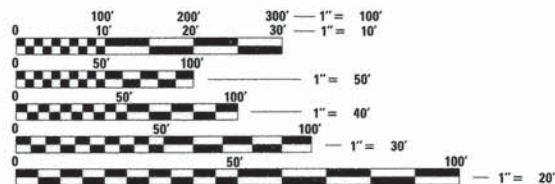


INDEX OF SHEETS:

- 1 COVER SHEET
- 2 SUMMARY OF QUANTITIES
- 3-4 GENERAL NOTES AND SCHEDULE OF QUANTITIES AND DETAILS
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- 13 27" x 48" PPC DECK BEAM DETAILS
- 14 WEST ABUTMENT DETAILS
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- 16 STEEL RAILING, TYPE SM DETAILS
- 17 HP PILE DETAILS
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- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 515001-03 NAME PLATE FOR BRIDGES
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 701901-04 TRAFFIC CONTROL DEVICES
- 720011-01 METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
- BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
- BLR 22-7 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



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

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

PROJECT ENGINEER: MAC
PROJECT MANAGER: BKC

CONTRACT NO. 87625

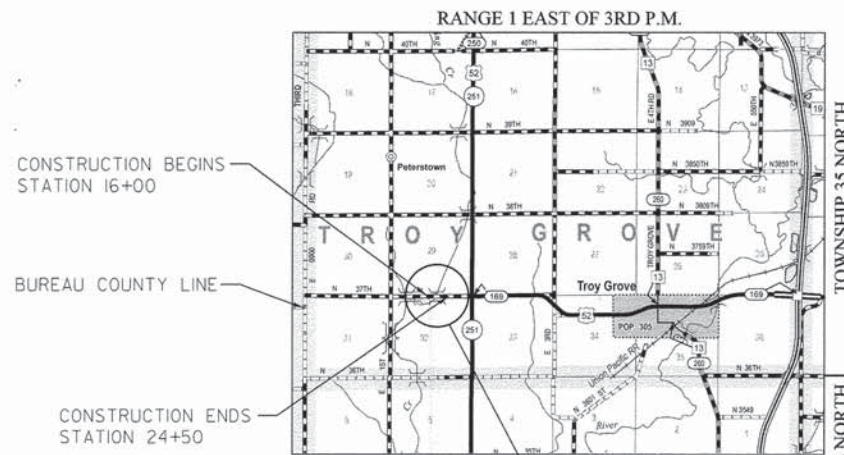
FUNCTIONAL CLASSIFICATION
MINOR COLLECTOR
DESIGN SPEED 40 MPH
2016 ADT - 110
3R GUIDELINES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID PROJECT
SURFACE TRANSPORTATION
RURAL - BRIDGE (FY-16)

TOWNSHIP ROUTE 187 (N 37TH ROAD)
SECTION 15-33758-00-BR
PROJECT NO. BROS-0099(056)
STRUCTURE REPLACEMENT
TROY GROVE ROAD DISTRICT
LASALLE COUNTY

C-93-076-15



PROPOSED STRUCTURE: S.N. 050-3619
 A SINGLE SPAN (1 @ 72'-8") PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE ON SPILL THRU ABUTMENTS AT STATION 19+93. SKEW 15° RT. AHEAD.

GROSS LENGTH = 850 FT. = 0.161 MILE
 NET LENGTH = 850 FT. = 0.161 MILE

UTILITIES:

FRONTIER COMMUNICATIONS
 112 ELM STREET
 SYCAMORE, ILLINOIS 60178
 PH: 815-895-1515
 ATTN: KALIN HINSHAW

CORN BELT ENERGY CORP.
 1702 PERU
 PRINCETON, ILLINOIS 61356
 PH: 309-662-5330
 ATTN: BARRY BURKMAN

NICOR GAS
 1844 FERRY ROAD
 NAPERVILLE, ILLINOIS 60563
 PH: 630-388-3046
 ATTN: BRUCE KOPPANG



Megan A. Cackley
 DATE: 10-19-2015
 EXPIRES 11/30/15

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	1
		ILLINOIS	CONTRACT NO. 87625	



LASALLE COUNTY HIGHWAY DEPARTMENT		
APPROVED	<i>Dawn Fin</i> 11-4	2015
TROY GROVE TOWNSHIP ROAD COMMISSIONER		
APPROVED	<i>Thomas G. King</i> 11-4	2015
LASALLE COUNTY ENGINEER		
PASSED	<i>Dan R. C.</i> 11-4	2015
DISTRICT 3 LOCAL ROADS & STREETS ENGINEER		
RELEASING FOR BID	<i>Dan A. Lohse</i> 11-4	2015
BASED ON LIMITED REVIEW		
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER		

WILLETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

SUMMARY OF QUANTITIES

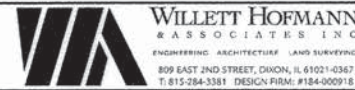
CONSTRUCTION TYPE CODE: 0011

PAY CODE	QUANTITY	UNIT	ITEM
20100110	14	UNIT	TREE REMOVAL (6 TO 15 UNITS DIAMETER)
20100210	92	UNIT	TREE REMOVAL (OVER 15 UNITS DIAMETER)
20300100	222	CU YD	CHANNEL EXCAVATION
20400800	1,657	CU YD	FURNISHED EXCAVATION
25100630	3,812	SQ YD	EROSION CONTROL BLANKET
28000250	79	POUND	TEMPORARY EROSION CONTROL SEEDING
28000305	150	FOOT	TEMPORARY DITCH CHECKS
28000400	168	FOOT	PERIMETER EROSION BARRIER
28000500	2	EACH	INLET AND PIPE PROTECTION
*30300011	1,292	TON	AGGREGATE SUBGRADE IMPROVEMENT
*40200800	64	TON	AGGREGATE SURFACE COURSE, TYPE B
*40600275	4,641	POUND	BITUMINOUS MATERIALS (PRIME COAT)
40603080	216	TON	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50
40603310	144	TON	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50
48101200	77	TON	AGGREGATE SHOULDERS, TYPE B
50100100	1	EACH	REMOVAL OF EXISTING STRUCTURES
50105220	50	FOOT	PIPE CULVERT REMOVAL
50200100	65	CU YD	STRUCTURE EXCAVATION
50300225	29.8	CU YD	CONCRETE STRUCTURES
50300280	3.6	CU YD	CONCRETE ENCASEMENT
50400505	1,744	SQ FT	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)
50800205	3,540	POUND	REINFORCEMENT BARS, EPOXY COATED
+50901050	148	FOOT	STEEL RAILING, TYPE SM
51201400	216	FOOT	FURNISHING STEEL PILES HP 10X42
51202305	216	FOOT	DRIVING PILES
51203400	2	EACH	TEST PILE STEEL HP 10X42
51500100	1	EACH	NAME PLATES
54200220	92	FOOT	PIPE CUVLERTS, CLASS D, TYPE 1 15"
+ 63200310	114	FOOT	GUARDRAIL REMOVAL
67100100	1	L SUM	MOBILIZATION
+*78201000	4	EACH	TERMINAL MARKER - DIRECT APPLIED
*X0327171	1,588	SQ YD	SCARIFY EXISTING SURFACE
*X2020410	502	CU YD	EARTH EXCAVATION (SPECIAL)
*X2501000	0.79	ACRE	SEEDING, CLASS 2 (SPECIAL)
*X2810210	649	TON	STONE RIPRAP, CLASS A5 (SPECIAL)
X5860110	60	CU YD	GRANULAR BACKFILL FOR STRUCTURES
*X7010216	1	L SUM	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)
*Z0013798	1	L SUM	CONSTRUCTION LAYOUT

*SEE SPECIAL PROVISIONS.

+SPECIALTY ITEM

FILE: S:\PROJECTS\2814\2814014.LCH\DESIGN\STRUCT\2814.Dwg\qta\1284014_Summary of Quantities.dwg



DESIGNED -	L.G.N. / P.L.P.	REVISED -
CHECKED -	L.G.N. / P.L.P.	REVISED -
DRAWN -	M.A.C.	REVISED -
CHECKED -	M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

SUMMARY OF QUANTITIES
STRUCTURE NO. 050-3619

SHEET NO. 1 OF 1 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	2
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BR05-00990561				

GENERAL NOTES:

EXISTING STRUCTURES (INCLUDING FOUNDATIONS, WALLS, CISTERNS, WELLS, OR OTHER UNDERGROUND STRUCTURES) WITHIN THE RIGHT OF WAY SHALL BE REMOVED IN ACCORDANCE WITH ARTICLE 501.04 AND 501.05 OF THE STANDARD SPECIFICATIONS, WITHOUT ADDITIONAL COMPENSATION, UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

NO OVERHAUL HAS BEEN COMPUTED AND NONE SHALL BE PAID FOR FROM ANY SOURCE.

THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS.

THE FINAL TOP FOUR INCHES OF SOIL IN ANY RIGHT-OF-WAY AREA DISTURBED BY THE CONTRACTOR MUST BE A COHESIVE SOIL CAPABLE OF SUPPORTING VEGETATION AND APPROVED BY THE ENGINEER.

ALL UTILITY POLES, GAS PIPES, ETC. IN THE WAY OF THE IMPROVEMENTS SHALL BE MOVED BY THE UTILITIES PRIOR TO CONSTRUCTION AND SHALL NOT BE INCLUDED IN THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE UTILITIES TO MAKE THE NECESSARY ADJUSTMENTS PRIOR TO CONSTRUCTION.

THE LOCATION AND ELEVATION OF THE VARIOUS UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL USE SPECIAL CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR THEM TO PREVENT DAMAGE.

THE LOCATION OF EXISTING FIELD TILES AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN IN THE PLANS ARE NOT TO BE TAKEN AS EXACT. EXACT LOCATION OF ALL FIELD TILES AND UTILITIES IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

THE UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS INCLUDE:

CORN BELT ENERGY CORP. 1702 W. PERU PRINCETON, ILLINOIS 61356 PH: 309-662-5330; EXT. 301 ATTN: BARRY BURKMAN	FRONTIER COMMUNICATIONS 112 ELM STREET SYCAMORE, ILLINOIS 60178 PH: 815-895-1515 ATTN: KALIN HINSHAW	NICOR GAS 1844 FERRY ROAD NAPERVILLE, ILLINOIS 60563 PH: 630-388-3046 ATTN: BRUCE KOPPANG
--	--	---

A NATIONWIDE 404 PERMIT HAS BEEN ISSUED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.

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

EXISTING TRAFFIC SIGNS THAT ARE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED BY THE CONTRACTOR. COST OF REMOVAL TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR EARTH EXCAVATION (SPECIAL).

WHERE THE PROPOSED CONSTRUCTION MEETS AN EXISTING BITUMINOUS SURFACE, OR WHERE SAWING IS STATED ON THE PLANS, THE EXISTING SHALL BE SAWED IN A NEAT, STRAIGHT LINE. COST OF SAWING TO BE INCLUDED IN THE CONTRACT UNIT PRICE BID PER CUBIC YARD FOR EARTH EXCAVATION (SPECIAL).

ALL BORROW/WASTE/USE SITES MUST BE APPROVED BY THE DEPARTMENT PRIOR TO REMOVING ANY MATERIAL FROM THE PROJECT OR INITIATING ANY EARTHMOVING ACTIVITIES, INCLUDING TEMPORARY STOCKPILING OUTSIDE THE LIMITS OF CONSTRUCTION.

SCHEDULE OF QUANTITIES – CONT.

EROSION CONTROL BLANKET		
STATION	SQ. YD.	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 16+00 - 24+50	2,091	
RT. STA. 16+00 - 24+50	1,721	
PROJECT TOTAL	3,812	

TEMPORARY EROSION CONTROL SEEDING		
STATION	POUND	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 16+00 - 24+50	43	100 LBS./ACRE
RT. STA. 16+00 - 24+50	36	100 LBS./ACRE
PROJECT TOTAL	79	

TEMPORARY DITCH CHECKS		
STATION	FOOT	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 16+48	10	
LT. STA. 17+00	10	
LT. STA. 17+50	10	
LT. STA. 20+50	10	
LT. STA. 22+04	10	
LT. STA. 22+77	10	
LT. STA. 23+27	10	
LT. STA. 23+77	10	
LT. STA. 23+84	10	
RT. STA. 18+65	10	
RT. STA. 20+50	10	
RT. STA. 22+44	10	
RT. STA. 23+00	10	
RT. STA. 23+53	10	
RT. STA. 24+05	10	
PROJECT TOTAL	150	

PERIMETER EROSION BARRIER		
STATION	FOOT	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 19+30 - 19+80	49	
LT. STA. 20+35 - 20+77	43	
RT. STA. 19+29 - 19+51	22	
RT. STA. 20+40 - 21+02	54	
PROJECT TOTAL	168	

SCHEDULE OF QUANTITIES – CONT.

INLET AND PIPE PROTECTION		
STATION	EACH	REMARKS
T.R. 187 (N. 37TH ROAD)		
F.E.R. STA. 16+35	1	
P.E.R. STA. 19+20	1	
PROJECT TOTAL	2	

AGGREGATE SUBGRADE IMPROVEMENT		
STATION	TON	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 16+00 - 19+55.98	593	12"
STA. 20+30.02 - 24+50	699	12"
PROJECT TOTAL	1,292	

AGGREGATE SURFACE COURSE, TYPE B		
STATION	TON	REMARKS
T.R. 187 (N. 37TH ROAD)		
F.E.R. STA. 16+35	31	8"
P.E.R. STA. 19+20	33	8"
PROJECT TOTAL	64	

BITUMINOUS MATERIALS (PRIME COAT)		
STATION	POUND	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 16+00 - 19+55.98	1,953	0.25 LB./SQ. FT. OVER AGG.
STA. 20+30.02 - 24+50	2,301	0.25 LB./SQ. FT. OVER AGG.
STA. 16+00 - 19+55.98	178	0.025 LB./SQ. FT. OVER BIT.
STA. 20+30.02 - 24+50	209	0.025 LB./SQ. FT. OVER BIT.
PROJECT TOTAL	4,641	

HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50		
STATION	TON	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 16+00 - 19+55.98	99	2 1/4" - 112 LBS/SQ.YD./IN.
STA. 20+30.02 - 24+50	117	2 1/4" - 112 LBS/SQ.YD./IN.
PROJECT TOTAL	216	

SCHEDULE OF QUANTITIES

TREE REMOVAL (6 TO 15 UNITS DIAMETER)		
STATION	UNIT	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 20+15	14	28.33' RT.
PROJECT TOTAL	14	

TREE REMOVAL (OVER 15 UNITS DIAMETER)		
STATION	UNIT	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 20+36	20	26.97' RT.
STA. 20+49	48	28.78' RT.
STA. 20+52	24	27.36' RT.
PROJECT TOTAL	92	

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DESIGNED - M.A.C.	REVISED -
CHECKED - L.G.N.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

GENERAL NOTES, SCHEDULE OF QUANTITIES & DETAILS
STRUCTURE NO. 050-3619

SHEET NO. 1 OF 2 SHEETS

TWP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	3
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT			BR05-00900561	

SCHEDULE OF QUANTITIES – CONT.

HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50		
STATION	TON	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 16+00 - 19+55.98	66	1 1/2" - 112 LBS/SQ.YD./IN.
STA. 20+30.02 - 24+50	78	1 1/2" - 112 LBS/SQ.YD./IN.
PROJECT TOTAL	144	

AGGREGATE SHOULDERS, TYPE B		
STATION	TON	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 16+00 - 19+55.98	18	4"
LT. STA. 20+30.02 - 24+50	22	4"
RT. STA. 16+00 - 16+15	1	4"
RT. STA. 16+55 - 19+05.27	13	4"
RT. STA. 19+33.32 - 19+55.98	1	4"
RT. STA. 20+30.02 - 24+50	22	4"
PROJECT TOTAL	77	

PIPE CULVERT REMOVAL		
STATION	FOOT	REMARKS
T.R. 187 (N. 37TH ROAD)		
RT. STA. 16+35	26	
RT. STA. 19+20	24	
PROJECT TOTAL	50	

PIPE CULVERTS, CLASS D, TYPE 1 15"		
STATION	FOOT	REMARKS
T.R. 187 (N. 37TH ROAD)		
F.E.R. RT. STA. 16+35	46	
P.E.R. RT. STA. 19+20	46	
PROJECT TOTAL	92	

GUARDRAIL REMOVAL		
STATION	FOOT	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 19+45 - 19+73	28	
RT. STA. 19+51 - 19+80	28	
LT. STA. 20+21 - 20+49	29	
RT. STA. 20+27 - 20+55	29	
PROJECT TOTAL	114	

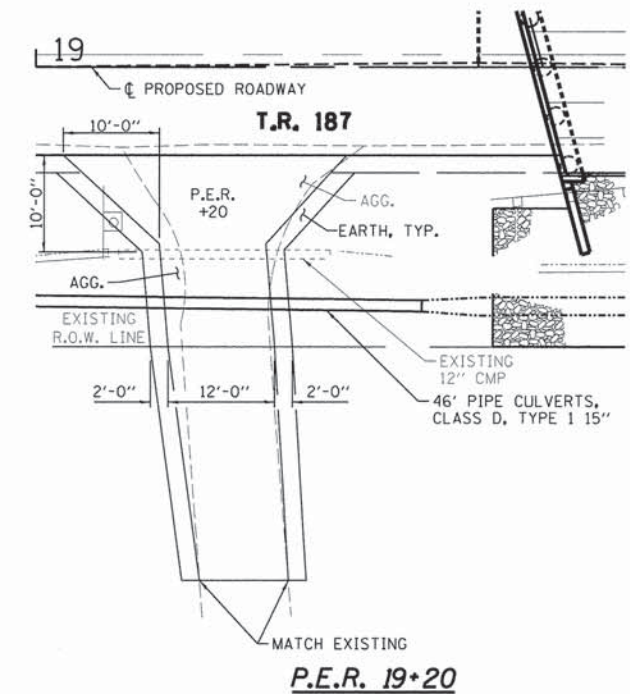
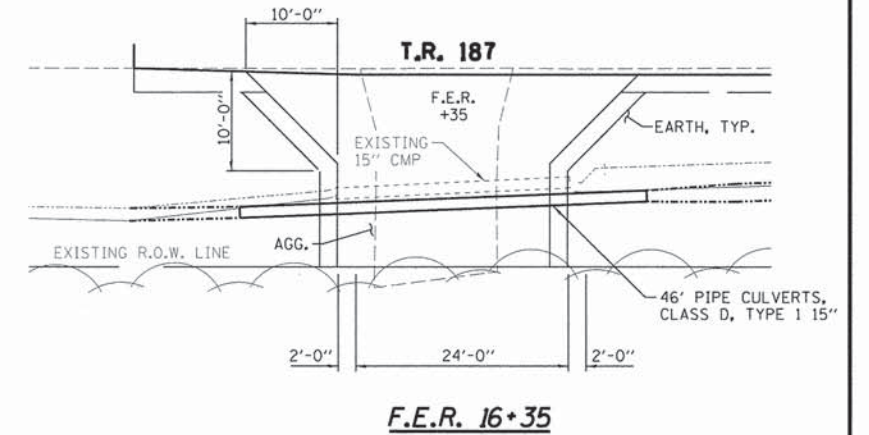
SCHEDULE OF QUANTITIES – CONT.

