EXAMPLE SET OF PLANS REVISIONS

Plans original date January 9, 2009 - 48 sheets

Revision 1 - March 12, 2009 - sheet 29 of 48 - added note about SAR procedures for structures

Revision 2 - June 30, 2009 - sheet 1 of 48 - included CADD Roadway Drafting Reference Guidelines - sheet 3 of 48 - revised note to "Central Office in Springfield" instead of just "Springfield" - sheets 40 and 41 of 48 - information is same, replaced with new sheets from Bridge Office in Springfield

Revision 3 - November 30, 2009 - sheet 5 of 48 - added note for Radar Speed Transformers on Interstates - sheet 20 of 48 - revised notes to include Alternate Routes

Revision 4 - January 4, 2010 - sheet 12 of 49 - added block with tie point table instructions - sheet 13 of 49 - NEW SHEET - added as example for tie points

Revision 5 - March 30, 2010 - sheet 1 of 49 - revised IDOT web site instructions - sheet 44 of 49 - replaced sheet with example in English - sheet 45 of 49 - replaced sheet with new example sheet - REVISED TEXT SIZES AND ADDED NOTES to example sheets

Revision 6 - January 21, 2011 - sheet 41 of 49 - updated approach slab and traffic barrier terminal, replaced border - sheet 42 of 49 - replaced border

Revision 7 - December 2, 2011 - sheet 6 of 49 - updated Summary of Quantities to new BD & E format.

Revision 8 - July 11, 2014 - sheet 3 of 49 - showed new location of data due to removal of ftp sites. - sheet 16 of 49 - Changed text to state that proper levels should be used.

Revision 9 - August 7, 2014 - sheet 1 of 49 - Updated IDOT web site information - sheet 3 of 49 - Updated IDOT web site information and JULIE web site information - sheet 5 of 49 - Updated IDOT web site information - sheet 26 of 49 - Updated IDOT web site information and corrected reference to Drainage Manual.

Revision 10 - April 1, 2017 - Update Text Styles with TrueType Font Text Styles

Revision 11 - May 24, 2017 - sheet 1 of 50 - Updated path to CADD information on website, edited signature block, and removed "Division of Highways" text. Corrected link for map location and made other minor text modifications.

- sheet 2 of 50 - Replaced with updated border cell.
- sheet 3 of 50 - Updated path to CADD information on website. Also removed district specific comment.
- sheet 5 of 50 - Updated paths to coded pay items. Removed district specific reference.
- sheet 12 of 50 - Removed district specific reference.
- sheet 21 of 50 - Removed district specific reference.
- sheet 41 of 50 - Replaced General Plan and Elevation sheet.
- sheet 42 of 50 - NEW SHEET - Top of Slab Elevations sheet.
- sheet 43 of 50 - Replaced Soil Boring Log sheet.
- All sheets - Changed sheet numbering due to added sheet
Add the following note
SUBSURFACE UTILITY ENGINEERING (S.U.E.) UTILIZED ON THIS PROJECT
if SUE was used on the project to locate utilities
The District will provide the necessary information for the plans

FOR INDEX OF SHEETS, SEE SHEET NO...
Index of sheets should be placed here on the cover sheet. If room allows, place Standards list here also. If there is not enough room, place on sheet 2. For order of sheets see 63 - 3.04 Plan Sheet Organization in the BDE Manual

Note: Examples are shown for information only and may not agree with all current policies.

Cadd drafting information is found at the IDOT web site www.idot.illinois.gov
Doing Business
Procurements
Engineering, Architectural & Professional Services
Consultant Resources
CADD

Do not change

Information in project report or supplied by district

See Chapter 63 of the BD & E Manual as well as the Computer Aided Design, Drafting, Modeling and Deliverables Manual for additional guidance.

Provide a project layout map (Maps can be found at http://www.idot.illinois.gov/transportation-system/Network-Overview/highway-system/index and then "Maps") Include the following (most can be found in project report)
- District north arrow (CADD)
- beginning and ending stations
- all important intermediate stations
- prominent features
- names of special features
- city, route and street names
- station equations and omissions
- description of all structures 20' and over including existing and proposed SN and for structures 6' and over but less than 20' in length

Include from project report for the year of construction
functional classification
year ADT and percentage breakdowns

Include the following note
SUBSURFACE UTILITY ENGINEERING (S.U.E.) UTILIZED ON THIS PROJECT
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- city, route and street names
- station equations and omissions
- description of all structures 20' and over including existing and proposed SN and for structures 6' and over but less than 20' in length

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functional classification
year ADT and percentage breakdowns

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year ADT and percentage breakdowns

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Consultant Resources
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# PROPOSED HIGHWAY PLANS

## FAP ROUTE 123 (US 456)

### SECTION 78RS, BR-3

**PROJECT**

3R RESURFACING AND BRIDGE REPLACEMENT ANYWHERE COUNTY

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

**LOCATION OF SECTION INDICATED THUS:**

- **BEGIN IMPROVEMENT**
  - STA 40+35
- **BRIDGE OMISSION**
  - SN 000-0123
  - STA 119+54 TO STA 120+53
- **BRIDGE REPLACEMENT**
  - STA 172+35
  - EXIST SN 000-0124
  - PROP SN 000-2012
- **STATION EQUATION**
  - STA 235+47.74 BK=
  - STA 900+00 AHD
- **END IMPROVEMENT**
  - STA 1004+52

**LOCATION MAP NOT TO SCALE**

- **VILLAGE OF ANYWHERE**
- **TOWNSHIP(S):**
- **NAME**

### FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

**FUNCTIONAL CLASSIFICATION**

- **RURAL MINOR ARTERIAL**
  - 2009 ADT = 1300
  - P.V. = 94.8%  S.U. = 4.2%  M.U. = 1.0%

### INDEX OF SHEETS

<table>
<thead>
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<th>SHEET</th>
<th>DESCRIPTION</th>
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<td>COVER SHEET</td>
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<tr>
<td>2</td>
<td>STANDARDS LIST &amp; GENERAL NOTES</td>
</tr>
<tr>
<td>3</td>
<td>SUMMARY OF QUANTITIES</td>
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<td>TYPICAL SECTIONS</td>
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<tr>
<td>11</td>
<td>ALIGNMENT, TIES, AND BENCHMARKS</td>
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<td>41 - 45</td>
<td>DETAILS</td>
</tr>
<tr>
<td>46 - 55</td>
<td>CROSS SECTIONS</td>
</tr>
</tbody>
</table>

### NET LENGTH = 29,865.74 FT. = 5.656 MILES

### GROSS LENGTH = 29,964.74 FT. = 5.675 MILES

### NET LENGTH = 29,865.74 FT. = 5.656 MILES

### PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS
Sheet 2: This sheet is for Index of Sheets, Highway Standards, General Notes, and Commitments.

Index of Sheets
If not able to place on cover sheet, place on this sheet.

General Notes
Include all applicable general plan notes.
The list of the district's general notes are found at:
www.idot.illinois.gov
Doing Business
Procurements
Engineering, Architectural & Professional Services
Consultant Resources
Highway Standards
highway-standards-and-district specific standards

Commitments
Include all commitments.
Commitments made in Phase I are found in the project report.
Commitments made during Phase II will be provided by the district.
If there are no commitments, then list NONE with the date.

