

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

D12-PPM-FY2025

FEDERAL PROJECT NUMBER

E241108

RAILROAD INVOLVEMENT

NONE

PROJECT DESCRIPTION

District Pavement Preventive Maintenance Contract For SFY 2025
 WORK LOCATIONS 1A, 1B & 2
 (See Sheets 2 & 3 for Work Descriptions and Locations)

EARTH DISTURBED AREAS

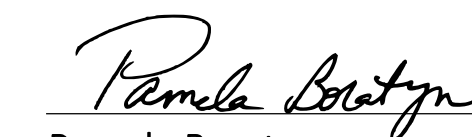
PROJECT EARTH DISTURBED AREA: N/A
 ESTIMATED CONTRACTOR EARTH DISTURBED AREA: N/A
 NOTICE OF INTENT EARTH DISTURBED AREA: N/A (NOI not required)*
 * Routine Maintenance Project

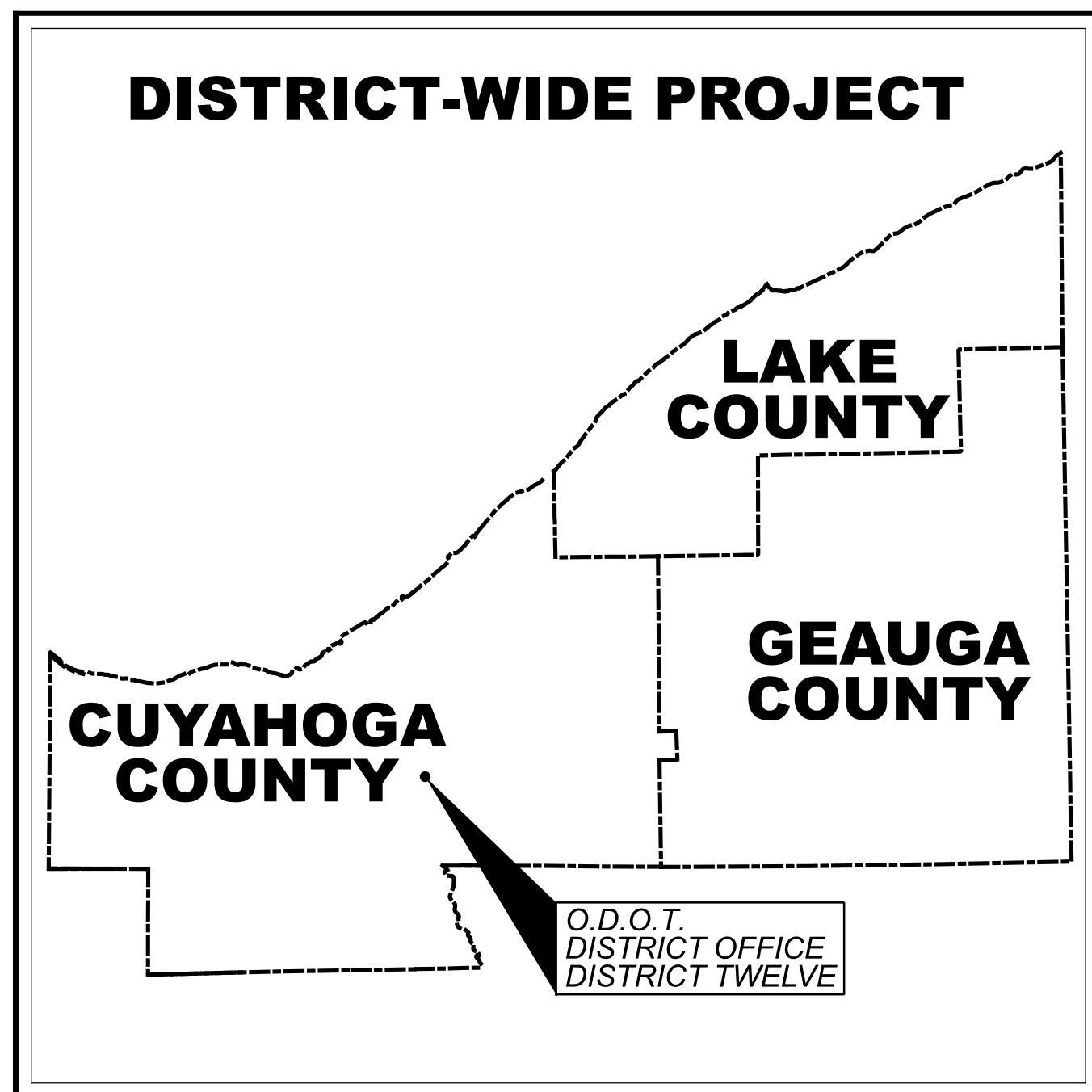
2023 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS, CHANGES LISTED IN THE PROPOSAL, AND THE SUPPLEMENTAL SPECIFICATION 800 VERSION INDICATED ON 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.

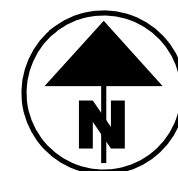

 John Picuri, P.E., P.S.
 District 12 Deputy Director


 Pamela Boratyn
 Director, Department of Transportation



LOCATION MAP

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



SPECIFIC WORK LOCATIONS

- SPECIFIC WORK LOCATION 1A - LAKE COUNTY**
 I.R.-90 (SLM 6.98 to SLM 13.10)
 LATITUDE: 41°38'09"± LONGITUDE: 81°23'06"±
- SPECIFIC WORK LOCATION 1B - LAKE COUNTY**
 I.R.-90 (SLM 13.10 to SLM 21.43)
 LATITUDE: 41°39'30"± LONGITUDE: 81°16'24"±
- SPECIFIC WORK LOCATION 2 - CUYAHOGA COUNTY**
 S.R.- 8 (SLM 0.00 to SLM 1.25)
 LATITUDE: 41°21'01"± LONGITUDE: 81°31'36"±

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DESIGN EXCEPTIONS

NONE

ADA DESIGN WAIVERS

NONE

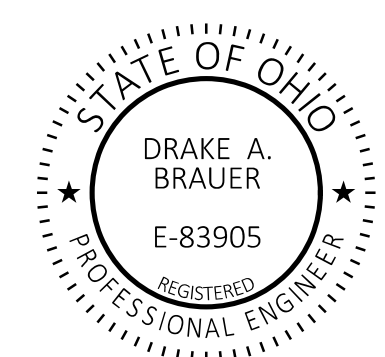
UNDERGROUND UTILITIES
 Contact Two Working Days Before You Dig


OHIO811.org
 Before You Dig

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

PLAN PREPARED BY:
 O.D.O.T. DISTRICT 12
 PLANNING AND ENGINEERING
 5500 TRANSPORTATION BLVD.
 GARFIELD HEIGHTS, OH 44125

ENGINEER'S SEAL




STANDARD CONSTRUCTION DRAWINGS						SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS	
BP-2.1	1/21/22		MT-95.30	7/19/19	MT-101.90	7/17/20	TC-41.20	10/18/13	800-2023 7/19/2024
BP-2.2	1/15/21						TC-41.30	4/21/23	
BP-3.1	1/19/24		MT-95.45	7/21/23			TC-41.40	10/18/13	821 4/20/12
			MT-95.50	7/21/17	MT-104.10	1/19/24	TC-42.20	10/18/13	832 7/19/24
							TC-52.10	10/18/13	
			MT-97.12	1/20/17	MT-105.10	1/17/20			
							TC-52.20	1/15/21	
			MT-98.10	1/17/20			TC-65.10	1/17/14	
			MT-98.11	1/17/20			TC-65.11	1/19/24	921 7/19/24
			MT-98.20	4/19/19			TC-71.10	4/21/23	
			MT-98.22	1/17/20			TC-72.20	7/21/23	
			MT-98.28	1/17/20					
							TC-82.10	7/19/19	
			MT-99.20	4/19/19					

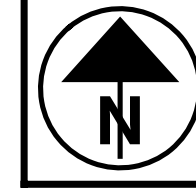
D12-PPM-FY2025

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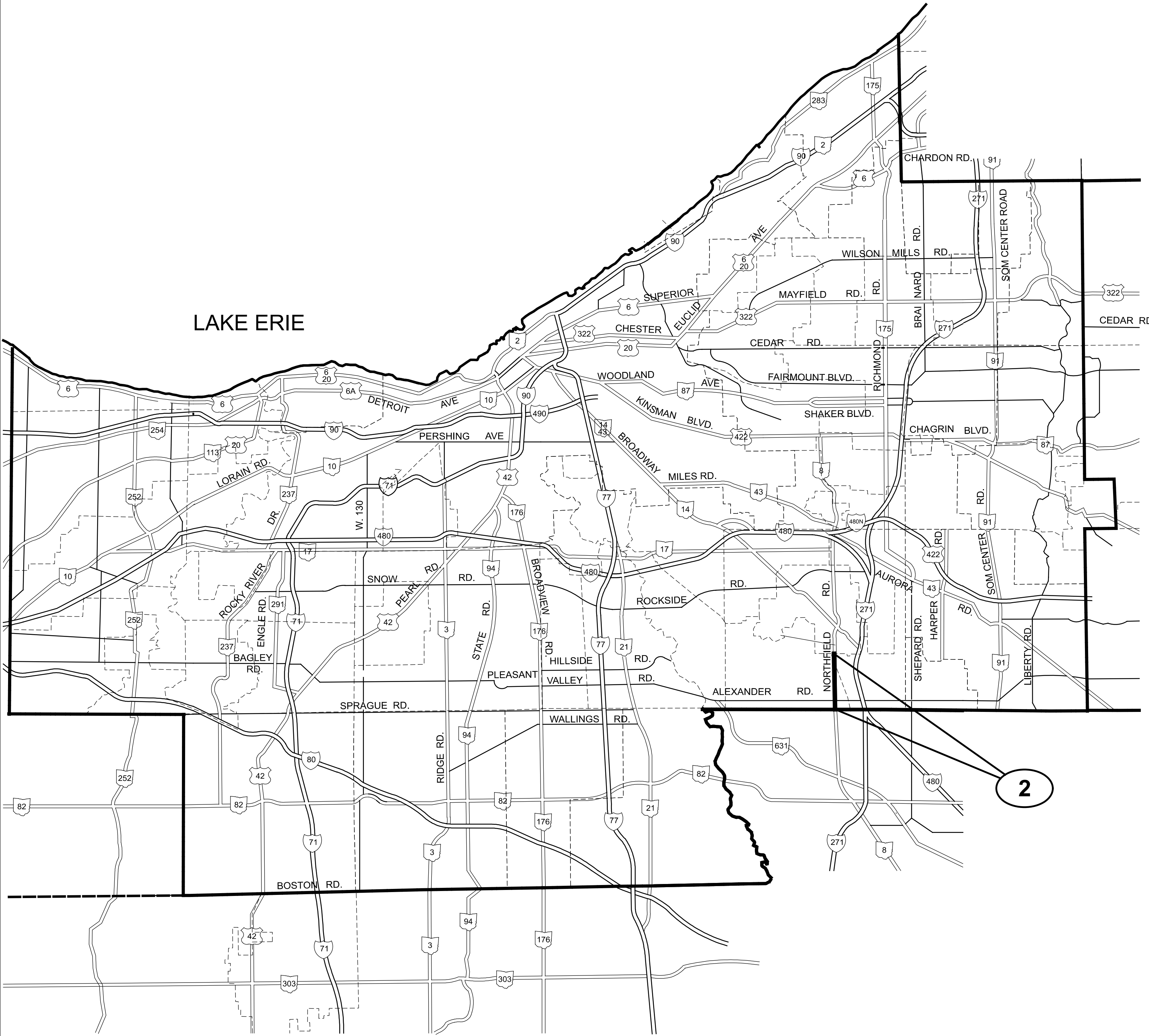
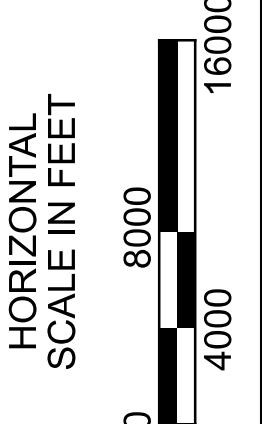
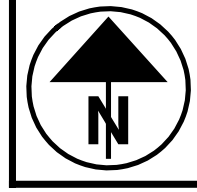
TITLE SHEET

DESIGN AGENCY

DESIGNER
JAG
REVIEWER
DAB 10/11/24
PROJECT ID
113132
SHEET TOTAL
P.01 42

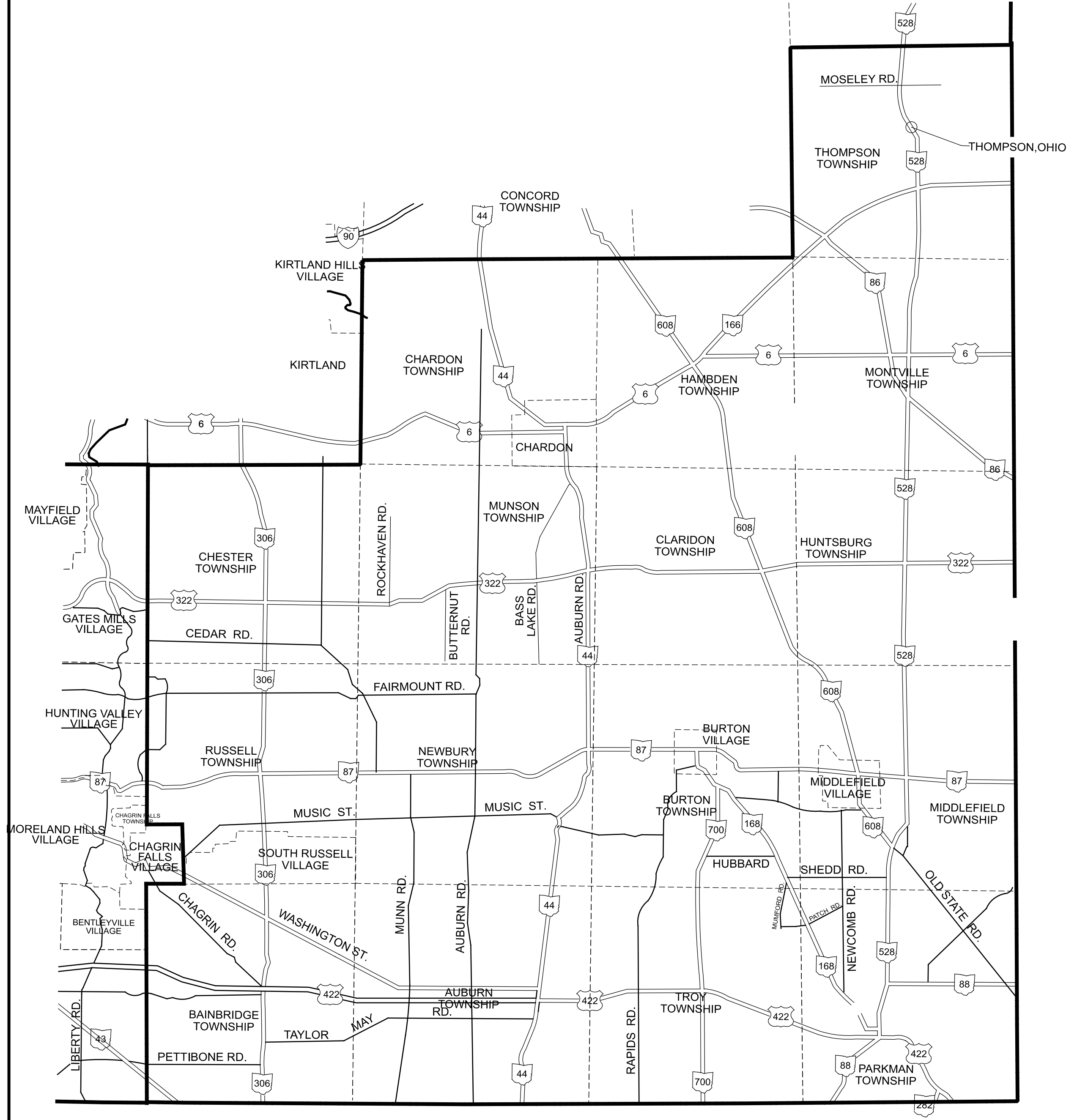
WORK LOCATION 2 - CUYAHOGA COUNTY
 S.R. - 8 (NORTHFIELD RD.) - (RESURFACING - SLM 0.00 to SLM 1.25)
 LAT.: N 41°21'01.7" LONG.: W 81°31'36"
 VILLAGE OF WALTON HILLS



NO WORK - GEAUGA COUNTY



CUYAHOGA COUNTY



GEAUGA COUNTY

LOCATION MAP CUYAHOGA COUNTY / GEAUGA COUNTY

D12-PPM-FY2025

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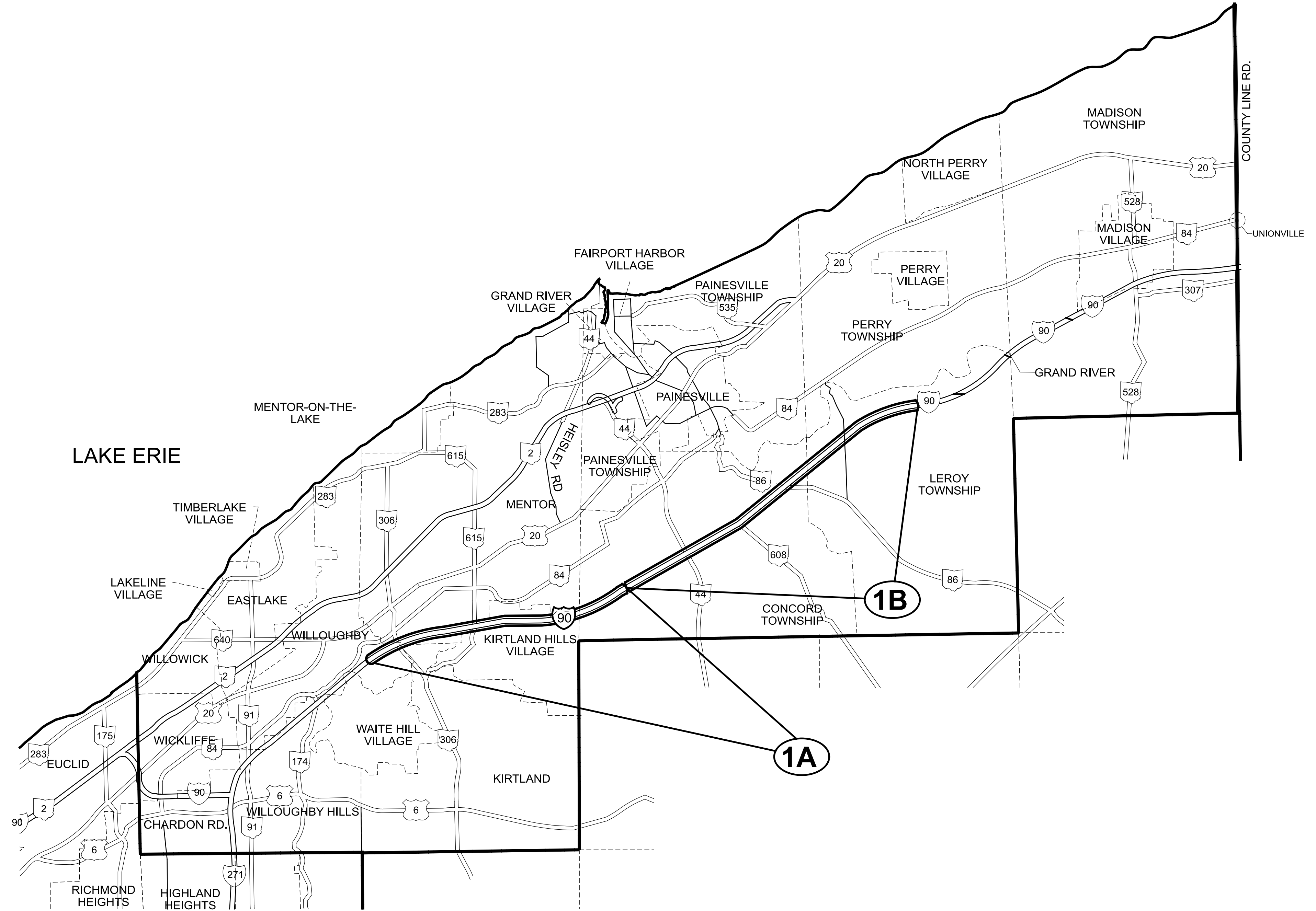
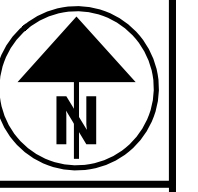
DESIGN AGENCY



DESIGNER
 JAG
 REVIEWER
 DAB 10/11/24
 PROJECT ID
 113132
 SHEET TOTAL
 P.02 42

SPECIFIC WORK LOCATION 1A
 LAKE COUNTY - I.R.-90 (SLM 6.93 to SLM 13.10)
 LAT.: N 41°38'09"± LONG.: W 81°23'06"± - CITY OF WILLOUGHBY, CITY OF MENTOR,
 VILLAGE OF KIRTLAND HILLS,
 CONCORD TOWNSHIP, LEROY TOWNSHIP

SPECIFIC WORK LOCATION 1B
 LAKE COUNTY - I.R.-90 (SLM 13.10 to SLM 21.43)
 LAT.: N 41°39'30"± LONG.: W 81°16'24"± - CONCORD TOWNSHIP
 LEROY TOWNSHIP



LOCATION MAP
 LAKE COUNTY

D12-PPM-FY2025

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LAKE COUNTY

DESIGN AGENCY



DESIGNER	JAG
REVIEWER	DAB
DATE	10/11/24
PROJECT ID	113132
SHEET	TOTAL
P.03	42

GENERAL

Project Description

This project consists of resurfacing and minor rehabilitation to locations throughout Cuyahoga and Lake Counties in District 12.

District Pavement Preventive Maintenance contract for SFY 2025.

Work Location 1A
(IR-90 – Concrete Pavement Repairs) :
Perform pavement repairs, As Directed
by the Project Engineer

Work Location 1B
(IR-90 – Pressure Relief Joint Repairs) :
Perform Relief Joint Repairs, As Directed
by the Project Engineer

Work Location 2
(SR-8 (Northfield Rd.) – Resurfacing of Asphalt Pavement) :
Perform resurfacing, As Directed
by the Project Engineer

Right Of Way

All work shall be performed within the existing Right of Way or easements.

Existing Typical Sections

Existing typical sections 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 typical sections, the Contractor shall refer to the previous construction plans.

These plans may be reviewed at the following location:

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

Work limits

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

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.

Utilities

There are no verified underground utilities shown on this plan. The nature of the work required by this project will not affect any known underground utilities that exist under or adjacent to the work area.

Cooperation Among Contractors

The Contractor shall cooperate and coordinate his/her operations with the Contractors on other projects that may be in force during the life of the contract. No waiver of any provisions of 105.07 of the Construction and Material Specifications is intended.

Plan Sheet Stationing

The roadway was not surveyed prior to the preparation of these plans. Previous construction plan stationing was used to prepare plan sheets and calculate estimated pavement area quantities and pavement marking quantities.

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 use the Right of Way E-Permitting System at <https://odhcp.bemcorp.net/Accounts/Account/Account> in order to apply for a permit per Section 107.02 of the CMS.

For specific permitting questions, the Contractor can contact the District Permitting Office, (Melvin Safford) at 216-584-2137, (Andrew Tomko) at 216-584-2195 or at District12Permits@dot.ohio.gov.

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.

Protection of Right-of-Way Landscaping

Prior to beginning work, the Contractor, the Project Engineer and a representative of the maintaining agency will review and record all landscaping items within the right-of-way (both within and outside the construction limits). A record of this review will be kept in the Project Engineer's files. Prior to final acceptance, a final review of landscaping items will be made.

Constrict all activities, equipment storage and staging to within the construction limits. Unless otherwise identified in the plans or proposal, the construction limits are identified as 30 feet from the edge of pavement.

Submit a written request to the Project Engineer to use any area outside these limits. The document submitted must clearly identify the area and explain the proposed use and restoration of the area. Use of these areas for disposal of waste material and construction debris, excavation of borrow material and placement of portable plants is prohibited. The request must be approved, in writing, before the Contractor has permission to use the area.

Any items damaged beyond the construction limits, as defined above, will be replaced in kind or as approved by the Project Engineer.

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.

Environmental Commitments

For this project the following environmental commitments shall be adhered to:

1. All work to be within existing right-of-way.
2. No work in streams, wetlands, or pollinator initiative sites.
3. No tree removal.

DESIGN AGENCY



DESIGNER
JAG

REVIEWER
DAB 10/11/24

PROJECT ID
113132

SHEET	TOTAL
P.04	42

ROADWAY AND EROSION CONTROL

Item 623 – Monument Assembly Adjusted To Grade, As Per Plan
Item 623 – Monument Assembly Reconstructed To Grade, As Per Plan

The Contractor and the Engineer shall field verify the location of all existing monument boxes, located within proposed pavement work areas, prior to beginning any work on the monument boxes. The use of metal detection rods may be necessary to locate buried monumentation. Any monument box that is immediately visible on the surface of the existing pavement, or is uncovered during the planing process, shall be adjusted to grade. No inserts or adjusting rings will be permitted. Any monument box that exhibits substantial deterioration as determined by the Engineer requiring more work than would be considered normal for Item 623, Monument Box Adjusted To Grade shall be reconstructed. The Engineer shall make the final determination of whether each monument box is to be adjusted or reconstructed. Where a monument box is either being adjusted to grade or reconstructed to grade requires a new frame and cover, the frame and cover will be paid for under Item 611, Miscellaneous Metal.

When performing this item, ensure all castings and monuments are clean and free of debris. Remove any existing sections of the monument identified as a potential failure point by the Engineer. Use of salvaged sections of the monuments is permitted upon the approval of the Engineer.

In addition to adjusting or reconstructing the casting vertically, the pay items shall include monument referencing and centering the casting over the existing iron pin or stone monument.

All work related to adjusting or reconstructing monument boxes to grade will be in accordance with Specifications 623.04, and 623.05 of the ODOT Construction and Materials Specifications.

All labor, material, equipment, and incidentals needed to complete this work is to be paid using the contract bid price per each for Item 623 – Monument Assembly Adjusted To Grade, As Per Plan or Item 623 – Monument Assembly Reconstructed To Grade, As Per Plan. The following estimated quantities have been carried to the General Summary for use As Directed By The Engineer.
If none are needed, these items are to be non-performed.

For estimating purposes,
(Location 2 -SR 8: Monument Assembly Adjusted To Grade, As Per Plan: 2)
(Location 2 -SR 8: Monument Assembly Reconstructed To Grade, As Per Plan: 1)

Item 623 – Monument Assembly Adjusted To Grade, As Per Plan **2 Each**
Item 623 – Monument Assembly Reconstructed To Grade, As Per Plan **1 Each**

DRAINAGE

Review Of Drainage Facilities

Before any work is started on the project and again before final acceptance by the state, representatives of the state and the Contractor, along with local representatives, shall make an inspection of all existing sewers which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Records of the inspection shall be kept in writing by the state.

All new conduits, inlets, catch basins and manholes constructed as part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the state.

All existing sewers inspected initially by the above mentioned parties shall be maintained and left in a condition reasonably comparable to that determined by the original inspection. Any change in the condition resulting from the Contractor's operations shall be corrected by the Contractor to the satisfaction of the Engineer .

Payment for all operations described above shall be included in the contract price for the pertinent 611 drainage items.

Item Special – Miscellaneous Metal

Existing castings may prove to be unsuitable for reuse, as determined by the Engineer . It shall be the Contractor's responsibility to provide the castings of the required type, size, and strength (heavy duty) for the particular structure in question. All materials must meet item 611 of the CMS and shall have the prior approval of the Engineer .

The Contractor is cautioned to use extreme care in the removal, storage, and replacement of all existing castings. Castings damaged by the negligence of the Contractor, as determined by the Engineer, shall be replaced with the proper new castings at the expense of the Contractor.

The Contractor shall not order materials until authorized by the Engineer, and if none are needed, the item shall be non-performed.

For estimating purposes,
(Location 1 -IR 90: Miscellaneous Metal: 500)
(Location 2 -SR 8: Miscellaneous Metal: 10,000)

The following estimated quantity has been carried to the General Summary for use As Directed by the Engineer:

Item Special – Miscellaneous Metal..... **10,500 lbs**

Item 611 – Drainage Structure, Misc.: Cleanout

This work shall consist of removing sediment, debris, tufa and thick mineral deposits from an existing drainage structure located within the project limits. All material removed shall be disposed of as per 105.16 and 105.17. All drainage structures shall be cleaned out to the satisfaction of the Engineer.

The cleaning of these drainage structures shall not cause blockages in the existing pipe downstream of the cleaning area. Any blockages caused by the contractor, downstream of the work area, shall be cleaned and inspected by the contractor at no additional cost to The State of Ohio.

Cleanout of the drainage structures shall be paid for at the unit bid price for Item 611 – Drainage Structure, Misc.: Cleanout. This price shall include the cost for all material, equipment, labor and all incidentals required to complete the cleanout. The following estimated quantity (**Location 2-SR-8: 15 catch basins**) have been carried to the General Summary:

Item 611 – Drainage Structure Misc.: Cleanout..... **15 Each**

Castings Adjusted To Grade

The following estimated quantities shall be used, As Directed by the Engineer, to adjust castings to the finished roadway elevation. If none are needed, these items are to be non-performed.

The time between adjusting the castings and resurfacing shall be kept to an absolute minimum. No adjusting rings shall be permitted. When performing this work, the pavement shall be sawcut prior to removal and hook bolts shall be used where practical to connect existing pavement to new concrete.

Castings adjusted to grade, reconstructed to grade or total replacement /reconstructed work shall, where required, include the removal and replacement of any existing concrete blockout, curb and/or pavement and sidewalk behind curb using Moderate-Setting concrete (Class QC MS) or, if Approved/Directed by the Engineer, Fast-Setting concrete (Class QC FS). To facilitate removal, the blockout pavements shall be sawed full depth along the limits of their removal unless otherwise Designated/Directed by the Engineer. All costs associated with the blockout removal/replacements shall be considered incidental to the per each bid items.

For estimating purposes,
(Location 2 -SR 8: Catch Basin Adjusted to Grade, As Per Plan: 21)
(Location 2 -SR 8: Manhole Adjusted to Grade, As Per Plan: 18)
(Location 2 -SR 8: Valve Box Adjusted to Grade, As Per Plan: 3)
(Location 2 -SR 8: Inlet Adjusted to Grade, As Per Plan: 1)

The following quantities have been carried to the General Summary:

Item 611 – Catch Basin Adjusted to Grade, As Per Plan **21 Each**
Item 611 – Manhole Adjusted to Grade, As Per Plan **18 Each**
Item 638 – Valve Box Adjusted to Grade, As Per Plan **3 Each**
Item 611 – Inlet Adjusted to Grade, As Per Plan **1 Each**

Castings Reconstructed To Grade

The Contractor and Field Engineer shall field check all existing catch basins, manholes, or monument boxes located within the limits of the project. Any casting found that exhibits substantial deterioration and requires more work than what is specified under "castings adjusted to grade" shall be "reconstructed to grade", at locations to be Determined by the Engineer . If none are needed, these items are to be non-performed.

Castings adjusted to grade, reconstructed to grade or total replacement /reconstructed work shall, where required, include the removal and replacement of any existing concrete blockout, curb and/or pavement and sidewalk behind curb using Moderate-Setting concrete (Class QC MS) or, if Approved/Directed by the Engineer, Fast-Setting concrete (Class QC FS). To facilitate removal, the blockout pavements shall be sawed full depth along the limits of their removal unless otherwise Designated/Directed by the Engineer. All costs associated with the blockout removal/replacements shall be considered incidental to the per each bid items.

For estimating purposes,
(Location 2 -SR 8: Catch Basin Reconstructed to Grade: 1)
(Location 2 -SR 8: Inlet Reconstructed to Grade: 1)

The following quantities have been carried to the General Summary:

Item 611 - Catch Basin Reconstructed To Grade **1 Each**
Item 611 - Inlet Reconstructed To Grade **1 Each**

PAVEMENT

Alignment And Profile

Place the proposed pavement to follow the alignment and profile of the existing pavement. Place the proposed asphalt concrete overlay as shown on the typical sections. The intent of the plans is to maintain the existing profile while smoothing out ruts and bumps.

Asphalt Concrete Surface Course Sealing Requirements

In addition to the gutter sealing requirements specified in SCD BP-3.1 and C&MS 401.15, after completion of the surface course, the Contractor shall use a certified 702.01 PG binder to seal the following locations:

- All castings including but not limited to monuments, manholes, water valves, catch basins, curb inlets.
- Butt joints and feather joints including bridge approaches.
- Forward joint for driveway asphalt and trailing joint when butting to existing asphalt drive.
- Perimeter of all pavement repairs or other asphalt inlays when pavement repairs/inlays are not overlaid with an asphalt concrete surface course.
- All cold longitudinal joints between paved shoulders and guardrail asphalt.

The material used shall be a certified 702.01 PG binder. The width of the sealer shall be 2-3 inches.

Any additional costs associated with the work identified in this note shall be included in the appropriate asphalt concrete surface course item of work.

Longitudinal Joints (Flexible Pavement)

Longitudinal joints between a pavement lane and adjoining shoulder or speed change lane, and between a speed change lane and the adjoining shoulder shall be made the same day. All longitudinal joints shall be hot with the exception of one cold joint per roadway. Locate the cold joint along the centerline or a lane line. Longitudinal joint locations shall be as approved by the Engineer. Each ramp shall have a maximum of one longitudinal cold joint located approximately halfway across the ramp.

**Item 442 – Asphalt Concrete Surface Course, 12.5mm, Type A (449),
 As Per Plan, PG76-22M**

(Locations 1A - Lake County – IR-90)

The coarse virgin aggregate for this item shall be limited to a blend of air cooled blast furnace slag (ACBFS) or Trap Rock from Ontario and limestone.

The Contractor shall use a minimum 60% of ACBFS or Trap Rock from Ontario with limestone comprising the remaining percentage. At least 50% of the fine virgin aggregate for this item shall be limited to ACBFS or Trap Rock from Ontario.

Table 442.02-2 applies except No. 4 sieve requirements are 52 to 60 Total Percent Passing. For the No. 4 sieve, do not exceed 63 in production.

When ACBFS is used for a fraction of the coarse aggregate, provide a total asphalt binder content greater than or equal to 6.2 percent. If ACBFS makes up 100% of the coarse aggregate, apply the binder content requirements of CMS 442.

TRAFFIC CONTROL

Raised Pavement Markers

Install raised pavement markers for lane lines at a spacing of eighty feet (80') center-to-center.

Item 621 – Raised Pavement Marker Removed

This item shall include the removal and disposal of existing RPMs.



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

See each Work Location specific Notes for additional Maintenance of Traffic Notes and Work Hours.

III. Lane Closure, Planing And Paving Restrictions

- All closures shall be in accordance with the applicable standard construction drawing(s).
- All through traffic lanes shall be kept open at all times except during hours of construction. Maintain a minimum of two 10 foot lanes when a flagger or temporary signal is not present.
- 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.
(2-Lane roads – Not Used)

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.
(2-Lane roads – Not Used)

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.



MAINTENANCE OF TRAFFIC (Cont'd)

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 (Observed)	(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 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 in the amount of \$100 for each minute the above-described lane closure restrictions are violated.

Schedule of Through Lanes to be Maintained – S.R.-8

S.R.-8	
Section	Permitted Lane Reductions
	One Lane Closure
SR-8 NB & SB: SLM 0.00 To SLM 1.25 (2 Lanes NB) (2 Lanes SB)	Weekdays 9:00am – 3:00pm 7:00pm – 6:00am
	Weekends 7:00pm Fri – 6:00am Mon

The Contractor shall be assessed a disincentive in the amount of \$50 for each minute the above-described SR-8 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 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.

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 as per the lane value contract table for lanes that are closed to traffic during times designated as "Lane Closure Not Permitted" as stated in these plans and on the ODOT PLCM Website.

Lane Value Contract Table

Description of Critical Lane/Ramp to be Maintained	Direction	Lanes	Restricted Time Period	Time Unit	Disincentive (per time unit per lane)
IR-90:					
IR-90	EB	3	As Per the Permitted Lane Closure Schedule	Each Minute	\$270
IR-90	WB	3	As Per the Permitted Lane Closure Schedule	Each Minute	\$270

The Contractor shall be assessed a disincentive in the amount of 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.

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.

Work Zone Markings

The estimated quantities have been carried to the General Summary for use at locations identified 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 markings.

Work zone temporary marking widths shall be as given in CMS 614 or 641.

The estimated quantities in the sub-summaries have been carried to the General Summary for use As Directed By The Engineer.

Permanent Pavement Markings

After placing the surface course, the Contractor may place permanent pavement markings instead of placing work zone pavement markings, which shall be non-performed at these locations.



MAINTENANCE OF TRAFFIC (Cont'd)

Maintaining Traffic And Sequence Of Operations – Asphalt Concrete

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 1-1/2" discontinuity in the elevation of the travelled 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 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, provided the transition is removed in a subsequent operation within 24 hours.

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.

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.

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.

