

| ROUTE    | SECTION    | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|----------|------------|--------|--------------|--------------|
| FAU 1223 | 10 HB-BR-1 | LAKE   | 10 + 2 = 12  | 1            |

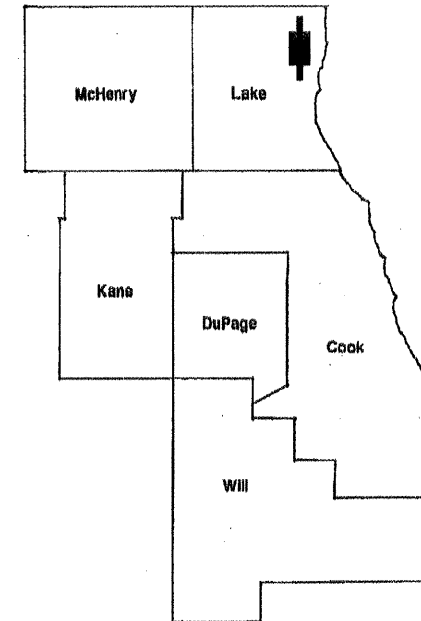
FOR INDEX OF SHEETS SEE SHEET 2

CONTRACT NO. 60G34

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
DISTRICT ONE  
**PROPOSED HIGHWAY PLANS**

D-91-370-09

IMPROVEMENT IS LOCATED IN  
THE VILLAGES OF GURNEE  
AND PARK CITY



FAU RTE. 1223: WASHINGTON ST  
OVER US 41  
SECTION 10 HB-BR-1  
BRIDGE IMPACT REPAIRS  
LAKE COUNTY  
C-91-370-09

LOCATION OF  
IMPROVEMENT  
SN 049-0016

R 11 E | R 12 E

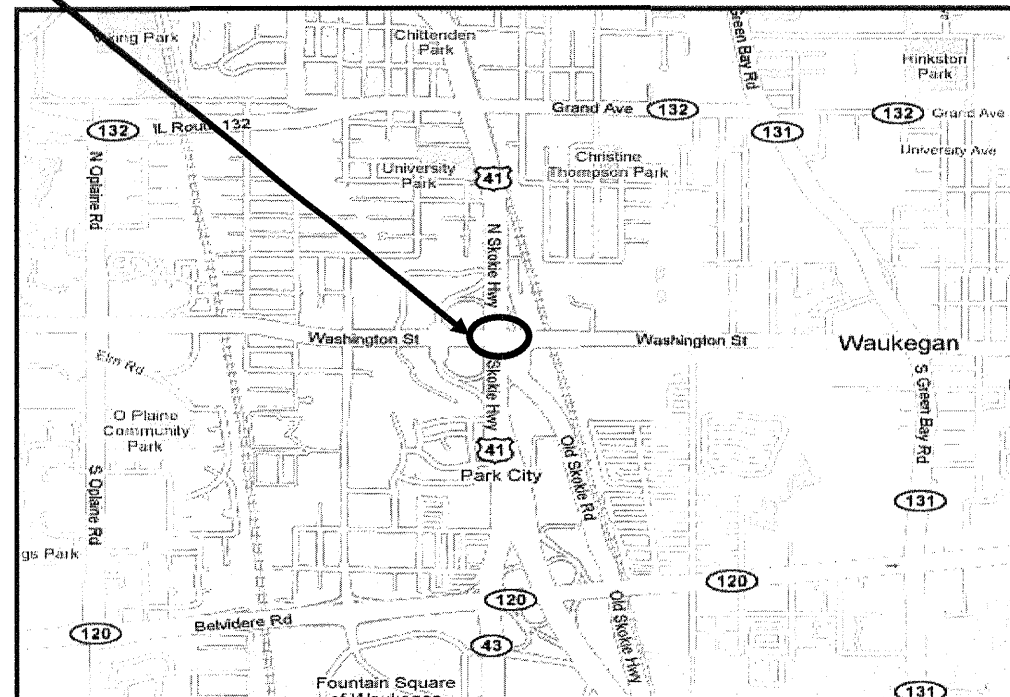
LOCATION OF IMPROVEMENT INDICATED THUS:

**TRAFFIC DATA:**

WASHINGTON ST:  
POSTED SPEED LIMIT = 45 MPH  
2007 ADT = 27,900

US 41:  
POSTED SPEED LIMIT = 45 MPH  
2007 ADT = 54,900

T45 N



WARREN TOWNSHIP

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SUBMITTED: APRIL 10, 2009  
*Diana M. O'Keefe*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER  
May 8, 2009  
*Charles J. Imersolet*  
ENGINEER OF DESIGN AND ENVIRONMENT  
May 8, 2009  
*Christine M. Reed*  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

J.U.L.I.E.: JOINT UTILITY LOCATION  
INFORMATION FOR EXCAVATION  
(800) 892-0123 OR 811

PROJECT ENGINEER **ROBERT BORO (847) 705-4178**  
PROJECT MANAGER **KEN ENG**

CONTRACT NO. 60G34

| ROUTE    | SECTION    | COUNTY | TOTAL SHEETS | SHEET NUMBER |
|----------|------------|--------|--------------|--------------|
| FAU 1223 | 10 HB-BR-1 | LAKE   | 10           | 2            |

CONTRACT NO: 60G34

**INDEX OF SHEETS**

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS AND GENERAL NOTES
- 3 SUMMARY OF QUANTITIES
- 4 TRAFFIC STAGING
- 5 - 7 BRIDGE REPAIR PLAN SHEETS
- 8 TRAFFIC CONTROL PLANS
- 9 TRAFFIC CONTROL & PROTECTION FOR SIDEROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
- 10 ARTERIAL ROAD INFORMATION SIGN (TC-22)
- 10A. TRAFFIC CONTROL (TC-14)
- 10B. PAVEMENT MARKING (TC-16)

**STATE STANDARDS**

| STANDARD NO | DESCRIPTION  |
|-------------|--|
| 701301-03   | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS                        |
| 701400-03   | APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY                       |
| 701401-05   | LANE CLOSURE, FREEWAY/EXPRESSWAY                                   |
| 701601-06   | URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN |
| 701901-01   | TRAFFIC CONTROL DEVICES  |
| 704001-05   | TEMPORARY CONCRETE BARRIER   |

**GENERAL NOTES**

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800)892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND THE VILLAGES OF GURNEE AND PARK CITY.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.

THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

THE ENGINEER SHALL CONTACT DEBBIE HANLON, AREA TRAFFIC FIELD ENGINEER, AT (847) 438-2300 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

BEFORE BEGINNING WORK, THE CONTRACTOR SHALL RETAIN AND RECORD (FOR FUTURE REFERENCE), ALL EXISTING PAVEMENT MARKING LINES AND RAISED REFLECTIVE PAVEMENT MARKERS IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL STRIPING SHALL BE AS DIRECTED BY THE ENGINEER.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECEIVED FROM BRIDGE INSPECTORS.

