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

**PLANS FOR PROPOSED
BRIDGE REPLACEMENT & REHABILITATION PROGRAM
F.A.U. ROUTE 5100 (HORACE AVENUE)
OVER SOUTH FORK OF KENT CREEK**

**SECTION 04-00526-00-BR
CITY OF ROCKFORD
PROJECT BHM-5099(63)
JOB C-92-085-04
CONTRACT NO. 85358**

LIST OF STANDARDS

- | | |
|-------------|--|
| 280001-02 | TEMPORARY EROSION CONTROL SYSTEMS |
| 515001-02 | NAME PLATE FOR BRIDGE |
| 606001-02 | CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER |
| 630001-05 | STEEL PLATE BEAM GUARDRAIL |
| 630101-05 | GUARDRAIL MOUNTED ON EXISTING CULVERTS |
| 630301-03 | SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS |
| 635006-02 | REFLECTOR AND TERMINAL MARKER PLACEMENT |
| 664001-01 | CHAIN LINK FENCE |
| 667101 | PERMANENT SURVEY MARKERS |
| 702001-05 | TRAFFIC CONTROL DEVICES |
| 780001-01 | TYPICAL PAVEMENT MARKINGS |
| B.L.R. 21-6 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS |
| B.L.R. 22-4 | TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC) |

TOLL FREE
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
(J.U.L.I.E.) TELEPHONE NUMBER
1-800-892-0123

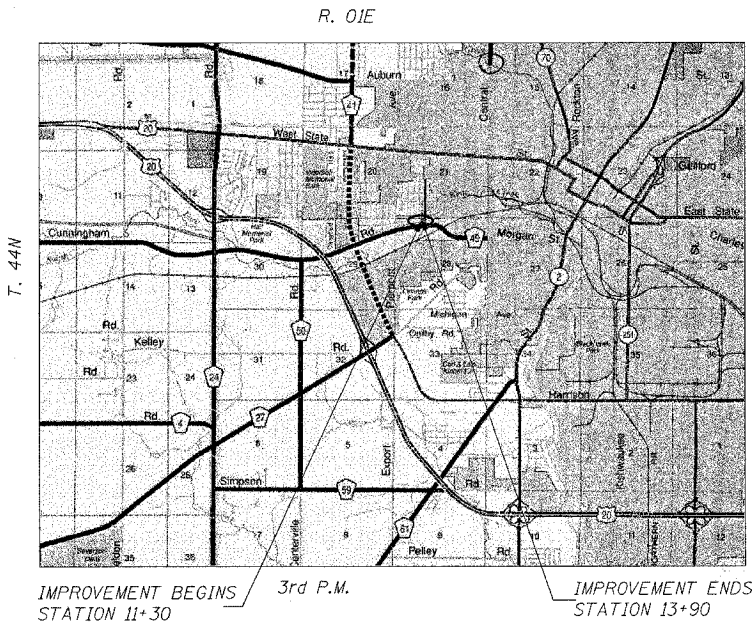
UTILITY NOTE

THE LOCATIONS OF THOSE BURIED AND ABOVEGROUND UTILITIES SHOWN ARE APPROXIMATE, ARE SHOWN FOR CONTRACTOR INFORMATIONAL USE ONLY, AND ARE NOT TO BE REFERENCED FOR CONSTRUCTION PURPOSES. THE IMPLIED PRESENCE OR ABSENCE OF UTILITIES IS NOT TO BE CONSTRUED BY THE OWNER, ENGINEER, CONTRACTOR, OR SUBCONTRACTORS TO BE AN ACCURATE AND COMPLETE REPRESENTATION OF UTILITIES THAT MAY OR MAY NOT EXIST ON THE CONSTRUCTION SITE. BURIED AND ABOVEGROUND UTILITY LOCATION, IDENTIFICATION, AND MARKING ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. REROUTING, DISCONNECTION, PROTECTION, ETC. OF ANY UTILITIES MUST BE COORDINATED AMONG THE CONTRACTOR, UTILITY COMPANY, AND OWNER. SITE SAFETY, INCLUDING THE AVOIDANCE OF HAZARDS, ASSOCIATED WITH BURIED AND ABOVEGROUND UTILITIES REMAIN THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

12-42:33 PM 03/17/2005 I:\04\Jobs\04r1901\Civil\Sheet\Rockford\Cover.dgn

LAYOUT SLG 02/21/05
DRAWN JIM 03/15/05
REVIEWED SLG 03/15/05

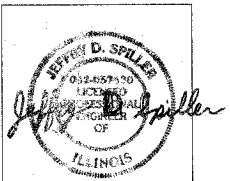
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100		WINNEBAGO	17	1
ILLINOIS FEDERAL PROJECT BHM-5099(63)				
04-00526-00-BR				



LOCATION PLAN
SCALE OF LAYOUT
NET LENGTH = 260 FEET (0.049 MI)

TRAFFIC DATA
HIGHWAY CLASSIFICATION: URBAN COLLECTOR
2004 ADT: 1,800 7% TRUCKS
DESIGN SPEED: 30 MPH
POSTED SPEED: 30 MPH

PROPOSED IMPROVEMENTS
REMOVAL AND REPLACEMENT OF THE EXISTING BRIDGE CARRYING F.A.U. ROUTE 5100 (HORACE AVENUE) OVER SOUTH FORK OF KENT CREEK AT STATION 12+84.28. NEW BRIDGE CONSISTS OF A FOUR - CELL 10 FOOT HIGH BY 10 FOOT WIDE PRECAST CONCRETE BOX CULVERT. EXISTING STRUCTURE NUMBER 101-6122. PROPOSED STRUCTURE NUMBER 101-6107.



DATE SIGNED: 3/17/05
LIC. EXP. DATE: 11/30/05

APPROVED MARCH 23 2005
Tony W. Kausch
ACTING CITY ENGINEER

PASSED April 15, 2005
Jeffery D. Spiller
DISTRICT ENGINEER OF LOCAL ROADS & STREETS

APPROVED 20
Henry L. Montan
DISTRICT ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Corporate License Number 184-001-084
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JOB NO. 04R1901
DATE 3/22/05

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100 04-00526-00-BR	WINNEBAGO	17	2	
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BHM-5099(63)		
CONTRACT NO. 85358				

GENERAL NOTES

- THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS", CURRENT EDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES ON SITE PRIOR TO ANY CONSTRUCTION AND WILL BE HELD RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THEIR FACILITIES. THE CONTRACTOR, ON SITE, SHALL DETERMINE THE EXACT LOCATIONS OF THE UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. @ 1-800-892-0123 FOR UTILITY LOCATIONS.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRS TO ANY UTILITY LINES AND EXISTING IMPROVEMENTS TO REMAIN THAT ARE DAMAGED AS A RESULT OF THE WORK.
- ADJUSTMENTS OF PROPOSED GRADES TO MATCH EXISTING ENTRANCES OR OTHER FIELD CONDITIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- ACCESS SHALL BE MAINTAINED TO ALL PROPERTIES DURING ALL STAGES OF CONSTRUCTION.
- EXCESS MATERIAL, IF NOT USED FOR OTHER ON-SITE PURPOSES, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- THE WORK AREA SHALL BE POSITIVELY DRAINED DURING CONSTRUCTION. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.
- WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAWCUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. THE SAWCUT IS TO BE INCLUDED IN THE COST OF THE BUTT JOINT.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE X028-2A

