

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF HIGHWAYS**  
**PLANS FOR PROPOSED**  
**SURFACE TRANSPORTATION PROGRAM**

**SECTION 11-00493-00-BR**  
**WINNEBAGO COUNTY**  
**PROJECT NO. BRS-1057(103)**  
**C.H. 21 (FAS 1057)**  
**C-92-061-13**  
**CONTRACT NO. 85597**



**CLASSIFICATION: MAJOR COLLECTOR (NON-URBAN)**  
**DESIGN VOLUME: 1000-3000 A.D.T.**  
**CURRENT ADT: 1125 (2013)**  
**DESIGN SPEED: 50 M.P.H.**  
**3R GUIDELINES**

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

APPROVED <u>October 17</u> 20 <u>13</u>  COUNTY ENGINEER	PASSED <u>November 25</u> 20 <u>13</u>  DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS
RELEASED FOR BID <u>November 25</u> 20 <u>13</u> BASED ON LIMITED REVIEW  DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER	
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	

**INDEX OF SHEETS**

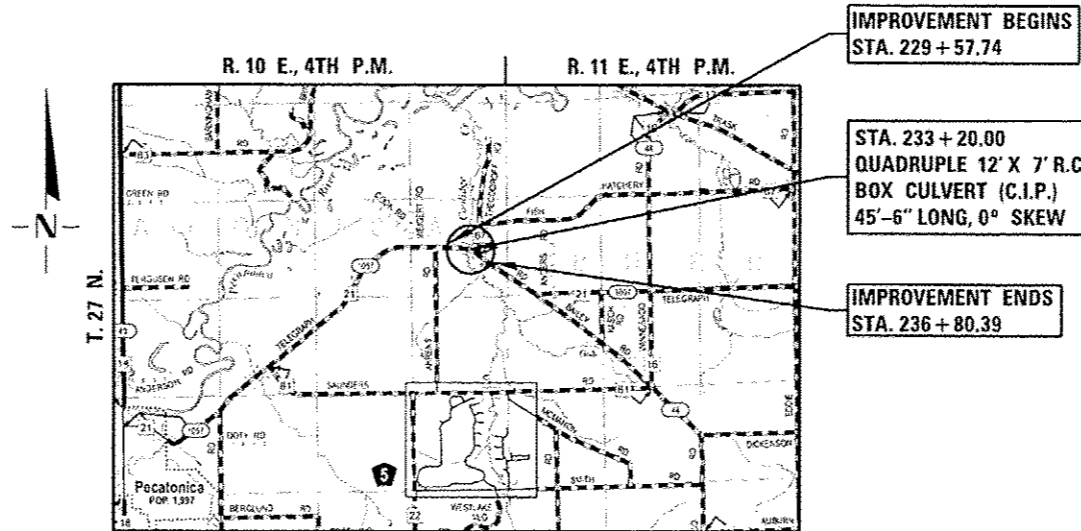
SHEET NO.	TITLE
1.	COVER SHEET
2.	SUMMARY OF QUANTITIES, GENERAL NOTES & TYPICAL SECTIONS
3.	PLAN AND PROFILE SHEET
4.	SHOULDER AND GUARDRAIL DETAIL
5.-6.	TRAFFIC CONTROL PLAN
7.-9.	BRIDGE PLANS
10.-15.	STATION CROSS SECTIONS
16.-17.	EROSION CONTROL PLAN

**STANDARDS**

280001-07	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-03	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
731001-01	BASE FOR TELESCOPING STEEL SIGN SUPPORT
BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD CLOSED TO THRU TRAFFIC)

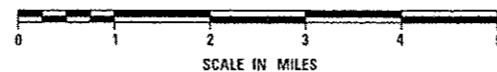
**SCALES**

PLAN	
PROFILE HORIZ.	
PROFILE VERT.	
CROSS SECTIONS	



**LOCATION PLAN**

GROSS LENGTH OF SECTION = 722.65 FEET = 0.137 MILES  
 NET LENGTH OF SECTION = 722.65 FEET = 0.137 MILES



**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL  
 ILLINOIS IOWA WISCONSIN

ILLINOIS PROFESSIONAL DESIGN FIRM NUMBER: IB4003525



*Gary J. Cartwright* 10-11-13  
 ILLINOIS PROFESSIONAL (NO. 43408)  
 EXPIRES 11-30-15

**SUMMARY OF QUANTITIES**  
CONSTRUCTION TYPE CODE: 0011

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	281
20700110	POROUS GRANULAR EMBANKMENT	TON	470
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	26
28000400	PERIMETER EROSION BARRIER	FOOT	880
28100207	STONE RIPRAP, CLASS A4	TON	103
28200200	FILTER FABRIC	SQ YD	104
30300011	AGGREGATE SUBGRADE IMPROVEMENT	TON	370
35101400	AGGREGATE BASE COURSE, TYPE B	TON	355
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	323
40603080	HOT-MIX ASPHALT BINDER COURSE, 1L-19.0, N50	TON	84
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	56
48101200	AGGREGATE SHOULDERS, TYPE B	TON	308
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	57,000
51500100	NAME PLATES	EACH	1
54003000	CONCRETE BOX CULVERTS	CU YD	243.4
63301210	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	712.5
63301235	REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	100
67100100	MOBILIZATION	L SUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	12
72900100	METAL POST - TYPE A	FOOT	27
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5018
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.1
X6330103	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE I SPECIAL, TANGENT	EACH	4
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
XX006821	CONCRETE TRUCK WASHOUT	L SUM	1

\*SEE SPECIAL PROVISIONS  
Δ SPECIALTY ITEMS

**GENERAL NOTES**

THE AREA TO BE SEEDDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE USE(S)	SURFACE	BINDER
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	3% @ N50	3% @ N50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	1L-9.5	1L-19.0
FRICTION AGGREGATE	MIX "C"	NA
20 YEAR ESAL		
MIX UNIT WEIGHT	112 LBS/SY/IN	112 LBS/SY/IN

**PAVEMENT DESIGN**

STRUCTURAL DESIGN TRAFFIC (S.D.T.): YEAR 2023; P.V. = 1152, S.U. = 12, M.U. = 12  
CLASS III ROAD

MINIMUM SOIL SUPPORT: I.B.R. = 3.0 (ASSUMED) (> 3 K.S.I.)

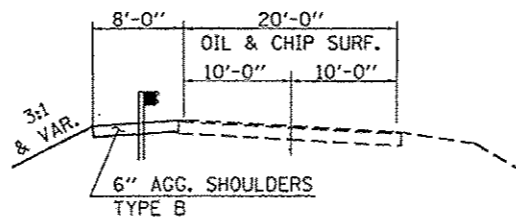
PERCENT OF S.D.T. IN DESIGN LANE: P = 50%, S = 50%, M = 50%  
T.F. = 0.061

TEMP. = 72° F.; E<sub>ac</sub> = 760; DESIGN STRAIN = 345

**APPLICATION RATES USED IN QUANTITY CALCULATIONS**

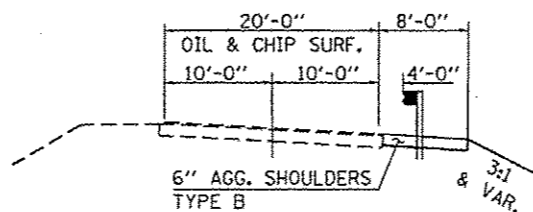
STONE RIPRAP, CLASS A4	1.65 TON/CU YD
AGGREGATE BASE COURSE	2.05 TON/CU YD
BITUMINOUS MATERIALS (PRIME COAT) - (AGG.)	0.35 GAL/SQ YD
BITUMINOUS MATERIALS (PRIME COAT) - (HMA)	0.10 GAL/SQ YD
HOT-MIX ASPHALT (BINDER & SURFACE COURSE)	112+/SQ YD/IN
AGGREGATE SHOULDERS	2.05 TON/CU YD
AGGREGATE SUBGRADE IMPROVEMENT	2.05 TON/CU YD

THE ABOVE NOTED APPLICATION RATES FOR BITUMINOUS MATERIALS (PRIME COAT) ARE FOR QUANTITY CALCULATIONS ONLY. THE APPLICATION RATE TO BE APPLIED WILL BE DETERMINED BY THE ENGINEER AT THE TIME OF PLACEMENT.



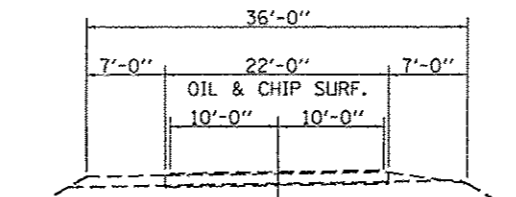
**TYPICAL PROPOSED CROSS SECTION**

STA. 231+47.68 TO STA. 231+82.50  
STA. 234+56.50 TO STA. 236+56.39



**TYPICAL PROPOSED CROSS SECTION**

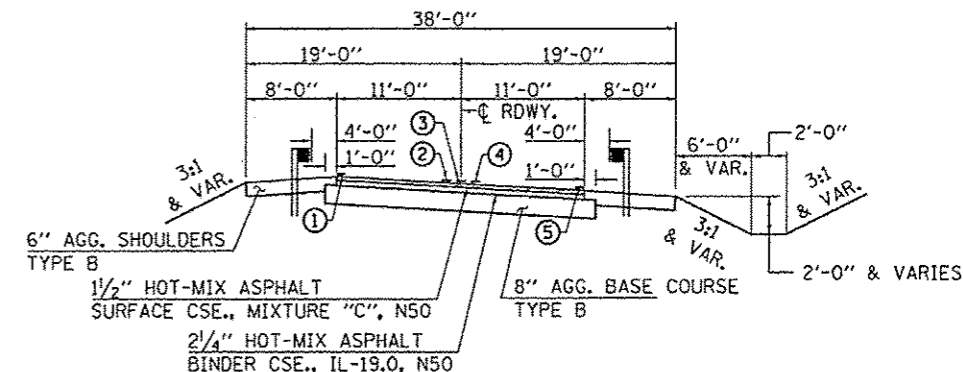
STA. 229+81.74 TO STA. 231+82.50  
STA. 234+56.50 TO STA. 234+85.45



**TYPICAL EXISTING CROSS SECTION**

- ① SOLID WHITE PAINT PAVEMENT MARKING - LINE 4"  
STA. 231+82.50 TO STA. 234+56.50
- ② SOLID YELLOW PAINT PAVEMENT MARKING - LINE 4"  
STA. 232+55 TO STA. 254+55
- ③ SKIP-DASH YELLOW PAINT PAVEMENT MARKING - LINE 4"  
STA. 231+82.50 TO STA. 234+56.50
- ④ SOLID YELLOW PAINT PAVEMENT MARKING - LINE 4"  
STA. 214+15 TO STA. 236+15
- ⑤ SOLID WHITE PAINT PAVEMENT MARKING - LINE 4"  
STA. 231+82.50 TO STA. 234+56.50

NOTE: INSTALL "NO PASSING ZONE" SIGN  
(W14-3) LT. STA. 214+15 AND  
RT. STA. 254+55.

