<table>
<thead>
<tr>
<th>Section A</th>
<th>Roadway / Pavement</th>
<th>Standard</th>
<th>Modification Summary</th>
<th>Effective 03/01/2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sheets</td>
<td>Illinois Tollway Standard Logo Inserted In Title Block.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

New Sheet
**Pavement Repair (Partial Depth)**

**Typical Roadway Plan**

**Section A-B & C-C**

**Asphalt Overlay Repair**

**Notes: Typical Asphalt Overlay Repair**

1. Location of allOverlay Repair areas shall be determined by the Engineer.
2. Minimum Overlay shall be as shown in Typical Roadway Plan.
3. All Overlay shall be removed to the top of the PCC Overlay Pavement.
4. Spall may be eliminated if milling equipment is used and vertical and straight cuts are obtained.

**General Notes**

1. The choice of corrective shall be cleaned of all dirt, loose or spalled concrete, and foreign material to a depth where the crack becomes less than 1/4 inch wide. Until the reinforcement is encountered, the work shall be performed by means of approved hand tools and pneumatic tools.
2. After removing loose material, all adjacent to the crack or joint, the crack or joint shall be filled with mortar for cracks and joints as required by Standard Specifications, or as directed by the Engineer.
3. Spall and spalled or damaged asphalt shall be removed, joint sealant and 1-2 inch layer of asphalt applied. Where necessary, a full-depth patch shall be constructed.

**Legend**

- Existing Reinforcing Material
- Existing or Proposed Asphalt Overlay
- Proposed Pavement Repair
- Partial Depth Pavement
- Milling for Cracks and Joints
- Existing Aggregate Material Depth
NOTES FOR ASPHALT PRESSURE RELIEF JOINTS

1. Placing of Asphalt Pressure Relief Joint shall be to a depth of 1/4-inch, or 6 mm, from the edge of the pavement, as shown on the plans or as directed by the Engineer. The area shall be cleaned to the satisfaction of the Engineer.

2. The in-place density shall not be less than 95% of the Bulk Specific Gravity (B.S.G.) density, except that if a target density has been previously established, then that target density shall be used. The voids in the mix at 95% of the Bulk Specific Gravity (B.S.G.) density, or 95% of the target density, whichever is the least.

3. The removal of existing longitudinal tie bars or reinforcement shall be considered incidental to asphalt pressure relief joint.

4. Exact locations and notes of asphalt pressure relief joint will be determined by the Engineer.

5. The contract unit price per square foot for asphalt pressure relief joint shall include the cost of the examination, removal of existing pavement, asphalt materials, backfill, and asphalt concrete materials.

6. Refer to the contract documents for the required binder and surface course materials.

7. If required, aggregate for base course restoration will be measured and paid for in tons per section.

LEGEND

- R.C.P. Pavement
- Proposed Surface Course (Use detail for asphalt p aveement without proposed overlay)
- Proposed Overlay
- Granular Surface

ASPHALT PRESSURE RELIEF JOINT
WITH PROPOSED OVERLAY

ASPHALT PRESSURE RELIEF JOINT
WITHOUT PROPOSED OVERLAY
NOTES FOR BUTT JOINT TYPE 1

1. The above work will be performed at the ends of all asphalt resurfacing. The removal of concrete pavement will be included in contract unit price per square yard for "paving and cement concrete surface removal, butt joint." Asphalt overlay to be paid for under item "Asphalt binder course" and "Asphalt surface course" of the type specified in the contract.

2. Only approved scarifying or milling equipment shall be used to scarify the concrete pavement.

3. Regardless of type or surface, the number of thickness of courses or layers, the overlay thickness shall be based on 1 1/2" in S.D. and the minimum layer thickness shall be 1".

4. Refer to the contract documents for the required binder and surface course materials. "g" is the thickness of the surface course specified in the contract, "h" is the thickness of the binder course specified in the contract. See note 3.

