

PLAN PREPARATION ENGINEER STEVEN W. MEGGINSON, P.E., S.E. (217) 546-3400

FEDERAL AID PROGRAM ENGINEER CHARLES RIDDLER, P.E. (847) 705-4406

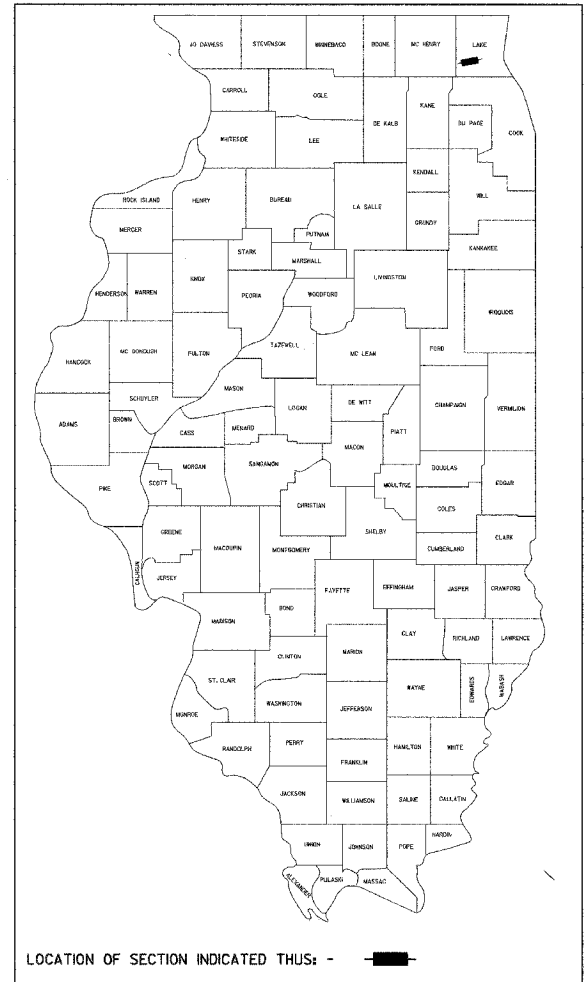
ROUTE NO. F.A.U. 3706	SECTION 00-00068 -07-BR	COUNTY LAKE	SHEET 50	PAGE 1
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT - BRM-7003(876)	
CONTRACT NO: 83763-83806 BRM-7003(876)				

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BRIDGE REPLACEMENT AND REHABILITATION PROGRAM

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PLANS FOR PROPOSED

F.A.U. 3706 / C.H. 30 / KELSEY ROAD OVER FLINT CREEK SECTION 00-00068-07-BR PROJECT BRM-7003(876) JOB NO.: C-91-170-00 LAKE COUNTY



HIGHWAY STANDARDS
SEE SHEET 3

UTILITIES

SBC
1200 N. ARLINGTON HEIGHTS ROAD
2ND FLOOR
ARLINGTON HEIGHTS, IL 60004
LEANNE RODGERS
(847) 506-8082

COMCAST
1575 ROHLING ROAD
ROLLING MEADOWS, IL 60008

AT&T LOCAL NETWORK SERVICES
4513 WESTERN AVE.
LISLE, IL 60532

NICOR
1844 FERRY RD
NAPERVILLE, IL 60563-9600

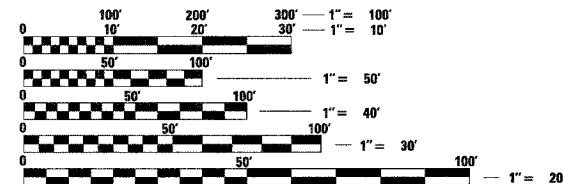
LAKE COUNTY PUBLIC WORKS
650 W. WINCHESTER ROAD
LIBERTYVILLE, IL 60048

ComEd
1500 FRANKLIN BLVD.
LIBERTYVILLE, IL 60048

DESIGN FUNCTIONAL CLASSIFICATION:
MINOR ARTERIAL URBAN
DESIGN SPEED, 45MPH
DESIGN ADT 15,200 (2025)
DESIGN DESIGNATION: 1783 (25) MINOR ARTERIAL URBAN 0.86 B(20)

SCALES

PLAN	0" = 20'
PROFILE HORIZ.	0" = 20'
PROFILE VERT.	0" = 5'
CROSS SECTIONS	0" = 5'



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

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

CONTRACT NO. 83763-83806

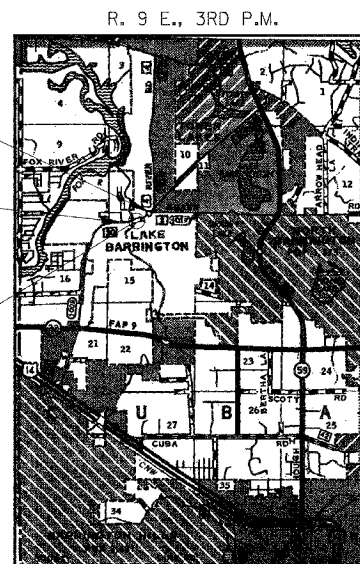


IMPROVEMENT ENDS
STATION 129+00

IMPROVEMENT BEGINS
STATION 119+50

STA. 124+70 - SPECIAL BRIDGE DESIGN
PRECAST PRESTRESSED CONCRETE DECK BEAM
BRIDGE. THREE SPANS @ 39'-0", 45'-3" RDWY.
SKEW = 0°
PROPOSED STRUCTURE NO. 049-3071

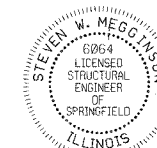
EXISTING STRUCTURE NO. 049-3036



LAYOUT

APPROXIMATE SCALE: 0 1 MILE

GROSS LENGTH = NET LENGTH OF SECTION = 950 FEET = 0.180 MILES

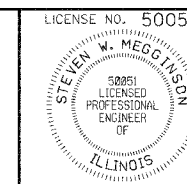


Expires 11-30-06

Steven W. Megginson 5-26-05
ILLINOIS STRUCTURAL NO. 6064

APPROVED	May 31 2005
	Steven W. Megginson COUNTY ENGINEER
PASSED	June 2 2005
	Clayton DISTRICT ENGINEER OF LOCAL ROADS & STREETS
APPROVED	June 6 2005
	Dina O'Keefe REGIONAL ENGINEER STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DATE:	May 26, 2005
BY:	Steven W. Megginson
LICENSE EXPIRES:	NOVEMBER 30, 2005



RBA
Rice, Berry and Associates
A Division of Hampton, Lenzini and Renwick, Inc.
Civil & Structural Engineers
801 S. Durkin Drive
Springfield, Illinois 62704
217-546-3400
Account Number: 12-07-0047-1
P.O. Box 1036
DuQuoin, Illinois 62832
618-790-4637

GENERAL NOTES

SPECIFICATIONS, STANDARDS, AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION,' ADOPTED JANUARY 1, 2002 (HEREINAFTER REFERRED TO AS THE STANDARD SPECIFICATIONS); THE 'SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS,' ADOPTED JANUARY 1, 2004; THE LATEST EDITION OF THE 'ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS'; THE 'STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS', FIFTH EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH ARTICLE 107.14 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR SHALL AT ALL TIMES PROVIDE PROTECTION FOR TRAFFIC AS CALLED FOR IN THE APPLICATION OF TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS AND THE PLANS.

UTILITIES

THE CONTRACTOR SHALL COOPERATE WITH THE COUNTY AND VILLAGE IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE COUNTY OR VILLAGE WITHIN THE DURATION OF THE CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.

STAKING

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED THE ENGINEER SHALL BE NOTIFIED BEFORE THE MONUMENTS ARE REMOVED.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN AT POINTS OF CURVE, ETC., ARE TOP OF CURB, UNLESS OTHERWISE NOTED.

STRUCTURE OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS ARE TO THE FOLLOWING POINTS: A) FOR STRUCTURES FALLING IN THE CURB LINE--TO THE BACK OF CURB; B) FOR ALL OTHER STRUCTURES--TO THE CENTER OF THE STRUCTURE.

ALL ELEVATIONS ARE ON U.S.G.S. DATUM.

ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR STRUCTURES, BACKS OF CURB, ETC. ARE FROM THE CENTERLINE AS SHOWN ON THE PLANS.

SEWERS AND WATER MAINS

ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR DRAINAGE STRUCTURES WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN IN AN OPERATING CONDITION TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

THE COST OF INTERCONNECTIONS BETWEEN THE PROPOSED AND EXISTING SEWER SYSTEMS AND PROPOSED AND EXISTING WATER MAIN SYSTEMS SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES OF THE PROPOSED SYSTEM.

ALL FRAMES, GRATES, LIDS, AND BOXES SCHEDULED TO BE REMOVED FROM EXISTING STRUCTURES SHALL REMAIN THE PROPERTY OF THE COUNTY OR VILLAGE, AS APPLICABLE. ANY ITEMS DAMAGED DURING REMOVAL SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THE COST OF SALVAGING EXISTING FRAMES, GRATES, LIDS, OR BOXES AND/OR STOCKPILING THEM ON THE JOB SITE FOR PICK-UP BY THE COUNTY OR VILLAGE OR DELIVERY TO THE COUNTY OR VILLAGE MAINTENANCE YARD SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

ANY OF THESE MATERIALS CONSIDERED SUITABLE FOR SALVAGE BY THE ENGINEER SHALL BE STORED WITHIN THE RIGHT-OF-WAY FOR LATER REMOVAL BY THE LAKE COUNTY DIVISION OF TRANSPORTATION. UNUSABLE MATERIAL SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH SECTION 202.03 OF THE 'STANDARD SPECIFICATIONS' AND AS DIRECTED BY THE ENGINEER.

ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THIS CONTRACT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: FOR STORM SEWER STRUCTURES--'STORM'. FOR SANITARY SEWER STRUCTURES--'SANITARY'. FOR WATER SYSTEM STRUCTURES--'WATER'. ANY ADDITIONAL COST FOR THIS REQUIREMENT SHALL BE CONSIDERED INCIDENTAL TO THE FRAME AND CLOSED LID PROVIDED.

BITUMINOUS OR CONCRETE PAVEMENT CROSSINGS SHALL NOT BE LEFT IN GRAVEL OVERNIGHT. THIS WILL INCLUDE THE MAIN ROAD, SIDE STREETS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES AND PARKING AREAS. TEMPORARY BITUMINOUS PATCHING AT THE CONTRACTOR'S EXPENSE MAY BE USED IN LIEU OF IMMEDIATE PAVEMENT REPLACEMENT.

AT LOCATIONS WHERE THE PROPOSED STORM SEWER CROSS OVER UTILITIES, A 4 INCH STYROFOAM CUSHION SHALL BE PLACED UNDER THE STORM SEWER WHERE DIRECTED TO DO SO BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

FRAME ELEVATIONS GIVEN ON THE PLANS ARE ONLY TO ASSIST THE CONTRACTOR IN DETERMINING THE APPROXIMATE OVERALL HEIGHT OF THE STRUCTURE. FRAMES ON ALL STRUCTURES WILL BE ADJUSTED TO THE FINAL ELEVATION AND CROSS SLOPE OF THE AREA IN WHICH THEY ARE LOCATED. THIS ADJUSTMENT SHALL BE INCLUDED IN THE COST OF THE STRUCTURE.

ALL STORM SEWERS SHALL BE RCCP, CLASS IV, UNLESS NOTED OTHERWISE ON THE PLAN.

WATER MAIN SHALL HAVE A MINIMUM COVER OF FIVE AND ONE-HALF (5 1/2) FEET.

BACKFILL

ALL TRENCH BACKFILL QUANTITIES FOR STORM AND SANITARY SEWER AND WATER MAIN HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, DIVISION OF HIGHWAYS, BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE.

MISCELLANEOUS

THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS, AND PEDESTRIAN ACCESS TO ADJUTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT. THIS ITEM SHALL BE INCLUDED IN THE ITEM 'AGGREGATE FOR TEMPORARY ACCESS'.

SAWING OF REMOVAL ITEMS AS NOTED ON THE PLANS, SPECIFIED IN THE STANDARD SPECIFICATIONS, OR AS REQUIRED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

AT ALL BUTT JOINT LOCATIONS, THE EXISTING SURFACE SHALL BE CUT TO A MINIMUM THICKNESS OF ONE AND ONE-HALF (1-1/2) INCHES.

THE THICKNESSES OF BITUMINOUS MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE BITUMINOUS MIXTURES ARE TO BE PLACED.

PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, OR CURB AND GUTTER, P.C.C. SIDEWALK, P.C.C. DRIVEWAY PAVEMENT, AND AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS CONTRACT.

WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.

ALL DISTURBED AREAS WITHIN THE PROJECT THAT ARE NOT OTHERWISE SURFACED SHALL BE SODDED. SOD LIMITS SHOWN ON THE PLANS ARE THE MAXIMUM PAY WIDTHS FOR PAYMENT PURPOSES.

ALL TYPE I AND II BARRICADES SHALL BE WEIGHTED DOWN WITH TWO SANDBAGS EACH.

THE CONTRACTOR SHALL PREPARE THE SUBGRADE IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS PRIOR TO THE REMOVAL OF ANY UNSTABLE MATERIALS.

EARTH EXCAVATION

EXCAVATION REQUIRED TO CLEAN SIDEROAD DITCHES, CONSTRUCT DRIVEWAYS OR CONSTRUCT SIDEROAD APPROACHES SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION.

ALL SUITABLE EXCESS MATERIAL FROM SEWER TRENCHES, SIDEROADS, ENTRANCES OR OTHER NECESSARY EXCAVATIONS SHALL BE USED IN THE CONSTRUCTION OF THE ROADWAY. PLACEMENT AND COMPACTION OF THIS MATERIAL SHALL BE CONSIDERED INCIDENTAL TO EARTH EXCAVATION AND NO ADDITION COMPENSATION WILL BE ALLOWED.

SIGNS

THE CONTRACTOR WILL BE REQUIRED TO RELOCATE OR REMOVE AND REPLACE SIGNS WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS AND TO TEMPORARILY RESET ALL SUCH SIGNS DURING CONSTRUCTION OPERATIONS. THIS WORK WILL BE CONSIDERED AS INCIDENTAL TO THE CONTRACT.

ALL WORK INVOLVING SIGNS SHALL BE GOVERNED BY THE FOLLOWING REQUIREMENTS:

1. SIGNS SHALL NOT BE MOVED UNTIL PROGRESS OF WORK NECESSITATES IT.
2. EVERY SIGN REMOVED MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO TRAFFIC FOR WHICH IT IS INTENDED. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING.
3. ALL SIGNS SHALL BE RE-ERECTED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. HORIZONTAL LOCATION FROM THE EDGE OF PAVEMENT SHALL BE AS DESIGNATED BY THE ENGINEER.
4. ALL UNUSED SIGNS WILL BE RETURNED TO THE COUNTY.
5. LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS.

THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL EXISTING MAILBOXES WHICH INTERFERE WITH HIS CONSTRUCTION OPERATIONS, AND AFTER COMPLETION OF ROADWAY CONSTRUCTION, TO SET THEM IN THEIR PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE IN CONFORMANCE WITH ARTICLE 107.20 OF THE STANDARD SPECIFICATIONS, AND THE COST WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

DRIVEWAYS OR ENTRANCES

- A) EXISTING BITUMINOUS, CONCRETE, AND GRAVEL DRIVEWAYS AND ENTRANCES SHALL BE RECONSTRUCTED TO THE RIGHT-OF-WAY LINE WITH BITUMINOUS CONCRETE SURFACE COURSE AND AGGREGATE BASE COURSE AS SCHEDULED IN THE PLANS.
- B) EXISTING FIELD ENTRANCES SHALL BE BUILT UP IN PLACE TO THE RIGHT-OF-WAY WITH AGGREGATE BASE COURSE.
- C) THE CONTRACTOR SHALL CONSTRUCT ALL COMMERCIAL AND PRIVATE DRIVEWAYS IN ACCORDANCE WITH THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

SEDIMENTATION AND EROSION CONTROL NOTES

SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL-STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY OR PERMANENT MEASURES.

SOIL-EROSION AND SEDIMENT-CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.

DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF THE ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.

AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V SHALL BE STABILIZED WITH SOD, MAT, OR BLANKET IN COMBINATION WITH SEEDING.

EROSION-CONTROL BLANKET SHALL BE REQUIRED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN NORMAL WATER LEVEL AND HIGH-WATER LEVEL.

ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT-CONTROL MEASURE.

ALL TEMPORARY EROSION- AND SEDIMENT-CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

ALL TEMPORARY AND PERMANENT EROSION-CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED BY THE CONTRACTOR AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.

A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY, OR PARKING AREA SHALL BE REMOVED BY SCRAPPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT-DISPOSAL AREA.

SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD-PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES.

IF DE-WATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE Routed THROUGH AN EFFECTIVE SEDIMENT-CONTROL MEASURE (E.G., SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE).

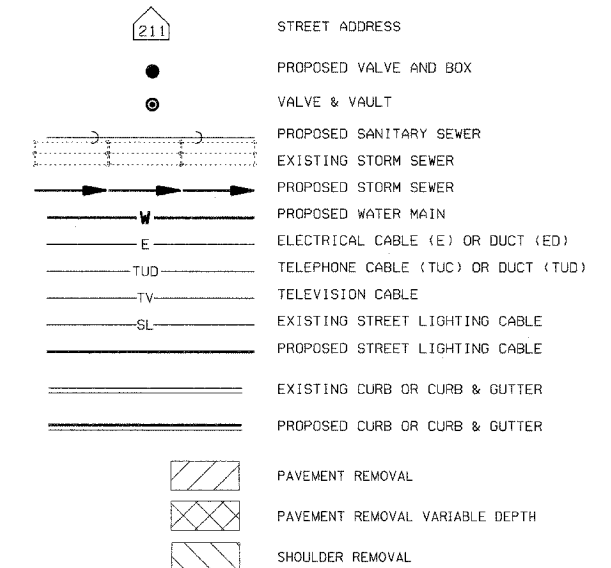
THE EROSION-CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.U. 3706	99-00076 -11-BR	LAKE	50	2
FED. ROAD DIST. NO. ALL-PHASE FED. AID PROJECT-BRM-7003(876)				

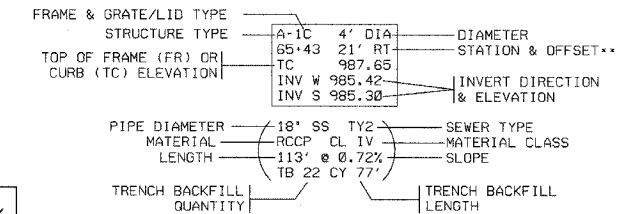
CONTRACT NO. 83806

SUPPLEMENTAL LEGEND

SEE STANDARDS FOR ADDITIONAL INFORMATION



SEWER STRUCTURE AND PIPE NOTATION

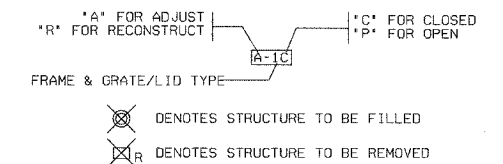


- NOTE:
- OFFSET FOR STRUCTURES FALLING IN THE CURB LINE IS TO BACK OF CURB
- OFFSET FOR ALL OTHER STRUCTURES IS TO CENTER OF STRUCTURE.

STRUCTURE DIAMETER	CENTER OF BASE STRUCTURE LOCATION FROM BACK OF CURB			
	B-6.24 C&G TY 24 F&G		B-6.12 C&G TY 11V F&G	
2 FT	CONE 1.52 FT	SLAB -	CONE 0.79 FT	SLAB -
3 FT	1.02 FT	1.18 FT	0.29 FT	0.46 FT
4 FT	0.52 FT	0.68 FT	-0.21 FT	-0.04 FT
5 FT	0.02 FT	0.18 FT	-0.71 FT	-0.54 FT
6 FT	-0.48 FT	-0.32 FT	-1.21 FT	-1.04 FT

1) POSITIVE VALUE INDICATES TOWARD CENTERLINE; NEGATIVE VALUE INDICATES AWAY FROM CENTERLINE.
2) ALL FLAT TOPS AND CONES ARE ASSUMED TO BE ECCENTRIC
3) FLAT TOPS AND CONES ARE TO BE TURNED SO THAT THE FRAME IS CLOSEST TO THE EDGE OF PAVEMENT WHERE SPACE PERMITS. IN THE CASE OF CONFLICT ADJUSTMENTS TO THESE VALUES WILL BE REQUIRED.

STRUCTURE ADJUSTMENT/RECONSTRUCTION/REMOVAL NOTATION



ROUTE NO.	SECTION	COUNTY	SHEETS	PAGE
F.A.U. 3706	00-00068 -07-BR	LAKE	50	3
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(876)	

CONTRACT NO. 83806


SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE:		TOTAL QUANTITY
CODE NO.	ITEM	UNIT	X080-2A	I000	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT		156	156
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT		160	160
20200100	EARTH EXCAVATION	CU YD		260	260
> 20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD		50	50
20300100	CHANNEL EXCAVATION	CU YD	830		830
> 20400800	FURNISHED EXCAVATION	CU YD		1,860	1,860
20700110	POROUS GRANULAR EMBANKMENT	TON	350		350
> 20800150	TRENCH BACKFILL	CU YD		2.8	2.8
> 21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD		2,522	2,522
21301052	EXPLORATION TRENCH 52" DEPTH	FOOT		50	50
25000314	SEEDING, CLASS 4B	ACRE		0.04	0.04
25200200	SUPPLEMENTAL WATERING	UNIT		3.3	3.3
> 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND		412	412
28000400	PERIMETER EROSION BARRIER	FOOT		1,500	1,500
> 28000500	INLET AND PIPE PROTECTION	EACH		7	7
> 28000510	INLET FILTERS	EACH		3	3
28100107	STONE RIPRAP, CLASS A4	SQ YD	430	5	435
28200200	FILTER FABRIC	SQ YD	430	5	435
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON		114	114
40600990	TEMPORARY RAMP	SQ YD		50	50
> 42001165	BRIDGE APPROACH PAVEMENT	SQ YD	288		288
42001300	PROTECTIVE COAT	SQ YD	544		544
> 42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	58		58
44000030	BITUMINOUS SURFACE REMOVAL (VARIABLE DEPTH)	SQ YD		435	435
44000100	PAVEMENT REMOVAL	SQ YD		775	775
44004250	PAVED SHOULDER REMOVAL	SQ YD		530	530
> 48200400	BITUMINOUS SHOULDERS 6"	SQ YD		1,900	1,900
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50300225	CONCRETE STRUCTURES	CU YD	37.8		37.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	97.6		97.6
> 50300260	BRIDGE DECK GROOVING	SQ YD	544		544
> 50301200	CONCRETE WEARING SURFACE	SQ YD	544		544
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	5,148		5,148
> 50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	21,550		21,550
51100300	SLOPE WALL 6 INCH	SQ YD	350		350
51201600	FURNISHING STEEL PILES HP12X53	FOOT	1,560		1,560
51202700	DRIVING STEEL PILES	FOOT	1,560		1,560
51203600	TEST PILE STEEL HP12X53	EACH	2		2
51204315	CONCRETE ENCASEMENT	CU YD	30.0		30.0
51500100	NAME PLATES	EACH	1		1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT		50	50
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH		2	2
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH		1	1
54213450	END SECTIONS 15"	EACH		4	4
54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH		1	1
> 550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT		20	20
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT		18	18
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT		20	20
> 60225300	RESTRICTED DEPTH MANHOLES, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH		1	1
60236600	INLETS, TYPE A, TYPE 9 FRAME AND GRATE	EACH		1	1
> 60255500	MANHOLES TO BE ADJUSTED	EACH		1	1
> 60500050	REMOVING CATCH BASINS	EACH		1	1
60900315	TYPE D INLET BOX, STANDARD 609006	EACH		1	1
60900515	CONCRETE THRUST BLOCKS	EACH		1	1
63000000	STEEL PLATE BEAM GUARD RAIL, TYPE A	FOOT		500	500
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH		4	4
> 63100167	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH		4	4
> 63304335	TERMINAL SECTION REMOVAL AND SALVAGE	EACH		8	8
> 67100100	MOBILIZATION	L SUM		1	1
> 70101700	TRAFFIC CONTROL AND PROTECTION	L SUM		1	1
> 70300625	TEMPORARY PAINT PAVEMENT MARKING LINE 4"	FOOT		2,416	2,416
> 70300630	TEMPORARY PAINT PAVEMENT MARKING LINE 5"	FOOT		1,850	1,850
> 70300645	TEMPORARY PAINT PAVEMENT MARKING LINE 12"	FOOT		56	56
> 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT		1,936	1,936
> 78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT		1,490	1,490
> 78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT		56	56
> 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT		480	480
> 78005120	EPOXY PAVEMENT MARKING - LINE 5"	FOOT		360	360
> 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH		34	34
> 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH		8	8
> 78200400	GUARDRAIL REFLECTORS	EACH		16	16
> 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH		4	4
> 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH		42	42

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE:		TOTAL QUANTITY
CODE NO.	ITEM	UNIT	X080-2A	I000	
> XX002868	TEMPORARY DITCH CHECKS (SPECIAL)	EACH		6	6
> XX004878	MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS	L SUM		1	1
> X0323426	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH		3	3
> X0632001	CLEAR PROTECTIVE COATING FOR CONCRETE	SQ FT	3,640		3,640
> X4066414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON		11	11
> X4066426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON		44	44
> X4066614	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON		12	12
> X4066770	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N70	TON		8	8
> X4073071	BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH), SUPERPAVE, 9 1/2"	SQ YD		2,522	2,522
> X4080020	INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N50	TON		11	11
> X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH		1	1
> X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH		1	1
> X6700405	ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)	CAL MO		6	6
> Z0001050	AGGREGATE SUBGRADE 12"	SQ YD		2,522	2,522
> Z0013798	CONSTRUCTION LAYOUT	L SUM		1	1
> Z0076600	TRAINEES	hour		500	500
> XX006334	AGGREGATE BASE COURSE, TYPE A (SPECIAL)	TON		69	69
> Z0000990	AGGREGATE FOR TEMPORARY ACCESS	TON		105	105
> XX006336	AGGREGATE SHOULDERS, TYPE A (SPECIAL)	TON		14	14
> XX006337	ARCHITECTURAL FINISH FOR CONCRETE SURFACES	SQ FT	3,000		3,000
> XX006338	EROSION CONTROL BLANKET (SPECIAL)	SQ YD		3,030	3,030
> XX006339	FENCE TO BE REMOVED AND REPLACED	FOOT		240	240
> XX006340	LIMESTONE CAP	EACH	234		234
> XX006341	RELOCATE WEATHER STATION	L SUM		1	1
> XX006342	REMOVE & REPLACE USGS GAGING STATION	L SUM		1	1
> XX006343	SEEDING (COMPLETE)	SQ YD		4,905	4,905
> XX006344	SODDING (COMPLETE)	SQ YD		225	225
> XX005543	STEEL PLATE BEAM GUARD RAIL REMOVAL & SALVAGE	FOOT		987.5	987.5
> XX006345	TURBIDITY BARRIER	FOOT		50	50

> SEE SPECIAL PROVISIONS
 * SPECIALTY ITEM
 + Y030

HIGHWAY STANDARDS

- 000001-04 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 280001-02 TEMPORARY EROSION CONTROL SYSTEMS
- 420001-06 PAVEMENT JOINTS
- 420401-05 BRIDGE APPROACH PAVEMENT
- 421001 BAR REINFORCEMENT FOR CRC PAVEMENT
- 515001-02 NAME PLATE FOR BRIDGES
- 542301 PRECAST REINFORCED CONCRETE FLARED END SECTION
- 542311 GRATING FOR CONCRETE FLARED END SECTION
- 542401 METAL END SECTION FOR PIPE CULVERTS
- 542516 INLET BOX TYPE 600 (24) D
- 602301 INLET - TYPE A
- 602401 MANHOLE TYPE A
- 604001-02 FRAMING AND LIDS TYPE 1
- 604041-01 FRAME AND GRATE TYPE 9
- 609006-02 BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN
- 630001-05 STEEL PLATE BEAM GUARDRAIL
- 630201-03 PCC/BITUMINOUS STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
- 630301-03 SHOULDER WIDENING FOR TYPE 1, (SPECIAL) GUARDRAIL TERMINALS
- 631031-05 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-02 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-01 REFLECTOR MARKER AND MOUNTING DETAILS
- 702001-05 TRAFFIC CONTROL DEVICES
- BLR 21-6 TYPICAL APPLICATION OF TRAFFIC CONTROL; DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS



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 Account Number 12-07-0047-1
 Date: 05/23/05
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

SUMMARY OF QUANTITIES AND HIGHWAY STANDARDS
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY

ROADWAY SCHEDULE

LOCATION	BRIDGE APPROACH PAVEMENT	FLEXIBLE PAVEMENT CONNECTOR	*SUB-BASE GRAN. MATL. TYPE A	AGGREGATE SUBGRADE	BITUMINOUS CONC. PVT. (FULL DEPTH) SUPERPAVE	BITUMINOUS SURF. CSE. SUPERPAVE MIX D N70	LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70	BITUMINOUS SURF. CSE. SUPERPAVE MIX C N50	BITUMINOUS BINDER CSE. SUPERPAVE IL-19.0 N50	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	BITUMINOUS SHOULDERS	AGGREGATE SHOULDER. TYPE A (SPECIAL)	AGGREGATE BASE CSE. TYPE A (SPECIAL)	BIT. SURFACE REMOVAL VARIABLE DEPTH	INCIDTL. BIT. SURFACING SUPERPAVE N50	BIT. MATERIAL PRIME COAT	*AGGREGATE PRIME COAT	AGGREGATE FOR TEMPORARY ACCESS	PAVED SHOULDER REMOVAL	PAVEMENT REMOVAL	TEMPORARY RAMP
	SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	TON	TON	TON	TON	SQ YD	SQ YD	TON	TON	SQ YD	TON	GAL	TON	TON	SQ YD	SQ YD	SQ YD
KELSEY ROAD STA. 119+50 TO 129+00	287.2	57.4	302.1	2,521.7	2,521.7	44.0	7.31			2,521.7	1899.0					34.8	0.68	104.17	526.7	773.2	47.6
BIKE PATH ENTRANCES								10.3	12.0			13.6	43.8	433.6		48.9					
													24.6		10.3	30					
TOTAL	287.2	57.4	302.1	2,521.7	2,521.7	44.0	7.31	10.3	12.0	2,521.7	1899.0	13.6	68.4	433.6	10.3	113.7	0.68	104.17	526.7	773.2	47.6
USE	288	58		2,522	2,522	44.0	8	11	12.0	2,522	1900	14	69	435	11	114		105	530	775	50

* COST INCLUDED WITH BRIDGE APPROACH PAVEMENT

* COST INCLUDED WITH BITUMINOUS CONCRETE

ENTRANCE SCHEDULE

LOCATION	TYPE	EXISTING SURFACE	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED SURFACE	RADIUS	INCIDENTAL BITUMINOUS SURFACING SUPERPAVE N50	AGGREGATE BASE CSE. TYPE A (SPECIAL) 6"	BITUMINOUS MATERIAL PRIME COAT
			FOOT	FOOT	BIT	FOOT	TON	TON	GAL
KELSEY ROAD, STA 120+24	PE	BIT	12.00	12.00	BIT	12	3.86	8.96	11
STA 121+85	PE	BIT	12.00	12.00	BIT	12	6.44	15.62	19
TOTAL							10.31	24.58	30

RIPRAP SCHEDULE

LOCATION	WIDTH	LENGTH	STONE RIPRAP CLASS A4	FILTER FABRIC
	FEET	FEET	SQ YD	SQ YD
LT. STA. 123+96	9	5	5	5
BRIDGE			430	430
TOTAL			435	435

TREE REMOVAL (6-15 UNITS DIA.)

LOCATION	LT/RT	OFFSET	QUANTITY
		FEET	UNIT
STA. 123+53.47	LT.	41.26	6
STA. 123+82.20	LT.	38.39	12
STA. 124+11.10	LT.	39.17	6
STA. 124+11.10	LT.	39.17	6
STA. 124+11.10	LT.	39.17	6
STA. 124+11.10	LT.	39.17	6
STA. 124+11.10	LT.	39.17	6
STA. 124+11.10	LT.	39.17	6
STA. 124+39.06	RT.	35.68	10
STA. 124+39.06	RT.	35.68	10
STA. 124+40.42	RT.	33.38	12
STA. 124+50.19	RT.	35.87	10
STA. 124+54.15	RT.	33.98	12
STA. 125+25.31	RT.	38.63	10
STA. 125+73.05	RT.	39.52	10
STA. 125+73.05	RT.	39.52	10
STA. 125+75.40	RT.	37.07	12
STA. 125+84.25	RT.	40.23	12
TOTAL			156

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION (CU YD)	SHRINKAGE FACTOR	PERCENT USED	AVAILABLE EXCAVATION (CU YD)	EMBANKMENT REQUIRED (CU YD)	EARTHWORK BALANCE (CU YD)
STA. 119+50 TO 124+10.25	196	15%	100%	166	1,396	-1,229
STA. 125+29.75 TO 129+00	2			1	1,138	-1,137
BIKE PATH	61	15%	100%	52	3	49
CHANNEL EXCAVATION	830	15%	70%	494		494
ENTRANCES					35	-35
TOTAL	259			713	2,572	-1,858
USE:	260					1,860

* AVAILABLE EXCAVATION = EXC. x (1-SHRINKAGE FACTOR) x % USED (FURN. EXC.)

SODDING (COMPLETE)

LOCATION	SOD	SUPPLEMENTAL WATERING	NITROGEN	POTASSIUM
	SQ YD	UNIT	90 LBS/ACRE	90 LBS/ACRE
** AS DIRECTED BY ENGINEER	225	3.3	0.5	0.5
** FOR BIDDING PURPOSES				

EXPLORATION TRENCH 52" DEPTH

LOCATION	FOOT
** AS DIRECTED BY ENGINEER	50
TOTAL	50
** FOR BIDDING PURPOSES	

TREE REMOVAL (OVER 15 UNITS DIA.)

LOCATION	LT/RT	OFFSET	QUANTITY
		FEET	UNIT
STA. 122+56.56	LT.	39.61	20
STA. 122+56.56	LT.	39.61	20
STA. 124+99.08	RT.	39.90	18
STA. 124+99.08	RT.	39.90	18
STA. 125+40.97	RT.	39.69	16
STA. 125+98.28	RT.	41.21	20
STA. 126+61.22	RT.	39.75	16
STA. 126+61.22	RT.	39.75	16
STA. 126+61.22	RT.	39.75	16
TOTAL			160

FENCE TO BE REMOVED AND REPLACED

LOCATION	FOOT
LT. STA. 122+00 TO STA. 124+40	240
TOTAL	240

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SCHEDULE OF QUANTITIES
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 LAKE COUNTY

LOCATION	GUARDRAIL						
	STEEL PLATE BEAM GUARDRAIL TYPE A FOOT	TRAFFIC BARRIER TERMINAL		TERMINAL MARKER DIRECT APPLIED	GUARDRAIL REFLECTORS	STEEL PLATE BEAM GR REMOVAL & SALVAGE FOOT	TERMINAL SECTION REMOVAL & SALVAGE EACH
		TYPE 1, SPL. (TANGENT) EACH	TYPE 6 EACH				
RT. STA. 121+79 TO RT. STA. 122+29	150	1					
RT. STA. 122+29 TO RT. STA. 123+79			1				
RT. STA. 123+79 TO RT. STA. 124+10				1			
RT. STA. 121+79							
LT. STA. 122+29 TO LT. STA. 122+79		1					
LT. STA. 122+79 TO LT. STA. 123+79	100						
LT. STA. 123+79 TO LT. STA. 124+10			1				
LT. STA. 122+29				1			
LT. STA. 125+30 TO LT. STA. 125+61			1				
LT. STA. 125+61 TO LT. STA. 127+11	150						
LT. STA. 127+11 TO LT. STA. 127+61		1					
LT. STA. 127+61				1			
RT. STA. 125+30 TO RT. STA. 125+61			1				
RT. STA. 125+61 TO RT. STA. 126+61	100						
RT. STA. 126+61 TO RT. STA. 127+11		1					
RT. STA. 127+11				1			
RT. STA. 121+79 TO RT. STA. 127+11					8		
LT. STA. 122+29 TO LT. STA. 127+61					8		
RT. STA. 121+46.5 TO RT. STA. 121+71.5							1 ①
LT. STA. 122+46.5 TO LT. STA. 122+71.5							1 ①
RT. STA. 124+59 TO RT. STA. 124+62							1 ②
LT. STA. 124+59 TO LT. STA. 124+62							1 ②
LT. STA. 125+03 TO LT. STA. 125+34							1 ③
RT. STA. 125+03 TO RT. STA. 125+34							1 ③
LT. STA. 127+96.5 TO LT. STA. 128+46.5							1 ④
RT. STA. 127+84 TO RT. STA. 128+34							1 ④
RT. STA. 121+71.5 TO RT. STA. 124+59						287.5	1
LT. STA. 122+71.5 TO LT. STA. 124+59						187.5	
LT. STA. 125+34 TO LT. STA. 127+96.5						262.5	
RT. STA. 125+34 TO RT. STA. 127+84						250	
TOTAL	500	4	4	4	16	987.5	8

RAISED REFLECTIVE PAVEMENT MARKERS	
LOCATION (PLACE @ 40' C.-C.)	EACH
RT. STA. 119+50 TO STA. 123+50	9
LT. STA. 119+50 TO STA. 123+50	7
RT. STA. 125+50 TO STA. 127+90	6
LT. STA. 125+50 TO STA. 127+90	6
RT. STA. 127+90 TO STA. 128+25	2
LT. STA. 127+90 TO STA. 128+25	4
TOTAL	34

RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	
LOCATION	EACH
RT. STA. 123+90 TO STA. 125+50	4
LT. STA. 123+90 TO STA. 125+50	4
TOTAL	8

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	
LOCATION	EACH
RT. STA. 119+00 TO STA. 129+00	21
LT. STA. 119+00 TO STA. 129+00	21
TOTAL	42

- ① TRAFFIC BARRIER TERMINAL TYPE 1 (BLR 23)
- ② TRAFFIC BARRIER TERMINAL TYPE 10
- ③ TRAFFIC BARRIER TERMINAL TYPE 6
- ④ TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)

STORM SEWER AND PIPE CULVERTS SUMMARY														
LOCATION	PIPE CULVERTS CLASS D TYPE 1 15"	END SECTIONS 15"	PRCFES 12"	PRCFES 24" WITH METAL GRATE	STORM SEWERS CLASS A TYPE 1 12"	STORM SEWERS CLASS A TYPE 1 24"	STORM SEWERS CLASS A TYPE 2 12"	TYPE D INLET BOX STD 609006	CONCRETE THRUST BLOCKS	RESTRICTED DEPTH MANHOLES 5' Ø, TY 1 FRAME OPEN LID	INLETS TYPE A, TYPE 9 FRAME & GRATE	MANHOLES TO BE ADJUSTED	REMOVING CATCH BASINS	TRENCH BACKFILL
	FOOT	EACH	EACH	EACH	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	EACH
RT. STA 120+24	22	2												
LT. STA 121+85	28	2												
LT. STA 123+96			1				20	1	1					1.3
LT. STA. 124+99.36			1								1			1.5
RT. STA 125+12.13				1		18				1			1	
RT. STA 128+10.41												1	1	
TOTAL	50	4	2	1	20	18	20	1	1	1	1	1	1	2.8

