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- 15. STANDARDS AND DETAILS

10.2

INLET SPECIAL

13.2

FRAME AND GRATE FOR INLET SPECIAL

STANDARDS

B.L.R. 22-5

TYPICAL APPLICATION OF TRAFFIC

CONTROL DEVICES FOR CONSTRUCTION

ON RURAL LOCAL HIGHWAYS MANHOLE, TYPE A

602401-01 604001-02

FRAME AND LID

701901 780001-01

TRAFFIC CONTROL DEVICES TYPICAL PAVEMENT MARKINGS

720011

METAL POSTS FOR SIGNS, MARKERS & DELINEATORS

TELEPHONE:

(815) 394-7276

2404 8th AVENUE

ATT STEVE STULL

728001

TELESCOPING STEEL SIGN SUPPORT

729001

APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

UTILITY CONTACTS

GAS: NICOR CONSTANCE LANE UTILITY CONSULTANT 1844 FERRY ROAD NAPERVILLE, ILLINOIS 60563-9600 PHONE:(630) 388-3830

FAX: (630) 983-4028 **ELECTRIC:** COMED MIKE LENOX 123 ENERGY AVENUE

ROCKFORD, ILLINIOS 61109

(815) 490-2869 CABLE TV: COMCAST MICHAEL OWENS 4450 KISHWAUKEE STREET

ROCKFORD, ILLINOIS 61109

CITY OF ROCKFORD MARCY LEACH 425 E. STATE STREET **ROCKFORD, ILLINOIS 61104** (815) 967-6740

ROCKFORD, ILLINOIS 61108

ROCK RIVER WATER RECLAMATION DISTRICT MICHAEL OLSON, P.E.

IMPROVEMENT BEGINS

STATION 12+36.00

3333 KISHWAUKEE STREET

P.O. BOX 7480

ROCKFORD, ILLINOIS 61126-7480

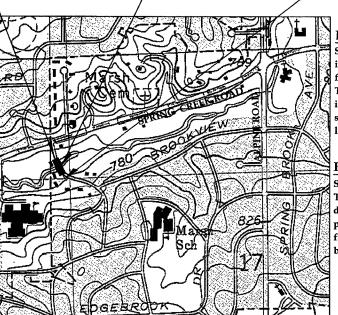
(815) 387-7660

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS**

PLANS FOR PROPOSED **TOWNSHIP BRIDGE PROGRAM BROOKVIEW ROAD BRIDGE** FEDERAL-AID BRRP PROJECT

TR 683 (BROOKVIEW ROAD) **SECTION 04-09116-00-BR PROJECT NO BROS - 201 (25)** ROCKFORD ROAD DISTRICT WINNEBAGO COUNTY **JOB NO. C - 92 - 063 - 08**

> IMPROVEMENT ENDS PROJECT LOCATION STATION 14+02.00



LOCATION PLAN PROJECT LENGTH: 166.0 FT (0.031 MI.)

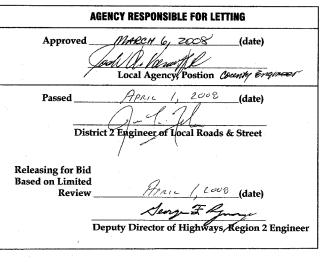
EXISTING STRUCTURE:

S.N. 101-3061; Built in 1950; three span bridge that is 46 ft long with steel beam spans varying from 13.1 ft to 14.6 ft long with two 12-inch thick concrete piers. The reinforced concrete deck with bituminous overlay is 24.2 feet wide with sub-standard steel railings. The steel beams are supported at the structure limits by limestone abutments with concrete caps.

PROPOSED IMPROVEMENT:

The proposed structure is a two span precast prestressed concrete deck beam (11") bridge on closed pile bent abutments. The proposed cross section is 30' - 4" out-to-out of deck and face-toface of bridge rail. The proposed total lenght is 50' - 7 " back-to-back of abutments.

LOCATION OF SECTION INDICATED THUS: -



PLAN & PROFILE SCALES 1" = 20' HORIZ.1" = 5' VER. CROSS SECTION SCALES 1" = 5' HORIZ. 1" = 5' VER.



7282 Argus Drive (815) 398-2332

ALI A. GHARAMTI , P.E., S.E. DATE

IL REGISTRATION #062-046049

EXPIRATION DATE 11/30/09

Rockford, Illinois 61107-5837 FAX (815) 398-2496 Design Firm License: Illinois 184-000816
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J.U.L.I.E. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION

CONTRACT NO. 85431

1-800-892-0123

BROOKVIEW ROAD FUNCTIONAL CLASSIFICATION: URBAN TWO-LANE LOCAL ROAD ADT = 550 (2004): 1% TRUCKS

SUMMARY OF QUANTITIES CONSTRUCTION TYPE CODE: X080 - 2A

| COD | DED PAY ITEM NO. | ITEM DESCRIPTION | UNIT | QUANTITY |
|-----|-------------------------|---|--------|----------|
| | 20100110 | TREE REMOVAL (6 - 15 UNITS DIAMETER) | UNIT | 48 |
| | 20100210 | TREE REMOVAL (OVER 15 UNITS DIAMETER) | UNIT | 102 |
| | 20200100 | EARTH EXCAVATION | CU YD | 710 |
| | 20700220 | POROUS GRANULAR EMBANKMENT | CU YD | 71 |
| | 20800150 | TRENCH BACKFILL | CU YD | 15 |
| | 21101615 | TOPSOIL FURNISH AND PLACE, 4" | SQ YD | 450 |
| | 25000400 | NITROGEN FERTILIZER NUTRIENT | POUND | 9 |
| | 25000500 | PHOSPHORUS FERTILIZER NUTRIENT | POUND | 9 |
| | 25000600 | POTASSIUM FERTILIZER NUTRIENT | POUND | 9 |
| | 25200100 | SODDING | SQ YD | 450 |
| | 25200200 | SUPPLEMENTAL WATERING | UNIT | 21 |
| | 28100109 | STONE RIPRAP, CLASS A5 | SQ YD | 315 |
| | 28200200 | FILTER FABRIC | SQ YD | 520 |
| | 28400100 | GABIONS | CU YD | 125 |
| | 35102000 | AGGREGATE BASE COURSE, TYPE B, 8" | SQ YD | 70 |
| | 35102600 | AGGREGATE BASE COURSE, TYPE B, 14" | SQ YD | 375 |
| | 40600100 | BITUMINOUS MATERIALS (PRIME COAT) | GAL. | 150 |
| | 40603310 | HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 | TON | 93 |
| | 40800050 | INCIDENTAL HOT-MIX ASPHALT SURFACING | TON | 10 |
| | 44000100 | PAVEMENT REMOVAL | SQ YD | . 366 |
| * | 44213200 | SAWCUT | FOOT. | 90 |
| | 50100100 | REMOVAL OF EXISTING STRUCTURE | EACH | 1 |
| | 50200100 | STRUCTURE EXCAVATION | CU YD | 210 |
| | 50300225 | CONCRETE STRUCTURES | CU YD | 74 |
| | 50300280 | CONCRETE ENCASEMENT | CU YD | 4.4 |
| | 50400205 | PRECAST PRESTRESSED CONCRETE DECK BEAMS (11" DEPTH) | SQ FT | 1484 |
| | 50800105 | REINFORCEMENT BARS | POUND | 8131 |
| | 50901 05<i>0</i> | STEEL RAILING, TYPE SM | FOOT | 98 |
| | 51201005 | FURNISHING METAL SHELL PILES, 12" | FOOT | 523 |
| | 51202305 | DRIVING PILES | FOOT | 523 |
| | 51203200 | TEST PILE METAL SHELLS | EACH | 2 |
| | 51500100 | NAME PLATES | EACH | 1 |
| | 550A0050 | STORM SEWER, CLASS A, TYPE 1, 12" | FOOT | 28 |
| | 550A0070 | STORM SEWER, CLASS A, TYPE 1, 15" | FOOT | 15 |
| | 58100200 | WATERPROOFING MEMBRANE SYSTEM | SQ YD. | 165 |
| | 58300100 | PORTLAND CEMENT MORTAR FAIRING COURSE | FOOT | 294 |
| * | 60240100 | INLETS, TYPE A, SPECIAL W/SPECIAL FRAME & GRATE | EACH | 1 |
| * | 60242400 | INLETS, SPECIAL | EACH | 2 |
| | 60500060 | REMOVING INLETS | EACH | 2 |
| * | 60610100 | COMBINATION CONC CURB & GUTTER, TYPE M-6.18(MOD.) | FOOT | 230 |
| | 67100100 | MOBILIZATION | L.S. | 1 |
| * | 70101700 | TRAFFIC CONTROL AND PROTECTION | L.S. | 1 |
| Δ | 78001110 | PAINT PAVEMENT MARKING - LINE 4" | FOOT | 142 |
| * | 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 4 |
| * | XX003952 | TEMPORARY EROSION CONTROL COMPLETE | L.S. | 1 . |
| * | X5510100 | STORM SEWER REMOVAL | FOOT | 59 |
| * | Z0013798 | CONSTRUCTION LAYOUT | L.S. | - 1 |
| | | | | |

