

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

FAU 2647 (CH 57 (BUTTERFIELD ROAD))
STP Section No.: 99-00142-07-WR
Project No.: F-0330(042)
HARDING AVENUE TO FAP 352 (IL ROUTE 137 (BUCKLEY ROAD))
ROADWAY RECONSTRUCTION & TRAFFIC SIGNAL MODERNIZATION
LAKE COUNTY
JOB No.: C-91-374-04

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	1
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
CONTRACT NO. 83815				

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	LISTING OF APPLICABLE HIGHWAY STANDARDS, GENERAL NOTES
3 - 6	SUMMARY OF QUANTITIES
7 - 11	TYPICAL SECTIONS
12 - 14	SCHEDULE OF QUANTITIES
15 - 17	ALIGNMENT, TIES AND BENCHMARKS
18 - 27	ROADWAY PLAN
28 - 33	ROADWAY PROFILE
34 - 35	DETOUR NOTES AND PLAN
36 - 53	SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL
54 - 58	EROSION CONTROL PLAN
59 - 68	UTILITY PLAN
69 - 74	UTILITY PROFILE
75 - 76	UTILITY INTERSECTION DETAILS
77 - 79	UTILITY AND DRAINAGE DETAILS
80	DETENTION POND GRADING PLAN
81 - 82	INTERSECTION DETAILS
83 - 87	PAVEMENT MARKING, LANDSCAPING AND SIGNING PLAN
88 - 90	MEDIAN AND LANDSCAPED MEDIAN DETAILS
91 - 120	TRAFFIC SIGNAL PLANS AND DETAILS
121 - 123	STRUCTURAL SHEETS
124 - 128	ROADWAY CONSTRUCTION WALL DETAILS
129	OUTLET FOR CONCRETE CURB AND GUTTER (BD03)
130	STORM SEWER CONNECTION TO EXISTING SEWER (BD07)
131	BUTT JOINTS AND BITUMINOUS TAPER (BD32)
132	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC11)
133	DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC13)
134	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING (TC16)
135	TEMPORARY INFORMATION SIGNING (TC22)
136 - 153	LAKE COUNTY STANDARDS
154 - 191	CROSS-SECTIONS - TEMPORARY PAVEMENT AND DRAINAGE
192 - 256	CROSS-SECTIONS



LIST OF STATE STANDARDS AND LCDOT STANDARDS LOCATED ON SHEET NO. 2

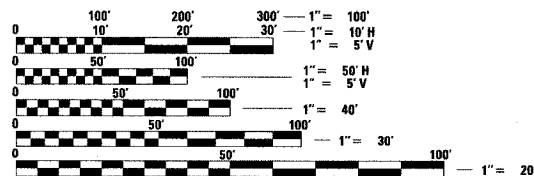
PROJECT LOCATED IN THE VILLAGE OF LIBERTYVILLE

THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/DIRECTION AND MEANS/METHODS OF CONSTRUCTION.

CALL JULIE 1-800-892-0123

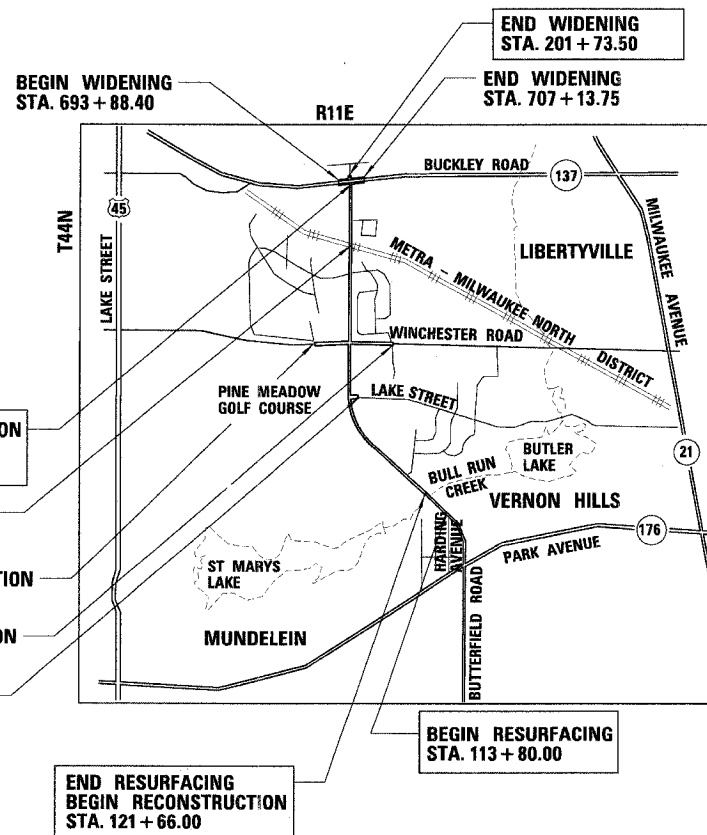
WITH THE FOLLOWING:

COUNTY LAKE
CITY-TOWNSHIP LIBERTYVILLE - LIBERTYVILLE
SEC. & 1/4 SEC. NO. # T44N R11E SEC. 17 - 20, 29
48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN., & HOLIDAYS



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.

CONTRACT NO. # 83815



LOCATION MAP

GROSS LENGTH OF PROJECT = 1.665 MILES (8793.5 FEET)
NET LENGTH OF PROJECT = 1.663 MILES (8780.5 FEET)

DESIGN DESIGNATION

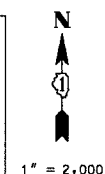
F.A.U. 2647 (BUTTERFIELD ROAD) =
1149 (25) MINOR ARTERIAL 8.68 (FD-20)

TRAFFIC DATA

F.A.U. 2647 (BUTTERFIELD ROAD) AADT =
19,500 (2005); 27,500 (2025)
F.A.P. 352 (IL ROUTE 137) AADT =
23,200 (2005); 31,000 (2025)

POSTED SPEED LIMIT

F.A.U. 2647 (BUTTERFIELD ROAD) = 40MPH
F.A.P. 352 (IL ROUTE 137) = 45MPH
WINCHESTER ROAD = 45MPH/35MPH



NOVEMBER 30, 2005

John P. Riley

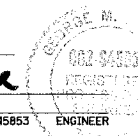
JOHN P. RILEY
ILLINOIS REGISTRATION No. 061-004427
EXPIRATION DATE: 11/30/06
STRUCTURAL SHEETS



Nov. 30, 2005

G. Michael Ziegler

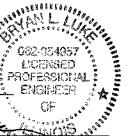
G. MICHAEL ZIEGLER
ILLINOIS REGISTRATION No. 062-054583
EXPIRATION DATE: 11/30/07
TRAFFIC SHEETS



Nov. 30, 2005

Bryan L. Luke

BRYAN L. LUKE
ILLINOIS REGISTRATION No. 062-054957
EXPIRATION DATE: 11/30/07
ROADWAY SHEETS



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED November 20 05
Christopher B. Burke
LAKE COUNTY

APPROVED DECEMBER 21 2005
C. H. H.
LOCAL ROADS ENGINEER

APPROVED Dec 21 20 05
Diane M. O'Keefe
DEPUTY DIRECTOR OF HWYS, REGION ENGINEER

CHRISTOPHER B. BURKE
ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

PROFESSIONAL DESIGN FIRM NO.: 184-001175
EXPIRATION DATE: APRIL 30, 2007

FEDERAL AID DESIGN ENGINEER: Ms. Abigail Brinks
201 W. CENTER COURT
SCHAMBURG, ILLINOIS 60196-1096
(847) 705-4233

LOCATION OF PROJECT: FAU 2647 (CH 57 (BUTTERFIELD ROAD)) LAKE COUNTY

SUMMARY OF QUANTITIES

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	3
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	406		406			
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	179		179			
20101100	TREE TRUNK PROTECTION	EACH	30		30			
* 20101200	TREE ROOT PRUNING	EACH	30		30			
* 20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	10		10			
* 20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	30		30			
20200100	EARTH EXCAVATION	CU YD	52900	52900				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	11097	11097				
20700300	POROUS GRANULAR EMBANKMENT, SPECIAL	TON	10487	10187		300		
20800250	TRENCH BACKFILL, SPECIAL	CU YD	6061			6061		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	20374	20374				
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	26135		26135			
21300010	EXPLORATION TRENCH, SPECIAL	FOOT	150	150				
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	230		230			
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	23		23			
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	230		230			
* 25100630	EROSION CONTROL BLANKET	SQ YD	4715		4715			
* 25200100	SCODDING	SQ YD	21055		21055			
* 25200200	SUPPLEMENTAL WATERING	UNIT	166		166			
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	783		783			
28000400	PERIMETER EROSION BARRIER	FOOT	7761		7761			
28000500	INLET AND PIPE PROTECTION	EACH	26		26			
28000510	INLET FILTERS	EACH	121		121			
28100105	STONE RIPRAP, CLASS A3	SQ YD	14	14				
28200200	FILTER FABRIC	SQ YD	14	14				
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	224	224				
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	8913	8913				
40600300	AGGREGATE (PRIME COAT)	TON	89	89				
40600600	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	276	276				
40600900	TEMPORARY RAMP	SQ YD	500	500				
40800040	INCIDENTAL BITUMINOUS SURFACING	TON	60	60				
42001300	PROTECTIVE COAT	SQ YD	12402	12402				
42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	14528	14528				
42400800	DETECTABLE WARNINGS	SQ FT	330	330				
44000008	BITUMINOUS SURFACE REMOVAL 2 1/2"	SQ YD	14604	14604				
44000100	PAVEMENT REMOVAL	SQ YD	45149	45149				
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	597	597				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	12025	12025				
44000600	SIDEWALK REMOVAL	SQ FT	14818	14818				
44003100	MEDIAN REMOVAL	SQ FT	480	480				
44100300	PAVEMENT REPLACEMENT (SPECIAL)	SQ YD	4				4	
44201785	CLASS D PATCHES, TYPE I, 12 INCH	SQ YD	40	40				
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	80	80				
44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	100	100				
44201796	CLASS D PATCHES, TYPE IV, 12 INCH	SQ YD	100	100				

* SPECIALTY ITEM

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	543	543				
48202850	BITUMINOUS SHOULDERS SUPERPAVE 12 1/2"	SQ YD	143	143				
50105220	PIPE CULVERT REMOVAL	FOOT	302			302		
50200100	STRUCTURE EXCAVATION	CU YD	200			200		
50300225	CONCRETE STRUCTURES	CU YD	85			85		
50300510	RUSTICATION FINISH	SQ FT	2100			2100		
50900005	STUD SHEAR CONNECTORS	EACH	143			143		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9400			9400		
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	5			5		
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	4			4		
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1			1		
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1			1		
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	1157			1157		
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	481			481		
550A0080	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	286			286		
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	330			330		
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	4279			4279		
550A0380	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	742			742		
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	1401			1401		
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	1384			1384		
550A0640	STORM SEWERS, CLASS A, TYPE 3 12"	FOOT	62			62		
550A0680	STORM SEWERS, CLASS A, TYPE 3 18"	FOOT	244			244		
55100100	STORM SEWER REMOVAL 4"	FOOT	56			56		
55100300	STORM SEWER REMOVAL 8"	FOOT	41			41		
55100400	STORM SEWER REMOVAL 10"	FOOT	207			207		
55100500	STORM SEWER REMOVAL 12"	FOOT	3033			3033		
55100700	STORM SEWER REMOVAL 15"	FOOT	81			81		
55100900	STORM SEWER REMOVAL 18"	FOOT	2035			2035		
55101200	STORM SEWER REMOVAL 24"	FOOT	55			55		
55101400	STORM SEWER REMOVAL 30"	FOOT	14			14		
55101900	STORM SEWER REMOVAL 48"	FOOT	74	74				
* 56100500	WATER SERVICE LINE 1 1/2"	FOOT	204	204				
* 56102900	DUCTILE IRON WATER MAIN 4"	FOOT	4	4				
* 56103000	DUCTILE IRON WATER MAIN 6"	FOOT	67	67				
* 56103100	DUCTILE IRON WATER MAIN 8"	FOOT	154	154				
* 56103200	DUCTILE IRON WATER MAIN 10"	FOOT	28	28				
* 56103300	DUCTILE IRON WATER MAIN 12"	FOOT	1731	1731				
* 56103400	DUCTILE IRON WATER MAIN 16"	FOOT	101	101				
* 56104800	WATER VALVES 6"	EACH	1	1				
* 56105000	WATER VALVES 8"	EACH	2	2				
* 56105100	WATER VALVES 10"	EACH	1	1				
* 56105200	WATER VALVES 12"	EACH	5	5				
* 56105300	WATER VALVES 16"	EACH	1	1				

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUMMARY OF QUANTITIES

SCALE: NONE
 DATE: 7/19/2006
 DRAWN BY: PMM
 CHECKED BY: BLL

7/19/2006 N:\LIBERTYVILLE\99-389\Civil\99389_01.dwg

LOCATION OF PROJECT: FAU 2647 (CH 57 (BUTTERFIELD ROAD)) LAKE COUNTY

SUMMARY OF QUANTITIES

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	4
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
* 5610640	ADJUSTING WATER MAIN 8"	FOOT	32					
* 5610650	ADJUSTING WATER MAIN 10"	FOOT	16					
* 5620070	WATER SERVICE LINE 2"	FOOT	63					
5620150	CORPORATION STOPS 1 1/2"	EACH	1					
* 5640040	FIRE HYDRANTS TO BE RELOCATED	EACH	2					
* 5640050	FIRE HYDRANTS TO BE REMOVED	EACH	8					
* 5640080	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	6					
* 5650060	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	1					
* 5650070	DOMESTIC WATER SERVICE BOXES TO BE REMOVED	EACH	1					
* 5650080	DOMESTIC WATER SERVICE BOXES	EACH	1					
6010000	FRENCH DRAINS	CU YD	25			25		
6010005	GEOTECHNICAL FABRIC FOR FRENCH DRAINS	SQ YD	200			200		
6020120	CATCH BASINS, TYPE A, 4-DIAMETER, TYPE 12 FRAME AND GRATE	EACH	3			3		
6020130	CATCH BASINS, TYPE A, 4-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	48			48		
6020760	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	11			11		
6020820	CATCH BASINS, TYPE C, TYPE 24 FRAME & GRATE	EACH	10			10		
6021470	RESTRICTED DEPTH CATCH BASINS, 4-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	5			5		
6021474	RESTRICTED DEPTH CATCH BASINS, 4-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	22			22		
6021630	RESTRICTED DEPTH CATCH BASINS, 5-DIAMETER, TYPE 8 GRATE	EACH	1			1		
6021694	RESTRICTED DEPTH CATCH BASINS, 5-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2			2		
6021840	MANHOLES, TYPE A, 4-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	15			15		
6022110	MANHOLES, TYPE A, 5-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	8			8		
6022380	MANHOLES, TYPE A, 6-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	6			6		
6022450	RESTRICTED DEPTH MANHOLES, 4-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	30			30		
6022512	RESTRICTED DEPTH MANHOLES, 4-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1			1		
6022540	RESTRICTED DEPTH MANHOLES, 5-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	10			10		
6022620	RESTRICTED DEPTH MANHOLES, 6-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2			2		
6022810	MANHOLES, SANITARY, WITH TYPE 1 FRAME, CLOSED LID	EACH	6					6
6023620	INLET TYPE A, TYPE 8 GRATE	EACH	3			3		
6023740	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	25			25		
6024035	INLETS, TYPE B, TYPE B-24 FRAME AND GRATE	EACH	5			5		
* 6024890	VALVE VAULTS, TYPE A, 5-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	9			9		
* 6024940	VALVE BOXES 5'	EACH	1			1		
6025020	CATCH BASINS TO BE ADJUSTED	EACH	1			1		
6025650	MANHOLES TO BE ADJUSTED	EACH	4			4		
6026570	VALVE VAULTS TO BE ADJUSTED	EACH	2			2		
6026650	VALVE VAULTS TO BE REMOVED	EACH	9			9		
6050004	REMOVING MANHOLES	EACH	27			27		
6050005	REMOVING CATCH BASINS	EACH	50			50		
6050006	REMOVING INLETS	EACH	8			8		
6060095	CLASS SI CONCRETE (OUTLET)	CU YD	9			9		
6060380	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-5, 12	FOOT	4835			4835		
6060500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-5, 24	FOOT	20622			20622		
6061830	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	1019			1019		
6062490	CORRUGATED MEDIAN	SQ FT	782			782		
6064055	CHAIN LINK FENCE, 6'	FOOT	525			525		

* SPECIALTY ITEM

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
6710010	MOBILIZATION	L SUM	1	1				
7010100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1				
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1660	1660				
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	72977	72977				
70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	54200	54200				
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	5039	5039				
70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	800	800				
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	701	701				
70300500	PAVEMENT MARKING TAPE, TYPE III	FOOT	18802	18802				
70300510	PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	1786	1786				
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	34397	34397				
70400100	TEMPORARY CONCRETE BARRIER	FOOT	7350	7350				
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	3660	3660				
72000100	SIGN PANEL TYPE 1	SQ FT	38				38	
72000200	SIGN PANEL TYPE 2	SQ FT	28				28	
73000100	WOOD SIGN SUPPORT	FOOT	28	28				
73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	10	10				
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1786	1786				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	40734	40734				
* 78000300	THERMOPLASTIC PAVEMENT MARKING - LINE 5"	FOOT	23407	23407				
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	6258	6258				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	2823	2823				
* 78000850	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	854	854				
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	665	665				
78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	1123	1123				
78300100	PAVEMENT MARKING REMOVAL	SQ FT	15467	15467				
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	665	665				
* 81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	12701				12701	
* 81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	168				168	
* 81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	158				158	
* 81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	38				38	
* 81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	2004				2004	
* 81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	1202				1202	
* 81400100	HANDHOLE	EACH	28				28	
* 81400200	HEAVY-DUTY HANDHOLE	EACH	4				4	
* 81400300	DOUBLE HANDHOLE	EACH	6				6	
* 81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	13191				13191	
* 81700215	ELECTRIC CABLE IN CONDUIT, 800V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	1657				1657	
* 82103250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	8				8	
* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	5				5	
* 85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	3				3	

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUMMARY OF QUANTITIES

SCALE: NONE
 DATE: 7/19/2006
 DRAWN BY: PMM
 CHECKED BY: BLL

LOCATION OF PROJECT: FAU 2647 (CH 57 (BUTTERFIELD ROAD)) LAKE COUNTY

SUMMARY OF QUANTITIES

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
* 86400100	TRANSCEIVER - FIBER OPTIC	EACH	3				3	
* 87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	4692				4692	
* 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	5254				5254	
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3721				3721	
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	4815				4815	
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN NO. 14 1-PAIR	FOOT	2342				2342	
* 87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 8 2C	FOOT	125				125	
* 87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	1				1	
* 87502490	TRAFFIC SIGNAL POST, GALVANIZED STEEL 15 FT.	EACH	1				1	
* 87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1				1	
* 87700200	STEEL MAST ARM ASSEMBLY AND POLE 32 FT	EACH	1				1	
* 87700280	STEEL MAST ARM ASSEMBLY AND POLE 48 FT	EACH	1				1	
* 87700300	STEEL MAST ARM ASSEMBLY AND POLE 52 FT	EACH	2				2	
* 87702940	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT.	EACH	1				1	
* 87704080	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)	EACH	2				2	
* 87704100	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1				1	
* 87704110	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	3				3	
* 87704140	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	1				1	
* 87704160	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT. (SPECIAL)	EACH	1				1	
* 87800100	CONCRETE FOUNDATION, TYPE A	FOOT	44				44	
* 87800200	CONCRETE FOUNDATION, TYPE D	FOOT	12				12	
* 87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15				15	
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	180				180	
* 87900200	DRILL EXISTING HANDHOLD	EACH	2				2	
* 88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	28				28	
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	10				10	
* 88600100	DETECTOR LOOP, TYPE I	FOOT	965				965	
* 88700200	LIGHT DETECTOR	EACH	8				8	
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	3				3	
* 88900100	PEDESTRIAN PUSH-BUTTON	EACH	19				19	
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2				2	
* 89502200	MODIFY EXISTING CONTROLLER	EACH	5				5	
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2				2	
* 89502380	REMOVE EXISTING HANDHOLE	EACH	25				25	
* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	24				24	
* A2004416	TREE, GINKGO BILOBA (GINKGO), 2" CALIPER, BALLED AND BURLAPPED	EACH	18		18			
* A3004816	TREE, GLEDITSIA TRIACANTHOS (JEROME SKYLINE (SKYLINE THORNLESS COMMON HONEYLOCUST)), 2" CALIPER, BALLED AND BURLAPPED	EACH	21		21			
* B2005516	TREE, PYRUS CALLERYANA ARISTOCRAT (ARISTOCRAT CALLERY PEAR), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	18		18			
* C2011424	SHRUB, SYRINGA VULGARIS (COMMON LILAC), 2" HEIGHT, BALLED AND BURLAPPED	EACH	158		158			
* D2000724	EVERGREEN, JUNIPERUS CHINENSIS VAR. SARGENTII VIVIDIS (GREEN SARGENT JUNPER), 2" WIDTH, BALLED AND BURLAPPED	EACH	72		72			
* K1005421	SEEDING (SPECIAL)	ACRE	1.04		1.04			

* SPECIALTY ITEM

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
* X1006661	UNINTERRUPTIBLE POWER SUPPLY	EACH	2				2	
X0301335	WATER MAIN REMOVAL 8"	FOOT	5461	5461				
X0320164	FURNISHING SOLDIER PILES	FOOT	445			445		
X0320561	SANITARY MANHOLES TO BE REMOVED	EACH	3			3		
X0320772	WATER MAIN REMOVAL 12"	FOOT	1053	1053				
X0321193	TEMPORARY GATCH BASINS	EACH	5	5				
X0322464	ABANDON AND FILL EXISTING SANITARY MANHOLE	EACH	2			2		
X0322671	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	167	167				
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1C	FOOT	16754				16754	
X0323381	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 12"	FOOT	308			308		
X0323382	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 15"	FOOT	93			93		
X0323383	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 18"	FOOT	148			148		
X0323428	SEDIMENT CONTROL, DRAINAGE STRUCTURE INLET FILTER CLEANING	EACH	121	121				
X0323430	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 24"	FOOT	116			116		
X0323494	DRILLING AND SETTING SOLDIER PILES	CU FT	1575			1575		
X0323522	AGGREGATE BACKFILL	TON	346	346				
X0323656	TEMPORARY RISER	EACH	1			1		
X0323827	WATER MAIN REMOVAL 10"	FOOT	2979	2979				
* X0323828	WATER MAIN REMOVAL 16"	FOOT	42	42				
X0323863	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 12"	FOOT	495			495		
X0323889	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 16"	FOOT	333			333		
X0330200	SANITARY MANHOLES TO BE ADJUSTED	EACH	3			3		
X4006334	AGGREGATE BASE COURSE, TYPE A (SPECIAL)	TON	2163	2163				
X4068414	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	151	151				
X4068426	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	TON	931	931				
X4068548	POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N80	TON	947	947				
X4068616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N70	TON	788	788				
X4067100	POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4 75, N50	TON	608	608				
X4073121	BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH), SUPERPAVE, 12"	SQ YD	69792	69792				
X4073131	BITUMINOUS CONCRETE PAVEMENT (FULL-DEPTH), SUPERPAVE, 12 1/2"	SQ YD	908	908				
X8013600	PIPE UNDERDRAINS 4" (MODIFIED)	FOOT	19300			19300		
X8063401	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12	FOOT	634	634				
X8063600	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24	FOOT	874	874				
X8700405	ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)	CAL MO	15	15				
X7015000	CHANGEABLE MESSAGE SIGN	CAL MO	24	24				
X7030010	TEMPORARY PAVEMENT MARKING TAPE, 6 INCH (BLACK)	FOOT	11250	11250				
X8050015	SERVICE INSTALLATION-POLE MOUNT	EACH	3			3		
X8710020	FIBER OPTIC CABLE IN CONDUIT, NO 62 5/125 MM12F & SM12F	FOOT	10247			10247		
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	1839			1839		
X8730250	ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	1973			1973		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUMMARY OF QUANTITIES

SCALE: NONE
 DATE: 7/19/2006
 DRAWN BY: PMW
 CHECKED BY: BLL

7/19/2006 N:\LIBERTYVILLE\99-389\Civil\99389_01.dwg

LOCATION OF PROJECT: FAU 2647 (CH 57 (BUTTERFIELD ROAD)) LAKE COUNTY

SUMMARY OF QUANTITIES

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	6
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
X8800020	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	16				16	
X8800035	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2				2	
X8800038	SIGNAL HEAD, L.E.D., 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	2				2	
X8800040	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5				5	
X8800045	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	10				10	
X8800060	SIGNAL HEAD, L.E.D., 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1				1	
X8800070	SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1				1	
X8805275	SIGNAL HEAD, L.E.D., 2-FACE, 1-3-SECTION, 1-4 SECTION, BRACKET MOUNTED	EACH	1				1	
X8805285	SIGNAL HEAD, L.E.D., 2-FACE, 1-4 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1				1	
X8810810	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2				2	
X8810820	PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE, BRACKET MOUNTED	EACH	1				1	
X000479	WATER MAIN REMOVAL 6 INCH	FOOT	108	108				
X000610	RELOCATE EXISTING MAILBOX	EACH	2	2				
X000882	WOOD FENCE	FOOT	793	793				
X001446	PLUG AND BLOCK WATER MAIN	EACH	15	15				
X001607	RETAINING WALL (SPECIAL)	SQ FT	6536			6536		
X002250	STRUCTURES TO BE REMOVED	EACH	1				1	
X0070200	SURVEY MONUMENTS	EACH	9	9				
X002968	TEMPORARY DITCH CHECKS (SPECIAL)	EACH	50	50				
X003353	FLARED END SECTION REMOVAL	EACH	10			10		
X003961	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	380				380	
X003985	IRRIGATION SYSTEM	L SUM	1		1			
X004679	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	16				16	
X004727	CAST-IN-PLACE CONCRETE WALL	SQ FT	5910			5910		
X004878	MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS	L SUM	1		1			
X004960	REMOVAL OF EXISTING STREET LIGHTING	EACH	7	7				
X004970	TEMPORARY PAVEMENT SUPERPAVE	TON	6411	6411				
X005178	HEMEROCALLIS 'CHICAGO APACHE' DAYLILY	EACH	411		411			
X005651	DRAINAGE BOARD	SQ FT	5910		5910			
X005723	VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	2			2		
X005940	REMOTE-CONTROLLED VIDEO SYSTEM	EACH	3			3		
X0011700	WATER MAIN FITTINGS	POUND	5999	5999				
Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	80672	80672				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1				
Z0019500	DUST CONTROL WATERING	UNIT	10	10				
Z0022800	FENCE REMOVAL	FOOT	1156	1156				
Z0030250	IMPACT ATTENUATOR, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	25	25				
Z0030350	IMPACT ATTENUATOR RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	16	16				
Z004665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1				

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	1000-1A	Y003	Y007	Y031-1F	NON-PARTICIPATING (VILLAGE)
Z0056900	SANITARY SEWER 8"	FOOT	19				19	
Z0057100	SANITARY SEWER 12"	FOOT	22				22	
Z0057400	SANITARY SEWER 21"	FOOT	20				20	
Z0079900	TRAINEES	HOURLY	2000	2000				
Z0077700	WOOD FENCE TO BE REMOVED AND RE-ERECTED	FOOT	36	36				
XX006633	DUCTILE IRON PIPE INSTALLED IN STEEL CASING, 12"	FOOT	116	116				
XX006634	DUCTILE IRON PIPE INSTALLED IN STEEL CASING, 16"	FOOT	13	13				
XX006635	MANHOLE, TYPE A, FRAME AND LID (SPECIAL)	EACH	1	1				
XX006636	SANITARY SEWER (DIRECTIONAL BORE) 18"	FOOT	369				369	
XX006637	SANITARY SEWER (DIRECTIONAL BORE) 21"	FOOT	580				580	
XX006638	STEEL CASING PIPE IN OPEN CUT, 20"	FOOT	82	82				
XX006639	STEEL CASING PIPE IN OPEN CUT, 30"	FOOT	21	21				
XX006640	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 30"	FOOT	107			107		
XX006641	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 1, 36"	FOOT	70			70		
XX006642	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 15"	FOOT	455			455		
XX006643	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 24"	FOOT	114			114		
XX006644	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 2, 30"	FOOT	447			447		
XX006645	STORM SEWERS, (WATER MAIN REQUIREMENTS) TYPE 3, 18"	FOOT	198			198		
XX006646	TREATMENT STRUCTURES	EACH	1			1		
XX006647	WATER MAIN REMOVAL 1-1/2"	FOOT	195	195				
XX006660	WEEDLANDS	EACH	50		50			
XX005022	LANDSCAPING - PLANTER	LUM SUM	1		1			
XX006648	TEMPORARY STORM SEWER 12"	FOOT	35	35				
XX006649	TEMPORARY STORM SEWER 18"	FOOT	35	35				
XX006522	FURNISH WITNESS POST	EACH	22	22				
XX006650	MEDIAN SIGN	EACH	2	2				
XX006652	STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)	SQ FT	13249	13249				
XX006651	MEDIAN SIGN (SPECIAL)	EACH	2	2				
XX006653	FENCE (SPECIAL)	FOOT	300			300		
XX006357	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR	FOOT	1657			1657		
XX006654	FIBER OPTIC CABLE CONDUIT, No 62 5/125 MM12F & SM24F	FOOT	6590			6590		
XX005937	L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	8			8		
XX006655	LAYER II (DATA) LINK SWITCH	EACH	3			3		
XX006656	MODIFY EXISTING VIDEO TRANSMISSION SYSTEM	EACH	1			1		
XX006657	RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1			1		
XX005931	TRAFFIC SIGNAL POST, 16 FT (SPECIAL)	EACH	8			8		
XX006658	FLOCCULATION LOGS	EACH	100		100			
XX006659	FLOCCULATION POWDER	POUND	250		250			

△ - Y080

* SPECIALTY ITEM

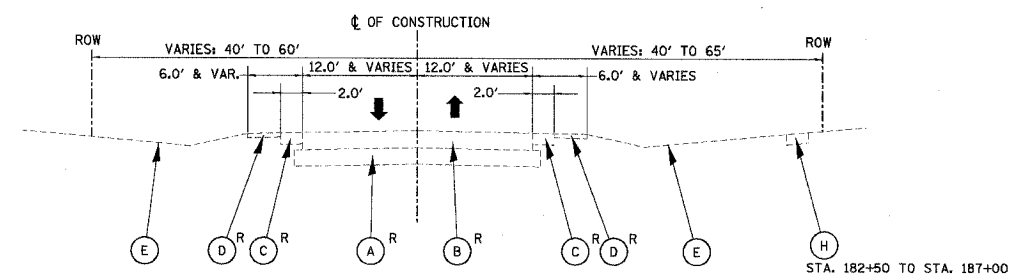
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUMMARY OF QUANTITIES

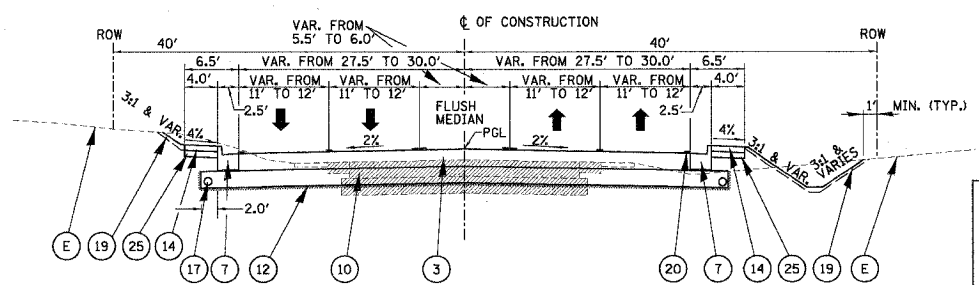
SCALE: NONE
 DATE: 7/19/2006

DRAWN BY: PMM
 CHECKED BY: BLL

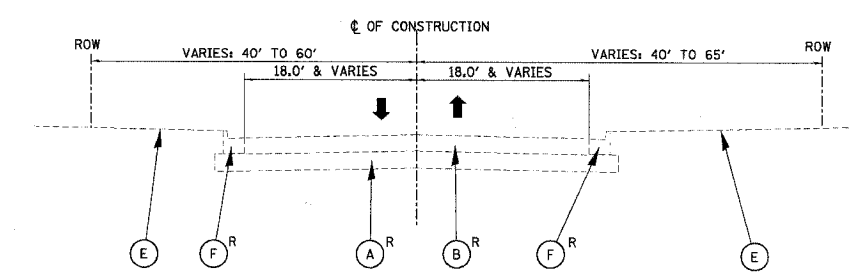
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	7
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



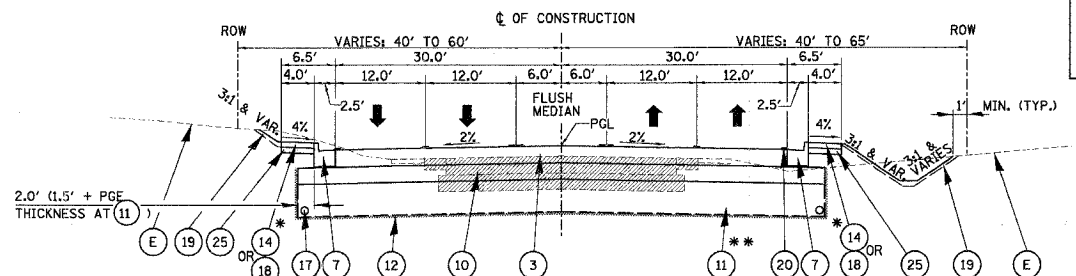
EXISTING TYPICAL SECTION - BUTTERFIELD ROAD
 STA. 121+66.00 TO STA. 123+00
 STA. 126+50 TO STA. 144+00
 STA. 157+00 TO STA. 161+50
 STA. 164+00 TO STA. 176+00
 STA. 182+50 TO STA. 187+00



PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD
 STA. 121+66.00 TO STA. 122+79
 (TRANSITION FROM 11' WIDE LANES TO 12' WIDE LANES)



EXISTING TYPICAL SECTION - BUTTERFIELD ROAD
 STA. 123+00 TO STA. 126+50
 STA. 144+00 TO STA. 157+00
 STA. 161+50 TO STA. 164+00
 STA. 187+00 TO STA. 193+50
 (GENERALLY WHERE CHANNELIZATION EXISTS)



PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD
 STA. 122+79 TO STA. 167+50
 STA. 175+15.70 TO STA. 184+25
 STA. 188+50 TO STA. 191+65.31

STRUCTURAL DESIGN TRAFFIC: YEAR 2025
 PV = 27500 SU = 1485 MU = 963

ROAD/STREET CLASSIFICATION: I

PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
 PV = 32% SU = 45% MU = 45%

TRAFFIC FACTOR: ACTUAL TF = 8.7 AC TYPE SBS/SBR PG 70-22
 MINIMUM TF = 6.0

SUBGRADE SUPPORT RATING: POOR

* BITUMINOUS SHOULDER LIMITS:
 STA. 121+66 TO STA. 149+19 (L.T.)
 STA. 121+66 TO STA. 124+77 (RT.)
 STA. 125+28 TO STA. 149+30 (RT.)
 STA. 149+95 TO STA. 162+66 (L.T.)
 STA. 163+50 TO STA. 179+09 (RT.)
 STA. 179+97 TO STA. 185+75 (L.T.)
 STA. 185+92 TO STA. 186+70 (L.T.)
 STA. 187+12 TO STA. 196+17 (L.T.)
 STA. 196+87 TO STA. 200+04 (L.T.)