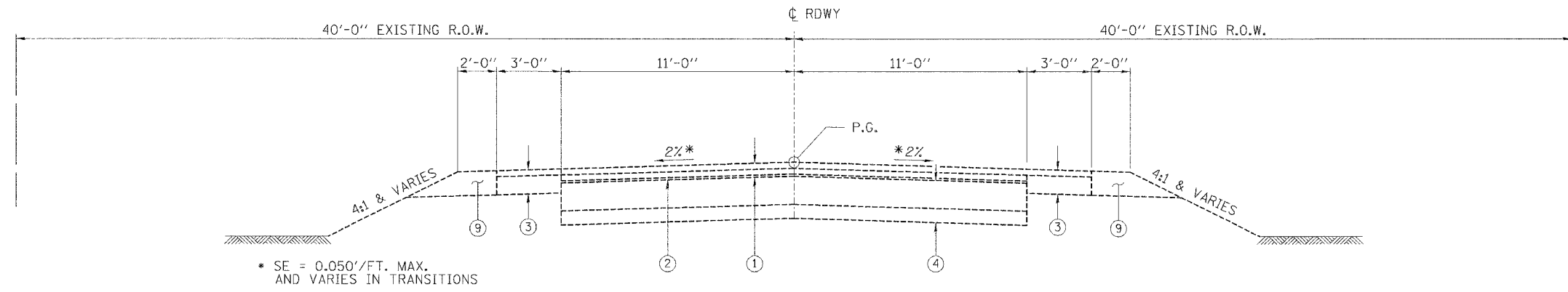
PAVEMENT MARKINGS								
LOCATION (STATION TO STATION)	PAINT PAVEMENT MARKINGS						EPOXY PAVT MARKINGS	
	PERMANENT			TEMPORARY			PERMANENT	
	5" SINGLE WHITE EDGE LINE	4" DOUBLE YELLOW CENTERLINE	12" YELLOW DIAGONAL	5" SINGLE WHITE EDGE LINE	4" DOUBLE YELLOW CENTERLINE	12" YELLOW DIAGONAL	5" SINGLE WHITE EDGE LINE	4" DOUBLE YELLOW CENTERLINE
FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	
KELSEY ROAD								
LT. STA. 119+50 TO STA. 123+80	430			430				
RT. STA. 119+50 TO STA. 123+80	430			430				
∅ STA. 119+50 TO STA. 123+80		860			860			
LT. STA. 123+80 TO STA. 125+60				180			180	
RT. STA. 123+80 TO STA. 125+60				180			180	
∅ STA. 123+80 TO STA. 125+60					480			480
LT. STA. 125+60 TO STA. 129+00	340			340				
RT. STA. 125+60 TO STA. 128+50	290			290				
∅ STA. 125+60 TO STA. 128+33		1,076			1,076			
∅ STA. 125+60 TO STA. 128+33			56			56		
TOTAL	1,490	1,936	56	1,850	2,416	56	360	480

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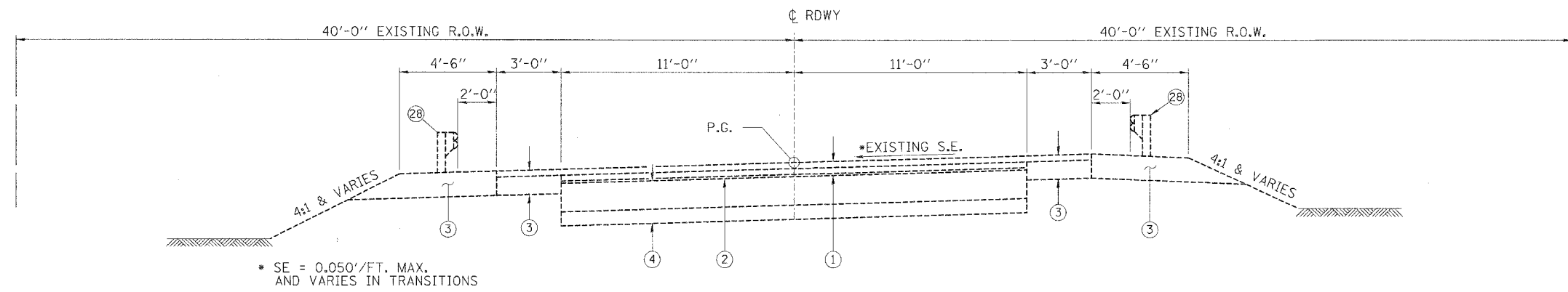
SCHEDULE OF QUANTITIES
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 3706	00-00068 -07-BR	LAKE	50	6
FED. ROAD DIST. NO.	T.L. CROSS	FED. AID PROJECT	BRM-7003(876)	

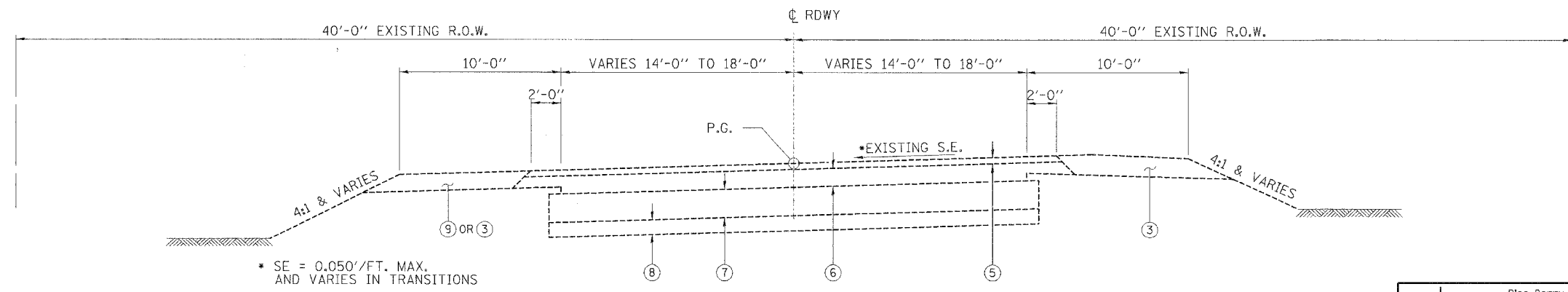
CONTRACT NO. 83806



EXISTING TYPICAL ROADWAY CROSS SECTION
STATION 119+50.00 TO 122+08.85



EXISTING TYPICAL ROADWAY CROSS SECTION
STATION 122+08.85 TO 124+60.00
STATION 125+07.00 TO 125+37.33



EXISTING TYPICAL ROADWAY CROSS SECTION
STATION 125+37.33 TO 129+00.00

NOTE: BITUMINOUS SHOULDERS (3) STA. 125+37.33 TO LT. STA. 125+55
AGGREGATE SHOULDERS (9) STA. 125+37.33 TO LT. STA. 129+00

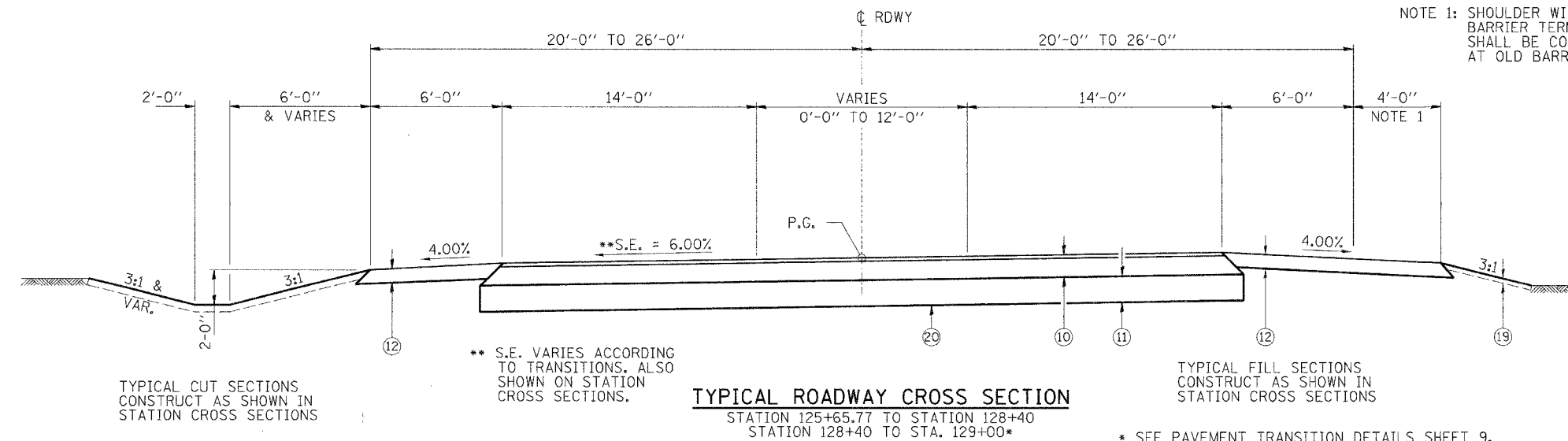
LEGEND

- ① 1 1/4" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
1 1/4" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ② AREA REFLECTIVE CRACK CONTROL FABRIC (EXISTING)
- ③ BITUMINOUS SHOULDERS, TY. B (6" THICK) (EXISTING)
- ④ 7 1/2" BITUMINOUS PAVEMENT (EXISTING)
6" AGGREGATE BASE
- ⑤ 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
- ⑥ 7" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ⑦ 12" AGGREGATE SUBGRADE (EXISTING)
- ⑧ POROUS GRANULAR EMBANKMENT (EXISTING)
- ⑨ AGGREGATE SHOULDERS (6" THICK) (EXISTING)
- ⑩ BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE, 9 1/2"
- ⑪ AGGREGATE SUBGRADE 12"
- ⑫ BITUMINOUS SHOULDERS 6"
- ⑬ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX, D, N70, 1 1/2"
- ⑭ TEMPORARY RAMP AT 1:40 (SEE ARTICLE 406.18)
- ⑮ BITUMINOUS SURFACE REMOVAL - VARIABLE DEPTH
- ⑯ BITUMINOUS MATERIALS (PRIME COAT)
- ⑰ PAVEMENT REMOVAL
- ⑱ LEVELING BINDER (MACHINE METHOD) SUPERPAVE, N70
- ⑲ 4" TOP SOIL
- ⑳ GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ㉑ BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX C, N50, 1 1/2"
- ㉒ BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE IL 19.0, N50, 1 1/4"
- ㉓ AGGREGATE BASE COURSE, TYPE A (SPECIAL) 6"
- ㉔ AGGREGATE SHOULDERS, TYPE A (SPECIAL) 4"
- ㉕ BRIDGE APPROACH PAVEMENT (STANDARD 420401)
- ㉖ SUB-BASE GRANULAR MATERIAL, TY A, 4"
- ㉗ AGGREGATE FOR TEMPORARY ACCESS (4" MIN.)
- ㉘ EXISTING GUARDRAIL
- ㉙ PROPOSED GUARDRAIL
- ㉚ PAVEMENT REMOVAL

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801 S. Durkin Drive
Springfield, Illinois 62704
217-546-3400
P.O. Box 1036
DuQuoin, Illinois 62832
618-790-4637
Account Number 12-07-0047-1
Date: 05/23/04
DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

EXISTING TYPICAL CROSS SECTIONS
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

ROUTE NO.	SECTION	COUNTY	POST MILES	SHEET
F.A.U. 3706	00-00068-07-BR	LAKE	50	7
FED. ROAD DIST. NO.	ILL. NO.	FED. AID PROJECT	BRM-7003(876)	
CONTRACT NO. 83806				



NOTE 1: SHOULDER WIDENING FOR TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL SHALL BE CONTINUED TO STA. 128+30 AT OLD BARRINGTON ROAD.

LEGEND

- ① 1 1/4" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
- 1 1/4" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ② AREA REFLECTIVE CRACK CONTROL FABRIC (EXISTING)
- ③ BITUMINOUS SHOULDERS, TY. B (6" THICK) (EXISTING)
- ④ 7 1/2" BITUMINOUS PAVEMENT (EXISTING)
- 6" AGGREGATE BASE
- ⑤ 1 1/2" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
- ⑥ 7" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ⑦ 12" AGGREGATE SUBGRADE (EXISTING)
- ⑧ POROUS GRANULAR EMBANKMENT (EXISTING)
- ⑨ AGGREGATE SHOULDERS (6" THICK) (EXISTING)
- ⑩ BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE, 9 1/2"
- ⑪ AGGREGATE SUBGRADE 12"
- ⑫ BITUMINOUS SHOULDERS 6"
- ⑬ BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX, D, N70, 1 1/2"
- ⑭ TEMPORARY RAMP AT 1:40 (SEE ARTICLE 406.18)
- ⑮ BITUMINOUS SURFACE REMOVAL - VARIABLE DEPTH
- ⑯ BITUMINOUS MATERIALS (PRIME COAT)
- ⑰ PAVEMENT REMOVAL
- ⑱ LEVELING BINDER (MACHINE METHOD) SUPERPAVE, N70
- ⑲ 4" TOP SOIL
- ⑳ GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ㉑ BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE, MIX C, N50, 1 1/2"
- ㉒ BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE IL 19.0, N50, 1 1/4"
- ㉓ AGGREGATE BASE COURSE, TYPE A (SPECIAL) 6"
- ㉔ AGGREGATE SHOULDERS, TYPE A (SPECIAL) 4"
- ㉕ BRIDGE APPROACH PAVEMENT (STANDARD 420401)
- ㉖ SUB-BASE GRANULAR MATERIAL, TY A, 4"
- ㉗ AGGREGATE FOR TEMPORARY ACCESS (4" MIN.)
- ㉘ EXISTING GUARDRAIL
- ㉙ PROPOSED GUARDRAIL
- ㉚ PAVEMENT REMOVAL

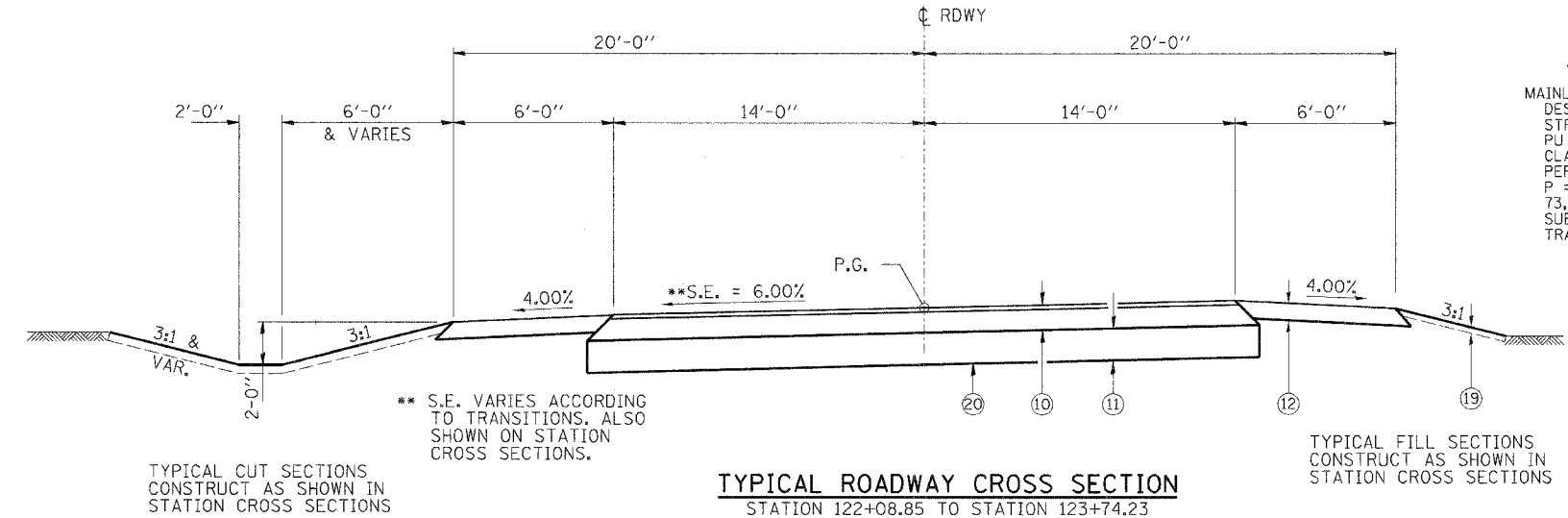
TYPICAL CUT SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS

TYPICAL ROADWAY CROSS SECTION

STATION 125+65.77 TO STATION 128+40
STATION 128+40 TO STA. 129+00*

TYPICAL FILL SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS

* SEE PAVEMENT TRANSITION DETAILS SHEET 9.



PAVEMENT DESIGN

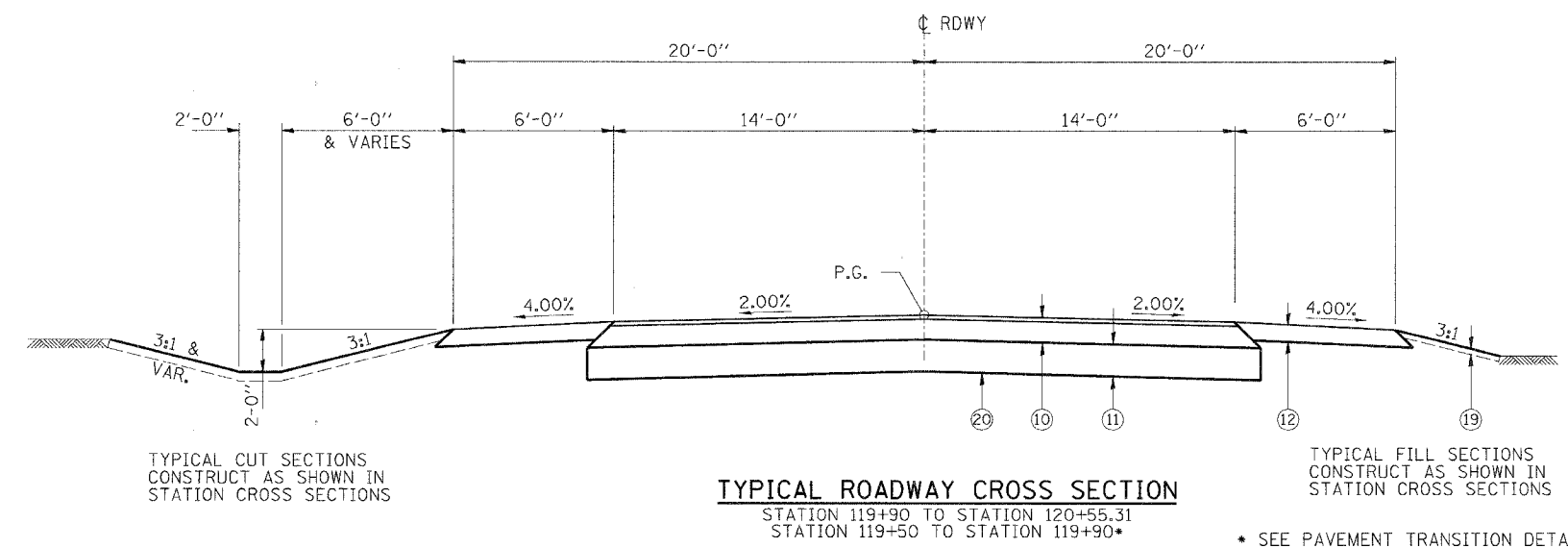
MAINLINE:
DESIGN PERIOD: 20 YEARS
STRUCTURAL DESIGN TRAFFIC (SDT) = 12,648 YEAR 2015
PU = 95% SU = 4% MU = 1%
CLASS II ROAD
PERCENT OF SDT IN DESIGN LANE
P = 50% SU = 50% MU = 50%
73,380 LB LOAD LIMIT
SUBGRADE SUPPORT RATING = POOR, IBR 3
TRAFFIC FACTOR = 0.86

TYPICAL CUT SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS

TYPICAL ROADWAY CROSS SECTION

STATION 122+08.85 TO STATION 123+74.23

TYPICAL FILL SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS



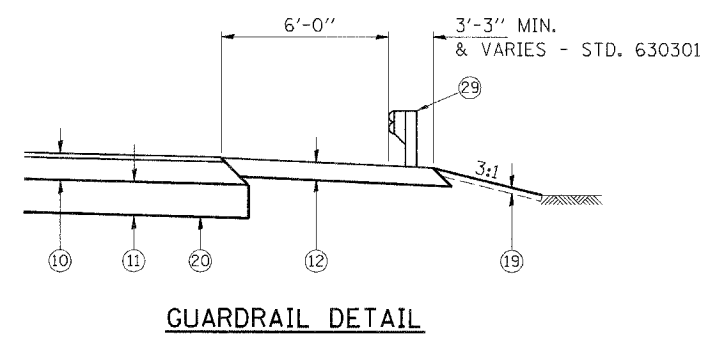
TYPICAL CUT SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS

TYPICAL ROADWAY CROSS SECTION

STATION 119+90 TO STATION 120+55.31
STATION 119+50 TO STATION 119+90*

TYPICAL FILL SECTIONS CONSTRUCT AS SHOWN IN STATION CROSS SECTIONS

* SEE PAVEMENT TRANSITION DETAILS SHEET 9.



GUARDRAIL DETAIL

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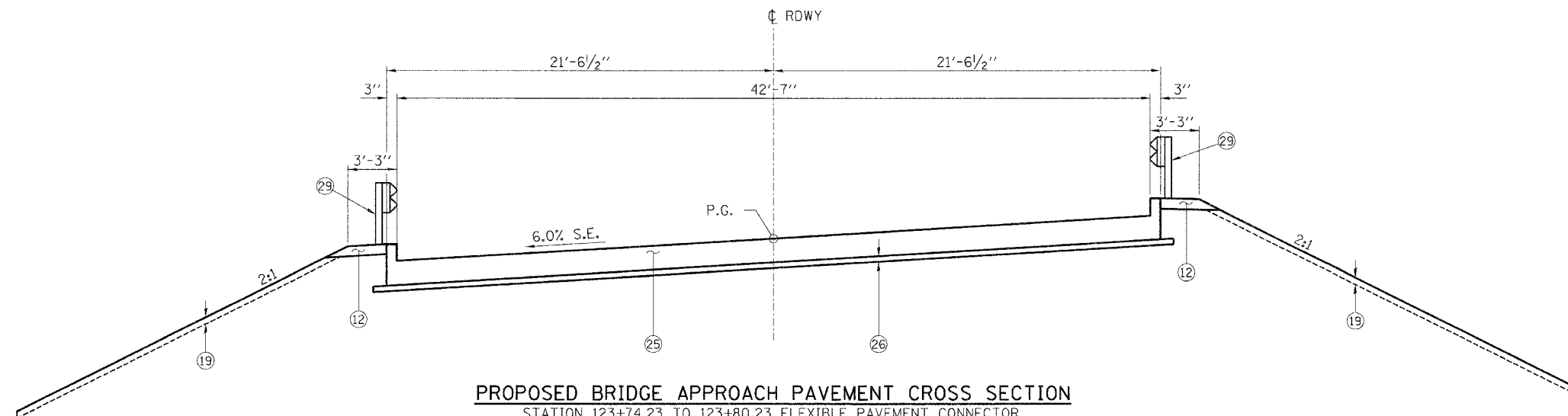
PROPOSED TYPICAL CROSS SECTIONS
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

ROUTE NO. F.A.U. 3706	SECTION 00-00068 -07-BR	COUNTY LAKE	DISTRICT 50	SHEET 8
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT: BRM-7003(876)	

CONTRACT NO. 83806

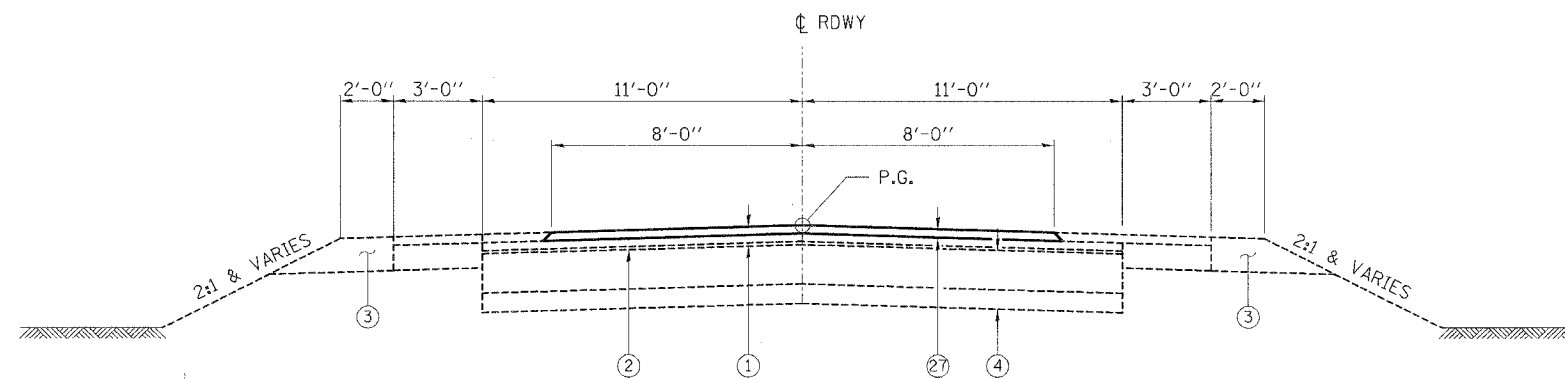
LEGEND

- ① 1/4" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
1/4" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ② AREA REFLECTIVE CRACK CONTROL FABRIC (EXISTING)
- ③ BITUMINOUS SHOULDERS, TY. B (6" THICK) (EXISTING)
- ④ 7/8" BITUMINOUS PAVEMENT (EXISTING)
6" AGGREGATE BASE
- ⑤ 1/2" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
- ⑥ 7" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ⑦ 12" AGGREGATE SUBGRADE (EXISTING)
- ⑧ POROUS GRANULAR EMBANKMENT (EXISTING)
- ⑨ AGGREGATE SHOULDERS (6" THICK) (EXISTING)
- ⑩ BITUMINOUS CONCRETE PAVEMENT
(FULL DEPTH), SUPERPAVE, 9 1/2"
- ⑪ AGGREGATE SUBGRADE 12"
- ⑫ BITUMINOUS SHOULDERS 6"
- ⑬ BITUMINOUS CONCRETE SURFACE COURSE,
SUPERPAVE, MIX, D, N70, 1 1/2"
- ⑭ TEMPORARY RAMP AT 1:40 (SEE ARTICLE 406.18)
- ⑮ BITUMINOUS SURFACE REMOVAL - VARIABLE DEPTH
- ⑯ BITUMINOUS MATERIALS (PRIME COAT)
- ⑰ PAVEMENT REMOVAL
- ⑱ LEVELING BINDER (MACHINE METHOD) SUPERPAVE, N70
- ⑲ 4" TOP SOIL
- ⑳ GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ㉑ BITUMINOUS CONCRETE SURFACE COURSE
SUPERPAVE, MIX C, N50, 1 1/2"
- ㉒ BITUMINOUS CONCRETE BINDER COURSE
SUPERPAVE IL 19.0, N50, 1 3/4"
- ㉓ AGGREGATE BASE COURSE, TYPE A (SPECIAL) 6"
- ㉔ AGGREGATE SHOULDERS, TYPE A (SPECIAL) 4"
- ㉕ BRIDGE APPROACH PAVEMENT (STANDARD 420401)
- ㉖ SUB-BASE GRANULAR MATERIAL, TY A, 4"
- ㉗ AGGREGATE FOR TEMPORARY ACCESS (4" MIN.)
- ㉘ EXISTING GUARDRAIL
- ㉙ PROPOSED GUARDRAIL
- ▨ PAVEMENT REMOVAL



PROPOSED BRIDGE APPROACH PAVEMENT CROSS SECTION

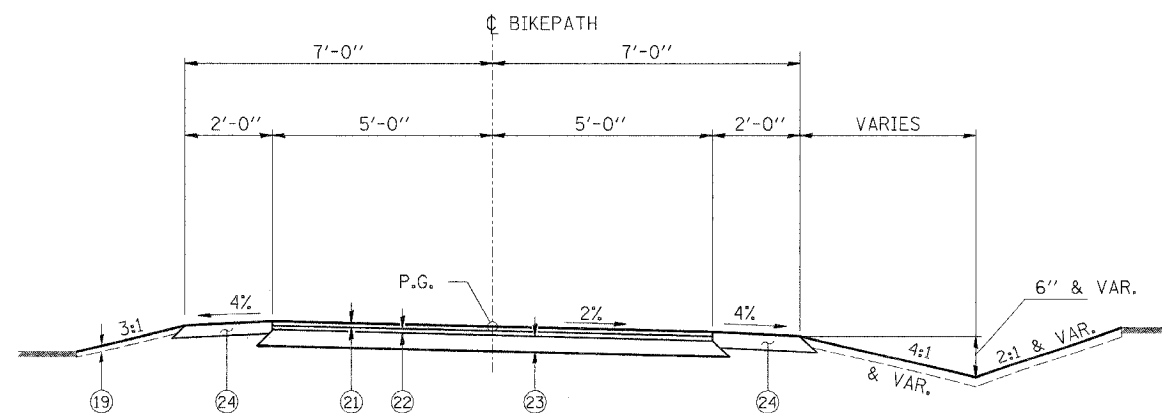
STATION 123+74.23 TO 123+80.23 FLEXIBLE PAVEMENT CONNECTOR
 STATION 123+80.23 TO 124+10.23 BRIDGE APPROACH PAVEMENT
 STATION 125+29.77 TO 125+59.77 BRIDGE APPROACH PAVEMENT
 STATION 125+59.77 TO 125+65.77 FLEXIBLE PAVEMENT CONNECTOR



TEMPORARY ACCESS CROSS SECTION

STATION 119+90.00 TO 122+00.00

NOTE: ACCESS TO DRIVEWAY:
 USE EXISTING ROADWAY UNTIL
 BRIDGE WORK COMPLETED OR
 AS DIRECTED BY THE ENGINEER.



TYPICAL FILL SECTIONS
 CONSTRUCT AS SHOWN IN
 STATION CROSS SECTIONS

TYPICAL CUT SECTIONS
 CONSTRUCT AS SHOWN IN
 STATION CROSS SECTIONS

TYPICAL BIKE PATH CROSS SECTION

STATION 9+45 TO STATION 10+55

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PROPOSED TYPICAL CROSS SECTIONS

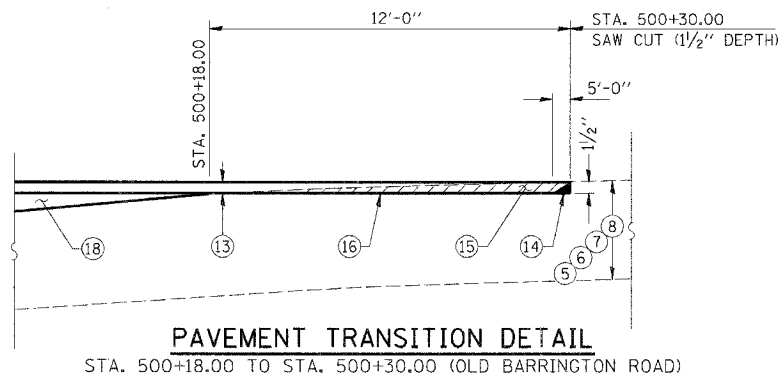
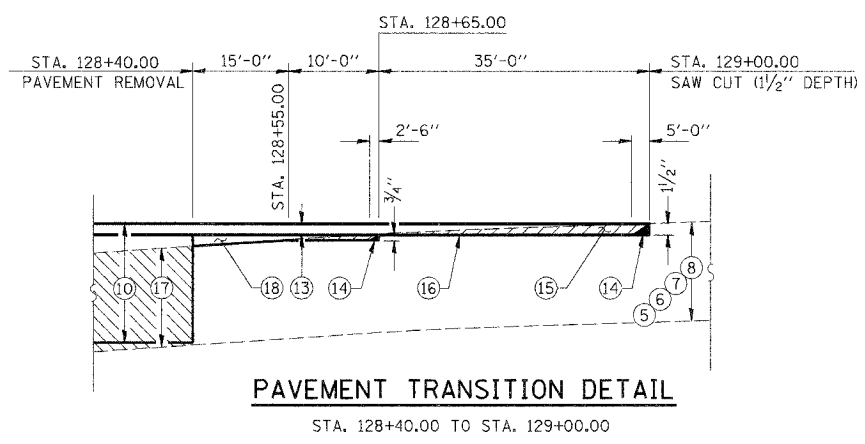
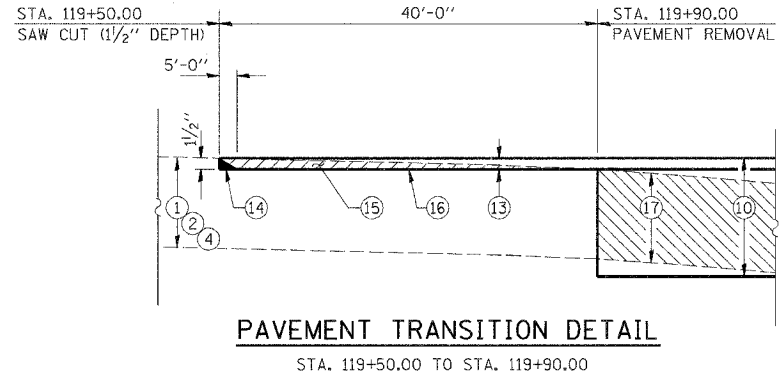
SECTION 00-00068-07-BR

F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.U. 3706	00-00068-07-BR	LAKE	50	9
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(8/76)	

CONTRACT NO. 83806

BITUMINOUS MIXTURE REQUIREMENTS			
PAY ITEM	AC TYPE	VOIDS	MAX RAP%
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX C, N50	PG 64-22	4% @ 50 GYR	15%
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	PG 64-22	4% @ 50 GYR	15%
BITUMINOUS CONCRETE (FULL DEPTH), SUPERPAVE 9 1/2"			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 GYR	10%
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	PG 64-22	4% @ 70 GYR	15%
BITUMINOUS SHOULDERS 6"			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 GYR	10%
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	PG 64-22	4% @ 50 GYR	15%
LEVELING BINDER (MACHINE METHOD), SUPERPAVE, N70	PG 64-22	4% @ 70 GYR	10%
INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE N50	PG 64-22	4% @ 50 GYR	15%

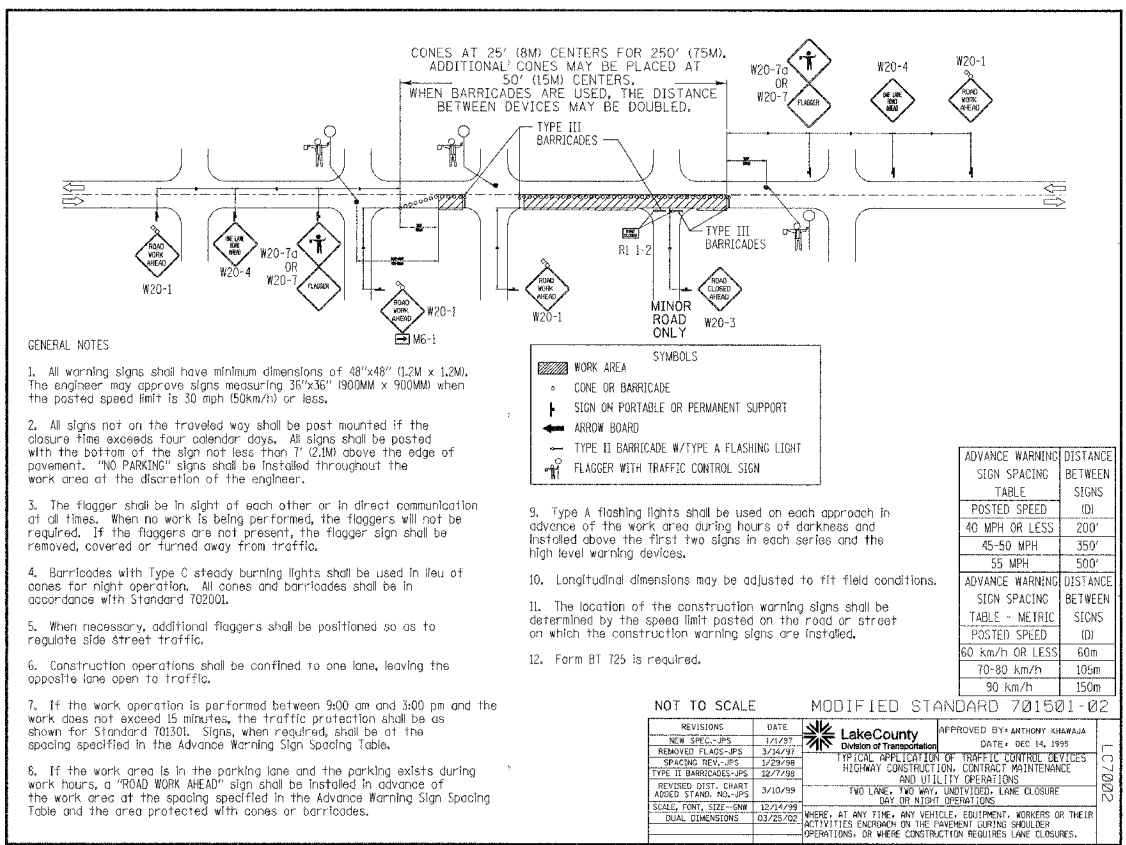
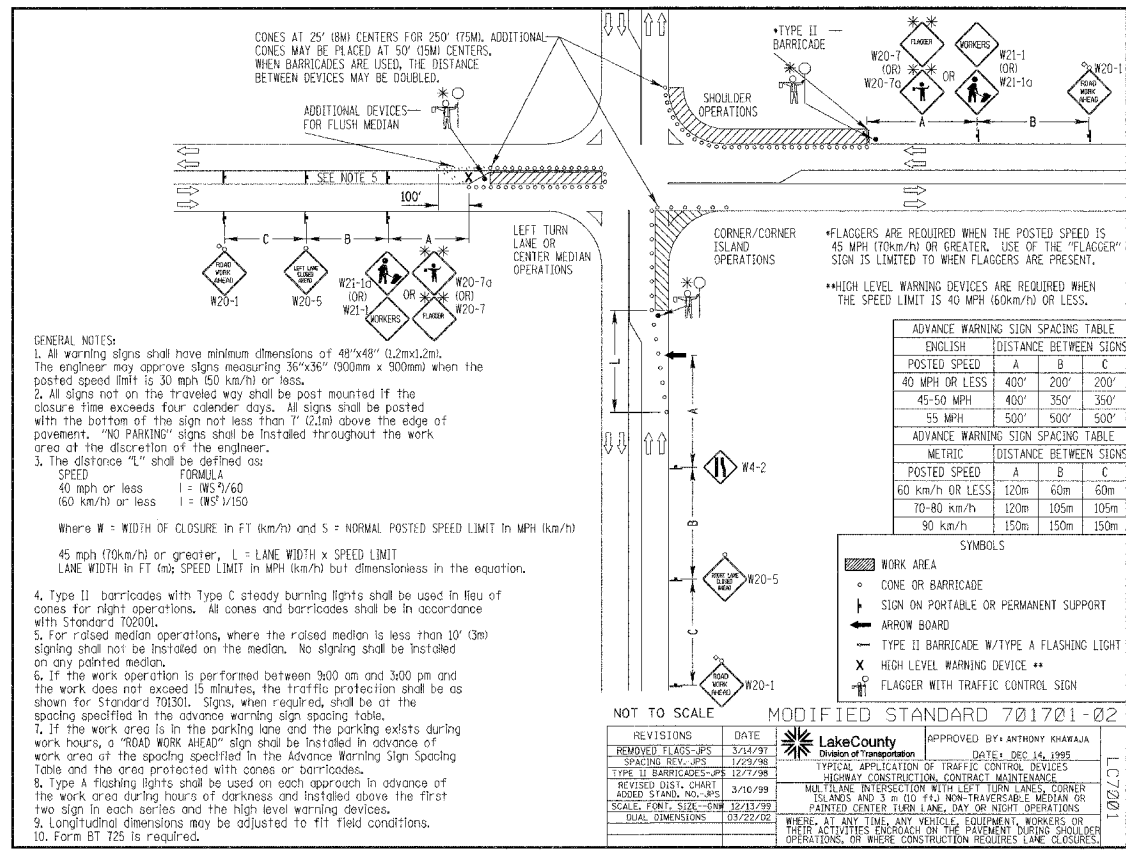
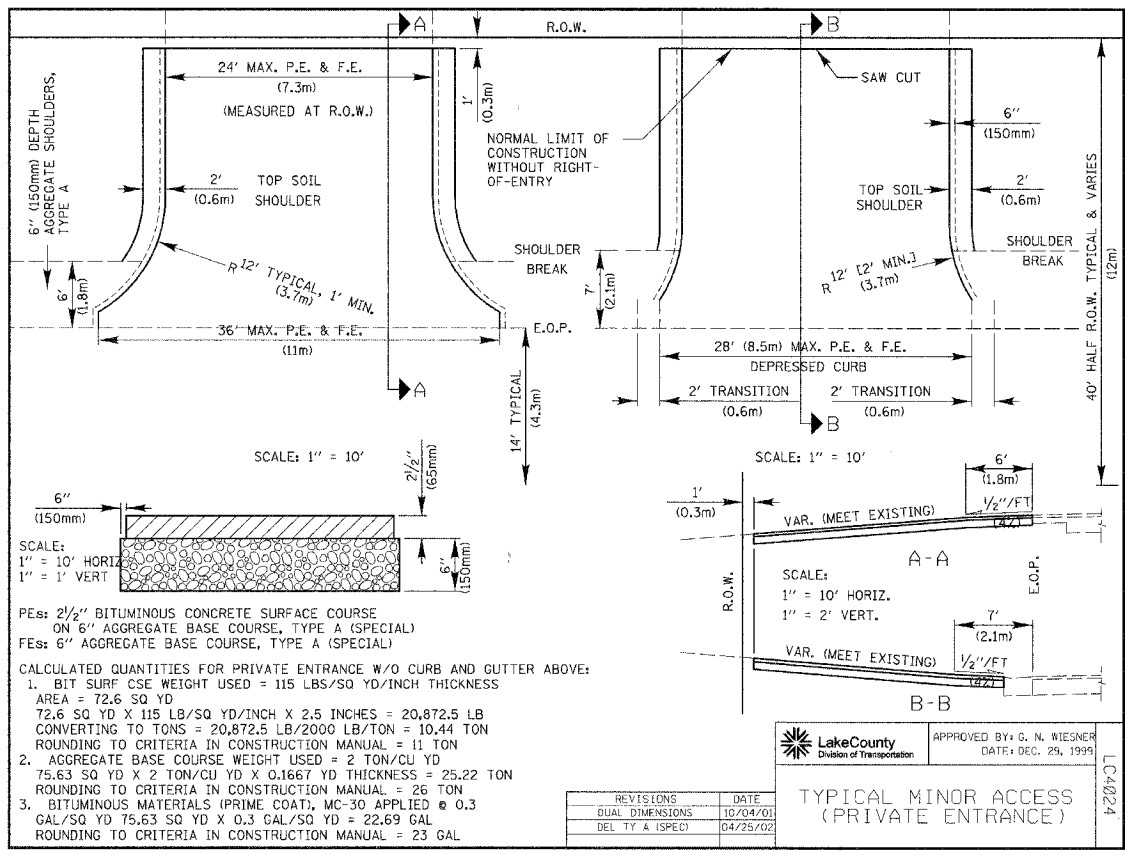