List of Highway Standards
If not able to place on cover sheet, place on this sheet.
List is to include only standards needed for this project.
Include the current revision number.
The Standard sheets will be inserted by the Central Office in Springfield prior to letting.
Standards can be found at the IDOT web site:
www.idot.illinois.gov
Doing Business
Procurements
Engineering, Architectural & Professional Services
Consultant Resources
Highway Standards

Include the correct Applications Rate Table
Include all JULIE member utilities and type of utility within the project limits and IDOT as a non-member if within project limits. If no utilities are present, list "NONE." Check project report for list of utilities.
The JULIE web site is: http://www.illinois1call.com

District Signature Block
The signature block is located in the District Specific Standards site
www.idot.illinois.gov
Doing Business
Procurements
Engineering, Architectural & Professional Services
Consultant Resources
Highways
District Specific Standards

Place description of sheet here
Information is same as cover sheet
THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE. FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNCONTROLLED MANNER, LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER. ONLY THOSE TREES DESIGNED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE WILL BE REMOVED. THE CONTRACTOR WILL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS. THE FINISHED EARTHWORK SHALL HAVE A VEGETATION-SUSTAINING SOIL, COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION-SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. ON EXISTING PAVEMENT WHICH MAY BE SUPERIMPOSED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERIMPOSITION UNTIL NEW SUPERIMPOSITION RATES ARE GIVEN ON THE PLANS. ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SURFACE NUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS. THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>RATE</th>
</tr>
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<tbody>
<tr>
<td>Bituminous Mix</td>
<td>0.05 tons per 1000 ft²</td>
</tr>
<tr>
<td>Aggregate Prime Coat</td>
<td>0.002 tons per 1000 ft²</td>
</tr>
<tr>
<td>HMA Recuperating</td>
<td>0.002 tons per 1000 ft²</td>
</tr>
<tr>
<td>Short Term Pavement Marking</td>
<td>0.2 ft² per 1000 ft² of application</td>
</tr>
<tr>
<td>Temporary Ditch Checks</td>
<td>5 tons aggregate</td>
</tr>
</tbody>
</table>

ALL EXISTING CORRUGATED METAL PIPE CIPP FIELD TILES COVERING THE ROADWAY, AS SHOWN ON THE PLANS OF DESIGNER/ENGINEER OR EXPANSION TRENCHING, SHALL BE REPLACED ACCORDING TO SECTION ALL OF THE STANDARD SPECIFICATIONS AND PAID FOR UNDER THE VARIOUS PAY ITEMS FOR FIELD TILE WORK. SEE SCHEDULE FOR PAY ITEMS.

THE REMOVAL OF GUARDRAILS, TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR GUARDRAIL REMOVAL.

MEMBERS OF THE PUBLIC KNOW TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

1. NICEL GAS
2. AT&T
3. FRONTIER COMMUNICATIONS OF ILLINOIS
4. COMMUNITY HEALTH EDISON COMPANY
5. EASTERN ILLINOIS ELECTRIC COOPERATIVE
6. MIDWEST ILLINOIS ELECTRIC COOPERATIVE
7. MECION
8. ESTATE TRUST
9. STATE OF ILLINOIS
10. DISTRICT THREE
11. FARMERS HOSPITALITY TRUST, TERRITORY LOCATED AT 3100 N. 4TH ST., MAHOMET, ILLINOIS. IN ADDITION IF ROOTS ARE ENCOUNTERED DURING THE INSTALLATION OF THE PIPE CULVERT (VINE ROOT PROOFING) WILL BE IMPLEMENTED.

12. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 RT. OWNER: RICK DARK,
13. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 907+00 LT. OWNER: RICK DARK,
14. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 949+00 LT. OWNER: RICK DARK,
15. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 952+00 LT. OWNER: RICK DARK,
16. PROVIDE A MINIMUM 24' ENTRANCE TO THE PROPERTY OWNER RT. STA. 1047+00 LT. OWNER, MARY HALEY TRUST, CONTRACT PERSON IS MIKE HALEY, PHONE NUMBER 815/474-2164.
17. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 RT. OWNER, RICK DARK,
18. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
19. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
20. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
21. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
22. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
23. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
24. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
25. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
26. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
27. PROVIDE A 24' ENTRANCE AT OR NEAR STA. 935+00 LT. OWNER, RICK DARK,
For the Summary of Quantities

Show the appropriate quantity breakdowns based on the construction and safety work type, project location, funding sources, etc. Check the project report for any agreement items. Quantities must be separated at all urban/rural splits and county lines. Use existing Structure numbers and note proposed number.

Provide the correct pay item code number, description, and pay unit exactly as shown.

Fill out the total quantities column.

Round all quantities according to Chapter 64 of the BDE Manual.

Do not rotate the Summary of Quantities on the sheet, use additional sheets instead.

Double space pay items.

Indicate Specialty Items with a symbol such as an asterisk.

Specialty Items are items of work requiring specialized knowledge, skills, or equipment which are typically outside the general contractor’s expertise (e.g., electrical work, traffic signals or permanent pavement markings on a paving contract, blasting on a bridge contract, paving work on an electrical contract, etc.).

Verify that quantities agree with schedules.

A list of pay items can be found at the IDOT website:

www.idot.illinois.gov

Doing Business

Procurements

Engineering, Architectural & Professional Services

Consultant Resources

Highways

Letting specific items

Coded Pay Items

and

www.idot.illinois.gov

Doing Business

Procurements

Engineering, Architectural & Professional Services

Consultant Resources

CADD

Summary of Quantities

NOTE:

An item followed by an asterisk does not always require a special provision. It may be covered by showing a dimension on a typical section, showing an area on a plan sheet, or by including a detail on the plans.

The following is a list of items that will be used during the plan review process. It contains district preferences to be considered during the plan preparation process:

- Items for traffic control
- Items for traffic signing
- Temporary quantities
- Raised reflective pavement markers
- Need approval from district for rip rap or revetment mat
- Need approval from district for hydro mulch
- Use sod in urban areas rather than seeding
- Include supplemental watering for sod
- Do not specify pipe material without prior approval (requires an exception)
- Use elliptical RCCP instead of arch diameter
- Include a Construction Test Strip for each type of HMA with quantity over 3,000 tons
- Include Bridge Deck Grooving for proposed concrete decks
- Use HMA Surface Course on all side roads that are US and state routes
- Use incidental HMA Surface for mailbox turnouts, entrances, and side roads less than 100’
- Permanent survey markers and/or land section markers
- Railroad protective liability insurance
- Need approval from district for reflective crack control
- Use Aggregate Base Course in tons
- Use Sub-base Granular Material, Type A in square yards
- Use Class SI Concrete Collar in each
- Use Temporary Sheet Piling in square feet or TSR System
- If earthwork quantities are small, measure by truck count
- Link incidental items to an appropriate pay item
- Use Short Term and Temporary Pavement Markings according to

Place SUMMARY OF QUANTITIES here as description.
<table>
<thead>
<tr>
<th>CODE NO.</th>
<th>ITEM</th>
<th>UNIT</th>
<th>TOTAL</th>
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<tbody>
<tr>
<td>20100110</td>
<td>TREE REMOVAL (6 TO 15 UNITS DIAMETER)</td>
<td>UNIT</td>
<td>903</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>602</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>301</td>
</tr>
<tr>
<td>20100210</td>
<td>TREE REMOVAL (OVER 15 UNITS DIAMETER)</td>
<td>UNIT</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>333</td>
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<td></td>
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<td>167</td>
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<tr>
<td>20103700</td>
<td>SUPPLEMENTAL WATERING</td>
<td>UNIT</td>
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<td></td>
<td>7</td>
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<tr>
<td>20200100</td>
<td>EARTH EXCAVATION</td>
<td>CU YD</td>
<td>21816</td>
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<td></td>
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<td>14544</td>
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<td></td>
<td></td>
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<td>7222</td>
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<tr>
<td>20201200</td>
<td>REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL</td>
<td>CU YD</td>
<td>3338</td>
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<td></td>
<td></td>
<td></td>
<td>1113</td>
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<tr>
<td>20400800</td>
<td>FURNISHED EXCAVATION</td>
<td>CU YD</td>
<td>3959</td>
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<td></td>
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<td>1320</td>
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<td>20700220</td>
<td>POREOUS GRANULAR EMBANKMENT</td>
<td>CU YD</td>
<td>354</td>
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<td>118</td>
</tr>
<tr>
<td>20800350</td>
<td>TRENCH BACKFILL</td>
<td>CU YD</td>
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<tr>
<td>21001000</td>
<td>GEOTECHNICAL FABRIC FOR GROUND STABILIZATION</td>
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<td></td>
<td></td>
<td></td>
<td>7210</td>
</tr>
<tr>
<td>21101505</td>
<td>TOPSOIL EXCAVATION AND PLACEMENT</td>
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</table>