** PGES LIMITS:
 STA. 153+00 TO STA. 159+00
 STA. 161+00 TO STA. 162+50
 STA. 183+50 TO STA. 198+00
 ESTIMATED QUANTITY WAS
 BASED ON ROADWAY SOILS
 INVESTIGATION; ACTUAL LOCATION
 AND DEPTH OF UNDERCUTS
 WILL BE DETERMINED IN THE FIELD
 BY THE ENGINEER. PROPOSED
 EXCAVATION TO SUBGRADE
 ELEVATION WILL BE PAID AS
 EARTH EXCAVATION.

BITUMINOUS MIX REQUIREMENTS

PAY ITEM	AC TYPE	VOIDS	MAX RAP %
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70	PG 64-22	4% @ 70 GYR.	10
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90	SBS/SBR PG 70-22	4% @ 90 GYR.	0
BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE 12"			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N70; 2"	PG 64-22	4% @ 70 GYR.	10
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70; 10"	PG 64-22	4% @ 70 GYR.	15
BITUMINOUS CONCRETE PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"			
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"			
POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"	SBS/SBR PG 70-22	4% @ 90 GYR.	0
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 GYR.	15
TEMPORARY PAVEMENT			
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N50; 1-3/4"	PG 64-22	4% @ 50 GYR.	15
BITUMINOUS BASE COURSE, SUPERPAVE; 6-1/4"	PG 58-22	2% @ 50 GYR.	50
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50 (BITUMINOUS DRIVEWAYS AND MAILBOX TURNOUTS)	PG 64-22	4% @ 50 GYR.	15
POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50	SBS/SBR PG 76-28	2.5% @ 50 GYR.	0
CLASS D PATCHES, TYPE I - IV, 12" IL-19MM	PG 64-22	4% @ 70 GYR.	15

NOTE:
 FOR DESIGN AND ESTIMATION PURPOSES, ALL BITUMINOUS CONCRETE
 PAVEMENT QUANTITIES WERE CALCULATED USING 112 LB/SQ YD
 PER INCH THICKNESS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
BUTTERFIELD ROAD
TYPICAL SECTIONS
STA. 121+66.00 TO STA. 200+35.50
 SCALE: NONE DRAWN BY: BLL,ELA
 DATE: 12/22/2005 CHECKED BY: BLL

PROPOSED LEGEND

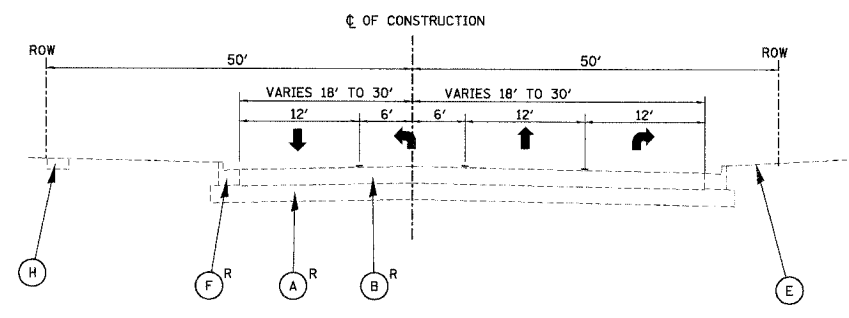
EXISTING LEGEND

- (A) EXISTING AGGREGATE BASE
- (B) EXISTING BITUMINOUS PAVEMENT
- (C) EXISTING BITUMINOUS SHOULDER
- (D) EXISTING GRAVEL SHOULDER
- (E) EXISTING GROUND LINE
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING CONCRETE PAVEMENT REMOVAL
- (H) EXISTING SIDEWALK
- (J) EXISTING MEDIAN SURFACE

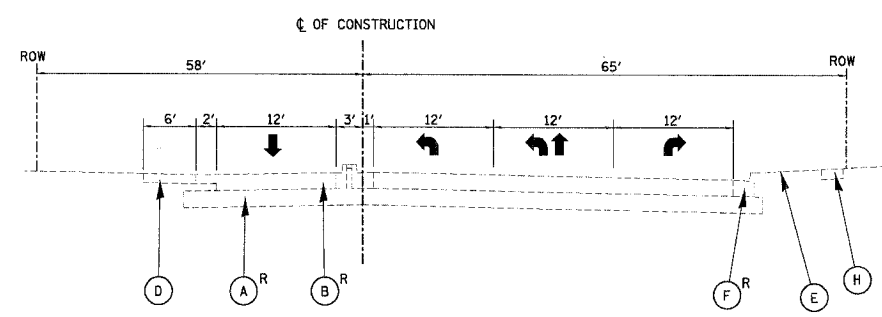
- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"
 - POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"
 - BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS
 - (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")
 - (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES: 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SODDING FERTILIZER NUTRIENTS FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL); 4"

12/22/2005
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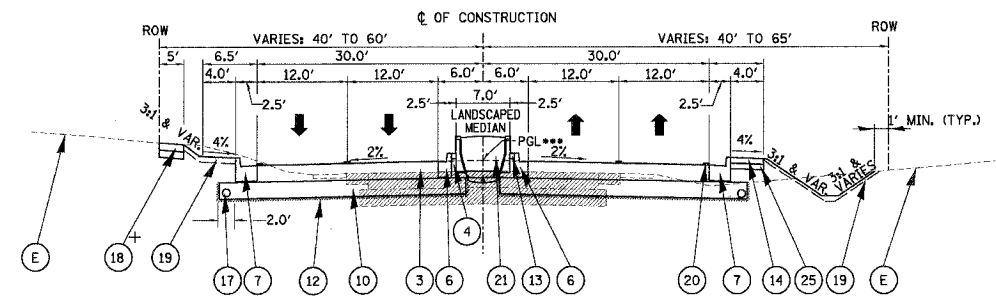
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	8
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



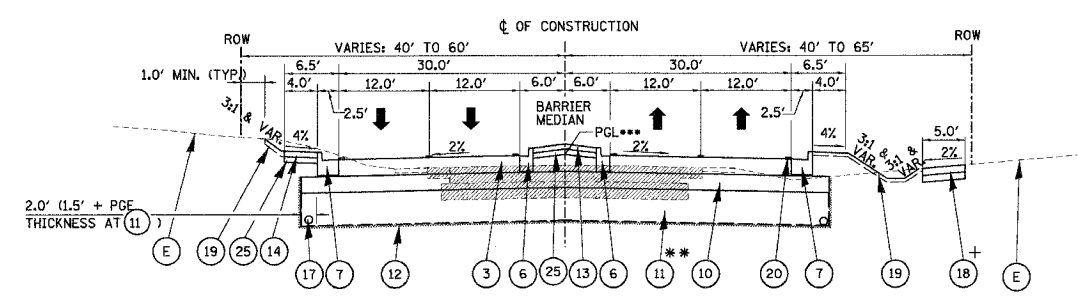
EXISTING TYPICAL SECTION - BUTTERFIELD ROAD
STA. 176+00 TO STA. 182+50



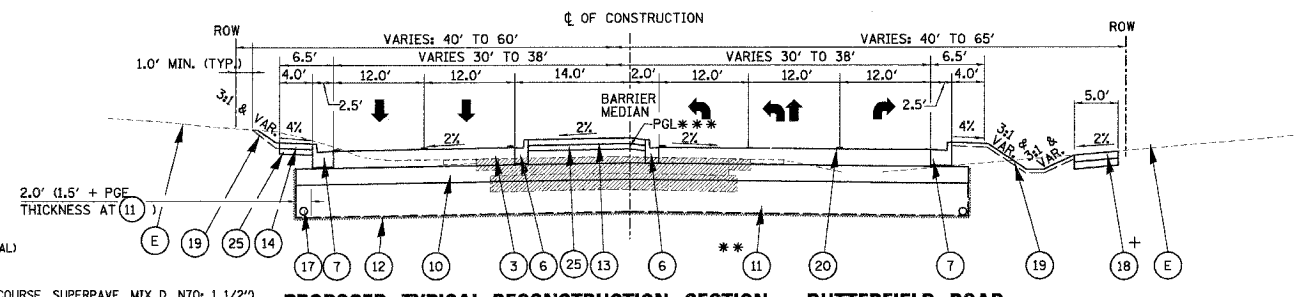
EXISTING TYPICAL SECTION - BUTTERFIELD ROAD
STA. 193+50 TO STA. 200+35



PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD
STA. 167+50 TO STA. 175+15.70



PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD
STA. 184+25 TO STA. 188+50
OMISSION STA. 185+77.36 TO STA. 185+90.37



PROPOSED TYPICAL RECONSTRUCTION SECTION - BUTTERFIELD ROAD
STA. 191+65.31 TO STA. 200+35.00

EXISTING LEGEND

- (A) EXISTING AGGREGATE BASE
- (B) EXISTING BITUMINOUS PAVEMENT
- (C) EXISTING BITUMINOUS SHOULDER
- (D) EXISTING GRAVEL SHOULDER
- (E) EXISTING GROUND LINE
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING CONCRETE PAVEMENT REMOVAL
- (H) EXISTING SIDEWALK
- (J) EXISTING MEDIAN SURFACE

--- R = REMOVAL

PROPOSED LEGEND

- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"
 - POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"
 - BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS
 - (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")
 - (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES: 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SODDING FERTILIZER NUTRIENTS FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL); 4"

+ SIDEWALK LIMITS:
 STA. 162+43 TO STA. 162+58 (LT.)
 STA. 162+43 TO STA. 162+60 (RT.)
 STA. 163+30 TO STA. 163+44 (LT.)
 STA. 163+34 TO STA. 168+80 (LT.)
 STA. 171+05 TO STA. 171+15 (LT.)
 STA. 174+26 TO STA. 174+36 (LT.)
 STA. 176+14 TO STA. 176+24 (LT.)
 STA. 179+13 TO STA. 179+28 (LT.)
 STA. 179+22 TO STA. 179+28 (RT.)
 STA. 179+78 TO STA. 179+98 (LT.)
 STA. 179+80 TO STA. 185+56 (LT.)

+ SIDEWALK LIMITS:
 STA. 186+54 TO STA. 186+81 (RT.)
 STA. 187+50 TO STA. 190+63 (RT.)

*** EOP IS PROJECTED GRADE OF 2% FROM PGL

+ SIDEWALK LIMITS:
 STA. 191+60 TO STA. 191+75 (RT.)
 STA. 192+22 TO STA. 192+37 (RT.)
 STA. 193+06 TO STA. 196+06 (RT.)
 STA. 196+81 TO STA. 196+96 (RT.)
 STA. 199+78 TO STA. 200+26 (RT.)

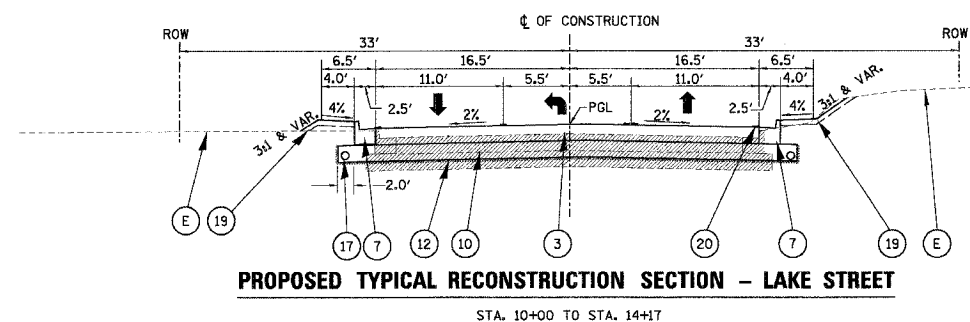
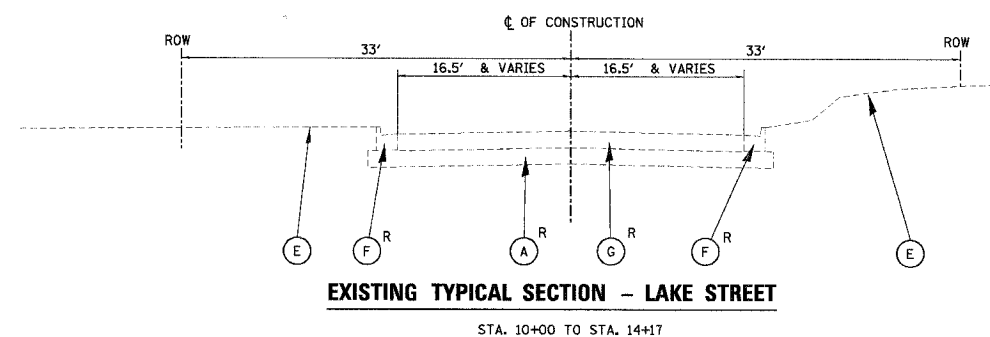
** PGE LIMITS:
 STA. 153+00 TO STA. 159+00
 STA. 161+00 TO STA. 162+50
 STA. 183+50 TO STA. 198+00

ESTIMATED QUANTITY WAS BASED ON ROADWAY SOILS INVESTIGATION: ACTUAL LOCATION AND DEPTH OF UNDERCUTS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER. PROPOSED EXCAVATION TO SUBGRADE ELEVATION WILL BE PAID AS EARTH EXCAVATION

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
BUTTERFIELD ROAD
TYPICAL SECTIONS
STA. 121+66.00 TO STA. 200+35.50
 SCALE: NONE DRAWN BY: BLL,ELA
 DATE: 12/22/2005 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	9
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING LEGEND

- (A) EXISTING AGGREGATE BASE
- (B) EXISTING BITUMINOUS PAVEMENT
- (C) EXISTING BITUMINOUS SHOULDER
- (D) EXISTING GRAVEL SHOULDER
- (E) EXISTING GROUND LINE
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING CONCRETE PAVEMENT REMOVAL
- (H) EXISTING SIDEWALK
- (J) EXISTING MEDIAN SURFACE

▨, R = REMOVAL

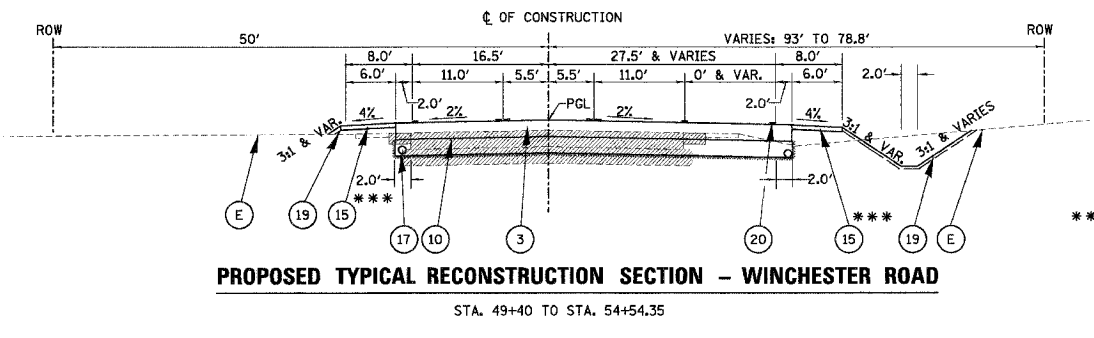
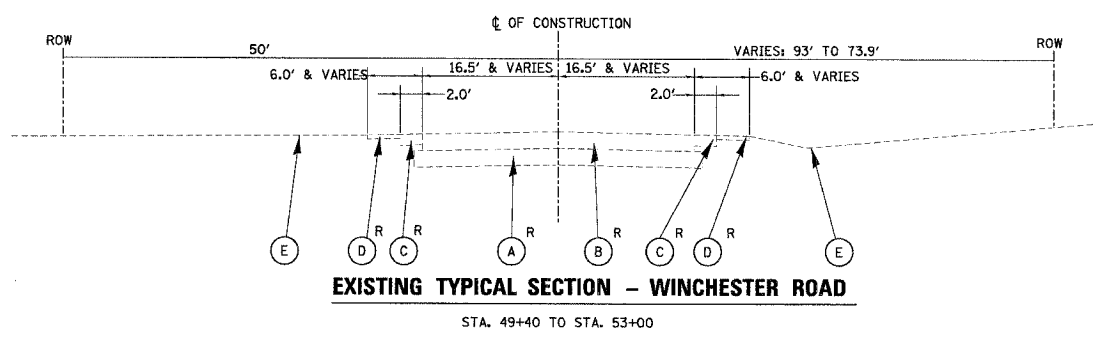
PROPOSED LEGEND

- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"
- POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"
- BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"
- BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS
- (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")
- (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES; 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SODDING
FERTILIZER NUTRIENTS
FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"
- BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL); 4"

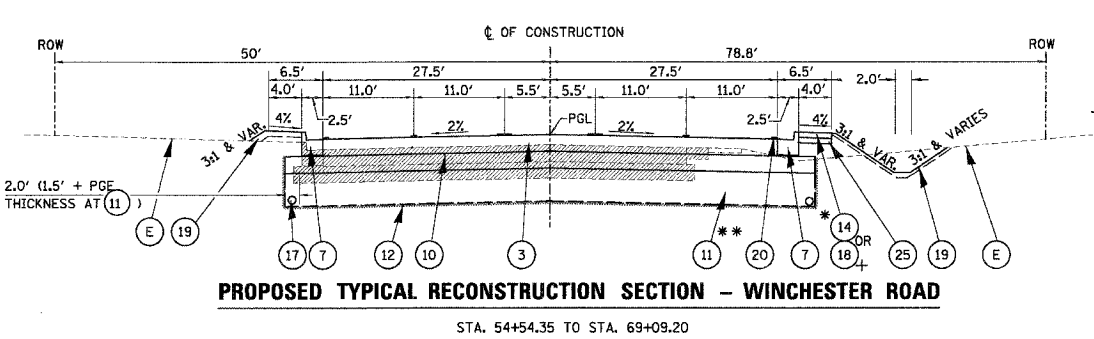
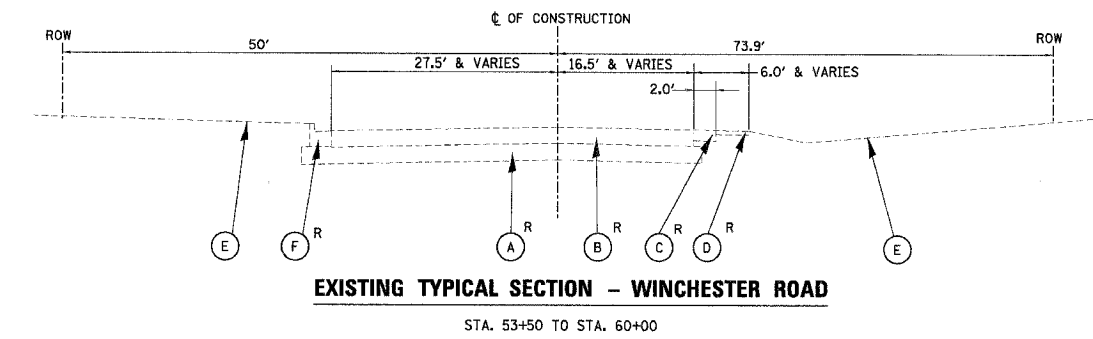
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
LAKE STREET
TYPICAL SECTIONS
STA. 9 + 11.52 TO STA. 14 + 17.00
SCALE: NONE
DATE: 12/22/2005
DRAWN BY: BLL,ELA
CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	10
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

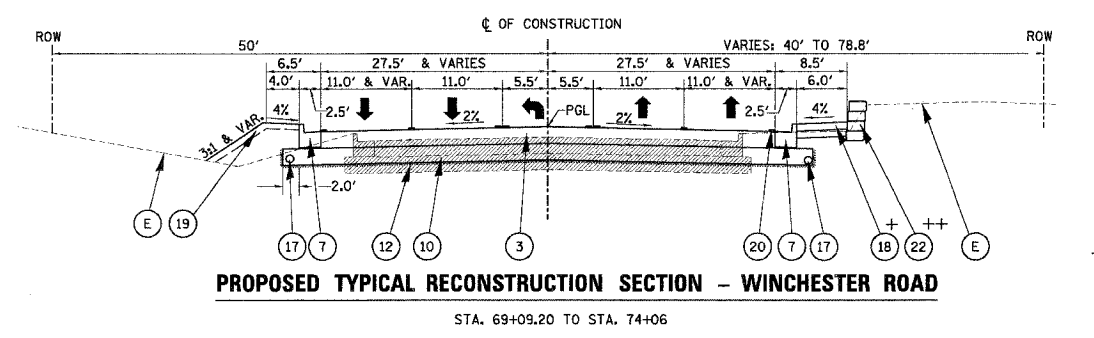
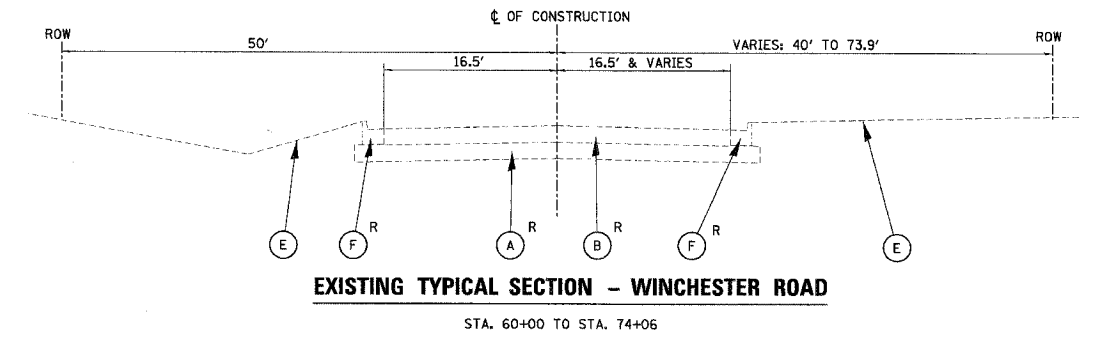


*** AGGREGATE SHOULDER LIMITS:
STA. 49+40 TO STA. 54+58 (L.T.)
STA. 49+40 TO STA. 54+36 (RT.)



+ SIDEWALK LIMITS:
STA. 53+42 TO STA. 53+55 (L.T.)
STA. 53+96 TO STA. 54+11 (L.T.)
STA. 65+22 TO STA. 65+62 (L.T.)
STA. 67+80 TO STA. 71+70 (RT.)
STA. 67+91 TO STA. 68+31 (L.T.)

* BITUMINOUS SHOULDER LIMITS:
STA. 54+36 TO STA. 63+15 (RT.)



+ SIDEWALK LIMITS:
STA. 72+91 TO STA. 73+40 (L.T.)
STA. 73+21 TO STA. 73+30 (RT.)
STA. 73+68 TO STA. 74+11 (L.T.)
STA. 73+78 TO STA. 73+92 (RT.)

++ WALL LIMITS:
STA. 68+20 TO STA. 70+00

PROPOSED LEGEND

EXISTING LEGEND

- (A) EXISTING AGGREGATE BASE
- (B) EXISTING BITUMINOUS PAVEMENT
- (C) EXISTING BITUMINOUS SHOULDER
- (D) EXISTING GRAVEL SHOULDER
- (E) EXISTING GROUND LINE
- (F) EXISTING CONCRETE CURB & GUTTER
- (G) EXISTING CONCRETE PAVEMENT REMOVAL
- (H) EXISTING SIDEWALK
- (J) EXISTING MEDIAN SURFACE

/// R = REMOVAL

- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"
- POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"
- BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"
- BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS
- (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")
- (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES: 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SODDING
FERTILIZER NUTRIENTS
FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"
- BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL) 4"

** PGES LIMITS:
STA. 54+00 TO STA. 57+00
STA. 64+00 TO STA. 67+00

ESTIMATED QUANTITY WAS
BASED ON ROADWAY SOILS
INVESTIGATION; ACTUAL LOCATION
AND DEPTH OF UNDERCUTS
WILL BE DETERMINED IN THE FIELD
BY THE ENGINEER. PROPOSED
EXCAVATION TO SUBGRADE
ELEVATION WILL BE PAID AS
EARTH EXCAVATION

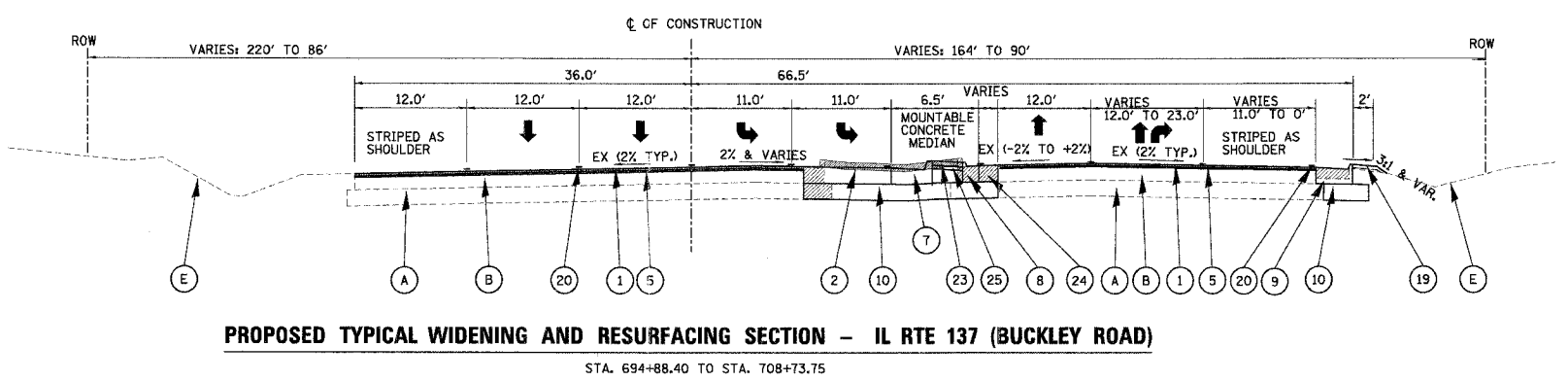
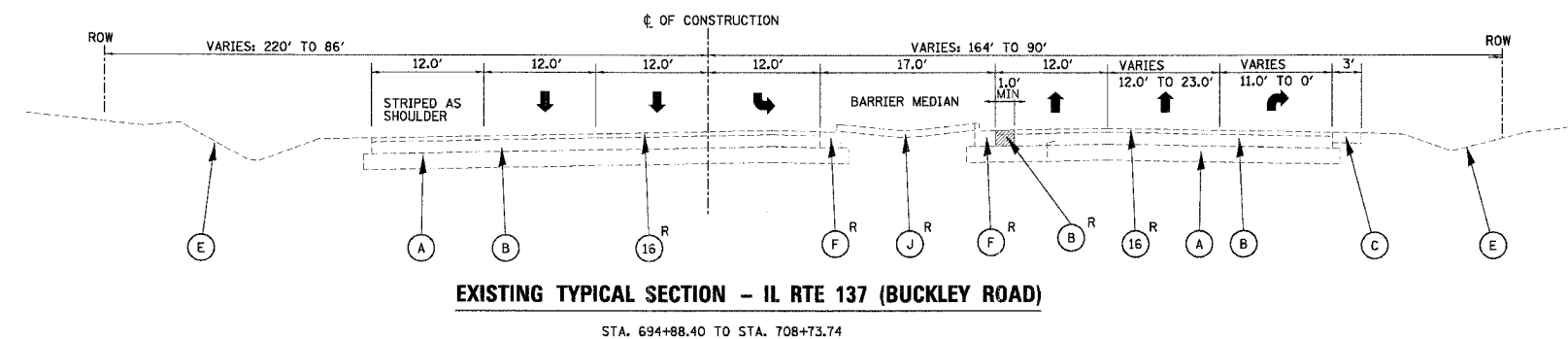
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
WINCHESTER ROAD
TYPICAL SECTIONS
STA. 49 + 50 TO STA. 74 + 06**

SCALE: NONE
DATE: 12/22/2005

DRAWN BY: BLL,ELA
CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	11
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT	



SIDEWALK LIMITS:
 STA. 699+58 TO STA. 699+65 (L.T.)
 STA. 700+31 TO STA. 700+47 (L.T.)

