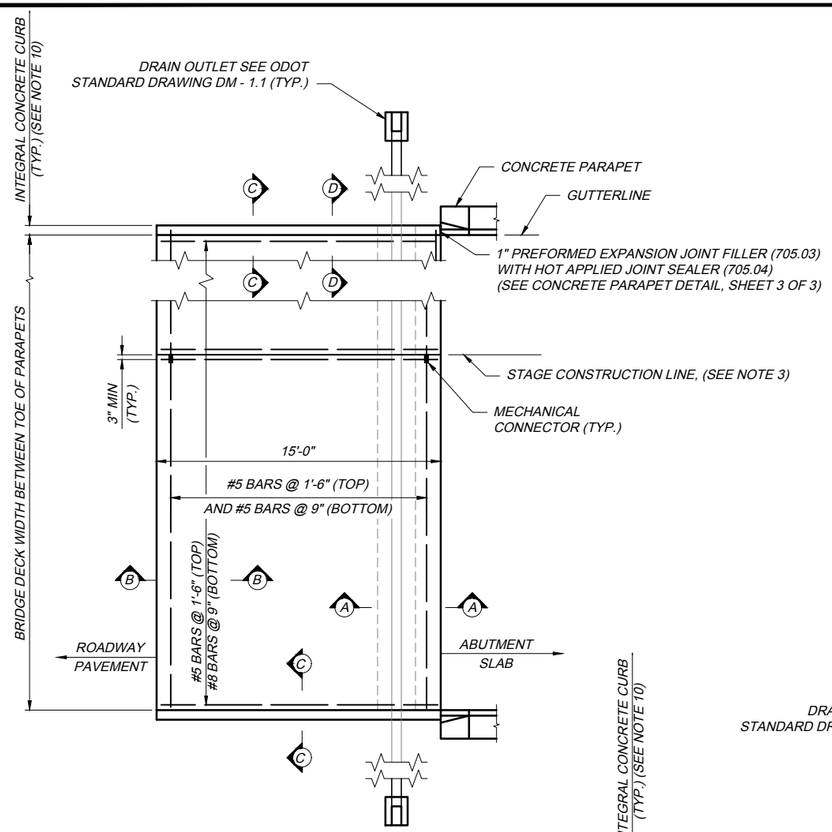
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

(REVISED FEBRUARY 17, 2023)

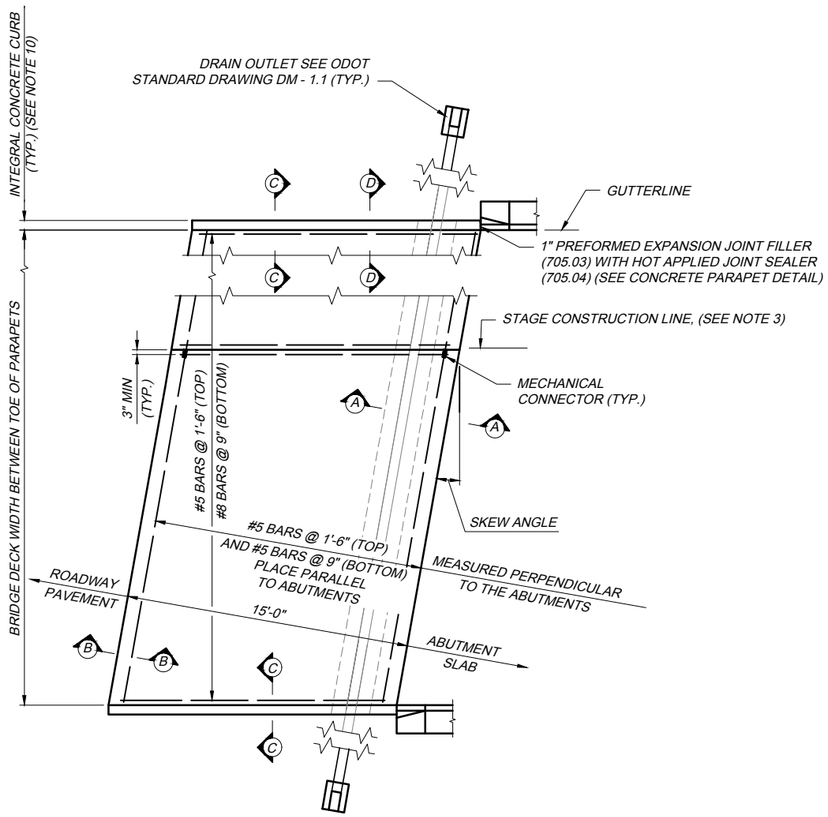
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION STANDARD DRAWINGS INDEX

DRAWING NAME	DESCRIPTION	DATE
AS-1 (3 SHEETS)	REINFORCED CONCRETE APPROACH SLAB	DECEMBER 31, 2019
CB-1	CATCH BASIN, NO. CB-1 WITH SLOPE DRAIN DETAIL	DECEMBER 31, 2019
CB-2	CATCH BASIN, NO. CB-1 RECONSTRUCTED	OCTOBER 20, 2017
CB-3	CATCH BASIN, MEDIAN WALL	OCTOBER 20, 2017
CB-3A	CATCH BASIN, MEDIAN WALL FOR SINGLE SLOPE BARRIER	FEBRUARY 9, 2021
CB-4	INLET, NO. I-3B50 DOUBLE GRATE	OCTOBER 20, 2017
CB-4A (2 SHEETS)	INLET, NO. I-3B50, DOUBLE GRATE FOR SINGLE SLOPE BARRIER, TYPE B50	SEPTEMBER 19, 2018
CB-5	INLET, NO. I-3C50 DOUBLE GRATE	OCTOBER 20, 2017
CB-5A (2 SHEETS)	INLET, NO. I-3C50, DOUBLE GRATE FOR SINGLE SLOPE BARRIER, TYPE C50	SEPTEMBER 19, 2018
CBR-1 (3 SHEETS)	CONCRETE BARRIER, TYPES B-50 AND C-50, AS PER PLAN	FEBRUARY 9, 2021
CBR-2 (3 SHEETS)	CONCRETE BARRIER, SINGLE SLOPE, TYPES B-50 AND C-50, AS PER PLAN	SEPTEMBER 26, 2018
CJ-1	CRACK AND JOINT DETAILS AT FULL DEPTH CONCRETE REPAIRS	OCTOBER 20, 2017
CJ-2	CRACK AND JOINT DETAILS AND FULL DEPTH ASPHALT REPAIRS	OCTOBER 20, 2017
CL-1	CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE 1	JANUARY 15, 2020
CL-2	CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE 2	JANUARY 15, 2020
DJ-1	DECK JOINT DETAILS CELLULAR ABUTMENTS	DECEMBER 31, 2019
DJ-2	DECK JOINT DETAILS	OCTOBER 20, 2017
DJ-3	DECK JOINT DETAILS BRIDGES WITH SIDEWALKS	OCTOBER 20, 2017
DJ-4	DECK JOINT DETAILS SPILL - THRU ABUTMENTS	OCTOBER 20, 2017
DJ-5	DECK JOINT DETAILS AT PIERS	OCTOBER 20, 2017
DJ-7	DECK JOINT DETAILS SP 533D - CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT	OCTOBER 20, 2017
DJ-9	DECK JOINT DETAILS SP 533F - REPLACEMENT OF COMPRESSION SEAL WITH CONTINUOUS ELASTOMERIC SEAL	JANUARY 7, 2021
DR-1	PRECAST FLARED END SECTION	OCTOBER 20, 2017
EPA-1	EMERGENCY PARKING AREA	OCTOBER 20, 2017
F-1	RIGHT OF WAY FENCE	JANUARY 7, 2021
RPM-1	RAISED PAVEMENT MARKER AND STRIPING LAYOUT	FEBRUARY 17, 2023
SBR-50 (2 SHEETS)	50" SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPET	SEPTEMBER 19, 2018
TC-1	TRAFFIC CONTROL BRIDGE AND BARRIER SIGN SUPPORT DETAILS	OCTOBER 20, 2017
TC-2	TRAFFIC CONTROL SPEED MEASUREMENT MARKING	FEBRUARY 17, 2023
TC-3 (2 SHEETS)	TRAFFIC CONTROL MISCELLANEOUS DELINEATION	FEBRUARY 17, 2023
TC-4	TRAFFIC CONTROL 2 - LANE HIGH SPEED CROSSOVER DELINEATION	JANUARY 7, 2021
TCB-1	REQUIREMENTS FOR PORTABLE BARRIER SETTING AND REMOVAL OPERATIONS	OCTOBER 20, 2017
TCB-2	PORTABLE BARRIER STORAGE DETAILS	OCTOBER 20, 2017
TCB-3	MEDIAN BARRIER WALL CLOSURE DETAILS	OCTOBER 20, 2017
TCR-1 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL GENERAL NOTES	FEBRUARY 17, 2023
TCR-2 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL DETAILS, LEGEND, NOTES AND STANDARD SINGLE LANE CLOSURE	FEBRUARY 17, 2023
TCR-3	TEMPORARY TRAFFIC CONTROL 2-LANE BI-DIRECTIONAL TRAFFIC	JANUARY 7, 2021
TCR-4	TEMPORARY TRAFFIC CONTROL BI-DIRECTION ROADSIDE DELINEATION	JANUARY 7, 2021
TCR-5 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL TWO LANE SPECIAL BI-DIRECTIONAL ZONE	JANUARY 7, 2021
TCR-6	TEMPORARY TRAFFIC CONTROL TOLL PLAZA LANE CLOSURES	FEBRUARY 17, 2023
TCR-7 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL TWO LANE CROSSOVER DETAILS	JANUARY 7, 2021
TCR-8	TEMPORARY TRAFFIC CONTROL TWO LANE SPECIAL CROSSOVER DETAILS	JANUARY 7, 2021
TCR-9 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL SHORT DURATION / SHORT TERM SHOULDER CLOSURE	JANUARY 7, 2021
TCR-9.1	TEMPORARY TRAFFIC CONTROL LANE CLOSURE AT EXIT AND ENTRANCE RAMPS	FEBRUARY 17, 2023
TCR-9.2	TEMPORARY TRAFFIC CONTROL LANE CLOSURE AT EXIT AND ENTRANCE RAMPS	FEBRUARY 17, 2023
TCR-9.3	TEMPORARY TRAFFIC CONTROL DOUBLE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS	FEBRUARY 17, 2023
TCR-9.4	TEMPORARY TRAFFIC CONTROL DOUBLE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS	FEBRUARY 17, 2023
TCR-10 (2 SHEETS)	TEMPORARY TRAFFIC CONTROL DOUBLE LANE CLOSURE	FEBRUARY 17, 2023
TCR-11MZ	TEMPORARY TRAFFIC CONTROL FOR SINGLE LANE MOBILE OPERATION	FEBRUARY 17, 2023
TCR-11PS	TEMPORARY TRAFFIC CONTROL PAVEMENT STRIPING MOVING ZONE	FEBRUARY 17, 2023
TCR-12 (4 SHEETS)	TEMPORARY TRAFFIC CONTROL SINGLE AND DOUBLE LANE SHIFT ZONES	FEBRUARY 17, 2023
TCR-13	SONIC NAP ALERT PATTERN (SNAP)	JANUARY 7, 2021
TCR-14	TEMPORARY TRAFFIC CONTROL SINGLE LANE CLOSURE WITH PORTABLE BARRIER	JANUARY 7, 2021
TCR-15	TEMPORARY TRAFFIC CONTROL SIGNS FOR MAINTENANCE AND CONSTRUCTION	FEBRUARY 17, 2023
UD-1 (2 SHEETS)	UNDERDRAIN DETAILS	SEPTEMBER 19, 2018
XOV-1	EXISTING CROSSOVER RESURFACING DETAIL	MARCH 1, 2019
XOV-2	CROSSOVER CONSTRUCTION PLAN	MARCH 1, 2019
XOV-3	MAINTENANCE CROSSOVER DETAILS	SEPTEMBER 19, 2018



PLAN

(SHOWING NON-SKEWED APPROACH SLAB)



PLAN

(SHOWING SKEWED APPROACH SLAB)

NOTES

1. THIS DRAWING PROVIDES DESIGN AND GENERAL CONSTRUCTION DETAILS. THE PROJECT PLANS WILL SHOW SKEW, CURBS IF ANY, ESTIMATED QUANTITIES, AND SPECIAL NOTES AND DETAILS, WHERE NECESSARY FOR CONDITIONS OTHER THAN THOSE INDICATED HEREIN. THE APPROACH SLAB SHALL BE ADAPTED TO FIT THE ENDS OF THE BRIDGE AND THE APPROACH PAVEMENT.
2. REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH SP 509. THE REINFORCING CLEARANCE TO THE CONCRETE SURFACE SHALL BE 3" UNLESS OTHERWISE SHOWN.
3. LONGITUDINAL CONSTRUCTION JOINTS AND PERMISSIBLE CONSTRUCTION JOINTS REQUIRED FOR STAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH CMS 509.07 AND 511.09. THE SURFACE SHALL BE TREATED IN ACCORDANCE WITH SP 516B AND AS DETAILED ON THE WIDENING DETAIL. PROVIDE 2'-6" LAP SPLICE OF REBARS OR PROVIDE MECHANICAL CONNECTORS PER CMS 509.07. A KEY WAY SHALL BE PROVIDED IN ACCORDANCE WITH CMS 511.09.
4. THE CROWN SHALL CONFORM TO THAT OF THE APPROACH PAVEMENT, ABUTMENT SLAB, AND BRIDGE DECK. IF THE RATE OF CROWN OF THE BRIDGE DECK DIFFERS FROM THAT OF THE APPROACH PAVEMENT, A SMOOTH TRANSITION SHALL BE PROVIDED ON THE APPROACH PAVEMENT.
5. 6" PERFORATED PIPE UNDERDRAIN WITH FABRIC WRAP PER SP 605 SHALL BE SLOPED AT ⅛" / FT. UNDER THE APPROACH SLAB THEN DRAINED WITH THE SAME PIPE MATERIAL AND BACKFILLED AT A 2% PREFERRED MINIMUM SLOPE ONTO THE ADJACENT EMBANKMENT. THE STONE SHALL BE IN ACCORDANCE WITH SP 605. PROVIDE A PRECAST REINFORCED CONCRETE OUTLET AND A TIED CONCRETE BLOCK MAT, TYPE 1 PER ODOT STANDARD DRAWING DM 1.1. THE UNDERDRAIN SHALL START AT THE MEDIAN AND DRAIN TOWARD THE OUTSIDE SHOULDER ON ALL MAINLINE APPROACH SLABS.
6. BASE MATERIAL SHALL BE SP 304 - AGGREGATE BASE.
7. SAW CUT A ½" X 2" GROOVE AND THEN APPLY A HOT JOINT SEALER PER CMS 705.04 (SEE DETAIL A, SHEET 3 OF 3).
8. TYPE A WATERPROOFING SHALL NOT EXTEND ABOVE THE BOTTOM OF THE ½" X 2" GROOVE. IT SHALL BE APPLIED TO THE ENTIRE AREA OF THE ABUTMENT WHICH COMES INTO CONTACT WITH THE APPROACH SLAB (SEE DETAIL A, SHEET 3 OF 3).
9. 1" PREFORMED EXPANSION JOINT FILLER SHALL BE PER CMS 705.03.
10. CURBS, BRIDGES WITH SIDEWALKS: FOR BRIDGES CONSTRUCTED WITH RAISED SIDEWALKS, DEFLECTOR PARAPETS OR OTHER TYPES OF CONSTRUCTION WHICH RETAIN ROADWAY SURFACE DRAINAGE, THE APPROACH SLABS SHALL EITHER INCLUDE INTEGRAL CURBS OR BE CONSTRUCTED IN CONJUNCTION WITH BRIDGE CURBS. CURB HEIGHT SHALL BE TRANSITIONED UNIFORMLY BETWEEN BRIDGE CURB HEIGHT AND APPROACH CURB HEIGHT.
11. APPROACH SLAB WIDTH SHALL EXTEND FROM GUTTER LINE TO GUTTER LINE AND BE 6" WIDER FOR EACH CURB BEYOND THE EDGE OF THE PARAPETS.
12. REMOVAL OF EXISTING CURB FOR APPROACH SLAB WIDENING SHALL BE PER SP 202 AND THE REMOVAL SHALL BE INCIDENTAL TO THE COST OF ITEM 526.
13. FRONT FACE OF CURB SHALL LINE UP WITH THE FRONT FACE OF THE GUARDRAIL PER ODOT STANDARD DRAWING MGS 3.1. IF CURB IS NOT REQUIRED ON THE APPROACHING ROADWAY, THE CURB SHALL STILL MEET THE LENGTH AS REQUIRED ON ODOT STANDARD DRAWING MGS 3.1.
14. THE DETERIORATED PORTIONS OF THE APPROACH SLAB SEAT SHALL BE RECONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THIS DETAIL OR AS DIRECTED BY THE CHIEF ENGINEER. REMOVAL SHALL BE PERFORMED IN ACCORDANCE WITH SP 202 - PORTIONS OF STRUCTURE REMOVED. PAYMENT FOR THIS WORK SHALL BE MADE AT THE UNIT PRICE BID FOR SP 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN AND SHALL INCLUDE THE SP 202 REMOVAL.
15. THE APPROACH SLAB SHALL BE WATER CURED WITH TWO LAYERS OF WET BURLAP FOR THE FIRST 24 HOURS OF THE 7 DAY CURING PERIOD. AFTER 24 HOURS, WHITE POLYETHYLENE SHEETING MAY BE APPLIED OVER THE PREVIOUS LAYERS OF WET BURLAP FOR THE REMAINDER OF THE CURING PERIOD. WATER SHALL BE CONTINUOUSLY APPLIED TO THE BURLAP AND THE BURLAP SHALL REMAIN WET DURING THE ENTIRE CURING PERIOD. ALL REQUIREMENTS FOR PLACING AND MAINTAINING THE SHEETING AND/OR BURLAP SHALL BE IN ACCORDANCE WITH CMS 511.14.STORAGE TANKS FOR CURING WATER SHALL BE ON SITE AND FILLED BEFORE CONCRETE PLACEMENT WILL BE PERMITTED TO START. STORAGE TANKS SHALL REMAIN ON SITE THROUGHOUT THE ENTIRE CURE PERIOD. THEY SHALL BE REPLENISHED, AS REQUIRED, WITH A SHUTTLE TANKER TRUCK OR A LOCAL WATER SOURCE SUCH AS A FIRE HYDRANT. CARE SHALL BE TAKEN TO AVOID THERMAL SHOCK OR EXCESSIVELY STEEP THERMAL GRADIENTS DUE TO THE USE OF COLD CURING WATER. CURING WATER SHALL NOT BE MORE THAN TWENTY (20)° F COOLER THAN THE CONCRETE, BECAUSE OF SURFACE TEMPERATURE STRESSES WHICH COULD CAUSE CRACKING.
16. CURING CONCRETE DURING COLD WEATHER SHALL BE PER CMS 511.12.
17. THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID PER SQUARE YARD FOR ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=12"), AS PER PLAN:
    - OTIC STANDARD DRAWING AS-1, ALL DETAILS
    - ALL JOINTS, INCLUDING MECHANICAL CONNECTORS, DOWEL HOLES, DOWELS, AND GROUT
    - GROOVE / SAW CUT AND JOINT SEALER
    - TYPE 'A' WATERPROOFING
    - 1" PERFORMED EXPANSION JOINT FILLER WITH JOINT SEALER
    - MEDIAN AND OUTSIDE BARRIERS / INTEGRAL CURBS
    - EPOXY COATED REINFORCING STEEL
    - 6" PERFORATED PIPE UNDERDRAIN WITH FABRIC WRAP, POROUS BACKFILL, PRECAST REINFORCED CONCRETE OUTLET AND A TIED CONCRETE BLOCK MAT, TYPE 1 .
    - HIGH MOLECULAR WEIGHT METHACRYLATE (SP 516B)

DATE: DECEMBER 31, 2019

STANDARD DRAWING

REINFORCED CONCRETE APPROACH SLAB

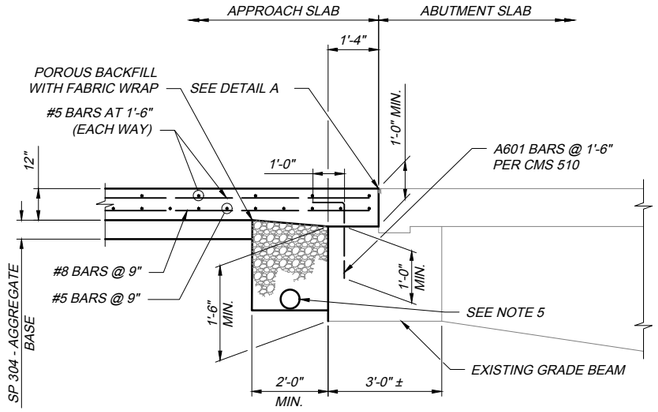
AS-1

1 / 3

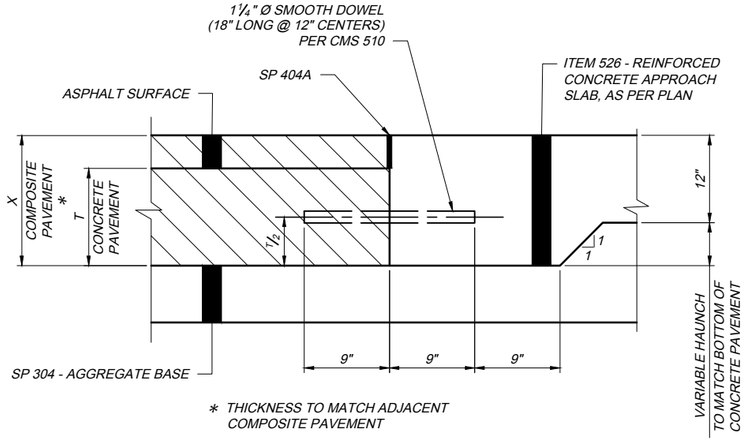
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

AS-1 2019.12.31.DWG; 12/18/19 - 8:46am

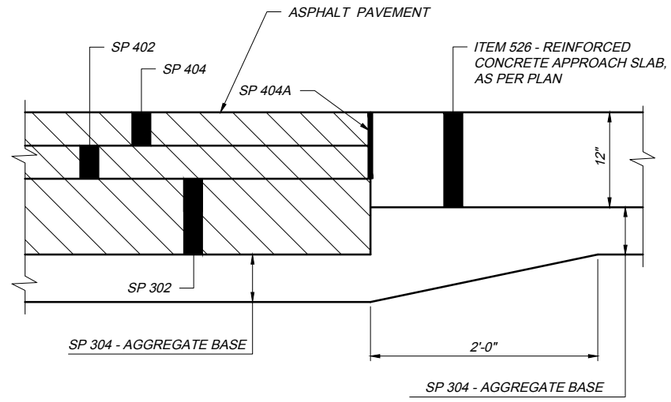


SECTION A-A



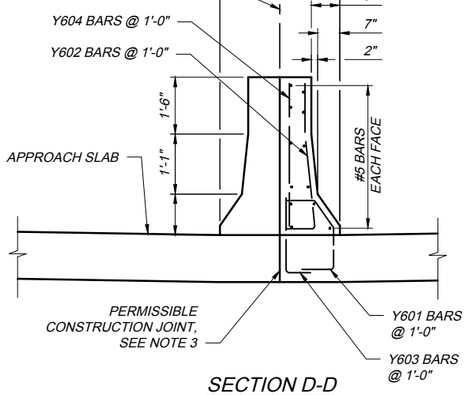
SECTION B-B

COMPOSITE PAVEMENT



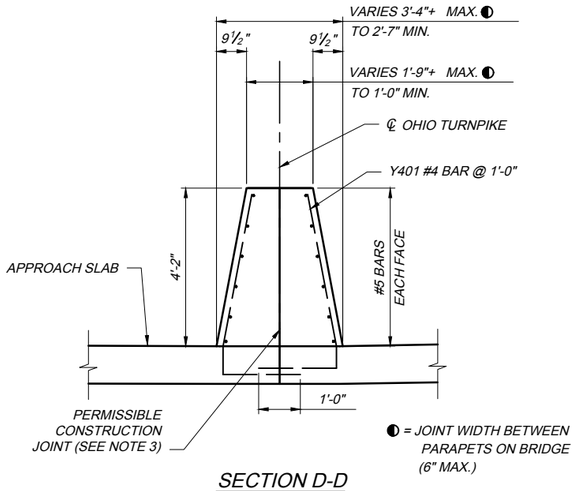
SECTION B-B

FLEXIBLE PAVEMENT



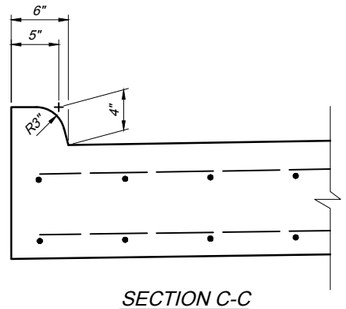
SECTION D-D

REINFORCING AND DIMENSIONS SYMMETRICAL ABOUT CENTERLINE
(SHOWN WITH 50" NEW JERSEY BARRIER)



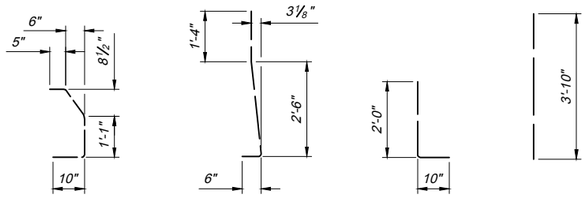
SECTION D-D

REINFORCING AND DIMENSIONS SYMMETRICAL ABOUT CENTERLINE
(SHOWN WITH 50" CONCRETE BARRIER, SINGLE SLOPE)



SECTION C-C

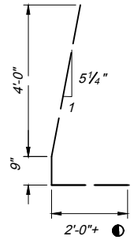
(SHOWN WITH INTEGRAL CONCRETE CURB)



Y601 Y602 Y603 Y604

BAR BENDING DIAGRAMS

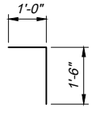
(50" NEW JERSEY BARRIER)



Y401

BAR BENDING DIAGRAMS

(50" CONCRETE BARRIER, SINGLE SLOPE)



A601

BAR BENDING DIAGRAMS

(GRADE BEAM)

NOTES

FOR NOTES, SEE SHEET 1 OF 3.

FOR DETAIL A, SEE SHEET 3 OF 3.

DATE: DECEMBER 31, 2019

STANDARD DRAWING

REINFORCED CONCRETE APPROACH SLAB

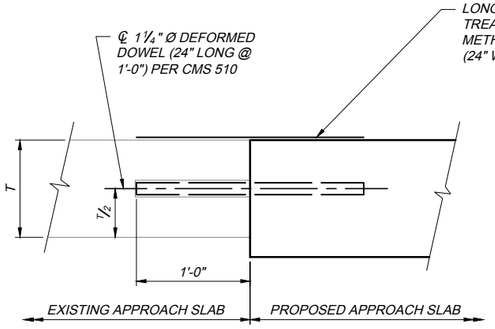
AS-1

2 / 3

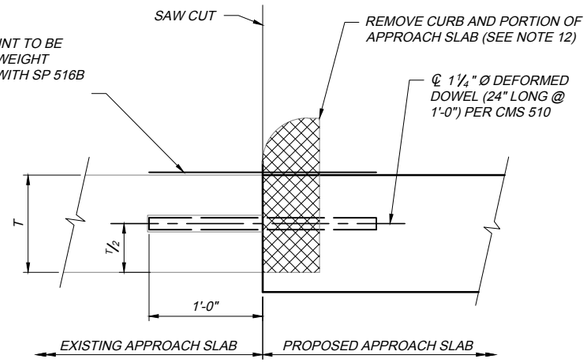
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

AS-1 2019.12.31.DWG; 12/18/19 - 8:47am

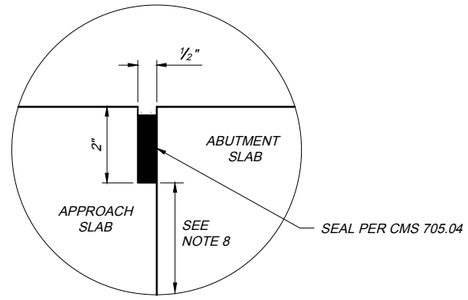


TRANSVERSE SECTION
(SHOWN WITHOUT INTEGRAL CONCRETE CURB)

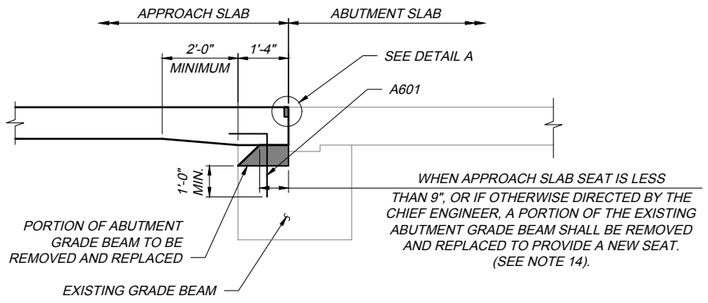


TRANSVERSE SECTION
(SHOWN WITH INTEGRAL CONCRETE CURB)

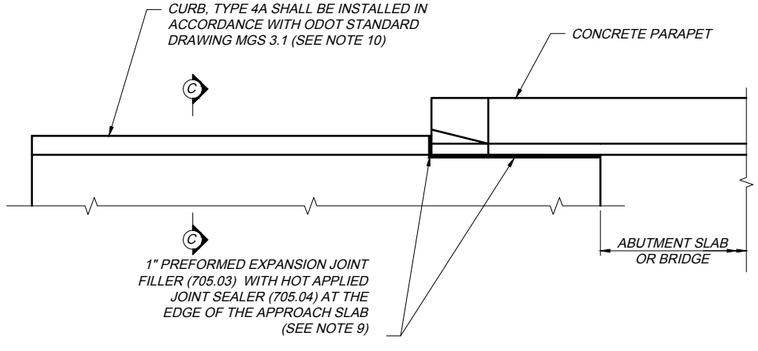
WIDENING DETAIL



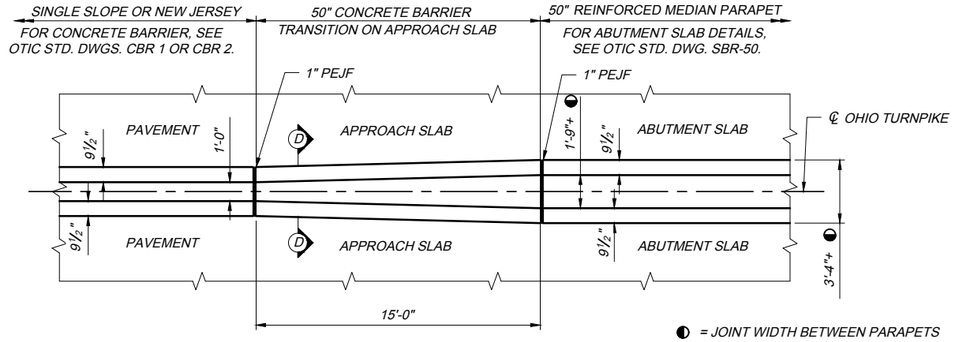
DETAIL A
(SEE NOTE 7)



APPROACH SLAB SEAT REPAIR DETAIL



CONCRETE PARAPET DETAIL
(OUTSIDE EDGE OF APPROACH SLAB AT THE END OF CONCRETE PARAPET)



◐ = JOINT WIDTH BETWEEN PARAPETS ON BRIDGE (6" MAX.)

PEJF = PREFORMED EXPANSION JOINT FILLER

MEDIAN BARRIER TRANSITION DETAIL

NOTES

FOR NOTES, SEE SHEET 1 OF 3.

DATE: DECEMBER 31, 2019

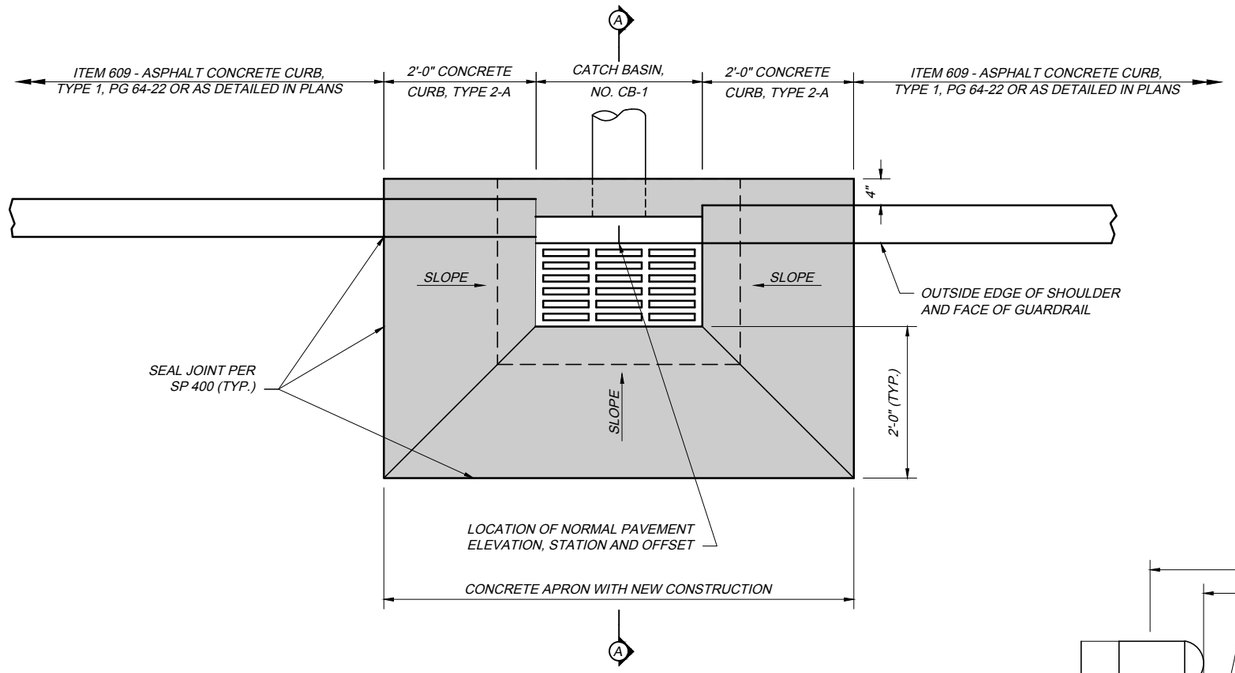
STANDARD DRAWING

REINFORCED CONCRETE APPROACH SLAB

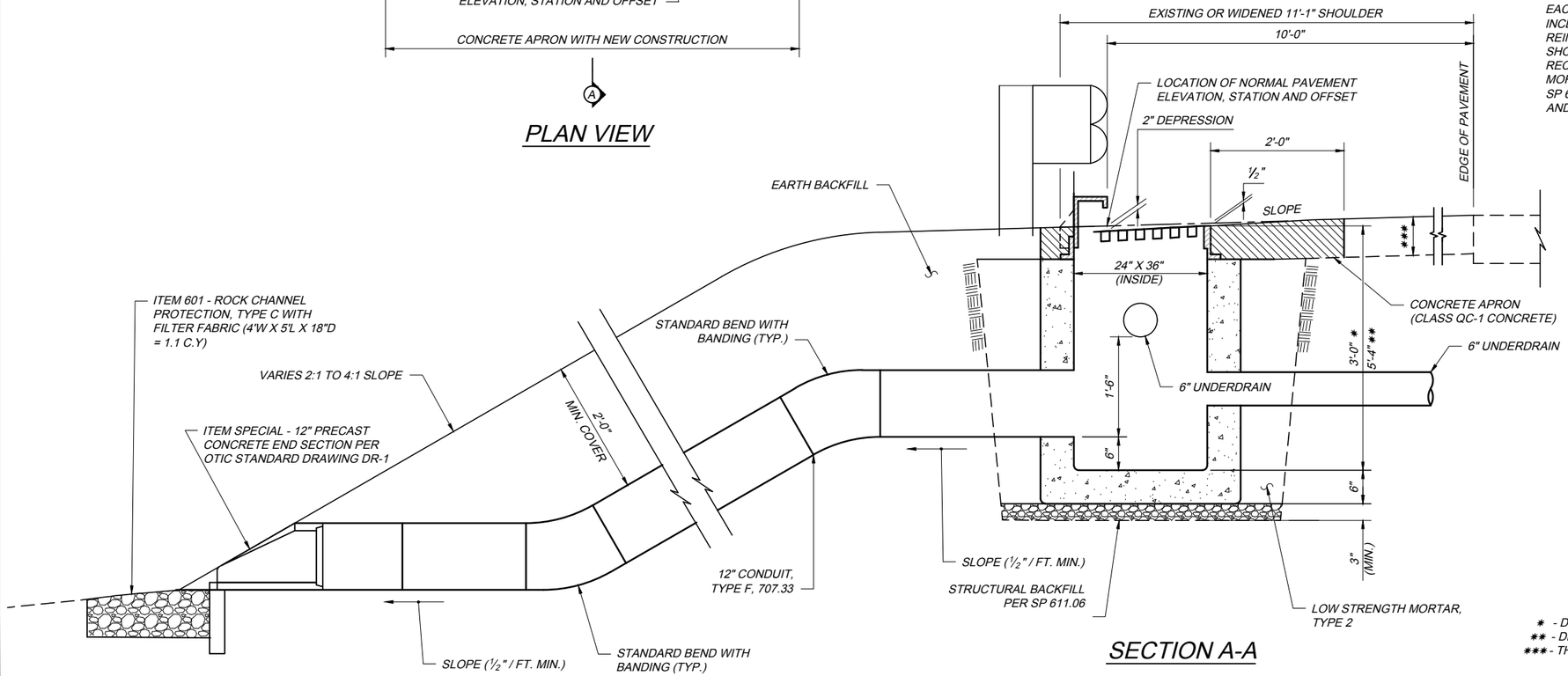
AS-1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE



PLAN VIEW



SECTION A-A

* - DEPTH WITHOUT UNDERDRAIN (MINIMUM)
** - DEPTH WITH UNDERDRAIN (PREFERRED)
*** - THICKNESS OF PAVEMENT (MINIMUM)

NOTES:

1. GRATE AND CASTING: THE GRATE AND CASTING SHALL BE A NEENAH FOUNDRY CO., MODEL NO. R-3246 (HEAVY DUTY), EAST JORDAN IRON WORKS, MODEL NO. 7030 (HEAVY DUTY) OR AN APPROVED EQUAL. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: "**DUMP NO WASTE**" AND "**DRAINS TO WATERWAY**". TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF ½". "**WATERWAY**" MAY BE SUBSTITUTED WITH "**STREAM**", "**RIVER**", "**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER. MASONRY BLOCKS SHALL NOT BE USED TO RAISE THE FRAME. THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND ADJUST IT TO CONFORM TO THE FINISHED SHOULDER ELEVATION AND SLOPE.
2. PRECAST CONSTRUCTION: THE STRUCTURE SHALL BE A PRECAST CONSTRUCTION MEETING SP 611.10 AND 706.13. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND REINFORCING SHALL BE SUFFICIENT TO PERMIT SHIPPING AND PLACEMENT WITHOUT DAMAGE. THE STRUCTURE SHALL BE PLACED ON 3" OF COMPACTED STRUCTURAL BEDDING PER SP 611.06. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH ITEM 613 - LOW STRENGTH MORTAR, TYPE 2.
3. STEPS: PROVIDE STEPS WHERE THE DEPTH EXCEEDS 6"`. STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1
4. OPENING: ALL PENETRATIONS THROUGH PRECAST DRAINAGE STRUCTURES SHALL BE EITHER MANUFACTURED OR CORED. ENSURE PIPE OPENINGS ARE THE O.D. OF THE PIPE BEING SUPPLIED PLUS 2 MINIMUM. MORTAR OR GROUT THE VOIDS PER SP 611.10. PIPE SHALL BE TRIMMED FLUSH WITH INSIDE OF BASIN OR EXTEND INTO THE BASIN 1" MAX.
5. CONCRETE APRON: CAST A QC-1 CONCRETE APRON WITH TYPE 2A CURB FOR LIMITS SHOWN.
6. CONDUIT: THE CONDUIT SHALL BE SP 611 - 12" CONDUIT, TYPE F, 707.33 USING STANDARD BENDS WITH BANDING PER THE MANUFACTURERS' RECOMMENDATIONS. WHEN TWO DIFFERENT PIPE MATERIALS ARE CONNECTED, PROVIDE A MASONRY COLLAR PER ODOT STANDARD DRAWING DM-1.1.
7. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - CATCH BASIN, NO. CB-1 AND SHALL INCLUDE ALL MATERIALS, EXCAVATION, EMBANKMENT, REINFORCING STEEL, CASTINGS, RECONSTRUCTED PAVED SHOULDER AND/OR CONCRETE APRON WITH CONCRETE CURB, RECONSTRUCTED ADJACENT ASPHALT CURB, LOW STRENGTH MORTAR BACKFILL AND LABOR REQUIRED TO CONSTRUCT THE SP 611 - CATCH BASIN, NO. CB-1 AS SHOWN ABOVE, COMPLETE AND ACCEPTED.

DATE: DECEMBER 31, 2019

STANDARD DRAWING

CATCH BASIN, NO. CB-1 WITH SLOPE DRAIN DETAIL

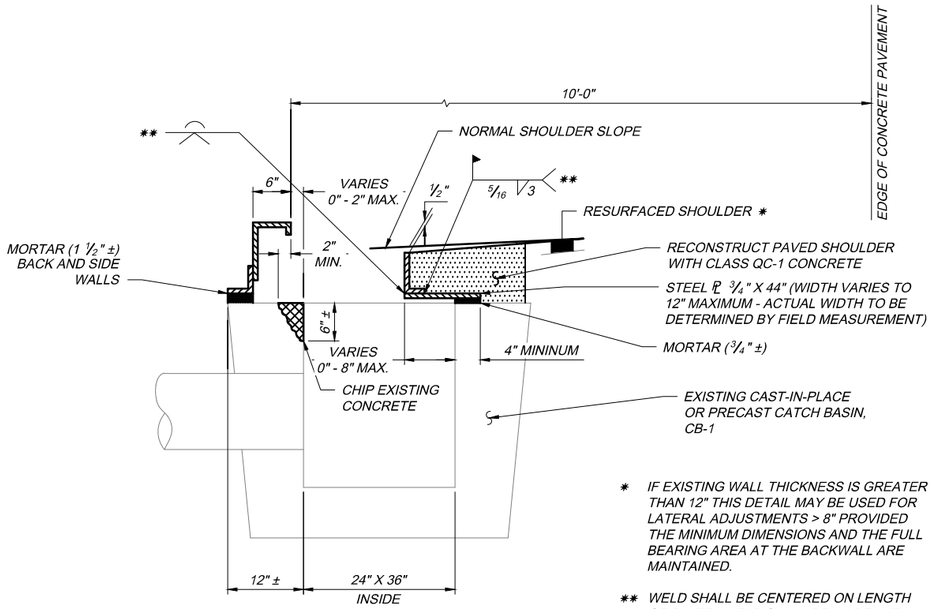
CB-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

CB-1 2019.12.31.dwg; 12/20/19 - 1:16pm

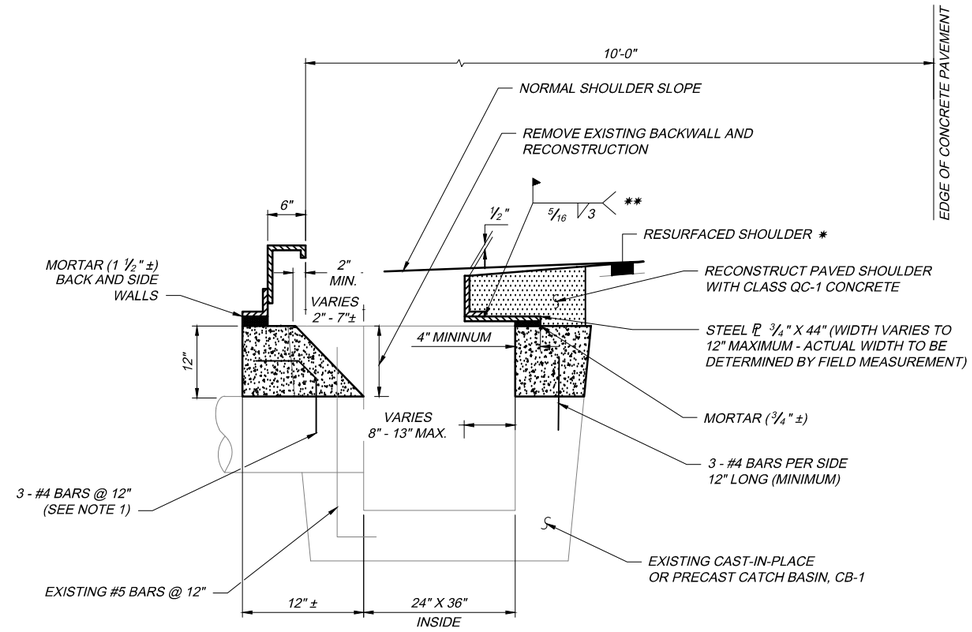


CATCH BASIN, RECONSTRUCTED TO GRADE, LESS THAN 4"

(TO BE USED FOR LATERAL ADJUSTMENT ≤ 8")

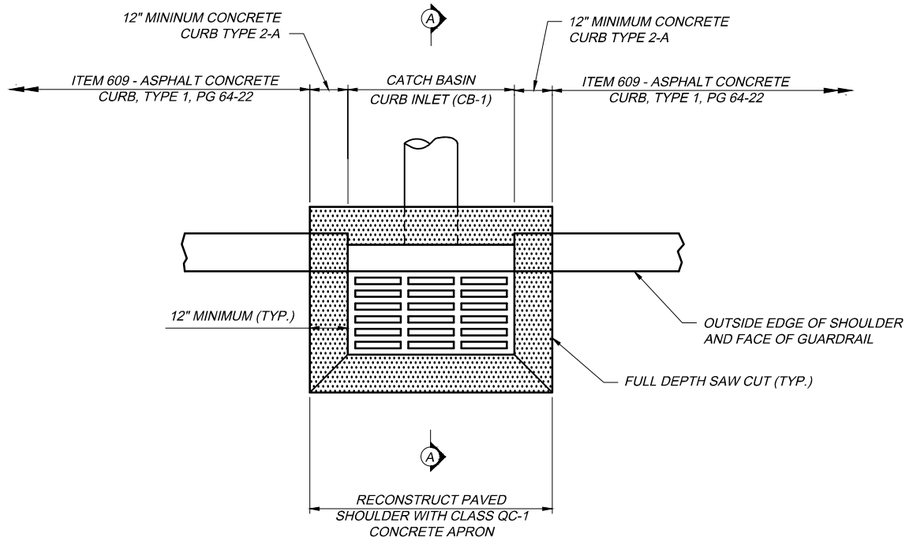
* IF EXISTING WALL THICKNESS IS GREATER THAN 12" THIS DETAIL MAY BE USED FOR LATERAL ADJUSTMENTS > 8" PROVIDED THE MINIMUM DIMENSIONS AND THE FULL BEARING AREA AT THE BACKWALL ARE MAINTAINED.

** WELD SHALL BE CENTERED ON LENGTH OF PLATE. WELD SHALL BE MADE WITH 750 POLYWELD IF THE MATERIALS ARE DISSIMILAR.



CATCH BASIN, RECONSTRUCTED TO GRADE, GREATER THAN 4"

(TO BE USED FOR LATERAL ADJUSTMENT > 8")



PLAN VIEW - CATCH BASINS

NOTES:

1. CATCH BASIN, RECONSTRUCTED TO GRADE, GREATER THAN 4": THE CONTRACTOR SHALL RECONSTRUCT THE EXISTING CATCH BASIN FROM THE TOP OF PRECAST STRUCTURE TO THE EXISTING GRADE USING CLASS QC-1 CONCRETE. THE USE OF BRICK OR MASONRY BLOCKS TO REBUILD THE CATCH BASIN SHALL BE PROHIBITED. THE PAVEMENT SHALL BE SAWCUT A MINIMUM OF 12" FROM THE CASTING. CLEAN THE EXISTING CASTING PRIOR TO REINSTALLING. NO. 4 DOWEL BARS SHALL BE SPACED 12" O/C, 3 PER SIDE UNLESS DIRECTED BY THE CHIEF ENGINEER, IN ACCORDANCE WITH CMS 509. THE DOWEL BARS SHALL BE EMBEDDED AT LEAST 6" IN THE NEW CONCRETE AND INTO THE EXISTING STRUCTURE. THE DOWEL BARS SHALL BE EMBEDDED INTO THE EXISTING STRUCTURE IN ACCORDANCE WITH CMS 510 USING NON-SHRINK, NON-METALLIC GROUT THAT CONFORMS TO CMS 705.20. FORMS SHALL BE SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN THAT WILL ENSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH.

2. CATCH BASIN, RECONSTRUCTED TO GRADE, LESS THAN 4": THE SAME METHOD SHALL BE USED TO RECONSTRUCT THE CATCH BASINS TO GRADE, EXCEPT THAT NO FORMS OR DOWELS ARE REQUIRED.

3. GRATE AND CASTING: THE EXISTING GRATE AND CASTING SHALL BE REUSED UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER. A CONTINGENCY QUANTITY OF SP 611 - CATCH BASIN, NO. CB-1, GRATE AND CASTING HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE CHIEF ENGINEER. THE REPLACEMENT GRATE AND CASTING SUPPLIED SHALL BE A NEENAH FOUNDRY CO., MODEL NO. R-3246 (HEAVY DUTY), EAST JORDAN IRON WORKS, MODEL NO. 7030 (HEAVY DUTY) OR AN APPROVED EQUAL. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: "**DUMP NO WASTE**" AND "**DRAINS TO WATERWAY**". TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF ½". "**WATERWAY**" MAY BE SUBSTITUTED WITH "**STREAM**", "**RIVER**", "**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.

4. STEEL PLATE: THE EXISTING PLATE THAT IS ATTACHED TO THE FRAME OF THE CASTING SHALL BE REMOVED AND REPLACED AS SHOWN ABOVE. A PLATE IS NOT REQUIRED IF THE FRAME IS SUPPORTED COMPLETELY ON THE STRUCTURE.

5. PAYMENT: ALL MATERIALS AND LABOR, INCLUDING PAVEMENT REMOVAL, RECONSTRUCTED PAVED SHOULDER, RECONSTRUCTED ADJACENT ASPHALT CURB ARE INCLUDED IN THE CONTRACT UNIT PRICE PER THE FOLLOWING ITEMS REQUIRED TO RECONSTRUCT THE CATCH BASIN AS SHOWN ABOVE, COMPLETE AND ACCEPTED:

   ITEM SP 611 - CATCH BASIN, RECONSTRUCTED TO GRADE, LESS THAN 4"
   ITEM SP 611 - CATCH BASIN, RECONSTRUCTED TO GRADE, 4" - 12"
   ITEM SP 611 - CATCH BASIN, RECONSTRUCTED TO GRADE, GREATER THAN 12"

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

DATE: OCTOBER 20, 2017

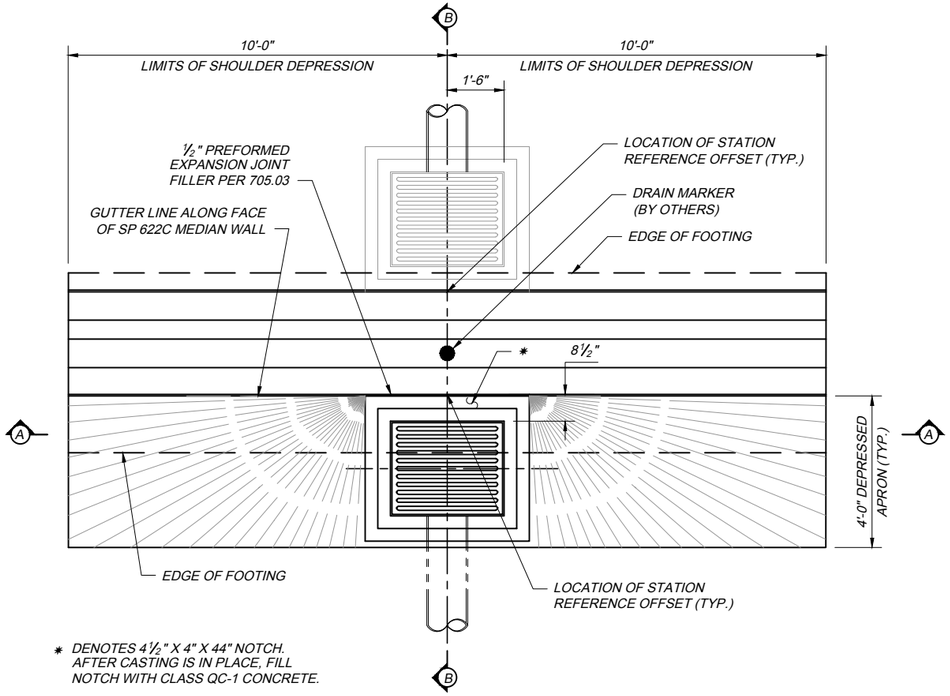
STANDARD DRAWING

CATCH BASIN, NO. CB-1 RECONSTRUCTED

CB-2

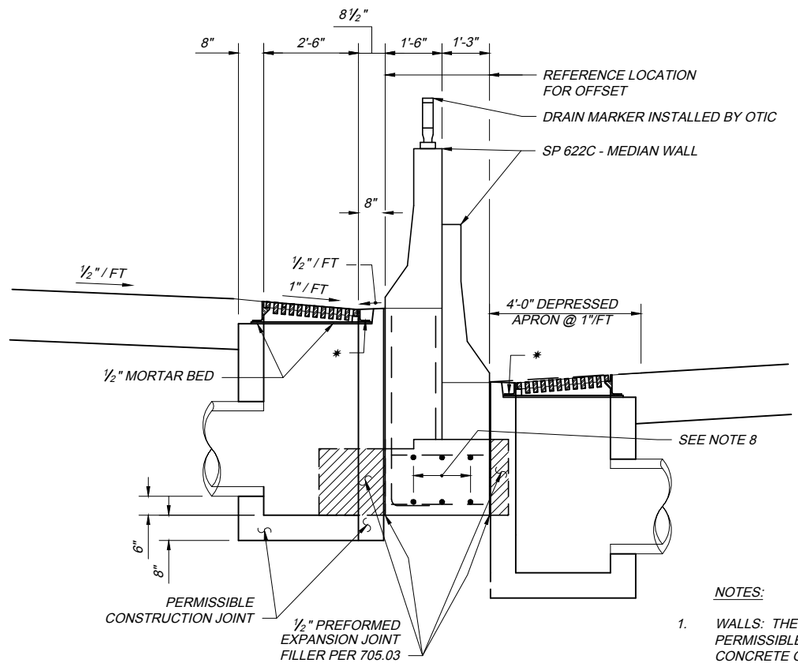
1 / 1

CB-2 2017.10.20.dwg, 11/09/17 - 1:05pm

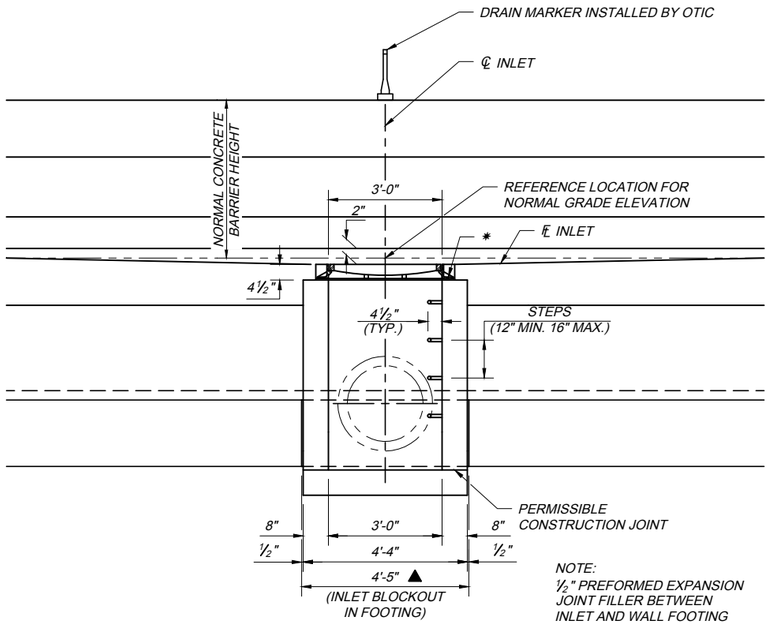


* DENOTES 4½" X 4" X 44" NOTCH. AFTER CASTING IS IN PLACE, FILL NOTCH WITH CLASS QC-1 CONCRETE.

PLAN VIEW



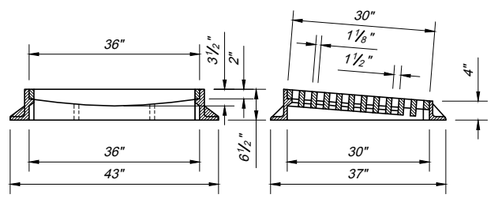
SECTION VIEW B-B



NOTE:
½" PREFORMED EXPANSION JOINT FILLER BETWEEN INLET AND WALL FOOTING (TYP.)

▲ - 4'-1" FOR PRECAST

ELEVATION VIEW A-A



CASTING DETAILS

NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC-1 CONCRETE. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE THE INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE O.D. PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #4 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONTALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. IF A SKEWED PIPE PROTRUDES MORE THAN 2" INSIDE A WALL, THE PIPE SHALL BE TRIMMED FLUSH AND FINISHED TO PROVIDE A NEAT APPEARANCE
7. FOR MEDIAN WALL DETAILS, SEE OTIC STANDARD DRAWINGS CBM-1 THRU CBM-5.
8. FOUR ADDITIONAL EPOXY COATED #5 BARS, 10'-0" LONG, CENTERED ABOUT THE THE CENTERLINE OF THE CATCH BASIN, SHALL BE PLACED, 2 TOP AND 2 BOTTOM, IN THE FOOTING. THE COST SHALL BE INCLUDED WITH THE COST OF SP 611 - CATCH BASIN, MEDIAN WALL.
9. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - CATCH BASIN, MEDIAN WALL AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE CATCH BASIN AS SHOWN, COMPLETE AND ACCEPTED.
10. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: "**DUMP NO WASTE**" AND "**DRAIN TO WATERWAY**" TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". ``**WATERWAY**" MAY BE SUBSTITUTED WITH ``**STREAM**", ``**RIVER**", ``**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.

▨ - DENOTES ½" PREFORMED EXPANSION JOINT FILLER BETWEEN SIDES OF CATCH BASIN AND FOOTING NOTCH.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

CATCH BASIN
MEDIAN WALL

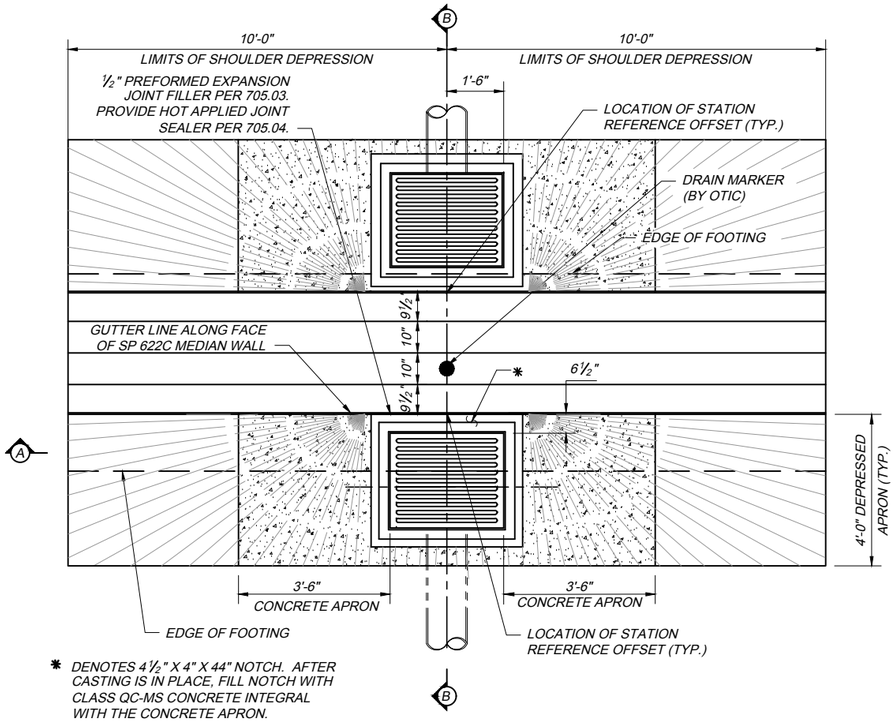
CB-3

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

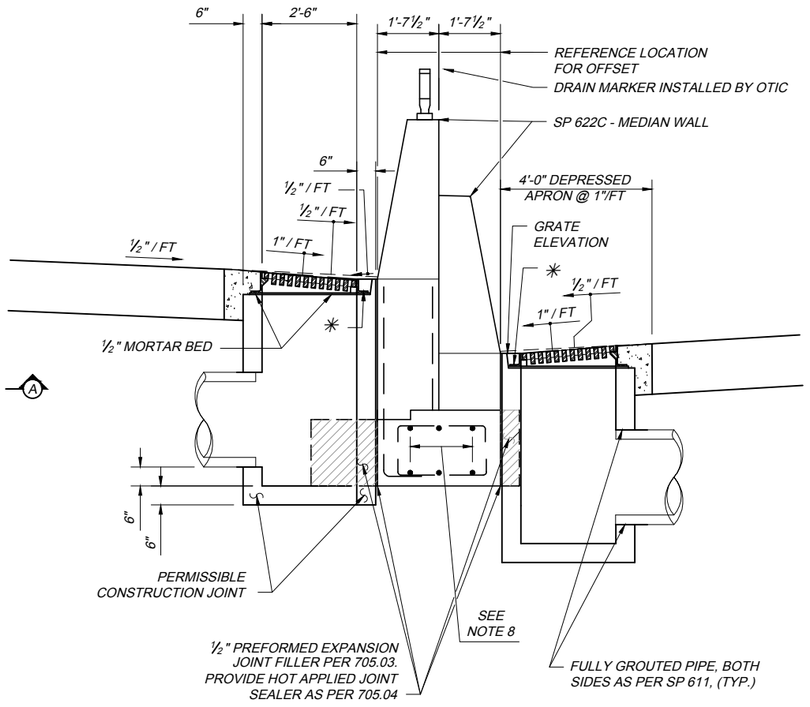
OHIO TURNPIKE

CB-3 2017.10.20.dwg, 10/25/17 - 3:55pm

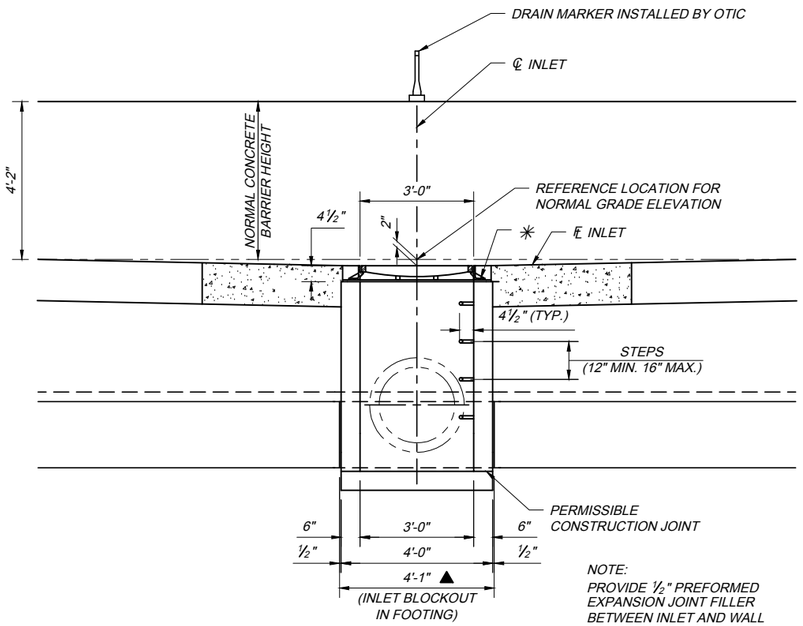


✱ DENOTES 4½" X 4" X 44" NOTCH. AFTER CASTING IS IN PLACE, FILL NOTCH WITH CLASS QC-MS CONCRETE INTEGRAL WITH THE CONCRETE APRON.

PLAN VIEW



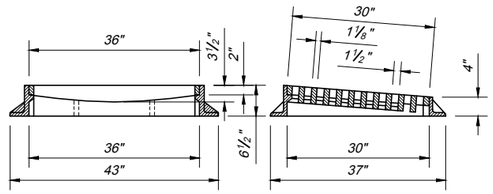
SECTION VIEW B-B



NOTE:
PROVIDE ½" PREFORMED EXPANSION JOINT FILLER BETWEEN INLET AND WALL FOOTING PER 705.03. PROVIDE HOT APPLIED JOINT SEALER PER 705.04. (TYP.)

▲ - 4'-5" FOR CAST IN PLACE.

ELEVATION VIEW A-A



CASTING DETAILS

NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC1 CONCRETE. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF CMS 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE THE INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE O.D. PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #5 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONTALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. IF A SKEWED PIPE PROTRUDES MORE THAN 2" INSIDE A WALL, THE PIPE SHALL BE TRIMMED FLUSH AND FINISHED TO PROVIDE A NEAT APPEARANCE
7. FOR MEDIAN WALL DETAILS, SEE OTIC STANDARD DRAWINGS CBM-2.
8. FOUR ADDITIONAL EPOXY COATED #5 BARS, 10'-0" LONG, CENTERED ABOUT THE THE CENTERLINE OF THE CATCH BASIN, SHALL BE PLACED, 2 TOP AND 2 BOTTOM, IN THE FOOTING. THE COST SHALL BE INCLUDED WITH THE COST OF SP 611 - CATCH BASIN, MEDIAN WALL.
9. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - CATCH BASIN, MEDIAN WALL AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE CATCH BASIN AS SHOWN, COMPLETE AND ACCEPTED.
10. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: "**DUMP NO WASTE**" AND "**DRAIN TO WATERWAY**" TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". ``**WATERWAY**" MAY BE SUBSTITUTED WITH ``**STREAM**", ``**RIVER**", ``**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
11. THE USE OF BRICK OR MASONRY BLOCK TO BUILD THE CATCH BASIN SHALL BE PROHIBITED. IF THE FRAME DOES NOT SIT ON THE CATCH BASIN WALLS, THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "QC MS" CONCRETE, TO BUILD THE CATCH BASIN TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE. THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C (3 PER SIDE UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER) IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC GROUT THAT CONFORMS TO CMS 705.20. THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN, AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED CATCH BASIN CASTING SHALL BE BACK FILLED WITH CLASS "QC MS" CONCRETE TO THE EXISTING SURFACE.

▨ DENOTES ½" PREFORMED EXPANSION JOINT FILLER BETWEEN SIDES OF CATCH BASIN AND FOOTING NOTCH.

OHIO TURNPIKE

DATE: FEBRUARY 9, 2021

STANDARD DRAWING

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

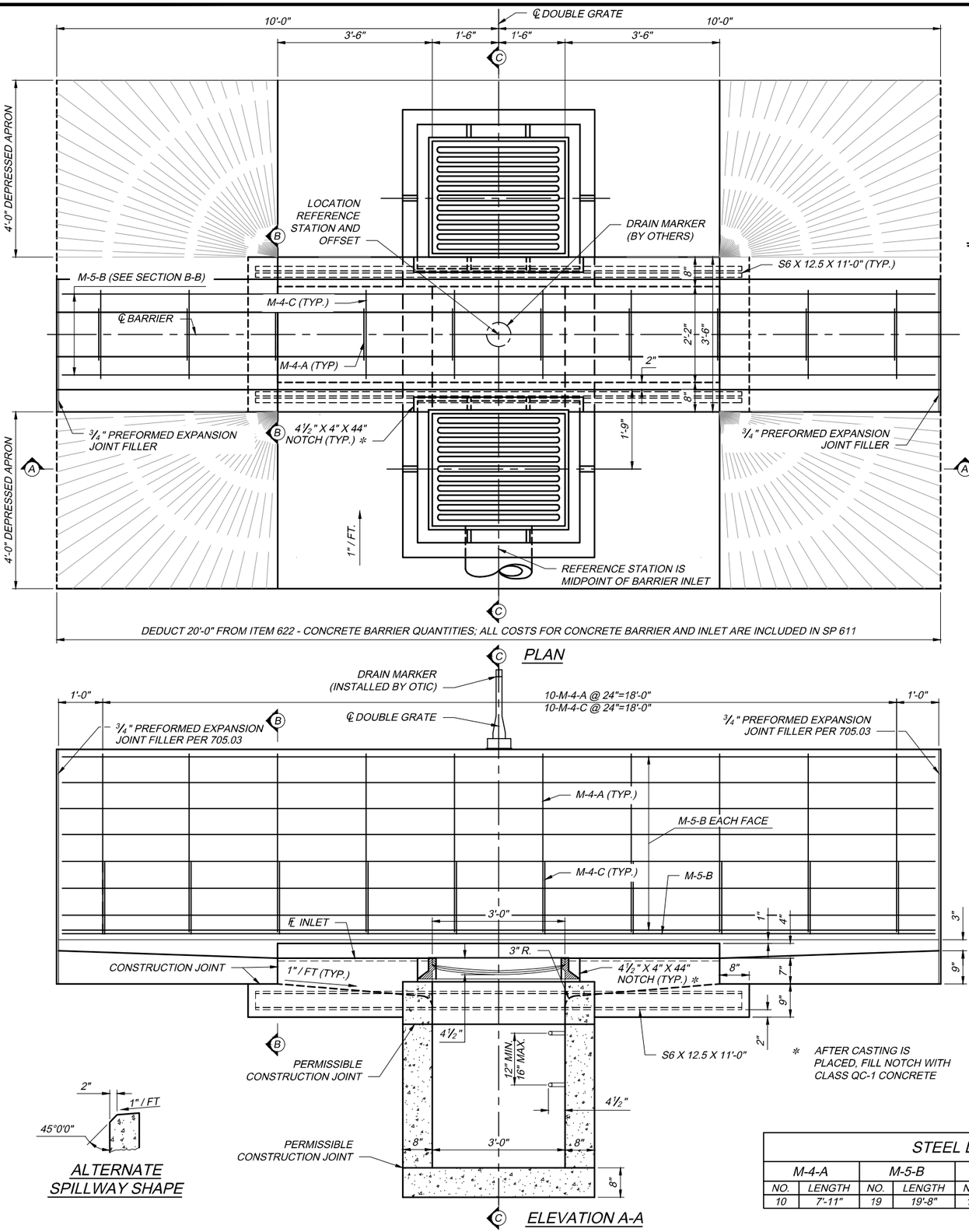
CATCH BASIN, MEDIAN WALL
FOR SINGLE SLOPE BARRIER

CB-3A

1 / 1

OHIO TURNPIKE

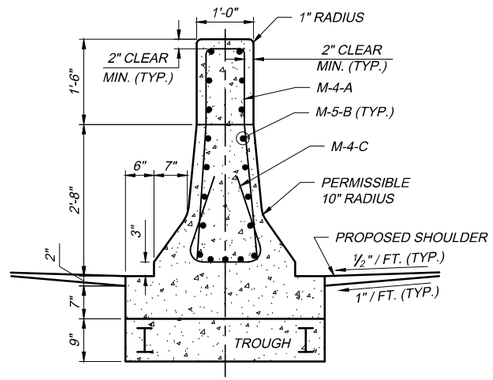
CB-3A 2021.2.9.dwg; 2/11/21



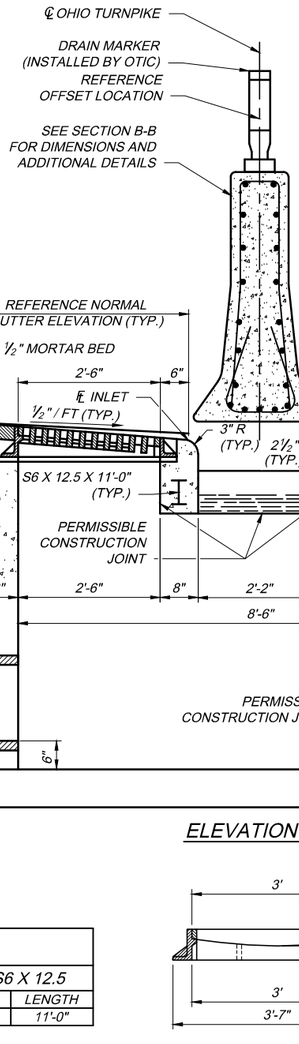
PLAN

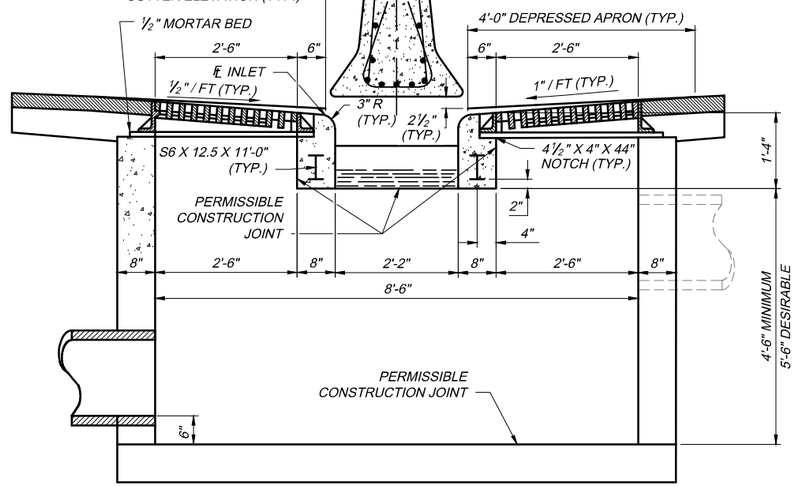
ELEVATION A-A

ALTERNATE SPILLWAY SHAPE

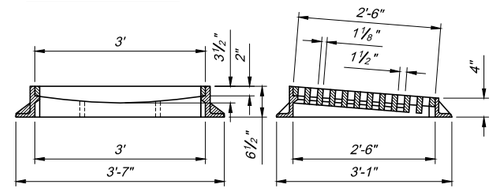


SECTION B-B

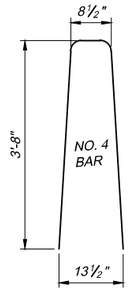




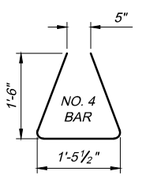
ELEVATION C-C



CASTING DETAILS



M-4-A



M-4-C

BAR BENDING DIAGRAM

STEEL LIST							
M-4-A		M-5-B		M-4-C		S6 X 12.5	
NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
10	7'-11"	19	19'-8"	10	4'-6"	2	11'-0"

NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC-1 CONCRETE. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE THE INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE OUTSIDE DIAMETER PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #4 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE:
   "**DUMP NO WASTE**" AND "**DRAIN TO WATERWAY**" TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". "**WATERWAY**" MAY BE SUBSTITUTED WITH "**STREAM**", "**RIVER**", "**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
7. CONCRETE BARRIER: FOR DETAILS AND NOTES FOR CONCRETE BARRIER, TYPE B-50, AS PER PLAN, SEE STANDARD DRAWING CBR-1. REINFORCING SHALL BE EPOXY COATED IN ACCORDANCE WITH 509.09.
8. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - INLET, NO. I-3B50, DOUBLE GRATE AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE INLET AS SHOWN, COMPLETE AND ACCEPTED.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

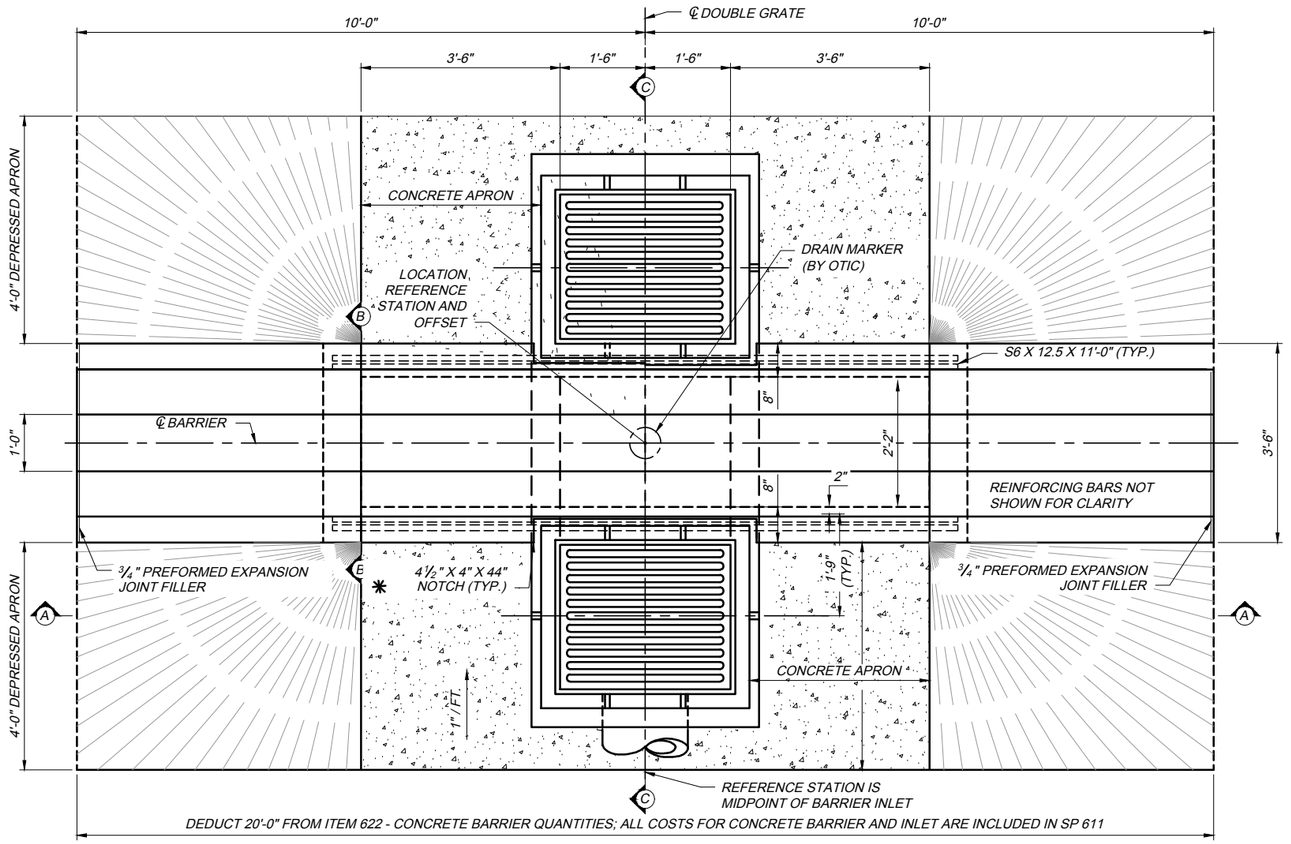
INLET, NO. I-3B50 DOUBLE GRATE

CB-4

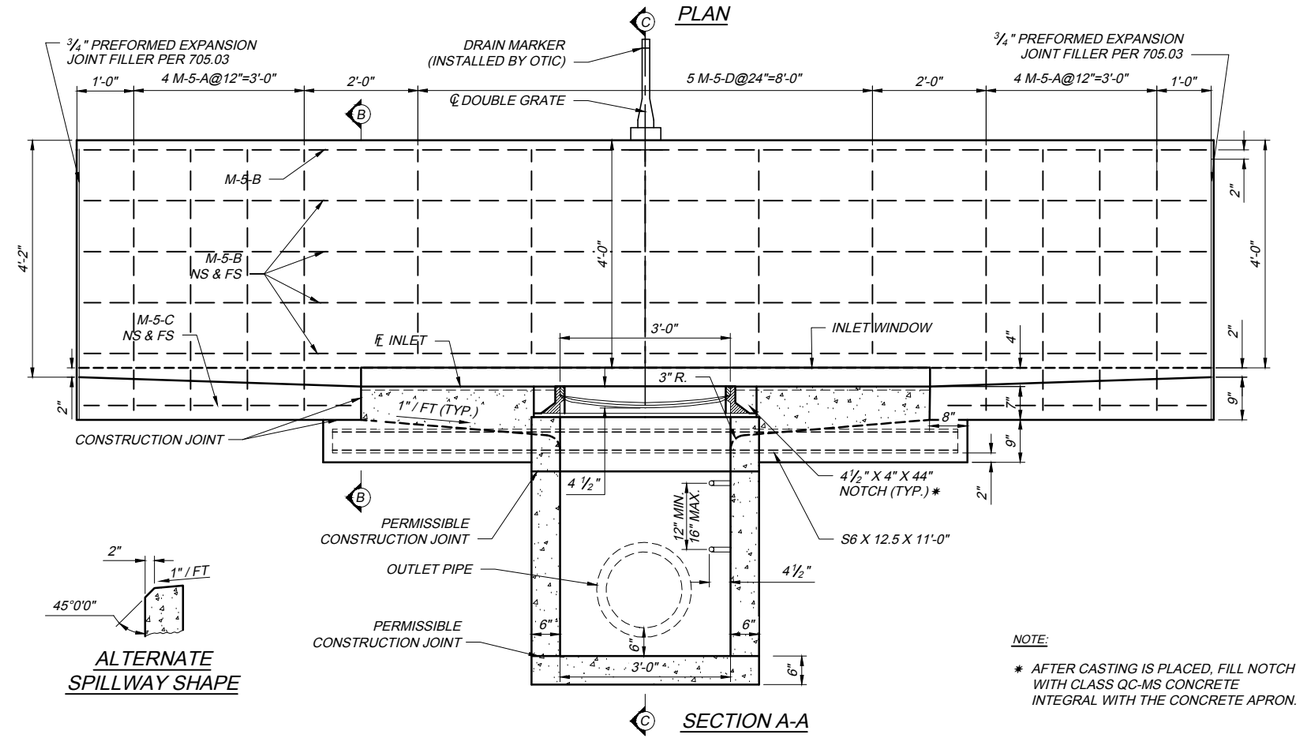
1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE



PLAN



SECTION A-A

ALTERNATE SPILLWAY SHAPE

NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC1 CONCRETE. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF CMS 706.13 WITH 6 ±2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE STATION, LOCATION, AND OFFSET WITH INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE OUTSIDE DIAMETER PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #5 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONTALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: "**DUMP NO WASTE**" AND "**DRAIN TO WATERWAY**" TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". "**WATERWAY**" MAY BE SUBSTITUTED WITH "**STREAM**", "**RIVER**", "**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
7. CONCRETE BARRIER: FOR DETAILS AND NOTES FOR SINGLE SLOPE CONCRETE BARRIER, TYPE B-50, AS PER PLAN, SEE STANDARD DRAWING CBR-2 SHEET 1 OF 3. REINFORCING SHALL BE EPOXY COATED IN ACCORDANCE WITH CMS 509.09.
8. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - INLET, NO. I-3B50, DOUBLE GRATE AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE INLET AS SHOWN, COMPLETE AND ACCEPTED.
9. THE USE OF BRICK OR MASONRY BLOCK TO BUILD THE CATCH BASIN SHALL BE PROHIBITED. IF THE FRAME DOES NOT SIT ON THE CATCH BASIN WALLS, THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "QC MS" CONCRETE, TO BUILD THE CATCH BASIN TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE. THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C (3 PER SIDE UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER) IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC GROUT THAT CONFORMS TO CMS 705.20. THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN, AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED CATCH BASIN CASTING SHALL BE BACK FILLED WITH CLASS "QC MS" CONCRETE TO THE EXISTING SURFACE.

