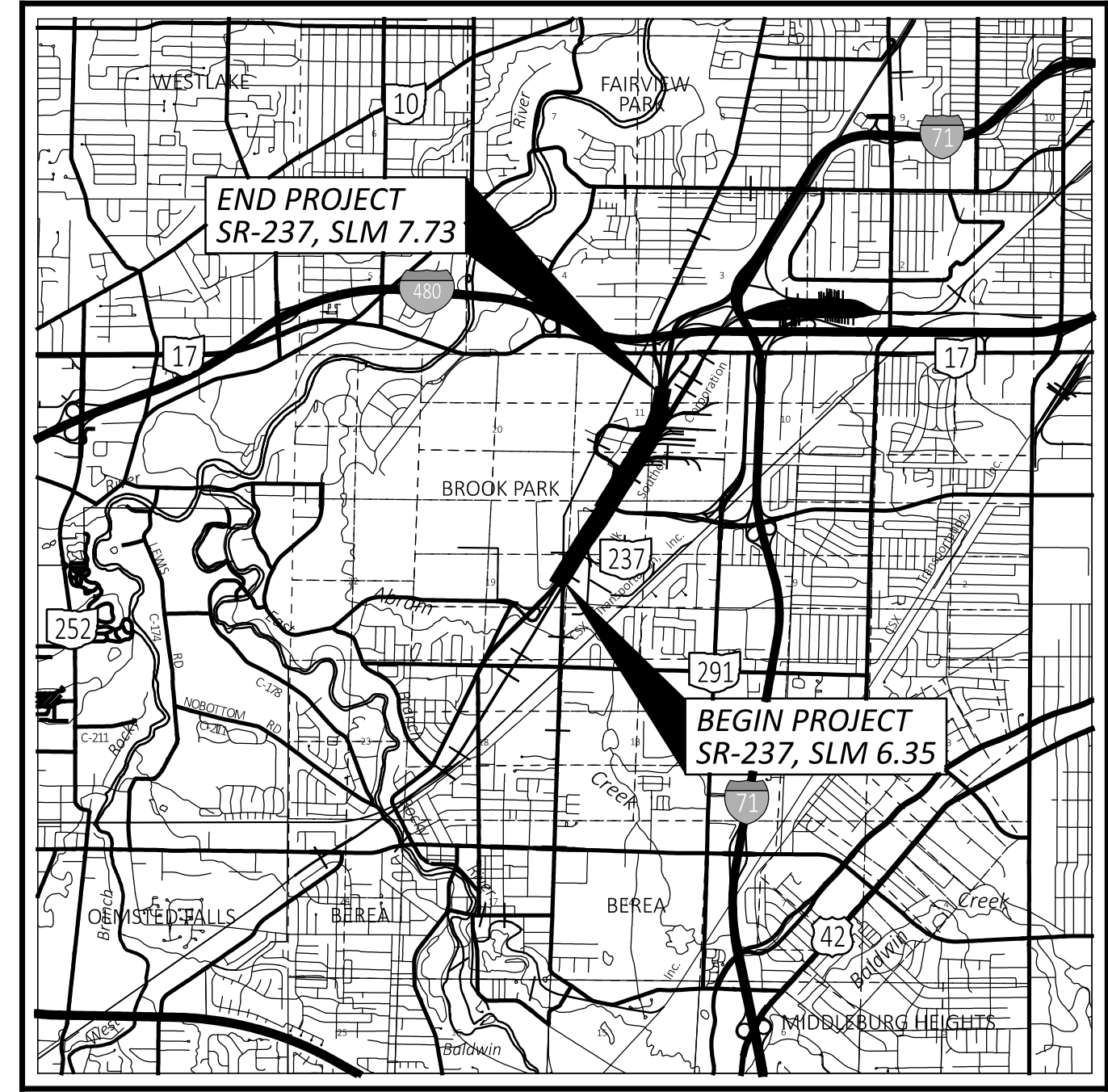


# STATE OF OHIO DEPARTMENT OF TRANSPORTATION

## CUY-237-6.35

CITY OF BROOK PARK  
CUYAHOGA COUNTY



LOCATION MAP

LATITUDE: N 41°24'21" LONGITUDE: W 81°50'08"



PORTION TO BE IMPROVED	=====
INTERSTATE HIGHWAY	=====
FEDERAL ROUTES	=====
STATE ROUTES	=====
COUNTY & TOWNSHIP ROADS	=====
OTHER ROADS	-----

DESIGN DESIGNATION	SLM 6.35 TO 6.67	SLM 6.67 TO 7.40	SLM 7.40 TO 7.65	SLM 7.65 TO 7.73
CURRENT ADT (2026)	31,000	30,500	36,500	36,500
DESIGN YEAR ADT (2046)	31,000	32,500	36,500	37,000
DESIGN HOURLY VOLUME (2046)	4,100	4,200	4,700	4,800
DIRECTIONAL DISTRIBUTION	51.5%	70.0%	70.0%	56.5%
TRUCKS (24 HOUR B&C)	3%	3%	3%	3%
DESIGN SPEED	60 MPH	60 MPH	60 MPH	60 MPH
LEGAL SPEED	50 MPH	50 MPH	50 MPH	50 MPH
DESIGN FUNCTIONAL CLASSIFICATION:				
URBAN ARTERIAL				
NHS PROJECT	YES			

### DESIGN EXCEPTIONS

NONE

### ADA DESIGN WAIVERS

NONE

**UNDERGROUND UTILITIES**  
Contact Two Working Days Before You Dig

OHIO811, 8-1-1, or 1-800-362-2764  
(Non members must be called directly)