EXISTING LEGEND

- (A) EXISTING AGGREGATE BASE
 - (B) EXISTING BITUMINOUS PAVEMENT
 - (C) EXISTING BITUMINOUS SHOULDER
 - (D) EXISTING GRAVEL SHOULDER
 - (E) EXISTING GROUND LINE
 - (F) EXISTING CONCRETE CURB & GUTTER
 - (G) EXISTING CONCRETE PAVEMENT REMOVAL
 - (H) EXISTING SIDEWALK
 - (J) EXISTING MEDIAN SURFACE
- R = REMOVAL

PROPOSED LEGEND

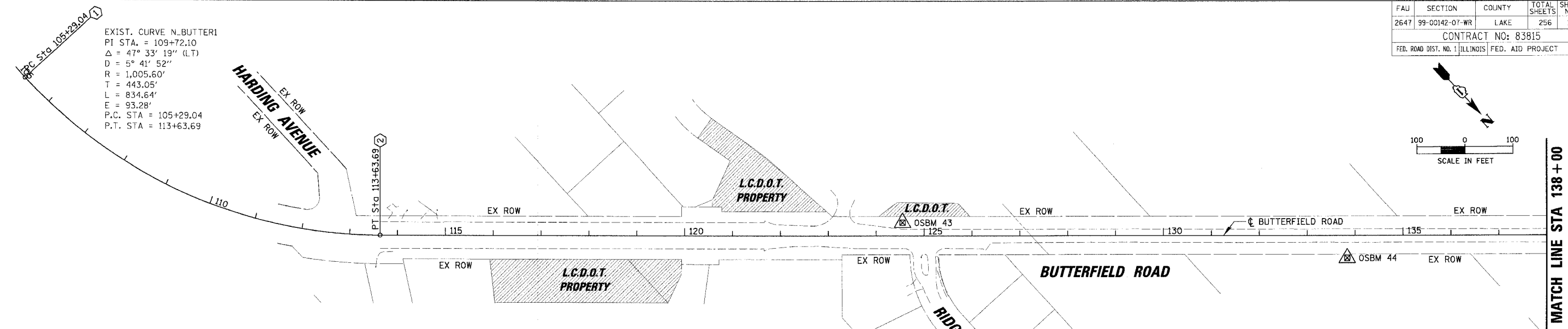
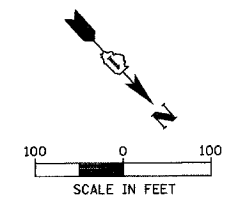
- (1) POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
- (2) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12 1/2"
 - POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1-3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N90; 10"
- (3) BITUMINOUS CONC. PAVEMENT (FULL DEPTH), SUPERPAVE 12"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 2"
 - BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (4) AGGREGATE BACKFILL
- (5) POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
- (6) COMBINATION CONC. CURB & GUTTER, TY B-6.12
- (7) COMBINATION CONC. CURB & GUTTER, TY B-6.24
- (8) COMBINATION CONC. CURB & GUTTER, TY M-4.12
- (9) COMBINATION CONC. CURB & GUTTER, TY M-4.24
- (10) AGGREGATE SUBGRADE 12"
- (11) POROUS GRANULAR EMBANKMENT SUBGRADE, UNDERCUTTING (PAID AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL)
- (12) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (13) STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)
- (14) BITUMINOUS SHOULDERS
 - (PAID AS BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX D, N70; 1 1/2")
 - (PAID AS BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 2 1/2")
- (15) AGGREGATE SHOULDER, TYPE A 6"
- (16) BITUMINOUS SURFACE REMOVAL 2 1/2" (VARIES: 2 1/2" TO 3")
- (17) PIPE UNDERDRAINS 4" (MODIFIED)
- (18) PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL
 OVER 4" AGGREGATE BASE COURSE TYPE A (SPECIAL) (INCLUDED IN SIDEWALK COST)
- (19) SOODING FERTILIZER NUTRIENTS FURNISHING AND PLACING TOPSOIL, 4"
- (20) PAVEMENT MARKINGS
- (21) LANDSCAPED MEDIAN
- (22) RETAINING WALL (SPECIAL)
- (23) CONCRETE MEDIAN SURFACE 4 INCH
- (24) BITUMINOUS SHOULDER (FULL DEPTH), SUPERPAVE 12 1/2"
 - BITUMINOUS CONC. SURFACE COURSE, SUPERPAVE, MIX "F", N90; 1 3/4"
 - POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 3/4"
 - POLYMERIZED BITUMINOUS CONC. BINDER COURSE, SUPERPAVE, IL-19, N70; 10"
- (25) AGGREGATE BASE COURSE TYPE A (SPECIAL); 4"

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
IL RTE 137 (BUCKLEY ROAD)
TYPICAL SECTIONS
STA. 694+18.88 TO STA. 707+20
 SCALE: NONE
 DATE: 12/22/2005
 DRAWN BY: BLL,ELA
 CHECKED BY: BLL

12/22/2005
 m:\liber\ty\09-389\01\11\99389.txd

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	15
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

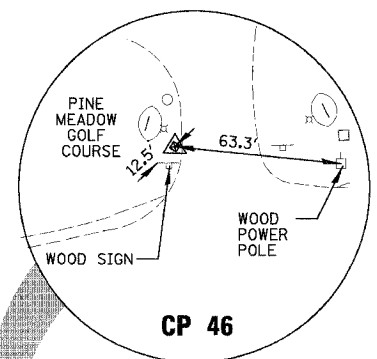


* MONUMENT

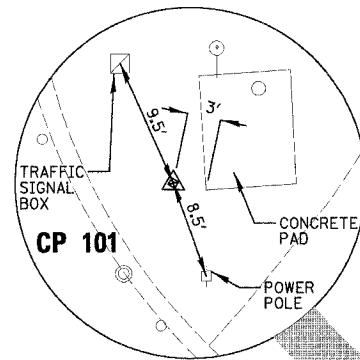
ID. #	STATION	OFFSET	NORTHING (Y)	EASTING (X)	DESCRIPTION
①	105+29.04	℄	2,045,621.81	1,081,506.26	PC
②	113+63.69	℄	2,046,364.10	1,081,179.84	PT
③	138+02.86	℄	2,048,011.50	1,079,381.05	PC
④	149+56.32	℄	2,049,015.12	1,078,862.31	POC
⑤	151+67.61	℄	2,049,225.89	1,078,849.59	PT
⑥	162+94.12	℄	2,050,352.40	1,078,854.38	POT
⑫	15+00.00	℄	2,049,014.63	1,079,362.31	POT

NO.	DESCRIPTION	ELEV.
OSBM 43	3/4" IRON PIPE WITH CAP AT WEST SIDE OF BUTTERFIELD ROAD JUST SOUTH OF RIDGEWOOD LANE	710.73
OSBM 44	3/4" IRON PIPE WITH CAP AT EAST SIDE OF BUTTERFIELD ROAD JUST NORTH OF THE COMED RIGHT-OF-WAY	731.28
OSBM 45	3/4" IRON PIPE WITH CAP AT WEST SIDE OF BUTTERFIELD ROAD ABOUT 800' ± SOUTH OF LAKE STREET BY THE JAWA VALVES	746.72
OSBM LAKE	ARROW BOLT OF FIRE HYDRANT A NORTHEAST CORNER OF BUTTERFIELD & LAKE STREET	743.67
OSBM 100	SMALL RAILROAD SPIKE WITH X-CUT AT EAST SIDE OF BUTTERFIELD ROAD ABOUT 500' ± SOUTH OF WINCHESTER ROAD AT END OF CURB AND GUTTER	739.68
OSBM WINCHESTER	SEMI-CIRCULAR SOUTHEAST CORNER OF CONCRETE BASE OF BRICK FENCE POST (THE SOUTHERN MOST BRICK FENCE POST IN THE NORTHWEST CORNER OF BUTTERFIELD & WINCHESTER ROAD)	732.55

NOTE: PK NAILS HAVE BEEN SET AT ALL+00 STATIONS AT PROPOSED CENTERLINES



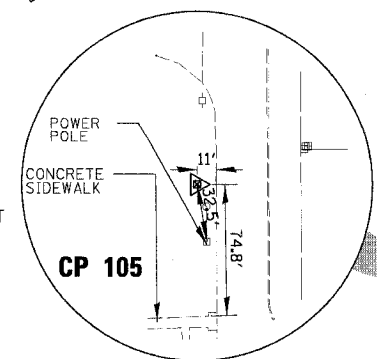
CP 46
STA. 149+45.63
OFFSET 52.51' LT
SET IRON PIPE
N= 2048997.64
E= 1078811.62
EL= 741.65



CP 101
STA. 163+31.97
OFFSET 46.47' LT
SET IRON PIPE
N= 2050390.42
E= 1078808.07
EL= 731.24

9 EACH - SURVEY MONUMENTS (INSTALL ONLY) TO BE INSTALLED BY CONTRACTOR AT ALIGNMENT POINT NUMBERS 3, 4, 5, 6, 7, 8, 9, 10, AND 11.

PROP. CURVE PB1
PI STA. = 145+27.70
Δ = 47° 45' 32" (RT)
D = 3° 29' 58"
R = 1,637.28'
T = 724.84'
L = 1,364.75'
E = 153.27'
P.C. STA = 138+02.86
P.T. STA = 151+67.61
SE = 3.2%



CP 105
STA. 15+70.79
OFFSET 26.44' RT
SET IRON PIPE
N= 2048988.1177
E= 1079433.0790
EL= 735.26

SEE SHEET NO. 17
WINCHESTER ROAD

WINCHESTER ROAD
SEE SHEET NO. 17

MATCH LINE STA 168+00
SEE SHEET NO. 16

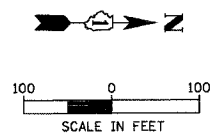
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
ALIGNMENT, TIES AND BENCHMARKS
STA. 105+29.04 TO STA. 168+00**

SCALE: 1"=100
DATE: 12/2/2005
DRAWN BY: ELA
CHECKED BY: JRM

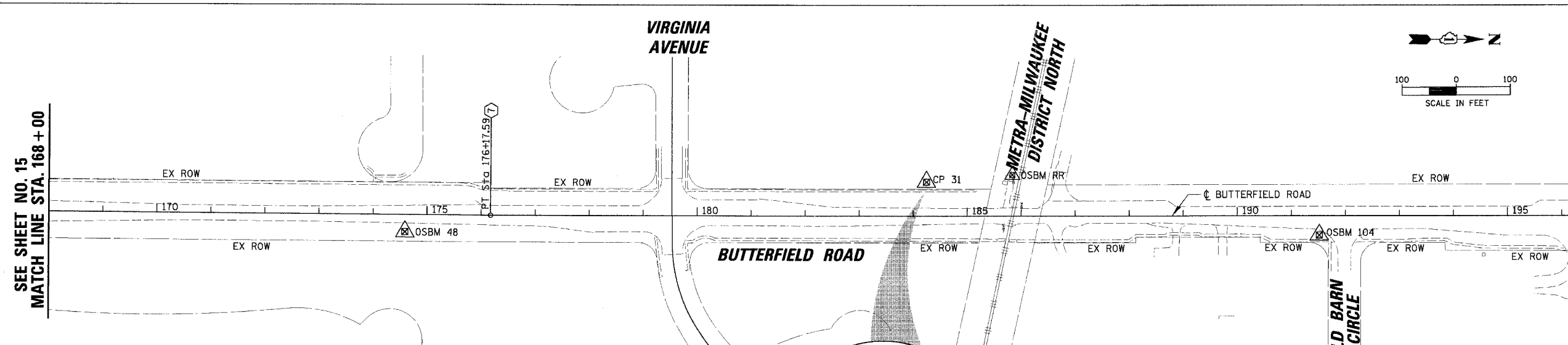
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	16
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



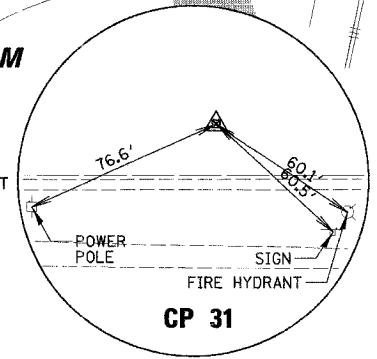
SEE SHEET NO. 15
MATCH LINE STA. 168+00

MATCH LINE STA. 198+00



ST. WILLIAM DRIVE

CP 31
STA. 184+22.34
OFFSET 69.35' LT
SET IRON PIPE
N= 2052480.42
E= 1078788.76
EL= 737.75



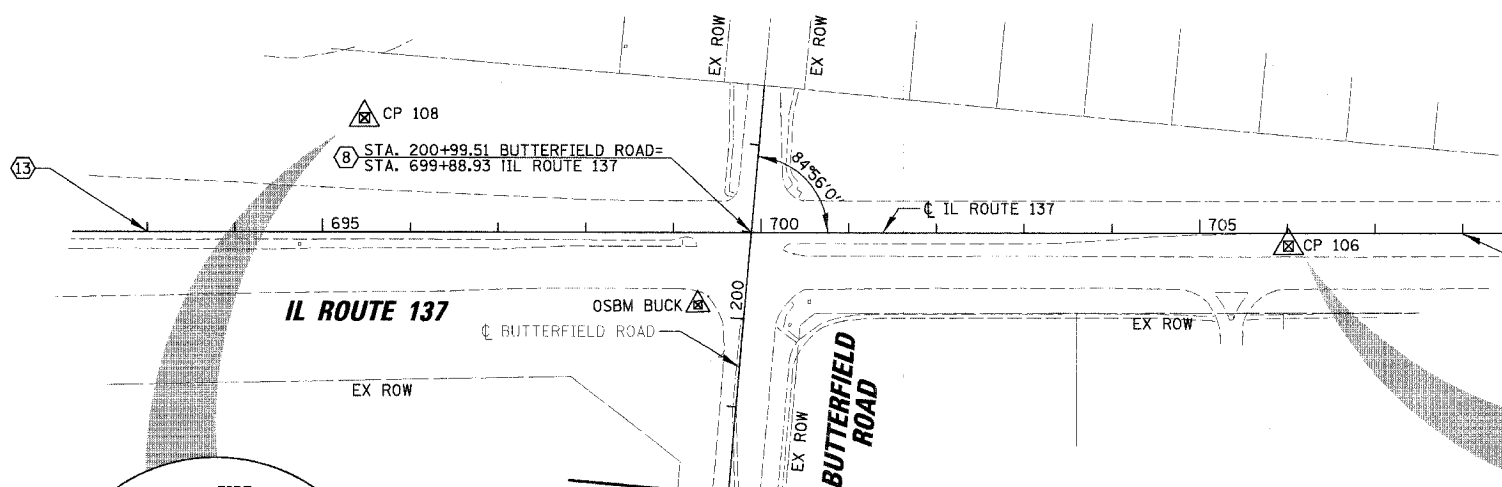
ELEVATION BENCHMARKS DATUM: NGVD OF 1929		
NO.	DESCRIPTION	ELEV.
OSBM 48	3/4" IRON PIPE WITH CAP AT EAST SIDE OF BUTTERFIELD ROAD BETWEEN WINCHESTER AND VIRGINIA AVE AT CENTERLINE OF ERIC LANE EXTENDED	741.63
OSBM RR	CUT SQUARE ON SOUTH FACE OF RAILROAD SIGNAL TOWER AT THE SOUTHWEST CORNER OF THE METRA MILWAUKEE DISTRICT NORTH RAILROAD & BUTTERFIELD ROAD	735.86
OSBM 104	X-CUT SET IN CONCRETE WALK AT SOUTHEAST CORNER OF BUTTERFIELD ROAD AND OLD BARN CIRCLE	733.90
OSBM BUCK	SQUARE CUT ON WEST FACE OF TRAFFIC LIGHT BASE AT SOUTHWEST CORNER OF BUTTERFIELD & ROUTE 137	722.25

* MONUMENT

ALIGNMENT POINTS					
ID.#	STATION	OFFSET	NORTHING (Y)	EASTING (X)	DESCRIPTION
* 7	176+17.59	CL	2,051,675.84	1,078,860.01	POT
* 8	699+88.93	CL	2,054,157.75	1,078,854.14	POT
13	693+00.00	CL	2,054,095.28	1,078,168.05	POT
14	708+00.00	CL	2,054,231.29	1,079,661.87	POT

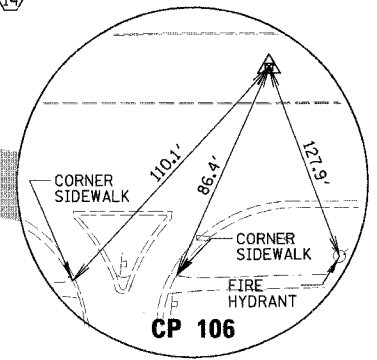
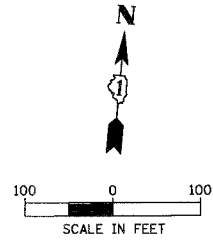
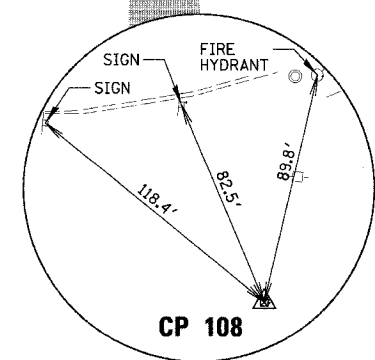
9 EACH - SURVEY MONUMENTS (INSTALL ONLY)
TO BE INSTALLED BY CONTRACTOR AT
ALIGNMENT POINT NUMBERS 3, 4, 5, 6, 7, 8,
9, 10, AND 11.

NOTE: PK NAILS HAVE BEEN SET AT ALL+00
STATIONS AT PROPOSED CENTERLINES



**BUTTERFIELD ROAD
MATCH LINE STA. 198+00**

CP 108
STA. 695+45.61
OFFSET 124.92' LT
SET IRON PIPE
N= 2054241.96
E= 1078401.32
EL= 722.56



CP 106
STA. 705+91.77
OFFSET 13.44' RT
SET IRON PIPE
N= 2054199.02
E= 1079455.72
EL= 726.91

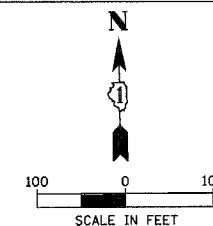
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
ALIGNMENT, TIES AND BENCHMARKS
STA. 168+00 TO STA. 198+00
IL ROUTE 137**

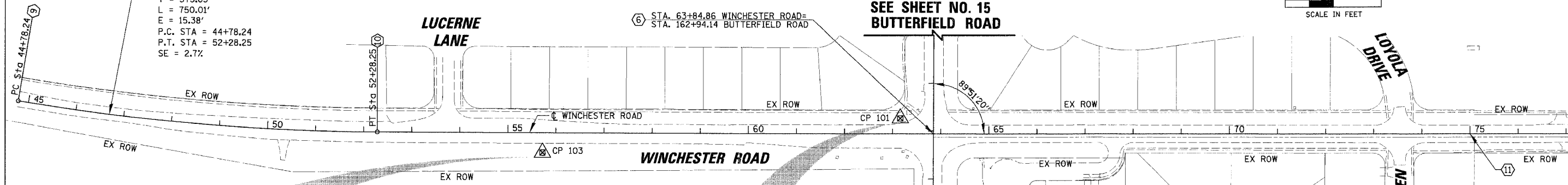
SCALE: 1"=100
DATE: 12/2/2005
DRAWN BY: ELA
CHECKED BY: JRM

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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	17
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



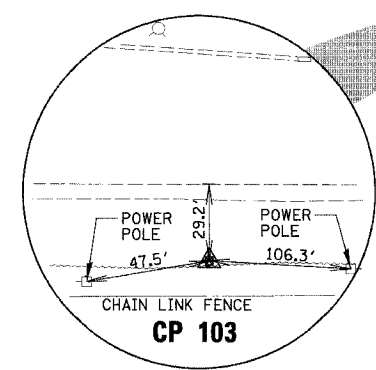
PROP. CURVE WINCHEST
 PI STA. = 48+54.09
 $\Delta = 9^\circ 22' 30''$ (LT)
 $D = 1^\circ 15' 00''$
 $R = 4,583.75'$
 $T = 375.85'$
 $L = 750.01'$
 $E = 15.38'$
 P.C. STA = 44+78.24
 P.T. STA = 52+28.25
 $SE = 2.7\%$



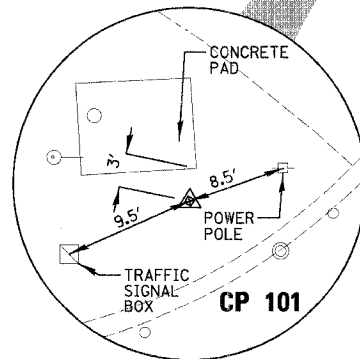
⑥ STA. 63+84.86 WINCHESTER ROAD=
 STA. 162+94.14 BUTTERFIELD ROAD

SEE SHEET NO. 15
 BUTTERFIELD ROAD

BUTTERFIELD ROAD
 SEE SHEET NO. 15



CP 103
 STA. 55+70.02
 OFFSET 50.83' RT
 SET IRON PIPE
 $N = 2050302.98$
 $E = 1078039.46$
 $EL = 737.27$



CP 101
 STA. 163+31.97
 OFFSET 46.47' LT
 SET IRON PIPE
 $N = 2050390.42$
 $E = 1078808.07$
 $EL = 731.24$

NOTE: PK NAILS HAVE BEEN SET AT ALL+00 STATIONS AT PROPOSED CENTERLINES

9 EACH - SURVEY MONUMENTS (INSTALL ONLY) TO BE INSTALLED BY CONTRACTOR AT ALIGNMENT POINT NUMBERS 3, 4, 5, 6, 7, 8, 9, 10, AND 11.

* MONUMENT

ALIGNMENT POINTS					
ID. #	STATION	OFFSET	NORTHING (Y)	EASTING (X)	DESCRIPTION
* ⑨	44+78.24	CL	2,050,416.92	1,076,951.21	PC
* ⑩	52+28.25	CL	2,050,354.40	1,077,697.78	PT
* ⑥	63+84.86	CL	2,050,352.40	1,078,854.38	CL-CL
* ⑪	75+00.00	CL	2,050,350.47	1,079,969.52	75+00

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 12/2/2005

REVISIONS	
NAME	DATE

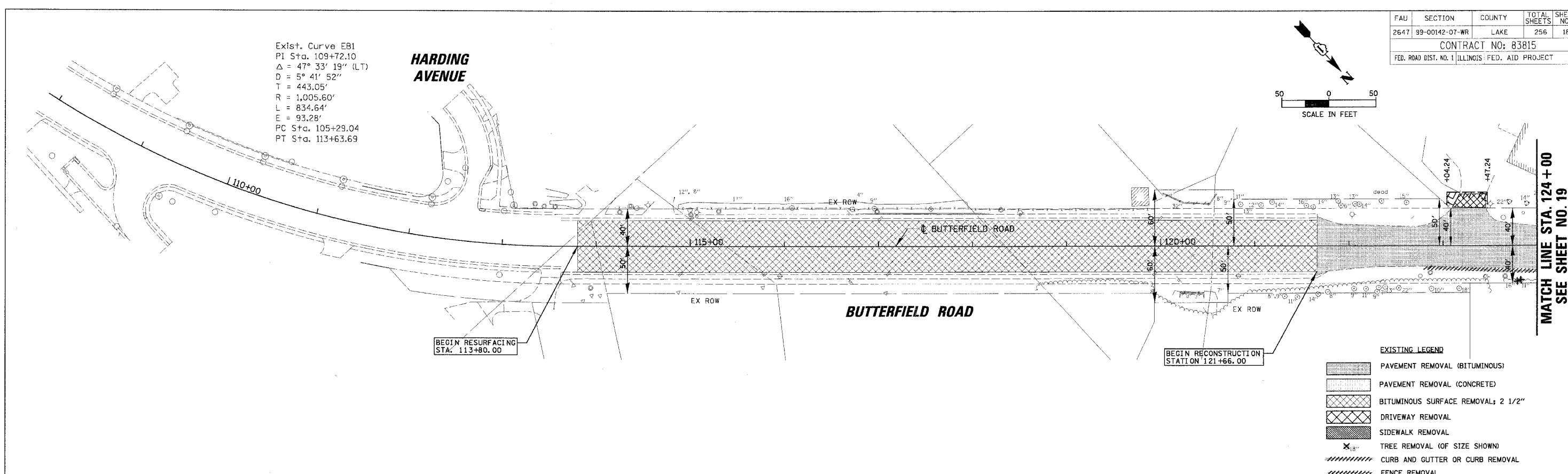
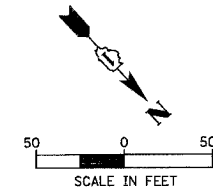
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 ALIGNMENT, TIES AND BENCHMARKS
 WINCHESTER ROAD**

SCALE: 1:100
 DATE: 12/2/2005

DRAWN BY: ELA
 CHECKED BY: JRM

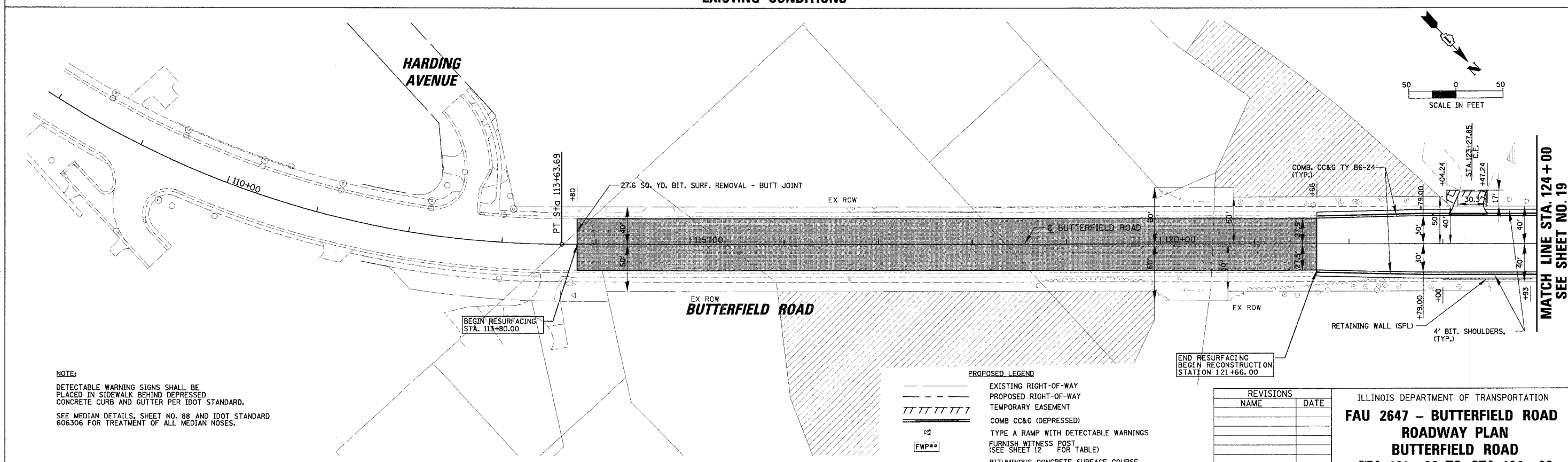
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	18
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

Exist. Curve EB1
 PI Sta. 109+72.10
 $\Delta = 47^\circ 33' 19''$ (LT)
 $D = 5^\circ 41' 52''$
 $T = 443.05'$
 $R = 1,005.60'$
 $L = 834.64'$
 $E = 93.28'$
 PC Sta. 105+29.04
 PT Sta. 113+63.69



EXISTING CONDITIONS

- EXISTING LEGEND**
- PAVEMENT REMOVAL (BITUMINOUS)
 - PAVEMENT REMOVAL (CONCRETE)
 - BITUMINOUS SURFACE REMOVAL; 2 1/2"
 - DRIVEWAY REMOVAL
 - SIDEWALK REMOVAL
 - TREE REMOVAL (OF SIZE SHOWN)
 - CURB AND GUTTER OR CURB REMOVAL
 - FENCE REMOVAL



PROPOSED CONDITIONS

- PROPOSED LEGEND**
- EXISTING RIGHT-OF-WAY
 - PROPOSED RIGHT-OF-WAY
 - TEMPORARY EASEMENT
 - COMB CC&G (DEPRESSED)
 - TYPE A RAMP WITH DETECTABLE WARNINGS
 - FURNISH WITNESS POST (SEE SHEET 12 FOR TABLE)
 - BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX 7D, N70; 1 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, IL-4.75, N50; 1 3/4"

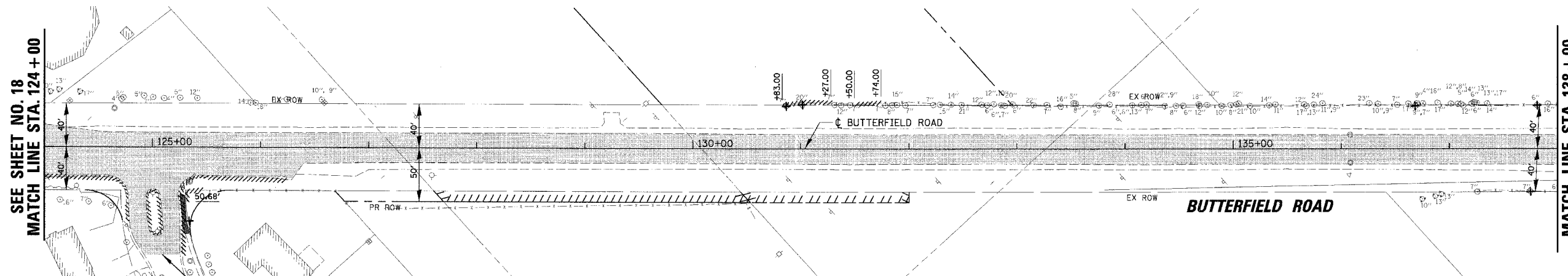
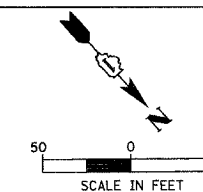
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PLAN
BUTTERFIELD ROAD
STA. 121+66 TO STA. 124+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA, PMM
 CHECKED BY: BLL

NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD. SEE MEDIAN DETAILS, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

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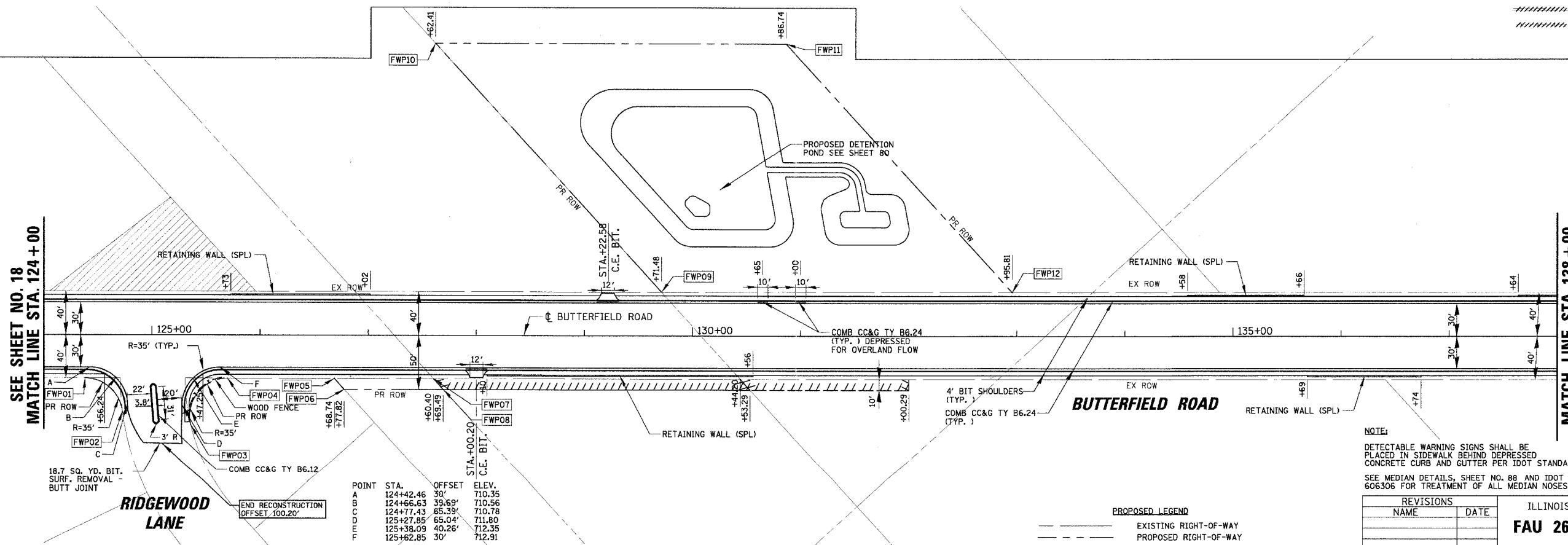
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	19
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (OF SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS



NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD. SEE MEDIAN DETAILS, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

POINT	STA.	OFFSET	ELEV.
A	124+42.46	30'	710.35
B	124+66.63	39.69'	710.56
C	124+77.43	65.39'	710.78
D	125+27.85	65.04'	711.80
E	125+38.09	40.26'	712.35
F	125+62.85	30'	712.91

PROPOSED LEGEND

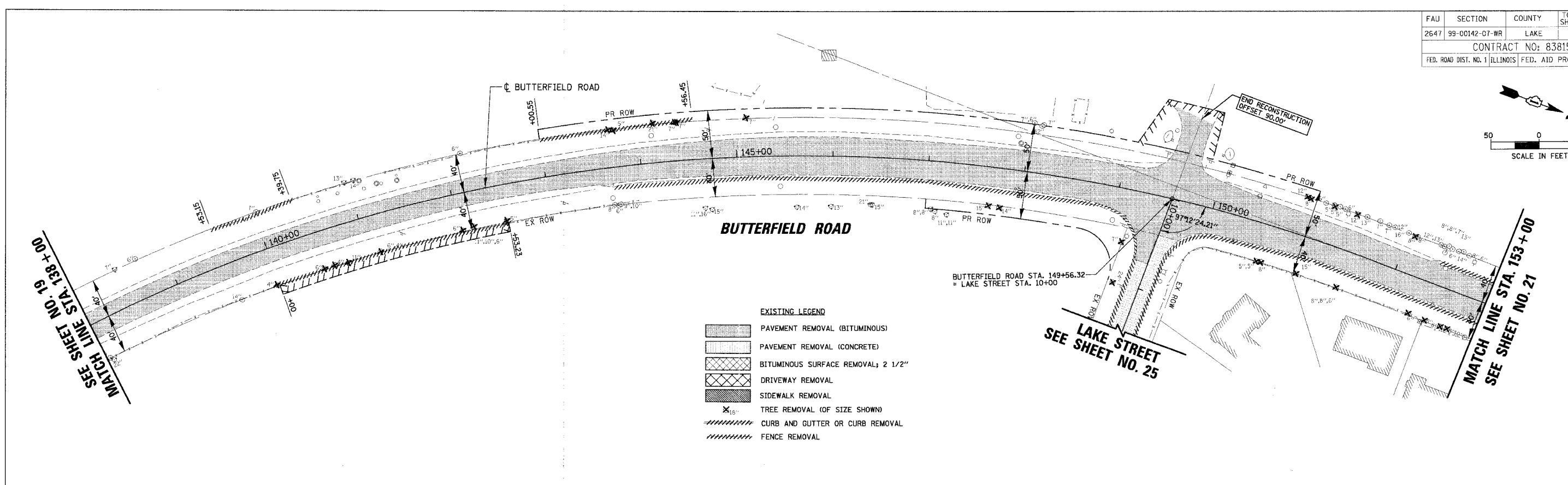
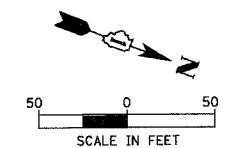
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 12 FOR TABLE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PLAN
BUTTERFIELD ROAD
STA. 124 + 00 TO STA. 138 + 00
 SCALE: 1:50
 DATE: 7/19/2006
 DRAWN BY: ELA, PMM
 CHECKED BY: BLL