NOTE:

✱ AFTER CASTING IS PLACED, FILL NOTCH WITH CLASS QC-MS CONCRETE INTEGRAL WITH THE CONCRETE APRON.

OHIO TURNPIKE

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

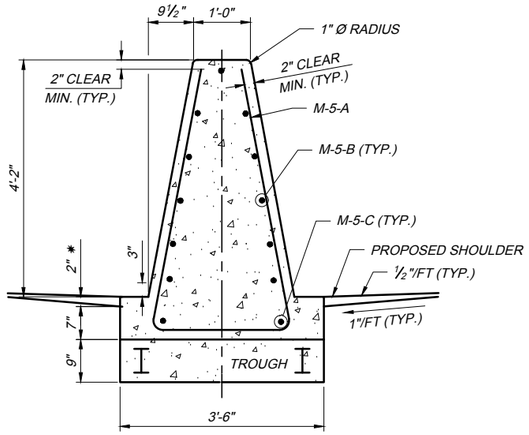
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

INLET, NO. I-3B50, DOUBLE GRATE
FOR SINGLE SLOPE BARRIER, TYPE B50

CB-4A

OHIO TURNPIKE

CB-4A 2018.09.19.dwg; 9/26/18 - 2:26pm

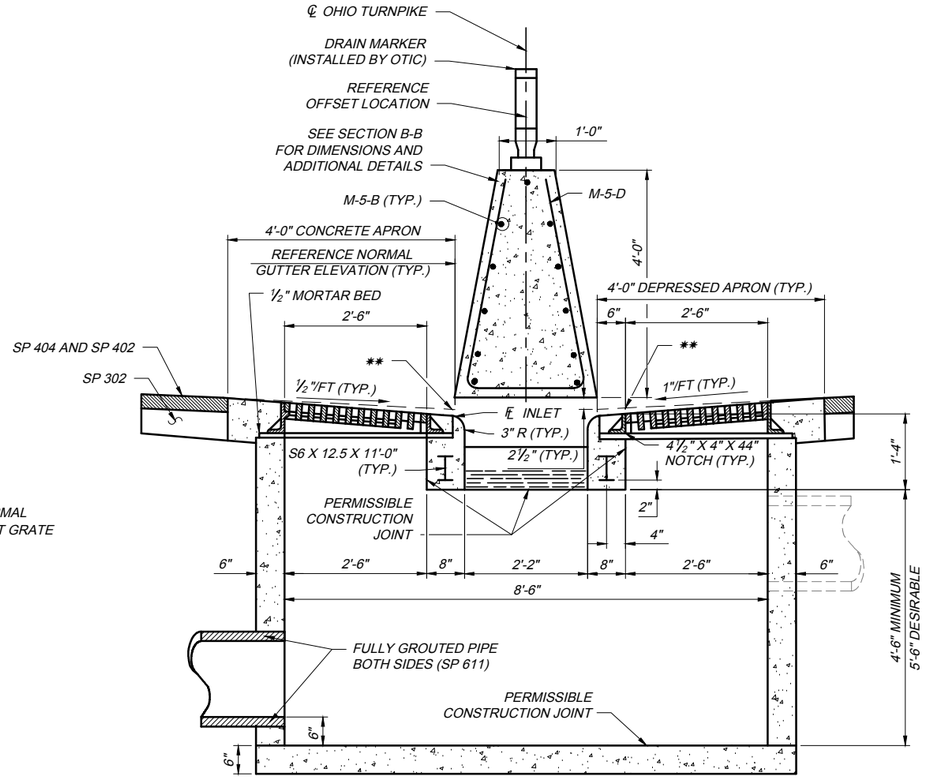


SECTION B-B

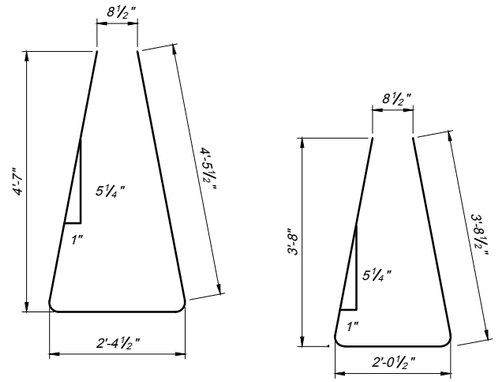
NOTE:

* THE DIFFERENCE BETWEEN THE NORMAL GRADE ELEVATION AND THE ℄ INLET GRATE ELEVATION IS 2".

** NORMAL GRADE ELEVATION

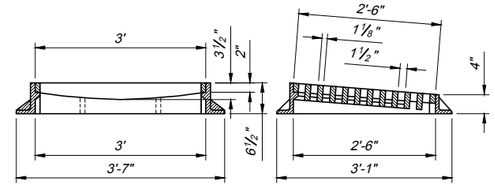


SECTION C-C



M-5-A M-5-D

BAR BENDING DIAGRAM



CASTING DETAILS

STEEL LIST									
M-5-A		M-5-B		M-5-C		M-5-D		S6 X 12.5	
NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
8	11'-5"	11	19'-8"	4	4'-8"	5	9' -5"	2	11'-0"

NOTE:

FOR STANDARD INLET TYPES, NOTES, LEGENDS, PLAN AND SECTION A-A, SEE SHEET 1 OF 2.

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

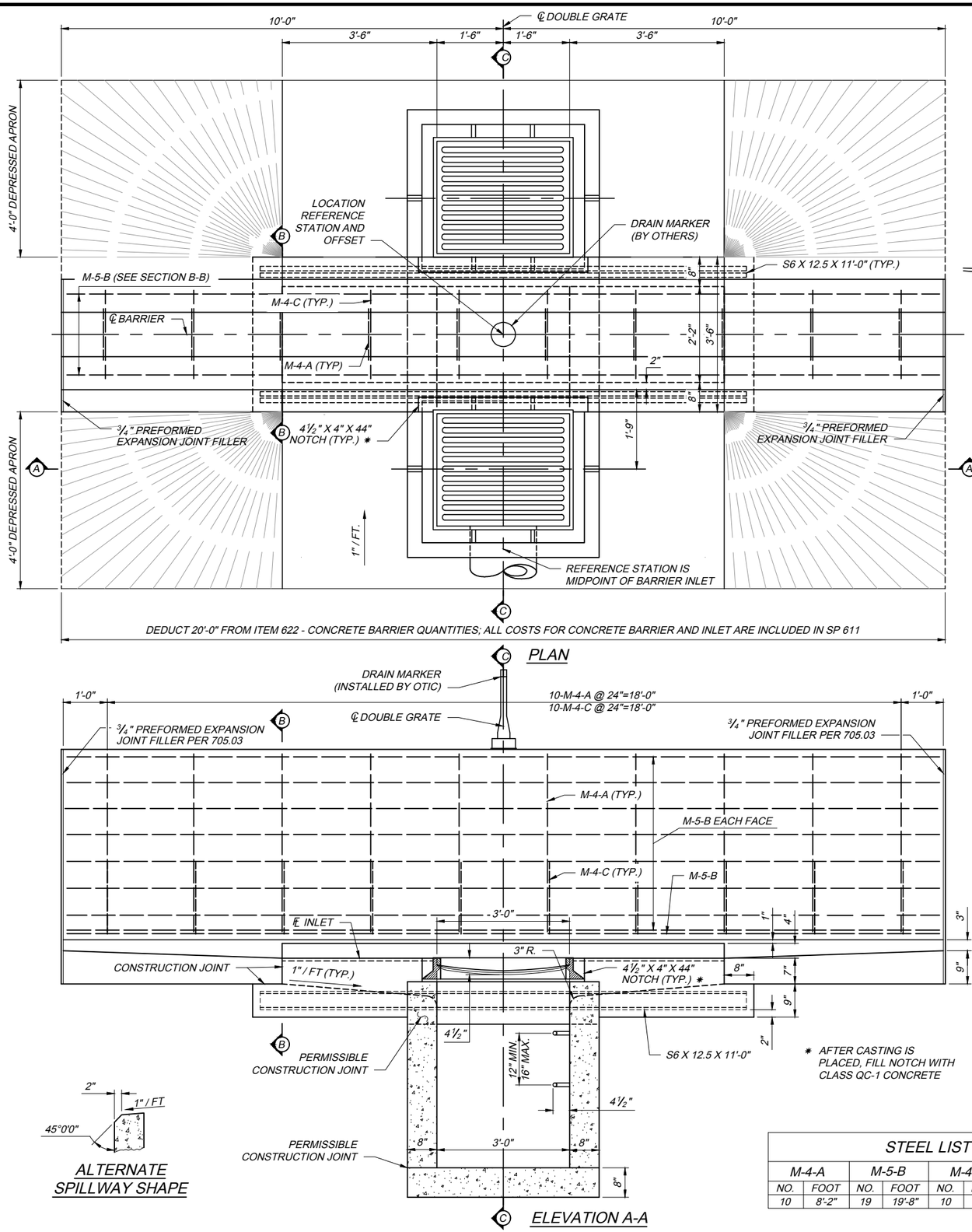
INLET, NO. I-3B50, DOUBLE GRATE
FOR SINGLE SLOPE BARRIER, TYPE B50

CB-4A

2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

CB-4A 2018.09.19.dwg; 9/26/18 - 2:26pm



NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC-1. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF 706.13 WITH 6 ± 2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE THE INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE O.D. PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #4 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE: " **DUMP NO WASTE** " AND " **DRAIN TO WATERWAY** " TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". " **WATERWAY** " MAY BE SUBSTITUTED WITH " **STREAM** ", " **RIVER** ", " **LAKE** ", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
7. CONCRETE BARRIER: FOR DETAILS AND NOTES FOR CONCRETE BARRIER, TYPE C-50, AS PER PLAN, SEE OTIC STANDARD DRAWING CBR-1. REINFORCING SHALL BE EPOXY COATED IN ACCORDANCE WITH 509.09
8. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - INLET, NO. I-3C50, DOUBLE GRATE AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE CATCH BASIN AS SHOWN, COMPLETE AND ACCEPTED.

STEEL LIST							
M-4-A		M-5-B		M-4-C		S6 X 12.5	
NO.	FOOT	NO.	FOOT	NO.	FOOT	NO.	FOOT
10	8'-2"	19	19'-8"	10	4'-4"	2	11'-0"

DATE: OCTOBER 20, 2017

STANDARD DRAWING

INLET, NO. I-3C50
DOUBLE GRATE

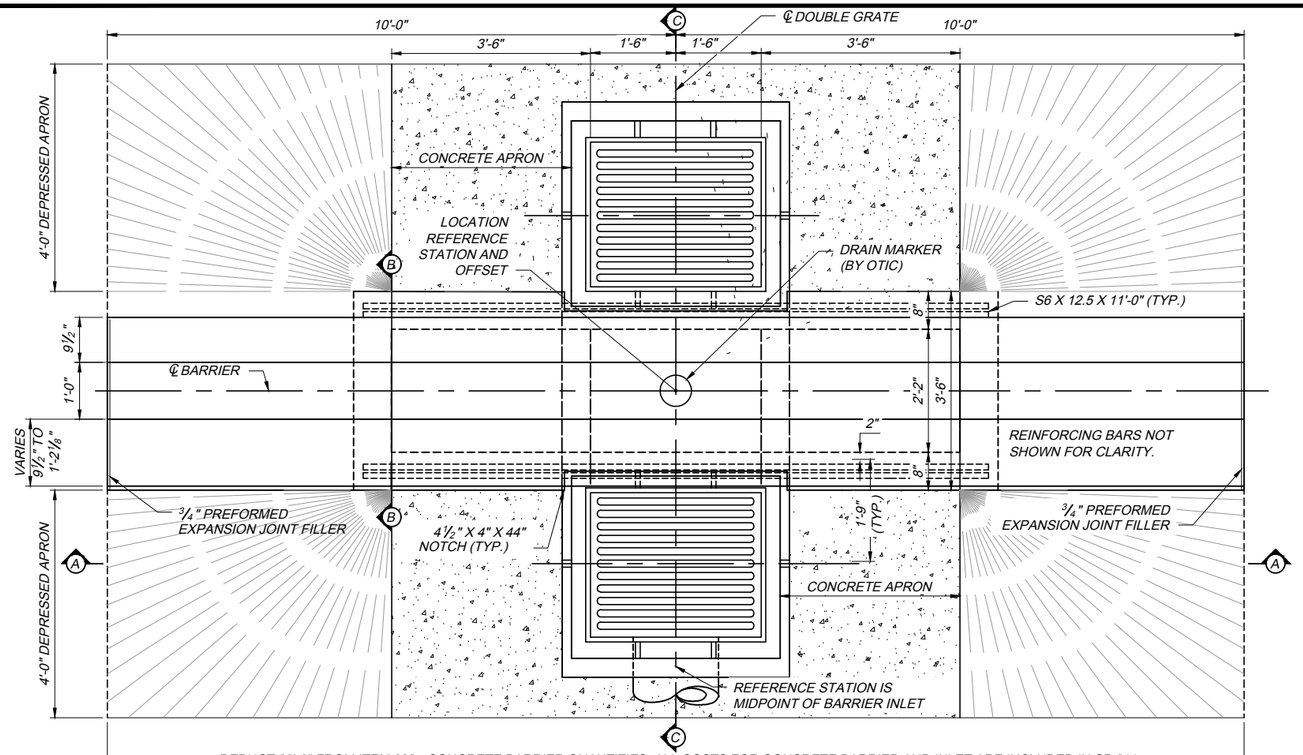
CB-5

1 / 1

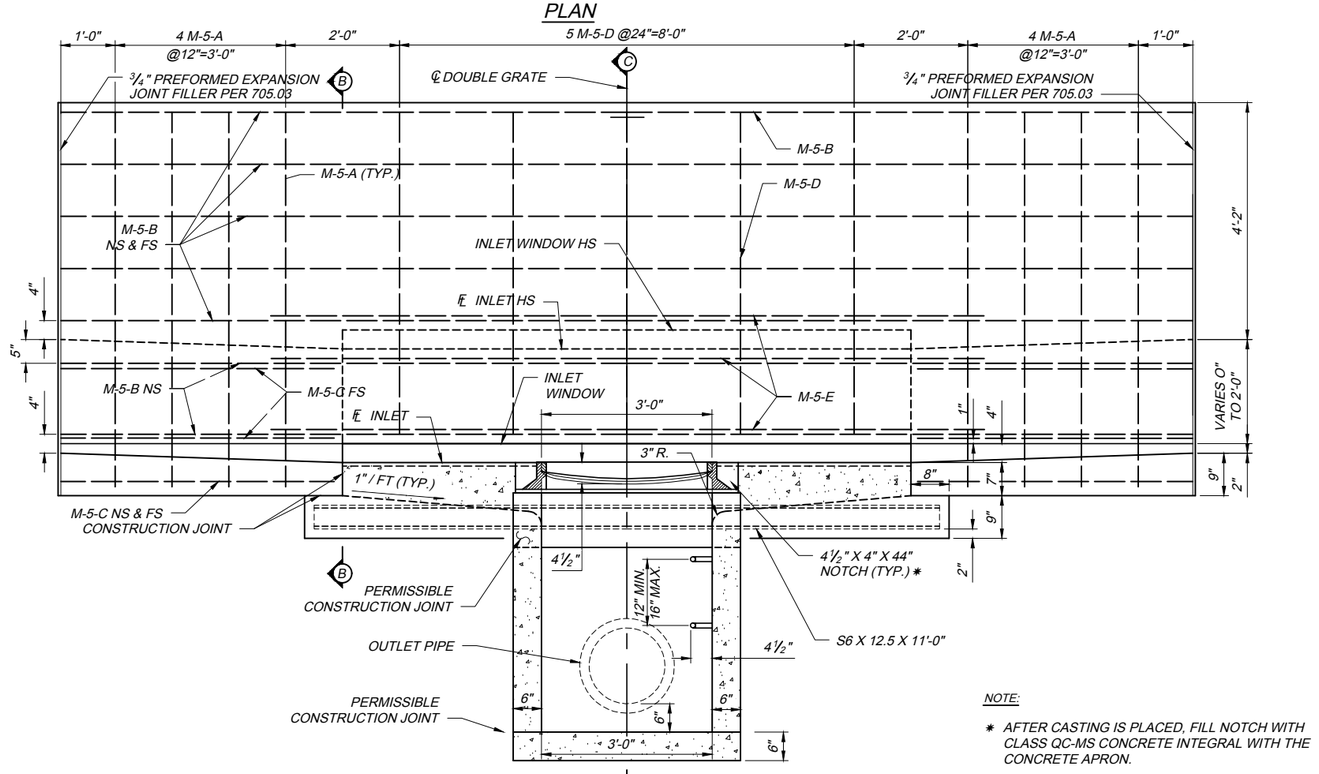
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

CB-5 2017-10.20.dwg; 10/25/17 - 4:01pm



PLAN



SECTION A-A

NOTE:

* AFTER CASTING IS PLACED, FILL NOTCH WITH CLASS QC-MS CONCRETE INTEGRAL WITH THE CONCRETE APRON.

NOTES:

1. WALLS: THE WALLS BETWEEN THE BOTTOM SLAB AND THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE BUILT OF CAST-IN-PLACE CONCRETE OR PRECAST. CAST-IN-PLACE CONCRETE SHALL HAVE A WALL THICKNESS OF 8" NOMINAL FOR DEPTHS OF 12' OR LESS. PRECAST WALLS SHALL HAVE A MINIMUM THICKNESS OF 6" AND BE REINFORCED SUFFICIENTLY TO PERMIT SHIPPING AND HANDLING WITHOUT DAMAGE. THE UNIT ABOVE THE UPPER PERMISSIBLE CONSTRUCTION JOINT MAY BE PRECAST OR CAST-IN-PLACE.
2. CONCRETE: CAST-IN-PLACE, TO BE CLASS QC1. ALL PRECAST CONCRETE SHALL MEET THE REQUIREMENTS OF CMS 706.13 WITH 6 ± 2% AIR VOID CONTENT IN THE HARDENED CONCRETE. REQUIRED MARKINGS SHALL INCLUDE THE INLET NUMBER. PRECAST UNITS SHALL BE BACKFILLED WITH LOW STRENGTH MORTAR, TYPE 2 AS PER SP 611 AND ITEM 613.
3. STEPS AND CASTING: STEPS SHALL BE IN ACCORDANCE WITH ODOT STANDARD DRAWING MH-1.1. CASTING: MINIMUM WEIGHT OF FRAME AND COVER SHALL BE 540 POUNDS.
4. OPENINGS: PIPE OPENINGS SHALL BE O.D. PLUS 2" WHEN PREFABRICATED OR CORED. FILL ANY VOIDS PER SP 611.
5. INLETS OVER 12 FEET IN DEPTH: SUCH INLETS SHALL BE PRECAST OF CAST-IN-PLACE CONCRETE; REINFORCED WITH EPOXY COATED #5 BARS ON 12" CENTERS BOTH VERTICALLY AND HORIZONTALLY WITH 2" CLEARANCE FROM THE INSIDE WALL FACE.
6. THE FOLLOWING TEXT SHALL BE CAST INTO THE TOP OF THE GRATE:
   "**DUMP NO WASTE**" AND "**DRAIN TO WATERWAY**"
   TEXT SHALL BE PRINTED IN BOLD, CAPITAL LETTERS WITH A MINIMUM HEIGHT OF 1/2". "**WATERWAY**" MAY BE SUBSTITUTED WITH "**STREAM**", "**RIVER**", "**LAKE**", ETC. ACTUAL PLACEMENT AND LOGO MAY VARY PER MANUFACTURER.
7. CONCRETE BARRIER: FOR DETAILS AND NOTES FOR SINGLE SLOPE CONCRETE BARRIER, TYPE C-50, AS PER PLAN, SEE OTIC STANDARD DRAWING CBR-2 SHEET 1 OF 3. REINFORCING SHALL BE EPOXY COATED IN ACCORDANCE WITH CMS 509.09
8. PAYMENT: PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR SP 611 - INLET, NO. I-3C50, DOUBLE GRATE AND SHALL INCLUDE ALL MATERIALS, REINFORCING STEEL AND CASTINGS AND LABOR REQUIRED TO CONSTRUCT THE CATCH BASIN AS SHOWN, COMPLETE AND ACCEPTED.
9. THE USE OF BRICK OR MASONRY BLOCK TO BUILD THE CATCH BASIN SHALL BE PROHIBITED. IF THE FRAME DOES NOT SIT ON THE CATCH BASIN WALLS, THE CONTRACTOR SHALL FORM AND POUR, USING CLASS "QC MS" CONCRETE, TO BUILD THE CATCH BASIN TO SECURE CONCRETE TO THE EXISTING PRECAST STRUCTURE. THE CONTRACTOR SHALL INSTALL #4 DOWEL BARS, SPACED 12" O/C (3 PER SIDE UNLESS DIRECTED OTHERWISE BY THE CHIEF ENGINEER) IN ACCORDANCE WITH ITEMS 509 AND 510. THE DOWEL BARS SHALL BE IMBEDDED AT LEAST 6" INTO THE EXISTING PRECAST STRUCTURE AND SECURED WITH NON-SHRINK NON-METALLIC GROUT THAT CONFORMS TO CMS 705.20. THE CONTRACTOR SHALL USE FORMS SIZED TO CONFORM TO THE INTERIOR OF THE CATCH BASIN, AND THAT WILL INSURE A SMOOTH INTERIOR FINISH. ALL OTHER CONCRETE SURFACES SHALL HAVE A BROOMED FINISH. AFTER THE CASTING IS SET TO THE FINAL GRADE, THE AREA AROUND THE ADJUSTED CATCH BASIN CASTING SHALL BE BACK FILLED WITH CLASS "QC MS" CONCRETE TO THE EXISTING SURFACE.

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

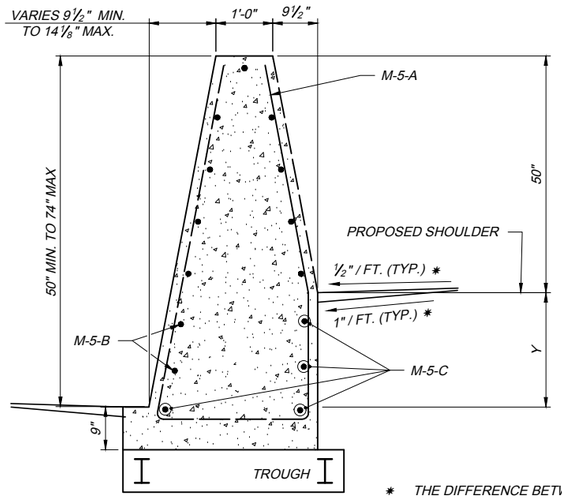
INLET, NO. I-3C50, DOUBLE GRATE
FOR SINGLE SLOPE BARRIER, TYPE C50

CB-5A

1 / 2

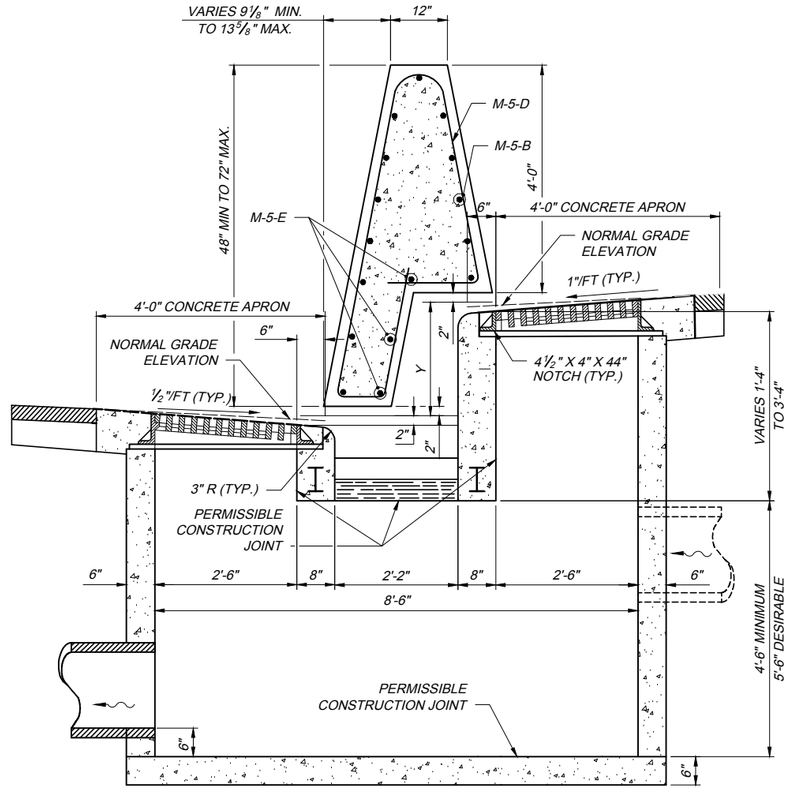
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

CB-5A 2018.09.19.dwg; 9/26/18 - 2:17pm

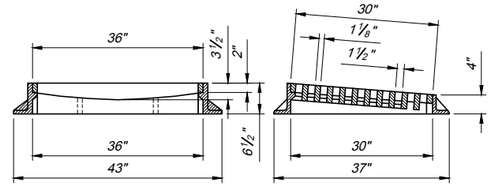


SECTION B-B

* THE DIFFERENCE BETWEEN THE NORMAL GRADE ELEVATION AND THE ℄ INLET GRATE ELEVATION IS 2".

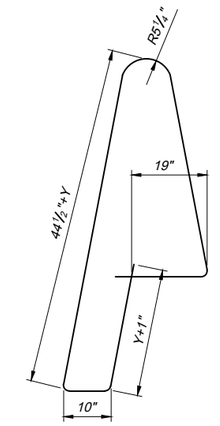


SECTION C-C

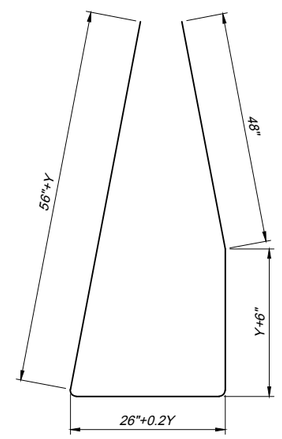


CASTING DETAILS

STEEL LIST											
M-5-A		M-5-B		M-5-C		M-5-D		M-5-E		S6 X 12.5	
NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH
8	VARIES 11'-1" TO 15'-6⅛"	VARIES 11 TO 13	19'-8"	VARIES 4 TO 8	4'-8"	5	VARIES 11'-3⅝" TO 14'-9¼"	VARIES 1 TO 3	12'-0"	2	11'-0"



M-5-D BAR



M-5-A BAR

BAR BENDING DIAGRAM

NOTES:

FOR STANDARD INLET TYPES, NOTES, LEGEND, PLAN VIEW AND SECTION A-A, SEE SHEET 1 OF 2.

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

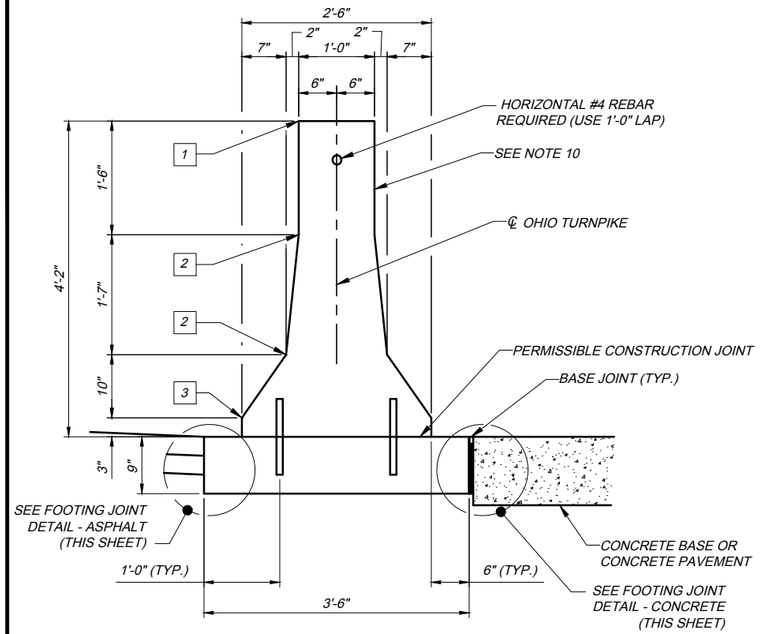
INLET, NO. I-3C50, DOUBLE GRATE
FOR SINGLE SLOPE BARRIER, TYPE C50

CB-5A

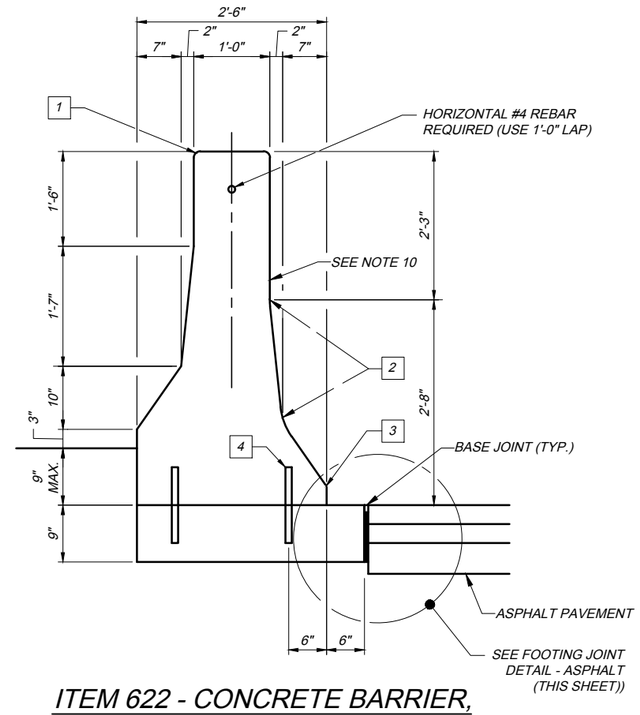
2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

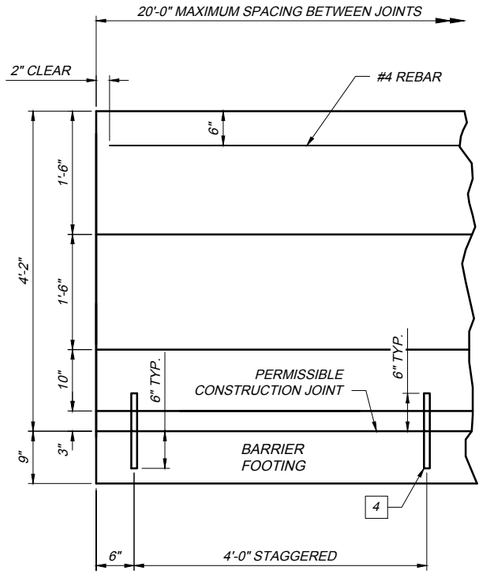
CB-5A 2018.09.19.dwg; 9/26/18 - 2:18pm



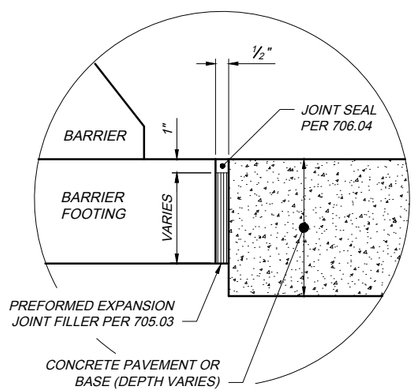
ITEM 622 - CONCRETE BARRIER, TYPE B-50, AS PER PLAN



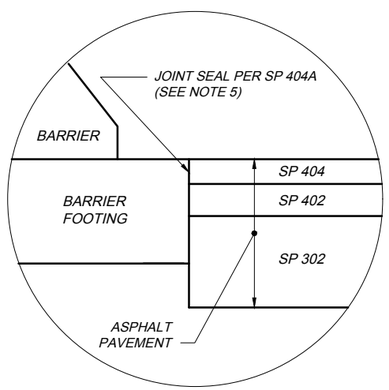
ITEM 622 - CONCRETE BARRIER, TYPE C-50, AS PER PLAN



BARRIER ELEVATION



FOOTING JOINT DETAIL - CONCRETE



FOOTING JOINT DETAIL - ASPHALT

NOTES:

1. CONCRETE BARRIER, MAY BE CAST IN PLACE OR SLIP FORMED AND SHALL BE BUILT IN LOCATIONS SPECIFIED IN THE PLANS. WHERE A BRIDGE FALLS WITHIN THE LIMITS OF THE CONCRETE BARRIER, THE BARRIER HEIGHT AND WIDTH SHALL BE ADJUSTED ON THE APPROACH SLAB, TO MATCH THE HEIGHT, WIDTH, AND SHAPE OF THE PROPOSED BARRIER ON THE ABUTMENT OR BRIDGE. FOR DETAILS, REFER TO OTIC STANDARD DRAWING AS-1.
2. MATERIALS: CONSTRUCT USING CONCRETE WITH A MINIMUM DESIGN STRENGTH OF 4000 PSI CONFORMING TO THE REQUIREMENTS OF SECTION 499 OF THE CMS. CONSTRUCT TOP AND END EDGES WITH EITHER A 1" RADIUS OR ¾" CHAMFER, EXCEPT AT LIGHT POLE FOUNDATIONS.
3. JOINTS: UNSEALED CONTRACTION JOINTS SPACED AT 20 FEET ON-CENTER (MAXIMUM SPACING) FOR CONCRETE BARRIER, TYPE B-50 OR C-50, SHALL BE CONSTRUCTED THROUGHOUT THE RUN OF CONCRETE BARRIER EXCEPT THAT EXPANSION JOINTS SHALL BE USED AT THE CENTER LINE OF AND AROUND EACH BRIDGE PIER COLUMN AND ON EITHER SIDE OF OVERHEAD SIGN SUPPORTS, INLETS, LIGHT POLE FOUNDATIONS, CHANGES IN MEDIAN BARRIER TYPE OR DIMENSIONS, AND AT APPROACH SLABS. IF THE INLET TOP IS SLIP FORMED, THE EXPANSION JOINTS ADJACENT TO IT MAY BE OMITTED.
4. CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. INSERTS, TOOLED JOINTS, AND SAWED JOINTS SHALL HAVE A 3 INCH MINIMUM DEPTH. ALL JOINTS SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE FOOTING. SAWING SHALL BE DONE AS SOON AS CURING WILL ALLOW, TO PREVENT SPALLING.
5. SEALING JOINTS: THE VERTICAL BARRIER WALL OR BARRIER FOOTING SHALL BE SPRAYED WITH SP 404A SEALING MATERIAL ADJACENT TO SP 404 AND SP 402 LAYERS. SEALING MATERIAL SHALL BE IN ACCORDANCE WITH SP 404A.
6. CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF ¾" DIAMETER. BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE B-50 OR C-50 DOWEL BAR PLACEMENT DETAILS ON SHEET 3 OF 3. PROVIDE A 4" CLEARANCE TO BARRIER SURFACES AND TO ANY RACEWAYS.
7. CURING AND SEALING: IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN CMS 622.07, THE CONCRETE BARRIER SHALL BE CURED AND SEALED BY CMS 511.14 METHOD B, MEMBRANE CURING UTILIZING CHEMMASTERS SILENCURE-A OR AN APPROVED EQUAL. MATERIAL APPLICATION SHALL BE AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. ALL OTHER PROVISIONS OF SECTION 622 OF THE CMS SHALL APPLY.
8. TRANSITIONS: MAKE LINEAR TRANSITIONS BETWEEN THE DIFFERENT TYPES OF BARRIER WITHIN A 20' LENGTH.
9. BARRIER REFLECTORS: BARRIER REFLECTORS SHALL BE INSTALLED AND PAID FOR IN ACCORDANCE WITH SP 626.
10. MEASUREMENT: ITEM 622 - CONCRETE BARRIER, TYPE B-50 OR C-50, AS PER PLAN, INCLUDING TRANSITIONS AND PIER SECTIONS AS DETAILED ON SHEET 2 OF 3 ARE PAID FOR AT THE UNIT PRICE BID PER FOOT, WITH APPROPRIATE DEDUCTIONS FOR OTHER ITEMS SUCH AS:

SP 611 MEDIAN INLET	20 FEET
ITEM 630 OVERHEAD SIGN SUPPORT FOUNDATION	10 FEET
ITEM 630 BARRIER WALL ASSEMBLY	10 FEET

11. BASIS OF PAYMENT: ITEM 622 - CONCRETE BARRIER, TYPE B-50 OR C-50, AS PER PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS OTIC STANDARD DRAWING AND SECTION 622 OF THE CMS.
12. PAYMENT FOR ANY REINFORCED END ANCHORS, AS SHOWN ON THE END ANCHORAGE DETAILS SHOWN ON SHEET 3 OF 3, WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR.

LEGEND:

1	1 INCH RADIUS OR ¾ INCH CHAMFER
2	PERMISSIBLE 10 INCH RADIUS
3	PERMISSIBLE 1 INCH RADIUS
4	#8 EPOXY COATED DEFORMED STEEL BARS, 12 INCH LONG, SPACED 4 FEET BETWEEN SUCCESSIVE BARS ON A STAGGERED PATTERN. START AND END DOWELS 6 INCHES FROM BARRIER CONTRACTION JOINTS. OMIT DOWELS WHEN TOP IS CONSTRUCTED INTEGRAL WITH THE BASE.

OHIO TURNPIKE

DATE: FEBRUARY 9, 2021

STANDARD DRAWING

CONCRETE BARRIER, TYPE B-50
AND C-50, AS PER PLAN

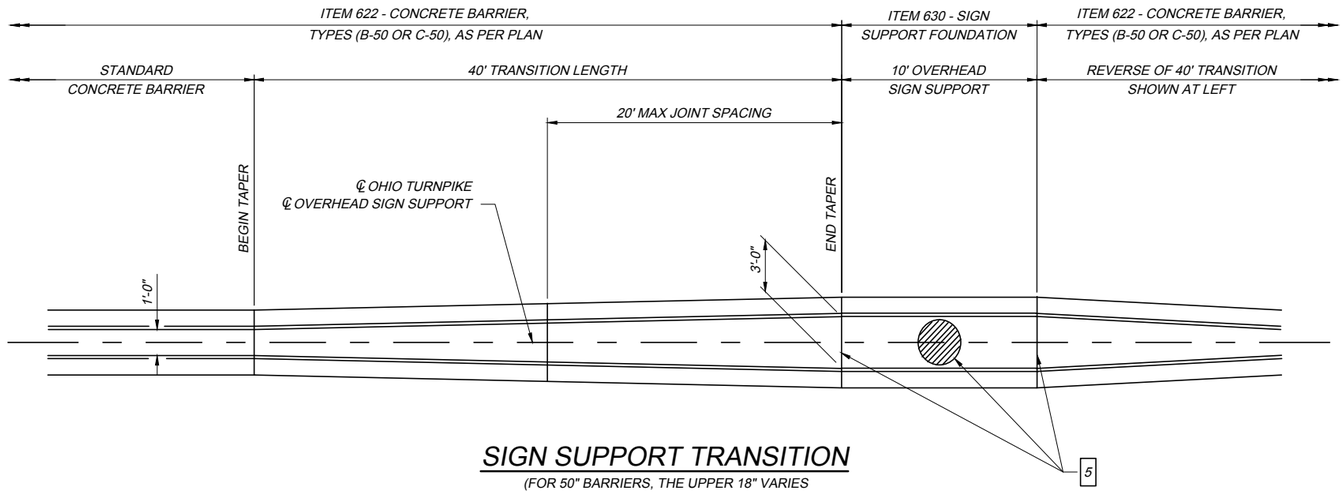
CBR-1

1 / 3

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

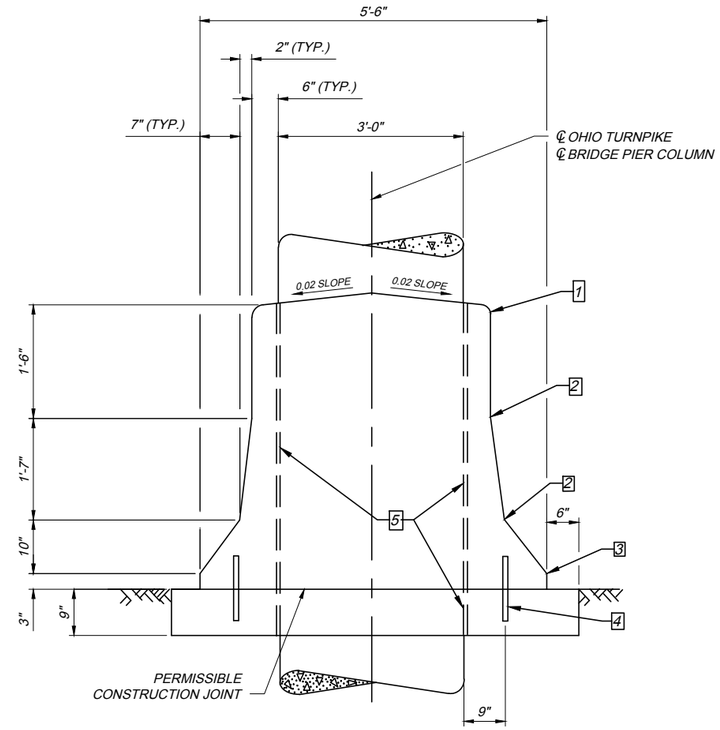
OHIO TURNPIKE

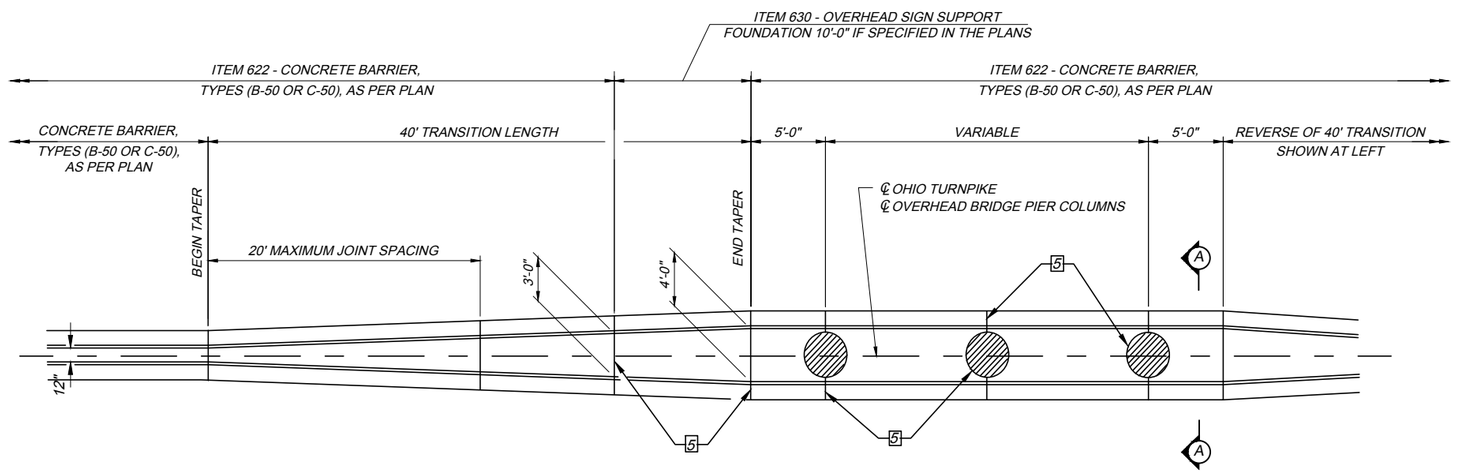
CBR-1 2021.2.9.dwg; 2/11/21



SIGN SUPPORT TRANSITION

(FOR 50" BARRIERS, THE UPPER 18" VARIES FROM 12" TO 36" IN WIDTH.)





BRIDGE PIER TRANSITION WITH SIGN SUPPORT

SECTION A-A

NOTES:

1. STANDARD BARRIERS: ITEM 622 - CONCRETE BARRIER, TYPE B-50 OR C-50, AS PER PLAN SHALL BE CONSTRUCTED AS SHOWN ON THE SHEET 1 OF 3 OR AS DETAILED IN THE PLANS.
2. FOR SIGN SUPPORT FOUNDATION DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING TC-21.50.
3. FOR ADDITIONAL NOTES, SEE SHEETS 1 AND 3 OF 3.

LEGEND

1	1" RADIUS OR 3/4" CHAMFER.
2	PERMISSIBLE 10" RADIUS.
3	PERMISSIBLE 1" RADIUS.
4	#8 EPOXY COATED DEFORMED STEEL BARS, 12" LONG, SPACED 2'-0" BETWEEN SUCCESSIVE BARS ON A STAGGERED PATTERN. DOWEL BARS SHALL BEGIN 4'-0" FROM THE LEADING EDGE OF THE END TERMINAL. OMIT DOWELS WHEN THE TOP IS CONSTRUCTED INTEGRALLY WITH THE BASE.
5	EXPANSION JOINT, 1" MIN. PREFORMED FILLER PER 705.03

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

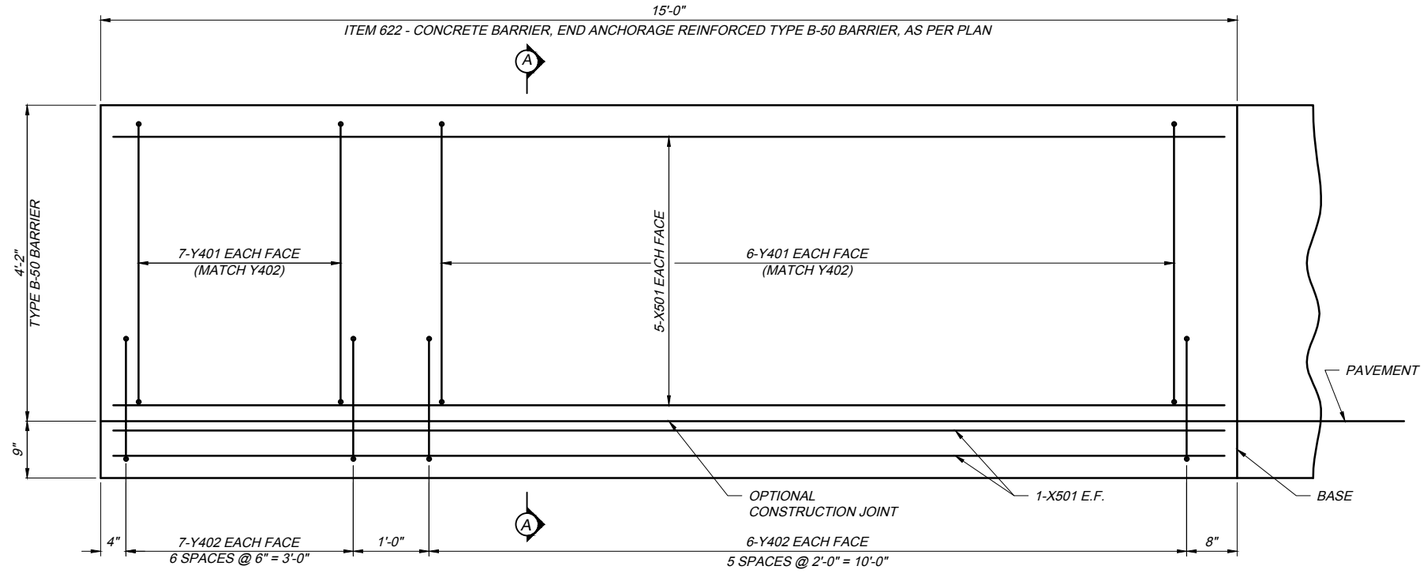
CONCRETE BARRIER, TYPE B-50
AND C-50, AS PER PLAN

STANDARD DRAWING

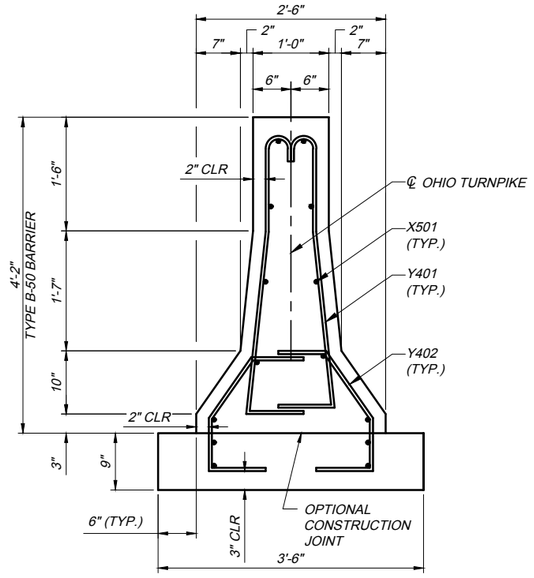
DATE: FEBRUARY 9, 2021

CBR-1

CBR-1 2021.2.9.dwg; 2/11/21



ELEVATION



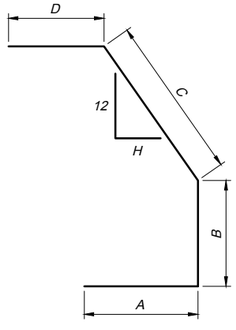
SECTION A-A

END ANCHORAGE, TYPE B-50

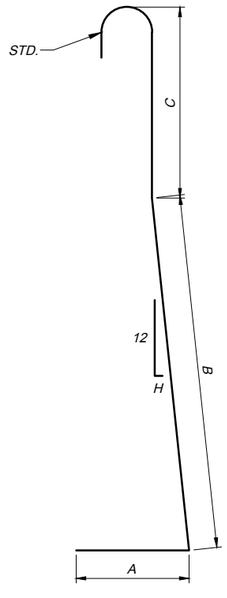
MARK	NUMBER	LENGTH	WEIGHT	TYPE	A	B	C	D	H
Y401	26	4'-9"	83	84	8"	2'-6"	1'-4"		1¼"
Y402	26	3'-0"	52	43	8"	9"	12"	8"	8½"
X501	14	14'-8"	214	STR.					
BARRIER TOTAL = 349 POUNDS									

NOTES:

1. ALL REINFORCING BARS SHALL BE EPOXY COATED
2. THE BAR NUMBER IS SPECIFIED ON THE PLANS IN THE BAR MARK COLUMN. THE FIRST DIGIT INDICATES THE BAR SIZE NUMBER. FOR EXAMPLE, Y401 IS A NUMBER 4 BAR. BAR DIMENSIONS SHOWN ARE OUT-TO-OUT UNLESS OTHERWISE NOTED.



TYPE 43



TYPE 84

NOTES:

1. CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF 3/4 " DIAMETER BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE DOWEL BAR PLACEMENT DETAIL ON THIS SHEET. IF THE CONTRACTOR ELECTS TO DRILL DOWELS, THE WORK SHALL BE COMPETED PER SECTION 510 OF THE CMS. GROUT SHALL BE NON-SHRINK, NON-METALLIC PER CMS 705.20. THIS WORK SHALL BE INCIDENTAL TO ITEM 622 PAY ITEMS.
2. PAYMENT FOR ALL REINFORCEMENT, CONCRETE FOOTING, AND ANY INCIDENTAL ITEMS REQUIRED TO CONSTRUCT THE CONCRETE BARRIER, END ANCHORAGE, REINFORCED AS SHOWN ON THIS SHEET WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR. IN ADDITION TO THE ANCHORAGE PAYMENT, THE CONTRACTOR WILL BE COMPENSATED FOR 15'-0" OF ITEM 622 - CONCRETE BARRIER, TYPE B-50 OR C-50, AS PER PLAN.
3. REINFORCED END ANCHORAGES ARE REQUIRED AT THE ENDS OF CONCRETE BARRIER RUNS AND AT INTERRUPTIONS IN BARRIER CAUSED BY EXPANSION JOINTS. WHEN BARRIER DOES NOT ABUT ANOTHER BARRIER RUN, CONSTRUCT THE LAST 15' USING THE END ANCHORAGE DETAIL AS SHOWN HERE.
4. AT EXPANSION JOINTS, CONSTRUCT AN END ANCHORAGE ON BOTH SIDES OF JOINT, WITH A MAXIMUM GAP OF 2" FOR THE OPEN JOINT. THE MAXIMUM EXPANSION JOINT SPACING SHALL BE 800'. THIS ANCHORAGE IS NOT NEEDED AT CONSTRUCTION JOINTS, PROVIDE DOWEL BAR CONNECTIONS INSTEAD. SEE CONSTRUCTION JOINT NOTE ON THIS SHEET FOR DOWELING DETAILS.
5. AT MAINTENANCE CROSSOVERS, PROVIDE A HINGE BAR PLACEMENT PER OTIC STANDARD DRAWING XOV-3.
6. GROUT INSTALLATION SHALL BE DONE IN ACCORDANCE WITH CMS 705.20 NON-SHRINK, NON-METALLIC MATERIAL. THE COST SHALL BE INCIDENTAL TO THIS STANDARD DRAWING.
7. FOR ADDITIONAL NOTES, SEE SHEETS 1 AND 2 OF 3.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

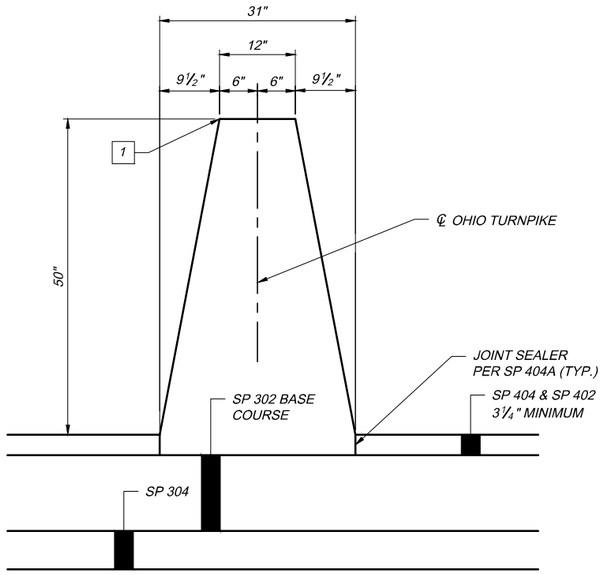
DATE: FEBRUARY 9, 2021

STANDARD DRAWING

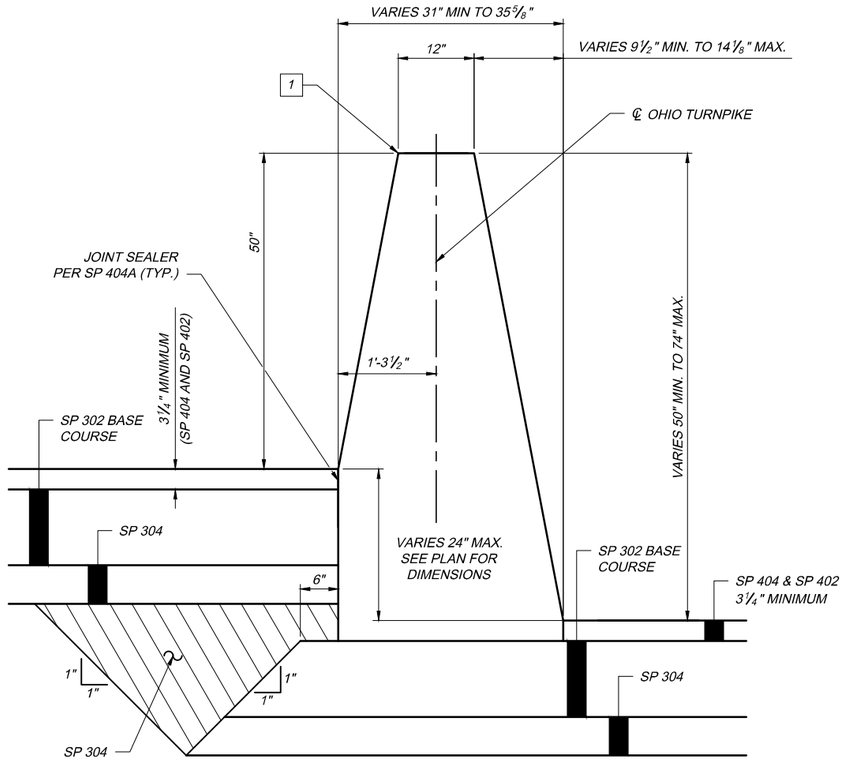
CONCRETE BARRIER, TYPE B-50
AND C-50, AS PER PLAN

CBR-1

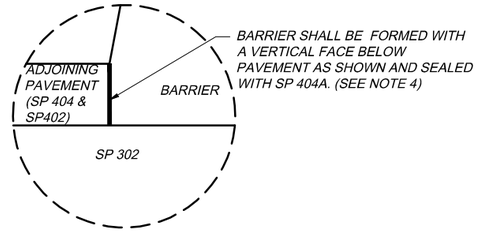
CBR-1 2021.2.9.dwg: 2/11/21



ITEM 622-CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50, AS PER PLAN



ITEM 622-CONCRETE BARRIER, SINGLE SLOPE, TYPE C-50, AS PER PLAN



TOE DETAIL

NOTES:

1. CONCRETE BARRIER, SINGLE SLOPE, MAY BE CAST IN PLACE OR SLIP FORMED AND SHALL BE BUILT IN LOCATIONS SPECIFIED IN THE PLANS. WHERE A BRIDGE FALLS WITHIN THE LIMITS OF THE CONCRETE BARRIER, THE BARRIER HEIGHT AND WIDTH SHALL BE ADJUSTED ON THE APPROACH SLAB, TO MATCH THE HEIGHT, WIDTH, AND SHAPE OF THE PROPOSED BARRIER ON THE ABUTMENT OR BRIDGE. FOR DETAILS, REFER TO OTIC STANDARD DRAWING AS-1.

2. MATERIALS: CONSTRUCT USING CONCRETE WITH A MINIMUM DESIGN STRENGTH OF 4000 PSI CONFORMING TO THE REQUIREMENTS OF SECTION 499 OF THE CMS. CONSTRUCT TOP AND END EDGES WITH EITHER A 1" RADIUS OR ¾" CHAMFER, EXCEPT AT LIGHT POLE FOUNDATIONS.

3. JOINTS: UNSEALED CONTRACTION JOINTS SPACED AT 20 FEET ON-CENTER (MAXIMUM SPACING) FOR CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, SHALL BE CONSTRUCTED THROUGHOUT THE RUN OF CONCRETE BARRIER EXCEPT THAT EXPANSION JOINTS SHALL BE USED AT THE CENTER LINE OF AND AROUND EACH BRIDGE PIER COLUMN AND ON EITHER SIDE OF OVERHEAD SIGN SUPPORTS, INLETS, LIGHT POLE FOUNDATIONS, CHANGES IN MEDIAN BARRIER TYPE OR DIMENSIONS, AND AT APPROACH SLABS. IF THE INLET TOP IS SLIP FORMED, THE EXPANSION JOINTS ADJACENT TO IT MAY BE OMITTED.

4. CONTRACTION JOINTS MAY BE CONSTRUCTED WITH METAL INSERTS INSIDE THE FORMS, PREFORMED FULL WIDTH JOINT FILLER, A GROOVING TOOL, OR BY SAWING. INSERTS, TOOLED JOINTS, AND SAWED JOINTS SHALL HAVE A 3 INCH MINIMUM DEPTH. ALL JOINTS SHALL BE CONSTRUCTED FOR THE FULL HEIGHT OF THE BARRIER INCLUDING THE FOOTING. SAWING SHALL BE DONE AS SOON AS CURING WILL ALLOW, TO PREVENT SPALLING.

5. SEALING JOINTS: THE VERTICAL BARRIER WALL OR BARRIER FOOTING SHALL BE SPRAYED WITH SP 404A SEALING MATERIAL ADJACENT TO SP 404 AND SP 402 LAYERS. SEALING MATERIAL SHALL BE IN ACCORDANCE WITH SP 404A.

6. CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF 3/4" DIA. BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE B-50 OR C-50 DOWEL BAR PLACEMENT DETAILS ON SHEET 3 OF 3. PROVIDE A 4" CLEARANCE TO BARRIER SURFACES AND TO ANY RACEWAYS.

7. CURING AND SEALING: IN LIEU OF THE CURING COMPOUNDS SPECIFIED IN CMS 622.07, THE CONCRETE BARRIER SHALL BE CURED AND SEALED BY CMS 511.14 METHOD B, MEMBRANE CURING UTILIZING CHEMMASTERS SILENCURE-A OR AN APPROVED EQUAL. MATERIAL APPLICATION SHALL BE AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. ALL OTHER PROVISIONS OF SECTION 622 OF THE CMS SHALL APPLY.

8. TRANSITIONS: MAKE LINEAR TRANSITIONS BETWEEN THE DIFFERENT TYPES OF BARRIER WITHIN A 20' LENGTH.

9. BARRIER REFLECTORS: BARRIER REFLECTORS SHALL BE INSTALLED AND PAID FOR IN ACCORDANCE WITH SP 626.

10. MEASUREMENT: ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN, INCLUDING TRANSITIONS AND PIER SECTIONS AS DETAILED ON SHEET 2 OF 3 ARE PAID FOR AT THE UNIT PRICE BID PER FOOT, WITH APPROPRIATE DEDUCTIONS FOR OTHER ITEMS SUCH AS:

SP 611 MEDIAN INLET	20 FEET
ITEM 630 OVERHEAD SIGN SUPPORT FOUNDATION	10 FEET
ITEM 630 BARRIER WALL ASSEMBLY	10 FEET

11. BASIS OF PAYMENT: ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS OTIC STANDARD DRAWINGS AND SECTION 622 OF THE CMS.

12. PAYMENT FOR ANY REINFORCED END ANCHORS, AS SHOWN ON THE END ANCHORAGE DETAILS SHOWN ON SHEET 3 OF 3, WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR.

LEGEND:

[1] 1 INCH RADIUS OR ¾" CHAMFER

DATE: SEPTEMBER 26, 2018

STANDARD DRAWING

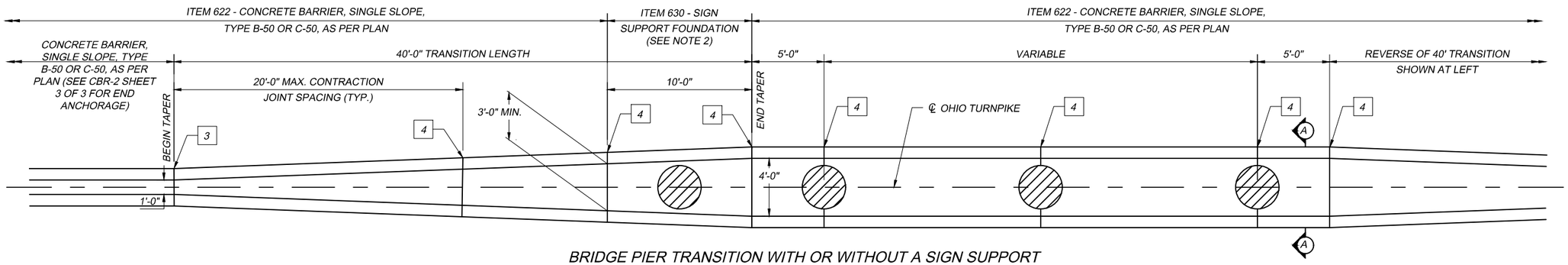
CONCRETE BARRIER, SINGLE SLOPE,
TYPES B-50 AND C-50, AS PER PLAN

CBR-2

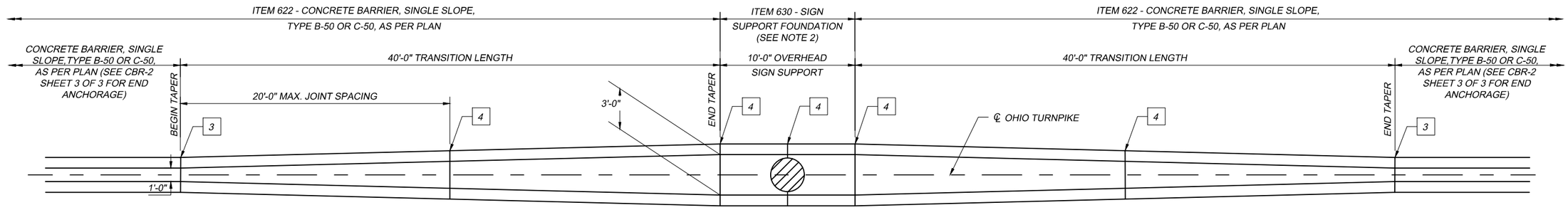
1 / 3

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

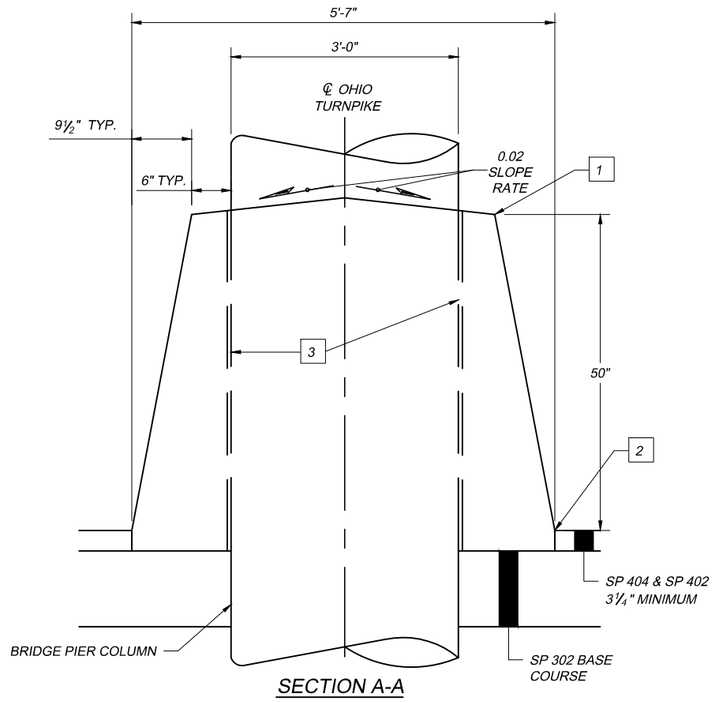


BRIDGE PIER TRANSITION WITH OR WITHOUT A SIGN SUPPORT



SIGN SUPPORT TRANSITION

(FOR 50" BARRIER, THE TOP VARIES FROM 12" TO 36" WIDTH)



SECTION A-A

NOTES:

1. STANDARD BARRIERS: ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN SHALL BE CONSTRUCTED AS SHOWN ON THE SHEET 1 OF 3 OR AS DETAILED IN THE PLANS.
2. FOR SIGN SUPPORT FOUNDATION DETAILS, SEE ODOT STANDARD CONSTRUCTION DRAWING TC-21.50.
3. FOR ADDITIONAL NOTES, SEE SHEETS 1 AND 3 OF 3.

LEGEND:

- [1] 1" RADIUS OR ¾" CHAMFER
- [2] PERMISSIBLE 1" RADIUS
- [3] EXPANSION JOINT, 1" MINIMUM PREFORMED FILLER PER CMS 705.03.
- [4] CONTRACTION JOINT

DATE: SEPTEMBER 26, 2018

STANDARD DRAWING

CONCRETE BARRIER, SINGLE SLOPE, TYPES B-50 AND C-50, AS PER PLAN

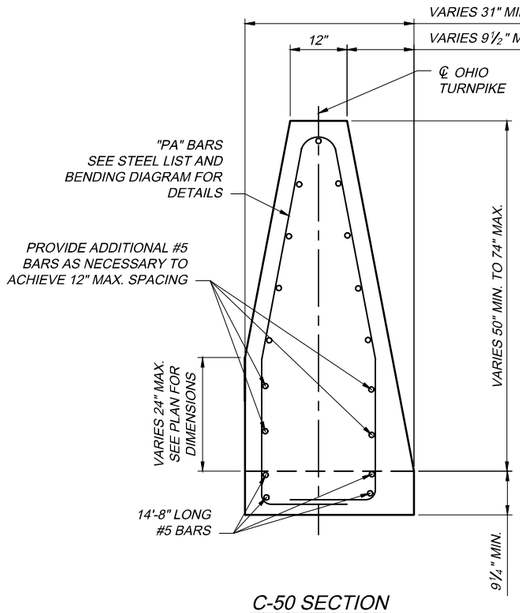
CBR-2

2 / 3

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

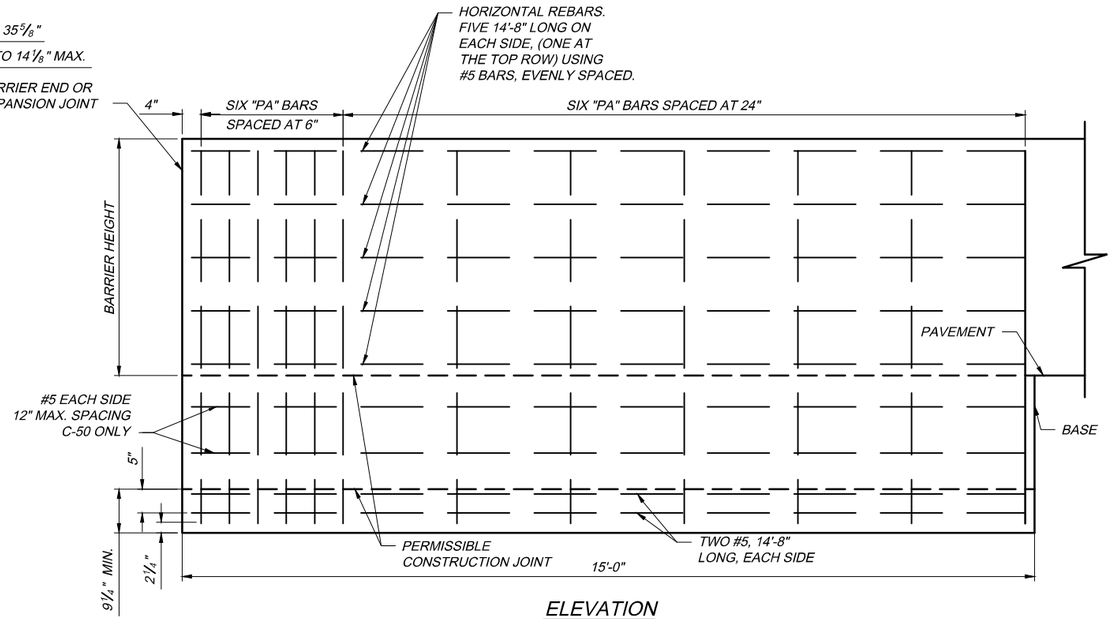
CBR-2 2018.09.26.dwg: 1/28/19 - 1:51pm



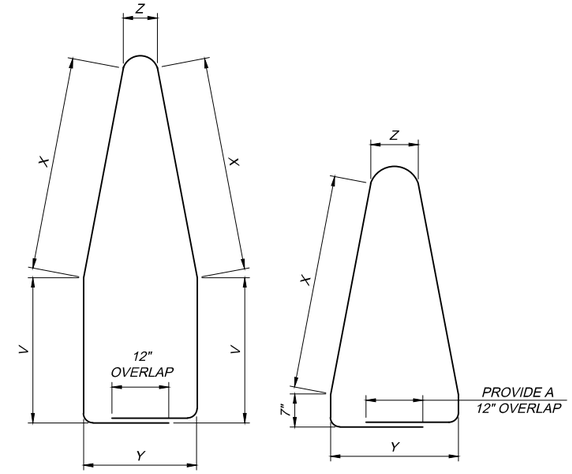
C-50 SECTION

NOTE:

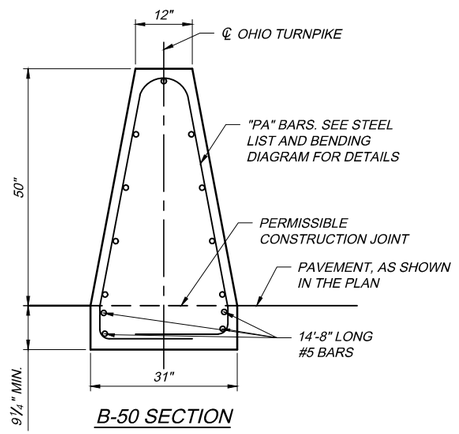
ADDITIONAL BARS SHOULD BE ADDED WITH RESPECT TO THE HEIGHT.



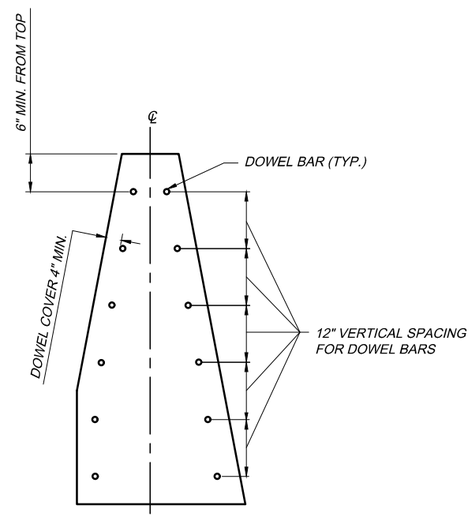
ELEVATION
END ANCHORAGE



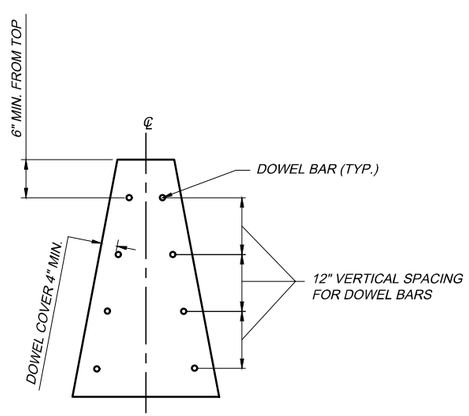
C-50 "PA" BARS #4



B-50 SECTION



C-50 DOWEL BAR PLACEMENT
(SEE NOTE 1)



B-50 DOWEL BAR PLACEMENT
(SEE NOTE 1)

DIMENSIONS FOR "PA" BARS					
BARRIER TYPE	V	X	Y	Z	LENGTH
B-50	-	45⅜"	24"	8"	12'-7"
C-50	VARIES 7" TO 31"	45⅜"	24"	8"	VARIES 12'-7" TO 16'-6"

DIMENSIONS FOR C-50 REBAR VARIES, THE CONTRACTOR SHALL USE THE CORRECT REBAR FOR THE ACTUAL C-50 HEIGHT.

