ 28.04″ W
10	CUY-490-0100N	1811991	IR-490 OVER CUYAHOGA RIVER	41° 28′ 42.13″ N	81° 40′ 26.71″ W
11	CUY-6-0738N	1800639	US-6 OVER ROCKY RIVER, US-6A & YACHT CLUB DRIVE	41° 29′ 12.33″ N	81° 49′ 54.38″ W
12	CUY-6-1456	1800930	US-6 OVER CUYAHOGA RIVER & RTA	41° 29′ 30.96″ N	81° 42′ 22.27″ W
13	CUY-42-1457N	1803271	US-42 OVER BIG CREEK, NSC RR & CSX RR	41° 26′ 40.49″ N	81° 42′ 11.47″ W
14	CUY-8-0226N	1801244	SR-8 OVER SR-14, TINKERS CREEK & W&LE RR	41° 22′ 59.07″ N	81° 31′ 36.01″ W
15	CUY-10-0869N	1801325	SR-10 OVER VALLEY PARKWAY & ROCKY RIVER	41° 27′ 04.59″ N	81° 49′ 27.17″ W
16	CUY-10-1613N	1801503	SR-10 OVER CUYAHOGA RIVER & FI RR	41° 29′ 14.56″ N	81° 41′ 47.19″ W
17	CUY-176-1229N	1810189	SR-176 OVER VALLEY RD, BIG CREEK, W&LE RR & CSX RR	41° 26′ 51.65″ N	81° 41′ 21.67″ W
18	CUY-176-1334N	1805436	SR-176 UNDER IR-71	41° 27′ 40.75″ N	81° 41′ 38.37″ W
19	ERI-6-1770N	2201984	US-6 OVER HURON RIVER	41° 23′ 24.06″ N	81° 33′ 18.81″ W
20	ERI-60-0227N	2202476	SR-60 OVER VERMILION RIVER	41° 18′ 51.88″ N	81° 21′ 51.06″ W
21	LAK-90-2342L	4304969	IR-90 OVER GRAND RIVER	41° 44′ 04.04″ N	81° 06′ 19.41″ W
22	LAK-90-2342R	4304993	IR-90 OVER GRAND RIVER	41° 44′ 07.21″ N	81° 06′ 13.38″ W
23	LOR-254-0090N	4706250	SR-254 OVER BLACK RIVER & METROPARKS	41° 25′ 13.72″ N	81° 06′ 07.16″ W

CALCULATED DAB
CHECKED RHW

LOCATION MAPS

D12 BH FY2017
MAJOR DECK SEALING

4
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GENERAL

Project Description

This project consists of sealing the decks of 20 major bridges throughout D-12 in Cuyahoga and Lake Counties and 3 major bridges in D-3 using Non-Epoxy Sealer.

Contingency Quantities

The contractor shall not order materials or perform work for items designated by plan note to be used "as directed by the engineer" unless authorized by the engineer. The actual work locations and quantities used for such items shall be incorporated into the final change order governing completion of this project.

Existing Plans

Dimensions have been taken from the records and are believed to represent the existing pavement, but the State of Ohio does not guarantee the accuracy of the same.

For further information in regard to the existing dimensions, the contractor shall refer to the previous construction plans.

These plans may be reviewed at the

Ohio Department of Transportation
District 12 Office
5500 Transportation Boulevard
Garfield Heights, OH 44125

Equipment and Material Storage

In order to provide for the safety of the traveling public the Contractor's attention is directed to 614.03. In addition the following provisions shall apply:

1. Any removed items shall not be stored on the right of way for more than thirty (30) days.
2. The storage of equipment, materials, and vehicles within the highway right of way will be permitted. The number of areas and exact locations shall be approved by the Engineer.
3. All disturbed areas shall be returned to their original condition at no expense to the state.

Cooperation Between Contractors

The contractor shall cooperate and coordinate operations with the contractors on other projects that may be in force during the life of the contract. As a result of this coordination, the contractor may have to mobilize multiple times for locations.

Work Limits

The work limits shown on these plans are for physical construction only. The installation and operation of all temporary traffic control and temporary traffic control devices required by these plans shall be provided by the contractor whether inside or outside these work limits.

Staging Areas

There are no specific areas given in the plans for the Contractor to use as a staging area(s). If the Contractor wants to use an area(s) for staging, regardless if it falls within the project limits or not, the Contractor is to contact Jill Powers at 216-584-2195 at District 12 in order to apply for a permit per Section 107.02 of the CMS.

If a permit is granted, all conditions of the permit shall be met in addition to the requirements of 104.04 of the CMS, at no additional cost to the State. If the Project Engineer deems that all the conditions of the permit were not met, then 10% of the Contract bid amount for mobilization shall be withheld until all the conditions of the permit are satisfied.

Item 619 – Field Office, Type B, As Per Plan

A Type B Field Office is required for this project. The following revisions to equipment supplied with the Type B Field Office, as specified in Table 619.02-1, Field Office, shall apply:

- The broadband internet connection must meet a minimum upload speed of 5MB per second.
- Contractor shall furnish and set up a Wi-Fi router meeting the requirements of IEEE 802.11ac for the exclusive use of the Department.

All other field office items supplied shall meet the requirements of a Type B, Field Office.

Item 619 – Field Office, Type B, As Per Plan ..... **17 Months**

Right Of Way

All work shall be performed within the existing right of way or easements.

Construction Noise

Activities and land use adjacent to this project may be affected by construction noise. In order to minimize any adverse construction noise impacts, do not operate power-operated construction-type devices between the hours of 9:00pm and 7:00am. In addition, do not operate at any time any device in such a manner that the noise created substantially exceeds the noise customarily and necessarily attendant to the reasonable and efficient performance of such equipment.

