ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
MAJOR BRIDGE FUNDS
LASALLE COUNTY
SECTION 05-00626-00-BR
F.A.S. 1365 (CH 33) OVER
LITTLE VERMILION RIVER
PROJECT NO. BRS-1365(111)
JOB NUMBER C-93-116-08

INDEX OF SHEETS

REQUIRED HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-04	TEMPORARY EROSION CONTROL SYSTEMS
515001-03	NAME PLATE FOR BRIDGES
542101-02	REINFORCED CONCRETE END SECTIONS FOR PIPE CULVERTS 15" (375 MM) THRU 36" (900 MM) DIA. AT RIGHT ANGLES WITH ROADWAY
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606401-01	PAVED DITCH
609006-04	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-07	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701901-01	TRAFFIC CONTROL DEVICES
780001-02	TYPICAL PAVEMENT MARKINGS
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR 24-2	MAILBOX TURNOUT FOR LOCAL ROADS

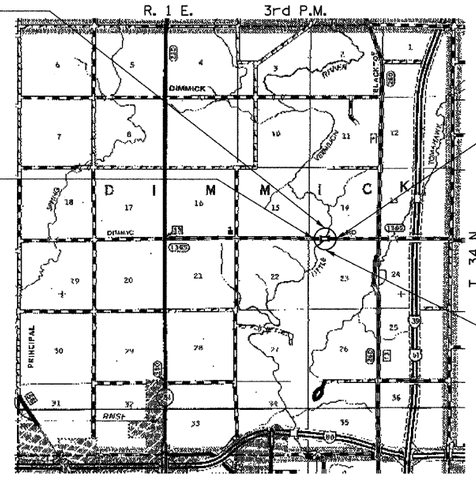
SCALES
- PLAN / PROFILE HORIZ. — 50' 0 50'
- PROFILE VERT. — 5' 0 5'
- CROSS SECTIONS HORIZ. / CROSS SECTIONS VERT. — 5' 0 5'

PROPOSED STRUCTURE NO. 050-3587
THREE SPAN 36" P.P.C. I-DECK BEAM WITH CONCRETE DECK STRUCTURE ON CONC. INTEGRAL ABUTMENTS AND CONC. ENCASED PIERS, 169'-4" BK. TO BK. AND 35'-2" O. TO O., 30° LT. AH. SKEW

SECTION 05-00626-00-BR BEGINS STATION 12+25.00

SECTION 05-00626-00-BR ENDS STATION 31+25.00

EXISTING STRUCTURE 050-3055
SINGLE SPAN CONCRETE T-BEAM SUPERSTRUCTURE ON CONCRETE CLOSED ABUTMENTS ON TIMBER PILE SUPPORTED CONCRETE FOOTINGS, ±53'-11" BK. TO BK., AND ±25'-4" O. TO O., 30° LT. AH. SKEW (TO BE REMOVED)



LOCATION MAP

1 MI 0 1 MI

APPROXIMATE SCALE

LOCATION OF SECTION INDICATED THUS:- —■—

UTILITY COMPANIES

CORN BELT ENERGY CORP.
PRINCETON, ILLINOIS

NICOR GAS
OTTAWA, ILLINOIS

AT&T
JOLIET, ILLINOIS

CALL J.U.L.I.E.
BEFORE YOU DIG
1-800-892-0123 OR 811

CONTRACT NO. 87368

NET LENGTH OF PROJECT = 1,900.00 FEET = 0.36 MILES

DESIGN CLASSIFICATION: MAJOR-COLLECTOR (NON-URBAN)
DESIGN ADT = 1000 (2029)
DESIGN SPEED = 50 MPH

Hutchison Engineering, Inc.
JACKSONVILLE ILLINOIS
SHOREWOOD ILLINOIS
2008 JOB#2498

JOSEPH P. HUTCHISON 58335 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
License Expires 11/30/2009
SIGNATURE
ENGINEER'S SEAL

APPROVED 1/29 2009
LASALLE COUNTY ENGINEER

PASSED 01-30-09 2009
DISTRICT THREE ENGINEER OF LOCAL ROADS & STREETS

Released For Bid Based on Limited Review 01-30-09 2009
DEPUTY DIRECTOR OF HIGHWAYS, REGION TWO ENGINEER

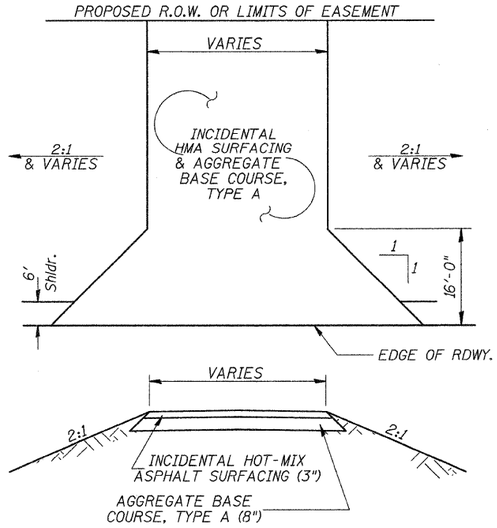
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

2498E001

COUNTY: LASALLE SECTION: 05-00626-00-BR ROUTE: CH 33

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	2
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT *87368



PROPOSED PRIVATE ENTRANCES

* STA 24+67 RT (16' WIDE)
STA 26+40 LT (42' WIDE)
STA 28+54 RT (24' WIDE)
STA 28+92 LT (24' WIDE)

* SEE SHT. #3 OF 53 FOR ADDITIONAL DETAILS.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA BINDER	HMA SURFACE	HMA SHOULDERS
PG GRADE	PG 64-22	PG 64-22	PG 58-22
MAX % RAP ALLOWABLE**	25%	15%	50%
DESIGN AIR VOIDS	4% @ N50	4% @ N50	2% @ N30
MIXTURE COMPOSITION	IL-19.0	IL-12.5 OR IL-9.5	IL-19.0
FRICTION AGGREGATE		MIXTURE C	
DENSITY TEST METHOD	CORES*	CORES	*

* 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.

** WHEN MORE THAN 20% RAP IS USED, A SOFTER ASPHALT BINDER (PG 58-22) MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.

STRUCTURAL DESIGN INFORMATION
COUNTY HIGHWAY 33

ROAD CLASSIFICATION: CLASS III 80,000 lb./20 YEAR DESIGN
STRUCTURAL DESIGN TRAFFIC:
PV = 805 SU = 64 MU = 46
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 88% S = 7% M = 5%
MINIMUM SUBGRADE SUPPORT RATING: GRANULAR
FLEXIBLE PAVEMENT DESIGN: MINIMUM TF = 0.25
ASPHALT PAVEMENT THICKNESS: 8"
AGGREGATE BASE COURSE, TYPE A: 12"

GENERAL NOTES

PLAN QUANTITIES FOR TREE REMOVAL HAVE BEEN BASED ON ALL TREES WITHIN THE EXISTING RIGHT OF WAY. THIS QUANTITY MAY BE REVISED DURING CONSTRUCTION, AT THE DIRECTION OF THE ENGINEER, BY DELETING FROM THE TREE REMOVAL QUANTITIES, SUCH TREES THAT DO NOT INTERFERE WITH THE PROPOSED CONSTRUCTION.

THE REMOVAL OF EXISTING ASPHALT SURFACE AND GRAVEL OR CRUSHED STONE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE NEW BRIDGE SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

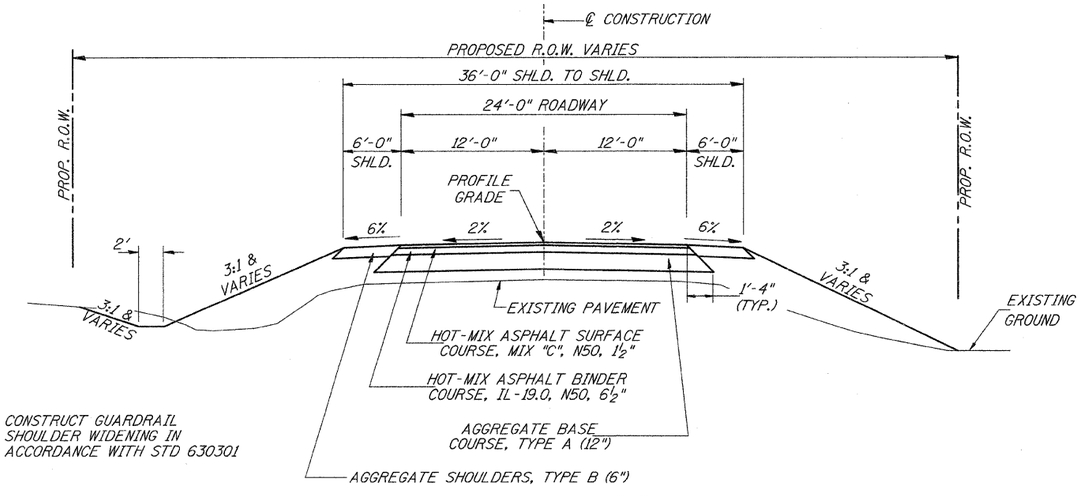
ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.



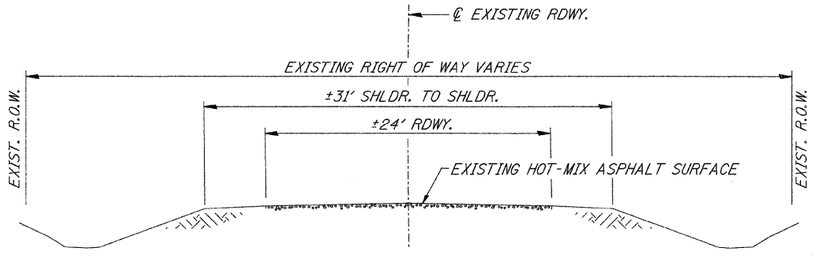
CONSTRUCT GUARDRAIL SHOULDER WIDENING IN ACCORDANCE WITH STD 630301

PROPOSED TYPICAL SECTION

STA. 12+25.00 TO STA. 19+12.19
STA. 21+11.53 TO STA. 31+25.00
EXCEPT TRANSITIONS

STA. 18+97.19 TO STA. 19+27.19
STA. 20+96.53 TO STA. 21+26.53
BRIDGE APPROACH PAVEMENT

BRIDGE OMISSION
STA. 19+27.19 TO STA. 20+96.53



EXISTING TYPICAL SECTION

GENERAL NOTES, DETAILS, AND TYPICAL SECTIONS

2498T001

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	3
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)
*05-00626-00-BR			CONTRACT *87368	

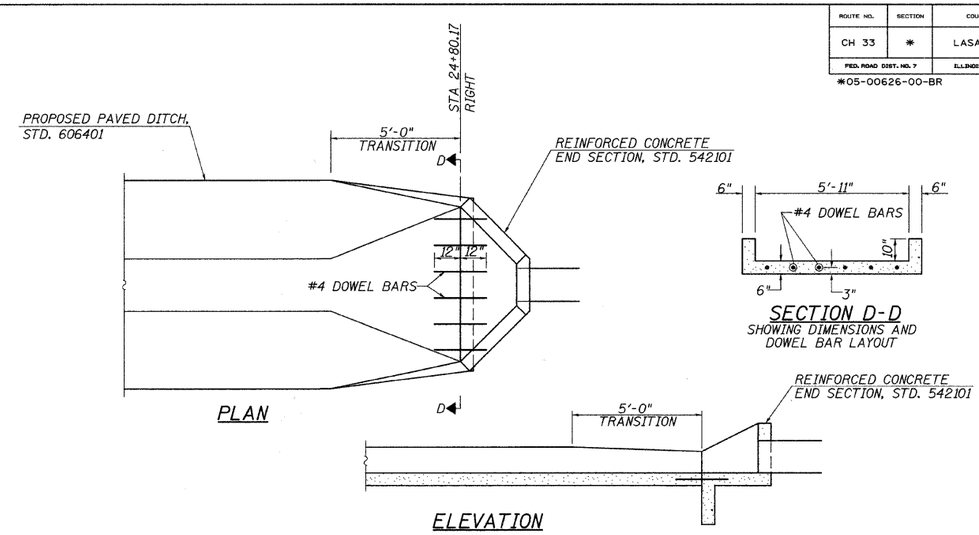
SUMMARY OF QUANTITIES

	CODE NO.	ITEM	UNIT	X081-2A MAJOR BRIDGE FUNDS	I000-2A NON-FEDERAL PARTICIPATION	TOTAL
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	18		18
	20200100	EARTH EXCAVATION	CU YD	3,093	2,087	5,180
	20200200	ROCK EXCAVATION	CU YD	10		10
	20300100	CHANNEL EXCAVATION	CU YD	2,620		2,620
①	20400800	FURNISHED EXCAVATION	CU YD	10,030		10,030
	20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	127		127
①	25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	2.7	0.5	3.2
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1,250	250	1,500
	28000300	TEMPORARY DITCH CHECKS	EACH	86	8	94
	28000400	PERIMETER EROSION BARRIER	FOOT	680	160	840
	28000500	INLET AND PIPE PROTECTION	EACH	1	1	2
	28000510	INLET FILTERS	EACH	2		2
	28100109	STONE RIPRAP, CLASS A5	SQ YD	825		825
	28300400	AGGREGATE DITCH	TON	724		724
	28200200	FILTER FABRIC	SQ YD	2,625		2,625
①		RELOCATE EXISTING RIPRAP	SQ YD	400		400
	35100100	AGGREGATE BASE COURSE, TYPE A	TON	2,154	1,133	3,287
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,672	951	2,623
	40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,153	520	1,673
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	260	118	378
	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	15	75	90
	42001165	BRIDGE APPROACH PAVEMENT	SQ YD	222		222
①	44004000	PAVED DITCH REMOVAL	FOOT	1,332	199	1,531
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	463	181	644
	48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	67		67
①	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
①	50105220	PIPE CULVERT REMOVAL	FOOT	62		62
	50200100	STRUCTURE EXCAVATION	CU YD	125		125
	50300225	CONCRETE STRUCTURES	CU YD	237.7		237.7
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	230.1		230.1
	50300260	BRIDGE DECK GROOVING	SQ YD	770		770
	50300280	CONCRETE ENCASEMENT	CU YD	4.2		4.2
	50300300	PROTECTIVE COAT	SQ YD	1,254	203	1,457
	50400805	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 36 IN.	FOOT	999		999
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	64,130		64,130
	50800515	BAR SPLICERS	EACH	68		68
	51201400	FURNISHING STEEL PILES HP10X42	FOOT	245		245
	51201610	FURNISHING STEEL PILES HP12X63	FOOT	504		504
	51202305	DRIVING PILES	FOOT	245		245
	51203400	TEST PILE STEEL HP10X42	EACH	2		2
	51204650	PILE SHOES	EACH	12		12
	51500100	NAME PLATES	EACH	1		1
	52100530	ANCHOR BOLTS, 1 1/4"	EACH	8		8
	54200430	PIPE CULVERTS, TYPE 1 RCCP 15"	FOOT	78		78
	54215415	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 15"	EACH	1		1
	54215547	METAL END SECTIONS 12"	EACH	2		2
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	67		67
	60105000	PIPE DRAINS, CORRUGATED STEEL OR ALUMINUM ALLOY 12"	FOOT	84		84
	60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	150		150
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	79		79
	60616110	PAVED DITCH, TYPE A-30	FOOT	288	220	508
	60900140	TYPE B INLET BOX, STANDARD 609006	EACH	2		2
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	412.5		412.5
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4		4
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4		4
	63200310	GUARDRAIL REMOVAL	FOOT	1,737		1,737
	67100100	MOBILIZATION	L SUM	1		1
①	70103700	TRAFFIC CONTROL COMPLETE	L SUM	1		1
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5,520	2,080	7,600
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4
*	78200405	GUARDRAIL MARKERS	EACH	10		10
*	78200520	BARRIER WALL MARKERS, TYPE B	EACH	4		4
	X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION, LOCATION 1	EACH	1		1
	X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION, LOCATION 2	EACH	1		1
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1		1
①	Z0065000	SETTING PILES IN ROCK	EACH	16		16

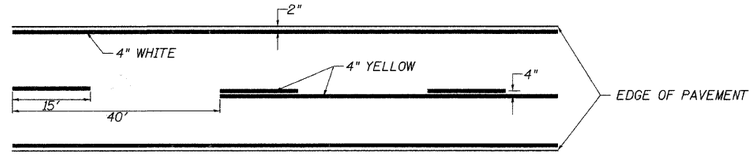
○ ① SEE SPECIAL PROVISIONS * SPECIALTY ITEMS

CONSTRUCTION CODE TYPE: X081-2A

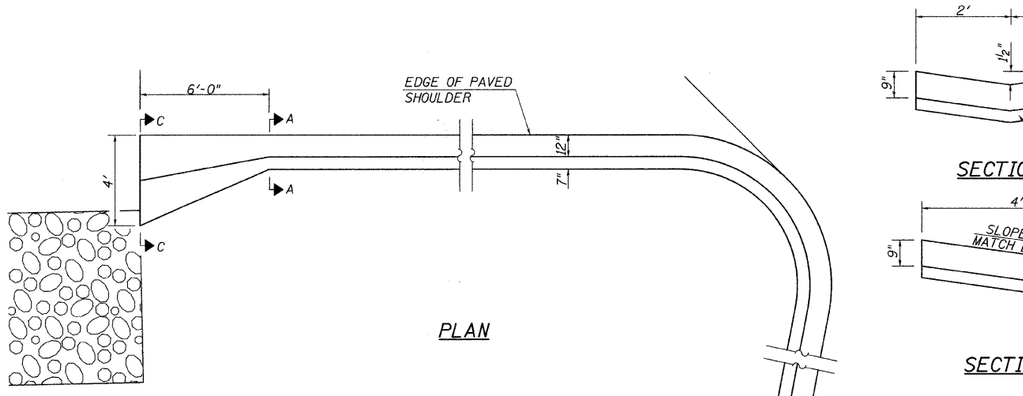
NOTES:
1. MAJOR BRIDGE FUNDS LIMITS FROM STA. 12+25.00 TO STA. 26+05.00.
2. NON-FEDERAL PARTICIPATION LIMITS FROM STA. 26+05.00 TO STA. 31+25.00.



DETAIL OF PAVED DITCH CONNECTION TO END SECTION



PAVEMENT STRIPING DETAIL



NOTES:
1. FOR SECTION A-A, SEE STANDARD 606001 FOR COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
2. GUTTER TAPERS AND AGGREGATE BASE COURSE ASSOCIATED WITH THE CONSTRUCTION OF THE CONCRETE CURB AND GUTTER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12.

DETAIL OF TAPER FOR CONCRETE CURB AND GUTTER, TYPE B-6.12

SUMMARY OF QUANTITIES AND DETAILS

2498D001

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	4
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT *87368		

PAVEMENT SCHEDULE

STATION TO STATION	WIDTH	LENGTH	AGGREGATE BASE COURSE, TYPE A TON	PRIME COAT GALLON 0.50 GAL/SQ YD	HOT-MIX ASPHALT BINDER CSE TON 112#/SQ YD/IN	HOT-MIX ASPHALT SURF CSE TON 112#/SQ YD/IN	INC HOT-MIX ASPHALT SURF TON 112#/SQ YD/IN	BRIDGE APPROACH PAVEMENT SQ YD
12+25.00 - 12+75.00	24.98' AVG.	50.00'	88					
12+75.00 - 18+97.19	26.33'	622.19'	1,147					
21+26.53 - 30+75.00	26.33'	948.47'	1,749					
30+75.00 - 31+25.00	25.38' AVG.	50.00'	89					
12+25.00 - 12+75.00	24.00' AVG.	50.00		67				
12+75.00 - 18+97.19	25.33'	622.19'		875				
21+26.53 - 30+75.00	25.33'	948.47		1,334				
30+75.00 - 31+25.00	24.40' AVG.	50.00'		68				
12+25.00 - 12+75.00	23.44' AVG.	50.00'			48			
12+75.00 - 18+97.19	24.79'	622.19'			625			
21+26.53 - 30+75.00	24.79'	948.47'			952			
30+75.00 - 31+25.00	23.84' AVG.	50.00'			48			
12+25.00 - 12+75.00	22.78' AVG.	50.00'				11		
12+75.00 - 18+97.19	24.13'	622.19'				141		
21+26.53 - 30+75.00	24.13'	948.47'				215		
30+75.00 - 31+25.00	23.18' AVG.	50.00'				11		
18+97.19 - 19+27.19	33.33'	30.00'						111
20+96.53 - 21+26.53	33.33'	30.00'						111
ENT. - 24+67 RT	21.00' AVG.	41.00'	37	57			15	
ENT. - 26+40 LT	42.00'	37.50'	92	107			36	
ENT. - 28+54 RT	24.00'	28.00'	41	47			16	
ENT. - 28+92 LT	24.00'	26.76'	44	51			17	
MB TURNOUT 26+76 LT	4.00'	24.50'		6			2	
MB TURNOUT 28+88 RT	4.00'	22.91'		5			2	
MB TURNOUT 29+31 LT	4.00'	25.50'		6			2	
		TOTAL	3,287	2,623	1,673	378	90	222

PIPE CULVERTS, TYPE 1 RCCP 15"

STATION	SIDE	FOOT
24+67	RIGHT	78
	TOTAL	78

CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 15"

STATION	SIDE	EACH
24+78	RIGHT	1
	TOTAL	1

APPROACH PAVEMENT DRAINS

STATION	SIDE	METAL END SECTIONS 12" (EACH)	PIPE DRAINS, CORRUGATED STEEL OR ALUMINUM ALLOY 12" (FOOT)	TYPE B INLET BOX, STANDARD 609006 (EACH)
19+04.00	RIGHT	1	38	1
19+23.00	LEFT	1	46	1
	TOTAL	2	84	2

TREE REMOVAL

STATION	OFFSET	SIDE	OVER 15 UNITS
24+98	63'	LEFT	18
		TOTAL	18

AGGREGATE DITCH**

STATION TO STATION	SIDE	WIDTH	TON	FILTER FABRIC (SQ YD)
12+25 - 20+00	LEFT	8'	371	719
12+25 - 16+00	RIGHT	8'	181	349
20+83 - 24+00	RIGHT	8'	152	294
24+10 - 24+50	LEFT	8'	20	39
		TOTAL	724	1,401

** Aggregate Ditch shall conform to material type A-4 of the Standard Specifications

PAVED DITCH, TYPE A-30

STATION TO STATION	SIDE	PAVED DITCH, TYPE A-30	PROTECTIVE COAT (SQ YD)
24+50 - 25+89	LEFT	155'	143
24+80 - 28+25	RIGHT	345'	319
24+86	RIGHT	8'	8
	TOTAL	508'	470

INLET FILTERS

STATION	SIDE	EACH
19+04	RIGHT	1
19+23	LEFT	1
	TOTAL	2

PIPE CULVERT REMOVAL

℄ STATION	SIZE	SIDE	FOOT
24+63	18"	LEFT	24
24+67	15"	RIGHT	38
		TOTAL	62

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

SIDE	STATION TO STATION	EACH
LEFT	15+56.02 - 16+06.02	1
RIGHT	17+87.07 - 18+37.07	1
RIGHT	21+30.20 - 21+80.20	1
LEFT	22+36.65 - 22+86.65	1
	TOTAL	4

PAVED DITCH REMOVAL

STATION TO STATION	SIDE	FOOT
12+25 - 15+61	LEFT	336
12+25 - 16+00	RIGHT	375
20+54 - 24+38	RIGHT	385
24+72 - 25+69	LEFT	107
24+76 - 28+04	RIGHT	328
	TOTAL	1,531

PAINT PAVEMENT MARKING - LINE 4"

STATION TO STATION	SIDE	DESCRIPTION	FOOT
12+25 - 31+25	LEFT	WHITE EDGE LINE	1,900
12+25 - 31+25	℄	DOUBLE YELLOW	3,800
12+25 - 31+25	RIGHT	WHITE EDGE LINE	1,900
		TOTAL	7,600

GUARDRAIL REMOVAL

STATION TO STATION	SIDE	FOOT
14+31 - 19+81	LEFT	550
14+53 - 19+65	RIGHT	512
20+19 - 21+44	RIGHT	125
20+34 - 25+84	LEFT	550
	TOTAL	1,737

PERIMETER EROSION BARRIER

STATION TO STATION	SIDE	FOOT
16+00 - 19+15	RIGHT	345
21+10 - 24+10	LEFT	335
27+75 - 29+25	LEFT	160
	TOTAL	840

BARRIER WALL AND GUARDRAIL MARKERS

STATION TO STATION	SIDE	GUARDRAIL MARKERS (EACH)	BARRIER WALL MARKERS, TYPE B (EACH)
18+37.07 - 21+30.20	RIGHT	3	2
16+06.02 - 22+36.65	LEFT	7	2
	TOTAL	10	4

EARTHWORK SUMMARY

STATION TO STATION		EARTH EXCAVATION CU YD	CHANNEL EXCAVATION CU YD	STRUCTURE EXCAVATION CU YD	FILL CU YD	WASTE (SHORTAGE) CU YD
RDWY 12+25.00 - 19+27.19		1,865			9,926	(8,527)
RDWY 20+96.53 - 31+25.00		3,314			3,988	(1,503)
CHANNEL			2,620			
STRUCTURE				125		
	TOTAL	5,179	2,620	125	13,914	(10,030)
	USE	5,180	2,620	125	-	(10,030)

(@ 25% SHRINKAGE)

TEMPORARY DITCH CHECKS

STATION TO STATION	SIDE	EACH
12+50 - 14+00	RIGHT	7
14+20 - 16+00	RIGHT	10
12+50 - 14+00	LEFT	6
14+25 - 15+00	LEFT	4
15+10 - 16+50	LEFT	15
17+88 - 19+25	LEFT	2
20+00	LEFT	1
20+83 - 21+50	RIGHT	5
21+75 - 23+75	RIGHT	9
25+10 - 27+90	RIGHT	9
24+10	LEFT	1
24+50 - 25+50	LEFT	21
25+63 - 25+75	LEFT	2
27+75	LEFT	1
31+25	RIGHT	1
	TOTAL	94

TRAFFIC BARRIER TERMINAL, TYPE 6

SIDE	STATION TO STATION	EACH
RIGHT	18+74.57 - 19+18.32	1
LEFT	18+93.52 - 19+37.27	1
RIGHT	20+86.45 - 21+30.20	1
LEFT	21+05.40 - 21+49.15	1
	TOTAL	4

STEEL PLATE BEAM GUARDRAIL, TYPE A

SIDE	STATION TO STATION	FOOT
LEFT	16+06.02 - 18+93.52	287.5
RIGHT	18+37.07 - 18+74.57	37.5
LEFT	21+49.15 - 22+36.65	87.5
	TOTAL	412.5

INLET & PIPE PROTECTION

STATION	SIDE	EACH
24+78	RIGHT	1
31+23	LEFT	1
	TOTAL	2

HOT-MIX ASPHALT SHOULDER, 6"

STATION TO STATION	SIDE	WIDTH	SQ YD
24+00 - 25+00	RIGHT	6.00'	67
		TOTAL	67

AGGREGATE SHOULDERS, TYPE B

STATION TO STATION	SIDE	WIDTH	LENGTH	TON
12+25.00 - 12+75.00	LEFT	4.00' AVG.	50.00'	7
12+25.00 - 12+75.00	RIGHT	4.55' AVG.	50.00'	8
12+75.00 - 19+05.85	LEFT	6.00'	630.85'	133
12+75.00 - 18+88.53	RIGHT	6.00'	613.53'	129
18+87.25 - 19+17.25	RIGHT	1.58'	30.00'	2
19+07.13 - 19+37.13	LEFT	1.58'	30.00'	2
20+86.59 - 21+16.59	RIGHT	1.58'	30.00'	2
21+06.47 - 21+36.47	LEFT	1.58'	30.00'	2
21+17.87 - 24+00.00	RIGHT	6.00'	282.13'	60
21+35.19 - 25+91.04	LEFT	6.00'	455.85'	96
25+00.00 - 28+33.38	RIGHT	6.00'	333.38'	70
26+59.92 - 28+67.00	LEFT	6.00'	207.08'	44
28+76.00 - 30+75.00	RIGHT	6.00'	199.00'	42
29+17.00 - 30+75.00	LEFT	6.00'	158.00'	33
30+75.00 - 31+25.00	RIGHT	4.20' AVG.	50.00'	7
30+75.00 - 31+25.00	LEFT	4.25' AVG.	50.00'	7
			TOTAL	644

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12

STATION TO STATION	SIDE	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (FOOT)	PROTECTIVE COAT (SQ YD)
24+00 - 24+43	RIGHT	79	18
	TOTAL	79	18

SCHEDULES OF QUANTITIES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	5
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT *87368

1 ROAD CLOSED 2 1/4 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3 — ROAD CLOSED 2 1/4 MILES AHEAD LOCAL TRAFFIC ONLY

2 ROAD CLOSED 3 3/4 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3 — ROAD CLOSED 3 3/4 MILES AHEAD LOCAL TRAFFIC ONLY

3 ROAD CLOSED 1 1/4 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3 — ROAD CLOSED 1 1/4 MILES AHEAD LOCAL TRAFFIC ONLY

4 ROAD CLOSED 3/4 MILES AHEAD LOCAL TRAFFIC ONLY — R11-3 — ROAD CLOSED 3/4 MILES AHEAD LOCAL TRAFFIC ONLY

5 ROAD CLOSED AHEAD — W20-3 — ROAD CLOSED AHEAD

6 ROAD CLOSED 500 FT — W20-3 — ROAD CLOSED 500 FT

7 TYPE III BARRICADES

SEE STANDARD BLR 21 AND SPECIAL PROVISIONS

1/2 MI 0 1/2 MI

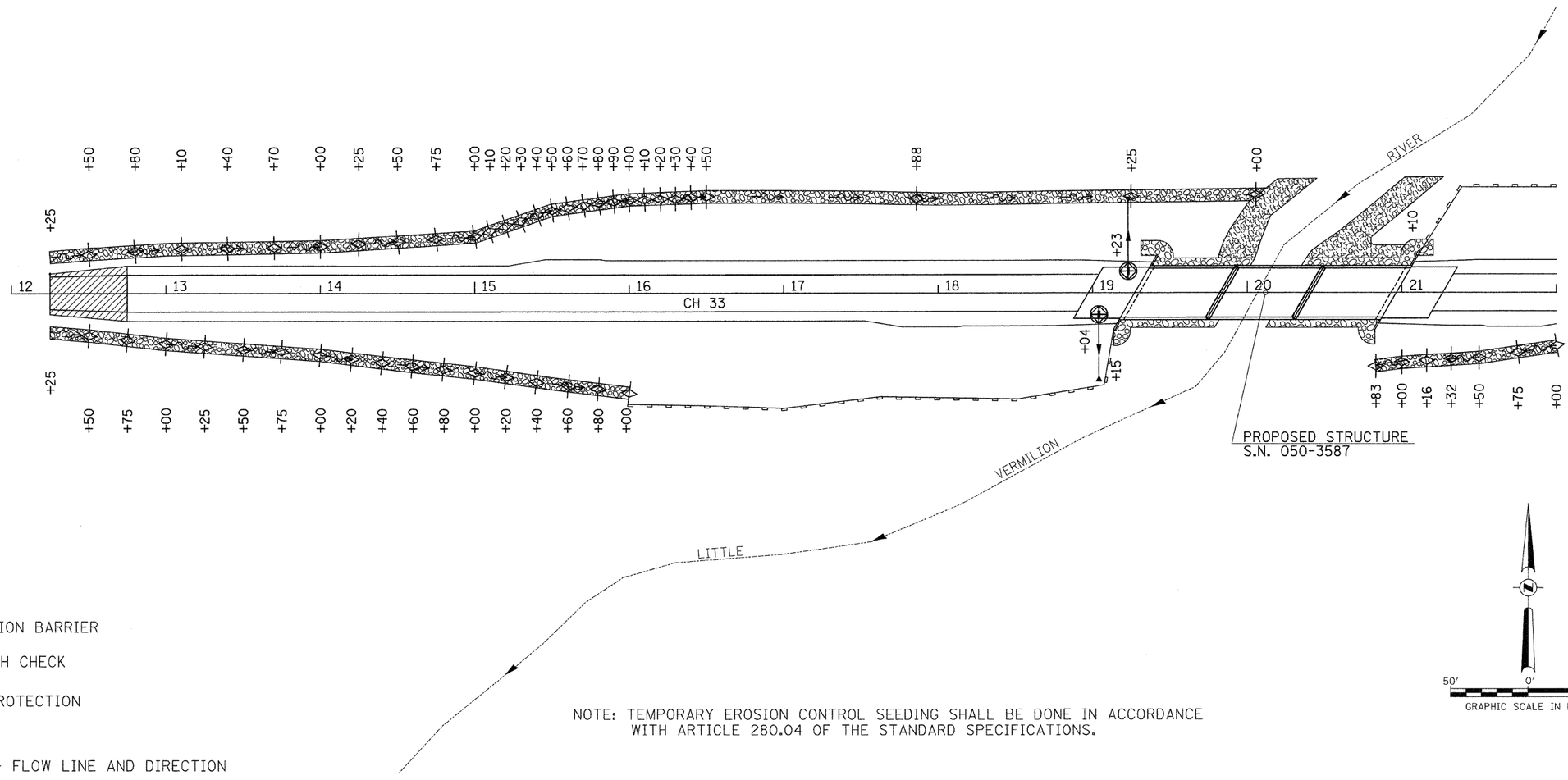
GRAPHIC SCALE IN MILES

TRAFFIC CONTROL PLAN

2498H001

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	6
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT	#87368	

T 34 N, R 1 E, 3rd PM
SECTION 14



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET & PIPE PROTECTION
- INLET FILTERS
- SPECIAL DITCH - FLOW LINE AND DIRECTION
- PROPOSED PAVED DITCH
- PROPOSED RIPRAP PLACEMENT
- PROPOSED RELOCATED EXISTING RIPRAP

NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.