CODE NO.	DESCRIPTION	QUANTITY	UNITS
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	86
20200100	EARTH EXCAVATION	CU YD	375
20400800	FURNISHED EXCAVATION	CU YD	40
20900110	POROUS GRANULAR BACKFILL	CU YD	202
28000300	TEMPORARY DITCH CHECKS	EACH	3
28000400	PERIMETER EROSION BARRIER	FOOT	319
28100101	STONE RIPRAP, CLASS A1	SQ YD	88
28100107	STONE RIPRAP, CLASS A4	SQ YD	88
28200200	FILTER FABRIC	SQ YD	88
31100900	SUB-BASE GRANULAR MATERIAL, TYPE A 10"	SQ YD	634
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	302
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	160
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SQ FT	346
44000100	PAVEMENT REMOVAL	SQ YD	401
48100300	AGGREGATE SHOULDERS, TYPE A 4"	SQ YD	1919
50100200	REMOVAL OF EXISTING STRUCTURE	L SUM	1
50900805	PEDESTRIAN RAILING	FOOT	80
51500100	NAME PLATES	EACH	1
54001000	BOX CULVERT END SECTIONS	EACH	8
54021010	PRECAST CONCRETE BOX CULVERT 10' X 10' (M273)	FOOT	213.5
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	139
63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	225
63000155	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES (SPECIAL)	FOOT	100
63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	17
66410200	CHAIN LINK FENCE (SPECIAL)	FOOT	100
66410300	CHAIN LINK FENCE REMOVAL	FOOT	104
66700305	PERMANENT SURVEY MARKER, TYPE II	EACH	1
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	3
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1
78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	520
78200410	GUARDRAIL MARKERS, TYPE A	EACH	9
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
XX002053	LANDSCAPE RESTORATION	L SUM	1
X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	102
X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON	112
Z0013798	CONSTRUCTION LAYOUT	L SUM	1

• SEE SPECIAL PROVISIONS AND/OR DETAILS IN PLANS

LEGEND

- CONTROL POINT
- POWER POLE
- DECIDUOUS TREE
- EXISTING SIGN
- MANHOLE
- SANITARY SEWER LINE
- EXISTING R.O.W.
- TREE LINE
- EXISTING FENCE
- EXISTING GUARDRAIL
- PROPOSED R.O.W.
- PROPOSED FENCE

FURNISHED EXCAVATION SUMMARY

DESCRIPTION	QUANTITY	UNITS
A. EARTH EXCAVATION (CROSS SECTIONS)	375	CU YD
B. ADJUSTED EARTH EXCAVATION (A*(1-0.25))	281	CU YD
C. EMBANKMENT (CROSS SECTIONS)	318	CU YD
D. FURNISHED EXCAVATION (C-B)	40	CU YD

••• PAY ITEMS

BITUMINOUS MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT.

LOCATION(S):	HORACE AVE. STA. 11+60.00 TO STA. 13+60.00	
MIXTURE USE(S):	SURFACE COURSE	BINDER COURSE
AC/PG:	PG 64-22	PG 64-22
RAP %: (MAX)**	15%	25%
DESIGN AIR VOIDS:	4% @ Ndes = 50	4% @ Ndes = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5 OR IL 12.5	IL 19.0
FRICTION AGGREGATE:	MIXTURE C	N/A
MIXTURE WEIGHT:	112 LB/SQ YD/IN	112 LB/SQ YD/IN
THICKNESS:	2.5 IN***	3.5 IN

•• IF > 15% RAP IS USED, THE CONTRACTOR MAY BE REQUIRED TO USE A SOFTER GRADE OF ASPHALT AS DETERMINED BY THE MATERIALS ENGINEER.

•••• SURFACE COURSE SHALL BE PAVED IN ONE LIFT.

EDGE OF PAVEMENT STATION, OFFSET, & ELEVATION

STATION	OFFSET LT.	ELEV. LT.	OFFSET RT.	ELEV. RT.	CL. ELEV.
11+60.00	-12.00	729.31	12.00	729.31	729.67
11+75.00	-12.00	729.39	12.00	729.39	729.75
12+00.00	-12.00	729.52	12.00	729.52	729.88
12+25.00	-12.23	729.65	12.00	729.66	730.02
12+50.00	-13.50	729.72	13.30	729.73	730.13
12+75.00	-13.50	729.74	13.50	729.74	730.15
13+00.00	-13.50	729.67	13.50	729.67	730.07
13+25.00	-12.91	729.52	13.35	729.50	729.90
13+50.00	-12.00	729.33	12.00	729.33	729.69
13+60.00	-12.00	729.25	12.00	729.25	729.61

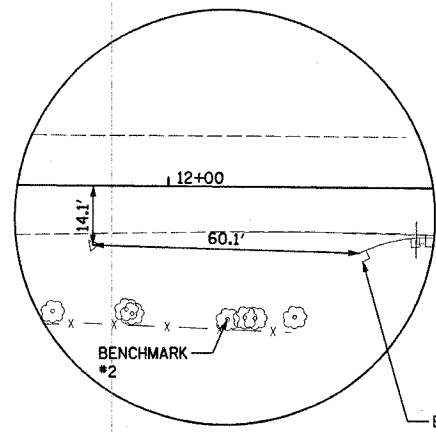
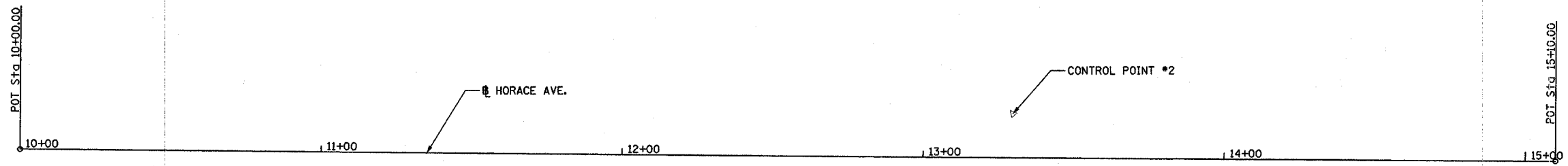
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 5100
 SECTION 04-00526-00-BR
 CITY OF ROCKFORD, IL
 HORACE AVE. OVER S. FORK KENT CREEK

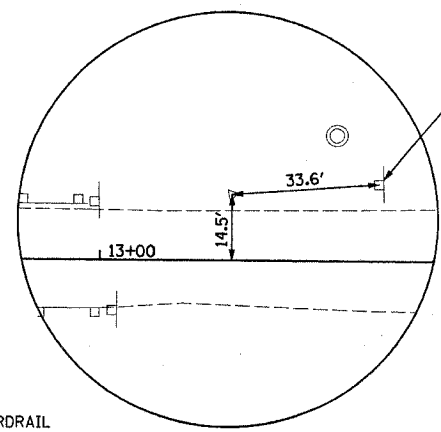
SUMMARY OF QUANTITIES AND GENERAL NOTES

SCALE: VERT. DATE 03/22/05
 HORIZ. DRAWN BY: RLA
 CHECKED BY: JDS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100	04-00526-00-BR	WINNEBAGO	17	3
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BHM-509963	
CONTRACT NO. 85358				



CONTROL POINT #1
5/8" IRON PIN



CONTROL POINT #2
5/8" IRON PIN

CONTROL AND TIES				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP #1	10000.000	10000.000	729.75	5/8" I.P.
CP #2	10149.610	10000.000	729.84	5/8" I.P.