TERMINAL MARKER – DIRECT APPLIED		
STATION	EACH	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 19+52.76	1	
RT. STA. 19+59.19	1	
LT. STA. 20+26.81	1	
RT. STA. 20+33.24	1	
PROJECT TOTAL	4	

SCARIFY EXISTING SURFACE		
STATION	SO. YD.	REMARKS
T.R. 187 (N. 37TH ROAD)		
STA. 16+00 - 19+55.98	737	6" DEPTH
STA. 20+30.02 - 24+50	851	6" DEPTH
PROJECT TOTAL	1,588	

SEEDING, CLASS 2 (SPECIAL)		
STATION	ACRE	REMARKS
T.R. 187 (N. 37TH ROAD)		
LT. STA. 16+00 - 24+50	0.43	
RT. STA. 16+00 - 24+50	0.36	
PROJECT TOTAL	0.79	

T.R. 187 (N. 37TH ROAD) EARTHWORK TOTALS						
LOCATION	EARTH EXCAVATION (SPECIAL) CU YD	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE 25% CU YD	EMBANKMENT CU YD	CHANNEL EXCAVATION CU YD	CHANNEL EXCAVATION ADJUSTED FOR SHRINKAGE 62.5% CU YD	FURNISHED EXCAVATION CU YD
T.R. 187 (N. 37TH ROAD)						
STA. 16+00 - 24+50	502	377	2,117	222	83	1,657
PROJECT TOTAL	502	377	2,117	222	83	1,657



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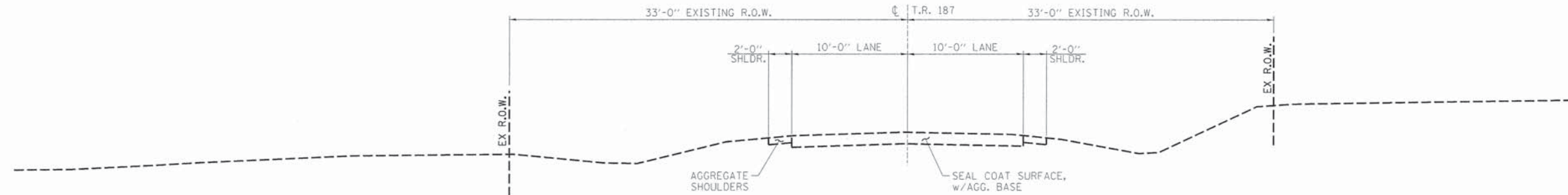
DESIGNED - M.A.C.	REVISED -
CHECKED - L.G.N.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

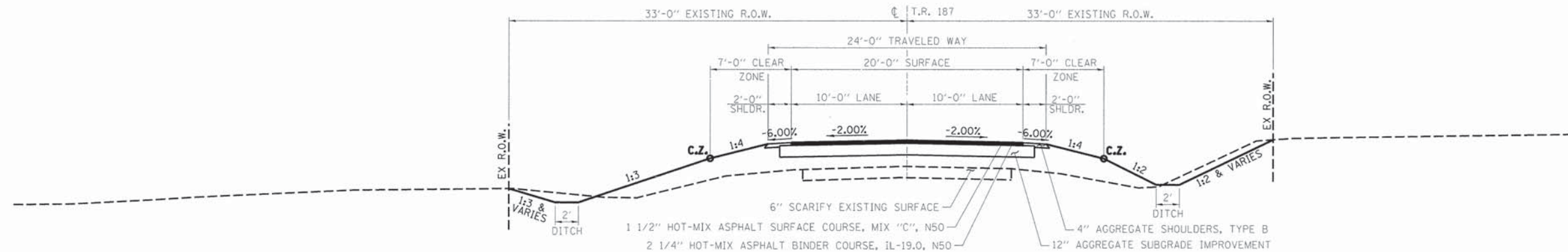
GENERAL NOTES, SCHEDULE OF QUANTITIES & DETAILS
STRUCTURE NO. 050-3619

SHEET NO. 2 OF 2 SHEETS

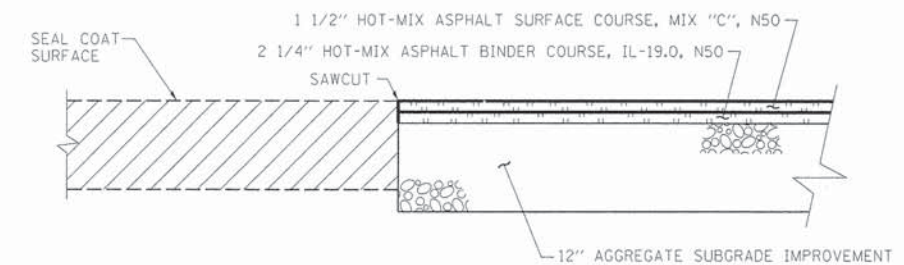
TWP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	4
WHA* 1284014		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BROS-00990561				



EXISTING ROADWAY TYPICAL SECTION



PROPOSED ROADWAY TYPICAL SECTION



TYPICAL CORE JOINT DETAIL

**PAVEMENT STRUCTURAL DESIGN
T.R. 187 (N. 37TH ROAD)**

STRUCTURAL DESIGN TRAFFIC (S.D.T.) = YEAR 2026
CLASS IV ROAD
80,000* TRUCK DESIGN

E_{RI} : 2 KSI (POOR SUBGRADE)
TF = N/A
HMA MIX TEMP. = N/A
HMA E_{AC} = N/A
HMA DESIGN STRAIN = N/A

P.V.	97	} 110 ADT
S.U.	10	
M.U.	3	

USE:
1 1/2" HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50
2 1/4" HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50
12" AGGREGATE SUBGRADE IMPROVEMENT

SEE SECTION 44-3.03(b) OF THE LOCAL ROADS AND STREETS MANUAL

PAVEMENT MIXTURE REQUIREMENTS		
MIXTURE USE:	BINDER	SURFACE
PG:	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL-19.0	IL-9.5
FRICTION AGGREGATE	N/A	MIX "C"
MIXTURE WEIGHT:	112 LBS/SY/IN	112 LBS/SY/IN
DENSITY TEST METHOD:	GUAGE	GUAGE

T.R. 187 - HORIZONTAL CONTROL POINTS					
PT. #	LOCATION	N	E	EL.	DESCRIPTION
1	14.0' RT. OF ±STA. 16+25.0	1750160.81	762631.78	680.23	5/8" IPS
2	15.0' LT. OF ±STA. 19+20.0	1750191.19	762926.29	678.71	5/8" IPS
3	14.0' RT. OF ±STA. 21+20.0	1750163.34	763126.93	678.11	5/8" IPS
4	17.0' LT. OF ±STA. 25+00.0	1750195.41	763508.35	682.76	5/8" IPS

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DESIGNED -	B.S.K.	REVISED -	
CHECKED -	L.G.N.	REVISED -	
DRAWN -	D.A.N.	REVISED -	
CHECKED -	M.A.C.	REVISED -	

**LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93**

**TYPICAL SECTIONS
STRUCTURE NO. 050-3619**

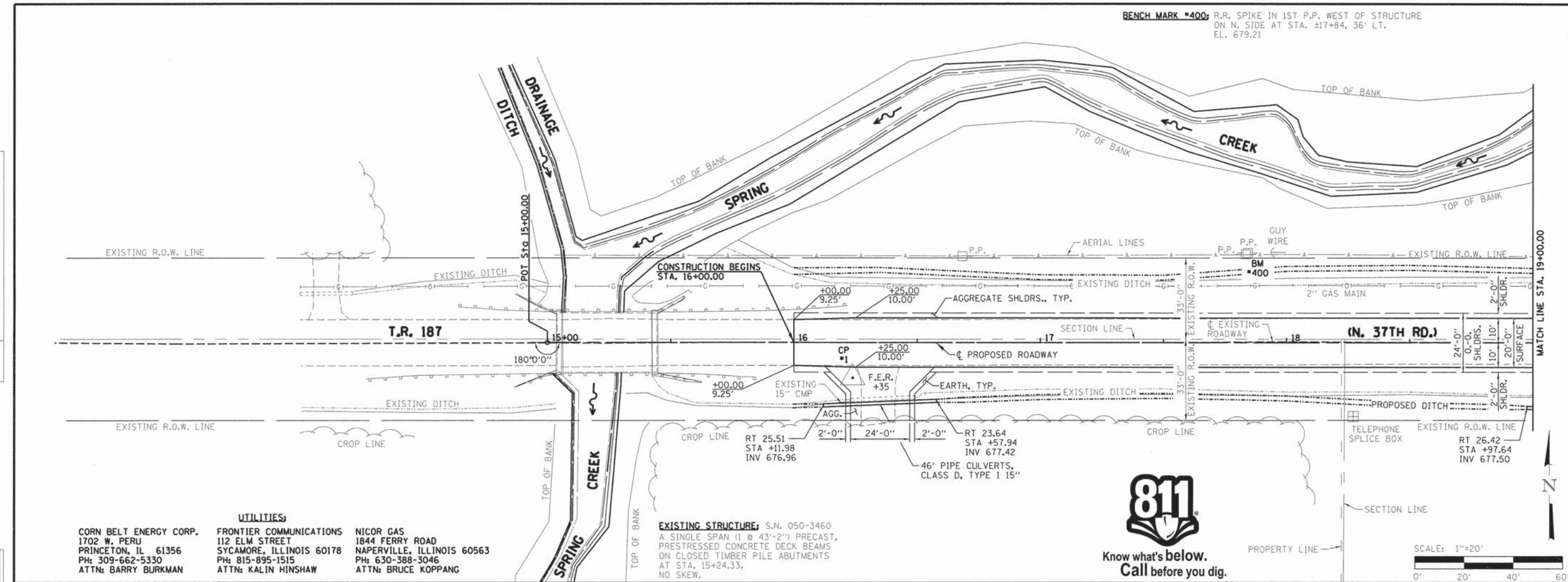
SHEET NO. 1 OF 1 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	5
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BR05-009R0561				

BENCH MARK #400: R.R. SPIKE IN 1ST P.P. WEST OF STRUCTURE ON N. SIDE AT STA. ±17+84, 36' LT. EL. 679.21

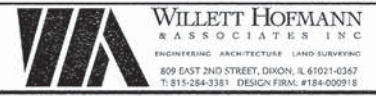
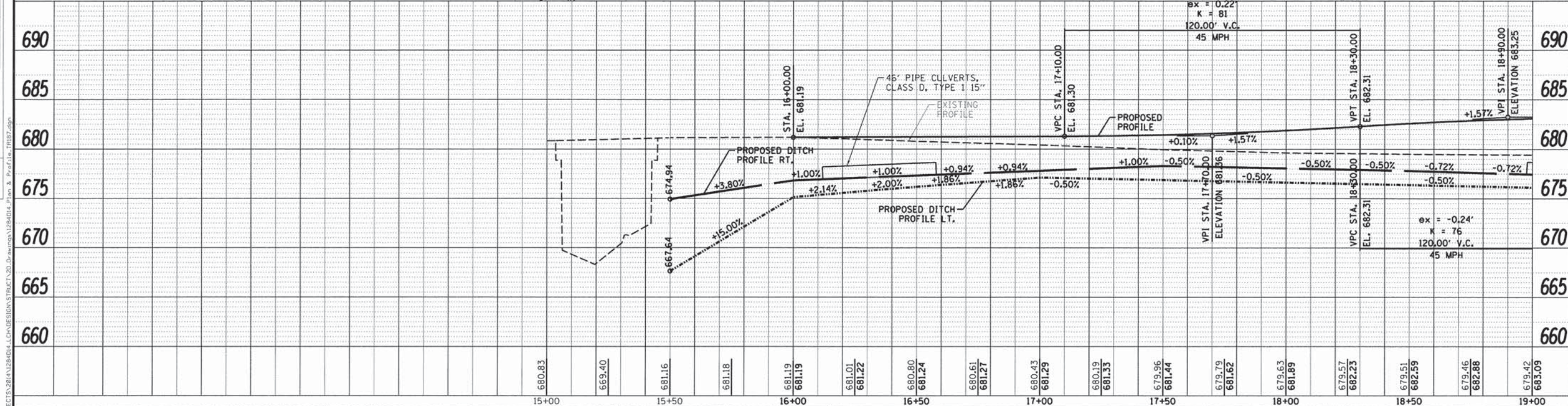
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PROFILE	DESIGNED	DATE
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	NO. OF SHEETS	
	NO. OF THIS SHEET	
	DATE	



UTILITIES:
 CORN BELT ENERGY CORP. 1702 W. PERU PRINCETON, IL 61356 PH: 309-662-5330 ATTN: BARRY BURKMAN
 FRONTIER COMMUNICATIONS 112 ELM STREET SYCAMORE, ILLINOIS 60178 PH: 815-895-1515 ATTN: KALIN HINSHAW
 NICOR GAS 1844 FERRY ROAD NAPERVILLE, ILLINOIS 60563 PH: 630-388-3046 ATTN: BRUCE KOPPANG

EXISTING STRUCTURE: S.N. 050-3460
 A SINGLE SPAN (1 @ 43'-2") PRECAST, PRESTRESSED CONCRETE DECK BEAMS ON CLOSED TIMBER PILE ABUTMENTS AT STA. 15+24.33. NO SKEW.



DESIGNED	-	M.A.C.	REVISED	-
CHECKED	-	M.C.W.	REVISED	-
DRAWN	-	D.A.N.	REVISED	-
CHECKED	-	B.K.C.	REVISED	-

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

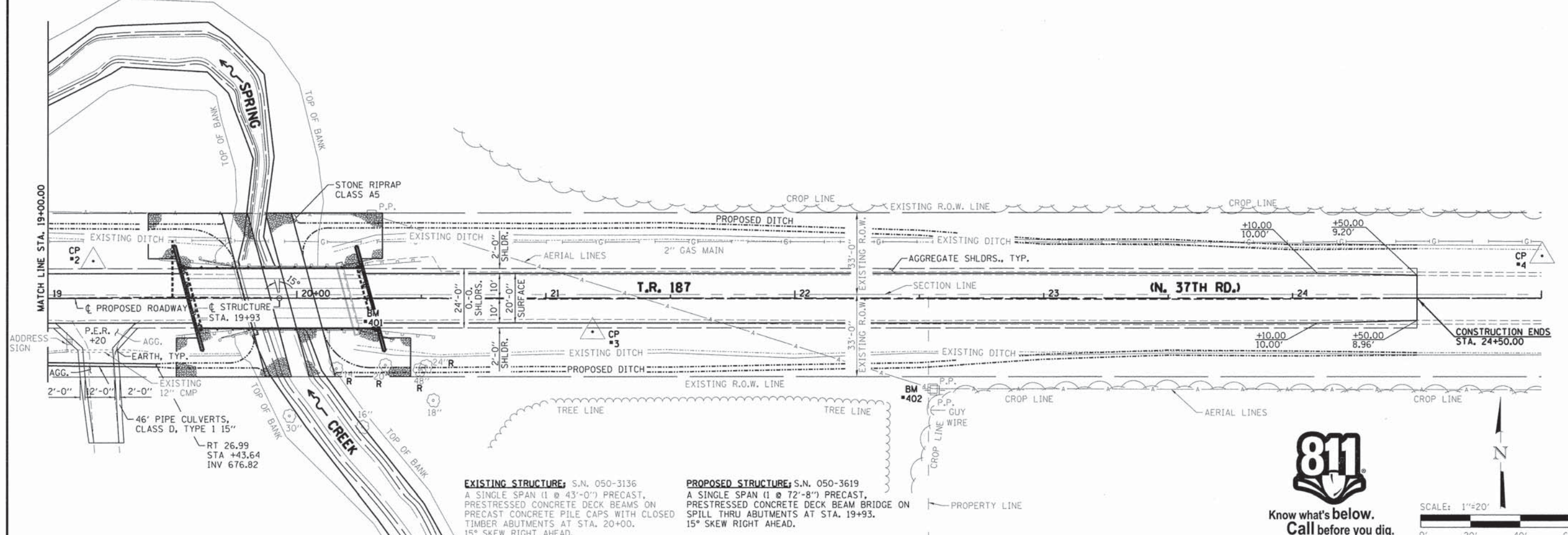
PLAN & PROFILE
STRUCTURE NO. 050-3619
 SCALE: 1" = 20'-0" SHEET NO. 1 OF 2 SHEETS STA. 15+00.00 TO STA. 19+00.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	6
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-00990561				

FILE = S:\PROJECTS\281\1284D14\CONSTRUCTION\TR187.dwg; Plot & Profile: TR187.dwg

BENCH MARK #401: CHIS. "T" SE CORNER OF HUB GUARD ON STRUCTURE AT STA. ±20+25, 12' RT. EL. 679.68

BENCH MARK #402: R.R. SPIKE IN 1ST P.P. EAST OF STRUCTURE ON S. SIDE AT STA. ±22+55, 36' RT. EL. 679.28

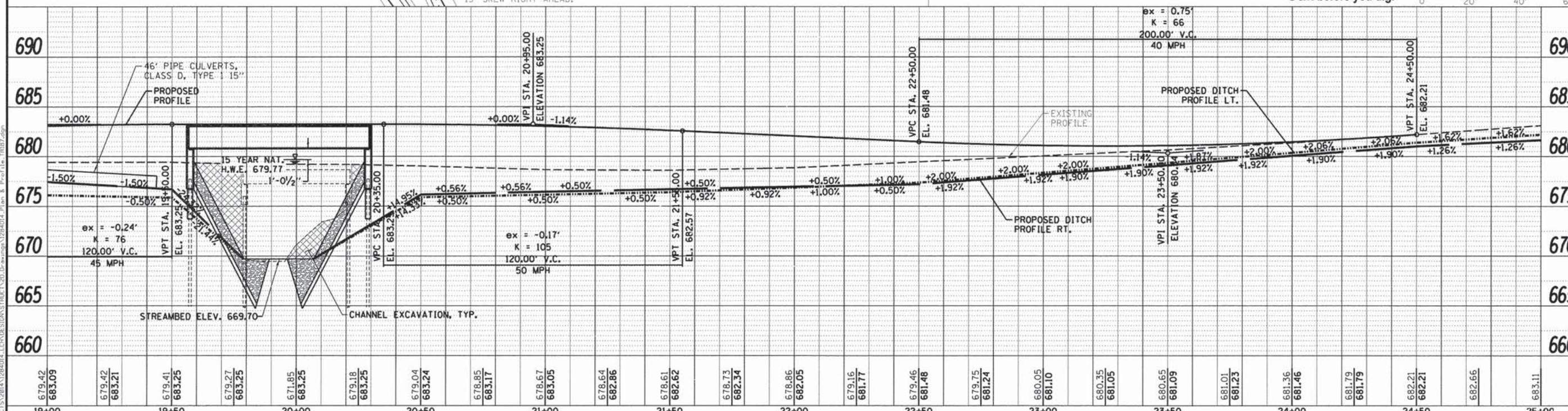
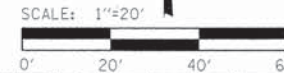


EXISTING STRUCTURE: S.N. 050-3136
A SINGLE SPAN (1 @ 43'-0") PRECAST, PRESTRESSED CONCRETE DECK BEAMS ON PRECAST CONCRETE PILE CAPS WITH CLOSED TIMBER ABUTMENTS AT STA. 20+00. 15° SKEW RIGHT AHEAD.

PROPOSED STRUCTURE: S.N. 050-3619
A SINGLE SPAN (1 @ 72'-8") PRECAST, PRESTRESSED CONCRETE DECK BEAM BRIDGE ON SPILL THRU ABUTMENTS AT STA. 19+93. 15° SKEW RIGHT AHEAD.



Know what's below.
Call before you dig.