Item 614 – Asphalt Concrete For Maintaining Traffic

This item shall be used to install and remove temporary asphalt ramps at butt joints and drainage/utility castings where required. Material shall be removed prior to the placement of the next course of asphalt. The following estimated quantity has been carried to the General Summary to accomplish this item of work, As Directed By The Engineer.

Item 614 – Asphalt Concrete For Maintaining Traffic **50 Cu Yd**

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 C&MS 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 C&MS 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) should 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 signalized 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.

(Location 1A / 1B – LAK IR 90 - 350 HRS)
(Location 2 – CUY SR 8 - 50 HRS)
Item 614 – Law Enforcement Officer
with Patrol Car for Assistance **400 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.

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.

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MAINTENANCE OF TRAFFIC (Cont'd)

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 estimated quantity provides for
(two) PCMS units at **2 SNMT (60 days)** each.
(Location 1A & 1B –LAK IR 90 – 2 units, 60 days) (4 SNMT)

The estimated quantity provides for
(two) PCMS units at **2 SNMT (60 days)** each.
(Location 2 –CUY SR 8 – 2 units, 60 days) (4 SNMT)

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. The Contractor shall only be paid for PCMS units when they are in operation on the project as specified in the plans or by the Engineer.

Item 614 – Portable Changeable Message Sign,
As Per Plan **8 SNMT**

Portable Changeable Message Signs for Lane Closure(s)

The Contractor shall place a PCMS 0.5 to 2 miles in advance of any lane closures or as directed by the Engineer. The PCMS shall read: ROAD WORK AHEAD/RIGHT (LEFT) (2) LANE(S) CLOSED. If traffic becomes congested and there is stopped traffic, the message board shall be changed to: STOPPED TRAFFIC AHEAD/PREPARE TO STOP. The WTS shall be responsible for monitoring traffic during lane closures and changing the message signs as necessary. The message shall be changed when there is no lane closure (e.g. ROAD WORK AHEAD/NIGHTLY LANE CLOSURES), or per the Engineer.

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MAINTENANCE OF TRAFFIC (cont'd)

Order Of Operations

The location number given to each location of work is to differentiate the location and is not intended to direct the Contractor to perform work in any specific order. Work at each location can occur concurrently.

The work on **Location 1A**, shall not start before July 17, 2025.

72 hours prior to work starting at each location or closure, a PCMS shall be placed As Directed by the Engineer, to inform the motoring public of upcoming work or closures.

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.

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.

This item of work shall be used to provide signs that are beyond the requirements of the signage that is detailed in the standard construction drawings and the OMUTCD.

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:

- (Location 1A & 1B – LAK IR 90 - 200 SF)
- (Location 2 – CUY SR 8 - 200 SF)

Item 630 – Signing Misc.: Additional Signs, Ground Mounted, As Directed By The Engineer **400 Sq Ft**

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 restricts, 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 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 re-erected 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 **10 Each**

Item 614 Maintaining Traffic – Work Zone Speed Zone Signs for Freeway Resurfacings

The following Work Zone Speed Zone (WZSZ) Speed Limit Revision(s) have been approved for use on this project when work zone conditions and factors are met as described below:

WZSZ Revision Number	County & Route	Direction
WZ-65275-00	LAK-90-6.98-21.43	EB & WB

Potential WZSZ locations shall have an original (pre-construction) posted speed limit of ≥55 mph, a qualifying work zone condition of at least 0.5 mile in length, an expected work duration of at least three hours, and a work zone condition in place that reduces the existing functionality of the travel lanes or shoulders (i.e., lane closure, lane shift, crossover, contraflow and/or shoulder closure). The length of the work zone condition is measured from the beginning of the taper for the subject work zone condition impacting the travel lanes and/or shoulder to the end of the downstream taper, where drivers are returned to typical alignment. An expected work duration of at least three hours is required to balance the additional exposure created by installing and removing WZSZ signing with the time needed to complete the work.

If the work zone meets these minimum criteria, it shall be analyzed further using Table 1 below to determine if and when it qualifies for a speed limit reduction. Depending on the original posted speed limit, the type of temporary traffic control used, and whether or not workers are present, a warranted WZSZ will vary in the approved speed limit to be posted over time.

C&MS Item 614, Paragraph 614.02(B), indicates that two directions of a divided highway are considered separate highway sections. Therefore, if the work on a multi-lane divided highway is limited to only one direction, a speed limit reduction in the direction of the work does not automatically constitute a speed limit reduction in the opposite direction. Each direction shall be analyzed independently from each other.

All WZSZs fluctuate between two approved reduced speed limits or between an approved reduced speed limit and the original posted speed limit. Only one of two signing strategies shall be used to implement a WZSZ.

WZSZs using DSL Sign Assemblies shall be in accordance with this note, Approved List, Supplemental Specification (SS) 808 and 908, and Traffic SCD MT-104.10.

When looking up the warranted work zone speed limits, always use the original, preconstruction, posted speed limit. Do not use a prior or current work zone speed limit as a look up value in the table. Positive Protection is generally regarded as portable barrier or other rigid barrier in use along the work area within the subject warranted work zone condition. Without Positive Protection is generally regarded as using drums, cones, shadow vehicle, etc., along the work area within the subject warranted work zone condition. Workers are considered as being present when on-site, working within the subject warranted work zone condition. When the work zone condition reducing the existing functionality of the travel lanes or shoulders is removed, the speed limit displayed shall return to the original posted speed limit.

Table 1: Warranted Work Zone Speed Limits (MPH) for Work Zones on High-Speed (≥55 mph) Multi-Lane Highways

Original Posted Speed Limit	WITH Positive Protection		WITHOUT Positive Protection	
	Workers Present	Workers NOT Present	Workers Present	Workers NOT Present
70	60	65	55	65
65	55	60	50	60
60	55	60	50	60
55	50	55	45	55

The following estimated quantity has been carried to the General Summary.

Item 614 – Digital Speed Limit (DSL) Sign Assembly **12 SNMT**
Assuming 4 DSL Sign Assemblies for 3 Months

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5	9	10	11	17	19	20	36	37	38	39				01/IMS/05	02/S>2/05							
ROADWAY																						
						486								486		202	23001	486	SY	PAVEMENT REMOVED, AS PER PLAN	18	
				15										15		203	10000	15	CY	EXCAVATION		
2															2	623	39501	2	EACH	MONUMENT ASSEMBLY ADJUSTED TO GRADE, AS PER PLAN	5	
1															1	623	39601	1	EACH	MONUMENT ASSEMBLY RECONSTRUCTED TO GRADE, AS PER PLAN	5	
EROSION CONTROL																						
														800	200	832	30000	1,000	EACH	EROSION CONTROL		
DRAINAGE																						
21															21	611	98631	21	EACH	CATCH BASIN ADJUSTED TO GRADE, AS PER PLAN	5	
1															1	611	98634	1	EACH	CATCH BASIN RECONSTRUCTED TO GRADE		
1															1	611	99151	1	EACH	INLET ADJUSTED TO GRADE, AS PER PLAN	5	
1															1	611	99154	1	EACH	INLET RECONSTRUCTED TO GRADE		
18															18	611	99655	18	EACH	MANHOLE ADJUSTED TO GRADE, AS PER PLAN	5	
10,500														500	10,000	SPECIAL	61199820	10,500	LB	MISCELLANEOUS METAL	5	
15															15	611	99900	15	EACH	DRAINAGE STRUCTURE, MISC.: CLEANOUT	5	
PAVEMENT																						
							325									325	251	01001	325	SY	PARTIAL DEPTH PAVEMENT REPAIR (441), AS PER PLAN	36
				100												100	252	01001	100	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "A"	17
				50												50	252	01001	50	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "B"	17
				100												100	252	01001	100	SY	FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN, "C"	17
				135												135	253	02001	135	CY	PAVEMENT REPAIR, AS PER PLAN	17
					15,407										15,407	254	01010	15,407	SY	PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, (1.5")		
				15											15	304	20000	15	CY	AGGREGATE BASE		
					1,233										1,233	407	13900	1,233	GAL	TACK COAT, 702.13		
									2,916						2,916	407	20000	2,916	GAL	NON-TRACKING TACK COAT		
									900						900	424	14100	900	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (449), (1.0")		
						641									641	442	22101	641	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG76-22M, (1.5")	6	
						1,091									1,091	SPECIAL	45130000	1,091	FT	PRESSURE RELIEF JOINT, TYPE A	2	
									2,191						2,191	875	10000	2,191	LB	LONGITUDINAL JOINT ADHESIVE		
									32,393						32,393	897	01010	32,393	SY	PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1.0")		
WATER WORK																						
3															3	638	10801	3	EACH	VALVE BOX ADJUSTED TO GRADE, AS PER PLAN	5	
TRAFFIC CONTROL																						
					178										178	621	00100	178	EACH	RPM		
					134										134	621	54000	134	EACH	RAISED PAVEMENT MARKER REMOVED		
					3.89										3.89	642	00104	3.89	MILE	EDGE LINE, 6", TYPE 1		
					0.35										0.35	642	00204	0.35	MILE	LANE LINE, 6", TYPE 1		
									2.36						2.36	646	10100	2.36	MILE	LANE LINE, 4"		
									1.23						1.23	646	10200	1.23	MILE	CENTER LINE		
									695						695	646	10300	695	FT	CHANNELIZING LINE, 8"		
									259						259	646	10400	259	FT	STOP LINE		
									230						230	646	10510	230	FT	CROSSWALK LINE, 12"		
									165						165	646	10600	165	FT	TRANSVERSE/DIAGONAL LINE		
									11						11	646	20300	11	EACH	LANE ARROW		
									115						115	646	20502	115	FT	DOTTED LINE, 4"		
TRAFFIC SIGNALS																						
								5							5	632	26501	5	EACH	DETECTOR LOOP, AS PER PLAN	37	

GENERAL SUMMARY

DESIGN AGENCY



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PROJECT ID

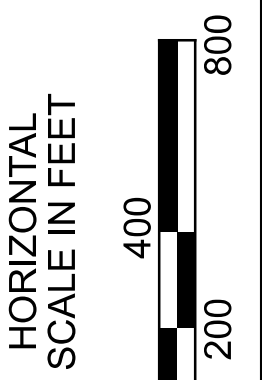
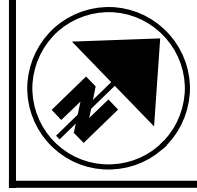
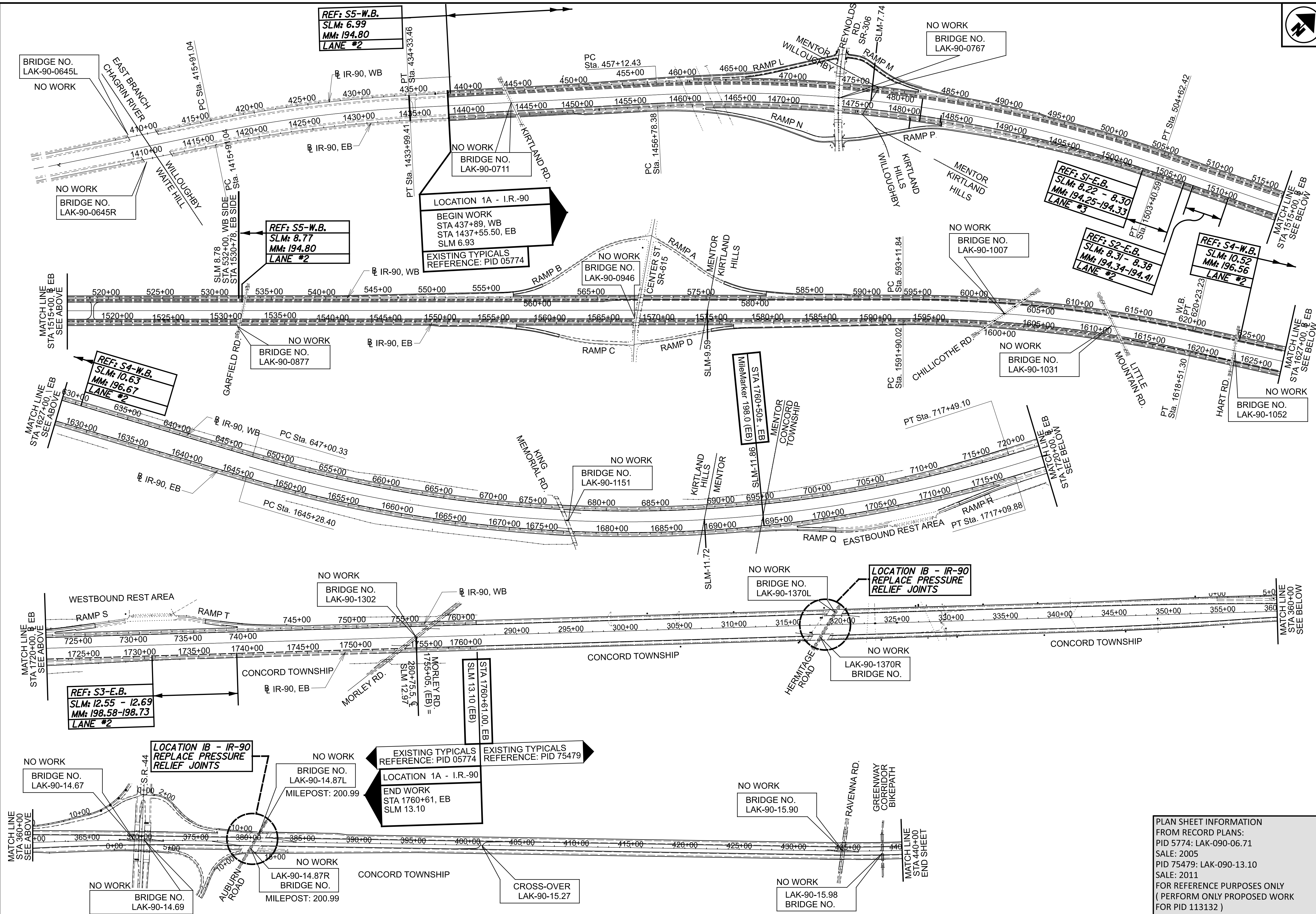
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TOTAL

42



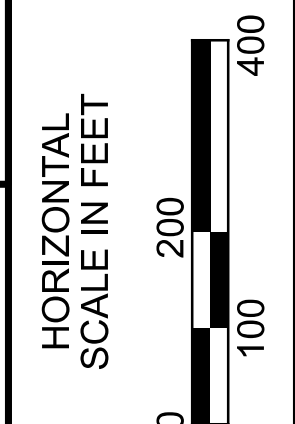
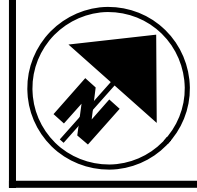
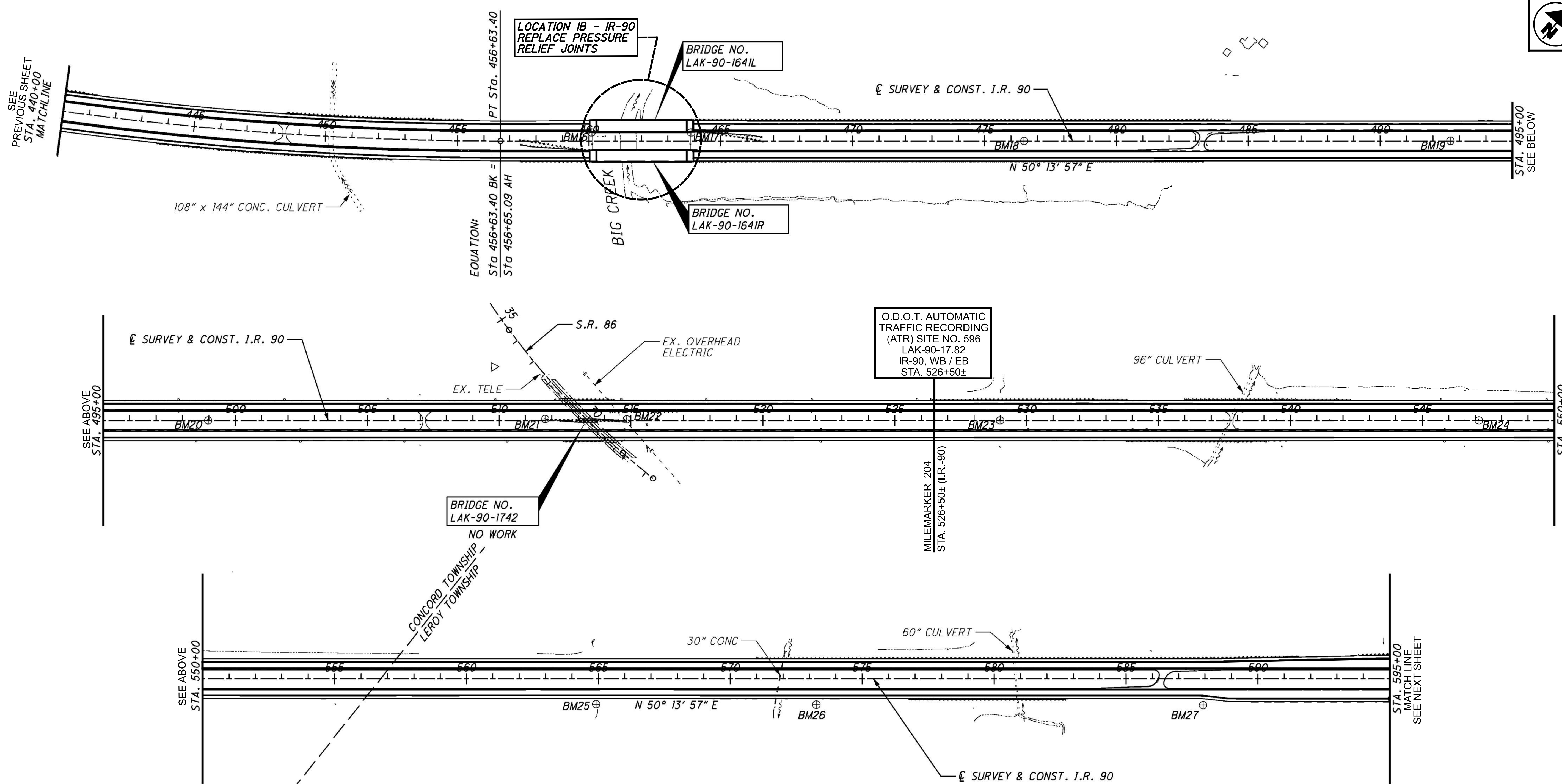
LOCATION 1A / 1B - PLAN SHEET
LAKE COUNTY - I.R.-90

DESIGN AGENCY



DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	113132
SHEET TOTAL	P.14 42

PLAN SHEET INFORMATION FROM RECORD PLANS:
 PID 5774: LAK-090-06.71
 SALE: 2005
 PID 75479: LAK-090-13.10
 SALE: 2011
 FOR REFERENCE PURPOSES ONLY
 (PERFORM ONLY PROPOSED WORK FOR PID 113132)



LOCATION 1A / 1B - PLAN SHEET
 LAKE COUNTY - I.R. 90

PLAN SHEET INFORMATION
 FROM RECORD PLANS:
 PID 75479
 LAK-090-13.10
 SALE: 2011
 FOR REFERENCE PURPOSES ONLY
 (PERFORM ONLY PROPOSED WORK
 FOR PID 114483)

DESIGN AGENCY



DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	113132
SHEET	TOTAL
P.15	42

LOCATION 1A & 1B – ADDITIONAL NOTES
(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 1A & 1B

This project Location 1A consists of flexible pavement repairs to a rigid concrete pavement on IR-90 in Lake County with the work section beginning just West of Kirtland Rd. to just pass the IR-90 bridge of Morley Rd. on both the EB and WB sides.

The items of work will include:

1. Location 1A - Perform pavement repairs to the unbonded concrete overlay section and full depth concrete pavement section of I.R.-90 in Lake County, As Directed by the Engineer, using the asphalt quantities provided.
2. Location 1B - Perform replacement of pressure relief joint repairs on I.R.-90 in Lake County, As Directed by the Engineer, using the quantities provided at the below bridges:
LAK-90-1370R & L - OVER HERMITAGE RD.
LAK-90-1487R & L - OVER AUBURN RD.
LAK-90-1641R & L - OVER BIG CREEK
LAK-90-2003R & L - OVER PAINE CREEK
LAK-90-2110R & L - OVER PAINE RD.

Project – Location 1A & 1B - 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 Times” list, which is located on the ODOT website:

<https://www.dot.state.oh.us/districts/D12/HighwayManagement/PermittedLaneClosures/ODO TD 12 Permitted Lane Closures Revision 16 revised January 1 2020.pdf>

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, unless directed by the Engineer.
Shoulder closures shall only be allowed at the times specified for lane closures, unless directed by the Engineer.

Item 253 - Pavement Repair, As Per Plan

This item shall be used to repair surface distresses in the existing concrete pavement as detailed on sheet “LOCATION 1A – PAVEMENT REPAIR DETAILS” and as outlined below.

The depth of the repairs shall be between 4-5 inches. The size and location of the repair areas shall be determined by the Engineer.

The contractor shall sawcut the edges of the repair to a minimum depth of 4 inches. Use replacement asphalt materials conforming to the requirements of Item 442 – Asphalt Concrete Surface Course, 12.5mm.
The repair shall be sealed with bituminous material per 702.01 .

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 253, Pavement Repair, As Per Plan

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 253 - Pavement Repair, As Per Plan **135 CY**

Item 304 – Aggregate Base

If, after removal of the rigid pavement the Engineer determines that the subbase or subgrade has failed or is pumping, the Engineer will direct the Contractor to excavate the unsuitable material and replace it with compacted 304 aggregate.

The quantities below of Item 203 - Excavation and Item 304 - Aggregate Base have been provided to repair said failed subbase or subgrade areas.

Item 203 – Excavation	15	CY
Item 304 – Aggregate Base	15	CY

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “A”

This item shall be used to perform a full depth flexible pavement repair the existing concrete base pavement as detailed on sheet “LOCATION 1A – PAVEMENT REPAIR DETAILS” and as described below. The depth of the full depth repair shall be 13.5 inches.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material.
The repair shall be sealed with bituminous material per 702.01 .
Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “A”

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “A” . . . **100 SY**

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “B”

This item shall be used to perform a full depth flexible pavement repair of the existing unbonded concrete overlay pavement in a normal pavement section as detailed on sheet “LOCATION 1A – PAVEMENT REPAIR DETAILS” and as described below. The depth of the full depth repair shall be between 9.5-10.5 inches. The concrete base under the unbonded concrete overlay shall remain in place.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material.
The repair shall be sealed with bituminous material per 702.01 .
Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “B”

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “B” . . . **50 SY**

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “C”

This item shall be used to perform a full depth flexible pavement repair of the existing unbonded concrete overlay pavement in a superelevated pavement section as detailed on sheet “LOCATION 1A – PAVEMENT REPAIR DETAILS” and as described below. The depth of the full depth repair shall be varied between 9.5-15.5 inches. The concrete base under the unbonded concrete overlay shall remain in place.

The Engineer will locate and mark all areas for full depth repair before the start of full depth sawing. Saw the limits of the full depth repair at the limits of the area designated by the Engineer to be repaired.

After the existing concrete pavement has been removed, place Item 301 material up to 1-1/2 inches from the top of the repair. The last 1-1/2 inches shall be replaced with Item 442 - Asphalt Concrete Surface Course, 12.5mm material.
The repair shall be sealed with bituminous material per 702.01 .
Complete all areas of full depth pavement removal and replacement at the end of each shift operation and open to the normal flow of traffic.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “C”

The following estimated quantity shall be carried to the General Summary to be used as outlined above:

Item 252 - Full Depth Rigid Pavement Removal and Flexible Replacement, As Per Plan “C” . . . **100 SY**

DESIGN AGENCY



DESIGNER

JAG

REVIEWER

DAB 10/11/24

PROJECT ID

113132

SHEET TOTAL

P.17 | 42

Project Location 1B

Item 202 - Pavement Removed, As Per Plan

For work designated in "LOCATION 1B-PRESSURE RELIEF JOINT REPAIRS",
This item shall be used in repairing pressure relief joints in the existing concrete pavement.

The depth of the removals shall be based on the typical sections in the plans.
The size and location of the repair areas shall be determined by the Engineer.
(For estimating purposes, the width is based on 4 FT.)

The contractor shall take care to avoid damaging surrounding concrete pavement.

All costs associated with this item including the sawcutting, labor, materials and equipment shall be included in Item 202 - Pavement Removed, As Per Plan.

The estimated quantities in the sub-summary shall be carried to the General Summary to be used as outlined above.

Item Special – Pressure Relief Joint, Type A

This item shall be used in replacing pavement pressure relief joints at the designated locations in the plans.

Description: This work consists of furnishing and placing asphalt concrete, Item 442 Asphalt Concrete Intermediate Course, 12.5mm, Type A (448), to reconstruct Pressure Relief Joint, Type A, in accordance with the details shown in the plans.

Place and compact asphalt concrete in equal courses not exceeding 3" with compaction equipment as Approved by the Engineer.

The finished surface of the asphalt concrete shall be flush to 1/4-inch above the adjacent concrete pavement and approach slab surface.

Where an existing curb is present, form asphalt concrete in place to conform with the adjacent curb.

Measurement and Payment: The Department will measure this item by the number of linear feet complete in place and measured along the skew at the end of the bridge approach slab.

The Department will pay for completed and accepted quantities at the contract price per foot for:

Item Special – Pressure Relief Joint, Type A

DESIGN AGENCY



DESIGNER

JAG

REVIEWER

DAB 10/11/24

PROJECT ID

113132

SHEET

P.18

TOTAL

42

REF. NO.	SHEET NO.	PLAN SPLIT NO.	IR-90 (LAKE COUNTY)						LANE / RAMP	LENGTH FT.	BEGIN WIDTH FT.	ENDING WIDTH FT.	AVERAGE WIDTH FT.	AREA SQ. YD.	254 PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, (1.5") SY	407 TACK COAT, 702.13 GAL	442 ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE A (449), AS PER PLAN, PG76-22M, (1.5") CY	642 LANE LINE, 6", TYPE 1 MILE	614 WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT MILE	642 EDGE LINE, 6", TYPE 1 MILE	614 WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT MILE			621 RAISED PAVEMENT MARKER REMOVED EACH	621 RPM EACH
			STATION	SLM	MileMarker	STATION	SLM	MileMarker																	
IR-90 - SPOT RESURFACING - E.B.																									
S1	1		1502+00	8.22	194.25	1506+00	8.3	194.33	LANE #3	400	12	12	12	533			22	400	400	400	400			3	3
S2	1		1506+85	8.31	194.34	1510+30	8.38	194.41	LANE #2	345	12	12	12	460			19	690	690					4	6
S3	1		1730+70	12.55	198.58	1738+50	12.69	198.73	LANE #2	780	12	12	12	1040			43	750	750	750	750			5	7
IR-90 - SPOT RESURFACING - W.B.																									
S4	1		630+55	10.63	196.67	624+40	10.51	196.56	LANE #2	615	12	12	12	820			34			585	585			4	5
S5	1		532+30	8.77	194.8	438+15	6.99	193.02	LANE #2	9415	12	12	12	12554			523			18830	18830			118	157
SUBTOTALS														15407	1233	641	1840	1840	20565	20565			134	178	
TOTALS CARRIED TO GENERAL SUMMARY														15407	1233	641	0.35 MI	0.35 MI	3.89 MI	3.89 MI			134	178	
PLAN SPLIT #1 TOTAL														15407	1233	641	0.35 MI	0.35 MI	3.89 MI	3.89 MI			134	178	

LOCATION 1A - I.R.-90 - PAVEMENT SUB-SUMMARY

DESIGN AGENCY



DESIGNER
JAG

REVIEWER
DAB 10/11/24

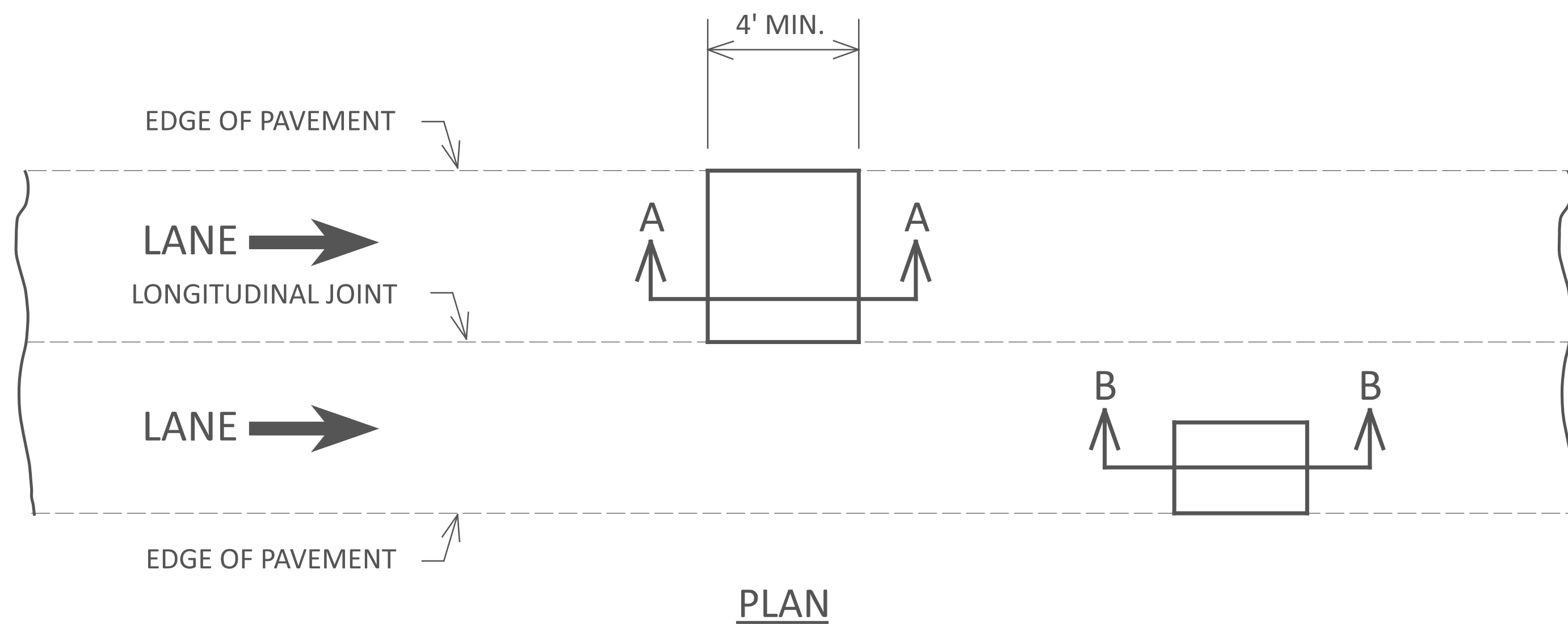
PROJECT ID
113132

SHEET TOTAL
P.19 42

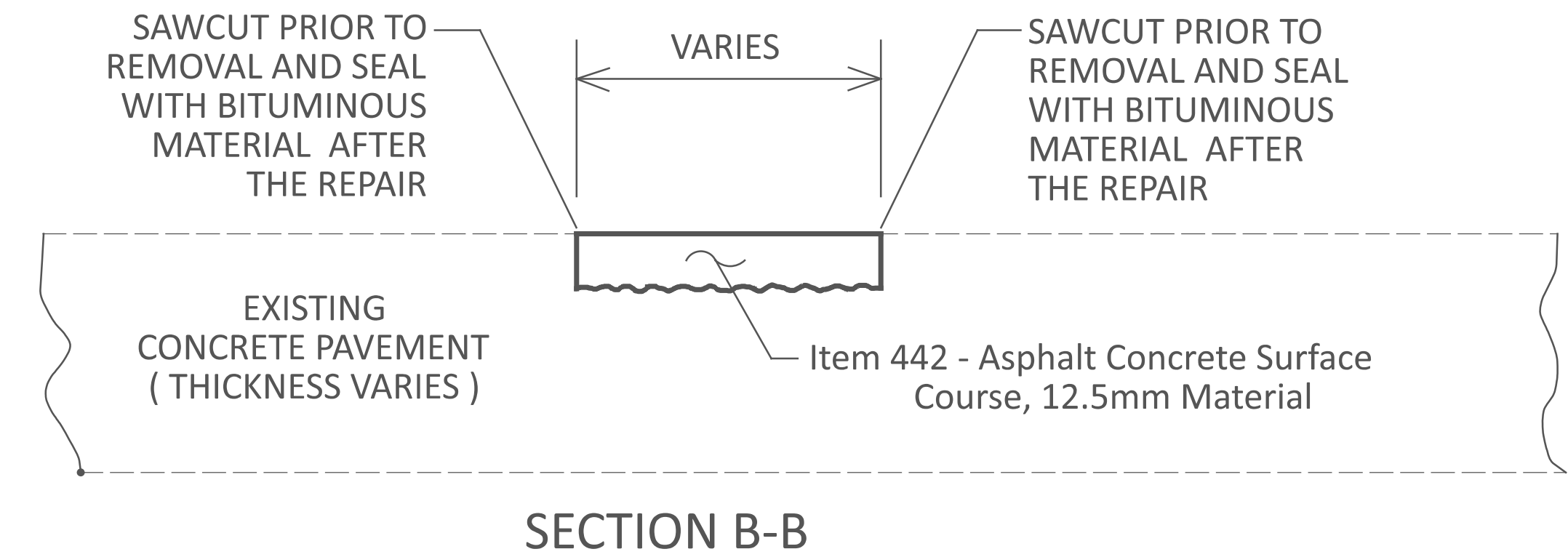
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			PRESSURE RELIEF JOINT REFERENCE NUMBERS FROM PID 75479 (LAK-90-13.10) - (2011)		PAVEMENT REMOVED, AS PER PLAN	PRESSURE RELIEF JOINT, TYPE A													
			BRIDGE	DESCRIPTION	SY	FT													
			LAKE COUNTY - I.R.-90	PRESSURE RELIEF JOINT															
PRJ1		1	LAK-90-1370R - OVER HERMITAGE RD.	REAR ABUTMENT - APPROACH SLAB	23.6	53													
PRJ2		1	LAK-90-1370R - OVER HERMITAGE RD.	FORWARD ABUTMENT - APPROACH SLAB	29.8	67													
PRJ3		1	LAK-90-1370L - OVER HERMITAGE RD.	REAR ABUTMENT - APPROACH SLAB	23.6	53													
PRJ4		1	LAK-90-1370L - OVER HERMITAGE RD.	FORWARD ABUTMENT - APPROACH SLAB	29.8	67													
PRJ5		1	LAK-90-1487R - OVER AUBURN RD.	REAR ABUTMENT - APPROACH SLAB	22.2	50													
PRJ6		1	LAK-90-1487R - OVER AUBURN RD.	FORWARD ABUTMENT - APPROACH SLAB	37.8	85													
PRJ9		1	LAK-90-1487R - OVER AUBURN RD.	REAR ABUTMENT - APPROACH SLAB - RAMP D	18.2	41													
PRJ7		1	LAK-90-1487L - OVER AUBURN RD.	REAR ABUTMENT - APPROACH SLAB	29.8	67													
PRJ8		1	LAK-90-1487L - OVER AUBURN RD.	FORWARD ABUTMENT - APPROACH SLAB	27.6	62													
PRJ10		1	LAK-90-1641R - OVER BIG CREEK	REAR ABUTMENT - APPROACH SLAB	19.6	44													
PRJ11		1	LAK-90-1641R - OVER BIG CREEK	FORWARD ABUTMENT - APPROACH SLAB	19.6	44													
PRJ12		1	LAK-90-1641L - OVER BIG CREEK	REAR ABUTMENT - APPROACH SLAB	18.2	41													
PRJ13		1	LAK-90-1641L - OVER BIG CREEK	FORWARD ABUTMENT - APPROACH SLAB	18.2	41													
PRJ14		1	LAK-90-2003R - OVER PAINE CREEK	REAR ABUTMENT - APPROACH SLAB	22.7	51													
PRJ15		1	LAK-90-2003R - OVER PAINE CREEK	FORWARD ABUTMENT - APPROACH SLAB	23.6	53													
PRJ16		1	LAK-90-2003L - OVER PAINE CREEK	REAR ABUTMENT - APPROACH SLAB	22.7	51													
PRJ17		1	LAK-90-2003L - OVER PAINE CREEK	FORWARD ABUTMENT - APPROACH SLAB	23.6	53													
PRJ18		1	LAK-90-2110R - OVER PAINE RD.	REAR ABUTMENT - APPROACH SLAB	18.7	42													
PRJ21		1	LAK-90-2110R - OVER PAINE RD.	FORWARD ABUTMENT - APPROACH SLAB	18.7	42													
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TOTALS CARRIED TO GENERAL SUMMARY					486	1091													
PLAN SPLIT #1 TOTAL					486	1,091													

