

**INDEX OF SHEETS**

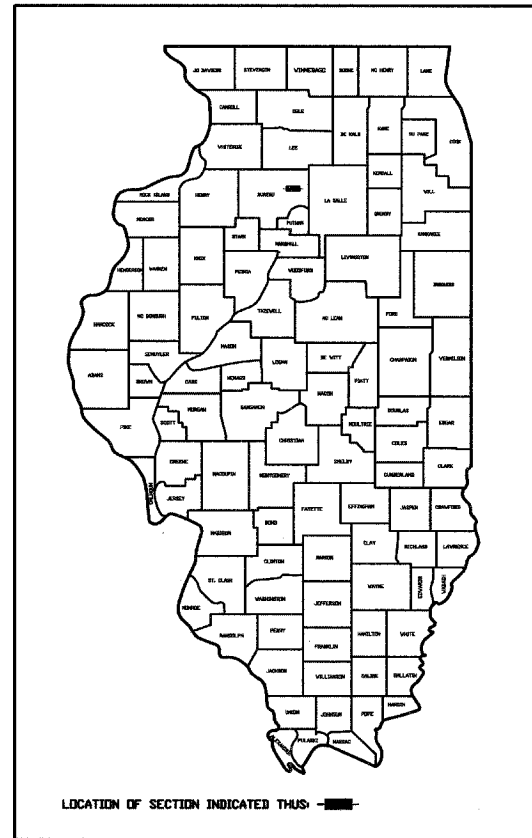
1	COVER SHEET AND INDEX OF SHEETS
2	GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	SCHEDULES OF QUANTITIES
6-11	TYPICAL SECTIONS
12	SUPERELEVATION DETAIL
13-14	PROJECT SCHEMATIC
15-18	PLAN AND PROFILES
19-21	DETAILS
22-24	CULVERT DETAILS
25-33	CROSS SECTIONS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR  
PROPOSED LOCAL AGENCY IMPROVEMENTS  
FY-07 TARP PROJECT

**HIGHWAY STANDARDS**

280001-03	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
483001-03	PCC SHOULDER
515001-02	NAME PLATES FOR BRIDGES
542406	METAL END SECTIONS FOR PIPE ARCHES
701001-01	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5 m (15') AWAY
701006-02	OFF-ROAD OPERATIONS, 2L, 2W, 4.5 M (15') TO 600 mm (24") FROM PAVEMENT EDGE
701201-02	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-02	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-01	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
701326-02	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
702001-06	TRAFFIC CONTROL DEVICES
780001-01	TYPICAL PAVEMENT MARKINGS
000001-04	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
BLR 14-9	PORTLAND CEMENT CONCRETE PAVEMENT (NONREINFORCED)
BLR 21-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 22-4	TYP. APPL. OF T.C.D. FOR RURAL LOC. HWYS. (2-LANE 2 WAY RURAL TRAFF.) (RD. CLOSED TO THRU TRAFF.)
BLR 24-1	MAILBOX TURNOUT FOR LOCAL ROADS

PLAN HORIZ. 1" = 20'  
PROFILE HORIZ. 1" = 20'  
PROFILE VERT. 1" = 2'  
CROSS SECTIONS 1" = 2'



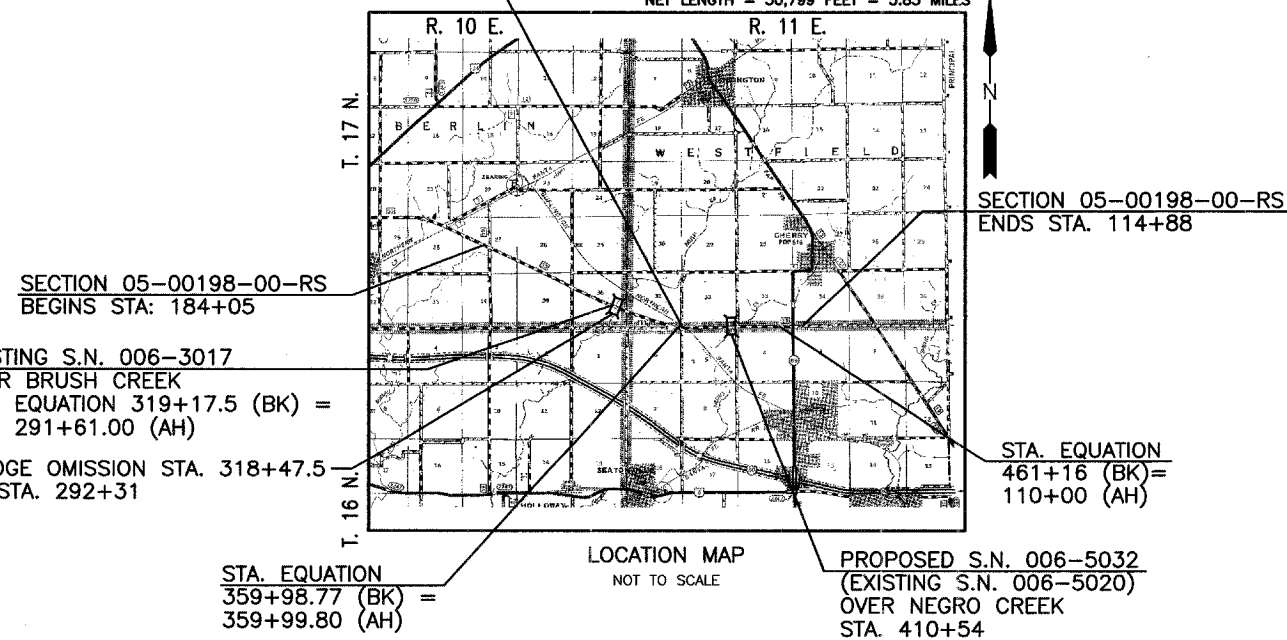
DESIGN GUIDELINES= 3R

FAS 1253 (COUNTY HIGHWAY 33)  
SECTION 05-00198-00-RS/BUREAU COUNTY  
PROJECT NO. RS-1253(103)  
BERLIN, HALL & WESTFIELD TOWNSHIP  
C-93-037-07

FUNCTIONAL CLASSIFICATION	HIGHWAY	DESIGN TRAFFIC	DESIGN SPEED
MINOR COLLECTOR	CH 33	750 ADT	50 MPH

RR OMISSION  
STA. 361+76.24 TO  
STA. 361+91.95

GROSS LENGTH = 30,954 FEET = 5.86 MILES  
NET LENGTH = 30,799 FEET = 5.83 MILES



SECTION 05-00198-00-RS  
BEGINS STA: 184+05

EXISTING S.N. 006-3017  
OVER BRUSH CREEK  
STA. EQUATION 319+17.5 (BK) =  
STA. 291+61.00 (AH)

BRIDGE OMISSION STA. 318+47.5  
TO STA. 292+31

STA. EQUATION  
359+98.77 (BK) =  
359+99.80 (AH)

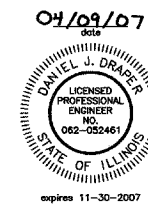
STA. EQUATION  
461+16 (BK) =  
110+00 (AH)

LOCATION MAP  
NOT TO SCALE

PROPOSED S.N. 006-5032  
(EXISTING S.N. 006-5020)  
OVER NEGRO CREEK  
STA. 410+54

CALL J.U.L.I.E.  
BEFORE YOU DIG  
800-892-0123

TWP. 17 N. R. 10 E. SECTIONS 26, 27, 35 & 36  
TWP. 17 N. R. 11 E. SECTIONS 31, 32, 33  
TWP. 16 N. R. 11 E. SECTIONS 4, 5 & 6



PROFESSIONAL DESIGN FIRM  
LICENSE NO. 184-001717

APPROVED 4-10-2007

*William Keith*  
BUREAU COUNTY ENGINEER

PASSED 4-10-2007

*Samuel R. Ly*  
DISTRICT 3 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW 4-10-2007

*George E. Ryan*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DRAWN BY: NV	CAD: COVER	REVISIONS	SCALE: NONE	SHEET 1
CHECKED BY: DJD	DATE: 04/07	DATE BY	FILE NO.: 6813.00Y-1	OF 33

**GENERAL NOTES**

THE THICKNESS OF HMA SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA IS PLACED.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE

EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

THE CONTRACTOR WILL BE RESPONSIBLE FOR STAKING EXISTING NO PASSING ZONES SO THEY MAY BE RE-ESTABLISHED AFTER RESURFACING IS COMPLETED.

PERMANENT PAVEMENT MARKING WILL BE PERFORMED BY THE COUNTY WITH THE EXCEPTION OF THE RAILROAD CROSSING MARKING AND THE STRIPED ISLAND AT THE IL 89 INTERSECTION.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

ADDITIONAL LEVELING BINDER HAS BEEN ADDED TO THE QUANTITIES FOR CROWN CORRECTION WHERE REQUIRED.

ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS INCLUDED IN THESE PLANS.

COMMITMENTS  
NONE

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05 TONS / CU YD
BITUMINOUS MAT PRIME COAT	0.08 GAL / SQ YD OR 0.375 GAL / SQ YD
AGGREGATE PRIME COAT	0.002 TONS / SQ YD
HMA RESURFACING	112 LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10 FT / 100 FT OF APPLICATION

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

CORN BELT ENERGY CORP.  
VERIZON NORTH, INC.  
HART ELECTRIC  
AMEREN IP  
NORTHERN BORDER PIPELINE  
INSIGHT COMMUNICATIONS

NON-MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

	HMA BINDER BOTTOM LIFT	HMA BINDER	HMA SURFACE
PG GRADE	PG 58-22	PG 58-22	PG 58-22
MAX % RAP ALLOWABLE **	30%	30%	30%
DESIGN AIR VOIDS	4.0% @ N30	4.0% @ N30	3.0% @ N30
MIXTURE COMPOSITION	IL 19.0L	IL 19.0L	IL 9.5L
FRICTION AGGREGATE			MIXTURE C
DENSITY TEST METHOD	*	CORRELATION	CORRELATION

\* MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

\*\* IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

**RIGID PAVEMENT STRUCTURAL DESIGN INFORMATION**

STRUCTURAL DESIGN TRAFFIC: YEAR 2017  
PV= 845 SU= 46 MU= 28

ROAD/STREET CLASSIFICATION: CLASS III

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
P= 50% S= 50% M= 50%

TRAFFIC FACTOR: ACTUAL TF= 0.218  
MINIMUM TF= 0.50

SUBGRADE SUPPORT RATING:  
SSR= POOR

**FLEXIBLE PAVEMENT STRUCTURAL DESIGN INFORMATION**

STRUCTURAL DESIGN TRAFFIC: YEAR 2017  
PV= 845 SU= 46 MU= 28

ROAD/STREET CLASSIFICATION: CLASS III

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:  
P= 50% S= 50% M= 50%

TRAFFIC FACTOR: ACTUAL TF= 0.159 AC TYPE= AC20  
MINIMUM TF= ---

PG GRADE: BINDER= PG 58-22 SURFACE= PG 58-22

SUBGRADE SUPPORT RATING:  
IBV= 6.0

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	1000 ROADWAY	1007 STRUCTURE
20200100	EARTH EXCAVATION	CU YD	962	962	
Δ 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	51	51	
Δ 28000300	TEMPORARY DITCH CHECKS	EACH	7	7	
Δ 28000500	INLET AND PIPE PROTECTION	EACH	4	4	
Δ 28100108	DUMPED RIPRAP, (SPECIAL)	TON	129		129
31100300	SUB-BASE GRANULAR MATERIAL, TYPE A 4'	SQ YD	842	842	
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12'	SQ YD	1335	1335	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	543	543	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	6878	6878	
40600300	AGGREGATE (PRIME COAT)	TON	150	150	
40600895	CONSTRUCTING TEST STRIP	EACH	1	1	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	257	257	
40600990	TEMPORARY RAMP	SQ YD	84	84	
Δ 40603100	HOT-MIX ASPHALT BINDER COURSE, IL-19.0L, N30	TON	12393	12393	
Δ 40603305	HOT-MIX ASPHALT SURFACE COURSE, MIX 'C', N30	TON	7484	7484	
Δ 40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	69	69	
Δ 42000200	PORTLAND CEMENT CONCRETE PAVEMENT 7'	SQ YD	794	794	
48101200	AGGREGATE SHOULDERS, TYPE B	TON	5391	5391	
Δ 48300200	PORTLAND CEMENT CONCRETE SHOULDERS 7'	SQ YD	127	127	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
51500100	NAME PLATES	EACH	1		1
Δ 54103900	CORRUGATED STRUCTURAL PLATE PIPE ARCHES 46 SQ. FT.	FOOT	82	82	
Δ 54200271	PIPE CULVERTS, CLASS C, TYPE 1 66'	FOOT	5	5	
Δ 54205923	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL, EQUIVALENT ROUND-SIZE 48'	FOOT	7	7	
Δ 54205929	PIPE CULVERTS, TYPE 1, CORRUGATED STEEL, EQUIVALENT ROUND-SIZE 54'	FOOT	12	12	
Δ 54207153	PIPE CULVERTS, TYPE 1, REINFORCED CONCRETE - ELLIPTICAL, EQUIVALENT ROUND-SIZE 18'	FOOT	36	36	
Δ 54214713	PRECAST REINFORCED CONCRETE FLARED END SECTIONS - ELLIPTICAL, EQUIVALENT ROUND-SIZE 18'	EACH	2	2	
54215163	STEEL END SECTIONS, EQUIVALENT ROUND-SIZE 48'	EACH	2	2	
Δ 67100100	MOBILIZATION	L SUM	1	1	
Δ 70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1	1	
Δ 70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3095	3095	
○ 78001100	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	123	123	
○ 78001140	PAINT PAVEMENT MARKING - LINE 8'	FOOT	102	102	
○ 78001150	PAINT PAVEMENT MARKING - LINE 12'	FOOT	122	122	
○ 78001180	PAINT PAVEMENT MARKING - LINE 24'	FOOT	93	93	
Δ X0320547	REMOVE AND REINSTALL END SECTION	EACH	6	6	
Δ X0976500	END SECTIONS TO BE REMOVED	EACH	2	2	
Δ X5121800	PERMANENT STEEL SHEET PILING	SQ FT	216		216
Δ XX003565	SEEDING SPECIAL, COMPLETE	ACRE	0.51	0.51	
Δ XX003643	BASE REPAIR, SPECIAL	SQ YD	1500	1500	
Δ Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1	
* Δ Z0076600	TRAINEES	HOUR	1000	1000	
Δ XX006942	PIPE CULVERTS, CLASS D, TYPE 2 EQUIVALENT ROUND-SIZE 120'	FOOT	116		116
Δ XX006943	REMOVAL OF CORRUGATED STRUCTURAL PLATE PIPE ARCH BEVELED END SECTION	FOOT	62	62	
Δ	SEE SPECIAL PROVISIONS				
○	SPECIALTY ITEM				
*	Y080				

DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/.DWG: SUMQUANS  
 DATE: 04/07

REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**  
 PERU MORRIS ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**SUMMARY OF QUANTITIES**

Drawing Name: C:\Users\LV813\Documents\Projects\05-00198-00-RS\05-00198-00-RS.dwg  
 Date: 04/07/07  
 Time: 2:55:00 PM  
 User: LV813

**PAVING SCHEDULE**

LOCATION	SUBBASE GRANULAR MAT'L, TY A, 4 INCH SQ YD	SUBBASE GRANULAR MAT'L, TY A, 12 INCH SQ YD	HMA SURFACE REMOVAL - BUTT JT SQ YD	BITUMINOUS MATERIALS (PRIME COAT) GALLON	AGGREGATE (PRIME COAT) TON	HMA BINDER CSE IL-19.0L, N30 TON	HMA SURF CSE MIX C, N30 TON	PCC PAVEMENT 7 INCH SQ YD	PCC SHOULDERS 7 INCH SQ YD	AGG SHOULDERS TYPE B TON
STA. 184 + 5.00 to 184 + 95.00			85.56	17.60	0.44	16.94	21.56			15.38
STA. 184 + 95.00 to 316 + 56.50				2573.80	64.35	4954.57	3152.91			2248.42
STA. 316 + 56.50 to 317 + 57.50				19.75	0.49	38.02	24.20			17.25
STA. 317 + 57.50 to 318 + 47.50			85.56	17.60	0.44	16.94	21.56			15.38
S. N. 006-3017 - OMISSION STA. 318+47.5 to STA. 292+31										
STA. EQUATION 319+17.50 (BK) = 291+61.00 (AH)										
STA. 292 + 31.00 to 293 + 21.00			85.56	17.60	0.44	16.94	21.56			15.38
STA. 293 + 21.00 to 294 + 0.00				15.45	0.39	29.74	18.92			13.50
STA. 294 + 0.00 to 353 + 71.50				1167.76	29.19	2247.94	1430.51			1020.13
STA. 353 + 71.50 to 354 + 94.88				24.13	0.60	57.86	29.56			34.44
STA. 354 + 94.88 to 358 + 73.97				74.13	1.85	212.49	90.81			99.22
STA. 358 + 73.97 to 359 + 98.77		332.80		114.40	0.61	72.61	29.90			37.90
STA. EQUATION 359+98.77 (BK) = 359+99.80 (AH)										
STA. 359 + 99.80 to 361 + 76.24		470.51		161.74	0.86	102.65	42.27			53.59
BNSF RR - OMISSION STA. 361+76.24 to STA. 361+91.95										
STA. 361 + 91.95 to 363 + 4.20		299.33		102.90	0.55	65.30	26.89			34.09
STA. 363 + 4.20 to 410 + 10.00				920.25	23.01	1771.47	1127.30			803.91
STA. 410 + 10.00 to 410 + 97.00		232.00		79.75	0.43	50.61	20.84			26.42
STA. 410 + 97.00 to 461 + 16.00				981.49	24.54	1889.37	1202.33			857.41
STA. EQUATION 416+16.00 (BK) = 110+00.00 (AH)										
STA. 110 + 0.00 to 113 + 20.00				62.58	1.56	120.46	76.66			54.67
STA. 113 + 20.00 to 114 + 88.00	842.00							794.00	127.00	44.30
ADDITIONAL BINDER FOR CROWN CORRECTION AS NEEDED						500.00				
GRAND-TOTAL	842	1,335	257	6,351	150	12,164	7,338	794	127	5,391

INLET AND PIPE PROTECTION	
LOCATION	EACH
STA. 357+75, RT	1
STA. 359+67, RT	1
STA. 363+60, RT	1
STA. 113+50, LT	1
TOTAL	4

CORRUGATED STRUCTURAL PLATE PIPE ARCHES 46 SQ. FT.		
LOCATION	FOOT	REMARKS
STA. 199+76, LT	21	ENDS BEVELED 1:2
STA. 199+76, RT	20	ENDS BEVELED 1:2
STA. 199+89, LT	21	ENDS BEVELED 1:2
STA. 199+89, RT	20	ENDS BEVELED 1:2
TOTAL	82	

STEEL END SECTIONS, EQUIVALENT ROUND-SIZE 48"	
LOCATION	EACH
STA. 288+41, LT	1
STA. 288+41, RT	1
TOTAL	2

END SECTIONS TO BE REMOVED	
LOCATION	EACH
STA. 288+41, LT	1
STA. 288+41, RT	1
TOTAL	2

TEMPORARY DITCH CHECKS	
LOCATION	EACH
STA. 113+00, LT	1
STA. 113+00, RT	1
STA. 114+00, RT	1
STA. 114+50, LT	1
STA. 114+50, RT	1
STA. 361+91, RT	1
STA. 32+25, LT	1
TOTAL	7

PIPE CULVERTS, TYPE 1, CORRUGATED STEEL, EQUIVALENT ROUND-SIZE 48"	
LOCATION	FOOT
STA. 288+41, LT	3
STA. 288+41, RT	4
TOTAL	7

PIPE CULVERTS, CLASS C, TYPE 1 66"	
LOCATION	FOOT
STA. 257+81, LT	4
STA. 257+81, RT	1
TOTAL	5

REMOVAL OF CURRUGATED STRUCTURAL PLATE PIPE ARCH BEVELED END SECTION	
LOCATION	FOOT
STA. 199+76, LT	16.5
STA. 199+76, RT	14.5
STA. 199+89, LT	16.5
STA. 199+89, RT	14.5
TOTAL	62

TEMPORARY RAMP	
LOCATION	SQ YD
STA. 184+05.00	14
STA. 318+47.50	14
STA. 292+31.00	14
STA. 361+76.24	14
STA. 361+91.95	14
STA. 113+20.00	14
TOTAL	84

PIPE CULVERTS, TYPE 1, CORRUGATED STEEL, EQUIVALENT ROUND-SIZE 54"	
LOCATION	FOOT
STA. 296+07, LT	3
STA. 296+07, RT	3
STA. 296+21, LT	3
STA. 296+21, RT	3
TOTAL	12

REMOVE AND REINSTALL END SECTION	
LOCATION	EACH
STA. 257+81, LT	1
STA. 257+81, RT	1
STA. 296+07, LT	1
STA. 296+07, RT	1
STA. 296+21, LT	1
STA. 296+21, RT	1
TOTAL	6

DRAWN BY: L.A.G.

CAD/DWG: SCHED

REVISIONS

DATE BY

CHECKED BY: D.J.D.

