

## DISTRICT 2 STANDARDS

5-17-23

### FULL SIZE

- 3.1 Mailbox Turnout in Curb and Gutter Section
- 4.1 PC Concrete Islands and Medians Accessible to the Disabled
- 5.1 Standard Outlet for Curb and Gutter
- 6.1 Precast Reinforced Concrete Flat Slab Top Centered and Offset Manhole - 36" Opening
- 10.1 Box Culvert End Sections
- 11.1 Concrete End Sections for Parallel Pipe Culverts 15" thru 84" Dia.
- 12.1 Concrete End Sections for Parallel Pipe Arch Culverts 15" thru 84" Dia.
- 13.1 Traversable Pipe Grate for Box Culvert End Section
- 14.1 Traversable Pipe Grate for Parallel Drainage Structure
- 20.1 Hot-Mix Asphalt Approaches and Mailbox Returns
- 25.1 Entrance Approaches – Urban Area
- 26.1 ADA Curb Ramp Pavement Removal And Replacement
- 32.1 Sewer and Water Main Crossings
- 33.1 Concrete Collars for Pipe or Box Culvert Extensions
- 34.1 Work Zone Sign Details
- 35.1 Urban Lane Inside Closure, Multilane, 2W, with Mountable Median
- 36.1 Temporary Road Closure Expressway
- 37.1 Traffic Control for Three Lane Section
- 38.1 Traffic Control for Transition Areas
- 39.1 Traffic Control Typical Weave
- 40.1 Traffic Control for Road Closure
- 41.1 Typical Pavement Markings
- 53.1 Remove and Re-erect Steel Plate Beam Guardrail
- 54.1 Traffic Barrier Terminal, Type 2 (27" height)
- 55.1 Guardrail Reflectors, Type C (Special)
- 68.1 Slotted Drain Pipe (Variable Height)
- 71.1 Detail of Flood Gate
- 72.1 40' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 73.1 50' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 74.1 64' Single Lane Median Crossover (45 mph Work Zone Speed Limit)
- 75.1 40' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 76.1 50' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 77.1 64' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 78.1 88' Single Lane Median Crossover (55 mph Work Zone Speed Limit)
- 79.1 40' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 80.1 50' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 81.1 64' Two Lane Median Crossover (45 mph Work Zone Speed Limit)
- 82.1 40' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 83.1 50' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 84.1 64' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 85.1 88' Two Lane Median Crossover (55 mph Work Zone Speed Limit)
- 86.1 Beveled Pipe & Guard Detail for Median Crossover
- 90.1 Traffic Barrier Terminal, Type 6B (Special)
- 92.1 Details of Planting and Bracing Trees

Full Size District 2 Standards

- 3.1 Use when a mailbox turnout is needed in a curb & gutter section and there isn't a parking lane or a mail delivery lane.
- 4.1 Use this when there are cross walks that will go through an island or median. Specify which option the contractor is required to use when building the Concrete Median (Special).
- 5.1 Use this when you need an outlet for curb and gutter, other than type B-6.24
- 10.1 This is to be used whenever we have a precast box culvert.
- 11.1 This is to be used for pipe culverts, Class D under all sideroads.
- 12.1 This is to be used for EQRS pipe culverts, Class D under all sideroads.
- 13.1 Use this whenever a cross drainage box culvert end section needs traversable pipe grates. Also include Standard 542311.
- 14.1 Use this whenever you use District Standards 10.1, 11.1 & 12.1 and the culvert is within the main line clear zone.
- 20.1 Include for rural entrances and sideroads on 3R projects, reconstruction projects, or for new entrances. Do not include on 3P or Smart resurfacing projects.
- 25.1 Include for urban entrances with curb & gutter on 3R projects, reconstruction projects, or for new entrances. Do not include on 3P or Smart resurfacing projects.
- 26.1 Use this on all projects with ADA curb ramps requiring HMA replacement in front of curb & gutter.
- 32.1 Include in urban projects with proposed storm sewers or water mains.
- 33.1 Use this for pipe or box culvert extensions. Fill in the information in the table for the Bill of Materials.

## District 2 Standards Designer Notes

5-17-23

- 34.1 Work Zone Sign Details. Include this when you have any of the following:
- Include in projects where the clear width through a work zone with temporary concrete barrier wall will be 16.0 feet or less.
  - Include when using Traffic Control and Protection Standard 701316 or 701321.
  - Use this in conjunction with the special provision Traffic Control for Narrow Lanes which is under the Traffic Control Plan. Use this on one-lane stage construction jobs when the lane is less than 13'-6" measured from the toe of the barrier wall to the guardrail or bridge wall.
  - Use this when using District Standard 37.1 and 38.1.
  - Use this on low volume entrances that are between the traffic signals on Highway Standard 701316 or 701321.
  - Include this for any milling of the mainline pavement.
- 35.1 Use this when it is necessary to close the inside lane on an urban project. Also include Highway Standard 701606 and the pay item for 701606.
- 36.1 Use this district standard for any short term closure of an expressway at a diamond interchange.
- 37.1 Use this district standard for work that will require a lane closure in a three lane section such as a truck climbing lane.
- 38.1 Use this district standard when there is a transition from a four lane section that transitions to a two lane section.
- 39.1 Include on 4 lane highways where the contractor may change a portion of the work to the opposite lane.
- 40.1 Include for a mainline road closure.
- 41.1 Include in projects with pavement marking or raised reflective pavement markers.
- 53.1 Use this to remove and re-erect an old type steel plate beam guardrail which has 6" block outs and a 27½" rail height.
- 54.1 Use this when installing a Traffic Barrier Terminal, Type 2 on the old type of steel plate beam guardrail with a 27½" rail height.
- 55.1 This will be used on all projects with guardrail, permanent barrier wall, and bridge structures. Use pay item (X7820007 Guardrail Reflectors. Type C (Special)). **(Do not)** use the pay items Guardrail Reflectors Type A & B or Barrier Wall Reflectors Type B & C).
- 68.1 This can be used to increase drainage in curb & gutter with very flat grades (less than 0.3%). Also include this when constructing median crossovers.

5-17-23

## District 2 Standards Designer Notes

- 71.1 Use if a property owner has a fenced field with livestock and a stream or river. The flood gate will be placed near the right-of-way to prevent livestock from leaving the field through the waterway. During high water, the flood gate will open to let water and debris through.
- 72.1, 73.1, 74.1, 75.1, 76.1, 77.1, 78.1 Use on single lane median crossovers of the median width specified and for the work zone speed limit. Include District Standard 86.1. If there are overlays on the existing PCC pavement, installing tie bars into the existing PCC pavement will not work. Talk to the Construction Field Engineer or your Project Engineer for more information.
- 79.1, 80.1, 81.1, 82.1, 83.1, 84.1, 85.1 Use on two lane median crossovers of the median width specified and for the work zone speed limit. Include District Standard 86.1. If there are overlays on the existing PCC pavement, installing tie bars into the existing PCC pavement will not work. Talk to the Construction Field Engineer or your Project Engineer for more information.
- 90.1 Use this on 4-lane highways that go under dual structures and the piers required shielding. The outside of the piers are shielded with impact attenuators. The gap between the piers is shielded using Traffic Barrier Terminal Type 6B (Special). The Traffic Barrier Terminal Type 6B (Special) is required on both sides of the piers.  
Design Note: The **length** of the double thrie beam between the piers **must be added on the elevation on the District Standard.**
- 92.1 Include when planting new ball & burlapped trees.

## DISTRICT 2 STANDARDS

4-13-16

### ½ SIZE

- 10.2 Inlets, Special
- 11.2 Inlets, Special (Type A Gutter)
- 12.2 Double Inlet, Special
- 13.2 Frame & Grate for Inlets, Special
- 13.2a Frame & Grate for Inlets, Special
- 13.2b Frame & Grate for Inlets, Special
- 13.2c Frame & Grate for Inlets, Special
- 13.2d Frame & Grate for Inlets, Special
- 14.2 Inlets, Special, No. 1
- 15.2 Inlets, Special, No. 2
- 20.2 Standard Inlet for Type A Gutter (Special)
- 21.2 Standard Inlet for Curb & Gutter
- 30.2 Field Tile Junction Vaults 2' and 3' Dia.
- 31.2 Treatment of Field Tile Systems Under Ditches
- 32.2 Sign Panel - Type 1 (Special)
- 33.2 Special Drainage Outlet
- 34.2 Inlet Stand Pipe
- 35.2 Guardrail Erosion Control Treatments
- 36.2 Paved Ditch (Special)
- 37.2 Underdrain for Across Road (AR) Culverts
- 44.2 Reserved Parking Sign Detail
- 45.2 Superelevation Transition on Two-Lane Highway
- 46.2 Hot-Mix Asphalt Approaches and Mailbox Returns for Single Lift (SMART) Resurfacing Projects
- 47.2 Hot-Mix Asphalt Approaches and Mailbox Returns for Two Lifts (3P) Resurfacing Projects
- 48.2 Safety Edge (SMART Projects)
- 49.2 Safety Edge (3P Projects)
- 61.2 Slotted Drain Pipe for Type A Gutter (Special)
- 63.2 Pipe Handrail for Steps
- 64.2 Pipe Handrail, Special – for Retaining Walls
- 66.2 Permanent Survey Markers, Type II
- 73.2 Automatic Flap Gate
- 81.2 Riprapped Culvert Energy Basin
- 89.2 Termination of Dead End Roads
- 90.2 Mechanical Joints for Concrete Pipe and Box Culverts
- 93.2 Typical Aggregate Base Sideroad
- 94.2 Traffic Control & Protection at Turn Bays (To Remain Open to Traffic)

## District 2 Standards Designer Notes

### ½ Size District 2 Standards

- 10.2 This is used for drainage in a curb & gutter section. The diagonal grate is included in the cost. The diagonal grate is bicycle safe. If the inlet is in a driveway which has a depressed curb, the grate on the bottom left hand side will be used. The cost of this grate is also included in the cost of the inlet special. When using this do not include 13.2, 13.2a, 13.2b, 13.2c or 13.2d.
- 11.2 This is used for drainage in a Type A gutter. The grate is included in the cost of the inlet.
- 12.2 This is used when extra inlet capacity is needed. For example, in a sag condition.
- 13.2 These are different types of frame & grates for inlet specials. One of these can  
13.2a be used to replace broken frame & grates on inlets to be adjusted or  
13.2b reconstructed. Select the one that matches the existing. All of them are  
13.2c bicycle safe.  
13.2d
- 14.2 This has been used in medians where the gutter flag is less than 24".
- 15.2 This has been used in medians where the curb is only 2"± high. For example, near the nose of a ramped median.
- 20.2 Use this on the inlet end of Type A Gutter (Special)
- 21.2 Use this on the inlet end of Combination Concrete Curb & Gutter
- 30.2 If there is existing field tile on your job or think there could be field tile, include this standard. Also include a pay item for junction vaults.
- 31.2 If there is storm sewer or field tile under a ditch with 24" or less of cover, include this standard. Include the pay item for Miscellaneous Concrete.
- 32.2 Use this where the bridge is less than 24" wider than the roadway surface. This is very rare on a state route, but should be used on bridges on detour routes on County or Township roads.
- 33.2 This is a special drainage outlet to be used on existing pavements with drainage problems. The existing underdrains might not be working, or there is water pumping out of the joint between the pavement and shoulder.
- 34.2 This can be used to replace existing field tile stand pipes. The existing stand pipe is usually an orange perforated 6" pipe, 24" to 36" high, near the outlet end of a culvert. This could also be a new installation if requested by the property owner during Phase I or during negotiations.

## District 2 Standards Designer Notes

7-20-16

- 35.2 This is an erosion control treatment at guardrail that Operations has used for years. The downside is the erosion control curb tends to further tilt the guardrail over time. This can be used to replace existing erosion control curb or at selected locations. A better treatment for slopes at guardrail is Perimeter Erosion Barrier, Special (Dist. Std. 8.4).
- 36.2 Paved ditch is rarely used in District 2. It tends to crack and water seeps under the concrete, causing it to be undermined. Once undermined it collapses, causing an erosion problem. Where it can be used is on very flat ditch grades, less than 0.2%. In this case, velocity is low, but the paved ditch could silt in. Operations could clean the paved ditch and the paved ditch establishes the grade line.
- 37.2 Include when installing or removing across road culverts in sags or on grades greater than 2%. The purpose of this is to prevent water pumping out of the joints of the pavement patch. Add the pay items for Pipe Underdrains, Type 2 and Concrete Headwalls for Pipe Drains.
- 44.2 This is to be used on all disabled parking stalls.
- 45.2 Include this on projects that correct existing superelevations, or on new pavements on superelevations. Not to be used on 3P or Smart projects because existing superelevations are not changed.
- 46.2 Include this on all Smart resurfacing projects.
- 47.2 Include this on all 3P resurfacing projects.
- 48.2 Include in Smart resurfacing projects with paved shoulders 3' or less.
- 49.2 Include in 3P resurfacing projects with paved shoulders 3' or less.
- 60.2 Deleted 4-15-15
- 61.2 This can be used to increase drainage in curb & gutter or Gutter, Type A (Special) where the longitudinal grade is less than 0.3%. Use 68.1 when constructing median crossovers.
- 63.2 Include this when constructing new steps.
- 64.2 Include this when handrails are needed on retaining walls. Not all retaining walls need handrails. Retaining walls that are supporting and adjacent to sidewalks or parking lots usually need a handrail. Landscaping walls to retain earth in front of a house usually don't need handrails.

## District 2 Standards Designer Notes

4-13-16

- 66.2 Include this when using the pay item for Permanent Survey Marks. Do not include Highway Standard 667101 because Standard 66.2 is 5' deep and requires a witness marker.
- 73.2 Use this on entrance pipes or berm pipes adjacent to a river or canal. This will prevent water from the river or canal backing up into the ditch.
- 81.2 This is one option to control erosion at the ends of culverts with very high velocities. There is a design process to determine the dimensions in the chart. Consult with the Hydraulics Engineer on its use.
- 89.2 Include this at the end of dead end roads like a cul-de-sac or hammer head turn around.
- 90.2 Use this at locations where pipe culverts or box culvert joints could separate. Most culverts do not require the ties, so this is rarely used. One application is where the culvert outlets into a river. There could be erosion at the end of the culvert so the end section or sections of the culvert could tip or fall off. In this case, only the last one or two sections were tied.
- 93.2 Include this when sideroads are constructed with 3"± of incidental on an aggregate base and the mainline has 8" HMA shoulders. This standard includes 4' HMA shoulders on the sideroad return, which will be placed monolithically when the return is resurfaced.
- 94.2 Include this on multi-lane roads when the traffic lane is closed adjacent to a left or right turn lane and the turn lane is to remain open to traffic.



## DISTRICT 2 STANDARDS

2-28-23

### ¼ SIZE

- 8.4 Perimeter Erosion Barrier, Special
- 11.4 Concrete Curb (Special)
- 12.4 Concrete Curb (Special) (Adjacent to Resurfacing)
- 13.4 Combination Concrete Curb & Gutter, Type \_\_\_\_\_, Special
- 15.4 Gutter Outlet Adjacent to Stabilized Shoulders
- 16.4 Concrete Gutter, Type A, with Flume
- 17.4 Catch Basins or Inlets to be Adjusted or Reconstructed
- 18.4 Curb & Gutter Outlet, Special
- 19.4 Riprap at End Sections
- 19.4a Concrete Revetment Mat at End Sections
- 20.4 Grading Around Wingwalls
- 21.4 Aggregate Ditch for Flexible Ditch Lining
- 22.4 Hot Mix-Asphalt Shoulder
- 23.4 Detail of Hot-Mix Asphalt Shoulder at Guardrail
- 24.4 Pavement Breaking Detail
- 27.4 Concrete Headwalls for Pipe Underdrains for Structures
- 28.4 Cast-in-Place Reinforced Concrete End Sections
- 29.4 Silicone Joint Seal (Concrete Details)
- 30.4 Stone Wells, Special
- 31.4 Parking Blocks
- 32.4 Pavement Patching for Hot-Mix Asphalt Surfaced Pavement
- 33.4 Pavement Patching Detail
- 34.4 Thrust Block Details
- 35.4 Sidewalk and Driveway Pavement Pay Areas
- 36.4 Concrete Gutter, Type A (Special)
- 37.4 Delineator and Post Orientation
- 38.4 Edge of Pavement Repair
- 43.4 Required Cold Milled Surface Texture
- 44.4 Slab Movement Detection Device
- 46.4 Aerial Speed Check Zones
- 50.4 Typical Benching Detail on Existing Embankment
- 51.4 Typical Construction of Embankments with Granular Material
- 63.4 Land Section & Reference Markers
- 70.4 Tree Wall
- 71.4 Detail of Concrete Steps
- 79.4 Inlets, Special, No. 3
- 79.4a Inlets, Special, No. 4
- 79.4b Inlets, Special, No. 5
- 79.4c Inlets, Special, No. 6
- 79.4d Inlets, Special, No. 7
- 79.4e Inlets, Special, No. 8
- 79.4f Nose Type for Inlet Top Slab
- 79.4g Inlets, Special, No. 3, 4, 5, 6 Reinforcement Detail
- 79.4h Inlets, Special, No. 7 & 8 Reinforcement Detail
- 80.4 Inlets to be Reconstructed with New Standard 542546 Frame & Grate
- 83.4 Grate, Special
- 87.4 Typical Median Crossover Closure (with Emergency Opening)
- 88.4 Drain for Aggregate Bases in Urban Areas
- 91.4 Rumble Resurfacing
- 96.4 Drain for Aggregate Base Course
- 97.4 Subgrade Replacement
- 98.4 Typical Median Crossover Closure

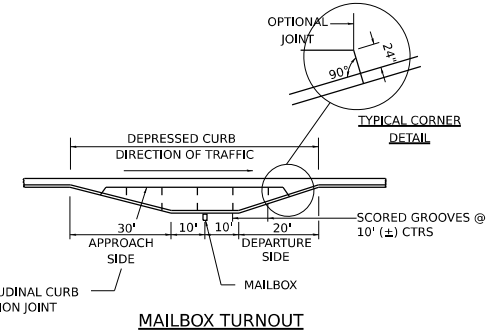
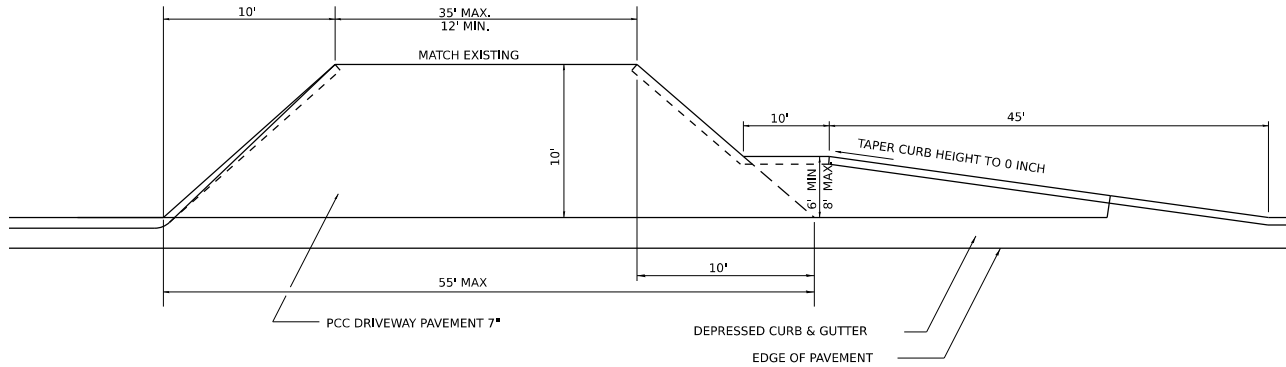
¼ Size District 2 Standards

- 8.4 This can be used on Smart & 3P resurfacing projects to maintain a maximum 9% cross slope on the aggregate shoulder in front of existing guardrail. The guardrail could also be removed and re-erected or replaced if it is extremely tipped, out of alignment, damaged, not to current standards, or the height is more than 3" high or low from the initial standard used to install it. Smart projects are allowed up to 15% of the total contract cost for spot safety improvements. 3P projects can also have spot safety improvements, but both projects require BDE approval. Include pay items for Steel Plate Beam Guardrail, Type A (Special), and Aggregate Wedge Shoulder, Type B.
- 11.4, 12.4 & 13.4 These can be used when a new median or curb & gutter is placed on bare concrete pavement. This isn't used much because the first thing necessary is bare concrete, and there isn't much bare concrete in our District.
- 15.4 This is used to replace existing gutter outlets adjacent to a HMA shoulder. District 2 doesn't construct new gutter adjacent to stabilized shoulders; curb & gutter is used. Therefore, when curb & gutter is constructed adjacent to a stabilized shoulder, use Highway Standard 606101.
- 16.4 This is a specialized gutter outlet. Do not use this on curb & gutter. An example of when it would be used is to outlet the gutter over the top of a culvert headwall.
- 17.4 Use this standard for adjustment of catch basins or inlets.
- 18.4 This is a specialized curb & gutter outlet. This can be used when there is a ditch behind the curb & gutter and there aren't any inlets with frame & grate or Winnebago's in the curb & gutter.
- 19.4 Use this when RIPRAP is required at culvert end section. Check the hydraulic report for the apron length and the size of the riprap to be used. Be sure to show the dimensions on the plans.
- 19.4a Use this when concrete revetment mat is required at an end section. There is a table on the standard which needs to be filled out. Check the hydraulic report for the apron length. Be sure to show the dimensions on the plans.
- 20.4 Use this on across road culverts that have wingwalls that are not parallel with the culvert. This is a guide for the Resident Engineer & Contractor on how to construct the dirt around wingwalls.
- 21.4 If riprap is needed in ditches to control erosion, use this standard. Specify the pay item for Class A3 or A4. Add the dimensions to the typical section. The height of the riprap on the side slopes should extend approximately 6" higher than the computed depth of water in the ditch.
- 22.4 Use this for new HMA shoulders. If guardrail will be installed before the surface course is placed, like on staged bridge projects, use District Standard 23.4
- 23.4 Use this on projects where guardrail will be installed before the surface course is placed. This allows the guardrail to be installed and the shoulder resurfaced to the post so the posts do not have to be removed and re-erected. For example, staged bridge projects require guardrail to be installed for Stage 2, but all of the surface course is placed after the bridge is completed. If new HMA shoulders are constructed and guardrail will be installed after the HMA shoulder is installed, use District Standard 22.4.

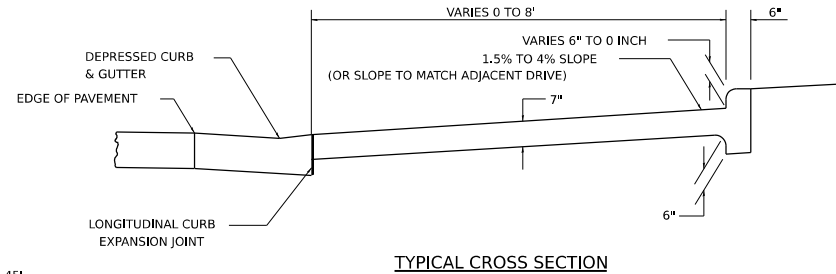
- 24.4 Use this on projects with large changes in vertical alignment from the existing pavement to a new full depth pavement. This will require a thick resurfacing taper, pavement breaking, and variable depth subbase granular material.
- 27.4 Use this if the pipe underdrain for structures behind the bridge abutment will outlet into the riprap on the bridge cone. If not, use Highway Standard 601101.
- 28.4 Use this if storm sewer or field tile outlets through the backslope of the ditch. This can also be used for Cast-in-Place Reinforced Concrete End Section 8" or 10".
- 29.4 Include this standard if #16 Polymer Concrete is checked on the Recurring Special Provision check sheet.
- 30.4 This can be used in sandy soils to drain areas with poor drainage or no outlets. Materials must take soil borings to determine if the stone well will function properly.
- 31.4 This can be used in parking lots or for diagonal parking if there isn't a curb or curb & gutter.
- 32.4 Use this standard for peek-a-boo patching. Peek-a-boo patching is used to remove and replace the existing HMA on top of concrete pavement, up to a maximum of 8" thick.
- 33.4 Use this standard for pavement patching when the existing HMA overlay thickness is 8" or thicker.
- 34.4 Include this when constructing new water mains, or moving or relocating fire hydrants. Do not include this for the thrust blocks on Highway Standard 610001.
- 35.4 Use this standard in urban areas when removing and replacing sidewalk and driveway pavements.
- 36.4 When constructing concrete gutter, District 2 has a flat bottom gutter which is easier to construct. Do not include Highway Standard 606101. For gutter inlets, include #20.2 Standard Inlet for Type A Gutter (Special), and for outlets include #15.4 Gutter Outlet Adjacent to Stabilized Shoulder.
- 37.4 Include when installing new delineators. The purpose of rotating the post 180° is to give more support for the delineators so it doesn't break off.
- 38.4 Include this standard on 3P projects when there are areas along the edge of pavement that are badly deteriorated. Also include the appropriate Recurring Special Provision.
- 43.4 Include this standard if #13 HMA Surface Correction is checked on the Recurring Special Provisions check sheet. This milling is for surface corrections that will not be resurfaced. To date this has not been used in District 2.
- 44.4 Include this standard if #12 Subsealing of Concrete Pavements is checked on the Recurring Special Provisions check sheet. This is used with the pay items Dry Grout Solids and Holes Drilled. To date this has not been used in District 2.

- 46.4 This is used when replacing existing aerial speed check zones on resurfacing projects. Field check the project to determine if any exist.
- 50.4 Include this when adding embankment on an existing slope that is 4' high or more.
- 51.4 Use on any project that will be widening the existing embankment, contact Geotech with any questions.
- 63.4 Include this if Land Sections or ¼ Section Corners will be disturbed. This applies to projects where earth will be moved, not Smart or 3P resurfacing. Check with Land Acquisition for the existing section locations.
- 70.4 This can be used to save a tree on a slope that will be excavated. Usually there is a commitment in the project report to save a tree that requires a tree well.
- 71.4 Include this detail for installing or replacing steps adjacent to sidewalk.
- 79.4 These inlets, known as Winnebago's. No. 3 & 4, can be used with storm sewer up to 36" diameter, No. 5 & 6 can be used with storm sewer up to 24" diameter, 79.4a No. 7 can be used with storm sewer up to 48" diameter, and No. 8 can be used 79.4b with storm sewer up to 60" diameter. No. 4 & 6 have open backs for drainage 79.4c behind the inlets. Do not use Winnebago's with curb & gutter with gutter flags 79.4d less than 24", it makes the cross slope of the gutter flag too steep. This can be 79.4e dangerous for bicyclists, or people stepping off of the curb. Instead, use an 79.4f inlet with a frame & grate to fit the curb & gutter. When using 79.4, 79.4a, 79.4g 79.4b, or 79.4c, also include 79.4f & 79.4g. When using 79.4d & 79.4e, also 79.4h include 79.4f & 79.4h.
- 80.4 This can be used to lower an existing 3' x 3' median inlet.
- 83.4 Use this to replace broken grates or to replace a grate that isn't bicycle safe. Measure the existing grate to ensure this will fit.
- 87.4 Use this on permanent median crossovers where an emergency opening is needed. If an emergency opening isn't needed, use District Standard 98.4. Check with Operations to see if an opening is needed.
- 88.4 Use this in urban areas with new pavement, subbase, and storm sewer. The purpose of this is to drain the subbase.
- 91.4 This is usually used to replace existing rumble strips in the traffic lane before stop signs. It can also be used at new locations to reduce accidents.
- 96.4 Use this on new pavements with subbase where there will be ditches. Place one in all low points and others at approximately 250' intervals.
- 97.4 Include this for full depth patching. The quantity for subgrade replacement will be approximately 10-20% of the area of the full depth patches. Remember to include the BDE special provision for Aggregate Subgrade Improvement.
- 98.4 Use this on permanent median crossovers where an emergency opening is not needed. If an emergency opening is needed, use District Standard 87.4. Check with Operations to see if an opening is needed.

# MAILBOX TURNOUT IN CURB AND GUTTER SECTION



**COMMERCIAL ENTRANCE WITH MAILBOX TURNOUT**

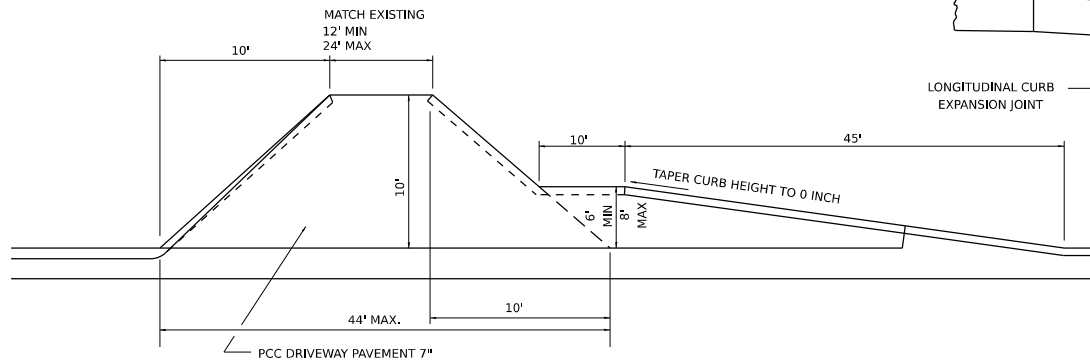


**TYPICAL CROSS SECTION**

**GENERAL NOTES**

- 1.) THE LONGITUDINAL CURB EXPANSION JOINT SHALL CONFORM TO SECTION 1051 OF THE STANDARD SPECIFICATIONS.
- 2.) THE MAILBOX TURNOUT CROSS SLOPE WILL BE AS SHOWN ABOVE, AS SHOWN ON THE STATION CROSS SECTIONS OR AS DIRECTED BY THE ENGINEER.
- 3.) THE MAILBOX TURNOUT SHALL BE CONSTRUCTED WITH SCORED GROOVES, AS SPECIFIED IN ARTICLE 423.06 OF THE STANDARD SPECIFICATIONS, AT APPROXIMATELY 10 FT. CENTERS. IN THE EVENT THERE IS EXISTING OR PROPOSED SIDEWALK PRESENT, THESE SCORED GROOVES SHALL BE PLACED IN LINE WITH EVERY OTHER JOINT IN THE ADJACENT SIDEWALK.
- 4.) THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR P.C. CONCRETE DRIVEWAY PAVEMENT OF THE THICKNESS SPECIFIED IN THE PLANS WHICH PRICE SHALL INCLUDE THE LONGITUDINAL CURB EXPANSION JOINT AND MONOLITHIC CURB AS SHOWN, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 5.) SEE THE DISTRICT STANDARD 25.1 FOR ADDITIONAL DETAILS.
- 6.) MAILBOXES SHALL BE INSTALLED TO CURRENT UNITED STATES POSTAL SERVICE MAILBOX GUIDELINES.

**PRIVATE ENTRANCE WITH MAILBOX TURNOUT**



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

PROJECT NO. 1001  
 REGION 2 / DISTRICT 2 STANDARD  
 PLOT DATE = 3/12/2024

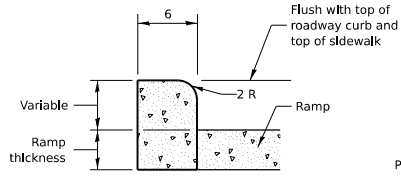
USER NAME = IDOT\cburk2	DESIGNED -	REVISED - 1-10-19
	DRAWN -	REVISED - 1-03-18
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 10-17-11
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

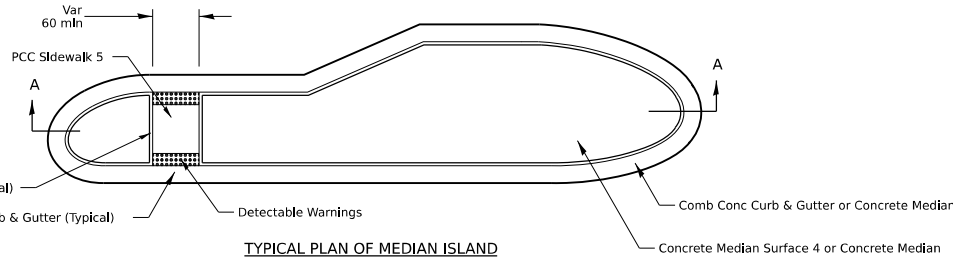
**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
									ILLINOIS FED. AID PROJECT	

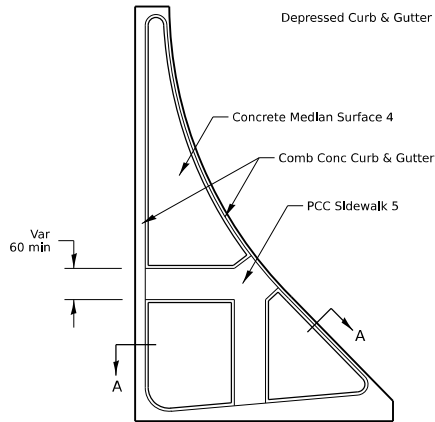
# PC CONCRETE ISLANDS AND MEDIANS ACCESSIBLE TO THE DISABLED



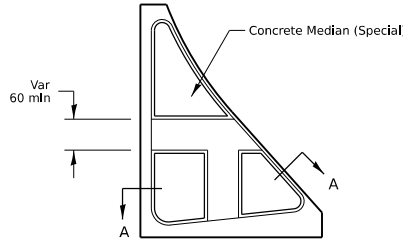
SIDE CURB DETAIL



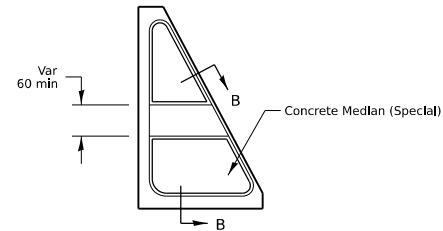
TYPICAL PLAN OF MEDIAN ISLAND



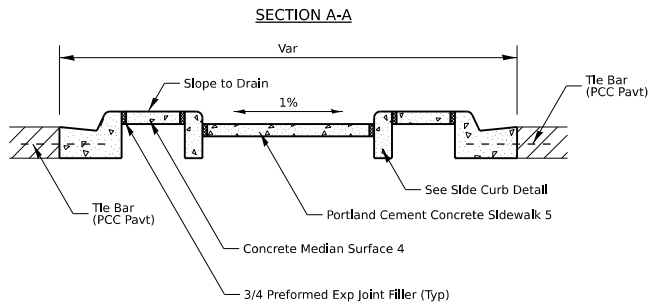
LARGE ISLAND  
(Free Flow Design)



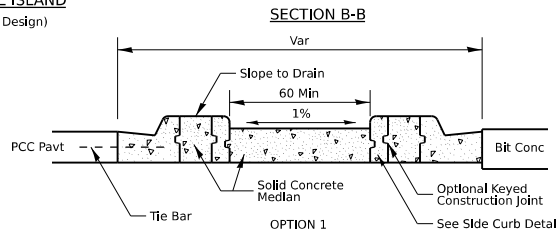
INTERMEDIATE ISLAND  
(For Right Turn Lane Design)



SMALL ISLAND  
(For Typical Design)

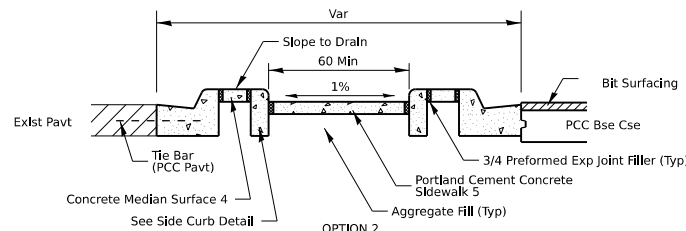


SECTION A-A



SECTION B-B

OPTION 1



OPTION 2

General Notes:  
See Standard 606301 and plan sheets for station & offsets, radii, dimensions, and details not shown.

See Standard 424031 for sidewalk details not shown.

The sidewalk should drain to the low side of the Island. If necessary the sidewalk shall be sloped to drain at 1%.

See the plan general notes for the type of curb & gutter to be used on islands.

The sidewalk should not be closer than 36 from the corner of the Island.

Keyed longitudinal construction joints shall be constructed without tie bars.

Medians and large islands shall consist of PCC Sidewalk 5, Concrete Median Surface 4, and Combination Concrete Curb & Gutter, Type M or B of the size specified. Median island can also be solid concrete medians.

Locations, layouts, and widths of the flush sidewalk area, shall be determined by the designer and shown on the plans.

Small islands will be measured for payment from E.O.P. to E.O.P. using either option 1 or option 2, as specified in the plans, and will be paid for at the contract unit price per SQ FT for CONCRETE MEDIAN (SPECIAL) which shall include the combination curb & gutter, sidewalk, aggregate fill, concrete median surface, and solid concrete median.

Omit detectable warnings when distance between back of curbs is less than 6'.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

ILLINOIS STATE BOARD OF ENGINEERS  
 REGISTERED PROFESSIONAL ENGINEER  
 LICENSE NO. 12120204

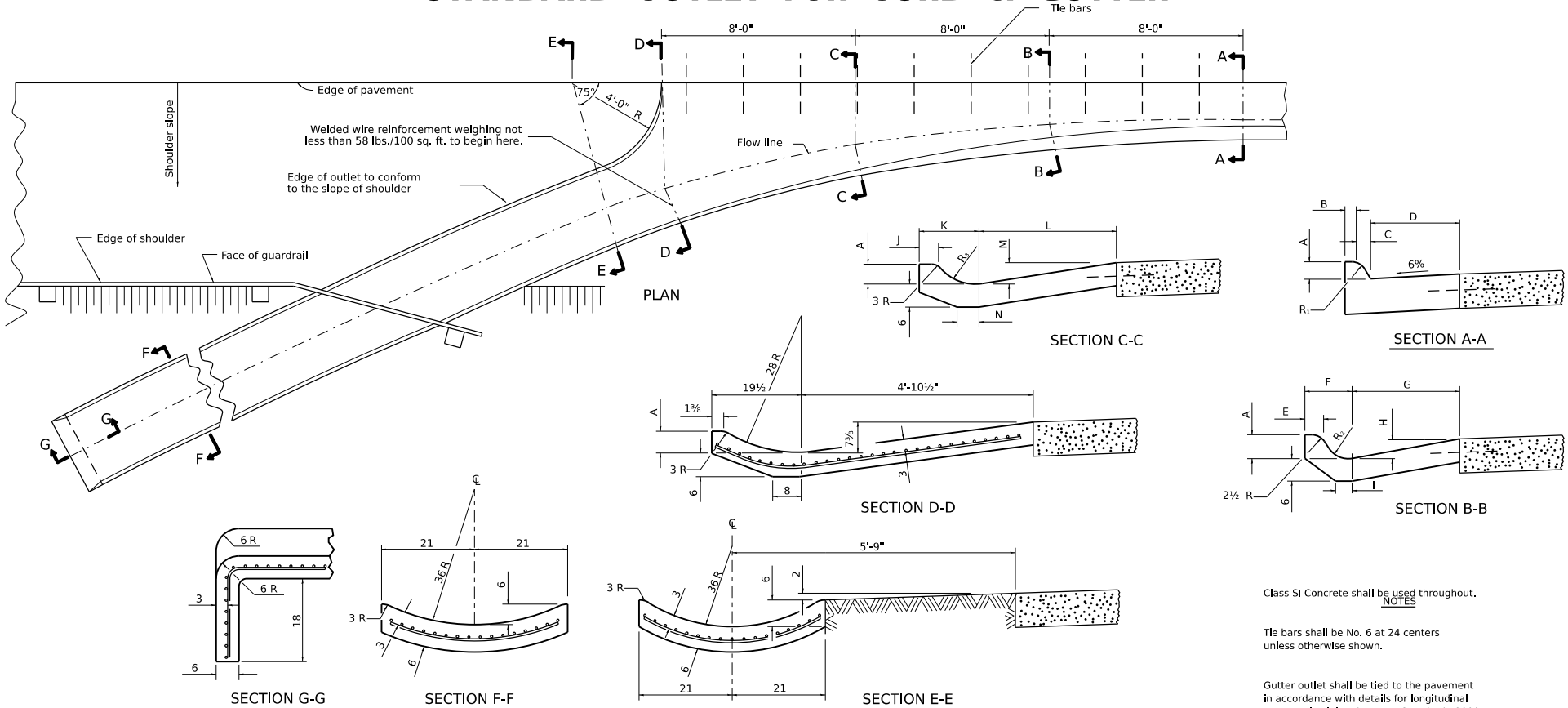
USER NAME = ISDOT\brk2	DESIGNED -	REVISED - 4-16-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 6-27-14
PLOT DATE = 3/12/2024	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				

# STANDARD OUTLET FOR CURB & GUTTER



Class SI Concrete shall be used throughout.  
**NOTES**

Tie bars shall be No. 6 at 24 centers unless otherwise shown.

Gutter outlet shall be tied to the pavement in accordance with details for longitudinal construction joint shown on Standard 420001.

If the average grade of pavement for the distance from Section A-A to D-D exceeds 2%, this distance shall be increased 6' for each 1% increase in grade.

When curb and gutter is constructed adjacent to flexible pavement, a 1 expansion joint shall be installed at construction joints.

### QUANTITY

For Section F-F = 0.069 cu. yds. concrete per ft.

TYPE OF CURB & GUTTER	TABLE OF DIMENSIONS															CONCRETE QUANTITY A-A TO E-E AND CURTAIN WALL FOR 9 PAV'T (CU YDS)	CONCRETE QUANTITY A-A TO E-E AND CURTAIN WALL FOR 10 PAV'T (CU YDS)		
	A	SECTION A-A			SECTION B-B					SECTION C-C					R <sub>1</sub>			R <sub>2</sub>	R <sub>3</sub>
B-6.12	6	6	1	12	3	7 1/2	13 3/4	2 3/4	4	3	12 1/2	26 1/2	5	6	1	2	8	1.87	1.89
B-6.18	6	6	1	18	3 1/4	9 1/4	22	3	5	3 1/2	14 1/4	28 3/4	5 1/2	5 1/2	1	4	10	2.18	2.20
M-4.06	4	3	4	6	3	9 1/2	10 1/2	2	4	3	13	25	3	6	3	5	11	1.78	1.79
M-4.12	4	3	4	12	3 1/2	9 1/4	13 3/4	2 3/4	6	3	13 1/2	26 1/2	5	6	3	5	9	1.89	1.91
M-4.18	4	3	4	18	3 1/2	9 1/4	22	3	5	3 1/2	14 1/4	28 3/4	5 1/2	5 1/2	3	4	10	2.11	2.13
M-4.24	4	3	4	24	5	11 1/2	26	3 1/4	4	3 1/4	15	38	5 1/2	5	3	6	12	2.34	2.37
M-6.06	6	2	6	6	2 1/4	9 1/4	10 1/2	2	4	2 1/2	13	25	3	6	2	5	10	1.84	1.86
M-6.12	6	2	6	12	3 1/2	8 1/2	13 3/4	2 3/4	6	3	13 1/2	26 1/2	5	6	2	2	9	1.96	1.98
M-6.18	6	2	6	18	3 1/2	9 1/4	22	3	5	3 1/2	14 1/4	28 3/4	5 1/2	5 1/2	2	4	10	2.18	2.20
M-6.24	6	2	6	24	5 1/4	11	26	3 3/4	4	3 3/4	17 3/4	38	5 1/2	5	2	3 1/4	16	2.46	2.49

PROJECT NO. 11-0001  
 SHEET NO. 11-0001-1  
 PLOT DATE: 11/20/2024

USERNAME = ISDOT\brk12  
 PLOT SCALE = 0.258"=1ft.  
 PLOT DATE = 3/12/2024

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED - 1-05-16  
 REVISED - 11-12-14  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

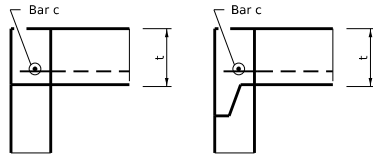
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

CONTRACT NO.

ILLINOIS FED. AID PROJECT

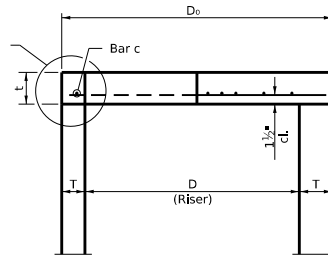
# PRECAST REINFORCED CONCRETE FLAT SLAB TOP CENTERED AND OFFSET MANHOLE – 36" OPENING



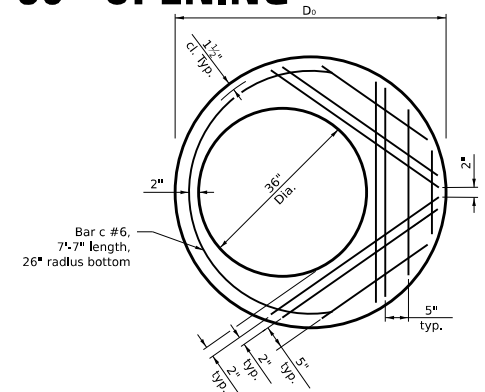
**FLAT SLAB TOP JOINT CONFIGURATIONS  
FOR D = 4'-0" AND D = 6'-0"**

(Shown at access hole)

See Top Slab Joint Configurations for D=36" and D=4'-0"

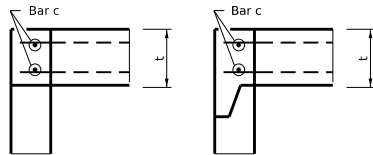


**SECTION THRU FLAT SLAB TOP  
FOR D = 4'-0" AND D = 6'-0"**



**PLAN - FLAT SLAB TOP FOR D = 4'-0"**

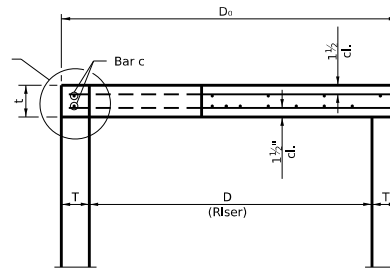
(Showing layout of reinforcement bars and c bars)



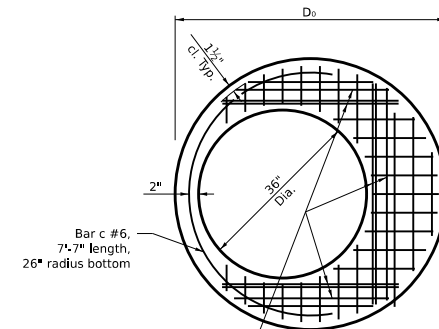
**FLAT SLAB TOP JOINT CONFIGURATIONS  
FOR D = 8'-0" AND D = 10'-0"**

(Shown at access hole)

See Top Slab Joint Configurations



**SECTION THRU FLAT SLAB TOP  
FOR D = 8'-0" AND D = 10'-0"**



**PLAN - FLAT SLAB TOP FOR D = 8'-0"**

(Showing layout of welded wire reinforcement and c bars)

**TABLE**

D	T	D <sub>o</sub> (min.)	t
4'-0"	See applicable Standards D + 2T	↑	6"
6'-0"			8"
8'-0"			10"
10'-0"			12"

### GENERAL NOTES

The flat slab top may be used in lieu of the tapered tops shown on Standards 602001, 602016, or 602306 at the option of the Contractor or when field conditions prohibit the use of tapered tops.

Lifting holes shall be located in the sections as per the manufacturer's recommendations.

All dimensions are in inches (millimeters) unless otherwise shown.

PROJECT: ILLINOIS DISTRICT 2 STANDARD  
 DRAWING NO.: 602306  
 PLOT DATE: 3/12/2024

USER NAME = IDOT\cbmk2  
 PLOT SCALE = 0.25787"/in.  
 PLOT DATE = 3/12/2024

DESIGNED -  
 DRAWN -  
 CHECKED -  
 DATE -

REVISED - 3-23-23  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				













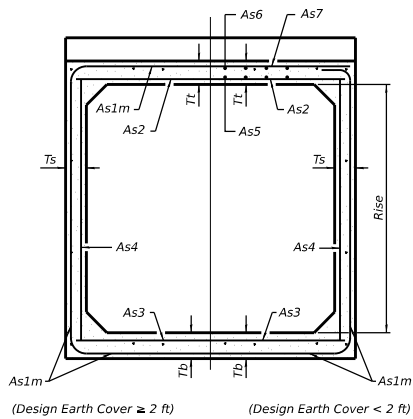




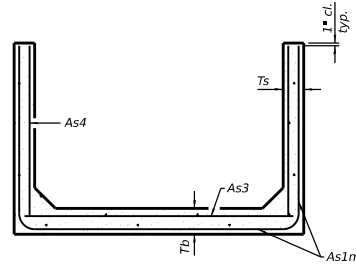
# BOX CULVERT END SECTIONS

Rise (ft)	2	3	4	5	6	7	8	9	10	11	12
Ts (in.)											
4	0.19	0.17									
5	0.26	0.21	0.18								
6	0.22	0.26	0.23	0.22							
7	0.25	0.33	0.59	0.27	0.28						
8	0.40	0.35	0.43	0.39	0.36	0.34	0.40				
9	0.44	0.39	0.35	0.43	0.40	0.37	0.36	0.48			
10	0.48	0.42	0.38	0.47	0.44	0.41	0.38	0.42	0.56		
11	0.52	0.45	0.54	0.50	0.46	0.44	0.41	0.46	0.50	0.65	
12	0.55	0.49	0.58	0.54	0.50	0.48	0.45	0.46	0.46	0.61	0.75

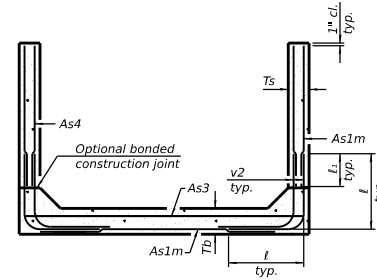
(As1m reinforcement based upon welded wire reinforcement conforming to AASHTO M 55 or M 221).



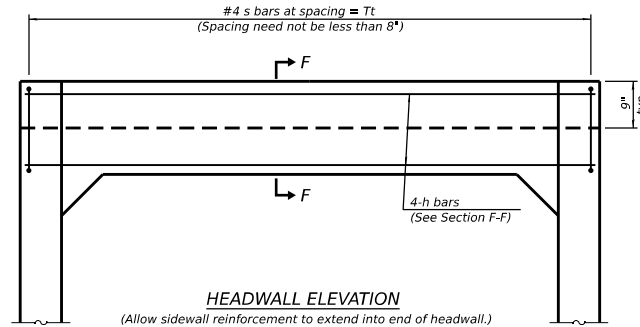
SECTION C-C  
(Design Earth Cover  $\geq$  2 ft) (Design Earth Cover < 2 ft)



SECTION D-D



ALTERNATE SECTION D-D



HEADWALL ELEVATION

(Allow sidewall reinforcement to extend into end of headwall.)

### l1 DIMENSION

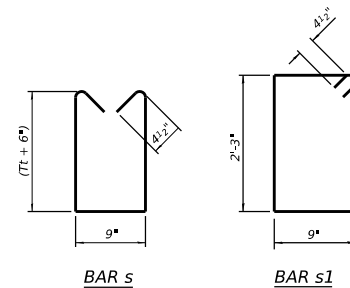
- #3 bar = 2'-0"
- #4 bar = 2'-8"
- #5 bar = 3'-4"
- #6 bar = 3'-11"

### Notes:

Alternate Section D-D is provided to allow the Contractor the option of casting the bottom slab of the end section first followed by construction of the sidewalls using conventional forming methods. Shop drawings that detail slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval when using Alternate Section D-D.

The size and spacing of the v2 bars shall provide a minimum reinforcement area along each face of the walls (in. \[Y ft.) equal to 1.10\*(As1m). v2 bars may consist of #3 thru #6 size reinforcement bars and the longitudinal spacing shall not exceed the lesser of the wall thickness or 8 inches.

Bonded construction joints shall be prepared according to Article 503.09 of the Standard Specifications.

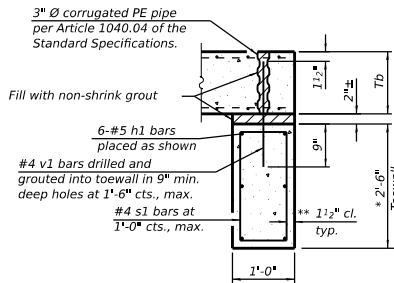


### TOEWALL CONSTRUCTION SEQUENCE

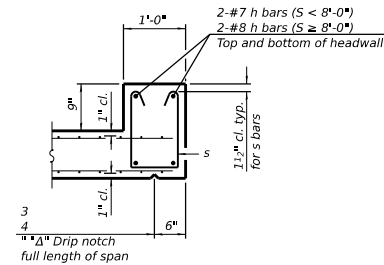
1. Perform excavation and construct toewall.
2. Backfill according to the applicable paragraphs of Article 502.10 of the Standard Specifications and place bedding for precast box culvert end sections.
3. Set precast box culvert end section.
4. Drill and epoxy grout reinforcement in toewall in accordance with Section 584 of the Standard Specifications.
5. Pressure grout voids using non-shrink grout conforming to Section 1024 of the Standard Specifications.

\* The Contractor may furnish a precast or cast-in-place toewall. The Contractor shall be responsible for the strength and stability of the precast toewall during handling. Additional lifting points may be required depending upon the length of the toewall or the Contractor may need to modify the design of the toewall for the proposed handling the method.

\*\* If soil conditions permit, the sides of the toewall may be poured directly against the soil. The clear cover on the sides of the toewall shall be increased to 3" by increasing the thickness of the toewall.



SECTION E-E



SECTION F-F

(Sheet 2 of 2)

PROJECT: ILLINOIS STATE ROADWAY DISTRICT 2  
 DRAWN BY: J. B. BROWN  
 CHECKED BY: J. B. BROWN  
 DATE: 3/12/2024

SCB-TES

2-17-2017

USER NAME = jboytobk12	DESIGNED -	REVISED - 1-10-18
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.25811 ft.	CHECKED -	REVISED - 5-08-14
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

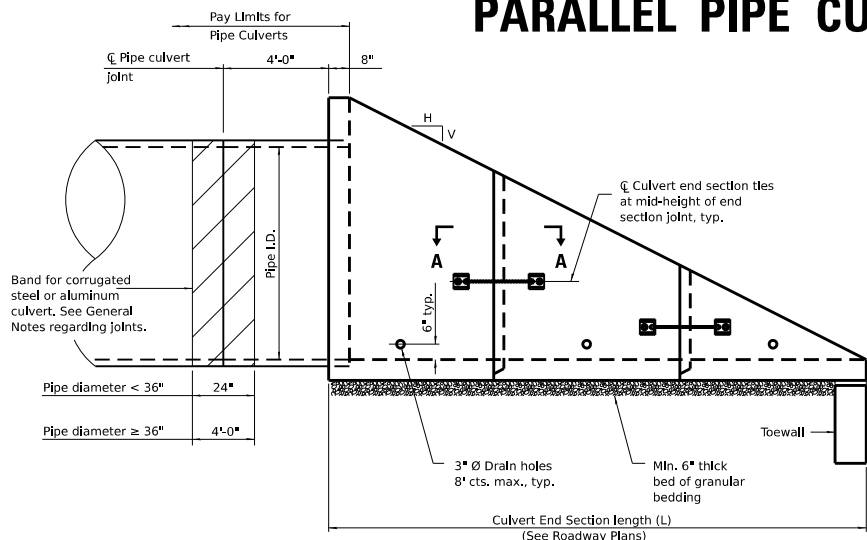
REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

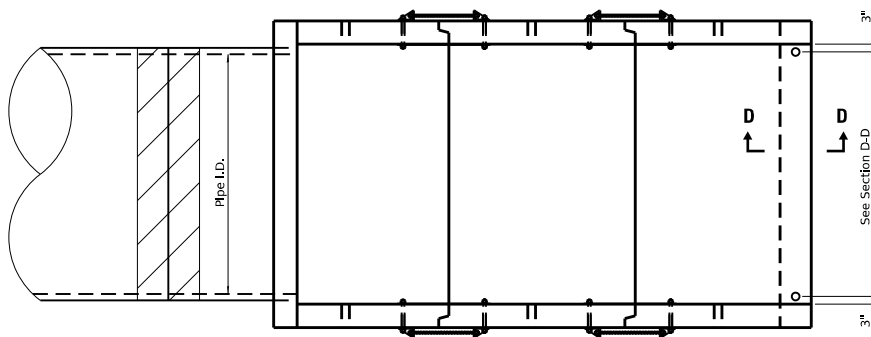
F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FEDERAL PROJECT				



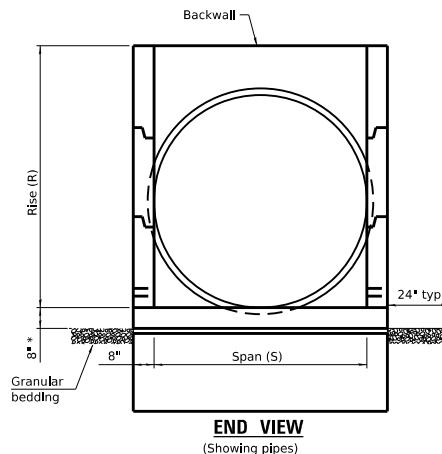
# CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.



**ELEVATION**



**PLAN**



**END VIEW**  
(Showing pipes)

\* This dimension shall be increased by 1" for CIP field construction. See General Notes.

**GENERAL NOTES**

The concrete end sections detailed herein for flexible type pipe culverts are restricted to use with parallel type drainage structures only and traversable pipe grating placed perpendicular to the sidewalls. When traversable pipe grating placed parallel to the sidewalls is required, use standard 542001 or 542011.

A segment of pipe culvert shall be cast into the backwall of the concrete end section such that a minimum of 4 ft of pipe culvert extends from the back face of the end section as shown in Elevation.

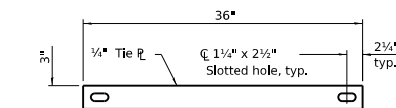
Segments of pipe culvert shall be joined in accordance with Article 542 of the Standard Specifications except bands for corrugated steel or aluminum culverts shall conform to the length requirements shown in elevation and have the same corrugations as the culvert pipe. These bands will be included in cost of the pipe.

The number of segments shown in elevation is for example only. The length and number of precast sections required to construct the end section shall be determined by the Contractor. See roadway plans for slope (V:H) and pipe inside diameter.

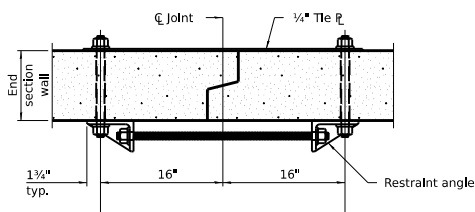
2 1/4" x 2 1/4" x D" plate washers shall be provided under each nut required for the anchor rods. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of formed holes.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.



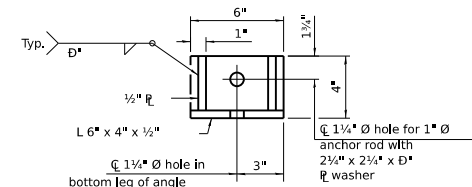
**TIE PLATE DETAIL**



1" Ø Anchor rods with 2 1/4" x 2 1/4" x D" washers installed in 1 1/2" dia. formed holes in end section walls

**SECTION A-A**

(Showing end section tie details)



**RESTRAINT ANGLE DETAIL**

11/20/2024  
 11/20/2024  
 11/20/2024

USER NAME = ISOT/02/02/2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 5-09-14
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

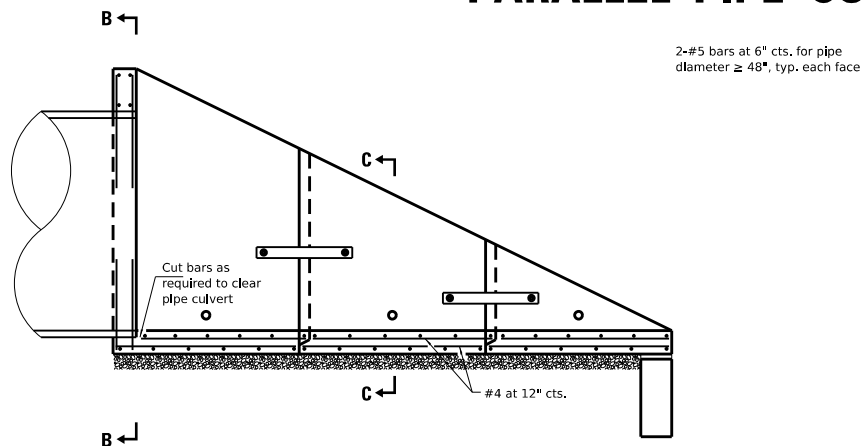
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

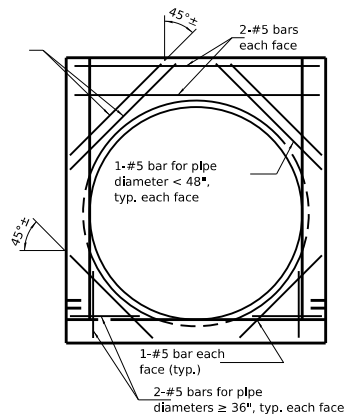
F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

# CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.



**LONGITUDINAL SECTION**  
(Showing bottom slab and backwall reinforcement.)

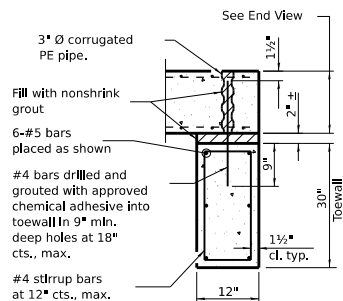


**SECTION B-B**  
(Showing backwall reinforcement for pipes.)

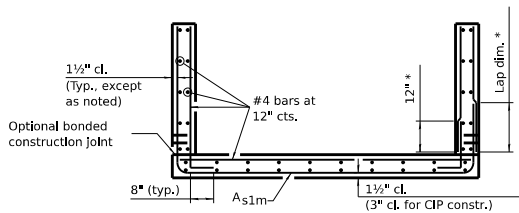
**LAP DIMENSION**

- #4 bar = 17"
- #5 bar = 21"
- #6 bar = 25"

\* The Contractor may use lap splices for the sidewall reinforcement at the locations shown.



**SECTION D-D**



**SECTION C-C**

**PARALLEL PIPE CULVERT END SECTION DIMENSIONS**

Pipe I.D.	Tables IB, IC, IIIA, AND IIIB				
	R	S	L		
			Slope of End Section		
			1:4	1:6	1:10
15"	25"	16"	9'-0"	13'-2"	21'-6"
18"	28"	18"	10'-0"	14'-8"	24'-0"
21"	31"	22"	11'-0"	16'-2"	26'-6"
24"	35"	24"	12'-4"	18'-2"	29'-10"
30"	3'-5"	30"	14'-4"	21'-2"	34'-10"
36"	3'-11"	36"	16'-4"	24'-2"	39'-10"
42"	4'-5"	3'-6"	18'-4"	27'-2"	44'-10"
48"	5'-0"	4'-0"	20'-8"	30'-8"	50'-8"
54"	5'-4"	4'-6"	22'-0"	32'-8"	54'-0"
60"	5'-10"	5'-0"	24'-0"	35'-8"	59'-0"
66"	6'-4"	5'-6"	26'-0"	38'-8"	64'-0"
72"	6'-10"	6'-0"	28'-0"	41'-8"	69'-0"
78"	7'-4"	6'-6"	30'-0"	44'-8"	74'-0"
84"	7'-10"	7'-0"	32'-0"	47'-8"	79'-0"

The above \*Tables\* are referenced from Article 542.03 of the Standard Specifications.

**REINFORCEMENT SCHEDULE**

PIPES		
Pipe I.D.	As1m	
	Bar Size	Bar Spacing
15"	#4	12"
18"	#4	12"
21"	#4	12"
24"	#4	12"
30"	#4	12"
36"	#4	12"
42"	#4	12"
48"	#4	8"
54"	#4	8"
60"	#5	8"
66"	#5	8"
72"	#5	8"
78"	#5	8"
84"	#6	8"

M. J. ...  
 ...  
 ...  
 ...  
 ...

USER NAME = jdot/cbmk2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 5-09-14
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FEB. 4th PROJECT				

# CONCRETE END SECTIONS FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.

### QUANTITIES

Pipe I.D.	Tables IB, IC, IIIA, AND IIIB								
	Concrete yd <sup>3</sup>			Reinforcement without Lap lbs.			Reinforcement with Lap lbs.		
	Slope of End Section			Slope of End Section			Slope of End Section		
	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10
15*	1.4	1.9	2.8	250	330	510	270	350	540
18*	1.6	2.2	3.4	290	400	600	310	420	640
21*	2.0	2.7	4.2	330	450	690	360	480	740
24*	2.3	3.2	5.0	370	510	790	400	550	850
30*	3.1	4.3	6.7	490	680	1060	520	720	1130
36*	3.9	5.5	8.7	580	810	1270	620	870	1360
42*	4.9	6.9	10.9	720	1020	1610	770	1080	1710
48*	6.0	8.6	13.7	940	1320	2090	1010	1420	2240
54*	6.9	9.8	15.7	1090	1540	2440	1160	1650	2610
60*	8.1	11.6	18.6	1410	2000	3190	1530	2180	3480
66*	9.5	13.6	21.8	1650	2360	3780	1780	2560	4100
72*	10.9	15.7	25.2	1840	2630	4220	1990	2850	4580
78*	12.4	17.9	28.9	2110	3040	4900	2280	3280	5290
84*	14.1	20.3	32.8	2710	3910	6320	2970	4290	6950

The above quantities are estimates and provided for information only. Actual quantities may vary depending upon the final layout of reinforcement and number of segments determined by the Contractor.

For cast-in-place construction, increase concrete volumes by approximately 12%.

11/15/2024 10:00 AM  
 PROJECT: I-55/US-41  
 PLOT DATE: 3/12/2024

USER NAME = jdot@ark2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 5-09-14
PLOT SCALE = 0.25" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

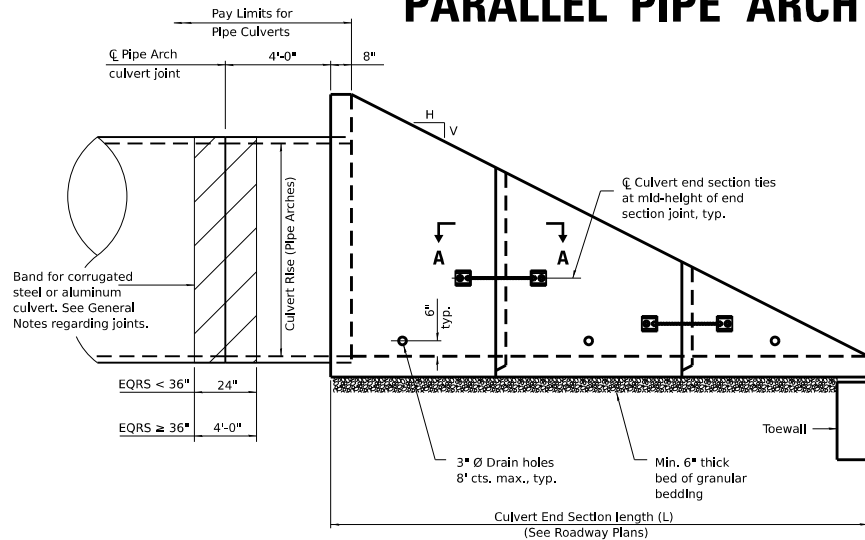
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

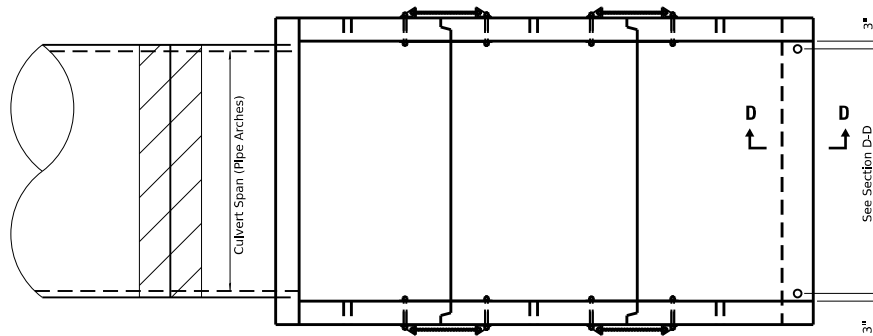
F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

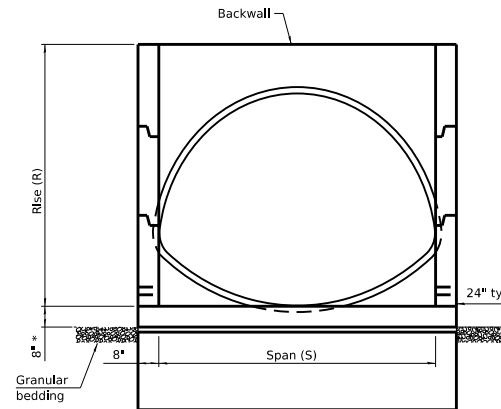
# CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.



**ELEVATION**

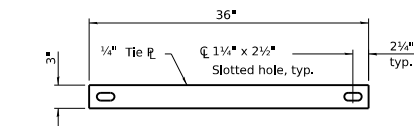


**PLAN**

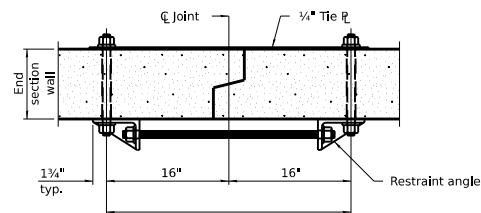


**END VIEW**  
(Showing pipe arches)

\* This dimension shall be increased by 1 1/2" for CIP field construction. See General Notes.

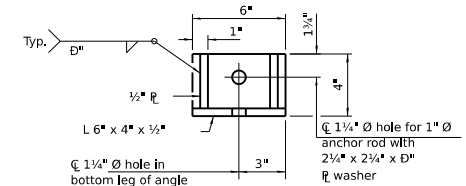


**TIE PLATE DETAIL**



1" Ø Anchor rods with 2 1/4" x 2 1/4" x D" R washers installed in 1 1/8" dia. formed holes in end section walls

**SECTION A-A**  
(Showing end section tie details)



**RESTRAINT ANGLE DETAIL**

**GENERAL NOTES**

The concrete end sections detailed herein for flexible type pipe culverts are restricted to use with parallel type drainage structures only and traversable pipe grating placed perpendicular to the sidewalls. When traversable pipe grating placed parallel to the sidewalls is required, use standard 542001 or 542011.

A segment of pipe culvert shall be cast into the backwall of the concrete end section such that a minimum of 4 ft of pipe culvert extends from the back face of the end section as shown in Elevation.

Segments of pipe culvert shall be joined in accordance with Article 542 of the Standard Specifications except bands for corrugated steel or aluminum culverts shall conform to the length requirements shown in elevation and have the same corrugations as the culvert pipe. These bands will be included in cost of the pipe.

The number of segments shown in elevation is for example only. The length and number of precast sections required to construct the end section shall be determined by the Contractor. See roadway plans for slope (V:H) and pipe inside diameter.

2 1/4" x 2 1/4" x D" plate washers shall be provided under each nut required for the anchor rods. Holes in the walls for the culvert tie assembly may be drilled using core bits in lieu of formed holes.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.

PROJECT: 150110000001  
 PROJECT TITLE: District 2 Standard  
 PLOT DATE: 3/12/2024

USER NAME = jdot@ibm2	DESIGNED -	REVISED - 5-09-14
	DRAWN -	REVISED -
PLOT SCALE = 0.25811/in.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

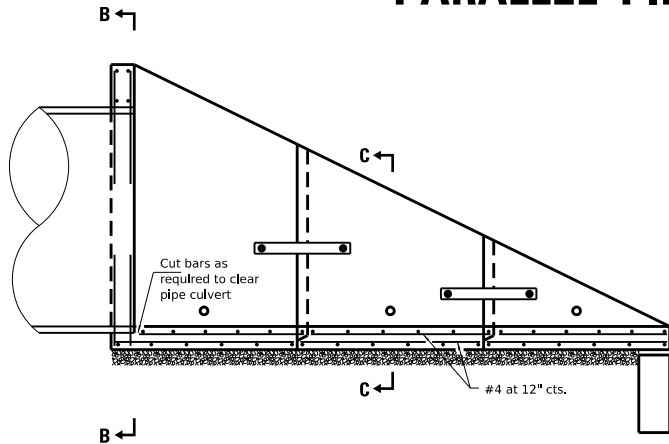
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

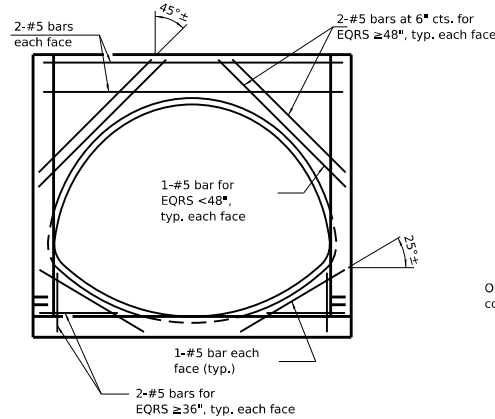
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.



**LONGITUDINAL SECTION**  
(Showing bottom slab and backwall reinforcement.)

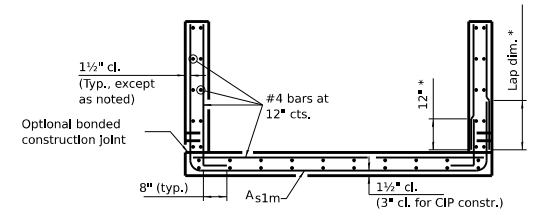


**SECTION B-B**  
(Showing backwall reinforcement for arches.)

**LAP DIMENSION**

- #4 bar = 17"
- #5 bar = 21"
- #6 bar = 25"

\* The Contractor may use lap splices for the sidewall reinforcement at the locations shown.



**SECTION C-C**

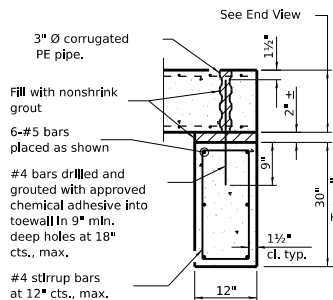
**PARALLEL PIPE ARCH CULVERT END SECTION DIMENSIONS**

Equivalent Round Size	Culvert		Table IIIA, Corrugation : 2" x 1/2"						Culvert		Table IIIA, Corrugation : 3" x 1"					
	Span	Rise	R	S	L			Span	Rise	R	S	L				
					Slope of End Section							Slope of End Section				
					1:4	1:6	1:10					1:4	1:6	1:10		
15"	17"	13"	23"	18"	8'-4"	12'-2"	19'-10"	-	-	-	-	-	-	-		
18"	21"	15"	25"	22"	9'-0"	13'-2"	21'-6"	-	-	-	-	-	-	-		
21"	24"	18"	28"	24"	10'-0"	14'-8"	24'-0"	-	-	-	-	-	-	-		
24"	28"	20"	30"	28"	10'-8"	15'-8"	25'-8"	-	-	-	-	-	-	-		
30"	35"	24"	34"	36"	12'-0"	17'-8"	29'-0"	-	-	-	-	-	-	-		
36"	42"	29"	39"	3'-6"	13'-8"	20'-2"	33'-2"	40"	31"	3'-6"	40"	14'-8"	21'-8"	35'-8"		
42"	49"	33"	3'-7"	4'-2"	15'-0"	22'-2"	36'-6"	46"	36"	3'-11"	3'-10"	16'-4"	24'-2"	39'-10"		
48"	57"	38"	4'-0"	4'-10"	16'-8"	24'-8"	40'-8"	53"	41"	4'-5"	4'-6"	18'-4"	27'-2"	44'-10"		
54"	64"	43"	4'-5"	5'-4"	18'-4"	27'-2"	44'-10"	60"	46"	4'-10"	5'-0"	20'-0"	29'-8"	49'-0"		
60"	71"	47"	4'-9"	6'-0"	19'-8"	29'-2"	48'-2"	66"	51"	5'-3"	5'-6"	21'-8"	32'-2"	53'-2"		
66"	77"	52"	5'-2"	6'-6"	21'-4"	31'-8"	52'-4"	73"	55"	5'-8"	6'-2"	23'-4"	34'-8"	57'-4"		
72"	83"	57"	5'-7"	7'-0"	23'-0"	34'-2"	56'-6"	81"	59"	6'-0"	6'-10"	24'-8"	36'-8"	60'-10"		
78"	-	-	-	-	-	-	-	87"	63"	6'-5"	7'-4"	26'-4"	39'-2"	64'-10"		
84"	-	-	-	-	-	-	-	95"	67"	6'-9"	8'-0"	27'-8"	41'-2"	68'-2"		

The above "Tables" are referenced from Article 542.03 of the Standard Specifications.

**REINFORCEMENT SCHEDULE**

PIPE ARCHES		
Equivalent Round Size	As1m	
	Bar Size	Bar Spacing
15"	#4	12"
18"	#4	12"
21"	#4	12"
24"	#4	12"
30"	#4	12"
36"	#4	12"
42"	#4	12"
48"	#4	12"
54"	#4	8"
60"	#4	8"
66"	#4	8"
72"	#5	8"
78"	#5	8"
84"	#5	8"



**SECTION D-D**

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 PROJECT NO. 15-012024  
 SHEET NO. 2 OF 3

USER NAME = jdot/cbmk2	DESIGNED -	REVISED - 5-08-14
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED -
PLOT DATE = 3/12/2024	CHECKED -	REVISED -
	DATE -	REVISED -

<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>
---

<b>REGION 2 / DISTRICT 2 STANDARD</b>
---------------------------------------

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FEDERAL PROJECT				

# CONCRETE END SECTIONS FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.

## QUANTITIES

Equivalent Round Size	Table IIA, Corrugation: 21" x 1/2"									Table IIA, Corrugation: 3" x 1"								
	Concrete yd <sup>3</sup>			Reinforcement without Lap lbs.			Reinforcement with Lap lbs.			Concrete yd <sup>3</sup>			Reinforcement without Lap lbs.			Reinforcement with Lap lbs.		
	Slope of End Section			Slope of End Section			Slope of End Section			Slope of End Section			Slope of End Section			Slope of End Section		
	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10	1:4	1:6	1:10
15"	1.3	1.8	2.7	240	320	480	250	330	500	-	-	-	-	-	-	-	-	-
18"	1.5	2.1	3.2	270	360	540	290	370	570	-	-	-	-	-	-	-	-	-
21"	1.8	2.5	3.8	310	420	630	330	450	670	-	-	-	-	-	-	-	-	-
24"	2.1	2.8	4.4	360	480	730	380	510	780	-	-	-	-	-	-	-	-	-
30"	2.7	3.7	5.7	420	570	860	440	610	920	-	-	-	-	-	-	-	-	-
36"	3.4	4.6	7.2	520	700	1070	550	740	1140	3.6	5.0	7.8	560	770	1200	600	820	1270
42"	4.1	5.7	8.9	630	860	1340	660	910	1420	4.4	6.1	9.6	640	890	1380	680	940	1470
48"	5.0	7.0	11.0	740	1010	1560	780	1070	1650	5.5	7.7	12.2	800	1120	1750	840	1180	1860
54"	5.9	8.4	13.2	940	1320	2060	1000	1400	2190	6.4	9.1	14.4	980	1380	2170	1050	1470	2310
60"	6.9	9.7	15.4	1050	1470	2300	1110	1560	2440	7.4	10.6	16.8	1120	1580	2500	1190	1680	2670
66"	8.0	11.3	17.9	1190	1680	2630	1260	1780	2800	8.7	12.4	19.7	1320	1870	2960	1390	1980	3140
72"	9.1	12.9	20.6	1540	2190	3490	1660	2350	3770	9.9	14.1	22.4	1660	2360	3760	1790	2550	4060
78"	-	-	-	-	-	-	-	-	-	11.1	15.9	25.5	1880	2700	4320	2010	2900	4640
84"	-	-	-	-	-	-	-	-	-	12.4	17.8	28.5	2050	2940	4690	2200	3150	5040

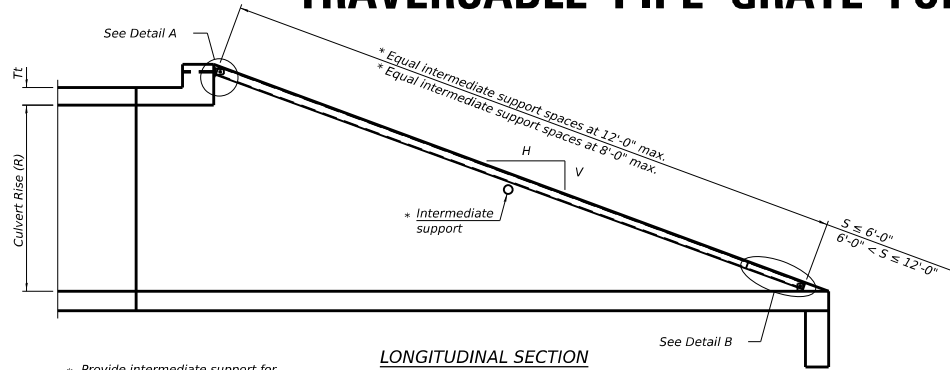
The above quantities are estimates and provided for information only. Actual quantities may vary depending upon the final layout of reinforcement and number of segments determined by the Contractor.

For cast-in-place construction, increase concrete volumes by approximately 12%.