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 7/19/2006

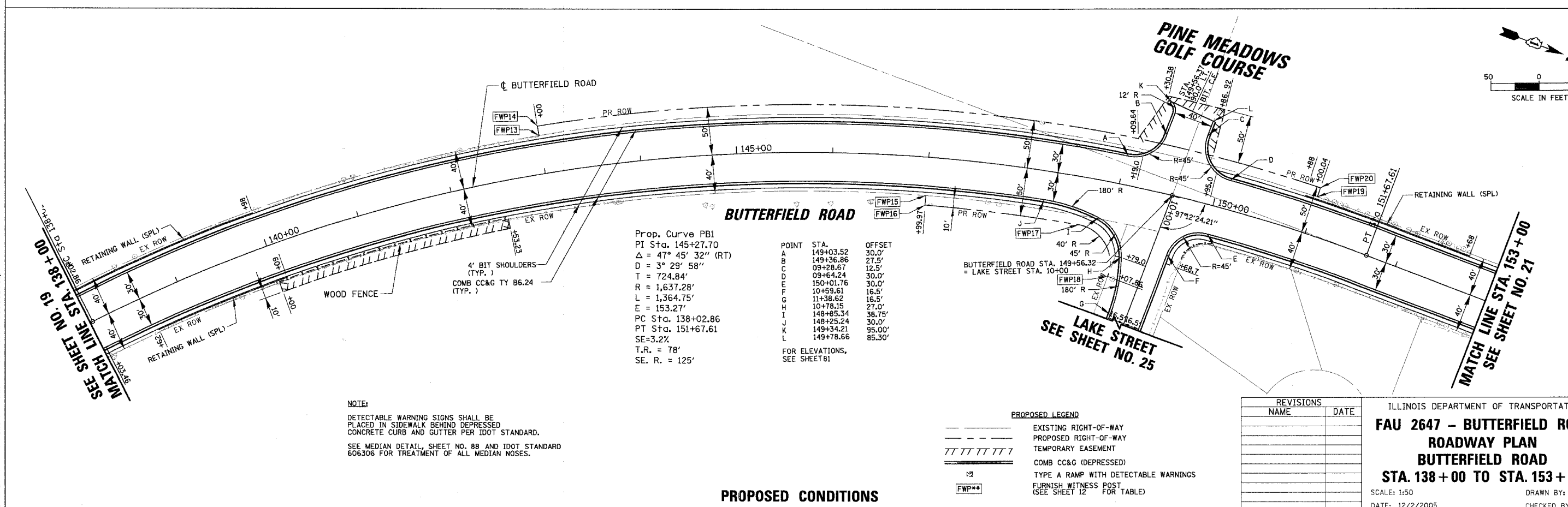
FAU	SECTION	COUNTY	TOTAL SHEET SHEETS	NO.
2647	99-00142-07-WR	LAKE	256	20
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (OF SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS



Prop. Curve PB1
 PI Sta. 145+27.70
 $\Delta = 47^\circ 45' 32''$ (RT)
 $D = 3^\circ 29' 58''$
 $T = 724.84'$
 $R = 1,637.28'$
 $L = 1,364.75'$
 $E = 153.27'$
 PC Sta. 138+02.86
 PT Sta. 151+67.61
 $SE = 3.27'$
 $T.R. = 78'$
 $SE. R. = 125'$

POINT	STA.	OFFSET
A	149+03.52	30.0'
B	149+36.86	27.5'
C	09+28.67	12.5'
D	09+64.24	30.0'
E	150+01.76	30.0'
F	10+59.61	16.5'
G	11+38.62	16.5'
H	10+78.15	27.0'
I	148+85.34	38.75'
J	148+25.24	30.0'
K	149+34.21	95.00'
L	149+78.66	85.30'

FOR ELEVATIONS, SEE SHEET 81

NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

PROPOSED LEGEND

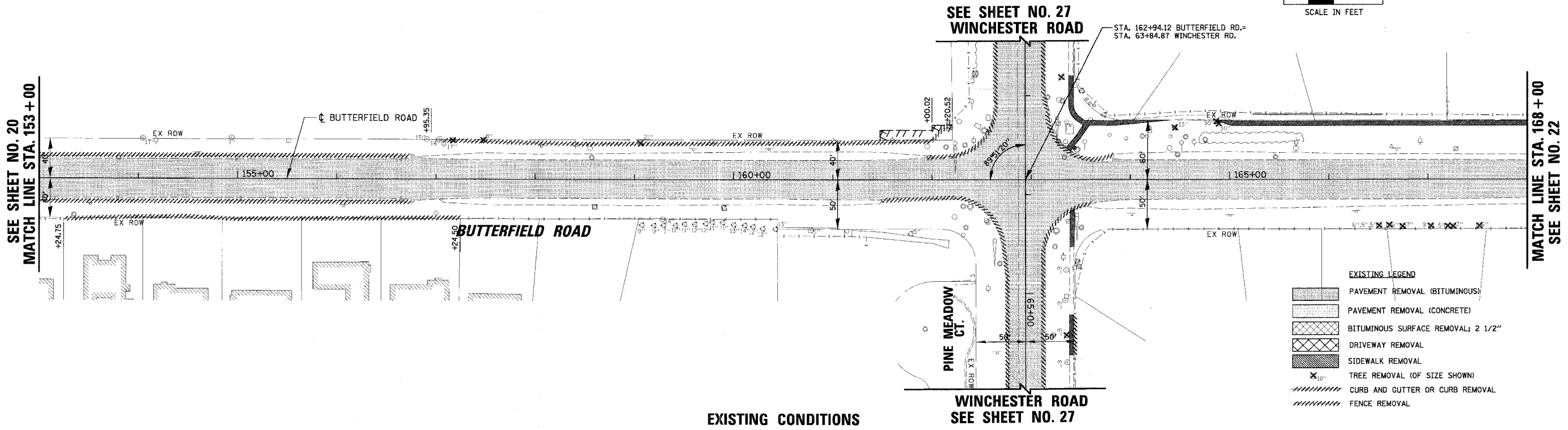
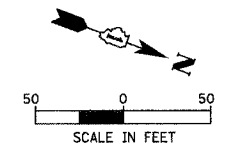
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 12 FOR TABLE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PLAN
BUTTERFIELD ROAD
STA. 138+00 TO STA. 153+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA/PMM
 CHECKED BY: BLL

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEET NO.
2647	99-00142-07-WR	LAKE	256 21
CONTRACT NO: 83815			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



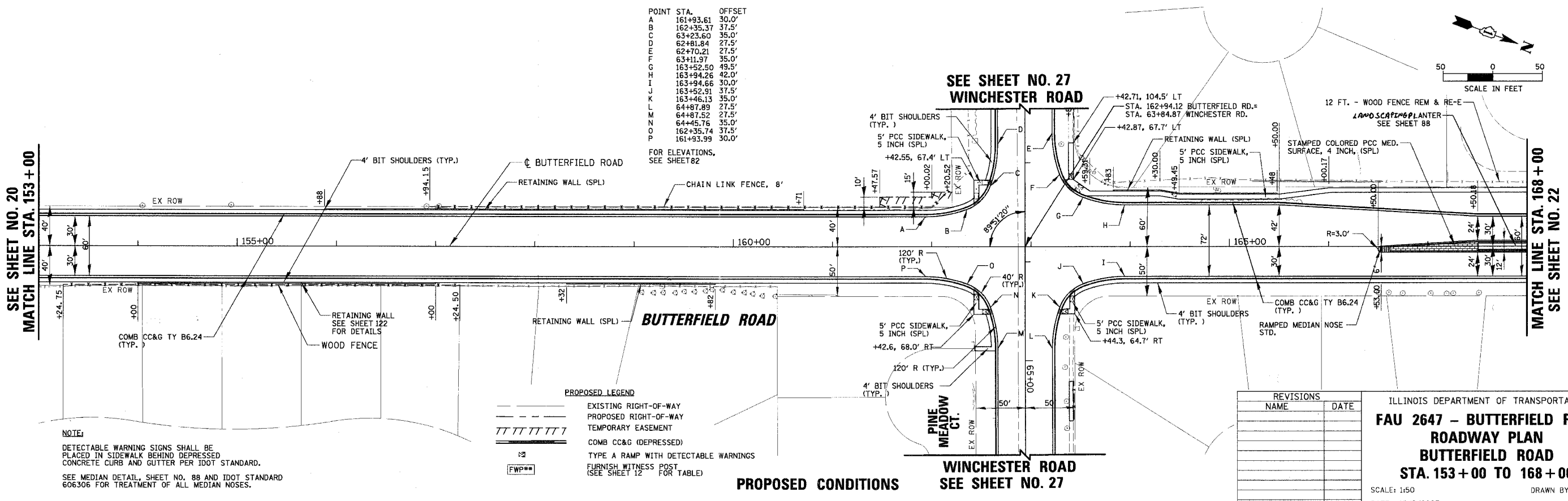
EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (OF SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS

POINT	STA.	OFFSET
A	161+93.61	30.0'
B	162+35.37	37.5'
C	63+23.60	35.0'
D	62+81.84	27.5'
E	62+70.21	27.5'
F	63+11.97	35.0'
G	163+52.50	49.5'
H	163+94.26	42.0'
I	163+94.66	30.0'
J	163+52.91	37.5'
K	163+46.13	35.0'
L	64+87.89	27.5'
M	64+87.52	27.5'
N	64+45.75	35.0'
O	162+35.74	37.5'
P	161+93.99	30.0'

FOR ELEVATIONS, SEE SHEET 82



PROPOSED LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 12 FOR TABLE)

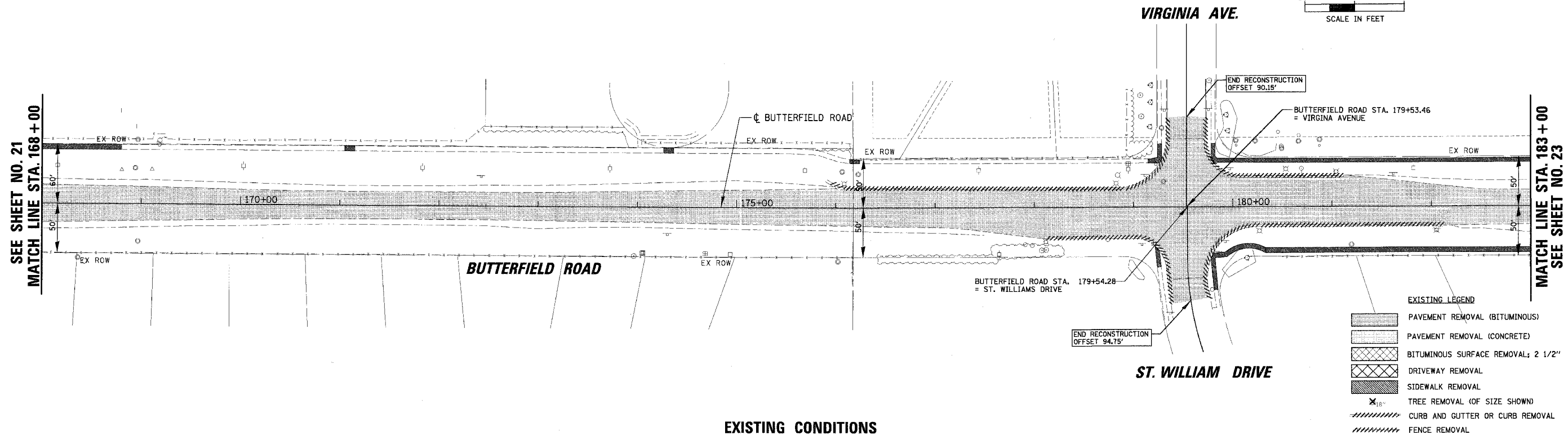
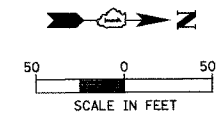
NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD ROADWAY PLAN
BUTTERFIELD ROAD
STA. 153+00 TO 168+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA, PMM
 CHECKED BY: BLL

PROPOSED CONDITIONS

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	22
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

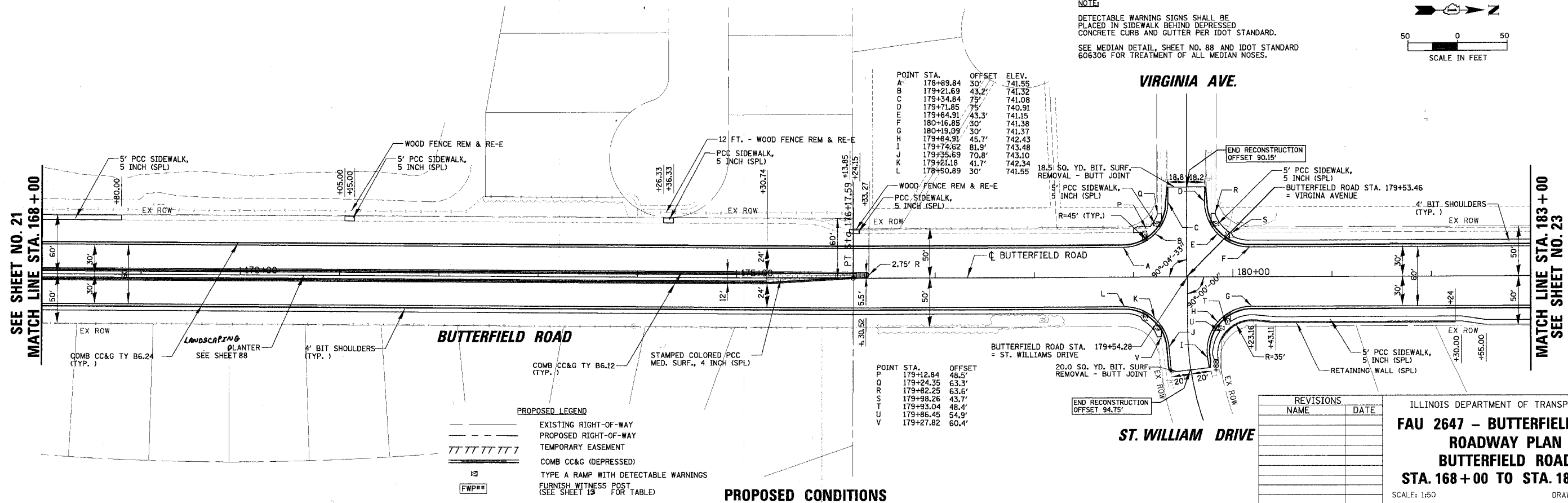
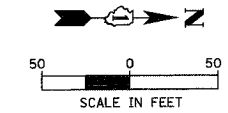


EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (OF SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS

NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.



POINT STA. OFFSET ELEV.

A	178+89.84	30'	741.55
B	179+21.69	43.2'	741.32
C	179+34.84	75'	741.08
D	179+71.85	75'	740.91
E	179+84.91	43.3'	741.15
F	180+16.85	30'	741.38
G	180+19.09	30'	741.37
H	179+84.91	45.7'	742.43
I	179+74.62	81.9'	743.48
J	179+35.69	70.8'	743.10
K	179+21.18	41.7'	742.34
L	179+90.89	30'	741.55

POINT STA. OFFSET

P	179+12.84	48.5'
Q	179+24.35	63.3'
R	179+82.25	63.6'
S	179+98.26	43.7'
T	179+93.04	48.4'
U	179+86.45	54.9'
V	179+27.82	60.4'

PROPOSED LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 13 FOR TABLE)

PROPOSED CONDITIONS

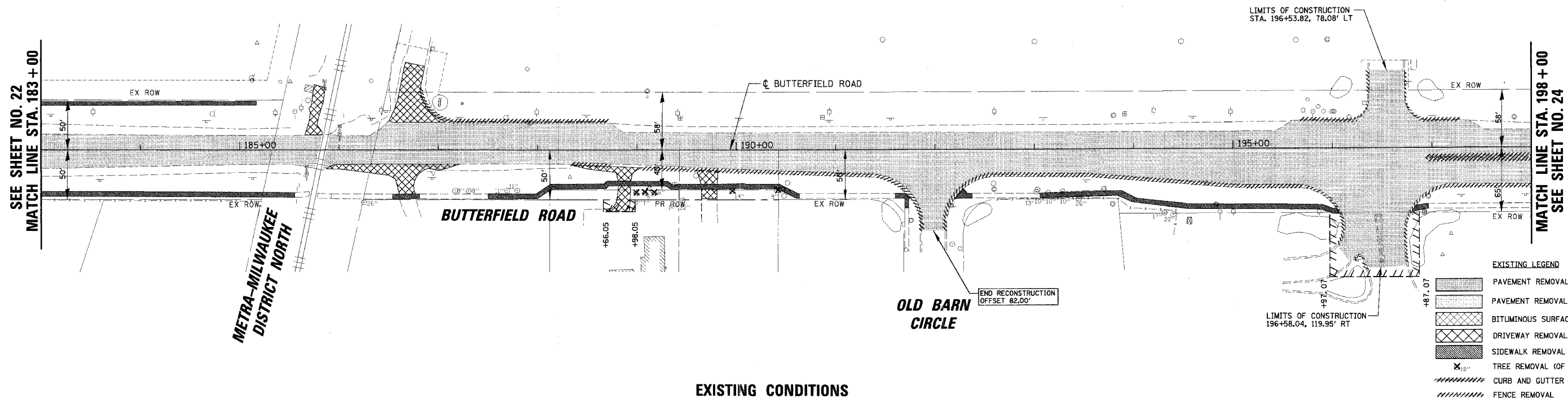
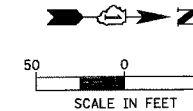
REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD ROADWAY PLAN
BUTTERFIELD ROAD
STA. 168 + 00 TO STA. 183 + 00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA,PM
 CHECKED BY: BLL

1:50
 12/2/2005
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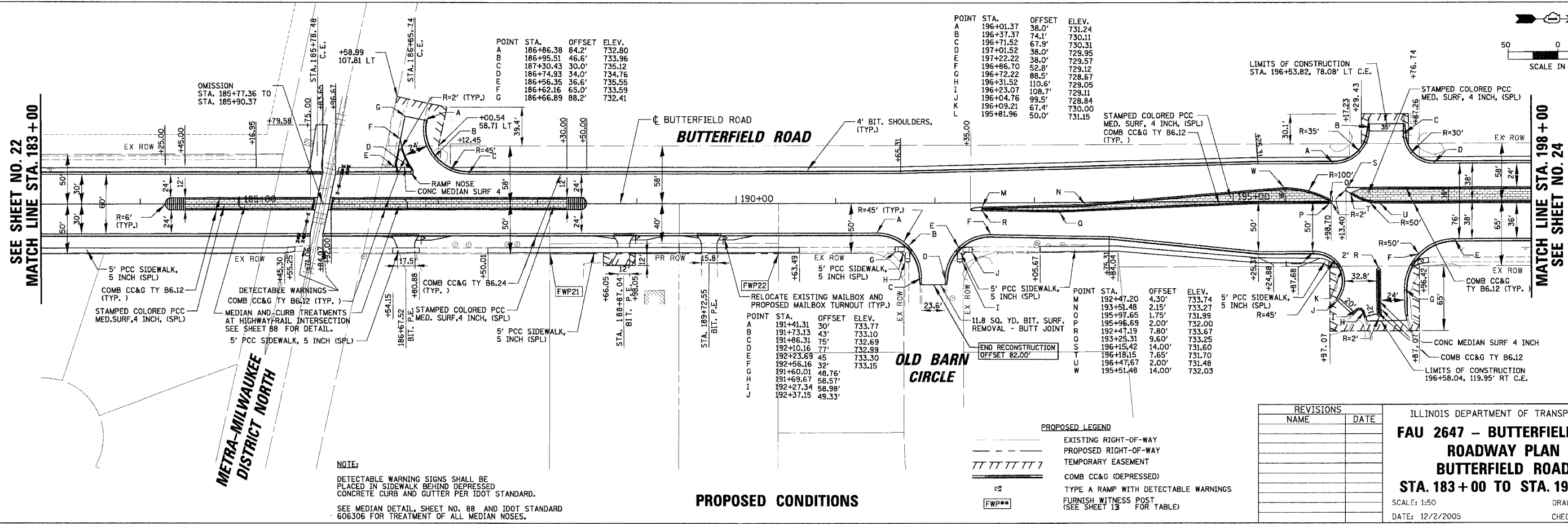
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	23
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING CONDITIONS

EXISTING LEGEND

[Pattern]	PAVEMENT REMOVAL (BITUMINOUS)
[Pattern]	PAVEMENT REMOVAL (CONCRETE)
[Pattern]	BITUMINOUS SURFACE REMOVAL; 2 1/2"
[Pattern]	DRIVEWAY REMOVAL
[Pattern]	SIDEWALK REMOVAL
[Symbol]	TREE REMOVAL (OF SIZE SHOWN)
[Pattern]	CURB AND GUTTER OR CURB REMOVAL
[Pattern]	FENCE REMOVAL



PROPOSED CONDITIONS

PROPOSED LEGEND

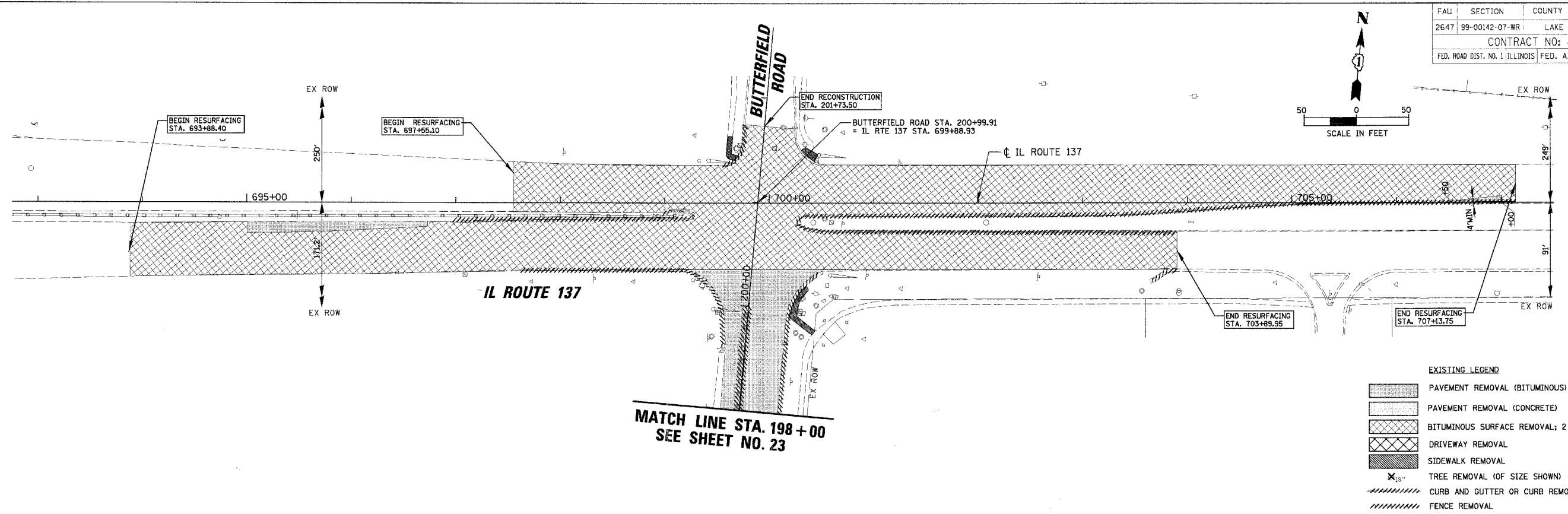
[Pattern]	EXISTING RIGHT-OF-WAY
[Pattern]	PROPOSED RIGHT-OF-WAY
[Pattern]	TEMPORARY EASEMENT
[Pattern]	COMB CC&G (DEPRESSED)
[Symbol]	TYPE A RAMP WITH DETECTABLE WARNINGS
[Symbol]	FURNISH WITNESS POST (SEE SHEET 13 FOR TABLE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PLAN
BUTTERFIELD ROAD
STA. 183+00 TO STA. 198+00
 SCALE: 1/50
 DATE: 12/2/2005
 DRAWN BY: ELA, P.M.M.
 CHECKED BY: BLL

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 1:50
 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	24
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



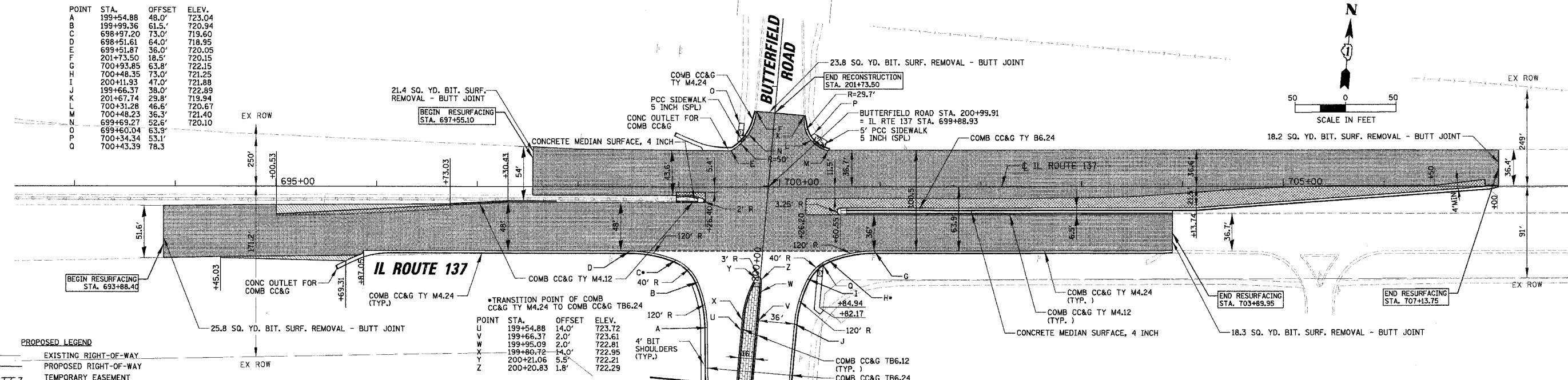
**MATCH LINE STA. 198+00
SEE SHEET NO. 23**

EXISTING CONDITIONS

EXISTING LEGEND

	PAVEMENT REMOVAL (BITUMINOUS)
	PAVEMENT REMOVAL (CONCRETE)
	BITUMINOUS SURFACE REMOVAL; 2 1/2"
	DRIVEWAY REMOVAL
	SIDEWALK REMOVAL
	TREE REMOVAL (OF SIZE SHOWN)
	CURB AND GUTTER OR CURB REMOVAL
	FENCE REMOVAL

POINT	STA.	OFFSET	ELEV.
A	199+54.88	48.0'	723.04
B	199+99.36	61.5'	720.94
C	698+97.20	73.0'	719.60
D	698+51.61	64.0'	718.95
E	699+51.87	36.0'	720.05
F	201+73.50	18.5'	720.15
G	700+93.85	63.8'	722.15
H	700+48.35	73.0'	721.25
I	200+11.93	47.0'	721.88
J	199+66.37	38.0'	722.89
K	201+67.74	29.8'	719.94
L	700+31.28	46.6'	720.67
M	700+48.23	36.3'	721.40
N	699+69.27	52.6'	720.10
O	699+60.04	63.9'	720.10
P	700+34.34	53.1'	720.10
Q	700+43.39	78.3'	720.10



**MATCH LINE STA. 198+00
SEE SHEET NO. 23**

PROPOSED CONDITIONS

PROPOSED LEGEND

	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	COMB CC&G (DEPRESSED)
	TYPE A RAMP WITH DETECTABLE WARNINGS
	FURNISH WITNESS POST (SEE SHEET 13 FOR TABLE)
	POLYMERIZED BITUMINOUS CONCRETE
	POLYMERIZED LEVELING BINDER (MACHINE METHOD)
	BITUMINOUS CONC PAVEMENT (FULL DEPTH)
	POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE
	POLYMERIZED LEVELING BINDER (MACHINE METHOD)
	POLYMERIZED BITUMINOUS CONC. BINDER COURSE

POINT	STA.	OFFSET	ELEV.
U	199+54.88	14.0'	723.72
V	199+66.37	2.0'	723.61
W	199+85.09	2.0'	722.81
X	200+21.06	5.5'	722.21
Z	200+20.83	1.8'	722.29

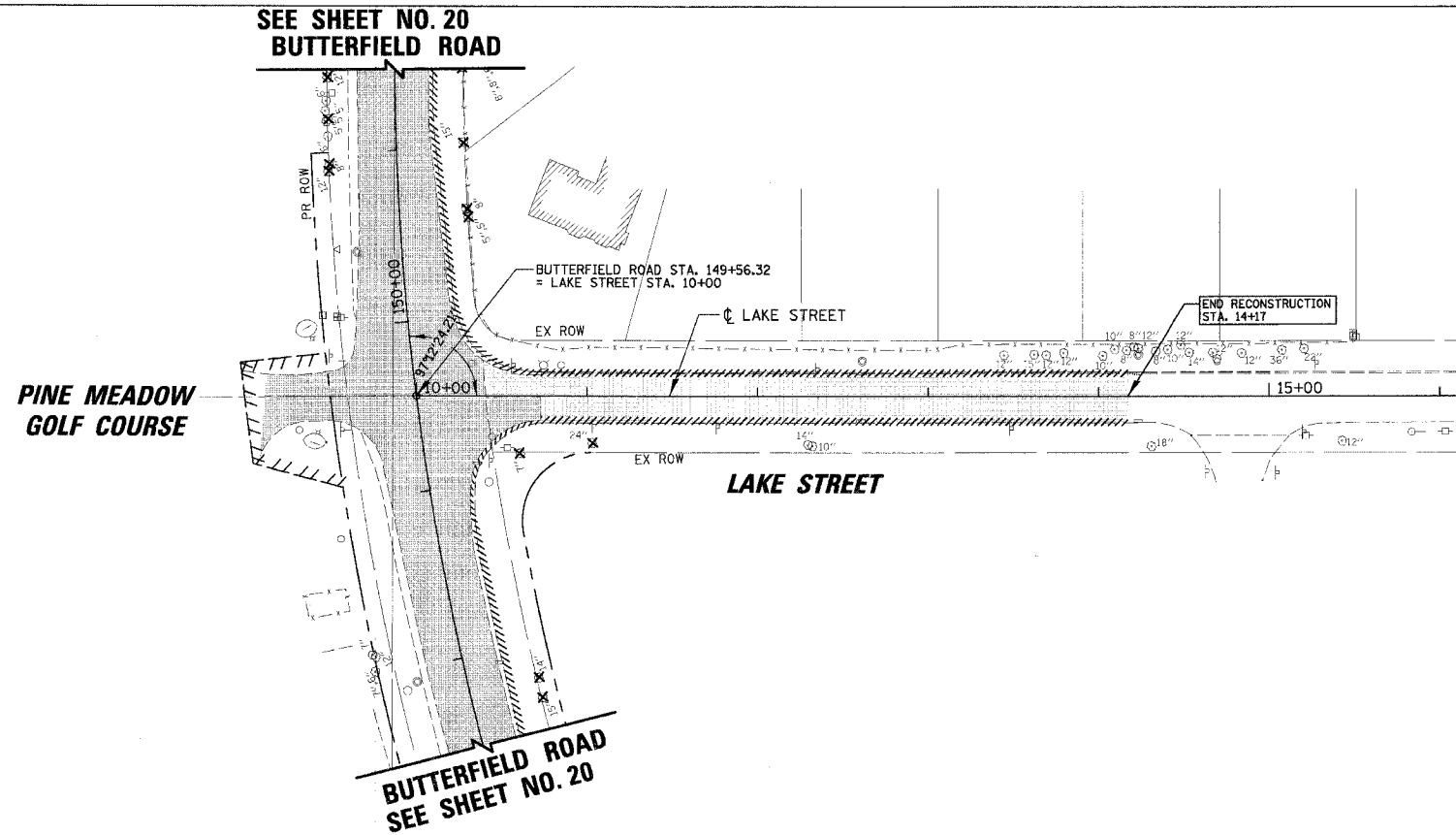
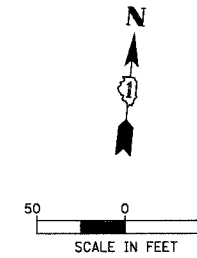
NOTE:
DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
ROADWAY PLAN BUTTERFIELD
ROAD AND ILLINOIS ROUTE 137
STA. 693 + 88.40 TO STA. 707 + 13.74**
SCALE: 1:50
DATE: 12/22/2005
DRAWN BY: ELA, PMM
CHECKED BY: BLL