LEGEND

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- ② 1/4" BITUMINOUS CONCRETE BINDER COURSE (EXISTING)
- ③ AREA REFLECTIVE CRACK CONTROL FABRIC (EXISTING)
- ④ BITUMINOUS SHOULDERS, TY. B (6" THICK) (EXISTING)
- ⑤ 7 1/2" BITUMINOUS PAVEMENT (EXISTING)
- ⑥ 6" AGGREGATE BASE
- ⑦ 1/2" BITUMINOUS CONCRETE SURFACE COURSE (EXISTING)
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- ⑨ 12" AGGREGATE SUBGRADE (EXISTING)
- ⑩ POROUS GRANULAR EMBANKMENT (EXISTING)
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ROADWAY DETAILS
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

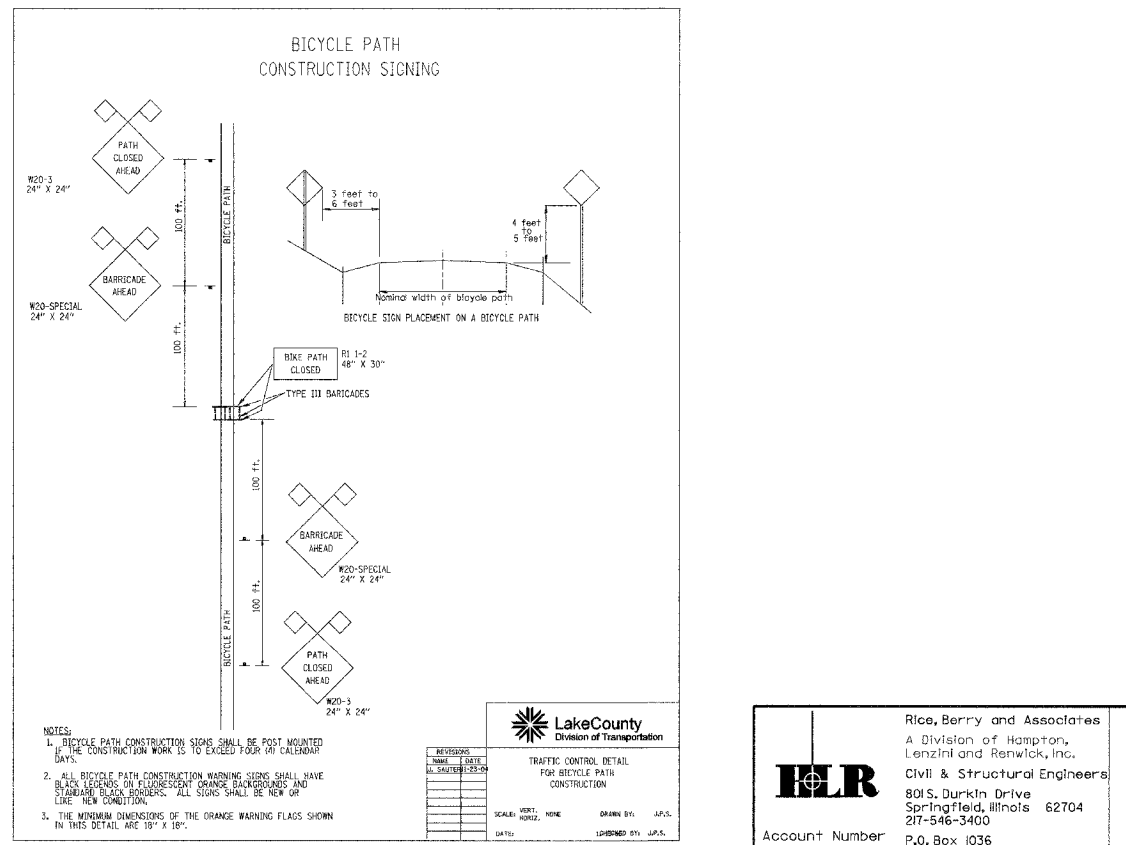
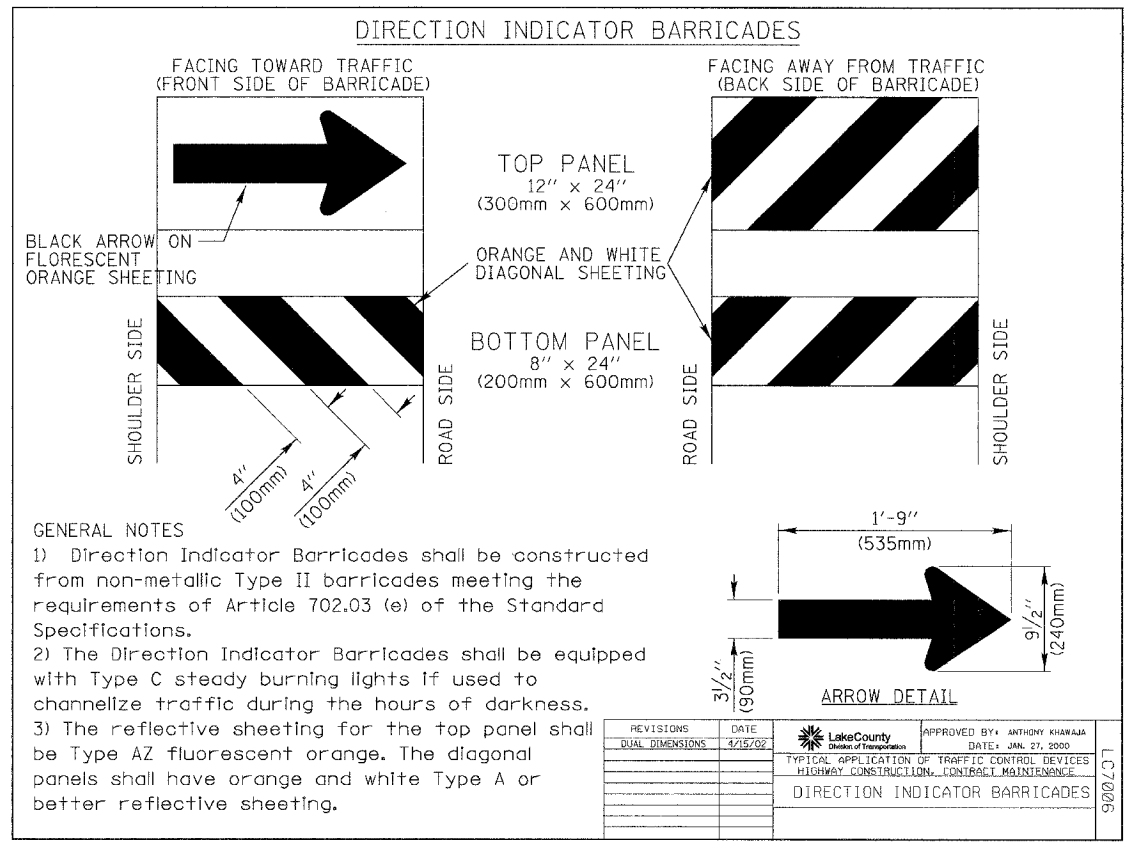
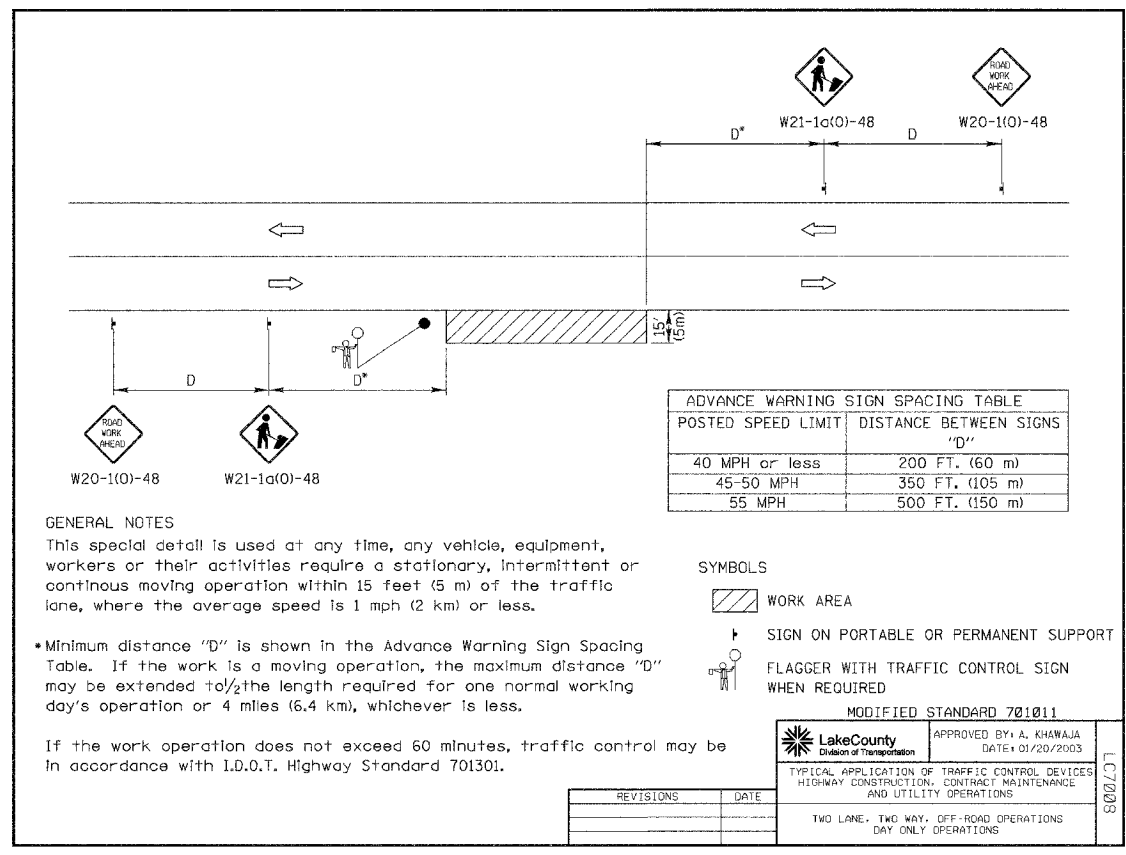
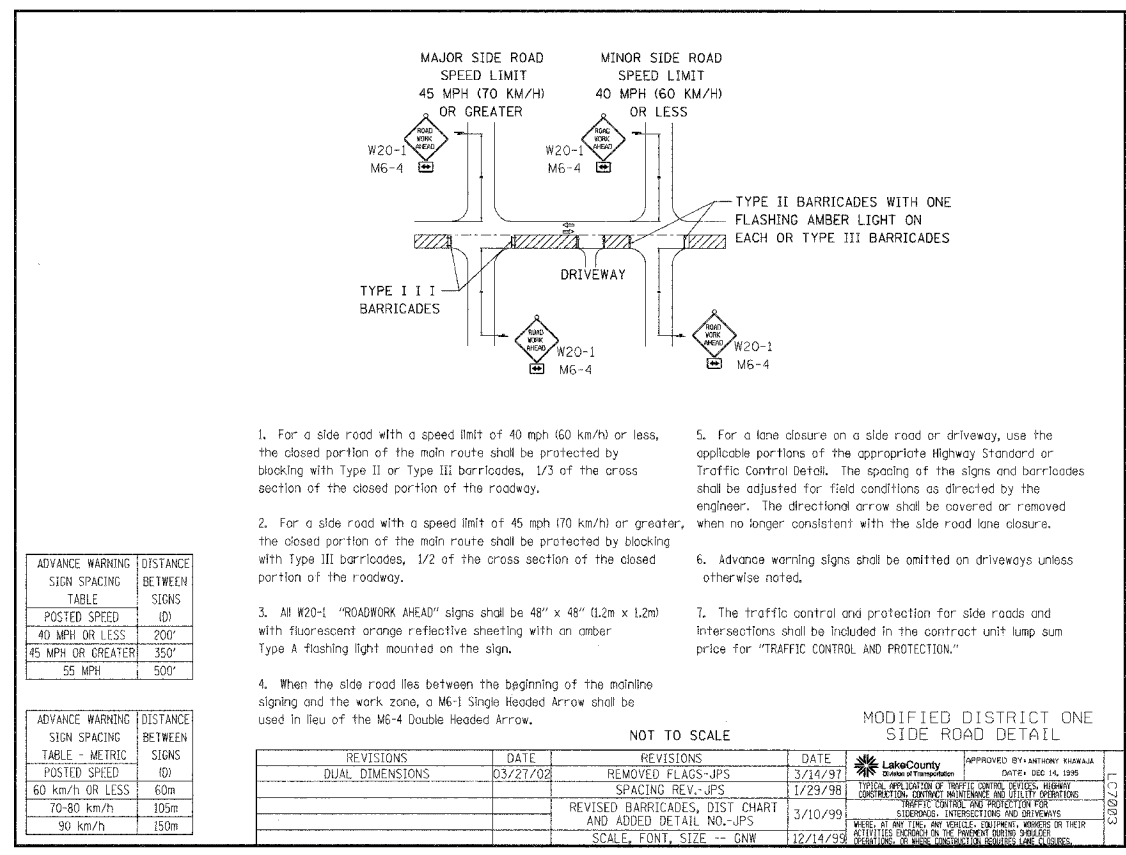


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ROADWAY DETAILS
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CONTRACT NO. 83806



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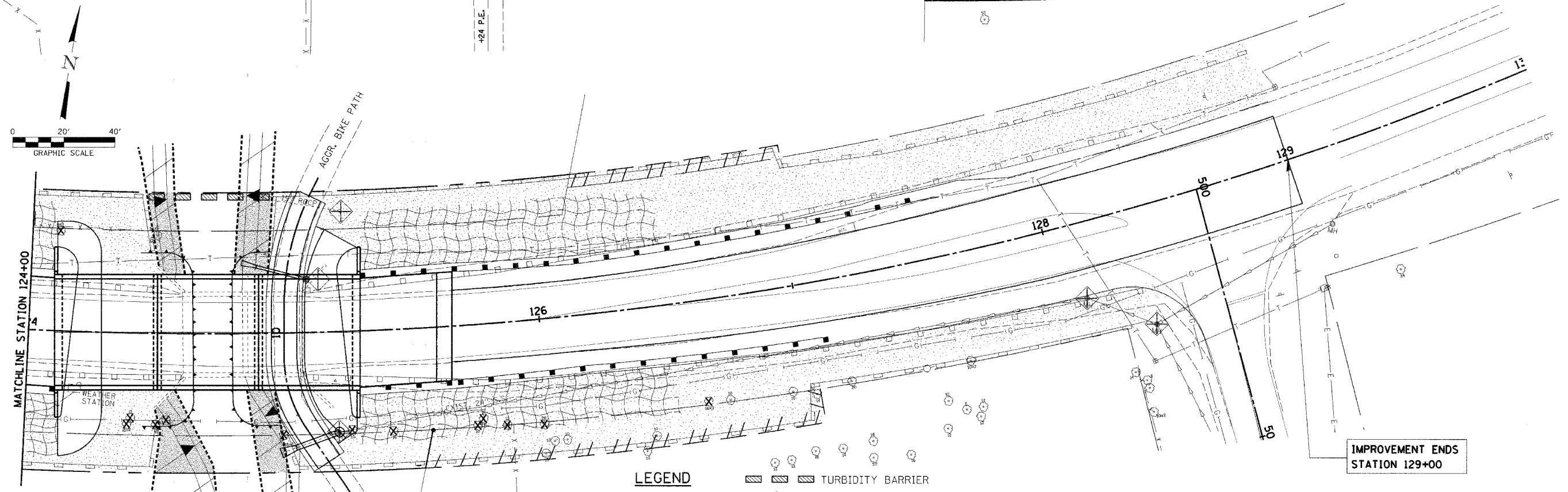
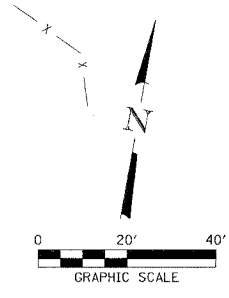
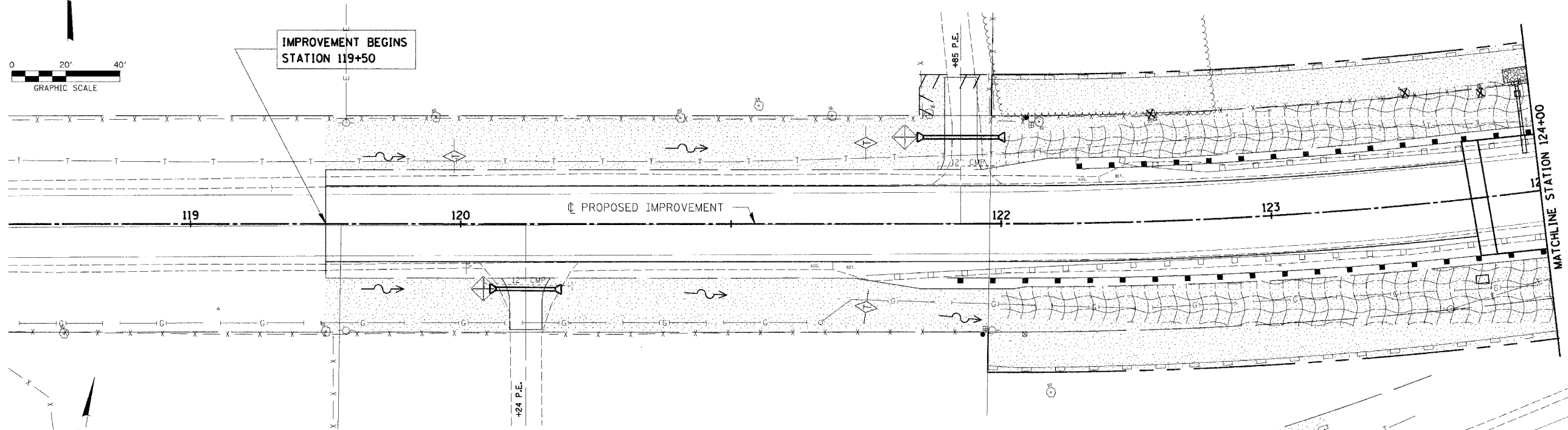
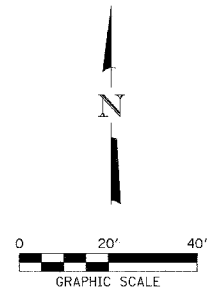
ROADWAY DETAILS

SECTION 00-00068-07-BR

F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

EROSION CONTROL PLAN & STORMWATER POLLUTION PREVENTION PLAN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.U. 3706	00-00068-00-BR	LAKE	50	12
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT: BRM-700318763		CONTRACT NO. 83806	



- LEGEND**
- EROSION CONTROL BLANKET
 - UNDERWATER STRUCTURE EXCAVATION PROTECTION
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECKS (SPECIAL)
 - DITCH FLOW OR OUTFALL
 - TURBIDITY BARRIER
 - TREE REMOVAL
 - INLET PROTECTION
 - INDICATES WETLAND AREA
 - SEEDING (COMPLETE) OR SODDING (COMPLETE)
 - INDICATES IMPACTED AREA OF WETLAND AND WATERS OF THE U.S. IMPACTS & SEEDING CLASS 4B.

HLR

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EROSION CONTROL PLAN
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

EROSION CONTROL PLAN & STORMWATER POLLUTION PREVENTION PLAN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 3706	00-00068 -00-BR	LAKE	50	13
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(876)	

CONTRACT NO. 83806

THIS PROJECT DISTURBS 2.1 ACRES OF TOTAL LAND AREA. COMPLIANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER PERMIT IS NECESSARY IF A PROJECT DISTURBS 1 OR MORE ACRES OF TOTAL LAND AREA; AN NPDES STORMWATER PERMIT WILL BE REQUIRED FOR THIS PROJECT. SEE SWPPP IN SPECIAL PROVISIONS.

SEEDING & TEMPORARY EROSION CONTROL SEEDING							
LOCATION	CLASS 4B	TEMPORARY EROSION CONTROL SEEDING	SEEDING (COMPLETE)				
			CLASS 2A	NITROGEN	POTASSIUM	EROSION CONTROL BLKT. (SPL)	TOPSOIL 4"
			ACRES	100 LB/ACRE/APP.*	SQ YD	90 LB/ACRE	90 LB/ACRE
LT. STA. 119+50 TO STA. 124+50		116	1,403	26	26	1,403	1,403
RT. STA. 119+50 TO STA. 124+50		120	1,440	27	27	1,440	1,440
LT. STA. 125+10 TO STA. 129+00		96	1,133	21	21	1,133	1,133
RT. STA. 125+10 TO STA. 128+43		76	893	17	17	893	893
RT. STA. 128+77 TO STA. 129+00		4	36	1	1	36	36
LT. WETLAND	0.02						
RT. WETLAND	0.02						
TOTAL	0.04	412	4,905	92	92	4,905	4,905

* 4 APPLICATIONS

SEDIMENTATION AND SOIL EROSION CONTROL NOTES

- SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 14 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE, OR REDISTURBANCE.
- AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V, AND APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE STABILIZED WITH SOD, MAT OR BLANKET IN COMBINATION WITH SEEDING.
- EROSION CONTROL BLANKET SHALL BE REQUIRED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE AREAS HAVE BEEN STABILIZED WITH VEGETATION OR TEMPORARY MEASURES ARE NO LONGER NEEDED.
- ALL TEMPORARY EROSION CONTROL MEASURES MUST BE MAINTAINED AND IMMEDIATELY REPLACED AS NEEDED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL INSPECTION AND REPAIR. THE CONTRACTOR SHALL INSPECT AND COMPLETE MAINTENANCE OF ALL ITEMS A MINIMUM OF EVERY 7 DAYS AND WITHIN 24 HOURS OF A ONE-HALF INCH RAINFALL.
- A STABILIZED MAT OF AGGREGATE UNDERLAIN WITH FILTER CLOTH (OR OTHER APPROPRIATE MEASURE) SHALL BE LOCATED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE TO OR FROM A PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA. THE PAVEMENT SHALL BE CLEANED DAILY TO THE SATISFACTION OF THE ENGINEER.
- SOIL STOCKPILES SHALL NOT BE LOCATED IN A FLOOD PRONE AREA OR A DESIGNATED BUFFER PROTECTING WATERS OF THE UNITED STATES OR ISOLATED WATERS OF LAKE COUNTY.
- IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (e.g. SEDIMENT TRAP, SEDIMENT BASIN, OR OTHER APPROPRIATE MEASURE.)
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL ALSO TAKE SPECIAL NOTE TO THE CONTRACT SPECIAL PROVISION "EROSION CONTROL PLAN". ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER. ALL MEASURES SHALL BE IN PLACE WITHIN 4 DAYS OF INITIAL DISTURBANCE.
- THE BARRIER INSTALLATION, MAINTENANCE, REMOVAL AND THE RESTORATION OF THE AREA DISTURBED BY THE BARRIER INSTALLATION IS INCLUDED IN COST OF THE PAY ITEM PERIMETER EROSION BARRIER.
- TEMPORARY DITCH CHECKS SHALL BE TRIANGULAR SILT DIKES AND CONSTRUCTED AS PER CONTRACT SPECIAL PROVISIONS ON 100 FEET CENTERS AS SHOWN HEREIN OR AS DIRECTED BY THE ENGINEER. THE DITCH CHECKS SHALL BE INSTALLED IMMEDIATELY AS GRADING PROGRESSES THROUGH THE PROJECT. THE PAY ITEM FOR TEMPORARY DITCH CHECKS (SPECIAL) SHALL INCLUDE THE COST OF INSTALLATION, MAINTENANCE AND REMOVAL. ONLY TRIANGULAR SILT DIKES OR AN APPROVED EQUAL SHALL BE USED. REMOVAL OF TRAPPED SEDIMENT SHALL BE PAID FOR AS EARTH EXCAVATION. SEDIMENT SHALL BE REMOVED WHEN SILTATION REACHES 50% CAPACITY OF STRUCTURE.
- THE CONTRACTOR SHALL CONTACT THE LAKE COUNTY STORMWATER MANAGEMENT COMMISSION AS SOON AS INITIAL EROSION CONTROL PRACTICES ARE INSTALLED.
- THE CONTRACTOR SHALL MAINTAIN AND PRESERVE ANY EXISTING SUB SURFACE DRAINAGE SYSTEMS (i.e. FIELD TILES) ACCORDING TO SECTION 611 OF THE IDOT STANDARD SPECIFICATIONS. ALL STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED, OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- TURBIDITY BARRIER SHALL BE LOCATED DOWNSTREAM OF CONSTRUCTION IN A LOCATION TO BE DETERMINED BY THE ENGINEER AND INSTALLED AS PER MANUFACTURER'S SPECIFICATIONS AND CONTRACT SPECIAL PROVISIONS.

SEE APPLICABLE STANDARDS, SPECIFICATIONS, AND SPECIAL PROVISIONS FOR:

- EROSION AND SEDIMENT CONTROL
- IDOT HIGHWAY STANDARD 280001
- REMOVAL OF EXISTING STRUCTURES
- UNDERWATER STRUCTURE EXCAVATION PROTECTION
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECKS (SPECIAL)
- EROSION CONTROL BLANKET
- TURBIDITY BARRIER

EROSION CONTROL BLANKET	
LOCATION	QUANTITY
KELSEY ROAD	SQ YD
LT. STA. 122+00 TO STA. 124+10	810
RT. STA. 122+00 TO STA. 124+10	963
LT. STA. 125+30 TO STA. 126+50	649
RT. STA. 125+30 TO STA. 126+50	604
TOTAL	3,026
USE	3,030

UNDERWATER STR. EXCAVATION PROTECTION	
LOCATION	EACH
LOCATION 1 STA. 124+65	1
LOCATION 2 STA. 124+80	1
TOTAL	2

TEMPORARY DITCH CHECKS (SPECIAL)	
LOCATION	QUANTITY
LT. STA. 120+00	2
LT. STA. 121+50	2
RT. STA. 121+50	2
TOTAL	6

PERIMETER EROSION BARRIER	
LOCATION	QUANTITY
KELSEY ROAD	FOOT
LT. STA. 121+95 TO STA. 124+60	265
RT. STA. 121+95 TO STA. 124+74	279
LT. STA. 124+80 TO STA. 129+00	420
RT. STA. 124+84 TO STA. 129+00	416
TOTAL	1,380
USE	1,500

TURBIDITY BARRIER	
LOCATION	QUANTITY
KELSEY ROAD	FOOT
55' LT. STA. 124+45± TO STA. 124+95±	50

NOTES

- TOPSOIL (4") SHALL BE PLACED ON ALL UNPAVED DISTURBED AREAS WITHIN LIMITS OF THE IMPROVEMENT.
- PERMANENT SEEDING SHALL CONSIST OF "SEEDING, CLASS 2A SPL", COMPLETED ON ALL UNPAVED AREAS WITHIN THE LIMITS OF THE IMPROVEMENT.
- TEMPORARY SEEDING SHALL CONSIST OF "TEMPORARY SEEDING FOR EROSION CONTROL" ON ALL UNPAVED AREAS WITHIN THE LIMITS OF THE IMPROVEMENT.
- UNDERWATER STRUCTURE EXCAVATION PROTECTION SHALL BE INSTALLED TO PREVENT SEDIMENT FROM ENTERING THE STREAM DURING REMOVAL OF THE EXISTING SUBSTRUCTURE AND CONSTRUCTION OF THE PROPOSED SUBSTRUCTURE.

TYPICAL CONSTRUCTION SEQUENCING

- INSTALL SEDIMENT AND EROSION CONTROL MEASURES
- COMPLETE TREE REMOVAL (CLEAR & GRUB).
- STRIP & STOCKPILE TOPSOIL & COMPLETE STOCKPILE PROTECTION.
- REMOVE EXISTING SUPERSTRUCTURE
- INSTALL UNDERWATER STRUCTURE EXCAVATION PROTECTION
- REMOVE EXISTING SUBSTRUCTURE
- CONSTRUCT PROPOSED SUBSTRUCTURE & ROADWAY GRADING.
- INSTALL TEMPORARY OR FINAL STABILIZATION MEASURES.
- REMOVE UNDERWATER STRUCTURE EXCAVATION PROTECTION & FINISH CONSTRUCTION OF PROPOSED STRUCTURE
- COMPLETE FINAL CONSTRUCTION ITEMS & CLEANUP.
- REMOVE EROSION CONTROL ITEMS.
- RESTORE FINAL AREAS.

INLET AND PIPE PROTECTION			
LOCATION	INLET FILTERS	INLET & PIPE PROTECTION	INLET FILTER CLEANING
	EACH	EACH	EACH
24.0' RT. STA. 120+05.00		1	
24.0' LT. STA. 122+02.00		1	
39.3' RT. STA. 125+20.00	1	1	1
25.0' LT. STA. 125+06.00		1	
48.0' LT. STA. 125+24.00		1	
29.3' RT. STA. 128+10.00	1	1	1
46.2' RT. STA. 128+34.00	1	1	1
TOTAL	3	7	3

HLR

Rice, Berry and Associates
A Division of Hampton,
Lenzini and Renwick, Inc.
Civil & Structural Engineers
801 S. Durkin Drive
Springfield, Illinois 62704
217-546-3400

Account Number
12-07-0047-1
Date: 05/23/05

P.O. BOX 1036
DuQuoin, Illinois 62832
618-790-4637

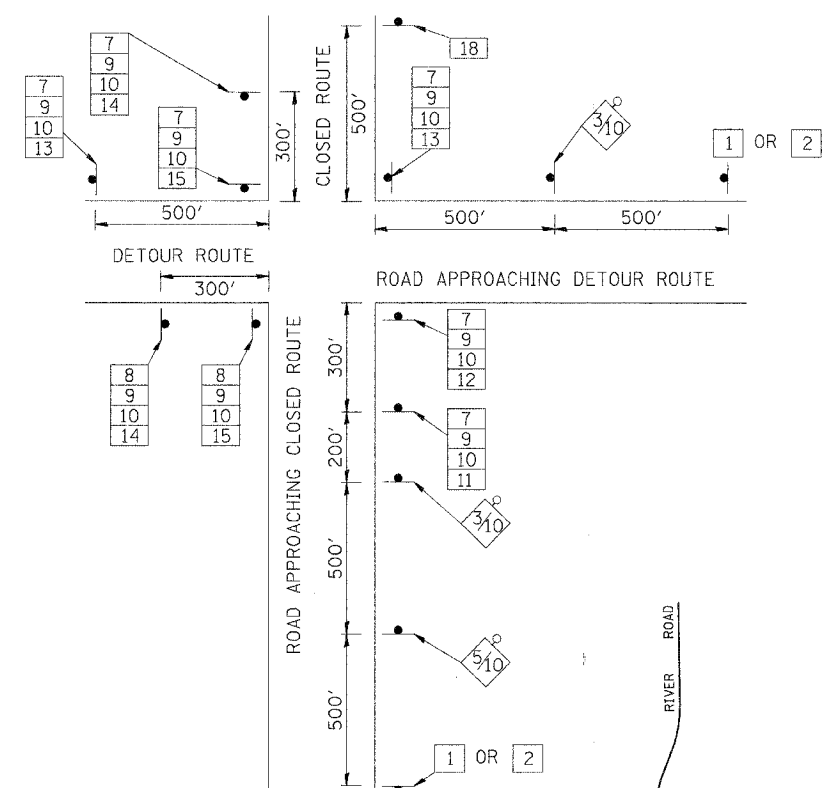
DESIGNED: T.P.L. | CHECKED: S.W.M. | DRAWN: D.T.M.

EROSION CONTROL PLAN

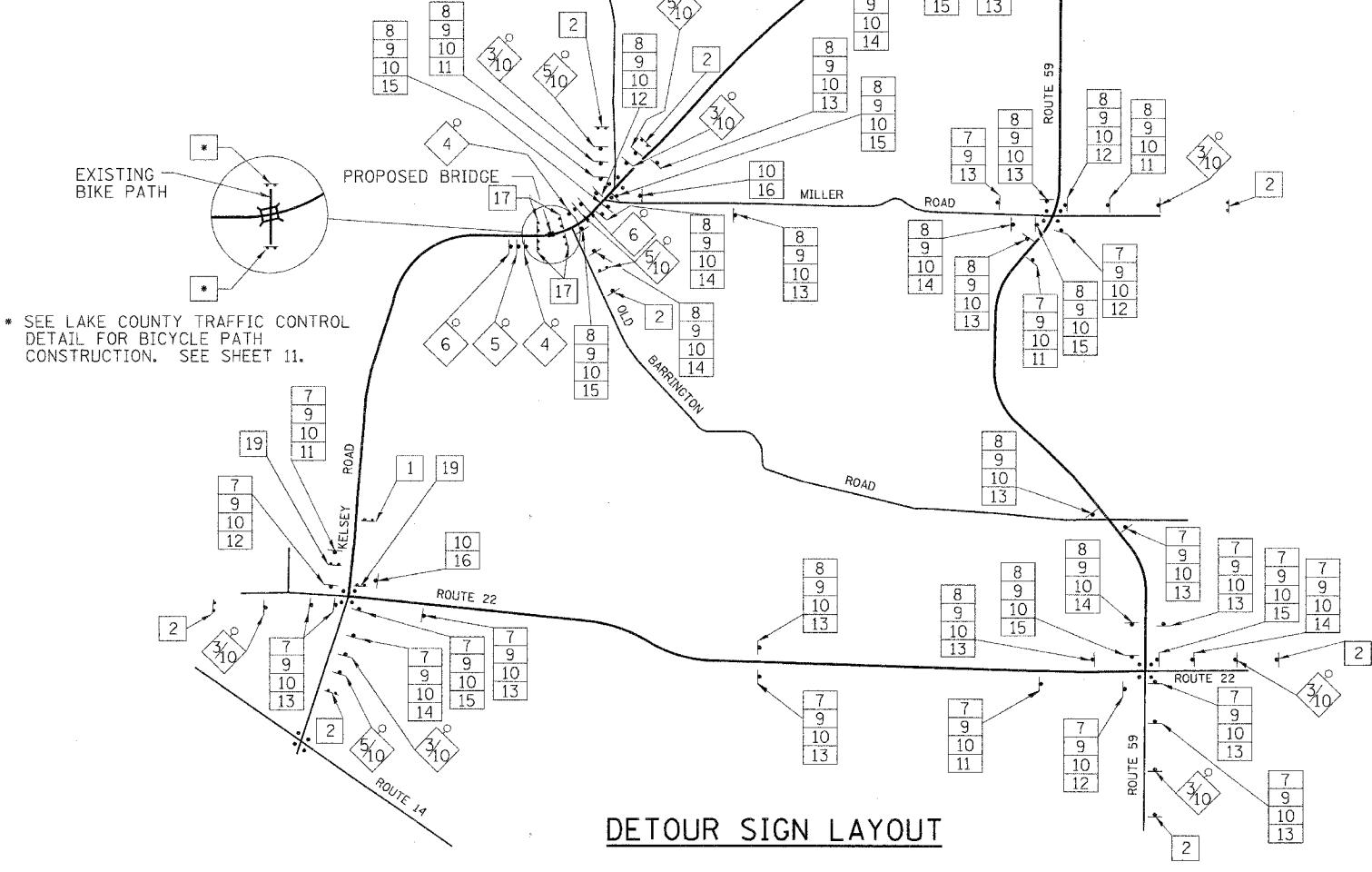
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.U. 3706	00-00068-07-BR	LAKE	50	14
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT- BRM-7003(876)	

CONTRACT NO. 83806



TYPICAL INTERSECTION AT POINT OF DETOUR



DETOUR SIGN LAYOUT

* SEE LAKE COUNTY TRAFFIC CONTROL DETAIL FOR BICYCLE PATH CONSTRUCTION. SEE SHEET 11.

SIGN LEGEND

①		NORTH KELSEY ROAD CLOSED TO TRAFFIC USE ROUTE 22	R11-3 WITH 2 AMBER FLASHING LIGHTS. (3 REQ'D)	⑪		M5-1 L (2 REQ'D)
②		SOUTH KELSEY ROAD CLOSED TO TRAFFIC USE ROUTE 59	R11-3 WITH 2 AMBER FLASHING LIGHTS. (5 REQ'D)	⑫		M6-1 (4 REQ'D)
③		DETOUR 500 FT.	W20-2, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. OPTIONAL (TYP). (4 REQ'D)	⑬		M6-3 (10 REQ'D)
④		BARRICADE 500 FT.	W20, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)	⑭		M5-1 R (3 REQ'D)
⑤		ROAD CLOSED 1000 FT.	W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (3 REQ'D)	⑮		M6-1 (4 REQ'D)
⑥		ROAD CLOSED 1500 FT.	W20-3, 48" x 48" WITH AMBER FLASHING LIGHT AND FLAG. (2 REQ'D)	⑯		M4-8A (2 REQ'D)
⑦		NORTH	M3-2 (13 REQ'D)	⑰		R11-2 (6 REQ'D)
⑧		SOUTH	M3-4 (12 REQ'D)	⑱		M4-8A (2 REQ'D)
⑨		DETOUR	M4-8 (25 REQ'D)			R11-2 (6 REQ'D)
⑩		KELSEY ROAD	M1-I100 (25 REQ'D)			R11-4 (0 REQ'D)
						R11-36 (2 REQ'D)

LEGEND

- DETOUR ROUTE
- ROAD OPEN TO LOCAL TRAFFIC ONLY
- SIGNALIZED INTERSECTION
- 48" x 48" CONSTRUCTION SIGN, WITH AMBER FLASHING LIGHT NUMBER DENOTES SIGN TYPE
- M4-9 SERIES DETOUR SIGN WITH DIRECTION AND ROAD NAME PLATES NUMBER DENOTES TYPE
- OTHER DETOUR SIGNS, NUMBER DENOTES TYPE

SPECIAL DETOUR NOTES

1. THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE DETOUR GENERAL NOTES, SEE SHEET 15 FOR THE DETOUR GENERAL NOTES.
2. SEE SHEET 15 FOR INFORMATION ON THE DESIGN AND LOCATION OF THE DETOUR INFORMATION SIGNS.
3. FOUR (4) TYPE III BARRICADES WILL BE NEEDED FOR THIS DETOUR AND ROAD CLOSURE.
4. THE TOTAL LENGTH OF THE DETOUR IS 8 MILES.
5. ALL DETOUR SIGNS, SHALL BE COMPLETELY COVERED AT ALL TIMES THE ROADWAY IS NOT CLOSED TO TRAFFIC.

HLR
 Rice, Berry and Associates
 A Division of Hampton, Lenzini and Renwick, Inc.
 Civil & Structural Engineers
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 217-546-3400
 P.O. Box 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Account Number 12-07-0047-1
 Date: 05/23/05
 DESIGNED: S.W.M. | CHECKED: S.W.M. | DRAWN: D.T.M.