I:\Projects\2024\1122024\1122024.dwg  
 PLOT DATE = 3/12/2024

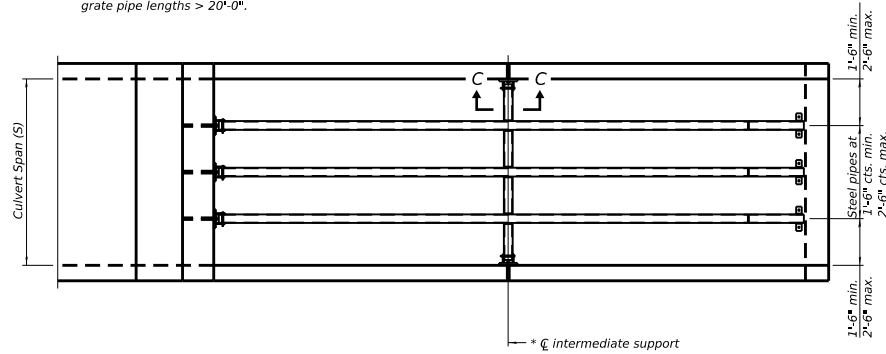
USER NAME = IDOT\cbank2 PLOT SCALE = 0.250" = 1'-0" PLOT DATE = 3/12/2024	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - 5-09-14 REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. RTEL SECTION COUNTY CONTRACT NO. ILLINOIS FED. AID PROJECT	TOTAL SHEETS SHEET NO.
			SCALE: SHEET OF SHEETS STA. TO STA.			

# TRAVERSABLE PIPE GRATE FOR BOX CULVERT END SECTIONS

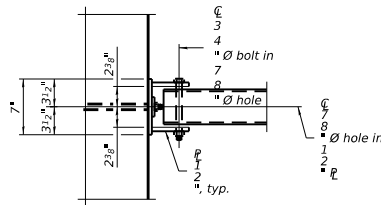


\* Provide intermediate support for grate pipe lengths > 20'-0".

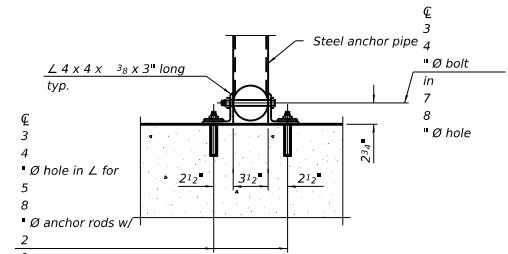
LONGITUDINAL SECTION



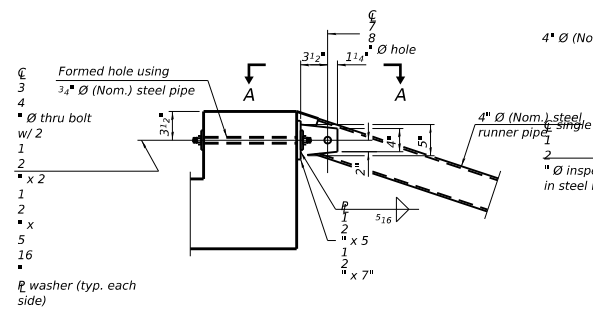
PLAN VIEW



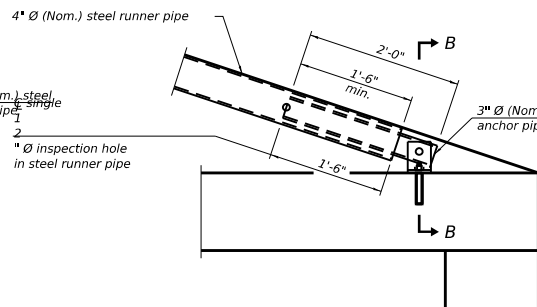
VIEW A-A



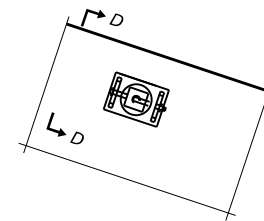
SECTION B-B



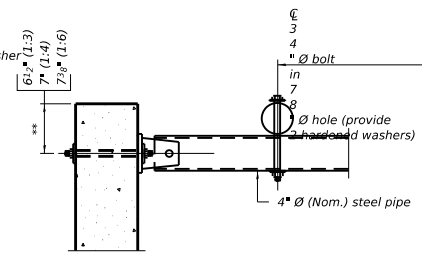
DETAIL A



DETAIL B



VIEW C-C  
(See Detail A for dimensions and details not shown.)



SECTION D-D

\*\* Measured perpendicular to top of culvert wall. In addition, formed hole shall be located a minimum of 6" measured horizontally from any vertical joints necessary for construction of the culvert end section.

(Sheet 1 of 2)

I:\Projects\2017\TPGBC-ZS\Drawings\TPGBC-ZS.dwg  
 PLOT DATE: 3/12/2024  
 PLOT SCALE: 1/8" = 1'-0"

TPGBC-ZS

2-17-2017

USER NAME = jdot@ibrd2	DESIGNED -	REVISED - 1-10-18
	DRAWN -	REVISED - 5-09-14
PLOT SCALE = 0.2581"/ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
									ILLINOIS FED. AID PROJECT	

# TRAVERSABLE PIPE GRATE FOR BOX CULVERT END SECTIONS

PIPE-GRATE SCHEDULE FOR BOX CULVERT END SECTIONS

GENERAL NOTES

This table is only to be used for cross drainage structures.

Precast Box Culvert Dimensions			Slope of End Section								
S (ft)	R (ft)	Tt (in)	1:3			1:4			1:6		
			Main Pipe No. / Length	Int. Support No. / Length	Total Length	Main Pipe No. / Length	Int. Support No. / Length	Total Length	Main Pipe No. / Length	Int. Support No. / Length	Total Length
4	2	7.5	1 @ 8'-10"	N/A	8'-10"	1 @ 11'-7"	N/A	11'-7"	1 @ 17'-2"	N/A	17'-2"
4	2	5	1 @ 8'-2"	N/A	8'-2"	1 @ 10'-8"	N/A	10'-8"	1 @ 15'-11"	N/A	15'-11"
4	3	7.5	1 @ 12'-0"	N/A	12'-0"	1 @ 15'-8"	N/A	15'-8"	1 @ 23'-3"	1 @ 3'-7"	26'-10"
4	3	5	1 @ 11'-4"	N/A	11'-4"	1 @ 14'-10"	N/A	14'-10"	1 @ 22'-0"	1 @ 3'-7"	25'-7"
4	4	7.5	1 @ 15'-2"	N/A	15'-2"	1 @ 19'-10"	1 @ 3'-7"	23'-5"	1 @ 29'-4"	2 @ 3'-7"	36'-6"
4	4	5	1 @ 14'-6"	N/A	14'-6"	1 @ 18'-11"	N/A	18'-11"	1 @ 28'-1"	2 @ 3'-7"	35'-3"
5	2	8	1 @ 8'-11"	N/A	8'-11"	1 @ 11'-9"	N/A	11'-9"	1 @ 17'-5"	N/A	17'-5"
5	2	6	1 @ 8'-5"	N/A	8'-5"	1 @ 11'-3"	N/A	11'-3"	1 @ 16'-5"	N/A	16'-5"
5	3	8	1 @ 12'-1"	N/A	12'-1"	1 @ 15'-10"	N/A	15'-10"	1 @ 23'-6"	1 @ 4'-7"	28'-1"
5	3	6	1 @ 11'-7"	N/A	11'-7"	1 @ 15'-2"	N/A	15'-2"	1 @ 22'-6"	1 @ 4'-7"	27'-1"
5	4	8	1 @ 15'-3"	N/A	15'-3"	1 @ 20'-0"	1 @ 4'-7"	24'-7"	1 @ 29'-7"	2 @ 4'-7"	38'-9"
5	4	6	1 @ 14'-9"	N/A	14'-9"	1 @ 19'-3"	N/A	19'-3"	1 @ 28'-7"	2 @ 4'-7"	37'-9"
5	5	8	1 @ 18'-5"	N/A	18'-5"	1 @ 24'-1"	2 @ 4'-7"	33'-3"	1 @ 35'-8"	3 @ 4'-7"	49'-5"
5	5	6	1 @ 17'-11"	N/A	17'-11"	1 @ 23'-5"	1 @ 4'-7"	28'-0"	1 @ 34'-8"	2 @ 4'-7"	43'-10"
6	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
6	2	7	2 @ 8'-8"	N/A	17'-4"	2 @ 11'-5"	N/A	22'-10"	2 @ 16'-11"	N/A	33'-10"
6	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	1 @ 5'-7"	52'-7"
6	3	7	2 @ 11'-10"	N/A	23'-8"	2 @ 15'-6"	N/A	31'-0"	2 @ 23'-0"	1 @ 5'-7"	51'-7"
6	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	1 @ 5'-7"	45'-7"	2 @ 29'-7"	2 @ 5'-7"	70'-4"
6	4	7	2 @ 15'-0"	N/A	30'-0"	2 @ 19'-8"	1 @ 5'-7"	44'-11"	2 @ 29'-1"	2 @ 5'-7"	69'-4"
6	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	2 @ 5'-7"	59'-4"	2 @ 35'-8"	3 @ 5'-7"	88'-1"
6	5	7	2 @ 18'-2"	N/A	36'-4"	2 @ 23'-9"	2 @ 5'-7"	58'-8"	2 @ 35'-2"	2 @ 5'-7"	81'-6"
6	6	8	2 @ 21'-7"	1 @ 5'-7"	48'-9"	2 @ 28'-3"	2 @ 5'-7"	67'-8"	2 @ 41'-9"	3 @ 5'-7"	100'-3"
6	6	7	2 @ 21'-4"	1 @ 5'-7"	48'-3"	2 @ 27'-11"	2 @ 5'-7"	67'-0"	2 @ 41'-3"	3 @ 5'-7"	99'-3"
7	2	8	2 @ 8'-11"	N/A	17'-10"	2 @ 11'-9"	N/A	23'-6"	2 @ 17'-5"	N/A	34'-10"
7	3	8	2 @ 12'-1"	N/A	24'-2"	2 @ 15'-10"	N/A	31'-8"	2 @ 23'-6"	2 @ 6'-7"	60'-2"
7	4	8	2 @ 15'-3"	N/A	30'-6"	2 @ 20'-0"	2 @ 6'-7"	53'-2"	2 @ 29'-7"	3 @ 6'-7"	78'-11"
7	5	8	2 @ 18'-5"	N/A	36'-10"	2 @ 24'-1"	3 @ 6'-7"	67'-11"	2 @ 35'-8"	4 @ 6'-7"	97'-8"
7	6	8	2 @ 21'-7"	2 @ 6'-7"	56'-4"	2 @ 28'-3"	3 @ 6'-7"	76'-3"	2 @ 41'-9"	5 @ 6'-7"	116'-5"
7	7	8	2 @ 24'-9"	3 @ 6'-7"	69'-3"	2 @ 32'-4"	4 @ 6'-7"	91'-0"	2 @ 47'-10"	6 @ 6'-7"	135'-2"
8	2	8	3 @ 8'-11"	N/A	26'-9"	3 @ 11'-9"	N/A	35'-3"	3 @ 17'-5"	N/A	52'-3"
8	3	8	3 @ 12'-1"	N/A	36'-3"	3 @ 15'-10"	N/A	47'-6"	3 @ 23'-6"	2 @ 7'-7"	85'-8"
8	4	8	3 @ 15'-3"	N/A	45'-9"	3 @ 20'-0"	2 @ 7'-7"	75'-2"	3 @ 29'-7"	3 @ 7'-7"	111'-6"
8	5	8	3 @ 18'-5"	N/A	55'-3"	3 @ 24'-1"	3 @ 7'-7"	95'-0"	3 @ 35'-8"	4 @ 7'-7"	137'-4"
8	6	8	3 @ 21'-7"	2 @ 7'-7"	79'-11"	3 @ 28'-3"	3 @ 7'-7"	107'-6"	3 @ 41'-9"	5 @ 7'-7"	163'-2"
8	7	8	3 @ 24'-9"	3 @ 7'-7"	97'-0"	3 @ 32'-4"	4 @ 7'-7"	127'-4"	3 @ 47'-10"	6 @ 7'-7"	189'-0"
8	8	8	3 @ 27'-11"	3 @ 7'-7"	106'-6"	3 @ 36'-6"	4 @ 7'-7"	139'-10"	3 @ 53'-11"	6 @ 7'-7"	207'-3"
9	2	9	3 @ 9'-3"	N/A	27'-9"	3 @ 12'-1"	N/A	36'-3"	3 @ 17'-11"	N/A	53'-9"
9	3	9	3 @ 12'-4"	N/A	37'-0"	3 @ 16'-2"	N/A	48'-6"	3 @ 24'-0"	3 @ 8'-7"	97'-9"
9	4	9	3 @ 15'-6"	N/A	46'-6"	3 @ 20'-4"	2 @ 8'-7"	78'-2"	3 @ 30'-1"	3 @ 8'-7"	116'-0"
9	5	9	3 @ 18'-8"	N/A	56'-0"	3 @ 24'-5"	3 @ 8'-7"	99'-0"	3 @ 36'-2"	4 @ 8'-7"	142'-10"
9	6	9	3 @ 21'-10"	2 @ 8'-7"	82'-9"	3 @ 28'-7"	3 @ 8'-7"	111'-6"	3 @ 42'-3"	5 @ 8'-7"	169'-8"
9	7	9	3 @ 25'-0"	3 @ 8'-7"	100'-9"	3 @ 32'-9"	4 @ 8'-7"	124'-4"	3 @ 48'-4"	6 @ 8'-7"	196'-5"
9	8	9	3 @ 28'-2"	3 @ 8'-7"	110'-3"	3 @ 36'-10"	4 @ 8'-7"	144'-10"	3 @ 54'-5"	6 @ 8'-7"	214'-9"
9	9	9	3 @ 31'-4"	3 @ 8'-7"	119'-9"	3 @ 40'-11"	5 @ 8'-7"	163'-8"	3 @ 60'-6"	7 @ 8'-7"	241'-7"
10	2	10	3 @ 9'-6"	N/A	28'-6"	3 @ 12'-5"	N/A	37'-3"	3 @ 18'-5"	N/A	55'-3"
10	3	10	3 @ 12'-8"	N/A	38'-0"	3 @ 16'-6"	N/A	49'-6"	3 @ 24'-6"	3 @ 9'-7"	102'-3"
10	4	10	3 @ 15'-10"	N/A	47'-6"	3 @ 20'-8"	2 @ 9'-7"	81'-2"	3 @ 30'-7"	3 @ 9'-7"	120'-6"
10	5	10	3 @ 19'-0"	N/A	57'-0"	3 @ 24'-9"	3 @ 9'-7"	103'-0"	3 @ 36'-8"	4 @ 9'-7"	148'-4"
10	6	10	3 @ 22'-1"	2 @ 9'-7"	85'-5"	3 @ 28'-11"	3 @ 9'-7"	115'-6"	3 @ 42'-9"	5 @ 9'-7"	176'-2"
10	7	10	3 @ 25'-3"	3 @ 9'-7"	104'-6"	3 @ 33'-0"	4 @ 9'-7"	137'-4"	3 @ 48'-10"	6 @ 9'-7"	204'-9"
10	8	10	3 @ 28'-5"	3 @ 9'-7"	114'-0"	3 @ 37'-2"	4 @ 9'-7"	149'-10"	3 @ 54'-11"	6 @ 9'-7"	222'-3"
10	9	10	3 @ 31'-7"	4 @ 9'-7"	133'-1"	3 @ 41'-3"	5 @ 9'-7"	171'-8"	3 @ 61'-0"	7 @ 9'-7"	250'-1"
10	10	10	3 @ 34'-9"	4 @ 9'-7"	142'-7"	3 @ 45'-5"	5 @ 9'-7"	184'-2"	3 @ 67'-1"	8 @ 9'-7"	277'-11"
11	2	11	4 @ 9'-9"	N/A	39'-0"	4 @ 12'-9"	N/A	51'-0"	4 @ 18'-11"	N/A	75'-8"
11	3	11	4 @ 12'-11"	N/A	51'-8"	4 @ 16'-11"	N/A	67'-8"	4 @ 25'-0"	3 @ 10'-7"	131'-9"
11	4	11	4 @ 16'-1"	N/A	64'-4"	4 @ 21'-0"	2 @ 10'-7"	105'-2"	4 @ 31'-1"	3 @ 10'-7"	156'-1"
11	6	11	4 @ 22'-5"	2 @ 10'-7"	110'-10"	4 @ 29'-3"	3 @ 10'-7"	148'-9"	4 @ 43'-3"	5 @ 10'-7"	225'-11"
11	8	11	4 @ 28'-9"	3 @ 10'-7"	146'-9"	4 @ 37'-6"	4 @ 10'-7"	192'-4"	4 @ 55'-5"	6 @ 10'-7"	285'-2"
11	10	11	4 @ 35'-0"	4 @ 10'-7"	182'-4"	4 @ 45'-9"	5 @ 10'-7"	235'-11"	4 @ 67'-7"	8 @ 10'-7"	355'-9"
11	11	11	4 @ 38'-2"	4 @ 10'-7"	195'-0"	4 @ 49'-10"	6 @ 10'-7"	262'-10"	4 @ 75'-8"	9 @ 10'-7"	389'-11"
12	2	12	4 @ 10'-0"	N/A	40'-0"	4 @ 13'-1"	N/A	52'-4"	4 @ 19'-5"	N/A	77'-8"
12	3	12	4 @ 13'-2"	N/A	52'-8"	4 @ 17'-3"	N/A	69'-0"	4 @ 25'-6"	3 @ 11'-7"	136'-9"
12	4	12	4 @ 16'-4"	N/A	65'-4"	4 @ 21'-4"	2 @ 11'-7"	108'-6"	4 @ 31'-7"	4 @ 11'-7"	172'-8"
12	6	12	4 @ 22'-8"	2 @ 11'-7"	113'-10"	4 @ 29'-7"	3 @ 11'-7"	153'-1"	4 @ 43'-9"	5 @ 11'-7"	232'-11"
12	8	12	4 @ 29'-0"	3 @ 11'-7"	150'-9"	4 @ 37'-10"	4 @ 11'-7"	197'-8"	4 @ 55'-11"	7 @ 11'-7"	304'-9"
12	10	12	4 @ 35'-4"	4 @ 11'-7"	187'-8"	4 @ 46'-1"	5 @ 11'-7"	242'-3"	4 @ 68'-1"	8 @ 11'-7"	365'-0"
12	12	12	4 @ 41'-8"	5 @ 11'-7"	224'-7"	4 @ 54'-4"	6 @ 11'-7"	288'-10"	4 @ 80'-3"	10 @ 11'-7"	436'-10"

TPGBC-ZS

2-17-2017

(Sheet 2 of 2)

USER NAME = jfoot@state.il.gov	DESIGNED -	REVISED - 1-10-18
	DRAWN -	REVISED - 5-09-14
PLLOT SCALE = 0.258"/ft.	CHECKED -	REVISED -
PLLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

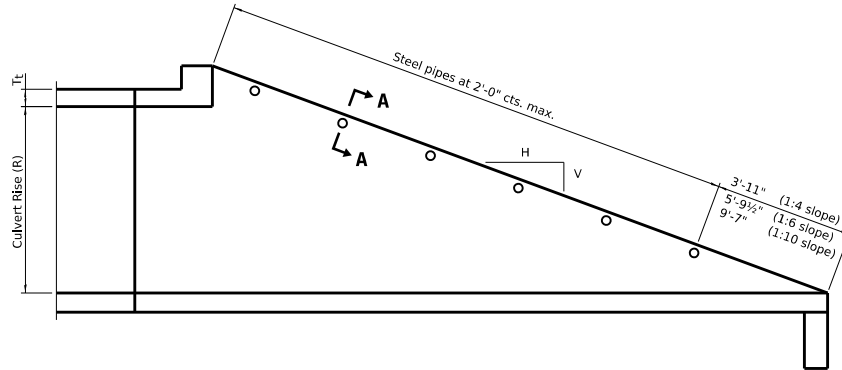
REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

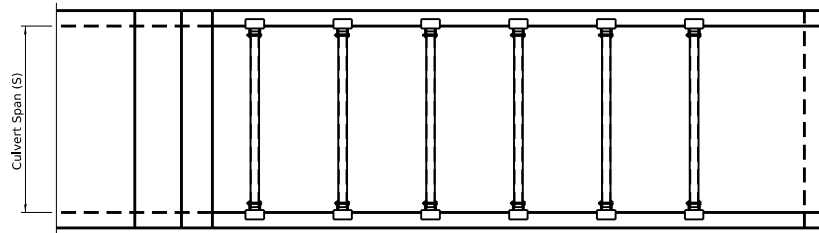
F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



# TRAVERSABLE PIPE GRATE FOR PARALLEL DRAINAGE STRUCTURE



**LONGITUDINAL SECTION**



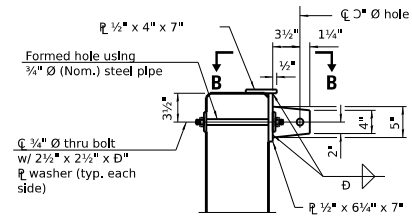
**PLAN VIEW**

## GENERAL NOTES

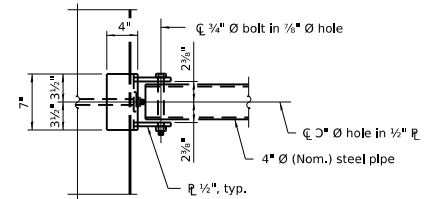
The minimum edge distance from the center of a hole to the free edge of a structural shape or plate shall be 1½" unless noted otherwise.

This standard shall only be used on concrete end sections for parallel drainage structures.

The Contractor may install the thru bolts using drilling and grouting in lieu of providing a formed hole using steel pipe. Installation shall be in accordance with Article 509.06 using a method that results in the annulus surrounding the bolt being completely filled with adhesive. The method of drilling shall not result in spalled concrete at the exit face. Epoxy grouted thru bolts shall be snug tightened followed by an additional 1/3 turn on the interior nut at final installation. Cost included with Traversable Pipe Grate.



**SECTION A-A**  
(4" Ø pipe not shown for clarity.)



**VIEW B-B**

11/20/2024  
 11/20/2024  
 11/20/2024

USER NAME = ISOT/06/12	DESIGNED -	REVISED - 5-09-14
	DRAWN -	REVISED -
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# TRAVERSABLE PIPE GRATE FOR PARALLEL DRAINAGE STRUCTURE

**PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS**

BOX SIZE		(<2 FT COVER)							
		SLOPE OF END SECTION							
		1:4		1:6		1:10			
SPAN (FT.)	RISE (FT.)	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
3	2	5 @ 2'-7"	12'-11"	8 @ 2'-7"	20'-8"	12 @ 2'-7"	31'-0"		
3	3	7 @ 2'-7"	18'-1"	11 @ 2'-7"	28'-5"	17 @ 2'-7"	43'-11"		
4	2	5 @ 3'-7"	17'-11"	8 @ 3'-7"	28'-8"	13 @ 3'-7"	46'-7"		
4	3	8 @ 3'-7"	28'-8"	11 @ 3'-7"	39'-5"	18 @ 3'-7"	64'-6"		
4	4	10 @ 3'-7"	35'-10"	14 @ 3'-7"	50'-2"	23 @ 3'-7"	82'-5"		
5	2	6 @ 4'-7"	27'-6"	8 @ 4'-7"	36'-8"	13 @ 4'-7"	59'-7"		
5	3	8 @ 4'-7"	36'-8"	11 @ 4'-7"	50'-5"	18 @ 4'-7"	82'-6"		
5	4	10 @ 4'-7"	45'-10"	14 @ 4'-7"	64'-2"	23 @ 4'-7"	105'-5"		
5	5	12 @ 4'-7"	55'-0"	17 @ 4'-7"	77'-11"	28 @ 4'-7"	128'-4"		
6	2	6 @ 5'-7"	33'-6"	8 @ 5'-7"	44'-8"	13 @ 5'-7"	72'-7"		
6	3	8 @ 5'-7"	44'-8"	11 @ 5'-7"	61'-5"	18 @ 5'-7"	100'-6"		
6	4	10 @ 5'-7"	55'-10"	14 @ 5'-7"	78'-2"	23 @ 5'-7"	128'-5"		
6	5	12 @ 5'-7"	67'-0"	17 @ 5'-7"	94'-11"	28 @ 5'-7"	156'-4"		
6	6	14 @ 5'-7"	78'-2"	20 @ 5'-7"	111'-8"	33 @ 5'-7"	184'-3"		
7	2	6 @ 6'-7"	39'-6"	8 @ 6'-7"	52'-8"	13 @ 6'-7"	85'-7"		
7	3	8 @ 6'-7"	52'-8"	11 @ 6'-7"	72'-5"	18 @ 6'-7"	118'-6"		
7	4	10 @ 6'-7"	65'-10"	14 @ 6'-7"	92'-2"	23 @ 6'-7"	151'-5"		
7	5	12 @ 6'-7"	79'-0"	17 @ 6'-7"	111'-11"	28 @ 6'-7"	184'-4"		
7	6	14 @ 6'-7"	92'-2"	20 @ 6'-7"	131'-8"	33 @ 6'-7"	217'-3"		
7	7	16 @ 6'-7"	105'-4"	23 @ 6'-7"	151'-5"	38 @ 6'-7"	250'-2"		
8	2	6 @ 7'-7"	45'-6"	8 @ 7'-7"	60'-8"	13 @ 7'-7"	98'-7"		
8	3	8 @ 7'-7"	60'-8"	11 @ 7'-7"	83'-5"	18 @ 7'-7"	136'-6"		
8	4	10 @ 7'-7"	75'-10"	14 @ 7'-7"	106'-2"	23 @ 7'-7"	174'-5"		
8	5	12 @ 7'-7"	91'-0"	17 @ 7'-7"	128'-11"	28 @ 7'-7"	212'-4"		
8	6	14 @ 7'-7"	106'-2"	20 @ 7'-7"	151'-8"	33 @ 7'-7"	250'-3"		
8	7	16 @ 7'-7"	121'-4"	23 @ 7'-7"	174'-5"	38 @ 7'-7"	288'-2"		
8	8	18 @ 7'-7"	136'-6"	26 @ 7'-7"	197'-2"	43 @ 7'-7"	326'-1"		
9	2	6 @ 8'-7"	51'-6"	8 @ 8'-7"	68'-8"	13 @ 8'-7"	111'-7"		
9	3	8 @ 8'-7"	68'-8"	11 @ 8'-7"	94'-5"	18 @ 8'-7"	154'-6"		
9	4	10 @ 8'-7"	85'-10"	14 @ 8'-7"	120'-2"	23 @ 8'-7"	197'-5"		
9	5	12 @ 8'-7"	103'-0"	17 @ 8'-7"	145'-11"	28 @ 8'-7"	240'-4"		
9	6	14 @ 8'-7"	120'-2"	20 @ 8'-7"	171'-8"	33 @ 8'-7"	283'-3"		
9	7	16 @ 8'-7"	137'-4"	23 @ 8'-7"	197'-5"	38 @ 8'-7"	326'-2"		
9	8	18 @ 8'-7"	154'-6"	26 @ 8'-7"	223'-2"	43 @ 8'-7"	369'-1"		
9	9	20 @ 8'-7"	171'-8"	30 @ 8'-7"	257'-6"	48 @ 8'-7"	412'-0"		
10	2	6 @ 9'-7"	57'-6"	9 @ 9'-7"	86'-3"	14 @ 9'-7"	134'-2"		
10	3	8 @ 9'-7"	76'-8"	12 @ 9'-7"	115'-0"	19 @ 9'-7"	182'-1"		
10	4	10 @ 9'-7"	95'-10"	15 @ 9'-7"	143'-9"	24 @ 9'-7"	230'-0"		
10	5	12 @ 9'-7"	115'-0"	18 @ 9'-7"	172'-6"	29 @ 9'-7"	277'-11"		
10	6	14 @ 9'-7"	134'-2"	21 @ 9'-7"	201'-3"	34 @ 9'-7"	325'-10"		
10	7	16 @ 9'-7"	153'-4"	24 @ 9'-7"	230'-0"	39 @ 9'-7"	373'-9"		
10	8	18 @ 9'-7"	172'-6"	27 @ 9'-7"	258'-9"	44 @ 9'-7"	421'-8"		
10	9	20 @ 9'-7"	191'-8"	30 @ 9'-7"	287'-5"	49 @ 9'-7"	469'-7"		
10	10	22 @ 9'-7"	210'-10"	33 @ 9'-7"	316'-3"	54 @ 9'-7"	517'-6"		

**PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS**

BOX SIZE		(<2 FT COVER)							
		SLOPE OF END SECTION							
		1:4		1:6		1:10			
SPAN (FT.)	RISE (FT.)	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
11	2	6 @ 10'-7"	63'-6"	9 @ 10'-7"	95'-3"	14 @ 10'-7"	148'-2"		
11	3	8 @ 10'-7"	84'-8"	12 @ 10'-7"	127'-0"	19 @ 10'-7"	201'-1"		
11	4	10 @ 10'-7"	105'-10"	15 @ 10'-7"	158'-9"	24 @ 10'-7"	254'-0"		
11	6	14 @ 10'-7"	148'-2"	21 @ 10'-7"	222'-3"	34 @ 10'-7"	359'-10"		
11	8	18 @ 10'-7"	190'-6"	27 @ 10'-7"	285'-9"	44 @ 10'-7"	465'-8"		
11	10	23 @ 10'-7"	243'-5"	33 @ 10'-7"	349'-3"	54 @ 10'-7"	571'-6"		
11	11	25 @ 10'-7"	264'-7"	36 @ 10'-7"	381'-0"	59 @ 10'-7"	624'-5"		
12	2	6 @ 11'-7"	69'-6"	9 @ 11'-7"	104'-3"	15 @ 11'-7"	173'-9"		
12	3	8 @ 11'-7"	92'-8"	12 @ 11'-7"	139'-0"	20 @ 11'-7"	231'-8"		
12	4	10 @ 11'-7"	115'-10"	15 @ 11'-7"	173'-9"	25 @ 11'-7"	289'-7"		
12	6	15 @ 11'-7"	173'-9"	21 @ 11'-7"	243'-3"	35 @ 11'-7"	405'-5"		
12	8	19 @ 11'-7"	220'-1"	27 @ 11'-7"	312'-9"	45 @ 11'-7"	521'-3"		
12	10	23 @ 11'-7"	266'-5"	33 @ 11'-7"	382'-3"	55 @ 11'-7"	637'-1"		
12	12	27 @ 11'-7"	312'-9"	39 @ 11'-7"	451'-9"	65 @ 11'-7"	752'-11"		

**PIPE GRATE SCHEDULE FOR PARALLEL BOX CULVERTS**

BOX SIZE		(>2 FT COVER)							
		SLOPE OF END SECTION							
		1:4		1:6		1:10			
SPAN (FT.)	RISE (FT.)	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
3	2	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"	11 @ 2'-7"	28'-5"		
3	3	7 @ 2'-7"	18'-1"	10 @ 2'-7"	25'-10"	16 @ 2'-7"	41'-4"		
4	2	5 @ 3'-7"	17'-11"	7 @ 3'-7"	25'-1"	12 @ 3'-7"	43'-0"		
4	3	7 @ 3'-7"	25'-1"	10 @ 3'-7"	35'-10"	17 @ 3'-7"	60'-11"		
4	4	9 @ 3'-7"	32'-3"	13 @ 3'-7"	46'-7"	22 @ 3'-7"	78'-10"		
5	2	5 @ 4'-7"	22'-11"	7 @ 4'-7"	32'-1"	12 @ 4'-7"	55'-0"		
5	3	7 @ 4'-7"	32'-1"	11 @ 4'-7"	50'-5"	17 @ 4'-7"	77'-11"		
5	4	9 @ 4'-7"	41'-3"	14 @ 4'-7"	64'-2"	22 @ 4'-7"	100'-10"		
5	5	11 @ 4'-7"	50'-5"	17 @ 4'-7"	77'-11"	27 @ 4'-7"	123'-9"		
6	2	5 @ 5'-7"	27'-11"	8 @ 5'-7"	44'-8"	12 @ 5'-7"	67'-0"		
6	3	7 @ 5'-7"	39'-1"	11 @ 5'-7"	61'-5"	17 @ 5'-7"	94'-11"		
6	4	9 @ 5'-7"	55'-10"	14 @ 5'-7"	78'-2"	23 @ 5'-7"	128'-5"		
6	5	12 @ 5'-7"	67'-0"	17 @ 5'-7"	94'-11"	28 @ 5'-7"	156'-4"		
6	6	14 @ 5'-7"	78'-2"	20 @ 5'-7"	111'-8"	33 @ 5'-7"	184'-3"		

Follow (<2 FT Cover) table for all other sizes

I:\Projects\2024\2401001\Drawings\Standard  
 PLOT DATE = 3/12/2024

USER NAME = jfoyt@ibm12	DESIGNED -	REVISED -	5/09-14
PLOT SCALE = 0.258" = 1ft.	DRAWN -	REVISED -	
PLOT DATE = 3/12/2024	CHECKED -	REVISED -	
	DATE -	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FEB. 4th PROJECT				

# TRAVERSABLE PIPE GRATE FOR PARALLEL DRAINAGE STRUCTURE

**PIPE GRATE SCHEDULE FOR PARALLEL PIPE CULVERTS 15" THRU 84" DIA.**

Pipe I.D.	SLOPE OF END SECTION					
	1:4		1:6		1:10	
	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	3 @ 0'-11"	2'-9"	4 @ 0'-11"	3'-8"	6 @ 0'-11"	5'-6"
18"	3 @ 1'-1"	3'-3"	5 @ 1'-1"	5'-5"	7 @ 1'-1"	7'-7"
21"	4 @ 1'-5"	5'-8"	5 @ 1'-5"	7'-1"	9 @ 1'-5"	12'-9"
24"	5 @ 1'-7"	7'-11"	6 @ 1'-7"	9'-6"	10 @ 1'-7"	15'-10"
30"	6 @ 2'-1"	12'-6"	8 @ 2'-1"	16'-8"	13 @ 2'-1"	27'-1"
36"	7 @ 2'-7"	18'-1"	10 @ 2'-7"	25'-10"	15 @ 2'-7"	38'-9"
42"	8 @ 3'-1"	24'-8"	11 @ 3'-1"	33'-11"	18 @ 3'-1"	55'-6"
48"	9 @ 3'-7"	32'-3"	13 @ 3'-7"	46'-7"	21 @ 3'-7"	75'-3"
54"	10 @ 4'-1"	40'-10"	14 @ 4'-1"	57'-2"	23 @ 4'-1"	93'-11"
60"	11 @ 4'-7"	50'-5"	15 @ 4'-7"	68'-9"	25 @ 4'-7"	114'-7"
66"	12 @ 5'-1"	61'-0"	17 @ 5'-1"	86'-5"	28 @ 5'-1"	142'-4"
72"	13 @ 5'-7"	72'-7"	18 @ 5'-7"	100'-6"	30 @ 5'-7"	167'-6"
78"	14 @ 6'-1"	85'-2"	20 @ 6'-1"	121'-8"	33 @ 6'-1"	200'-9"
84"	15 @ 6'-7"	98'-9"	21 @ 6'-7"	138'-3"	35 @ 6'-7"	230'-5"

11/15/2024 10:00 AM  
 11/15/2024 10:00 AM  
 11/15/2024 10:00 AM

USER NAME = IDOT\cbk12	DESIGNED -	REVISED - 5/09/14	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 0.25" = 1'-0"	DRAWN -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
PLOT DATE = 3/12/2024	CHECKED -	REVISED -			CONTRACT NO.					
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

# TRAVERSABLE PIPE GRATE FOR PARALLEL DRAINAGE STRUCTURE

**PIPE GRATE SCHEDULE FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.**

SLOPE OF END SECTION						
Pipe I.D.	Table IIA, Corrugation : 21" x 1/2"					
	1:4		1:6		1:10	
	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	2 @ 1'-1"	2'-2"	3 @ 1'-1"	3'-3"	5 @ 1'-1"	5'-5"
18"	3 @ 1'-5"	4'-3"	4 @ 1'-5"	5'-8"	6 @ 1'-5"	8'-6"
21"	3 @ 1'-7"	4'-9"	5 @ 1'-7"	7'-11"	7 @ 1'-7"	11'-1"
24"	4 @ 1'-11"	7'-8"	5 @ 1'-11"	9'-7"	8 @ 1'-11"	15'-4"
30"	4 @ 2'-7"	10'-4"	6 @ 2'-7"	15'-6"	10 @ 2'-7"	25'-10"
36"	5 @ 3'-1"	15'-5"	7 @ 3'-1"	21'-7"	12 @ 3'-1"	37'-0"
42"	6 @ 3'-9"	22'-6"	9 @ 3'-9"	33'-9"	14 @ 3'-9"	52'-6"
48"	7 @ 4'-5"	30'-11"	10 @ 4'-5"	44'-2"	16 @ 4'-5"	70'-8"
54"	8 @ 4'-11"	39'-4"	11 @ 4'-11"	54'-1"	18 @ 4'-11"	88'-6"
60"	8 @ 5'-7"	44'-8"	12 @ 5'-7"	67'-0"	20 @ 5'-7"	111'-8"
66"	9 @ 6'-1"	54'-9"	13 @ 6'-1"	79'-1"	22 @ 6'-1"	133'-10"
72"	10 @ 6'-7"	65'-10"	15 @ 6'-7"	98'-9"	24 @ 6'-7"	158'-0"
78"	-	-	-	-	-	-
84"	-	-	-	-	-	-

**PIPE GRATE SCHEDULE FOR PARALLEL PIPE ARCH CULVERTS 15" THRU 84" DIA.**

SLOPE OF END SECTION						
Pipe I.D.	Table IIA, Corrugation : 3" x 1"					
	1:4		1:6		1:10	
	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	-	-	-	-	-	-
18"	-	-	-	-	-	-
21"	-	-	-	-	-	-
24"	-	-	-	-	-	-
30"	-	-	-	-	-	-
36"	6 @ 2'-11"	17'-6"	8 @ 2'-11"	23'-4"	13 @ 2'-11"	37'-11"
42"	7 @ 3'-5"	23'-11"	10 @ 3'-5"	34'-2"	15 @ 3'-5"	51'-3"
48"	8 @ 4'-1"	32'-8"	11 @ 4'-1"	44'-11"	18 @ 4'-1"	73'-6"
54"	9 @ 4'-7"	41'-3"	12 @ 4'-7"	55'-0"	20 @ 4'-7"	91'-10"
60"	9 @ 5'-1"	45'-9"	14 @ 5'-1"	71'-2"	22 @ 5'-1"	111'-10"
66"	10 @ 5'-9"	57'-6"	15 @ 5'-9"	86'-3"	24 @ 5'-9"	138'-0"
72"	11 @ 6'-5"	70'-7"	16 @ 6'-5"	102'-8"	26 @ 6'-5"	166'-10"
78"	12 @ 6'-11"	83'-0"	17 @ 6'-11"	117'-7"	28 @ 6'-11"	193'-8"
84"	12 @ 7'-7"	91'-0"	18 @ 7'-7"	136'-6"	30 @ 7'-7"	227'-6"

11/11/2024 10:00 AM  
 PROJECT DATE = 11/11/2024

USERNAME = jdot@idmkt2 PLOT SCALE = 0.258" / ft. PLOT DATE = 3/12/2024	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - 5/09/14 REVISED - REVISED - REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b> SCALE: SHEET OF SHEETS STA. TO STA.	F.A. RTEL. SECTION COUNTY TOTAL SHEETS SHEET NO. CONTRACT NO. ILLINOIS FED. AID PROJECT
--	--	--	---	--	---

# TRAVERSABLE PIPE GRATE FOR PARALLEL DRAINAGE STRUCTURE

PIPE GRATE SCHEDULE FOR PARALLEL ELLIPTICAL PIPE CULVERTS 15" THRU 72" DIA.

Pipe I.D.	SLOPE OF END SECTION					
	1:4		1:6		1:10	
	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe	Pipes No. / Length	Total Length of Pipe
15"	3 @ 2'-7"	7'-9"	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"
18"	3 @ 2'-7"	7'-9"	5 @ 2'-7"	12'-11"	7 @ 2'-7"	18'-1"
21"	5 @ 3'-3"	16'-3"	7 @ 3'-3"	22'-9"	12 @ 3'-3"	39'-0"
24"	5 @ 3'-3"	16'-3"	7 @ 3'-3"	22'-9"	12 @ 3'-3"	39'-0"
27"	6 @ 3'-7"	21'-6"	8 @ 3'-7"	28'-8"	13 @ 3'-7"	46'-7"
30"	6 @ 3'-11"	23'-6"	9 @ 3'-11"	35'-3"	14 @ 3'-11"	54'-10"
36"	7 @ 4'-7"	32'-1"	10 @ 4'-7"	45'-10"	16 @ 4'-7"	73'-4"
42"	8 @ 5'-5"	43'-4"	11 @ 5'-5"	59'-7"	18 @ 5'-5"	97'-6"
48"	9 @ 6'-1"	54'-9"	13 @ 6'-1"	79'-1"	20 @ 6'-1"	121'-8"
54"	10 @ 6'-9"	67'-6"	14 @ 6'-9"	94'-6"	23 @ 6'-9"	155'-3"
60"	11 @ 7'-7"	83'-5"	15 @ 7'-7"	113'-9"	25 @ 7'-7"	189'-7"
66"	11 @ 8'-3"	90'-9"	17 @ 8'-3"	140'-3"	27 @ 8'-3"	222'-9"
72"	12 @ 8'-11"	107'-0"	18 @ 8'-11"	160'-6"	30 @ 8'-11"	267'-6"

Model: I:\Projects\2024\1122024\1122024.dwg  
 Plot Date: 3/12/2024  
 Plot Scale: 1/8" = 1'-0"  
 User: jdoyle

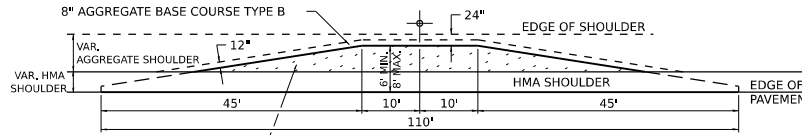
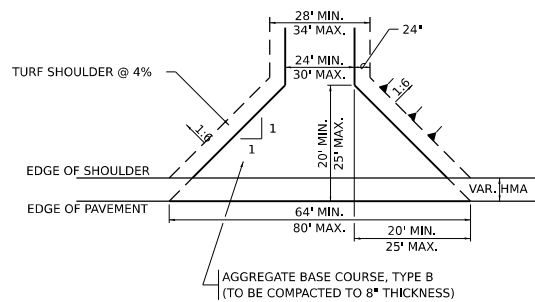
USER NAME = jdoyle	DESIGNED -	REVISED - 5/09/14
PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE = 3/12/2024	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET OF SHEETS	STA. TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.	
						ILLINOIS FED. AID PROJECT	

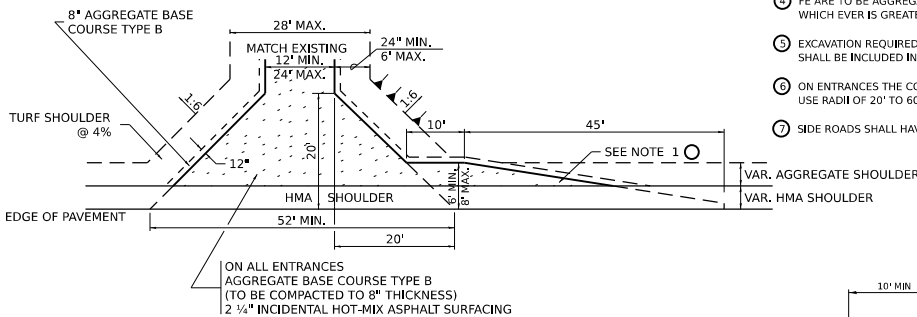
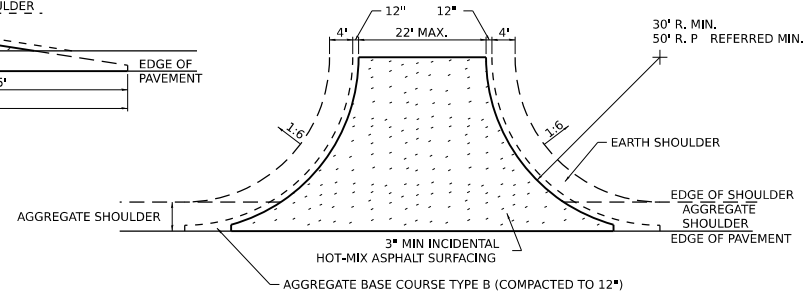
# HOT-MIX ASPHALT APPROACHES AND MAILBOX RETURNS



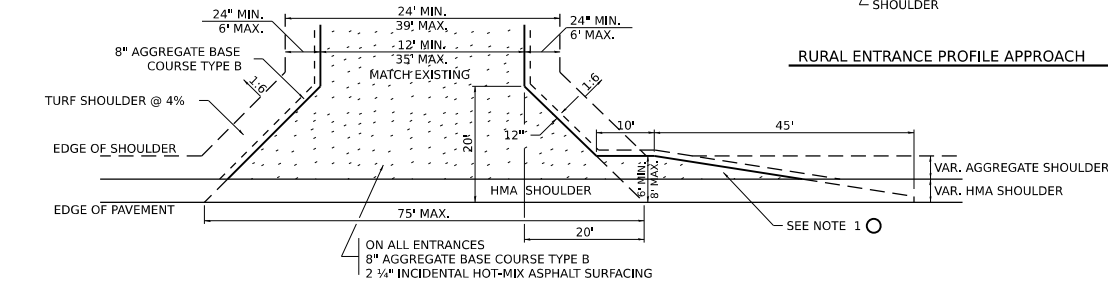
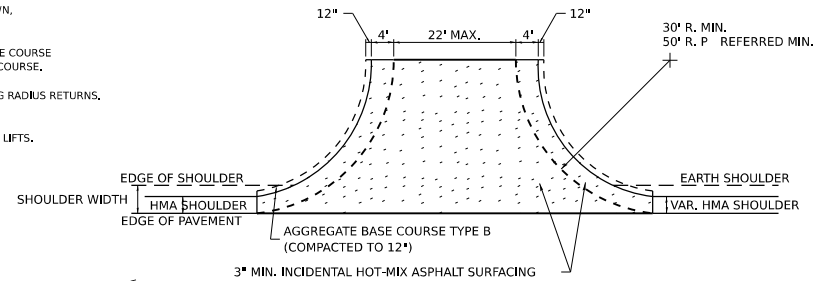
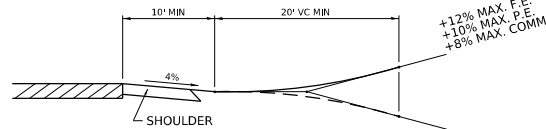
ON ALL ENTRANCES  
8" AGGREGATE BASE COURSE TYPE B  
2 1/2" INCIDENTAL HOT-MIX ASPHALT SURFACING

**NOTE**

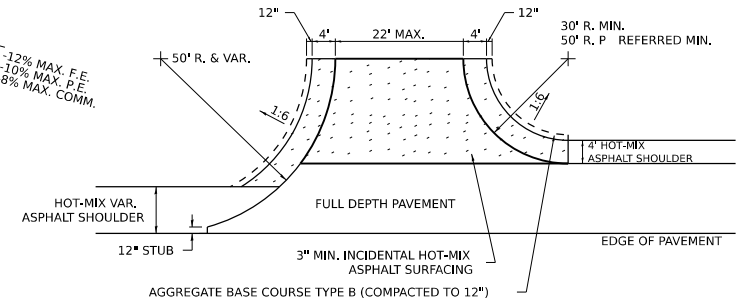
- TURNOUTS ARE TO BE CONSTRUCTED ON THE APPROACH SIDE OF ALL PE & CE REGARDLESS IF A MAILBOX IS PRESENT.
- ALL PE & CE ARE TO BE SURFACED TO RIGHT OF WAY LINE. AREA BEHIND RIGHT OF WAY SHALL MATCH EXISTING SURFACE.
- ALL PE & CE TO BE CONSTRUCTED WITH AN 8" AGGREGATE BASE COURSE, TYPE B AND WITH A 2 1/2" INCIDENTAL HOT-MIX ASPHALT SURFACING, UNLESS OTHERWISE NOTED.
- FE ARE TO BE AGGREGATE TO RIGHT OF WAY OR TOUCH DOWN, WHICH EVER IS GREATEST.
- EXCAVATION REQUIRED FOR PLACEMENT OF AGGREGATE BASE COURSE SHALL BE INCLUDED IN THE COST OF THE AGGREGATE BASE COURSE.
- ON ENTRANCES THE CONTRACTOR HAS THE OPTION OF USING RADIUS RETURNS, USE RADIUS OF 20' TO 60'.
- SIDE ROADS SHALL HAVE 3" INCIDENTAL PLACED IN TWO 1 1/2" LIFTS.



ON ALL ENTRANCES  
AGGREGATE BASE COURSE TYPE B (TO BE COMPACTED TO 8" THICKNESS)  
2 1/2" INCIDENTAL HOT-MIX ASPHALT SURFACING



ON ALL ENTRANCES  
8" AGGREGATE BASE COURSE TYPE B  
2 1/2" INCIDENTAL HOT-MIX ASPHALT SURFACING



PROJECT NO. 1001  
 DRAWN BY: J. S. [unreadable]  
 CHECKED BY: J. S. [unreadable]  
 DATE: 8-27-13

USER NAME = jsoy02@state.il.gov	DESIGNED -	8-03-17
	DRAWN -	1-13-17
PLOT SCALE = 0.25" = 1'-0"	CHECKED -	6-27-14
PLOT DATE = 3/12/2024	DATE -	8-27-13

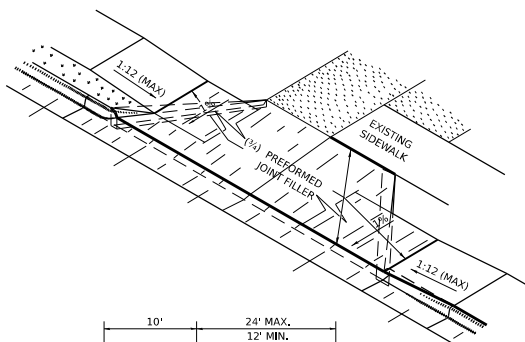
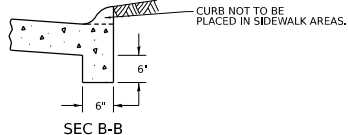
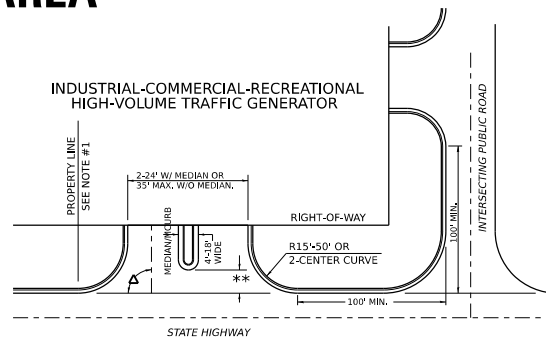
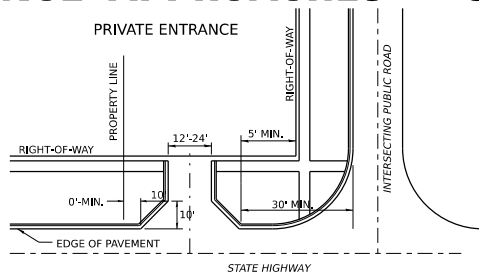
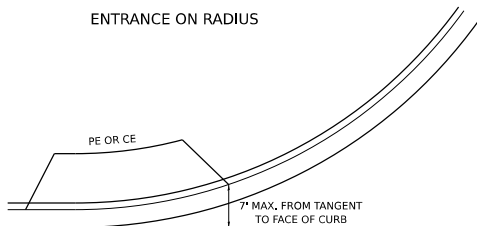
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

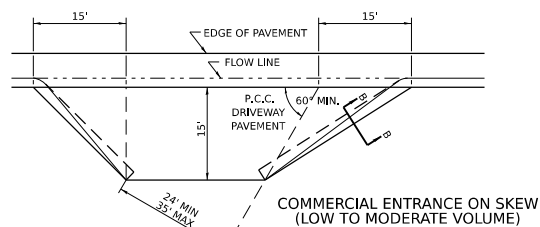
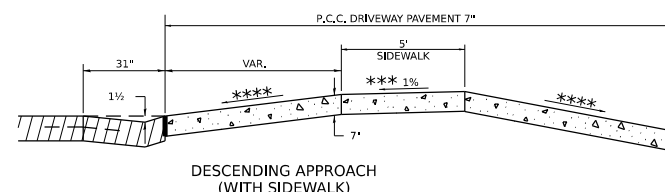
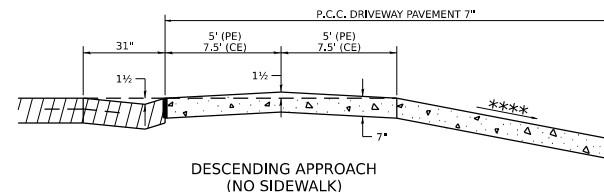
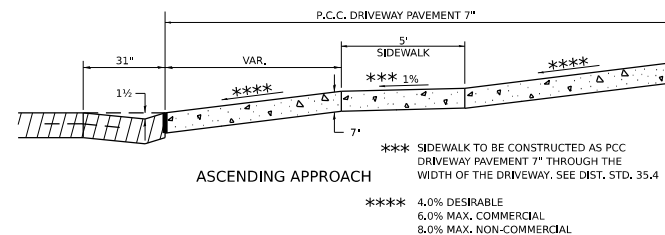
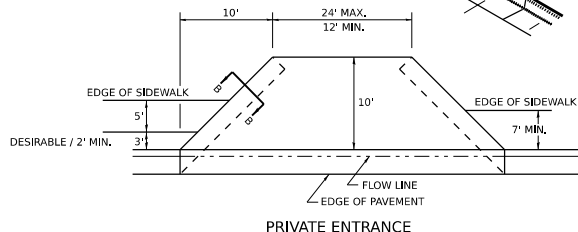
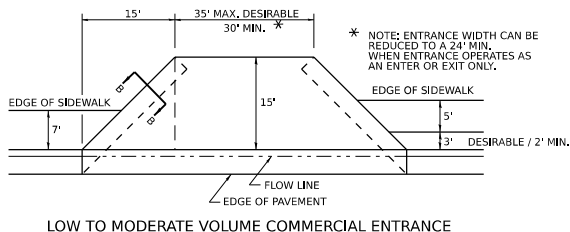
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				

# ENTRANCE APPROACHES – URBAN AREA

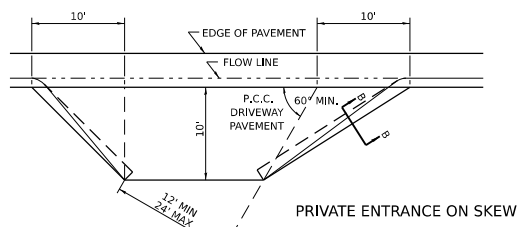
ENTRANCE ON RADIUS



A MINIMUM OF 440 FEET SHALL BE MAINTAINED BETWEEN CENTER LINES OF ADJACENT DRIVEWAYS.  
 20° DESIRABLE, 45° MIN. ANGLE PERMITTED ONLY FOR ONE-WAY DRIVEWAYS.  
 60° MIN. ANGLE FOR TWO-WAY DRIVEWAYS.  
 NOTE: #1 ENCROACHMENT ON THE ADJACENT PROPERTY OWNER LAND REQUIRES HIS OR HER WRITTEN APPROVAL.  
 \*\* 4'-10" IF HIGHWAY CURBED, AT EDGE OF SHOULDER IF HIGHWAY UNCURBED.



NOTE: CURVED ENTRANCE RETURNS MAY BE USED FOR LOW TO MODERATE VOLUME LOCATIONS WITH REVIEW ON A CASE-BY-CASE BASIS.



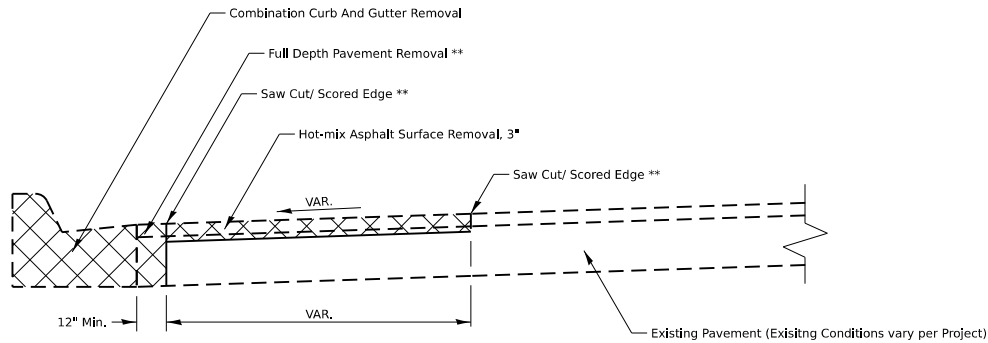
USER NAME = IDOT\cburd2	DESIGNED - Designed By	REVISED - 7-18-18
	DRAWN - Drawn By	REVISED - 1-03-18
PLOT SCALE = 0.258"/ft.	CHECKED - Checked By	REVISED - 6-27-14
PLOT DATE = 3/12/2024	DATE - Checked Date	REVISED - 12-07-10

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

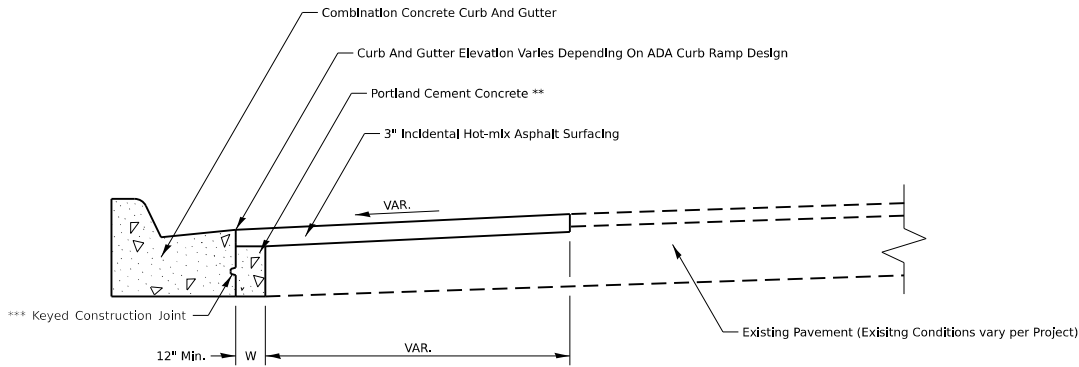
REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FEDERAL PROJECT										

# ADA CURB RAMP PAVEMENT REMOVAL AND REPLACEMENT



**PAVEMENT REMOVAL**



**PAVEMENT REPLACEMENT**

**GENERAL NOTES:**

SEE STANDARD 606001 FOR CONCRETE CURB AND COMBINATION CURB AND GUTTER DETAILS NOT SHOWN.

SEE STANDARD 420001 FOR KEYED CONSTRUCTION JOINT DETAILS

SAW CUTTING/ SCORING SHALL BE INCLUDED IN THE UNIT COST OF HOT-MIX ASPHALT SURFACE REMOVAL.

FULL DEPTH PAVEMENT REMOVAL SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CURB AND GUTTER REMOVAL.

PORTLAND CEMENT CONCRETE NEEDED TO FILL IN THE FORMWORK AREA IN FRONT OF THE COMBINATION CURB AND GUTTER SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CONCRETE CURB AND GUTTER.

IF THERE IS A CHANGE IN RADIUS AND THE DISTANCE BETWEEN THE NEW COMBINATION CURB AND GUTTER AND THE EXISTING PAVEMENT IS 4FT OF GREATER, THE PCC IN FRONT OF THE CURB AND GUTTER SHALL BE TIED TO THE NEW COMBINATION CURB AND GUTTER AND THE EXISTING PAVEMENT WITH TIE BARS. TIE BARS SHALL BE INCLUDED IN THE UNIT COST OF COMBINATION CONCRETE CURB AND GUTTER.

**CONSTRUCTION SEQUENCE**

1. REMOVE EXISTING FULL DEPTH PAVEMENT AND CURB AND GUTTER
2. FORM AND POUR COMBINATION CONCRETE CURB AND GUTTER
3. REPLACE FULL DEPTH PAVEMENT WITH PORTLAND CEMENT CONCRETE (UP TO 3" FROM FINISHED SURFACE ELVATION TO ALLOW FOR HMA OVERLAY)
4. HOT-MIX ASPHALT REMOVAL AND REPLACEMENT.

**NOTES:**

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

\*\* COST INCLUDED IN OTHER PAY ITEMS PER GENERAL NOTES

\*\*\* IF W > 24" TIE BARS SHALL BE USED INSTEAD OF A KEYED CONSTRUCTION JOINT

I:\Projects\2024\ADA Curbs\2024 ADA Curbs\2024 ADA Curbs.dwg  
 PLOT DATE = 3/12/2024

USER NAME = IDOT\cbank2	DESIGNED -	REVISED - 1-10-22
	DRAWN -	REVISED -
PLOT SCALE = 0.2500' = 1"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

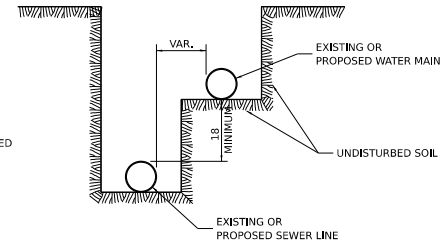
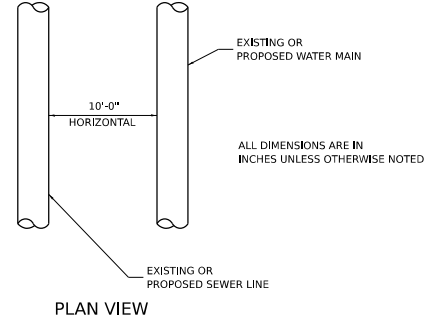
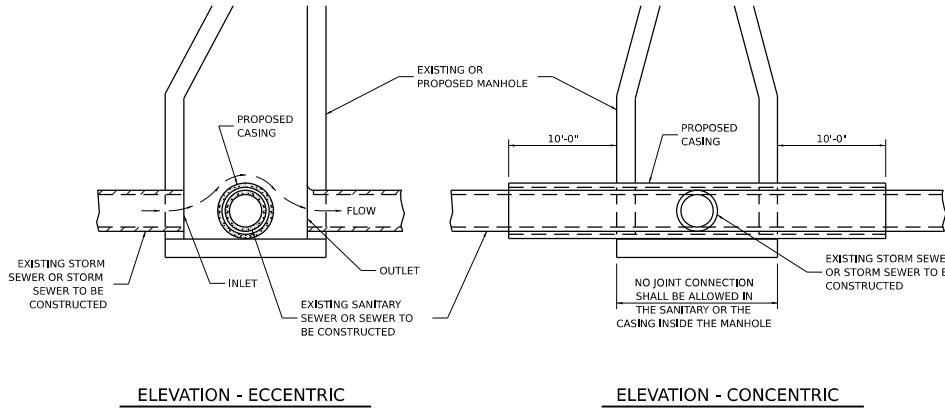


# SEWER AND WATER MAIN CROSSINGS

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10'-0" OR MORE FROM EXISTING WATER (OR SEWER) NO SPECIAL CONSTRUCTION REQUIRED.

WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10'-0" FROM EXISTING WATER (OR SEWER) DETAILS BELOW SHALL APPLY.

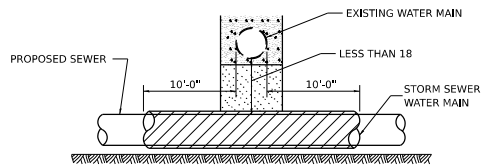


CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

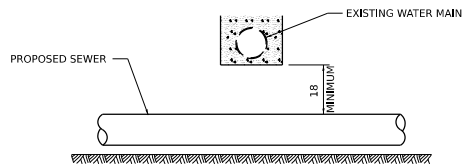
## AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN  
 PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



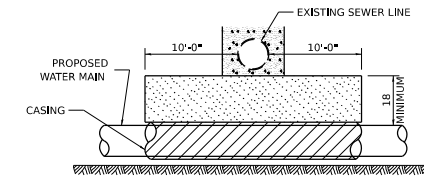
PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH  
 MAINTAIN 18 MINIMUM VERTICAL SEPARATION FOR 10 FT. HORIZONTALLY



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

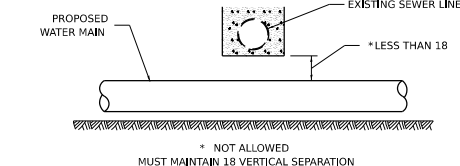
## PROPOSED SEWER LINE BELOW EXISTING WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT  
 PLACE TRENCH BACKFILL FOR 10 FT. ON EITHER SIDE OF SEWER LINE



CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH  
 MAINTAIN 18 MINIMUM VERTICAL SEPARATION FOR 10 FT. HORIZONTALLY

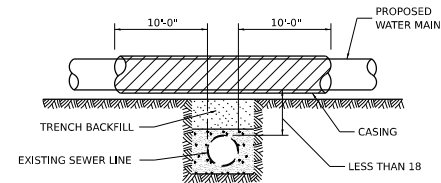


\* NOT ALLOWED MUST MAINTAIN 18 VERTICAL SEPARATION

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

## PROPOSED WATER MAIN BELOW EXISTING SEWER LINE

POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER

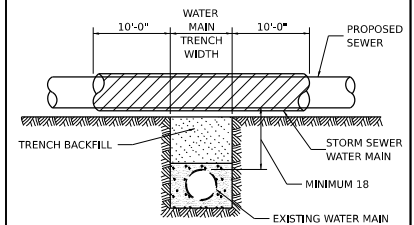


CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 2" LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

## PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

PROVIDE ADEQUATE SUPPORT FOR SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN.



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

## EXISTING WATER MAIN BELOW PROPOSED SEWER LINE WITH MINIMUM 18 VERTICAL SEPARATION

ILLINOIS STATE DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 FEBRUARY 2024

USER NAME = I20102024	DESIGNED -
PLOT SCALE = 0.2500" = 1'-0"	DRAWN -
PLOT DATE = 3/12/2024	CHECKED -
	DATE -

REVISION -	10-17-11
REVISION -	
REVISION -	
REVISION -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.
-------------------------------------

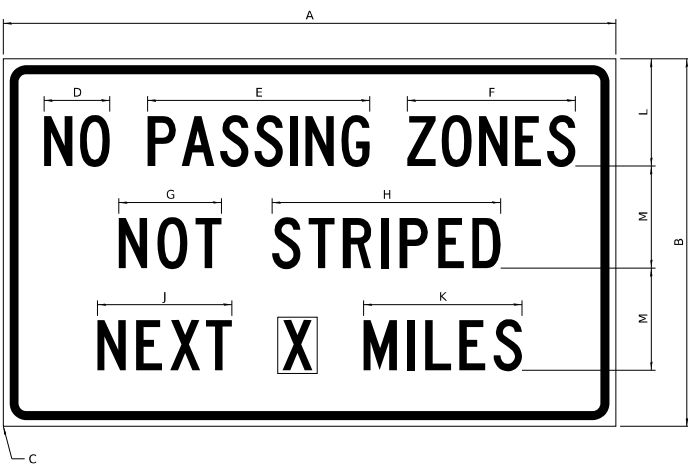
SCALE: SHEET OF SHEETS STA. TO STA.
-------------------------------------

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



# WORK ZONE SIGN DETAILS

**ILLINOIS STANDARD G20-I100**



COLOR    LEGEND AND BORDER BACKGROUND    BLACK ORANGE    NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

**GENERAL NOTES**

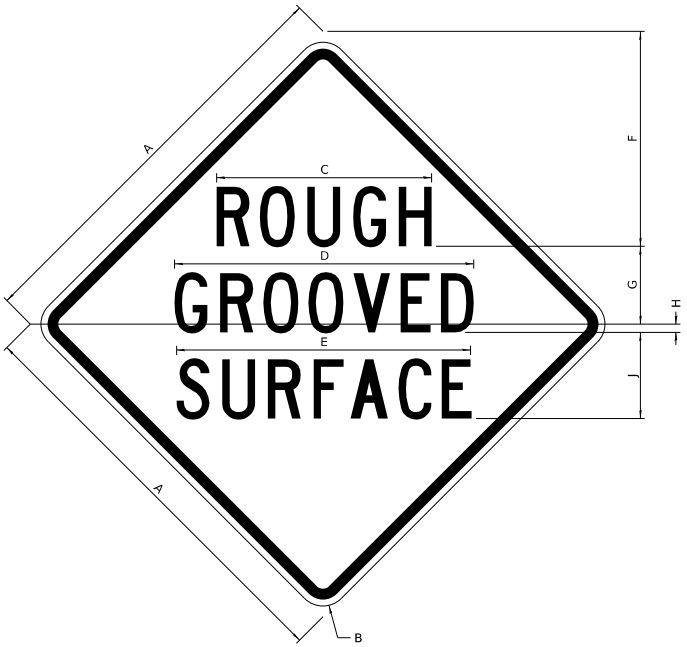
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

**ILLINOIS STANDARD W8-I107**



COLOR    LEGEND AND BORDER BACKGROUND    BLACK ORANGE    NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS									
	A	B	C	D	E	F	G	H	J	
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00	

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

Sign not to scale

WORK ZONE SIGN DETAILS  
 ILLINOIS STANDARD HIGHWAY SIGNS BOOK  
 PLOT DATE = 3/12/2024

USER NAME = IDOT/IDOT/IDOT	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

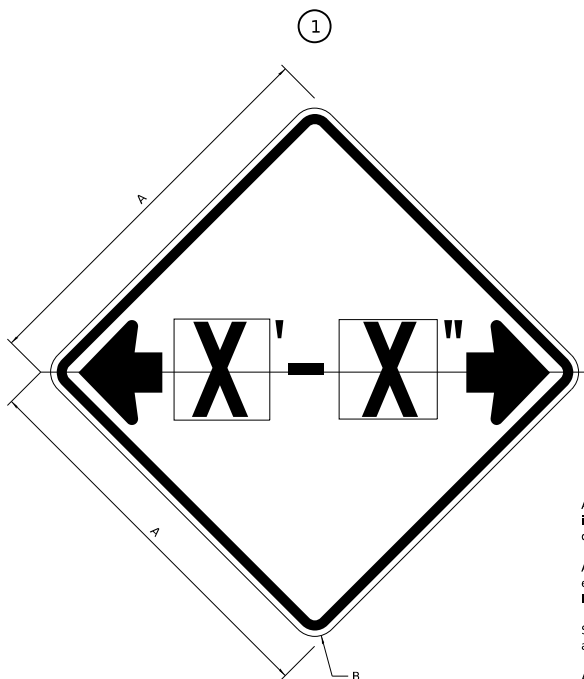
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

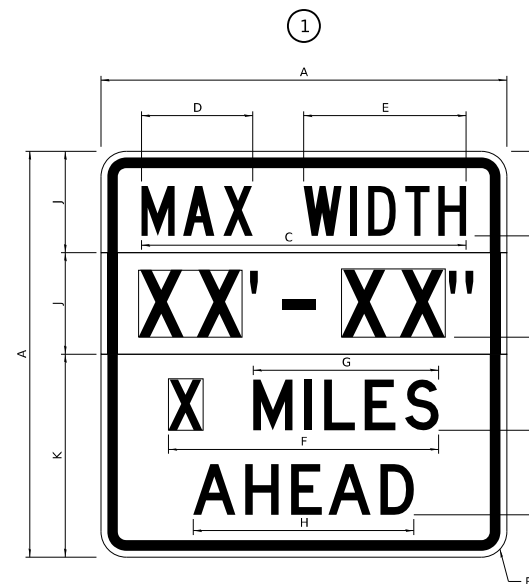
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

# WORK ZONE SIGN DETAILS

## ILLINOIS STANDARD W12-I102



## ILLINOIS STANDARD W12-I103



### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of Invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

COLOR	LEGEND AND BORDER BACKGROUND	BLACK FL ORANGE	NON-REFLECTORIZED REFLECTORIZED
-------	------------------------------	-----------------	---------------------------------

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

① Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1				
48 x 48	12C			0.750	1.250

Sign not to scale

COLOR	LEGEND AND BORDER BACKGROUND (WIDTH)	BLACK WHITE FL ORANGE	NON-REFLECTORIZED REFLECTORIZED
-------	--------------------------------------	-----------------------	---------------------------------

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE TOP AND BOTTOM OF BACKGROUND WHITE

ILLINOIS STANDARD SIGN W12-I102  
 ILLINOIS STANDARD SIGN W12-I103  
 ILLINOIS STANDARD SIGN W12-I103

USER NAME = IDOT/CD/0012	DESIGNED -	REVISED - 3-02-16
	DRAWN -	REVISED -
PLOT SCALE = 0.250" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

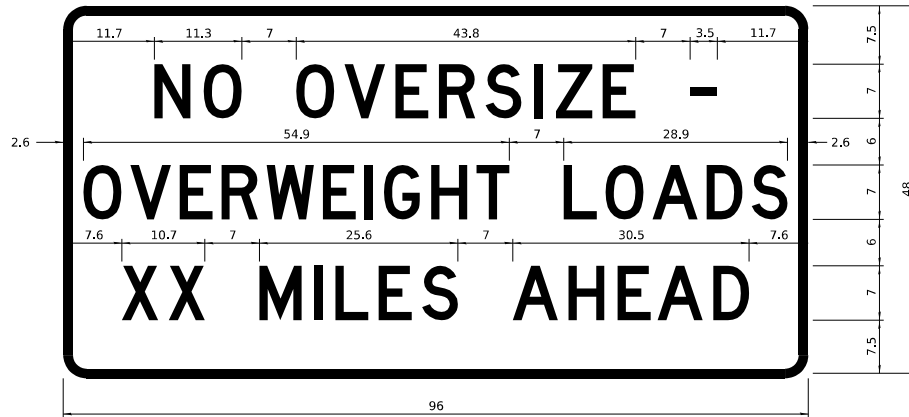
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

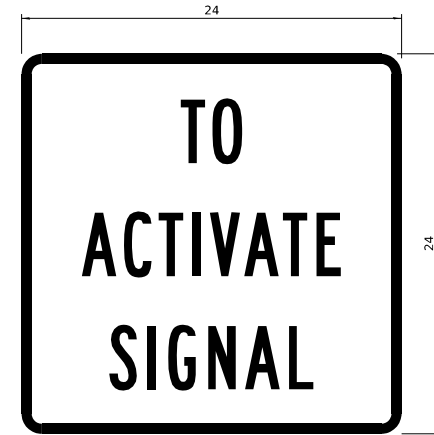
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
ILLINOIS FEDERAL PROJECT										

# WORK ZONE SIGN DETAILS

## ROAD CLOSED TO OVERSIZED LOADS



## STOP LINE SIGN FOR TEMPORARY SIGNALS



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;  
 [NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;  
 Table of letter and object lefts.

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

COLOR LEGEND AND BORDER BACKGROUND BLACK WHITE NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

Sign not to scale

### GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

ILLINOIS STANDARD HIGHWAY SIGN BOOK  
 11TH EDITION, 2003  
 ILLINOIS STATE BOARD OF TRANSPORTATION  
 PLD DATE # 4/2/2004

USER NAME # IDOT/06/04/2	DESIGNED -	REVISED - 3/02/16
	DRAWN -	REVISED -
PLOT SCALE # 0.258" = 1'-0"	CHECKED -	REVISED -
PLOT DATE # 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

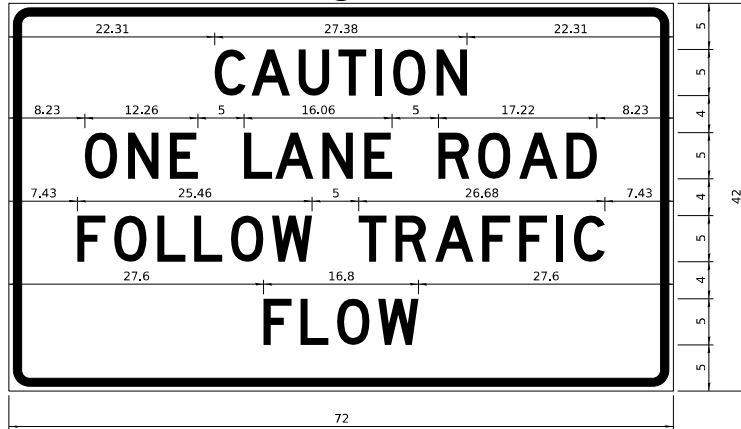
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

**ENTRANCE SIGN FOR USE  
WITH TEMPORARY SIGNALS**

**WORK ZONE SIGN DETAILS**

2



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" Indent;  
[CAUTION] D; [ONE LANE ROAD] D;  
[FOLLOW TRAFFIC] D; [FLOW] D

2 This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

**Table Of Widths And Spaces**

22.31	C	0.62	A	0.94	U	0.94	T	0.94	I	1.17	O	1.17	N	3.36	22.31
-------	---	------	---	------	---	------	---	------	---	------	---	------	---	------	-------

8.23	O	1.17	N	1.18	E	3.04
------	---	------	---	------	---	------

5.00	L	0.31	A	0.94	N	3.36	1.17	E	3.05
------	---	------	---	------	---	------	------	---	------

5.00	R	0.93	O	0.94	A	0.93	D	3.36	8.23
------	---	------	---	------	---	------	---	------	------

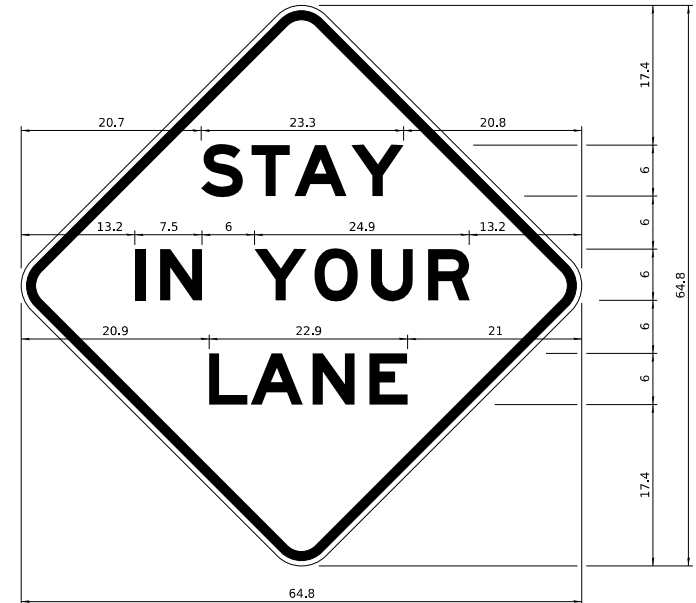
7.43	F	0.94	O	1.17	L	0.94	L	3.05	O	0.94	W	4.37
------	---	------	---	------	---	------	---	------	---	------	---	------

5.00	T	0.94	R	0.94	A	0.93	F	0.94	F	3.04	I	0.78	1.18	C	3.35	7.43
------	---	------	---	------	---	------	---	------	---	------	---	------	------	---	------	------

27.60	F	0.94	L	0.94	O	0.93	W	4.38	27.60
-------	---	------	---	------	---	------	---	------	-------

Sign not to scale

**STAY IN YOUR LANE**



COLOR LEGEND AND BORDER BACKGROUND BLACK ORANGE NON-REFLECTORIZED REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;  
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

**Table of Letter and Object Lefts**

S	T	A	Y
---	---	---	---

I	N	Y	O	U	R
---	---	---	---	---	---

L	A	N	E
---	---	---	---

Sign not to scale

**GENERAL NOTES**

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

PROJECT: I-55/US 41 Bypass Segment  
 PLOT DATE: 3/12/2024

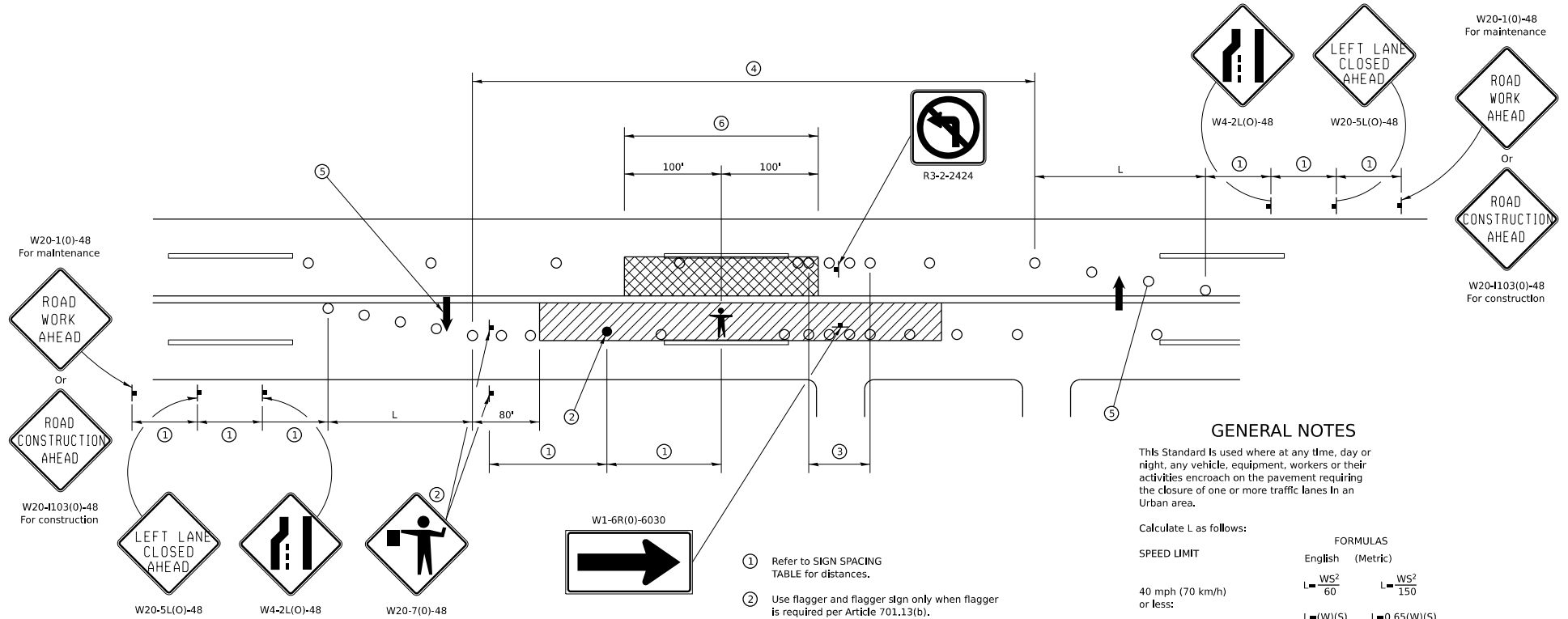
USER NAME = jdot/cbmk2	DESIGNED -	REVISED - 3/02/16
	DRAWN -	REVISED -
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				

# URBAN LANE INSIDE CLOSURE, MULTILANE, 2-WAY, WITH MOUNTABLE MEDIUM



### GENERAL NOTES

This Standard Is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one or more traffic lanes in an Urban area.