Utilities

The nature of the work to be performed on this project implies that no utilities, underground, surface or overhead should be impacted. Therefore, no utilities companies are listed and no utilities are shown on these plans. However, it is the responsibility of the Contractor to verify the absence of utilities within the area of impact for each location shown in these plans. Contact the Ohio Utility Protection Service (OUPS) a minimum of two and no more than ten business days prior to commencing work on each structure in accordance with state law.

Structure Repair

Existing Structure Verification

Details and dimensions shown on these plans pertaining to the existing structures have been obtained from plans of the existing structures and from field observations and measurements. Consequently, they are indicative of the existing structures and the proposed work, but they shall be considered tentative and approximate. The Contractor is referred to C&MS sections 102.05 and 105.02.

Base contract bid prices upon a recognition of the uncertainties described above and upon a Prebid examination of the existing structures. However, the Department will pay for all project work based upon actual details and dimensions which have been verified in the field.

Item 512 – Sealing of Concrete Surfaces (Non-Epoxy), As Per Plan

The provisions of section 512 shall apply for this item of work. Any pavement markings damaged or altered as a result of the work shall be replaced in kind by the contractor. All pavement marking repairs are incidental to item 512 – Sealing of Concrete Surfaces (Non-Epoxy), As Per Plan. The contractor is reminded that CM&S 107.19 is a contract requirement and will be enforced.

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GENERAL NOTES

D12 BH FY2017
MAJOR DECK SEALING

CALCULATED DAB
CHECKED RHW

Maintenance of Traffic

Item 614 – Maintaining Traffic

Generally the Contractor shall conduct his operations as to complete the proposed improvement with a minimum of hazard, delay and inconvenience to the motorists using the highway affected by the work done under this contract. In addition to the construction and material specifications, the following specific provisions are mandatory.

I. Notification

Since functional traffic control is a major concern on this project, it is essential that the motoring public be adequately forewarned of future lane closures and traffic constrictions. Therefore, the Contractor shall submit a written schedule to the Engineer, responsible law enforcement agencies, and the ODOT Public Information Office (216-584-2007) indicating the locations and dates of the lane closures at least 3 days prior to the implementation of any such closures.

Use portable changeable message signs to alert motorists 3 days prior to the implementation of any changes such as lane closures or other restrictions.

II. Work Hours

The Contractor is permitted to work at night.

III. Lane Closure Restrictions

1. All closures shall be in accordance with the applicable Standard Construction Drawing(s).
2. All through traffic lanes shall be kept open at all times except during hours of construction.
3. Pedestrian traffic shall be permitted and accommodated on at least one side at all times.

Notwithstanding the above, no lane closures shall occur during the period beginning at 12:00 noon on the day preceding and continuing until noon on the following legal holidays and holiday weekends such as Memorial Day, Fourth of July and Labor Day. Furthermore, no lane closures shall be implemented or in place during increased traffic volumes caused by special events or when the Engineer deems the climatological conditions too hazardous.

IV. Maintenance of Traffic Systems

A. When Required

Whenever any part of the traveled surface is being worked upon or is otherwise not suitable for safe and convenient use by vehicles, traffic control devices sufficient to protect such areas to assure the safe and convenient passage of vehicular traffic shall be installed and maintained. Such traffic control devices and the manner in which they are used shall be consistent with these plans and the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, hereinafter referred to as the OMUTCD. The traffic control device system shall constitute the minimum provisions for traffic control for each particular situation. Whenever the Engineer deems it necessary especially where a grade, curve, or merge conditions exists, he may direct that additional or alternative devices be used.

B. Conditions

During all parts of this project, flaggers, signing, barricades, flashing arrows, etc. shall be located as indicated in the OMUTCD or as shown in the Standard Construction Drawings. Two-way traffic shall be maintained at all times.

C. Advance Warning Signs

All advance warning signs for any condition which restricts traffic shall be erected before any such restriction is put into effect. All such signs shall be covered or removed from the view of traffic whenever they are not applicable.

D. Flashing Arrow Requirement

Whenever any part of the traveled surface is closed, the motorists shall be warned and directed by the Contractor through the use of one flashing arrow for each lane closed. Additionally, the provisions set forth in the OMUTCD and the applicable Standard Construction Drawings shall be met.

E. Flaggers and Law Enforcement Officers

At least two flaggers are required for each closure. The Contractor shall furnish additional flaggers as directed by the Engineer. Law Enforcement Officers (LEO's) shall be required for traffic direction only under the following circumstances: (1) if signals are non-operational, or (2) if traffic must move against signal phasing.

F. Protection of Public

Personal cars shall not be parked within the R/W.

G. Failure to Comply

If there is any failure to comply with provisions for traffic control set out in these plans and notes, or with the provisions of the OMUTCD, the highway in the vicinity of the work area shall not be considered in a condition for the safe and convenient use by the traveling public. Any failure to keep the highway, in the vicinity of the work area, in a condition for the safe and convenient use by the traveling public shall be considered a breach of this contract. Work shall be suspended until the Contractor complies with the provisions of the aforementioned items.

V. Maintenance of Traffic Materials

A. Signs

Sign dimensions and specifications, including letter sizes, shall be as provided in the OMUTCD or in design drawings provided by the Department of Transportation. The signs shall be subject to approval of the Engineer prior to the start of the project.

B. Sign Supports

Sign supports shall be of sufficient size and mass as to support the signs at the appropriate height. Supports shall be as shown on the Standard Construction Drawings.

C. Flashing Arrows

Whenever any part of the traveled surface is closed, the motorist shall be warned and diverted by the Contractor through the use of one flashing arrow barricade for each lane closed. The Contractor shall refer to Supplemental Specification 821 and 921 and the provisions set forth in the OMUTCD for all information regarding furnishing, maintaining, and use of flashing arrow barricades. Payment for the above shall be included in the lump sum bid for Item 614 – Maintaining Traffic.