LOCATION 1B - I.R.-90 - PRESSURE RELIEF JOINT SUB-SUMMARY

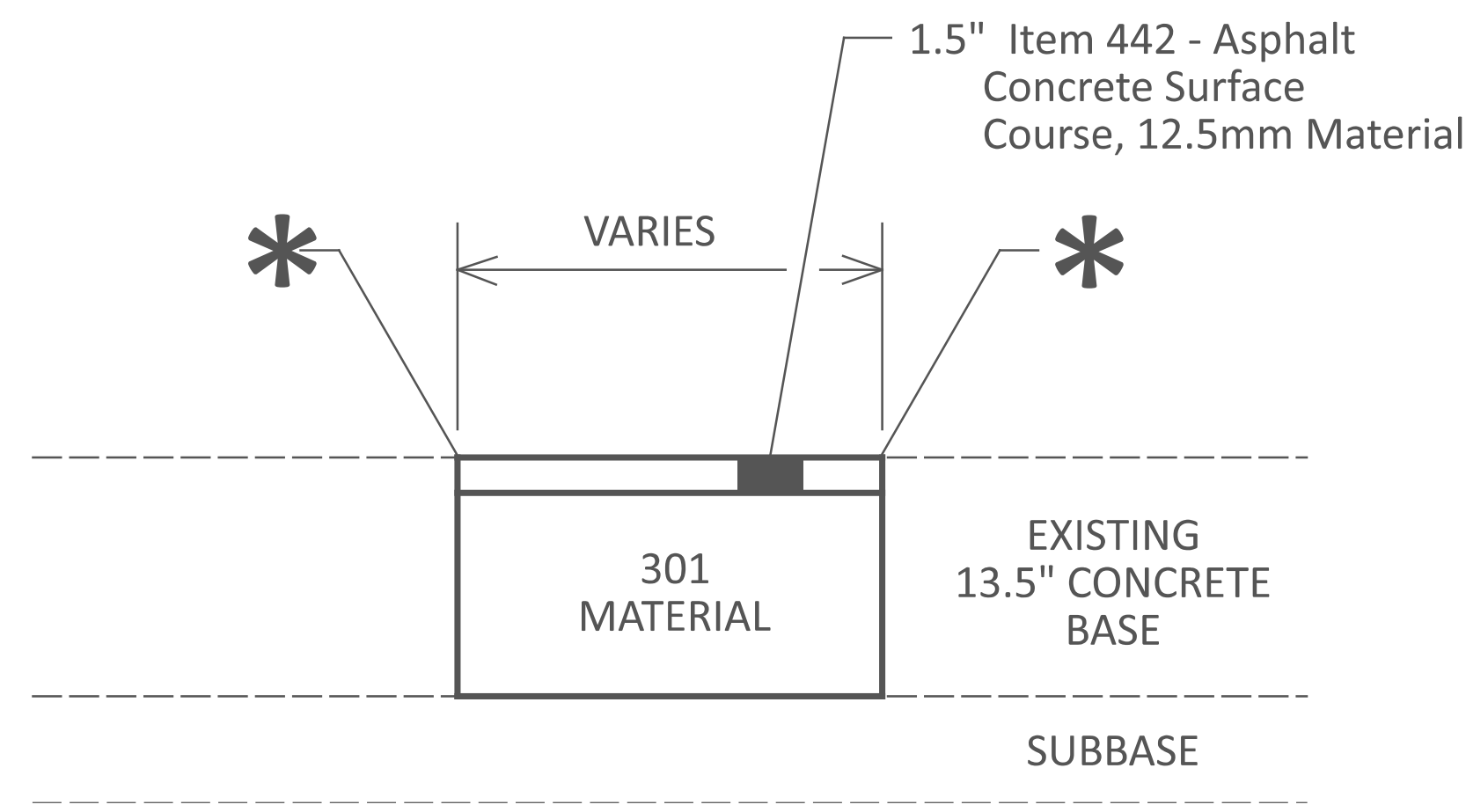
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DESIGNER	JAG
REVIEWER	DAB 10/11/24
PROJECT ID	113132
SHEET TOTAL	P.20 42



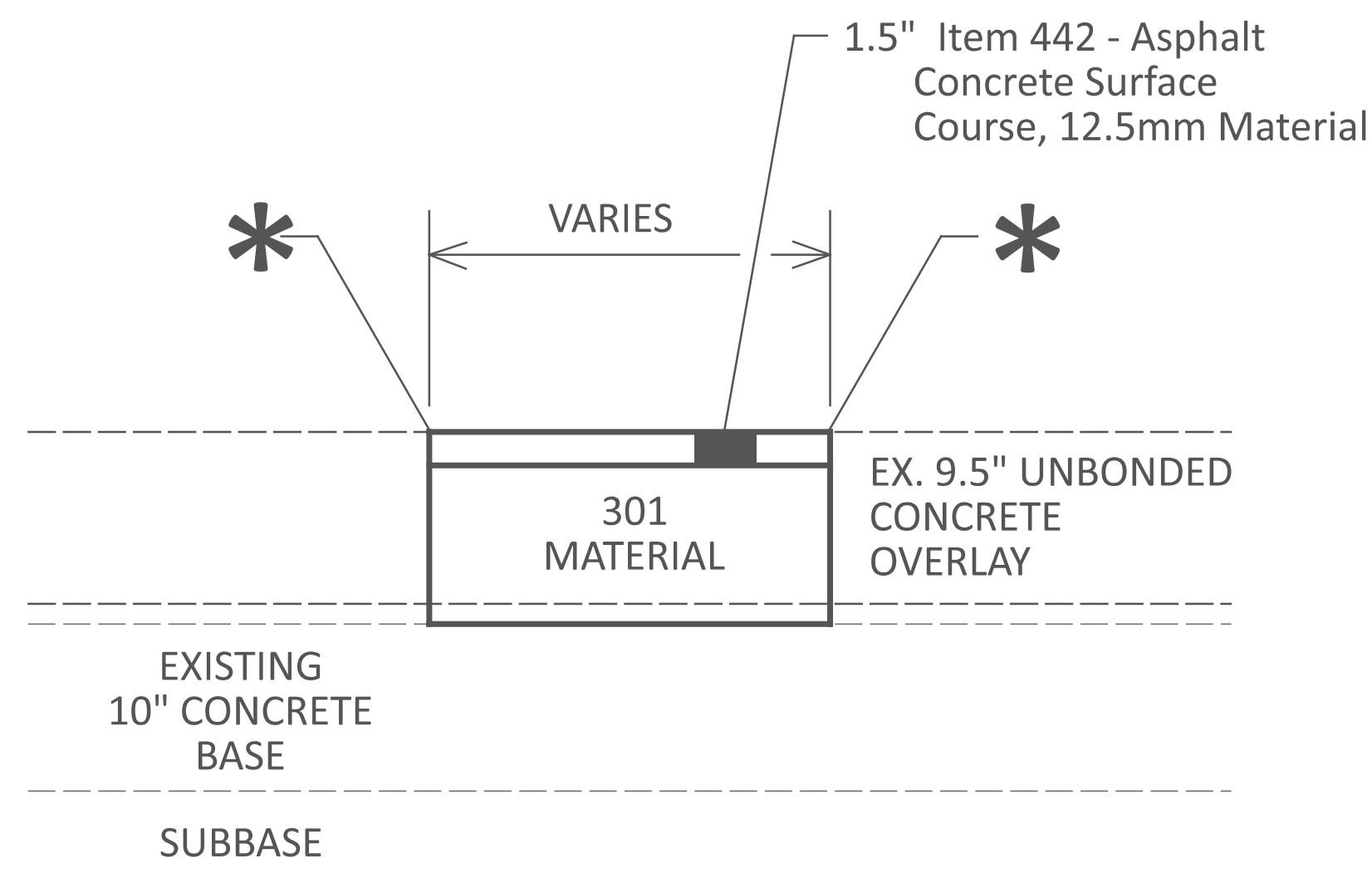
PLAN



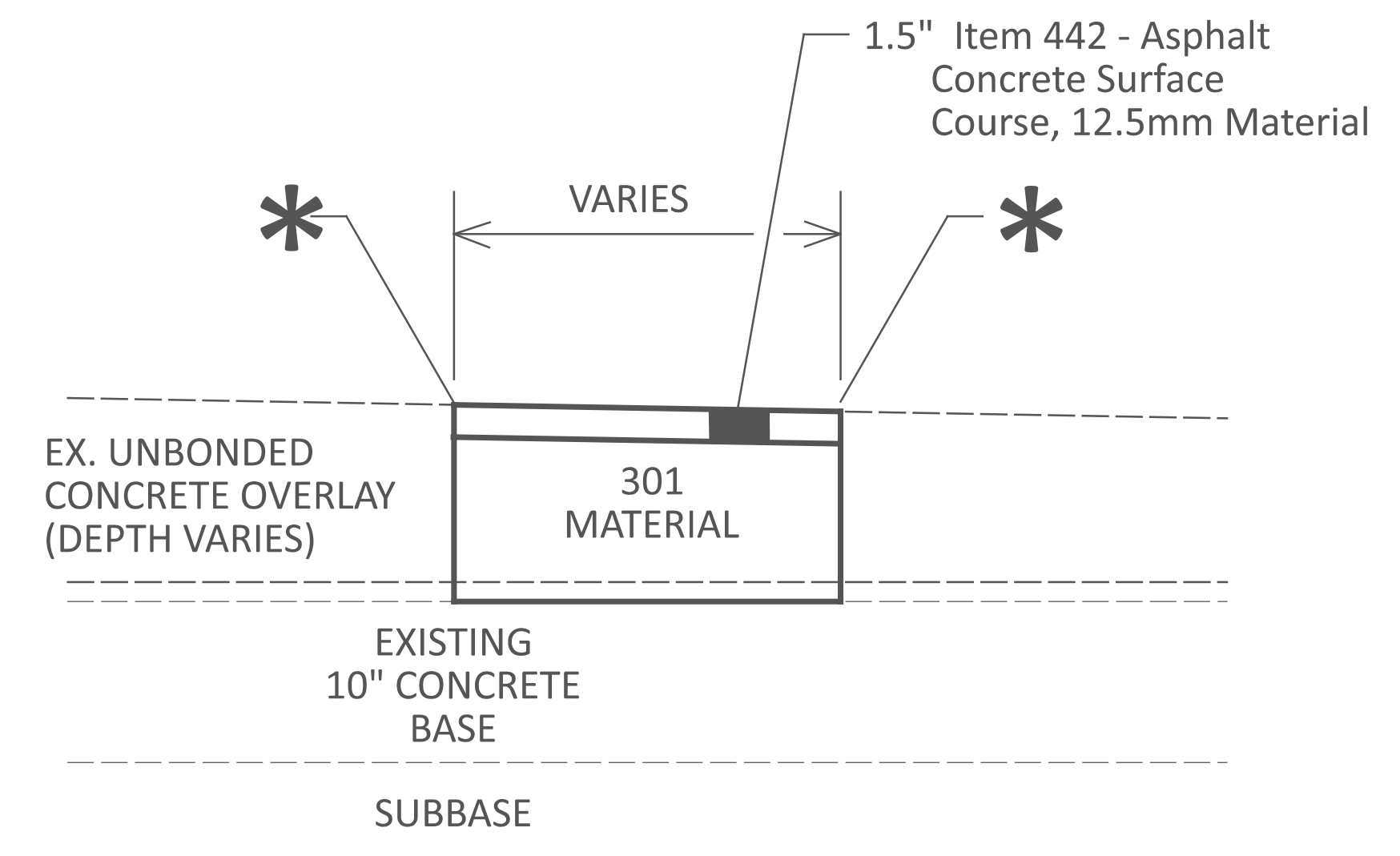
SECTION B-B
ITEM 253 - PAVEMENT REPAIR, AS PER PLAN



SECTION A-A
ITEM 252 - FULL DEPTH
RIGID PAVEMENT REMOVAL
AND FLEXIBLE REPLACEMENT,
AS PER PLAN "A"



SECTION A-A
ITEM 252 - FULL DEPTH
RIGID PAVEMENT REMOVAL
AND FLEXIBLE REPLACEMENT,
AS PER PLAN "B"



SECTION A-A
ITEM 252 - FULL DEPTH
RIGID PAVEMENT REMOVAL
AND FLEXIBLE REPLACEMENT,
AS PER PLAN "C"

* SAWCUT FULL DEPTH PRIOR TO REMOVAL AND SEAL WITH BITUMINOUS MATERIAL AFTER THE REPAIR.



EXISTING

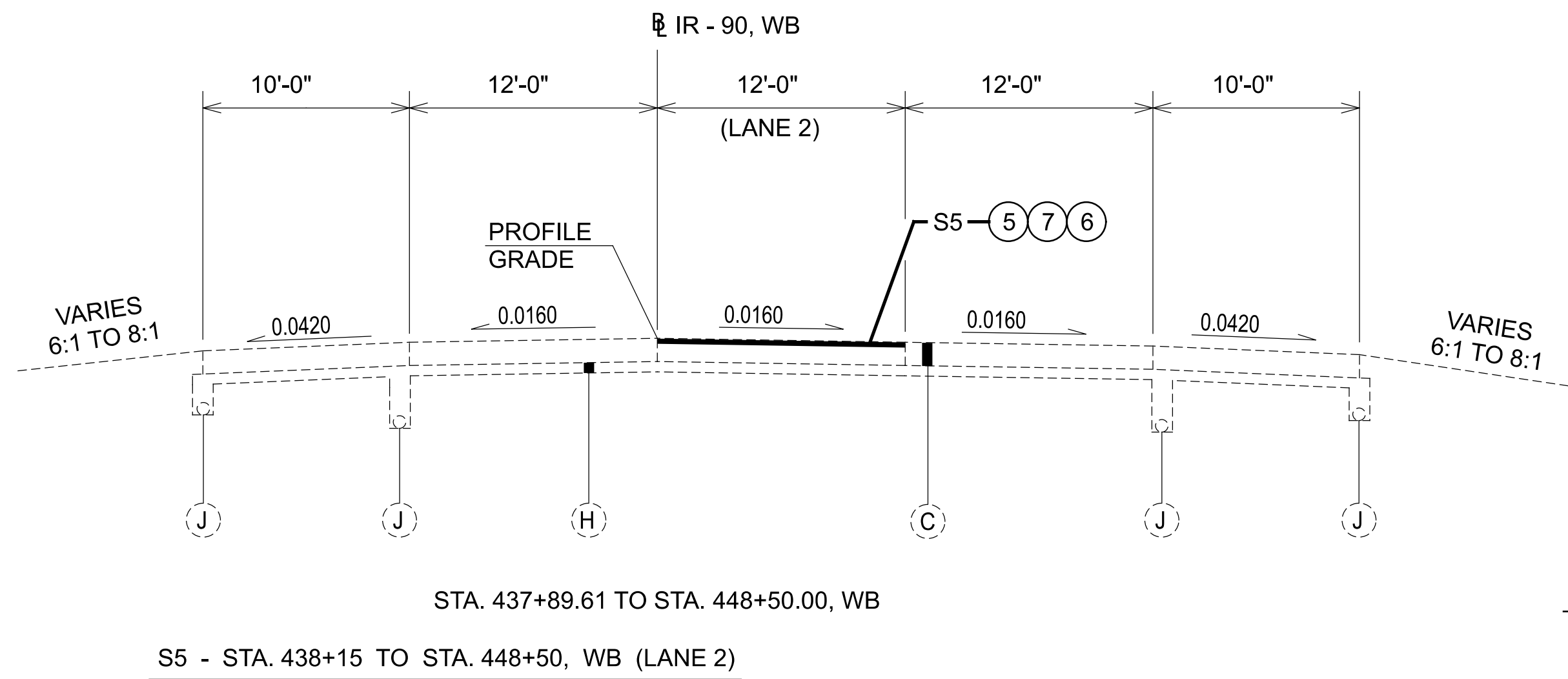
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- (B) 12.5" NON-REINFORCED CONCRETE
- (C) 13.5" NON-REINFORCED CONCRETE
- (D) 9.5" TO 14.5 NON-REINFORCED CONCRETE PAVEMENT
- (E) 10" REINFORCED CONCRETE BASE
- (H) SUBBASE
- (J) UNDERDRAIN
- (K) ASPHALT CONCRETE BONDBREAKER, 1"

PROPOSED

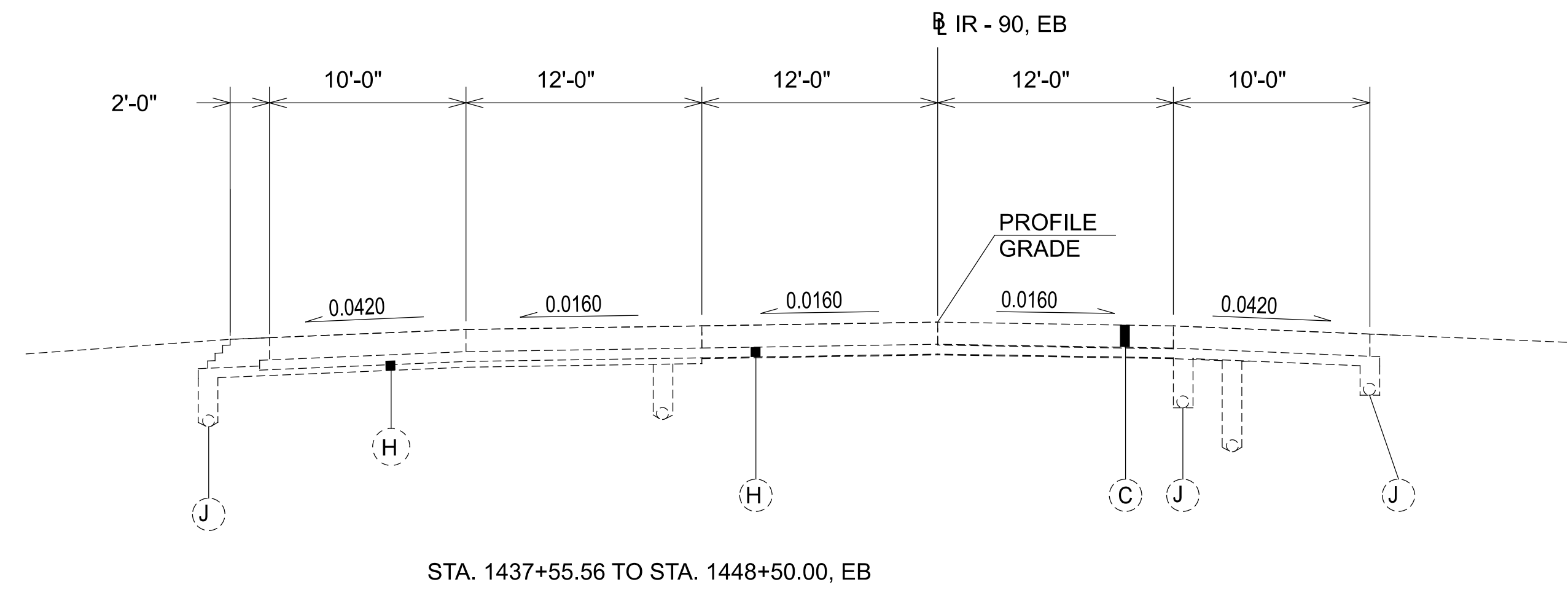
- (1) FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "A"
- (2) FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "B"
- (3) FULL DEPTH RIGID PAVEMENT REMOVAL AND FLEXIBLE REPLACEMENT, AS PER PLAN "C"
- (4) PAVEMENT REPAIR, AS PER PLAN "A"

PROPOSED

- (5) ITEM 254 - PAVEMENT PLANING, PORTLAND CEMENT CONCRETE, AS PER PLAN, (1.5")
- (6) ITEM 442 - ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (448), AS PER PLAN, PG70-22M (1.5")
- (7) ITEM 407 - TACK COAT, 702.13

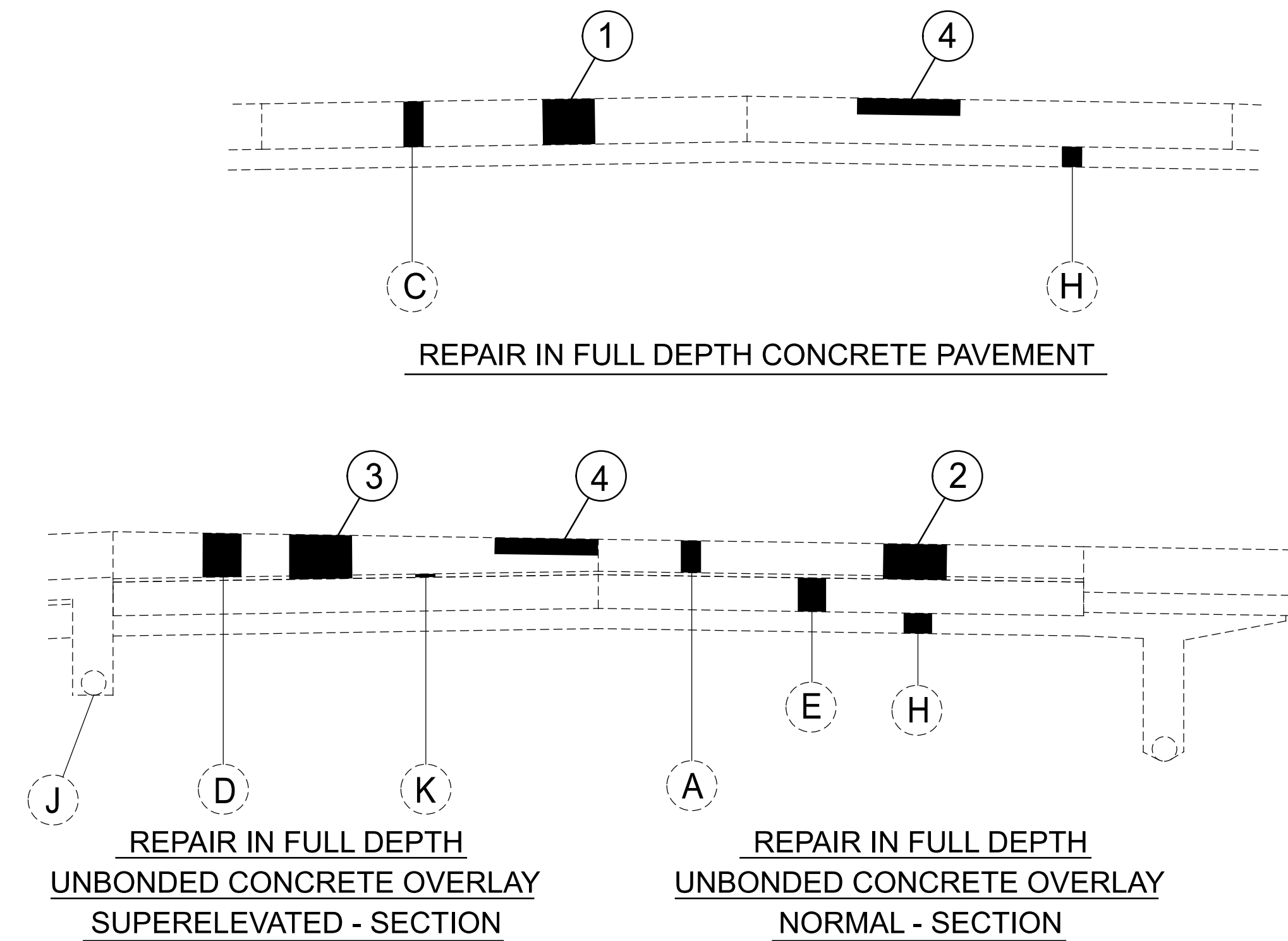


NORMAL SECTION IR-90



STA. 1437+55.56 TO STA. 1448+50.00, EB

PAVEMENT REPAIR DETAILS



SEE SHEET "LOCATION 1A - PAVEMENT REPAIR DETAILS" FOR ADDITIONAL DETAILS

TYPICAL SECTION INFORMATION	
FROM RECORD PLANS:	
PID 5774	
LAK-090-6.71	
SALE: 2005	
(PERFORM ONLY PROPOSED WORK FOR PID 113132)	

DESIGN AGENCY

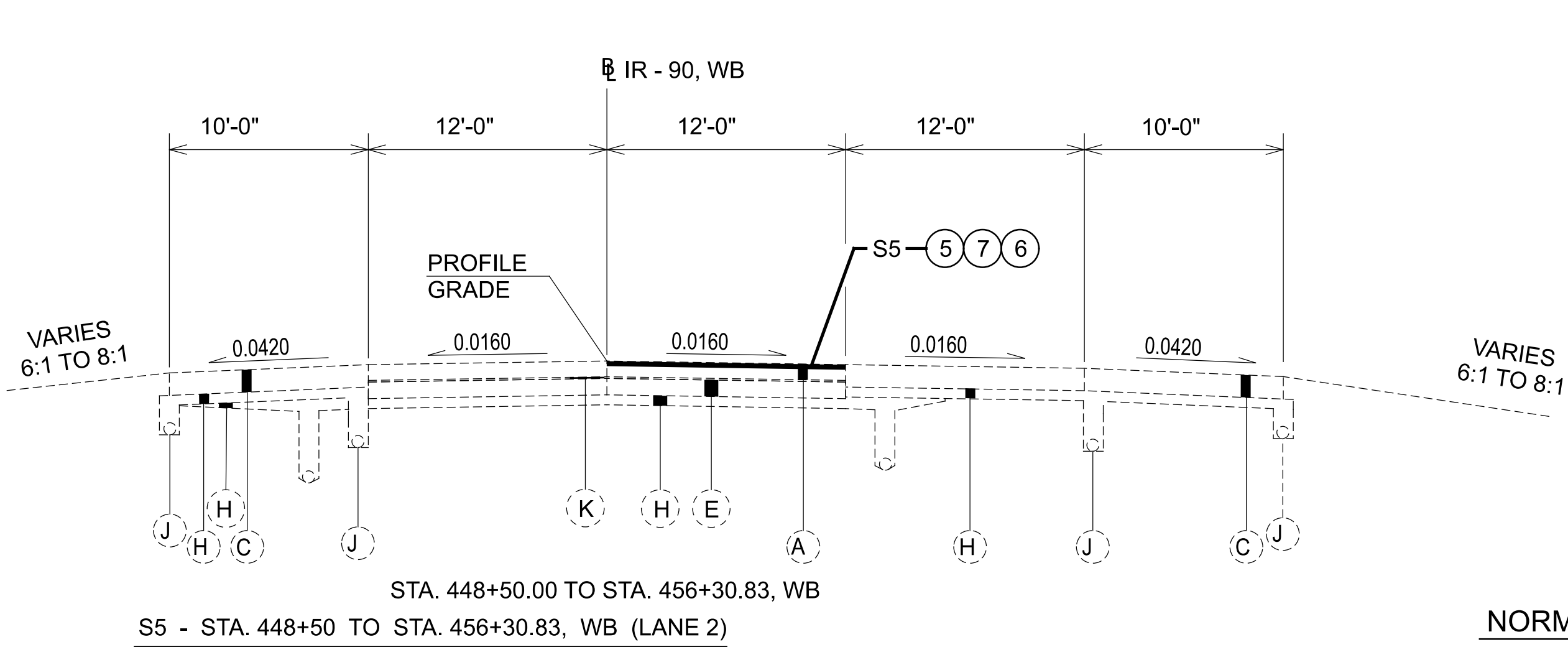


DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	113132
SHEET	TOTAL
P.22	42

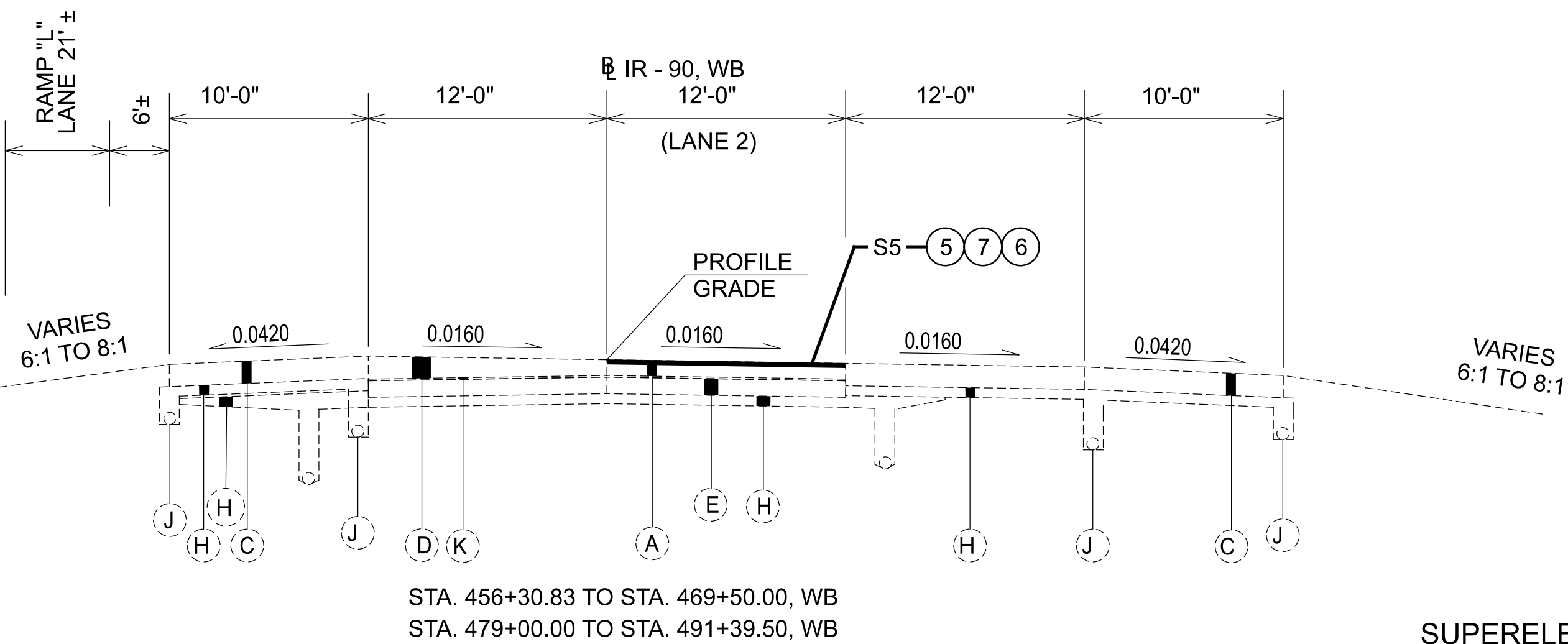
LOCATION 1A - I.R.-90 - EXISTING TYPICAL SECTIONS

D12-PPM-FY2025

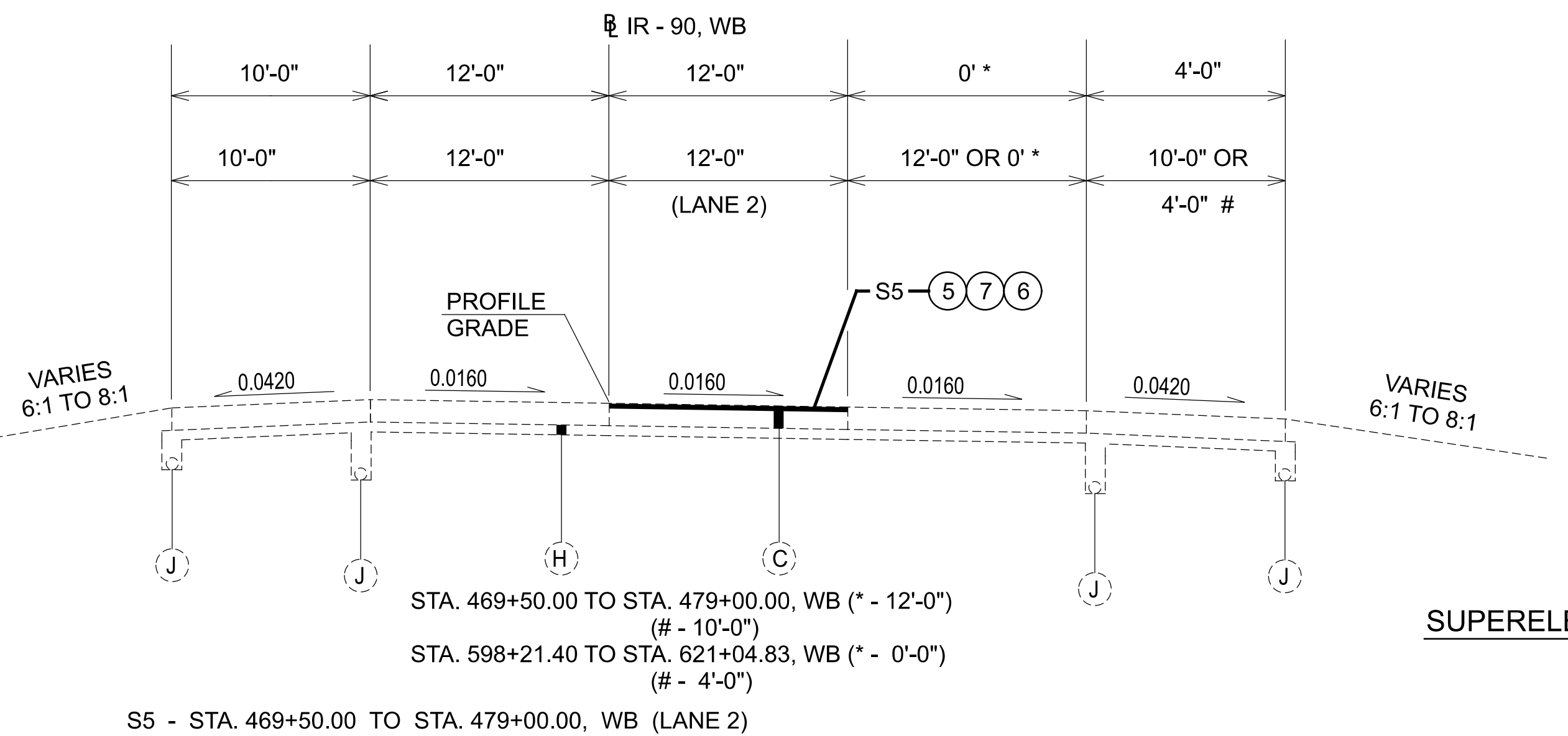
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NORMAL SECTION IR-90