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

ENGINEER'S SEAL

**INDEX OF SHEETS:**

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STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-3.1	1/19/24	MH-1	7/15/22	MT-101.90	7/17/20	800-2023	1/16/26		
BP-9.1	1/18/19	MH-3	7/19/24	MT-104.10	1/19/24	807	1/17/25		
		MH-5	7/19/24	MT-105.10	1/17/20				
CB-2-2A, 2B, 2C	7/19/24					821	4/20/12		
CB-2-5, 2-6	7/19/24	RM-1.1	7/18/25	TC-41.20	10/18/13	832	7/18/25		
CB-3	7/19/24			TC-41.30	4/21/23	850	7/21/23		
CB-3A	7/19/24	MT-95.30	7/18/25	TC-41.40	10/18/13	872	1/17/25		
CB-4A, 5A, 8A	7/19/24	MT-98.10	1/17/20	TC-42.20	10/18/13	896	7/21/17		
CB-5	7/19/24	MT-98.11	1/17/20	TC-52.10	10/18/13	905	1/17/25		
CB-6	7/19/24	MT-98.20	4/19/19	TC-52.20	1/15/21				
CB-8	7/19/24	MT-98.22	1/17/20	TC-65.10	1/17/14	921	7/19/24		
		MT-98.28	1/17/20	TC-65.11	1/17/25				
I-2	7/19/24	MT-98.29	1/17/20	TC-71.10	7/18/25				
I-2A	7/19/24	MT-99.20	4/19/19	TC-72.20	7/18/25				
I-3B, 3B1	1/17/25	MT-99.50	7/18/25	TC-73.20	1/17/25				
		MT-101.60	1/17/25	TC-82.10	1/17/25				

### FEDERAL PROJECT NUMBER

E250857

### RAILROAD INVOLVEMENT

NONE

### PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RESURFACING OF THE BEREA FREEWAY (SR-237) FROM EASTLAND ROAD TO APPROXIMATELY RAMP B-7 SOUTH OF SR-17 IN THE CITY OF BROOK PARK.

### EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	N/A ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	N/A ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A ACRES (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.

### 2023 SPECIFICATIONS

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

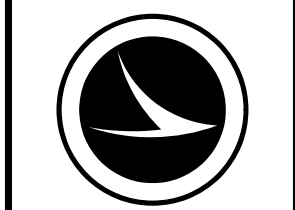
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

John Picuri, P.E., P.S.  
District 12 Deputy Director

Pamela Boratyn  
Director, Department of Transportation

TITLE SHEET

DESIGN AGENCY



DESIGNER  
KHD

REVIEWER  
DAB 02-13-26

PROJECT ID  
110961

SHEET TOTAL  
P.1 24



**Maintenance of Traffic**

**General**

It is the responsibility of the Contractor to provide through vehicular access in both directions at all times throughout the project area. The project shall be constructed in phases in order to minimize traffic disruption and inconvenience to the general public. The Contractor shall be responsible for providing all equipment, materials and manpower needed to adequately maintain traffic as provided for in the plans and specifications.

The Contractor is reminded that, in the conduct of this project, the sequence of operations shall be planned in a fashion which minimizes the number of lane reductions and/or lane width reductions required to maintain traffic through the project.

Permitted lane closures shall be as shown on the "Schedule of Through Lanes to be Maintained" table. The time limits shown in this table shall be adhered to or road user costs will be assessed.

**Construction Sequence**

No permanent maintenance of traffic zones are detailed in these plans. Traffic shall be maintained in accordance to the "Schedule of Through Lanes to be Maintained" note. All work zone closures shall comply with the appropriate Standard Construction Drawings.

Prior to opening all lanes to normal traffic, the Contractor shall ensure that the pavement is in a drivable condition with no potholes or dust and that all longitudinal drop-offs greater than 1-1/2" and transverse drop-offs are ramped as per the "Maintaining Traffic and Sequence of Operations" note.

**Maintenance of Traffic Control Zones**

The Contractor shall be responsible to maintain the signs, drums or cones specified in the Standard Construction 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. If any noted deficiencies are not corrected within 24 hours the Engineer shall deduct one day pay for Item 614 – Maintaining Traffic, not as a penalty but as road user costs. The Contractor shall be subject to these road user costs for each and every day that these provisions are not met. All costs for maintaining the work zones as described above shall be included under Item 614 – Maintaining Traffic.

**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.

**Payment**

All work and traffic control devices shall be in accordance with CMS 614 and other applicable portions of the specifications, as well as the Ohio Manual of Uniform Traffic Control Devices. Payment for all labor, equipment, and materials shall be included in the lump sum contract price for Item 614 – Maintaining Traffic unless separately itemized in the plans.

**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 authorities.

**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.

**Permitted Lane Closure Schedule (PLCS)**

Lane closure(s) shall conform to the PLCS. Published PLCS information can be found on the ODOT website.

The monthly published schedules required to be used, for each PLCS segment within the project area, are those that comprise the consecutive 12-month period beginning 15 months prior to the month and year of sale and ending 4 months prior to the month and year of sale. These same 12 months apply for the life of the project and shall be applied to each respective month of construction (month of lane closure(s) shall match month of PLCS used). Lane closure(s) in place for multiple months shall always comply with the current respective month.

More restrictive changes to the allowable lane closure hours are at the discretion of the Engineer in order to comply with the Traffic Management in Work Zones Policy (21-008(P)) and Standard Procedure (123-001(SP)).

Less restrictive changes to the allowable lane closure hours are subject to the Traffic Management in Work Zones Policy (21-008(P)) and Standard Procedure (123-001(SP)) and shall not be implemented until, and unless, approved by the proper ODOT authority.

Any roadway not listed shall not have any lane closures on weekdays from 6:30 AM to 9:00 AM and 3:00 PM to 8:00 PM. Contact Troy Onesti, District 12 Work Zone Traffic Manager, at (216) 584-2204 if there are any questions.

Allowable lane closure hours for facilities not covered by the PLCS, if any, shall be as specified elsewhere in the plans.

**Ramp Closures for Resurfacing**

Lane closures on multi-lane ramps shall be restricted. No lane shall be closed between 5am to 9PM. Where maintaining a single lane, 11' width, on the ramp is not possible, the contractor may close one ramp at a time for milling, partial depth pavement repairs, or resurfacing due to the portions of the ramps with only one travel lane. Closures for ramps scheduled for repairs and resurfacing shall be limited according to the days of the week and hours shown in the Permitted Lane Closure Schedule. Ramp closures are permitted only from the hours of 9:00 PM to 5:00 AM.

The motoring public shall be given advance warning of closures at least 72 hours in advance through the use of either a ground mounted flat sheet sign or a portable changeable message sign. A LEO with patrol car (paid for separately) shall be used for each ramp closure and be present for the entire closure time.

Freeway entrance ramps shall be closed with a PCMS suggesting a recommended detour. Freeway exit ramps shall be closed with a PCMS routing traffic to the next exit and a second PCMS indicating a U-turn at the exit, unless directed differently by the Project Engineer.