D. Drums

Drums shall be in accordance with pertinent sections of the OMUTCD. All costs for installing, maintaining and subsequent removal of said drums shall be included in the lump sum bid price for Item 614 – Maintaining Traffic.

E. Cones

Cones, if utilized, shall be located as shown in the OMUTCD and the Standard Construction Drawings.

F. Flashers

Flashers shall be 12 volt battery-operated models with 7 inch diameter yellow lenses illuminated by rapid intermittent flashers of short duration and shall be placed on all signs at all times as required by the OMUTCD and the Standard Construction Drawings.

VI. Payment

Payment for providing, erecting, maintaining and removing temporary maintenance of traffic control devices shall be made under the lump sum price bid for Item 614 – Maintaining Traffic.

Lanes Open During Holidays or Special Events

No work shall be performed and all existing lanes shall be open to traffic during the following designated holidays or events:

Christmas	New Years	Mother's Day
Memorial Day	Fourth of July	Easter
Labor Day	Thanksgiving	Father's Day

The period of time that the lanes are to be open depends on the day of the week on which the holiday or event falls. The following schedule shall be used to determine this period:

Day of the Week	Times All Lanes Must Be Open to Traffic
Sunday	12:00 Noon Friday through 6:00 AM Monday
Monday	12:00 Noon Friday through 6:00 AM Tuesday
Tuesday	12:00 Noon Monday through 6:00 AM Wednesday
Wednesday	12:00 Noon Tuesday through 6:00 AM Thursday
Thursday	12:00 Noon Wednesday through 6:00 AM Monday
Friday	12:00 Noon Thursday through 6:00 AM Monday
Saturday	12:00 Noon Friday through 6:00 AM Monday

No extensions of time shall be granted for delays in material deliveries, unless such delays are industry-wide, or for labor strikes, unless such strikes are area-wide.

Should the Contractor fail to meet any of these requirements, the Contractor shall be assessed a disincentive in the amount of $50 for each minute the above described lane closure restrictions are violated.

Suspension of Work

If the Contractor fails to comply with the provisions for traffic control as set forth in these plans or with provisions of the OMUTCD, the Engineer shall suspend work until the Contractor complies with the necessary requirements.

Maintenance of Traffic Control Zones

The Contractor shall be responsible to maintain the signs, drums and temporary pavement markings at the locations detailed in the plans or specified in the Standard Drawings. When the Contractor is notified of deficiencies he shall correct the deficiencies as soon as possible, preferably within 12 hours and no later than 24 hours.

Construction Equipment Median Crossing

Construction equipment is permitted to only cross the median at the existing interchanges, intersections, and U-turn crossovers.

MAINTENANCE OF TRAFFIC GENERAL NOTES

D12 BH FY2017
BRIDGE DECK SEALING

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Construction Traffic

All construction traffic shall use acceptable truck routes to access the construction area. Use of local residential streets is strictly prohibited unless allowed in writing by the local enforcement authority.

Contractor's Equipment – Operation and Storage

Vehicles and equipment shall always move with, and not across or against the flow of traffic. Vehicles and other equipment shall not park or stop except within designated work areas; and shall not enter and leave work areas in a manner which will be hazardous to, or interfere with the normal traffic flow. Personal vehicles will not be permitted to park within the right-of-way except in specific areas designated by the Engineer.

Equipment, vehicles and materials shall not be stored or parked within 30 feet of the traveled way unless 6 feet behind PCB or guardrail.

All work vehicles and equipment that enters the work zone more than once a day must be equipped with at least one flashing, rotating, or oscillating amber light that is visible in all directions of traffic for at least one quarter of a mile, day or night.

Floodlighting

Floodlighting of the work site for operations conducted during nighttime periods shall be accomplished so that the lights do not cause glare to the drivers on the roadway. To ensure the adequacy of the floodlight placement, the Contractor shall drive through the work site each night when the lighting is in place and operative prior to commencing any work. If glare is detected, the light placement and shielding shall be adjusted before work proceeds.

Payment for all labor, equipment and materials shall be included in the lump sum contract price for Item 614 – Maintaining Traffic.

Major Work Items

The following major work items will require traffic maintenance which shall be incorporated into the Contractor's sequence of operations.

A. Removal of existing coatings on bridge decks
B. Cleaning of deck surface
C. Sealing of deck surface with Non-Epoxy Sealer

Continuous Access

The Contractor shall maintain safe and adequate driveways and walkways in order to provide continuous access for pedestrians, passenger vehicles, trucks, and safety equipment to all adjoining properties

The cost for all materials, equipment, and labor necessary to provide continuous access shall be included in the lump sum price for Item 614 – Maintaining Traffic.

Item 614 – Maintaining Traffic Lane Closure/Reduction Required

Length and duration of lane closures and restrictions shall be at the approval of the engineer. It is the intent to minimize the impact to the traveling public. Lane closures or restrictions over segments of the project in which no work is anticipated within a reasonable time frame, as determined by the Engineer, shall not be permitted. The level of utilization of maintenance of traffic devices shall be commensurate with the work in progress.

Schedule of Through Lanes to be Maintained

All lane closures may only be implemented at the times permitted by the District 12 Permitted Lane Closure list, which is located on the ODOT website at:

http://www.dot.state.oh.us/districts/D12/HighwayManagement/Pages/PermittedLaneClosures.aspx

All Notes on the Permitted Lane Closure Times shall be part of the project.

The latest revision, at 14 days prior to the bid date, shall be in effect for this project.