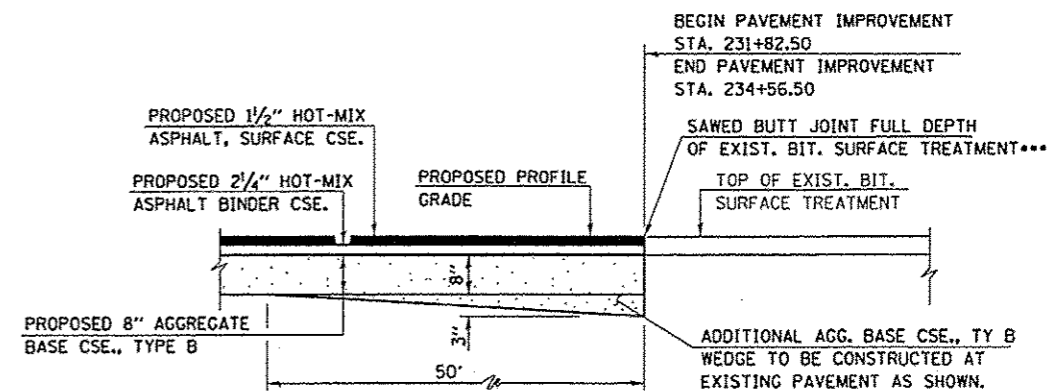


SUGGESTED FILL SECTION  
CONSTRUCT AS SHOWN BY  
STATION CROSS SECTIONS

SUGGESTED CUT SECTION  
CONSTRUCT AS SHOWN BY  
STATION CROSS SECTIONS

**TYPICAL PROPOSED CROSS SECTION**

STA. 231+82.50 TO STA. 234+56.50



**ELEVATION AT BEGINNING AND END OF IMPROVEMENT**

**JOINT DETAILS**

\*\*\*COST INCLUDED IN "EARTH EXCAVATION".

CONTROL POINTS			
POINT	NORTHING	EASTING	NOTE
CP 1	2067603.942	2533734.124	SET RB
CP 2	2067677.829	2533615.404	SET RB

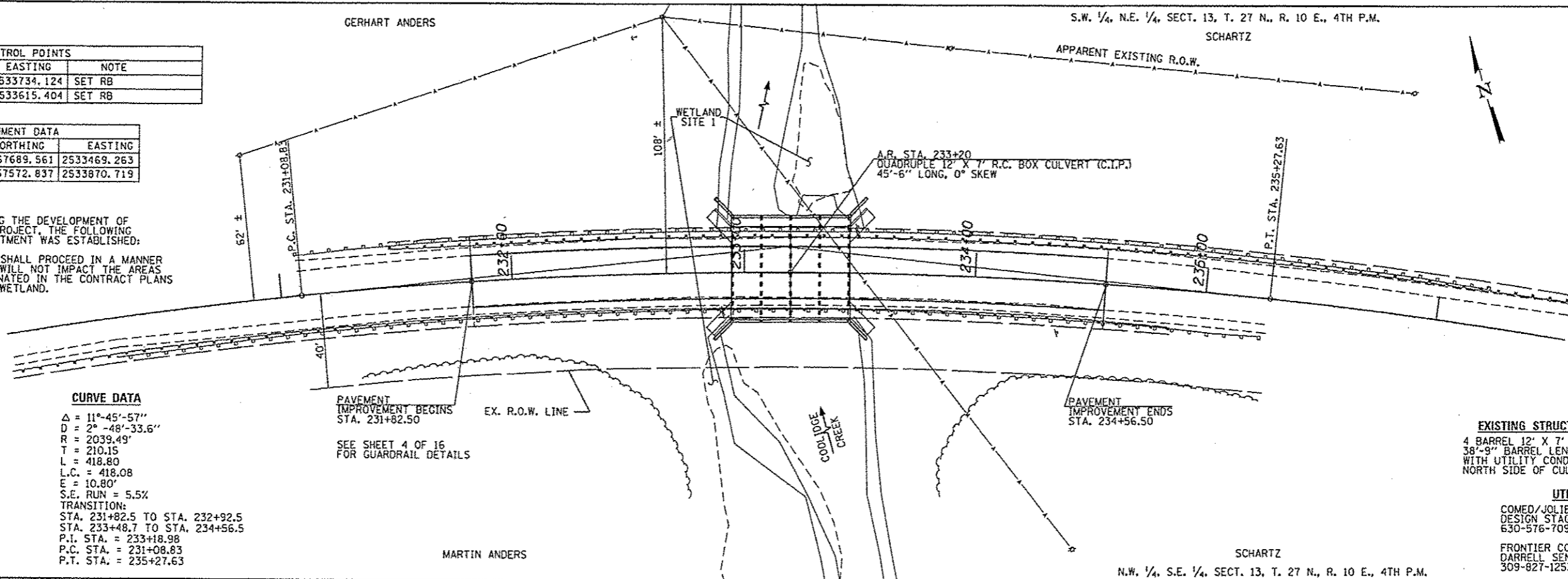
ALIGNMENT DATA		
ALIGNMENT STA.	NORTHING	EASTING
P. C. STA. 231+08.83	2067689.561	2533469.263
P. T. STA. 235+27.63	2067572.837	2533870.719

NOTE:  
DURING THE DEVELOPMENT OF  
THE PROJECT, THE FOLLOWING  
COMMITMENT WAS ESTABLISHED:

WORK SHALL PROCEED IN A MANNER  
THAT WILL NOT IMPACT THE AREAS  
DESIGNATED IN THE CONTRACT PLANS  
AS A WETLAND.

**CURVE DATA**

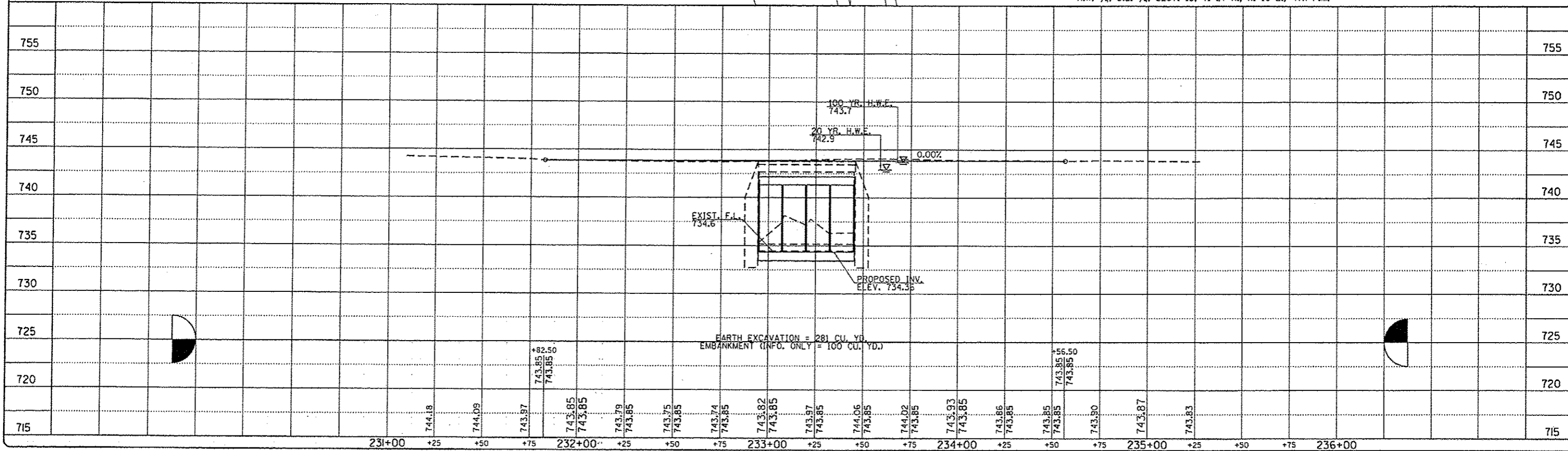
Δ = 11°-45'-57"  
D = 2° -48'-33.6"  
R = 2039.49'  
T = 210.15  
L = 418.80  
L.C. = 418.08  
E = 10.80'  
S.E. RUN = 5.5%  
TRANSITION:  
STA. 231+82.5 TO STA. 232+92.5  
STA. 233+48.7 TO STA. 234+56.5  
P.T. STA. = 233+18.98  
P.C. STA. = 231+08.83  
P.T. STA. = 235+27.63



**EXISTING STRUCTURE: NO 101-5009**  
4 BARREL 12' X 7' C.I.P. RC-BOX CULVERT  
38'-9" BARREL LENGTH, SKEW 0°  
WITH UTILITY CONDUIT ATTACHED TO  
NORTH SIDE OF CULVERT

**UTILITIES**

COMED/JOLIET  
DESIGN STAGE LOCATE LINE  
630-576-7094  
FRONTIER COMMUNICATIONS  
DARRELL SENIOR  
309-827-1253



**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL

ILLINOIS DESIGN FIRM NO. 184-003523  
© 2013 FEHR-GRAHAM

ILLINOIS  
IOWA  
WISCONSIN

AGENCY:  
WINNEBAGO COUNTY HWY. DEPT.

PROJECT:  
SECTION II-00493-00-BR  
C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
CHECKED: R.D.F.  
DRAWN: A.D.S.  
CHECKED:

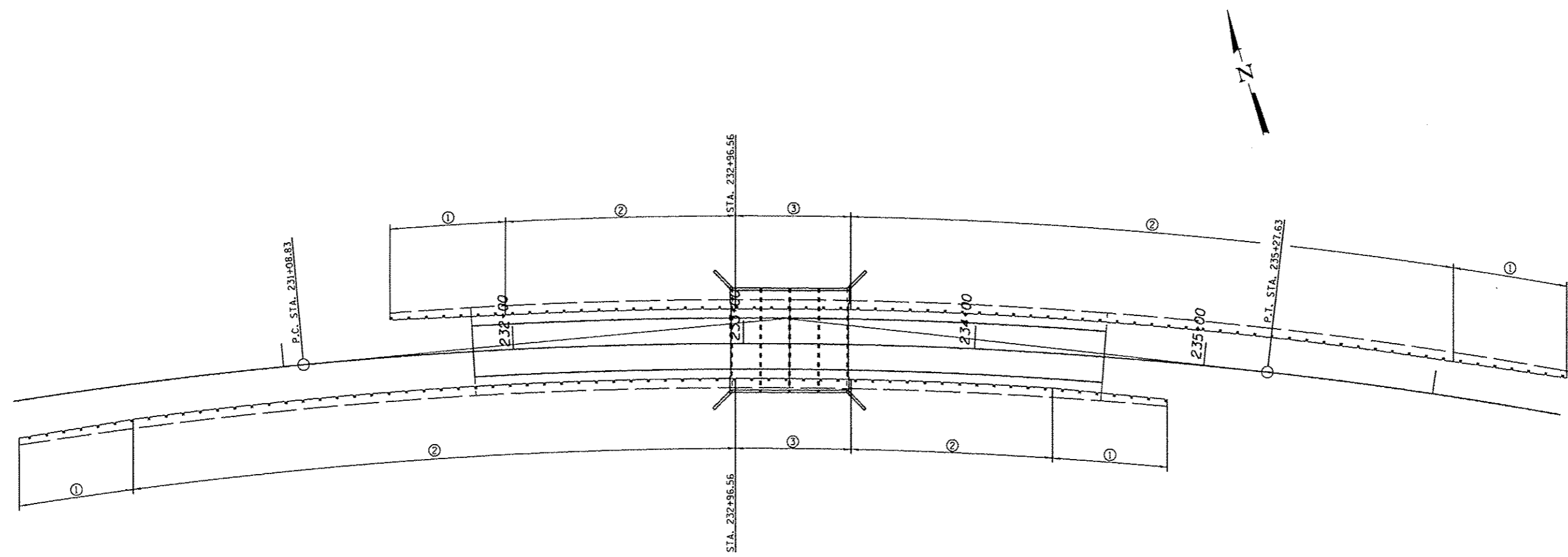
REV. NO.	DESCRIPTION	DATE

DRAWING:  
PLAN & PROFILE

JOB NUMBER:  
12-550

SHEET NUMBER  
3 of 17

CONTRACT NO. 85597



**GUARDRAIL & SHOULDER DETAIL**

NOTE: THE EXISTING STEEL PLATE BEAM GUARDRAIL AND TERMINAL SECTIONS WERE INSTALLED IN 2011 UNDER CONTRACT 85533, WHICH WAS LET ON THE APRIL 29, 2011 STATE LETTING AS ITEM NO. 057.

**REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT**

SOUTHEAST QUADRANT	=	1 EACH
SOUTHWEST QUADRANT	=	1 EACH
NORTHWEST QUADRANT	=	1 EACH
NORTHEAST QUADRANT	=	1 EACH
<b>TOTAL</b>	=	<b>4 EACH</b>

**REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL ATTACHED TO STRUCTURES**

SOUTHSIDE CULVERT	=	50 FOOT
NORTHSIDE CULVERT	=	50 FOOT
<b>TOTAL</b>	=	<b>100 FOOT</b>

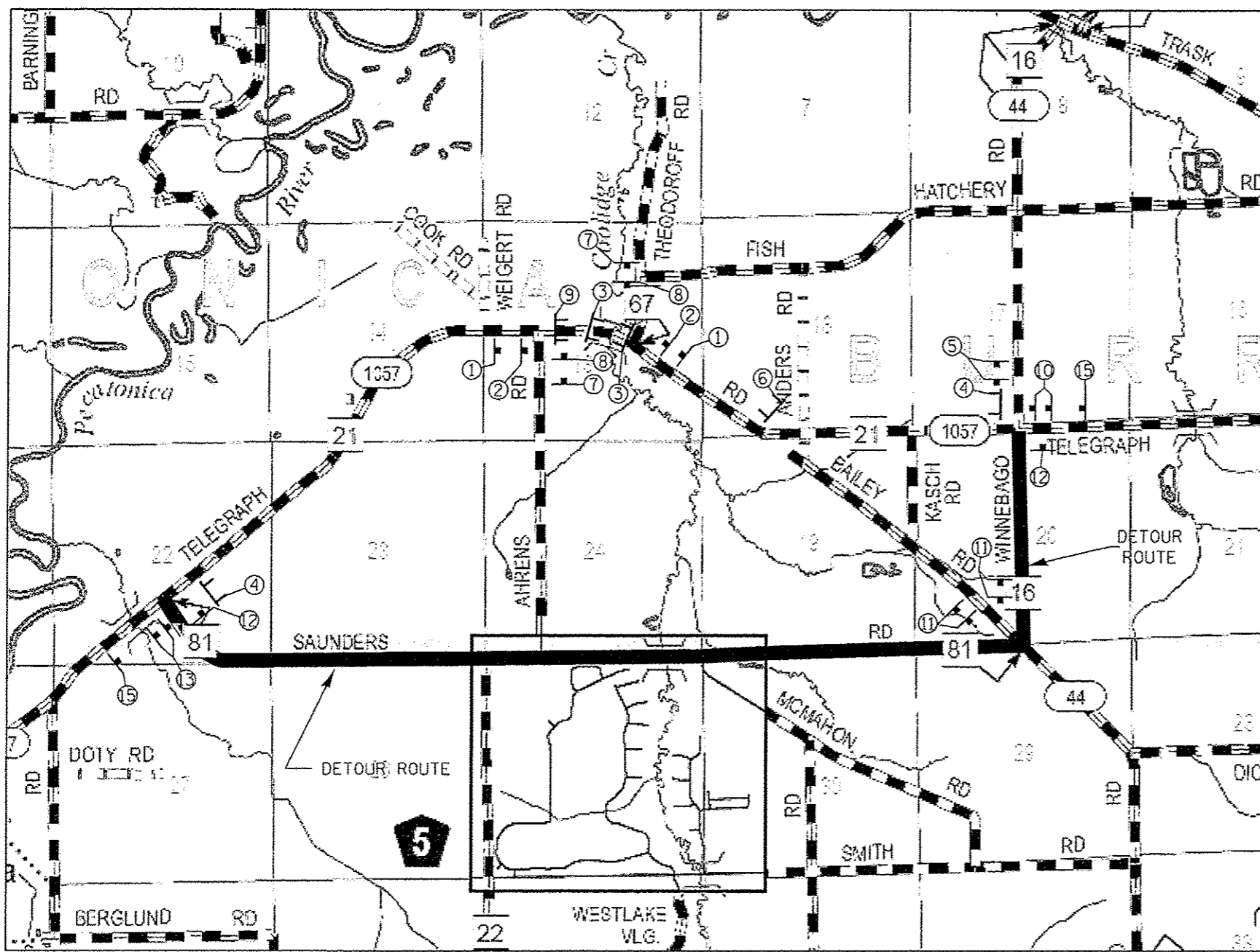
**REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A**

SOUTHEAST QUADRANT	=	87.5 FOOT
SOUTHWEST QUADRANT	=	262.5 FOOT
NORTHWEST QUADRANT	=	100.0 FOOT
NORTHEAST QUADRANT	=	262.5 FOOT
<b>TOTAL</b>	=	<b>712.5 FOOT</b>

- LEGEND**
- ① REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL, TANGENT
  - ② REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL, TYPE A
  - ③ REMOVE AND RE-ERECT STEEL PLATE BEAM GUARDRAIL ATTACHED TO STRUCTURES

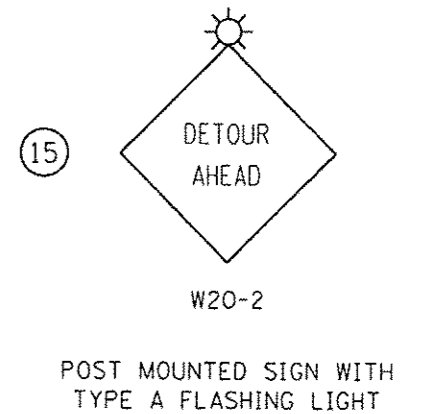
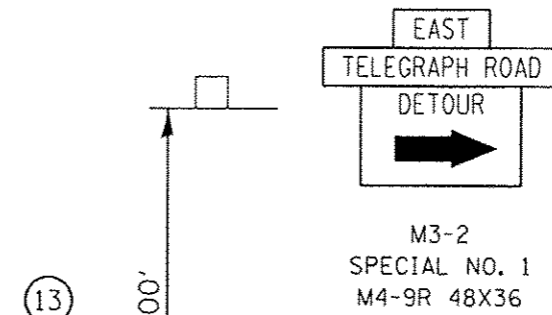
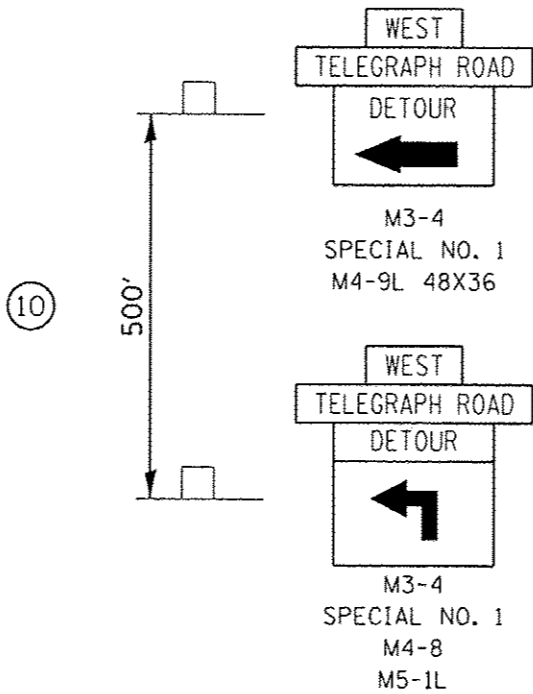
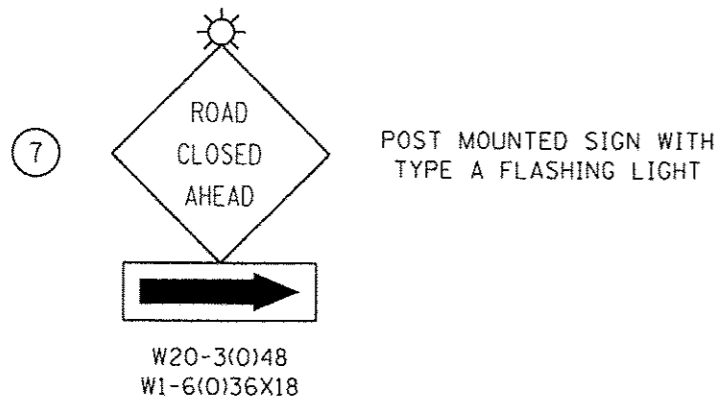
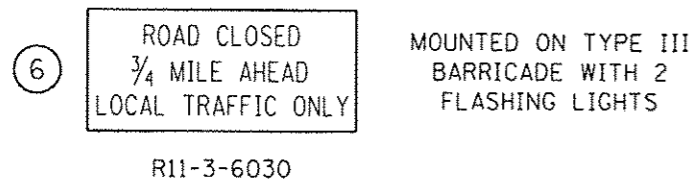
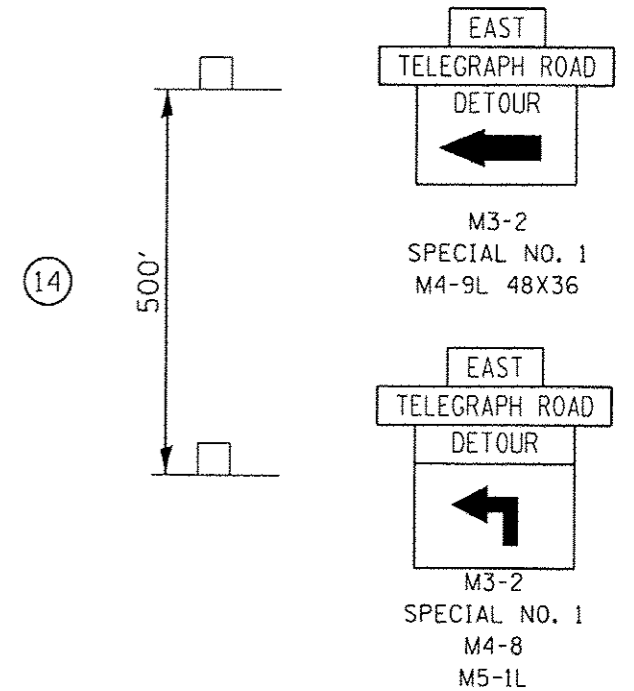
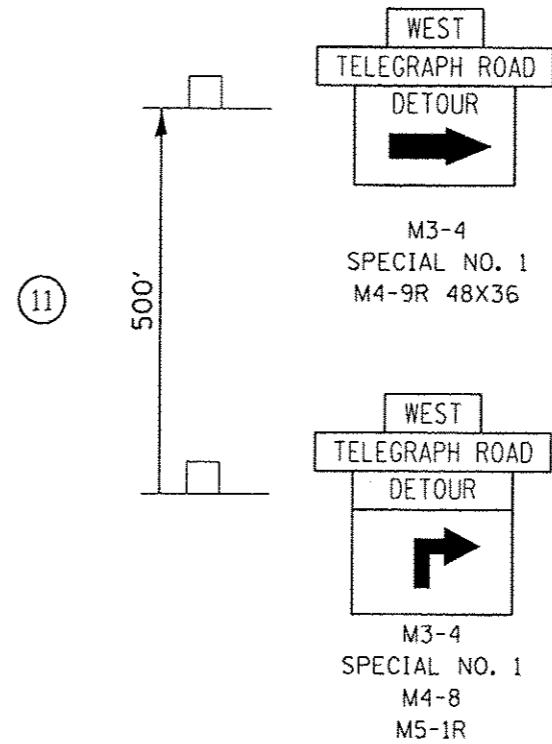
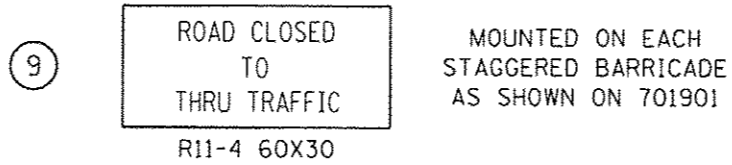
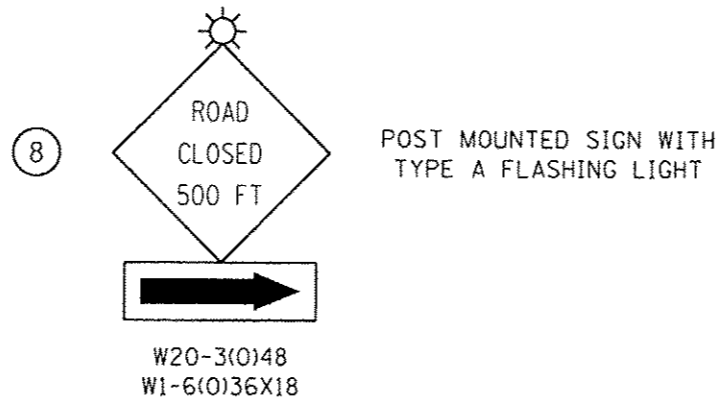
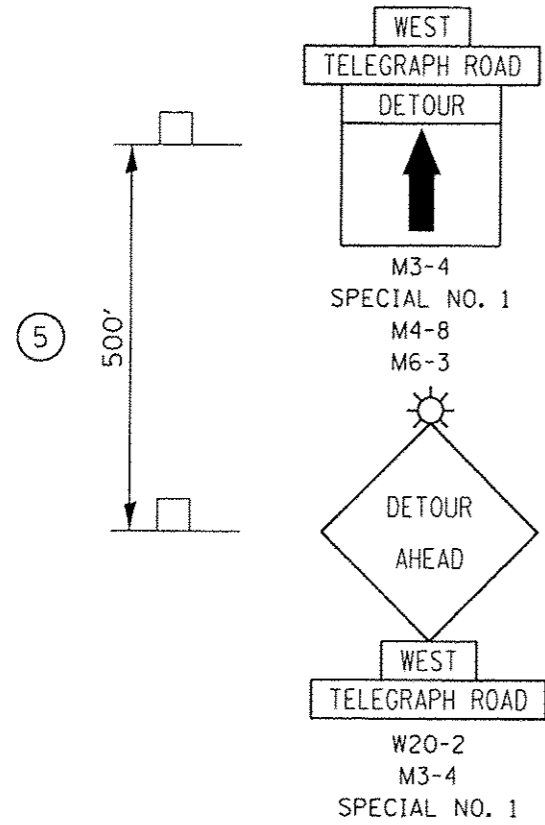
REVISIONS	
REV. NO.	DESCRIPTION