SUPERELEVATED SECTION IR-90

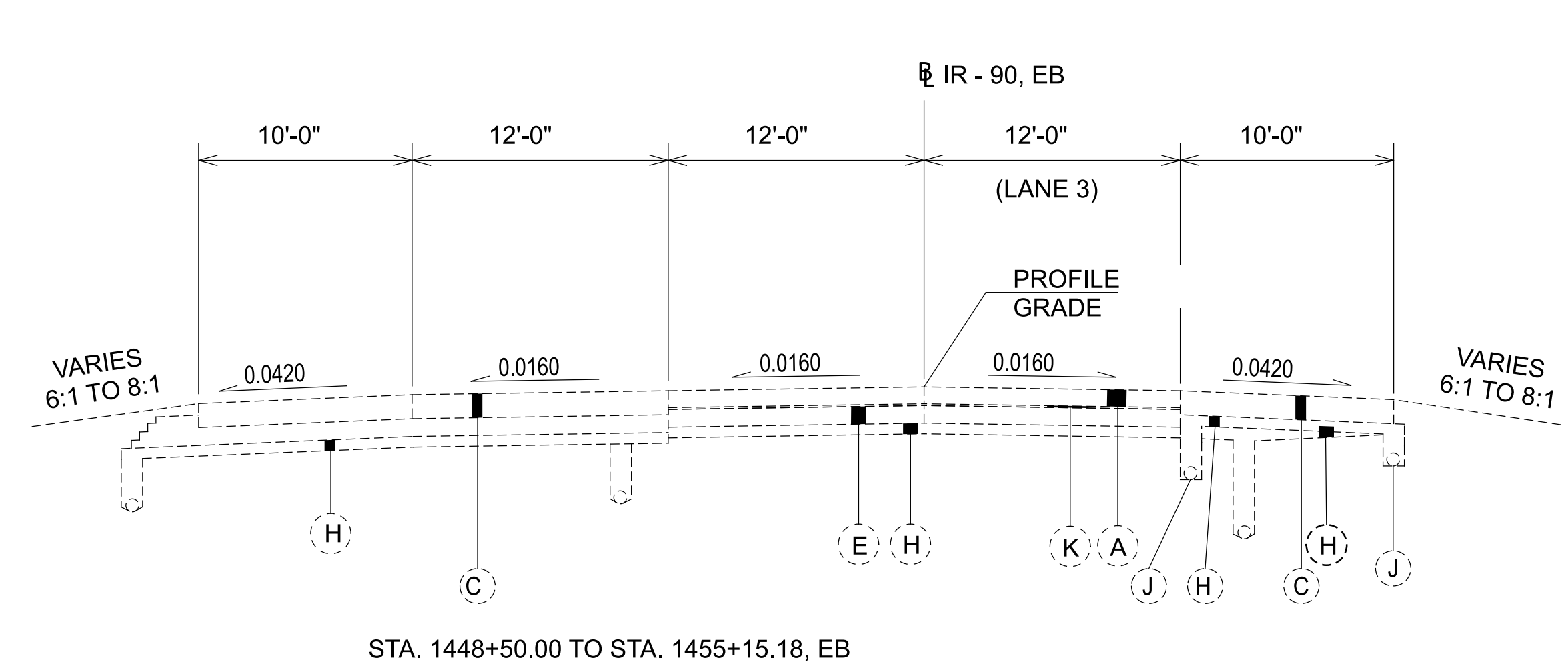


SUPERELEVATED SECTION IR-90

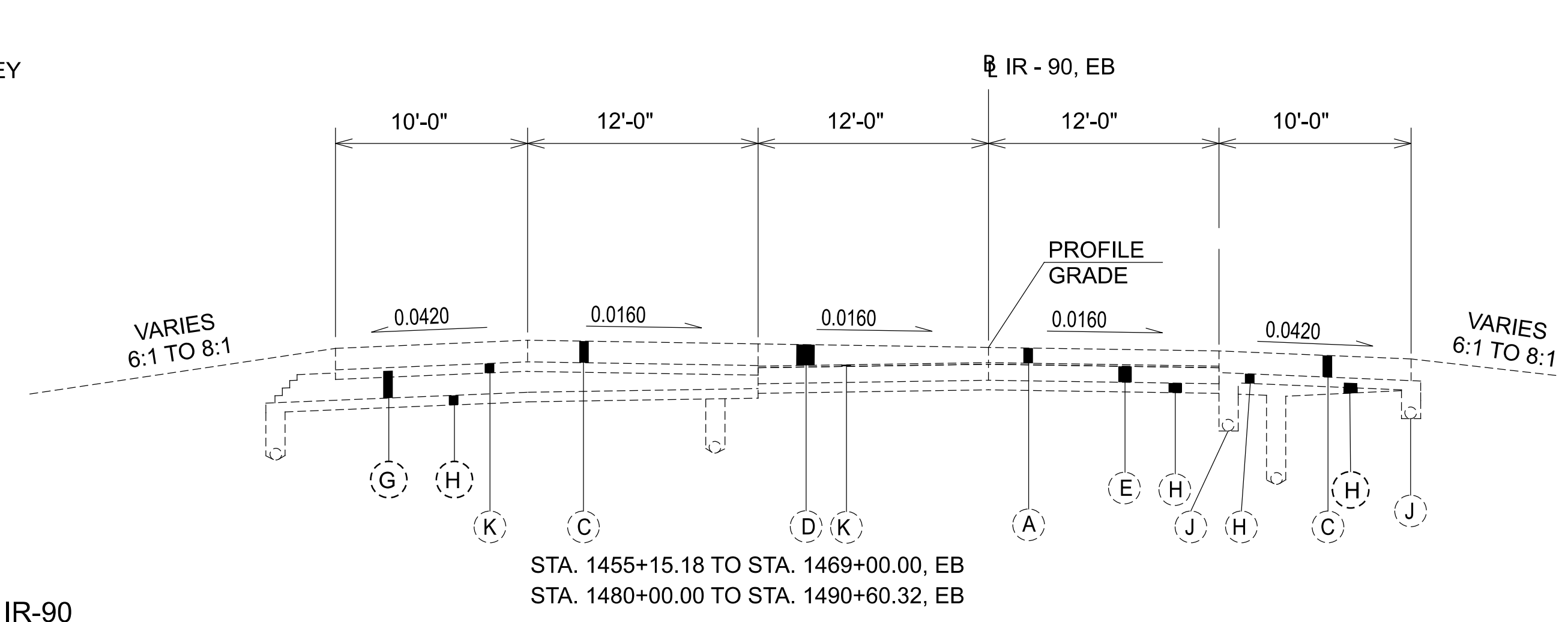
CL SURVEY

CL SURVEY

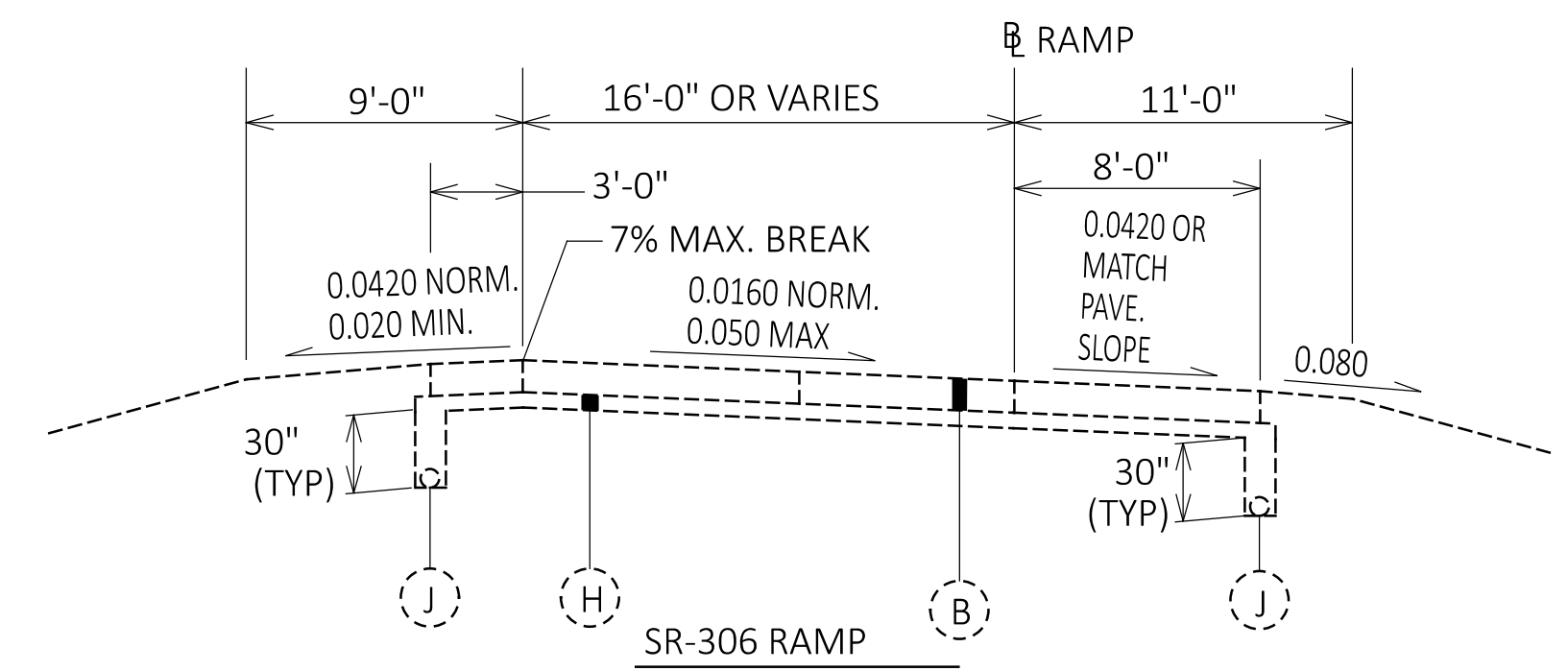
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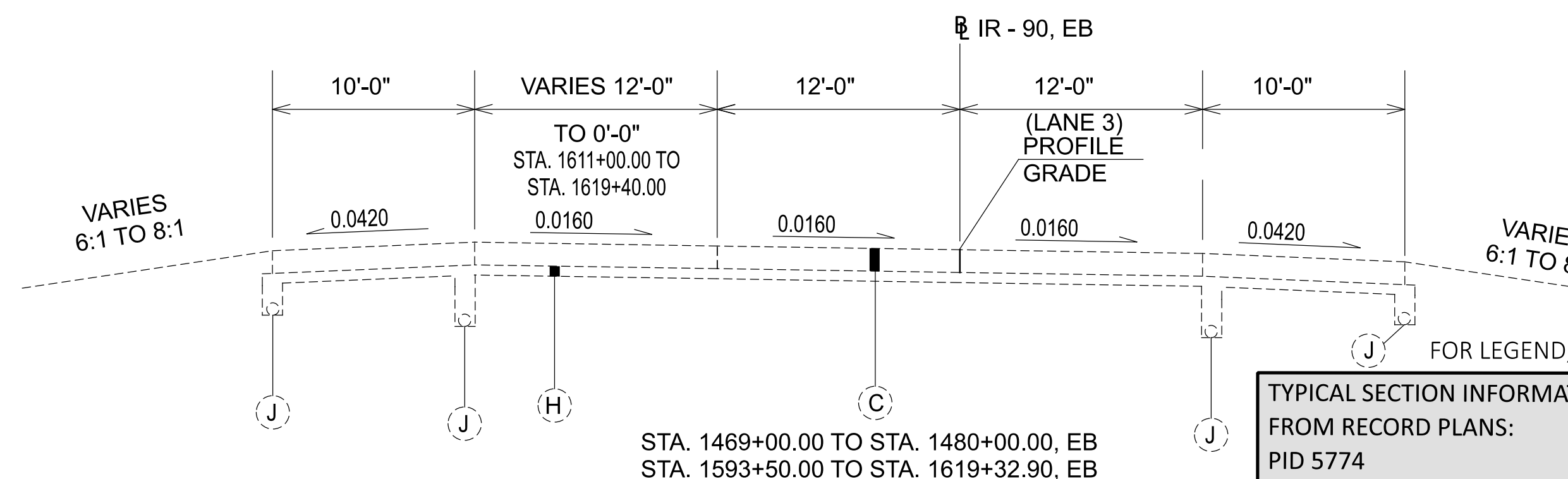
NORMAL SECTION IR-90



SUPERELEVATED SECTION IR-90



SR-306 RAMP



NORMAL SECTION IR-90

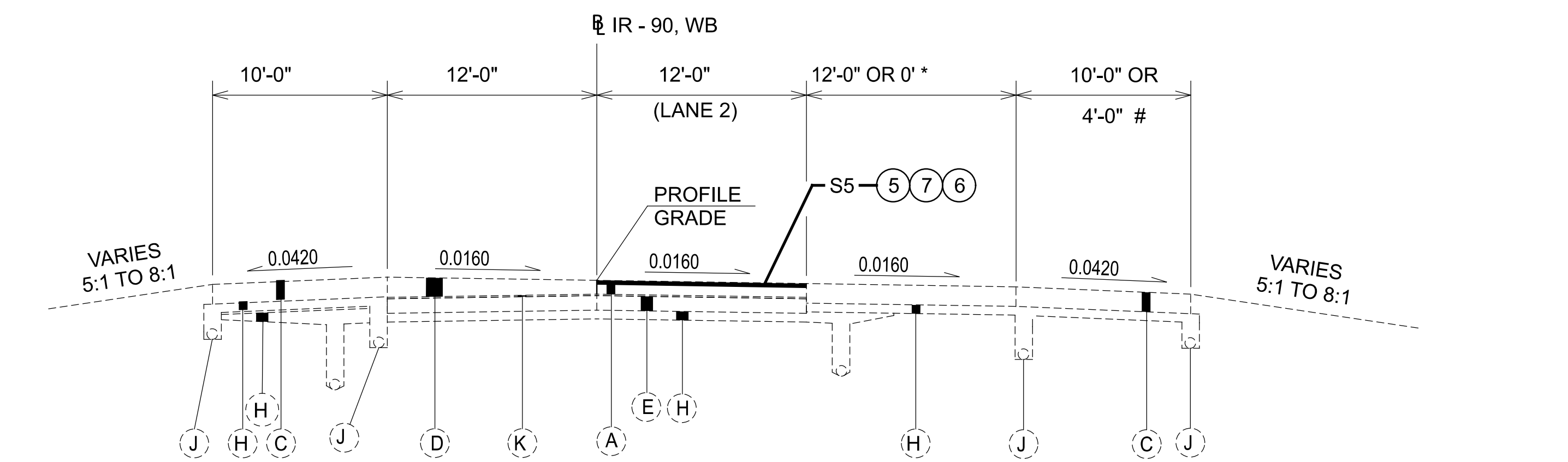
FOR LEGEND, SEE SHEET 18

TYPICAL SECTION INFORMATION
 FROM RECORD PLANS:
 PID 5774
 LAK-090-6.71
 SALE: 2005
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

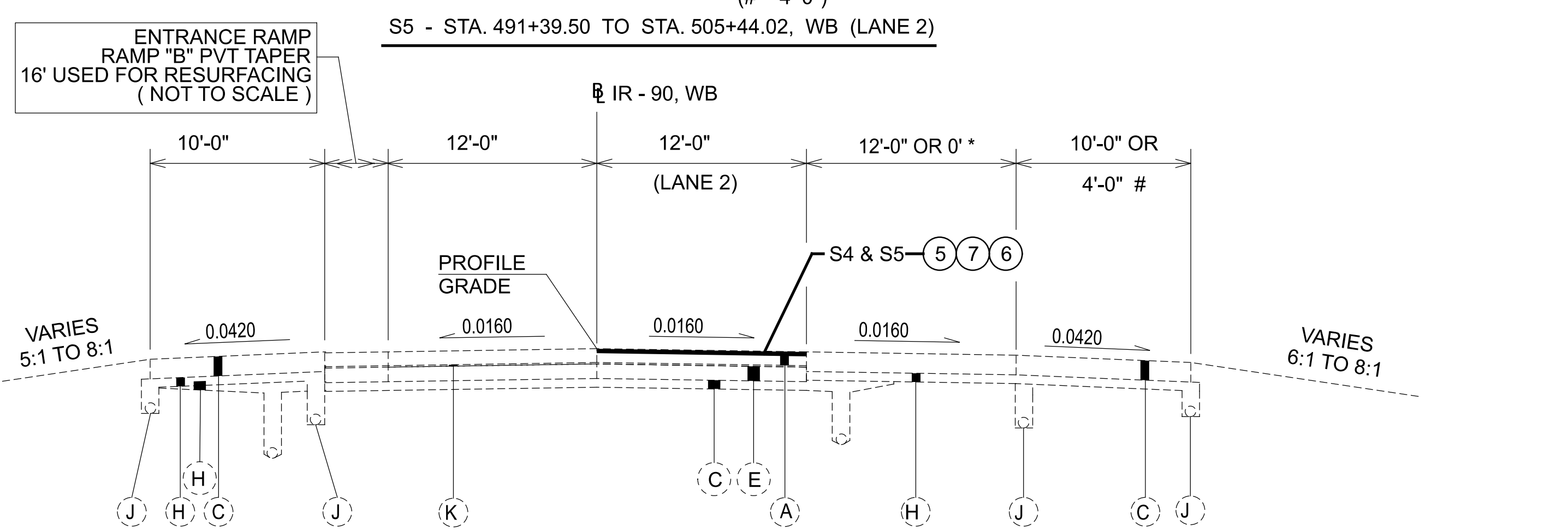
DESIGN AGENCY



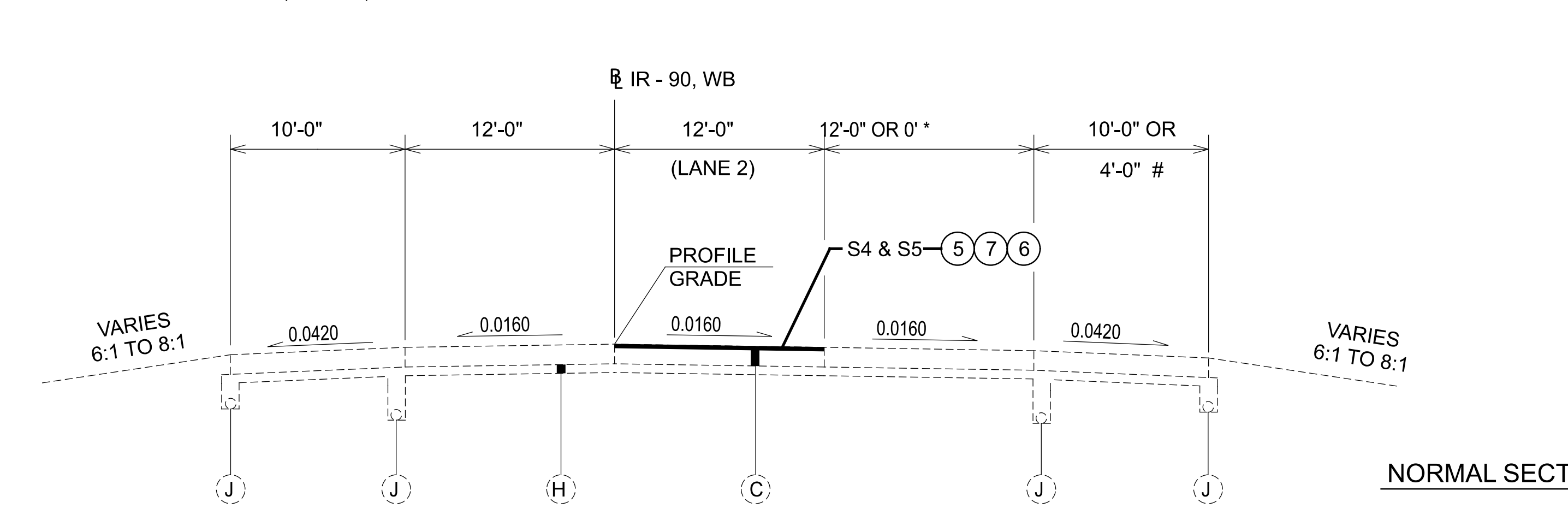
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REVIEWER	PID 5774
DATE	10/11/24
PROJECT ID	113132
SHEET	P.23
TOTAL	42



SUPERELEVATED SECTION IR-90

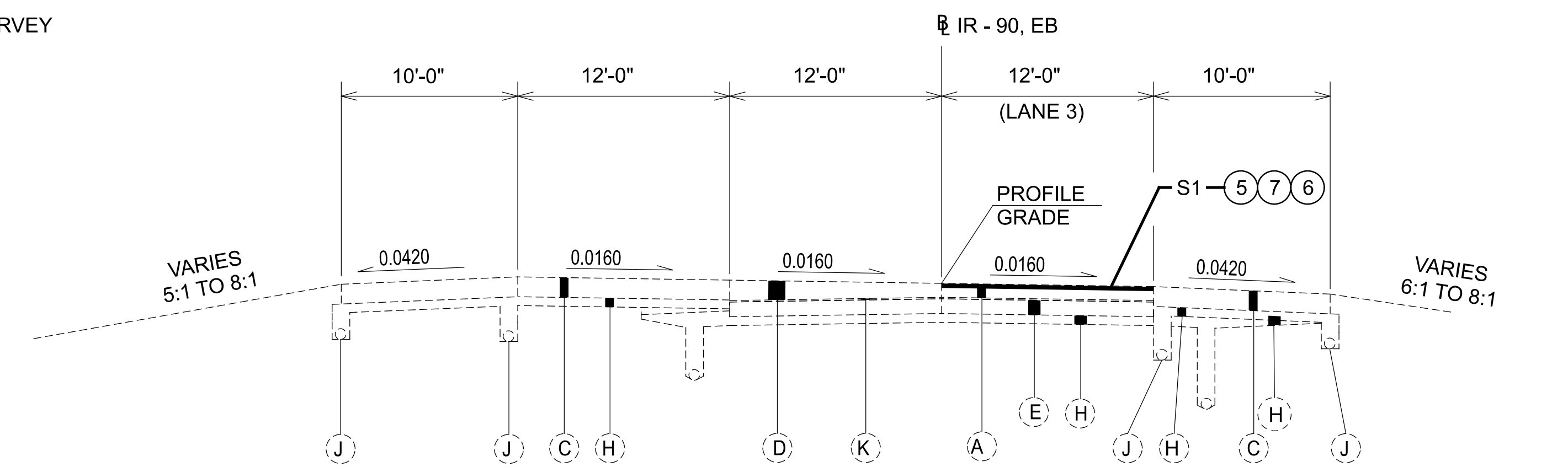


NORMAL SECTION IR-90

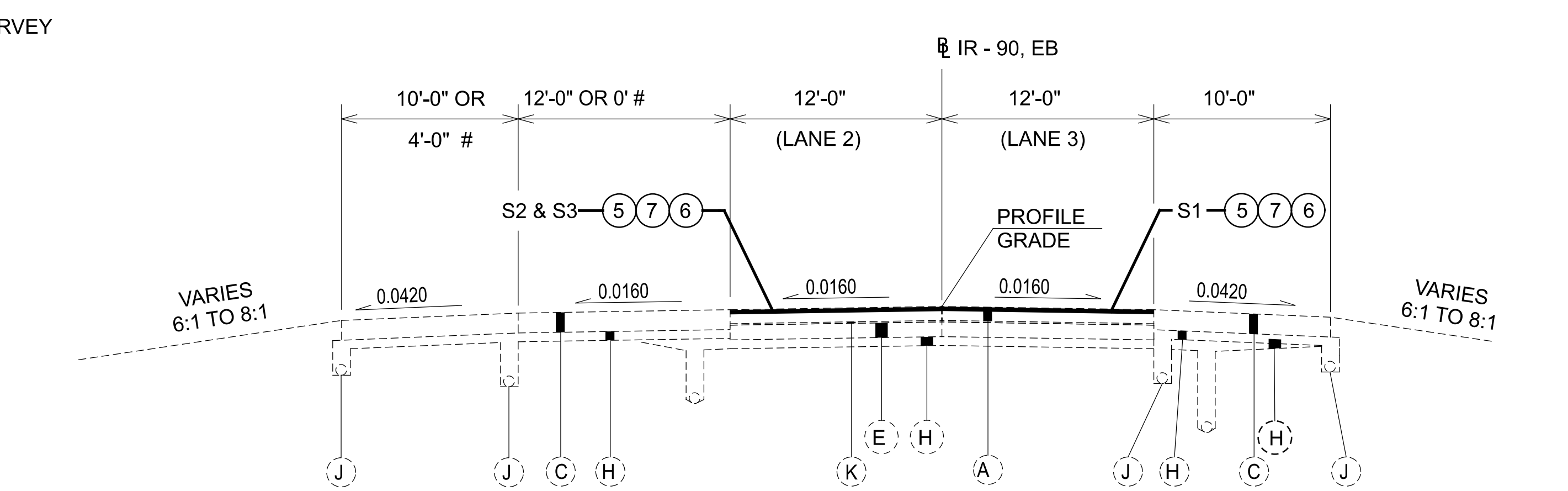


NORMAL SECTION IR-90

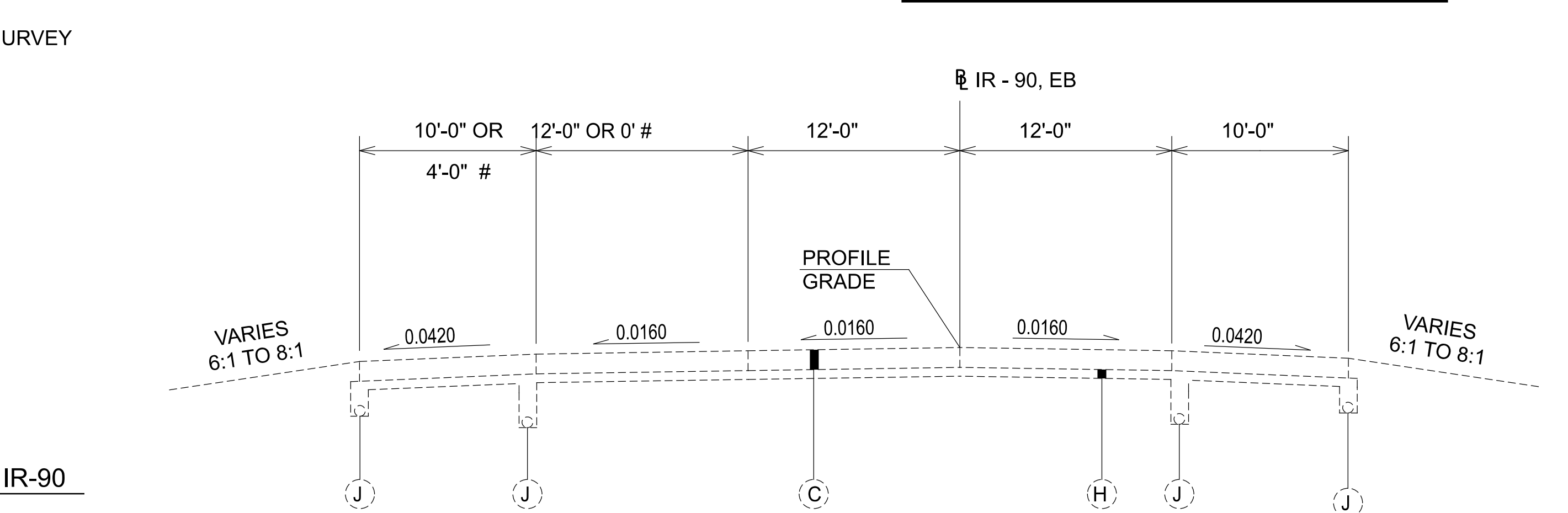
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 * - 0'-0" FROM STA. 566+50.00 TO STA. 573+35.08
 # - VARIES 10'-0" TO 4'-0" FROM STA. 566+50.00 TO STA. 567+00.00



S1 - STA. 1502+00 TO STA. 1505+03.79, EB (LANE 3)



S1 - STA. 1505+03.79 TO STA. 1506+00, EB (LANE 3)
 S2 - STA. 1506+85 TO STA. 1510+30, EB (LANE 2)
 S3 - STA. 1730+70 TO STA. 1738+50, EB (LANE 2)



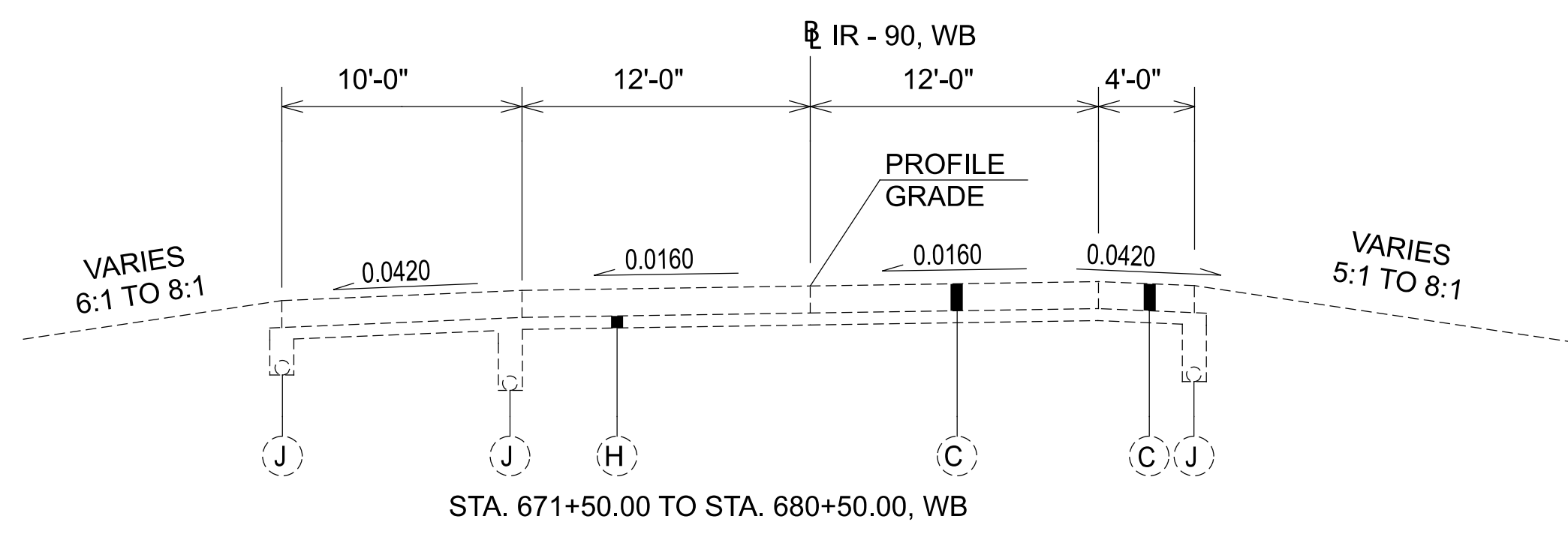
STA. 1526+50.00 TO STA. 1535+50.00, EB (# - 12'-0") (# - 10'-0")
 STA. 1563+20.40 TO STA. 1572+20.40, EB (# - 12'-0") (# - 10'-0")
 STA. 1619+32.90 TO STA. 1629+00.00, EB (# - 0'-0") (# - 4'-0")
 STA. 1749+00.00 TO STA. 1760+61.00, EB (# - 0'-0") (# - 4'-0")

FOR LEGEND, SEE SHEET 18

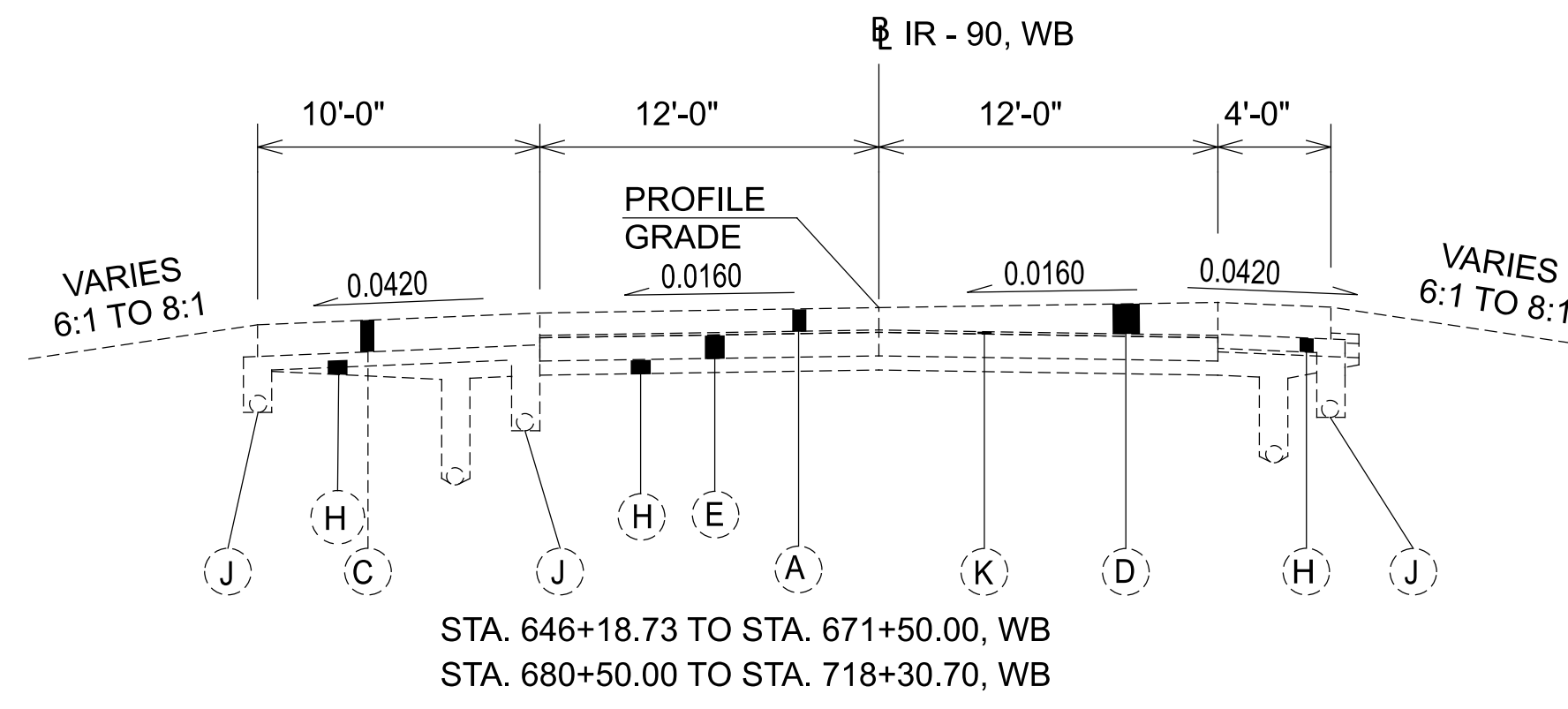
TYPICAL SECTION INFORMATION	
FROM RECORD PLANS:	
PID 5774	
LAK-090-6.71	
SALE: 2005	
(PERFORM ONLY PROPOSED WORK FOR PID 113132)	