* See special provisions Δ specialty Items

GENERAL NOTES

- 1. The contractor shall be required to topsoil and sod all areas disturbed by all construction activities, to the satisfaction of the engineer. This work shall be performed according to the applicable portions of sections 211 and 252 of the Standard specifications. The final top four inches of soil in any area disturbed by the contractor must be a cohesive soil capable of supporting vegetation. All material and labor required to complete this work shall be paid for at the Contract Unit Price for the appropriate item.
- 2. Clearing of existing saplings, brush, etc. required in order to construct abutments, piers, gabions and riprap slopes, shall be performed in accordance with section 201 of the standard specifications and shall not be paid for separately, but shall be included with the cost of Earth Excavation. Removal of trees as shown on the plans shall be paid for at the Contract Unit Price for Tree Removal of the size specified. Contractor shall coordinate all tree removal activities with the Engineer prior to starting construction. Refer to Tree Removal note on plan and profile sheet.
- 3. The Contractor shall carefully protect and be responsible for all trees and shrubs directly adjacent to the construction limits. Other private property shall be similarly protected. Contractor shall remove and replace the existing mailbox near the southwest corner of the existing structure. Contractor shall provide a temporary mailbox if the relocated box will be removed for any period of time greater than one (1) day. This work will not be paid for separately but should be included in the Cost of Earth Excavation.
- 4. The work included on these plans shall reference the Standard Specifications for Road and Bridge Construction adopted January 1, 2007 and the latest Supplemental Specifications and Recurring Special Provisions.
- 5. All debris resulting from construction operations shall be properly disposed of off-site. Removal and disposal of unsalvageable material shall conform to the requirements of section 202.03. The existing bridge railing, approach railing and signs shall be removed in accordance with the plans and specifications. The Contractor shall store signs and reinstall as directed by the Engineer. This work shall be included in the cost of Structure Removal with no additional compensation.
- 6. A nationwide 404 permit has been issued for this project, and the conditions of the permit must be adhered to. See special provisions.
- 7. Backfill shall be placed behind the abutments in accordance with article 502.10 of the standard specifications. The abutment backfill material shall be in accordance with section 207 and shall be measured and paid for at the Contract Unit Price for Porous Granular Embankment.
- 8. All exposed concrete edges shall have a 1" chamfer, unless noted otherwise. Chamfer on the vertical edges shall be continued a minimum of one foot below finished ground level. Exposed concrete shall be given a normal finish which shall be included with the cost per cubic yard for Concrete Structures.
- 9. The locations of existing water main, gas main, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on the best information available, but they are not guaranteed. All utility locations shown are supplied by the utility companies. It is the contractor's responsibility to ascertain their exact location from the utility companies, and by field inspection. It shall be the responsibility of the Contractor to protect all existing utilities.
- 10. Final gabions locations may be varied in the field to suit ground conditions or as directed by the Engineer.
- 11. Excavation required for the construction of the gabion walls, sediment removal at structure limits, and riprap placement will not be paid for separately, but shall be included in the Contract Unit Price for Earth Excavation. Also, pavement removal and excavation of the existing residential drives as shown on the plans shall not be paid for separately but shall be included with Earth Excavation.
- 12. Contractor shall provide positive drainage at all times within the construction area.
- 13. Erosion control features as needed shall be incorporated into the construction at the earliest possible time to limit erosion and stream pollution and shall be maintained until acceptance of the project. This work shall be included in the Contract Unit Price for Temporary Erosion Control Complete.
- 14. The Contractor shall notify the Engineer immediately if any discrepancies are encountered between the plans and specifications and the existing field conditions.
- 15. All materials, labor, and equipment required to furnish and install the PPC deck beams including the cost of furnishing and installing the dowels, bearing pads and associated items, as shown on the plans shall be included in the Contract Unit Price of Precast, Prestressed Concrete Deck Beams (11" depth).
- 16. The Contractor shall carefully preserve all existing property markers until referenced by a Licensed Professional Land Surveyor. Property markers damaged by the Contractor shall be replaced at the expense of the Contractor at no additional expense to the Contract.
- 17. The existing roadway pavement to be removed consists of approximately 2 inches of asphalt thickness overlaying 11 inches of concrete with integral curbing. The removal of these items will not be paid for separately but shall be measured by the square yard and paid for at the Contract Unit Price for Pavement Removal.

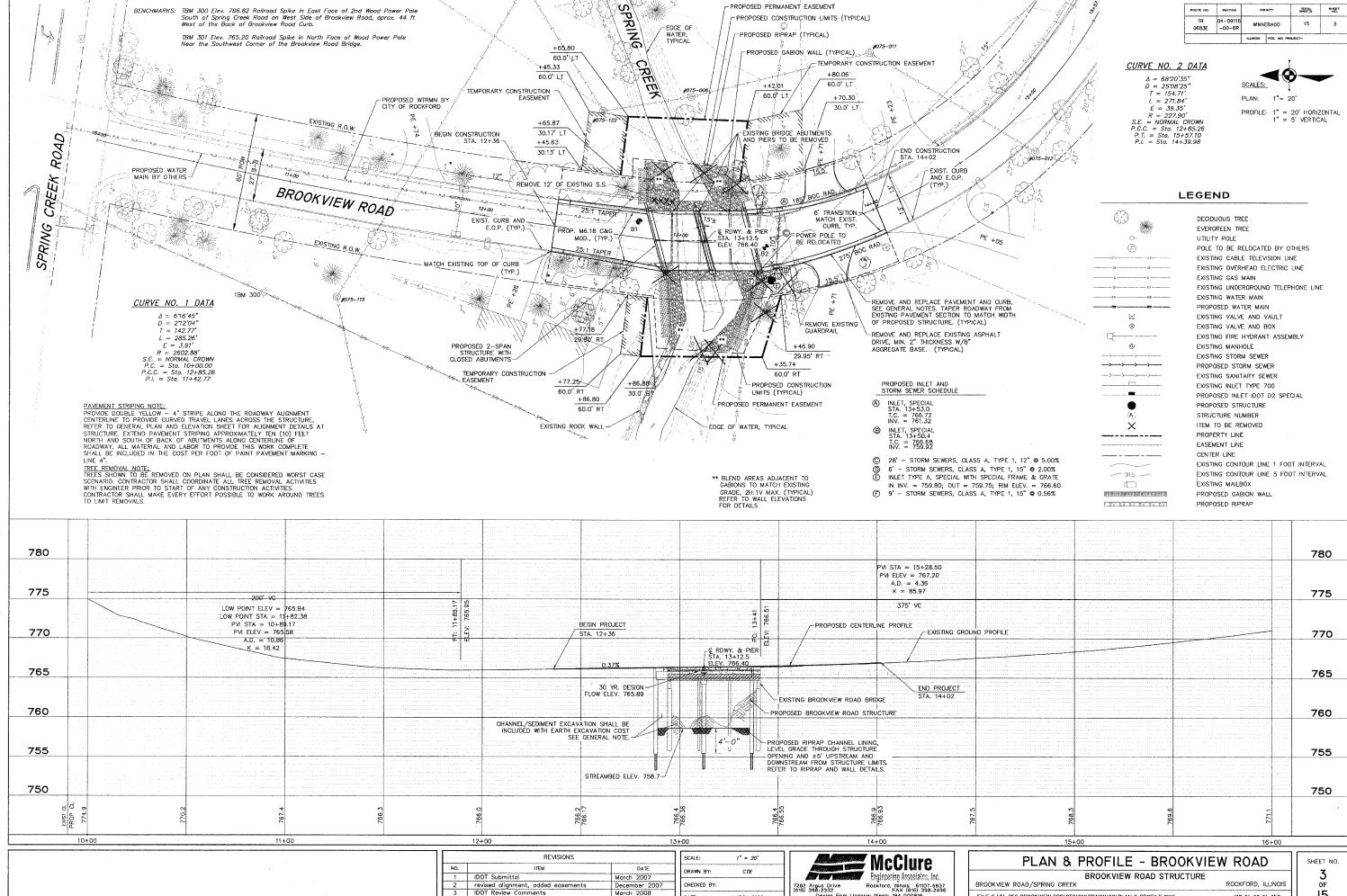
| Combination Concrete Curb and Gutter Type M—6.18 (Modified)— | | | | | |
|---|--|-----|---------------------------|-----|---------------------------|
| | 30' | Ψ. | | 30' | |
| | 2.0' Varies 11.5' SII 1.0' (Typ.) te Base Course, be B, 14" Depth | PGL | Hot-Mix As Mix "C", NS | 2% | dax. (Typ.) total depth) |

| Mixture Uses(s): | Surface |
|--|----------------|
| PG: | PG 58-22 |
| Design Air Voids | 3.0 @ N50 |
| Mixture Composition (Gradation Mixture) | IL 9.5 or 12.5 |
| Friction Aggregate | С |
| 20 Year ESAL | 0.02 |
| Mix Unit Weight | 112 lbs/sy/in |