50' 0' 50'
GRAPHIC SCALE IN FEET

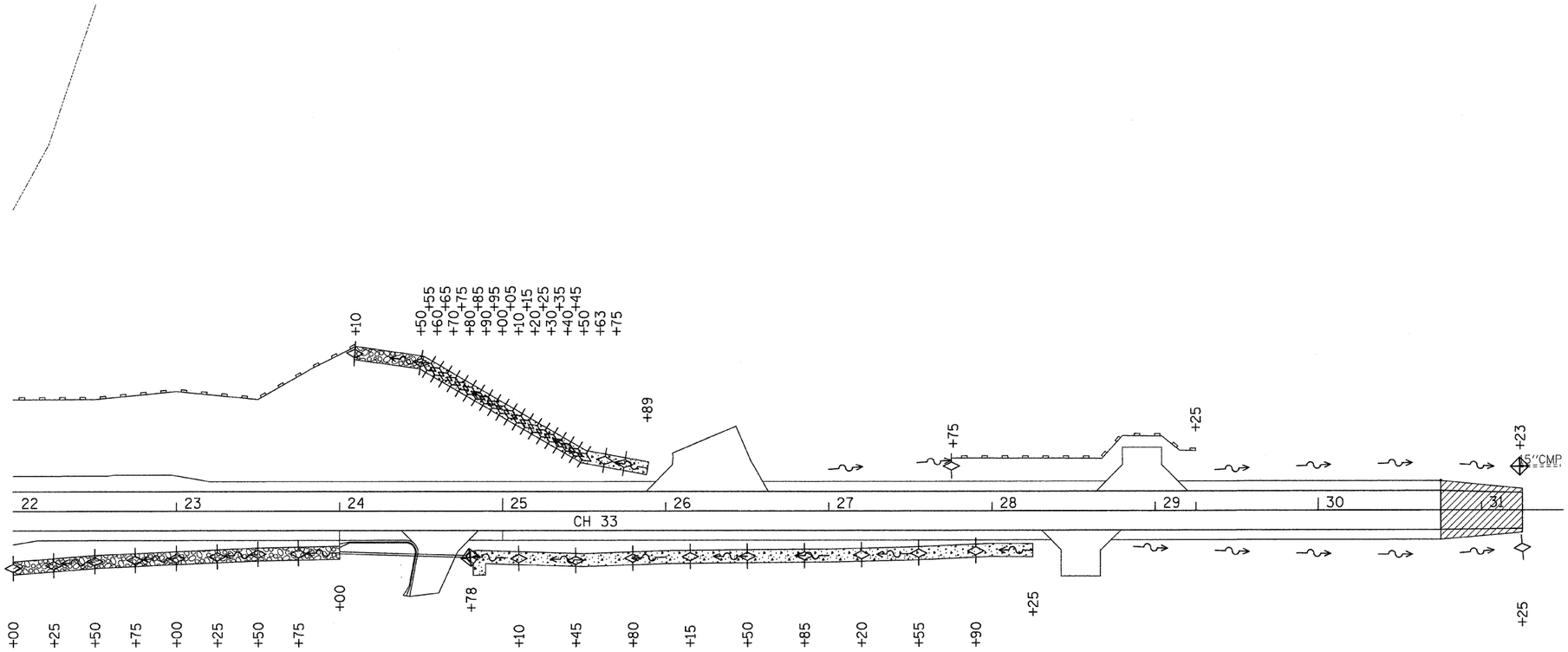
T 34 N, R 1 E, 3rd PM
SECTION 23

STORM WATER POLLUTION PREVENTION PLAN

2498S001

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	7
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT *87368		

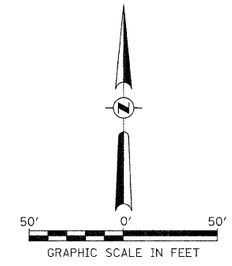
T 34 N, R 1 E, 3rd PM
SECTION 14



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET & PIPE PROTECTION
- INLET FILTERS
- SPECIAL DITCH - FLOW LINE AND DIRECTION
- PROPOSED PAVED DITCH
- PROPOSED RIPRAP PLACEMENT
- PROPOSED RELOCATED EXISTING RIPRAP

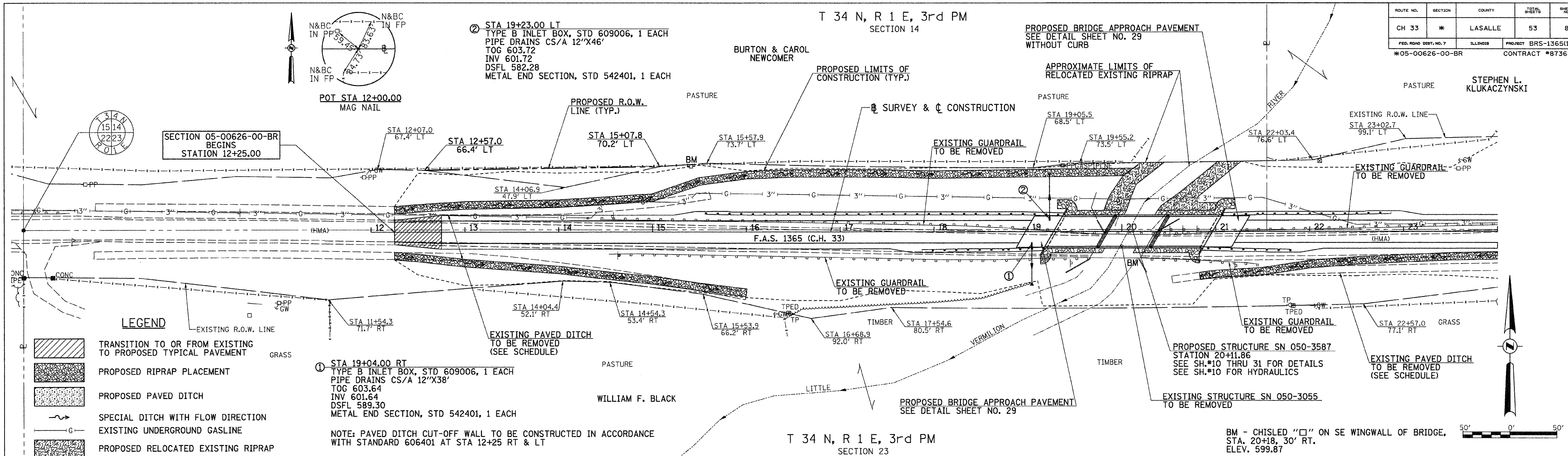
NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.

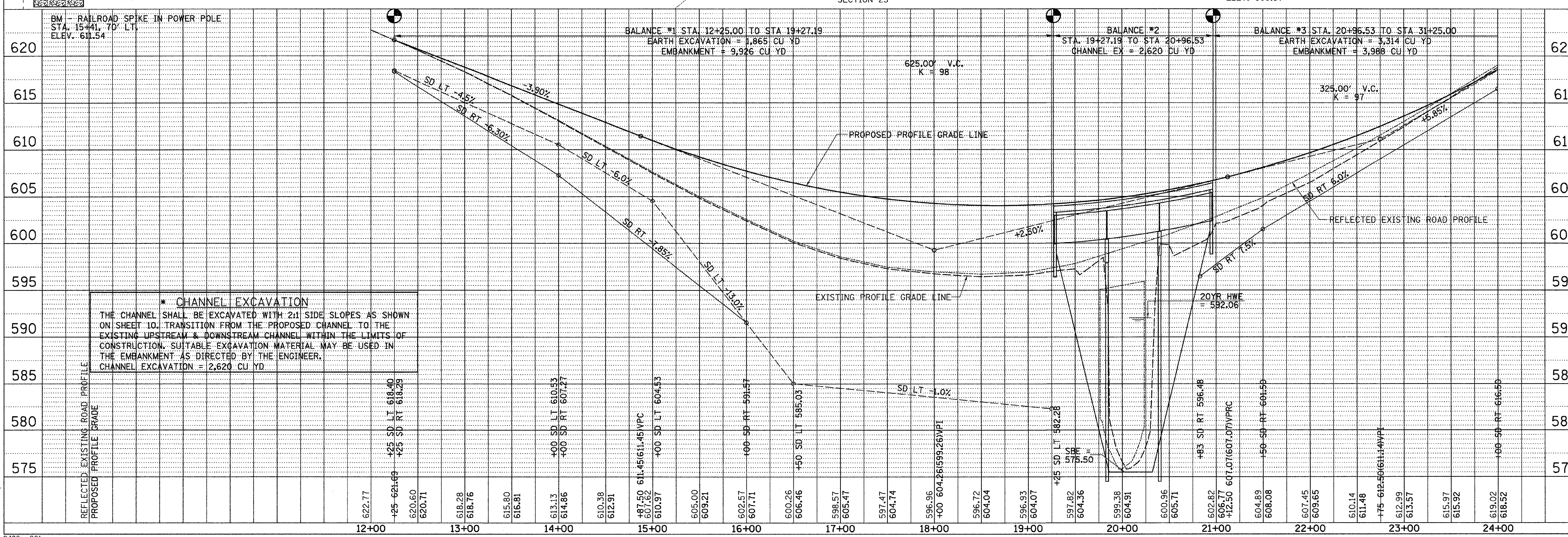


T 34 N, R 1 E, 3rd PM
SECTION 23

STORM WATER POLLUTION PREVENTION PLAN

2498S002





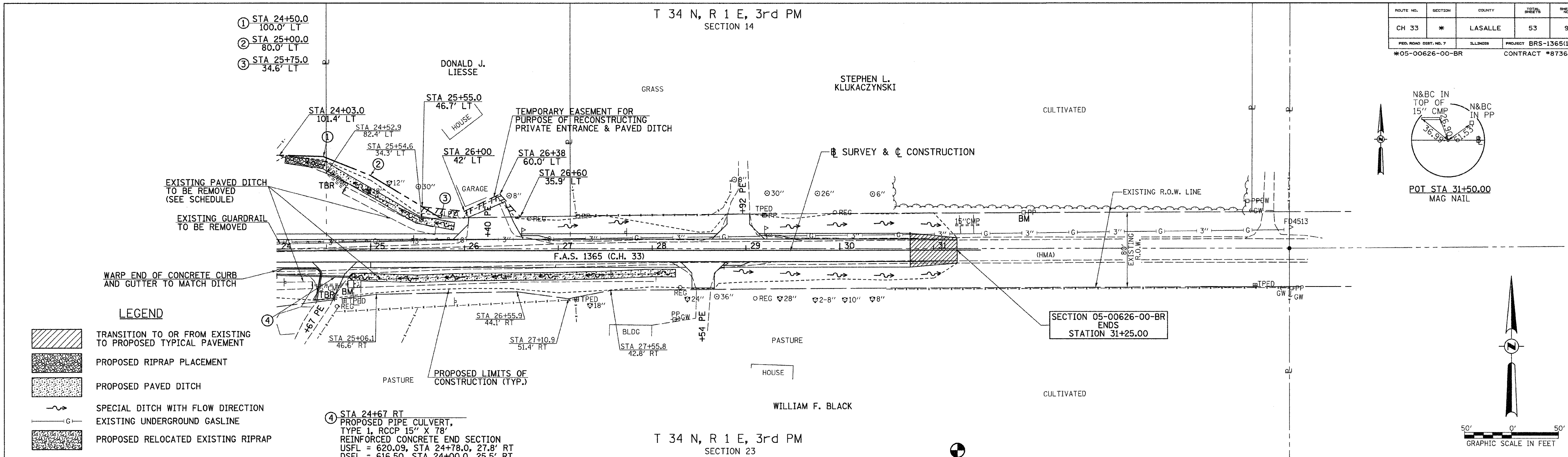
PLOT DATE = 1/23/2009
PLOT SCALE = 50.0000 ' / IN.

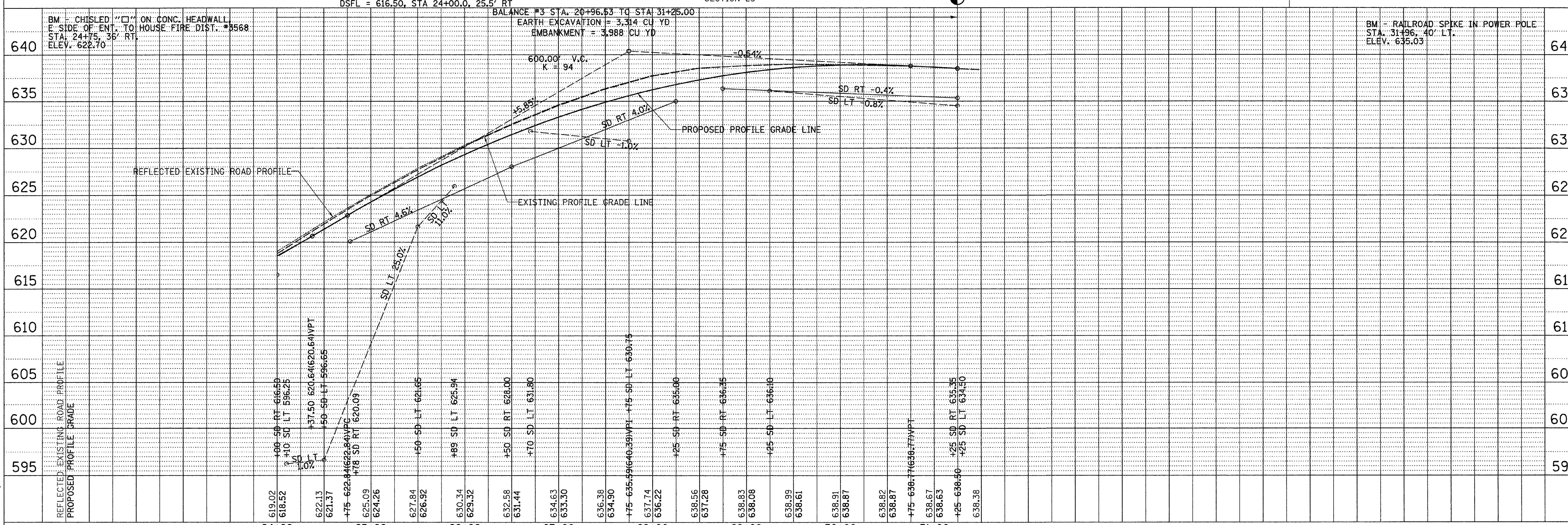
2498pp001

PLAN AND PROFILE STA 12+00 TO STA 24+00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	9
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368





PLOT DATE = 1/23/2009
FILE NAME = V:\Bridge\2498-LaSalle\2498pp002.dgn
PLOT SCALE = 50.0000 ' / IN.
USER NAME = jhutchison

2498pp002

PLAN AND PROFILE STA 24+00 TO STA 31+00

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		

*05-00626-00-BR CONTRACT #87368

SHEET NO. 1 OF 22 SHEETS

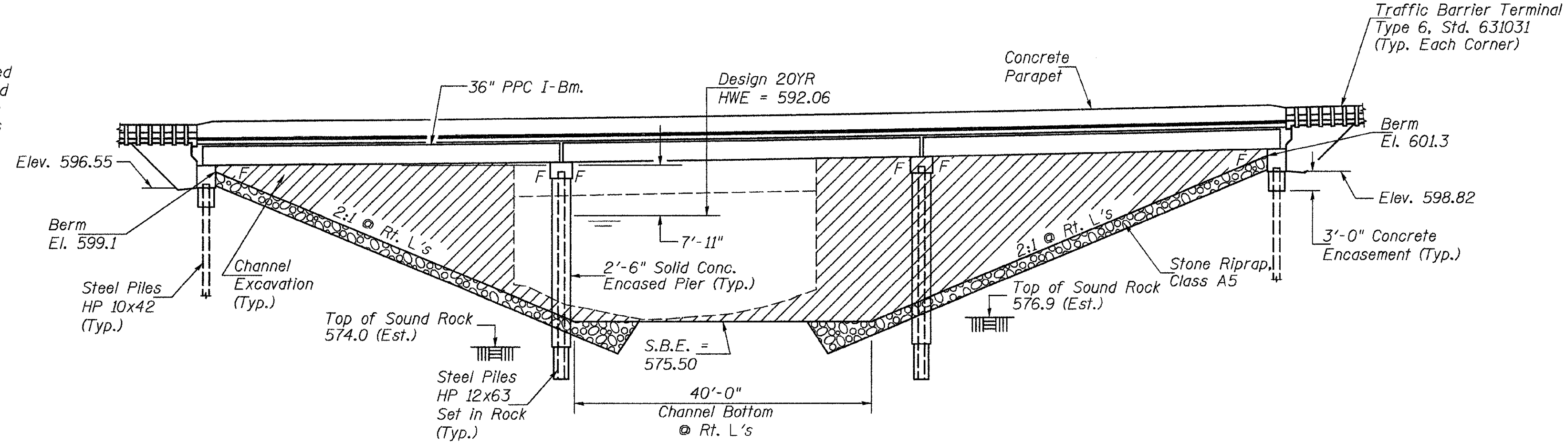
B.M.: RR Spike in Power Pole, Sta. 15+41, 70' Lt. Elev. 611.54
RR Spike in Power Pole, Sta. 31+96, 40' Rt. Elev. 635.03

Existing Structure:
Single span concrete T-beam superstructure supported on concrete closed abutments on timber pile supported concrete footings. The structure is ±53'-11" back to back of abutments, 25'-4" out to out of deck, and is skewed 30° left ahead.
Str. No. 050-3055

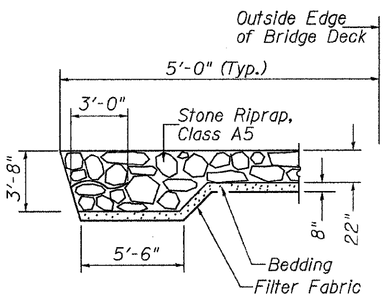
Salvage: Riprap

Road to be closed to traffic during construction.

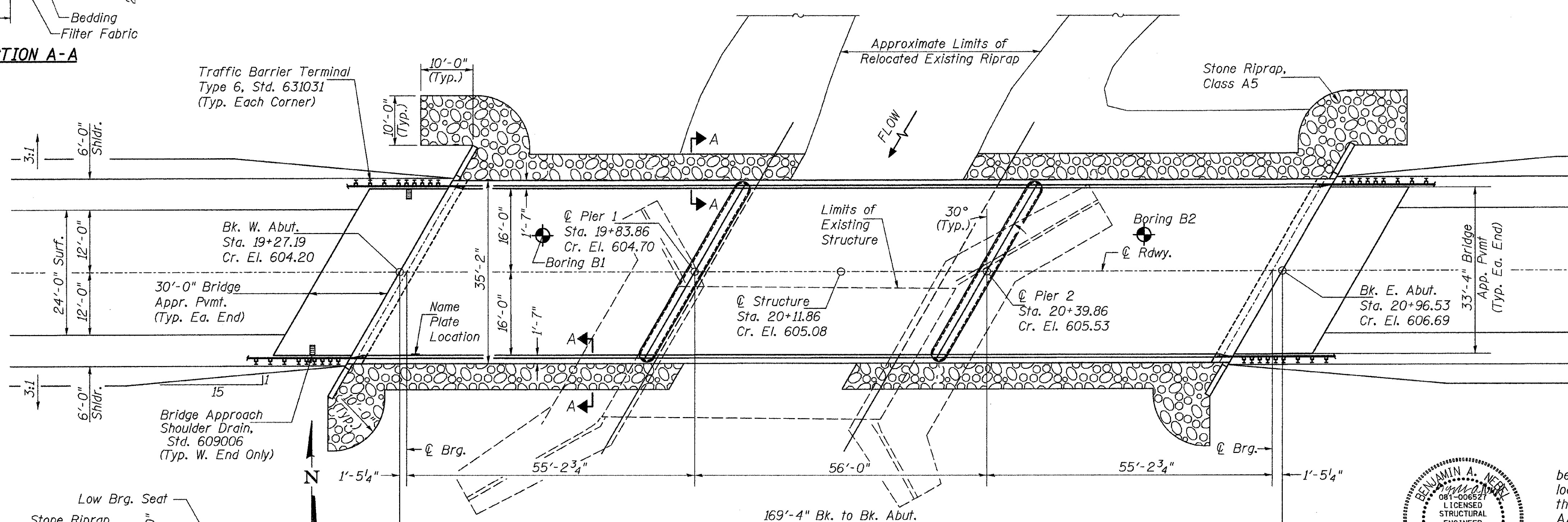
NOTE:
For Bill of Material and General Notes, See Sheet 2 of 22.



ELEVATION

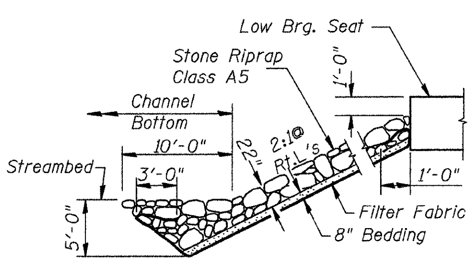


SECTION A-A



PLAN

Note: The existing footings shall be removed as required to construct the proposed piers and set piles in rock.

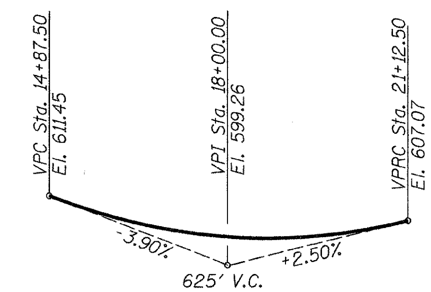


STONE RIPRAP DETAIL

LITTLE VERMILION RIVER
BUILT 200_ BY
LASALLE COUNTY
SEC. 05-00626-00-BR
C.H. 33 STATION 20+11.86
F.A. PROJ. BRS-1365(111)
STR. NO. 050-3587 LOADING HL-93

NAME PLATE

Locate Name Plate on Face of Parapet S.W. Corner of Bridge (See Std. 515001)



PROFILE GRADE

DESIGN SCOUR TABLE

Location	W. Abut	Pier 1	Pier 2	E. Abut
Design Scour Elevation	596.6	574.0	574.5	598.8

BENJAMIN A. NEDL 081-006527 LICENSED STRUCTURAL ENGINEER OF JACKSONVILLE ILLINOIS
Lic. Exp. 11/30/2010

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications.
This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

[signature] 1/26/2009
Illinois Structural No. 6527
Expires 11/30/2010

DESIGNED	B.A.N.
CHECKED	J.O.H./J.E.H.
DRAWN	C.E.T./T.A.C.
CHECKED	B.A.N./J.E.H.

2498B001

WATERWAY INFORMATION

Drainage Area = 69.8 Sq. Mi.			Low Grade Elev. = 604.02 @ Sta. 18+68.39						
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	4,581	588	1,156	592.06	0.29	0.03	592.35	592.09
Base	100	6,499	671	1,375	594.09	0.53	0.04	594.62	594.13

Construction of this project complies with IDNR, Office of Water Resources Statewide Permit No. 2

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.040 g
Site Coefficient (S) = 1.0

LOADING HL-93

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

DESIGN SPECIFICATIONS

2007 AASHTO (LRFD)

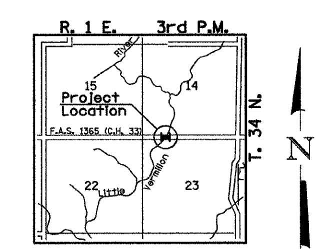
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 p.s.i.
f'ci = 5,000 p.s.i.
f's = 270,000 p.s.i. (½" ϕ low relaxation strands)
f'si = 201,960 p.s.i. (½" ϕ low relaxation strands)

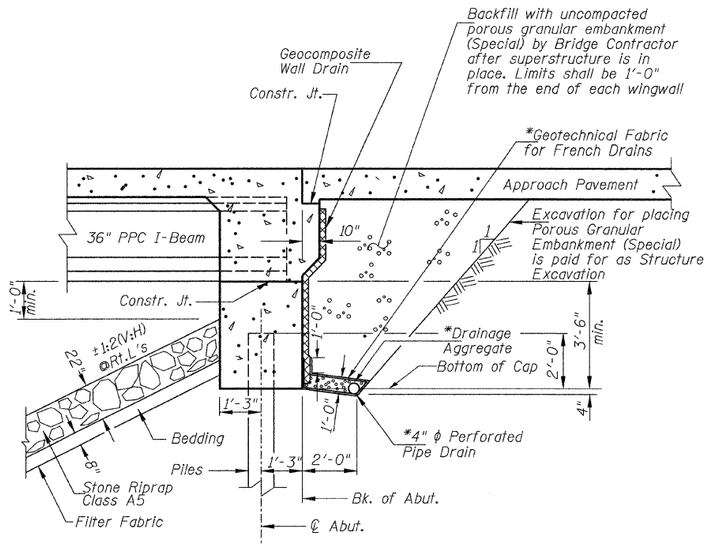


LOCATION SKETCH

GENERAL PLAN & ELEVATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	11
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT #87368



*Included in the cost of Pipe Underdrains for Structures. All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

SECTION THRU ABUTMENTS

(Horiz. dim. ℄ Rt. L's)

GENERAL NOTES

The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at the substructures specified or approved by the Engineer before ordering the remainder of the piles.