For ramp closures, one or two additional PCMS units will be needed as described above. These will be in addition to the PCMS units specified in the plans and shall be included for payment in Item 614 – Maintaining Traffic.

Ramp Closure Restrictions				
State Route 237 in Cuyahoga County				
Secondary Route: Snow Rd & Inner Rd/Upper Rd		SLM along SR-237:		
Ramp Designation	Movement	No Closures Allowed		Detour Routes
		Mon-Fri	Sat-Sun	Primary DR
Ramp A	SR237 North to Snow Rd	5am to 9pm	5am to 9pm	SR-237 N to Brook Park Rd W to SR-237 S to Snow Rd
Ramp B	Snow Rd to SR 237 South/Five Points	5am to 9pm	5am to 9pm	SR-237 N to Brook Park Rd W to SR-237 S
Ramp C (Multi-lane section)	Snow Rd to SR 237 North/Upper Dr/Lower Dr	No Full Closure Permitted	No Full Closure Permitted	
Ramp C (Single-lane section)	Snow Rd to SR 237 North/Upper Dr/Lower Dr	5am to 9pm	5am to 9pm	SR-237 N to Brook Park Rd W to SR-237 S to Upper Dr/Lower Dr
Ramp C-1	Ramp C to SR 237 North/Ramp C-1	No Full Closure Permitted	No Full Closure Permitted	
Ramp D	Ramp D-1/Upper Dr/Lower Dr to Snow Rd	No Full Closure Permitted	No Full Closure Permitted	
Ramp D-1	SR 237 South to Ramp D	5am to 9pm	5am to 9pm	SR-237 S to IX Center Dr/Kolthoff Dr Exit to SR-237 N on Ramp to SR-237
Five Points	Ramp B to Five Points Rd	5am to 9pm	5am to 9pm	SR-237 to Cargo Rd to Five Points Rd

Note: Upper Dr & Lower Dr are also know also roads to/from the Airport

**Alternate Methods**

If the Contractor so elects, he may submit alternate methods for the maintenance of traffic, provided the intent of the provisions is followed and no additional inconvenience to the traveling public results there from. No alternate plan shall be placed into effect until approval has been granted, in writing, by the Director.

All items proposed for use under these provisions must comply with current Department standards for their use when the plan detail, Standard Construction Drawing or other bid document governing their use is not provided as part of the bid package.

**Lane Value Contract Table (PN 127)**

Description of Critical Lane/Ramp to be Maintained	Restricted Period	Time	Time Unit	Disincentive \$ per Time Unit per Lane
Mainline, Eastland Rd to Snow Rd	As per the Permitted Closure Schedule	D12 Lane	Each Minute	\$105
Mainline, Snow Rd Ramp C-1 Gore	As per the Permitted Closure Schedule	D12 Lane	Each Minute	\$155
Mainline, Ramp C-1 Gore to Project End	As per the Permitted Closure Schedule	D12 Lane	Each Minute	\$150
Ramp A	Per Ramp Closures for Resurfacing Note		Each Minute	\$45
Ramp B	Per Ramp Closures for Resurfacing Note		Each Minute	\$45
Ramps C & C-1 (Multi-Lane)	Per Ramp Closures for Resurfacing Note		Each Minute	\$125
Ramp C-1 (Single-Lane)	Per Ramp Closures for Resurfacing Note		Each Minute	\$225
Ramp D	Per Ramp Closures for Resurfacing Note		Each Minute	\$45
Ramp D-1	Per Ramp Closures for Resurfacing Note		Each Minute	\$90
Five Points Rd Ramp	Per Ramp Closures for Resurfacing Note		Each Minute	\$90

The Contractor shall be assessed a disincentive equal to the largest disincentive within all sections impacted by the physical lane restriction, including the Transition Area, Activity Area, and Termination Area as defined by the OMUTCD. Holiday disincentives shall be applied per section per lane per time unit.

No full closures of any mainline section for paving operations is permitted with the exception of the northern end of the SB SR-237 mainline (from the Ramp F Entrance Ramp to the project's end limits), where SB traffic may be rerouted to Ramp E, to Ramp F, and back to SR-237 SB per SCD MT-99.50 at the direction of the on-site engineer and the Work Zone Traffic Supervisor.

**Disincentive Contract (PN 121)**

The contractor shall complete all critical work and safety items according to the Incentive/Disincentive Contract Table below. In the event the contractor impedes the flow of traffic subsequent to the opening to unrestricted traffic, the contractor shall be assessed a disincentive according to the Incentive/Disincentive Contract Table.

Critical work is shown below in the Incentive/Disincentive Contract Table.

Critical work is defined as having the designated section of work open to unrestricted traffic as shown in the table, or the entire project if not otherwise listed.

Unrestricted traffic is defined as all traffic lanes being available for use at their final design width with all markings, and safety features installed, along with no restrictions within 2 feet of the edge line on the shoulder.

Incentive/Disincentive Amount:  
The contractor will be paid an incentive or will be assessed a disincentive according to the Incentive/ Disincentive Contract Table below.

Extensions of time will be for calendar days and calculated in accordance with C&MS 108.06 except as follows: no extensions of time will be granted for delays in material deliveries (unless such delays are industry wide), and labor strikes (unless such strikes are area wide).

Incentive / Disincentive Contract Table		
Description of Critical Work	Completion Date	Disincentive \$ Per Day
All work on the Mainline from Eastland Rd to Snow Rd Overpass, Ramp A, and Ramp B	07/01/2027	Assessed Per CMS 108.07

**Maintaining Traffic – General Provisions**

1. Traffic shall be maintained in accordance with the "Schedule of Through Lanes to be Maintained." The Contractor shall set up and operate his equipment in such a manner as to minimize encroachment upon the traveled width of pavement

2. The Contractor shall notify the Engineer, the responsible law enforcement agency and the Ohio Department of Transportation, District 12 Public Information Officer ((216) 584-2007) not less than 24 hours prior to a scheduled disruption of traffic.

3. Nighttime work shall be permitted in accordance with these plans and notes. The Contractor shall provide flood lighting of the work area in accordance with CMS 401.15 in order to assure the safest conditions during nighttime work. A lighting plan for nighttime operations shall be presented to and approved by the Engineer.

