

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS APPROVED PRODUCTS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 614, MAINTAINING TRAFFIC (AT ALL TIMES)

A MINIMUM OF 3 LANE(S) OF TRAFFIC IN EACH DIRECTION SHALL BE MAINTAINED AT ALL TIMES BY USE OF THE EXISTING PAVEMENT.

ITEM 614, MAINTAINING TRAFFIC (SIGNS AND BARRICADES)

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 5 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL; AND, ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (ONE-WAY OR BI-DIRECTIONAL) 18 EACH

ITEM 614, OBJECT MARKER, ONE-WAY 18 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

WORK ZONE MARKINGS

WORK ZONE PAVEMENT MARKINGS SHALL BE PLACED PER REQUIREMENTS OF C&MS 614.11. ALL WORK ZONE MARKINGS SHALL BE EITHER CLASS I OR III. THE FOLLOWING QUANTITES ARE PROVIDED PER MAINTANCE OF TRAFFIC DESIGN PROVIDED ON SHEETS P.10 - P.15 .

WORK ZONE CHANNELIZING LINE -3,900 FT
WORK ZONE DOTTED LINE -1,020 FT
WORK ZONE EDGE LINE (WHITE) -0.70 MILE
WORK ZONE EDGE LINE (YELLOW) -0.65 MILE
WORK ZONE LANE LINE (WHITE) -0.65 MILE

ALL COSTS FOR MULTIPLE MOBILIZATIONS AND RESTORATION OF WORK ZONE MARKINGS PER THE DIRECTION OF THE ENGINEER ARE TO BE CONSIDERED INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC, AS PER LOAN AND WILL NOT BE PAID FOR SEPARATELY



WINTER WORK ZONE

IF THE CONTRACTOR ELECTS TO WORK DURING THE WINTER SEASON, THE MOT SCHEME CAN BE MAINTAINED AS SHOWN IN THE PLANS. IF THE CONTRACTOR WILL NOT BE WORKING DURING THE WINTER SEASON, THE CONTRACTOR SHALL PLACE THE PORTABLE BARRIER AND IMPACT ATTENUATOR AT A 3' OFFSET FROM THE EXISTING GUARDRAIL UNTIL WORK IS EXPECTED TO RESUME.

THE COSTS FOR MOVING OF THE BARRIER SHALL BE INCLUDED IN THE ITEM 614- MAINTAINING TRAFFIC, AS PER PLAN.

ITEM 614, MAINTAINING TRAFFIC (SIGNS AND BARRICADES)

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN SIGNS AND SIGN SUPPORTS, AS DETAILED IN THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

CONFLICTING PAVEMENT MARKINGS

THE CONTRACTOR SHALL, PRIOR TO PLACING TEMPORARY WORK ZONE PAVEMENT MARKINGS, REMOVE ALL EXISTING CONFLICTING PAVEMENT MARKINGS VISIBLE TO THE TRAVELING PUBLIC DURING DAYLIGHT OR NIGHT TIME HOURS IN ACCORDANCE WITH 614.11 (WHICH INCLUDES RPM'S) AND ALL APPLICABLE STANDARD DRAWINGS. THIS ALSO APPLIES TO THE REMOVAL OF CONFLICTING TEMPORARY MARKINGS IN SUBSEQUENT PHASES COVERING THE SAME PAVEMENT AREAS. THE COST FOR REMOVAL OF CONFLICTING PERMANENT OR TEMPORARY MARKINGS SHALL BE INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

ALL COSTS OF PLACING PERMANENT PAVEMENT MARKINGS ARE TO BE CONSIDERED INCIDENTAL TO ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN AND WILL NOT BE PAID FOR SEPARATELY.

DRUM REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED.

PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC, AS PER PLAN.

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUT-DOWNS.

(THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1) SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.)

THE R11-H5A-48 SIGNS SHALL BE MOUNTED ON 2 NO. 3 POSTS WHEN LOCATED WITHIN CLEAR ZONES.

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS.

WORK ZONE INCREASED PENALTIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALTIES SIGN 2 EACH FOR LOCATIONS OF WORK ZONE INCREASE PENALTIES SIGNS SEE SHEET P.15.