* SPECIALTY ITEM
Typical Sections

Place mainline typical sections first, followed by other typical sections as they appear along the mainline. Alphabetize or number sequentially each typical section.

Note the title of the typical section and station locations directly below the typical section. The station locations should be continuous through the project. If no work is proposed, show existing typical and no work.

Separate existing and proposed typical sections are only required when pavement is being replaced or when showing the proposed work on the existing typical is too cluttered.

Existing roadway information and/or old plans will be supplied by the district, also see project report.

Include the following on the typicals:
- Horizontal dimensions rounded to nearest 0.1 ft
- Vertical dimensions rounded to nearest 1/4 in for resurfacing
- Profile grade line reference if different than the centerline
- Types and depths of surface, base, and subbase courses
- Side slopes expressed as a ratio of vertical to horizontal distances (To avoid confusion may include V:H such as 1V:4H)
- Cross slopes expressed in percent on pavement and shoulders
- Superelevations expressed in percent
- Arrows showing direction of drainage for side slopes, cross slopes, and superelevation rates
- Final striped width
- All applicable pay items

Show paved shoulders and delineators on 40-45 mph curves

Extend subbase past proposed curb and gutter 6"

For further guidance also see 64-2.06 and -2.07 of the BDE Manual and the pavement and shoulder highway standards.

Include the approved pavement design with the structural design information (If only doing policy resurfacing, this is not necessary).

For projects with HMA, include a Mixtures Table (Information will be provided by district).
**TYPICAL SECTION A**

STA. 19+93 TO STA. 21+83

- 1½" HMA SURFACE COURSE
- ½" HMA LEVEL BINDER

**TYPICAL SECTION B**

STA. 21+93 TO STA. 22+35

- 1½" HMA SURFACE COURSE
- ½" LEVEL BINDER (MACHINE METHOD)

**TYPICAL SECTION C**

BRIDGE OMISSION STA. 24+54 TO STA. 28+79

- 1½" HMA SURFACE COURSE
- ½" LEVEL BINDER (MACHINE METHOD)

**MIXTURES TABLE**

<table>
<thead>
<tr>
<th>Mix Type</th>
<th>HMA Binder for Base Course</th>
<th>HMA Surface</th>
<th>HMA Level Binder</th>
<th>HMA Incidental Surface</th>
<th>HMA Shoulders</th>
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<tr>
<td>A</td>
<td>PG 64-22</td>
<td>PG 64-22</td>
<td>PG 64-22</td>
<td>PG 64-22</td>
<td>PG 58-22</td>
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<tr>
<td>B</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
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<tr>
<td>C</td>
<td>4.0% @ N50</td>
<td>4.0% @ N50</td>
<td>4.0% @ N50</td>
<td>4.0% @ N50</td>
<td>2.0% @ N50</td>
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<tr>
<td></td>
<td>IL 12.5 OR IL 19.0</td>
<td>IL 12.5 OR IL 19.0</td>
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</table>

- Design Air Void
- Mixtures Composition
- Friction
- Density Test Method
- Saturation

- Material shall be compacted to 93.0-97.8% of the maximum theoretical density. Except that when placed as first lift on an unprepared subgrade, the minimum percent compaction shall be 90.0%. The maximum theoretical density shall be determined from the MDD specified in the specifications.
- When more than 20 percent RAP is used, a softer asphalt binder (PG 58-22) may be required as determined by the Engineer.
HALF SECTION SHOWING PROPOSED RESURFACING

1½" POLYMERIZED HMA SURFACE COURSE, MIX "E", N90

4" POLYMERIZED HMA BINDER COURSE

EXTEND UNDERDRAINS

1½" MINIMUM HMA SHOULDERS

4" HMA SHOULDERS

1½" HMA SHOULDERS

VARIABLE DEPTH HMA SHOULDERS

PROPOSED TYPICAL SECTION

NORMAL CROWN AREAS

STA 100+00 TO STA 120+65
STA 147+60 TO STA 184+05
STA 245+90 TO STA 294+58
STA 351+73 TO STA 500+00

HALF SECTION SHOWING PROPOSED REMOVAL

1½" POLYMERIZED HMA SURFACE COURSE, MIX "E", N90

4" POLYMERIZED HMA BINDER COURSE

PLUS ADDITIONAL BINDER WEDGE FOR SUPER ELEVATION CORRECTION

4" HMA SHOULDERS

1½" HMA SHOULDERS

VARIABLE DEPTH HMA SHOULDERS

* WHEN THE SUPERELEVATION RATE OF THE PAVEMENT IS BETWEEN 0% AND 4%, THE SHOULDER SHALL BE SLOPED AT 4%. WHEN THE SUPERELEVATION RATE OF THE PAVEMENT EXCEEDS 4%, THE SHOULDER SHALL BE SLOPED SO THAT THE ALGEBRAIC DIFFERENCE BETWEEN PAVEMENT AND SHOULDER WILL NOT BE GREATER THAN 8%.

SEE STAGING TYPICALS FOR ADDITIONAL PAVING DETAILS.

16' MINIMUM VERTICAL CLEARANCES SHALL BE MAINTAINED UNDER OVERHEAD STRUCTURES. SEE TAPER DETAILS.

PROPOSED TYPICAL SECTIONS

SUPERELEVATION AREAS

STA 120+65 TO STA 147+60
STA 184+05 TO STA 245+90
STA 294+58 TO STA 351+73

SEE SCHEDULES AND PLAN SHEETS FOR TRANSITION LOCATIONS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

Sheet 9 of 50
5/26/2017
Schedules of Quantities

Show all work items in schedules
Do NOT use the word "Contingent"
Check for agreement with the Summary of Quantities
Schedule for Sideroads and Entrances must have quantities broken out per individual location
Include Temporary Fence for protection of wetlands, hazardous waste areas, property owner commitment areas, or any other areas that the Contractor is prohibited from utilizing during construction.
For clarification, provide an index of schedules for large projects with multiple pages of schedules

Consider for long term projects (i.e. projects longer than one construction season)
- Include quantities for maintenance of temporary erosion control
- Include temporary seeding if the project will not be completed in one season, consider use of Temporary Mulch (Mulch Method II) for over winter break
- Estimate the increase in patching quantities if the project will not be let in the same year as the plans were developed or if the project will require more than one construction season
- Include temporary sidewalks
- Include quantities for maintenance of temporary access
- Address responsibility for maintenance of existing highway lighting
- Include method of payment for drums, barricades, or barrier wall to be left in place and becoming the property of the state or another agency. Include method and location of delivery if required.
- Include maintenance responsibilities during a winter shut down.