DETOUR PLAN
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY

DETOUR GENERAL NOTES

ROUTE NO.	SECTION	COUNTY	SHEET
F.A.U. 3706	00-00068 -07-BR	LAKE	50 15
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT: BRM-7003(876)

CONTRACT NO. 83806

- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JAN. 1, 2002", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2001", THE DETAILS IN THESE PLANS, AND THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION (LC-T-701 NOS. 1 AND 2) AND THE L.C.D.O.T. DETOUR PROCEDURES AND GUIDELINES
- THE DURATION OF THE DETOUR SHALL NOT EXCEED 65 CALENDAR DAYS. THE CONTRACTOR SHALL SCHEDULE ALL WORK IN AN EXPEDIENT MANNER TO REDUCE THE LENGTH OF TIME THAT THE DETOUR NEEDS TO BE IN EFFECT.
- THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES FOR APPROVAL OF SUCH DATE.
- IF DEEMED NECESSARY BY THE ENGINEER A PRE-CONSTRUCTION MEETING WITH THE CONTRACTOR SHALL BE HELD AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT.
- THE CONTRACTOR SHALL SUPPLY TO THE ENGINEER THE NAMES AND TELEPHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE AND HIS REPRESENTATIVE RESPONSIBLE FOR THE DETOUR SIGNING PRIOR TO THE START OF THE WORK. THE WILL COUNTY HIGHWAY DEPARTMENT REPRESENTATIVE FOR THE DETOUR IS:

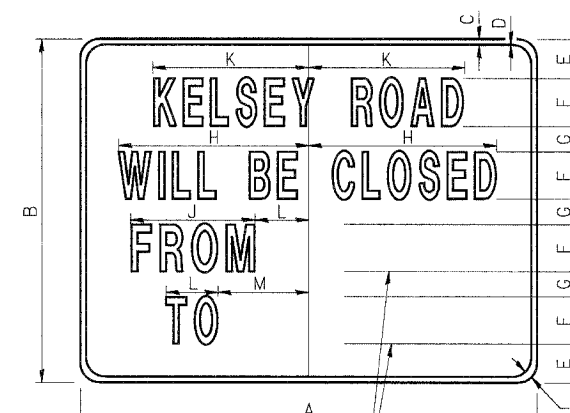
JOHN P. SAUTER
LAKE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC ENGINEERING SECTION
600 W. WINCHESTER ROAD
LIBERTYVILLE, ILLINOIS 60048
(847) 362-3950

- IF REQUESTED BY THE CONTRACTOR IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT THE ENGINEER WILL FIELD LOCATE THE POSITIONS OF ANY SIGNS.
- LONGITUDINAL DIMENSIONS SHOWN ON THESE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.
- THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING IS ERECTED IN ACCORDANCE WITH THE DETOUR PLAN AND INSPECTED AND APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THE DETOUR IS IN EFFECT.
- THE TRAFFIC CONTROL SHOWN ON THE DETOUR PLAN IS THE MINIMUM NECESSARY TO ENSURE THIS ROAD CLOSURE. THE CONTRACTOR SHALL MAKE ALL CHANGES IN TRAFFIC CONTROL THAT IS DEEMED NECESSARY BY THE ENGINEER. ADDITIONS AND DELETIONS OF TRAFFIC CONTROL FOR THIS DETOUR SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION".
- ALL EXISTING SIGNING THAT IS NOT APPLICABLE WHILE THE DETOUR IS IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR, IN A MANNER APPROVED BY THE ENGINEER.
- ALL DETOUR SIGNING SHALL BE POST MOUNTED IF THE ROAD CLOSURE IS TO EXCEED FOUR (4) CALENDAR DAYS.
- ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR LIKE NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION AND ACCEPTANCE OF THE SIGNS.
- THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED FOR THIS DETOUR SHALL MEET THE REQUIREMENTS FOR TYPE A-LOW INTENSITY FLASHING LIGHTS IN ARTICLE 1084.01 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING THE HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE USED.
- THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THE PLANS ARE 18" BY 18".
- ALL BARRICADES SHALL HAVE REFLECTORIZED STRIPING ON BOTH SIDES OF THE BARRICADES. THE TYPE III BARRICADES USED AT THE POINT OF CLOSURE TO THRU TRAFFIC SHALL NOT EXCEED 8'-0" IN WIDTH EACH, FOR A SINGLE APPROACH LANE.
- THE "ROAD CLOSED" (R11-2), THE "ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY" (R11-3), AND THE "ROAD CLOSED TO THRU TRAFFIC" (R11-4) SIGNS SHALL BE MOUNTED ABOVE THE TOP OF THE BARRICADE. ALL TYPE III BARRICADES SHALL HAVE TWO (2) AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINE OF THE SUPPORTS.
- THE ROAD NAME SIGN SHALL HAVE A BLACK LEGEND ON FLUORESCENT ORANGE REFLECTIVE SHEETING. THE SIGN BLANK SHALL BE A 9" BY VARIABLE OR A 12" BY VARIABLE WITH DESIGN SERIES C LETTERS. THE CAPITAL LETTERS SHALL BE 6" WITH 5" LOWER CASE.
- DURING NON-WORKING HOURS AT THE POINT OF ROAD CLOSURE TO ALL TRAFFIC THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.
- CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARD SPECIFICATIONS SHALL APPLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNING, INCLUDING BRUSHING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
- THE FOLLOWING ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD IS APPLICABLE FOR THIS WORK: STANDARD 702001
- THE ENGINEER SHALL BE NOTIFIED AT LEAST TWO (2) HOURS BEFORE THE ROAD IS TO BE OPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- THE PENALTY FOR EXCEEDING THE TIME LIMIT, AS STATED IN DETOUR GENERAL NOTE TWO OF THESE PLANS, SHALL EQUAL THE CHARGE OF TRAFFIC CONTROL DEFICIENCY OF \$1000 PER DAY, FOR EVERY CALENDAR DAY THE DETOUR AND ROAD CLOSURE EXCEEDS THE TIME LIMIT SET IN DETOUR GENERAL NOTE TWO. THIS PENALTY CAN BE ASSESSED IN ADDITION TO THE PENALTY SPECIFIED IN THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION AND BOTH PENALTIES CAN BE CHARGED CONCURRENTLY.

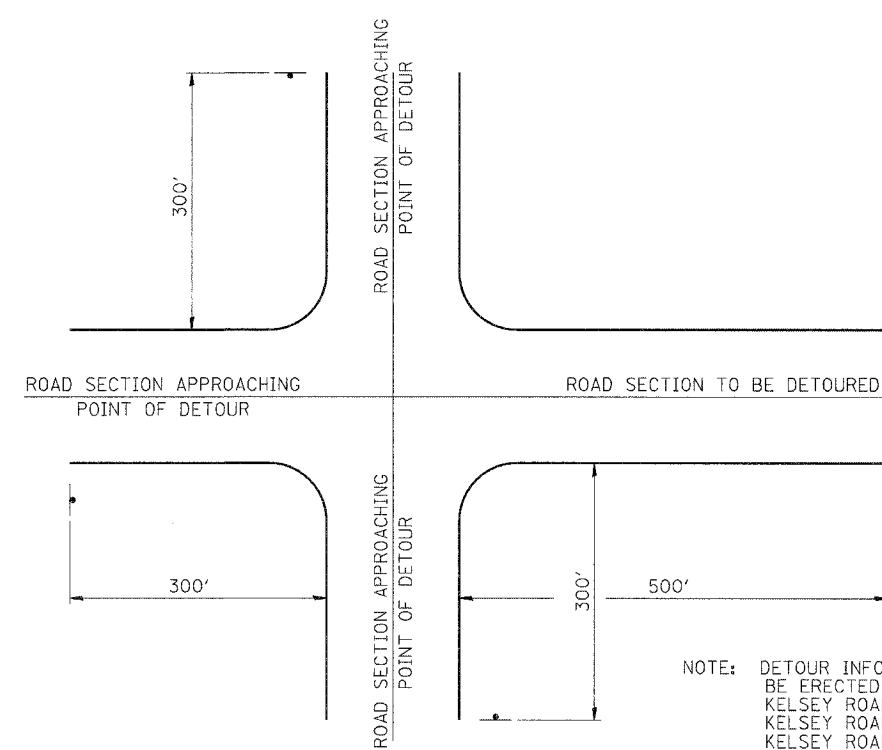
NOTE: THIS SIGN SHALL BE INSTALLED 7-10 CALENDAR DAYS PRIOR TO THE DETOUR AND ROAD CLOSURE. THE SIGNS SHALL BE REMOVED THE DAY THE DETOUR BEGINS. THE SIGN SHALL BE LOCATED AS NOTED BELOW.

SIGN SHEETING SHALL BE FLOURESCENT ORANGE WITH 5" BLACK SERIES C LETTERS.

DIMENSIONS													
	A	B	C	D	E	F	G	H	J	K	L	M	N
STD	48"	36"	1/2"	3/4"	4/4"	5"	2 1/2"	20"	13"	13"	5 1/2"	8 1/2"	2 1/4"



DATE BLANK, 6" BY 24" FLOURESCENT ORANGE REFLECTIVE SHEETING WITH 5" BLACK SERIES C UPPER CASE LETTERS



DETOUR INFORMATION SIGNS
AT TYPICAL INTERSECTION

NOTE: DETOUR INFORMATION SIGNS SHALL BE ERECTED AT INTERSECTIONS:
KELSEY ROAD AT IL. ROUTE 59
KELSEY ROAD AT RIVER ROAD
KELSEY ROAD AT MILLER ROAD
KELSEY ROAD AT OLD BARRINGTON ROAD
KELSEY ROAD AT IL. ROUTE 22
IL. ROUTE 59 AT MILLER ROAD
IL. ROUTE 59 AT OLD BARRINGTON ROAD
IL. ROUTE 59 AT IL. ROUTE 22

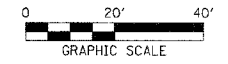
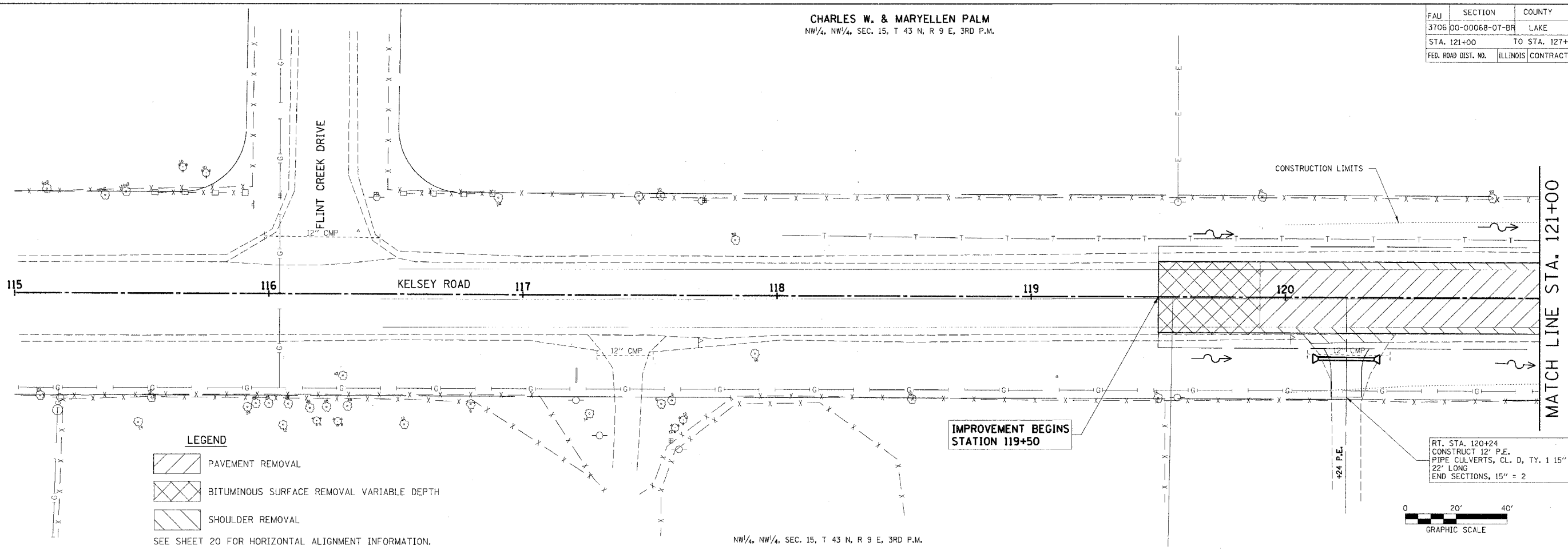
HLR
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217-546-3400
P.O. Box 1036
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Account Number 12-07-0047-1
Date: 05/23/05
DESIGNED: S.W.M. | CHECKED: S.W.M. | DRAWN: D.T.M.

DETOUR GENERAL NOTES
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY

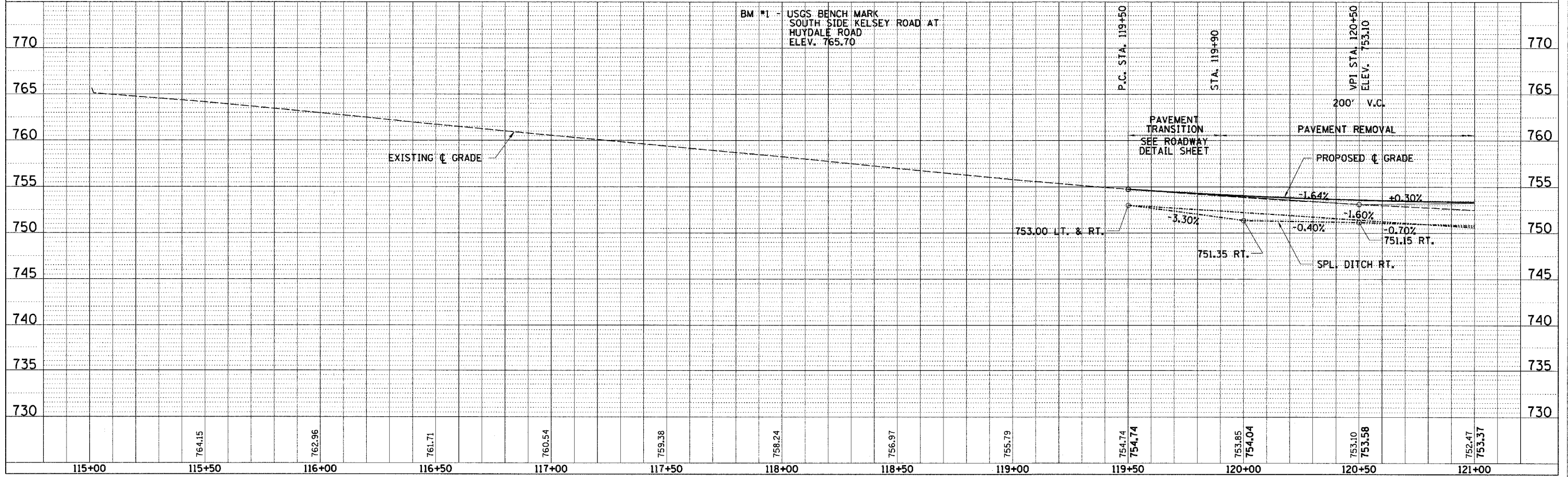
CHARLES W. & MARYELLEN PALM
 NW/4, NW/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.

FALL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	16
STA. 121+00		TO STA. 127+00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

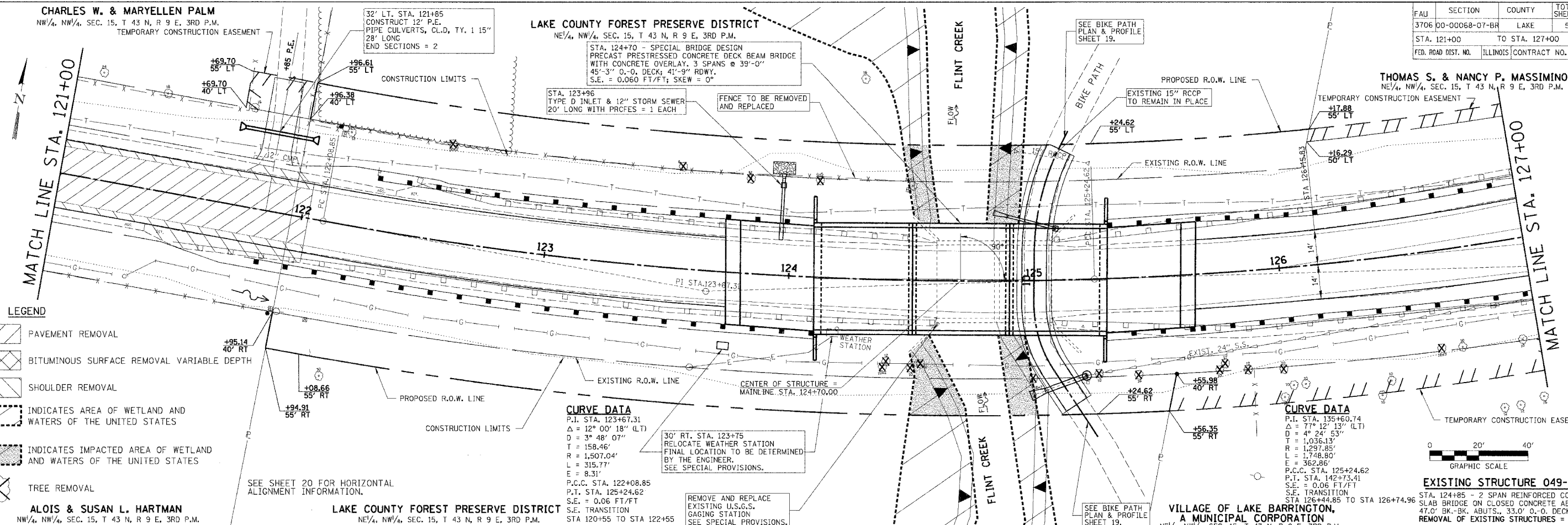
PLAN	SUBMITTED	DATE
NO. 83806	BY	11/17/10
NO. 83806	BY	11/17/10
NO. 83806	BY	11/17/10
NO. 83806	BY	11/17/10



PROFILE	SUBMITTED	DATE
NO. 83806	BY	11/17/10
NO. 83806	BY	11/17/10
NO. 83806	BY	11/17/10



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	17
STA. 121+00		TO STA. 127+00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO.		83906

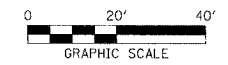


PLAN	DATE	BY
NO. 10/20/07	10/20/07	ALH
NO. 10/20/07	10/20/07	ALH
NO. 10/20/07	10/20/07	ALH

- LEGEND**
- [Hatched Box] PAVEMENT REMOVAL
 - [Cross-hatched Box] BITUMINOUS SURFACE REMOVAL VARIABLE DEPTH
 - [Diagonal Lines] SHOULDER REMOVAL
 - [Dashed Box] INDICATES AREA OF WETLAND AND WATERS OF THE UNITED STATES
 - [Stippled Box] INDICATES IMPACTED AREA OF WETLAND AND WATERS OF THE UNITED STATES
 - [Circle with X] TREE REMOVAL

CURVE DATA
 P.I. STA. 123+67.31
 $\Delta = 12^\circ 00' 18''$ (LT)
 $D = 3^\circ 48' 07''$
 $T = 158.46'$
 $R = 1,507.04'$
 $L = 315.77'$
 $E = 8.31'$
 P.C.C. STA. 122+08.85
 P.T. STA. 125+24.62
 S.E. = 0.06 FT/FT
 S.E. TRANSITION STA 120+55 TO STA 122+55

CURVE DATA
 P.I. STA. 125+60.74
 $\Delta = 77^\circ 12' 13''$ (LT)
 $D = 4^\circ 24' 53''$
 $T = 1,036.13'$
 $R = 1,297.85'$
 $L = 1,748.80'$
 $E = 362.86'$
 P.C.C. STA. 125+24.62
 P.T. STA. 127+73.41
 S.E. = 0.06 FT/FT
 S.E. TRANSITION STA 126+44.85 TO STA 126+74.96



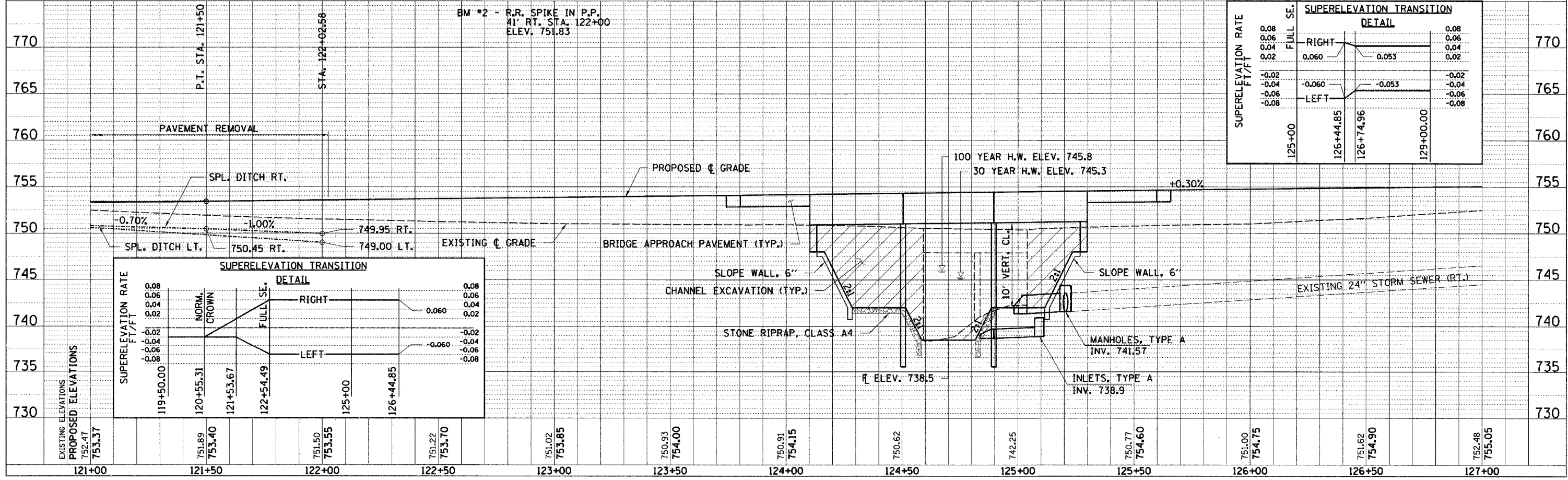
ALOIS & SUSAN L. HARTMAN
 NW/4, NW/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.

LAKE COUNTY FOREST PRESERVE DISTRICT
 NE/4, NW/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.

VILLAGE OF LAKE BARRINGTON, A MUNICIPAL CORPORATION
 NE/4, NW/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.

EXISTING STRUCTURE 049-3036
 STA. 124+85 - 2 SPAN REINFORCED CONCRETE SLAB BRIDGE ON CLOSED CONCRETE ABUTMENTS. 47.0' BK.-BK. ABUTS., 33.0' O.-O. DECK. REMOVAL OF EXISTING STRUCTURES = 1 EACH

PROFILE	DATE	BY
NO. 10/20/07	10/20/07	ALH
NO. 10/20/07	10/20/07	ALH
NO. 10/20/07	10/20/07	ALH



SUPERELEVATION TRANSITION DETAIL

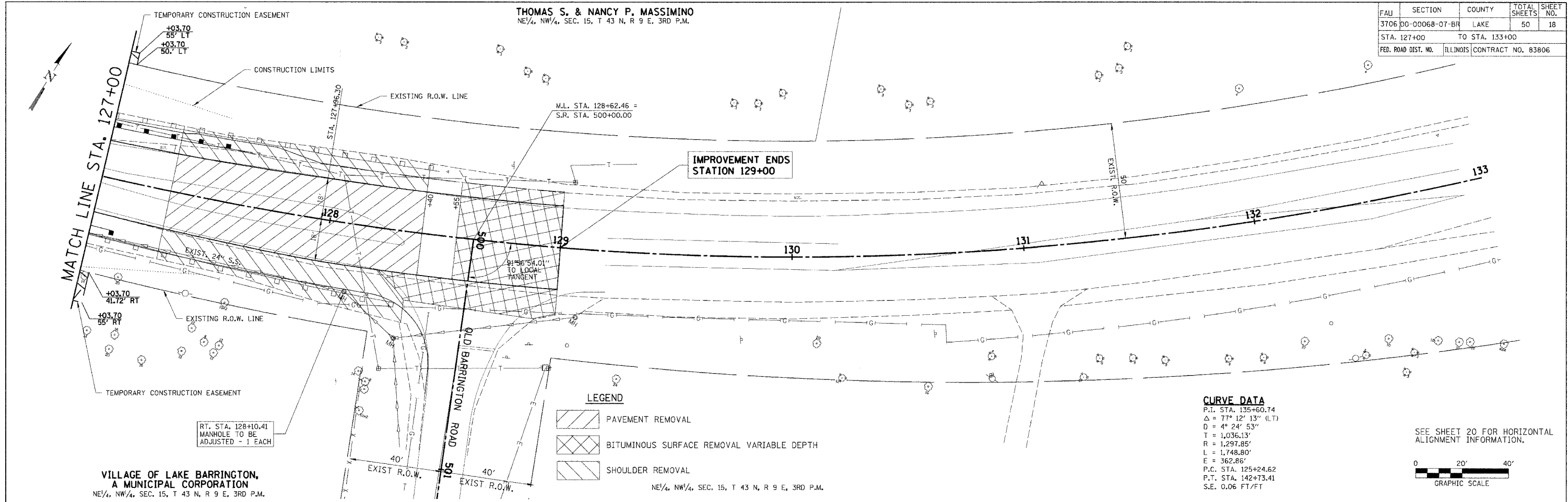
SUPERELEVATION RATE (FT/FT)	STATION	RIGHT	LEFT
0.08	119+50.00	0.08	-0.08
0.06	120+55.31	0.06	-0.06
0.04	121+53.67	0.04	-0.04
0.02	122+54.49	0.02	-0.02
0.00	125+00	0.00	0.00
-0.02	126+44.85	-0.02	-0.02
-0.04		-0.04	-0.04
-0.06		-0.06	-0.06
-0.08		-0.08	-0.08

SUPERELEVATION TRANSITION DETAIL

SUPERELEVATION RATE (FT/FT)	STATION	RIGHT	LEFT
0.08	125+00	0.08	-0.08
0.06		0.06	-0.06
0.04		0.04	-0.04
0.02		0.02	-0.02
0.00	126+44.85	0.00	0.00
-0.02	126+74.96	-0.02	-0.02
-0.04		-0.04	-0.04
-0.06		-0.06	-0.06
-0.08		-0.08	-0.08

FALL	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	18
STA. 127+00		TO STA. 133+00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

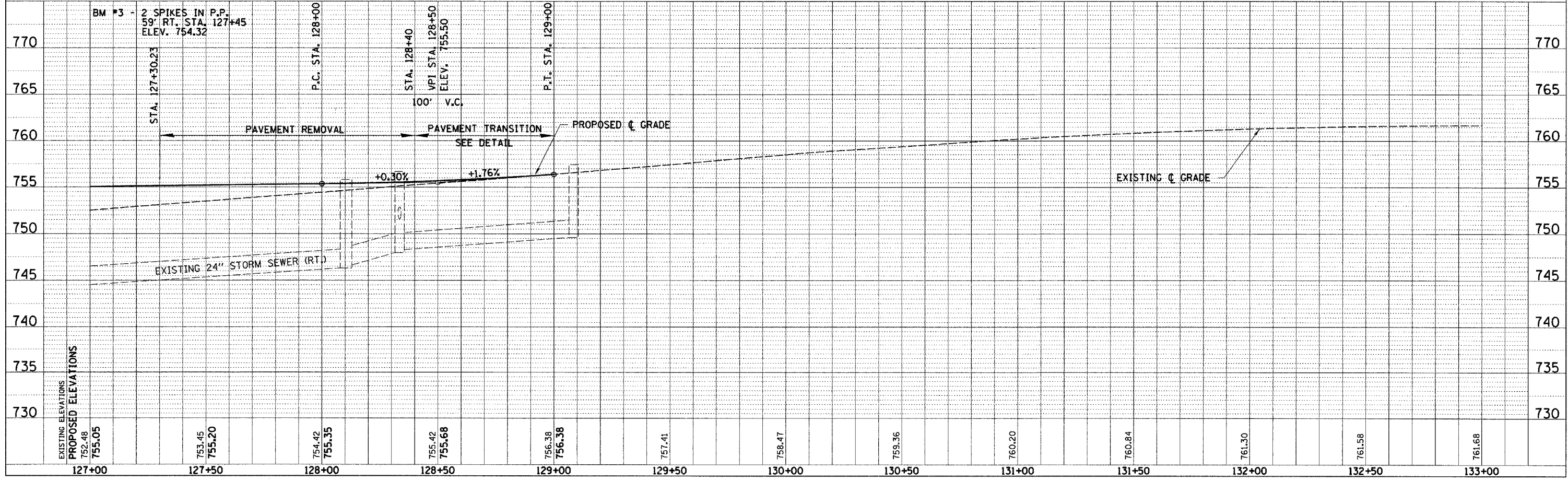
THOMAS S. & NANCY P. MASSIMINO
NE 1/4, NW 1/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.



VILLAGE OF LAKE BARRINGTON,
A MUNICIPAL CORPORATION
NE 1/4, NW 1/4, SEC. 15, T 43 N, R 9 E, 3RD P.M.

PLAN	DATE	BY
DESIGNED		
PLOTTED		
CHECKED		
RT. OF WAY CHECKED		
CAD FILE NAME		

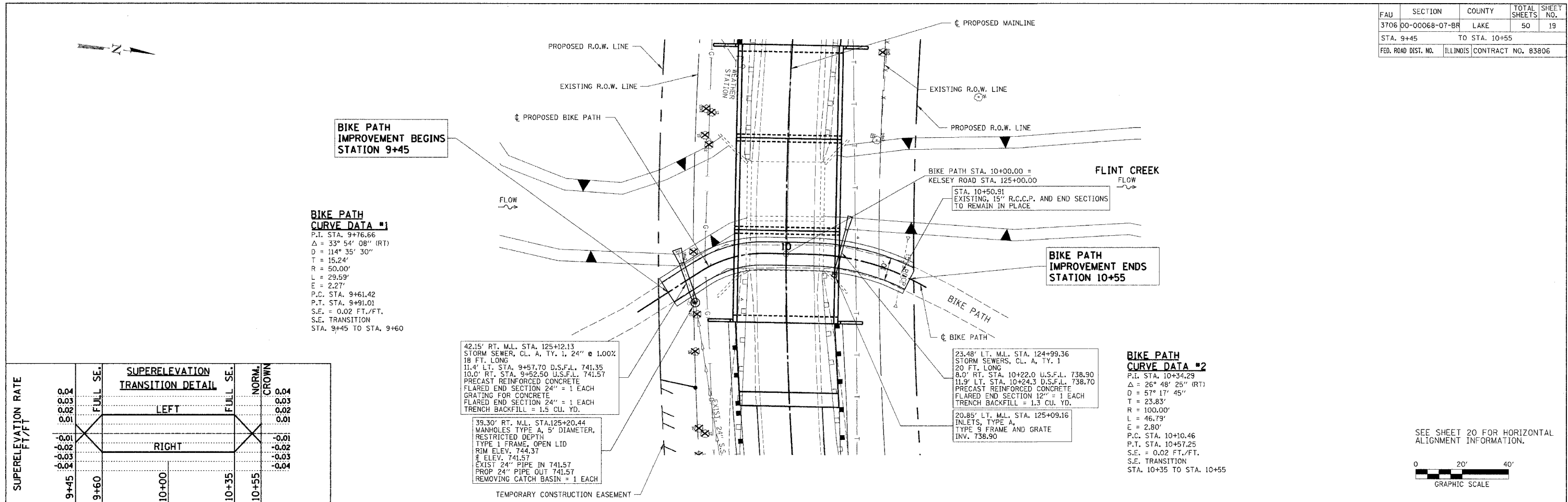
PROFILE	DATE	BY
DESIGNED		
PLOTTED		
CHECKED		
STRUCTURE NOTATIONS CHECKED		



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	19
STA. 9+45		TO STA. 10+55		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 83806	

PLAN	SUBMITTED	DATE
NO. 899952	BY	02/27/02
	IN CHARGE	
	BY	
	DATE	
	BY	
	DATE	

PROFILE	SUBMITTED	DATE
NO. 899952	BY	02/27/02
	IN CHARGE	
	BY	
	DATE	
	BY	
	DATE	



BIKE PATH CURVE DATA #1
P.I. STA. 9+76.66
 $\Delta = 33^\circ 54' 08''$ (RT)
 $D = 114^\circ 35' 30''$
 $T = 15.24'$
 $R = 50.00'$
 $L = 29.59'$
 $E = 2.27'$
P.C. STA. 9+61.42
P.T. STA. 9+91.01
S.E. = 0.02 FT./FT.
S.E. TRANSITION
STA. 9+45 TO STA. 9+60

BIKE PATH CURVE DATA #2
P.I. STA. 10+34.29
 $\Delta = 26^\circ 48' 25''$ (RT)
 $D = 57^\circ 17' 45''$
 $T = 23.83'$
 $R = 100.00'$
 $L = 46.79'$
 $E = 2.80'$
P.C. STA. 10+10.46
P.T. STA. 10+57.25
S.E. = 0.02 FT./FT.
S.E. TRANSITION
STA. 10+35 TO STA. 10+55

SUPERELEVATION RATE FT/FT	SUPERELEVATION TRANSITION DETAIL			NORMAL CROWN
	9+45	10+00	10+55	
0.04	FULL SE. LEFT	FULL SE. RIGHT	FULL SE.	0.04
0.03				0.03
0.02				0.02
0.01				0.01
-0.01	FULL SE. LEFT	FULL SE. RIGHT	FULL SE.	-0.01
-0.02				-0.02
-0.03				-0.03
-0.04				-0.04

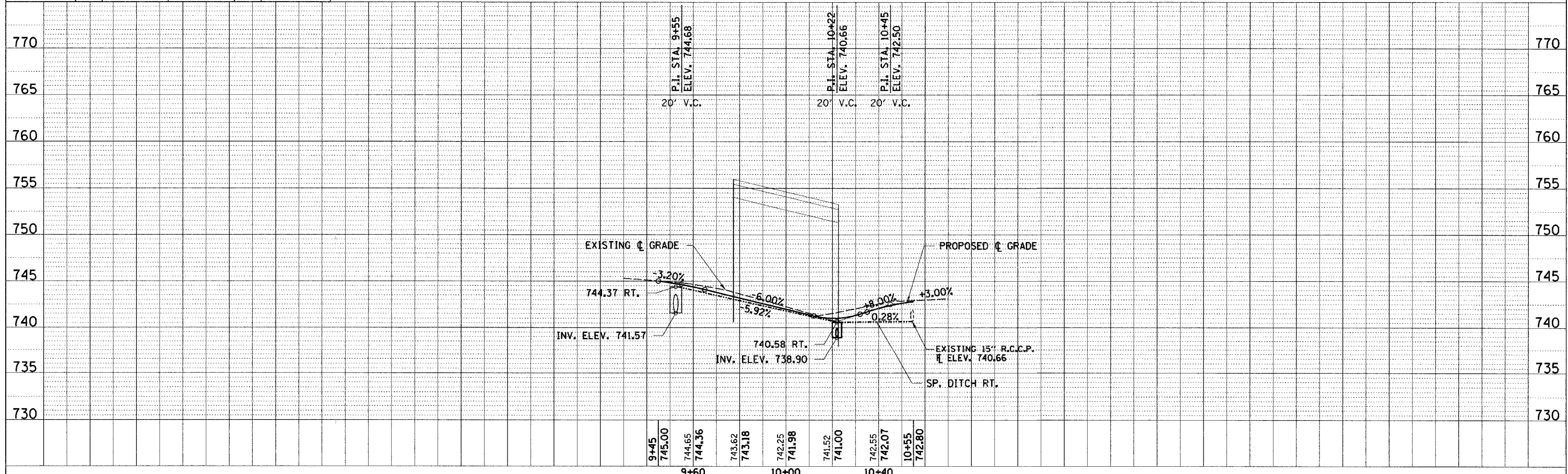
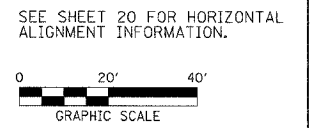
42.15' RT. M.L. STA. 125+12.13
STORM SEWER, CL. A, TY. 1, 24" @ 1.00%
18 FT. LONG
11.4' LT. STA. 9+57.70 D.S.F.L. 741.35
10.0' RT. STA. 9+52.50 U.S.F.L. 741.57
PRECAST REINFORCED CONCRETE
FLARED END SECTION 24" = 1 EACH
GRATING FOR CONCRETE
FLARED END SECTION 24" = 1 EACH
TRENCH BACKFILL = 1.5 CU. YD.

39.30' RT. M.L. STA. 125+20.44
MANHOLES TYPE A, 5' DIAMETER,
RESTRICTED DEPTH
TYPE 1 FRAME, OPEN LID
RIM ELEV. 744.37
I. ELEV. 741.57
EXIST 24" PIPE IN 741.57
PROP 24" PIPE OUT 741.57
REMOVING CATCH BASIN = 1 EACH

TEMPORARY CONSTRUCTION EASEMENT

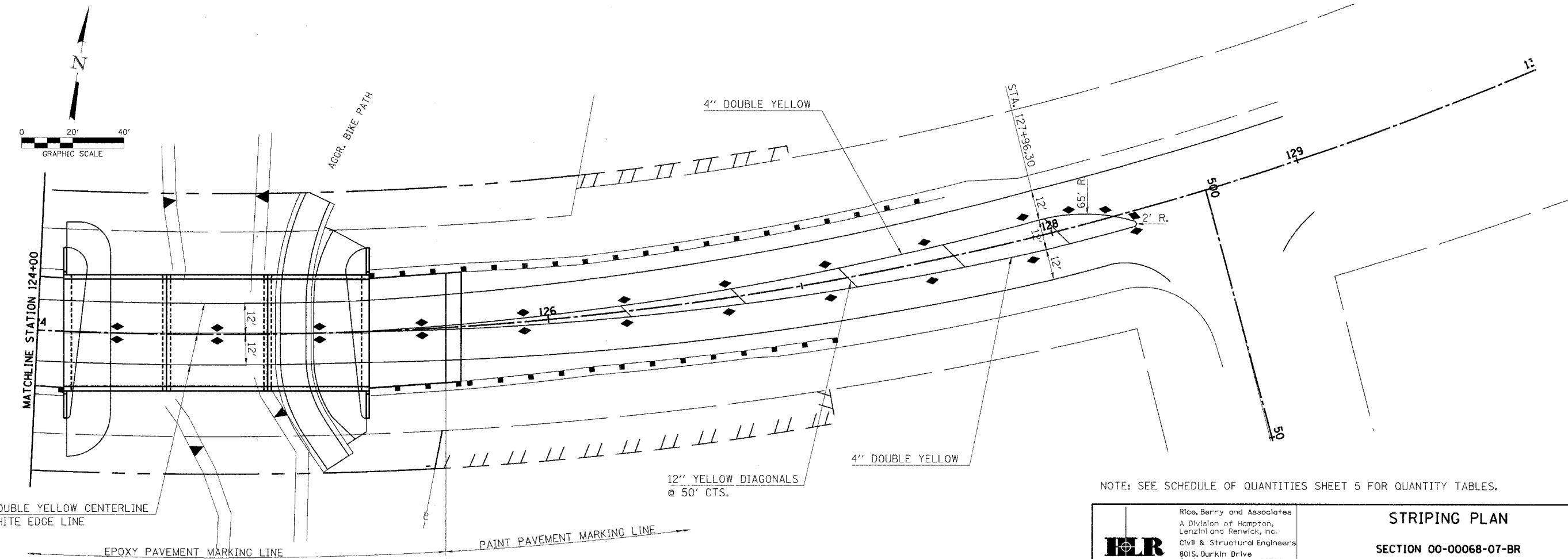
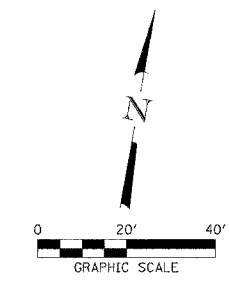
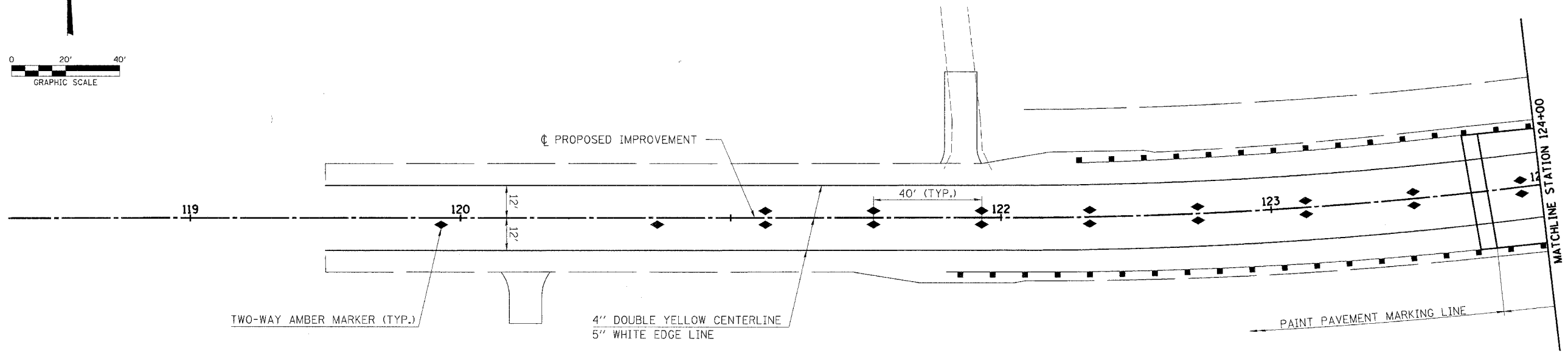
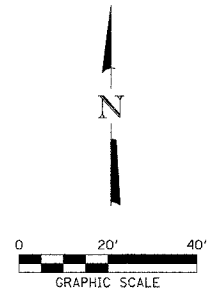
23.48' LT. M.L. STA. 124+99.36
STORM SEWERS, CL. A, TY. 1
20 FT. LONG
8.0' RT. STA. 10+22.0 U.S.F.L. 738.90
11.9' LT. STA. 10+24.3 D.S.F.L. 738.70
PRECAST REINFORCED CONCRETE
FLARED END SECTION 12" = 1 EACH
TRENCH BACKFILL = 1.3 CU. YD.