DESIGN AGENCY



WSP USA, Inc.
1660 W. 2nd Street,
Suite 820
Cleveland, OH 44113

DESIGNER

BLM

REVIEWER

SJG 12/03/24

PROJECT ID

112663

SHEET

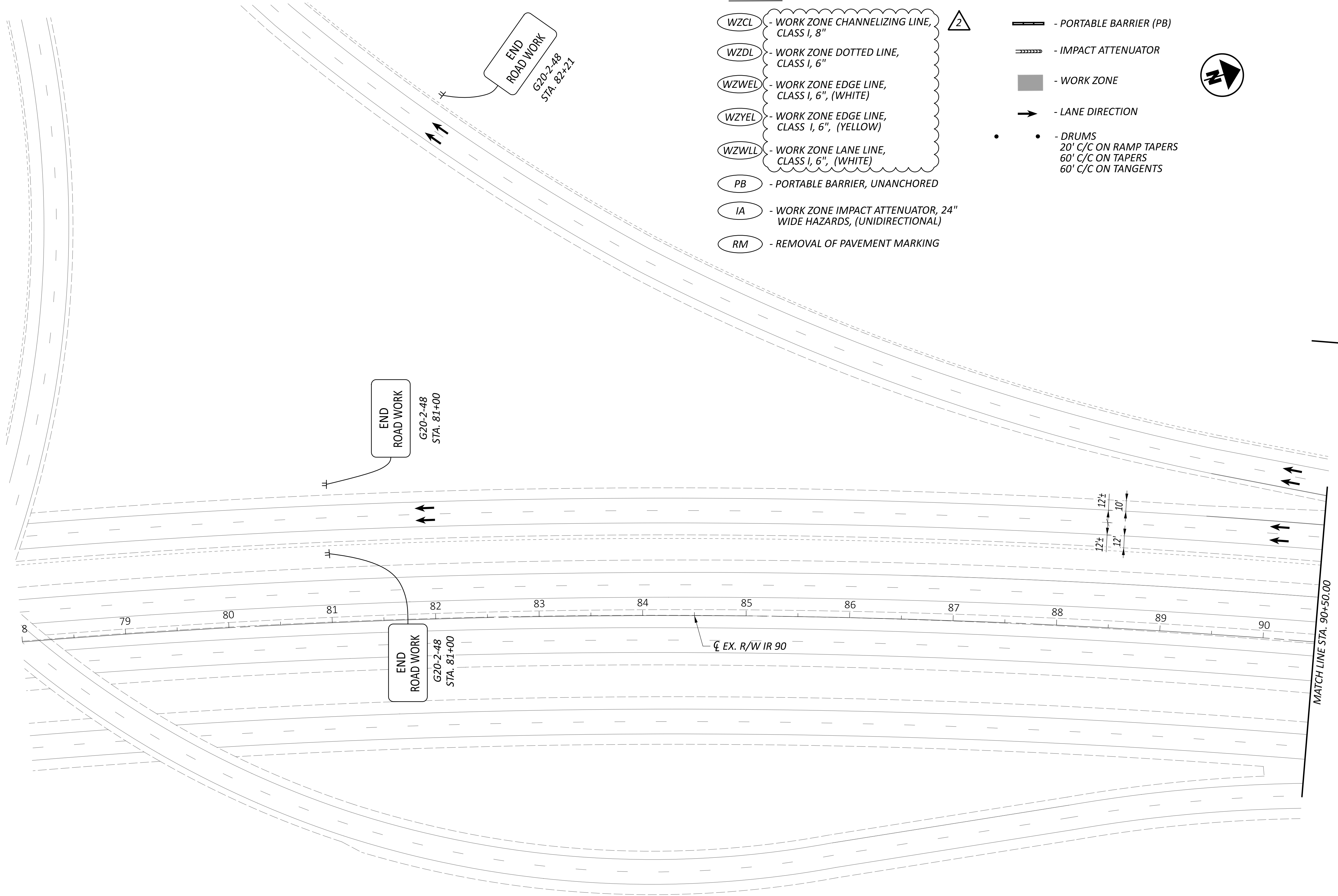
P.07

TOTAL

131



ADDENDUM 2
3/25/25



LEGEND

- WZCL - WORK ZONE CHANNELIZING LINE, CLASS I, 8"
- WZDL - WORK ZONE DOTTED LINE, CLASS I, 6"
- WZWEL - WORK ZONE EDGE LINE, CLASS I, 6", (WHITE)
- WZYEL - WORK ZONE EDGE LINE, CLASS I, 6", (YELLOW)
- WZWLL - WORK ZONE LANE LINE, CLASS I, 6", (WHITE)
- PB - PORTABLE BARRIER, UNANCHORED
- IA - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
- RM - REMOVAL OF PAVEMENT MARKING