Calculate L as follows:

#### SPEED LIMIT

40 mph (70 km/h) or less:

45 mph (80 km/h) or greater:

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in Inches (millimeters) unless otherwise shown.

Lane closures in the opposite direction shall be removed when no workers are present.

Cones or reflectorized cones shall not be used during hours of darkness.

This Traffic Control detail shall be included in the cost of Traffic Control and Protection Standard 701606.

#### FORMULAS

English (Metric)

$$L = \frac{WS^2}{60} \quad L = \frac{WS^2}{150}$$

$$L = (W)(S) \quad L = 0.65(W)(S)$$

### SYMBOLS

WORK AREA

CLOSED LANE

ARROW BOARD

SIGN ON PORTABLE OR PERMANENT SUPPORT

CONE, DRUM OR BARRICADE

FLAGGER WITH TRAFFIC CONTROL SIGN.

WORKER ON FOOT

SIGN SPACING	
Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

- Refer to SIGN SPACING TABLE for distances.
- Use flagger and flagger sign only when flagger is required per Article 701.13(b).
- Devices at 10' centers from edge of radius return to edge of radius return when left turns are prohibited due to actively working in the intersection.
- Cones at 20' (6 m) centers for 250' (75 m). Additional cones may be placed at 40' (12 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled (excluding devices in Intersections).
- Cones, drums or barricades at 20' (6 m) centers in taper.
- No equipment, materials, vehicles, or other hazards are allowed in the closed lane in the opposite direction within 100' of a worker on foot.

PROJECT NO. 11001001  
 PLAN SHEET 2 OF 2  
 PLANT DATE 3/12/2024

USER NAME = jdot/cbmk2	DESIGNED -	REVISD - 1-05-16
	DRAWN -	REVISD - 7-22-14
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISD -
PLOT DATE = 3/12/2024	DATE -	REVISD -

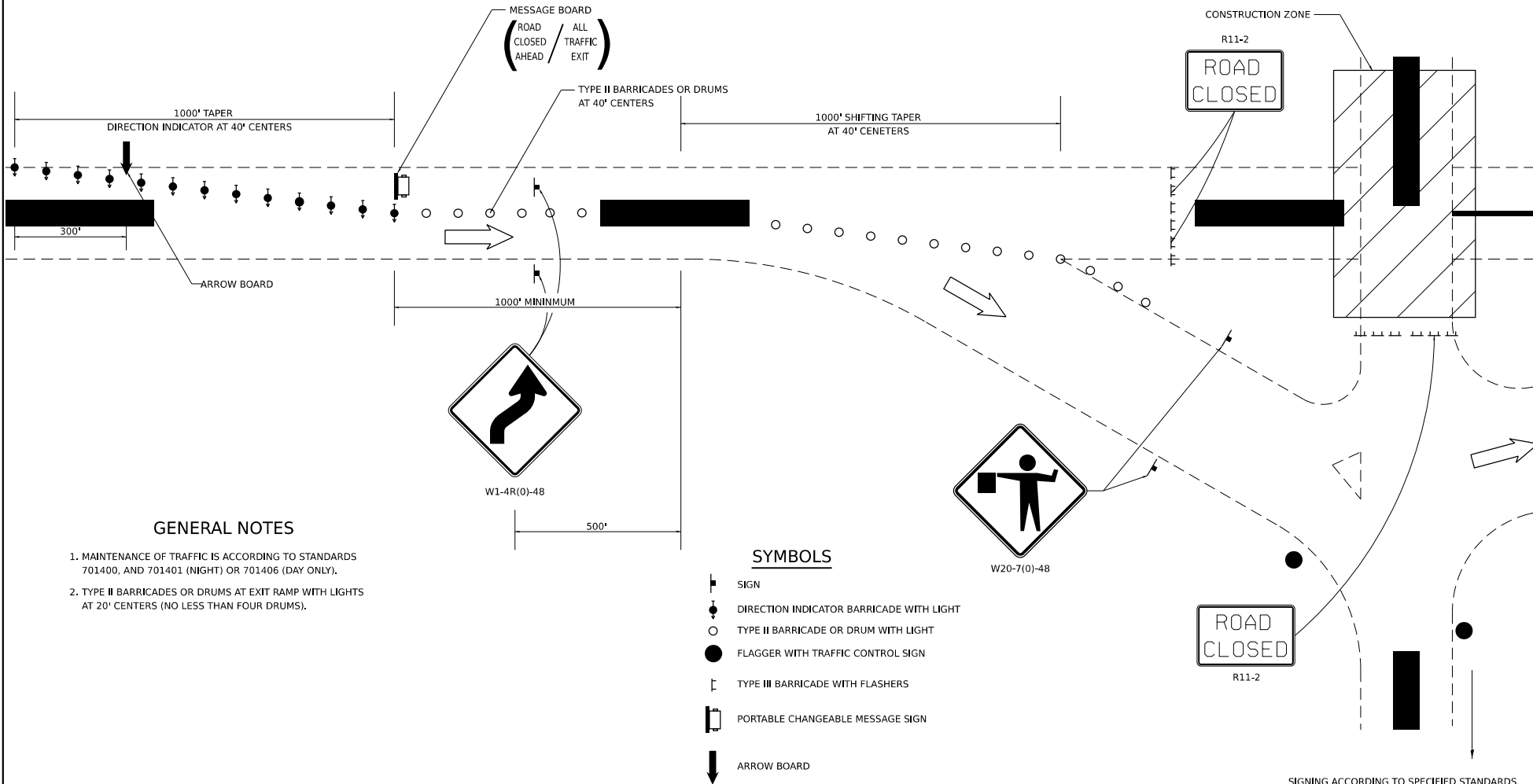
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

# TEMPORARY ROAD CLOSURE EXPRESSWAY



## GENERAL NOTES

1. MAINTENANCE OF TRAFFIC IS ACCORDING TO STANDARDS 701400, AND 701401 (NIGHT) OR 701406 (DAY ONLY).
2. TYPE II BARRICADES OR DRUMS AT EXIT RAMP WITH LIGHTS AT 20' CENTERS (NO LESS THAN FOUR DRUMS).

## SYMBOLS

- █ SIGN
- ◆ DIRECTION INDICATOR BARRICADE WITH LIGHT
- TYPE II BARRICADE OR DRUM WITH LIGHT
- FLAGGER WITH TRAFFIC CONTROL SIGN
- ▮ TYPE III BARRICADE WITH FLASHERS
- ☐ PORTABLE CHANGEABLE MESSAGE SIGN
- ↓ ARROW BOARD

PROJECT NO. 16-000  
 PLAN NO. 16-000-01  
 PLOT DATE: 3/12/2024

USER NAME = Isot/Dwork 2	DESIGNED -	REVISED - 4-20-17
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.25" = 1'-0"	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 4-04-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

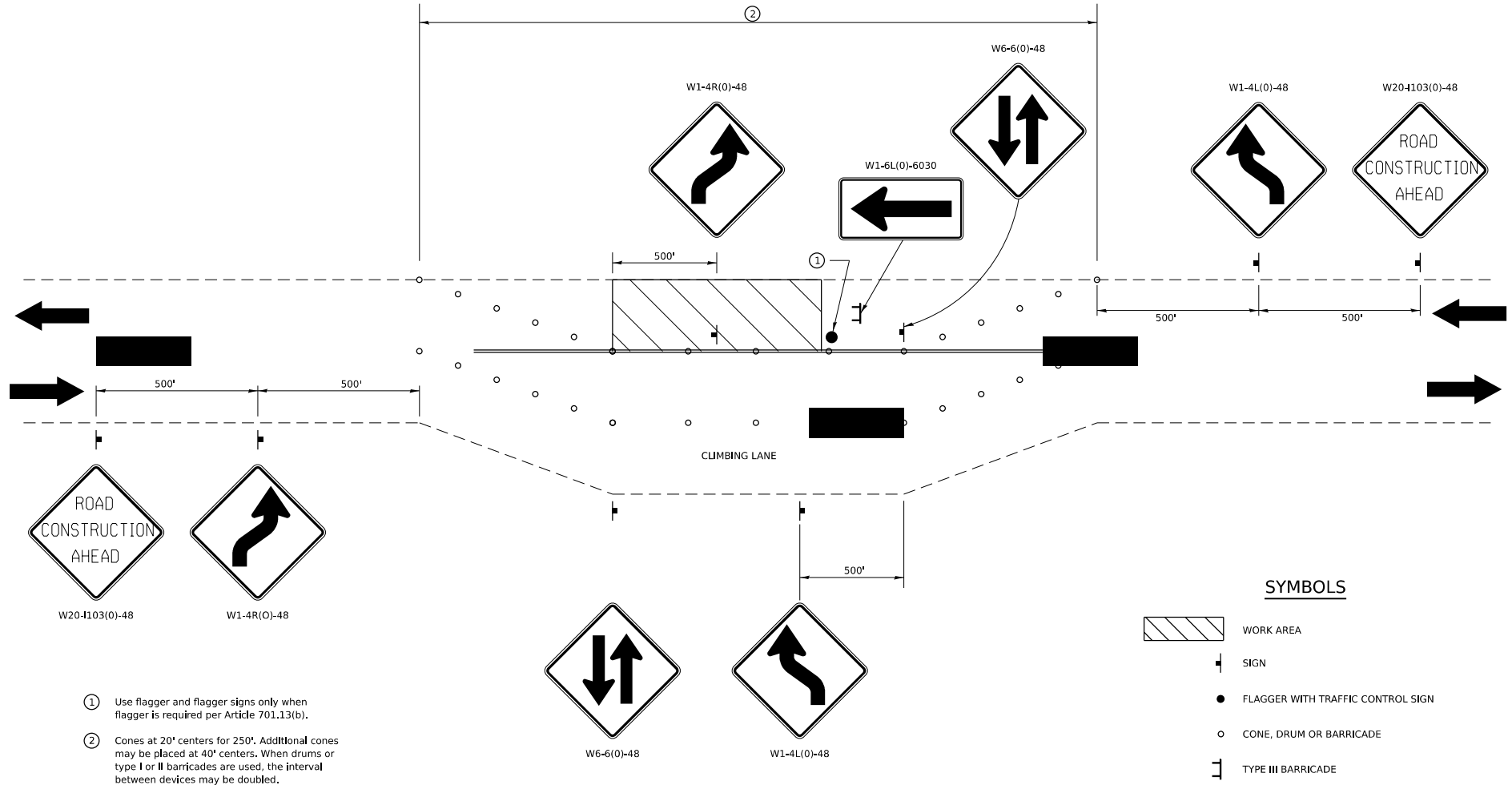
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				CONTRACT NO.
				ILLINOIS FED. AID PROJECT

TEMPORARY ROAD CLOSURE EXPRESSWAY



# TRAFFIC CONTROL FOR THREE LANE SECTION CASE 1



- ① Use flagger and flagger signs only when flagger is required per Article 701.13(b).
- ② Cones at 20' centers for 250'. Additional cones may be placed at 40' centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

**SYMBOLS**

- WORK AREA
- SIGN
- FLAGGER WITH TRAFFIC CONTROL SIGN
- CONE, DRUM OR BARRICADE
- TYPE III BARRICADE

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

ILLINOIS STATE BOARD OF EXAMINERS  
 PROFESSIONAL ENGINEERS  
 LICENSE NO. 12120204

USER NAME = ISDOT/bmk2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 7-30-13
PLOT DATE = 3/12/2024	DATE -	REVISED -

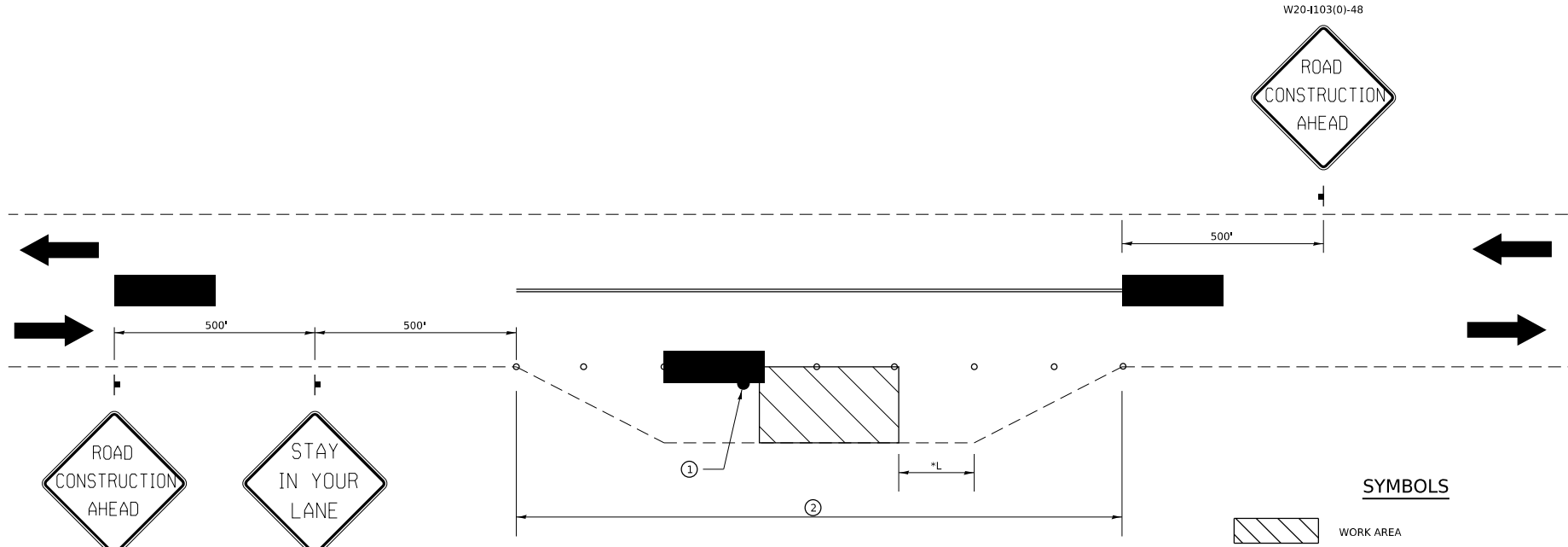
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>REGION 2 / DISTRICT 2 STANDARD</b>			
SCALE:	SHEET	OF	SHEETS

F.A. RT#:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL FOR THREE LANE SECTION

## CASE 2



W20-1103(0)-48



500'

500'

500'



W20-1103(0)-48

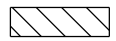


①

②

\*L

### SYMBOLS



WORK AREA



SIGN



FLAGGER WITH TRAFFIC CONTROL SIGN



CONE, DRUM OR BARRICADE

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

\*IF THE WORK ENDS WITHIN 2500 FEET OF THE TRANSITION WHEN THE SPEED IS > 40 MPH OR 1500 FEET FOR ALL OTHER SPEEDS, THE CLIMBING LANE SHALL REMAIN CLOSED AS SHOWN.

- ① Use flagger and flagger signs only when flagger is required per Article 701.13(b).
- ② Cones at 20' centers for 250'. Additional cones may be placed at 40' centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

ILLINOIS STATE BOARD OF PROFESSIONAL ENGINEERS  
 LICENSE NO. 1212-00001  
 PROJECT NO. 1212-00001  
 DRAWING NO. 1212-00001

USER NAME = ISDOT\brk2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 7-30-13
PLOT DATE = 3/12/2024	DATE -	REVISED -

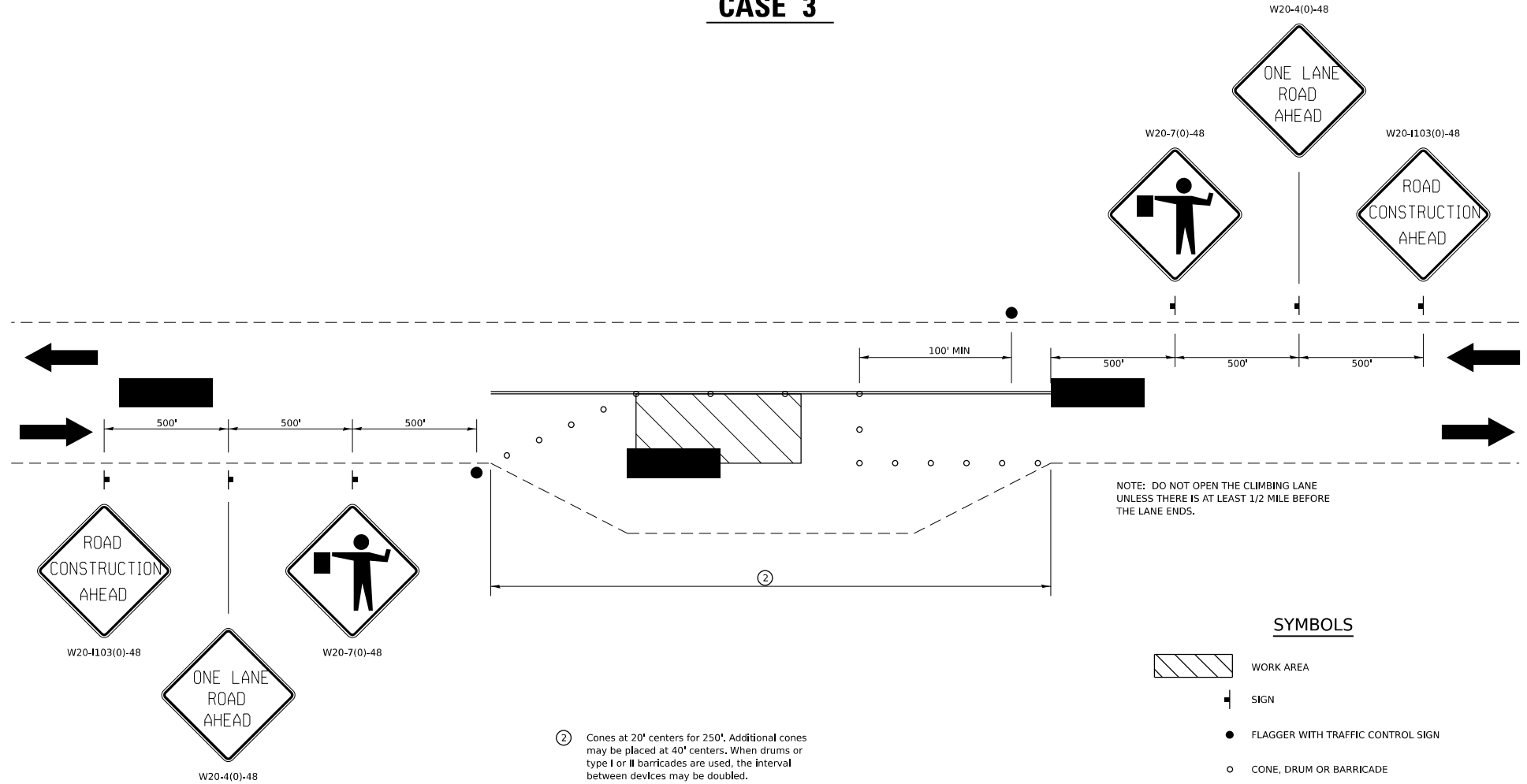
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
								CONTRACT NO.		
								ILLINOIS FED. AID PROJECT		

# TRAFFIC CONTROL FOR THREE LANE SECTION

## CASE 3



NOTE: DO NOT OPEN THE CLIMBING LANE UNLESS THERE IS AT LEAST 1/2 MILE BEFORE THE LANE ENDS.

### SYMBOLS

- WORK AREA
- SIGN
- FLAGGER WITH TRAFFIC CONTROL SIGN
- CONE, DRUM OR BARRICADE

② Cones at 20' centers for 250'. Additional cones may be placed at 40' centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

ILLINOIS STATE BOARD OF EXAMINERS  
 PROFESSIONAL ENGINEERS  
 LICENSE NO. 1212/2024

USER NAME = ISDOT\brk2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 8-27-13
	CHECKED -	REVISED - 7-30-13
	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

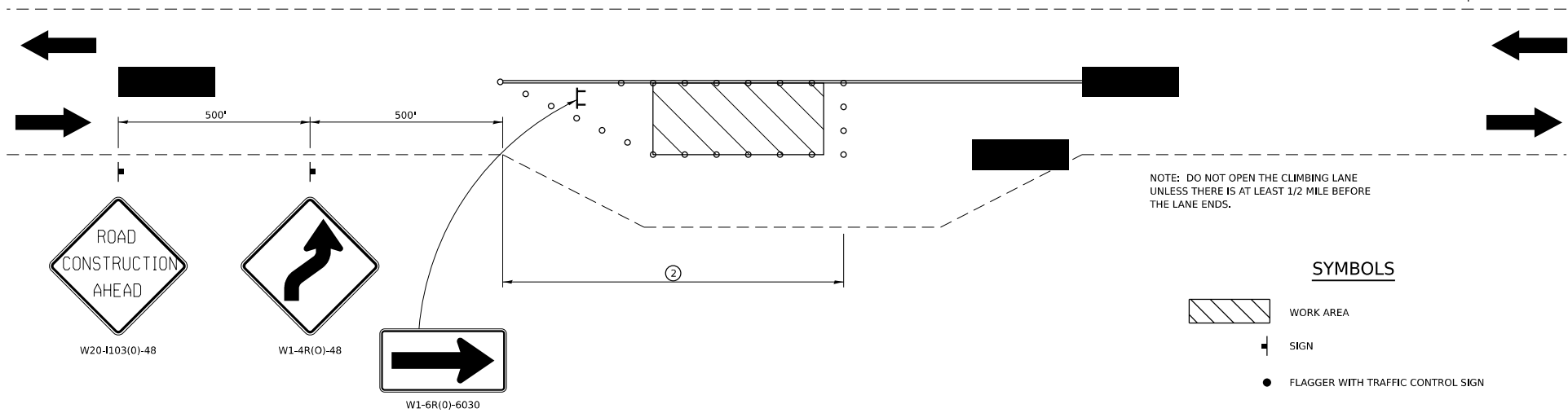
F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

# TRAFFIC CONTROL FOR THREE LANE SECTION

## CASE 4

W20-1103(0)-48



NOTE: DO NOT OPEN THE CLIMBING LANE UNLESS THERE IS AT LEAST 1/2 MILE BEFORE THE LANE ENDS.

### SYMBOLS

- WORK AREA
- SIGN
- FLAGGER WITH TRAFFIC CONTROL SIGN
- CONE, DRUM OR BARRICADE
- TYPE III BARRICADE

② Cones at 20' centers for 250'. Additional cones may be placed at 40' centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

CASE 4 APPLIES WHEN NO WORKERS ARE PRESENT. WHEN WORKERS ARE PRESENT, TWO LANES SHALL BE CLOSED AND TRAFFIC CONTROL SHALL BE ACCORDING TO CASE 3.

ILLINOIS STATE BOARD OF PROFESSIONAL ENGINEERS  
 PROFESSIONAL ENGINEER  
 LICENSE NO. 12120204

USER NAME = ISDOT/bmk2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 7-30-13
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

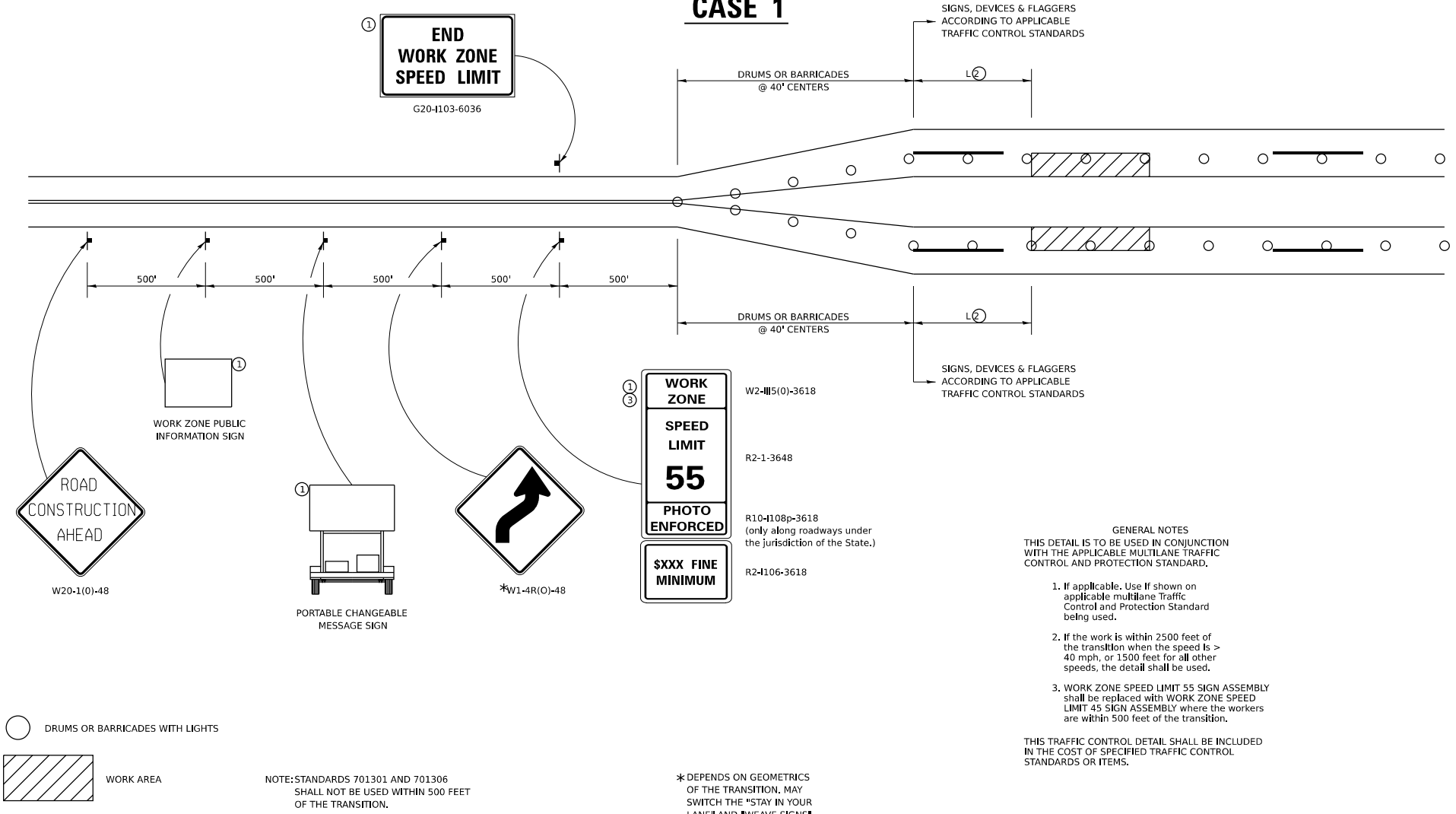
**REGION 2 / DISTRICT 2 STANDARD**

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

# TRAFFIC CONTROL FOR TRANSITION AREAS

## CASE 1



**GENERAL NOTES**

THIS DETAIL IS TO BE USED IN CONJUNCTION WITH THE APPLICABLE MULTILANE TRAFFIC CONTROL AND PROTECTION STANDARD.

1. If applicable, use If shown on applicable multilane Traffic Control and Protection Standard being used.
2. If the work is within 2500 feet of the transition when the speed is > 40 mph, or 1500 feet for all other speeds, the detail shall be used.
3. WORK ZONE SPEED LIMIT 55 SIGN ASSEMBLY shall be replaced with WORK ZONE SPEED LIMIT 45 SIGN ASSEMBLY where the workers are within 500 feet of the transition.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 PROJECT DATE: 3/12/2024

USER NAME = IDOT\cburk2	DESIGNED -	REVISED - 4-20-17
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 1-16-13

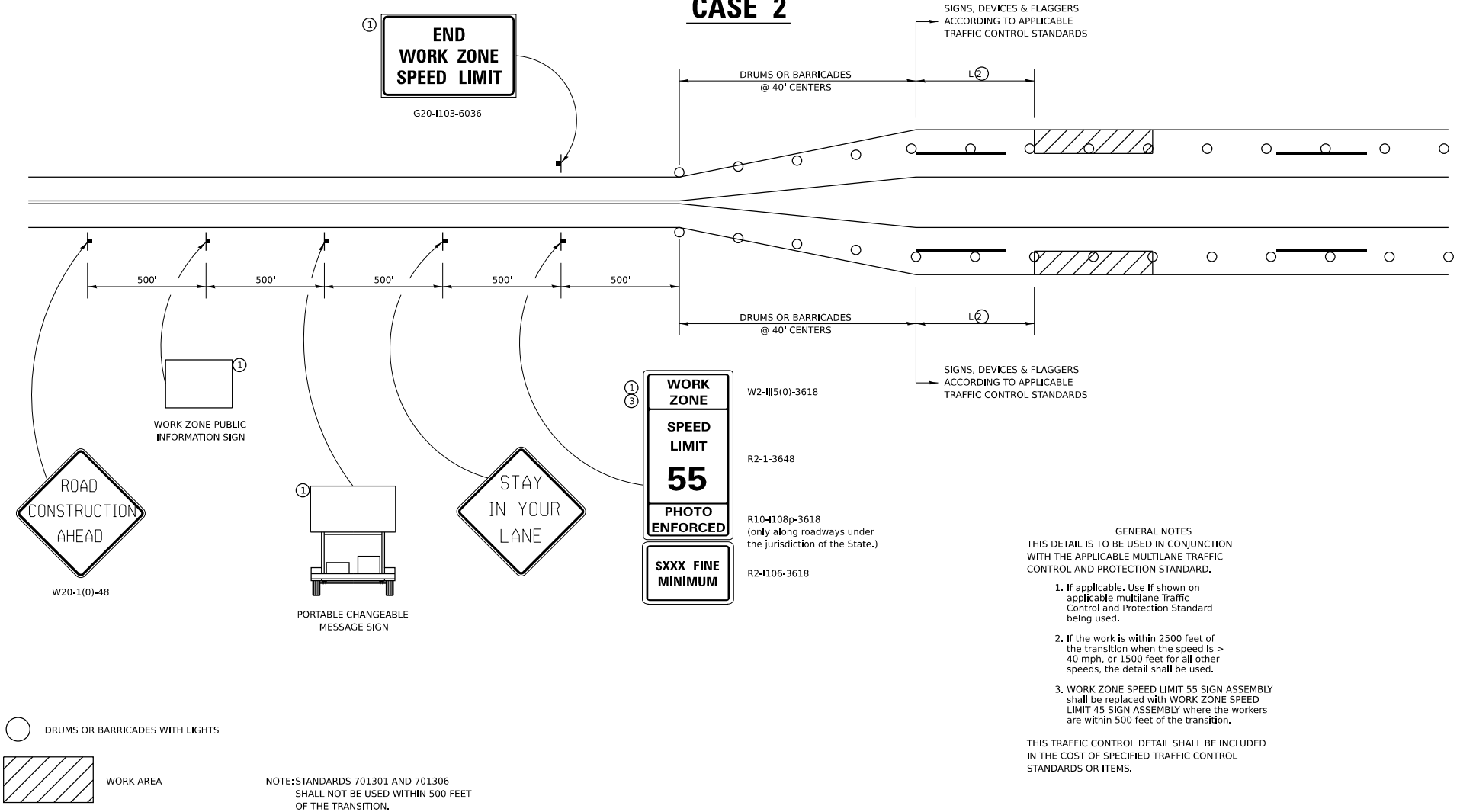
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>REGION 2 / DISTRICT 2 STANDARD</b>			
SCALE:	SHEET	OF	SHEETS
			STA. TO STA.

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# TRAFFIC CONTROL FOR TRANSITION AREAS

## CASE 2



**GENERAL NOTES**  
 THIS DETAIL IS TO BE USED IN CONJUNCTION WITH THE APPLICABLE MULTILANE TRAFFIC CONTROL AND PROTECTION STANDARD.

- If applicable, use If shown on applicable multilane Traffic Control and Protection Standard being used.
- If the work is within 2500 feet of the transition when the speed is > 40 mph, or 1500 feet for all other speeds, the detail shall be used.
- WORK ZONE SPEED LIMIT 55 SIGN ASSEMBLY shall be replaced with WORK ZONE SPEED LIMIT 45 SIGN ASSEMBLY where the workers are within 500 feet of the transition.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

NOTE: STANDARDS 701301 AND 701306 SHALL NOT BE USED WITHIN 500 FEET OF THE TRANSITION.

ILLINOIS STATE BOARD OF PROFESSIONAL ENGINEERS  
 REGISTERED PROFESSIONAL ENGINEER  
 LICENSE NO. 12120204

USER NAME = IDOT\cburk2	DESIGNED -	REVISED - 4-20-17
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 1-16-13

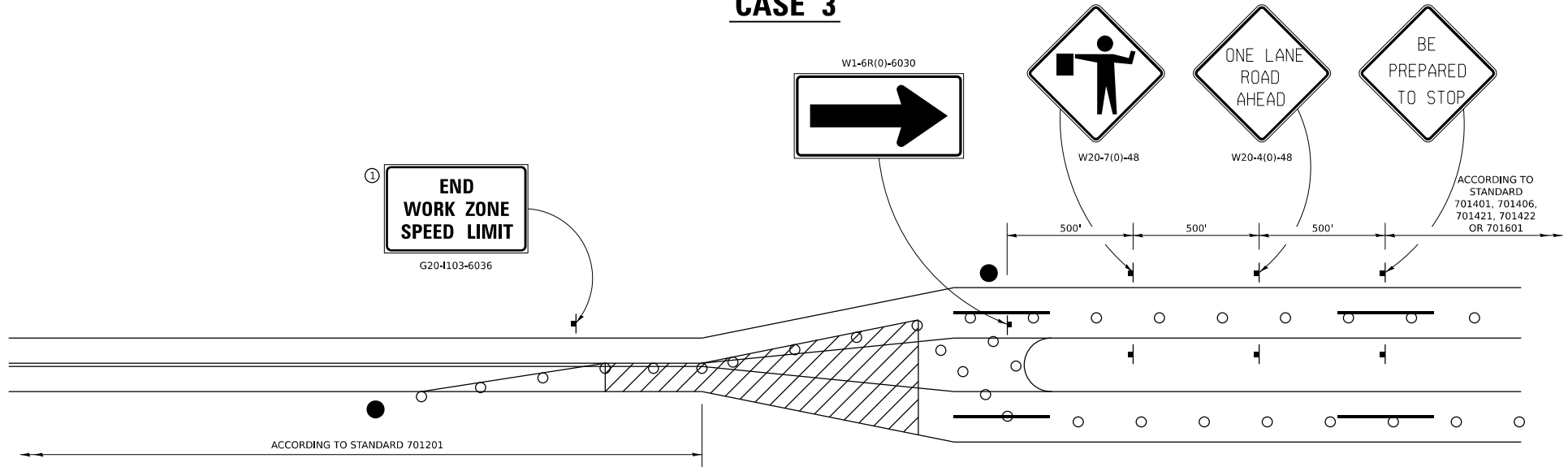
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

# TRAFFIC CONTROL FOR TRANSITION AREAS

## CASE 3



**GENERAL NOTES**  
 THIS DETAIL IS TO BE USED IN CONJUNCTION WITH THE APPLICABLE MULTILANE TRAFFIC CONTROL AND PROTECTION STANDARD.

1. If applicable, Use if shown on applicable multilane Traffic Control and Protection Standard being used.
2. If the work is within 2500 feet of the transition when the speed is > 40 mph, or 1500 feet for all other speeds, the detail shall be used.
3. WORK ZONE SPEED LIMIT 55 SIGN ASSEMBLY shall be replaced with WORK ZONE SPEED LIMIT 45 SIGN ASSEMBLY where the workers are within 500 feet of the transition.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

- FLAGGER WITH TRAFFIC CONTROL SIGN
- DRUMS OR BARRICADES WITH LIGHTS
- WORK AREA

NOTE: STANDARDS 701301 AND 701306 SHALL NOT BE USED WITHIN 500 FEET OF THE TRANSITION.

ILLUSTRATION BY: [unreadable]  
 PLANTING: [unreadable]  
 PLOT DATE: 3/12/2024

USER NAME = [unreadable]	DESIGNED - [unreadable]	REVISED - 4-20-17	
	DRAWN - [unreadable]	REVISED - 1-05-16	
	CHECKED - [unreadable]	REVISED - 8-27-13	
	DATE - 3-12-2024	REVISED - 3-05-12	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

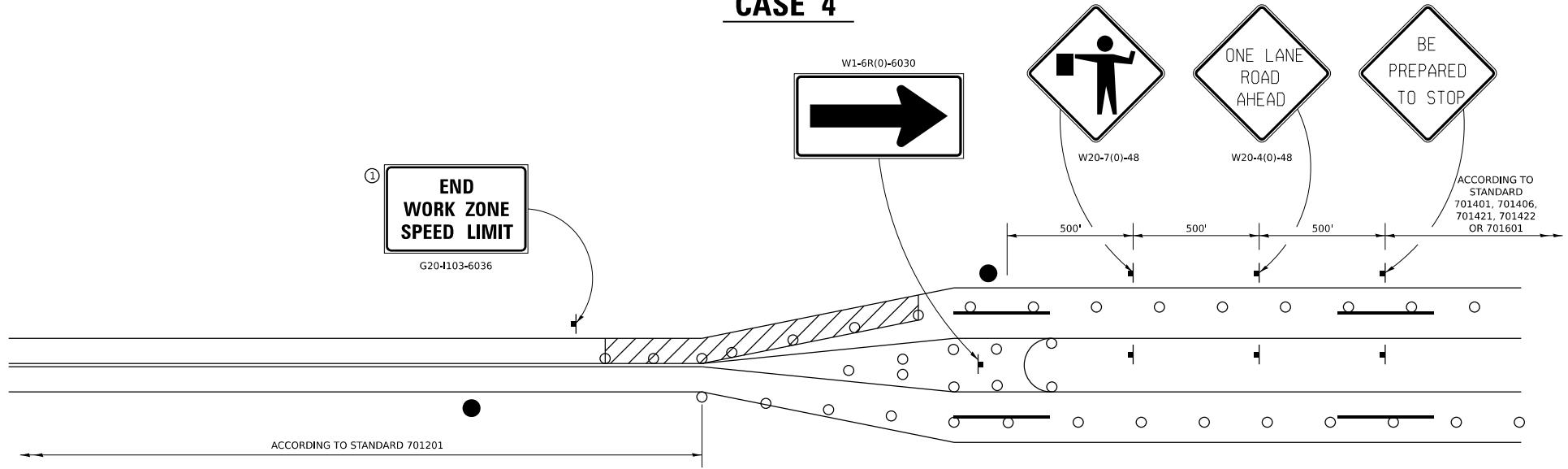
**REGION 2 / DISTRICT 2 STANDARD**

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO. [unreadable]				
ILLINOIS FED. AID PROJECT [unreadable]				

SCALE: SHEET OF SHEETS STA. TO STA.

# TRAFFIC CONTROL FOR TRANSITION AREAS

## CASE 4



**GENERAL NOTES**  
 THIS DETAIL IS TO BE USED IN CONJUNCTION WITH THE APPLICABLE MULTILANE TRAFFIC CONTROL AND PROTECTION STANDARD.

1. If applicable, Use if shown on applicable multilane Traffic Control and Protection Standard being used.
2. If the work is within 2500 feet of the transition when the speed is > 40 mph, or 1500 feet for all other speeds, the detail shall be used.
3. WORK ZONE SPEED LIMIT 55 SIGN ASSEMBLY shall be replaced with WORK ZONE SPEED LIMIT 45 SIGN ASSEMBLY where the workers are within 500 feet of the transition.

THIS TRAFFIC CONTROL DETAIL SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

● FLAGGER WITH TRAFFIC CONTROL SIGN

○ DRUMS OR BARRICADES WITH LIGHTS

WORK AREA

NOTE: STANDARDS 701301 AND 701306 SHALL NOT BE USED WITHIN 500 FEET OF THE TRANSITION.

ILLUSTRATION BY: [unreadable]  
 PLANTING: [unreadable]  
 PLOT DATE: 3/12/2024

USER NAME = ISOTC@ark2	DESIGNED -	REVISED - 4-20-17
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 3-05-12

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

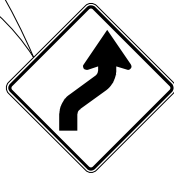
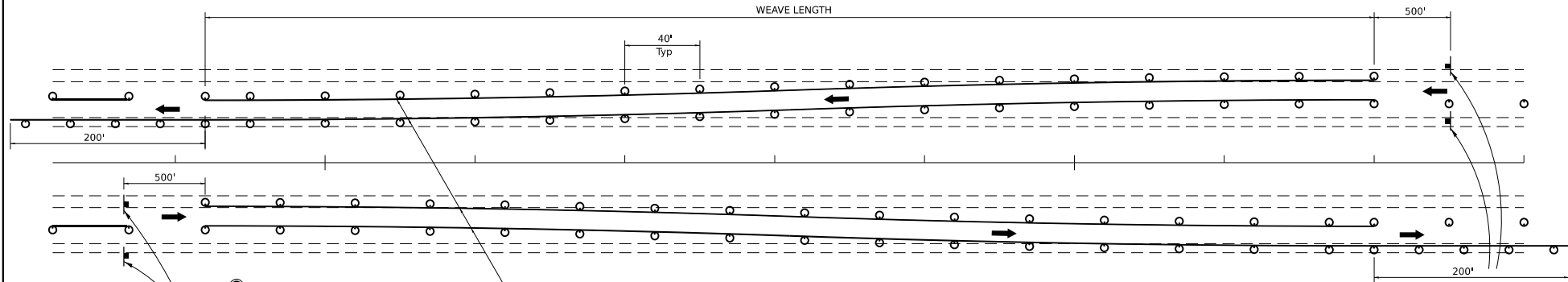
**REGION 2 / DISTRICT 2 STANDARD**

F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				CONTRACT NO.
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



# TRAFFIC CONTROL TYPICAL WEAVE



W1-4R(O)-48

Temporary Pavement Marking required if Typical Weave is used for 14 days or more.

### SYMBOLS

- DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- ┼ SIGN



W1-4L(O)-48

### STANDARD WEAVE CONDITIONS FOR DIFFERENT SPEED LIMITS

POSTED SPEED LIMIT	WEAVE LENGTH
65 MPH OR HIGHER	780 FT.
55 MPH	660 FT.
45 MPH	540 FT.

### GENERAL NOTES:

USE ON LONG 4-LANE PROJECTS WHERE THE CONTRACTOR MAY CHANGE A PORTION OF THE WORK TO THE OPPOSITE LANE.

USE WHERE THE PROJECT IS ADJACENT TO ANOTHER AND THE CONTRACTOR COULD BE WORKING ON DIFFERENT LANES.

TEMPORARY PAVEMENT MARKING SHALL BE USED WHEN TYPICAL WEAVE IS USED FOR 14 DAYS OR MORE.

TRAFFIC CONTROL TYPICAL WEAVE SHALL BE INCLUDED IN THE COST OF THE SPECIFIC TRAFFIC CONTROL STANDARDS OF ITEMS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

ILLINOIS STATE BOARD OF TRANSPORTATION  
 PLANT DATE # 01/2004

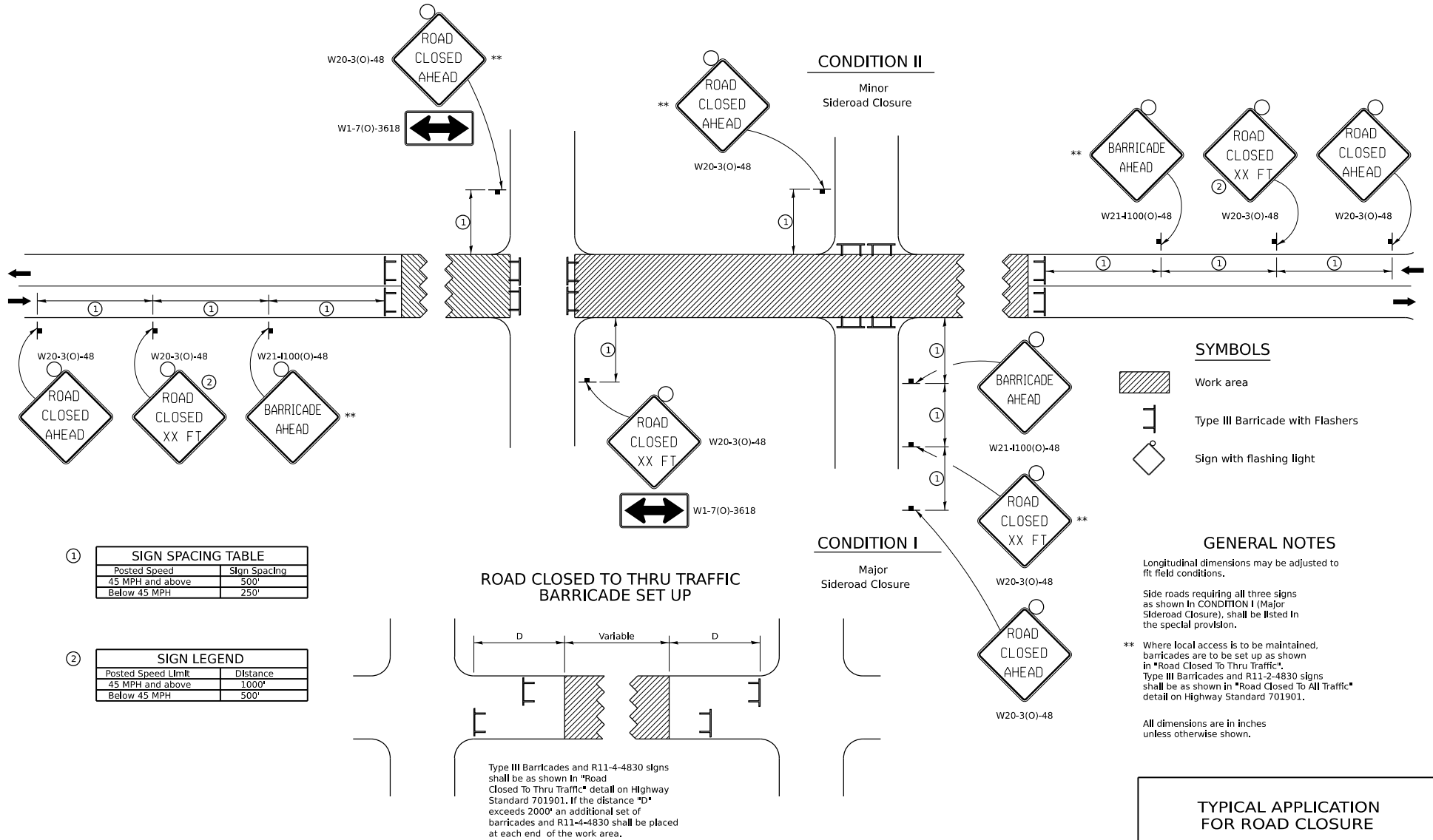
USER NAME # ISOT/Chark2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 6-27-14
PLOT SCALE # 0.258" / 1ft.	CHECKED -	REVISED - 8-27-13
PLOT DATE # 3/12/2024	DATE -	REVISED - 10-17-11

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
									ILLINOIS	FEB. 410 PROJECT

# TRAFFIC CONTROL FOR ROAD CLOSURE



ILLINOIS  
 REGION 2 / DISTRICT 2 STANDARD  
 PLOT DATE = 3/12/2024

USER NAME = ISOTC/bmk2	DESIGNED -	REVISED - 8-03-17
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" = 1 ft.	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 10-17-11

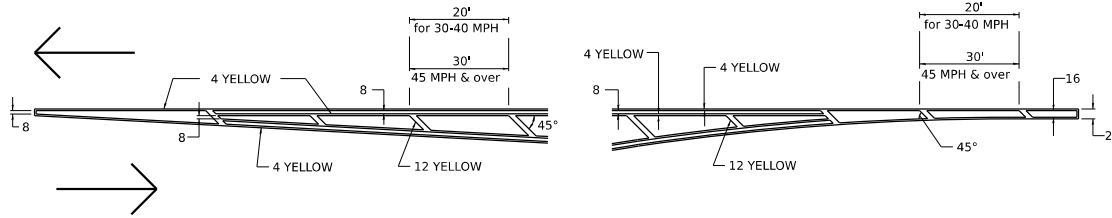
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

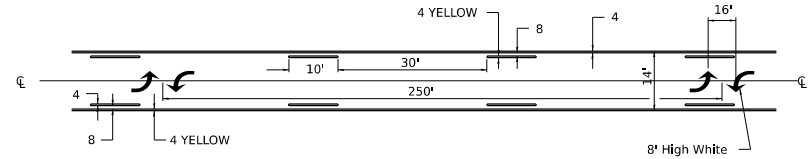
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FEDERAL PROJECT										

# TYPICAL PAVEMENT MARKINGS

## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

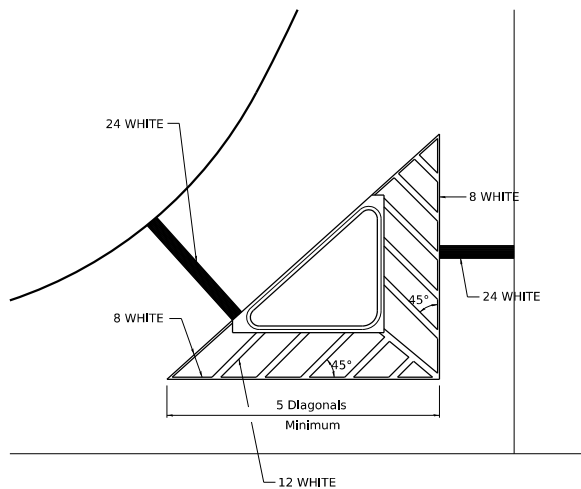


## MEDIAN PAVEMENT MARKING



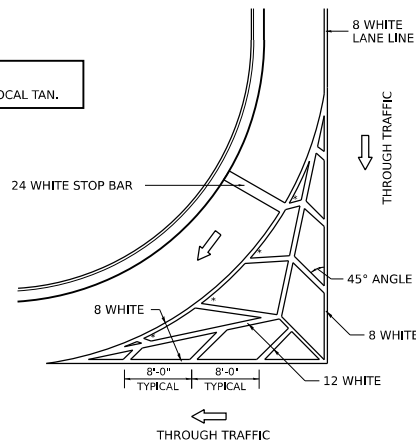
\*\* ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## TYPICAL ISLAND OFFSET SHOULDER WIDTH



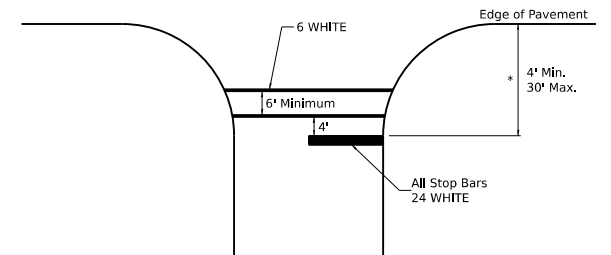
## TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:  
\* 45° TO LOCAL TAN.



## STANDARD CROSSWALK MARKING

See Schedules for Locations



\* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
PLANT DATE = 3/12/2024

USER NAME = ISDOT\cburk2	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 3-05-12
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

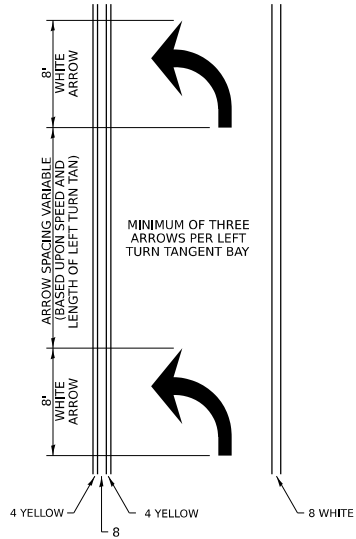
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RT.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
									ILLINOIS FED. AID PROJECT	

# TYPICAL PAVEMENT MARKINGS

## ARROW LAYOUT

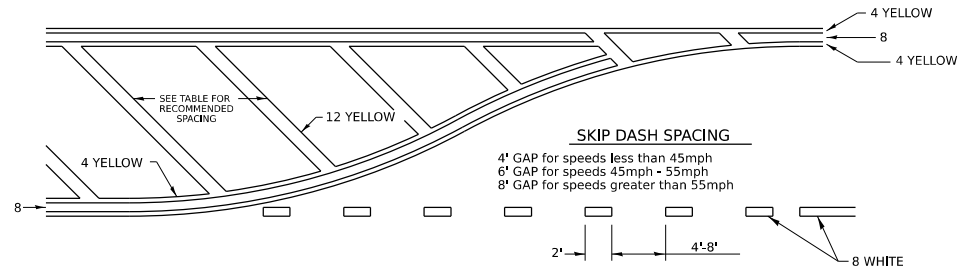


## SYMBOLS

- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER
- ◀ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

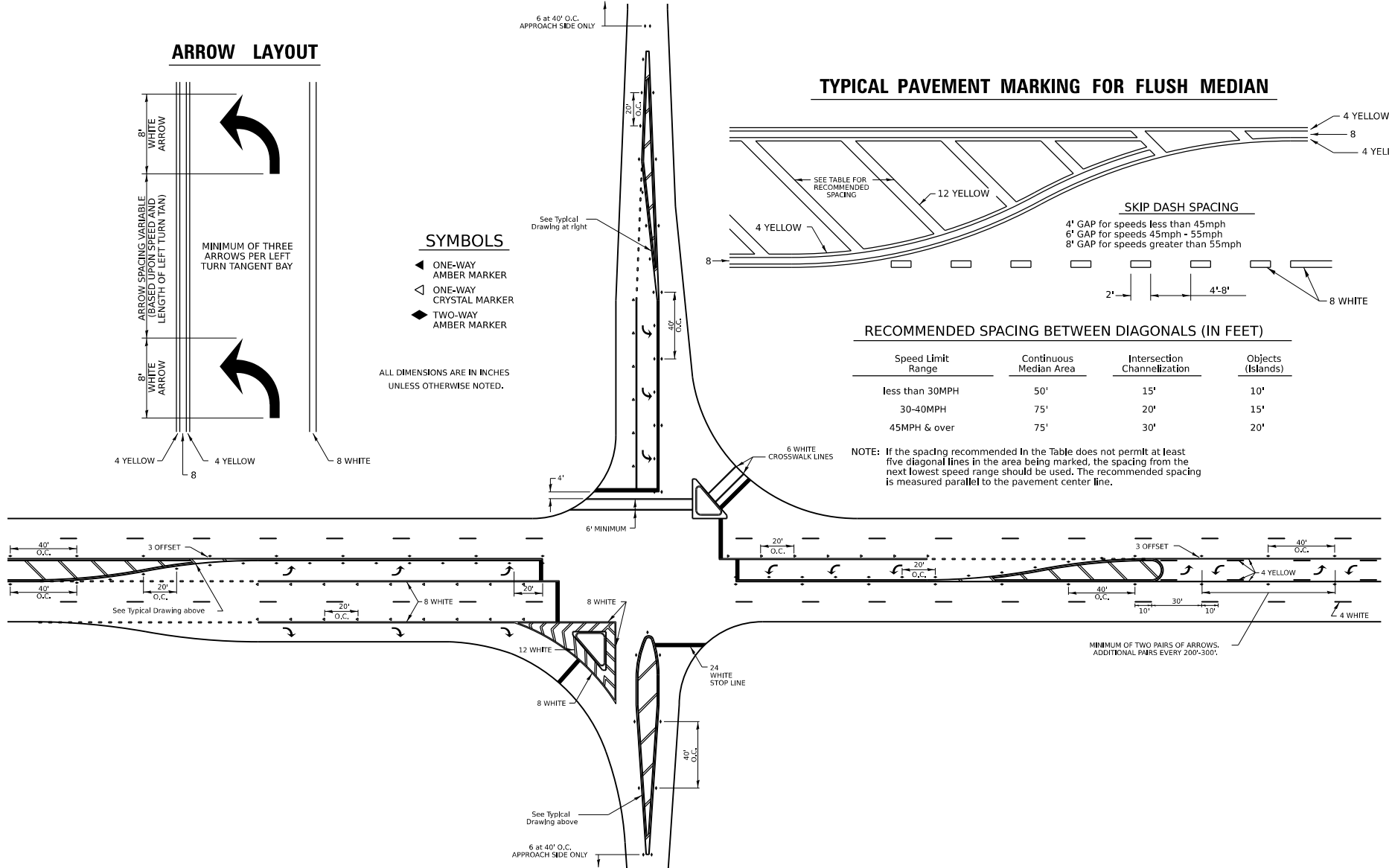
## TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



## RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

NOTE: If the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 PLOT DATE: 3/12/2024

USER NAME = ISOT/ibank2	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 3-05-12
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

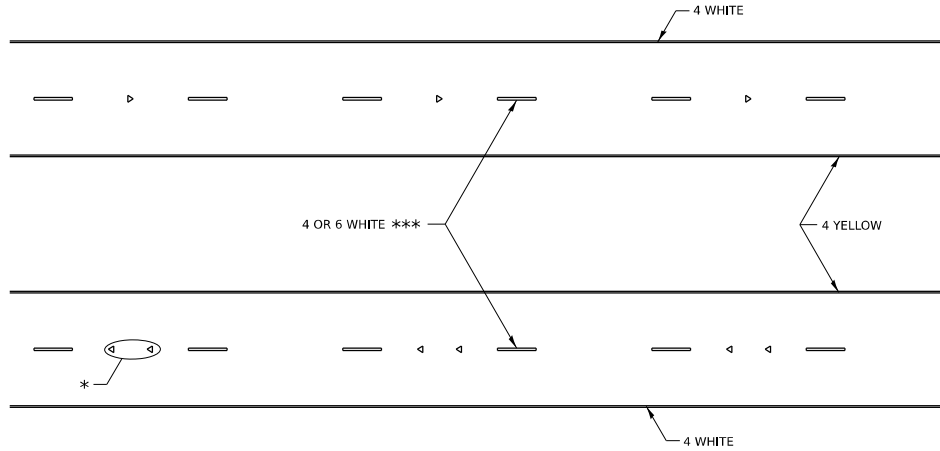
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

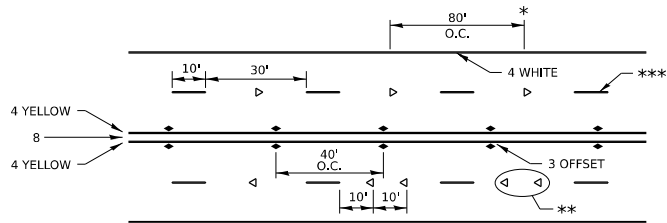
F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# TYPICAL PAVEMENT MARKINGS



\* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.  
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

## MULTI-LANE / DIVIDED



\* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

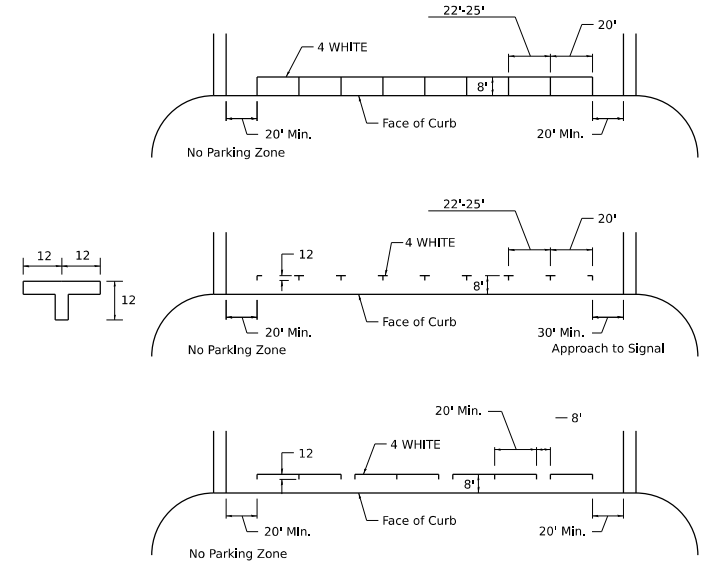
\*\* USE DOUBLE MARKERS WHEN ADT ≥ 20,000

\*\*\* CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

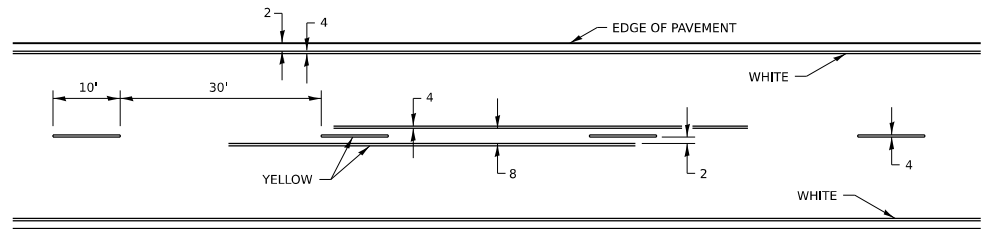
## MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS  
DETAIL NOT HIGHWAY STANDARD 781001)

## TYPICAL PARKING SPACING



## TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 PROJECT DATE: 3/12/2024

USER NAME = ISOT/ibank2	DESIGNED -	REVISED - 6-27-14
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 11-28-12
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

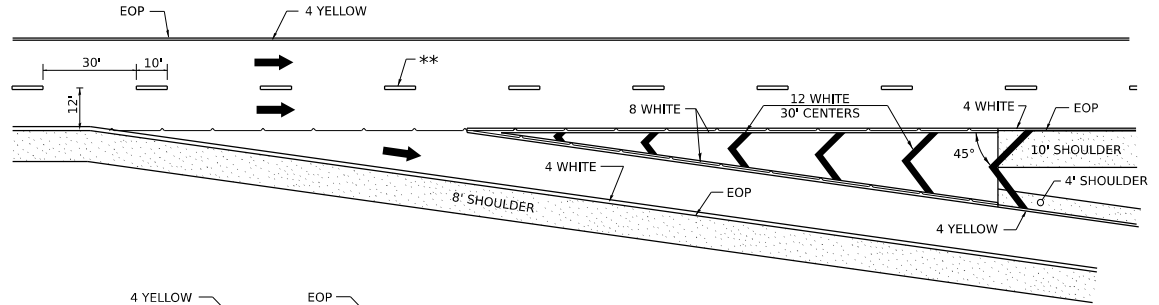
SCALE: SHEET OF SHEETS STA. TO STA.

# TYPICAL PAVEMENT MARKINGS

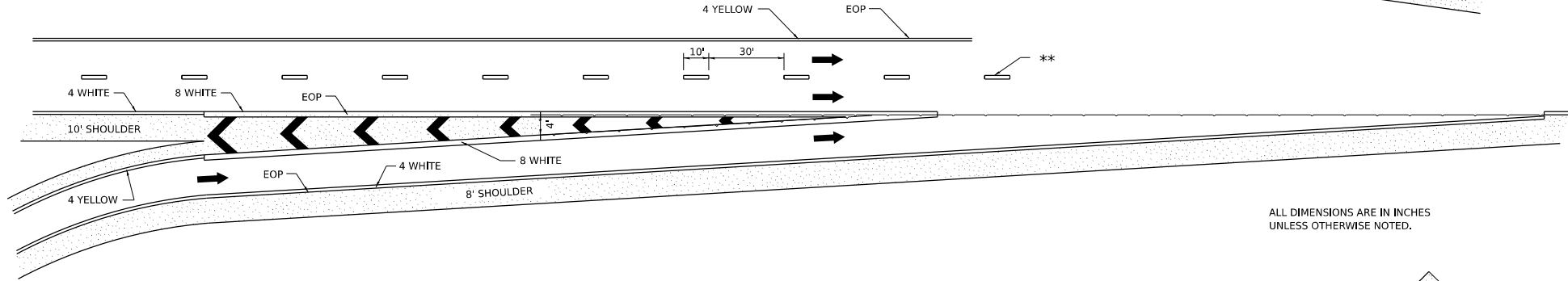
\*\* 6" WHITE ON INTERSTATES, WHERE THE SPEED LIMIT IS 65 MPH, OR WHEN DIRECTED BY THE ENGINEER.  
4" WIDE AT ALL OTHER LOCATIONS.

NOTE: GORE HATCHING PLACED ONLY WHEN SCHEDULED IN THE PLANS

## EXIT RAMP

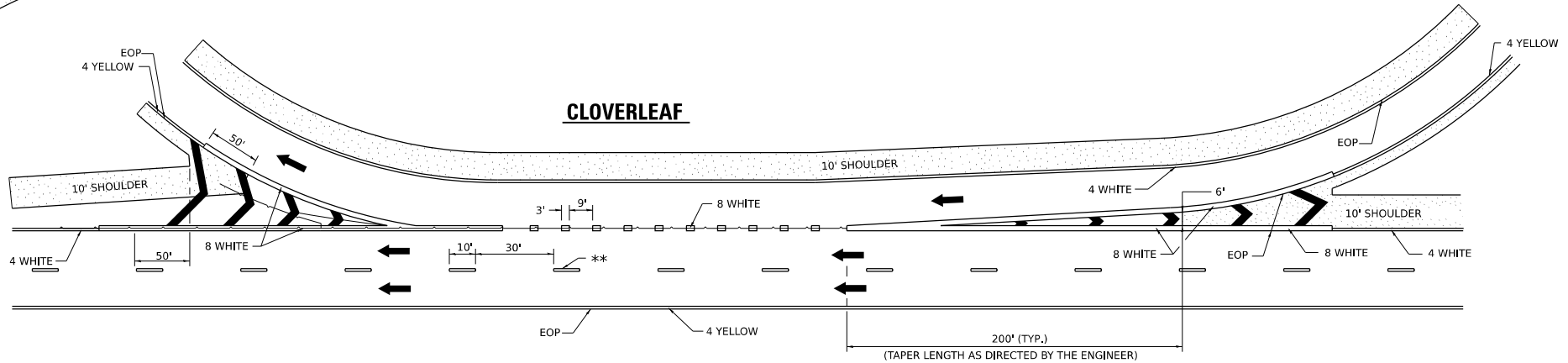


## ENTRANCE RAMP



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

## CLOVERLEAF



ILLINOIS DEPARTMENT OF TRANSPORTATION  
 REGION 2 / DISTRICT 2 STANDARD  
 PLOT DATE: 3/12/2024

USER NAME = IDOT\cburk2	DESIGNED -	REVISED - 9-15-23
	DRAWN -	REVISED - 8-27-13
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - 10-18-11
PLOT DATE = 3/12/2024	DATE -	REVISED -

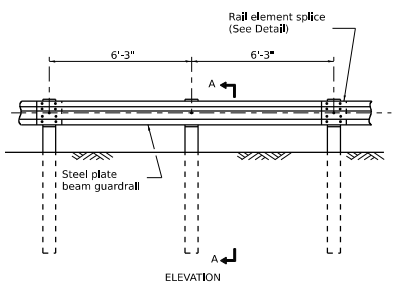
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
---

REGION 2 / DISTRICT 2 STANDARD
--------------------------------

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

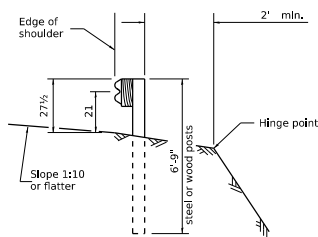
F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL

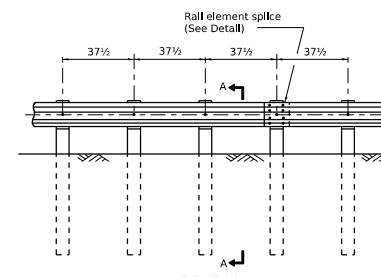


**TYPE A**

6'-3" Typical post spacing

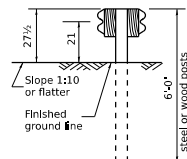


**SECTION A-A**

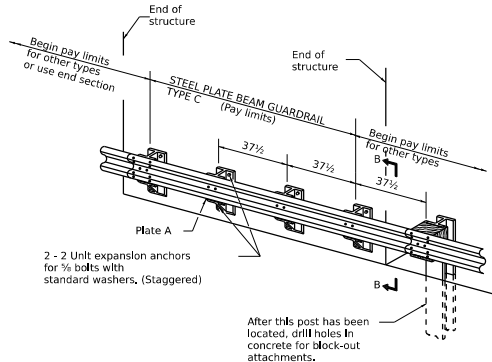


**TYPE B**

37 1/2" Closed post spacing

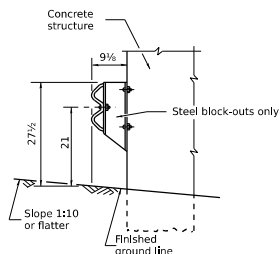


**SECTION C-C**

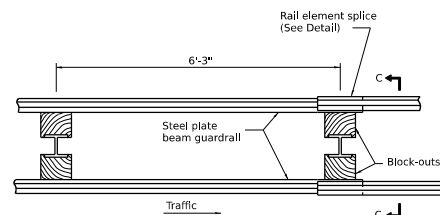


**TYPE C**

37 1/2" Block-out spacing



**SECTION B-B**



**PLAN**

**TYPE D**

Double steel plate beam guardrail  
6'-3" typical post spacing

## GENERAL NOTES

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.

The existing steel posts may be drilled to match the bolt pattern shown herein for the wood block-out, or a new steel post shall be provided.

This detail is applicable to the guardrail system used prior to January 1, 2007. For details on the Midwest Guardrail System, see Standard 630001.

PROJECT: I-55/US 41 Bypass  
 DRAWN BY: J. J. B. / J. J. B.  
 PLOT DATE: 3/12/2024

USER NAME = I550700012	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 10-19-11
PLOT SCALE = 0.258" = 1 ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

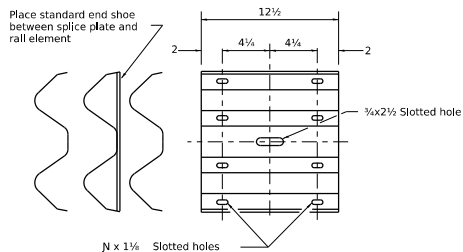
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

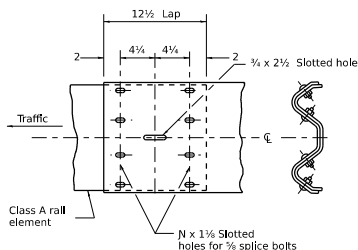




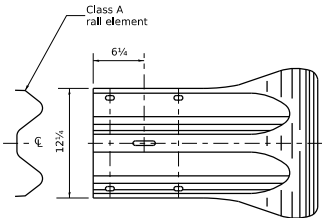
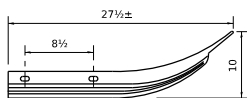
# REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL



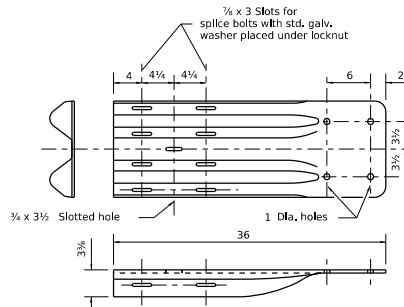
**SPLICE PLATE**



**RAIL ELEMENT SPLICE**



**END SECTION**



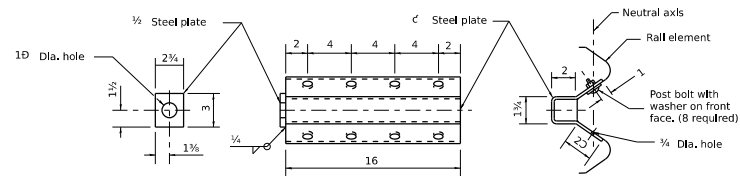
**NOTE**

When end shoe is attached to a bridge parapet which has an expansion joint, the bolts shall be provided with a locknut or double nut and shall be tightened only to a point that will allow guardrail movement.

The standard end shoe shall be attached to the concrete with pre-drilled or self-drilling anchor bolts. The anchor cone shall be set flush with the surface of the concrete.

Externally threaded studs protruding from the surface of the concrete will not be permitted.

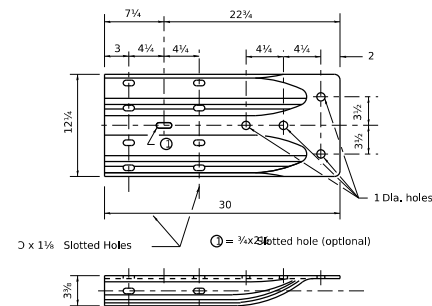
**END SHOE**



**NOTE**

Anchor plate T shall be used to attach cable assembly to guardrail when required on traffic barrier terminals.

**ANCHOR PLATE T DETAILS**



**ALTERNATE END SHOE**

PROJECT: I-55/US 52 Interchange  
 DRAWING NO.: 400-1000-1000-1000  
 PLOT DATE: 3/12/2024

USER NAME = ISOT/04/04/2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 10-19-11
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

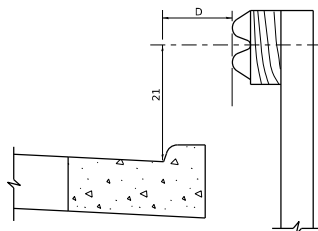
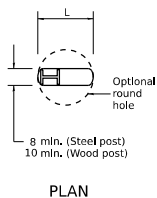
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

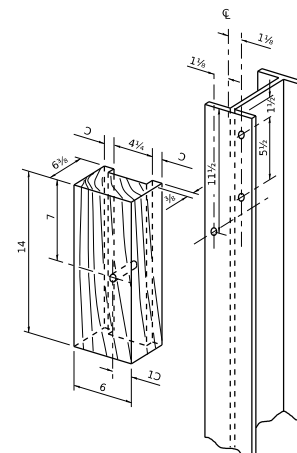
# REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL



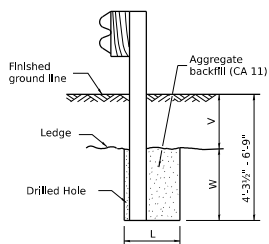
Note:  
If it is necessary for D to be more than 12" and less than 10'4" (per curb and gutter (Std. 606001) shall be used in front of and in advance of the guardrail.

**GUARDRAIL PLACED BEHIND CURB**

(D - O desirable to maximum)



**WOOD BLOCK-OUT AND STEEL POST DETAILS**

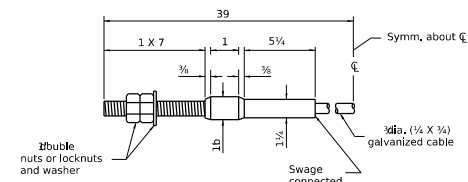


Note:  
Ledge line is top of rock ledge or hard slag fill.

**ELEVATION**

**FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED**

V	W	L	
		Steel Post	Wood Post
0 - 18	24	21	23
>18 - 41.5	12	8	10
>41.5 - 53.5	12 - 0	8	10



**CABLE ASSEMBLY**  
(40,000 lbs. min. breaking strength)  
Tighten to taut tension.

ILLINOIS STATE BOARD OF SURVEYING AND LAND ADJUSTMENT  
 LICENSE NO. 123456789  
 EXPIRES 12/31/2024

USER NAME = IDOT/IDOT/2	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 10-19-11
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

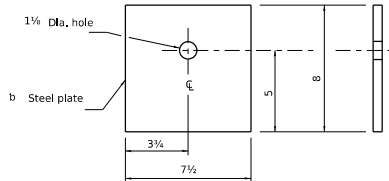
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

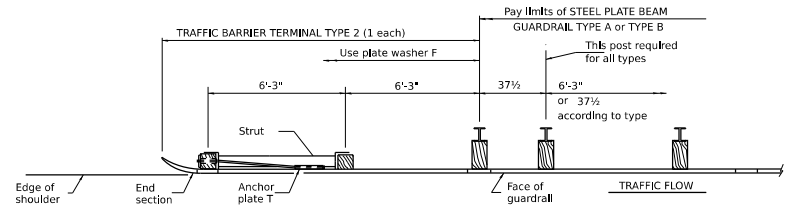
F.A. DIST.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

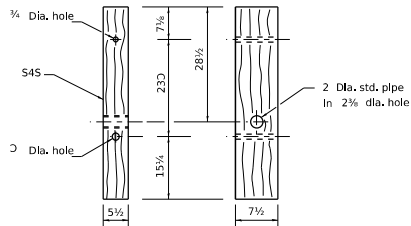
# TRAFFIC BARRIER TERMINAL, TYPE 2 (27" HEIGHT)



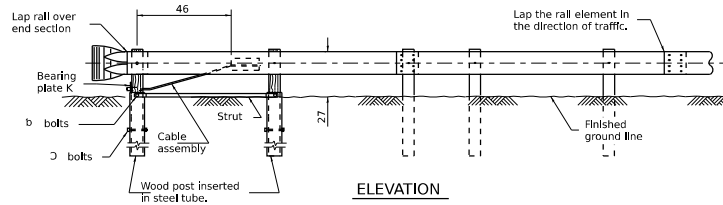
**BEARING PLATE K**



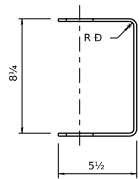
**PLAN**



**WOOD POST**

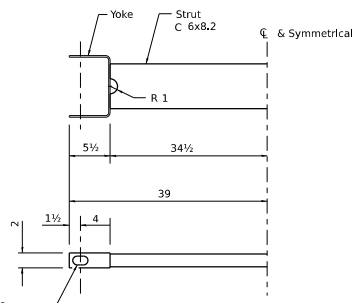


**ELEVATION**

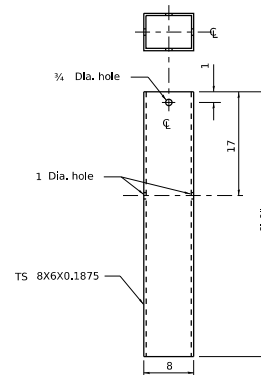


**YOKE**

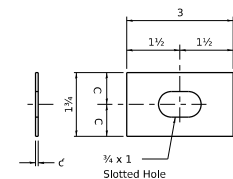
5/8" thick steel



**CABLE STRUT**



**STEEL TUBE**



**PLATE WASHER F**

**GENERAL NOTES**

See Standard 630001 for details of guardrail not shown.

The bearing plate K shall be held in position by (2) two eight penny nails driven into the post and bent over the top of the plate.

All dimensions are in inches unless otherwise shown.

I:\Projects\2024\11-27-2024\11-27-2024.dwg  
 PLOT DATE = 3/12/2024  
 PLOT SCALE = 1/8"=1'-0"

USER NAME = ISDOT\cburk2	DESIGNED -	REVISED - 10-18-11
	DRAWN -	REVISED -
PLOT SCALE = 1/8"=1'-0"	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

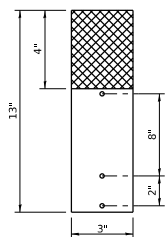
**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

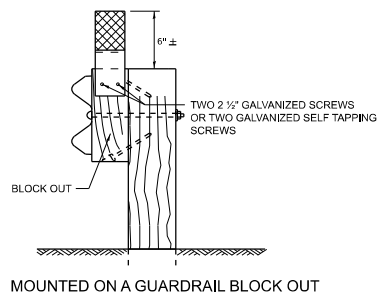
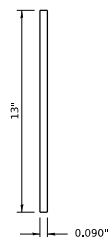
# GUARDRAIL REFLECTORS, TYPE C (SPECIAL)

## REFLECTORS FOR GUARDRAIL BLOCK OUT OR DELINEATOR POST

STRAIGHT REFLECTOR / DELINEATOR



SIDE VIEW

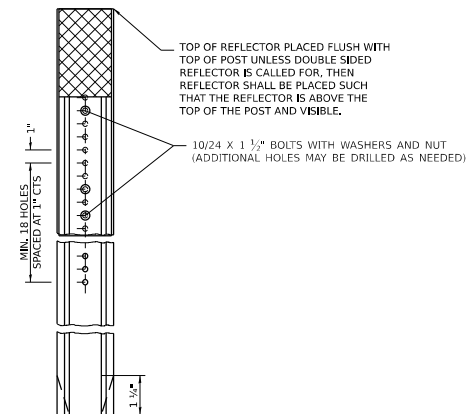


MOUNTED ON A GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO BLOCK OUTS.

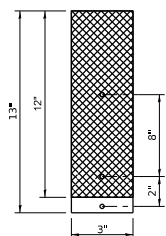
REFLECTORS MOUNTED ON WOODEN OR PLASTIC OR METAL BLOCK OUT SHALL BE MOUNTED USING TWO 1/2" GALVANIZED SCREWS WITH WASHERS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.