TELEGRAPH ROAD  
SPECIAL NO. 1



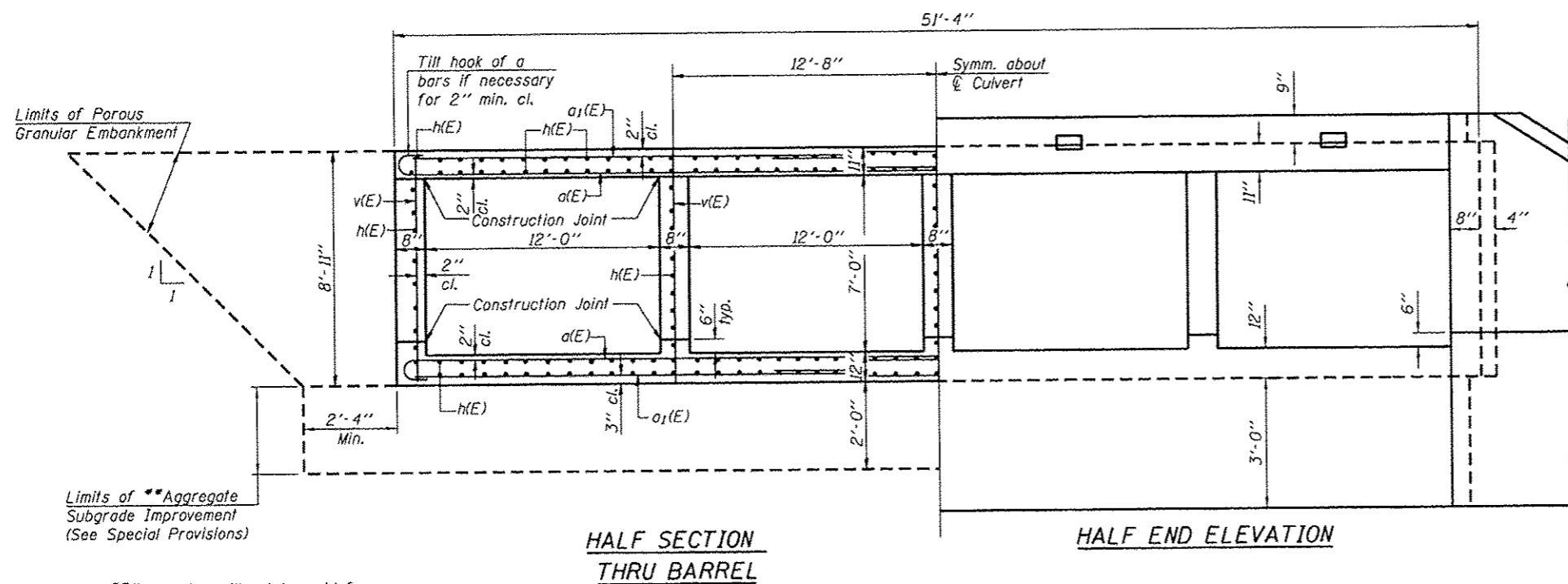
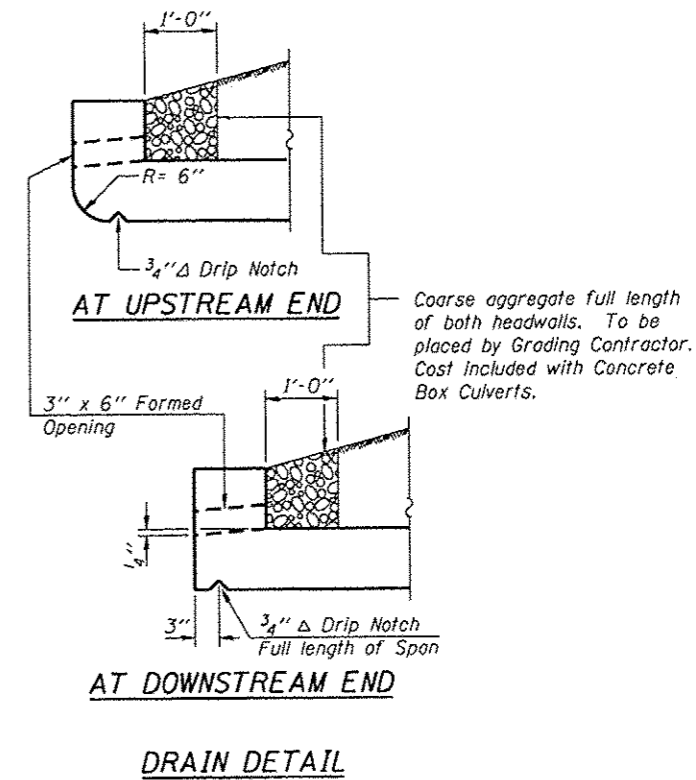
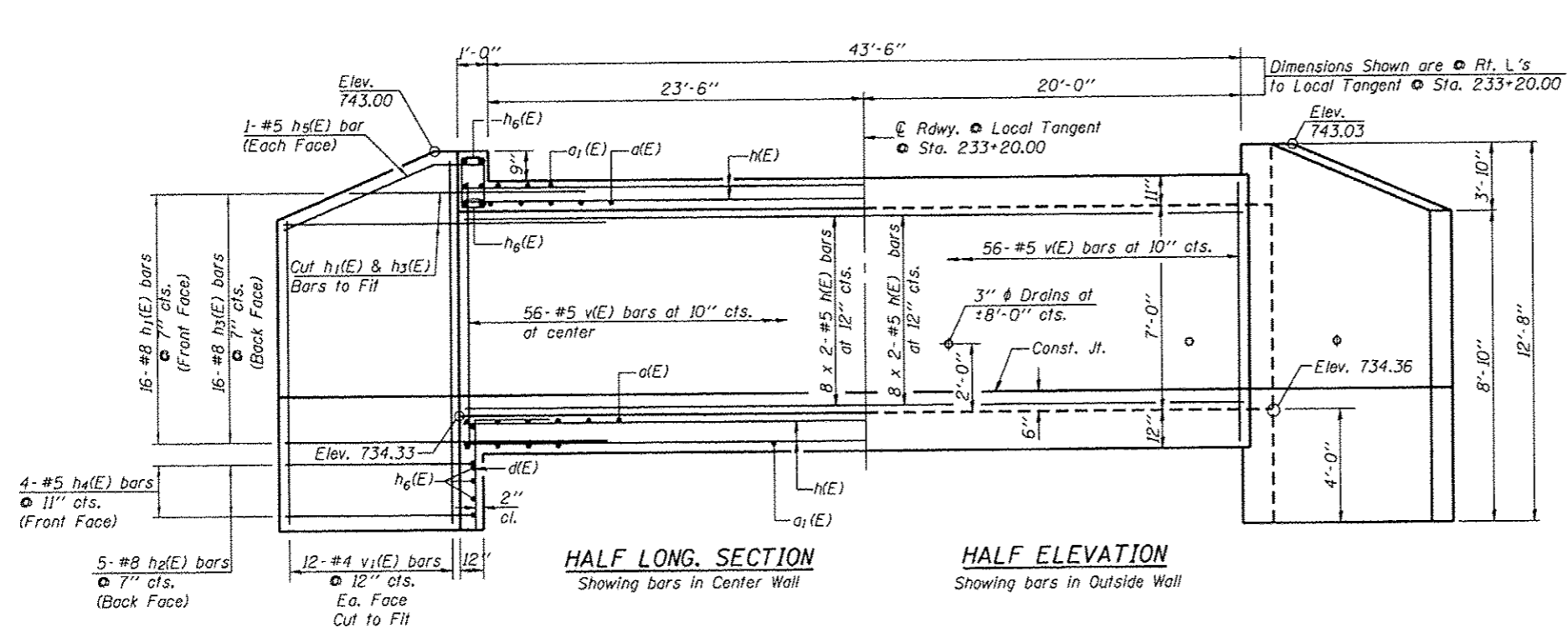
- ① POST MOUNTED SIGN WITH TYPE A FLASHING LIGHT  
W20-3(0)48
- ② POST MOUNTED SIGN WITH TYPE A FLASHING LIGHT  
W20-3(0)48
- ③ MOUNT ON TYPE III BARRICADES AS SHOWN ON STD. 701901 DETAIL FOR "ROAD CLOSED TO ALL TRAFFIC". EACH TYPE III BARRICADE SHALL HAVE TWO TYPE A FLASHING LIGHTS.  
R11-2-4830
- ④ MOUNTED ON TYPE III BARRICADE WITH 2 FLASHING LIGHTS  
R11-3a-6030