SUMMARY OF QUANTITIES, GENERAL NOTES, TYPICAL SECTION

BROOKVIEW ROAD BRIDGE
OVER SPRING CREEK
ROCKFORD ROAD DISTRICT
WINNEBAGO COUNTY
SECTION 04-09116-00-BR
STATION 13+12
STRUCTURE NO. 101-3096





MARCH 2006

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ROCKFORD, ILLINOIS FILE: G:\04-059 BROOKVIEW SPC\DESIGN\DRAWINGS\PLAN & PROFILE.DWG JOB: 04-30-04-059

15

RENCHMARKS.

B.M.- No. 300, Railroad Spike in East Face of 2nd Wood Power Pole South of Spring Creek Road on West Side of Brookview Road, appox. 44ft West of Back of Curb

B.M.- No. 301, Railroad Spike in North Face of Wood Power Pole Near the Southwest Corner of

EXISTING STRUCTURE: S.N. 101-3061; Built in 1950, three span bridge that is 46 ft. long with steel beam spans varying from 13.1 ft. to 14.6 ft. long with two 12 inch thick concrete piers. The reinforced concrete deck with bituminous overlay is 24.2 ft. wide with sub-standard steel railings. The steel beams are supported at the structure limits by limestone abutments with concrete caps, Structure will be closed for demolition and construction.

Salvage- None

-10.49%



BRIDGE SHEET

GENERAL NOTES

- 1. The Contractor shall drive 2 test piles, as specified, in permanent locations as directed by the Engineer before ordering the remaining piles. The test piles shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.
- 2. The Metal Shell piles shall be according to ASTM A 252 Grade 3.
- 3. See Special Provisions for boring logs.
- 4. The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast, Prestressed Concrete Products. Corrosion Inhibitor, per Article 1020.05 (b)(12) of the Standard Specification, shall be used in the concrete for the precast, prestressed deck beams.

BILL OF MATERIAL - BRIDGE

| Item | Unit | Super | S | Sub. | | |
|---|---------|-------|-------|--------|-------|--|
| | U/III | Super | Piers | Abuts. | Total | |
| Removal of Existing Structures | Each | | | | 1 | |
| Hot-Mix Asphalt Surface Course, Mix "C", N50 | Ton | 28.4 | | , | 28.4 | |
| Waterproofing Membrane System | Sq. Yd. | 165 | | | 165 | |
| Concrete Structures | Cu. Yd. | | 21.4 | 52.6 | 74.0 | |
| Precast Prestressed Concrete Deck Beams (11'' Depth) | Sq. Ft. | 1484 | | | 1484 | |
| Steel Bridge Rail, Type SM | Foot | 98 | | - | 98 | |
| Reinforcement Bars | Pound | | 1679 | 6452 | 8131 | |
| Furnishing Metal Shell Piles - 12" | Foot | | 190 | 333 | 523 | |
| Driving Piles | Foot | | 190 | .3.3.3 | 523 | |
| Test Pile Metal Shells | Each | | 1 | 1 | 2 | |
| Name Plates | Each | 1 | | | 1 | |
| Concrete Encasement | Cu. Yd. | | 1.6 | 2.8 | 4.4 | |
| Portland Cement Mortar Fairing Course | Foot | 294 | | | 294 | |



INDEX OF SHEETS 1. GENERAL PLAN & ELEVATION P.P.C. DECK BEAM SUPERSTRUCTURE 3. P.P.C. DECK BEAM DETAILS 4. P.P.C. DECK BEAM PILE BENT ABUTMENTS 5. P.P.C. DECK BEAM PILE BENT PIER

LOCATION SKETCH

LVC = 375'

SCOPE OF WORK

Existing structure to be removed and replaced with a precast prestressed deck beam bridge supported by pile bent abutments and pier.

STA 766

Structure Limits

ROADWAY PROFILE GRADE

HIGHWAY CLASSIFICATION

Brockview Road ADT: 550 (2004) Functional Class: Local Road Design Speed: 20 mph

DESIGN SPECIFICATIONS

2002 A.A.S.H.T.O. Standard Specifications - 17th ed.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A Bedrock Acceleration Coefficient (A) = 03.25% Site Coefficient (S) = 1.5

PILE DATA (PIER)

Type & Size: Nominal Required Bearing: Allowable Resistance Available: 68 kips

Estimated Length:

Number Required:

Number Required:

Metal Shell - 12 in. dia. x 0.179 in. Walls

204 kips 38Feet

6 (Includes 1 Test Pile)

PILE DATA (2-ABUTS.)

Type & Size: Nominal Required Bearing: Allowable Resistance Available: 64 kips Estimated Lenath:

Metal Shell - 12 in. dia. x 0.179 in. Walls 192 kips

37Feet 10 (Includes 1 Test Pile located in South Abutment)

GENERAL NOTES

Soils information for final foundation design to be based on Geotechnical Engineering Report dated May 19, 2005 prepared by Terracon.

WATERWAY INFORMATION

| Orainage Area = 5.74 SQ.MI. Low Grade Elev. = 765.98 © Sta. 11+88 | | | | | | | | | |
|---|-------|--------|---------|---------|--------|--------|-------|--------|----------|
| lood | Freq. | Q | Opening | Sq. Ft. | Nat. | Head | - Ft. | Headwe | ater El. |
| | Yr. | C.F.S. | Exist. | Prop. | H.W.E. | Exist. | Prop. | Exist. | Prop. |
| Design | 30 | 1150 | 222.37 | 265.02 | 765.62 | 0.38 | 0.27 | 766,00 | 765.89 |
| Base | 100 | 1480 | 222.37 | 265.02 | 765.94 | 0.50 | 0.46 | 766.44 | 766.40 |
| Overtopping | 50 | 1268 | 222.37 | 265.02 | 765.73 | 0.44 | 0.34 | 766,17 | |
| | | | | | | | | | |

SPRING CREEK BUILT 2008 BY ROCKFORD ROAD DISTRICT WINNEBAGO COUNTY SEC. 04-09116-00-BR STATION 13+12 STR. NO. 101-3096 LOADING HS20-44

LETTERING FOR NAME PLATE

Locate Name Plate at Northwest Corner of Bridge (See Std. CN)

50' - 7" Back to Back Abutments

24'-0" c.-c. of piles

3'-6"

Sta. 13+12.31

Elev. 766.40'

— € Piles

Pier

0.70' Lt

-0.70

ELEVATION

50'-7" Back to Back Abutments

Roadway & Profile Grade Line

PLAN

Skew Angle 'D'= 15° Right Forward

(curve no. 2)

Sediment Excavation

Metal Shell Piles

11" Precast Prestressed

Existing Brookview Road

Vertical Solid Wall Abutment

Supported on Piles, typ.

Concrete Deck Beams

+0.37% Grade

Bridge

Bk. S. Abut.

0.70' Rt

- € Piles

Sta. 13+37.58

Elev. 766.50'

24'-0" c.-c. of piles

THE PROPERTY OF THE PARTY OF TH

L'Streambed Elev. 758.7

Bk. N. Abut.

Elev. 766.31

· @ Piles

Name Plate

0.70' Rt

Sta. 12+87.03

+0.37% Grade

0.70

30 Yr. Design

Flow Elev. 765.89

+4.70%

CURVE NO. 2

 $\Delta = 68^{\circ} 20' 35''$

D = 25° 08' 25'

R = 227.90'T = 154.71' L = 271.84'

39,35

P.I. STA. = 14+39.98

S.E. RUN = Normal Crown

P.C.C. STA = 12+85.26

P.T. STA = 15+57.10

-Steel Railing, Type SM

4'-0" min.