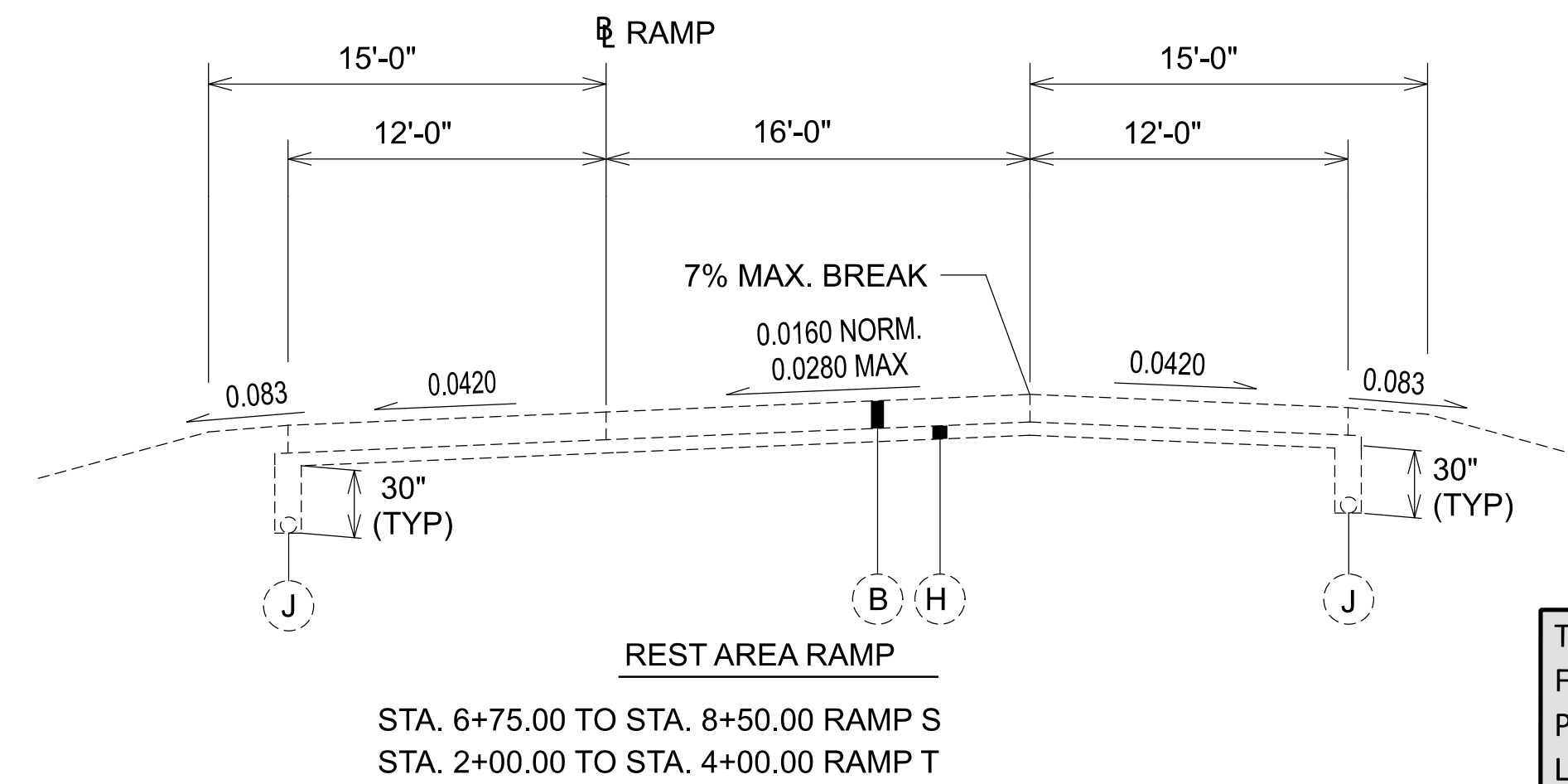
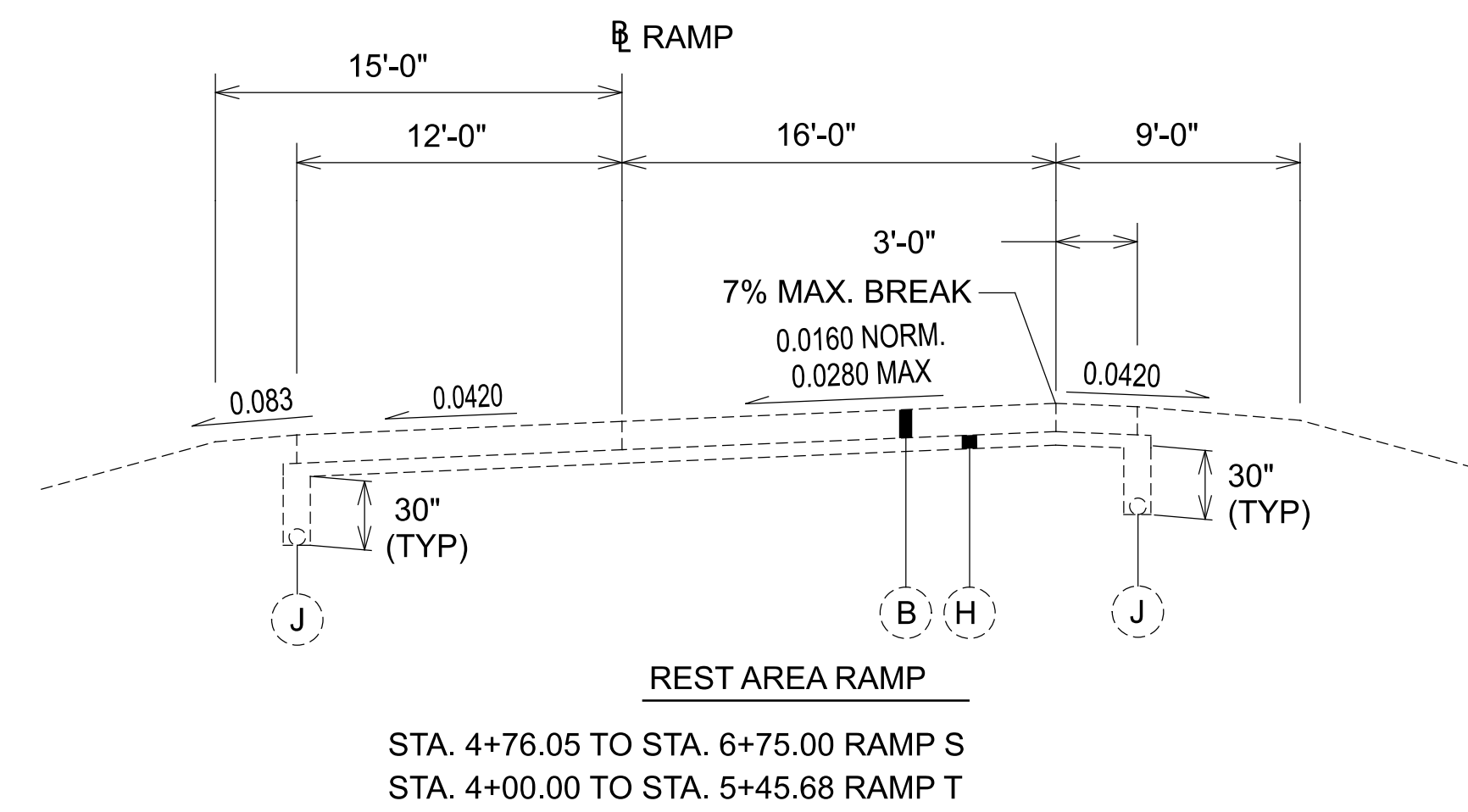
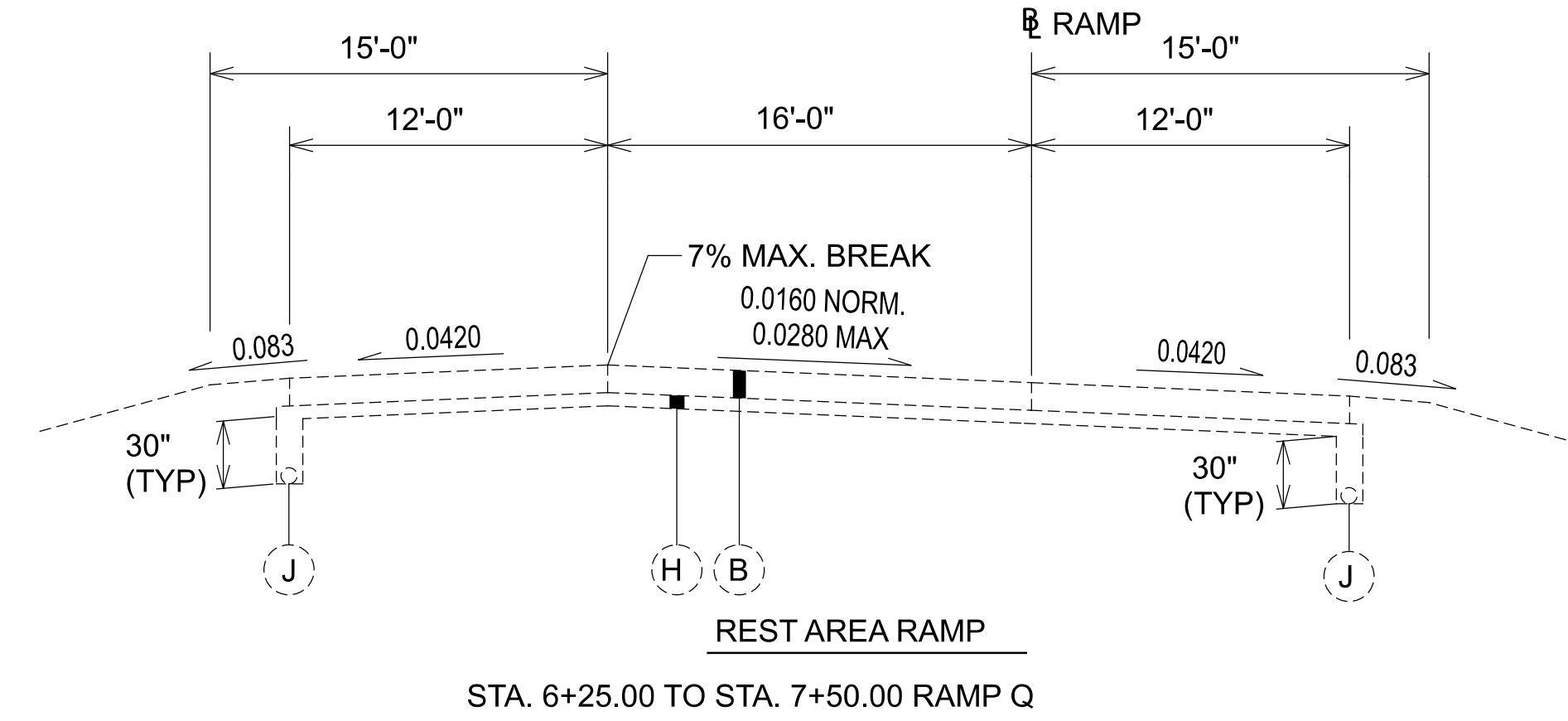
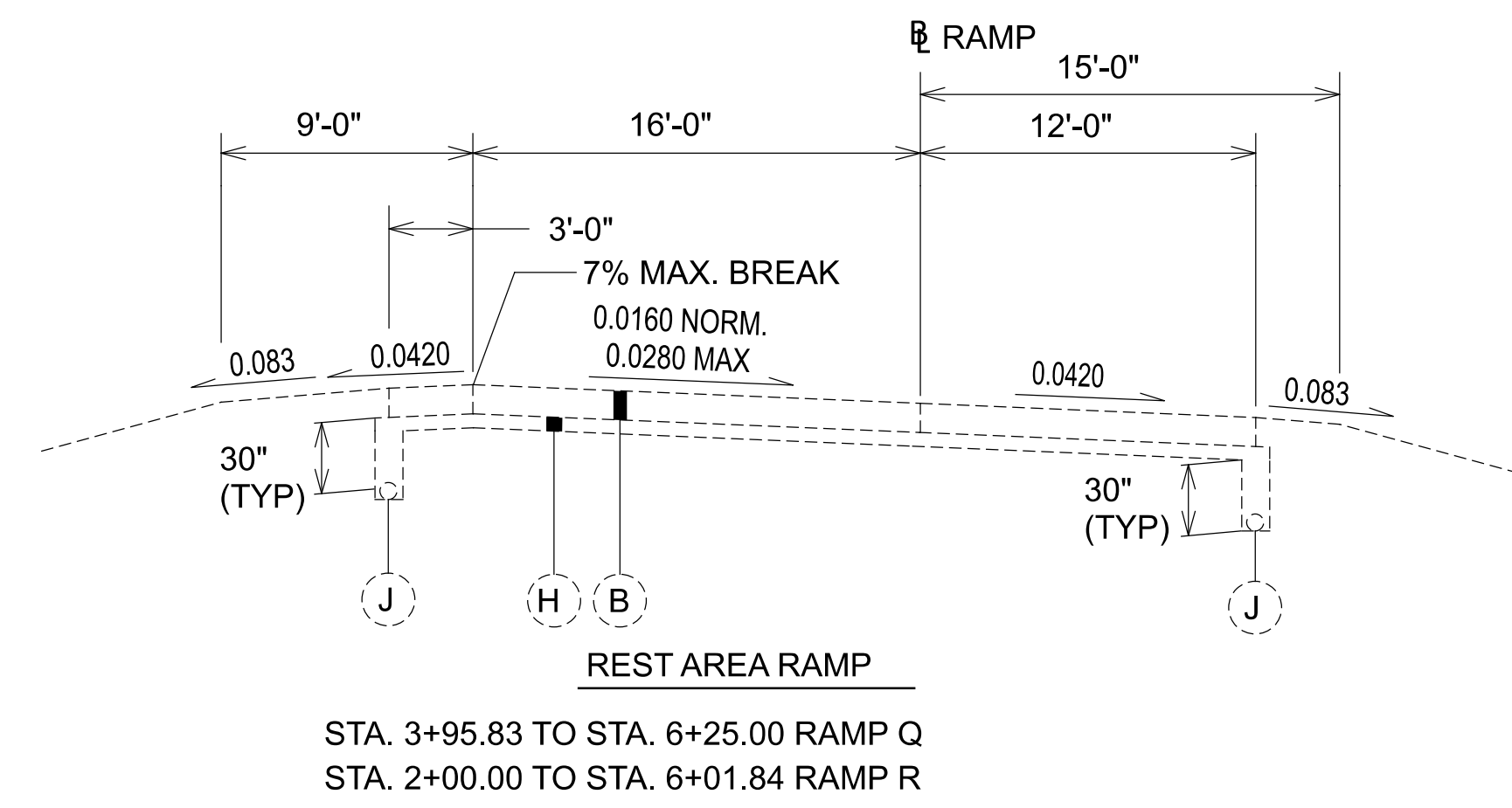
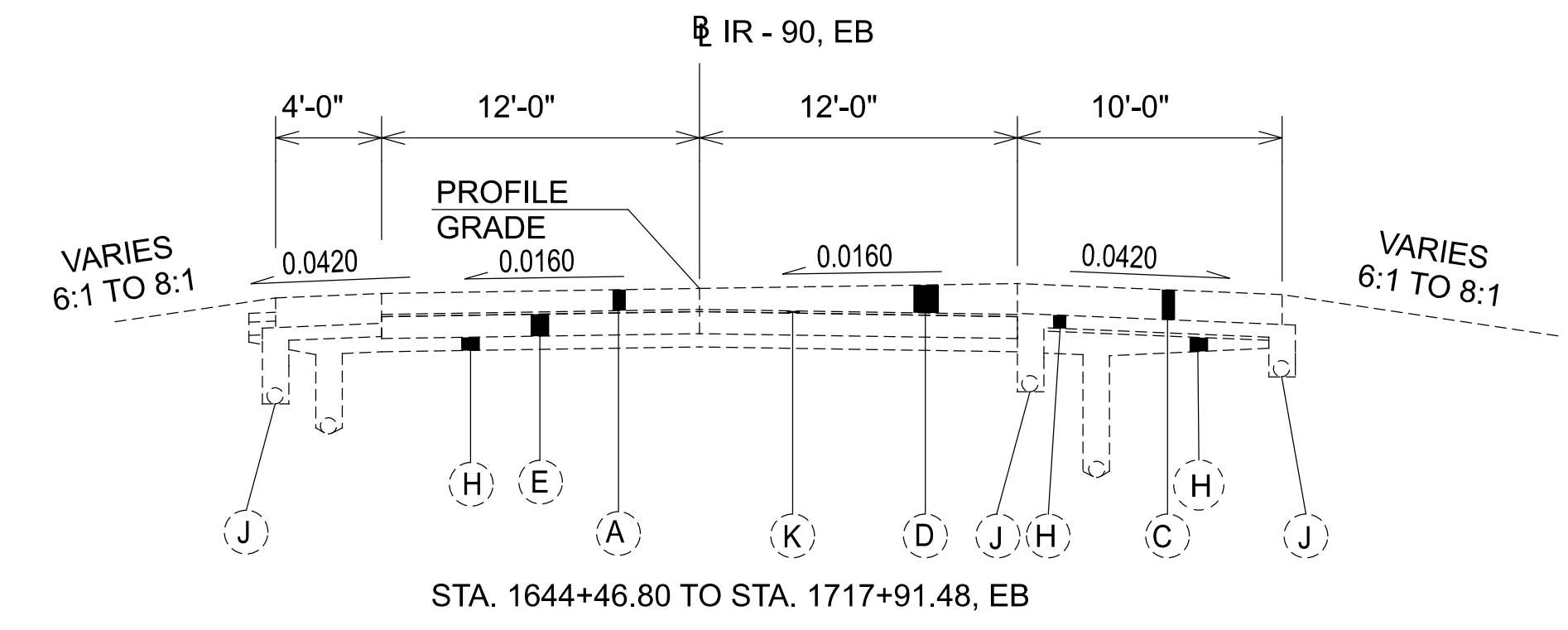
DESIGNER	JAG
REVIEWER	PID 5774
DATE	10/11/24
PROJECT ID	113132
SHEET	P.24
TOTAL	42



SUPERELEVATED SECTION IR-90



SUPERELEVATED SECTION IR-90



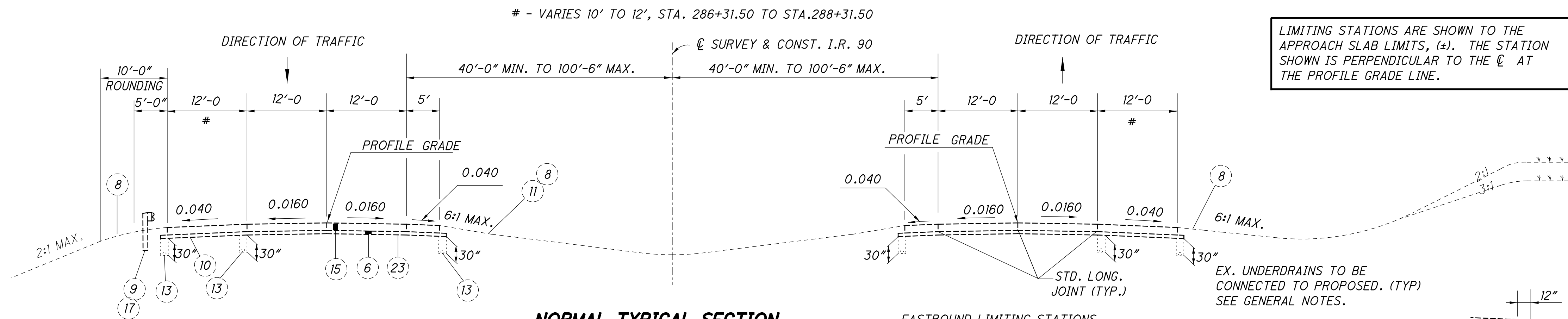
FOR LEGEND, SEE SHEET 18

TYPICAL SECTION INFORMATION
 FROM RECORD PLANS:
 PID 5774
 LAK-090-6.71
 SALE: 2005
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

DESIGN AGENCY



DESIGNER	JAG
REVIEWER	DAB 10/11/24
PROJECT ID	113132
SHEET TOTAL	P.25 42



LIMITING STATIONS ARE SHOWN TO THE APPROACH SLAB LIMITS, (+). THE STATION SHOWN IS PERPENDICULAR TO THE CL AT THE PROFILE GRADE LINE.

WESTBOUND LIMITING STATIONS

- STA. 286+31.50 TO STA. 318+46.03
- STA. 320+32.46 TO STA. 343+00.00
- STA. 359+33.90 TO STA. 377+08.60
- STA. 381+72.48 TO STA. 432+92.89
- STA. 457+49.09 TO STA. 460+02.75±
- STA. 463+97.25± TO STA. 587+29.64
- STA. 604+61.02 TO STA. 617+73.65
- STA. 629+50.02 TO STA. 630+65.32
- STA. 680+46.92 TO STA. 686+59.45 (BACK) = STA. 686+29.94 (AHEAD)
- STA. 686+29.94 TO STA. 707+82.77
- STA. 709+45.87 TO STA. 724+50.00±

NORMAL TYPICAL SECTION

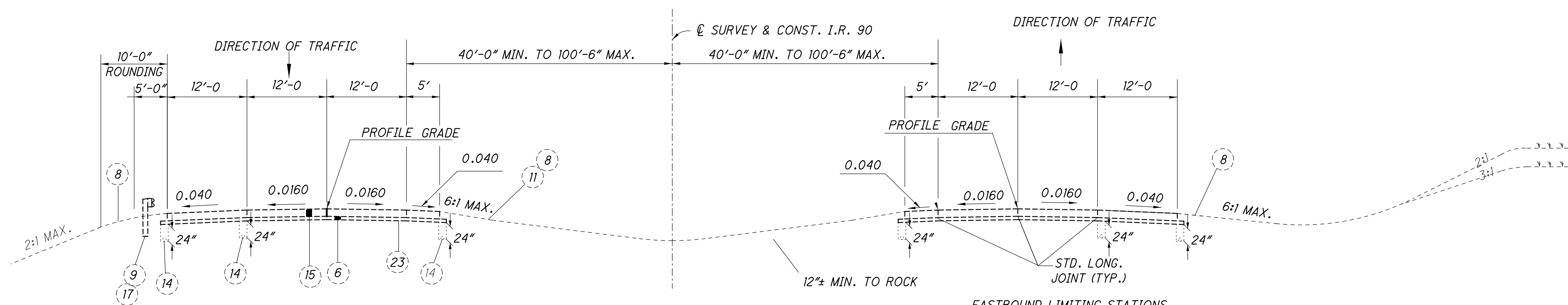
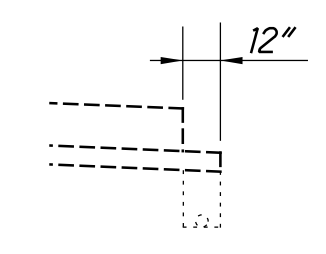
LIMITING STATIONS SHOWN INCLUDE THE ROCK AREAS WHICH ARE SHOWN BELOW AND ARE APPROXIMATE.

EASTBOUND LIMITING STATIONS

- STA. 286+31.50 TO STA. 316+89.11
- STA. 318+99.67 TO STA. 360+50.00
- STA. 372+49.65 TO STA. 379+09.50
- STA. 396+99.12 TO STA. 432+92.89
- STA. 457+49.09 TO STA. 460+02.75±
- STA. 463+97.25± TO STA. 587+90.00
- STA. 599+76.78 TO STA. 614+72.96
- STA. 680+46.92 TO STA. 686+59.45 (BACK) = STA. 686+29.94 (AHEAD)
- STA. 686+29.94 TO STA. 707+70.06
- STA. 709+58.22 TO STA. 724+50.00

TYPICAL EDGE DETAIL

CONCRETE PAVEMENT



WESTBOUND LIMITING STATIONS

- STA. 362+85 TO STA. 376+00
- STA. 392+00 TO STA. 407+85
- STA. 457+50 TO STA. 460+75

NORMAL TYPICAL SECTION - ROCK

APPROXIMATE LIMITING STATIONS

EASTBOUND LIMITING STATIONS

- STA. 331+00 TO STA. 343+00
- STA. 362+85 TO STA. 376+00
- STA. 396+99.12 TO STA. 423+80
- STA. 540+50 TO STA. 562+50
- STA. 606+50 TO STA. 614+72.96

*NOTE: SEE TABLE LOCATED ON SHEET 28 FOR 200 FOOT TRANSITIONS OF THE INSIDE EDGE OF PAVEMENT BETWEEN THE MAINLINE PAVEMENT AND ALL STRUCTURES EXCEPT LAK-90-13.70L.

EXISTING LEGEND: (FROM RECORD PLANS - PID 75479)

1	442	1 1/2" ASPHALT CONCRETE SURFACE COURSE, 12.5mm, TYPE A (446)	13	605	6" SHALLOW PIPE UNDERDRAIN WITH FABRIC, WRAP AS PER PLAN, 707.31 OR 707.41
2	407	TACK COAT FOR INTERMEDIATE COURSE	14	605	6" ROCK CUT UNDERDRAIN WITH FABRIC WRAP, AS PER PLAN
3	442	1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, 19mm, TYPE A (446)	15	888	PORTLAND CEMENT CONCRETE PAVEMENT, 13" THICK (NON-REINFORCED PER 452), AS PER PLAN
4	302	10.5" ASPHALT CONCRETE BASE, PG64-22	16	609	CURB, TYPE 4C
6	304	6" AGGREGATE BASE	17	448	3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 1, UNDER GUARDRAIL, PG64-22, AS PER PLAN (4' WIDE)
7		NOT USED	18	888	PORTLAND CEMENT CONCRETE PAVEMENT, 12.5" THICK (NON-REINFORCED PER 452), AS PER PLAN A
8	659	SEEDING AND MULCHING	19		NOT USED
9	606	GUARDRAIL, TYPE 5	20	526	REINFORCED CONCRETE APPROACH SLAB (T=15"), AS PER PLAN
10	203	EXCAVATION	21	609	CONCRETE MEDIAN
11	203	EMBANKMENT	22	254	PAVEMENT PLANING, ASPHALT CONCRETE (T=3.25")
			23	204	SUBGRADE COMPACTION

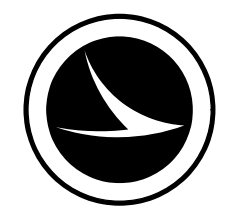
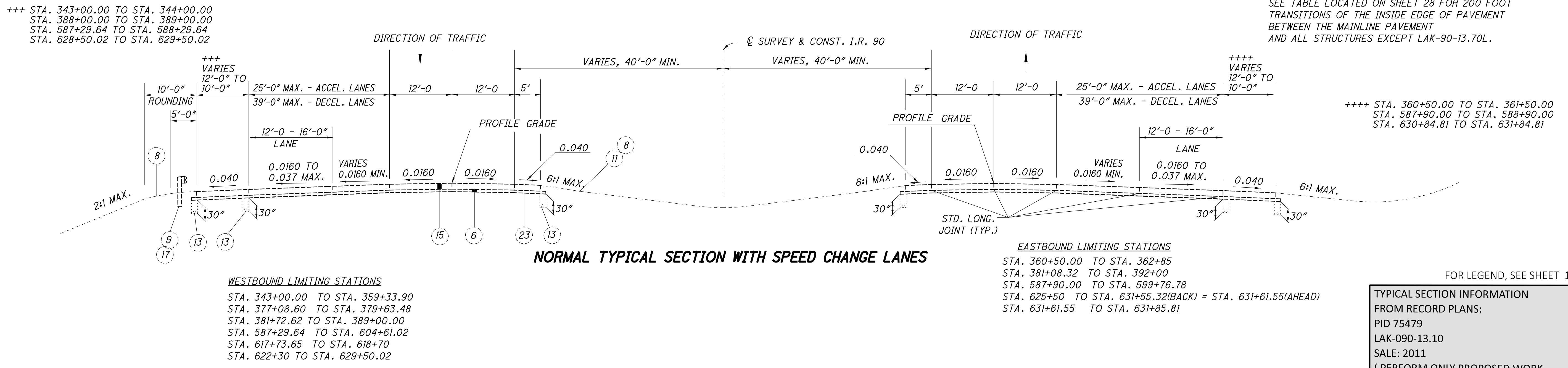
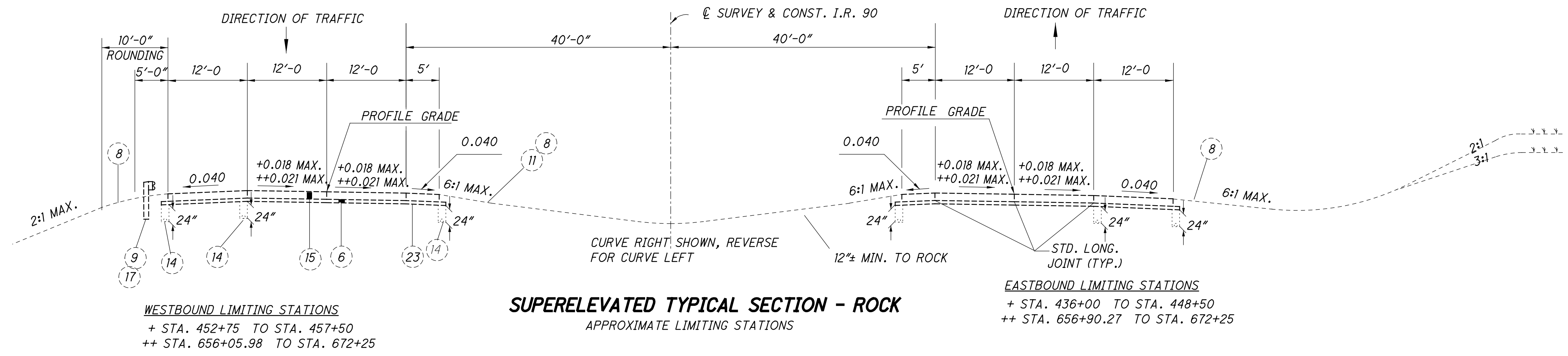
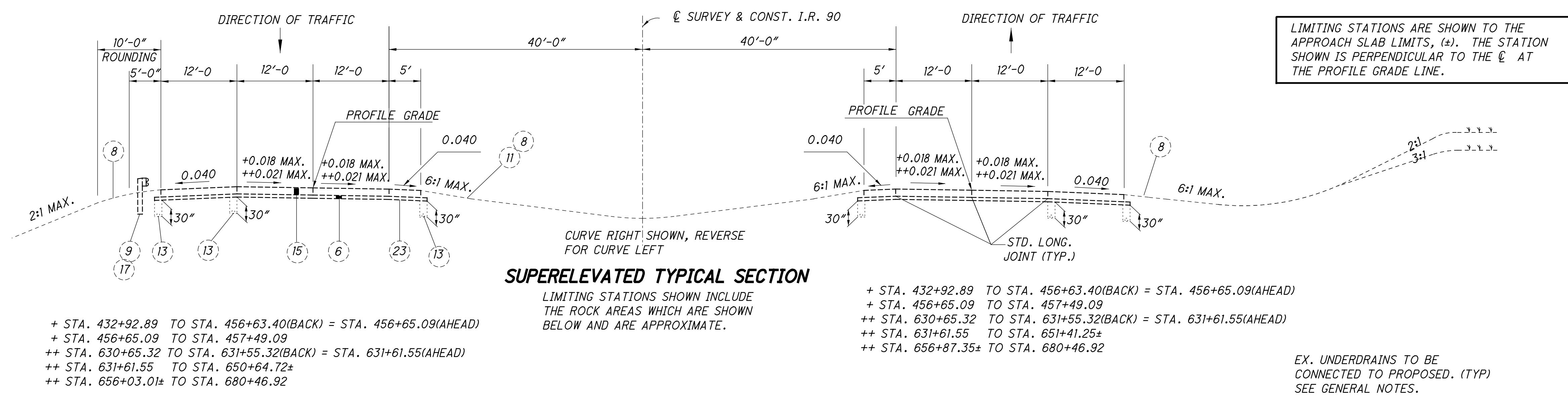
TYPICAL SECTION INFORMATION

FROM RECORD PLANS:
 PID 75479
 LAK-090-13.10
 SALE: 2011
 (PERFORM ONLY PROPOSED WORK FOR PID 113132)

DESIGN AGENCY



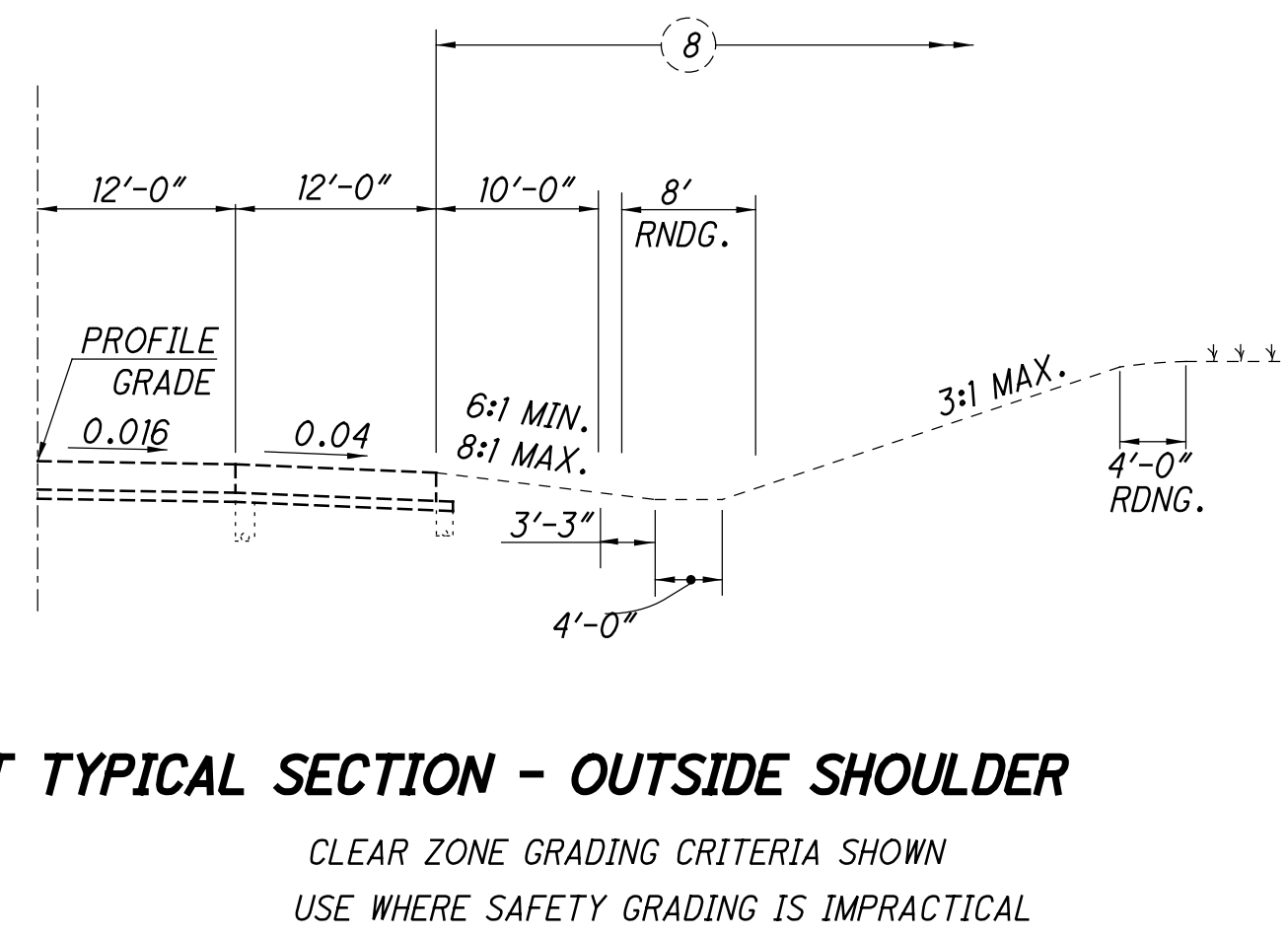
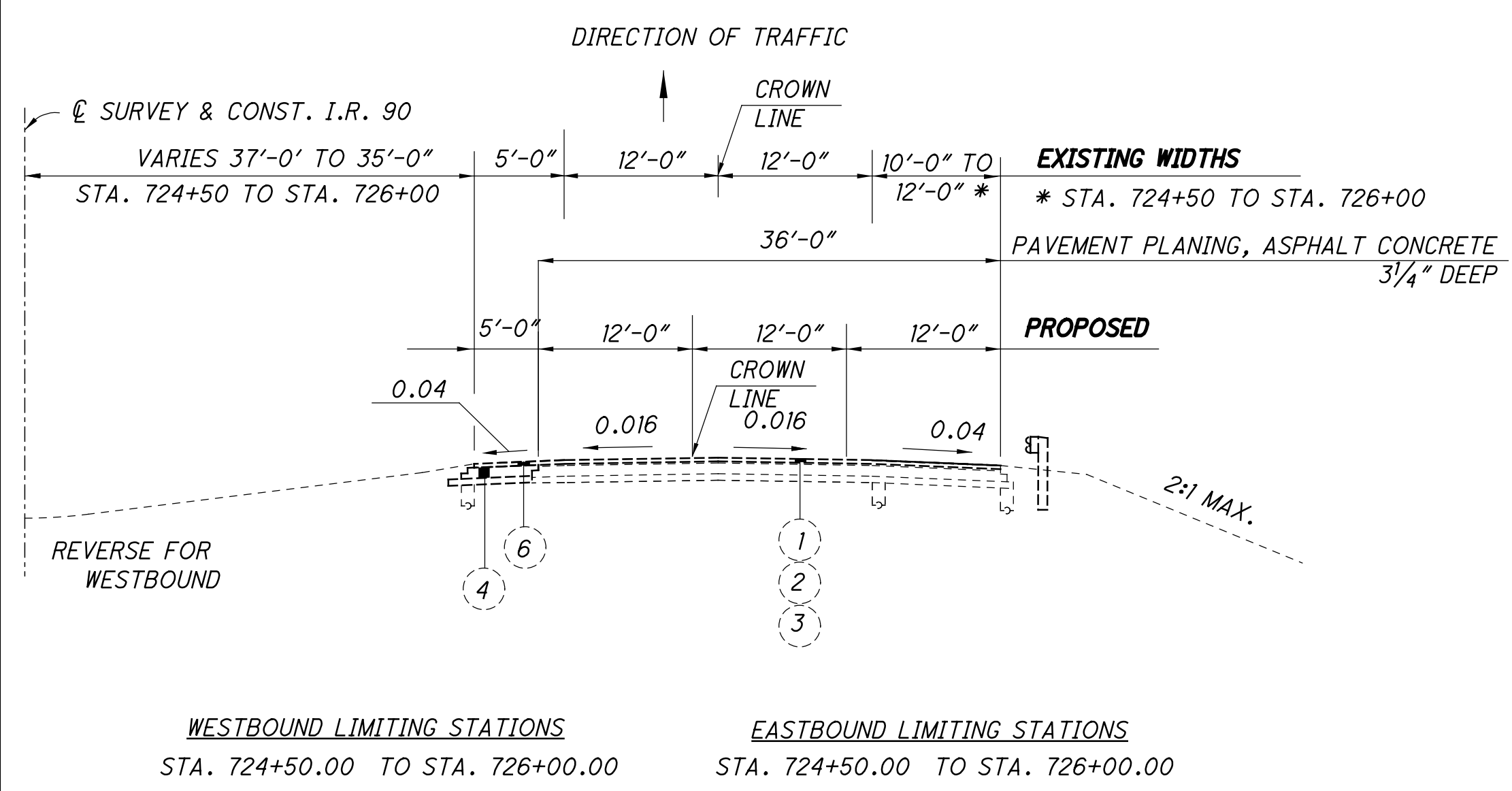
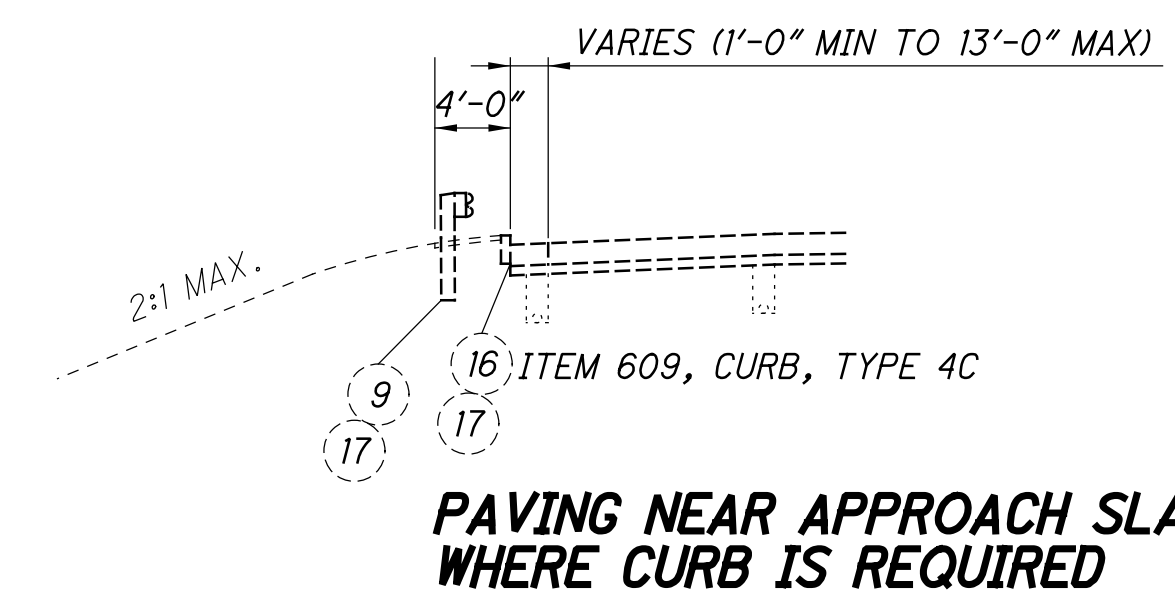
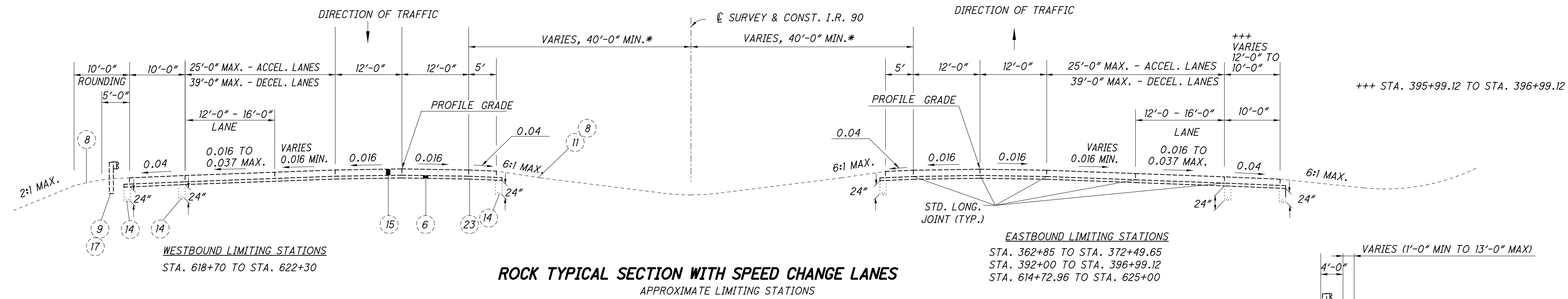
DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	113132
SHEET	P.26
TOTAL	42



