## Tollway Standard Drawing Revisions

### Section A  Roadway / Pavement

<table>
<thead>
<tr>
<th>Standard</th>
<th>Modification Summary</th>
<th>Effective 11/1/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>A18</td>
<td>Precast Pavement Slab Series Revised</td>
<td></td>
</tr>
<tr>
<td>Sheet 1</td>
<td>Fabrication General Notes</td>
<td>Added note 15.</td>
</tr>
<tr>
<td>Sheet 4-6</td>
<td>Revised Note 4.</td>
<td></td>
</tr>
<tr>
<td>Sheet 8</td>
<td>Revised Note 1.</td>
<td></td>
</tr>
<tr>
<td>Sheet 9</td>
<td>Installation General Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revised Notes: 2,4,13,16</td>
<td></td>
</tr>
<tr>
<td>Sheet 10</td>
<td>Installation General Notes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Revised Notes: 27(C), 32, 35, 36, 37(C),39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Added note 27(E)</td>
<td></td>
</tr>
</tbody>
</table>

New Sheet
NOTES FOR BUTT JOINT, TYPE 1

1. The above work will be performed at the ends of all hot-mix asphalt surfacing. The removal of concrete pavement will be included in contract unit price per square yard for "post and cement concrete surface removal - butt joint." Hot-mix asphalt overlay to be paid for under items "hot-mix asphalt binder course" and "hot-mix 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 of surface mix used, number of thickness of courses or layers, the overlay thickness transition length shall be based on 3' to 2' and the minimum layer thickness shall be 2".

4. Refer to the contract documents for the required binder and surface course materials. **t₁** is the thickness of the surface course specified in the contract, **t₂** is the thickness of the binder course specified in the contract. See note 3.

DETAIL OF BUTT JOINT, TYPE 2

NOTES FOR BUTT JOINT, TYPE 2

1. The above work will be performed at the ends of all hot-mix asphalt surfacing where butt joints exist. The removal of hot-mix asphalt overlay and base will be included in the contract unit price per square yard for "hot-mix asphalt surface removal - butt joint."

2. Hot-mix asphalt overlay to be paid under items "hot-mix asphalt binder course" and "hot-mix asphalt surface course" of the type specified in the contract.

3. Refer to the contract documents for the required binder and surface course materials.
PAVEMENT CROSS SECTION (2 LANCES)

PAVEMENT PLAN
2 - LANE SECTION

GENERAL NOTES:
1. Conduits, ducts, and conduits shall be supported and anchored in accordance with the standard specifications.
2. Any conduit, duct, or joint need not be built in line with the design line. A longitudinal joint shall be replaced with a rebar.
3. Materials and project-specific details are to be referred to project plans and contract documents for details.
4. See standard details and test standards (good) for details of joints and tie downs not shown.
5. Pavement designs are project specific. Other materials may be indicated on the drawings. All dimensions are approximate. Refer to project plans for details and material schedules.

Illinois Tollway
Open Roads for a Faster Future

12" OR LESS
STANDARD AS-01
PAVEMENT CROSS SECTION (2 LANE)

PAVEMENT PLAN
2 - LANE SECTION

GENERAL NOTES:
1. CORING DISCARD ASSEMBLIES WHERE USES SHALL BE SUPPORTED AND
REMOVES IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
2. WHEN SUBGRADE LAMPS ARE USED IN ONE OR MORE A
CORNERLESS JOINTS SHALL BE REPLACED WITH CORNERLESS
CORNERLESS JOINTS.
3. MATERIALS ARE PART OF THE SPECIFIC PROGRESS PLAN AND
CONTRACT DOCUMENTS FOR DETAILS.
4. SEE STANDARDS AT PAVEMENT JOINTS.
5. PAVEMENT SIZING AND PROJECT SPECIFIC REQUIREMENTS MAY
BE DETERMINED ON THE BASIS OF EXISTING SURVEYS AND MATERIAL
SPECIFICATIONS.