ADDITIONAL SHEETING MAY BE ADDED AS NEEDED FOR TURN AROUNDS AS SHOWN IN THE PLANS

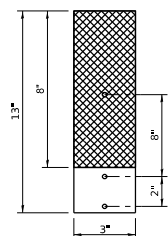


MOUNTED ON A DELINEATOR POST

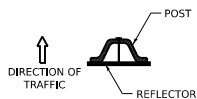
REPLACING 3 BUTTON DELINEATOR



REPLACING 2 BUTTON DELINEATOR



ADDITIONAL HOLES SHALL BE DRILLED IN THE REFLECTORS AS SHOWN ABOVE.



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHED AS SHOWN ABOVE.

NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS, WASHERS OR AN APPROVED BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON CENTER BARRIER OR IN THE MEDIAN SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE AMBER.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS ON THE OUTSIDE OF THE ROADWAY SHALL BE DOUBLE SIDED CRYSTAL.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS, WASHERS OR AN APPROVED BONDING AGENT.

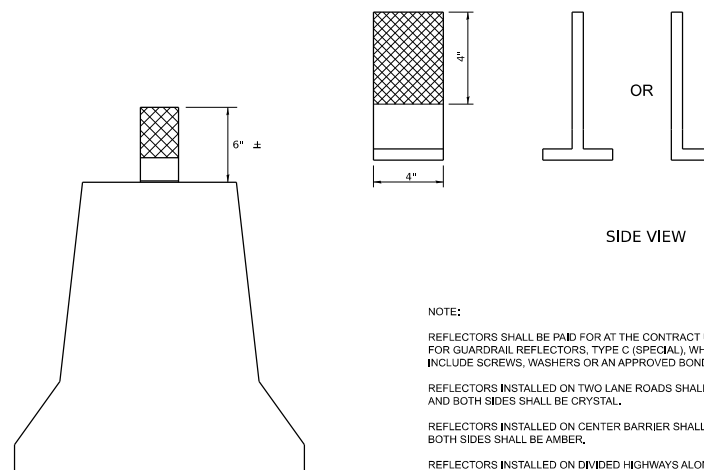
REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED AND BOTH SIDES SHALL BE CRYSTAL.

REFLECTORS INSTALLED ON CENTER BARRIER SHALL BE DOUBLE SIDE AND BOTH SIDES SHALL BE AMBER.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS ALONG THE OUTSIDE OF THE HIGHWAY SHALL BE DOUBLE SIDED CRYSTAL.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

## REFLECTORS MOUNTED ON BARRIER WALL



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

SCALE: SHEET OF SHEETS STA. TO STA.

CONTRACT NO. ILLINOIS FED. AID PROJECT

USER NAME = IDOTCIBK12	DESIGNED -	REVISED - 3-07-24
	DRAWN -	REVISED - 4-27-23
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED - 6-21-21
PLOT DATE = 3/12/2024	DATE -	REVISED -

# SLOTTED DRAIN PIPE

LOADING CONDITION	MAX. EXTENDER HEIGHT - "H"
H20/H25 * 750 PSI CONCRETE	19"

\* 125 PSI TIRE PRESSURE

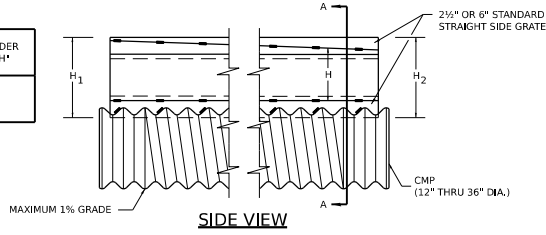
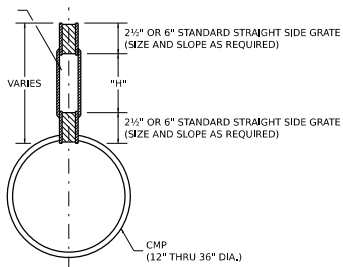


PLATE EXTENDERS  
7 GA. GALVANIZED PLATE  
PER ASTM A761  
SLOPE AS REQUIRED.



## SECTION A-A

### GENERAL

Class 51 Concrete shall be used throughout. This specification covers Slotted Drain used for the removal of water as shown on the plans. The Slotted Drain shall be Corrugated Pipe Culvert with Integral Slotted Drains. Before placing the concrete adjacent to the pipe, the slot shall be covered by either thin flat metal sheeting or by a board notched to fit over the grate bars. This covering must fit closely in the slot to prevent entry of concrete into the pipe. Paving over the slotted drain will then be one continuous operation over the protected drain. The protection for the drain slot shall then be removed. The pipe shall drain into the side of the inlet. The opening where the slot is removed shall be covered to prevent concrete from entering the pipe. The Corrugated Steel Pipe used in the Slotted Drain shall meet the requirements of AASHTO M36/ASTM A760. The CMP shall be ALUMINIZED STEEL Type 2. The diameter shall be as shown on the plans. Steel grating shall meet the galvanizing requirements of AASHTO M111. This work will be paid for at the contract unit price per foot for SLOTTED DRAIN of the pipe diameter specified WITH VARIABLE SLOT, or SLOTTED DRAIN, of the pipe diameter specified, WITH 6" SLOT, and shall include concrete and grating for depth specified on plans. Use approved end cap to prevent concrete entry into the pipe during gutter construction on the upstream end of the pipe.

### CONNECTIONS

The Corrugated Steel Pipe shall have a minimum of two rolled annular ends. The Slotted Drain bands shall be modified HUGGER Bands to secure the pipe and prevent infiltration of the backfill. When the Slotted Drain is banded together, the adjacent grates shall have a maximum 3" gap.

### GRATES

The grates shall be manufactured from ASTM A670, Grade 36 steel. The spacers and bearing bars (sides) shall be 3/16" material ±0.008". The spacers shall be on 6" centers and welded on both sides to each bearing bar (sides) with four (4) 1/4" x 1/4" long 3/16" fillet welds on each side of the bearing bar. The plate extender shall be 7 gage steel meeting ASTM A761. The engineer may call for tensile strength tests on the grate if the grate is not in compliance with the above spacer specifications. If tensile strength tests are called for, minimum results for an in-place spacer pulled perpendicular to the bearing bar shall be:  
T = 12,000 pounds for 2-1/2" grate  
T = 15,000 pounds for 6" grate

### GALVANIZING

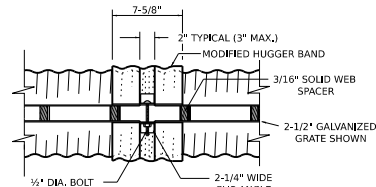
The grate and plate extenders shall be galvanized in accordance with ASTM A123 except with a 2 oz. galvanized coating.

### GRATE ATTACHED TO CSP

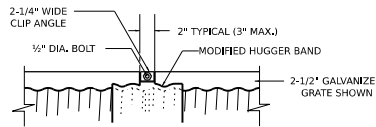
The grate shall be fillet welded with a minimum weld 1" long to the CSP on each side of the grate at every other corrugation.

### TOLERANCES - FINISHED SLOTTED DRAIN - 20' LENGTHS

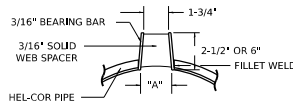
Vertical Bow = ± 3/8"  
Horizontal Bow = ± 5/8"  
Twist = ± 1/2"



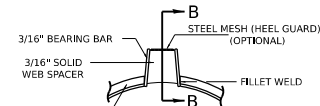
## TOP VIEW



## SIDE VIEW



## SECTION A-A STANDARD DETAIL



## SECTION A-A DETAIL WITH MESH

(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

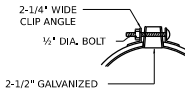
GAGE OF PIPE	STANDARD SIZES					
	DIAMETER OF PIPE					
12"	15"	18"	24"	30"	36"	
16	X	X	X	X	X	
14	X	X	X	X	X	
12	N.A.	N.A.	N.A.	N.A.	X X X	

GRATE TYPE	"A"	
	VERT	2-1/2"
TRAP	2-1/2"	2-1/4"
TRAP	6"	3"

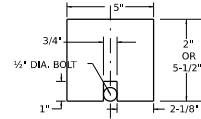
VERT = VERTICAL  
TRAP = TRAPEZOIDAL

### SLOTTED DRAIN NOTES

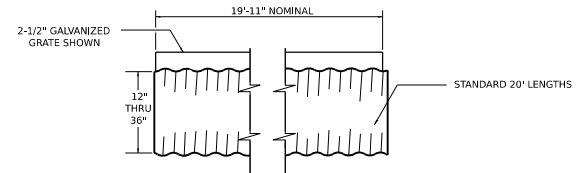
- GRATING IS AVAILABLE IN DEPTHS OF 2-1/2" AND 6".
- VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
- FOR 6" VERTICAL & TRAPEZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 4" TECHCO BAND ANGLE.
- DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- DIMENSIONS FOR H AND H<sub>S</sub> REQUIRED.
- H AND H<sub>S</sub> MEASURED FROM TOP OF GRATE TO BOTTOM OF GRADE.



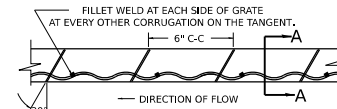
## END VIEW



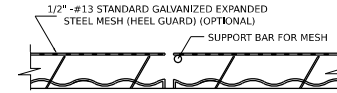
GAP PLATE (OPTIONAL)  
MAY BE PLACED DIRECTLY  
OVER BAND BOLT TO PROVIDE  
CONTINUOUS FORM FOR GROUTING.



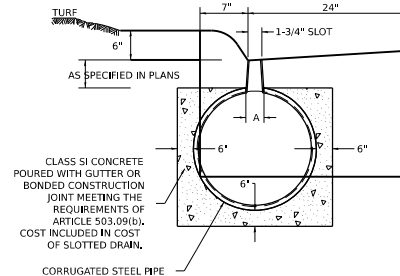
## TYPICAL PIPE SECTION



## GRATE WELDING DETAIL

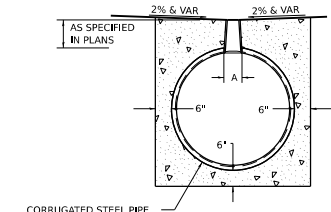


## SECTION B-B



## DETAIL FOR CURB & GUTTER

CLASS 51 CONCRETE  
POURED WITH GUTTER OR  
BONDED CONSTRUCTION  
JOINT MEETING THE  
REQUIREMENTS OF  
ARTICLE 503.09(b),  
COST INCLUDED IN COST  
OF SLOTTED DRAIN.



## DETAIL FOR CROSSOVERS, DRIVEWAYS, OR PARKING LOTS

ALL DIMENSIONS ARE IN INCHES UNLESS  
OTHERWISE NOTED.

PROJECT NO. 11-0000  
 DRAWING NO. 11-0000  
 SHEET NO. 11-0000

USER NAME = jdot@ibm.com	DESIGNED -	REVISED - 1-05-16
	DRAWN -	REVISED - 6-27-14
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED - 10-18-11
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
CONTRACT NO.					
ILLINOIS FED. AID PROJECT					



# 40' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**

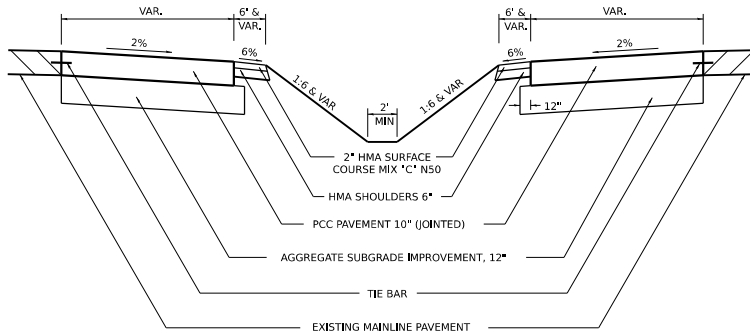
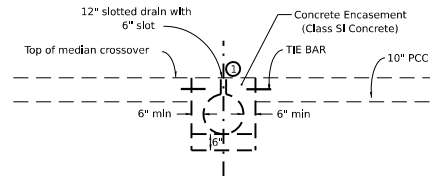
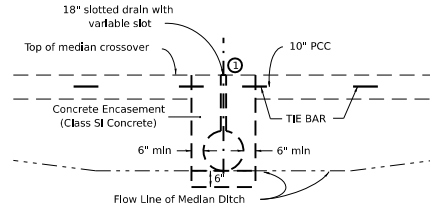


TABLE OF OFFSETS AND DROPS						
Distance feet from location station	0	60'	75'	100'	125'	143.73'
Offsets feet from inside edge of pavement	20'	18'	15.32'	11.37'	8.06'	6.00'
Drop feet from inside edge of pavement	0.0'	0.0'	0.0'	0.0'	0.0'	0.0'



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**SECTION A-A**  
(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

**GENERAL NOTES**

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1340.88 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1250.80 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(45.1 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(402.52 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

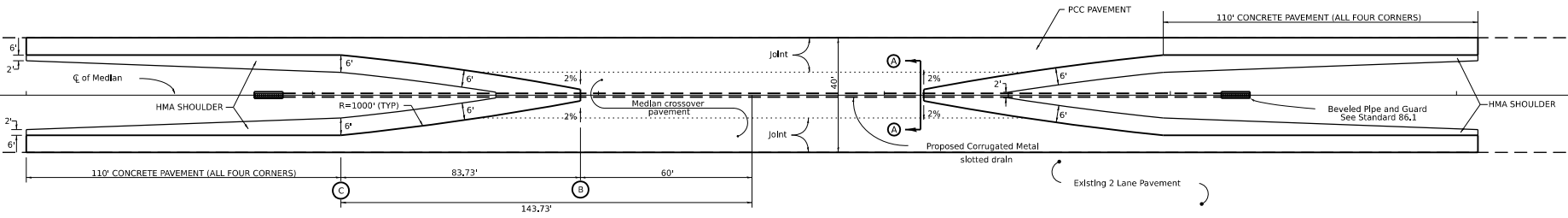
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).



**TYPICAL PLAN**

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

11/16/2024 10:01 AM  
 PLOT DATE = 3/12/2024  
 PLOT SCALE = 0.258" = 1'-0"  
 PLOT DATE = 3/12/2024

USER NAME = ISOTDIBK12	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
	CHECKED -	REVISED - 8-27-13
	DATE -	REVISED - 12-07-10

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.

# 50' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**

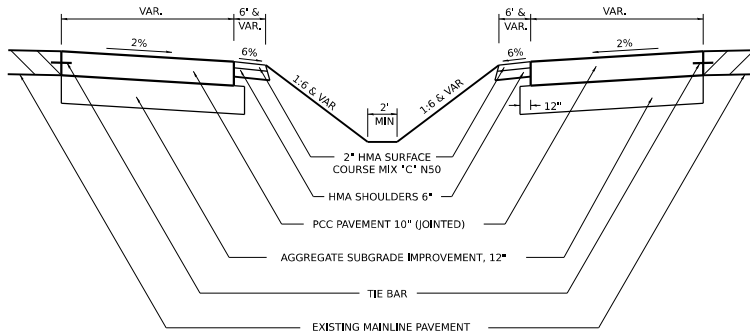
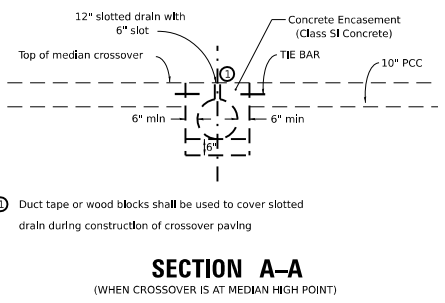
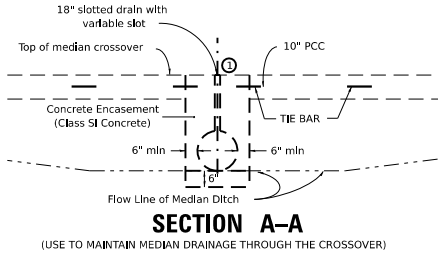


TABLE OF OFFSETS AND DROPS							
Distance feet from location station	0'	53'	75'	100'	125'	150.00'	161.73'
Offsets feet from inside edge of pavement	25'	23'	18.57'	14.14'	10.37'	7.25'	6.00'
Drop feet from inside edge of pavement	0.5'	0.46'	0.37'	0.28'	0.021'	0.15'	0.12'

**GENERAL NOTES**

- Construction of median crossover shall conform to the requirement of current Standard Specifications.
- Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.
- Pavement, subbase, & shoulder quantities are:
 

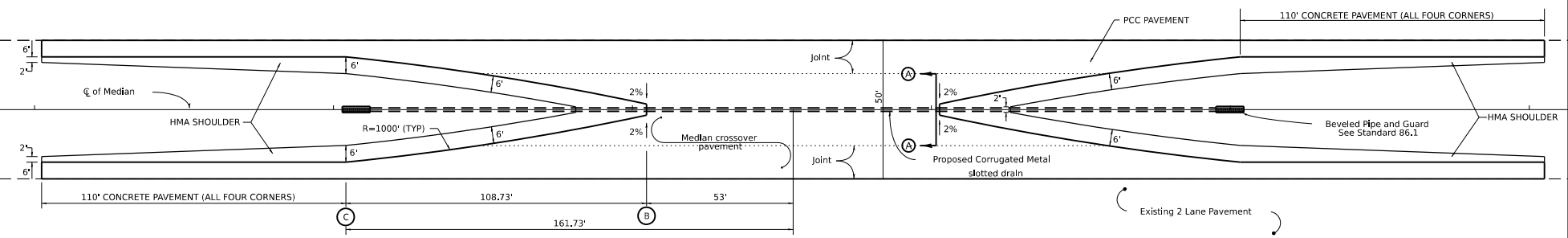
(1634.94 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1533.52 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(52.9 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(472.79 Sq. Yds.)	HMA SHOULDERS 6"
- Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.
- See District Standard 61.2 or 68.1 for details for the slotted drain.
- See District Standard 86.1 for details for the beveled pipe & guard.
- The crossover is designed using a 45mph design speed.
- The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.
- The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106
- The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**SECTION A-A**

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)



**TYPICAL PLAN**

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

11/16/2024  
 11/16/2024  
 11/16/2024

USER NAME = jsoot@ibrd2	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 12-07-10

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				



# 64' SINGLE LANE MEDIAN CROSSOVER (POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**

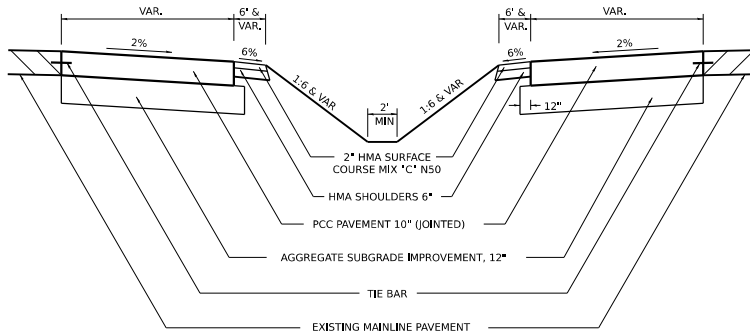
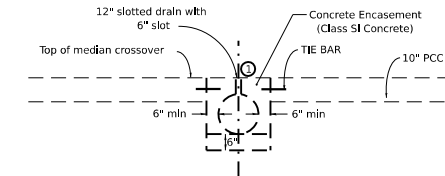
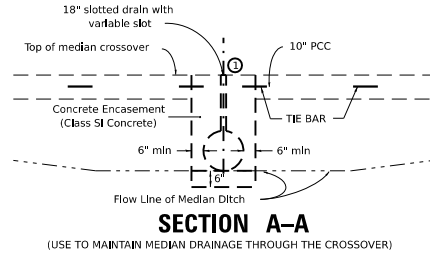


TABLE OF OFFSETS AND DROPS									
Distance feet from location station	0	46'	50'	75'	100'	125'	150'	175'	185.20'
Offsets feet from inside edge of pavement	32'	30'	29.02'	23.32'	18.28'	13.90'	10.17'	7.08'	6'
Drop feet from inside edge of pavement	0.64'	0.6'	0.58'	0.47'	0.37'	0.28'	0.20'	0.14'	0.12'

**GENERAL NOTES**

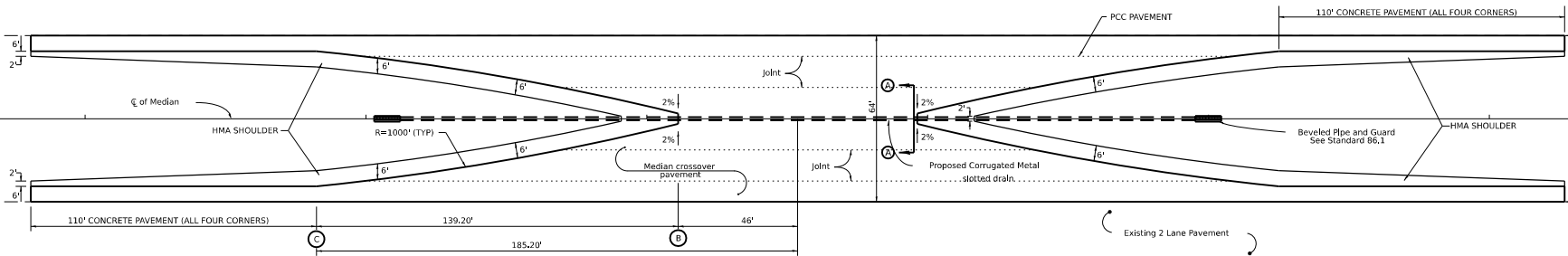
- Construction of median crossover shall conform to the requirement of current Standard Specifications.
- Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.
- Pavement, subbase, & shoulder quantities are:
 

(2071.96 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1956.64 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(62.5 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(558.24 Sq. Yds.)	HMA SHOULDERS 6"
- Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.
- See District Standard 61.2 or 68.1 for details for the slotted drain.
- See District Standard 86.1 for details for the beveled pipe & guard.
- The crossover is designed using a 45mph design speed.
- The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.
- The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106
- The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**SECTION A-A  
(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)**



**TYPICAL PLAN**

- Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.
- Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.
- TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

PROJECT NO. = 110010001  
 PLAN NO. = 110010001-2 Standard  
 PLOT DATE = 3/12/2024

USER NAME = jdot@ibrd2	DESIGNED -	REVISED - 2-26-19	
	DRAWN -	REVISED - 1-05-16	
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 8-27-13	
PLOT DATE = 3/12/2024	DATE -	REVISED - 12-07-10	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				

# 40' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION

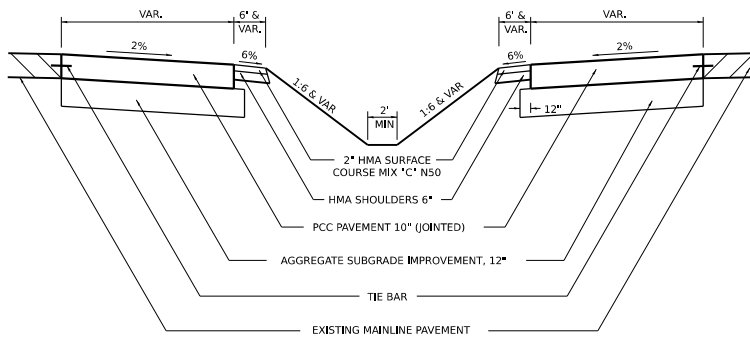


TABLE OF OFFSETS AND DROPS						
Distance feet from location station	0	77'	100'	125'	150'	183.23
Offsets feet from inside edge of pavement	20'	18'	14.79'	11.69'	8.98'	6'
Drop feet from inside edge of pavement	0.4'	0.36'	0.3'	0.23'	0.18'	0.12'

## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1709.35 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1596.03 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(57.1 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(509.64 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

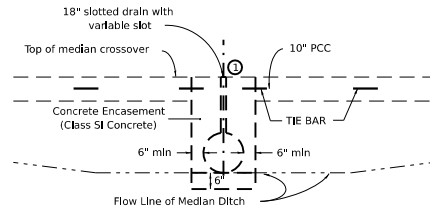
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

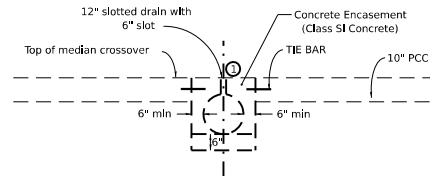
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

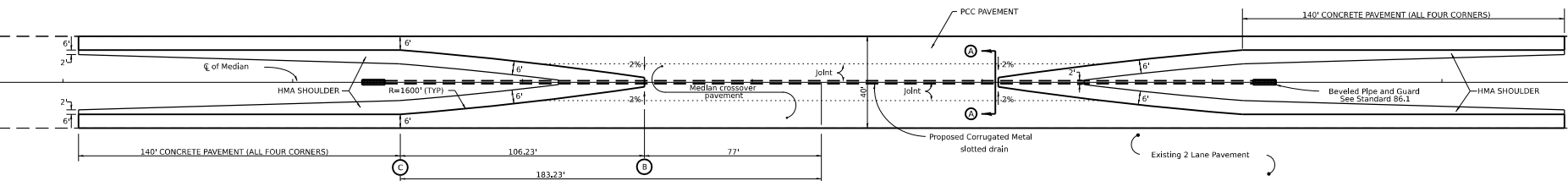
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

Ⓢ Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

I:\Projects\2024\40' Single Lane Median Crossover\Drawings\40' Single Lane Median Crossover.dwg  
 PLOT DATE: 3/12/2024

USER NAME = ISOT/Chad2	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED - 6-27-14
PLOT DATE = 3/12/2024	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.

# 50' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION

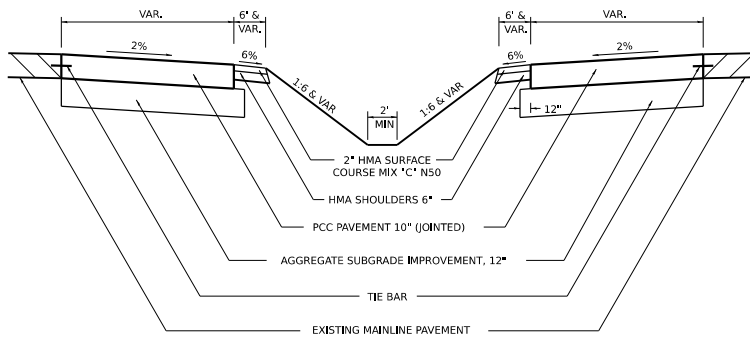


TABLE OF OFFSETS AND DROPS									
Distance feet from location station	0'	68'	75'	100'	125'	150'	175'	200'	206.02'
Offsets feet from inside edge of pavement	25'	23'	21.84'	17.97'	14.50'	11.43'	8.76'	6.49'	6'
Drop feet from inside edge of pavement	0.5'	0.46'	0.44'	0.36'	0.29'	0.23'	0.175'	0.13'	0.12'

## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2084.0 Sq. Yds.) (1956.55 Sq. Yds.) (67.1 Tons) (598.67 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12" P.C.C. PAVEMENT 10" (JOINTED) 2" HMA SURFACE COURSE, MIX "C", N50 HMA SHOULDERS 6"
---	---

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

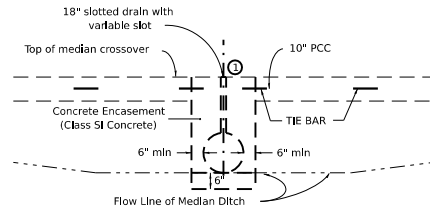
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 14' front slope can be constructed from each side of pipe guard to the HMA shoulder.

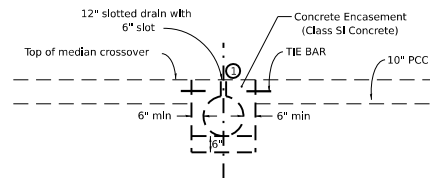
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

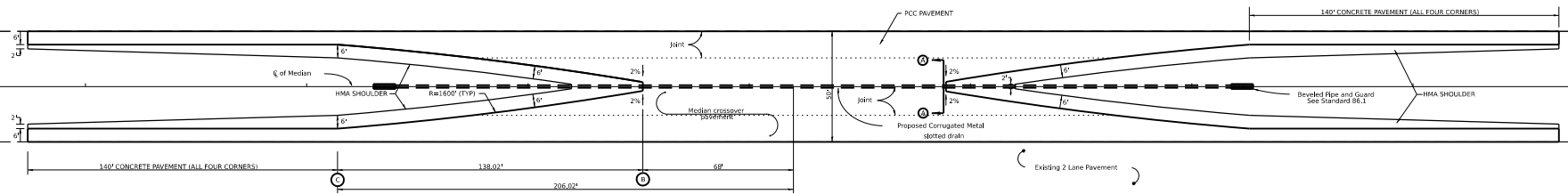


SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

## TYPICAL PLAN



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

USER NAME = ISOT/06/12	DESIGNED -	REVISED - 2-26-19
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED - 1-05-16
PLOT DATE = 3/12/2024	CHECKED -	REVISED - 6-27-14
	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

# 64' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION

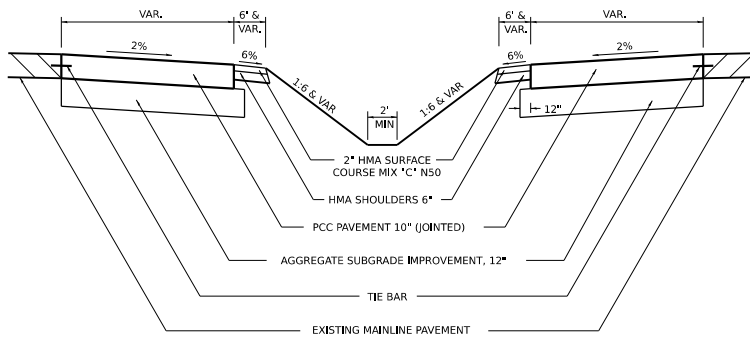


TABLE OF OFFSETS AND DROPS										
Distance feet from location station	0	60'	75'	100'	125'	150'	175'	200'	225'	236.83'
Offsets feet from inside edge of pavement	32'	30'	27.18'	22.80'	18.84'	15.27'	12.11'	9.35'	6.98'	6'
Drop feet from inside edge of pavement	0.64'	0.6'	0.54'	0.456'	0.377'	0.31'	0.24'	0.187'	0.139'	0.12'

## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2651.79 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(2509.74 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(79.2 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(707.03 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

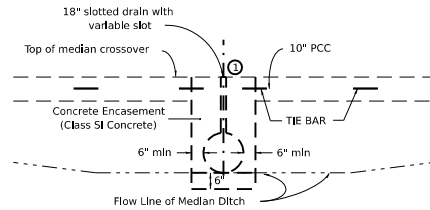
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

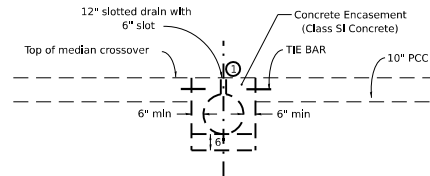
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

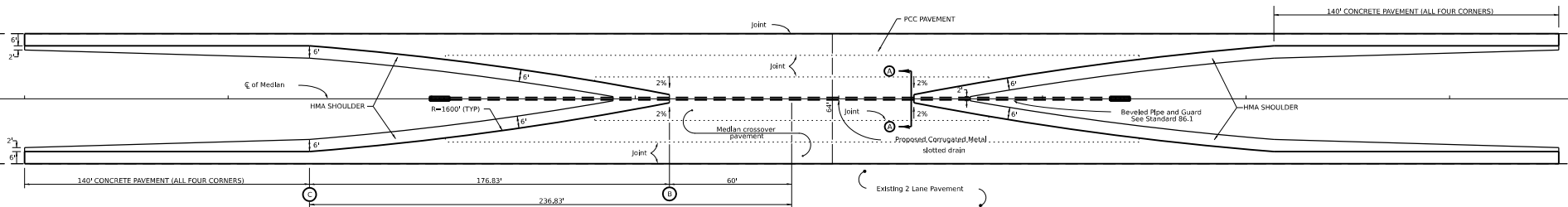


SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

## TYPICAL PLAN



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

USER NAME = ISOT/Chank2	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 6-27-14
PLOT DATE = 3/12/2024	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

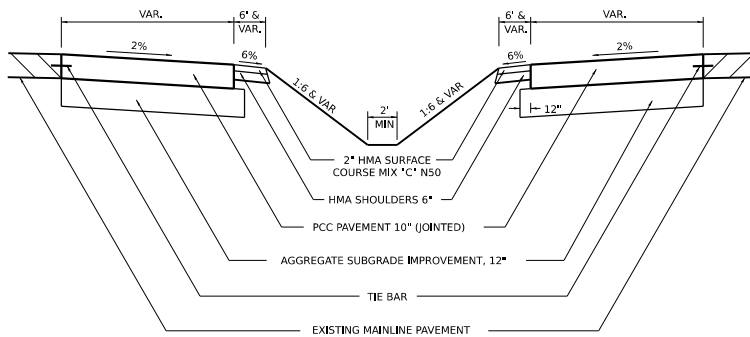
REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						CONTRACT NO.				
						ILLINOIS FED. AID PROJECT				

# 88' SINGLE LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION



GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(3704.06 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(3535.98 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(96.79 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(864.23 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

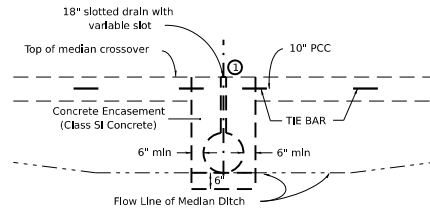
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

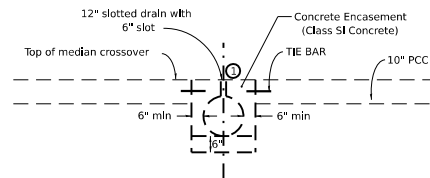
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



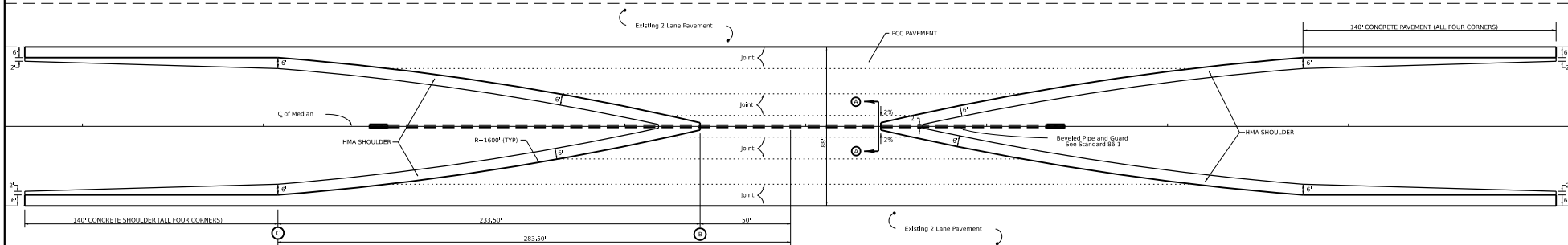
SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

TABLE OF OFFSETS AND DROPS

Distance feet from location station	0	50'	75'	100'	125'	150'	175'	200'	225'	250'	275'	283.50'
Offsets feet from inside edge of pavement	44'	42'	36.44'	31.30'	26.57'	22.25'	18.34'	14.83'	11.72'	9.01'	6.70'	6'
Drop feet from inside edge of pavement	0.88'	0.84'	0.73'	0.63'	0.53'	0.43'	0.37'	0.30'	0.23'	0.18'	0.13'	0.12'



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

USER NAME = ISOT/06/12	DESIGNED -	REVISED - 2-26-19
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED - 1-05-16
PLOT DATE = 3/12/2024	CHECKED -	REVISED - 6-27-14
	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

# 40' TWO LANE MEDIAN CROSSOVER (POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**

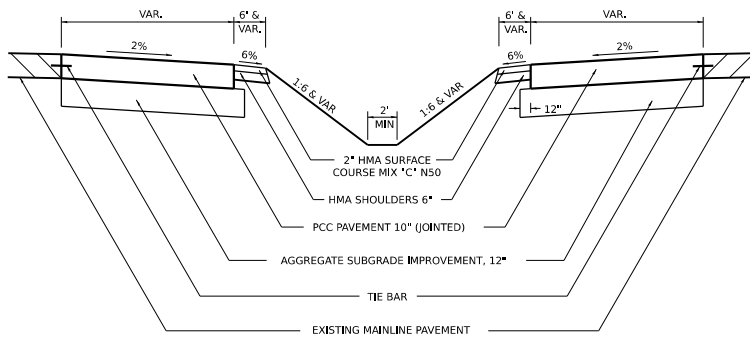


TABLE OF OFFSETS AND DROPS						
Distance feet from location station	0	76.95	100'	125'	150'	168.69'
Offsets feet from inside edge of pavement	20'	18'	14.22'	10.70'	7.79'	6.00'
Drop feet from inside edge of pavement	0.4'	0.36'	0.28'	0.21'	0.16'	0.12'

**GENERAL NOTES**

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(1,685.28 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(1,572.43 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(57.28 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(511.45 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

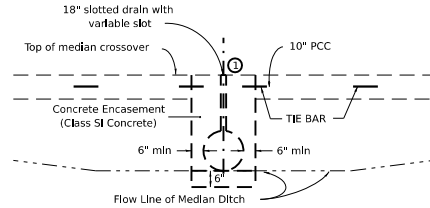
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

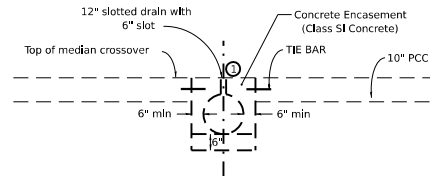
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



**SECTION A-A**

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

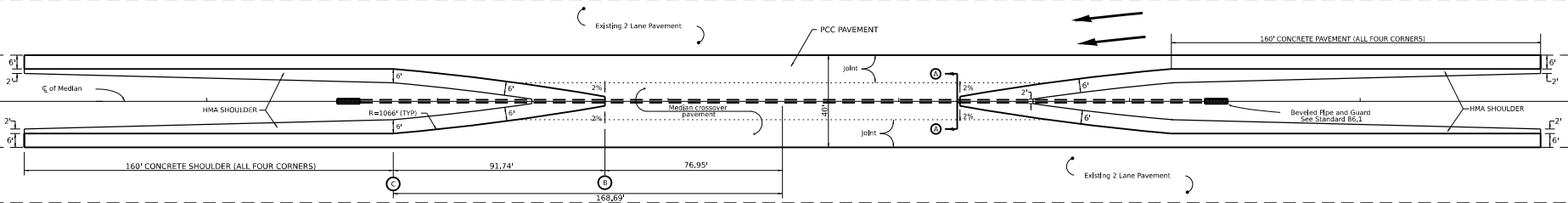


**SECTION A-A**

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

Ⓢ Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**TYPICAL PLAN**



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

USER NAME = ISOT/Chick2	DESIGNED -	REVISED - 2-26-19	
	DRAWN -	REVISED - 1-05-16	
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED - 8-27-13	
PLOT DATE = 3/12/2024	DATE -	REVISED - 4-04-11	

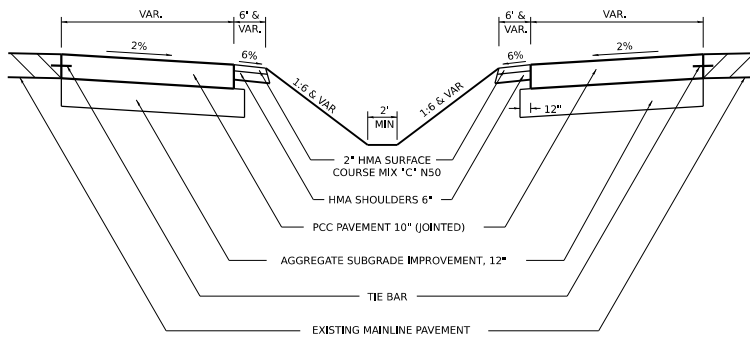
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
ILLINOIS FED. AID PROJECT										

# 50' TWO LANE MEDIAN CROSSOVER (POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**



**TABLE OF OFFSETS AND DROPS**

Distance feet from location station	0	65.72	75	100	125	150	175	188.01
Offsets feet from inside edge of pavement	25'	23'	21.95'	17.35'	13.37'	9.99'	7.21'	6.00'
Drop feet from inside edge of pavement	0.5'	0.46'	0.44'	0.35'	0.27'	0.20'	0.14'	0.12'

**GENERAL NOTES**

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2029.23 Sq. Yds.) (1904.29 Sq. Yds.) (65.64 Tons) (586.07 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12" P.C.C. PAVEMENT 10" (JOINTED) 2" HMA SURFACE COURSE, MIX "C", N50 HMA SHOULDERS 6"
---	---

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

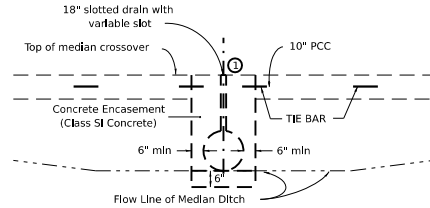
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 14' front slope can be constructed from each side of pipe guard to the HMA shoulder.

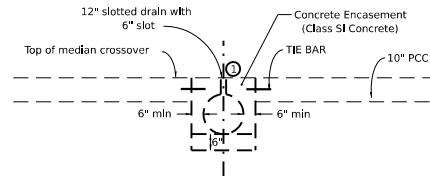
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30' cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



**SECTION A-A**

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

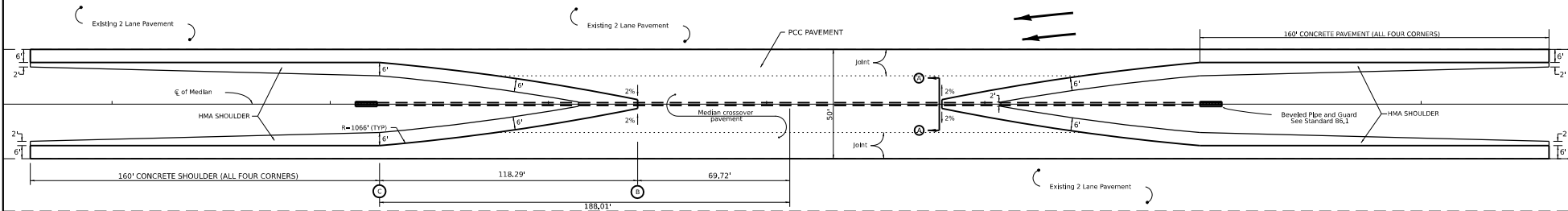


**SECTION A-A**

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**TYPICAL PLAN**



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

USER NAME = ISOTD\brk2	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" / ft.	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 4-04-11

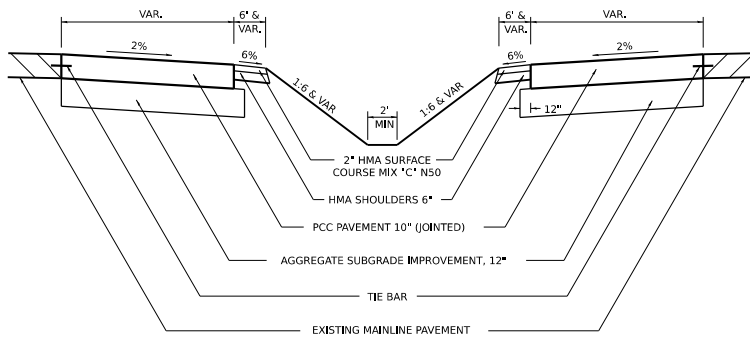
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

# 64' TWO LANE MEDIAN CROSSOVER (POSTED SPEED LIMIT 55 MPH, WORK ZONE SPEED LIMIT 45 MPH)

**TYPICAL SECTION**



**TABLE OF OFFSETS AND DROPS**

Distance feet from location station	0	62.41'	75'	100'	125'	150'	175'	200'	212.87'
Offsets feet from inside edge of pavement	32'	30'	27.14'	21.82'	17.33'	13.35'	9.97'	7.20'	6.00'
Drop feet from inside edge of pavement	0.64'	0.60'	0.54'	0.44'	0.35'	0.27'	0.20'	0.14'	0.12'

**GENERAL NOTES**

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2534.76 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(2394.89 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(75.73 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(676.15 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

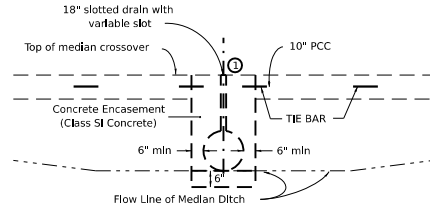
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 45mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

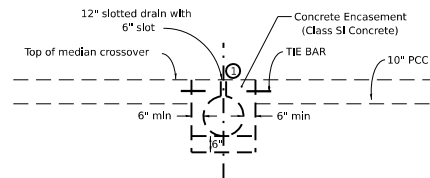
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



**SECTION A-A**

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

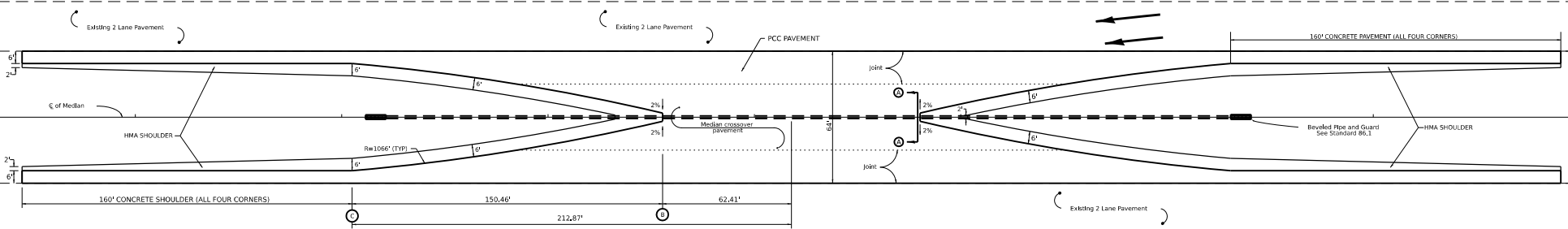


**SECTION A-A**

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

**TYPICAL PLAN**



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

USER NAME = ISOT/06/12	DESIGNED -	REVISED - 2-26-19
	DRAWN -	REVISED - 1-05-16
PLOT SCALE = 0.258" = 1'-0"	CHECKED -	REVISED - 8-27-13
PLOT DATE = 3/12/2024	DATE -	REVISED - 4-04-11

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

PROJECT NO. = 11010101  
 PLAN NO. = 11010101-2 Standard  
 PLOT DATE = 3/12/2024



# 40' TWO LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION

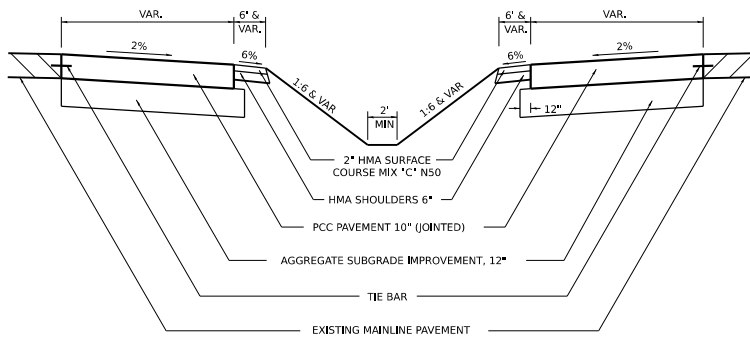


TABLE OF OFFSETS AND DROPS							
Distance feet from location station	0	100.33	125	150	175	200	220.57
Offsets feet from inside edge of pavement	20'	18'	14.88'	12.07'	9.60'	7.48'	6.00'
Drop feet from inside edge of pavement	0.40'	0.36'	0.30'	0.24'	0.19'	0.15'	0.12'

## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2142.56 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(2003.87 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(71.01 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(634.04 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

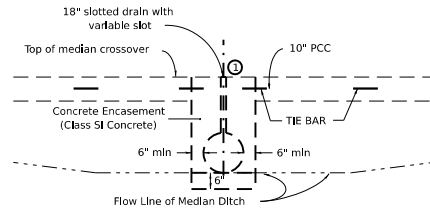
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

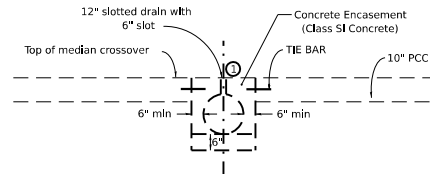
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

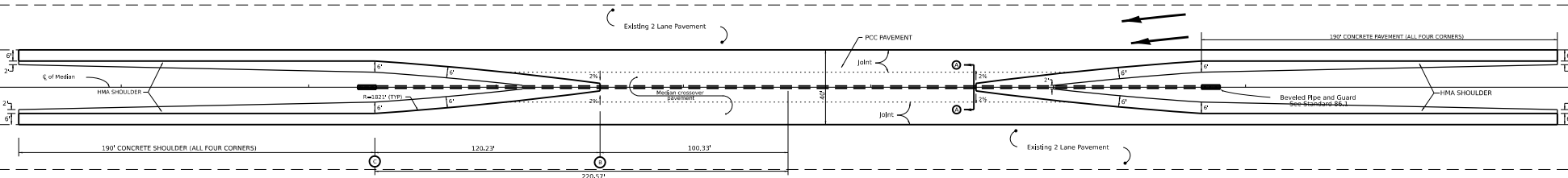


SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

## TYPICAL PLAN



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

USER NAME = ISOT/Chank2	DESIGNED -	REVISED - 2-26-19
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED - 1-05-16
PLOT DATE = 3/12/2024	CHECKED -	REVISED - 6-27-14
	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

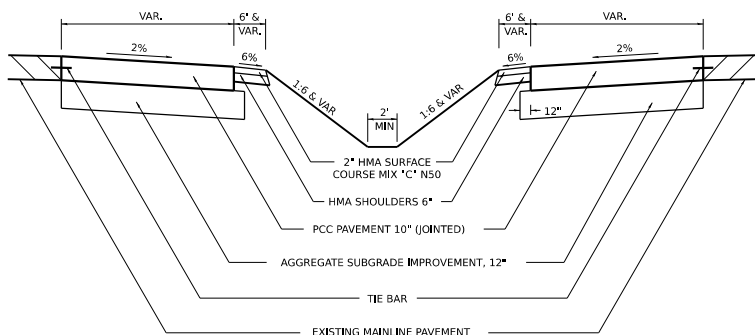
REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
									CONTRACT NO.	
ILLINOIS FED. AID PROJECT										

# 50' TWO LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION



## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(2593.23 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(2438.79 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(81.92 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(731.46 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

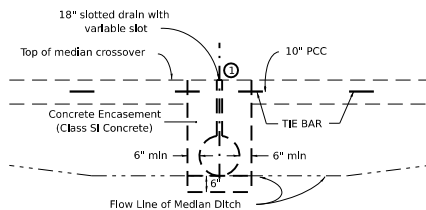
See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

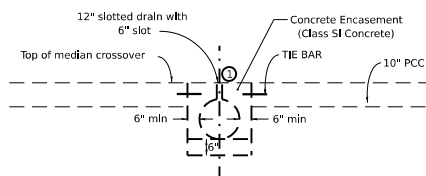
The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).



SECTION A-A

(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

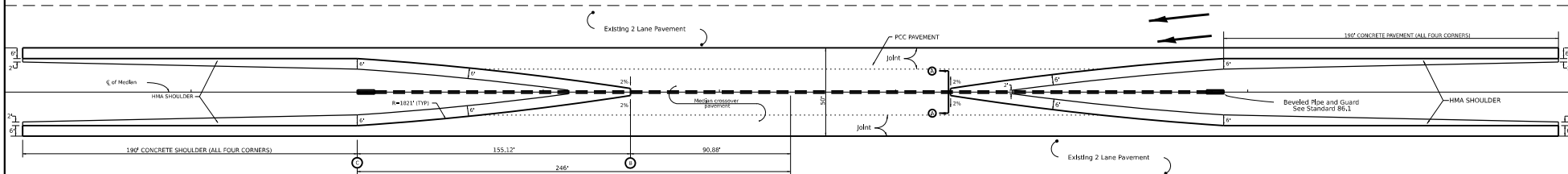


SECTION A-A

(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

Ⓢ Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

Distance feet from location station	0	90.88	100	125	150	175	200	225	246
Offsets feet from inside edge of pavement	25'	23'	21.63'	18.10'	14.93'	12.11'	9.64'	7.52'	6.00'
Drop feet from inside edge of pavement	0.50'	0.46'	0.43'	0.36'	0.30'	0.24'	0.19'	0.15'	0.12'



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL

USER NAME = ISOT/02/01/2	DESIGNED -	REVISED - 2-26-19
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED - 1-05-16
PLOT DATE = 3/12/2024	CHECKED -	REVISED - 6-27-14
	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

# 64' TWO LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

**TYPICAL SECTION**

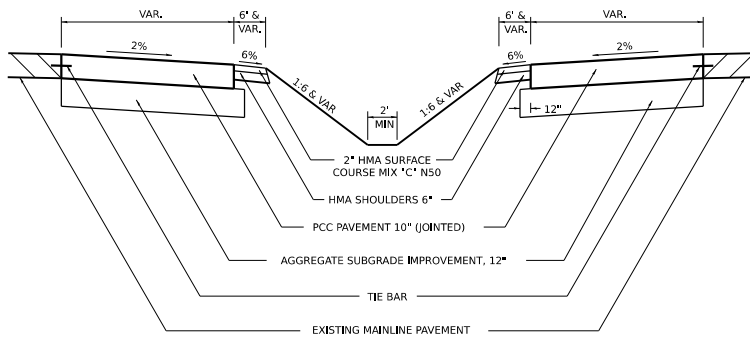


TABLE OF OFFSETS AND DROPS											
Distance feet from location station	0	81.32	100'	125'	150'	175'	200'	225'	250'	275'	278.80'
Offsets feet from inside edge of pavement	32'	30'	26.79'	22.80'	19.16'	15.88'	12.95'	10.37'	8.14'	6.26'	6.00'
Drop feet from inside edge of pavement	0.64'	0.60'	0.54'	0.46'	0.38'	0.32'	0.26'	0.21'	0.16'	0.13'	0.12'

**GENERAL NOTES**

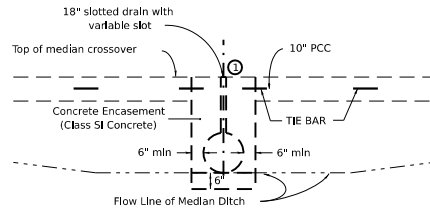
Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

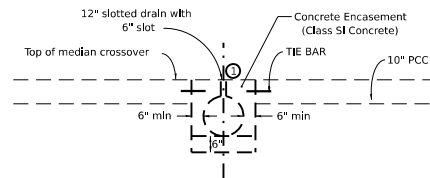
Pavement, subbase, & shoulder quantities are:

(3256.59 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(3082.80 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(95.09 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(848.99 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.



**SECTION A-A**  
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)



**SECTION A-A**  
(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

See District Standard 61.2 or 68.1 for details for the slotted drain.

See District Standard 86.1 for details for the beveled pipe & guard.

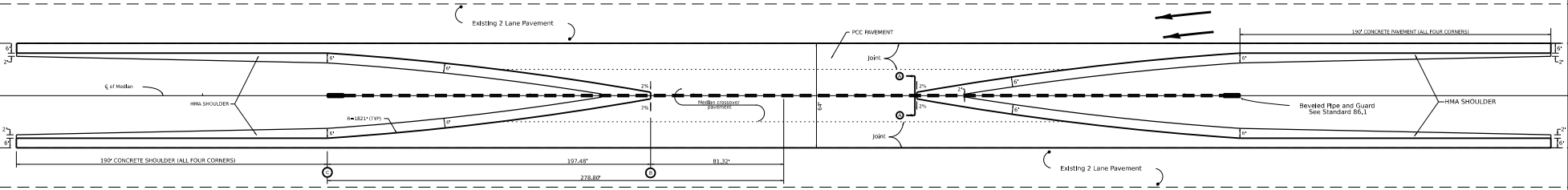
The crossover is designed using a 55mph design speed.

The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (JOINTED) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (JOINTED) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (JOINTED).

**TYPICAL PLAN**



Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

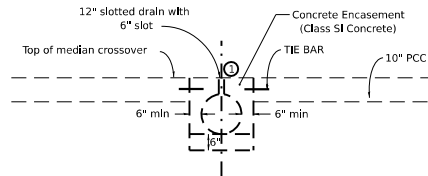
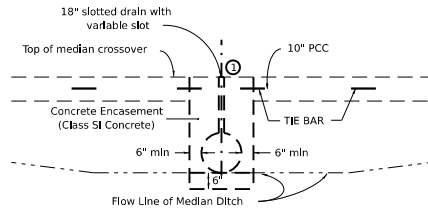
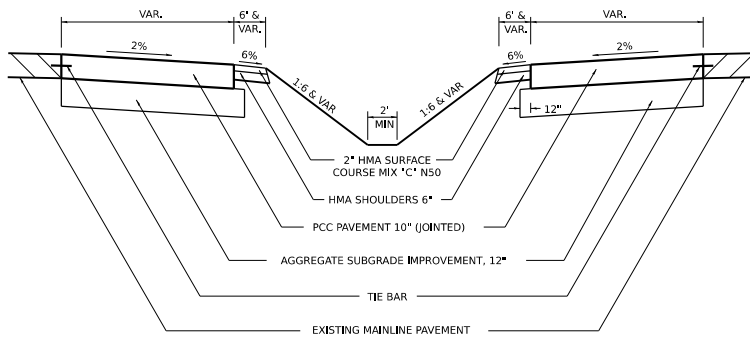
PROJECT NO. = 120101001  
 DRAWING NO. = 2-Standard  
 PLOT DATE = 3/12/2024

USER NAME = ISOTOIBK12 PLOT SCALE = 0.258" / ft. PLOT DATE = 3/12/2024	DESIGNED - DRAWN - CHECKED - DATE -	REVISED - 2-26-19 REVISED - 1-05-16 REVISED - 6-27-14 REVISED - 8-27-13	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. SITE: SECTION: COUNTY: CONTRACT NO.:	TOTAL SHEETS: NO. ILLINOIS FED. AID PROJECT
--	--	--	---	---------------------------------------	--	--

# 88' TWO LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)

TYPICAL SECTION



① Duct tape or wood blocks shall be used to cover slotted drain during construction of crossover paving

SECTION A-A  
(WHEN CROSSOVER IS AT MEDIAN HIGH POINT)

## GENERAL NOTES

Construction of median crossover shall conform to the requirement of current Standard Specifications.

Slotted drain shall be constructed of 14 or 16 gauge corrugated metal roadway pipe modified to accommodate slotted drain as shown.

Pavement, subbase, & shoulder quantities are:

(4481.22 Sq. Yds.)	AGGREGATE SUBGRADE IMPROVEMENT, 12"
(4279.37 Sq. Yds.)	P.C.C. PAVEMENT 10" (JOINTED)
(114.14 Tons)	2" HMA SURFACE COURSE, MIX "C", N50
(1019.14 Sq. Yds.)	HMA SHOULDERS 6"

Elbows and Caps shall be considered included to the SLOTTED DRAIN 12" WITH 6" SLOT.

See District Standard 61.2 or 68.1 for details for the slotted drain.

See District Standard 86.1 for details for the beveled pipe & guard.

The crossover is designed using a 55mph design speed.

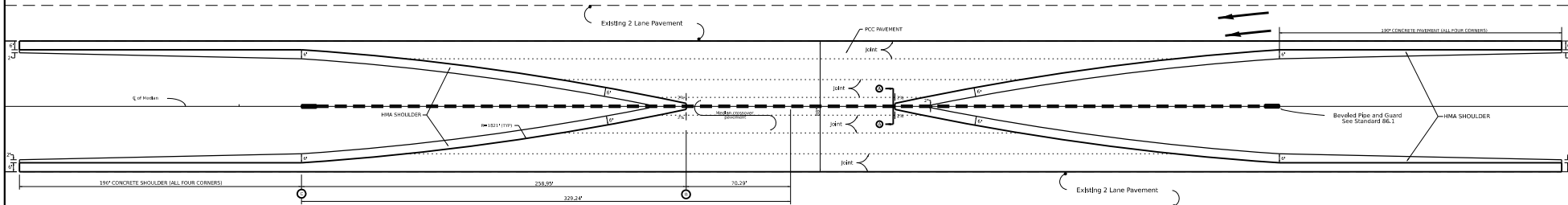
The end of the pipe guard shall be set where a minimum 1:4 front slope can be constructed from each side of pipe guard to the HMA shoulder.

The PCC Pavement 10" (Jointed) shall be constructed according to Section 420 of the Standard Specifications and Highway Standards 420001, 420101, & 420106

The PCC Pavement 10" (Jointed) shall be tied to adjacent existing concrete pavement and the concrete encasement for the slotted drain. The tie bars shall be No.6 bars 24" long @ 30" cts. and installed according to the applicable portions of Article 420.05(b) of the Standard Specifications. The cost of the bars to be included in the cost of the PCC Pavement 10" (Jointed).

TABLE OF OFFSETS AND DROPS

Distance feet from location station	0	70.25' ①	75'	100'	125'	150'	175'	200'	225'	250'	275'	300'	325'	329.24' ②
Offsets feet from inside edge of pavement	44'	42'	41.00'	35.93'	31.23'	26.86'	22.86'	19.22'	15.94'	13.00'	10.42'	8.18'	6.29'	6.00'
Drops feet from inside edge of pavement	0.88'	0.84'	0.82'	0.72'	0.62'	0.54'	0.46'	0.38'	0.32'	0.26'	0.21'	0.16'	0.13'	0.12'



TYPICAL PLAN

Unless otherwise specified, when the median crossover is to be removed, the Contractor shall be required to saw full-depth along the shoulder line 6' from edge of pavement. The 6' adjacent to the edge of pavement shall remain in place and be used as shoulders. The cost of Sawing shall be included in the Pavement Removal.

Longitudinal joints shall be sawed at a max 12' width. All joints shall be sealed.

TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

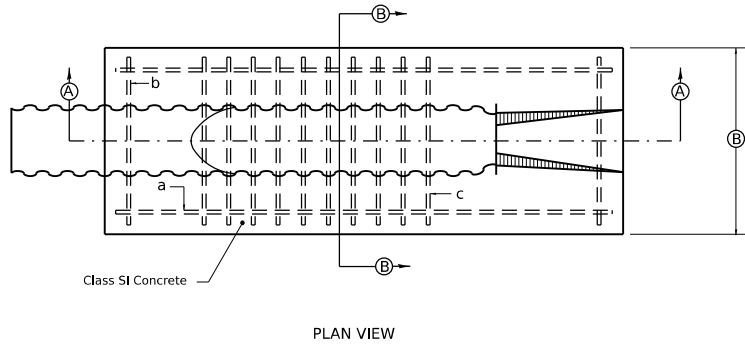
USER NAME = ISOTC/bmk2	DESIGNED -	REVISED - 2-26-19
PLOT SCALE = 0.258" / ft.	DRAWN -	REVISED - 1-05-16
PLOT DATE = 3/12/2024	CHECKED -	REVISED - 6-27-14
	DATE -	REVISED - 8-27-13

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. SITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
										CONTRACT NO.
										ILLINOIS FED. AID PROJECT

# BEVELED PIPE & GUARD DETAIL FOR MEDIAN CROSSOVER



12 PIPE REINFORCING SCHEDULE			
Mark Req'd	Bar Size	Length	No.
a	5	110	2
b	5	32	2
c	8	34	10

18 PIPE REINFORCING SCHEDULE			
Mark Req'd	Bar Size	Length	No.
a	5	162	2
b	5	38	2
c	8	40	18

## GENERAL NOTES:

Details shown hereon are for the construction of beveled pipe and guard. Alternate designs, methods of construction or materials may be submitted to the Engineer for approval. All methods of construction and materials involved shall conform to current Standard Specifications.

Reinforcing steel used in construction of "Beveled Pipe and Guard" shall be deformed bars meeting the requirements of Article 1006.10 of the Standard Specifications. All steel bars shall be hot-dip galvanized in accordance with ASTM A 123 specifications.

Concrete used in construction of the beveled pipe and guard shall be Class "SI" Concrete.

The corrugated metal pipe shall be cut to fit the 1:8 foreslope. Slots shall be cut into the C.M.P. for placement of the 'b' and 'c' bars. After the foreslope has been placed, the 'b' and 'c' bars shall be fitted into the slots cut in the C.M.P., so they will be in proper position when the concrete collar is poured.

This work shall be paid for at the contract unit price per Each for "Beveled Pipe and Guard", as shown hereon and as directed by the Engineer.

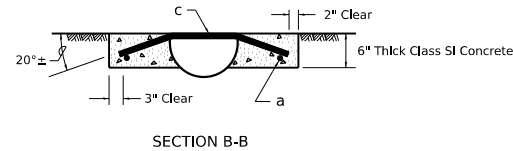
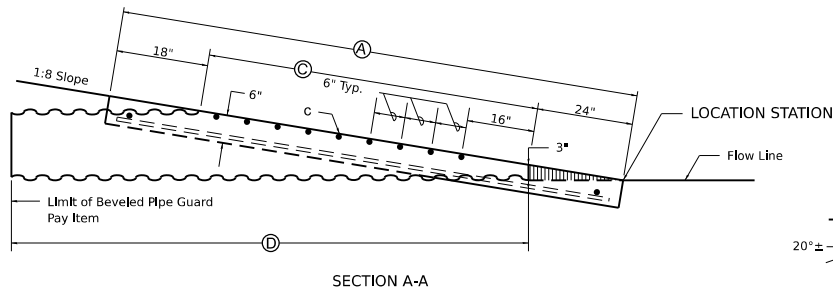
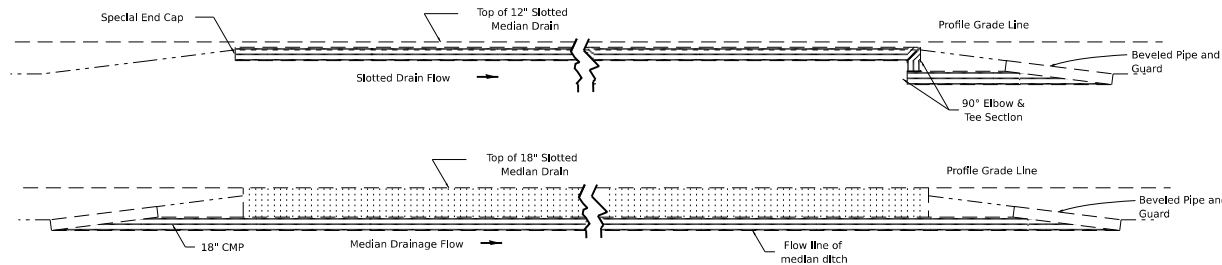


TABLE OF DIMENSIONS				
PIPE SIZE	A	B	C	D
12	9'-6"	36	6'	10'
18	13'-10"	42	10'-4"	14'-10"

## TYPICAL SECTION THRU CENTERLINE OF MEDIAN CROSSOVER



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

PROJECT NO. = 1107010001  
 DRAWING NO. = 1107010001-2  
 PLOT DATE = 3/12/2024

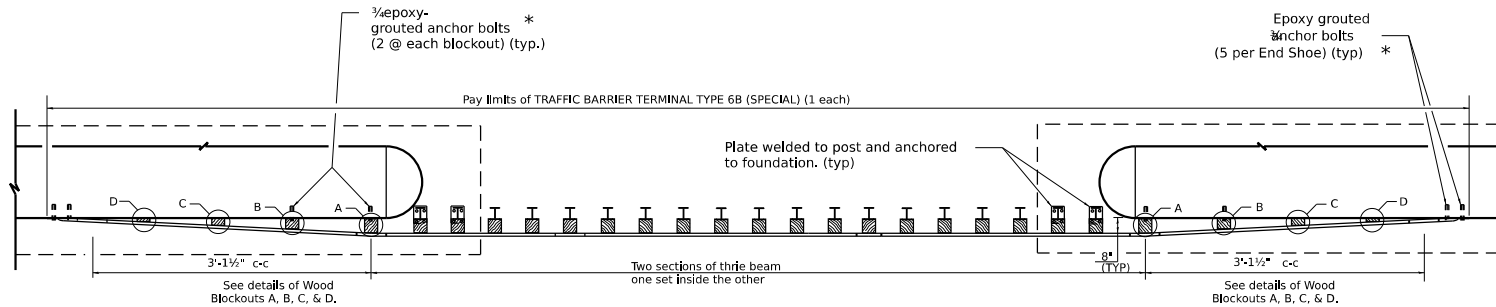
USER NAME = jdot@ibm2	DESIGNED -	REVISED - 5-27-09
	DRAWN -	REVISED -
PLOT SCALE = 0.258"/ft.	CHECKED -	REVISED -
PLOT DATE = 3/12/2024	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

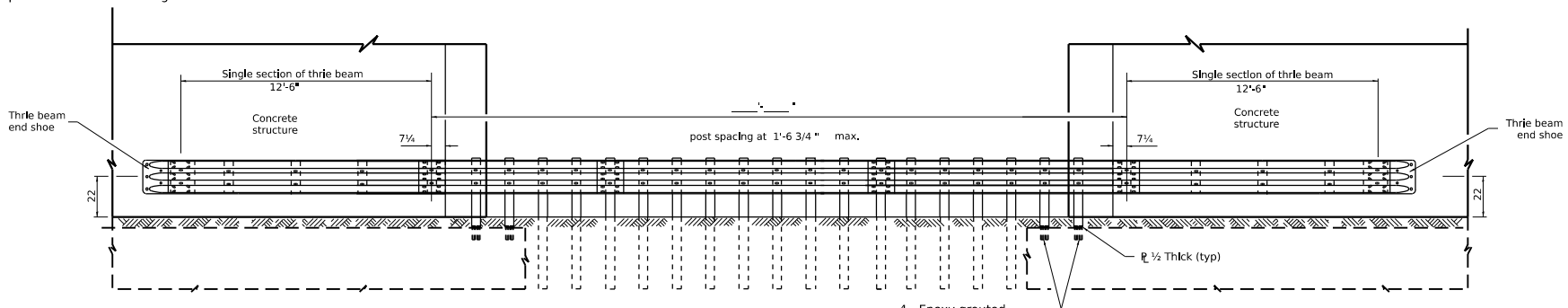
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	F.A. RTEL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.										
ILLINOIS FED. AID PROJECT										

BEVELED PIPE & GUARD DETAIL FOR MEDIAN CROSSOVER



**PLAN**

\* With standard washers. After tightening, cut the anchor bolts flush with the nuts and damage the nuts to prevent them from loosening.



**ELEVATION**

**GENERAL NOTES**

This work shall be done according to Section 631 of the Standard Specifications and this detail.

See Standard 630001 for details of guardrail not shown.

Thrie beam rail shall be bolted to block-out at all posts.

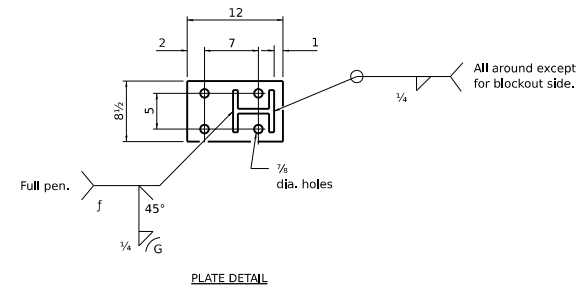
Posts located above pier foundation shall have plate attached to post and anchored to foundation.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches unless otherwise shown.

The Traffic barrier Terminal, Type 6B (Special) will be measured for payment, complete in place, in units of each.

This work shall be paid for at the contract unit price per each for TRAFFIC BARRIER TERMINAL, TYPE 6B (SPECIAL).



**PLATE DETAIL**

PROJECT: I-55/US 41 Bypass  
 DRAWN BY: J. J. B. / J. J. B.  
 PLOT DATE: 3/12/2024

USER NAME = jscot@ibm2	DESIGNED -	REVISED - 10-18-11
PLOT SCALE = 0.258"/ft.	DRAWN -	REVISED -
PLOT DATE = 3/12/2024	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REGION 2 / DISTRICT 2 STANDARD**

SCALE: SHEET OF SHEETS STA. TO STA.

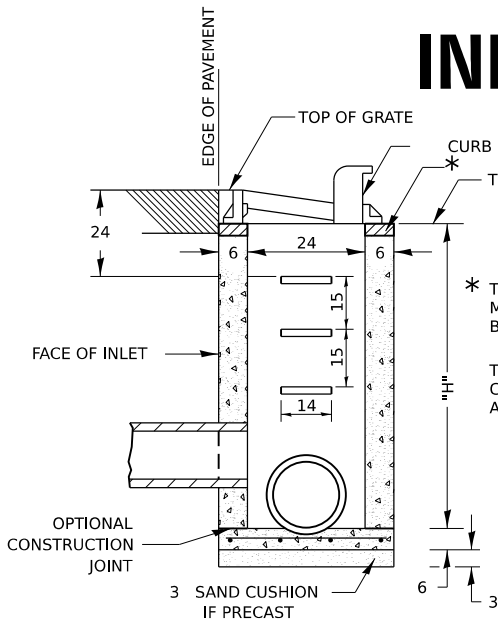
F.A. RTEL.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



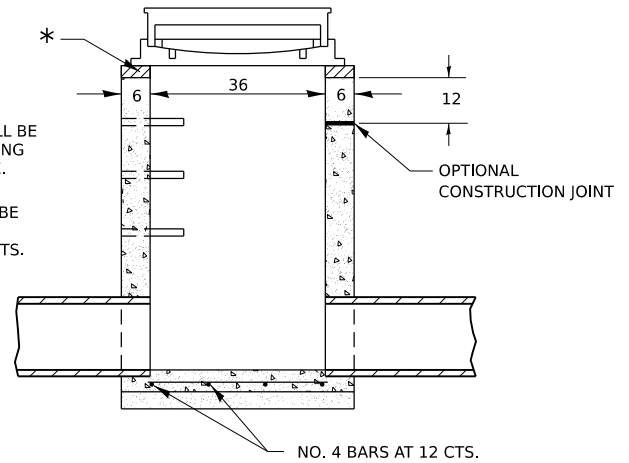




# INLETS, SPECIAL



SEC. A-A



SEC. B-B

## NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

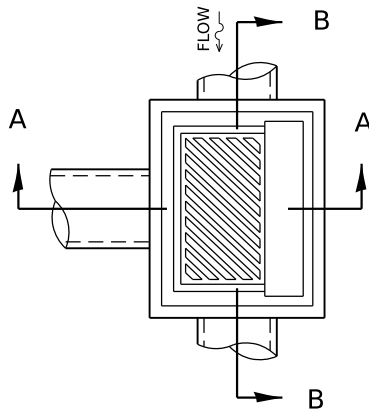
THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

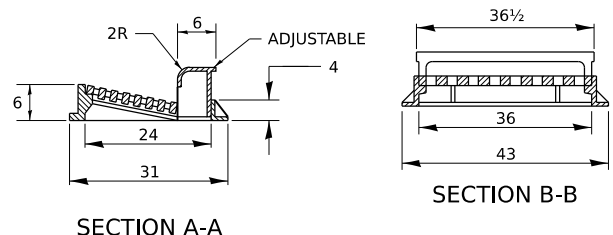
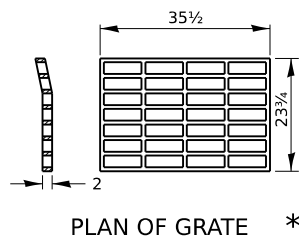
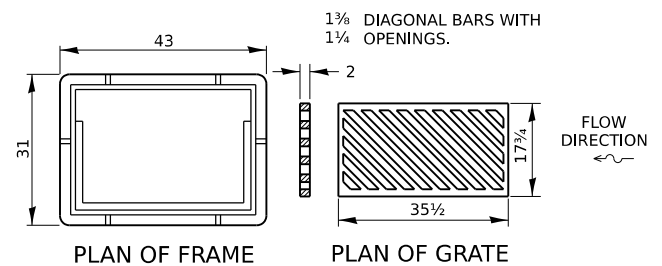
WEIGHT OF CAST IRON FRAME & GRATE = 530 lbs. ± . STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 ft.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE CAST IRON STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.



## DETAIL OF FRAME & GRATE



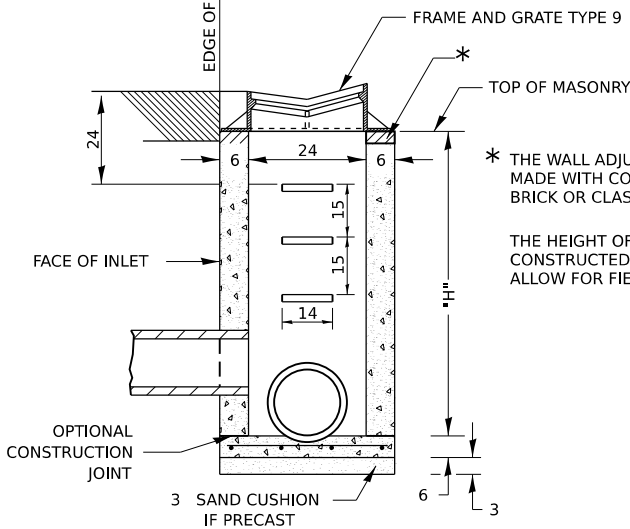
\* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

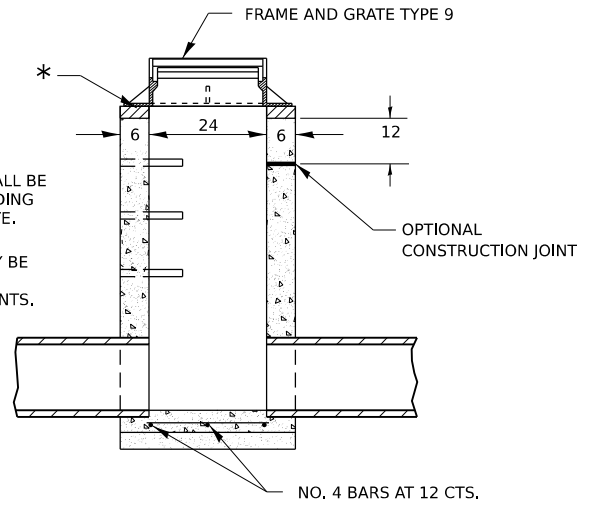
MODEL: 10902  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVISED - 6-27-14									CONTRACT NO.			
REVISED - 10-13-11									ILLINOIS FED. AID PROJECT			
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.						

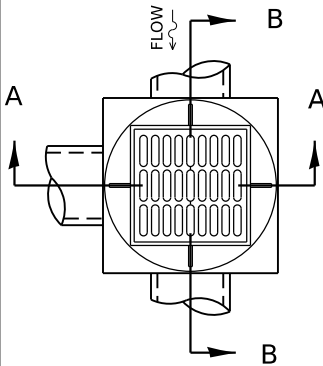
# INLETS, SPECIAL (TYPE A GUTTER)



SEC. A-A

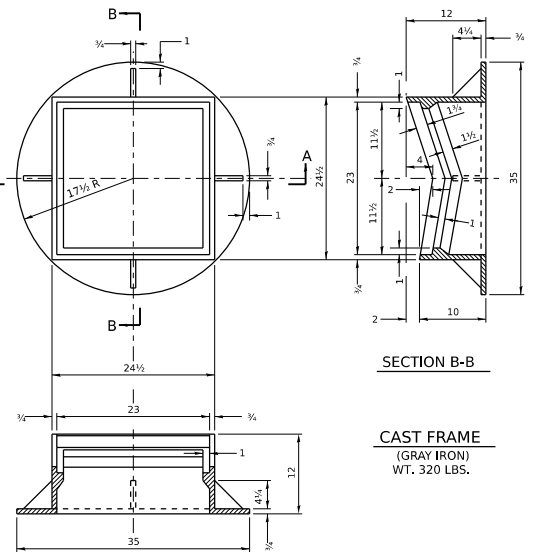


FRAME AND GRATES TYPE 9



### NOTES

- SEE STANDARD 602701 FOR DETAILS OF STEPS.
- EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
- THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.
- ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.
- WEIGHT OF CAST IRON FRAME & GRATE = 440 LBS.
- STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FT.



SECTION B-B

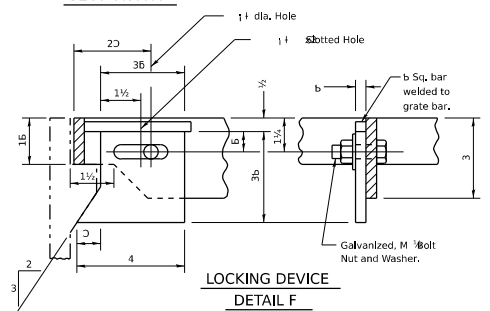
CAST FRAME (GRAY IRON) WT. 320 LBS.