No lane or shoulder closures shall be in place when no work is being performed. Shoulder closures shall only be allowed at the times specified for lane closures. All work performed on ramps shall be half width, no closures shall be permitted.

The following lane closure restrictions shall apply to the non-interstate routes on this project: Location 11 (CUY-6-0738), one lane each direction can be closed long term. Location 12 (CUY-6-1456), no EB lane closures from 7am to 9am weekdays, no WB lane closures from 4pm to 6pm weekdays, and no weekend restrictions. Location 13 (CUY-42-1457), no NB restrictions for one lane closures, no SB lane closures from 4pm to 6pm, and no weekend restrictions. Location 14 (CUY-8-0226), no restrictions on one lane closures. Location 15 (CUY-10-0869), no restrictions on one lane closures. Location 16 (CUY-10-1613), no restrictions on one lane closures. Location 19 (ERI-6-1770), no restrictions on one lane closures. Location 20 (ERI-60-0227), no restrictions, use flaggers or temporary signals. Location 23 (LOR-254-0090), no restrictions on one lane closures.

Any roadway not listed shall not have any lane closures on weekdays from 6:30am to 9:00am and 3:00pm to 6:00pm.Contact Dennis O'Neil, District 12 Work Zone Traffic Manager, at (216) 584-2204 if there are any questions.

Lane Closure Disincentive

A lane closure is defined as any restriction of a lane of traffic including, but not limited to, set-up and tear-down of traffic control zones. The Contractor will be assessed a disincentive fee in the amount of $200.00 per minute that lanes are closed to traffic during times designated as "lane closure not permitted" as stated in these plans and on the ODOT PLCM website.

Work Operations

In addition to the requirements of section 614 of the construction and material specifications the following shall apply:

The Contractor's equipment shall be operated in the direction of travel where practical.

The Contractor shall arrange construction operations so as to prevent any interference to the continuous flow of traffic. All vehicles, equipment, workers and their activities are restricted at all times to the closed lanes unless otherwise approved by the Engineer.

Covering of Ground-Mounted Signs – General

When required by other items or incidentally to Item 614 – Maintaining Traffic, cover existing ground-mounted signs with plywood or OSB blanks (1/2" minimum thickness) covering 80% of the sign area and all of the sign legend. The use of low quality materials such as duct tape and black plastic is not permitted.

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by the Engineer

When additional signing is needed to maintain traffic, the Contractor shall furnish the sign or signs as directed by the Engineer. These signs shall be ground mounted and meet all the specifications of the plan, proposal and current year CMS.

Payment for this item shall include, but not be limited to, the cost to furnish and erect the sign, including driving posts or other approved methods of sign support, maintaining the sign and removal of the sign. The following estimated quantity has been carried to the General Summary for use as directed by the Engineer:

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed by the Engineer ..... **300 Sq Ft**

Truck Mounted Attenuator

When the Contractor is setting short term work zones and the shoulders (right or left shoulder) are less than 10 feet in width and are on a road with speeds 45 mph or higher, a Truck Mounted Attenuator (TMA) must trail the operation of setting the advance warning signs up or taking them down. This same truck must have a Type B flashing arrow panel mounted on it facing the rear of the truck.

The TMA must meet NCHRP 350 TL-3 criteria. The manufacturer's specification must be followed concerning the size of the truck and the connections to the TMA.

Item 614 – Maintenance of Traffic for all Structures Involved within this Project

Though traffic on all structures in all lanes and ramps shall be maintained at all times except that these structures may have single or double lane closures as shown in the MT-series standard construction drawings referenced on the title sheet of these plans. There shall be a minimum of one (1) eleven-foot (11') lane in each direction at all times.

Work on these structures may be completed concurrently using continuous maintenance of traffic schemes at the option of the Contractor so long as the length of the work zone is no longer than four (4) miles and the maintenance of traffic scheme is approved by the worksite traffic supervisor and the Engineer prior to implementation. A written plan for maintenance of traffic shall be submitted a minimum of fourteen (14) days prior to planned implementation for review and approval by the Department.

Lane closures shall follow the time restrictions stated in the general lane closures limitations note shown in these plans.

The Contractor will be assessed a disincentive fee as set forth in these plans for any lane closure violations.

All work and traffic control devices shall be in accordance with C&MS 614 and other applicable portions of the specifications, as well as the Ohio Manual of Uniform Traffic Control Devices (OMUTCD). Payment for all labor, equipment, and materials shall be included in the lump sum contract bid price for Item 614 – Maintaining Traffic, unless separately itemized on the General Summary of these plans.

CALCULATED DAB CHECKED RHW

MAINTENANCE OF TRAFFIC GENERAL NOTES

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Allowable Road Closures

The following structures can be closed down within the restricted times listed.

Location 1 (CUY-71-1016R) can be closed weekdays between 11:00pm and 5:00am and on weekends between 11:00pm Friday and 8:00am Saturday. Traffic shall be detoured on IR-480 west to the Grayton Rd exit and then directed to re-enter IR-480 in the eastbound direction to get on the IR-71 north ramp.

Location 2 (CUY-71-1016L) can be closed within the limits of the two lane section of the bridge weekdays between 11:00pm and 5:00am and on weekends between 11:00pm Friday and 8:00am Saturday. Where the ramp from IR-480 east to IR-71 south adds a lane the bridge cannot be closed. Traffic shall be detoured on IR-480 west to the Grayton Rd exit and then directed to re-enter IR-480 in the eastbound direction to get on the IR-71 south ramp.

Location 3 (CUY-71-1791R) can have the two lane section going to IR-71 north closed weekdays between 8:00pm and 5:00am, 9:00pm Friday to 9:00am Saturday, 9:00pm Saturday to 11:00am Sunday, and 8:00pm Sunday to 5:00am Monday. The two lane section going to W. 14th St and IR-490 east shall not be closed. Traffic shall be detoured to IR-490 east and then to IR-77 north.