Illinois Tollway
Open Roads for a Future

DATE
REVISIONS
STANDARD A6.01
TRANSVERSE CONSTRUCTION JOINT (JOINTED PLAIN CONCRETE PAVEMENT)

GENERAL NOTES

1. DOWEL BAR CAPS SHALL BE PLACED ON OPPOSITE END OF ADJACENT DOWEL BARS.

2. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.

3. T = PAVEMENT THICKNESS

4. A 16" SM CUTOFF SHALL BE PROVIDED FOR PAVEMENT CRACK CONTROL.
REINFORCEMENT BAR LAP PLAN LONGITUDINAL REINFORCEMENT BARS

**12'-0" LANE**

<table>
<thead>
<tr>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12</td>
<td>18</td>
<td>6</td>
<td>24</td>
<td>4</td>
<td>30</td>
<td>2</td>
<td>36</td>
<td>2</td>
<td>42</td>
<td>2</td>
</tr>
</tbody>
</table>

**15'-0" LANE**

<table>
<thead>
<tr>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
<th>No. of Bars (EA.)</th>
<th>Spacing (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12</td>
<td>18</td>
<td>6</td>
<td>24</td>
<td>4</td>
<td>30</td>
<td>2</td>
<td>36</td>
<td>2</td>
<td>42</td>
<td>2</td>
</tr>
</tbody>
</table>

**GENERAL NOTES:**
1. Specified units are pounds per linear feet. For use on highway projects.
2. "#" reinforcement bars are used throughout these tables.
3. The distance from the end of the lap to the last bar of reinforcing steel shall be increased by 1' for cold-formed plate.
4. The placement of #16 reinforcement in the cross section shall be in accordance with the specifications for design and/or contact documents for details.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.O.G.T. HWY. STANDARD 420001, EXCEPT EXPANSION JOINT SEALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISION, BONDED PERFORMED 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. STUBS SHALL BE THE MINIMUM DIMENSION AS SHOWN AND ALIGNED WITH A MAINLINE TRANSVERSE JOINT.

4. 7" NOISE 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 J20.T.

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 pavements for details of pavement reinforcement.

4. Typical PCC pavement joint spacing shall be 15 feet.

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 3' wide. Longitudinal joint locations in the wheel path shall be minimized.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON IDOT.T, HWY. STANDARD 42000; EXCEPT EXPANSION JOINT SEAL MATERIALS SHALL BE AS DESCRIBED IN THE SPECIAL PROVISIONS, BONDED PRE-FORMED 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.


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

6. AS ADDITIONAL RAMP LINES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15' LONG BY 15' WIDE. TYPICAL SPACING IS 30' LONG BY 12' WIDE. LONGITUDINAL JOINT LOCATIONS IN THE WEEL PATH SHALL BE MINIMIZED.
NOTES:

1. ALL PAVEMENT JOINTS SHALL BE DETAILED AS SHOWN ON I.D.O.T. H.W.Y. STANDARD A-9000 LR 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 JOINTED 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'-0" TO 18'-0". LONGITUDINAL JOINT SHALL TRANSITION FROM 10'-0" FROM THE RAMP BASELINE TO 9'-0" FROM THE RAMP BASELINE.

7. AS ADDITIONAL RAMP LANES ARE ADDED, THE MAXIMUM JOINT SPACING SHALL BE 15'-0" LONG BY 15'-0" 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., HRV, STANDARD 420000, 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 HOIITED 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 18'. 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 ILO.T. HWY. STANDARD 42000L. 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 BE 7" FROM THE RAMP BASELINE AT THE EXPANSION JOINT.


7. AS ADDITIONAL RAMP LAKES 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.O.T. HIGHWAY 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 PPC 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 LANE 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 SLAB. MINIMUM AND MAXIMUM DIMENSIONS FOR LENGTHS AND WIDTHS ARE NOTED ON THE STANDARD DRAWINGS.