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

ILLINOIS DEPARTMENT OF TRANSPORTATION  
  
INDEX OF SHEETS  
STATE STANDARDS  
GENERAL NOTES

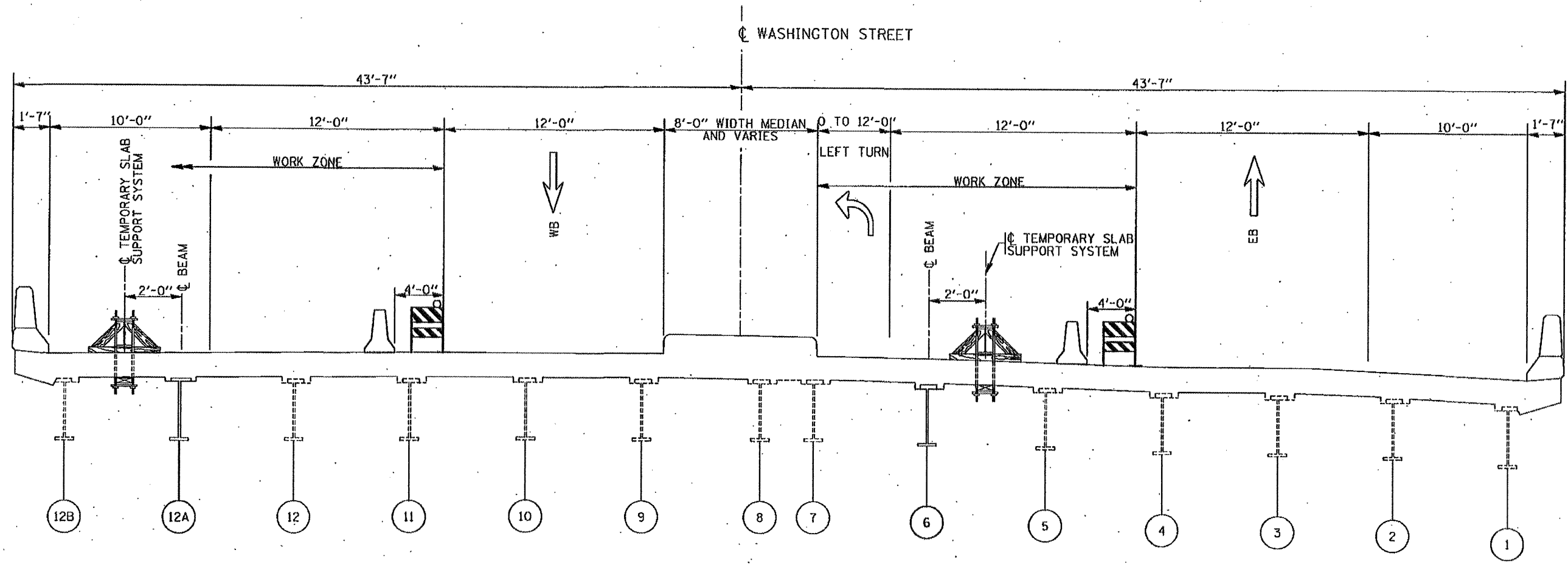
|              |                |               |                     |                     |
|--------------|----------------|---------------|---------------------|---------------------|
| <b>ROUTE</b> | <b>SECTION</b> | <b>COUNTY</b> | <b>TOTAL SHEETS</b> | <b>SHEET NUMBER</b> |
| FAU 1223     | 10 HB-BR-1     | LAKE          | 10                  | 3                   |

CONTRACT NO.: 60G34

| <b>SUMMARY OF QUANTITIES</b> |  | CONSTRUCTION TYPE CODE: SFTY - 2A |                                       | MCHD CLAIM # 736341  |  |
|------------------------------|--|-----------------------------------|---------------------------------------|----------------------|--|
| <b>CODE NO.</b>              | <b>ITEMS</b>   | <b>UNITS</b>                      | <b>URBAN<br/>TOTAL<br/>QUANTITIES</b> | <b>100%<br/>MCHD</b> | <b>CONTRACT<br/>MAINTENANCE<br/>100% STATE</b> |
| 50102400                     | CONCRETE REMOVAL   | CU YD                             | 1.0                                   |                      | 1.0  |
| 50300255                     | CONCRETE SUPERSTRUCTURE  | CU YD                             | 1.0                                   |                      | 1.0  |
| 50500405                     | FURNISHING AND ERECTING STRUCTURAL STEEL                         | POUND                             | 12400                                 |                      | 12400  |
| 50501110                     | STRUCTURAL STEEL REMOVAL   | POUND                             | 10830                                 |                      | 10830  |
| 67000400                     | ENGINEER'S FIELD OFFICE, TYPE A                                  | CAL MO                            | 3                                     | 1                    | 2  |
| 67100100                     | MOBILIZATION   | L SUM                             | 1                                     | 0.25                 | 0.75   |
| 70101800                     | TRAFFIC CONTROL AND PROTECTION, (SPECIAL)                        | L SUM                             | 1                                     | 0.25                 | 0.75   |
| 70400100                     | TEMPORARY CONCRETE BARRIER                                       | FOOT                              | 250                                   |                      | 250  |
| X0322256                     | TEMPORARY INFORMATION SIGNING                                    | SQ FT                             | 102.8                                 | 51.4                 | 51.4   |
| X0325702                     | NIGHTTIME WORK ZONE LIGHTING                                     | L SUM                             | 1                                     | 0.25                 | 0.75   |
| X0325775                     | WET REFLECTIVE TEMPORARY TAPE, TYPE III, 4 INCH                  | FOOT                              | 1131                                  |                      | 1131   |
| Z0003600                     | BEAM STRAIGHTENING   | L SUM                             | 1                                     | 0.25                 | 0.75   |
| Z0030240                     | IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE),<br>TEST LEVEL 2 | EACH                              | 2                                     |                      | 2  |
| Z0073300                     | TEMPORARY SHORING AND CRIBBING                                   | L SUM                             | 1                                     |                      | 1  |
| Z0073351                     | TEMPORARY SLAB SUPPORT SYSTEM                                    | L SUM                             | 1                                     |                      | 1  |

ILLINOIS DEPARTMENT OF  
TRANSPORTATION

**SUMMARY OF QUANTITIES**



CROSS SECTION  
(LOOKING EAST)

|   |                     |            |           |
|---|---------------------|------------|-----------|
| FILE NAME *   | USER NAME * hmdanah | DESIGNED - | REVISED - |
| o:\pwwork\pmsdot\hmdanah\db\35211\013789-sht-plan.dgn |                     | DRAWN -    | REVISED - |
| PLOT SCALE = 1/8" = 1'-0"                             |                     | CHECKED -  | REVISED - |
| PLOT DATE = 9/6/2009                                  |                     | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET OVER U.S. 41  
TRAFFIC CONTROL PLAN  
S.N. 049-0018**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

|                           |            |        |              |           |
|---------------------------|------------|--------|--------------|-----------|
| F.A.D. R/E.               | SECTION    | COUNTY | TOTAL SHEETS | SHEET NO. |
| 1223                      | 10 HB-BR-1 | LAKE   | 70           | 4         |
|                           |            |        | CONTRACT NO. | 60G34     |
| ILLINOIS FED. AID PROJECT |            |        |              |           |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Fasteners shall be high strength bolts. Bolts  $7/8''\phi$ , open holes  $15/16''\phi$ , unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be gray, Munsell No. 5B 7/1. See Special Provision "Cleaning and Painting New Metal Structures".

After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection".

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Grinding shall be done parallel to the longitudinal axis of the member. Ground surfaces shall be inspected for cracks using dye penetrant or magnetic particle testing prior to initiating any beam straightening operations. Any cracks that cannot be removed by grinding approximately  $1/4''$  deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Ground surfaces shall be spot cleaned and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Cost of grinding, testing and spot painting included with Beam Straightening.

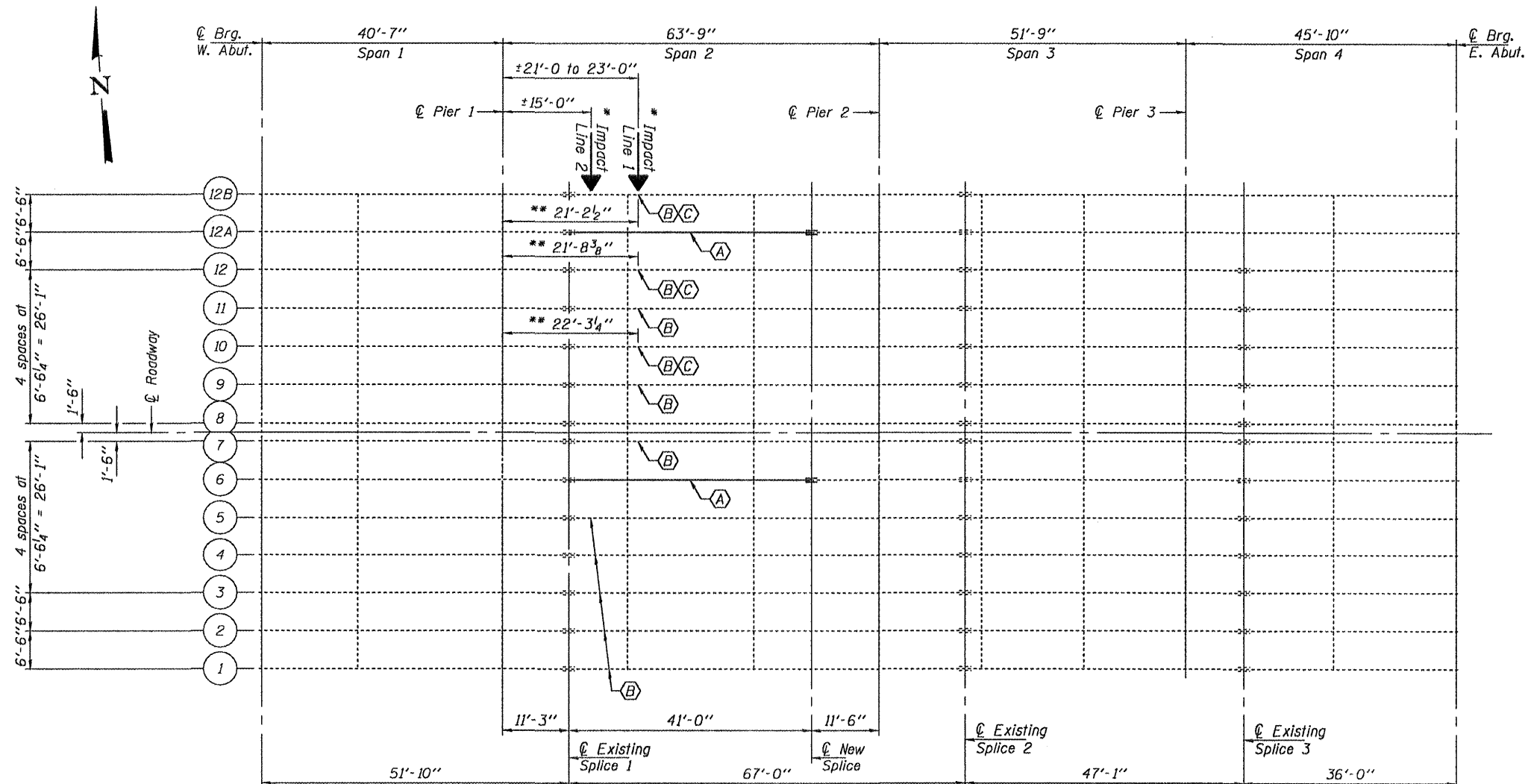
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Diaphragm connection holes shall be  $15/16''\phi$  for  $3/4''\phi$  bolts. Two hardened washers shall be required at diaphragm connections.