NOTES:

1. CONSTRUCTION JOINTS: BARRIER RUNS WITH ABUTTING VERTICAL SURFACES AT EITHER REQUIRED OR PERMISSIBLE CONSTRUCTION JOINTS ARE TO BE DOWELED TO EACH OTHER BY USE OF 3/4" DIA. BY 18" LONG EPOXY COATED DEFORMED DOWEL BARS AS PER CMS 622.02. BARS ARE TO BE PLACED AS SHOWN ON THE DOWEL BAR PLACEMENT DETAIL ON THIS SHEET. IF THE CONTRACTOR ELECTS TO DRILL DOWELS, THE WORK SHALL BE COMPETED PER SECTION 510 OF THE CMS. GROUT SHALL BE NON-SHRINK, NON-METALLIC PER CMS 705.20. THIS WORK SHALL BE INCIDENTAL TO ITEM 622 PAY ITEMS.
2. PAYMENT FOR ALL REINFORCEMENT, CONCRETE FOOTING, AND ANY INCIDENTAL ITEMS REQUIRED TO CONSTRUCT THE CONCRETE BARRIER, END ANCHORAGE, REINFORCED AS SHOWN ON THIS SHEET WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM 622 - CONCRETE BARRIER, END ANCHORAGE, REINFORCED. THIS INCLUDES ALL MATERIALS, LABOR, AND OTHER INCIDENTALS NECESSARY TO CONSTRUCT THIS ANCHOR. IN ADDITION TO THE ANCHORAGE PAYMENT, THE CONTRACTOR WILL BE COMPENSATED FOR 15' OF ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50 OR C-50, AS PER PLAN.
3. REINFORCED END ANCHORAGES ARE REQUIRED AT THE ENDS OF CONCRETE BARRIER RUNS AND AT INTERRUPTIONS IN BARRIER CAUSED BY EXPANSION JOINTS. WHEN BARRIER DOES NOT ABUT ANOTHER BARRIER RUN, CONSTRUCT THE LAST 15' USING THE END ANCHORAGE DETAIL AS SHOWN HERE.
4. AT EXPANSION JOINTS, CONSTRUCT AN END ANCHORAGE ON BOTH SIDES OF JOINT, WITH A MAXIMUM GAP OF 2" FOR THE OPEN JOINT. THE MAXIMUM EXPANSION JOINT SPACING SHALL BE 800'. THIS ANCHORAGE IS NOT NEEDED AT CONSTRUCTION JOINTS, PROVIDE DOWEL BAR CONNECTIONS INSTEAD. SEE CONSTRUCTION JOINT NOTE ON THIS SHEET FOR DOWELING DETAILS.
5. AT MAINTENANCE CROSSOVERS, PROVIDE A HINGE BAR PLACEMENT PER OTIC STANDARD DRAWING XOV-3.
6. GROUT INSTALLATION SHALL BE DONE IN ACCORDANCE WITH CMS 705.20 NON-SHRINK, NON-METALLIC MATERIAL. THE COST SHALL BE INCIDENTAL TO THIS STANDARD DRAWING.
7. FOR ADDITIONAL NOTES, SEE SHEETS 1 AND 2 OF 3.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

STANDARD DRAWING

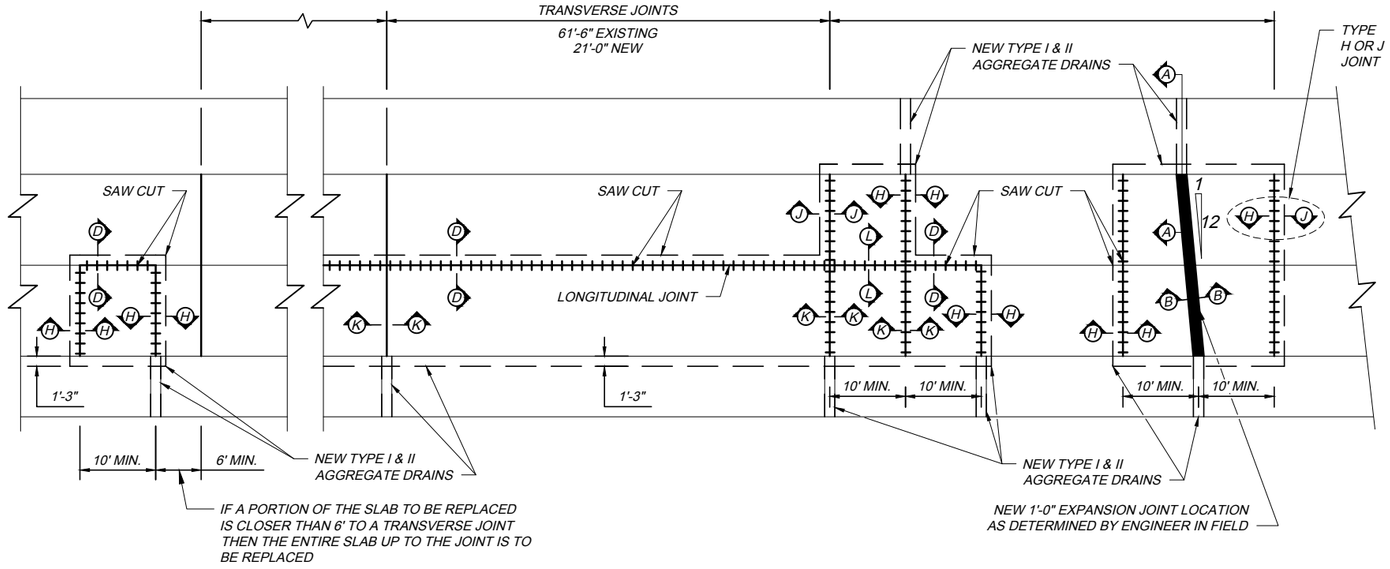
DATE: SEPTEMBER 26, 2018

CONCRETE BARRIER, SINGLE SLOPE, TYPES B-50 AND C-50, AS PER PLAN

CBR-2

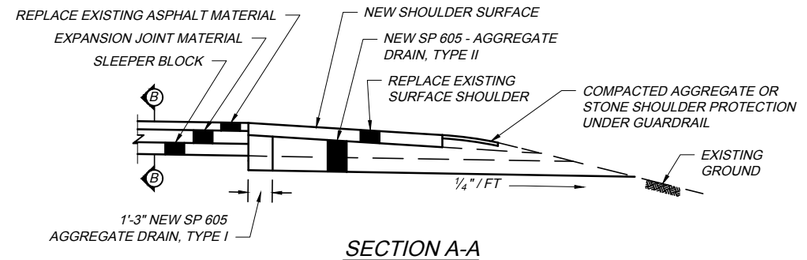
3 / 3

CBR-2 2018.09.26.dwg; 1/28/19 - 1:52pm

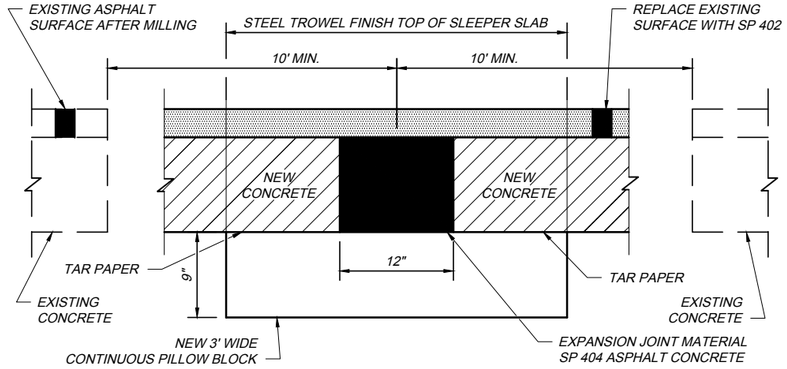


CONCRETE JOINT ARRANGEMENT PLAN

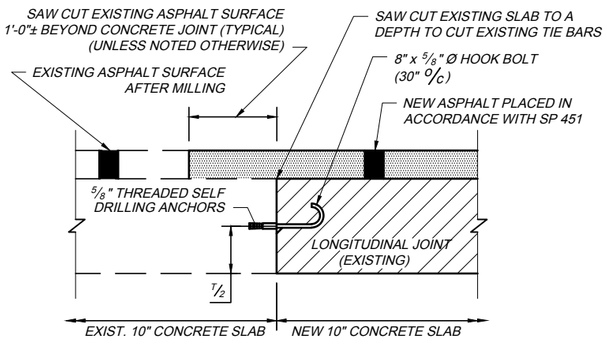
(SEE NOTE 5)



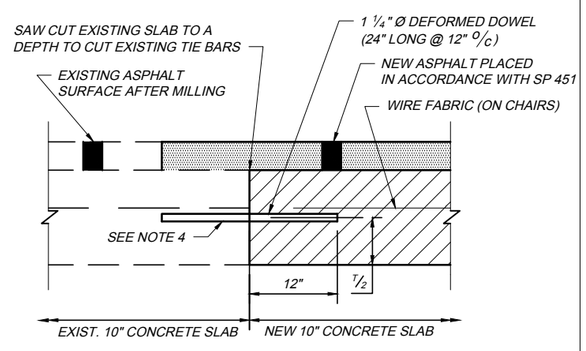
SECTION A-A



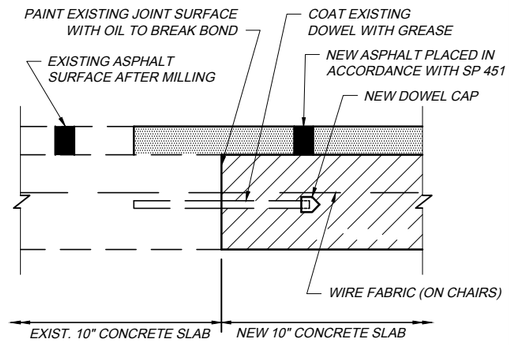
SECTION B-B



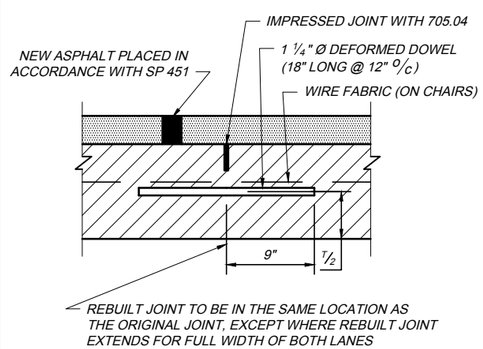
TYPE "D" JOINT



TYPE "H" JOINT



TYPE "J" JOINT



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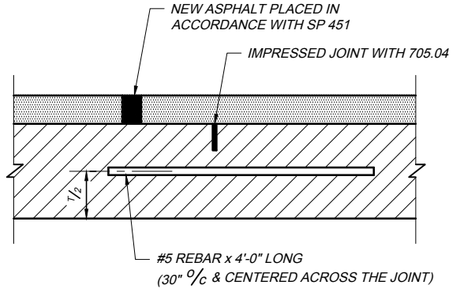
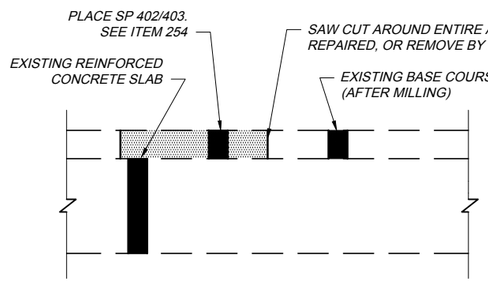
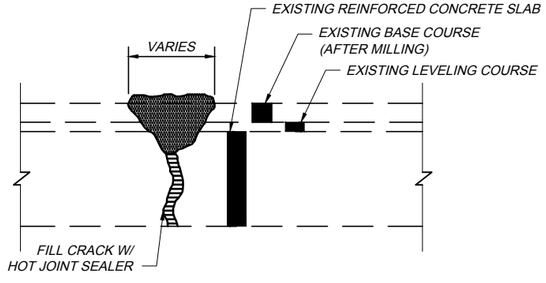


TYPE "L" JOINT



ASPHALT BASE COURSE REPAIRS



MINOR TRANSVERSE & LONGITUDINAL CRACK & JOINT REPAIRS

(SEE NOTES 2 & 3)

NOTES:

1. FOR DETAILS, NOT SHOWN SEE ODOT STANDARD DRAWINGS BP-1.1, BP-2.1 & BP-2.2
2. FOR CRACK AND JOINT SPECIAL PROVISION, SEE SP 202B.
3. DETAIL OF LONGITUDINAL PAVEMENT SHOULDER JOINT SIMILAR.
4. GROUT ANCHORING SHALL BE IN ACCORDANCE WITH CMS 510 USING NON-SHRINK, NON-METALLIC GROUT THAT CONFORMS T0 705.20. THE GROUT SHALL FIRMLY ANCHOR THE DOWEL WITHIN 30 MINUTES. THE RIGID REPLACEMENT SHALL NOT BE PLACED UNTIL THE GROUT AROUND THE DOWEL HAS HARDENED.
5. A NEW TYPE II DRAIN MAY ONLY BE REQUIRED AT ONE END OF THE EXPANSION JOINT OR SLAB REPLACEMENT AS DICTATED BY DRAINAGE CONDITIONS IN THE FIELD

OHIO TURNPIKE

DATE: OCTOBER 20, 2017

STANDARD DRAWING

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

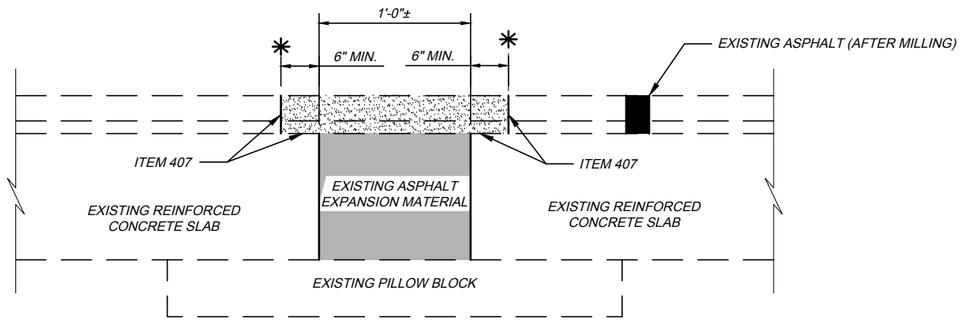
CRACK AND JOINT DETAILS
AT FULL DEPTH CONCRETE REPAIRS

CJ-1

1 / 1

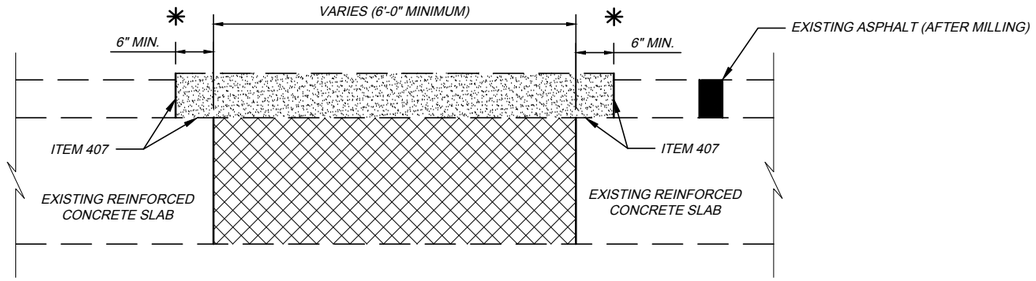
OHIO TURNPIKE

CJ-1 2017.10.20.DWG; 10/25/17 - 4:24pm



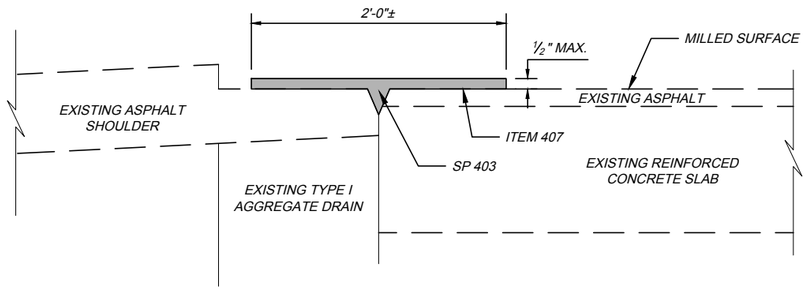
REPAIR EXISTING EXPANSION JOINTS

(SEE NOTES 1, 2 AND 3)



FULL DEPTH REPAIRS & "BLOW-UP" REPAIRS (ASPHALT)

(SEE SP 451 FOR FULL DEPTH REPAIRS)
(SEE NOTE 6 FOR "BLOW-UP" REPAIRS)



LONGITUDINAL CRACK REPAIR

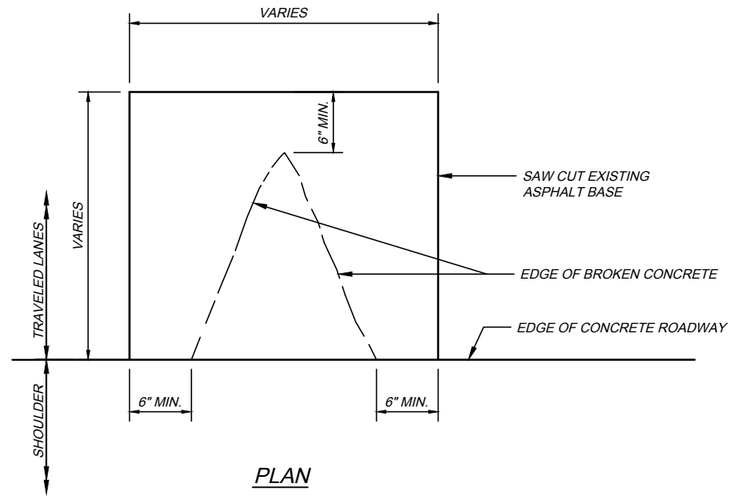
(EDGE LINE CRACK SHOWN)

NOTES:

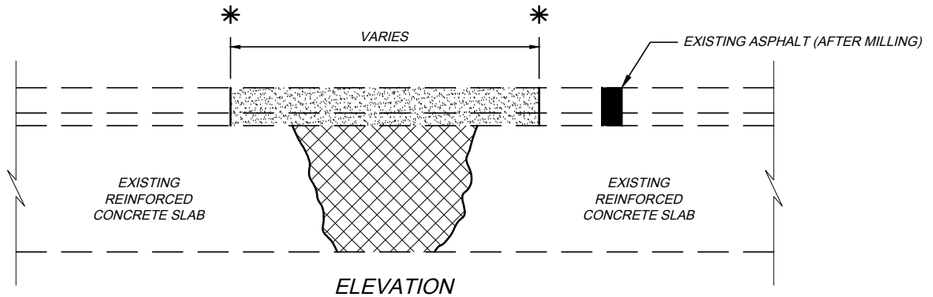
A. ALL LOOSE OR SPALLING ASPHALT SHALL BE REMOVED, BY A PRE-APPROVED METHOD, FROM THE EXISTING EDGELINE OR CENTERLINE LONGITUDINAL CRACK AS DIRECTED BY THE CHIEF ENGINEER. THE CRACK AND SURROUNDING AREA SHALL BE BLOWN CLEAN PRIOR TO THE APPLICATION OF ITEM 407, NON-TRACKING TACK COAT.

B. SP 403 SHALL BE COMPACTED BY USE OF A PNEUMATIC TIRE/STEEL-WHEELED ROLLER TO THE SATISFACTION OF THE CHIEF ENGINEER.

C. A CONTINGENCY QUANTITY OF SP 202B - LONGITUDINAL CRACK REPAIR, AS PER PLAN HAS BEEN INCLUDED IN THE PROPOSAL TO BE USED AS DIRECTED BY THE CHIEF ENGINEER TO REPAIR THE EXISTING EDGELINE OR CENTERLINE LONGITUDINAL CRACK. PAYMENT FOR THIS ITEM SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO COMPLETE THIS ITEM AS SHOWN.



PLAN



ELEVATION

3 CORNER CRACK REPAIR

(SEE NOTES 4 AND 5)

NOTES

1. CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING ASPHALT CONCRETE TO THE LIMITS INDICATED ON THE PLAN OR AS DIRECTED BY THE CHIEF ENGINEER AND REMOVE ALL ASPHALT MATERIAL WITHIN THE EXPANSION JOINT.

2. AFTER THE JOINT HAS BEEN CLEANED TO THE SATISFACTION OF THE CHIEF ENGINEER, THE CONCRETE SURFACES SHALL BE COATED WITH ITEM 407 - NON-TRACKING TACK COAT AND THE EXPANSION JOINT FILLED AND COMPACTED WITH SP 404 TO THE LEVEL OF THE CONCRETE SURFACE. THE ASPHALT BASE COURSE SHALL BE BROUGHT TO THE LEVEL OF THE MILLED SURFACE USING SP 402. WHEN BASE REPAIR IS NOT REQUIRED SP 404 SHALL BE BROUGHT TO THE LEVEL OF THE MILLED SURFACE.

3. SEE SP 202B FOR THE REMOVAL AND THE REPLACEMENT OF THE EXPANSION JOINT MATERIAL AND ITEM 254 FOR THE REMOVAL AND REPLACEMENT OF THE BASE COURSE, WHICH IS INCIDENTAL TO SP 202B REPAIRS OF EXISTING EXPANSION JOINT.

4. CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING ASPHALT CONCRETE TO THE LIMITS INDICATED ON THE PLAN OR AS DIRECTED BY THE CHIEF ENGINEER. ALL BROKEN, LOOSE AND SPALLED CONCRETE SHALL BE REMOVED AND EXISTING DOWELS AND/OR REINFORCING MATS SHALL BE CUT AT THE FACE OF THE REMAINING CONCRETE.

5. AFTER THE OPENING HAS BEEN CLEANED TO THE SATISFACTION OF THE CHIEF ENGINEER, THE CONCRETE SURFACES SHALL BE COATED WITH ITEM 407, NON-TRACKING TACK COAT, AND THE OPENING FILLED AND COMPACTED WITH SP 402 TO THE LEVEL OF THE MILLED SURFACE, ALL IN ACCORDANCE WITH SP 202B.

6. CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING ASPHALT CONCRETE AND REINFORCED CONCRETE SLAB (INCLUDING DOWELS AND REINFORCING MAT) TO THE LIMITS INDICATED ON THE PLAN OR AS DIRECTED BY THE CHIEF ENGINEER. AFTER THE OPENING HAS BEEN CLEANED TO THE SATISFACTION OF THE CHIEF ENGINEER, THE CONCRETE SURFACES SHALL BE COATED WITH ITEM 407 - NON-TRACKING TACK COAT, AND THE OPENING FILLED AND COMPACTED WITH AT LEAST 10" OF SP 302, SP 402 (DEPTH AS REQUIRED TO MATCH THE ADJOINING SP 402), AND OVERFILLED WITH 1-½"± SP 404. THE OVERFILLED SP 404 SHALL BE PLANED USING DIAMOND BLADES TO PRODUCE A SMOOTH JOINT WITH THE ADJOINING PAVEMENT. PAYMENT FOR "BLOW-UP" REPAIR WILL BE MADE IN ACCORDANCE WITH THE STANDARD CONDITIONS OF THE CONTRACT, SECTION "CHANGE ORDER PROCEDURE AND PRICING GUIDELINES" (OTIC-CO).

LEGEND:

- REMOVE EXISTING CONCRETE
- REMOVE AND REPLACE EXISTING ASPHALT
- ✱ SAW CUT

DATE: OCTOBER 20, 2017

STANDARD DRAWING

CRACK AND JOINT DETAILS AND FULL DEPTH ASPHALT REPAIRS

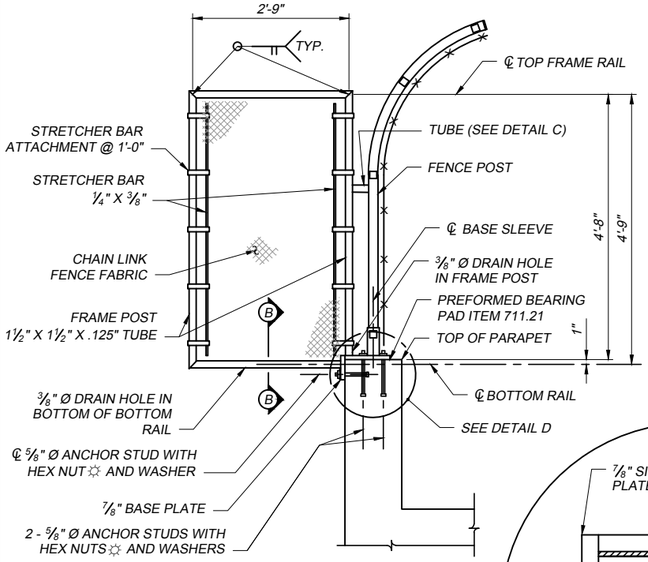
CJ-2

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

CJ-2 2017.10.20.DWG; 10/25/17 - 4:25pm

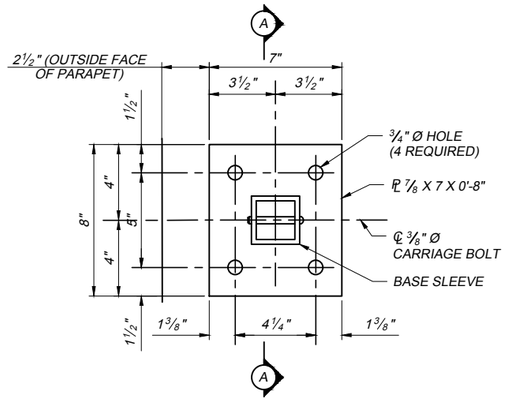


ANTI-CLIMB SHIELD DETAIL

LOCATE ANTI-CLIMB SHIELD AT POST NEAREST MIDPOINT OF END SPANS. (4 REQUIRED FOR EACH STRUCTURE)

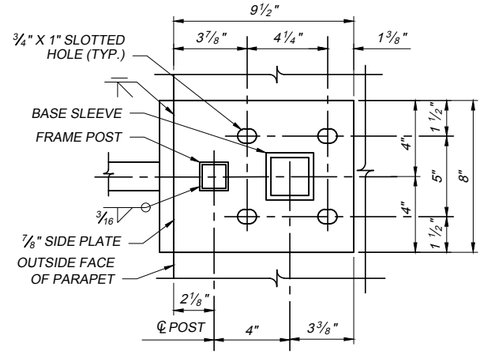
☼ STAINLESS STEEL SELF-LOCKING HEX NUT WITH NYLON INSERT

(FOR DETAILS NOT SHOWN, REFER TO TYPE I CHAIN LINK FENCE DETAIL)



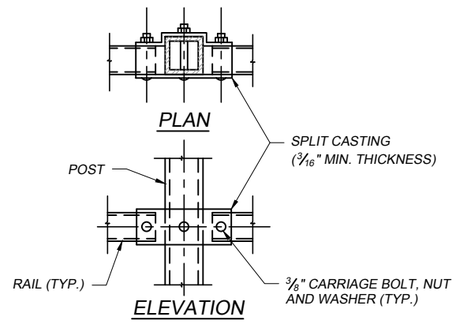
DETAIL A

(POST NOT SHOWN)

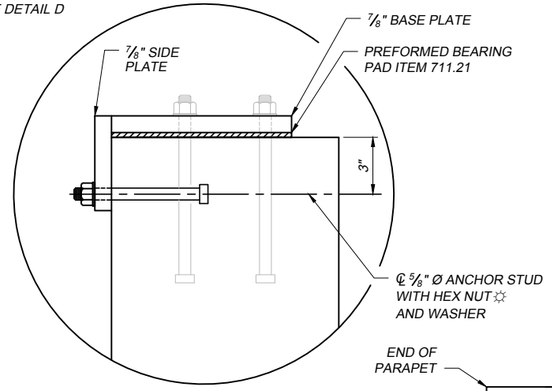


DETAIL B

(POST NOT SHOWN)

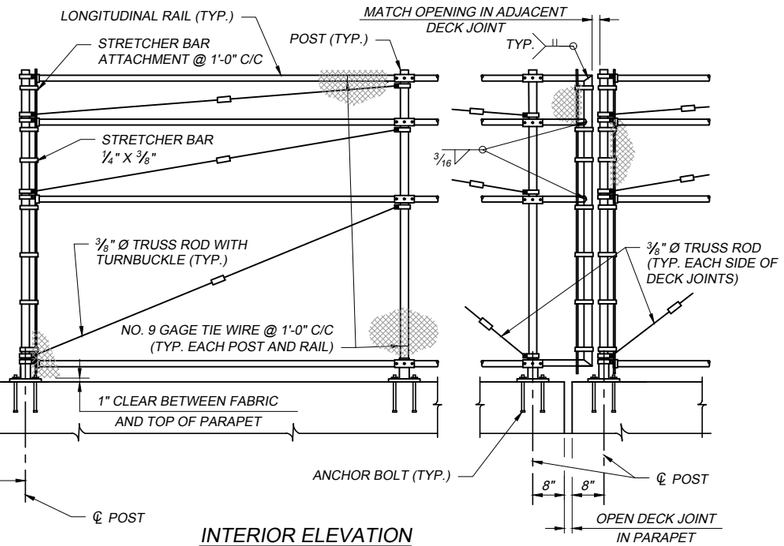


SPLIT CASTING LONGITUDINAL RAIL-POST ATTACHMENT

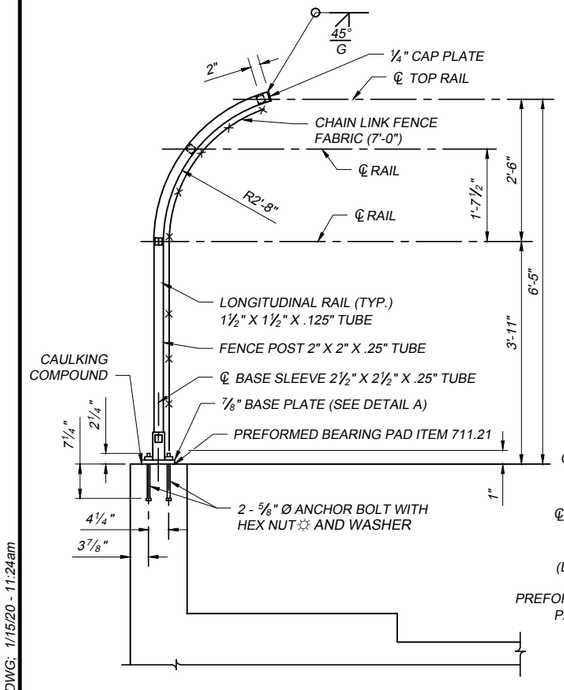


DETAIL D

(POST NOT SHOWN)

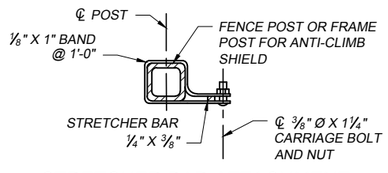


INTERIOR ELEVATION

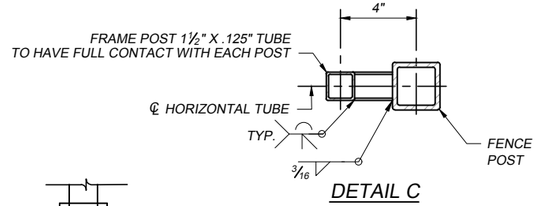


TYPE I CHAIN LINK FENCE DETAIL

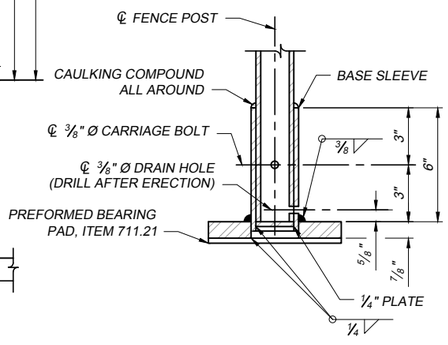
☼ STAINLESS STEEL SELF-LOCKING HEX NUT WITH NYLON INSERT



STRETCHER BAR ATTACHMENT

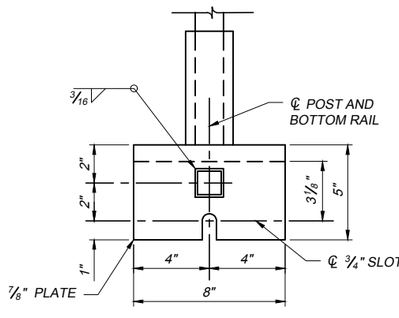


DETAIL C

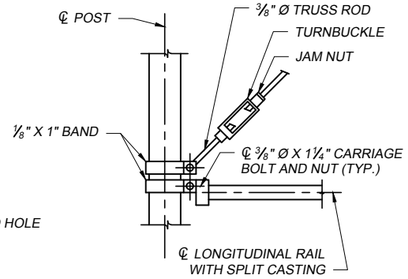


SECTION A-A

NOTE:
FOR BASE SLEEVE, POST AND RAIL SIZES, SEE FENCE DETAIL.



SECTION B-B



TRUSS ROD AND END PANEL RAIL ATTACHMENT

GENERAL NOTES

1. SPECIFICATIONS: JANUARY 2016 EDITION OF OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS"; AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION" AND 2013 EDITION OF AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS".

2. MATERIALS: CHAIN LINK FENCE FABRIC SHALL BE 1" MESH WOVEN FROM NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF AASHTO M181, TYPE III ASTM F1183 AND SHALL HAVE KNUCKLED SELVAGE AT THE BOTTOM AND AT THE TOP. FABRIC TIES SHALL BE NO. 9 GAGE ALUMINUM ALLOY WIRE CONFORMING TO THE REQUIREMENTS OF ASTM B211, ALLOY 6061, TEMPER T6.

   POSTS, RAILS, PLATES, AND TRUSS RODS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF ASTM B221, ALLOY 6061, TEMPER T6. SHIMS SHALL BE ALUMINUM ALLOY CONFORMING TO ASTM B209, ALLOY 1100-0.

   RAIL FITTINGS, TURNBUCKLES AND SPLIT CASTINGS SHALL BE ALUMINUM ALLOY CASTINGS CONFORMING TO THE REQUIREMENTS OF ASTM B26, B85 OR B108, ALLOY ZG61A-T5, SG70A-T6, ZC81A-T5, SG100A, SG100B OR S12B.

   CARRIAGE BOLTS AND NUTS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF ASTM F467 AND F468, ALLOY 2024-T4 FOR BOLTS, AND ALLOY 6061-T6 FOR NUTS. WASHERS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF ASTM B209, ALLOY 6061-T6. BANDS AND STRETCHER BARS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF ASTM B221, ALLOY 6063, TEMPER T6.

3. ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO ASTM DESIGNATION A-276, TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT- FINISHED, ULTIMATE STRENGTH 70,000 PSI MINIMUM, 20% MINIMUM ELONGATION. THREADS MAY BE ROLLED OR CUT. ANCHOR STUDS SHALL BE SET IN PLACE IN THE FORMWORK UTILIZING A TEMPLATE PRIOR TO THE PLACEMENT OF THE CONCRETE. APPROVAL OF THE ANCHOR STUD PLACEMENT BY THE CHIEF ENGINEER IS REQUIRED PRIOR TO THE PLACEMENT OF THE PARAPET CONCRETE.

4. POST SPACING: FOR POST SPACING, SEE PERTINENT STRUCTURE SHEETS. POST SPACING SHALL BE 8'-0" MAXIMUM.

5. ERECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET. ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET, EXCEPT AS OTHERWISE NOTED IN THE PLANS.

6. CERTIFICATION: THE PRODUCER OR SUPPLIER SHALL FURNISH CERTIFICATES STATING THAT EACH LOT HAS BEEN SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATIONS, AND HAS MET THE REQUIREMENTS.

7. ALUMINUM SURFACES TO BE ISOLATED FROM CONTACT WITH CONCRETE WITH 1/8" THICK PREFORMED BEARING PADS, ITEM 711.21 PADS SHALL BE THE SAME SIZE OF PLATE CONTACT SURFACES.

8. CAULKING COMPOUND SHALL CONFORM TO FEDERAL SPECIFICATION TT-S-00230C, TYPE II, CLASS A, ALUMINUM GRAY. WHEN APPLYING THE CAULK TO THE BASE PLATE, PROVIDE A 1 INCH OPENING THROUGH THE CAULK ON THE LOW SIDE OF THE BASE PLATE.

OHIO TURNPIKE

DATE: JANUARY 15, 2020

STANDARD DRAWING

CHAIN LINK SAFETY FENCE
(ALL ALUMINUM) DETAILS, TYPE 1

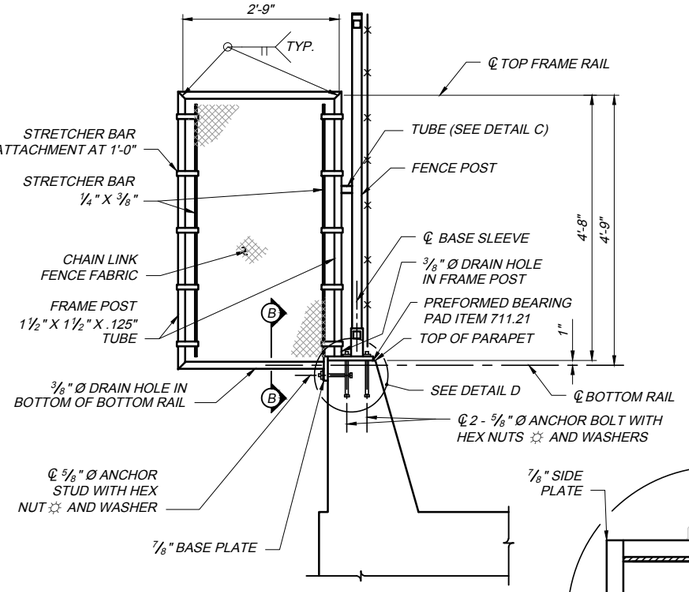
CL-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

CL-1 2020.01.15.DWG; 1/15/20 - 11:24am

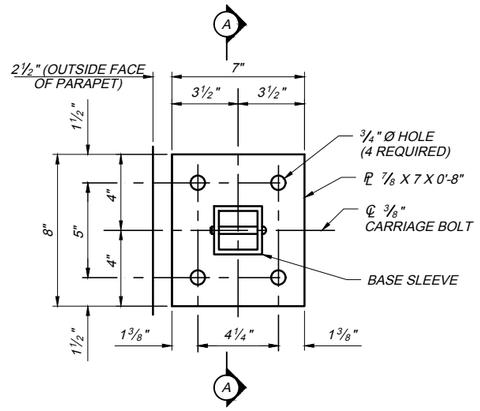


ANTI-CLIMB SHIELD DETAIL

LOCATE ANTI-CLIMB SHIELD AT POST NEAREST MIDPOINT OF END SPANS. (4 REQUIRED FOR EACH STRUCTURE)

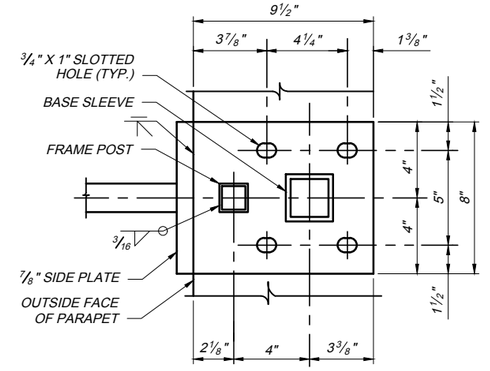
☼ STAINLESS STEEL SELF-LOCKING HEX NUT WITH NYLON INSERT

FOR DETAILS NOT SHOWN, REFER TO (TYPE II CHAIN LINK FENCE DETAIL)



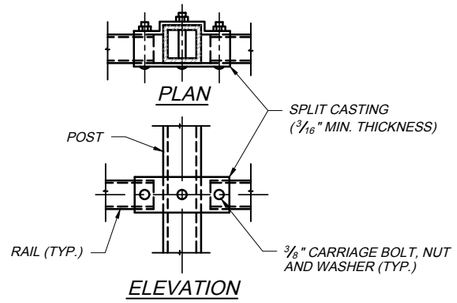
DETAIL A

(POST NOT SHOWN)



DETAIL B

(POST NOT SHOWN)



SPLIT CASTING LONGITUDINAL RAIL-POST ATTACHMENT

GENERAL NOTES

1. SPECIFICATIONS: JANUARY 2016 EDITION OF OHIO DEPARTMENT OF TRANSPORTATION "CONSTRUCTION AND MATERIAL SPECIFICATIONS"; AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION" AND 2013 EDITION OF AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS".

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   POSTS, RAILS, PLATES, AND TRUSS RODS SHALL BE ALUMINUM ALLOY CONFORMING TO THE REQUIREMENTS OF ASTM B221, ALLOY 6061, TEMPER T6. SHIMS SHALL BE ALUMINUM ALLOY CONFORMING TO ASTM B209, ALLOY 1100-0.

   RAIL FITTINGS, TURNBUCKLES AND SPLIT CASTINGS SHALL BE ALUMINUM ALLOY CASTINGS CONFORMING TO THE REQUIREMENTS OF ASTM B26, B85 OR B108, ALLOY ZG61A-T5, SG70A-T6, ZC81A-T5, SG100A, SG100B OR S12B.

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3. ANCHOR STUDS: MATERIAL FOR ANCHOR STUDS SHALL CONFORM TO ASTM DESIGNATION A-276, TYPE 430 TO TYPE 304 STAINLESS STEEL ANNEALED, HOT- FINISHED, ULTIMATE STRENGTH 70,000 PSI MINIMUM, 20% MINIMUM ELONGATION. THREADS MAY BE ROLLED OR CUT. ANCHOR STUDS SHALL BE SET IN PLACE IN THE FORMWORK UTILIZING A TEMPLATE PRIOR TO THE PLACEMENT OF THE CONCRETE. APPROVAL OF THE ANCHOR STUD PLACEMENT BY THE CHIEF ENGINEER IS REQUIRED PRIOR TO THE PLACEMENT OF THE PARAPET CONCRETE.

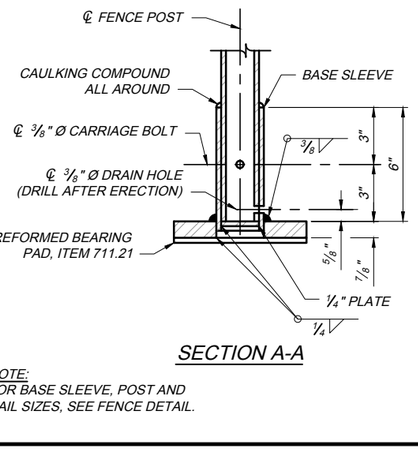
4. POST SPACING: FOR POST SPACING, SEE PERTINENT STRUCTURE SHEETS. POST SPACING SHALL BE 8'-0" MAXIMUM.

5. ERECTION: ALL LONGITUDINAL RAILS TO BE PARALLEL TO TOP OF PARAPET. ALL POSTS TO BE SET NORMAL TO TOP OF PARAPET, EXCEPT AS OTHERWISE NOTED IN THE PLANS.

6. CERTIFICATION: THE PRODUCER OR SUPPLIER SHALL FURNISH CERTIFICATES STATING THAT EACH LOT HAS BEEN SAMPLED, TESTED AND INSPECTED IN ACCORDANCE WITH THE SPECIFICATIONS, AND HAS MET THE REQUIREMENTS.

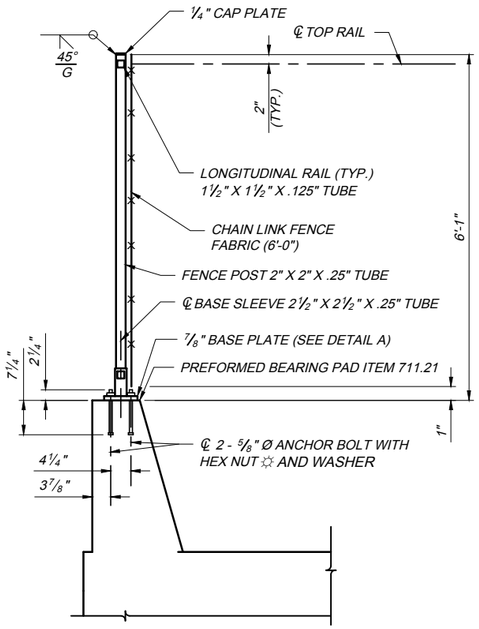
7. ALUMINUM SURFACES TO BE ISOLATED FROM CONTACT WITH CONCRETE WITH 1/8" THICK PREFORMED BEARING PADS, ITEM 711.21 PADS SHALL BE THE SAME SIZE OF PLATE CONTACT SURFACES.

8. CAULKING COMPOUND SHALL CONFORM TO FEDERAL SPECIFICATION TT-S-00230C TYPE II, CLASS A, ALUMINUM GRAY. WHEN APPLYING THE CAULK TO THE BASE PLATE, PROVIDE A 1" OPENING THROUGH THE CAULK ON THE LOW SIDE OF THE BASE PLATE.



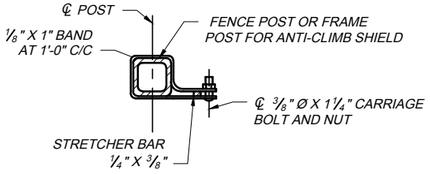
DETAIL D

(POST NOT SHOWN)



TYPE 2 CHAIN LINK FENCE DETAIL

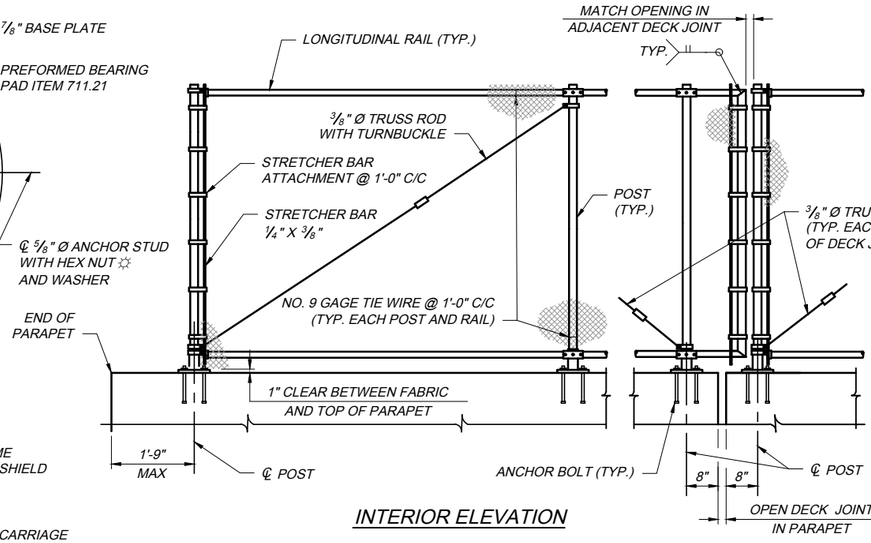
☼ STAINLESS STEEL SELF-LOCKING HEX NUT WITH NYLON INSERT



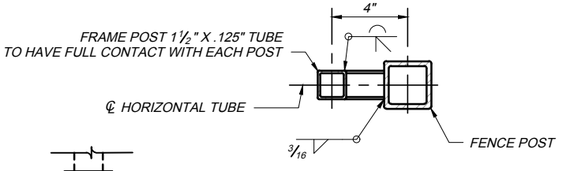
STRETCHER BAR ATTACHMENT

SECTION A-A

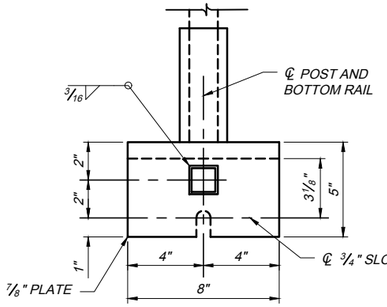
NOTE:
FOR BASE SLEEVE, POST AND RAIL SIZES, SEE FENCE DETAIL.



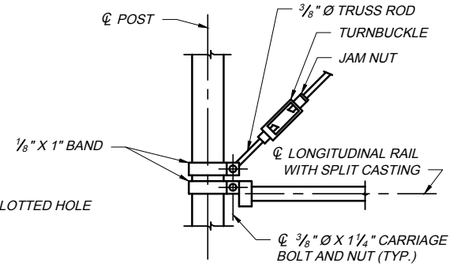
INTERIOR ELEVATION



DETAIL C



SECTION B-B



TRUSS ROD AND END PANEL RAIL ATTACHMENT

CL-2 2020.01.15.dwg; 1/15/20 - 11:25am

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

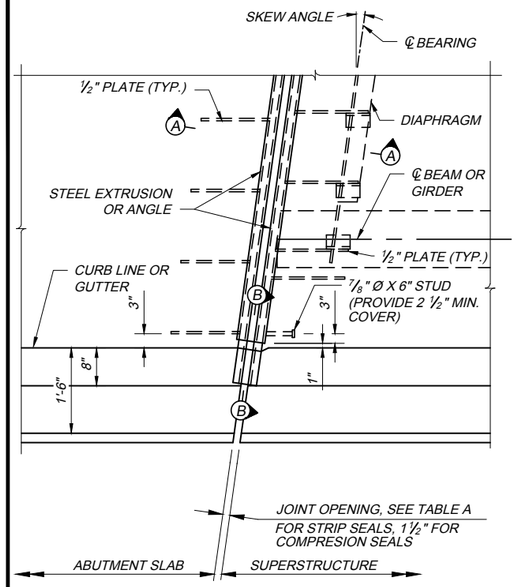
DATE: JANUARY 15, 2020

STANDARD DRAWING

CHAIN LINK SAFETY FENCE (ALL ALUMINUM) DETAILS, TYPE 2

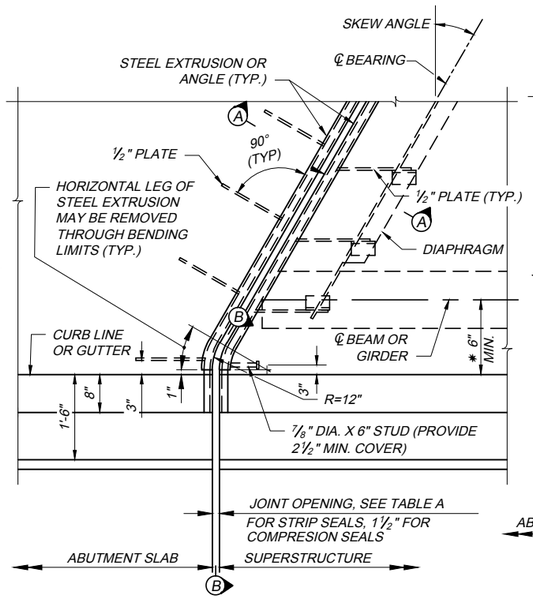
CL-2

1 / 1



PLAN - SKEW ANGLE < 10°

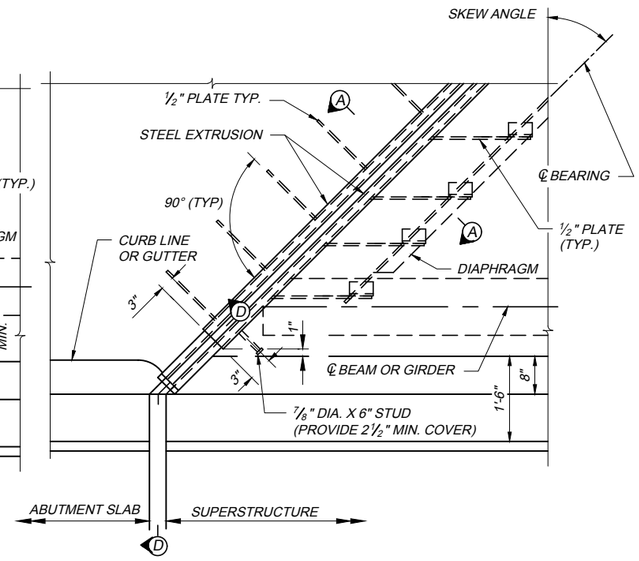
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



PLAN - SKEW ANGLE 10° TO 45°

(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)

✱ NOTE TO DESIGNER: IF THIS DIMENSION IS LESS THAN 6", DETAIL AT PARAPET NEEDS TO BE DEVELOPED



PLAN - SKEW ANGLE > 45° (STRIP SEAL ONLY)

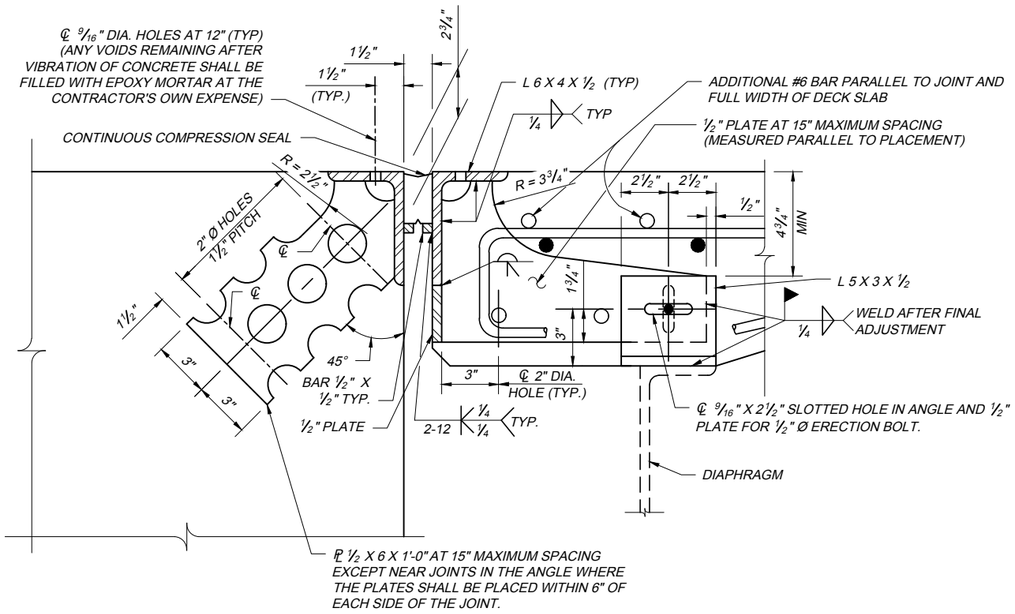
NOTE: WHEN SKEW ANGLE IS GREATER THAN 45°, FURNISH JOINT ASSEMBLIES IN TWO SECTIONS AND PROVIDE A FIELD SPLICE AT THE CENTERLINE OF ROADWAY. (STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)

NOTES:

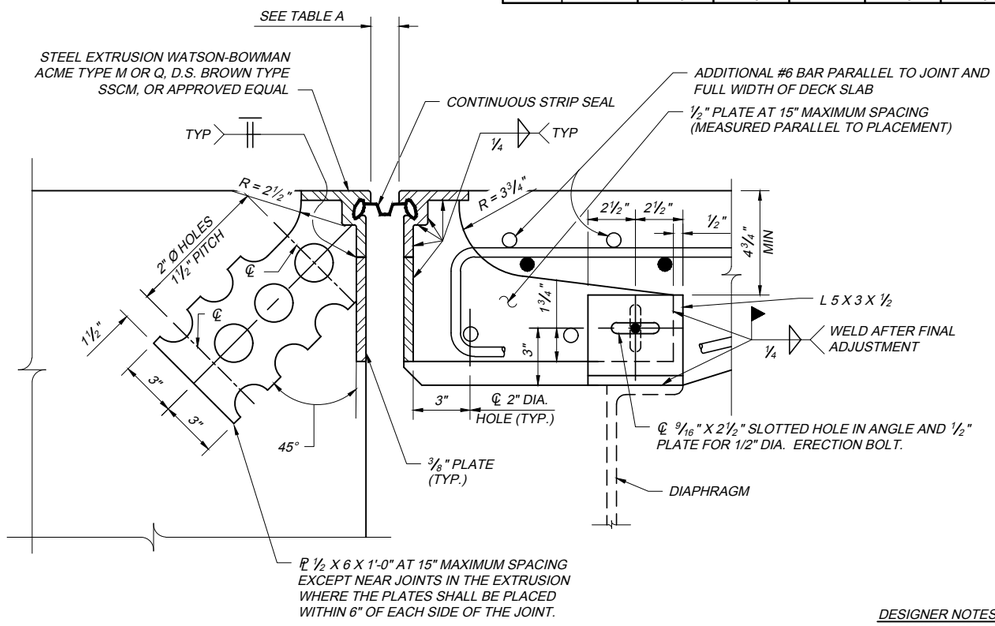
1. ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45 DEGREES.
2. STUDS SHALL BE LOW CARBON STEEL IN ACCORDANCE WITH ASTM A-108.
3. THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS UNLESS OTHERWISE SHOWN.
4. JOINTS IN EXTRUSIONS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL AND/OR ANCHOR PLATES SHALL BE GROUND SMOOTH.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
6. ELASTOMERIC COMPRESSION SEALS SHALL BE D.S. BROWN C-V 2000, ERIE METAL SPECIALTIES BR-200 OR APPROVED EQUAL.
7. CONTINUOUS STRIP SEALS SHALL BE AS MANUFACTURED BY WATSON-BOWMAN ACME, D.S. BROWN OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED. SEE STRIP SEAL SELECTION TABLE ON STANDARD DRAWING DJ-2.
8. DETAILS AT DIAPHRAGMS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR.
9. TRANSVERSE JOINTS IN COMPRESSION SEAL ARMOR AND VERTICAL LEGS OF EXTRUSIONS SHALL HAVE FULL PENETRATION BUTT WELDS. WELDS WHICH WILL BE IN CONTACT WITH SEALS SHALL BE GROUND FLUSH.
10. ARMOR STEEL COATING: FINISHED STEEL ASSEMBLY SHALL BE METALIZED, SEE SP 533 OR SP 533A.
11. FOR SECTIONS B-B AND D-D, SEE STANDARD DRAWING DJ-2.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING						
	TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2¼"	2⅛"	2"	1⅞"	1¾"	1⅝"	1½"
4"	3"	2¾"	2⅝"	2⅜"	2¼"	2⅛"	1⅞"
5"	3½"	3⅜"	3⅛"	2⅞"	2⅝"	2⅜"	2⅛"



SECTION A-A (COMPRESSION SEAL)



SECTION A-A (STRIP SEAL)

WATSON-BOWMAN ACME TYPE M, OR D.S. BROWN TYPE SSCM EXTRUSIONS SHOWN.

DESIGNER NOTES :
MAXIMUM EXPANSION LENGTHS STRIP SEAL SIZE;
(3") = 160 FEET
(4") = 224 FEET
(5") = 304 FEET

DATE: DECEMBER 31, 2019

STANDARD DRAWING

DECK JOINT DETAILS
CELLULAR ABUTMENTS

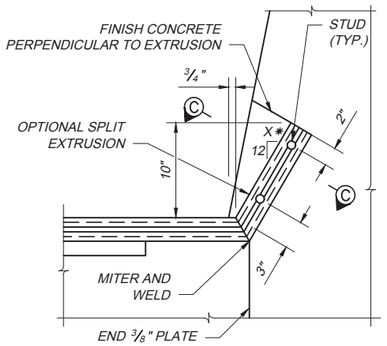
DJ-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

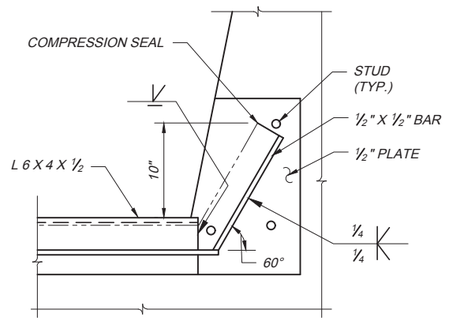
OHIO TURNPIKE

DJ-1 2019.12.31.dwg; 1/15/20 - 11:35am

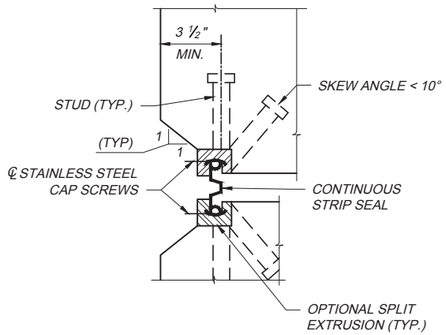


SECTION B-B (STRIP SEAL)

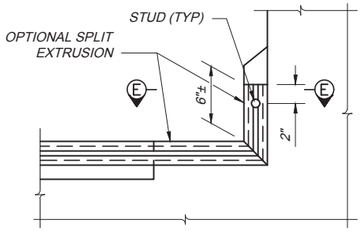
✱ SEE TABLE B FOR VALUE



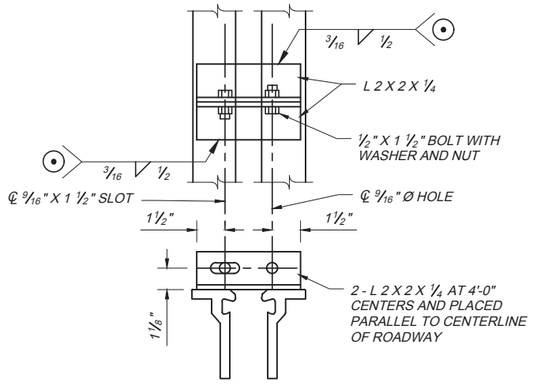
SECTION B-B (COMPRESSION SEAL)



SECTION C-C



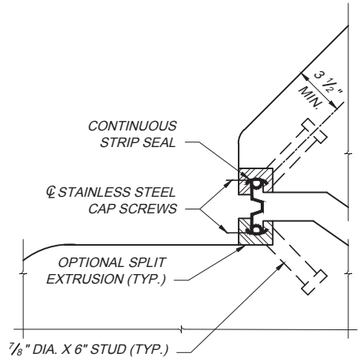
SECTION D-D



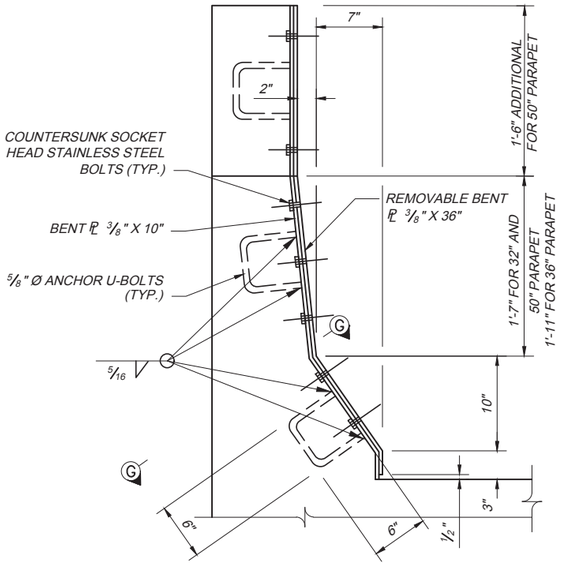
DETAIL - ALIGNMENT BRACKET

(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)

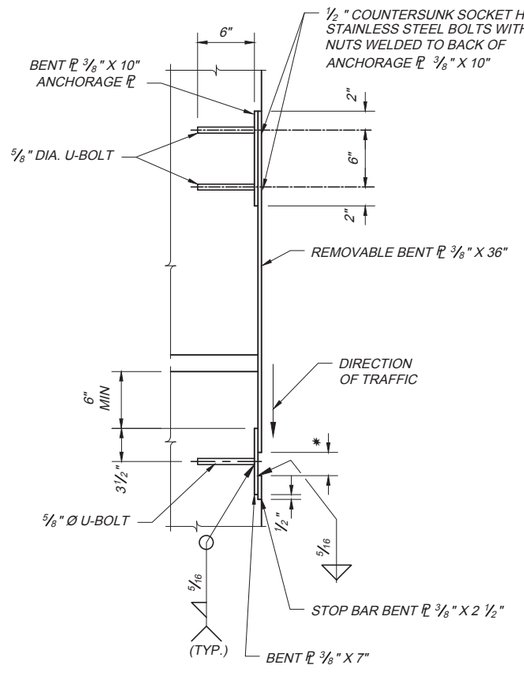
⊙ TEMPORARY WELD TO BE REMOVED AND GROUND SMOOTH IN FIELD. LOOSEN TEMPORARY JOINT ARMOR AFTER INITIAL SET OF CONCRETE, PREFERABLY NOT LATER THAN TWO HOURS AFTER CONCLUSION OF CONCRETE PLACEMENT.



SECTION E-E



SECTION AT MEDIAN PARAPET



SECTION G-G

✱ DIMENSION SET EQUAL TO JOINT OPENING AT TIME OF INSTALLATION

NOTES:

1. THE SPLIT EXTRUSION SHOWN IS A NORMAL EXTRUSION WHICH HAS BEEN MODIFIED. AT JOINT UPTURNS, ESPECIALLY ON SKEWED BRIDGE DECKS, THE USE OF SPLIT EXTRUSIONS MAY BE NECESSARY TO ENSURE GOOD SEAL INSTALLATION. ON SHOP DRAWINGS, WHERE THE SPLIT EXTRUSION IS NOT USED, THE SEAL MANUFACTURER OR HIS AGENT WARRANTS TO THE CHIEF ENGINEER THAT THE FURNISHED CONFIGURATION WILL PROVIDE FOR READY INSTALLATION AND REPLACEMENT OF THE SEAL.
2. SECTION F-F & G-G - THE BENT STEEL PLATES SHALL BE A-36 STEEL, GALVANIZED IN ACCORDANCE WITH 711.02.

   SHOP DRAWINGS SHALL BE SUBMITTED PER 501.04.

TABLE B

	SKEW ANGLE	
	<10°	10° - 45°
x	7"	7 1/2"

STRIP SEAL SELECTION TABLE

SEAL MOVEMENT RATING (SIZE)	MANUFACTURER & DESIGNATION ✱	
	THE D.S. BROWN COMPANY	WATSON-BOWMAN ACME CORP.
3"	300L	SE-300
4"	400L	SE-400
5"	500L	SE-500

✱ OR APPROVED EQUAL

DJ-2 2017.10.20.DWG; 10/25/17 - 3:30pm

DATE: OCTOBER 20, 2017

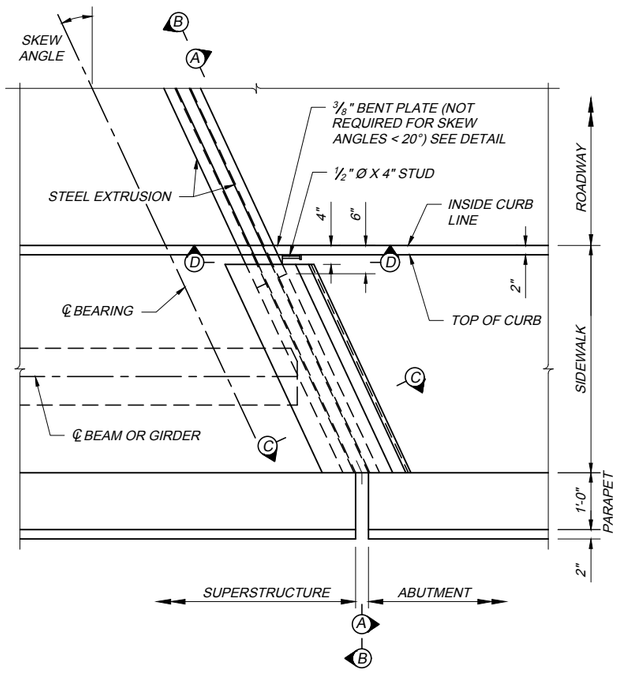
STANDARD DRAWING

DECK JOINT DETAILS

DJ-2

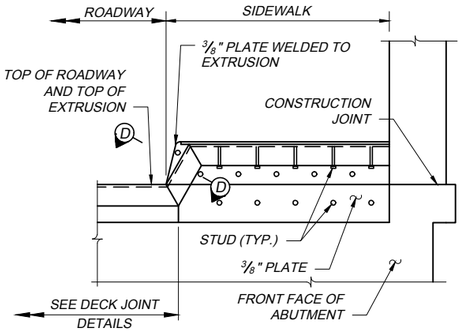
1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

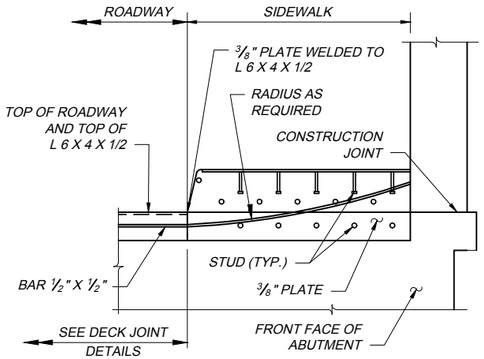


PLAN AT ABUTMENT - ANY SKEW ANGLE

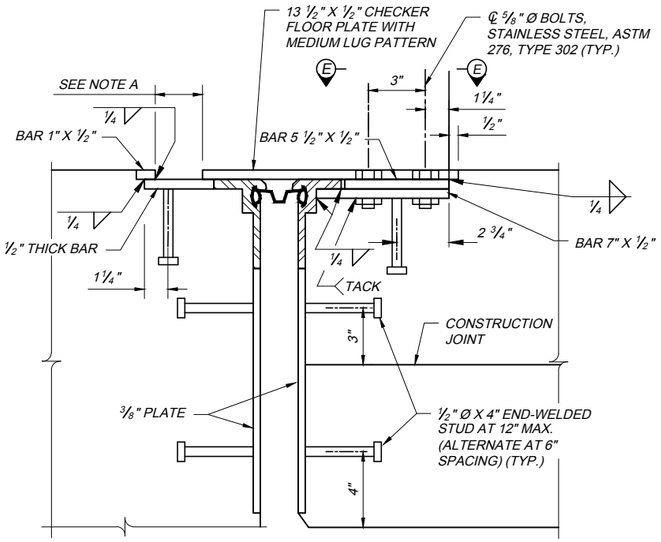
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



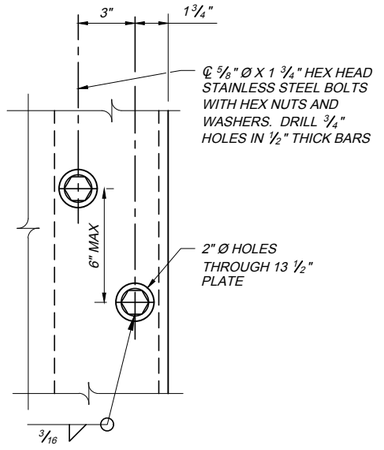
SECTION A-A (STRIP SEAL)



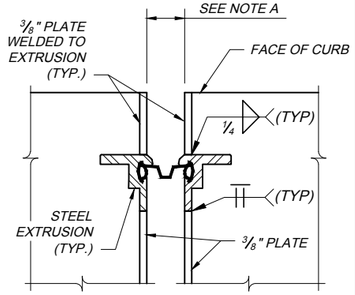
SECTION A-A (COMPRESSION SEAL)



SECTION C-C (STRIP SEAL)

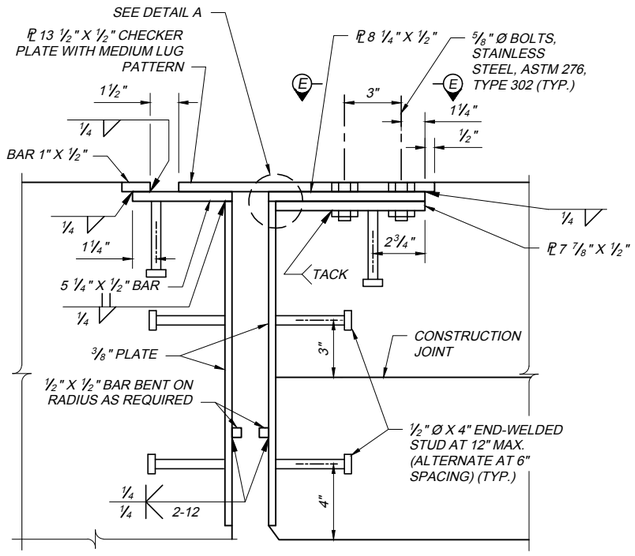


VIEW E-E

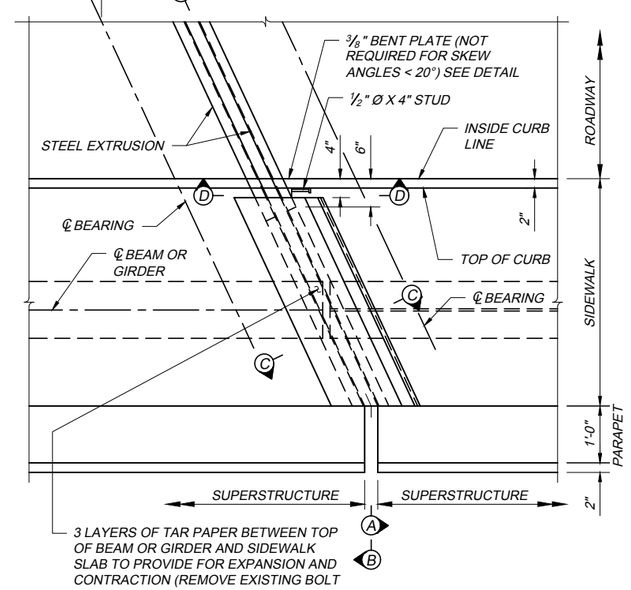


SECTION D-D

(BENT PLATE NOT SHOWN)

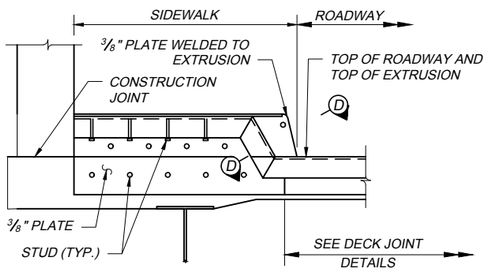


SECTION C-C (COMPRESSION SEAL)

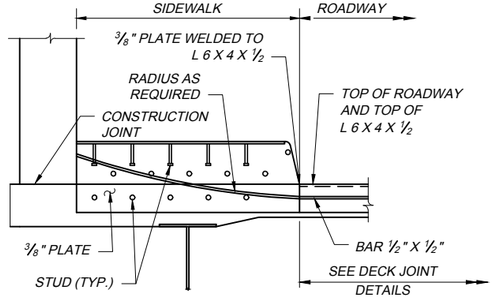


PLAN AT PIER OR OTHER INTERMEDIATE JOINT - ANY SKEW ANGLE

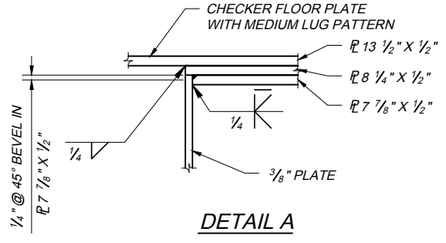
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



SECTION B-B (STRIP SEAL)



SECTION B-B (COMPRESSION SEAL)



DETAIL A

DECK JOINT DETAILS
BRIDGES WITH SIDEWALKS

NOTE A:

FOR JOINT DETAILS IN ROADWAY, ADDITIONAL NOTES AND TABULATIONS OF JOINT OPENING INSTALLATION DIMENSION CHART, SEE STANDARD DRAWING DJ-1.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

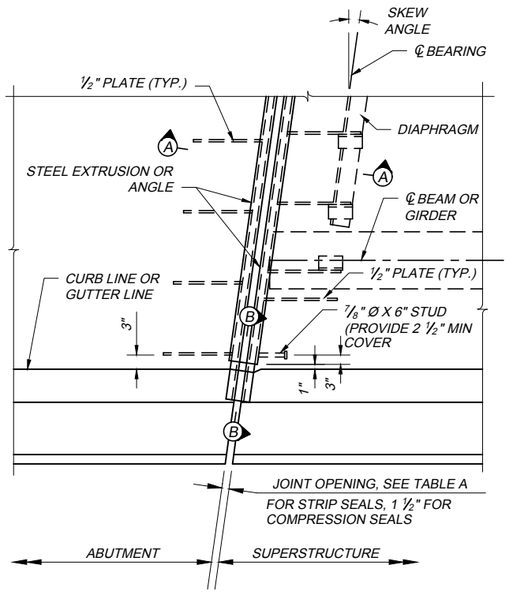
DJ-3

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

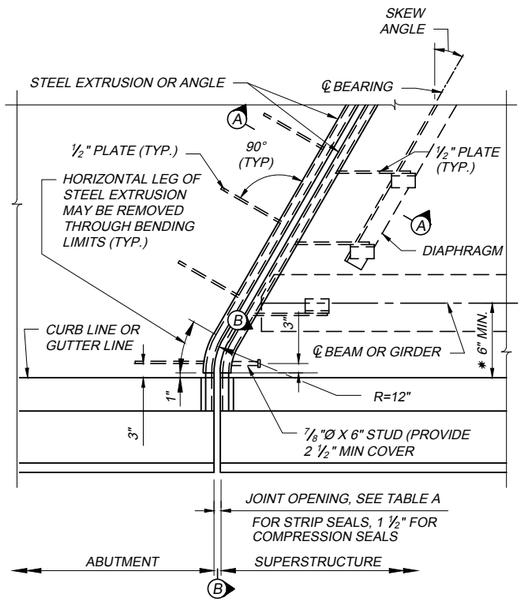
OHIO TURNPIKE

DJ-3 2017.10.20.DWG; 10/26/17 - 8:25am



PLAN - SKEW ANGLE <10°

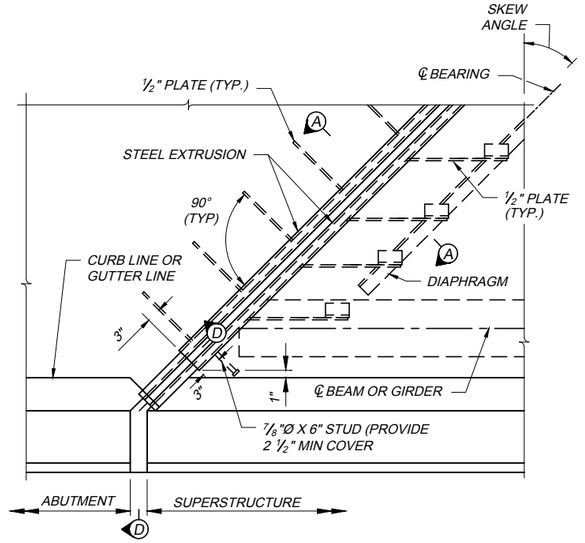
(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)



PLAN - SKEW ANGLE 10° TO 45°

(STRIP SEAL SHOWN, COMPRESSION SEAL SIMILAR)

* NOTE TO DESIGNER, IF THIS DIMENSION IS LESS THAN 6", DETAIL AT PARAPET NEEDS TO BE DEVELOPED



PLAN - SKEW ANGLE >45° (STRIP SEAL ONLY)

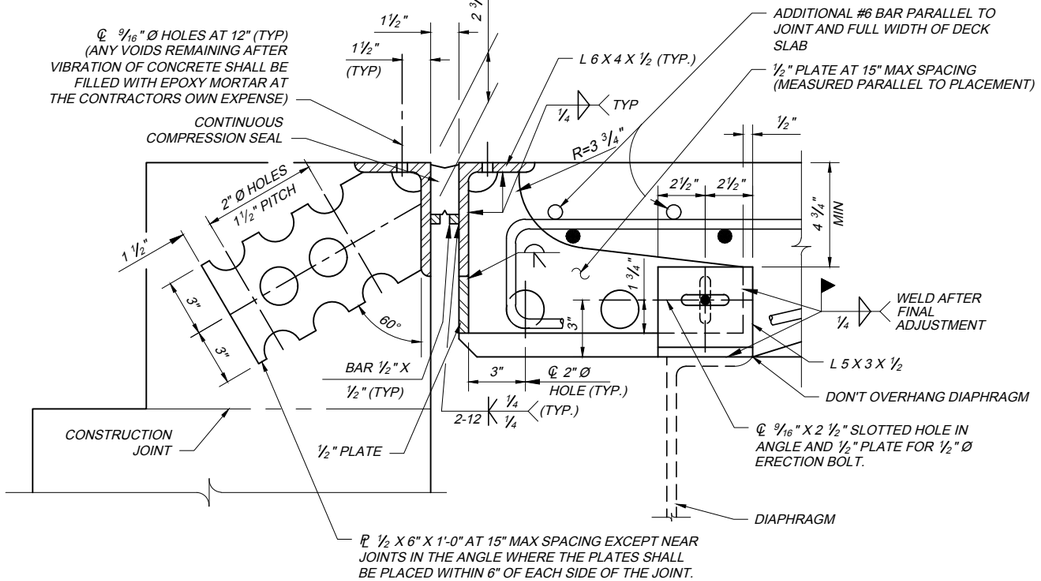
NOTE: WHEN SKEW ANGLE IS GREATER THAN 45°, FURNISH JOINT ASSEMBLIES IN TWO SECTIONS AND PROVIDE A FIELD SPLICE AT THE CENTERLINE OF ROADWAY.