PROPOSED ALIGNMENT		
STATION	NORTHING	EASTING
10+00.00	9823.007	9951.698
15+10.00	10323.602	10049.195

BENCHMARK #1 = BENCHMARK DISC LOCATED IN CONCRETE HEADWALL OF CONCRETE ARCH VIADUCT STRUCTURE OVER SOUTH FORK OF KENT CREEK. THIS STRUCTURE IS LOCATED IMMEDIATELY NORTH OF CUNNINGHAM ROAD AND ABOUT 65 YARDS WEST OF SOUTH HORACE AVENUE. THE BENCHMARK DISK IS LOCATED IN SOUTH HEADWALL OF THE STRUCTURE ABOUT 2 FEET WEST OF EAST END OF HEADWALL, 1.5 FEET NORTH OF SOUTH EDGE OF HEADWALL, AND ABOUT 2 FEET BELOW LEVEL OF FORMER RAILROAD TRACK. ELEV. = 751.26

BENCHMARK #2 = SET SPIKE IN TREE LOCATED ON THE ROADWAY SIDE OF EXISTING FENCE PARALLEL TO HORACE AVENUE NEAR SOUTHEAST CORNER OF EXISTING STRUCTURE. TREE IS LOCATED ABOUT 65 FEET SOUTH AND ABOUT 30 FEET EAST OF THE CENTERLINE OF HORACE AVENUE. ELEV. = 729.62

NOTE:

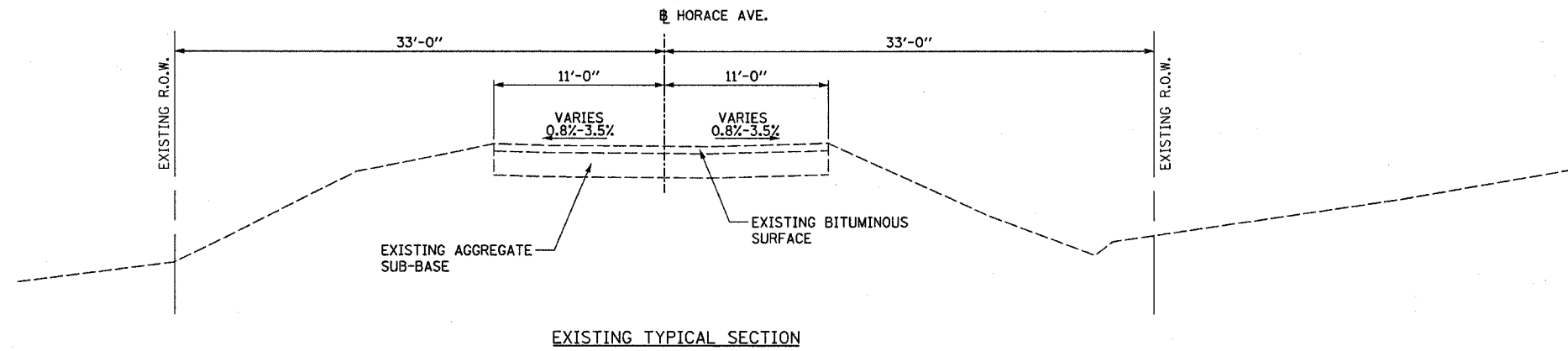
THE TWO BENCHMARKS DESCRIBED IN PLANS WILL BE DESTROYED DURING CONSTRUCTION. CONTRACTOR WILL NEED TO ESTABLISH NEW BENCHMARKS.

LAYOUT	RLA	02/23/05	rlg
DRAWN	RLA	02/25/05	03/17/2005
REVIEWED	JDS	03/17/05	1:04:47 pm C:\44190\CR\CH\AS\Sheet\NC-5071ES.dgn

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 5100
 SECTION 04-00526-00-BR
 CITY OF ROCKFORD, IL
 HORACE AVE. OVER S. FORK KENT CREEK
ALIGNMENT AND TIES
 SCALE: VERT. -
 HORIZ. -
 DATE 03/22/05
 DRAWN BY RLA
 CHECKED BY JDS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100	04-00526-00-BR	WINNEBAGO	17	4
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BHM-5099(63)	
CONTRACT NO. 85358				



LAYOUT	RLA	02/23/05	rla
DRAWN	RLA	02/25/05	03/17/2005
REVIEWED	JDS	03/17/05	h:\24\85358\04\04\04\Civil\Sheet\AC-STYP02.dwg

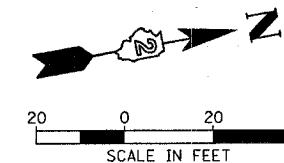
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 5100
 SECTION 04-00526-00-BR
 CITY OF ROCKFORD, IL
 HORACE AVE. OVER S. FORK KENT CREEK

EXISTING TYPICAL SECTION

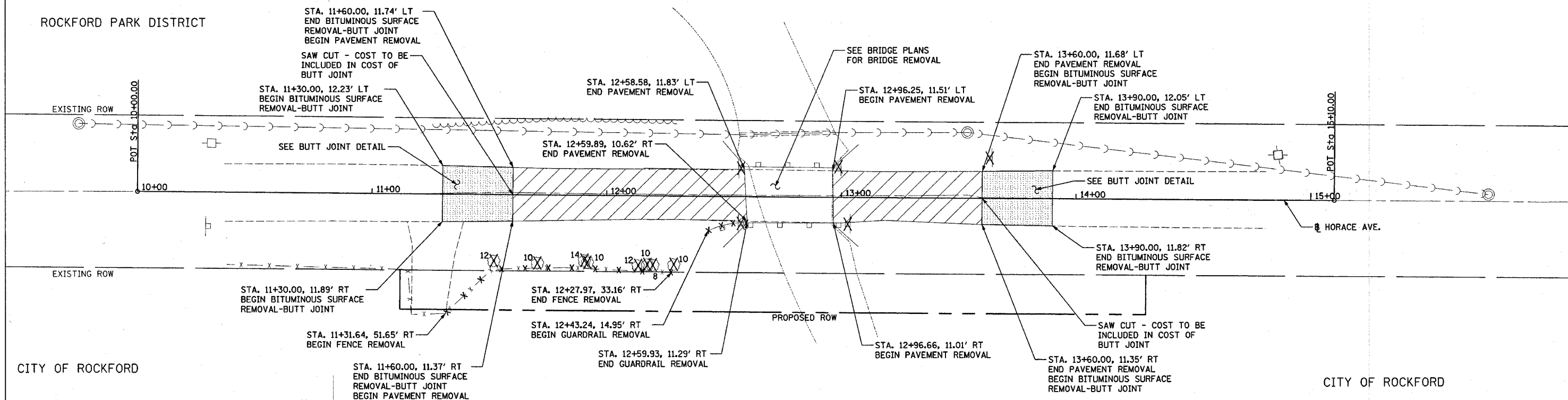
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 DATE 03/22/05

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5100	04-00526-00-BR	WINNEBAGO	17	6
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS PROJECT BHM-5099(63)		
CONTRACT NO. 85358				



ROCKFORD PARK DISTRICT

ROCKFORD PARK DISTRICT



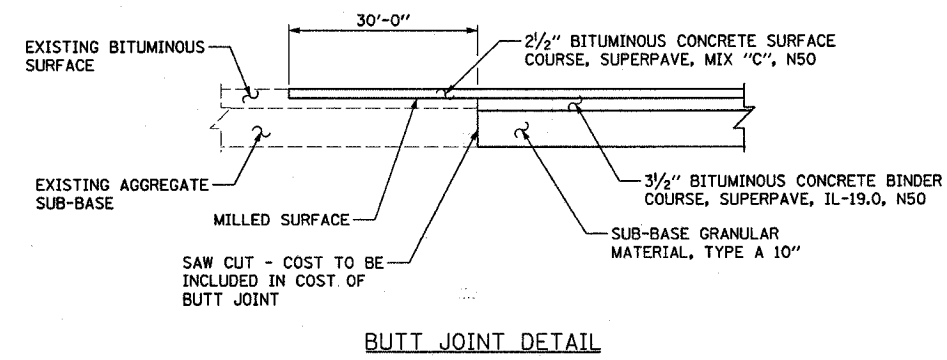
CITY OF ROCKFORD

CITY OF ROCKFORD

NOTE:
REMOVE EXISTING SIGNS MARKED ON PLANS.
COST OF SIGN REMOVAL TO BE INCLUDED
IN THE COST OF GUARDRAIL REMOVAL.