Following is a list of schedules the plans might contain:

- Box Culverts
- Bridge Approach
- Building Removal
- Cleaning Culverts
- Curb and Gutter
- Deck Drain Extensions
- Delineators
- Detector Loops
- Driveways
- Earthwork
- Entrances and Side Roads
- Erosion Control
- Exploration Trench and other Field Tile items
- Fence
- Grading and Shaping Ditches
- Guard Rail
- Hazardous Materials
- HMA
- HMA Surface Removal or Milling
- Impact Attenuators
- Landscaping
- Lighting
- Lime Modified Soils
- Median and Islands
- Patching
- Paved Ditch
- Pavement
- Pavement Marking
- Pavement Removal
- Permanent Survey Markers
- Pipe Culverts
- Protective Coat
- Rebar
- Removal and Disposal of Unsuitable Materials
- Right-of-way Markers
- Riprap
- Rock Excavation
- Rumble Strips
- Sanitary Sewer
- Seeding and Sodding
- Sidewalk
- Storm Sewer including Inlets and Manholes
- Structure Rehab
- Temporary Concrete Barrier
- Temporary Pavement
- Temporary Pavement Marking
- Topsoil
- Traffic Signals
- Tree Removal
- Trench Backfill
- Undrains
- Water Main
- Water Valves and/or Manhole Adjustment
- Staging
- Slurry Sealing or Grouting
- On projects, where work is done in stages, separate quantities by each stage.

Quantities that may need to be separated are temporary and/or proposed:
- earthwork
- pavement
- widening
- drainage items
- barricades and barrier walls
- pavement marking
- removal of pavement marking
- guardrail and impact attenuators
- geotextile retaining walls
- other miscellaneous items

Place SCHEDULES OF QUANTITIES here as description

Information is same as cover sheet
### Locations

<table>
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<tr>
<th>S'A</th>
<th>SIDE</th>
<th>DESCRIPTION</th>
<th>WIDTH</th>
<th>EXIST PAIV TYPE</th>
<th>INC HMA SURF TON</th>
<th>HMA SURF REM 1%* YD</th>
<th>BIT MATL 1% YD</th>
<th>CTL CTY GALLON</th>
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<th>TIMP RAMP SQ YD</th>
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### Entrainces and Sideways

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<th>INC HMA SURF TON</th>
<th>HMA SURF REM 1%* YD</th>
<th>BIT MATL 1% YD</th>
<th>CTL CTY GALLON</th>
<th>AGG (PR CTY)</th>
<th>TIMP RAMP SQ YD</th>
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### Mainline Schedule

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<th>CTL CTY GALLON</th>
<th>AGG (PR CTY)</th>
<th>TIMP RAMP SQ YD</th>
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### Notes

- See Mainline Schedule for details.
District Alignment, Ties, and Benchmark Sheet Requirements

1. Alignment. On all projects, a separate alignment sheet will be provided showing the existing and proposed horizontal alignment with the appropriate curve data, line bearings, centerline control points, and other pertinent information. The alignment drawing should be drawn to scale and include a north arrow.

2. Reference Ties. Reference ties will be required on every project. Figures illustrating the reference tie point locations may be simple or detailed schematics with the appropriate dimensions and tie points identified, including the station and offset and applicable control tie designation (e.g., POT, PI, PT, PC). Locating and referencing the centerline of survey will consist of establishing and referencing the control points of the centerline of surveys such as PC’s, PT’s and as many POT’s as are necessary to provide a line of sight. Show reference ties having locations tied to the mainline first, by increasing station, followed by ties to other points in the order they appear along the mainline. Clearly identify the feature to which the ties are referenced (e.g., iron pin 18 in. (0.5 m) deep, corner of wall). Tie figures are generally not drawn to scale. If too congested with the alignment drawing, transfer the tie figure to an insert directly under the point involved. At least three reference ties less than 100’ in length are required to each point. Note the tie distances to the nearest 0.01 ft. (5 mm). State Plane Coordinates shall be provided for all control points and centerline control points.

3. Benchmark Data. Benchmark tabulations should show the station, location, description, and elevation of each benchmark. Show mainline benchmarks first, followed by benchmarks to other facilities in the order they appear along the mainline. Clearly identify the road or line to which a group of benchmarks is referenced. Show elevations in feet to two decimal places (i.e., 0.01 ft.); show elevations in meters to three decimal places (i.e., 0.001 m). Provide a detailed description to locate the benchmark used for the level datum source. The description should include the benchmark location, elevation, number, and any other pertinent information. Benchmarks will be established along the project outside of construction limits not exceeding 1000 ft. (300 m) intervals horizontally and 20 ft. (6 m) vertically. A minimum of two benchmarks will be required regardless of the project size.

Also include layout information for all streets and sideroads.

Point locations should be listed in a table with the following instructions:
1) Engineer will re-establish monument (usually with in kind i.e. PK nail)
   Engineer will re-establish monument and furnish tie sketches to =
   District Plats and Plans (usually paid for as Permanent Survey Marker)
   Professional land surveyor shall re-establish monument, record new =
   monument record and provide copy to District Plats and Plans (usually=
   paid for as Land Section Marker) =

The table information will be provided by the District Land Acquisition
department. Tie points for notes 1 and 2 will generally be for resurfacing
projects. Tie points for note 3 will generally be for projects with major
ROW purchases where existing topography is being destroyed.
### Notes:

1. **Engineer will re-establish monument**

2. **Engineer will re-establish monument and furnish tie sketches to District 3 Plats & Plans**

3. **Professional land surveyor shall re-establish monument, record new monument record and provide copy to District 3 Plats & Plans**

**PSM = Permanent Survey Marker**

<table>
<thead>
<tr>
<th>Tie Point Location STA</th>
<th>Description</th>
<th>Existing Monument Type</th>
<th>Proposed Monument Type</th>
<th>Monument Record to be Recorded</th>
<th>Note</th>
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<tr>
<td>IL 47 43122</td>
<td>NE Corner SEC 22, T25N R7E (Monument Record)</td>
<td>PSM</td>
<td>N &amp; B.C. in power pole</td>
<td>YES</td>
<td>3</td>
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<tr>
<td>IL 47 43122</td>
<td>NW Corner SEC 26, T25N R7E (Monument Record)</td>
<td>PSM</td>
<td>N &amp; B.C. in power pole</td>
<td>YES</td>
<td>3</td>
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<tr>
<td>IL 47 43122</td>
<td>SW Corner SEC 26, T25N R7E (Monument Record)</td>
<td>PSM</td>
<td>N &amp; B.C. in power pole</td>
<td>YES</td>
<td>3</td>
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<tr>
<td>IL 47 545100</td>
<td>E Corner SEC 24, T25N R7E (Monument Record)</td>
<td>PSM</td>
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<tr>
<td>IL 165 173405</td>
<td>Pot PK Nail PK Nail</td>
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<tr>
<td>IL 165 225139</td>
<td>SW Corner SEC 27, T25N R7E (Monument Record)</td>
<td>PSM</td>
<td>N &amp; B.C. in tree</td>
<td>YES</td>
<td>2</td>
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</table>