NOTES:

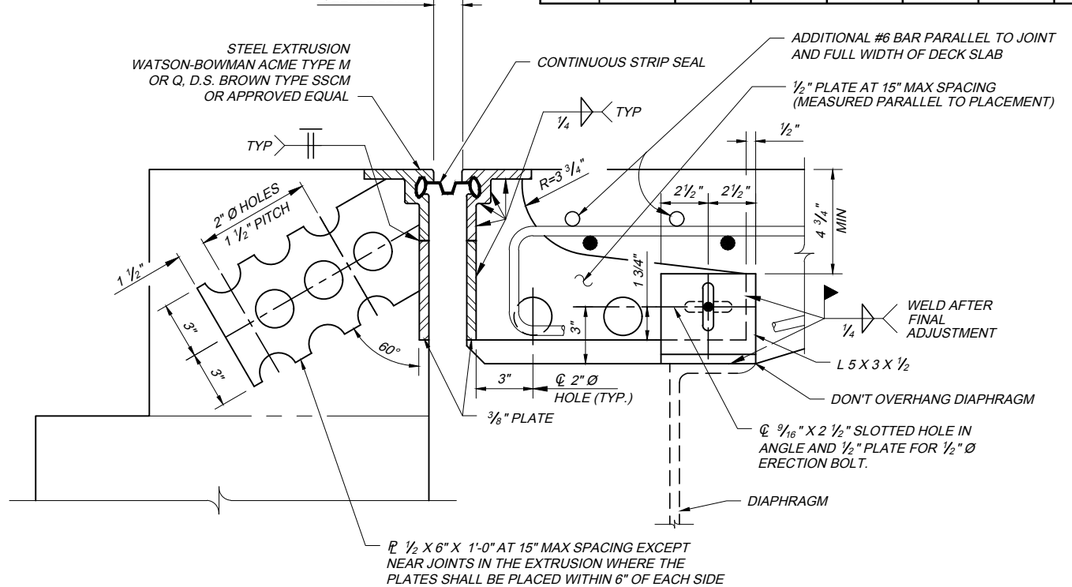
1. ELASTOMERIC COMPRESSION SEALS SHALL BE USED AT FIXED JOINTS ONLY, AND AT SKEWS LESS THAN 45 DEGREES.
2. STUDS SHALL BE LOW CARBON STEEL IN ACCORDANCE WITH ASTM A-108.
3. THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS UNLESS OTHERWISE SHOWN.
4. JOINTS IN EXTRUSIONS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL AND/OR ANCHOR PLATES SHALL BE GROUND SMOOTH.
5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
6. ELASTOMERIC COMPRESSION SEALS SHALL BE D.S. BROWN C-V 2000, ERIE METAL SPECIALTIES BR-200 OR APPROVED EQUAL.
7. CONTINUOUS STRIP SEALS SHALL BE AS MANUFACTURED BY WATSON-BOWMAN ACME, D.S. BROWN OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED. SEE STRIP SEAL SELECTION TABLE ON DRAWING DJ-2.
8. DETAILS AT DIAPHRAGMS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR.
9. TRANSVERSE JOINTS IN COMPRESSION SEAL ARMOR AND VERTICAL LEGS OF EXTRUSIONS SHALL HAVE FULL PENETRATION BUTT WELDS. WELDS WHICH WILL BE IN CONTACT WITH SEALS SHALL BE GROUND FLUSH.
10. FINISHED STEEL ASSEMBLY SHALL BE METALIZED, SEE SP 533 OR SP 533A.
11. FOR SECTIONS B-B AND D-D, SEE STANDARD DRAWING DJ-2.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING						
	TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2 1/4"	2 1/8"	2"	1 7/8"	1 3/4"	1 5/8"	1 1/2"
4"	3"	2 3/4"	2 5/8"	2 3/8"	2 1/4"	2 1/8"	1 7/8"
5"	3 1/2"	3 3/8"	3 1/8"	2 7/8"	2 5/8"	2 3/8"	2 1/8"



SECTION A-A (COMPRESSION SEAL)



SECTION A-A (STRIP SEAL)

WATSON-BOWMAN ACME TYPE M, D.S. BROWN TYPE SSCM EXTRUSIONS SHOWN.

DESIGNER NOTES :

MAXIMUM EXPANSION LENGTHS STRIP SEAL SIZE;
(3") = 160 FEET
(4") = 224 FEET
(5") = 304 FEET

DATE: OCTOBER 20, 2017

STANDARD DRAWING

DECK JOINT DETAILS
SPILL - THRU ABUTMENTS

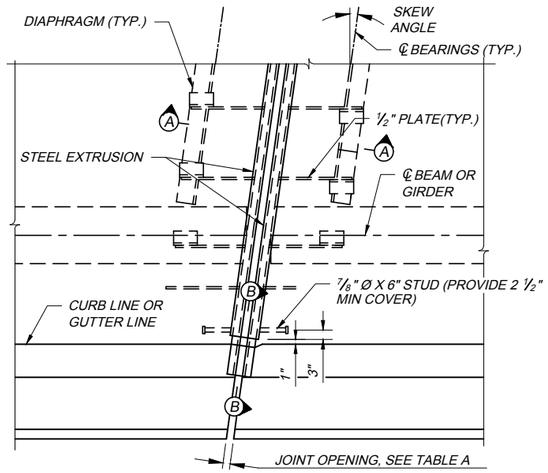
DJ-4

1 / 1

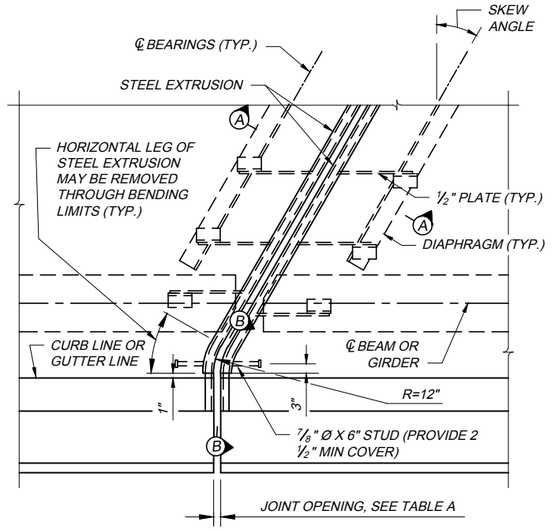
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

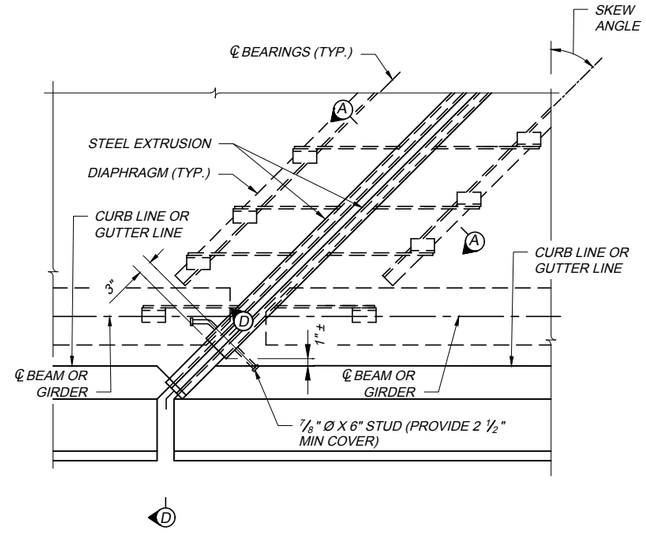
DJ-4 2017.10.20.DWG; 10/26/17 - 9:40am



PLAN - SKEW ANGLE < 10°

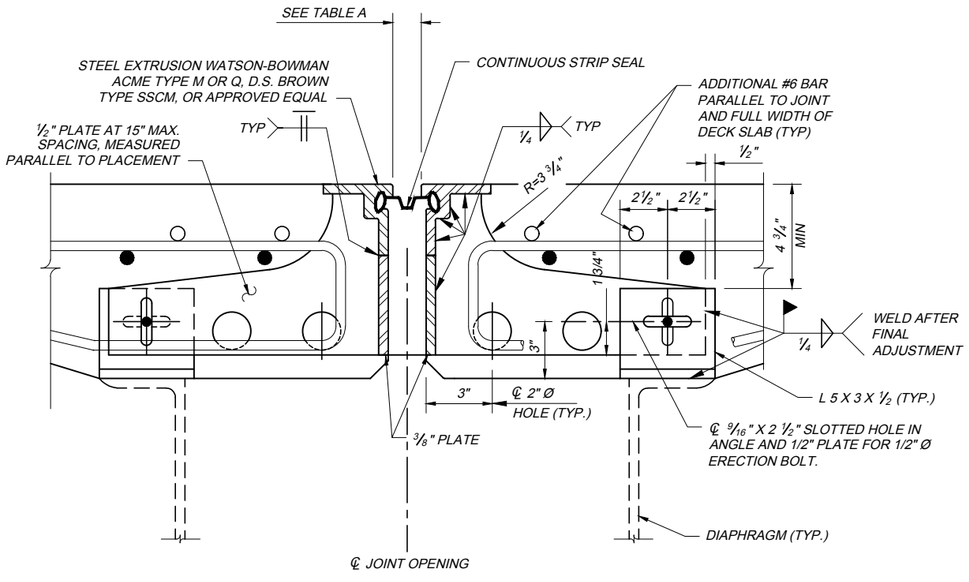


PLAN - SKEW ANGLE 10° TO 45°



PLAN - SKEW ANGLE > 45°

NOTE: WHEN SKEW ANGLE IS GREATER THAN 45°, FURNISH JOINT ASSEMBLIES IN TWO SECTIONS AND PROVIDE A FIELD SPLICE AT THE CENTERLINE OF ROADWAY.



SECTION A-A (STRIP SEAL)

WATSON-BOWMAN ACME TYPE M, D.S. BROWN TYPE SSCM EXTRUSIONS SHOWN.

TABLE A

STRIP SEAL SIZE	STRIP SEAL JOINT OPENING TEMPERATURE °F						
	30	40	50	60	70	80	90
3"	2 1/4"	2 1/8"	2"	1 7/8"	1 3/4"	1 5/8"	1 1/2"
4"	3"	2 3/4"	2 5/8"	2 3/8"	2 1/4"	2 1/8"	1 7/8"
5"	3 1/2"	3 3/8"	3 1/8"	2 7/8"	2 5/8"	2 3/8"	2 1/8"

NOTES:

1. STUDS SHALL BE LOW CARBON STEEL IN ACCORDANCE WITH ASTM A-108.
2. THE MINIMUM LENGTH OF RETAINER SHALL BE 6'-0" BETWEEN JOINTS UNLESS OTHERWISE SHOWN.
3. JOINTS IN EXTRUSIONS SHALL HAVE WATERTIGHT, PARTIAL PENETRATION BUTT WELDS COMPLETELY AROUND THE OUTER PERIPHERY OF THE ABUTTING SURFACES. WELDS WHICH WILL BE IN CONTACT WITH THE SEAL AND/OR ANCHOR PLATES SHALL BE GROUND SMOOTH.
4. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION.
5. CONTINUOUS STRIP SEALS SHALL BE AS MANUFACTURED BY WATSON-BOWMAN ACME, D.S. BROWN OR APPROVED EQUAL, AND SHALL BE THE SIZE AS SPECIFIED. SEE STRIP SEAL SELECTION TABLE ON DRAWING DJ-2.
6. DETAILS AT DIAPHRAGMS SHOWN, DETAILS AT BEAMS OR GIRDERS SIMILAR.
7. TRANSVERSE JOINTS IN VERTICAL LEGS OF EXTRUSIONS SHALL HAVE FULL PENETRATION BUTT WELDS. WELDS WHICH WILL BE IN CONTACT WITH SEALS SHALL BE GROUND FLUSH.
8. FINISHED STEEL ASSEMBLY SHALL BE METALIZED, SEE SP 533 OR SP 533A.
9. FOR SECTIONS B-B AND D-D, SEE STANDARD DRAWING DJ-2.

DESIGNER NOTES :

MAXIMUM EXPANSION LENGTHS
STRIP SEAL SIZE;
(3") = 160 FEET
(4") = 224 FEET
(5") = 304 FEET

DJ-5 2017.10.20.dwg; 10/26/17 - 10:30am

OHIO TURNPIKE

DATE: OCTOBER 20, 2017

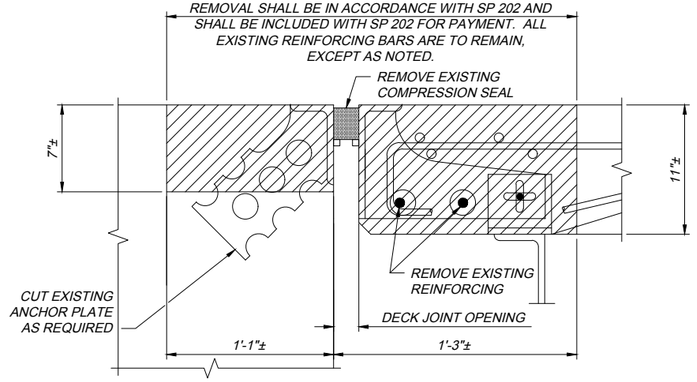
STANDARD DRAWING

DECK JOINT DETAILS AT PIERS

DJ-5

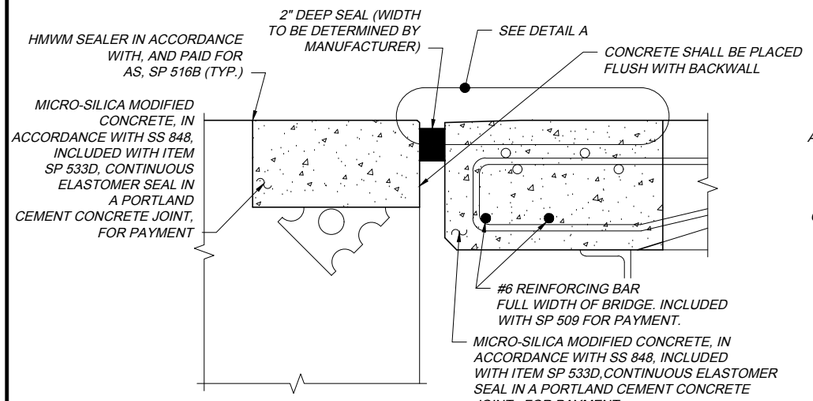
1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



REMOVAL DETAILS

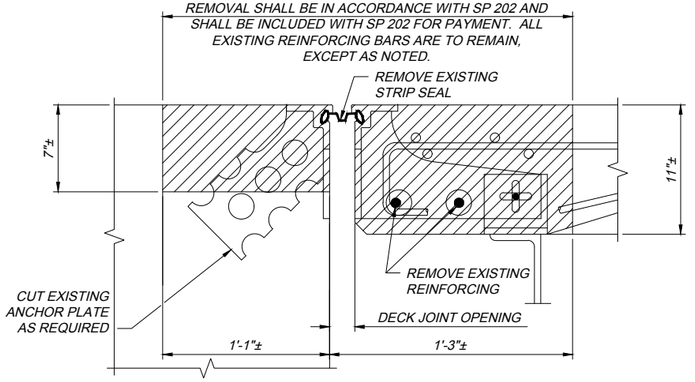
(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN,
EXCEPT AS NOTED)



PROPOSED CONSTRUCTION DETAILS

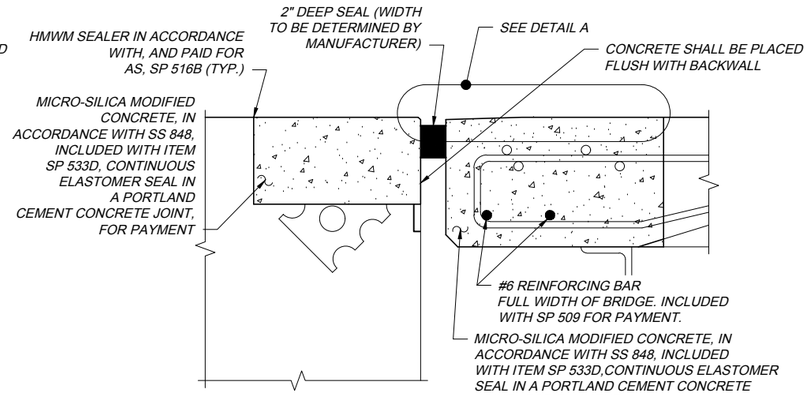
(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN)

DETAIL AT ABUTMENT - EXISTING COMPRESSION SEAL



REMOVAL DETAILS

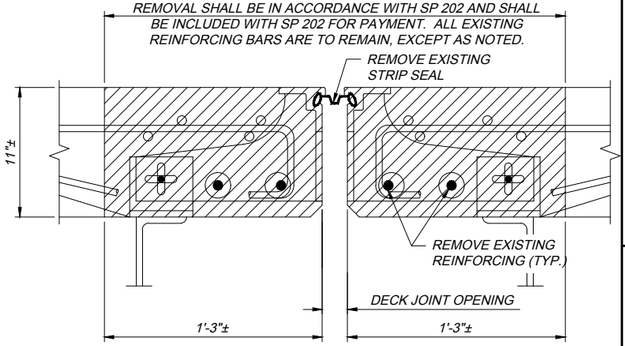
(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN,
EXCEPT AS NOTED)



PROPOSED CONSTRUCTION DETAILS

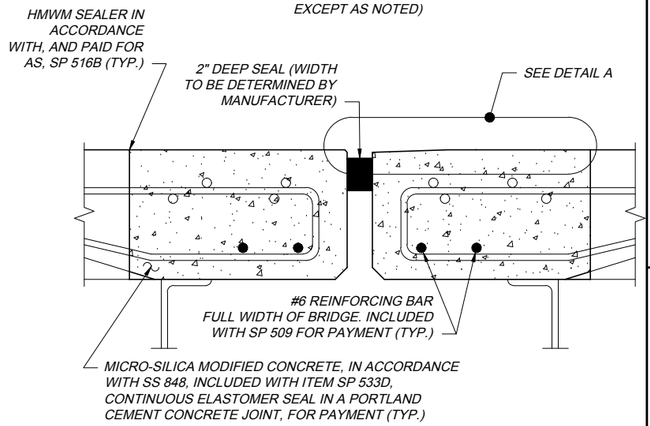
(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN)

DETAIL AT ABUTMENT - EXISTING STRIP SEAL



REMOVAL DETAILS

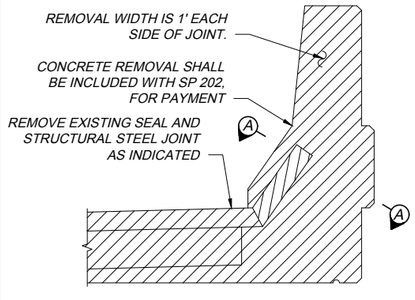
(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN,
EXCEPT AS NOTED)



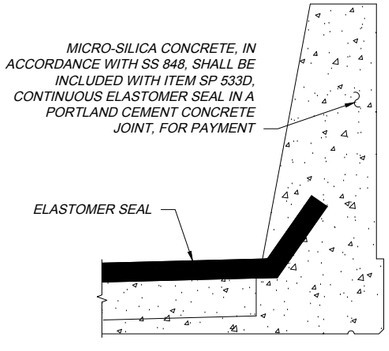
PROPOSED CONSTRUCTION DETAILS

(ALL REINFORCING NOT SHOWN.
EXISTING REINFORCING TO REMAIN)

DETAIL AT PIER - EXISTING STRIP SEAL

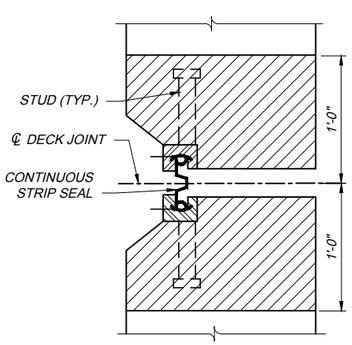


REMOVAL DETAILS

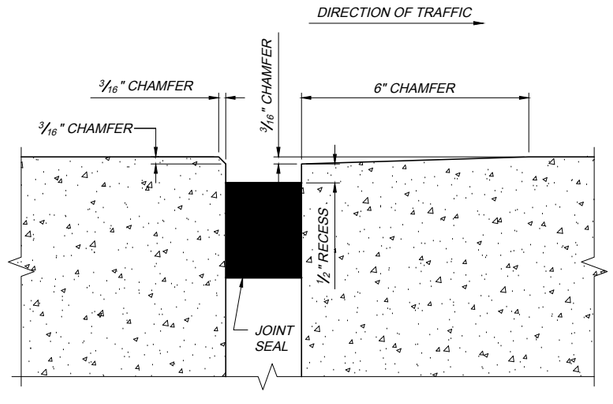


PROPOSED CONSTRUCTION DETAILS

DETAIL AT PARAPET



SECTION A-A



DETAIL A

NOTES:

TRIM BEAM ENDS, AS NECESSARY, AND AS DIRECTED AND APPROVED BY THE CHIEF ENGINEER. INCLUDE WITH ITEM SP 202 FOR PAYMENT.

LEGEND

- REMOVAL LIMITS

NOTES TO DESIGNER:

- SP 533D TO BE USED ONLY ON MAINLINE TURNPIKE BRIDGES

- INCLUDE THE FOLLOWING SPECIAL PROVISIONS: SP 202, SP 509, SP 533D AND SUPPLEMENTAL SPECIFICATION 848.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

DECK JOINT DETAILS SP 533D - CONTINUOUS ELASTOMER SEAL IN A PORTLAND CEMENT CONCRETE JOINT

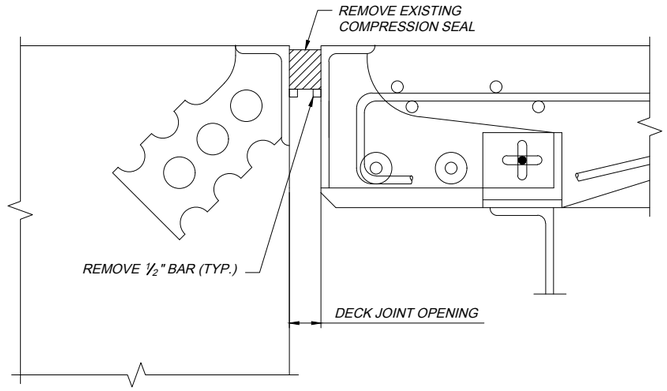
DJ-7

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

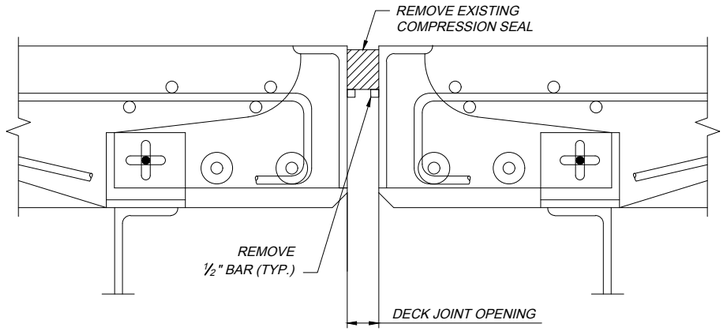
OHIO TURNPIKE

DJ-7 2017.10.20.dwg; 10/25/17 - 4:28pm

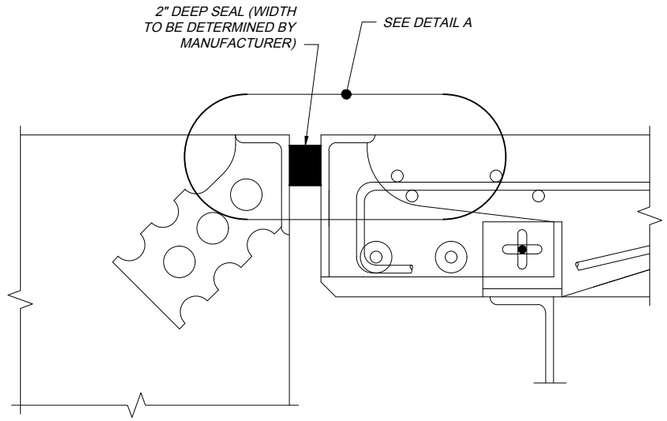


REMOVAL DETAILS

(ALL REINFORCING NOT SHOWN)



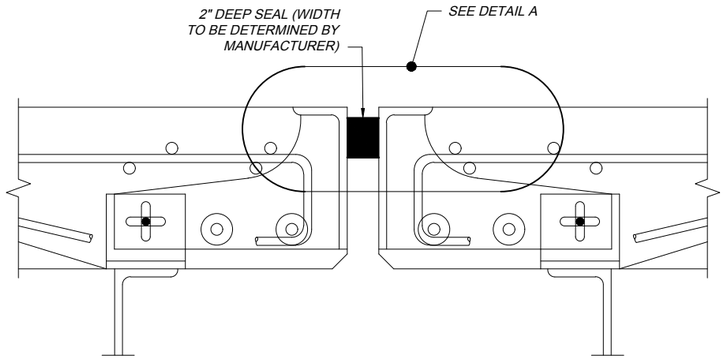
REMOVAL DETAILS



PROPOSED CONSTRUCTION DETAILS

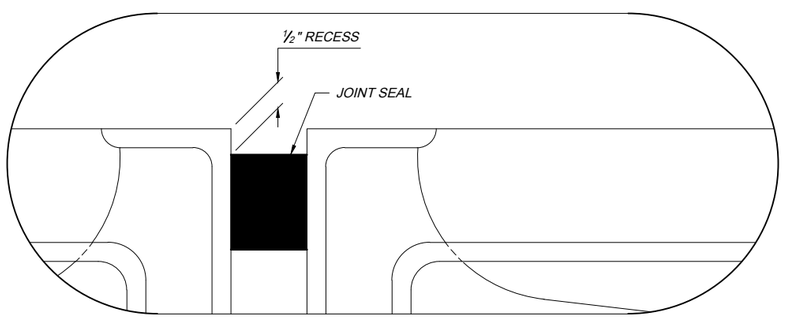
(ALL REINFORCING NOT SHOWN)

DETAIL AT ABUTMENT - EXISTING COMPRESSION SEAL



PROPOSED CONSTRUCTION DETAILS

DETAIL AT PIER - EXISTING COMPRESSION SEAL



DETAIL A

NOTES:

THE CONTRACTOR SHALL VERIFY WITH THE SEAL MANUFACTURER THAT THE EXISTING JOINT OPENING AND THE AVAILABLE VERTICAL BONDING SURFACE ON THE EXISTING DECK JOINT ARE ALL APPROPRIATE FOR THE SEAL PRIOR TO ORDERING.

THE CONTRACTOR SHALL PAINT THE EXPOSED STEEL JOINT ARMOR PER SP 514A WITH PAYMENT INCLUDED IN SP 533F.

LEGEND

-- REMOVAL LIMITS

NOTES TO DESIGNER:

- INCLUDE THE FOLLOWING SPECIAL PROVISIONS: SP 202, SP 514A, AND SP 533F.

- VERIFY WITH THE SEAL MANUFACTURER'S THAT THE EXISTING JOINT OPENING, THE EXPECTED JOINT MOVEMENT AND THE AVAILABLE VERTICAL BONDING SURFACE ON THE EXISTING DECK JOINT ARE ALL APPROPRIATE FOR BOTH SEAL TYPES BEFORE INCLUDING ITEM IN PLAN SET.

DJ-9 2021.01.07.dwg; 1/12/21

DATE: JANUARY 7, 2021

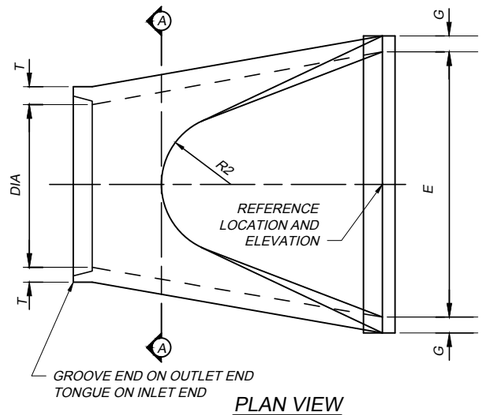
STANDARD DRAWING

DECK JOINT DETAILS SP 533F - REPLACEMENT OF COMPRESSION SEAL WITH CONTINUOUS ELASTOMERIC SEAL

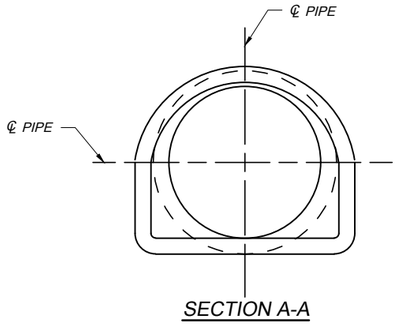
DJ-9

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



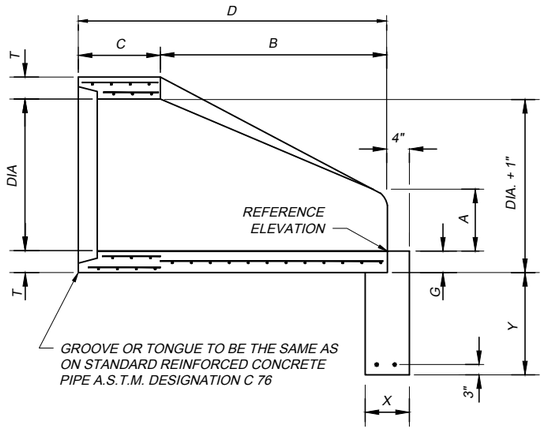
PLAN VIEW



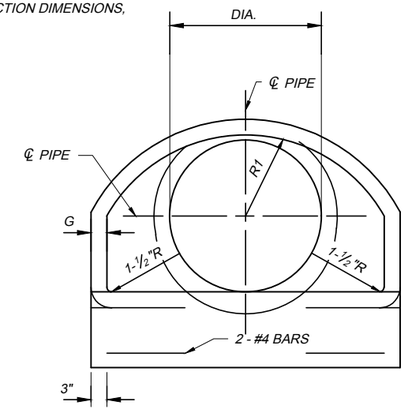
SECTION A-A

NOTE:

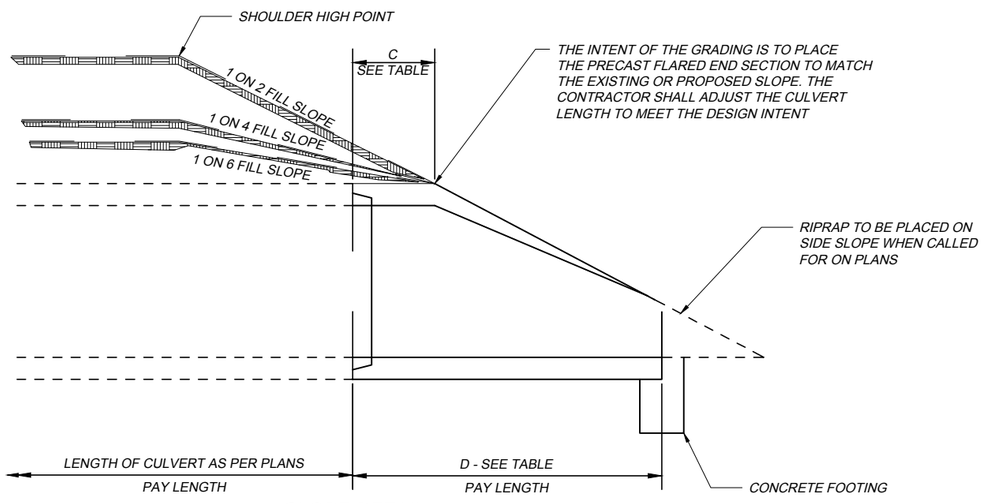
FOR END SECTION DIMENSIONS, SEE TABLE.



LONGITUDINAL SECTION



END ELEVATION



SLOPE DETAIL

END SECTION DIMENSION TABLE

DIA.	T (MIN.)	A (MIN.)	B (✱)	C (✱)	D (✱)	E (✱)	G	R1	R2	X	Y	APPROX. WT. LBS.
12"	2"	5"	23"	51"	74"	24"	2"	10⅛"	9"	8"	28"	800
15"	2¼"	7"	24"	50"	74"	30"	2¼"	12½"	11"	8"	28"	1100
18"	2½"	11"	25"	49"	74"	36"	2½"	15½"	12"	8"	28"	1300
21"	2¾"	11"	33"	42"	75"	42"	2¾"	16⅛"	13"	8"	28"	1500
24"	3"	12"	43"	32"	75"	48"	3"	16 3/16"	14"	8"	28"	1800
30"	3½"	14"	53"	22"	75"	60"	3½"	18½"	15"	8"	28"	2400
36"	4"	17"	62"	37"	99"	72"	4"	24 5/16"	20"	8"	28"	4200
42"	4½"	22"	62"	37"	99"	78"	4½"	27½"	22"	10"	28"	5600
48"	5"	24"	72"	28"	98"	84"	5"	28½"	22"	10"	28"	7400
54"	5½"	27"	65"	33¼" - 35"	98¼" - 100"	90"	5"	#	#	10"	28"	8040
60"	6"	30"	68"	39"	99"	96"	5"	#	#	12"	30"	8730
66"	6½"	24"	72"-78"	21" - 27"	99"	102"	5½"	#	#	12"	30"	10630
72"	7"	24"	78"	21"	99"	108"	8"	#	#	12"	30"	12520
78"	7½"	24"	78"	21"	99"	114"	6½"	#	#	12"	30"	14430
84"	8"	36"	90½"	21"	111½"	120"	6½"	#	#	12"	30"	18160

✱ - TOLERANCE ± 1"

- RADIUS AS FURNISHED BY THE MANUFACTURER

WEIGHT SHOWN DOES NOT INCLUDE CONCRETE FOOTING.

NOTES:

1. CONCRETE IN THESE END SECTIONS SHALL BE THE SAME GRADE AND STRENGTH AS SPECIFIED FOR REINFORCED CONCRETE PIPE A.S.T.M. DESIGNATION C 76 CLASS II. EXCEPT AS MODIFIED BY THE STANDARD SPECIFICATIONS.
2. REINFORCEMENT IN THE "C" PORTION SHALL BE THE SAME AS SPECIFIED FOR REINFORCED CONCRETE A.S.T.M. DESIGNATION C 76 CLASS II FOR THE SIZE OF CONNECTING PIPE.
3. REINFORCEMENT IN THE "B" PORTION SHALL HAVE A CROSS-SECTIONAL AREA EQUAL TO THAT OF ONE LAYER OF STEEL IN THE "C" PORTION.
4. THE END OF THE PIPE CULVERT SHALL BE PLACED IN THE CONCRETE END SECTION SO THAT THE FLOW LINES ARE FLUSH. THE JOINT SHALL BE COMPLETELY FILLED WITH NON-SHRINK MORTAR PER 705.22.
5. TO CHANGE THE FILL SLOPE TO THE SLOPE OF THE END SECTION, USE A TRANSITION SLOPE OF APPROXIMATELY 10' IN LENGTH TO PROVIDE A PLEASING APPEARANCE.
6. VARIATIONS IN DIMENSIONS: THE THICKNESS OF THE CONCRETE, THE POSITION OF STEEL AND THE INTERNAL DIAMETER OF THE PIPE SHALL CONFORM WITH THE VARIATIONS IN DIMENSIONS AS PROVIDED IN THE SPECIFICATIONS FOR REINFORCED CONCRETE CULVERT, STORM DRAINS AND SEWER PIPE A.S.T.M. DESIGNATION C 76.
7. CAST IN PLACE CONCRETE FOOTING: REINFORCED CONCRETE FOOTING USING CLASS QC-1 CONCRETE WITH EPOXY COATED STEEL REBARS SHALL MEET THE THE REQUIREMENTS OF 499.03 AND 509.02.
8. PAYMENT WILL BE MADE AT THE UNIT PRICE BID PER EACH FOR ITEM SPECIAL - __" PRECAST CONCRETE END SECTION AND SHALL INCLUDE THE COST OF ALL LABOR, EARTHWORK, FOOTING AND MATERIALS NECESSARY TO PLACEMENT OF THE PRECAST CONCRETE END SECTION.

OHIO TURNPIKE

DATE: OCTOBER 20, 2017

STANDARD DRAWING

PRECAST FLARED
END SECTION

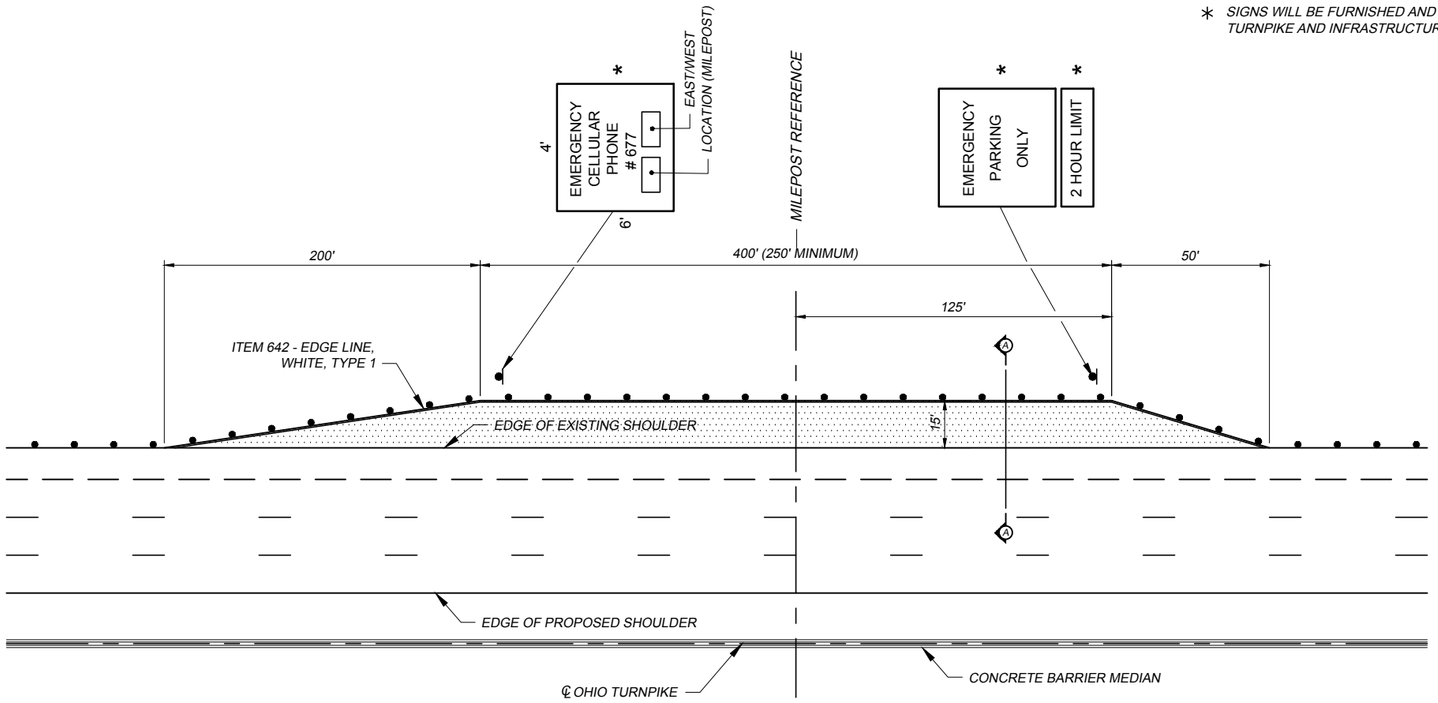
DR-1

1 / 1

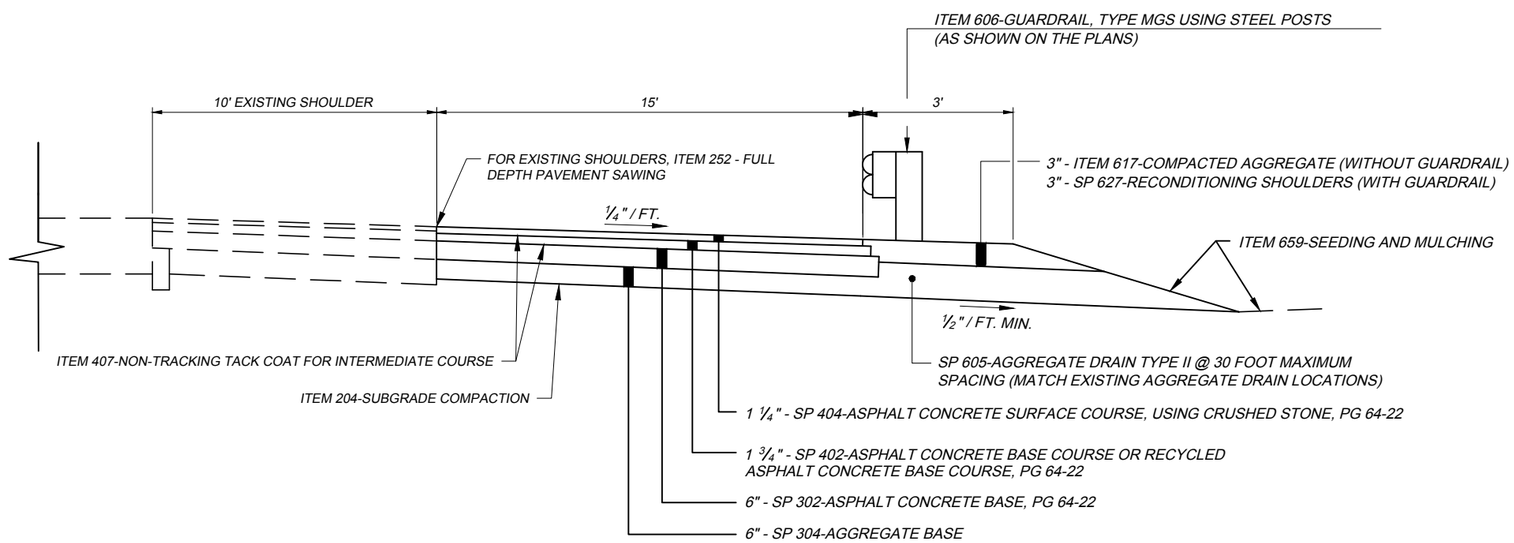
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

DR-1 2017.10.20.dwg; 10/25/17 - 4:27pm

* SIGNS WILL BE FURNISHED AND ERECTED BY THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION.



PLAN



SECTION A-A

NOTES:

1. FOR EMERGENCY PARKING AREA LOCATIONS REFER TO PLAN AND PROFILE SHEETS.
2. THE EMERGENCY PARKING AREA SHALL BE CONSTRUCTED DURING MILLING AND RESURFACING OF OUTSIDE SHOULDER OPERATIONS.
3. FOR EARTHWORK, SEE CROSS SECTION SHEETS.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

EMERGENCY PARKING AREA

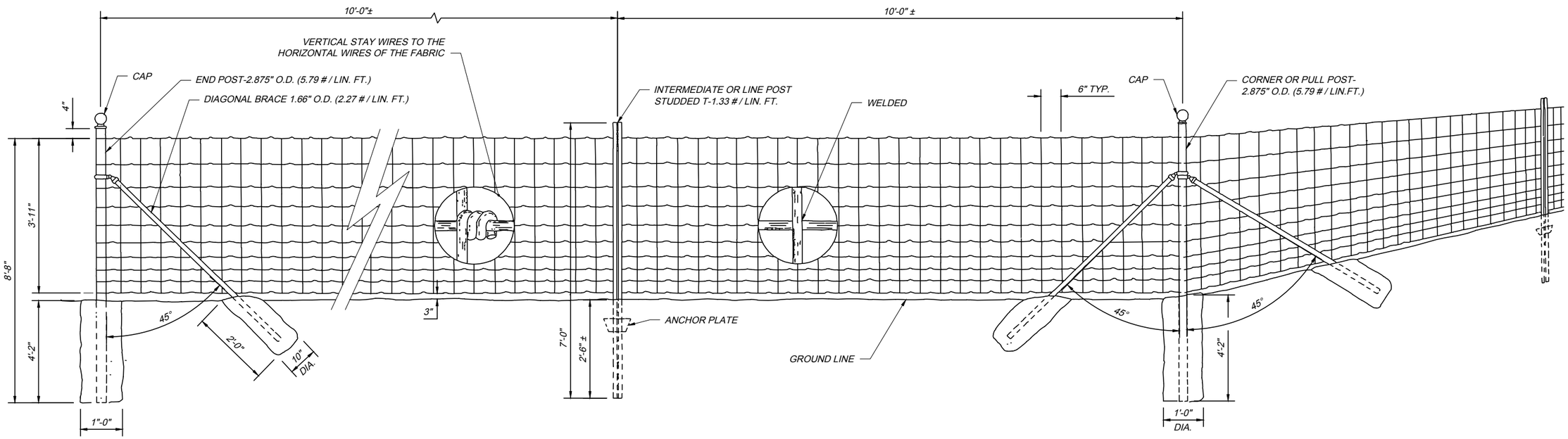
EPA-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

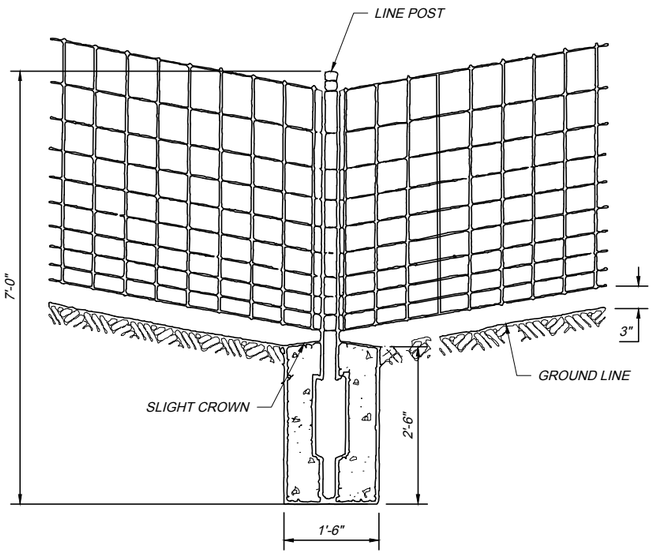
EPA-1 2017.10.20.DWG; 2/20/19 - 10:15am



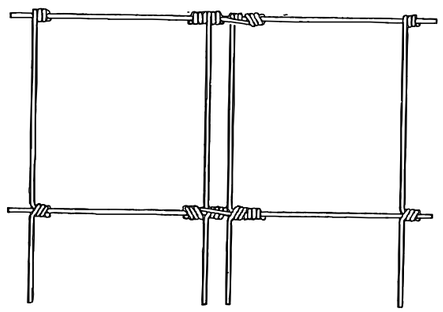
END POST ASSEMBLY (SEE DETAIL A)

LINE POST

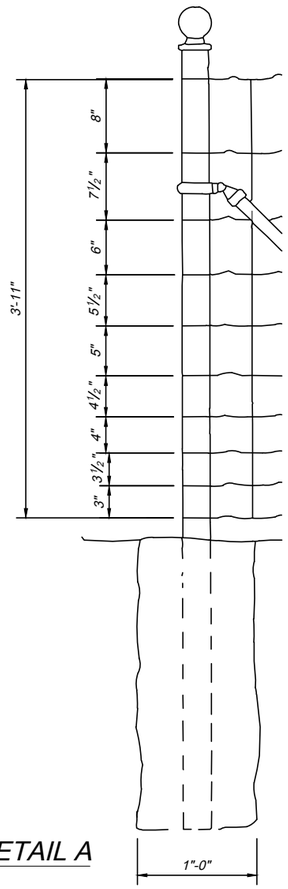
CORNER OR INTERMEDIATE ANCHOR POST ASSEMBLY (PULL POST)



LINE POST IN DIP SECTION



WIRE FENCE SPLICE



DETAIL A

NOTES:

1. *PULL POSTS TO BE USED AT SHARP BREAKS IN THE VERTICAL GRADES AT APPROXIMATELY 500' CENTERS ON STRAIGHT RUNS OF FENCE, OR AS DIRECTED BY THE CHIEF ENGINEER.*
2. *WHERE RIGHT OF WAY FENCE FOLLOWS THE RIGHT OF WAY LINE, IT SHALL BE INSTALLED PARALLEL TO AND 1'-0" INSIDE THE RIGHT OF WAY LINE ON TURNPIKE PROPERTY.*
3. *CONCRETE: THE PROVISIONS OF 511.12 ARE MODIFIED TO THE EXTENT THAT CONCRETE SHALL BE PROTECTED DURING THE CURING PERIOD IN A MANNER SUCH THAT IT WILL NOT FREEZE. CONCRETE SHALL BE CLASS QC-1 CONCRETE.*
4. *FABRIC: OTHER METHODS FOR SPLICING WIRE FENCE MAY BE USED IN LIEU OF THE METHOD SHOWN, WHEN APPROVED BY THE CHIEF ENGINEER.*
5. *GALVANIZING: ALL FENCING MATERIALS ARE TO BE GALVANIZED IN ACCORDANCE WITH 711.02.*
6. *FOR GATE INSTALLATION, REFER TO ODOT STANDARD DRAWING F-1.1.*
7. *FOR FENCE DETAILS AT BRIDGES, REFER TO ODOT STANDARD DRAWING F-3.1.*
8. *FOR WALK GATES, REFER TO ODOT STANDARD DRAWING F-3.2.*
9. *FOR FENCE TERMINALS, REFER TO ODOT STANDARD DRAWING F-3.3.*
10. *FOR DITCH AND STREAM CROSSINGS, REFER TO ODOT STANDARD DRAWING F-3.4.*
11. *PAYMENT: PAYMENT FOR ITEM 607 FENCE, TYPE 47, AS PER PLAN SHALL INCLUDE ALL MATERIALS LABOR, EQUIPMENT AND INCIDENTALS NECESSARY TO COMPLETE THE ITEM IN ACCORDANCE WITH ITEM 607 FENCE, EXCEPT AS MODIFIED HERE ON.*

OHIO TURNPIKE

DATE: JANUARY 7, 2021

STANDARD DRAWING

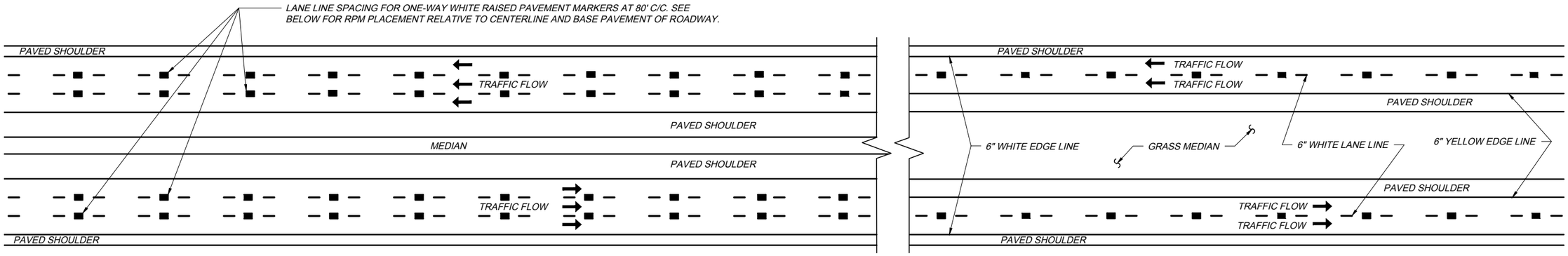
RIGHT OF WAY FENCE

F-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

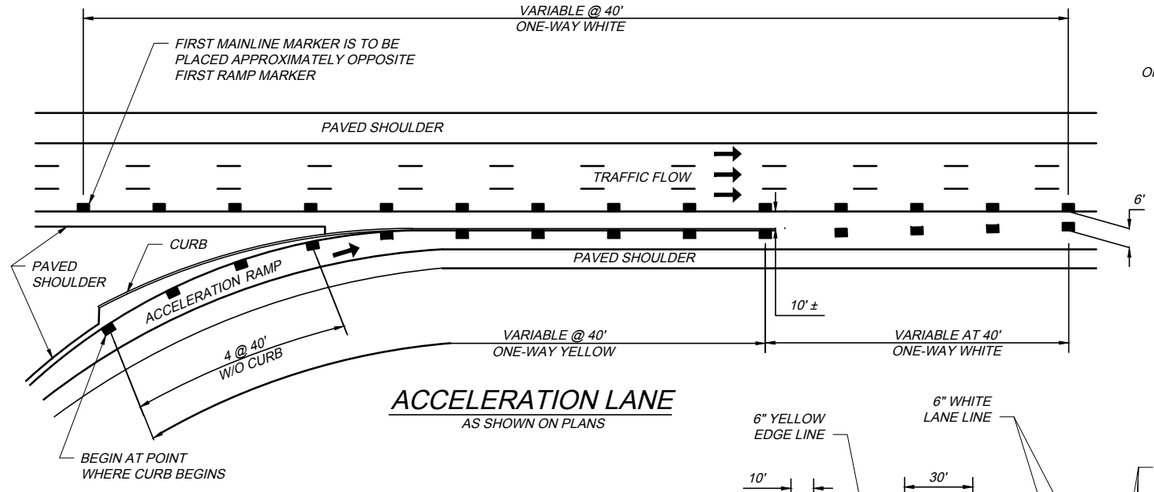
F-1 2021.01.07.dwg; 1/12/21



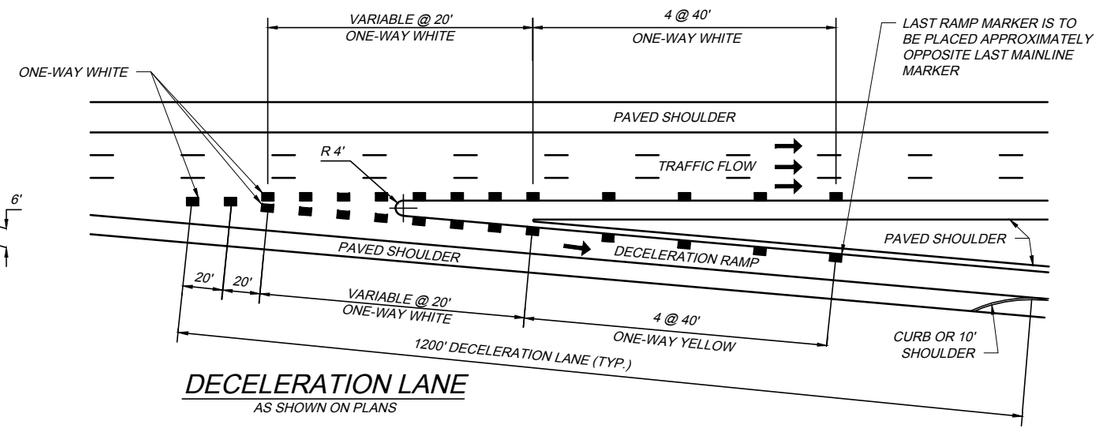
3 LANE PLAN

2 LANE PLAN

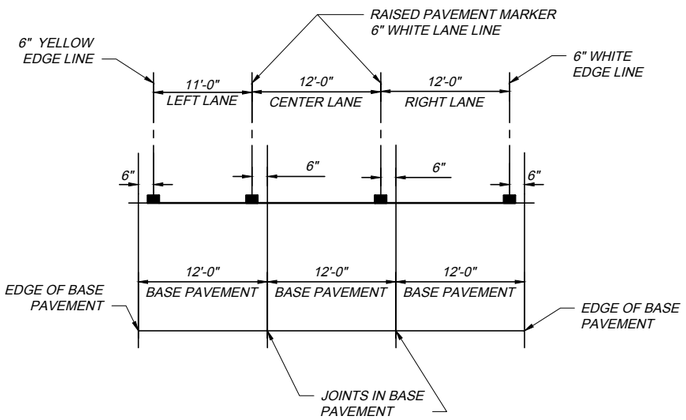
MAINLINE RAISED PAVEMENT MARKER AND LANE LINE LAYOUT



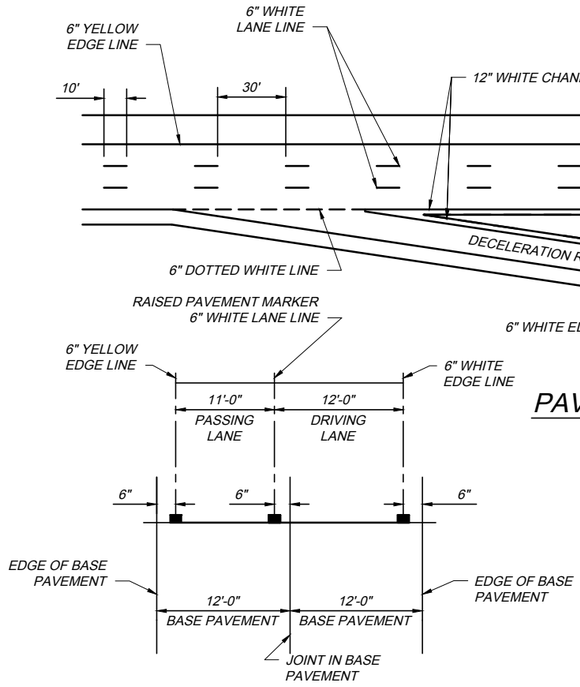
ACCELERATION LANE
AS SHOWN ON PLANS



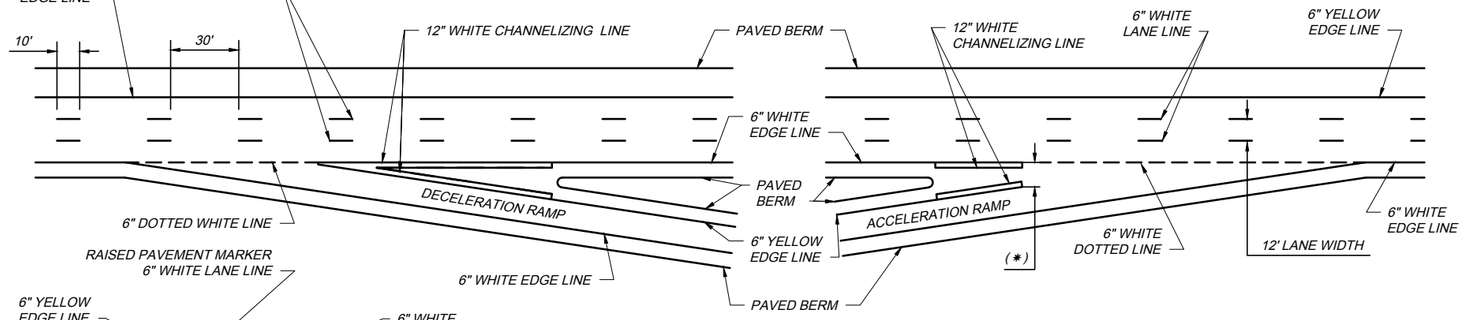
DECELERATION LANE
AS SHOWN ON PLANS



3 LANE STRIPING AND RPM PLACEMENT



2 LANE STRIPING AND RPM PLACEMENT



PAVEMENT MARKING LAYOUT AT RAMP GORES

NOTES:

MARKERS INSTALLED ALONG AN EDGE LINE OR CHANNELIZING LINE SHALL BE PLACED SO THAT THE NEAR EDGE OF THE MARKER CASTING IS NO MORE THAN 1/2" FROM THE NEAR EDGE OF THE PAINTED LINE. MARKERS INSTALLED ALONG A LANE LINE SHALL BE PLACED BETWEEN AND IN LINE WITH THE DASHES. MARKERS SHALL NOT BE PLACED OVER THE PAINTED LINE EXCEPT WHERE THE LINES DEVIATE VISIBLY FROM THEIR CORRECT ALIGNMENT, AND THEN ONLY WITH THE APPROVAL OF THE ENGINEER. EXACT LIMITS OF CHANNELIZING PAVEMENT MARKERS WILL BE DETERMINED IN THE FIELD BY THE CHIEF ENGINEER.

(✱) EXTEND TO END OF EXISTING SNAPS. THIS DIMENSION SHALL BE 6' FOR NEW CONSTRUCTION AND RESURFACING CONTRACTS.

RAISED PAVEMENT MARKERS SHALL NOT BE INSTALLED UNTIL AFTER THE FINAL PAVEMENT MARKINGS ARE IN PLACE, UNLESS APPROVED OTHERWISE BY THE CHIEF ENGINEER.

SEE SP 621 FOR RAISED PAVEMENT MARKERS SPECIFICATIONS.

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

RAISED PAVEMENT MARKER AND STRIPING LAYOUT

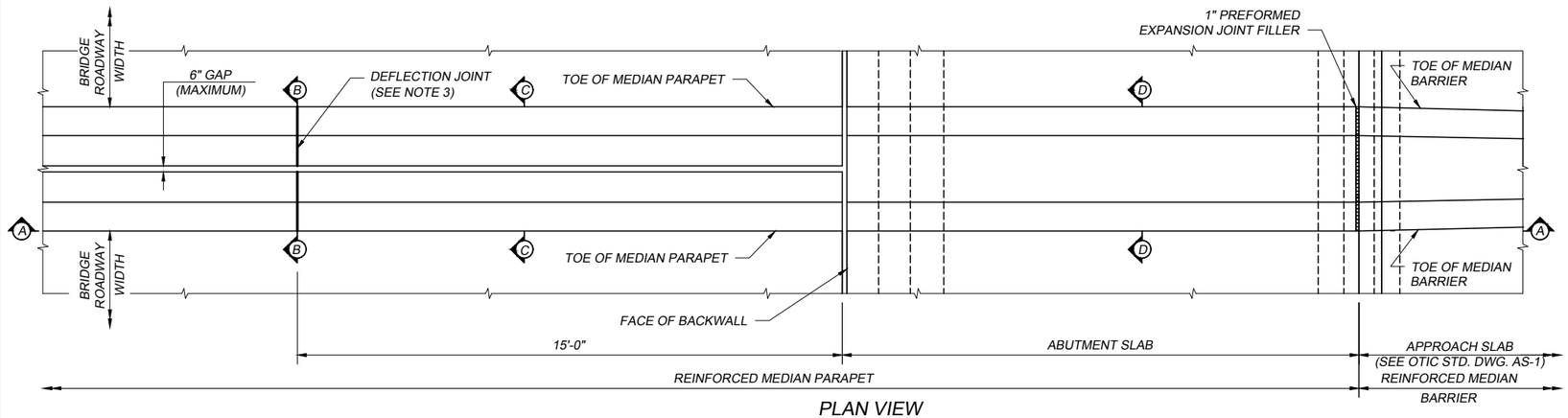
RPM-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

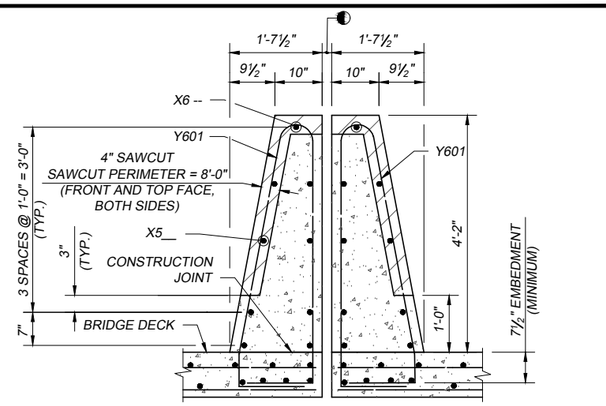
OHIO TURNPIKE

RPM-1 2023.02.17.DWG; 2/28/23 - 8:27am



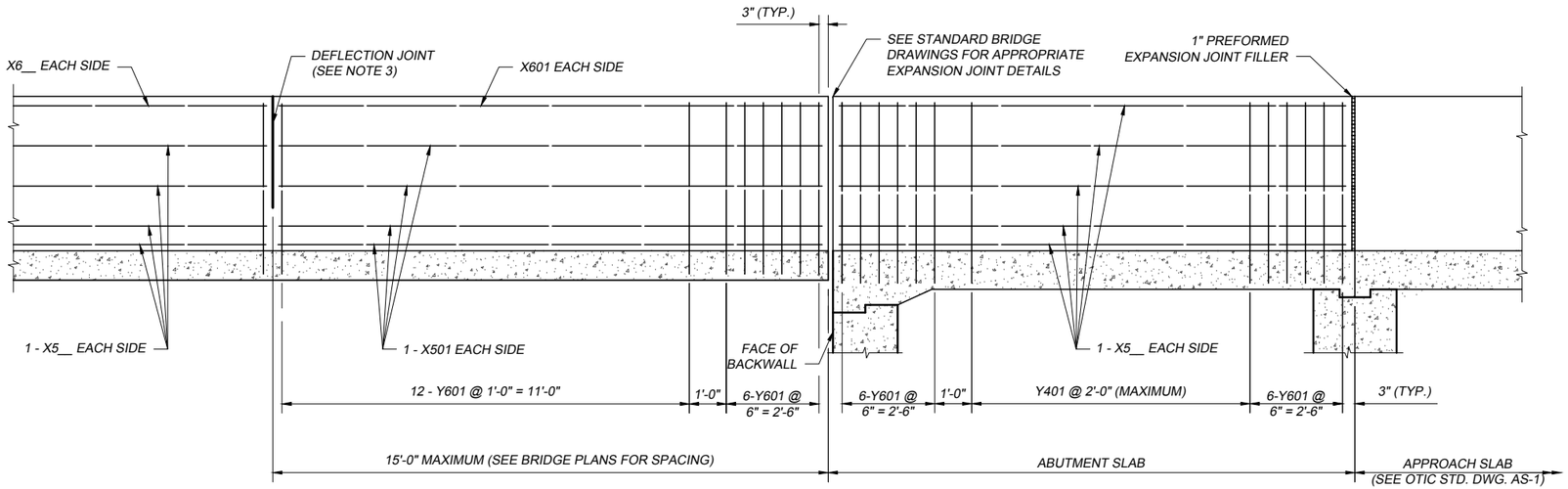
PLAN VIEW

50" SINGLE SLOPE BACK-TO-BACK CONCRETE MEDIAN
BRIDGE PARAPET WITH TYPICAL ABUTMENT SHOWN

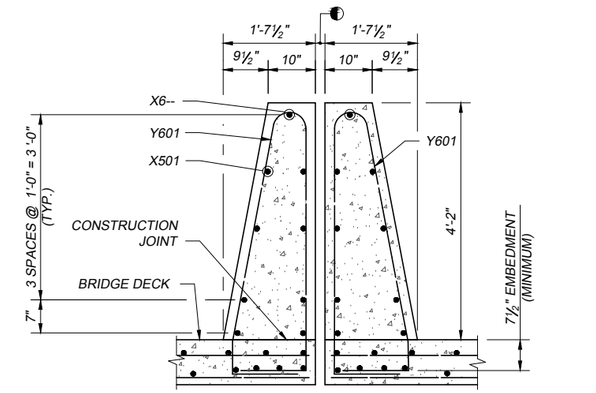


SECTION B-B

REINFORCED CONCRETE DECK ON STEEL (BEAMS/GIRDERS NOT SHOWN)
(CONCRETE PARAPET CROSS SECTION AREA = 10.25 SQ.FT. BOTH SIDES)



SECTION A-A



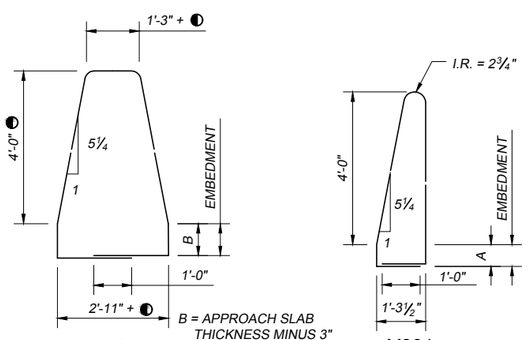
SECTION C-C

REINFORCED CONCRETE DECK ON STEEL
(BEAMS/GIRDERS NOT SHOWN)

REINFORCING STEEL LIST

MARK	LENGTH	TYPE
X501	14'-8"	STR
X5__		STR ⊕
X601	14'-8"	STR
X6__		STR ⊕
Y401	2B + 13'-3" + 2	BENT
Y601	2A + 10'-5½"	BENT

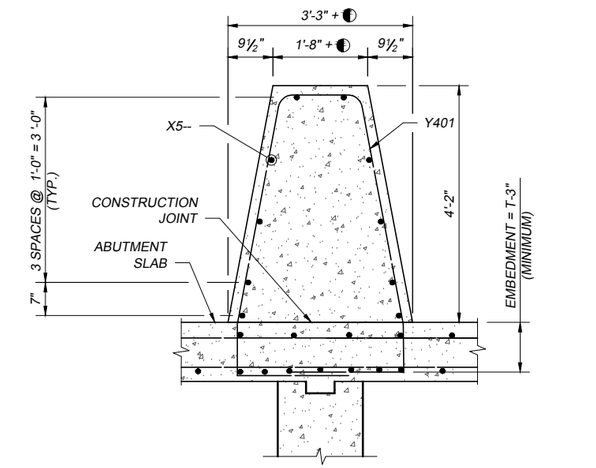
BENDING DIAGRAMS



B = APPROACH SLAB THICKNESS MINUS 3"
⊕ = SEE PROJECT PLANS

NOTE:

FOR NOTES AND ADDITIONAL DETAILS, SEE SHEET 2 OF 2.



SECTION D-D

CONCRETE PARAPET CROSS SECTION AREA
=10.25 SQ.FT + AREA OF MEDIAN GAP

= 6" MAXIMUM GAP
T = APPROACH SLAB THICKNESS

OHIO TURNPIKE

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

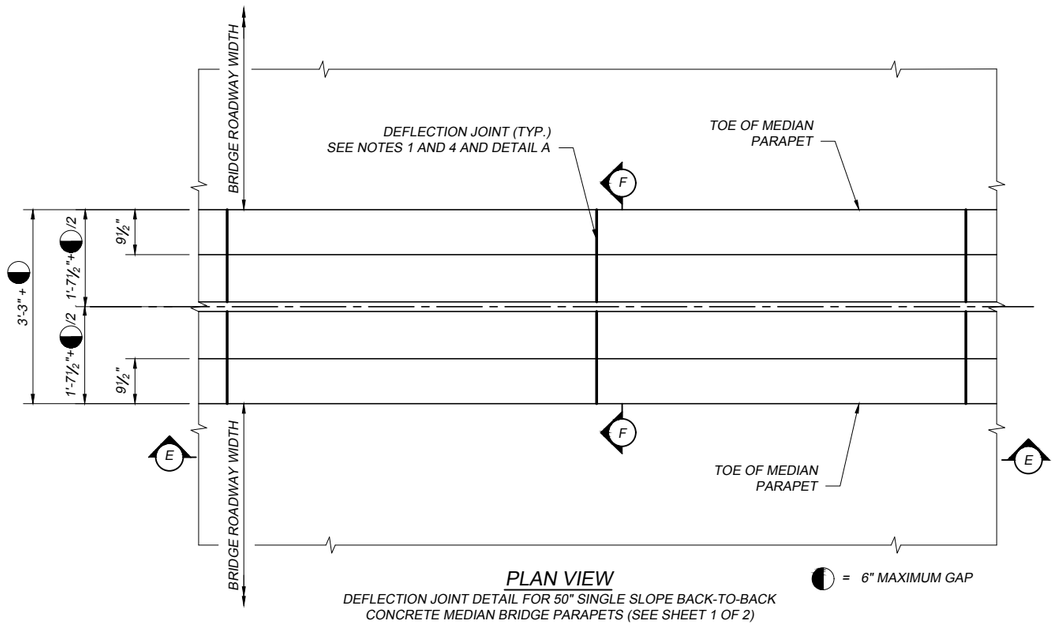
50" SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPET

SBR-50

1 / 2

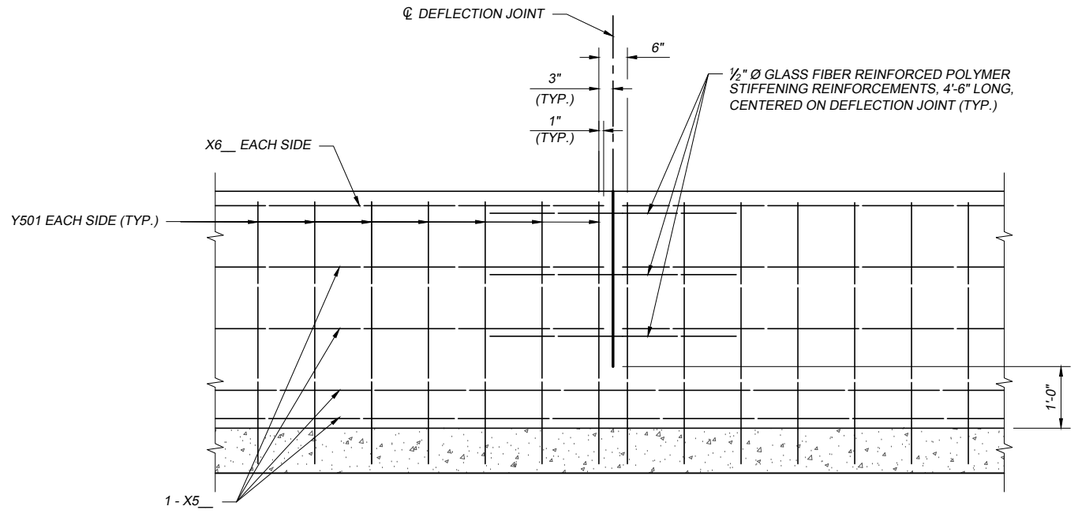
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

SBR-50 2018-09-19.DWG; 10/23/18 - 11:26am



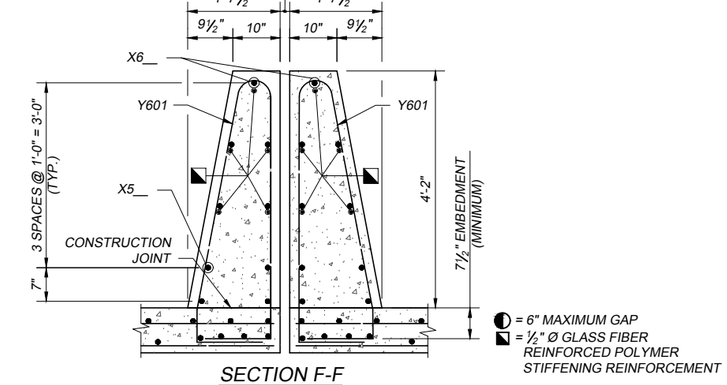
PLAN VIEW

DEFLECTION JOINT DETAIL FOR 50" SINGLE SLOPE BACK-TO-BACK CONCRETE MEDIAN BRIDGE PARAPETS (SEE SHEET 1 OF 2)



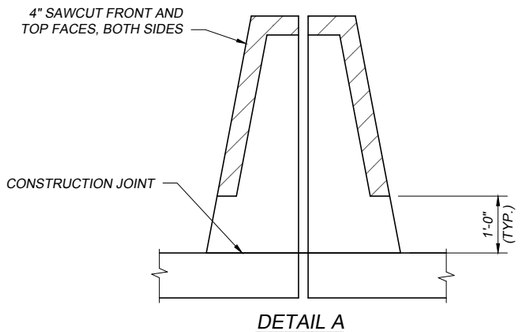
ELEVATION E-E

GLASS FIBER REINFORCED POLYMER REBAR STIFFENING DETAIL AT DEFLECTION JOINT FOR 50" SINGLE SLOPE BACK-TO-BACK CONCRETE MEDIAN BRIDGE PARAPETS (SEE NOTE 3)



SECTION F-F

REINFORCED CONCRETE DECK ON STEEL BEAMS/GIRDERS (BEAMS/GIRDERS NOT SHOWN)



DETAIL A

SECTION THROUGH SAWCUT SAWCUT PERIMETER = 8'-0" (BOTH SIDES)

NOTES:

1. FOR THE ENTIRE LENGTH OF SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPETS, PROJECT PLANS SHALL SHOW THE LOCATIONS OF DEFLECTION JOINTS.
2. DEFLECTION JOINT SPACING SHALL NOT EXCEED 15'-0" ON CENTERS. FOR CONTINUOUS STRUCTURES, THE DEFLECTION JOINTS WITHIN THE DEAD LOAD CONTRAFLEXURE (NEGATIVE MOMENT REGIONS OVER PIER LOCATIONS) SHALL BE SPACED NOT LESS THAN 5'-0" NOR MORE THAN 7'-6" ON CENTERS.
3. PAYMENT FOR ½" DIAMETER GLASS FIBER REINFORCED POLYMER STIFFENING REINFORCEMENT SHALL BE INCLUDED WITH CONTRACT PRICE FOR ITEM 509 - EPOXY COATED REINFORCING STEEL.
4. FOR 50" SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPET, PROJECT PLANS SHALL INCLUDE PLAN VIEW, ELEVATION VIEW, SECTIONS, REINFORCING MARKS, REINFORCING BENDING DIAGRAMS, AND REINFORCING WEIGHTS.
5. FOR CONCRETE BARRIER BEYOND THE STRUCTURE (ROADWAY BARRIER), SEE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION STANDARD DRAWING AS-1, CBR-1 OR CBR-2.

DESIGN CRITERIA:
50" SINGLE SLOPE BACK-TO-BACK CONCRETE MEDIAN BRIDGE PARAPET MEETS THE REQUIREMENTS OF NCHRP 350 TEST LEVEL 5 AND "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS", 2012.

DESIGN DATA:
CONCRETE - COMPRESSIVE STRENGTH = 4.5 KSI
REINFORCING STEEL - MINIMUM YIELD STRENGTH = 60 KSI

AREA OF 50" SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPET IS SHOWN ON SHEET 1 OF 2.

DEFLECTION JOINTS FOR 50" SINGLE SLOPE BACK-TO-BACK REINFORCED CONCRETE MEDIAN BRIDGE PARAPETS (SHEET 1 OF 2): SAWCUT 1¼" INCH DEEP DEFLECTION JOINTS ALONG THE PERIMETER OF THE MEDIAN BRIDGE PARAPET WHEN THE CONCRETE IS STILL GREEN OR AS SOON AS THE SAW CAN BE OPERATED WITHOUT DAMAGING THE CONCRETE.

AFTER THE CONCRETE CURING PERIOD SPECIFIED IN CMS 511.14 HAS BEEN REACHED, PERFORM 4" SAWCUT THROUGH THE GLASS FIBER REINFORCED POLYMER AS SHOWN IN DETAIL A.

THE CONTRACTOR HAS AN OPTION TO PERFORM FULL DEPTH SAWCUT. HOWEVER, THE SAWCUT SHALL NOT BE LESS THAN 1'-0" FROM THE TOP OF THE CONCRETE DECK SLAB.

USE AN EDGE GUIDE, FENCE, OR JIG TO ENSURE THAT THE CUT JOINT IS STRAIGHT, TRUE, AND ALIGNED ON ALL FACES OF THE MEDIAN BRIDGE PARAPET. THE JOINT WIDTH SHALL BE THE WIDTH OF THE SAW BLADE, A NOMINAL WIDTH OF ¼ INCH.

SEAL THE PERIMETER OF THE DEFLECTION JOINTS TO A MINIMUM DEPTH OF ONE INCH WITH A POLYURETHANE OR POLYMERIC MATERIAL CONFORMING TO ASTM C920, TYPE S. LEAVE THE BOTTOM ½ INCH OF BOTH FRONT FACES OF THE MEDIAN BRIDGE PARAPETS UNSEALED TO ALLOW ANY WATER WHICH MAY ENTER THE JOINT TO ESCAPE.