DATE: 04/07



PERU MORRIS ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
2007  
SECTION 05-00198-00-RS

SCHEDULE OF QUANTITIES

SCALE: NONE

SHEET 4

FILE NO.: 6813.00Y-1

OF 33



ENTRANCE AND SIDEROAD SCHEDULE				INCIDENTAL HOT-MIX ASPHALT SURFACING	AGGREGATE SURFACE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)
LOG MILE				TON	TON	GAL
0.00 (CH 19)	LT.	S. R.	4		7	6
0.00 (CH 19)	RT.	S. R.	11			5
0.01	LT.	P. E.	3		5	5
0.02	RT.	F. E.	4		6	6
0.06	RT.	F. E.	4		7	6
0.06	LT.	P. E.	10			4
0.11	LT.	F. E.	4		7	6
0.36	RT.	F. E.	3		5	5
0.41	LT.	P. E.	3		4	5
0.45	LT.	P. E.	5		9	7
0.47	LT.	P. E.	4		4	6
0.56	LT.	F. E.	4		6	6
0.55	RT.	F. E.	4		7	6
0.71	LT.	F. E.	4		8	7
0.73	LT.	F. E.	3		5	5
0.76	LT.	P. E.	8			3
0.72	RT.	F. E.	4		6	6
0.81	LT.	F. E.	5		8	7
0.81	RT.	P. E.	5		9	8
0.86	RT.	P. E.	4		6	6
0.92	RT.	F. E.	5		9	8
0.93	LT.	P. E.	8			3
1.01	LT.	F. E.	4		7	6
1.11	RT.	P. E.	4		7	6
1.11	RT.	P. E.	9			4
1.18	LT.	P. E.	10			4
1.23	LT.	F. E.	4		7	6
1.36	RT.	F. E.	4		6	6
1.41	LT.	P. E.	10			4
1.51	LT.	F. E.	4		7	6
1.51	RT.	F. E.	5		8	7
1.56	RT.	F. E.	5		9	8
1.66 (2900E RD)	LT.	S. R.	11			5
1.66 (2900E RD)	RT.	S. R.	11			5
1.91	LT.	F. E.	4		6	6
1.86	RT.	F. E.	4		7	6
1.93	RT.	F. E.	4		6	6
2.01	LT.	F. E.	3		5	5
2.06	RT.	F. E.	5		8	7
2.11	LT.	F. E.	4		6	6
2.21	LT.	F. E.	4		6	6
2.3	LT.	P. E.	9			4
2.3	RT.	F. E.	4		7	6
2.31	LT.	F. E.	4		5	5
2.51 (BRUSH CR)						
2.58	LT.	F. E.	3		5	5
2.56	RT.	F. E.	5		8	7
2.65	RT.	F. E.	4		7	6
2.7	RT.	F. E.	4		7	7
2.71	LT.	F. E.	4		6	6
2.71	RT.	P. E.	3		4	5
2.72	RT.	F. E.	4		7	6
2.76	LT.	F. E.	3		5	5
2.91	RT.	F. E.	4		7	7
3	LT.	P. E.	5		9	8
3	LT.	P. E.	4		6	6
3.01	LT.	P. E.	3		5	5
3.03	LT.	F. E.	4		7	6
3.3	LT.	F. E.	3		5	5
3.38	RT.	P. E.	3		5	5
3.39	RT.	P. E.	4		7	6
3.36	LT.	P. E.	6		11	9
3.36	LT.	P. E.	6		11	9
3.4	RT.	P. E.	4		7	6
3.41	RT.	F. E.	6		12	9
3.75 (1800N RD)	RT.		10		27	15

ENTRANCE AND SIDEROAD SCHEDULE				INCIDENTAL HOT-MIX ASPHALT SURFACING	AGGREGATE SURFACE COURSE, TYPE B	BITUMINOUS MATERIALS (PRIME COAT)
LOG MILE				TON	TON	GAL
3.41	LT.	F. E.	5		10	8
3.79	RT.	P. E.	12			5
3.81 (3100E RD)	LT.	S. R.	4		7	5
3.81 (3100E RD)	RT.	S. R.	12			6
BNSF RR						
3.87	RT.	F. E.	4		7	6
4.06	LT.	F. E.	4		6	6
4.11	LT.	P. E.	3		5	5
4.29	RT.	P. E.	3		5	5
4.36	RT.	P. E.	4		6	6
4.41	RT.	F. E.	4		7	6
4.51	RT.	P. E.	3		5	5
4.45	LT.	P. E.	3		5	5
4.51	RT.	F. E.	4		5	5
4.53	RT.	P. E.	6		11	8
4.56	LT.	P. E.	3		4	5
4.80 (3200E RD)	RT.	S. R.	4		7	6
4.81 (3200E RD)	LT.	S. R.	4		5	5
5.73	LT.	P. E.	3		4	5
5.04	RT.	F. E.	4		7	6
5.06	LT.	F. E.	4		8	7
5.11	LT.	P. E.	4		5	5
5.12	RT.	P. E.	3		4	5
5.21	LT.	F. E.	4		7	7
5.41	LT.	P. E.	3		5	5
5.52	RT.	F. E.	11		25	17
5.80 (IL 89)						
TOTAL				435	543	527

EARTHWORK QUANTITIES				
LOCATION	THEORETICAL		FURNISHED EXCAVATION SHORTAGE (-) OR EXCESS (+)	REMARKS
	CUT	FILL		
	CU YD	CU YD	CU YD	
	[(A)0.75]-(B)			
353+50.00 - 359+98.77	128	46	+50	
359+99.80 - 361+76.24	227	3	+168	
361+91.95 - 363+04.20	132	13	+86	
410+10.00 - 411+55.00	75	62	-6	
112+00.00 - 114+60.00	280	2	+208	
32+25.00 - 34+11.00	120	8	+82	
TOTAL	962	134	+588	
	PAY ITEM	INFO ONLY	INFO ONLY	

DRAWN BY: L.A.G.  
CHECKED BY: D.J.D.

CAD./DWG: SCHED  
DATE: 04/07

REVISIONS	
DATE	BY

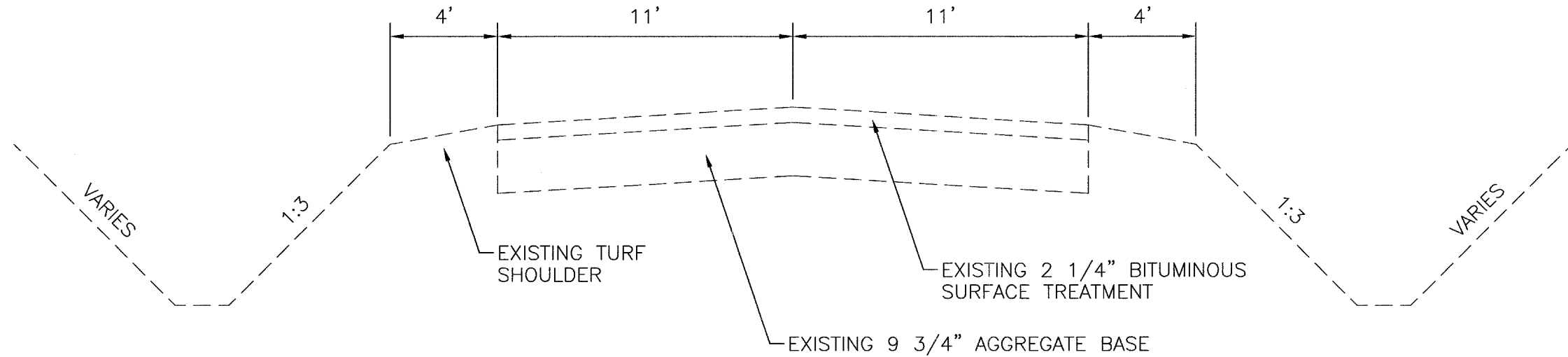


PERU MORRIS  
ILLINOIS

C.H. 33 (ANGLING ROAD)  
2007  
SECTION 05-00198-00-RS

SCHEDULE OF QUANTITIES

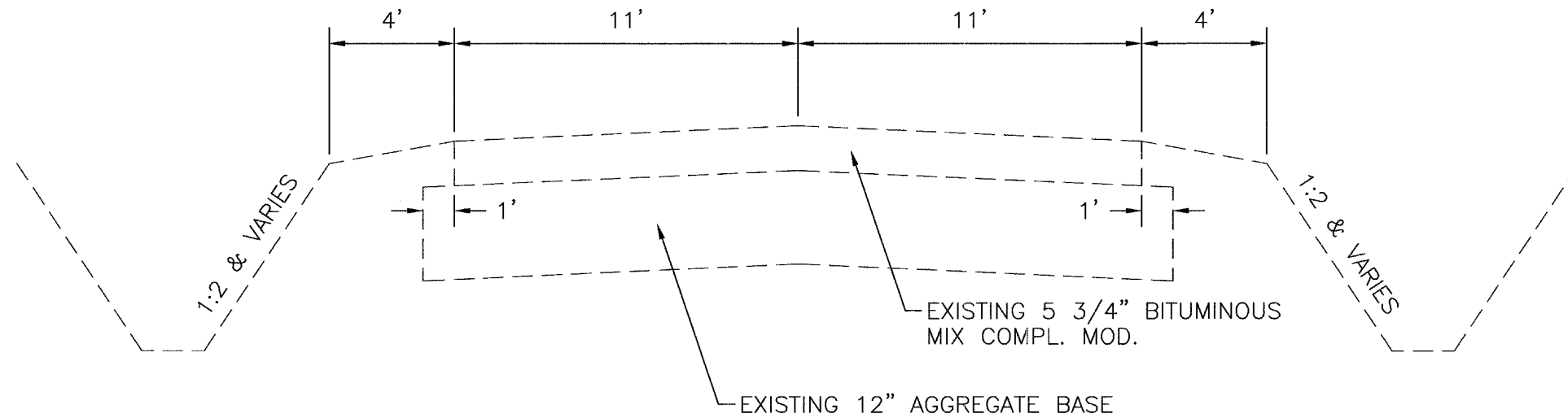
SCALE: NONE  
FILE NO.: 6813.00Y-1  
SHEET 5 OF 33



**EXISTING TYPICAL SECTION**

**STA. 184+05 TO STA. 316+56.5**

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)



**EXISTING TYPICAL SECTION**

**STA. 316+56.5 TO STA. 318+47.5**  
**STA. 292+31 TO STA. 294+00**

Date: 04/07, Drawn: L.A.G., Checked: D.J.D., Date: 04/07, File No.: 6813.00Y-1, Sheet: 6 of 33

DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: TYPX  
 DATE: 04/07

REVISIONS	
DATE	BY



PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

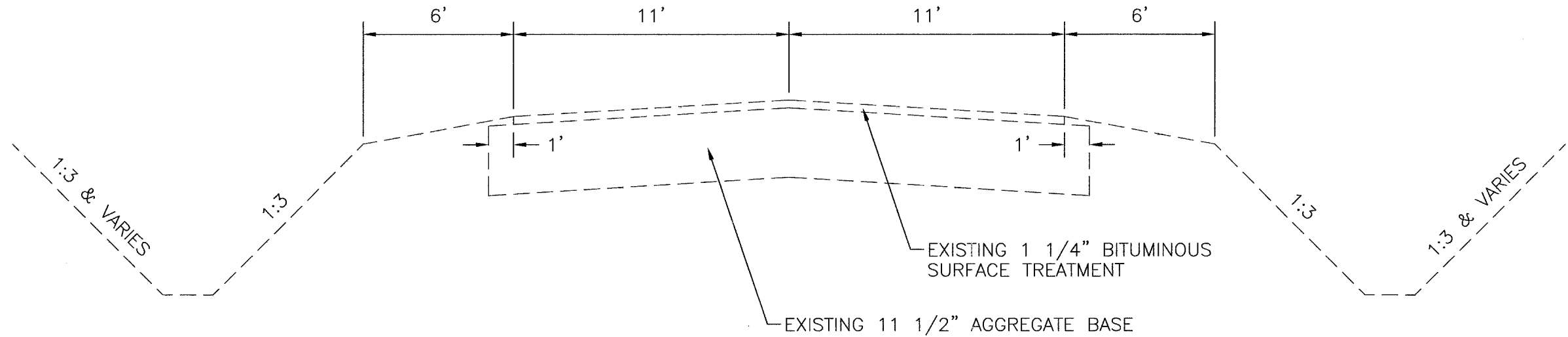
TYPICAL SECTIONS

SCALE: NONE

SHEET 6

FILE NO.: 6813.00Y-1

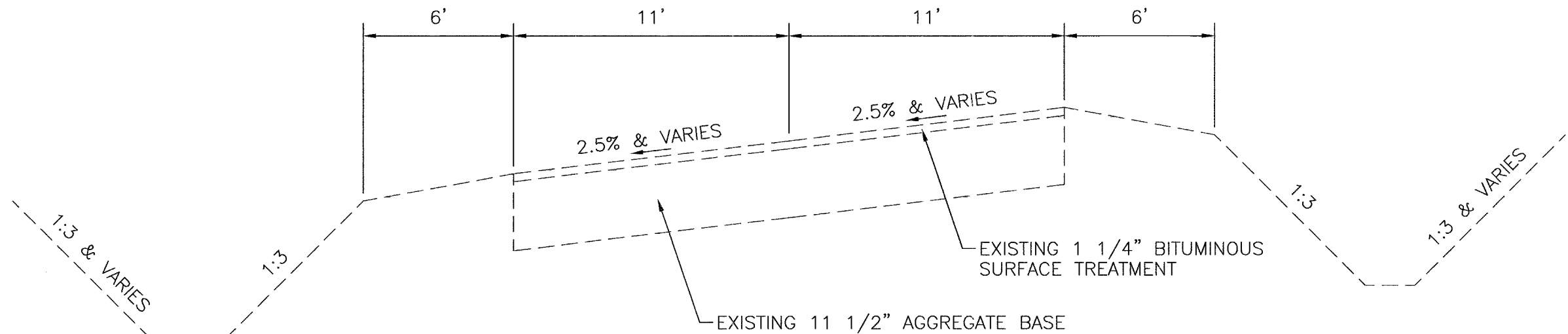
OF 33



**EXISTING TYPICAL SECTION**

**STA. 294+00 TO STA. 354+94.88**  
**STA. 359+98.77 (BK) / 359+99.80 (AH) TO STA. 361+76.2**  
**STA. 361+91.95 TO STA. 461+16 (BK)**  
**STA. 110+00 (AH) TO STA. 114+88**

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)

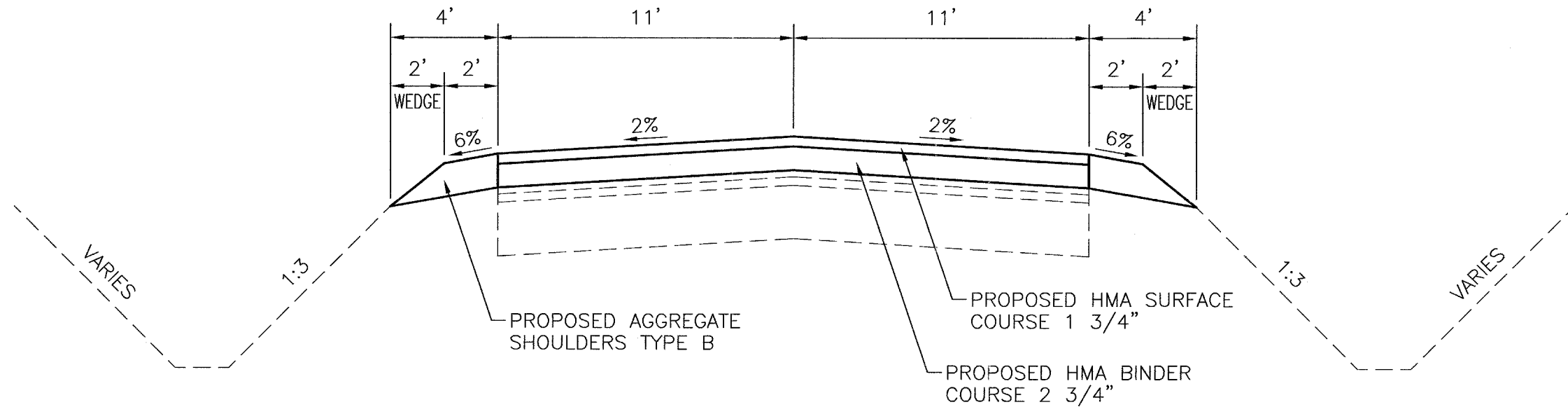


**EXISTING TYPICAL SECTION**

**STA. 354+94.88 TO STA. 359+98.77 (BK)**  
**359+99.80 (AH)**

Drawn by: L.A.G. / Date: 04/07 / Checked by: D.J.D. / File No.: 6813.00Y-1

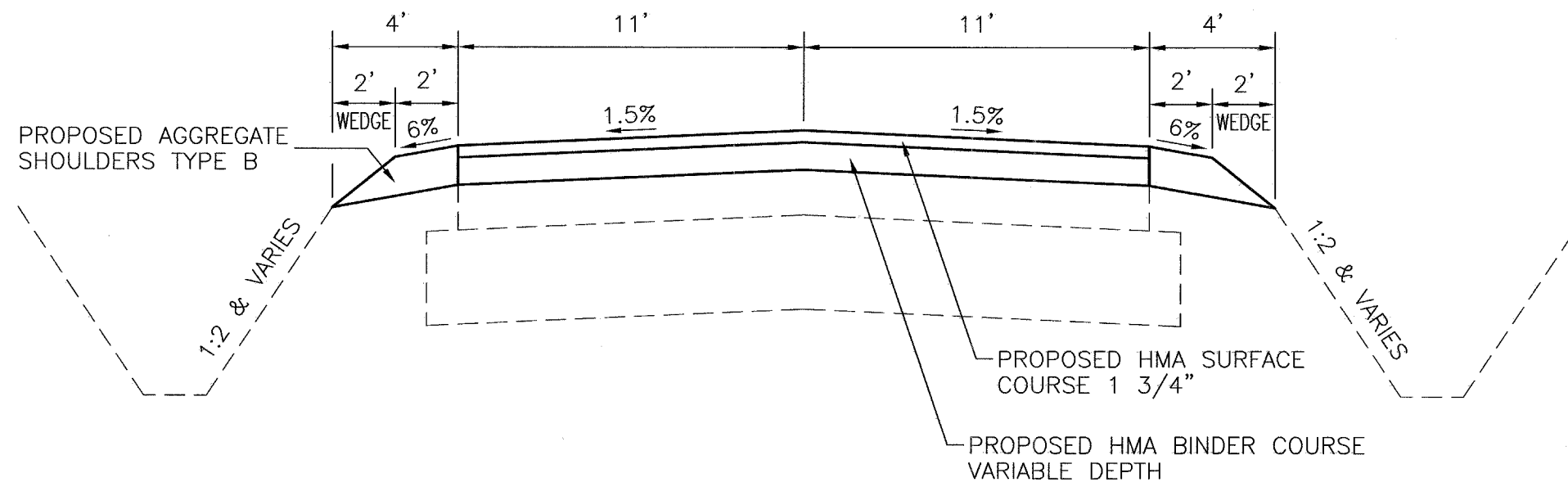
DRAWN BY: L.A.G.	CAD/.DWG: TYPX	REVISIONS			PERU MORRIS ILLINOIS	<b>C.H. 33 (ANGLING ROAD)</b> 2007 SECTION 05-00198-00-RS	<b>TYPICAL SECTIONS</b>	SCALE: NONE	SHEET 7
		DATE	BY					FILE NO.: 6813.00Y-1	OF 33
CHECKED BY: D.J.D.	DATE: 04/07								



**PROPOSED TYPICAL SECTION**

**STA. 184+05 TO STA. 316+56.5**

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)



**PROPOSED TYPICAL SECTION**

**STA. 316+56.5 TO STA. 318+47.5**  
**STA. 292+31 TO STA. 294+00**

DRAWN BY: L.A.G.

CAD/.DWG: TYPX

REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**

PERU MORRIS  
ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
2007  
SECTION 05-00198-00-RS

**TYPICAL SECTIONS**

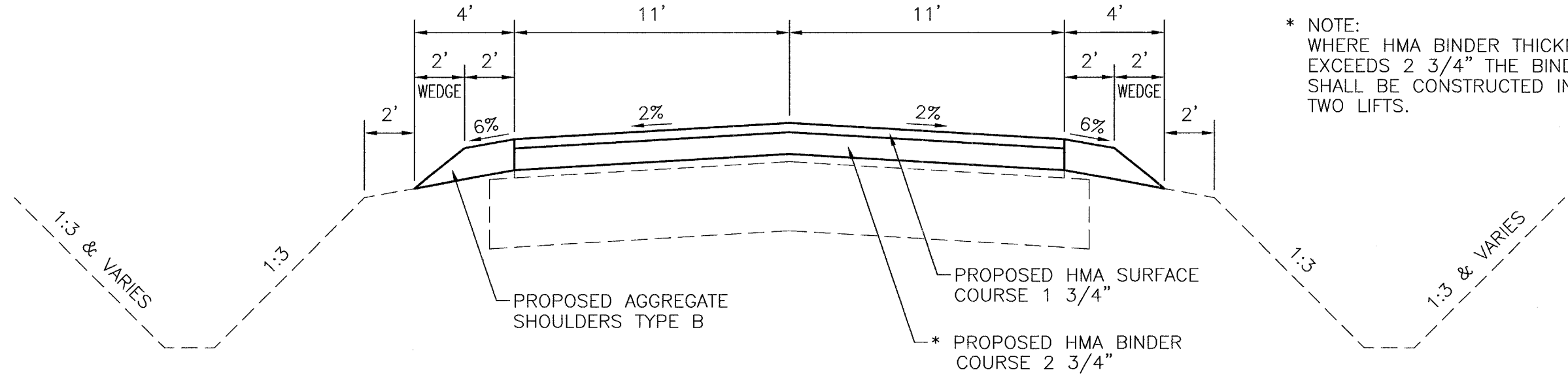
SCALE: NONE

SHEET 8

FILE NO.: 6813.00Y-1

OF 33

CHAMLIN ASSOCIATES, INC. 1100 N. WYOMING STREET, SUITE 100, CHAMPAIGN, ILLINOIS 61821-3000  
 PHONE: 309/244-1100 FAX: 309/244-1101  
 WWW.CHAMLINASSOCIATES.COM

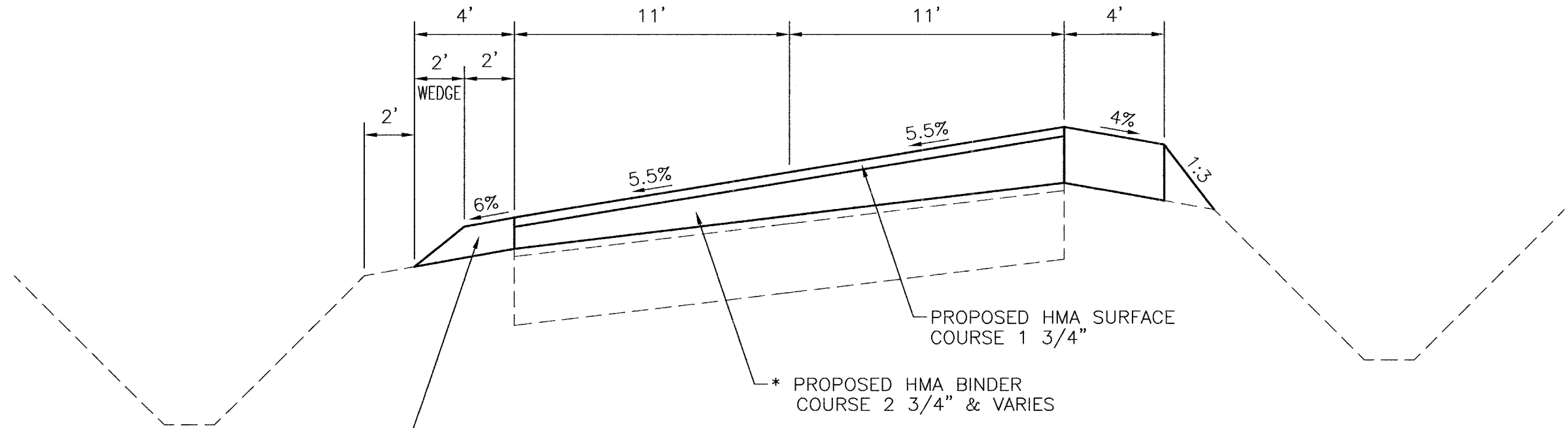


\* NOTE:  
WHERE HMA BINDER THICKNESS  
EXCEEDS 2 3/4" THE BINDER  
SHALL BE CONSTRUCTED IN  
TWO LIFTS.