REVISIONS	
REV. NO.	DESCRIPTION







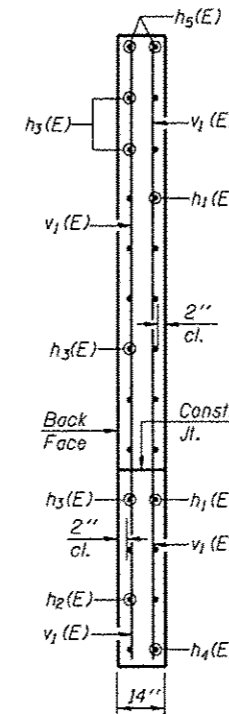
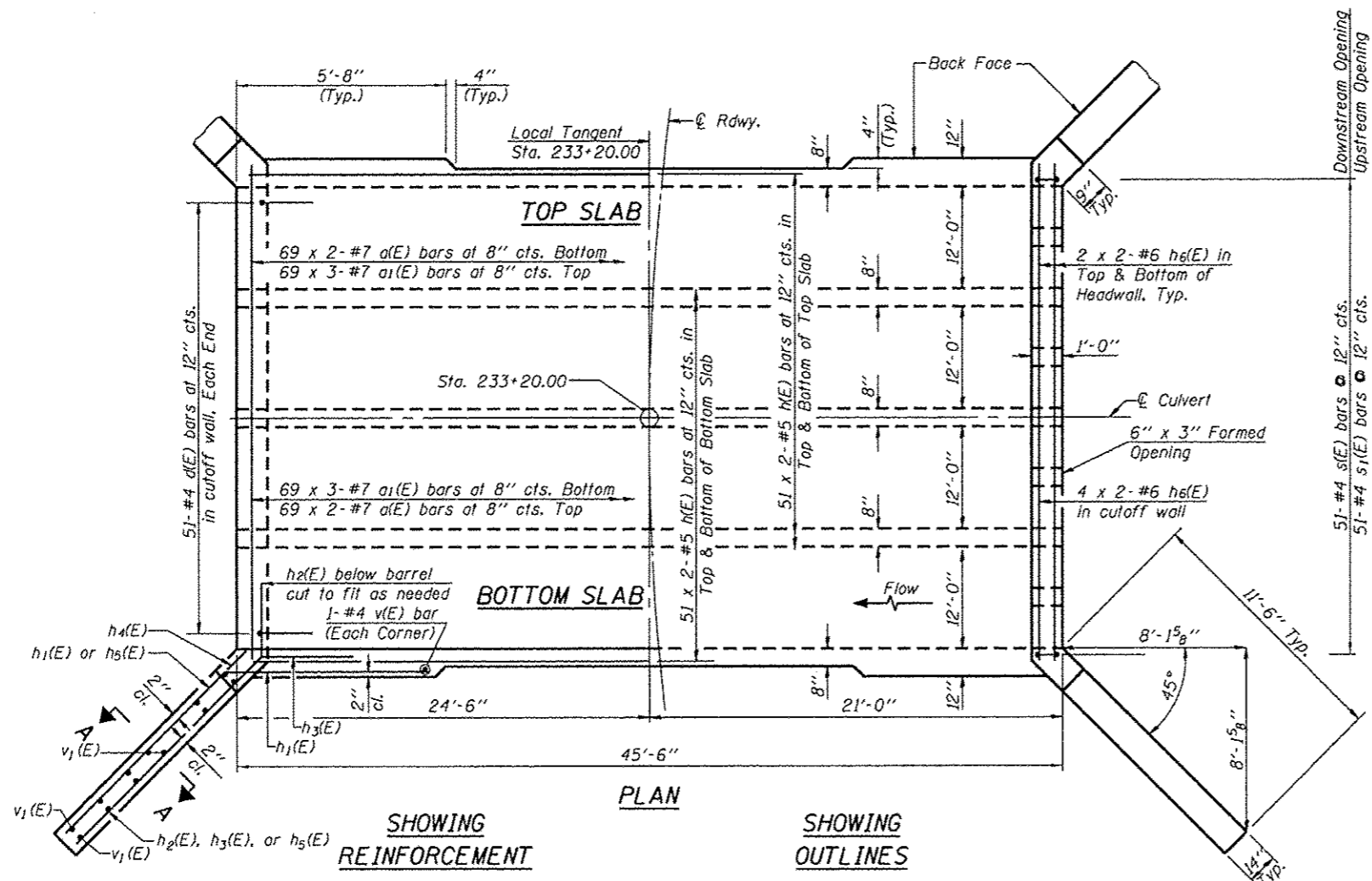


\*\*Excavation will not be paid for as a separate item and shall be considered as included in Aggregate Subgrade Improvement.

Notes:  
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.  
 Bars indicated thus 12x4-#5 etc. indicates 12 lines of bars with 4 lengths per line.  
 All construction Joints shall be banded.

REVISIONS		
REV. NO.	DESCRIPTION	DATE
REV1	REVISED DESCRIPTION	DATE1
REV2	REVISED DESCRIPTION	DATE2
REV3	REVISED DESCRIPTION	DATE3
REV4	REVISED DESCRIPTION	DATE4





C.H. 21 OVER COOLIDGE CREEK  
 BUILT 20... BY  
 WINNEBAGO COUNTY HWY. DEPT.  
 WINNEBAGO COUNTY  
 SEC. 11-00493-00-BR  
 STR. NO. 101-5159  
 LOADING HL-93

LETTERING FOR NAME PLATE  
 See Std. 515001

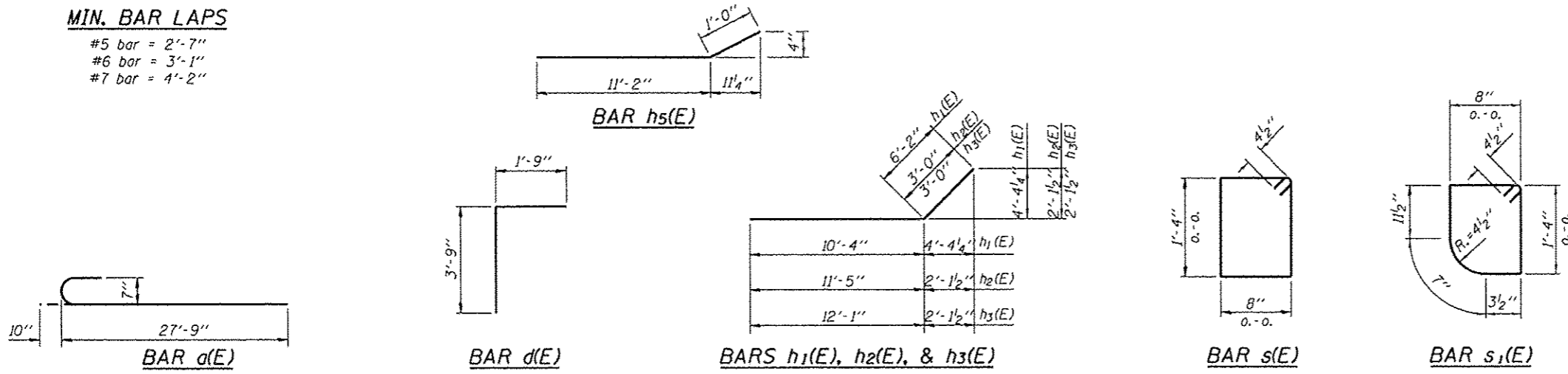
Notes:  
 A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.  
 Bars indicated thus 12 x 4-#5 etc. indicated 12 lines of bars with 4 lengths per line.  
 All construction joints shall be bonded.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	276	#7	28'-7"	C
a1(E)	414	#7	19'-11"	—
d(E)	102	#4	5'-6"	┌
h(E)	488	#5	24'-0"	—
h1(E)	64	#8	16'-6"	—
h2(E)	20	#8	14'-5"	—
h3(E)	64	#8	15'-1"	—
h4(E)	16	#5	11'-6"	—
h5(E)	8	#5	12'-2"	—
h6(E)	32	#6	27'-6"	—
s(E)	51	#4	4'-9"	□
s1(E)	51	#4	4'-7"	□
v(E)	284	#5	8'-7"	—
v1(E)	96	#4	12'-4"	—
Concrete Box Culverts			Cu. Yd.	243.4
Reinforcement Bars, Epoxy Coated			Pound	57,000

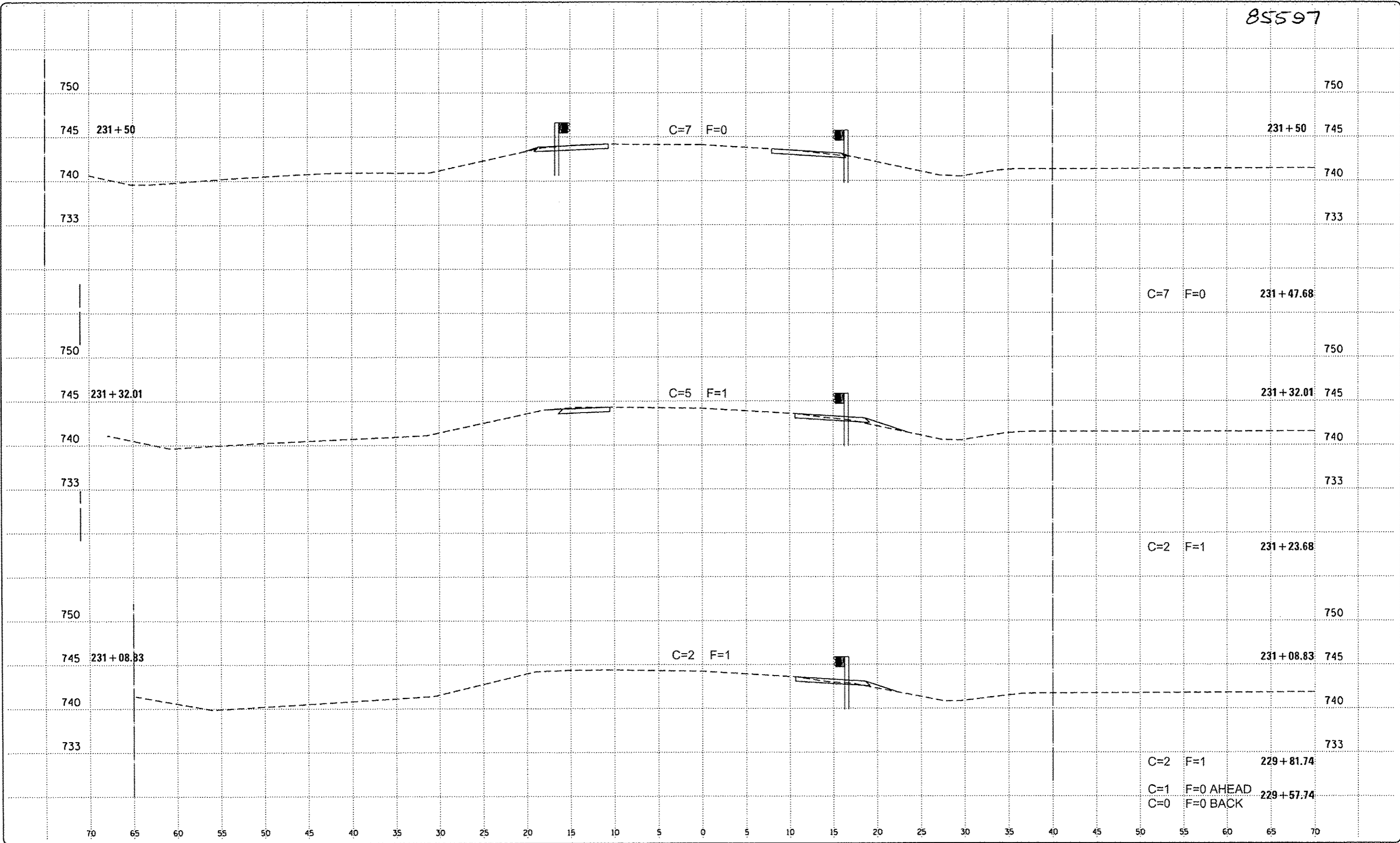
MIN. BAR LAPS

- #5 bar = 2'-7"
- #6 bar = 3'-1"
- #7 bar = 4'-2"