For Soil Boring Logs, See Sheet #'s 21 & 22 of 22.

For Existing Structure Plans, See Special Provisions.

Reinforcement Bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.

Reinforcement Bars designated (E) shall be epoxy coated.

Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

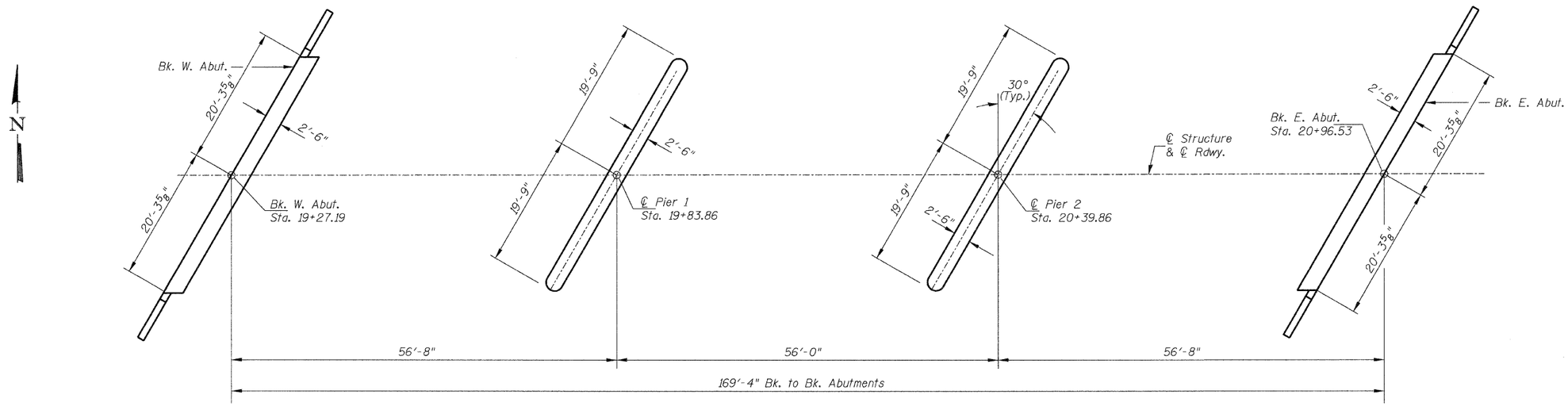
All embedded and seperate bearing plates, side retainers, anchor bolts, nuts, washers and pintles shall be galvanized according to AASHTO M111 or M232 (as applicable).

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
(1)	Removal of Existing Structures	EACH	———	———	1
	Channel Excavation	CU YD	———	2,620	2,620
	Structure Excavation	CU YD	———	125	125
	Rock Excavation	CU YD	———	10	10
	Concrete Structures	CU YD	———	237.7	237.7
	Concrete Superstructure	CU YD	230.1	———	230.1
	Bridge Deck Grooving	SQ YD	770	———	770
	Protective Coat	SQ YD	969	———	969
	Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36 in.	FOOT	999	———	999
(1)	Reinforcement Bars, Epoxy Coated	POUND	46,420	17,710	64,130
	Name Plates	EACH	1	———	1
	Furnishing Steel Piles HP10x42	FOOT	———	245	245
	Test Pile Steel HP10x42	EACH	———	2	2
	Furnishing Steel Piles HP12x63	FOOT	———	504	504
	Driving Piles	FOOT	———	245	245
	Pile Shoes	EACH	———	12	12
(1)	Setting Piles in Rock	EACH	———	16	16
(1)	Porous Granular Embankment, Special	CU YD	———	127	127
(1)	Pipe Underdrains for Structures 4"	FOOT	———	150	150
	Geocomposite Wall Drain	SQ YD	———	67	67
	Concrete Encasement	CU YD	———	4.2	4.2
	Stone Riprap, Class A5	SQ YD	———	825	825
	Filter Fabric	SQ YD	———	1,225	1,225
	Anchor Bolts, 1 1/4"ϕ	EACH	———	8	8
(1)	Underwater Structure Excavation Protection, Location 1 (Pier #1)	EACH	———	1	1
(1)	Underwater Structure Excavation Protection, Location 2 (Pier #2)	EACH	———	1	1
	Bar Splicers	EACH	68	———	68
	Bridge Approach Pavement	SQ YD	———	———	222
(1)	Relocate Existing Riprap	SQ YD	———	400	400

(1) See Special Provisions



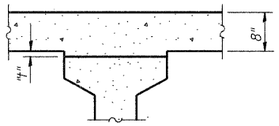
FOOTING LAYOUT

FOOTING LAYOUT, GENERAL NOTES, DETAILS, & BILL OF MATERIALS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	12
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

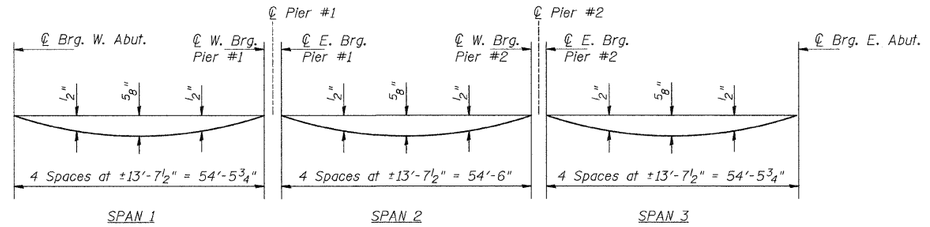
*05-00626-00-BR CONTRACT #87368

SHEET NO. 3 OF 22 SHEETS



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on sheets 4 of 22, minus the 8" deck thickness, equals the fillet heights "t" above top flanges of beams.

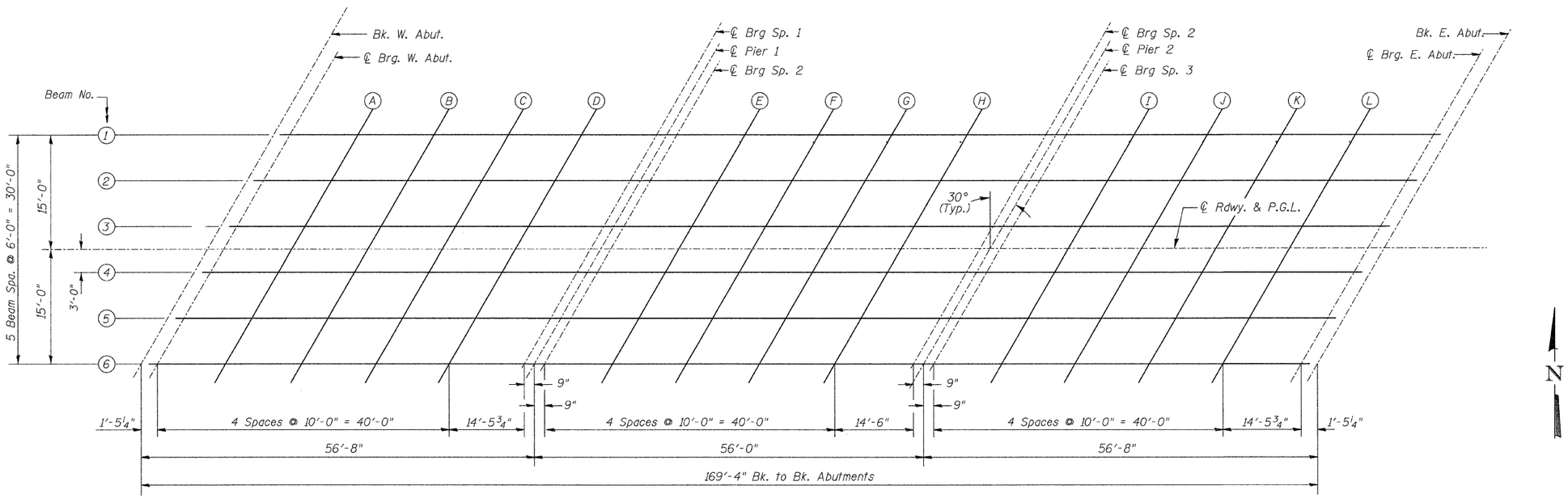
FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete deck and parapets, excluding beams)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown.



PLAN

TOP OF SLAB ELEVATIONS

2498B003

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	13
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

SHEET NO. 4 OF 22 SHEETS

*05-00626-00-BR CONTRACT #87368

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1935.85	-15.00	604.01	604.01
CL Brg W. Abut.	1937.29	-15.00	604.02	604.02
A	1947.29	-15.00	604.10	604.12
B	1957.29	-15.00	604.18	604.23
C	1967.29	-15.00	604.28	604.33
D	1977.29	-15.00	604.39	604.42
CL Brg	1991.77	-15.00	604.56	604.56
Pier 1	1992.52	-15.00	604.57	604.57
CL Brg	1993.27	-15.00	604.58	604.58
E	2003.27	-15.00	604.71	604.74
F	2013.27	-15.00	604.85	604.90
G	2023.27	-15.00	605.01	605.05
H	2033.27	-15.00	605.17	605.21
CL Brg	2047.77	-15.00	605.43	605.43
Pier 2	2048.52	-15.00	605.44	605.44
CL Brg	2049.27	-15.00	605.45	605.45
I	2059.27	-15.00	605.64	605.67
J	2069.27	-15.00	605.85	605.89
K	2079.27	-15.00	606.06	606.10
L	2089.27	-15.00	606.28	606.31
CL Brg E. Abut.	2103.75	-15.00	606.62	606.62
Bk E. Abutment	2105.19	-15.00	606.65	606.65

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1932.39	-9.00	604.09	604.09
CL Brg W. Abut.	1933.83	-9.00	604.10	604.10
A	1943.83	-9.00	604.18	604.20
B	1953.83	-9.00	604.26	604.30
C	1963.83	-9.00	604.35	604.40
D	1973.83	-9.00	604.45	604.49
CL Brg	1988.31	-9.00	604.62	604.62
Pier 1	1989.06	-9.00	604.63	604.63
CL Brg	1989.81	-9.00	604.64	604.64
E	1999.81	-9.00	604.77	604.79
F	2009.81	-9.00	604.91	604.95
G	2019.81	-9.00	605.06	605.10
H	2029.81	-9.00	605.22	605.25
CL Brg	2044.31	-9.00	605.47	605.47
Pier 2	2045.06	-9.00	605.48	605.48
CL Brg	2045.81	-9.00	605.50	605.50
I	2055.81	-9.00	605.68	605.71
J	2065.81	-9.00	605.88	605.92
K	2075.81	-9.00	606.09	606.13
L	2085.81	-9.00	606.30	606.34
CL Brg E. Abut.	2100.28	-9.00	606.64	606.64
Bk E. Abutment	2101.73	-9.00	606.67	606.67

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1928.92	-3.00	604.16	604.16
CL Brg W. Abut.	1930.37	-3.00	604.17	604.17
A	1940.37	-3.00	604.24	604.27
B	1950.37	-3.00	604.32	604.36
C	1960.37	-3.00	604.41	604.45
D	1970.37	-3.00	604.51	604.54
CL Brg	1984.84	-3.00	604.67	604.67
Pier 1	1985.59	-3.00	604.68	604.68
CL Brg	1986.34	-3.00	604.69	604.69
E	1996.34	-3.00	604.81	604.84
F	2006.34	-3.00	604.95	604.99
G	2016.34	-3.00	605.10	605.14
H	2026.34	-3.00	605.25	605.29
CL Brg	2040.84	-3.00	605.50	605.50
Pier 2	2041.59	-3.00	605.51	605.51
CL Brg	2042.34	-3.00	605.52	605.52
I	2052.34	-3.00	605.71	605.73
J	2062.34	-3.00	605.90	605.94
K	2072.34	-3.00	606.10	606.15
L	2082.34	-3.00	606.32	606.35
CL Brg E. Abut.	2096.82	-3.00	606.65	606.65
Bk E. Abutment	2098.26	-3.00	606.68	606.68

PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1927.19	0.00	604.20	604.20
CL Brg W. Abut.	1928.63	0.00	604.21	604.21
A	1938.63	0.00	604.27	604.30
B	1948.63	0.00	604.35	604.39
C	1958.63	0.00	604.44	604.48
D	1968.63	0.00	604.53	604.57
CL Brg	1983.11	0.00	604.69	604.69
Pier 1	1983.86	0.00	604.70	604.70
CL Brg	1984.61	0.00	604.71	604.71
E	1994.61	0.00	604.84	604.86
F	2004.61	0.00	604.97	605.01
G	2014.61	0.00	605.11	605.16
H	2024.61	0.00	605.27	605.30
CL Brg	2039.11	0.00	605.51	605.51
Pier 2	2039.86	0.00	605.53	605.53
CL Brg	2040.61	0.00	605.54	605.54
I	2050.61	0.00	605.72	605.75
J	2060.61	0.00	605.91	605.95
K	2070.61	0.00	606.11	606.16
L	2080.61	0.00	606.33	606.36
CL Brg E. Abut.	2095.09	0.00	606.65	606.65
Bk E. Abutment	2096.53	0.00	606.69	606.69

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1925.46	3.00	604.14	604.14
CL Brg W. Abut.	1926.90	3.00	604.15	604.15
A	1936.90	3.00	604.22	604.24
B	1946.90	3.00	604.29	604.33
C	1956.90	3.00	604.38	604.42
D	1966.90	3.00	604.47	604.51
CL Brg	1981.38	3.00	604.63	604.63
Pier 1	1982.13	3.00	604.64	604.64
CL Brg	1982.88	3.00	604.65	604.65
E	1992.88	3.00	604.77	604.79
F	2002.88	3.00	604.90	604.94
G	2012.88	3.00	605.04	605.09
H	2022.88	3.00	605.20	605.23
CL Brg	2037.38	3.00	605.44	605.44
Pier 2	2038.13	3.00	605.45	605.45
CL Brg	2038.88	3.00	605.46	605.46
I	2048.88	3.00	605.64	605.67
J	2058.88	3.00	605.83	605.88
K	2068.88	3.00	606.03	606.08
L	2078.88	3.00	606.24	606.28
CL Brg E. Abut.	2093.35	3.00	606.57	606.57
Bk E. Abutment	2094.80	3.00	606.60	606.60

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1921.99	9.00	604.03	604.03
CL Brg W. Abut.	1923.44	9.00	604.04	604.04
A	1933.44	9.00	604.10	604.13
B	1943.44	9.00	604.17	604.22
C	1953.44	9.00	604.26	604.30
D	1963.44	9.00	604.35	604.38
CL Brg	1977.91	9.00	604.50	604.50
Pier 1	1978.66	9.00	604.51	604.51
CL Brg	1979.41	9.00	604.52	604.52
E	1989.41	9.00	604.63	604.66
F	1999.41	9.00	604.76	604.81
G	2009.41	9.00	604.90	604.95
H	2019.41	9.00	605.05	605.09
CL Brg	2033.91	9.00	605.29	605.29
Pier 2	2034.66	9.00	605.30	605.30
CL Brg	2035.41	9.00	605.31	605.31
I	2045.41	9.00	605.49	605.51
J	2055.41	9.00	605.68	605.72
K	2065.41	9.00	605.87	605.92
L	2075.41	9.00	606.08	606.11
CL Brg E. Abut.	2089.89	9.00	606.40	606.40
Bk E. Abutment	2091.33	9.00	606.43	606.43

BEAM #6

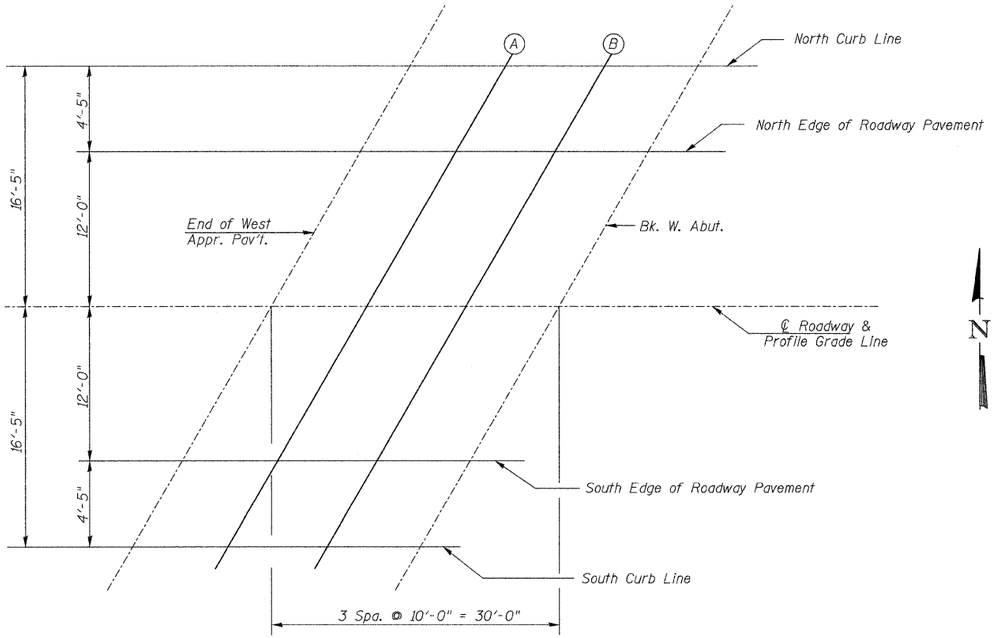
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk W. Abutment	1918.53	15.00	603.91	603.91
CL Brg W. Abut.	1919.97	15.00	603.92	603.92
A	1929.97	15.00	603.97	604.00
B	1939.97	15.00	604.04	604.09
C	1949.97	15.00	604.12	604.17
D	1959.97	15.00	604.21	604.24
CL Brg	1974.45	15.00	604.36	604.36
Pier 1	1975.20	15.00	604.36	604.36
CL Brg	1975.95	15.00	604.37	604.37
E	1985.95	15.00	604.49	604.51
F	1995.95	15.00	604.61	604.65
G	2005.95	15.00	604.75	604.79
H	2015.95	15.00	604.89	604.93
CL Brg	2030.45	15.00	605.12	605.12
Pier 2	2031.20	15.00	605.14	605.14
CL Brg	2031.95	15.00	605.15	605.15
I	2041.95	15.00	605.32	605.35
J	2051.95	15.00	605.50	605.55
K	2061.95	15.00	605.70	605.74
L	2071.95	15.00	605.90	605.94
CL Brg E. Abut.	2086.43	15.00	606.21	606.21
Bk E. Abutment	2087.87	15.00	606.25	606.25

TOP OF SLAB ELEVATIONS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	14
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT #87368

SHEET NO. 5 OF 22 SHEETS



PLAN WEST APPROACH PAVEMENT

NORTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. App. Pvmt.	1906.67	-16.42	603.59
A	1916.67	-16.42	603.71
B	1926.67	-16.42	603.85
Bk W. Abutment	1936.67	-16.42	603.99

NORTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. App. Pvmt.	1904.12	-12.00	603.85
A	1914.12	-12.00	603.91
B	1924.12	-12.00	603.98
Bk W. Abutment	1934.12	-12.00	604.06

PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. App. Pvmt.	1897.19	0.00	604.06
A	1907.19	0.00	604.10
B	1917.19	0.00	604.14
Bk W. Abutment	1927.19	0.00	604.20

SOUTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End W. App. Pvmt.	1890.26	12.00	603.81
A	1900.26	12.00	603.85
B	1910.26	12.00	603.91
Bk W. Abutment	1920.26	12.00	603.98

SOUTH CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End W. App. Pvmt.	1887.71	16.42	603.53
A	1897.71	16.42	603.64
B	1907.71	16.42	603.75
Bk W. Abutment	1917.71	16.42	603.88

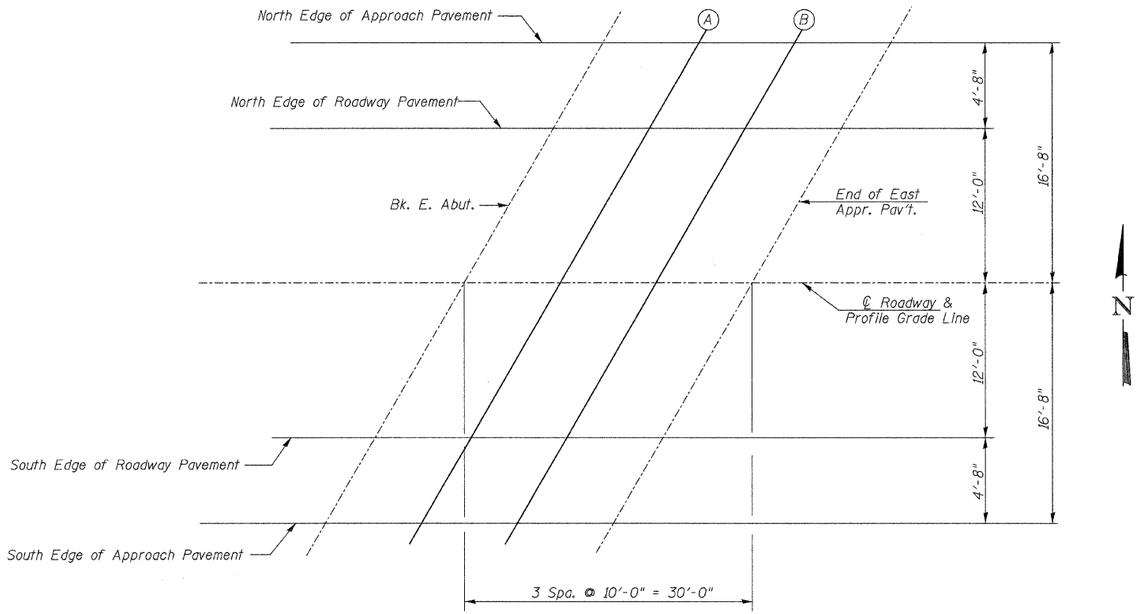
TOP OF WEST APPROACH PAVEMENT ELEVATIONS

2498B005

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	15
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

SHEET NO. 6 OF 22 SHEETS

*05-00626-00-BR CONTRACT *87368



PLAN EAST APPROACH PAVEMENT

NORTH EDGE OF APPROACH PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	2106.15	-16.67	606.65
A	2116.15	-16.67	606.80
B	2126.15	-16.67	606.96
End E. App. Pvmt.	2136.15	-16.67	607.17

NORTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	2103.46	-12.00	606.67
A	2113.46	-12.00	606.89
B	2123.46	-12.00	607.13
End E. App. Pvmt.	2133.46	-12.00	607.38

PROFILE GRADE LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	2096.53	0.00	606.69
A	2106.53	0.00	606.93
B	2116.53	0.00	607.17
End E. App. Pvmt.	2126.53	0.00	607.43

SOUTH EDGE OF ROADWAY PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	2089.60	12.00	606.35
A	2099.60	12.00	606.56
B	2109.60	12.00	606.78
End E. App. Pvmt.	2119.60	12.00	607.01

SOUTH EDGE OF APPROACH PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk E. Abutment	2086.91	16.67	606.20
A	2096.91	16.67	606.34
B	2106.91	16.67	606.50
End E. App. Pvmt.	2116.91	16.67	606.65

TOP OF EAST APPROACH PAVEMENT ELEVATIONS

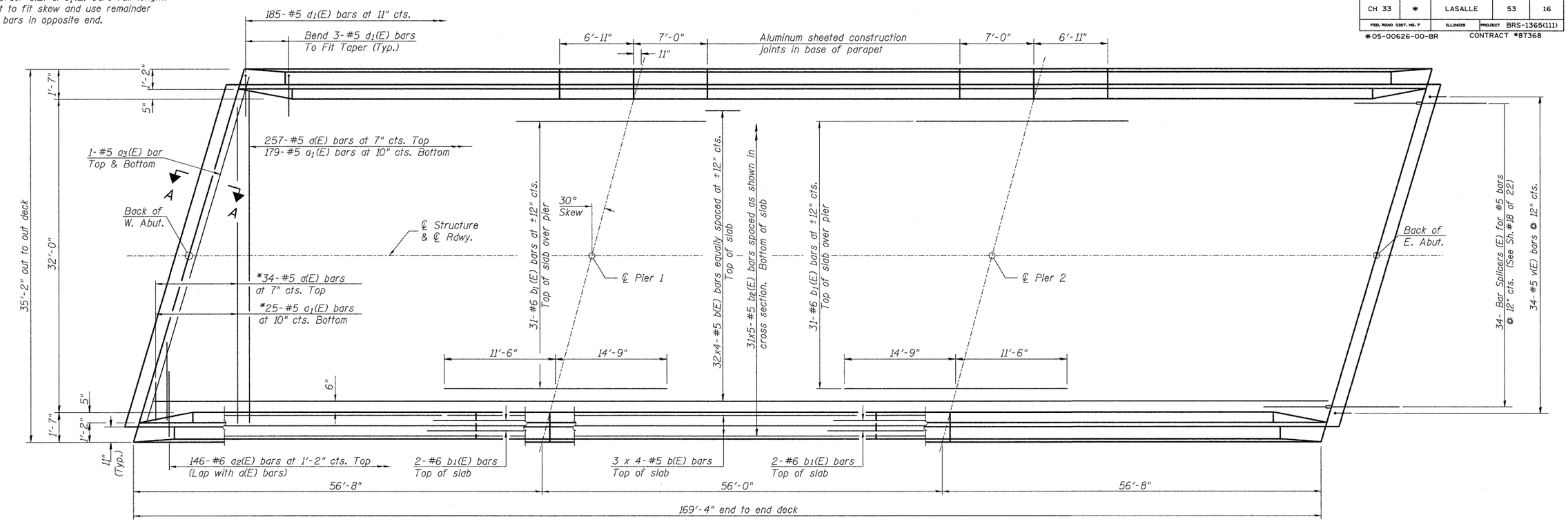
2498B006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	16
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

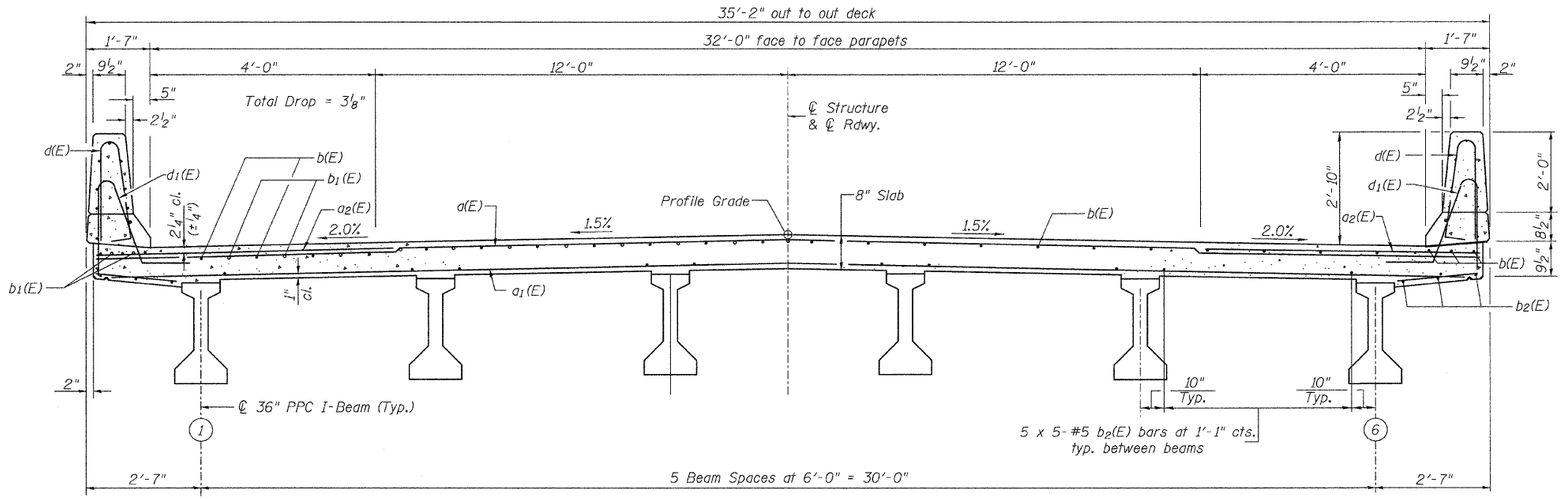
*05-00626-00-BR CONTRACT #87368

SHEET NO. 7 OF 22 SHEETS

* Order a(E) & a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PLAN



NEAR PIER NEAR MIDSPAN

CROSS SECTION
(Looking East)

MIN. BAR LAP
#5 = 1'-8" (Longitudinal)

Notes:
See sheet 8 of 22 for superstructure details and Bill of Material.
For Section A-A and diaphragm details see sheet 9 of 22.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheet 8 of 22 for parapet reinforcement.