NOTE FOR TEMORARY TRANSVERSE BUTT JOINT

TEMPORARY TRANSVERSE BUTT JOINT

NOTES FOR TEMPORARY TRANSVERSE BUTT JOINT

1. This item will be used only where specified by the Engineer.

2. Payment will be made at the contract unit price per square yard for "permanent transverse butt joint" which includes the removal of the temporary transverse butt joint, as specified in the standard specifications.

3. Upon removal of the transverse butt joint, the surface course shall be smooth and parallel to the joint to provide a true central support.

4. Refer to the contract documents for the required binder and surface course materials.

NOTE FOR TEMPORARY LONGITUDINAL BUTT JOINT

TEMPORARY LONGITUDINAL BUTT JOINT

NOTES FOR TEMPORARY LONGITUDINAL BUTT JOINT

1. This item will be used only where specified by the Engineer.

2. Payment will be made at the contract unit price per square yard for "permanent longitudinal butt joint" which includes the removal of the temporary longitudinal butt joint, as specified in the standard specifications.

3. Upon removal of the transverse butt joint, the surface course shall be smooth and parallel to the joint to provide a true central support.

4. Refer to the contract documents for the required binder and surface course materials.
TRANSFER CONSTRUCTION JOINT
(JOINTED PLAIN CONCRETE PAVEMENT)

GENERAL NOTES
1. CONCRETE BAR CAPS SHALL BE PLACED ON OPPOSITE END OF ADJACENT BAR CAPS.
2. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
3. "P" = PAVEMENT THICKNESS
4. A 1½" GAP CUT SHALL BE PROVIDED FOR PAINTED CRACK CONTROL.

DATE   REV.   PROJECT NAME  SHEET NAME  DESIGN NUMBER  PAVEMENT JOINTS
STANDARD A7-01
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.D.O.T. HWY. STANDARD 420001, EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PERFORMED JOINT SEALER.


3. STUBS SHALL BE THE MINIMUM DIMENSION AS SHOWN AND ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

4. 7" NOSE LOCATION SHALL BE ADJUSTED TO BE ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

5. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15'.

6. AS ADDITIONAL RAMP LANES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE, TYPICAL SPACING IS 15' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATION IN THE WHEEL PATH SHALL BE MINIMIZED.
NOTES:
1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON J.R.O.T. HAY, STANDARD 422002. EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PREFORMED JOINT SEALER.

2. THE THICKNESS OF THE JOINTED RAMP PAVEMENT IN THE TANGENT AREA SHALL MATCH THE MAINLINE PAVEMENT. THE EXTRA THICKNESS OF PAVEMENT SHALL BE INCLUDED IN THE PRICE FOR THE RAMP PAVEMENT.

3. SEE STANDARD 412 (BAR REINFORCEMENT) FOR CRC PAVEMENT FOR DETAILS OF PAVEMENT REINFORCEMENT.

4. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 25 FEET.

5. AS ADDITIONAL RAMP LAKES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE. TYPICAL JOINT SPACING IS BY LONG BY 15' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WHEEL PATH SHALL BE MINIMIZED.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON IDOT TYPICAL HIGHWAY DETAIL 420000. EXCEPT EXPANSION JOINT SEALING MATERIALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISIONS, BONDED PRE-FORMED JOINT SEALER.

2. STUB JOINTS SHALL BE THE MINIMUM DIMENSION SHOWN AND ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

3. 6-FOOT NOSE LOCATION SHALL BE ADJUSTED TO BE ALIGNED WITH A MAINLINE TRANSVERSE JOINT.


5. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15 FEET.

6. AS ADDITIONAL RAMP LINES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15 FOOT LONG BY 15' WIDE, TYPICAL SPACING IS 20' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE NODE PATH SHALL BE MINIMIZED.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.D.O.T. HWY. STANDARD 420001. EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PREFORMED JOINT SEALER.

2. STUBS SHALL BE THE MINIMUM DIMENSION AS SHOWN AND ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

3. 4-FOOT NOSE LOCATION SHALL BE ADJUSTED TO BE ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

4. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15 FEET.