2. ALL CIRCUMFERENCES FOR DEFORMABLE JOINTS SHALL BE AS NOTED ON THE STANDARD DRAWINGS.

3. ANY CUSTOM SLABS LESS THAN 6 INCH IN LENGTH THAT WILL BE CUT FROM THE MATERIAL IN THIS SPECIFICATION OR LARGE CUTTING OF CLEARANCE ARE REQUIRED TO BE ALLOWED FOR THE NON-LISTED SLAB SPECIFICATIONS. THIS REQUIREMENT SHALL BE ADJUSTED TO ALLOW FOR THE ADDITION OF 10 PERCENT TO ALLOW FOR THE NON-LISTED SLAB SPECIFICATIONS.

4. ANY CUSTOM SLABS ARE REQUIRED TO BE PRODUCTION OF THE SLAB SPECIFICATIONS. THIS REQUIREMENT SHALL BE ADJUSTED TO ALLOW FOR THE ADDITION OF 10 PERCENT TO ALLOW FOR THE NON-LISTED SLAB SPECIFICATIONS.

5. ALL CUSTOM SLABS SHALL BE PRODUCTION OF THE SLAB SPECIFICATIONS. THIS REQUIREMENT SHALL BE ADJUSTED TO ALLOW FOR THE ADDITION OF 10 PERCENT TO ALLOW FOR THE NON-LISTED SLAB SPECIFICATIONS.

6. ALL CUSTOM SLABS SHALL BE PRODUCTION OF THE SLAB SPECIFICATIONS. THIS REQUIREMENT SHALL BE ADJUSTED TO ALLOW FOR THE ADDITION OF 10 PERCENT TO ALLOW FOR THE NON-LISTED SLAB SPECIFICATIONS.

7. FOR FABRICATION OF CUSTOM SLABS, THE WERKSTEINE DEFORMABLE JOINTS SHALL BE ADJUSTED TO ALLOW FOR THE ADDITION OF 10 PERCENT TO ALLOW FOR THE NON-LISTED SLAB SPECIFICATIONS.

8. PRECUT WORKING DRAWINGS THAT SHALL INCLUDE THE FOLLOWING:
   a. SLOW (LAYOUT) DRAWING FOR TYPICAL SLABS WITH ACCURATE DIMENSIONS.
   b. ELEVATION SHEET FOR THE PRECUT SLAB WITH DETAILS.
   c. MATERIAL TAKE-OFF SHEET FOR THE PRECUT SLAB.
   d. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
   e. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
   f. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.

9. PRECUT WORKING DRAWINGS FOR TYPICAL SLABS WITH ACCURATE DIMENSIONS:
   a. SLOW (LAYOUT) DRAWING FOR TYPICAL SLABS WITH ACCURATE DIMENSIONS.
   b. ELEVATION SHEET FOR THE PRECUT SLAB WITH DETAILS.
   c. MATERIAL TAKE-OFF SHEET FOR THE PRECUT SLAB.
   d. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
   e. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
   f. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.

10. PRECUT WORKING DRAWINGS FOR TYPICAL SLABS WITH ACCURATE DIMENSIONS:
    a. SLOW (LAYOUT) DRAWING FOR TYPICAL SLABS WITH ACCURATE DIMENSIONS.
    b. ELEVATION SHEET FOR THE PRECUT SLAB WITH DETAILS.
    c. MATERIAL TAKE-OFF SHEET FOR THE PRECUT SLAB.
    d. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
    e. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
    f. ELEVATION SHEET FOR THE TEAR-DOWN AND INSTALLATION OF THE PRECUT SLAB.
TYPICAL REINFORCEMENT DETAIL FOR CUSTOM SLABS

REINFORCEMENT SECTION 8.2
The use of reinforcement shall be for application to all custom slabs greater than 6 ft. longitudinal length to be opened to traffic before grouting is completed.
All bars are 1 in. dia. for 6 in. dia.