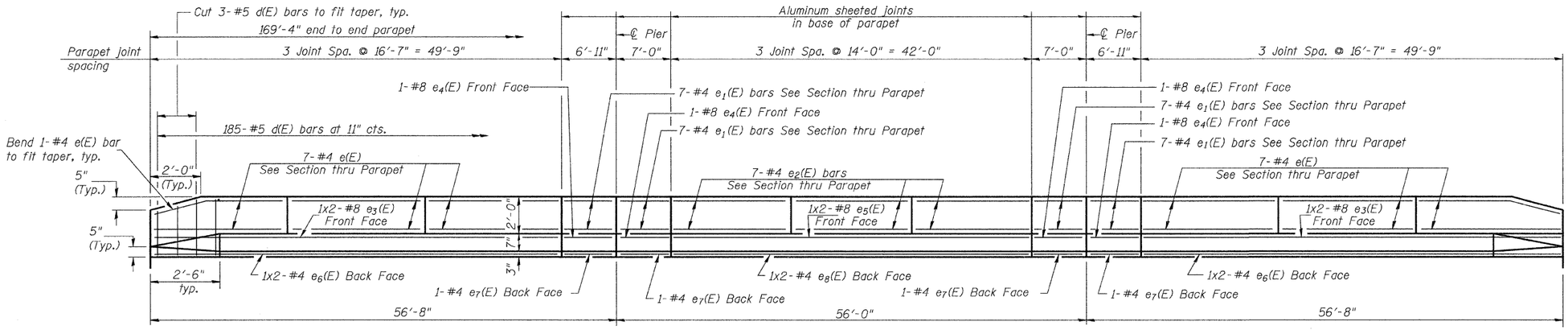
SUPERSTRUCTURE

2498B007

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	17
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368

SHEET NO. 8 OF 22 SHEETS



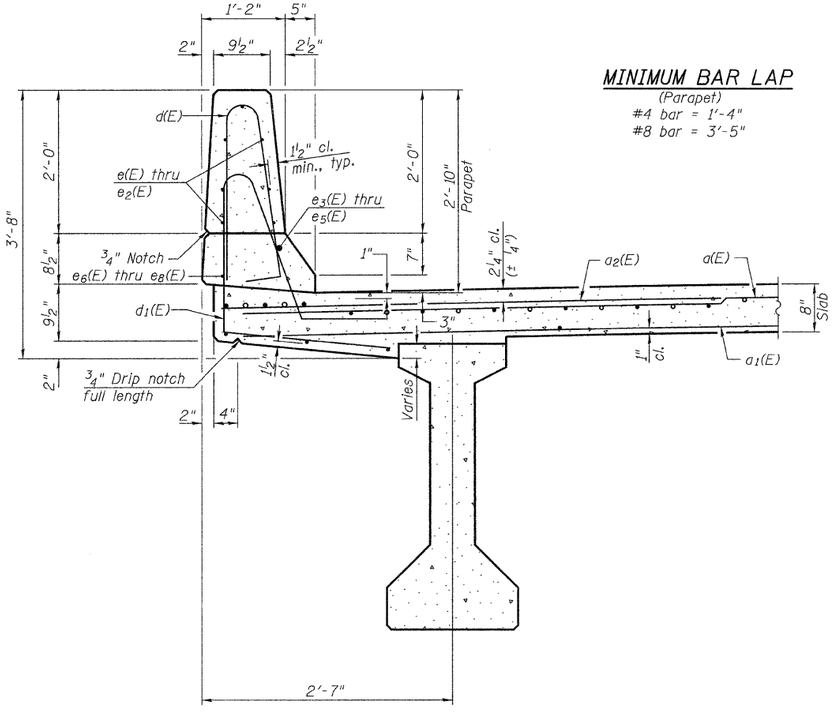
INSIDE ELEVATION OF PARAPET

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	291	#5	34'-7"	
a_1(E)	204	#5	33'-7"	
a_2(E)	292	#6	6'-0"	
a_3(E)	4	#5	39'-11"	
b(E)	152	#5	43'-7"	
b_1(E)	70	#6	26'-3"	
b_2(E)	155	#5	35'-2"	
d(E)	370	#5	5'-7"	
d_1(E)	370	#5	7'-4"	
e(E)	84	#4	16'-4"	
e_1(E)	56	#4	6'-8"	
e_2(E)	42	#4	13'-9"	
e_3(E)	8	#8	26'-6"	
e_4(E)	8	#8	6'-8"	
e_5(E)	4	#8	22'-7"	
e_6(E)	8	#4	25'-5"	
e_7(E)	8	#4	6'-8"	
e_8(E)	4	#4	21'-7"	
m(E)	4	#6	38'-2"	
m_1(E)	6	#6	40'-4"	
m_2(E)	24	#6	9'-1"	
m_3(E)	30	#6	4'-11"	
m_4(E)	4	#6	1'-10"	
m_5(E)	40	#4	5'-11"	
m_6(E)	12	#8	5'-6"	
s(E)	72	#5	5'-10"	
s_1(E)	62	#4	10'-2"	
s_2(E)	50	#4	9'-9"	
v(E)	68	#5	3'-4"	
(1) Reinforcement Bars, Epoxy Coated			POUND	46,420
Concrete Superstructure			CU YD	230.1

(1) See Special Provisions

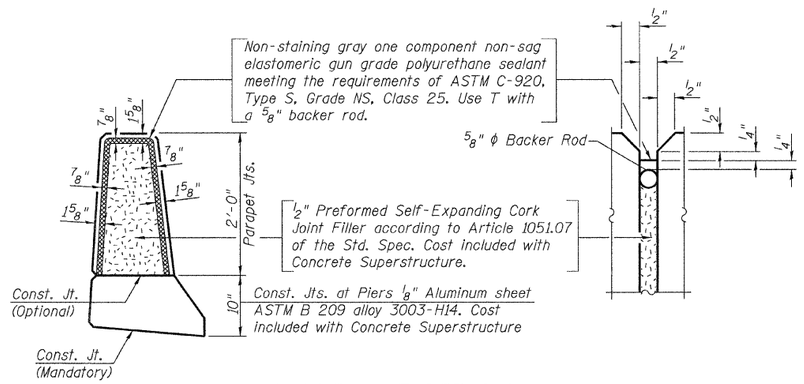
Bars indicated thus 3x2-#5 etc. indicates 3 lines of bars with 2 lengths per line.



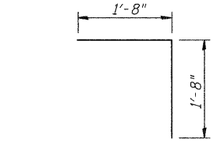
SECTION THRU PARAPET

MINIMUM BAR LAP

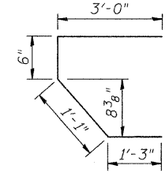
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



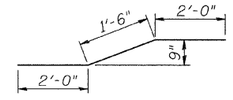
PARAPET JOINT DETAILS



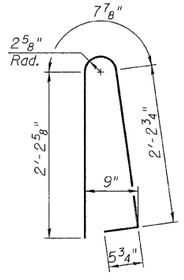
BAR v(E)



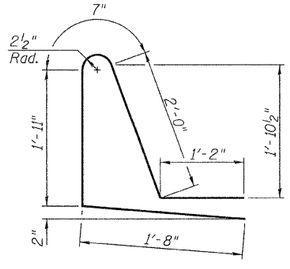
BAR s(E)



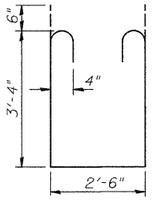
BAR m_6(E)



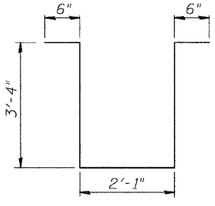
BAR d(E)



BAR d_1(E)



BAR s_1(E)



BAR s_2(E)

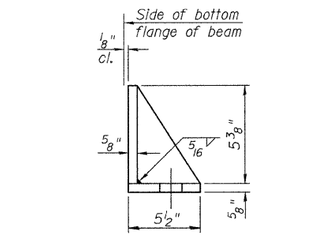
SUPERSTRUCTURE DETAILS

2498B008

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		

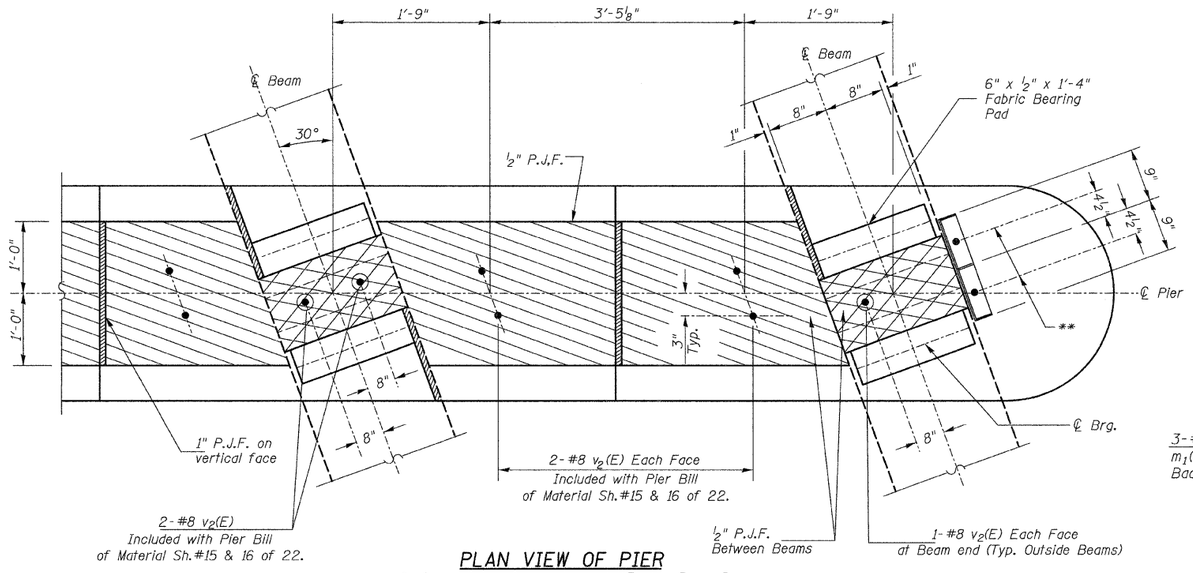
SHEET NO. 9 OF 22 SHEETS

*05-00626-00-BR CONTRACT #87368



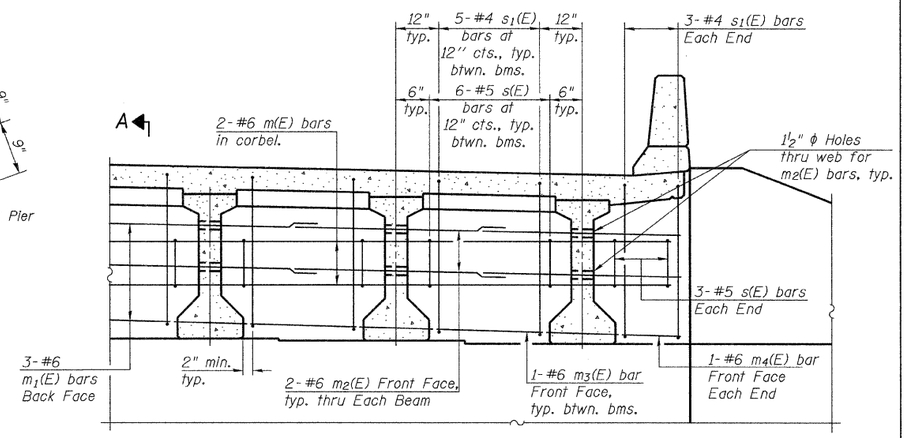
SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. (4 Req'd.)



PLAN VIEW OF PIER

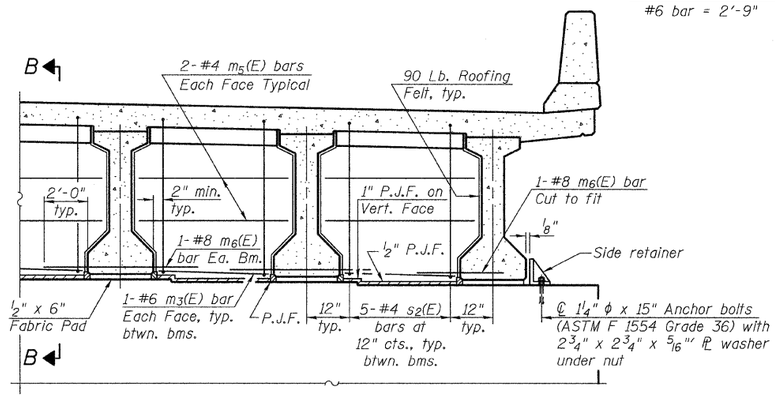
** ℄ 1 1/4" x 15" Anchor Bolts with 2 3/4" x 2 3/4" x 5/16" washer under nut. Holes to be drilled after beams are in place.



DIAPHRAGM ELEVATION AT ABUTMENT

MIN. BAR LAP

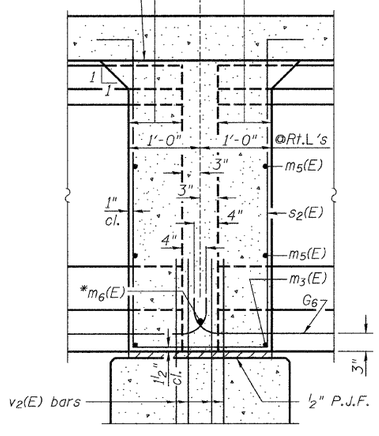
#6 bar = 2'-9"



DIAPHRAGM AT PIER

Pour diaphragm flush with bott. of slab. Concrete in slab above this line shall be placed not less than 45 min. nor more than 90 min. after diaphragm has been poured.

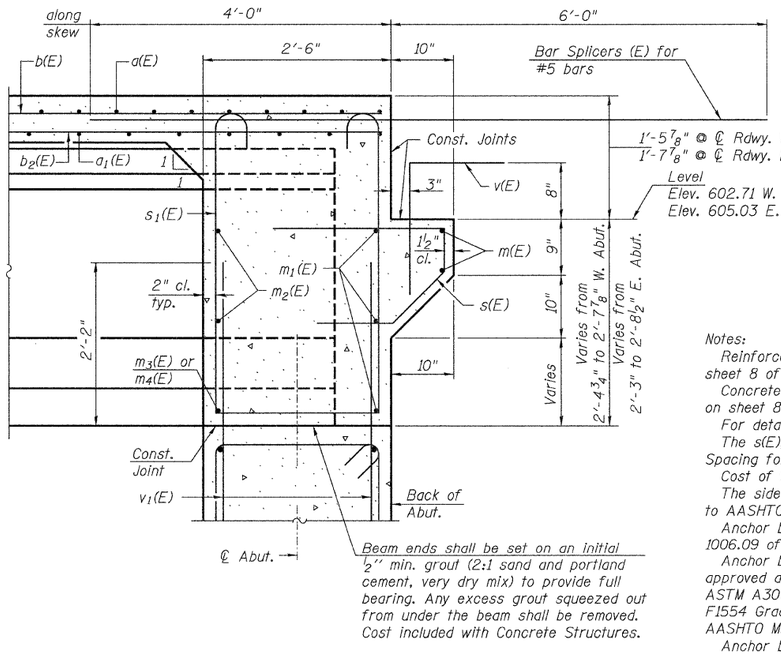
Roofing felt shall be bonded to side of beam embedded into diaphragm.



SECTION B-B

Dimensions along ℄ of beam, except as shown.

* Tightly fasten the #8 bars together with No. 9 wire ties.



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 8 of 22.

Concrete in diaphragm is included with Concrete Superstructure on sheet 8 of 22.

For details of bars s(E), s1(E) and s2(E) see sheet 8 of 22.

The s(E), s1(E) and s2(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

Cost of 90 Lb. roofing felt is included with Concrete Superstructure.

The side retainer shall be galvanized after shop fabrication according to AASHTO M 111.

Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for side retainers may be either cast in place or installed in holes drilled after the supporting member is in place and prior to pouring the deck.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Cost of side retainers shall be included with Concrete Structures.

DIAPHRAGM AND BEARING PAD DETAILS

2498B009

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

SHEET NO. 10 OF 22 SHEETS

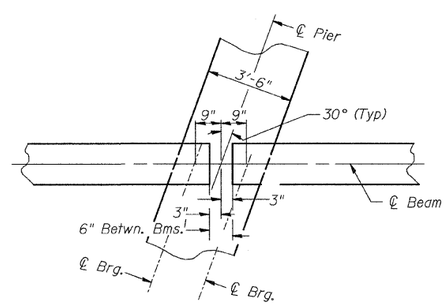
*05-00626-00-BR CONTRACT #87368

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I	(in^4)	48,648	-	48,648
I'	(in^4)	291,149	-	291,149
S_b	(in^3)	3,165	-	3,165
S_b'	(in^3)	6,000	-	6,000
S_t	(in^3)	2,358	-	2,358
S_t'	(in^3)	25,964	-	25,964
DC1	(k/')	1.00	-	1.00
M_{DC1}	('k)	381	-	392
DC2	(k/')	0.15	0.15	0.15
M_{DC2}	('k)	37	46	13
DW	(k/')	0.30	0.30	0.30
M_{DW}	('k)	73	92	26
$M_{L + Imp}$	('k)	600	454	485

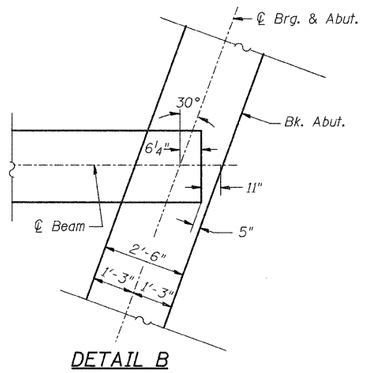
INTERIOR BEAM REACTION TABLE				
		Abut.	Pier 1 Span 1 Pier 2 Span 3	Pier 1 Span 2 Pier 2 Span 2
R_{DC1}	(k)	27.6	27.6	28.0
* R_{DC2}	(k)	3.3	4.6	4.6
* R_{DW}	(k)	6.6	9.2	9.2
* $R_{L + Imp}$	(k)	49.1	44.1	44.1
R_{Total}	(k)	86.6	85.5	85.9

* The total R_{DC2}, R_{DW} and $R_{L + Imp}$ are assumed to be distributed evenly to each bearing line at a pier regardless of the span ratios. The bearing design at a pier is based on the maximum reactions of either span.

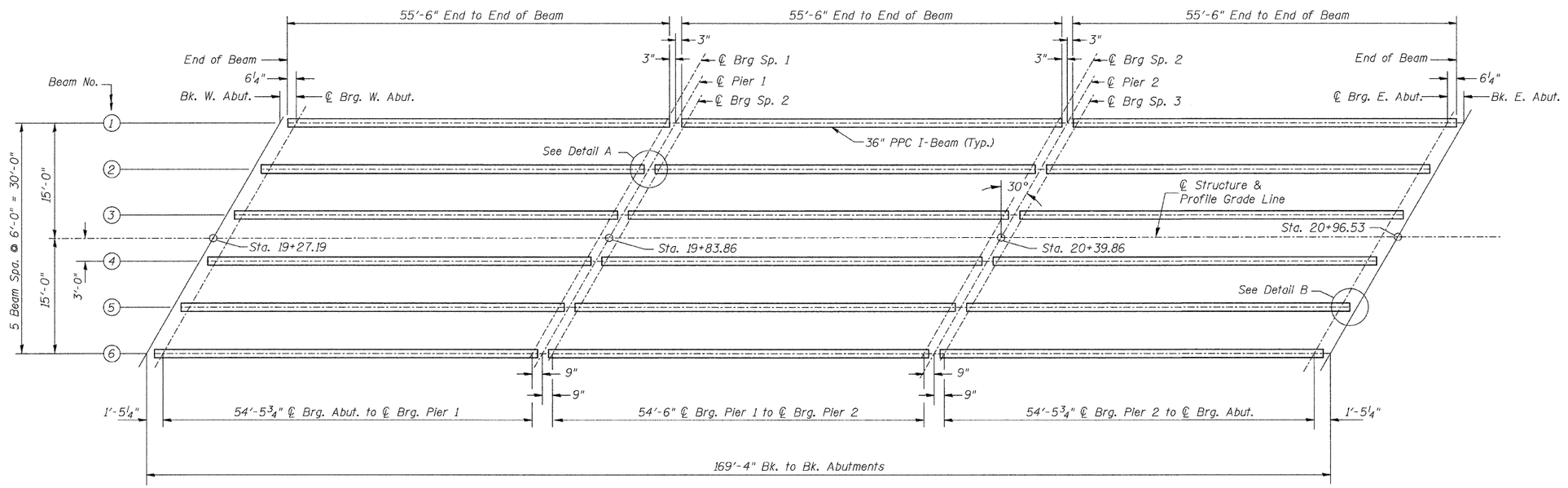
I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_b': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_t: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
S_t': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft).
$M_{L + Imp}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



DETAIL A
(Typical @ Piers)



DETAIL B
(Typical @ Abutments)



FRAMING PLAN

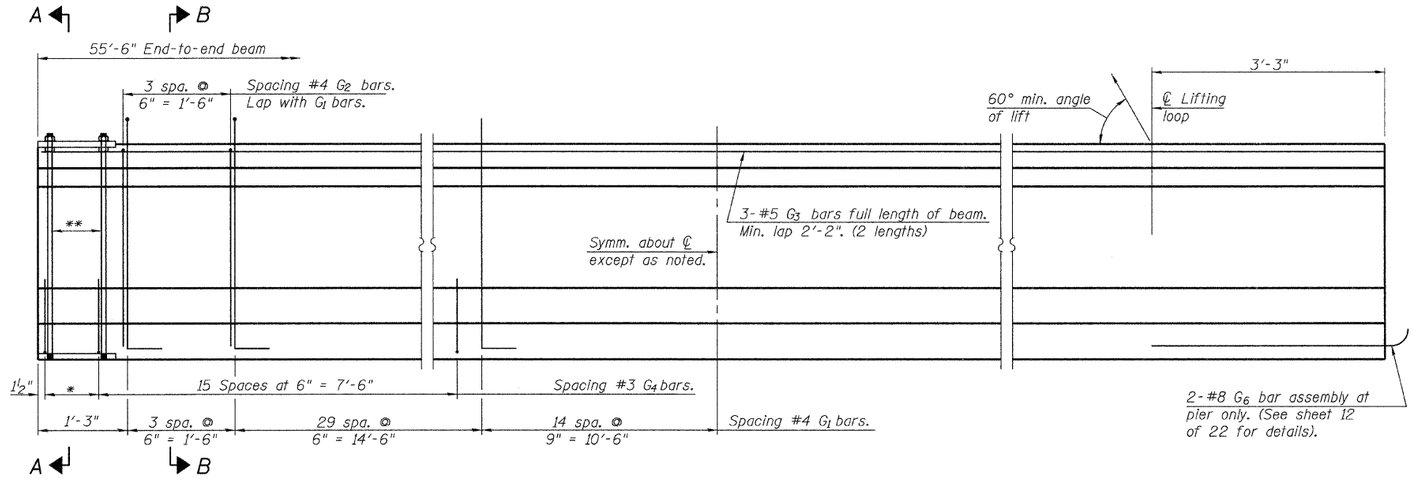
FRAMING PLAN

2498B010

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	20
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		

SHEET NO. 11 OF 22 SHEETS

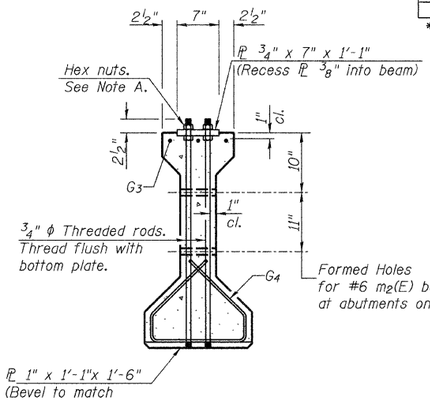
*05-00626-00-BR CONTRACT *87368



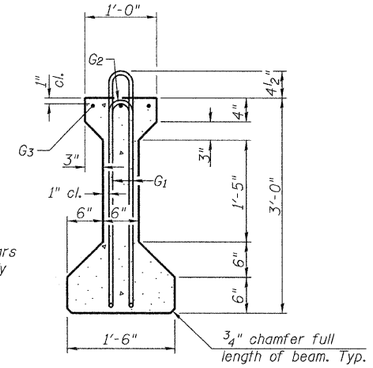
*3 spaces at 3" = 9".
**4-¾" ϕ threaded dowel rods at 3" cts., Each Face.

ELEVATION OF BEAM
(Showing reinforcement & dimensions)

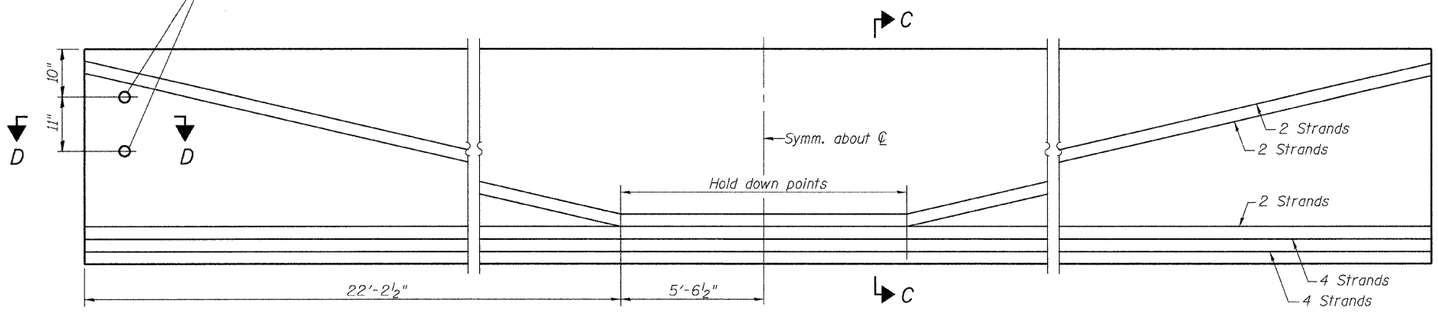
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



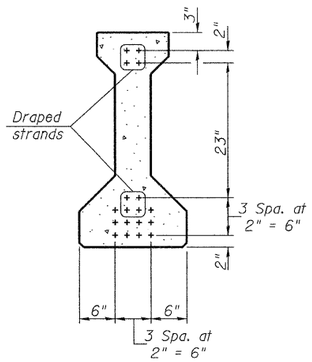
SECTION A-A



SECTION B-B



ELEVATION OF BEAM
(Showing prestressing steel)



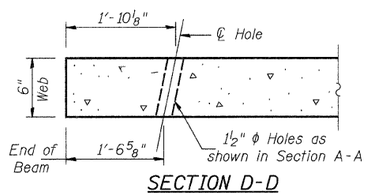
SECTION C-C

***BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G1	93	#4	7'-5"	
G2	8	#4	5'-8"	
G3	6	#5	28'-9"	
G4	38	#3	4'-1"	
G6	****2	#8	3'-9"	

***For information only
**** 4 Bars for Center Span

Notes:
See sheet 12 of 22 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.



SECTION D-D

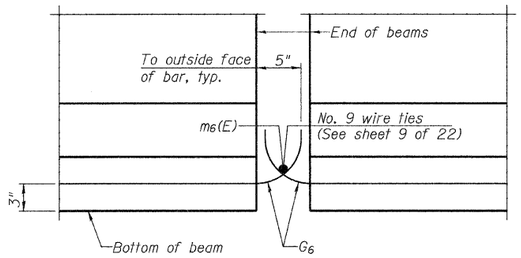
PPC I-BEAMS

2498B011

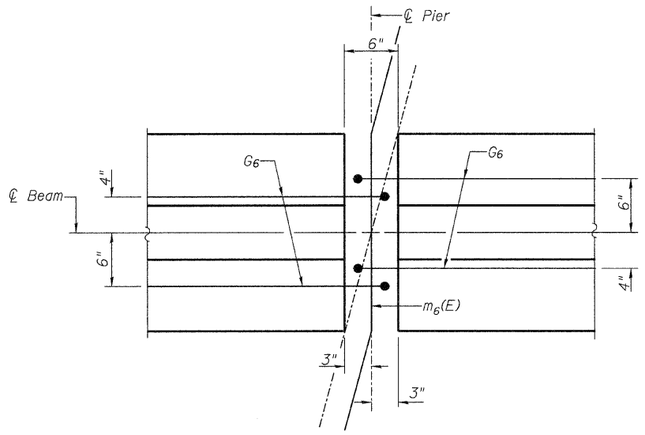
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	21
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT *87368

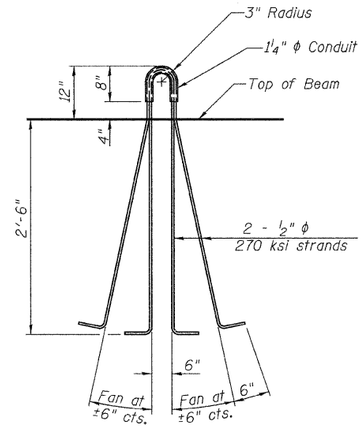
SHEET NO. 12 OF 22 SHEETS



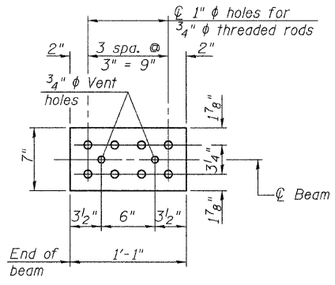
ELEVATION OF BEAM AT PIER



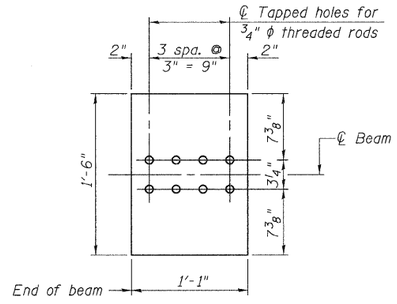
PLAN OF BEAM AT PIER



LIFTING LOOP DETAIL



TOP PLATE



BOTTOM PLATE

NOTES

Inserts for ¾" ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).

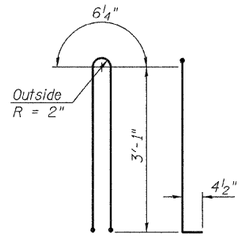
A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

Cut G6 bars when necessary to maintain 1½" clearance.