Location 4 (CUY-77-0950N) can be closed in the northbound direction at IR-480, including the IR-480 west ramp to IR-77 north and the IR-480 east ramp to IR-77 north, weekdays between 11:00pm and 5:00am, 12:00 midnight Saturday to 8:00am Saturday, and 12:00 midnight Sunday to 9:00am Sunday. Traffic shall be detoured on IR-480 west to SR-176 north to IR-490 east to IR-77 north. The southbound direction can be closed at SR-21, including a soft closure of IR-77 south at IR-490, weekdays between 11:00pm and 5:00am, 12:00 midnight Saturday to 8:00am Sunday, and 12:00 midnight Sunday to 8:00am Sunday. Traffic shall be detoured to IR-490 west to SR-176 south to IR-480 east to IR-77 south. For traffic entering south of IR-490, the detour shall be SR-21 south to SR-17 west to IR-480 east to IR-77 south.

Location 5 (CUY-77-1457N) can be closed in the northbound direction weekdays between 11:00pm and 5:00am, 12:00 midnight Saturday to 8:00am Saturday, and 12:00 midnight Sunday to 9:00am Sunday. Traffic shall be detoured to IR-490 west to W. 7th St to IR-490 east to IR-77 north. The southbound direction can be closed weekdays between 11:00pm and 5:00am, 12:00 midnight Saturday to 8:00am Saturday, and 12:00 midnight Sunday to 9:00am Sunday. Traffic shall be detoured to IR-490 west to W. 7th St to IR-490 east to IR-77 south. Northbound and southbound shall not be closed at the same time.

Location 8 (CUY-90-1532L) can be closed, including entrance ramps from E. 9th and Ontario and IR-90 west at IR-77, weekdays between 12:00 midnight to 5:00am, 1:00pm Saturday to 7:00am Saturday, and 1:00pm Sun to 8:00am Sunday.

All other locations shall not be totally closed.

The contractor shall provide a detour plan to the project engineer 2 weeks before the closure for approval. The detour plan shall follow the OMUTCD.

A PCMS shall be provided by the Contractor for each closure. The PCMS will be in place 2 days before the closure for pre-notification to the motorists.

The Contractor shall be responsible for providing, placing and removing all detour signs, per the OMUTCD. The detour will be provided at the contractors expense.

Item 614 – Law Enforcement Officer (With Patrol Car) For Assistance

Use of law enforcement officers (LEOs) by Contractors other than the uses specified below will not be permitted at project cost. LEOs should not be used where the OMUTCD intends that flaggers be used.

In addition to the requirements of CMS 614 and the OMUTCD, a uniformed LEO with an official patrol car (car with top-mounted emergency flashing lights and complete markings of the appropriate law enforcement agency) shall be provided for the following traffic control tasks:

- During the entire advance preparation and closure sequence where complete blockage of traffic is required.
- During a traffic signal installation when impacting the normal function of the signal or the flow of traffic or when traffic needs to be directed through an energized traffic signal contrary to the signal display (e.g., directing motorists through a red light).

In addition to the requirement of CMS 614 and the OMUTCD, a uniformed LEO with an official patrol car (car with top-mounted emergency flashing lights and complete markings of the appropriate law enforcement agency) may be provided, if deemed necessary by the Engineer, for the following traffic control tasks:

- For lane closures: during initial set-up periods, tear down periods, substantial shifts of a closure point or when new lane closure arrangements are initiated for long-term lane closures/shifts (for the first and last day of major changes in traffic control setup).

In general, LEOs should be positioned at the point of lane restriction or road closure and to manually control traffic movements through intersections in work zones.

LEOs should not forgo their traffic control responsibilities to apprehend motorists for routine traffic violations. However, if a motorist's actions are considered to be reckless, then pursuit of the motorist is appropriate.

The LEOs work at the direction of the Contractor. The Contractor is responsible for securing the services of the LEOs with the appropriate agencies and communicating the intentions of the plans with respect to duties of the LEOs. The Engineer shall have final control over the LEOs' duties and placement, and will resolve any issues that may arise between the two parties.

The LEO should report in to the Contractor prior to the start of the shift, in order to receive instructions regarding specific work assignments during his/her shift. The LEO is expected to stay at the project site for the entire duration of his/her shift. The LEO shall report to the Contractor at the end of his/her shift. Once the LEO has completed the duties described above and still has time remaining on his/her shift, the LEO may be asked to patrol through the work zone (with flashing lights off) or be placed at a location to deter motorists from speeding. Should it be necessary to leave the project site, the LEO shall notify the Engineer. The Contractor shall provide the LEO with a two-way communication device which shall be returned to the Contractor at the end of his/her shift.

LEOs with patrol car required by the traffic maintenance tasks above shall be paid for on a unit price (hourly) basis under Item 614, Law Enforcement Officer with Patrol Car for Assistance. The following estimated quantity has been carried to the General Summary.

Item 614 – Law Enforcement Officer
with Patrol Car for Assistance..... **1000 Hours**

The hours paid shall include any minimum show-up time required by the law enforcement agency involved.

Any additional costs (administrative or otherwise) incurred by the Contractor to obtain the services of an LEO are included with the bid unit price for Item 614, Law Enforcement Officer with Patrol Car for Assistance.

Item 614 – Portable Changeable Message Signs, As Per Plan

The Contractor shall furnish, install, maintain and remove, when no longer needed, a changeable message sign. The sign shall be of a type shown on a list of approved PCMS units available on the Office of Materials Management web page. The list contains Class A and B units with minimum legibility distances of 800 feet and 650 feet, respectively.