- PORTABLE BARRIER (PB)

- IMPACT ATTENUATOR

- WORK ZONE

- LANE DIRECTION

- DRUMS
- 20' C/C ON RAMP TAPERS
- 60' C/C ON TAPERS
- 60' C/C ON TANGENTS



MAINTENANCE OF TRAFFIC PLAN
BEGIN WORK TO STA. 90+50.00

DESIGN AGENCY



WSP USA, Inc.
1660 W 2nd St.
Suite 820
Cleveland, OH 44113

DESIGNER

ABS

REVIEWER

SJG 12/03/24

PROJECT ID

112663

SHEET

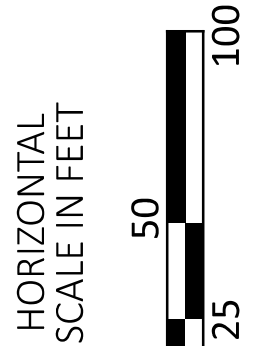
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TOTAL

131

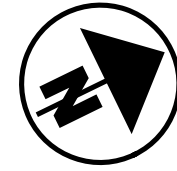


ADDENDUM 2
3/25/25

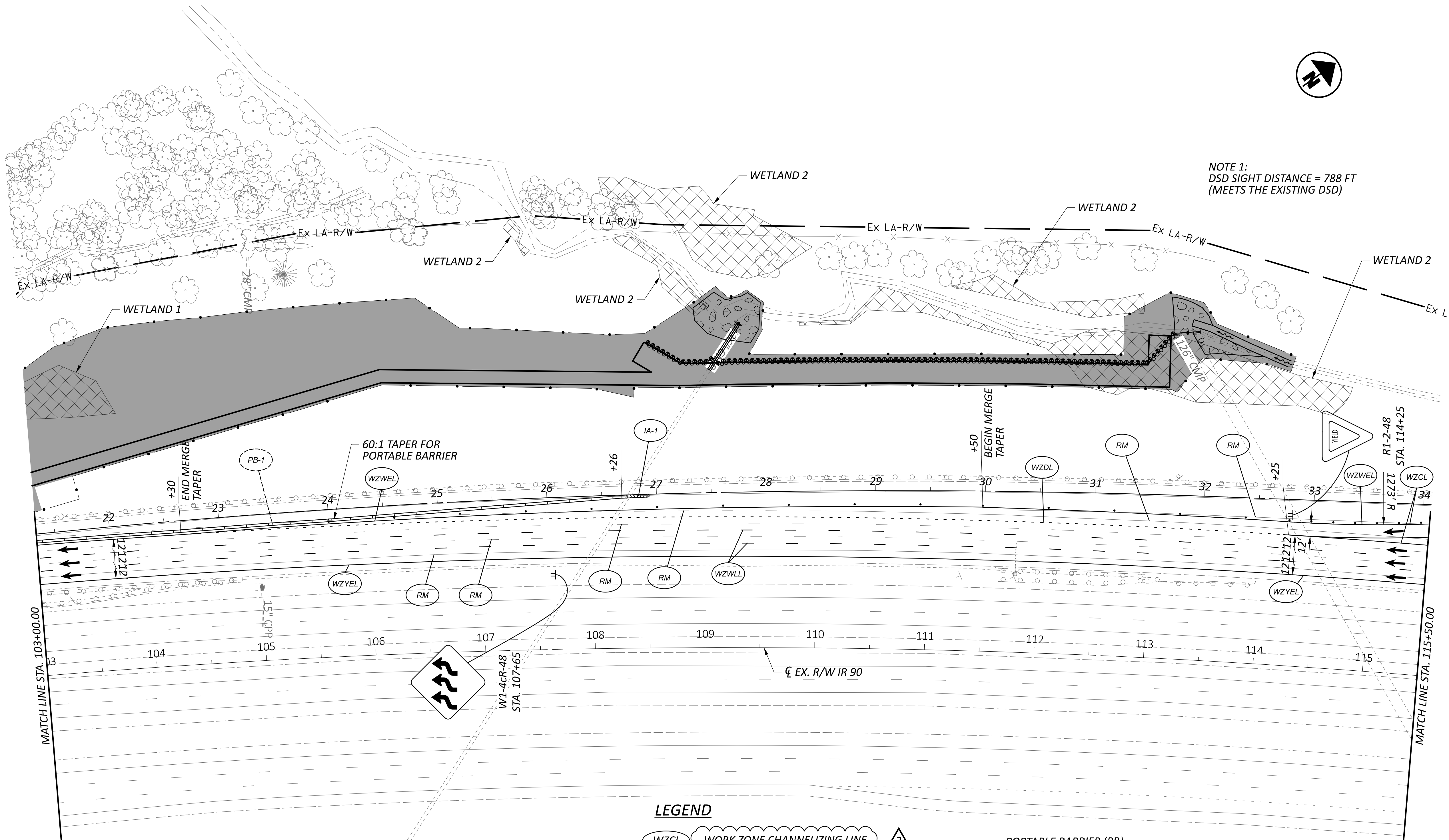




- - DRUMS
- 20' C/C ON RAMP TAPERS
- 60' C/C ON TAPERS
- 60' C/C ON TANGENTS



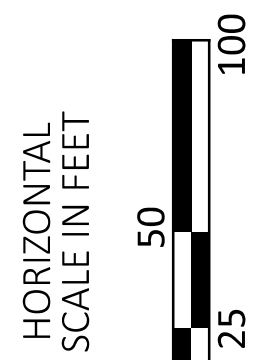
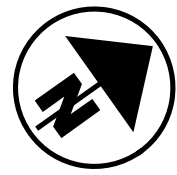
HEET	TOTAL
P.11	131



LEGEND

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- WZDL - WORK ZONE DOTTED LINE, CLASS I, 6"
- WZWEL - WORK ZONE EDGE LINE, CLASS I, 6", (WHITE)