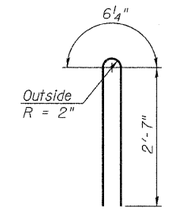
The top and bottom plates shall be AASHTO M270 Grade 50.

The bottom plates and studs shall be galvanized according to AASHTO M111.

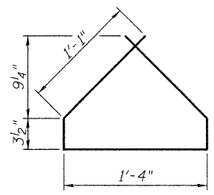
Threaded rods shall be ASTM F 1554 Grade 55.



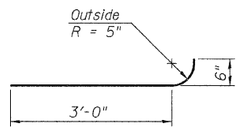
BAR G1



BAR G2



BAR G4



BAR G6

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	FOOT	999

PPC I-BEAM DETAILS

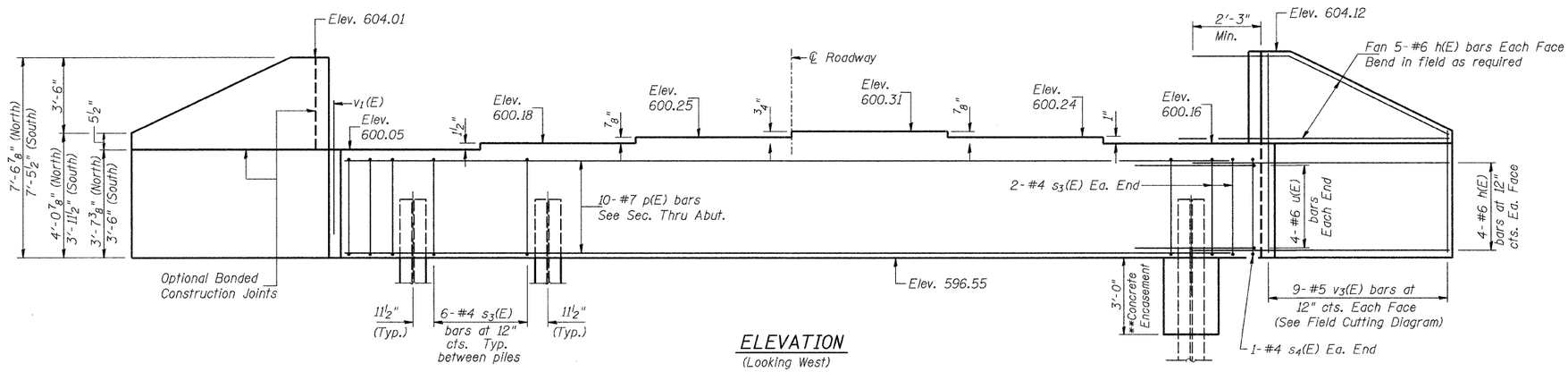
24988012

Notes:
Pour steps monolithically with cap.
All edges shall have standard $\frac{3}{4}$" chamfer.
See Sh 17 of 22 for pile details.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

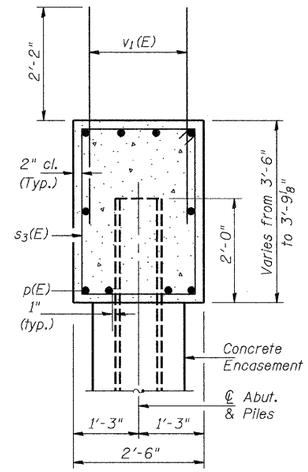
SHEET NO. 13 OF 22 SHEETS

*05-00626-00-BR CONTRACT #87368

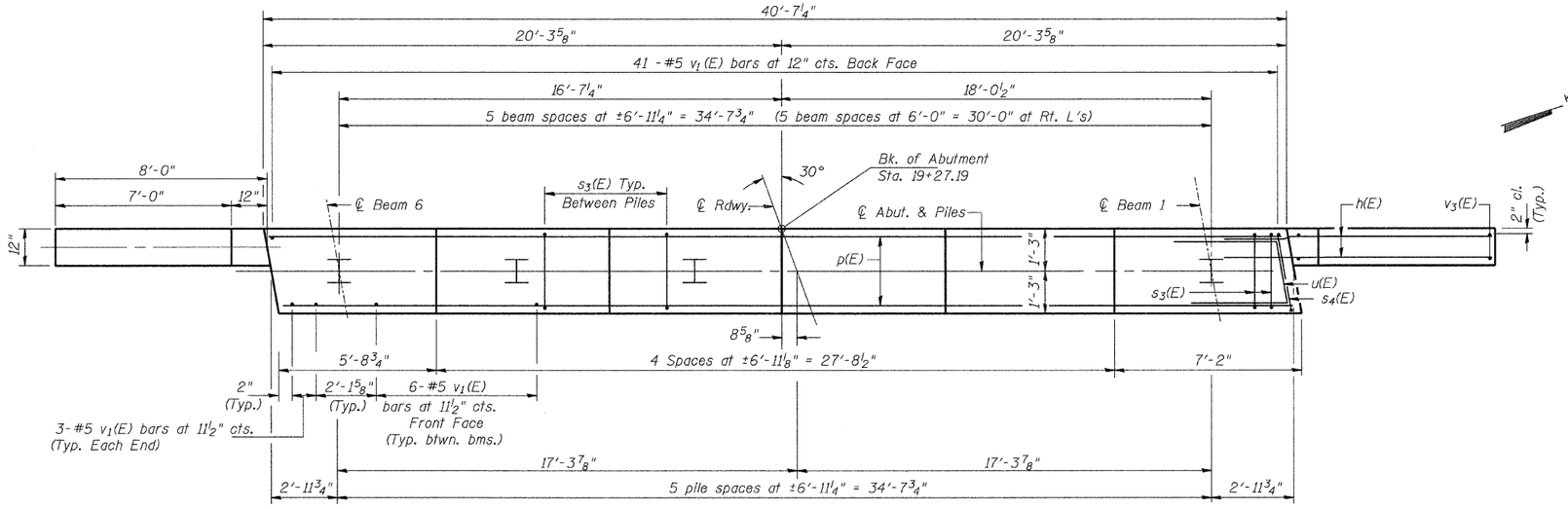


ELEVATION
(Looking West)

**See Sheet 17 of 22 for details.



SEC. THRU ABUT.
(At Right Angles)



PLAN

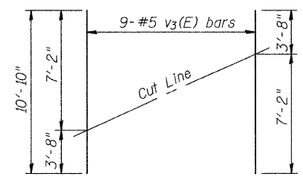
WEST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#6	10'-3"	
p(E)	10	#7	40'-4"	
s3(E)	34	#4	11'-5"	
s4(E)	2	#4	12'-1"	
u(E)	8	#6	10'-5"	
v1(E)	77	#5	4'-4"	
v3(E)	18	#5	10'-10"	
Concrete Structures			CU YD	17.3
(1) Reinforcement Bars, Epoxy Coated			POUND	2,330
Structure Excavation			CU YD	15
Furnishing Steel Piles HP10x42			FOOT	125
Test Pile Steel HP10x42			EACH	1
Pile Shoes			EACH	6
Driving Piles			FOOT	125
Concrete Encasement			CU YD	2.1

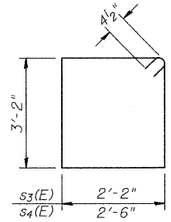
(1) See Special Provisions

PILE DATA

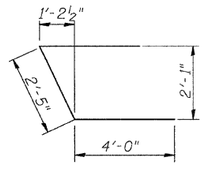
Type & Size: Steel HP10x42 w/ Pile Shoes
Nominal Required Bearing: 335 kips
Factored Resistance Available: 167 kips
Est. Length: 25'
No. Required: 6 (Includes 1 test pile)



FIELD CUTTING DIAGRAM
Order v3(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s3(E) & s4(E)



BAR u(E)

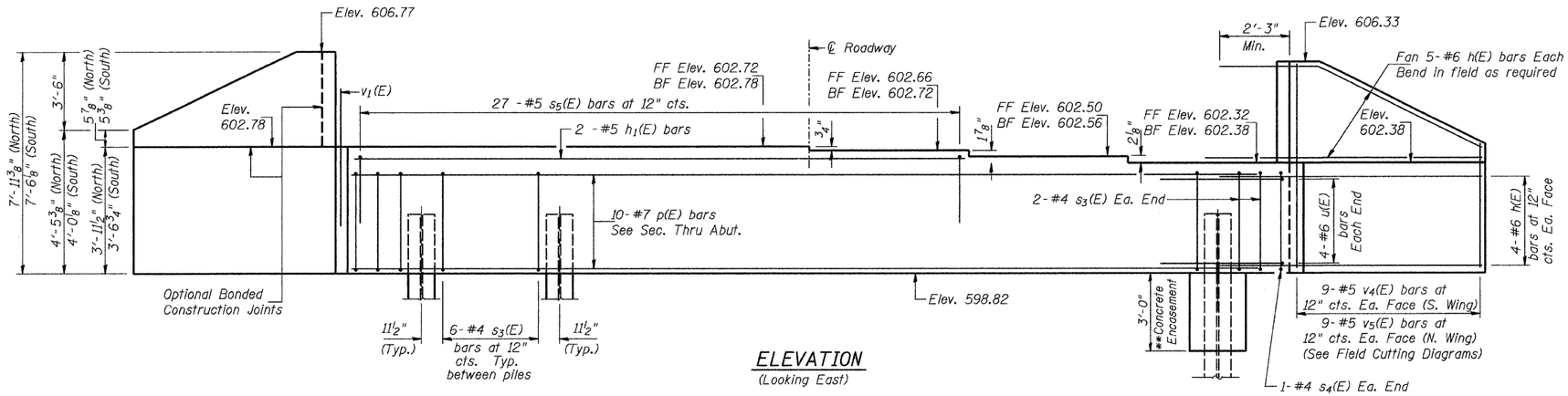
WEST ABUTMENT

2498B013

Notes:
Pour steps monolithically with cap.
All edges shall have standard $\frac{3}{4}$" chamfer.
See Sh 17 of 22 for pile details.

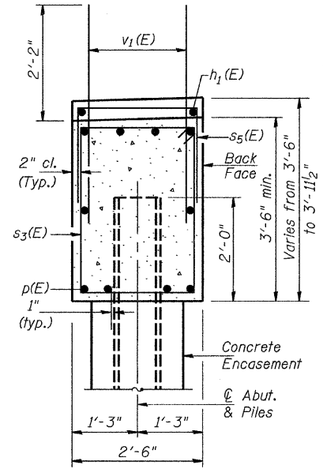
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	23
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT *87368		

SHEET NO. 14 OF 22 SHEETS

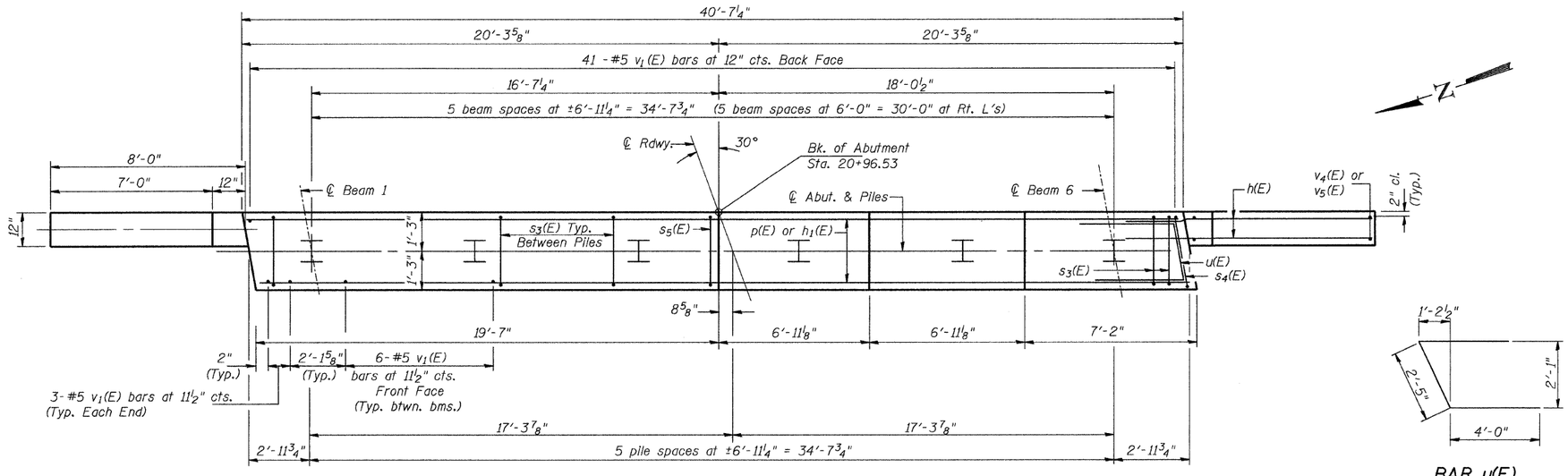


ELEVATION
(Looking East)

**See Sheet 17 of 22 for details.



SEC. THRU ABUT.
(At Right Angles)



PLAN

BAR u(E)

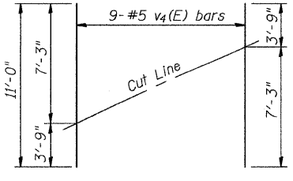
EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	36	#6	10'-3"	
h1(E)	2	#4	26'-3"	
p(E)	10	#7	40'-4"	
s3(E)	34	#4	11'-5"	
s4(E)	2	#4	12'-1"	
s5(E)	27	#4	6'-6"	
u(E)	8	#6	10'-5"	
v1(E)	77	#5	4'-4"	
v4(E)	9	#5	11'-0"	
v5(E)	9	#5	11'-10	
Concrete Structures			CU YD	18.2
(1) Reinforcement Bars, Epoxy Coated			POUND	2,490
Structure Excavation			CU YD	65
Furnishing Steel Piles HP10x42			FOOT	120
Test Pile Steel HP10x42			EACH	1
Pile Shoes			EACH	6
Driving Piles			FOOT	120
Concrete Encasement			CU YD	2.1

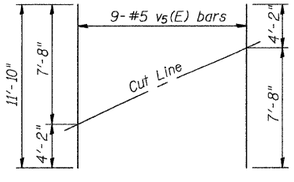
(1) See Special Provisions

PILE DATA

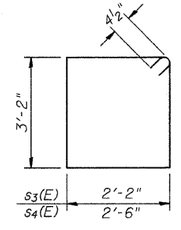
Type & Size: Steel HP10x42 w/ Pile Shoes
Nominal Required Bearing: 335 kips
Factored Resistance Available: 167 kips
Est. Length: 24'
No. Required: 6 (Includes 1 test pile)



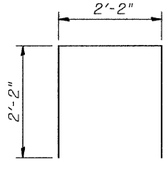
FIELD CUTTING DIAGRAM
Order v4(E) full length. Cut as shown and use remainder of bars in opposite face.



FIELD CUTTING DIAGRAM
Order v5(E) full length. Cut as shown and use remainder of bars in opposite face.



BARS s3(E) & s4(E)



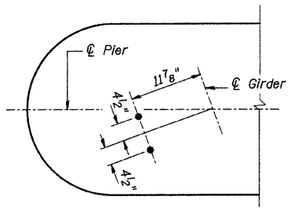
BAR s5(E)

EAST ABUTMENT

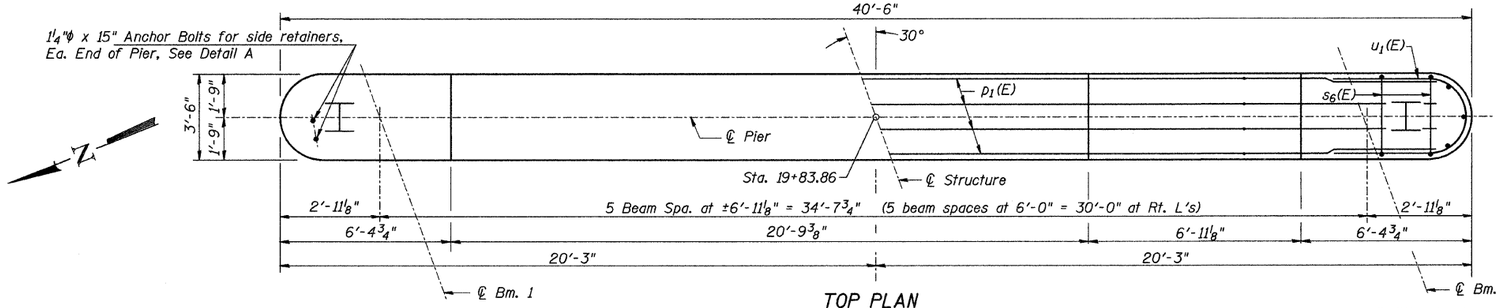
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	24
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

*05-00626-00-BR CONTRACT #87368

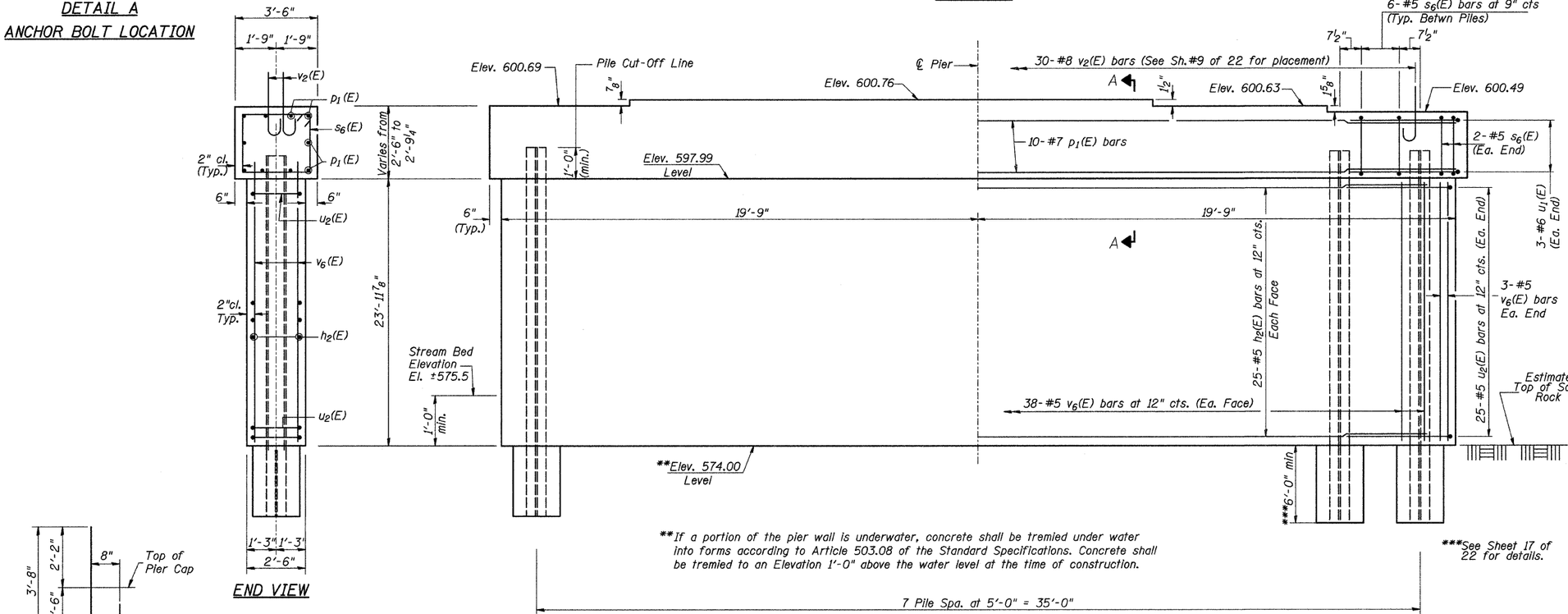
Notes:
All edges shall have standard $\frac{3}{4}$" chamfer.
Pour steps monolithically with cap.
Space reinforcement to miss anchor bolts.
See Sh 17 of 22 for pile details.



DETAIL A
ANCHOR BOLT LOCATION



TOP PLAN

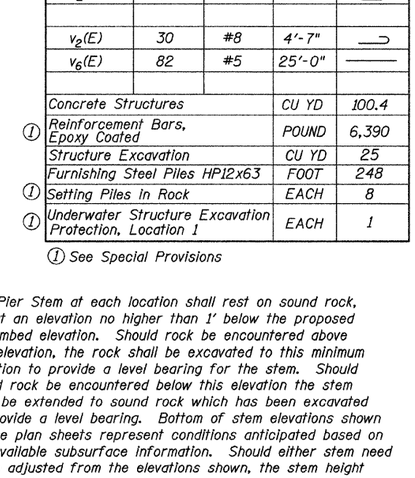


**If a portion of the pier wall is underwater, concrete shall be tremied under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an Elevation 1'-0" above the water level at the time of construction.

***See Sheet 17 of 22 for details.

7 Pile Spa. at 5'-0" = 35'-0"

ELEVATION
(Looking East)



SECTION A-A

PIER #1
BILL OF MATERIAL

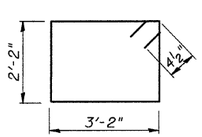
BAR	NO.	SIZE	LENGTH	SHAPE
h_2(E)	50	#5	37'-0"	———
p_1(E)	10	#7	37'-0"	———
s_6(E)	46	#5	11'-5"	□
u_1(E)	6	#6	12'-0"	⊂
u_2(E)	50	#5	10'-5"	⊂
v_2(E)	30	#8	4'-7"	⊃
v_6(E)	82	#5	25'-0"	———
Concrete Structures			CU YD	100.4
① Reinforcement Bars, Epoxy Coated			POUND	6,390
Structure Excavation			CU YD	25
Furnishing Steel Piles HP12x63			FOOT	248
① Setting Piles in Rock			EACH	8
① Underwater Structure Excavation Protection, Location 1			EACH	1

① See Special Provisions

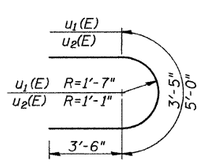
BAR v_2(E)

PILE DATA

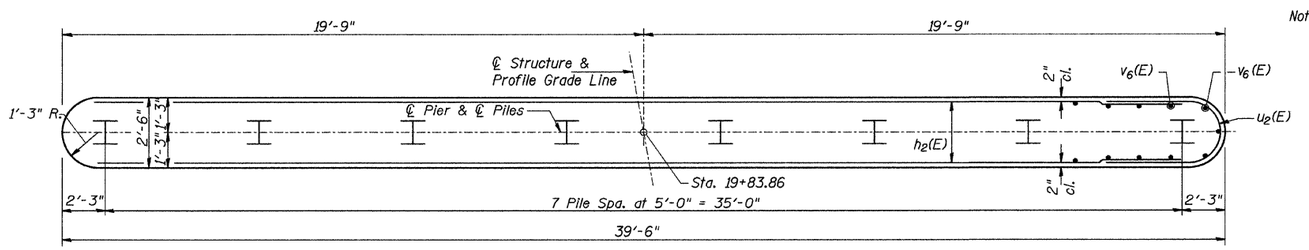
Type & Size: Steel HP12x63
Nominal Required Bearing: Set in Rock (497 kips)
Factored Resistance Available: (249 kips)
Est. Length: 31'
No. Required: 8



BAR s_6(E)



BAR u_1(E) & u_2(E)



FOOTING PLAN

Note:
The Pier Stem at each location shall rest on sound rock, but at an elevation no higher than 1' below the proposed streambed elevation. Should rock be encountered above this elevation, the rock shall be excavated to this minimum elevation to provide a level bearing for the stem. Should sound rock be encountered below this elevation the stem shall be extended to sound rock which has been excavated to provide a level bearing. Bottom of stem elevations shown on the plan sheets represent conditions anticipated based on the available subsurface information. Should either stem need to be adjusted from the elevations shown, the stem height and effected reinforcement lengths and/or number of bars required shall be adjusted accordingly.

PIER #1

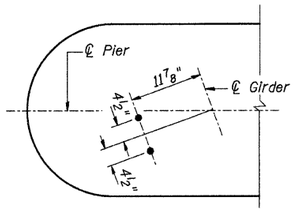
2498B015

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	25
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368

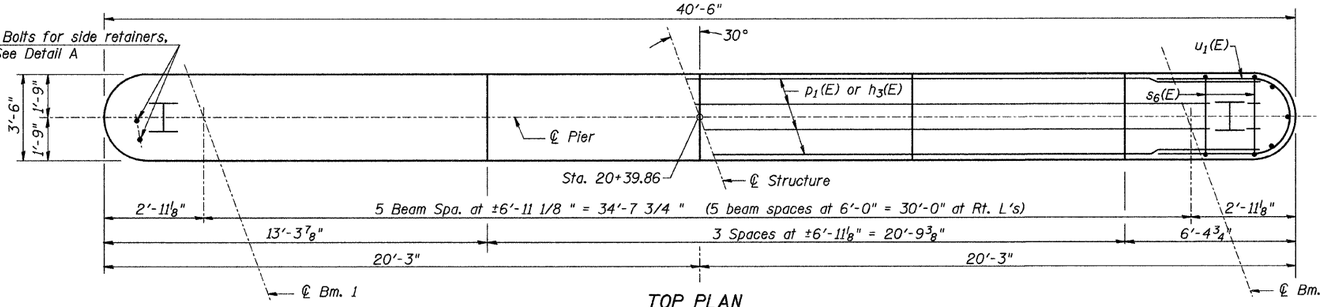
SHEET NO. 16 OF 22 SHEETS

Notes:
All edges shall have standard $\frac{3}{4}$" chamfer.
Pour steps monolithically with cap.
Space reinforcement to miss anchor bolts.
See Sh 17 of 22 for pile details.

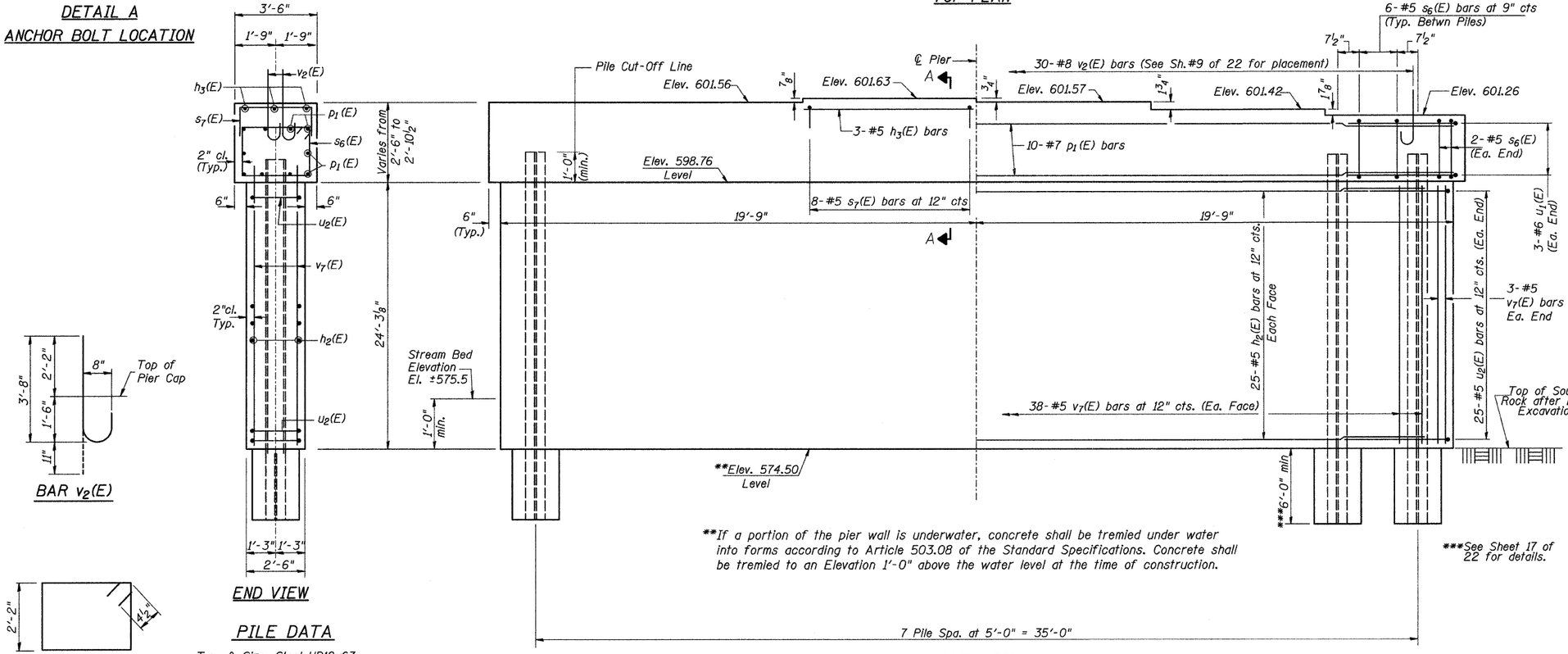


DETAIL A
ANCHOR BOLT LOCATION

1 1/4"ϕ x 15" Anchor Bolts for side retainers, Ea. End of Pier, See Detail A



TOP PLAN



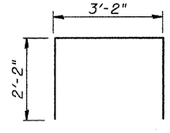
ELEVATION
(Looking East)

**If a portion of the pier wall is underwater, concrete shall be tremied under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an Elevation 1'-0" above the water level at the time of construction.

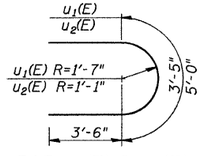
***See Sheet 17 of 22 for details.