Each sign shall be trailer-mounted and equipped with a functional dimming mechanism, to dim the sign during darkness, and a tamper and vandal proof enclosure. Each sign shall be provided with appropriate training and operation instructions to enable on-site personnel to operate and troubleshoot the unit. The sign shall also be capable of being powered by an electrical service drop from a local utility company. The PCMS shall be delineated in accordance with C&MS 614.03.

The probable PCMS locations and work limits for those locations are shown on sheet(s) of the plan. Placement, operation, maintenance and all activation of the signs by the Contractor shall be as directed by the Engineer. The PCMS shall be located in a highly visible position yet protected from traffic. The Contractor shall, at the direction of the Engineer, relocate the PCMS to improve visibility or accommodate changed conditions. When not in use, the PCMS shall be turned off. Additionally, when not in use for extended periods of time, the PCMS shall be turned away from all traffic.

The Engineer shall be provided access to each sign unit and shall be provided with appropriate training and operation instructions to enable ODOT personnel to operate and troubleshoot the unit, and to revise sign messages, if necessary.

All messages to be displayed on the sign will be provided by the Engineer. A list of all required pre-programmed messages will be given to the Contractor at the project preconstruction conference. The sign shall have the capability to store up to 99 messages. Message memory or pre-programmed displays shall not be lost as a result of power failures to the on-board computer. The sign legend shall be capable of being changed in the field. Three-line presentation formats with up to six message phases shall be supported. PCMS format shall permit the complete message for each phase to be read at least twice.

The PCMS shall contain an accurate clock and programming logic which will allow the sign to be activated, deactivated or messages changed automatically at different times of the day for different days of the week.

The PCMS unit shall be maintained in good working order by the Contractor in accordance with the provisions of C&MS 614.07. The Contractor shall, prior to activating the unit, make arrangements, with an authorized service agent for the PCMS, to assure prompt service in the event of failure. Any failure shall not result in the sign being out of service for more than 12 hours, including weekends. Failure to comply may result in an order to stop work and open all traffic lanes and/or in the Department taking appropriate action to safely control traffic. The entire cost to control traffic, accrued by the Department due to the Contractor's noncompliance, will be deducted from moneys due, or to become due the Contractor on his contract.

The Contractor shall be responsible for 24-hour-per-day operation and maintenance of these signs on the project for the duration of the phases when the plan requires their use. This responsibility includes programming the messages provided by the Engineer.

Payment for the above described item shall be at the contract unit price. Payment shall include all labor, materials, equipment, fuels, lubricating oils, software, hardware and incidentals to perform the above described work.

Item 614, Portable Changeable Message Sign, as per plan ….. **20 Sign Month(s)**
Assuming 2 PCMS Sign(s) for 10 Month(s)

CALCULATED DAB CHECKED RHW

MAINTENANCE OF TRAFFIC GENERAL NOTES

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Item 614 - Worksite Traffic Supervisor

Subject to approval of the Engineer, the Contractor shall employ and identify (someone other than the superintendent) a certified Worksite Traffic Supervisor (WTS) before starting work in the field. The WTS shall be certified from one of the following organizations:

1. American Traffic Safety Service Association (ATSSA), phone number 1-800-272-8772, certified Traffic Control Supervisor (TCS).

2. National Highway Institute, Design and Operation of Work Zone Traffic Control, phone number 1-703-235-0528.

3. The Ohio Contractors Association, Traffic Control Supervisor (OCA/TCS) work zone class, only if taken after May 5, 2004, phone number 1-800-229-1388.

4. Ohio Laborers' Training, Traffic Control Supervisors Class, phone number 1-740-599-7915.

A copy of each WTSs certification and 24-hour contact information shall be provided to the Engineer at the preconstruction conference. If the designated WTS will not be available full time (24/7) the Contractor may designate an alternate WTS to be available when the primary is off duty. Each WTS shall have a current WTS certification (with an expiration date no more than 5 years from the date of issue) from any of the approved organizations.

The WTS position has the responsibility of monitoring traffic control deficiencies for the entire work zone. The duties of the WTS are as follows:

1. Be available on a 24-hour per day basis, and be able to be on site for all emergency traffic control needs within one hour of notification by police or project staff and be prepared to effect corrective measures immediately on existing work zone traffic control devices.

2. Attend preconstruction and all project meetings where traffic control management is discussed.

3. Be available for meetings or discussions with the Engineer upon request or within 36 hours.

4. Coordinate a Traffic Incident Management meeting each year before construction work begins with ODOT and the Safety Forces that will respond to incidents on the project. Items to be discussed will be the:

    a. Traffic Incident Management Plan (TIMP);
    b. Emergency Response and Notification;
    c. Project work/phasing concerns (e.g., ramp closures); and
    d. Responders concerns.

5. Be aware of, and coordinate if necessary, all traffic control operations, including those of subcontractors and suppliers.

6. Coordinate project activities with all Law Enforcement Officers (LEOs). A WTS shall also be the main contact person with the LEOs while they are on the project.

7. Coordinate meetings with ODOT personnel, LEOs and other applicable entities before each plan phase switch to discuss work zone traffic control.

8. Ensure compliance with the contract documents for signs, barricades, temporary concrete barrier, pavement markings, portable message signs, and other traffic control devices on a daily basis; and facilitate any corrective action necessary.

9. Notify the Contractor of the need for cleaning and maintenance of all traffic control devices, including the covering and removal of inapplicable signs.

10. Inspect, evaluate, propose necessary modifications to, and document the effectiveness of, the traffic control devices and/or traffic operations on a DAILY BASIS (7 days a week). In addition, a weekly night inspection of the work zone setup for daytime work operations; and one daytime inspection per week for nighttime projects. This shall include (but not be limited to) documentation on the following project events:

    a. Initial traffic control setup (day and night review).
    b. Daily traffic control setup and removal.
    c. When construction staging causes a change in the traffic control setup.
    d. Crash occurrences within the construction area.
    e. Removal of traffic control devices at the end of a phase or project.
    f. All other emergency traffic control needs.