20.85' LT. M.L. STA. 125+09.16
INLETS, TYPE A,
TYPE 9 FRAME AND GRATE
INV. 738.90



ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 3706	00-00068 -00-BR	LAKE	50	21
FED. ROAD DIST. NO.	ILL. PROJ. NO.	FED. AID PROJECT	BRM-7003(876)	

CONTRACT NO. 83806



NOTE: SEE SCHEDULE OF QUANTITIES SHEET 5 FOR QUANTITY TABLES.

HLR
 Rice, Berry and Associates
 A Division of Hampton,
 Lenzini and Renwick, Inc.
 CIVIL & Structural Engineers
 801 S. Durkin Drive
 Springfield, Illinois 62704
 217-546-3400
 P.O. BOX 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Account Number 12-07-0047-1
 Date: 05/23/05
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

STRIPING PLAN
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY

TYPICAL PAVEMENT MARKINGS AND RAISED PAVEMENT MARKERS

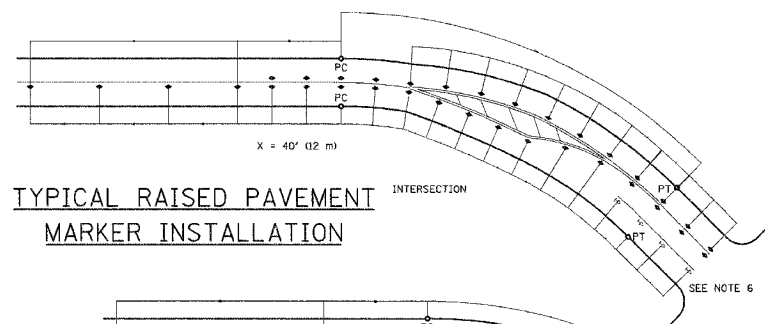
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.U. 3706	00-00068 -07-BR	LAKE	50	22
FED. ROAD DIST. NO.		ILLINOIS	PROJ. AND PROJECT: BRM-7003(876)	

CONTRACT NO. 83806

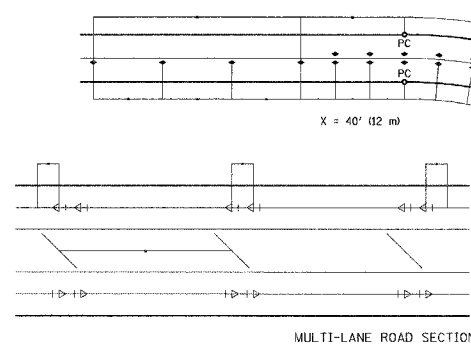
CROSSWALKS

TYPICAL CROSSWALK INSTALLATION
ALL LOCATIONS EXCEPT
SIGNALIZED INTERSECTIONS
WITH VIDEO DETECTION

TYPICAL CROSSWALK INSTALLATION
FOR SIGNALIZED INTERSECTIONS WITH VIDEO DETECTION



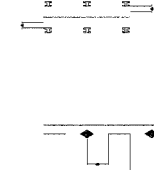
TYPICAL RAISED PAVEMENT MARKER INSTALLATION



NOTES:

- SPACING = 40' (12 m) FOR CENTERLINE MARKERS.
- ALL RAISED PAVEMENT MARKERS ON CENTERLINE ARE 2-WAY YELLOW.
- LANE LINE MARKERS ARE WHITE/RED.
- MARKERS SHALL BE FIELD ADJUSTED TO BE LOCATED IN CENTER OF THE 30' (9 m) GAP OF A 30'/10' (9 m/3 m) SKIP/DASH CENTERLINE.
- PAVEMENT MARKERS WHICH ARE TO BE LOCATED WITHIN THE INTERSECTION OF A CROSS STREET, SHALL NOT BE INSTALLED.
- A MINIMUM OF 4 WHITE/RED MARKERS SHALL BE INSTALLED ALONG THE TURN LANE LINE.
- PAVEMENT MARKER PAIRS ON MULTI-LANE ROAD SECTIONS SHALL BE 80' (24 m) CENTER TO CENTER. SPACING WITHIN EACH PAIR SHALL BE 10', CENTERED WITHIN THE 30' (9m) SKIP.

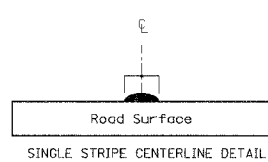
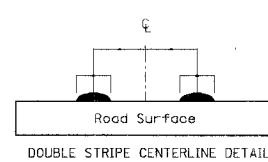
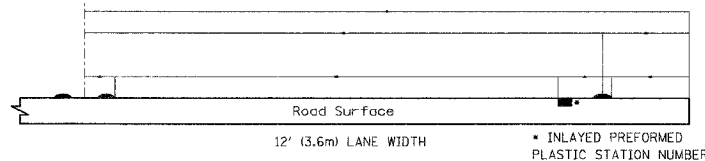
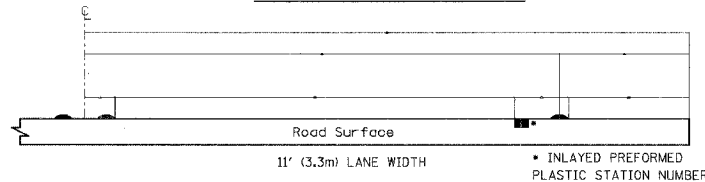
CENTER LINE PAVEMENT MARKER INSTALLATION DETAIL



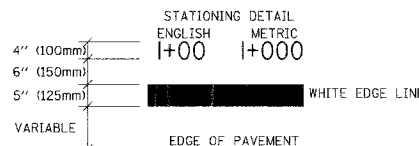
PAVEMENT MARKER LEGEND

- OR RAISED PAVEMENT MARKER, DOUBLE YELLOW
- RAISED PAVEMENT MARKER, WHITE AND RED

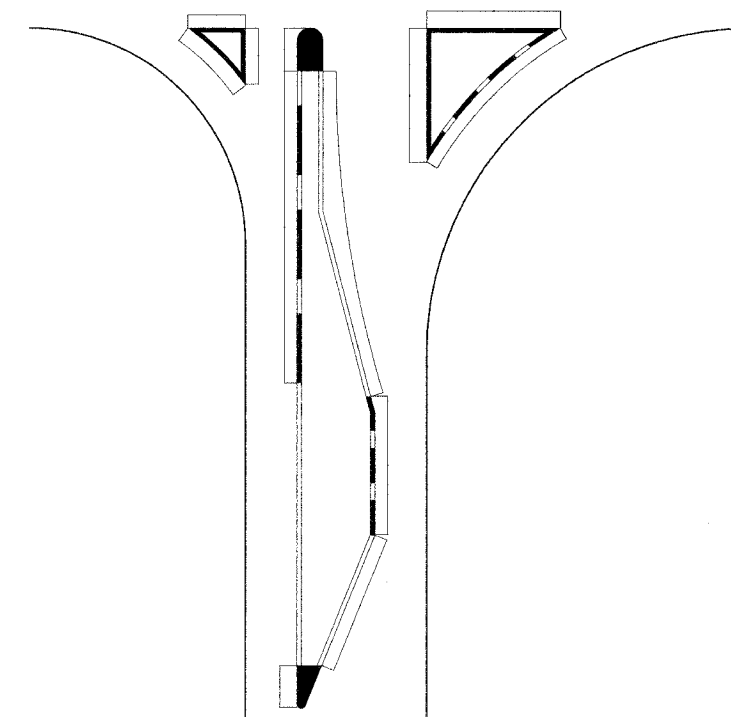
PAVEMENT CROSS SECTION SHOWING TYPICAL PAVEMENT MARKINGS (2-LANE ROADWAY)



Notes:
Centerline markings are 4" (100mm) lines at 12" (300mm) centers.
[Thermoplastic centerline markings are 4" (100mm) lines at 11" (275mm) centers.]

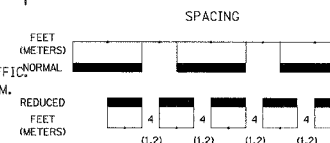


CURB MARKING



NOTES:

- PAINT CURB AND NOSE SOLID FOR 10' (3m) OR RADIUS OF NOSE, WHICHEVER IS GREATER.
- PAINT MINIMUM OF 3 STRIPES IN DIRECTION OF TRAFFIC NORMAL.
- REDUCED SPACING USED TO OBTAIN 3 STRIPE MINIMUM.
- STRIPING RECOMMENDED ONLY WHERE OPERATIONAL PROBLEMS DICTATE.
- PAINT SOLID WHERE A MINIMUM OF 3 STRIPES CANNOT BE PLACED.



PAVEMENT MARKING GUIDELINES - ENGLISH MEASUREMENTS				
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE OF 2 LANE PAVEMENT	4 IN.	SKIP-DASH	YELLOW	10 FT. LINE WITH 30 FT. SPACE
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 IN.	SOLID	YELLOW	6 IN.-C.C FROM SKIP-DASH CENTERLINE
	2 @ 4 IN.	SOLID	YELLOW	12 IN.-C.C (OMIT SKIP-DASH CENTERLINE BETWEEN)
CENTERLINE ON MULTI-LANE UNDIVIDED LANE LINES	2 @ 4 IN.	SOLID	YELLOW	12 IN. C.C
DOTTED LINES (EXTENSIONS OF CENTERLANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2 FT. LINE WITH 6 FT. SPACE
EDGE LINES	5 IN. WHITE 4 IN. YELLOW	SOLID	WHITE - RIGHT YELLOW - LEFT	OUTLINE RAISED MEDIANS IN YELLOW
TURN LANE MARKINGS	6 IN. LINE FULL SIZE LETTERS AND SYMBOLS (8 FT.)	SOLID	WHITE	TURN ARROW 156 SQ.FT. STRAIGHT ARROW 115 SQ.FT. ONLY 208 SQ.FT. COMB. ARROW 260 SQ.FT.
TWO WAY LEFT TURN MARKING	2 @ 4 IN. EACH DIRECTION 8 FT. LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10 FT. LINE WITH 30 FT. SPACE FOR SKIP-DASH 6 IN.-C.C BETWEEN SKIP-DASH LINE AND SOLID LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK	12 IN. @ 90°	SOLID	WHITE	12 IN. LONGITUDINAL BAR WITH 24/36 IN. SPACE 6 FT. TO 12 FT. WIDE SEE TYPICAL CROSSWALK MARKING DETAIL PLACE 4 FT. IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE PLACE AT DESIRED STOPPING POINT.
STOP BARS	24 IN.	SOLID	WHITE	
PAINTED MEDIANS	2 @ 4 IN. WITH 12 IN. DIAGONALS @ 45° NO DIAGONALS USED FOR 4 FT. WIDE MEDIAN	SOLID	YELLOW - 2-WAY TRAFFIC WHITE - 1-WAY TRAFFIC	12 IN.-C.C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING DETAIL MINIMUM OF 5 DIAGONALS
GORE MARKING AND CHANNELIZING LINES	8 IN. WITH 12 IN. DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS 15 FT.-C.C (LESS THAN 30 MPH) 20 FT.-C.C (30 TO 45 MPH) 30 FT.-C.C (OVER 45 MPH) MINIMUM OF 5 DIAGONALS
R.R. CROSSING	24 IN. TRANSVERSE LINES RR IS 6 FT. LETTER 16 IN. LINE FOR "X"	SOLID	WHITE	SEE I.D.D.T. STD. 780001 SQ.FT. AREA OF: "R" = 36 SQ.FT. / "P" "X" = 540 SQ.FT.
SHOULDER DIAGONALS	12 IN. @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50 FT.-C.C (LESS THAN 30 MPH) 75 FT.-C.C (30 TO 45 MPH) 150 FT.-C.C (OVER 45 MPH) MINIMUM OF 5 DIAGONALS

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO PART III "MARKINGS" IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND I.D.D.T. HIGHWAY STANDARD 780001 EFFECTIVE JAN. 9, 1998.

PAVEMENT MARKING GUIDELINES - METRIC MEASUREMENTS				
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE OF 2 LANE PAVEMENT	100 mm	SKIP-DASH	YELLOW	3 m. LINE WITH 9 m. SPACE
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	100 mm	SOLID	YELLOW	150 mm C-C FROM SKIP-DASH CENTERLINE
	2 @ 100 mm	SOLID	YELLOW	300 mm C-C (OMIT SKIP-DASH CENTERLINE BETWEEN)
CENTERLINE ON MULTI-LANE UNDIVIDED LANE LINES	2 @ 100 mm	SOLID	YELLOW	300 mm C.C
DOTTED LINES (EXTENSIONS OF CENTERLANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 mm LINE WITH 1.8 m. SPACE
EDGE LINES	125 mm WHITE 100 mm YELLOW	SOLID	WHITE - RIGHT YELLOW - LEFT	OUTLINE RAISED MEDIANS IN YELLOW
TURN LANE MARKINGS	150 mm LINE FULL SIZE LETTERS AND SYMBOLS (2.4 m)	SOLID	WHITE	TURN ARROW 15 SQ.m COMB. ARROW 2.4 SQ.m STRAIGHT ARROW 150.m ONLY 19 SQ.m
TWO WAY LEFT TURN MARKING	2 @ 100 mm EACH DIRECTION 2.4 m LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	3 m. LINE WITH 9 m. SPACE FOR SKIP-DASH 150 mm C-C BETWEEN SKIP-DASH LINE AND SOLID LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK	300 mm @ 90°	SOLID	WHITE	300 mm LONGITUDINAL BAR WITH 600/900 mm SPACE. 1.8 m. TO 3.6 m. WIDE SEE TYPICAL CROSSWALK MARKING DETAIL PLACE 1.2 m. IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE PLACE AT DESIRED STOPPING POINT.
STOP BARS	600 mm	SOLID	WHITE	
PAINTED MEDIANS	2 @ 100 mm WITH 300 mm DIAGONALS @ 45° NO DIAGONALS USED FOR 1.2 m. WIDE MEDIAN	SOLID	YELLOW - 2-WAY TRAFFIC WHITE - 1-WAY TRAFFIC	300 mm C.C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING DETAIL MINIMUM OF 5 DIAGONALS
GORE MARKING AND CHANNELIZING LINES	200 mm WITH 300 mm DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS 4.6 m C.C (LESS THAN 30 MPH) 6 m C.C (30 TO 45 MPH) 9 m C.C (OVER 45 MPH) MINIMUM OF 5 DIAGONALS
R.R. CROSSING	400 mm TRANSVERSE LINES RR IS 1.8 m LETTER 400 mm LINE FOR "X"	SOLID	WHITE	SEE I.D.D.T. STD. 780001 SQUARE METER AREA OF: "R" = 0.33 SQ.m / "R" "X" = 50 SQ.m
SHOULDER DIAGONALS	300 mm @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15.2 m C.C (LESS THAN 30 MPH) 23.0 m C.C (30 TO 45 MPH) 45.7 m C.C (OVER 45 MPH) MINIMUM OF 5 DIAGONALS

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO PART III "MARKINGS" IN THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES". THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND I.D.D.T. HIGHWAY STANDARD 780001 EFFECTIVE JAN. 9, 1998.

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS

SCALE: NONE
DATE: JAN. 12, 1998

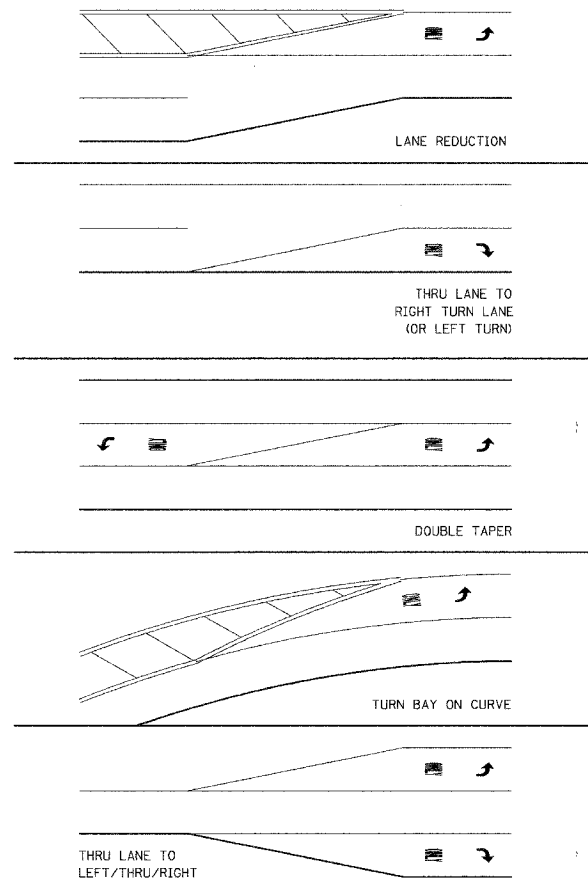
DRAWN BY: JPS
CHECKED BY: ANK

REVISIONS	
NAME	DATE
JOHN SAUTER	7/7/99
JOHN SAUTER	11/01/00

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
F.A.U. 3706	00-00068 -07-BR	LAKE	50	23
FED. ROAD DIST. NO.		ILLINOIS FED. RD. PROJECT BRM-70031876		

CONTRACT NO. 83806

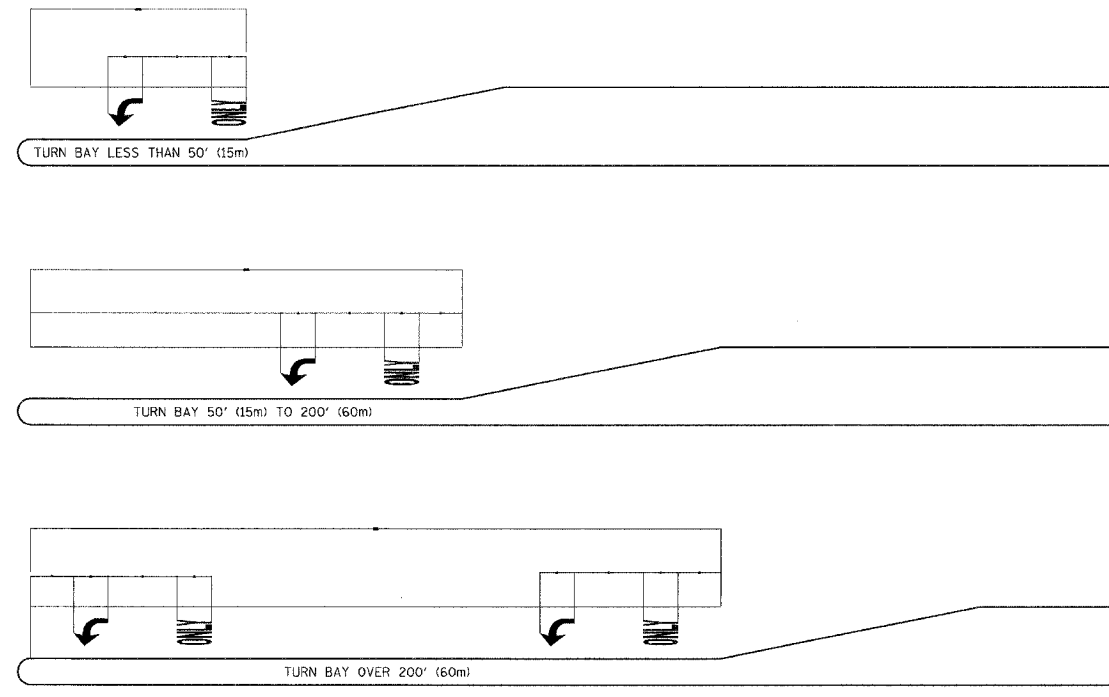
TYPICAL MINI-SKIP PAVEMENT MARKINGS



MINI-SKIPS ARE 2 FEET (600mm) WHITE LINE WITH 6 FEET (1.8m) SPACING. THE MINI-SKIP IS THE SAME WIDTH AS THE PAVEMENT MARKING LINE, IT EXTENDS

TYPICAL PAVEMENT MARKINGS

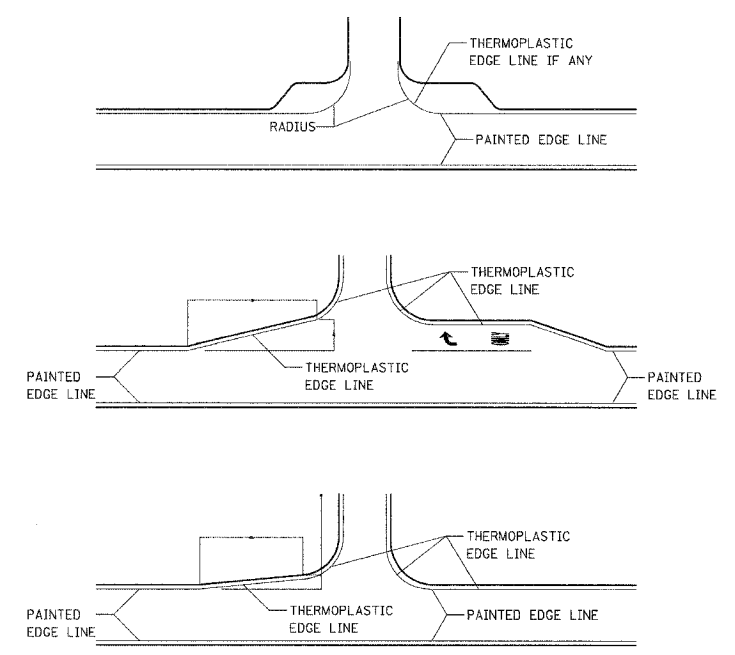
TYPICAL TURN BAY PAVEMENT MARKINGS



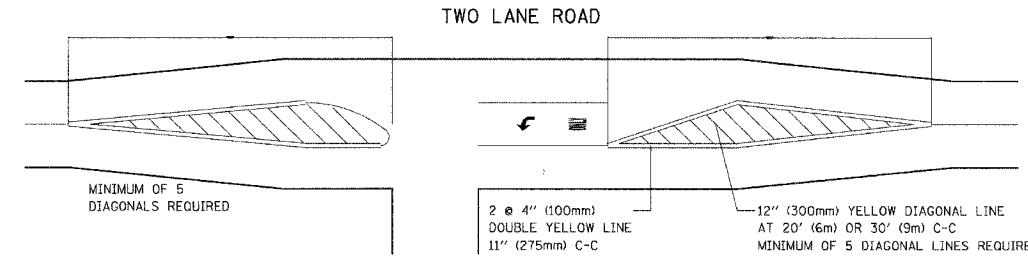
AREA = 15.6 SQ. FT. (1.5 SQ. m) AT INTERSECTIONS WITH VIDEO DETECTION THE DISTANCE "X" SHALL BE A MINIMUM OF 30' (10m). FULL SIZE LETTERS (8" (2.4m)) AND ARROWS SHALL BE USED. TURN LANES IN EXCESS OF 400' (120m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW W/ "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW W/ "ONLY".

ONLY AREA = 20.8 SQ. FT. (1.9 SQ. m)

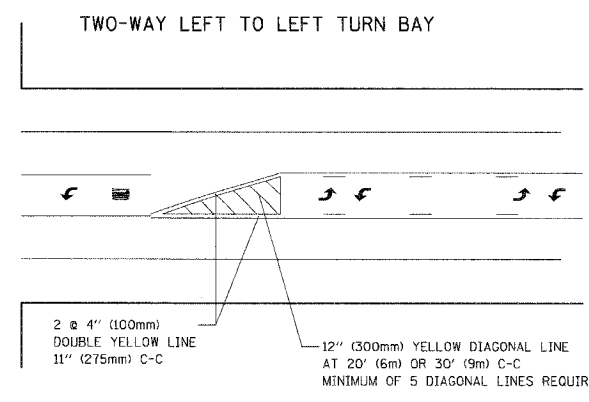
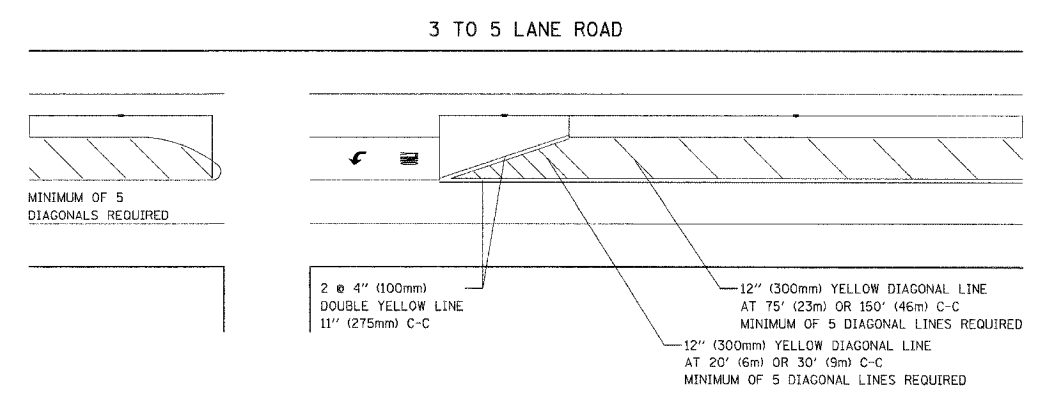
EDGE LINE RADII AT SIDE STREETS



TYPICAL DIAGONAL SPACING



SPEED LIMIT RANGE	DIAGONAL SPACING	
	CONTINUOUS	INTERSECTION CHANNELIZATION
30-45 MPH	75 FT. (20m)	20 FT. (6m)
OVER 45 MPH	150 FT. (45m)	30 FT. (9m)



DUAL LEFT TURN ARROWS

A MINIMUM OF TWO PAIRS OF DUAL LEFT TURN ARROWS SHALL BE USED. THE DUAL LEFT TURN ARROWS SHALL BE WHITE IN COLOR. THE INTERVAL BETWEEN SETS OF DUAL LEFT TURN ARROWS SHOULD BE 200' (60 m) AND 300' (90 m).

31.2 SQ. FT. (2.94 SQ. M) MIN. OF 2 SETS REQUIRED

REVISIONS	
NAME	DATE
JOHN SAUTER	7/7/99
JOHN SAUTER	11/01/00

Lake County
Division of Transportation

TYPICAL PAVEMENT MARKINGS FOR COUNTY HIGHWAYS

SCALE: NONE
DATE: JAN. 12, 1998

DRAWN BY: JPS
CHECKED BY: ANK

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
F.A.U. 3706	00-00068-07-BR	LAKE	50	24
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(876)	

CONTRACT NO. 83806

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M322 Grade 60. The Contractor shall drive two concrete test piles in permanent locations, one at the East Abutment and one at Pier 1, as directed by the Engineer before ordering the remainder of the piles.

Layout of riprap may be varied in the field to better suit existing ground conditions as directed by the Engineer. See Riprap and Slope Wall Layout sheet.

All proposed construction activity shall be in accordance with Regional Permit of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions.

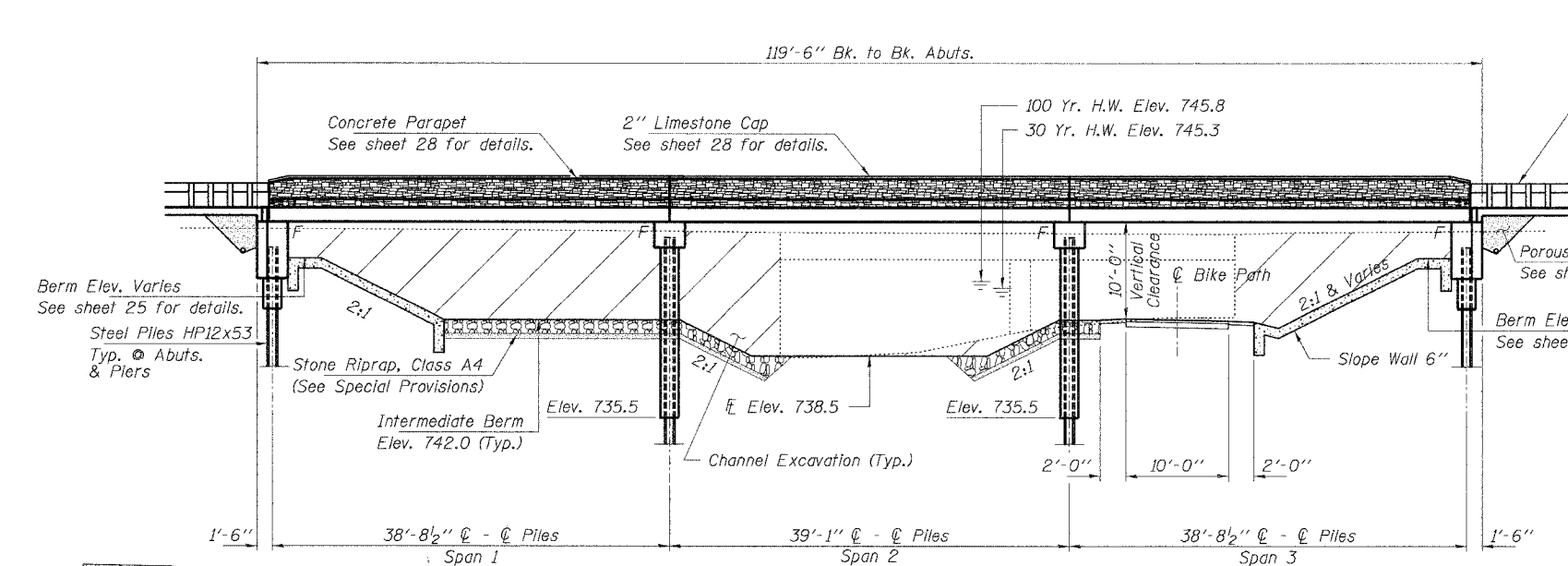
Protective Coat shall be applied to all exposed areas of the bridge surface and approach pavement.

** Concrete Superstructure in the parapets noted to receive Architectural Finish for Concrete Surfaces shall also have a color additive to match "Sandstone" color. (See Special Provisions for Architectural Finish for Concrete Surfaces)

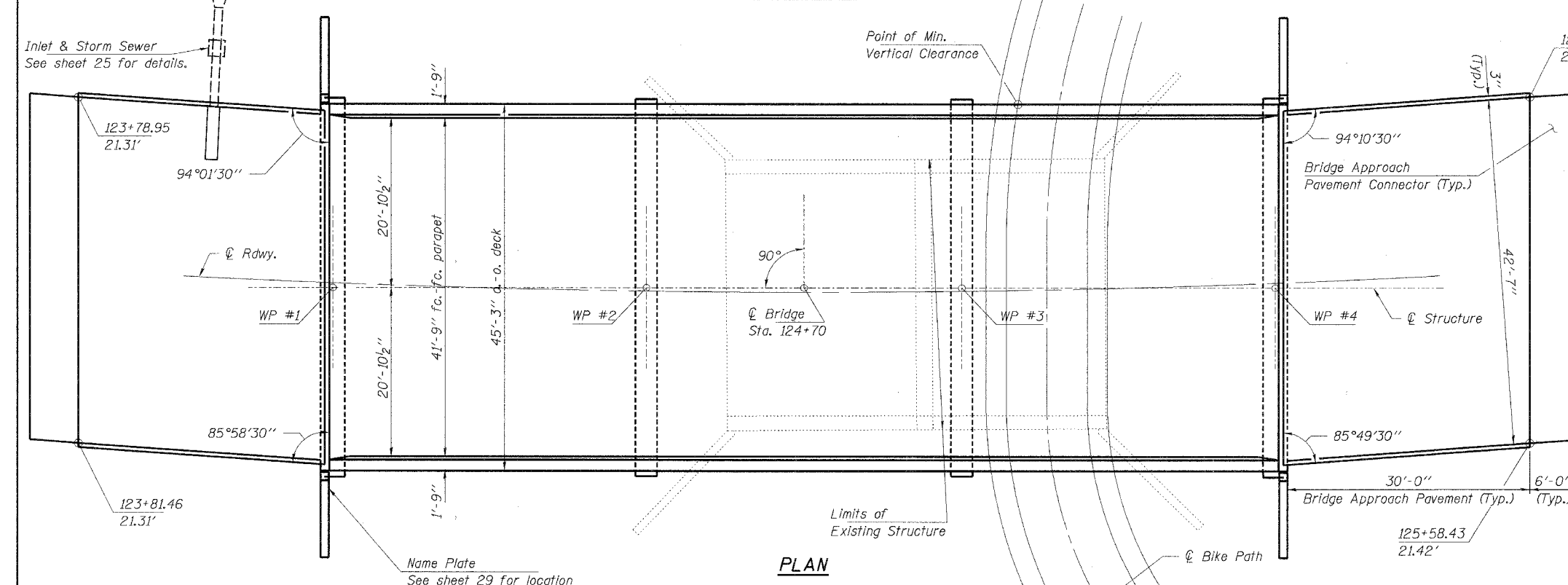
A Clear Protective Coating for concrete shall be applied to all exposed vertical surfaces of the structure and concrete slopewall.

See sheet 25 for Riprap & Slope Wall Layout.

See sheets 32 & 33 for Borings.



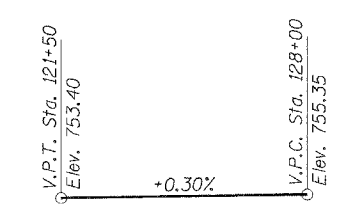
ELEVATION



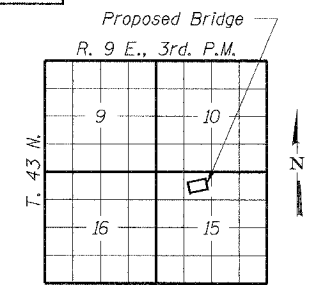
PLAN

FLINT CREEK
BUILT 200... BY
F.A.U. 3706 / C.H. 9
LAKE COUNTY
SEC. 00-00068-07-BR
F.A. PROJ. BRM-7003(876)
STR. NO. 049-3071 LOADING HS20

NAME PLATE
See Std. 515001



PROFILE GRADE



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Ton		350	350
Stone Riprap, Class A4	Sq. Yd.			430
Filter Fabric	Sq. Yd.			430
Bridge Approach Pavement	Sq. Yd.			290
Concrete Wearing Surface	Sq. Yd.	544		544
Protective Coat	Sq. Yd.	544		544
Concrete Superstructure**	Cu. Yd.		37.8	37.8
Concrete Structures	Cu. Yd.		97.6	97.6
Bridge Deck Grooving	Sq. Yd.	544		544
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	5,148		5,148
Slope Wall 6 Inch	Sq. Yd.		350	350
Reinforcement Bars, Epoxy Coated	Pound	11,060	10,490	21,550
Steel Piles HP12x53	Foot		1,560	1,560
Test Pile Steel HP12x53	Each		2	2
Concrete Encasement	Cu. Yd.		30.0	30.0
Name Plates	Each		1	1
Clear Protective Coating for Concrete	Sq. Ft.	1,710	1,930	3,640
Architectural Finish for Concrete Surfaces	Sq. Ft.	1,425	1,575	3,000
Limestone Cap	Foot	234		234

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 5,000 psi
f'ci = 4,000 psi
f's = 270,000 psi (1/2" low lax. strands)
f'si = 201,960 psi (1/2" low lax. strands)
fy = 60,000 psi (Reinf.)

Loading HS 20-44
Design Specifications: 2002 AASHTO & all applicable interims.
25#/Sq. Ft. included in dead load for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.0

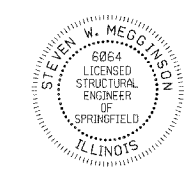
WATERWAY INFORMATION

Drainage Area = 31.6 Sq. Mi. Low Grade Elev. 753.35 @ Sta. 121+20

Flood Yr.	Freq.	C.F.S.	Q	Opening Sq. Ft.	Natural Head - Ft.	Headwater El.			
			Exist.	Prop.	Exist.	Prop.			
Design	30	1030	200	380	745.3	0.5	0.1	745.8	745.4
Base	100	1372	220	430	745.8	0.8	0.2	746.6	746.0
Overtopping	-	-	-	-	-	-	-	-	-
Max. Calc.	500	1925	240	480	746.4	1.3	0.4	747.7	746.8

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 Standard Specifications for Highway Bridges".

Steven W. Morrison 6-1-05
ILLINOIS STRUCTURAL NO. 6064

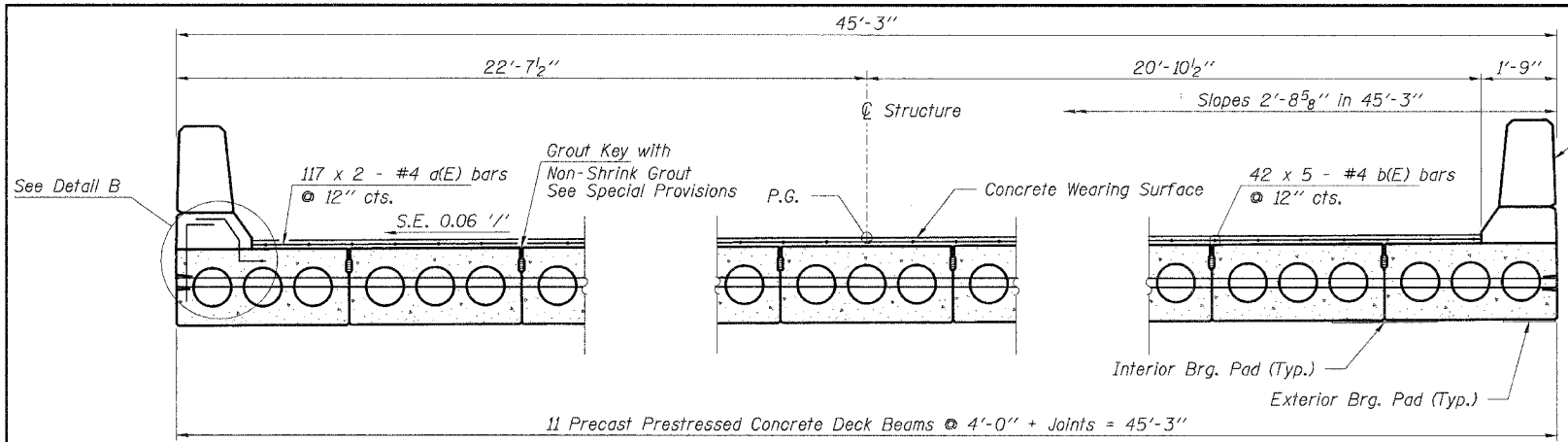


Expires 11-30-06

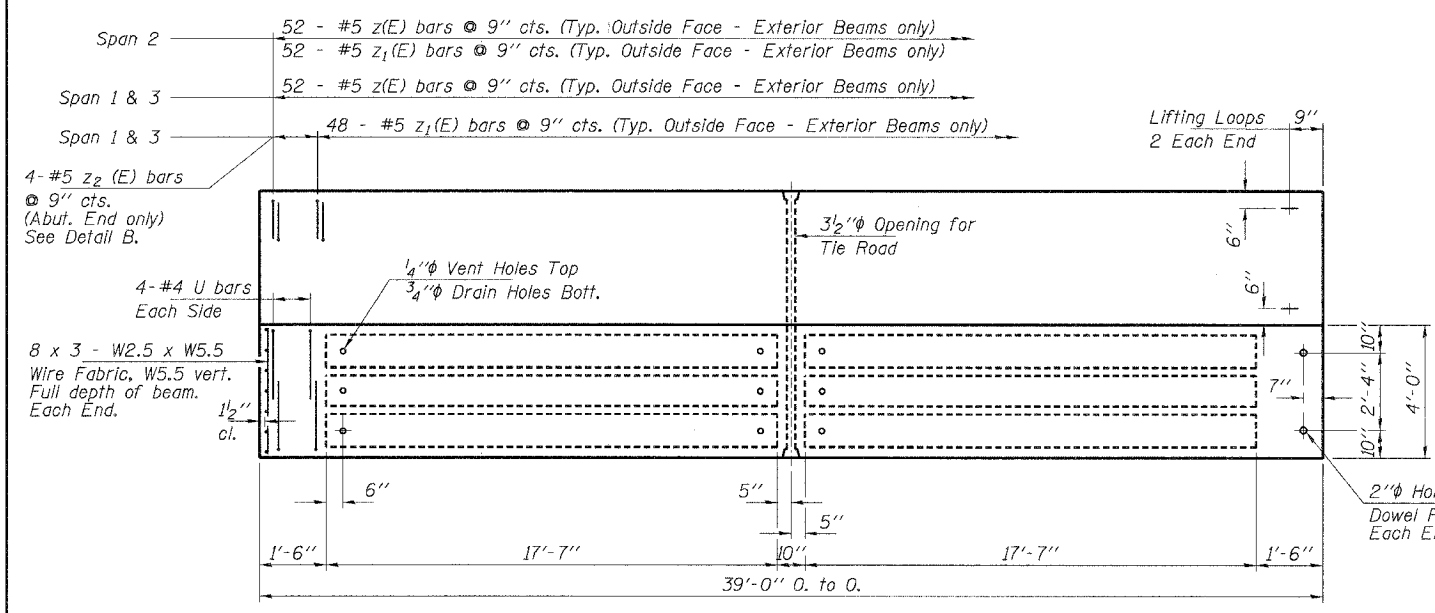
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A Division of Hampton, Lenzini and Renwick, Inc.
Civil & Structural Engineers
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217-546-3400
P.O. Box 1036
DuQuoin, Illinois 62832
618-790-4637
Account Number 12-07-0047-1
Date: 05/23/05
DESIGNED: T.P.L. | CHECKED: S.W.M. | DRAWN: D.T.M.