5. THE THICKNESS OF THE JOINTERED RAMP PAVEMENT SHALL MATCH THE MAINLINE PAVEMENT. THE EXTRA THICKNESS OF PAVEMENT SHALL BE INCLUDED IN THE PRICE FOR THE RAMP PAVEMENT.

6. RAMP NARROWS FROM 21' TO 18'. LONGITUDINAL JOINT SHALL TRANSITION FROM 10' FROM THE RAMP BASELINE TO 9' FROM THE RAMP BASELINE.

7. AS ADDITIONAL RAMP LINES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE, TYPICAL JOINT SPACING IS 15' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WHEEL PATH SHALL BE MINIMIZED.
NOTES:
1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.D.O.T. R.M.V. STANDARD 42000, EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PREFORMED JOINT SEALER.
2. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15 FEET.
3. THE THICKNESS OF THE HIGHLIGHTED RAMP PAVEMENT SHALL MATCH THE MAINLINE PAVEMENT. THE EXTRA THICKNESS OF PAVEMENT SHALL BE INCLUDED IN THE PRICE FOR THE RAMP PAVEMENT.
4. RAMP NARROWS FROM 21' TO 12'. LONGITUDINAL JOINT SHALL TRANSITION FROM 10' FROM THE RAMP BASELINE TO 9' FROM THE RAMP BASELINE.
5. AS ADDITIONAL RAMP LANES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE. TYPICAL JOINT SPACING IS 15' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WHEEL PATH SHALL BE MINIMIZED.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.D.O.T. HWY. STANDARD 420000, EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PREFORMED JOINT SEALER.

2. STUBS SHALL BE THE MINIMUM DIMENSION AS SHOWN AND ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

3. 6'-FOOT NOSE LOCATION SHALL BE ADJUSTED TO BE ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

4. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15 FEET.

5. RAMP TAPERS FROM 18" TO 14", LONGITUDINAL JOINT SHALL BE 9" FROM THE RAMP BASELINE AT THE PCC AND TRANSITION TO 7" FROM THE RAMP BASELINE AT THE EXPANSION JOINT.


7. AS ADDITIONAL RAMP LANES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15" LONG BY 15" WIDE. TYPICAL JOINT SPACING IS 15" LONG BY 12" WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WHEEL PATH SHALL BE MINIMIZED.
LONGITUDINAL KEYED JOINT WITHOUT TIE BARS IS PARALLEL TO RAMP BASELINE.

CORE PAVEMENT TYPE AND THICKNESS TO MATCH MAINLINE

4' STUB

6' STUB (SEE DETAIL B)

6' NOMINAL

РРРР

РР РР РР

РР РР РР

LONGITUDINAL SAWSJOINT OR LONGITUDINAL CONSTRUCTION JOINT WITH NO. 6 TIE BARS AT 24" CENTERS.

ASPHALT SHOULDER (TYP.)

P.C.C.

SEE NOTE 4

SEE NOTE 5

NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.O.G.T. Hwv. Standard 420001, EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PREFORMED JOINT SEALER.

2. SEE STANDARD A12 (BAR REINFORCEMENT FOR CRC PAVEMENT) FOR DETAILS OF PAVEMENT REINFORCEMENT.

3. TYPICAL PCC PAVEMENT JOINT SPACING SHALL BE 15 FEET.

4. RAMP TAPERS FROM 18' TO 14'. LONGITUDINAL JOINT SHALL BE 9' FROM THE RAMP BASELINE AT THE PCC AND TRANSITION TO 7' FROM THE RAMP BASELINE AT THE EXPANSION JOINT.

5. THE THICKNESS OF THE JOINTED RAMP PAVEMENT SHALL MATCH THE MAINLINE PAVEMENT, THE EXTRA THICKNESS OF PAVEMENT SHALL BE INCLUDED IN THE PRICE FOR THE RAMP PAVEMENT.