**TOTALS**

| | 1 | 4 |

- **STA 45|22**
  - Replace with Land Section Marker Ties to NE Corner of Section 22, T25N, R7E
- **STA 1279+87.66**
  - Replace with Land Section Marker Ties to IL 47 at 8.4' East of IL 47 Centerline
- **STA 306+41.06**
  - Replace with Land Section Marker Ties to IL 47 at 4.0' East of IL 47 Centerline
- **STA 545|00**
  - Replace with Land Section Marker Ties to IL 47 at 97.4' East of IL 47 Centerline
- **STA 171+00**
  - Replace with PK Nail Ties to POT
- **STA 223|26**
  - Replace with Permanent Survey Marker Ties to SW Corner of Section 27, T25N, R7E
- **STA 118|45**
  - Replace with Iron Pin on ~ IL 165 at 34.56' East of IL 165 Centerline
- **STA 307+00**
  - Replace with PK Nail Ties to tree
- **STA 306+00**
  - Replace with Permanent Survey Marker Ties to tree
- **STA 1279+00**
  - Replace with Iron Pin on ~ IL 47 at 34.56' East of IL 47 Centerline
- **STA 545+00**
  - Replace with Iron Pin on ~ IL 47 at 34.56' East of IL 47 Centerline

**State of Illinois**

**Department of Transportation**

**Tie Points**

---

*Model: 12345*

*Sheet 13 of 50*

*5/26/2017*
PLAN AND PROFILE VIEWS

1. Provide the mainline plan and profile sheets first, followed by other plan and profile sheets as they appear along the centerline.
2. Plot existing and proposed facilities using proper levels. See the Computer Aided Design, Drafting, Modeling and Deliverables Manual.
3. Keep all notes brief, clear, and consistent.
4. Label sheet with applicable stations.

PLAN VIEW CHECK SHEET

5. Show mainline stationing increasing from left to right. Note where the centerline line is not coincident with the survey line.
6. Provide tic marks along the centerline at 100 ft (50 m) intervals and note the station.
7. Use matchlines on sheet. Provide the correct district North arrow on each sheet.
8. On projects where a coordinate system has been set up, show the coordinates for all control points.
9. For rural facilities, use a plan view scale of 1 in = 50 ft (1:500 metric). For urban facilities, use a plan view scale of 1 in = 20 ft (1:250 metric).
10. For all control points along the centerline, provide a 0.1 in (2.5 mm) diameter circle on the centerline.
11. Place the horizontal curve data on the inside of the curve to which it applies. Present the curve data in accordance with the format and accuracy presented in Figure 63-4D of the BDE Manual.
12. Include the pavement edge elevations and superelevation rates for superelevated sections.
13. Show perpendicular lines from the centerline to the inside of the curve at all curve control points. Indicate the curve control point and station.
14. Where deflection angles are used, show the angle to nearest second of a degree. Include coordinates, if available.
15. Note all pavement widths at the beginning and end of each sheet and wherever there is a change in pavement width.
16. Show existing and proposed structures.
17. Ensure station call outs are provided at:
   - beginning and end points of the project,
   - matchlines with other projects,
   - omissions from paving and station equations,
   - 100 ft (50 m) station increments,
   - horizontal curve points,
   - beginning and ending points of tapers,
   - construction limit locations,
   - right-of-way alignment breaks,
   - curb returns for entrances and intersections,
   - entrance centerlines,
   - special construction applications,
   - side street intersections,
   - permanent survey and right-of-way markers,
   - section lines, and
   - other necessary locations.
18. In general, do not show utility and drainage information on the plan and profile sheets, just show topography features. Provide other information on the drainage plan and profile sheets.
19. If separate right-of-way sheets are included with the plans, show the existing and proposed right-of-way limits on the plans. If the right-of-way plans are not included with the plans, also incorporate the following:
   - dimensions of the properties to be acquired,
   - station ties to property lines,
   - property ownership lines,
   - parcel numbers,
   - property owner names,
   - station locations of right-of-way alignment breaks,
   - temporary and permanent easement locations,
   - points where the control of access does not coincide with the right-of-way line,
   - location of right-of-way markers, and
   - any pertinent data that will affect right-of-way costs.
20. Show all approved points of entry or exits across control of access lines.
21. Show the locations for all new and existing guardrail installations.
22. For entrances and side road intersections, show the following:
   - the facility with the applicable street name, route number, or entrance type;
   - the existing surface material type;
   - the width of the intersecting facility;
   - for intersections with public roads, the angle of intersection from the side road centerline to the mainline centerline; and
   - direction of ditch drainage.
23. Properly label all additional constructed improvements.

See Chapter 63 of the BDE Manual for additional information on what is shown on the plan/profile sheets.
**PLAN AND PROFILE VIEWS (continued)**

24. Show the profile of the finished surface or top of the subgrade along the centerline for the proposed facility.

25. Use the same horizontal scale as shown for the plan view. The vertical scale is typically 1 in = 5 ft (1:50 metric) or 1 in = 10 ft (1:100 metric).

26. Show the existing ground line to the nearest 0.1 ft (30 mm) and existing pavement surfaces to the nearest 0.01 ft (5 mm).

27. Show the vertical curve data above the profile line for crest curves and below the profile line for sag curves. Include the following vertical data for each curve:
   - small triangle at the VPI,
   - small circles (0.1 in (2.5 mm) diameter) at all other vertical curve control points,
   - the VPI station, including short segments of vertical tangents,
   - the vertical curve length,
   - the elevation at the VPI, and
   - the "M" distance between the VPI and roadway surface.

28. Show tangent grades to the nearest hundredth of a percent (i.e., 0.01%). Use a "+" prefix for positive grades and "-" prefix for negative grades.

29. Show the benchmark information on the top portion of the profile view.

30. Show the elevations for the survey line and proposed centerline vertically every 100 ft (25 m) for rural projects and every 50 ft (10 m) for urban projects. For vertical curves, use a closer interval.

31. Provide additional profiles, where necessary, for:
   - pavement edges,
   - drainage structures,
   - special ditches,
   - side roads, and
   - other situations.

32. Show locations of all undercutting for unsuitable materials with cross hatching and show this excavation to the top of subgrade. Note the applicable stations and depth of excavation on the profile sheet.

33. For bridges within the project, show elevations for:
   - abutments,
   - piers,
   - low vertical clearance points,
   - the high water level, and
   - stream bed.

Additional items the District is looking for on the plans sheets are:
- ADA compliance
- Locations of any traffic counter loops
- Locations of asbestos removal
- Locations of septic tank or well abandonment
- Locations of underground storage tanks
- Locations of protected areas such as wetlands, hazardous waste, or property owner commitments

**PROFILE VIEW**

- Benchmark information locations
- Place proposed elevation here
- Place existing elevation here
- Place station here
- Provide elevations to show scale of profile
Suggested Stages of Construction and Traffic Control

Determine which IDOT Highway Standards are applicable for the traffic control on the project.

Where necessary, provide plan view sheets showing:
- temporary roadway horizontal alignment,
- temporary pavement widths,
- temporary traffic lanes,
- proposed construction staging,
- temporary traffic signals,
- location of signing for work zones,
- temporary pavement markings,
- roadside safety layouts, and
- general notes for construction, closures, time frames, etc.

Where necessary, provide the temporary roadway profile grade line on the profile sheet.

The following is a list of items that will be used during the plan review process. It contains District preferences to be considered during the plan preparation process for Traffic Control/Staging plans.

Include temporary
- Lighting
- Signals
- Bridge Rail
- Concrete Barriers
- Guardrail
- Earthwork
- Pavement Widening
- Sheet Piling
- Attenuators
- Rumble Strips (for mainline interstate, multilane, and high accident locations)

Check for adequate lane widths
Check construction access for entrances, side roads, and streets
Check that there is adequate work space for contractor operations and access to work areas
Check interstate jobs for possible shoulder reconstruction or bridge deck repair
Use Material Transfer Device on Interstate projects
Paint yellow pavement marking line on concrete barrier (District Cadd detail) (use discretion - Highway Standards 701402 and 701416)
Check project report for approved methods for traffic control and any staging, detour, or alternate route requirements
Check project report for any local agreements, including local road repairs after detour or alternate route completion
Check existing shoulder conditions for possible shoulder widening requirements for bridge repair or replacement projects
Check taper lengths for adjacent construction areas, is there adequate space between or do they need to be combined
Evaluate temporary lighting needs for interstate crossovers and ramps to see if existing lighting already meets requirements
Use District detail, 701400 Special, instead of Standard 701400
Consider coordinating multiple temporary traffic signals with timing or interconnect cable
NOTES

PRIOR TO INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CONTACT IDOT.