4. The Contractor shall furnish, erect and maintain all warning and information signs necessary for maintaining traffic. The sign faces shall be reflectorized with type G sheeting complying with the requirements of CMS 730.19. The Contractor shall determine what signs are needed and advise the Engineer two weeks in advance of his detailed plans. See the OMUTCD and standard drawings for the minimum signage required.

5. Traffic control devices shall be set up prior to the start of construction and shall be properly maintained during the time special conditions exist. They shall remain in place only as long as they are needed and shall be immediately removed thereafter. Where operations are performed in stages, there shall be in place only those devices that apply to the condition present during the stage in progress. All

signs with messages which do not apply during a certain period shall be covered or set aside out of the view of traffic.

6. Placement of final roadway pavement markings and raised pavement markers shall be accomplished in accordance with the "Schedule of Through Lanes to be Maintained." The Contractor shall provide 2 shadow vehicles as per MT-99.20 following the pavement marking equipment. The shadow vehicles shall travel 500' apart with the remote vehicle traveling on the shoulder (left or right as applicable) where usable shoulder is available. The first shadow vehicle in a traffic lane shall be equipped with a truck mounted attenuator meeting NCHRP 350 requirements. Each shadow vehicle shall have a yellow flashing beacon plus 48" construction warning signs mounted on the back facing traffic with standard type messages advising motorists of the work ahead, advisory warning speed, and which lane is closed.

7. During non-working periods, open excavations shall be delineated with warning flashers and/or other approved devices as deemed appropriate by the Engineer.

8. Existing signs located within the road work areas which are necessary for interim or permanent traffic control shall be removed and re-erected in locations as approved by the Engineer.

9. No stoppage of traffic shall occur without law enforcement personnel at each location to direct traffic.

10. Whenever a total closure is implemented, the Contractor shall provide a portable changeable message sign from ODOT's pre-approved list. It shall be placed 1.5 miles to 2 miles in advance of the closure or as directed by the Engineer.

11. For any operation not specifically mentioned in these plans, the traffic shall be maintained in accordance with the OMUTCD.

**Holiday Closures**

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

New Years (Observed)	-	Memorial Day
Fourth of July (Observed)	Labor Day	General/Regular Election Day (Nov)
Thanksgiving	Christmas	(Other Holiday or Special Event)

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

Day of Holiday or Special Event	Times All Lanes Must Be Open to Traffic
Sunday	12:00N Friday through 6:00 AM Monday
Monday	12:00N Friday through 6:00 AM Tuesday
Tuesday	12:00N Monday through 6:00 AM Wednesday
Tuesday (Gen. / Reg. Election)	5:00 AM Tuesday through 12:00 AM Wednesday
Wednesday	12:00N Tuesday through 6:00 AM Thursday
Thursday	12:00N Wednesday through 6:00 AM Friday
Thursday (Thanksgiving only)	6:00 AM Wednesday through 6:00 AM Monday
Friday	12:00N Thursday through 6:00 AM Monday
Saturday	12:00N Friday through 6:00 AM Monday

During the same periods, maintain pedestrian access if pedestrian access was present prior to construction.

Should the Contractor fail to meet any of these requirements, the Contractor shall be assessed a disincentive per the lane value contract table (PN 127).



**Maintaining Traffic and Sequence of Operations**

All asphalt concrete operations shall be conducted in a manner that will assure minimum danger and inconvenience to highway users. The procedure for the removal or placement of any existing or proposed asphalt course shall be such that no greater than 1-3/4" discontinuity in the elevation of the traveled surface shall be exposed to traffic.

Traffic shall not be permitted to cross any partial-width removal or resurfacing joint during the actual removal or paving operation except as necessary. Any partial-width longitudinal joints with a discontinuity greater than 1-3/4" which must be exposed to traffic shall be ramped using Item 614 – Asphalt Concrete for Maintaining Traffic at a rate not steeper than 6:1.

Temporary transverse removal or paving joints which must be exposed to traffic shall be ramped using Item 614 – Asphalt Concrete for Maintaining Traffic at a rate not to exceed 1" in 10'.

For removal of existing overlays, a transition may be planed into the existing overlay and may be substituted for the asphalt ramps previously described.

Whenever traffic is subject to partial width removals or overlays prior to full width completion, the Contractor shall provide W8-11-48 "UNEVEN LANES" signs (dual sign installation). Placement shall be as directed by the Engineer and included in the lump sum payment for Item 614 – Maintaining Traffic.

Whenever any part of the traveled surface is closed, the motorists shall be warned and diverted by the Contractor through the use of a flashing arrow, in addition to those provisions set forth in the OMUTCD, the Traffic Engineering Manual and the applicable Standard Construction Drawings.

**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 and the Engineer 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 to the satisfaction of the Engineer 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 RPMs
- B. Completion of pavement repairs
- C. Planing of asphalt concrete
- D. Adjustment/reconstruction of existing castings
- E. Placing of asphalt concrete
- F. Placing proposed pavement markings and raised pavement markers
- G. Placing of rumble strips

**Item 614 – Asphalt Concrete for Maintaining Traffic, As Per Plan**

This item shall be used to provide temporary asphalt ramps for transverse discontinuities. Ramping shall be placed at the rate of 1" per 10' or to be used as directed by the Engineer.

Remove temporary asphalt ramps as part of this item. Materials shall be removed prior to the placement of the next course of asphalt.

Item 614 – Asphalt Concrete for Maintaining Traffic, As Per Plan..... **200 CY**

**Item 614 – Work Zone Pavement Markings**

The following estimated quantities have been carried to the General Summary to be used as directed by the Engineer for work zone pavement markings per the requirements of CMS 614.04 and 614.11. Place temporary markings at the same locations as the proposed permanent pavement markings.