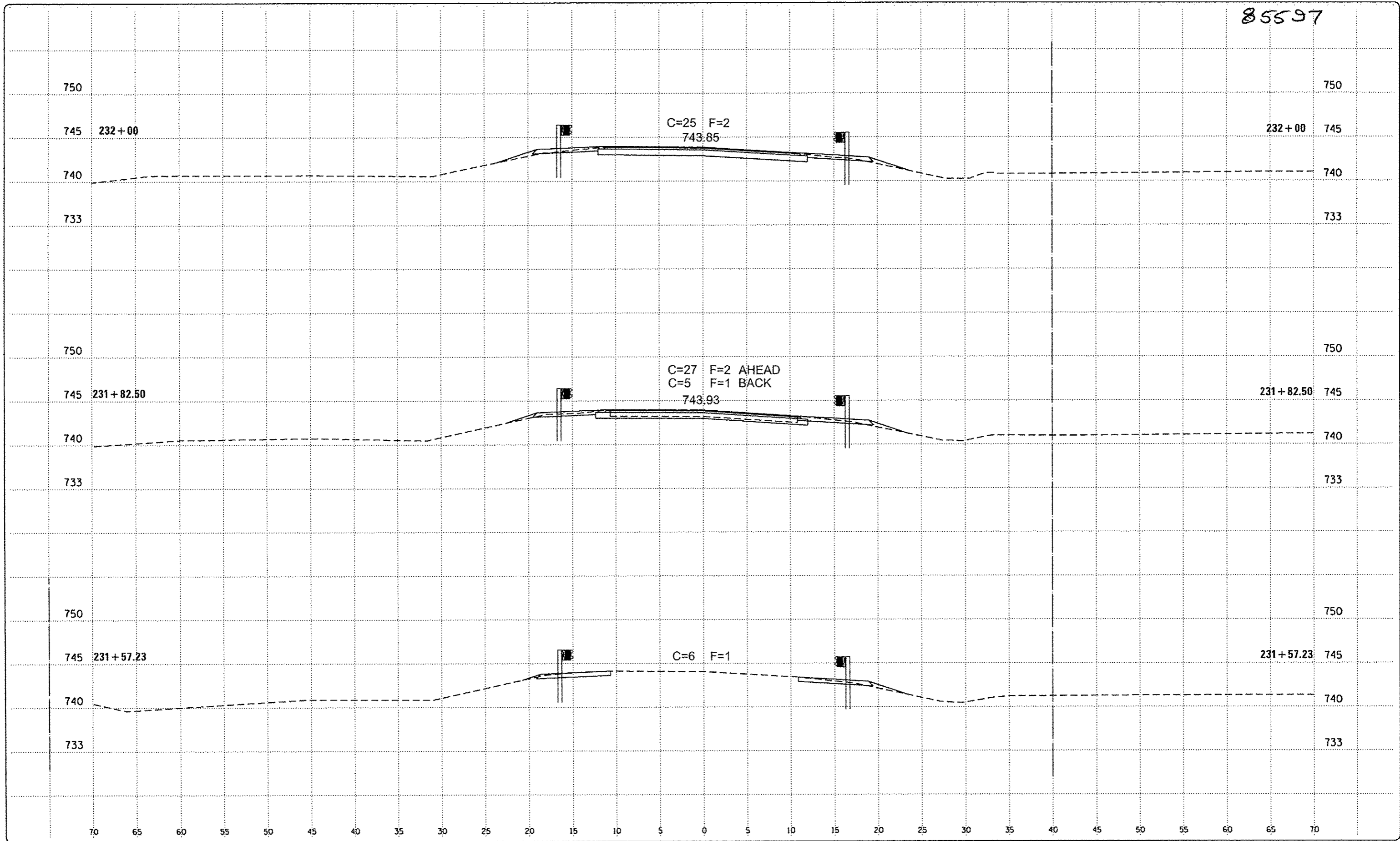


REVISIONS		
REV. NO.	DESCRIPTION	DATE
REV1	REVISED DESCRIPTION	DATE1
REV2	REVISED DESCRIPTION	DATE2
REV3	REVISED DESCRIPTION	DATE3
REV4	REVISED DESCRIPTION	DATE4

85597



REVISIONS		
REV. NO.	DESCRIPTION	DATE



**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL

ILLINOIS DESIGN FIRM NO. 184-003325  
© 2013 FEHR-GRAHAM

ILLINOIS  
IOWA  
WISCONSIN

AGENCY:  
WINNEBAGO COUNTY HWY.  
DEPT.

PROJECT:  
SECTION II-00493-00-BR  
C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
CHECKED: R.D.F.  
DRAWN: A.D.S.  
CHECKED:

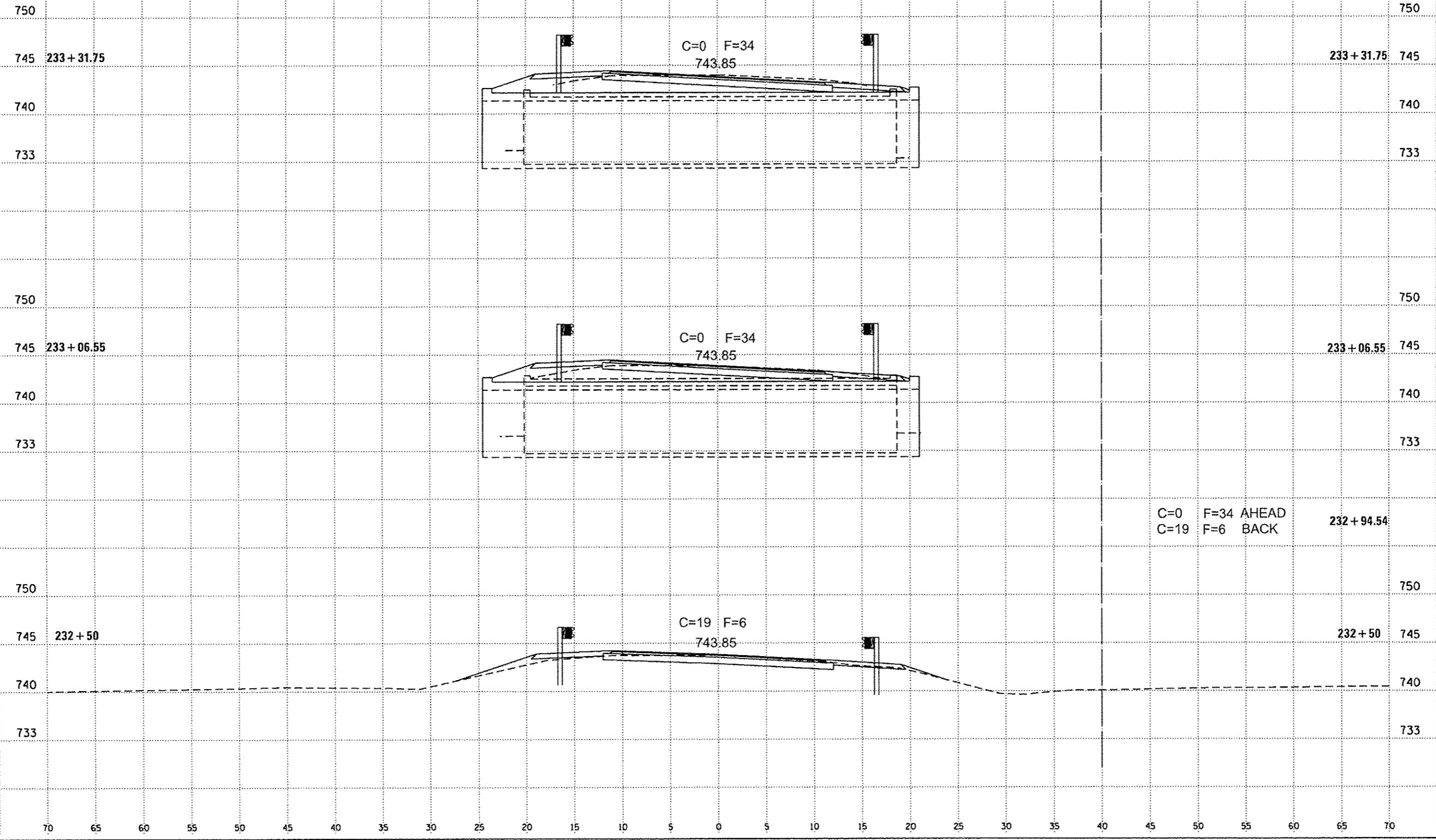
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
ROADWAY CROSS SECTIONS -  
C.H. 21

JOB NUMBER:  
12-550

SHEET NUMBER:  
11 of 17

85597



**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003225  
 © 2013 FEHR-GRAHAM

ILLINOIS  
 IOWA  
 WISCONSIN

AGENCY:  
 WINNEBAGO COUNTY HWY.  
 DEPT.