"I certify that to the best of my knowledge, info These up that in the oest of my knowledge, morrantion, and cellef, this bridge is designed and structurally adequate for the design loading shown the plans, the design is an economical one for the style of attructure and complies with the requirements of the current AAS.H.T.O. standard resulting the production of the current AAS.H.T.O. standard

GENERAL PLAN & ELEVATION

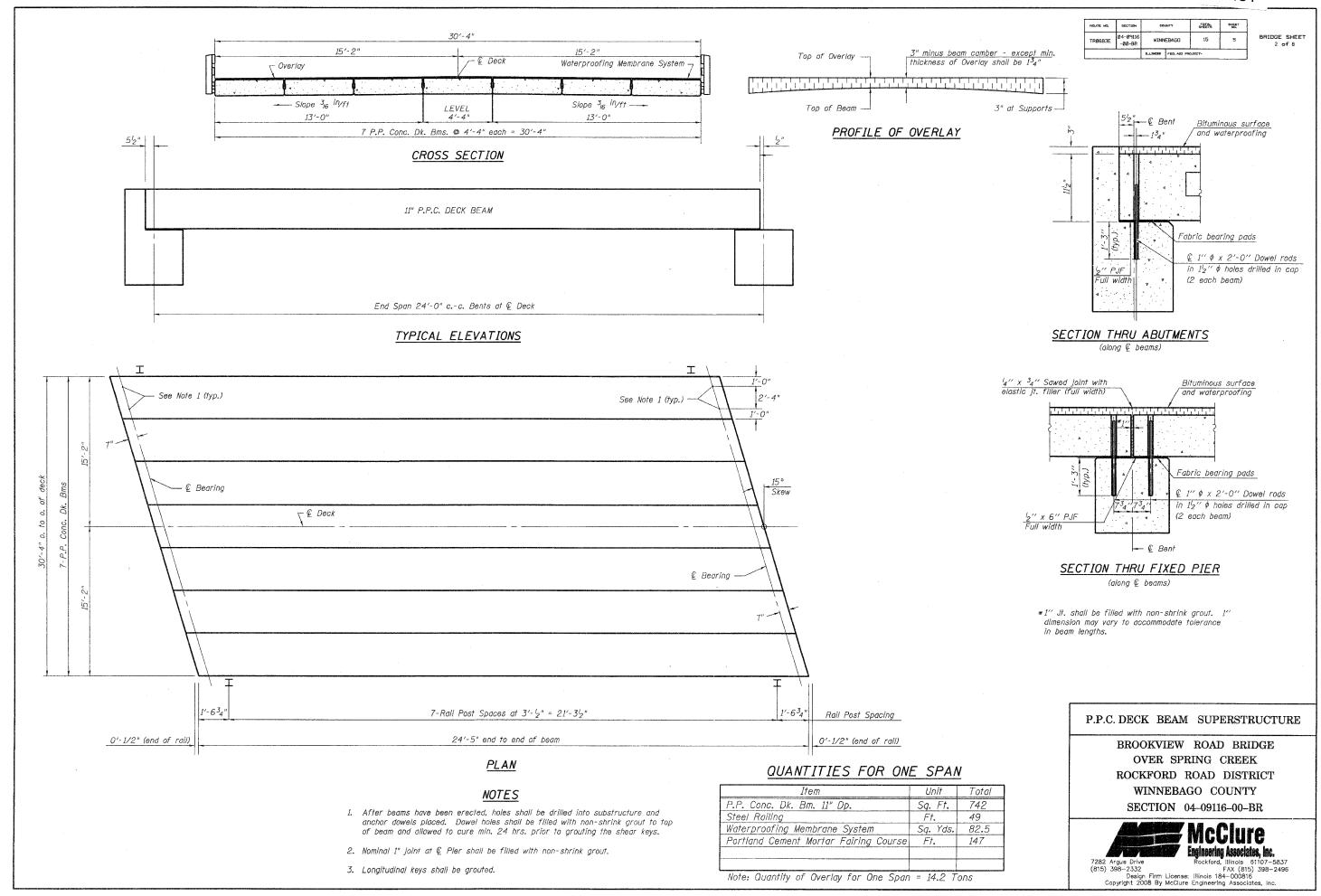
6. STEEL BRIDGE RAIL, TYPE SM

7. NAME PLATE 8. PILE DETAILS

BROOKVIEW ROAD BRIDGE OVER SPRING CREEK ROCKFORD ROAD DISTRICT WINNEBAGO COUNTY SECTION 04-09116-00-BR

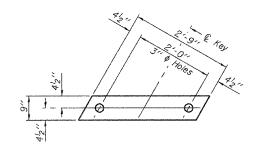


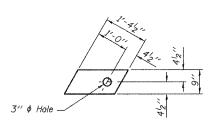
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| ROUTE NO. | SECTION | COUNTY | | TOTAL SHEETS | SHEET NO. |
|-----------|--------------------|---------------------------|--|-----------------|--------------|
| TRØ683E | Ø4-Ø9116 -ØØ-BR | WINNEBAGO | | 15 | 6 |
| | | ILLINOIS PED AID PROJECT- | | | |

BRIDGE SHEET

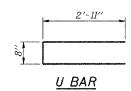


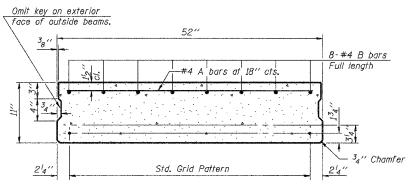


FABRIC BEARING PAD
(Interior)

FABRIC BEARING PAD (Exterior)

<u>FIXED</u>

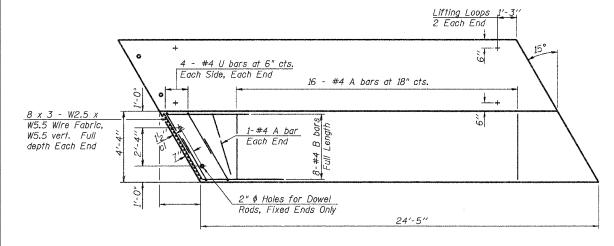


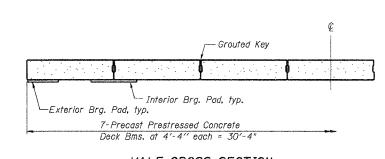


TYPICAL SECTION

 $^{l}_{2}{}^{\prime\prime}$ ϕ Strands, Each Strand Stressed to 30,900 Lbs. 6-Strands $^{13}_{4}{}^{\prime\prime}$ up, 8-Strands $^{3l}_{4}{}^{\prime\prime}$ up,

Note: Place strands symmetrically about € of beam.





<u>HALF CROSS SECTION</u>

PLAN

3" Radius (Cold bent) Top of Ream

LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be $^{\prime}_{2}$ '' and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be 2 - $^{\prime}_{2}$ '' $^{\prime}_{2}$ -270 ksi strands, as shown.

The 1" \$\psi\$ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place. N/A

Non prestressing steel placed in deck beams shall conform to ASTM A 706 (IL MOD), Grade 60, and shall be included in the cost of the deck beams.

The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Corrosion Inhibitor, per Article 1020.05(b)(12) of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