6. AS ADDITIONAL RAMP LANES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE. TYPICAL JOINT SPACING IS 15' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WHEEL PATH SHALL BE MINIMIZED.
FABRICATION GENERAL NOTES

1. DEVELOP WORKING DRAWINGS FOR THE SLABS. MINIMUM AND MAXIMUM DIMENSIONS FOR LENGTHS AND WIDTHS ARE NOTED ON THE DRAWINGS. AIAG AND SCAFFOLDING ARE TO BE IN ACCORDANCE WITH THE MERCHANTS SPECIFICATIONS.

2. ANY CUSTOM SLABS’S AND their LENGTHS WHICH WILL EXTEND BEYOND THE FIELD CONSTRUCTION LIMITS OF THE BUILDING OR ANY OTHER CONSTRUCTION ACTIVITY, SHALL BE PROVIDED TO THE CONTRACTOR AND ENGINEER FOR APPROVAL.

3. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

4. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

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7. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

8. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

9. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

10. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.

11. ALL EXPOSED SURFACES OF ALL PRECAST SLABS SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS. THE EXPOSED TOP SURFACES SHALL BE FINISHED IN ACCORDANCE WITH THE MERCHANT’S SPECIFICATIONS, AS INSTRUCTED IN THE SLAB DESIGN.
TYPICAL REINFORCEMENT DETAIL FOR STANDARD SLABS

REINFORCEMENT SECTION A-A

One way of reinforcement shall be for application to all standard slabs and for any custom slabs greater than 6 ft. longitudinal length to be opened to traffic before sections are completed.

Saw cuts off longitudinal edges shall be no more than 6" off the edges.

REINFORCEMENT SECTION A-A

One way of reinforcement shall be for application to all standard slabs and for any custom slabs greater than 6 ft. longitudinal length to be opened to traffic before sections are completed.

Saw cuts off longitudinal edges shall be no more than 6" off the edges.

REINFORCEMENT SECTION B-B

One way of reinforcement shall be for application to all standard slabs and for any custom slabs greater than 6 ft. longitudinal length to be opened to traffic before sections are completed.

Saw cuts off longitudinal edges shall be no more than 6" off the edges.

REINFORCEMENT SECTION B-B

One way of reinforcement shall be for application to all standard slabs and for any custom slabs greater than 6 ft. longitudinal length to be opened to traffic before sections are completed.

Saw cuts off longitudinal edges shall be no more than 6" off the edges.
TYPICAL REINFORCEMENT DETAIL FOR CUSTOM SLABS

REINFORCEMENT SECTION A-2
The reinforcement shall be for application to all custom slabs greater than 6 ft. Longitudinal elements to be opened to traffic before placing is completed.

All bars are 1/2" to fit 1/2" out.

REINFORCEMENT SECTION A-4
One bar of reinforcement shall be for application to all standard slabs and for any custom slabs greater than 6 ft. Longitudinal elements to be opened to traffic only after placing is completed.

All bars are 1/2" to fit 1/2" out.

NOTE: For all custom slabs of Exposed Smooth, reinforcement shall be laid out in a perpendicular grid pattern, not shown.

All clearance for top reinforcement shall be adjusted for finishing as per proper finish or exposed aggregate.
STANDARD 12"-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT
WITH EMBEDDED DOWELS FOR PRECAST WIDE MOUTH
SLOTS IN ADJACENT PAVEMENT

NOTES:
1. The width and length of produced slabs shall be the indicated dimensions ± 1/8".
2. For middle line slab openings, the width shall be 12"-6" wide. The standard precast slab can be saw cut onsite to fit the opening and be in alignment with existing conditions. Joint offsets in the slab path location shall be preplotted by the contractor and the slab fabricated as a custom slab.
3. Slab thickness shall be at 1 1/2" - 2".
4. A foam rubber seal shall be placed around the outside perimeter of the slab at the bottom of the joint before the slab has been set and before recoating with the subgrade and leveling fill or subgrade is applied. The backer rod shall not be removed until the slab is level with the surrounding fill.
5. See sheet 7 for section details.
6. It shall be the contractor's option to replace any damaged or failed concrete slabs as shown on these sheets. Damaged concrete slabs may be replaced with new concrete slabs.