**PROPOSED TYPICAL SECTION**

**STA. 294+00 TO STA. 354+94.88**  
**STA. 363+04.20 TO STA. 410+10**  
**STA. 410+97 TO STA. 461+16 (BK)**  
**STA. 110+00 (AH) TO STA. 113+20**

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)



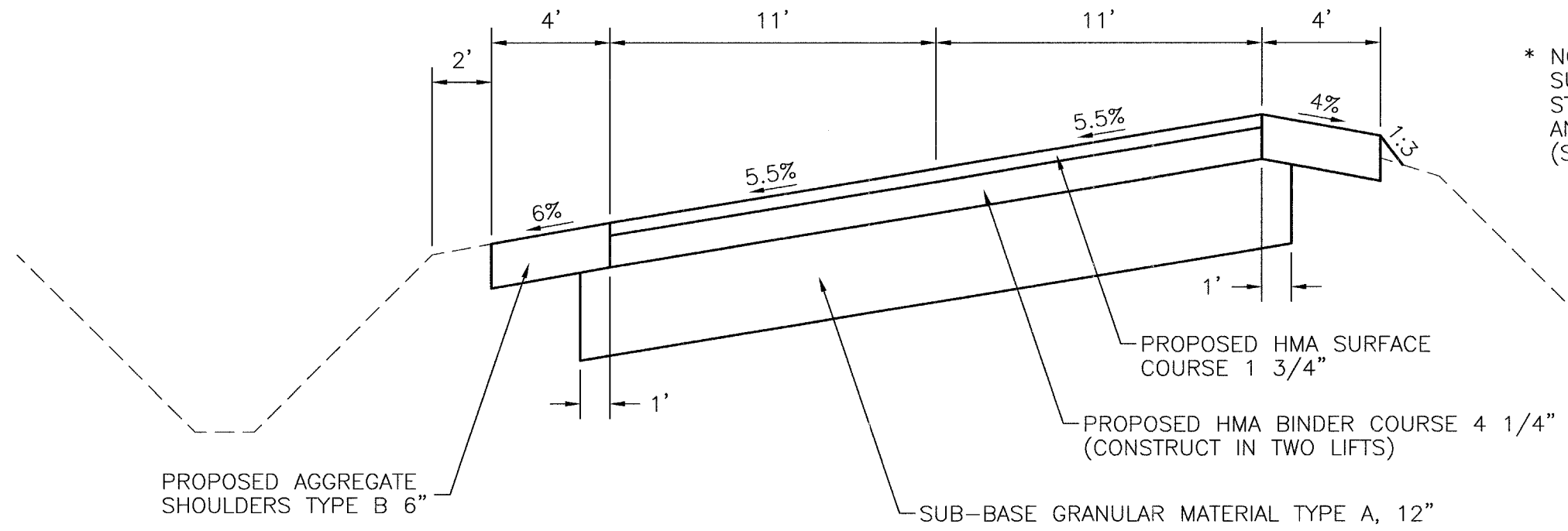
**PROPOSED TYPICAL SECTION**

**STA. 354+94.88 TO STA. 358+73.97 \*\***

\*\* NOTE:  
SUPERELEVATION TRANSITION FROM  
STA. 353+71.13 TO STA. 355+36.13  
AND STA. 359+57.52 TO STA. 361+23.55  
(SEE SUPERELEVATION TRANSITION DETAILS)

Drawing Number: 05-00198-00-RS-01 (1 of 2) Date: 04/07 2:30pm

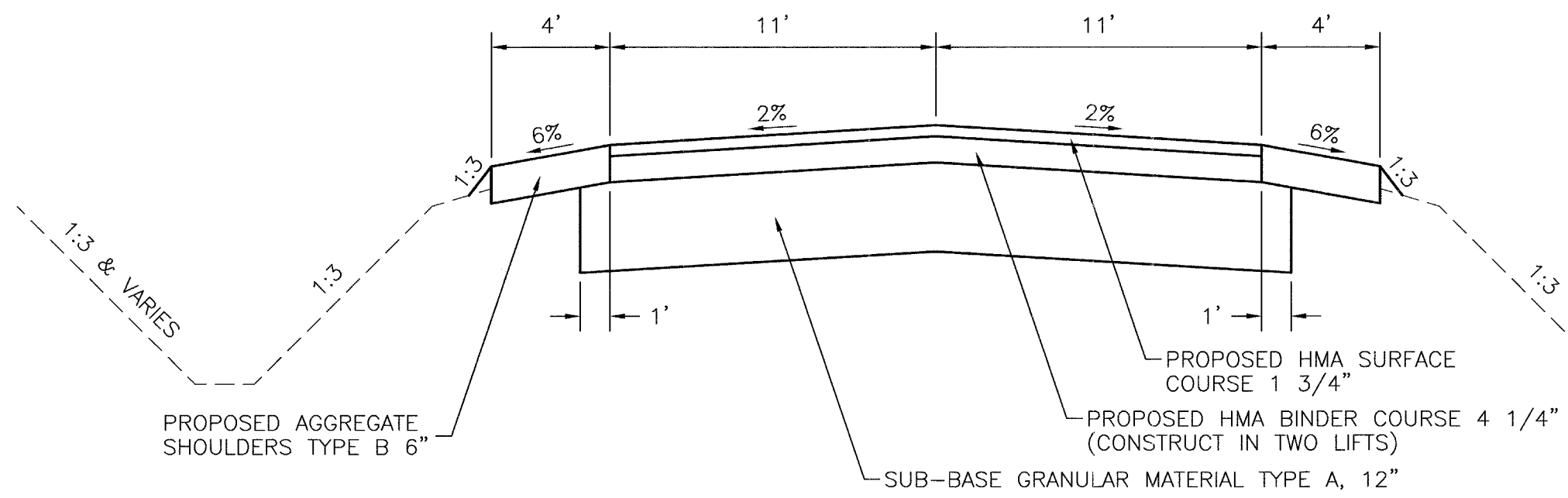
DRAWN BY: L.A.G.	CAD/.DWG: TYPX	REVISIONS		CHAMLIN ASSOCIATES	PERU MORRIS ILLINOIS	C.H. 33 (ANGLING ROAD) 2007 SECTION 05-00198-00-RS	TYPICAL SECTIONS	SCALE: NONE	SHEET 9
		DATE	BY					FILE NO.: 6813.00Y-1	OF 33
CHECKED BY: D.J.D.	DATE: 04/07								



\* NOTE:  
 SUPERELEVATION TRANSITION FROM  
 STA. 353+71.13 TO STA. 355+36.13  
 AND STA. 359+57.52 TO STA. 361+23.55  
 (SEE SUPERELEVATION TRANSITION DETAILS)

**PROPOSED TYPICAL SECTION**

**STA. 358+73.97 TO STA. 359+98.77 (BK)\*  
 359+99.80 (AH)**

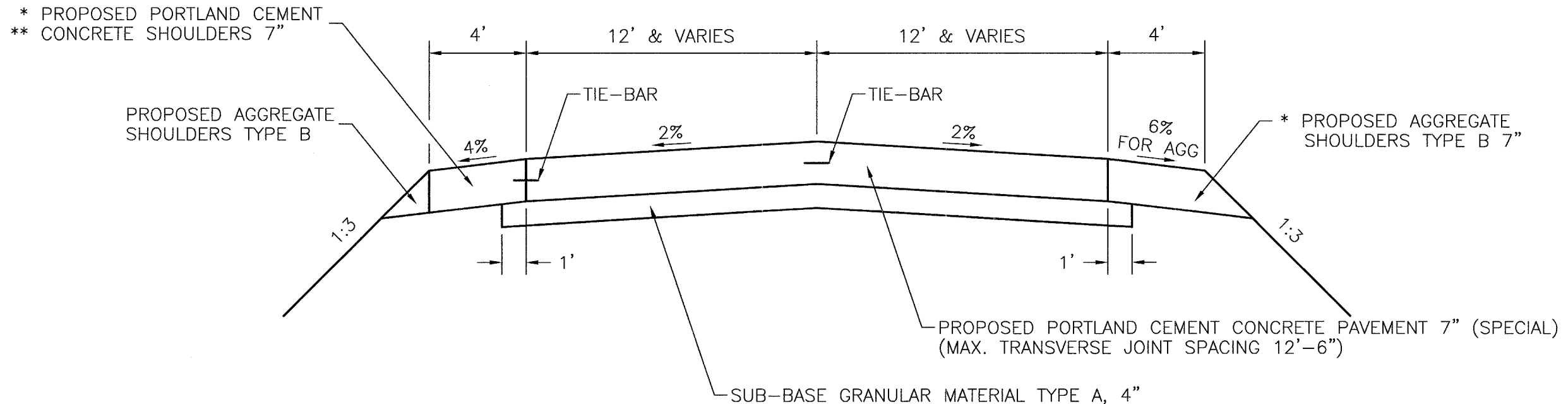


**PROPOSED TYPICAL SECTION**

**STA. 359+98.77 (BK) / 359+99.80 (AH) TO STA. 361+76.24  
 STA. 361+91.95 TO STA. 363+04.20  
 STA. 410+10 TO STA. 410+97**

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)

DRAWN BY: L.A.G.	CAD/.DWG: TYPX	REVISIONS		CHAMLIN ASSOCIATES	PERU MORRIS ILLINOIS	C.H. 33 (ANGLING ROAD) 2007 SECTION 05-00198-00-RS	TYPICAL SECTIONS	SCALE: NONE	SHEET 10
		DATE	BY					FILE NO.: 6813.00Y-1	OF 33
CHECKED BY: D.J.D.	DATE: 04/07								



\* NOTE:  
SEE PLAN & PROFILE SHEETS  
FOR LOCATIONS OF PROPOSED  
PORTLAND CEMENT CONCRETE  
SHOULDERS & AGGREGATE  
SHOULDERS.

\*\* NOTE:  
PCC SHOULDERS SHALL HAVE  
A UNIFORM THICKNESS OF 7"  
FOR FULL WIDTH OF SHOULDER.

### PROPOSED TYPICAL SECTION

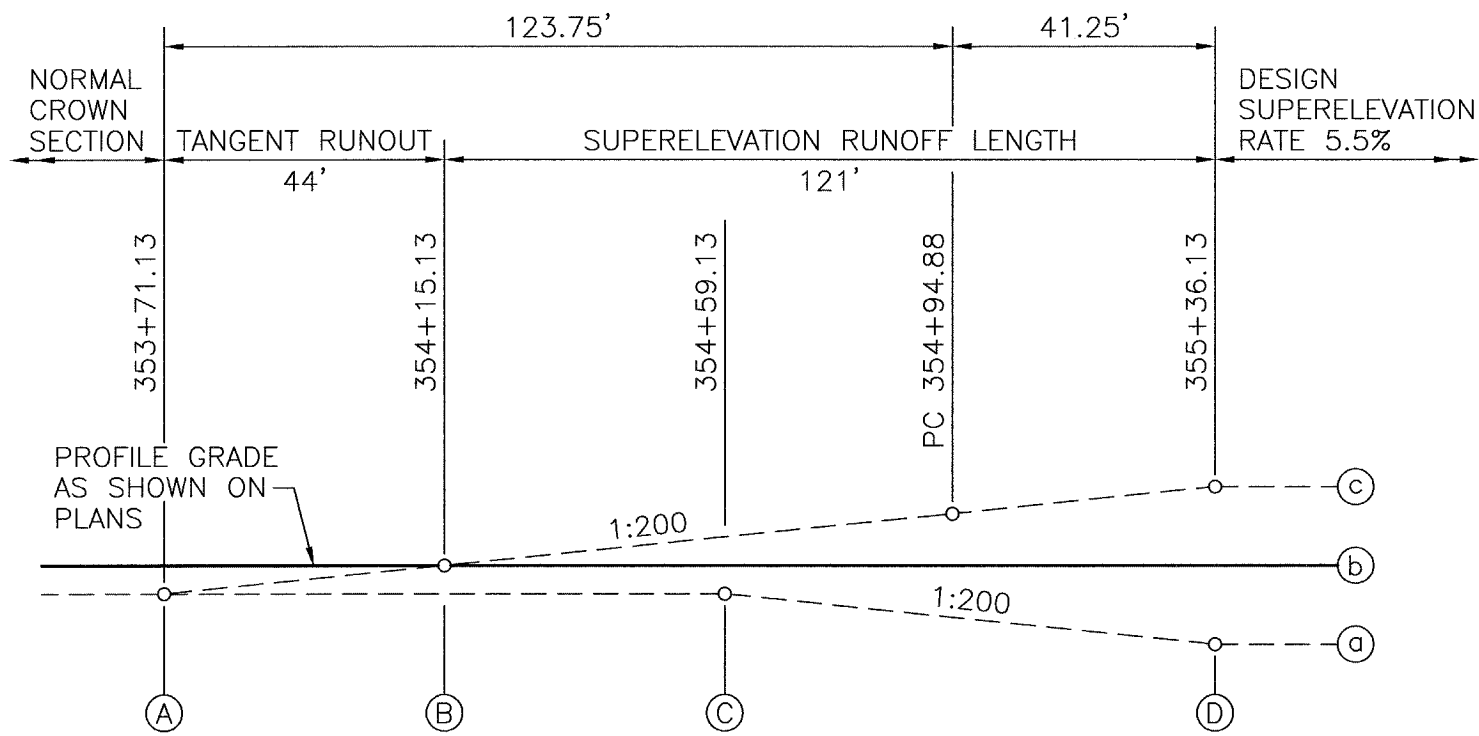
STA. 113+20 TO STA. 114+88.50

NOTE: STATION EQUATIONS  
 STA. 319+17.50 (BK) = STA. 291+61.00 (AH)  
 STA. 359+98.77 (BK) = STA. 359+99.80 (AH)  
 STA. 461+16 (BK) = STA. 110+00 (AH)

DRAWN BY: L.A.G.	CAD/DWG: TYPX	REVISIONS			PERU MORRIS ILLINOIS	<b>C.H. 33 (ANGLING ROAD)</b> 2007 SECTION 05-00198-00-RS	<b>TYPICAL SECTIONS</b>	SCALE: NONE	SHEET 11
		DATE	BY					FILE NO.: 6813.00Y-1	OF 33
CHECKED BY: D.J.D.	DATE: 04/07								

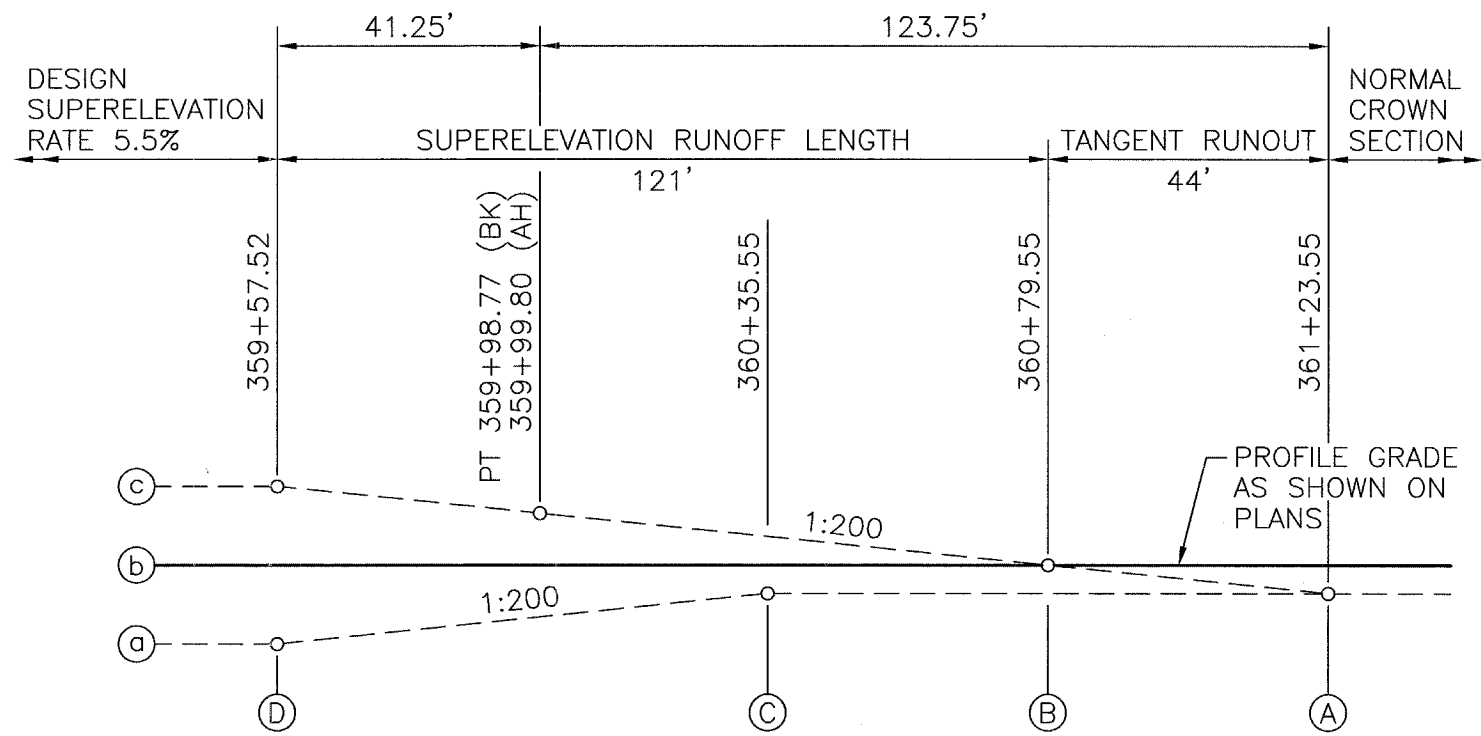
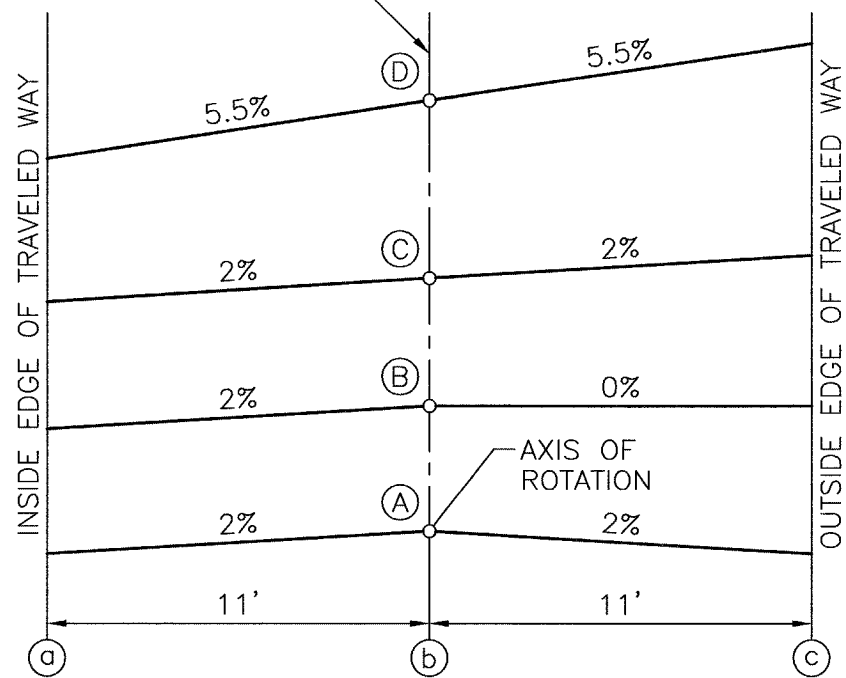
Drawing Name: C:\Users\lchamlin\Documents\Projects\87341\87341.dwg, Date: 04/07/07, 11:51 AM, Plot Date: 04/07/07, 11:51 AM, Plotter: AutoCAD