FOR LEGEND, SEE SHEET 18

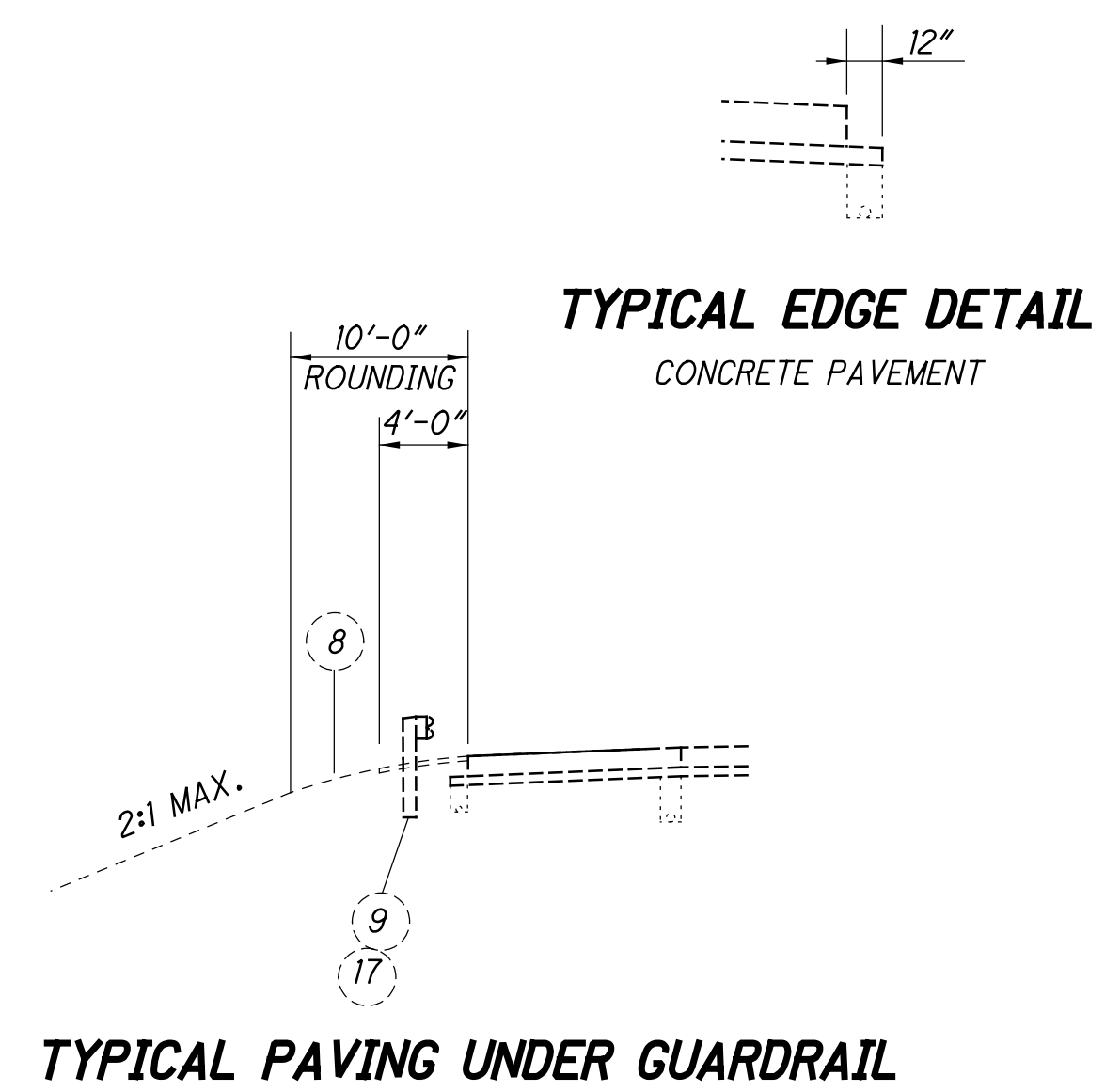
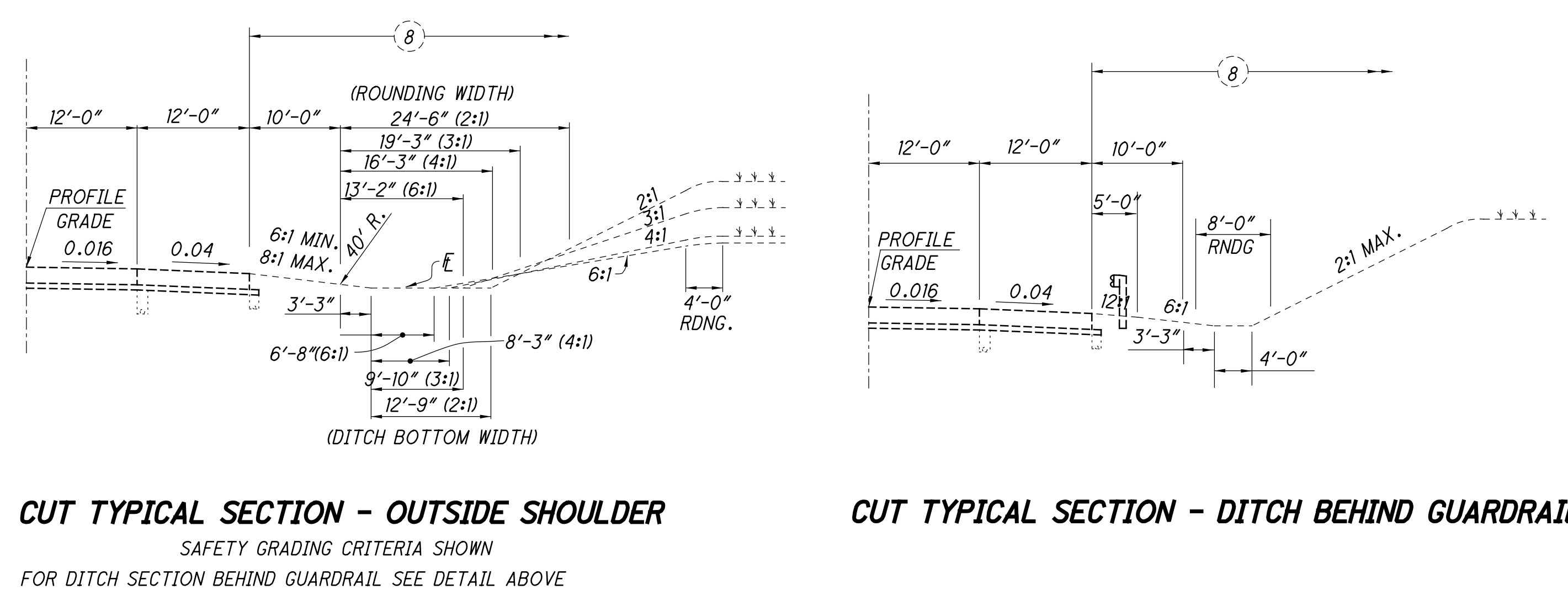
TYPICAL SECTION INFORMATION	
FROM RECORD PLANS:	PID 75479
	LAK-090-13.10
	SALE: 2011
	(PERFORM ONLY PROPOSED WORK FOR PID 113132)

DESIGNER	JAG
REVIEWER	PID 10/11/24
PROJECT ID	113132
SHEET	TOTAL
P.27	42



MAINLINE PAVEMENT SHIFTS
INSIDE EDGE OF PAVEMENT SHIFTS

EASTBOUND		WESTBOUND	
STATION	OFFSET	STATION	OFFSET
286+31.50	102.5	286+31.50	102.5
288+31.50	100.5	288+31.50	100.5
314+50	100.5	316+00	100.5
316+50	102.5	318+00	100.5
319+50	102.5	320+50	100.5
321+50	100.5	322+50	100.5
376+50	40.0	377+00	40.0
378+50	41.0	379+00	42.0
381+50	41.0	382+00	42.0
383+50	40.0	384+00	40.0
457+50	40.0	457+50	40.0
459+50	41.0	459+50	41.0
464+50	41.0	464+50	41.0
466+50	40.0	466+50	40.0
649+00	40.0	648+00	40.0
651+00	41.0	650+00	41.0
657+50	41.0	656+50	41.0
659+50	40.0	658+50	40.0
705+50	40.0	705+50	40.0
707+50	41.0	707+50	41.0
709+50	41.0	709+50	41.0
711+50	40.0	711+50	40.0



FOR LEGEND, SEE SHEET XX

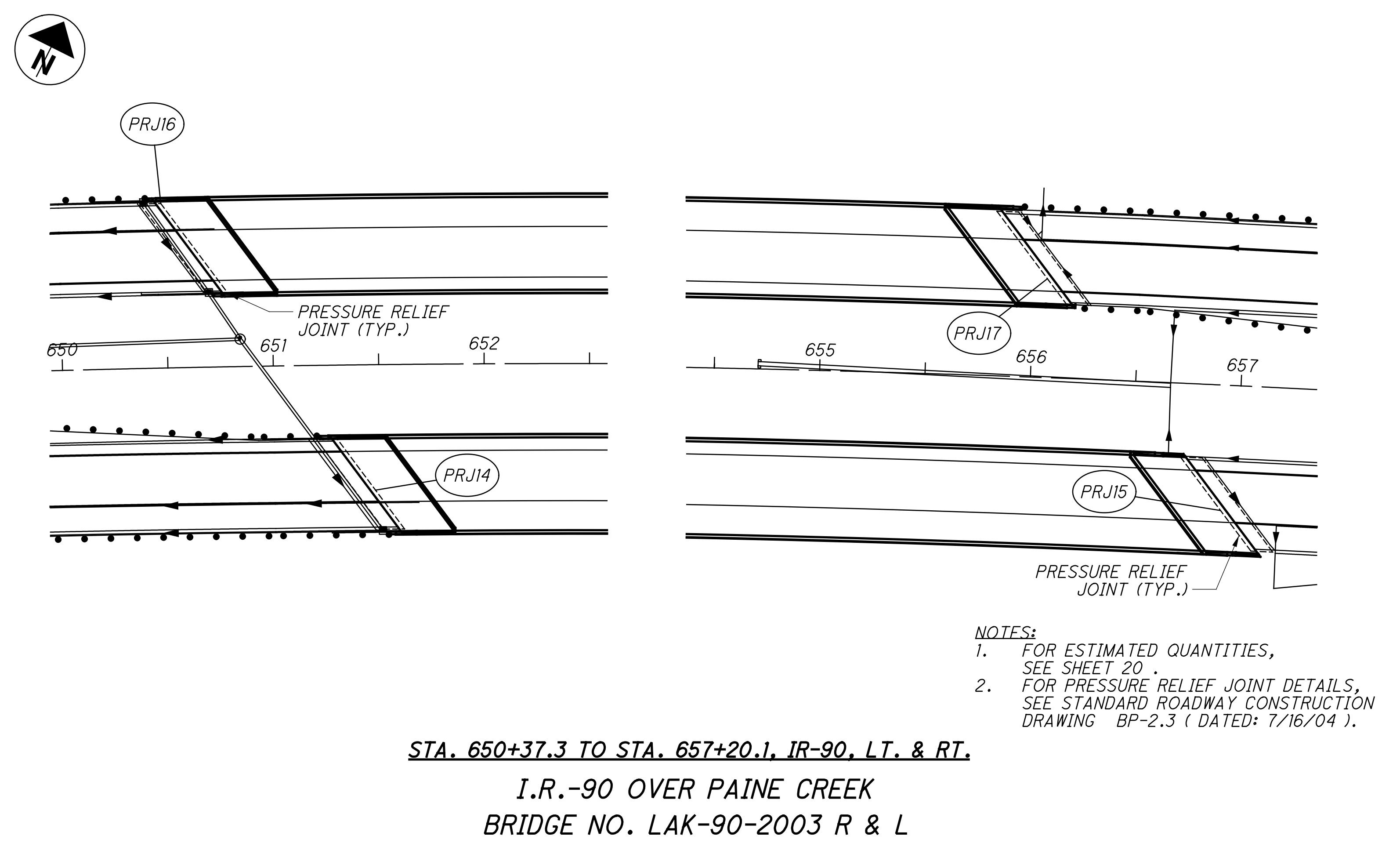
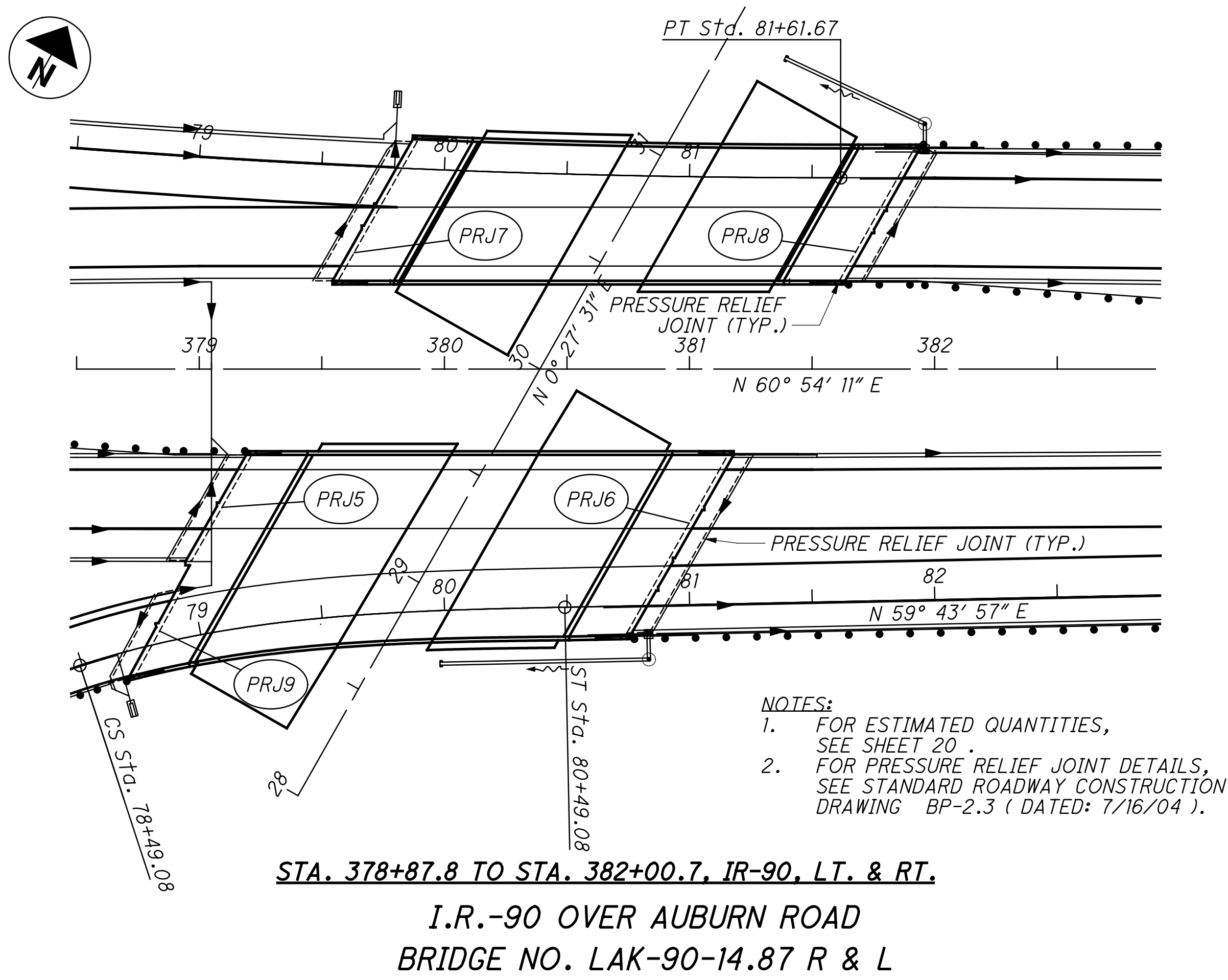
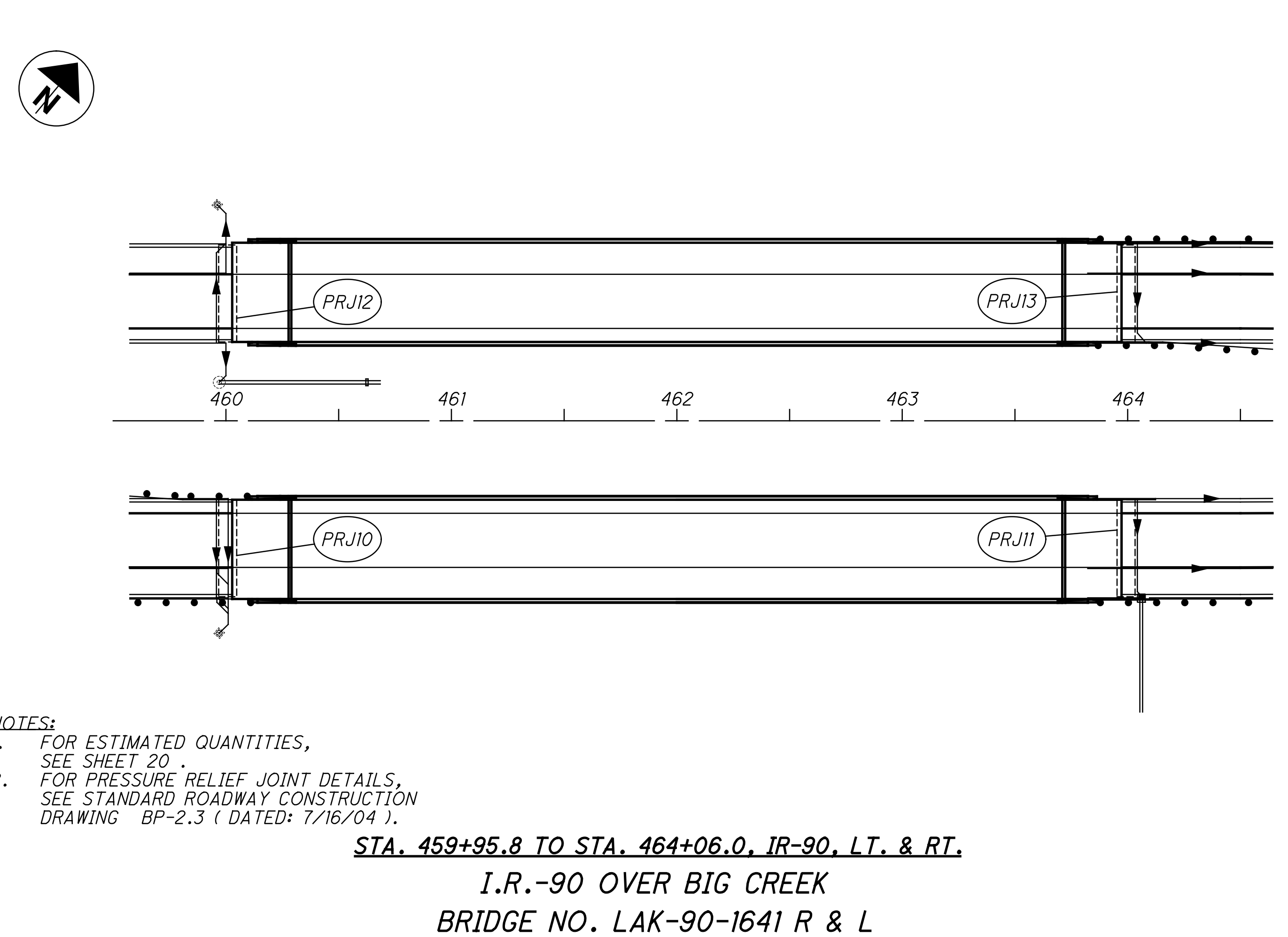
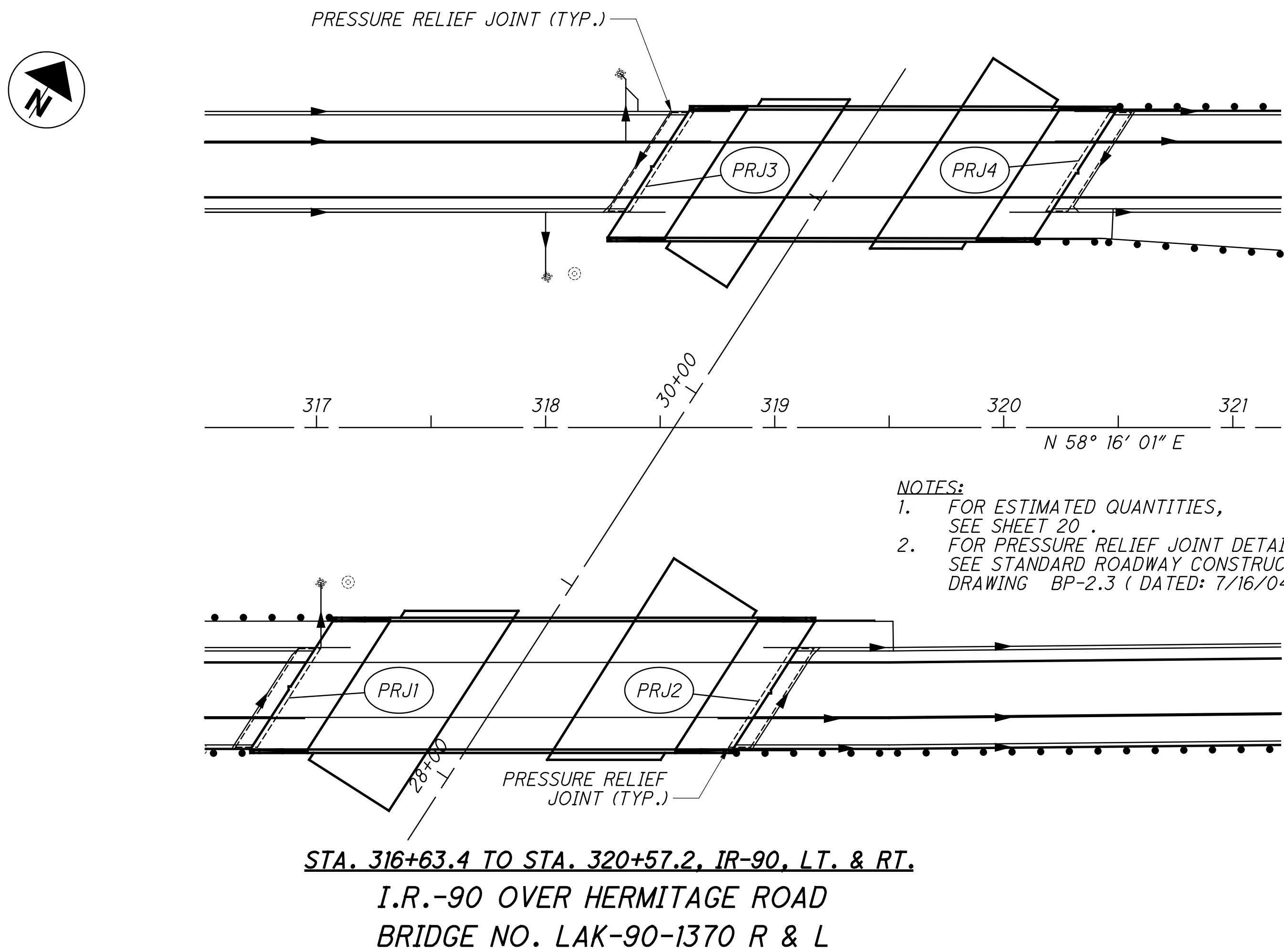
TYPICAL SECTION INFORMATION

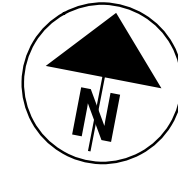
FROM RECORD PLANS:
PID 75479
LAK-090-13.10
SALE: 2011
(PERFORM ONLY PROPOSED WORK FOR PID 113132)

DESIGN AGENCY

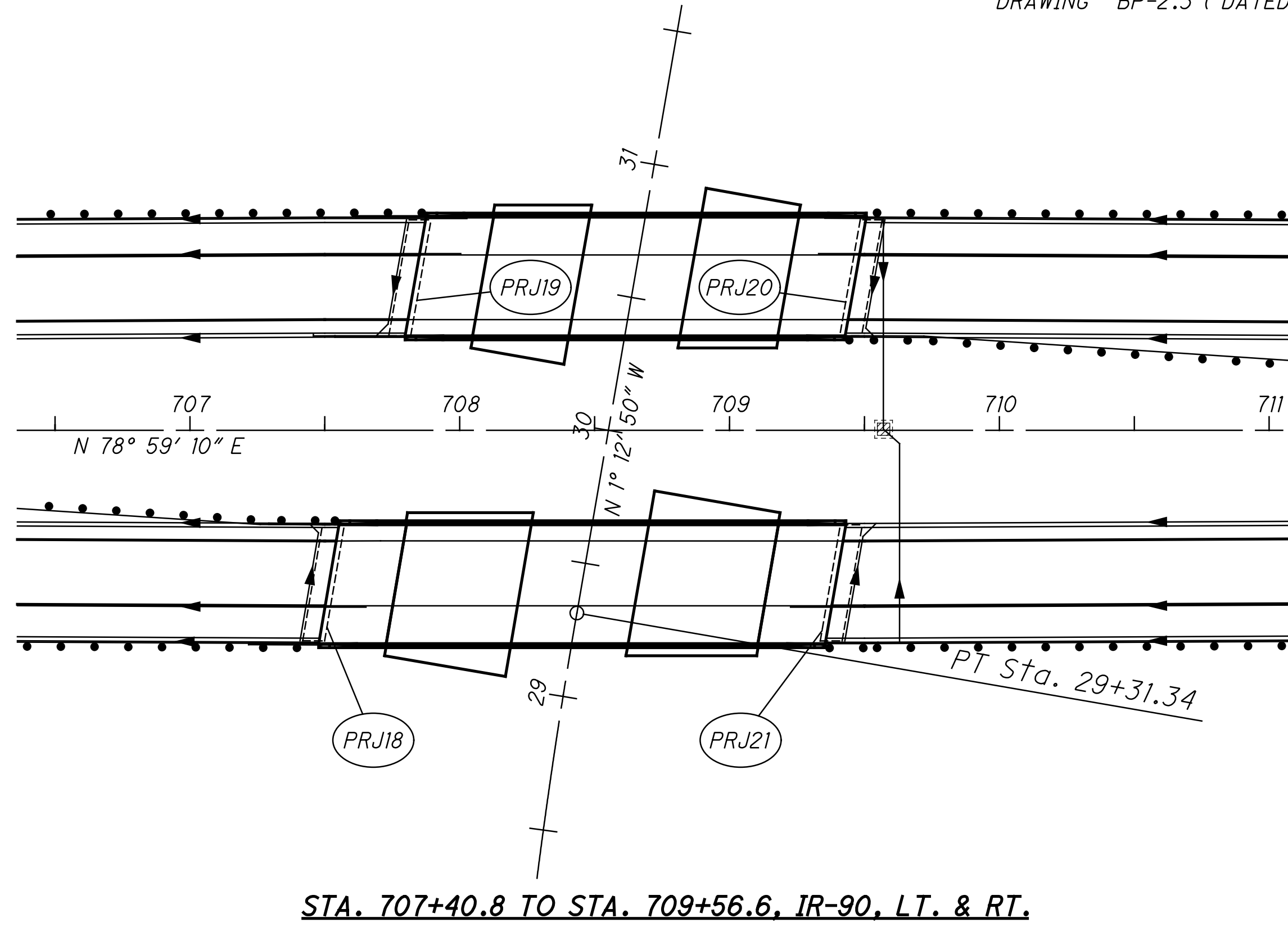
DESIGNER: JAG
REVIEWER: DAB 10/11/24
PROJECT ID: 113132
SHEET TOTAL: P.28 OF 42

D12-PPM-FY2025
MODEL: Sheet PAPER SIZE: 34x22 (in.) DATE: 10/4/2024 TIME: 10:58:50 AM USER: jgimove
pvc:\ohiodot-pw-bentley.com\ohiodot-pw-02\Documents\01 Active Projects\District 12_D12\113132\100-Engineering\Roadway\Sheets\113132_GY107.dgn





- NOTES:
1. FOR ESTIMATED QUANTITIES, SEE SHEET 20 .
 2. FOR PRESSURE RELIEF JOINT DETAILS, SEE STANDARD ROADWAY CONSTRUCTION DRAWING BP-2.3 (DATED: 7/16/04).

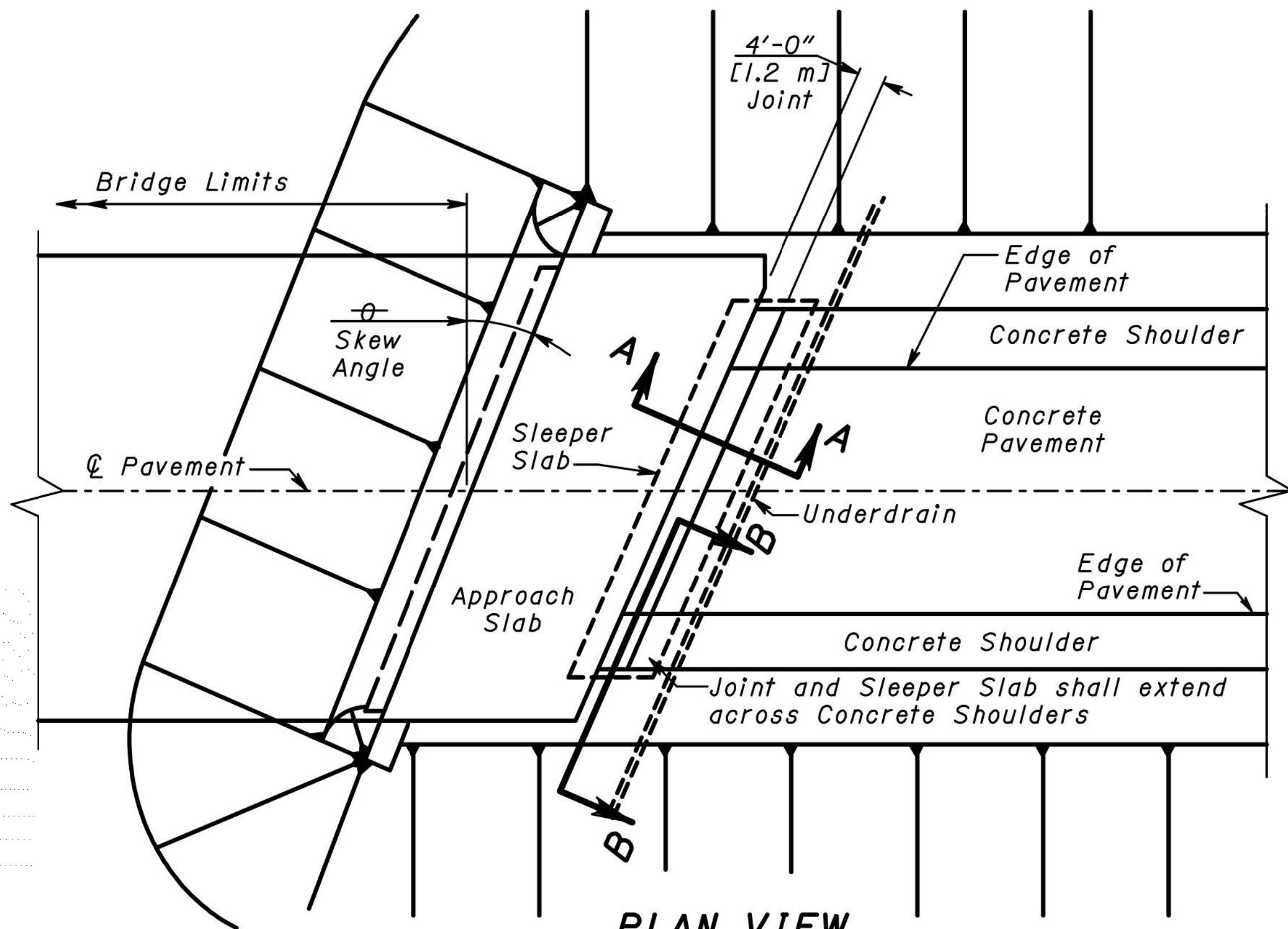


STA. 707+40.8 TO STA. 709+56.6, IR-90, LT. & RT.
 I.R.-90 OVER PAINE ROAD
 BRIDGE NO. LAK-90-2110 R & L

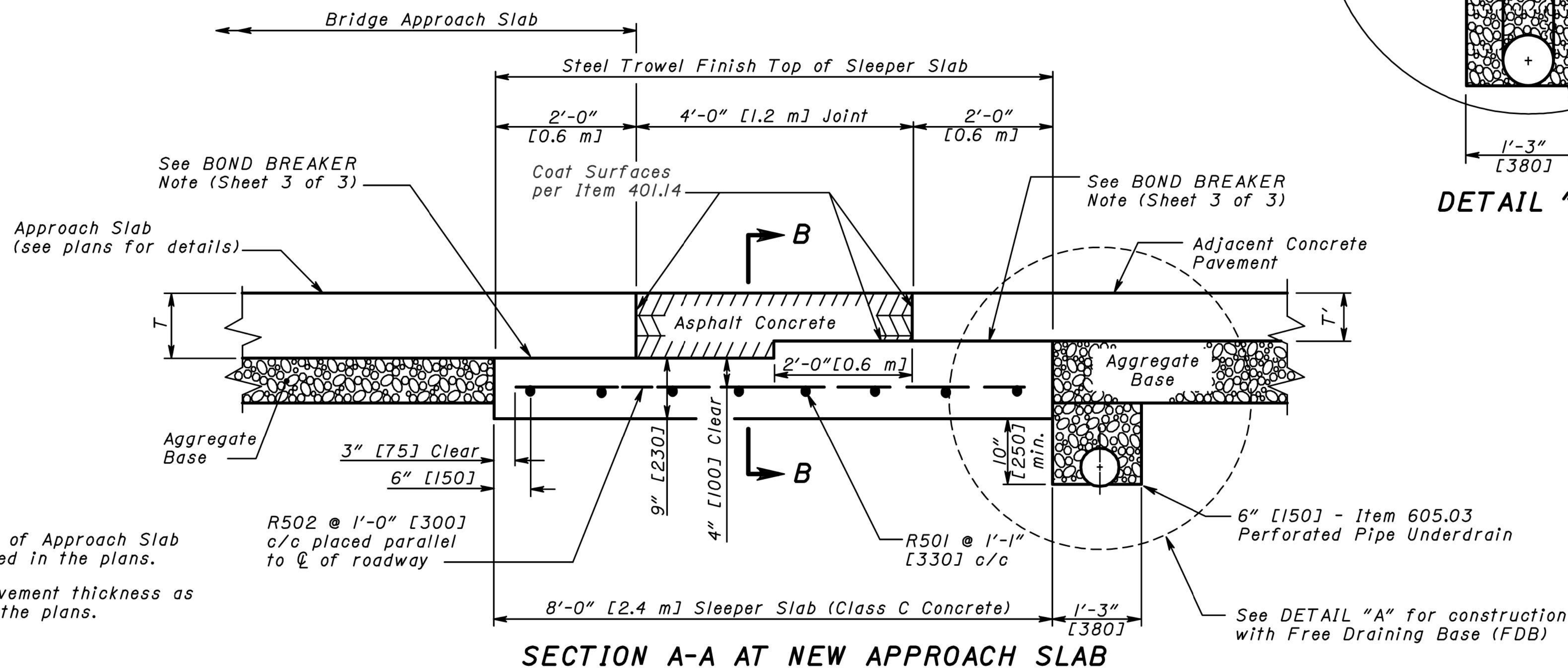
DESIGN AGENCY



DESIGNER	JAG
REVIEWER	DAB 10/11/24
PROJECT ID	113132
SHEET	TOTAL
P.30	42



**PLAN VIEW
PRESSURE RELIEF JOINT - TYPE A
AT NEW APPROACH SLAB**
(Concrete Shoulders shown)



SECTION A-A AT NEW APPROACH SLAB

T = Thickness of Approach Slab as required in the plans.
 T' = Design Pavement thickness as shown in the plans.