## DETAIL OF FRAME & GRATE

### NOTES

- CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS.
- THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLAB, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

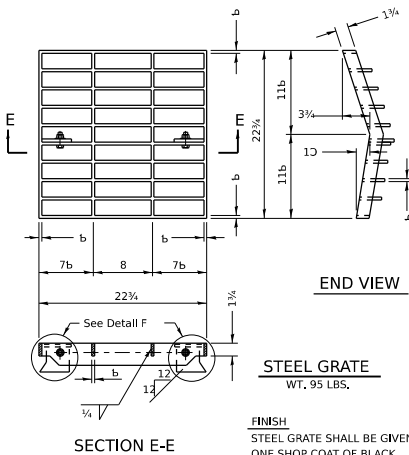
SECTION A-A



LOCKING DEVICE DETAIL F

### GENERAL NOTES

- THE MATERIAL FOR STEEL GRATE SHALL CONFORM TO ARTICLE 1006.04 OF THE STANDARD SPECIFICATIONS.
- THE USE OF EITHER A CAST GRATE OR A STEEL GRATE WITH THE CAST FRAME SHALL BE THE OPTION OF THE CONTRACTOR.
- THE CAST GRATE MAY BE MADE OF EITHER GRAY IRON OR DUCTILE IRON CONFORMING TO THE STANDARD SPECIFICATIONS. DUCTILE IRON CASTING SHALL BE GRADE 65-45-12
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

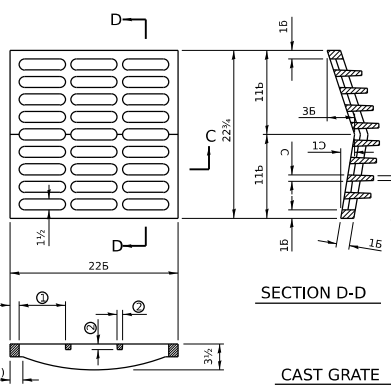


END VIEW

STEEL GRATE WT. 95 LBS.

SECTION E-E

FINISH  
STEEL GRATE SHALL BE GIVEN ONE SHOP COAT OF BLACK BITUMINOUS PAINT.



SECTION D-D

CAST GRATE 120 lbs.

SECTION C-C  
 ○ = 6 1/4 max. (typ.)  
 ⊙ = 3/4 min. (typ.)

### REGION 2 / DISTRICT 2 STANDARD

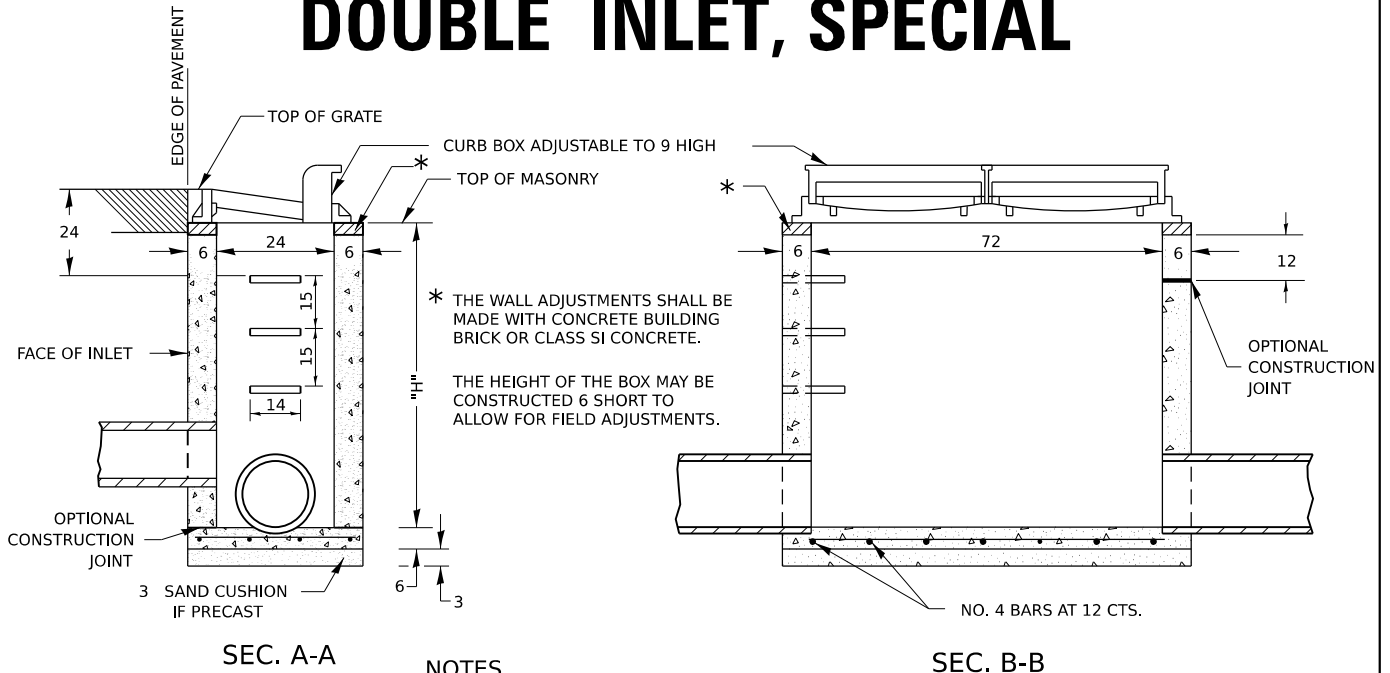
REVISED -	1-05-16
REVISED -	6-27-14
REVISED -	10-13-11
REVISED -	

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

MODEL: 11p02  
 District 2 Standard  
 FILE NAME: 3/12/2024  
 PLOT DATE: 3/12/2024

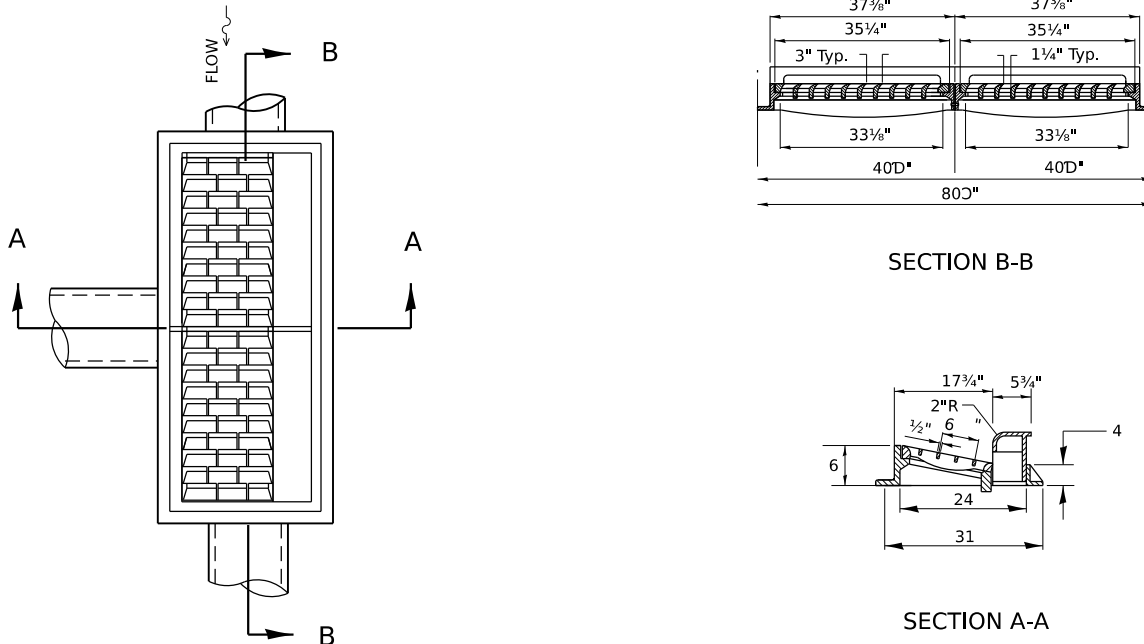
# DOUBLE INLET, SPECIAL



## NOTES

- SEE STANDARD 602701 FOR DETAILS OF STEPS.
- EXCEPT AS NOTED HEREON DOUBLE INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.
- THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.
- ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.
- R-3295-2 DOUBLE UNIT OR EQUIVALENT.
- STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FOOT.
- CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS.
- CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

## DETAIL OF FRAME & GRATE

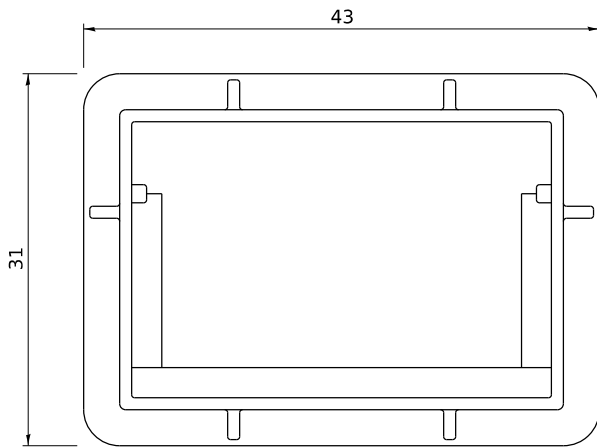


ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

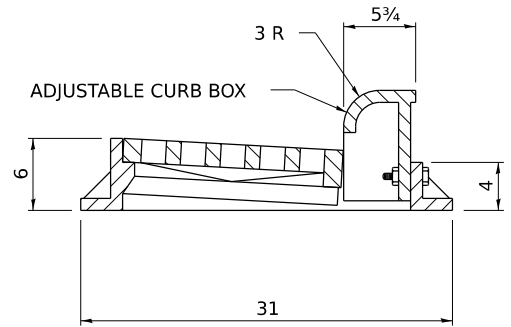
MODEL: 12012  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVISED - 7-16-15									CONTRACT NO.			
REVISED - 10-13-11									ILLINOIS FED. AID PROJECT			
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.						

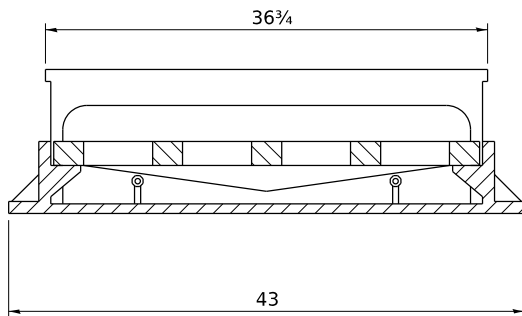
# FRAME AND GRATE FOR INLETS, SPECIAL



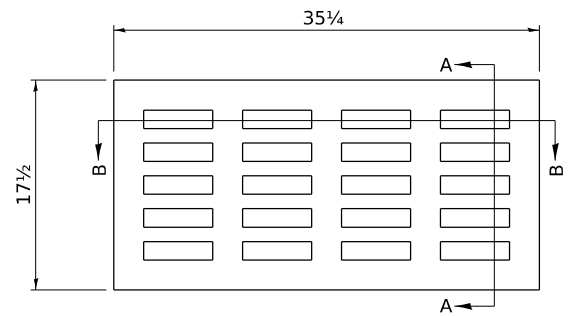
PLAN OF FRAME  
WITHOUT GRATE AND CURB BOX



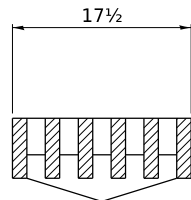
TRANSVERSE SECTION



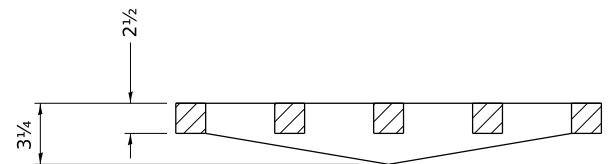
LONGITUDINAL SECTION



PLAN OF GRATE



SECTION A-A



SECTION B-B

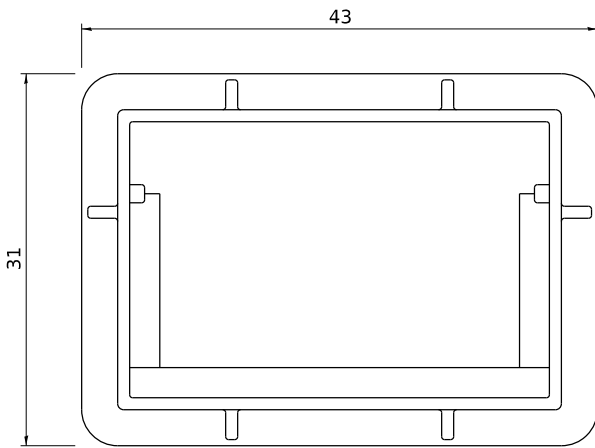
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

R 3246 OR EQUIVALENT  
APPROXIMATE WEIGHT - 495 LBS.

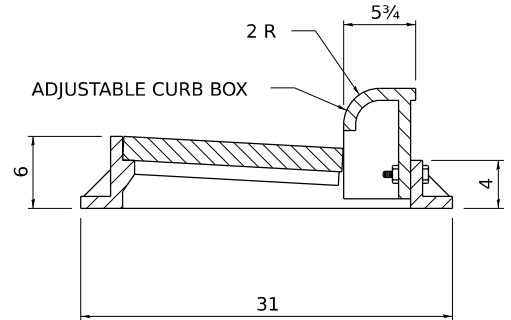
MODEL: 13902  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-13-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

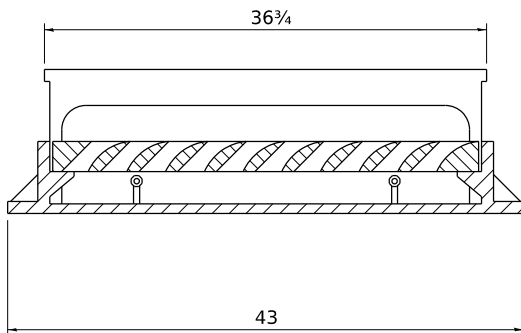
# FRAME AND GRATE FOR INLETS, SPECIAL



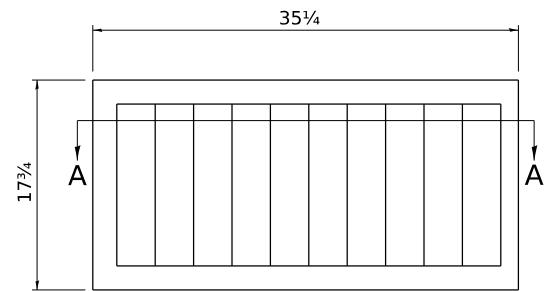
PLAN OF FRAME  
WITHOUT GRATE AND CURB BOX



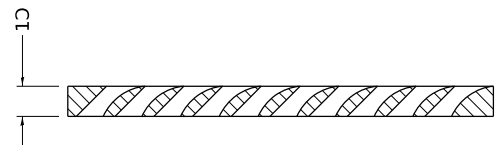
TRANSVERSE SECTION



LONGITUDINAL SECTION



PLAN OF GRATE



SECTION A-A

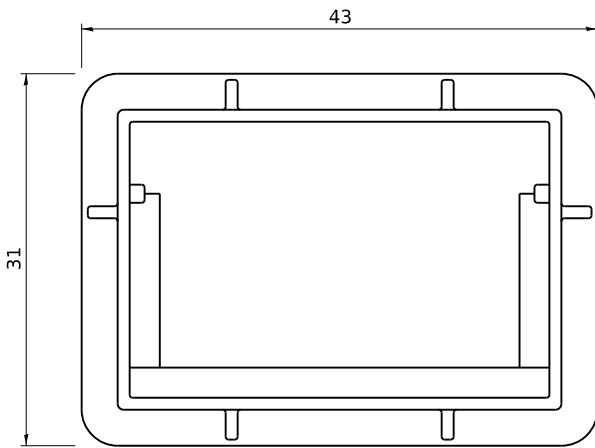
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

R 3067 OR EQUIVALENT  
APPROXIMATE WEIGHT - 465 LBS.

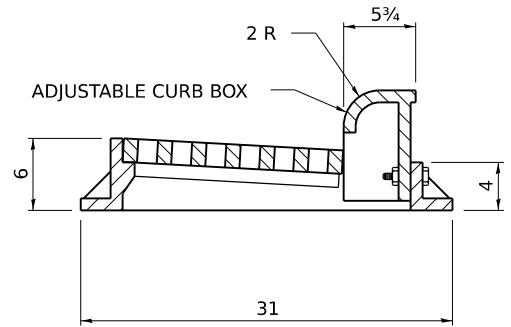
MODEL: 13a02a  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-13-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

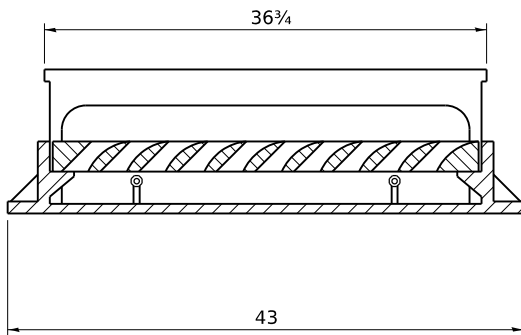
# FRAME AND GRATE FOR INLETS, SPECIAL



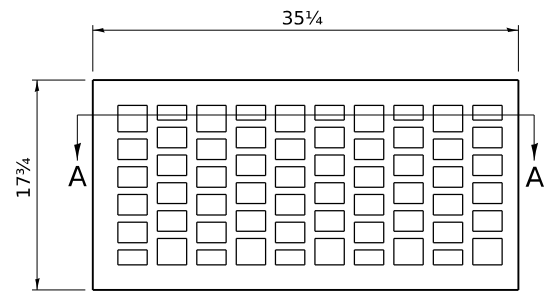
PLAN OF FRAME  
WITHOUT GRATE AND CURB BOX



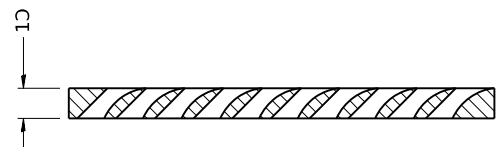
TRANSVERSE SECTION



LONGITUDINAL SECTION



PLAN OF GRATE



SECTION A-A

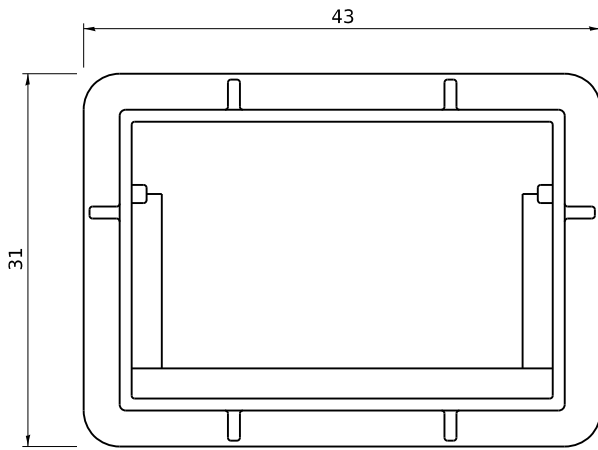
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

R 3067 OR EQUIVALENT  
APPROXIMATE WEIGHT - 490 LBS.

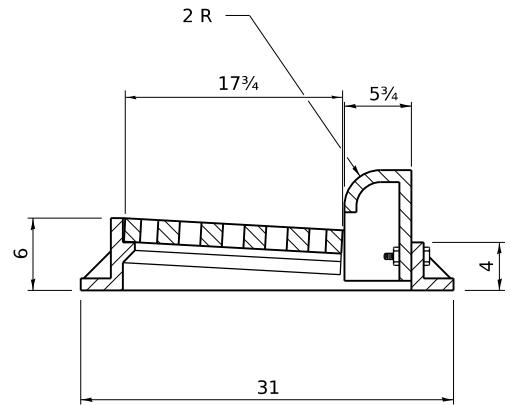
MODEL: 13a02b  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-13-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

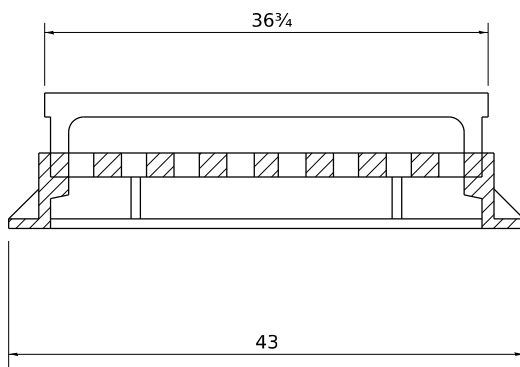
# FRAME AND GRATE FOR INLETS, SPECIAL



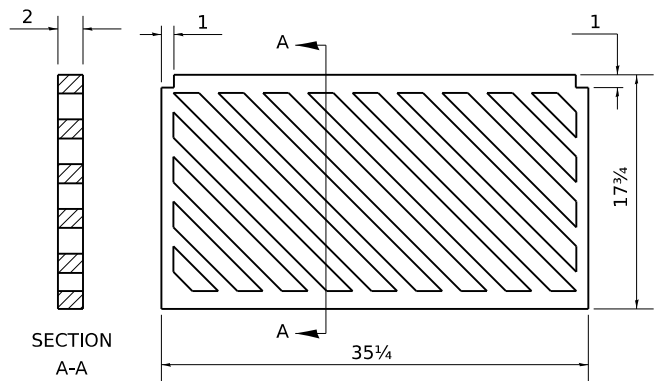
PLAN OF FRAME  
WITHOUT GRATE AND CURB BOX



TRANSVERSE SECTION



LONGITUDINAL SECTION



PLAN OF GRATE

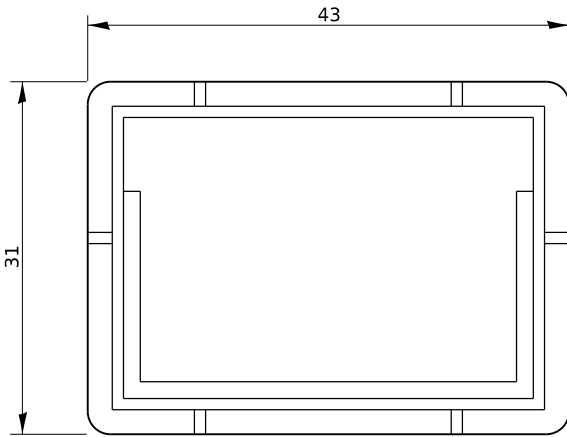
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

R 3067 OR EQUIVALENT  
APPROXIMATE WEIGHT - 510 LBS.

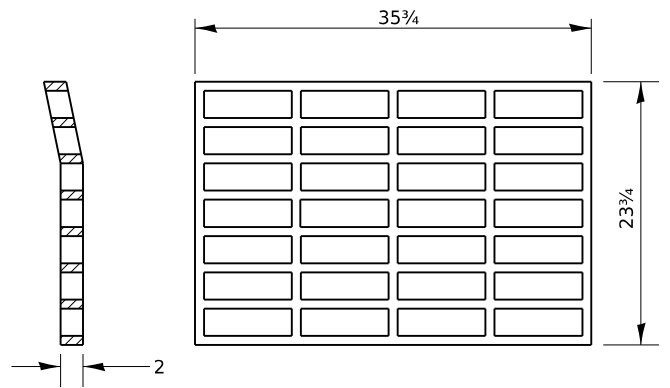
MODEL: 13902  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-13-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# FRAME AND GRATE FOR INLETS, SPECIAL

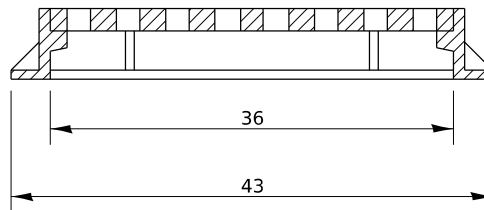


PLAN OF FRAME



PLAN OF GRATE \*

\* THIS GRATE TO BE USED WITHOUT CURB BOX WHEN INLET IS IN DRIVEWAY.



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

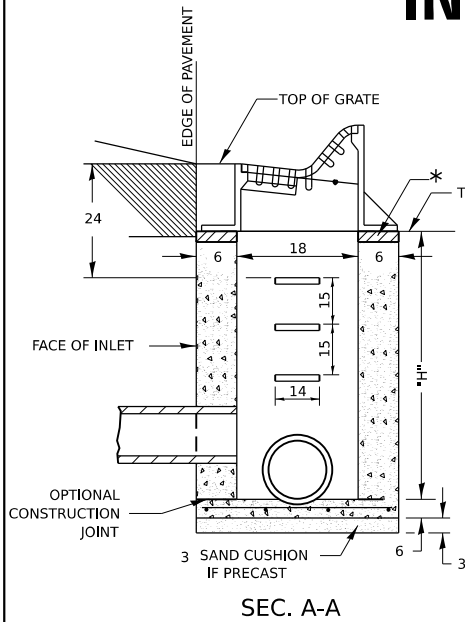
R-3290-A OR EQUIVALENT  
APPROXIMATE WEIGHT OF CAST IRON FRAME & GRATE - 530 LBS.

MODEL: 130923  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 4-14-15	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14									
REVISED - 10-14-11					CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



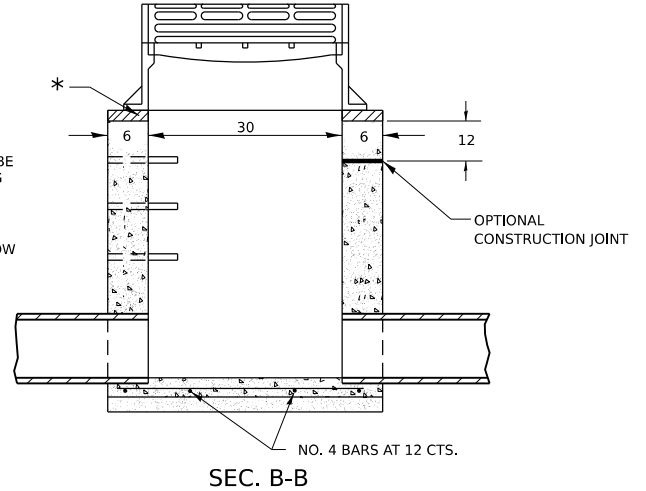
# INLETS, SPECIAL, NO. 1



SEC. A-A

\* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.

THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.



SEC. B-B

## NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FEET.

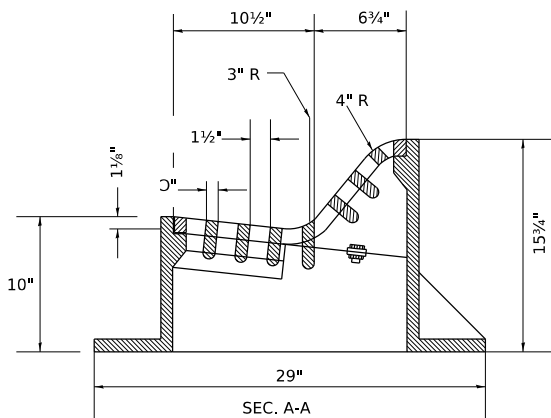
BOTH INLET SPECIAL NO. 1 SHALL DRAIN VERTICALLY TO THE ACROSS ROAD CULVERT LOCATED BENEATH.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

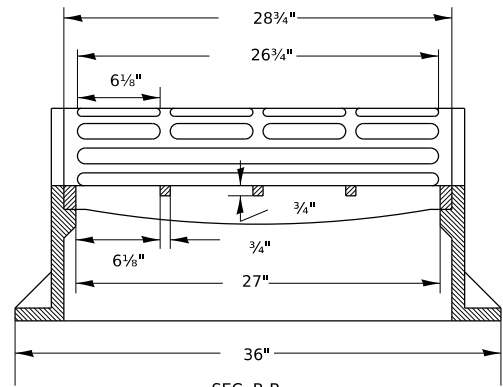
THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL, NO.1 SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLABS, SAND CUSHION (WHEN USED) AND REINFORCEMENT BARS.

FRAME AND GRATE # R-3503-B OR EQUIVALENT

## DETAIL OF FRAME & GRATE



SEC. A-A



SEC. B-B

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 14p02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

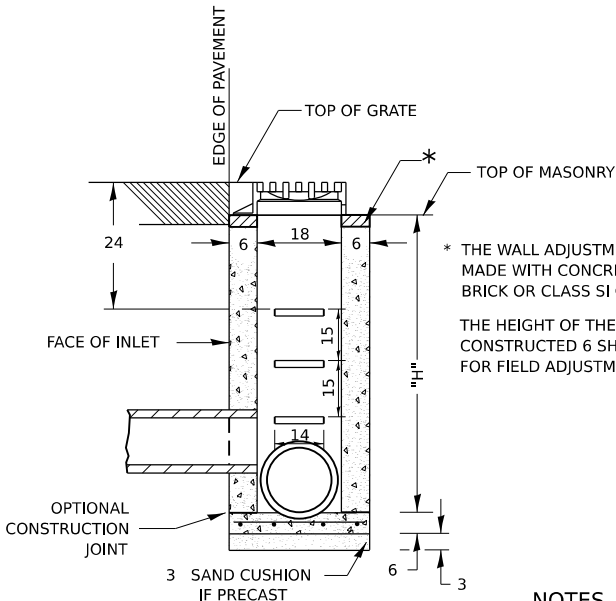
REVISED -	1-05-16
REVISED -	6-27-14
REVISED -	10-14-11
REVISED -	

### REGION 2 / DISTRICT 2 STANDARD

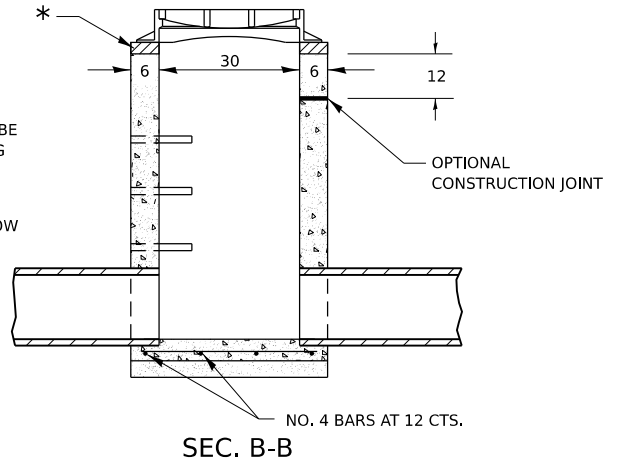
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# INLETS, SPECIAL, NO. 2



SEC. A-A



SEC. B-B

\* THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.  
THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.

### NOTES

SEE STANDARD 602701 FOR DETAILS OF STEPS.

EXCEPT AS NOTED HEREON INLET SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTED SECTIONS.

ALL VOIDS AROUND PIPE ENTRANCE, BOTH INSIDE AND OUTSIDE, SHALL BE SEALED WITH MORTAR.

STEPS SHALL BE OMITTED WHEN DEPTH OF "H" IS LESS THAN 5 FOOT.

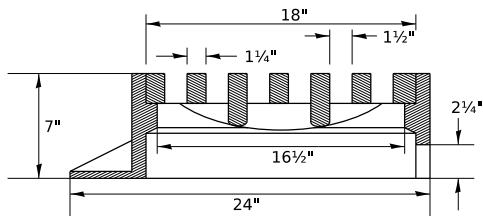
INLET SPECIAL NO. 2 SHALL MATCH THE EXISTING STORM SEWER AS SHOWN ON THE PLANS.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT. PRECAST CONCRETE SHALL BE IN ACCORDANCE WITH ARTICLES 504.01 THRU 504.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT CONCRETE STRENGTH SHALL BE 4,000 psi AFTER 28 DAYS.

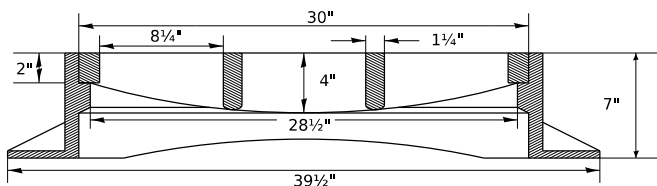
THE CONTRACT UNIT PRICE EACH FOR INLETS, SPECIAL, NO.2 SHALL INCLUDE THE COST OF CONSTRUCTING THE INLET BOX, FURNISHING AND INSTALLING THE FRAME AND GRATE, THE STEPS (IF USED), THE PRECAST FLOOR SLABS, AND CUSHION (WHEN USED) REINFORCEMENT BARS, AND REMOVAL OF ANY EXCESS STORM SEWER.

FRAME AND GRATE # R-3461 OR EQUIVALENT

## DETAIL OF FRAME & GRATE



SEC. A-A

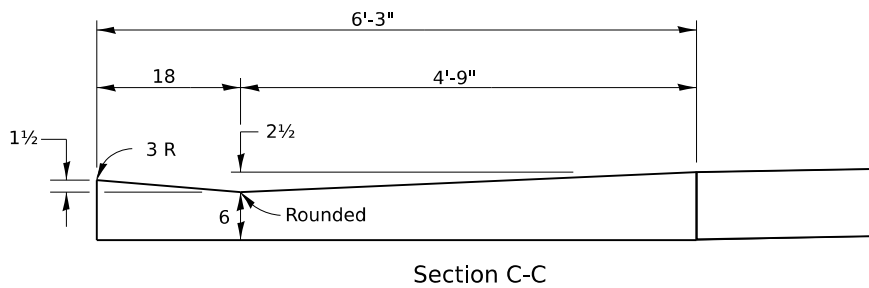
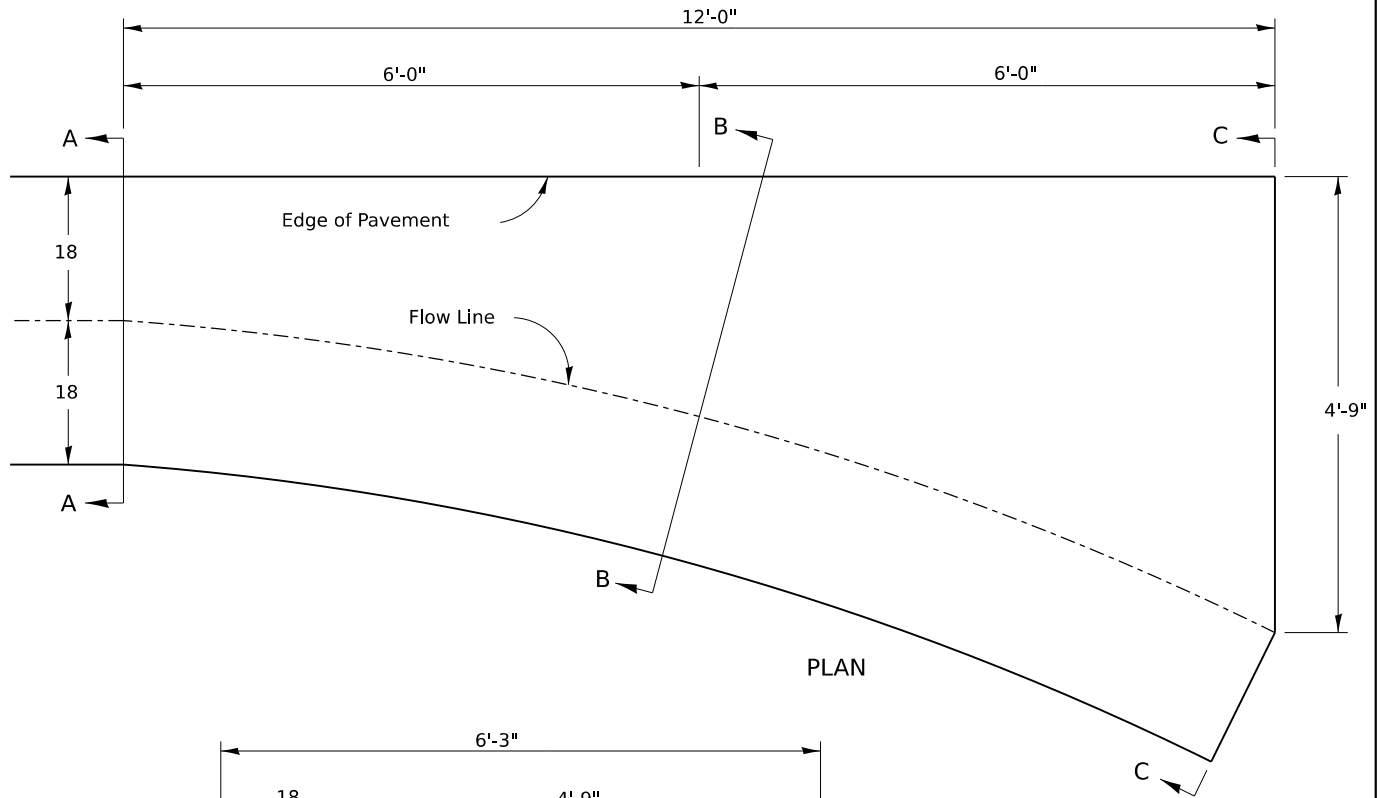


SEC. B-B

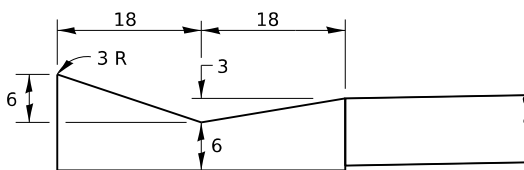
MODEL: 1592  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14									
REVISED - 10-14-11					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

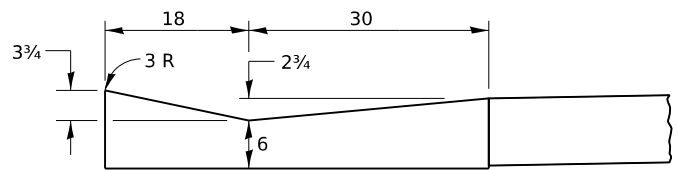
# STANDARD INLET FOR TYPE A GUTTER (SPECIAL)



- QUANTITY -  
Section A-A to C-C  
1.2 Cu. Yds.  
Class SI Concrete



Section A-A



Section B-B

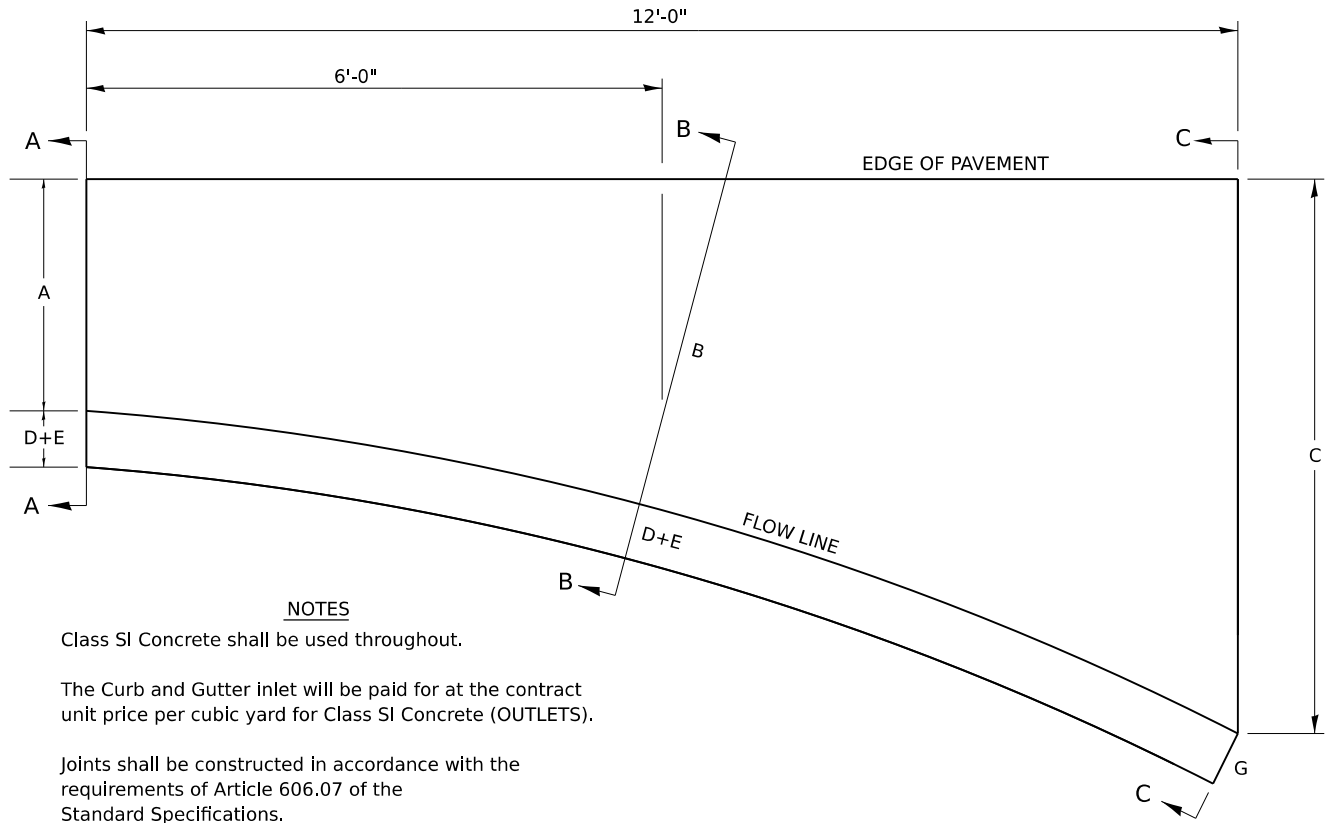
Class SI Concrete shall be used throughout.  
The gutter inlet will be paid for at the contract  
unit price per cubic yard for Class SI Concrete (OUTLETS)

ALL DIMENSIONS ARE IN INCHES UNLESS  
OTHERWISE NOTED.

MODEL: 2002  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 12-04-13	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
REVISED -										
REVISED -				CONTRACT NO.						
REVISED -				SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.

# STANDARD INLET FOR CURB & GUTTER



### NOTES

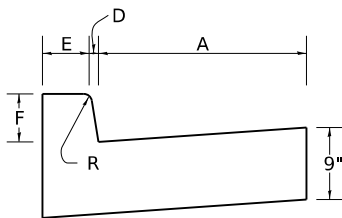
Class SI Concrete shall be used throughout.

The Curb and Gutter inlet will be paid for at the contract unit price per cubic yard for Class SI Concrete (OUTLETS).

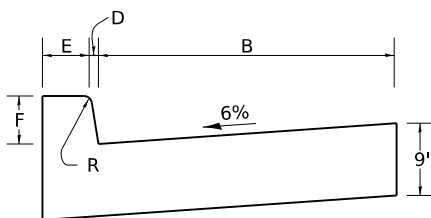
Joints shall be constructed in accordance with the requirements of Article 606.07 of the Standard Specifications.

When curb and gutter is constructed adjacent to flexible pavement, a 1" expansion joint shall be installed at construction joints.

All dimensions are in inches unless otherwise noted.



SECTION A-A



SECTION B-B



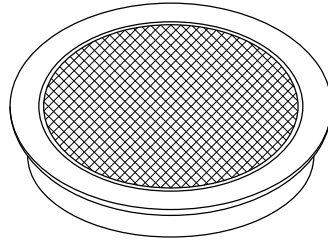
SECTION C-C

TYPE OF CURB & GUTTER	TABLE OF DIMENSIONS								CONCRETE QUANTITY A-A TO C-C (CU YDS)
	A	B	C	D	E	F	G	R	
B-6.06	6	15	4'	1	6	6	7	1	0.87
B-6.12	12	18.25	4'	1	6	6	7	1	0.95
B-6.18	18	27.25	4' 9"	1	6	6	7	1	1.18
B-6.24	24	32.4	4' 9"	1	6	6	7	1	1.30
M-4.06	6	17.8	3' 9"	4	3	4	7	3	0.75
M-4.12	12	18.25	4'	4	3	4	7	3	0.91
M-4.18	18	27.25	4' 9"	4	3	4	7	3	1.14
M-4.24	24	32.4	4' 9"	4	3	4	7	3	1.25
M-6.06	6	17.8	3' 9"	6	2	6	8	3	0.86
M-6.12	12	18.25	4'	6	2	6	8	2	0.96
M-6.18	18	27.25	4' 9"	6	2	6	8	2	1.20
M-6.24	24	32.4	4' 9"	6	2	6	8	2	1.30

MODEL: 21102  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

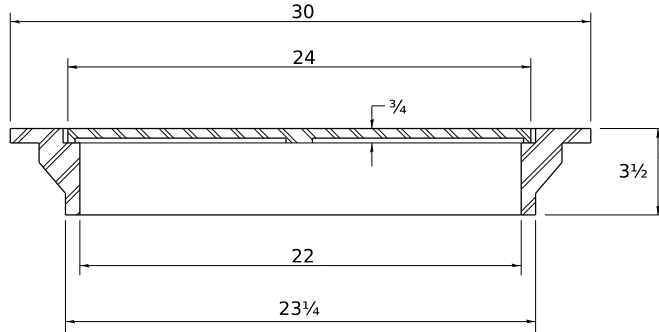
REVISED - 11-12-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVISED - 8-27-13												
REVISED - 10-10-06									CONTRACT NO.			
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					

# FIELD TILE JUNCTION VAULTS 2' AND 3' DIA.

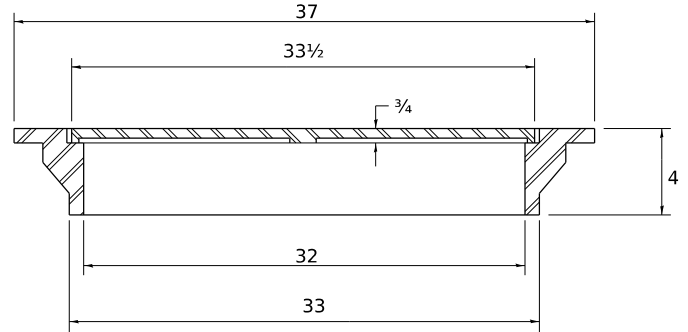


FRAME & LID FOR  
2' VAULT

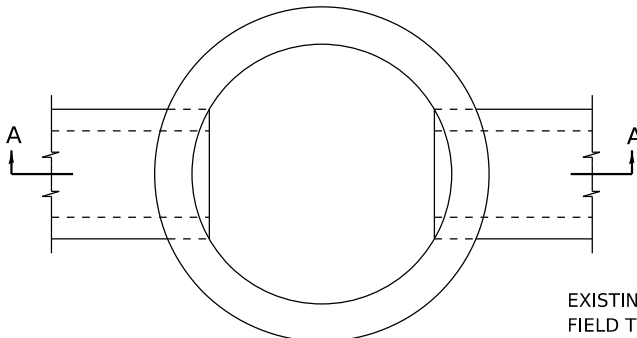
FRAME & LID FOR  
3' VAULT



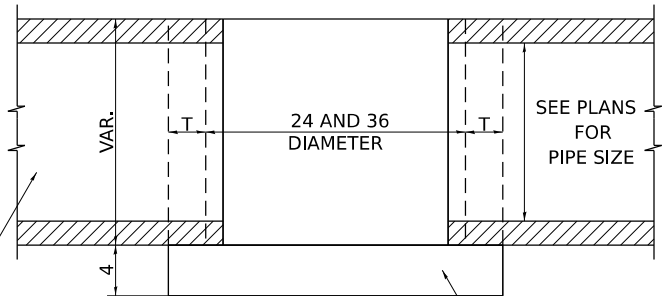
TOTAL WEIGHT: 146 LBS.



TOTAL WEIGHT: 280 LBS.



PLAN



CAST-IN-PLACE CONCRETE  
SECTION A-A

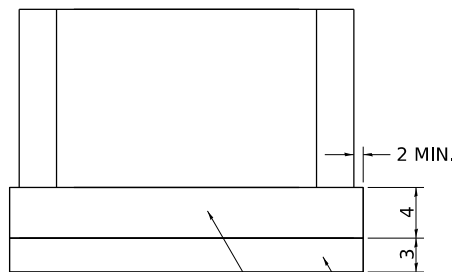
**GENERAL NOTES:**

THE FRAME AND LID IS REQUIRED ON ALL JUNCTION VAULTS.  
THE FRAME AND LID SHALL BE INSTALLED FLUSH WITH THE GROUND.

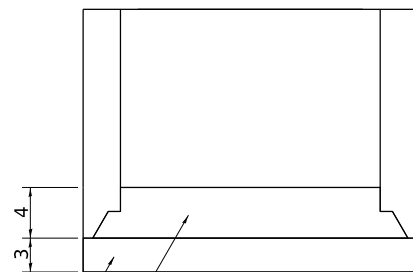
**FRAME AND LIDS:**

R-6040 OR EQUIVALENT (2')  
R-6080 OR EQUIVALENT (3')

ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8
CAST-IN-PLACE CONCRETE	6
CONCRETE MASONRY UNIT	5
PRECAST REINFORCED CONCRETE SECTION	3



PRECAST REINFORCED  
CONCRETE SLAB



PREFABRICATED CONCRETE SLAB,  
WHEN THE PRECAST REINFORCED  
CONCRETE SECTION ALTERNATE  
IS USED.

ALTERNATE METHODS

ALL DIMENSIONS ARE IN INCHES  
UNLESS OTHERWISE NOTED.

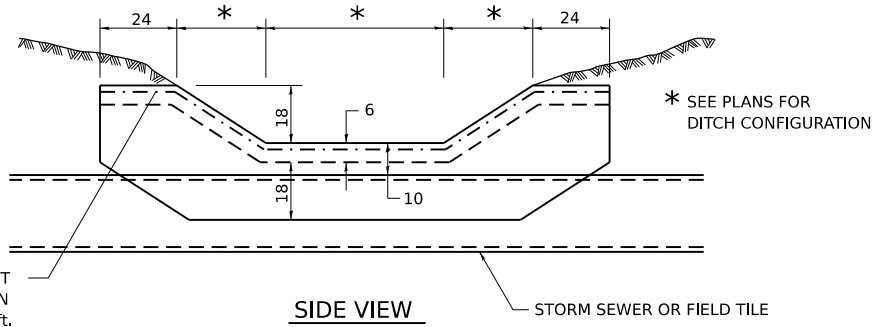
MODEL: 3002  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-03-18	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14									
REVISED - 10-14-11					CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

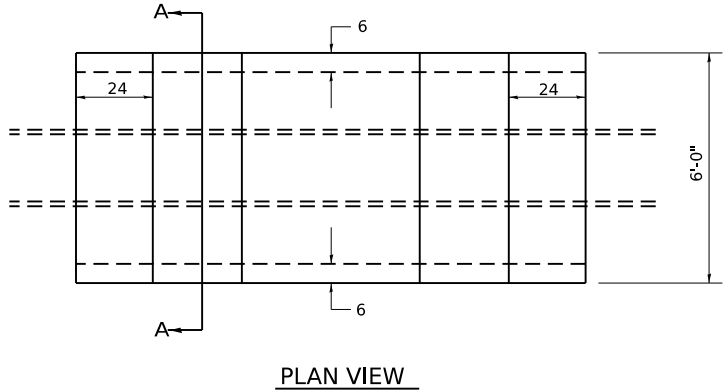
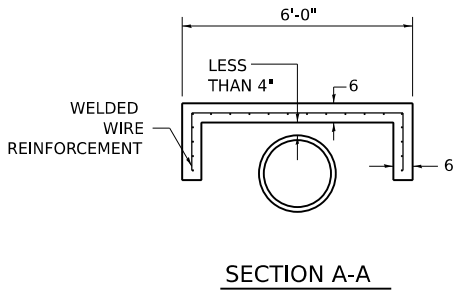
# TREATMENT OF FIELD TILE SYSTEMS UNDER DITCHES

## PAVED DITCH

TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS LESS THAN 10 inches

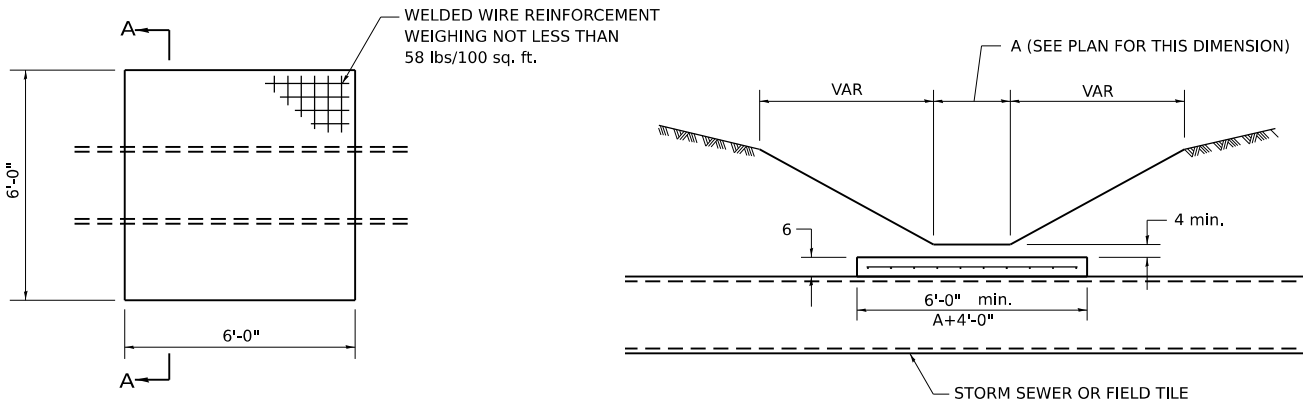


WELDED WIRE REINFORCEMENT WEIGHING NOT LESS THAN 58 lbs./100 sq. ft.



## CONCRETE SLAB

TO BE USED IF COVER OVER THE PIPE AT THE BOTTOM OF THE DITCH IS 10 INCHES TO 24 INCHES



## NOTES

THIS WORK SHALL BE DONE IN ACCORDANCE WITH ARTICLE 611.04 OF THE STANDARD SPECIFICATION.

THE CONCRETE SLAB AND PAVED DITCH WILL BE PAID FOR AT THE CONCRETE UNIT PRICE PER CUBIC YARD FOR MISCELLANEOUS CONCRETE.

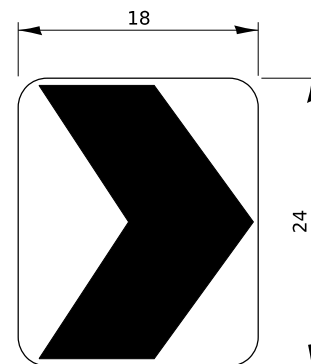
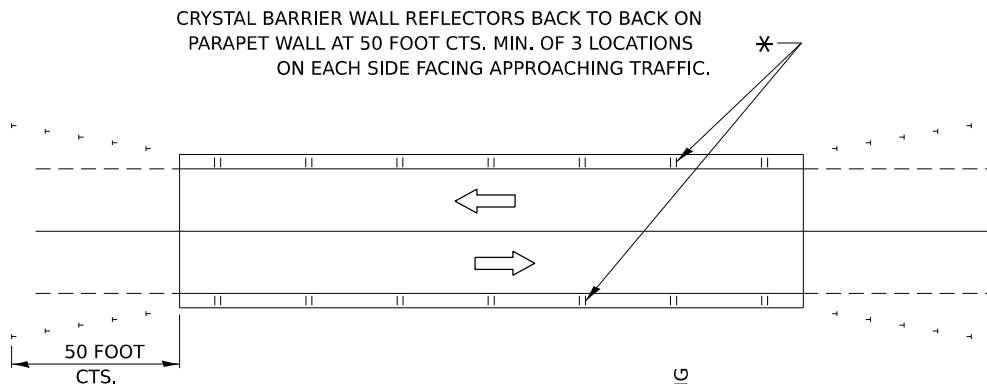
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 31p02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

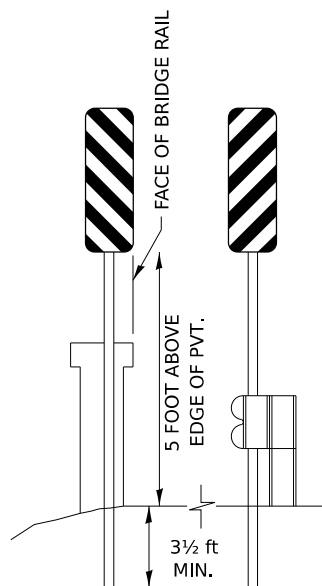
REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# SIGN PANEL – TYPE 1 (SPECIAL)

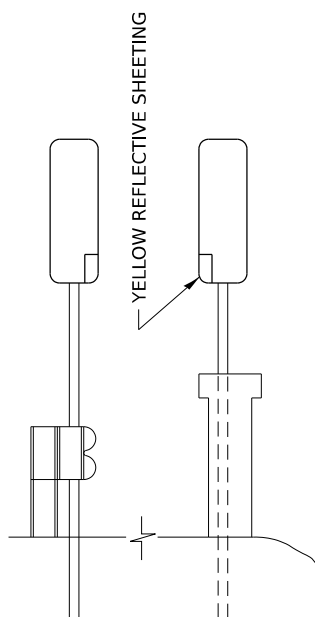
SIGN LAY OUT FOR NARROW BRIDGES ON TWO-WAY ROADWAYS  
(WHERE THE BRIDGE IS LESS THAN 24 WIDER THAN THE ROADWAY SURFACE.)



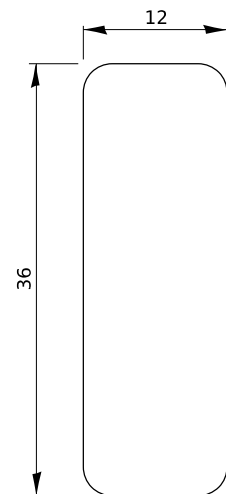
TYPICAL CHEVRON



FRONT VIEW



BACK VIEW



TYPICAL SIGN

## NOTES

STRIPES ON THE FACE OF THE SIGN SHALL SLOPE TOWARDS THE EDGE OF PAVEMENT ON BOTH SIDES OF THE ROADWAY.

WHEN THE GUARDRAIL IS PRESENT THE DISTANCE FROM THE EDGE OF THE SIGN SHALL BE POSITIONED WITH THE FACE OF THE GUARDRAIL, AS SHOWN.

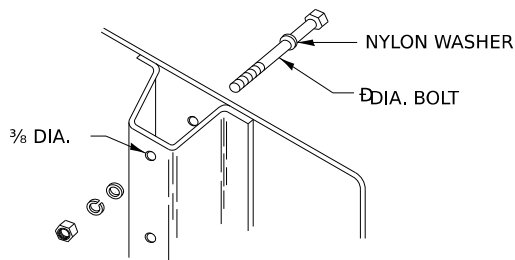
ALL MOUNTING HARDWARE SHALL BE ALUMINUM, STAINLESS STEEL, OR ZINC OR CADMIUM PLATED STEEL AND SHALL BE INCLUDED TO THE COST OF THE INSTALLATION.

PLACEMENT OF CHEVRON ALIGNMENT SIGNS ALONG THE 25 TO 1 TAPER WILL CONFORM TO THE DEPARTMENT OF TRANSPORTATION'S STANDARDS MANUAL UNDER THE SECTION FOR GUARDRAIL PLACEMENT.

ALL LEFT SIDE MARKERS SHALL BE OMITTED FOR FOUR-LANE, TWO-WAY BRIDGE APPLICATIONS.

\* REFER TO THE BUREAU OF TRAFFIC'S SPECIFICATIONS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



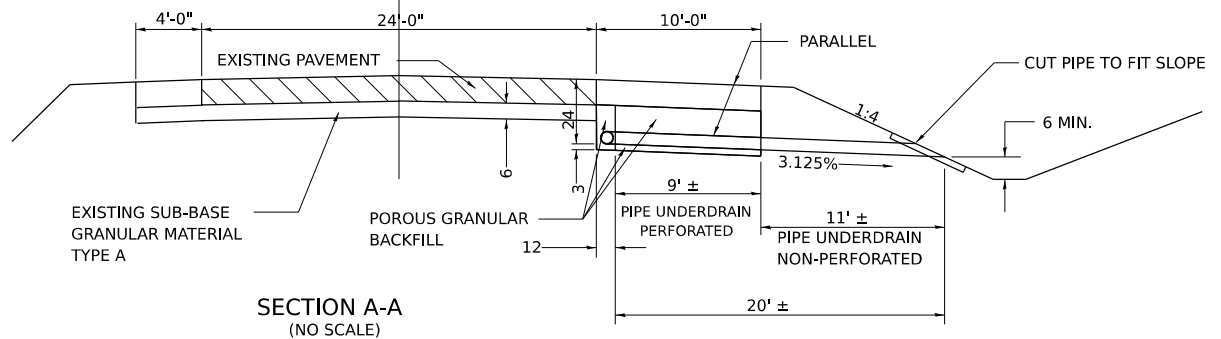
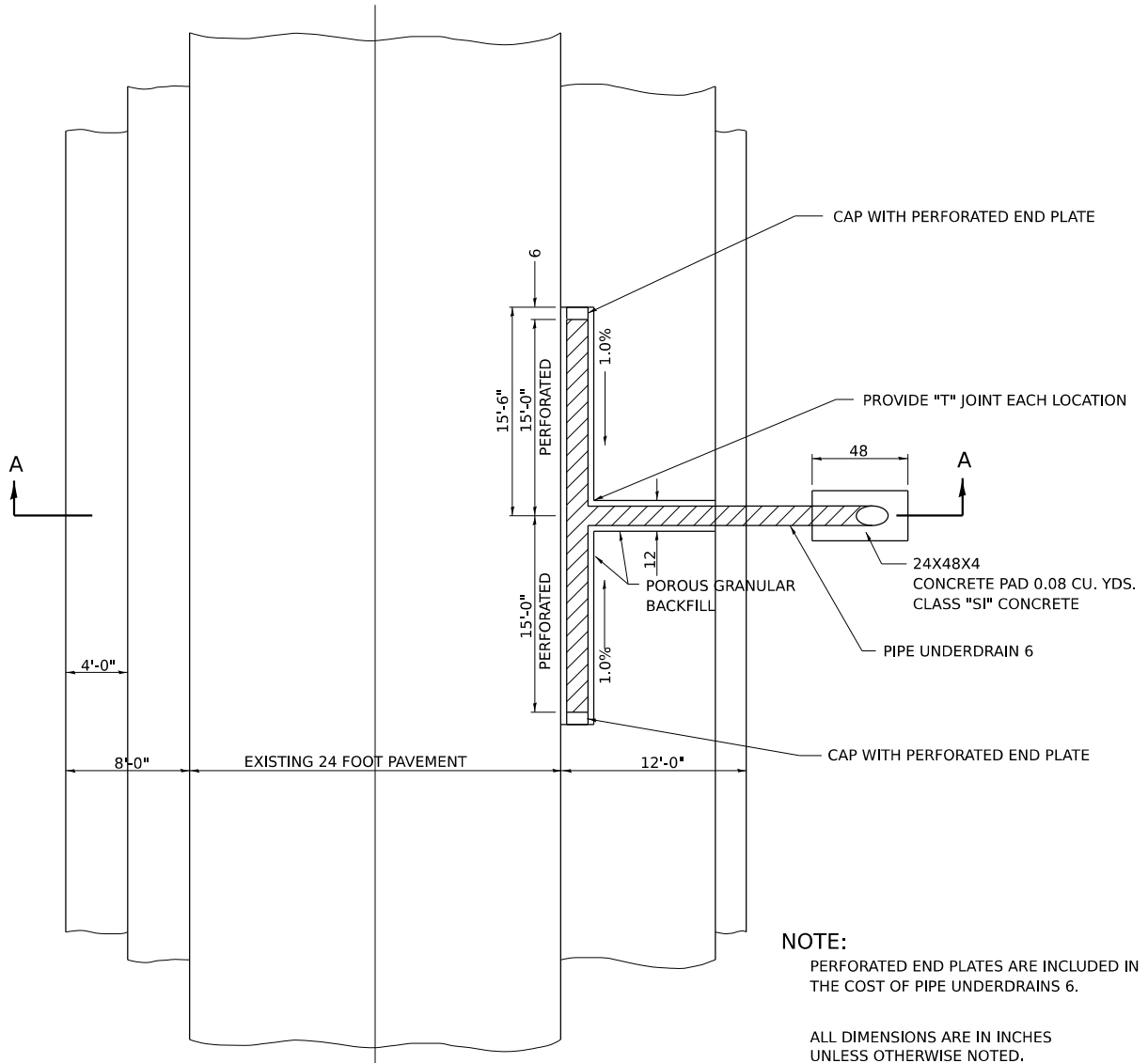
NOTE: MINIMUM OF TWO BOLTS PER POST REQUIRED.

## DETAIL OF MOUNTING SIGN TO POST

MODEL: 32012  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11									
REVISED -									
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO.		
							ILLINOIS	FED. AID PROJECT	

# SPECIAL DRAINAGE OUTLET



MODEL: 33902  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	10-14-11
REVISED -	
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		



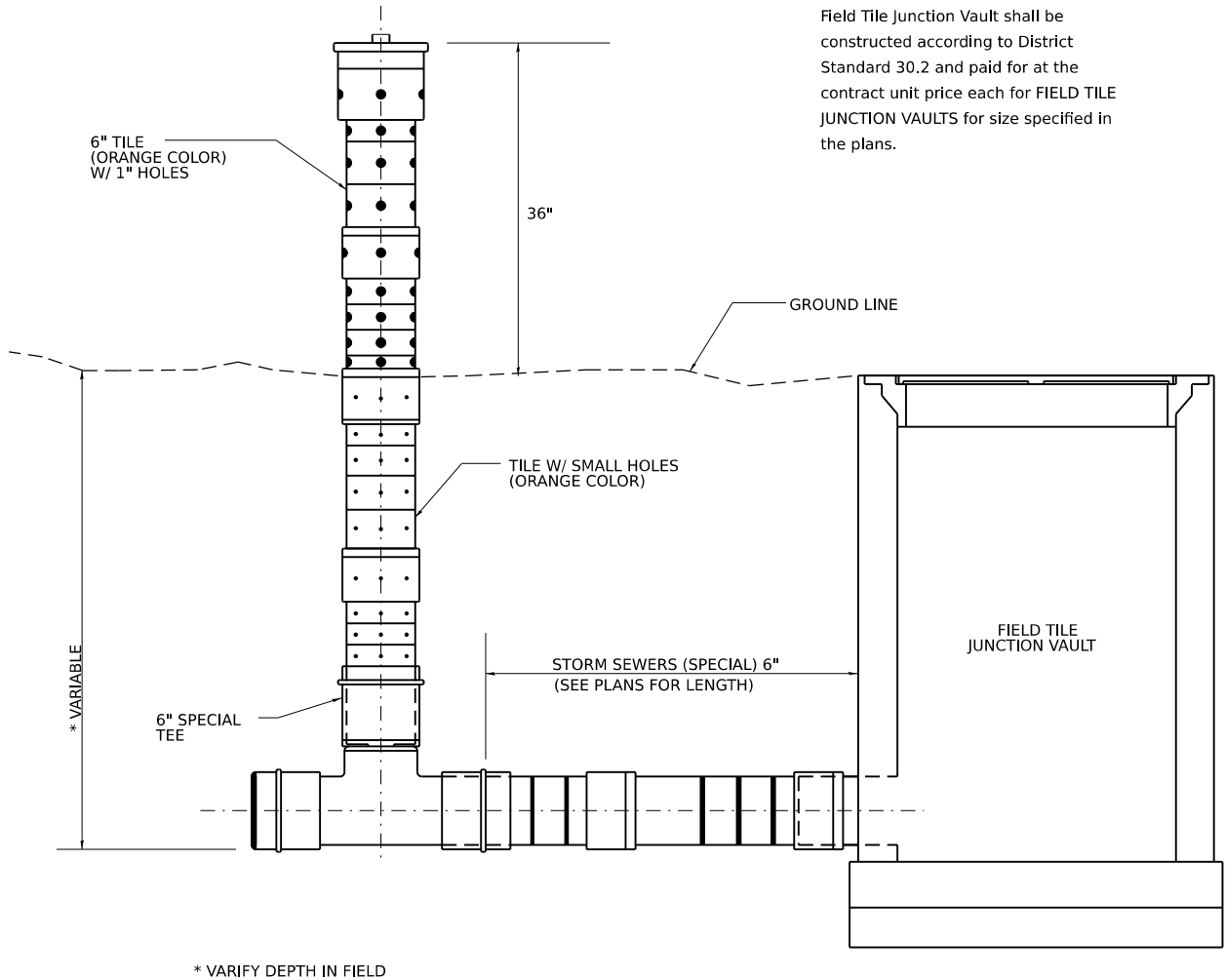
# INLET STAND PIPE

## Inlet Stand Pipe

Inlet Stand Pipe shall be included in the contract unit price per FOOT for STORM SEWERS (SPECIAL) 6". Which shall include the following items--one 36" above ground section with 1" holes, one variable depth below ground section with small holes, one 6" tee section, collars (if needed) and end caps (if needed) as directed by the engineer.

Storm Sewer shall be paid for at the contract unit price per foot for STORM SEWERS (SPECIAL) 6". According to Article 611.04.

Field Tile Junction Vault shall be constructed according to District Standard 30.2 and paid for at the contract unit price each for FIELD TILE JUNCTION VAULTS for size specified in the plans.



MODEL: 34p02  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED -	10-14-11
REVISED -	
REVISED -	
REVISED -	

### REGION 2 / DISTRICT 2 STANDARD

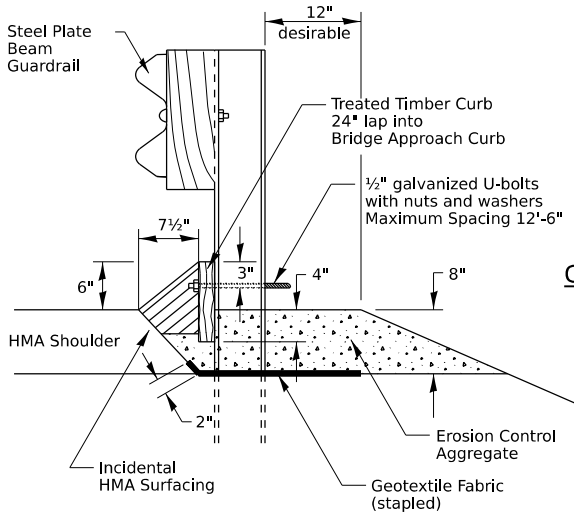
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# GUARDRAIL EROSION CONTROL TREATMENTS

## GENERAL NOTES: EROSION CONTROL CURB

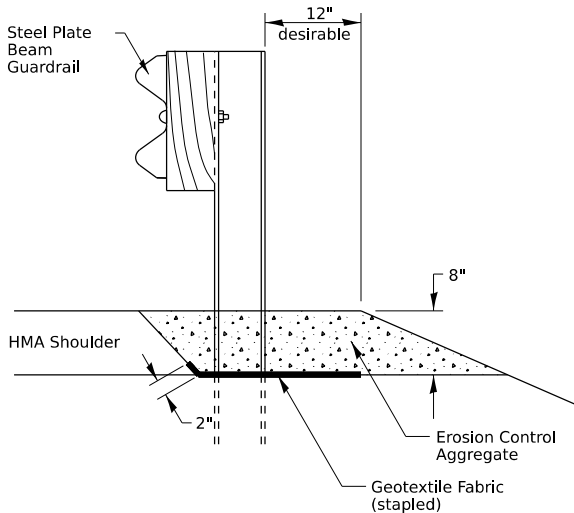
1. This work shall consist of grading as needed, installing hardware, 2" x 10" treated timber boards and incidental hot-mix asphalt surfacing in front of steel plate beam guardrail in accordance with plan details.
2. Timber shall be treated in accordance with Article 1007.12 Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu.ft.
3. This work will be paid for at the contract unit price per foot for EROSION CONTROL CURB (pay code Z0020800).



**TYPICAL SECTION  
WITH EROSION CONTROL CURB**

## GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of furnishing and installing, Geotextile Fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile Fabric shall be placed with a 12" minimum overlay. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and aggregate are in place. If the guardrail is placed after the Geotextile Fabric and aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet following requirements:
  - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01 of the Standard Specifications.
  - B. The aggregate shall meet class D quality requirements as outlined in Article 1004.01 of the Standard Specifications with the following exceptions:
    - 1) Revise the maximum allowable percentage of weighted average loss when the material is subjected to 5 cycles of the Sodium Sulfate Soundness Test from 25% as shown under class D of the quality chart in Article 1004.01(b) of the Standard Specifications to 40%.
    - 2) Revise the maximum allowable percentage of wear as determined by the Los Angeles Abrasion Method from 45% as shown under as shown under class D of the quality chart in Article 1004.01(b) of the Standard Specifications to 65%.
    - 3) The sum of the percentage of weighted average loss when the material is subjected to 5 cycles of the Sodium Sulfate Soundness Test; and the percentage of wear as determined by the Los Angeles Abrasion Method, shall not exceed 95%.
  - C. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.
7. This work will be paid for at the contract unit price per ton for GUARDRAIL AGGREGATE EROSION CONTROL (pay code Z0001002).

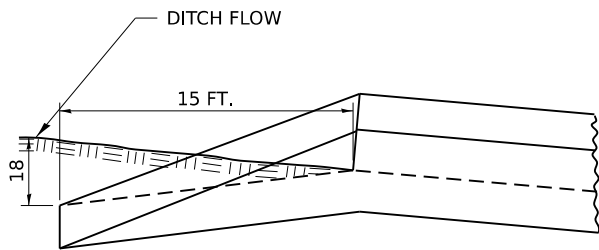
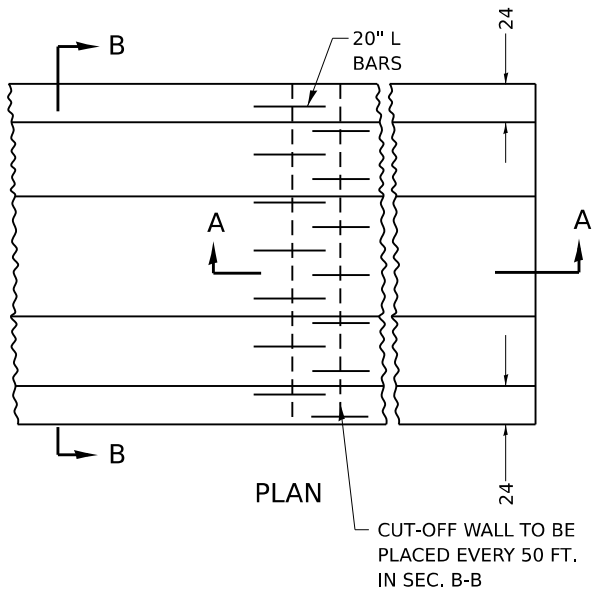
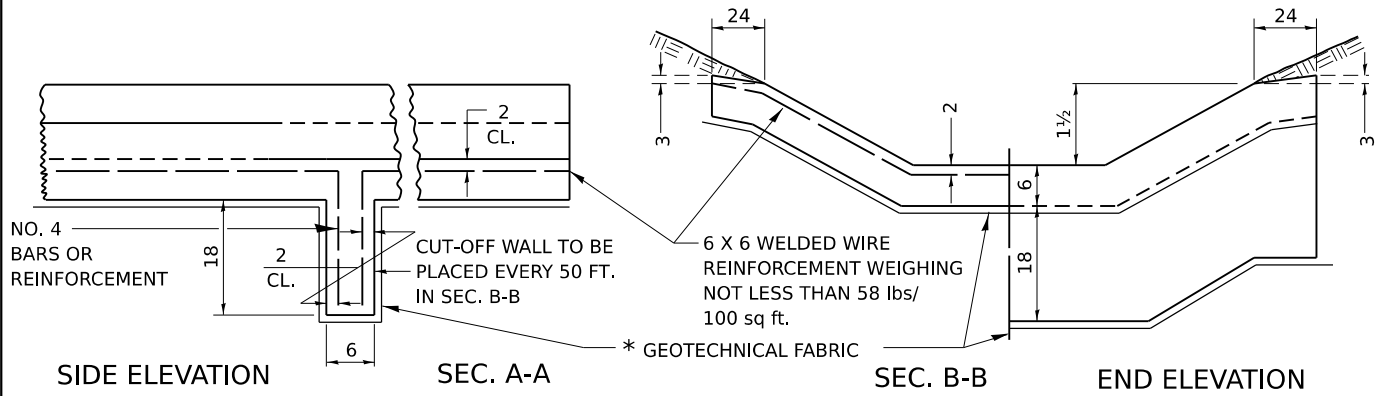


**TYPICAL SECTION  
WITHOUT EROSION CONTROL CURB**

MODEL: 359r2  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11						
REVISED -		CONTRACT NO.				
REVISED -		SCALE:	SHEET	OF	SHEETS	STA.
		ILLINOIS		FED. AID PROJECT		

# PAVED DITCH (SPECIAL)



SIDE ELEVATION SHOWING METHOD OF BURYING UP STREAM AND DOWN STREAM END OF PAVED DITCH.

( SEE NOTE )

## NOTES:

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

WELDED WIRE REINFORCEMENT SHALL BE 6 X 6 MESH, NO. 4 GAUGE, 58 lbs/100 sq ft, CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A1064.

1/2" PREMOULDED JOINT FILLER SHALL BE PLACED AT THE JUNCTION OF PAVED DITCH WITH ANY OTHER STRUCTURE.

CUT-OFF WALLS SHALL BE COSTRUCTED MONOLITHICALLY WITH THE PAVED DITCH.

AT THE OPTION OF THE CONTRACTOR, NO. 4 L 20 REINFORCING BARS PLACED AT 12 CENTERS LONGITUDINALLY IN PAVED DITCH AND VERTICALLY IN CUT-OFF WALLS IN LIEU OF THE WELDED WIRE FABRIC.

THE SOIL PLACED OVER THE 24 FLATTENED SECTION OF THE DITCH SHALL BE TAMPED FIRMLY. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE FOR PAVED DITCH.

PAVED DITCH SHALL BE CONSTRUCTED IN ACCORDANCE WITH ARTICLES 606.01 THROUGH 606.13.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

\* THE GEOTECHNICAL FABRIC IS INCLUDED IN THE PAVED DITCH.

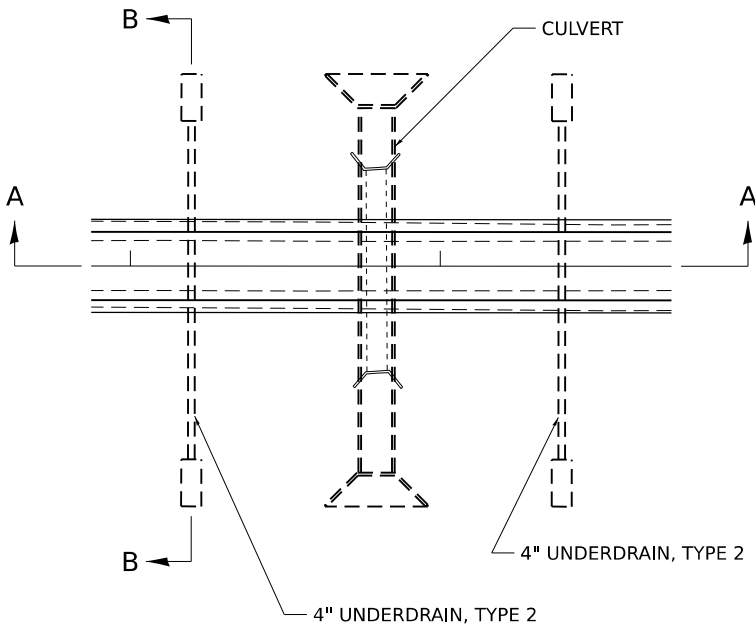
## BASIS OF PAYMENT

PAVED DITCH (SPECIAL) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT MEASURED IN PLACE INCLUDING THE COST OF FURNISHING AND PLACING THE JOINT FILLER, THE WELDED WIRE REINFORCEMENT OR THE NO. 4 REINFORCING BARS, AND THE NECESSARY EXCAVATION AND DISPOSAL OF SURPLUS MATERIALS.

MODEL: 36g02  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11								
REVISED -								
REVISED -	SCALE:	SHEET OF SHEETS	STA. TO STA.	CONTRACT NO.				
				ILLINOIS FED. AID PROJECT				

# UNDERDRAIN FOR ACROSS ROAD (AR) CULVERTS



## NOTES:

IN SAG CONDITIONS INSTALL PIPE UNDERDRAINS, TYPE 2, 4" ON BOTH SIDES OF CULVERT.

ON HIGHWAY GRADES GREATER THAN 2% INSTALL PIPE UNDERDRAINS, TYPE 2, 4" ON THE HIGH SIDE OF THE CULVERT.

THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.

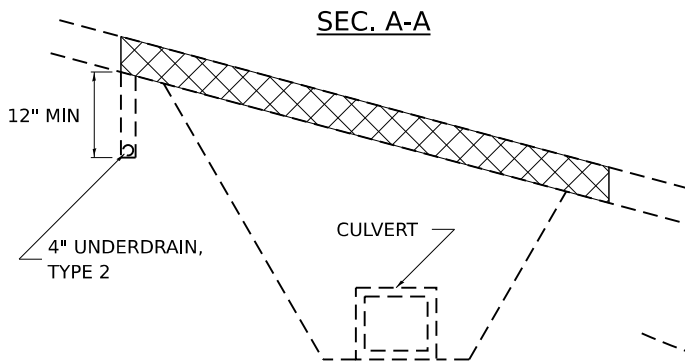
THE UNDERDRAIN SHALL EXTEND UNTIL INTERSECTING WITH THE SIDE SLOPES. THE PIPES SHALL DRAIN INTO CONCRETE HEADWALLS. (SEE ARTICLE 601.05 OF THE STANDARD SPECIFICATIONS AND HIGHWAY STANDARD 601101).

THE UNDERDRAIN SHALL BE A MINIMUM OF 12" BELOW THE EXISTING PAVEMENT.

PIPE UNDERDRAINS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE UNDERDRAINS, TYPE 2, 4".