- WZYL - WORK ZONE EDGE LINE, CLASS I, 6", (YELLOW)
- WZWLL - WORK ZONE LANE LINE, CLASS I, 6", (WHITE)
- PB - PORTABLE BARRIER, UNANCHORED
- IA - WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)
- RM - REMOVAL OF PAVEMENT MARKING
- 2 - PORTABLE BARRIER (PB)
- IMPACT ATTENUATOR
- WORK ZONE
- LANE DIRECTION
- DRUMS
20' C/C ON RAMP TAPERS
60' C/C ON TAPERS
60' C/C ON TANGENTS

NOTE 1:
DSD SIGHT DISTANCE = 788 FT
(MEETS THE EXISTING DSD)



MAINTENANCE OF TRAFFIC PLAN
STA. 103+00.00 TO STA. 115+50.00

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Suite 820
Cleveland, OH 44113

DESIGNER

ABS

REVIEWER

SJG 12/03/24

PROJECT ID

112663

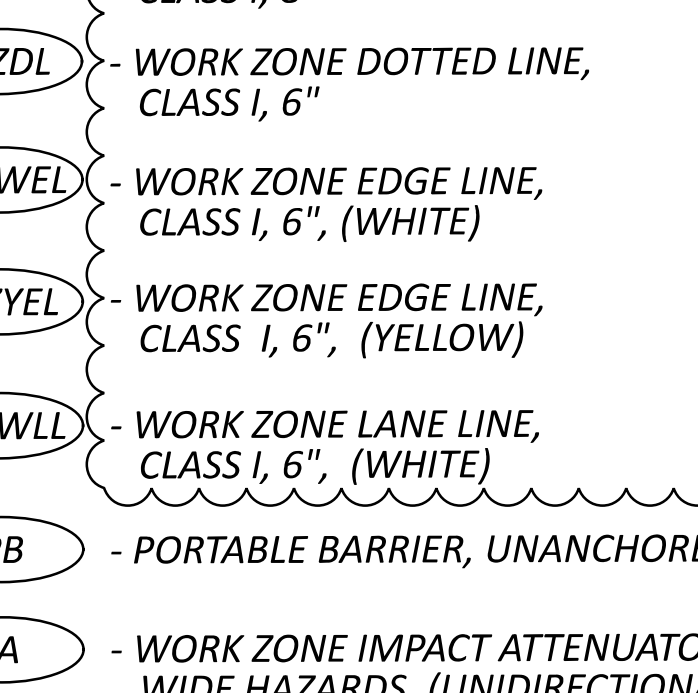
SHEET

P.12

TOTAL

131

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WZCL - WORK ZONE CHANNELIZING LINE,
CLASS I, 8"

WZDL - WORK ZONE DOTTED LINE,
CLASS I, 6"

WZWEL - WORK ZONE EDGE LINE,
CLASS I, 6", (WHITE)