Temporary shoring may be required to facilitate alignment of existing splice. Use 12" x 12" Timbers or HP's to be paid for as Temporary Shoring and Cribbing. Remove and replace stopwall, if required. Cost included with Temporary Shoring and Cribbing.

ELEVATION



FRAMING PLAN

- (A) - Existing Beam to be replaced.
- (B) - Existing Beam to be Straightened.
- (C) - Existing Beam to be Strengthened.

\* Impact Line 1 affected all beams except beams 3 & 8.  
Impact Line 2 affected beams 1, 3, & 4.

\*\* Point of Impact and  $\phi$  Strengthening  $\phi$ .

TOTAL BILL OF MATERIAL

| ITEM                                     | UNIT    | QUANTITY |
|--|---------|----------|
| Concrete Removal                         | Cu. Yd. | 1.0      |
| Concrete Superstructure                  | Cu. Yd. | 1.0      |
| Furnishing and Erecting Structural Steel | Pound   | 12,400   |
| Structural Steel Removal                 | Pound   | 10,830   |
| Beam Straightening                       | L.S.    | 1        |
| Temporary Slab Support System            | L.S.    | 1        |
| Temporary Shoring and Cribbing           | L.S.    | 1        |

PLAN AND ELEVATION  
WASHINGTON STREET OVER US 41  
SN 049-0016

|          |                  |
|----------|------------------|
| DESIGNED | Victor H. Veb... |
| CHECKED  | [Signature]      |
| DRAWN    | Kyle M. Steffen  |
| CHECKED  | AJB VHV          |

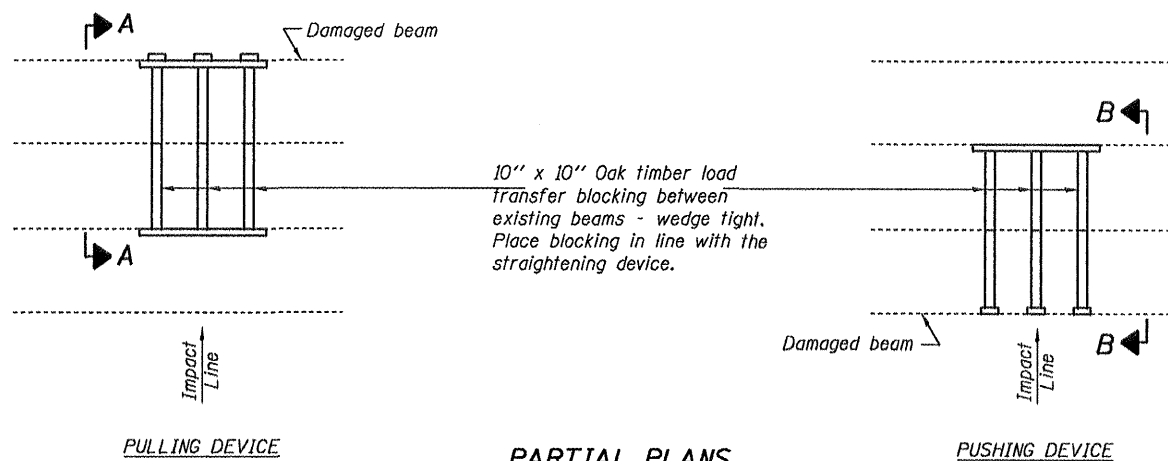
MAY 1, 2009  
EXAMINED [Signature]  
PASSED [Signature]  
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRES 11-30-2010

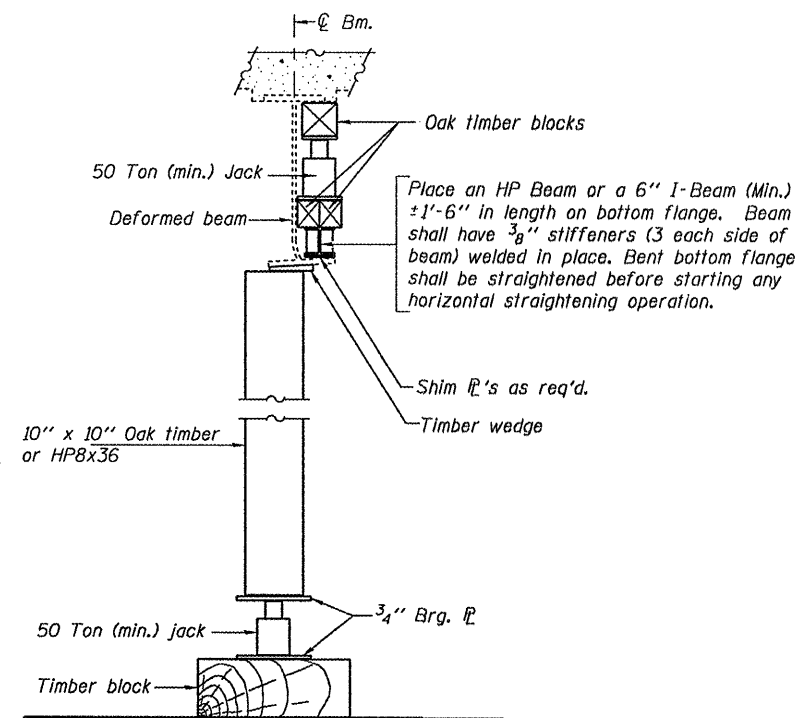
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|-----------------------------|-------------|---------|----------|------------------|-----------|
| SHEET NO. 1<br><br>3 SHEETS | F.A.U. RTE. | SECTION | COUNTY   | TOTAL SHEETS     | SHEET NO. |
|                             | 1223        | -       | LAKE     | 10               | 5         |
| FED. ROAD DIST. NO.         |             |         | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 60G34          |             |         |          |                  |           |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

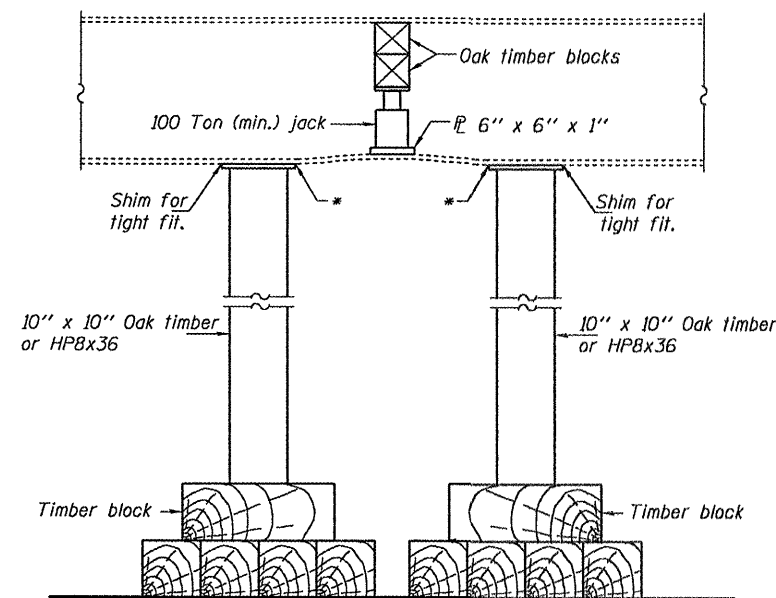


**PARTIAL PLANS**  
**SUGGESTED BEAM STRAIGHTENING METHODS**

Straightening force shall be maintained on all load transfer blocking during beam straightening.