11. Complete the Department approved Long Term Inspection form (CA-D-8) after each inspection as required in #10 and submit it to the Engineer the following work day. These reports shall include a checklist of all traffic control maintenance items to be reviewed. A copy of the form will be provided at the pre-construction meeting. Any deficiencies observed shall be noted, along with recommended corrective actions and the dates by which such corrections were, or will be, completed. A copy of this document can be found in current revision of the Department of Transportation Construction Inspection Forms Manual.

12. Verify that all flagging operations are being conducted per the Ohio Manual of Uniform Traffic Control Devices.

13. Have copies of the ODOT Temporary Traffic Control Manual and applicable standards and specifications included in the contract documents available at all times on the project.

14. Identify and contact all possible response personnel; preplan and keep an updated roster with phone numbers:

    a. Federal, State, and local transportation agencies (Traffic Management Center);
    b. Regional, county or local 911 dispatch; and
    c. Towing and recovery providers.

15. Comply with the provisions of OMUTCD Chapter 6I, Control of Traffic Through Traffic Incident Management Areas.

16. Propose a response/action plan to:

    a. Establish alternate route plans per the provided ODOT Playbook;
    b. Remove traffic demand from impacted roadway(s);
    c. Divert traffic to routes that can accommodate demands;
    d. Detour traffic away from sensitive areas (such as schools, hospitals, etc.);
    e. Discuss methods of determining a staging area for responders within or near the construction zone; and
    f. Discuss methods of developing ingress and egress sites within the construction zone.

The response/action plan shall be submitted to ODOT for acceptance before the Contractor's first day of work.

17. Perform, at a minimum, the following functions in incident detection and verification:

    a. Call 911/ notify Traffic Management Center and provide the following:
        I. Location – including milepost number and direction of travel.
        II. Number and type of vehicles involved.
        III. Estimated extent of damage or injury.
        IV. Estimated number of patients involved.
        V. Any potential hazardous conditions.
        VI. The placard number on any hazardous materials placard from a safe distance.

    b. Initiate traffic management/provide traffic control.
    c. Assist motorist with disabled vehicles.
    d. Recommend roadway repair needs.
    e. Provide repair resources.

18. Attend post-incident debriefings if required.

The Department will deduct the prorated daily amount of the unit price bid for the WTS for any day on which the Contractor fails to perform the duties set forth above. Should the Contractor's failure to perform any of the duties described above result in a maintenance of traffic safety issue, the Department will deduct the prorated daily amount for Item 614 Maintenance of Traffic from the Contractor's next scheduled estimate.

In addition to the plan requirements for Worksite Traffic Supervisor, complete a department-approved inspection form for each day a work zone speed zone is implemented. In the inspection report, note the disposition of all existing and work zone speed limit signing, including the actual times that the work zone speed limit signs were in place each day. Submit these daily inspection reports to the Engineer at least as often as the weekly inspection reports required in Item 10 of the Work Zone Supervisor plan note.

If three or more failures to perform the duties set forth above occur, the WTS shall be immediately removed from the work in accordance with C&MS 108.05.

The following estimated quantity has been carried to the General Summary for the Worksite Traffic Supervisor:

Item 614 – Worksite Traffic Supervisor ..... **10 Months**

CALCULATED DAB CHECKED RHW

GENERAL NOTES OF TRAFFIC MAINTENANCE

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SHEET NUM.												PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
5	7	8	9	11								01/NFP/BR							
																		EROSION CONTROL	
												1,000		832	30000	1,000	EACH	EROSION CONTROL	
																		STRUCTURE REPAIR (VARIOUS STRUCTURES IN D12 & D3)	
				380,647								380,647		512	10051	380,647	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN	5
																		MAINTENANCE OF TRAFFIC	
		1,000										1,000		614	11110	1,000	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			10									10		614	11500	10	MNTH	WORKSITE TRAFFIC SUPERVISOR	
		20										20		614	18601	20	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	8
	300											300		630	97800	300	SF	SIGNING, MISC.: ADDITIONAL SIGNS, GROUND MOUNTED, AS DIRECTED BY THE ENGINEER	7
																		INCIDENTALS	
												LS		614	11000	LS		MAINTAINING TRAFFIC	
17												17		619	16011	17	MNTH	FIELD OFFICE, TYPE B, AS PER PLAN	5
												LS		624	10000	LS		MOBILIZATION	

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GENERAL SUMMARY

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MAJOR DECK SEALING

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I:\ProjectData\D12\99952\Design\Roadway\Sheets\99952_GG001.dgn Sheet 2/28/2017 9:20:33 AM dbrauer