REMOVAL LEGEND

	PAVEMENT REMOVAL
	GUARDRAIL AND FENCE REMOVAL
	BITUMINOUS SURFACE REMOVAL-BUTT JOINT
	TREE REMOVAL
	SIGN REMOVAL



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.U. 5100
SECTION 04-00526-00-BR
CITY OF ROCKFORD, IL
HORACE AVE. OVER S. FORK KENT CREEK
REMOVAL PLAN
SCALE: VERT. 1" = 20'
HORIZ. 1" = 20'
DATE 03/22/05
DRAWN BY RLA
CHECKED BY JDS

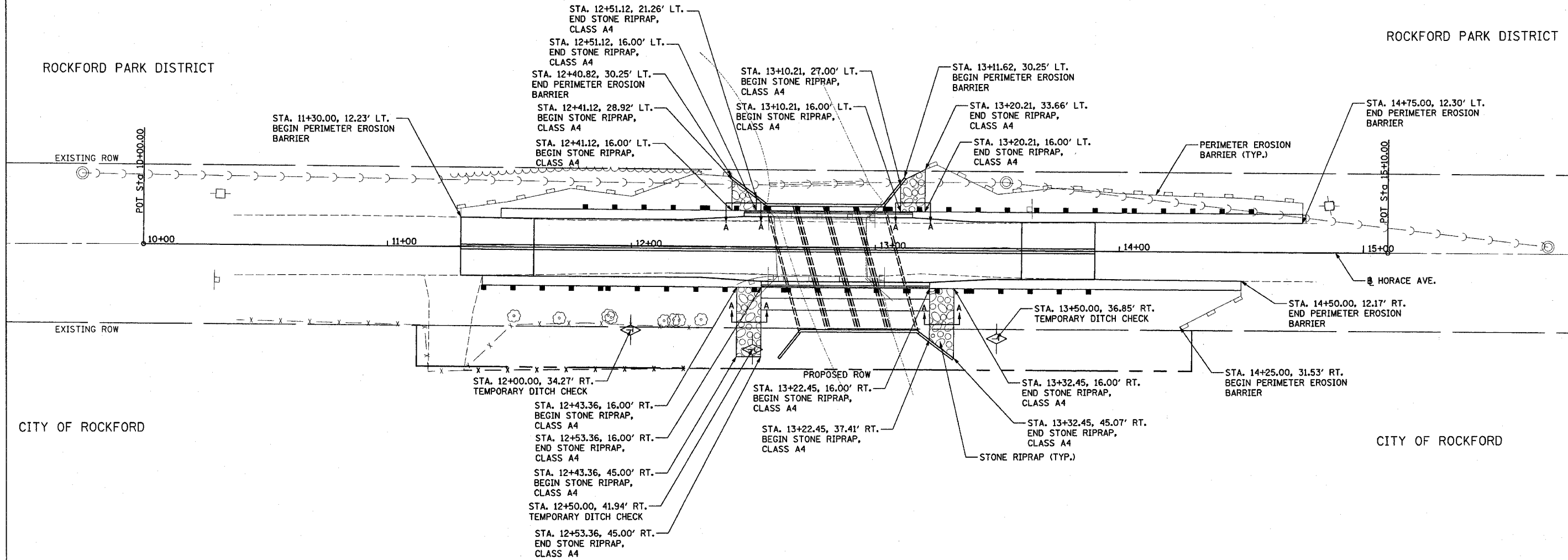
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REVIEWED JDS 03/17/05
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100	04-00526-00-BR	WINNEBAGO	17	9
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BHM-5099(63)	
CONTRACT NO. 85358				






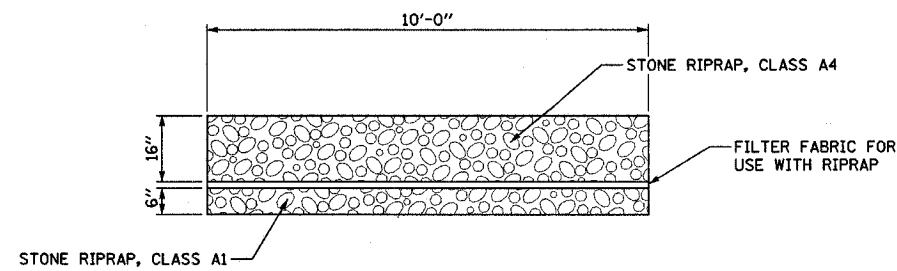
ROCKFORD PARK DISTRICT

ROCKFORD PARK DISTRICT

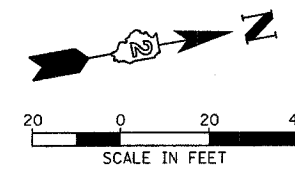


EROSION CONTROL LEGEND

-  STONE RIPRAP
-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK



SECTION A-A



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.U. 5100
 SECTION 04-00526-00-BR
 CITY OF ROCKFORD, IL
 HORACE AVE. OVER S. FORK KENT CREEK

EROSION CONTROL PLAN

SCALE: VERT. 1" = 20'
 HORIZ. 1" = 20'
 DATE 03/22/05
 DRAWN BY RLA
 CHECKED BY JDS

LAYOUT RLA 03/15/05
 DRAWN RLA 03/15/05
 REVIEWED JDS 03/17/05

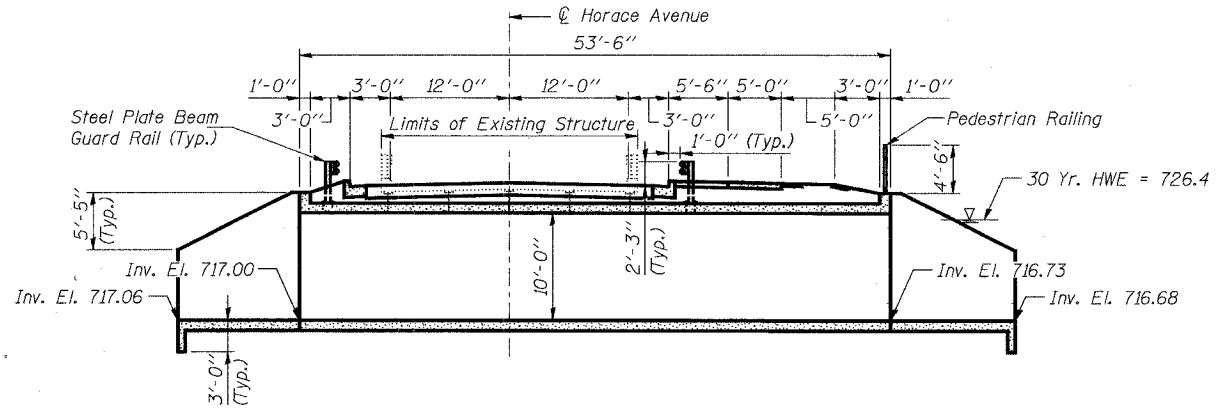
ROUTE NO.	SECTION	COUNTY	SHEETS	"SET"	SHEET NO. 1
F.A.U. 5100		WINNEBAGO	17	10	4 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BHM-5099(63)	* 04-00526-00-BR		

Bench Mark #1: Benchmark disk located in concrete headwall of concrete arch viaduct structure over South Fork of Kent Creek. This structure is located immediately north of Cunningham Road and about 65 yards west of South Horace Avenue. The benchmark disk is located in south headwall of the structure about 2 feet west of east end of headwall, 1.5 feet north of south edge of headwall, and about 2 feet below level of former railroad track. Elev. 751.26