GENERAL PLAN AND ELEVATION
SECTION 00-00068-07-BR
F.A.U. 3706 / C.H. 30 / KELSEY ROAD
LAKE COUNTY
STATION 124+70

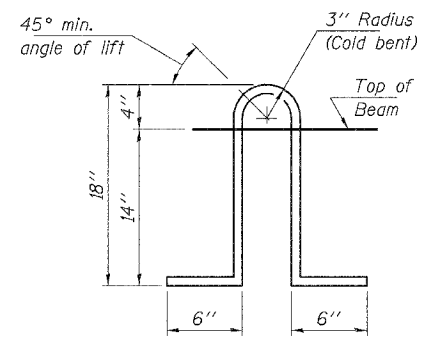
ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
F.A.U. 3706	00-00068-07-BR	LAKE	50	26
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT - BRM-7003876)		



CROSS SECTION
(Looking Upstation)



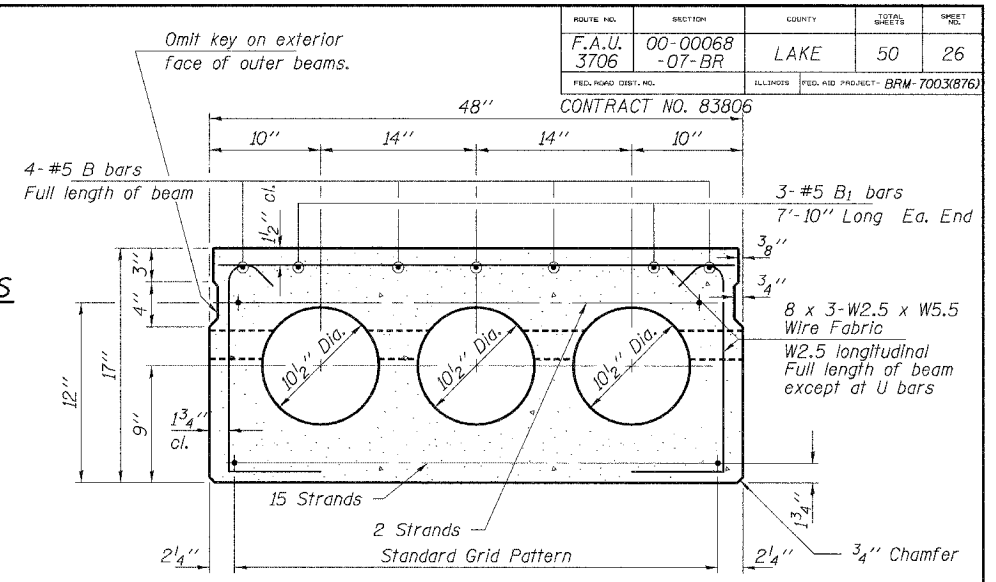
PLAN



LIFTING LOOP DETAIL

Approved alternate may be substituted for the above. Weight of 1 Beam = 23,010 lbs.

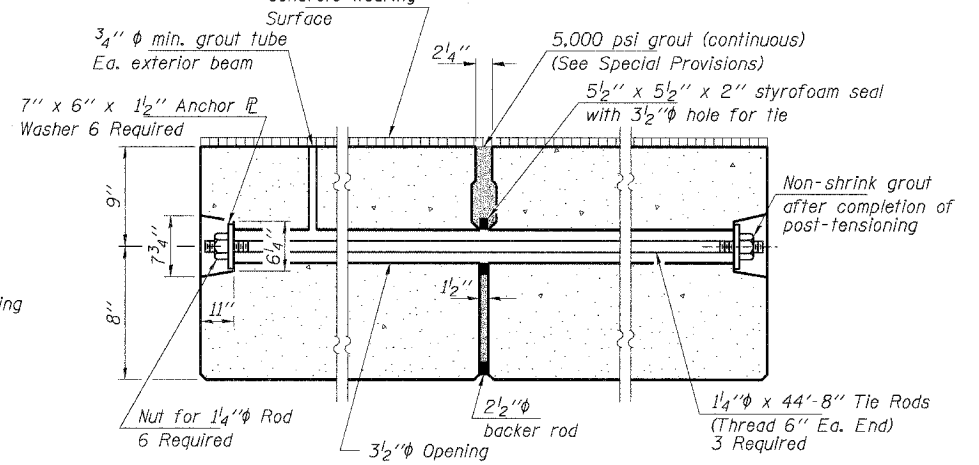
Note: The loop shall be formed in a manner such that all strands are engaged during lifting. Loops shall be cut off after beams have been erected.



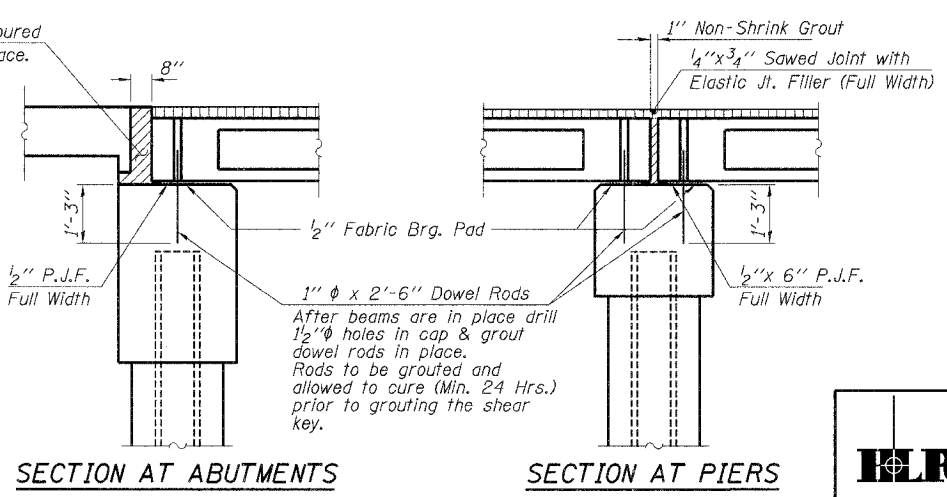
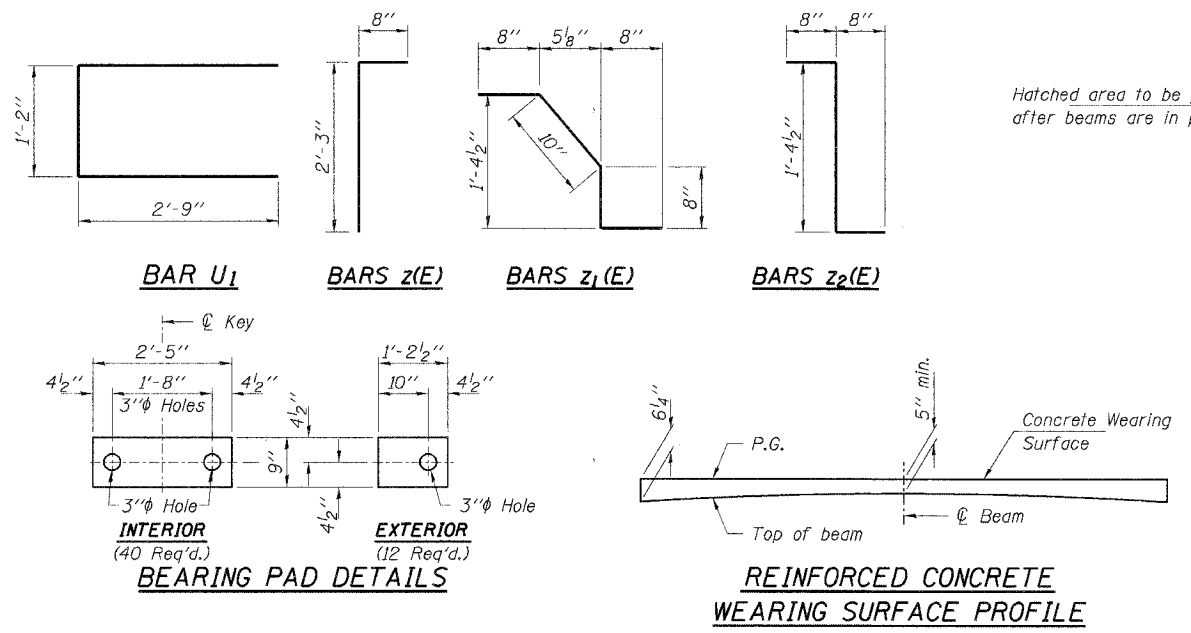
TYPICAL SECTION

17-1/2" Strands, Each Strand Stressed to 30,900 Lbs. 15-Strands 1 3/4" up, 2-Strands 12" up Expected Camber = 1/4"

Note: Place strands symmetrically about centerline of beam.



TYPICAL POST-TENSIONED TRANSVERSE TIE ROD DETAIL



SECTION AT ABUTMENTS

SECTION AT PIERS

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a(E)	234	#4	21'-10"	—
b(E)	210	#4	25'-0"	—
Concrete Wearing Surface			Sq. Yd.	544
Protective Coat			Sq. Yd.	544
Bridge Deck Grooving			Sq. Yd.	544
Precast Prestressed Concrete Deck Beams (17" Depth)			Sq. Ft.	5,148
Reinforcement Bars, Epoxy Coated			Pound	6,920

Bars designated (E) shall be epoxy coated.
 Bars indicated thus 42x5-#4 etc. indicates 42 lines of bars with 5 lengths per line.

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SUPERSTRUCTURE
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY
 STATION 124+70

ROUTE NO.	SECTION	COUNTY	SHEET
F.A.U. 3706	00-00068 -07-BR	LAKE	50 27
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(B76)

CONTRACT NO. 83806

NOTES

Prestressing steel shall be uncoated high strength, low-relaxation 7-wire strand, Grade 270. The nominal diameter shall be $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in. Lifting loops shall be $2-\frac{1}{2}$ " ϕ -270 ksi strands, as shown.

The $\frac{1}{4}$ " ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to the requirements of AASHTO M-31 or M-322, Grade 60. The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two $\frac{1}{8}$ " fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.

Required Release Strength, f'_{ci} , shall be 4,000 p.s.i.

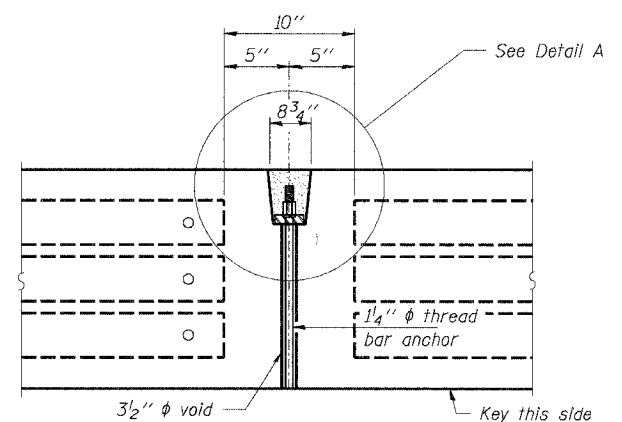
An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted. Thread bar post-tensioning rod to be $\frac{1}{4}$ " diameter, ultimate stress 150 ksi (Ultimate Strength 125 kips). Conforming to ASTM A722 Steel hot rolled and proof stressed. The bar deformations shall conform to the requirements of ASTM A615.

Anchor plates, couplers and nuts shall exceed the requirements of ACI 318 and AASHTO Standard Specifications for Highway Bridges, 2002, Section 9, Article 9.27 Post Tensioning Anchorages and Couplers. Voids around thread bar to be grouted after post-tensioning is complete. See Special Provisions for grout and grouting pressures.

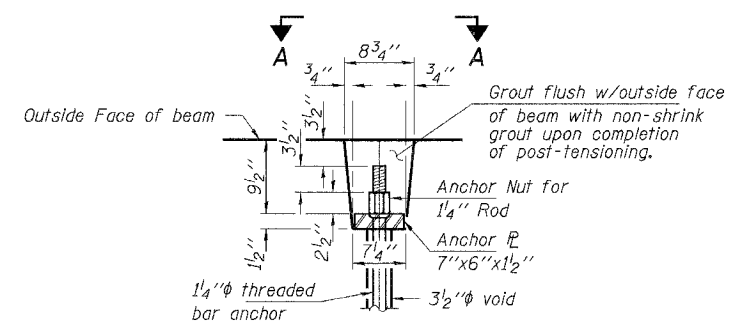
The tie rods shall be stressed to not more than 40 kips (temporary) and not more than 120 kips at lockoff (transfer).

The top surface of the beams shall be finished according to Article 504.06 of the Standard Specifications with metal lines drawn in a transverse direction. The corrugations formed shall be uniform in appearance and in no case be more than $\frac{1}{4}$ " deep.

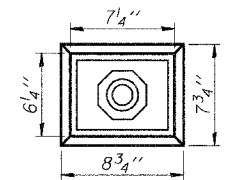
A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams.



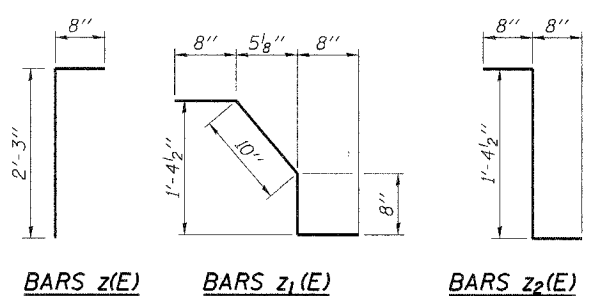
PLAN AT POST-TENSIONED TRANSVERSE TIE ROD



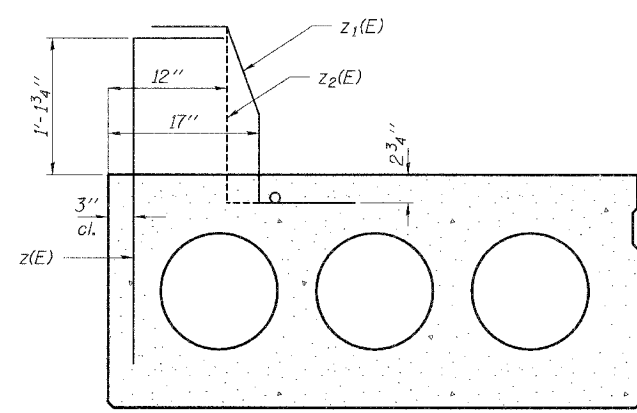
DETAIL A



SECTION A-A



BARS z(E) BARS z₁(E) BARS z₂(E)



DETAIL B

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
z(E)	312	#5	2'-11"	[
z ₁ (E)	296	#5	2'-10"	[
z ₂ (E)	16	#5	2'-9"	[

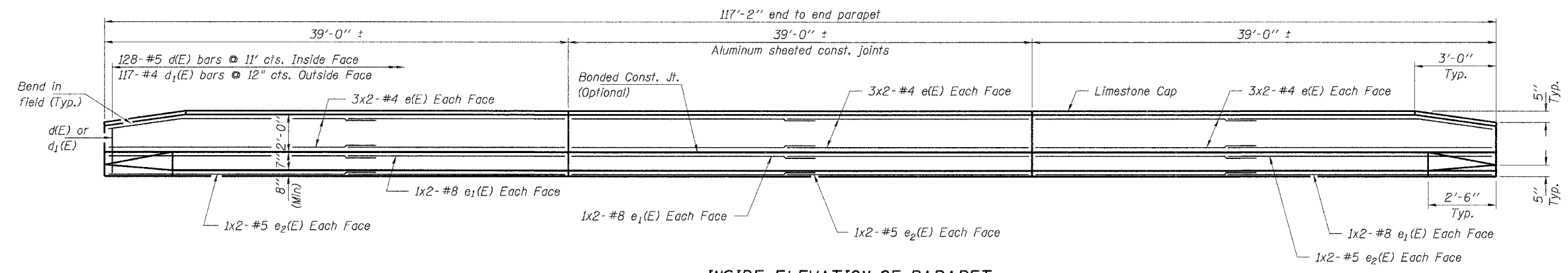
* Reinforcement Bars, Epoxy Coated Pound 1,870

* Cost included with Precast Prestressed Concrete Deck Beams (17" Depth).

Bars designated (E) shall be epoxy coated.

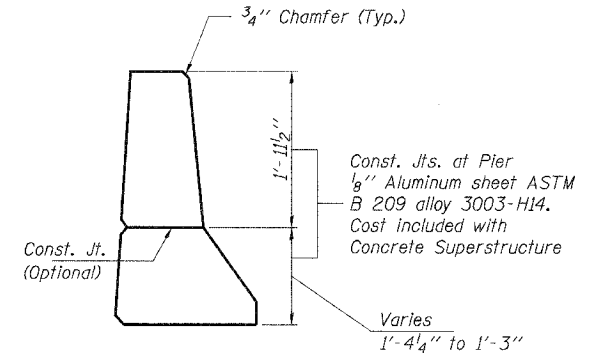
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SUPERSTRUCTURE DETAILS
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 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY
 STATION 124+70

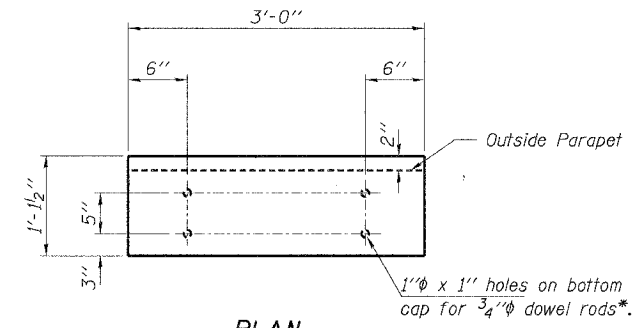


INSIDE ELEVATION OF PARAPET

MIN. BAR LAPS
 #4 bars = 1'-8"
 #5 bars = 2'-2"
 #8 bars = 4'-6"

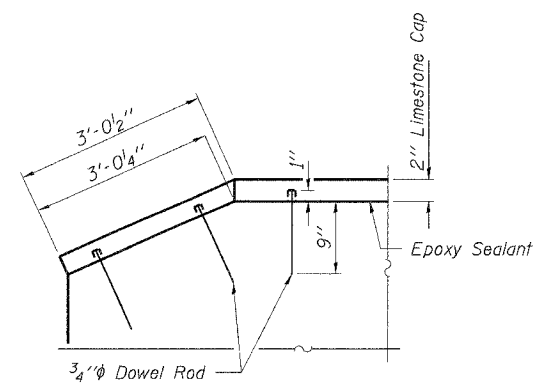


PARAPET JOINT DETAIL

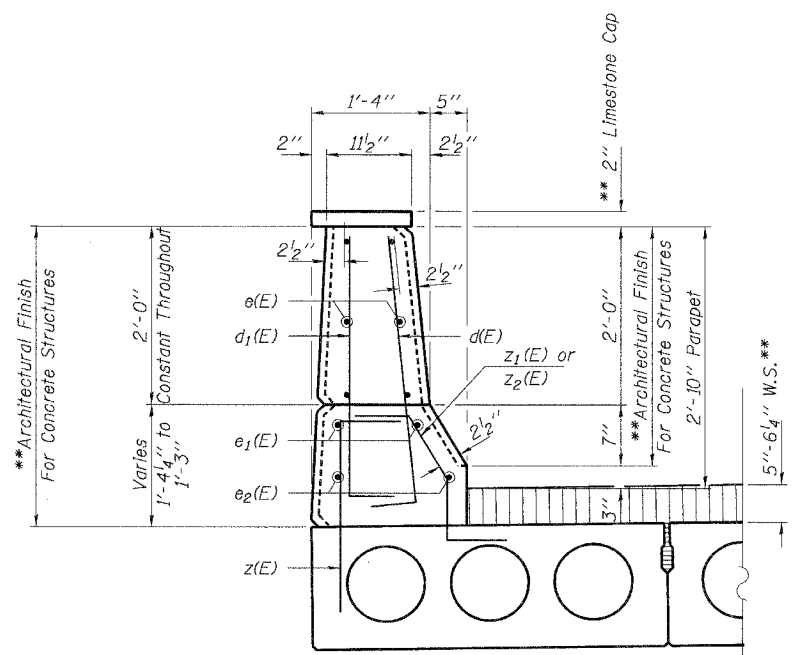


PLAN

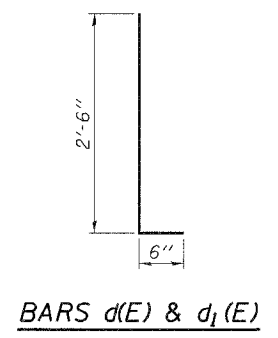
* Dowel Rods shall be drilled and epoxy grouted in place. Cost is included in the price of Limestone Cap.



LIMESTONE CAP ELEVATION



SECTION THRU PARAPET
 ** See Special Provisions



BARS d(E) & d1(E)

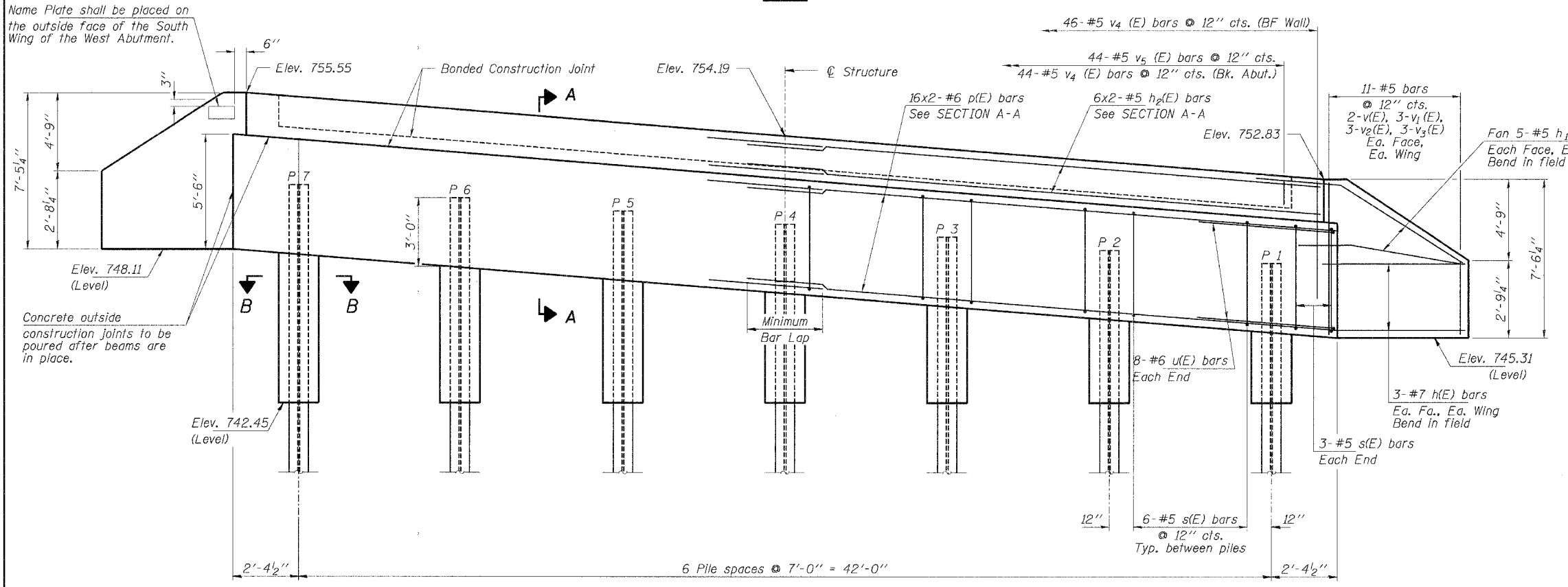
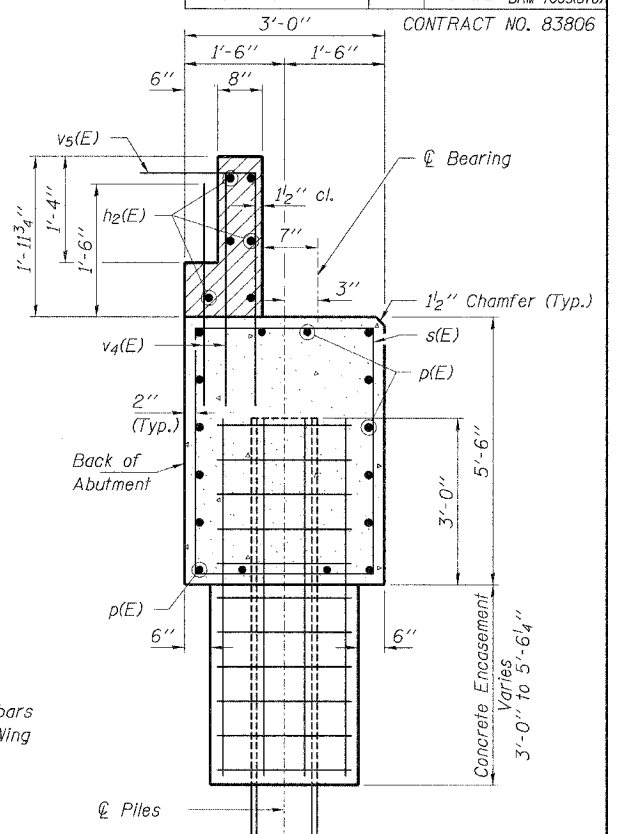
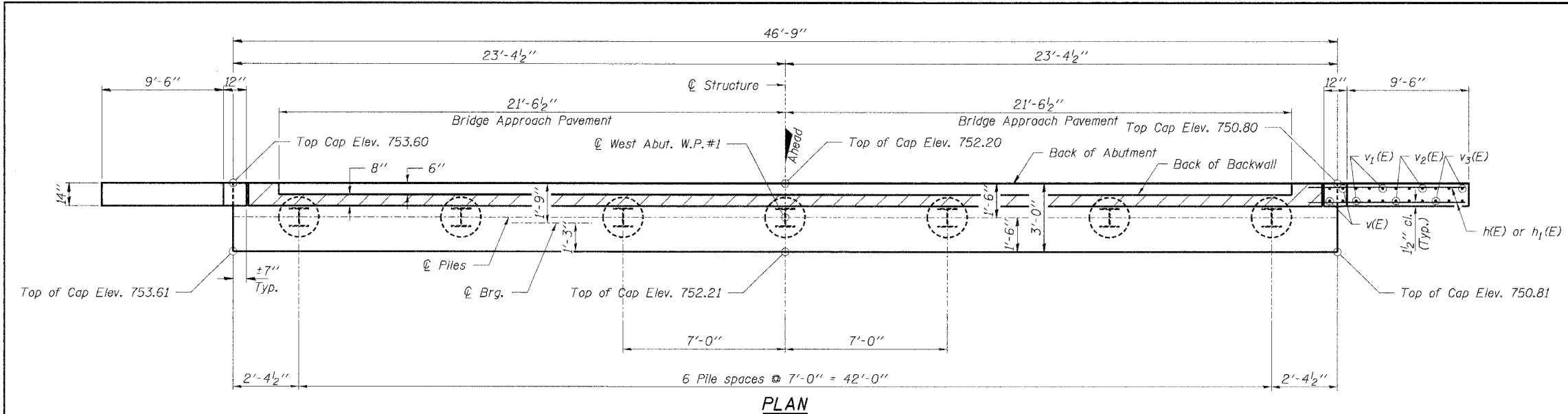
BILL OF MATERIAL - PARAPETS

BAR	NO.	SIZE	LENGTH	SHAPE
d(E)	256	#5	3'-0"	┌
d1(E)	234	#4	3'-0"	└
e(E)	72	#4	20'-3"	—
e1(E)	24	#8	21'-7"	—
e2(E)	24	#5	20'-6"	—
Concrete Superstructure			Cu. Yd.	37.8
Reinforcement Bars, Epoxy Coated			Pound	4,140
Clear Protective Coating for Conc.			Sq. Ft.	1,710
Architectural Finish for Conc. Surf.			Sq. Ft.	1,425
Limestone Cap			Foot	234

Bars designated (E) shall be epoxy coated.
 Bars indicated thus 16x2 - #6 etc. indicates 16 lines of bars with 2 lengths per line.

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PARAPET DETAILS
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 LAKE COUNTY
 STATION 124+70



SECTION A-A

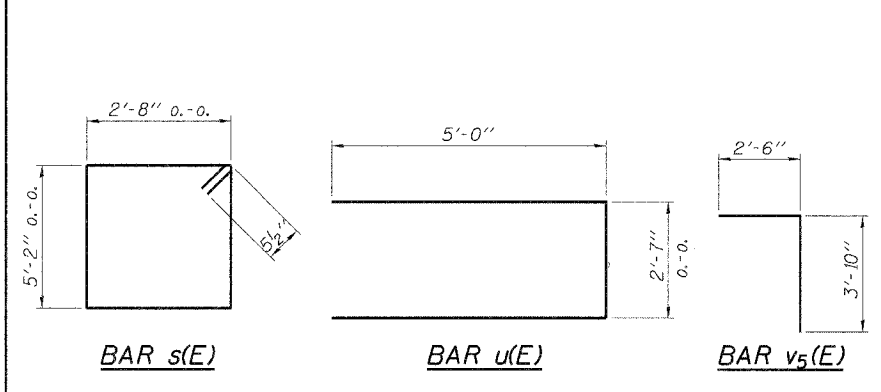
Hatched area to be poured after beams are in place.

BILL OF MATERIAL - WEST ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	12	#7	12'-0"	—
h1(E)	20	#5	12'-6"	—
h2(E)	12	#5	23'-11"	—
p(E)	32	#6	24'-6"	—
s(E)	42	#5	16'-7"	□
u(E)	16	#6	12'-7"	▭
v(E)	8	#5	7'-0"	—
v1(E)	12	#5	5'-3"	—
v2(E)	12	#5	3'-5"	—
v3(E)	12	#5	2'-4"	—
v4(E)	90	#5	3'-6"	—
v5(E)	44	#5	6'-4"	—
Concrete Structures		Cu. Yd.	35.8	
Reinforcement Bars, Epoxy Coated		Pound	3,880	
Name Plate		Each	1	
Steel Piles HP12x53		Foot	420	
Concrete Encasement		Cu. Yd.	3.4	
Clear Protective Coating for Conc.		Sq. Ft.	370	

Bars designated (E) shall be epoxy coated.

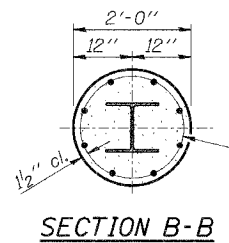
Bars indicated thus 16x2 - #6 etc. indicates 16 lines of bars with 2 lengths per line.



ELEVATION

PILE DATA

Type	Steel HP12x53
No. Req'd.	7
Design Capacity	43 Tons/Pile
Required Bearing Capacity	65 Tons/Pile
Est. Length	60 Feet/Pile



Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft. The cost of Excavation, Reinforcement, and Concrete Encasement is incidental to the cost of Furnishing Steel Piles. Form for encasement may be omitted when soil conditions will permit.

MIN. BAR LAPS

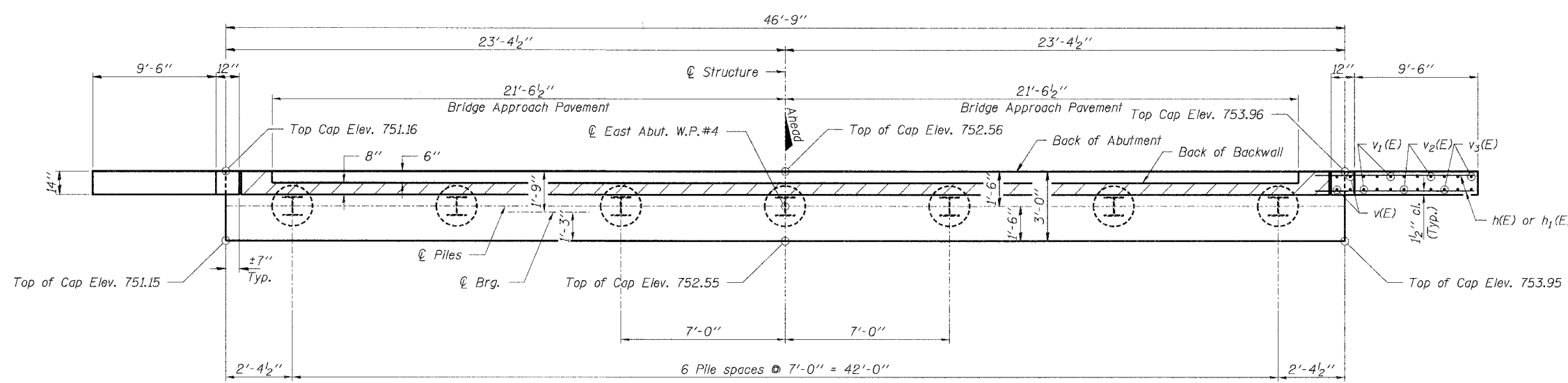
#5 Bar = 1'-9"
#6 Bar = 2'-8"

TOP OF PILE ELEVATIONS

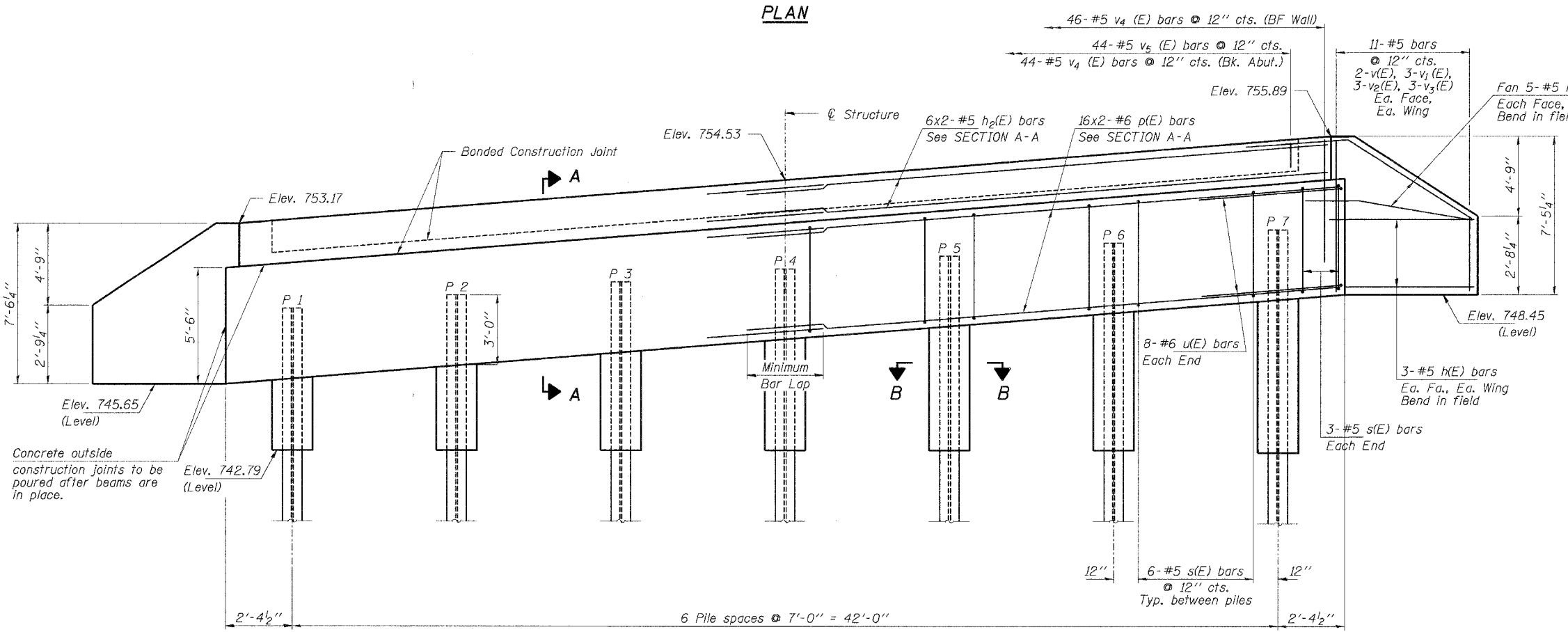
Location	Pile 7	Pile 6	Pile 5	Pile 4	Pile 3	Pile 2	Pile 1
W. Abut.	750.96	750.54	750.12	749.70	749.28	748.86	748.44

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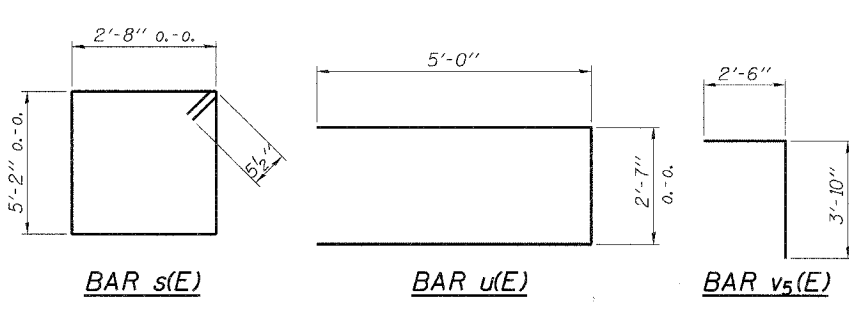
WEST ABUTMENT
SECTION 00-00068-07-BR
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LAKE COUNTY
STATION 124+70



PLAN



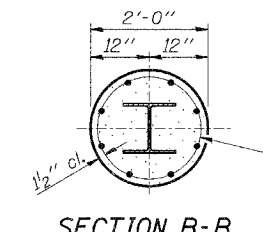
ELEVATION



PILE DATA

Type..... Steel HP12x53
 No. Req'd..... *7
 Design Capacity..... 43 Tons/Pile
 Required Bearing Capacity..... 65 Tons/Pile
 Est. Length..... 60 Feet/Pile

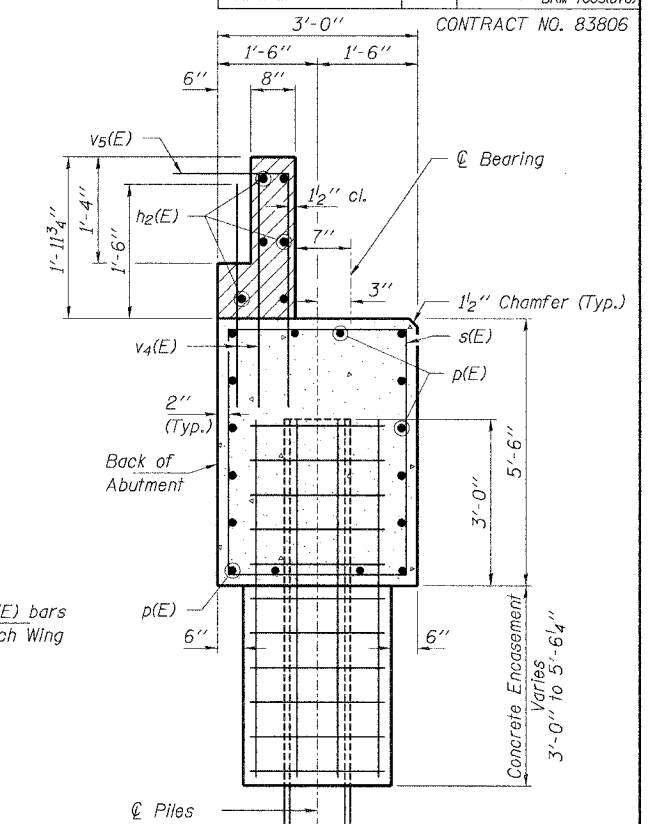
* Includes one Steel Test Pile to be driven in a permanent location.