AT EACH DEFLECTION JOINT LOCATION, USE GLASS FIBER REINFORCED POLYMER REINFORCEMENT TO MAINTAIN THE RIGIDITY OF THE CAGE ACROSS THE PROPOSED JOINTS AT THOSE LONGITUDINAL BARS AS SHOWN IN SECTIONS B-B & F-F ABOVE. OTHER NON-FERROUS REINFORCEMENT MAY BE PROPOSED FOR USE, SUBJECT TO APPROVAL BY THE ENGINEER.

DEFLECTION JOINTS ARE NOT REQUIRED WITHIN THE ABUTMENT SLAB MEDIAN PARAPET SECTIONS.

THE MAXIMUM SPACING OF VERTICAL REINFORCING BARS FOR THE 50" SINGLE SLOPE BACK-TO-BACK CONCRETE MEDIAN BRIDGE PARAPET SHALL BE 1'-0", EXCEPT AS OTHERWISE NOTED.

IF THE MINIMUM EMBEDMENT SHOWN FOR THE VERTICAL REINFORCING BARS INTO THE BRIDGE DECK IS NOT MET, THEN THE DESIGNER SHALL CALCULATE THE REQUIRED REINFORCEMENT ACCORDING TO SECTION 13 OF THE "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS.

LAP LENGTHS - THE MINIMUM LAP LENGTH FOR #5 BARS IS 2'-1".

DATE: SEPTEMBER 19, 2018

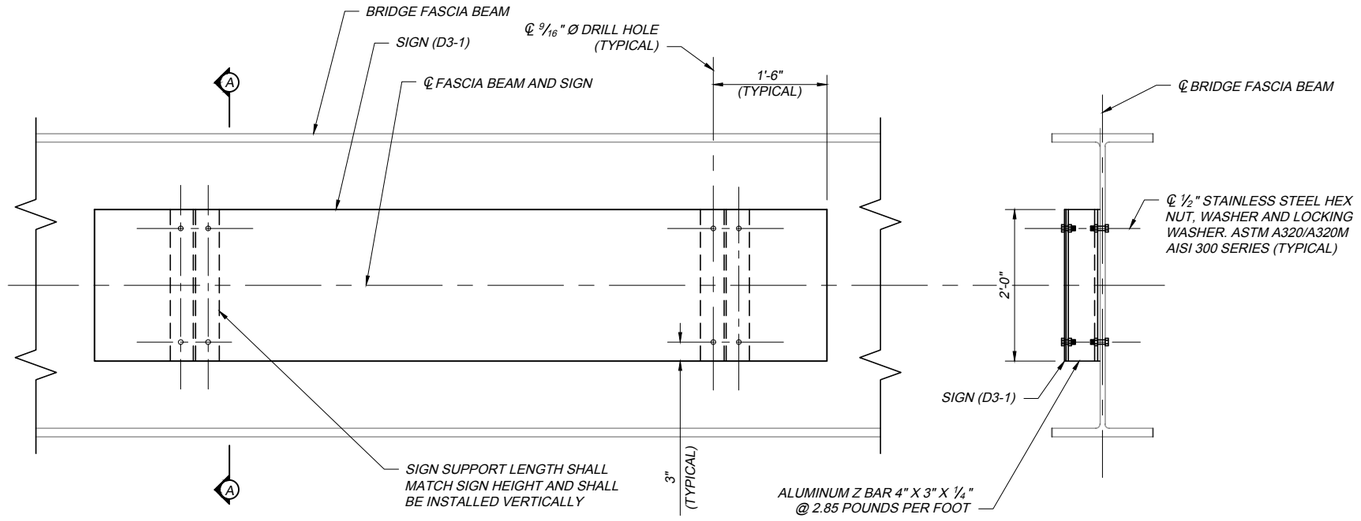
STANDARD DRAWING

50" SINGLE SLOPE CONCRETE MEDIAN BRIDGE PARAPET

SBR-50

2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



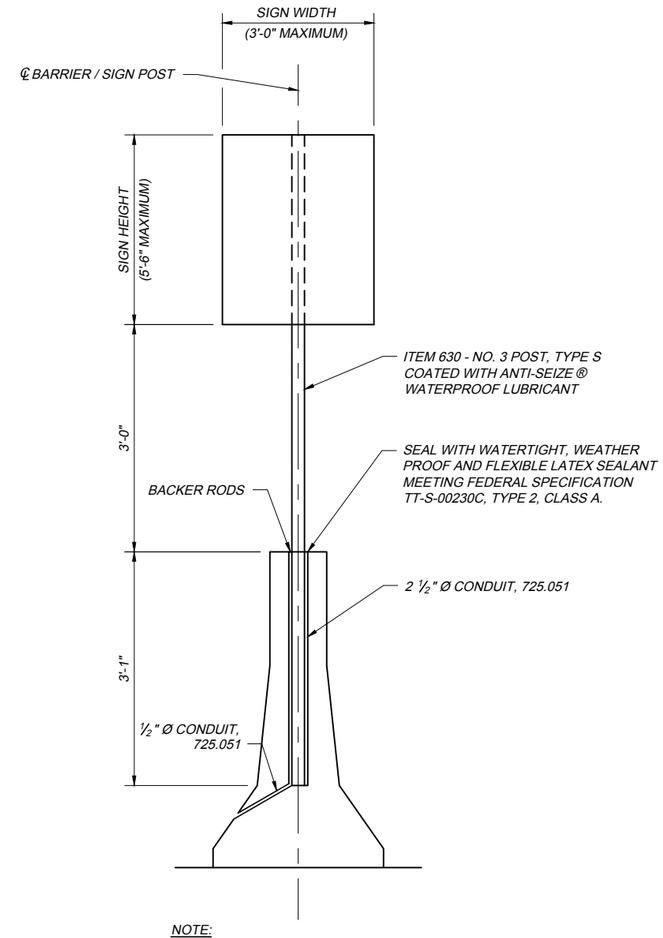
ELEVATION

SECTION A-A

NOTE:

INSTALL 1/16" CHLOROPRENE GASKET OR APPROVED EQUAL TO PREVENT CONTACT BETWEEN ALUMINUM AND STEEL PARTS.

ITEM 630 - SIGN SUPPORT ASSEMBLY, BRIDGE MOUNTED, AS PER PLAN



NOTE:

COST OF CONDUIT, SEALANT, BACKER RODS, ETC. SHALL BE INCIDENTAL TO NO. 3 POST SUPPORT.

ITEM 630 - GROUND MOUNTED SUPPORT, NO. 3 POST, AS PER PLAN

SIGN SUPPORTS

TC-1 2017.10.20.DWG; 10/25/17 - 4:33pm

OHIO TURNPIKE

DATE: OCTOBER 20, 2017

STANDARD DRAWING

TRAFFIC CONTROL

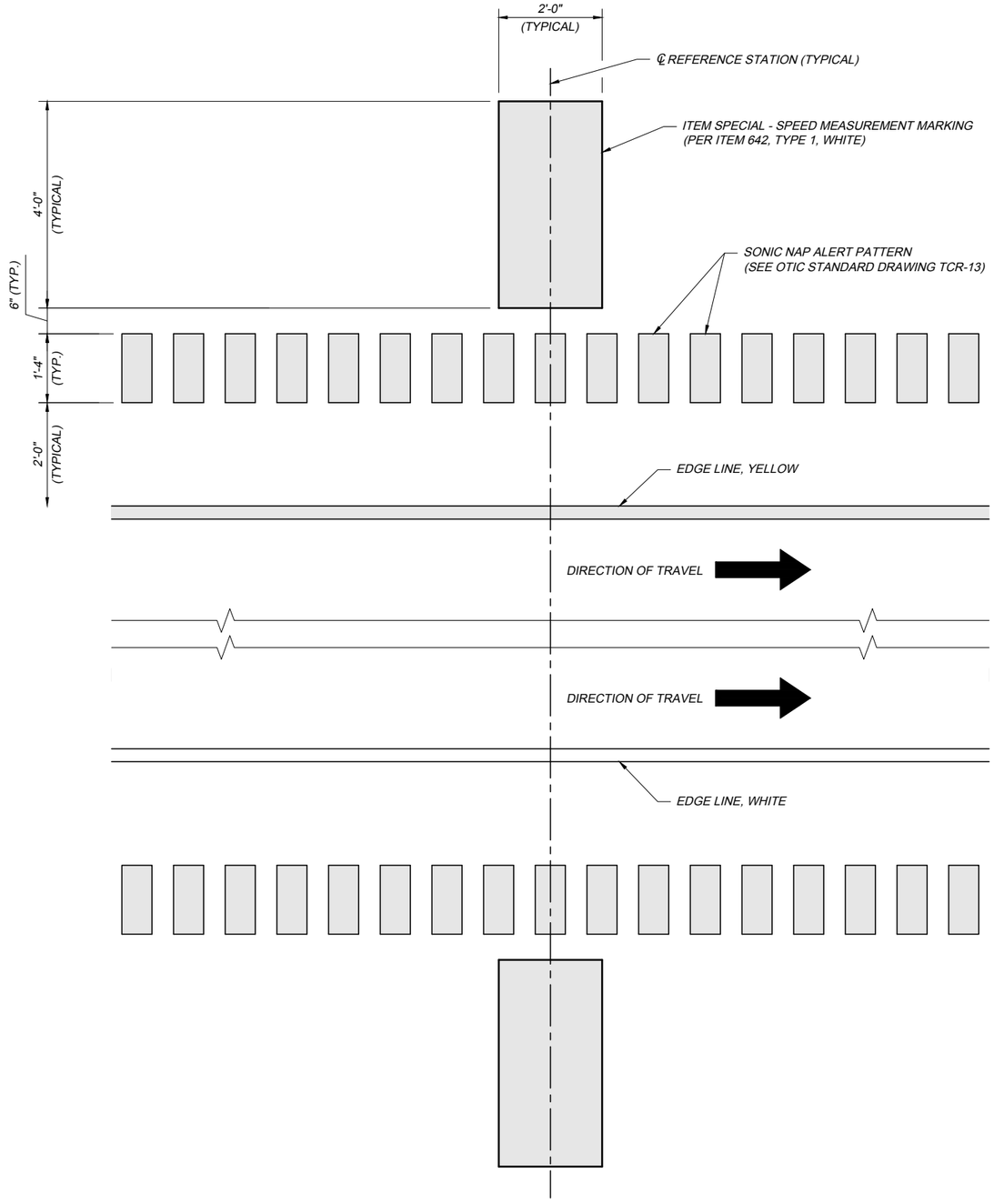
BRIDGE AND BARRIER SIGN SUPPORT DETAILS

TC-1

1 / 1

OHIO TURNPIKE

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



ITEM SPECIAL - SPEED MEASUREMENT MARKING DETAIL

NOTES:

ITEM SPECIAL - SPEED MEASUREMENT MARKING

SPEED MEASUREMENT MARKINGS SHALL BE ITEM 642, TYPE 1 WHITE STRIPES 24 INCHES WIDE, 48 INCHES LONG AND PLACED ON THE PAVED SHOULDER AT 90 DEGREES TO THE DIRECTION OF TRAVEL AS DETAILED. THEY SHALL BE PLACED DIRECTLY OPPOSITE ONE ANOTHER AT ONE-QUARTER MILE INTERVALS AS SHOWN IN THE PLANS. THE SURVEYOR SHALL PLACE A PK NAIL APPROXIMATELY 5-FEET FROM THE EDGE LINE AT EVERY SPEED MEASUREMENT MARKING.

THE MARKINGS SHALL BE LAID OUT BY A REGISTERED SURVEYOR. THE LINEAR MEASUREMENTS SHALL BE SURFACE MEASURED AND NOT BASED ON A HORIZONTAL PROJECTION. ON SECTIONS WITH CURVES, THE MARKINGS ON THE INSIDE OF THE CURVE SHALL MEET THE REQUIRED ONE-QUARTER MILE INTERVALS. MARKINGS ON THE OUTSIDE OF THE CURVE SHALL BE DIRECTLY ACROSS FROM THE MARKINGS ON THE INSIDE OF THE CURVE, NOT STAGGERED.

THE OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION (OTIC) WILL PROVIDE THE SURVEYOR WITH THE OTIC "SPEED MEASUREMENT SURVEY" FORM. THIS FORM SHALL BE SEALED AND SIGNED BY A REGISTERED SURVEYOR PRIOR TO SUBMITTING IT TO THE COMMISSION, THIS IS THE ONLY FORM THAT WILL BE ACCEPTED. THE FORM SHALL BE RETURNED TO THE OTIC TRAFFIC ENGINEER.

PAYMENT SHALL BE MADE AT THE UNIT BID PRICE PER EACH FOR ITEM SPECIAL - SPEED MEASUREMENT MARKING AND SHALL INCLUDE ALL LABOR, SURVEYING, TOOLS, MATERIALS AND EQUIPMENT NECESSARY TO PERFORM THE REQUIRED WORK AS SHOWN.

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

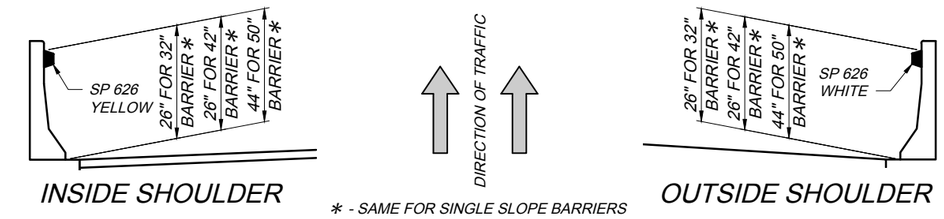
TRAFFIC CONTROL
SPEED MEASUREMENT MARKING

TC-2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TC-2 2023.02.17.DWG; 2/28/23 - 8:32am

CONCRETE BARRIER DELINEATION

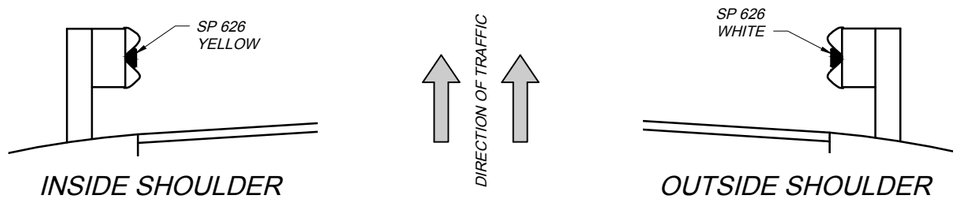


INSIDE SHOULDER

OUTSIDE SHOULDER

* - SAME FOR SINGLE SLOPE BARRIERS

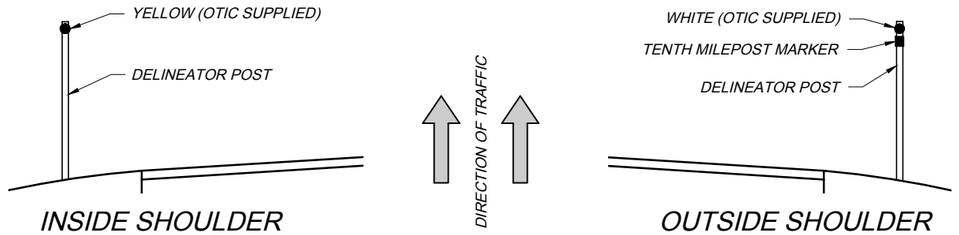
GUARDRAIL DELINEATION



INSIDE SHOULDER

OUTSIDE SHOULDER

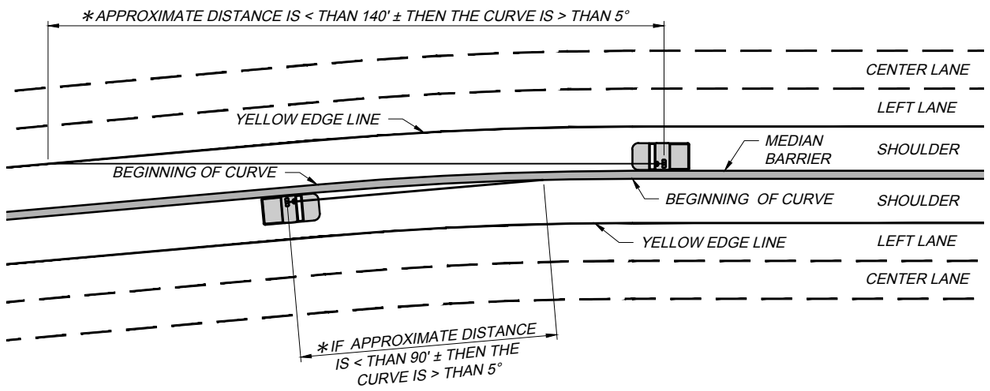
DELINEATOR POST



INSIDE SHOULDER

OUTSIDE SHOULDER

FIGURE 1



NOTE:

* WORK VEHICLE MUST BE APPROXIMATELY ONE (1) FOOT FROM THE FACE OF THE BARRIER WITH THE FRONT OF THE WORK VEHICLE AT THE BEGINNING OF THE CURVE. THE APPROXIMATE DISTANCE IS TO BE MEASURED FROM THE DRIVERS POSITION IN WORK VEHICLE STRAIGHT AHEAD TO WHERE THE YELLOW EDGELINE OR CONCRETE BARRIER FACE INTERSECTS THE VIEWER'S LINE OF SIGHT. THE VIEWER'S BODY SHOULD BE PERPENDICULAR WITH THE TANGENT OF THE CURVE.

NOTES:

DELINEATION SHALL BE CONSISTENT IN SPACING, MOUNTING HEIGHT, ORIENTATION, AND RETROREFLECTIVITY.

DELINEATOR POSTS

1. STEEL DELINEATOR POSTS SHALL BE INSTALLED EVERY TWENTIETH OF A MILE WITH THE APPROPRIATE REFLECTOR. "TENTH" DELINEATOR POSTS SHALL HAVE THE PROPER MARKER INSTALLED WITH A WHITE NUMBER ON A BLACK BACKGROUND.

GUARDRAIL AND BARRIER DELINEATION LAYOUT, SPACING AND HEIGHT

1. ALL GUARDRAIL AND BARRIER SHALL HAVE A SP 626 BARRIER REFLECTOR AT THE BEGINNING AND THE END OF THE RUN AND AT LEAST ONE (1) EVENLY SPACED BETWEEN THE TERMINI. THE SP 626 BARRIER REFLECTORS SHALL BE SPACED AT 100 FEET ON TANGENTS AND ON CURVES OF LESS THAN 5 DEGREES. THE SP 626 BARRIER REFLECTORS SHALL BE SPACED AT 50 FEET FOR CURVES OF 5 DEGREES OR GREATER (SEE FIGURE 1 FOR ASSISTANCE IN IDENTIFYING FIVE-DEGREE CURVES).

   THE SPACING ON TANGENTS AND CURVES LESS THAN 5 DEGREES MAY VARY FROM 75 FEET TO 125 FEET IN THE FINAL 250 FEET TO ACHIEVE EVEN SPACING OF THE REFLECTORS.

2. WHEN A GUARDRAIL ANCHOR ASSEMBLY OR A GUARDRAIL BRIDGE TERMINAL ASSEMBLY IS USED, THE FIRST (OR LAST) SP 626 GUARDRAIL REFLECTOR SHALL BE PLACED NEAR THE FIRST (OR LAST) POST RATHER THAN AT THE END OF THE ASSEMBLY.

3. WHEN A BUFFER END SECTION OR SIMILAR DEVICE IS PROVIDED ON THE END OF THE GUARDRAIL, THE FIRST SP 626 GUARDRAIL REFLECTOR SHALL BE PLACED SO THAT IT IS VISIBLE TO APPROACHING TRAFFIC.

4. WHEN GUARDRAIL, BARRIERS, RETAINING WALLS, OR BRIDGE PARAPETS ARE TIED TOGETHER IN A CONTINUOUS RUN, THE TOTAL LENGTH OF THE RUN SHALL BE USED FOR DETERMINING THE NUMBER AND LOCATION OF REFLECTORS.

5. WHEN THE DISTANCE FROM A RUN OF GUARDRAIL / BARRIER VARIES FROM THE EDGE OF PAVEMENT, A REFLECTOR SHALL BE PLACED WHERE THE RUN FIRST APPROACHES CLOSEST TO THE PAVEMENT. IF THIS RESULTS IN SPACING GREATER THAN 125 FEET, OR 65 FEET IN CASES WHERE 50 FOOT STANDARD SPACING IS REQUIRED, AN ADDITIONAL REFLECTOR SHALL BE INSTALLED.

6. MEDIAN WALL DELINEATION: REDUCE SPACING TO 20 FEET WHERE BARRIER WALL IS WIDER AT BRIDGE PIERS AND OVERHEAD SIGN SUPPORTS. THE 20 FOOT SPACING SHALL BEGIN WHERE THE SHOULDER BEGINS TO NARROW.

7. BARRIER DELINEATION (BRIDGE PARAPET WALLS): ONE PLACED 14 FEET FROM EACH END AND THEN EVENLY SPACED (50 FOOT MAXIMUM) BETWEEN THE ENDS. IF THERE ISN'T GUARDRAIL AT THE TRAILING END OF THE BRIDGE PARAPET, ADD A DELINEATOR TO THE END OF THE PARAPET.

8. BARRIER DELINEATION (PIER PROTECTION): ONE PLACED 14 FEET FROM EACH END AND EVENLY SPACED (50 FOOT MAXIMUM) BETWEEN THE ENDS. A MINIMUM OF 3 DELINEATORS SHALL BE PLACED ON EACH PIER PROTECTION RUN. IF THERE ISN'T GUARDRAIL AT THE TRAILING END OF THE PIER PROTECTION, ADD A DELINEATOR TO THE END OF THE PIER PROTECTION.

9. ON 50 INCH CONCRETE BARRIER, RETAINING WALLS AND BRIDGE PARAPETS, THE HEIGHT OF THE TOP OF THE SP 626 BARRIER REFLECTOR SHALL BE 44 INCHES ABOVE THE NEAR EDGE OF PAVEMENT, EXCEPT THAT THE TOP OF THE SP 626 BARRIER REFLECTOR SHALL NOT BE LESS THAN 3 INCHES BELOW THE TOP OF THE CONCRETE BARRIER, 32 INCH OR 42 INCH CONCRETE BARRIER, RETAINING WALLS AND BRIDGE PARAPETS, THE HEIGHT OF THE TOP OF THE SP 626 BARRIER REFLECTOR SHALL BE 26 INCHES ABOVE THE NEAR EDGE OF PAVEMENT, EXCEPT THAT THE TOP OF THE SP 626 BARRIER REFLECTOR SHALL NOT BE LESS THAN 3 INCHES BELOW THE TOP OF THE CONCRETE BARRIER.

10. SP 626 GUARDRAIL REFLECTORS SHALL BE INSTALLED WITHIN THE CONCAVE OF THE GUARDRAIL. ATTACHMENT SHALL BE BY USE OF A BRACKET WHICH FITS UNDER THE HEAD OF THE POST BOLT.

GUARDRAIL AND BARRIER DELINEATION INSTALLATION

A. ATTACHMENT OF THE SP 626 BARRIER REFLECTOR SHALL BE BY A SUITABLE CORROSION RESISTANT MECHANICAL FASTENER, MECHANICAL BRACKET FOR GUARDRAIL AND APPROPRIATE ADHESIVE FOR CONCRETE BARRIER WALLS.

B. THE SURFACE OF THE CONCRETE BARRIER SHALL BE WIRE BRUSHED TO REMOVE ANY LOOSE CONCRETE, RUST, DIRT, OR OTHER LOOSE MATERIAL. DUST CREATED BY WIRE BRUSHING SHALL BE REMOVED PRIOR TO APPLICATION OF ADHESIVE. ADHESIVE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

C. THE SP 626 BARRIER REFLECTOR FACE SHALL BE CLEAN AND FREE OF DUST, DIRT, ADHESIVE OR ANY FOREIGN MATERIAL AFTER INSTALLATION.

D. EXCEPT WHEN MOUNTED IN THE CONCAVE RECESS OF GUARDRAIL, SINGLE-DIRECTIONAL SP 626 BARRIER REFLECTORS SHALL HAVE THE REFLECTIVE FACE ROTATED FORWARD FROM THE VERTICAL (OR PLUMB) POSITION BY APPROXIMATELY 2 DEGREES TO FACILITATE "RAIN WASHING" OF THE REFLECTOR FACE.

E. WHEN REPLACING REFLECTORS ON A CONCRETE SURFACE, THE NEW LOCATION OF THE SP 626 BARRIER REFLECTOR SHALL BE LOCATED APPROXIMATELY 3 INCHES HORIZONTALLY IN EITHER DIRECTION FROM THE OLD LOCATION.

F. SP 626 BARRIER REFLECTORS SHALL BE THE SAME COLOR AS THE ADJACENT EDGE LINE.

DATE: FEBRUARY 17, 2023

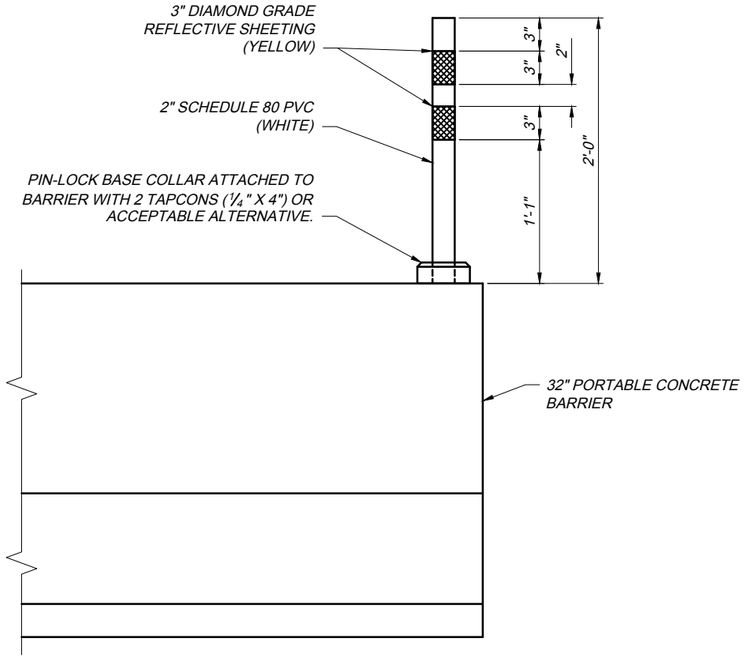
STANDARD DRAWING

TRAFFIC CONTROL
MAINLINE DELINEATION

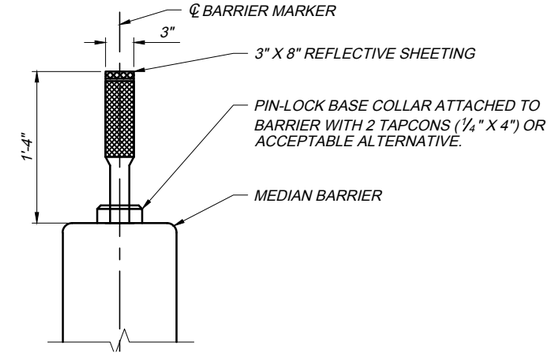
TC-3

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

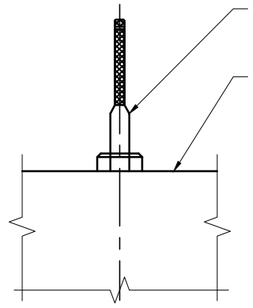
TC-3 2023.02.17.dwg; 2/22/23 - 3:13pm



MEDIAN BARRIER CROSS-OVER DELINEATOR



CROSS SECTION



SIDE VIEW

COLOR LEGEND FOR MARKER

(AS VIEWED FROM DIRECTION OF TRAVEL) FACED WITH 8" TALL BLUE SHEETING

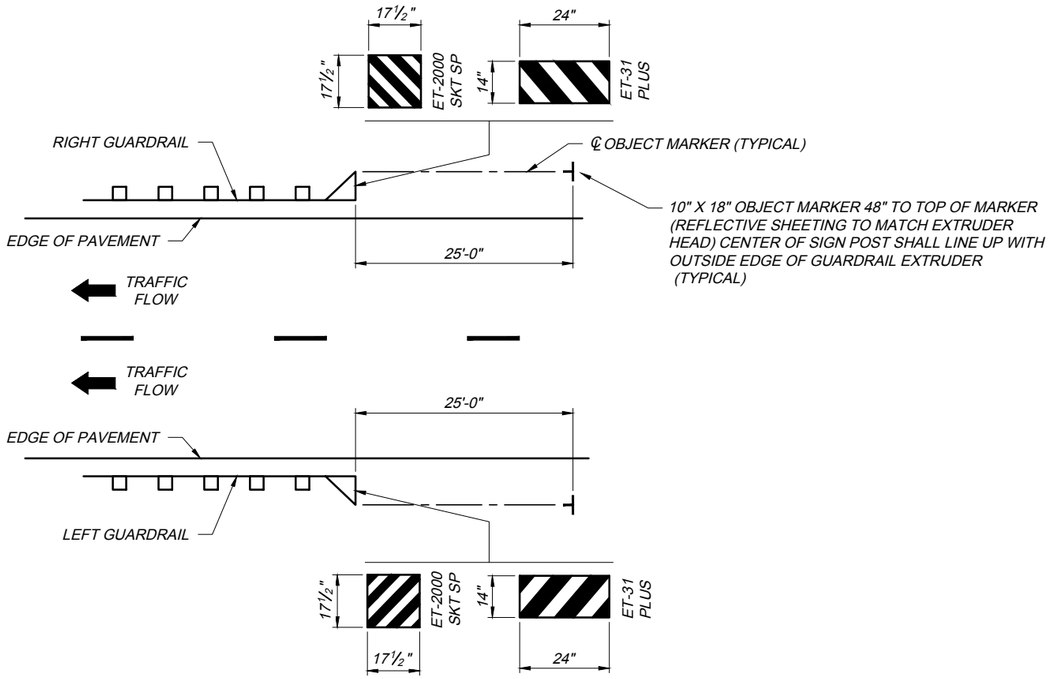
SOLID BLUE - WALL DRAIN ONLY, NO GRATE (3" x 8" BLUE)

BLUE-ORANGE-BLUE - WALL DRAIN WITH GRATE (2" BLUE, 4" ORANGE, 2" BLUE)

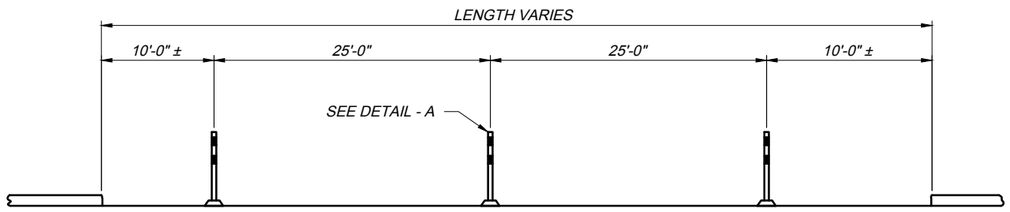
ORANGE-BLUE - GRATE ONLY, NO WALL DRAIN (4" ORANGE ON TOP, 4" BLUE ON BOTTOM)

BLACK - NO GRATE, NO WALL DRAIN THIS SIDE

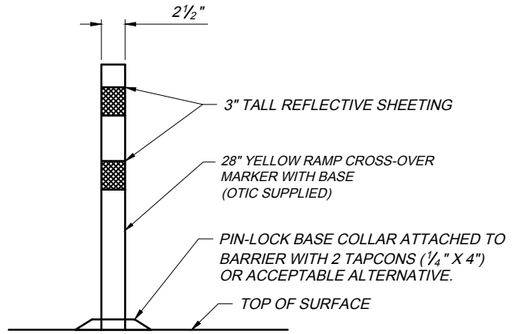
MEDIAN DRAIN DELINEATOR



GUARDRAIL EXTRUDER DELINEATOR



PROFILE VIEW



DETAIL - A

TURNPIKE RAMP CROSS-OVER DELINEATORS

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

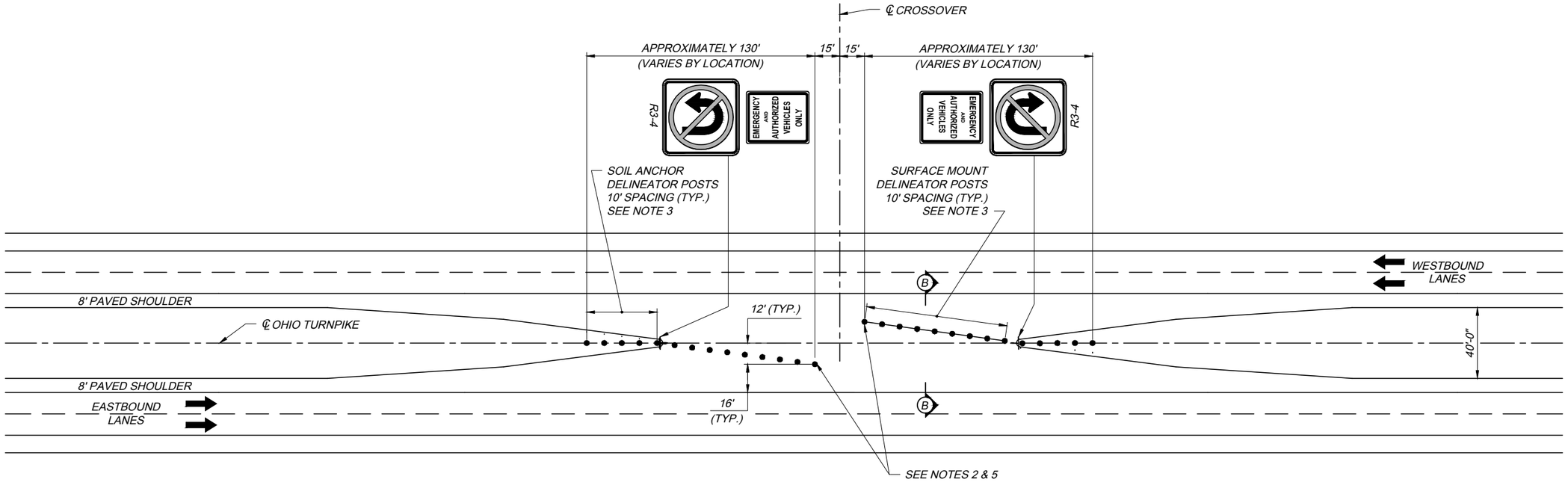
STANDARD DRAWING

DATE: FEBRUARY 17, 2023

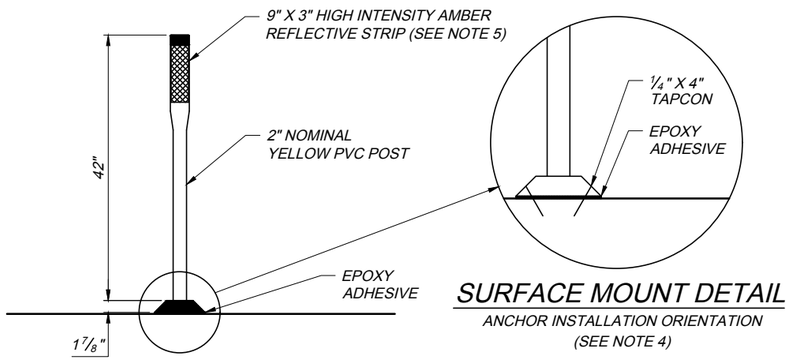
TRAFFIC CONTROL
MISCELLANEOUS DELINEATION

TC-3

TC-3 2023.02.17.dwg; 2/22/23 - 3:13pm



CROSSOVER DELINEATOR POST PLAN



SURFACE MOUNT DETAIL

ANCHOR INSTALLATION ORIENTATION
(SEE NOTE 4)

SURFACE MOUNT MEDIAN DELINEATOR POST

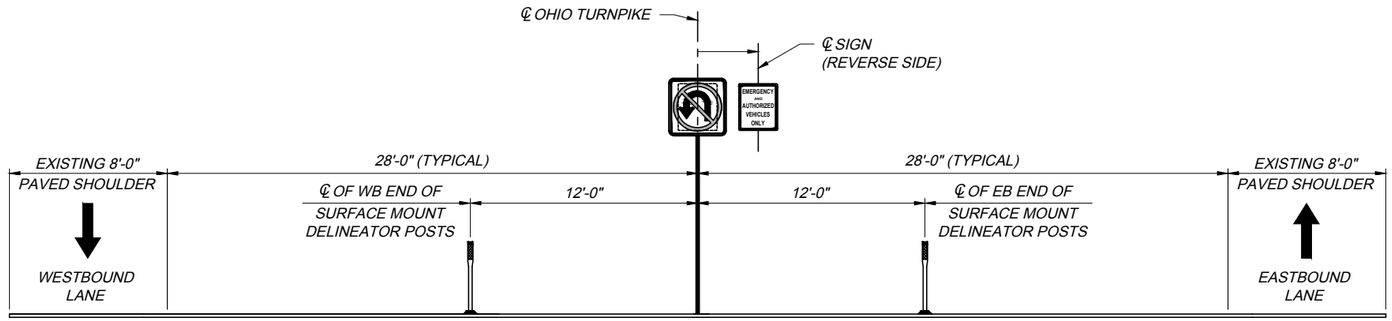
(SEE NOTES 3 AND 4)

NOTES:

42" AMBER DELINEATOR POST WITH SURFACE MOUNT PIN-LOCK BASE SAFEHIT MODEL SH242ZSMA-YAO9

42" AMBER DELINEATOR POST WITH18" SOIL ANCHOR SAFEHIT MODEL SHZ42GP3-YAO9

PLACE REFLECTIVE STRIP ON BOTH SIDES OF POST.



SECTION B-B

NOTES:

1. THE FORTY-TWO INCH HIGH (42") DELINEATOR POSTS SHALL BE INSTALLED IN CONFORMANCE WITH THE PLAN SHOWN.
2. MAXIMUM OPEN WIDTH SHALL BE THIRTY FEET (30').
3. THE DELINEATOR POST SHALL HAVE THE AMBER REFLECTIVE STRIP ORIENTED IN THE DIRECTION OF TRAFFIC.
4. INSTALL SURFACE MOUNT DELINEATOR POST WITH EPOXY ADHESIVE AND ¼" X 4" TAPCON BLUE CLIMASEAL ANCHORS WITH HEX HEAD, OR APPROVED EQUAL.
5. PLACE A BLUE REFLECTIVE STRIP ON BOTH SIDES OF THE LAST POST IN EACH DIRECTION.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

STANDARD DRAWING

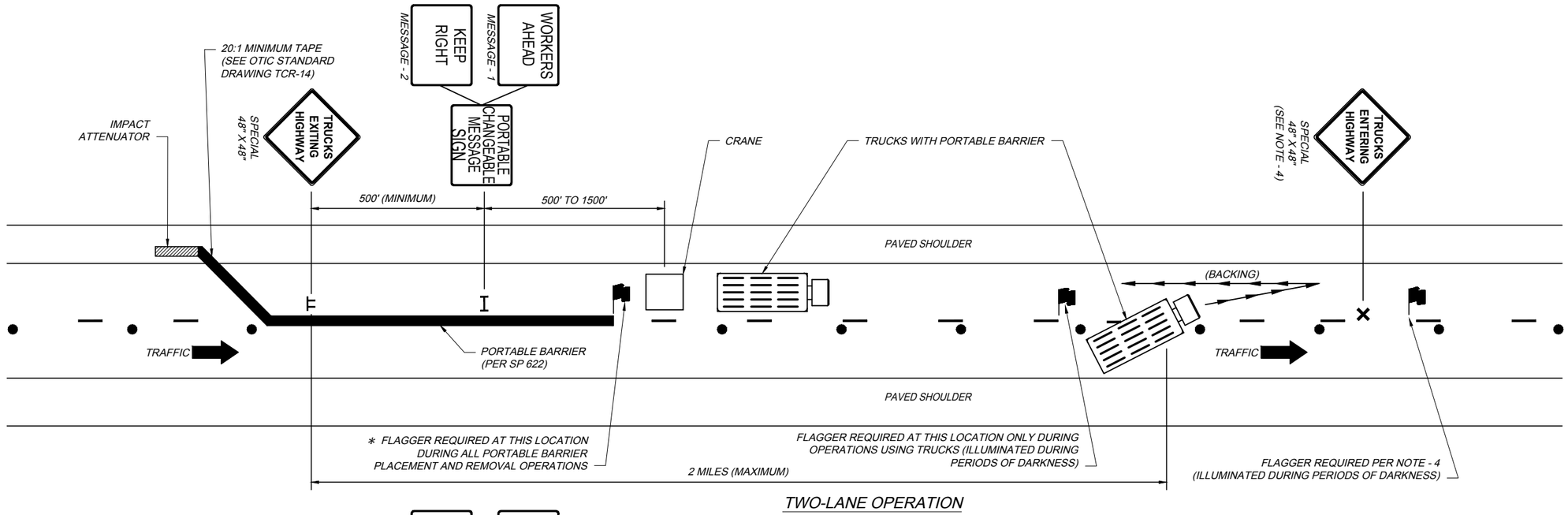
DATE: JANUARY 7, 2021

TRAFFIC CONTROL
2 - LANE HIGH SPEED CROSSOVER DELINEATION

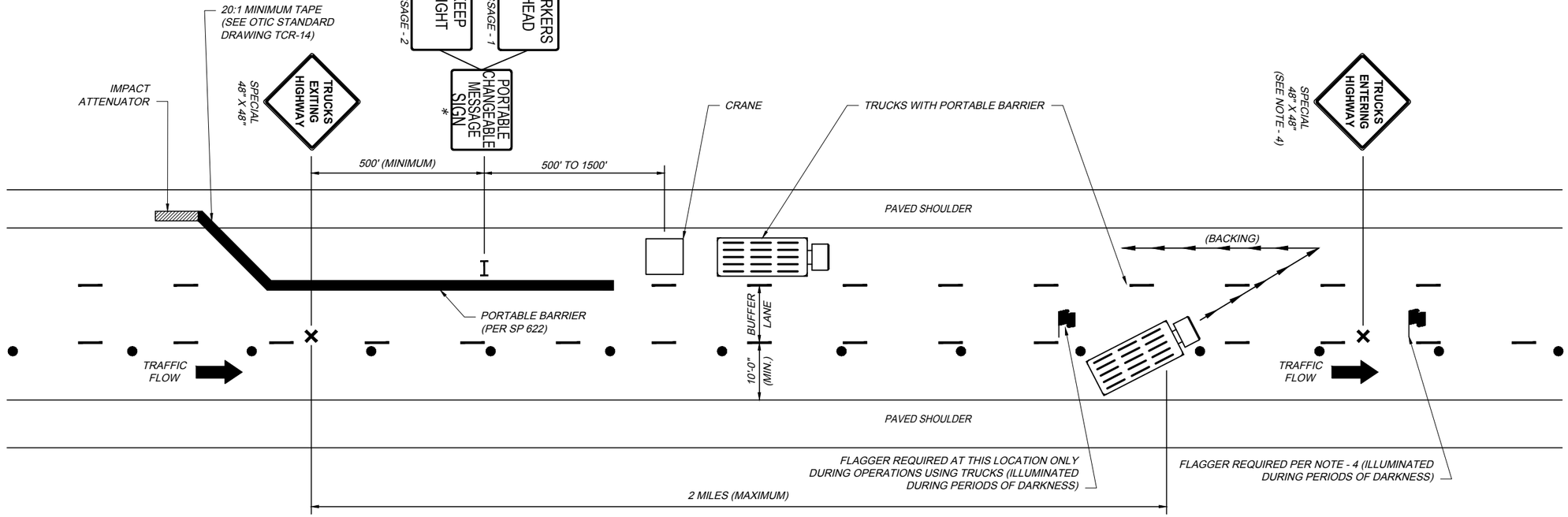
TC-4

1 / 1

TC-4 2021.01.07.dwg; 1/12/21



TWO-LANE OPERATION



THREE-LANE OPERATION
(WITH BUFFER LANE)

NOTES:

1. FOR NIGHTTIME OPERATIONS ALL LIGHTS SHALL BE DIRECTED AT SUCH AN ANGLE SO AS NOT TO HINDER THE VISION OF ONCOMING TRAFFIC, YET SUFFICIENT TO LIGHT THE CONSTRUCTION AREA.

2. ORDER OF OPERATIONS.

   A. SET IMPACT ATTENUATOR FIRST.
   B. SET BARRIER WITH DIRECTION OF TRAFFIC FLOW.
   C. REMOVE BARRIER AGAINST DIRECTION OF TRAFFIC FLOW.
   D. REMOVE IMPACT ATTENUATOR.

3. CONTRACTOR SHALL ADJUST SIGN AND PORTABLE CHANGEABLE MESSAGE SIGN TO MAINTAIN REQUIRED SPACINGS.

4. IF THE DELIVERY TRUCKS RETURN TO THE OPEN TRAFFIC LANE, A "TRUCKS ENTERING HIGHWAY" SIGN SHALL BE LOCATED 1000 FEET AHEAD OF THE ENTRY LOCATION AND A FLAGGER SHALL BE LOCATED AT THE ENTRY LOCATION. THE FLAGGER AND ADDITIONAL SIGN IS NOT REQUIRED IF THE BARRIER DELIVERY TRUCKS EXIT THE WORK ZONE AT THE END OF THE CLOSED LANE.

5. FOR LEGENDS, DETAILS AND NOTES, SEE OTIC STANDARD DRAWING TCR-2

* - THESE ITEMS ARE NOT REQUIRED IF THERE IS NO EQUIPMENT, MATERIALS OR WORKERS IN THE BUFFER LANE.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

REQUIREMENTS FOR PORTABLE BARRIER SETTING AND REMOVAL OPERATIONS

TCB-1

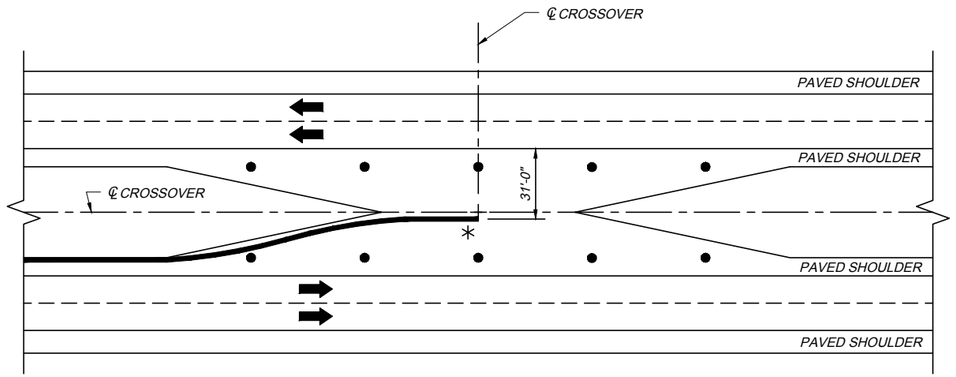
1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

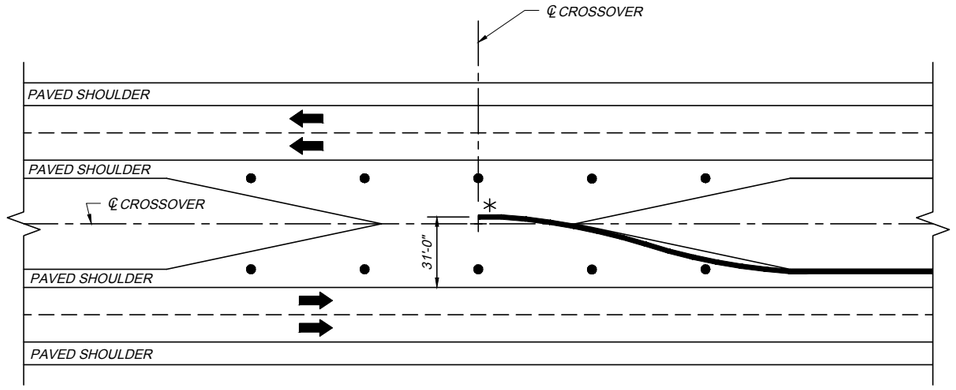
OHIO TURNPIKE

OHIO TURNPIKE

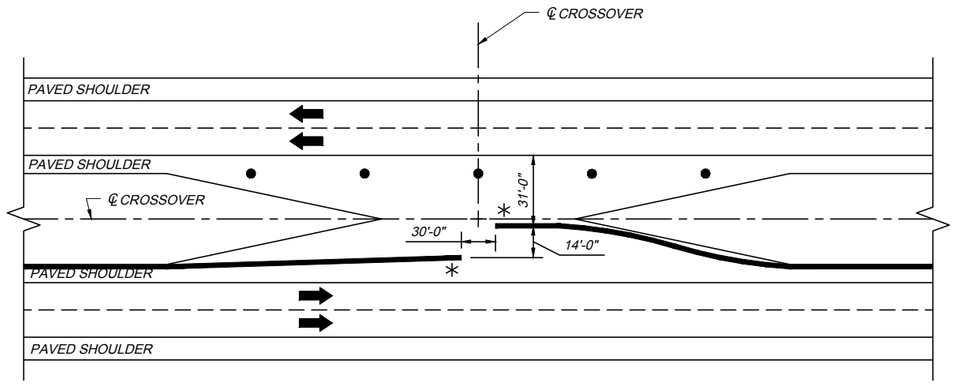
TCB-1 2017.10.20.DWG; 10/25/17 - 4:41pm



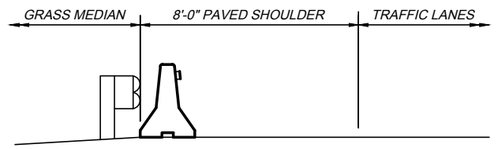
STORAGE WHEN ENDING IN CROSSOVER



STORAGE WHEN BEGINNING IN CROSSOVER

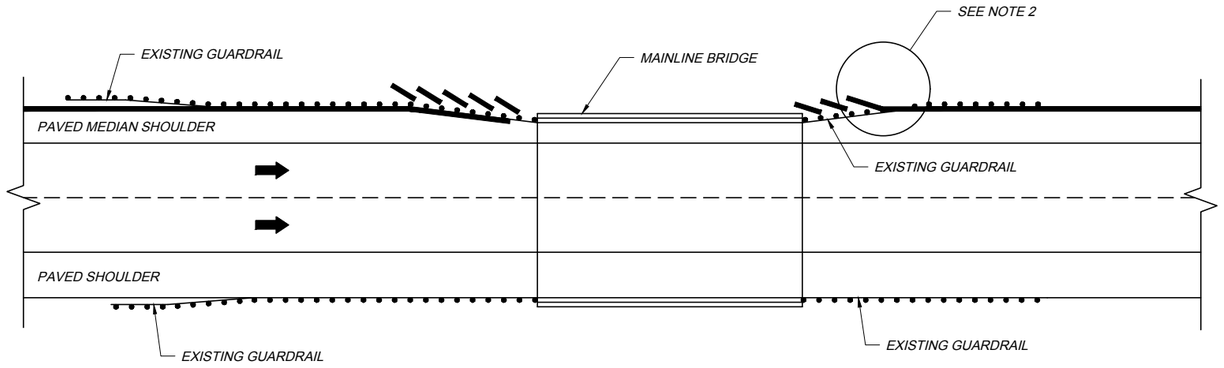


STORAGE WHEN CONTINUING PAST CROSSOVER



TYPICAL PORTABLE BARRIER LOCATION ON PAVED SHOULDER

(ALL LOCATIONS WHERE 8 FOOT MEDIAN SHOULDER IS PRESENT)
(WITH OR WITH OR WITHOUT GUARDRAIL PRESENT)
(DELINEATION PER SP 622A)



STORAGE AT MAINLINE BRIDGES

(IF MEDIAN SHOULDER IS < 8 FEET)

NOTES:

1. ALL DIMENSIONS ARE TO THE CENTERLINE OF BARRIER.
2. REMOVE ONE GUARDRAIL PANEL (AND POST IF NECESSARY) AND PLACE PORTABLE BARRIER: BEGINNING IN GRASS MEDIAN - THRU OPENING IN GUARDRAIL -TO TYPICAL LOCATION ON PAVED SHOULDER.
3. ALL PORTABLE BARRIER STORED BEHIND EXISTING GUARDRAIL SHALL BE PLACED AS PARALLEL TO THE ROADWAY AS POSSIBLE WHILE STILL MAINTAINING AN OVERLAP PATTERN. THIS PORTABLE BARRIER WILL ALSO BE LOCATED A MINIMUM OF 5½ FEET BEHIND THE FACE OF GUARDRAIL.
4. ALL PORTABLE BARRIER SECTIONS SHALL BE CONNECTED TOGETHER EXCEPT THE INDIVIDUAL SECTIONS STORED BEHIND EXISTING GUARDRAIL AT MAINLINE BRIDGES.

LEGEND:

— - PORTABLE BARRIER
✳ - IMPACT ATTENUATOR
● - TRAFFIC DRUMS (50' SPACING)

DATE: OCTOBER 20, 2017

STANDARD DRAWING

PORTABLE BARRIER
STORAGE DETAILS

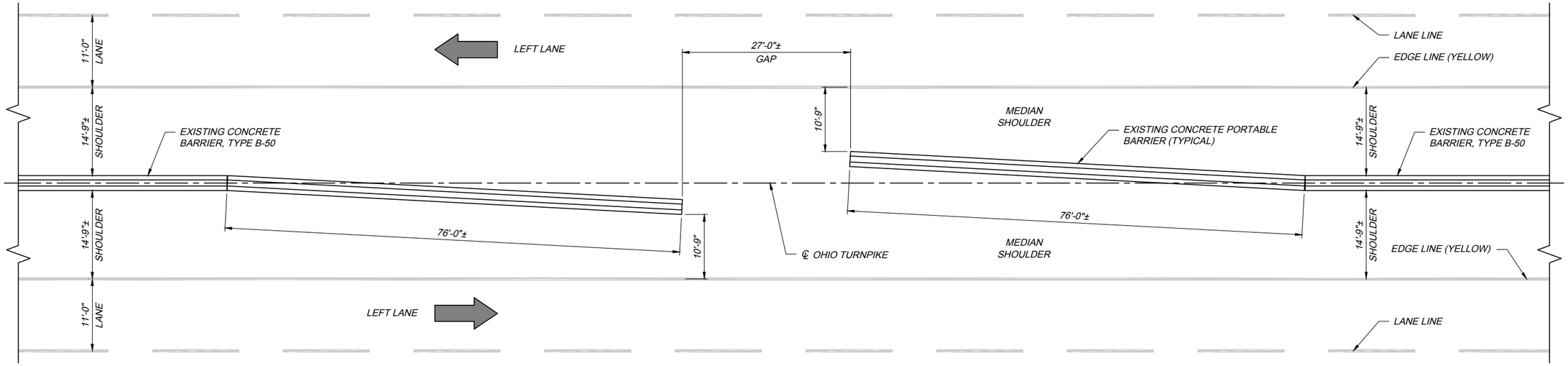
TCB-2

1 / 1

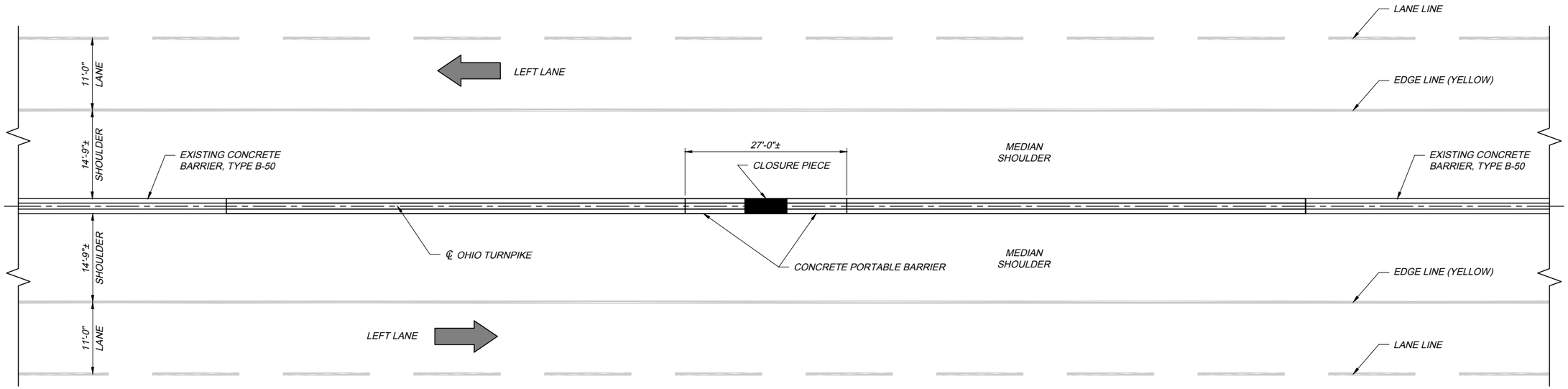
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

TCB-2 2017.10.20.DWG; 2/20/19 - 10:48am



EXISTING CROSSOVER



PROPOSED CONDITIONS

NOTES:

1. CONTRACTOR SHALL ALIGN EXISTING CONCRETE PORTABLE BARRIER ALONG ℄ OF TURNPIKE.
2. CONTRACTOR TO FIELD VERIFY HEIGHT, WIDTH AND OPENING OF EXISTING CONCRETE PORTABLE BARRIER AFTER REALIGNMENT.
3. CONTRACTOR SHALL INSTALL ADDITIONAL SECTIONS OF CONCRETE PORTABLE BARRIER (MINIMUM 2) IN THE GAP TO END UP WITH A CLOSURE PIECE WITH A LENGTH THAT IS LESS THAN 10 FEET. THE REMAINING GAP SHALL BE CLOSED IN ACCORDANCE WITH NOTE 4.
4. THE CONTRACTOR SHALL FIELD VERIFY THE LENGTH AND HEIGHT REQUIRED FOR THE CLOSURE PIECE. A CLOSURE PIECE CAN BE EITHER CAST IN PLACE IN ACCORDANCE WITH ITEM 622 OR A PIECE OF EXISTING BARRIER THAT HAS BEEN SIZED TO MATCH THE NEEDED CLOSURE WIDTH. IF CAST IN PLACE IS UTILIZED, A BOND BREAKER SHALL BE USED UNDER THE CLOSURE PIECE SO AS TO NOT DISCOLOR OR DAMAGE THE EXISTING ASPHALT. IF A SIZED PIECE OF EXISTING BARRIER IS USED, THE CUT END SHALL HAVE A SMOOTH FACE AND THE APPROPRIATE CONNECTIONS SHALL BE DRILLED AND GROUTED INTO THE BARRIER PER THE DIMENSIONS AS SHOWN ON ODOT STANDARD CONSTRUCTION DRAWING RM-4.2. GROUT USED FOR ANCHORING OF CONNECTIONS SHALL BE IN ACCORDANCE WITH 705.20.
5. THE CONTRACTOR SHALL REMOVE THE ITEMS INSTALLED FOR GAP CLOSURE AFTER COMPLETION OF ALL WORK WITHIN THE ZONE AND RESTORE THE CONCRETE PORTABLE BARRIER IN ACCORDANCE WITH OTIC STANDARD DRAWING XOV-3 OR AS DIRECTED BY THE CHIEF ENGINEER.
6. PAYMENT FOR ALL EQUIPMENT, MATERIALS, LABOR AND INCIDENTALS NECESSARY TO CLOSE AND RE-OPEN THE MEDIAN BARRIER WALL SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR ITEM SPECIAL - EXISTING CROSSOVER TO BE CLOSED/RE-OPENED.
7. ALL MATERIALS PROVIDED FOR THIS WORK SHALL BE IN ACCORDANCE WITH ODOT STANDARD CONSTRUCTION DRAWING RM-4.2 AND ITEM 622.

DATE: OCTOBER 20, 2017

STANDARD DRAWING

MEDIAN BARRIER WALL
CLOSURE DETAILS

TCB-3

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

TCB-3 2017.10.20.dwg; 10/25/17 - 4:42pm

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

1. ALL TEMPORARY TRAFFIC CONTROL (TTC) DEVICES, DRUMS, TRAFFIC CONTROL SIGNS, ARROW BOARDS, FLAGGERS, ETC., AS SHOWN AND LOCATED ON THE TEMPORARY TRAFFIC CONTROL DRAWINGS, SHALL BE INCORPORATED FOR THE VARIOUS TYPES OF WORK AREAS UNDER NORMAL TRAFFIC CONDITIONS. IF SPECIAL TRAFFIC CONDITIONS EXIST, THE TEMPORARY TRAFFIC CONTROL PLANS MAY HAVE TO BE MODIFIED. HOWEVER, NO MODIFICATIONS OF THE TEMPORARY TRAFFIC CONTROL PLANS SHALL BE MADE UNLESS APPROVED BY THE CHIEF ENGINEER.

   WHENEVER WORKERS ARE PRESENT AND NOT PHYSICALLY SEPARATED FROM TRAFFIC BY A BARRIER THEN A FLAGGER SHALL BE PRESENT.

2. SUPPLEMENTAL GUIDE SIGNS:

   A. ADVANCE GUIDE SIGNS FOR SERVICE OR TOLL PLAZAS:

      WHEN TRAFFIC IS SITUATED SO THAT PERMANENT MAINLINE ADVANCED GUIDE SIGNS FOR SERVICE AND TOLL PLAZAS ARE NOT READILY VISIBLE TO THE RELOCATED TRAFFIC LANE, SUPPLEMENTAL GUIDE SIGNS SHALL BE INSTALLED ADJACENT TO THE APPROPRIATE BI-DIRECTIONAL TRAFFIC LANE TO ALERT MOTORISTS OF THE APPROACHING PLAZA OR EXIT.

   B. SIGNS FOR ANY SINGLE LANE ZONES EXCEEDING TWO (2) MILES IN LENGTH:

      WHEN SINGLE LANE ZONES EXCEED TWO (2) MILES IN LENGTH, SIGNS ARE TO BE PLACED EVERY 2 MILES TO INFORM MOTORISTS OF THE NUMBER OF MILES OF SINGLE LANE TRAFFIC REMAINING AS WELL AS THE POSTED CONSTRUCTION ZONE SPEED LIMIT.

3. VEHICLE TYPES:

   SHADOW VEHICLE:

   A VEHICLE LOCATED A SHORT DISTANCE BEHIND A MOVING OPERATION WITH A TRUCK MOUNTED ATTENUATOR (TMA) OR TOWABLE TRAILER MOUNTED ATTENUATOR (TTMA) AND CHANGEABLE MESSAGE BOARD (CMB) OR APPROPRIATE SIGN. THE VEHICLE SHALL MEET THE TMA/TTMA MANUFACTURER'S REQUIREMENT FOR SIZE, WEIGHT, ETC.

   BARRIER VEHICLE:

   AN UNOCCUPIED SHADOW VEHICLE, WITH OR WITHOUT A TMA/TTMA, PARKED WITHIN A STATIONARY WORK ZONE PRIOR TO A LOCALIZED WORK AREA. THE TRUCK'S BRAKE SHOULD BE SET, THE TRANSMISSION PLACED IN PARK OR GEAR, AND THE FRONT WHEELS TURNED AWAY FROM THE WORK AREA. IF A TMA/TTMA IS NOT USED THEN THE VEHICLE SHALL HAVE A GROSS VEHICLE WEIGHT OF AT LEAST 19,500 POUNDS.

   IF TWO LOCALIZED WORK AREAS WITHIN THE SAME STATIONARY WORK ZONE ARE SEPARATED LONGITUDINALLY BY MORE THAN 950 FEET THEN EACH WORK AREA SHALL HAVE ITS OWN BARRIER VEHICLE AND FLAGGER.

   ADVANCED WARNING VEHICLE:

   A VEHICLE LOCATED A CONSIDERABLE DISTANCE PRIOR TO A MOVING OR STATIONARY OPERATION. THIS VEHICLE MAY BE A PATROL CAR, MAINTENANCE VEHICLE, OR ZONE TRUCK WITH FLASHING LIGHTS. FOR ANY PLANNED OPERATIONS, A CHANGEABLE MESSAGE BOARD SHOULD ALSO BE UTILIZED.

4. SCHEDULED DURATION OF WORK ZONES:

   LONG TERM STATIONARY ZONES:

   MORE THAN 3 DAYS, REFLECTORIZED TRAFFIC DRUMS AND POST MOUNTED SIGNS. REMOVE CONFLICTING PAVEMENT MARKINGS PER SP 614C OR COVER PER SP 614B. REMOVAL OF CONFLICTING PAVEMENT MARKINGS, USE OF 42-INCH CONES OR SIGNS ON X-FOOTPRINT SIGN STANDS MAY BE AUTHORIZED BY THE CHIEF ENGINEER. (RESURFACING PROJECTS, PAVEMENT RECONSTRUCTION PROJECTS, ETC.)

   INTERMEDIATE TERM STATIONARY ZONES:

   OVERNIGHT TO 3 DAYS, ROLL UP SIGNS ON X-FOOTPRINT SIGN STANDS, REFLECTORIZED 42-INCH TRAFFIC CONES OR TRAFFIC DRUMS. (FULL DEPTH PAVEMENT REPAIRS, ETC.)

   SHORT TERM STATIONARY ZONES:

   FROM 1 TO 12 HOURS, SIGNS ON X-FOOTPRINT SIGN STANDS, 28-INCH OR 42-INCH TRAFFIC CONES IN DAYTIME HOURS AND REFLECTORIZED 42-INCH TRAFFIC CONES OR TRAFFIC DRUMS AT NIGHT TIME. (CRACK SEALING OPERATIONS, RPM REFLECTOR REPLACEMENT, GUARDRAIL REPAIR, WASH-OUT REPAIRS, PAVEMENT BLOW-UPS, ETC.)

   SHORT DURATION INTERMITTENT ZONES:

   LESS THAN 1 HOUR, APPROPRIATE TRUCK MOUNTED SIGNS. (SPRING CLEAN-UP, CATCH BASIN CLEANING, ETC.)

   NIGHT TIME ZONES:

   NIGHT TIME USE OF 42-INCH TRAFFIC CONES SHALL BE LIMITED TO THAT PORTION OF THE CLOSURE WHICH IS BEYOND THE SHOULDER TAPER AND LANE CLOSURE TAPER. TRAFFIC DRUMS MUST MUST BE USED FOR ALL TAPERS. FOR STANDARD DRAWING TCR-10, TRAFFIC DRUMS MUST BE USED FOR ALL TAPERS AND THE LONGITUDINAL SECTION BETWEEN THE FIRST AND SECOND LANE CLOSURE TAPER. MAXIMUM SPACING OF 42-INCH CONES, WHEN USED AT NIGHT, SHALL BE 50 FEET.

   MOBILE OPERATION:

   AN OPERATION THAT TAKES PLACE OUTSIDE OF A LONG TERM, INTERMEDIATE TERM OR SHORT TERM STATIONARY WORK ZONE. A MOBILE OPERATION IS SLOW MOVING CONTINUOUS OR MOVING WITH INTERMITTENT SHORT STOPS, SHADOW VEHICLE WITH A TMA AND CMB OR APPROPRIATE SIGN.

   MOBILE OPERATIONS TAKING PLACE ON THE SHOULDER (SWEEPING OPERATIONS, WEED SPRAYING, ROADWAY POLICING, ETC.) SHOULD REFERENCE TCR-9. MOBILE OPERATIONS TAKING PLACE IN A LIVE LANE OF TRAFFIC (POTHOLE REPAIR, DELINEATOR CLEANING / REPAIR / REPLACEMENT, RPM CASTING INSTALLATION, ETC.) SHOULD REFERENCE TCR-11MZ. MOBILE OPERATIONS FOR LINE STRIPING SHOULD REFERENCE TCR-11PS.

5. TMA/TTMA ARE CRASH CUSHIONS THAT ARE ATTACHED TO THE REAR OF OR TOWED BY PROTECTIVE VEHICLES TO REDUCE THE SEVERITY OF REAR-END COLLISIONS. TMA/TTMA ARE INTENDED TO BE USED ON SHADOW VEHICLES IN MOVING OPERATIONS (THAT PARTIALLY OR TOTALLY ENCROACH ON THE PAVED SHOULDER OR TRAVELED LANE), OPERATIONS IN WHICH THE SHADOW VEHICLE IS BEING OCCUPIED, AND WHEN THERE ARE FEW OR NO ADVANCED WARNING SIGNS OR TRAFFIC CONTROL DEVICES.

6. CONFLICTING SIGNS (70 MPH, EXIT SIGNS, LANE USAGE, ETC.) BETWEEN "ROAD WORK AHEAD" (TC-1) AND "END ROAD WORK" (TC-6) SHALL BE COVERED DURING ALL TEMPORARY TRAFFIC CONTROL OPERATIONS.

7. DEFINITIONS

   A. "EQUIPMENT" MEANS ALL TYPES OF EQUIPMENT, VEHICLES, AND TOOLS USED IN CONNECTION WITH ROADWAY MAINTENANCE OR CONTRACTUAL OBLIGATIONS ON THE TURNPIKE.

   B. "WORKER" INCLUDES EVERY PERSON, FIRM OR CORPORATION PERFORMING WORK IN CONNECTION WITH MAINTENANCE OR CONTRACTUAL OBLIGATIONS ON THE TURNPIKE.

   C. THE "CHIEF ENGINEER" IS THE CHIEF ENGINEER OF THE OHIO TURNPIKE & INFRASTRUCTURE COMMISSION ("COMMISSION") OR A DULY AUTHORIZED REPRESENTATIVE.

   D. IN TWO-LANE SECTIONS, THE "DRIVING LANE" IS THE RIGHT LANE WHEN LOOKING IN THE DIRECTION OF NORMAL TRAFFIC OPERATIONS.

   E. IN TWO-LANE SECTIONS, THE "PASSING LANE" IS THE LEFT LANE WHEN LOOKING IN THE DIRECTION OF NORMAL TRAFFIC OPERATIONS.

   F. IN THREE-LANE SECTIONS THE "RIGHT LANE" IS THE LANE FURTHEST TO THE RIGHT WHEN LOOKING IN THE DIRECTION OF NORMAL TRAFFIC OPERATIONS.

   G. IN THREE-LANE SECTIONS THE "CENTER LANE" IS THE MIDDLE LANE WHEN LOOKING IN THE DIRECTION OF NORMAL TRAFFIC OPERATIONS.

   H. IN THREE-LANE SECTIONS THE "LEFT LANE" IS THE LANE FURTHEST TO THE LEFT WHEN LOOKING IN THE DIRECTION OF NORMAL TRAFFIC OPERATIONS.

   I. THE "MEDIAN" IS THE GRASSED AREA LOCATED BETWEEN PASSING LANE SHOULDERS, OR THE GRASSED AREA LOCATED BETWEEN LEFT LANE SHOULDERS, OR THE PAVED AREA LOCATED BETWEEN LEFT LANE SHOULDERS WHERE PERMANENT MEDIAN BARRIER WALL IS PRESENT.

   J. THE "ROADWAY" IS THE PORTION OF THE HIGHWAY SURFACE THAT LIES BETWEEN THE EDGE LINES.

   K. "WORK SPACE" IS THAT PORTION OF THE ROADSIDE OR HIGHWAY CLOSED TO ROAD USERS AND SET ASIDE FOR WORKERS, EQUIPMENT, AND MATERIALS. CARE SHALL BE TAKEN SUCH THAT NO EQUIPMENT OR MATERIAL ENCROACHES ON AN ACTIVE LANE.

   L. "ACTIVITY AREA" IS THE SECTION OF THE HIGHWAY WHERE THE WORK ACTIVITY TAKES PLACE. IT IS COMPRISED OF THE WORK SPACE, THE TRAFFIC SPACE, AND THE BUFFER SPACE.

   M. "ACTIVE LANE" IS THAT PORTION OF THE ROADWAY THAT IS OPEN TO TRAFFIC.

8. STOPPING, STANDING, OR PARKING OF EQUIPMENT

   EQUIPMENT SHALL NOT BE STOPPED, LEFT STANDING, OR PARKED ON ANY BRIDGE CARRYING TURNPIKE TRAFFIC, TRAFFIC LANE, INTERCHANGE LANE, ACCELERATION LANE, DECELERATION LANE, SHOULDER OR ADJACENT TO A SHOULDER, MEDIAN GRASSED AREA, MEDIAN CROSSOVER, SERVICE ROAD AND ACCESS ROAD TO ANY MAINTENANCE BUILDING OR SERVICE PLAZA, EXCEPT AS PROVIDED HEREIN. CONSTRUCTION EQUIPMENT MAY BE STOPPED, LEFT STANDING OR PARKED IN THESE AREAS ONLY IF THE PROPER TRAFFIC CONTROL ZONE IS SET, WHICH INCLUDES TRAFFIC CONTROL DEVICES APPROPRIATE FOR THE PARTICULAR TYPE OF ZONE IN USE.

9. WORK SPACE REQUIREMENTS

   IF THE WORK SPACE IS 30 FEET OR MORE FROM THE ROADWAY EDGE LINE - NO WORK ZONE IS REQUIRED. IF THE WORK SPACE IS BEYOND THE PAVED SHOULDER, BUT LESS THAN 30 FEET FROM THE ROADWAY EDGE LINE, TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION (OTIC) STANDARD DRAWING TCR-9 (1 OF 2). IF THE WORK SPACE OCCUPIES ANY PORTION OF THE PAVED SHOULDER, TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE OTIC STANDARD DRAWING TCR-9 (1 OF 2). IF THE WORK SPACE OCCUPIES ANY PORTION OF A DRIVING LANE, PASSING LANE, RIGHT LANE, OR LEFT LANE, THE LANE SHALL BE CLOSED AND THE TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH OTIC STANDARD DRAWING TCR-2. IF THE WORK SPACE OCCUPIES ANY PORTION OF A CENTER LANE, THE CENTER LANE AND ONE ADJACENT LANE SHALL BE CLOSED IN ACCORDANCE WITH OTIC STANDARD DRAWING TCR-10.

10. SPEED REGULATIONS FOR EQUIPMENT TRAVELING ON TURNPIKE TO OR FROM THE WORK SPACE

    EXCEPT AS PROVIDED BELOW, EQUIPMENT SHALL, WHEN TRAVELING ON THE TURNPIKE TO OR FROM THE WORK SPACE, BE OPERATED AT A MINIMUM SPEED OF 50 MILES PER HOUR. IF SUCH SPEED IS NOT PRACTICABLE OR OBTAINABLE, THE EQUIPMENT SHALL BE TRANSPORTED BY A VEHICLE OPERATED AT THE ABOVE SAID SPEED.

    COMMISSION OWNED VEHICLES; INCLUDING; BUT, NOT LIMITED TO; BACKHOES AND LOADERS MAY TRAVEL TO AND FROM WORK SPACE AT SPEEDS SLOWER THAN 50 MILES PER HOUR PROVIDED A VEHICLE WITH ACTIVATED AMBER FLASHING SAFETY LIGHTS; AS DEFINED IN SECTION 17, HEREIN; FOLLOWS BEHIND THE SLOW MOVING VEHICLE, AND BOTH VEHICLES TRAVEL ON A PAVED SHOULDER.

    MOWERS MAY TRAVEL TO AND FROM WORK SPACE AT SPEEDS SLOWER THAN 50 MILES PER HOUR PROVIDED THEY ARE EQUIPPED WITH ACTIVATED AMBER FLASHING SAFETY LIGHTS; AS DEFINED IN SECTION 17, HEREIN; TRAVEL ON A PAVED SHOULDER, AND DISPLAY A "SLOW MOVING VEHICLE" (SMV) EMBLEM (TRIANGLE). THE SMV EMBLEM SHALL MEET THE REQUIREMENTS OF OHIO ADMINISTRATIVE CODE CHAPTER 4501-13. THE SMV EMBLEM SHALL BE COVERED IF THE EQUIPMENT IS BEING TRANSPORTED.

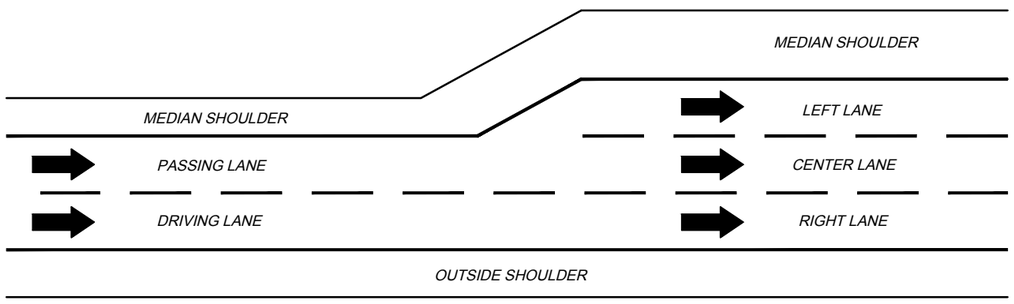
11. SPEED REGULATIONS FOR EQUIPMENT TRAVELING WITHIN WORK SPACE

    NO VEHICLE OR EQUIPMENT SHALL BE OPERATED IN EXCESS OF 25 MILES PER HOUR IN ANY PART OF THE ROADWAY CLOSED TO TRAFFIC, UNLESS AUTHORIZED BY THE CHIEF ENGINEER.

12. ONE-WAY TRAFFIC

    NO EQUIPMENT SHALL BE OPERATED ON THE TRAFFIC LANES, INTERCHANGE LANES, ACCELERATION LANES, DECELERATION LANES OR SHOULDERS EXCEPT IN THE DESIGNATED DIRECTION OF TRAVEL FOR RESPECTIVE LANES OR SHOULDERS, EXCEPT AS PROVIDED HEREIN. WHEN A WORK ZONE CLOSES A DIRECTIONAL LANE OR LANES, EQUIPMENT MAY BE OPERATED IN THE DIRECTION OPPOSITE TO THE NORMAL FLOW OF TRAFFIC PROVIDED THE EQUIPMENT IS IN THE CLOSED PORTION OF A WORK ZONE. WHEN A SHOULDER ZONE IS UTILIZED TO CLOSE A SHOULDER, EQUIPMENT SHALL BE OPERATED IN THE DESIGNATED DIRECTION OF TRAVEL FOR THE ADJACENT LANE.

LANE DESIGNATIONS



DATE: FEBRUARY 17, 2023

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

TCR-1

1 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-1 2023.02.17.dwg; 2/27/23

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

13. MEDIAN CROSSINGS

COMMISSION OWNED VEHICLES AND EQUIPMENT MAY CROSS THE MEDIAN AT ESTABLISHED CROSSOVERS AND MAY U-TURN IN FRONT OF TOLLBOOTHS WITHOUT THE ASSISTANCE OF A FLAGGER. ALL OTHER VEHICLES AND EQUIPMENT MAY CROSS THE MEDIAN ONLY WITH PRIOR APPROVAL OF AND AT CROSSOVERS DESIGNATED BY THE CHIEF ENGINEER.

CROSSING THE MEDIAN SHALL BE KEPT TO A MINIMUM AND SHALL BE EXECUTED WITH EXTREME CARE SINCE SUCH TRAFFIC MOVEMENTS ARE UNUSUAL AND ARE, THEREFORE, POTENTIALLY HAZARDOUS TO NOT ONLY THE ROAD USER BUT ALSO THE CROSSING VEHICLES. ALL MEDIAN CROSSINGS BY VEHICLES AND EQUIPMENT SHALL BE EXECUTED IN STRICT COMPLIANCE WITH THE PROCEDURES PRESCRIBED IN THIS SECTION.