STRUCTURAL FILE NUMBER	COUNTY	ROUTE	NAME	REFERENCE STRUCTURE NUMBER	DIRECTION OF TRAVEL	NUMBER OF LANES	STRUCTURE OVER	STRUCTURE TYPE	BRIDGE DECK LENGTH FT	BRIDGE DECK WIDTH* FT	BRIDGE DECK AREA SY	EXISTING WEARING SURFACE	512 SEALING OF CONCRETE SURFACES (NON-EPOXY), AS PER PLAN SY
1804685	CUY	IR-71	1016 R	1	NB	2	IR-71 NB OVER NSC RR & RTA91 JUST NORTH OF IR-480	15 SPAN STEEL BEAM	1169.37	39.37	5116	CONCRETE	5116
1804650	CUY	IR-71	1016 L	2	SB	3	IR-71 SB OVER NSC RR, RTA91 & AIRPORT FREEWAY JUST NORTH OF IR-480	26 SPAN STEEL BEAM	1382.53	39.37	7872	CONCRETE	7872
1805371	CUY	IR-71	1791 R	3	NB	4	IR-71 NB OVER SR-176 NB	28 SPAN STEEL BEAM	1811.16	62	14052	CONCRETE	14052
1806173	CUY	IR-77	0950 N	4	NB/SB	6	IR-77 NB/SB OVER CUYAHOGA RIVER, SR-17, CANAL RD & CSX RR	28 SPAN STEEL BEAM	3021.19	54.33	44281	CONCRETE	44281
1806726	CUY	IR-77	1457 N	5	NB/SB	8	IR-77 NB/SB OVER KINGSBURY RUN, RTA38 & NSC RR JUST NORTH OF IR-490	12 SPAN STEEL GIRDER	1979	53	28806	CONCRETE	28806
1808567	CUY	IR-90	0758 N	6	EB/WB	8	IR-90 EB/WB OVER ROCKY RIVER VALLEY	5 SPAN STEEL GIRDER	838.66	67	12488	CONCRETE	12488
1807870	CUY	IR-90	1372 N	7	EB/WB	10	IR-90 EB/WB OVER NSC RR & TRAIN AVE JUST EAST OF W. 41ST	5 SPAN STEEL BEAM	530.18	82	9827	CONCRETE	9827
1809431	CUY	IR-90	1532 L	8	WB	5	IR-90 WB INNERBELT BRIDGE OVER CUYAHOGA RIVER VALLEY & RTA45	15 SPAN STEEL GIRDER	4347.24	84	50431	CONCRETE	50431
1812831	CUY	IR-480	0647 N	9	EB/WB	8	IR-480 EB/WB OVER ROCKY RIVER	9 SPAN STEEL GIRDER	1571	69.5	23986	CONCRETE	23986
1811991	CUY	IR-490	0100 N	10	EB/WB	8	IR-490 EB/WB OVER CUYAHOGA RIVER	28 SPAN STEEL GIRDER	3461.82	65.83	58898	CONCRETE	58898
1800639	CUY	US-6	0738 N	11	EB/WB	4	US-6 EB/WB OVER ROCKY RIVER, US-6A & YACHT CLUB DRIVE	8 SPAN STEEL BEAM	1139.17	28	7090	CONCRETE	7090
1800930	CUY	US-6	1456 N	12	EB/WB	6	US-6 EB/WB OVER CUYAHOGA RIVER & RTA	13 SPAN STEEL ARCH	2696	58	19152	CONCRETE	19152
1803271	CUY	US-42	1457 N	13	NB/SB	4	US-42 NB/SB OVER BIG CREEK, NSC RR & CSX RR NEAR THE ZOO	18 SPAN STEEL BEAM	1713.93	52	9993	CONCRETE	9993
1801244	CUY	SR-8	0226 N	14	NB/SB	4	SR-8 NB/SB OVER SR-14, TINKERS CREEK & W&LE RR	11 SPAN STEEL BEAM	1607	52	9285	CONCRETE	9285
1801325	CUY	SR-10	0869 N	15	EB/WB	4	SR-10 EB/WB OVER VALLEY PARKWAY & ROCKY RIVER	9 SPAN STEEL ARCH	1229.83	52	7106	CONCRETE	7106
1801503	CUY	SR-10	1613 N	16	EB/WB	4	SR-10 EB/WB OVER CUYAHOGA RIVER & FI RR	20 SPAN STEEL TRUSS	3285.37	51	18618	CONCRETE	18618
1810189	CUY	SR-176	1229 N	17	NB/SB	6	SR-176 NB/SB OVER VALLEY RD, BIG CREEK, W&LE RR & CSX RR	8 SPAN STEEL BEAM	1101.83	57.5	15486	CONCRETE	15486
1805436	CUY	SR-176	1334 N	18	NB	3	SR-176 NB UNDER IR-71 NB	18 SPAN STEEL BEAM	1073.73	50	8664	CONCRETE	8664
2201984	ERI	US-6	1770 N	19	EB/WB	4	US-6 EB/WB OVER HURON RIVER	23 SPAN STEEL BEAM	1026.52	26	5940	CONCRETE	5940
2202476	ERI	SR-60	0227 N	20	NB/SB	2	SR-60 NB/SB OVER VERMILION RIVER	5 SPAN STEEL BEAM	1137.63	39.3	4968	CONCRETE	4968
4304969	LAK	IR-90	2342 L	21	WB	2	IR-90 WB OVER GRAND RIVER	5 SPAN STEEL BEAM	909	52	5252	CONCRETE	5252
4304993	LAK	IR-90	2342 R	22	EB	2	IR-90 EB OVER GRAND RIVER	5 SPAN STEEL BEAM	909	52	5252	CONCRETE	5252
4706250	LOR	SR-254	0090 N	23	EB/WB	4	SR-254 EB/WB OVER BLACK RIVER & METROPARKS	12 SPAN PRESTRESS	1420.93	51.2	8084	CONCRETE	8084

* WIDTHS MAY VARY DUE TO EXIT AND ENTRANCE RAMPS ON THE STRUCTURE. WIDTHS SHOWN REPRESENT ONLY ONE DIRECTION OF TRAFFIC ON BIDIRECTIONAL BRIDGES. SEE PREVIOUS CONSTRUCTION PLANS FOR MORE DETAILED DIMENSIONS. THESE PLANS CAN BE VIEWED AT ODOT'S DISTRICT 12 OFFICE.

TOTALS CARRIED TO GENERAL SUMMARY 380647

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STRUCTURES SUBSUMMARY

D12 BH FY2017
MAJOR DECK SEALING

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