Bench Mark #2: Set spike in tree located on the roadway side of the existing fence parallel to Horace Avenue near southeast corner of existing structure. Tree is located about 65 feet south and about 30 feet east of the centerline of Horace Avenue. Elev. 729.62

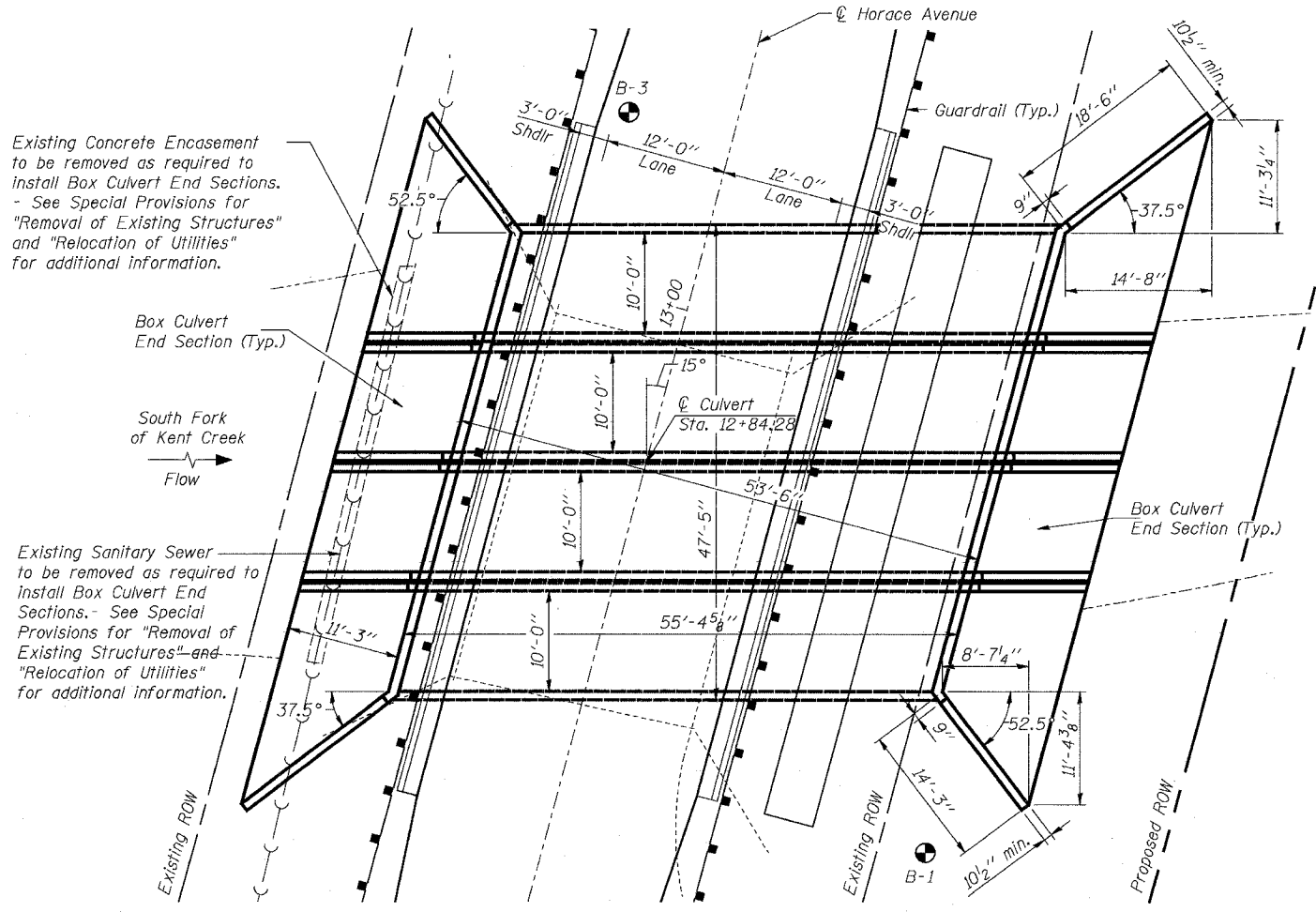
Existing Structure: Structure Number 101-6122. Built in 1950. The existing bridge is a reinforced concrete deck supported on a single span steel beam superstructure on closed concrete abutments. The existing bridge is 24 feet wide out-to-out and 38 feet long end-to-end of deck. The existing structure shall be removed as required to accommodate construction of a new precast concrete box culvert structure. The road will be closed during construction and will utilize a signed detour route.

No salvage.

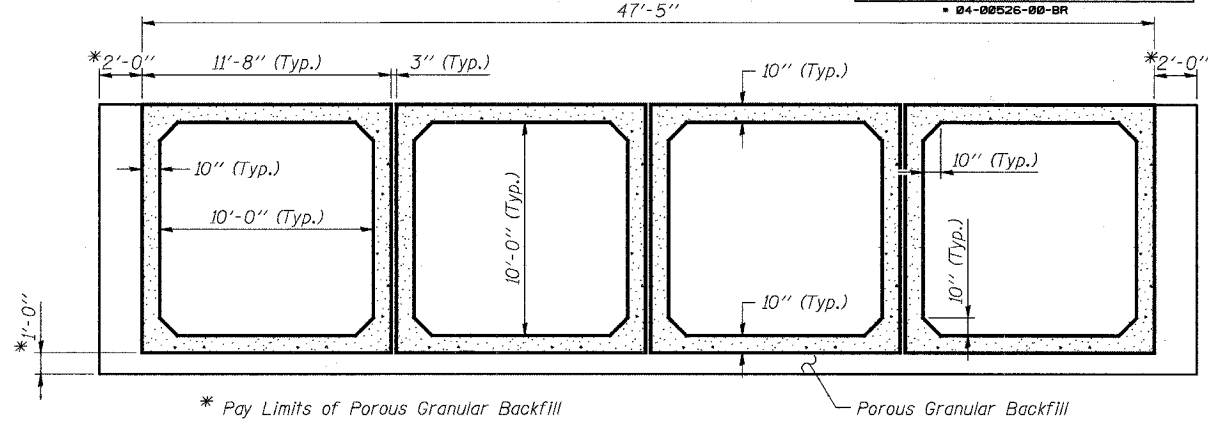


LONGITUDINAL SECTION

(Looking North, Dimensions at Right Angles to Centerline of Horace Avenue)



PLAN



LOADING HS20

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

SECTION THRU BARREL

(At Right Angle to Centerline of Culvert)

DESIGN SPECIFICATIONS

2002 (17th Edition) AASHTO Standard Specifications for Highway Bridges

DESIGN LOADINGS

Design Fill Height < 2 Feet
 Allowable Average Net Bearing Pressure* = 2,500 psf (Strip Footings)
 5,000 psf (Culvert Sections)

* The allowable bearing values are valid only for undisturbed native materials anticipated to be present at the subgrade elevation for the bottom of box culvert or for unsuitable materials removed and replaced in accordance with the following requirements. If unsuitable materials are present at the base of excavation, these materials shall be removed and replaced in accordance with Article 542.04(a) of the Standard Specifications. Alternately, said material meeting the requirements of IDOT Gradation CA-6, compacted to 95% of the standard laboratory density. If such work is required, it shall be considered extra work and shall be paid in accordance with Article 109.04 of the Standard Specifications.