STANDARD 12"-6" WIDE PANEL LAYOUT FOR CONSECUTIVE PLACEMENT

* For internal consecutive slots, preformed cuts in accordance with Section 2.4 of Sheet 1 may be used instead of embedded dowels in adjacent panels. 

* All precast slabs must be placed before being opened to traffic.

Sheets 1 of 19

Precast Pavement Slabs

Standard A18-02
STANDARD 13'-6" WIDE PANEL LAYOUT FOR ISOLATED PLACEMENT WITH EMBEDDED DOWELS FOR PRECUT WIDE MOUTH SLOTS IN ADJACENT PAVEMENT.

NOTES:
1. THE WIDTH AND LENGTH OF PRODUCED SLABS SHALL BE THE INDICATED DIMENSIONS ± 3/8".
2. FOR COMMUNE LAKE SLAB OPENINGS/PATTERNS LESS THAN 12'-6" IN WIDTH AND GREATER THAN 12'-6" IN WIDTH, THE STANDARD PRECAST SLAB CAN BE SAWN ON SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING CONSTRUCTION. JOINTS ALIGNED WITH THE SLAB PATH Location MUST BE PREPARED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
3. SLAB THICKNESS SHALL BE 81/2" ± 1/8".
5. SEE SHEET 1 FOR SECTION DETAILS.
6. IT SHALL BE THE CONTRACTOR'S OPTION TO REPLACE ANY EMBEDDED DOWEL BARS OR PRECUT SLOTS AS SHOWN ON THESE DRAWINGS WITH FULLY RETROFITTED DOWEL BARS INSTALLED IN ACCORDANCE WITH "DETAIL 1" OF SHEET 1. THE CONTRACTOR SHALL USE AN APPROVED TEMPLATE TO LOCATE THE SAN CUES REQUIRED FOR PROPER SPACING AND RETROFITTING OF THE DOWEL BARS IN ACCORDANCE WITH THESE DRAWINGS. STANDARD BLADES CUES SHALL BE USED TO MAKE SAN CUES PERPENDICULAR TO THE TRANSVERSE MEMBER JOINT LINE TO ALLOW FOR EASEL SLAB PLACEMENTS WITHIN THE SPECIFIED TOLERANCES.
7. SEE NOTE B ON SHEET 1 FOR LOCATING UNDERSHEARING DOWELS POINTS.
Standard 12'-6" wide panel layout for isolated placement with narrow mouth preformed dowel slots to align with predrilled holes in adjacent pavement.

Notes:
1. The width and length of precast slabs shall be the indicated dimensions ± 1/4".
2. For middle lane slab openings/patches less than 17'-6" in width and greater than 12'-6" in width, the 12'-6" wide standard precast slab can be saw cut on site to fit the opening and to maintain alignment with existing longitudinal joints. Otherwise, the slab patch location must be prescribed by the Contractor and the slab fabricated as a custom slab.
3. For middle lane slab openings/patches less than 17'-6" in width and greater than 12'-6" in width, the 13'-6" wide standard precast slab can be saw cut on site to fit the opening and to maintain alignment with existing longitudinal joints. Otherwise, the slab patch location must be prescribed by the Contractor and the slab fabricated as a custom slab.
4. A foam backer rod shall be placed around the outside perimeter of the slab at the bottom of the joints before the slab has been set and before bedding or granular base is placed. The backer rod shall not be removed when any slab is located with flexible fill.
5. See Sheet 7 for section details.
6. See Note 6 on Sheet 1 for locating underslab drainage ports.
INSTALLATION GENERAL NOTES

1. When the transverse joints of any precast slab can not be aligned with transverse joints in an adjacent slab, a minimum 1-1/2" offset between joints shall be provided.