BAR v_2(E)

BAR s_6(E)

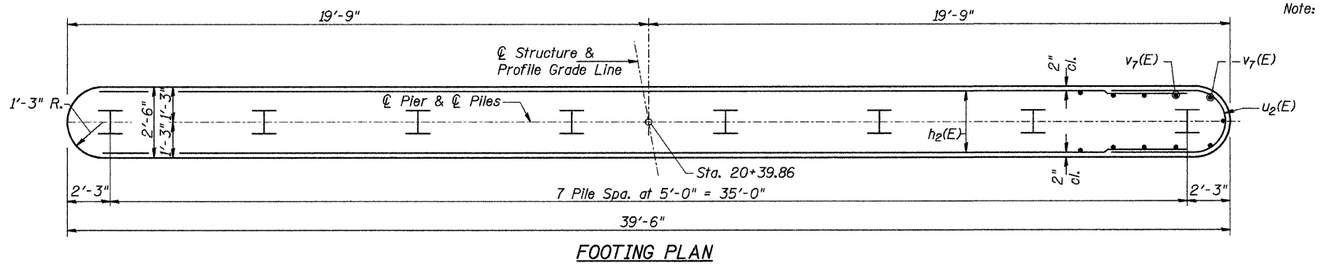


BAR s_7(E)



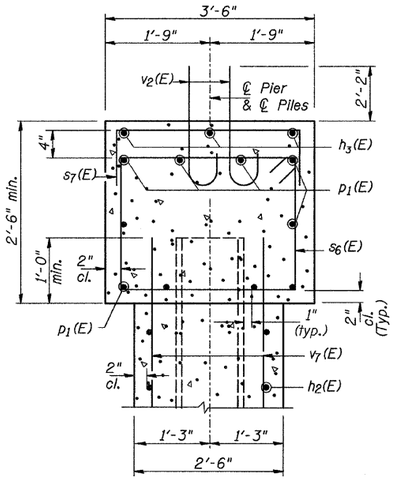
BAR u_1(E) & u_2(E)

PILE DATA
Type & Size: Steel HP12x63
Nominal Required Bearing: Set in Rock (497 kips)
Factored Resistance Available: (249 kips)
Est. Length: 32'
No. Required: 8



FOOTING PLAN

Note:
The Pier Stem at each location shall rest on sound rock, but at an elevation no higher than 1' below the proposed streambed elevation. Should rock be encountered above this elevation, the rock shall be excavated to this minimum elevation to provide a level bearing for the stem. Should sound rock be encountered below this elevation the stem shall be extended to sound rock which has been excavated to provide a level bearing. Bottom of stem elevations shown on the plan sheets represent conditions anticipated based on the available subsurface information. Should either stem need to be adjusted from the elevations shown, the stem height and effected reinforcement lengths and/or number of bars required shall be adjusted accordingly.



SECTION A-A

PIER #2 - BILL OF MATERIAL

	BAR	NO.	SIZE	LENGTH	SHAPE
	h_2(E)	50	#5	37'-0"	——
	h_3(E)	3	#5	6'-7"	——
	p_1(E)	10	#7	37'-0"	——
	s_6(E)	46	#5	11'-5"	□
	s_7(E)	8	#5	7'-6"	⊓
	u_1(E)	6	#6	12'-0"	⊂
	u_2(E)	50	#5	10'-5"	⊂
	v_2(E)	30	#8	4'-7"	⊃
	v_7(E)	82	#5	25'-3"	——
	Concrete Structures			CU YD	101.8
(1)	Reinforcement Bars, Epoxy Coated			POUND	6,500
	Rock Excavation			CU YD	10
	Structure Excavation			CU YD	20
	Furnishing Steel Piles HP12x63			FOOT	256
(1)	Setting Piles in Rock			EACH	8
(1)	Underwater Structure Excavation Protection, Location 2			EACH	1

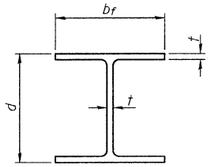
(1) See Special Provisions

PIER #2

2498B016

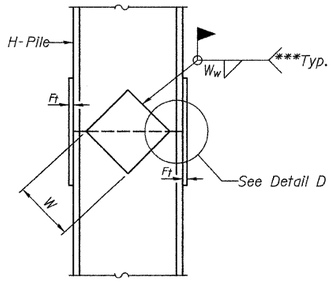
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	26
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR	CONTRACT *87368			

SHEET NO. 17 OF 22 SHEETS

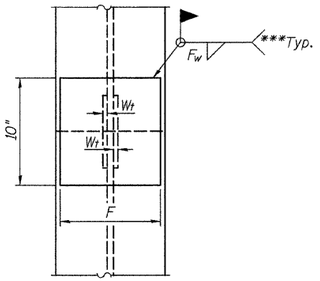


STEEL PILE TABLE

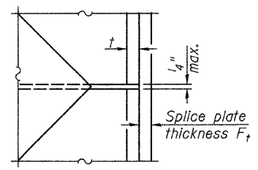
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



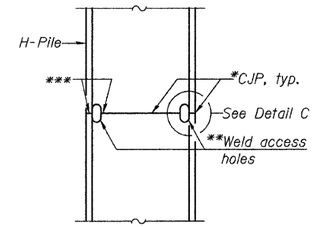
ELEVATION



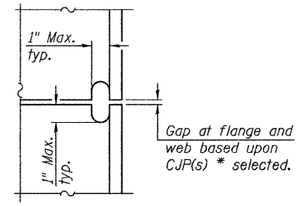
END VIEW



DETAIL D



ELEVATION



DETAIL C

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

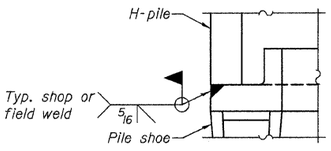
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

COMPLETE PENETRATION WELD SPLICE

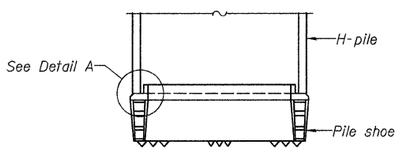
*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code - Steel.

**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code - Steel.

***Interrupt welds 1/4" from end of each pile.

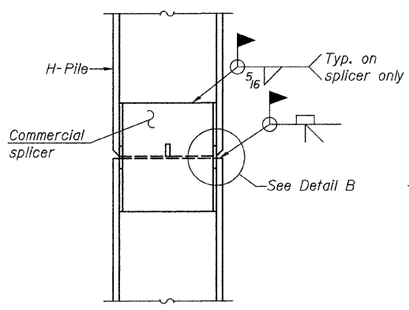


DETAIL A

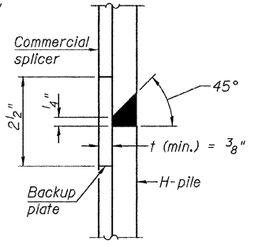


ELEVATION

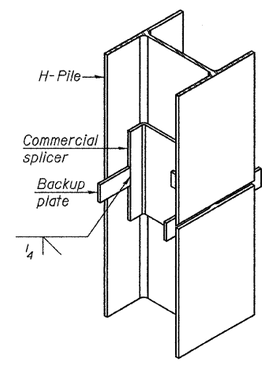
H-PILE SHOE ATTACHMENT



ELEVATION

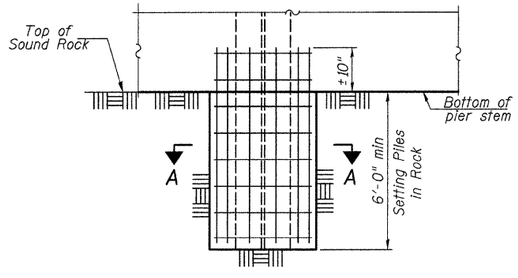


DETAIL "B"

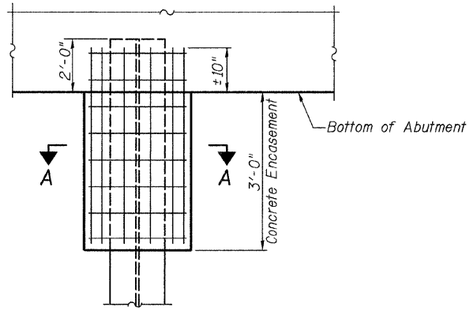


ISOMETRIC VIEW

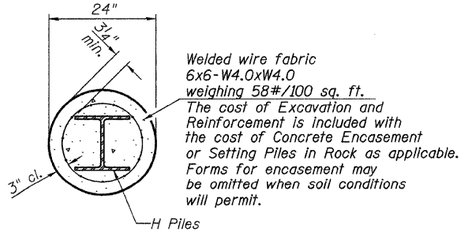
WELDED COMMERCIAL SPLICE



PIER ELEVATION



ABUTMENT ELEVATION



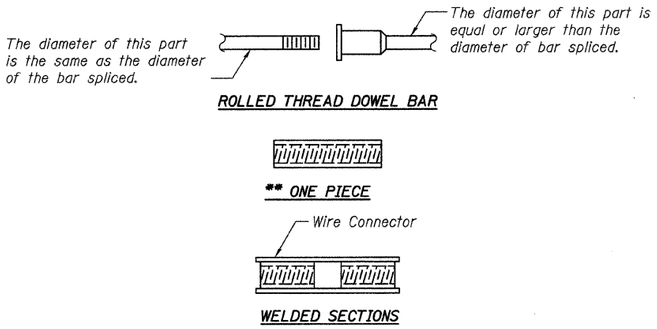
SECTION A-A

PILE ENCASEMENT

PILE DETAILS

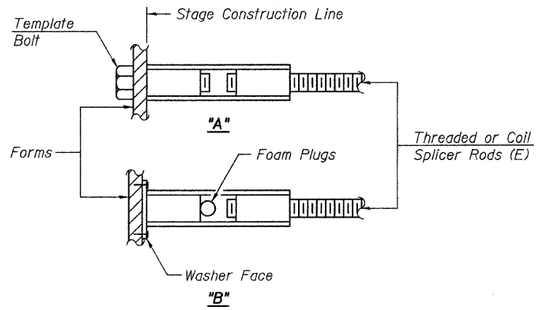
2498B017

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	27
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT *87368		



BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.

All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

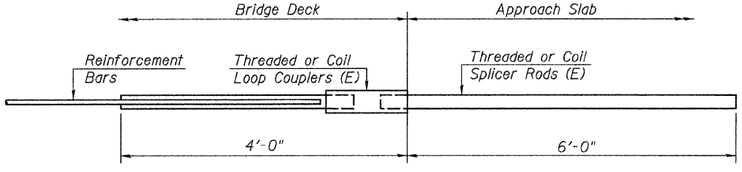
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times fy \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times fy \times A_t$

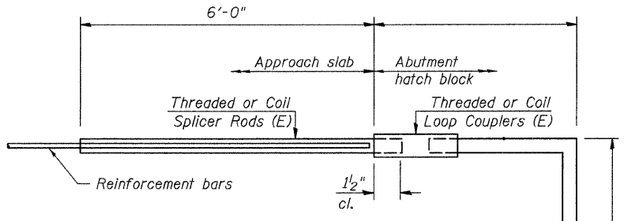
Where fy = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-0"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



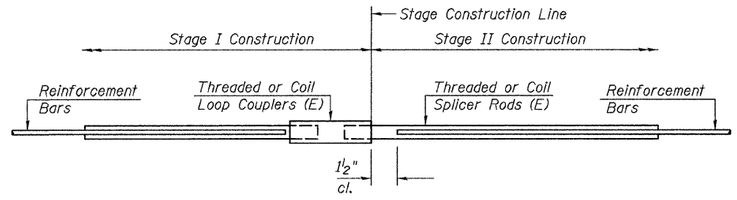
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 68



FOR PILE BENT ABUTMENTS

Bar Splicer for #5 bar
Min. Capacity = 23.0 kips - tension
Min. Pull-out Strength = 12.3 kips - tension
No. Required = 0



STANDARD

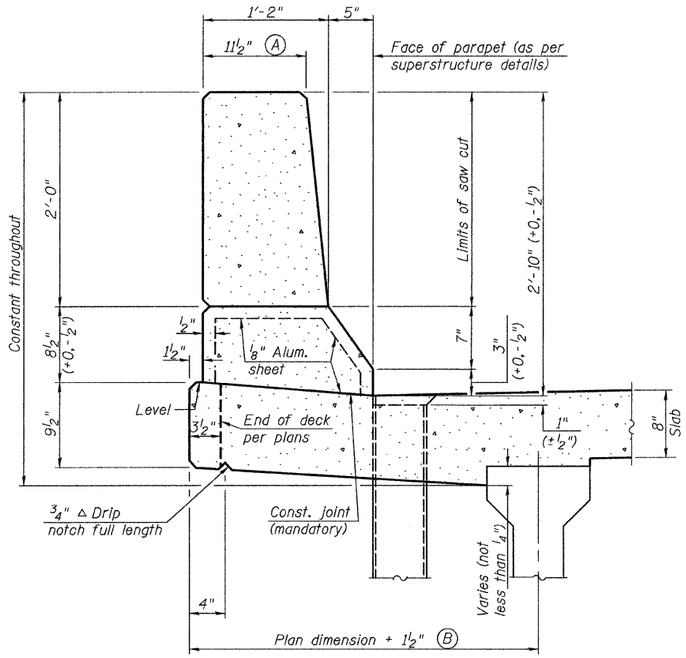
Bar Size	No. Assemblies Required	Location

BAR SPLICER ASSEMBLY DETAILS

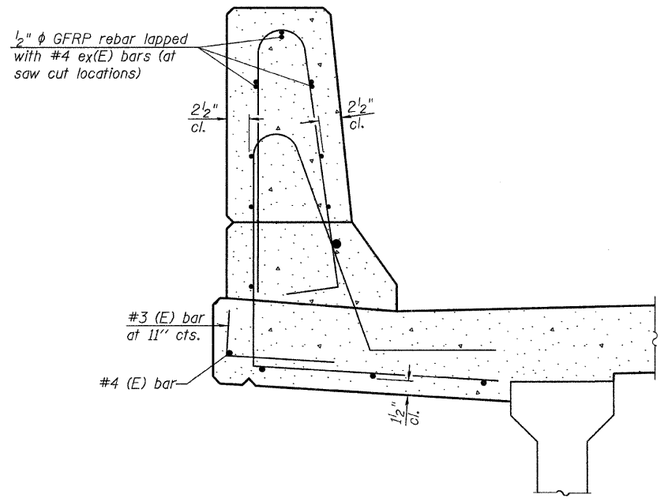
2498B018

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(11)	

*05-00626-00-BR CONTRACT *87368



SECTION
(Showing dimensions)

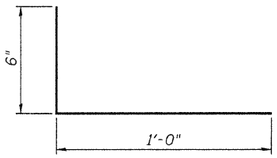


SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

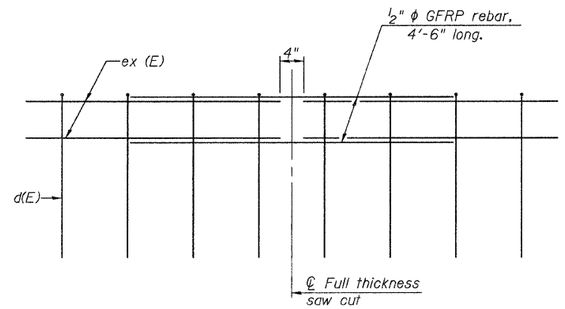
GENERAL NOTES

All dimensions shall remain the same as shown on contract plans, except dimensions (A) and (B) which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension (A) and (B) = 0.0165 cu. yds./ft. of parapet.

Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location.)

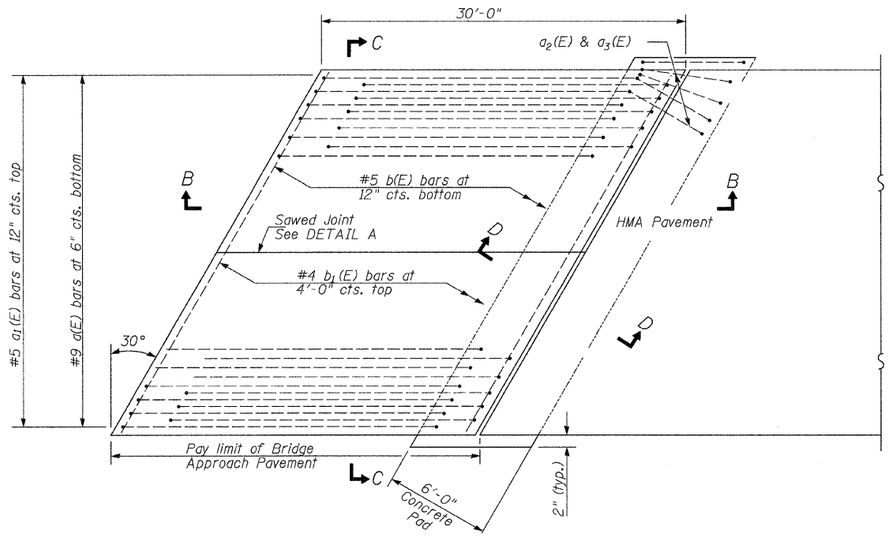
CONCRETE PARAPET SLIPFORMING OPTION

2498B019

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	29
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	BRS-1365(111)

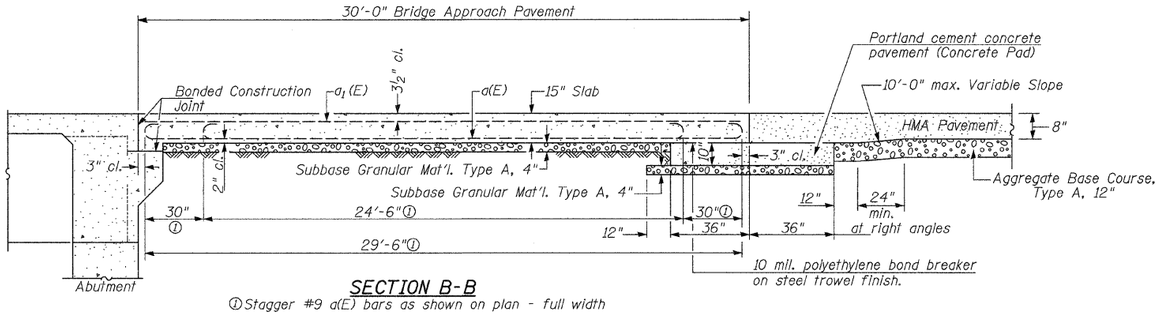
*05-00626-00-BR CONTRACT *87368

SHEET NO. 20 OF 22 SHEETS



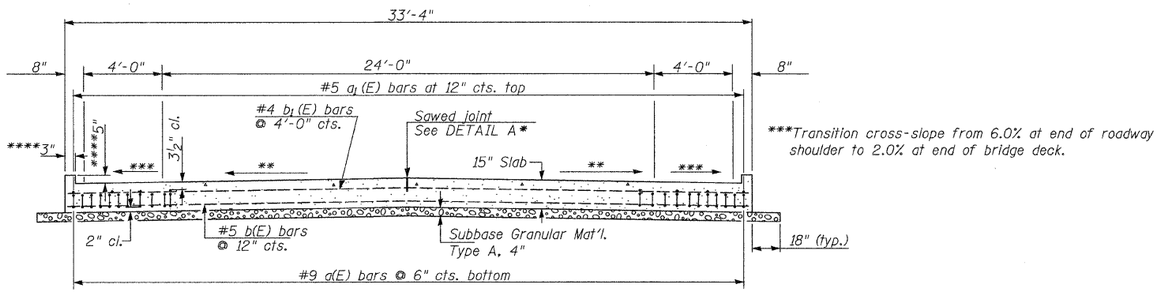
PLAN

Note:
Cost of Concrete, Reinforcement and Subbase Granular Material for Approach Pavement and Concrete Pad is included in cost of Bridge Approach Pavement.



SECTION B-B

①Stagger #9 a(E) bars as shown on plan - full width



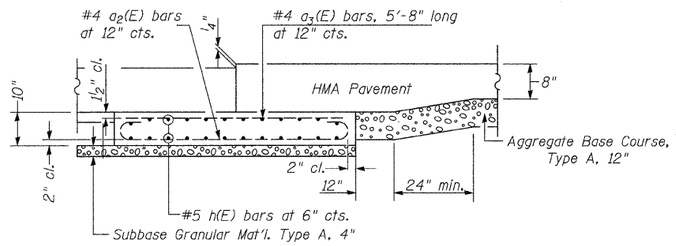
***Transition cross-slope from 6.0% at end of roadway shoulder to 2.0% at end of bridge deck.

SECTION C-C

(See Plan for Dimensions not shown)

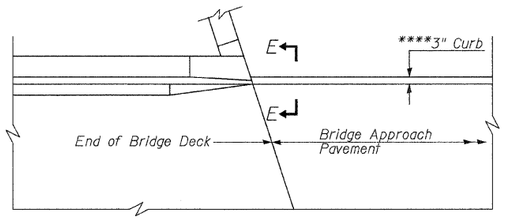
**Transition cross-slope from 2.0% at end of roadway pavement to 1.5% at end of bridge deck.

****No curb on east approach pavement.



SECTION D-D

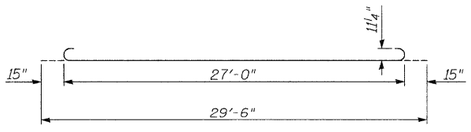
(Showing reinforcement)



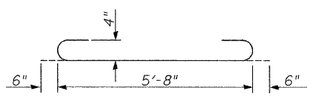
PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT

BILL OF MATERIAL

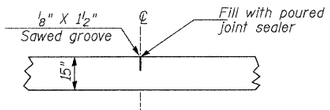
Item	Unit	Quantity
Bridge Approach Pavement	SQ YD	222



BAR a(E)

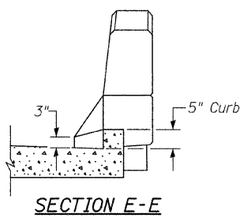


BAR a_2(E)



DETAIL A

(Reinforcement Not Shown)



SECTION E-E

DESIGN STRESSES

fy = 60,000 p.s.i.
f'c = 3,500 p.s.i.
n = 8.5

BRIDGE APPROACH PAVEMENT DETAILS

2498B020

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	30
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		

SHEET NO. 21 OF 22 SHEETS

*05-00626-00-BR CONTRACT *87368

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 2

Client: Hutchison Engineering, Inc.
Project Name: Sec 05-00626-00-BR
Project Site: CH-33 Over Little Vermilion River
LaSalle County, Illinois

Location: 6' Lt of Centerline CH-33
Station 19+55

Boring No. B-1
Surface Elev. 598.03
Auger Depth 34' Rotary Depth NA
Start Date 05/03/08 Finish Date 05/03/08

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) *ELEV.	DESCRIPTION OF MATERIALS	Depth in feet	Sample No.	Sample Type	Qu. (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
598.03										
597.03	Stiff Brown Sandy To Gravely Loam	1	1	SS	1.8	13	S	16		
596.03		2								
595.03		3	2	SS	1.4	11	S	12		
594.03		4								
593.03		5	3	SS	1.2	10	B	20		
592.03		6								
591.03		7	4	SS	---	12	---	22		
590.03		8								
589.03	Medium Brown Sandy Loam	9	5	SS	---	14	---	19		
588.03		10								
587.03		11	6	SS	0.8	7	B	24		
586.03		12								
585.03		13	7	SS	1.3	10	B	21		
584.03		14								
583.03	Medium To Stiff Brownish Gray Silty Clay Loam	15	8	SS	---	55	---	---		
582.03		16								
581.03		17								
580.03		18								
579.03		19								
578.03	Very Dense Brown Coarse Gravel And Cobbles	20								

Groundwater Data: Static water level after auger removal - elevation 581.0.
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: midwest.07@insightbb.com

BORING LOG

Sheet 2 of 2

Client: Hutchison Engineering, Inc.
Project Name: Sec 05-00626-00-BR
Project Site: CH-33 Over Little Vermilion River
LaSalle County, Illinois

Location:

Boring No. B-1
Surface Elev. 598.03
Auger Depth 34' Rotary Depth NA
Start Date 05/03/08 Finish Date 05/03/08

DRILLED BY: Randy Safranski, Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Depth in feet	Sample No.	Sample Type	Qu. (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
577.03										
576.03	Very Dense Brown Coarse Gravel And Cobbles	22								
575.03		23	9	SS	---	78	---	---		
574.03	Very Dense Yellowish Brown Weathered Sandstone	24								
573.03		25								
572.03	Refusal With Hollow Stem Auger	26								
571.03		27								
570.03		28								
569.03		29								
568.03	Very Dense Pale Yellow And White Sandstone	30								
567.03		31								
566.03	Penetrated With Rock Bit	32								
565.03		33								
564.03	Bottom of Boring	34								
563.03		35								
562.03		36								
561.03		37								
560.03		38								
559.03		39								
558.03		40								
557.03		41								

Groundwater Data: Static water level after auger removal - elevation 581.0.
Comments:

SOIL BORING LOGS

2498B021

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: mts37@comcast.net

BORING LOG

Sheet 1 of 2

Client: Hutchison Engineering, Inc.
Project Name: Sec 05-00626-00-BR
Project Site: CH-33 Over Little Vermilion River
LaSalle County, Illinois

Boring No. B-2
Surface Elev. 601.87
Auger Depth 35' Rotary Depth NA
Start Date 05/03/08 Finish Date 05/03/08

Location: 7' Lt of Centerline CH-33
Station 20+70

DRILLED BY: Randy Safranski
Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
601.87											
600.87			1								
599.87			2								
598.87	Very Stiff To Stiff Black Brown And Gray Gravely Clay		3	1	SS	2.1	14	S	18		
597.87			4								
596.87			5	2	SS	1.5	10	B	20		
595.87			6								
594.87			7								
593.87	Medium Brown Sandy Loam		8	3	SS	---	15	---	18		
592.87			9								
591.87			10								
590.87			11	4	SS	---	17	---	22		
589.87			12								
588.87			13	5	SS	1.3	10	B	19		
587.87	Stiff Gray Sandy Clay Loam		14								
586.87			15								
585.87			16	6	SS	1.4	10	B	19		
584.87			17								
583.87			18	7	SS	1.5	12	B	21		
582.87	Stiff Gray Sandy Clay		19								
581.87			20	8	SS	1.8	13	B	20		

Groundwater Data: Static water level after auger removal - elevation 581.0.
Comments:

Midwest Testing Services, Inc.
3705 Progress Blvd.
Peru, IL 61354
Phone: 815-223-6696
Fax: 815-223-6659
e-mail: midwest.07@insightbb.com

BORING LOG

Sheet 2 of 2

Client: Hutchison Engineering, Inc.
Project Name: Sec 05-00626-00-BR
Project Site: CH-33 Over Little Vermilion River
LaSalle County, Illinois

Boring No. B-2
Surface Elev. 601.87
Auger Depth 35' Rotary Depth NA
Start Date 05/03/08 Finish Date 05/03/08

Location: 7' Lt of Centerline CH-33
Station 20+70

DRILLED BY: Randy Safranski
Diedrich D-120

(DEPTH) ELEV.	DESCRIPTION OF MATERIALS	Graphic Log	Depth in feet	Sample No.	Sample Type	Qu (TSF)	N Value (Blows)	Bulge / Shear	Moisture (%)	Dry Density (PCF)	REMARKS
580.87											
579.87	Stiff Gray Sandy Clay		22								
578.87			23	9	SS	---	100/9"	---	---		
577.87	Very Dense Yellowish Brown Weathered Sandstone		24								
576.87			25								
575.87	Refusal With Hollow Stem Auger		26								
574.87			27								
573.87			28								
572.87			29								
571.87			30								
570.87	Very Dense Pale Yellow And White Sandstone		31								
569.87			32								
568.87	Penetrated With Rock Bit		33								
567.87			34								
566.87			35								
565.87	Bottom of Boring		36								
564.87			37								
563.87			38								
562.87			39								
561.87			40								
560.87			41								

Groundwater Data: Static water level after auger removal - elevation 581.0.
Comments:

SOIL BORING LOGS

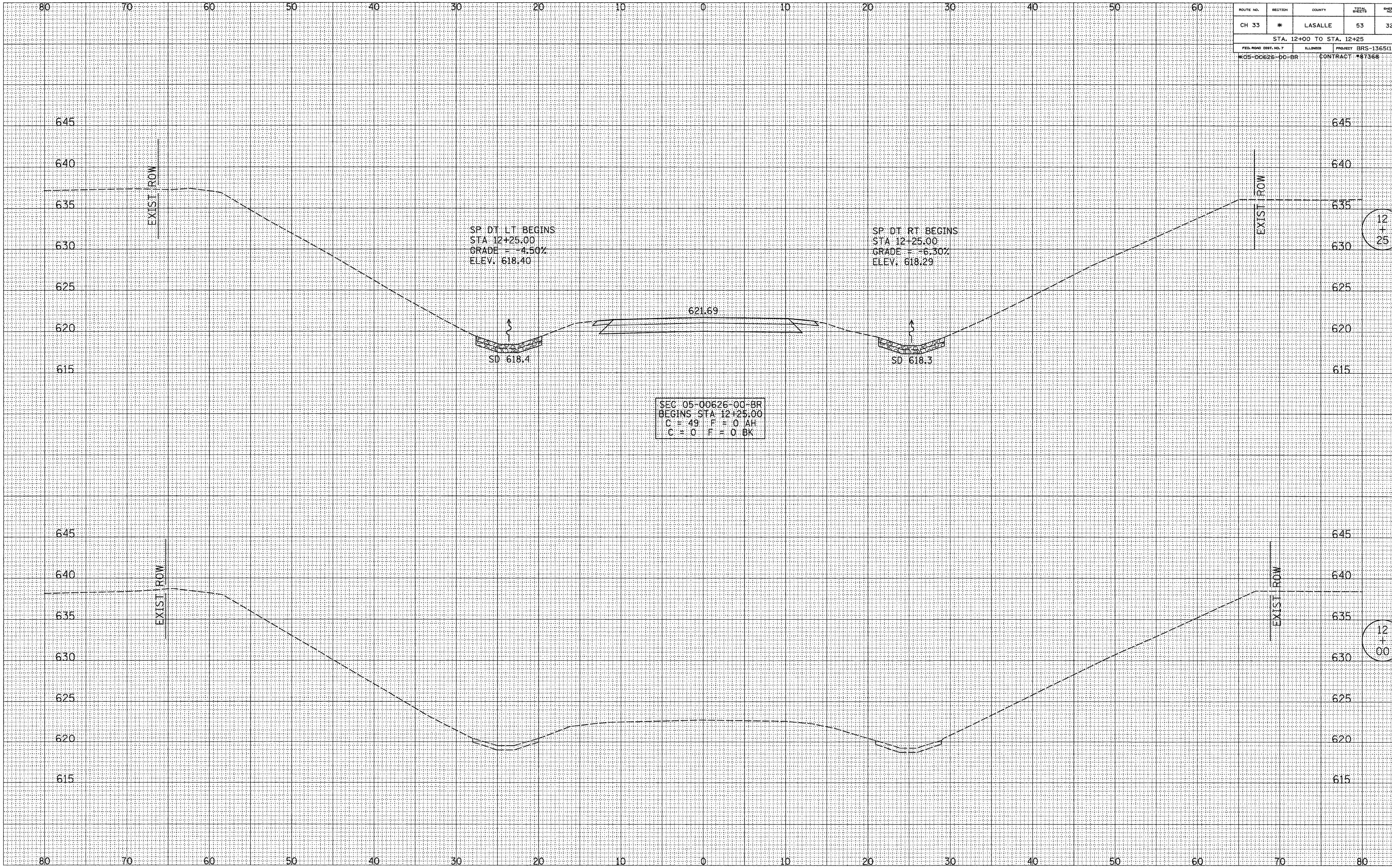
2498B022

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	32
STA. 12+00 TO STA. 12+25				
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT BRS-1365(111)	

*05-00626-00-BR CONTRACT #87368

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	33
STA. 12+50 TO STA. 13+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		

*05-00626-00-BR CONTRACT *87368

FINAL SURVEY
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SURVEYED
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TEMPLATE
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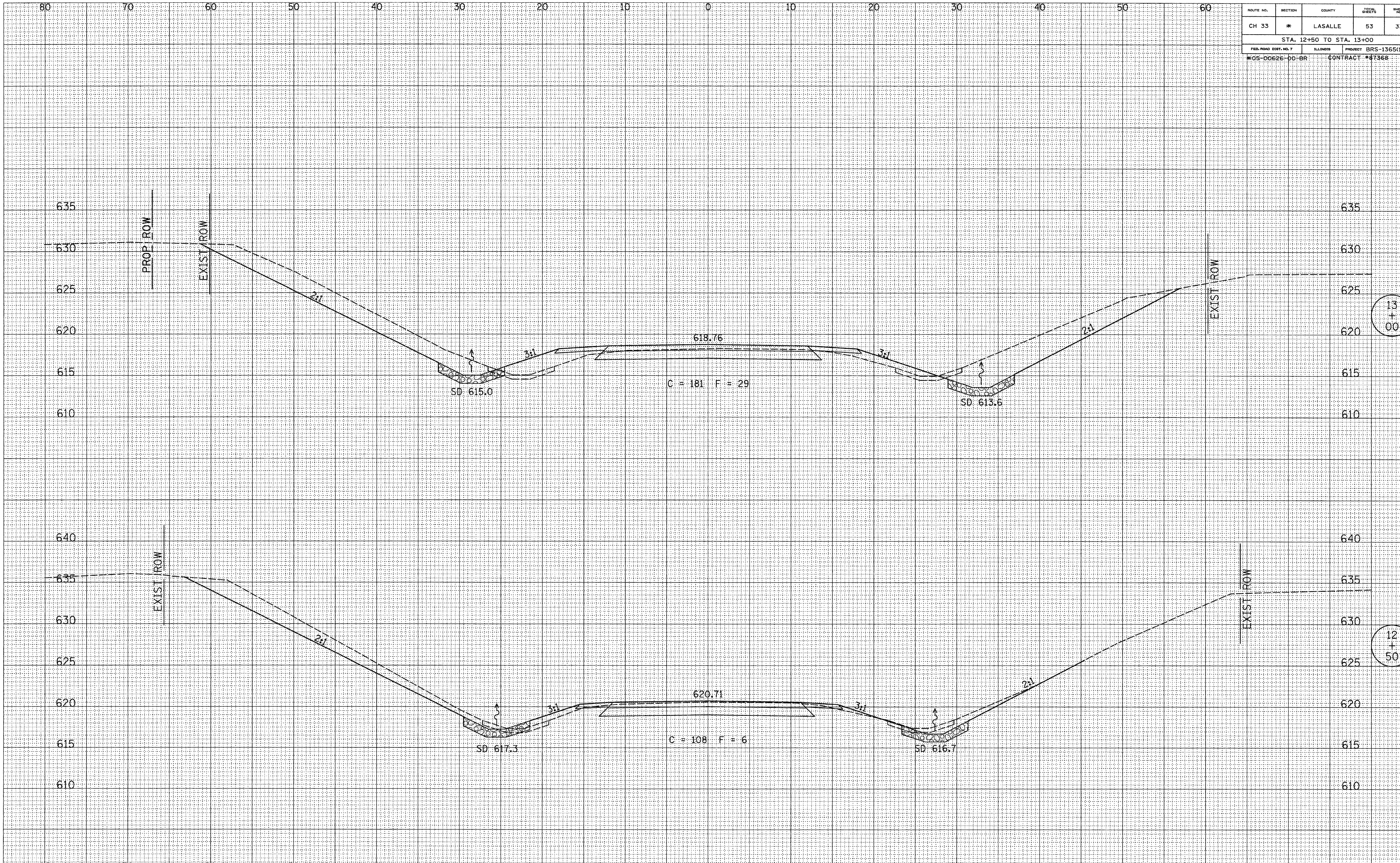

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	34
STA. 13+50 TO STA. 14+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*K05-00626-00-BR	CONTRACT *87368			

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

625 620 615 610 605

PROP ROW

EXIST ROW

SP DT LT BEGINS
STA 14+00.00
GRADE = -6.00%
ELEV. 610.53

3:1

2:1

614.86

C = 143 F = 60

SD 610.5

SP DT LT ENDS
STA 14+00.00
GRADE = -4.50%
ELEV. 610.53

SP DT RT BEGINS
STA 14+00.00
GRADE = -7.85%
ELEV. 607.27

3:1

2:1

SD 607.3

EXIST ROW

SP DT RT ENDS
STA 14+00.00
GRADE = -6.30%
ELEV. 607.27

14 + 00

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

630 625 620 615 610

PROP ROW

EXIST ROW

2.8:1

3:1

616.81

C = 188 F = 40

SD 612.8

3:1

2:1

SD 610.4

EXIST ROW

13 + 50

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	35
STA. 14+50 TO STA. 15+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
#05-00626-00-BR	CONTRACT #87368			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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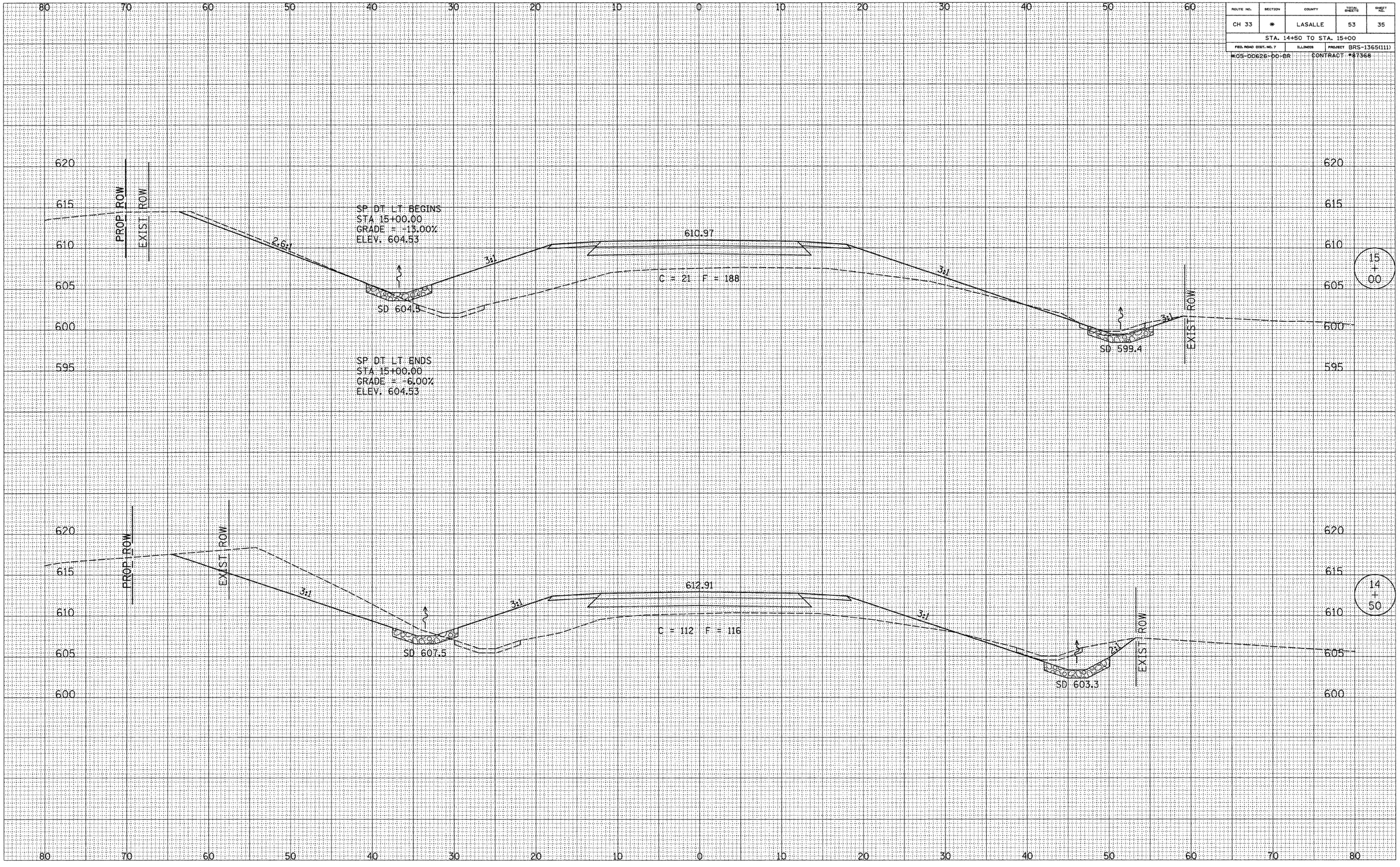

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	36
STA. 15+50 TO STA. 16+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*Q5-00626-00-BR	CONTRACT *87368			

FINAL SURVEY
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PLOTTED
TEMPLATE
VERIFIED
AREAS CHECKED
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DATE

ORIGINAL SURVEY
NOTE BOOK
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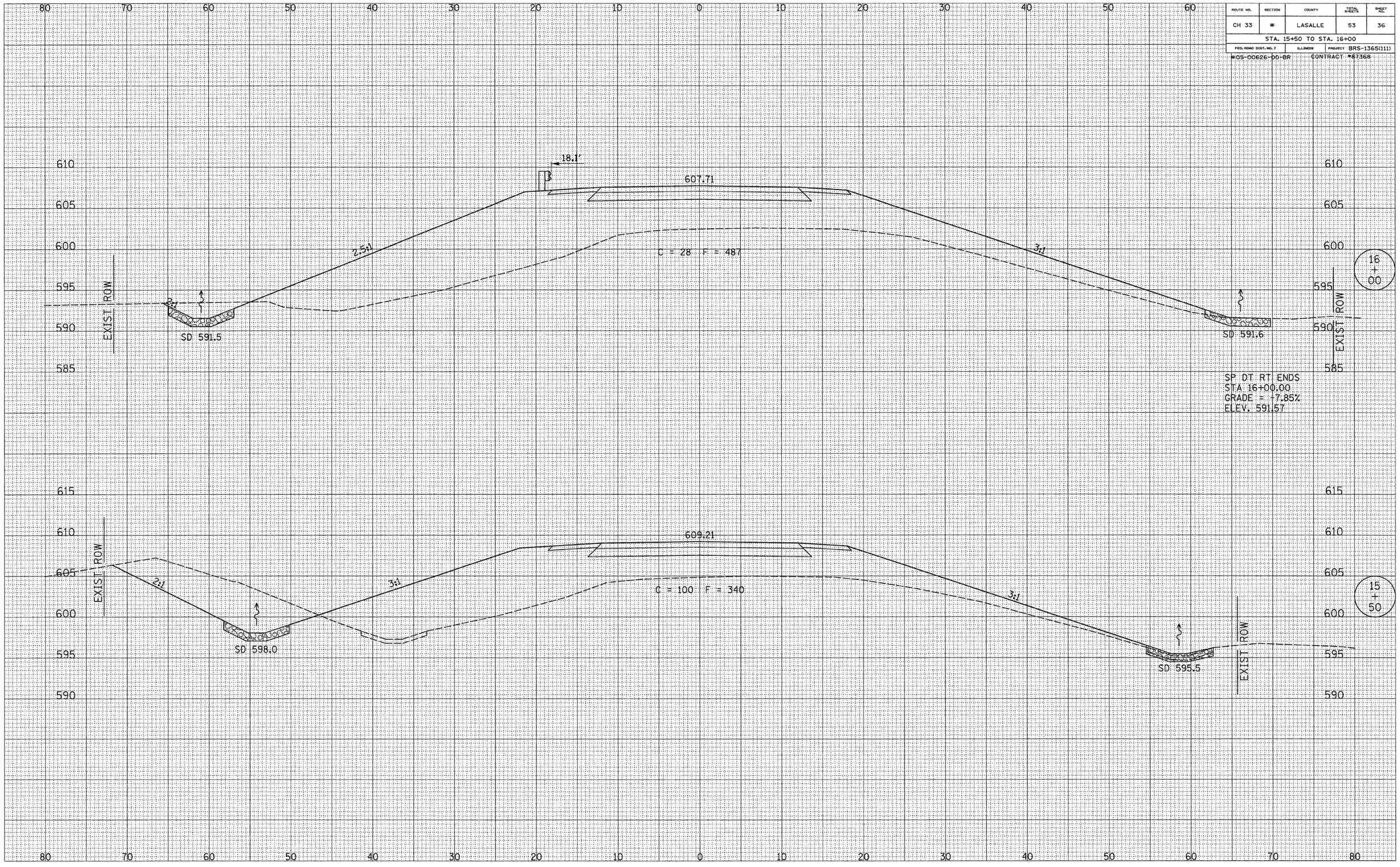
TEMPLATE
VERIFIED
AREAS CHECKED
BY
DATE



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	37

STA. 16+50 TO STA. 17+00

FED. ROAD DIST. NO. 7 | ILLINOIS | PROJECT BRS-1365(111)

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

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

610 605 600 595 590 585 580

18.0'

605.47

C = 21 F = 677

87.8'

EXIST ROW

2:1

3:1

2'

2'

7'

SD 584.5

EXIST ROW

17 + 00

606.46

C = 25 F = 597

SP DT LT BEGINS
STA 16+50.00
GRADE = -1.00%
ELEV. 585.03

SD 585.0

SP DT LT ENDS
STA 16+50.00
GRADE = -13.00%
ELEV. 585.03

16 + 50

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	38
STA. 17+50 TO STA. 18+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
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FINAL SURVEY
NOTE BOOK
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SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
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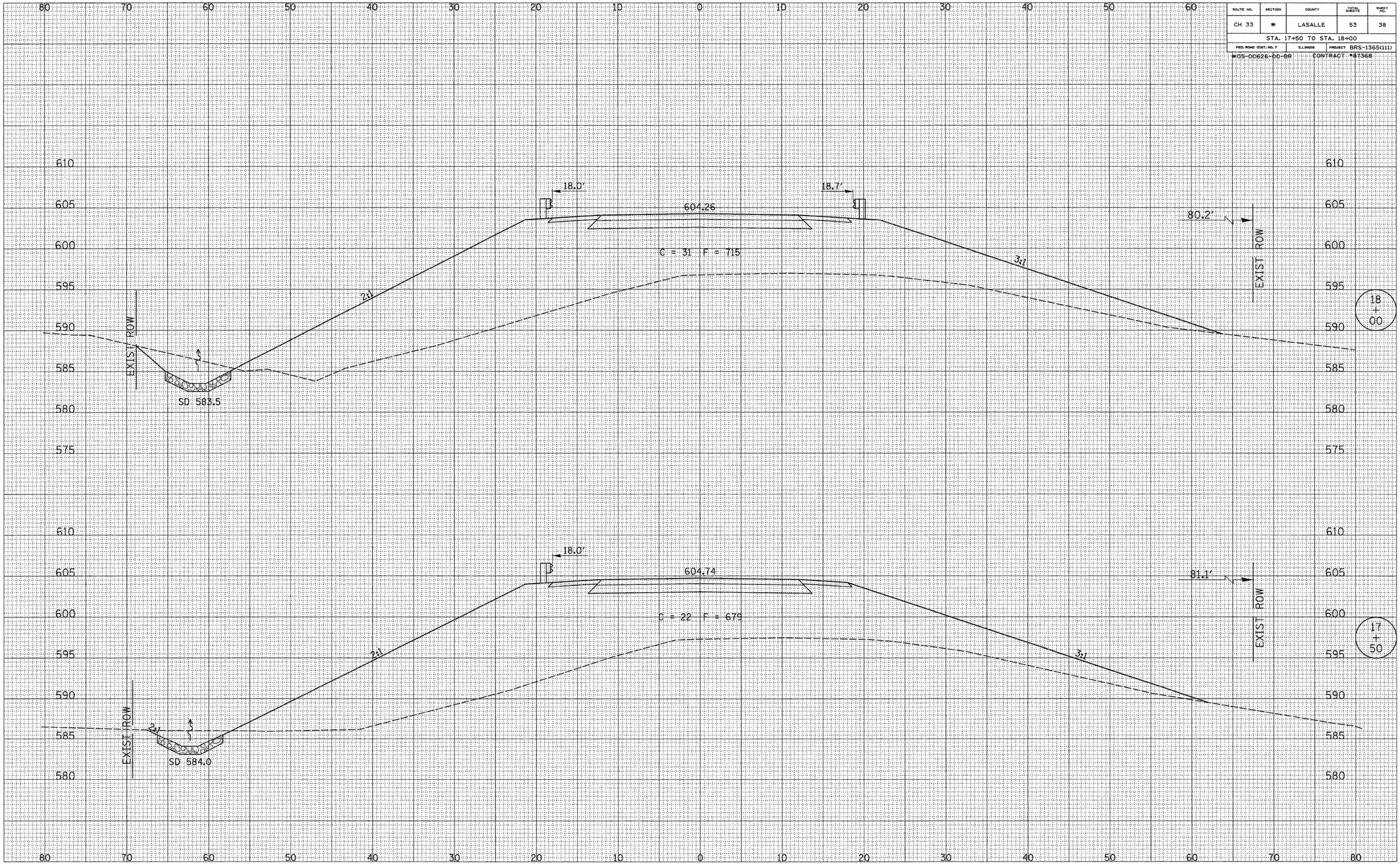
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	39
STA. 18+50 TO STA. 19+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
K05-00626-00-BR		CONTRACT: 87368		

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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

STA 20+96.53
C = 0 F = 328 AH
C = 0 F = 0 BK

BRIDGE OMMISION

STA 19+27.19
C = 0 F = 0 AH
C = 0 F = 688 BK

17.8'

17.2'

604.07

C = 22 F = 690

79.5'

EXIST ROW

2:1

2:1

SP DT LT ENDS
STA 19+25.00
GRADE = -1.00%
ELEV. 582.28

EXIST ROW

SD 582.5

19 + 00

18.0'

18.0'

604.04

C = 25 F = 708

79.9'

EXIST ROW

2:1

3:1

EXIST ROW

SD 583.0

18 + 50

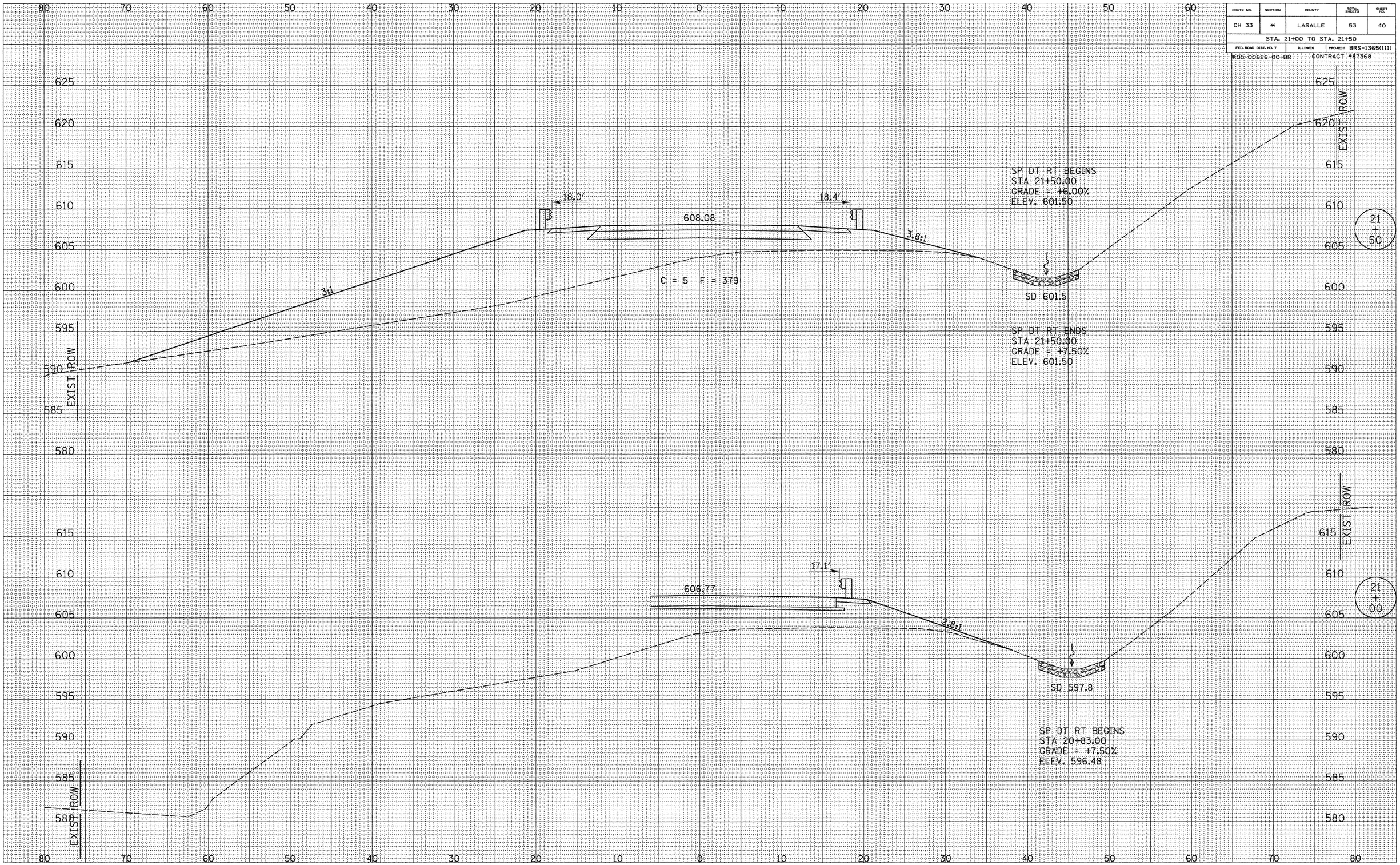
610 605 600 595 590 585 580 575

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	40
STA. 21+00 TO STA. 21+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*Q5-00626-00-BR	CONTRACT *87368			

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS CHECKED
BY
DATE

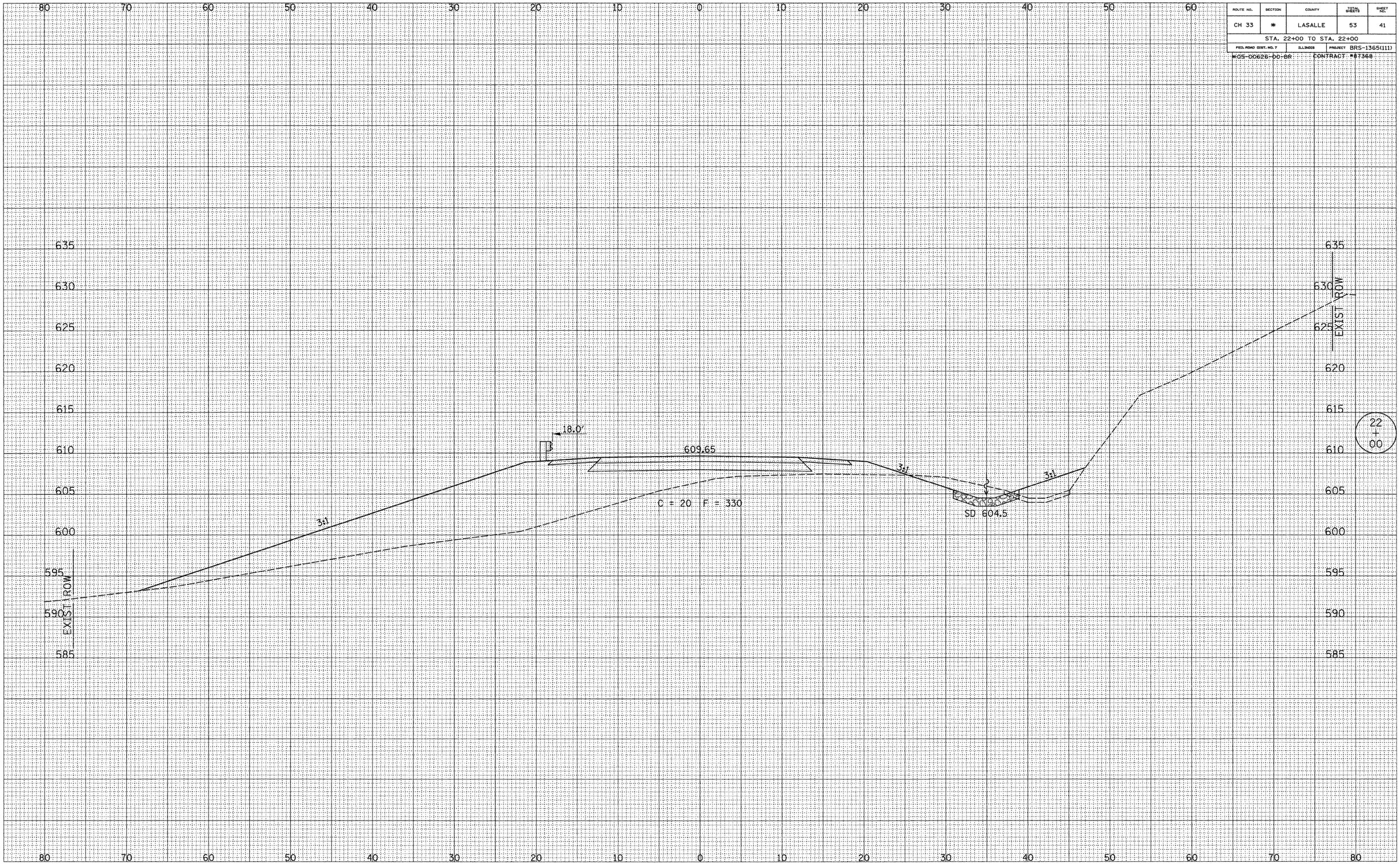
ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS CHECKED
BY
DATE