DESIGN STRESSES

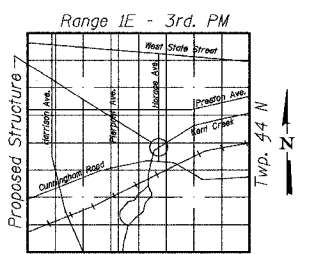
f'c = 5,000 psi
 fy = 60,000 psi (Reinforcement)
 fy = 65,000 psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.035g
 Site Coefficient (S) = 1.0

SOUTH FORK OF KENT CREEK
 BUILT 200... BY
 CITY OF ROCKFORD
 SECTION 04-00526-00-BR
 F.A.U. RT. 5100 STA. 12+84.28
 STR. NO. 101-6107 LOADING HS20

NAME PLATE
 See Std. 515001



LOCATION SKETCH

GENERAL NOTES

Precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M273.
 Reinforcement bars shall conform to the requirements of AASHTO M31, M42, or M53 Grade 60.
 Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
 Box culvert sections shall be precast. Cast-in-place concrete alternative for box culvert sections is not allowed. End sections may either be precast or cast-in-place. See Special Provision for Box Culvert End Sections for additional information.

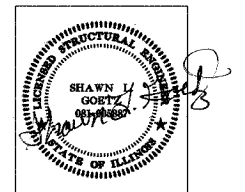
CULVERT BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Backfill	Cu. Yd.		202	202
Removal of Existing Structures	L. Sum			1
Name Plates	Each	1		1
Box Culvert End Sections	Each		8	8
Precast Concrete Box Culvert 10'x10' (M273)	Foot		213.5	213.5
Steel Plate Beam Guardrail, Attached to Structures (Special)	Foot	100		100
Pedestrian Railing	Foot	80		80

WATERWAY INFORMATION

Drainage Area = 14.4 sq. mi. Low Grade Elev. 727.30

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Headwater El. Exist.	Prop.	
Design	30	1025	327.7	379.9	726.41	0.03	0.06	726.44	726.47
Base	100	1375	365.1	398.0	727.44	0.02	0.19	727.46	727.63



DATE SIGNED: 3/22/2005
 LIC. EXP. DATE: 11/30/2006

Corporate License Number 184-001-084

GENERAL PLAN & ELEVATION

HORACE AVENUE BRIDGE
 OVER SOUTH FORK OF KENT CREEK
 F.A.U. ROUTE 5100
 SECTION 04-00526-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-6107
 STATION 12+84.28

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JOB NO. 04R1901
 DATE 3/22/05

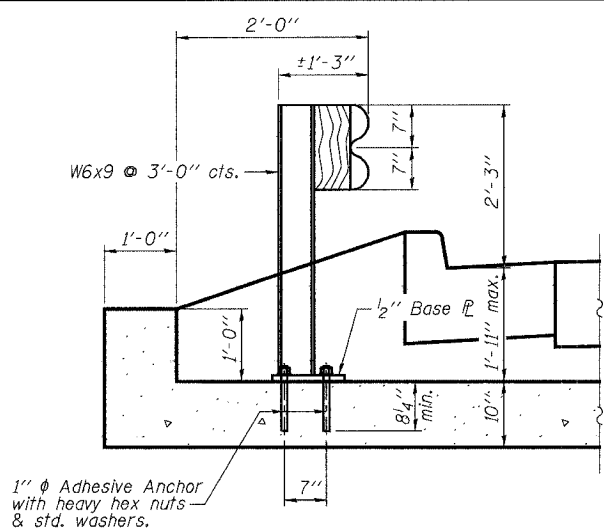
08-4633 PM 03/22/2005
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 LAYOUT: JKR 02/25/05
 DRAWN: JKR 03/01/05
 REVIEWED: SLG 03/22/05

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current 'AASHTO Standard Specifications for Highway Bridges.'"

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO. 3
F.A.U. 5100	*	WINNEBAGO	17	12
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BHM-5099(63)	
* 04-00526-00-BR				

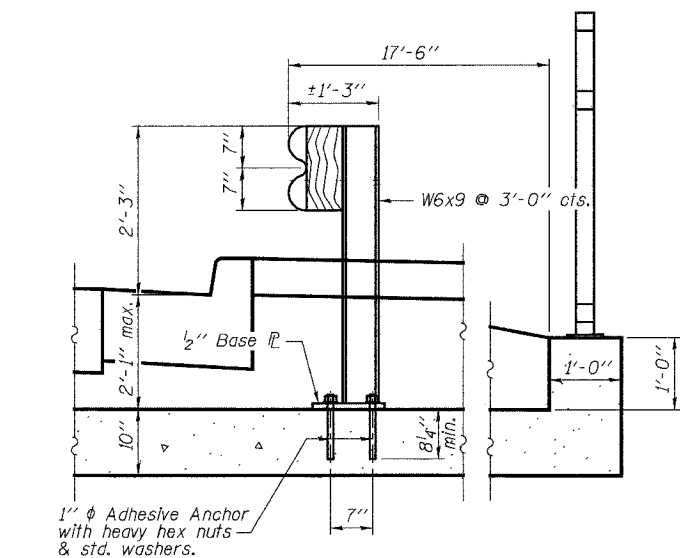
GENERAL NOTES

Bolts, nuts, washer and threaded rods shall conform to the requirements of A.S.T.M. designation A-307.
 All other structural steel shapes and plates shall conform to the requirements of A.A.S.H.T.O. M270, Grade 50.
 Bolts, nuts, and washers shall be galvanized in accordance with A.A.S.H.T.O. M-232.
 The posts, plates, and threaded rods shall be galvanized after fabrication in accordance with A.A.S.H.T.O. M-111 and A.S.T.M. A-385.
 Cost of special posts and attachments for connecting guardrail to the culvert shall be included in the cost of STEEL PLATE BEAM GUARD RAIL, ATTACHED TO STRUCTURES (SPECIAL).
 For details of guardrail elements not shown, see applicable portions of Standards 630001 and 630101.