2. A transverse joint of any isolated or consecutive standard precast slab must be aligned to be parallel with existing longitudinal joints. No longitudinal offset between any precast slabs shall be allowed.

3. A transverse joint of any isolated precast slab shall be no less than 4'-0" in diameter from an adjacent transverse joint, or a minimum 2'-0" from any transverse joint that is removed and replaced with a new precast slab.

4. Prior to the placement of an isolated standard precast slab in a middle lane, the width of the existing longitudinal concrete pavement shall be measured by the contractor under maintenance of traffic and used by the engineer to ensure that the accurate width is placed in the lane. The width of the existing longitudinal concrete pavement shall be measured by the engineer to ensure that the accurate width is placed in the lane. The width of the existing longitudinal concrete pavement shall be measured by the engineer to ensure that the accurate width is placed in the lane.

5. The transverse joint of any isolated precast slab shall be no more than 7'-0" from any transverse joint that is removed and replaced with a new precast slab.

6. The transverse joint of any isolated precast slab shall be no more than 7'-0" from any transverse joint that is removed and replaced with a new precast slab.

7. The transverse joint of any isolated precast slab shall be no more than 7'-0" from any transverse joint that is removed and replaced with a new precast slab.

8. The transverse joint of any isolated precast slab shall be no more than 7'-0" from any transverse joint that is removed and replaced with a new precast slab.

9. The transverse joint of any isolated precast slab shall be no more than 7'-0" from any transverse joint that is removed and replaced with a new precast slab.

10. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

11. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

12. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

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36. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

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39. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

40. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.

41. For precast slabs supported and leveled by high-density foam placed after full-depth repair and precast repair that requires more than 3 consecutive precast slabs.
INSTALLATION GENERAL NOTES

20. WITH ANY FIELD INSERTIONS OF DOWEL BARS INTO PRECASTED HOLES, THE DRILLING OPERATION SHALL BE ACCORDING TO ARTICULATED ARTI-STANDARD, CIRCUMSTANCES, AND SPECIFICATIONS. HAND HELD DRILLING TOOLS WILL NOT BE ALLOWED.

21. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

22. ANY ADDITIONAL HOLES INSERTED IN THE PRECAST CONCRETE ElementType, THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

23. BATTING EQUIPMENT FOR FLUSH BARS SHALL HAVE DEVICES DESIGNED TO MEASURE THE SPECIFIED DIAMETER OF THE DOWEL BARS, INSERTING IN PLACE WITHOUT THE USE OF SPECIAL TOOLS OR EQUIPMENT.

24. FOR THE INSTALLATION OF DOWEL BARS INTO PRECASTED HOLES, THE DRILLING OPERATION SHALL BE ACCORDING TO ARTICULATED ARTI-STANDARD, CIRCUMSTANCES, AND SPECIFICATIONS. HAND HELD DRILLING TOOLS WILL NOT BE ALLOWED.

25. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

26. THE INSTALLATION OF DOWEL BARS INTO PRECASTED HOLES, THE DRILLING OPERATION SHALL BE ACCORDING TO ARTICULATED ARTI-STANDARD, CIRCUMSTANCES, AND SPECIFICATIONS. HAND HELD DRILLING TOOLS WILL NOT BE ALLOWED.

27. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

28. IF THE ENGINEER DETERMINES THAT THE EXISTING ORALAN SLABS IS INCOMPLETE, THE CONTRACTOR SHALL REMOVE THE ORALAN SLABS, AS DIRECTED, AND PROVIDE A PROPER FILL OR A FINE AGGREGATE MEETING THE REQUIREMENTS OF THIS CONTRACT DOCUMENT.

29. INSTALLATION OF PRECAST CONCRETE ELEMENTS, THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

30. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

31. IF THE ENGINEER DETERMINES THAT THE EXISTING ORALAN SLABS IS INCOMPLETE, THE CONTRACTOR SHALL REMOVE THE ORALAN SLABS, AS DIRECTED, AND PROVIDE A PROPER FILL OR A FINE AGGREGATE MEETING THE REQUIREMENTS OF THIS CONTRACT DOCUMENT.