REINFORCEMENT SECTION 8.4
One use 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 only after grouting is completed.
All bars are 1 in. dia. for 6 in. dia.

NOTE:
For all custom slabs of transverse spans, reinforcement shall be left out in a perpendicular grid pattern, not shown.

All clearance for the reinforcement shall be selected for plain leads to the nearest known or expected movement.
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 ± 1/4".
2. FOR WIDER SLAB DEEPER/SHORTER LENGTHS THAN 12'-6" IN WIDTH AND GREATER THAN 10'-4" IN WIDTH, THE STANDARD PRECAST SLAB CAN BE SAW CUT ON-SITE TO FIT THE OPENING AND TO MAINTAIN ALIGNMENT WITH EXISTING CONSTRUCTION. JUNCTURE SHAPES/ENDS, THE SLAB PATCH LOCATION MUST BE PREPLANNED BY THE CONTRACTOR AND THE SLAB FABRICATED AS A CUSTOM SLAB.
3. SLAB THICKNESS SHALL BE 15/8" ± 1/8".
5. SEE SHEET 1 FOR SECTION DETAILS.
6. IT SHALL BE THE CONTRACTOR'S OPTION TO REPLACE ANY CHANGED DOWEL BARS OR PRECASTED SLOTS AS SHOWN ON THESE DRAWINGS WITH FULLY RESTRICTED DOWEL BARS PRECASTED IN ACCORDANCE WITH DETAIL "C" OF SHEET 1. THE CONTRACTOR SHALL USE AN APPROXIMATE TEMPLATE TO LOCATE THE SAW CUTS REQUIRED FOR PROPER SPACING AND RESTRICTING OF THE DOWEL BARS IN ACCORDANCE WITH THESE DRAWINGS. CHANGING PRECASTED DOWEL BARS SHALL BE USED TO MAKE SAW CUTS PERPENDICULAR TO THE TRANSVERSE CENTERLINE JOINT LINE TO ALLOW FOR DOWEL BARS PLACEMENTS WITHIN THE SPECIFIED TOLERANCES.
7. SEE NOTE "B" ON SHEET 1 FOR LOCATING UNDERLAMINATION GROUT PORTS.

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

* FOR INTERIM CONSECUTIVE PANELS, PRECASTED SLOTS IN ACCORDANCE WITH SECTION "C" OF SHEET 1 MAY BE USED INSTEAD OF PRECASTED SLOTS FOR EASE/REDUCTION DURING HORIZONALース青染色. ALL PRECASTED SLOTS MUST BE PALLET-IZED WHERE NEEDED FOR STORAGE.
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 PRODUCTS SLABS SHALL BE AS INDICATED DIMENSIONS ± ¼".
2. FORM WORKER MUST BE FAMILIAR WITH THE CROSS-SLITS TO ALLOW FOR EASIER MOVEMENT OF SLABS.
3. SLAB THICKNESS SHALL BE 6" ± ¼".
4. A FORM RACKER MUST BE PLACED AROUND THE OUTSIDE PERIMETER OF THE SLAB AT THE BOTTOM OF THE JOINTS PRIOR TO THE SLAB BEING CAST AND BEFORE BEGINNING OR MAC-MARKING OR ANY OTHER WORK BEING DONE.
5. SEE SHEET 1 FOR SECTION DETAILS.
6. IT SHALL BE THE CONTRACTOR'S OPTION TO REPLACE ANY EMBEDDED DOWEL, BARS OR PRECASTED SLOTS AS SHOWN ON THESE SHEETS WITH FULLY WELDED DOWELS. BARS OR REINFORCING BARS SHALL BE EMBEDDED IN CONCRETE WITH "CLEAN" Joints. THE CONTRACTOR SHALL USE AN APPROVED TEMPLATE TO LOCATE THE SLAB CUTS REQUIRED FOR PROPER SIZING AND RETROFITTING OF THE DOWEL BARS. IN ACCORDANCE WITH THESE DIMENSIONS, DOWEL BARS OR CATALYST CEMENT SHALL BE USED TO MAKE SURE CUTS PERPENDICULAR TO THE TRANVERSE INDOOR SURFACE TO ALLOW FOR EASIER MOVEMENT OF SLABS WITHIN THE SPECIFIED TOLERANCES.