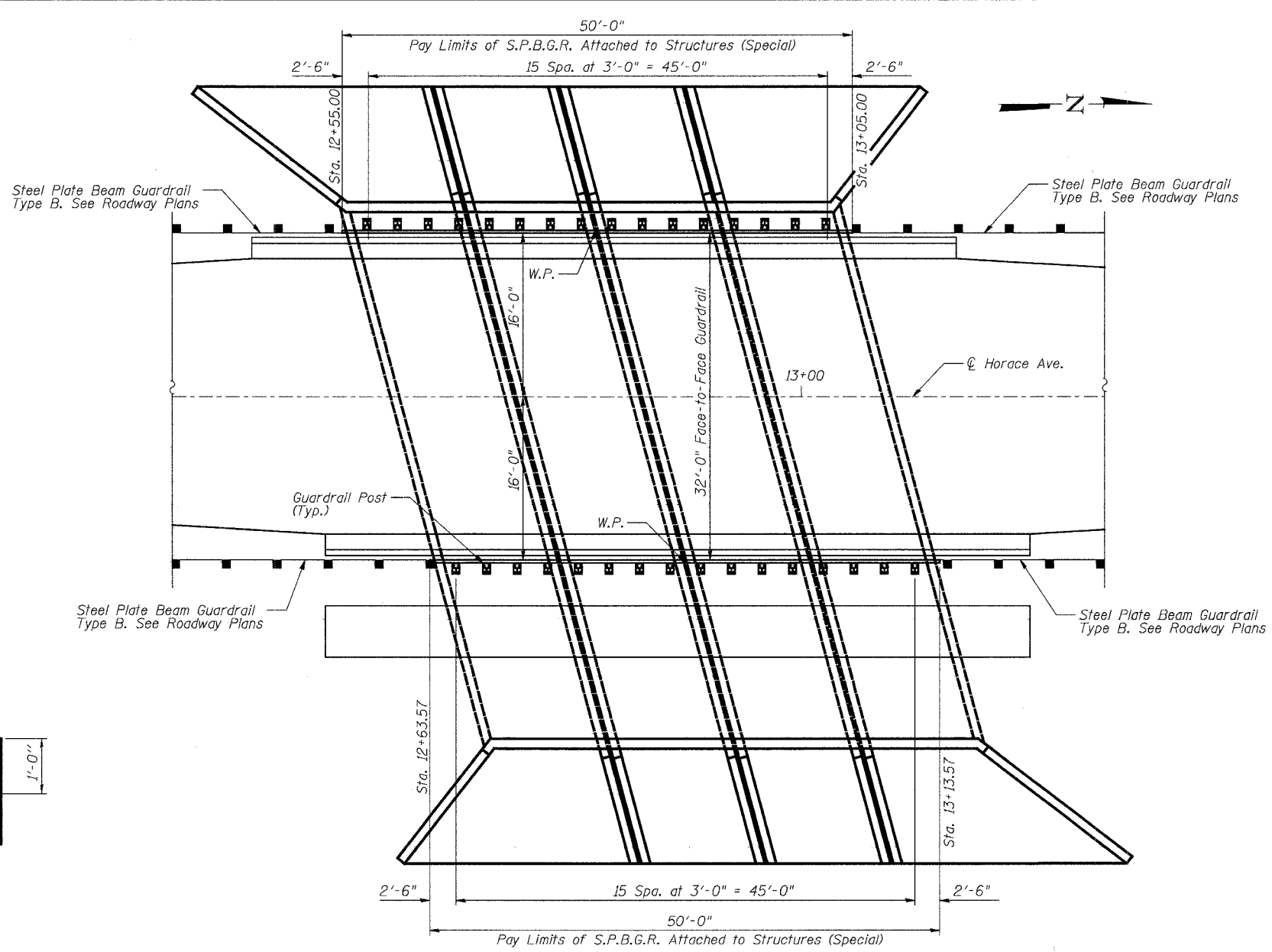
SECTION AT GUARDRAIL

(Looking North, West Guardrail)
 See Standard 630101-05 for dimensions not shown.

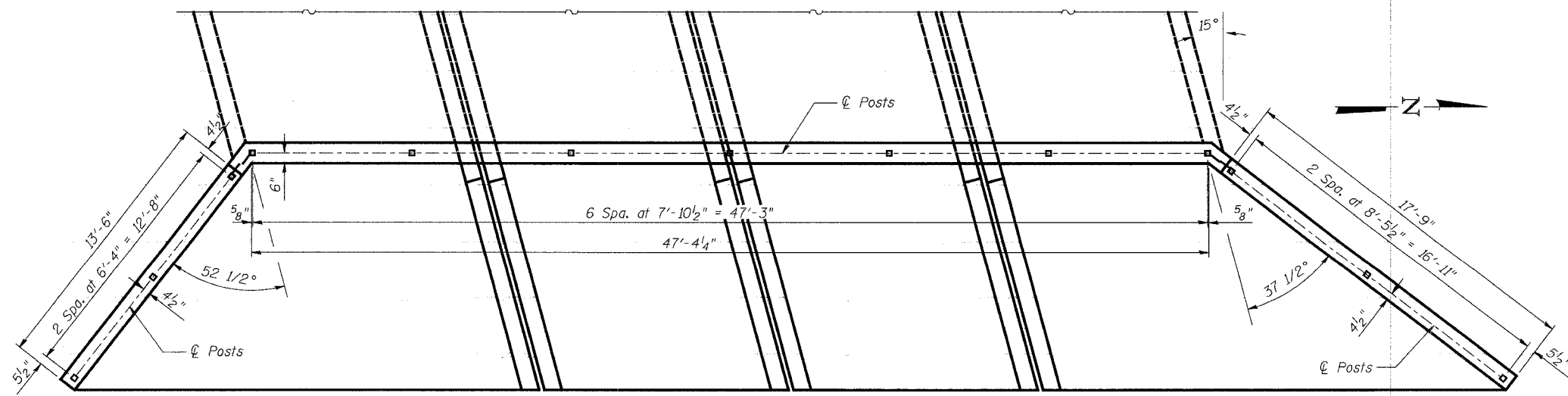


SECTION AT GUARDRAIL

(Looking North, East Guardrail)
 See Standard 630101-05 for dimensions not shown.



GUARDRAIL LAYOUT PLAN



PEDESTRIAN RAIL LAYOUT PLAN

BILL OF MATERIAL

Item	Unit	Quantity
Steel Plate Beam Guardrail Attached to Structures (Special)	Foot	100

Corporate License Number 184-001-084

GUARDRAIL DETAILS AND PEDESTRIAN RAIL LAYOUT PLAN

**HORACE AVENUE BRIDGE
 OVER SOUTH FORK OF KENT CREEK
 F.A.U. ROUTE 5100
 SECTION 04-00526-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-6107
 STATION 12+84.28**

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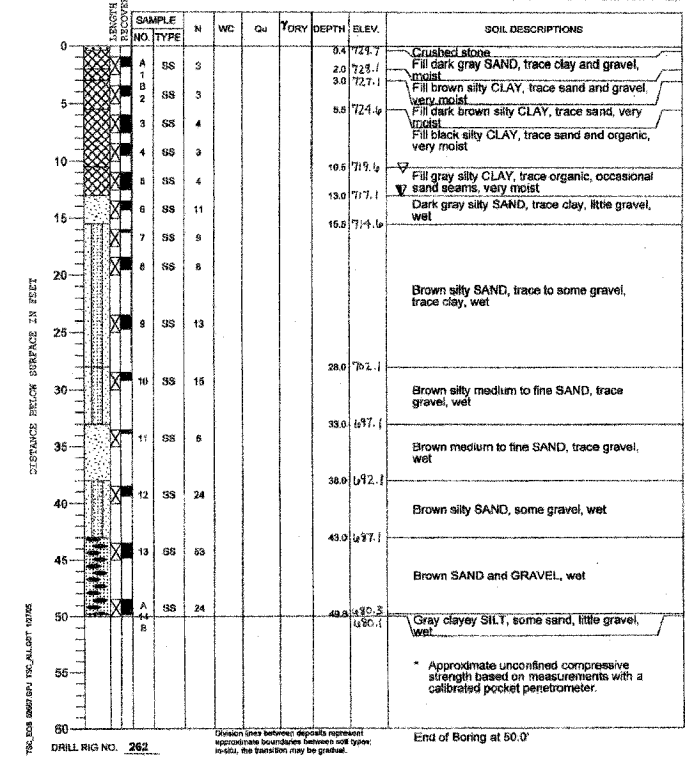


JOB NO.
04R1901
DATE
3/22/05

02-4628 PM
 03/22/2005
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 LAYOUT: JMR 03/01/05
 DRAWN: JMR 03/22/05
 REVIEWED: S.G. 03/22/05

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET	SHEET NO.
5100		WINNEBAGO	17	13	4
F.A.U. PROJECT: BHM-5099(63)					4 SHEETS
* 04-00526-00-BR					

PROJECT **Horace Street Bridge over Kent Creek, Job 04R1901, Rockford, IL**
 CLIENT **Hanson Professional Services, Springfield, IL**
 BORING **1** DATE STARTED **1-21-06** DATE COMPLETED **1-21-06** JOB **L-62,867**
 ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **730.1** WHILE DRILLING **13.0'**
 END OF BORING **(80.1)** AT END OF BORING **11.0'**
 24 HOURS