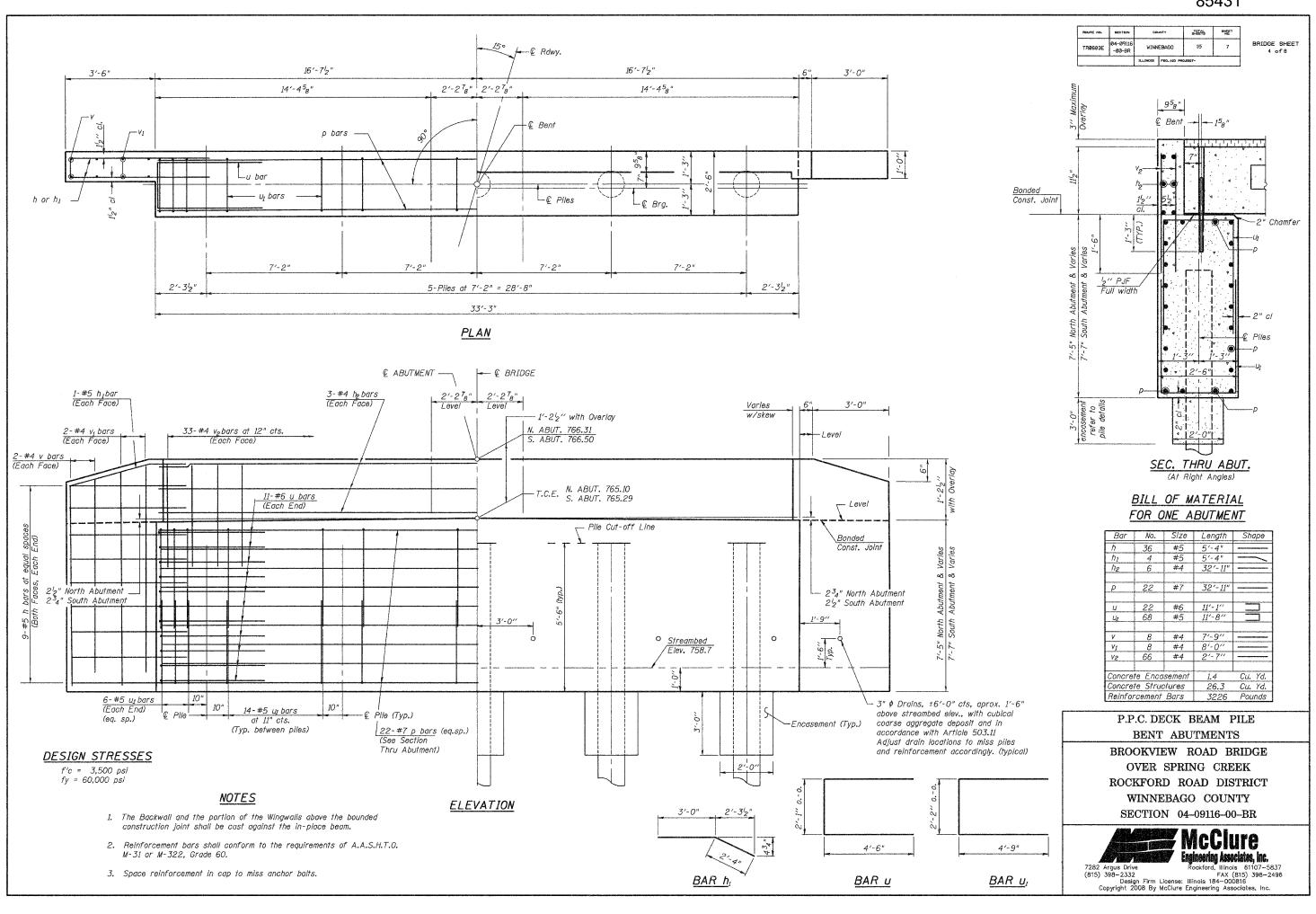
Required Release Strength, f'ci, shall be 4,000 p.s.i.

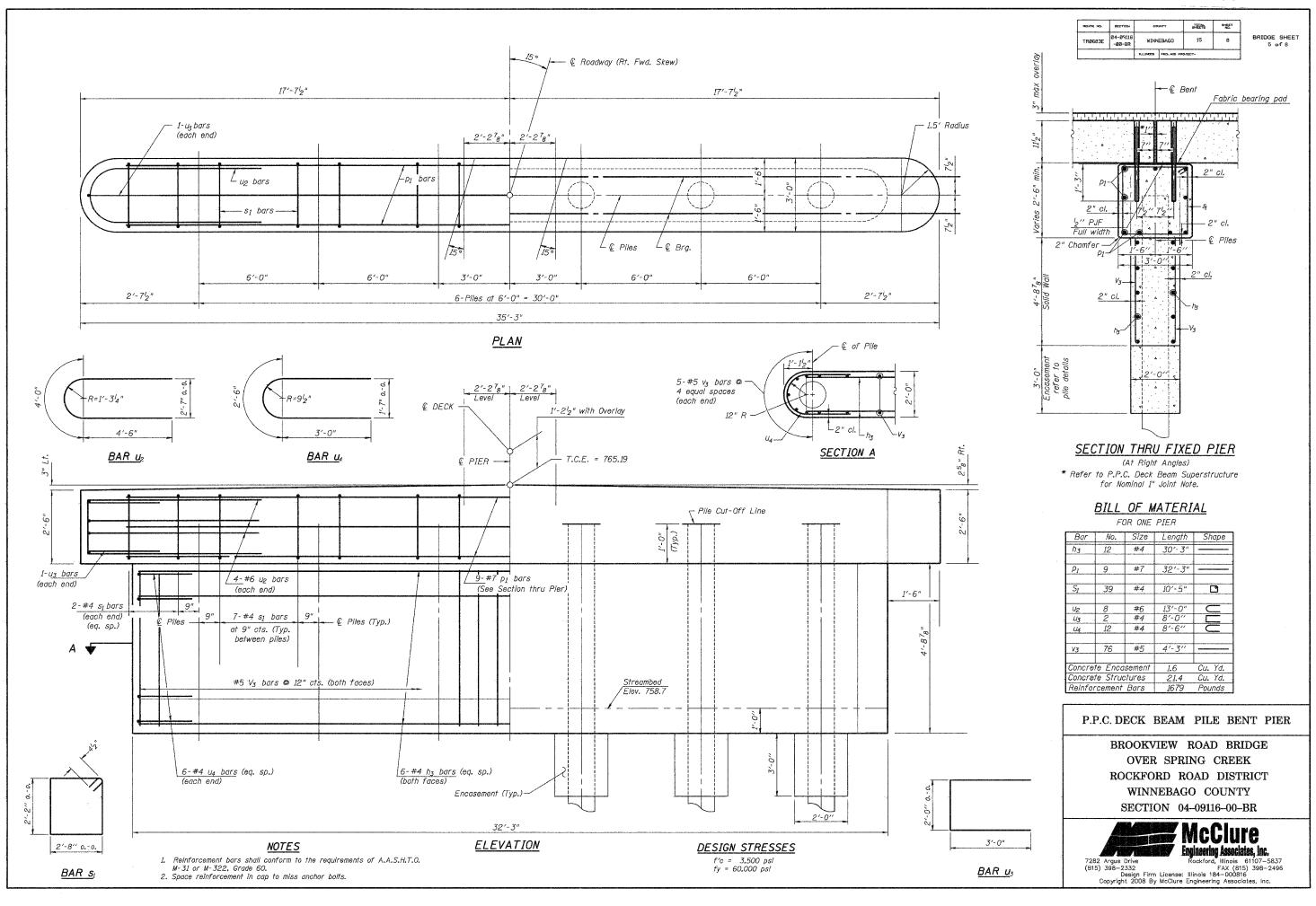
P.P.C. DECK BEAM DETAILS

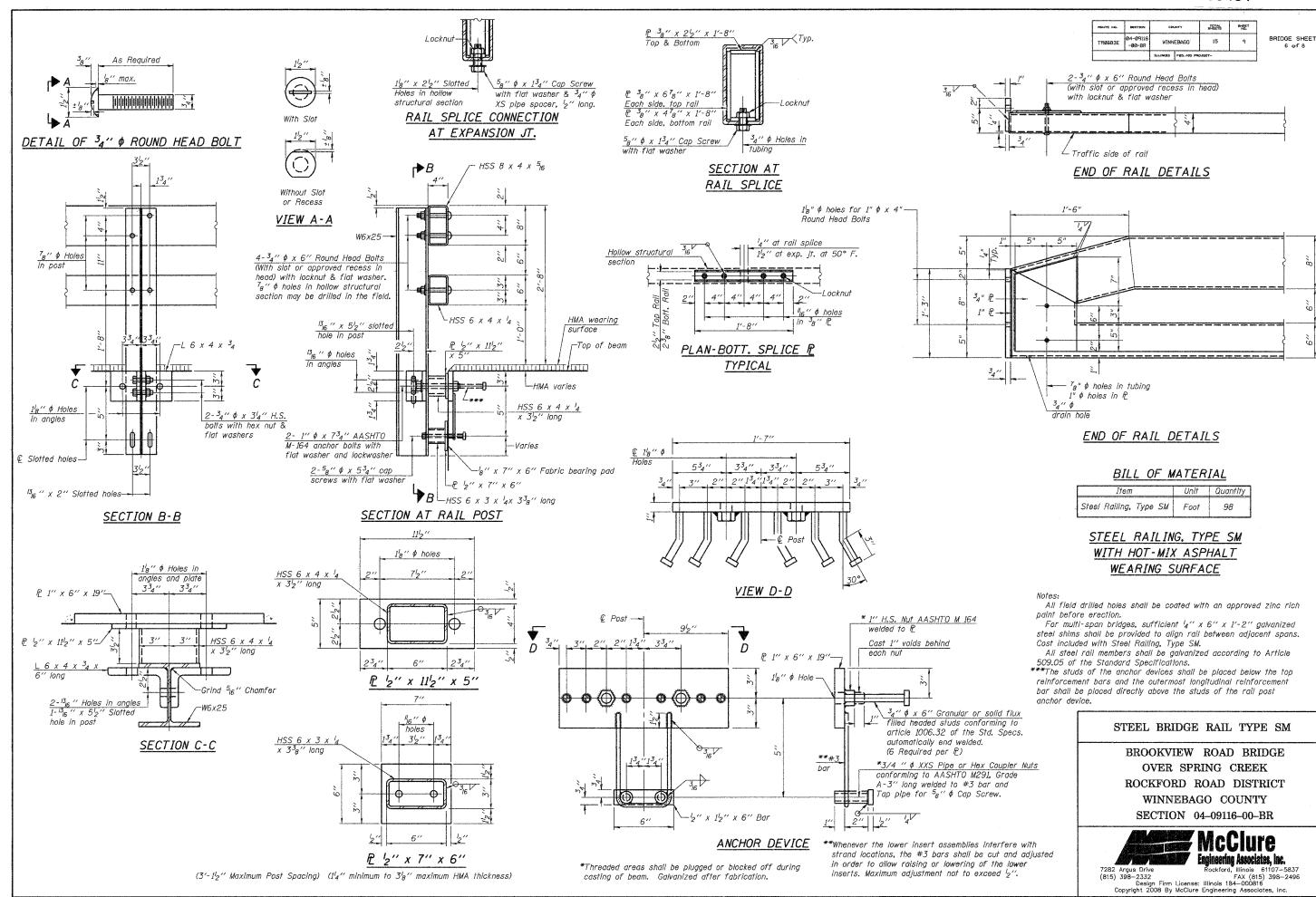
BROOKVIEW ROAD BRIDGE
OVER SPRING CREEK
ROCKFORD ROAD DISTRICT
WINNEBAGO COUNTY
SECTION 04-09116-00-BR