After the planing is completed, use the following temporary markings:

Item 614 – Work Zone Lane Line, Class III, 6", 642 Paint .....	<b>3.74 Mile</b>
Item 614 – Work Zone Edge Line, Class III, 6", 642 Paint .....	<b>7.68 Mile</b>
Item 614 – Work Zone Center Line, Class III, 642 Paint .....	<b>0.01 Mile</b>
Item 614 – Work Zone Channelizing Line, Class III, 12", 642 Paint .....	<b>7,472 Ft</b>
Item 614 – Work Zone Dotted Line, Class III, 6", 642 Paint .....	<b>600 Ft</b>
Item 614 – Work Zone Dotted Line, Class III, 12", 642 Paint .....	<b>3,491 Ft</b>
Item 614 – Work Zone Arrow, Class III, 642 Paint .....	<b>25 Each</b>
Item 614 – Work Zone Stop Line, Class III, 642 Paint .....	<b>250 Ft</b>

After the surface course is placed, use the following temporary markings:

Item 614 – Work Zone Lane Line, Class I, 6", 642 Paint .....	<b>3.74 Mile</b>
Item 614 – Work Zone Edge Line, Class I, 6", 642 Paint .....	<b>7.68 Mile</b>
Item 614 – Work Zone Center Line, Class I, 642 Paint .....	<b>0.01 Mile</b>
Item 614 – Work Zone Channelizing Line, Class I, 12", 642 Paint .....	<b>7,472 Ft</b>
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Item 614 – Work Zone Dotted Line, Class I, 12", 642 Paint .....	<b>3,491 Ft</b>
Item 614 – Work Zone Arrow, Class I, 642 Paint .....	<b>25 Each</b>
Item 614 – Work Zone Stop Line, Class I, 642 Paint .....	<b>250 Ft</b>

**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.

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.

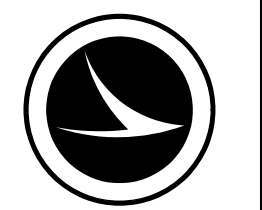
The Contractor shall be responsible for 24-hour-per-day operation and maintenance of these signs on the project for the duration of the phases when the plan requires their use.

The Portable Changeable Message Sign shall have a Web Based Communication System that will allow the Contractor or ODOT to change or program the message board remotely. This system shall be password protected and may be operated from a computer or have an application that can be opened from a cell phone, android or I phone. The Web Based Communication System will show the location of each message board on a map. All charges for the Web Based Communication System will be included in the cost of this item, Portable Changeable Message Sign, As Per Plan.

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 .....	<b>24 Sign Month(s)</b>
Assuming 4 PCMS Signs for 6 Months	

DESIGN AGENCY



DESIGNER  
KHD

REVIEWER  
DAB 02-23-26

PROJECT ID  
110961

SHEET TOTAL  
P.14 | 24

**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 latest edition of 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 for the following traffic control tasks as approved by the Engineer:

- 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 in advance of and on the same side as the lane restriction or at the point of 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 shall 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 quantities have 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 price for Item 614, Law Enforcement Officer with Patrol Car for Assistance.

**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.

This item of work shall be used to provide signs that are beyond the requirements of the signage detailed in the Standard Construction Drawings and the OMUTCD.

The following estimated quantity has been carried to the General Summary to be used as directed by the Engineer:

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

**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 614 Work Zone Increased Penalties Sign**

R11-H5a-48 signs shall be furnished, erected, and maintained in good condition and/or replaced as necessary and subsequently removed by the Contractor. Signs shall be mounted at the appropriate offsets and elevations as prescribed by the Ohio Manual of Uniform Traffic Control Devices. They shall be maintained on supports meeting current safety criteria.

The signs may be erected or uncovered no more than four hours before the actual start of work. The signs shall be removed or covered no later than four hours following restoration of all lanes to traffic with no restrictions, or sooner as directed by the Engineer. Temporary sign covering and uncovering due to temporary lane restorations shall be guided by the four-hour limitations stated above. Such lane restorations should be expected to remain in effect for 30 or more consecutive calendar days, such as during winter shut-downs.

The signs on the mainline shall be dual mounted unless not physically possible. The first sign shall be placed between the ROAD WORK AHEAD (W20-1) sign and the next sign in the sequence. Signs shall be erected on each entrance ramp and every 2 miles through the construction work limits. Signs on the mainline shall be R11-H5a-48. Signs used on the ramps shall be R11-H5a-24. R11-H5a-24 signs may be used in the median in lieu of R11-H5a-48 signs if it is not physically possible to provide R11-H5a-48 signs in the median.

The R11-H5a-48 signs shall be mounted on 2 No. 3 posts when located within clear zones.

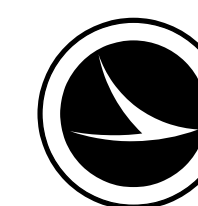
The Contractor may use signs and supports in used, but good, condition provided the signs meet current ODOT specifications. Sign faces shall be retroreflectorized with Type G sheeting complying with the requirements of C&MS 730.19.

Work Zone Increased Penalties signs and supports will be measured as the number of sign installations, including the sign and necessary supports. If a sign and support combination is removed and reerected at another location as directed by the Engineer, it shall be considered another unit.

Payment for accepted quantities, complete, in place will be made at the contract unit price. Payment shall be full compensation for all materials, labor, incidentals and equipment for furnishing, erecting, maintaining, covering during suspension of work, and removal of the sign and support.

Item 614 - Work Zone Increased Penalties Sign..... **4 Each**

DESIGN AGENCY



DESIGNER

KHD

REVIEWER

DAB 02-19-26

PROJECT ID

110961

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**Worksite Traffic Supervisor**

Subject to approval of the Engineer, the Contractor shall employ and identify (someone other than the superintendent) a prequalified Worksite Traffic Supervisor (WTS) before starting work in the field. The WTS shall be trained in accordance with CMS 614.03, shall have successfully completed ODOT administered WTS testing (and re-testing when applicable) and be listed on the ODOT prequalified WTS roster. Prequalification expires every 5 years. Re-testing shall be successfully repeated every 5 years to remain prequalified.

The name of the prequalified WTS and related 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 (secondary) WTS to be available when the primary is off duty; however the primary WTS shall remain the point of contact at all times. Any alternate (secondary) WTS is subject to the same training, prequalification and other requirements outlined within this plan note. At all times the Engineer, or Engineer's representatives, must be informed of who the primary WTS (and secondary WTS, if applicable) is at the current time.