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12/22/2005

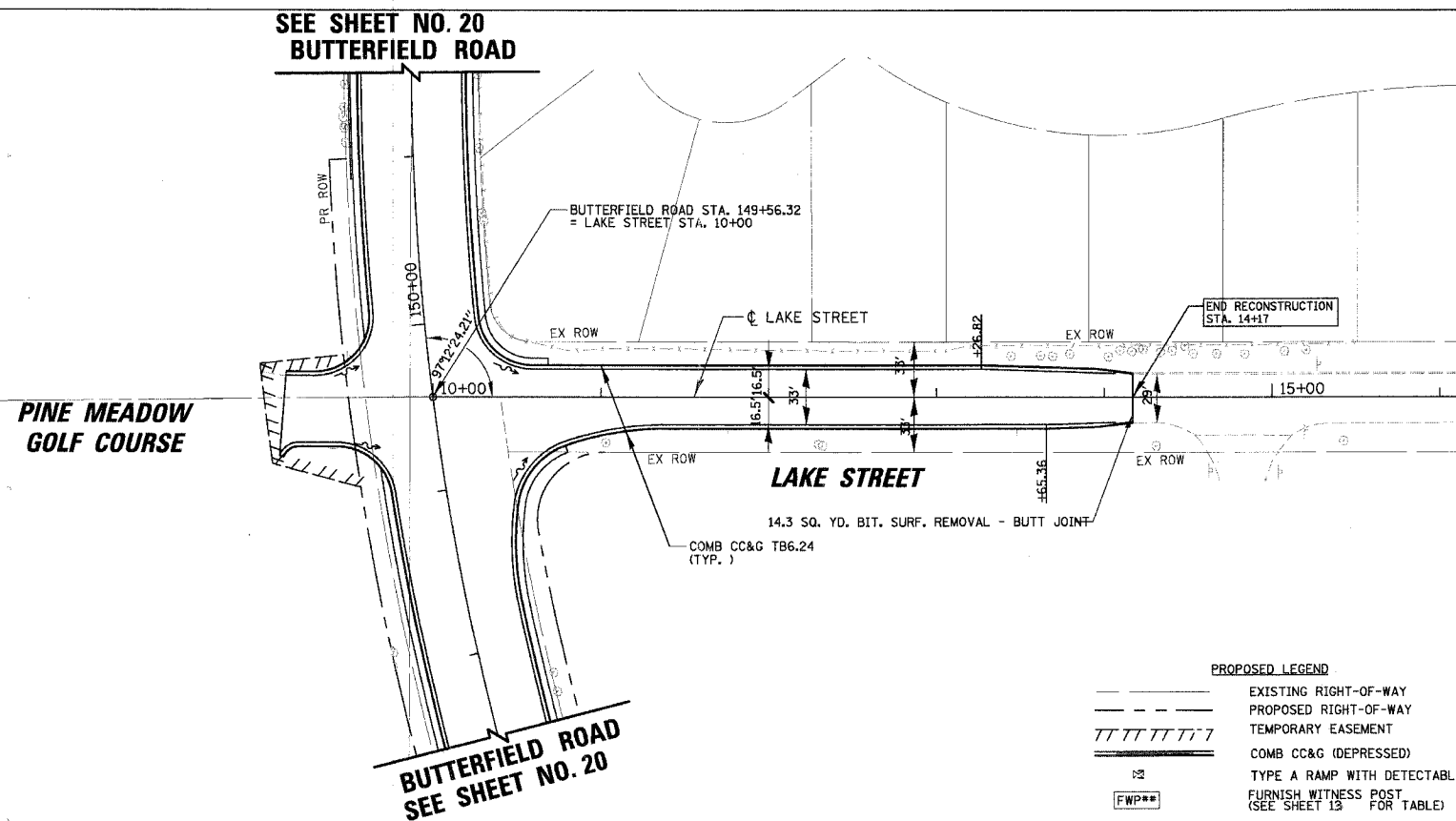
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	25
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING CONDITIONS

EXISTING LEGEND

	PAVEMENT REMOVAL (BITUMINOUS)
	PAVEMENT REMOVAL (CONCRETE)
	BITUMINOUS SURFACE REMOVAL; 2 1/2"
	DRIVEWAY REMOVAL
	SIDEWALK REMOVAL
	TREE REMOVAL (OF SIZE SHOWN)
	CURB AND GUTTER OR CURB REMOVAL
	FENCE REMOVAL



PROPOSED CONDITIONS

PROPOSED LEGEND

	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	TEMPORARY EASEMENT
	COMB CC&G (DEPRESSED)
	TYPE A RAMP WITH DETECTABLE WARNINGS
	FURNISH WITNESS POST (SEE SHEET 13 FOR TABLE)

REVISIONS	
NAME	DATE

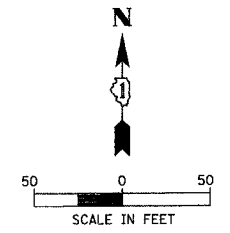
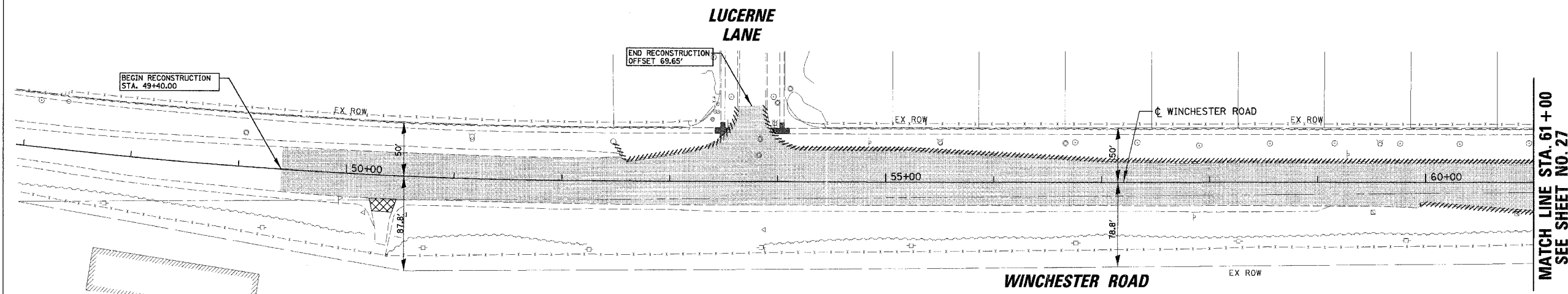
NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306-02 FOR TREATMENT OF ALL MEDIAN NOSES.

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 ROADWAY PLAN
 LAKE STREET
 STA. 10+00 TO 14+17**

SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA, PMM
 CHECKED BY: BLL

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 12/2/2005
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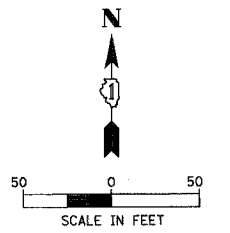
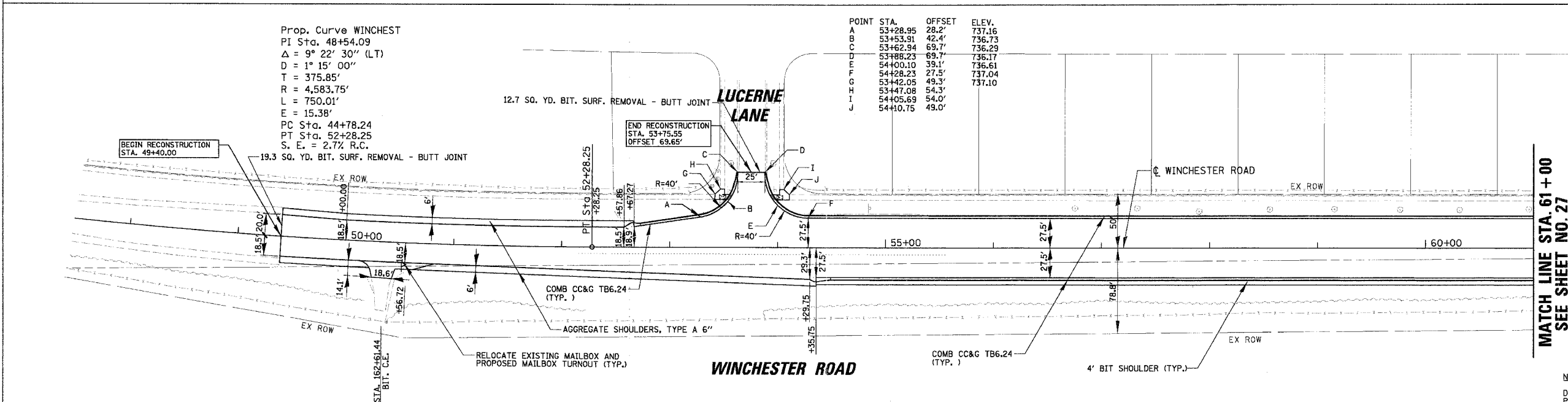
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	26
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (OF SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS



PROPOSED LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 13 FOR TABLE)

REVISIONS	
NAME	DATE

NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

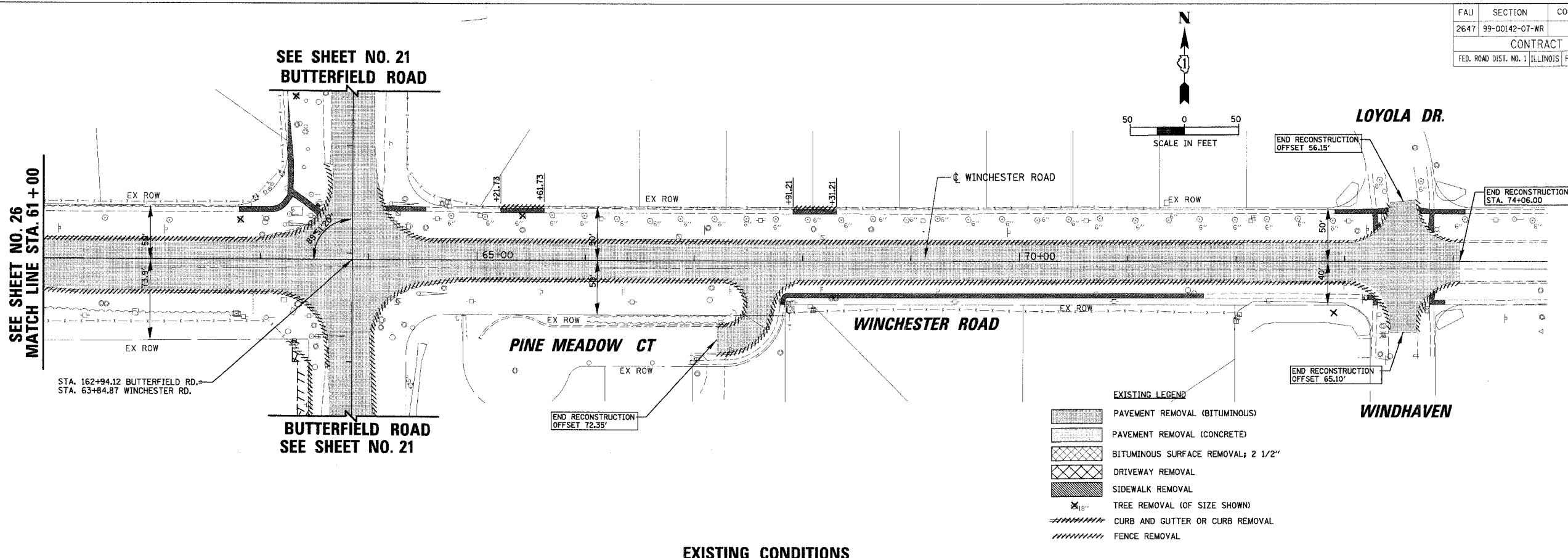
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD ROADWAY PLAN
WINCHESTER ROAD
STA. 49+40 TO STA. 61+00

SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA/PMM
 CHECKED BY: BLL

PROPOSED CONDITIONS

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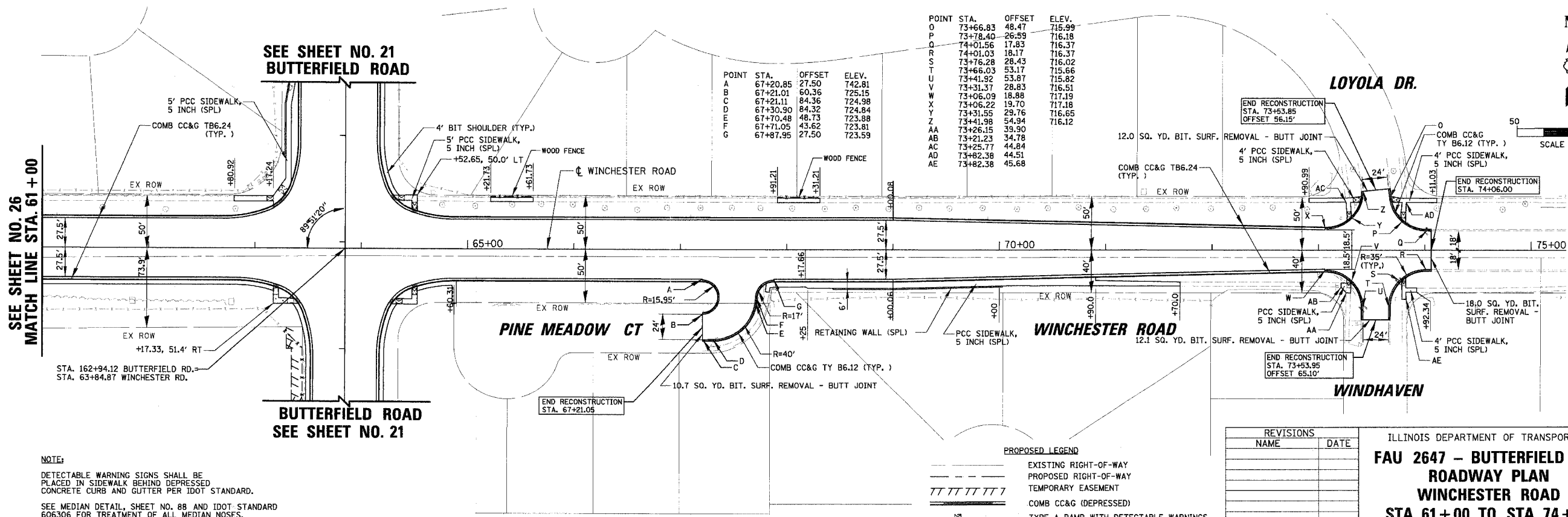
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	27
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING LEGEND

- PAVEMENT REMOVAL (BITUMINOUS)
- PAVEMENT REMOVAL (CONCRETE)
- BITUMINOUS SURFACE REMOVAL; 2 1/2"
- DRIVEWAY REMOVAL
- SIDEWALK REMOVAL
- TREE REMOVAL (10' SIZE SHOWN)
- CURB AND GUTTER OR CURB REMOVAL
- FENCE REMOVAL

EXISTING CONDITIONS



POINT	STA.	OFFSET	ELEV.
O	73+66.83	48.47	715.99
P	73+78.40	26.59	716.18
Q	74+01.56	17.83	716.37
R	74+01.03	16.17	716.37
S	73+76.28	28.43	716.02
T	73+66.03	53.17	715.66
U	73+41.92	53.87	715.82
V	73+31.37	28.83	716.51
W	73+06.09	18.88	717.19
X	73+06.22	19.70	717.18
Y	73+31.55	29.76	716.65
Z	73+41.98	54.34	716.12
AA	73+26.15	39.90	
AB	73+21.23	34.78	
AC	73+25.77	44.84	
AD	73+82.38	44.51	
AE	73+82.38	45.68	

PROPOSED LEGEND

- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- TEMPORARY EASEMENT
- COMB CC&G (DEPRESSED)
- TYPE A RAMP WITH DETECTABLE WARNINGS
- FURNISH WITNESS POST (SEE SHEET 19 FOR TABLE)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD ROADWAY PLAN
WINCHESTER ROAD
STA. 61+00 TO STA. 74+06
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA, PMM
 CHECKED BY: BLL

NOTE:
 DETECTABLE WARNING SIGNS SHALL BE PLACED IN SIDEWALK BEHIND DEPRESSED CONCRETE CURB AND GUTTER PER IDOT STANDARD.
 SEE MEDIAN DETAIL, SHEET NO. 88 AND IDOT STANDARD 606306 FOR TREATMENT OF ALL MEDIAN NOSES.

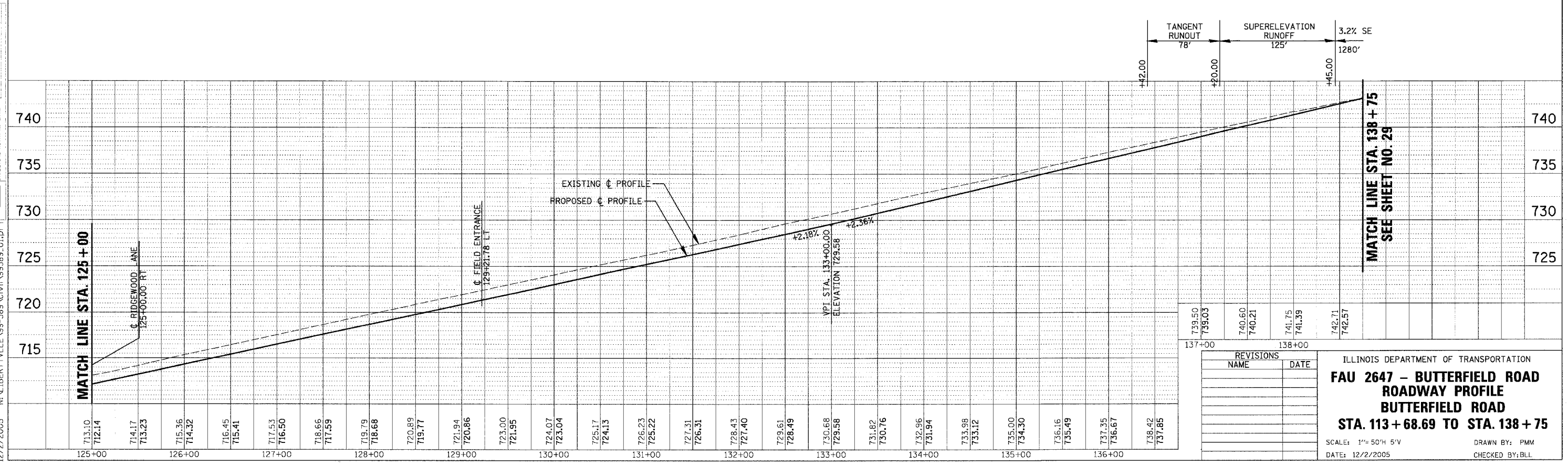
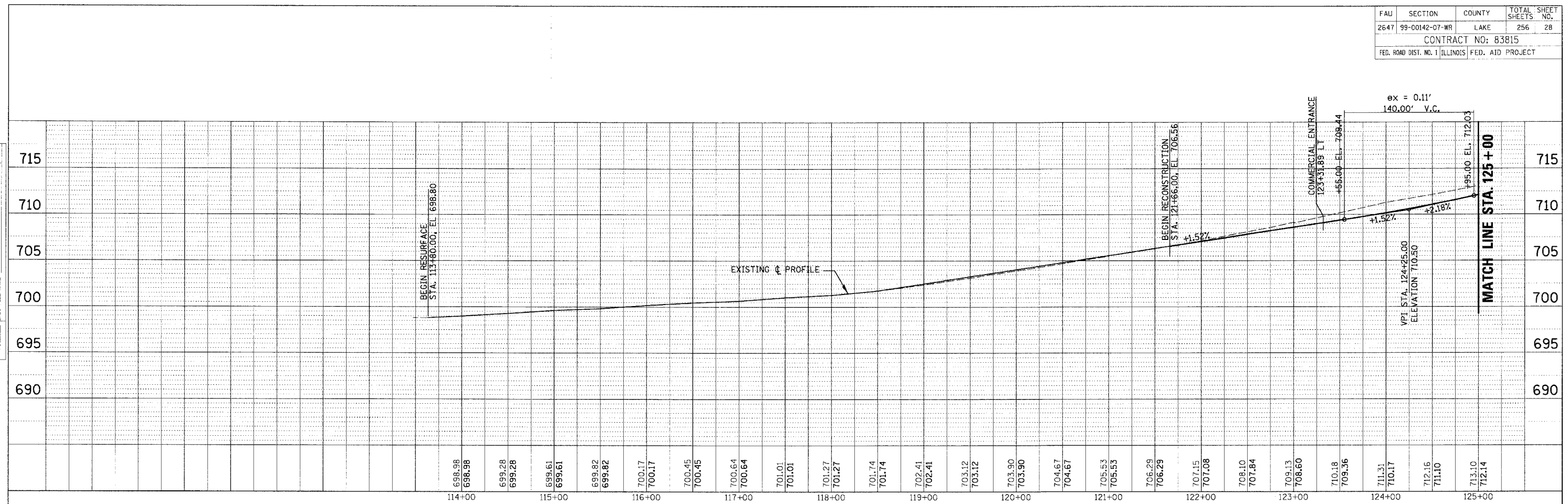
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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	28
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	DATE
STREETS PLOTTED NOT BOOK NO. _____	BY _____
ALIGNED AS SHOWN NO. _____	DATE _____
FILE NAME	

PROFILE	DATE
NO. _____	BY _____
STRUCTURE NO. _____	DATE _____
NO. _____	

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12/2/2005
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739.50
739.03
740.60
740.21
741.75
741.39
742.71
742.57

REVISIONS	
NAME	DATE

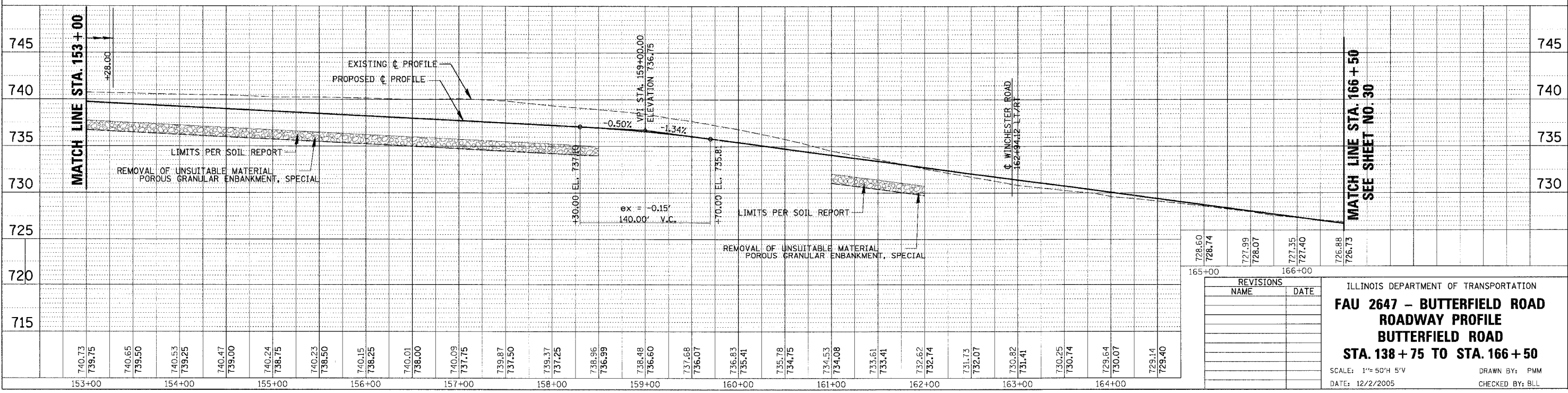
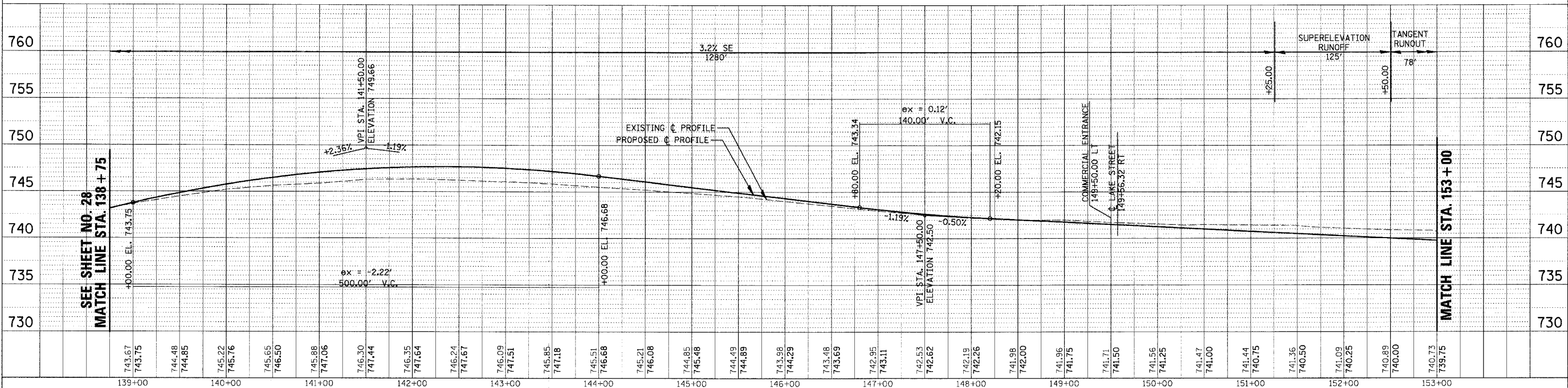
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PROFILE
BUTTERFIELD ROAD
STA. 113 + 68.69 TO STA. 138 + 75
 SCALE: 1" = 50' H 5' V
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	29
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	DATE
SURVEYED BY	
NOTED BY	
ALIGNED BY	
CHECKED BY	
NO.	
FILE NAME	

PROFILE	DATE
DRAWN BY	
CHECKED BY	
NO.	
FILE NAME	

150
12/2/2005
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728.60	165+00
728.74	
727.99	166+00
728.07	
727.35	
727.40	
726.88	
726.73	

REVISIONS	
NAME	DATE

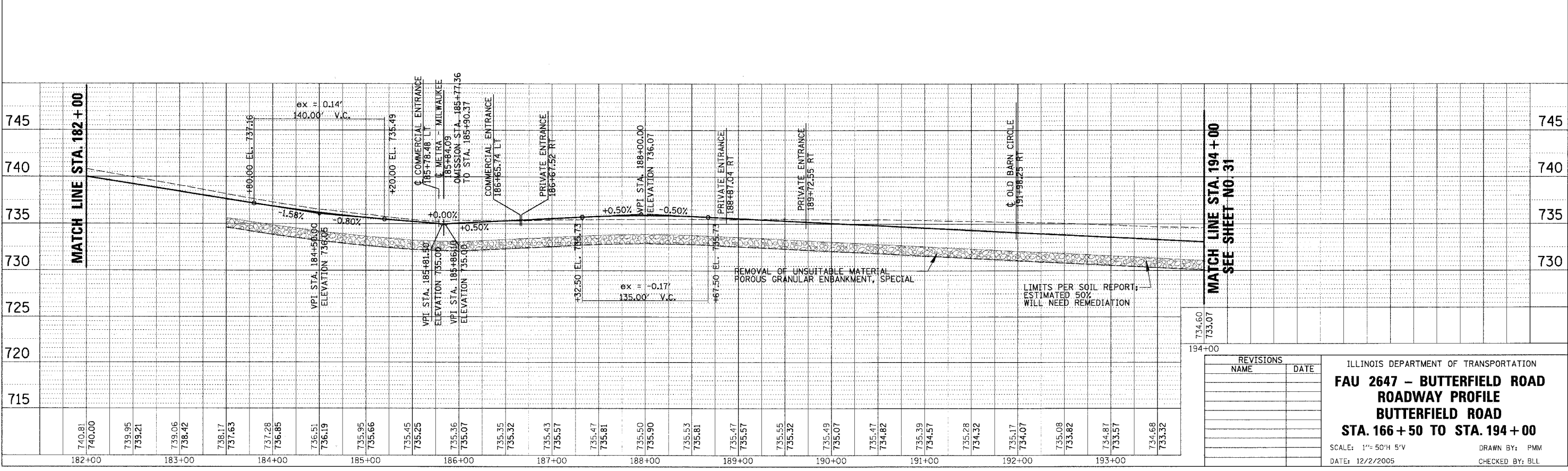
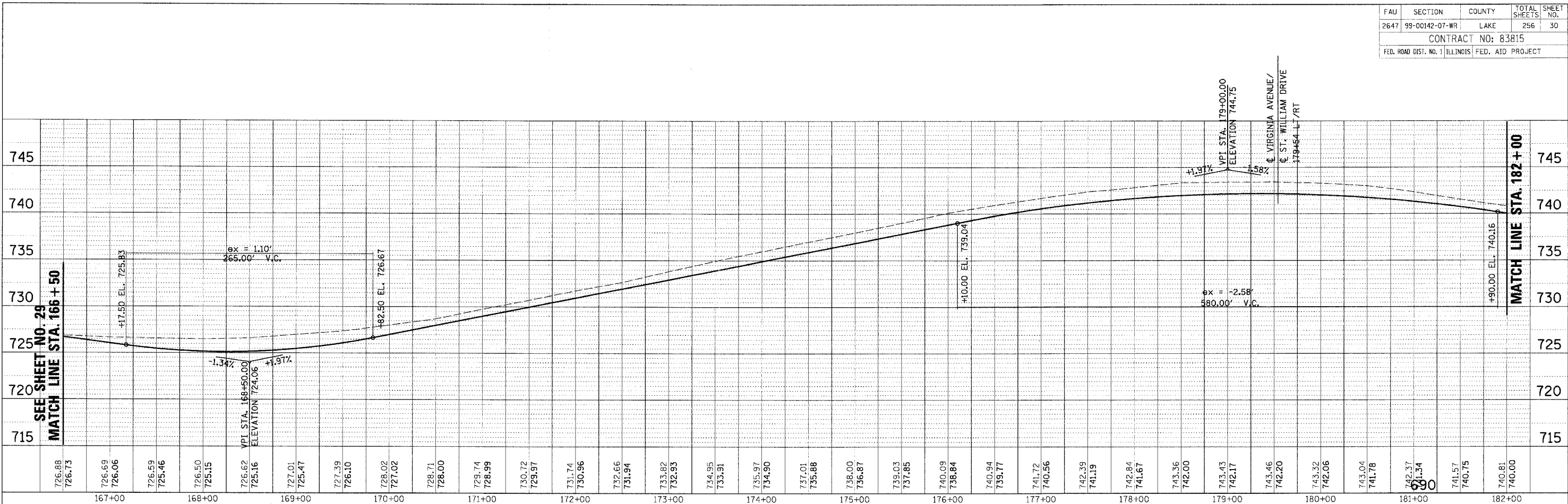
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PROFILE
BUTTERFIELD ROAD
STA. 138 + 75 TO STA. 166 + 50
 SCALE: 1"= 50'H S'V
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	30
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	DATE
SURVEYED	BY
ALIGNED	BY
DESIGNED	BY
CHECKED	BY
DATE	

PROFILE	DATE
GRADES	BY
NOTES	BY
STRUCTURE	BY
DATE	

149
12/2/2005
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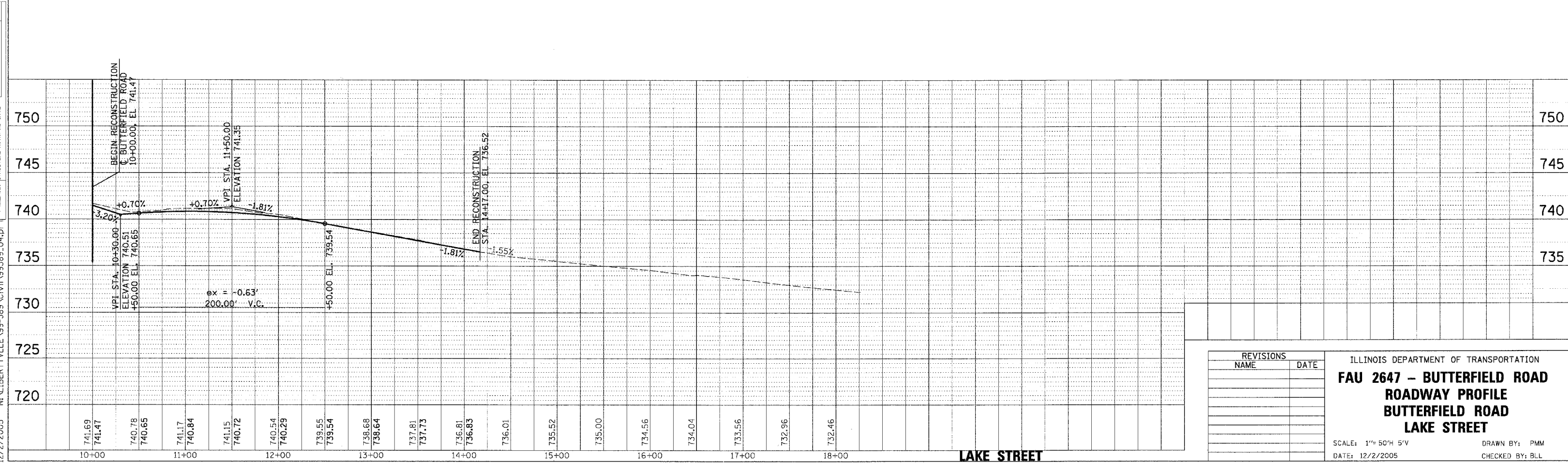
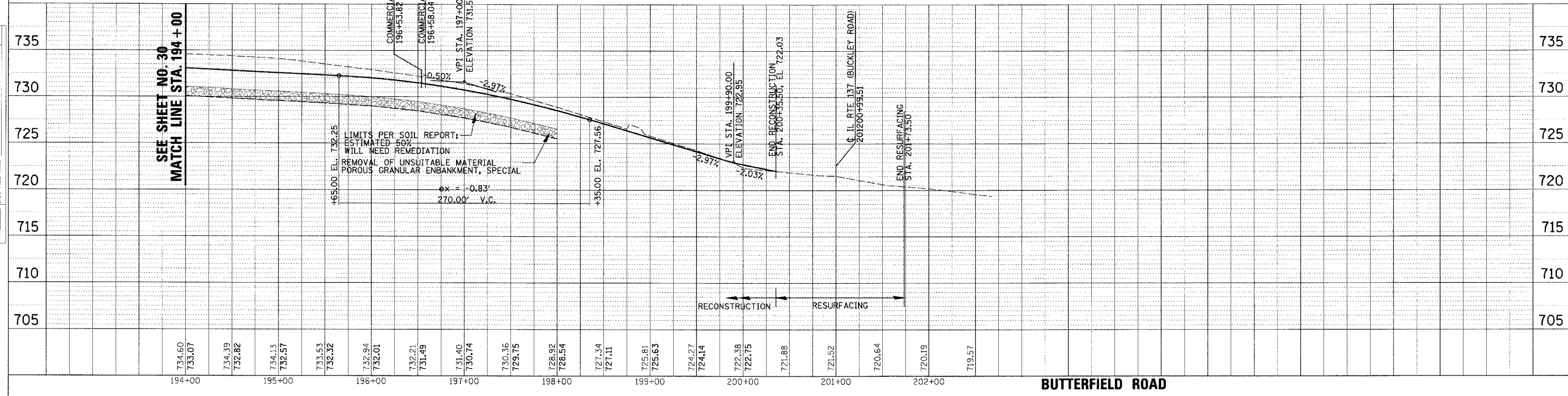