DESIGNED - M.A.C.	REVISIONS	<p align="center">LASALLE COUNTY T.R. 187 (N. 37TH RD.) OVER SPRING CREEK STATION 19 + 93</p> <p align="center">PLAN & PROFILE STRUCTURE NO. 050-3619</p>		TWP. RTE. 187	SECTION 15-33758-00-BR	COUNTY LASALLE	TOTAL SHEETS 24	SHEET NO. 7	
CHECKED - M.C.W.	REVISIONS			WHA# 1284014	CONTRACT NO. 87625	ILLINOIS FED. AID PROJECT BROS-009K0561			
DRAWN - D.A.N.	REVISIONS			SCALE: 1" = 20'-0" SHEET NO. 2 OF 2 SHEETS STA. 19+00.00 TO STA. 25+00.00					
CHECKED - B.K.C.	REVISIONS								

WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, OXFORD, IL 61021-0367
TEL: 815-284-3381 DESIGN FROM: #184-000918

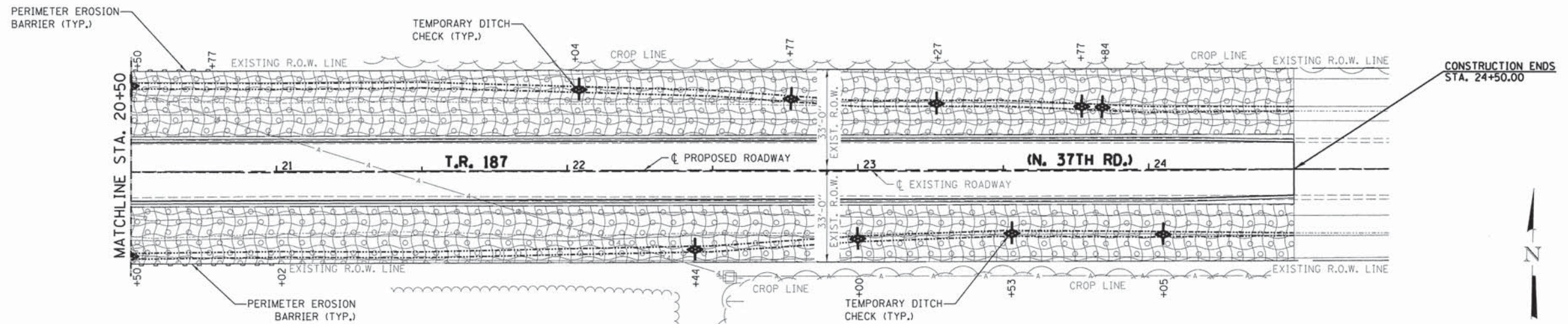
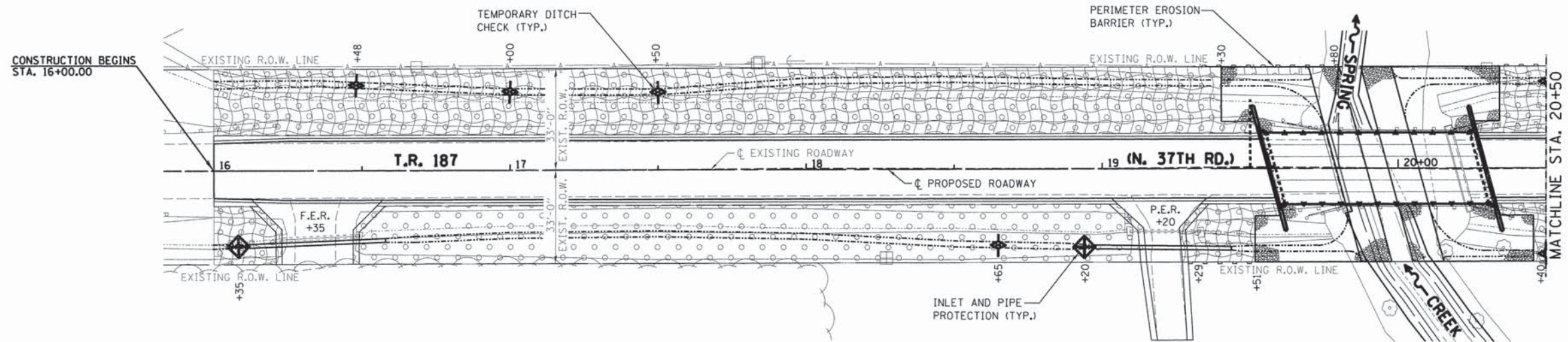
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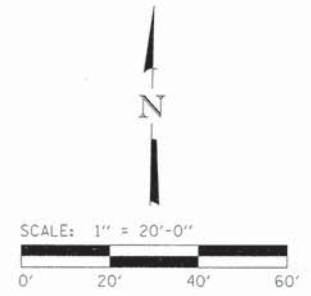
PROFILE

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CONSTRUCTION ENDS
STA. 24+50.00



EROSION CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2" OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.

PERIMETER EROSION BARRIER SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS AND SHALL BE PLACED AS SHOWN ON THE EROSION CONTROL PLAN AND IN ACCORDANCE WITH STATIONS SHOWN ON THE SCHEDULE OF QUANTITIES SHEET OR AS DIRECTED BY THE ENGINEER.

SILT FENCE SHALL BE INSTALLED FOLLOWING THE COMPLETION AND STABILIZATION OF ALL AREAS ADJACENT TO THE ON-SITE DRAINAGES. THE SILT FENCE WILL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA IS STABILIZED.

FOR SEEDING, CLASS 2 (SPECIAL) SEE SPECIAL PROVISIONS.

EROSION CONTROL BLANKET SHALL BE PLACED IN DITCHES AND TO ALL DISTURBED AREAS AS SHOWN ON THIS EROSION CONTROL PLAN SHEET AND IN ACCORDANCE WITH SECTION 251 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE USE OF GREEN DYE IN THE EROSION CONTROL BLANKET IS NOT ACCEPTABLE.

TEMPORARY DITCH CHECKS SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 280001-07.

TEMPORARY DITCH CHECKS SHALL BE PLACED AT STATIONS CALLED OUT IN THE SCHEDULE OF QUANTITIES OR AS DIRECTED BY THE ENGINEER.

STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

ALL ADJACENT ENTRANCES MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY AND CLEANED WHEN NECESSARY.

LEGEND

- PERIMETER EROSION BARRIER
- SEEDING, CLASS 2 (SPECIAL)
- TEMPORARY DITCH CHECKS
- EROSION CONTROL BLANKET
- INLET AND PIPE PROTECTION

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
EROSION CONTROL BLANKET	SQ. YD.	3,812
TEMPORARY EROSION CONTROL SEEDING	POUND	79
TEMPORARY DITCH CHECKS	FOOT	150
PERIMETER EROSION BARRIER	FOOT	168
INLET AND PIPE PROTECTION	EACH	2
SEEDING, CLASS 2 (SPECIAL)	ACRE	0.79



Know what's below.
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DESIGNED - M.A.C.	REVISED -
CHECKED - L.G.N.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

EROSION CONTROL PLAN
STRUCTURE NO. 050-3619
SHEET NO. 1 OF 2 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	8
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BROS-00990561				

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STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN STANDARD 280001 LOCATED IN THE SPECIFICATIONS.

SECTION 280, TEMPORARY EROSION CONTROL, OF THE STANDARD SPECIFICATIONS ADDITIONALLY SUPPLEMENTS THIS PLAN.

SITE DESCRIPTION:

DESCRIPTION OF CONSTRUCTION ACTIVITY:

1. THE PROJECT CONSISTS OF BRIDGE REPLACEMENT ON T.R. 187 OVER SPRING CREEK & APPROACH ROADWAY WORK THERETO.
2. CONSTRUCTION INCLUDES PAVEMENT REMOVAL, EARTH EXCAVATION, CHANNEL EXCAVATION, VARIOUS PAVEMENT ITEMS, BRIDGE ITEMS AND OTHER MISCELLANEOUS ITEMS OF CONSTRUCTION.

DESCRIPTION OF INTENDED SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE:

1. STRUCTURE REMOVAL AND BRIDGE CONSTRUCTION
2. CHANNEL EXCAVATION
3. EARTH AND FURNISHED EXCAVATION
4. HMA SURFACE AND RELATED APPURTENANCES
5. PLACEMENT OF PERMANENT EROSION CONTROL, INCLUDING SEEDING

AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 1.30 ACRES OF WHICH 1.30 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES, AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

1. INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
2. PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROL

DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

1. THE DRAWINGS, SPECIFICATIONS, AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE: TEMPORARY SEEDING, PERMANENT SEEDING, PERIMETER EROSION BARRIER, AND OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
 - (A) AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.
 - (B) DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER, ALONG WITH REQUIRED TREE REMOVAL.
 - (C) AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS AND PERIMETER EROSION BARRIER SHALL BE INSTALLED AS CALLED OUT IN THIS PLAN AND DIRECTED BY THE ENGINEER.
 - (D) BARE AND SPARSELY VEGETATED GROUND IN HIGHLY ERODIBLE AREAS AS DETERMINED BY THE ENGINEER SHALL BE TEMPORARILY SEEDED AT THE BEGINNING OF CONSTRUCTION WHERE NO CONSTRUCTION ACTIVITIES ARE EXPECTED WITHIN 7 DAYS.
 - (E) AT LOCATIONS WHERE A SIGNIFICANT AMOUNT OF WATER DRAINS INTO THE CONSTRUCTION ZONE FROM OUTSIDE AREAS (ADJACENT LANDOWNERS), TEMPORARY DITCH CHECKS WILL BE UTILIZED TO LOCALLY DIVERT WATER, REDUCE FLOW RATES, AND COLLECT OUTSIDE SILTATION INSIDE THE RIGHT-OF-WAY LINE.
2. ESTABLISHMENT OF THESE TEMPORARY EROSION CONTROL MEASURES WILL HAVE ADDITIONAL BENEFITS TO THE PROJECT. DESIRABLE GRASS SEED WILL BECOME ESTABLISHED IN THESE AREAS AND WILL SPREAD SEEDS ONTO THE CONSTRUCTION SITE UNTIL PERMANENT SEEDING/MOWING AND OVER SEEDING CAN BE COMPLETED.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

1. DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.
 - (A) WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
 - (B) EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN 14 DAYS.
 - (C) AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - I. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - II. TEMPORARILY SEED ERODIBLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
 - (D) EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR 7 DAYS.
 - (E) CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
 - (F) THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT DAILY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2" OR GREATER OR EQUIVALENT SNOWFALL AND DURING THE WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE CONSTRUCTION FIELD ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT EROSION CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.
 - (G) SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EARTH EXCAVATION (SPECIAL).
 - (H) THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

1. TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS SEEDED AND ESTABLISHED.
2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEDED.

MAINTENANCE AFTER CONSTRUCTION:

1. CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY LASALLE COUNTY FINAL INSPECTION. MAINTENANCE UP TO THIS DATE WILL BE BY THE CONTRACTOR.

MISCELLANEOUS:

1. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS./ACRE.
2. TEMPORARY DITCH CHECKS SHALL COMPLY WITH SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD 280001-07.
3. ALL EROSION CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PRODUCT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

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DESIGNED - M.A.C.	REVISED -
CHECKED - L.G.N.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

EROSION CONTROL PLAN
STRUCTURE NO. 050-3619

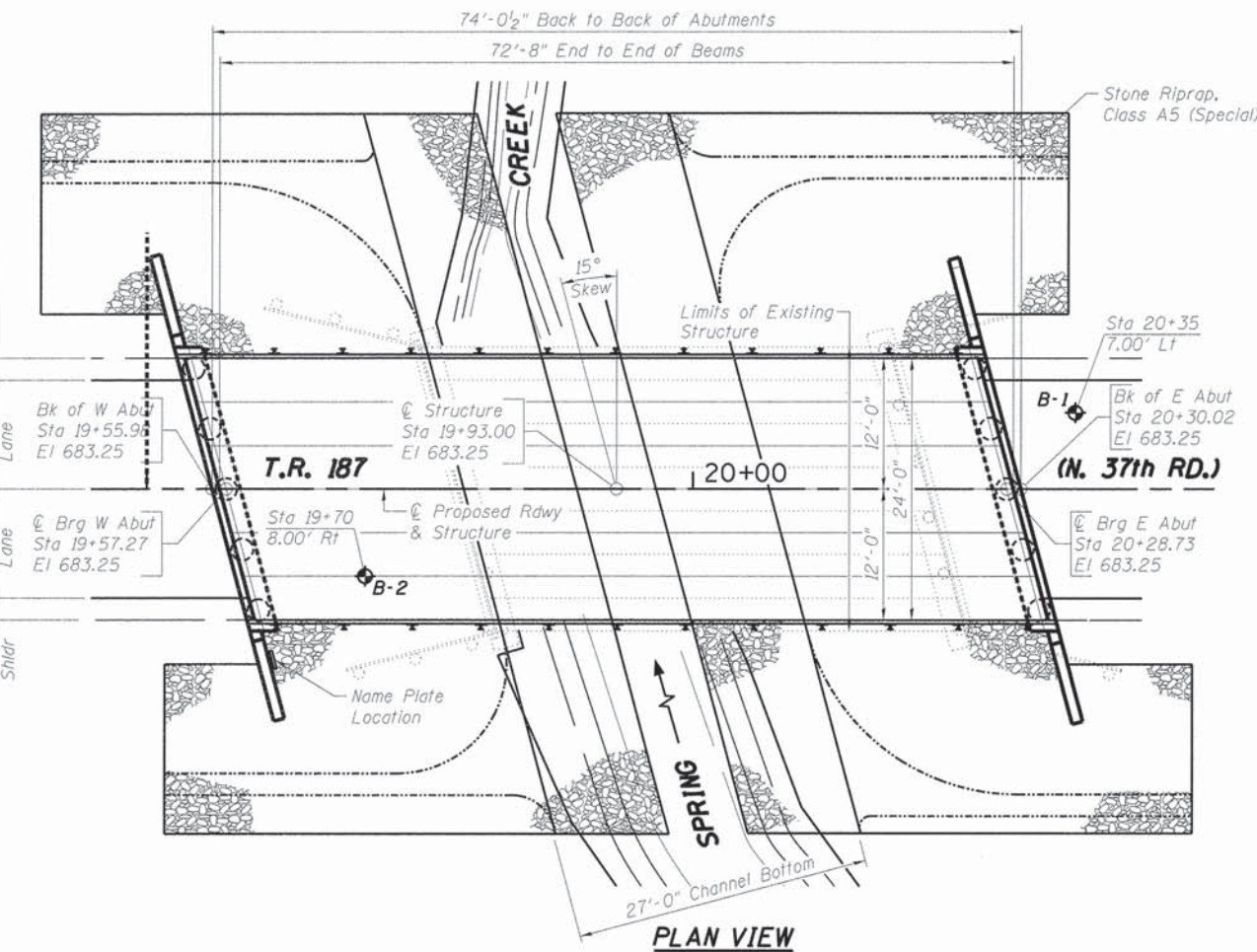
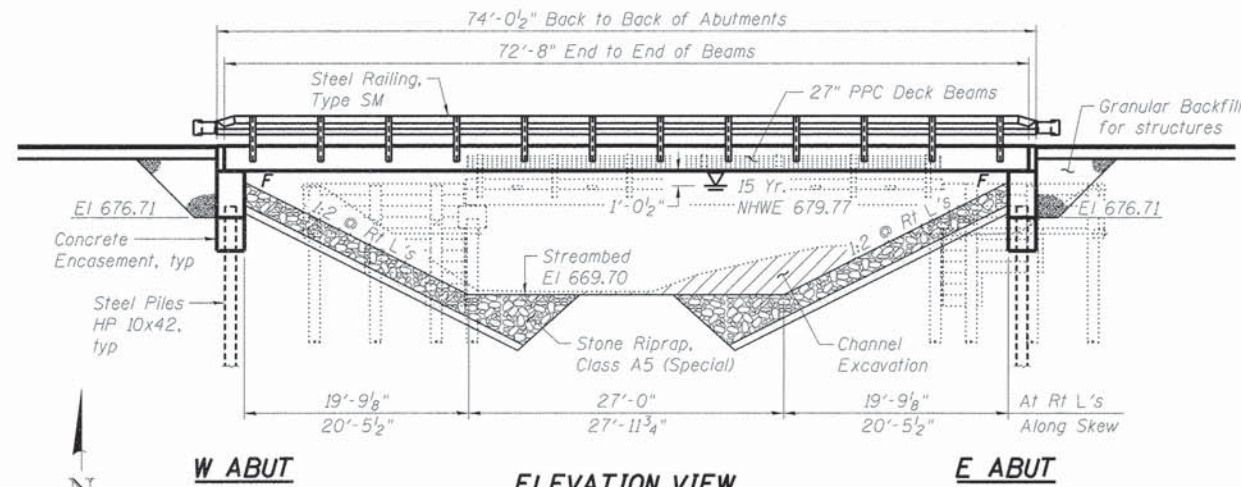
SHEET NO. 2 OF 2 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	9
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BR05-00990561				

BENCH MARK: Chiseled "□" in Southeast Corner Hubguard on existing structure, El 679.68

EXISTING STRUCTURE: S.N. 050-3136 built in 1967 under Troy Grove Twp. Sec. 90-67B as Structure "D" at Sta 3+40.00 as a single span (43'-0" skewed 15° Rt Ahead) precast, prestressed concrete deck beam bridge on precast concrete pile caps. The structure is supported on creosoted timber piles with closed timber abutments. 43'-0" end to end of beams and 26'-0" out to out of deck. The existing structure is to be removed and replaced.

No salvage.



INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 Riprap and Pile Layout
- 3 27" x 48" PPC Deck Beam
- 4 27" x 48" PPC Deck Beam Details
- 5 West Abutment Details
- 6 East Abutment Details
- 7 Steel Railing, Type SM Details
- 8 HP Pile Details
- 9 Boring Logs



PROFILE GRADE

HIGHWAY CLASSIFICATION

TR 187 (N 37th Rd)
Functional Class: Minor Collector
ADT: 110 (2016), 110 (2016)
ADTT: 2 (2016), 2 (2016)
DHW: 1
Design Speed: 40 M.P.H.
Posted Speed: 55 M.P.H.
2-Way Traffic
Directional Distribution: 50:50

LOADING HL-93

Allow 50#/sq ft for future wearing surface.

DESIGN SPECIFICATIONS

Design in accordance with 2014 AASHTO LRFD Bridge Design Specifications, 7th Ed. with 2015 Interim Revisions

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2" φ Low Lax Strands)
fpbt = 201,960 psi (1/2" φ Low Lax Strands)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.068
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.120
Soil Site Class = C



Brian K. Conwell
DATE: 10/22/2015
EXPIRES: 11/30/16

"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 Bridge Design Specifications.'"



BILL OF MATERIAL - BRIDGE

ITEM	UNIT	SUB	SUPER	TOTAL
Channel Excavation	Cu Yd	222	—	222
* Removal of Existing Structures	Each	—	1	1
Structure Excavation	Cu Yd	65	—	65
Concrete Structures	Cu Yd	29.8	—	29.8
Concrete Encasement	Cu Yd	3.6	—	3.6
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq Ft	—	1,744	1,744
Reinforcement Bars, Epoxy Coated	Pound	3,540	—	3,540
* Steel Railing, Type SM	Foot	—	148	148
Furnishing Steel Piles HP 10x42	Foot	216	—	216
Driving Piles	Foot	216	—	216
Test Pile Steel HP 10x42	Each	2	—	2
Name Plates	Each	1	—	1
* Stone Riprap, Class A5 (Special)	Ton	649	—	649
Granular Backfill for Structures	Cu Yd	60	—	60

*See Special Provisions

GENERAL NOTES:

- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- The channel shall be transitioned to fit the proposed structure inside the Right of Way. Cost shall be included in price per Cubic Yard for Channel Excavation.