MEDIAN CROSSOVER PROCEDURES:

A. PASSENGER CARS AND PICKUP TRUCKS - ARE PERMITTED TO USE THE LEFT (MEDIAN) SHOULDER WHILE IN THE ACT OF REVERSING THEIR DIRECTION OF TRAVEL AT DESIGNATED CROSSOVERS. EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES - ESPECIALLY AT NIGHT AND DURING PERIODS OF INCLEMENT WEATHER.

B. SINGLE UNIT TRUCKS AND EQUIPMENT* - (EMPTY DUMP TRUCKS AND STAKE BODY TRUCKS, TRACTORS, MOWERS, ETC.) IN TWO-LANE SECTIONS, THEY ARE TO FIRST PULL ONTO THE RIGHT (OUTSIDE) SHOULDER AND WAIT FOR CLEAR AND UNOBSTRUCTED PASSAGE, THEN PULL ACROSS THE TRAFFIC LANES INTO THE AREA DESIGNATED AND SPECIFICALLY PROVIDED FOR REVERSING TRAVEL DIRECTION. UPON ENTERING THE DESIGNATED AREA, THE OPERATOR SHALL AGAIN WAIT FOR CLEAR AND UNOBSTRUCTED PASSAGE BEFORE ENTERING THE TRAVEL LANES TO COMPLETE THE REVERSAL OF DIRECTION. A FLAGGER IS TO BE STATIONED AT ALL ACTIVE BI-DIRECTIONAL CROSSOVERS TO AID THIS TYPE OF CROSSING MANEUVER.

IN THREE-LANE SECTIONS, COMMISSION OWNED SINGLE UNIT TRUCKS AND EQUIPMENT HAVE THE OPTION TO USE THE LEFT (MEDIAN) SHOULDER WHILE IN THE ACT OF REVERSING THEIR DIRECTION OF TRAVEL AT DESIGNATED CROSSOVERS. ALL NON-COMMISSIONED OWNED SINGLE UNIT TRUCKS AND EQUIPMENT ATTEMPTING A MEDIAN CROSSING IN THREE-LANE SECTIONS SHALL USE THE METHOD DESCRIBED BELOW IN SECTION C OR THEY SHALL PROCEED TO THE NEAREST INTERCHANGE AND U-TURN IN FRONT OF THE TOLLBOOTHS WITH A FLAGGER'S ASSISTANCE.

WHEN HEAVY TRAFFIC VOLUME DOES NOT ALLOW FOR CLEAR AND UNOBSTRUCTED PASSAGE, THE VEHICLE SHOULD PROCEED TO THE NEXT INTERCHANGE AND U-TURN IN FRONT OF THE TOLLBOOTHS WITH A FLAGGER'S ASSISTANCE. EXTREME CAUTION SHALL BE EXERCISED AT ALL TIMES - ESPECIALLY AT NIGHT AND/OR DURING PERIODS OF INCLEMENT WEATHER.

* - "SINGLE UNIT TRUCKS AND EQUIPMENT" WHICH EXCEED 24 FEET IN LENGTH ARE PROHIBITED FROM CROSSING THE MEDIAN AT LOCATIONS WITH CONCRETE BARRIERS. SUCH VEHICLES MAY CROSS THE MEDIAN IF THE PROCEDURES SET FORTH IN SUBPART C. FOR "SLOW-ACCELERATING VEHICLES" ARE UTILIZED. (NOTE: THIS PROHIBITION DOES NOT APPLY TO COMMISSION OWNED SINGLE AXLES VEHICLES AS WELL AS OTHER VEHICLES AND EQUIPMENT APPROVED BY BOTH THE OTIC MAINTENANCE ENGINEER AND CHIEF ENGINEER.)

C. SLOW-ACCELERATING VEHICLES - (TRACTOR TRAILER, TRACTOR LOW BOY, LOADED DUMP TRUCKS, LOADED STAKE BODY TRUCKS, CONCRETE TRUCKS, ETC.) ARE TO EXERCISE EXTREME CARE WHEN ATTEMPTING A MEDIAN CROSSING AND IN NO INSTANCE ARE TO ATTEMPT THIS MANEUVER WITHOUT THE ASSISTANCE OF A FLAGGER. ALL "SLOW ACCELERATING VEHICLES" ATTEMPTING TO MAKE A MEDIAN CROSSING SHALL DO SO ONLY UNDER THE PROTECTION OF 2 SINGLE LANES (PASSING OR LEFT LANE CLOSED) ZONES, 1 IN EACH DIRECTION, PRECEDING THE CROSSOVER IN QUESTION. "SLOW ACCELERATING VEHICLES" ARE TO ENTER THE CLOSED PORTION OF A SINGLE LANE ZONE APPROACHING A CROSSOVER, ENTER THE CROSSOVER AND MAKE THE NECESSARY MANEUVERS TO GET TURNED AROUND, ENTER THE SINGLE LANE ZONE ON THE OPPOSITE ROADWAY AND THEN PROCEED TO THE END OF THE CLOSED LANE AND THEN MERGE WITH TRAFFIC USING EXTREME CAUTION. IF 2 SINGLE LANE ZONES ARE NOT OR CANNOT BE SET, THEN "SLOW ACCELERATING VEHICLES" SHALL PROCEED TO THE NEAREST INTERCHANGE AND U-TURN IN FRONT OF THE TOLLBOOTHS WITH A FLAGGER'S ASSISTANCE.

SLOW-ACCELERATING COMMISSION OWNED DUMP TRUCKS MAY UTILIZE ESTABLISHED CROSSOVERS IN ACCORDANCE WITH THE PROCEDURE SET FORTH IN SUBPART B. FOR "SINGLE UNIT TRUCKS AND EQUIPMENT" PROVIDED EXTREME CAUTION IS EXERCISED BY THE OPERATOR.

D. ALL VEHICLES - ARE PROHIBITED FROM CROSSING INACTIVE MEDIAN CROSSOVERS LOCATED WITHIN THE LIMITS OF BI-DIRECTIONAL WORK ZONES, UNLESS SPECIAL PERMISSION HAS FIRST BEEN OBTAINED FROM THE CHIEF ENGINEER.

14. WORK TIME

WORK INVOLVING OCCUPANCY OF THE TRAFFIC LANES, SHOULDERS, INTERCHANGE LANES, ACCELERATION LANES OR DECELERATION LANES SHALL NOT BE PERFORMED DURING THE HOURS OF DARKNESS, ADVERSE WEATHER CONDITIONS, OR ADVERSE ROADWAY CONDITIONS, UNLESS AUTHORIZED BY THE CHIEF ENGINEER. WHEN SUCH WORK IS AUTHORIZED, TRAFFIC AND WORKERS SHALL BE SAFEGUARDED BY THE USE OF RETRO-REFLECTORIZED SIGNS AND DRUMS, FLASHING ARROW PANELS AND OTHER TRAFFIC CONTROL DEVICES AS SHOWN ON THE OTIC TTC STANDARD DRAWINGS.

REQUEST FOR APPROVAL OF NIGHT WORK SHALL INCLUDE THE PROPOSED SCHEME FOR LIGHTING THE TTC ZONE AND APPROACHES. LIGHTING SHALL BE SHIELDED TO PREVENT DIRECT ILLUMINATION OF ADJACENT RESIDENCES AND THE TRAVELING PUBLIC.

EXCEPT FOR EMERGENCY SITUATIONS, FLAGGER STATIONS SHALL BE ILLUMINATED AT NIGHT.

15. TRAVEL DURING HOURS OF DARKNESS OR ADVERSE WEATHER OR ROADWAY CONDITIONS

NO EQUIPMENT, OTHER THAN THAT DESIGNED FOR NORMAL HIGHWAY TRAVEL, SHALL BE MOVED ON THE TURNPIKE DURING HOURS OF DARKNESS, PERIODS OF ADVERSE WEATHER CONDITIONS WHICH REDUCE NORMAL VISIBILITY, OR WHEN THE ROADWAY IS COVERED WITH SNOW AND ICE; UNLESS SPECIAL PERMISSION HAS FIRST BEEN OBTAINED FROM THE CHIEF ENGINEER.

16. WORKERS CROSSING TRAFFIC LANES

WORKERS ON FOOT SHALL NOT CROSS TRAFFIC LANES, ACCELERATION LANES, DECELERATION LANES, INTERCHANGE RAMPS, OR ANY OTHER TRAFFIC LANE OPEN TO TRAFFIC WITHOUT EXERCISING EXTREME CAUTION. WORKERS SHALL NOT CROSS MORE THAN 2 LANES WHEN DEPLOYING OR REMOVING TTC DEVICES.

IN SECTIONS WHERE THERE ARE 3 LANES OPEN TO TRAFFIC, SIGNS SHOULD BE DEPLOYED ALONG THE OPEN LANE SIDE FIRST SO TRAFFIC IS NOT DIRECTED TO MERGE INTO EMPLOYEES SETTING SIGNS. ONLY ONE SIDE SHALL BE SET AT A TIME. COMPLETE THE OPEN LANE SIDE BEFORE SETTING ANY SIGNS ALONG THE CLOSED LANE SIGN SIDE.

IN SECTIONS WHERE THERE WILL BE 3 LANES OPEN TO TRAFFIC, SIGNS SHOULD BE REMOVED ALONG THE PREVIOUSLY CLOSED LANE SIDE FIRST SO TRAFFIC IS NOT DIRECTED TO MERGE INTO THE EMPLOYEES REMOVING SIGNS. ONLY ONE SIDE SHALL BE REMOVED AT A TIME. COMPLETELY REMOVE THE PREVIOUSLY CLOSED LANE SIDE BEFORE REMOVING ANY SIGNS ALONG THE PREVIOUSLY OPEN LANE SIDE OF THE ROAD.

ALL WORKERS ON FOOT AND CROSSING ACTIVE LANES OR RAMPS SHALL WEAR HIGH-VISIBILITY SAFETY APPAREL AS DESCRIBED UNDER SECTION 18 HEREIN.

17. AMBER FLASHING SAFETY LIGHTS

ALL EQUIPMENT DESIGNED FOR NORMAL HIGHWAY TRAVEL SHALL BE EQUIPPED WITH AMBER HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS. SUCH AMBER FLASHING SAFETY LIGHTS SHALL BE VISIBLE TO APPROACHING AND TRAILING TRAFFIC. ALTHOUGH VEHICLE HAZARD WARNING LIGHTS ARE PERMITTED TO BE USED TO SUPPLEMENT HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS, THEY SHALL NOT BE USED INSTEAD OF HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

THE FLASHING SAFETY LIGHTS SHALL BE ACTIVATED WHENEVER EQUIPMENT IS ON THE SHOULDER, WHENEVER EQUIPMENT IS ENTERING OR EXITING A WORK SPACE, AND WHENEVER EQUIPMENT IS CROSSING THE MEDIAN.

18. FLAGGER

FLAGGERS SHALL BE FAMILIAR WITH, AND FLAGGING SHALL BE IN ACCORDANCE WITH, THE LATEST VERSION OF THE OHIO TURNPIKE "FLAGGING HANDBOOK".

SINCE FLAGGERS ARE RESPONSIBLE FOR HUMAN SAFETY IT IS IMPORTANT THAT THEY ARE MENTALLY ALERT, COURTEOUS BUT WITH A FIRM MANNER, PROPERLY ATTIRED WITH A NEAT APPEARANCE, AWARE OF THE RESPONSIBILITY FOR THE SAFETY OF THE WORKERS AND THE TRAVELING PUBLIC, AND INFORMED OF THE EXACT TRAFFIC MOVEMENTS THAT THEY ARE TO CONTROL.

FLAGGERS SHALL WEAR HIGH VISIBILITY SAFETY APPAREL, WHICH MEETS OR EXCEEDS THE PERFORMANCE CLASS 3 REQUIREMENTS OF THE LATEST REVISION OF ANSI/ISEA 107 PUBLICATION AND LABELED AS MEETING THE LATEST REVISION OF ANSI 107 STANDARD PERFORMANCE FOR CLASS 3 RISK EXPOSURE.

19. OTIC INCIDENT RESPONSE VEHICLES, ZONE VEHICLES AND ZONE PERSONS

IT IS WIDELY RECOGNIZED THAT THE RISK OF TRAFFIC CRASHES INCREASES WHEN CONGESTION DEVELOPS AND QUEUES (TRAFFIC BACK-UPS) FORM, ESPECIALLY ON HIGHWAYS LIKE THE OHIO TURNPIKE WHERE SPEEDS ARE HIGH AND DRIVERS ARE ACCUSTOMED TO UNENCUMBERED TRAVEL. QUEUING CAN LEAD TO INCREASED REAR-END CRASH RISK DUE TO THE HIGHER SPEED OF TRAFFIC APPROACHING THE BACK OF THE QUEUE.

DURING A TRAFFIC INCIDENT OR ANY OTHER OCCURRENCE CAUSING A TRAFFIC QUEUE, THE MAIN PRIORITY OF THE OTIC INCIDENT RESPONDER (IR) OR ZONE PERSON (ZP) IS TO PROTECT THE BACK OF THE QUEUE. THIS SHALL BE ACCOMPLISHED BY POSITIONING THE INCIDENT RESPONSE VEHICLE (IRV) / ZONE VEHICLE (ZV) ON THE ROADWAY SHOULDER AND APPROXIMATELY 1,000 FEET BEHIND THE REAR OF STOPPED/SLOWED TRAFFIC, WHILE MOVING FORWARD OR BACKWARD AS NEEDED TO MAINTAIN THE PROPER DISTANCE. THE DISTANCE FROM THE QUEUE SHOULD BE INCREASED IF THERE IS LIMITED SIGHT DISTANCE DUE TO ROADWAY GEOMETRY.

IRV / ZV EQUIPPED WITH A PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) MUST BE USED TO WARN DRIVERS OF THE CONDITIONS AHEAD.

IF TRAFFIC IS QUEUED FOR ANY REASON, THE IRV / ZV SHALL MOVE INTO POSITION IMMEDIATELY AND PLACE OTIC MESSAGE 1 (SHOWN BELOW) ON THE PCMS. THE IR / ZP SHALL THEN NOTIFY THE OTIC COMMUNICATION CENTER (COMMCENTER) OF THEIR LOCATION AND THE MESSAGE DISPLAYED ON THEIR PCMS.

OTIC PCMS MESSAGE 1: (DISPLAY EACH PANEL FOR 2 SECONDS)

THE COMMCENTER MAY DIRECT THE ZP TO DISPLAY AN ALTERNATE MESSAGE ON THE ZV PCMS. THE ZV PCMS SHALL DISPLAY ONLY MESSAGE 1 UNLESS DIRECTED OTHERWISE BY THE COMMCENTER.

		S	L	O	W		
T	R	A	F	F	I	C	
	A	H	E	A	D		

			B	E			
P	R	E	P	A	R	E	D
	T	O		S	T	O	P

20. REMOVAL OF TTC DEVICES

ALL TTC DEVICES SHALL BE REMOVED AT THE CLOSE OF THE WORK DAY UNLESS THE STATE OF THE WORK IS SUCH THAT THE DEVICES ARE STILL NEEDED TO CONTROL TRAFFIC OR AUTHORIZED BY THE CHIEF ENGINEER.

HOWEVER, 42-INCH TRAFFIC CONES AND / OR DRUMS MAY BE NEATLY STORED BEHIND GUARDRAIL, OFF THE SHOULDER IN THE GRASS AND / OR AGAINST THE MEDIAN BARRIER WALL. TEMPORARY SIGNS MOUNTED ON POSTS MAY BE COVERED.

IF A TCR-10 IS REDUCED TO A TCR-2, THE ARROW BOARD FOR THE SECOND LANE CLOSURE TAPER MAY REMAIN IN PLACE AND PLACED IN FLASHING CAUTION MODE. THIS SHALL ONLY BE DONE IF THE TCR-10 WILL BE RE-ESTABLISHED WITHIN 24-HOURS.

21. TRACKED OR SPILLED EARTH, GRAVEL, ETC.

ANY DEBRIS TRACKED OR SPILLED ON TRAFFIC LANES OR SHOULDERS SHALL BE IMMEDIATELY REMOVED AND TRAFFIC SHALL BE ADEQUATELY SAFEGUARDED DURING THE PERIOD SUCH DEBRIS IS ON THE ROAD AND WHILE BEING REMOVED.

IF PONDING WATER IS PRESENT OR MAY ENTER THE ACTIVE LANE OF TRAFFIC, DUE TO CONSTRUCTION/WORK ACTIVITIES, PUMPS OR OTHER MEANS MUST BE EMPLOYED TO REMOVE AND PREVENT SUCH PONDING WATER ENTERING ACTIVE LANES.

22. MOVEMENT OF CONTRACTOR'S OVER-SIZE / OVER-WEIGHT EQUIPMENT

NO CONTRACTOR'S EQUIPMENT EXCEEDING THE MAXIMUM VEHICLE DIMENSIONS AS PROVIDED IN OHIO ADMINISTRATIVE CODE SECTION 5537-3-01 OF "PROHIBITED USES", SHALL BE MOVED OVER THE TURNPIKE WITHOUT OBTAINING PERMISSION FROM THE CHIEF ENGINEER.

23. STORAGE OF EQUIPMENT AND MATERIALS

IF EQUIPMENT OR MATERIALS ARE STORED OR PARKED WITHIN THE RIGHT-OF-WAY, THEY SHALL BE LOCATED NOT LESS THAN 6 FEET BEHIND EXISTING GUARDRAIL AND A MINIMUM DISTANCE OF 360 FEET FROM THE APPROACH END OF THE EXISTING GUARDRAIL; OR, IN THE ABSENCE OF GUARDRAIL, NOT LESS THAN 30 FEET BEYOND THE ROADWAY EDGE LINE. SUCH ITEMS MAY BE STORED IN A WORK SPACE THAT IS SHIELDED FROM TRAFFIC BY PORTABLE BARRIER INSTALLED IN ACCORDANCE WITH AND AS A REQUIREMENT OF THE CONTRACT PLANS. FLAMMABLE LIQUIDS SHALL NOT BE STORED IN THE MEDIAN OR IN CROSSOVER AREAS, UNLESS THOSE AREAS ARE SHIELDED FROM TRAFFIC BY PORTABLE BARRIER INSTALLED IN ACCORDANCE WITH AND AS A REQUIREMENT OF THE CONTRACT PLANS. EQUIPMENT OR MATERIAL SHALL BE LOCATED NOT LESS THAN 8 FEET 3 INCHES BEHIND UNANCHORED 50 INCH CONCRETE PORTABLE BARRIER OR 7 FEET 6 INCHES BEHIND UNANCHORED 32 INCH CONCRETE PORTABLE BARRIER.

THIS REQUIREMENT INCLUDES THE LOCATION OF PORTABLE TOILETS LOCATED IN THE WORK ZONE. IN ADDITION, EQUIPMENT USED AT NIGHT, SUCH AS LIGHT PLANTS, SHALL BE STORED AS DESCRIBED ABOVE DURING THE DAYTIME.

24. X - FOOTPRINT SIGN STANDS

X - FOOTPRINT SIGN STANDS SHALL NOT BE PLACED ON MAINLINE BRIDGES UNLESS APPROVED BY THE CHIEF ENGINEER.

25. MODIFICATION OF PROCEDURES

IN THE EVENT THE STANDARD PROCEDURES ESTABLISHED HEREIN PRESENT AN UNREASONABLE HARDSHIP UPON, OR CANNOT BE FULLY IMPLEMENTED BY THE MAINTENANCE FORCES OR CONTRACTORS IN THE PERFORMANCE OF THEIR WORK, THEY SHALL REQUEST PERMISSION TO USE AN ALTERNATE METHOD FROM THE CHIEF ENGINEER. ALTERNATE METHOD OR PROCEDURE SUBMITTALS MUST BE STAMPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER. ALTERNATE METHODS OR PROCEDURES SHALL NOT BE UTILIZED WITHOUT FIRST OBTAINING PERMISSION FROM THE CHIEF ENGINEER.

DATE: FEBRUARY 17, 2023

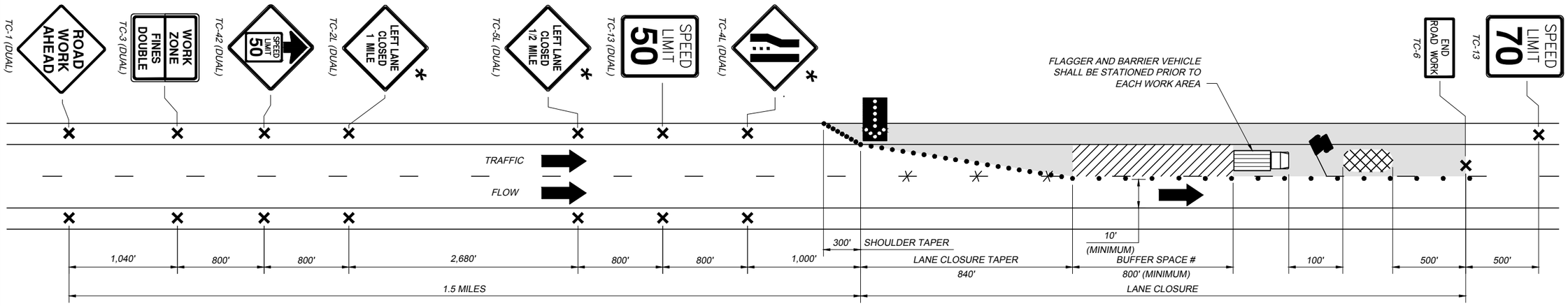
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

TCR-1

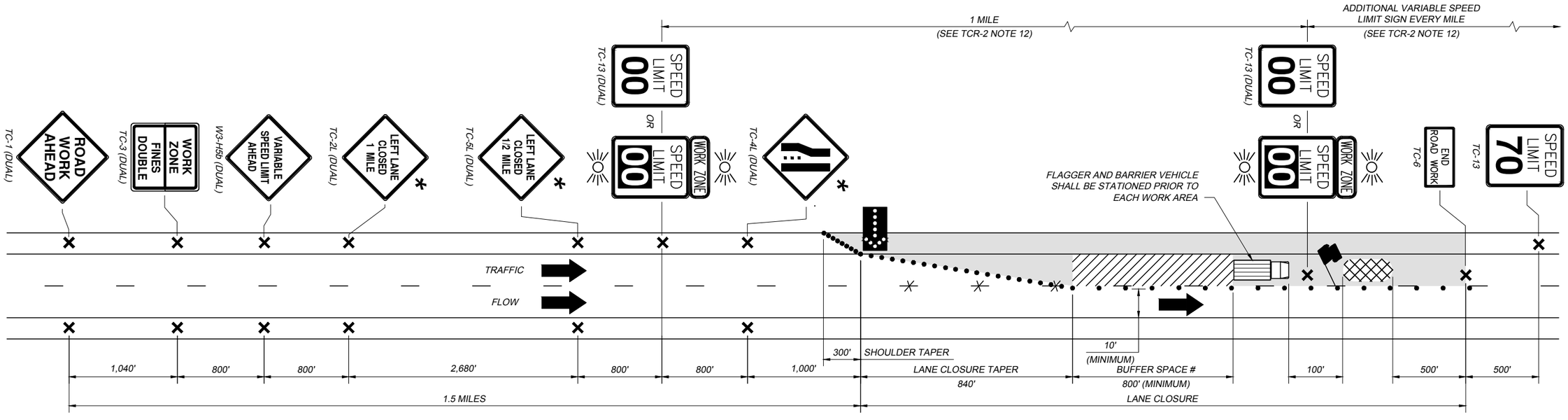
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-1 2023.02.17.dwg; 2/27/23 - 9:13am



STANDARD SINGLE LANE CLOSURE

TWO-LANE AND THREE-LANE ROADWAY



STANDARD SINGLE LANE CLOSURE WITH VARIABLE SPEED LIMITS

TWO-LANE AND THREE-LANE ROADWAY

NOTE:

* - SUBSTITUTE "RIGHT LANE CLOSED" SIGNS (TC-2R, TC-5R, TC-4R) FOR "LEFT LANE CLOSED" SIGNS (SHOWN) WHEN RIGHT LANE IS CLOSED.

\# - THE BUFFER SPACE SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.

SEE OTIC STANDARD DRAWING TCR-2 SHEET 2 OF 2 FOR LEGEND.

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL DETAILS, LEGEND, NOTES AND STANDARD SINGLE LANE CLOSURE

TCR-2

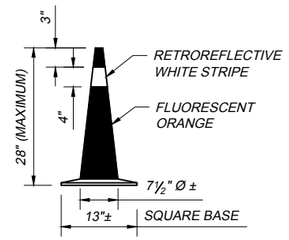
1 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

TCR-2 2023.02.17.DWG; 2/27/23

DETAILS



28" TRAFFIC CONE

NOTES:

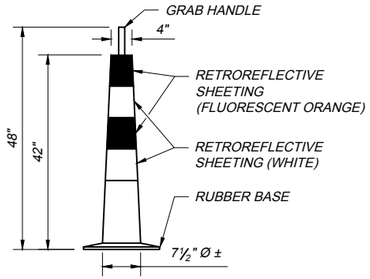
TRAFFIC CONES SHALL BE THE SLIMLINE OR TRIMLINE STYLE WITH THE BODY OF THE TRAFFIC CONE CONSTRUCTED OF POLYVINYL CHLORIDE MATERIAL. THE BASE OF THE TRAFFIC CONE SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE OR MOLDED RUBBER MATERIAL. THE CONE SHALL BE HOLLOW. THE NET WEIGHT OF THE CONE SHALL NOT BE LESS THAN 5½ POUNDS.

THE EXTERIOR OF THE CONE SHALL BE HIGH VISIBILITY, FADE RESISTANT, IMPREGNATED FLUORESCENT ORANGE. THE GUIDE SHALL HAVE ONE RETROREFLECTIVE WHITE STRIPE ENCIRCLING THE CONE AND BE NOT LESS THAN 4 INCHES IN WIDTH. THE STRIPE SHALL BE PERMANENTLY APPLIED SO THAT THE TOP EDGE IS APPROXIMATELY 3 INCHES FROM THE CONE APEX.

EACH CONE IS TO HAVE A SLIP-OVER COLLAR BASE. THE SLIP-OVER COLLAR BASE SHALL BE BLACK IN COLOR AND SHALL BE CONSTRUCTED OF A RUBBER MATERIAL AND SHALL WEIGH NOT LESS THAN 5 POUNDS. THE SLIP-OVER COLLAR BASE SHALL BE FULLY COMPATIBLE WITH THE PHYSICAL PROPERTIES OF THE CONE.

A ONE-PIECE TRAFFIC CONE MEETING THE ABOVE MATERIAL REQUIREMENTS AND HAVING A NET WEIGHT OF APPROXIMATELY 10½ POUNDS, WITH THE WEIGHT DISTRIBUTED TO ENSURE MAXIMUM STABILITY, MAY BE USED.

SHALL BE CERTIFIED TO MEET THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) CRASH TEST STANDARDS.



42" TRAFFIC CONE

NOTES:

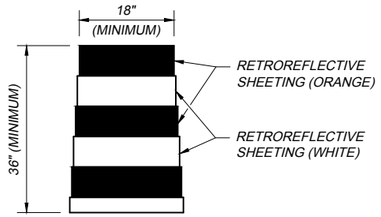
42 INCH TRAFFIC CONES SHALL BE A TWO PIECE DESIGN CONSISTING OF A HOLLOW STEM AND A WEIGHTED BASE. THE STEM SHALL BE MANUFACTURED FROM ULTRAVIOLET STABILIZED, HIGH VISIBILITY ORANGE IMPACT RESISTANT LOW DENSITY POLYETHYLENE AND SHALL HAVE AN INTEGRAL MOLDED HANDLE AT THE TOP OF THE STEM.

EACH CONE IS TO HAVE A SLIP-OVER COLLAR BASE. THE SLIP-OVER COLLAR BASE SHALL BE BLACK IN COLOR AND SHALL BE MANUFACTURED FROM MOLDED RUBBER MATERIAL AND SHALL WEIGH 16 POUNDS. THE SLIP-OVER COLLAR BASE SHALL BE FULLY COMPATIBLE WITH THE PHYSICAL PROPERTIES OF THE CONE.

THE 42 INCH CONE SHALL HAVE A MINIMUM OF 4 EACH, NOMINAL 6 INCH WIDE RETROREFLECTIVE STRIPES STARTING FROM THE TOP IN FLUORESCENT ORANGE, WHITE, FLUORESCENT ORANGE, WHITE SEQUENCE. ANY NONRETROREFLECTIVE SPACES BETWEEN THE FLUORESCENT ORANGE AND WHITE STRIPES SHALL NOT EXCEED 3 INCHES IN WIDTH.

THE RETROREFLECTIVE SHEETING SHALL BE NO. 3910 WHITE AND NO. 3914 FLUORESCENT ORANGE SCOTCHLITE DIAMOND GRADE WORK ZONE SHEETING AS MANUFACTURED BY 3M, OR EQUAL AS APPROVED BY THE CHIEF ENGINEER, CONSIDERING REFLECTIVITY, DURABILITY, PLIABILITY AND ADHESION QUALITIES.

SHALL BE CERTIFIED TO MEET THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) CRASH TEST STANDARDS.



TRAFFIC DRUM

NOTES:

THE TRAFFIC DRUM SHALL BE A TWO PIECE, BREAKAWAY STYLE, DESIGNED THAT DAMAGE AFTER IMPACT WILL BE MINIMAL THROUGH A TEMPERATURE OF -15 °F TO +125 °F. THE DRUM SHALL BE CONSTRUCTED OF NOT LESS THAN ⅛ INCH THICK, IMPACT RESISTANT, POLYETHYLENE, FORMULATED TO ALLOW THE DRUM TO RETURN TO THE ORIGINAL DESIGN AFTER IMPACT.

THE DRUM SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT AND A MINIMUM OF 18 INCHES IN DIAMETER. THE DRUM SHALL CONTAIN 5 RECESSED BANDS WHICH SHALL ACCEPT RETROREFLECTIVE SHEETING BANDS OF 6 INCH WIDTH. THE DRUM SHALL BE DESIGNED WITH ONE OR MORE FLAT SIDES OR WITH AN ANTI-ROLL DEVICE, TO MINIMIZE ROLLING, SHOULD THE UNIT BE KNOCKED OVER. TOTAL WEIGHT OF THE DRUM SHALL BE NOT LESS THAN 12 POUNDS.

COLOR OF THE DRUM SHALL BE COLOR STABILIZED, SAFETY ORANGE. TO PROVIDE STABILITY OF THE DRUM THE WEIGHTED BASE PORTION SHALL BE THE RUBBER COLLAR WEIGHTING TYPE WITH COMPATIBLE DRUM. DOUBLE WEIGHTING OF DRUMS MAY BE NECESSARY TO PREVENT MOVEMENT.

THE TRAFFIC DRUM SHALL HAVE A MINIMUM OF 4 EACH, NOMINAL 6 INCH WIDE, RETROREFLECTIVE STRIPES APPLIED TO THE DRUM RECESSED BANDS, STARTING FROM THE TOP, IN FLUORESCENT ORANGE, WHITE, FLUORESCENT ORANGE, WHITE SEQUENCE. THE RETROREFLECTIVE SHEETING SHALL BE NO. 3810 WHITE AND NO. 3814 ORANGE AS MANUFACTURED BY THE 3M COMPANY, HIGH IMPACT CHANNELIZER MATERIAL AS MANUFACTURED BY REFLEXITE NORTH AMERICA, OR EQUAL AS APPROVED BY THE CHIEF ENGINEER, CONSIDERING REFLECTIVITY, DURABILITY, PLIABILITY AND ADHESION QUALITIES.

SHALL BE CERTIFIED TO MEET THE MANUAL FOR ASSESSING SAFETY HARDWARE (MASH) CRASH TEST STANDARDS.

NOTES

1. DRUM/CONE SPACING IS 50 FEET ON-CENTER IN TAPERS, CROSSOVERS AND RAMPS; 100 FEET ON-CENTER IN TANGENTS UNLESS OTHERWISE NOTED.
2. FINAL LOCATION OF TEMPORARY TRAFFIC CONTROL DEVICES MAY NEED TO BE ADJUSTED TO PROVIDE MAXIMUM VISIBILITY.
3. SIGNS USED FOR LONG TERM STATIONARY ZONES, WHICH ARE LOCATED ON THE LEFT SIDE OF AN OPEN 3-LANE SECTION OF ROADWAY ARE TO BE MOUNTED ON MEDIAN BARRIER CLAMPS WHEN THE MEDIAN BARRIER WALL HEIGHT IS 6 FEET OR LESS. SIGNS ON X - FOOTPRINT SIGN STANDS MAY BE USED IF AUTHORIZED BY THE CHIEF ENGINEER. WHEN THE MEDIAN BARRIER WALL IS OVER 6 FEET HIGH, SIGNS SHALL BE MOUNTED ON APPROVED SIGN SUPPORTS LOCATED ON THE SHOULDER.
4. FOR SHORT TERM AND DAYTIME ZONES, SIGNS SHALL BE MOUNTED ON X-FOOTPRINT SIGN STANDS THAT MEET THE REQUIREMENTS OF SP 730. IF A TC-3 OR TC-13 IS REQUIRED ON A PORTABLE SIGN STAND THEN USE A TC-28 OR TC-29, RESPECTIVELY. FOR BI-DIRECTIONAL AND LONG TERM STATIONARY ZONES, SIGNS ARE TO BE MOUNTED ON BREAKAWAY POSTS OR APPROVED SIGN SUPPORTS, UNLESS OTHERWISE SHOWN.
5. "END ROAD WORK" AND "SPEED LIMIT 70 MPH" SIGN SHALL BE OMITTED IF ANOTHER ACTIVE WORK ZONE'S ADVANCED SIGNAGE IS LOCATED LESS THAN 1.5 MILES FROM THE INTENDED LOCATION OF THE "END ROAD WORK" SIGN.
6. IN LONG TERM STATIONARY ZONES REMOVE REFLECTORS FROM ALL EXISTING RAISED PAVEMENT MARKERS (RPM'S) THAT ARE IN CONFLICT WITH TEMPORARY TRAVEL LANES AND PAVEMENT MARKINGS.
7. ANY EXISTING SPEED LIMIT SIGN(S) LOCATED BETWEEN THE TC-1 AND TC-6 SIGNS SHALL BE COVERED WHILE THE ZONE IS IN PLACE. IN PASSING LANE, LEFT LANE OR LEFT/CENTER LANE CLOSURES A TC-13 SHALL BE INSTALLED ON THE RIGHT SHOULDER ADJACENT TO ANY EXISTING SPEED LIMIT SIGN(S) LOCATED WITHIN THE LANE CLOSURE.
8. ALL MAINTENANCE OF TRAFFIC DEVICES AND ZONES SHALL FOLLOW THESE STANDARDS. IF SITE SPECIFIC TRAFFIC CONDITIONS EXIST, THE MAINTENANCE OF TRAFFIC PLANS MAY BE MODIFIED TO SUIT THESE CONDITIONS; HOWEVER, NO MODIFICATIONS TO THE MAINTENANCE OF TRAFFIC PLANS SHALL BE MADE UNLESS APPROVED BY THE CHIEF ENGINEER.
9. THE WIDTH OF A SINGLE TEMPORARY LANE MAY BE REDUCED TO 10 FEET.
10. TC-6 AND TC-13 SHALL BE PLACED ON THE SIDE OF THE CLOSED LANE(S). ON TCR-3 AND TCR-12, TC-6 AND TC-13 WILL ALWAYS BE PLACED ON THE RIGHT SIDE OF THE ROAD.
11. WHEN WORKERS ARE REQUIRED TO WORK NEXT TO LIVE TRAFFIC (E.G., FULL DEPTH REPAIR, RPM REPLACEMENT, ETC.) A SINGLE TEMPORARY LANE MAY BE PARTIALLY SHIFTED ON TO THE SHOULDER DURING SHORT TERM ZONES OR SHORT DURATION INTERMITTENT ZONES. THE TEMPORARY SINGLE LANE "BUMP OUT" SHALL BE ALIGNED SUCH THAT THE WHEELS OF THE VEHICLES STRADDLE THE SONIC NAP ALERT PATTERN (SNAP).

    IF A "BUMP OUT" IS NEEDED WITHIN A HALF-MILE OF THE START OF THE SINGLE TEMPORARY LANE THEN THE LANE CLOSURE TAPER SHOULD BE EXTENDED SO TRAFFIC IS SHIFTED ONTO THE SHOULDER AT THE BEGINNING OF THE WORK ZONE AND A "RUMBLE STRIPS AHEAD" SIGN SHALL BE PLACED 500 FEET PRIOR TO THE ARROW BOARD.

    IF A "BUMP OUT" IS NEEDED FURTHER INTO THE WORK ZONE, THEN THE "BUMP OUT" TAPER SHOULD BE SET AT A 70:1 TAPER RATE. THE "BUMP OUT" TAPER SHALL BE LOCATED SO THERE IS AN 800 FOOT BUFFER SPACE, SPACE FOR A BARRIER VEHICLE, AND 100 FOOT SPACE FOR THE FLAGGER PRIOR TO THE WORK AREA. A LANE SHIFT SIGN (TC-7L/R) SHALL BE PLACED 1,000 FEET PRIOR TO THE START OF THE "BUMP OUT" TAPER. A "RUMBLE STRIPS AHEAD" SIGN SHALL BE PLACED 500 FEET PRIOR TO THE START OF THE "BUMP OUT" TAPER.

    THE "BUMP OUT" SHOULD BE TAPERED BACK TO THE SINGLE TEMPORARY LANE AFTER THE WORK AREA. THIS TAPER SHOULD BE SET AT A 70:1 TAPER RATE AND A LANE SHIFT SIGN (TC-7L/R) SHALL BE PLACED 1,000 FEET PRIOR TO THE START OF THE TAPER.

    IF MULTIPLE "BUMP OUTS" ARE NEEDED THROUGHOUT THE WORK ZONE THEN THE SINGLE TEMPORARY LANE SHOULD REMAIN SHIFTED UNTIL AFTER THE LAST "BUMP OUT" AREA.

    DRUM / CONES SPACING IS 50 FEET ON-CENTER IN THE "BUMP OUT" TAPER AND TANGENT SECTION.
12. PLACE A DIGITAL SPEED LIMIT (DSL) SIGN ASSEMBLY OR THE APPROPRIATE TC-13 (SPEED LIMIT 00) SIGN 1,800 FEET PRIOR TO THE LANE CLOSURE TAPER. PLACE ADDITIONAL DSL OR TC-13 AT APPROXIMATELY 1-MILE INTERVALS THROUGHOUT THE LENGTH OF THE LANE CLOSURE. DSL OR TC-13 LOCATED IN THE LANE CLOSURE SHALL BE STATIONED IN THE CLOSED LANE ADJACENT TO TRAFFIC.

    DSL OR TC-13 LOCATED IN THE WORK SPACE SHALL NOT BE PLACED IN THE WORK AREA OR THE BUFFER SPACE. DSL OR TC-13 PLACEMENT IN THE WORK AREA SHALL BE ADJUSTED SO THEY DO NOT INTERFERE WITH OTHER REQUIRED TRAFFIC CONTROL DEVICES.

    A DSL OR TC-13 MAY BE PLACED PRIOR TO ANY WORK AREA.

    A DSL OR TC-13 SHALL BE PLACED AFTER EVERY ACCELERATION RAMP WITHIN THE WORK ZONE.

    IF THE LANE CLOSURE IS APPROXIMATELY 1-MILE IN LENGTH THEN AT LEAST ONE DSL OR TC-13 SHALL BE PLACED IN THE WORK ZONE.

    THE SPEED LIMIT SHALL BE DISPLAYED IN ACCORDANCE WITH THE REQUIREMENTS OF SP 808.

LEGEND

- H - TYPE III PORTABLE BARRICADE WITH APPROPRIATE SIGN
- X - SIGN MOUNTED ON X-FOOTPRINT SIGN STAND (SEE NOTES 4 & 5)
- ⊢ - SIGN MOUNTED ON BREAKAWAY OR YIELDING POST(S)
- ⊢ - SIGN MOUNTED ON PERFORATED STEEL SQUARE TUBE SUPPORT (PSST)
- ● - REFLECTORIZED TRAFFIC DRUMS
- ○ - REFLECTORIZED TRAFFIC CONES
- ✗ - REMOVE LANE LINE AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES)
- ▨ - WORK AREA
- ▭ - WORK SPACE
- ▨ - BUFFER SPACE
- - FLAGGER LOCATION (ALL WORKING HOURS)
- - ARROW BOARD (AB) TYPE C PER ODOT SUPPLEMENTAL SPECIFICATION 821
- - BARRIER VEHICLE
- - WORK VEHICLE
- - SHADOW VEHICLE
- - DIGITAL SPEED LIMIT (DSL) SIGN

TC-13

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

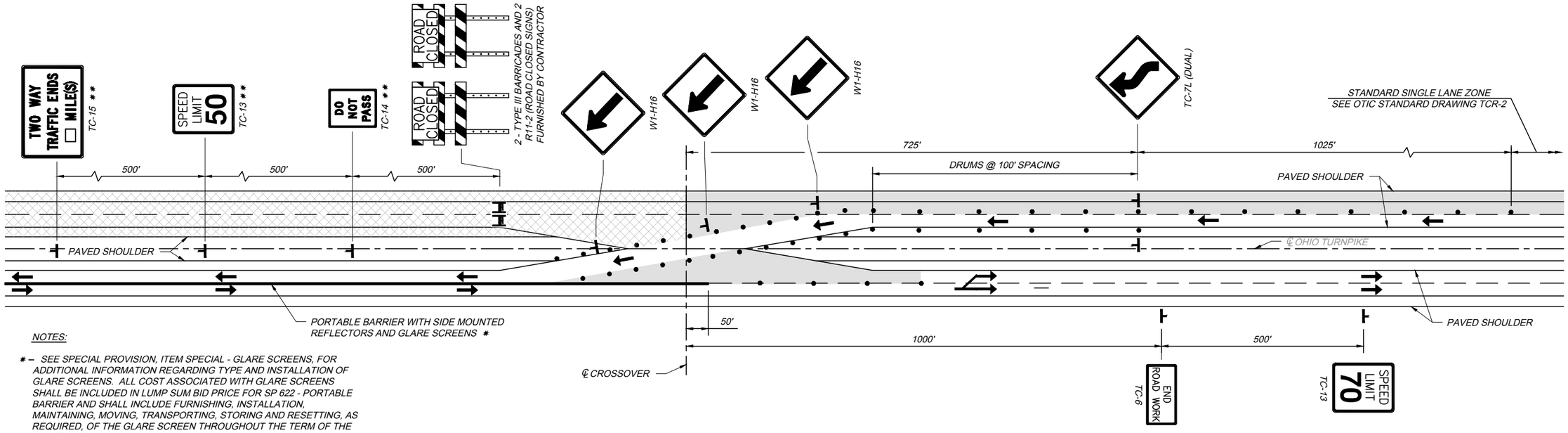
TEMPORARY TRAFFIC CONTROL DETAILS, LEGEND, NOTES AND STANDARD SINGLE LANE CLOSURE

TCR-2

2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-2 2023.02.17.DWG; 2/27/23



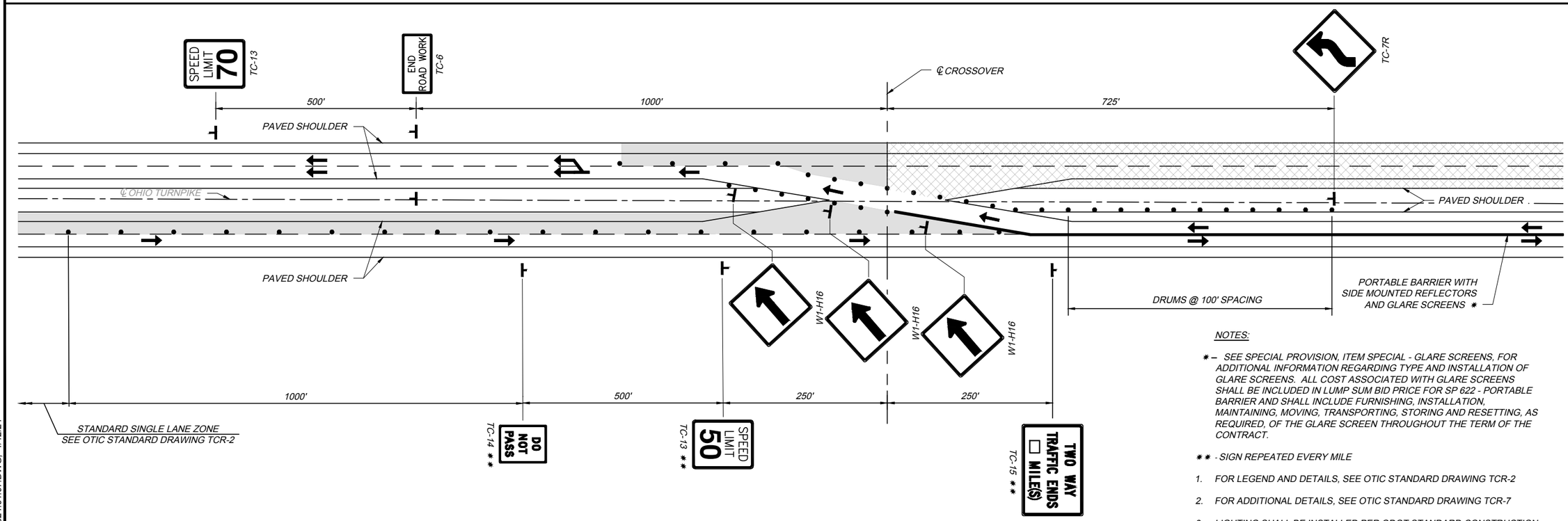
NOTES:

* – SEE SPECIAL PROVISION, ITEM SPECIAL - GLARE SCREENS, FOR ADDITIONAL INFORMATION REGARDING TYPE AND INSTALLATION OF GLARE SCREENS. ALL COST ASSOCIATED WITH GLARE SCREENS SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR SP 622 - PORTABLE BARRIER AND SHALL INCLUDE FURNISHING, INSTALLATION, MAINTAINING, MOVING, TRANSPORTING, STORING AND RESETTING, AS REQUIRED, OF THE GLARE SCREEN THROUGHOUT THE TERM OF THE CONTRACT.

** - SIGN REPEATED EVERY MILE

1. FOR LEGEND AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2
2. FOR ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING TCR-7
3. LIGHTING SHALL BE INSTALLED PER ODOT STANDARD CONSTRUCTION DRAWING MT-100.00

CROSS MEDIAN APPROACH



NOTES:

* – SEE SPECIAL PROVISION, ITEM SPECIAL - GLARE SCREENS, FOR ADDITIONAL INFORMATION REGARDING TYPE AND INSTALLATION OF GLARE SCREENS. ALL COST ASSOCIATED WITH GLARE SCREENS SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR SP 622 - PORTABLE BARRIER AND SHALL INCLUDE FURNISHING, INSTALLATION, MAINTAINING, MOVING, TRANSPORTING, STORING AND RESETTING, AS REQUIRED, OF THE GLARE SCREEN THROUGHOUT THE TERM OF THE CONTRACT.

** - SIGN REPEATED EVERY MILE

1. FOR LEGEND AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2
2. FOR ADDITIONAL DETAILS, SEE OTIC STANDARD DRAWING TCR-7
3. LIGHTING SHALL BE INSTALLED PER ODOT STANDARD CONSTRUCTION DRAWING MT-100.00

STRAIGHT THRU APPROACH

TCR-3 2021.01.07.DWG; 1/12/21

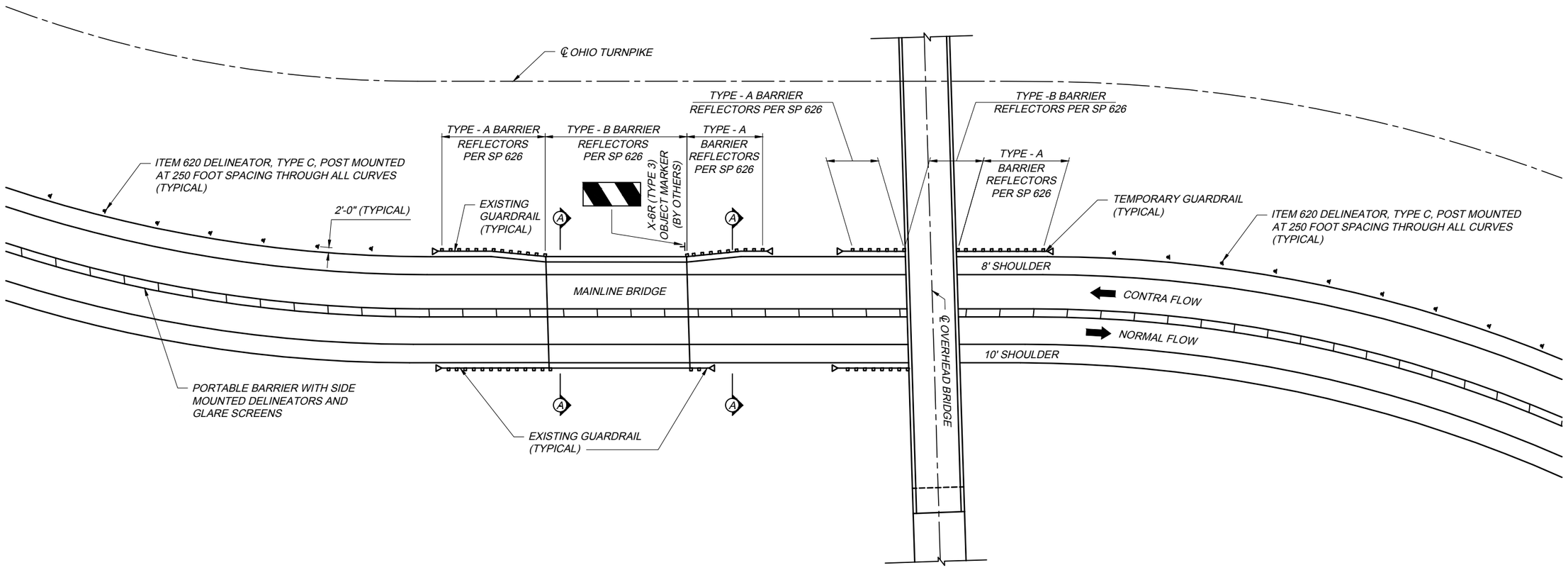
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

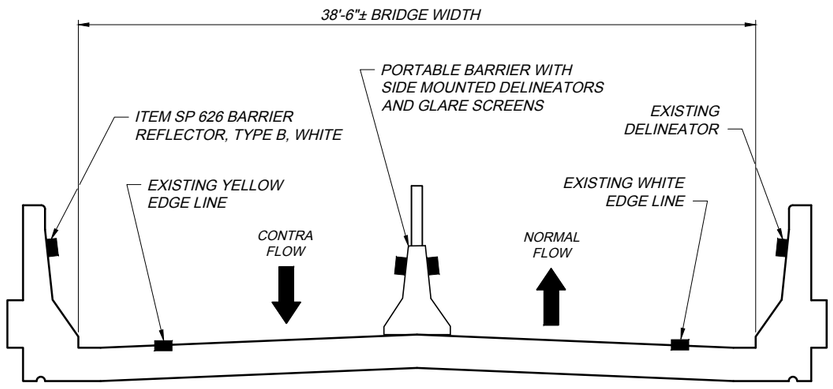
DATE: JANUARY 7, 2021

STANDARD DRAWING

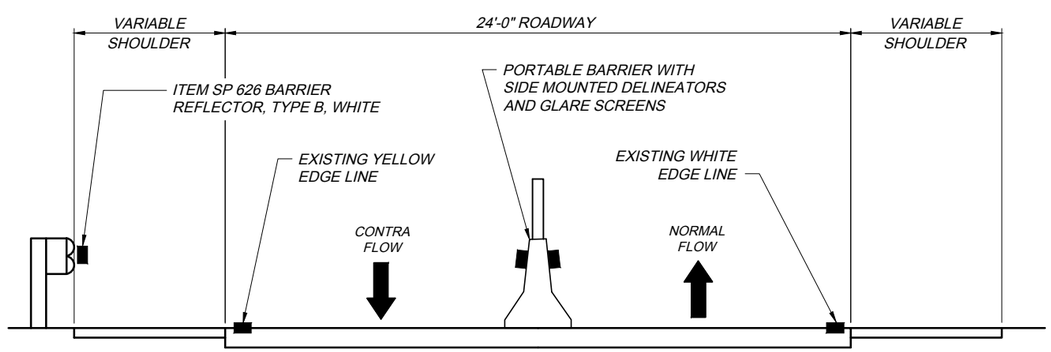
TEMPORARY TRAFFIC CONTROL
2-LANE BI-DIRECTIONAL TRAFFIC

TCR-3





SECTION A-A



SECTION B-B

NOTES:

1. DELINEATION OF REVERSE FLOW GUARDRAIL EXTRUDER PER OTIC STANDARD DRAWING TC-3

TCR-4 2021.01.07.DWG; 1/14/21

DATE: JANUARY 7, 2021

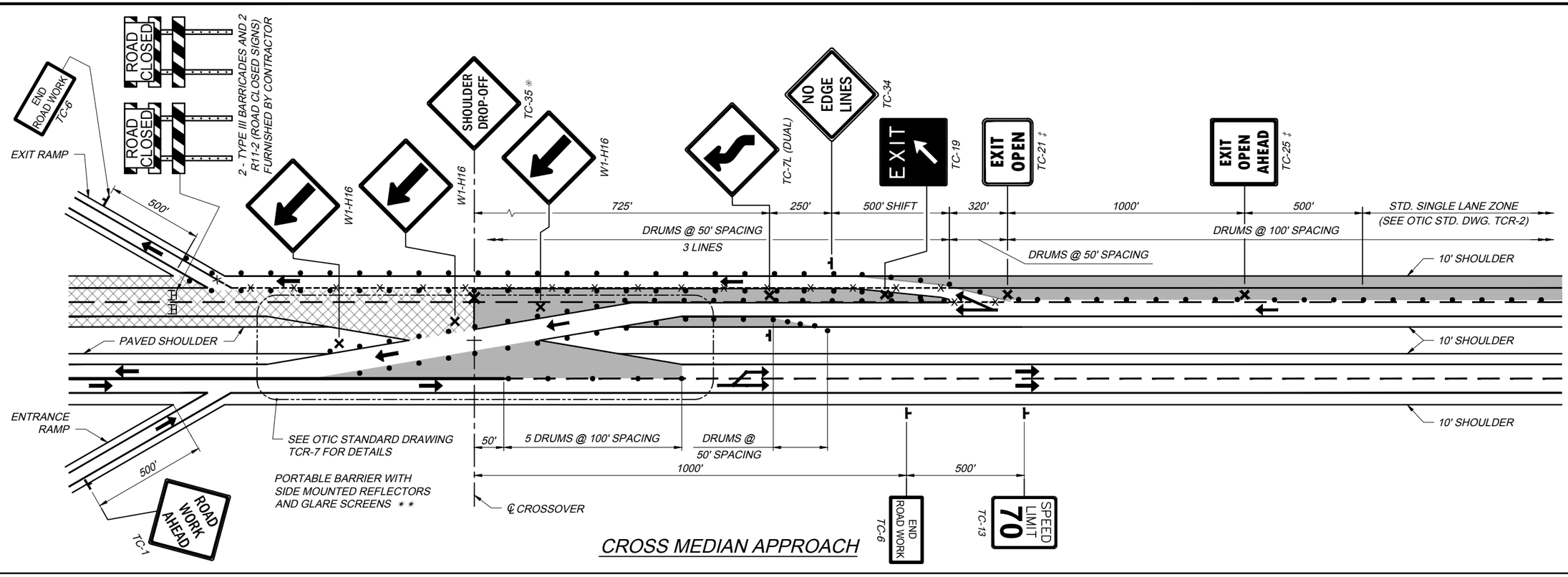
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
BI-DIRECTION ROADSIDE DELINEATION

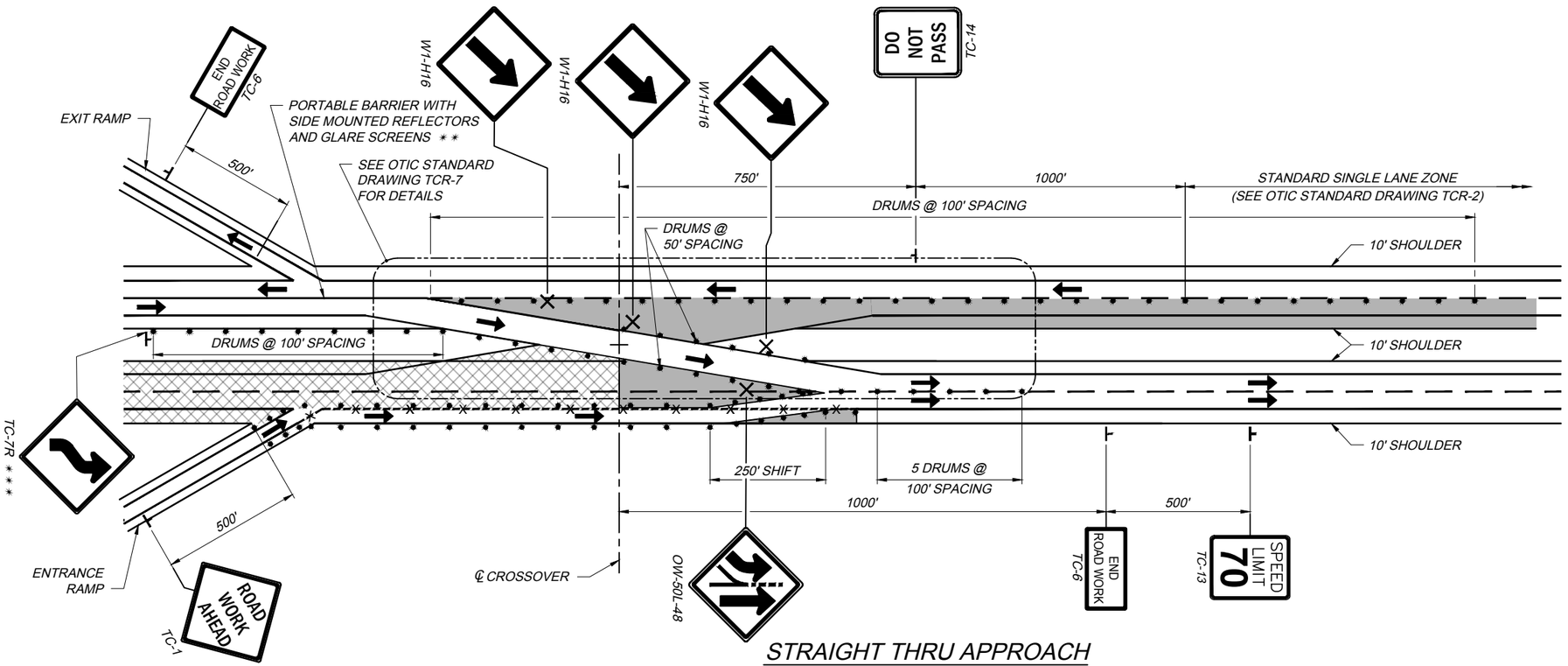
TCR-4

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



CROSS MEDIAN APPROACH



STRAIGHT THRU APPROACH

NOTES

SEE OTIC STANDARD DRAWING TCR-5 (SHEET 2 OF 2) FOR EXIT RAMP DETAILS.

SEE OTIC STANDARD DRAWING TCR-7 FOR CROSSOVER DETAILS.

** – THE TC-35 "SHOULDER DROP-OFF" SIGN SHALL BE INSTALLED ONLY WHEN THE EDGE DROP OFF EXCEEDS 3".*

** * - SEE SPECIAL PROVISION, ITEM SPECIAL - GLARE SCREENS. FOR ADDITIONAL INFORMATION REGARDING TYPE AND INSTALLATION OF GLARE SCREENS. ALL COST ASSOCIATED WITH GLARE SCREENS SHALL BE INCLUDED IN LUMP SUM BID PRICE FOR SP 622 - PORTABLE BARRIER AND SHALL INCLUDE FURNISHING, INSTALLATION, MAINTAINING, MOVING, TRANSPORTING, STORING AND RESETTING, AS REQUIRED, OF THE GLARE SCREEN THROUGHOUT THE TERM OF THE CONTRACT.*

** * * – LOCATE TC-7R 725 FEET FROM CENTER LINE OF CROSSOVER.*

‡ - ADD ROUTE MARKER(S) FOR CONNECTING ROADWAYS TO TOP OF TC-21 AND TC-25 SIGNS.

FOR LEGENDS AND DETAILS SEE OTIC STANDARD DRAWING TCR-2.

LEGEND

- REMOVE EDGE LINE AND / OR LANE LINE AND RPM REFLECTORS

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

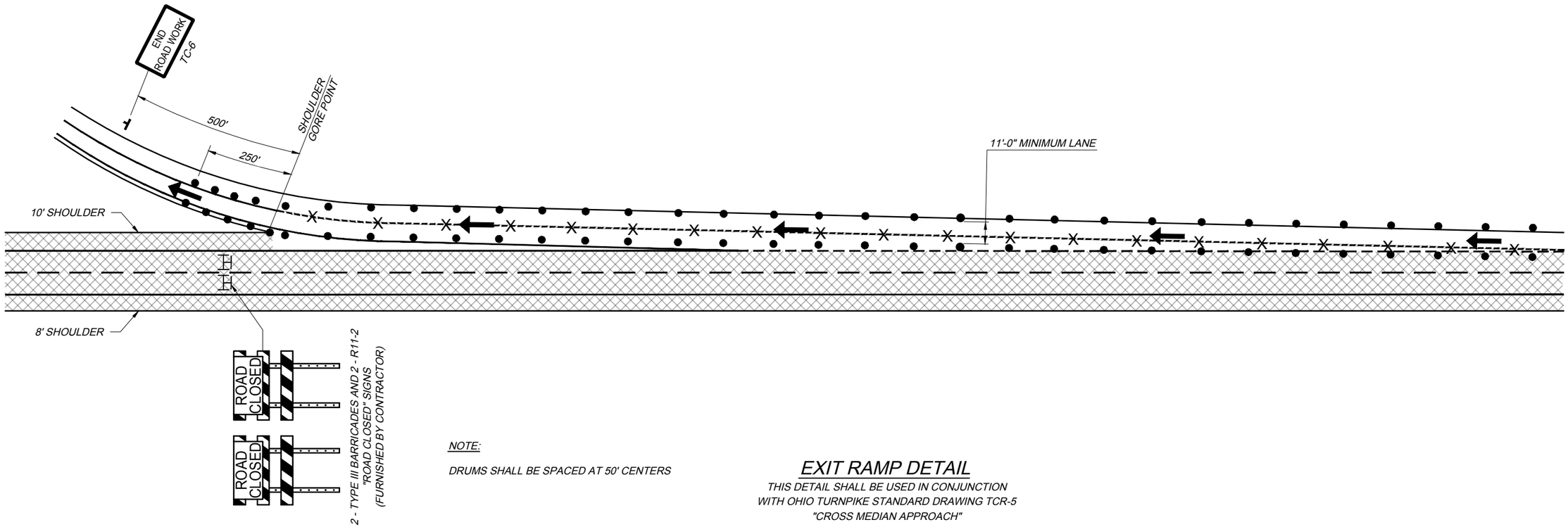
STANDARD DRAWING

DATE: JANUARY 7, 2021

TEMPORARY TRAFFIC CONTROL
TWO LANE SPECIAL BI-DIRECTIONAL ZONE

TCR-5

TCR-5 2021.01.07.dwg; 1/14/21

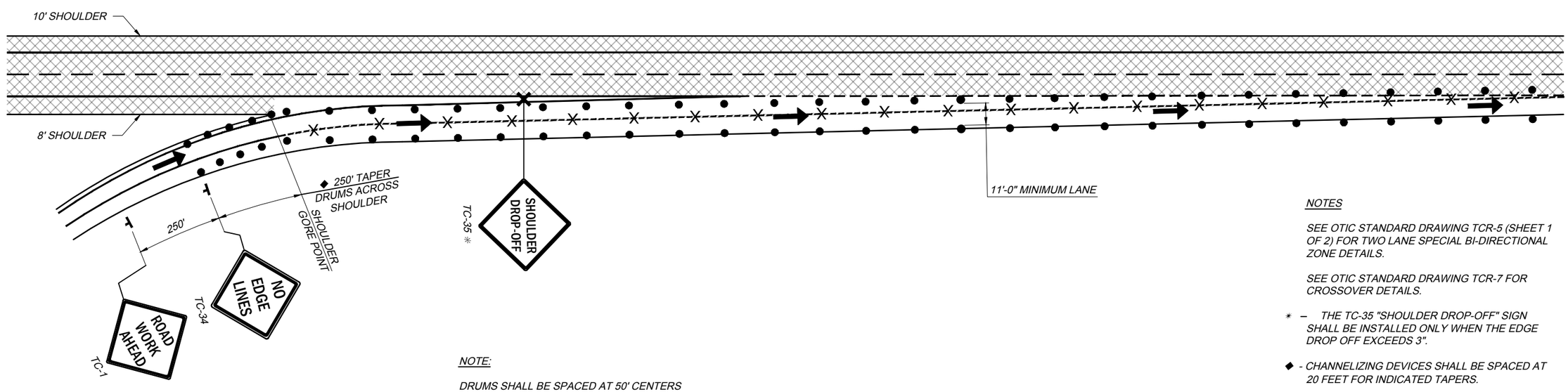


NOTE:

DRUMS SHALL BE SPACED AT 50' CENTERS

EXIT RAMP DETAIL

THIS DETAIL SHALL BE USED IN CONJUNCTION WITH OHIO TURNPIKE STANDARD DRAWING TCR-5 "CROSS MEDIAN APPROACH"



NOTE:

DRUMS SHALL BE SPACED AT 50' CENTERS EXCEPT AS NOTED

ENTRANCE RAMP DETAIL

THIS DETAIL SHALL BE USED IN CONJUNCTION WITH OHIO TURNPIKE STANDARD DRAWING TCR-5 "STRAIGHT THRU APPROACH"

NOTES

SEE OTIC STANDARD DRAWING TCR-5 (SHEET 1 OF 2) FOR TWO LANE SPECIAL BI-DIRECTIONAL ZONE DETAILS.

SEE OTIC STANDARD DRAWING TCR-7 FOR CROSSOVER DETAILS.

* – THE TC-35 "SHOULDER DROP-OFF" SIGN SHALL BE INSTALLED ONLY WHEN THE EDGE DROP OFF EXCEEDS 3".

◆ - CHANNELIZING DEVICES SHALL BE SPACED AT 20 FEET FOR INDICATED TAPERS.

FOR LEGENDS AND DETAILS SEE OTIC STANDARD DRAWING TCR-2.

LEGEND

--x-----x-- - REMOVE EDGE LINE AND / OR LANE LINE AND RPM REFLECTORS

DATE: JANUARY 7, 2021

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
TWO LANE SPECIAL BI-DIRECTIONAL ZONE

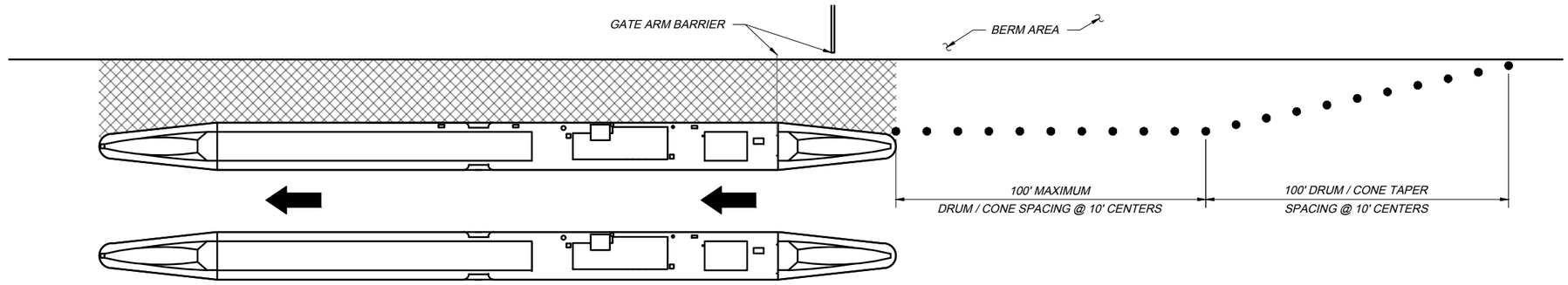
TCR-5

2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

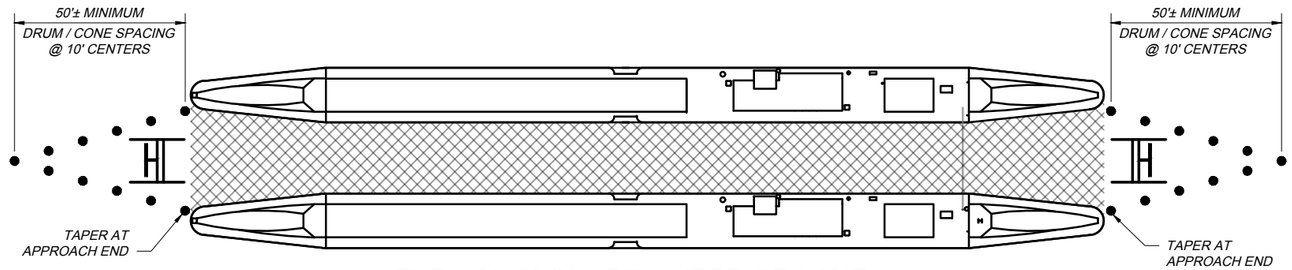
OHIO TURNPIKE

TCR-5 2021.01.07.dwg; 1/14/21



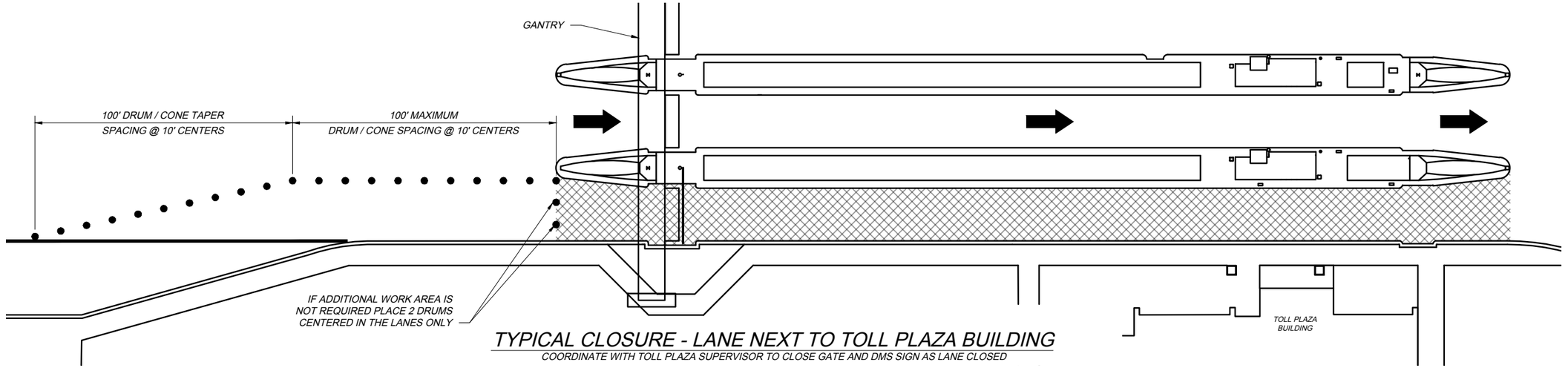
TYPICAL CLOSURE - LANE FURTHEST FROM TOLL PLAZA BUILDING

COORDINATE WITH TOLL PLAZA SUPERVISOR TO CLOSE GATE AND DMS SIGN AS LANE CLOSED



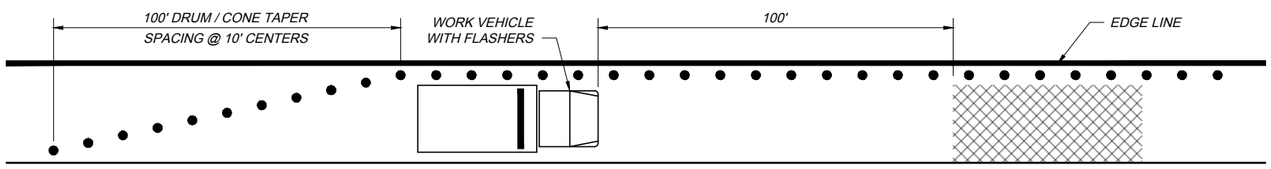
TYPICAL CLOSURE - INTERIOR LANE

COORDINATE WITH TOLL PLAZA SUPERVISOR TO CLOSE GATE AND DMS SIGN AS LANE CLOSED



TYPICAL CLOSURE - LANE NEXT TO TOLL PLAZA BUILDING

COORDINATE WITH TOLL PLAZA SUPERVISOR TO CLOSE GATE AND DMS SIGN AS LANE CLOSED



TYPICAL SHOULDER CLOSURE - NEAR TOLL PLAZA

COORDINATE WITH TOLL PLAZA SUPERVISOR

LEGEND

- WORK AREA
- CONE / DRUM
- LANE DIRECTION ARROW
- TYPE III BARRICADE

NOTES:

1. ALL EXISTING PAVEMENT MARKINGS SHALL REMAIN.
2. PLACE ROAD WORK AHEAD (W20-1 36" X 36") SIGNS ON ALL APPROACH RAMPS.
3. KEEP THE EXISTING CROSSINGS AND TURNAROUNDS ON BOTH SIDES OF THE PLAZA FUNCTIONAL FOR OVERWEIGHT AND OVERSIZED TRUCKS.
4. DO NOT BLOCK TOLL PLAZA PARKING AREA ACCESS.
5. KEEP THE TOLL BOOTH CROSSINGS CLEAR FOR ALL OPEN BOOTHS AND SHALL PROVIDE A SAFE PATH WITHIN THE CLOSED LANES.

OHIO TURNPIKE

DATE: FEBRUARY 17, 2023

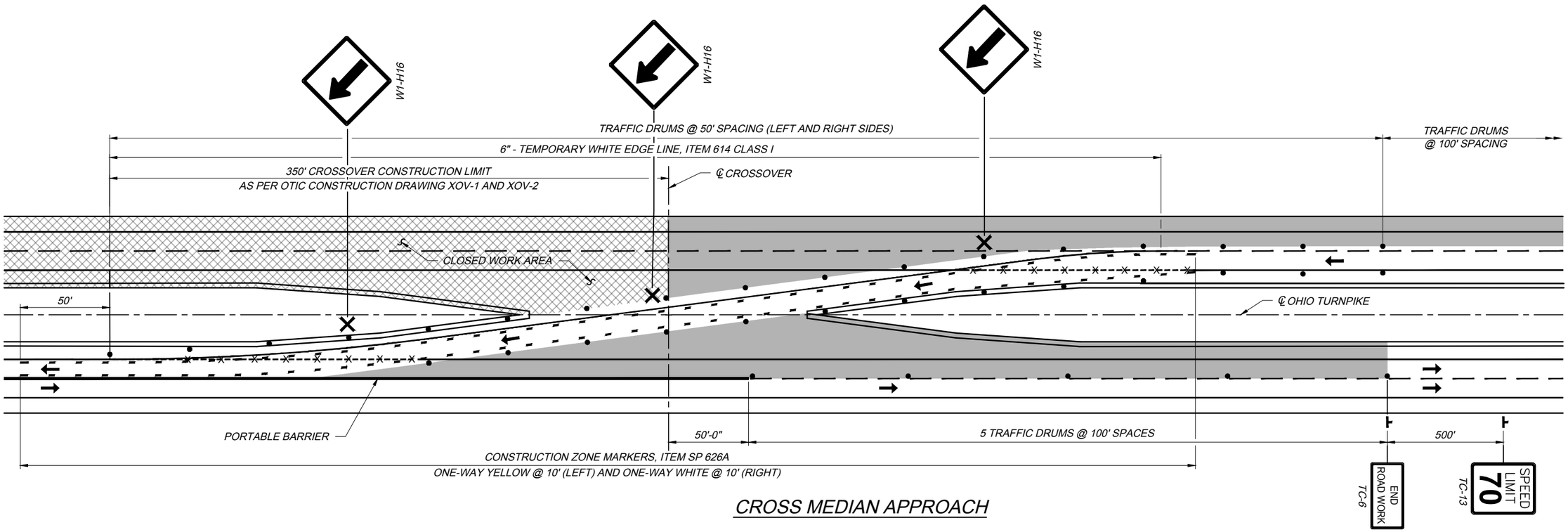
STANDARD DRAWING

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

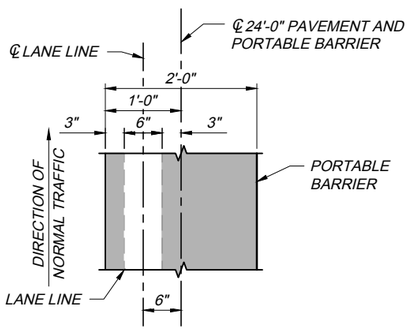
TEMPORARY TRAFFIC CONTROL
TOLL PLAZA LANE CLOSURES

TCR-6

1 / 1

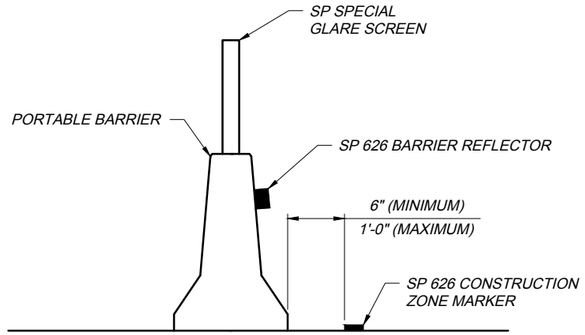


CROSS MEDIAN APPROACH



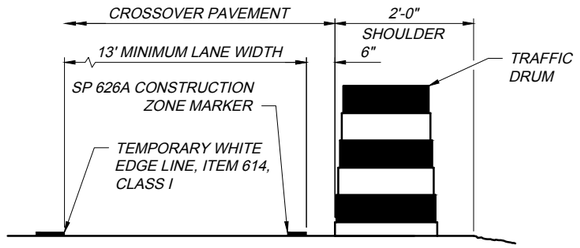
TYPICAL PLACEMENT PLAN DETAIL

PORTABLE BARRIER



PORTABLE BARRIER WITHIN CROSSOVERS

TYPICAL LAYOUT CONSTRUCTION ZONE MARKERS



CROSSOVER LANE / EDGE DETAIL

NOTES:

SEE OTIC STANDARD DRAWING TCR-2.FOR ADDITIONAL LEGENDS AND DETAILS.