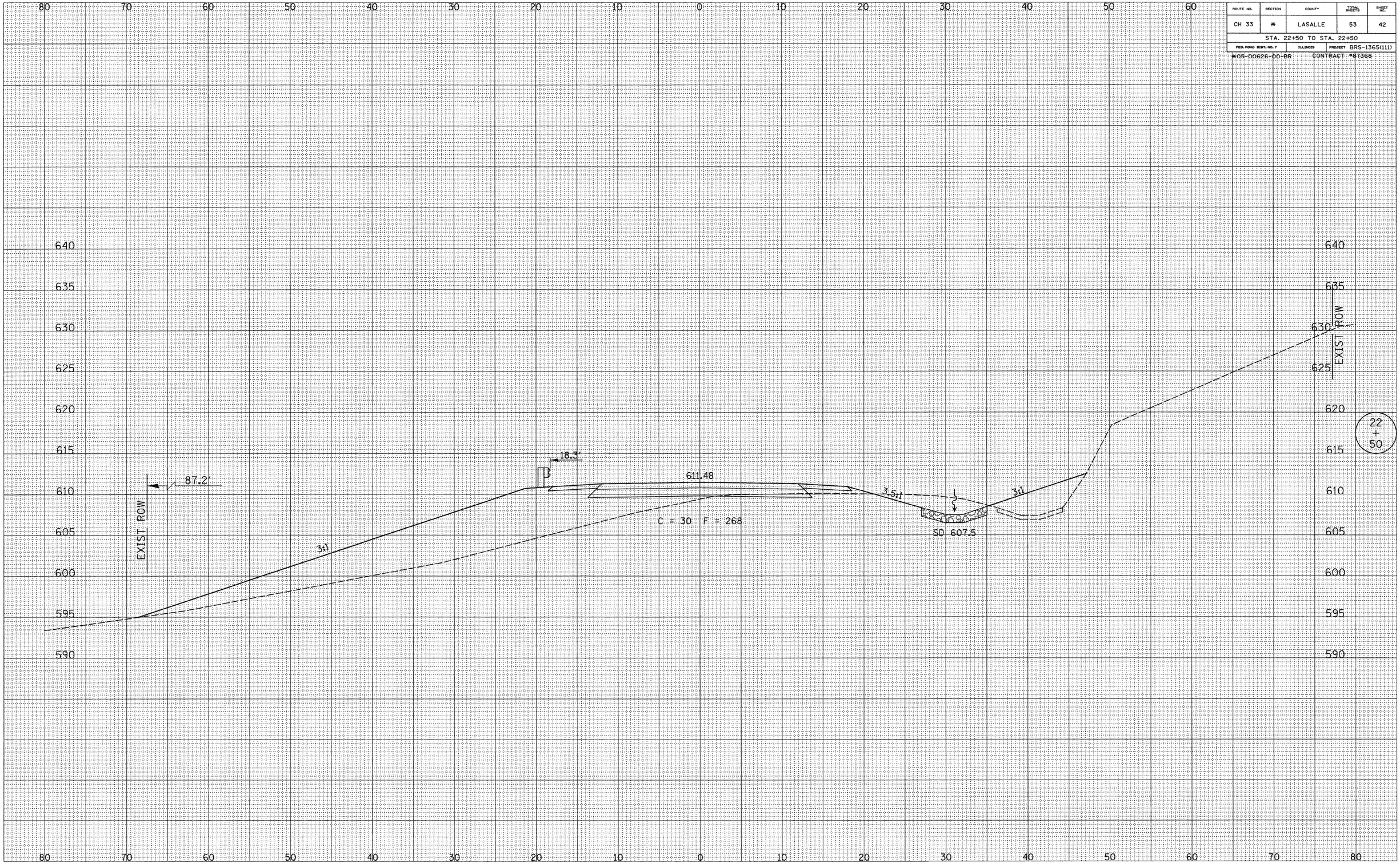
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	41
STA. 22+00 TO STA. 22+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
#05-00626-00-BR		CONTRACT	#87368	

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NOTES		
NO.	AREAS CHECKED	

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



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	42
STA. 22+50 TO STA. 22+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR		CONTRACT *87368		



FINAL SURVEY

NOTE BOOK	BY	DATE
NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
NOTES		
AREAS CHECKED		

ORIGINAL SURVEY

NOTE BOOK	BY	DATE
NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
NOTES		
AREAS CHECKED		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	43
STA. 23+00 TO STA. 23+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR		CONTRACT *87368		

FINAL SURVEY

NOTE BOOK	BY	DATE
NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
WORKED		
AREAS CHECKED		

ORIGINAL SURVEY

NOTE BOOK	BY	DATE
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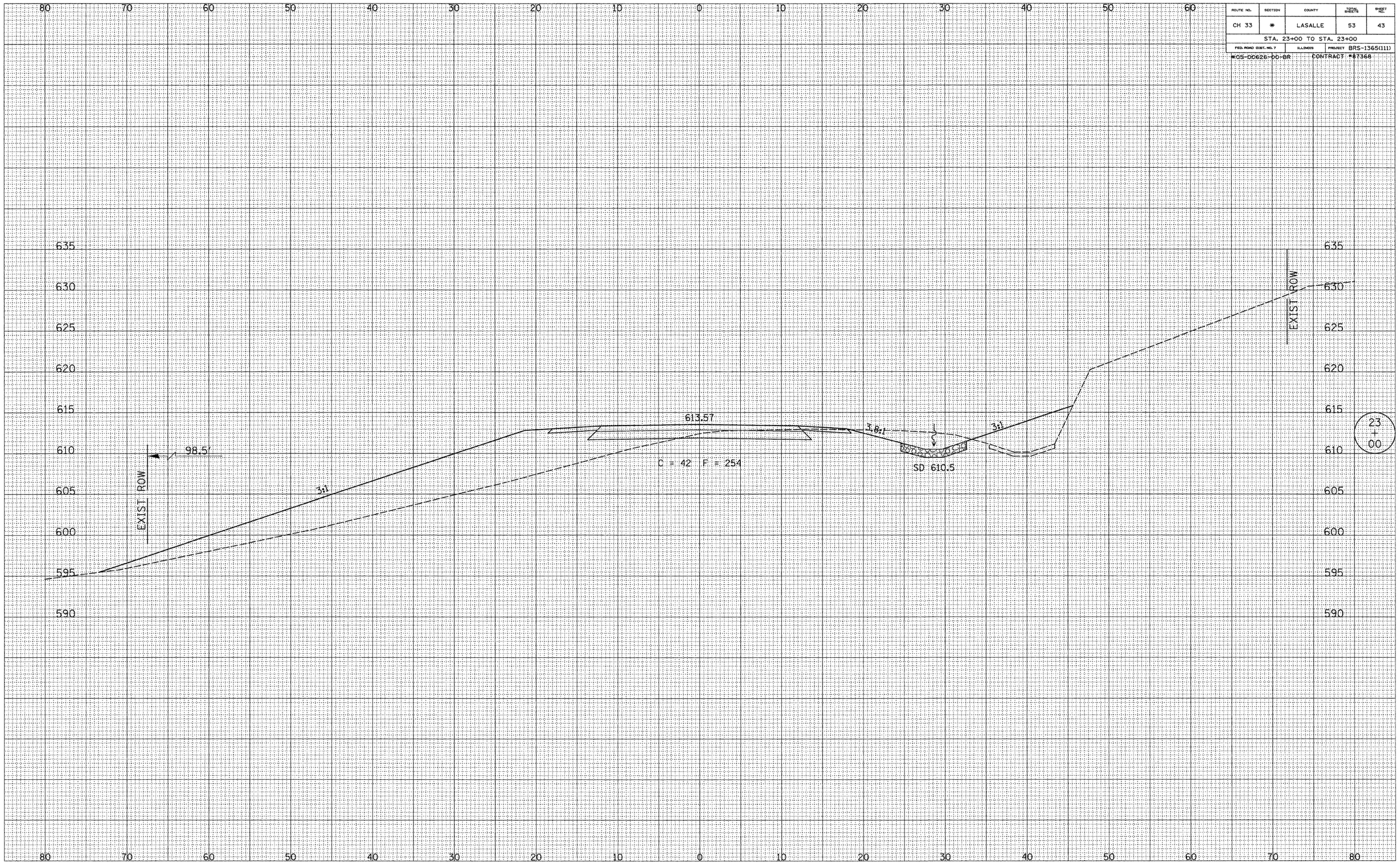
SURVEYED		
PLOTTED		
TEMPLATE		
WORKED		
AREAS CHECKED		



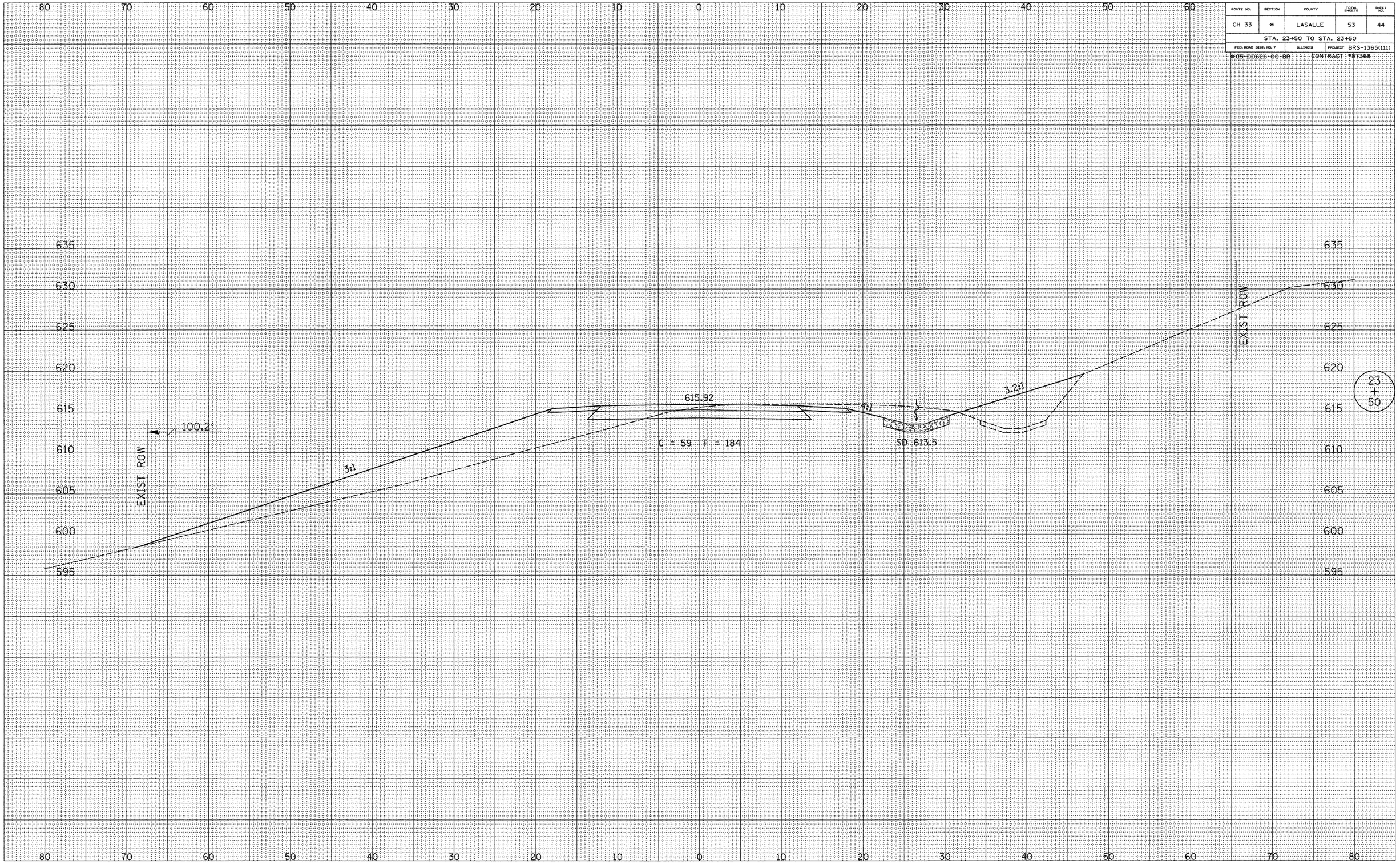
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	44
STA. 23+50 TO STA. 23+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR		CONTRACT *87368		

FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	45
STA. 24+00 TO STA. 24+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR	CONTRACT *87368			

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
VERIFIED
AREAS CHECKED
BY
DATE

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

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

635 630 625 620 615 610 605 600 595

SP DT LT BEGINS
STA 24+10.00
GRADE = +1.00%
ELEV. 596.25

101.3'

EXIST ROW

3:1

618.52

C = 77 F = 165

15" CL-D

5:1

INV. 616.5
SD 616.5

SP DT RT ENDS
STA 24+00.00
GRADE = +6.00%
ELEV. 616.50

EXIST ROW

24 + 00

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	46
STA. 24+50 TO STA. 24+67				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*K05-00626-00-BR		CONTRACT *67368		

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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

SP DT RT BEGINS
STA 24+78.00
GRADE = +4.60%
ELEV. 620.09

622.37

11%

EXIST ROW

15" CL. D

EXIST. 15"

INV. 619.25

ENT C = 4 F = 0

24 + 67

PE RT ON SKEW

621.37

15" CL. D

EXIST. 15"

618.81

EXIST ROW

C = 136 F = 208

24 + 50

83.5'

EXIST ROW

3:1

SP DT LT BEGINS
STA 24+50.00
GRADE = +25.00%
ELEV. 596.65

PROP ROW

SD 596.7

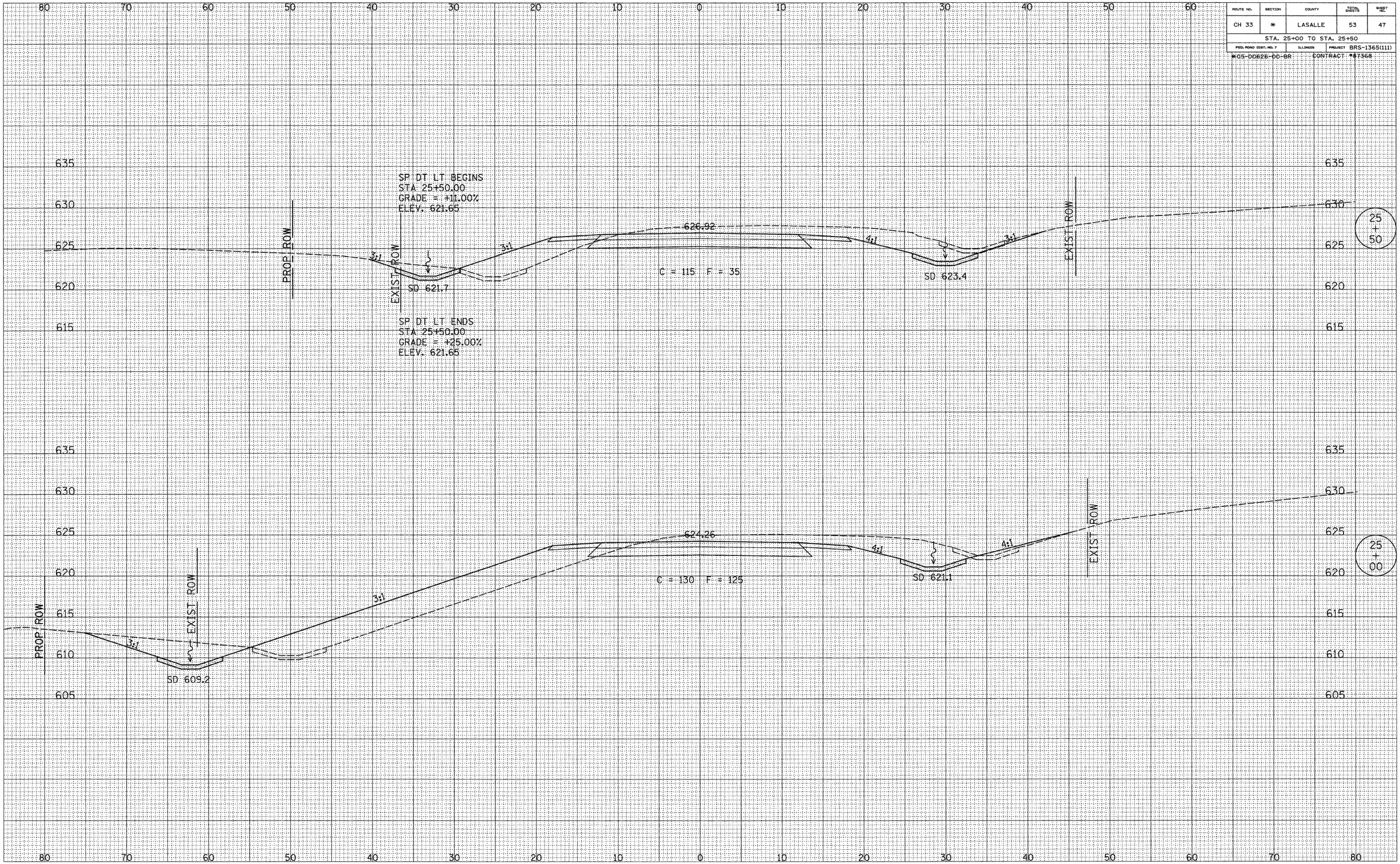
EXIST ROW

SP DT LT ENDS
STA 24+50.00
GRADE = +1.00%
ELEV. 596.65

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	47
STA. 25+00 TO STA. 25+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*G5-00626-00-BR		CONTRACT *87368		

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	48
STA. 26+00 TO STA. 26+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*K05-00626-00-BR	CONTRACT *87368			

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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

SP DT LT BEGINS
STA 26+70.00
GRADE = -1.00%
ELEV. 631.80

SP DT RT BEGINS
STA 26+50.00
GRADE = +4.00%
ELEV. 628.00

SP DT RT ENDS
STA 26+50.00
GRADE = +4.60%
ELEV. 628.00

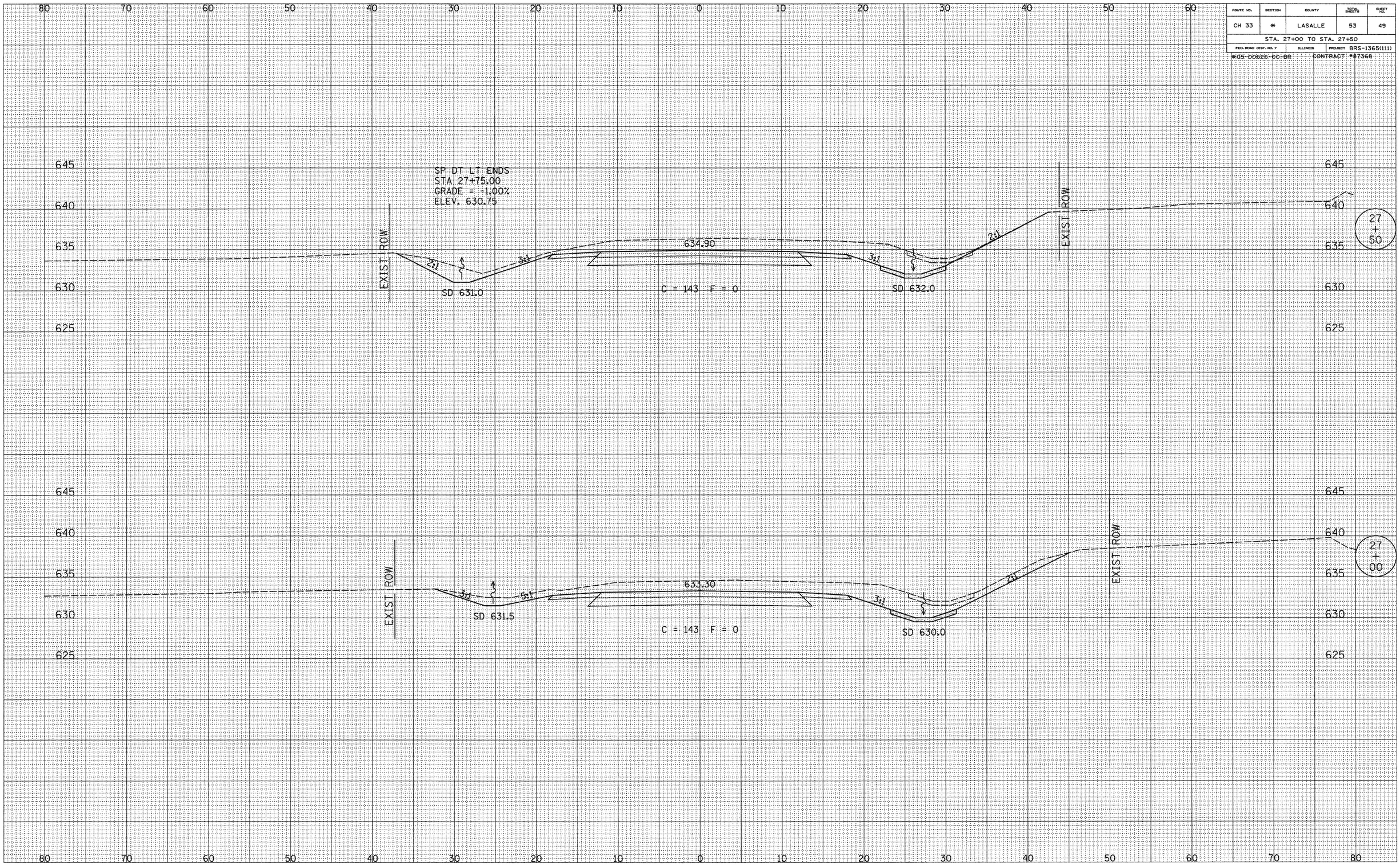
SP DT LT ENDS
STA 25+89.00
GRADE = +11.00%
ELEV. 625.94

TEMP EASEMENT
EXIST ROW
631.44
631.04
629.32
5.7%
4:1
3:1
2.5:1
C = 148 F = 0
ENT C = 39 F = 0
C = 136 F = 0
SD 628.0
SD 625.7
26 + 50
26 + 40
PE LT ON SKEW
26 + 00
640
635
630
625
620
80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	49
STA. 27+00 TO STA. 27+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR		CONTRACT #87368		

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
LINES
AREAS CHECKED
BY
DATE

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



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	50
STA. 28+00 TO STA. 28+54				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	BRS-1365(111)	
*05-00626-00-BR		CONTRACT *87368		

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

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

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60

645 640 635 630 625 620

637.36
6.5%
EXIST ROW
28 + 54
PE RT ON SKEW
ENT C = 29 F = 0

637.28
EXIST ROW
28 + 50
C = 103 F = 0

SP DT RT ENDS
STA 28+25.00
GRADE = +4.00%
ELEV. 635.00

636.22
3:1
5:1
℄
SD 634.0
EXIST ROW
EXIST ROW
28 + 00
C = 115 F = 6

80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80

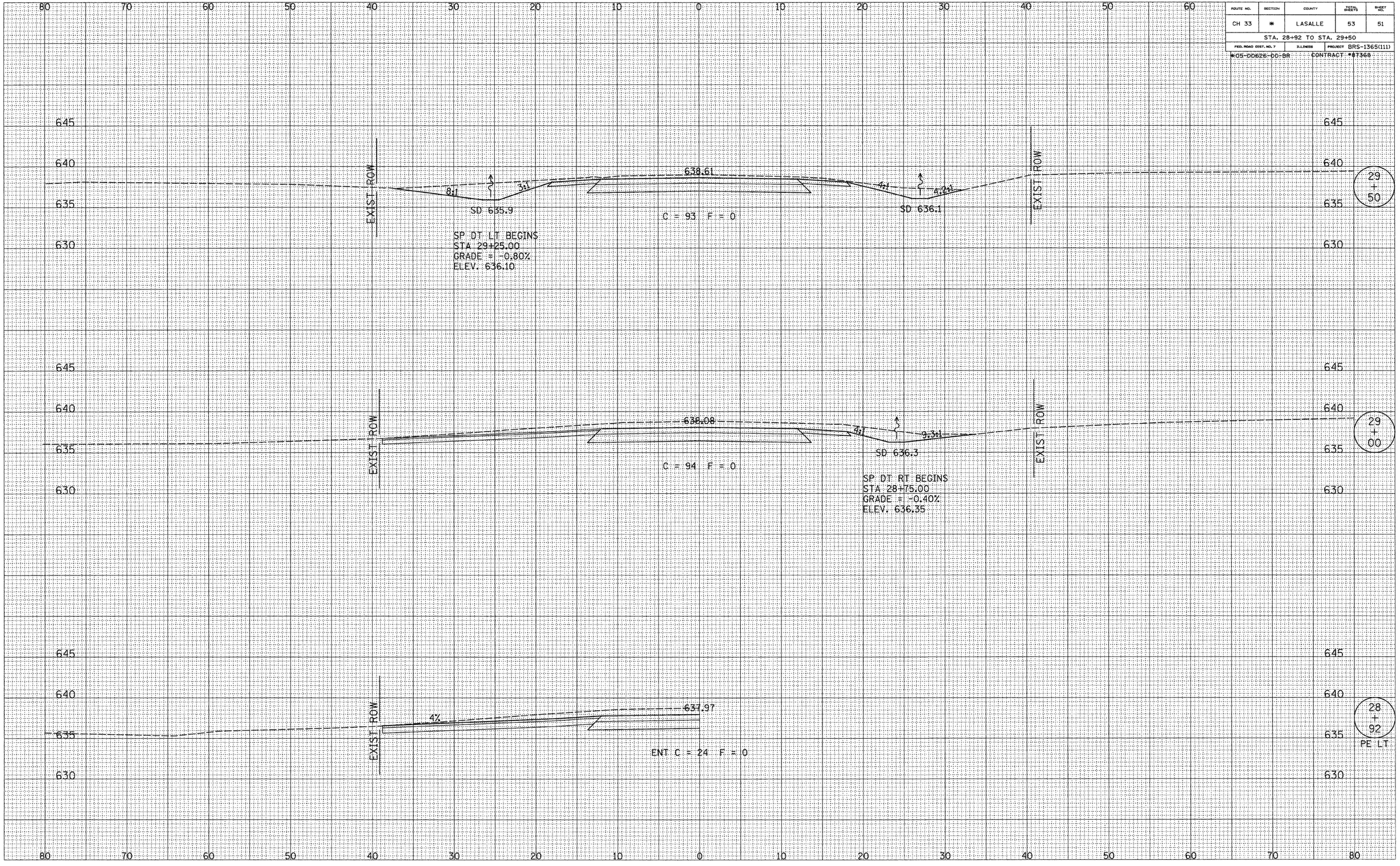
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	51
STA. 28+92 TO STA. 29+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR	CONTRACT *67368			

FINAL SURVEY — NOTE BOOK — NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY — NOTE BOOK — NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		



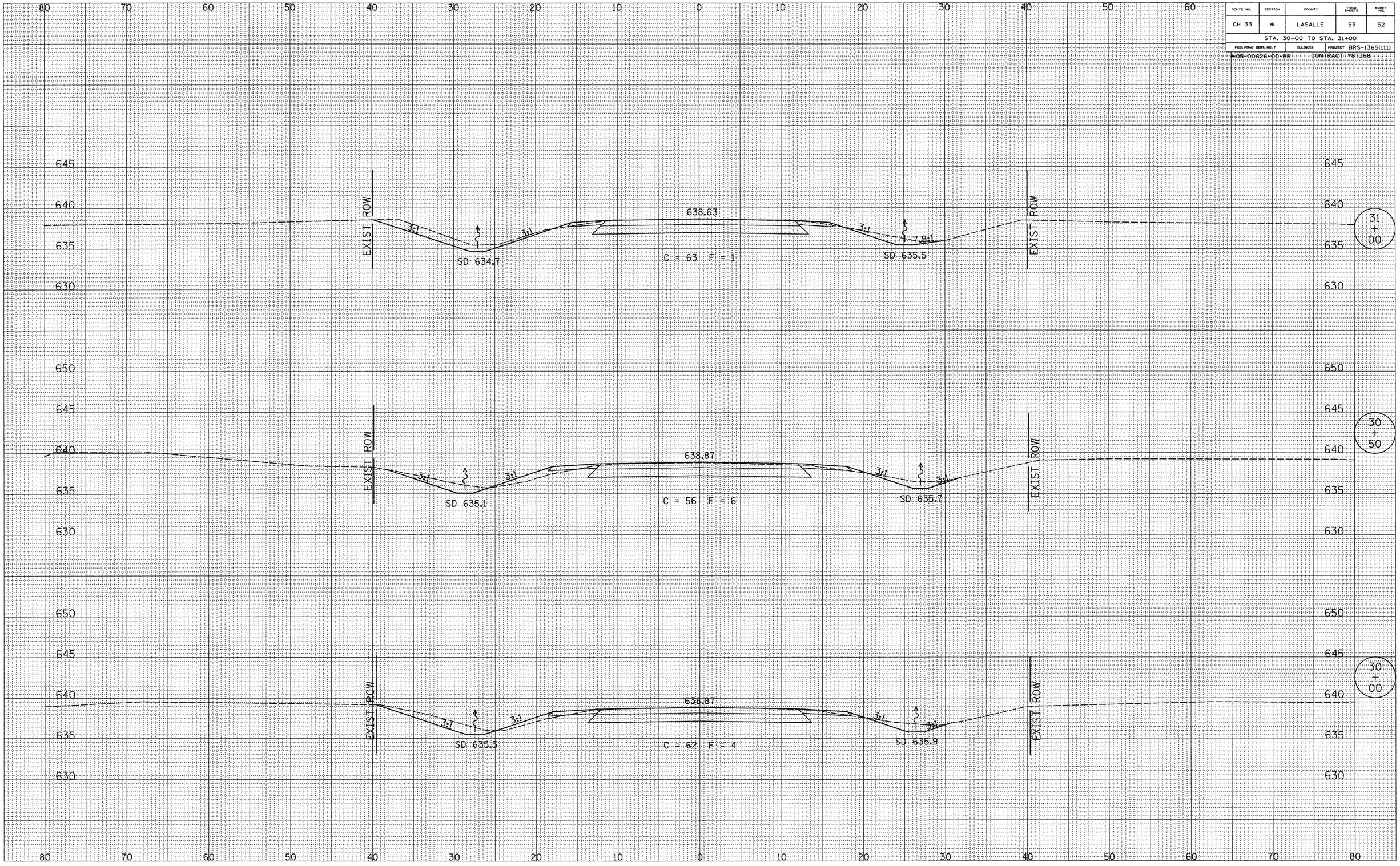
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	52
STA. 30+00 TO STA. 31+00				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR	CONTRACT *87368			

FINAL SURVEY

NO.	NOTE BOOK	BY	DATE
	AREAS		
	TEMPLATE		
	PLOTTED		
	SURVEYED		
	AREAS CHECKED		

ORIGINAL SURVEY

NO.	NOTE BOOK	BY	DATE
	AREAS		
	TEMPLATE		
	PLOTTED		
	SURVEYED		
	AREAS CHECKED		



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CH 33	*	LASALLE	53	53
STA. 31+25 TO STA. 31+50				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BRS-1365(111)		
*05-00626-00-BR	CONTRACT #87368			

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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