SPRING CREEK
BUILT 2016 BY
LASALLE COUNTY
SECTION 15-33758-00-BR
STATION 19+93
STR. NO. 050-3619 LOADING HL-93

NAME PLATE LETTERING

Refer To Std. 515001

WATERWAY INFORMATION

Drainage Area = 11.2 sq mi Low Grade El 681.05 at Sta 23+25.75

Flood	Freq. Yr	0 C.F.S.	Opening Sq Ft	**Nat. H.W.E.	Head - Ft	Headwater El
		Exist	Prop	Exist	Prop	Exist
Overtopping (EX)	5	1,180	225 420	679.0	0.3 0.1	679.3 679.1
Design	15	1,840	225 474	679.8	0.2 0.2	680.0 680.0
Overtopping (PR)	50	2,630	225 543	681.0	0 0.6	681.0 681.6
Base	100	3,100	225 543	681.6	0 0.6	681.6 682.2
Scour Check	200	3,600	225 543	682.0	0.1 0.5	682.1 682.5
Max. Calc.	500	4,250	225 543	682.5	0.1 0.4	682.6 682.9

**The downstream structure was included in the Natural model used to determine the Nat. H.W.E.s listed.

BRIDGE DESIGN SCOUR ELEVATION TABLE

Event / Limit	Design Scour Elevations (ft.)			
State	W. Abut.	E. Abut.	Item 113	
0100	673.3	674.0		
0200	672.8	673.3		
Design	676.73	676.73		8
Check	676.73	676.73		

GENERAL PLAN AND ELEVATION
T.R. 187 (N. 37TH ROAD) OVER SPRING CREEK
SEC. 15-33758-00-BR
LASALLE COUNTY
STATION 19+93
STRUCTURE NO. 050-3619

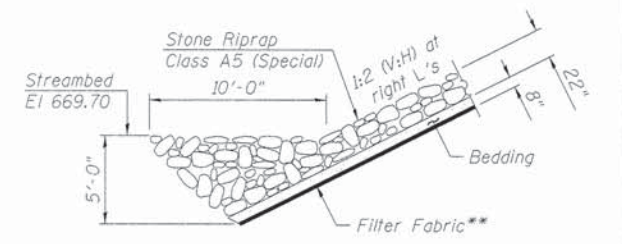
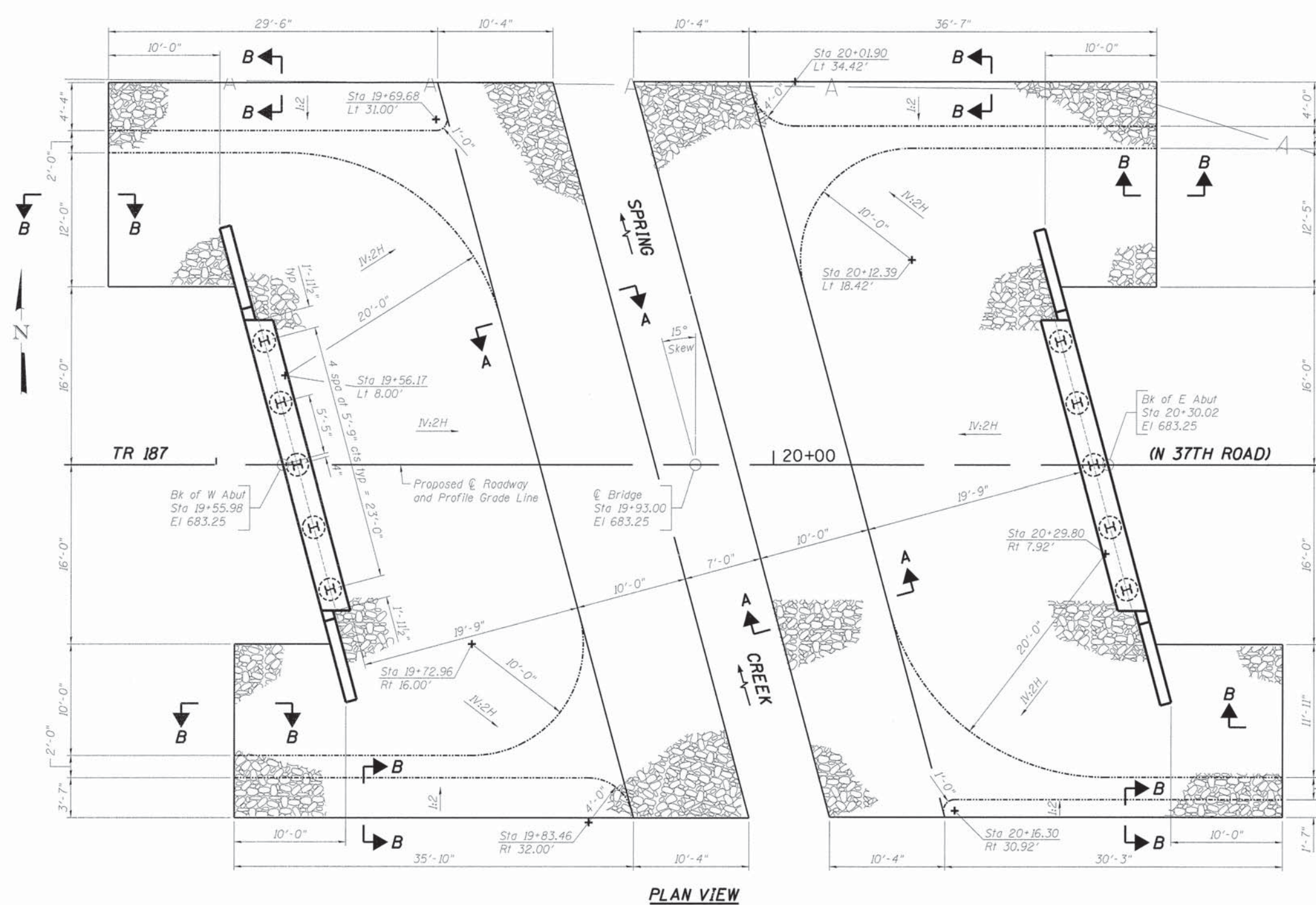
WILETT HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DEION, IL 61021-0367
T: 815-284-3351 DESIGN FIRM: #184-005918

DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

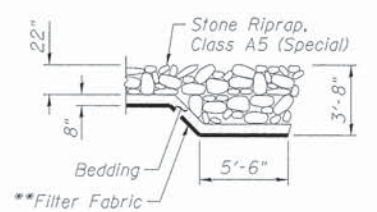
LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

STRUCTURAL SHEET NO. 1 OF 9 SHEETS

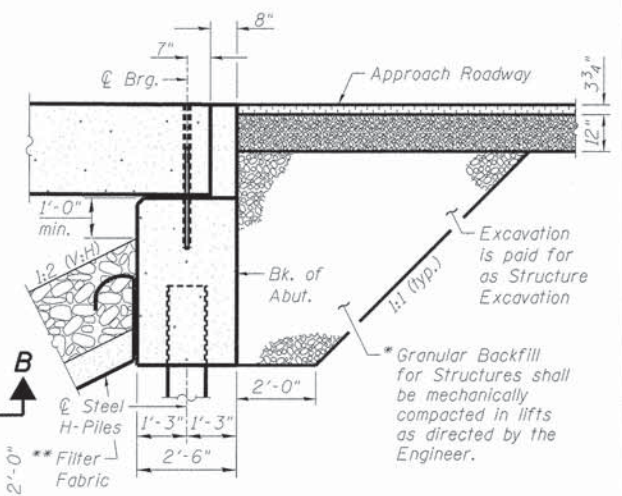
TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	10
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-00990561				



SECTION A-A



SECTION B-B



SECTION THRU ABUTMENT
(Dimensions at Rt. L's.)

BILL OF MATERIAL

Item	Unit	Quantity
Stone Riprap, Class A5 (Special)	Ton	649

NOTE:

* Pay Limits of Granular Backfill for Structures shall extend to 2'-0" in from the end of each wingwall.
 ** Cost included in Stone Riprap, Class A5 (Special).

FILE = S:\PROJECTS\284\284D14.L\DESIGN\STRUCT\2D_Drawing\1284D14_Riprap & Pile Layout.dwg

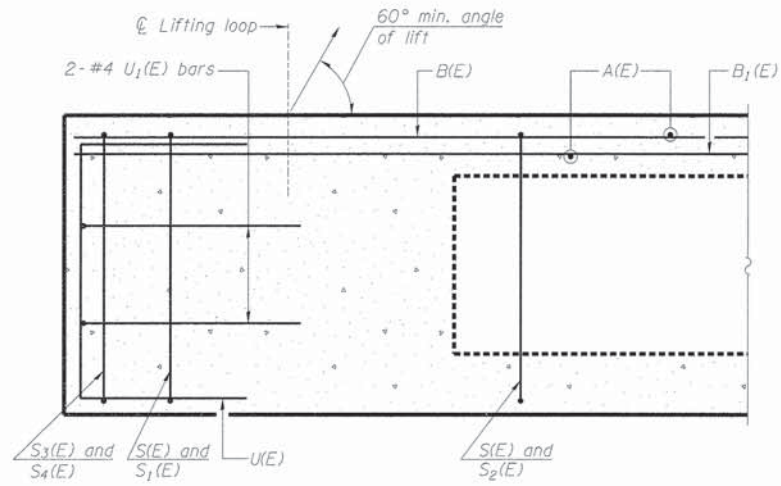
WILETT HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

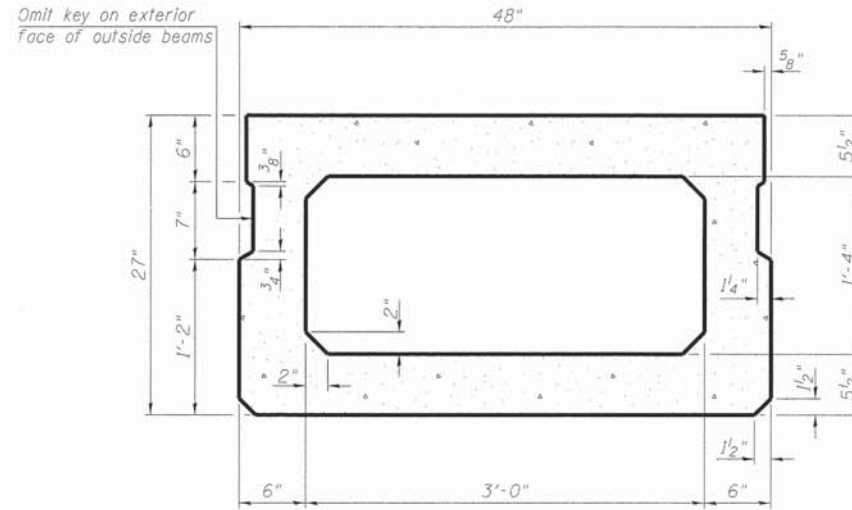
LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

RIPRAP AND PILE LAYOUT
STRUCTURE NO. 050-3619
 STRUCTURAL SHEET NO. 2 OF 9 SHEETS

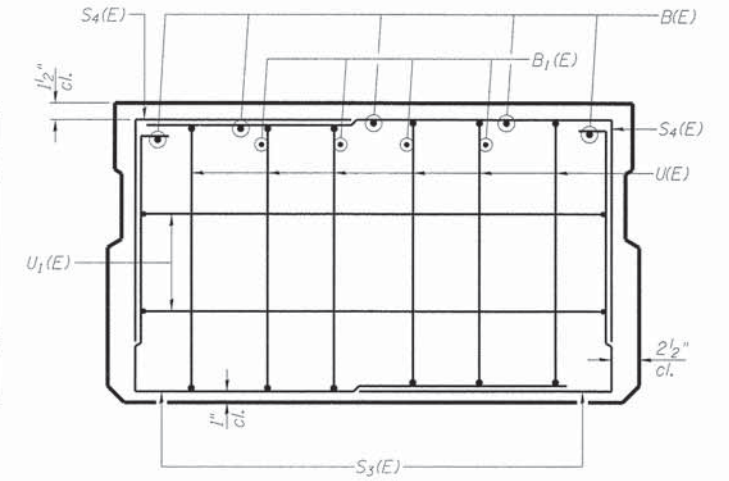
TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	11
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT			BROS-00990561	



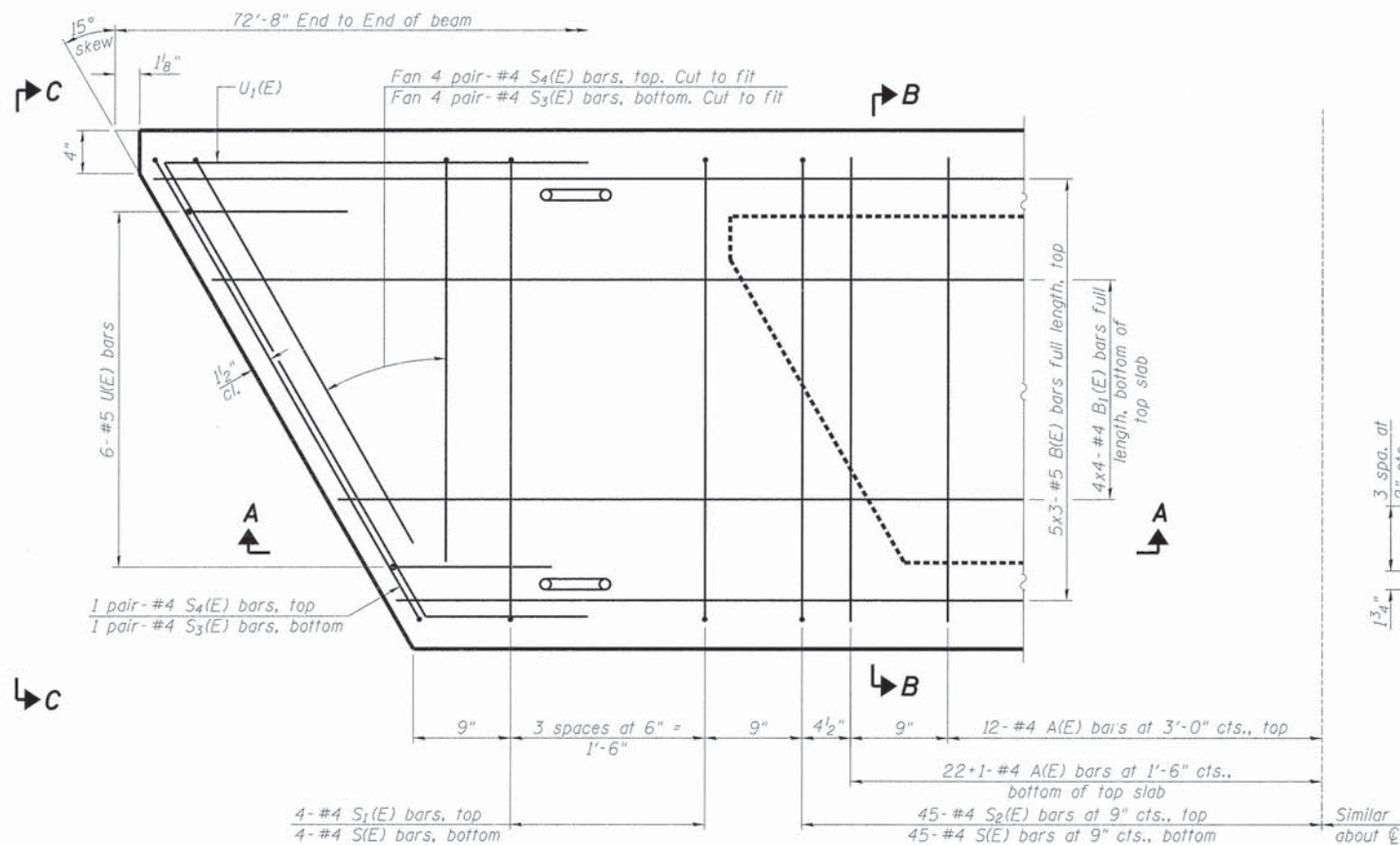
SECTION A-A



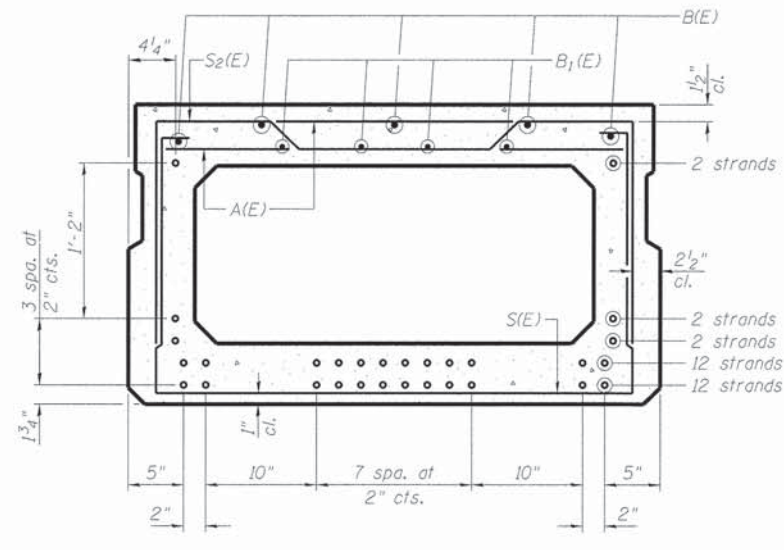
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)

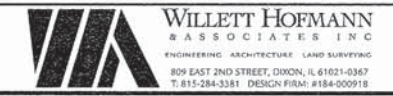
BAR LIST
ONE BEAM ONLY
(For information only)

Bar No.	Size	Length	Shape
A(E)	#4	3'-7"	—
B(E)	#5	25'-10"	—
B1(E)	#4	19'-7"	—
S(E)	#4	8'-5"	U
S1(E)	#4	6'-11"	U
S2(E)	#4	7'-2"	U
S3(E)	#4	5'-5"	U
S4(E)	#4	4'-8"	U
U(E)	#5	4'-6"	U
U1(E)	#4	7'-1"	U

NOTE:
See Structural Sheet 4 of 9 for additional details and Bill of Material.

NOTES:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
Bars indicated thus 5x3-#5 etc., indicates 5 lines of bars with 3 lengths per line.
Bars indicated thus 22+1-#4 etc., indicates 22 bars on each side of centerline plus 1 additional bar at centerline.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"



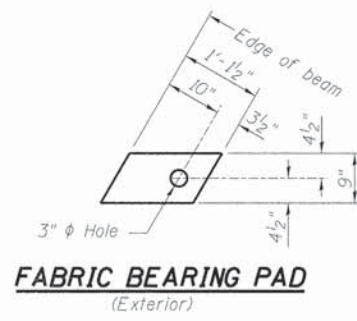
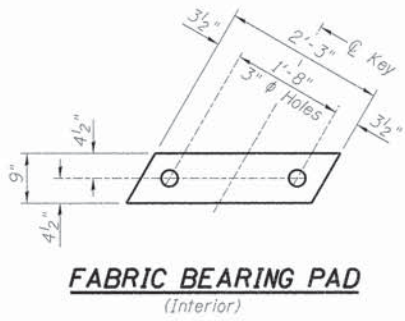
DESIGNED - P.L.P.	REVISED -
CHECKED - M.A.C.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

27" x 48" PPC DECK BEAM
STRUCTURE NO. 050-3619

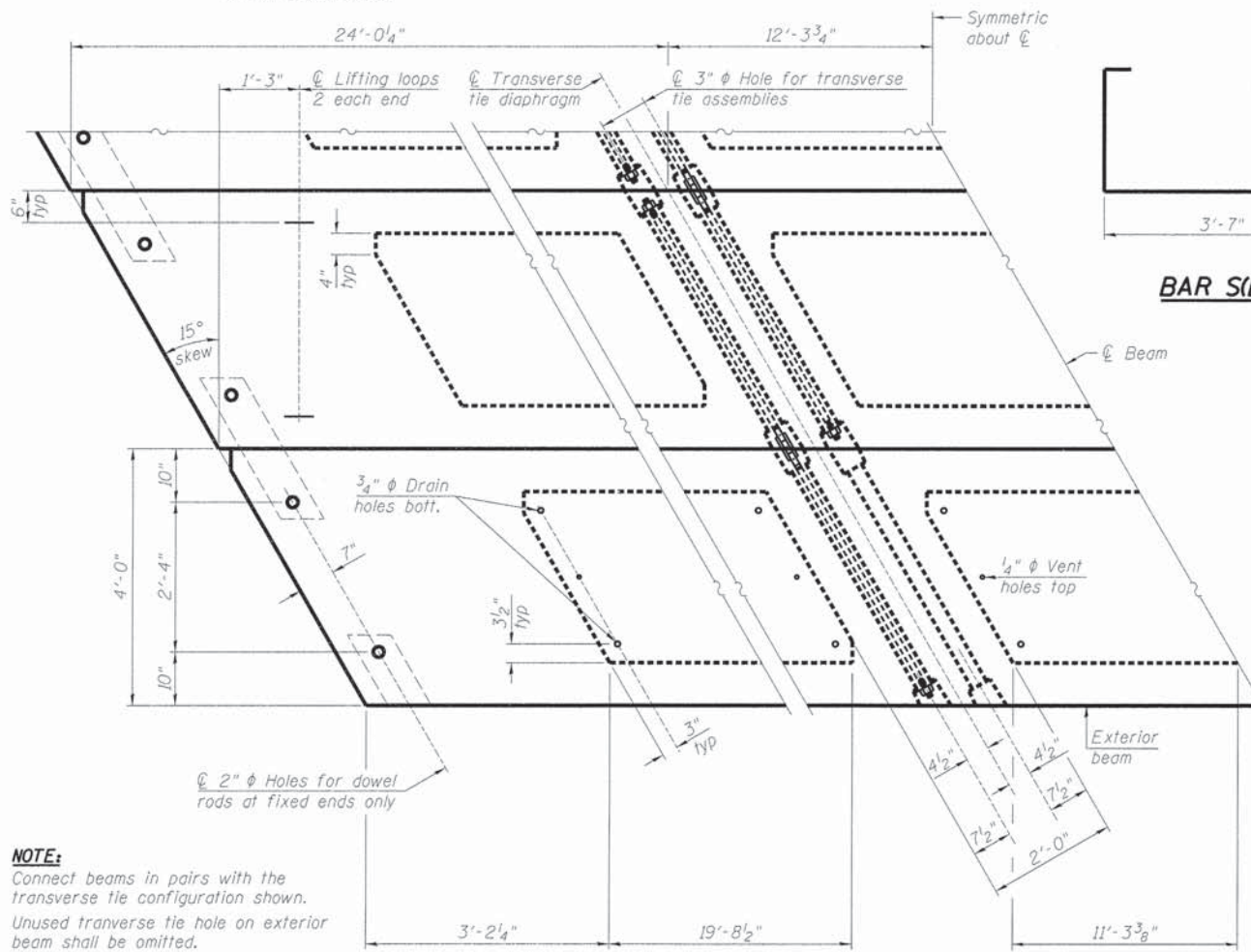
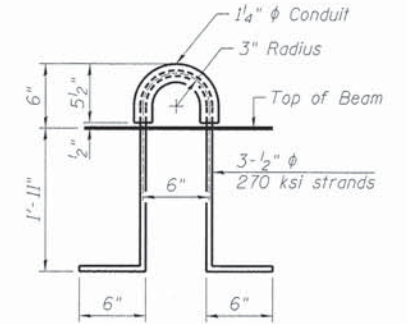
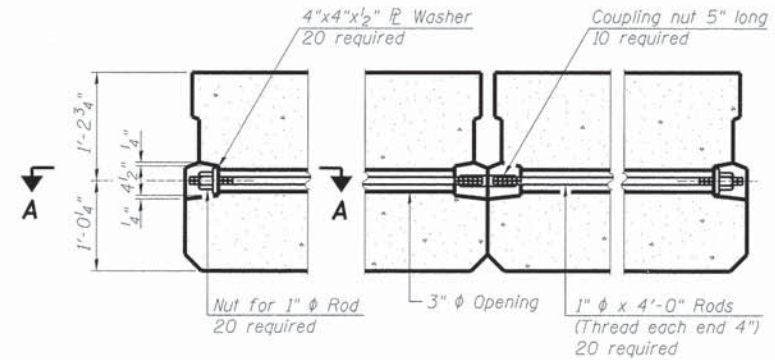
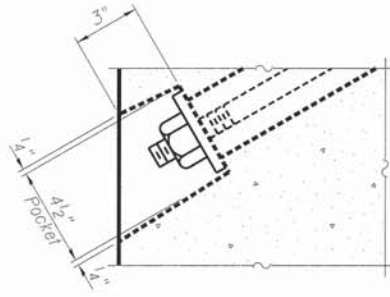
TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	12
WHA# 1284014		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT			BROS-009K0561	

