

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74		CHAMPAIGN	19	1

•D5 SAFETY IMPROVEMENT 2007-1

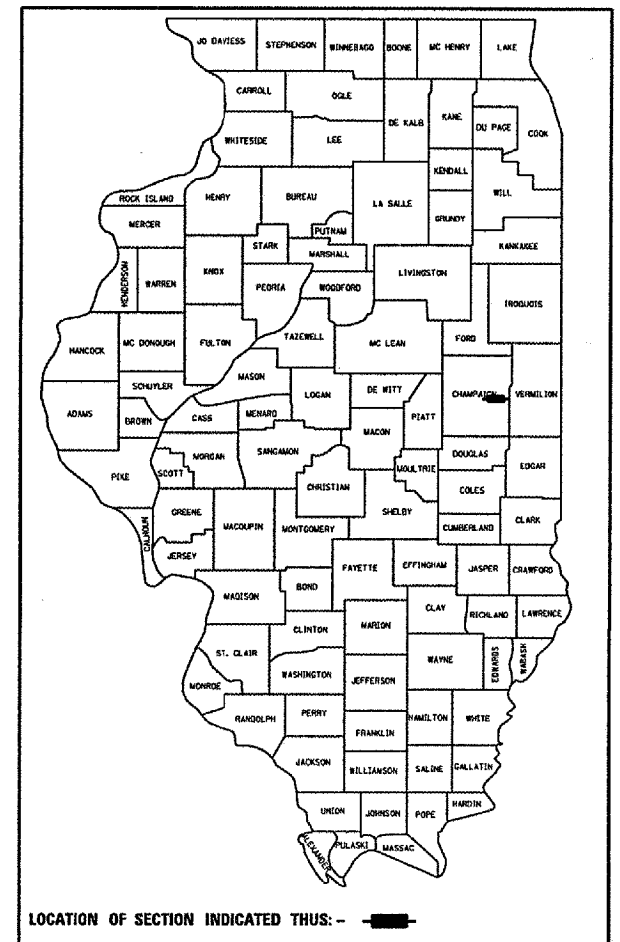
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

F.A.I. ROUTE 74 (I-74)  
SECTION D5 SAFETY IMPROVEMENT 2007-1  
PROJECT HSIP-074-6 (148)185  
CHAMPAIGN COUNTY

**C-95-003-07**  
GUARDRAIL IMPACT ATTENUATORS

D95-003-07



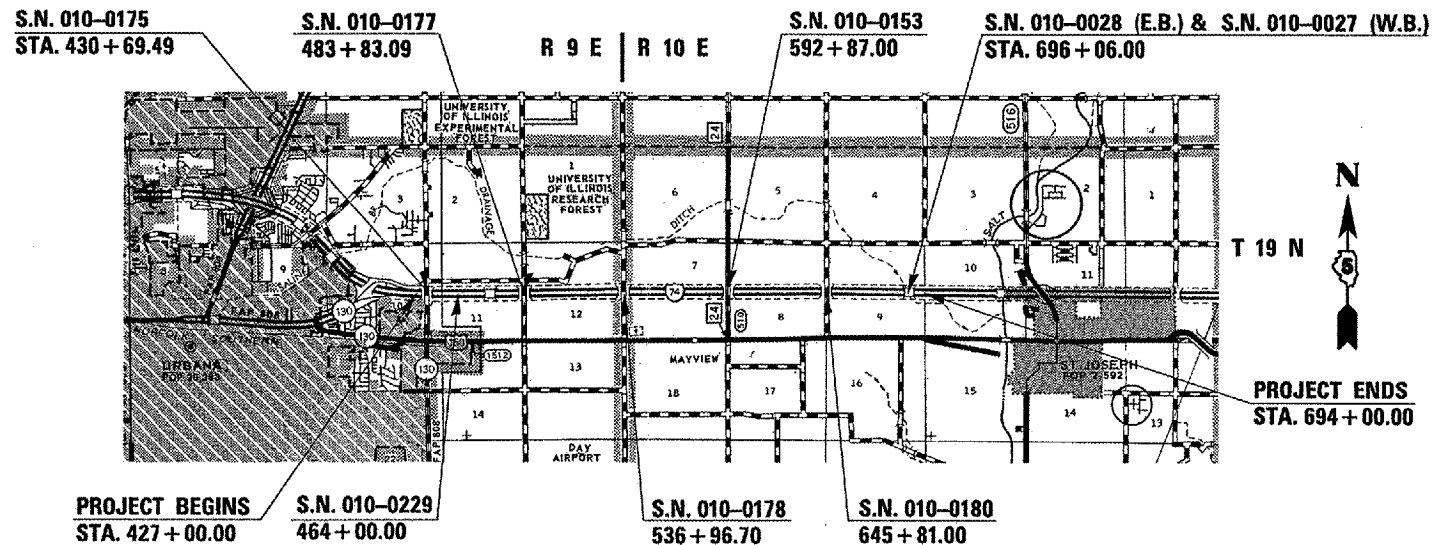
217-465-4181

PROJECT ENGINEER: KENSIL GARNETT

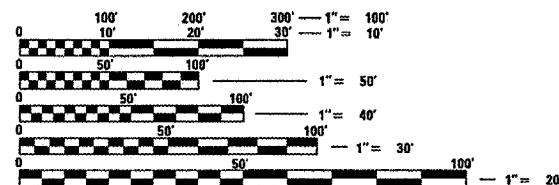
SQUAD LEADER: CORY SHEEHY

DESIGNER: RYAN CARROLL

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3



ADT: 29,200 (2007)  
**DESIGN DESIGNATION**  
FUNCTIONAL CLASSIFICATION  
INTERSTATE



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123

CONTRACT NO. 70633

TOTAL LENGTH OF SECTION & PROJECT = 26,700.00 FEET = 5.057 MILES  
NET LENGTH OF SECTION & PROJECT = 4,271.20 FEET = 0.809 MILES

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED 3/29 2007  
Joseph E. Crowe  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 3 ENGINEER

May 11, 2007  
Eric E. Harman  
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

May 11, 2007  
Michael P. Sees  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	.	CHAMPAIGN	19	2

•D5 SAFETY IMPROVEMENT 2007-1

## INDEX

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1	COVER SHEET
2	INDEX OF SHEETS & LIST OF STANDARDS
2	GENERAL NOTES
2	EARTHWORK SCHEDULE
3	SUMMARY OF QUANTITIES
4	SCHEDULE OF QUANTITIES
5-11	PLAN SHEETS
12	DETAIL OF CRASH WALL EXTENSIONS
13	DETAIL OF IMPACT ATTENUATORS
14-16	WEST BOUND CROSS SECTIONS
17-19	EAST BOUND CROSS SECTIONS