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
ROADWAY PROFILE
BUTTERFIELD ROAD
STA. 166 + 50 TO STA. 194 + 00**

SCALE: 1"= 50'H 5'V
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	31
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



DATE	BY

DESIGNED BY: _____
 CHECKED BY: _____
 PLOTTED BY: _____
 NOTE BOOK NO.: _____
 DATE PLOTTED: _____
 CAD FILE NAME: _____

DATE	BY

PROFILE REQUESTED BY: _____
 CHECKED BY: _____
 DATE CHECKED: _____
 STRUCTURE NOTATIONS: _____
 NO.: _____

150 N. LIBERTYVILLE 99-389 CIVIL 99389.TBL
 12/2/2005 N. LIBERTYVILLE 99-389 CIVIL 99389.04.DWG

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
ROADWAY PROFILE
BUTTERFIELD ROAD
LAKE STREET

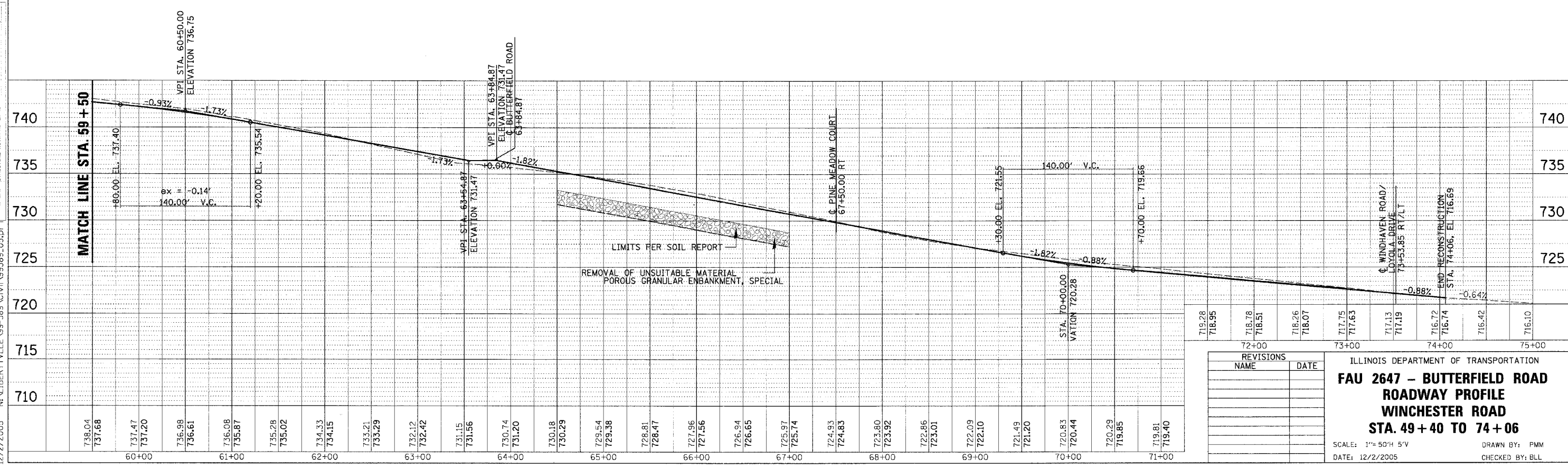
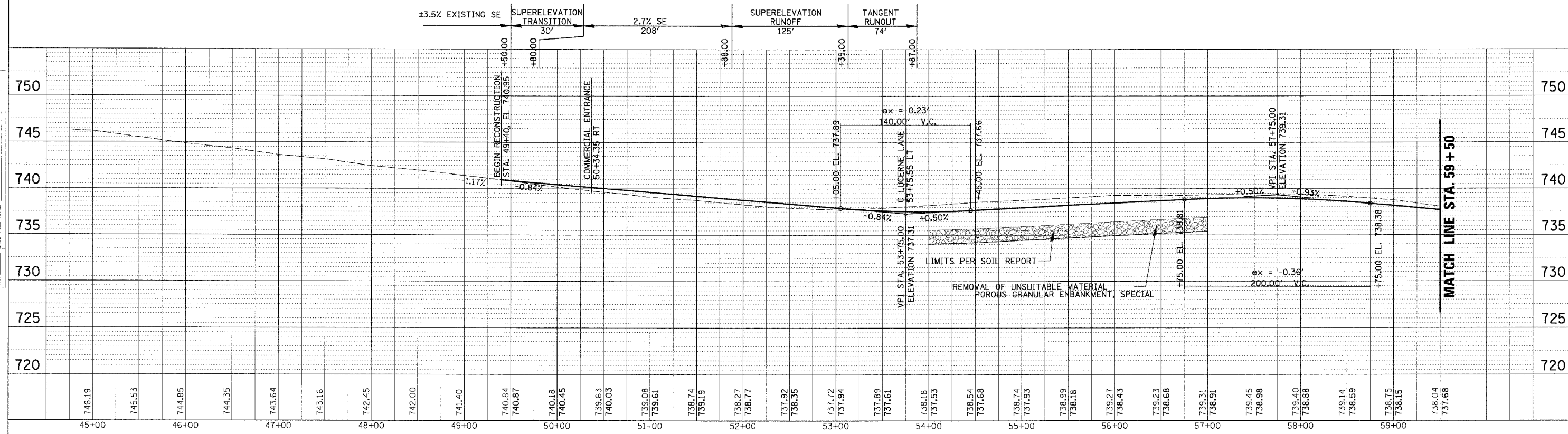
SCALE: 1"= 50' H 5' V
 DATE: 12/2/2005
 DRAWN BY: PMM
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	32
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	DATE
NO. E. BOOK	BY
NO. SHEET	NO.
NO. SHEET	NO.
NO. SHEET	NO.

PROFILE	DATE
NO. E. BOOK	BY
NO. SHEET	NO.
NO. SHEET	NO.
NO. SHEET	NO.

N. LIBERTYVILLE 99-389 CIVIL 99389.TBL
 12/2/2005 N. LIBERTYVILLE 99-389 CIVIL 99389.05.DWG



NO.	DATE	DESCRIPTION
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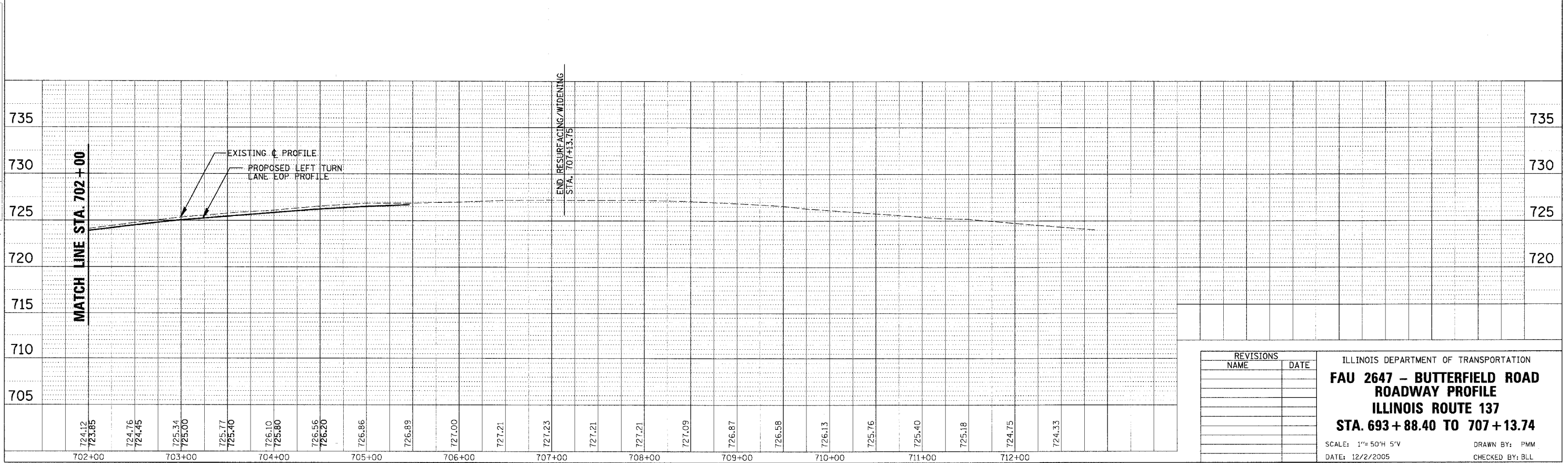
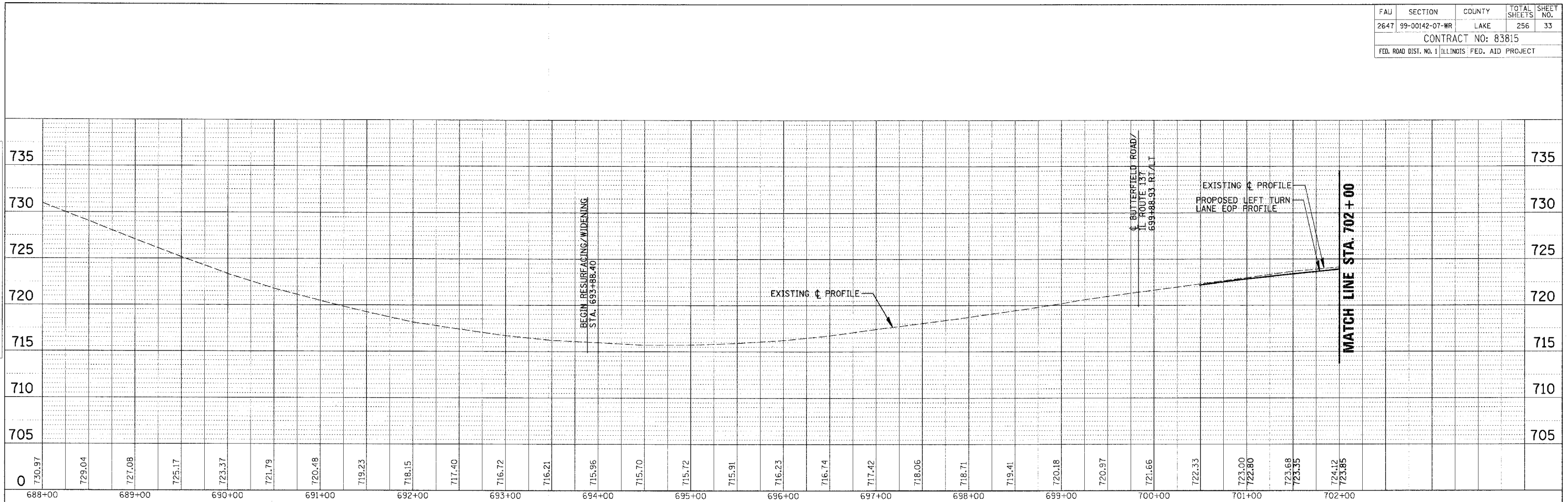
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 ROADWAY PROFILE
 WINCHESTER ROAD
 STA. 49+40 TO 74+06**
 SCALE: 1" = 50' H 5' V
 DATE: 12/2/2005
 DRAWN BY: FMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	33
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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REVISIONS	
NAME	DATE

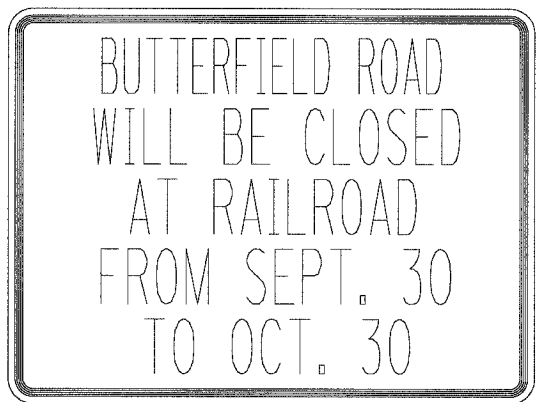
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD ROADWAY PROFILE
ILLINOIS ROUTE 137
STA. 693 + 88.40 TO 707 + 13.74
 SCALE: 1"=50'H 5'V
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU :	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	34
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

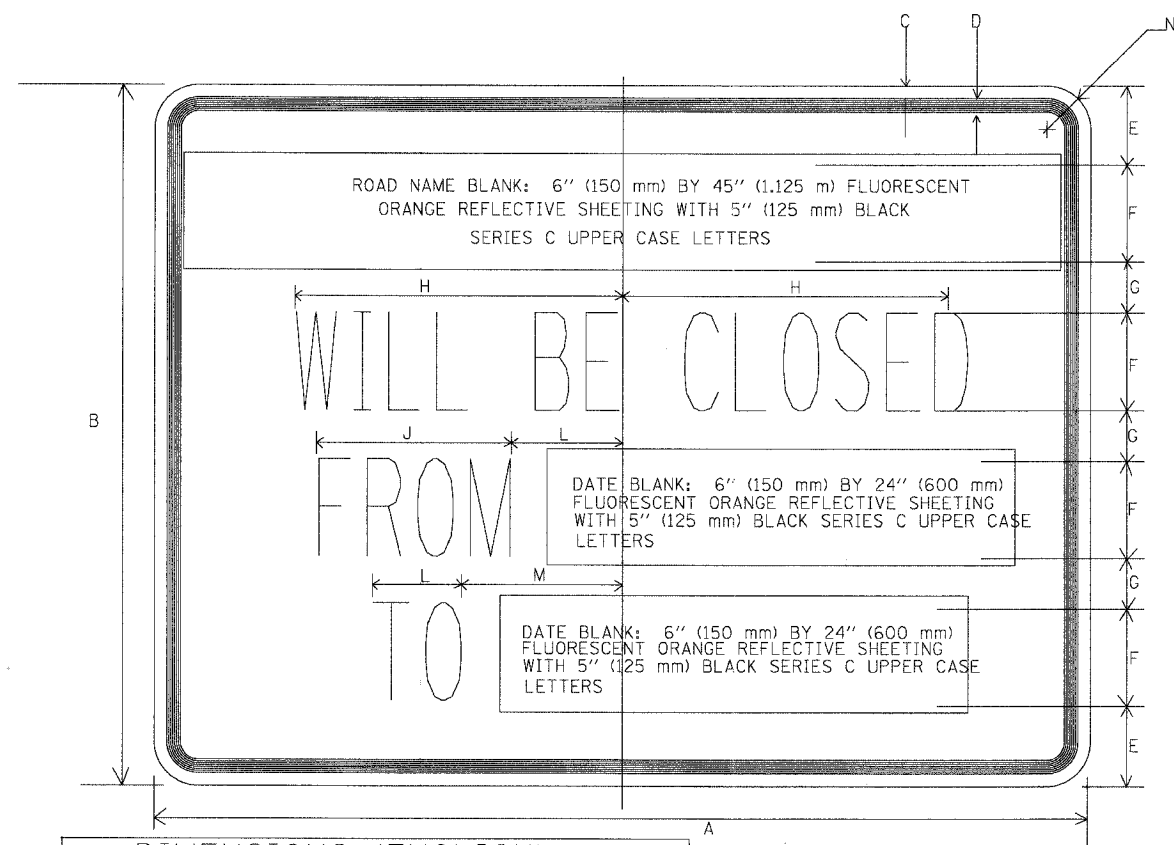
DETOUR INFORMATION SIGNS



NUMBER OF SIGNS 1
DATE SHOWN IS FOR EXAMPLE ONLY



NUMBER OF SIGNS 6



DIMENSIONS (ENGLISH)													
	A	B	C	D	E	F	G	H	J	K	L	M	N
STD.	48	36	5/8	7/8	4/8	5	2 5/8	9 3/4	12	5 1/2	5 1/2	8 1/2	2 1/4
DIMENSIONS (S.I.)													
	A	B	C	D	E	F	G	H	J	K	L	M	N
STD.	1.2 m	900 mm	12 mm	19 mm	103 mm	125 mm	66 mm	325 mm	138 mm	138 mm	219 mm	56 mm	

NOTE: SIGN SHEETING SHALL BE FLUORESCENT ORANGE WITH 5 INCH (125 mm) BLACK SERIES C LETTERS.

DETOUR GENERAL NOTES

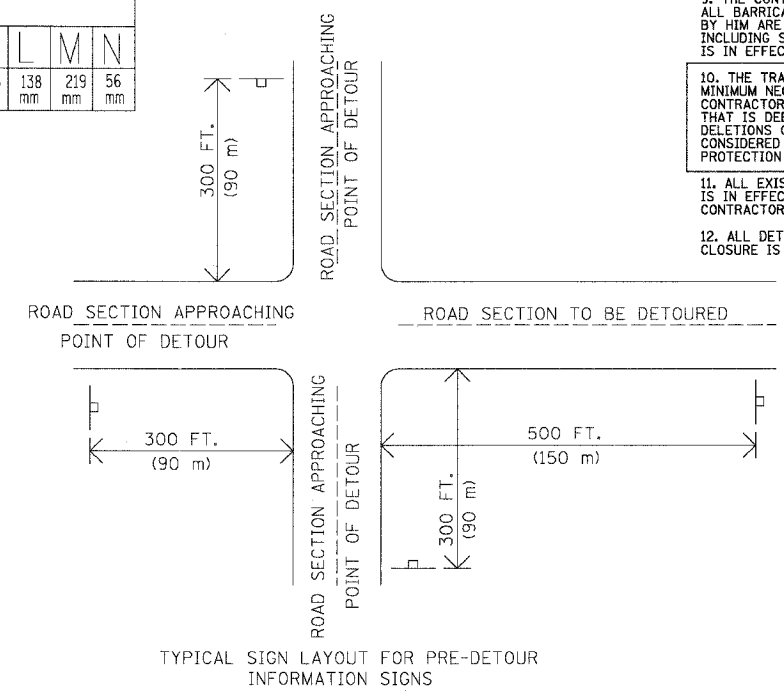
- ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2002", "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES ADOPTED 2004", THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", THE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION (LC-T-700 NOS. A ND 2) AND THE L.C.D.O.T. DETOUR PROCEDURES AND GUIDELINES.
- THE DURATION OF THIS DETOUR SHALL NOT EXCEED (SEE BELOW) CONSECUTIVE CALENDAR DAYS. THE CONTRACTOR SHALL PROCEED WITH THE WORK IN AN EXPEDIENT MANNER TO REDUCE THE LENGTH OF TIME THAT THE DETOUR NEEDS TO BE IN EFFECT.
 - BUTTERFIELD ROAD DETOUR - 5 CALENDER DAYS
 - LAKE STREET DETOUR - 30 CALENDER DAYS*
 - * THE CONTRACTOR WILL COORDINATE THE RECONSTRUCTION OF LAKE STREET WITH LIBERTYVILLE ELEMENTARY SCHOOL DISTRICT #70 1381 W. LAKE ST. LIBERTYVILLE IL 60048, SUCH THAT THE RECONSTRUCTION OCCURS WHEN SCHOOL IS NOT IN SESSION.
- THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST THREE WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE ENGINEER SHALL DETERMINE THE HOUR OF CLOSURE. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.
- 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 LAKE COUNTY DIVISION OF TRANSPORTATION REPRESENTATIVE FOR THIS 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, WITH THE APPROVAL OF THE ENGINEER.
- 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 (SPECIAL)".
- 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 OF THE SIGNS. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.
- THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON 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.
- WHEN REQUIRED THE MINIMUM DIMENSIONS OF THE ORANGE WARNING FLAGS SHOWN IN THESE PLANS ARE 18" X 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 FEET 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" X VARIABLE OR A 12" X 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 702001-05
- 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 FOR TRAFFIC CONTROL DEFICIENCY OF \$1000.00 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 PROVISION FOR TRAFFIC CONTROL AND PROTECTION AND BOTH PENALTIES CAN BE CHARGED CONCURRENTLY.

LOCATIONS OF PRE-DETOUR INFORMATION SIGNS BY INTERSECTION

- BUTTERFIELD ROAD DETOUR ROUTE**
- SOUTHBOUND BUTTERFIELD ROAD APPROACHING IL RTE 137
 - WESTBOUND ILLINOIS ROUTE 137 APPROACHING BUTTERFIELD ROAD
 - EASTBOUND ILLINOIS ROUTE 137 APPROACHING BUTTERFIELD ROAD
 - NORTHBOUND BUTTERFIELD ROAD APPROACHING WINCHESTER ROAD
 - WESTBOUND WINCHESTER ROAD APPROACHING BUTTERFIELD ROAD
 - EASTBOUND WINCHESTER ROAD APPROACHING BUTTERFIELD ROAD

- WESTBOUND LAKE STREET DETOUR ROUTE**
- WESTBOUND LAKE STREET APPROACHING BUTTERFIELD ROAD
 - NORTHBOUND IL RTE 21 APPROACHING LAKE STREET
 - SOUTHBOUND IL RTE 21 APPROACHING LAKE STREET

NOTE: THE PRE-DETOUR SIGNS SHALL BE INSTALLED 7-10 CALENDAR DAYS PRIOR TO THE DETOUR AND ROAD CLOSURE. THE SIGNS SHALL BE REMOVED THE DAY THE DETOUR BEGINS



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

FAU 2647 - BUTTERFIELD ROAD

DETOUR NOTES

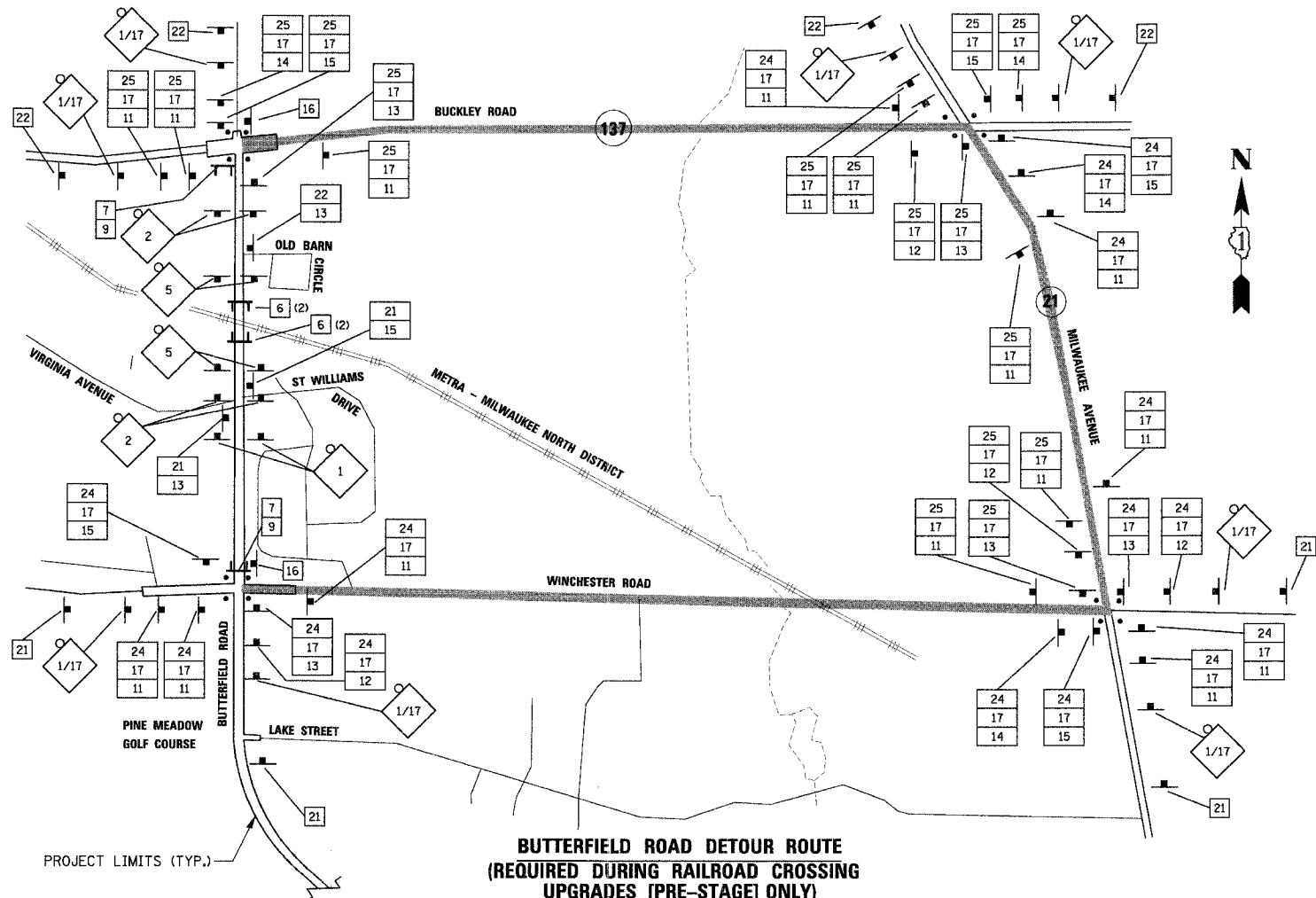
SCALE: NONE DRAWN BY: PMM

DATE: 12/5/2005 CHECKED BY: BLL

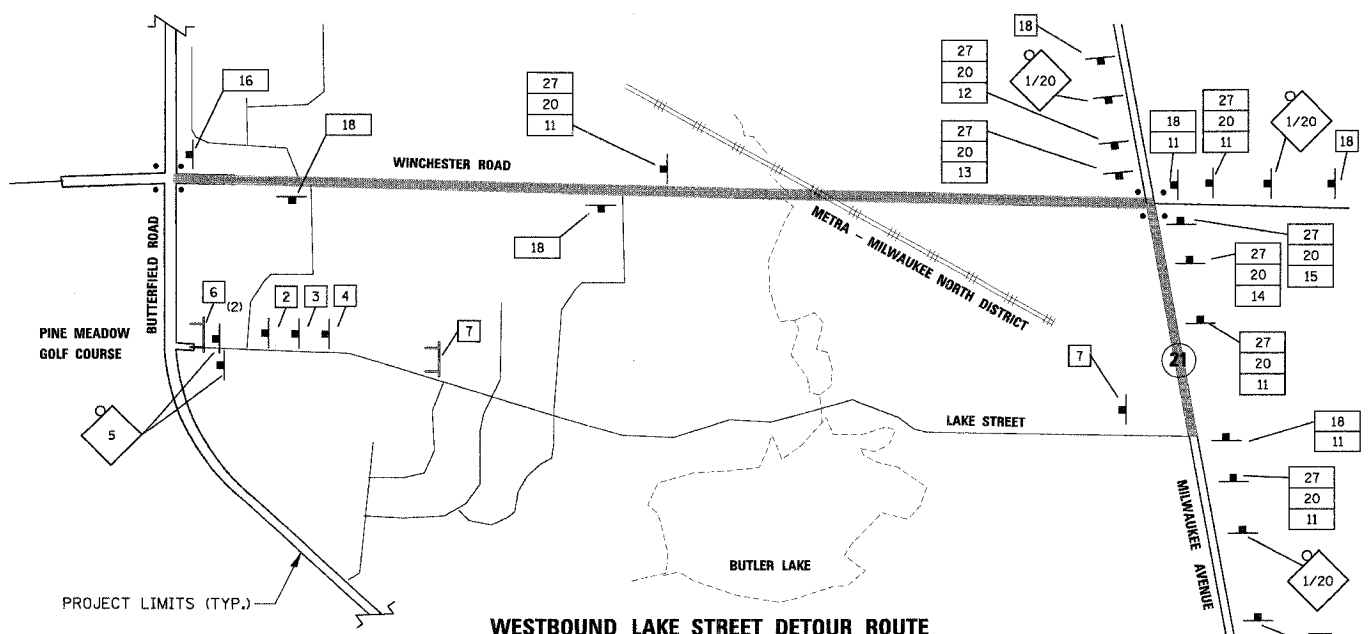
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12/5/2005

SCHEDULE OF SIGNS

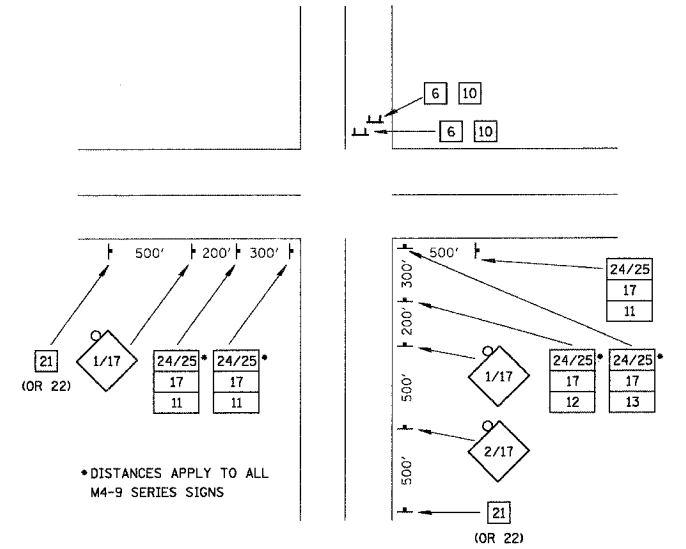
SIGN NO.	SIGN TYPE	BUTTERFIELD RD CLOSURE QUANTITY	LAKE ST CLOSURE QUANTITY
1	DETOUR 500 FT W20-2 (O) 48	10	3
2	ROAD CLOSED 1000 FT W20-3 (O) 48	4	1
3	ROAD CLOSED 1500 FT W20-3 (O) 48	0	1
4	ROAD CLOSED AHEAD W20-3 (O) 48	0	1
5	BARRICADE 500 FT W21-1100 (O) 48	4	2
6	ROAD CLOSED R11-2 (O) 4830	2	2
7	ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY R11-3 (O) 6030	2	2
11	DETOUR M4-9 (O) 3021	16	6
12	DETOUR M4-9 R (O) 3021	4	1
13	DETOUR M4-9 R (O) 3021	7	1
14	DETOUR M4-9 L (O) 3021	4	1
15	DETOUR M4-9 L (O) 3021	5	1
16	END DETOUR M4-8g (O) 2418	2	1
17	BUTTERFIELD ROAD SPECIAL (O) 9 VARIABLE	42	0
18	WESTBOUND LAKE STREET CLOSED TO THRU TRAFFIC USE WINCHESTER ROAD SPECIAL (O) 6030	0	7
20	LAKE STREET SPECIAL (O) 9 VARIABLE	0	11
21	NORTHBOUND BUTTERFIELD ROAD CLOSED TO THRU TRAFFIC USE MILWAUKEE AVENUE SPECIAL (O) 6036	6	0
22	SOUTHBOUND BUTTERFIELD ROAD CLOSED TO THRU TRAFFIC USE MILWAUKEE AVENUE SPECIAL (O) 6036	5	0
23	DETOUR INFORMATION SIGN SPECIAL (O) 4836	8	3
24	NORTH M3-1 (O) 2412	17	0
25	SOUTH M3-3 (O) 2412	18	0
27	WEST M3-4 (O) 2412	0	8
8, 9, 10, 19, 26	NOT USED	0	0



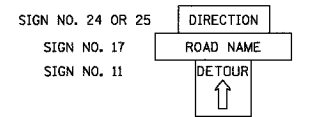
**BUTTERFIELD ROAD DETOUR ROUTE
(REQUIRED DURING RAILROAD CROSSING
UPGRADES [PRE-STAGE] ONLY)**



**WESTBOUND LAKE STREET DETOUR ROUTE
(REQUIRED DURING STAGE II ONLY)**



**TYPICAL INTERSECTION AT
POINT OF DETOUR**



**TYPICAL DETOUR
ASSEMBLY SIGN**

- LEGEND**
- SIGNALIZED INTERSECTION
 - 48" x 48" CONSTRUCTION WARNING SIGN WITH AMBER FLASHING LIGHT AND ORANGE WARNING FLAG. NUMBER DENOTES TYPE.
 - M4-9 SERIES DETOUR SIGN WITH ROAD NAME AND CARDINAL DIRECTION PLATE. NUMBER DENOTES TYPE.
 - OTHER DETOUR SIGNS. NUMBER DENOTES TYPE.
 - TYPE III BARRICADE WITH AMBER FLASHING LIGHTS.
 - DETOUR ROUTE

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 DETOUR PLAN**

SCALE: NONE
 DATE: 12/5/2005

DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	36
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUGGESTED MAINTENANCE OF TRAFFIC STAGING NOTES

**PRE-STAGE (BUILD TEMPORARY PAVEMENT AND DRAINAGE, BUILD RAILROAD CROSSING)
MAINTENANCE OF TRAFFIC**

- LANE CLOSURES IN ACCORDANCE WITH IDOT STANDARDS 701421, 702001 AND LCDOT STANDARDS LC7005, LC7008.