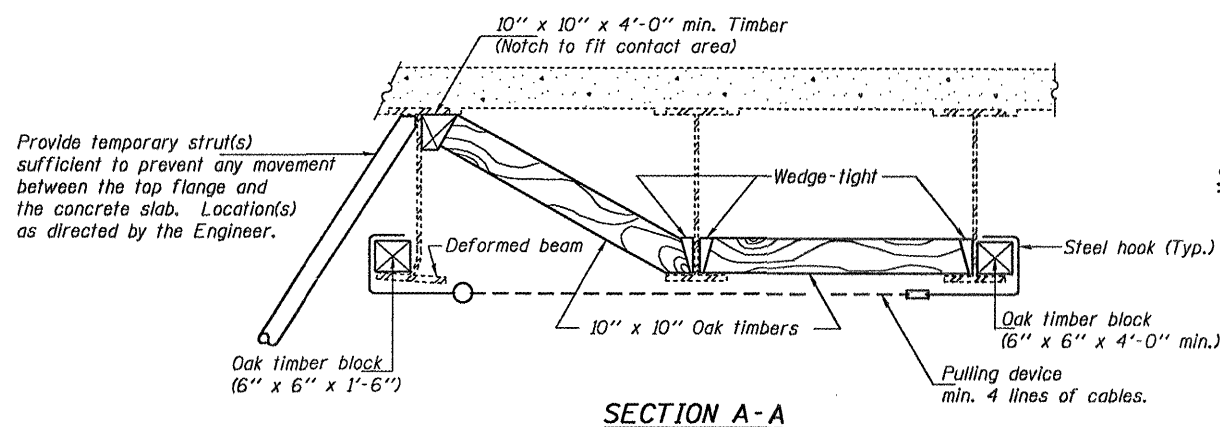
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct flange rotation.)



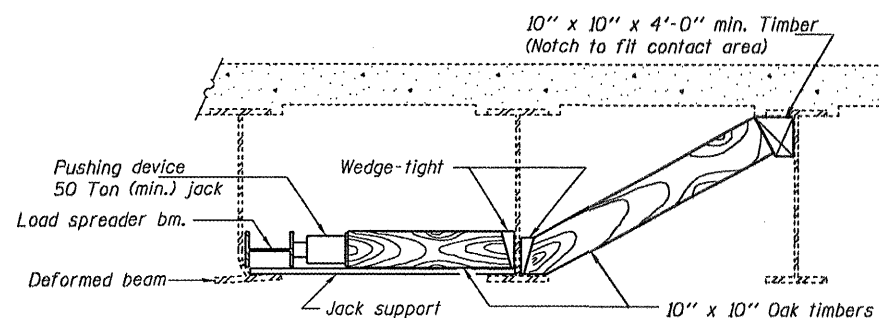
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct localized vertical flange deformations.)

\* Edge of plate shall line up with edge of deformation.

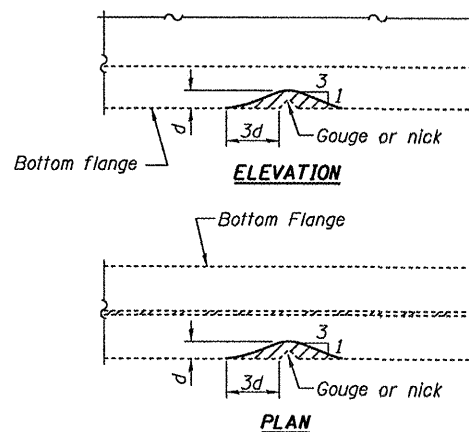
Note:  
Braces and jack assembly shall be placed on same side of web.  
Bent bottom flange shall be straightened before starting any horizontal straightening operations.



**SECTION A-A**



**SECTION B-B**



**GRINDING DETAIL**

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any beam straightening operations. Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Ground surfaces shall be spot cleaned and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Cost of grinding, testing and spot painting included with Beam Straightening.

**TABLE OF DIMENSIONS**

| BEAM #   | Y      | X      | L     |
|----------|--------|--------|-------|
| Beam 1   | 3/8"   | 0"     | 1'-0" |
| Beam 1   | 3/8"   | 0"     | 2'-0" |
| Beam 2   | 1/2"   | 0"     | 1'-0" |
| Beam 3   | 5/8"   | 0"     | 2'-0" |
| Beam 4   | 1/2"   | 0"     | 2'-0" |
| Beam 4   | 1/2"   | 0"     | 1'-0" |
| Beam 5   | 1 1/4" | 0"     | 4'-0" |
| Beam 7   | 1"     | 0"     | 3'-0" |
| Beam 9   | 1 1/2" | 0"     | 2'-0" |
| Beam 10  | 1 3/8" | 1/4"   | 3'-0" |
| Beam 11  | 1"     | 0"     | 2'-0" |
| Beam 12  | 3/4"   | 9/16"  | 4'-0" |
| Beam 12B | 1 1/4" | 1 1/8" | 5'-0" |



**EXISTING DEFORMATION TO BE STRAIGHTENED**

(Looking East)  
(Approximate max. deflections)  
Deflected length of beam to be straightened is approximately "L"  
(See Table for dimensions)

**BEAM STRAIGHTENING DETAILS**  
**WASHINGTON STREET OVER US 41**  
**SN 049-0016**

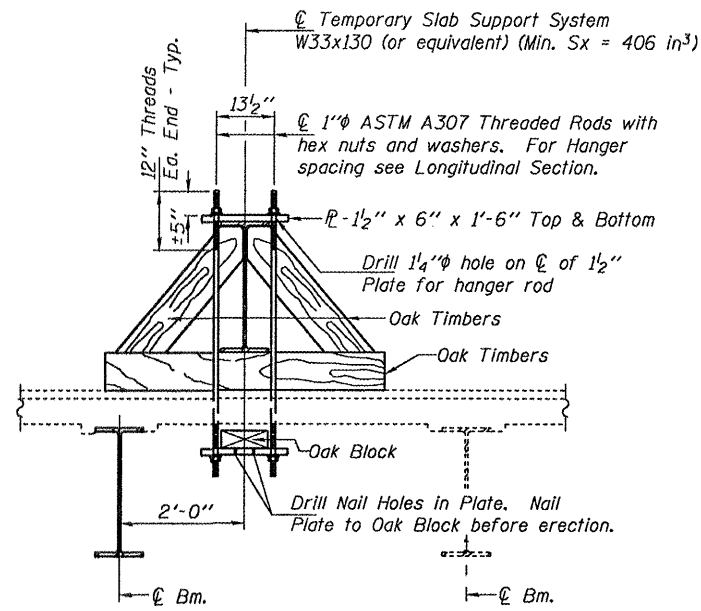
|          |                 |
|----------|-----------------|
| DESIGNED | VHV             |
| CHECKED  | AJB             |
| DRAWN    | Kyle M. Steffen |
| CHECKED  | VHV AJB         |

MAY 1, 2009  
EXAMINED *Carl Perry*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

REP-11-14-2005

|                     |                    |          |                  |              |           |
|---------------------|--------------------|----------|------------------|--------------|-----------|
| SHEET NO. 2         | F.A.U. RTE.        | SECTION  | COUNTY           | TOTAL SHEETS | SHEET NO. |
|                     | 1223               | -        | LAKE             | 10           | 6         |
| 3 SHEETS            | CONTRACT NO. 60G34 |          |                  |              |           |
| FED. ROAD DIST. NO. |                    | ILLINOIS | FED. AID PROJECT |              |           |