## LIST OF STANDARDS

STANDARD NO.	DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-01	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-03	TEMPORARY EROSION CONTROL SYSTEMS
630001-07	STEEL PLATE BEAM GUARDRAIL
630301-04	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-06	TRAFFIC BARRIER TERMINAL, TYPE 6
631033-02	TRAFFIC BARRIER TERMINAL, TYPE 6B
635006-02	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-01	REFLECTOR MARKER AND MOUNTING DETAILS
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5M (15') TO 600MM (24") FROM PAVEMENT EDGE
702001-06	TRAFFIC CONTROL DEVICES
701400-02	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-04	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY

## GENERAL NOTES

G.N.-100

ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-105.07B

EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL SECURE AN APPROVED LOCATING FIRM TO LOCATE STATE-OWNED UTILITIES PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES IN ACCORDANCE TO SECTION 803 OF THE STANDARD SPECIFICATIONS. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THE STATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

G.N.-250C - SPL

TEMPORARY EROSION CONTROL SEEDING WILL BE USED FOR AREAS DISTURBED DURING ATTENUATOR PAD CONSTRUCTION AND FOR AREAS INCLUDED IN GRADING AND SHAPING DITCHES QUANTITIES. SOME OR ALL OF THE TEMPORARY EROSION CONTROL SEEDING WILL BE DELETED IF IT IS POSSIBLE TO PLACE PERMANENT SEEDING ON EARTH SHOULDERS AT THE TIME OF THEIR COMPLETION.

G.N.-631

IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE MOUNTING METHOD OF THRU DRILLING THE MOUNTING HOLES FOR THE TRAFFIC BARRIER TERMINALS, TYPE 6, THE HOLES SHALL BE DRILLED USING A CORE DRILL. A HAMMER DRILL WILL NOT BE ALLOWED.

G.N.-1004.01

COARSE AGGREGATE GRADATION CA-10 MAY BE USED WHENEVER COARSE AGGREGATE CA-6 IS SPECIFIED IN THE STANDARD SPECIFICATIONS.

NO COMMITMENTS

## EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EXCAVATION ADJ. FOR SHRINKAGE	EMBANKMENT	BALANCE WASTE (+) SHORTAGE (-)
	CU YD	CU YD	CU YD (1)	CU YD (2)
S.N. 010-0175	2.4	1.8	28.0	-26.2
S.N. 010-0229	3.0	2.3	41.9	-39.7
S.N. 010-0177	0.0	0.0	17.3	-17.3
S.N. 010-0178	0.0	0.0	17.9	-17.9
S.N. 010-0153	10.0	7.5	18.1	-10.6
S.N. 010-0180	2.8	2.1	14.5	-12.4
S.N. 010-0028	0.0	0.0	16.0	-16.0
S.N. 010-0027	1.7	1.3	22.2	-20.9
<b>TOTAL =</b>	<b>20</b>	<b>15</b>	<b>176</b>	<b>-161</b>
<b>USE =</b>	<b>20</b>			<b>-165</b>

**NOTES:**

- QUANTITY OF EARTH EXCAVATION (CUT) ADJUSTED FOR A SHRINKAGE FACTOR OF 25%
- NO SHRINKAGE FACTOR APPLIED TO THE EMBANKMENT QUANTITY
- NO PAYMENT WILL BE ALLOWED FOR OVERHAUL

**PAY ITEMS**

20200100-EARTH EXCAVATION	20	CU YD
20400800-FURNISH EXCAVATION	165	CU YD

NOTE: MILLINGS, IF USED IN FILLS OR EMBANKMENTS, SHALL BE BURIED UNDER A MINIMUM OF 2 FT OF EARTH COVER AND SHALL NOT CREATE AN UNSIGHTLY APPEARANCE OR DETRACT FROM THE NATURAL TOPOGRAPHIC FEATURES OF AN AREA, PER ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS

# SUMMARY OF QUANTITIES

RURAL  
STA. 427+00.00  
TO STA. 694+00.00  
90% FED.  
10% STATE

CODE NO.	DESCRIPTION	CONSTRUCTION TYPE CODE:	UNIT	TOTAL	SFTY-3J	SFTY-3N
				QUANTITY	QUANTITY	QUANTITY
X0325764	HOT-MIX ASPHALT REMOVAL, SPECIAL		SQ YD	96.0	0.0	96.0
20200100	EARTH EXCAVATION		CU YD	20.0	20.0	0.0
20400800	FURNISHED EXCAVATION		CU YD	165.0	165.0	0.0
21400100	GRADING AND SHAPING DITCHES		FOOT	500.0	0.0	500.0
25000200	SEEDING, CLASS 2		ACRE	0.8	0.4	0.4
25000400	NITROGEN FERTILIZER NUTRIENT		POUND	72.0	36.0	36.0
25000500	PHOSPHORUS FERTILIZER NUTRIENT		POUND	72.0	36.0	36.0
25000600	POTASSIUM FERTILIZER NUTRIENT		POUND	72.0	36.0	36.0
25100115	MULCH, METHOD 2		ACRE	0.8	0.4	0.4
28000255	TEMPORARY EROSION CONTROL SEEDING		ACRE	0.8	0.4	0.4
28000300	TEMPORARY DITCH CHECKS		EACH	16.0	16.0	0.0
28000400	PERIMETER EROSION BARRIER		FOOT	800.0	800.0	0.0
50800205	REINFORCEMENT BARS, EPOXY COATED		POUND	920.0	613.3	306.7
* 63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A		FOOT	3250.0	3,250.0	0.0
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6		EACH	4.0	4.0	0.0
* 63100089	TRAFFIC BARRIER TERMINAL, TYPE 6B		EACH	10.0	10.0	0.0
* 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)		EACH	3.0	3.0	0.0
* 63100169	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED)		EACH	13.0	13.0	0.0
63200310	GUARDRAIL REMOVAL		FOOT	4000.0	4,000.0	0.0
63400105	GUARD POSTS		EACH	40.0	0.0	40.0
63400205	GUARD POSTS REMOVAL		EACH	54.0	0.0	54.0
67000200	ENGINEER'S FIELD OFFICE, TYPE A		EACH	3.0	1.5	1.5
67100100	MOBILIZATION		L SUM	1.0	0.5	0.5
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406		L SUM	1.0	0.5	0.5
* 78200410	GUARDRAIL MARKERS, TYPE A		EACH	64.0	64.0	0.0
* 78201000	TERMINAL MARKER - DIRECT APPLIED		EACH	16.0	16.0	0.0
X7015005	CHANGEABLE MESSAGE SIGN		CAL DA	28.0	14.0	14.0
XX002909	CLASS SI CONCRETE		CU YD	55.9	37.3	18.6
Z0013300	CONCRETE REMOVAL (SPECIAL)		SQ YD	212.0	0.0	212.0
* Z0030150	IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3		EACH	10.0	0.0	10.0
Z0056220	SAND MODULE IMPACT ATTENUATOR TO BE REMOVED		EACH	150.0	0.0	150.0