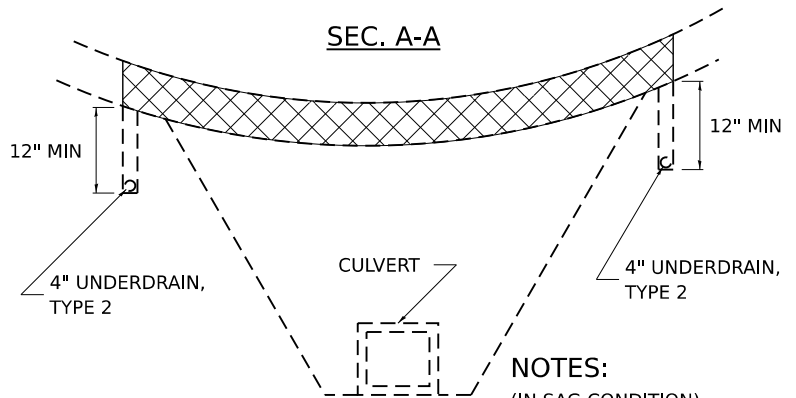
CONCRETE HEADWALLS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR CONCRETE HEADWALLS FOR PIPE DRAINS.

A DELINEATOR SHALL BE PLACED AT EACH CONCRETE HEADWALL. THESE BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR DELINEATORS.



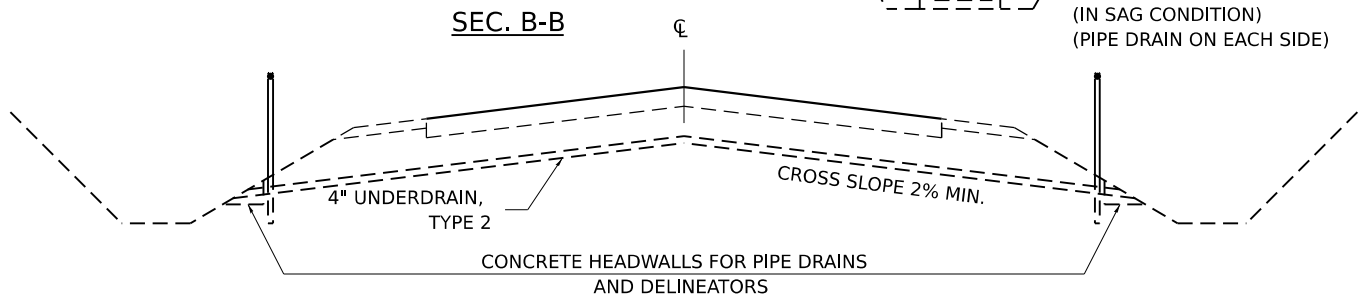
## NOTES:

(HIGHWAY GRADE GREATER THAN 2%)



## NOTES:

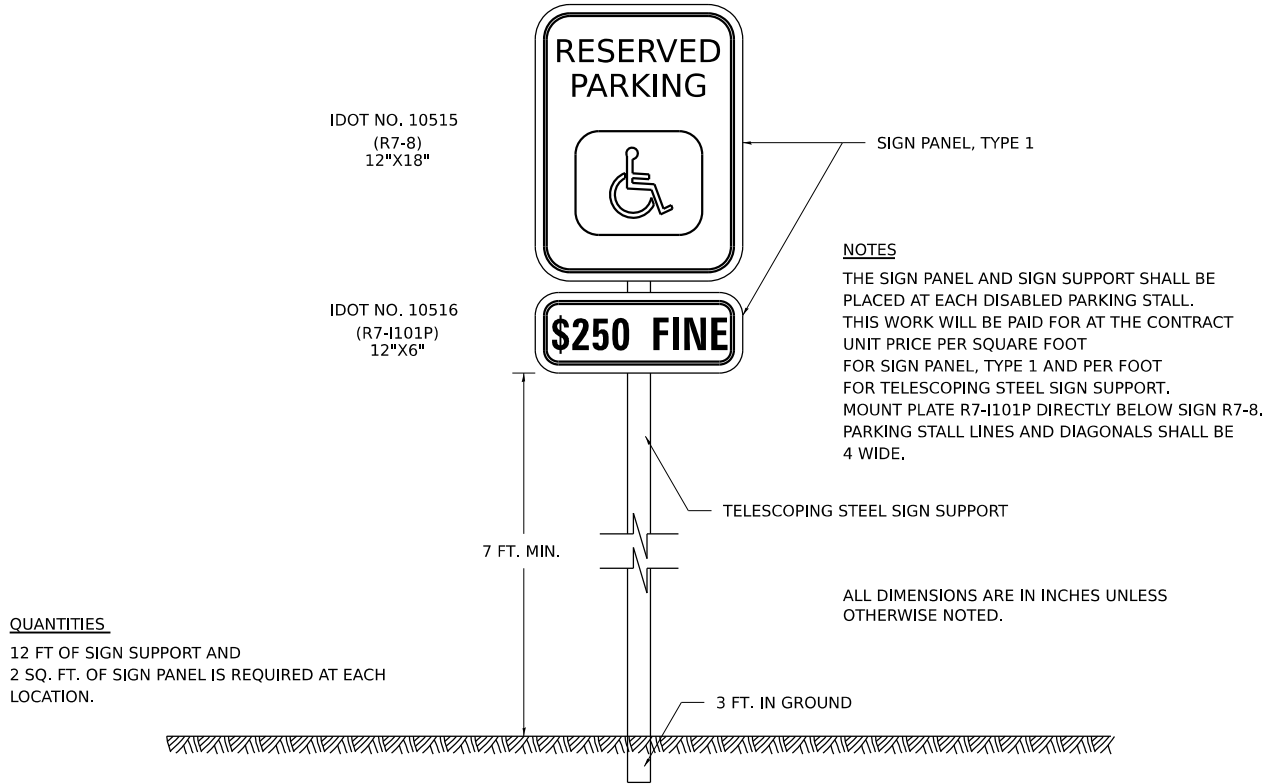
(IN SAG CONDITION)  
(PIPE DRAIN ON EACH SIDE)



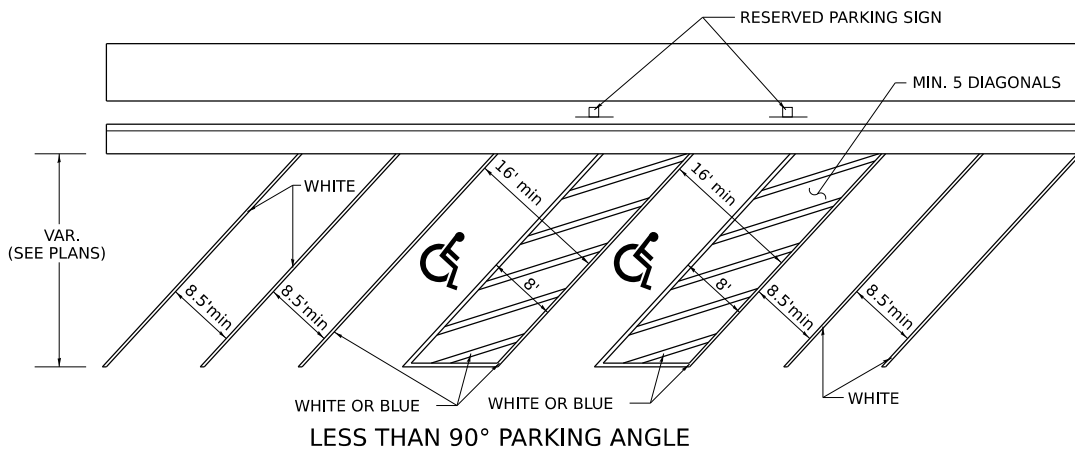
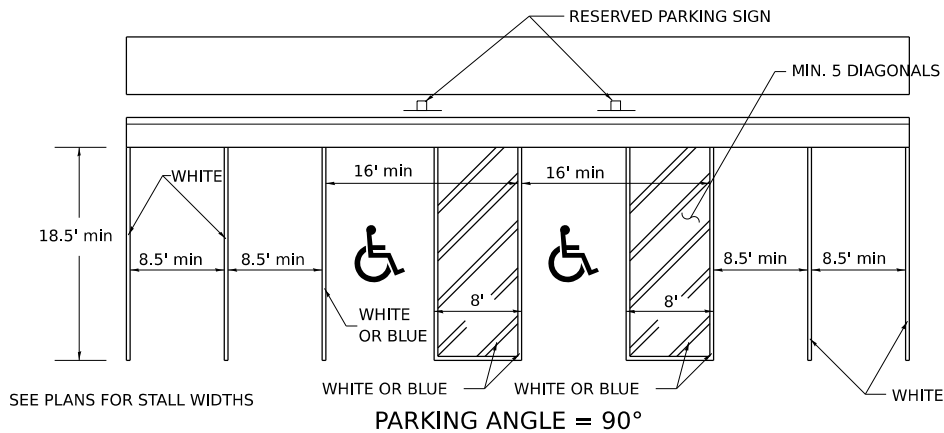
MODEL: 37r02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 8-03-17	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
REVISED - 7-13-16											
REVISED - 1-05-16					CONTRACT NO.						
REVISED - 6-27-14					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT			

# RESERVED PARKING SIGN DETAIL



## DISABLED PARKING STRIPING



MODEL: 44p2  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED -	4-19-18
REVISED -	1-05-16
REVISED -	6-27-14
REVISED -	10-14-11

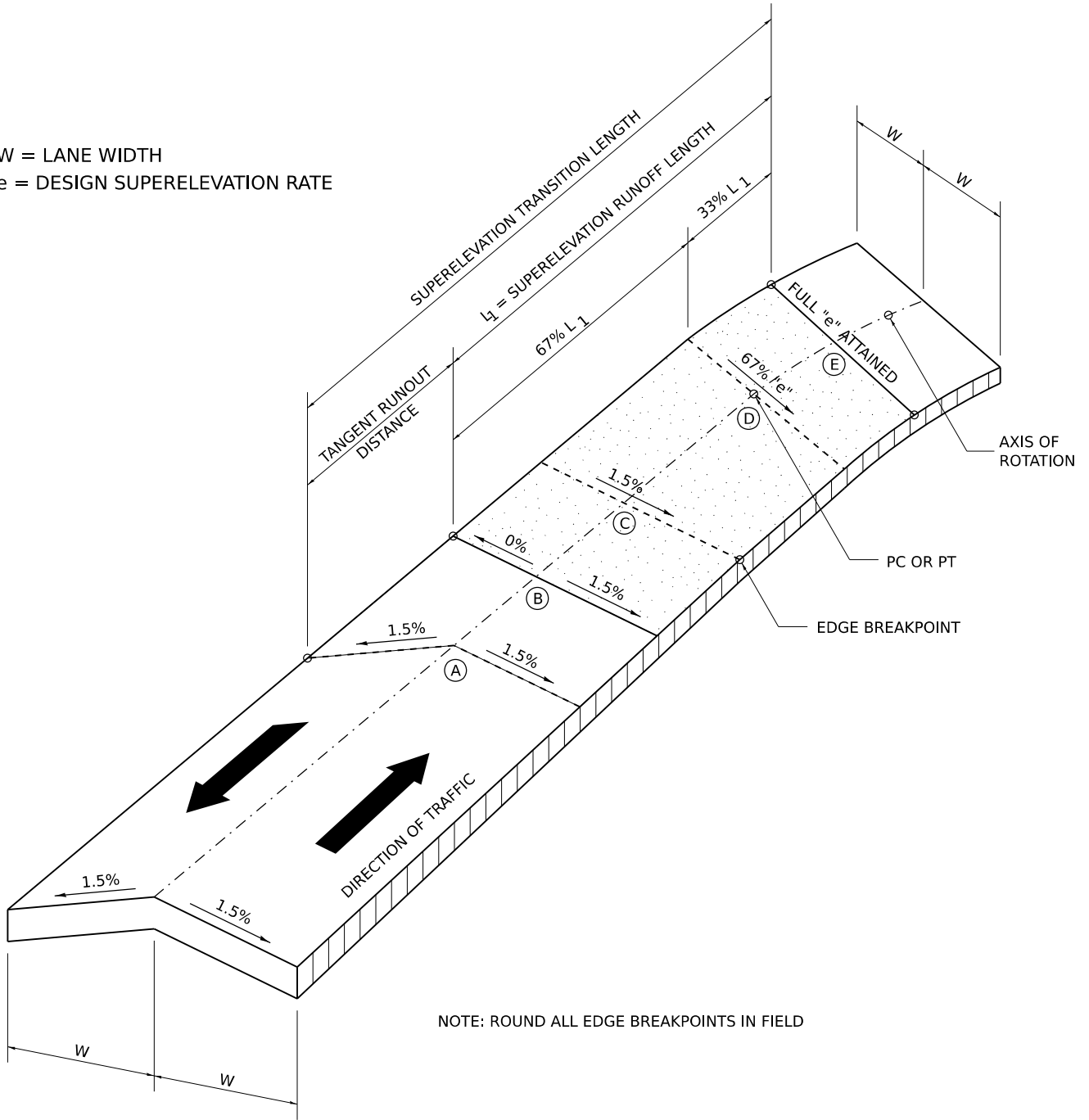
### REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# SUPERELEVATION TRANSITION ON TWO-LANE HIGHWAY

W = LANE WIDTH  
e = DESIGN SUPERELEVATION RATE



NOTE: ROUND ALL EDGE BREAKPOINTS IN FIELD

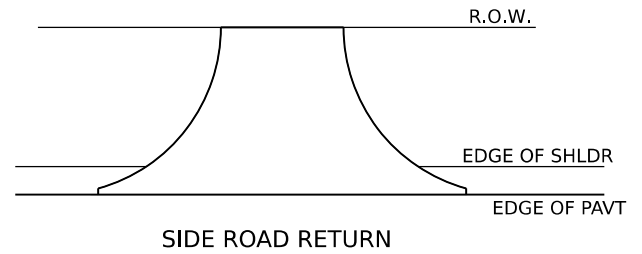
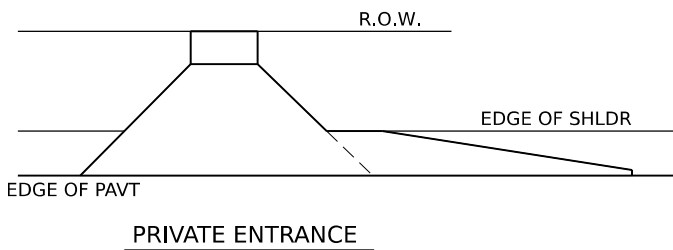
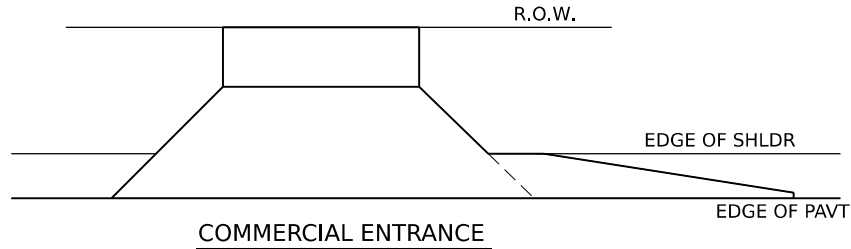
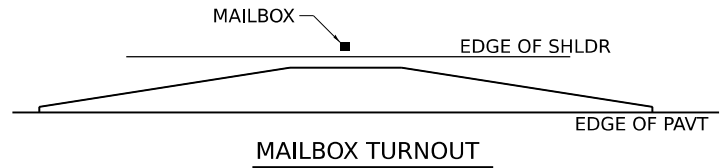
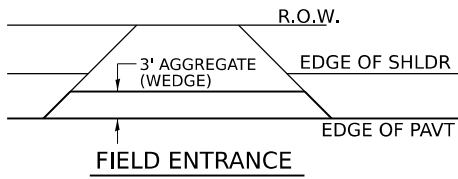
**TRANSITION CURVE TABLE**

CURVE PI STA.	SUPERELEVATION "e"	W	SUPERELEVATION TRANSITION LENGTH	TANGENT RUNOUT DISTANCE	SUPERELEVATION RUNOFF LENGTH

MODEL: 45p02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 11-09-06	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -									
REVISED -				CONTRACT NO.					
REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

# HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR SINGLE LIFT (SMART) RESURFACING PROJECTS

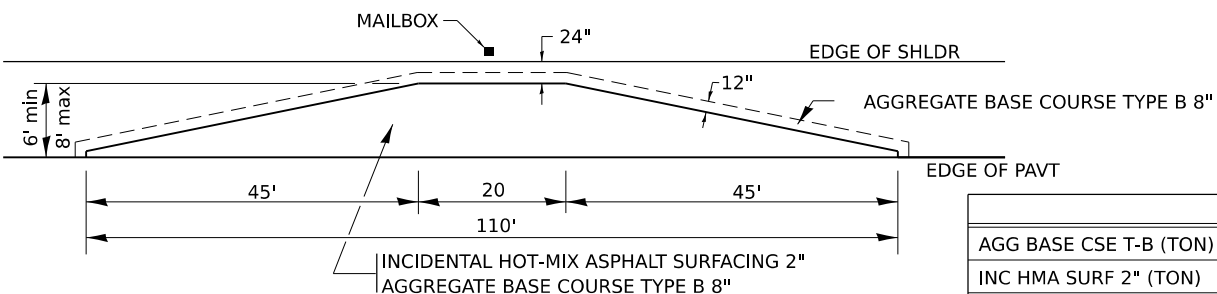


**NOTE:** EXISTING HMA PE's, CE's, SR's, & MB TURNOUTS  
Place 1 1/2" Incidental Hot-Mix Asphalt Surfacing on entrance to conform to the existing configuration.

EXISTING AGG. PE's & CE's  
Place 2" Incidental Hot-Mix Asphalt Surfacing on existing entrance to conform to the present configuration.

EXISTING AGG. SIDEROADS  
Place 3" Incidental Hot-Mix Asphalt Surfacing on sideroad to conform to the present configuration.

EXISTING AGG. MAILBOX TURNOUTS  
Existing Agg. Mailbox Turnouts shall be constructed as shown below.



	6'	8'
AGG BASE CSE T-B (TON)	24.5	31.1
INC HMA SURF 2" (TON)	7.3	9.8
BIT PRIME COAT (POUND)	120	161

MODEL: 46g02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

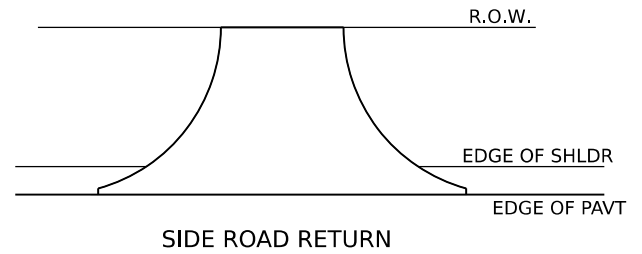
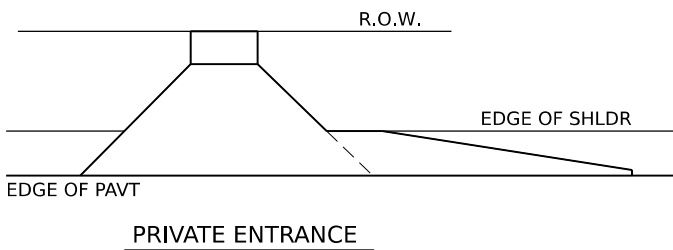
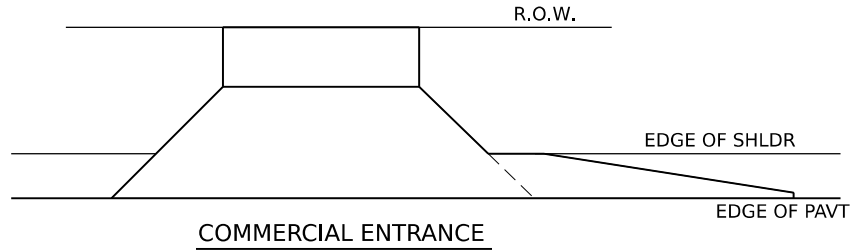
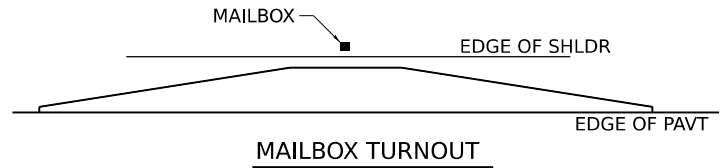
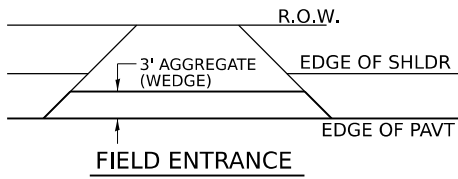
REVISED -	1-05-16
REVISED -	7-21-15
REVISED -	10-21-08
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# HOT-MIX ASPHALT APPROACHES & MAILBOX RETURNS FOR TWO LIFT (3P) RESURFACING PROJECTS

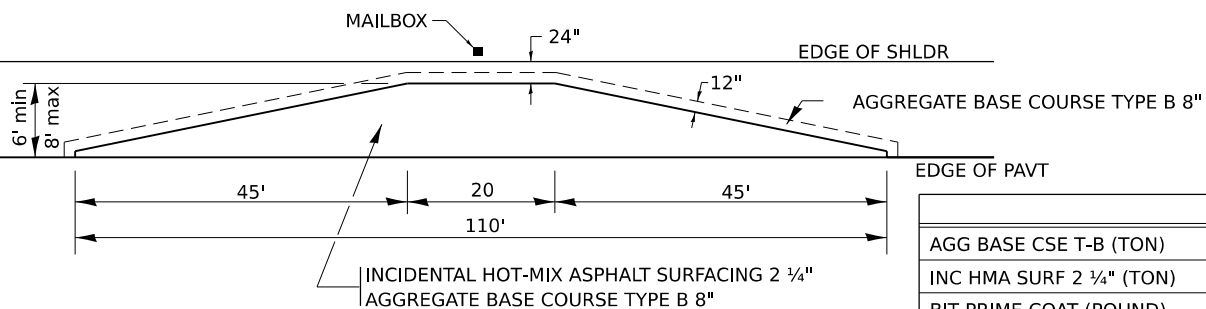


**NOTE:** EXISTING HMA PE's, CE's, SR's, & MB TURNOUTS  
Place 2 ¼" Incidental Hot-Mix Asphalt Surfacing on entrance to conform to the existing configuration.

EXISTING AGG. PE's & CE's  
Place 2 ¼" Incidental Hot-Mix Asphalt Surfacing on existing entrance to conform to the present configuration.

EXISTING AGG. SIDEROADS  
Place 3" Incidental Hot-Mix Asphalt Surfacing on sideroad to conform to the present configuration.

EXISTING AGG. MAILBOX TURNOUTS  
Existing Agg. Mailbox Turnouts shall be constructed as shown below.



	6'	8'
AGG BASE CSE T-B (TON)	24.5	31.1
INC HMA SURF 2 ¼" (TON)	8.2	11.0
BIT PRIME COAT (POUND)	120	161

MODEL: 47p02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	7-21-15
REVISED -	6-27-14
REVISED -	10-21-08

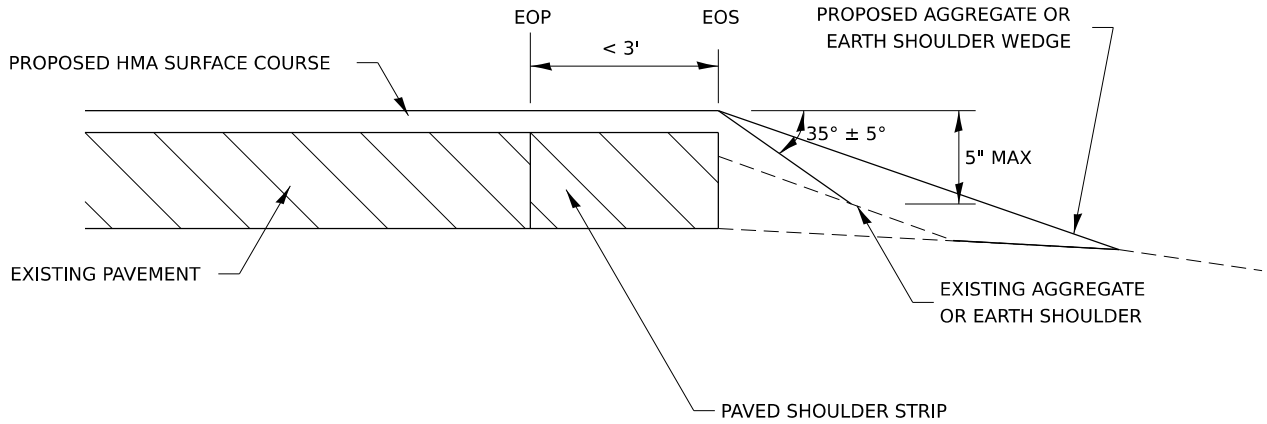
## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

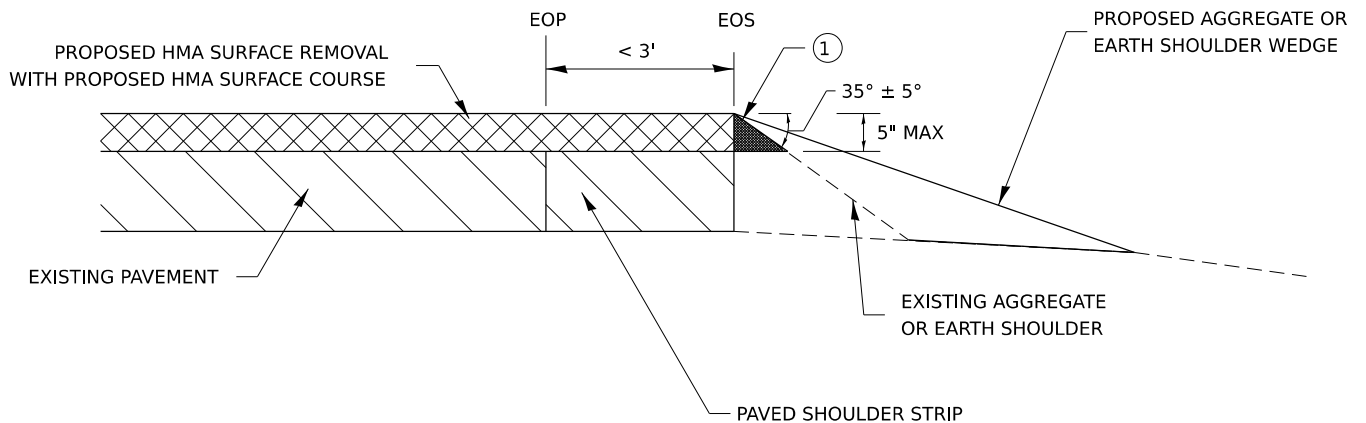
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



# SAFETY EDGE ( SMART PROJECT )



**NO MILLING: ADJACENT SHOULDER FLUSH WITH OR LOWER THAN EXISTING PAVEMENT**



**MILLING: WITH ADJACENT SHOULDER FLUSH WITH OR HIGHER THAN MILLED SURFACE**

NOTES : THE DEVICE WHICH FORMS THE SAFETY EDGE SHALL BE MOUNTED ON THE PAVER SCREED AGAINST THE END GATE AND SHALL BE REMOVABLE OR BE ABLE TO BE LIFTED WHEN NOT IN USE. THE DEVICE SHALL BE DESIGNED TO MAINTAIN CONTACT WITH SURFACE OF THE SHOULDER AND ALLOW AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. THE DEVICE SHALL ALSO CONSTRAIN THE HMA MATERIAL AND INCREASE THE CONSOLIDATION OF THE EXTRUDED PROFILE. THE USE OF A CONVENTIONAL SINGLE PLATE STRIKE-OFF WILL NOT BE ALLOWED.

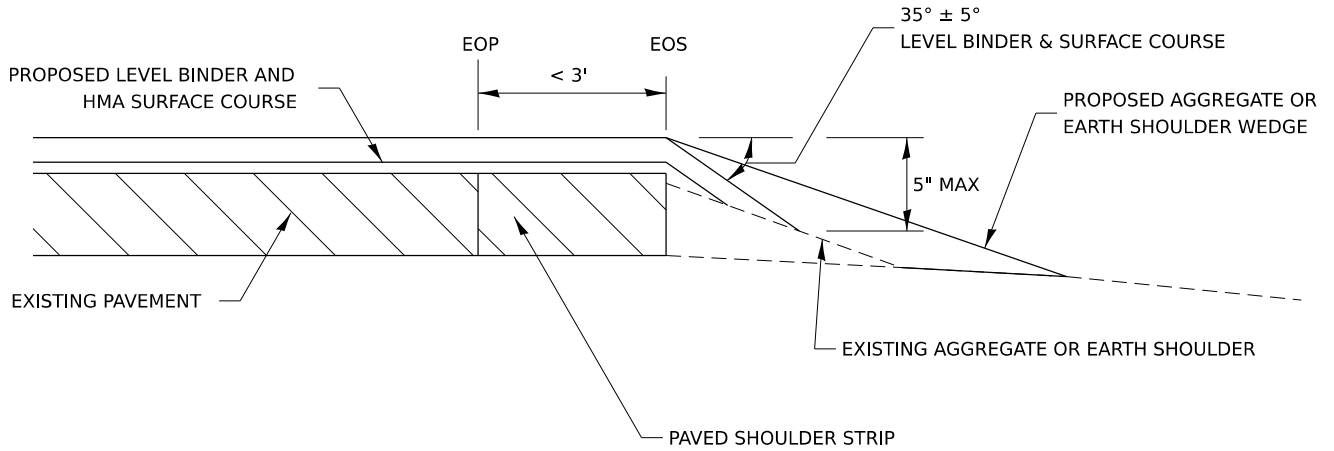
① PRIOR TO THE PLACEMENT OF THE HMA SAFETY EDGE, IF THE ADJACENT AGGREGATE OR EARTH SHOULDER IS HIGHER THAN THE MILLED SURFACE, THE AREA REQUIRED FOR PLACEMENT OF THE SAFETY EDGE SHALL BE BROUGHT FLUSH WITH THE MILLED SURFACE IN A MANNER APPROVED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE OF THE TYPE SPECIFIED.

ROLLERS WILL NOT BE ALLOWED ON THE SLOPED FACE OF THE SAFETY EDGE.

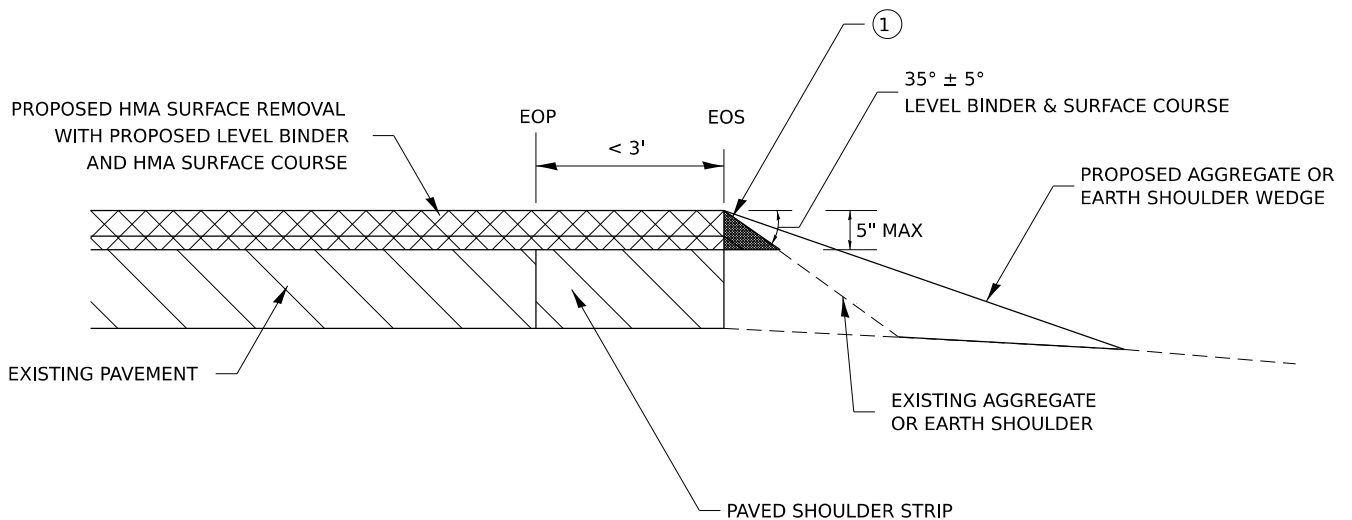
MODEL: 48902  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-11-13									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# SAFETY EDGE ( 3P PROJECTS )



**NO MILLING: ADJACENT SHOULDER FLUSH WITH OR LOWER THAN EXISTING PAVEMENT**



**MILLING: WITH ADJACENT SHOULDER FLUSH WITH OR HIGHER THAN MILLED SURFACE**

NOTES : THE DEVICE WHICH FORMS THE SAFETY EDGE SHALL BE MOUNTED ON THE PAVER SCREED AGAINST THE END GATE AND SHALL BE REMOVABLE OR BE ABLE TO BE LIFTED WHEN NOT IN USE. THE DEVICE SHALL BE DESIGNED TO MAINTAIN CONTACT WITH SURFACE OF THE SHOULDER AND ALLOW AUTOMATIC TRANSITION TO CROSS ROADS, DRIVEWAYS AND OBSTRUCTIONS. THE DEVICE SHALL ALSO CONSTRAIN THE HMA MATERIAL AND INCREASE THE CONSOLIDATION OF THE EXTRUDED PROFILE. THE USE OF A CONVENTIONAL SINGLE PLATE STRIKE-OFF WILL NOT BE ALLOWED.

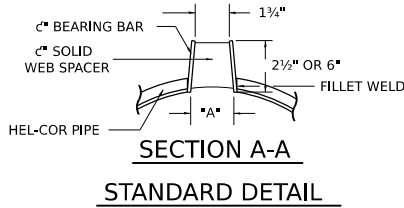
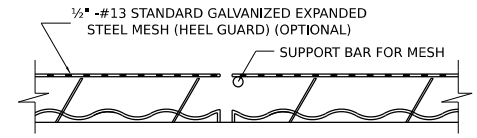
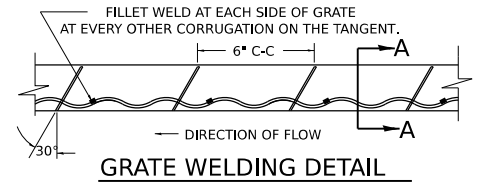
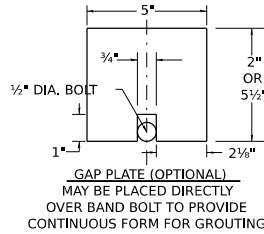
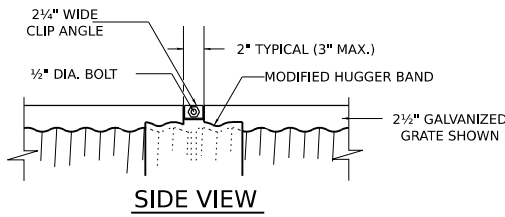
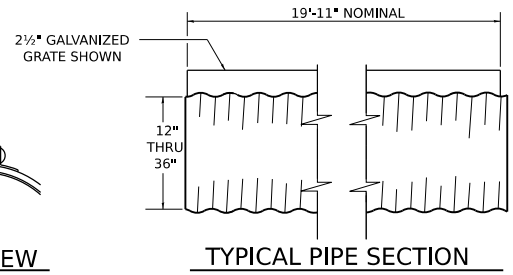
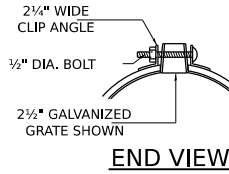
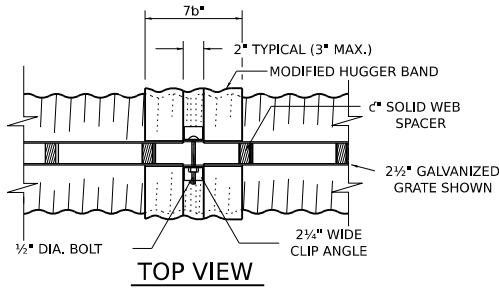
① PRIOR TO THE PLACEMENT OF THE HMA SAFETY EDGE, IF THE ADJACENT AGGREGATE OR EARTH SHOULDER IS HIGHER THAN THE MILLED SURFACE, THE AREA REQUIRED FOR PLACEMENT OF THE SAFETY EDGE SHALL BE BROUGHT FLUSH WITH THE MILLED SURFACE IN A MANNER APPROVED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE OF THE TYPE SPECIFIED.

ROLLERS WILL NOT BE ALLOWED ON THE SLOPED FACE OF THE SAFETY EDGE.

MODEL: 46902  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-11-13									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

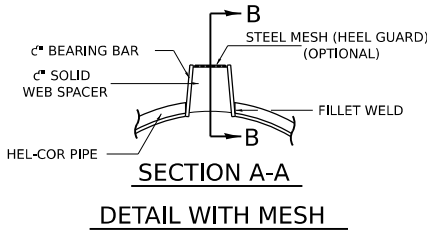
# SLOTTED DRAIN PIPE FOR TYPE A GUTTER (SPECIAL)



GAGE OF PIPE	DIAMETER OF PIPE					
	12"	15"	18"	24"	30"	36"
16	X	X	X	X	X	X
14	X	X	X	X	X	X
12	N.A.	N.A.	N.A.	N.A.	X	X

GRATE TYPE	"A"	
VERT	2-1/2"	1-3/4"
VERT	6"	1-3/4"
TRAP	2-1/2"	2-1/4"
TRAP	6"	3"

VERT = VERTICAL  
TRAP = TRAPEZOIDAL



(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

- SLOTTED DRAIN NOTES**
- GRATING IS AVAILABLE IN DEPTHS OF 2 1/2" AND 6".
  - VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
  - FOR 6" VERTICAL & TRAPEZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 4" TECHCO BAND ANGLE.
  - DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
  - REFERENCE CONTECH BAND MANUAL DWG. NO. 1008466 FOR BAND DETAILS.

**MANUFACTURING TOLERANCES**

- VERTICAL BOW ± 3/8"
- HORIZONTAL BOW ± 5/8"
- TWIST ± 1/2"

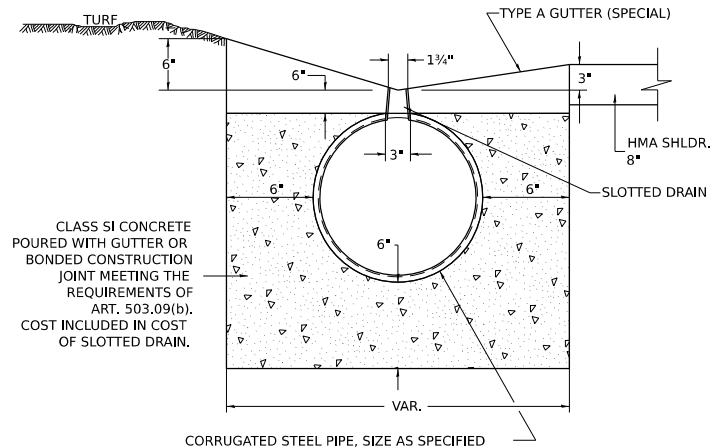
**NOTES**

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

THE SLOTTED DRAIN SHALL BE CORRUGATED PIPE CULVERT WITH INTEGRAL SLOTTED DRAINS. BEFORE PLACING THE CONCRETE ADJACENT TO THE PIPE, THE SLOT SHALL BE COVERED BY EITHER THIN, FLAT METAL SHEETING OR BY A BOARD NOTCHED TO FIT OVER THE GRATE BARS. THIS COVERING MUST FIT CLOSELY IN THE SLOT TO PREVENT ENTRY OF CONCRETE INTO THE PIPE. PAVING OVER THE SLOTTED DRAIN WILL THEN BE ONE CONTINUOUS OPERATION OVER THE PROTECTED DRAIN. THE PROTECTION FOR THE DRAIN SLOT SHALL THEN BE REMOVED. THE PIPE SHALL DRAIN INTO THE SIDE OF THE INLET. THE OPENING WHERE THE SLOT IS REMOVED SHALL BE COVERED TO PREVENT CONCRETE FROM ENTERING THE PIPE.

THE CORRUGATED STEEL PIPE USED IN THE SLOTTED DRAIN SHALL MEET THE REQUIREMENTS OF AASHTO M-36/ASTM A 760. THE CMP SHALL BE GALVANIZED OR ALUMINIZED STEEL TYPE 2. STEEL GRATING SHALL MEET THE GALVANIZING REQUIREMENTS OF AASHTO M-111. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLOTTED DRAIN PIPE, AND SHALL INCLUDE ELBOWS.

USE APPROVED END CAP TO PREVENT CONCRETE ENTRY INTO THE PIPE DURING GUTTER CONSTRUCTION ON THE UPSTREAM END OF PIPE.



CORRUGATED STEEL PIPE, SIZE AS SPECIFIED

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 61102  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

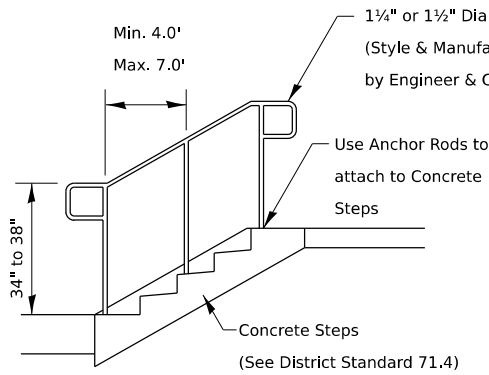
REVISED -	1-05-16
REVISED -	6-27-14
REVISED -	10-14-11
REVISED -	

**REGION 2 / DISTRICT 2 STANDARD**

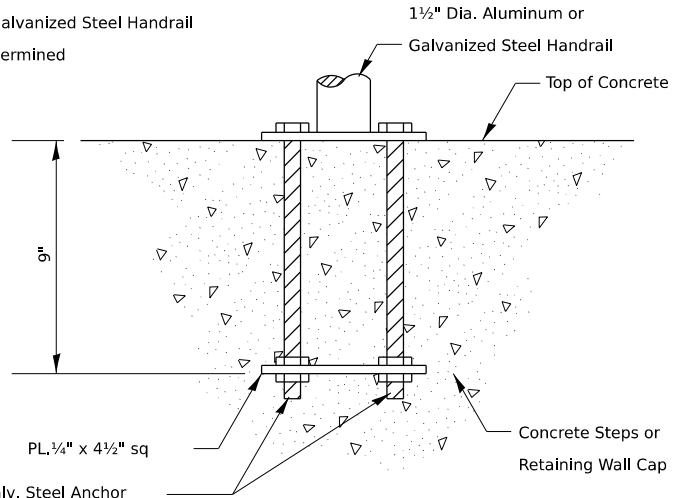
SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS			FED. AID PROJECT	

# PIPE HANDRAILS FOR STEPS



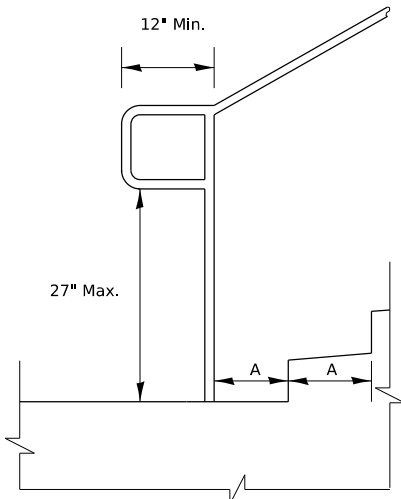
**HANDRAIL FOR CONCRETE STEPS**



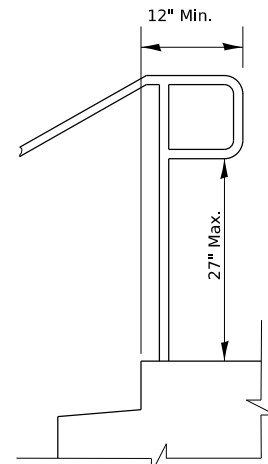
3/4" Dia. Galv. Steel Anchor Rod Thd'd both ends with Heavy Hex Nut Washer & two Hex Nuts

**ANCHOR ROD DETAIL**

(Included in the cost of Hand or Safety Rail)



**Extension at Bottom of Run Detail**



**Extension at Top of Run Detail**

**Notes:**

Stairways shall have continuous handrails both sides of all stairs.

The inside handrail on switchback or dogleg stairs shall always be continuous.

Gripping surfaces shall be uninterrupted by newel posts, other construction elements, or obstructions.

Ends of handrail shall be either rounded or returned smoothly to floor, wall, or post.

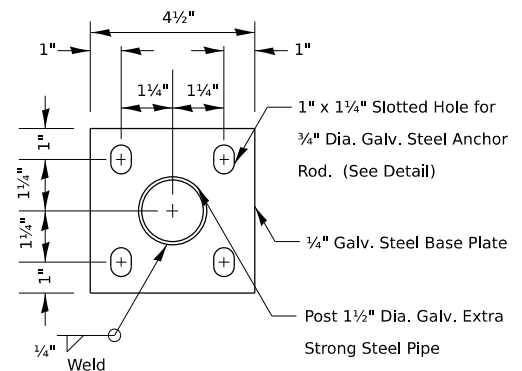
Hand & safety rails shall not rotate within their fittings.

The clear space between hanrails and any wall shall be 1/2"

Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006.34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2"

This work shall be paid for at the contract unit price per FOOT for PIPE HANDRAIL.



**POST BASE PLATE DETAIL**

(Included in the cost of Hand or Safety Rail)

MODEL: 6392  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

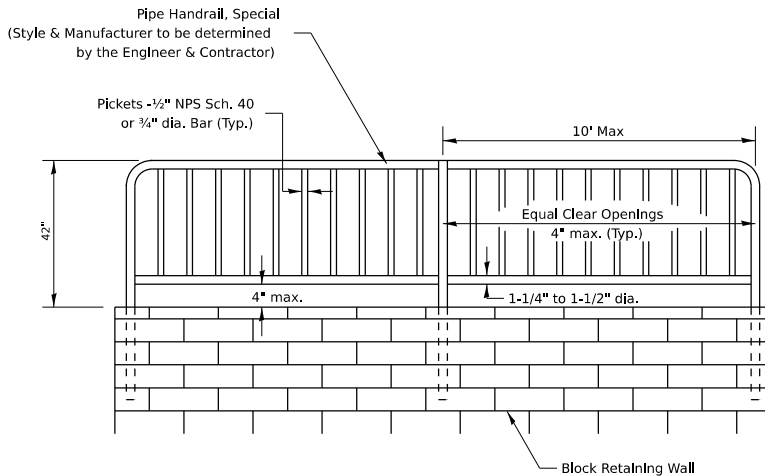
REVISED -	1-05-16
REVISED -	10-14-11
REVISED -	
REVISED -	

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# PIPE HANDRAIL, SPECIAL – FOR RETAINING WALLS



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(See details for Installation options)

**Notes:**

Gripping surfaces shall be uninterrupted by construction elements, or obstructions.

Ends of handrail shall be rounded.

Handrail shall not rotate within their fittings.

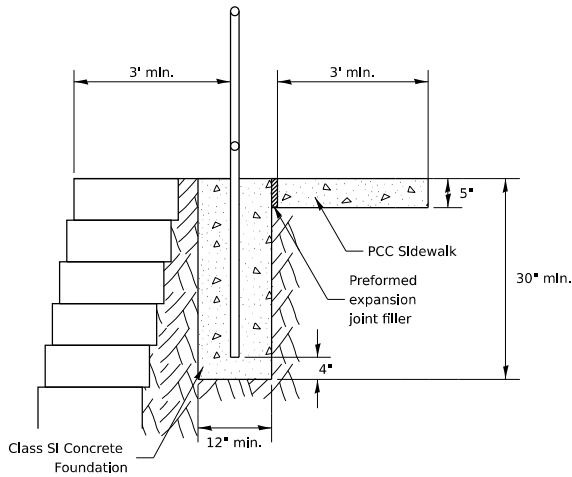
Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006.34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2"

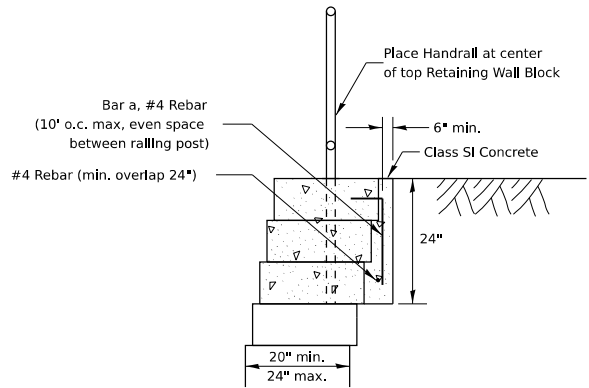
Handrail required when wall height difference is 4' or greater

Drilling of blocks will be necessary for reinforcement placement.

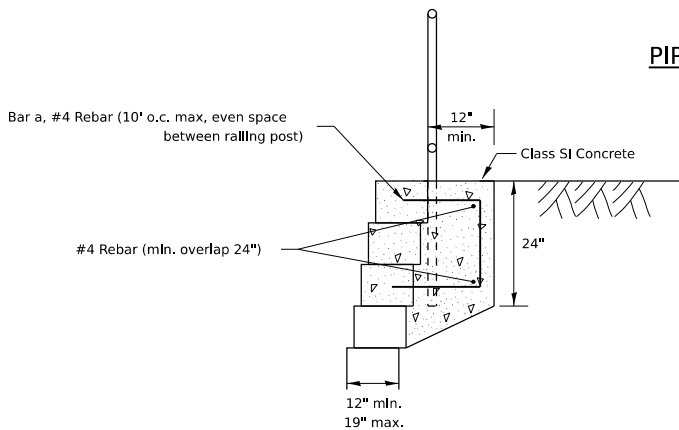
This work shall consist of furnishing and erecting Handrails as listed above and according to this detail. This work shall be paid for at the contract UNIT price per FOOT for PIPE HANDRAIL, SPECIAL.



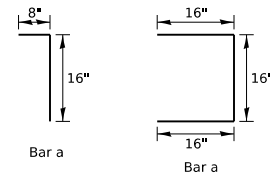
**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 1)



**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 2-Block depth greater than 20")



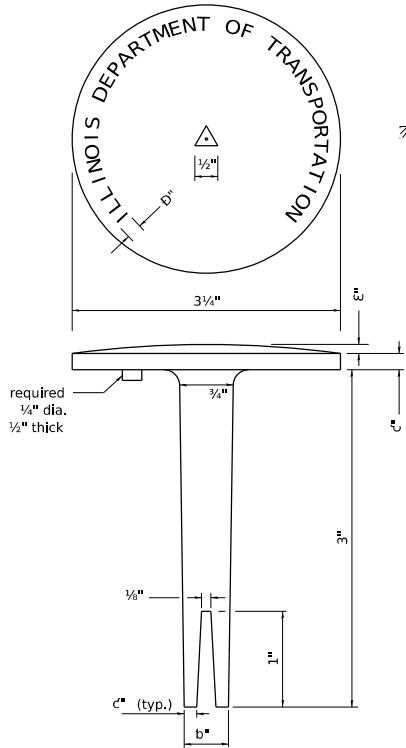
**PIPE HANDRAIL, SPECIAL - FOR RETAINING WALL**  
(Option 3 - Block depth 12" to 19")



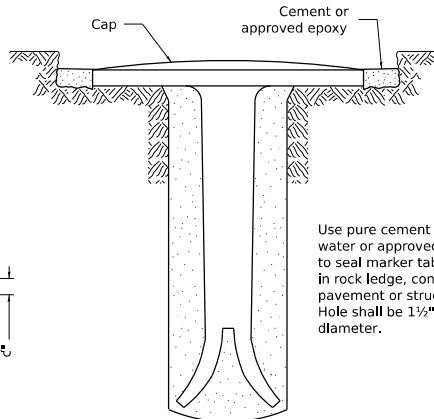
MODEL: 6492  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 12-03-14				CONTRACT NO.				
REVISED - 2-01-10								ILLINOIS FED. AID PROJECT
REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.		

# PERMANENT SURVEY MARKERS, TYPE II

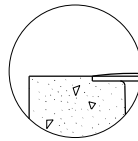


**BRASS OR ALUMINUM TABLET**



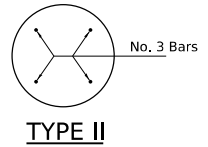
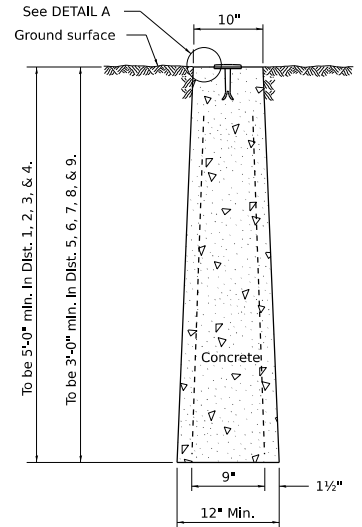
Tablet constructed in rock ledge or concrete.

**TYPE II**



**DETAIL A**

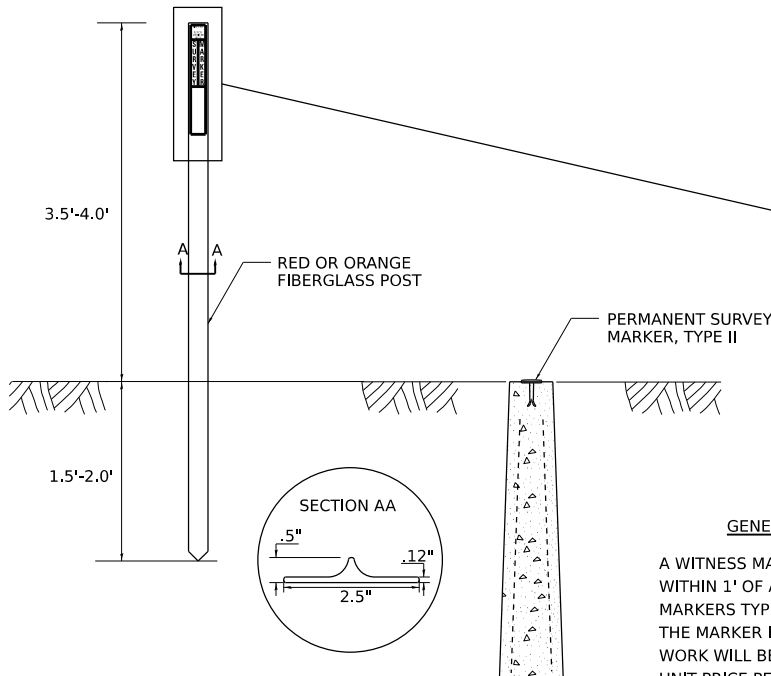
Use pure cement and water or approved epoxy to seal marker tablet in rock ledge, concrete pavement or structure. Hole shall be 1 1/2" diameter.



**CAST-IN-PLACE MARKER**

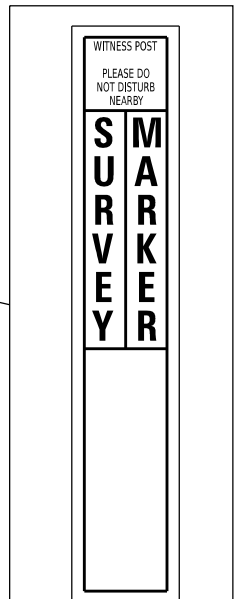
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

# WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



**GENERAL NOTES**

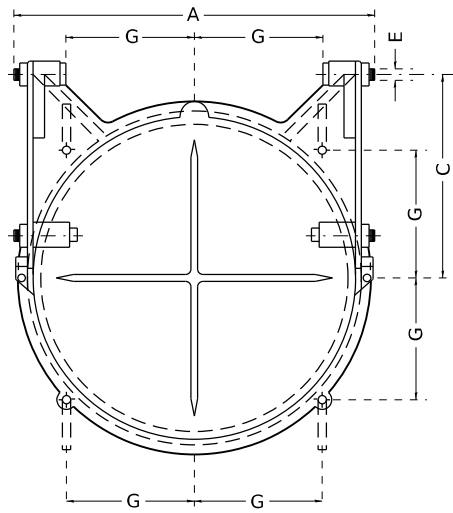
A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.



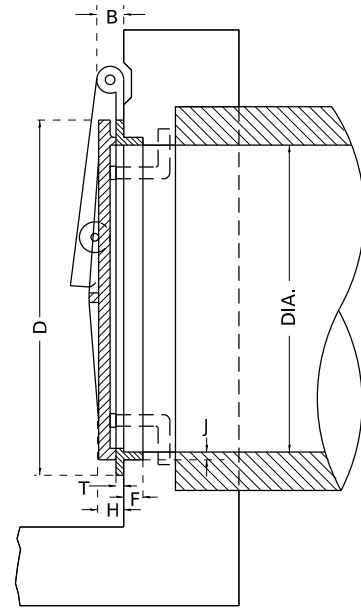
MODEL: e6602  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11									
REVISED -									
REVISED -	SCALE:	SHEET OF SHEETS	STA.	TO STA.	CONTRACT NO.				
					ILLINOIS FED. AID PROJECT				

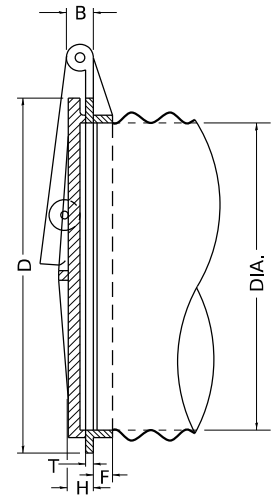
# AUTOMATIC FLAP GATE



FRONT ELEVATION



SECTION



SECTION SHOWING METHOD OF APPLICATION TO CORRUGATED METAL PIPE

IT IS INTENDED THAT THE AUTOMATIC FLAP GATES SHALL BE A COMMERCIAL PRODUCT PRODUCED BY A RELIABLE MANUFACTURER. THE GATE MAY BE MADE OF CAST IRON, CAST STEEL OR OTHER SUITABLE MATERIALS. THE DESIGN MAY DIFFER FROM THE DRAWING IF IT WILL WORK IN A SATISFACTORY, TROUBLE FREE MANNER AND WILL WITHSTAND THE WATER PRESSURE AT THE INSTALLATION LOCATION. THE GATE SHALL BE APPROVED BY THE ENGINEER.

THE SIZE OF AUTOMATIC FLAP GATES SHALL REFER TO THE DIAMETER OF THE OUTLET PIPE OR OPENING.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR FLAP GATE OF THE SIZE SPECIFIED AND SHALL INCLUDE ALL MATERIALS AND COMPLETE INSTALLATION.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

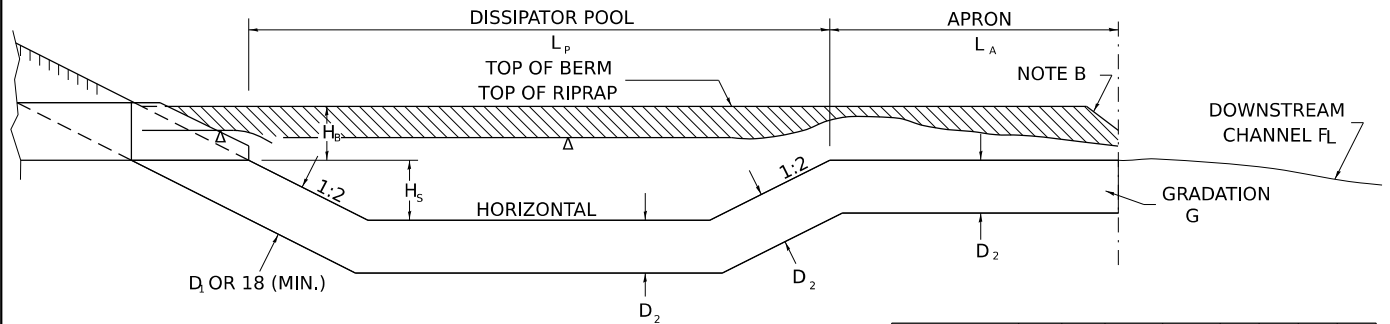
TABLE OF DIMENSIONS

DIAM	A	B	C	D	E	F	G	H	J	T
8	10 3/4	1 3/8	5 0	10	1/2	1 1/8	3 0	1 1/4	3/8	3/8
10	12 3/4	1 3/8	7 1/8	12 1/4	1/2	1 1/8	4 3/8	1 1/2	1/2	0
12	14 3/4	1 3/8	8 1/2	14 1/2	1/2	1 1/8	5 5/8	1 1/2	1/2	1/2
14	17 1/4	1 3/8	9 7/8	16 3/4	1/2	1 1/4	5 0	1 1/2	1/2	0
15	17 3/4	1 3/8	10 5/8	17 3/4	1/2	1 1/4	6 1/4	1 1/2	1/2	0
16	19 1/4	1 3/8	11 1/4	18 3/4	1/2	1 1/4	6 5/8	1 1/2	1/2	0
18	22 1/4	2	12 5/8	21	3/4	1 0	7 0	1 3/4	0	0
20	24 3/4	2	14 1/8	23 3/4	3/4	1 3/8	8 1/4	1 3/4	5/8	5/8
21	25 1/4	2	14 1/8	24 1/4	3/4	1 3/8	8 0	1 3/4	5/8	5/8
24	28 1/4	2	17	27 1/2	3/4	1 1/2	9 3/4	1 3/4	5/8	5/8
30	35 1/4	2 1/2	20 1/2	34	1	1 0	12	2	1 0	5/8
36	41 1/2	2 1/2	25	40 7/8	1	2 0	14 0	2 1/4	1 1/8	0
42	47 1/2	2 1/2	29 3/4	47	1	2 0	16 5/8	2 1/4	1 1/8	3/4
48	53 1/2	2 1/2	34	54	1	2 3/4	19 0	2 1/4	1 3/8	3/4
54	60 3/4	2 1/2	38	62 1/4	1 1/4	2 3/4	22	3	1 1/2	7/8
60	67	2 1/2	42	68 1/2	1 1/4	2 3/4	24 1/4	3	1 1/2	0
66	73 3/8	2 1/2	47	75	1 1/4	2 7/8	26 1/2	3	1 1/2	1
72	79	2 1/2	51	82	1 1/4	3	29	3	1 1/2	1
78	86	2 1/2	55 1/4	88 3/4	1 1/4	3 1/2	31 3/8	3	1 5/8	1 1/8
84	92 1/2	3 1/2	59 1/2	95 1/2	1 1/2	3 1/2	33 3/4	3	1 3/4	1 1/4

MODEL: 7392  
 District 2 Standard  
 FILE NAME: 3/12/2024  
 PLOT DATE:

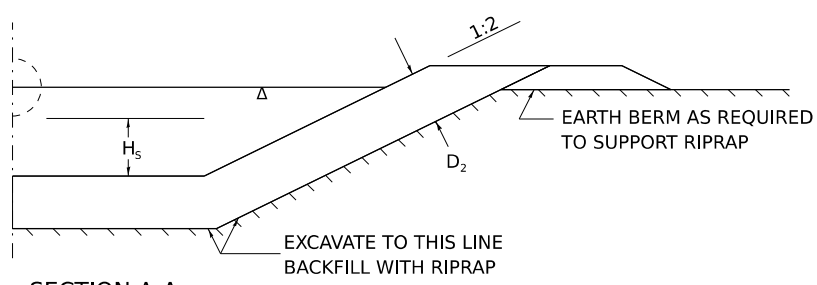
REVISED -	10-14-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -										
REVISED -						CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT		

# RIPRAPPED CULVERT ENERGY BASIN



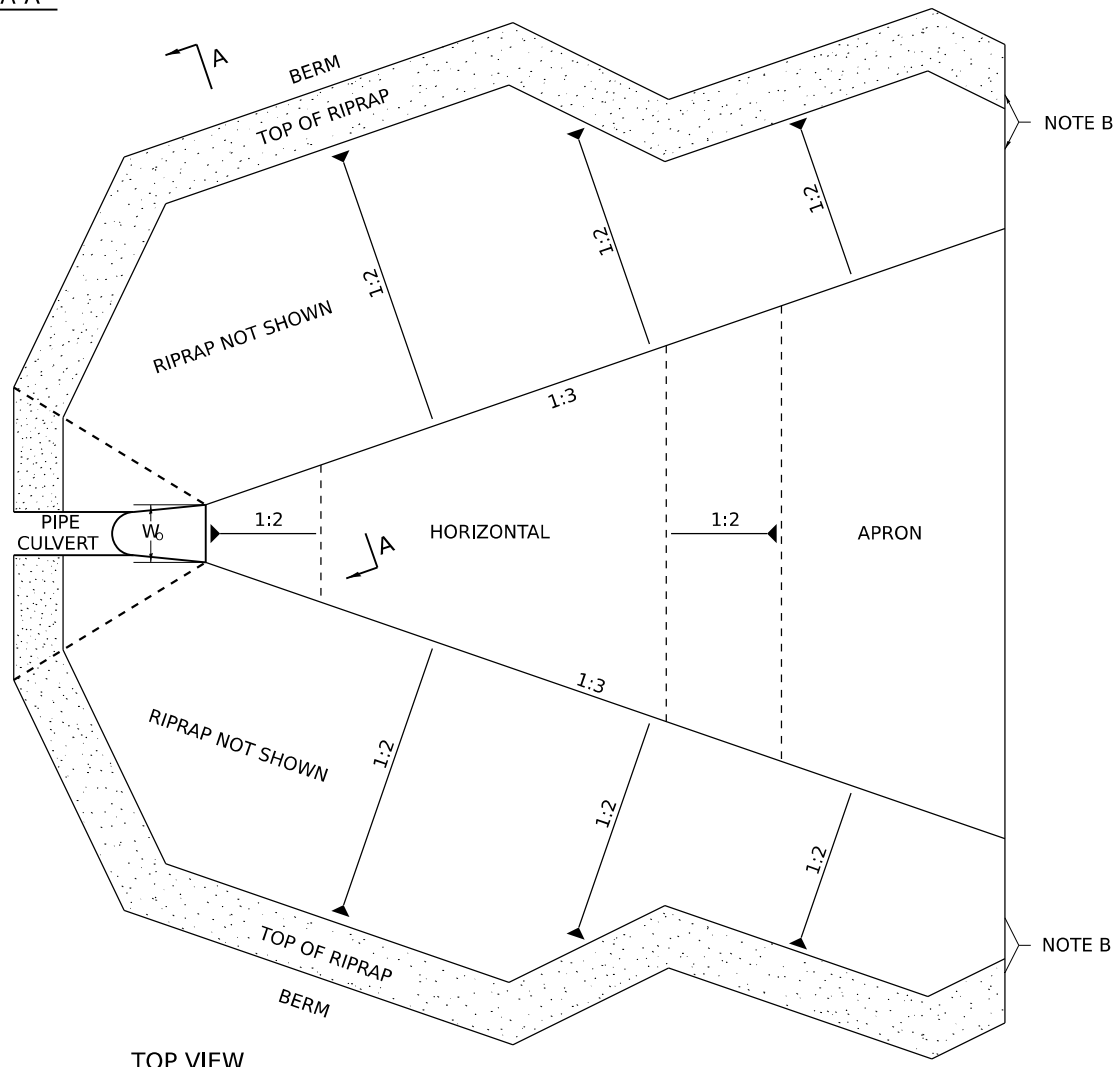
SECTION

STATION	G	W <sub>0</sub>	L <sub>p</sub>	L <sub>a</sub>	H <sub>s</sub>	H <sub>b</sub>	D <sub>1</sub>	D <sub>2</sub>



SECTION A-A

NOTE B: WARP BASIN TO CONFORM TO NATURAL STREAM CHANNEL.



TOP VIEW

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 81102  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVISED - 10-14-11									CONTRACT NO.			
REVISED -									ILLINOIS FED. AID PROJECT			
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	

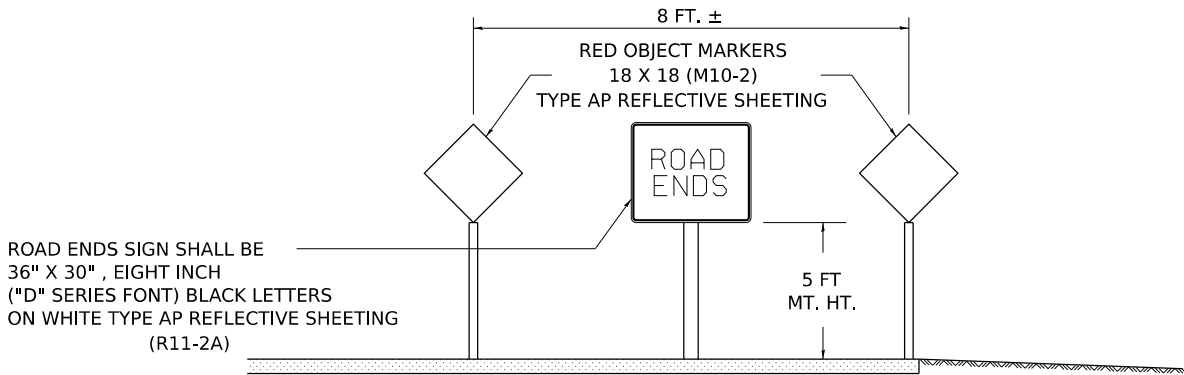


# TERMINATION OF DEAD END ROADS

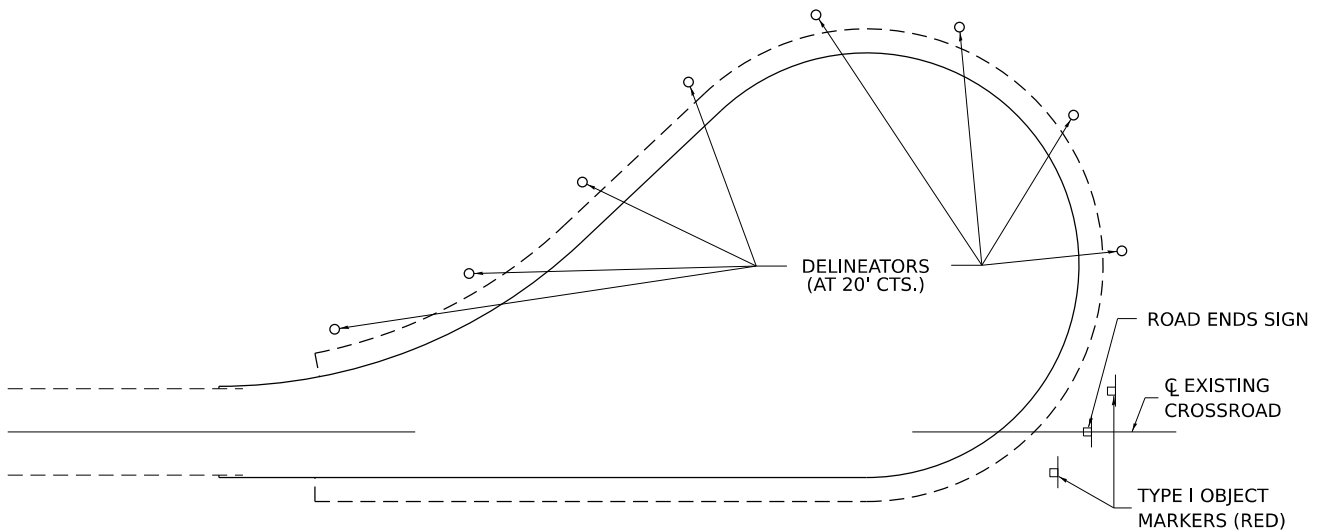
NOTES: A "NO OUTLET" (36"x36" YELLOW) SIGN SHALL BE ERECTED SLIGHTLY BEYOND THE LAST ROAD INTERSECTING THE ROAD WITH NO OUTLET. IF THIS INTERSECTION IS MORE THAN 1500 FT FROM TERMINATION POINT, OR IF SIGHT DISTANCE TO THE CLOSURE IS LESS THAN 500 FT, A ROAD ENDS 500 FT (WB-I6) SIGN SHALL BE ERECTED 500 FT IN ADVANCE OF THE TERMINATION OF THE ROAD. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR "TERMINATION OF DEAD END ROADS" WHICH PRICE SHALL INCLUDE ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO INSTALL THE SIGNS AND DELINEATORS.

USE 4X6 WOOD POSTS INSTALLED IN ACCORDANCE WITH SECTION 730 OF STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS. USE APPLICABLE PARTS OF STANDARD 720001 FOR SIGN MOUNTING.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



TERMINATION SIGNING



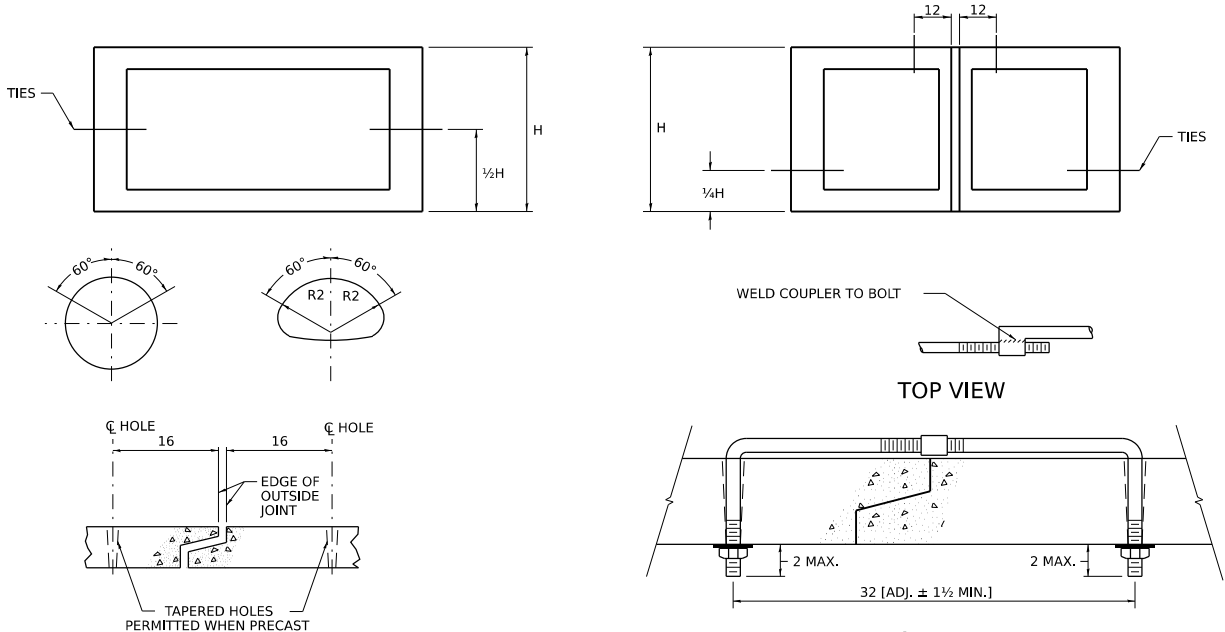
TRAFFIC CONTROL  
TYPICAL CUL-DE-SAC

MODEL: 89902  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 11-12-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-14-11									
REVISED -					CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT	

# MECHANICAL JOINTS FOR CONCRETE PIPE AND BOX CULVERTS

THE CULVERT TIES SHALL BE INCLUDED IN THE COST OF THE CONCRETE PIPE CULVERTS OR THE PRECAST CONCRETE BOX CULVERT. THE MECHANICAL TIES SHALL BE ON THE OUTSIDE OF THE CULVERT. THE NUTS AND WASHERS SHALL BE PLACED ON THE INSIDE OF THE CULVERT AND COVERED WITH MASTIC JOINT SEALER CONFORMING TO SECTION 1055 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

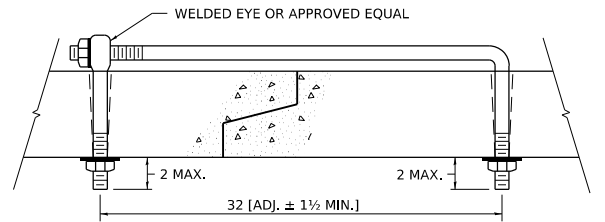


ADJUSTABLE TIE

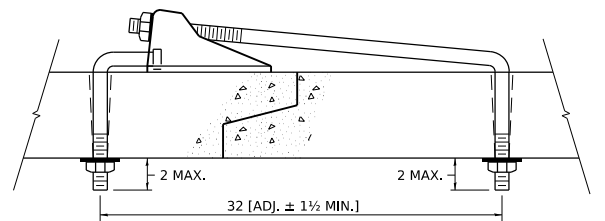
PLACEMENT OF HOLES		
BOX CULVERT FEET	PIPE SIZE INCHES	THREAD DIAMETER
	12	3/4 ROLLED THREADS (SEE NOTE 4)
	15	
	18	
	21	
	24	
	27	
3x2 3x3 4x2 4x3 4x4 5x3 5x4 5x5 6x * 7x * 8x * 9x * 10x *	30	3/4 CUT OR ROLLED
	33	
	36	
	42	
	48	
	54	
	60	
	66	
	72	
	78	
11 X * AND GREATER	84	1 CUT OR ROLLED
	90	
	96	
	102	
	108	
	120	
	132	1 1/4
	138 AND GREATER	

**NOTES:**

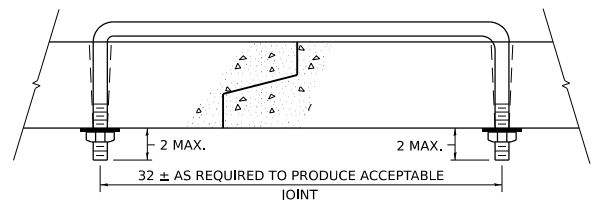
- HOLES SHALL BE CAST-IN OR DRILLED 16 FROM OUTSIDE EDGE OF JOINT.
- NUTS AND WASHERS ARE NOT REQUIRED ON INSIDE OF 27 DIAM. PIPE OR LESS.
- TIES ARE NOT REQUIRED FOR BELL PIPE 24 AND SMALLER. ON OTHER SIZES TIE MAY BE INSERTED FROM INSIDE.
- CUT THREADS MAY BE USED IF WASHER AND NUT ARE USED.
- PIPE SIZE LISTED IS INSIDE DIAM. OF ROUND PIPE OR EQUIVALENT DIAM. OF PIPE ARCH OR ELLIPTICAL.
- GALVANIZING OF TIES IS REQUIRED.
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



EYE BOLT TIE



CANOPY TIE

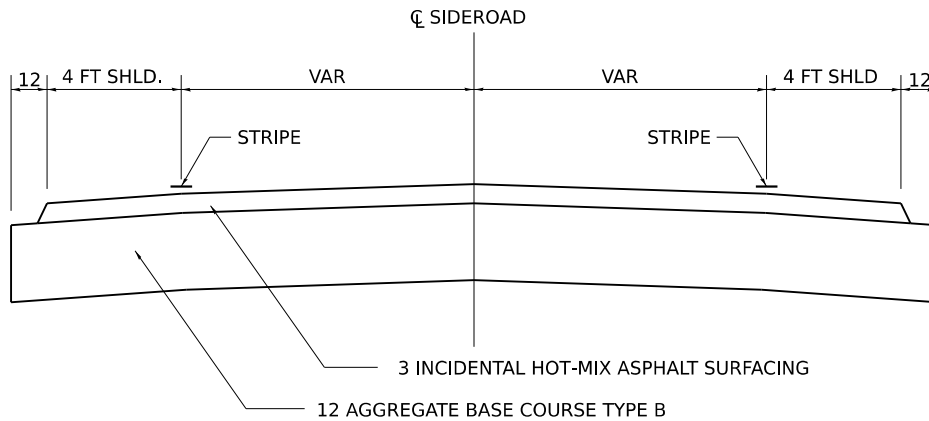
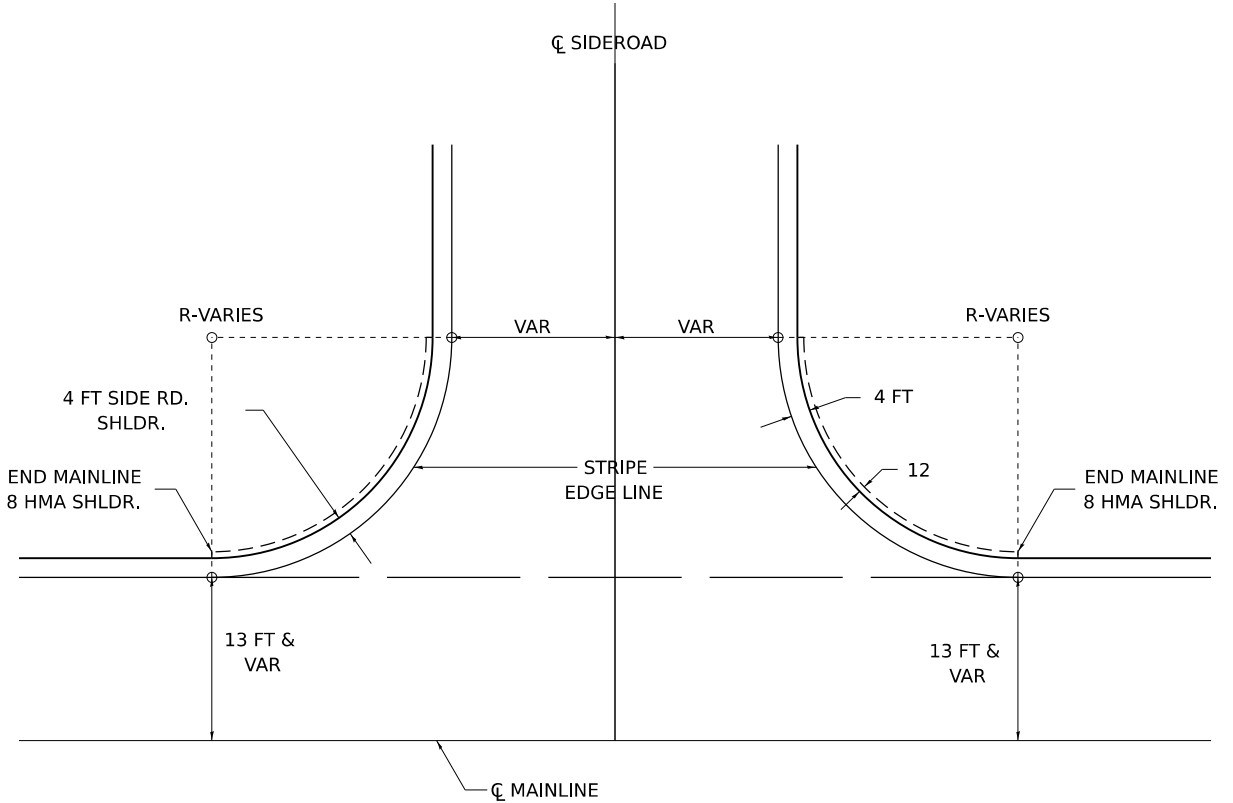


U BOLT TIE

MODEL: 90p02  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED - 11-12-14							
REVISED - 10-14-11		CONTRACT NO.					
REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

# TYPICAL AGGREGATE BASE SIDEROAD

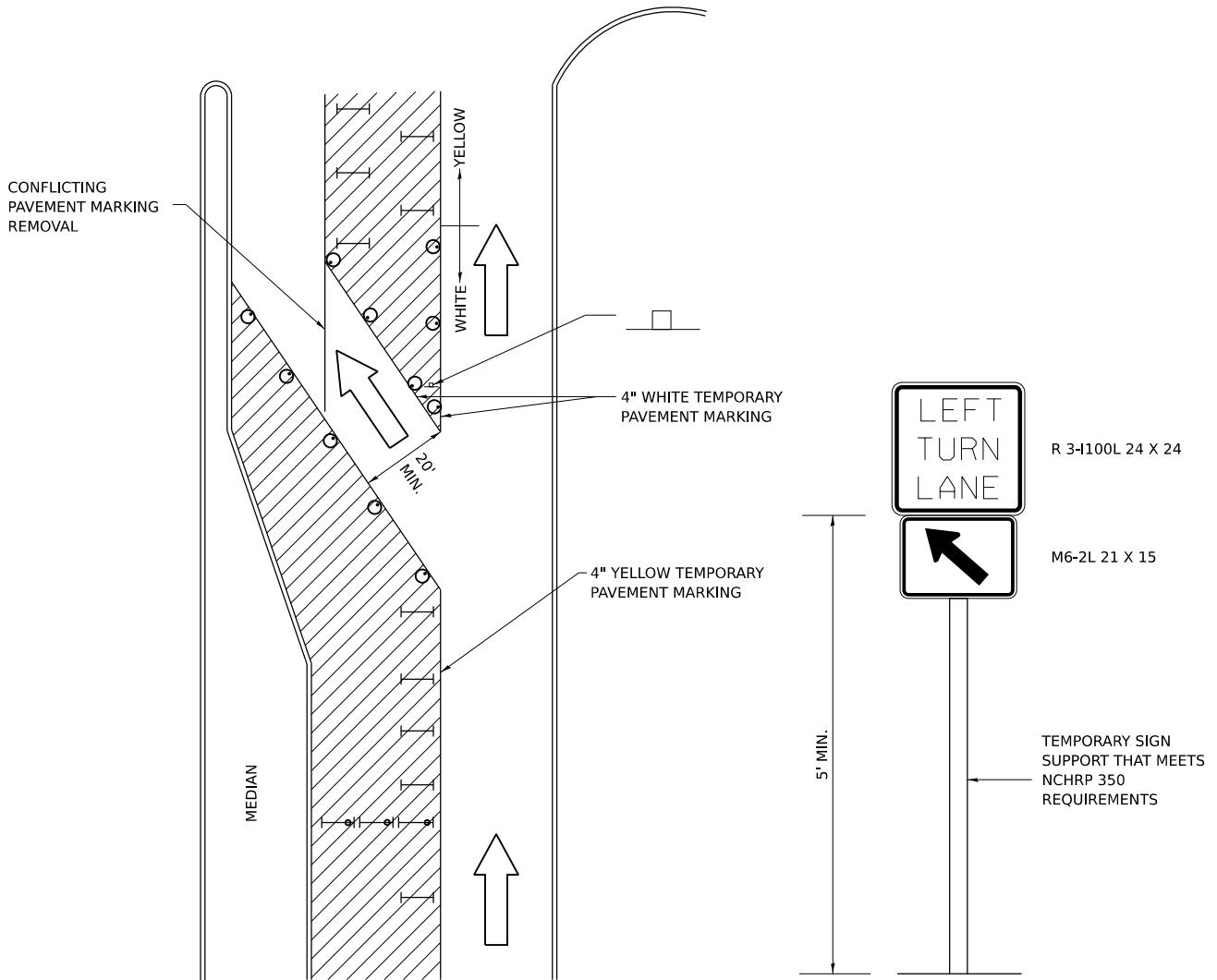


ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.