32. IF THE ENGINEER DETERMINES THAT THE EXISTING ORALAN SLABS IS INCOMPLETE, THE CONTRACTOR SHALL REMOVE THE ORALAN SLABS, AS DIRECTED, AND PROVIDE A PROPER FILL OR A FINE AGGREGATE MEETING THE REQUIREMENTS OF THIS CONTRACT DOCUMENT.

33. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

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41. THE NUMBER AND LOCATION OF HOLES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AS PERMITTED UNDER THE ARTICULATED CIRCUMSTANCES.

42. IF THE ENGINEER DETERMINES THAT THE EXISTING ORALAN SLABS IS INCOMPLETE, THE CONTRACTOR SHALL REMOVE THE ORALAN SLABS, AS DIRECTED, AND PROVIDE A PROPER FILL OR A FINE AGGREGATE MEETING THE REQUIREMENTS OF THIS CONTRACT DOCUMENT.
DETAIL F. WIDE MOUTH DOWEL BAR PLACEMENT DETAIL FOR THE LAST TRANSFER JOINT OF CONSECUTIVELY PLACED STANDARD PRECAST PANELS

SECTION F-F

SECTION N-N

CHAIR DETAIL

NOTES:
1. Place foam core boards at the top of forms.
2. Upon completion, the finished surface of the concrete transfer material shall be below the existing concrete surface.
DETAIL H - LONGITUDINAL TIE BAR
STITCHING FOR PRECAST PANELS

NOTES FOR TIE BAR STITCHING:

1. DRILL HOLES THAT ARE ORIENTED AT 45° C 5° ANGLE TO THE PAVEMENT SURFACE SO THAT THEY INTERSECT THE LONGITUDINAL, TRANSITION, OR JOINT AT ABOUT 45 DEGREES. IT IS IMPORTANT TO START DRILLING THE HOLE AT A CONVEX DISTANCE FROM THE JOINT, IN ORDER TO CONSISTENTLY CROSS AT THE MIDDLE/DEPTH OF THE SLAB.

2. HOLES CENTERLINES ARE PERPENDICULAR TO THE JOINT/PLAN VIEW AT EACH LOCATION BEING DRILLED.

3. SELECT A DRILL THAT MINIMIZES DAMAGE TO THE CONCRETE SURFACE, SUCH AS A HYDRAULIC POWERED DRILL. SELECT A DRILL DIAMETER NO MORE THAN 0.25" I.D. LARGER THAN THE TIE BAR DIAMETER. CHOOSE A HAND/POWERED DRILL IF A HIGHER PRODUCTIVITY IS NEEDED.

4. DRILL HOLES WITH NO LESS THAN A 24 INCH BORE SPACING, REGARDLESS HOLES ARE DRILLED IN OPPOSITE DIRECTIONS ACROSS THE JOINT. THE HOLE AND INSERTED TIE BAR SHALL BE NO LESS THAN 24 INCHES FROM ANY EXISTING TRANSITION/JOINT OR ANY PRECAST/CONCRETE JOINT.

5. HOLES BORING ARE NO MORE THAN 2 INCH FROM THE SLAB BOTTOM.

6. AIR BLOW THE HOLES TO REMOVE DUST AND DEBRIS AFTER DRILLING.

7. INJECT ADHESIVE INTO THE HOLE, LEAVING SOME VOLUME FOR THE BAR TO OCCUPY THE HOLE. APPLYING THE ADHESIVE IS ACCEPTABLE FOR SMALL QUANTITIES.

9. INSERT THE NO. 4 EPOXY COATED DEFORMED TIE BAR INTO THE HOLE, LEAVING ABOUT 1 IN. FROM THE TOP OF BAR TO THE PAVEMENT SURFACE. DEFORMED TIE BARS SHALL BE EPOXY COATED.

10. REMOVE EXCESS ADHESIVE AND FINISH FLUSH WITH THE PAVEMENT SURFACE.