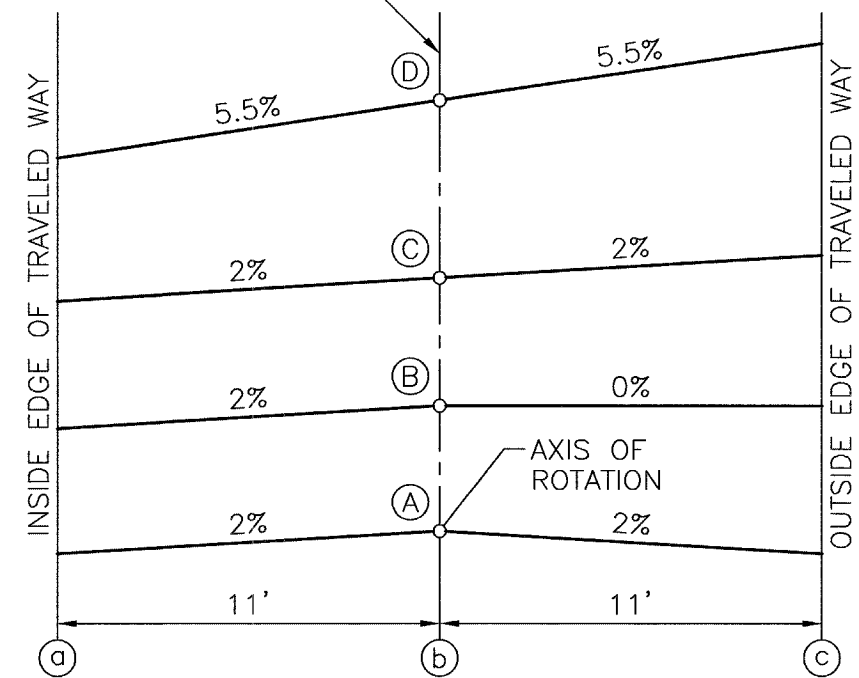
- (C) PROFILE OUTSIDE EDGE OF TRAVELED WAY
- (b) PROFILE GRADE LINE AT CENTERLINE TRAVELED WAY
- (a) PROFILE INSIDE EDGE OF TRAVELED WAY

CENTERLINE AND PROFILE GRADE LINE



- (C) PROFILE OUTSIDE EDGE OF TRAVELED WAY
- (b) PROFILE GRADE LINE AT CENTERLINE TRAVELED WAY
- (a) PROFILE INSIDE EDGE OF TRAVELED WAY

CENTERLINE AND PROFILE GRADE LINE



DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD./DWG: SUPERS  
 DATE: 04/07

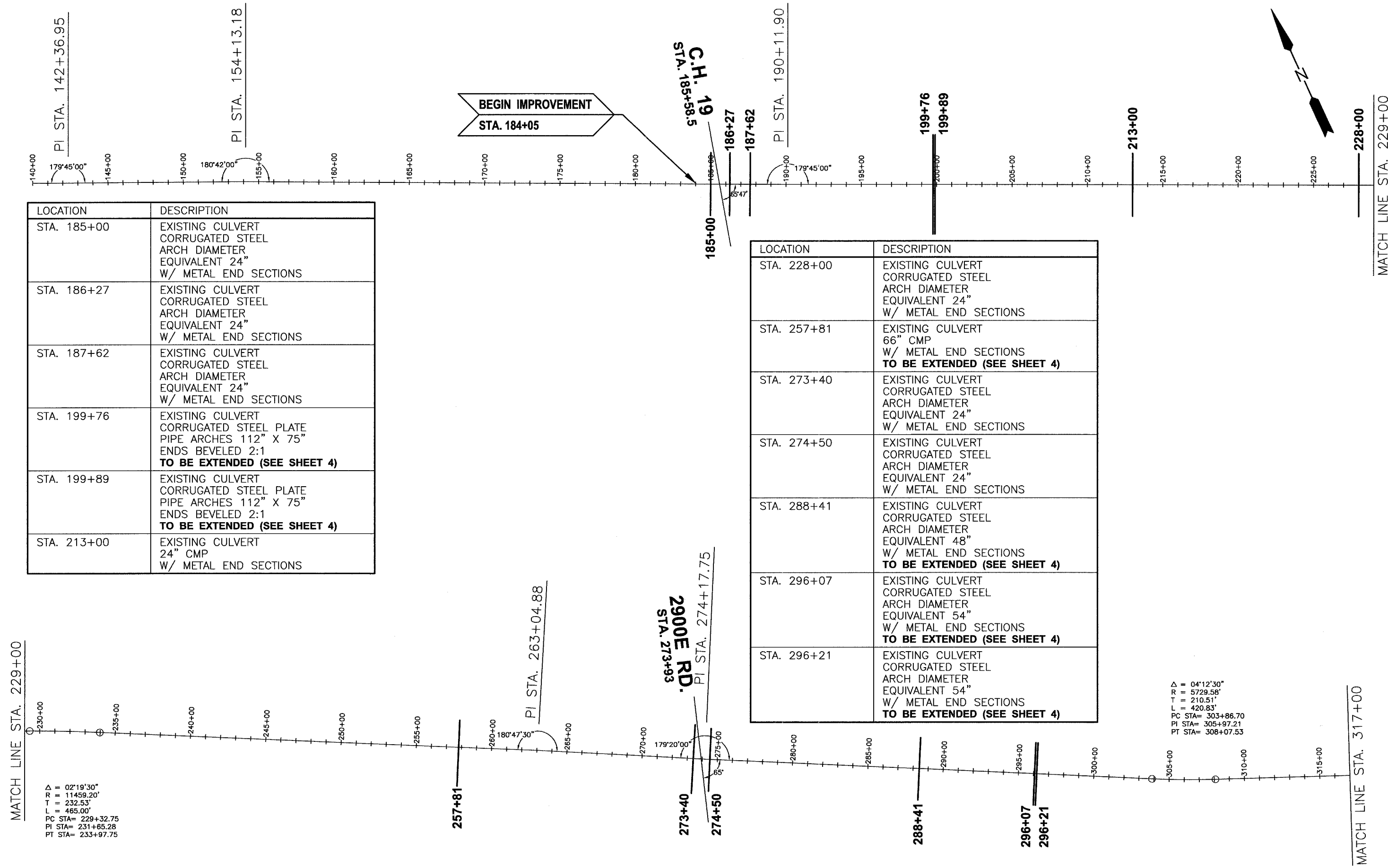
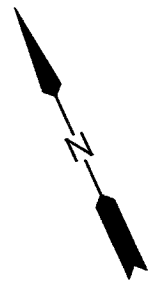
REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**  
 PERU MORRIS ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**SUPERELEVATION TRANSITION DETAILS**

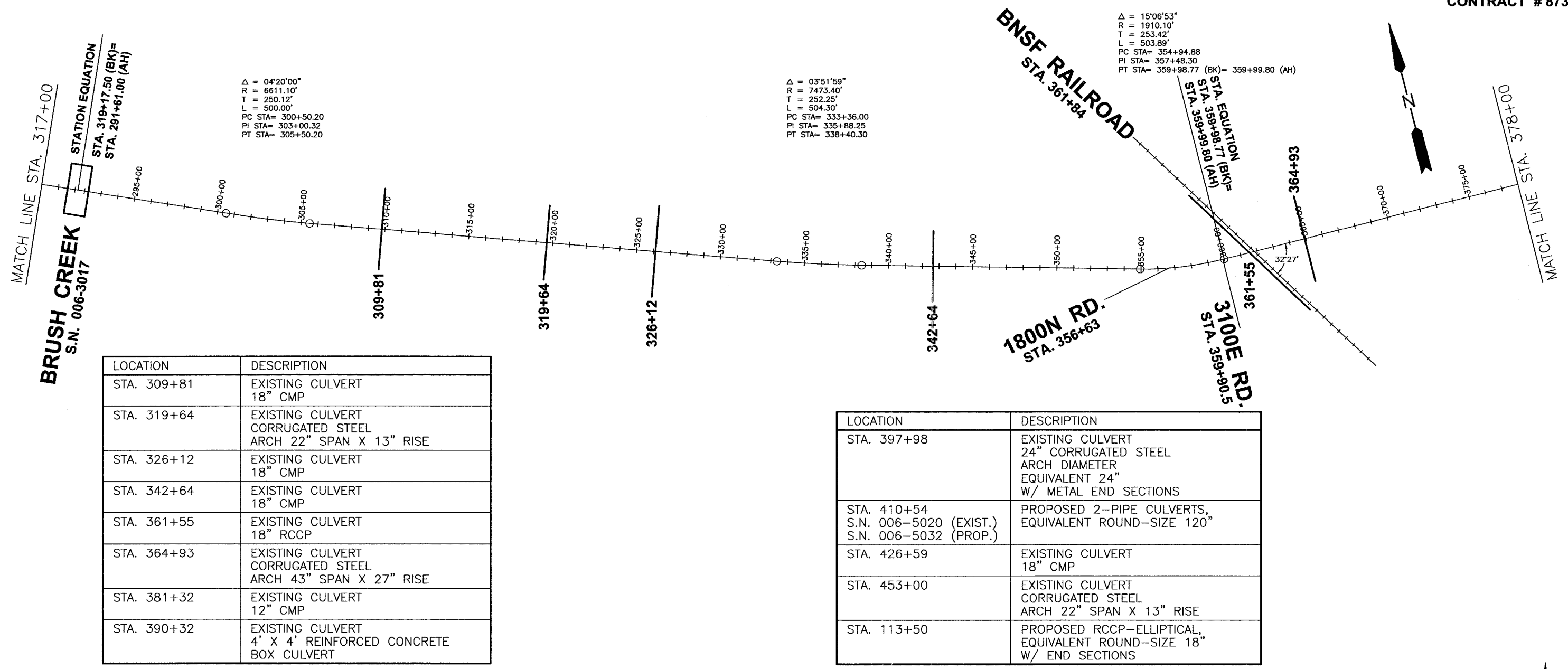
SCALE: NONE  
 SHEET 12  
 FILE NO.: 6813.00Y-1  
 OF 33



LOCATION	DESCRIPTION
STA. 185+00	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 186+27	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 187+62	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 199+76	EXISTING CULVERT CORRUGATED STEEL PLATE PIPE ARCHES 112" X 75" ENDS BEVELED 2:1 <b>TO BE EXTENDED (SEE SHEET 4)</b>
STA. 199+89	EXISTING CULVERT CORRUGATED STEEL PLATE PIPE ARCHES 112" X 75" ENDS BEVELED 2:1 <b>TO BE EXTENDED (SEE SHEET 4)</b>
STA. 213+00	EXISTING CULVERT 24" CMP W/ METAL END SECTIONS

LOCATION	DESCRIPTION
STA. 228+00	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 257+81	EXISTING CULVERT 66" CMP W/ METAL END SECTIONS <b>TO BE EXTENDED (SEE SHEET 4)</b>
STA. 273+40	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 274+50	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 288+41	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 48" W/ METAL END SECTIONS <b>TO BE EXTENDED (SEE SHEET 4)</b>
STA. 296+07	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 54" W/ METAL END SECTIONS <b>TO BE EXTENDED (SEE SHEET 4)</b>
STA. 296+21	EXISTING CULVERT CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 54" W/ METAL END SECTIONS <b>TO BE EXTENDED (SEE SHEET 4)</b>

DRAWN BY: L.A.G. CAD./DWG: CULVERTS-EXH  
 CHECKED BY: D.J.D. DATE: 04/07  
 CHAMBLIN ASSOCIATES PERU MORRIS ILLINOIS  
 C.H. 33 (ANGLING ROAD) SECTION 05-00198-00-RS  
 PROJECT SCHEMATIC  
 SCALE: NONE SHEET 13  
 FILE NO.: 6813.00Y-1 OF 33



$\Delta = 04'20'00''$   
 $R = 6611.10'$   
 $T = 250.12'$   
 $L = 500.00'$   
 $PC STA = 300+50.20$   
 $PI STA = 303+00.32$   
 $PT STA = 305+50.20$

$\Delta = 03'51'59''$   
 $R = 7473.40'$   
 $T = 252.25'$   
 $L = 504.30'$   
 $PC STA = 333+36.00$   
 $PI STA = 335+88.25$   
 $PT STA = 338+40.30$

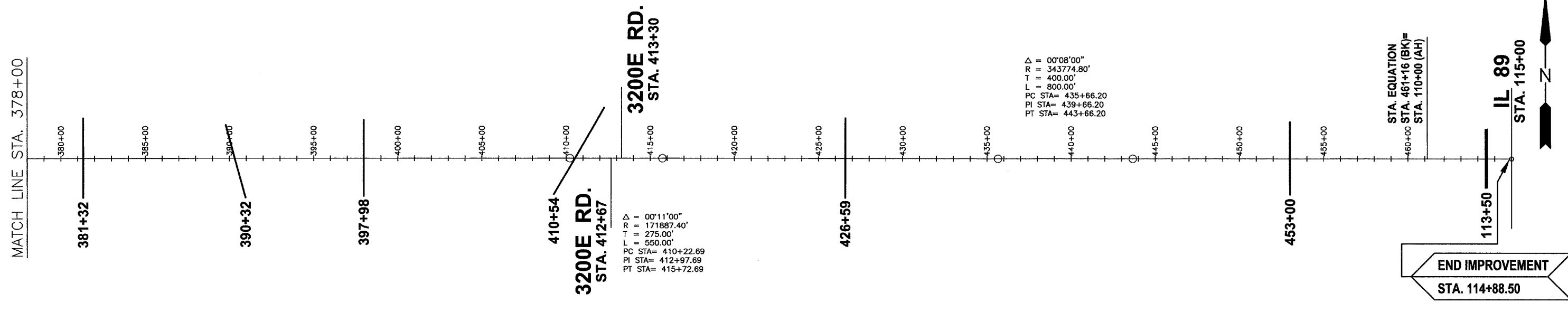
$\Delta = 15'06'53''$   
 $R = 1910.10'$   
 $T = 253.42'$   
 $L = 503.89'$   
 $PC STA = 354+94.88$   
 $PI STA = 357+48.30$   
 $PT STA = 359+98.77$  (BK) = 359+99.80 (AH)

$\Delta = 00'08'00''$   
 $R = 343774.80'$   
 $T = 400.00'$   
 $L = 800.00'$   
 $PC STA = 435+66.20$   
 $PI STA = 439+66.20$   
 $PT STA = 443+66.20$

$\Delta = 00'11'00''$   
 $R = 171887.40'$   
 $T = 275.00'$   
 $L = 550.00'$   
 $PC STA = 410+22.69$   
 $PI STA = 412+97.69$   
 $PT STA = 415+72.69$

LOCATION	DESCRIPTION
STA. 309+81	EXISTING CULVERT 18" CMP
STA. 319+64	EXISTING CULVERT CORRUGATED STEEL ARCH 22" SPAN X 13" RISE
STA. 326+12	EXISTING CULVERT 18" CMP
STA. 342+64	EXISTING CULVERT 18" CMP
STA. 361+55	EXISTING CULVERT 18" RCCP
STA. 364+93	EXISTING CULVERT CORRUGATED STEEL ARCH 43" SPAN X 27" RISE
STA. 381+32	EXISTING CULVERT 12" CMP
STA. 390+32	EXISTING CULVERT 4' X 4' REINFORCED CONCRETE BOX CULVERT

LOCATION	DESCRIPTION
STA. 397+98	EXISTING CULVERT 24" CORRUGATED STEEL ARCH DIAMETER EQUIVALENT 24" W/ METAL END SECTIONS
STA. 410+54 S.N. 006-5020 (EXIST.) S.N. 006-5032 (PROP.)	PROPOSED 2-PIPE CULVERTS, EQUIVALENT ROUND-SIZE 120"
STA. 426+59	EXISTING CULVERT 18" CMP
STA. 453+00	EXISTING CULVERT CORRUGATED STEEL ARCH 22" SPAN X 13" RISE
STA. 113+50	PROPOSED RCCP-ELLIPTICAL, EQUIVALENT ROUND-SIZE 18" W/ END SECTIONS



DRAWN BY: L.A.G. CAD./DWG: CULVERTS-EXH DATE: 04/07 CHECKED BY: D.J.D.

DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

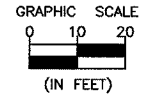
REVISIONS	
DATE	BY

**CHAMLIN & ASSOCIATES**  
 PERU MORRIS  
 ILLINOIS

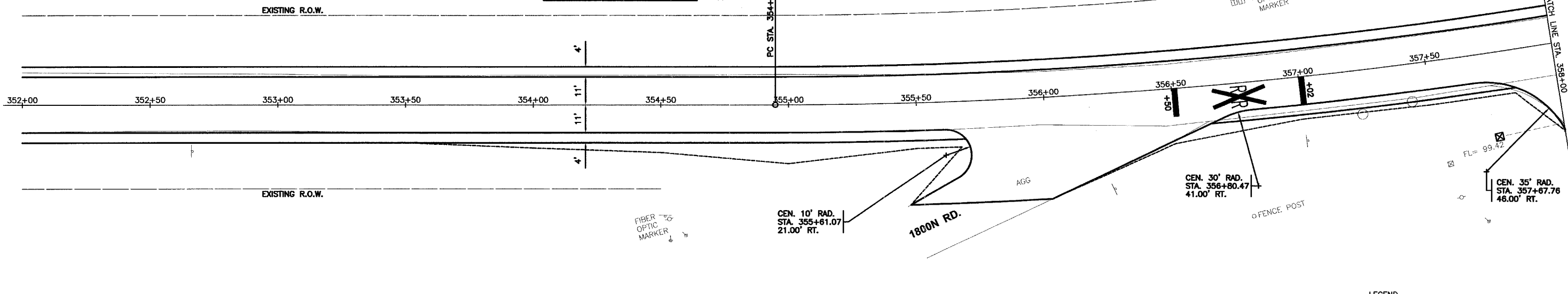
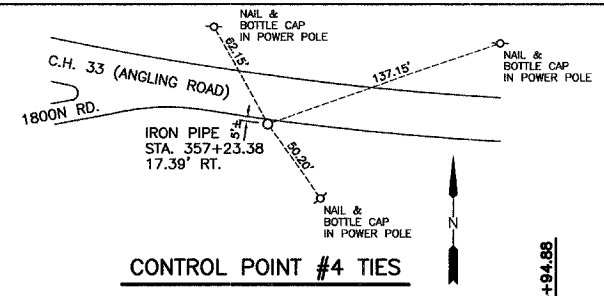
**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**PROJECT SCHEMATIC**

SCALE: NONE	SHEET 14
FILE NO.: 6813.00Y-1	OF 33

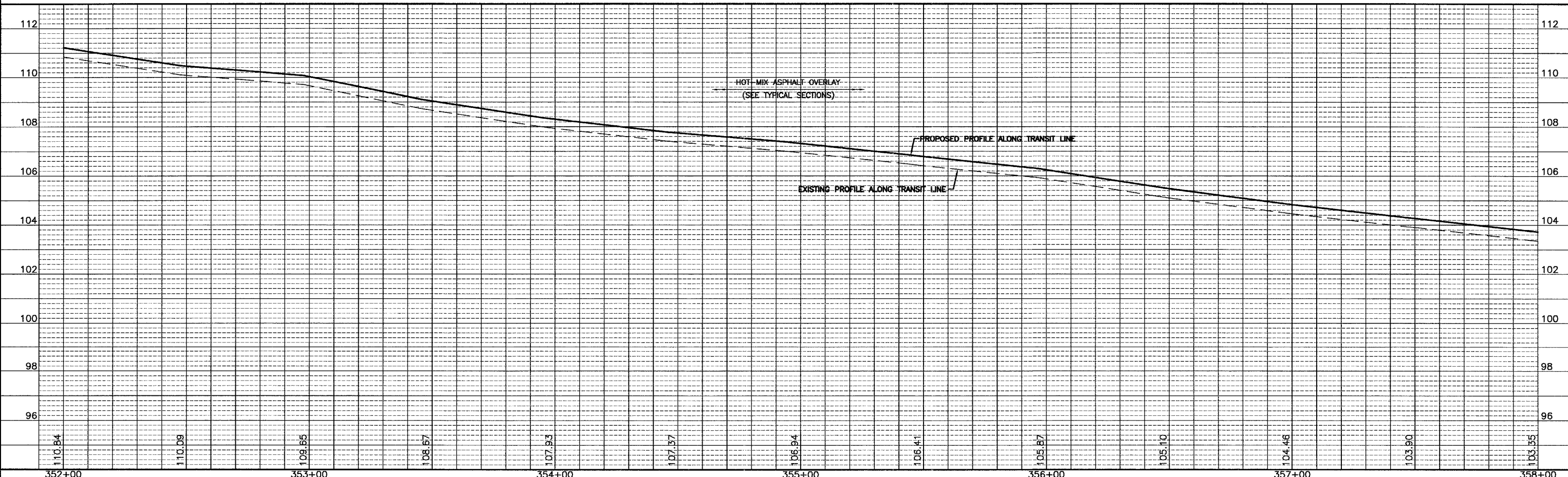


$\Delta = 15'06.53"$   
 $R = 1910.10'$   
 $T = 253.42'$   
 $L = 503.89'$   
 $PC STA = 354+94.88$   
 $PI STA = 357+48.30$   
 $PT STA = 359+98.77 (BK) = 359+99.80 (AH)$



**LEGEND**  
 - - - - - CONSTRUCTION LIMITS  
 ☒ INLET & PIPE PROTECTION

BENCHMARK "A":  
 RAILROAD SPIKE IN POWER POLE  
 AT N.E. CORNER OF 3100E ROAD  
 AND 1800N ROAD (C.H. 33)  
 ELEV. = 100.00



DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/.DWG: PP352-358  
 DATE: 04/07

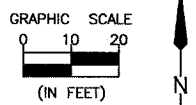
REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**  
 PERU MORRIS  
 ILLINOIS