\* SPECIALITY ITEMS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	.	CHAMPAIGN	19	4

# SCHEDULE OF QUANTITIES

**21400100**

**GRADING AND SHAPING DITCHES**

STRUCTURE NUMBER	* STA.	PAD LOCATION	FEET
010-0175	430+69.49	EAST	50.0
010-0175	430+69.49	WEST	50.0
010-0177	483+83.09	EAST	50.0
010-0177	483+83.09	WEST	50.0
010-0178	536+76.70	EAST	50.0
010-0178	536+76.70	WEST	50.0
010-0153	592+57.00	EAST	50.0
010-0153	592+57.00	WEST	50.0
010-0180	645+81.00	EAST	50.0
010-0180	645+81.00	WEST	50.0
TOTAL			<b>500.0</b>

FEET

\*LOCATION TO BE VERIFIED BY ENGINEER

**#5000827**

**HOT-MIX ASPHALT REMOVAL SPECIAL**

STRUCTURE NUMBER	STATION	PAD LOCATION	REMOVAL SQ. YD.
010-0175	430+69.49	EAST	46.8
010-0175	430+69.49	WEST	49.0
TOTAL =			<b>95.9</b>
USE =			<b>96.0</b>

**Z0056220**

**SAND MODULE IMPACT ATTENUATOR REMOVAL**

STRUCTURE NUMBER	STATION	PAD LOCATION	EACH
010-0175	430+69.49	EAST	19.0
010-0175	430+69.49	WEST	19.0
010-0177	483+83.09	EAST	14.0
010-0177	483+83.09	WEST	14.0
010-0178	536+76.70	EAST	14.0
010-0178	536+76.70	WEST	14.0
010-0153	592+57.00	EAST	14.0
010-0153	592+57.00	WEST	14.0
010-0180	645+81.00	EAST	14.0
010-0180	645+81.00	WEST	14.0
TOTAL =			<b>150.0</b>
USE =			<b>150.0</b>

**63400105**

**GUARD POSTS**

STRUCTURE NUMBER	STATION	PAD LOCATION	EACH
010-0175	430+69.49	EAST	4.0
010-0175	430+69.49	WEST	4.0
010-0177	483+83.09	EAST	4.0
010-0177	483+83.09	WEST	4.0
010-0178	536+76.70	EAST	4.0
010-0178	536+76.70	WEST	4.0
010-0153	592+57.00	EAST	4.0
010-0153	592+57.00	WEST	4.0
010-0180	645+81.00	EAST	4.0
010-0180	645+81.00	WEST	4.0
TOTAL =			<b>40.0</b>
USE =			<b>40.0</b>

**Z0013300**

**CONCRETE REMOVAL SPECIAL**

STRUCTURE NUMBER	STATION	PAD LOCATION	REMOVAL SQ. YD.
010-0177	483+83.09	EAST	26.1
010-0177	483+83.09	WEST	27.3
010-0178	536+76.70	EAST	26.5
010-0178	536+76.70	WEST	27.6
010-0153	592+57.00	EAST	25.8
010-0153	592+57.00	WEST	26.3
010-0180	645+81.00	EAST	25.5
010-0180	645+81.00	WEST	26.3
TOTAL =			<b>211.5</b>
USE =			<b>212.0</b>

**Z0030150**

**IMPACT ATTENUATORS (NON-REDIRECTIVE), TEST LEVEL 3**

STRUCTURE NUMBER	STATION	PAD LOCATION	EACH
010-0175	430+69.49	EAST	1.0
010-0175	430+69.49	WEST	1.0
010-0177	483+83.09	EAST	1.0
010-0177	483+83.09	WEST	1.0
010-0178	536+76.70	EAST	1.0
010-0178	536+76.70	WEST	1.0
010-0153	592+57.00	EAST	1.0
010-0153	592+57.00	WEST	1.0
010-0180	645+81.00	EAST	1.0
010-0180	645+81.00	WEST	1.0
TOTAL =			<b>10.0</b>
USE =			<b>10.0</b>

**63400205**

**GUARD POSTS REMOVAL**

STRUCTURE NUMBER	STATION	PAD LOCATION	EACH
010-0175	430+69.49	EAST	4.0
010-0175	430+69.49	WEST	4.0
010-0177	483+83.09	EAST	4.0
010-0177	483+83.09	WEST	6.0
010-0178	536+76.70	EAST	6.0
010-0178	536+76.70	WEST	6.0
010-0153	592+57.00	EAST	6.0
010-0153	592+57.00	WEST	6.0
010-0180	645+81.00	EAST	6.0
010-0180	645+81.00	WEST	6.0
TOTAL =			<b>54.0</b>
USE =			<b>54.0</b>

**28000300**

**TEMPORARY DITCH CHECKS**

STR#	SIDE	*STA.	EACH
010-0175	EB	427+39.0	1.0
	WB	430+75.0	1.0
010-0290	EB	461+57.0	1.0
	WB	463+88.0	1.0
010-0177	EB	481+79.0	1.0
	WB	484+12.0	1.0
010-0178	EB	535+68.0	1.0
	WB	536+92.0	1.0
010-0153	EB	591+18.0	1.0
	WB	592+50.0	1.0
010-0180	EB	643+53.0	1.0
	WB	645+77.0	1.0
010-0028	EB MED	685+13.0	1.0
	EB OUT	686+39.0	1.0
010-0027	WB MED	690+99.0	1.0
	WB OUT	690+74.0	1.0
TOTAL =			<b>16.0</b>

\*TO BE VERIFIED BY ENGINEER

**28000400**

**PERIMETER EROSION BARRIER**

SR#	SIDE	*STA.	FOOT
010-0175	EB	427+39.0	50.0
	WB	430+75.0	50.0
010-0290	EB	461+57.0	50.0
	WB	463+88.0	50.0
010-0177	EB	481+79.0	50.0
	WB	484+12.0	50.0
010-0178	EB	535+68.0	50.0
	WB	536+92.0	50.0
010-0153	EB	591+18.0	50.0
	WB	592+50.0	50.0
010-0180	EB	643+53.0	50.0
	WB	645+77.0	50.0
010-0028	EB MED	685+13.0	50.0
	EB OUT	686+39.0	50.0
010-0027	WB MED	690+99.0	50.0
	WB OUT	690+74.0	50.0
TOTAL =			<b>800.0</b>

\*TO BE VERIFIED BY ENGINEER

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	5
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

**STEEL PLATE BEAM GUARDRAIL, TYPE A**

	STATION	TO	STATION	FOOT
EB	428+27.59		430+15.09	187.5
WB	431+23.89		433+61.39	237.5

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION	TO	STATION	EACH
EB	428+27.59		427+77.59	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 6B**