SECTION B-B

TOP OF PILE ELEVATIONS

Location	Pile 1	Pile 2	Pile 3	Pile 4	Pile 5	Pile 6	Pile 7
E. Abut.	748.80	749.22	749.64	750.06	750.48	750.90	751.32



SECTION A-A

BILL OF MATERIAL - EAST ABUT.

BAR	NO.	SIZE	LENGTH	SHAPE
h(E)	12	#7	12'-0"	—
h1(E)	20	#5	12'-6"	—
h2(E)	12	#5	23'-11"	—
p(E)	32	#6	24'-6"	—
s(E)	42	#5	16'-7"	□
u(E)	16	#6	12'-7"	≡
v(E)	8	#5	7'-0"	—
v1(E)	12	#5	5'-3"	—
v2(E)	12	#5	3'-5"	—
v3(E)	12	#5	2'-4"	—
v4(E)	90	#5	3'-6"	—
v5(E)	44	#5	6'-4"	—
Concrete Structures		Cu. Yd.		35.8
Reinforcement Bars, Epoxy Coated		Pound		3,880
Steel Piles HP12x53		Foot		360
Test Pile Steel HP12x53		Each		1
Concrete Encasement		Cu. Yd.		3.4
Clear Protective Coating for Conc.		Sq. Ft.		370

Bars designated (E) shall be epoxy coated.

Bars indicated thus 16x2 - #6 etc. indicates 16 lines of bars with 2 lengths per line.

MIN. BAR LAPS
 #5 Bar = 1'-9"
 #6 Bar = 2'-8"

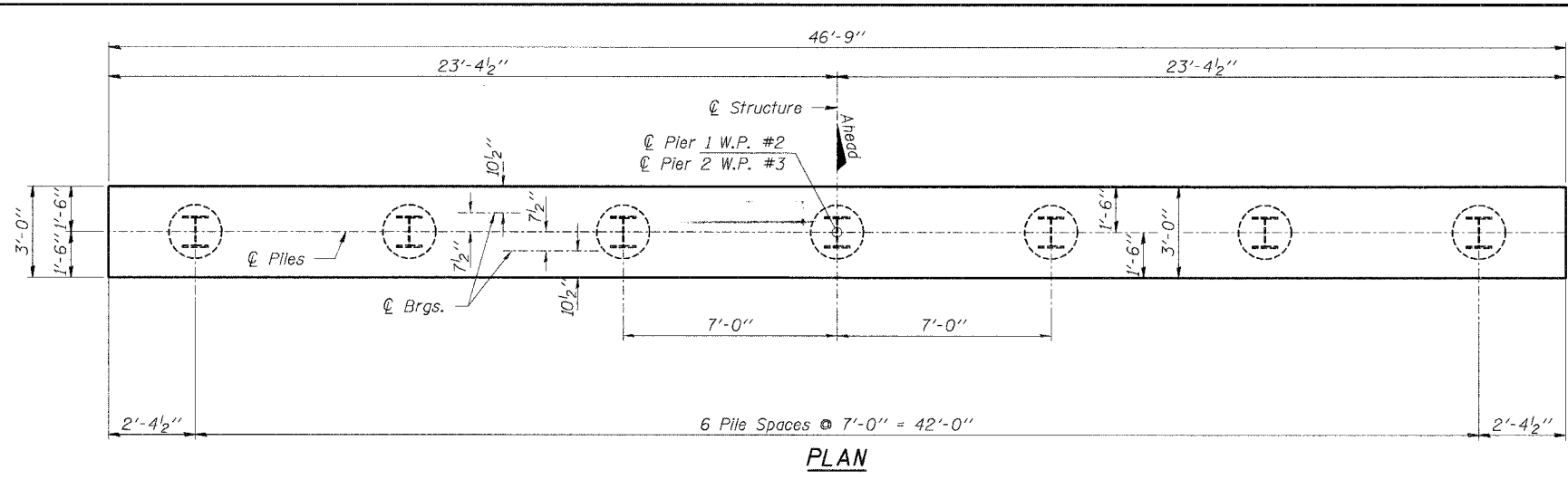
Welded wire fabric 6x6-W4.0xW4.0 weighing 58#/100 sq. ft. The cost of Excavation, Reinforcement, and Concrete Encasement is incidental to the cost of Furnishing Steel Piles. Form for encasement may be omitted when soil conditions will permit.

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 Date: 05/23/05
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

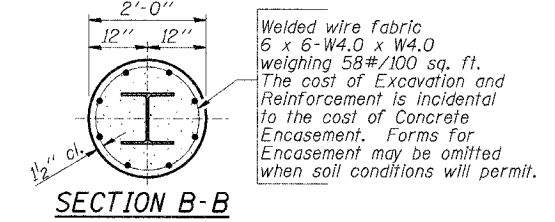
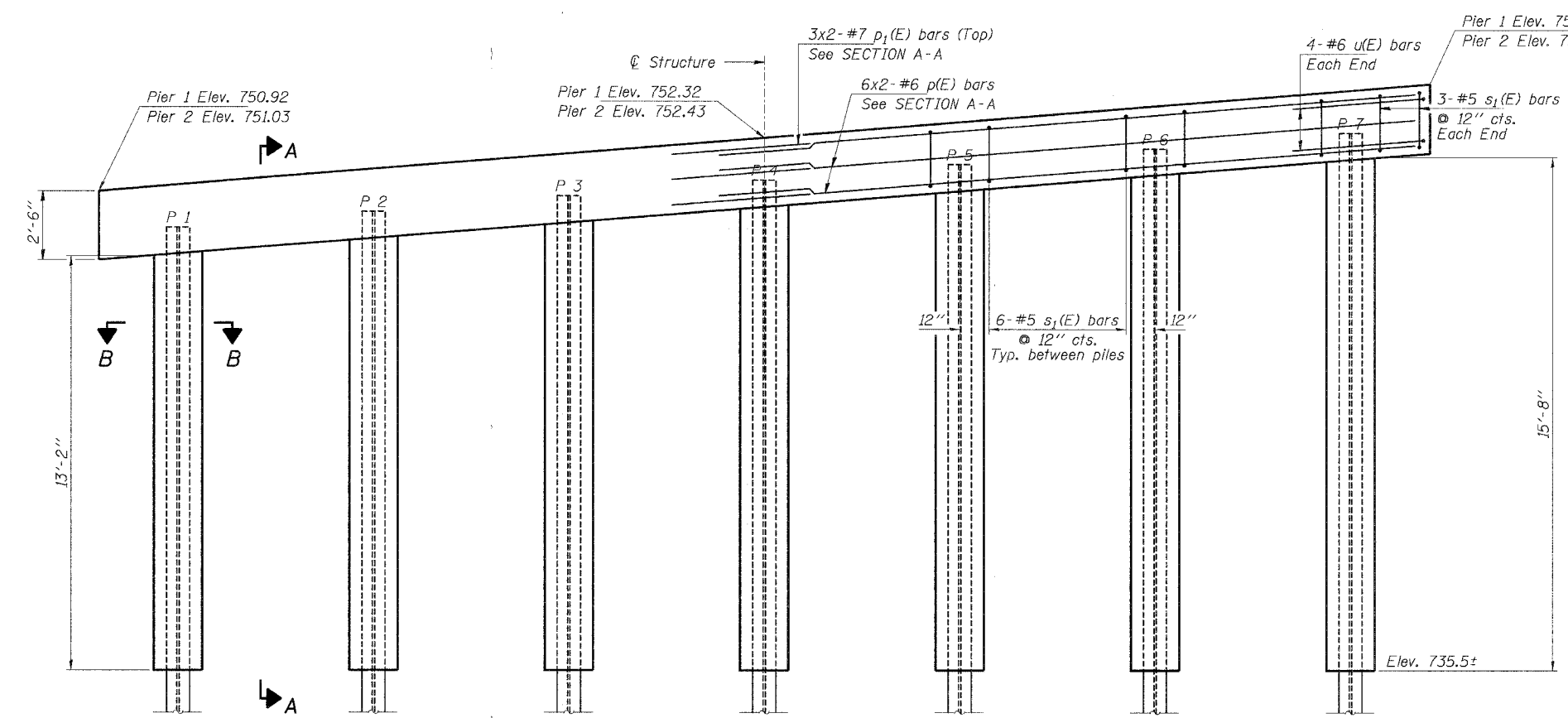
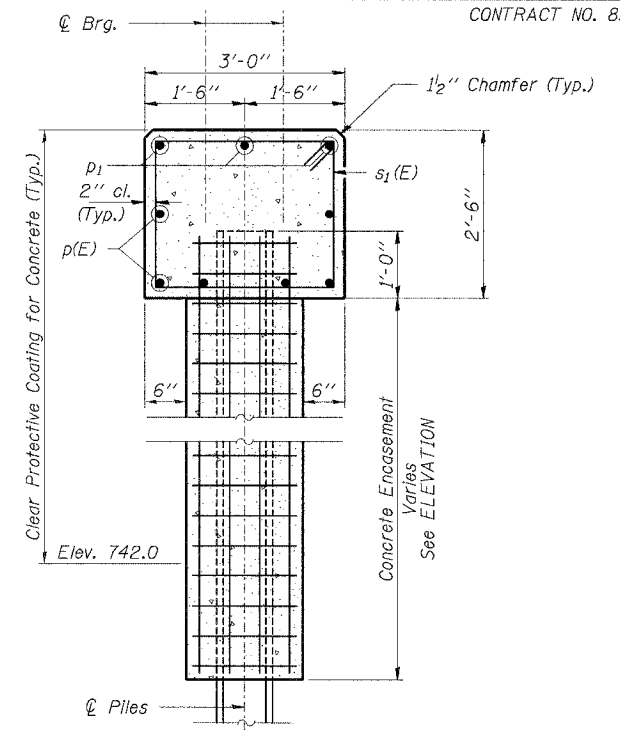
EAST ABUTMENT
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY
 STATION 124+70

ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL SHEETS
F.A.U. 3706	00-00068-07-BR	LAKE	50	31
FED. RD. DIST. NO.	ILLINOIS	FED. AID PROJECT	BRM-7003(876)	

CONTRACT NO. 83806



MIN. BAR LAPS
 #6 bar = 2'-8"
 #7 bar = 3'-7"



BILL OF MATERIAL - 2 PIERS

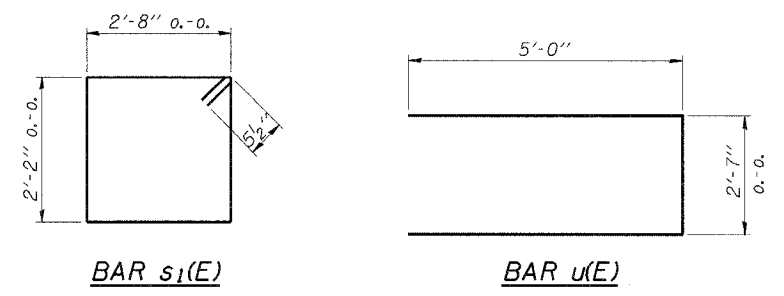
BAR	NO.	SIZE	LENGTH	SHAPE
p(E)	24	#6	24'-6"	—
p1(E)	12	#7	25'-0"	—
s1(E)	84	#5	10'-7"	□
u(E)	16	#6	12'-7"	—
Concrete Structures			Cu. Yd.	26.0
Reinforcement Bars, Epoxy Coated			Pound	2,730
Steel Piles HP12x53			Foot	780
Test Pile Steel HP12x53			Each	1
Concrete Encasement			Cu. Yd.	23.2
Clear Protective Coating for Conc.			Sq. Ft.	1,190

PILE DATA

Type.....Steel HP12x53
 No. Req'd. (2 Piers).....*14
 Design Capacity.....46 Tons/Pile
 Required Bearing Capacity.....69 Tons/Pile
 Est. Length.....60 Feet/Pile

* Includes one Steel Test Pile to be driven in a permanent location at Pier 1.

Bars designated (E) shall be epoxy coated.
 Bars indicated thus 16x2 - #6 etc. indicates 16 lines of bars with 2 lengths per line.



TOP OF PILE ELEVATIONS

Location	Pile 1	Pile 2	Pile 3	Pile 4	Pile 5	Pile 6	Pile 7
Pier 1	749.56	749.98	750.40	750.82	751.24	751.66	752.08
Pier 2	749.68	750.10	750.52	750.94	751.36	751.78	752.20

HLR
 Rice, Berry and Associates
 A Division of Hampton, Lenzini and Renwick, Inc.
 Civil & Structural Engineers
 801 S. Durkin Drive
 Springfield, Illinois 62704
 217-546-3400
 P.O. Box 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Account Number 12-07-0047-1
 Date: 05/23/05
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

PIERS
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY
 STATION 124+70

CONTRACT NO. 83806



Sh. 1 of 2 Sh.

FOUNDATION BORING LOG

PROJECT Kelsey Road Bridge Lake Barrington Date 10-3-01
 E BHM7003(874) Bored By _____
00-00068-07-BR STA. _____ Checked By T. Dunne

DEPTH	Elevation	BLOWS	Cu vs.f.	w(%)	Soils	Surface Water El.	Groundwater El. at Completion	After	Hours
Surface	0					-9.0'	N/A	N/A	
Asphalt 6"									
Stone Sub-Base 6"									
Brown Silty CLAY, Trace Sand and Gravel, Very Stiff		4	3.32	17	A-6				
		4							
		5							
		2							
		3	2.49	20					
		4							
		5							
		7	2.08	21					
		6							
Gray LOAM, Trace Wood Pieces, Loose		2		19	A-4				
		3							
		3							
		1		18					
		1							
		1							
		6		15					
		6							
		9							
Gray SAND, Medium to Fine, Trace Gravel, Medium Dense		10		15	A-3				
		11							
		14							
		7		8					
		8							
		11							
Gray SAND, Medium to Coarse, Trace Gravel, Medium Dense		6		18	A-6				
		6							
		9							
		7							
		8	1.30	21					
		8							
		12							

FOUNDATION BORING LOG

Sh. 2 of 2 Sh.

No. B-1

PSI File No.

DEPTH	Elevation	BLOWS	Cu vs.f.	w(%)	Soils	Notes
	-45				A-6	End of Boring @ 70.0'
						Due to the use of bentonite during drilling, final water level could not be determined.
		9			A-3	
		12				
		16	19			
		12				
		15				
		24	18			
		16			A-1-c	
		20				
		25	9			
		18			A-3	
		30				
		33	16			
		27				
		28				
		36	17			

BORING I

Rice, Berry and Associates
 A Division of Hampton, Lenzini and Renwick, Inc.
 Civil & Structural Engineers
 801 S. Durkin Drive
 Springfield, Illinois 62704
 217-546-3400
 P.O. BOX 1036
 DuQuoin, Illinois 62832
 618-790-4637
 Account Number 12-07-0047-1
 Date: 01/21/05
 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.

BORING I
 SECTION 00-00068-07-BR
 F.A.U. 3706 / C.H. 30 / KELSEY ROAD
 LAKE COUNTY
 STATION 124+70

CONTRACT NO. 83806

ISI Professional Service Industries, Inc.
A & H/Flood Engineering

Sh. 1 of 2 Sh.

FOUNDATION BORING LOG

CT Kelsey Road Bridge Lake Barrington Date 10-8-01

BHM7003(874) Bored By _____

00-00068-07-BR STA. _____ Checked By T. Dunne

Y Lake

Boring No. B-2
Station East Abutment
Offset 10' LOC

Elevation	BLOWS	Cu /s.f.	w(%)	Surface Water El.	Groundwater El. at Completion	After Hours	Elevation	BLOWS	Cu /s.f.	w(%)
0				-9.0'	N/A	N/A				
Surface asphalt 6" concrete Sub-Base 6"										
Brown Silty CLAY, Trace sand and Gravel, Stiff A-6										
	3							6		
	3	0.93	18				-25	8	2.24	17
	4							9		
	3							8		
	3	1.02	19					9	1.12	18
	3							10		
	2							6		
	2	1.02	19				-30	8	1.07	19
	5							9		
	3									
	4		17							
	6									
	3							5		
	4		17				-35	6	0.98	20
	5							8		
	2									
	3		22							
	4									
	6							6		
	9		17				-40	7	2.28	25
	9							12		
	5									
	6		24							
	7									
	5							12		
	7	2.99	19				-45	14		19
	9							18		

FOUNDATION BORING LOG

Sh. 2 of 2 Sh.

PSI File No. _____


o. B-2

Elevation	BLOWS	Cu /s.f.	w(%)	Elevation	BLOWS	Cu /s.f.	w(%)
-45							
Gray SAND, Medium to Fine, Trace Gravel, Dense A-3							
	13						
	15		20	-75			
	21						
	19						
	22		18	-80			
	29						
	20						
	25		9	-85			
	24						
	18						
	27		19	-90			
	33						
	23						
	28		18	-95			
	34						

End of Boring @ 70.0'

Due to the use of bentonite during drilling, final water level could not be determined.

BORING II

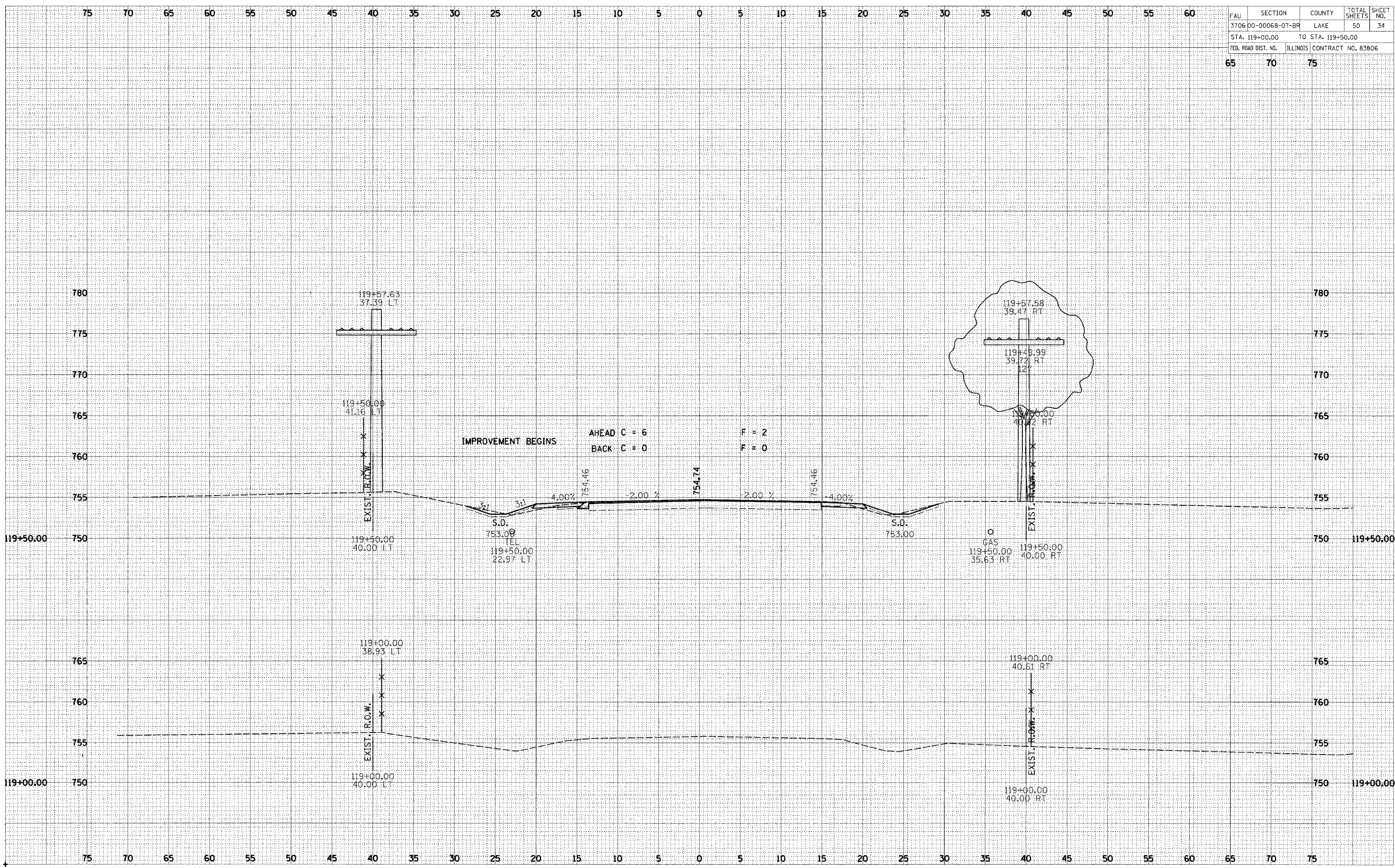
	Rice, Berry and Associates A Division of Hampton, Lenzini and Renwick, Inc. CIVIL & Structural Engineers 801 S. Durkin Drive Springfield, Illinois 62704 217-546-3400	BORING II SECTION 00-00068-07-BR F.A.U. 3706 / C.H. 30 / KELSEY ROAD LAKE COUNTY STATION 124+70
	Account Number 12-07-0047-1 Date: 01/21/05 DESIGNED: T.P.L. CHECKED: S.W.M. DRAWN: D.T.M.	

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706.00-00068-07-BR	LAKE	LAKE	50	34
STA. 119+00.00		TO STA. 119+50.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

65 70 75

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

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

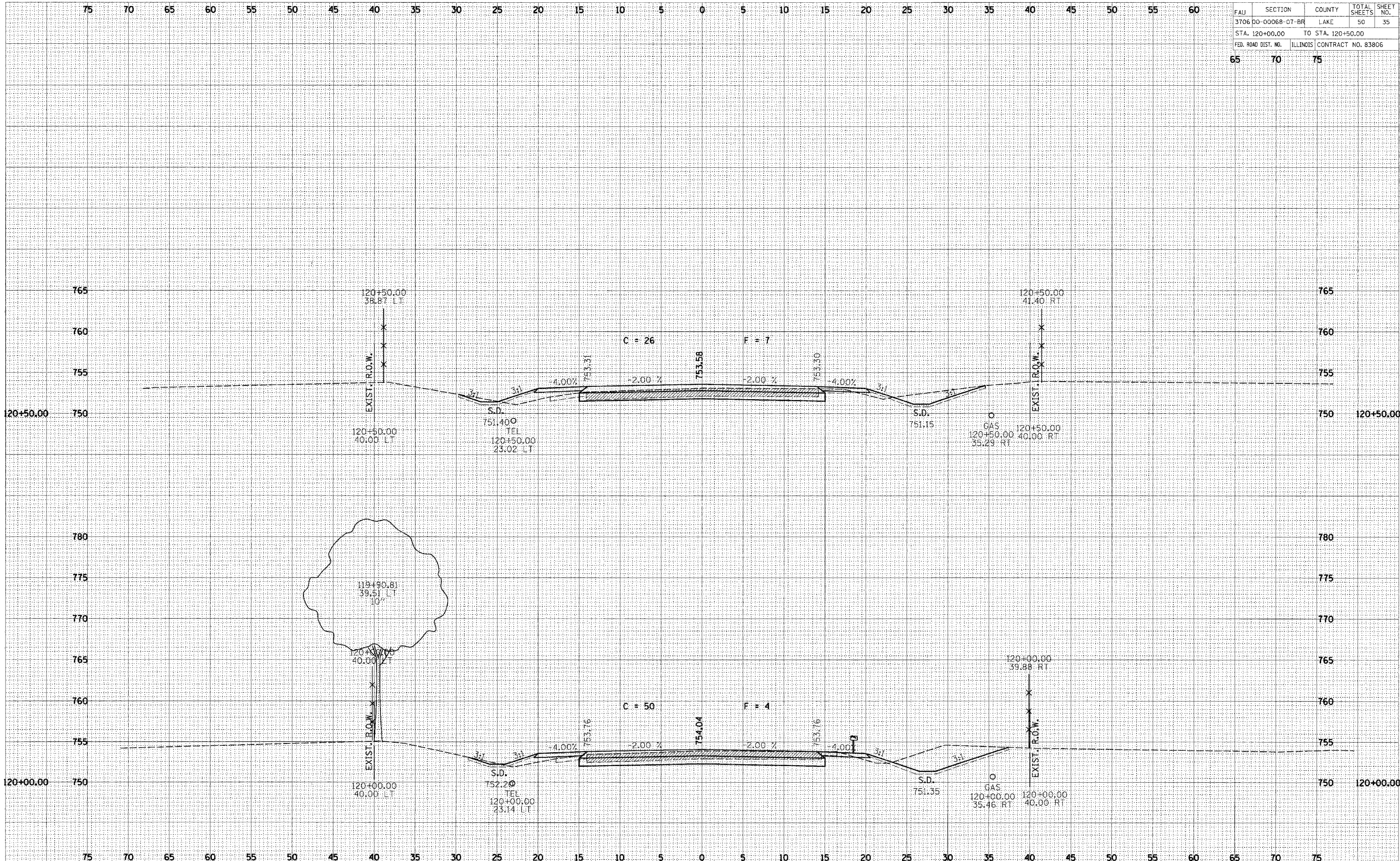


FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	35
STA. 120+00.00		TO STA. 120+50.00		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 83806	

65 70 75

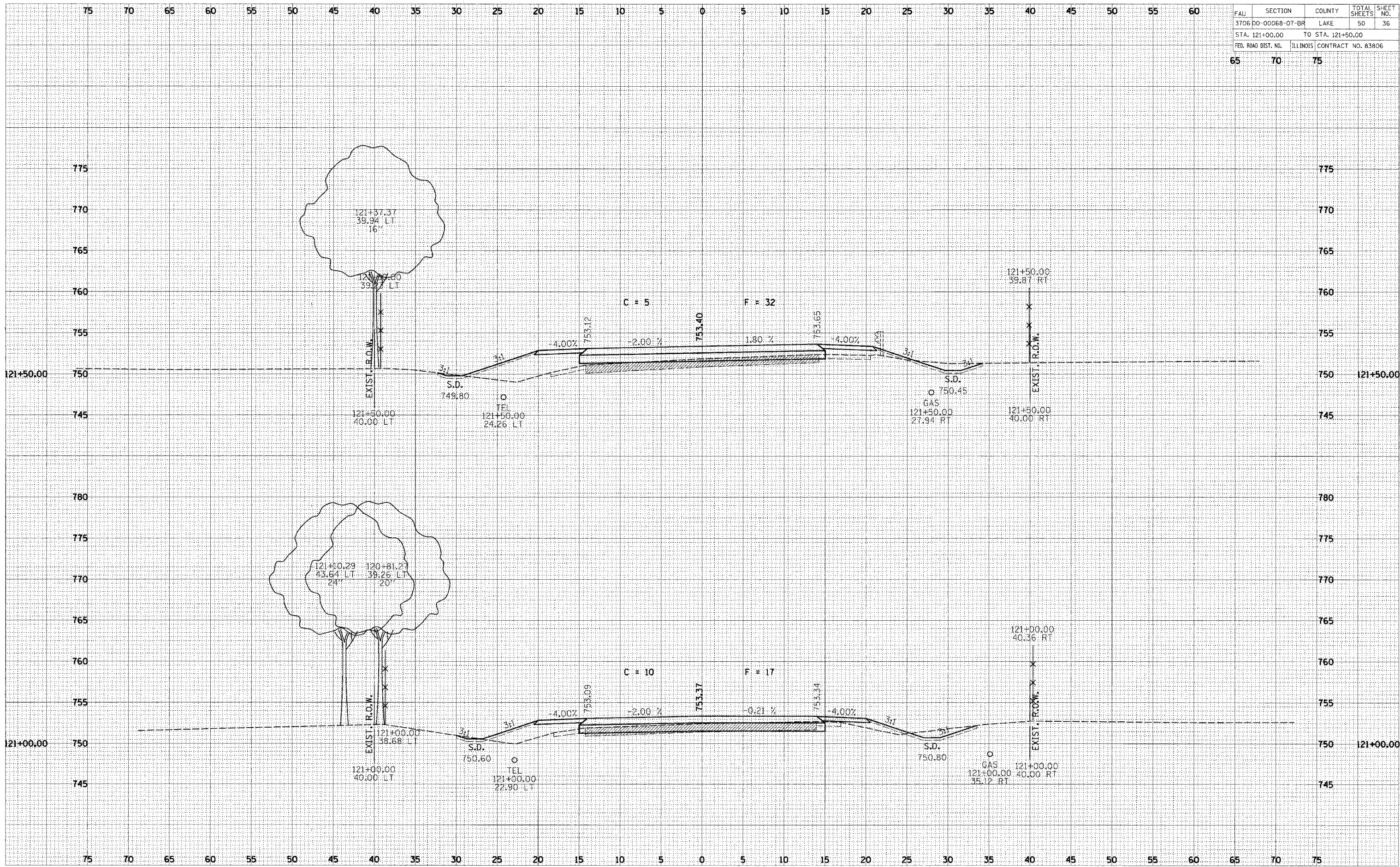
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SURVEYED	
PLOTTED	
NOTE BOOK	
NO.	

ORIGINAL SURVEY	DATE
SURVEYED	
PLOTTED	
NOTE BOOK	
NO.	



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	36
STA. 121+00.00		TO STA. 121+50.00		
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 83806		

65 70 75



DATE	BY

DATE	BY

DATE	BY

DATE	BY

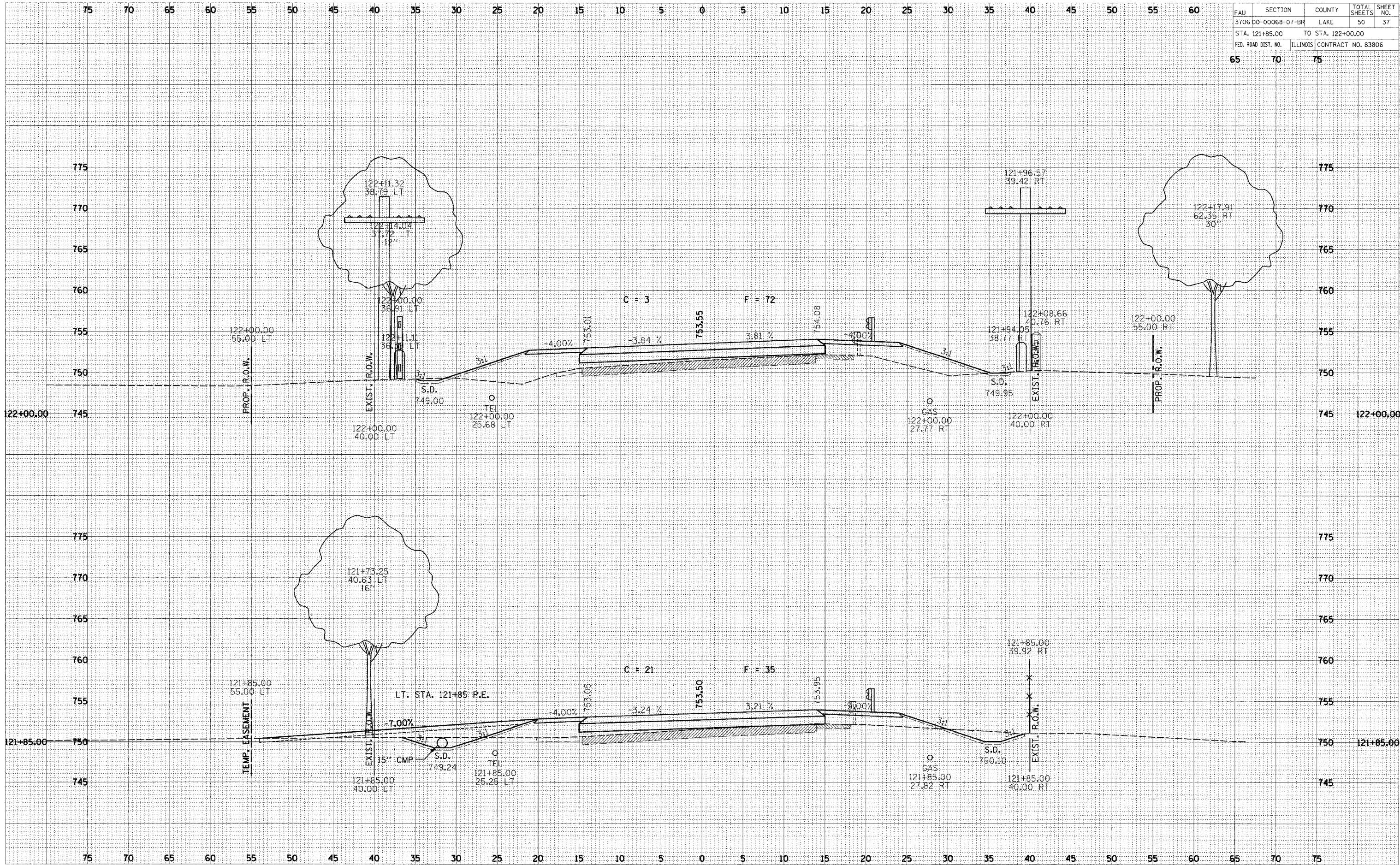
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3706	00-00068-07-BR	LAKE	50	37
STA. 121+85.00		TO STA. 122+00.00		
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 83806	
	65	70	75	

DATE	BY

NO.	AREAS CHECKED

DATE	BY

NO.	AREAS CHECKED



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	38
STA. 122+50.00		TO STA. 123+00.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

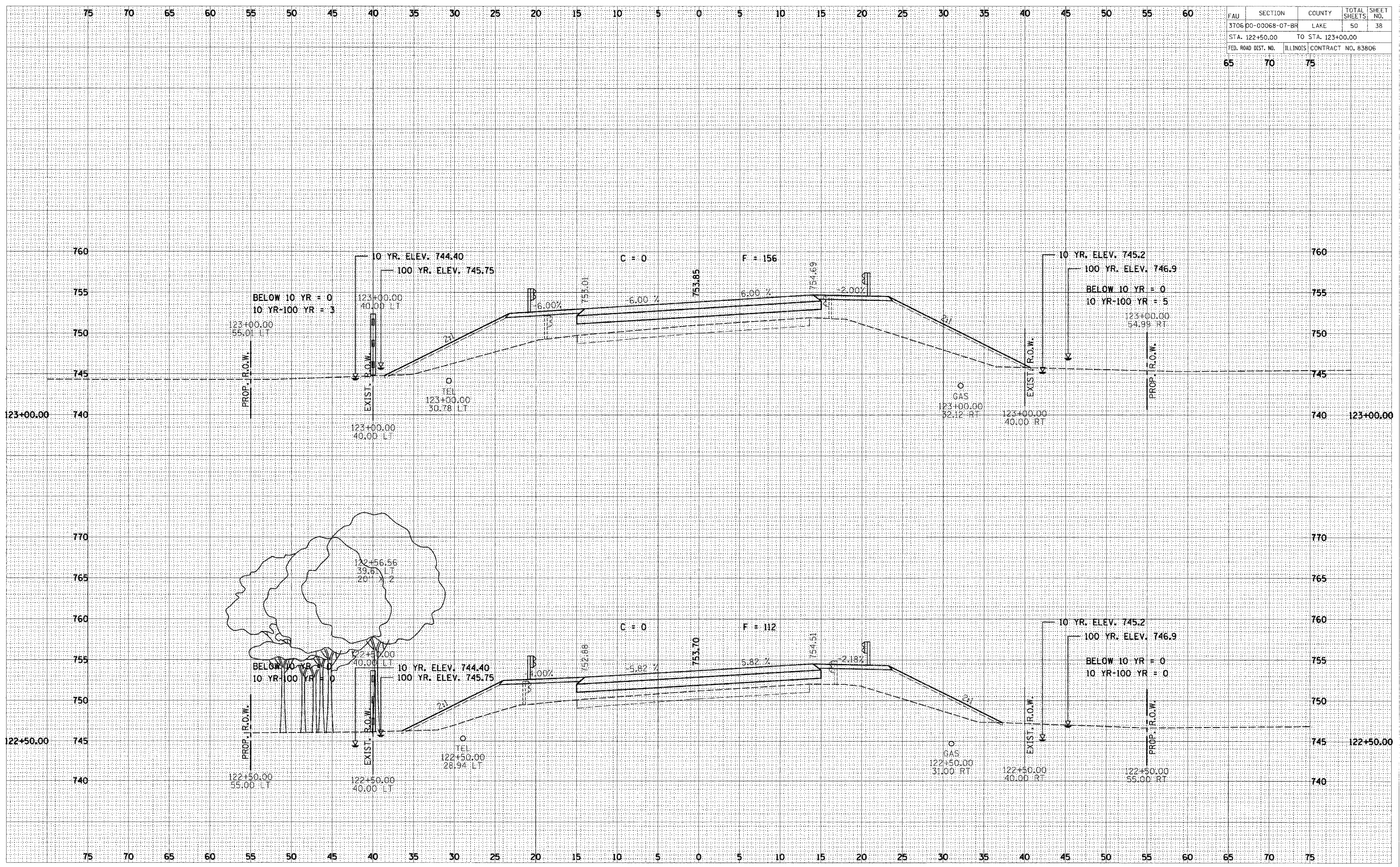
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DATE	BY

NO.	AREAS CHECKED

DATE	BY

NO.	AREAS CHECKED

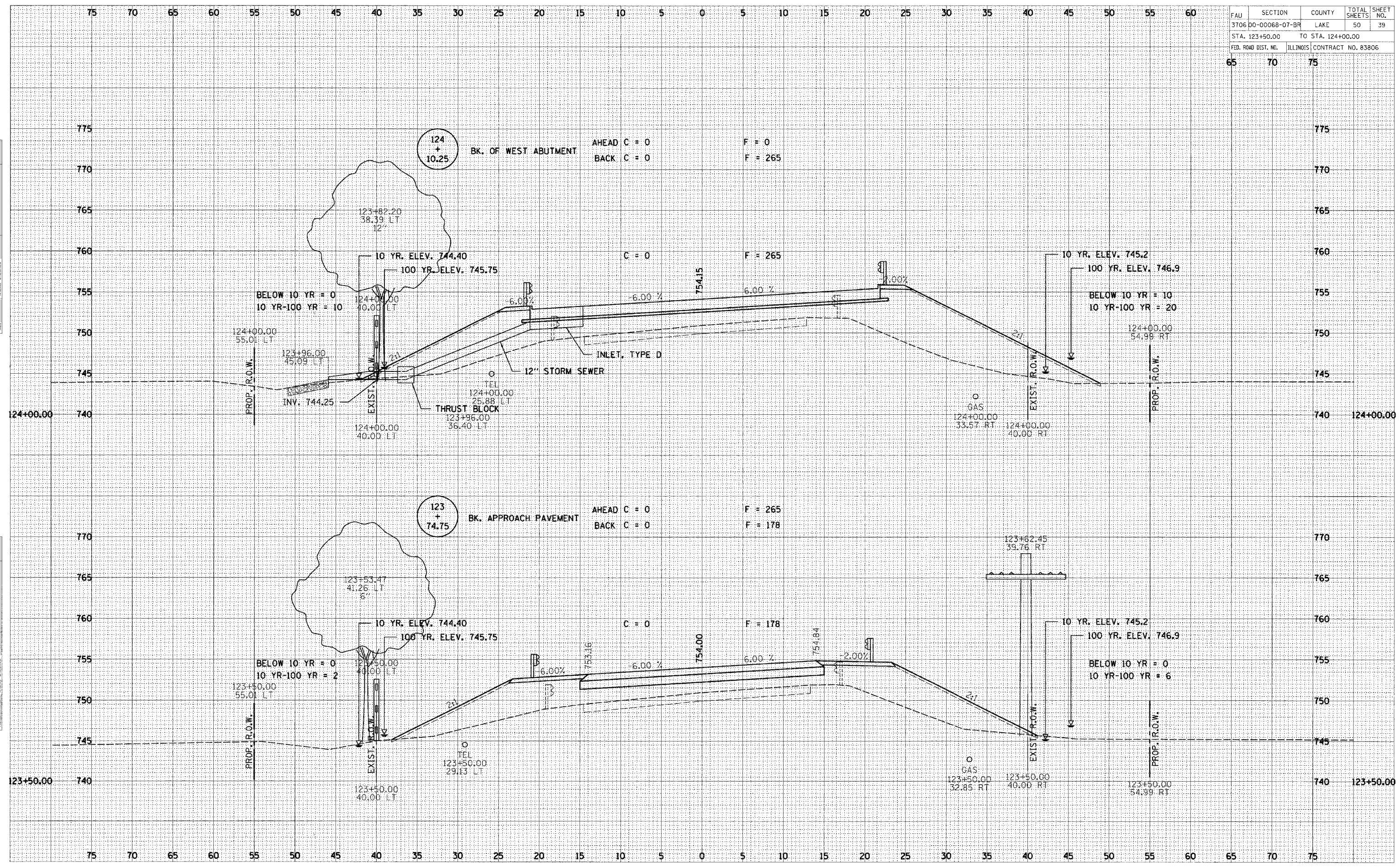


FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	39
STA. 123+50.00		TO STA. 124+00.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