CONSTRUCTION

- PLACE EROSION CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN AND AS DIRECTED BY THE ENGINEER.
- RELOCATE UTILITIES (ELECTRIC, CABLE, GAS, AND TELEPHONE) (BY OTHERS).
- INSTALL WATER MAIN FROM STA. 180+00 TO STA. 191+75.
- PLACE MAINLINE STORM SEWER, LATERALS, AND DRAINAGE STRUCTURES BETWEEN STA. 163+70 AND STA. 168+85, STA. 168+00 LT AND STA. 200+40 LT STA. 55+50 RT AND STA. 64+60 RT
- SET UP DETOUR ROUTE FOR THE CLOSING OF BUTTERFIELD ROAD AT THE RAILROAD TRACKS.
- RECONSTRUCT RAILROAD TRACKS (BY OTHERS) AND RAILROAD WARNING DEVICES (BY OTHERS).
- REMOVE DETOUR ROUTE FOR THE CLOSING OF BUTTERFIELD ROAD AT THE RAILROAD TRACKS.
- PLACE TEMPORARY TRAFFIC SIGNALS AT THE INTERSECTIONS OF BUTTERFIELD ROAD AT WINCHESTER ROAD AND BUTTERFIELD ROAD AT IL. RTE. 137 (BUCKLEY ROAD).
- BUILD TEMPORARY PAVEMENT AND DRAINAGE AS SHOWN ON STAGE IA MAINTENANCE OF TRAFFIC PLAN AND CROSS SECTION-TEMPORARY PAVEMENT AND DRAINAGE.
- PLACE EROSION CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN AND AS DIRECTED BY THE ENGINEER.
- PLACE TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE IA MAINTENANCE OF TRAFFIC PLAN.

STAGE IA (BUILD NORTHBOUND AND EASTBOUND LANES AND DRAINAGE)

MAINTENANCE OF TRAFFIC

- RELOCATE TRAFFIC TO THE LANES SHOWN ON STAGE IA MAINTENANCE OF TRAFFIC PLANS.
- LANE CLOSURES IN ACCORDANCE WITH IDOT STANDARDS 701422, 701502, 701606, 701801, 702001 AND LCDOT STANDARDS LC7001, LC7003.

CONSTRUCTION

- PLACE EROSION CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN AND AS DIRECTED BY THE ENGINEER.
- COMPLETE CONSTRUCTION OF THE MAINLINE STORM SEWERS AND DRAINAGE STRUCTURES ON THE EAST SIDE OF BUTTERFIELD ROAD, AND THE NORTH SIDE OF WINCHESTER ROAD.
- BEGIN CONSTRUCTION OF DETENTION POND AT STATION 131+00 LT.
- CONSTRUCT THE EAST SIDE OF BUTTERFIELD ROAD, AND THE NORTH SIDE OF WINCHESTER ROAD ALONG WITH ALL DRIVEWAYS, ENTRANCES, SIDEWALKS AND LANDSCAPING.
- CONTRACTOR MAY CONSTRUCT MEDIAN CURB AND GUTTER IN AREAS DESCRIBED BELOW THAT WILL NOT BE IN CONFLICT WITH STAGE IB TRAFFIC MOVEMENTS OR IN CONFLICT WITH STAGE II TRAFFIC MOVEMENTS.
- THE BITUMINOUS CONCRETE SURFACE COURSE WILL NOT BE PLACED AT THIS TIME.
- BUILD TEMPORARY PAVEMENT AND DRAINAGE AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN
- PLACE TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN.

STAGE IB (BUILD CENTER LANES/MEDIANS AS REQUIRED FOR STAGE II TRAFFIC)

- ONLY WORK PERTAINING TO THE ITEMS DESCRIBED IN STAGE IB WILL BE WORKED ON DURING STAGE IB. ALL WORK PERTAINING TO STAGE II WILL BE STARTED ONLY AT THE COMPLETION OF STAGE IB, AS DETERMINED BY THE ENGINEER.

- CONTRACTOR MAY CONSTRUCT MEDIAN CURB AND GUTTER IN AREAS DESCRIBED BELOW THAT WILL NOT BE IN CONFLICT WITH STAGE IB TRAFFIC MOVEMENTS OR IN CONFLICT WITH STAGE II TRAFFIC MOVEMENTS.

MAINTENANCE OF TRAFFIC

- RELOCATE TRAFFIC TO THE LANES SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLANS.
- LANE CLOSURES IN ACCORDANCE WITH IDOT STANDARDS 701422, 701502, 701606, 701801, 702001 AND LCDOT STANDARDS LC7001.

CONSTRUCTION

- CONSTRUCT THE LEFT TURN LANES AT THE INTERSECTION OF BUTTERFIELD ROAD AT LAKE STREET, AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN (SUB-STAGE REQUIRED FOR LEFT TURN LANES).
- PLACE TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLANS FOR THE INTERSECTION OF BUTTERFIELD ROAD AT LAKE STREET. RELOCATE TRAFFIC TO THE NEW LANES.
- CONSTRUCT THE LEFT TURN LANES AT THE INTERSECTION OF BUTTERFIELD ROAD AT WINCHESTER ROAD AND CENTER LANE OF WINCHESTER ROAD AT PROJECT LIMITS, AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN.
- PLACE TEMPORARY PAVEMENT, TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLANS FOR THE INTERSECTION OF BUTTERFIELD ROAD AT WINCHESTER ROAD AND WINCHESTER ROAD. RELOCATE TRAFFIC TO THE NEW LANES.
- CONSTRUCT THE LEFT TURN LANES AT THE INTERSECTION OF BUTTERFIELD ROAD AT VIRGINIA AVENUE/ST. WILLIAM DRIVE, AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN.
- PLACE TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLANS FOR THE INTERSECTION OF BUTTERFIELD ROAD AT VIRGINIA AVENUE/ST. WILLIAM DRIVE. RELOCATE TRAFFIC TO THE NEW LANES.
- CONSTRUCT THE LEFT TURN LANES AT THE INTERSECTION OF BUTTERFIELD ROAD AT IL. RTE. 137 (BUCKLEY ROAD), AS SHOWN ON STAGE IB MAINTENANCE OF TRAFFIC PLAN.
- BITUMINOUS SURFACE REMOVAL OF IL. RTE. 137 (BUCKLEY ROAD) AS SHOWN ON THE PLANS.
- COMPLETE CONSTRUCTION OF THE MAINLINE STORM SEWERS AND DRAINAGE STRUCTURES ON IL. RTE. 137 (BUCKLEY ROAD).
- CONSTRUCT THE LEFT TURN LANES, CURB AND GUTTER AND MEDIANS AT THE INTERSECTION OF BUTTERFIELD ROAD AND IL. RTE. 137 (BUCKLEY ROAD).
- PLACE THE BITUMINOUS CONCRETE SURFACE COURSE ON IL. RTE. 137 (BUCKLEY ROAD).
- THE BITUMINOUS CONCRETE SURFACE COURSE WILL NOT BE PLACED ON BUTTERFIELD ROAD AT THIS TIME.
- PLACE TEMPORARY PAVEMENT MARKINGS AND TRAFFIC CONTROL AS SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLAN.

STAGE II (BUILD SOUTHBOUND AND WESTBOUND LANES AND DRAINAGE, BUILD REMAINING CENTER LANES)

MAINTENANCE OF TRAFFIC

- RELOCATE TRAFFIC TO THE LANES SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLANS.
- LANE CLOSURES IN ACCORDANCE WITH IDOT STANDARDS 701502, 701606, 701801, 702001 AND LCDOT STANDARDS LC7001, LC7003.

CONSTRUCTION

- PLACE EROSION CONTROL ITEMS PER THE STORM WATER POLLUTION PREVENTION PLAN AND AS DIRECTED BY THE ENGINEER.
- SET UP DETOUR ROUTE FOR THE CLOSING OF WESTBOUND LAKE STREET, AS SHOWN ON THE DETOUR PLAN. ONE LANE EASTBOUND MUST REMAIN OPEN TO TRAFFIC AT ALL TIMES.
- COMPLETE CONSTRUCTION OF THE MAINLINE STORM SEWERS AND DRAINAGE STRUCTURES ON LAKE STREET.
- CONSTRUCT LAKE STREET.
- REMOVE WESTBOUND LAKE STREET DETOUR ROUTE.
- COMPLETE CONSTRUCTION OF THE STORM SEWERS AND DRAINAGE STRUCTURES ON THE WEST SIDE OF BUTTERFIELD ROAD, AND THE SOUTH SIDE OF WINCHESTER ROAD.
- CONSTRUCT THE WEST SIDE OF BUTTERFIELD ROAD, THE SOUTH SIDE OF LAKE STREET, AND THE SOUTH SIDE OF WINCHESTER ROAD ALONG WITH ALL DRIVEWAYS, ENTRANCES, SIDEWALKS AND LANDSCAPING.
- THE BITUMINOUS CONCRETE SURFACE COURSE WILL NOT BE PLACED AT THIS TIME.
- REMOVE ALL TEMPORARY PAVEMENT MARKINGS AND PLACE SHORT TERM PAVEMENT MARKINGS FOR ALL LANES.

STAGE III (BUILD REMAINING MEDIANS, FINAL PAVEMENT MARKINGS)

MAINTENANCE OF TRAFFIC

- RELOCATE TRAFFIC TO THE PROPOSED LANES.
- DAYTIME LANE CLOSURES IN ACCORDANCE WITH IDOT STANDARDS 701421, 701426, 701502, 702001.

CONSTRUCTION

- COMPLETE ALL CONCRETE MEDIAN CURB AND GUTTER, CONCRETE MEDIAN SURFACES AND MEDIAN PLANTERS.
- COMPLETE ALL LANDSCAPING PRIOR TO PLACEMENT OF BITUMINOUS CONCRETE SURFACE COURSE.
- PLACE BITUMINOUS CONCRETE SURFACE COURSE.
- PLACE FINAL PAVEMENT MARKINGS.
- UPON APPROVAL FROM THE ENGINEER, REMOVE ALL EROSION CONTROL ITEMS.

GENERAL

- THE CONTRACTOR SHALL FOLLOW STORM WATER POLLUTION PREVENTION PLAN.
- THE CONTRACTOR SHALL COORDINATE THE TEMPORARY RAILROAD GATES AND FLASHER PLACEMENT WITH THE METRA RAILROAD REPRESENTATIVE. TRAFFIC WILL NOT BE RELOCATED UNTIL THE RAILROAD PROTECTION DEVICES ARE FUNCTIONING TO THE SATISFACTION OF THE ENGINEER AND THE METRA RAILROAD REPRESENTATIVE.
- THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL PERMANENT TRAFFIC SIGNAL EQUIPMENT AND APPURTENANCES PER STAGE.
- THE LEFT TURN LANES (AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS) SHALL BE MAINTAINED DURING ALL STAGES OF CONSTRUCTION AT THE INTERSECTION OF BUTTERFIELD ROAD AND WINCHESTER ROAD, AT THE INTERSECTION OF BUTTERFIELD ROAD AND VIRGINIA STREET/ST. WILLIAMS DRIVE, AND AT THE INTERSECTION OF BUTTERFIELD ROAD AND IL RTE 137 (BUCKLEY ROAD).
- DRIVEWAY ACCESS SHALL BE MAINTAINED AT ALL TIMES THROUGH THE USE OF AGGREGATE SURFACE COURSE, TYPE B. DRIVEWAYS NOT SHOWN TO BE CLOSED SHALL BE CONSTRUCTED IN STAGES, ONE HALF AT A TIME.
- THE CONTRACTOR SHALL REMOVE EXISTING PAVEMENT MARKING WHICH CONFLICT. THIS WORK SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
- TEMPORARY PAVEMENT MARKING - LINE 6" (BLACK) TO BE APPLIED OVER EXISTING PAVEMENT MARKINGS OUTSIDE OF RECONSTRUCTION LIMITS ON LAKE STREET, WINCHESTER ROAD AND IL RTE 137 TO "OBLITERATE" CONFLICTING PAVEMENT MARKINGS DURING CONSTRUCTION.
- THE CONTRACTOR WILL COORDINATE THE RECONSTRUCTION OF LAKE STREET WITH LIBERTY ELEMENTARY SCHOOL DISTRICT #70 1381 W. LAKE ST. LIBERTYVILLE IL 60048, SUCH THAT THE RECONSTRUCTION OCCURS WHEN SCHOOL IS NOT IN SESSION.

THE MAINTENANCE OF TRAFFIC WILL INCLUDE TEMPORARY CONSTRUCTION SIGNING (LCDOT STANDARD LC7007) PLACED AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE COST WILL BE INCLUDED IN THE UNIT PRICE OF TRAFFIC CONTROL AND PROTECTION (SPECIAL). ALL "ENTRANCE" SIGNS WILL BE PLACED BY COUNTY FORCES.

AS SHOWN ON THE PLANS, THE MAINTENANCE OF TRAFFIC WILL INCLUDE DIRECTIONAL INDICATOR BARRICADES (LCDOT STD LC7006). ON IL RTE 137 DIRECTIONAL INDICATOR BARRICADES WILL BE USED FOR LANE DROPS ONLY. ON ALL OTHER ROADWAYS, DIRECTIONAL INDICATOR BARRICADES WILL BE USED AT LANE DROPS, AND LANE SHIFTS.

A TEMPORARY PATCH SHALL BE PLACED OVER THE TOP OF STORM SEWER OR WATER MAIN TRENCHES AT THE END OF EACH DAY IN ACCORDANCE WITH THE TEMPORARY PATCH DETAIL. REMOVAL OF THE TEMPORARY PATCH WILL BE INCIDENTAL IN THE UNIT COST FOR INCIDENTAL BITUMINOUS SURFACING.

THE CONTRACTOR SHALL PLACE TEMPORARY BITUMINOUS RAMPS BETWEEN THE EXISTING AND PROPOSED PAVEMENT AT LOCATIONS AS DIRECTED BY THE ENGINEER WHEN DIRECTED BY THE ENGINEER. THIS WORK WILL BE INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION (SPECIAL).

THE CONTRACTOR SHALL COVER TRAFFIC SIGNAL HEADS AND MODIFY CONTROLLER PHASING AND TIMINGS TO MATCH THE TRAFFIC PATTERNS SHOWN ON THE PLANS. THIS WORK WILL BE INCIDENTAL TO TRAFFIC CONTROL AND PROTECTION (SPECIAL).

LANE CLOSURES: THE CONTRACTOR SHALL WORK EXPEDITIOUSLY TO OPEN TRAFFIC LANES CLOSED DUE TO ROADWORK. THE ENGINEER WILL BE THE SOLE JUDGE OF WHEN A LANE IS READY TO BE OPENED TO TRAFFIC. THE OPENING OF THE LANE TO TRAFFIC WILL BE IN ACCORDANCE WITH SECTION 107.29 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

ROADWORK REQUIRING A CLOSURE OF A LANE, WHICH HAS BEEN OPENED PREVIOUSLY TO TRAFFIC, WILL BE ALLOWED AT THE DISCRETION OF THE ENGINEER AND UNDER THE FOLLOWING CONDITIONS:

- THE LANE CLOSURE SHALL ONLY BE IN EFFECT WHILE WORKERS ARE PRESENT IN OR NEAR THE CLOSED LANE.
- THE CLOSED LANE WILL BE REOPENED TO TRAFFIC AT THE END OF THE WORKDAY.
- ALL TRAFFIC CONTROL DEVICES PERTAINING TO THE LANE CLOSURE SHALL BE REMOVED FROM THE ROADWAY AT THE END OF THE WORKDAY.

FOR SIDE STREETS THAT CROSS THE WORK ZONE - PLACE THE AGGREGATE BASE COURSE AND BITUMINOUS BINDER COURSES BEFORE THE WEEKEND FOLLOWING REMOVAL OF THE SIDE STREET EXISTING PAVEMENT.

WINTER SHUTDOWN IS ANTICIPATED AFTER ALL PRE-STAGE, STAGE IA AND STAGE IB WORK IS COMPLETE AND TRAFFIC HAS BEEN RELOCATED TO THE LANES SHOWN ON STAGE II MAINTENANCE OF TRAFFIC PLANS. CONTRACTOR WILL PLACE SURFACE COURSE ON ALL PROPOSED PAVEMENT TO BE OPEN TO TRAFFIC DURING WINTER SHUTDOWN.

"WORKERS" SIGN TO BE REMOVED OR COVERED WHEN WORKERS ARE NOT PRESENT.

SPACING OF TYPE II BARRICADES AS FOLLOWS: 50' C-C ON TANGENTS, 25' C-C ON TAPERS/SHIFTS, 12' C-C AROUND RADII.

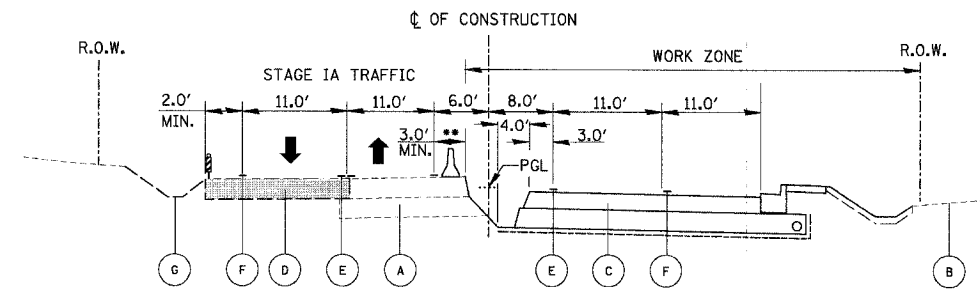
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
SUGGESTED MAINTENANCE OF
TRAFFIC - GENERAL NOTES**

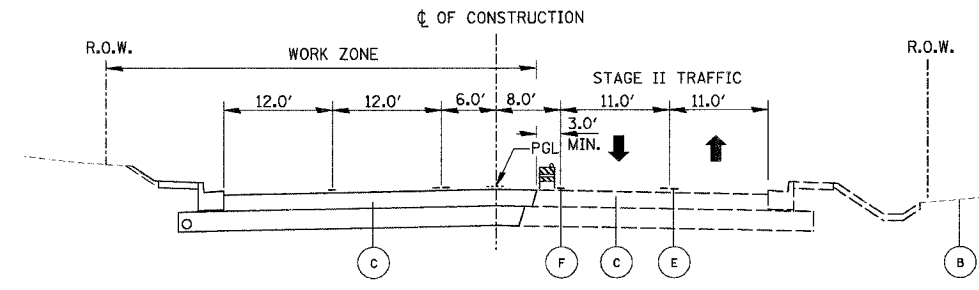
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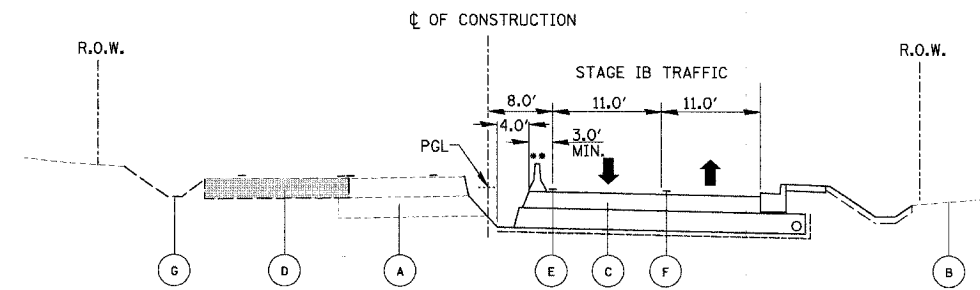
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	37
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**PROPOSED TYPICAL RECONSTRUCTION STAGE IA
BUTTERFIELD ROAD**

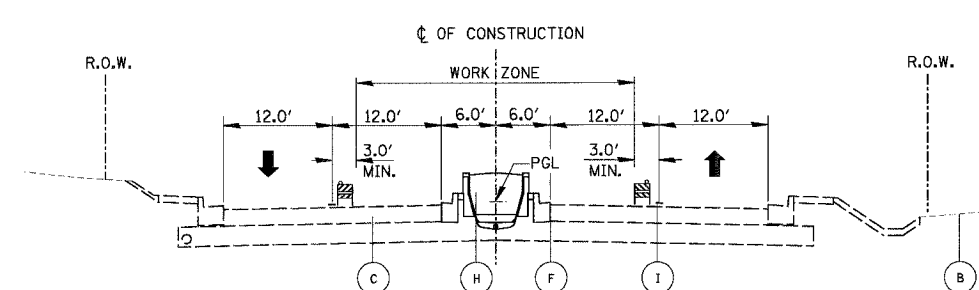


**PROPOSED TYPICAL RECONSTRUCTION STAGE II
BUTTERFIELD ROAD**



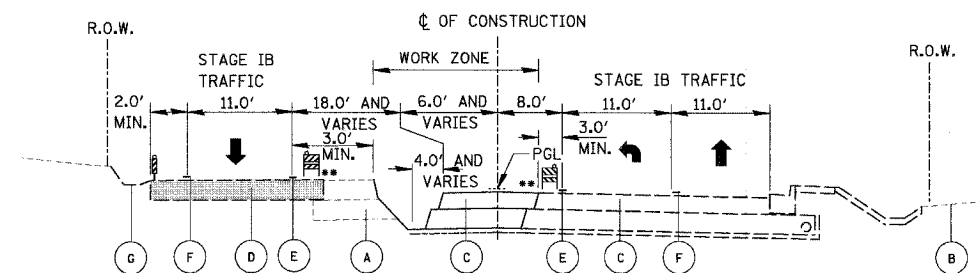
**PROPOSED TYPICAL RECONSTRUCTION STAGE IB
BUTTERFIELD ROAD**

STA. 112+20 TO STA 144+13
STA. 152+45 TO STA 158+63
STA. 167+63 TO STA 175+65
STA. 180+95 TO STA 192+77
STA. 196+50 TO STA 197+89



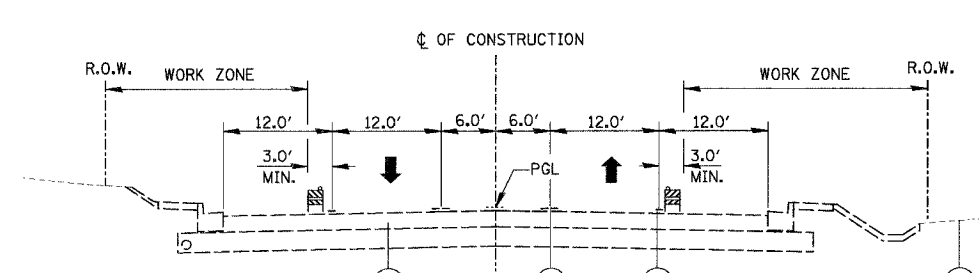
**PROPOSED TYPICAL RECONSTRUCTION STAGE III *
BUTTERFIELD ROAD**

STA. 167+50 TO STA. 175+15.70
STA. 184+25 TO STA. 188+50
STA. 191+65.31 TO STA. 200+35.00



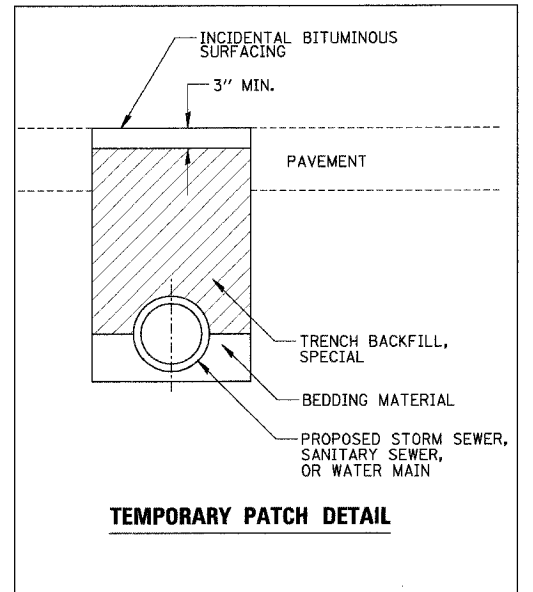
**PROPOSED TYPICAL RECONSTRUCTION STAGE IB
BUTTERFIELD ROAD**

STA. 144+13 TO STA 152+45
STA. 158+63 TO STA 167+63
STA. 175+65 TO STA 180+95
STA. 192+77 TO STA 196+50
STA. 197+89 TO STA 200+00



**PROPOSED TYPICAL RECONSTRUCTION STAGE III *
BUTTERFIELD ROAD**

* THE LANE CLOSURE SHALL ONLY BE IN EFFECT WHILE WORKERS ARE PRESENT IN OR NEAR THE CLOSED LANE. ALL TRAFFIC CONTROL DEVICES PERTAINING TO THE LANE CLOSURE WILL BE REMOVED FROM THE ROADWAY WHEN THE LANE CLOSURE IS NOT IN EFFECT.



TEMPORARY PATCH DETAIL

LEGEND

- | | |
|---|---|
| (A) EXISTING ROADWAY | (G) TEMPORARY DRAINAGE AND EROSION CONTROL |
| (B) EXISTING GROUND | (H) CONCRETE MEDIAN OR LANDSCAPED MEDIAN |
| (C) PROPOSED ROADWAY | (I) SHORT TERM PAVEMENT MARKING |
| (D) TEMPORARY PAVEMENT SUPERPAVE | ▨ TYPE II BARRICADE OR WITH LIGHT |
| (E) TEMPORARY PAVEMENT MARKING - LINE, YELLOW | ▨ VERTICAL PANEL WITH LIGHT |
| (F) TEMPORARY PAVEMENT MARKING - LINE, WHITE | ▨ TEMPORARY CONCRETE BARRIER WALL WITH MONODIRECTIONAL PRISMATIC BARRIER REFLECTORS |

** TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,

- SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
- EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.

ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES.

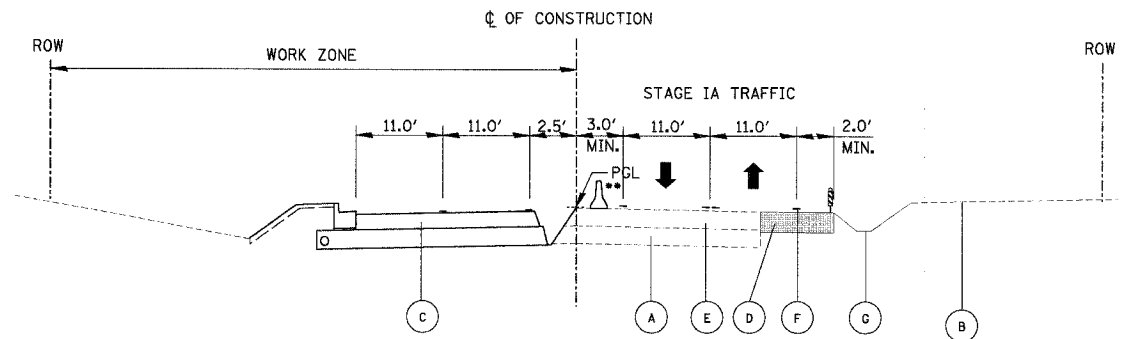
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
SUGGESTED MAINTENANCE OF
TRAFFIC - TYPICAL SECTIONS**

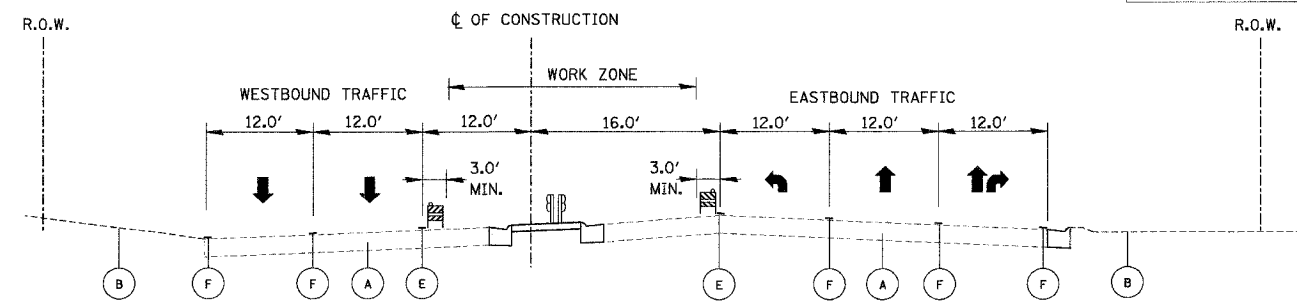
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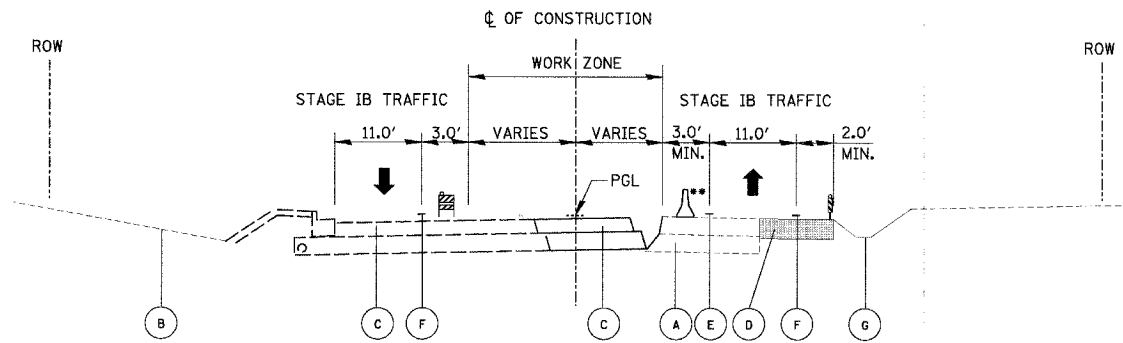
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



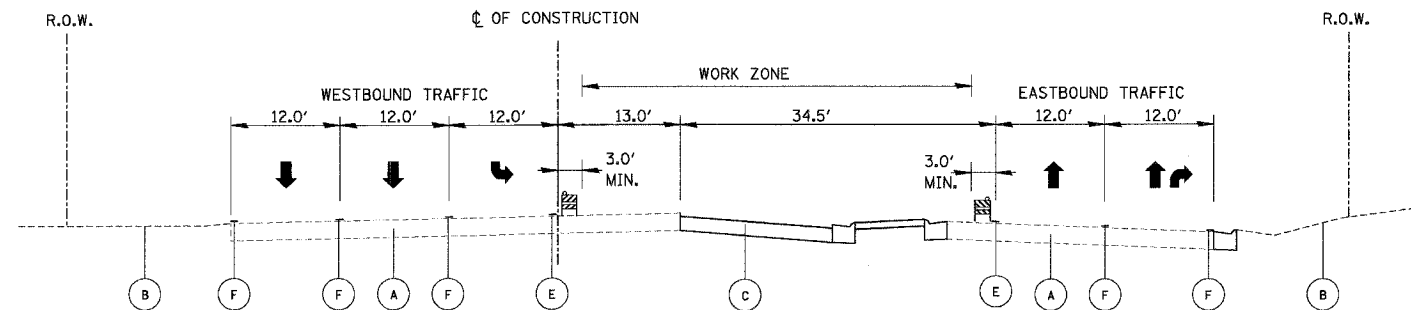
PROPOSED TYPICAL RECONSTRUCTION - STAGE IA
WINCHESTER ROAD
 STA. 49+40 TO STA. 74+06



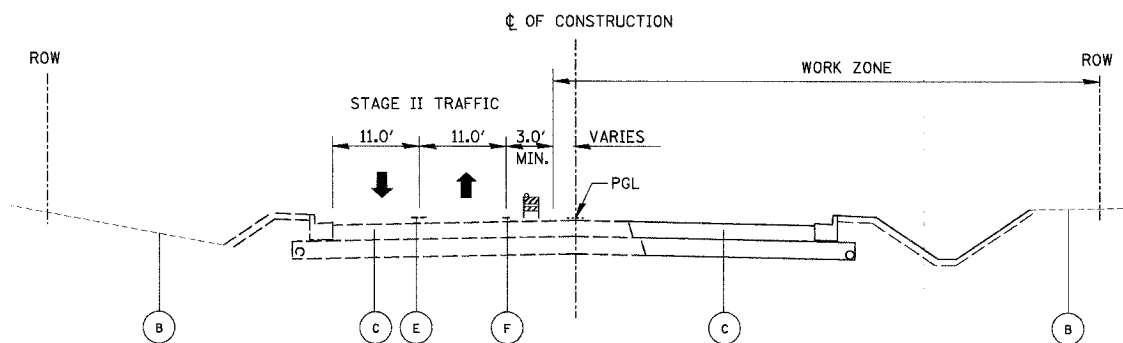
PROPOSED TYPICAL RECONSTRUCTION STAGE IB
IL RTE 137
 STA. 684+40 TO STA. 700+00



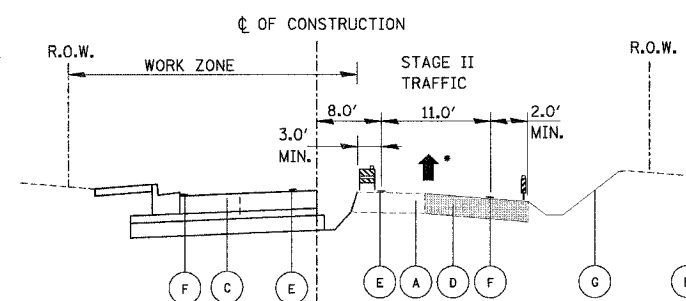
PROPOSED TYPICAL RECONSTRUCTION - STAGE IB
WINCHESTER ROAD
 STA. 49+40 TO STA. 74+06



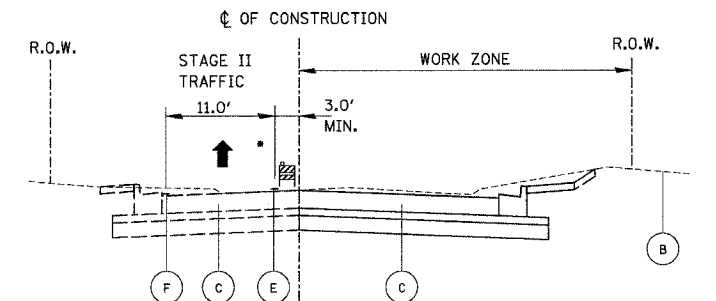
PROPOSED TYPICAL RECONSTRUCTION STAGE IB
IL RTE 137
 STA. 700+00 TO STA. 713+25



PROPOSED TYPICAL RECONSTRUCTION - STAGE II
WINCHESTER ROAD
 STA. 49+40 TO STA. 74+06



PROPOSED TYPICAL RECONSTRUCTION STAGE II
LAKE STREET
 STA. 10+00 TO STA. 14+17



PROPOSED TYPICAL RECONSTRUCTION STAGE II
LAKE STREET
 STA. 10+00 TO STA. 14+17

• ONE WAY TRAFFIC ONLY.
 SEE LAKE STREET DETOUR ROUTE, SHEET 35.