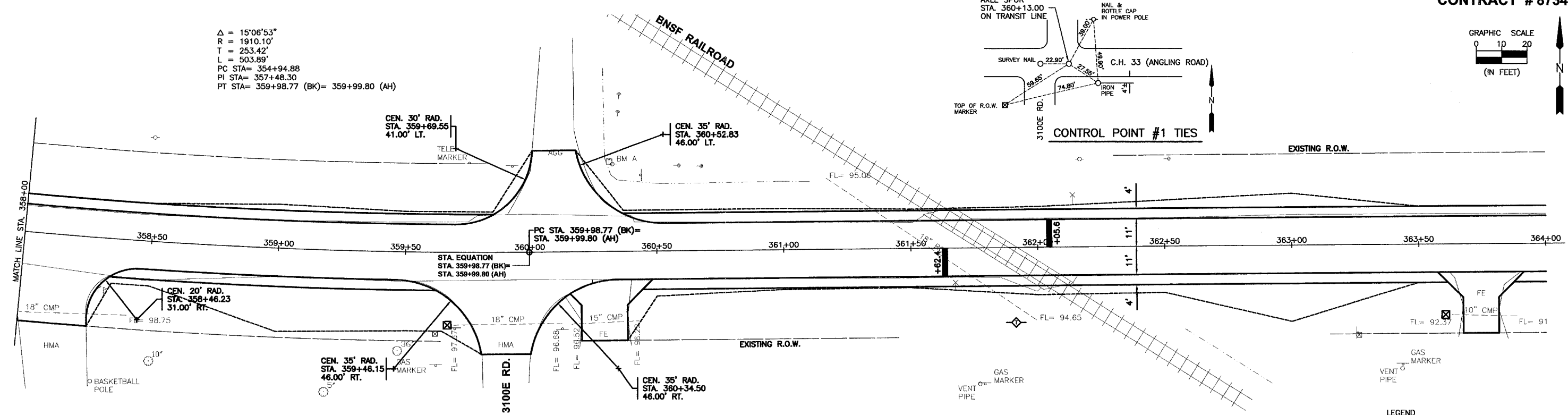
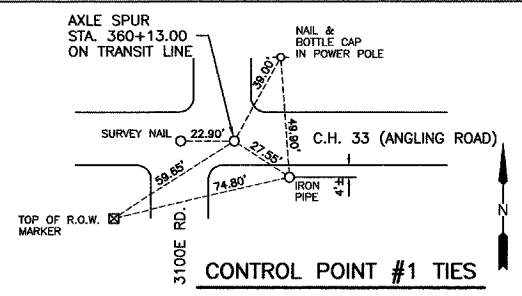
**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**PLAN AND PROFILE STA. 352+00 TO STA. 358+00**

SCALE: AS NOTED  
 SHEET 15  
 FILE NO.: 6813.00Y-1  
 OF 33



$\Delta = 15'06''53''$   
 $R = 1910.10'$   
 $T = 253.42'$   
 $L = 503.89'$   
 $PC STA = 354+94.88$   
 $PI STA = 357+48.30$   
 $PT STA = 359+98.77 (BK) = 359+99.80 (AH)$

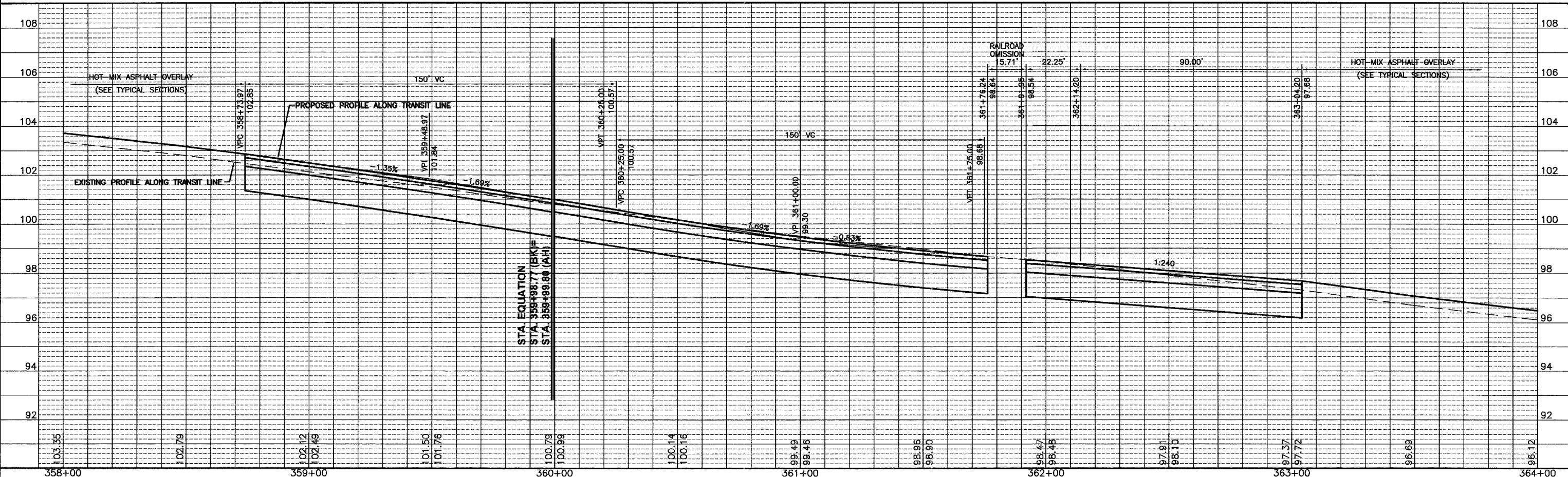


**BENCHMARK "A":**  
 RAILROAD SPIKE IN POWER POLE  
 AT N.E. CORNER OF 3100E ROAD  
 AND 1800N ROAD (C.H. 33)  
 ELEV. = 100.00

**NOTES:**  
 ROTATE EDGES OF PAVEMENT TO  
 MATCH RAILROAD CROSSING  
 STA. 361+25 TO STA. 361+60.  
 ROTATE EDGES OF PAVEMENT TO  
 MATCH RAILROAD CROSSING  
 STA. 362+20 TO STA. 362+55.

**LEGEND**

- CONSTRUCTION LIMITS
- ☒ -INLET & PIPE PROTECTION
- ◇ -TEMPORARY DITCH CHECK



DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD./DWG: PP358-364  
 DATE: 04/07

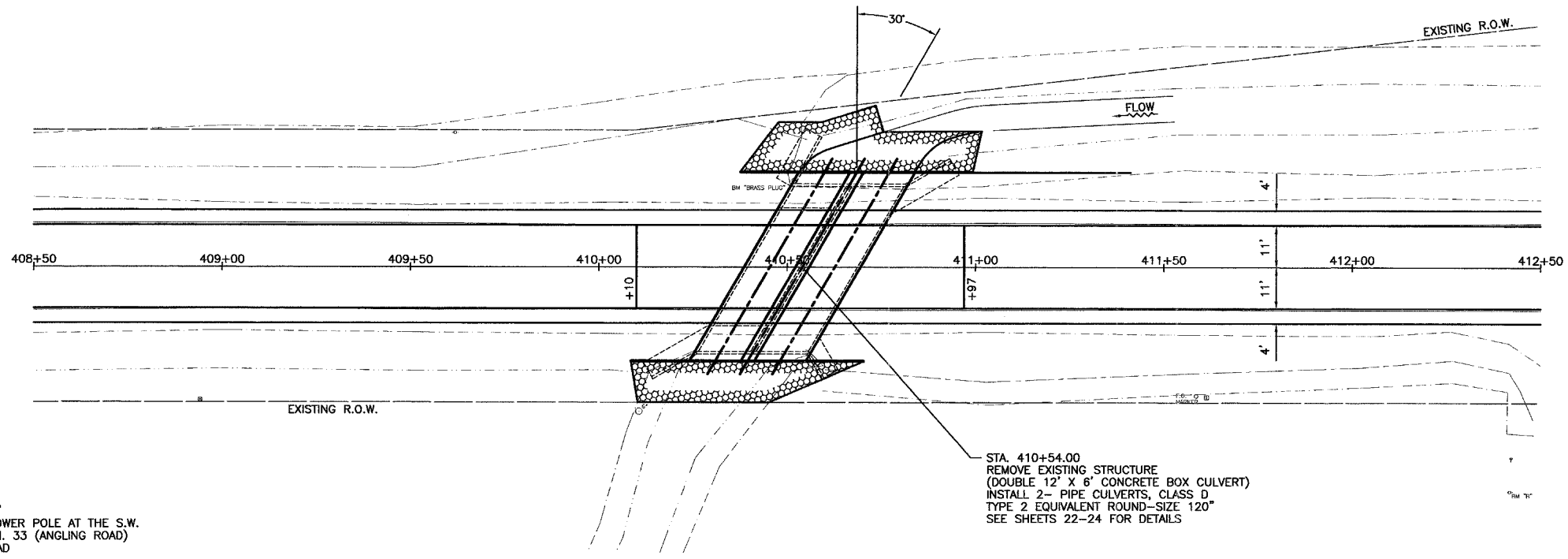
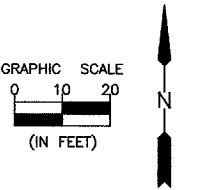
REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**  
 PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**PLAN AND PROFILE STA. 358+00 TO STA. 364+00**

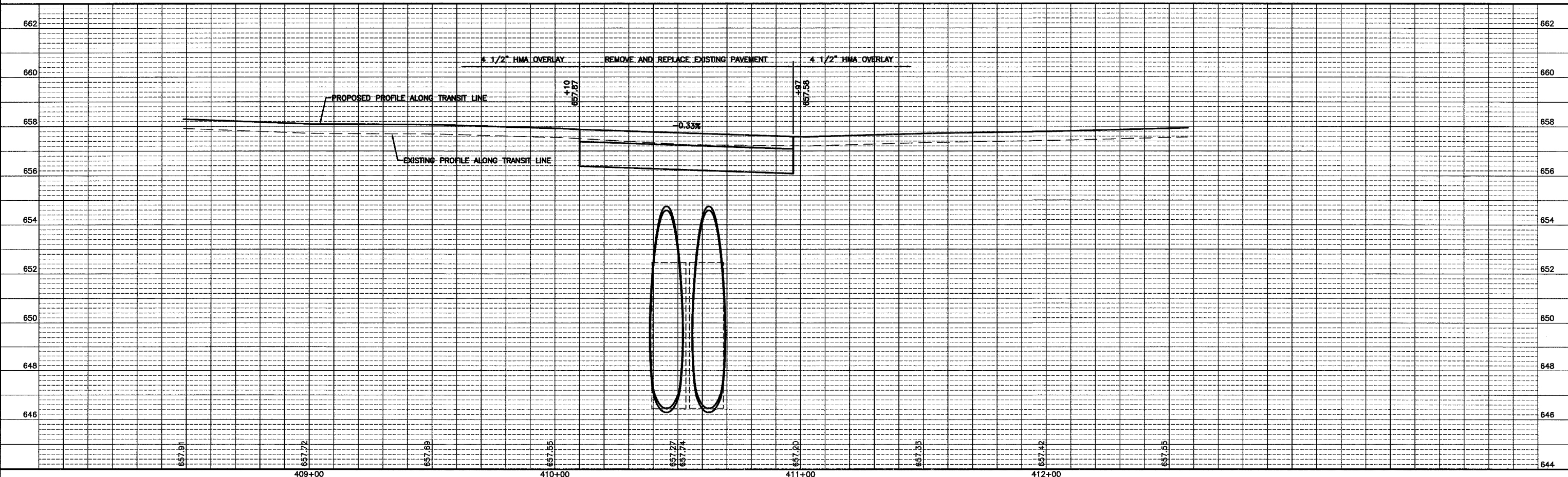
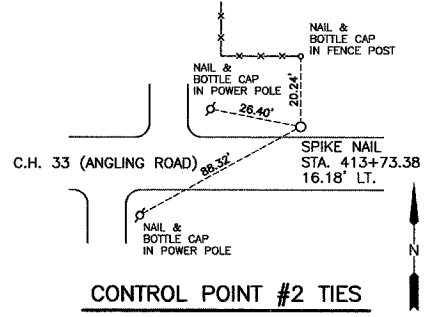
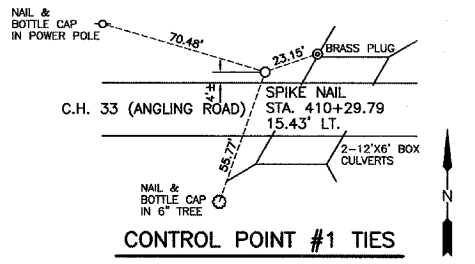
SCALE: AS NOTED  
 SHEET 16  
 FILE NO.: 6813.00Y-1  
 OF 33



BENCHMARK "B"  
20P NAIL IN POWER POLE AT THE S.W.  
CORNER OF C.H. 33 (ANGLING ROAD)  
AND 3200E ROAD  
ELEV. 655.52

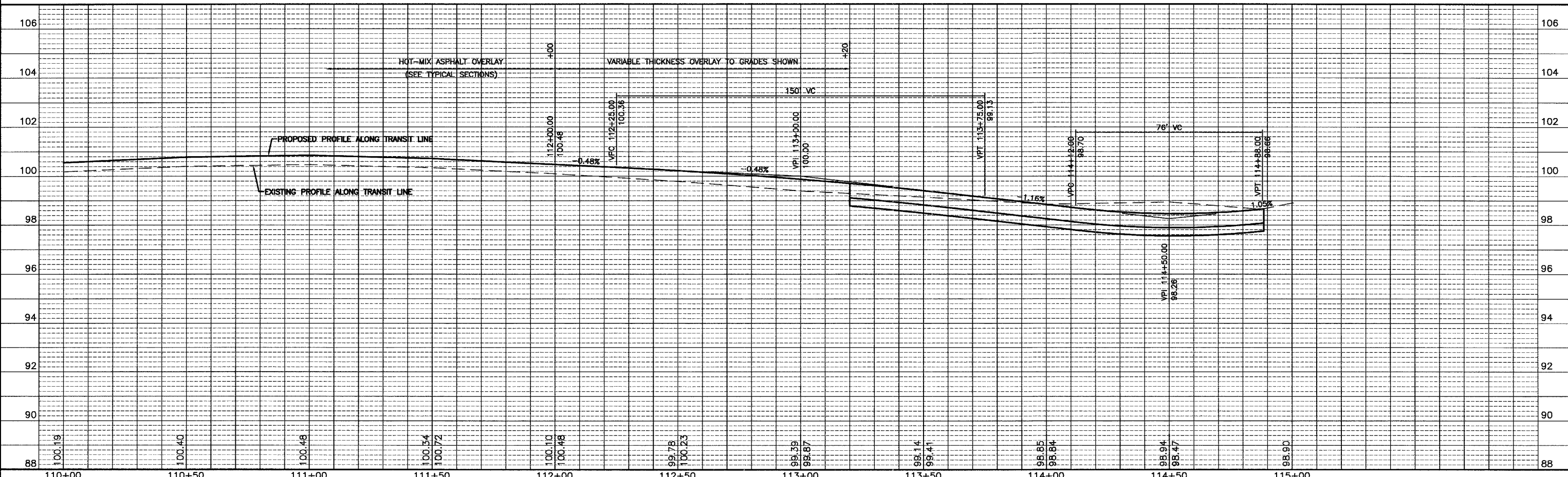
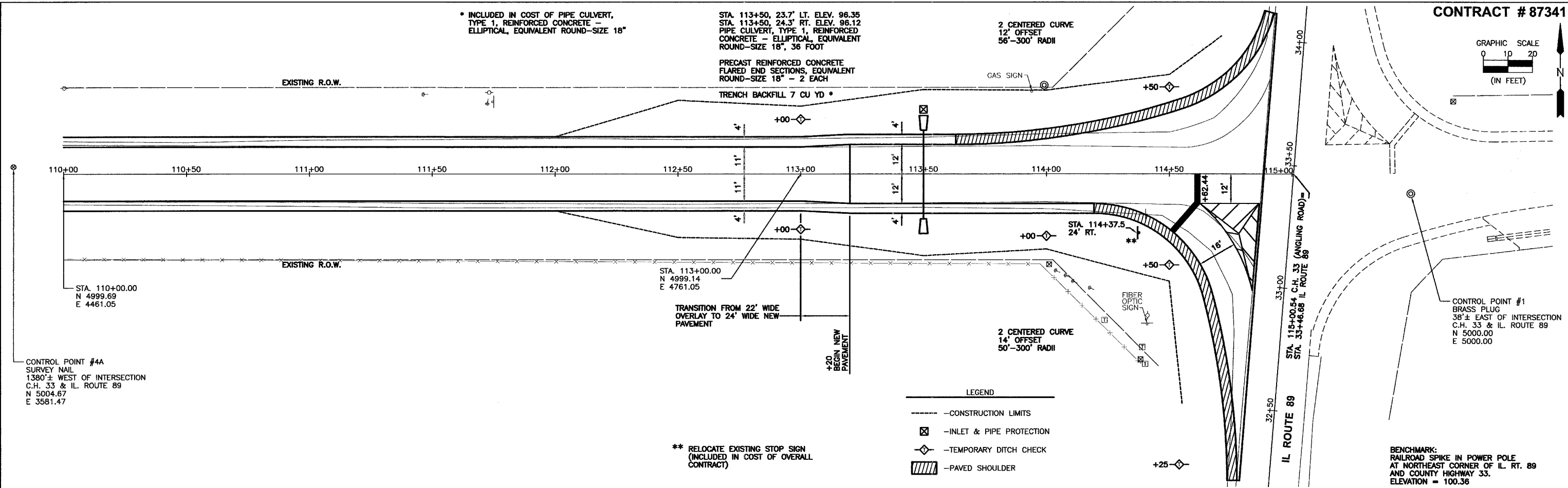
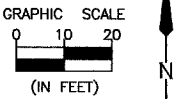
BENCHMARK "BRASS PLUG"  
BRASS PLUG IN N.W. WINGWALL OF  
EXISTING BOX CULVERT.  
ELEV. 654.00

STA. 410+54.00  
REMOVE EXISTING STRUCTURE  
(DOUBLE 12' X 6' CONCRETE BOX CULVERT)  
INSTALL 2- PIPE CULVERTS, CLASS D  
TYPE 2 EQUIVALENT ROUND-SIZE 120"  
SEE SHEETS 22-24 FOR DETAILS



CHAMBLIN ASSOCIATES, INC. 1100 N. WASHINGTON ST. SUITE 200, DECATUR, IL 62521  
 TEL: 618-281-1100 FAX: 618-281-1101  
 WWW.CHAMBLINASSOCIATES.COM





CHAMLIN ASSOCIATES, INC. 11500 N. WISCONSIN AVENUE, SUITE 200, CHICAGO, IL 60631  
 TEL: 773.330.3300 FAX: 773.330.3301 WWW.CHAMLINASSOCIATES.COM

DRAWN BY: N.Q./L.A.G.  
 CHECKED BY: D.J.D.

CAD./DWG: PP110-116  
 DATE: 04/07

REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**

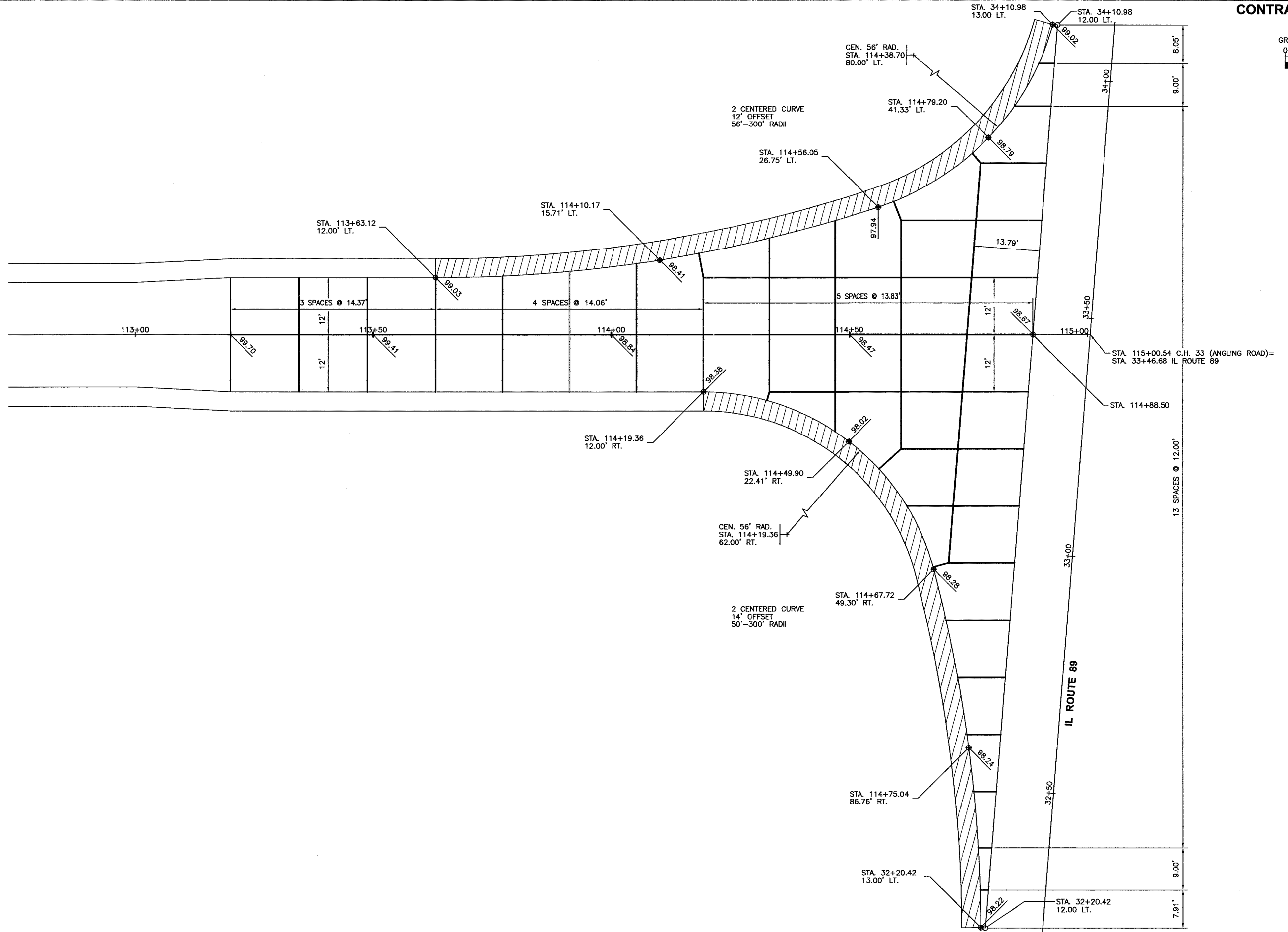
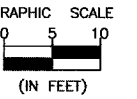
PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**PLAN AND PROFILE STA. 110+00 TO STA. 115+00**

SCALE: AS NOTED  
 SHEET 18  
 FILE NO.: 6813.00Y-1  
 OF 33





Drawing Name: C:\Users\A\Documents\2007\05-00198-00-RS.dwg, Date: 04/07, 11:28am, Plotter: HP DesignJet 500, Plot Size: 36x48, Scale: 1:1, Plot By: LAG

DRAWN BY: L.A.G.  
CHECKED BY: D.J.D.