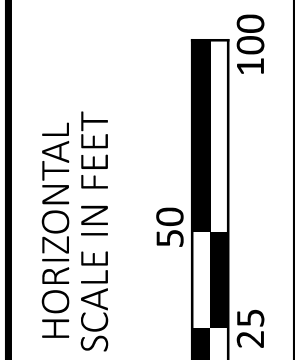
WZYEL - WORK ZONE EDGE LINE,
CLASS I, 6", (YELLOW)

WZWLL - WORK ZONE LANE LINE,
CLASS I, 6", (WHITE)

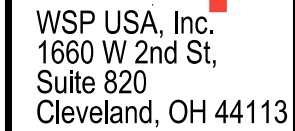
PB - PORTABLE BARRIER, UNANCHORED

IA - WORK ZONE IMPACT ATTENUATOR, 24"
WIDE HAZARDS, (UNIDIRECTIONAL)

RM - REMOVAL OF PAVEMENT MARKING



DESIGN AGENCY

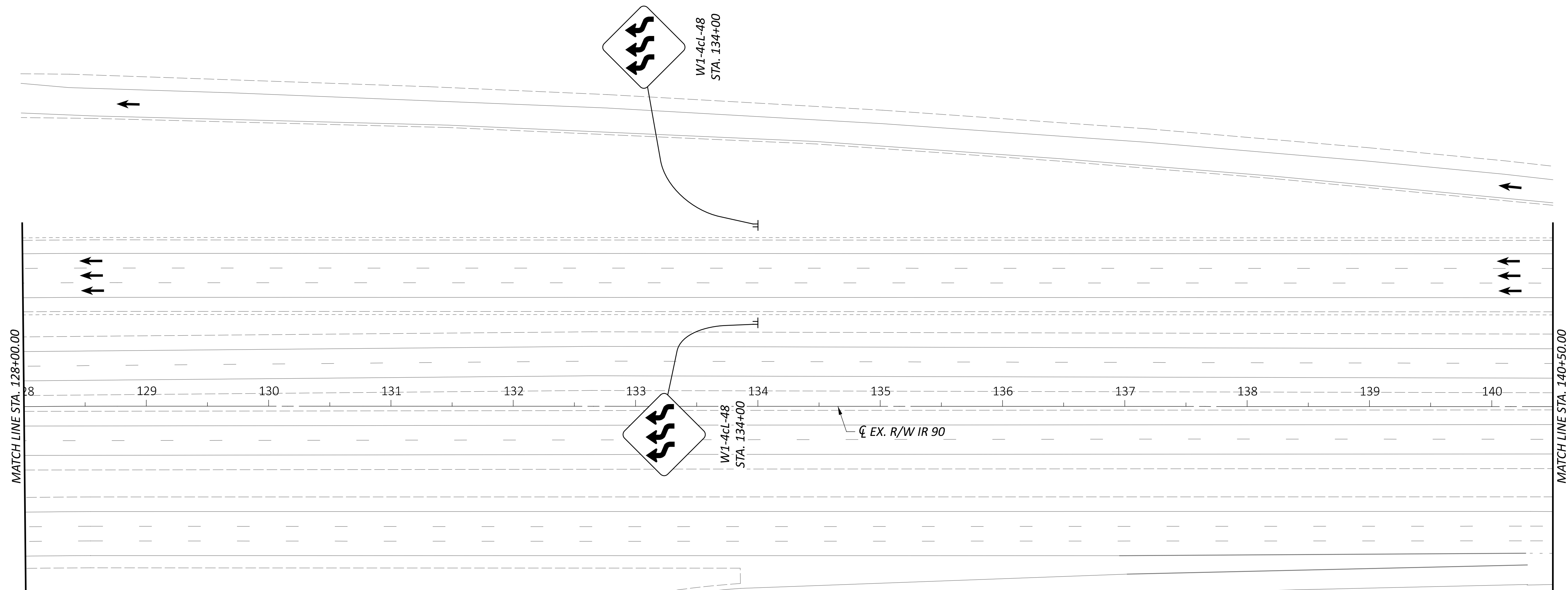


REVIEWER
SJG 12/03/24


SHEET	TOTAL
P.13	131

2 *ADDENDUM 2*
3/25/25

A circular prohibition sign with a black border. Inside the circle, there is a black silhouette of a mobile phone. A diagonal black line runs from the top-left to the bottom-right, crossing out the phone icon.