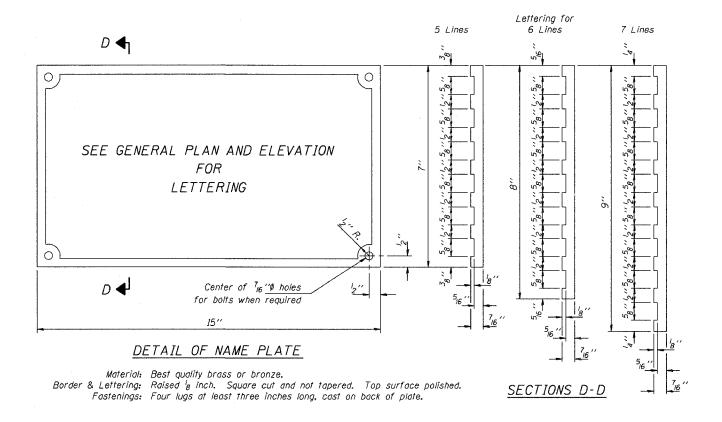


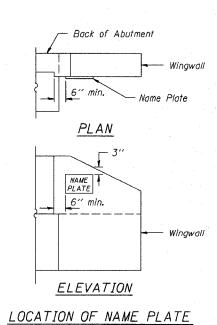
7282 Argus Drive Rockford, Illinois 61107-5837
(815) 398-2332 FAX (815) 398-2496
Design Firm License: Illinois 184-000816
Copyright 2008 By McClure Engineering Associates, Inc.