R502 @ 1'-0" [300] c/c placed parallel to ϕ of roadway

R501 @ 1'-1" [330] c/c

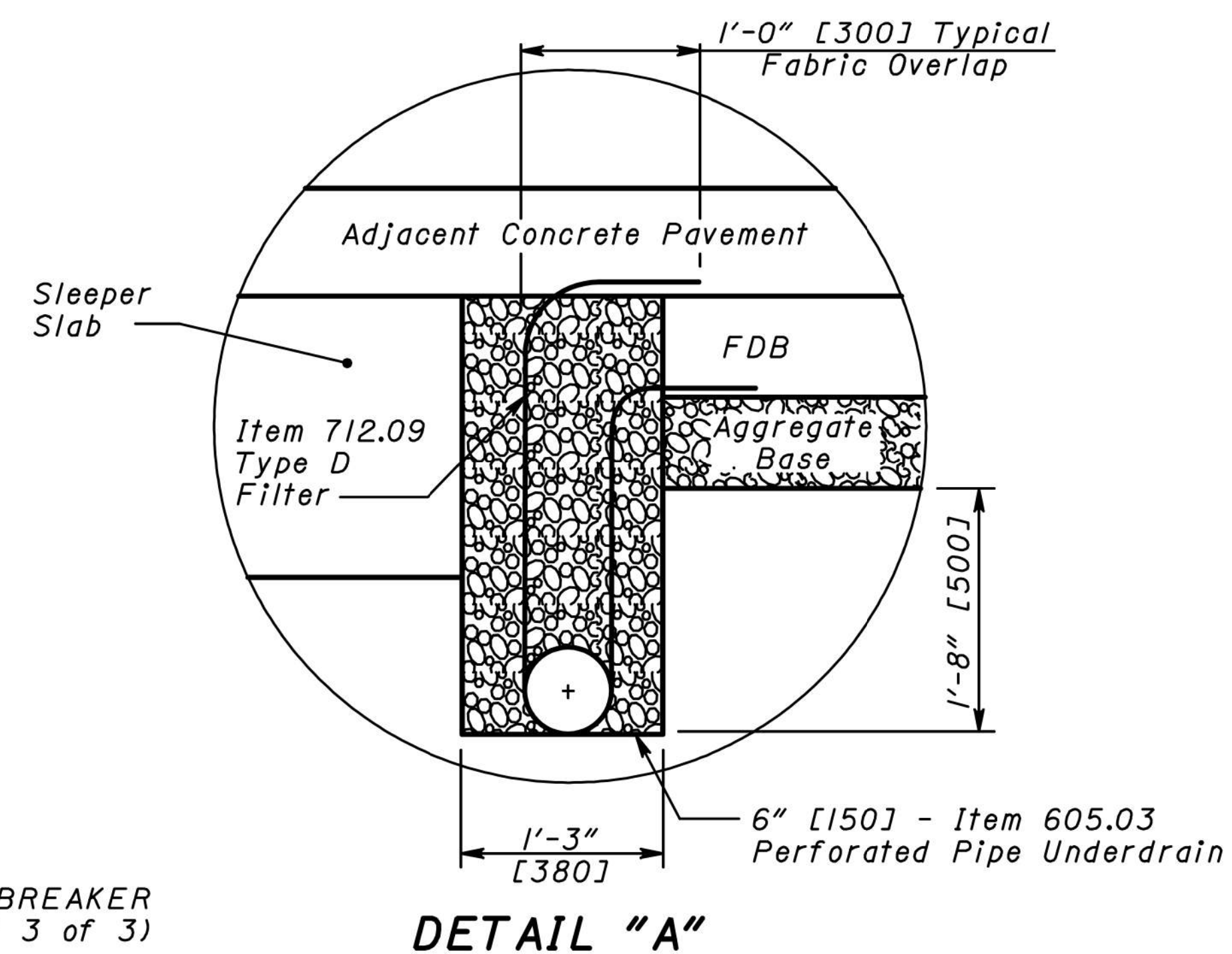
6" [150] - Item 605.03 Perforated Pipe Underdrain

See DETAIL "A" for construction with Free Draining Base (FDB)

REINFORCING STEEL LIST					
Mark	Shape	Number		Length	
		English	Metric	English	Metric
R501 [#16M]	Straight	8	8	S-0.5 ft.	S-0.15 m
R502 [#16M]	Straight	$N = \frac{S}{1 \text{ ft.}}$	$N = \frac{S}{0.3 \text{ m}}$	$\frac{8}{\cos \theta} \text{ ft.}$	$\frac{2.25}{\cos \theta} \text{ m}$

S = Length of sleeper slab in feet [meters]

⌈ R501 bars may be furnished in segments with a 1'-7" [485] bar lap between segments.



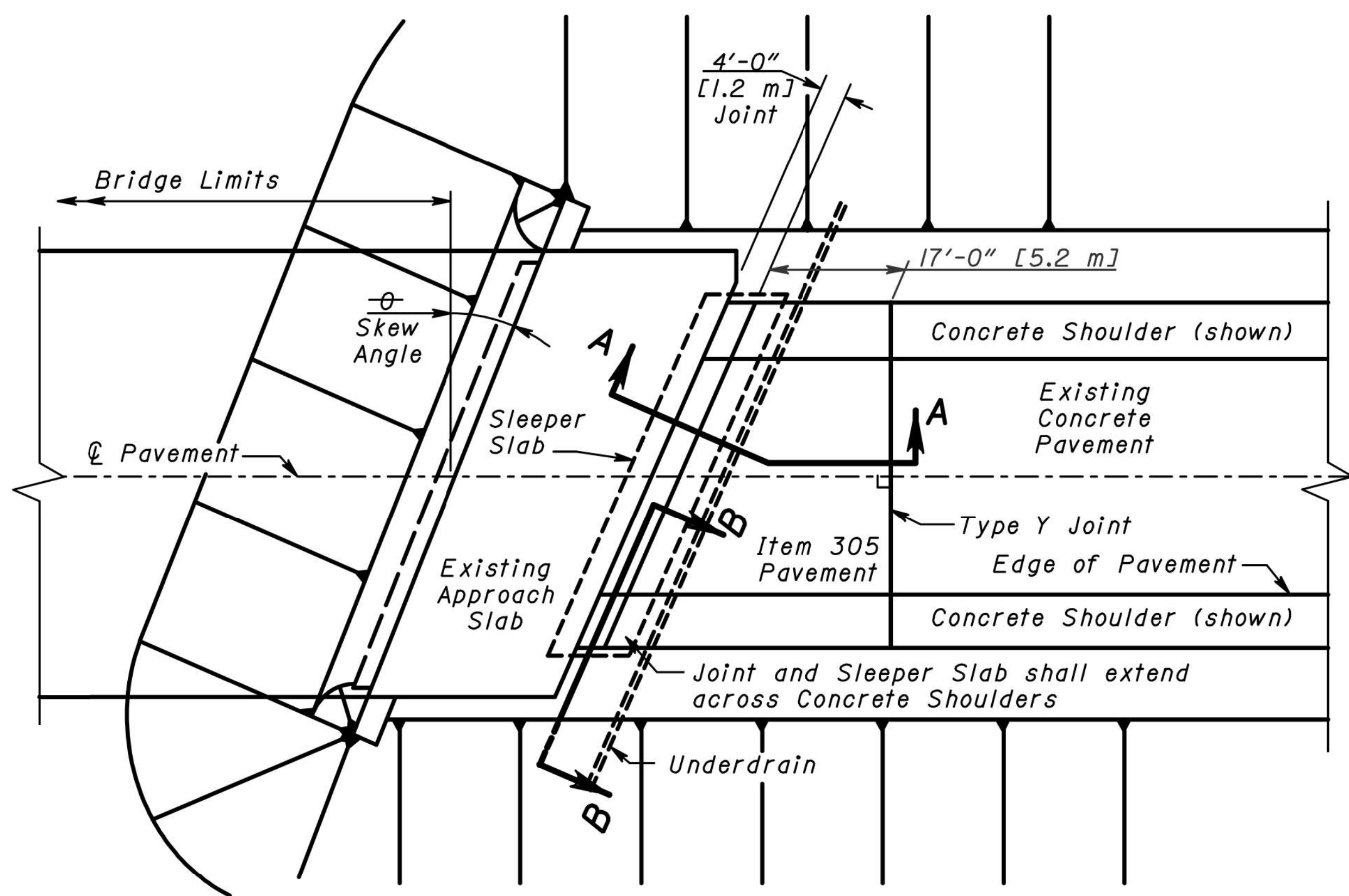
DETAIL "A"

PLAN INSERT SHEET
 BP-2.3 (DATED: 07-16-04)
 PROVIDED FOR REFERENCE PURPOSES.
 PAYMENT FOR THE PROPOSED WORK WILL BE AS OUTLINED ELSEWHERE IN THE PLANS.
 (PERFORM ONLY PROPOSED WORK FOR PID 113132)

THIS DRAWING REPLACES BP-2.3 DATED 7-28-00.

OHIO DEPARTMENT OF TRANSPORTATION		DATE	7-16-04
ROADWAY DESIGN ENGINEER		REVISION DATE	07-16-2004
STDS. ENGR.	D. Focke	OFFICE OF ROADWAY ENGINEERING	
ROADWAY ENGINEERING SERVICES		REVISION DATE	
ALL metric dimensions (in brackets []) are in millimeters unless otherwise noted.		REVISION DATE	
ROADWAY ENGINEERING SERVICES		REVISION DATE	
PRESSURE RELIEF JOINT TYPE A (at New Approach Slab)		REVISION DATE	
DESIGN AGENCY		REVISION DATE	
DESIGNER JAG		REVISION DATE	
REVIEWER DAB		REVISION DATE	
PROJECT ID 113132		REVISION DATE	
SUBSET TOTAL		REVISION DATE	
1 / 3		REVISION DATE	
SHEET TOTAL		REVISION DATE	
P.31 / 42		REVISION DATE	

LOCATION 1B - PRESSURE RELIEF JOINT REPAIR DETAILS
 PLAN INSERT SHEET - BP-2.3 (DATED: 07-16-04)



**PLAN VIEW
 PRESSURE RELIEF JOINT - TYPE A
 AT EXISTING APPROACH SLAB**
 (Concrete Shoulders shown)

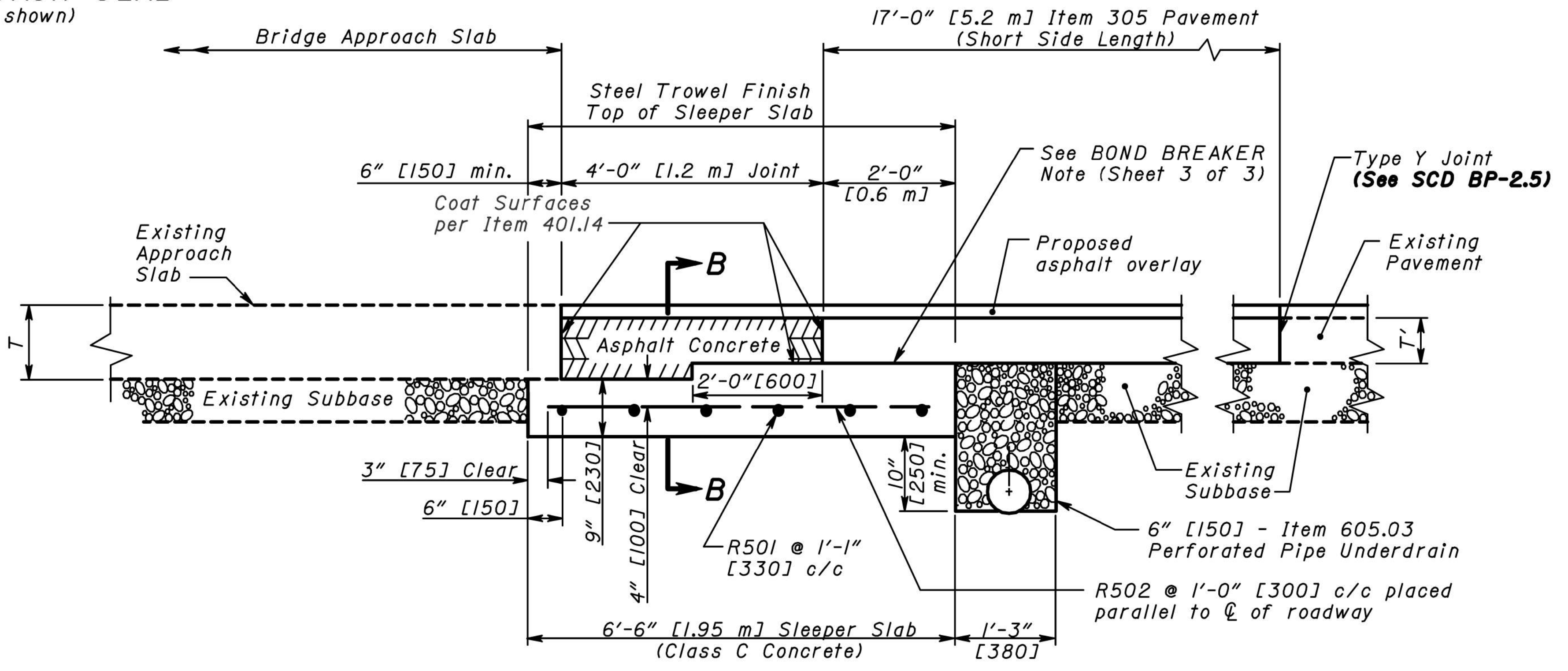
REINFORCING STEEL LIST					
Mark	Shape	Number		Length	
		English	Metric	English	Metric
R501 [#16M]	Straight	6	6	S-0.5 ft.	S-0.15 m
R502 [#16M]	Straight	$N = \frac{S}{1 \text{ ft.}}$	$N = \frac{S}{0.3 \text{ m}}$	$\frac{6}{\cos \theta} \text{ ft.}$	$\frac{1.8}{\cos \theta} \text{ m}$

S = Length of sleeper slab in feet [meters]

[T] R501 bars may be furnished in segments with a 1'-7" [485] bar lap between segments.

PLAN INSERT SHEET
 BP-2.3 (DATED: 07-16-04)
 PROVIDED FOR REFERENCE
 PURPOSES.
 PAYMENT FOR THE PROPOSED WORK
 WILL BE AS OUTLINED ELSEWHERE
 IN THE PLANS.
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

T = Thickness of Approach Slab as shown in the plans.
 T' = Design Pavement thickness as shown in the plans.



SECTION A-A AT EXISTING APPROACH SLAB

THIS DRAWING REPLACES BP-2.3 DATED 7-28-00.

OHIO DEPARTMENT OF TRANSPORTATION	ROADWAY DESIGN ENGINEER	DATE
	D. Focke	7-16-04
STDS. ENGR.	ROADWAY ENGINEERING SERVICES	REVISION DATE
All metric dimensions in brackets [] are in millimeters unless otherwise noted.		07-16-2004

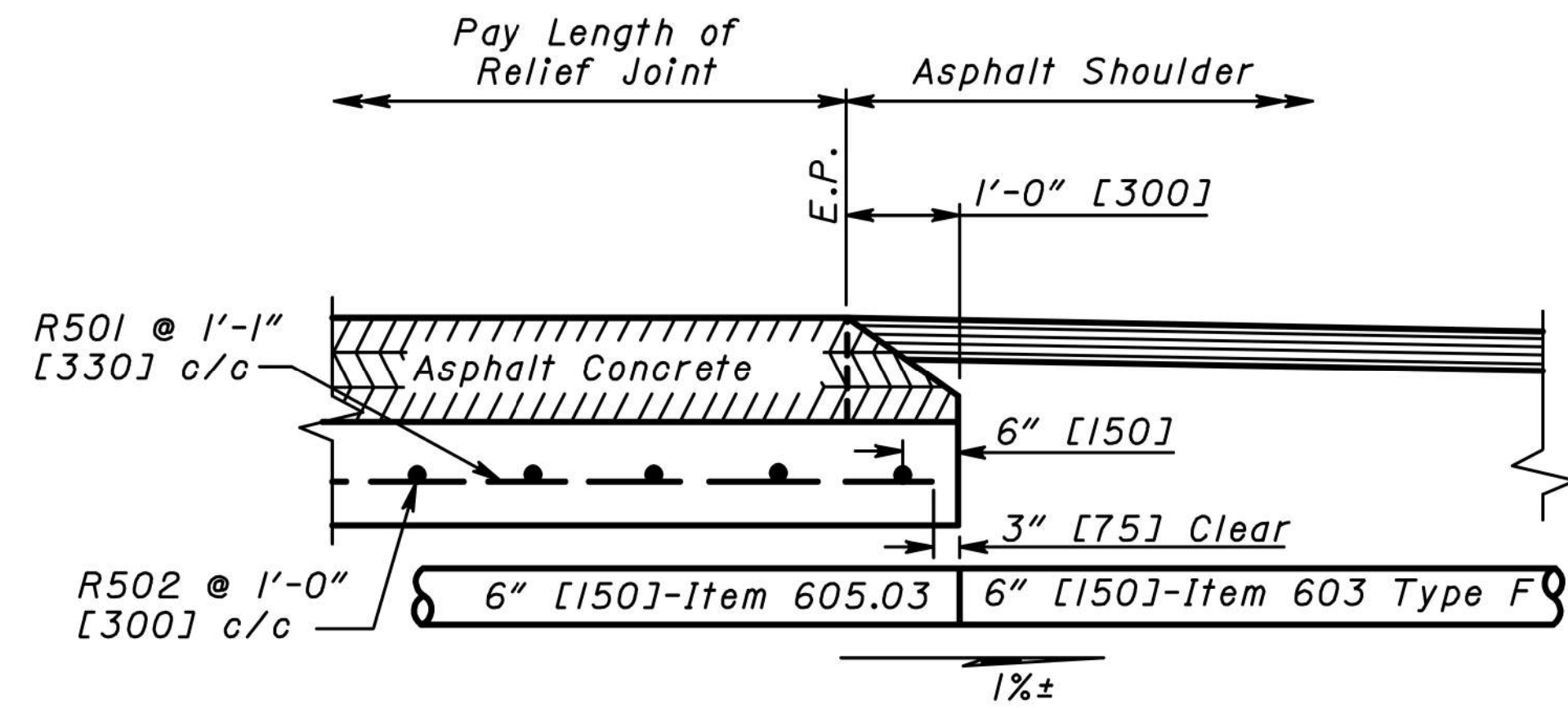
OFFICE OF ROADWAY ENGINEERING

LOCATION 1B - PRESSURE RELIEF JOINT REPAIR DETAILS
 PLAN INSERT SHEET - BP-2.3 (DATED: 07-16-04)

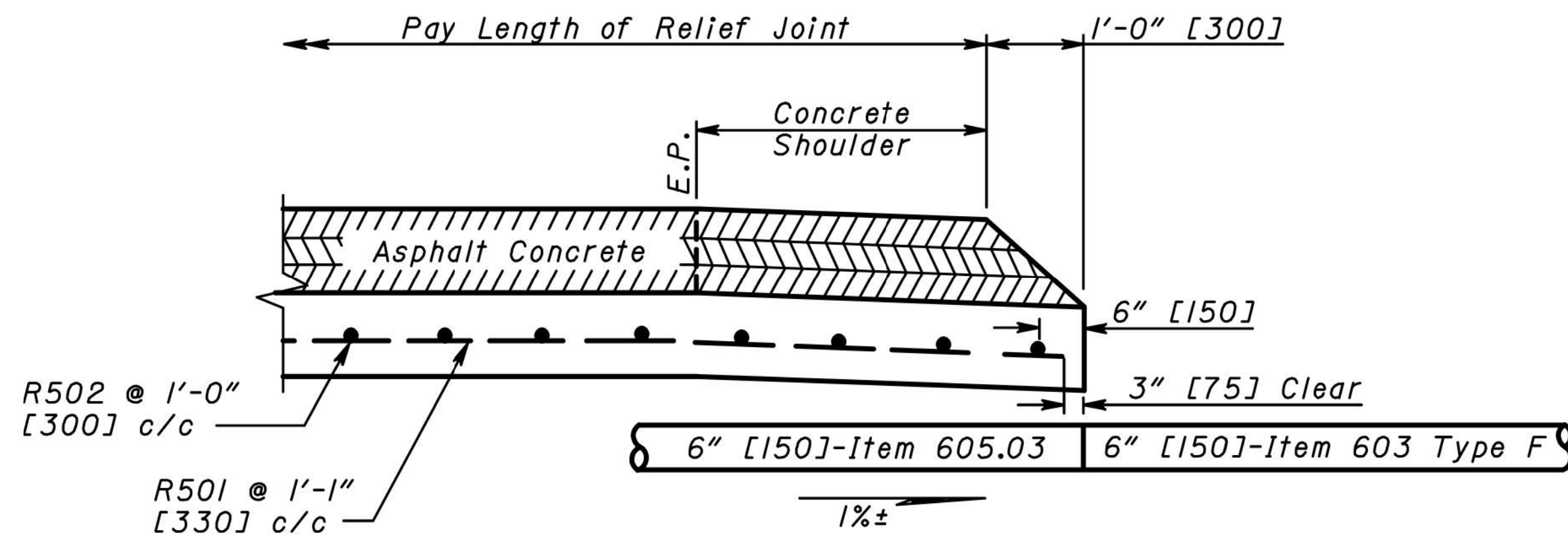
DESIGN AGENCY

DESIGNER: JAG
 REVIEWER: DAB 10/11/24
 PROJECT ID: 113132

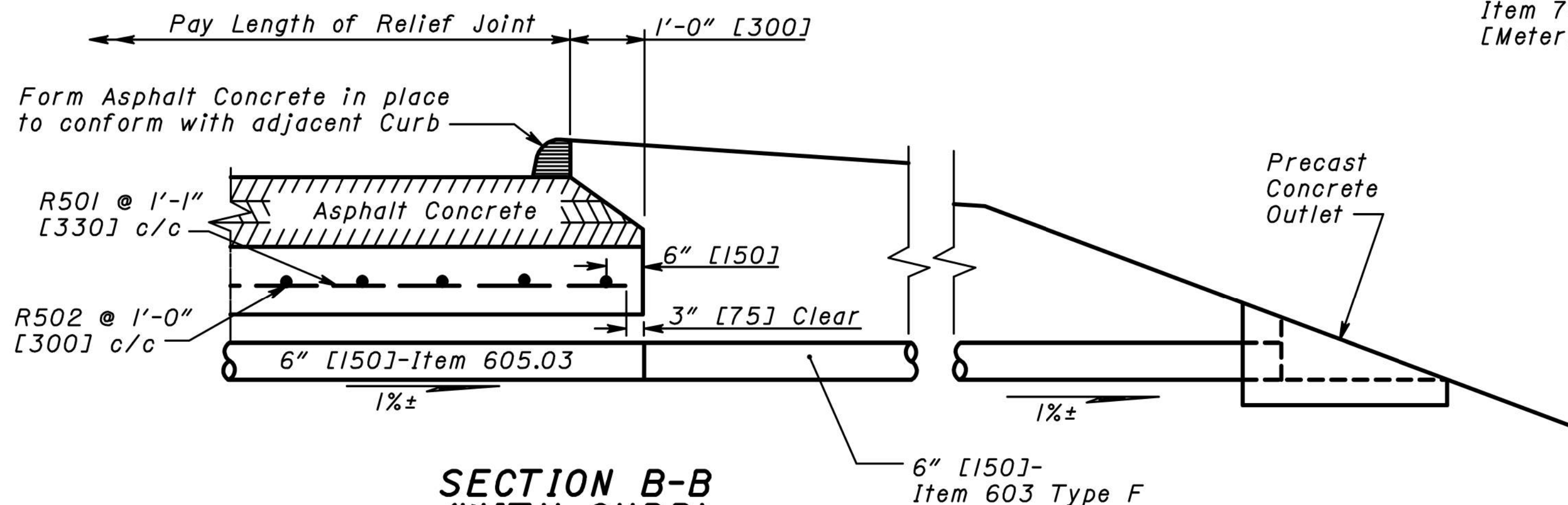
NUMBER	BP-2.3	
2 / 3	SUBSET	TOTAL
	2	3
SHEET	TOTAL	
P.32	42	



**SECTION B-B
(WITH ASPHALT SHOULDERS)**



**SECTION B-B
(WITH CONCRETE SHOULDERS)**



**SECTION B-B
(WITH CURB)**
(Showing an Underdrain Outlet through the embankment)

NOTES

APPROACH SLAB PRESSURE RELIEF JOINTS: Relief joints are to be provided regardless of abutment design at all bridge approaches where approach pavement is rigid, or composite consisting of a rigid base.

ASPHALT CONCRETE: Item 448 - Asphalt Concrete Intermediate Course, Type 2 PG 64-22 shall be compacted in equal lifts not exceeding 3" [75] with compaction equipment as approved by the Engineer.

ITEM 305 PAVEMENT: shall be constructed in accordance with **SCD BP-2.1 & BP-2.2.** Longitudinal joints shall be placed in the same location and in the same alignment as the longitudinal joints in the existing pavements.

BOND BREAKER: A bond breaker consisting of two 4 foot [1.2 m] sheets of clear or opaque polyethylene film, Item 705.06, shall be centered above the joint between the subbase and the sleeper slab. Care shall be taken in the area beneath the polyethylene film to ensure the surface of the subbase is finished smooth and is flush with or slightly higher than the surface of the sleeper slab. The film shall have a nominal thickness of 4 mils [0.1].

UNDERDRAIN: A perforated underdrain shall be placed as shown. It shall extend from edge to edge of the sleeper slab and be outletted as shown on the plan, either to a longitudinal underdrain, a catch basin, or through the embankment or ditch foreslope. For additional information, see **SCD DM-1.2.**

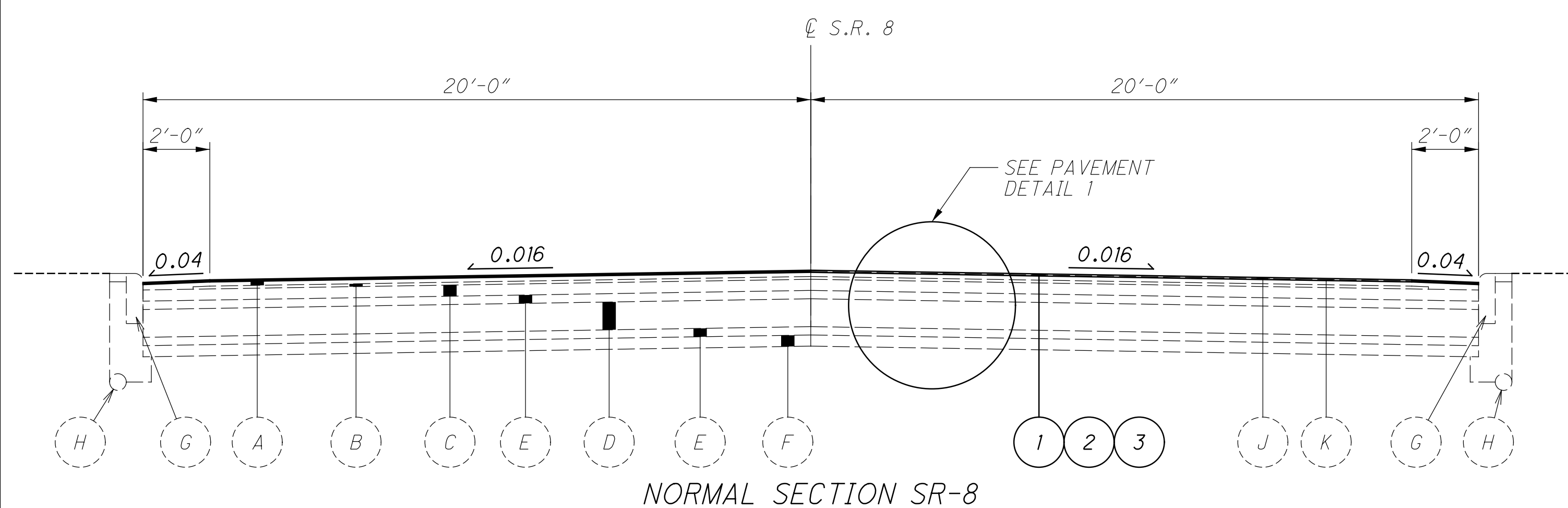
PAYMENT: Measurement of the pressure relief joint for payment purposes shall be along the centerline of the Sleeper Slab 1) between the outside edges of concrete shoulders, 2) between the backs of curb, and 3) between the edges of pavement when asphalt shoulders are used. Payment shall be per Linear Foot [Meter] of **Item Special - Pressure Relief Joint, Type A** and shall include saw cutting & removal of existing pavement, Items 305 & 448, and all labor, materials and incidentals needed to construct the joint as shown, except for the pipe Underdrain. The Underdrains shall be paid for per Linear Foot [Meter] of **Item 605 - 6" [150] Shallow Pipe Underdrain,** Item 707.32 Type CP, or 707.41. The outlet pipe shall be paid for per Linear Foot [Meter] of **Item 603 - 6" [150] Conduit, Type F.**

PLAN INSERT SHEET
 BP-2.3 (DATED: 07-16-04)
 PROVIDED FOR REFERENCE
 PURPOSES.
 PAYMENT FOR THE PROPOSED WORK
 WILL BE AS OUTLINED ELSEWHERE
 IN THE PLANS.
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

THIS DRAWING REPLACES BP-2.3 DATED 7-28-00.

OHIO DEPARTMENT OF TRANSPORTATION	DATE	7-16-04
	ROADWAY DESIGN ENGINEER	
STDS. ENGR.	D. Focke	
All metric dimensions (in brackets []) are in millimeters unless otherwise noted.		
ROADWAY ENGINEERING SERVICES		
STANDARD ROADWAY CONSTRUCTION DRAWING		
PRESSURE RELIEF JOINT TYPE A		
(Notes and Section B-B)		
NUMBER	BP-2.3	
3 / 3	SUBSET	TOTAL
	3	3
SHEET	TOTAL	
P.33	42	

LOCATION 1B - PRESSURE RELIEF JOINT REPAIR DETAILS
 PLAN INSERT SHEET - BP-2.3 (DATED: 07-16-04)

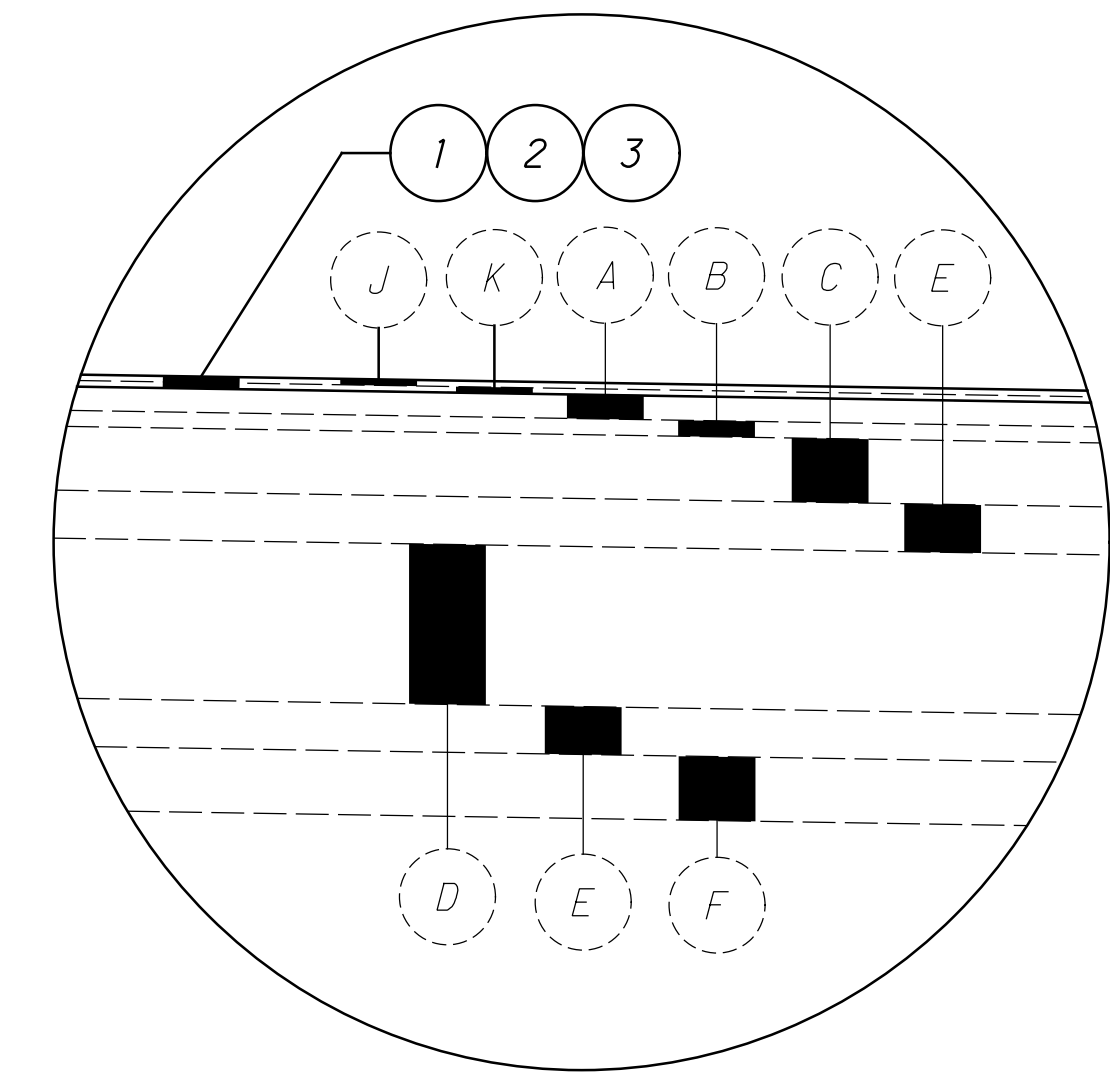


NORMAL SECTION SR-8

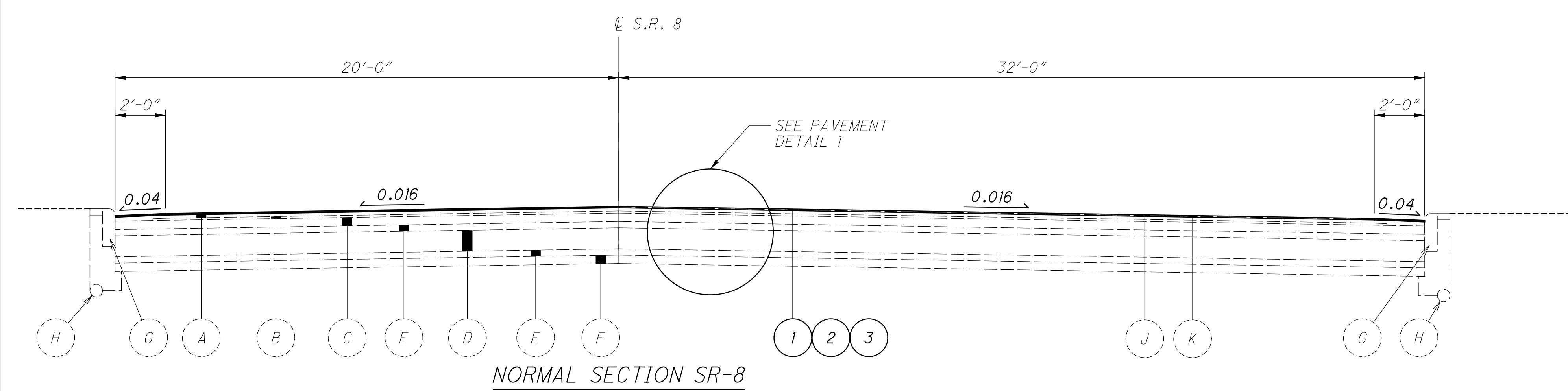
STA. 0+00 TO STA. 4+14
 STA. 7+40 TO STA. 13+40
 STA. 17+19 TO STA. 19+00
 STA. 33+88 TO STA. 65+70

- EXISTING LEGEND**
- (A) ASPHALT SURFACE COURSE, 1-1/2"
 - (B) ASPHALT INTERMEDIATE COURSE, 1"
 - (C) ASPHALT OVERLAY (3.75" TO 5.5"+)
 - (D) REINFORCED CONCRETE BASE (10" TO 13.25")
 - (E) 3" BRICK
 - (F) 4" AGGREGATE BASE
 - (G) CONCRETE CURB
 - (H) UNDERDRAIN
 - (J) ITEM 421 - MICROSURFACING, SURFACE COURSE (2016 PROJECT)
 - (K) ITEM 421 - MICROSURFACING, LEVELING COURSE (2016 PROJECT)

- PROPOSED LEGEND**
- ① ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (1")
 - ② ITEM 407 - NON-TRACKING TACK COAT
 - ③ ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (1")