STRUCTURAL SHEET NO. 3 OF 9 SHEETS

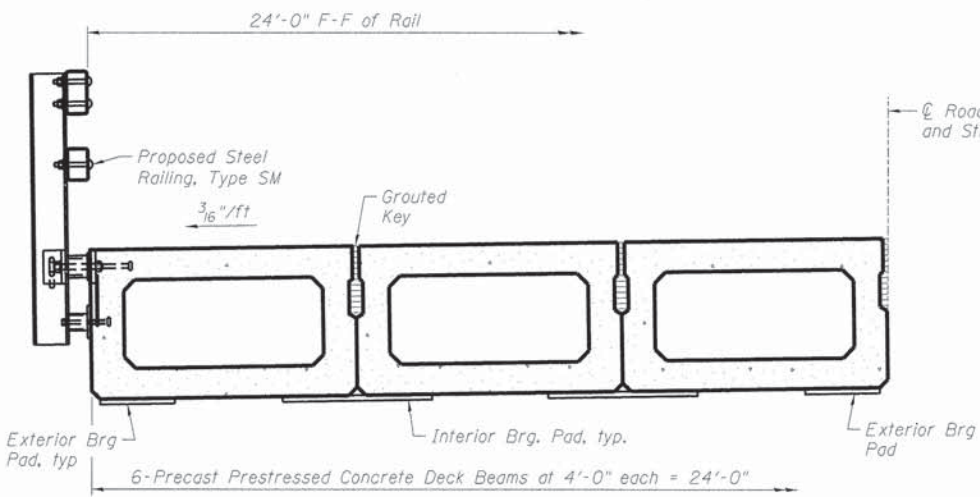
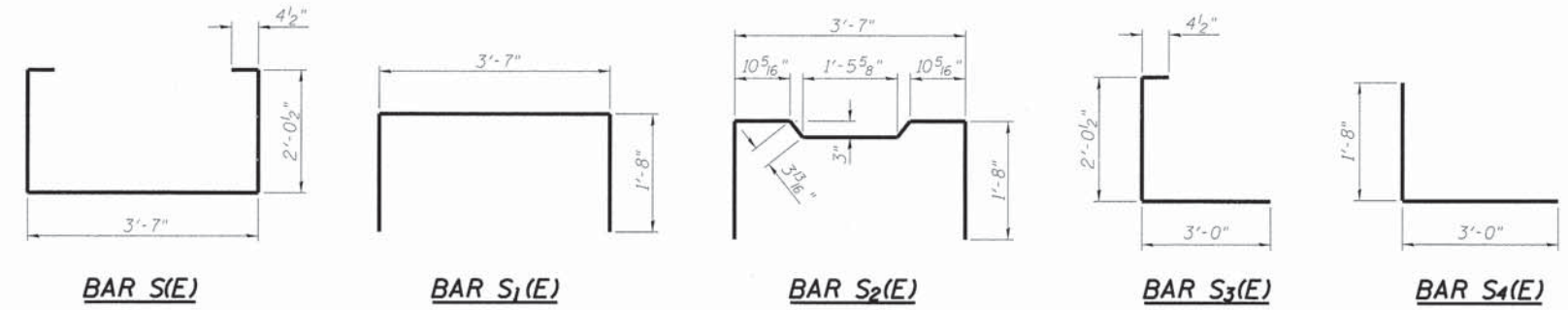
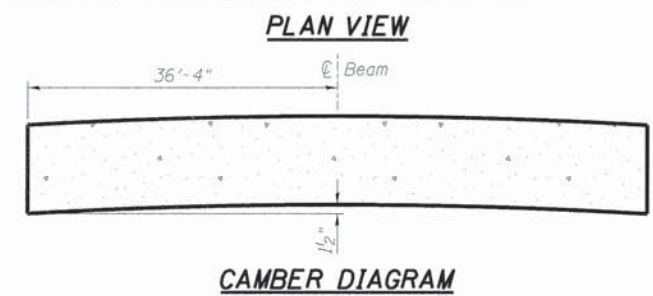


FIXED

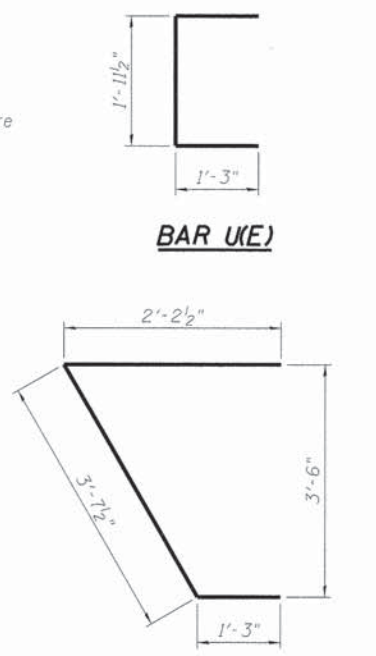
NOTES:
All bearing pads shall be 1" thick.
Exterior bearing pads shall be used at the crown break.



NOTE:
Connect beams in pairs with the transverse tie configuration shown. Unused transverse tie hole on exterior beam shall be omitted.

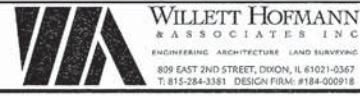


NOTES:
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq in.
The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.
Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
Compressive strength of prestressed concrete, f'c, shall be 6,000 psi.
Compressive strength of prestressed concrete at release, f'ci, shall be 5,000 psi.



BILL OF MATERIAL

Precast Prestressed Conc Deck Bms (27" depth)	Sq Ft	1,744
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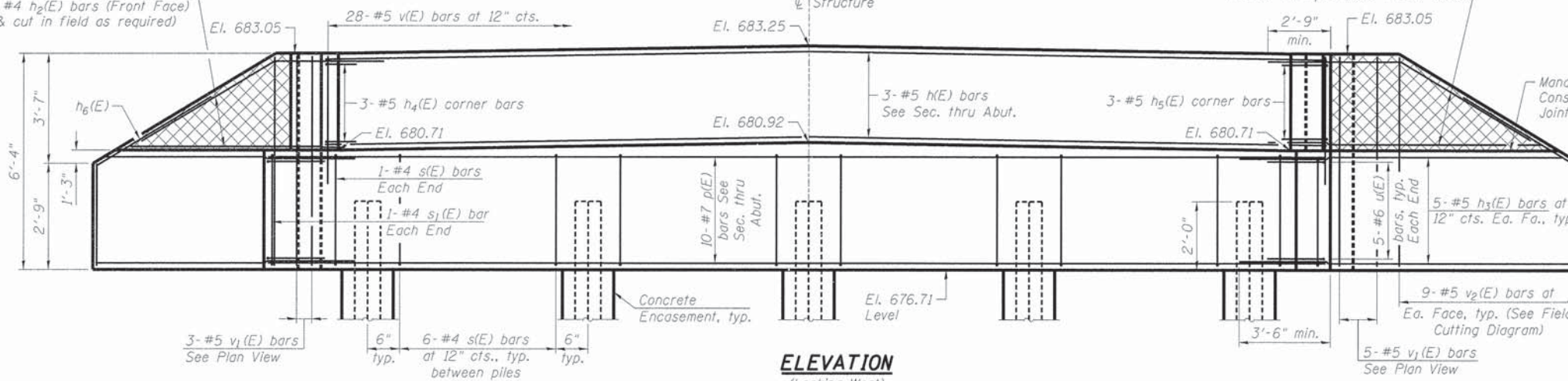
DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

27" x 48" PPC DECK BEAM DETAILS
STRUCTURE NO. 050-3619
STRUCTURAL SHEET NO. 4 OF 9 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	13
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT		BROS-00990561		

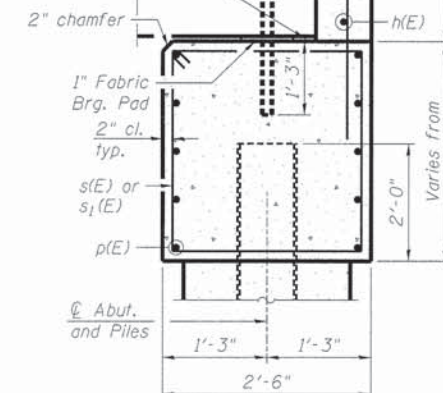
Fan 5-#4 $h_1(E)$ bars (Back Face)
Fan 5-#4 $h_2(E)$ bars (Front Face)
(Bend & cut in field as required)



ELEVATION
(Looking West)

1" ϕ x 2'-6" Dowel Rods in
1/2" ϕ holes drilled in cap
(2 Each Beam)

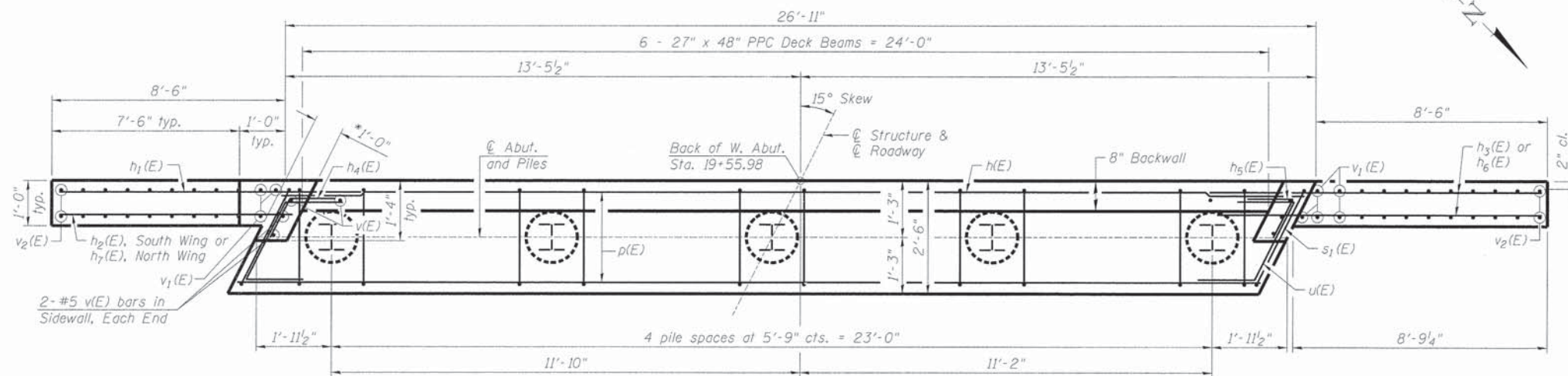
1" x 2 1/2" P.J.F.
(Full width)



SEC. THRU ABUT.
(Dimensions are at Rt. L's)

BILL OF MATERIAL - WEST ABUT.

Bar	No.	Size	Length	Shape
$h(E)$	3	#5	26'-7"	—
$h_1(E)$	10	#4	12'-1"	—
$h_2(E)$	5	#4	8'-5"	—
$h_3(E)$	20	#5	13'-3"	—
$h_4(E)$	3	#5	3'-0"	↙
$h_5(E)$	3	#5	3'-0"	↘
$h_6(E)$	4	#4	4'-10"	—
$h_7(E)$	5	#4	9'-7"	—
$p(E)$	10	#7	26'-7"	—
$s(E)$	26	#4	12'-5"	□
$s_1(E)$	2	#4	12'-7"	□
$u(E)$	10	#6	7'-2"	┘
$v(E)$	32	#5	4'-4"	—
$v_1(E)$	8	#5	6'-0"	—
$v_2(E)$	18	#5	8'-5"	—
Structure Excavation			Cu. Yd.	33
Concrete Structures			Cu. Yd.	14.9
Concrete Encasement			Cu. Yd.	1.8
Reinforcement Bars, Epoxy Coated			Pound	1,770
Furnishing Steel			Foot	108
Piles HP 10x42			Foot	108
Driving Piles			Foot	108
Test Pile Steel HP 10x42			Each	1
** Granular Backfill for Structures			Cu. Yd.	30



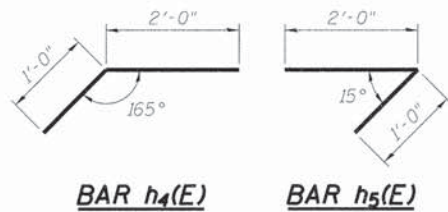
ABOVE CONSTRUCTION JOINT IN WINGWALL

PLAN

BELOW CONSTRUCTION JOINT IN WINGWALL

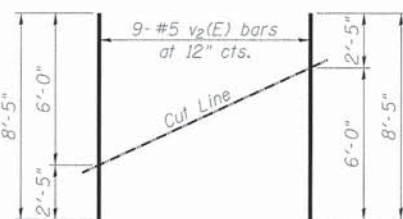
PILE DATA

Type: Steel HP 10x42
Nominal Required Bearing: Drive to Refusal
Factored Resistance Available: 138 k
Est. Length: 27'
No. Production Piles: 4
No. Test Piles: 1



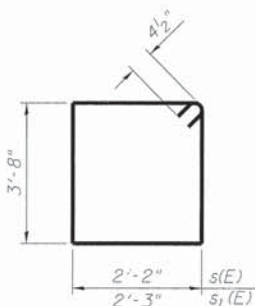
BAR $h_4(E)$

BAR $h_5(E)$

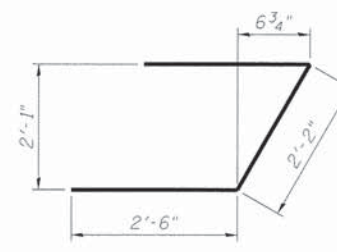


FIELD CUTTING DIAGRAM

Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



BARS $s(E)$ & $s_1(E)$



BAR $u(E)$

NOTES:

Hatched portion of wingwalls to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours.

All exposed edges shall have standard 3/4" chamfers, except as noted.

Space reinforcement in cap to miss dowel rods.

After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a min. of 24 hours prior to grouting the shear keys.

For Concrete Encasement details, see Structural Sheet 8 of 9.

For pile details, see Structural Sheet 8 of 9.

* May vary due to overrun of beams.

** For drainage details, see Structural Sheet 2 of 9.



WILLET HOFMANN & ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - F.D.L.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

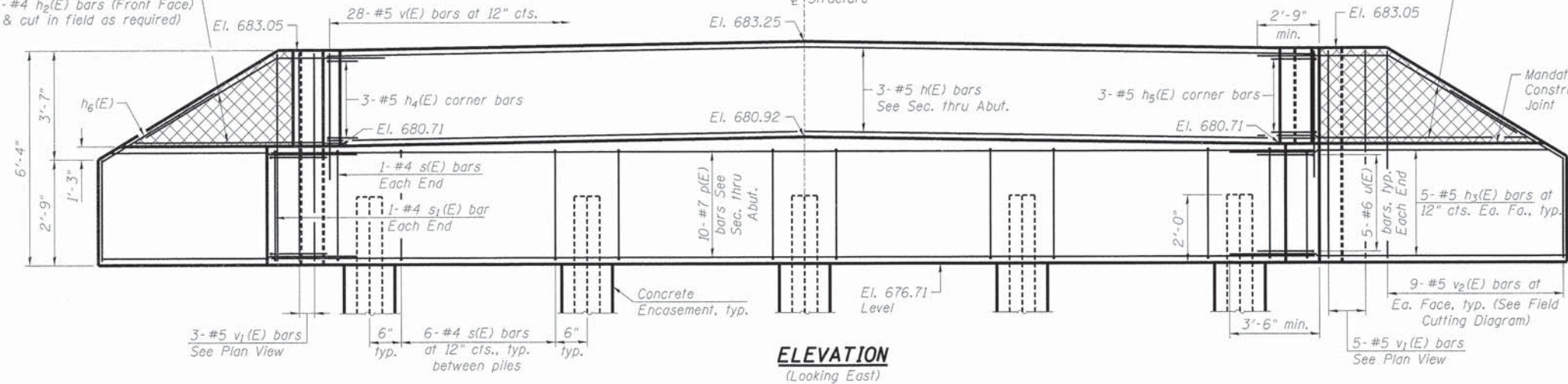
WEST ABUTMENT DETAILS
STRUCTURE NO. 050-3619

STRUCTURAL SHEET NO. 5 OF 9 SHEETS

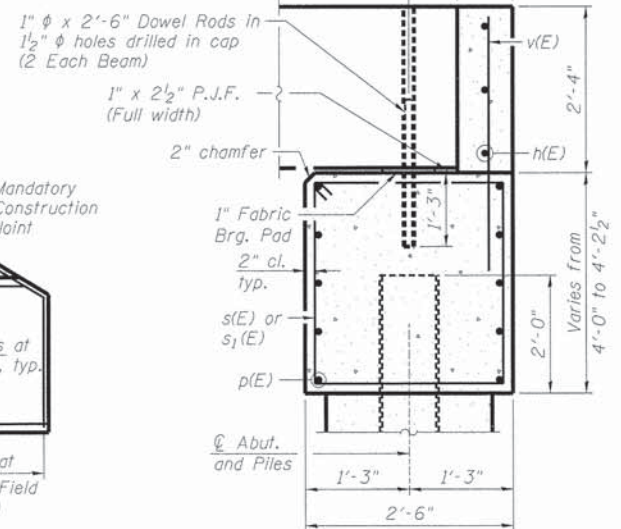
TWP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	14
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BROS-00910561				

FILE = S:\PROJECTS\281A\284014_ARCH\DESIGN\STRUCT\20-Drawing\1284D14_West_Abutment.dwg

Fan 5-#4 $h_1(E)$ bars (Back Face)
 Fan 5-#4 $h_2(E)$ bars (Front Face)
 (Bend & cut in field as required)



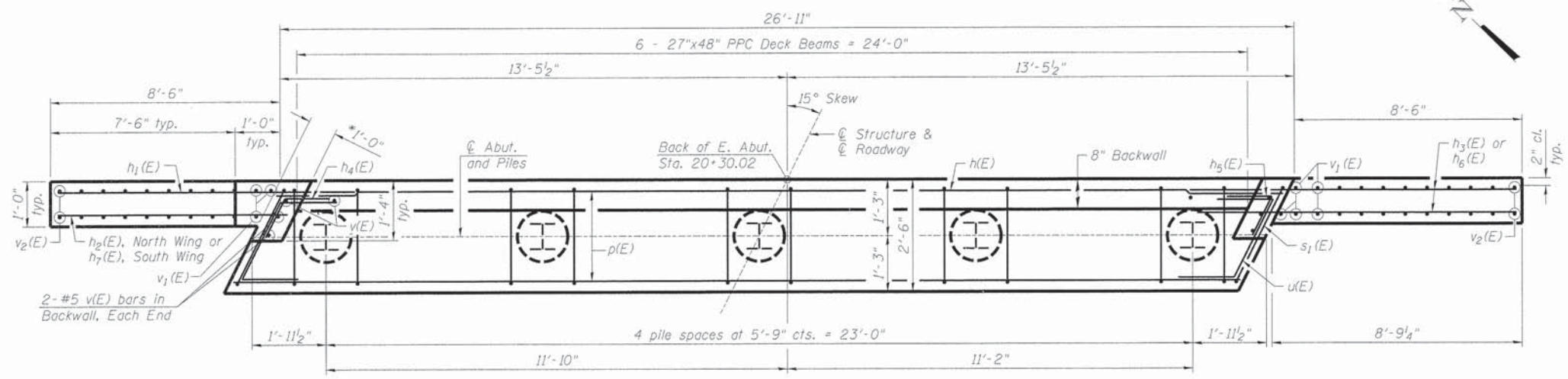
ELEVATION
 (Looking East)



SEC. THRU ABUT.
 (Dimensions are at Rt. L's)

BILL OF MATERIAL - EAST ABUT.