PROJECT:  
 SECTION II-00493-00-BR  
 C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
 CHECKED: R.D.F.  
 DRAWN: A.D.S.  
 CHECKED:

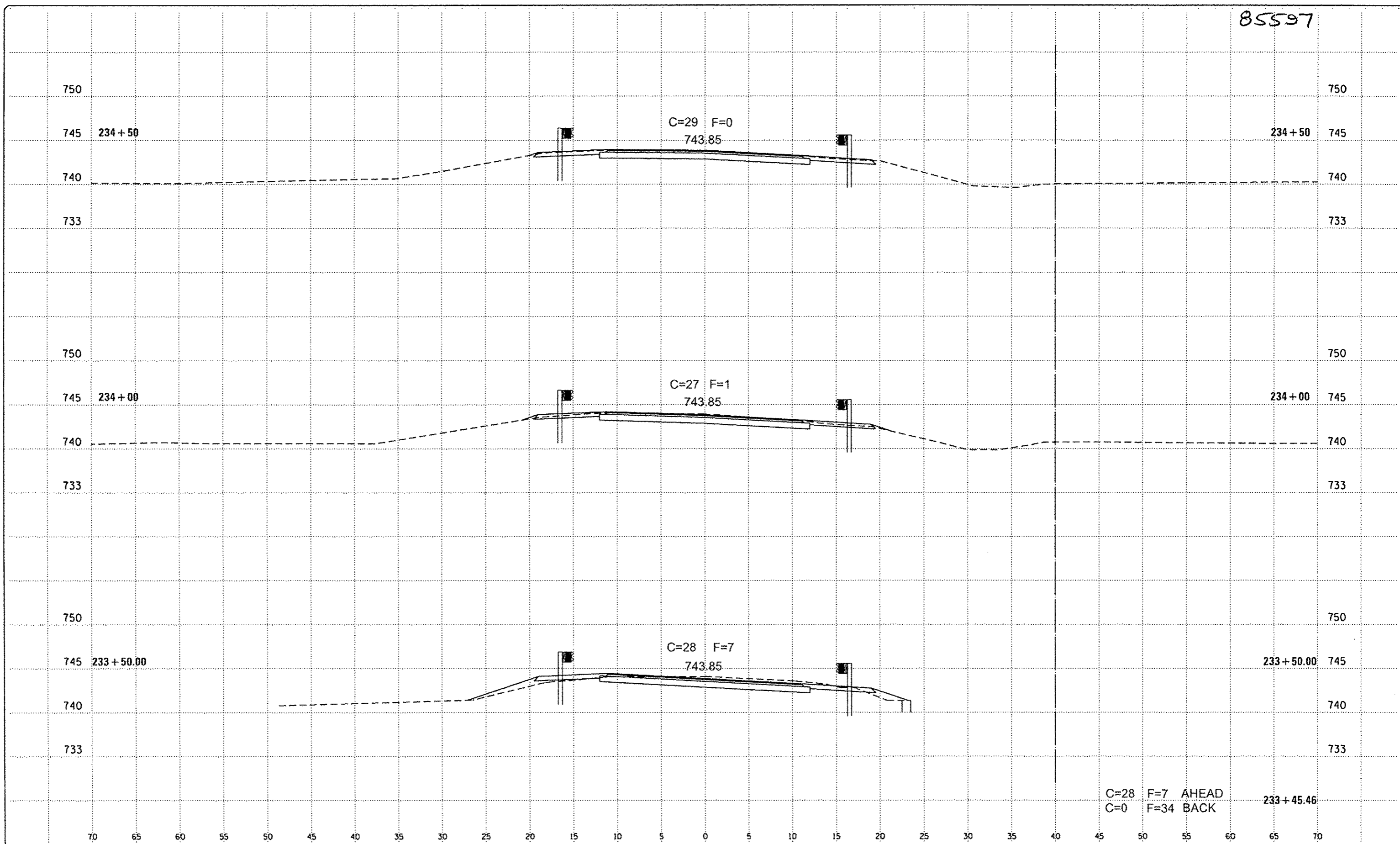
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 ROADWAY CROSS SECTIONS -  
 C.H. 21

JOB NUMBER:  
 12-550  
 SHEET NUMBER:  
 12 of 17

CONTRACT NO. 85597

85597



**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
 © 2013 FEHR-GRAHAM

ILLINOIS  
 IOWA  
 WISCONSIN

AGENCY:  
 WINNEBAGO COUNTY HWY.  
 DEPT.

PROJECT:  
 SECTION II-00493-00-BR  
 C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
 CHECKED: R.D.F.  
 DRAWN: A.D.S.  
 CHECKED:

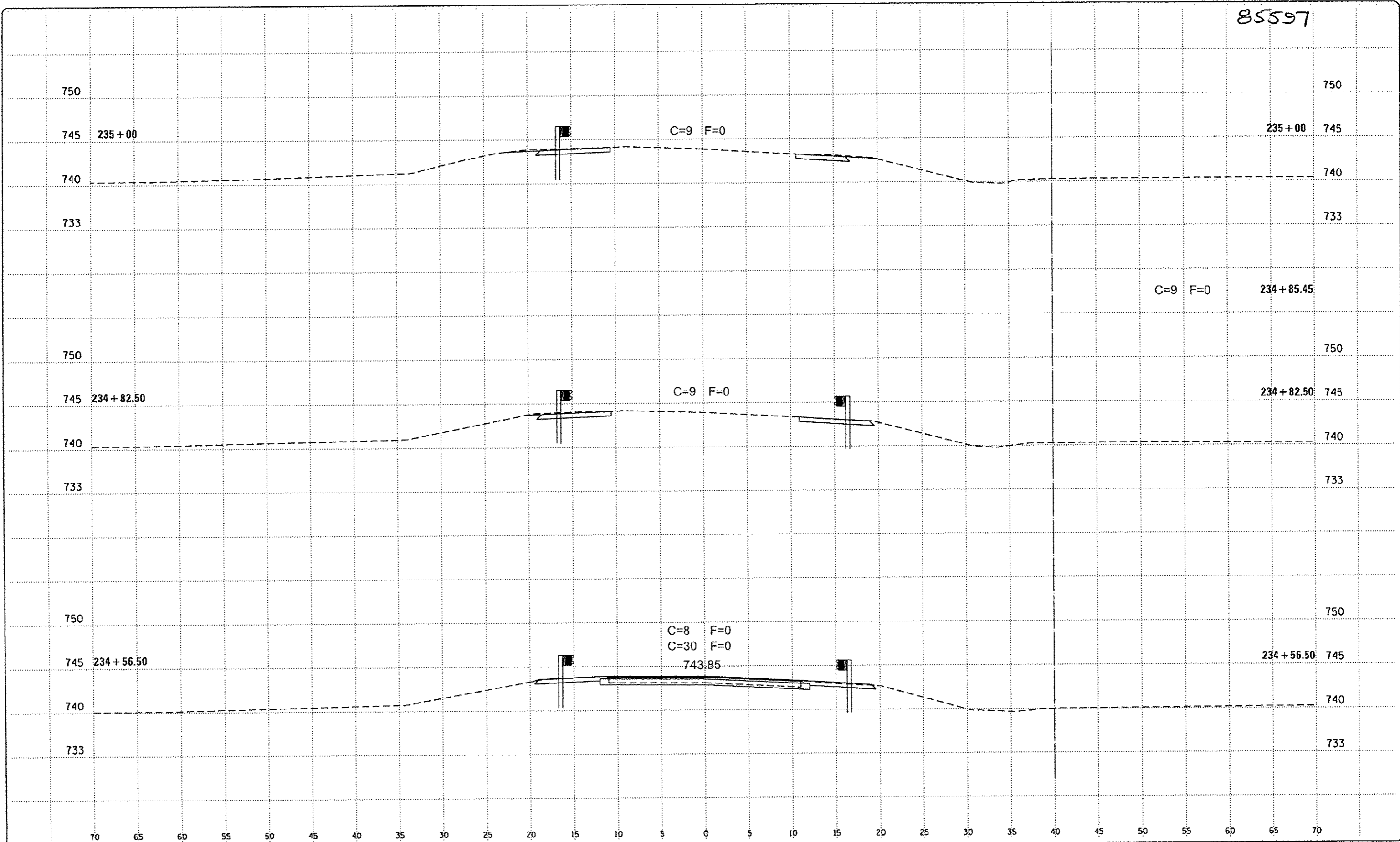
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 ROADWAY CROSS SECTIONS -  
 C.H. 21

JOB NUMBER:  
 12-550  
 SHEET NUMBER:  
 13 of 17

CONTRACT NO. 85597

85597



**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
 © 2013 FEHR-GRAHAM

ILLINOIS  
 IOWA  
 WISCONSIN

AGENCY:  
 WINNEBAGO COUNTY HWY.  
 DEPT.

PROJECT:  
 SECTION II-00493-00-BR  
 C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
 CHECKED: R.D.F.  
 DRAWN: A.D.S.  
 CHECKED:

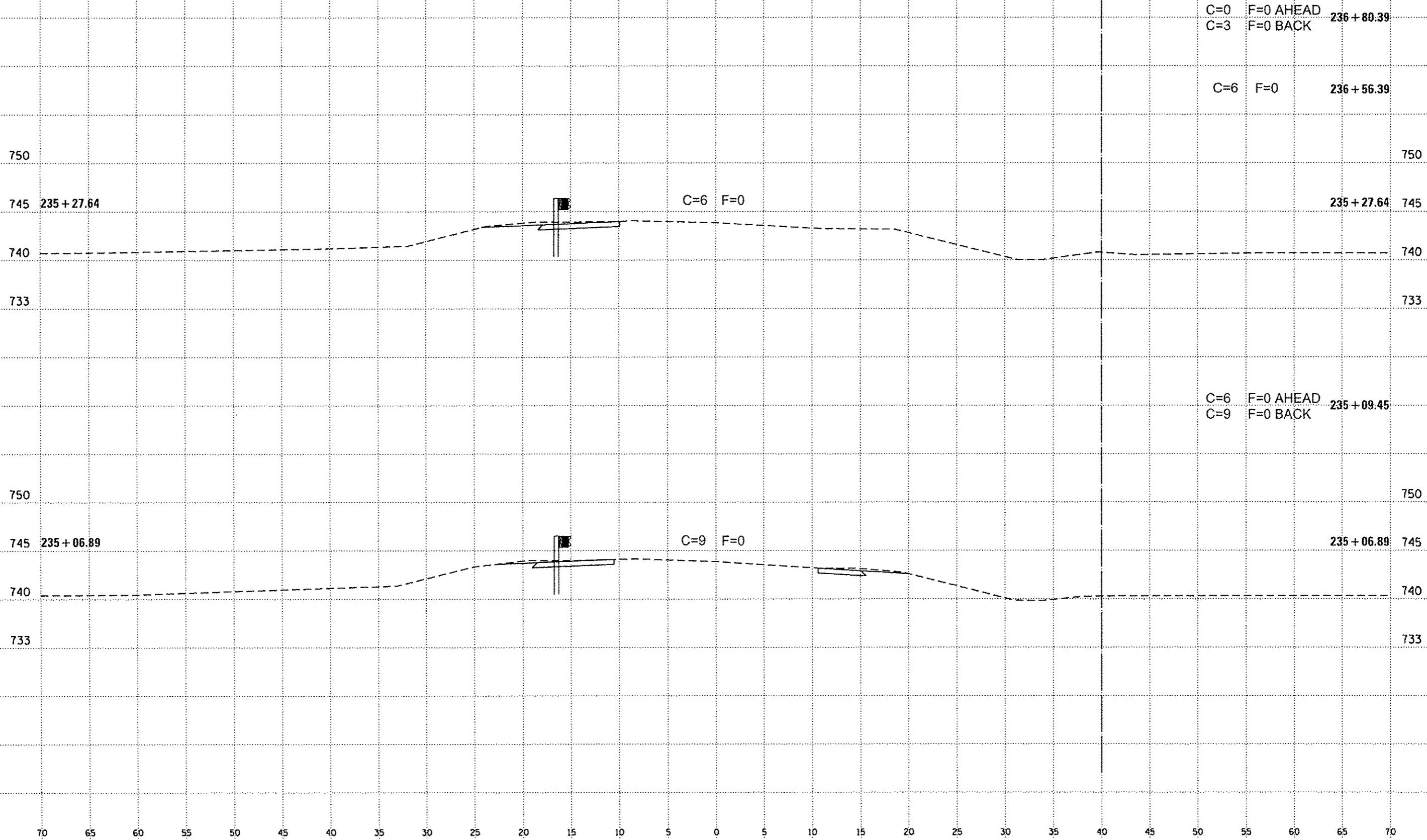
REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 ROADWAY CROSS SECTIONS -  
 C.H. 21

JOB NUMBER:  
 12-550  
 SHEET NUMBER:  
 14 of 17

CONTRACT NO. 85597

85597



**FEHR GRAHAM**  
 ENGINEERING & ENVIRONMENTAL  
 ILLINOIS DESIGN FIRM NO. 184-003525  
 © 2013 FEHR-GRAHAM

ILLINOIS  
 IOWA  
 WISCONSIN

AGENCY:  
 WINNEBAGO COUNTY HWY.  
 DEPT.