ANY IDOT SIGN THAT IS COVERED OR CHANGED SHALL BE DONE IN A MANNER WHICH DOES NOT DAMAGE ANY SIGNS OR POSTS. ANY SIGN OR POST WHICH THE ENGINEER DETERMINES HAS BEEN DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S OWN EXPENSE.

THE DETOUR IS REQUIRED TO REMAIN IN PLACE UNTIL THE WORK NECESSARY TO REMOVE STRUCTURE 050-0095 AND RECONSTRUCT US ROUTE 6 HAS BEEN COMPLETED EXCEPT FOR THE FINAL SURFACE COURSE LIFT.

SEE STAGE CONSTRUCTION SHEETS FOR ADDITIONAL ROAD CLOSURE SIGNING.

SEE STANDARDS 701801 AND 702001 FOR ADDITIONAL INFORMATION.

Any IDOT sign that is covered or changed shall be done in a manner which does not damage any signs or posts. Any sign or post which the engineer determines has been damaged by the contractor shall be repaired or replaced at the contractor's own expense.

The detour is required to remain in place until the work necessary to remove structure 050-0095 and reconstruct US Route 6 has been completed except for the final surface course lift.

See stage construction sheets for additional road closure signing.

See standards 701801 and 702001 for additional information.

**NOT TO SCALE**

**LEGEND (THIS SHEET)**

- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"

**STATE OF ILLINOIS**

**DEPARTMENT OF TRANSPORTATION**

**ROAD CLOSURE AND DETOUR**

**TRAFFIC CONTROL PLAN ON 300-0095**

**.detour.m4-8(fo) 24"x12"**

- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"

**WARNING**

- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"
- DETOUR: M4-8(FO) 24"x12"

**FILE NAME: $FILEL$, USER NAME: $USER$**

- PLOT SCALE: $SCALE$
- PLOT DATE: $DATE$
- DESIGNED: $DATE$
- CHECKED: $DATE$
- DRAWN: $DATE$
- REVISED: $DATE$

**NOTE:**

atoire D'Information et de Télécommunication (J.U.L.I.E.)

Prior to installing post mounted signs, the contractor shall contact IDOT.

IDOT will supply 32 M-1-4, "US 6," signs from District 3. For survey or operations, the contractor shall be responsible for erection, maintenance, and removal of IDOT-supplied signs. All other signs shall be supplied by the contractor.

Any IDOT sign that is covered or changed shall be done in a manner which does not damage any signs or posts. Any sign or post which the engineer determines has been damaged by the contractor shall be repaired or replaced at the contractor's own expense.

The detour is required to remain in place until the work necessary to remove structure 050-0095 and reconstruct US Route 6 has been completed except for the final surface course lift.

See stage construction sheets for additional road closure signing.

See standards 701801 and 702001 for additional information.

Any IDOT sign that is covered or changed shall be done in a manner which does not damage any signs or posts. Any sign or post which the engineer determines has been damaged by the contractor shall be repaired or replaced at the contractor's own expense.

The detour is required to remain in place until the work necessary to remove structure 050-0095 and reconstruct US Route 6 has been completed except for the final surface course lift.

See stage construction sheets for additional road closure signing.

See standards 701801 and 702001 for additional information.
NOT TO SCALE

STAGING QUANTITIES

<table>
<thead>
<tr>
<th>PAY ITEM</th>
<th>STAGE I</th>
<th>STAGE II</th>
<th>STAGE III</th>
<th>TOTAL QUANTITY</th>
<th>UNITS</th>
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<tr>
<td>TEMP. CONC. BARRIER</td>
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<td>124</td>
<td>404</td>
<td>404</td>
<td>SQ YD</td>
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LEGEND

- TYPE III BARRICADE
- RAMP
- DRUM WITH STEADY BURNING LIGHT
- TRAFFIC SIGNAL WITH BACKPLATE
- Temporary Concrete Barrier
- Impact Attenuator
- Temporary Guardrail

NOT TO SCALE
Erosion and Sediment Control Details

Determine which IDOT Highway Standards are applicable for erosion and sediment control on the project.

Where necessary, provide any commitments or General Notes that relate to erosion and sediment control.

Where necessary, provide plan view sheets showing:
- proposed construction staging,
- location and protection of environmentally sensitive areas,
- location of erosion and sediment control items, and
- general notes for construction, pay items, etc.

Use double plan sheets as appropriate.
1. 'TEMPORARY EROSION CONTROL SEEDING' WILL BE PLACED ON ALL ERODIBLE EARTH AREAS AS DIRECTED BY THE ENGINEER AS PER THE SPECIFICATIONS.
2. CONTRACTOR MUST MULCH ALL AREAS DISTURBED AS A RESULT OF TEMPORARY PAVEMENT PLACEMENT IN PRE-STAGE 1. PAYMENT WILL ONLY BE MADE FOR THE 10' SHOWN. ADDITIONAL MULCH PLACED WILL BE DONE SO AT THE CONTRACTOR'S EXPENSE.
3. TEMPORARY MULCH WILL MEET REQUIREMENTS OF AND BE PAID FOR AS 'MULCH, METHOD 2'.

NOTES:
- TEMPORARY DITCH CHECK
- TEMPORARY MULCH
- PERIMETER EROSION BARRIER
- PROP ROW (TYP)
- TEMP EASEMENT (TYP)
- INLET AND PIPE PROTECTION

LEGEND
- PERIMETER EROSION BARRIER
- TEMP EASEMENT
- TEMPORARY MULCH
- TEMPORARY DITCH CHECK

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
STAGE 1

MATCH LINE STA 540+00 TO STA 555+00
SCALE: 1" = 50'

DEERPATH DRIVE
PARK BOULEVARD
DEERPATH DRIVE
PARK BOULEVARD

M A T C H L I N E  S T A  555 + 00

~ UNION STREET
~ MICHAEL DRIVE
~ UNION STREET
~ MICHAEL DRIVE
~ UNION STREET
~ MICHAEL DRIVE
~ UNION STREET
~ MICHAEL DRIVE

EX ROW (TYP)
PROP ROW (TYP)
TEMP EASEMENT (TYP)
INLET AND PIPE PROTECTION
PERIMETER EROSION BARRIER
TEMPORARY MULCH
TEMPORARY DITCH CHECK

NOTE 1
NOTE 2
1. For culverts, note the following on the drainage plan view sheet:
   - centerline station for the ends,
   - direction and distance of the ends from the centerline,
   - culvert type (do not specify pipe material),
   - pipe size and length,
   - flow direction,
   - skew angle,
   - upstream and downstream flow elevations,
   - end section or headwall type and size,
   - waterway table if not shown elsewhere in plans, and
   - all applicable construction notes.

2. For storm drainage pipes, show the following:
   - Plan View
each run of pipe between manholes, catch basins, and inlets;
   - pipe diameter and length; and
   - gradient.
   - Profile View
diameter of pipe,
   - type of pipe (do not specify pipe material),
   - length; and
   - gradient.