LEGEND

- REMOVE EDGE LINE AND / OR LANE LINE AND RPM REFLECTORS
- SP 626A CONSTRUCTION ZONE MARKERS

DATE: JANUARY 7, 2021

STANDARD DRAWING

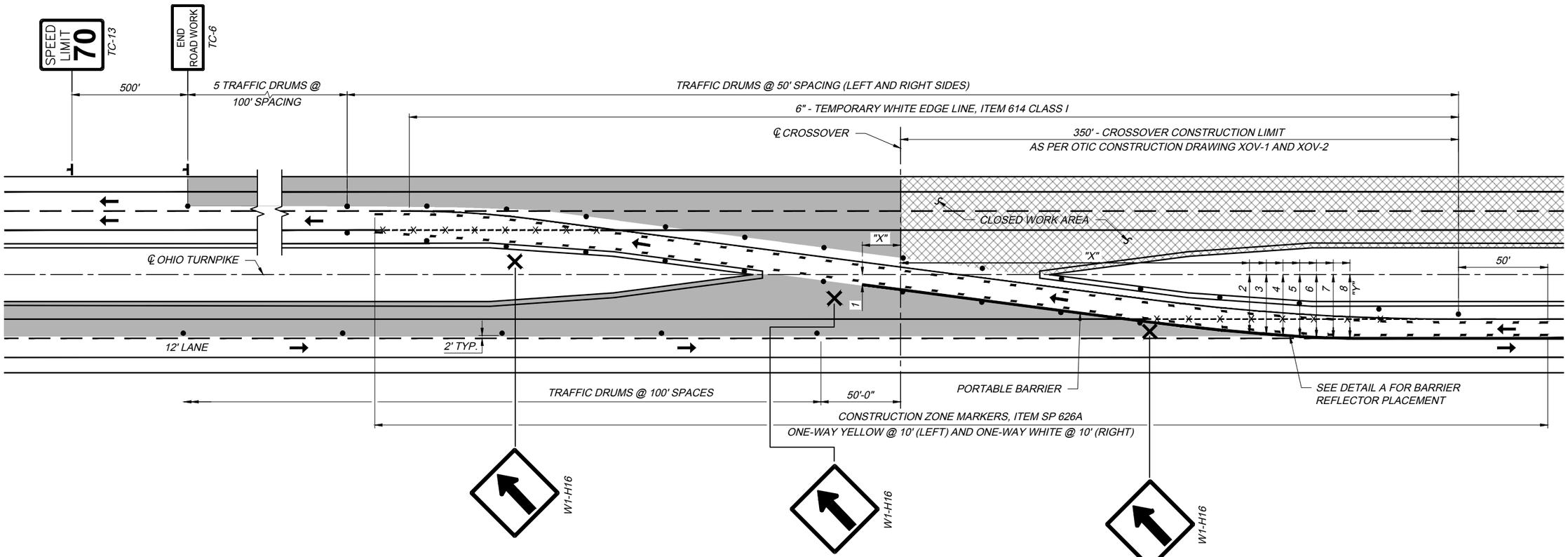
TEMPORARY TRAFFIC CONTROL
TWO LANE CROSSOVER DETAILS

TCR-7

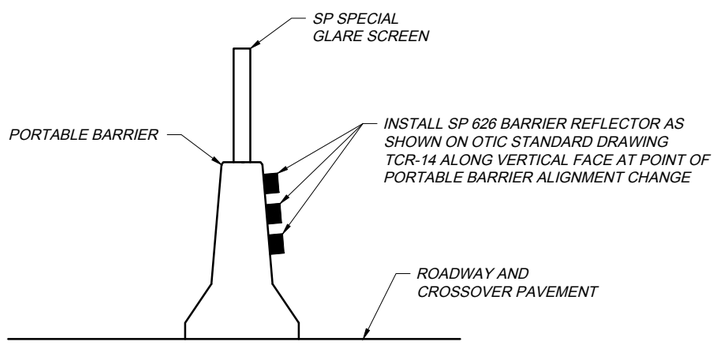
1 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-7 2021.01.07.dwg; 1/14/21



STRAIGHT THRU APPROACH



DETAIL A

PORTABLE BARRIER REFLECTOR PLACEMENT

BARRIER PLACEMENT		
POINT	"X"	"Y"
1	-24.0'	9.0'
2	190.0'	36.1'
3	200.0'	37.3'
4	210.0'	38.3'
5	220.0'	38.9'
6	230.0'	39.5'
7	240.0'	39.8'
8	250.0'	40.0'

NOTES:

PORTABLE BARRIER PLACEMENT GUIDE

ORIGIN BEING TAKEN AS INTERSECTION OF ℄ OF CROSSOVER AND ℄ OHIO TURNPIKE.

"Y" DISTANCE IS MEASURED TO THE ℄ OF THE BARRIER.

THIS DRAWING IS TO BE USED AS A GUIDE. THE FINAL LAY-OUT OF THE PORTABLE BARRIER SHALL BE FIELD VERIFIED AND ADJUSTED AS NEEDED, BY THE CHIEF ENGINEER. ADDITIONAL ADJUSTMENTS MAY BE MADE TO TEMPORARY TRAFFIC CONTROL DEVICES TO INSURE PROPER PLACEMENT.

SEE OTIC STANDARD DRAWING TCR-2.FOR ADDITIONAL LEGENDS AND DETAILS.

SEE OTIC STANDARD DRAWING TCR-3 FOR DETAILS NOT SHOWN.

LEGEND

- REMOVE EDGE LINE AND / OR LANE LINE AND RPM REFLECTORS
- SP 626A CONSTRUCTION ZONE MARKERS

DATE: JANUARY 7, 2021

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
TWO LANE CROSSOVER DETAILS

TCR-7

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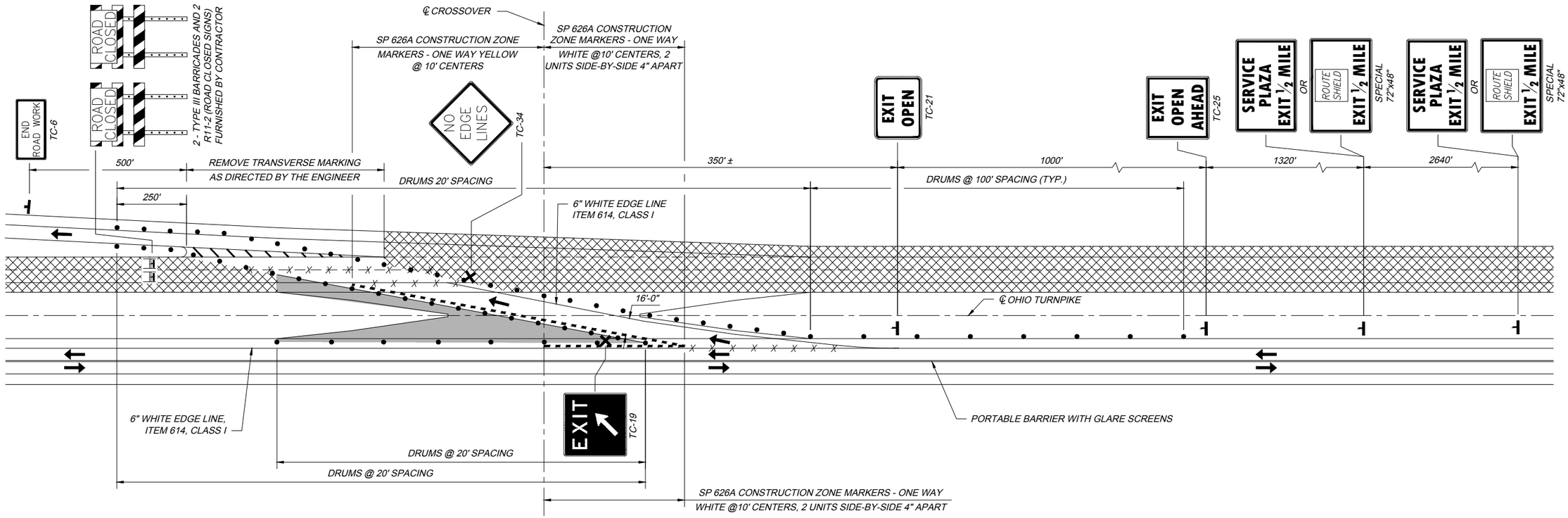
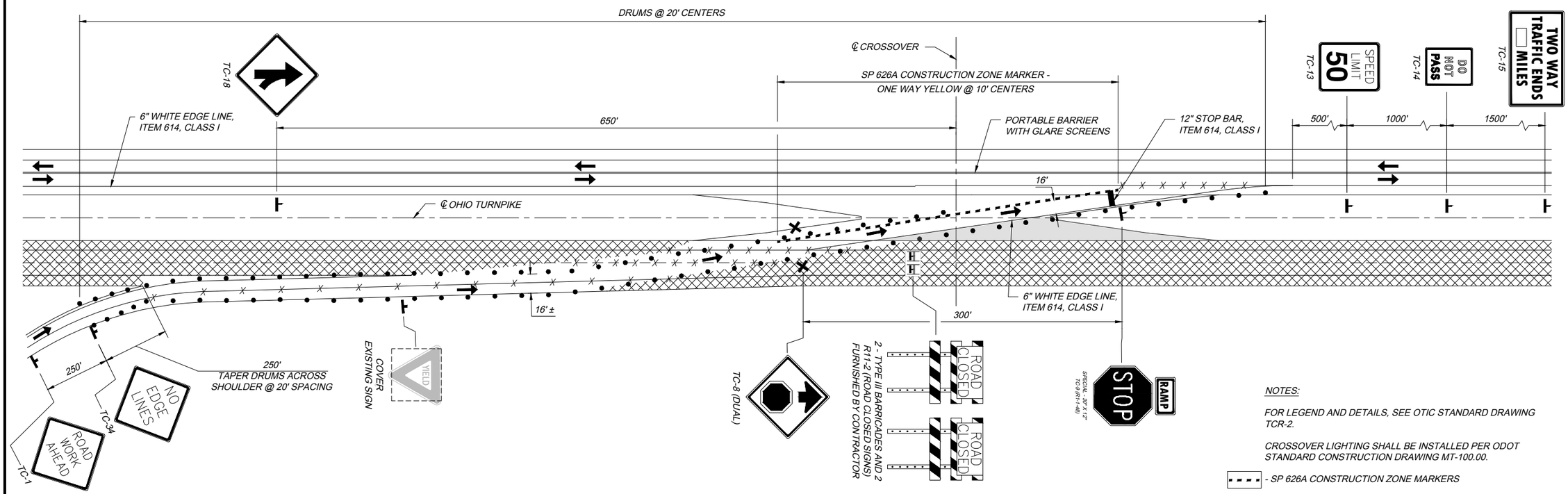
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-7 2021.01.07.dwg; 1/14/21



DECELERATION LANE DETAIL



ACCELERATION LANE DETAIL

NOTES:

FOR LEGEND AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.

CROSSOVER LIGHTING SHALL BE INSTALLED PER ODOT STANDARD CONSTRUCTION DRAWING MT-100.00.

- SP 626A CONSTRUCTION ZONE MARKERS

TCR-8 2021.01.07.dwg; 1/14/21

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

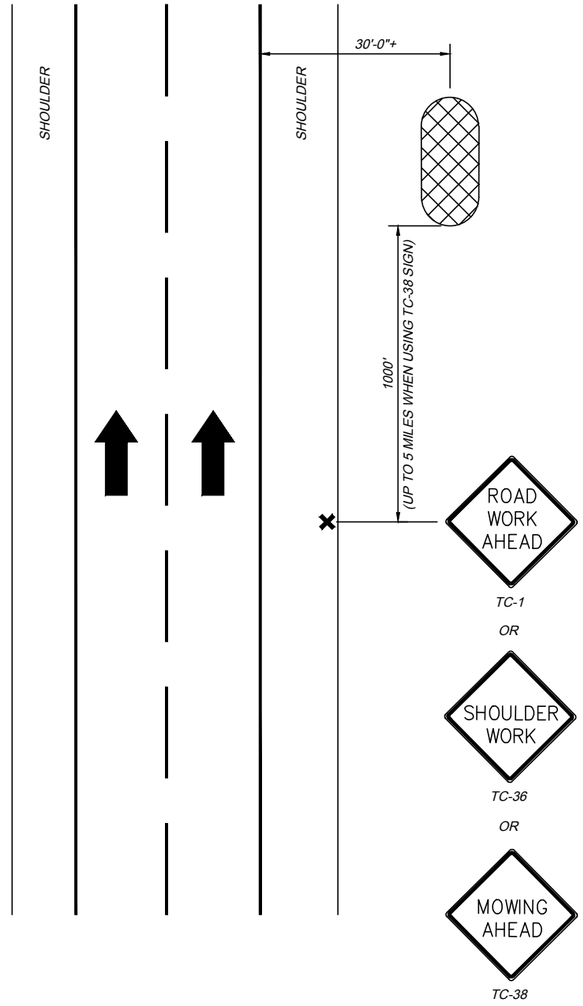
TEMPORARY TRAFFIC CONTROL
TWO LANE SPECIAL CROSSOVER DETAILS

STANDARD DRAWING

DATE: JANUARY 7, 2021

TCR-8

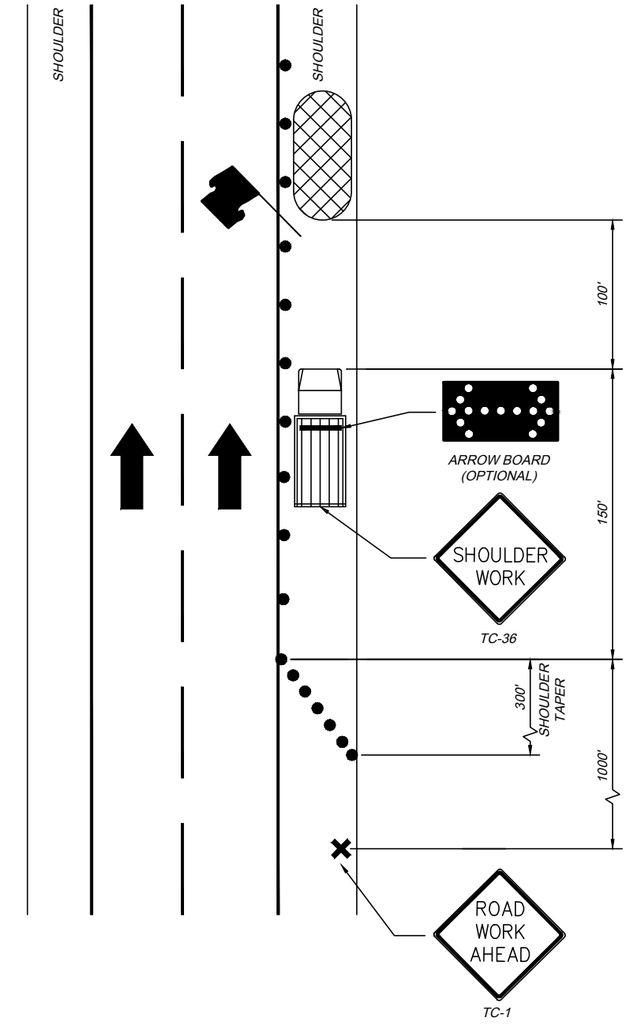
1 / 1



WORK BEYOND THE SHOULDER

NOTES:

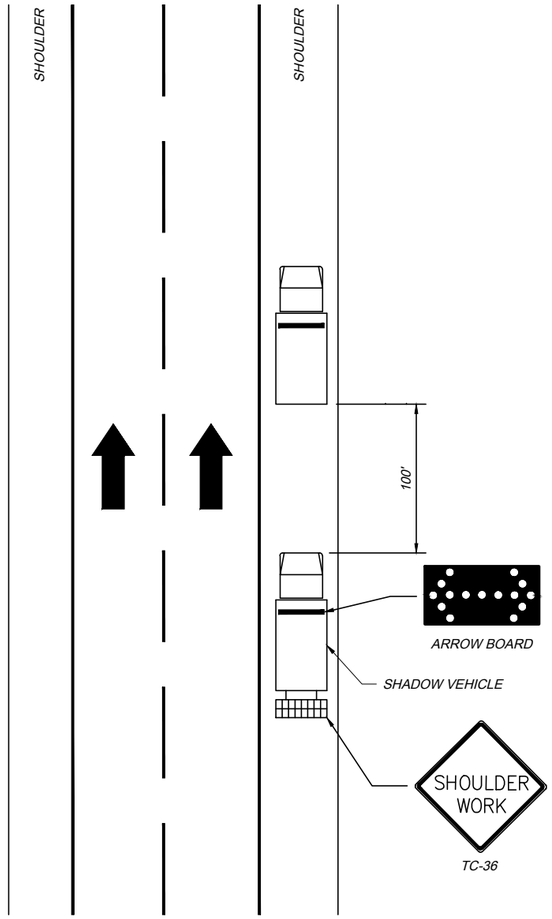
1. IF THE WORK AREA IS IN THE MEDIAN, PLACE AN ADVANCE WARNING SIGN ON THE LEFT AND RIGHT SIDE OF THE ROADWAY.
2. THE ADVANCE WARNING SIGN(S) MAY BE OMITTED WHERE THE WORK AREA IS MORE THAN 15 FEET FROM THE EDGE OF THE ROADWAY.
3. THE ADVANCE WARNING SIGN(S) MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED.
4. VEHICLE HAZARD WARNING SIGNALS MAY BE USED TO SUPPLEMENT BUT NOT REPLACE THE AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS PER TCR-1.
5. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
6. SEE OTIC STANDARD DRAWING TCR-2 FOR LEGEND AND DETAILS.



STATIONARY SHOULDER CLOSURE

NOTES:

1. FOR SHORT DURATION INTERMITTENT CLOSURES, WARNING SIGNS MAY BE OMITTED WHEN THE BARRIER VEHICLE DISPLAYS AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS PER TCR-1 IF THE DISTANCE BETWEEN WORK LOCATIONS IS ONE MILE OR MORE, AND IF THE BARRIER VEHICLE TRAVELS AT VEHICULAR TRAFFIC SPEEDS BETWEEN LOCATIONS.
2. VEHICLE HAZARD WARNING SIGNALS MAY BE USED TO SUPPLEMENT BUT NOT REPLACE THE AMBER COLORED HIGH-INTENSITY, ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
3. IF AN ARROW BOARD IS USED, THE CAUTION MODE SHALL BE USED. THE ARROW BOARD MAY BE MOUNTED ON THE BARRIER VEHICLE OR IT MAY BE TRAILER MOUNTED.
4. CONES SHALL BE SPACED 50 FEET CENTER TO CENTER. CONES MAY BE OMITTED FOR SHORT DURATION INTERMITTENT ZONES.
5. IF THE WORK AREA IS IN THE MEDIAN, PLACE AN ADVANCE WARNING SIGN ON THE LEFT AND RIGHT SIDE OF THE ROADWAY.
6. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
7. SEE OTIC STANDARD DRAWING TCR-2 FOR LEGEND AND DETAILS.
8. SHORT DURATION INTERMITTENT CLOSURES FOR NON-CONSTRUCTION ACTIVITIES (SURVEYING, INSPECTION, ETC.) DO NOT REQUIRE BARRIER VEHICLE OR FLAGGER; HOWEVER, THE WORK VEHICLE MUST DISPLAY AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.



MOBILE OPERATION (SHOULDER)

NOTES:

1. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
2. SEE OTIC STANDARD DRAWING TCR-2 FOR LEGEND AND DETAILS.
3. THE SHADOW VEHICLE CAN ALSO BE USED AS A WORK VEHICLE.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

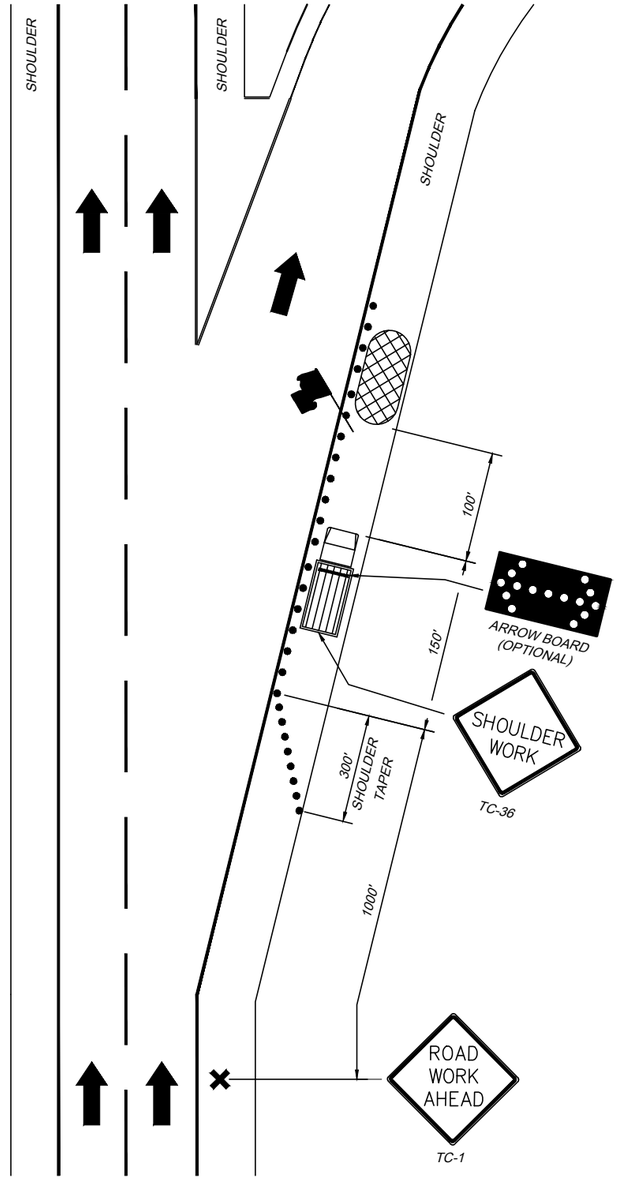
STANDARD DRAWING

DATE: JANUARY 7, 2021

TEMPORARY TRAFFIC CONTROL
MOBILE / SHORT DURATION / SHORT TERM SHOULDER CLOSURE

TCR-9

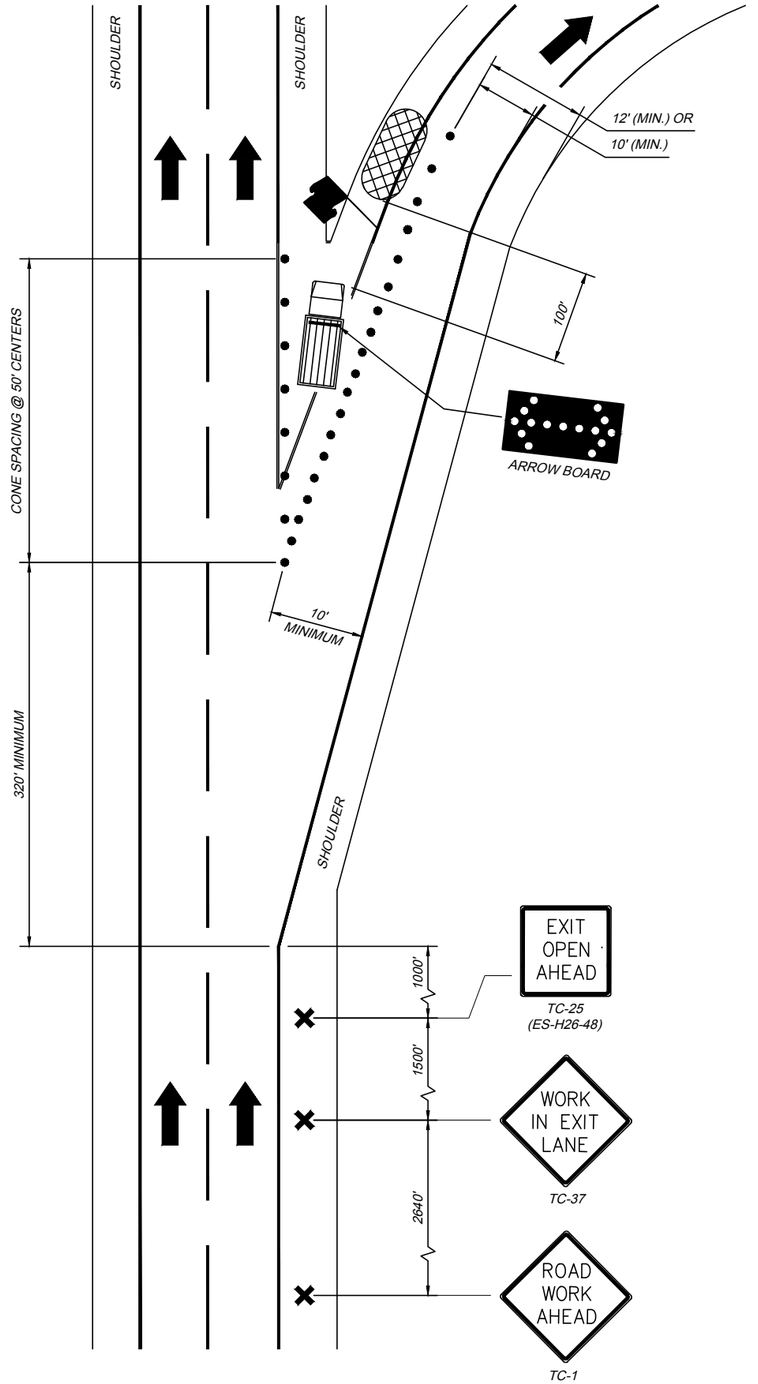
TCR-9 2021.01.07.DWG; 1/15/21



NOTES:

1. FOR SHORT DURATION INTERMITTENT CLOSURES, WARNING SIGNS MAY BE OMITTED WHEN THE BARRIER VEHICLE DISPLAYS AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS PER TCR-1, IF THE DISTANCE BETWEEN WORK LOCATIONS IS ONE MILE OR MORE, AND IF THE WORK VEHICLE TRAVELS AT VEHICULAR TRAFFIC SPEEDS BETWEEN LOCATIONS.
2. VEHICLE HAZARD WARNING SIGNALS MAY BE USED TO SUPPLEMENT BUT NOT REPLACE THE AMBER COLORED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS.
3. IF AN ARROW BOARD IS USED, THE CAUTION MODE SHALL BE USED. THE ARROW BOARD MAY BE MOUNTED ON THE BARRIER VEHICLE OR IT MAY BE TRAILER MOUNTED.
4. CONES SHALL BE SPACED 50 FEET CENTER TO CENTER. CONES MAY BE OMITTED FOR SHORT DURATION INTERMITTENT ZONES.
5. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
6. SEE OTIC STANDARD DRAWING TCR-2 FOR LEGEND AND DETAILS.

RAMP SHOULDER CLOSURE



NOTES:

1. THE DOUBLE ARROW MODE OF THE ARROW BOARD SHALL BE USED.
2. CONES SHALL BE SPACED 20 FEET CENTER TO CENTER, EXCEPT AS SHOWN.
3. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
4. SEE OTIC STANDARD DRAWING TCR-2 FOR LEGEND AND DETAILS.

DATE: JANUARY 7, 2021

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
MOBILE / SHORT DURATION / SHORT TERM SHOULDER CLOSURE

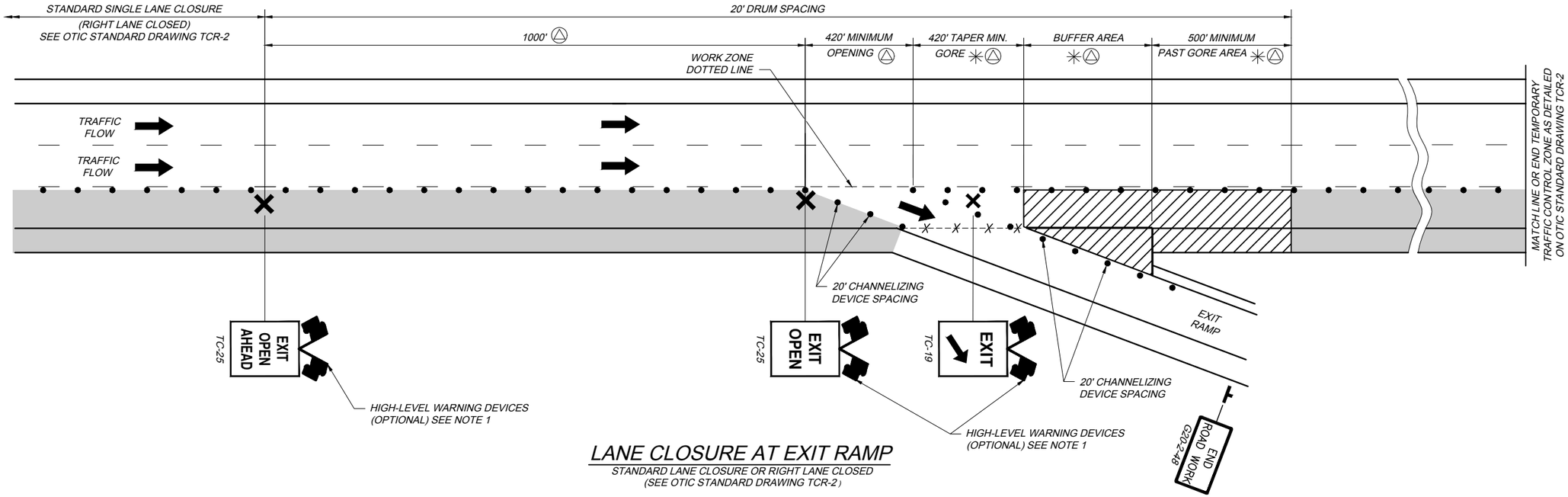
TCR-9

2 / 2

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

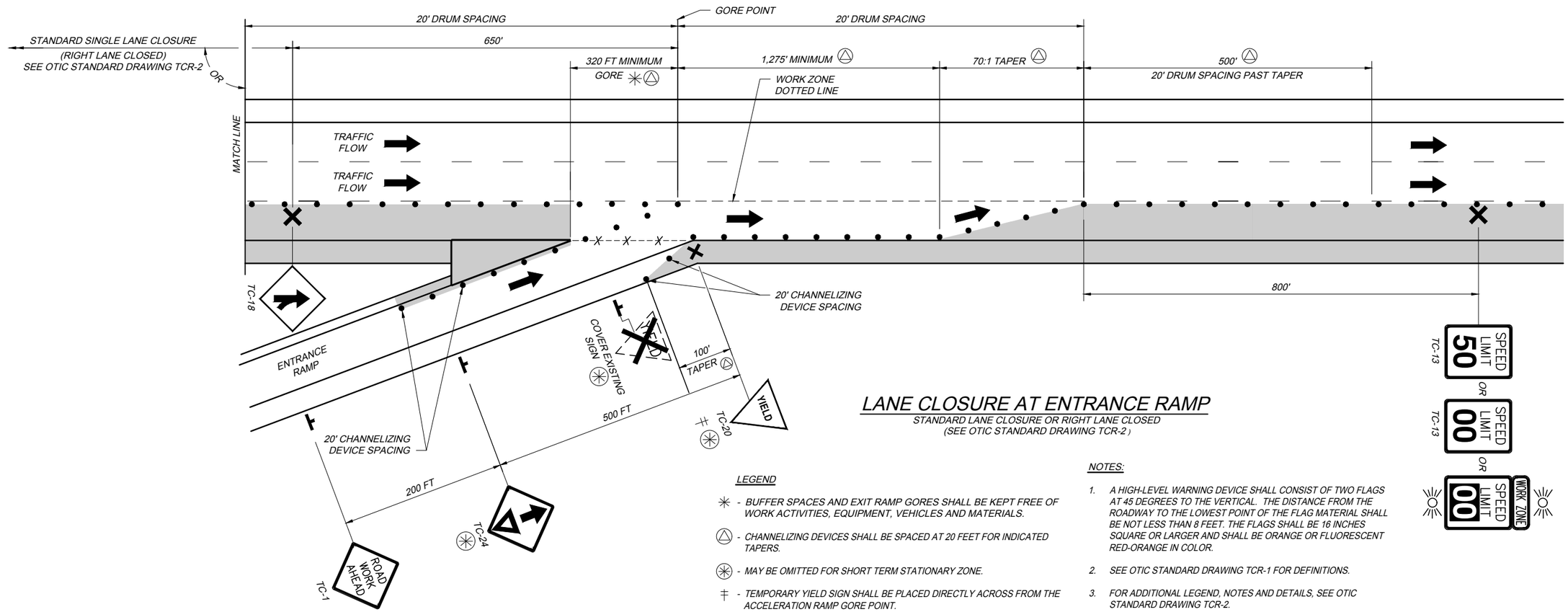
OHIO TURNPIKE

TCR-9 2021.01.07.DWG; 1/15/21



LANE CLOSURE AT EXIT RAMP

STANDARD LANE CLOSURE OR RIGHT LANE CLOSED
(SEE OTIC STANDARD DRAWING TCR-2)



LANE CLOSURE AT ENTRANCE RAMP

STANDARD LANE CLOSURE OR RIGHT LANE CLOSED
(SEE OTIC STANDARD DRAWING TCR-2)

LEGEND

- ✳ - BUFFER SPACES AND EXIT RAMP GORES SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.
- △ - CHANNELIZING DEVICES SHALL BE SPACED AT 20 FEET FOR INDICATED TAPERS.
- ✳ - MAY BE OMITTED FOR SHORT TERM STATIONARY ZONE.
- ‡ - TEMPORARY YIELD SIGN SHALL BE PLACED DIRECTLY ACROSS FROM THE ACCELERATION RAMP GORE POINT.
- X X X - REMOVE LANE LINE, DOTTED LINES, AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES).

NOTES:

1. A HIGH-LEVEL WARNING DEVICE SHALL CONSIST OF TWO FLAGS AT 45 DEGREES TO THE VERTICAL. THE DISTANCE FROM THE ROADWAY TO THE LOWEST POINT OF THE FLAG MATERIAL SHALL BE NOT LESS THAN 8 FEET. THE FLAGS SHALL BE 16 INCHES SQUARE OR LARGER AND SHALL BE ORANGE OR FLUORESCENT RED-ORANGE IN COLOR.
2. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.
3. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
4. TC-1 AND TC-24 SIGNS MAY BE MOUNTED ON X-FOOT PRINT SIGN STANDS FOR SHORT TERM STATIONARY ZONES.

OHIO TURNPIKE

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

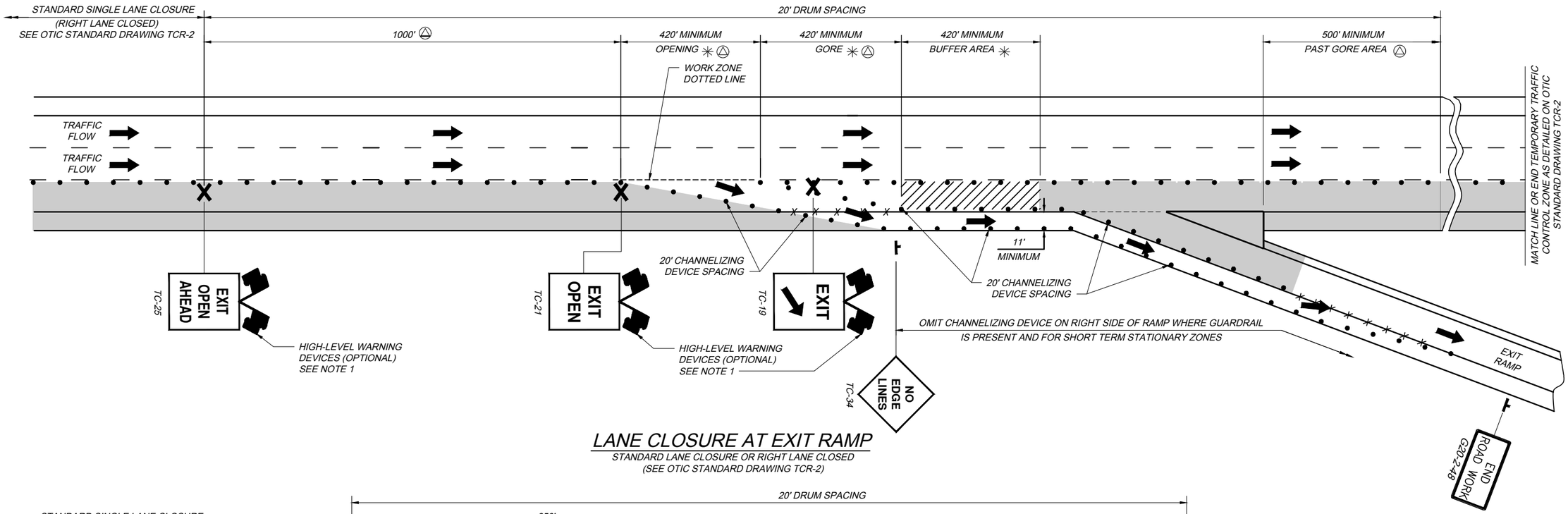
TEMPORARY TRAFFIC CONTROL
LANE CLOSURE AT EXIT AND ENTRANCE RAMPS

TCR-9.1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-9.1 2023.02.17.dwg 2/27/23 - 11:44am



DATE: FEBRUARY 17, 2023

STANDARD DRAWING

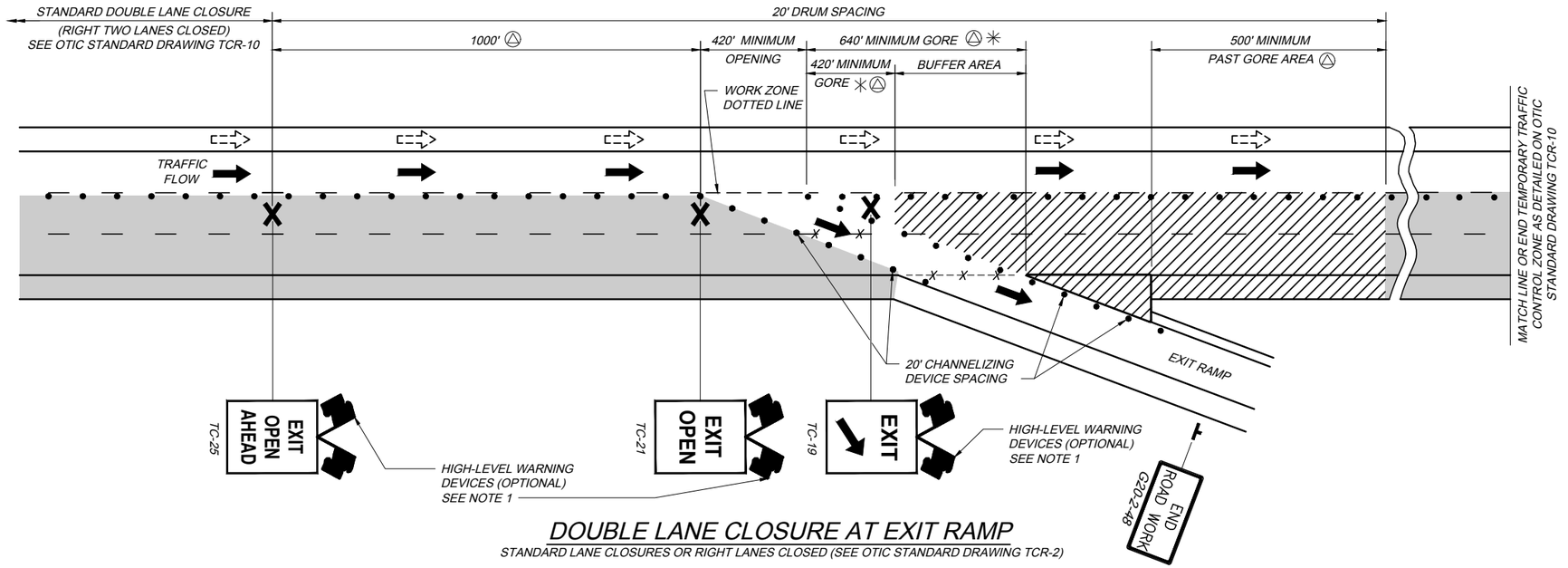
TEMPORARY TRAFFIC CONTROL
LANE CLOSURE AT EXIT AND ENTRANCE RAMPS

TCR-9.2

1 / 1

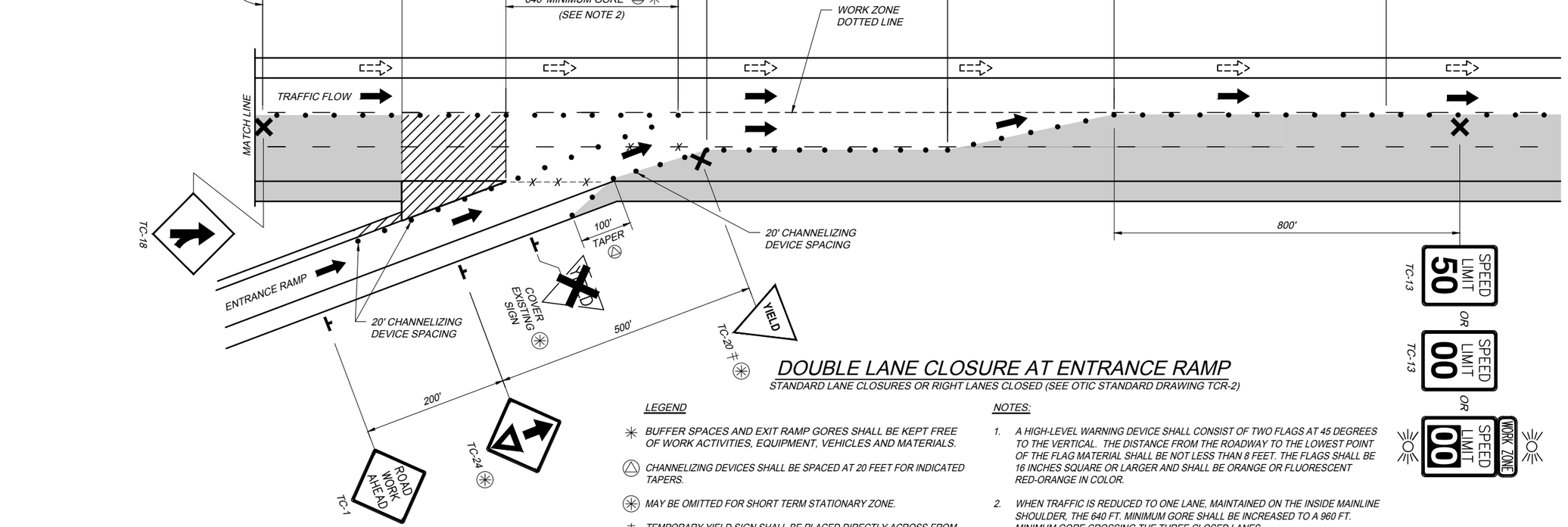
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-9.2 2023.02.17.dwg; 2/28/23 - 9:00am



DOUBLE LANE CLOSURE AT EXIT RAMP

STANDARD LANE CLOSURES OR RIGHT LANES CLOSED (SEE OTIC STANDARD DRAWING TCR-2)



DOUBLE LANE CLOSURE AT ENTRANCE RAMP

STANDARD LANE CLOSURES OR RIGHT LANES CLOSED (SEE OTIC STANDARD DRAWING TCR-2)

LEGEND

- ✳ BUFFER SPACES AND EXIT RAMP GORES SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.
- △ CHANNELIZING DEVICES SHALL BE SPACED AT 20 FEET FOR INDICATED TAPERS.
- ✳ MAY BE OMITTED FOR SHORT TERM STATIONARY ZONE.
- ‡ TEMPORARY YIELD SIGN SHALL BE PLACED DIRECTLY ACROSS FROM THE ACCELERATION RAMP GORE POINT.
- X X X REMOVE LANE LINE, DOTTED LINES, AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES).
- ADDITIONAL LANE OF TRAFFIC ON INSIDE SHOULDER WHEN REQUIRED BY CONTRACT PLANS.

NOTES:

1. A HIGH-LEVEL WARNING DEVICE SHALL CONSIST OF TWO FLAGS AT 45 DEGREES TO THE VERTICAL. THE DISTANCE FROM THE ROADWAY TO THE LOWEST POINT OF THE FLAG MATERIAL SHALL BE NOT LESS THAN 8 FEET. THE FLAGS SHALL BE 16 INCHES SQUARE OR LARGER AND SHALL BE ORANGE OR FLUORESCENT RED-ORANGE IN COLOR.
2. WHEN TRAFFIC IS REDUCED TO ONE LANE, MAINTAINED ON THE INSIDE MAINLINE SHOULDER, THE 640 FT. MINIMUM GORE SHALL BE INCREASED TO A 960 FT. MINIMUM GORE CROSSING THE THREE CLOSED LANES.
3. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
4. TC-1 AND TC-24 SIGNS MAY BE MOUNTED ON X-FOOT PRINT SIGN STANDS FOR SHORT TERM STATIONARY ZONES.
5. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

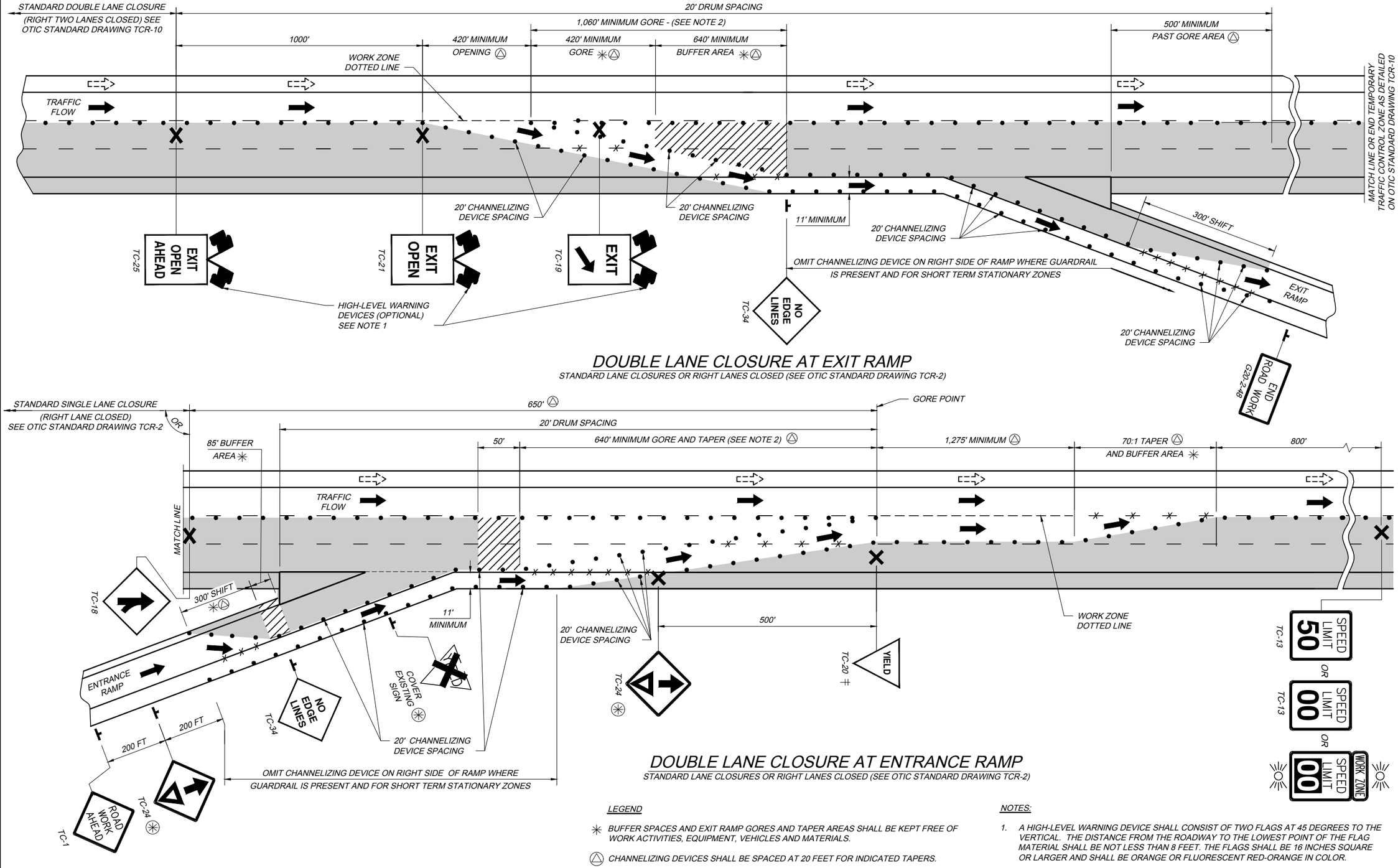
TEMPORARY TRAFFIC CONTROL
DOUBLE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS

TCR-9.3

1 / 1

OHIO TURNPIKE

TCR-9.3 2023.02.17.dwg; 2/28/23 - 9:18am



DOUBLE LANE CLOSURE AT EXIT RAMP

STANDARD LANE CLOSURES OR RIGHT LANES CLOSED (SEE OTIC STANDARD DRAWING TCR-2)

DOUBLE LANE CLOSURE AT ENTRANCE RAMP

STANDARD LANE CLOSURES OR RIGHT LANES CLOSED (SEE OTIC STANDARD DRAWING TCR-2)

LEGEND

- ✳ BUFFER SPACES AND EXIT RAMP GORES AND TAPER AREAS SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.
- △ CHANNELIZING DEVICES SHALL BE SPACED AT 20 FEET FOR INDICATED TAPERS.
- ✳ MAY BE OMITTED FOR SHORT TERM STATIONARY ZONE.
- ‡ TEMPORARY YIELD SIGN SHALL BE PLACED DIRECTLY ACROSS FROM THE ACCELERATION RAMP GORE POINT.
- X X X REMOVE LANE LINE, DOTTED LINES, AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES).
- ⇨ TRAFFIC FLOW ON INSIDE SHOULDER WHEN REQUIRED BY CONTRACT PLANS.

NOTES:

1. A HIGH-LEVEL WARNING DEVICE SHALL CONSIST OF TWO FLAGS AT 45 DEGREES TO THE VERTICAL. THE DISTANCE FROM THE ROADWAY TO THE LOWEST POINT OF THE FLAG MATERIAL SHALL BE NOT LESS THAN 8 FEET. THE FLAGS SHALL BE 16 INCHES SQUARE OR LARGER AND SHALL BE ORANGE OR FLUORESCENT RED-ORANGE IN COLOR.
2. WHEN TRAFFIC IS REDUCED TO ONE LANE, MAINTAINED ON THE INSIDE MAINLINE SHOULDER, THE 640 FT. MINIMUM GORE SHALL BE INCREASED TO A 960 FT. MINIMUM GORE CROSSING THE THREE CLOSED LANES.
3. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2
4. TC-1, TC-7R, TC-24, AND TC-34 SIGNS MAY BE MOUNTED ON X-FOOT PRINT SIGN STANDS FOR SHORT TERM STATIONARY ZONES.
5. SEE OTIC STANDARD DRAWING TCR-1 FOR DEFINITIONS.

OHIO TURNPIKE

DATE: FEBRUARY 17, 2023

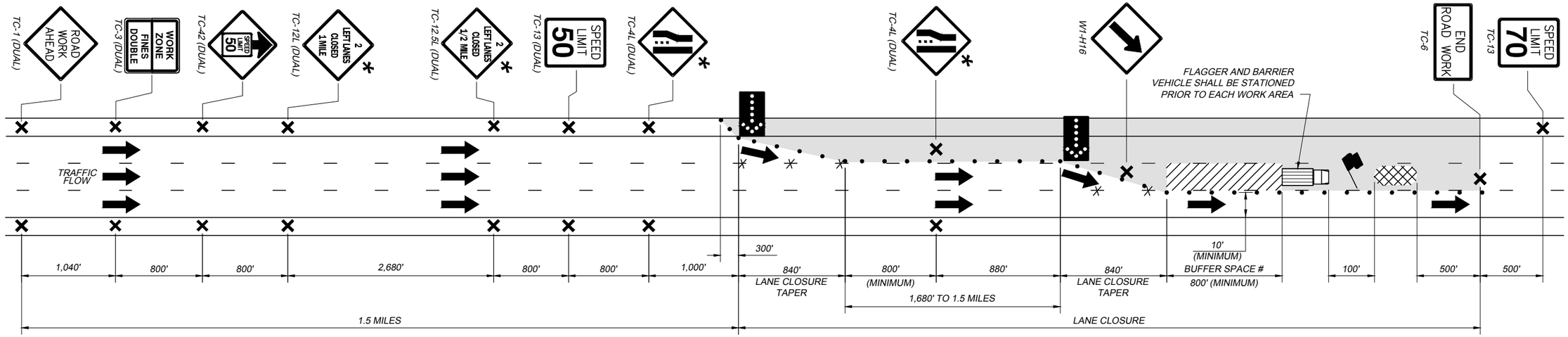
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
DOUBLE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS

TCR-9.4

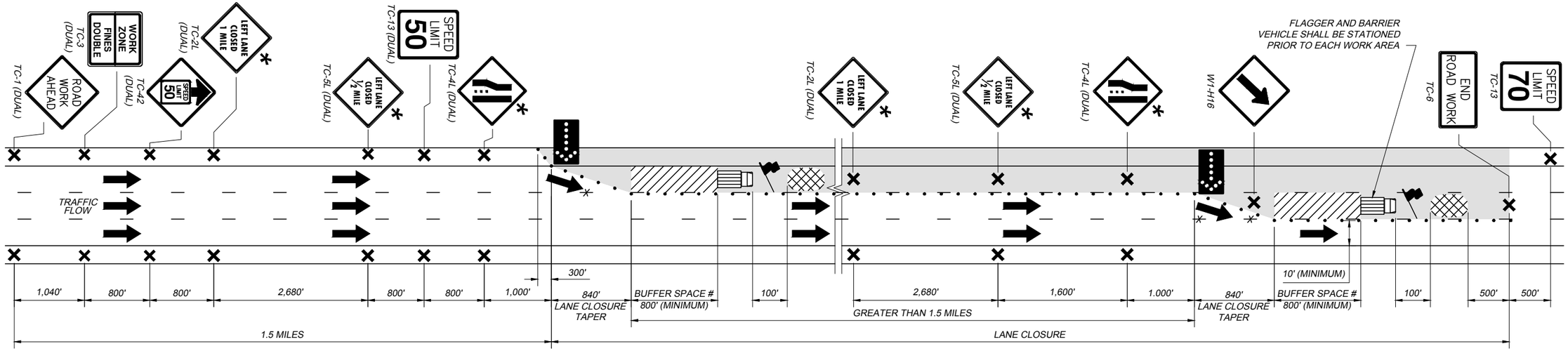
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-9.4 2023.02.17.dwg; 2/28/23 - 9:27am



DOUBLE LANE CLOSURE

THREE - LANE ROADWAY



DOUBLE LANE CLOSURE ≠

THREE - LANE ROADWAY

LEGEND

- * - SUBSTITUTE "RIGHT LANE CLOSED" SIGNS (TC-2R, TC-5R, TC-4R) FOR "LEFT LANE CLOSED" SIGNS (SHOWN) WHEN RIGHT LANE IS CLOSED.
- # - THE BUFFER SPACE SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.
- ≠ - IF THE SECOND LANE CLOSURE IS GREATER THAN 1.5 MILES FROM THE FIRST LANE CLOSURE THEN THE ZONE SHOULD BE SET AS TWO SINGLE LANE CLOSURES INSTEAD OF A DOUBLE LANE CLOSURE.
- X X X - REMOVE LANE LINE, DOTTED LINES, AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES).

NOTES:

1. IN SECTIONS WHERE THE RIGHT LANE IS THE ONLY LANE OPEN TO TRAFFIC, ALL EMERGENCY PARKING AREAS (EPA) LOCATED WITHIN THE LANE CLOSURE SHALL BE CLOSED, AS FOLLOWS.
   - USE 42-INCH CONES OR DRUMS AT TWENTY (20) FOOT ON-CENTER SPACING TO EXTEND THE EDGE OF SHOULDER LONGITUDINALLY THROUGH THE EPA.
   - COVER ALL SIGNS RELATED TO THE EPA (E.G. "EMERGENCY PARKING ONLY" / "2 HOUR LIMIT", "NO PARKING EXCEPT FOR EMERGENCY", "EMERGENCY PARKING 1/2 MILE", ETC.)
2. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

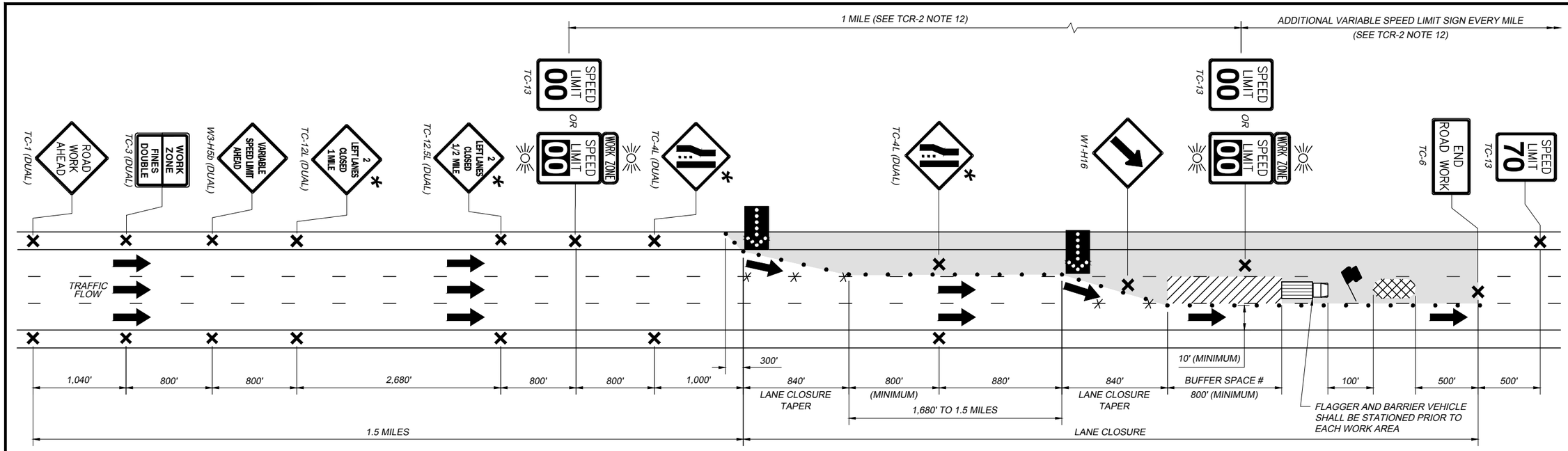
STANDARD DRAWING

DATE: FEBRUARY 17, 2023

TEMPORARY TRAFFIC CONTROL
DOUBLE LANE CLOSURE

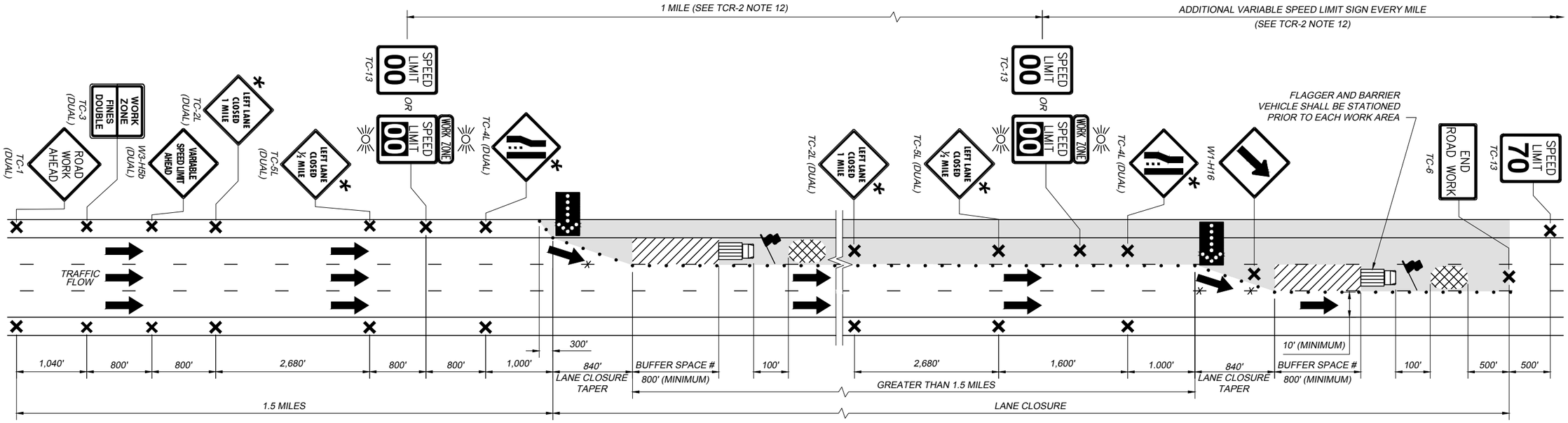
TCR-10

TCR-10 2023.02.17.dwg; 2/27/23



DOUBLE LANE CLOSURE WITH VARIABLE SPEED LIMITS

THREE - LANE ROADWAY



DOUBLE LANE CLOSURE WITH VARIABLE SPEED LIMITS ≠

THREE - LANE ROADWAY

LEGEND

- ✱ - SUBSTITUTE "RIGHT LANE CLOSED" SIGNS (TC-2R, TC-5R, TC-4R) FOR "LEFT LANE CLOSED" SIGNS (SHOWN) WHEN RIGHT LANE IS CLOSED.
- # - THE BUFFER SPACE SHALL BE KEPT FREE OF WORK ACTIVITIES, EQUIPMENT, VEHICLES AND MATERIALS.
- ≠ - IF THE SECOND LANE CLOSURE IS GREATER THAN 1.5 MILES FROM THE FIRST LANE CLOSURE THEN THE ZONE SHOULD BE SET AS TWO SINGLE LANE CLOSURES INSTEAD OF A DOUBLE LANE CLOSURE.
- X X X - REMOVE LANE LINE, DOTTED LINES, AND RPM REFLECTORS (OMIT FOR SHORT AND INTERMEDIATE TERM STATIONARY ZONES).

NOTES:

1. IN SECTIONS WHERE THE RIGHT LANE IS THE ONLY LANE OPEN TO TRAFFIC, ALL EMERGENCY PARKING AREAS (EPA) LOCATED WITHIN THE LANE CLOSURE SHALL BE CLOSED, AS FOLLOWS.
   - USE 42-INCH CONES OR DRUMS AT TWENTY (20) FOOT ON-CENTER SPACING TO EXTEND THE EDGE OF SHOULDER LONGITUDINALLY THROUGH THE EPA.
   - COVER ALL SIGNS RELATED TO THE EPA (E.G. "EMERGENCY PARKING ONLY" / "2 HOUR LIMIT", "NO PARKING EXCEPT FOR EMERGENCY", "EMERGENCY PARKING 1/2 MILE", ETC.)
2. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

STANDARD DRAWING

DATE: FEBRUARY 17, 2023

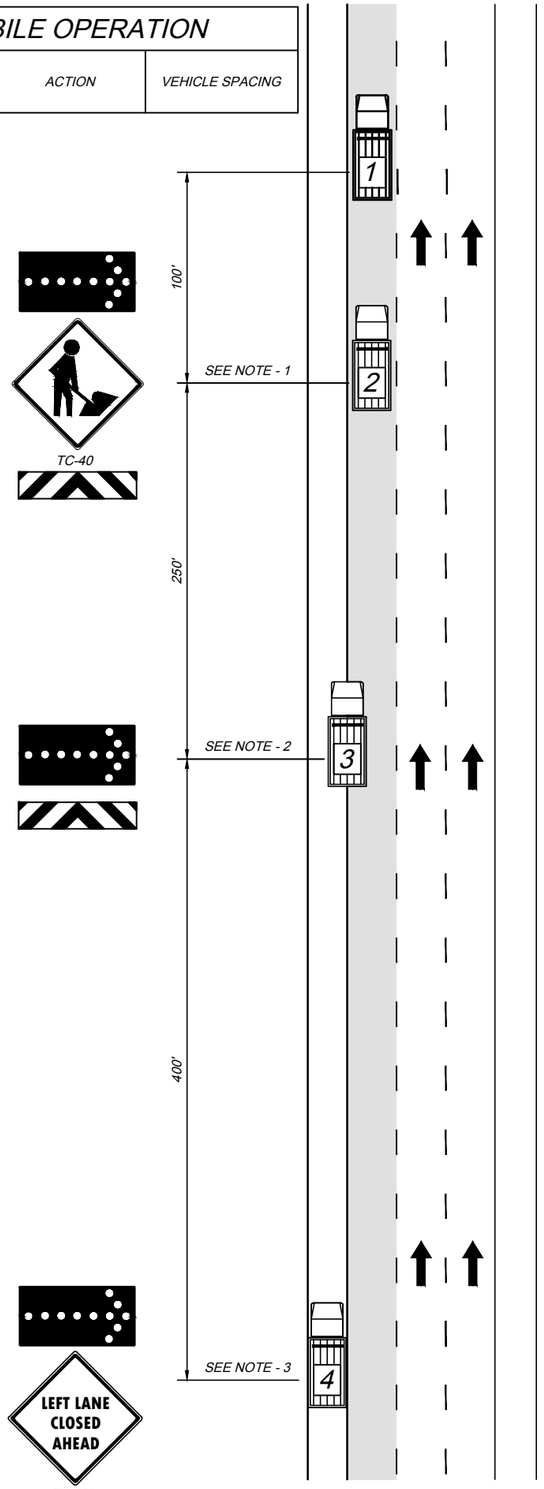
TEMPORARY TRAFFIC CONTROL
DOUBLE LANE CLOSURE

TCR-10

TCR-10 2023.02.17.dwg; 2/28/23

SINGLE LANE MOBILE OPERATION

VEHICLE NUMBER	VEHICLE	ACTION	VEHICLE SPACING
1	WORK VEHICLE WITH FLASHING LIGHTS		
2	SHADOW VEHICLE WITH TYPE C ARROW BOARD, SIGN AND TMA OR TTMA	TC-40	100'
		SEE NOTE - 1	
			250'
3	SHADOW VEHICLE WITH TYPE C ARROW BOARD AND TMA OR TTMA (STRADDLES EDGE LINE)	SEE NOTE - 2	
			400'
4	ADVANCED WARNING VEHICLE WITH TYPE B ARROW BOARD AND SIGN (ON SHOULDER)	LEFT LANE CLOSED AHEAD TC-39L (W20-5)	SEE NOTE - 3



LEFT LANE CLOSED

3 LANE ROADWAY

NOTES:

GENERAL: WHEN POSSIBLE, WORKERS SHALL EXIT WORK VEHICLE ON NON-TRAFFIC SIDE.

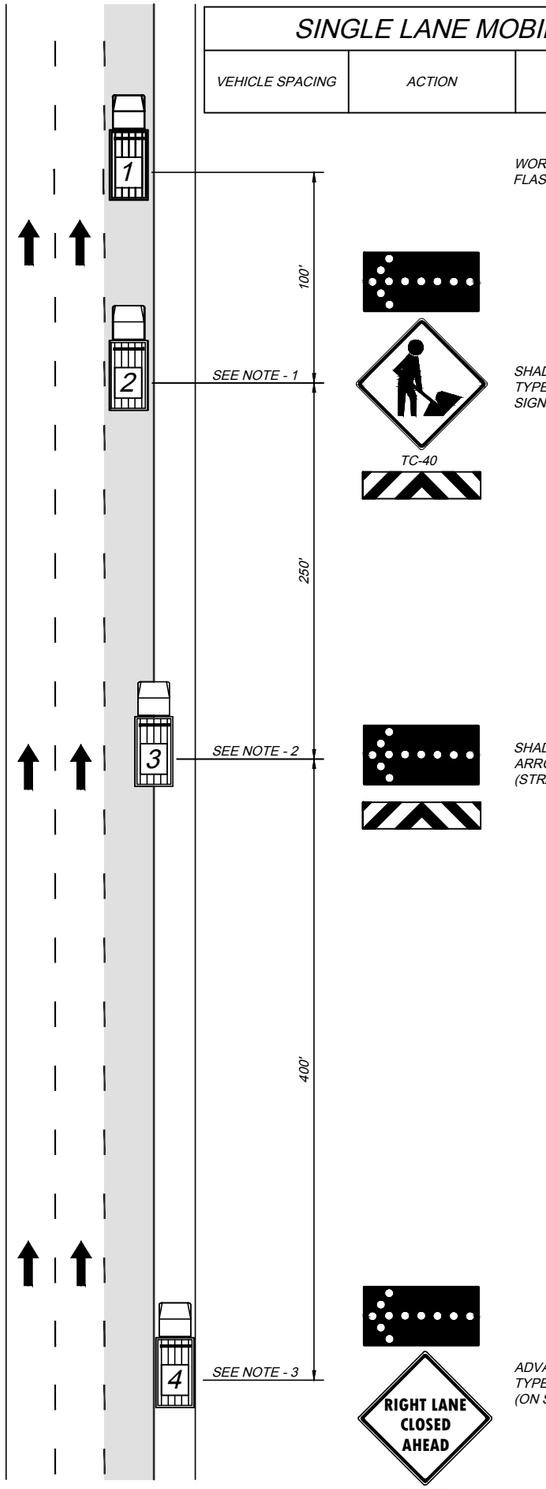
1. ADJUST AS NECESSARY TO PREVENT VEHICLE INTRUSION (NOT TO EXCEED 150').
2. ADJUST AS NECESSARY TO PREVENT VEHICLE INTRUSION AND TO PROVIDE ADEQUATE SIGHT DISTANCE. (NOT TO EXCEED 250').
3. ADVANCE WARNING VEHICLE 4 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR VEHICULAR TRAFFIC APPROACHING FROM THE REAR.
4. SEE TCR-1 FOR DEFINITIONS.

LEGEND

- MOVING ZONE - ROADWAY CLOSED TO TRAFFIC
- ARROW BOARD TYPE C AS INDICATED, PER CURRENT ODOT APPROVED LIST
- TRUCK-MOUNTED ATTENUATOR (TMA) OR TOWABLE TRAILER - MOUNTED ATTENUATOR (TTMA)

SINGLE LANE MOBILE OPERATION

VEHICLE SPACING	ACTION	VEHICLE	VEHICLE NUMBER
		WORK VEHICLE WITH FLASHING LIGHTS	1
100'	TC-40	SHADOW VEHICLE WITH TYPE C ARROW BOARD, SIGN AND TMA OR TTMA	2
SEE NOTE - 1			
250'			
SEE NOTE - 2		SHADOW VEHICLE WITH TYPE C ARROW BOARD AND TMA OR TTMA (STRADDLES EDGE LINE)	3
400'			
SEE NOTE - 3	RIGHT LANE CLOSED AHEAD TC-39R (W20-5)	ADVANCED WARNING VEHICLE WITH TYPE B ARROW BOARD AND SIGN (ON SHOULDER)	4



RIGHT LANE CLOSED

3 LANE ROADWAY

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
FOR SINGLE LANE MOBILE OPERATION

TCR-11MZ

1 / 1

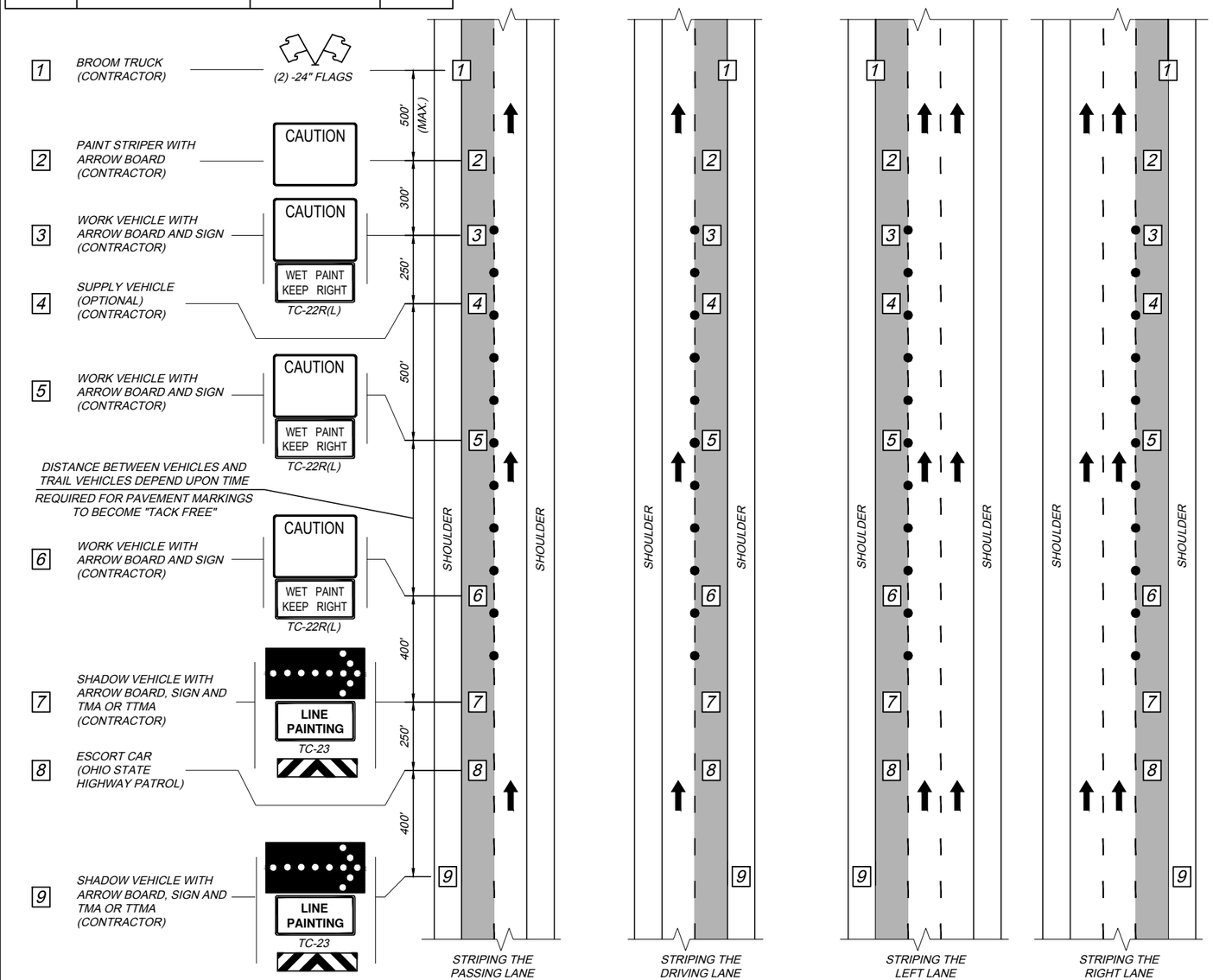
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-11MZ 2023.02.17.dwg; 2/27/23 - 2:51pm

PAVEMENT STRIPING MOVING ZONE

VEHICLE NUMBER	VEHICLE	ACTION	VEHICLE SPACING
1	BROOM TRUCK (CONTRACTOR)	(2) -24" FLAGS	500' (MAX.)
2	PAINT STRIPER WITH ARROW BOARD (CONTRACTOR)	CAUTION	300'
3	WORK VEHICLE WITH ARROW BOARD AND SIGN (CONTRACTOR)	CAUTION / WET PAINT KEEP RIGHT / TC-22R(L)	250'
4	SUPPLY VEHICLE (OPTIONAL) (CONTRACTOR)		500'
5	WORK VEHICLE WITH ARROW BOARD AND SIGN (CONTRACTOR)	CAUTION / WET PAINT KEEP RIGHT / TC-22R(L)	DISTANCE BETWEEN VEHICLES AND TRAIL VEHICLES DEPEND UPON TIME REQUIRED FOR PAVEMENT MARKINGS TO BECOME "TACK FREE"
6	WORK VEHICLE WITH ARROW BOARD AND SIGN (CONTRACTOR)	CAUTION / WET PAINT KEEP RIGHT / TC-22R(L)	400'
7	SHADOW VEHICLE WITH ARROW BOARD, SIGN AND TMA OR TTMA (CONTRACTOR)	LINE PAINTING / TC-23	250'
8	ESCORT CAR (OHIO STATE HIGHWAY PATROL)		400'
9	SHADOW VEHICLE WITH ARROW BOARD, SIGN AND TMA OR TTMA (CONTRACTOR)	LINE PAINTING / TC-23	

STANDARD ZONE



2 LANE ROADWAY

3 LANE ROADWAY

LEGEND

- TRAFFIC CONES IF REQUIRED, (CONTRACTOR)
- MOVING ZONE - ROADWAY CLOSED TO TRAFFIC
- STATIONARY - ROADWAY CLOSED TO TRAFFIC
- CAUTION - ARROW BOARD TYPE C PER CURRENT ODOT APPROVED LIST (CAUTION MODE)
- ARROW BOARD TYPE C PER CURRENT ODOT APPROVED LIST
- TRUCK-MOUNTED ATTENUATOR (TMA) OR TOWABLE TRAILER-MOUNTED ATTENUATOR (TTMA)

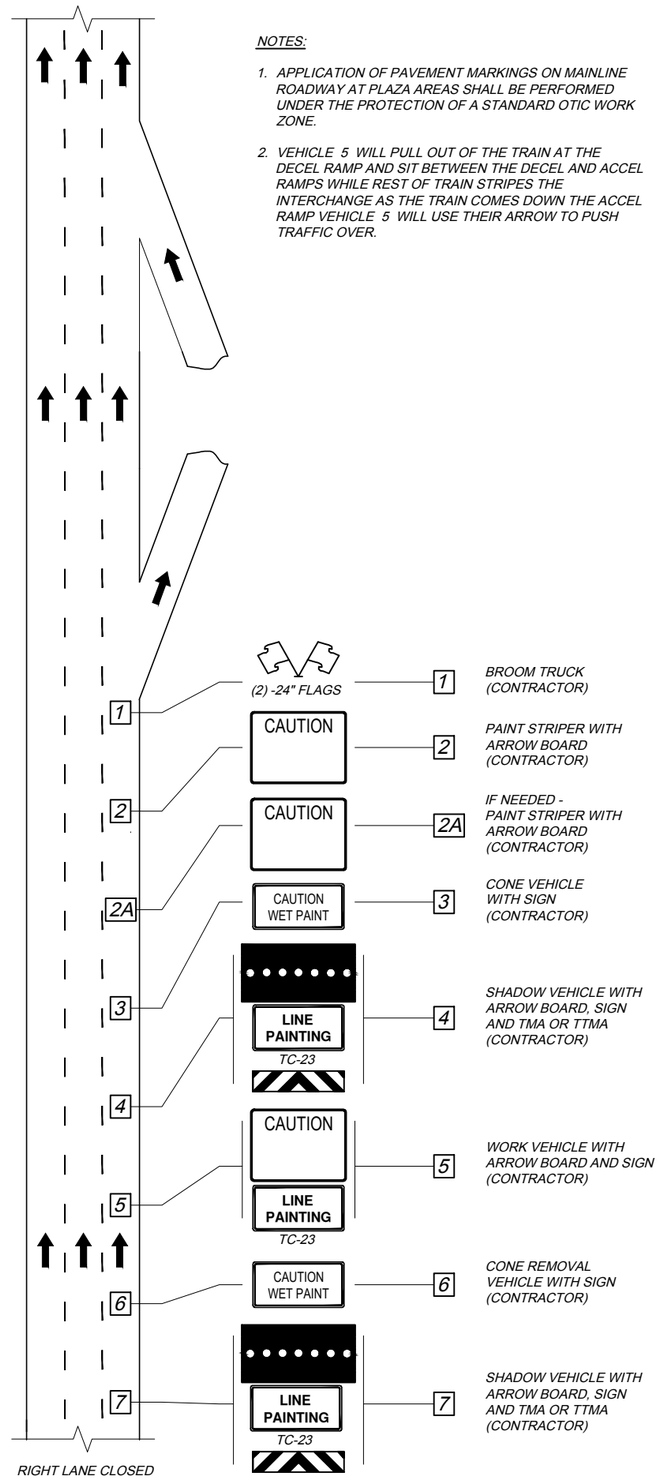
NOTES:

1. INSPECTOR'S VEHICLE LOCATED IN ZONE (AS REQUIRED).
2. ARROW BOARD AND SIGNS SHALL BE VEHICLE MOUNTED.
3. SHADOW VEHICLE 9 MAY STRADDLE THE EDGE LINE WHERE ADEQUATE WIDTH IS NOT AVAILABLE.
4. IF AN ADDITIONAL PAINT STRIPER WITH ARROW BOARD IS USED, THEN IT SHALL BE 300' BEHIND 2 AND 300' IN FRONT OF 3.