HORIZONTAL
SCALE IN FEET



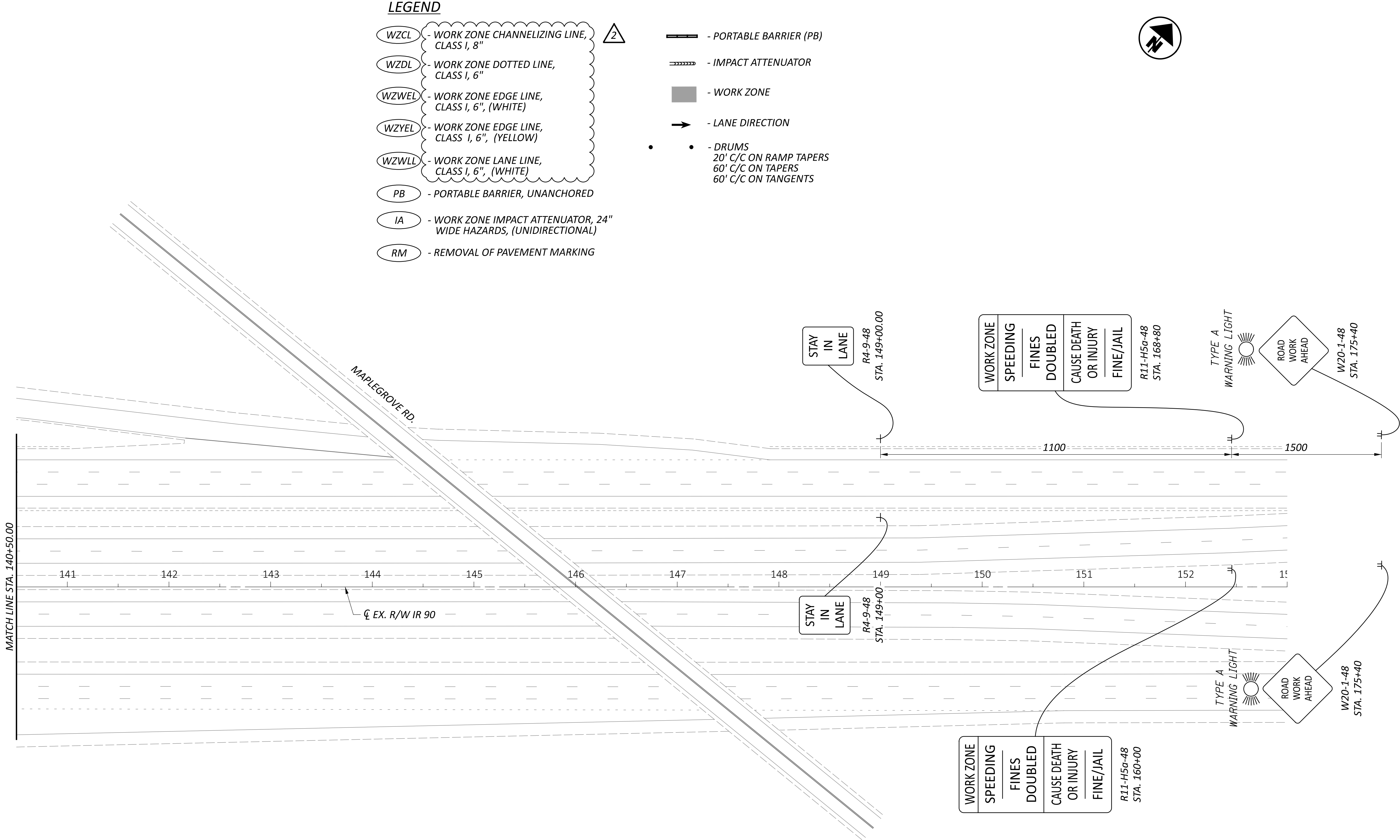
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DESIGN AGENCY

wsp

WSP USA, Inc.
1660 W 2nd St,
Suite 820
Cleveland, OH 44113

DESIGNER	
ABS	
REVIEWER	
SJG 12/03/24	
PROJECT ID	
112663	
SHEET	TOTAL
P.14	131



MAINTENANCE OF TRAFFIC PLAN
STA. 140+50.00 TO END WORK

DESIGN AGENCY
wsp
WSP USA, Inc.
1660 W 2nd St.
Suite 820
Cleveland, OH 44113

DESIGNER
ABS

REVIEWER
SJG 12/03/24

PROJECT ID
112663

SHEET
P.15

TOTAL
131