3. For manholes, catch basins, and inlets, show the following:
   - Plan View
centerline station,
   - direction and distance from centerline,
   - edge of pavement or ground elevation, and
   - invert elevations for all pipes.
   - Profile View
centerline station,
   - direction from centerline,
   - device type and size,
   - invert elevations for all pipes, and
   - top of casting elevation.
   - Note if Flat Slab Top or Restricted Depth is required.

4. For end sections, show the following:
   - Plan View
centerline station and offset,
   - type, and
   - size.
   - Profile View
centerline station,
   - direction from centerline,
   - device type and size, and
   - outflow elevation at the bottom of pipe.

5. Note special ditch locations with invert elevations at 100 ft (25 m) intervals on the cross sections. On the profile view note:
   - gradient percentage,
   - centerline station,
   - beginning and ending elevations, and
   - elevations at gradient changes.

6. Show drainage direction arrows for all ditches, waterways, and streams.

7. Note all overhead utilities where they cross the centerline and the type of utility.

8. Note all underground utilities within the right-of-way limits affected by the construction with the following:
   - Plan View
centerline station,
   - direction and distance from the centerline, and
   - all applicable elevations.
   - Profile View
type and size.

For Waterway Table guidelines see 1-303.02 Plan Notation - Waterway Information in the IDOT Drainage Manual found at the IDOT web site:
www.idot.illinois.gov

Check horizontal and vertical separation distances between water main, storm sewers, and sanitary sewers. See Standard Specifications for Water and Sewer Main Construction in Illinois. See District Special Provisions for specific pay items. Include necessary District CADD details.

If watermain work is required, notify District as soon as possible to allow time for obtaining required permits.

If rock is suspected or known to be in the area, verify the rock elevations and whether rock excavation is needed or not.

When utilities have been located using a S.U.E. survey, include the test hole locations on the drainage sheets with a page reference to the test hole data sheet.

Include test hole data sheets in plans immediately following the utility sheets from S.U.E.
Include the following sheets and details when needed:

Removal Sheets
- Right-of-way sheets
  - Obtain these from the District Bureau of Land Acquisition
  - Check that shown correctly on other plan sheets and cross sections

Intersection details
- Include pavement elevations,
  - lane widths,
  - curb or edge of pavement radii,
  - curb ramps,
  - turning radii for left-turning vehicles,
  - location of median noses and islands,
  - location of traffic signal equipment,
  - location of loop detectors,
  - location of traffic signs,
  - pavement markings, and
  - construction joint layout

Pavement marking details
- District uses 6" centerline skip dashes
- District uses the large size arrows in urban and rural, note on plans
- Check for appropriate lane widths
- Show layout information
- Show raised reflective pavement markers

Landscaping details
- If plans are simple, consider combining with pavement marking detail sheets

Traffic signal details
- Verify pole locations are not in ditch flow lines
- Check for conflicts at proposed pole locations
- Check clear zone requirements
- Check to see if borings are necessary
- Check placement of loop detectors in relation to stop bar locations
- Check for electrical supply
- Show loading diagrams

Lighting details
- Lighting at interstate interchanges
- Check to see if borings are necessary
- Check for electrical supply
- Show loading diagrams

Structure sheets
- Include boring logs on CAD generated sheets and
  - check to see that borings are complete and adequate
- verify rock elevation does not require separate item for rock excavation
- Check approach details
- Check for bridge painting, coordinate with District
- Check for piling or footing conflicts, such as from old structures
- Include shoulder repair quantities for shifting traffic
- Contact District to see if any utilities are attached to structure
- Include existing structure plan sheets for information only (supplied by district)
- or if project has been selected to follow the SAR procedures, coordinate with
  district for inclusion of structure information and general notes required. See
  GBSP 67 and ABD 09.1 for information.

Wetland details
- Culvert details

Refer to the following locations in the BDE Manual for guidance:

- 63-4.11 Right-of-Way Plan Sheets
- 63-4.12 Intersection Details
- 63-4.13 Pavement Marking Details
- 63-4.14 Special Plans
  - 63-4.14(a) Landscaping Details
  - 63-4.14(b) Traffic Signal Plans
  - 63-4.14(c) Lighting Plans
  - 63-4.14(d) Structure Plans
  - 63-4.14(e) Wetland Plans
**Mast Arm Northwest Quadrant (A)**

Lighting arm shall be parallel to mast arm.

**Mast Arm Northeast Quadrant (B)**

Lighting arm shall be parallel to mast arm.

**Mast Arm Southwest Quadrant (C)**

Lighting arm shall be parallel to mast arm.

**Mast Arm Southeast Quadrant (D)**

Lighting arm shall be parallel to mast arm.

**Street Sign Detail**

Street name signs shall be placed on the mast arms parallel to the respective route as directed by the engineer.

1. Type A or Relief Required
2. White/Red Background
3. Style: 64% Reflectivity
4. In series of letters
5. All dimensions are in inches unless otherwise shown

---

**Electrical Load Chart**

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<th>INDICATION</th>
<th>NUMBER</th>
<th>WATTAGE</th>
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<td>52</td>
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<tr>
<td>Yellow</td>
<td>15</td>
<td>12</td>
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<td>Red</td>
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<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Yellow Arrow</td>
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<td>8</td>
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<tr>
<td>Green Arrow</td>
<td>4</td>
<td>7</td>
<td>95</td>
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</table>

**Traffic Sign Cabinet**

Item: Controller

- 1: 150 W
- 2: 250 W
- 3: 350 W
- 4: 500 W

**Detector Loop Inductance Chart**

<table>
<thead>
<tr>
<th>DETECTOR LOOP TYPE</th>
<th>FREQUENCY (KHZ)</th>
<th>INDUCTANCE READING (MICROHENRIES)</th>
<th>STATUS</th>
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<td>A</td>
<td>36344</td>
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</tbody>
</table>

**Pedestrian Crossing Sign Detail**

- Push button: Walk Signal
  - Wait for Green
  - Go to Cross
  - Turn Left or Right

- Pedestrian push button required.

**Damping Plate Detail**

Top view incidental to mast arm quantity.
Traffic will be maintained utilizing stage construction.

Salvage: None

Traffic Barrier Terminal, type 6 (Std. 631031), typ.

Soil Site Class = C

Design Spectral Acceleration at 0.2 sec. \( (S_2) \) = 0.76 g

Design Spectral Acceleration at 1.0 sec. \( (S_1) \) = 0.27 g

State of Illinois

Department of Transportation

General Plan and Elevation

U.S. Route 45 Over

South Fork of Saline River

F.A.P. RTE. 881 - SEC. 32B-1

Saline County

Station 615+74.32

Structure No. 083-0067

Design Specifications, 6th Edition

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

LOADING HL-92

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2

Design Spectral Acceleration at 0.2 sec. \( (S_2) \) = 0.27 g

Design Spectral Acceleration at 1.0 sec. \( (S_1) \) = 0.27 g

Soil Site Class = C

LOCATION SKETCH

GENERAL PLAN AND ELEVATION

U.S. ROUTE 45 OVER

SOUTH FORK OF SALINE RIVER

F.A.P. RTE. 881 - SEC. 32B-1

SALINE COUNTY

STATION 615+74.32

STRUCTURE NO. 083-0067

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

Sheet 1 of 26 sheets

INDEX OF SHEETS

1 - General Plan & Elevation
2 - General Data
3 - Stage Construction Details
4 - Temporary Concrete Barrier
5-7 - Top of Stab Elevations
8-9 - Top of Approach Stab Elevations
10-11 - Superstructure Details
12 - Drainage Details
13-14 - Bridge Approach Stab Details
15-16 - Structural Steel Details
17-19 - Abutment Details
20-22 - Pier Details
23 - Steel H-Pile Details
24 - Bar Splicer Assembly Details
25-26 - Soil Boring Logs

DESIGN DATA

Soil Boring Logs

DESIGN STRESSES

LOADING HL-92

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2

Design Spectral Acceleration at 0.2 sec. \( (S_2) \) = 0.27 g

Design Spectral Acceleration at 1.0 sec. \( (S_1) \) = 0.27 g

Soil Site Class = C

LOCATION SKETCH

GENERAL PLAN AND ELEVATION

U.S. ROUTE 45 OVER

SOUTH FORK OF SALINE RIVER

F.A.P. RTE. 881 - SEC. 32B-1

SALINE COUNTY

STATION 615+74.32

STRUCTURE NO. 083-0067

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

Sheet 1 of 26 sheets
**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheet 6 of 26, minus slab thickness, equals the fillet heights "t" above top flange of beams.