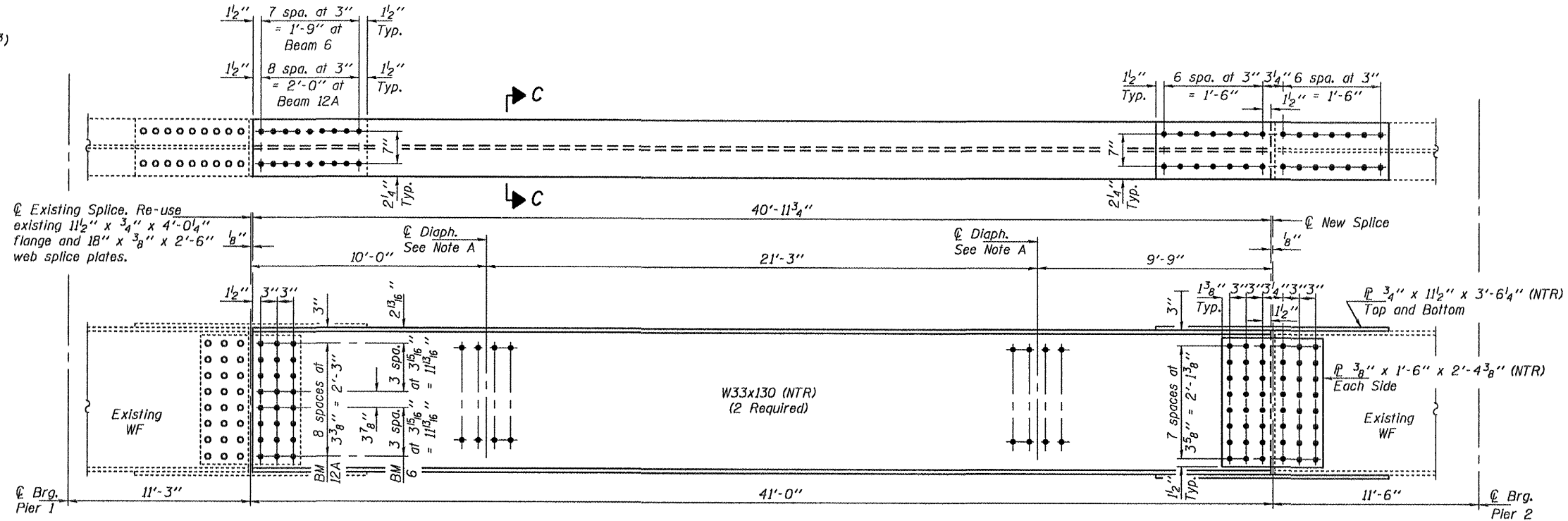
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SECTION A-A

\* These dimensions may vary for available beams in stock.

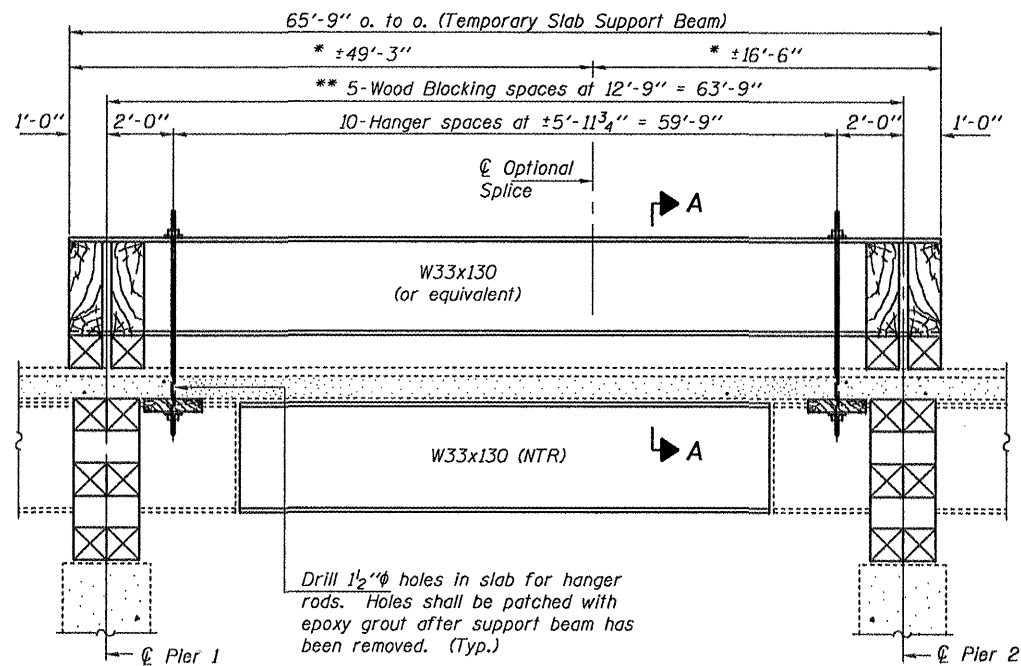
\*\* Wood Blocking to be placed after support beam is allowed to deflect under its own weight.



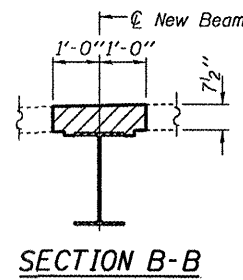
ELEVATION BEAMS 6 & 12A

Note A:  
Use holes in existing diaphragm connection angles as template for field drilling holes in new beam.

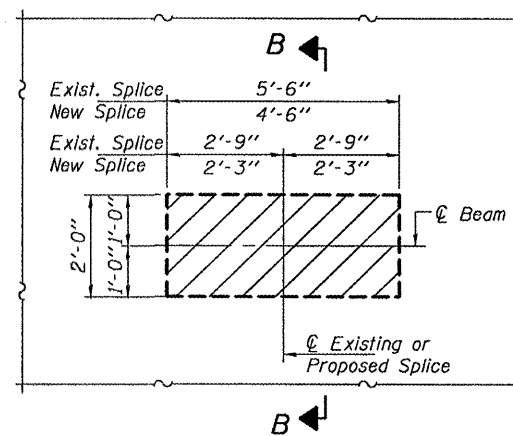
Note:  
Natural camber of new beam shall be placed upward for fabrication.



LONGITUDINAL SECTION  
SUGGESTED TEMPORARY SLAB SUPPORT SYSTEM

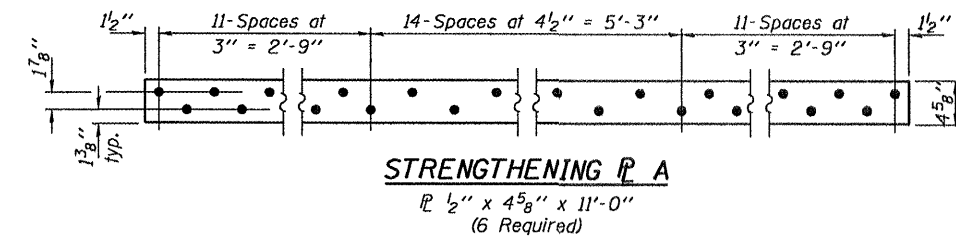


SECTION B-B

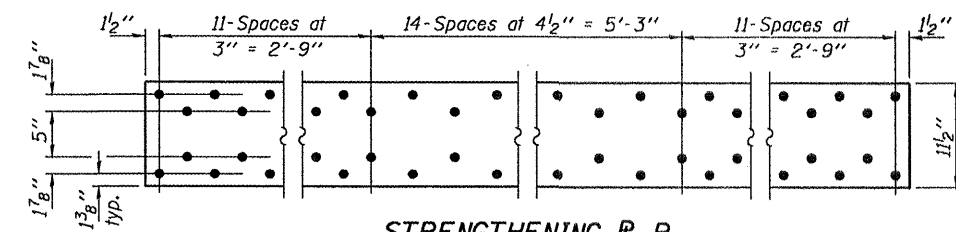


TYPICAL CONCRETE  
REMOVAL AND REPLACEMENT

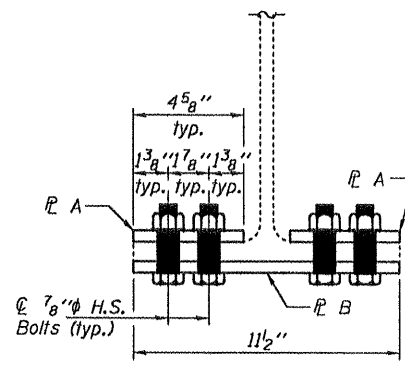
Hatched areas indicate concrete sections to be removed and replaced. Perimeters of concrete removal areas shall be saw cut 3/4" prior to the removal of concrete. Reinforcement shall be cut only if required for fitting bolts. Cut reinforcement shall be spliced as directed by the Engineer. Cost shall be included with Concrete Removal.