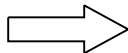




MODEL: 93902  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 10-14-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

# TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)



## LEGEND

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE OR DRUM WITH FLASHING BURNING LIGHT
-  DRUM OR BARRICADE WITH STEADY BURN LIGHT
-  SIGN (SEE DETAIL)
-  TYPE I OR II CHECK BARRICADE WITH STEADY LIGHT BURN

## GENERAL NOTES

CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 IN HEIGHT.

STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS WILL BE MONODIRECTIONAL.

TEMPORARY PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.

THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 X 24 AND M6-2R 21 X 15 SHALL BE USED.

THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

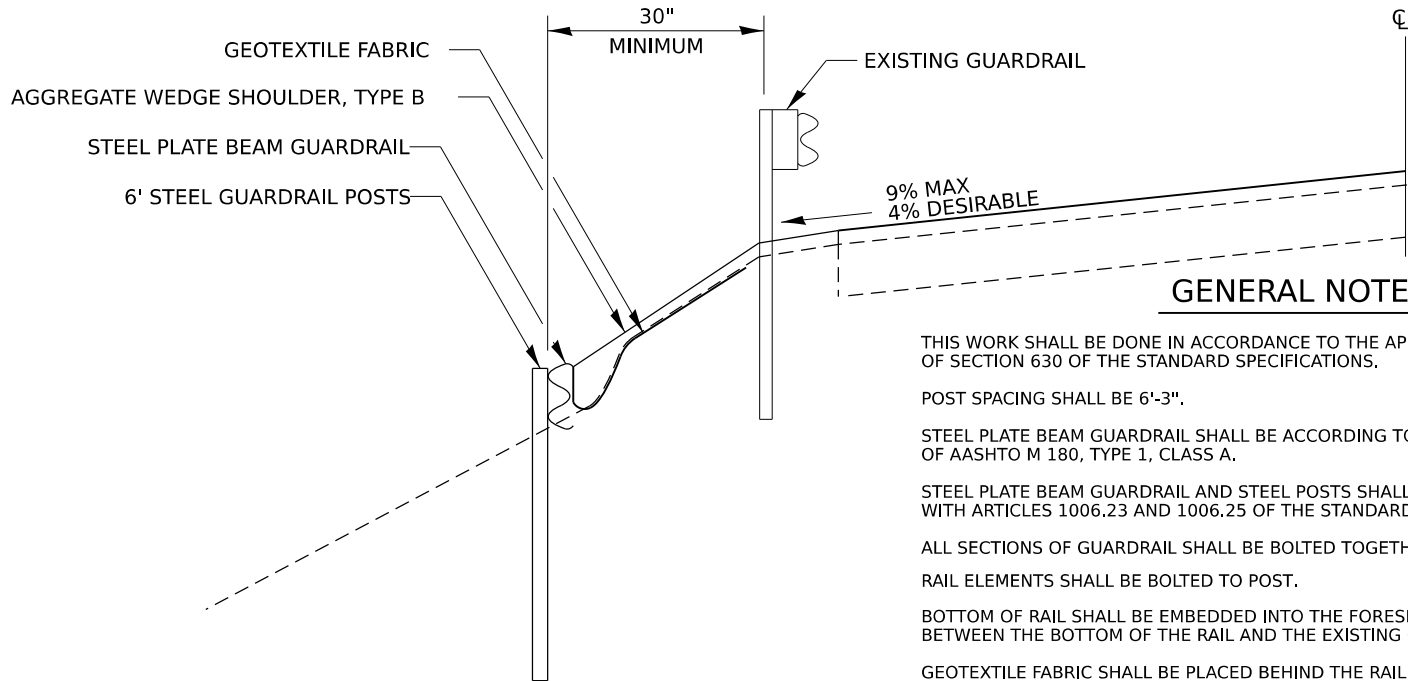
TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 9492  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 10-14-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -	SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT	

# PERIMETER EROSION BARRIER, SPECIAL



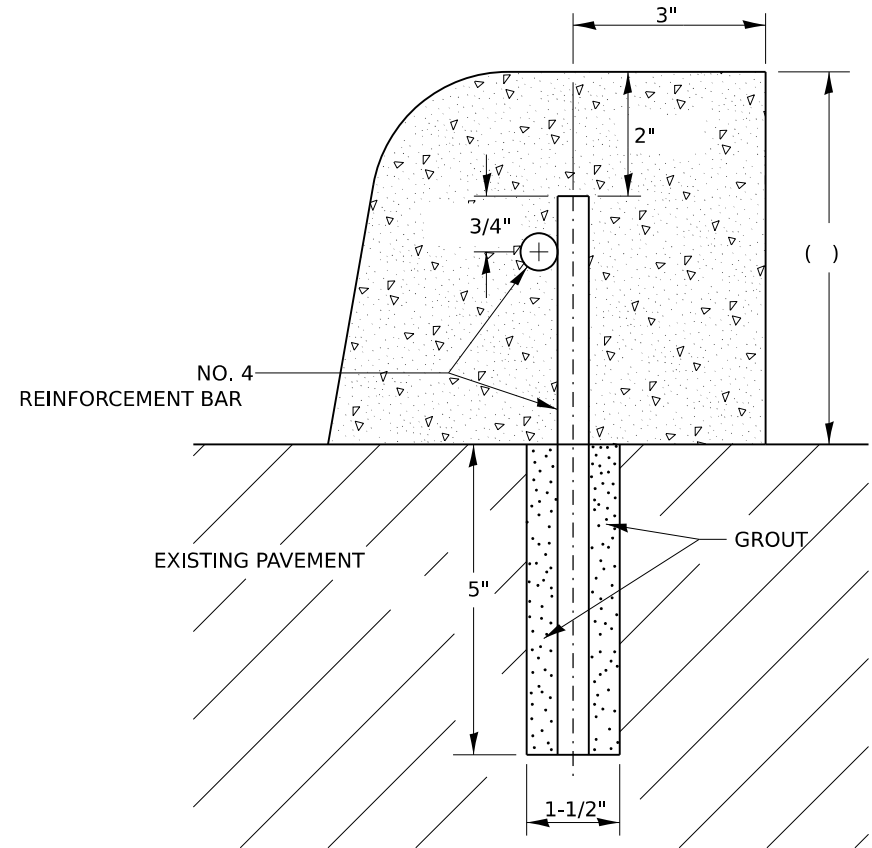
## GENERAL NOTES

- THIS WORK SHALL BE DONE IN ACCORDANCE TO THE APPLICABLE PORTIONS OF SECTION 630 OF THE STANDARD SPECIFICATIONS.
- POST SPACING SHALL BE 6'-3".
- STEEL PLATE BEAM GUARDRAIL SHALL BE ACCORDING TO THE REQUIREMENTS OF AASHTO M 180, TYPE 1, CLASS A.
- STEEL PLATE BEAM GUARDRAIL AND STEEL POSTS SHALL BE IN ACCORDANCE WITH ARTICLES 1006.23 AND 1006.25 OF THE STANDARD SPECIFICATIONS.
- ALL SECTIONS OF GUARDRAIL SHALL BE BOLTED TOGETHER.
- RAIL ELEMENTS SHALL BE BOLTED TO POST.
- BOTTOM OF RAIL SHALL BE EMBEDDED INTO THE FORESLOPE UNTIL NO GAP EXISTS BETWEEN THE BOTTOM OF THE RAIL AND THE EXISTING GROUND.
- GEOTEXTILE FABRIC SHALL BE PLACED BEHIND THE RAIL ELEMENT AND ON THE GROUND BEHIND THE EXISTING GUARDRAIL BEFORE PLACING THE AGGREGATE WEDGE SHOULDERS. THE INSTALLATION AND MATERIAL FOR GEOTEXTILE FABRIC SHALL BE ACCORDING TO SECTION 210 OF THE STANDARD SPECIFICATIONS.
- AT LOCATIONS WHERE THERE ARE GAPS UNDER THE RAIL ANOTHER RAIL ELEMENT SHALL BE PLACED BELOW THE FIRST RAIL AND BOLTED TO IT. THE ADDITIONAL RAIL ELEMENTS WILL BE PAID AT THE CONTRACT UNIT PRICE PER FOOT FOR STEEL PLATE BEAM GUARD RAIL, TYPE A (SPECIAL).
- STEEL PLATE BEAM GUARDRAIL, 6' STEEL GUARDRAIL POSTS, AND GEOTEXTILE FABRIC SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PERIMETER EROSION BARRIER, SPECIAL.
- AGGREGATE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR AGGREGATE WEDGE SHOULDER, TYPE B.

MODEL: 9p14  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 9-16-11								
REVISED -				CONTRACT NO.				
REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# CONCRETE CURB (SPECIAL)



CONCRETE CURB (SPECIAL) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

HOLES 1-1/2"Ø AND 5" DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE PAVEMENT AT 5'-0" CENTERS. NO. 4 REINFORCEMENT BARS ( ) LONG SHALL BE GROUTED IN THE HOLES AND A NO. 4 REINFORCEMENT BAR SHALL BE INSTALLED LONGITUDINALLY IN THE CURB.

JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

THE COST OF ALL MATERIALS AND LABOR REQUIRED TO INSTALL THE JOINTS AND REINFORCEMENT BARS IN THE CURB SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOOT FOR CONCRETE CURB (SPECIAL).

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 11p4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 9-16-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

**CONCRETE CURB (SPECIAL) 11.4**

# CONCRETE CURB (SPECIAL) (ADJACENT TO RESURFACING)

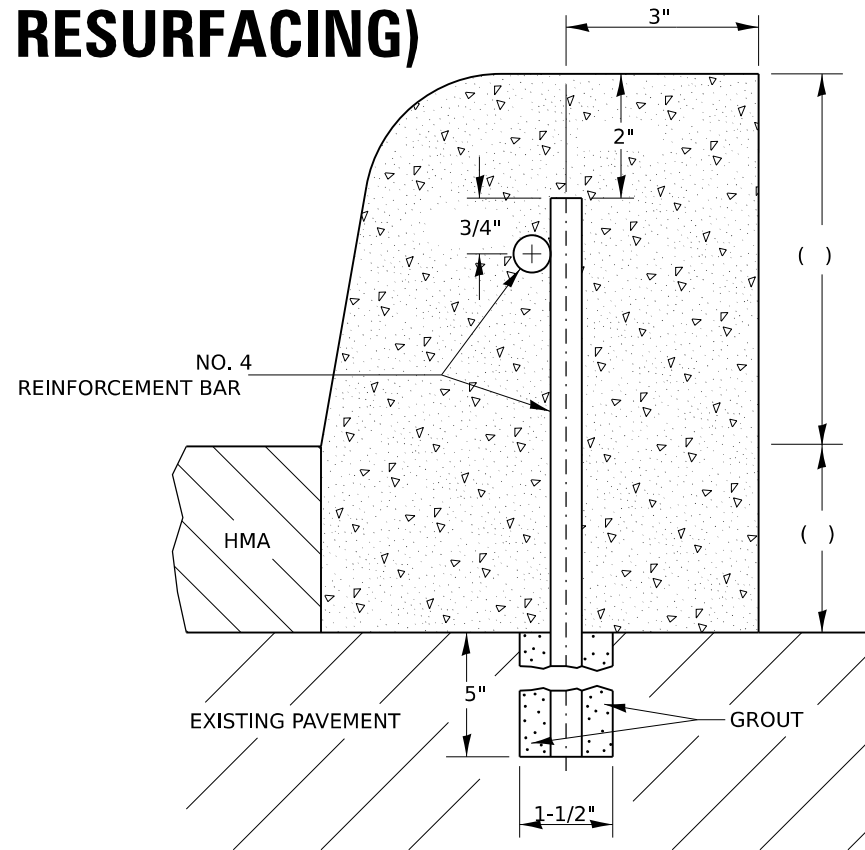
CONCRETE CURB (SPECIAL) SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

HOLES 1-1/2"Ø AND 5" DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE PAVEMENT AT 5'-0" CENTERS. NO. 4 REINFORCEMENT BARS ( ) LONG SHALL BE GROUTED IN THE HOLES AND A NO. 4 REINFORCEMENT BAR SHALL BE INSTALLED LONGITUDINALLY IN THE CURB.

JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

THE COST OF ALL MATERIALS AND LABOR REQUIRED TO INSTALL THE JOINTS AND REINFORCEMENT BARS IN THE CURB SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOOT FOR CONCRETE CURB (SPECIAL).



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 12pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
REVISED - 9-16-11										
REVISED -				CONTRACT NO.						
REVISED -				SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS

# COMBINATION CONCRETE CURB & GUTTER, TYPE , SPECIAL

COMBINATION CONCRETE CURB AND GUTTER, TYPE SPECIAL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

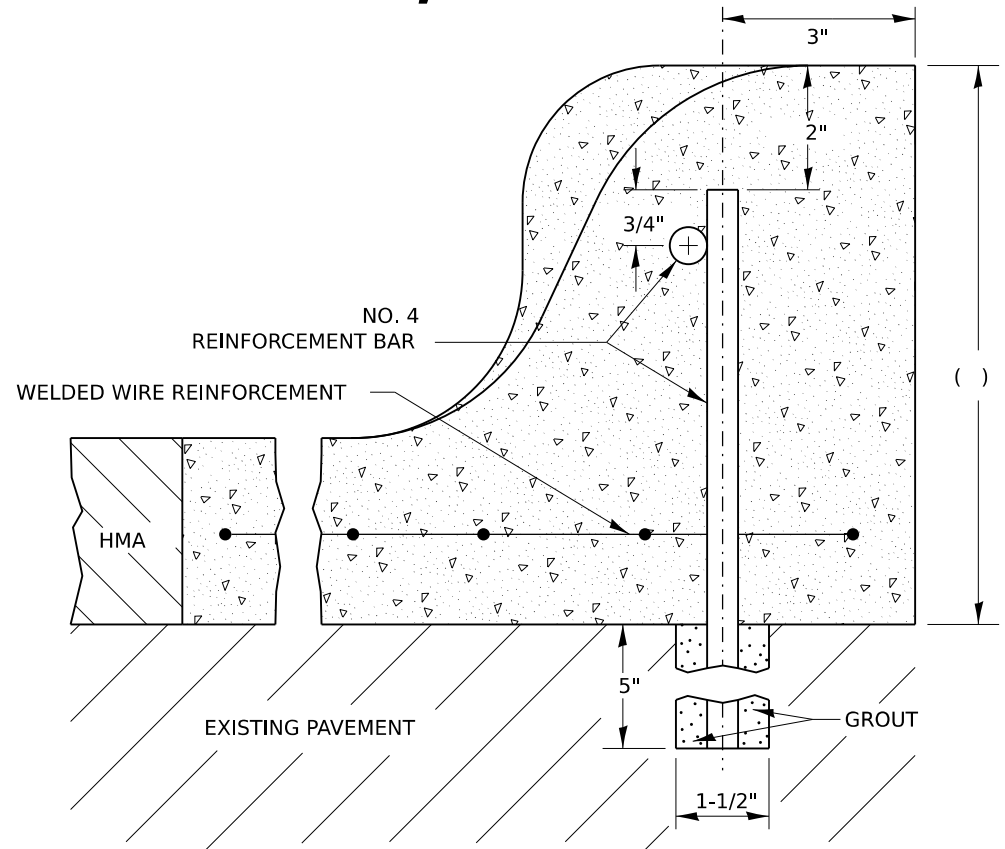
HOLES 1-1/2" Ø AND 5" DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE PAVEMENT AT 5'-0" CENTERS. NO. 4 REINFORCEMENT BARS " LONG SHALL BE GROUDED IN THE HOLES AND A NO. 4 REINFORCEMENT BAR SHALL BE INSTALLED LONGITUDINALLY IN THE CURB.

JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB AND GUTTER IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

GUTTER FLAG 12" OR GREATER IN WIDTH SHALL BE REINFORCED WITH WELDED WIRE REINFORCEMENT, 6 x 6 MESH NO. 4 WIRE, NOT WEIGHING LESS THAN 58 lbs/100 sq. ft.

THE COST OF ALL MATERIALS AND LABOR REQUIRED TO INSTALL THE JOINTS, REINFORCEMENT BARS AND WELDED WIRE REINFORCEMENT IN THE CURB AND GUTTER SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER FOOT FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE , SPECIAL.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 13pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 9-16-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

**COMBINATION CONCRETE CURB & GUTTER, TYPE , SPECIAL 13.4**

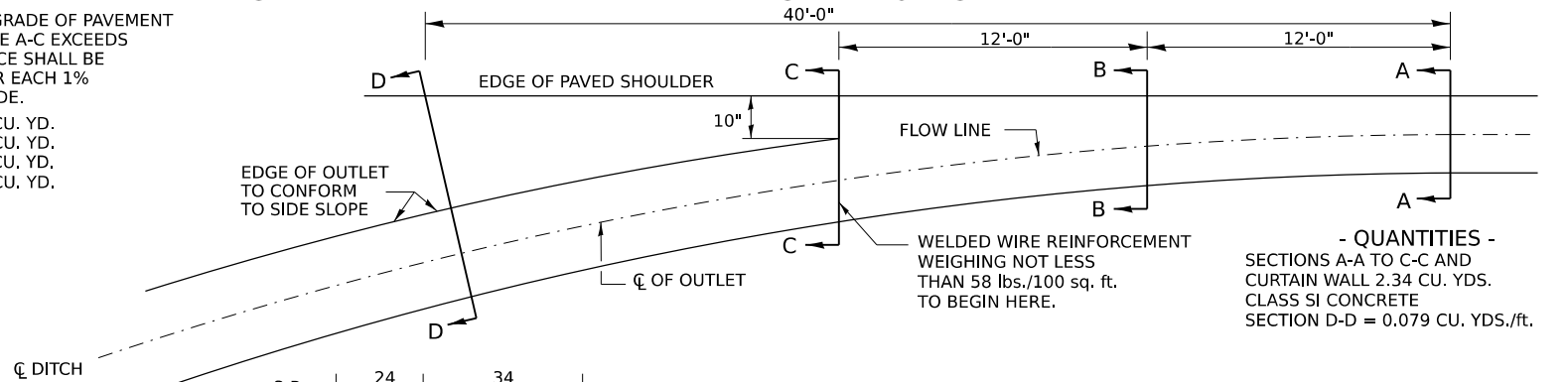


# GUTTER OUTLET ADJACENT TO STABILIZED SHOULDER

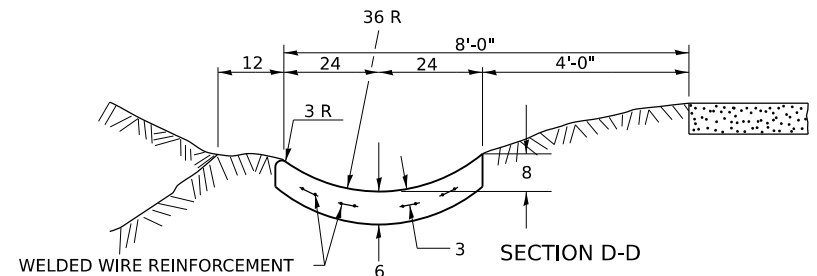
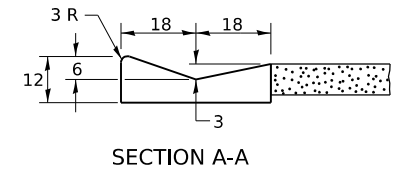
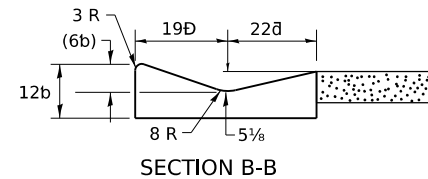
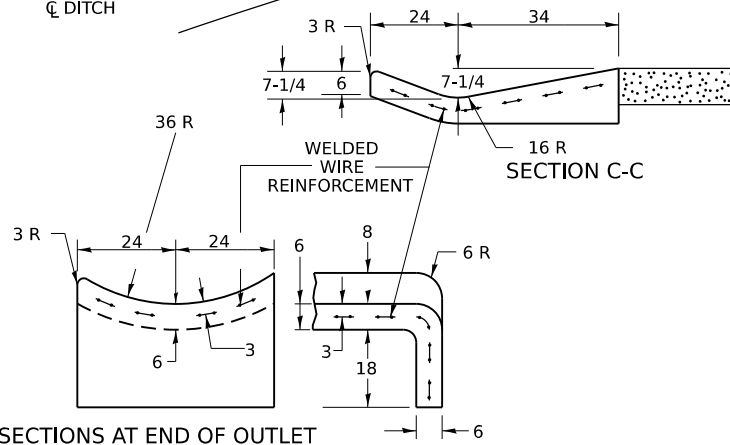
**NOTE:**

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE A-C EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' FOR EACH 1% INCREASE IN GRADE.

3 % 30'	2.93 CU. YD.
4 % 36'	3.51 CU. YD.
5 % 42'	4.10 CU. YD.
6 % 48'	4.68 CU. YD.



**- QUANTITIES -**  
 SECTIONS A-A TO C-C AND CURTAIN WALL 2.34 CU. YDS. CLASS SI CONCRETE  
 SECTION D-D = 0.079 CU. YDS./ft.



**NOTES:**

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. THE GUTTER OUTLET WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. FOR CLASS SI CONCRETE (OUTLETS), WHICH PRICE SHALL INCLUDE THE COST OF THE WELDED WIRE REINFORCEMENT

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

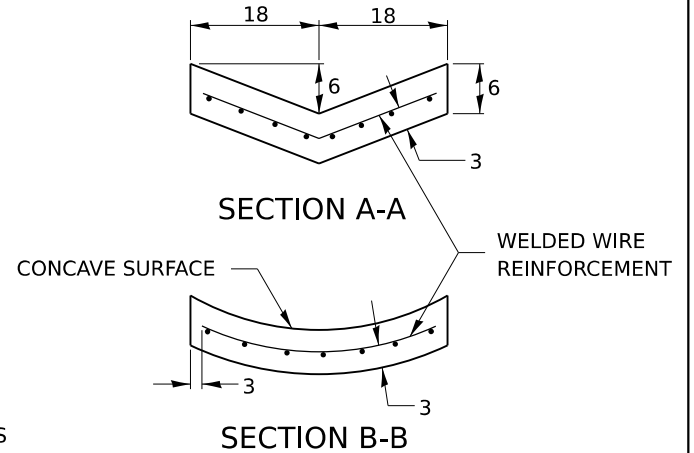
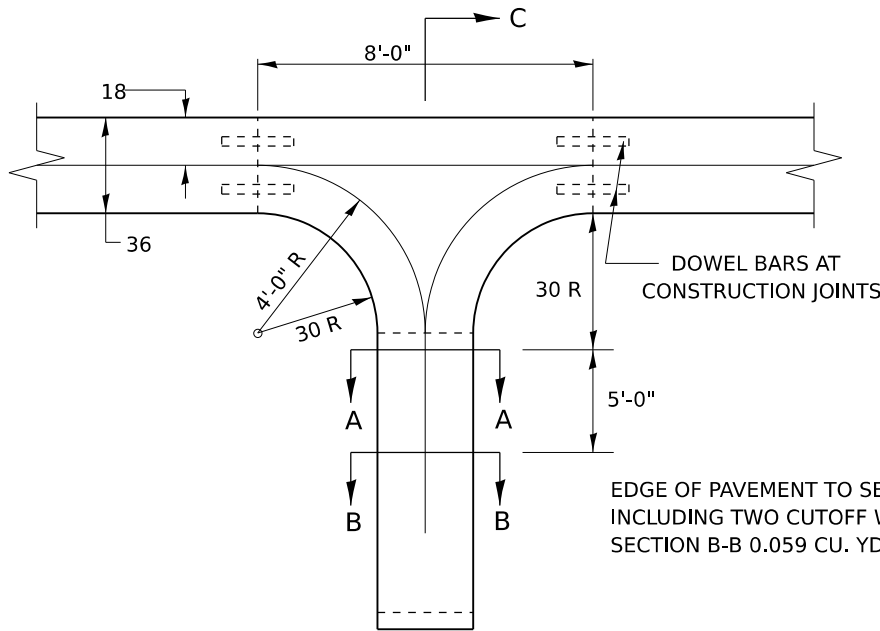
MODEL: 15pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED - 9-30-11										
REVISED -										
REVISED -										
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO.				
						ILLINOIS	FED. AID PROJECT			

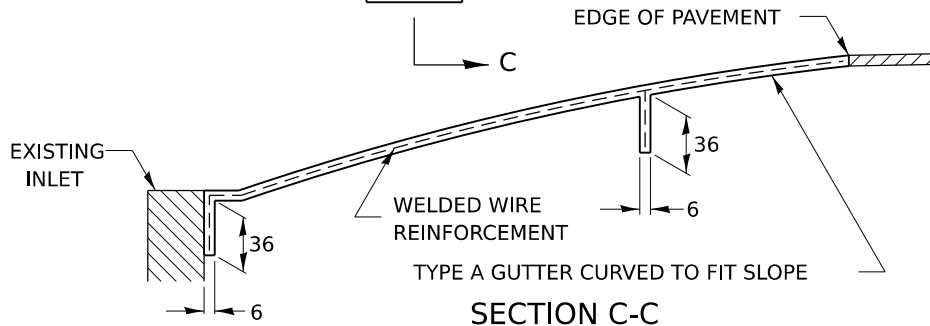
## GUTTER OUTLET ADJACENT TO STABILIZED SHOULDER

15.4

# CONCRETE GUTTER, TYPE A, WITH FLUME



EDGE OF PAVEMENT TO SECTION A-A INCLUDING TWO CUTOFF WALLS 1.02 CU YDS  
SECTION B-B 0.059 CU. YD./FT.



**NOTES:**

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. THE GUTTER SHALL BE TIED TO ITS FLUME AS SHOWN. THE FLUME SHALL BE REINFORCED WITH WELDED WIRE REINFORCEMENT HAVING A WEIGHT OF AT LEAST 58 lbs/100 sq. ft., WITH 6 x 6 MESH, NO. 4 WIRE. FLUME SHALL ALSO HAVE TWO CUTOFF WALLS AS SHOWN. COST OF FLUME PORTION INCLUDING ALL MATERIALS AND LABOR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU. YD. FOR CLASS SI CONCRETE (OUTLET).

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 16pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	6-27-14
REVISED -	9-30-11
REVISED -	

<b>REGION 2 / DISTRICT 2 STANDARD</b>				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

# CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED (DETAILS FOR CURB & GUTTER REPLACEMENT)

CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. A HOLE 1-1/2 IN DIAMETER AND 9 DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE CURB AS SHOWN. A 1-1/4 X 18 SMOOTH DOWEL BAR SHALL BE GROUTED IN THE HOLE LONGITUDINALLY.

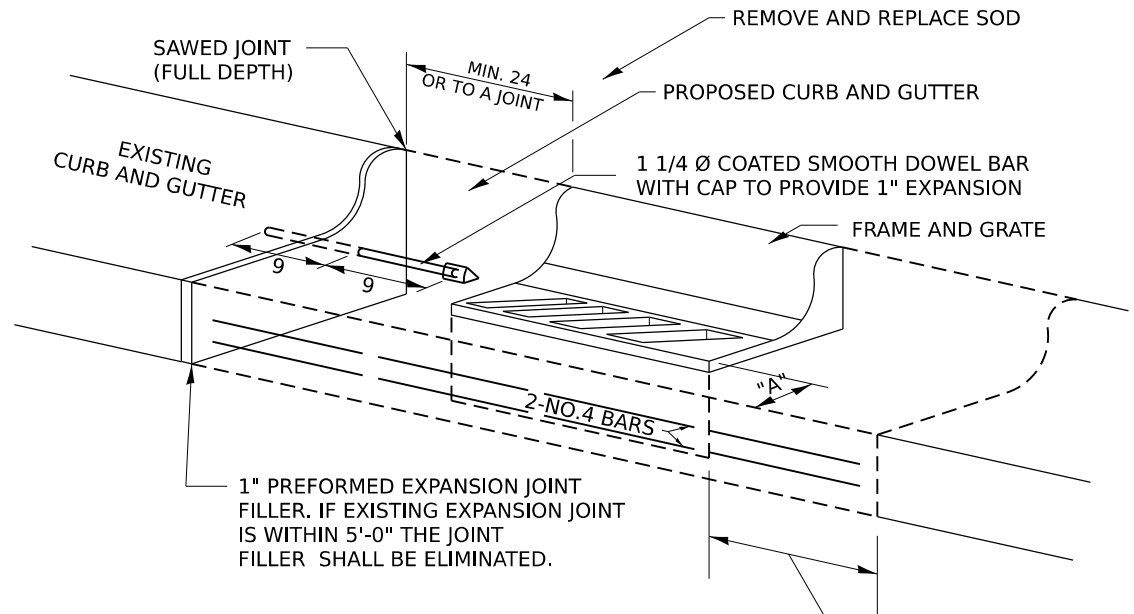
JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

THE PROPOSED CONFIGURATION OF THE CURB AND GUTTER SHALL MATCH THAT REMOVED.

THE LOCATION OF THE DOWEL BAR SHALL BE DETERMINED BY THE ENGINEER.

ALL EXISTING TIE BARS IN EDGE OF PAVEMENT SLAB THRU REPLACEMENT AREA SHALL BE CUT OFF.

THE WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND INCLUDES THE REMOVAL AND REPLACEMENT OF SOD, CONCRETE PAVEMENT AND/OR CURB AND GUTTER ADJACENT TO CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AND SHALL BE INCLUDED IN THE PAY ITEM OF CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AS SPECIFIED.



WHEN "A" IS GREATER THAN 2, 2-NO. 4 BARS SHALL BE PLACED AS SHOWN.

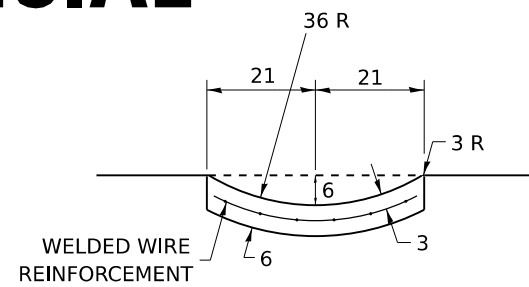
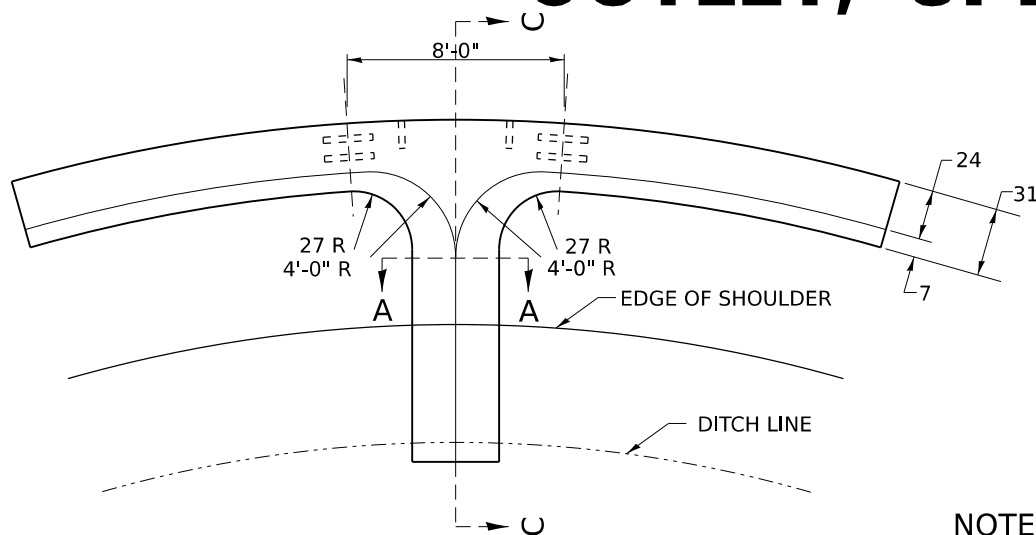
SAME REPAIR AS INDICATED ON OTHER SIDE OF FRAME AND GRATE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 17p14  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

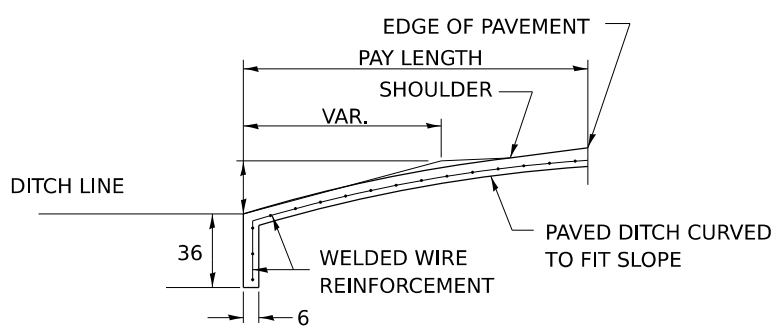
REVISED - 9-30-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -								
REVISED -				CONTRACT NO.				
REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# CURB AND GUTTER OUTLET, SPECIAL



QUANTITY OF CONCRETE  
 SECTION A-A = 0.07 CU.YD./FT.  
 8' SECTION OF CURB & GUTTER UP TO  
 SECTION A-A = 0.75 CU.YD.

SECTION A-A



SECTION C-C

**NOTE:**

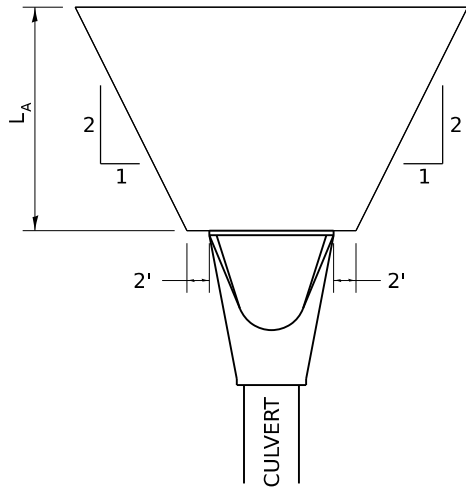
CLASS SI CONCRETE SHALL BE USED THROUGHOUT. CURB AND GUTTER OUTLET SHALL BE TIED TO PAVEMENT SLAB WITH 2 TIE BARS, 30 LONG - 30 CENTERS. OUTLET SHALL BE TIED TO CURB AND GUTTER AT CONTRACTION JOINTS AS SHOWN. GUTTER OUTLET AND PAVED DITCH SHALL BE REINFORCED WITH WELDED WIRE REINFORCEMENT HAVING A WEIGHT OF AT LEAST 58 lbs/100 sq. ft. WITH 6 x 6 MESH, NO. 4 WIRE. COST TO BE INCLUDED IN THE UNIT PRICE PER CUBIC YARD FOR CLASS SI CONCRETE (OUTLET).

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

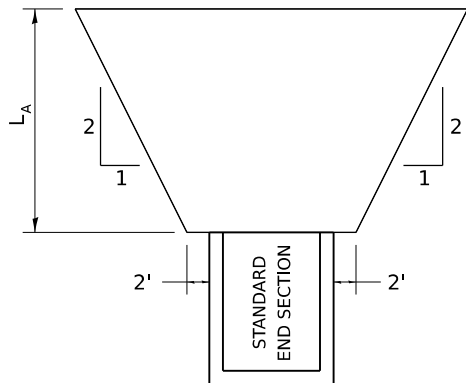
MODEL: 18pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 9-30-11									
REVISED -									
REVISED -									
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO.			
						ILLINOIS	FED. AID PROJECT		

# RIPRAP AT END SECTIONS



FLARED END SECTION

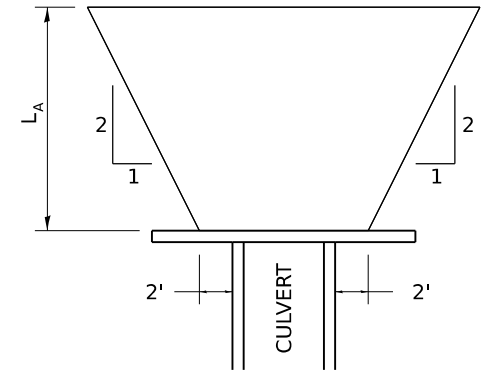


STANDARD END SECTION

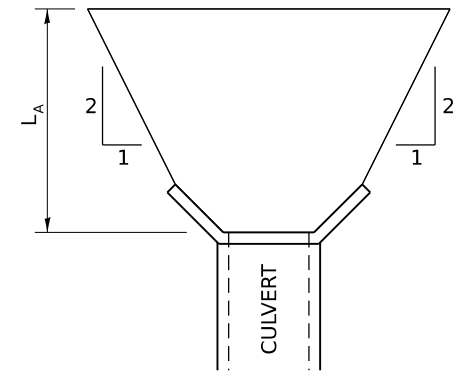
$L_A$  = APRON LENGTH (ft)

IF THE CULVERT OUTLETS INTO A DEFINED CHANNEL, RIPRAP BANK TO BANK FOR LENGTH ( $L_A$ )

STANDARD END SECTION:  
542001 (PIPE), 542011 (ELLIPTICAL)  
DISTRICT STANDARD 10.1 (BOX).



CULVERT WITH HEADWALL



CULVERT WITH WING WALLS

MODEL: 19ppt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

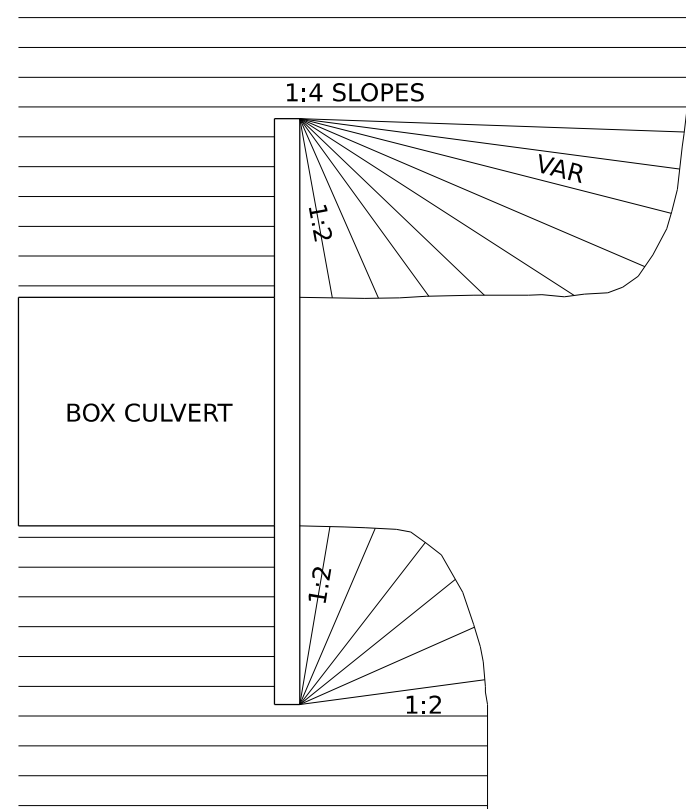
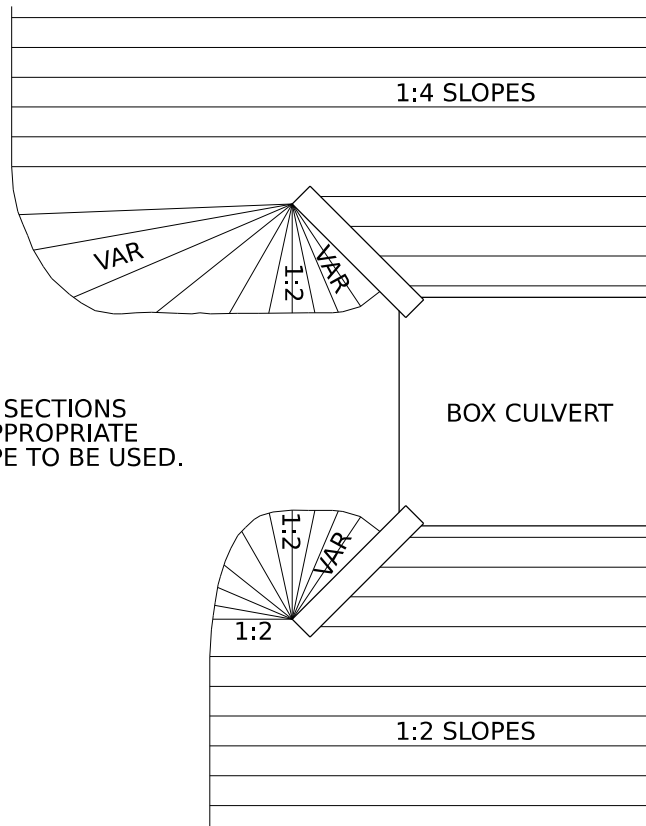
REVISED -	7-13-16
REVISED -	11-12-14
REVISED -	2-10-14
REVISED -	

<b>REGION 2 / DISTRICT 2 STANDARD</b>			
SCALE:	SHEET	OF	SHEETS
	STA.	TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		



# GRADING AROUND WINGWALLS



**NOTES**  
SEE CROSS SECTIONS  
FOR THE APPROPRIATE  
FRONTSLOPE TO BE USED.

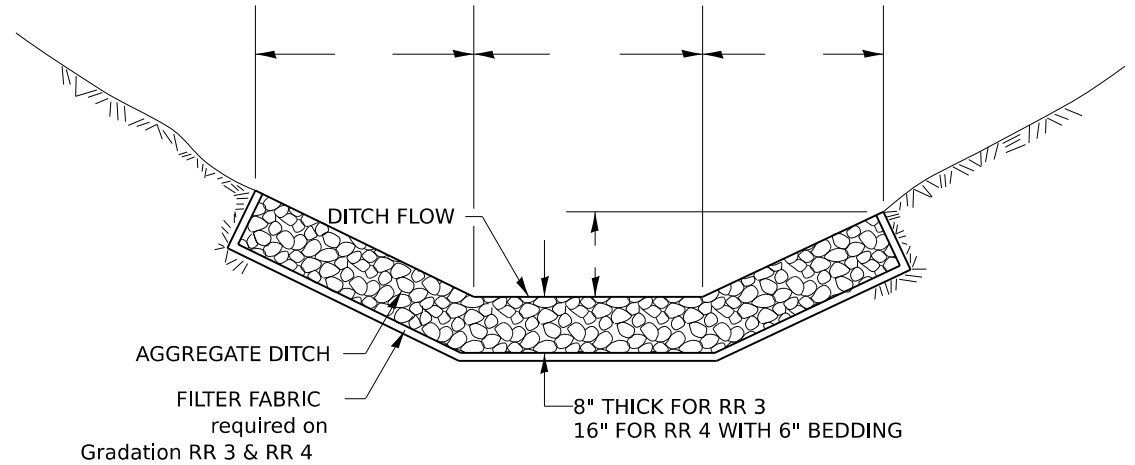
MODEL: 20pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 5-27-09	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

## GRADING AROUND WINGWALLS

## 20.4

# AGGREGATE DITCH FOR FLEXIBLE DITCH LINING



THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 281. AGGREGATE DITCH WILL BE MEASURED FOR PAYMENT IN PLACE AND THE AREA COMPUTED IN SQUARE YARDS OF ACTUAL SURFACE AREA.

AGGREGATE DITCH WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR STONE RIPRAP CLASS A3 OR STONE RIPRAP CLASS A4 THE FILTER FABRIC SHALL BE ACCORDING TO SECTION 282. FILTER FABRIC WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR FILTER FABRIC.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 21pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

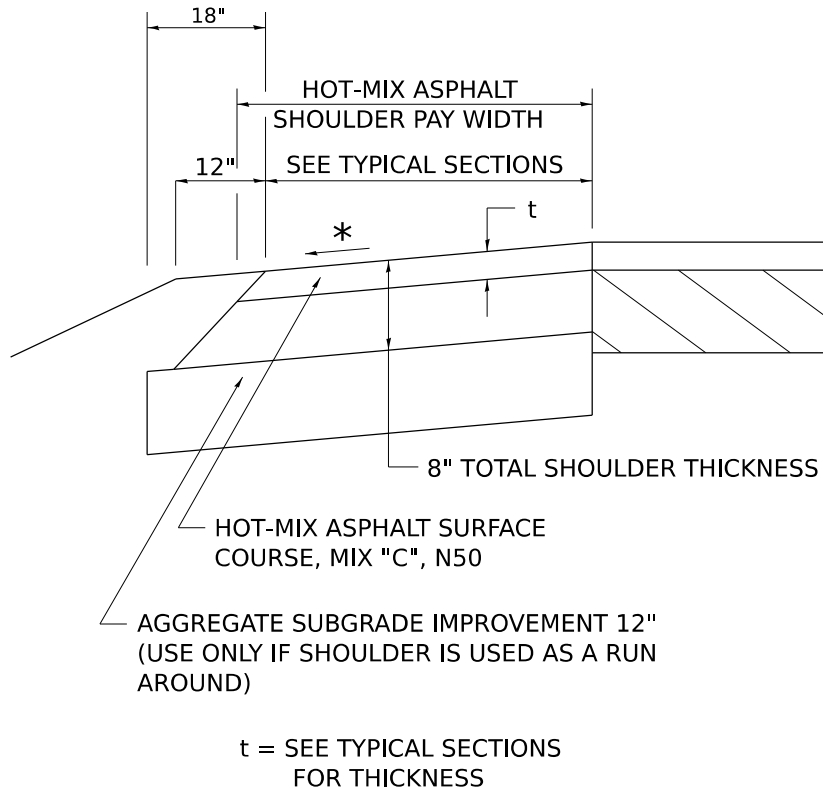
REVISED - 7-05-12	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

## AGGREGATE DITCH FOR FLEXIBLE DITCH LINING

21.4



# HOT-MIX ASPHALT SHOULDER



## GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

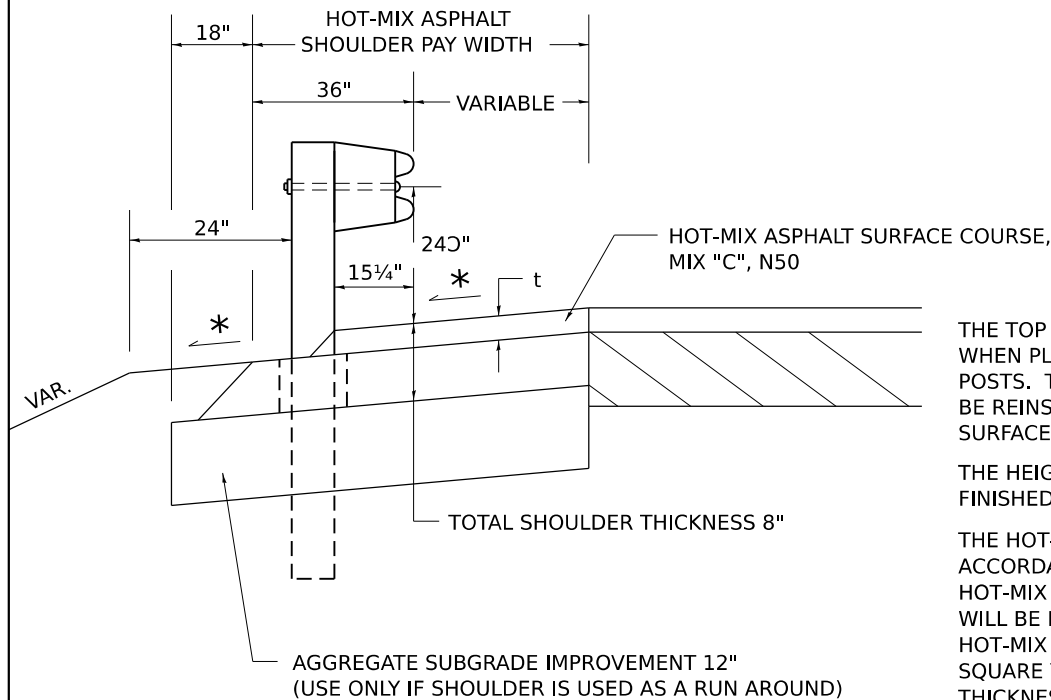
MODEL: 22pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 3-13-13									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

## HOT-MIX ASPHALT SHOULDER

## 22.4

# DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARDRAIL



t = SEE TYPICAL SECTIONS FOR THICKNESS

### GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED. THE RAIL ELEMENT SHALL BE REINSTALLED WITHIN 72 HOURS OF THE COMPLETION OF THE SURFACE COURSE.

THE HEIGHT OF THE GUARDRAIL SHALL BE SET 24 $\frac{3}{8}$ " FROM THE FINISHED SURFACE.

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

\* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATED SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

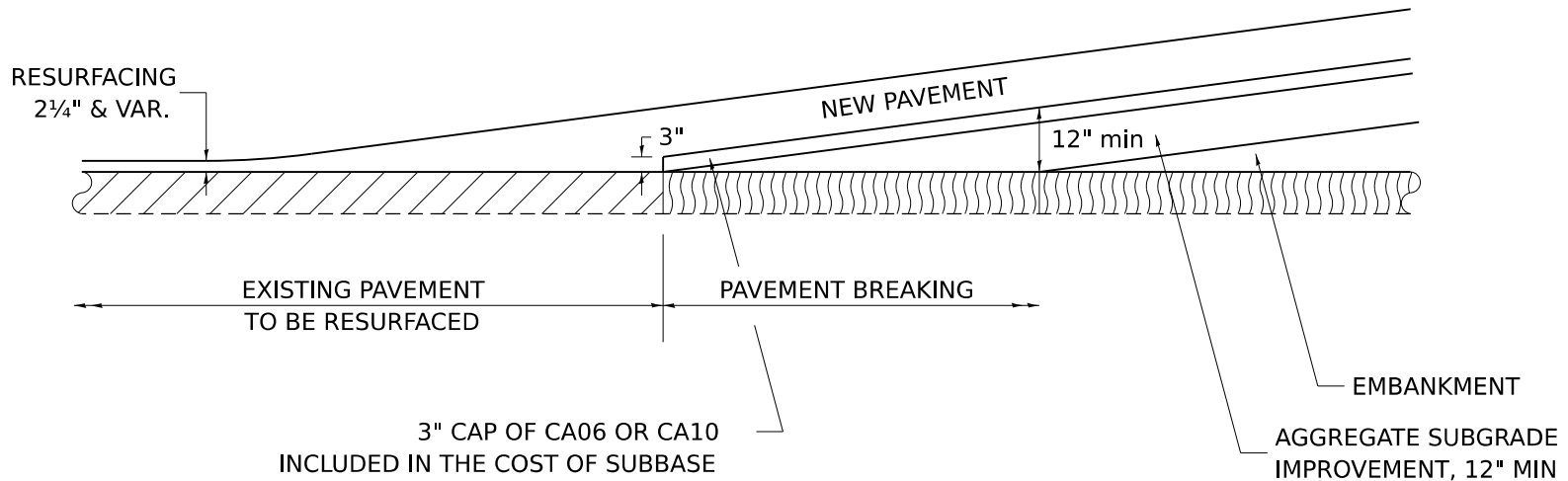
MODEL: 23pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14									
REVISED - 8-27-13					CONTRACT NO.				
REVISED - 3-13-13					SCALE:	SHEET	OF	SHEETS	STA.

## DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARDRAIL

23.4

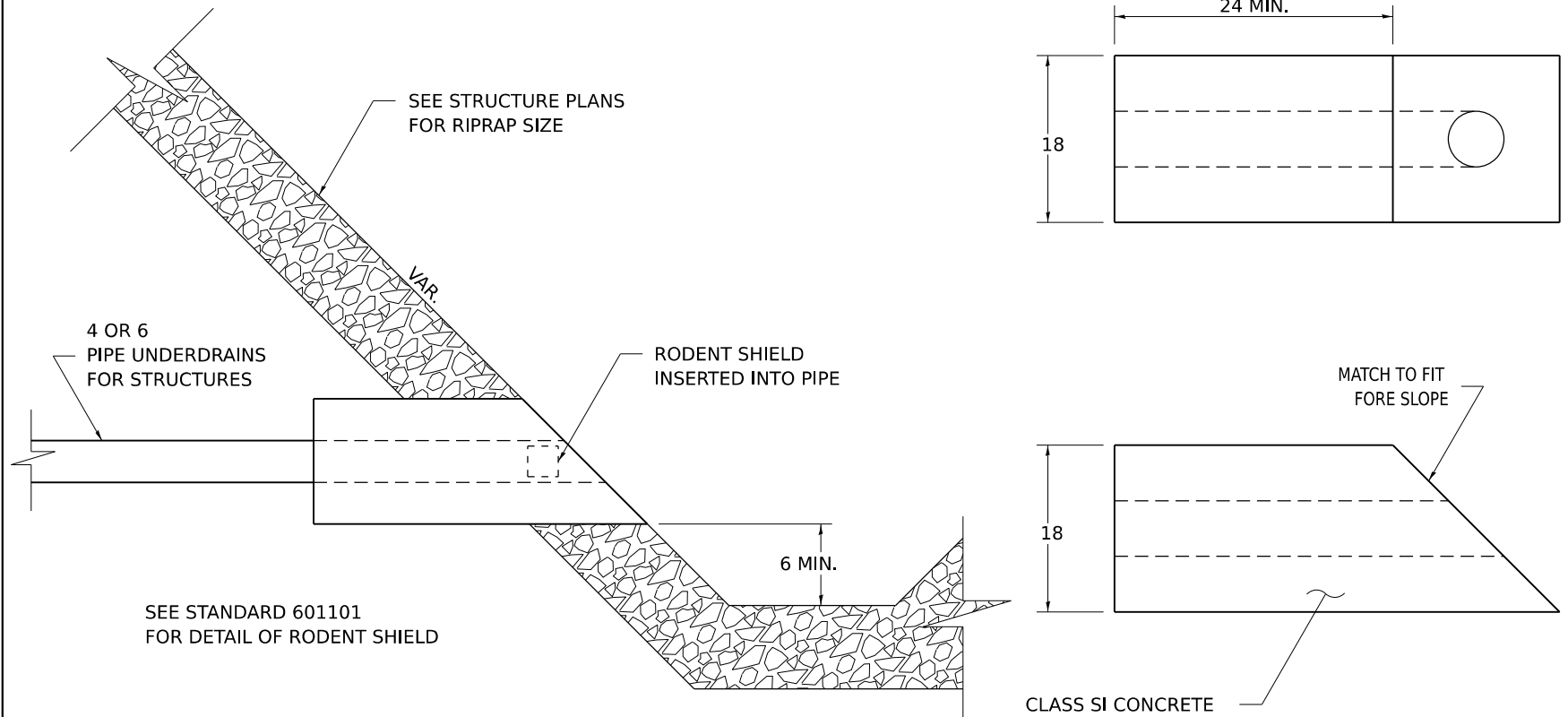
# PAVEMENT BREAKING DETAIL



MODEL: 24p14  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

REVISED - 3-19-13	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# CONCRETE HEADWALLS FOR PIPE UNDERDRAINS FOR STRUCTURES



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 27pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED -	9-28-17
REVISED -	11-12-14
REVISED -	10-03-11
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
		ILLINOIS	FED. AID PROJECT	

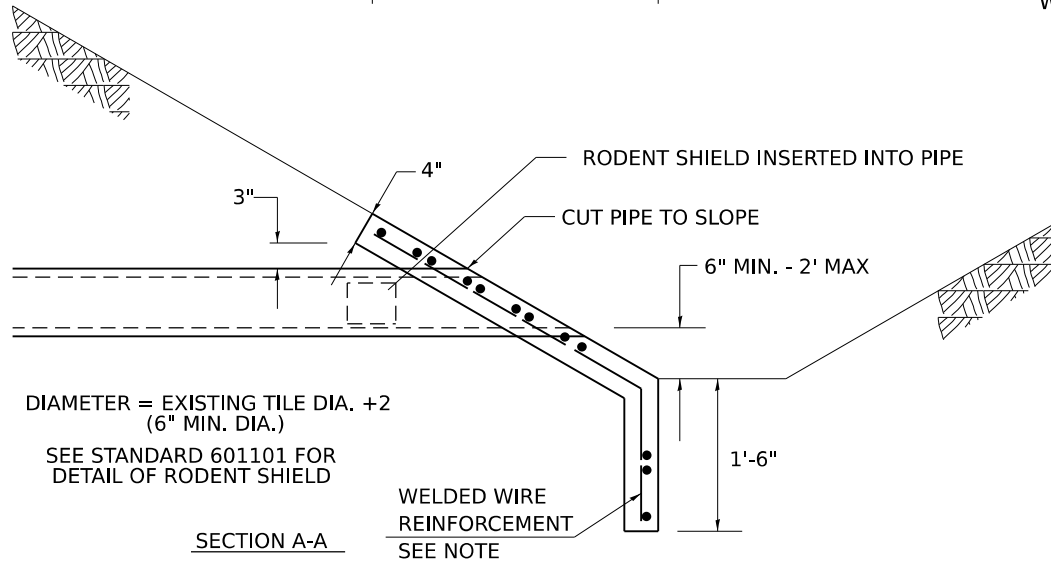
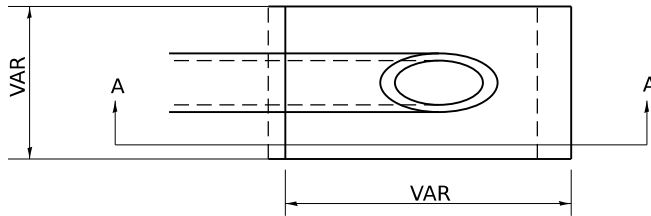
# CONCRETE HEADWALLS FOR PIPE UNDERDRAINS FOR STRUCTURES

27.4

# CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS

## NOTES

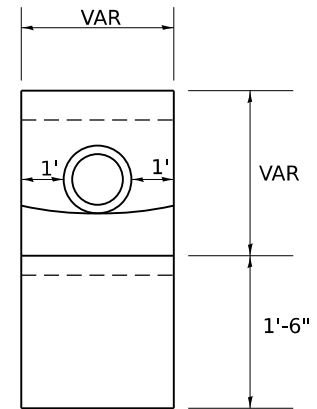
1. ANY STORM SEWER OR FIELD TILE OUTLET INTO A DITCH SHALL HAVE A HEADWALL BUILT IN ACCORDANCE WITH THIS DETAIL.
2. COST OF FURNISHING AND INSTALLING WELDED WIRE REINFORCEMENT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE EACH OF THE SIZE SPECIFIED. WELDED WIRE REINFORCEMENT TO WEIGH NOT LESS THAN 58 lbs/100 sq. ft.



DIAMETER = EXISTING TILE DIA. +2  
(6" MIN. DIA.)

SEE STANDARD 601101 FOR  
DETAIL OF RODENT SHIELD

WELDED WIRE  
REINFORCEMENT  
SEE NOTE



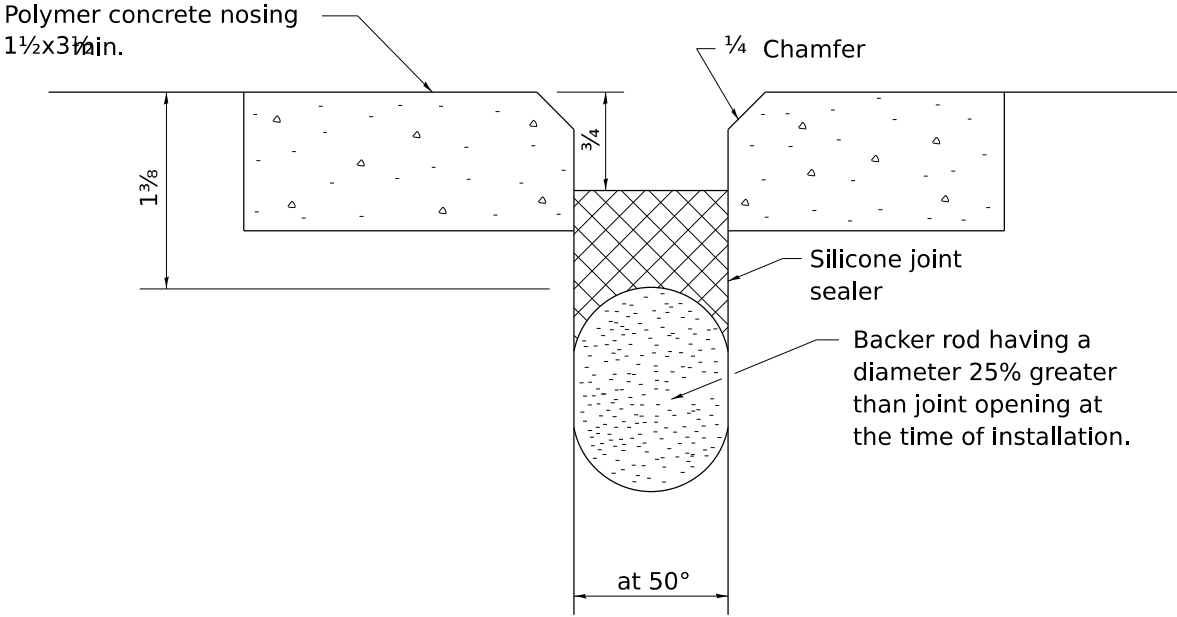
MODEL: 28pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-09-12									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS

28.4

# SILICONE JOINT SEAL (CONCRETE DETAILS)

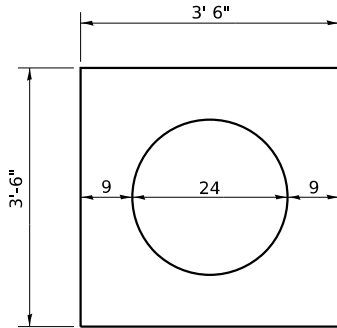


ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

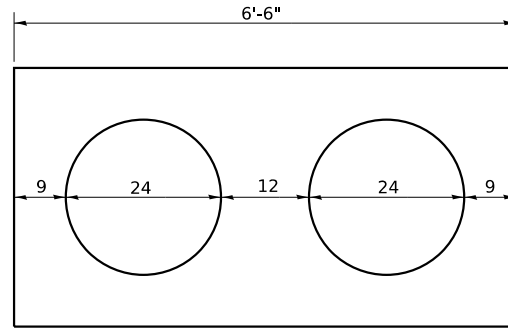
MODEL: 29ppt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

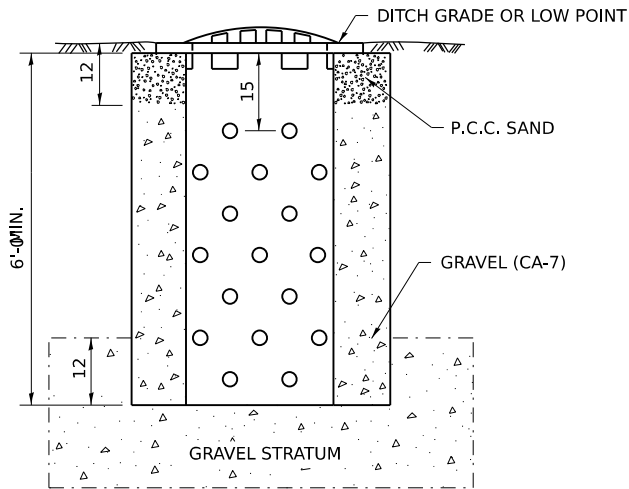
# STONE WELLS, SPECIAL



PLAN  
SINGLE STONE WELL



PLAN  
DOUBLE STONE WELL



**NOTE:**

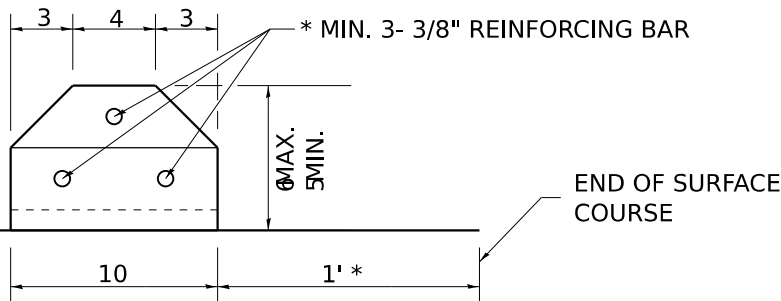
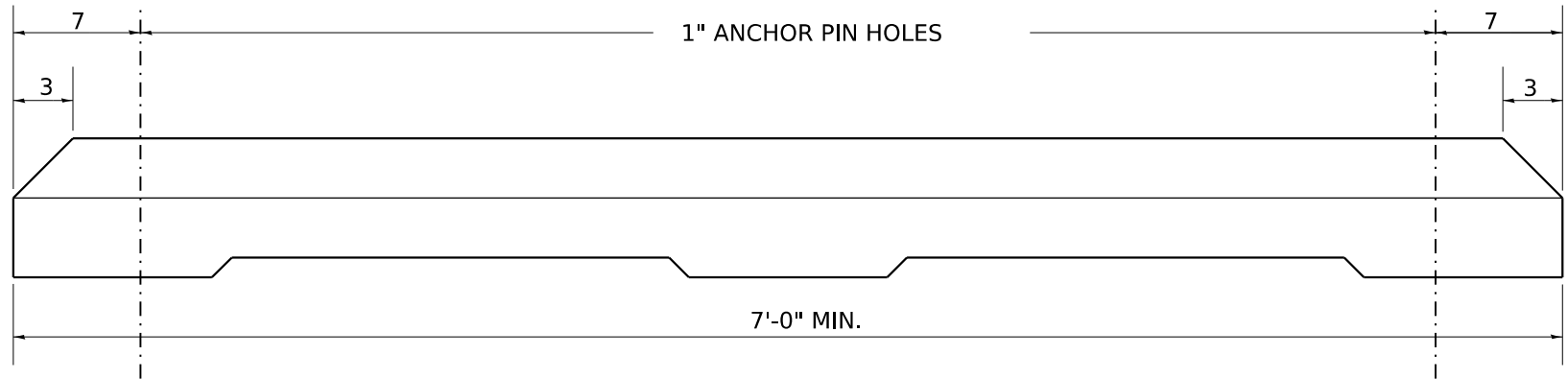
THE INSIDE LINER OF THE STONE WELL SHALL BE A 24 CORRUGATED METAL PIPE OF THE SAME QUALITY AS SPECIFIED FOR PIPE CULVERTS, TYPE I. THE PERFORATIONS SHALL BEGIN 15 FROM THE TOP OF THE STONE WELL AT THE RATE OF 4 HOLES PER SQUARE FOOT. THE SIZE OF THE HOLES SHALL NOT BE LESS THAN 5/16 OR MORE THAN 5/8 DIAMETER. DOUBLE STONE WELL TO BE PAID FOR AS TWO (2) STONE WELLS. STANDARD GRATE TYPE 8 (STD. 604036) WILL BE USED. THE CONTRACT UNIT PRICE FOR STONE WELLS, SPECIAL SHALL INCLUDE ALL MATERIALS AND LABOR FOR THE COMPLETE IN PLACE STONE WELL.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 30pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-03-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# PARKING BLOCKS



\* OR AS DIRECTED BY THE ENGINEER.

## GENERAL NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

ANCHOR PINS SHALL BE 3/4 DIAMETER, 36 LONG.

THE COST OF THE MATERIAL, LABOR AND EQUIPMENT NECESSARY TO INSTALL THE PARKING BLOCKS WITH ANCHOR PINS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR PARKING BLOCKS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 31pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

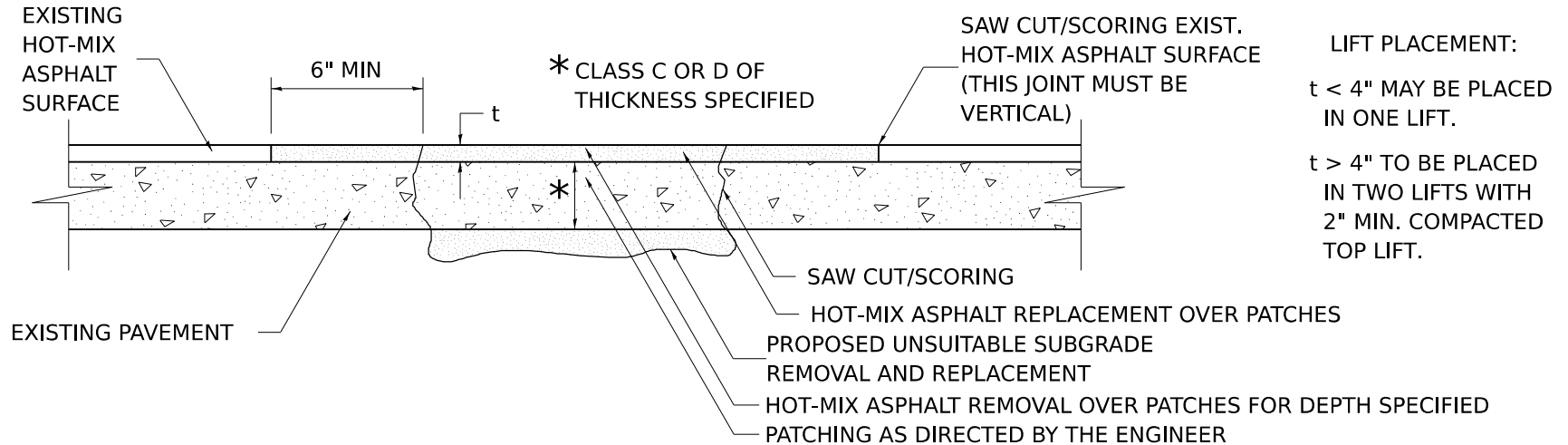
REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -										
REVISED -										
REVISED -										
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO.				
						ILLINOIS	FED. AID PROJECT			

**PARKING BLOCKS**

**31.4**



# PAVEMENT PATCHING FOR HOT-MIX ASPHALT SURFACED PAVEMENT



### SEQUENCE OF CONSTRUCTION:

1. REMOVE THE EXISTING HOT-MIX ASPHALT SURFACE.
2. RESIDENT ENGINEER WILL DETERMINE IF LOCATION IS TO BE PATCHED OR TO ONLY REPLACE HOT-MIX ASPHALT SURFACE.
3. REMOVE AND REPLACE FULL DEPTH PATCHES AT LOCATIONS DIRECTED BY THE ENGINEER.
4. REPLACE HOT-MIX ASPHALT SURFACE OVER FULL DEPTH PATCHES AND AT LOCATIONS OF HOT-MIX ASPHALT SURFACE REMOVAL.

### GENERAL NOTES:

1. FOR BASIS OF PAYMENT: SEE THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

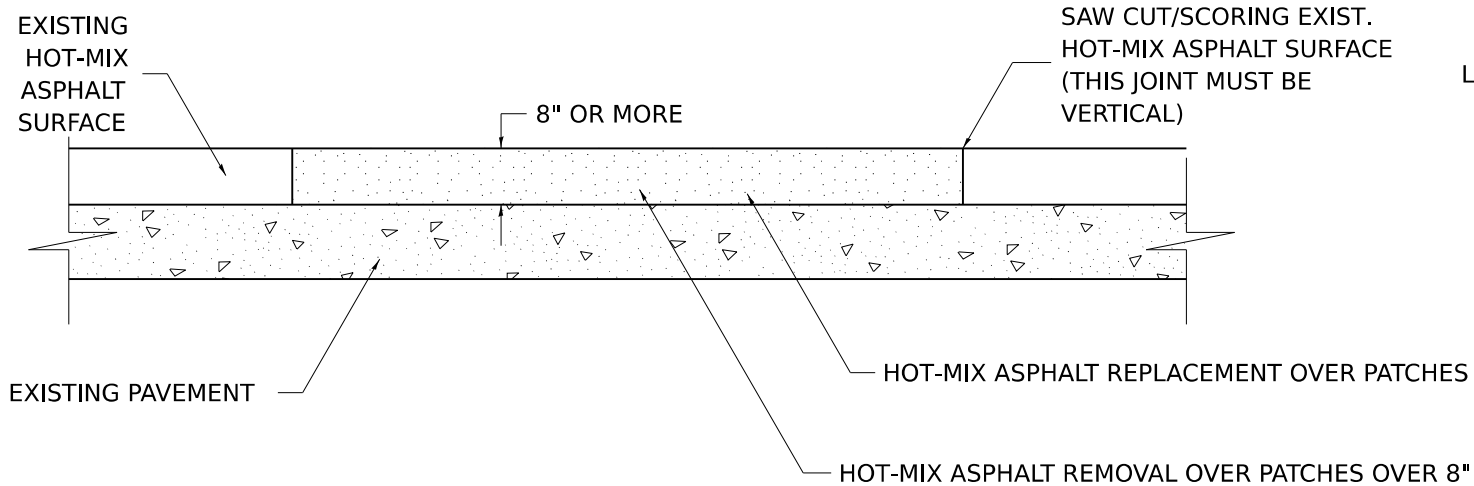
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

LIFT PLACEMENT:  
 $t < 4"$  MAY BE PLACED IN ONE LIFT.  
 $t > 4"$  TO BE PLACED IN TWO LIFTS WITH 2" MIN. COMPACTED TOP LIFT.

MODEL: 32pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# PAVEMENT PATCHING DETAIL



LIFT PLACEMENT:  
TO BE PLACED  
IN TWO LIFTS WITH  
2" MIN. COMPACTED  
TOP LIFT.

**SEQUENCE OF CONSTRUCTION:**

1. REMOVE THE EXISTING HOT-MIX ASPHALT SURFACE.
2. REPLACE HOT-MIX ASPHALT SURFACE.

**GENERAL NOTES:**

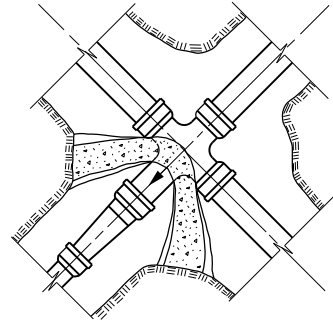
1. FOR BASIS OF PAYMENT: SEE THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 33pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

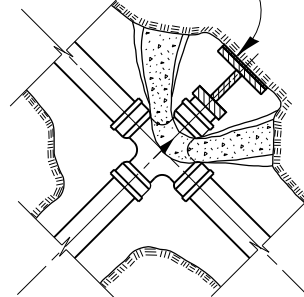
REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# THRUST BLOCK DETAILS

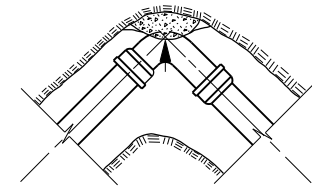


REDUCING CROSS

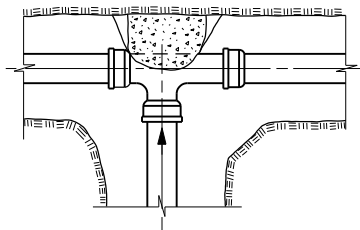
BRACE PLUG AGAINST  
UNDISTURBED EARTH



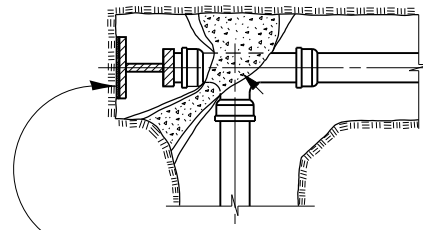
PLUGGED CROSS



90° ELBOW

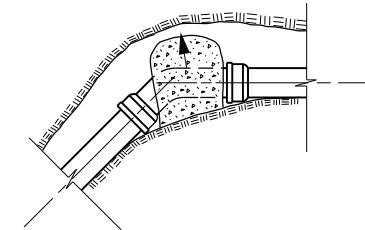


TEE



BRACE PLUG AGAINST  
UNDISTURBED EARTH

PLUGGED TEE



VERTICAL BEND

NOTES:  
ALL BLOCKS TO BEAR AGAINST UNDISTURBED EARTH.  
ARROWS INDICATE DIRECTION OF THRUST.  
ALL BLOCKS TO BE CLASS SI CONCRETE.  
ALL FITTINGS SHOWN IN PLAN EXCEPT VERTICAL BEND.





ALL DIMENSIONS ARE IN INCHES UNLESS  
OTHERWISE NOTED.