CAD/DWG: JOINT  
DATE: 04/07

REVISIONS	
DATE	BY



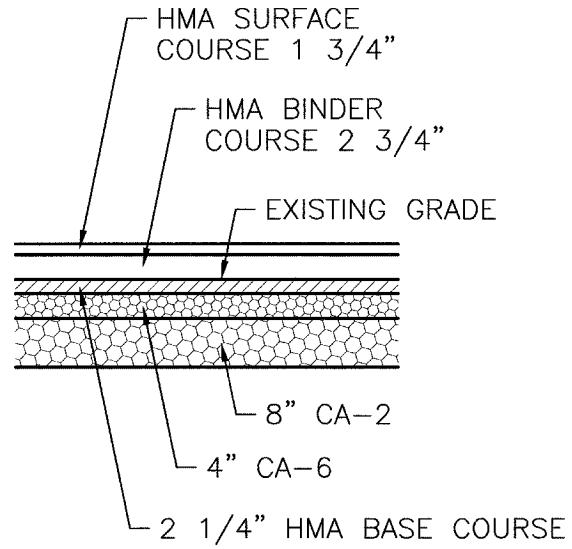
PERU MORRIS  
ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
2007  
SECTION 05-00198-00-RS

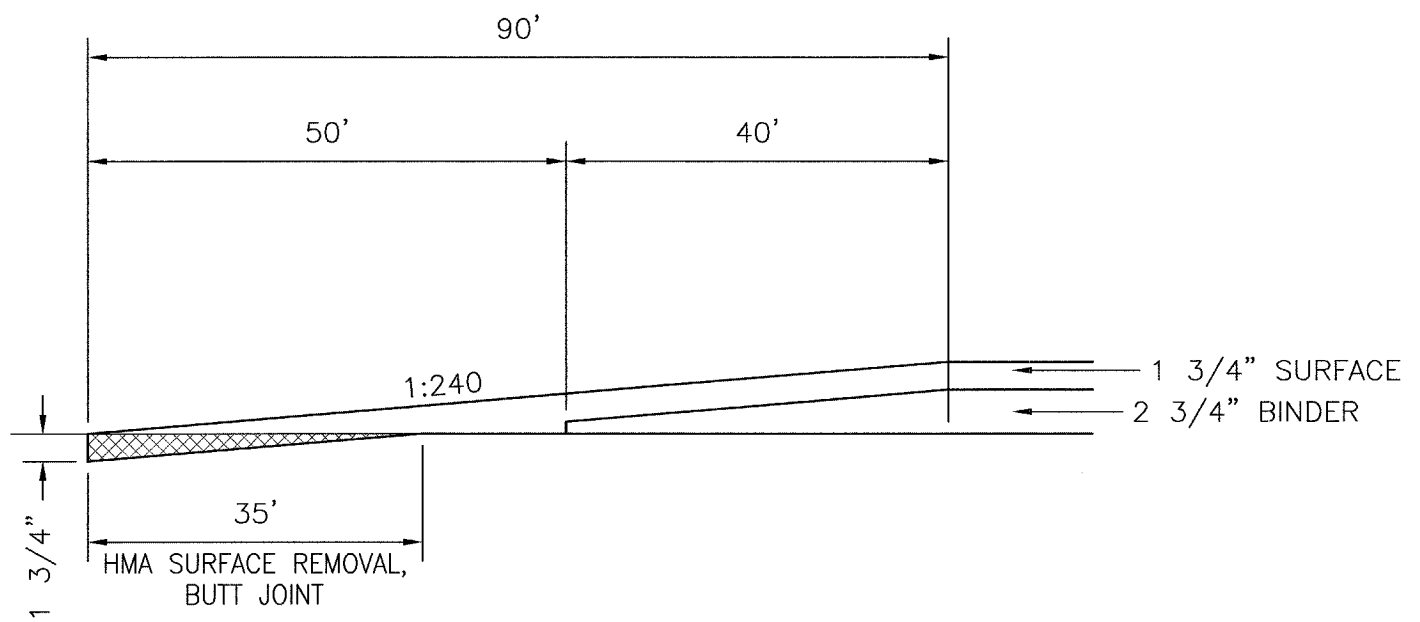
**INTERSECTION DETAIL**

SCALE: AS NOTED  
FILE NO.: 6813.00Y-1

SHEET 19  
OF 33



**BASE REPAIR, SPECIAL DETAIL**

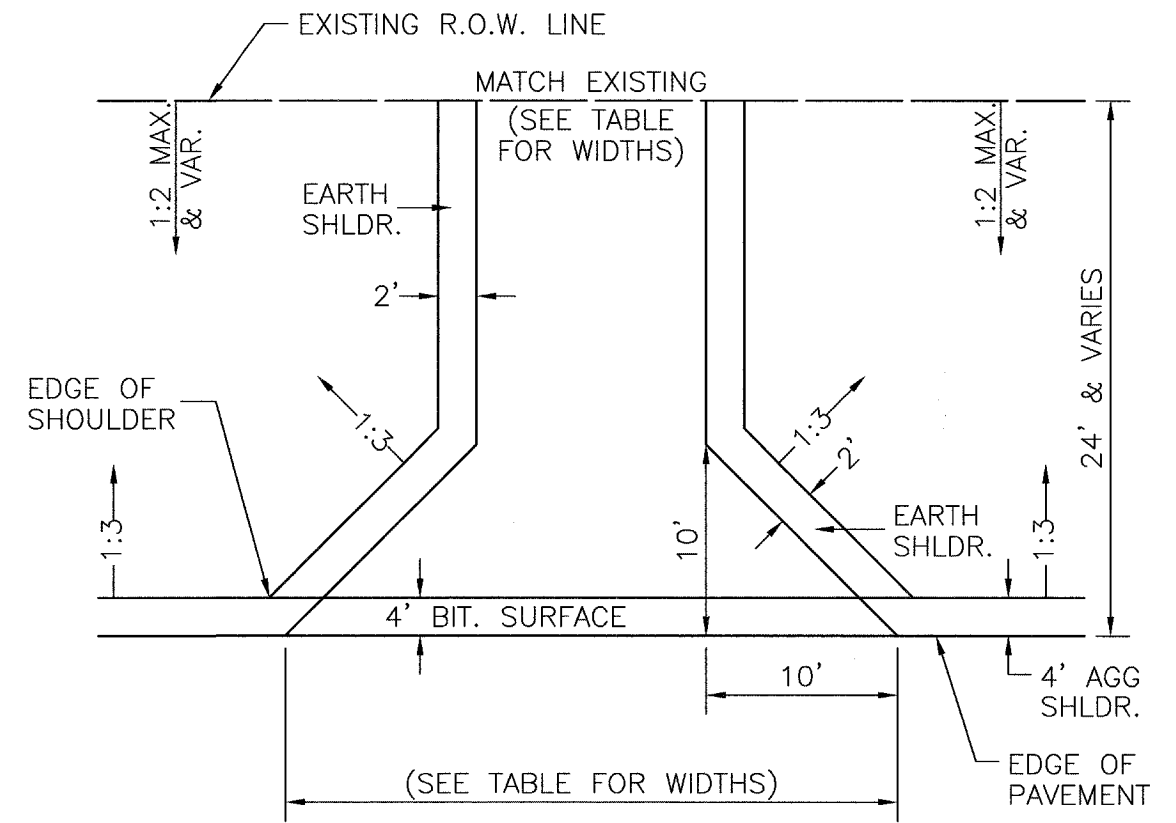


**RUNDOWN DETAIL**

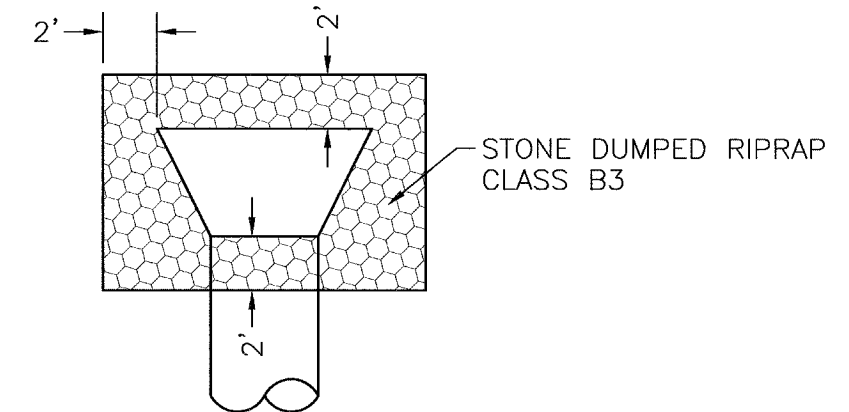
STA. 184+05 TO STA. 184+95  
 STA. 317+57.5 TO STA. 318+47.5  
 STA. 292+31 TO STA. 293+21

CONSTRUCT PRIVATE ENTRANCES WITH 4 1/2" AGGREGATE SURFACE COURSE, TYPE B (CA-6)

CONSTRUCT FIELD ENTRANCES WITH 4 1/2" AGGREGATE SURFACE COURSE, TYPE B (CA-6)



**TYPICAL ENTRANCE  
(PRIVATE OR FIELD)**



**EMBANKMENT STABILIZATION AT  
CULVERT EXTENSIONS**

DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/.DWG: DETAILS  
 DATE: 04/07

REVISIONS	
DATE	BY

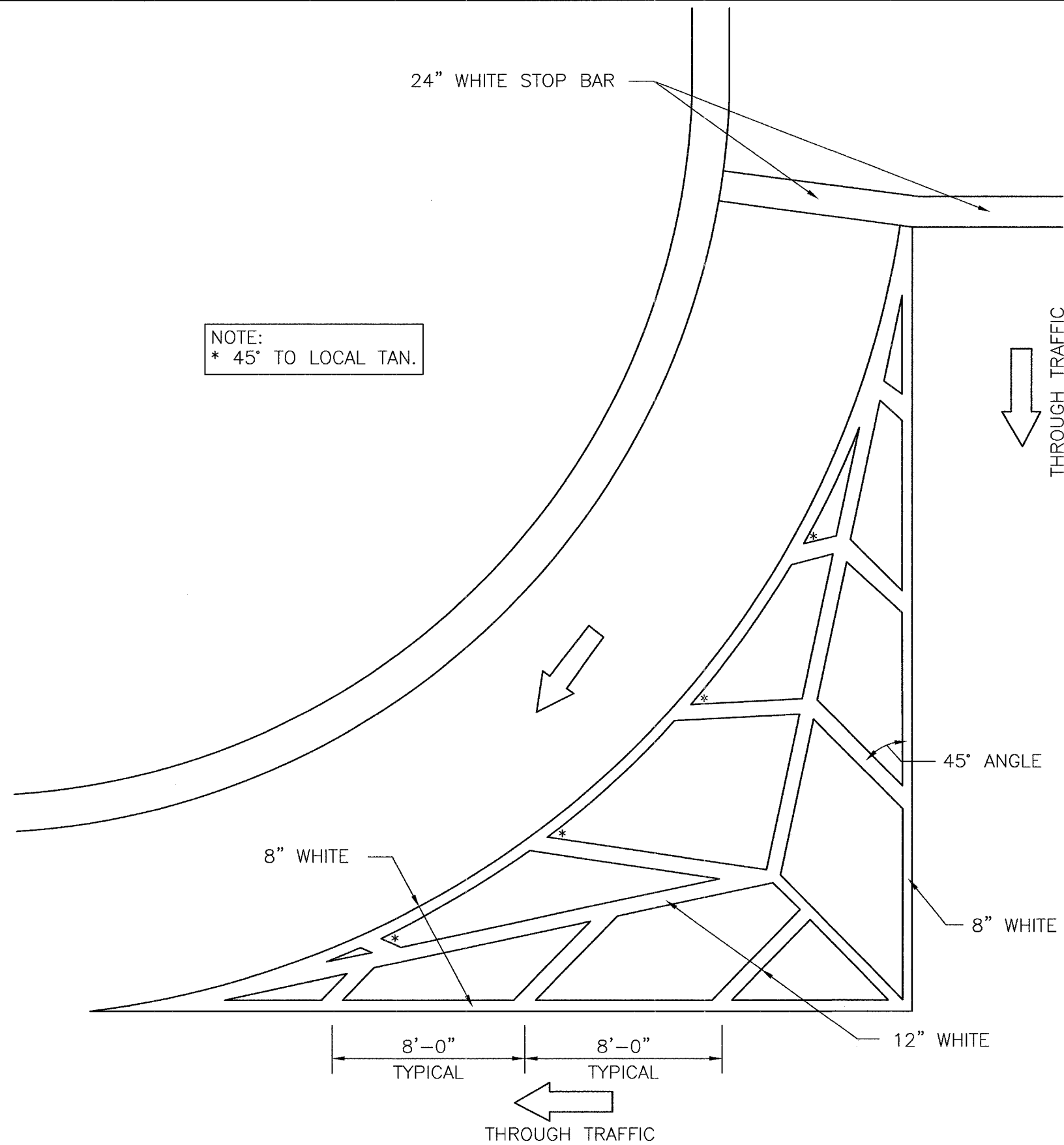
**CHAMLIN & ASSOCIATES**

PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

DETAILS

SCALE: NONE  
 FILE NO.: 6813.00Y-1  
 SHEET 20  
 OF 33



NOTE:  
\* 45° TO LOCAL TAN.

**TYPICAL MARKING FOR PAINTED ISLANDS**

DRAWN BY: L.A.G.	CAD/.DWG: DETAILS	REVISIONS	
		DATE	BY
CHECKED BY: D.J.D.	DATE: 04/07		



PERU MORRIS  
ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
2007  
SECTION 05-00198-00-RS

**DETAILS**

SCALE: NONE	SHEET 21
FILE NO.: 6813.00Y-1	OF 33

CHAMLIN ASSOCIATES, INC. 1000 S. WASHINGTON ST. DEPT. 1000, CHAMPAIGN, ILL. 61820-1000  
 TEL: 217/244-1000 FAX: 217/244-1001  
 PROJECT NO. 05-00198-00-RS DATE: 04/07/07

**GENERAL NOTES:**

- FOR BORING DATA SEE SHEETS 23 & 24.
- LAYOUT OF SLOPE PROTECTION SYSTEM MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
- CULVERT HEADWALLS AND WINGWALLS SHALL BE PARALLEL TO CENTERLINE.
- CULVERT HEADWALLS AND WINGWALLS SHALL BE DESIGNED BY CULVERT SUPPLIER AND SHALL BE ANCHORED INTO THE EMBANKMENT.

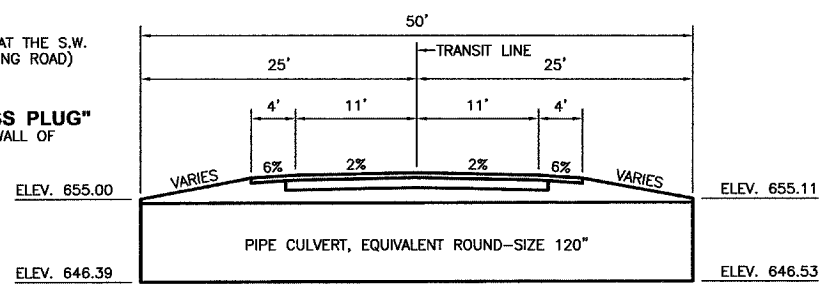
NEGRO CREEK  
 BUILT 2007 BY  
 BUREAU COUNTY  
 SEC. 05-00198-00-RS  
 CH. 33 STA 410+54  
 STR. NO. 006-5032 LOADING HS-20

**NAME PLATE**  
 SEE STD. 515001

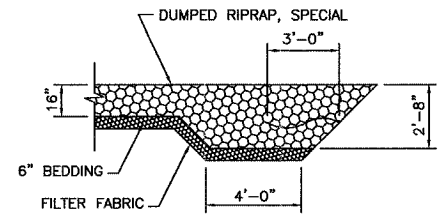
**EXISTING STRUCTURE:**  
 SN 006-5020, 52'-2" REINFORCED CONCRETE  
 DOUBLE 12" X 6" BOX CULVERT BUILT 1961  
 TO BE REMOVED.

**BENCHMARK "B"**  
 20P NAIL IN POWER POLE AT THE S.W.  
 CORNER OF C.H. 33 (ANGLING ROAD)  
 AND 3200E ROAD  
 ELEV. 655.52

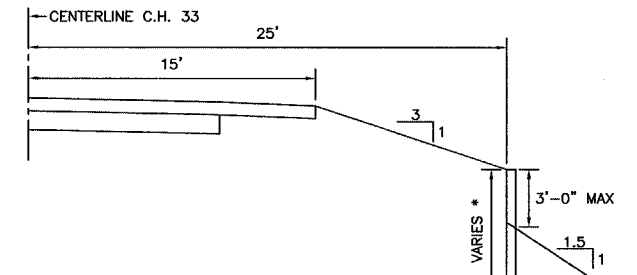
**BENCHMARK "BRASS PLUG"**  
 BRASS PLUG IN N.W. WINGWALL OF  
 EXISTING BOX CULVERT.  
 ELEV. 654.00



**LONGITUDINAL SECTION**  
 ALL DIMENSIONS AT RT L'S TO TRANSIT LINE

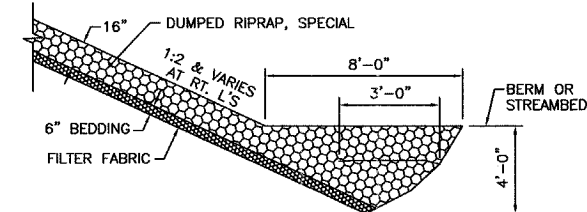


**FLANK RIPRAP TREATMENT**

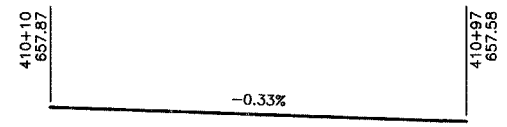


**SECTION A-A**  
 \* 7'-0" STA 410+99 TO STA 411+14  
 5'-0" STA 411+14 TO STA 411+29  
 3'-0" STA 411+29 TO STA 411+41

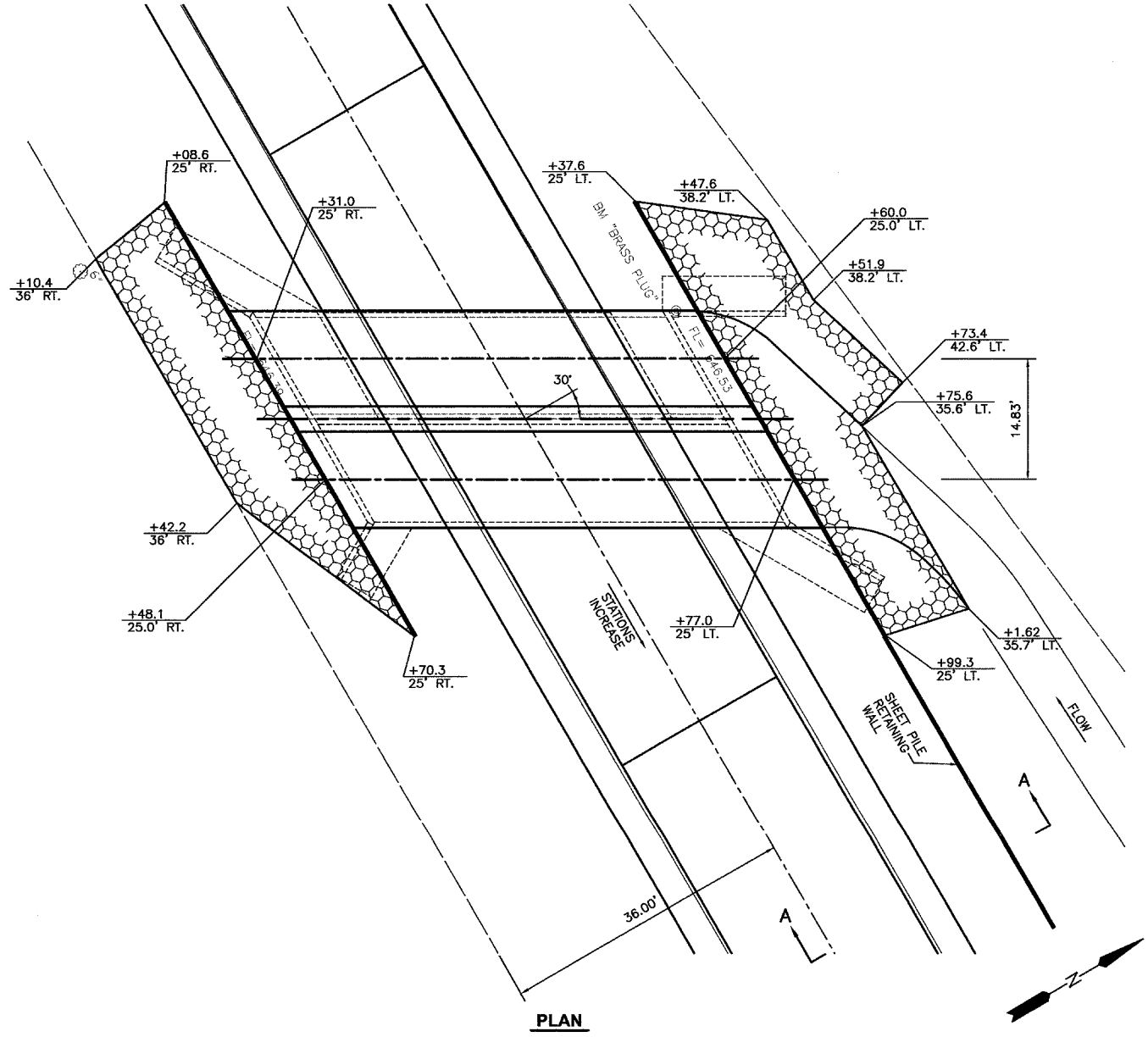
PERMANENT STEEL SHEET PILING  
 EFFECTIVE SECTION MODULUS  
 REQUIRED = 3.5 IN<sup>3</sup>/FT