	STATION	EACH
EB	430+15.09	1.0
WB	431+23.89	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, TANGENT**

	STATION	TO	STATION	EACH
WB	433+61.39		434+11.39	1.0

**GUARDRAIL REMOVAL**

	STATION	TO	STATION	FOOT
EB	427+39.0		430+64.0	325.0
WB	430+75.0		434+00.0	325.0

\* CRASH WALLS TO BE EXTENDED  
SEE DETAIL SHEET - PG 12

S.N. 010-0175  
STA. 430+69.49 (F.A.I. 74)  
STA. 50+00 (T.R. 208)

EXISTING P. CULV., TYPE 1A, 24" (RCCP)  
W/ PRECAST R.C. FLARED END SECTIONS AND GRATES  
RT. & LT. STA. 434+00  
EXISTING INLET BOX (SPL)

IMPACT ATTENUATORS (NON-REDIRECTIVE),  
TEST LEVEL 3 - 2.0 EACH

SAND MODULE IMPACT ATTENUATOR TO BE REMOVED  
-38.0 EACH

HOT-MIX ASPHALT REMOVAL SPECIAL - 95.9 SQYD

SEC. 10, T19N, R9E, 2ND P.M.

SEC. 11, T19N, R9E, 2ND P.M.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

S.N. 010-0175  
STA. 430+69.49 (F.A.I. 74)  
STA. 50+00 (T.R. 208)

SCALE: VERT.  
HORIZ.

DRAWN BY  
CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

**STEEL PLATE BEAM GUARDRAIL, TYPE A**

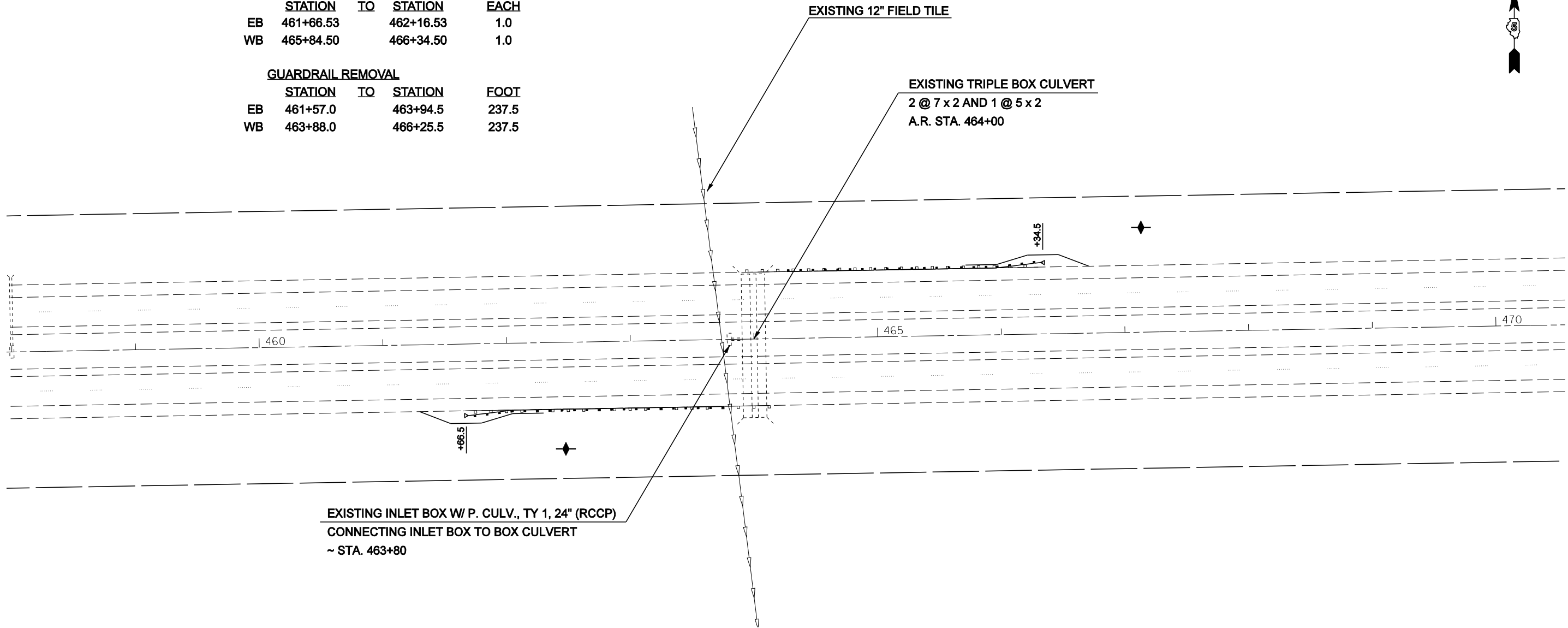
	STATION	TO	STATION	FOOT
EB	462+16.53		463+91.53	175.0
WB	464+09.50		465+84.50	175.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION	TO	STATION	EACH
EB	461+66.53		462+16.53	1.0
WB	465+84.50		466+34.50	1.0

**GUARDRAIL REMOVAL**

	STATION	TO	STATION	FOOT
EB	461+57.0		463+94.5	237.5
WB	463+88.0		466+25.5	237.5



EXISTING INLET BOX W/ P. CULV., TY 1, 24" (RCCP)  
 CONNECTING INLET BOX TO BOX CULVERT  
 ~ STA. 463+80

SEC. 11, T19N, R9E, 2ND P.M.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**BOX CULVERT @ STA 464+00**  
**STR# 010-0229**

SCALE: VERT.  
 HORIZ.  
 DATE

DRAWN BY  
 CHECKED BY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	7
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

**STEEL PLATE BEAM GUARDRAIL, TYPE A**

	STATION	TO	STATION	FOOT
EB	481+41.19		483+28.69	187.5
WB	484+37.49		486+24.99	187.5

**TRAFFIC BARRIER TERMINAL, TYPE 6B**

	STATION	EACH
EB	483+28.69	1.0
WB	484+37.49	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION	TO	STATION	EACH
EB	480+91.19		481+41.19	1.0
WB	486+24.99		486+74.99	1.0

**GUARDRAIL REMOVAL**

	STATION	TO	STATION	FOOT
EB	481+79.0		483+91.5	212.5
WB	484+12.0		485+49.5	137.5

S.N. 010-0177  
 STA. 483+83.09 (F.A.I. 74)  
 STA. 50+00 (T.R. 220)

EXISTING STORM SEWER, 15"

EXISTING INLET BOX W/ P. CULV., TY 1, 24" (RCCP)  
 CONNECTING INLET BOX TO A.R. CULVERT  
 ~ STA. 482+70

EXISTING P. CULV., TYPE 1A, 36" x 128' (RCCP)  
 W/ PRECAST R.C. FLARED END SECTIONS AND GRATES  
 RT. & LT. STA. 483+00

IMPACT ATTENUATORS (NON-REDIRECTIVE),  
 TEST LEVEL 3 - 2.0 EACH (SEE DETAIL)

SAND MODULE IMPACT ATTENUATOR TO BE REMOVED  
 -28.0 EACH

CONCRETE REMOVAL (SPECIAL) -  
 (E) = 26.1 SQYD (W) = 27.3 SQYD

EXISTING PIPE CULVERT, TYPE 2, 24"  
 RT. STATION 483+83.09

\* CRASH WALLS TO BE EXTENDED  
 SEE DETAIL SHEET - PG 12

SEC. 11, T19N, R9E, 2ND P.M.