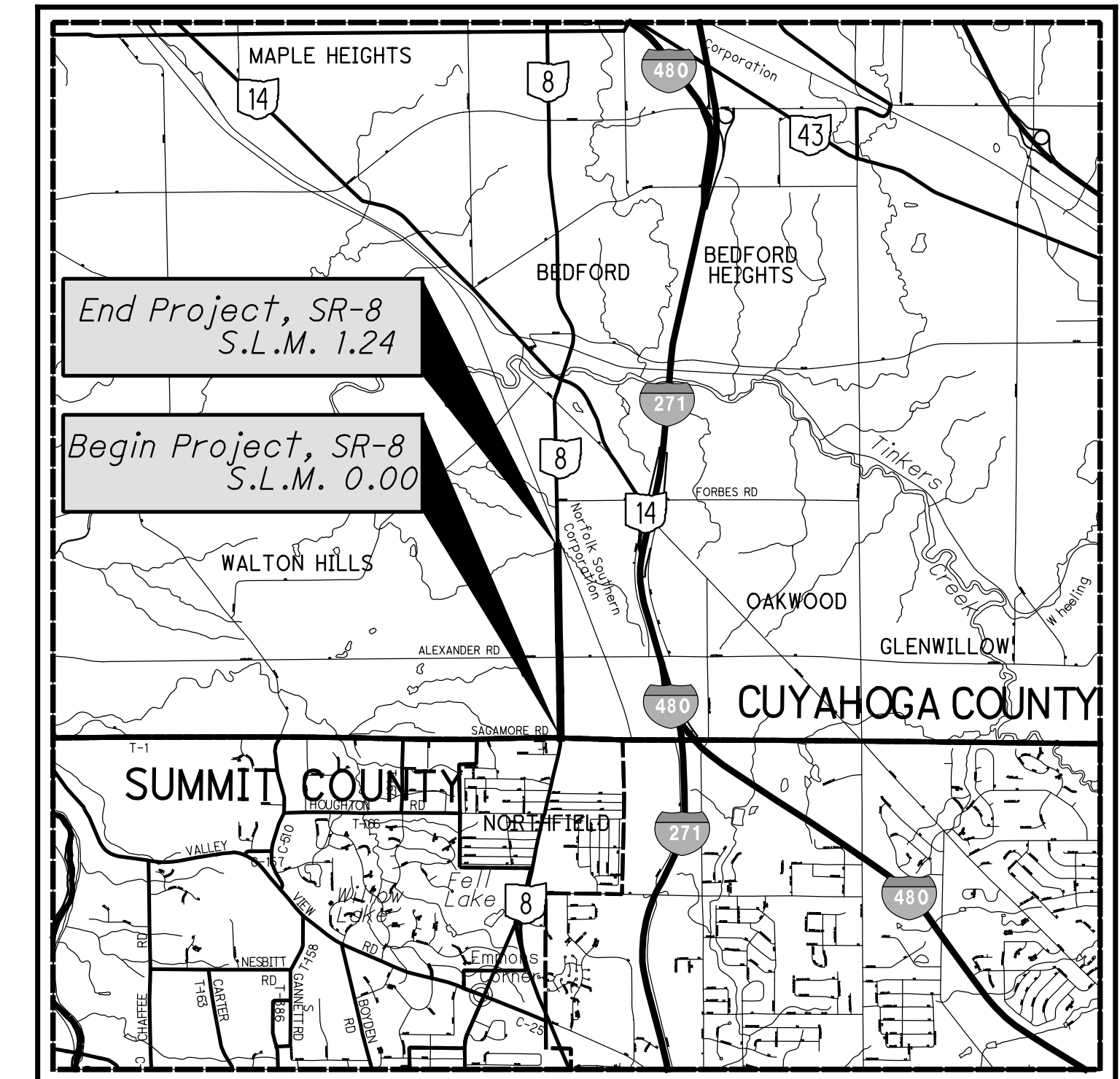


PAVEMENT DETAIL 1



NORMAL SECTION SR-8

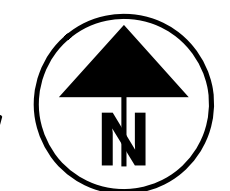
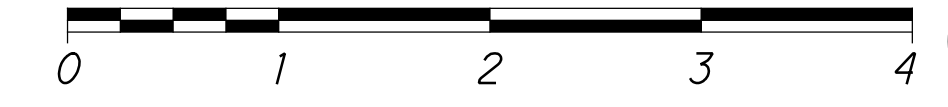
STA. 4+14 TO STA. 7+40
 STA. 13+40 TO STA. 17+19
 STA. 19+00 TO STA. 20+78



LOCATION MAP

LATITUDE: 41°21'34" LONGITUDE: -81°31'36"

SCALE IN MILES

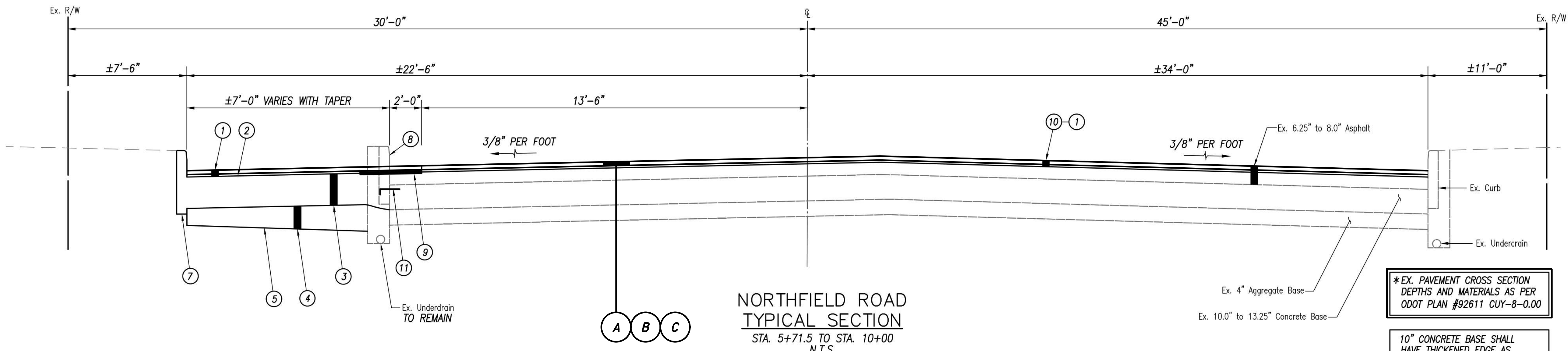


PORTION TO BE IMPROVED

LOCATION 2
 S.R.- 8
 CUYAHOGA COUNTY

TYPICAL SECTION INFORMATION
 FROM RECORD PLANS:
 PID 92611
 CUY-008-00.00
 SALE: 2016
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

DESIGN AGENCY	
DESIGNER	JAG
REVIEWER	DAB
DATE	10/11/24
PROJECT ID	113132
SHEET	P.34
TOTAL	42

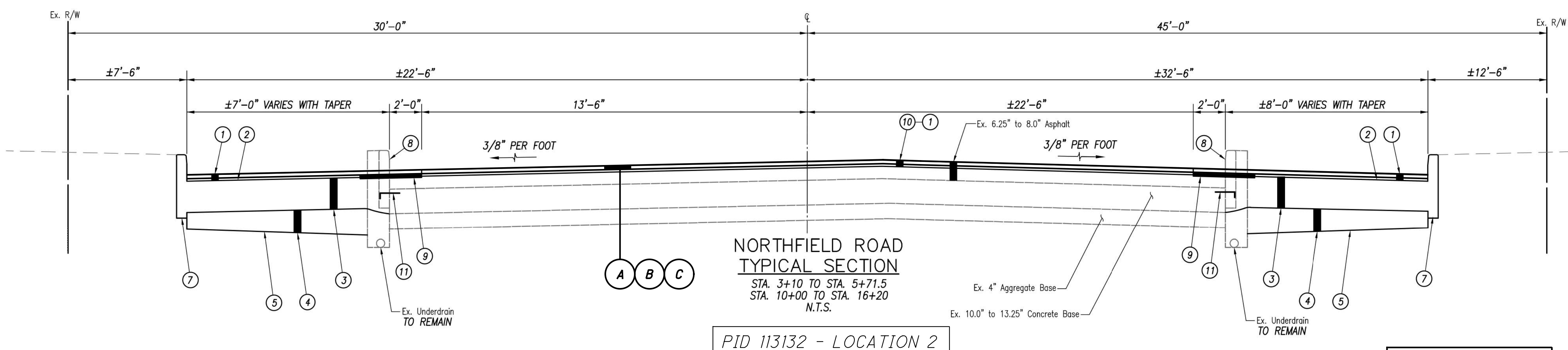


PID 113132 - LOCATION 2
 REMAPPED STATIONS
 STA. 23+39.5 TO STA. 27+68
 N.T.S.

* EX. PAVEMENT CROSS SECTION DEPTHS AND MATERIALS AS PER ODOT PLAN #92611 CUY-8-0.00

10" CONCRETE BASE SHALL HAVE THICKENED EDGE AS NEEDED TO ACHIEVE MIN. 4.0" COVER, BOTH ABOVE AND BELOW, ON HOOK BOLTS.

4" AGGREGATE BASE SHALL BE INSTALLED WITH BOTTOM SLOPED TOWARDS EXISTING UNDERDRAIN.



PID 113132 - LOCATION 2
 REMAPPED STATIONS
 STA. 20+78 TO STA. 23+39.5
 STA. 27+68 TO STA. 33+88
 N.T.S.

* EX. PAVEMENT CROSS SECTION DEPTHS AND MATERIALS AS PER ODOT PLAN #92611 CUY-8-0.00

LEGEND - FROM LPA PROJECT 14110

- | | |
|--|--|
| ① ODOT 448 - ASPHALT CONCRETE SURFACE COURSE, TYPE 2, PG64-22 (1.75") | ⑦ ODOT TYPE 2B CURB, 8" WIDE |
| ② ODOT 407 - TACK COAT @ 0.05 GAL./S.Y. | ⑧ ODOT 202 - CURB REMOVED |
| ③ 10" ODOT 452 CLASS QC MS CONCRETE PAVEMENT WITH REINFORCING | ⑨ PAVEMENT PREP GEO-COMPOSITE MEMBRANE 48" WIDE ROLL CENTER ON WIDENING JOINT |
| ④ 4" ODOT 304 AGGREGATE BASE | ⑩ 1.75" PAVEMENT PLANING |
| ⑤ ODOT 204 SUBGRADE COMPACTION | ⑪ HOOK BOLTS AS PER ODOT SCD BP-2.1 AND PER CUYAHOGA COUNTY ENGINEER CONSTRUCTION DETAIL BP-2.5C |
| ⑥ SUBGRADE REMOVAL & REPLACEMENT - ITEM 304 AGGREGATE BASE (AS NEEDED) | |

TYPICAL SECTION INFORMATION FROM RECORD PLANS:
 LPA PROJECT: 14110
 (VILLAGE OF WALTON HILLS)
 CUY-008
 NORTHFIELD RD. AND ALEXANDER RD. INTERSECTION
 SALE: MARCH 2019
 (PERFORM ONLY PROPOSED WORK FOR PID 113132)

- PROPOSED LEGEND - PID 113132**
- Ⓐ ITEM 897 - PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (1")
 - Ⓑ ITEM 407 - NON-TRACKING TACK COAT
 - Ⓒ ITEM 424 - FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B (1")

SHEET PROVIDED FOR REFERENCE PURPOSES

CHAGRIN VALLEY ENGINEERING, LTD. Creative Engineers. Intelligent Solutions. 29999 Forbes Road, Suite B, Cleveland, Ohio 44146-5667 Phone • 440.439.1999 Fax • 440.439.1969 www.cveintd.com	
REVISIONS Bld. Sht. 03/22/2019	TYPICAL SECTIONS NORTHFIELD RD. & ALEXANDER RD. INTERSECTION VILLAGE OF WALTON HILLS COUNTY OF CUYAHOGA STATE OF OHIO
DESIGNED BY: JLG DRAWN BY: TPM CHECKED BY: JRZ DATE: 03/07/19 SCALE: NA SCALE: NA	
PROJECT NUMBER 14110 Drawing Name	
SHEET: 2 TOTAL SHEETS: 25	
DESIGN AGENCY DESIGNER JAG REVIEWER DAB 10/11/24 PROJECT ID 113132 SHEET TOTAL P.35 42	

LOCATION 2 – ADDITIONAL NOTES
(IN ADDITION TO PROJECT GENERAL NOTES)

Project Location 2 Description

This project location consists of resurfacing SR-8 (Northfield Rd.) from SLM 00.00 to SLM 1.25

Location 2 - (S.R.-8 - Resurfacing)

Utilize standard drawings to close lanes during the working hours, As Directed By The Engineer. Outside of working hours, all lanes shall be open to traffic.

The items of work will include:

1. Perform partial depth pavement repairs.
2. Plane asphalt
3. Perform casting adjustments
4. Placement of temporary pavement markings.
5. Place asphalt concrete surface course and temporary markings.
6. Place final pavement markings.

Maintenance of Traffic

Work Hours:

The Contractor is permitted to work at night.

Proposed work for this Location, including pavement repairs, pavement milling, pavement paving and placing pavement markings shall be performed between The hours of 7:00 PM and 6:00 AM, Monday thru Friday.

Notification

The Contractor shall conduct their operations to construct the proposed work with a minimum of hazard, delay and inconvenience to the motorists using the highway affected by the work being done under this contract.

The Village of Walton Hills shall be notified at least TWO (2) weeks prior to the actual start of construction by the Contractor.

Item 251 – Partial Depth Pavement Repair (441), As Per Plan

Use this item to repair unsound, cold-patch, or pop-out areas of longitudinal and transverse joints As Directed By The Engineer.

**Perform repairs after planing at:
(Location 2 -SR 8)**

Make standard repairs at a depth of 3” and at a minimum width of 12”. Center the repair over the existing joint.

Use Type 2 material for this item.

For estimating purposes,
**(Location 2 -SR 8: Partial Depth Pavement Repair (441),
As Per Plan: 325 SY)**

The following quantity have been carried to the General Summary:

Item 251 - Partial Depth Pavement Repair (441), As Per Plan **325 SY**

DESIGN AGENCY



DESIGNER
JAG

REVIEWER
DAB 10/11/24

PROJECT ID
113132

SHEET TOTAL
P.36 | 42

Traffic Control

Detection Maintenance

If vehicle detection becomes unexpectedly disabled, requires modification, or is scheduled to be temporarily removed during the construction project, the Contractor shall immediately notify the Project Engineer and the District 12 Roadway Services Department.

If the loss of vehicle detection is known prior to the start of construction, it shall be discussed at the preconstruction meeting. At such time, the District Traffic Engineer shall advise the Project Engineer and Contractor on the appropriate action to rectify any loss of vehicle detection. This may include placing the traffic signal on minimum or maximum recall, modifying the minimum green times, and removing the malfunctioning detection from service. Where nonintrusive detection (i.e. video, radar) already exists, the Contractor shall insure that detection is operating and maintained by reconfiguring the detection units accordingly during all construction phases. This is to avoid the signal from maxing out the effected signal phase and creating unnecessary delays.

Locations where non-intrusive detection is proposed and the existing vehicle detection is to be abandon, the non-intrusive vehicle detection shall be installed, configured and made fully functional prior to the existing detection being disabled. The Contractor shall continue to maintain and modify the detection until final acceptance of the traffic signal. This is to ensure vehicle detection remains fully functional throughout construction.

Item 632 – Detector Loop, As Per Plan

Prior to planing the pavement, the Contractor shall field survey the locations of the existing loop detectors within the project limits. The Project Engineer shall confirm these locations. The survey shall include the location of the loop, size of the loop, offset from curb and/or centerline and the location of the stub. A copy of this survey shall be given to the Project Engineer.

An estimated quantity of Item 632 – Detector Loop, As Per Plan has been provided as a contingency when wire is cut, broken, or destroyed due to pavement planing operations.

All stop line inductance detector loops shown in the plans shall be the powerhead configuration shown on TC-82.10. The stop line detector loops shall not be wired to any other loops and shall have its own detector channel. The location of these loops shall be such that the powerhead is located at the stop line, not past it.

All dilemma zone inductance detector loops called for in the plans shall be the Angular Design Detection (ADD) loop as shown on TC-82.10. System loops shall be as depicted in the plans.

All stop line detection shall be tested for a bicycle target and all dilemma detection zones shall be tested for a motorcycle target.

When replacing the loop detectors, the loop detector wire shall be replaced to the pull box or pole, whichever is applicable, under Item 632 and Standard Drawing TC-82.10. The new cable splice kits shall be included in this pay item.

The Contractor shall contact the Project Engineer and

Rob Kalman
Street Commissioner I Building / Zoning
 7595 Walton Road
 Walton Hills, Ohio 44146
 PH: 216.523.4445
kalmanr@waltonhillsohio.gov

seven (7) days prior to planing through an intersection to adjust signal operation as needed. The detector loops shall be placed in the surface course.

Refer to plan sheets for approximate locations. These locations are from record plans and field verification is needed.

The following estimated quantity has been carried to the General Summary:

Item 632 – Detector Loop,
 As Per Plan..... **5 Each**


LOCATION REF. NO.	ROUTE	TRAFFIC DIRECTION	INTERSECTION	6' X 25' POWERHEAD DETECTOR LOOP		6' X 6' SYSTEM DETECTOR LOOP	DESCRIPTION
				EACH		EACH	
L-1	SR-8	NB	APPROX. 310' +/- SOUTH FROM KRICK RD.			1	1 NORTHBOUND LT. LANE (APPROX. STA. 55+35)
L-2	SR-8	NB	APPROX. 310' +/- SOUTH FROM KRICK RD.			1	1 NORTHBOUND RT. LANE (APPROX. STA. 55+35)
L-3	SR-8	NB	AT KRICK RD.	1			1 NORTHBOUND LT. TURN LANE (APPROX. STA. 57+84)
L-4	SR-8	SB	APPROX. 304' +/- NORTH FROM KRICK RD.			1	1 SOUTHBOUND LT. LANE (APPROX. STA. 61+49)
L-5	SR-8	SB	APPROX. 304' +/- NORTH FROM KRICK RD.			1	1 SOUTHBOUND RT. LANE (APPROX. STA. 61+49)
TRAFFIC LOOP QUANTITIES - SHEET - TOTALS:				1		4	
PLAN SPLIT #2 TOTALS				1		4	



REF. NO.	SHEET NO.	PLAN SPLIT NO.	STATION TO STATION S.R.-8 (NORTHFIELD RD.)	LENGTH	BEGIN WIDTH	ENDING WIDTH	AVERAGE WIDTH	AREA		897	407	424	875	646	646	646	646	646	646	646	646	
										PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A, (1.0")	NON-TRACKING TACK COAT	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, (449), (1.0")	LONGITUDINAL JOINT ADHESIVE	LANE LINE, 4"	CENTER LINE	CHANNELIZING LINE, 8"	STOP LINE	CROSSWALK LINE, 12"	LANE ARROW	DOTTED LINE, 4"	TRANSVERSE/DIAGONAL LINE	
				FT.	FT.	FT.	FT.	SQ. YD.		SY	GAL	CY	LB	MILE	MILE	FT	FT	FT	EACH	FT	FT	
PAVEMENT																						
Begin Resurfacing (SLM 00.00)																						
	2		0+00	4+14	414	40	40	40	1840	1840.00	165.60	51.11	138.00									
	2		4+14	4+43	29	40	40	40	128.89	128.89	11.60	3.58	9.67									
	2		4+43	6+90	247	40	40	40	1097.78	1097.78	98.80	30.49	82.33									
	2		6+90	7+40	50	40	40	40	222.22	222.22	20.00	6.17	16.67									
	2		7+40	13+40	600	40	40	40	2666.67	2666.67	240.00	74.07	200.00									
	2		13+40	13+90	50	40	52	46	255.56	255.56	23.00	7.10	16.67									
	2		13+90	16+80	290	52	52	52	1675.56	1675.56	150.80	46.54	96.67									
	2		16+80	17+19	39	52	40	46	199.33	199.33	17.94	5.54	13.00									
	2		17+19	19+00	181	40	40	40	804.44	804.44	72.40	22.35	60.33									
	2		19+00	19+50	50	40	52	46	255.56	255.56	23.00	7.10	16.67									
	2		19+50	20+78	128	52	52	52	739.56	739.56	66.56	20.54	42.67									
	2		20+78	20+90	12	52	52	52	69.33	69.33	6.24	1.93	4.00									
	2		20+90	21+20	30	52	53	52.5	175	175.00	15.75	4.86	10.00									
	2		21+20	21+41	21	53	46.5	49.8	116.2	116.20	10.46	3.23	7.00									
	2		21+41	23+00	159	46.5	56	51.3	906.3	906.30	81.57	25.18	53.00									
	2		23+00	23+39.50	39.5	56	57	56.5	247.97	247.97	22.32	6.89	13.17									
	2		23+39.50	25+18	178.5	57	57	57	1130.5	1130.50	101.75	31.40	59.50									
	2		25+18	26+88	170	57	56	56.5	1067.22	1067.22	96.05	29.65	56.67									
	2		26+88	27+68	80	56	55.5	55.8	496	496.00	44.64	13.78	26.67									
	2		27+68	28+50	82	55.5	55	55.3	503.84	503.84	45.35	14.00	27.33									
	2		28+50	32+68	418	55	55	55	2554.44	2554.44	229.90	70.96	139.33									
	2		32+68	33+88	120	55	40	47.5	633.33	633.33	57.00	17.59	40.00									
	2		33+88	65+70	3182	40	40	40	14142.22	14142.22	1272.80	392.84	1060.67									
End Resurfacing (SLM 01.24)																						
Intersection Extra Areas																						
	2		Alexander Rd.	LT	25				205	205.00	18.45	5.69										
	2		Alexander Rd.	RT	25				260	260.00	23.40	7.22										
PAVEMENT MARKINGS																						
	2		0+91	15+89	1498									2996	1498		52					
	2		15+89	16+72	83									166								
	2		16+72	20+78	406									812	406		20					
	2		20+78	23+39	261									522	522						80	
	2		23+39	23+50	11									22	11	11				1		
	2		23+50	26+94	344									688	344	344	35			5		
	2		26+94	28+28	134												80				115	
	2		28+28	28+84	56									112	20	56	32					
	2		28+84	31+68	284									568	284	284				5		
	2		31+68	33+88	220									440	440						85	
	2		33+88	50+85	1697									3394	1697							
	2		50+85	51+73	88									88								
	2		51+73	57+84	611									1222	611		20					
	2		57+84	59+05	121									121			20				230	
	2		59+05	65+70	665									1330	665							
SUBTOTALS										32393	2916	900	2191	12481	6498	695	259	230	11	115	165	
TOTALS CARRIED TO GENERAL SUMMARY										32393	2916	900	2191	2.36 MI	1.23 MI	695	259	230	11	115	165	
PLAN SPLIT #1 TOTAL																						
PLAN SPLIT #2 TOTAL										32393	2916	900	2191	2.36	1.23	695	259	230	11	115	165	

LOCATION 2 - S.R.-8
PAVEMENT / TRAFFIC CONTROL SUB-SUMMARY

DESIGN AGENCY



DESIGNER: JAG
 REVIEWER: DAB 10/11/24
 PROJECT ID: 113132
 SHEET TOTAL: P.38 / 42


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								WORK ZONE LANE LINE, CLASS I, 4", 642 PAINT	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS I, 8", 642 PAINT	WORK ZONE STOP LINE, CLASS I, 642 PAINT	WORK ZONE CROSSWALK LINE, CLASS I, 12", 642 PAINT	WORK ZONE ARROW, CLASS I, 642 PAINT	WORK ZONE DOTTED LINE, CLASS I, 4", 642 PAINT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I, 642 PAINT		WORK ZONE LANE LINE, CLASS III, 4", 642 PAINT	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	WORK ZONE CHANNELIZING LINE, CLASS III, 8", 642 PAINT	WORK ZONE STOP LINE, CLASS III, 642 PAINT	WORK ZONE CROSSWALK LINE, CLASS III, 12", 642 PAINT	WORK ZONE ARROW, CLASS III, 642 PAINT	WORK ZONE DOTTED LINE, CLASS III, 4", 642 PAINT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT		
				FT.	FT.	FT.	SQ. YD.	MILE	MILE	FT	FT	FT	EACH	FT	FT		MILE	MILE	FT	FT	FT	FT	EACH	FT	FT	
			SR-8 (NORTHFIELD RD.)																							
			WORK ZONE PAVEMENT MARKINGS																							
		2	0+91 15+89	1498				2996	1498		52						2996	1498		52						
		2	15+89 16+72	83				166									166									
		2	16+72 20+78	406				812	406	20							812	406		20						
		2	20+78 23+39	261				522	522						80		522	522						80		
		2	23+39 23+50	11				22	11	11			1			22	11	11				1				
		2	23+50 26+94	344				688	344	344	35		5			688	344	344	35			5				
		2	26+94 28+28	134							80			115						80				115		
		2	28+28 28+84	56				112	20	56	32					112	20	56	32							
		2	28+84 31+68	284				568	284	284			5			568	284	284				5				
		2	31+68 33+88	220				440	440					85		440	440							85		
		2	33+88 50+85	1697				3394	1697							3394	1697									
		2	50+85 51+73	88				88								88										
		2	51+73 57+84	611				1222	611	20						1222	611		20							
		2	57+84 59+05	121				121		20	230					121			20	230						
		2	59+05 65+70	665				1330	665							1330	665									
SUBTOTALS								12481	6498	695	259	230	11	115	165		12481	6498	695	259	230	11	115	165		
TOTALS CARRIED TO GENERAL SUMMARY								2.36 MI	1.23 MI	695	259	230	11	115	165		2.36 MI	1.23 MI	695	259	230	11	115	165		
PLAN SPLIT #1 TOTAL																										
PLAN SPLIT #2 TOTAL								2.36	1.23	695	259	230	11	115	165		2.36	1.23	695	259	230	11	115	165		









LOCATION 2 - S.R.-8
 WORK ZONE PAVEMENT MARKINGS SUB-SUMMARY

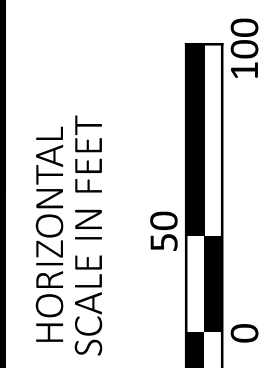
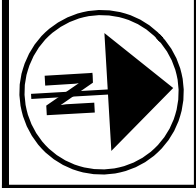
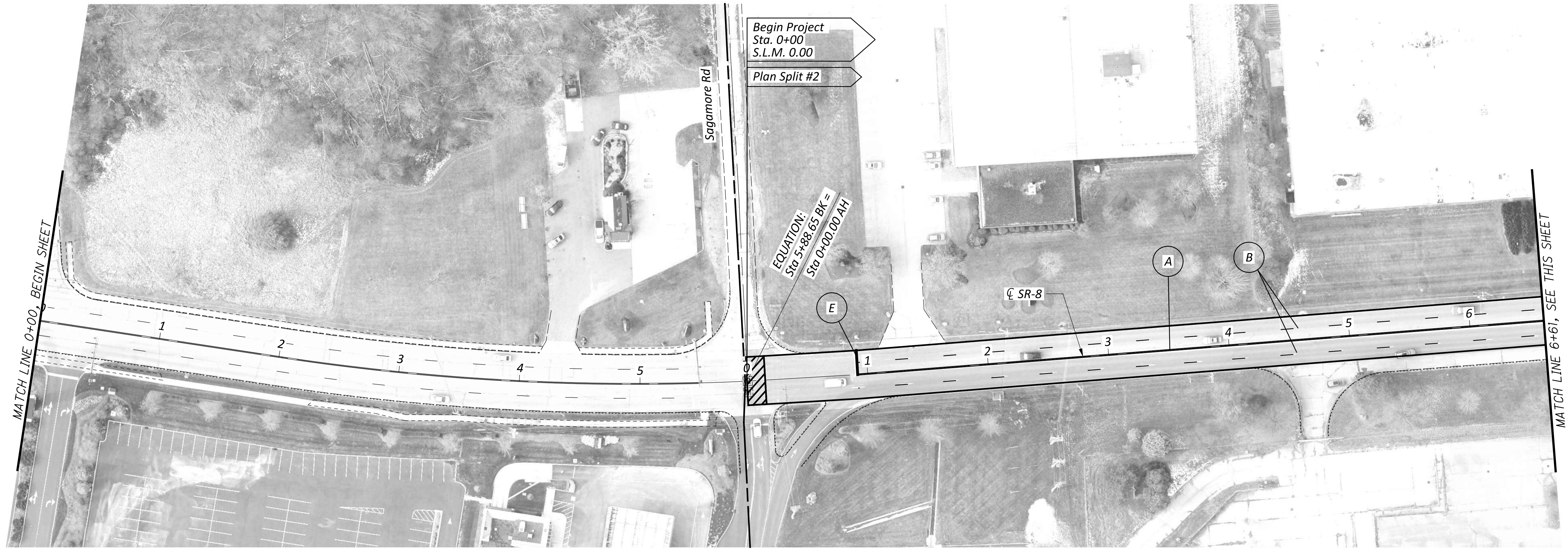
DESIGN AGENCY	
DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	10/11/24
SHEET	113132
TOTAL	42
P.39	

This Plan Sheet (within project limits):
 Existing Roadway Monuments - 2

Approximate Roadway Alignment Data:
 * Approximate Curve Alignment Information
 Based on Graphical Aerial Information,
 Cuyahoga County GIS and Record Plans.
 (No Surveying Was Performed)

 - Butt Joint as per SCD BP-3.1

Pavement Marking Legend			
	Center Line		Stop Line
	Lane Line, 4"		Crosswalk Line
	Channelizing Line, 8"		Lane Arrow
	Dotted Line, 4"		Transverse / Diagonal Line



LOCATION 2 - PLAN SHEET
 SR-8, STA. 0+00 TO STA. 19+11


DESIGN AGENCY

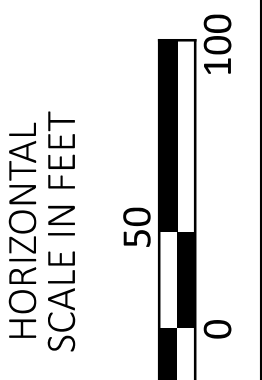
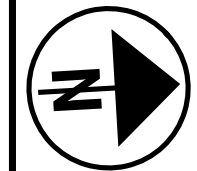
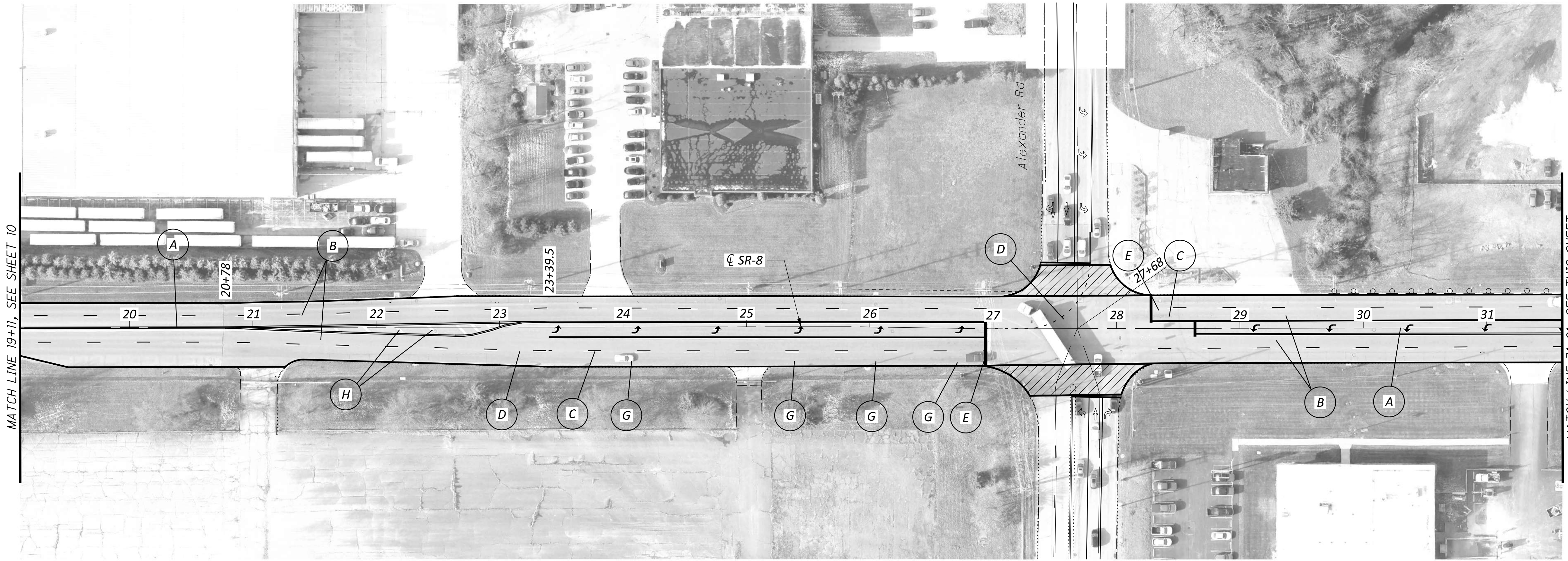


DESIGNER	JAG
REVIEWER	DAB
DATE	10/11/24
PROJECT ID	113132
SHEET TOTAL	P.40 42

PLAN SHEET INFORMATION
 FROM RECORD PLANS:
 PID 92611
 CUY-008-00.00
 SALE: 2016
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

Approximate Roadway Alignment Data:
 * Approximate Curve Alignment Information
 Based on Graphical Aerial Information,
 Cuyahoga County GIS and Record Plans.
 (No Surveying Was Performed)

 - Butt Joint as per SCD BP-3.1
 For Pavement Marking Legend,
 See Sheet 40



LOCATION 2 - PLAN SHEET
 SR-8, STA. 19+11 TO STA. 44+11


DESIGN AGENCY

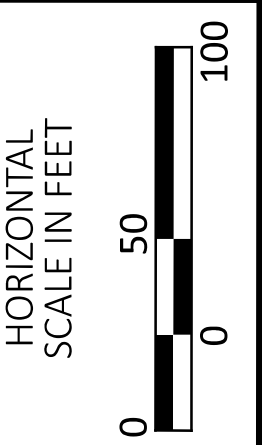
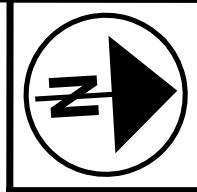
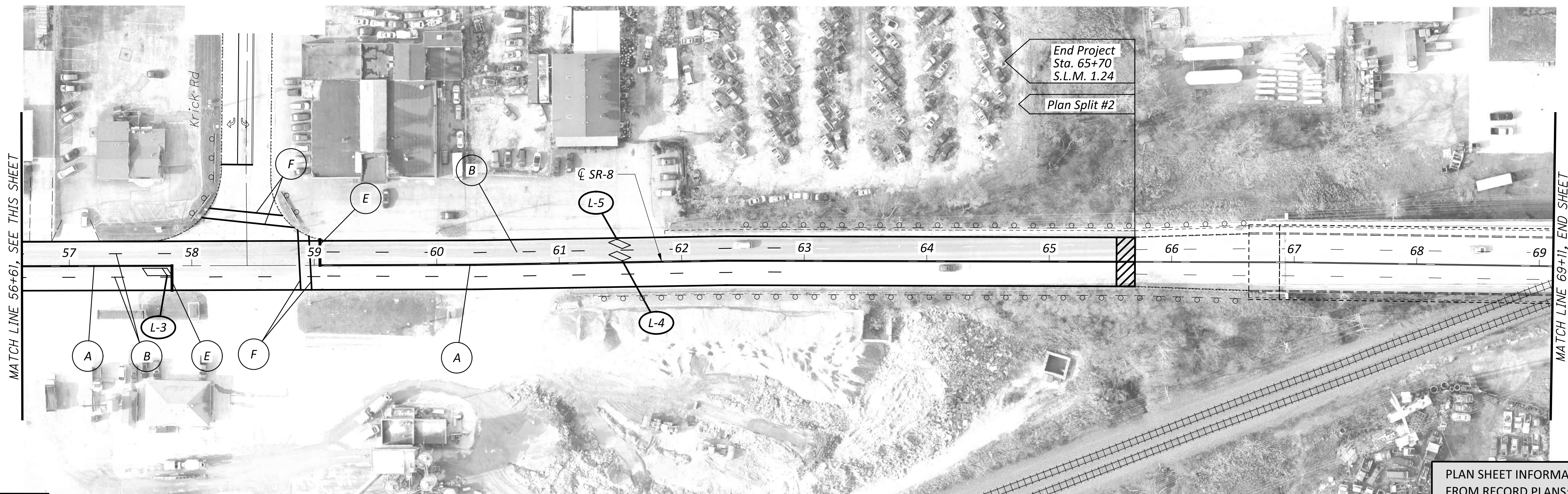


DESIGNER	JAG
REVIEWER	DAB
PROJECT ID	113132
SHEET	P.41
TOTAL	42

PLAN SHEET INFORMATION
 FROM RECORD PLANS:
 PID 92611
 CUY-008-00.00
 SALE: 2016
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)


Approximate Roadway Alignment Data:
 * Approximate Curve Alignment Information
 Based on Graphical Aerial Information,
 Cuyahoga County GIS and Record Plans.
 (No Surveying Was Performed)

 - Butt Joint as per SCD BP-3.1
 For Pavement Marking Legend,
 See Sheet 40



LOCATION 2 - PLAN SHEET
 SR-8, STA. 44+11 TO STA. 69+11

PLAN SHEET INFORMATION
 FROM RECORD PLANS:
 PID 92611
 CUY-008-00.00
 SALE: 2016
 (PERFORM ONLY PROPOSED WORK
 FOR PID 113132)

DESIGN AGENCY	
	
DESIGNER	JAG
REVIEWER	DAB 10/11/24
PROJECT ID	113132
SHEET	TOTAL
P.42	42