STRENGTHENING P A  
P 1/2" x 4 5/8" x 11'-0"  
(6 Required)

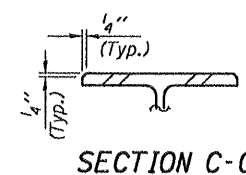


STRENGTHENING P B  
P 1/2" x 11 1/2" x 11'-0"  
(3 Required)



STRENGTHENING DETAIL  
BEAMS 10, 12, & 12B

Note:  
Field drill holes in existing flange using holes in P's as template.



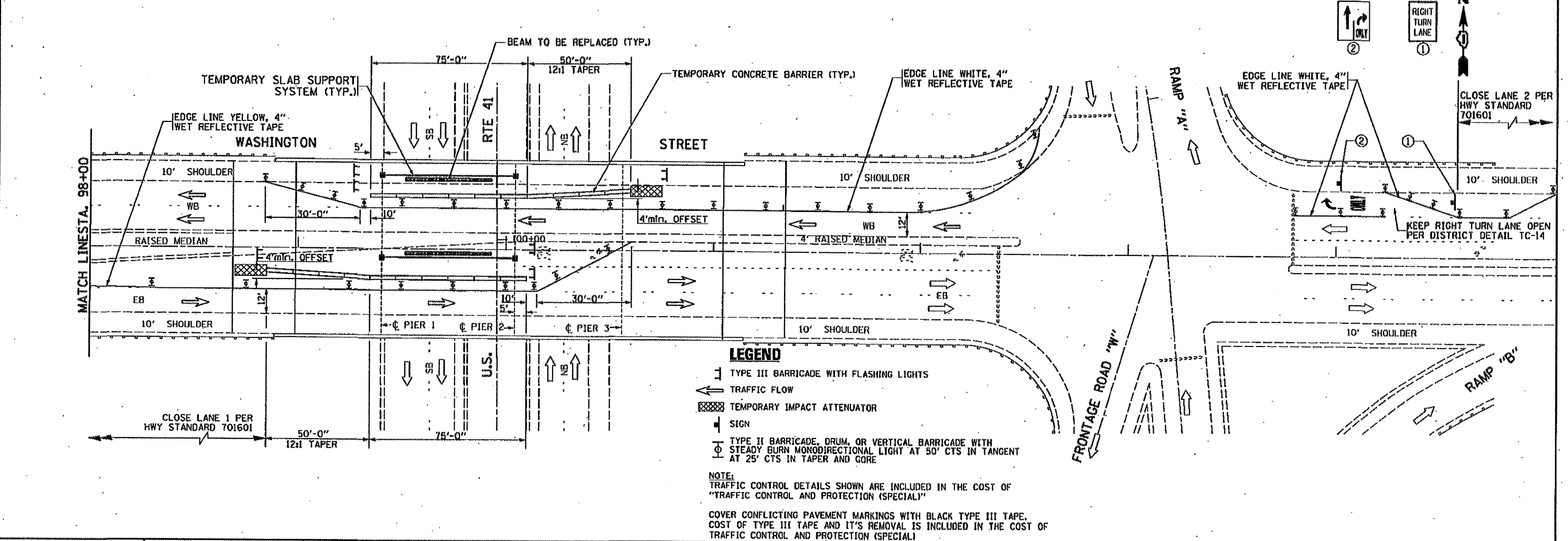
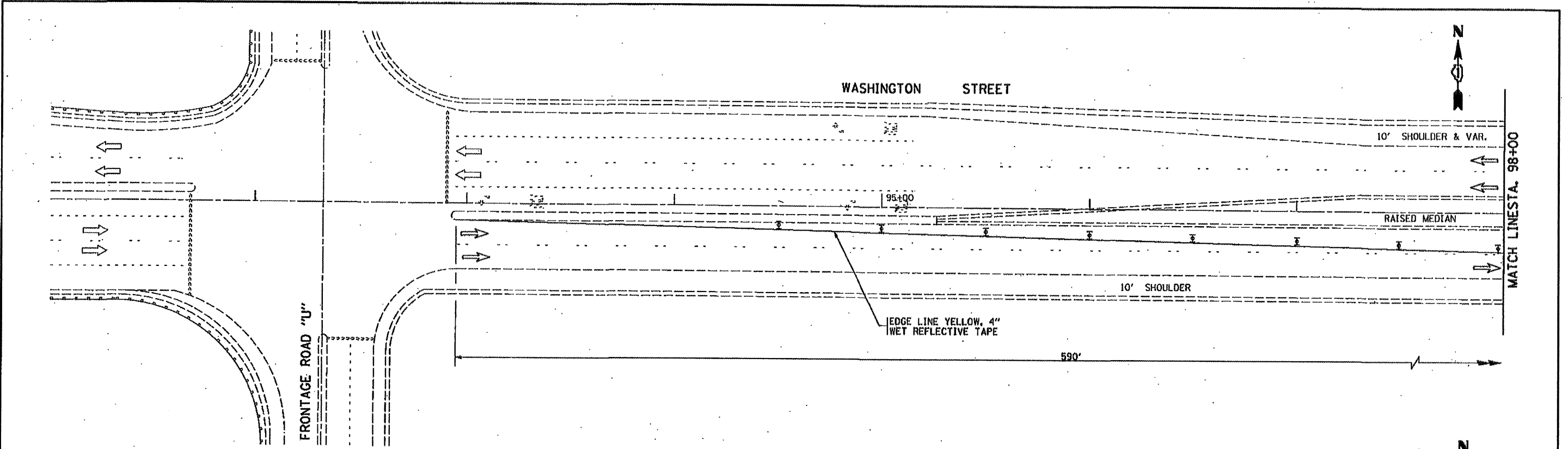
SECTION C-C

REPAIR DETAILS  
WASHINGTON STREET OVER US 41  
SN 049-0016

|          |                 |
|----------|-----------------|
| DESIGNED | VHV             |
| CHECKED  | AJB             |
| DRAWN    | Kyle M. Steffen |
| CHECKED  | VHV             |

MAY 1, 2009  
EXAMINED  
PASSED

|             |                              |           |                                     |                 |             |
|-------------|------------------------------|-----------|-------------------------------------|-----------------|-------------|
| SHEET NO. 3 | F.A.U. RTE. 1223             | SECTION - | COUNTY LAKE                         | TOTAL SHEETS 10 | SHEET NO. 7 |
| 3 SHEETS    | FED. ROAD DIST. NO. ILLINOIS |           | FED. AID PROJECT CONTRACT NO. 60G34 |                 |             |



- LEGEND**
- ▬ TYPE III BARRICADE WITH FLASHING LIGHTS
  - TRAFFIC FLOW
  - ▨ TEMPORARY IMPACT ATTENUATOR
  - SIGN
  - ⊙ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT AT 50' CTS IN TANGENT AT 25' CTS IN TAPER AND GORE

**NOTE:**  
 TRAFFIC CONTROL DETAILS SHOWN ARE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)"  
 COVER CONFLICTING PAVEMENT MARKINGS WITH BLACK TYPE III TAPE. COST OF TYPE III TAPE AND IT'S REMOVAL IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL)

|  |            |
|--|------------|
| FILE NAME  | USER NAME  |
| o:\pwork\p\dot\h\mendeh\46139211\013799-shr-plan.dgn | hondanah   |
| PLOT SCALE   | PLOT DATE  |
| = 1/8" = 1' IN.                                      | = 8/6/2009 |

|          |         |
|----------|---------|
| DESIGNED | REVISED |
| DRAWN    | REVISED |
| CHECKED  | REVISED |
| DATE     | REVISED |