Bar	No.	Size	Length	Shape
$h(E)$	3	#5	26'-7"	—
$h_1(E)$	10	#4	12'-1"	—
$h_2(E)$	5	#4	8'-5"	—
$h_3(E)$	20	#5	13'-3"	—
$h_4(E)$	3	#5	3'-0"	↙
$h_5(E)$	3	#5	3'-0"	↘
$h_6(E)$	4	#4	4'-10"	—
$h_7(E)$	5	#4	9'-7"	—
$p(E)$	10	#7	26'-7"	—
$s(E)$	26	#4	12'-5"	□
$s_1(E)$	2	#4	12'-7"	□
$u(E)$	10	#6	7'-2"	↗
$v(E)$	32	#5	4'-4"	—
$v_1(E)$	8	#5	6'-0"	—
$v_2(E)$	18	#5	8'-5"	—
Structure Excavation			Cu. Yd.	32
Concrete Structures			Cu. Yd.	14.9
Concrete Encasement			Cu. Yd.	1.8
Reinforcement Bars, Epoxy Coated			Pound	1,770
Furnishing Steel			Foot	108
Piles HP 10x42			Foot	108
Driving Piles			Foot	108
Test Pile Steel HP 10x42			Each	1
** Granular Backfill for Structures			Cu. Yd.	30



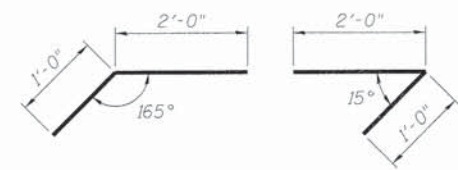
ABOVE CONSTRUCTION JOINT IN WINGWALL

PLAN

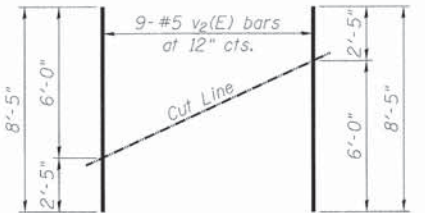
BELOW CONSTRUCTION JOINT IN WINGWALL

PILE DATA

Type: Steel HP 10 x 42
 Nominal Required Bearing: Drive to Refusal
 Factored Resistance Available: 138 k
 Est. Length: 27'
 No. Production Piles: 4
 No. Test Piles: 1

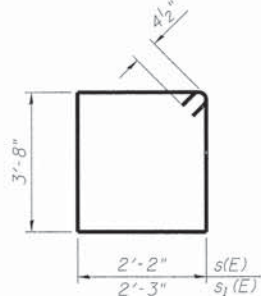


BAR $h_4(E)$ **BAR $h_5(E)$**

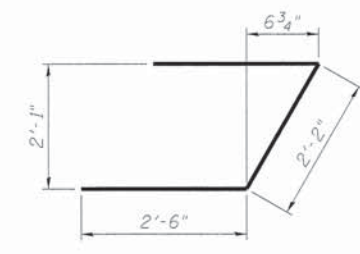


FIELD CUTTING DIAGRAM

Order $v_2(E)$ full length. Cut as shown and use remainder of bars in opposite face.



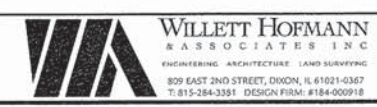
BARS $s(E)$ & $s_1(E)$



BAR $u(E)$

NOTES:

- Hatched portion of wingwalls to be poured with the backwall after the deck beams have been installed and grout has cured for a minimum of 24 hours.
- All exposed edges shall have standard $\frac{3}{4}$ " chamfers, except as noted.
- Space reinforcement in cap to miss dowel rods.
- After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a min. of 24 hours prior to grouting the shear keys.
- For Concrete Encasement details, see Structural Sheet 8 of 9.
- For pile details, see Structural Sheet 8 of 9.
- * May vary due to overrun of beams.
- ** For drainage details, see Structural Sheet 2 of 9.

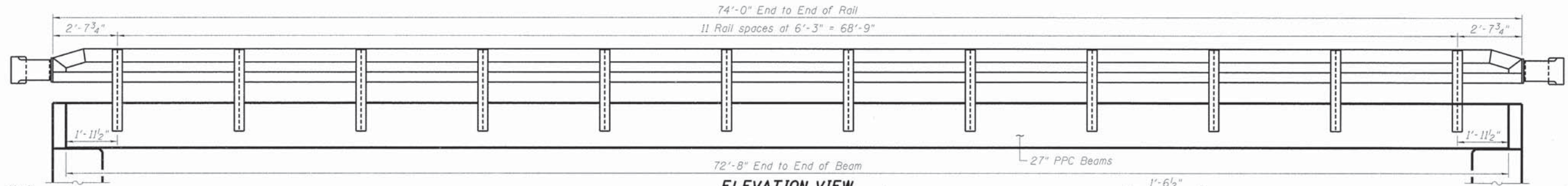


DESIGNED	- P.L.P.	REVISED	-
CHECKED	- M.C.W.	REVISED	-
DRAWN	- F.D.L.	REVISED	-
CHECKED	- M.A.C.	REVISED	-

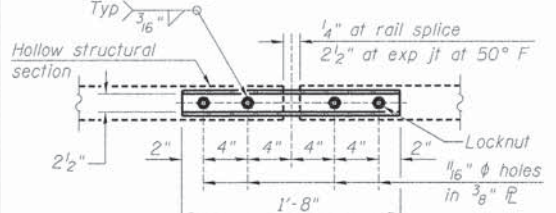
LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

EAST ABUTMENT DETAILS
STRUCTURE NO. 050-3619
 STRUCTURAL SHEET NO. 6 OF 9 SHEETS

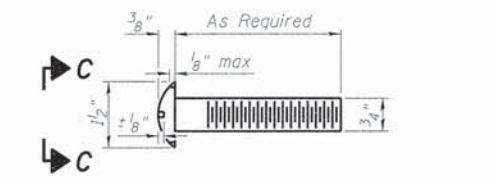
TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	15
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BR05-0090561				



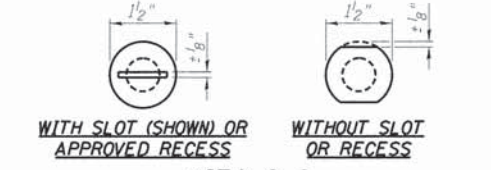
ELEVATION VIEW



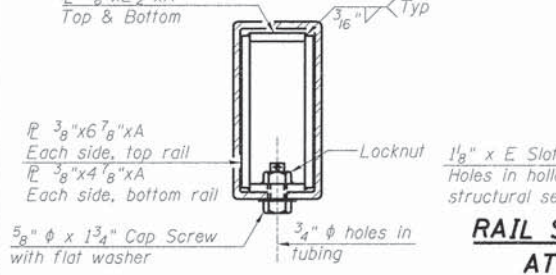
PLAN-BOTT SPLICE R TYPICAL



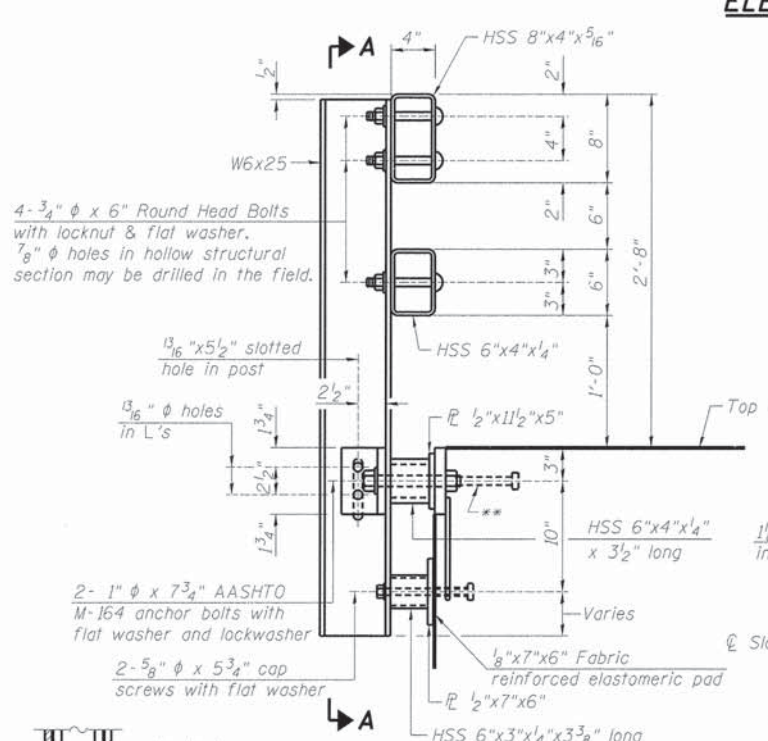
DETAIL OF 3/4" ROUN HEAD BOLT



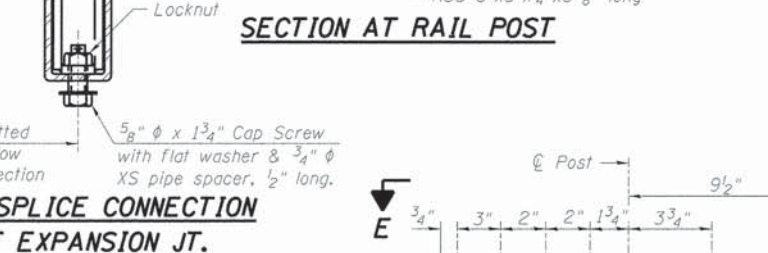
VIEW C-C



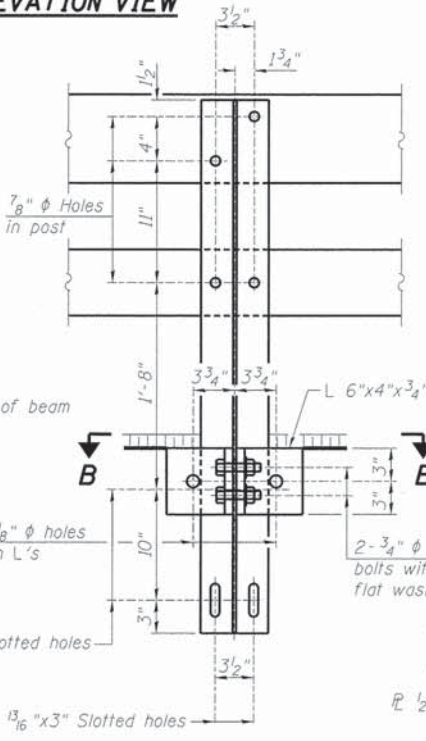
SECTION AT RAIL SPLICE



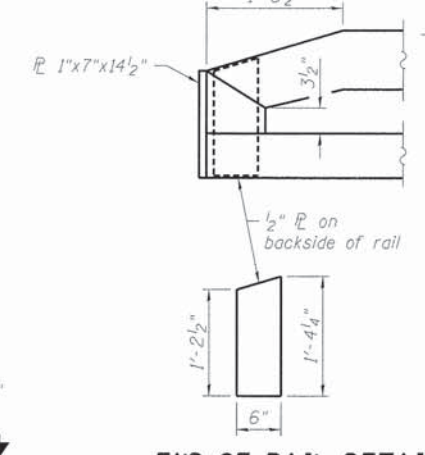
SECTION A-A



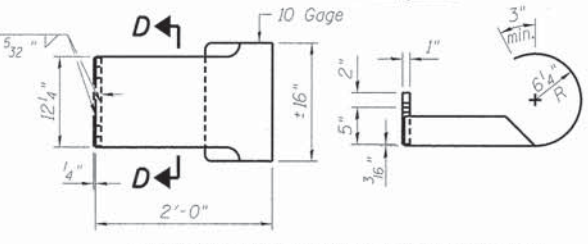
SECTION AT RAIL POST AT EXPANSION JT.



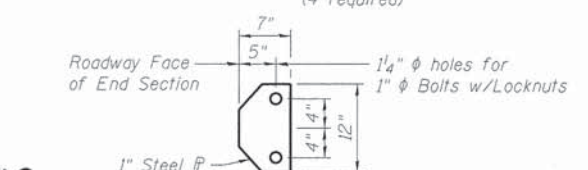
SECTION B-B



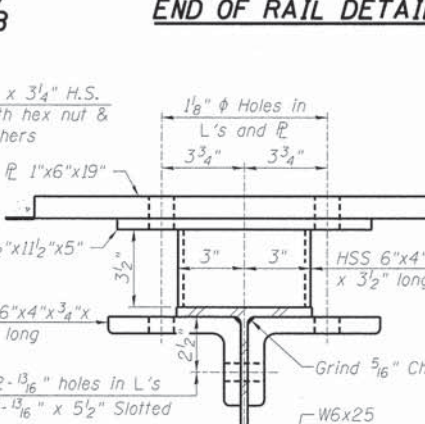
END OF RAIL DETAILS



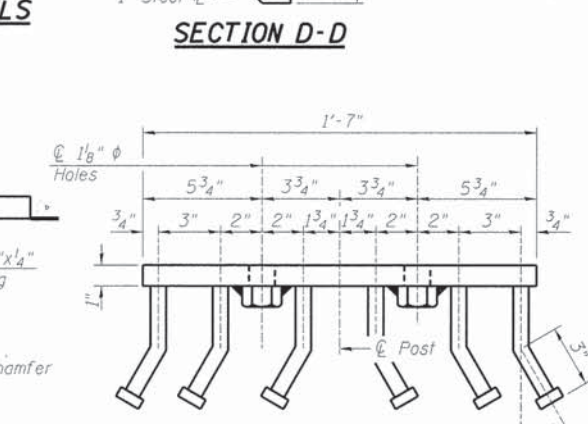
CURLED END SECTION DETAILS



SECTION D-D



SECTION B-B

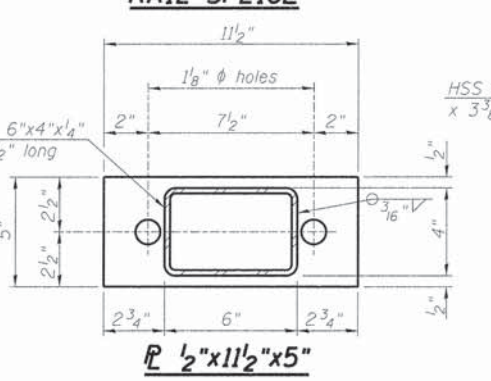


VIEW E-E

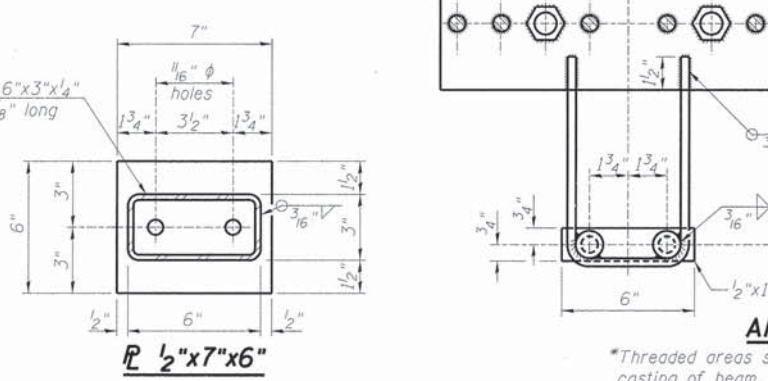
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	148

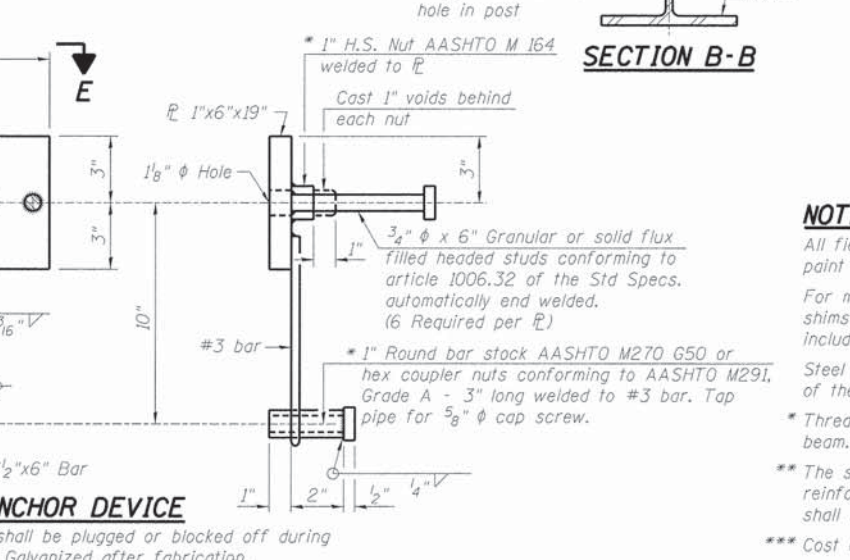
- NOTES:**
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
 - For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.
 - Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 - * Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.
 - ** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.
 - *** Cost of Curled End Sections to be included with Steel Railing, Type SM.