**TOE STONE RIPRAP TREATMENT**



**PROFILE GRADE**

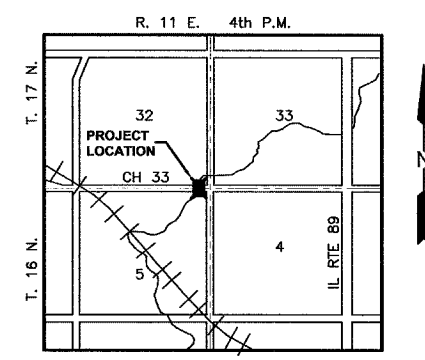


**PLAN**

BILL OF MATERIALS		
REMOVAL OF EXISTING STRUCTURES	EACH	1
NAME PLATES	EACH	1
PIPE CULVERTS, CLASS D, TYPE 2, EQUIVALENT ROUND- SIZE 120"	FOOT	116
DUMPED RIPRAP, SPECIAL	TON	129
*TRENCH BACKFILL	TON	155
PERMANENT STEEL SHEET PILING	SQ FT	216

\*INCLUDED IN COST OF PIPE CULVERTS,  
 CLASS D, TYPE 2, EQUIVALENT  
 ROUND- SIZE 120"

WATERWAY INFORMATION									
DRAINAGE AREA= 8.1 SQ. MI.					Low Grade Elev. = 657.20 / 657.58 (exist / prop.) @ sta. 411+00				
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT. H.W.E.	HEAD - FT.		HEADWATER EL.	
			EXIST.	PROP.		EXIST.	PROP.	EXIST.	PROP.
	10	930	144	149	654.6	0	0.1	654.6	654.7
DESIGN	20	1324	144	149	655.2	0	0.3	655.2	655.5
OVERTOPPING	-	-	-	-	-	-	-	-	-
BASE	100	1683	144	149	656.9	0	0	656.9	656.9



**LOCATION SKETCH**

DRAWN BY: KKP/LAG  
 CHECKED BY: JKC

DATE: 04/07

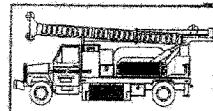
REVISIONS	
DATE	BY

**CHAMLIN ASSOCIATES**  
 PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**GENERAL PLAN SN 006-5032**

SCALE: AS NOTED  
 SHEET 22  
 FILE NO.: 6813.00Y-1 OF 33



**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 1 of 2

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest @ TheRamp.net

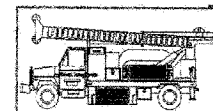
Client: Chamlin & Associates  
Project Name: Angling Road (CH. 33)  
Project Site: Bureau County, Illinois

Boring No. B-1  
Surface Elev. 99.80  
Auger Depth 26' Rotary Depth NA  
Start Date 02/23/07 Finish Date 02/23/07

Location: 25' East of Centerline of Box and  
7' North of Centerline of Road

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
99.80											Randy Safranski CME-55
98.80	Stiff Black And Brown Silty Clay (Fill)		1								
97.80			2								
96.80			3	1	SS	1.3	8	B	22		
95.80			4								
94.80			5								
93.80			6	2	SS	1.5	9	B	20		
92.80	Soft To Medium Black Silty Clay		7								
91.80			8	3	SS	0.6	3	B	26		
90.80			9								
89.80			10	4	SS	0.5	3	B	28		
88.80	Loose Gray Coarse Sand To Fine Gravel		11								
87.80			12								
86.80			13	5	SS	--	7	--	--		
85.80			14								
84.80			15	6	SS	--	9	--	--		
83.80	Medium Gray Fine To Coarse Sand		16								
82.80			17								
81.80			18	7	SS	--	17	--	--		
80.80			19								
79.80			20	8	SS	--	22	--	--		

Groundwater Data: Static water level at elevation - 88.0.  
Comments: \*Assumed centerline of roadway and existing culvert elevation - 100.0.



**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 2 of 2

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest @ TheRamp.net

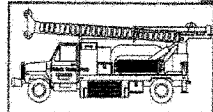
Client: Chamlin & Associates  
Project Name: Angling Road (CH. 33)  
Project Site: Bureau County, Illinois

Boring No. B-1  
Surface Elev. 99.80  
Auger Depth 26' Rotary Depth NA  
Start Date 02/23/07 Finish Date 02/23/07

Location: 25' East of Centerline of Box and  
7' North of Centerline of Road

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
78.80											Randy Safranski 0 CME-55
77.80	Medium Gray Fine To Coarse Sand With Gray Clay Seams		22								
76.80			23	9	SS	--	18	--	--		
75.80			24								
74.80			25								
73.80			26	10	SS	--	24	--	--		
72.80	Bottom of Boring		27								
71.80			28								
70.80			29								
69.80			30								
68.80			31								
67.80			32								
66.80			33								
65.80			34								
64.80			35								
63.80			36	14	SS						
62.80			37								
61.80			38	15	SS						
60.80			39								
59.80			40								
58.80			41	16	SS						

Groundwater Data: Static water level at elevation - 88.0.  
Comments: \*Assumed centerline of roadway and existing culvert elevation - 100.0.



**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 1 of 2

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

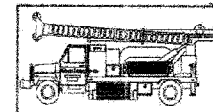
Client: Chamlin & Associates  
Project Name: Angling Road (CH. 33)  
Project Site: Bureau County, Illinois

Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 31' Rotary Depth NA  
Start Date 02/23/07 Finish Date 02/23/07

Location: 25' West of Centerline of Box and  
8' South of Centerline of Road

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
99.90											Randy Safranski CME-55
98.90	Stiff Black And Brown Silty Clay (Fill)		1								
97.90			2								
96.90			3	SS	1.8	10	B	18			
95.90			4								
94.90			5	2	SS	1.3	9	B	22		
93.90	Medium Black Silty Clay		6								
92.90			7								
91.90			8	3	SS	0.7	5	B	24		
90.90	Loose To Very Loose Gray Coarse Sand To Fine Gravel		9								
89.90			10	4	SS	---	4	---	11		
88.90			11								
87.90			12								
86.90	Loose Gray Fine To Coarse Sand		13	5	SS	---	8	---	---		
85.90			14								
84.90			15								
83.90			16	6	SS	---	8	---	---		
82.90	Medium Gray Fine To Coarse Gravel		17								
81.90			18	7	SS	---	14	---	---		
80.90			19								
79.90			20	8	SS	---	20	---	---		

Groundwater Data: Static water level at elevation - 88.0.  
Comments: \* Assumed centerline of roadway and existing culvert elevation - 100.0.



**Midwest Testing Services, Inc.**  
3705 Progress Blvd.  
Peru, IL 61354

**BORING LOG**

Sheet 2 of 2

Phone: 815-223-6696  
Fax: 815-223-6659  
E-Mail: Midwest@TheRamp.net

Client: Chamlin & Associates  
Project Name: Angling Road (CH. 33)  
Project Site: Bureau County, Illinois

Boring No. B-2  
Surface Elev. 99.90  
Auger Depth 31' Rotary Depth NA  
Start Date 02/23/07 Finish Date 02/23/07

Location: 25' West of Centerline of Box and  
8' South of Centerline of Road

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	SAMPLES						DRILLED BY	
				Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
78.90											Randy Safranski CME-55
77.90	Medium Gray Fine To Coarse Sand		22								
76.90			23	9	SS	---	21	---	---		
75.90	Very Stiff Gray Silty Clay Till		24								
74.90			25	10	SS	2.3	15	B	18		
73.90			26								
72.90			27								
71.90			28	11	SS	2.1	13	B	19		
70.90			29								
69.90			30								
68.90	Bottom of Boring		31	12	SS	2.7	17	B	16		
67.90			32								
66.90			33								
65.90			34								
64.90			35								
63.90			36								
62.90			37								
61.90			38								
60.90			39								
59.90			40								
58.90			41								

Groundwater Data: Static water level at elevation - 88.0.  
Comments: \* Assumed centerline of roadway and existing culvert elevation - 100.0.

DRAWN BY: L.A.G.  
CHECKED BY: D.J.D.

CAD/DWG: BORINGS  
DATE: 04/07

REVISIONS	
DATE	BY



PERU MORRIS  
ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
2007  
SECTION 05-00198-00-RS

SOIL BORINGS

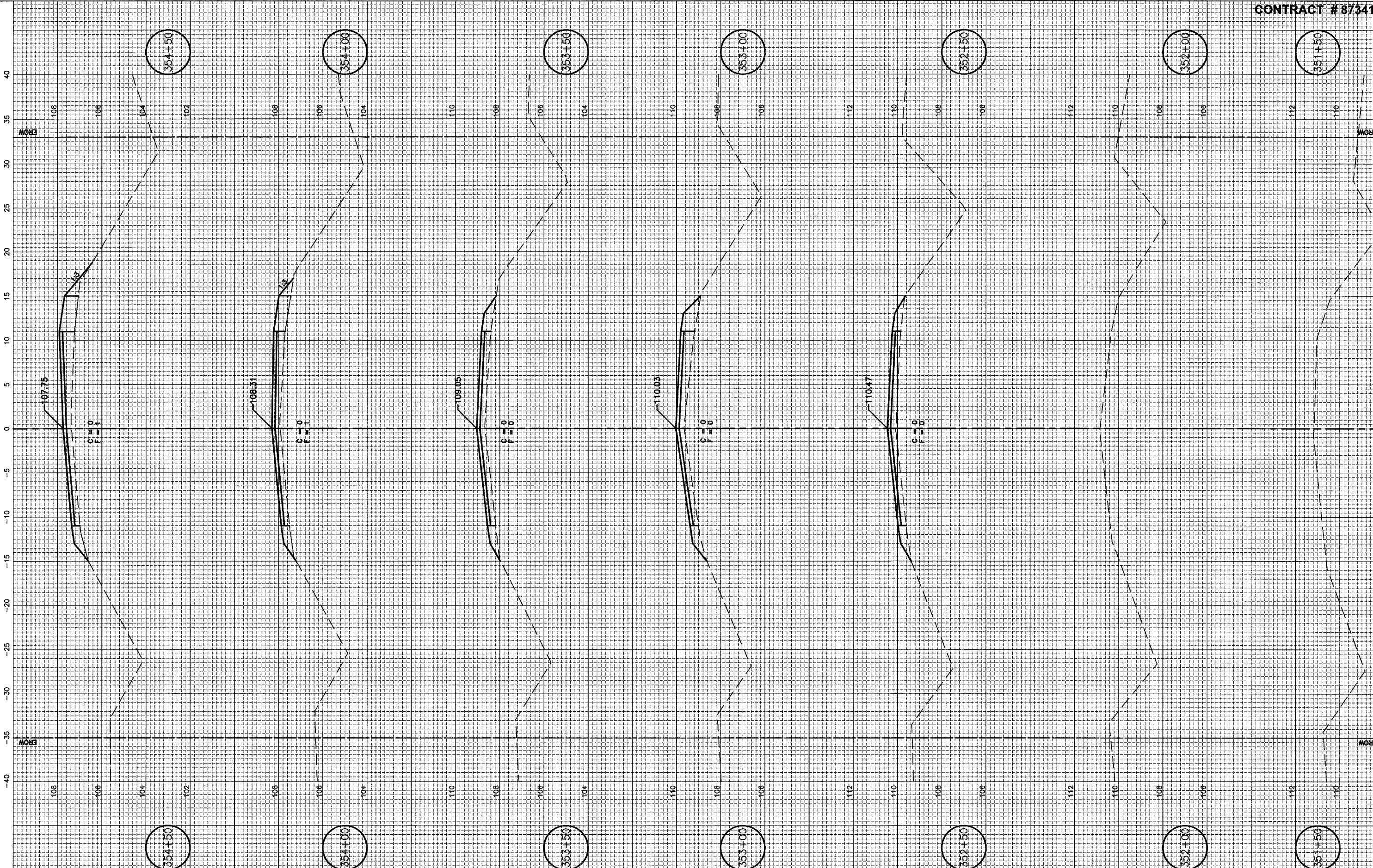
SCALE: AS NOTED

FILE NO.: 6813.00Y-1

SHEET 24

OF 33





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: XS33ATRR  
 DATE: 04/07

REVISIONS	
DATE	BY

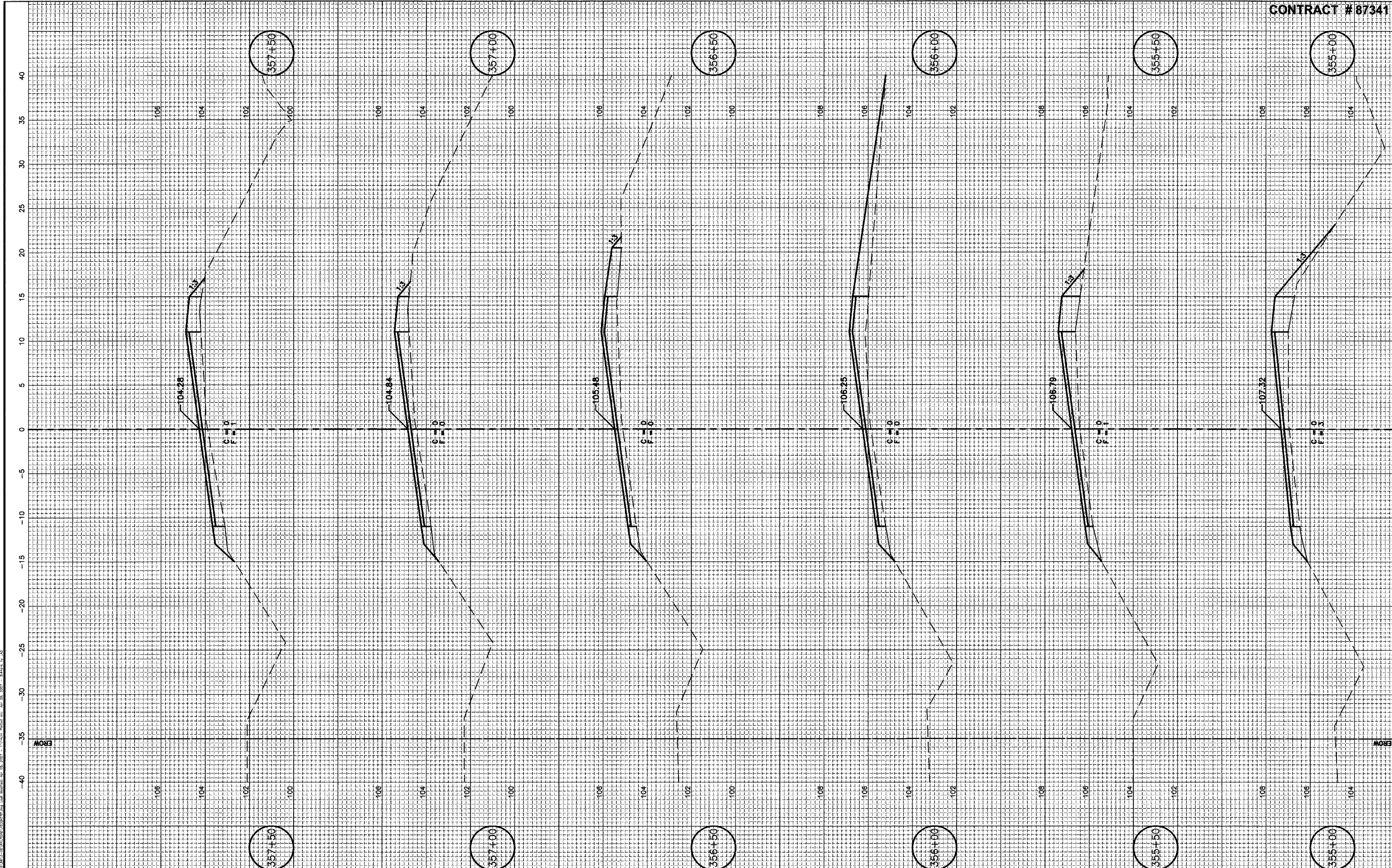


PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**CROSS SECTIONS STA. 351+50 TO STA. 354+50**





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: XS33ATRR  
 DATE: 04/07

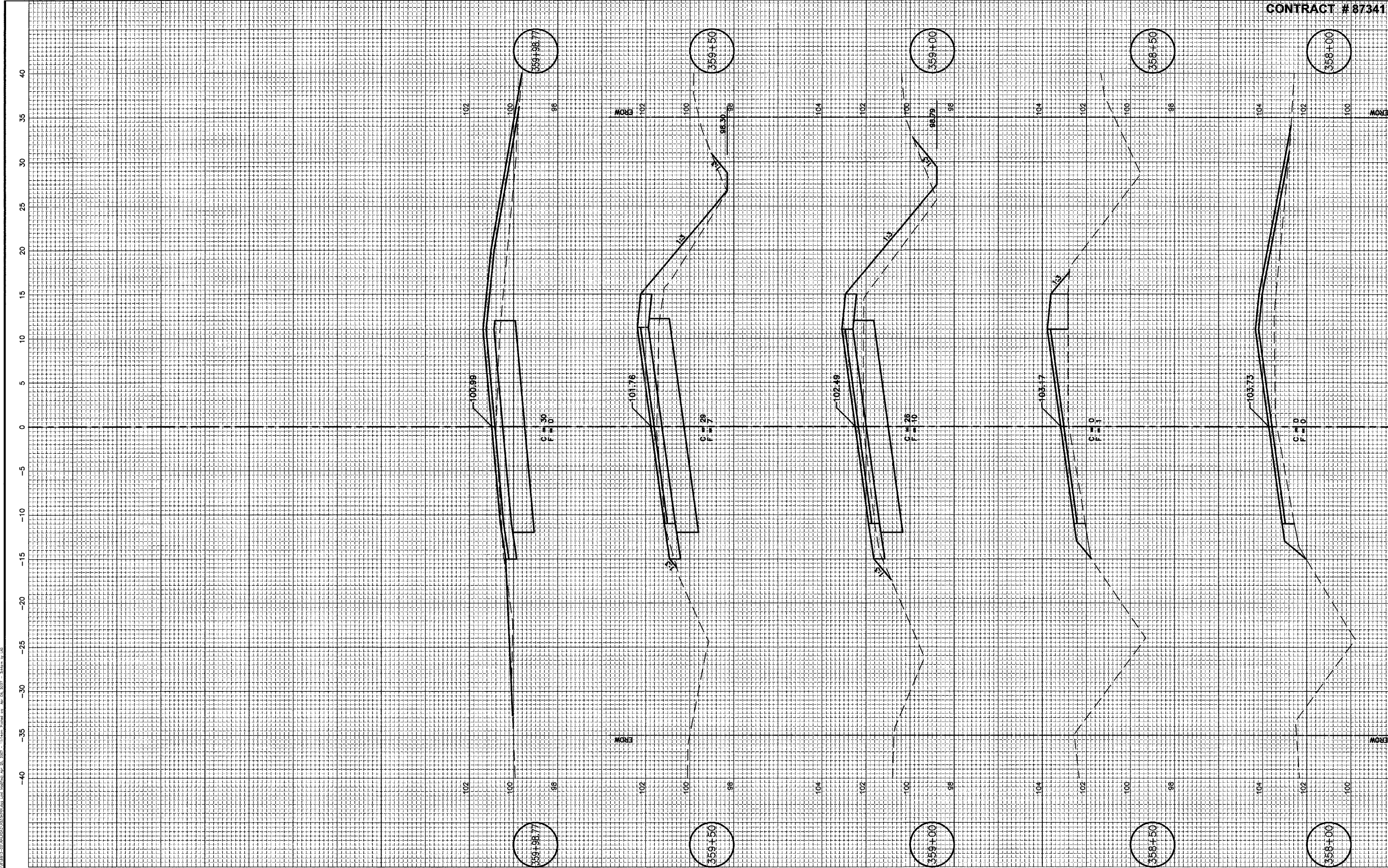
REVISIONS	
DATE	BY



PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

**CROSS SECTIONS STA. 355+00 TO STA. 357+50**



DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/.DWG: XS33ATTR  
 DATE: 04/07