PROJECT:  
 SECTION II-00493-00-BR  
 C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G.J.C.  
 CHECKED: R.D.F.  
 DRAWN: A.D.S.  
 CHECKED:

REVISIONS		
REV. NO.	DESCRIPTION	DATE

DRAWING:  
 ROADWAY CROSS SECTIONS -  
 C.H. 21

JOB NUMBER:  
 I2-550  
 SHEET NUMBER:  
 15 of 17

CONTRACT NO. 85597

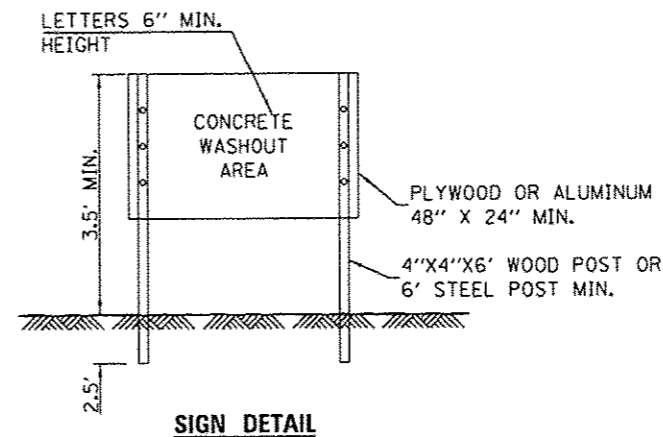


**DESCRIPTION OF INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB EARTH AND LEAD TO POSSIBLE EROSION FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:**

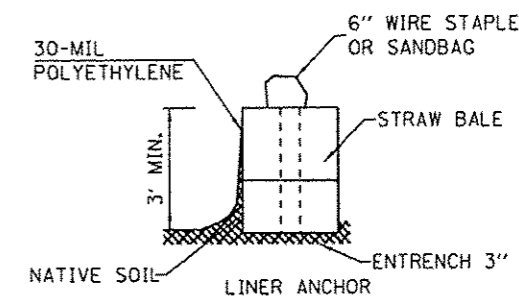
1. PLACEMENT OF PERIMETER EROSION CONTROL FENCE PRIOR TO THE COMMENCEMENT OF ANY ROAD OR BRIDGE WORK. SEE STD. 280001
2. REMOVAL OF EXISTING STRUCTURE.
3. CONSTRUCTION OF THE REPLACEMENT STRUCTURE.
4. PLACEMENT OF ROADWAY EMBANKMENT TO RAISE THE ROADWAY TO THE PROPOSED GRADE.
5. PLACEMENT AND MAINTENANCE OF TEMPORARY EROSION CONTROL.
6. PLACEMENT OF PERMANENT EROSION CONTROL.
7. REMOVAL AND PROPER CLEAN UP OF TEMPORARY EROSION CONTROL.
8. FINAL GRADING, PLACING AGGREGATE AND OTHER MISCELLANEOUS ITEMS.

**GENERAL EROSION CONTROL NOTES**

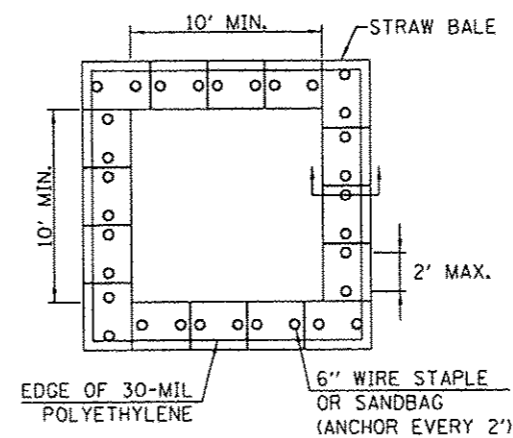
1. EROSION CONTROL DEVICES SHALL BE IN PLACE AND APPROVED BY THE RESIDENT ENGINEER AS TO PROPER PLACEMENT AND INSTALLATION PRIOR TO BEGINNING OTHER WORK.
2. THE RESIDENT ENGINEER WILL DETERMINE WHEN TEMPORARY EROSION CONTROL SYSTEMS SHOWN ON THE PLAN MAY BE MOVED TO A DIFFERENT LOCATION OR DELETED.
3. IN THE EVENT OF HIGH WATER AND/OR HIGH FLOW RATES THAT DAMAGE THE PERIMETER EROSION AND SEDIMENT CONTROLS, THE CONTRACTOR SHALL RETRIEVE ANY CONTROLS THAT HAVE BEEN WASHED DOWNSTREAM.
4. STRAW BALES ARE NOT ALLOWED FOR ANY USE.
5. AFTER THE VEGETATION IS ESTABLISHED IN THE DISTURBED AREA, THE CONTRACTOR SHALL:
  - REMOVE THE REMAINING SEDIMENT CONTROL ITEMS AS DIRECTED BY THE RESIDENT ENGINEER.
  - RESTORE THE AREAS DISTURBED BY THE SEDIMENT CONTROL ITEMS BY PERMANENT SEEDING MEASURES.



**SIGN DETAIL**



**STRAW BALE ANCHOR SECTIONS**

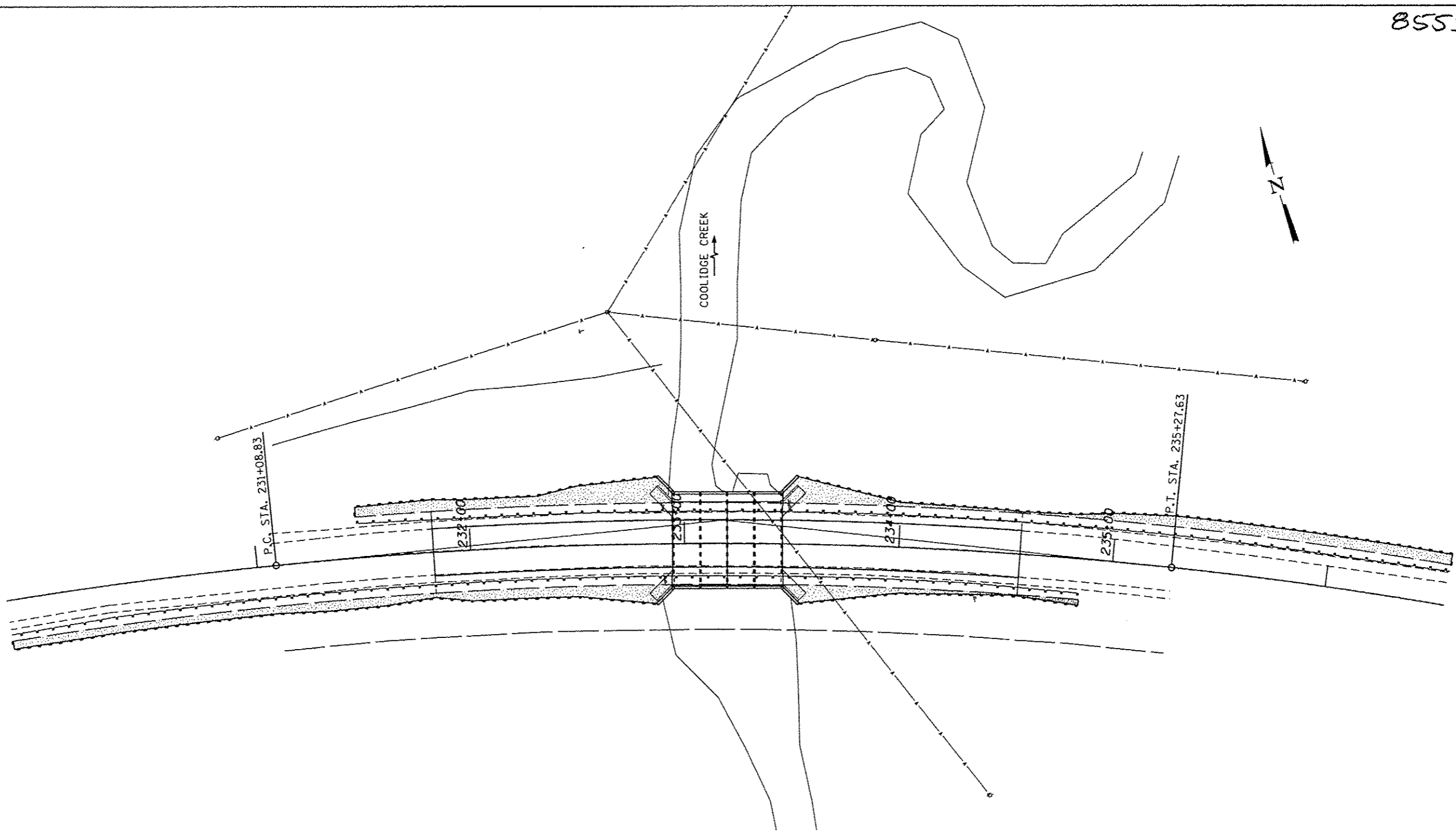


**PLAN VIEW**

**TEMPORARY CONCRETE WASHOUT FACILITY - STAW BALE**

- NOTES:
1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE WASHOUT TO A FUNCTIONAL CONDITION AT THE END OF THE PROJECT.
  2. WASHOUT SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
  3. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"X2"X4' WOODEN STAKES.

REV. NO.	DESCRIPTION	DATE



**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
TEMPORARY EROSION CONTROL SEEDING	POUND	26
PERIMETER EROSION BARRIER	FOOT	880
CONCRETE TRUCK WASHOUT	LSUM	1

NOTE: CONCRETE TRUCK WASHOUT TO BE LOCATED AS DIRECTED BY THE ENGINEER.

**TEMPORARY EROSION CONTROL:**

- CONCRETE TRUCK WASH OUT
- PERIMETER EROSION BARRIER

**PERMANENT EROSION CONTROL:**

- SEEDING CLASS 2 (SPECIAL)

**FEHR GRAHAM**

ENGINEERING & ENVIRONMENTAL  
ILLINOIS DESIGN FIRM NO. 184-003525  
© 2013 FEHR-GRAHAM

ILLINOIS  
IOWA  
WISCONSIN

AGENCY:  
WINNEBAGO COUNTY HWY. DEPT.

PROJECT:  
SECTION 11-00493-00-BR  
C.H. 21 OVER COOLIDGE CREEK

DESIGNED: G. J. C.  
CHECKED: R. D. F.  
DRAWN: A. D. S.  
CHECKED:

REV. NO.	DESCRIPTION	DATE

DRAWING:  
EROSION CONTROL PLAN

JOB NUMBER:  
12-550  
SHEET NUMBER:  
17 of 17