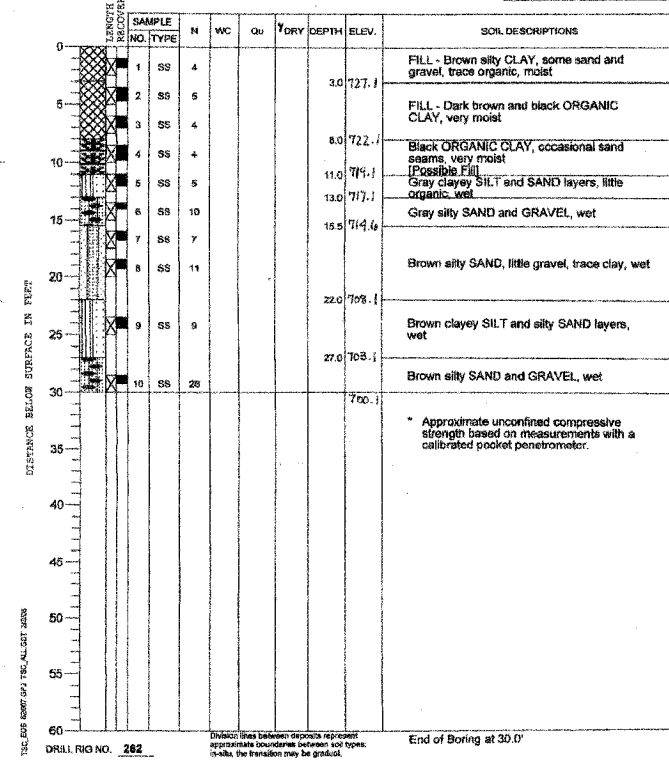


DRILL RIG NO. **262**

Distich lines between depths represent approximate boundaries between soil types; in-situ, the transition may be gradual.

End of Boring at 50.0'

PROJECT **Horace Street Bridge over Kent Creek, Job 04R1901, Rockford, IL**
 CLIENT **Hanson Professional Services, Springfield, IL**
 BORING **3** DATE STARTED **2-2-05** DATE COMPLETED **2-2-05** JOB **L-62,867**
 ELEVATIONS WATER LEVEL OBSERVATIONS
 GROUND SURFACE **730.1** WHILE DRILLING **Dry to 11.0'**
 END OF BORING **(100.1)** AT END OF BORING **N/A wash methods used**
 24 HOURS



DRILL RIG NO. **262**

Distich lines between depths represent approximate boundaries between soil types; in-situ, the transition may be gradual.

End of Boring at 30.0'

06-46-41 PM
 03/22/2005
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 LAYOUT: JKR 02/25/05
 DRAWN: JKR 03/01/05
 REVIEWED: SLG 03/22/05

Corporate License Number 184-001-084

SOIL BORINGS

**HORACE AVENUE BRIDGE
 OVER SOUTH FORK OF KENT CREEK
 F.A.U. ROUTE 5100
 SECTION 04-00526-00-BR
 WINNEBAGO COUNTY
 STRUCTURE NUMBER 101-6107
 STATION 12+84.28**

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JOB NO.
04R1901

DATE
3/22/05

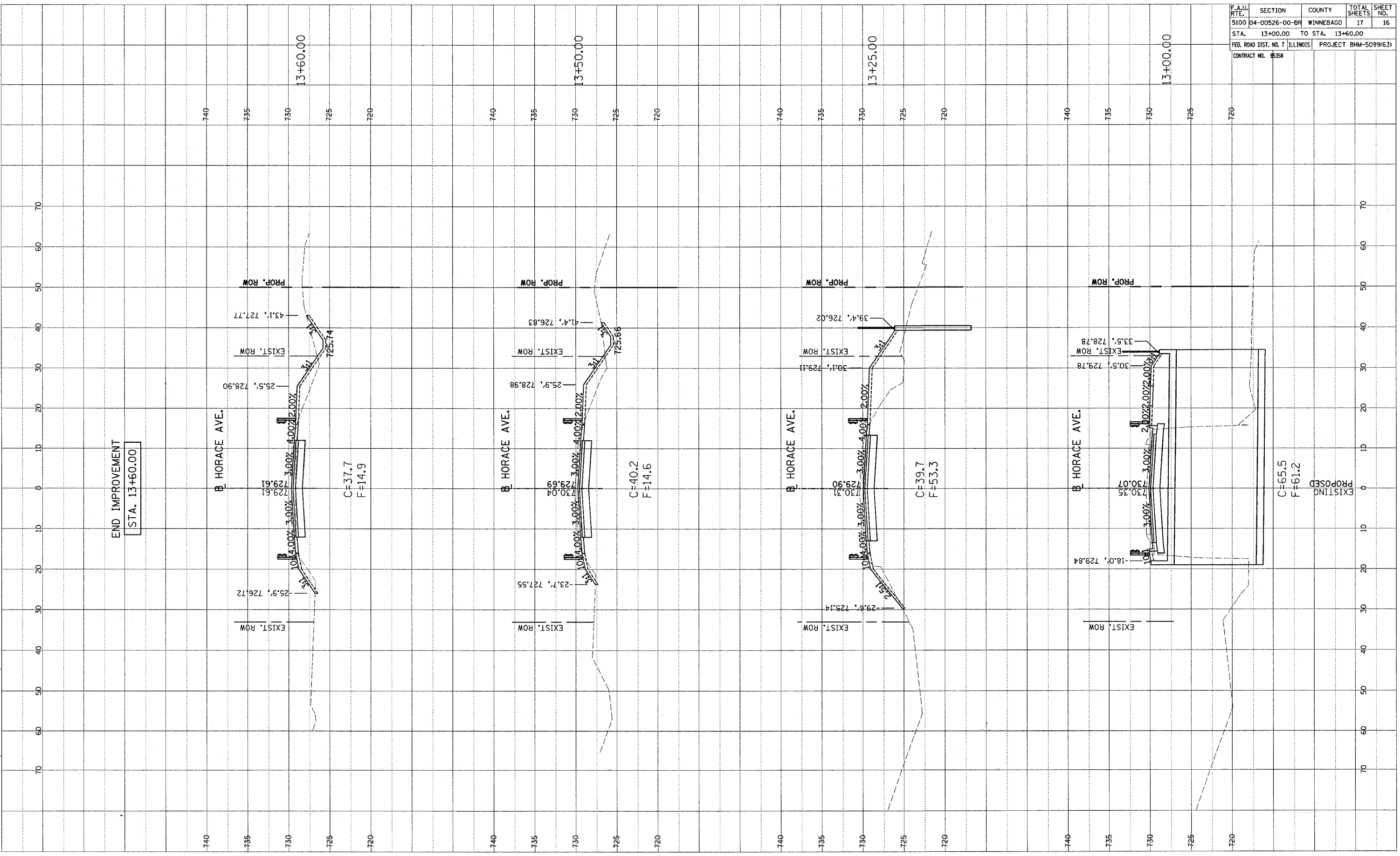
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NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	AREAS CHECKED		

DATE	BY
02/22/05	JUS
03/16/05	JUS
03/17/05	JUS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100	04-00526-00-BR	WINNEBAGO	17	16
STA.	13+00.00	TO STA.	13+60.00	
FED. ROAD DIST. NO. 7	ILLINOIS		PROJECT BHM-5099(63)	
CONTRACT NO. 85358				



F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5100	04-00526-00-BR	WINNEBAGO	17	17
STA.	13+75.00	TO STA.	14+75.00	
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BHM-5099(63)	
CONTRACT NO. 85358				

FINAL SURVEY	DATE
SURVEYED	
NOTED	
TO BE	
AREAS	
CHECKED	
NO.	



ORIGINAL SURVEY	DATE
SURVEYED	
PLOTTED	
AREAS	
CHECKED	
NO.	

LAYOUT	DATE
JOS	03/27/05
JOS	03/16/05
JOS	03/17/2005
REVIEWED	JOS