The WTS position has the primary responsibility of implementing the Traffic Management Plan (TMP), monitoring the safety and mobility of the entire work zone, and correcting Temporary Traffic Control (TTC) deficiencies for the entire work zone. The WTS, and alternate WTS when on duty, shall have sufficient authority to effectively carry out the identified WTS responsibilities and duties. The duties of the WTS are as follows:

1. Be available on a 24-hour per day basis.
2. Be on site for all emergency TTC needs within one hour of notification by police or project staff, and effect corrective measures immediately on existing work zone TTC devices.
3. Attend preconstruction meeting and all project meetings where TTC management is discussed.
4. Be available on site for other meetings or discussions with the Engineer upon request.
5. Be aware of all existing and proposed TTC operations of the contractor, subcontractors and suppliers, and ensure coordination occurs between them to eliminate conflicting temporary and/or permanent traffic control.
6. Coordinate project activities with all Law Enforcement Officers (LEOs). The WTS shall also be the main contact person with the LEOs while LEOs are on the project.
7. Coordinate and facilitate meetings with ODOT personnel, LEOs and other applicable entities before each plan phase switch to discuss the work zone TTC for implementing the phase switch. Submit a written detail of MOT operations and schedule of events to implement the switch between phase plans to the Engineer 5 calendar days prior to this meeting.
8. Be present, on site for, and involved with, each TTC set up/take down and each phase change in accordance with CMS 614.03.
9. On a continual basis ensure that the TTC zone and all related devices are installed, maintained and removed in compliance with the contract documents.
10. On a continual basis facilitate corrective action(s) necessary to bring deficient TTC zones and all related devices into compliance with contract documents in the timeframe determined by the Engineer.

11. Inspect, evaluate, propose necessary modifications to, and document the effectiveness of, the TTC devices and traffic operations on a DAILY BASIS (7 days a week). In addition, perform one 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 TTC setup (day and night review).
  - b. Daily TTC setup and removal.
  - c. When construction staging causes a change in the TTC setup.
  - d. Crash occurrences within the construction area and within the influence area(s) approaching the work zone.
  - e. Removal of TTC devices at the end of a phase or project.
  - f. All other emergency TTC needs.
12. Complete the Department approved Long Term Inspection form (CA-D-8) after each inspection as required in # 11 and submit it to the Engineer the following workday. These reports shall include a checklist of all TTC 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 or completed corrective actions and the dates by which such corrections were, or will be, completed. A copy of the current CA-D-8 document can be found on the Office of Construction Administration's Inspection Forms website.
13. Have copies of the ODOT Temporary Traffic Control Manual and contract documents available at all times on the project.

The Department will deduct:

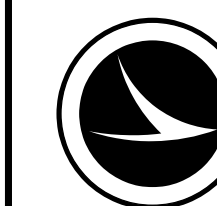
- A. The prorated daily amount of Item 614 Maintaining Traffic for any day in which the WTS fails to perform the duties set forth above. The prorated daily amount will be equal to the original bid amount for Item 614 Maintaining Traffic divided by the difference between the original completion date and the first day of work, in calendar days.
- B. 1% of the original bid amount for Item 614 Maintaining Traffic for any day that a TTC issue is identified in the field and is not corrected in the given timeframe per the Engineer. Deduction B shall not apply to situations covered by Deduction C.
- C. 1% of the original bid amount for Item 614 Maintaining Traffic for any day that a lane or ramp is blocked (fully or partially) without TTC, as determined by the Engineer. This deduction shall be in addition to any other disincentives established for unauthorized lane use.

For days in which more than one deduction listed above occur, the highest deduction amount will apply.

If three or more total days result in TTC issues described in Deduction B or C above, the primary WTS shall be immediately removed from the work in accordance with C&MS 108.05. Upon removal the Engineer shall notify ODOT Central Office (WTSPrequalification@dot.ohio.gov) to register a removal against the statewide prequalification for the primary WTS. Three removals shall cause statewide disqualification for any previously prequalified WTS.

Payment for the above requirements, responsibilities and duties shall be included in the lump sum price bid for Item 614, Maintaining Traffic.

DESIGN AGENCY



DESIGNER

KHD

REVIEWER

DAB 02-19-26

PROJECT ID

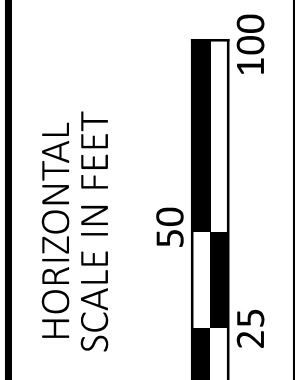
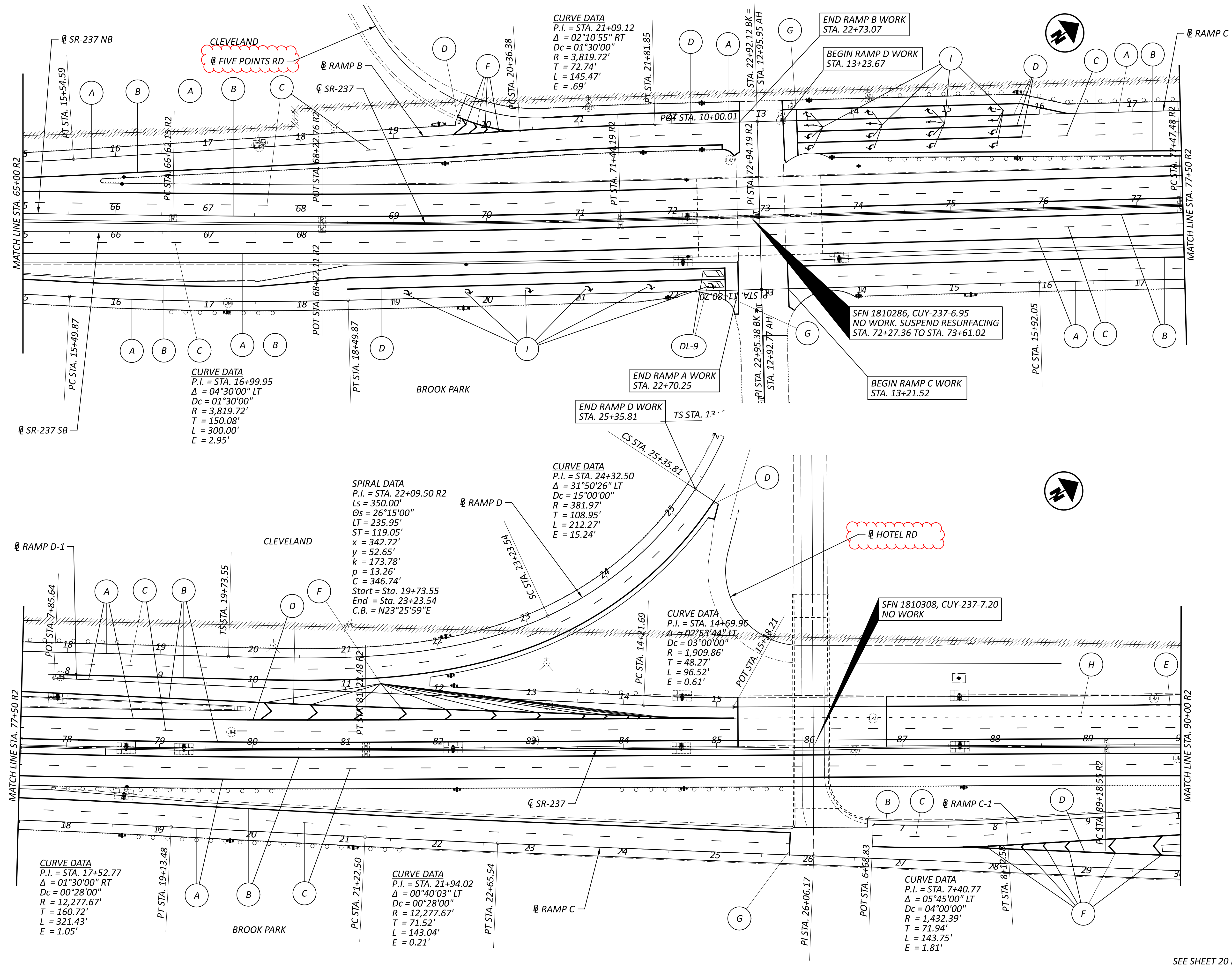
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SHEET