REVISIONS	
DATE	BY

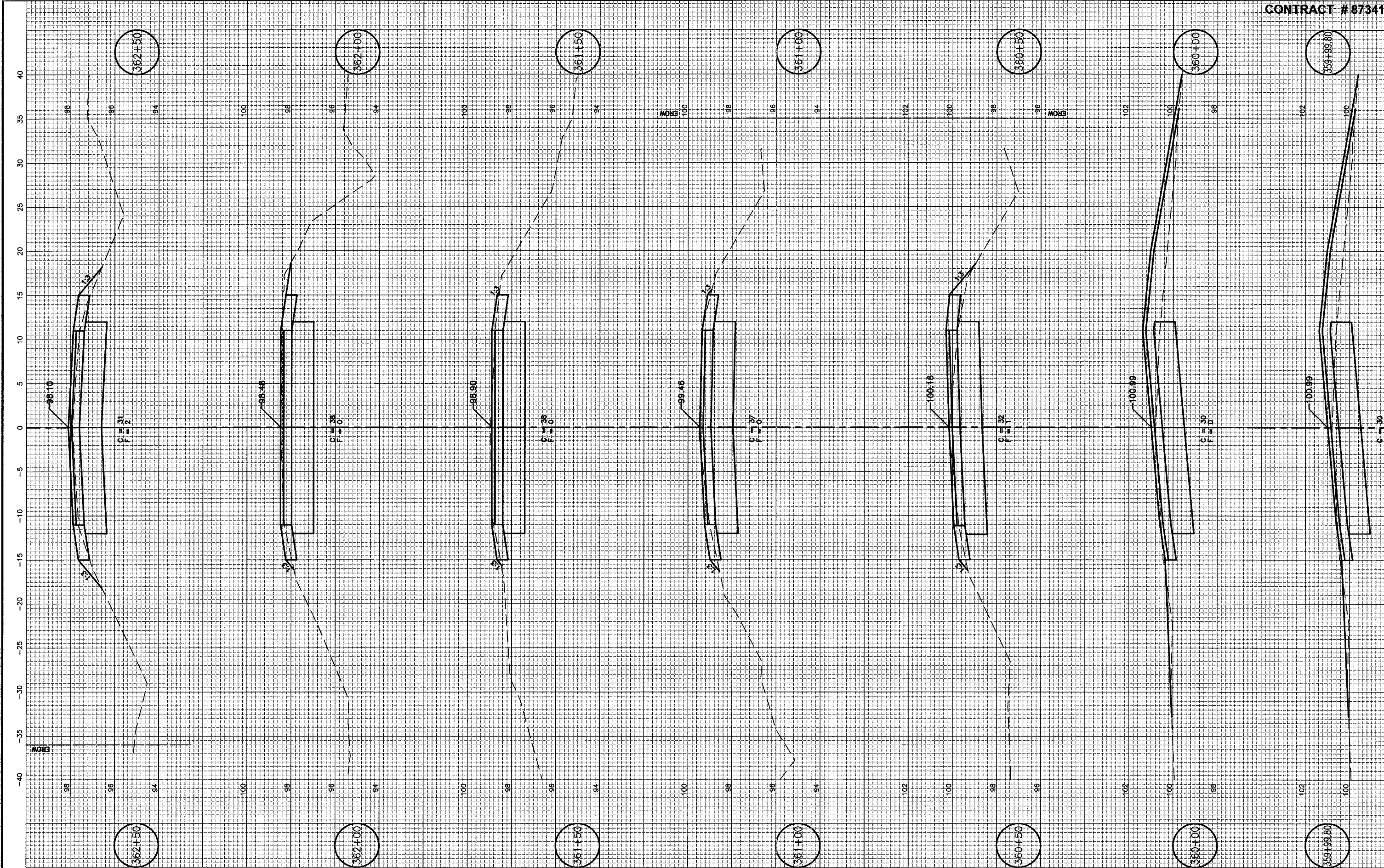


PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 358+00 TO STA. 359+98.77





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/.DWG: XS33ATTR  
 DATE: 04/07

REVISIONS	
DATE	BY

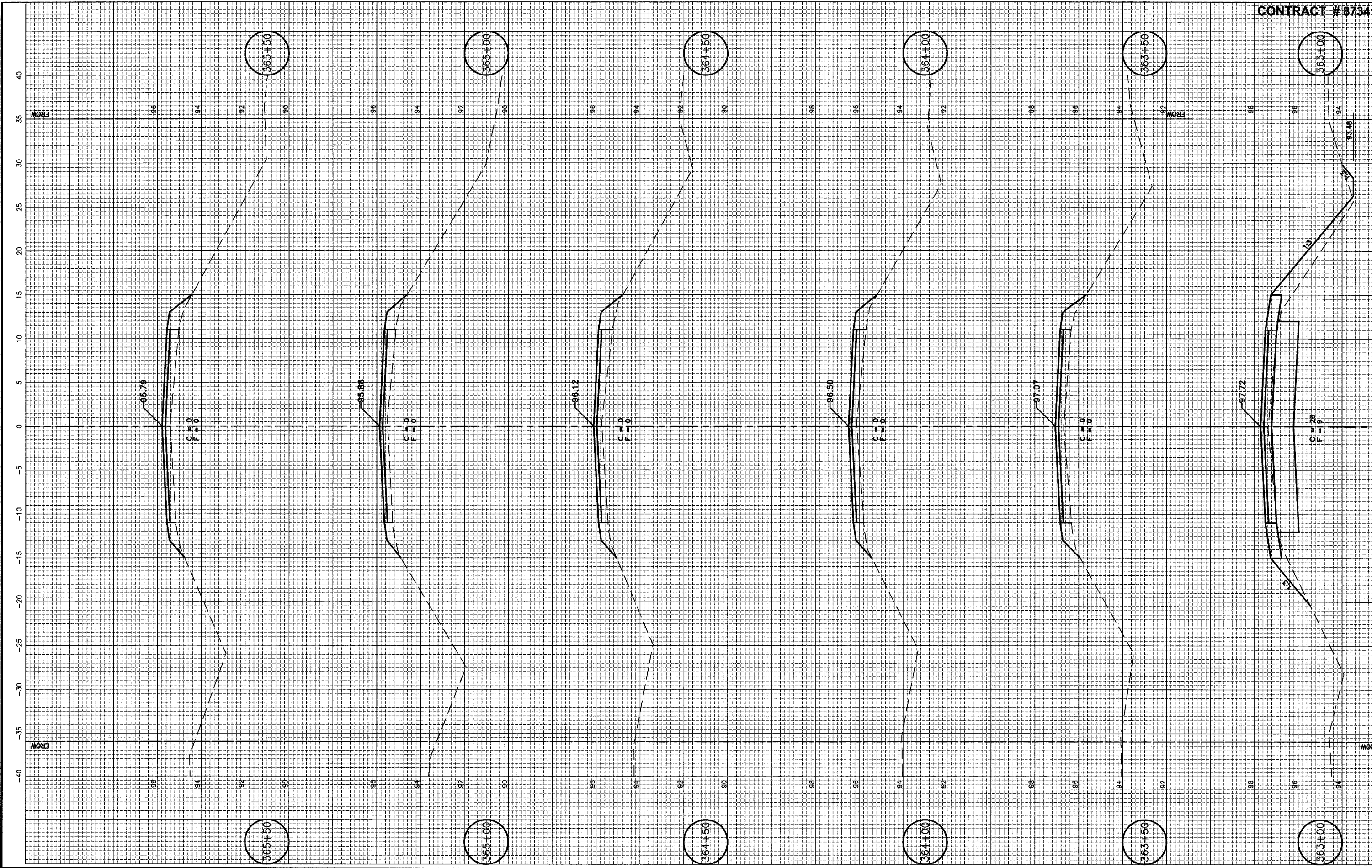


PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 359+99.80 TO STA. 362+50





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: XS33ATTR  
 DATE: 04/07

REVISIONS	
DATE	BY

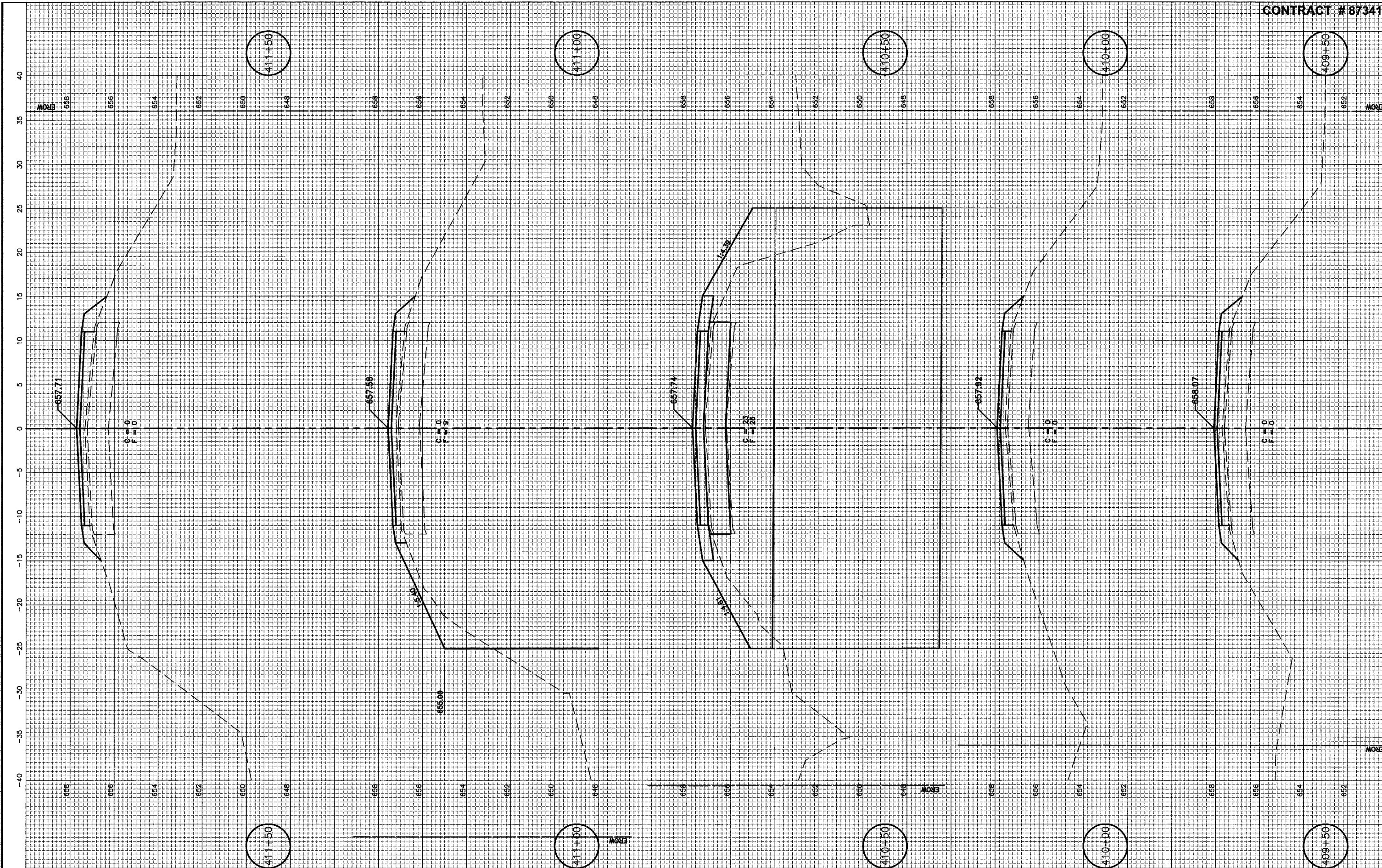


PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 363+00 TO STA. 365+50





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: XS-CULV  
 DATE: 04/07

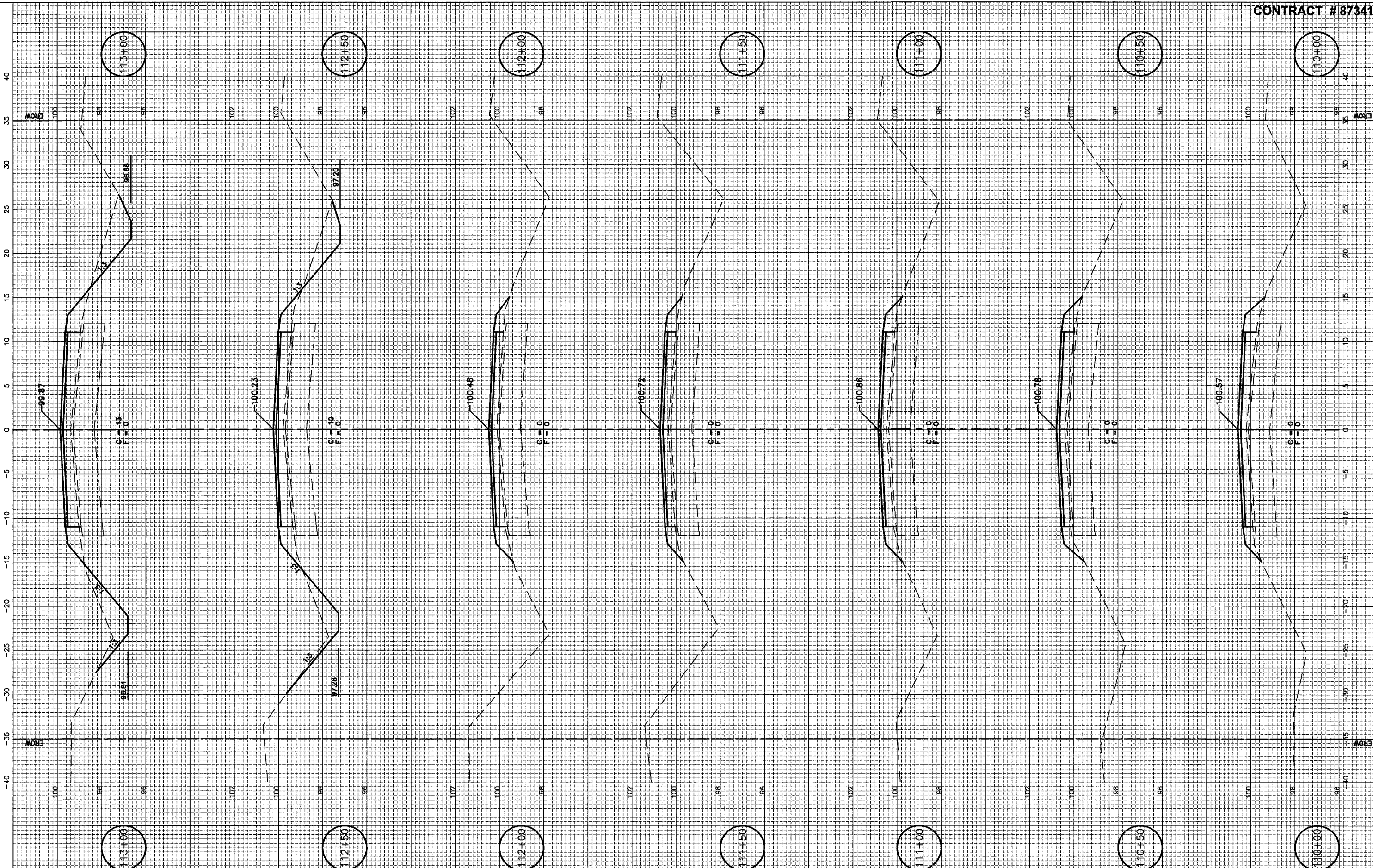
REVISIONS	
DATE	BY



PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 409+50 TO STA. 411+50



DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD/DWG: XS33  
 DATE: 04/07

REVISIONS	
DATE	BY

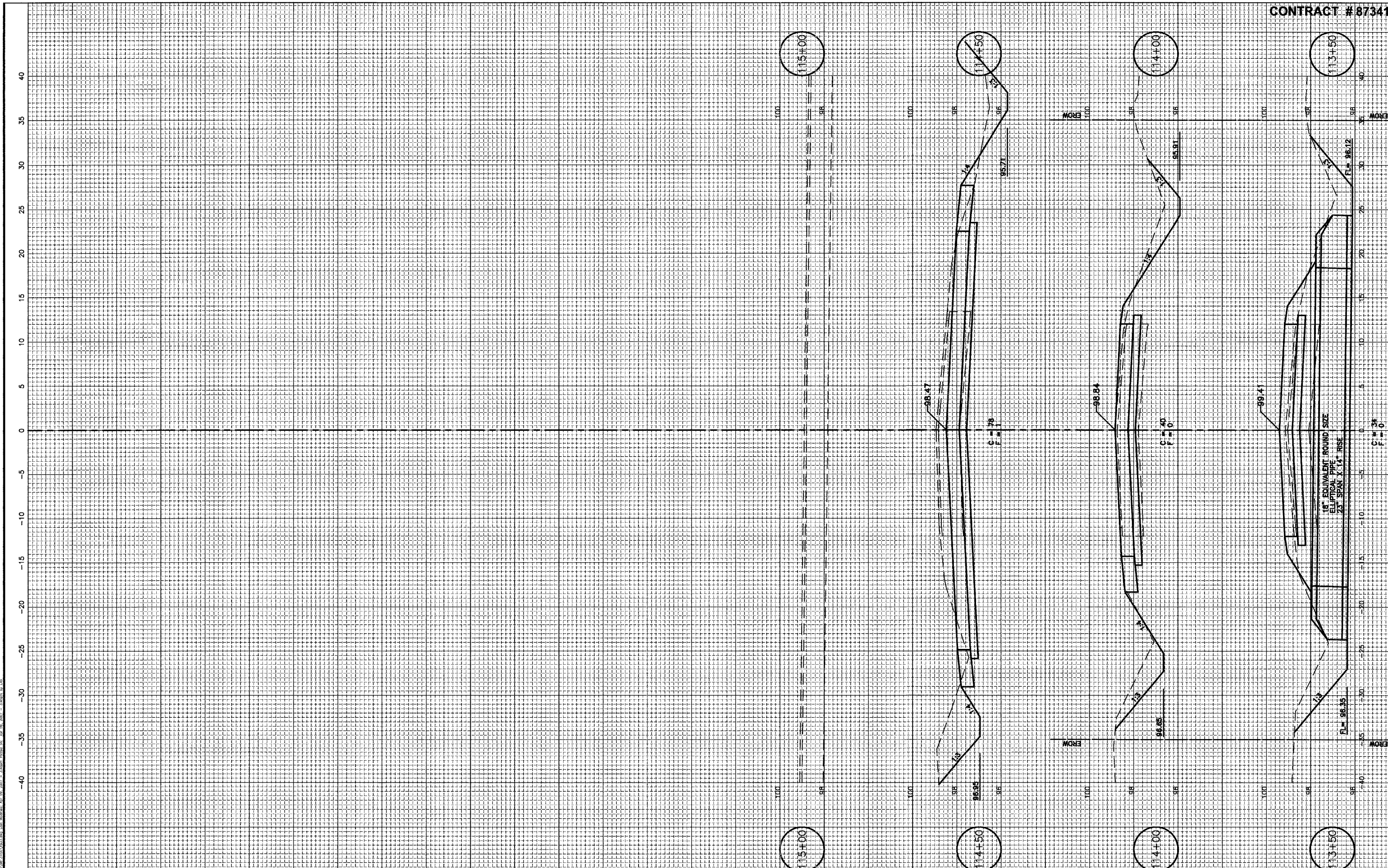


PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 110+00 TO STA. 113+00





DRAWN BY: L.A.G.  
 CHECKED BY: D.J.D.

CAD./DWG: XS33  
 DATE: 04/07

REVISIONS	
DATE	BY



PERU MORRIS  
 ILLINOIS

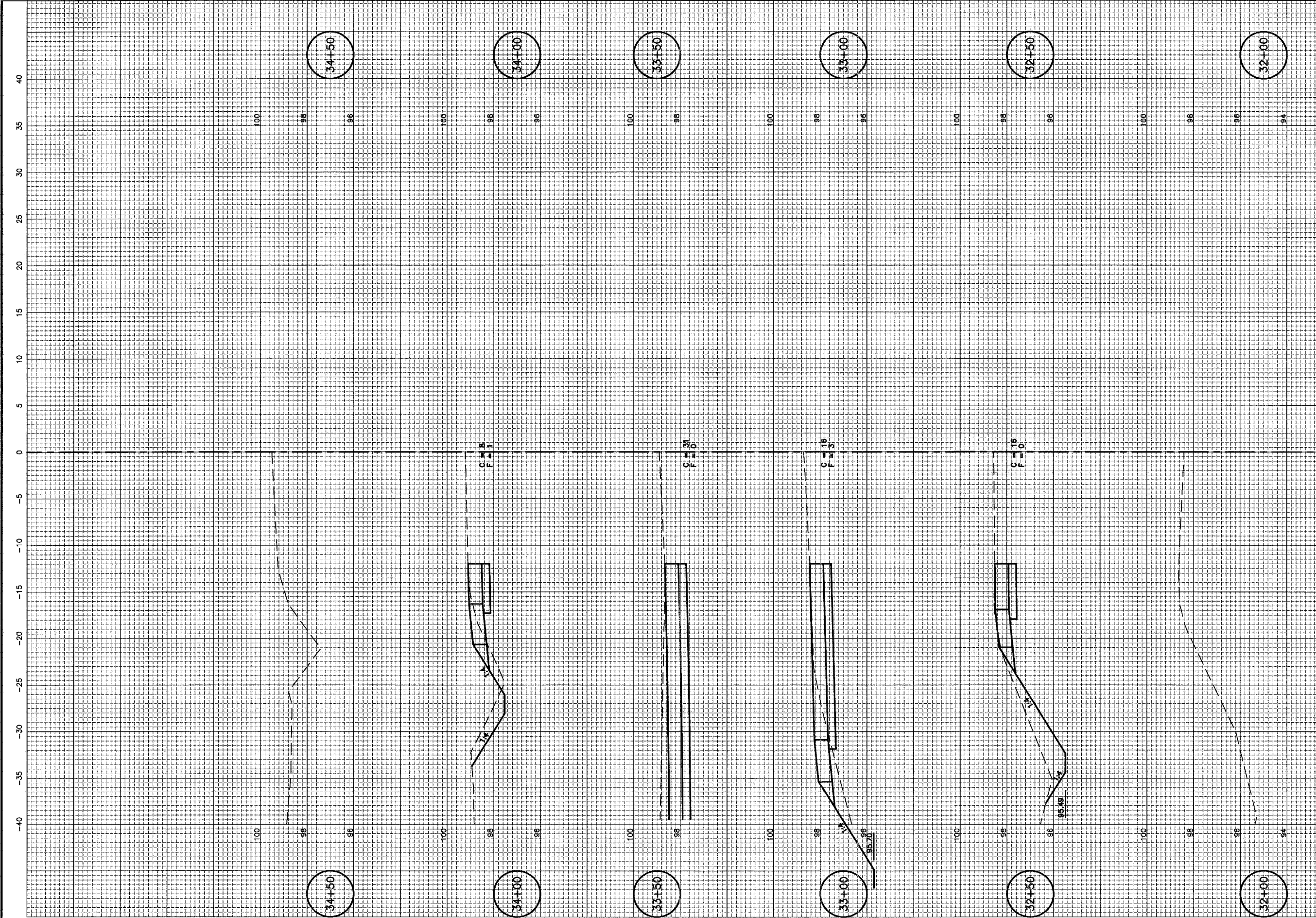
**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 113+50 TO STA. 115+00

SCALE: AS NOTED  
 FILE NO.: 6813.00Y-1

SHEET 32  
 OF 33





DRAWN BY: N.Q./L.A.G.  
 CHECKED BY: D.J.D.

CAD./DWG: XSB9  
 DATE: 04/07

REVISIONS	
DATE	BY



PERU MORRIS  
 ILLINOIS

**C.H. 33 (ANGLING ROAD)**  
 2007  
 SECTION 05-00198-00-RS

CROSS SECTIONS STA. 32+00 TO STA. 34+50