SEC. 12, T19N, R9E, 2ND P.M.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

**STR# 010-0177**  
**TR 220**

SCALE: VERT. \_\_\_\_\_  
 HORIZ. \_\_\_\_\_

DRAWN BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_

PLOT DATE = 3/29/2007  
 FILE NAME = c:\projects\70633\70633.pln.dgn  
 PLOT SCALE = 84.785' / IN.  
 USER NAME = sheehygm

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	.	CHAMPAIGN	19	8
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

**STEEL PLATE BEAM GUARDRAIL, TYPE A**

	STATION TO	STATION	FOOT
EB	534+54.80	536+42.30	187.5
WB	537+51.10	539+38.60	187.5

**TRAFFIC BARRIER TERMINAL, TYPE 6B**

	STATION	EACH
EB	536+42.30	1.0
WB	537+51.10	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION TO	STATION	EACH
EB	534+04.80	534+54.80	1.0
WB	539+38.60	539+88.60	1.0

**GUARDRAIL REMOVAL**

	STATION TO	STATION	FOOT
EB	535+68.0	537+05.5	137.5
WB	536+92.0	538+29.5	137.5

EXISTING STORM SEWER, 8"

S.N. 010-0178  
STA. 536+96.70 (F.A.I. 74)  
STA. 50+00 (T.R. 230)

EXISTING P. CULV., TYPE 2A, 24" (RCCP)  
W/ PRECAST R.C. FLARED END SECTION AND GRATE  
LT. STA. 536+00

EXISTING INLET BOX (SPL)

EXISTING STORM SEWER, 12"

EXISTING 12" FIELD TILE

EXISTING 12" FIELD TILE

EXISTING STORM SEWER, 12"

IMPACT ATTENUATORS (NON-REDIRECTIVE),  
TEST LEVEL 3 - 2.0 EACH (SEE DETAIL)

SAND MODULE IMPACT ATTENUATOR TO BE REMOVED  
- 28.0 EACH

CONCRETE REMOVAL (SPECIAL) - SQYD  
(E) = 26.5 SQYD (W) = 27.6 SQYD

\*CRASH WALLS TO BE EXTENDED  
SEE DETAIL SHEET - PG 12

SEC. 12, T19N, R9E, 2ND P.M.

SEC. 7, T19N, R10E, 2ND P.M.

REVISIONS	
NAME	DATE

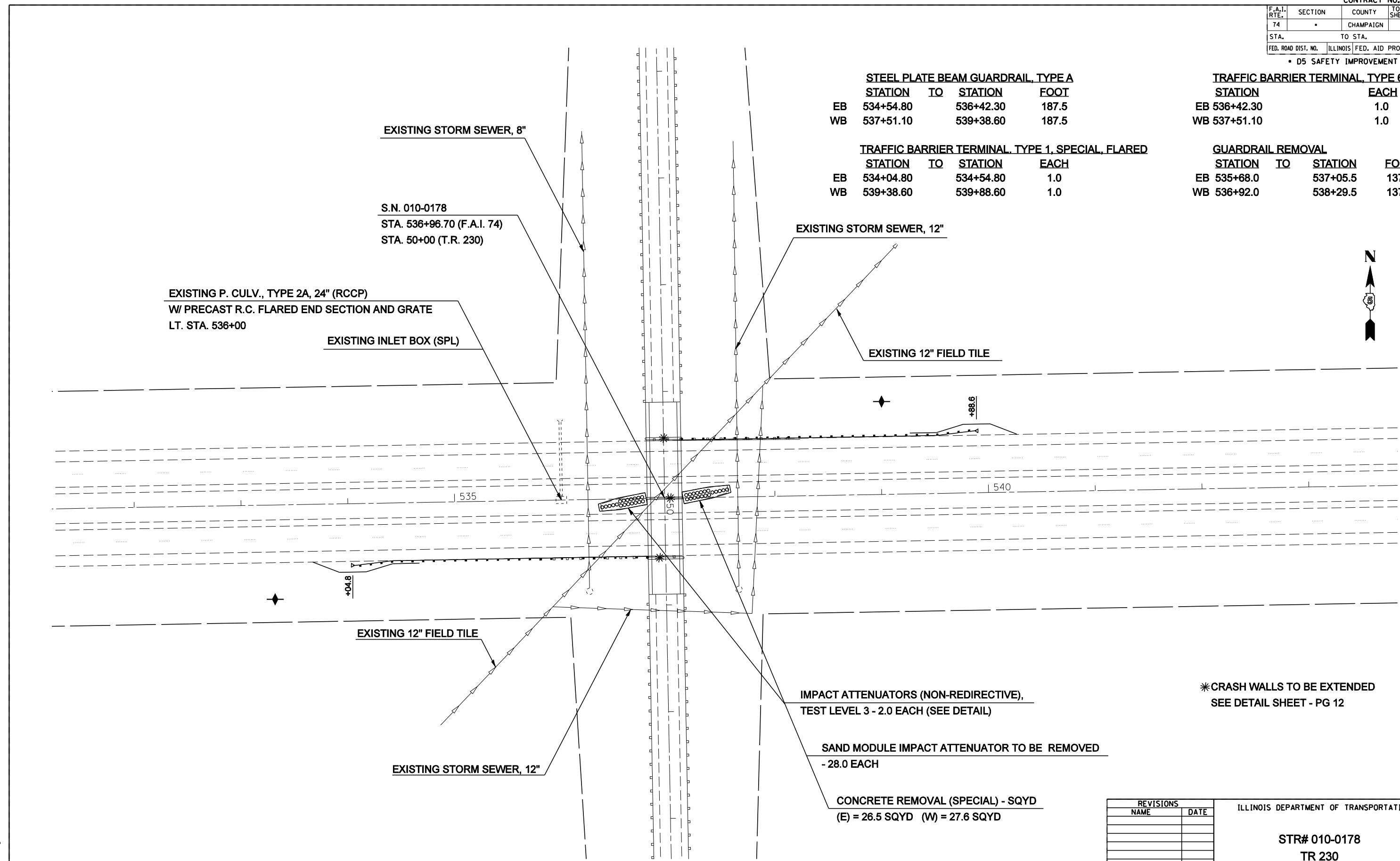
ILLINOIS DEPARTMENT OF TRANSPORTATION

STR# 010-0178  
TR 230

SCALE: VERT.  
HORIZ.  
DATE

DRAWN BY  
CHECKED BY

PLOT DATE = 3/29/2007  
FILE NAME = c:\projects\70633\plan.dgn  
PLOT SCALE = 84.785' / IN.  
USER NAME = sheehygm