SEE SHEET 1 FOR LOCATING UNDERSLAB DOWEL PLANTS.

STANDARD 13'-6" WIDE PANEL LAYOUT FOR CONSECUTIVE PLACEMENT

FOR INTERNAL CONSECUTIVE SLABS, SLABS TO BE INSTALLED IN ACCORDANCE WITH SECTION 4-6.06 SHEET 1 MAY BE USED TO SIZE OR EMBEDDING SLOTS OR PRECUT REINFORCING SLOTS SLABS WITH STABILIZED SLABS. ALL PRECUT REINFORCING SLABS MUST BE RATED BEFORE BEING STORED IN WAREHOUSE.

SHEET 5 OF 18

PRECAST PAVEMENT SLABS

STANDARD A18-02
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 PRECASTED SLAB SHALL BE AS INCREASED DIMENSIONS ± 1/4".
2. IF WIDE-LINE (2) OPENING FEATURES LESS THAN 2'-0" IN WIDTH AND GREATER THAN 4'-0" IN WIDTH, THE 1'-0" WIDE STANDARD MOLD KIT IS TO BE USED. THE OPENING SHALL BE WEDGED AT THE Edge To PROVIDE A PERPENDICULAR SURFACE. OTHERWISE THE PANEL SHALL BE PLACED ON A FRESHLY PLACED SLAB.
3. FOR MOLD LINE (2) OPENING FEATURES LESS THAN 2'-0" IN WIDTH AND GREATER THAN 4'-0" IN WIDTH, THE 1'-0" WIDE STANDARD MOLD KIT IS TO BE USED. THE OPENING SHALL BE WEDGED AT THE Edge TO PROVIDE A PERPENDICULAR SURFACE. OTHERWISE THE PANEL SHALL BE PLACED ON A FRESHLY PLACED SLAB.
4. PANEL REVERSES SHALL BE CUT ± 1/4".
5. A pair of panels shall be placed around the opening positioned on the slab side of the centerline of the opening being the slab and then cut and form fitting panels on perpendicular sides. If applied, the back up slab shall be recovered and the reverse slab aligned with finish grade.
6. SEE SHEET 7 FOR SECTION DETAILS.
7. SEE NOTE 2 ON SHEET 7 FOR LOCATION OF END/STARTING GROUT PONDS.
INSTALLATION GENERAL NOTES

20. With any field insertion of dowel bars into preformed holes, the drilled holes shall be in accordance with the manufacturers’ specifications. Any deviation in depth or angle or slot width shall not be allowed.

21. In the event of a misalignment of the job or placing holes, the contractor shall be allowed one additional hole of 0.250" diameter for each 0.250" of misalignment.

22. Consolidation equipment used to consolidate the concrete repair material in the end zone of the slab shall not be allowed after a minimum of 0.5 in of the slab and shall have a vertical vibration that will not damage the concrete repair material or underlying slab. Consolidation equipment shall be placed in the end zone of the slab and shall not be allowed to consolidate any area of the slab which is more than 0.5 in deep.

23. Compacted fill shall be used as a leveling material only on tangent pavement sections and shall be placed to a minimum density of 95%. Compacted fill shall be free of oil and other contaminants.

24. Portable compaction equipment shall be used in the end zone of the slab to consolidate the concrete repair material to a minimum density of 95%. Compacted fill shall be free of oil and other contaminants.

25. The face of the wet mixture shall be smooth and the wet mixture shall be free of oil and other contaminants.

26. Prior to the placement of any concrete repair material, the face of the wet mixture shall be smooth and the wet mixture shall be free of oil and other contaminants.