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TOTAL

24



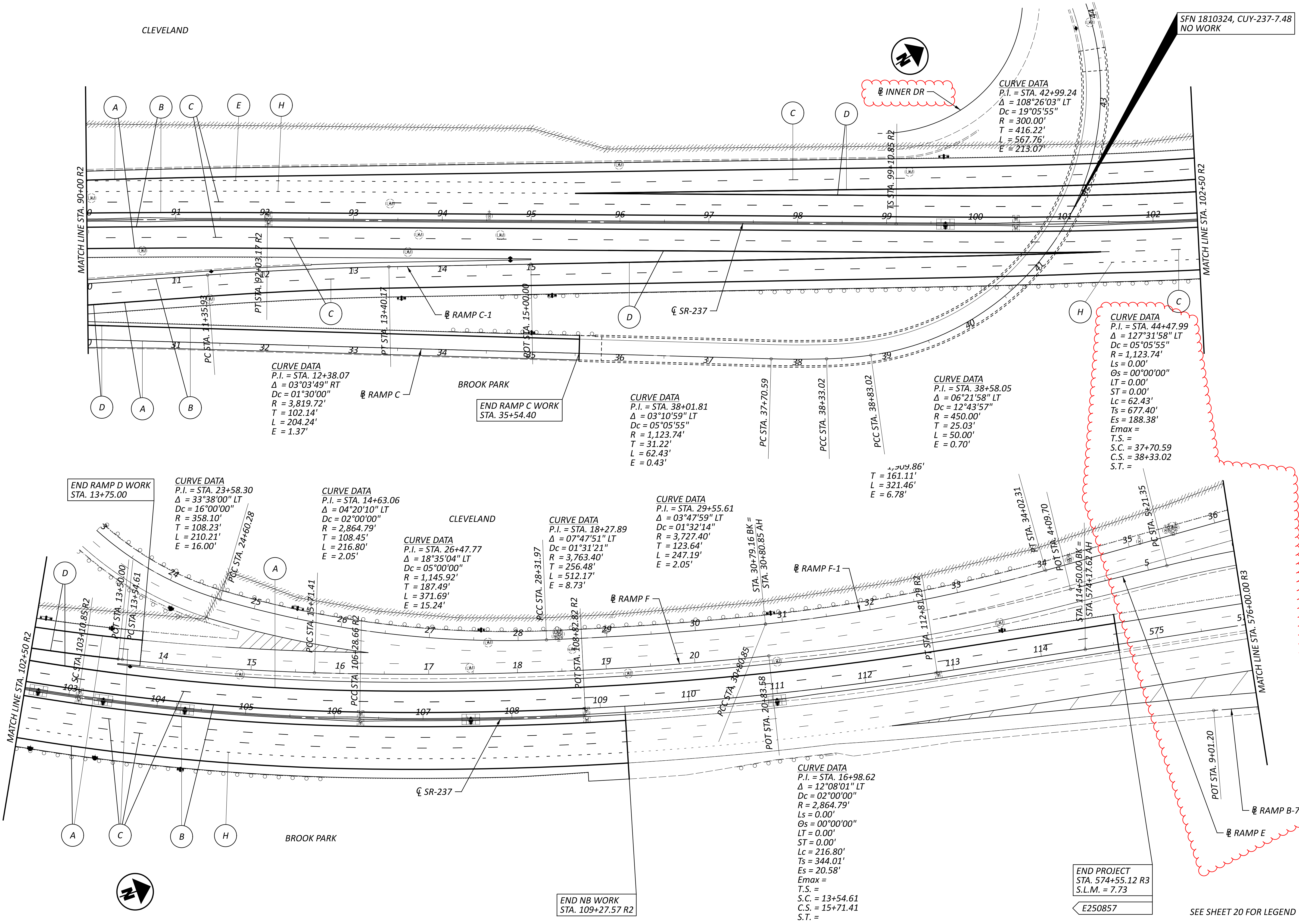
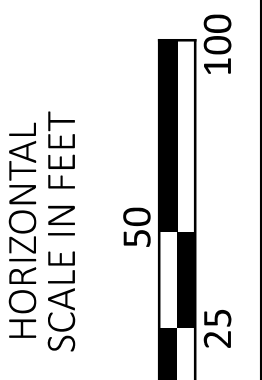
GENERAL PLANS  
SR-237, STA. 65+00.00 R2 TO STA. 90+00.00 R2