SPECIAL ZONE

NOTES:

1. APPLICATION OF PAVEMENT MARKINGS ON MAINLINE ROADWAY AT PLAZA AREAS SHALL BE PERFORMED UNDER THE PROTECTION OF A STANDARD OTIC WORK ZONE.
2. VEHICLE 5 WILL PULL OUT OF THE TRAIN AT THE DECEL RAMP AND SIT BETWEEN THE DECEL AND ACCEL RAMPS WHILE REST OF TRAIN STRIPES THE INTERCHANGE AS THE TRAIN COMES DOWN THE ACCEL RAMP VEHICLE 5 WILL USE THEIR ARROW TO PUSH TRAFFIC OVER.



AT PLAZA RAMP

DATE: FEBRUARY 7, 2023

STANDARD DRAWING

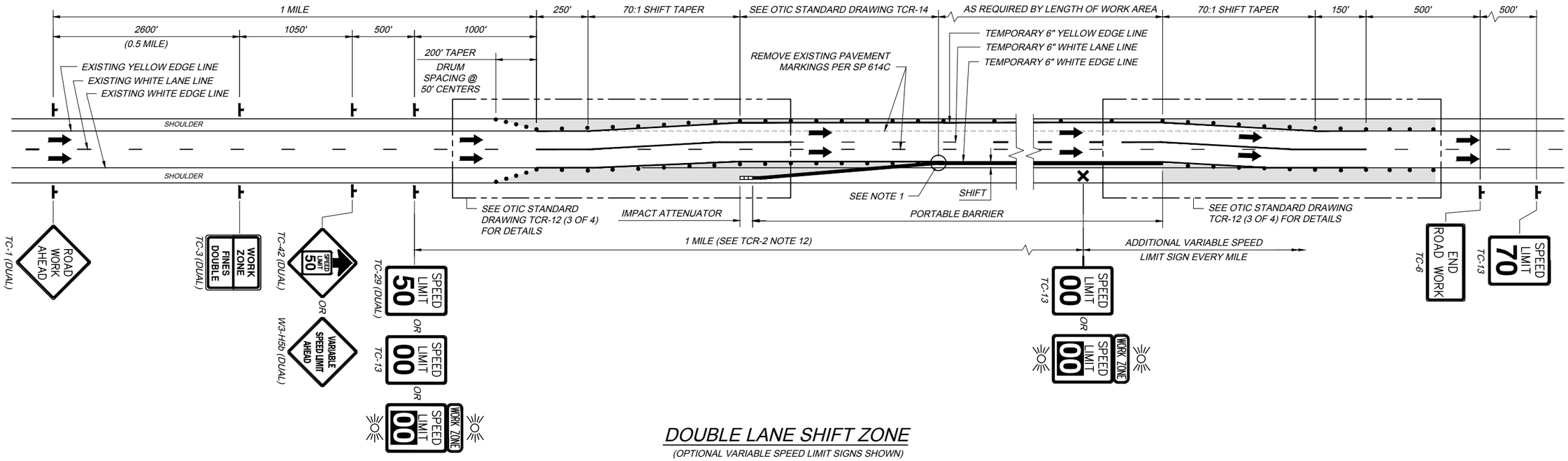
TEMPORARY TRAFFIC CONTROL
PAVEMENT STRIPING MOVING ZONE

TCR-11PS

1 / 1

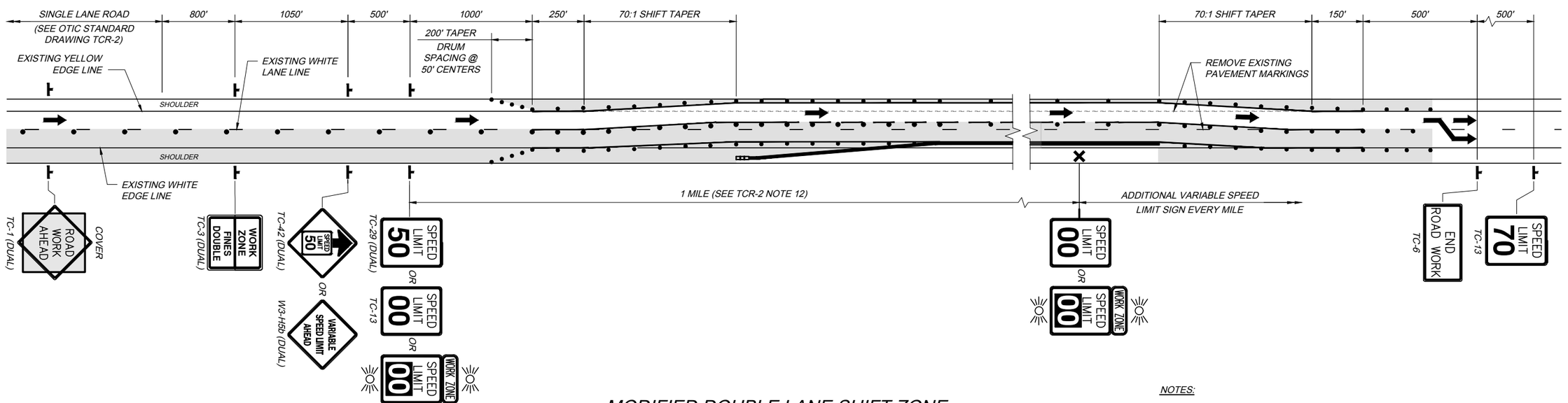
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-11PS 2023.02.17.DWG; 2/27/23 - 3:04pm



DOUBLE LANE SHIFT ZONE

(OPTIONAL VARIABLE SPEED LIMIT SIGNS SHOWN)



MODIFIED DOUBLE LANE SHIFT ZONE

(TO BE USED TO CLOSE ONE LANE OF A DOUBLE LANE SHIFT ZONE)
(OPTIONAL VARIABLE SPEED LIMIT SIGNS SHOWN)

NOTES:

1. AT THE TRAFFIC APPROACH END OF THE FIRST BARRIER IN THE TANGENT SECTION INSTALL 3 BARRIER REFLECTORS, AS SHOWN ON OTIC STANDARD DRAWING TCR-14.
2. TEMPORARY PAVEMENT MARKING SHALL BE ITEM 614, CLASS 1.
3. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
4. FOR DEFINITIONS SEE OTIC STANDARD DRAWING TCR-1.
5. VARIABLE SPEED LIMITS SHALL BE APPLIED AS SHOWN IN THE PLANS OR WHERE APPROVED BY THE CHIEF ENGINEER.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

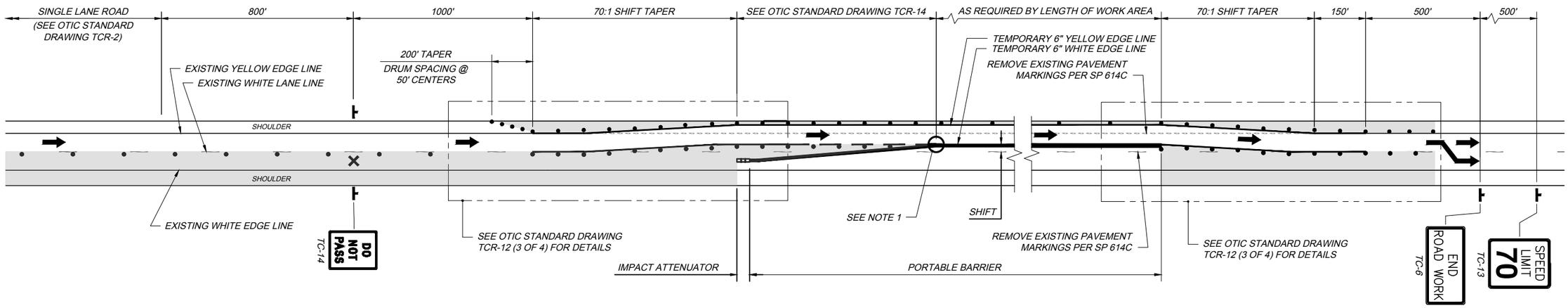
DATE: FEBRUARY 17, 2023

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
SINGLE AND DOUBLE LANE SHIFT ZONES

TCR-12

TCR-12.2023.02.17.DWG, 2/27/23



SINGLE LANE SHIFT ZONE

NOTES:

1. AT THE TRAFFIC APPROACH END OF THE FIRST BARRIER IN THE TANGENT SECTION INSTALL 3 BARRIER REFLECTORS, AS SHOWN ON OTIC STANDARD DRAWING TCR-14.
2. TEMPORARY PAVEMENT MARKING SHALL BE ITEM 614, CLASS 1.
3. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
4. FOR DEFINITIONS SEE OTIC STANDARD DRAWING TCR-1.
5. VARIABLE SPEED LIMITS SHALL BE APPLIED AS SHOWN IN THE PLANS OR WHERE APPROVED BY THE CHIEF ENGINEER.

TCR-12 2023.02.17.DWG; 2/27/23

DATE: FEBRUARY 17, 2023

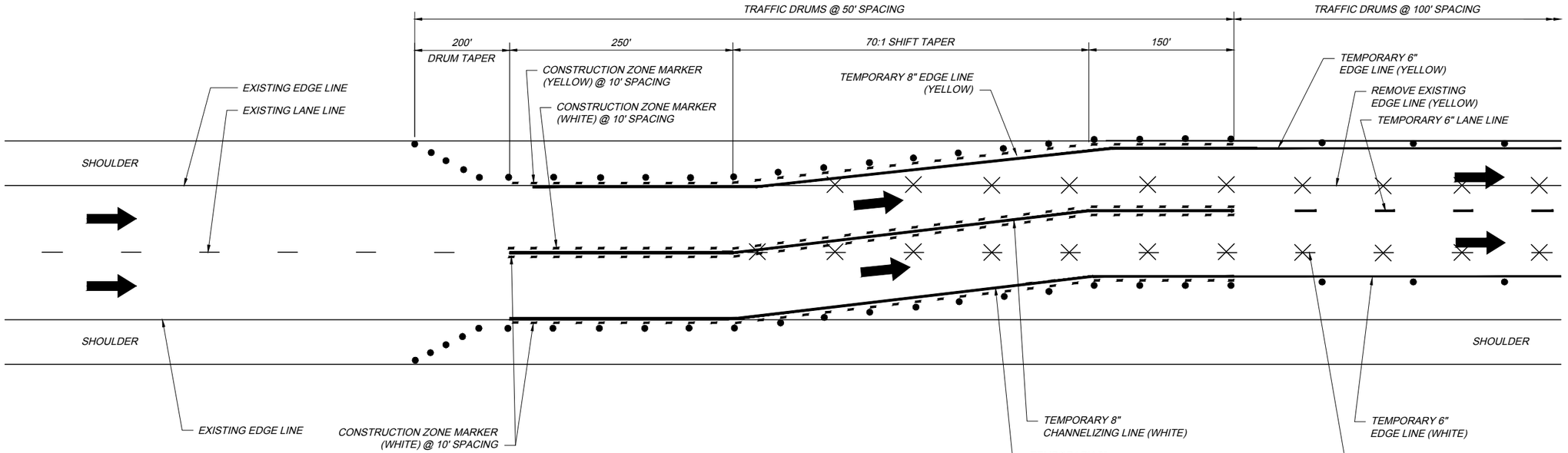
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
SINGLE AND DOUBLE LANE SHIFT ZONES

TCR-12

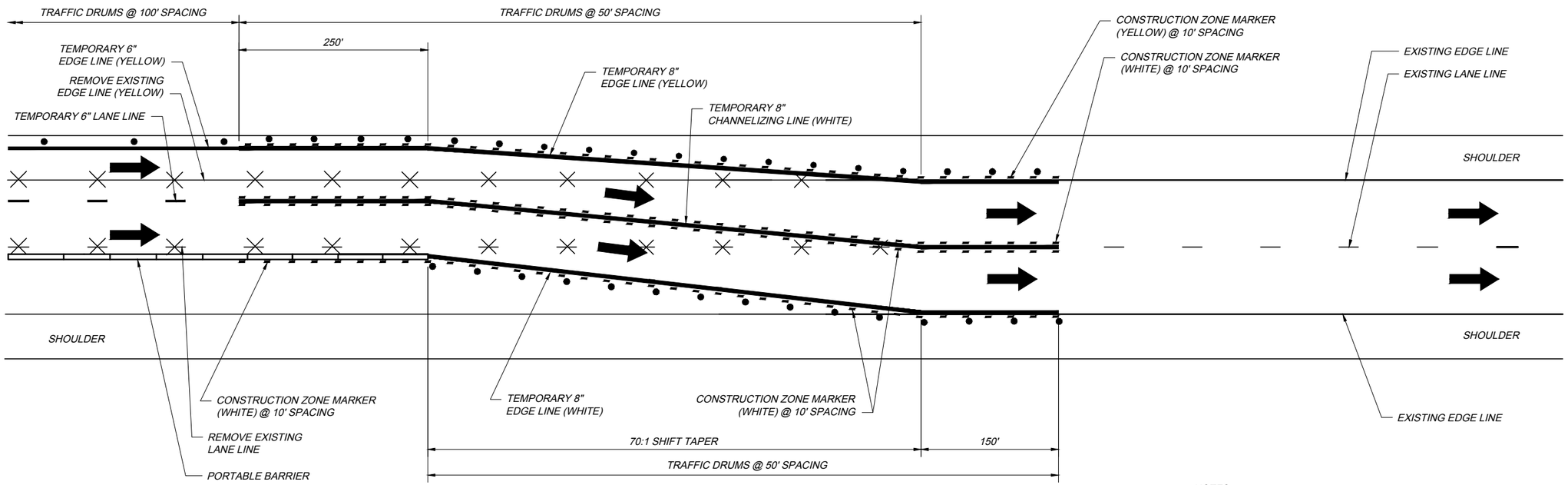
2 / 4

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



ENTRANCE TO SHIFT ZONE

(SIGNS, IMPACT ATTENUATOR AND PORTABLE BARRIER NOT SHOWN)



EXIT FROM SHIFT ZONE

(SIGNS NOT SHOWN)

NOTES:

1. TEMPORARY PAVEMENT MARKING SHALL BE ITEM 614, CLASS 1.
2. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
3. FOR DEFINITIONS SEE OTIC STANDARD DRAWING TCR-1.

TCR-12.2023.02.17.DWG, 2/27/23

DATE: FEBRUARY 17, 2023

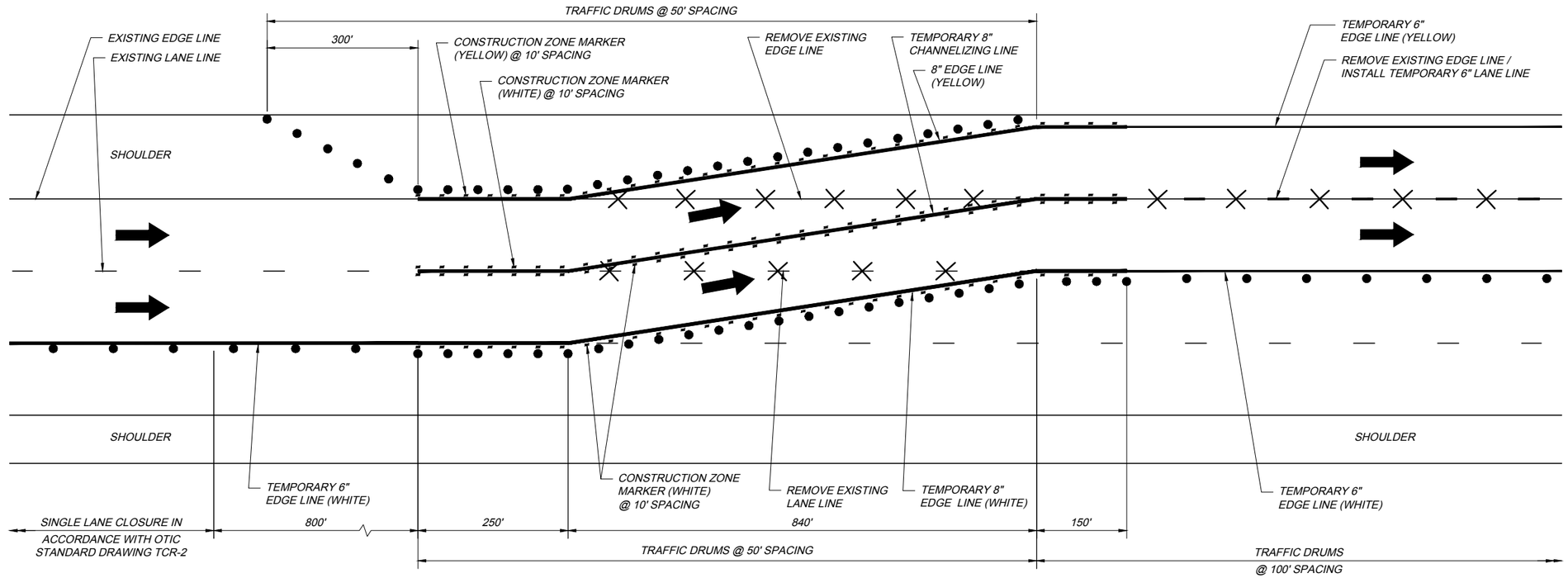
STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
SINGLE AND DOUBLE LANE SHIFT ZONES

TCR-12

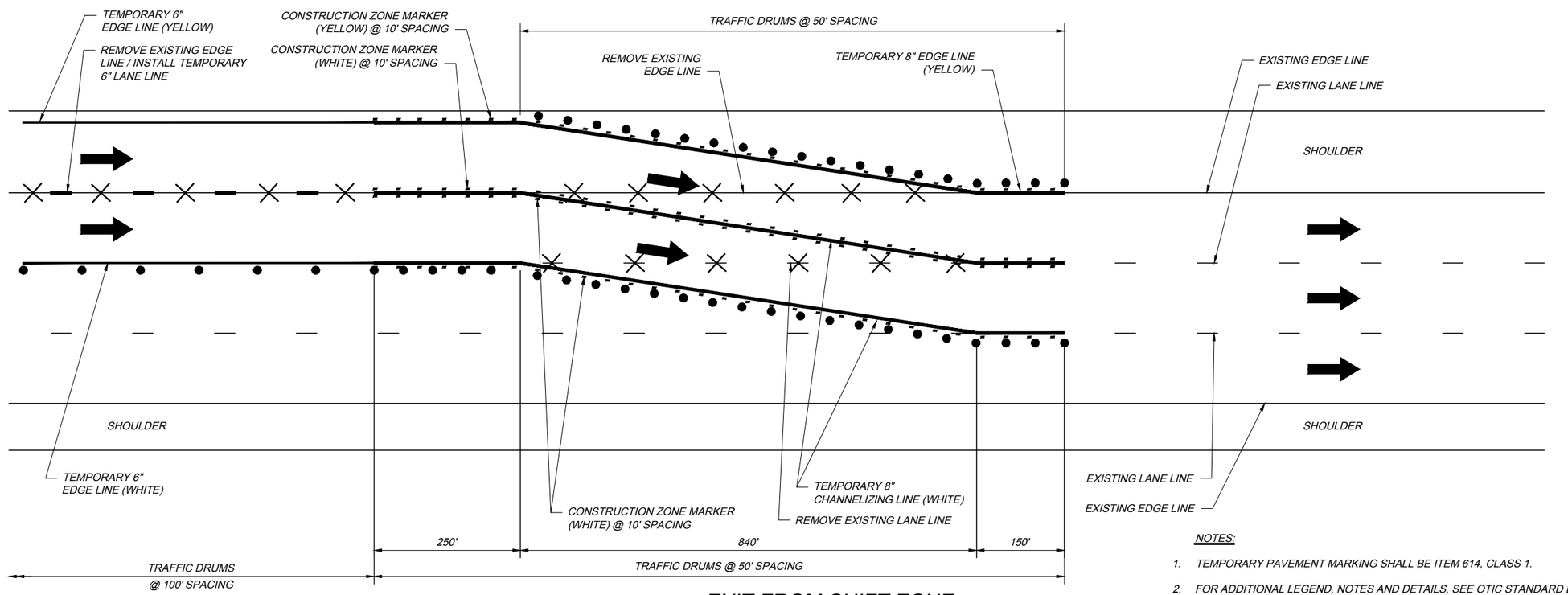
3 / 4

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



ENTRANCE TO SHIFT ZONE

(SIGNS NOT SHOWN)



EXIT FROM SHIFT ZONE

(SIGNS NOT SHOWN)

NOTES:

1. TEMPORARY PAVEMENT MARKING SHALL BE ITEM 614, CLASS 1.
2. FOR ADDITIONAL LEGEND, NOTES AND DETAILS, SEE OTIC STANDARD DRAWING TCR-2.
3. FOR DEFINITIONS SEE OTIC STANDARD DRAWING TCR-1.

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL
SINGLE AND DOUBLE LANE SHIFT ZONES

TCR-12

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

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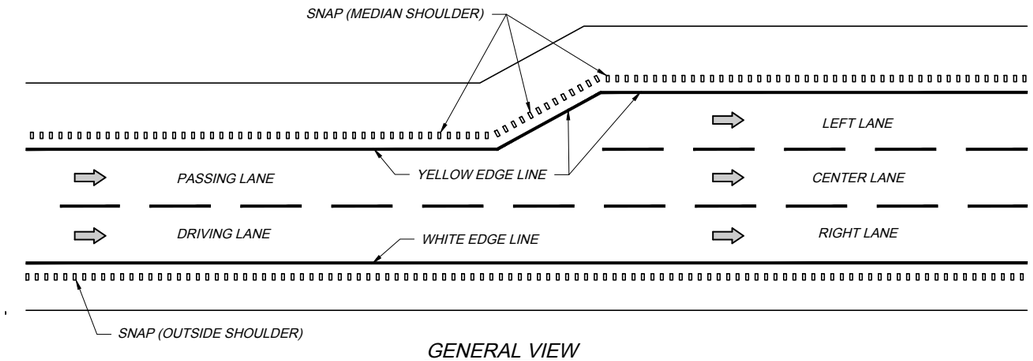
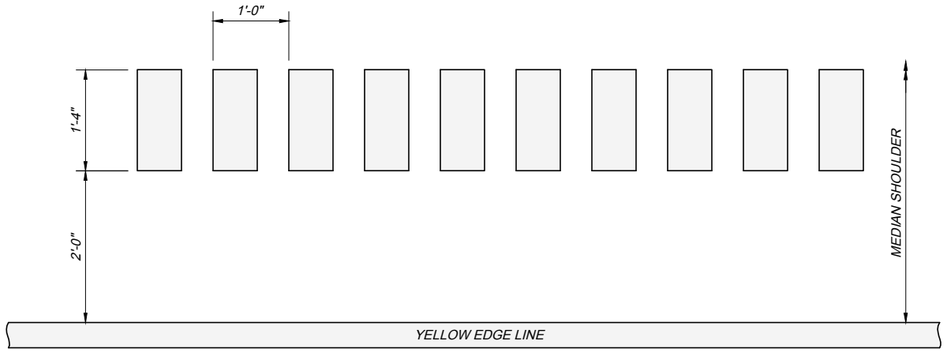
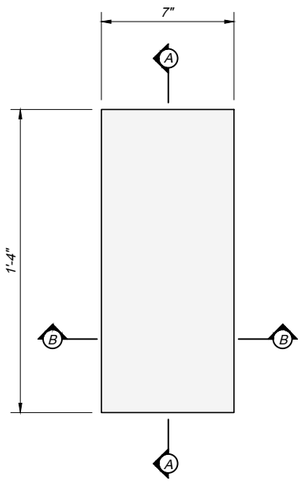
TCR-12 2023.02.17.DWG; 2/28/23



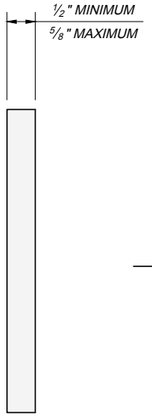
GENERAL VIEW



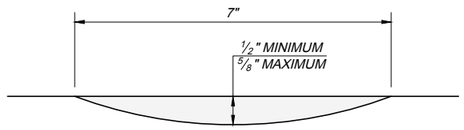
LOCATION OF SONIC NAP ALERT PATTERN
(MEDIAN SHOULDER)



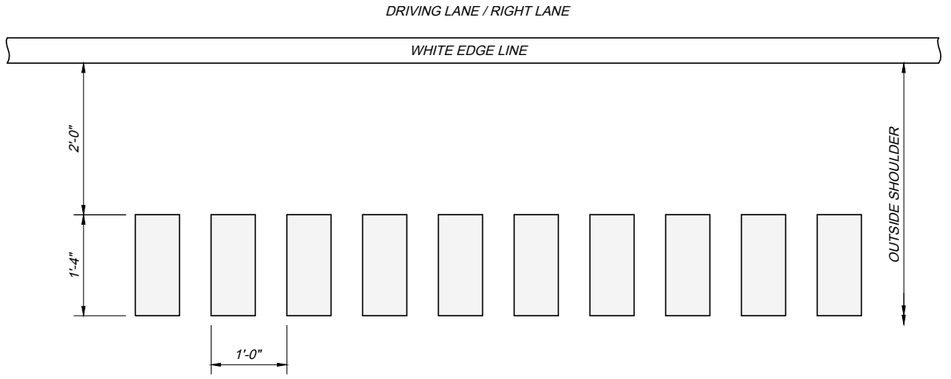
PLAN



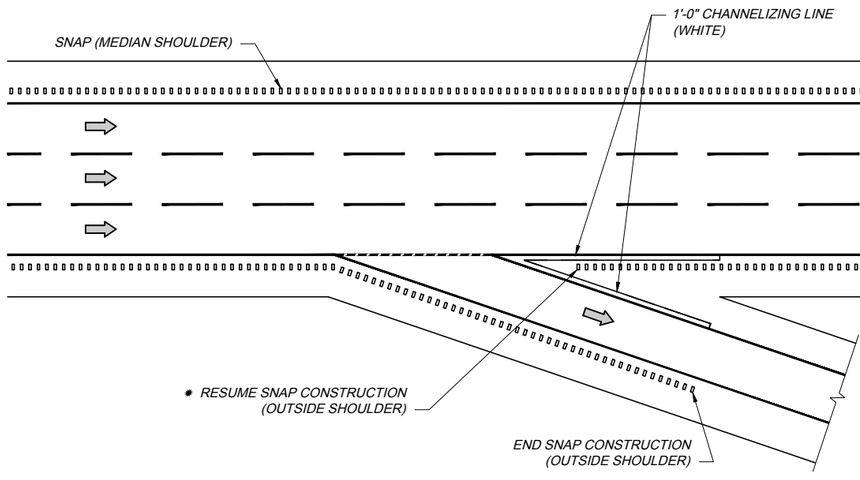
SECTION A-A



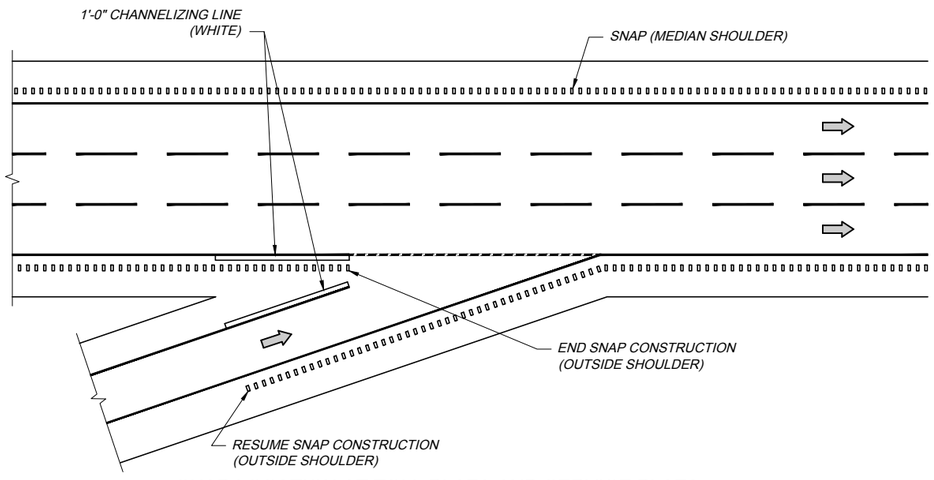
SECTION B-B



LOCATION OF SONIC NAP ALERT PATTERN
(OUTSIDE SHOULDER)



SNAP LOCATION AT TOLL PLAZA AND SERVICE PLAZA
(DECELERATION RAMP)



SNAP LOCATION AT TOLL PLAZA AND SERVICE PLAZA
(ACCELERATION RAMP)

NOTES:

1. REFER TO SPECIAL PROVISION ITEM SPECIAL - SONIC NAP ALERT PATTERN (SNAP) FOR ADDITIONAL REQUIREMENTS AND PAYMENT.
2. ● - PLACEMENT OF FIRST "SNAP" TO MAINTAIN INTEGRITY OF CHANNELIZING LINES.

DATE: JANUARY 7, 2021

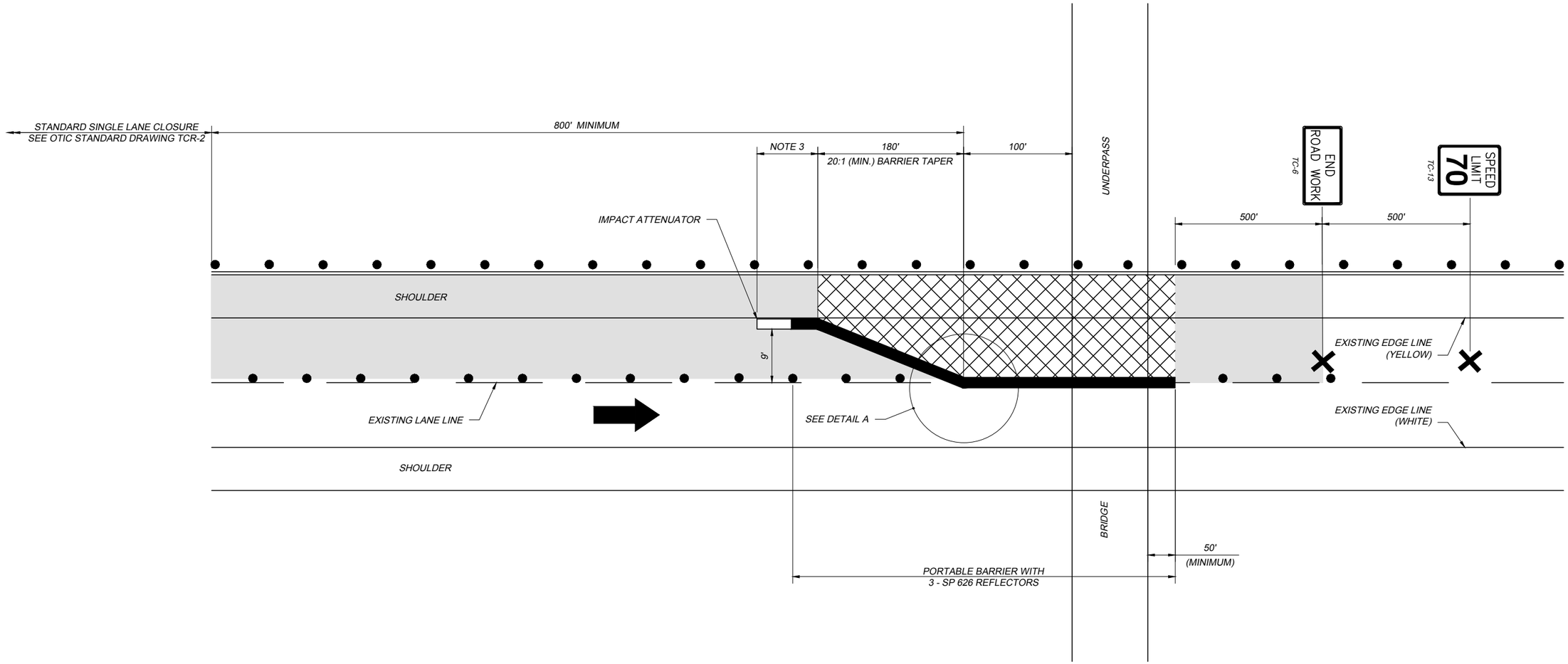
STANDARD DRAWING

SONIC NAP ALERT PATTERN (SNAP)

TCR-13

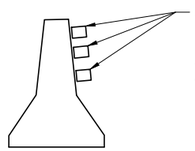
1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION



SINGLE LANE CLOSURE WITH PORTABLE BARRIER (TPB)

(LEFT LANE CLOSURE SHOWN, RIGHT LANE CLOSURE SIMILAR)
(TWO LANE SECTION SHOWN, THREE LANE CLOSURE SIMILAR)



3 - SP 626 BARRIER REFLECTORS (YELLOW FOR LEFT SIDE LANE CLOSURE, WHITE FOR RIGHT LANE CLOSURE) ALONG VERTICAL FACE AT POINT OF BARRIER ALIGNMENT CHANGE

DETAIL A

NOTES:

1. IMPACT ATTENUATOR FROM CURRENT ODOT APPROVED LIST, ODOT TYPE 3 AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. THE IMPACT ATTENUATOR AND PORTABLE BARRIER NEEDED FOR THIS DETAIL SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR SP 614 - MAINTAINING TRAFFIC AND SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO SET, RESET, AND REMOVE THE IMPACT ATTENUATOR AND PORTABLE BARRIER.
3. DISTANCE BASED ON MANUFACTURER'S RECOMMENDATION.
4. SP 626 BARRIER REFLECTORS @ 10' SPACING (YELLOW FOR LEFT LANE CLOSURE, WHITE FOR RIGHT LANE CLOSURE)
5. IMPACT ATTENUATORS INSTALLED AT LOCATIONS OTHER THAN UNDERPASS BRIDGE (SHOWN) SHALL BE INSTALLED PER ODOT STANDARD CONSTRUCTION DRAWING MT - 101.75.

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

DATE: JANUARY 7, 2021

STANDARD DRAWING

TEMPORARY TRAFFIC CONTROL SINGLE LANE CLOSURE WITH PORTABLE BARRIER

TCR-14

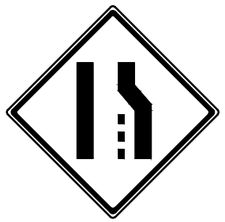
TCR-14 2021.01.07.DWG; 1/19/21

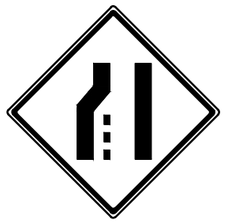
TC-1
(W20-1-48)

TC-2L
(W20-5-48)

TC-2R
(W20-5-48)

TC-3


TC-4R
(W4-2-48)


TC-4L
(W4-2-48)

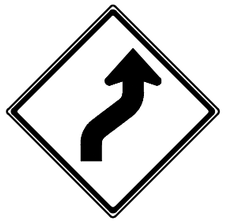
TC-5L
(W20-5-48)

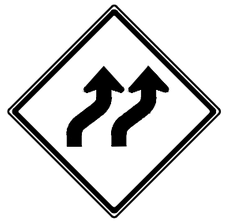
TC-5R
(W20-5-48)

TC-6
(G20-2-48)


TC-7L
(W1-4-48)


W1-4b


TC-7R
(W1-4-48)


W1-4b


TC-8
(W3-1-48)

TC-9
(R1-1-48)

TC-10F
(W16-2P-30)

TC-10M

TC-11
(W20-1-48)

TC-12L
(W20-5a-48)

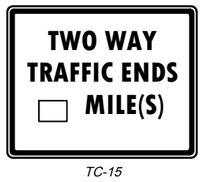
TC-12R
(W20-5a-48)

TC-12.5L
(W20-5a-48)

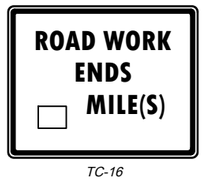
TC-12.5R
(W20-5a-48)

TC-13
(R2-1-48)

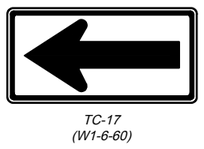
TC-14
(R4-1-48)



TC-15



TC-16


TC-17
(W1-6-60)


TC-18
(W4-1-48)

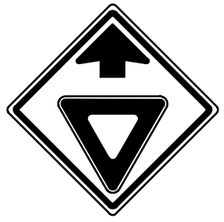
TC-19

TC-20

TC-21
(E5-2-48)

TC-22L
TC-22R

TC-23


TC-24
(W3-2-48)

TC-19

TC-28

TC-29
(R2-1-36)

TC-34
(W8-H12a-48)

TC-35

TC-36
(W21-5-48)

TC-37

TC-38

TC-39L
(W20-5)

TC-39R
(W20-5)


TC-40
(W21-1-48)

TC-41
(W21-1a-48)

TC-42
(W3-5-48)


W1-H16

TC-43

NOTES:

ALL SIGN SIZES ARE 48"x 48" EXCEPT AS FOLLOWS:

TC-3 (48" x 60"); TC-6 (48" x 24"); TC-10F (30" x 24"); TC-10M (30" x 16"); TC-13 AND 14 (48" x 60"); TC-15 (72" x 48"); TC-16 (60" x 48"); TC-17 (60" x 30"); TC-21 (48" x 36"); TC-22L&R AND TC-23 (72" x 36"); TC-28 (36" x 48"); TC-29 (36" x 48").

SPECIAL SIZES FOR SIGNS ON X-FOOTPRINT SIGN STANDS:

TC-3 (36" X 48") AND TC-13 (36" x 48").

ALL SIGNS ARE BLACK LEGENDS AND BORDERS ON FLUORESCENT ORANGE BACKGROUND EXCEPT AS FOLLOWS:

TC-9: WHITE ON RED. TC-13, TC-14, TC-29 AND THE BOTTOM HALF OF TC-3 AND TC-28 ARE BLACK ON WHITE. TC-19 IS WHITE ON GREEN. TC-8 AND TC-24 ARE RED, WHITE AND BLACK ON FLUORESCENT ORANGE; TC-20 RED ON WHITE.

DATE: FEBRUARY 17, 2023

STANDARD DRAWING

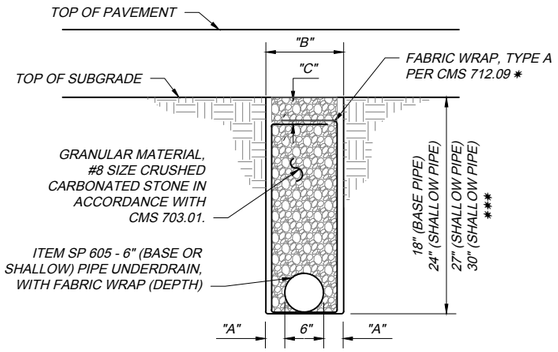
TEMPORARY TRAFFIC CONTROL
SIGNS FOR MAINTENANCE AND CONSTRUCTION

TCR-15

1 / 1

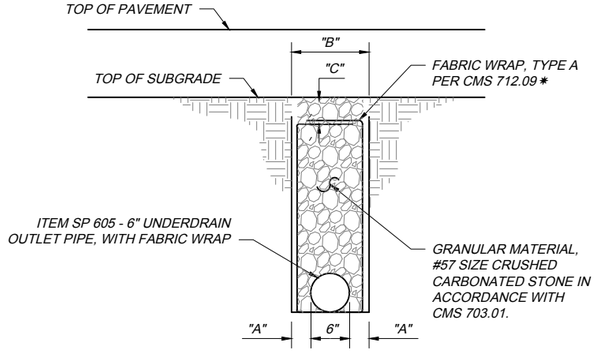
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

TCR-15 2023.02.17.dwg 2/27/23



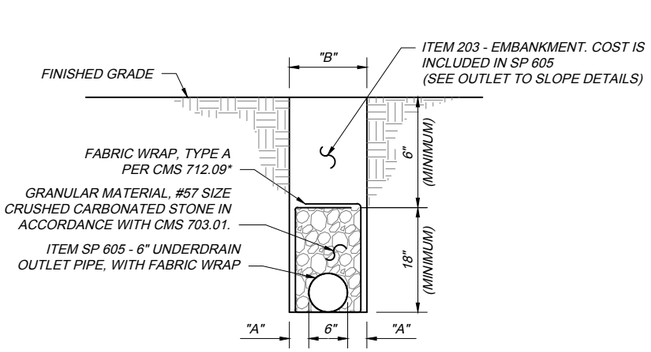
6" (SHALLOW OR BASE) PIPE UNDERDRAIN, WITH FABRIC WRAP

(UNDER PAVEMENT OR BASE)



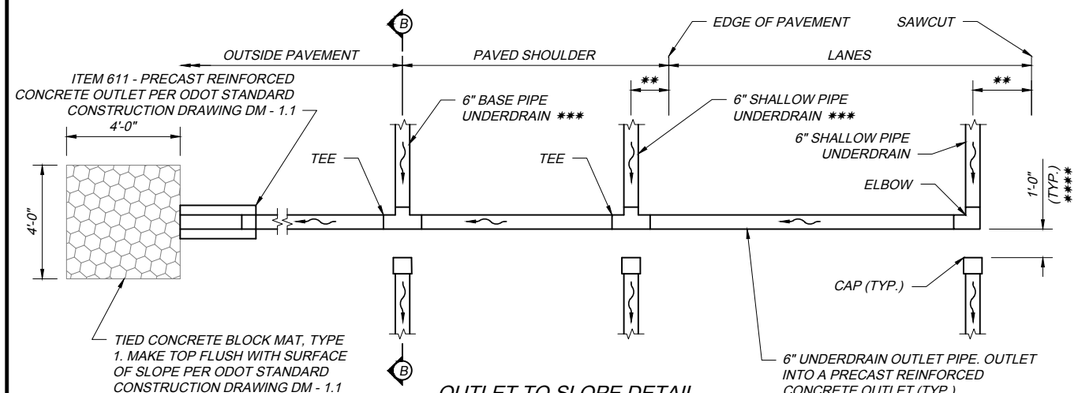
6" UNDERDRAIN OUTLET PIPE, WITH FABRIC WRAP

(UNDER PAVEMENT OR BASE)



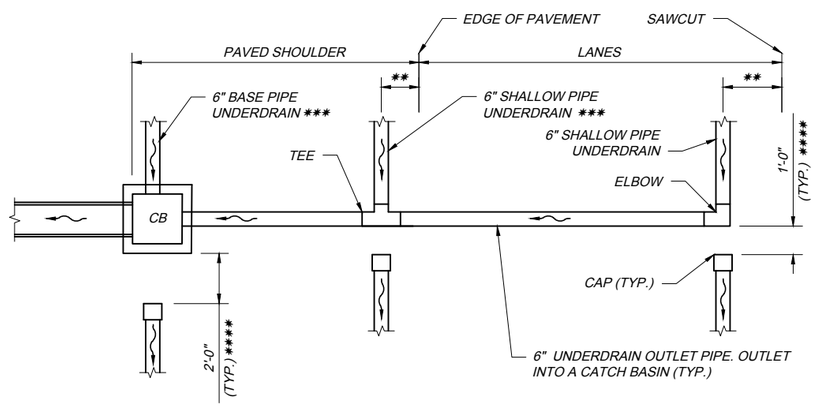
6" UNDERDRAIN OUTLET PIPE, WITH FABRIC WRAP

(OUTSIDE PAVEMENT OR BASE)



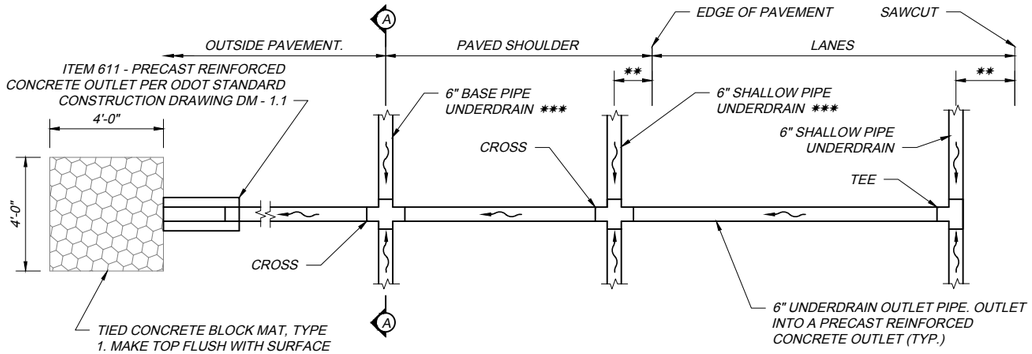
OUTLET TO SLOPE DETAIL

(END OF RUN PLAN)



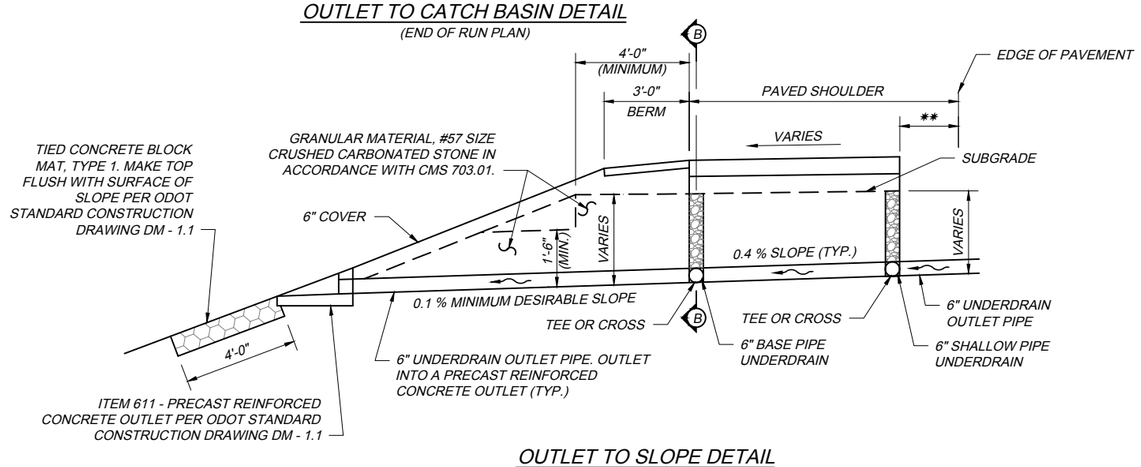
OUTLET TO CATCH BASIN DETAIL

(END OF RUN PLAN)



OUTLET TO SLOPE DETAIL

(SAG PLAN)



OUTLET TO SLOPE DETAIL

(PROFILE)

LEGEND

"A" - 4" MINIMUM FOR 6" Ø CONDUIT

"B" - 14" MINIMUM FOR 6" Ø CONDUIT

"C" - 0" TO 3" MAXIMUM

* - 6" MINIMUM TO 14" MAXIMUM OVERLAP

** - SEE TYPICAL SECTIONS FOR OFFSET DISTANCE

*** - CONTRACTOR SHALL TRANSITION DEPTH OF UNDERDRAIN FROM THE BASE/SHALLOW PIPE UD TO THE UNDERDRAIN OUTLET PIPE WITHIN TEN (10) FEET WHEN UNDERDRAIN OUTLETS INTO A PRECAST REINFORCED CONCRETE OUTLET. REFER TO TYPICAL SECTIONS FOR A REVISED LOCATION WHEN THERE IS NO BARRIER/GUARDRAIL ALONG THE OUTSIDE OF THE SHOULDER.

**** - TRENCH AND GRANULAR MATERIAL SHALL CONTINUE BETWEEN RUNS OF UNDERDRAIN.

NOTES:

DESCRIPTION: THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A PIPE UNDERDRAIN SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS, SPECIAL PROVISIONS AND THE DETAILS ON THE PLANS OR AS DIRECTED BY THE CHIEF ENGINEER. THE LOCATION AND DEPTH OF UNDERDRAIN AND THE PAVEMENT BUILD-UP SHALL FOLLOW THE ROADWAY TYPICAL SECTIONS.

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

UNDERDRAIN DETAILS

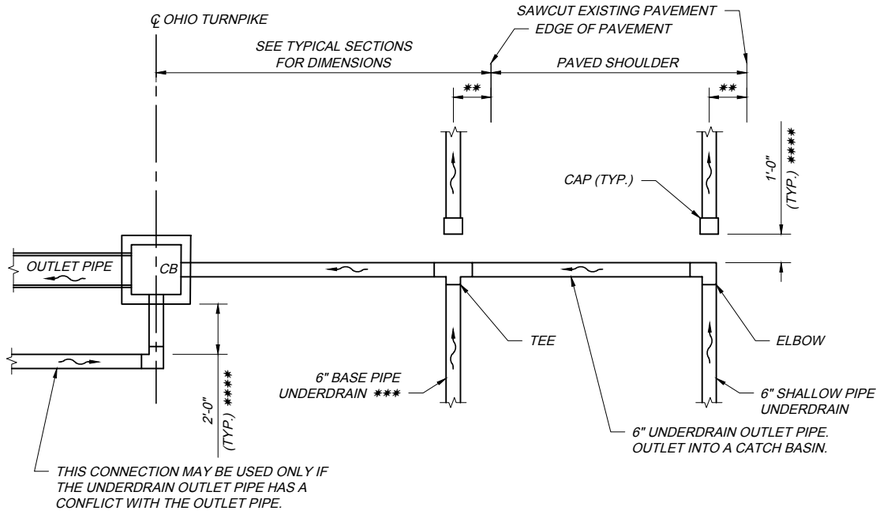
UD-1

1 / 2

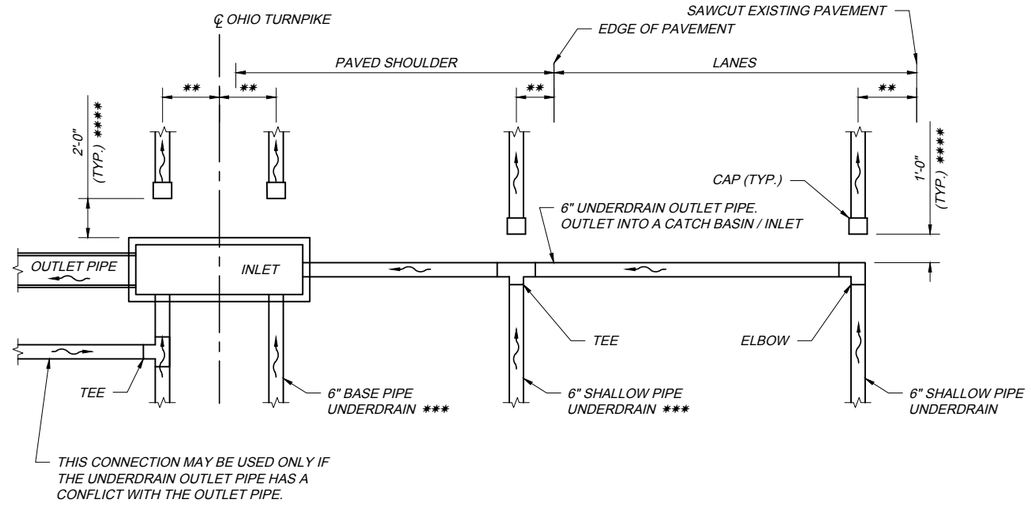
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

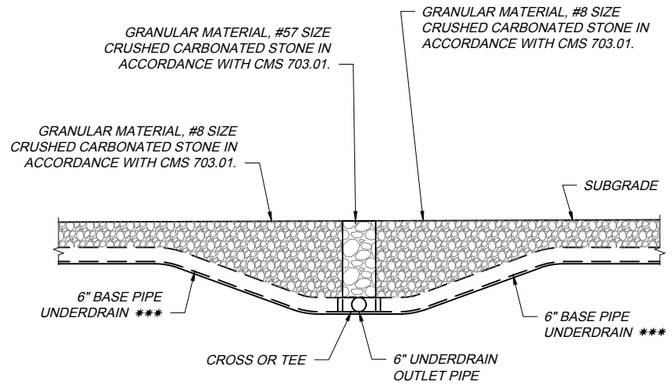
UD1 2018.09.19.dwg; 9/26/18 - 2:06pm



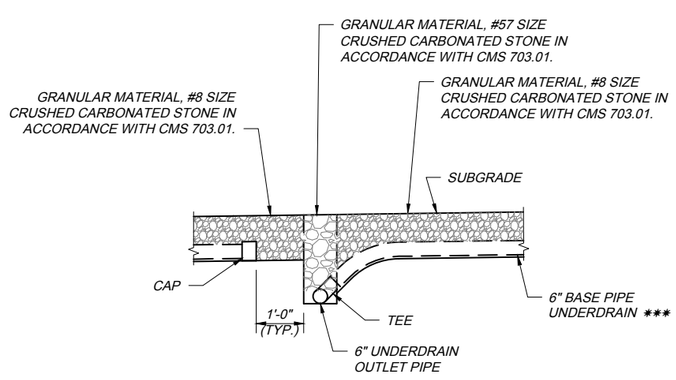
MEDIAN / 3RD LANE DETAIL
(END OF RUN - CONNECTION TO CATCH BASIN)



MEDIAN / 3RD LANE DETAIL
(END OF RUN - CONNECTION TO MEDIAN INLET)



SECTION A-A ***
(END OF RUN - CONNECTION TO 6" UNDERDRAIN OUTLET PIPE)



SECTION B-B ***
(END OF RUN - CONNECTION TO 6" UNDERDRAIN OUTLET PIPE)

NOTES:

FOR NOTES AND LEGEND, SEE SHEET 1 OF 2.

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

UNDERDRAIN DETAILS

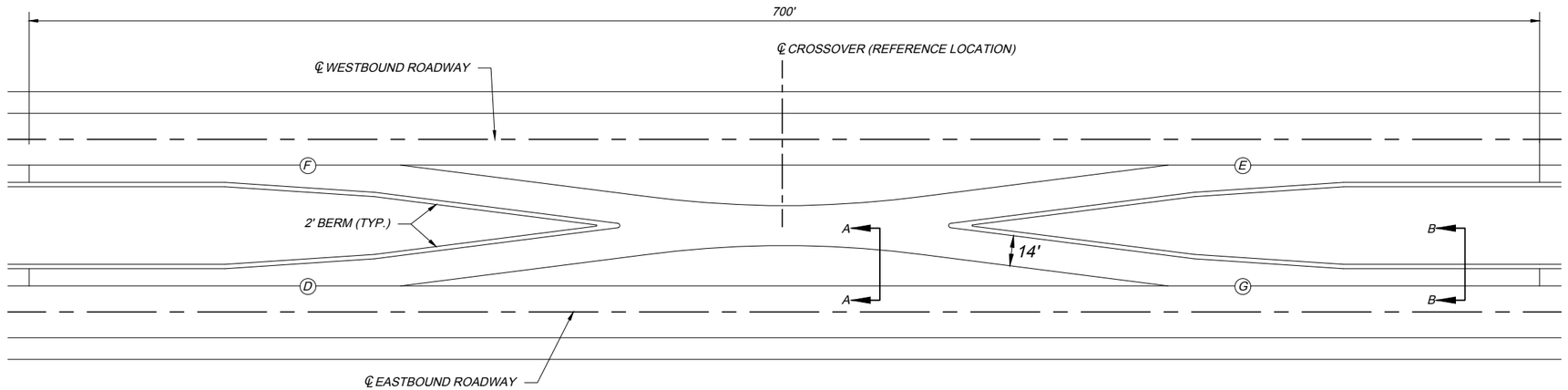
UD-1

2 / 2

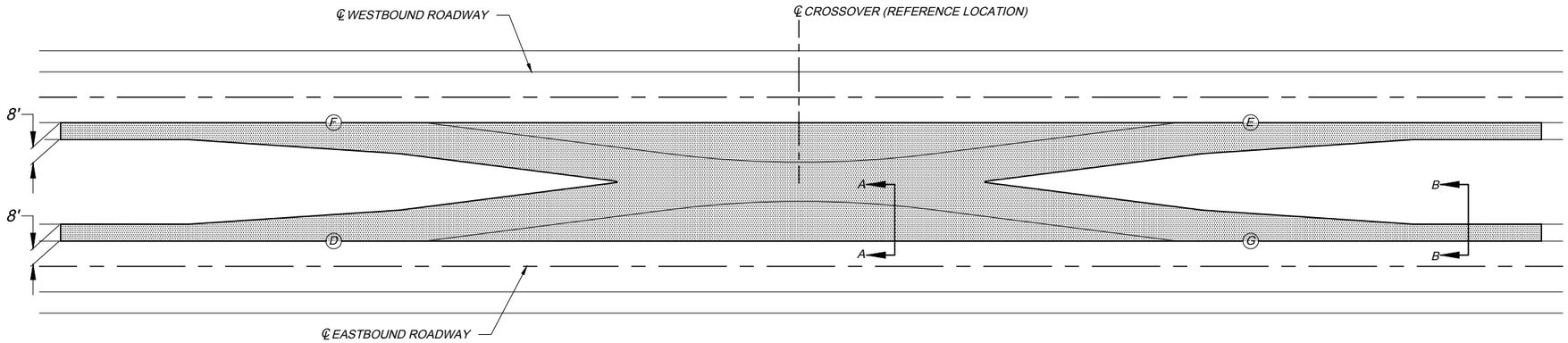
OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

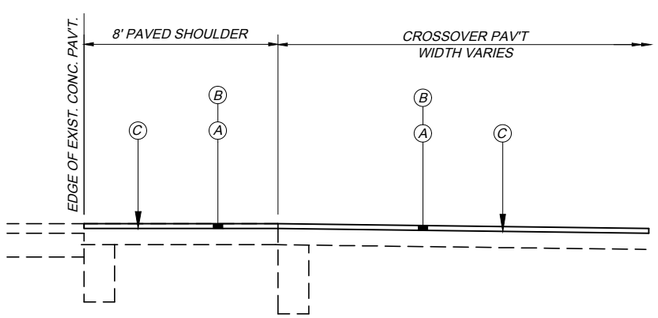
UD1 2018.09.19.dwg: 9/26/18 - 2:07pm



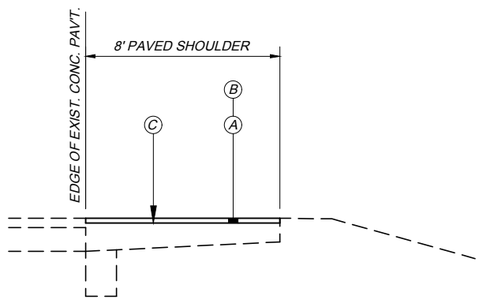
PLAN
NOT TO SCALE



CROSSOVER MILLING DETAIL
NOT TO SCALE



SECTION A-A
NOT TO SCALE



SECTION B-B
NOT TO SCALE

NOTES

1. THE INTENT OF THIS WORK IS TO MILL AND RESURFACE THE EXISTING CROSSOVERS, WHERE INDICATED ON THE PLANS, ACCORDING TO THE DETAILS ON THIS SHEET OR AS DIRECTED BY THE CHIEF ENGINEER TO PROVIDE A FINAL PAVEMENT PROFILE BETWEEN POINTS D-E AND F-G THAT IS SMOOTH AND SAFE FROM ONE PASSING LANE TO THE OTHER PASSING LANE FOR TEMPORARY TRAFFIC CONTROL PURPOSES. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING POSITIVE DRAINAGE FROM THE CROSSOVER PAVEMENT. IT IS ASSUMED FOR ESTIMATING PURPOSES, THE AVERAGE THICKNESS OF SP404 SHALL BE 1-1/2".
2. PAYMENT FOR OVERLAYING THE EXISTING CROSSOVERS SHALL BE ITEMIZED SEPERATELY.
3. PAYMENT FOR ALL LABOR AND MATERIALS NECESSARY TO MAINTAIN TRAFFIC THROUGH THE CROSSOVERS DURING THE CONTRACT WORK SHALL BE INCLUDED UNDER SP 614 - MAINTAINING TRAFFIC.

LEGEND

- (A) SP 404 - ASPHALT CONCRETE SURFACE COURSE USING CRUSHED STONE, PG 64-22 (1-1/2" AVERAGE)
- (B) ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")
- (C) ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.075 GAL./S.Y.)
- ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE (1-1/2")

DATE: MARCH 1, 2019

STANDARD DRAWING

EXISTING CROSSOVER
RESURFACING DETAIL

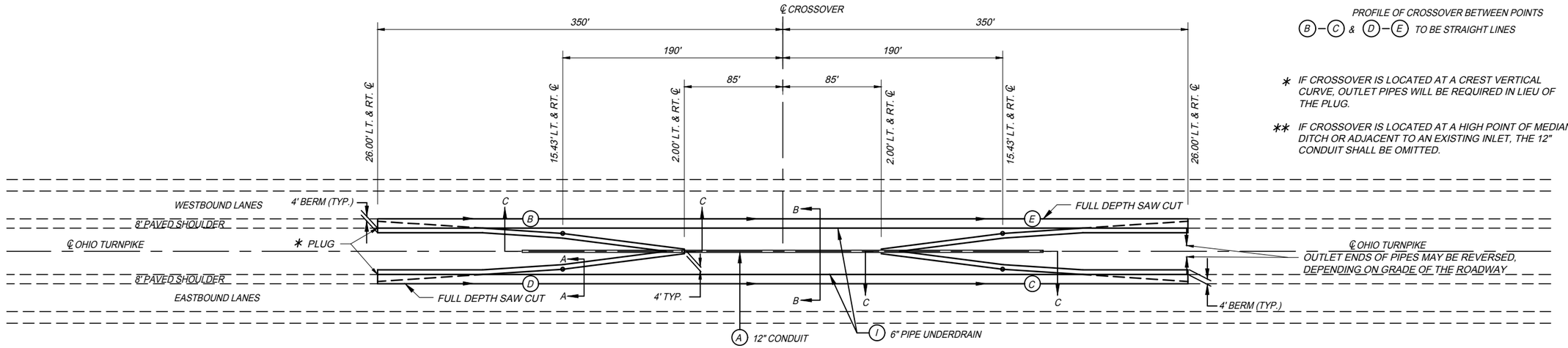
XOV-1

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

XOV-1 2019.03.01.DWG; 2/22/19 - 3:17pm

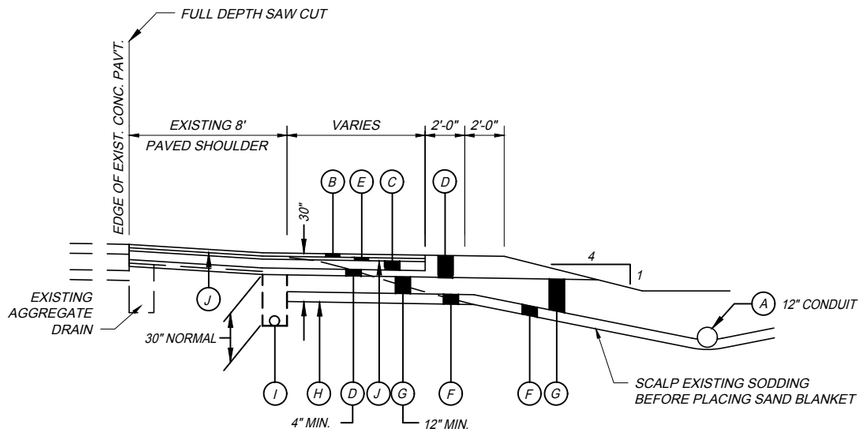


PROFILE OF CROSSOVER BETWEEN POINTS (B)–(C) & (D)–(E) TO BE STRAIGHT LINES

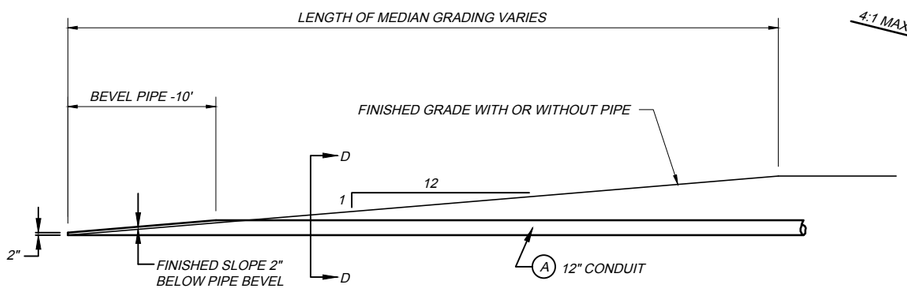
* IF CROSSOVER IS LOCATED AT A CREST VERTICAL CURVE, OUTLET PIPES WILL BE REQUIRED IN LIEU OF THE PLUG.

** IF CROSSOVER IS LOCATED AT A HIGH POINT OF MEDIAN DITCH OR ADJACENT TO AN EXISTING INLET, THE 12" CONDUIT SHALL BE OMITTED.

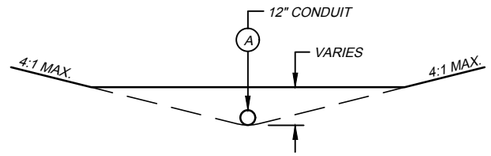
PLAN OF NEW CROSSOVER
SCALE: 1" = 50'



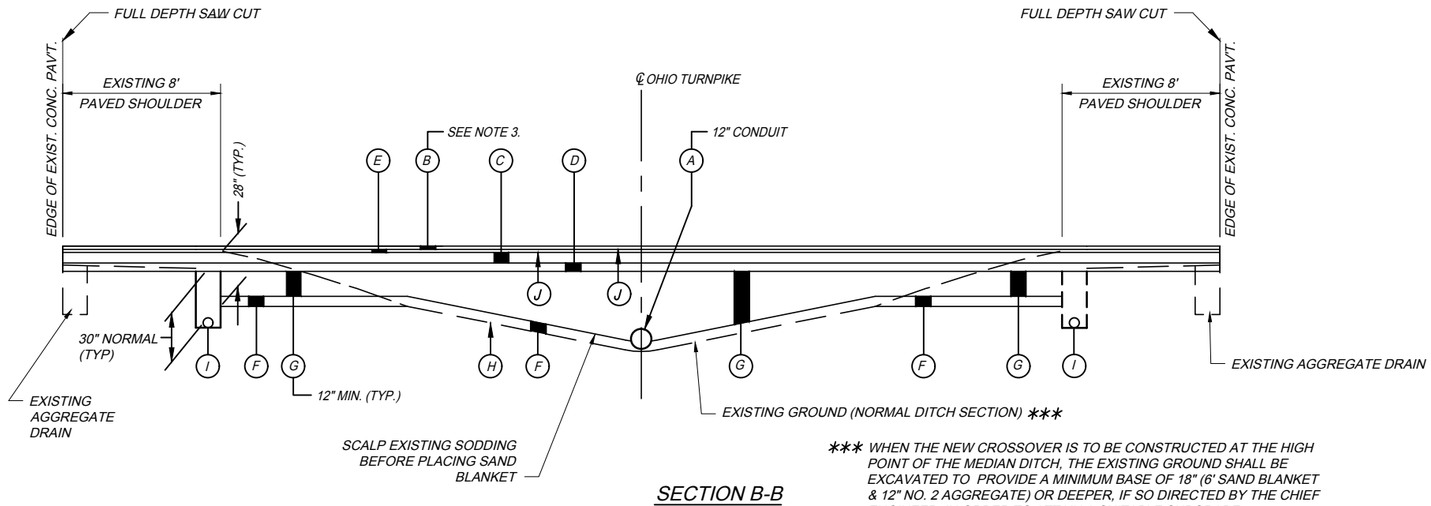
SECTION A-A
SCALE: 1/4" = 1'-0"



SECTION C-C
SCALE: 3/16" = 1'-0"



SECTION D-D
NOT TO SCALE



SECTION B-B
NOT TO SCALE

*** WHEN THE NEW CROSSOVER IS TO BE CONSTRUCTED AT THE HIGH POINT OF THE MEDIAN DITCH, THE EXISTING GROUND SHALL BE EXCAVATED TO PROVIDE A MINIMUM BASE OF 18" (6" SAND BLANKET & 12" NO. 2 AGGREGATE) OR DEEPER, IF SO DIRECTED BY THE CHIEF ENGINEER, IN ORDER TO ATTAIN A SUITABLE SUBGRADE

NOTES

1. THE NEW CROSSOVER IS TO BE CONSTRUCTED BY THE CONTRACTOR TO THE DIMENSIONS AND DETAILS SHOWN ON THIS SHEET. ALL LABOR AND MATERIALS NECESSARY FOR THE CONSTRUCTION OF THE NEW CROSSOVER IS TO BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - CONSTRUCT NEW CROSSOVER FOR MAINTAINING TRAFFIC, EXCEPT FOR 6" PIPE UNDERDRAINS AND 12" CONDUIT. THESE ITEMS WILL BE PAID FOR AS FOLLOWS:
   SP 611 - 12" CONDUIT, TYPE B, 707.33 ____ L.F.
   ITEM 605 - 6" PIPE UNDERDRAINS, WITH FABRIC WRAP (30") ___ L.F.
   IF THE NEW CROSSOVER IS CALLED TO BE REMOVED IN THE PLANS AT THE END OF THE PROJECT, THIS ALSO SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614 - CONSTRUCT NEW CROSSOVER FOR MAINTAINING TRAFFIC.
2. MAINTENANCE OF CROSSOVER (DURING CONTRACT WORK) SHALL BE INCIDENTAL TO SP 614 - MAINTAINING TRAFFIC.
3. THE FINAL ASPHALT SURFACE SHALL BE SLOPED TO INSURE THAT THE CROSSOVER DRAINS. THE FINAL ASPHALT SURFACE SHALL HAVE A SMOOTH TRANSITION FROM PASSING LANE TO PASSING LANE WITHOUT ANY SUDDEN DIPS OR BUMPS AND THE FINAL ASPHALT SURFACE CONDITION SHALL BE APPROVED BY THE CHIEF ENGINEER.

LEGEND:

- (A) SP 611 - 12" CONDUIT, TYPE B, 707.33
- (B) SP 404 - ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED STONE, PG 64-22 (1-3/4")
- (C) SP 302 - ASPHALT CONCRETE BASE, PG 64-22 (5")
- (D) SP 304 - AGGREGATE BASE (VARIABLE DEPTH - 4"MIN.)
- (E) SP 402 - ASPHALT CONCRETE INTERMEDIATE COURSE, PG 64-22 (2")
- (F) 6" SAND BLANKET USING 703.02
- (G) NO.2 AGGREGATE USING 703.01 (VARIABLE DEPTH - 12" MIN.)
- (H) ITEM 204 - PROOF ROLLING
- (I) ITEM 605 - 6" UNCLASSIFIED PIPE UNDERDRAIN, WITH FABRIC WRAP (30")
- (J) ITEM 407 - NON-TRACKING TACK COAT (APPLIED @ 0.075 GAL./S.Y.)

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

STANDARD DRAWING

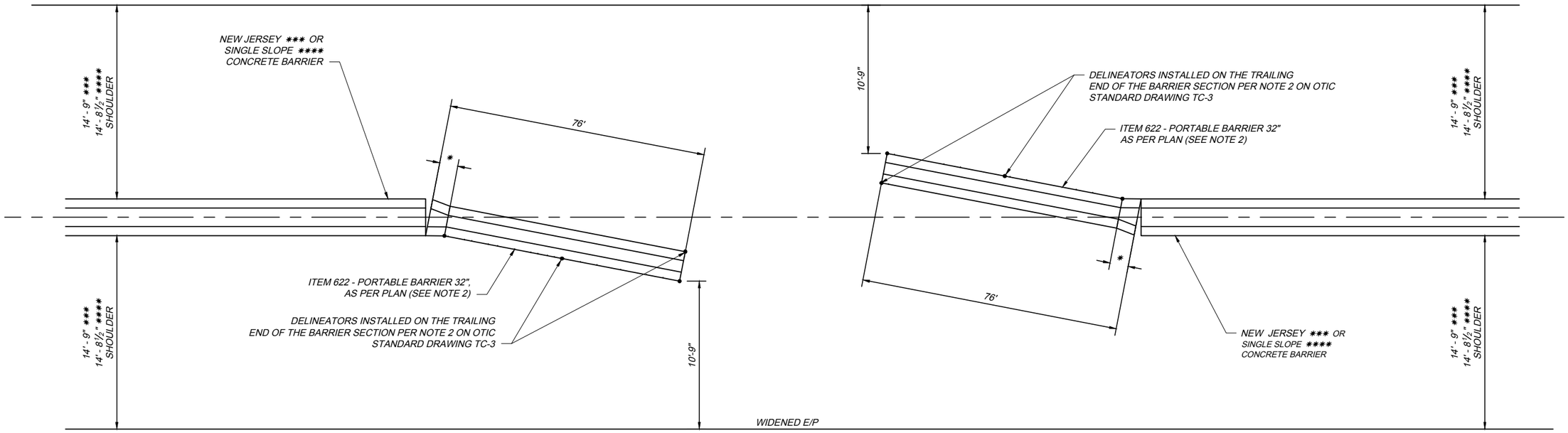
DATE: MARCH 1, 2019

CROSSOVER CONSTRUCTION PLAN

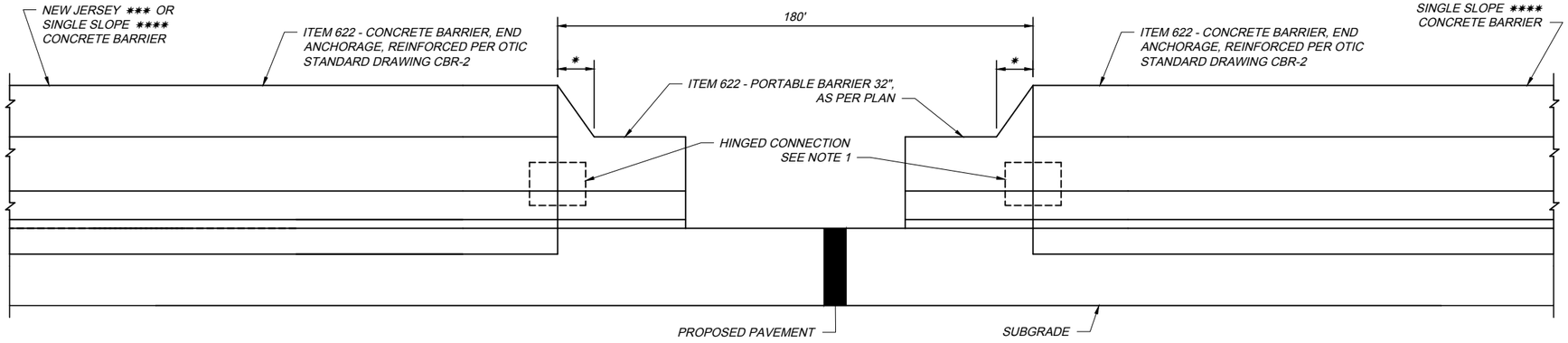
XOV-2

1 / 1

XOV-2 2019.03.01.DWG; 6/09/20 - 2:28pm



MAINTENANCE CROSSOVER - PLAN



MAINTENANCE CROSSOVER - ELEVATION

NOTES:

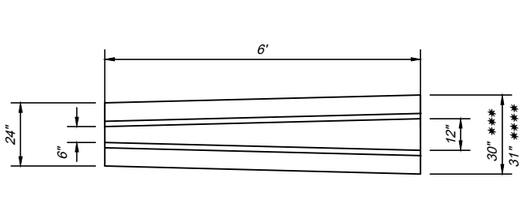
1. *HINGED BAR PLACEMENT: REFER TO HINGED CONNECTION DETAIL ON ODOT STANDARD DRAWING RM-4.1. HINGED CONNECTION IS INCLUDED IN THE UNIT PRICE BID FOR ITEM 622 - PORTABLE BARRIER 32", AS PER PLAN.*
2. *ITEM 622 - PORTABLE BARRIER 32", AS PER PLAN. THIS ITEM SHALL BE AS PER SECTION 622 OF THE CMS AND AS SHOWN ON ODOT STANDARD DRAWING RM-4.2. THE BARRIER SHALL BE NEW AND LEFT IN PLACE UPON COMPLETION OF THE WORK. THE UNIT PRICE BID FOR ITEM 622 - PORTABLE BARRIER 32", AS PER PLAN SHALL INCLUDE ALL MATERIAL AND LABOR REQUIRED INCLUDING DELINEATORS AND THE 6' TRANSITION BARRIER. DELINEATORS SHALL MEET THE REQUIREMENTS OF SP 626.*
3. *A 6' SECTION OF TRANSITION BARRIER SHALL BE PROVIDED ACCORDING TO ODOT STANDARD DRAWING RM-4.1 AND THIS STANDARD DRAWING, VIEW A-A ** AND VIEW B-B ***. THIS 6' SECTION SHALL MATCH BOTH ITEM 622 - PORTABLE BARRIER, 32", AS PER PLAN AND ITEM 622 - CONCRETE BARRIER, TYPE B-50, AS PER PLAN.*
4. *A 6' SECTION OF TRANSITION BARRIER SHALL BE PROVIDED ACCORDING TO ODOT STANDARD DRAWING RM-4.1 AND THIS STANDARD DRAWING, VIEW A-A ** AND VIEW B-B ****. THIS 6' SECTION SHALL MATCH BOTH ITEM 622 - PORTABLE BARRIER, 32", AS PER PLAN AND ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50, AS PER PLAN.*

NOTE:

* 6' TRANSITION SECTION
** ITEM 622 - CONCRETE BARRIER 32", AS PER PLAN
*** ITEM 622 - CONCRETE BARRIER, TYPE B-50, AS PER PLAN
**** ITEM 622 - CONCRETE BARRIER, SINGLE SLOPE, TYPE B-50, AS PER PLAN

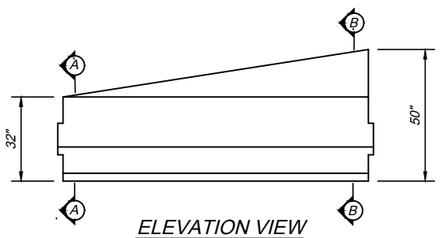
LEGEND:

1 - 1" RADIUS OR ¾" CHAMFER, ALL TOP AND END CORNERS
2 - PERMISSIBLE 10" RADIUS
3 - PERMISSIBLE 1" RADIUS



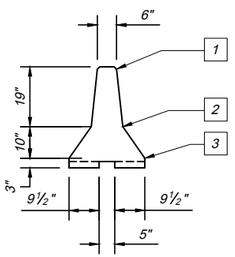
PLAN VIEW

6' TRANSITION SECTION
(32" TO TYPE B-50 SHOWN, SEE NOTE 3)
(32" TO SINGLE SLOPE B-50 SIMILAR, SEE NOTE 4)



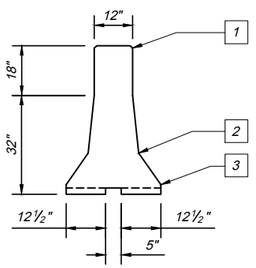
ELEVATION VIEW

6' TRANSITION SECTION
(32" TO TYPE B-50 SHOWN, SEE NOTE 3)
(32" TO SINGLE SLOPE B-50 SIMILAR, SEE NOTE 4)



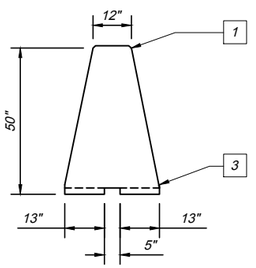
A-A VIEW **

✱ SEE NOTE 2



B-B VIEW ***

✱ SEE NOTES 2 AND 3



B-B VIEW ****

✱ SEE NOTES 2 AND 4

DATE: SEPTEMBER 19, 2018

STANDARD DRAWING

MAINTENANCE CROSSOVER DETAILS

XOV-3

1 / 1

OHIO TURNPIKE AND INFRASTRUCTURE COMMISSION

OHIO TURNPIKE

XOV-3 2018.09.19.DWG; 2/25/19 - 11:13am