27. Panels shall be installed at a time and shall be installed in such a manner that the surface/leveling material of any remaining pavement is not damaged during installation. During placement of the slab, the site professional (or if the professional is not present, an employee of the contractor) shall be designated to verify that the work is being done to the specifications of this contract document.

28. Prior to the placement of the wet concrete, the face of the wet mixture shall be smooth and the wet mixture shall be free of oil and other contaminants.

29. The face of the wet mixture shall be smooth and the wet mixture shall be free of oil and other contaminants.
DETAIL F. WIDE MOUTH DOWEL BAR PLACEMENT DETAIL FOR THE LAST TRANSFER JOINT OF CONSECUTIVELY PLACED STANDARD PRECAST PANELS

SECTION N-N

SECTION F-F

NOTE:
1. Place foam core boards at the top of footing.
2. Upon completion, the finished surface of the concrete footings shall be below the existing concrete surface.

CHAIR DETAIL
**PLAN VIEW**

- Concrete overlay material
- 3/4" thick with existing concrete surface where
- No. 6 rebar

**SECTION C-C**

- Placement detail for isolated precast panels

  (For optional application with all isolated slabs in place of full slabs)

**DETAIL C - NARROW MOUTH DOWEL BAR**

- Placement detail for isolated precast panels

**NOTES:**
1. Line from core elevated to the top of panel
2. Upon completion, the finished surface of the concrete overlay material shall not be lower than existing concrete surface.

**SECTION M-M**

- Clamp detail for sliding dowel bar slots

**ILLINOIS TOLLWAY**

Open Roads for a Great Future

PREFECT PAVEMENT SLABS

STANDARD A18-02
DETAIL H - LONGITUDINAL TIE BAR STITCHING FOR PRECAST PANELS

NOTES FOR TIE BAR STITCHING:

1. DRILL HOLES THAT ARE ORIENTED AT 45° TO THE SHEAR PLANE TO PREVENT THE DEVELOPMENT OF CRACKS OR JUNCTURES. THIS IS IMPORTANT TO STABILIZE THE SHEAR PLAN IN JUNCTURES. THE HOLES SHOULD BE DRILL AT A CONCENTRIC CENTERLINE FROM THE JOINT, IN ORDER TO CONSISTENTLY CROSS AT THE MID-POINT OF THE SLAB.

2. HOLES CENTRALIZE ARE MUNICIPAL TO THE JOINT PLAN VIEW AT EACH LOCATION BEING DRILLED.

3. SELECT A DRILL THAT MINIMIZES DAMAGE TO THE CONCRETE SURFACE, SUCH AS A HOLLOW-BAR DIAMETER DRILL. SELECT A DRILL DIAMETER NO MORE THAN FIST 10% LARGER THAN THE TIE BAR DIAMETER. USE A COMBINATION DRILL OR A HOLLOW-BAR DIAMETER DIAMETER. USE A RENNER PRODUCTIVITY TO MINIMIZE.

4. SLAB HOLES WITH THE SAME BAR SPACING, ADJACENT HOLES ARE DRILLED IN OPPOSITE DIRECTIONS ACROSS THE JOINT. THE HOLES ARE INSERTED TIE BAR SHALL BE NO LESS THAN 24 INCHES FROM ANY EXISTING TRANSVERSE JOINT OR ANY PRECAST OR REPAIR TRAFFIC JOINT.

5. HOLES BORING ARE NO MORE THAN 3 INCHS THE SLAB BOTTOM.

6. AIR BLOW THE HOLES TO REMOVE DUST AND DING DURING AERIAL DRILLING.

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

8. INSERT THE TIE BAR AND ADHESIVE INTO THE HOLE, LEAVING ABOUT 1 IN FROM THE TOP OF BAR TO THE SHEAR PLANE, ADHESIVE TIE BARS SHALL BE EPOXY CEMENTED.

9. REMOVE EXCESS ADHESIVE AND FINISH FLUSH WITH THE SHEAR PLANE.