DESIGN AGENCY	
DESIGNER	KHD
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SEE SHEET 20 FOR LEGEND

CLEVELAND

SFN 1810324, CUY-237-7.48  
NO WORK



END RAMP D WORK  
STA. 13+75.00

CURVE DATA  
P.I. = STA. 23+58.30  
Δ = 33°38'00" LT  
Dc = 16°00'00"  
R = 358.10'  
T = 108.23'  
L = 210.21'  
E = 16.00'

CURVE DATA  
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Dc = 02°00'00"  
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T = 108.45'  
L = 216.80'  
E = 2.05'

CURVE DATA  
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Dc = 05°00'00"  
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E = 15.24'

CURVE DATA  
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T = 123.64'  
L = 247.19'  
E = 2.05'

CURVE DATA  
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T = 123.64'  
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E = 2.05'

CURVE DATA  
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Ls = 0.00'  
Gs = 00°00'00"  
LT = 0.00'  
ST = 0.00'  
Lc = 216.80'  
Ts = 344.01'  
Emax = 20.58'  
T.S. =  
S.C. = 13+54.61  
C.S. = 15+71.41  
S.T. =

END PROJECT  
STA. 574+55.12 R3  
S.L.M. = 7.73

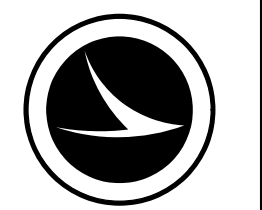
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SEE SHEET 20 FOR LEGEND

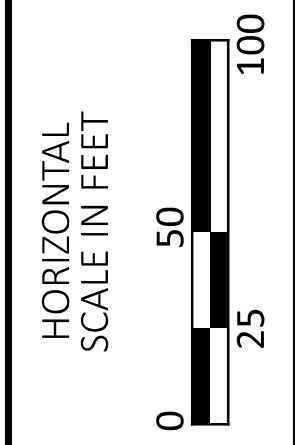
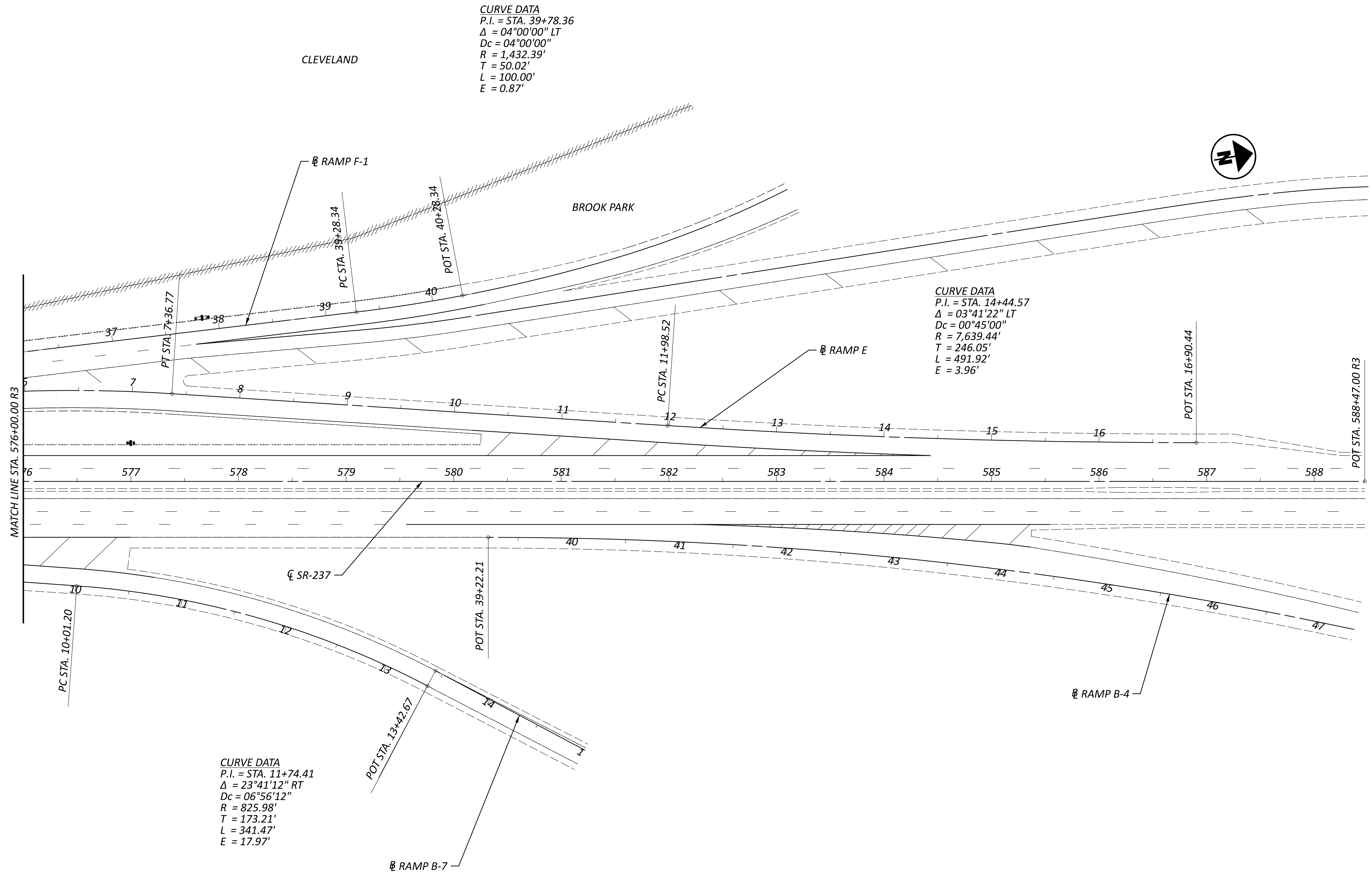
GENERAL PLANS

SR-237, STA. 90+00.00 R2 TO STA. 576+00.00 R3

DESIGN AGENCY

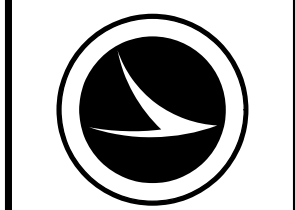


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GENERAL PLANS  
SR-237, STA. 576+00.00 R3 TO STA. 588+47.00 R3

DESIGN AGENCY



DESIGNER  
KHD

REVIEWER  
VP 05-19-26

PROJECT ID  
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