F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	9
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

**STEEL PLATE BEAM GUARDRAIL, TYPE A**

	STATION	TO	STATION	FOOT
EB	590+14.10		592+01.60	187.5
WB	593+12.40		594+99.90	187.5

**TRAFFIC BARRIER TERMINAL, TYPE 6B**

	STATION	EACH
EB	592+01.60	1.0
WB	593+12.40	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION	TO	STATION	EACH
EB	589+64.10		590+14.10	1.0
WB	594+99.90		595+49.90	1.0

**GUARDRAIL REMOVAL**

	STATION	TO	STATION	FOOT
EB	591+18.0		592+68.0	150.0
WB	592+50.0		594+00.0	150.0

S.N. 010-0153  
 STA. 592+57.00 (F.A.I. 74)  
 STA. 50+19.50 (C.H. 24)

EXISTING P. CULV., TYPE 1A, 24" (RCCP)  
 W/ PRECAST R.C. FLARED END SECTION AND GRATE  
 LT. STA. 588+00

EXISTING INLET BOX

EXISTING P. CULV., TYPE 1A, 24" (RCCP)  
 W/ PRECAST R.C. FLARED END SECTION AND GRATE  
 RT. STA. 593+50

EXISTING INLET BOX

IMPACT ATTENUATORS (NON-REDIRECTIVE),  
 TEST LEVEL 3 - 2.0 EACH (SEE DETAIL)

SAND MODULE IMPACT ATTENUATOR TO BE REMOVED  
 -28.0 EACH

CONCRETE REMOVAL (SPECIAL) - SQYD  
 (E) = 25.8 SQYD (W) = 26.3 SQYD

CRASH WALLS TO BE EXTENDED  
 SEE DETAIL SHEET - PG 12

EXISTING STORM SEWER, 12"

SEC. 7, T19N, R10E, 2ND P.M.

SEC. 8, T19N, R10E, 2ND P.M.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STR# 010-0153  
 CH 24

SCALE: VERT.  
 HORIZ.  
 DATE

DRAWN BY  
 CHECKED BY

PLOT DATE = 3/29/2007  
 FILE NAME = c:\projects\70633\plan.dgn  
 PLOT SCALE = 84.785' / IN.  
 USER NAME = sheehygm



F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	10
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				



**STEEL PLATE BEAM GUARDRAIL, TYPE A**

	STATION	TO	STATION	FOOT
EB	643+39.15		645+26.65	187.5
WB	646+35.35		648+22.85	187.5

**TRAFFIC BARRIER TERMINAL, TYPE 6B**

	STATION	EACH
EB	645+26.65	1.0
WB	646+35.35	1.0

**TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED**

	STATION	TO	STATION	EACH
EB	642+89.15		643+39.15	1.0
WB	648+22.85		648+72.85	1.0

**GUARDRAIL REMOVAL**

	STATION	TO	STATION	FOOT
EB	643+53.0		645+90.5	237.5
WB	645+77.0		648+14.5	237.5

S.N. 010-0180  
 STA. 645+81.00 (F.A.I. 74)  
 STA. 50+00.00 (T.R. 258)

EXISTING P. CULV., TYPE 2, 24" (RCCP)  
 LT. STA. 645+81.00

EXISTING INLET BOX (SPL) W/ P. CULV., TY 1, 18" (RCCP)  
 CONNECTING INLET BOX TO MANHOLE

EXISTING MANHOLE, TYPE A, 4' DIAMETER

EXISTING P. CULV., TYPE 1, 18" (RCCP)  
 W/ PRECAST R.C. FLARED END SECTION AND GRATE  
 RT. STA. 645+25

EXISTING P. CULV., TYPE 2, 24" (RCCP)  
 RT. STA. 645+81.00

IMPACT ATTENUATORS (NON-REDIRECTIVE),  
 TEST LEVEL 3 - 2.0 EACH

SAND MODULE IMPACT ATTENUATOR TO BE REMOVED  
 -28.0 EACH

CONCRETE REMOVAL (SPECIAL) - SQYD  
 (E) = 25.5 SQYD (W) = 26.3 SQYD

CRASH WALLS TO BE EXTENDED  
 SEE DETAIL SHEET - PG 12

SEC. 8, T19N, R10E, 2ND P.M.

SEC. 9, T19N, R10E, 2ND P.M.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STR# 010-0180  
 TR 258

SCALE: VERT.  
 HORIZ.  
 DATE

DRAWN BY  
 CHECKED BY

PLOT DATE = 3/29/2007  
 FILE NAME = c:\projects\70633\plan.dgn  
 PLOT SCALE = 84.785' / IN.  
 USER NAME = sheehygm

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	11
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• D5 SAFETY IMPROVEMENT 2007-1				