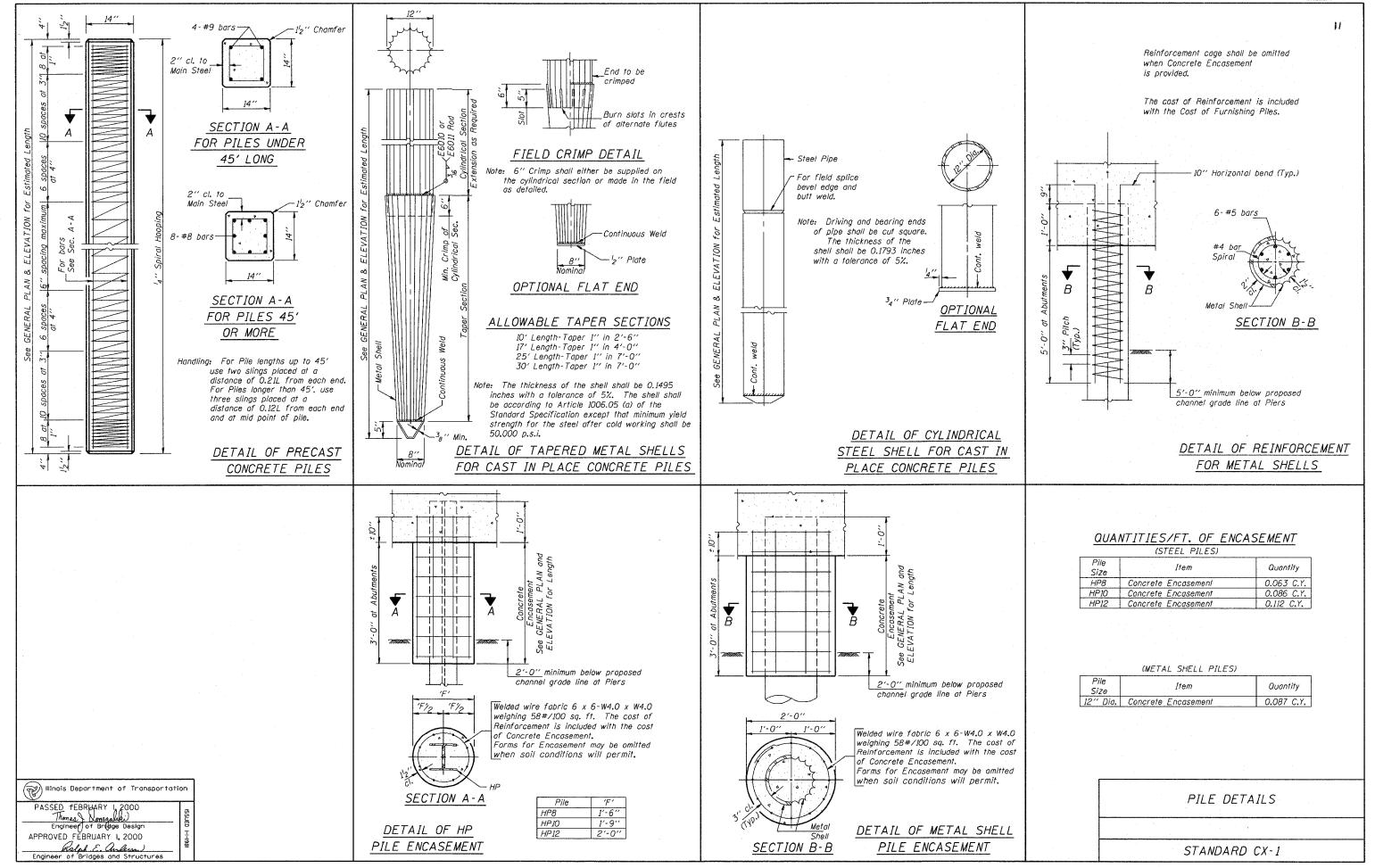


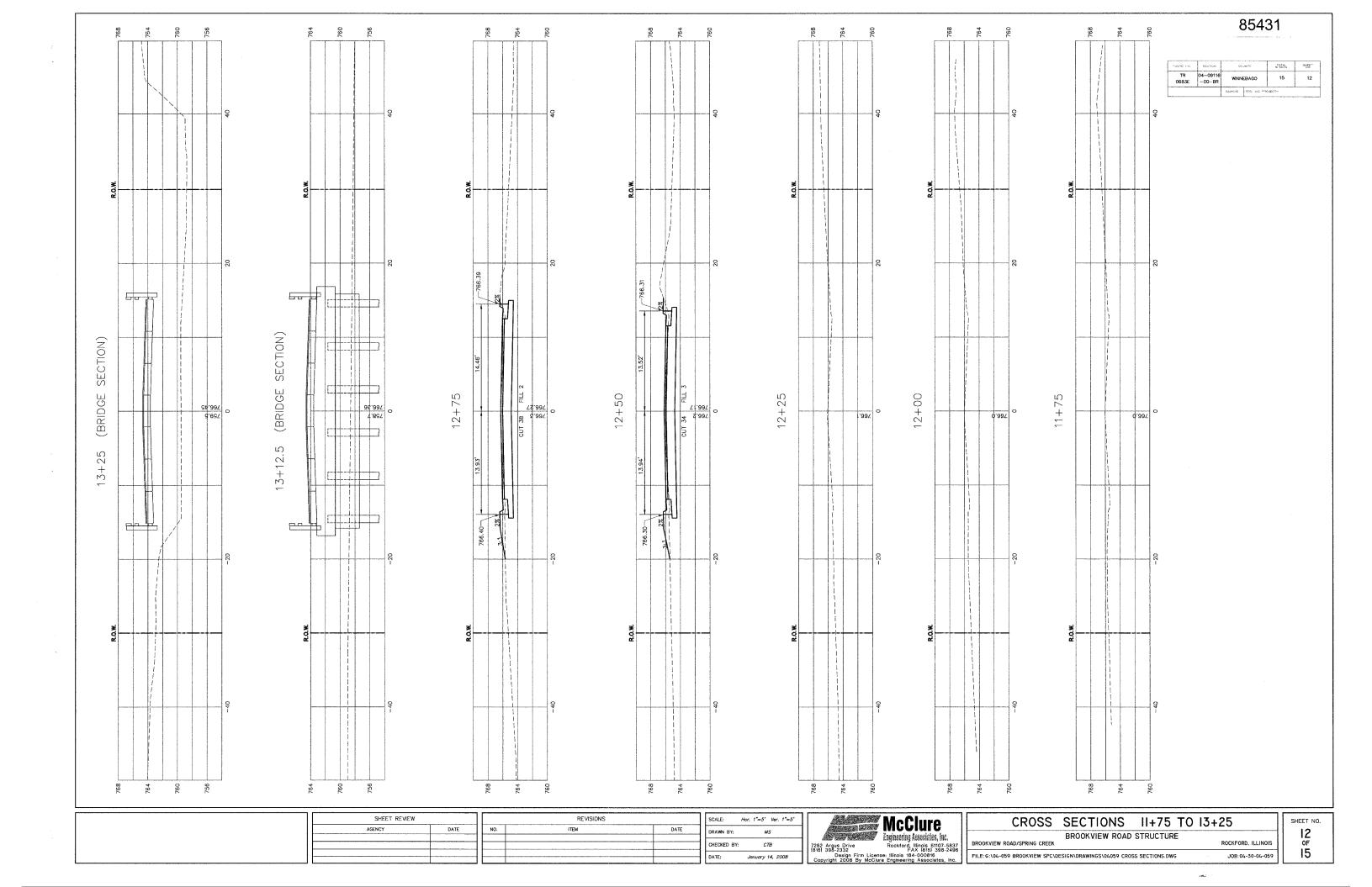
Illinois Department of Transportation PASSED APRIL 4, 2005
Thomas Nomagaluki
Engineer of Bridge Design
APPROVED APRIL 4, 2005

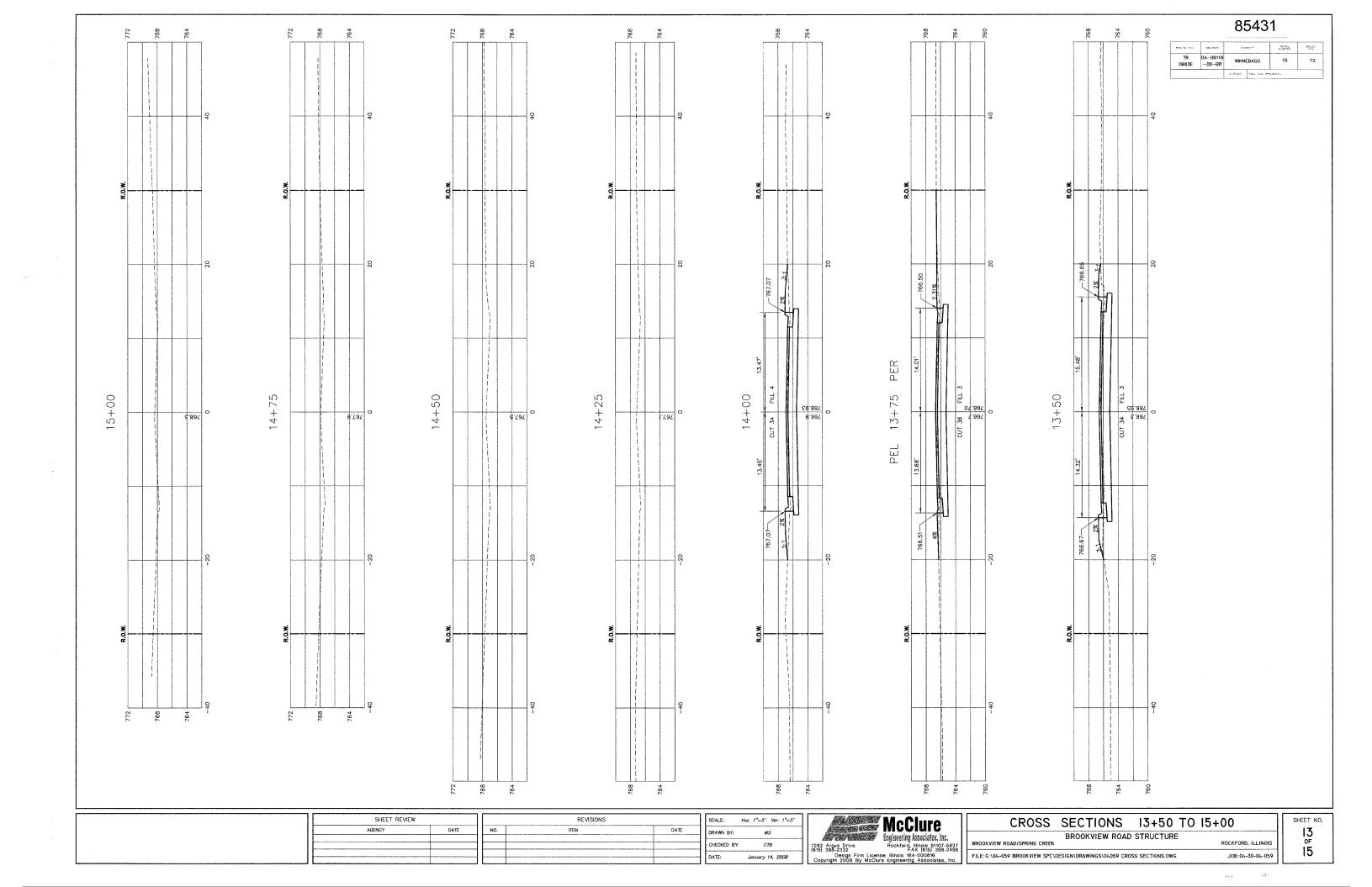
Ralph E. Anderson)
Engineer of Bridges and Structures

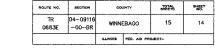
NAME PLATE

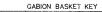
STANDARD CN











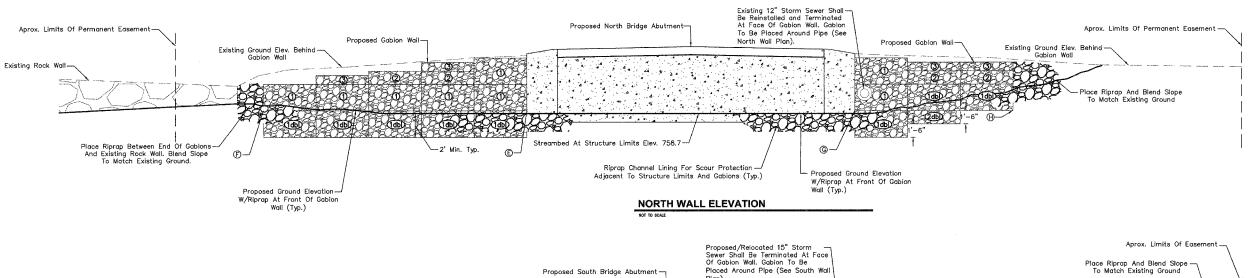
| Unit No. | Basket Size (HxWxL) | BASKET VOL. (C.Y.) |
|----------|------------------------|-----------------------|
| ① | 3' x 3' x 6' | 2.0 |
| 2 | 1.5' x 3' x 6' | 1.0 |
| 3 | 1' x 3' x 6' | 0.7 |

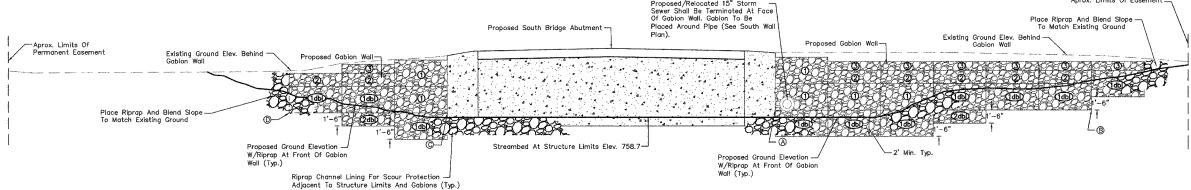
Basket No. followed by "dbl" shall denote two (2) baskets of the size specified for that layer. Refer to Typical Gabion Wall Section.