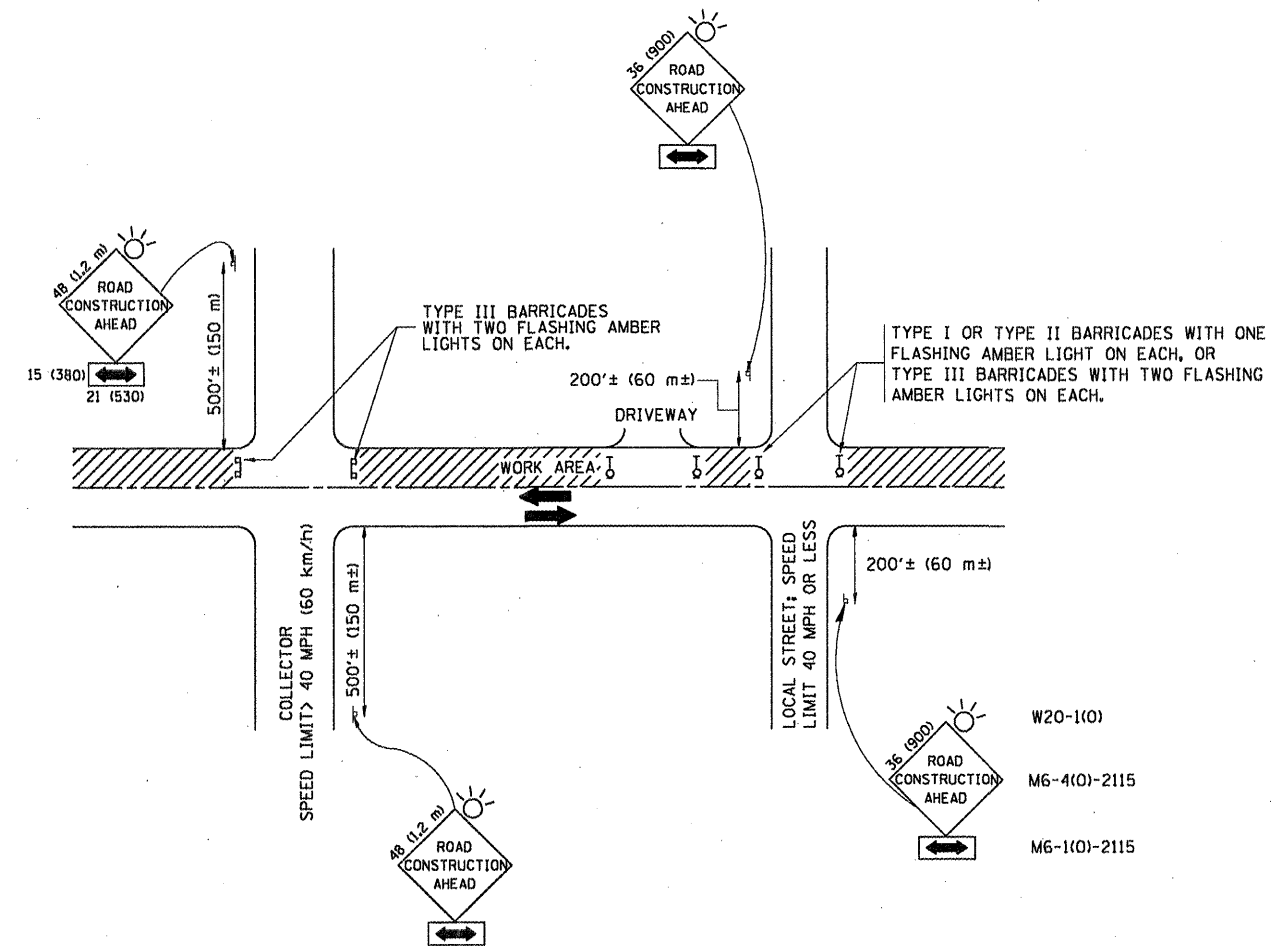
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WASHINGTON STREET OVER U.S. 41  
 TRAFFIC CONTROL PLAN  
 S.N. 049-0016**

SCALE: SHEET NO. OF SHEETS STA. TO STA.

|                    |            |        |                           |           |
|--------------------|------------|--------|---------------------------|-----------|
| F.A.U. RTE.        | SECTION    | COUNTY | TOTAL SHEETS              | SHEET NO. |
| 1223               | 10 HB-BR-1 | LAKE   | 10                        | 8         |
| CONTRACT NO. 60G34 |            |        | ILLINOIS FED. AID PROJECT |           |





**TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

**NOTES:**

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS**
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
    - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
  - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
    - ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
    - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
  - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:**
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.**
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.**

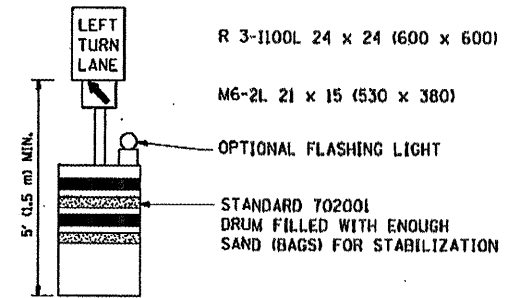
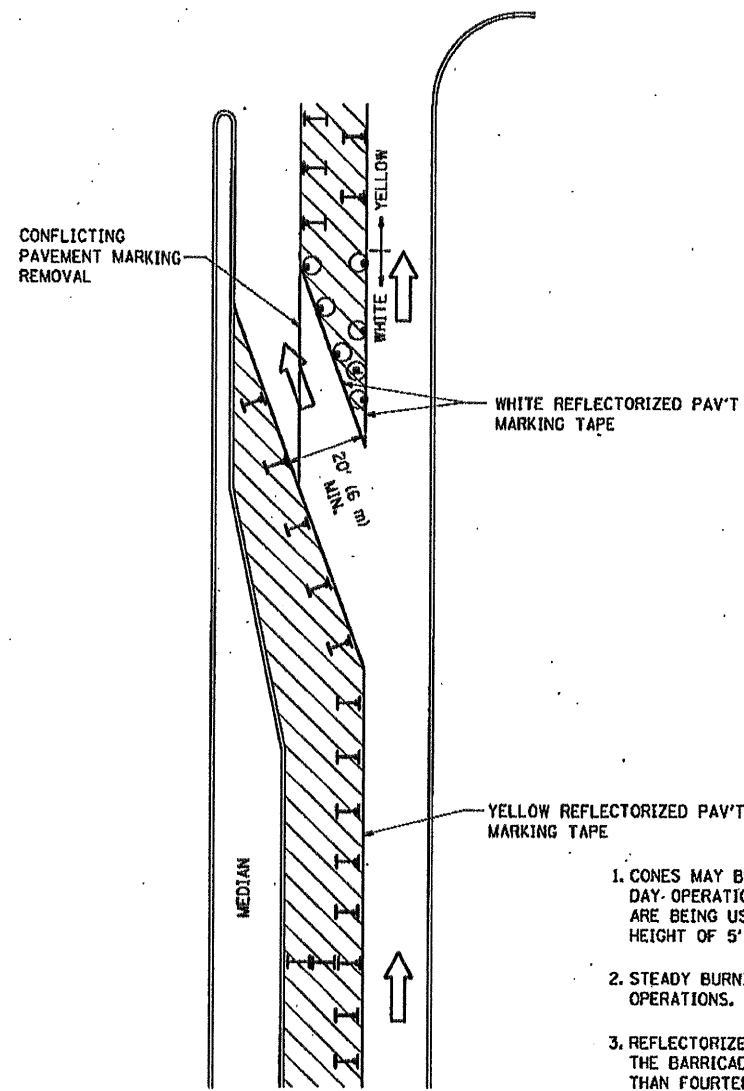
All dimensions are in millimeters (inches) unless otherwise shown.

|   |                      |                                 |                              |
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| es:\pwwork\pwwork\hamdenah\08135211\01.st | td.dgn               | DRAWN -                         | REVISED - A. HOUSEH 03-06-96 |
| PLOT SCALE = 1/8" = 1'-0"                 | CHECKED -            | DATE - 06-89                    | REVISED - A. HOUSEH 10-15-96 |
| PLOT DATE = 4/14/2009                     | DATE -               | REVISED - T. RAMMACHER 01-06-00 |                              |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

|  |                         |                        |                       |                    |                       |                   |
|--|-------------------------|------------------------|-----------------------|--------------------|-----------------------|-------------------|
| TRAFFIC CONTROL AND PROTECTION FOR<br>SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS |                         | F.A.U.<br>RTE.<br>1223 | SECTION<br>10 HB-BR-1 | COUNTY<br>LAKE     | TOTAL<br>SHEETS<br>10 | SHEET<br>NO.<br>9 |
| SCALE: NONE  | SHEET NO. 1 OF 1 SHEETS | STA.                   | TO STA.               | CONTRACT NO. 60G34 |                       |                   |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT                                |                         |                        |                       |                    |                       |                   |