### BEAM 5

<table>
<thead>
<tr>
<th>Location</th>
<th>Station</th>
<th>Offset</th>
<th>Theoretical Grade Elevations Adjusted For Dead Load Deflection</th>
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### BEAM 6

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<th>Theoretical Grade Elevations Adjusted For Dead Load Deflection</th>
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To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on sheet 6 of 26, minus slab thickness, equals the fillet heights "t" above top flange of beams.
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206). The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).

**SOIL BORING LOG**

<table>
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<tr>
<th>SECTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>STRUCT. NO.</th>
<th>DESCRIPTION</th>
<th>DRILLING METHOD</th>
<th>HAMMER TYPE</th>
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<tr>
<td>FAP 881 (US 45)</td>
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<td>-88.677632</td>
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<td>FAP 881 (US 45) over So Fork Saline River</td>
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**Contraction Due to Water**

- Bottom of hole = 41.5 feet
- No free water observed
- Sandstone with clay layers

**Groundwater Elev.**

- First Encounter = 35.4 feet
- No free water observed
- Sandstone with clay layers

**Surface Water Elev.**

- First Encounter = 398.1 feet
- No free water observed
- Sandstone with clay layers

**Total Recovery**

- 100% Recovery, 63% RQD
- Cored 30.4 to 35.4 feet
- Sandstone with clay layers

**UCS Values**

- To convert "N" values to "N60" values, multiply by 1.25.
- For design plans, after generating the logs in Microstation and applying the text style settings, we then scale the logs 1.22x for legibility (0.11/0.09). The text height then becomes 0.11x.
Where necessary, the following details may be included:

- Special drainage details that are not covered in the IDOT Highway Standards or on the drainage plan and profile sheets
- Field tile details
- Earthwork details for interchanges requiring significant earthwork
- Signing plans
- Superelevation transition diagrams
- Railroad crossing details
- District CADD details
- Butt joint details
- Transition details where there is a change in the roadway surface or base course width. These details should include: beginning and ending stations, distances and direction from the centerline, and all necessary curve data
- Transition details where there is a change in roadway material's depth
- Any special designs not covered in the IDOT Highway Standards or elsewhere in the plans
ADA SIDEWALK ACCESSIBILITY RAMPS

METHOD 1

TYPICAL CURB APPLICATIONS FOR METHOD 1

LEGEND

- PLANTING OR OTHER NON-WALKING SURFACE
- SLOPE = 2\% MAX.
- DETECTABLE WARNING

NON-WALKING SURFACE
PLANTING OR OTHER
SLOPE = 2\% MAX.

EXTERIOR CURB & REPL.
CC & G REM.
INTERIOR CURBS
W SIDE ROAD (S R )
MAX 1:12

EXTERIOR CURB
MAX 1:12

P.C.C. SIDEWALK
CURBS
6" SIDE CURBS (TYP.)
MAX 1:12

P.C.C. SIDEWALK
CURBS
4" SIDE CURBS (TYP.)
MAX 1:12

P.C.C. SIDEWALK
CURBS
6" SIDE CURBS (TYP.)
MAX 1:12

ADA SIDEWALK ACCESSIBILITY RAMPS

METHOD 1 PERSPECTIVE WITH SIDE CURBS

METHOD 1 PERSPECTIVE WITH SIDE FLARES

METHOD 1 PERSPECTIVE WITH SIDE CURBS AND SIDE FLARES

ADA SIDEWALK ACCESSIBILITY RAMPS
SECTION A-A
DETAILS AT ENTRANCES & SIDE ROADS

MILLING AND RESURFACING TAPER

SECTION B-B

DEPARTMENT OF TRANSPORTATION
STATE OF ILLINOIS

DETAILS AT ENTRANCES & SIDE ROADS

THE COST OF REMOVAL AT EXISTING HMA OR F.C.C. LOCATIONS SHALL BE PAID FOR PER SQUARE YARD. REMOVAL AT THE STOPPING AGG. LOCATIONS SHALL BE INCIDENTAL TO THE HMA. A 2' LOCATIONS SHALL BE FEATHER TAPERED.

DETAIL A

MATCH EXIST. RADIUS OR HMA FLARE OR USE 1:1 FLARE FOR NEW HMA OVER EXIST. AGG. LOCATIONS SHALL BE PAID FOR PER "LEVEL BIND (MM)"

END OF IMPROVEMENT
Some guidelines for cross sections are:

1. Plot rural cross sections at 100 ft intervals and urban cross sections at 50 ft intervals.
2. Plot intermediate cross sections at all major grade breaks, pipe crossings, side streets, entrances, guardrail terminals, and other locations as necessary. 
3. Ensure the spacings between cross sections do not overlap.
4. The mainline cross sections are placed first, by increasing stations, from the bottom of the sheet to top of the sheet. Provide the cross sections for other facilities after the mainline cross section in the order they appear along the mainline.
5. Note the stations of the cross section shown on the bottom of the sheet. Also note the name of the facility to which the cross sections apply.
6. Use a horizontal scale of 1 in = 5 ft or 1 in = 10 ft. The vertical scale is a 2:1 proportion of the horizontal scale. Show at least two elevation lines for each cross section.
7. Plot the existing cross section using a light, dashed line and show the existing:
   - ground line,
   - pavement structure,
   - drainage structures,
   - major utilities,
   - all affected structures,
   - existing and proposed right-of-way and easement lines, and
   - bodies of water near the right-of-way limits.
8. Plot the proposed cross section using a dark, solid line and show:
   - centerline (and the profile grade line, if different); 
   - proposed pavement structure;
   - all side road and entrances;
   - curb and gutter;
   - sidewalk locations and depth;
   - proposed side slopes;
   - special fill materials;
   - all new drainage structures, include the following:
     - centerline station,
     - distance and direction from centerline,
     - description and size of structure,
     - top and flow line elevations;
   - all underground utilities;
   - special ditch elevations and drainage direction;
   - proposed right-of-way and easement lines; and
   - any other special features.
9. Provide the proposed centerline pavement surface elevation vertically on each cross section.
10. Label the side slope on the first and last cross section of each sheet and where there are changes in the slope. Show the side slope using a vertical to horizontal ratio, e.g., 1V:3H.
11. Show the end area cut and fill amounts, in square feet, below each cross section.
12. Show all undercutting for subgrade and unsuitable material.
13. Show all earthwork for temporary pavements.
14. Provide separate cross sections for all approaches including side roads and entrances, and note the approach type, direction from centerline, and station next to the cross section.
The IDOT Highway Standards will be the last sheets added to the project. The Bureau of Design and Environment will be responsible for adding these sheets to the plans. The sheets added will be based on the listing provided in the Index of Sheets.