SECTION AT RAIL SPLICE



SECTION AT RAIL SPLICE



ANCHOR DEVICE

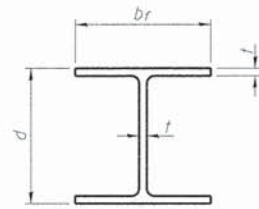
WILETT HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DEION, IL 61021-0367
T: 815-264-3381 DESIGN FIRM: #184-00918

DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

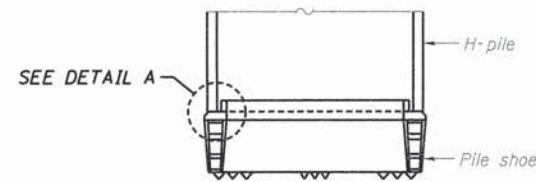
STEEL RAILING, TYPE SM DETAILS
STRUCTURE NO. 050-3619
STRUCTURAL SHEET NO. 7 OF 9 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	16
WHA# 1284014		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BR05-0090561				

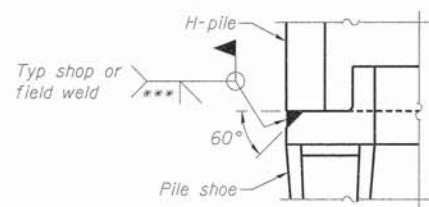


STEEL PILE TABLE

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

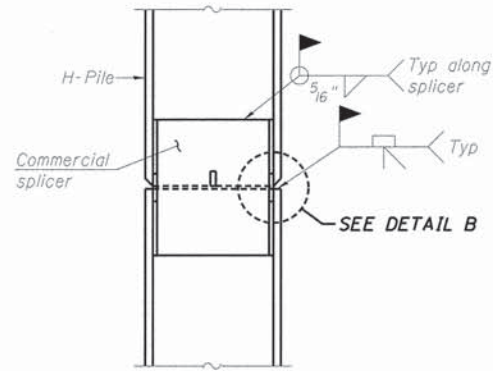


ELEVATION

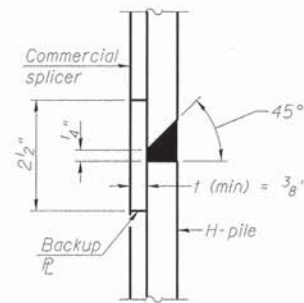


DETAIL A

H-PILE SHOE ATTACHMENT

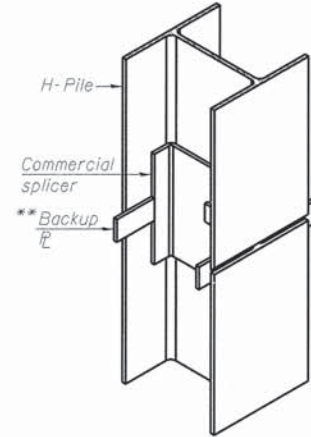


ELEVATION

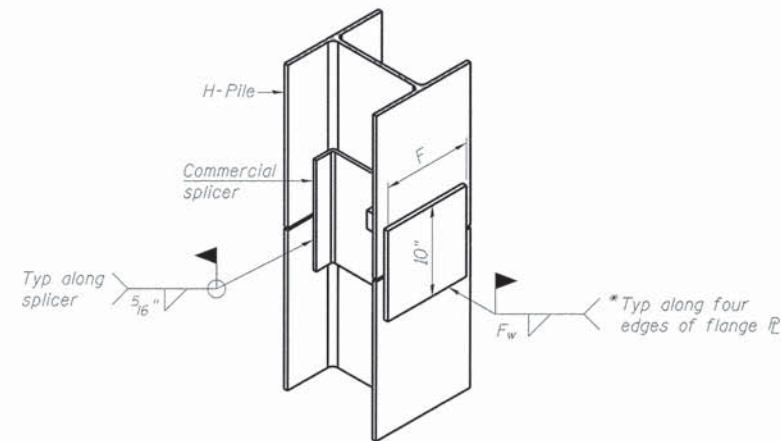


DETAIL "B"

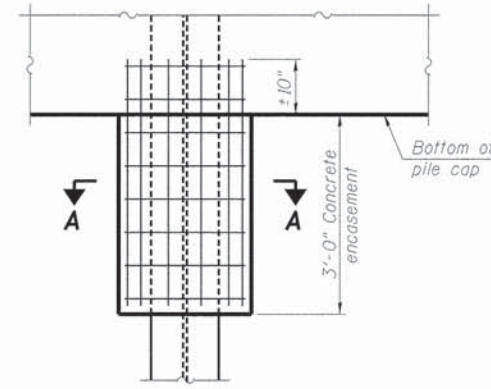
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

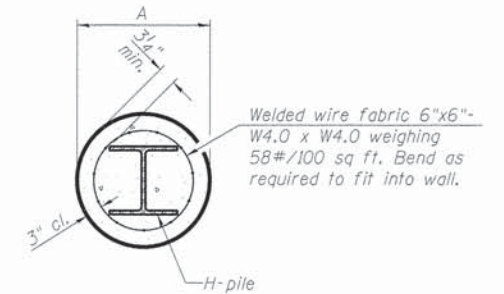


WELDED COMMERCIAL SPLICE ALTERNATE



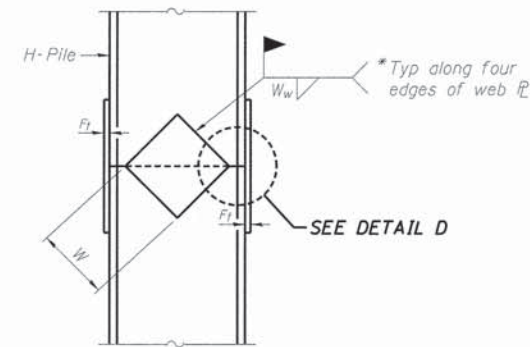
ELEVATION

PILE ENCASEMENT



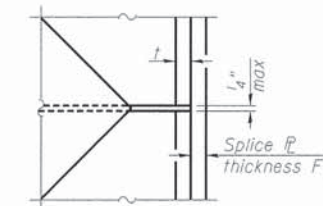
NOTE:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

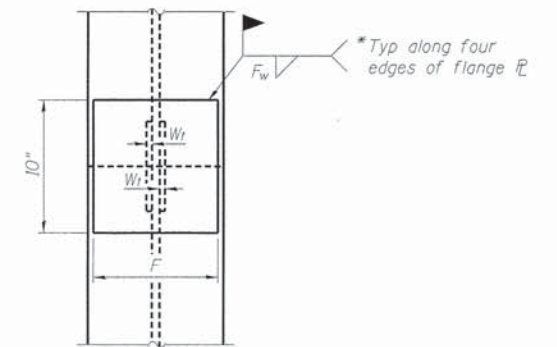


ELEVATION

WELDED \bar{r} FIELD SPLICE



DETAIL D



END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 $\frac{1}{2}$ "	1"	$\frac{7}{8}$ "	7 $\frac{3}{4}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
x102	12 $\frac{1}{2}$ "	$\frac{7}{8}$ "	$\frac{3}{4}$ "	7 $\frac{3}{4}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
x89	12 $\frac{1}{2}$ "	$\frac{3}{4}$ "	$\frac{11}{16}$ "	7 $\frac{3}{4}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
x73	12 $\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{9}{16}$ "	7 $\frac{3}{4}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
HP 12x84	10"	$\frac{7}{8}$ "	$\frac{11}{16}$ "	6 $\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
x74	10"	$\frac{7}{8}$ "	$\frac{11}{16}$ "	6 $\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{1}{2}$ "
x63	10"	$\frac{5}{8}$ "	$\frac{1}{2}$ "	6 $\frac{1}{2}$ "	$\frac{1}{2}$ "	$\frac{3}{8}$ "
x53	10"	$\frac{5}{8}$ "	$\frac{1}{2}$ "	6 $\frac{1}{2}$ "	$\frac{1}{2}$ "	$\frac{3}{8}$ "
HP 10x57	8"	$\frac{3}{4}$ "	$\frac{9}{16}$ "	5 $\frac{1}{4}$ "	$\frac{1}{2}$ "	$\frac{3}{8}$ "
x42	8"	$\frac{5}{8}$ "	$\frac{9}{16}$ "	5 $\frac{1}{4}$ "	$\frac{1}{2}$ "	$\frac{3}{8}$ "
HP 8x36	7"	$\frac{5}{8}$ "	$\frac{7}{16}$ "	4 $\frac{1}{4}$ "	$\frac{1}{2}$ "	$\frac{3}{8}$ "

NOTES:

- The steel H-piles shall be according to AASHTO M270 Grade 50.
- * Interrupt welds $\frac{1}{4}$ " from end of web and/or each flange.
- ** Remove portions of backup \bar{r} 's that extend outside the flanges.
- *** Weld size per pile shoe manufacturer ($\frac{5}{16}$ " min.).

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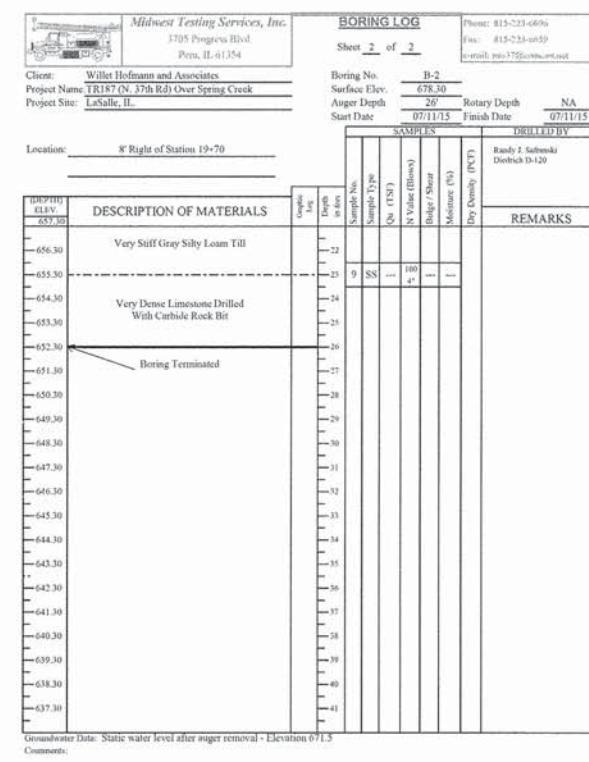
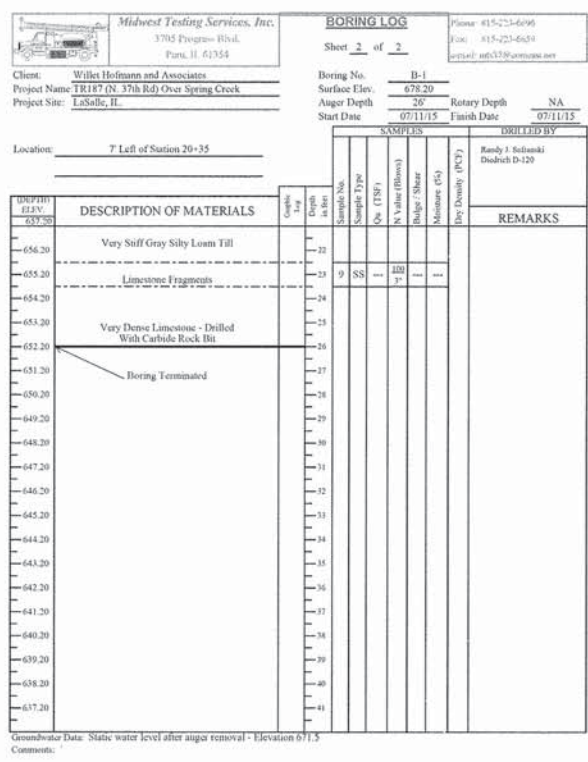
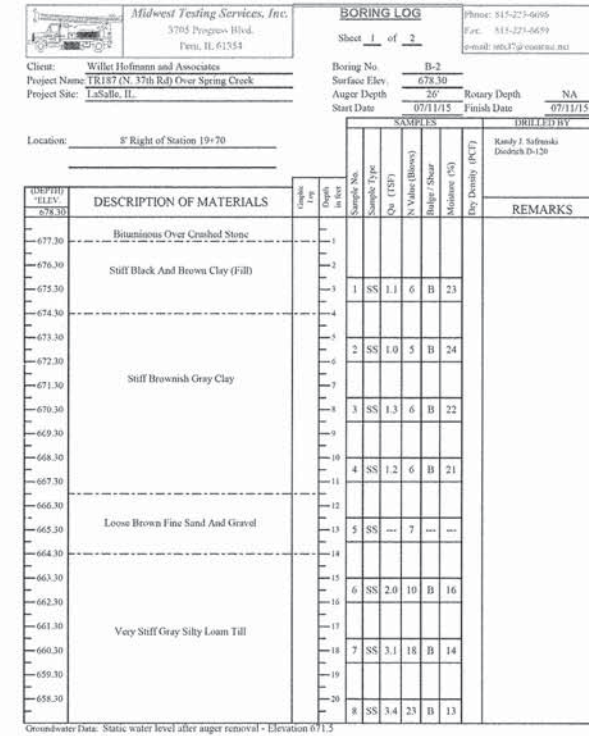
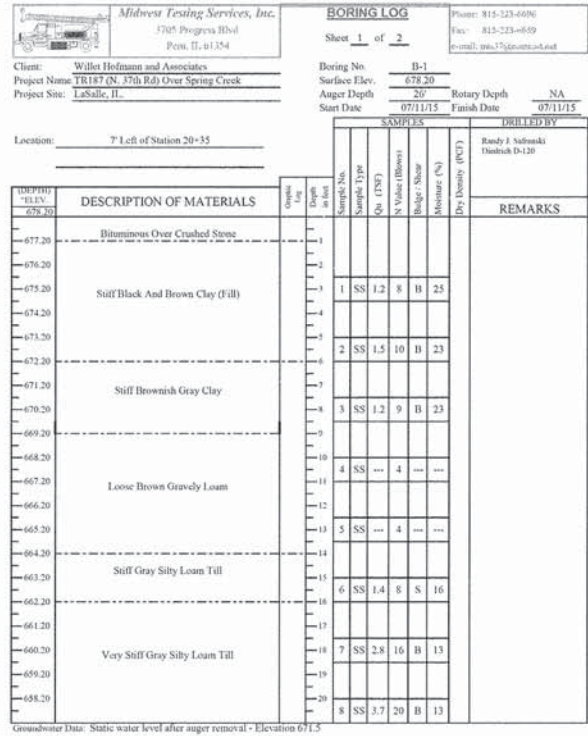
WILETT HOFMANN ASSOCIATES INC.
ENGINEERING ARCHITECTURE LAND SURVEYING
809 EAST 2ND STREET, DEKALB, IL 61021-0357
T: 815-284-3381 DESIGN FIRM: #184-000918

DESIGNED - P.L.P.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - R.D.A.	REVISED -
CHECKED - M.A.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19 + 93

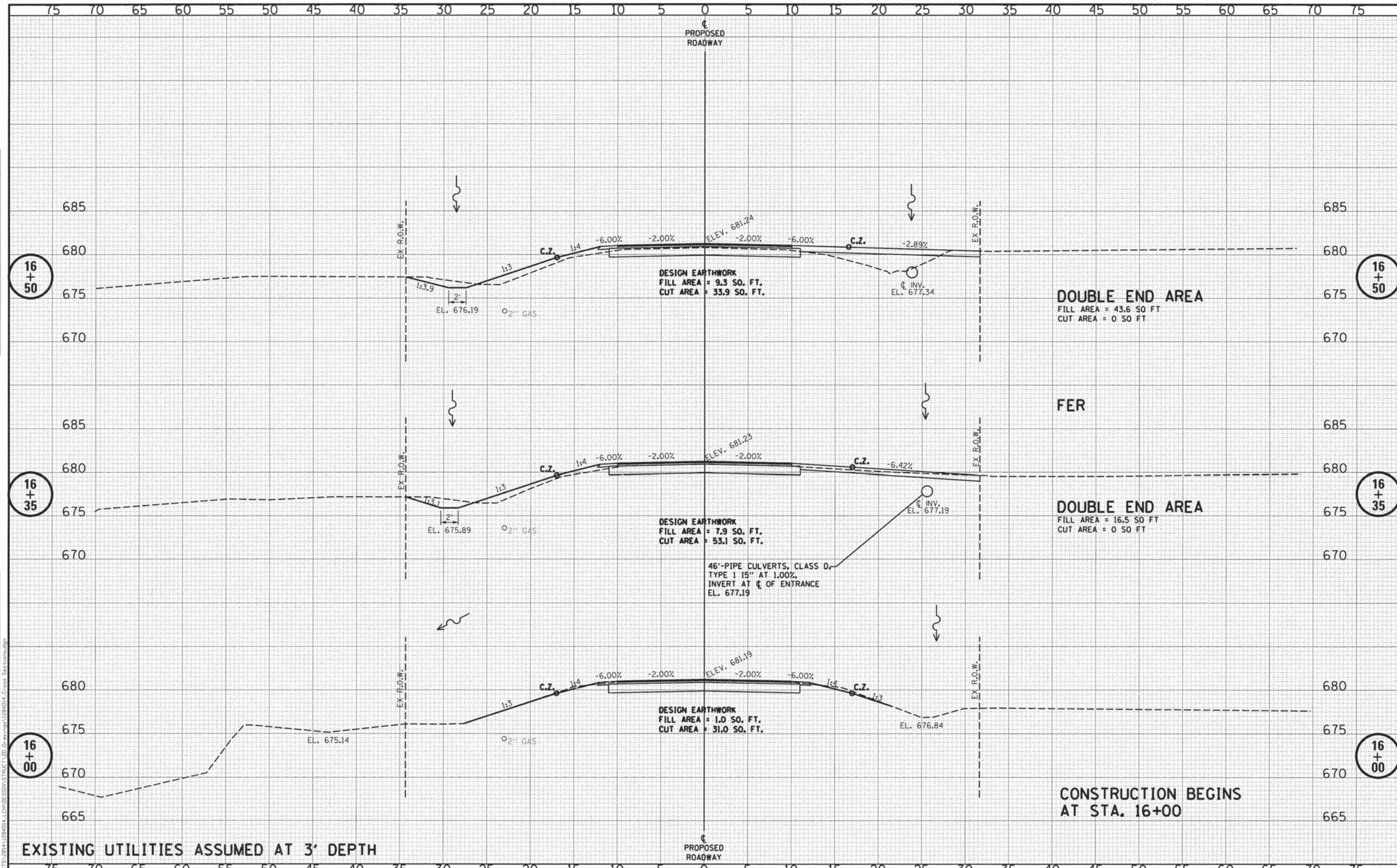
HP PILE DETAILS
STRUCTURE NO. 050-3619
STRUCTURAL SHEET NO. 8 OF 9 SHEETS

TWP	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	17
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT BROS-00990561				



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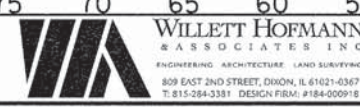
 WILLET HOFMANN & ASSOCIATES INC. <small>ENGINEERING ARCHITECTURE LAND SURVEYING</small> 809 EAST 2ND STREET, OXFORD, IL 61021-0367 T: 815-284-3381 DESIGN FIRM: #184-000918	DESIGNED - P.L.P.	REVISED -	LASALLE COUNTY T.R. 187 (N. 37TH RD.) OVER SPRING CREEK STATION 19 + 93	BORING LOGS STRUCTURE NO. 050-3619 <small>STRUCTURAL SHEET NO. 9 OF 9 SHEETS</small>	TWP RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CHECKED - M.C.W.	REVISED -			187	15-33758-00-BR	LASALLE	24	18
	DRAWN - R.D.A.	REVISED -			WHA* 1284D14			CONTRACT NO. 87625	
	CHECKED - M.A.C.	REVISED -			ILLINOIS FED. AID PROJECT BROS-009R0561				



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FINAL SURVEY	
REVISED	
NOTE BOOK	
AREAS CHECKED	
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BY	
ORIGINAL SURVEY	
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NOTE BOOK	
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EXISTING UTILITIES ASSUMED AT 3' DEPTH

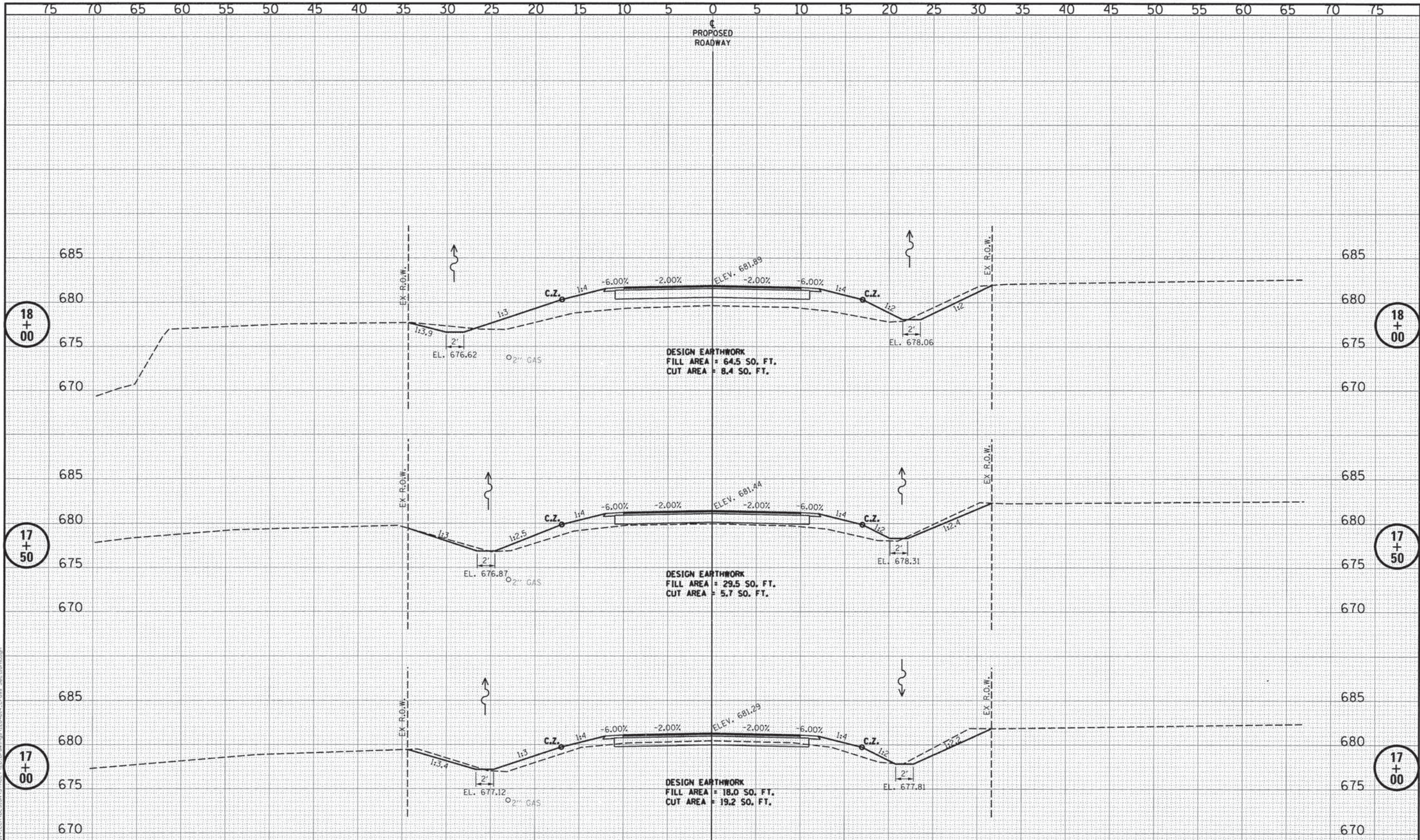


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CHECKED - M.C.W.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - B.K.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