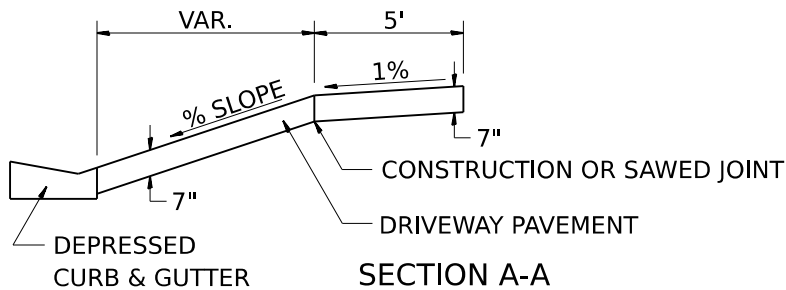
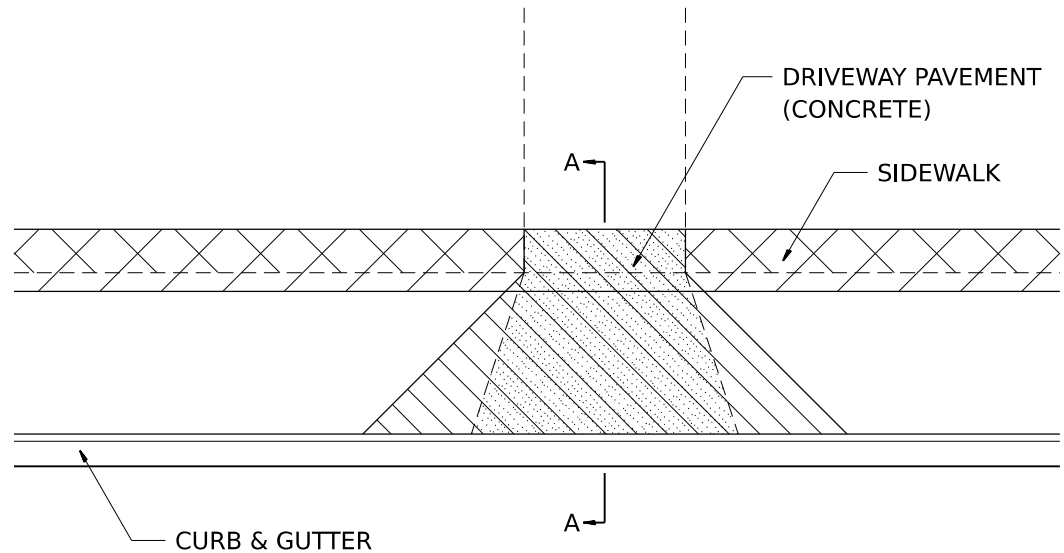
MODEL: 34pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# SIDEWALK AND DRIVEWAY PAVEMENT PAY AREAS

PAY FOR AS

-  SIDEWALK REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  PCC SIDEWALK 5
-  PCC DRIVEWAY PAVEMENT 7



FOR DETAILS ON DIMENSIONS AND GRADES, SEE DISTRICT STANDARD 25.1 OR PLANS.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

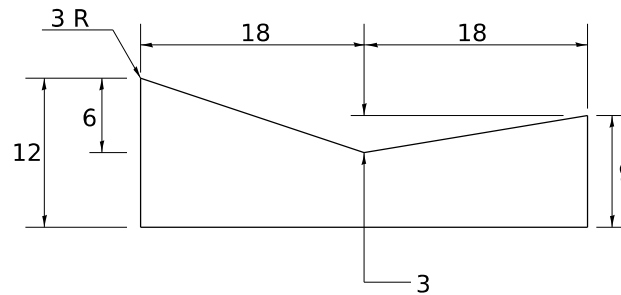
MODEL: 35pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 6-27-14	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
REVISED - 10-03-11										
REVISED -				CONTRACT NO.						
REVISED -				SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS

## SIDEWALK AND DRIVEWAY PAVEMENT PAY AREAS

35.4

# CONCRETE GUTTER, TYPE A (SPECIAL)



**NOTES:**

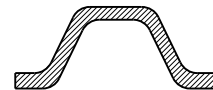
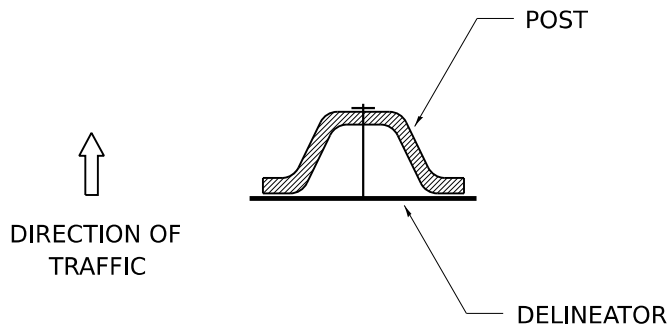
THIS WORK SHALL BE DONE IN ACCORDANCE WITH THIS DETAIL AND STANDARD 606101  
 THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR  
 CONCRETE GUTTER, TYPE A (SPECIAL).

ALL DIMENSIONS ARE IN INCHES UNLESS  
 OTHERWISE NOTED.

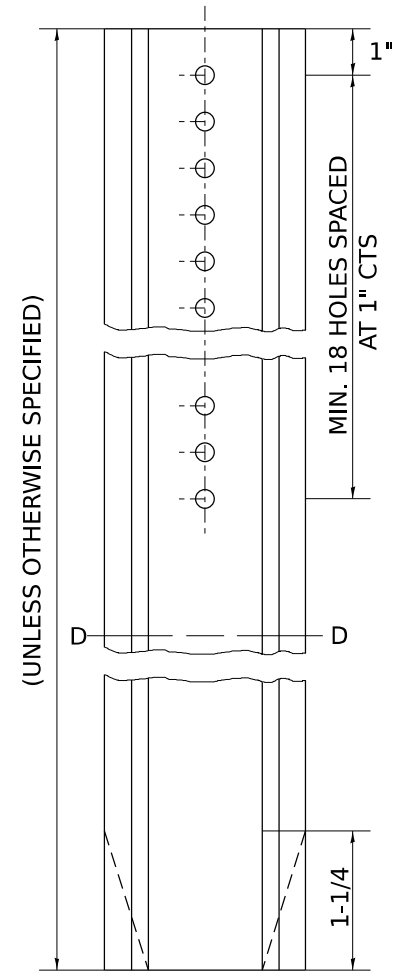
MODEL: 36pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

REVIS	10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
REVIS													
REVIS						CONTRACT NO.							
REVIS						SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT

# DELINEATOR AND POST ORIENTATION



SECTION D-D



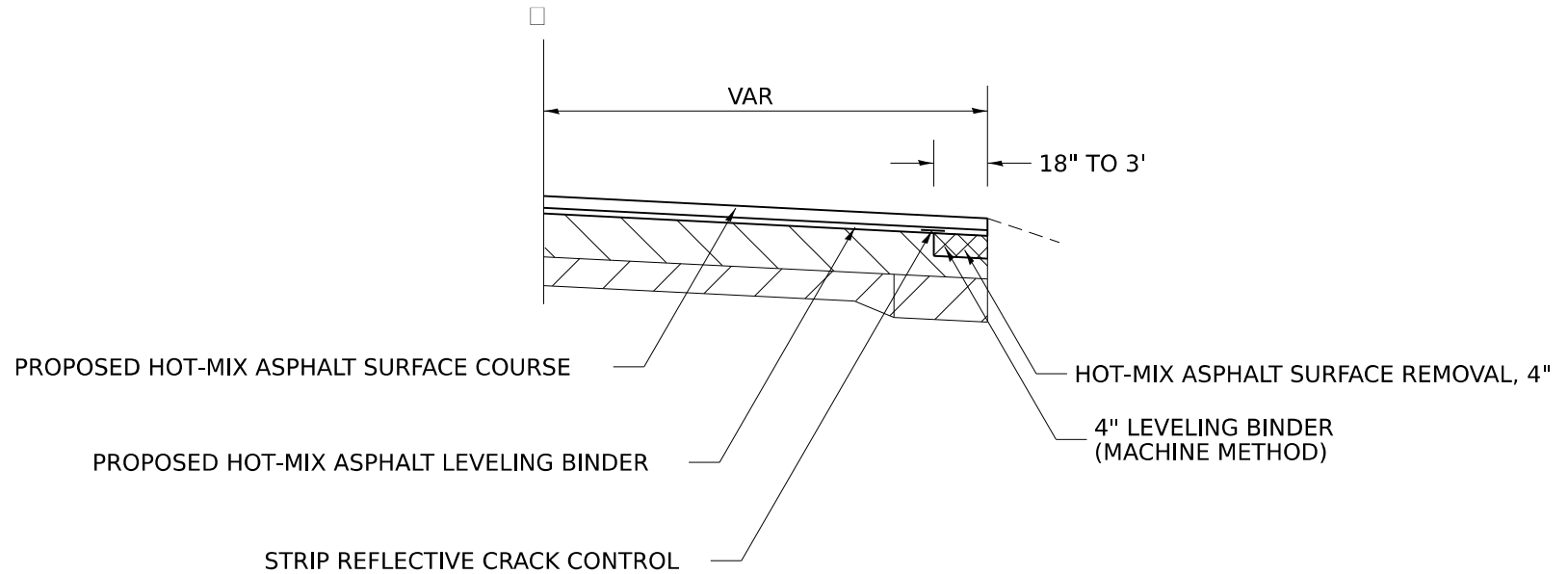
DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180°. THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHED AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 37pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# EDGE OF PAVEMENT REPAIR



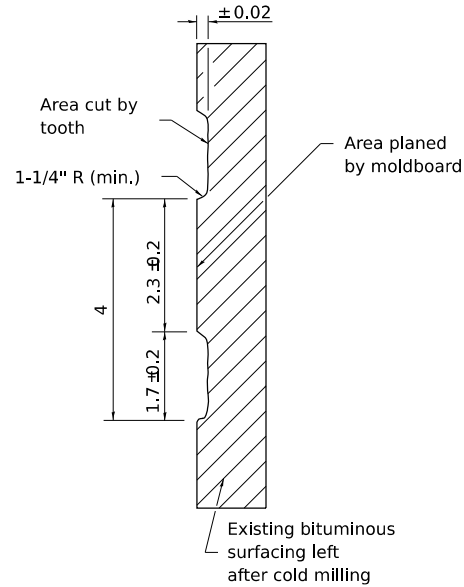
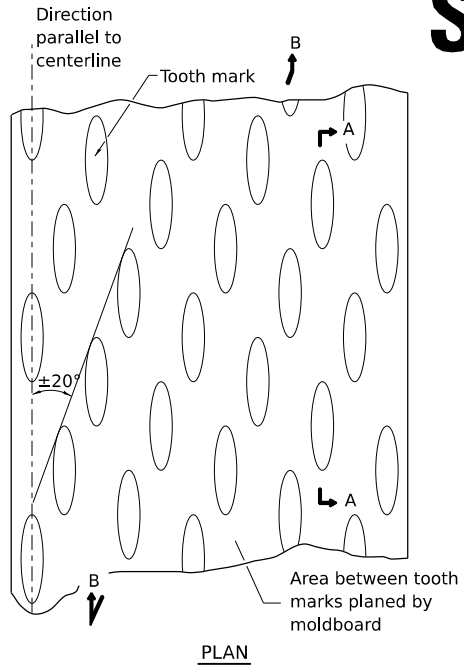
MODEL: 38pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED - 4-04-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

**EDGE OF PAVEMENT REPAIR**

**38.4**

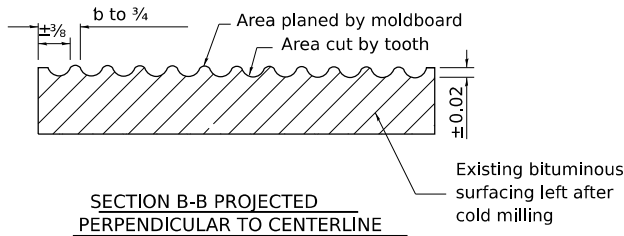
# REQUIRED COLD MILLED SURFACE TEXTURE



## NOTES

1. Cold Milling shall consist of two processes: Cutting with carbide teeth mounted on a rotating drum, and planing with a moldboard mounted immediately behind the cutting drum.
2. Other similar patterns will be acceptable if they consist of a smooth, flat, planed surface interspersed with a pattern of discontinuous longitudinal striations.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.



MODEL: 43pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

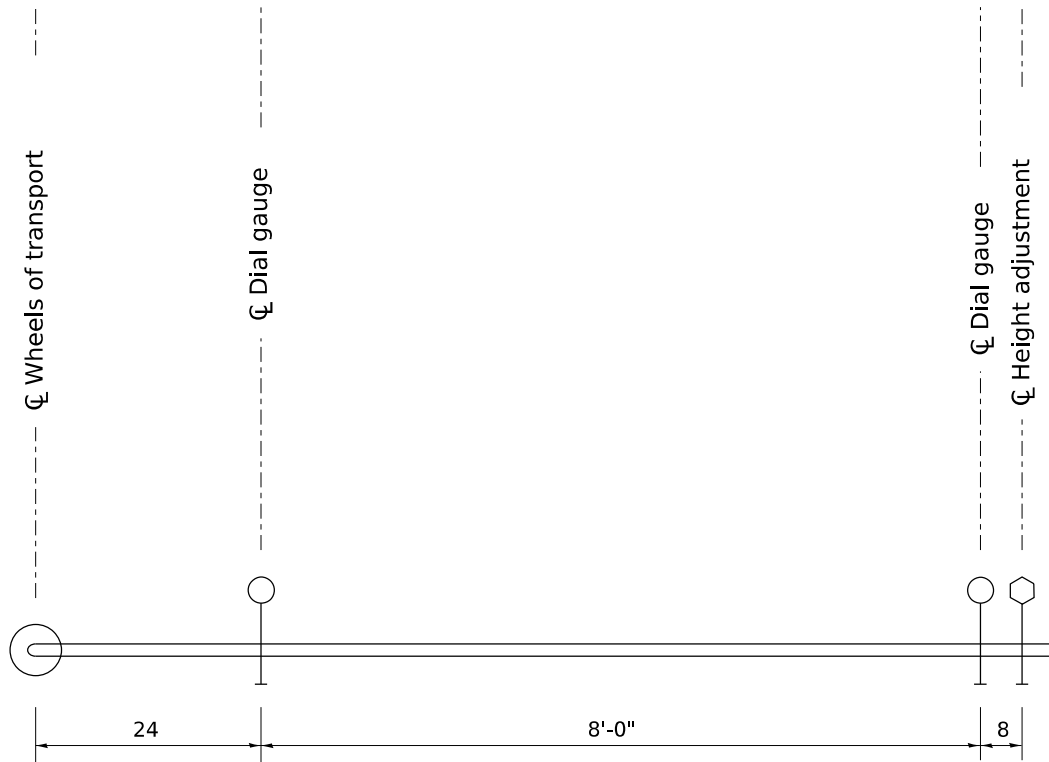
REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

## REQUIRED COLD MILLED SURFACE TEXTURE

## 43.4



# SLAB MOVEMENT DETECTION DEVICE



ELEVATION

## NOTES

Dial gauges shall be spring loaded in order to measure both extension and compression.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

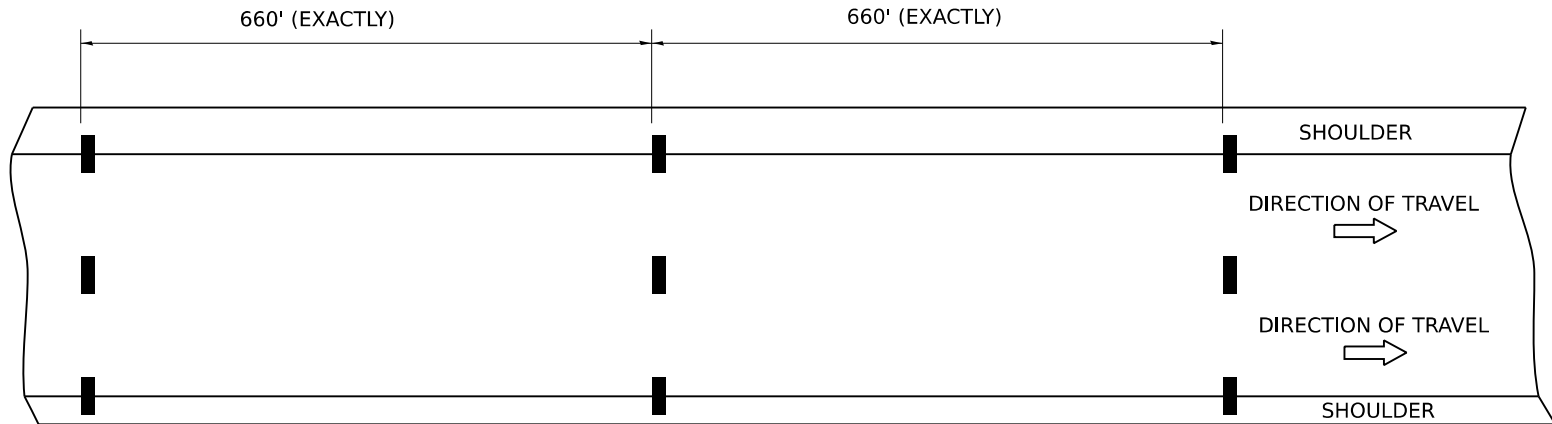
MODEL: 44pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

## SLAB MOVEMENT DETECTION DEVICE

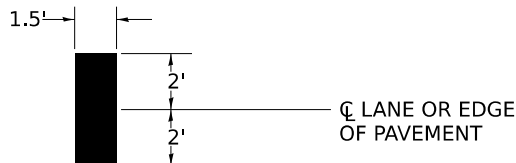
## 44.4

# AERIAL SPEED CHECK ZONES



USE THERMOPLASTIC PAVEMENT MARKINGS MEETING THE REQUIREMENTS OF SECTION 782 OF THE STANDARD SPECIFICATIONS.

## PAVEMENT MARKING DETAIL



## POLICE AERIAL SPEED CHECK ZONES

ESTABLISHED ZONES AND NEW ZONES REQUESTED BY THE ILLINOIS STATE POLICE SHALL BE MARKED CONSISTENT WITH THE REQUIREMENTS OF SECTION 3B.21 OF THE MUTCD. WHEN NEW ZONES ARE PLACED IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF THE MEASUREMENT CAN BE ATTESTED TO IN COURT.

## ILLINOIS STATE POLICE

DISTRICT 1 STERLING 815/632-4010  
 DISTRICT 7 EAST MOLINE 309/752-4915  
 DISTRICT 16 PECATONICA 815/239-1152

CARROLL, LEE, OGLE, WHITESIDE  
 HENRY, ROCK ISLAND  
 BOONE, JO DAVIESS, STEPHENSON, WINNEBAGO

## BASIS OF PAYMENT:

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR AERIAL SPEED CHECK MARKING.

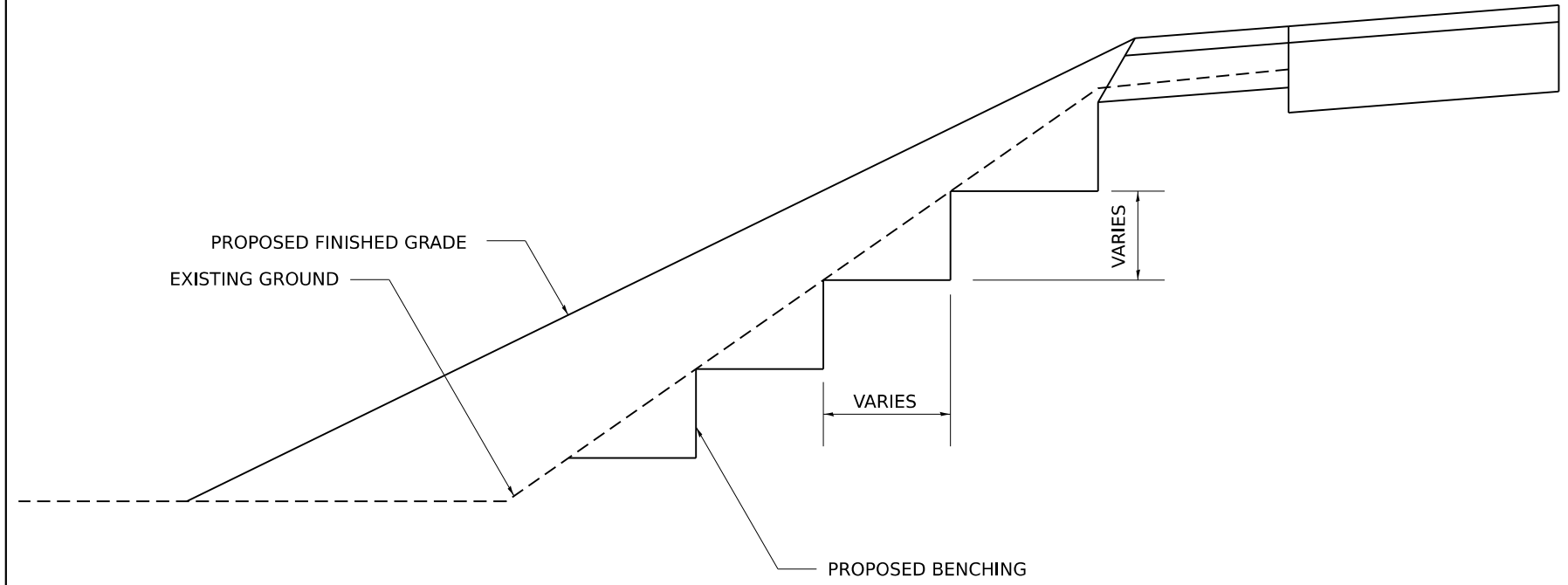
MODEL: 46pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 6-27-14									
REVISED - 8-27-13					CONTRACT NO.				
REVISED - 10-03-11					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# AERIAL SPEED CHECK ZONES

# 46.4

# TYPICAL BENCHING ON EXISTING EMBANKMENT



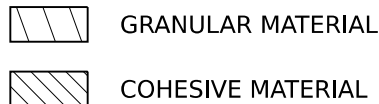
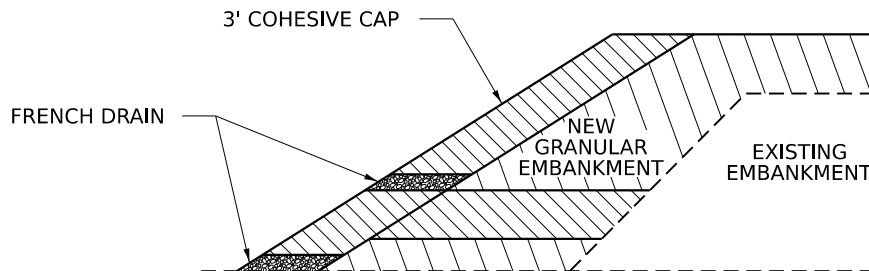
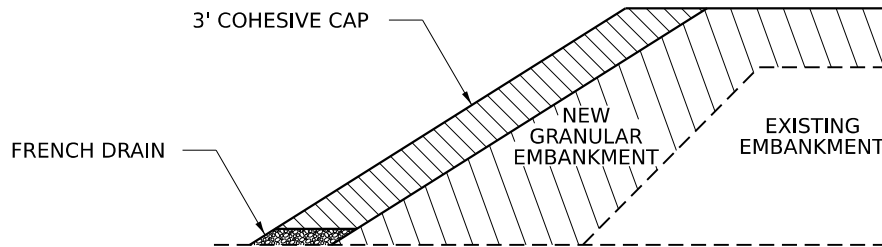
MODEL: 50pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 2-22-06	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

## TYPICAL BENCHING ON EXISTING EMBANKMENT

50.4

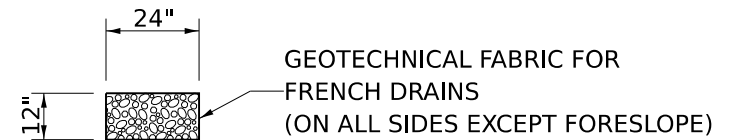
# TYPICAL CONSTRUCTION OF EMBANKMENTS WITH GRANULAR MATERIAL



**NOTES:**

WHEN THE CONTRACTOR ELECTS TO USE A GRANULAR TYPE OF MATERIAL TO CONSTRUCT THE NEW EMBANKMENT, A 3' THICK COHESIVE MATERIAL WILL BE REQUIRED ON THE SLOPE CONSTRUCTED CONCURRENTLY WITH THE GRANULAR EMBANKMENT LIFTS.

IF THE CONTRACTOR SWITCHES BETWEEN GRANULAR TYPES OF MATERIAL LIFTS AND COHESIVE MATERIAL LIFTS IN THE NEWER EMBANKMENT, FRENCH DRAINS SHALL BE CONSTRUCTED EVERY 250' ACCORDING TO ARTICLE 601.06. THE COST OF MATERIALS AND LABOR WILL BE INCLUDED IN THE CONTRACT UNIT PRICE OF EARTH EXCAVATION.



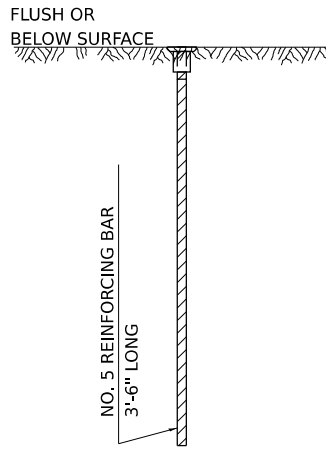
FRENCH DRAIN DETAIL

MODEL: 51p4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 11-01-21	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

# LAND SECTION & REFERENCE MARKERS

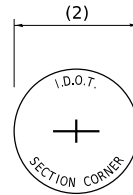
REFERENCE MARKER & LAND SECTION MARKER



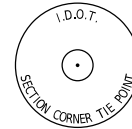
SECTION



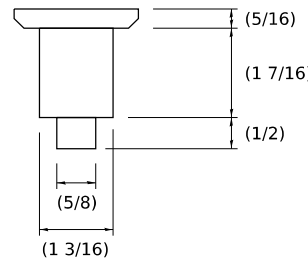
R.O.W. CAP



SECTION CORNER CAP



SECTION CORNER TIE POINT CAP



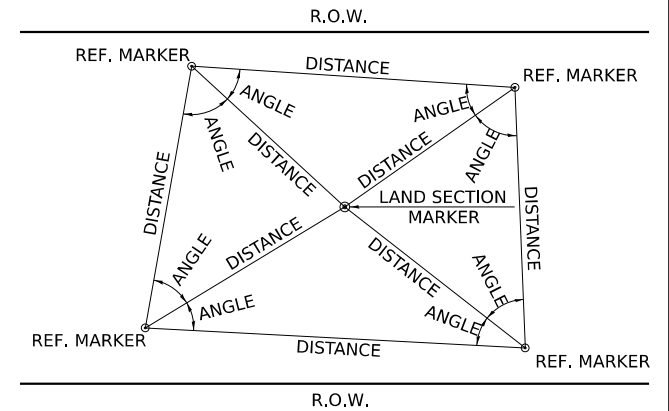
CAP DETAIL

## METHOD OF REFERENCING POINTS

REFERENCE MARKERS SHALL BE USED TO TIE IN PERMANENT LAND SECTION AND 1/4 SECTION CORNERS. WHERE LAND SECTION MARKERS FALL IN THE SHOULDERS OR GRAVEL SURFACES, THE TOP OF THE BAR SHALL BE KEPT 3" BELOW THE SURFACE. LAND SECTION MARKERS LOCATED IN TRAFFIC LANES SHALL BE REPLACED BY CORE DRILL AND RESETTING PIN.

ALUMINUM CAPS SHALL BE PLACED ON TOP OF THE REINFORCEMENT BAR. THERE ARE 3 TYPES OF CAPS, ONE FOR THE RIGHT-OF-WAY CORNERS, ONE FOR THE SECTION CORNERS AND ONE FOR THE SECTION CORNER TIE POINTS. THE CAPS WILL BE SUPPLIED BY THE SURVEYOR WHO IS RESPONSIBLE FOR MONUMENTING CORNERS.

## METHOD OF REFERENCING MARKERS



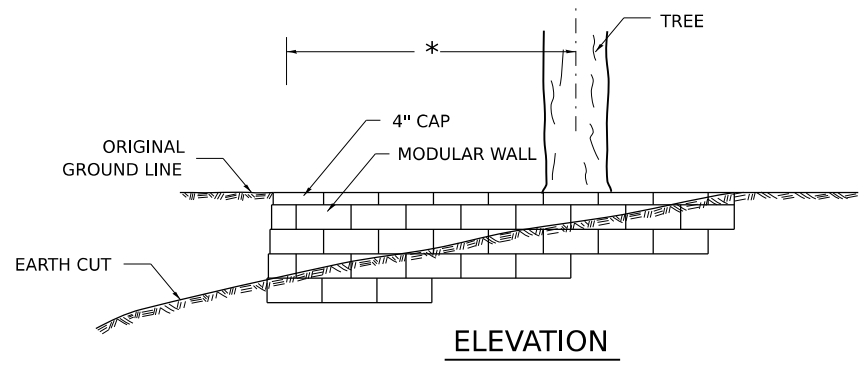
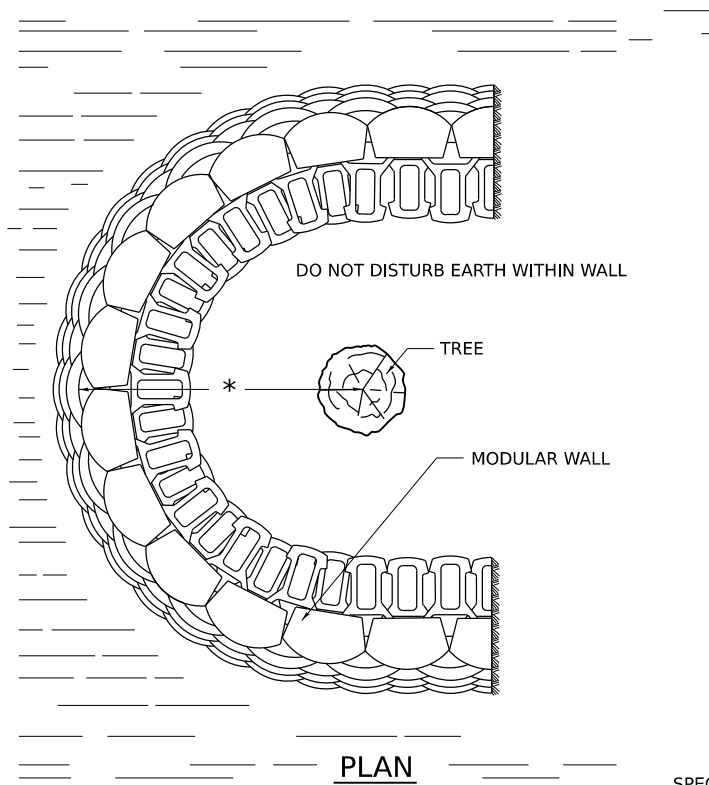
- USE INSTRUMENT TIES TO NEARBY LAND-MARKS (STEEPLES, TOWERS, SILOS, ETC...)
- IN CULTIVATED FIELDS, SET 28" OR MORE BELOW GROUND SURFACE.
- IN FENCE LINE OR PROTECTED AREA SET TOP AT GROUND LEVEL SO AS NOT TO BE DISTURBED BY MOWING.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 63pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 3-05-10	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

# TREE WALL



HEIGHT OF WALL DEPENDENT ON SLOPE OF THE CUT.  
 \* THE RADIUS OF THE TREE WALL SHALL BE DETERMINED BY MULTIPLYING 6 BY THE DIAMETER OF THE TREE, WITH A MAXIMUM OF A 12 FOOT RADIUS.  
 USE 8" HIGH BLOCKS EXCEPT WHEN HEIGHT OF WALL IS LESS THAN 24", THEN 4" HIGH BLOCKS SHALL BE USED.

## NOTES

SPECIAL CARE SHALL BE TAKEN BY THE CONTRACTOR NOT TO DISTURB THE EARTH OR THE ROOTS WITHIN THE PROPOSED TREE WALL.

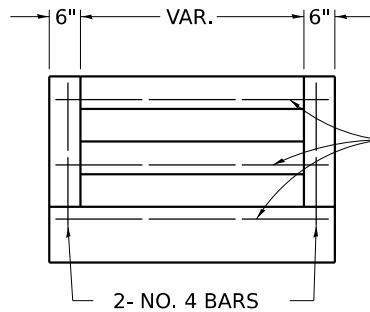
THESE TREE WALLS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR "SEGMENTAL CONCRETE BLOCK WALL" INCLUDED IN THIS SHALL BE THE FACE OF THE WALL THAT ARE BURIED.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

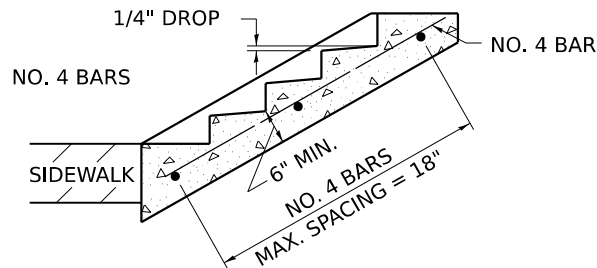
MODEL: 70pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

REVISED - 10-03-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -										
REVISED -										
REVISED -										
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.	CONTRACT NO.				
						ILLINOIS	FED. AID PROJECT			

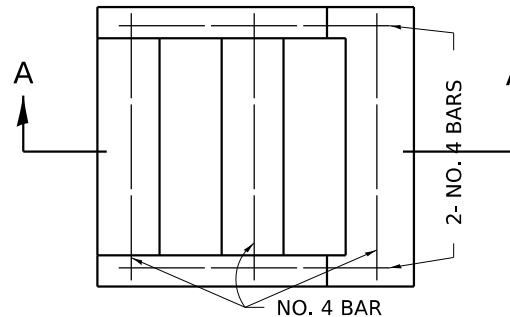
# DETAIL OF CONCRETE STEPS



END ELEVATION



SECTION A-A



PLAN

## TABLE OF TREADS & RISERS

### SLOPE TREAD RISER

SLOPE	TREAD	RISER
1:2	12"	6"
1:3	15"	5"
1:4	17"	4 1/4"

WHERE SLOPES FALL BETWEEN THOSE SHOWN IN THE TABLE ABOVE, THE STAIR RAIL SHOULD FIT THE SLOPE AND THE TREAD IN INCHES x THE RISER IN INCHES SHOULD BE BETWEEN 72 AND 78.

#### EXAMPLE:

FOR A 1:4 SLOPE USE  $y = \text{RISER HEIGHT } 4y = 75"$ .  
 SOLVING  $y \approx \frac{75}{4}$ ,  $y = 4.3"$  (USE 4 1/4" FOR CONVENIENCE.)  
 TREAD WOULD THEN BE  $4 \frac{1}{4} \times 4 = 17"$

COST OF REINFORCEMENT BARS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LBS FOR REINFORCEMENT BARS.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT, WHICH SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE STEPS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 71pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED -	8-27-13
REVISED -	10-03-11
REVISED -	
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

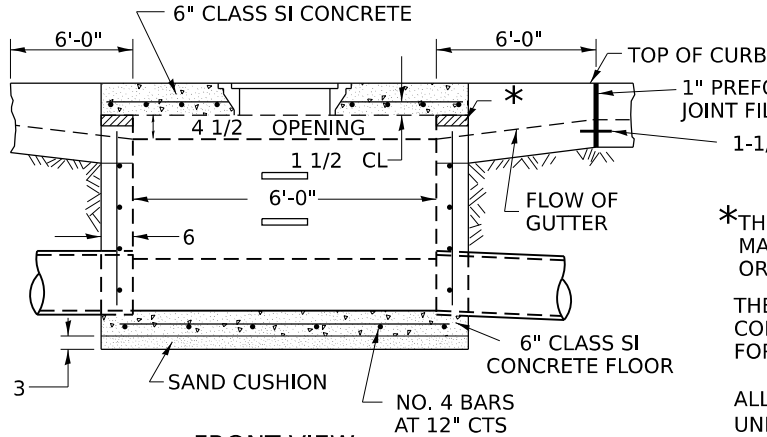
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
		ILLINOIS	FED. AID PROJECT	

# DETAIL OF CONCRETE STEPS

71.4

# INLETS, SPECIAL, NO. 3



**FRONT VIEW**

SEE STANDARD 602701 FOR DETAILS OF STEPS.

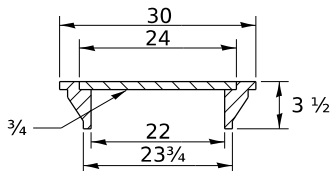
1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.

CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT.

THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.

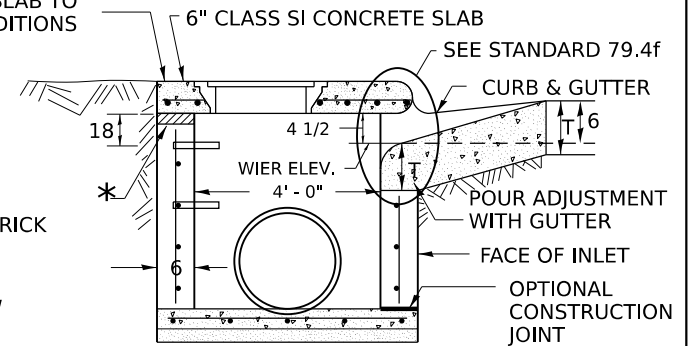
REINFORCEMENT FOR INLETS, SPECIAL, NO. 3 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

### LIGHT WEIGHT MANHOLE CASTING

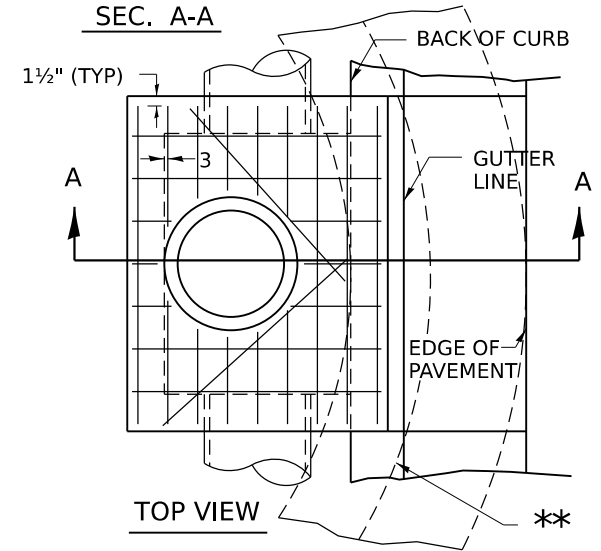


TOTAL WEIGHT 160 LBS.

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS



**SEC. A-A**



**TOP VIEW**

### NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT

THE INLET SHALL BE CAST IN PLACE OR PRECAST.

EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 3 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.

THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 3 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).

THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.

THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.

ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS, TYPE 2 OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 79pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	8-27-13
REVISED -	10-03-11
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

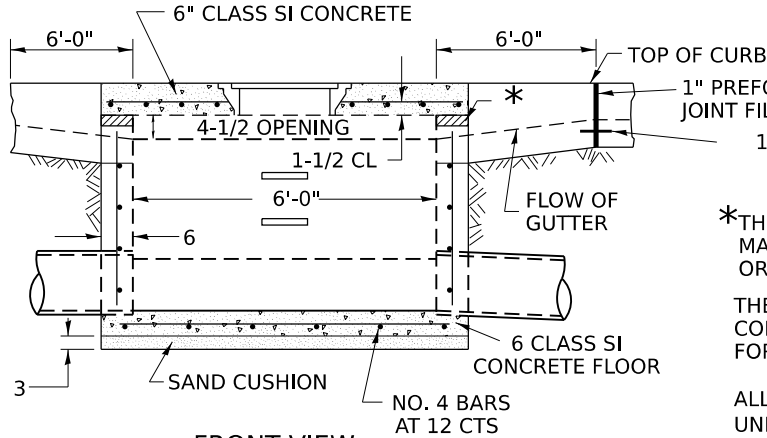
**INLETS, SPECIAL, NO. 3**

**79.4**





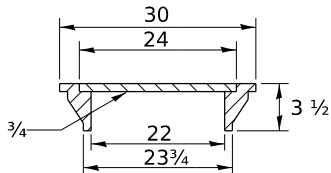
# INLETS, SPECIAL, NO. 5



**FRONT VIEW**

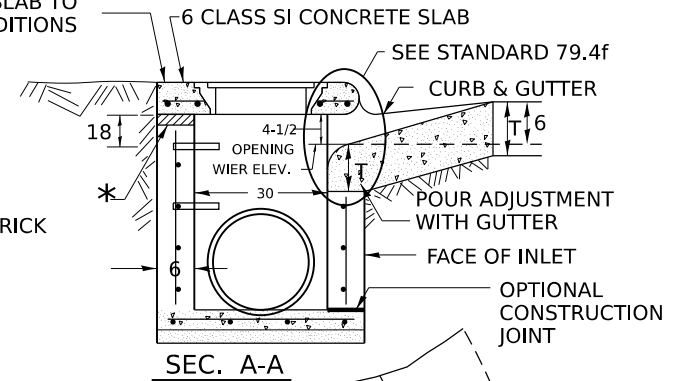
SEE STANDARD 602701 FOR DETAILS OF STEPS.  
 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.  
 CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT.  
 THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.  
 REINFORCEMENT FOR INLETS, SPECIAL, NO. 5 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

### LIGHT WEIGHT MANHOLE CASTING



TOTAL WEIGHT 160 LBS.

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS

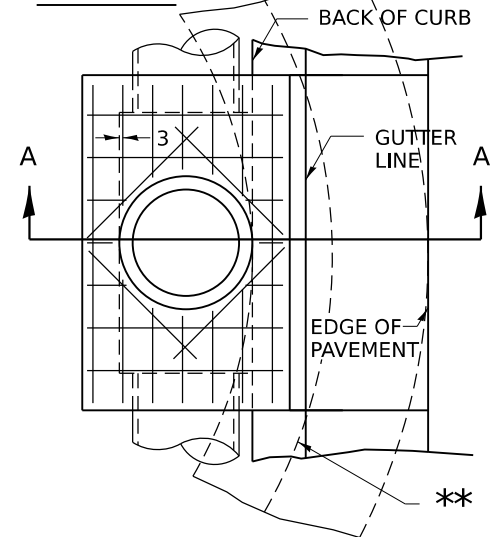


**SEC. A-A**

STEPS AT 12 TO 16 CTS.  
 \*THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.  
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.  
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

### NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT  
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.  
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 5 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.  
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 5 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).  
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.  
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.  
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS, TYPE 2 OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.



\*\*WHEN INLET IS CONSTRUCTED IN RETURN, THE TOP OF SLAB SHALL CONFORM TO THE RADIUS OF THE RETURN.

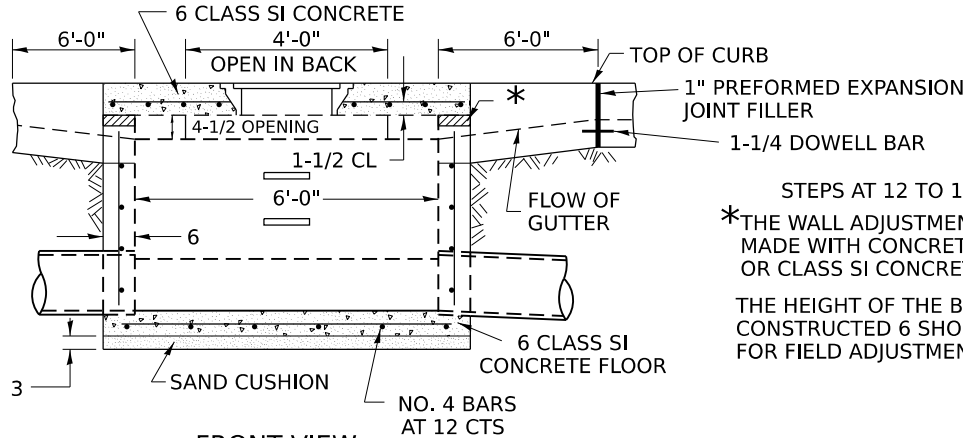
MODEL: 79pt4b  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	8-27-13
REVISED -	10-04-11
REVISED -	

<b>REGION 2 / DISTRICT 2 STANDARD</b>				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

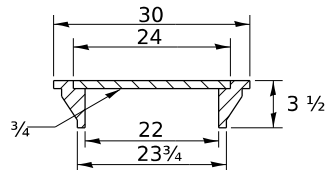
# INLETS, SPECIAL, NO. 6



**FRONT VIEW**

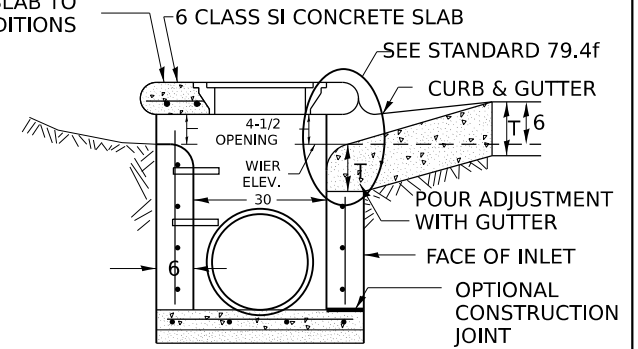
SEE STANDARD 602701 FOR DETAILS OF STEPS.  
 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.  
 CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT.  
 THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.  
 REINFORCEMENT FOR INLETS, SPECIAL, NO. 6 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4g

### LIGHT WEIGHT MANHOLE CASTING

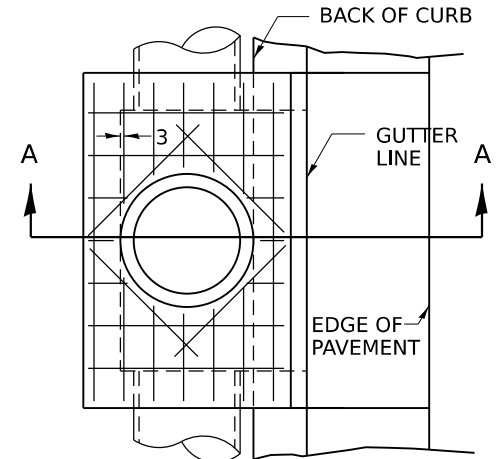


TOTAL WEIGHT 160 LBS.

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS



**SEC. A-A**



**TOP VIEW**

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

STEPS AT 12 TO 16 CTS.  
 \*THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.  
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.

### NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT  
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.  
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 6 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.  
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 6 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).  
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.  
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.  
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS, TYPE 2 OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

MODEL: 79pt4c  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED -	1-05-16
REVISED -	8-27-13
REVISED -	10-05-11
REVISED -	

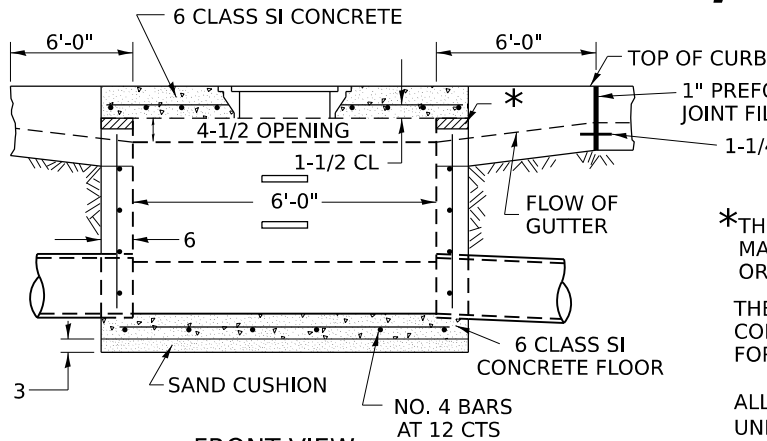
### REGION 2 / DISTRICT 2 STANDARD

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

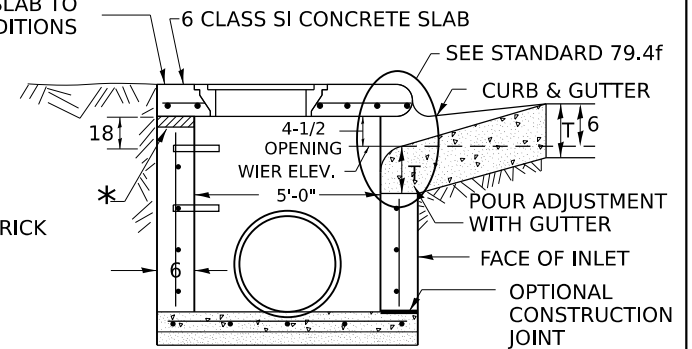
**INLETS, SPECIAL, NO. 6 79.4c**

# INLETS, SPECIAL, NO. 7



**FRONT VIEW**

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS



**SEC. A-A**

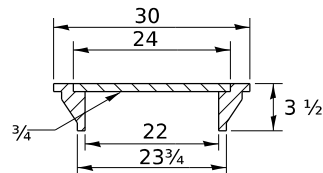
STEPS AT 12 TO 16 CTS.  
 \*THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.  
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.  
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

**NOTES**

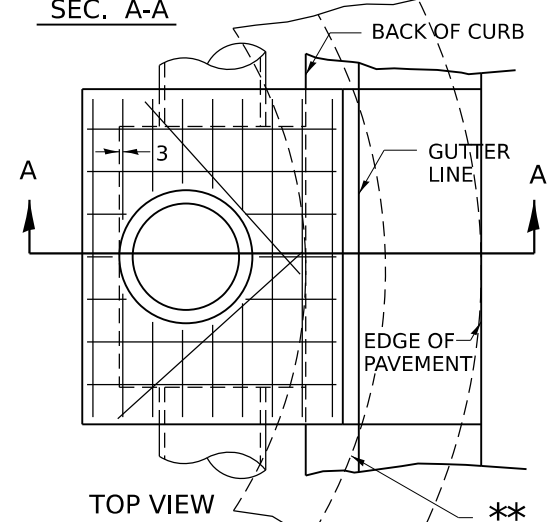
SEE STANDARD 602701 FOR DETAILS OF STEPS.  
 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.  
 CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT.  
 THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.  
 REINFORCEMENT FOR INLETS, SPECIAL, NO. 7 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4h

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT  
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.  
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 7 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.  
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 7 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).  
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.  
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.  
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS, TYPE 2 OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

**LIGHT WEIGHT MANHOLE CASTING**



TOTAL WEIGHT 160 LBS.



**TOP VIEW**

\*\*WHEN INLET IS CONSTRUCTED IN RETURN, THE TOP OF SLAB SHALL CONFORM TO THE RADIUS OF THE RETURN.

MODEL: 79pt4d  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

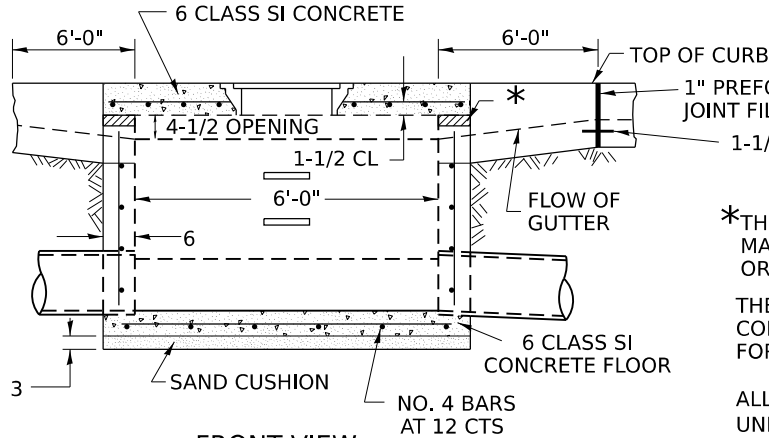
REVISED -	1-05-16
REVISED -	8-27-12
REVISED -	10-05-11
REVISED -	

**REGION 2 / DISTRICT 2 STANDARD**

SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

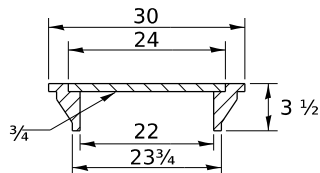
# INLETS, SPECIAL, NO. 8



**FRONT VIEW**

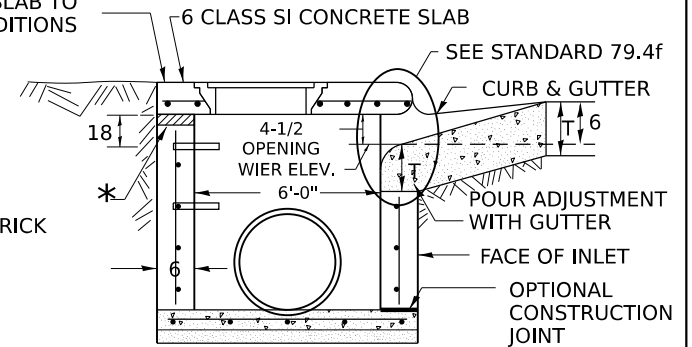
SEE STANDARD 602701 FOR DETAILS OF STEPS.  
 1" PREFORMED EXPANSION JOINTS AS SHOWN SHALL BE PROVIDED ON EACH SIDE OF INLET.  
 CLASS SI CONCRETE OR PRECAST CONCRETE SHALL BE USED THROUGHOUT.  
 THE SIDE WALLS MAY BE BUILT AS PRECAST SEGMENTAL SECTIONS.  
 REINFORCEMENT FOR INLETS, SPECIAL, NO. 8 SHALL BE ACCORDING TO DISTRICT STANDARD 79.4h

### LIGHT WEIGHT MANHOLE CASTING

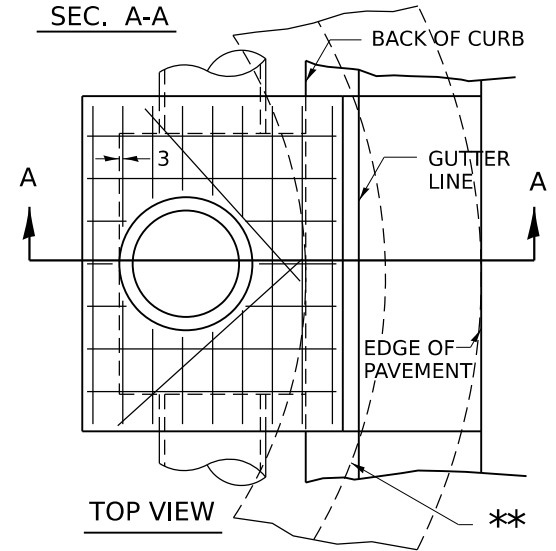


TOTAL WEIGHT 160 LBS.

SLOPE TOP SLAB TO MATCH FINAL CONDITIONS



**SEC. A-A**



**TOP VIEW**

STEPS AT 12 TO 16 CTS.  
 \*THE WALL ADJUSTMENTS SHALL BE MADE WITH CONCRETE BUILDING BRICK OR CLASS SI CONCRETE.  
 THE HEIGHT OF THE BOX MAY BE CONSTRUCTED 6 SHORT TO ALLOW FOR FIELD ADJUSTMENTS.  
 ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

### NOTES

STEPS SHALL BE OMITTED WHEN DEPTH OF INLET IS LESS THAN 5 FOOT  
 THE INLET SHALL BE CAST IN PLACE OR PRECAST.  
 EXCEPT AS NOTED HEREON INLETS, SPECIAL, NO. 8 SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS.  
 THE CONTRACT UNIT PRICE EACH FOR INLET SPECIAL NO. 8 SHALL INCLUDE THE COST OF FURNISHING AND INSTALLING THE FRAME, LID, REINFORCEMENT BARS, FLOOR AND TOP SLABS, CAST IRON STEPS (IF USED).  
 THE CURB AND GUTTER WILL BE PAID FOR SEPARATELY AND WILL BE MEASURED THROUGH THE INLET.  
 THE CURB AND GUTTER ADJACENT TO AND 6 FOOT ON EITHER SIDE OF THE INLET SHALL BE CONSTRUCTED AS SHOWN WITH NO ADDITIONAL COMPENSATION FOR THE TRANSITION.  
 ALL PIPE UNDERDRAIN CONNECTIONS WHEN SPECIFIED SHALL BE DONE IN ACCORDANCE WITH ART. 601 OF THE STANDARD SPECIFICATIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER (FOOT) FOR PIPE UNDERDRAINS, TYPE 2 OR PIPE UNDERDRAINS (SPECIAL) OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

\*\*WHEN INLET IS CONSTRUCTED IN RETURN, THE TOP OF SLAB SHALL CONFORM TO THE RADIUS OF THE RETURN.

MODEL: 79pt4e  
 FILE NAME: District 2 Standard  
 PLOT DATE: 3/12/2024

REVISED	1-05-16
REVISED	8-27-13
REVISED	10-05-11
REVISED	

### REGION 2 / DISTRICT 2 STANDARD

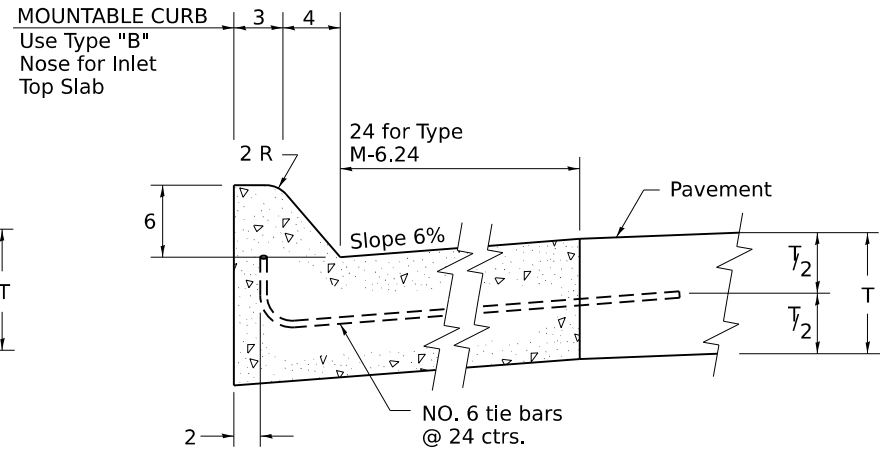
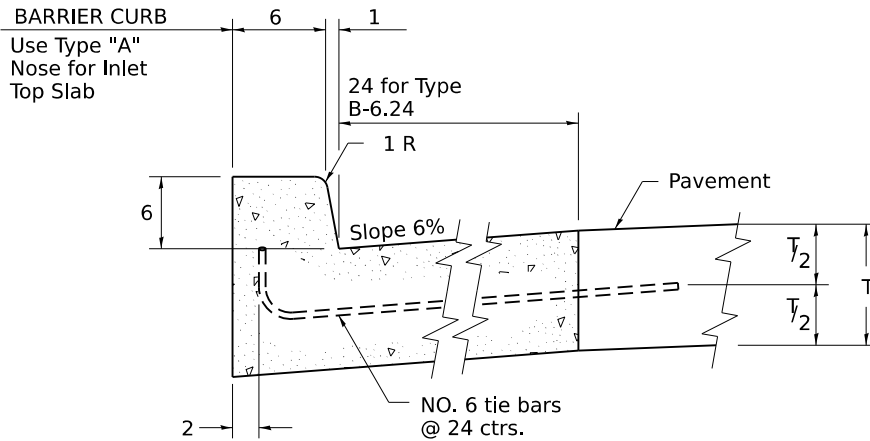
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.
--------	-------	----	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS		FED. AID PROJECT		

**INLETS, SPECIAL, NO. 8**

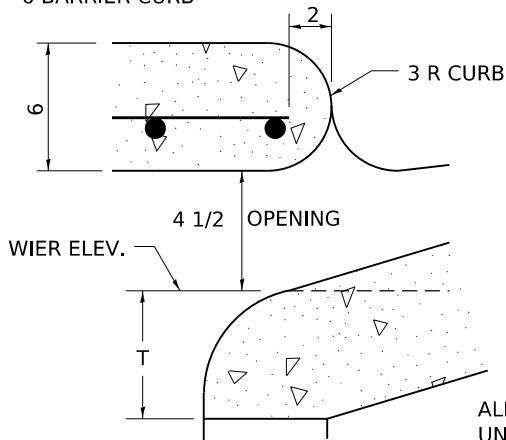
**79.4e**

# NOSE TYPE FOR INLET TOP SLAB



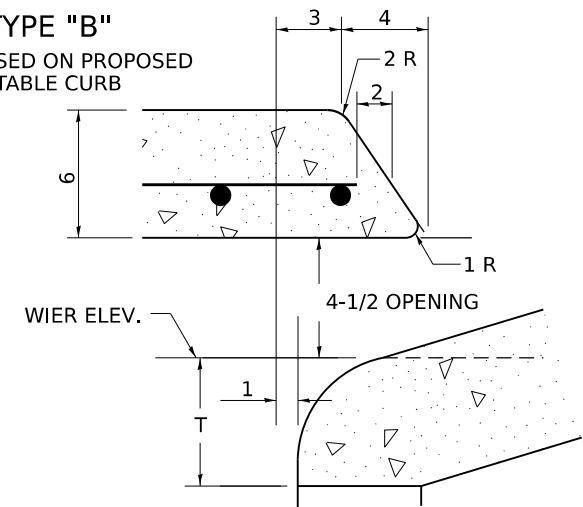
## TYPE "A"

TO BE USED ON EXISTING OR PROPOSED  
6 BARRIER CURB



## TYPE "B"

TO BE USED ON PROPOSED  
6 MOUNTABLE CURB



ALL DIMENSIONS ARE IN INCHES  
UNLESS OTHERWISE NOTED.

MODEL: 79pt4f  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED -	4-14-15
REVISED -	10-05-11
REVISED -	
REVISED -	

## REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	

# NOSE TYPE FOR INLET TOP SLAB

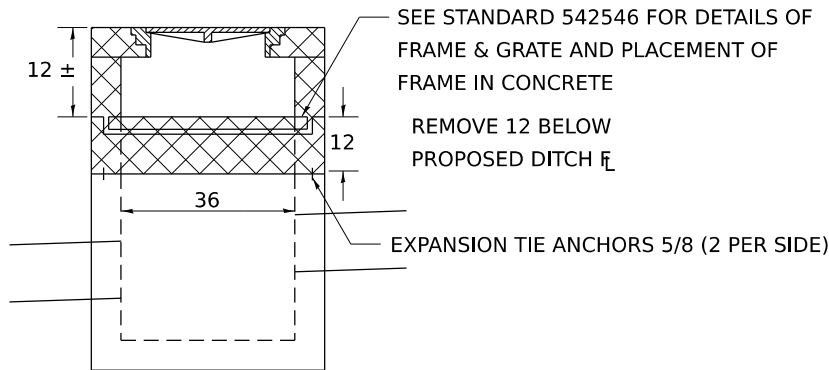
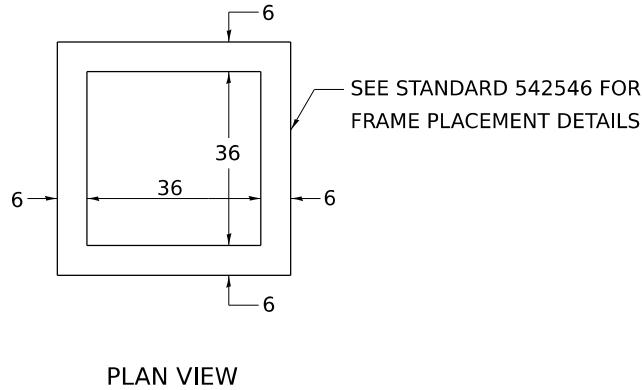
79.4f







# INLETS TO BE RECONSTRUCTED WITH NEW STANDARD 542546 FRAME AND GRATE



## NOTES:

THIS WORK SHALL BE DONE IN ACCORDANCE WITH STANDARD 542546 AND THIS DETAIL.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. THE PROPOSED TOP CAN BE CAST IN PLACE OR PRECAST.

THE EXISTING FRAME & GRATE SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

THE CONCRETE SHALL BE REMOVED BY DRILLING, CHIPPING, SAWING, OR OTHER METHOD APPROVED OF BY THE ENGINEER.

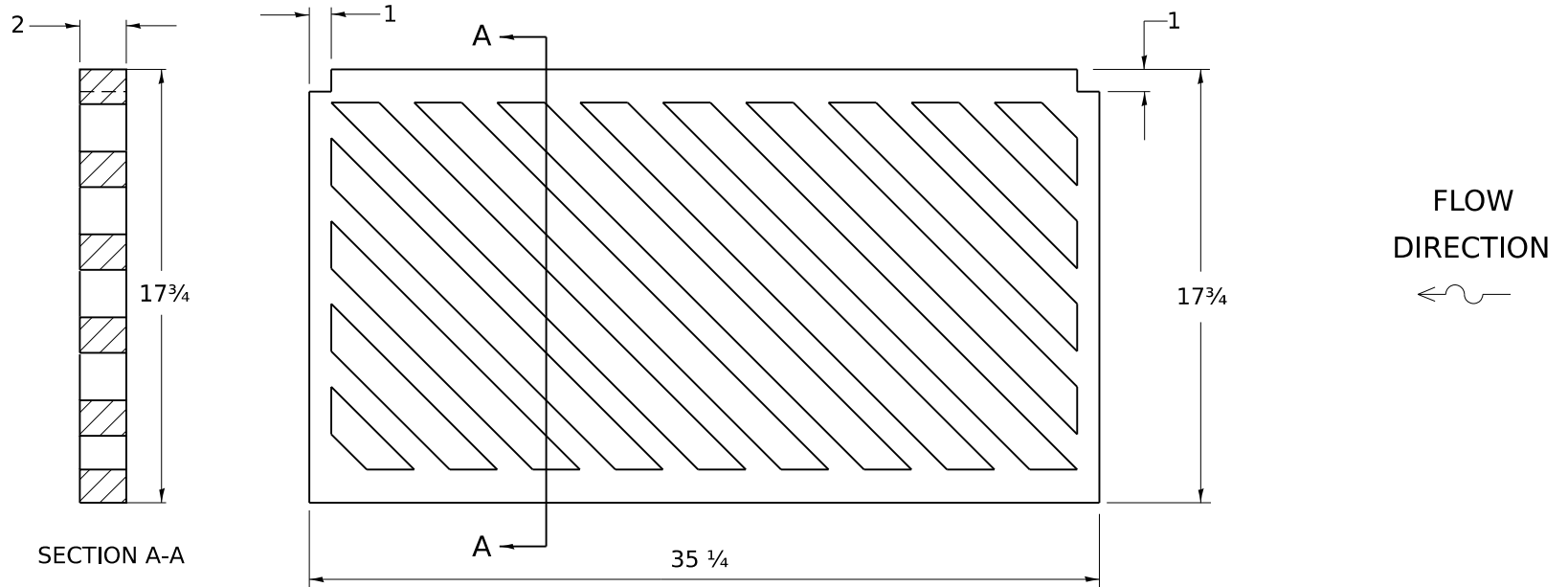
THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR INLETS TO BE RECONSTRUCTED WITH NEW STANDARD 542546 FRAME AND GRATE WHICH SHALL INCLUDE REMOVING THE FRAME & GRATE & CONCRETE, EXPANSION TIE ANCHORS, CLASS SI CONCRETE, AND FURNISHING & INSTALLING FRAME & GRATE (EITHER STEEL OR DUCTILE IRON).

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 80pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 10-05-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
REVISED -									
REVISED -				CONTRACT NO.					
REVISED -				SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		

# GRATE, SPECIAL



ALL DIMENSIONS ARE IN INCHES  
UNLESS OTHERWISE NOTED.

## PLAN VIEW OF CAST IRON GRATE

1-3/8 DIAGONAL BARS WITH  
1-1/4 OPENINGS

### NOTES

THE CONTRACTOR SHALL FIELD CHECK  
THE SIZE OF THE EXISTING GRATE  
BEFORE ORDERING THE NEW GRATE  
TO INSURE THE CORRECT SIZE.

THIS WORK SHALL BE PAID FOR AT THE  
CONTRACT UNIT PRICE PER EACH FOR  
SPECIAL GRATE NO. 1.

THE EXISTING GRATES ARE TO BE SALVAGED  
AND TO BECOME THE PROPERTY OF THE .

MODEL: 83pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 10-05-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.

**GRATE SPECIAL**

**83.4**

# TYPICAL MEDIAN CROSSOVER CLOSURE (WITH EMERGENCY OPENING)

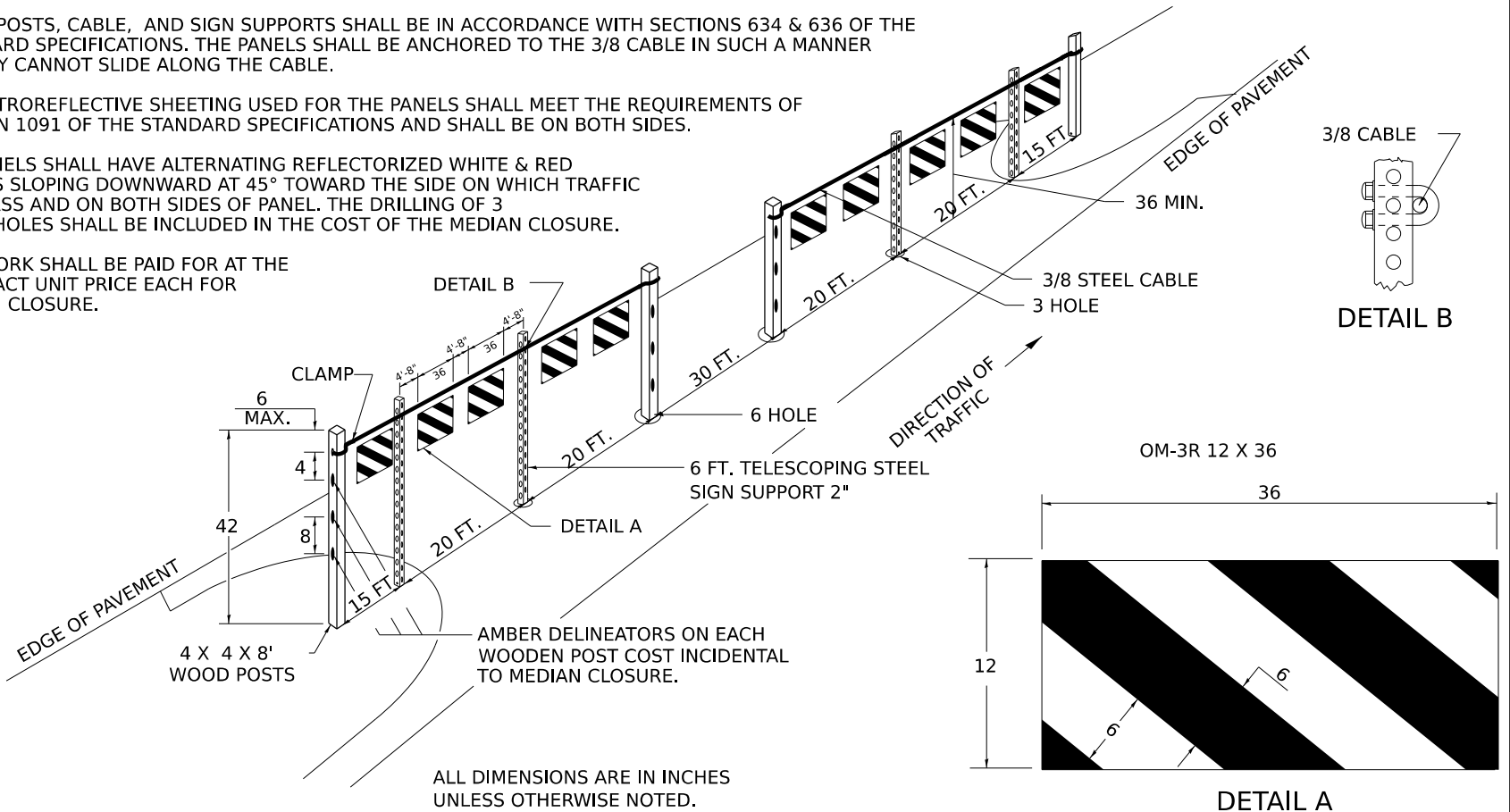
## GENERAL NOTES

WOOD POSTS, CABLE, AND SIGN SUPPORTS SHALL BE IN ACCORDANCE WITH SECTIONS 634 & 636 OF THE STANDARD SPECIFICATIONS. THE PANELS SHALL BE ANCHORED TO THE 3/8 CABLE IN SUCH A MANNER SO THEY CANNOT SLIDE ALONG THE CABLE.

THE RETROREFLECTIVE SHEETING USED FOR THE PANELS SHALL MEET THE REQUIREMENTS OF SECTION 1091 OF THE STANDARD SPECIFICATIONS AND SHALL BE ON BOTH SIDES.

ALL PANELS SHALL HAVE ALTERNATING REFLECTORIZED WHITE & RED STRIPES SLOPING DOWNWARD AT 45° TOWARD THE SIDE ON WHICH TRAFFIC WILL PASS AND ON BOTH SIDES OF PANEL. THE DRILLING OF 3 AND 6 HOLES SHALL BE INCLUDED IN THE COST OF THE MEDIAN CLOSURE.

THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR MEDIAN CLOSURE.



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 87p14  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

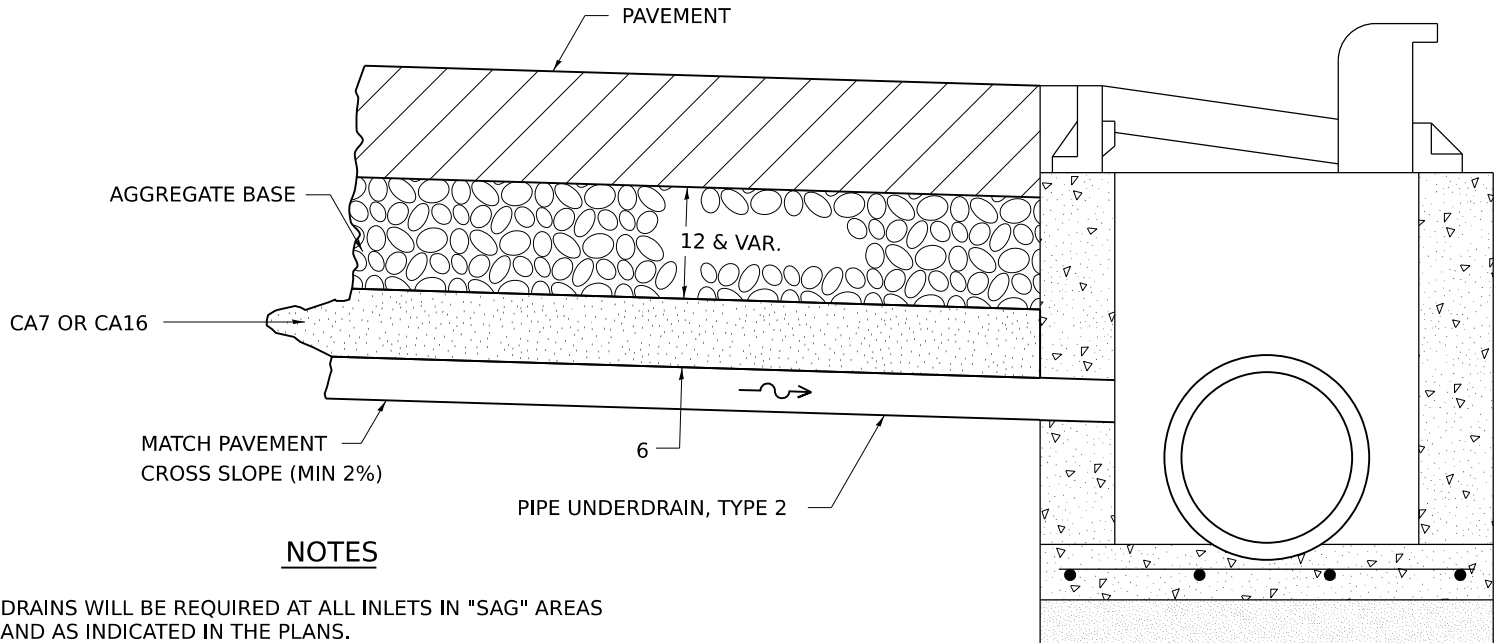
REVISED -	1-05-16
REVISED -	1-17-12
REVISED -	
REVISED -	

### REGION 2 / DISTRICT 2 STANDARD

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
		ILLINOIS	FED. AID PROJECT	

# DRAIN FOR AGGREGATE BASES IN URBAN AREAS



## NOTES

DRAINS WILL BE REQUIRED AT ALL INLETS IN "SAG" AREAS AND AS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR PIPE UNDERDRAINS, TYPE 2 OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

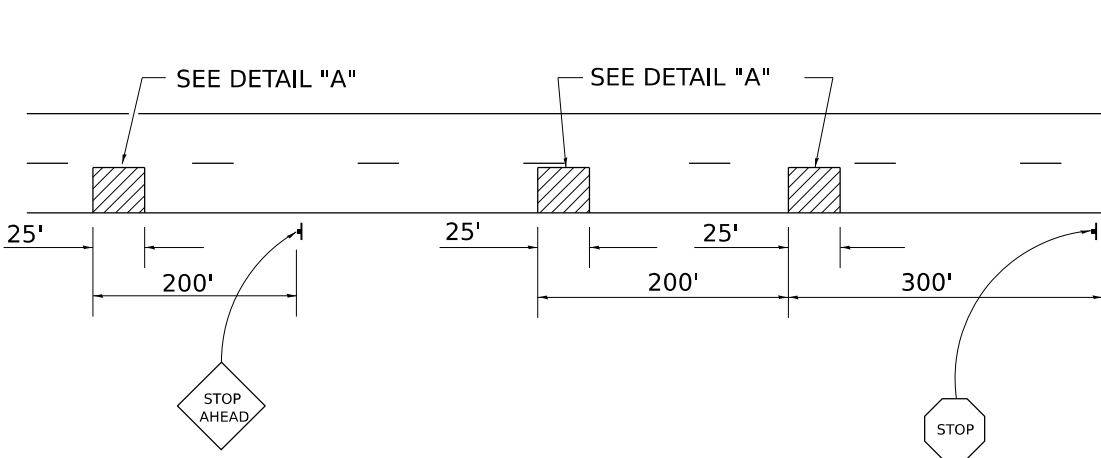
MODEL: 88pt4  
FILE NAME: District 2 Standard  
PLOT DATE: 3/12/2024

REVISED - 1-05-16	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED - 10-05-11									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	

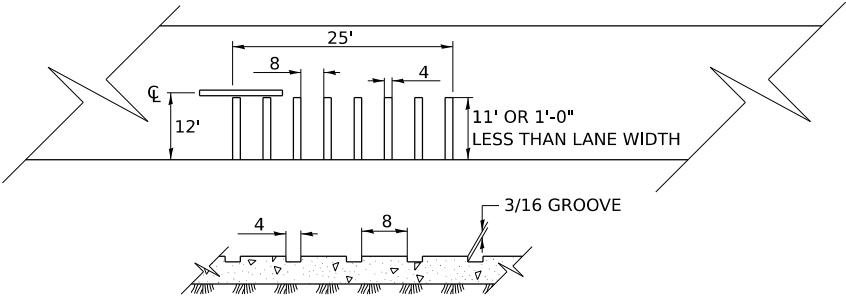
# DRAIN FOR AGGREGATE BASES IN URBAN AREAS

# 88.4

# RUMBLE RESURFACING



**GROOVED**



**DETAIL "A"**

**NOTES**

THE GROOVES SHALL BE CONSTRUCTED WITH A MILLING MACHINE CAPABLE OF COLD MILLING THE EXISTING SURFACE IN THE PATTERN SHOWN.

RUMBLE RESURFACING SHALL BE MEASURED FOR PAYMENT IN PLACE AND THE AREA COMPUTED IN SQUARE YARDS. THE LENGTH SHALL BE THE DISTANCE FROM OUTSIDE EDGE TO OUTSIDE EDGE OF THE GROOVE WHICH WILL BE APPROXIMATELY 25'. THE WIDTH SHALL BE 1' LESS THAN LANE WIDTH.

RUMBLE STRIPS SHALL BE CONSTRUCTED AS SHOWN AND PAID FOR PER SQUARE YARD AS RUMBLE RESURFACING.

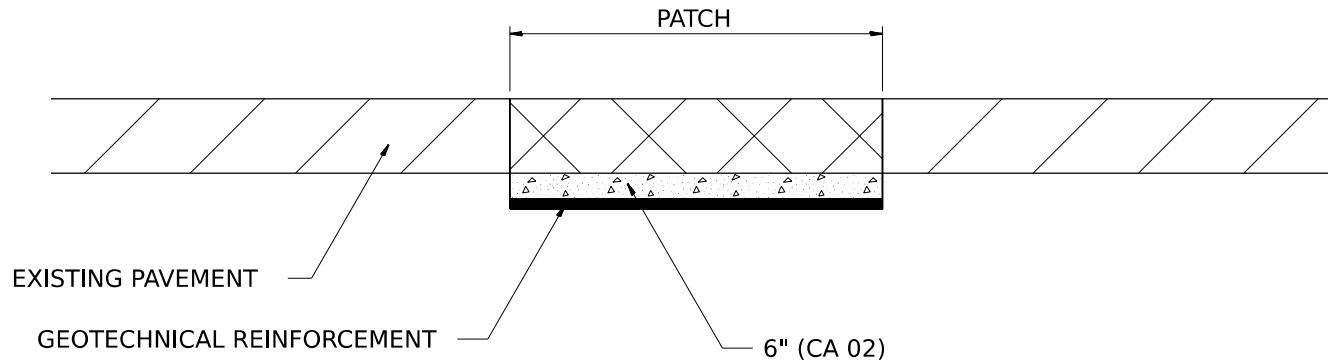
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 91pt4  
FILE NAME: District 2 Standard  
PLOT DATE = 3/12/2024

REVISED - 10-05-11	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET	OF	SHEETS	STA.



# SUBGRADE REPLACEMENT



**NOTES:**

THE CA 02 SHALL BE COMPACTED IN A MANNER APPROVED BY THE ENGINEER. IF THE MOISTURE CONTENT OF THE MATERIAL IS SUCH THAT COMPACTION SATISFACTORY TO THE ENGINEER CANNOT BE OBTAINED, SUFFICIENT WATER SHALL BE ADDED SO THAT SATISFACTORY COMPACTION CAN BE OBTAINED.

THE CA 02 SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CU YD FOR AGGREGATE SUBGRADE IMPROVEMENT WHICH SHALL ALSO INCLUDE ALL EARTH EXCAVATION.

THE GEO TECHNICAL REINFORCEMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQ YD FOR GEO TECHNICAL REINFORCEMENT.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: 97pt4  
 FILE NAME: District 2 Standard  
 PLOT DATE = 3/12/2024

REVISED - 3-13-13	<b>REGION 2 / DISTRICT 2 STANDARD</b>				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -									
REVISED -					CONTRACT NO.				
REVISED -					SCALE:	SHEET OF SHEETS	STA.	TO STA.	ILLINOIS