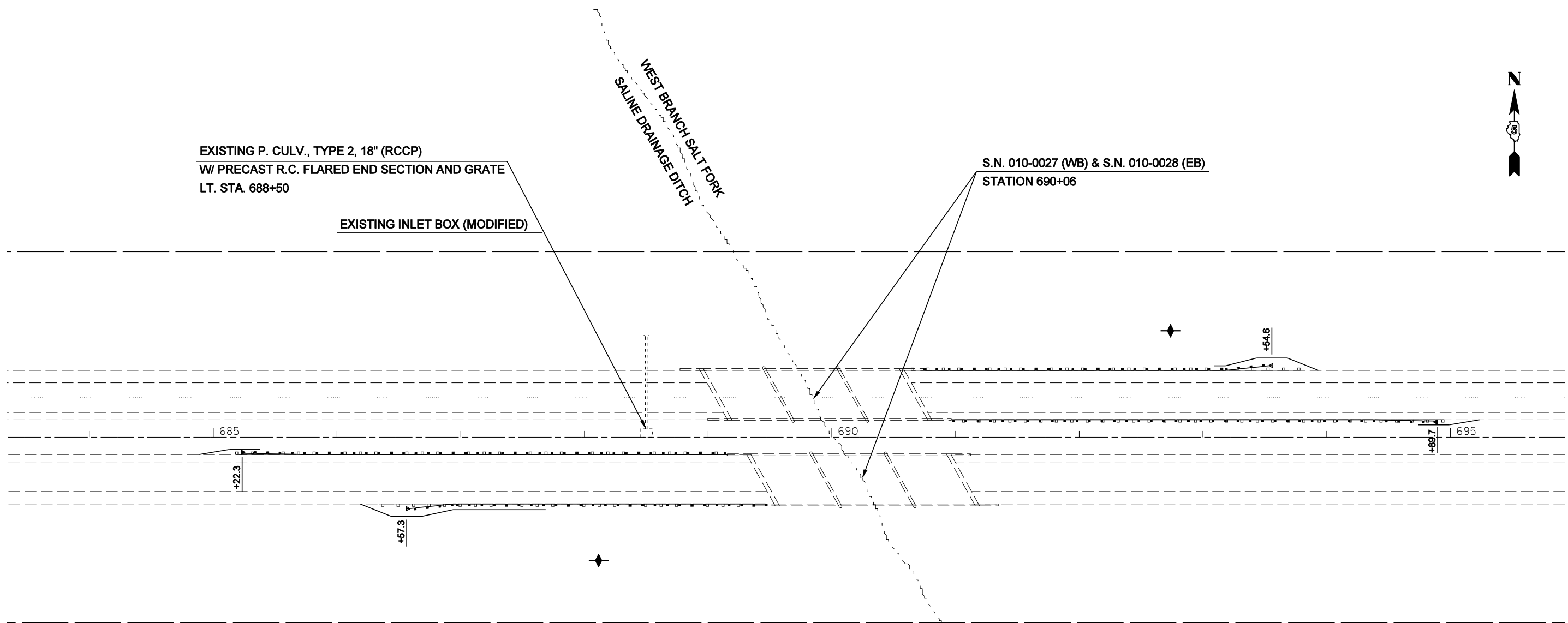


EXISTING P. CULV., TYPE 2, 18" (RCCP)  
W/ PRECAST R.C. FLARED END SECTION AND GRATE  
LT. STA. 688+50

EXISTING INLET BOX (MODIFIED)

S.N. 010-0027 (WB) & S.N. 010-0028 (EB)  
STATION 690+06

WEST BRANCH SALT FORK  
SALINE DRAINAGE DITCH



STEEL PLATE BEAM GUARDRAIL, TYPE A			
	STATION	TO	STATION
EB MED	685+72.28		688+72.28
EB OUT	687+07.27		688+94.77
WB MED	691+39.71		694+39.71
WB OUT	691+17.15		693+04.65

GUARDRAIL REMOVAL			
	STATION	TO	STATION
EB MED	685+13.0		689+25.5
EB OUT	686+39.0		689+51.5
WB MED	690+99.0		695+36.5
WB OUT	690+74.0		693+86.5

TRAFFIC BARRIER TERMINAL, TYPE 6		
	STATION	EACH
EB MED	536+42.30	1.0
EB OUT	484+37.49	1.0
WB MED	592+01.60	1.0
WB OUT	537+51.10	1.0

TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, FLARED			
	STATION	TO	STATION
EB OUT	686+57.27		687+07.27
WB OUT	693+04.65		693+54.65

TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL, TANGENT			
	STATION	TO	STATION
EB MED	685+22.28		685+72.28
WB MED	694+39.71		694+89.71

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STR# 010-0027 & 0028  
SALINE DRAINAGE DITCH

SCALE: VERT.  
HORIZ.  
DATE

DRAWN BY  
CHECKED BY

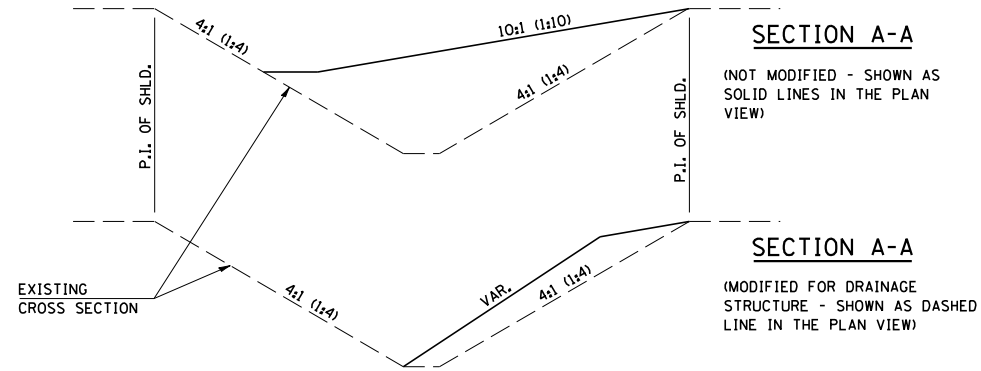
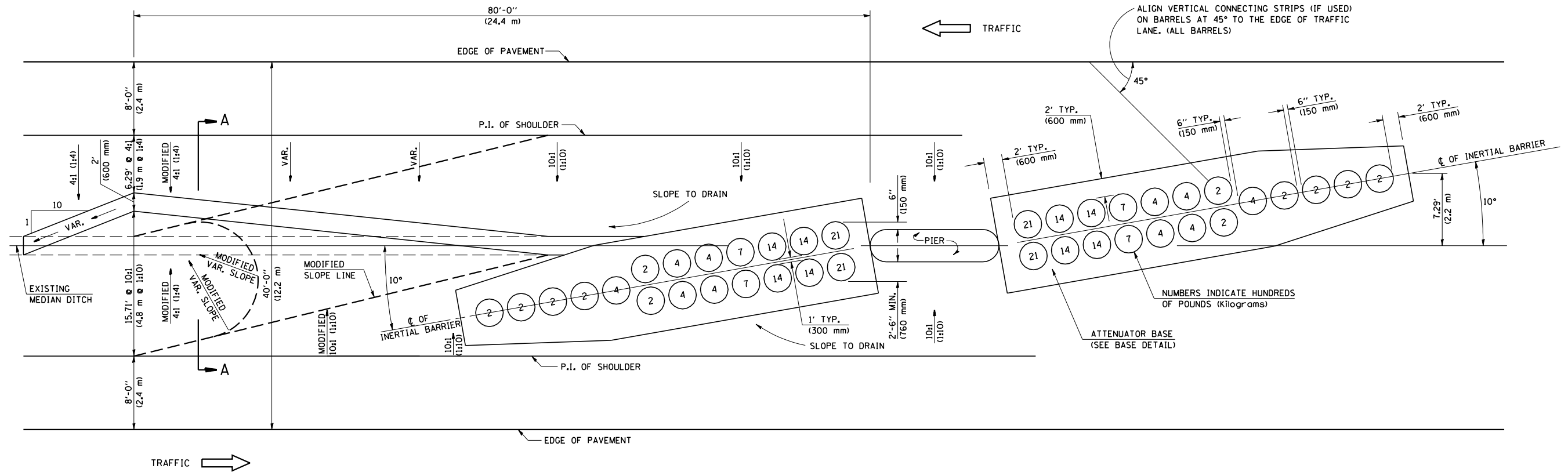
SEC. 9, T19N, R10E, 2ND P.M.