CROSS SECTIONS
STRUCTURE NO. 050-3619
SCALE: 1" = 5'-0" SHEET NO. 1 OF 6 SHEETS STA. 16+00.00 TO STA. 16+50.00

R/W	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	19
WHA* 1284D14		CONTRACT NO. 87625		
ILLINOIS FED. AID PROJECT				BROS-00990561



EXISTING UTILITIES ASSUMED AT 3' DEPTH

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
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DATE	
BY	
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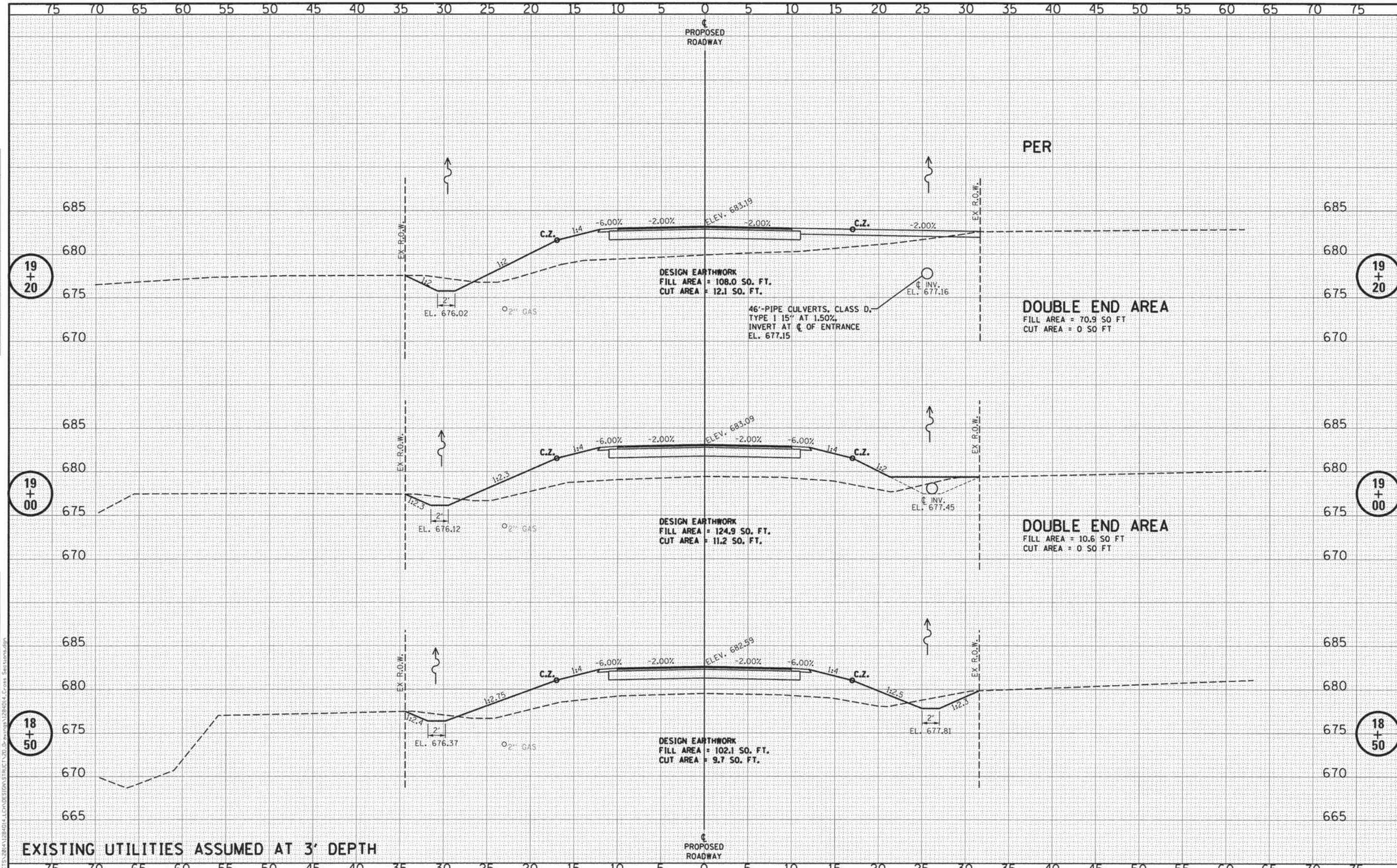
WILLET HOFMANN & ASSOCIATES INC.
 ENGINEERING ARCHITECTURE LAND SURVEYING
 809 EAST 2ND STREET, DIXON, IL 61021-0367
 T. 815-284-3381 DESIGN FIRM #184-000918

DESIGNED - M.A.C.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - B.K.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

CROSS SECTIONS
STRUCTURE NO. 050-3619
 SCALE: 1" = 5'-0" SHEET NO. 2 OF 6 SHEETS STA. 17+00.00 TO STA. 18+00.00

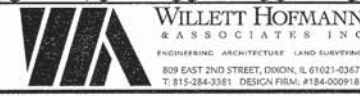
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	20
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-00990561				



DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

EXISTING UTILITIES ASSUMED AT 3' DEPTH



DESIGNED -	M.A.C.	REVISED -	
CHECKED -	M.C.W.	REVISED -	
DRAWN -	D.A.N.	REVISED -	
CHECKED -	B.K.C.	REVISED -	

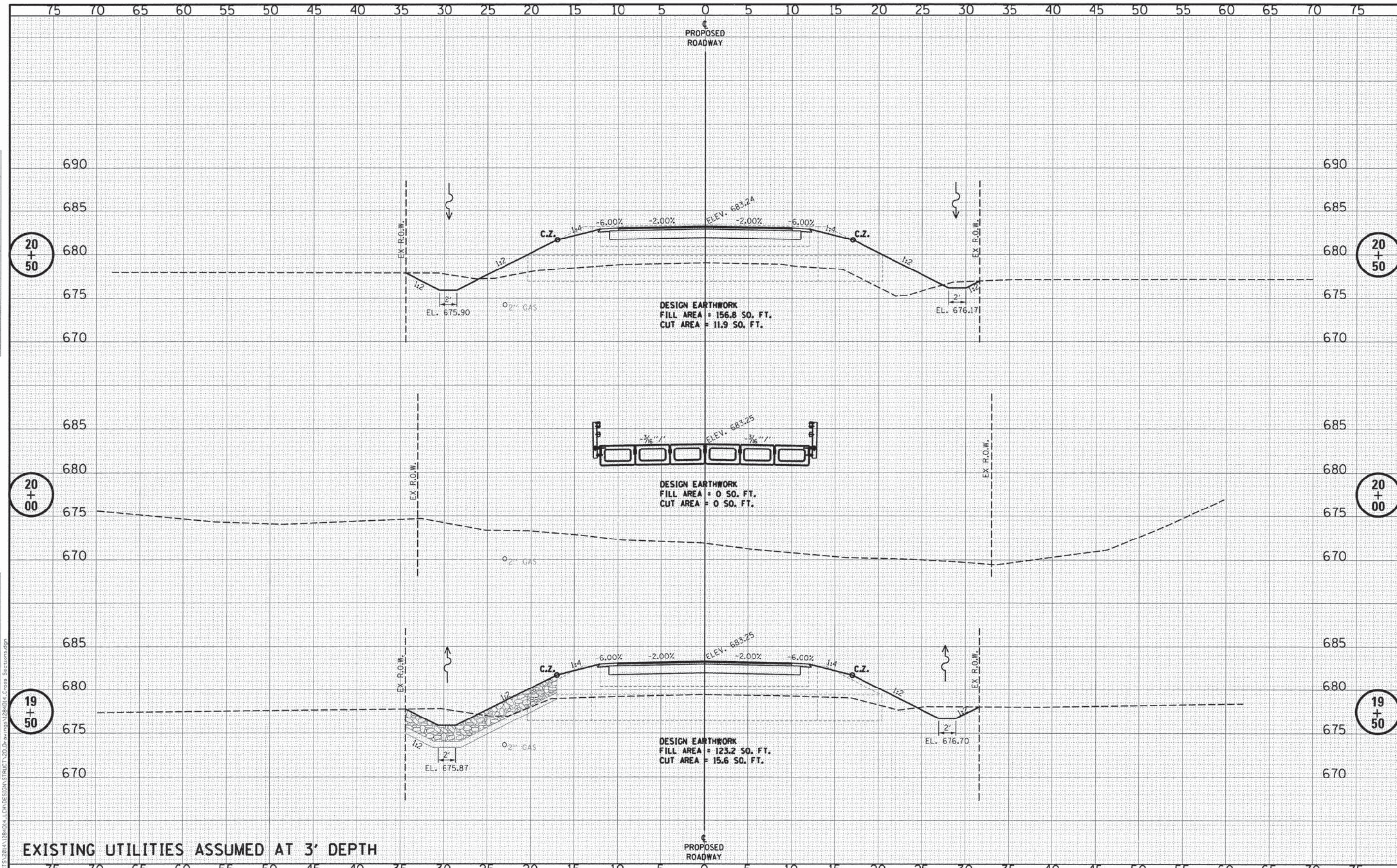
LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

CROSS SECTIONS
STRUCTURE NO. 050-3619
SCALE: 1" = 5'-0" SHEET NO. 3 OF 6 SHEETS STA. 18+50.00 TO STA. 19+20.00

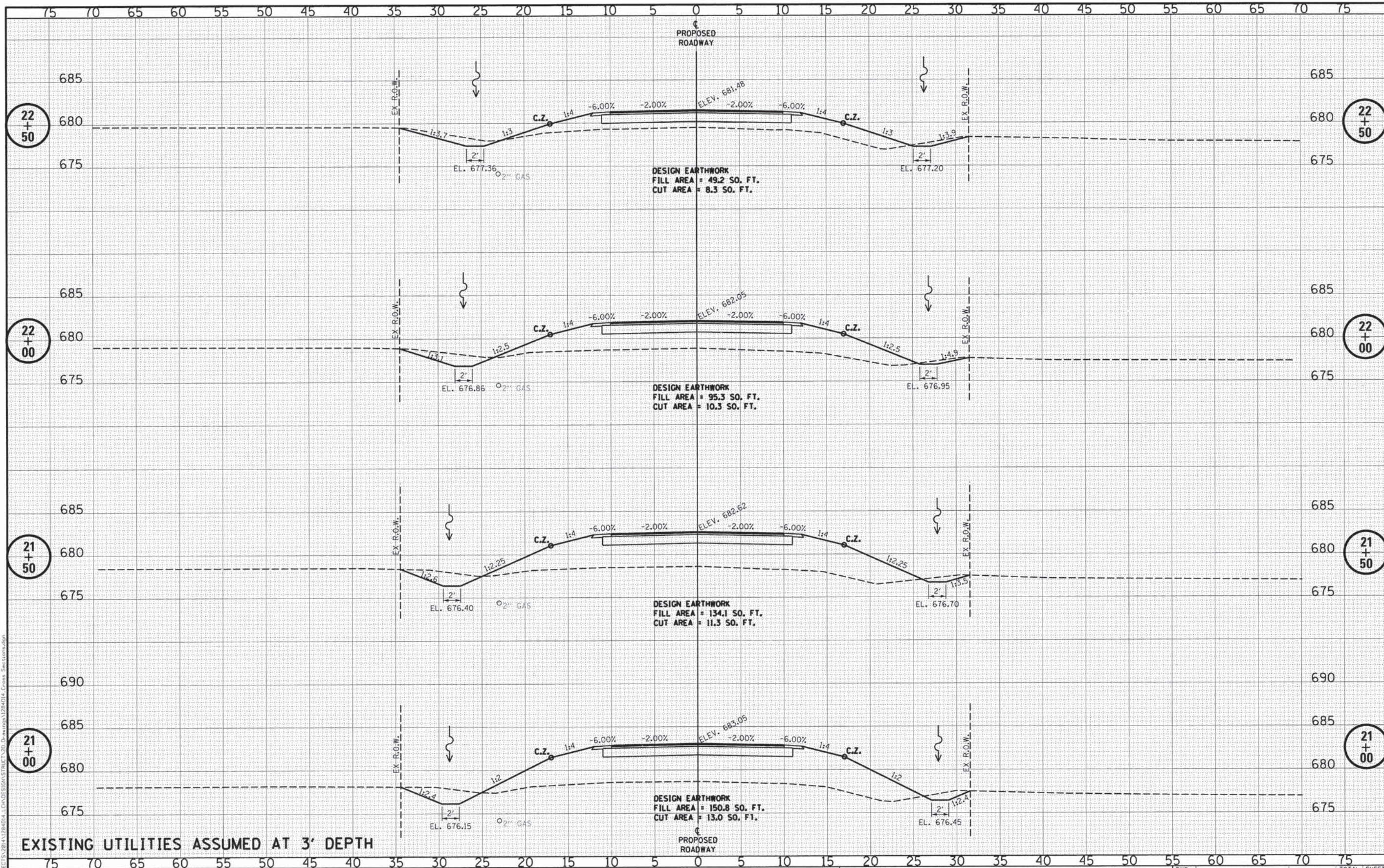
TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	21
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-00990561				

DATE	
BY	
FINAL SURVEY	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
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DATE	
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TEMPLATE	
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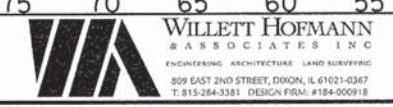
WILLET HOFMANN ASSOCIATES INC. ENGINEERING ARCHITECTURE LAND SURVEYING 809 EAST 2ND STREET, DIXON, IL 61021-0367 T. 815-284-3381 DESIGN FIRM #184-00918	DESIGNED - M.A.C.	REVISD -	LASALLE COUNTY T.R. 187 (N. 37TH RD.) OVER SPRING CREEK STATION 19+50	CROSS SECTIONS STRUCTURE NO. 050-3619		TWP. 187	SECTION 15-33758-00-BR	COUNTY LASALLE	TOTAL SHEETS 24	SHEET NO. 22
	CHECKED - M.C.W.	REVISD -		SCALE: 1" = 5'-0"	SHEET NO. 4 OF 6 SHEETS	STA. 19+50.00 TO STA. 20+50.00	WHA# 1284D14	CONTRACT NO. 87625	ILLINOIS FED. AID PROJECT	BROS-00990561
DRAWN - D.A.N.	REVISD -									
CHECKED - B.K.C.	REVISD -									



DATE	
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NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
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ORIGINAL SURVEYED	
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EXISTING UTILITIES ASSUMED AT 3' DEPTH



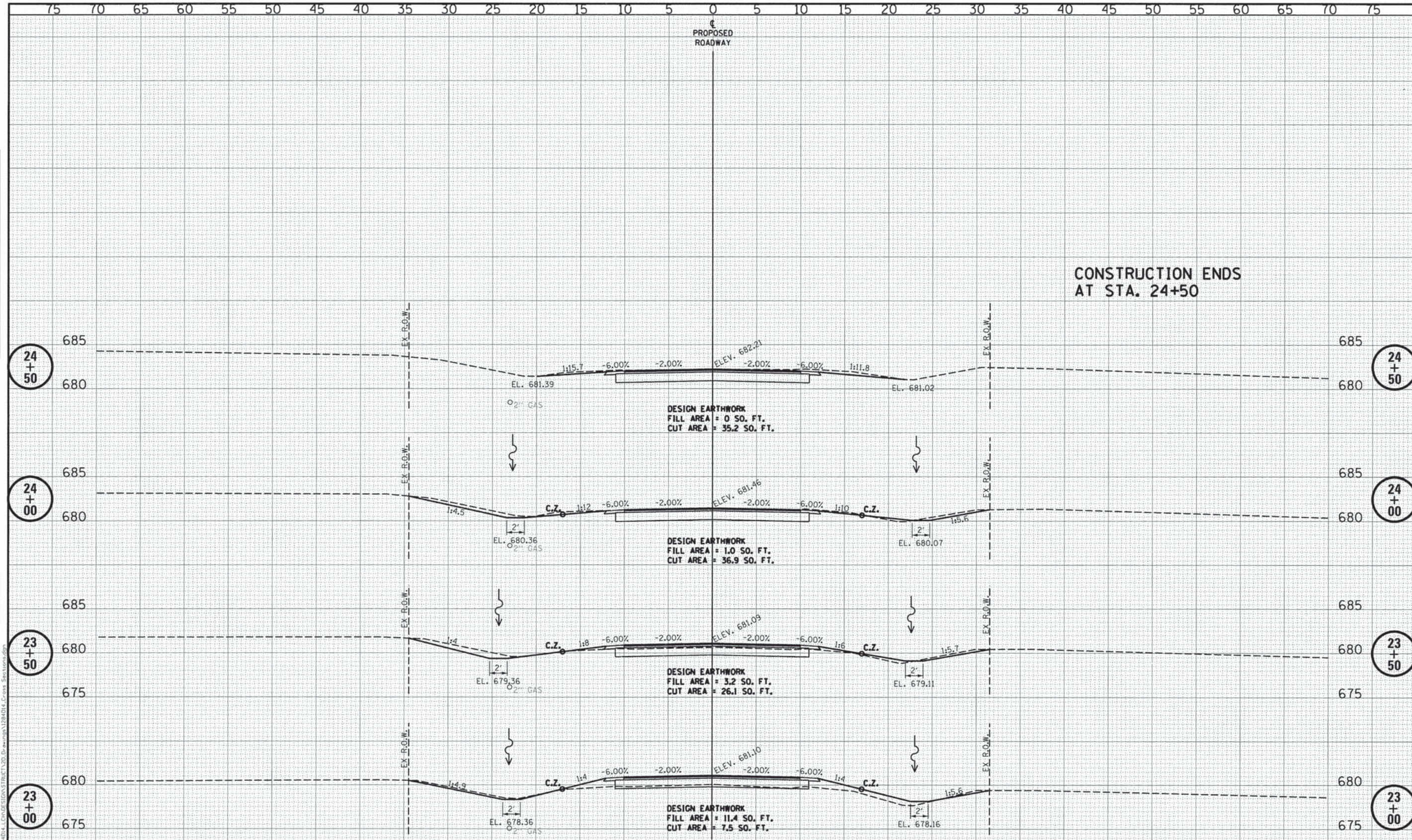
DESIGNED - M.A.C.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - B.K.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

CROSS SECTIONS
STRUCTURE NO. 050-3619
SCALE: 1" = 5'-0" SHEET NO. 5 OF 6 SHEETS STA. 21+00.00 TO STA. 22+50.00

TWP. 187	SECTION 15-33758-00-BR	COUNTY LASALLE	TOTAL SHEETS 24	SHEET NO. 23
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-00910561				

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REVISIONS	
NO.	

EXISTING UTILITIES ASSUMED AT 3' DEPTH



DESIGNED - M.A.C.	REVISED -
CHECKED - M.C.W.	REVISED -
DRAWN - D.A.N.	REVISED -
CHECKED - B.K.C.	REVISED -

LASALLE COUNTY
T.R. 187 (N. 37TH RD.) OVER SPRING CREEK
STATION 19+93

CROSS SECTIONS
STRUCTURE NO. 050-3619
 SCALE: 1" = 5'-0" SHEET NO. 6 OF 6 SHEETS STA. 23+00.00 TO STA. 24+50.00

TWP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
187	15-33758-00-BR	LASALLE	24	24
WHA* 1284D14			CONTRACT NO. 87625	
ILLINOIS FED. AID PROJECT BROS-009R0561				