65 70 75

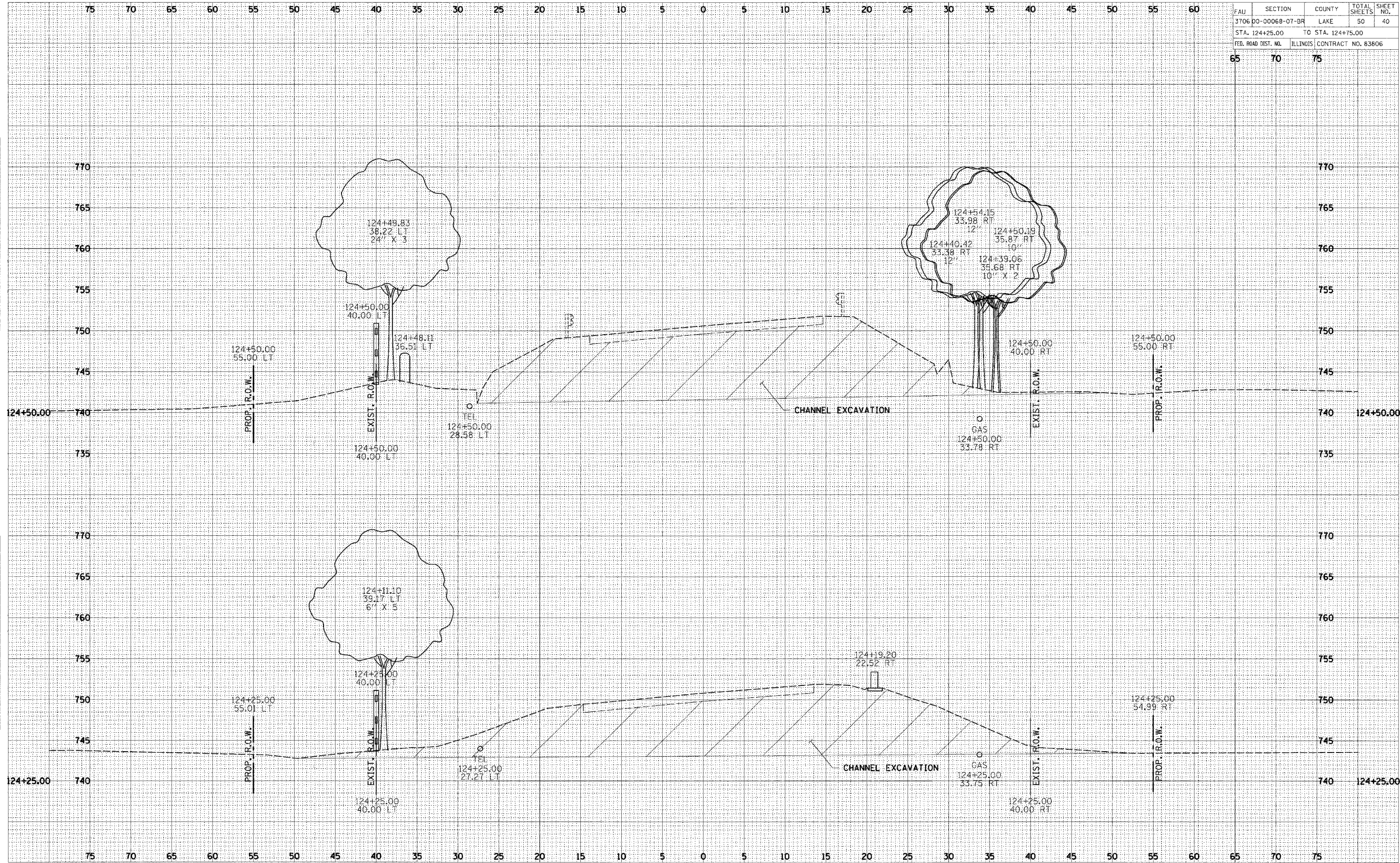
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BY	
FINAL SURVEY	
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NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	40
STA. 124+25.00		TO STA. 124+75.00		
FEB. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

65 70 75



FINAL SURVEY	SURVEYED	DATE
NO.	PLOTTED	
NO.	TEMPLATE	
NO.	AREAS CHECKED	

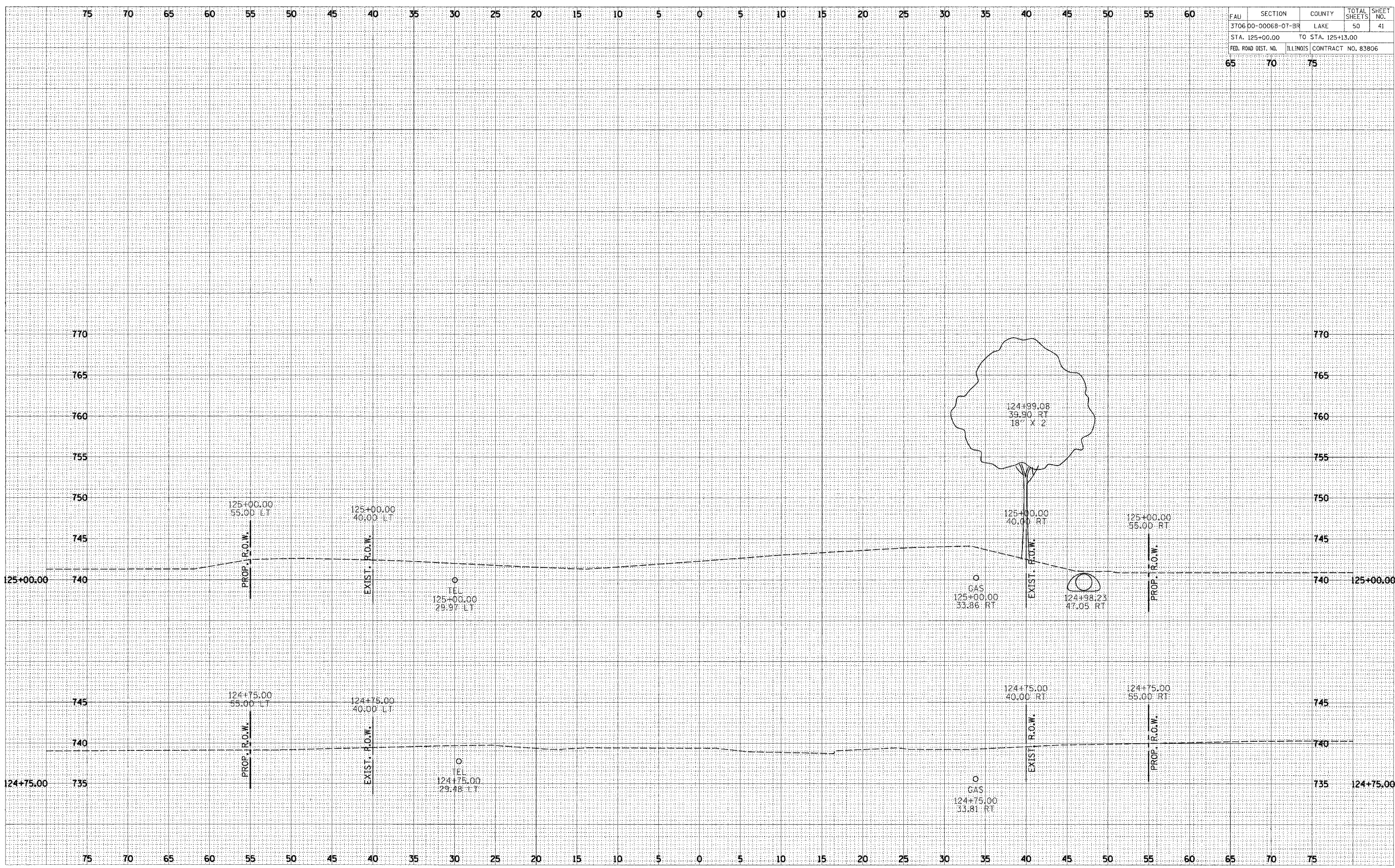
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NO.	PLOTTED	
NO.	TEMPLATE	
NO.	AREAS CHECKED	

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE		50	41
STA. 125+00.00		TO STA. 125+13.00		
FED. ROAD DIST. NO.	ILLINOIS CONTRACT NO. 83806			

65 70 75

FINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.		

ORIGINAL SURVEY	DATE	BY
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
NO.		



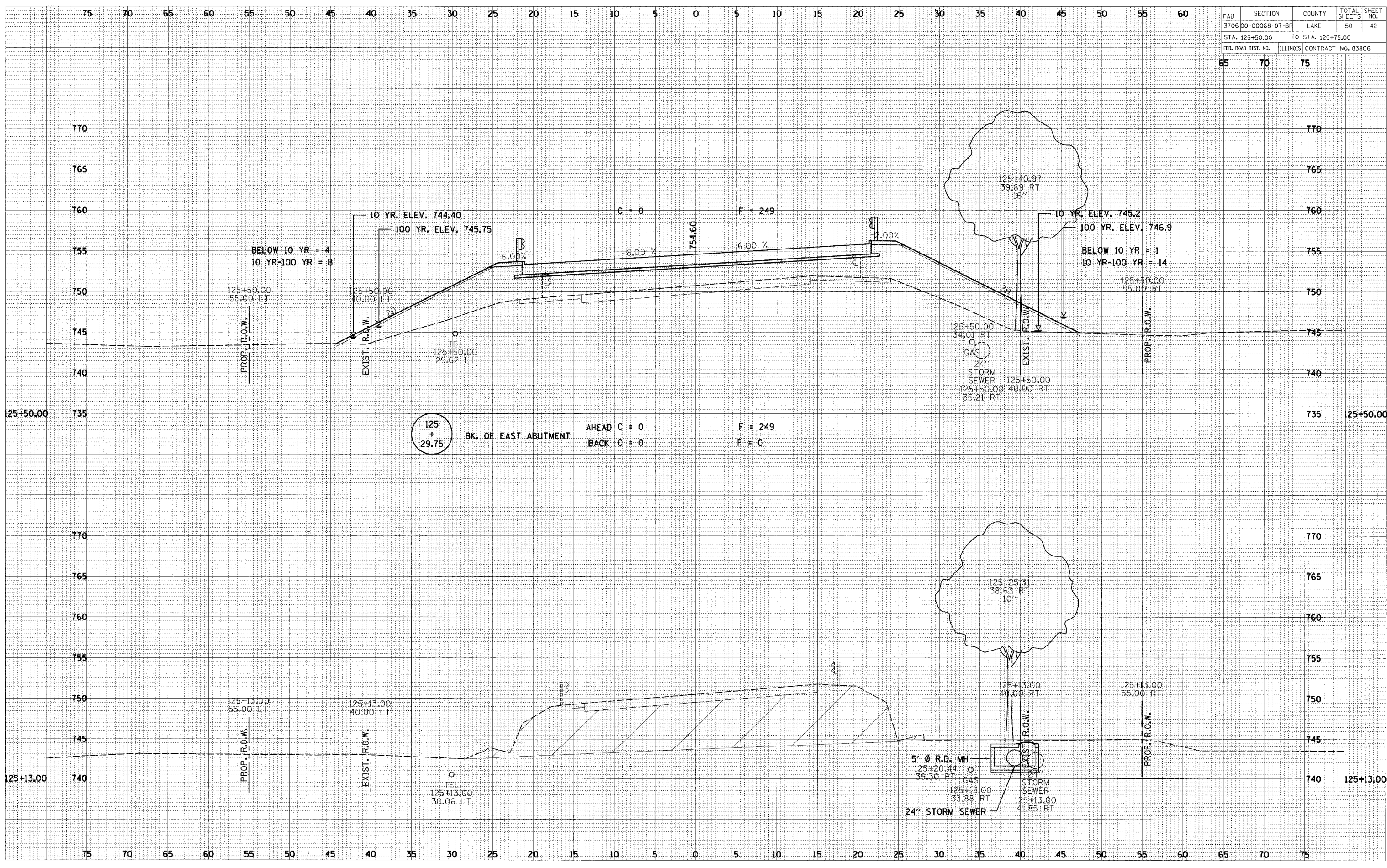
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706	00-00068-07-BR	LAKE	50	42
STA. 125+50.00		TO STA. 125+75.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

DATE	BY

NO.	AREAS CHECKED

DATE	BY

NO.	AREAS CHECKED



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE	LAKE	50	43
STA. 126+00.00		TO STA. 126+50.00		
ILLINOIS CONTRACT NO. 83806				

65 70 75

DATE	BY

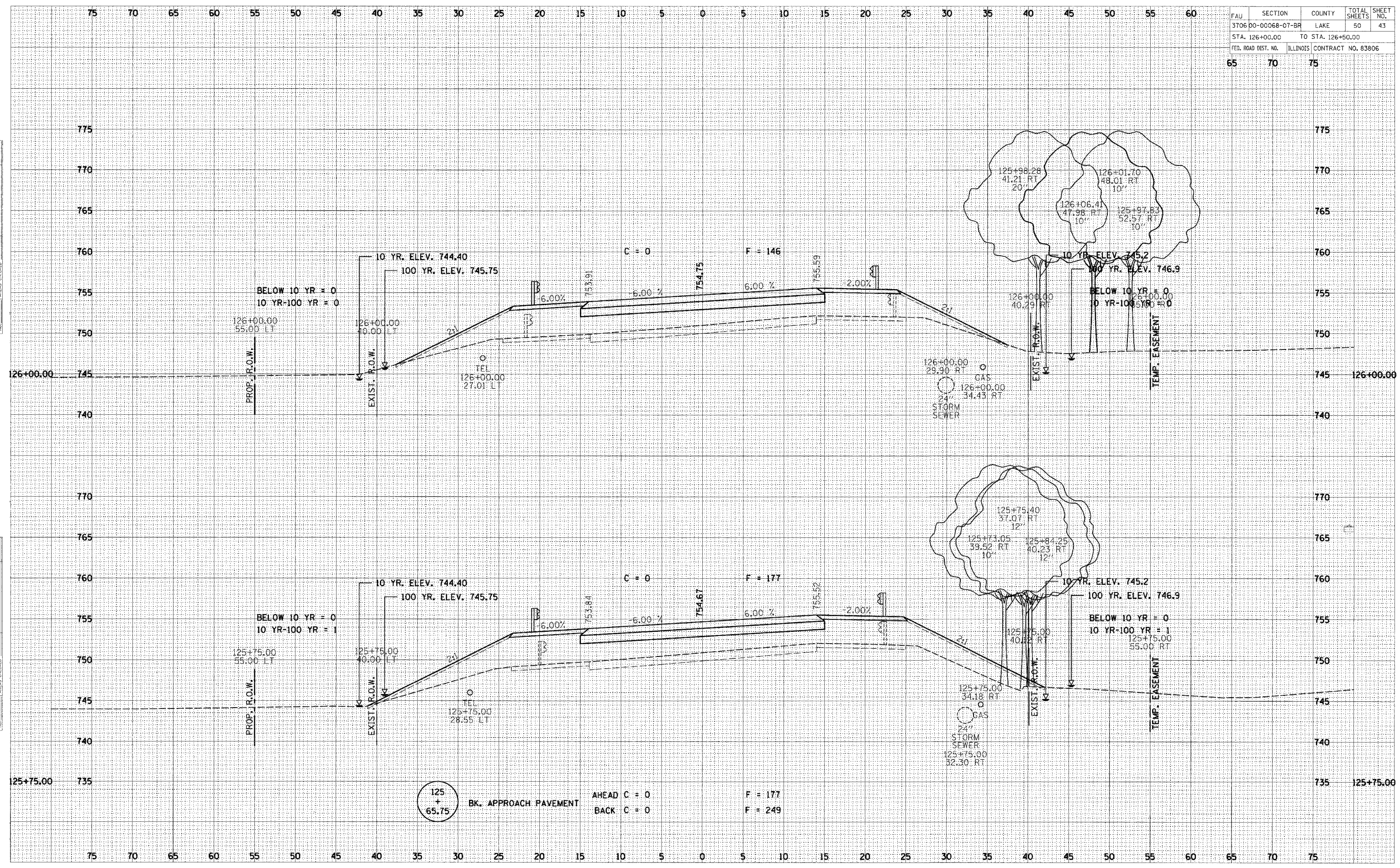
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PLOTTED	
REPLATE	
AREAS CHECKED	

NO.	
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DATE	BY

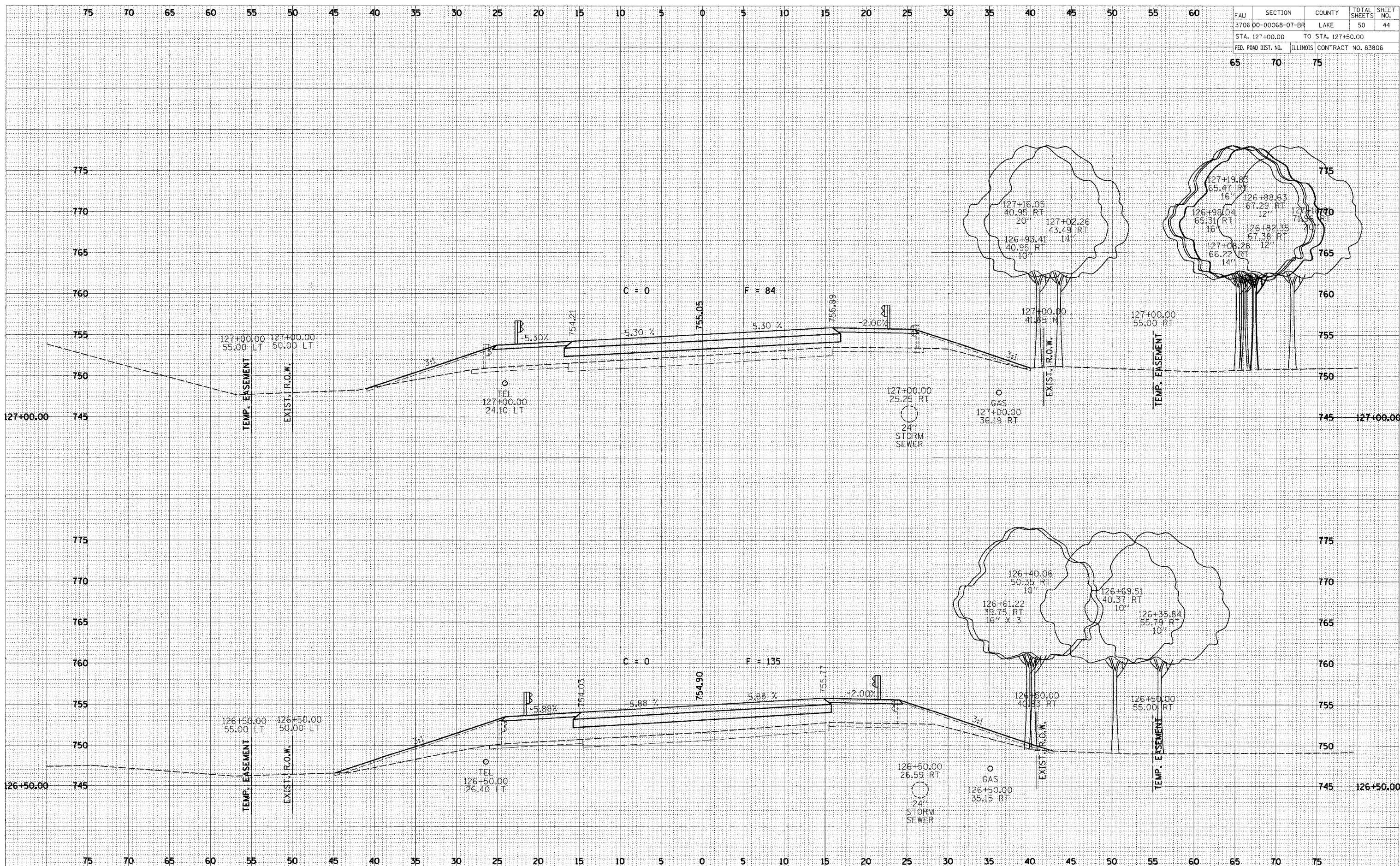
SURVEYED	
PLOTTED	
REPLATE	
AREAS CHECKED	

NO.	
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE	LAKE	50	44
STA. 127+00.00		TO STA. 127+50.00		
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 83806		

65 70 75



DATE	BY

NO.	AREAS CHECKED

NO.	AREAS CHECKED

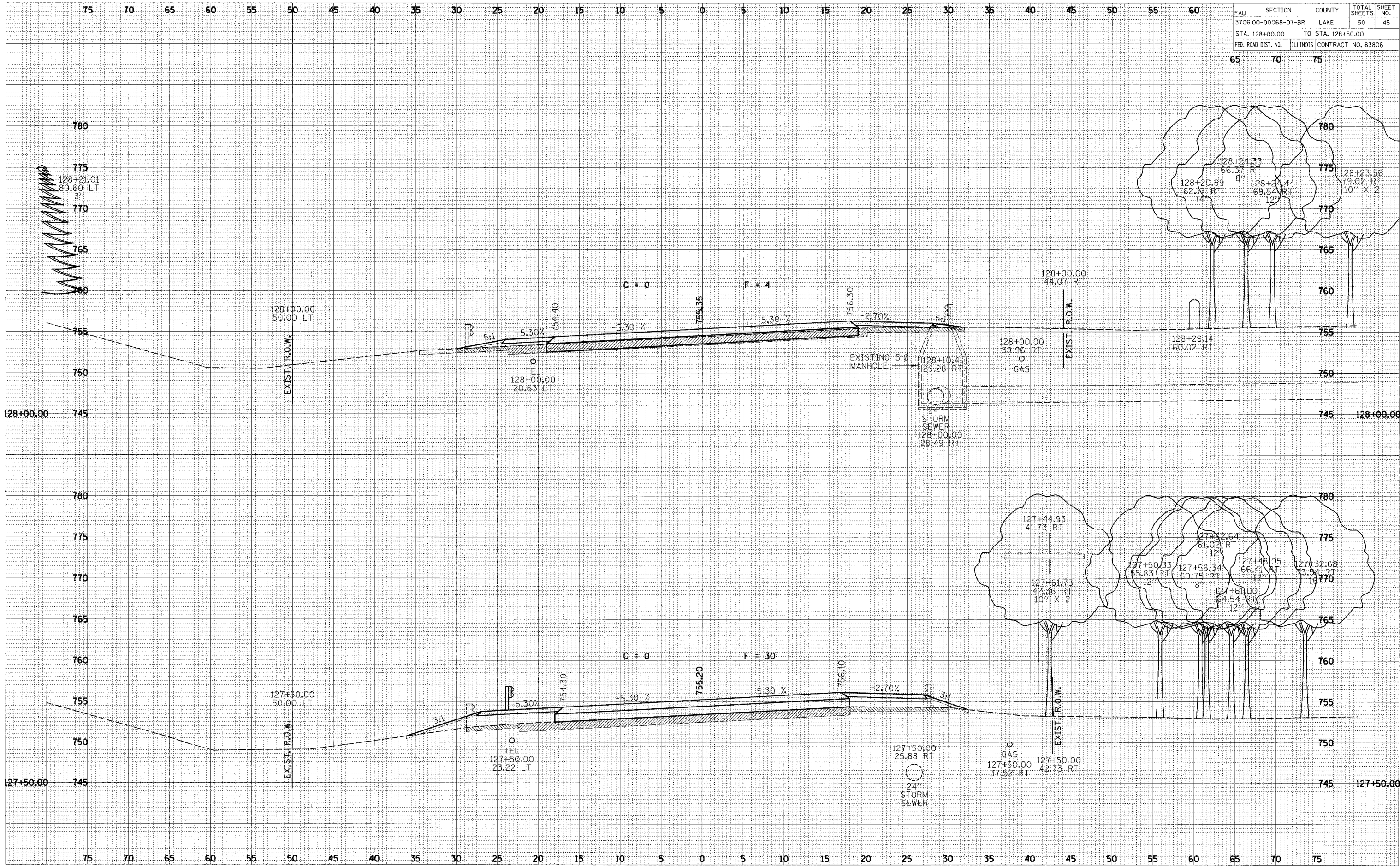
DATE	BY

NO.	AREAS CHECKED

NO.	AREAS CHECKED

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE	LAKE	50	45
STA. 128+00.00		TO STA. 128+50.00		
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 83806		

65 70 75



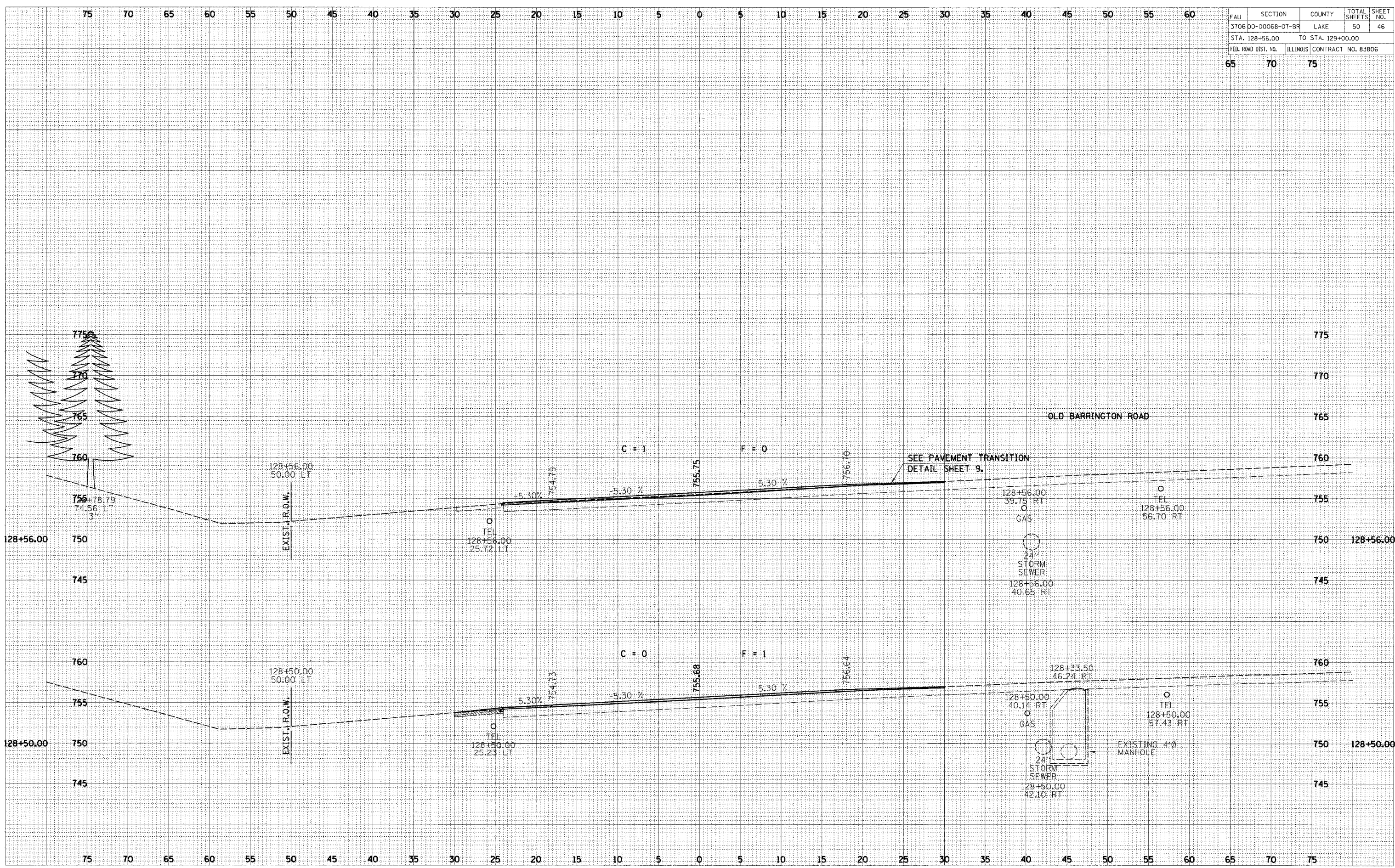
DATE	BY

DATE	BY

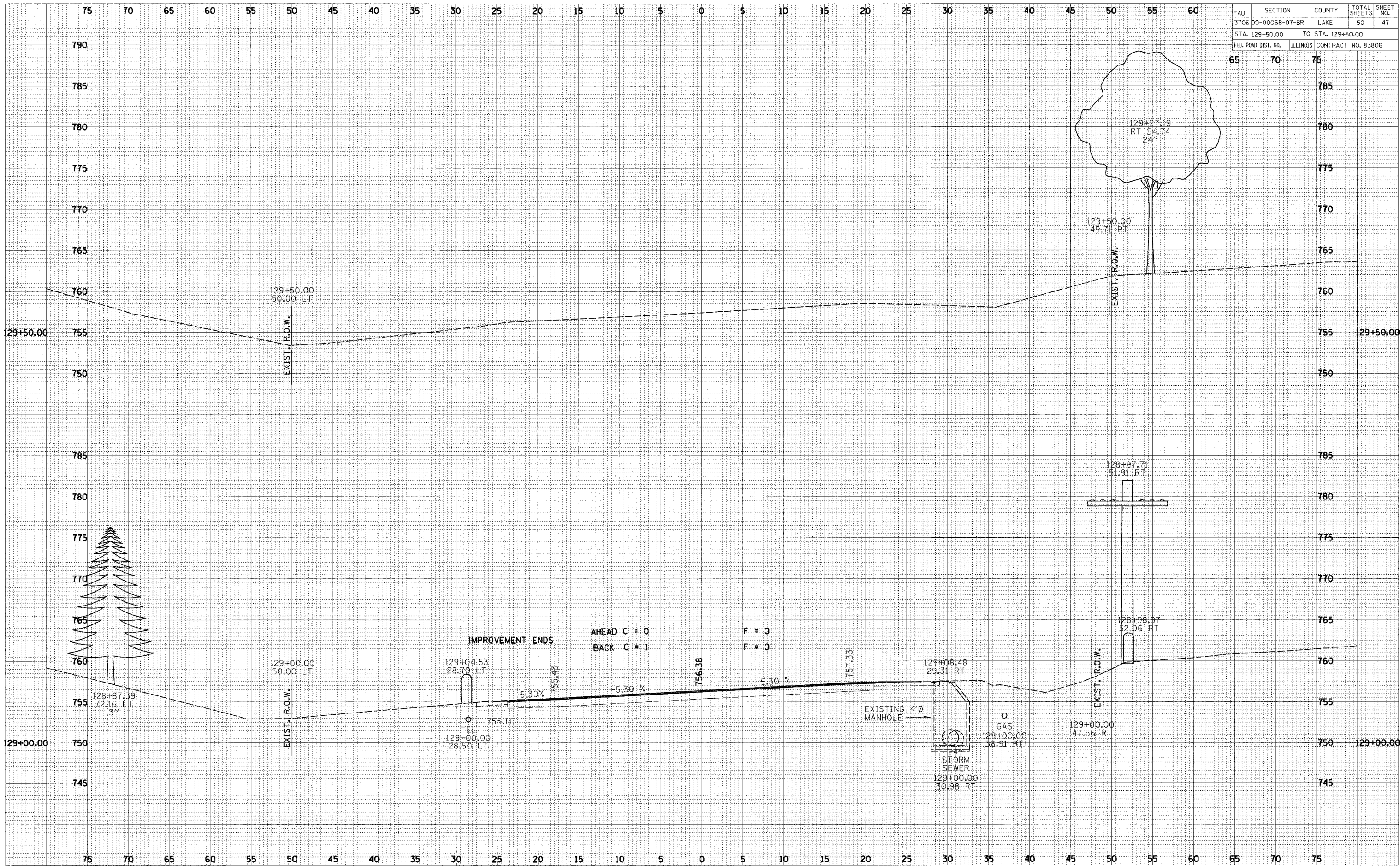
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE	50	46	
STA. 128+56.00		TO STA. 129+00.00		
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 83806		
65	70	75		

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY



FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706.00-00068-07-BR		LAKE	50	47
STA. 129+50.00		TO STA. 129+50.00		
FED. ROAD DIST. NO.	ILLINOIS		CONTRACT NO. 83806	



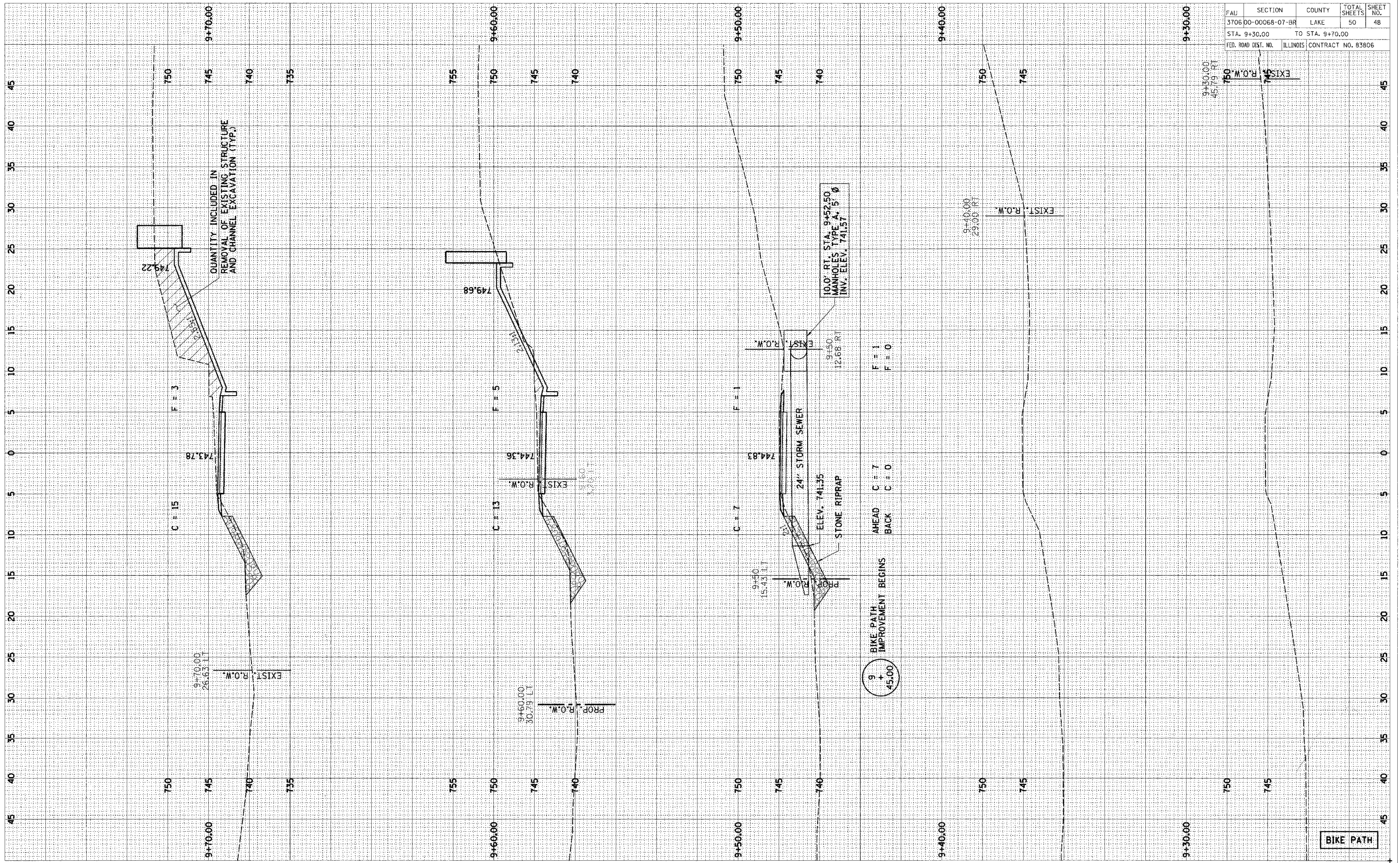
FINAL SURVEY	DATE
SURVEYED	
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TEMPLATE	
NOTE BOOK	
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ORIGINAL SURVEY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
NOTE BOOK	
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FINAL SURVEY
NO. _____
NOTE BOOK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

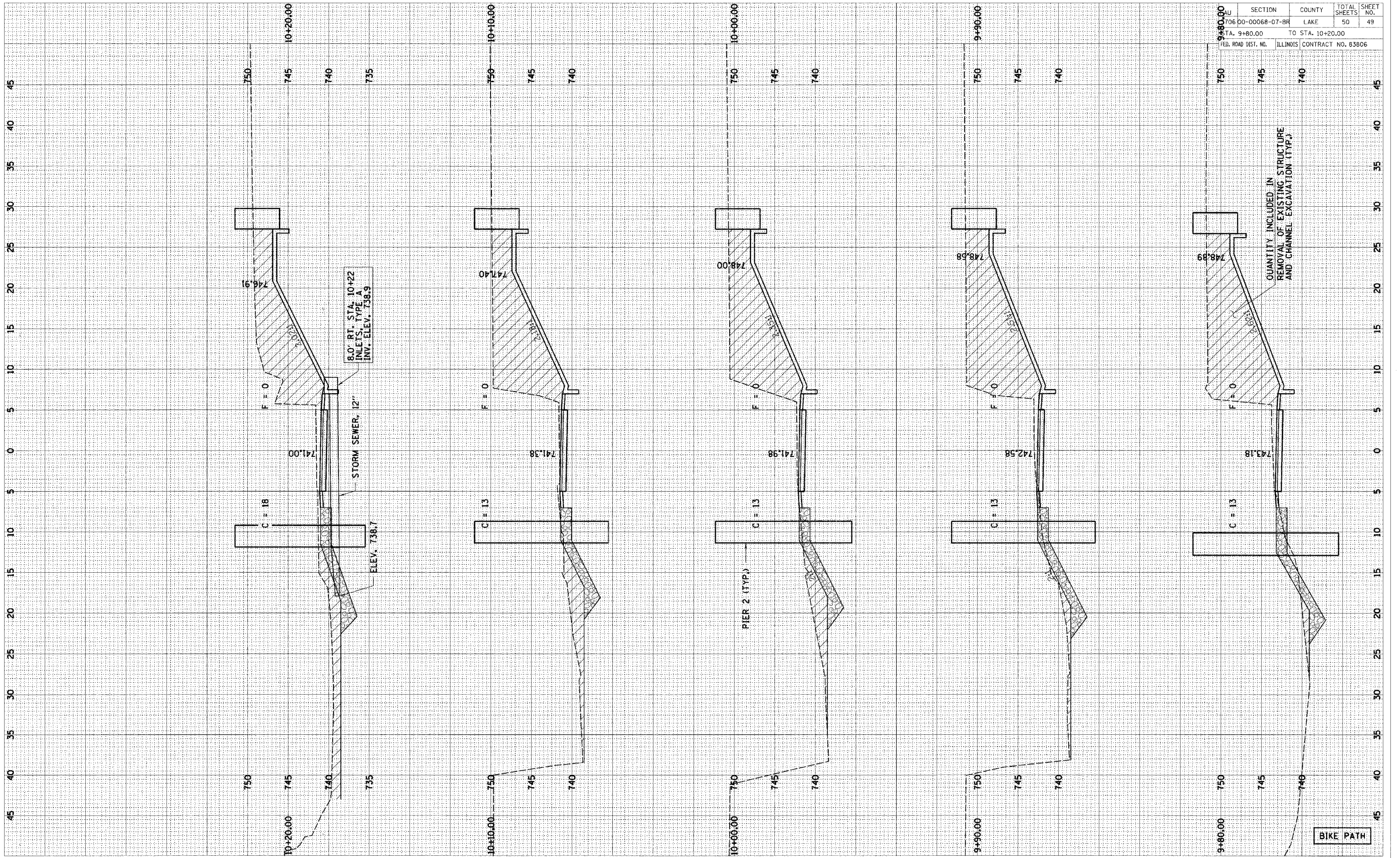
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NO. _____
NOTE BOOK NO. _____
EXCERPTED
PLOTTED
TEMPLATE
AREAS
CHECKED

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3706 00-00068-07-BR	LAKE	50	48	
STA. 9+30.00 TO STA. 9+70.00		ILLINOIS CONTRACT NO. 83806		



BIKE PATH

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
706 00-00068-07-BB	LAKE	50	49
STA. 9+80.00 TO STA. 10+20.00			
ILLINOIS CONTRACT NO. 83806			



BIKE PATH

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

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

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

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



SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
706 00-00068-07-BR	LAKE	50	50
TA. 10+30.00	TO STA. 10+62.00		
ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 83806	

BIKE PATH