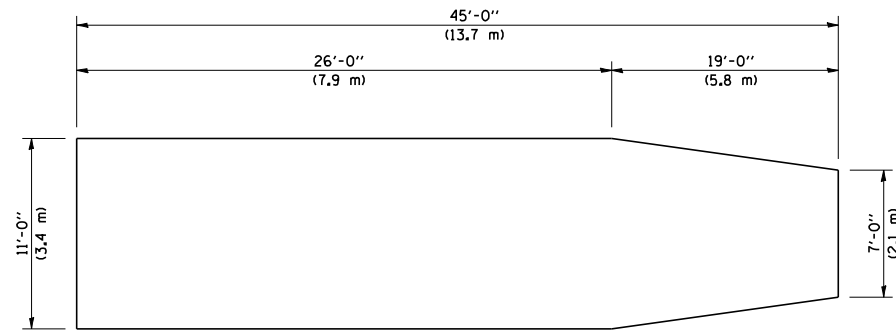
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	.	CHAMPAIGN	19	13

•D5 SAFETY IMPROVEMENT 2007-1

70 MPH (110 km/h) DESIGN - 40' (12 m) MEDIAN



GRADING AND SHAPING DETAIL



BASE DETAIL

GENERAL NOTES

- ALL 10:1 (1:10) SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 (1:10) OR FLATTER.
- ANY EXISTING DRAINAGE STRUCTURES LOCATED WITHIN THE 80' (24.4 m) WORKING AREA SHALL BE MODIFIED OR LEFT IN PLACE AS SHOWN ON THE PLANS. WHERE THE EXISTING DRAINAGE STRUCTURES ARE TO REMAIN IN PLACE, THE SLOPES ARE TO BE CONSTRUCTED AS SHOWN AS MODIFIED SLOPES ON THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
- THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
- THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' x 7.0' : 19 MODULES - 14,400 LBS. (12.5 m x 2.1 m : 19 MODULES - 6532 kg).
- IN AREAS OF 10:1 (1:10) SLOPES PRECEDING THE ATTENUATOR IN THE MEDIAN INSTALLATION, FOUR WOOD POSTS SHALL BE PLACED AT 5' (1.5 m) INTERVALS IN THE MEDIAN  $\bar{c}$ . SEE SPECIAL PROVISIONS.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DATE	REVISIONS	NAME
11/06	Replaced Detail F-1.51A	TJB

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**IMPACT ATTENUATORS  
 (NON-REDIRECTIVE)  
 TEST LEVEL 3**  
**DISTRICT 5 DETAIL NO. Z0030150B**

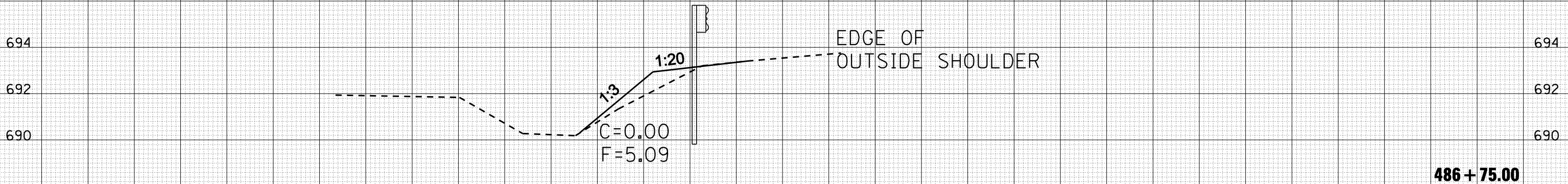
DESIGNER NOTE: SEE BDE PROCEDURE MEMORANDUM 34-06

PLOT DATE = 3/30/2007  
 FILE NAME = c:\projects\70633\det.dgn  
 PLOT SCALE = 42.3525 / IN.  
 USER NAME = sheehygm

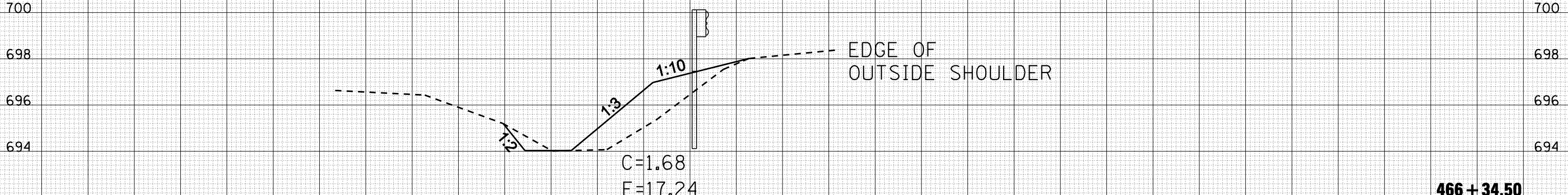
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	*	CHAMPAIGN	19	14
STA. 434+11.40		TO STA. 486+75.00		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
*05 SAFETY IMPROVEMENT 2007-I				

130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0

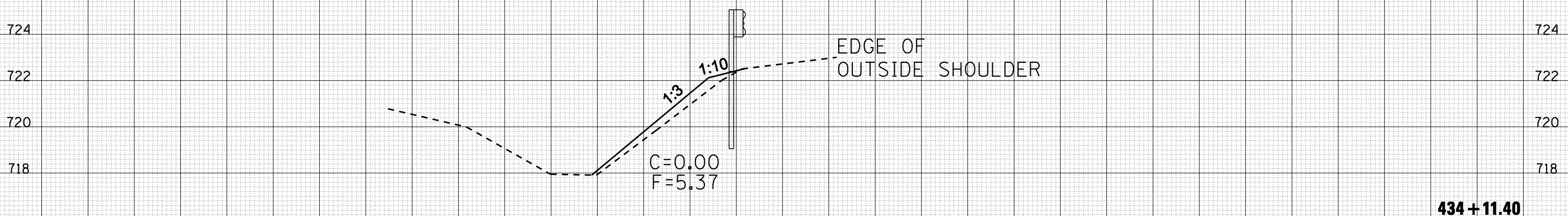
**S.N. 010-0177**



**S.N. 010-0229**



**S.N. 010-0175**



130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0

**TYPE 1, SPECIAL WIDENING (WB)**

BY	DATE

FINAL SURVEY	SURVEYED	PLOTTED	DATE

BY	DATE

ORIGINAL SURVEY	SURVEYED	PLOTTED	DATE

PLOT DATE = 3/30/2007  
 FILE NAME = 1015582  
 PLOT SCALE = 10.5582 / IN.  
 USER NAME = sheehyem