GABION WALL NOTES:

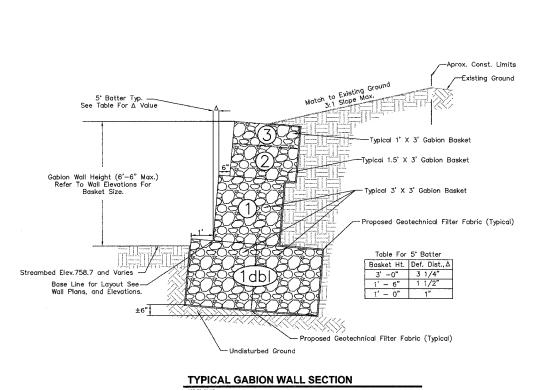
- Contact McClure Engineering 48 hrs. prior to starting Gabion Wall Construction.
- Gabions and Riprap shall be installed in accordance with Section 201 & Section 284 of the IDOT Standard Specification for Road and Bridge Construction.
- 3. Contractor shall provide a uniform base of compacted, undisturbed ground or granular material for the Gabion foundation capable of supporting 1500 psf. Top of foundation shall be a minimum of 2'-0" below streambed/ground elevation. This work shall be included with the cost of Gabions.

| GABION QUANTITIES | | |
|-------------------------------|------|-------|
| Item | Unit | Qty. |
| Earth Excavation | C.Y. | 138 |
| Filter Fabric | S.Y. | 205 |
| Gabions (Total) | C.Y. | 124.7 |
| 50 - 3'x3'x6' Gabion Basket | C.Y. | 100 |
| 17 - 1.5'x3'x6' Gabion Basket | C.Y. | 17 |
| 11 - 1'x3'x6' Gabion Basket | C.Y. | 7.7 |

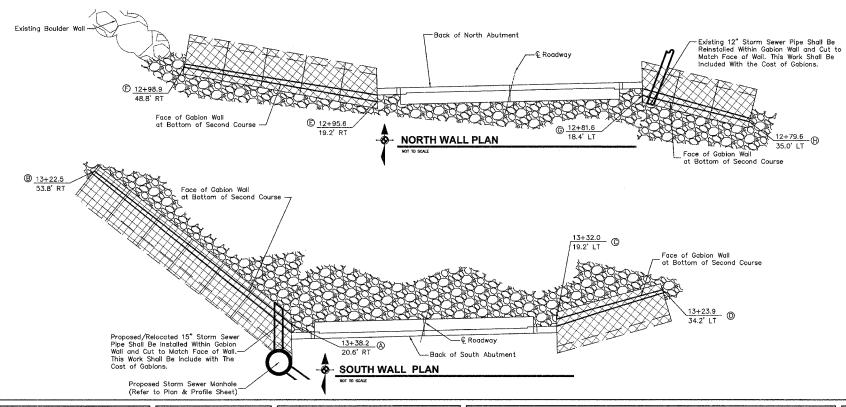




SOUTH WALL ELEVATION



mar yes

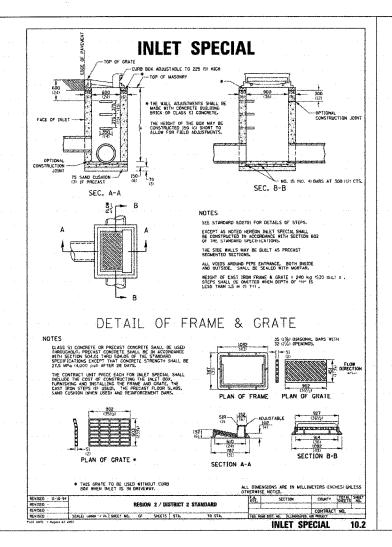


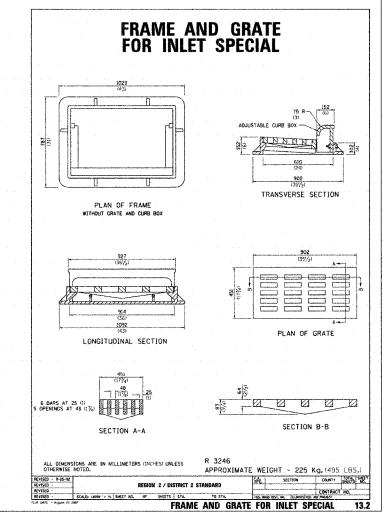
| - 1 | SHEET REVIEW | | | REVISIONS | | SCA |
|-----|--------------|------|-----|----------------------|----------|-----|
| - 1 | AGENCY | DATE | NO. | ITEM | DATE | DRA |
| - 1 | | | 1 | IDOT Review Comments | 3/7/2008 | - |
| - 1 | | | | | | CHE |
| - 1 | | | | | | DAT |
| | L | | L | I | | Ь |

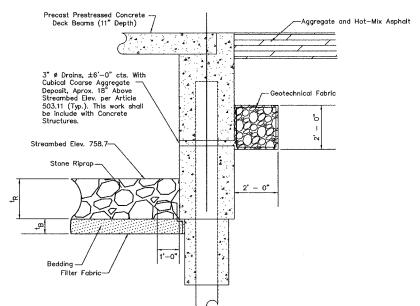
| | SCALE: | 1" = 1' | | |
|---|-------------|------------------|---|-------------|
| | DRAWN BY: | PLH | | |
| 2 | CHECKED BY: | | | 728 (81) |
| | DATE: | January 15, 2008 | 1 | 101 |



| WALL ELEVATIONS | |
|--|--------------------|
| BROOKVIEW ROAD STRUCTURE EW ROAD/SPRING CREEK | ROCKFORD, ILLINOIS |
| 04-059 BROOKVIEW SPC\DESIGN\DRAWINGS\DETAILS.DWG | JOB: 04-30-04-059 |



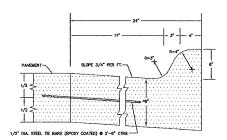




SECTION AT ABUTMENT SHOWING DRAIN AND RIPRAP

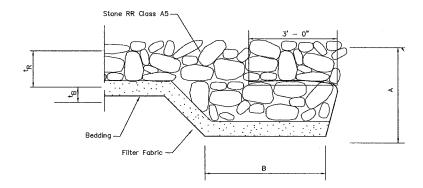
85431

| ROUTE NO. | SECTION | 004 | INTY | STAN | SHEET NO. |
|-------------|------------------|-----------|-------------|--------|--------------|
| TR 0683E | 04-09116 00BR | WINNEBAGO | | 15 | 15 |
| | | ILUNOIS | PED. AID PR | OJECY- | |



COMBINATION CONCRETE CURB AND GUTTER - M-6.18 (MODIFIED)

| Riprap Ciass | ^t R | ^t B | Α | В |
|-----------------|----------------|----------------|---------|---------|
| A4 | 16" | 6" | 2' - 8" | 4' - 0" |
| A5 | 22" | 8" | 3' - 8" | 5' 6" |
| A6 | 26" | 10" | 4' 4" | 6' ~ 6" |
| A7 | 30" | 12" | 5' - 0" | 7' - 6" |



FLANK STONE RIPRAP TREATMENT STREAM CROSSING

| ١ | 1 | SHEET REVIEW | | | | REVISIONS | |
|---|---|--------------|------|---|-----|----------------------|--|
| İ | | AGENCY | DATE | | NO. | ITEM | |
| 1 | Ì | | | 1 | 1 | IDOT Review Comments | |
| 1 | ı | | | 1 | | | |
| ١ | l | | | 1 | | | |

| | SCALE: | 1" = 1" | I | |
|----------|-------------|------------------|---|----|
| DATE | DRAWN BY: | PLH | l | i |
| 3/7/2008 | CHECKED BY: | | | 7: |
| | DATE: | January 16, 2008 | | |



| STANDARDS AND DETAILS | |
|---|--------------------|
| BROOKVIEW ROAD STRUCTURE OKVIEW ROAD/SPRING CREEK | ROCKFORD, ILLINOIS |
| : G:\04-059 BROOKVIEW SPC\DESIGN\DRAWINGS\DETAILS.DWG | JOB: 04-30-04-059 |