**GENERAL NOTES**

1. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT. WHEN CONES ARE BEING USED, THE "LEFT TURN LANE" SIGN MAY BE SKID MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).
2. STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
3. REFLECTORIZED TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH TURN BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.
4. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
5. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
6. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
7. FORM BT 725 IS REQUIRED.
8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

**LEGEND**

-  WORK AREA
-  LANE OPEN TO TRAFFIC
-  TYPE I OR II BARRICADE WITH STEADY BURN LIGHT
-  DRUM WITH STEADY BURN LIGHT
-  DRUM WITH SIGN (WITH OPTIONAL FLASHING LIGHT) SEE DETAIL
-  TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

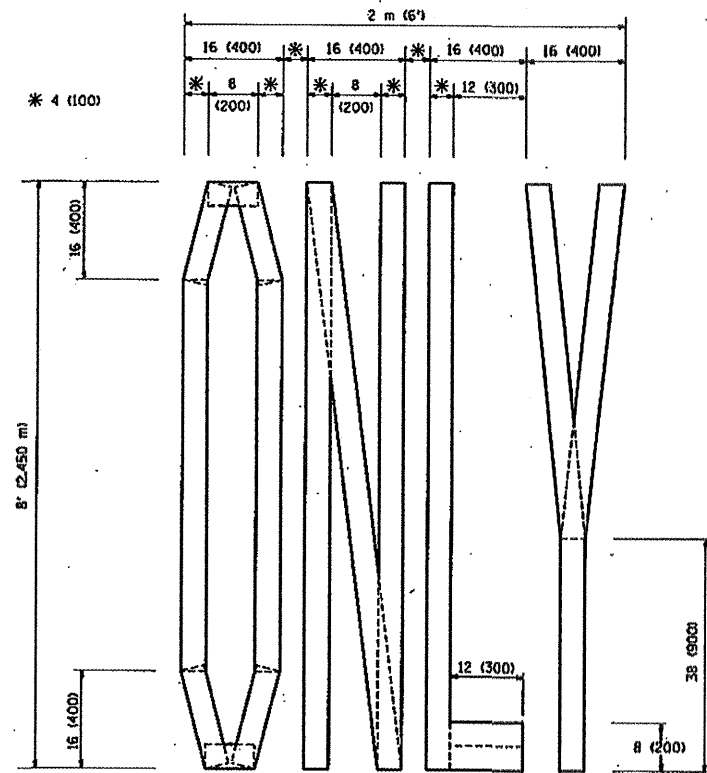
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| FILE NAME =                                    | USER NAME = hmdoggh | DESIGNED - | REVISED -T. RAMMACHER 09-08-94 |
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|  |                     | CHECKED -  | REVISED - A. HOUSEH 10-12-96   |
|  |                     | DATE -     | REVISED -T. RAMMACHER 01-06-00 |
|  |                     |            |                                |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

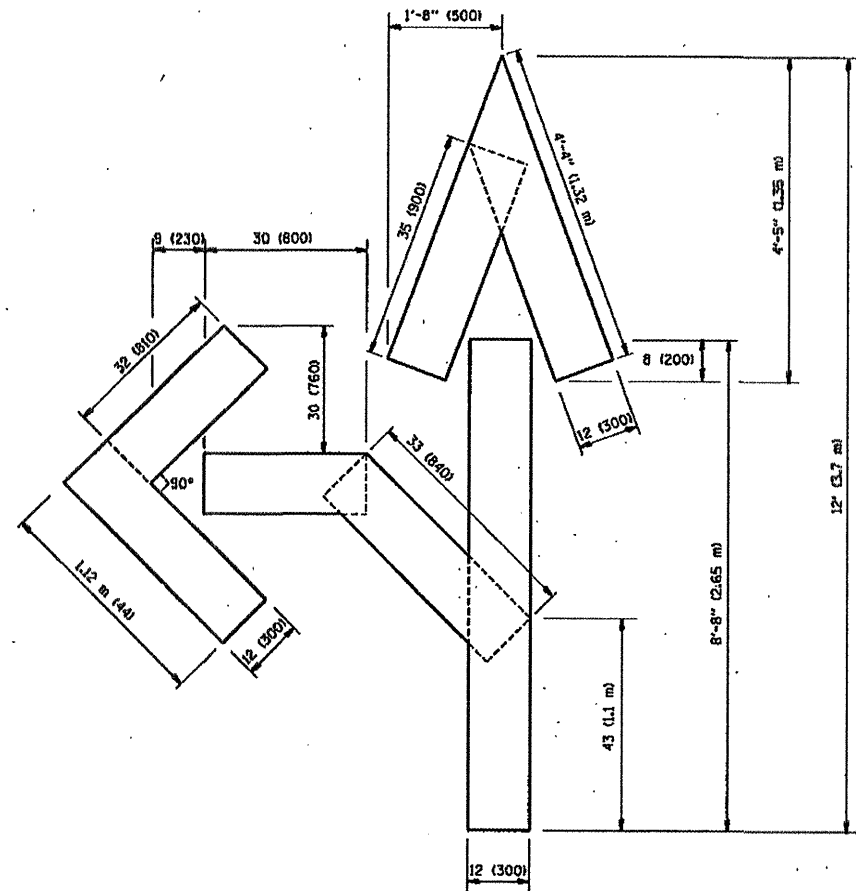
**TRAFFIC CONTROL AND PROTECTION AT TURN BAYS  
(TO REMAIN OPEN TO TRAFFIC)**

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

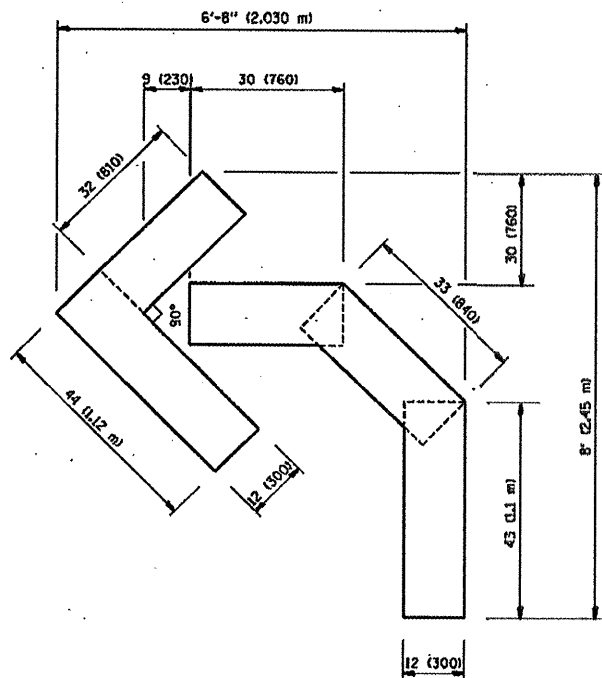
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| F.A.U. RTE.                                     | SECTION    | COUNTY | TOTAL SHEETS       | SHEET NO. |
| 1223  | 10 HB-BR-1 | LAKE   | 10                 | 10A       |
| TC-14   |            |        | CONTRACT NO. 60G34 |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |            |        |                    |           |



QUANTITY  
 4 (100) LINE = 64.1 ft. (19.7 m)  
 21.1 sq. ft. (1.97 sq. m)



QUANTITY  
 4 (100) LINE = 82.5 ft. (25.3 m)  
 27.5 sq. ft. (2.53 sq. m)



QUANTITY  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.39 sq. m)

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

|  |                      |                 |                                |
|--|----------------------|-----------------|--------------------------------|
| FILE NAME =                                | USER NAME = fandanah | DESIGNED -      | REVISED -Y. RAMMACHER 06-05-96 |
| o:\pwr\work\purdot\handanah\d813821\03.dgn |                      | DRAWN -         | REVISED -Y. RAMMACHER 11-04-97 |
|  |                      | CHECKED -       | REVISED -T. RAMMACHER 03-02-98 |
|  |                      | DATE - 09-18-94 | REVISED -E. GOMEZ 08-28-00     |

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS  
 FOR TRAFFIC STAGING

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

|   |            |                    |              |           |
|---|------------|--------------------|--------------|-----------|
| F.A.J. RTE.                                     | SECTION    | COUNTY             | TOTAL SHEETS | SHEET NO. |
| 1223  | 10 HB-BR-1 | LAKE               | 10           | 10B       |
| TC-16   |            | CONTRACT NO. 60G34 |              |           |
| FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT |            |                    |              |           |