LEGEND

- (A) EXISTING ROADWAY
- (B) EXISTING GROUND
- (C) PROPOSED ROADWAY
- (D) TEMPORARY PAVEMENT SUPERPAVE
- (E) TEMPORARY PAVEMENT MARKING - LINE, YELLOW
- (F) TEMPORARY PAVEMENT MARKING - LINE, WHITE
- (G) TEMPORARY DRAINAGE AND EROSION CONTROL
- (H) CONCRETE MEDIAN OR LANDSCAPED MEDIAN
- (I) SHORT TERM PAVEMENT MARKING
- [Symbol] TYPE II BARRICADE OR WITH LIGHT
- [Symbol] VERTICAL PANEL WITH LIGHT
- [Symbol] TEMPORARY CONCRETE BARRIER WALL WITH MONODIRECTIONAL PRISMATIC BARRIER REFLECTORS **

** TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,

1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.

ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS

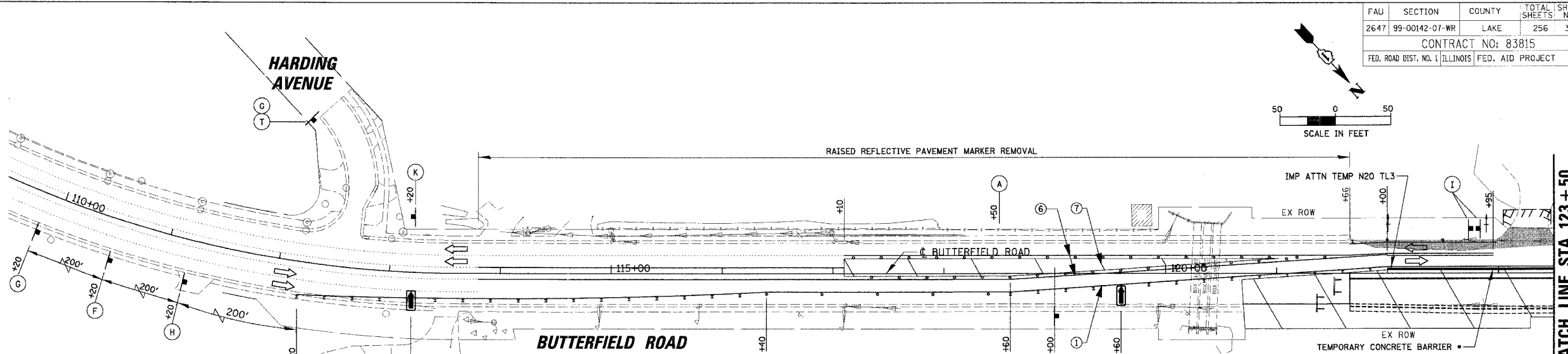
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	39
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN LEGEND

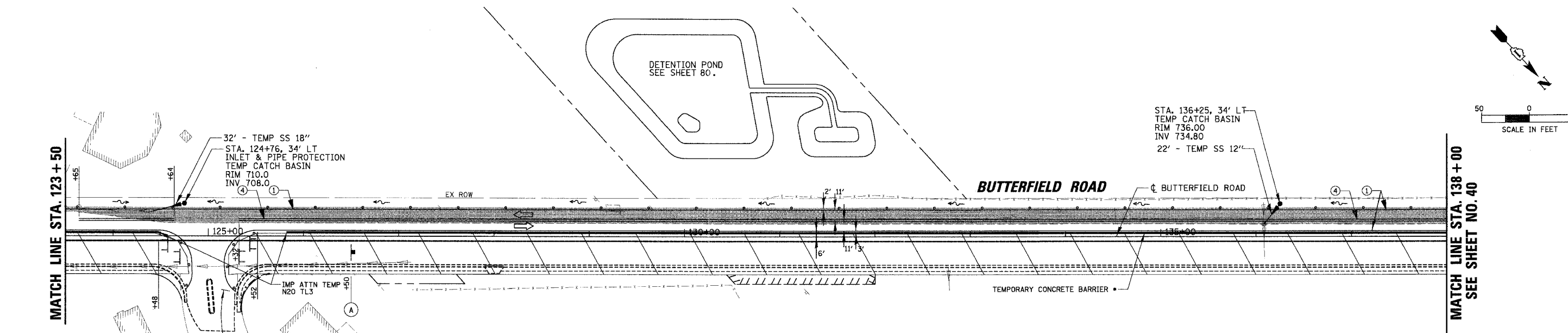


LEGEND

- ① TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')
- ③ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')
- ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
- ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ⑦ TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)
- ⑧ TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)
- ⑨ TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
- ⑩ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
- ⑪ TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
- TYPE II DIRECTIONAL BARRICADE W/ LIGHT
- TYPE III BARRICADE W/ LIGHTS
- WORK ZONE SIGN
- TRAFFIC FLOW
- ARROW BOARD
- LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
- TEMP DITCH FLOW

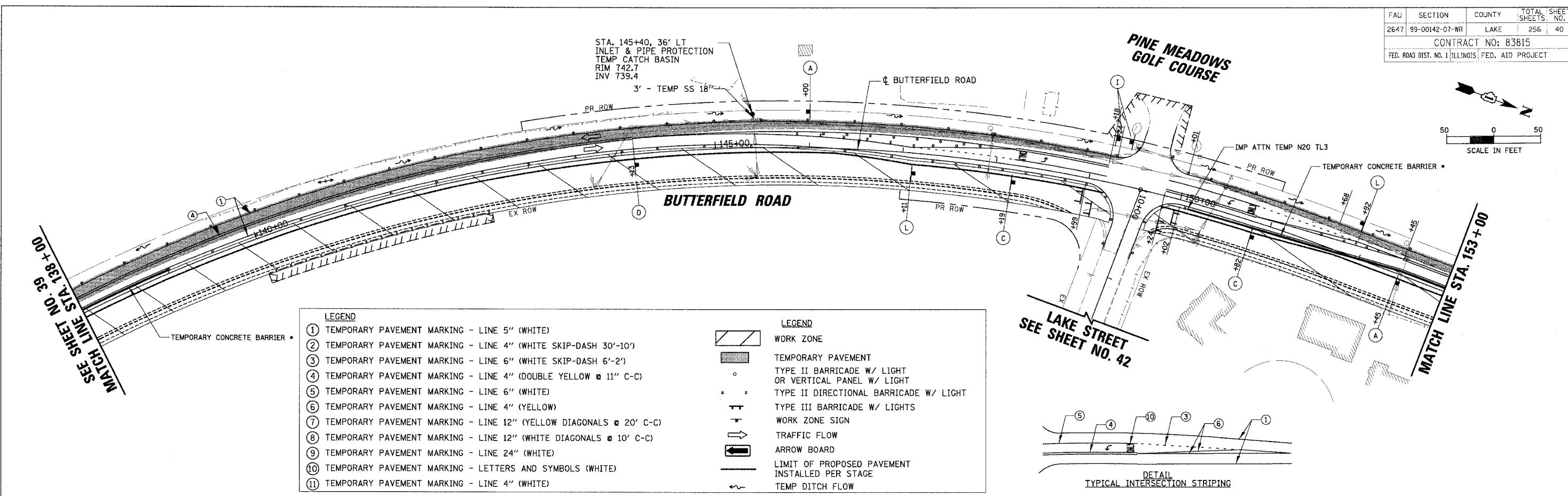


- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

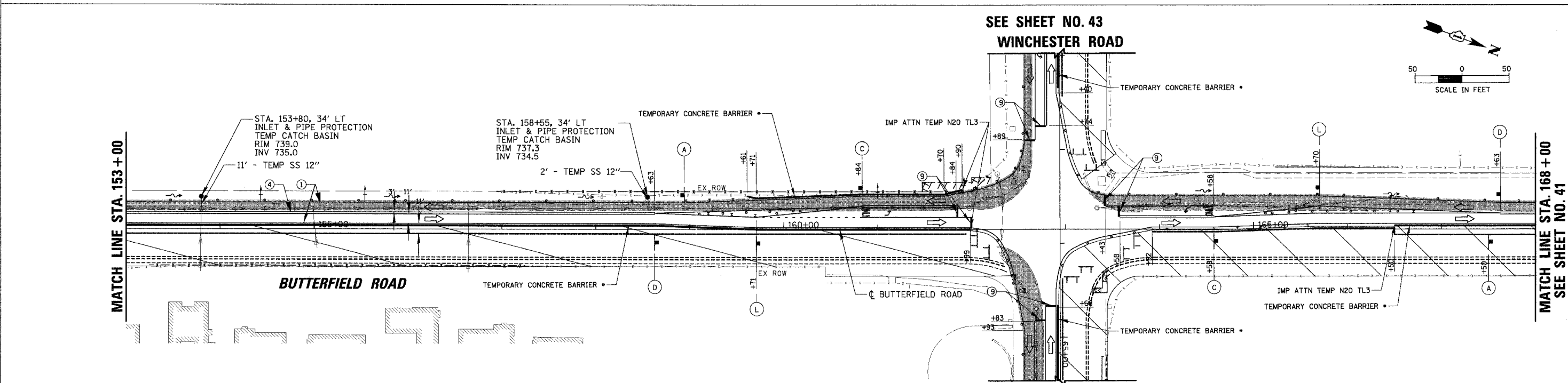
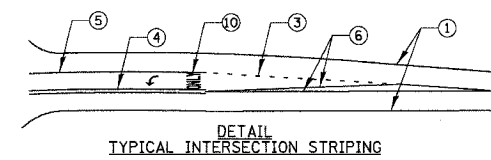
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	FAU 2647 - BUTTERFIELD ROAD	
		SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL - STAGE IA	
		STA. 121+66 TO STA. 138+00	
		SCALE: 1:50	DRAWN BY: PMM
		DATE: 12/22/2005	CHECKED BY: BLL

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FAU	SECTION	COUNTY	TOTAL SHEET SHEETS
2647	99-00142-07-WR	LAKE	256 / 40
CONTRACT NO: 83815			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)	[Hatched Box]	WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')	[Solid Grey Box]	TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')	[Circle]	TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)	[X-Mark]	TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)	[T-Mark]	TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)	[Arrow]	WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)	[Arrow]	TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)	[Arrow]	ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)	[Arrow]	LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)	[Wavy Line]	TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2' TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

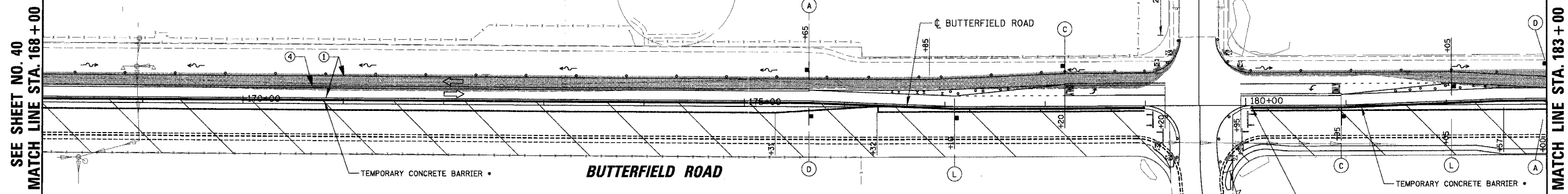
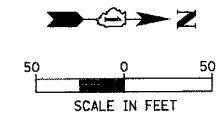
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IA
STA. 138+00 TO STA. 168+00

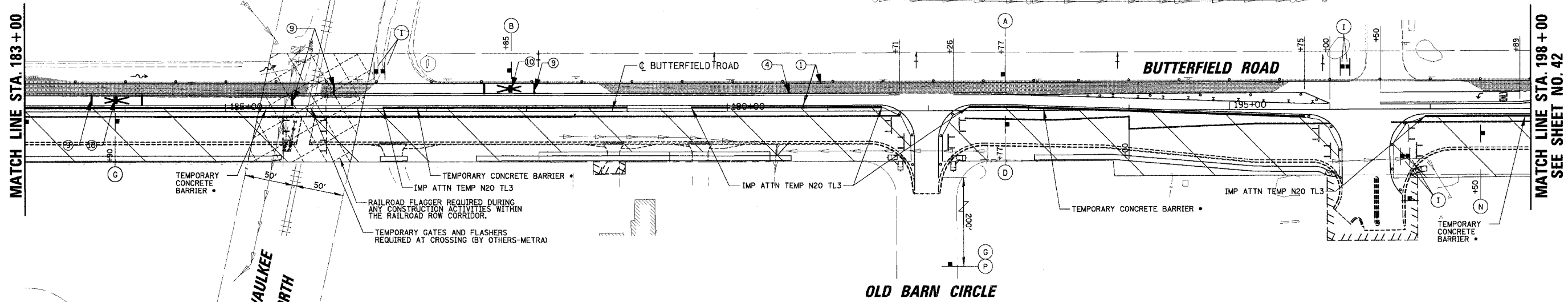
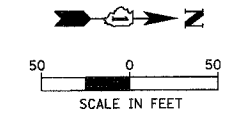
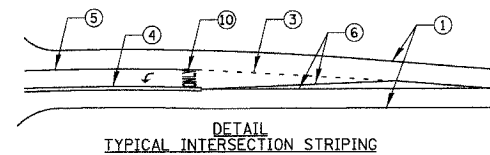
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	41
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)	[Hatched Box]	WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')	[Dotted Box]	TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')	[Circle]	TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)	[Dashed Line]	TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)	[Arrow]	TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)	[Sign]	WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)	[Arrow]	TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)	[Arrow]	ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)	[Dashed Line]	LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)	[Wavy Line]	TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



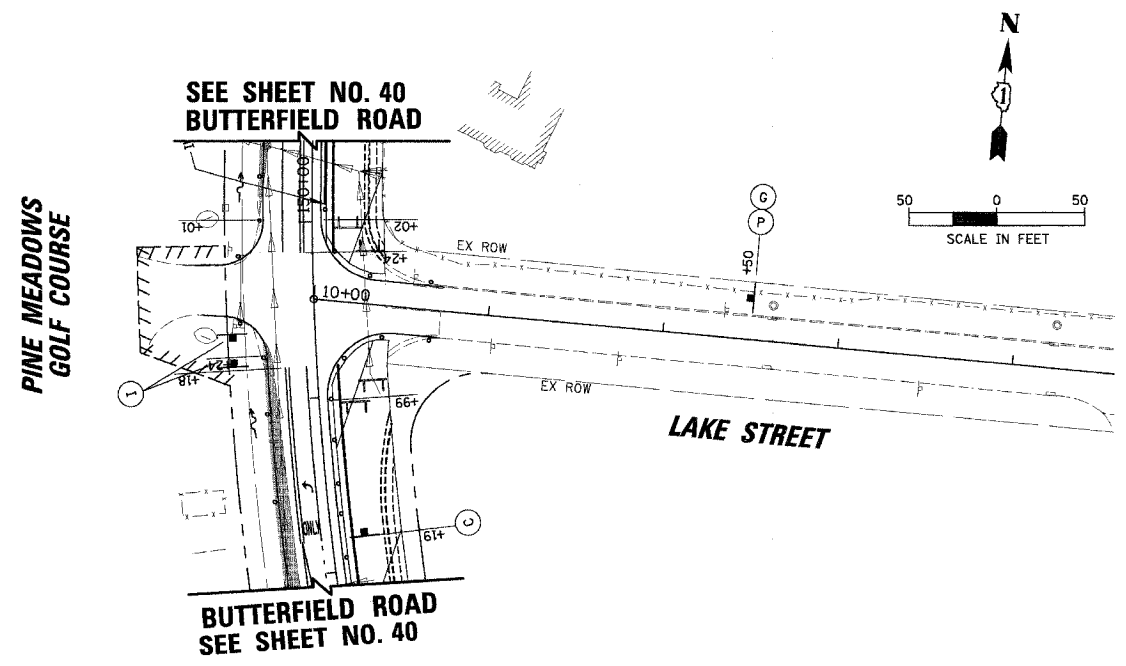
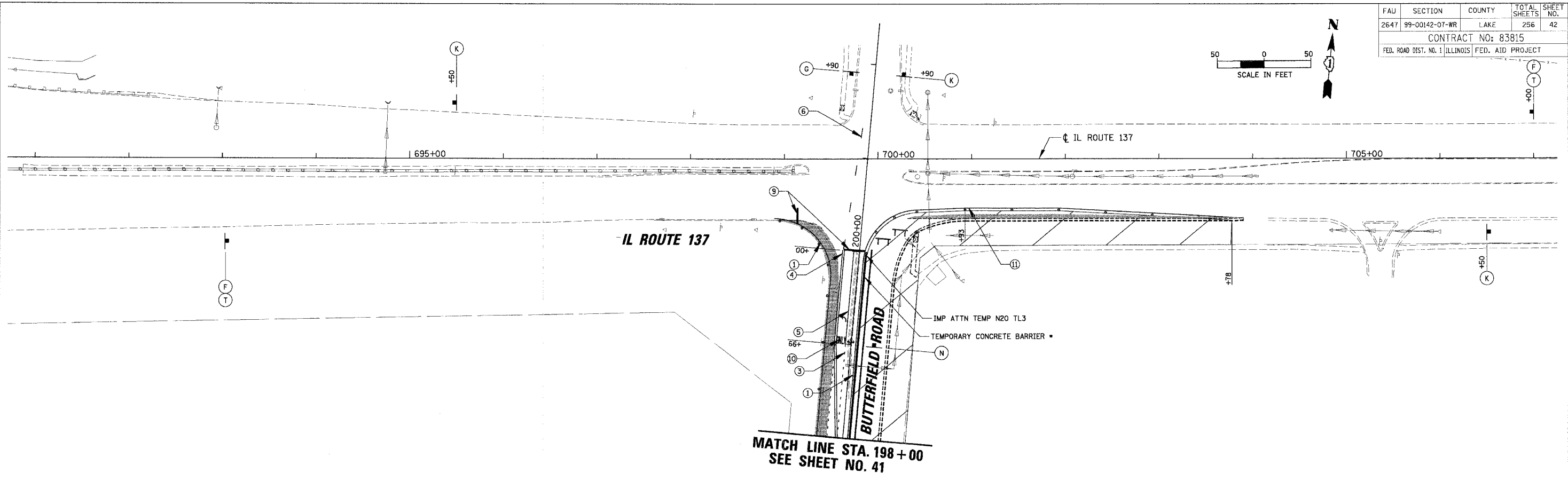
- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IA
STA. 168+00 TO STA. 198+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	42
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- ① TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)
 - ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')
 - ③ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')
 - ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)
 - ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑦ TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)
 - ⑧ TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)
 - ⑨ TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑩ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑪ TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- WORK ZONE
 - TEMPORARY PAVEMENT
 - TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
 - TYPE II DIRECTIONAL BARRICADE W/ LIGHT
 - TYPE III BARRICADE W/ LIGHTS
 - WORK ZONE SIGN
 - TRAFFIC FLOW
 - ARROW BOARD
 - LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
 - TEMP DITCH FLOW

- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

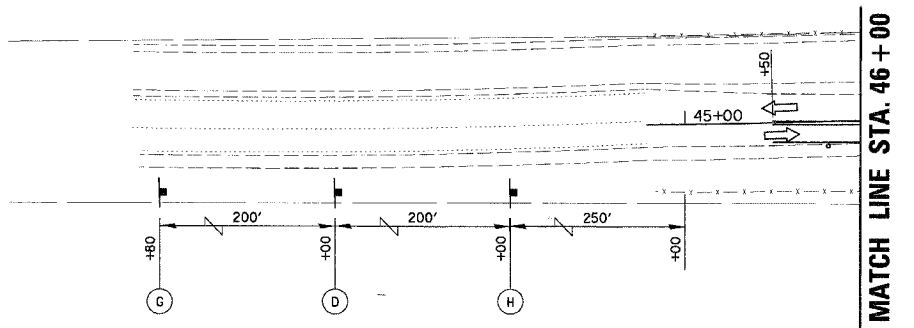
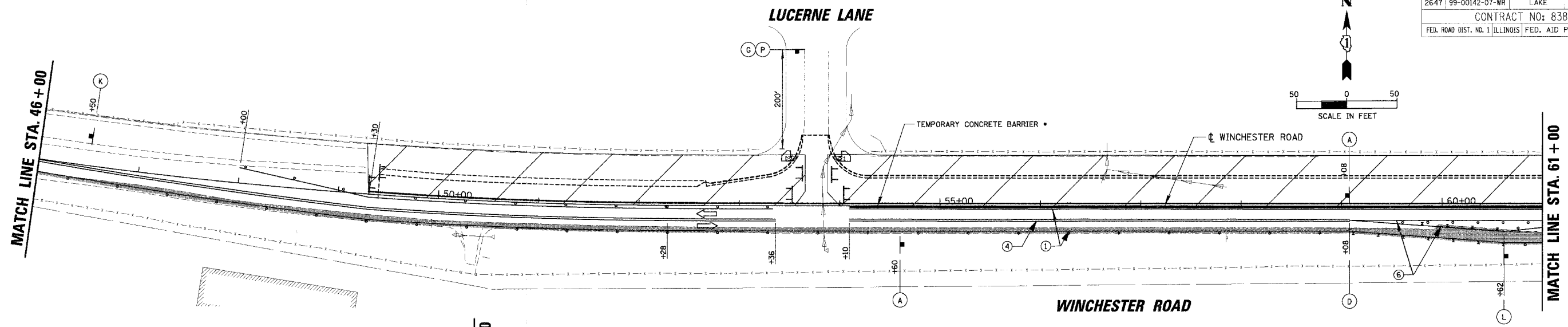
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IA
IL RTE. 137 AND LAKE STREET

SCALE: 1:50
DATE: 12/2/2005

DRAWN BY: PMM
CHECKED BY: BLL

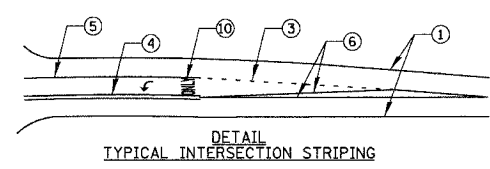
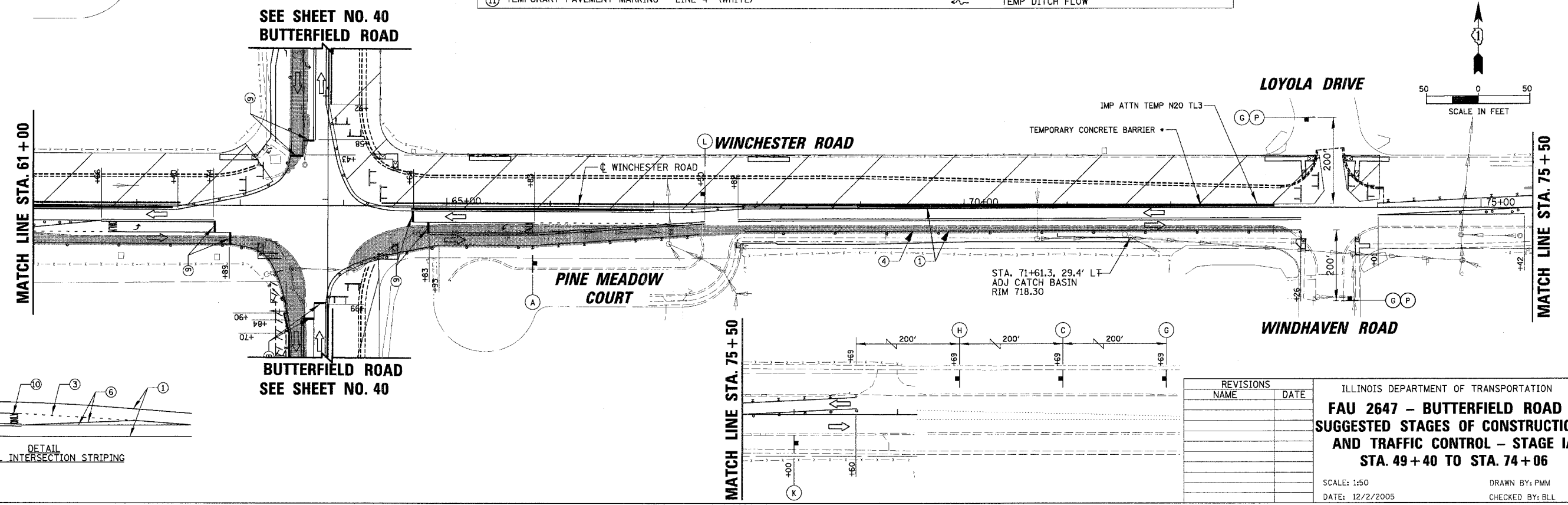
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12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	43
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)	[Hatched Box]	WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')	[Dotted Box]	TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')	[Circle]	TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)	[Dashed Line]	TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)	[T-shaped Symbol]	TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)	[Arrow]	WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)	[Arrow]	TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)	[Arrow]	ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)	[Dashed Line]	LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)	[Wavy Line]	TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		

- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 - SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IA
STA. 49+40 TO STA. 74+06

SCALE: 1/50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

1450
 12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	44
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SIGN LEGEND

HARDING AVENUE

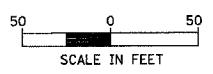
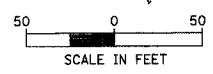
BUTTERFIELD ROAD

LEGEND

- ① TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')
- ③ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')
- ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
- ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ⑦ TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)
- ⑧ TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)
- ⑨ TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
- ⑩ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
- ⑪ TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)

LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
- TYPE II DIRECTIONAL BARRICADE W/ LIGHT
- TYPE III BARRICADE W/ LIGHTS
- WORK ZONE SIGN
- TRAFFIC FLOW
- ARROW BOARD
- LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
- TEMP DITCH FLOW



DETENTION POND
SEE SHEET 80.

MATCH LINE STA. 124 + 00

MATCH LINE STA. 138 + 00
SEE SHEET NO. 45

- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

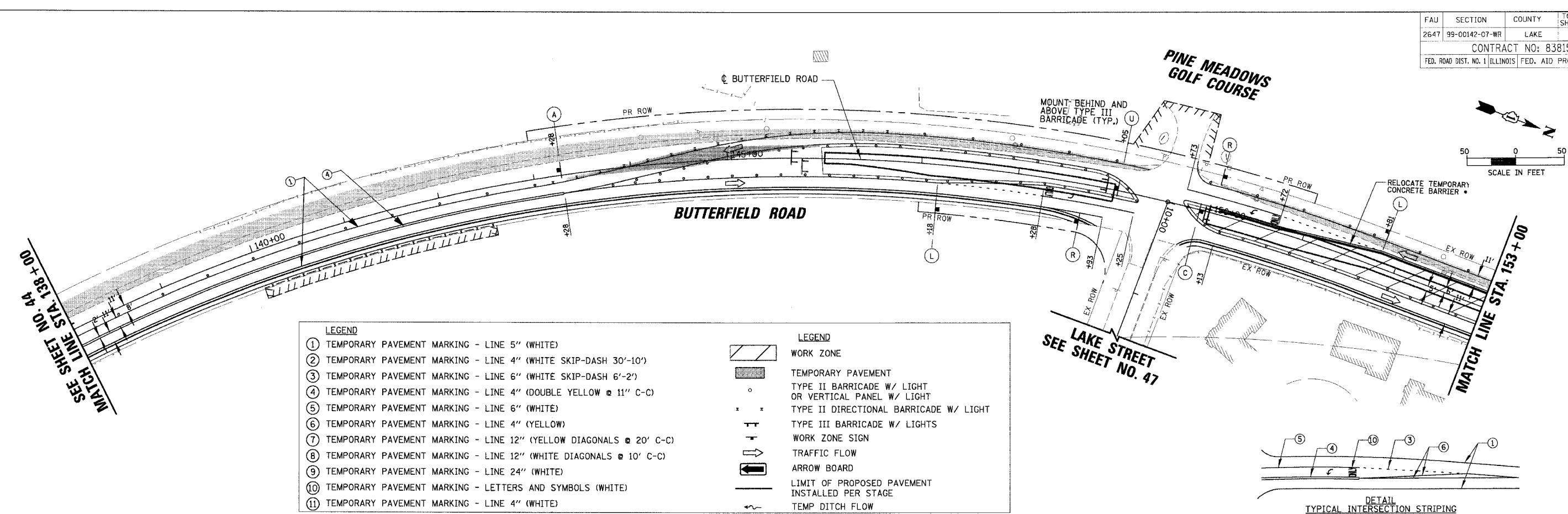
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IB
STA. 121 + 66 TO STA. 138 + 00

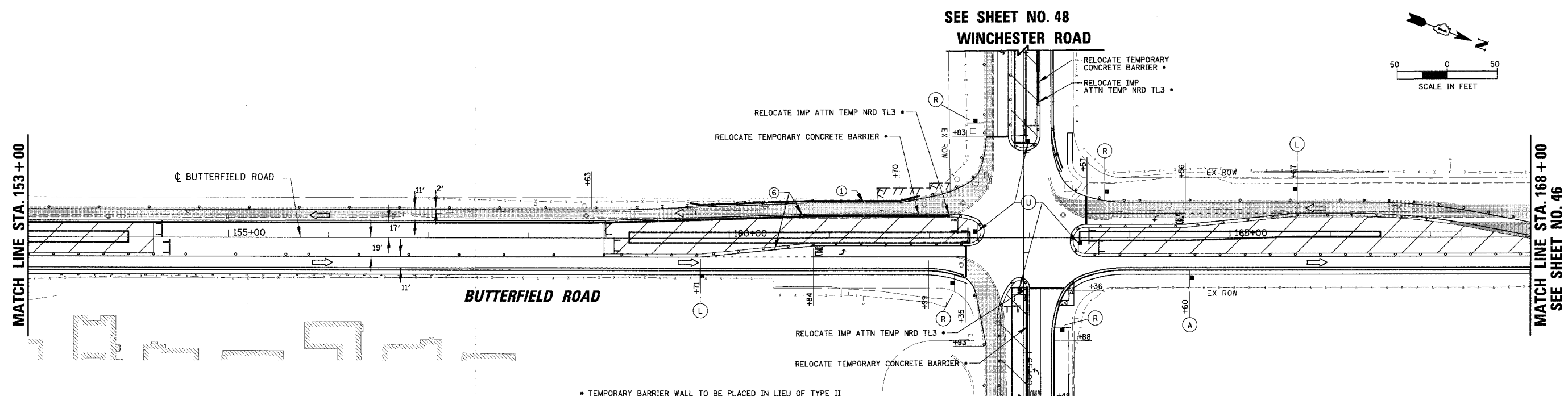
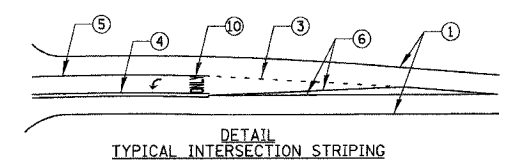
SCALE: 1:50
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	45
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)		WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')		TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')		TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)		TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)		TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)		WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)		TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)		ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)		LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)		TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 - SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

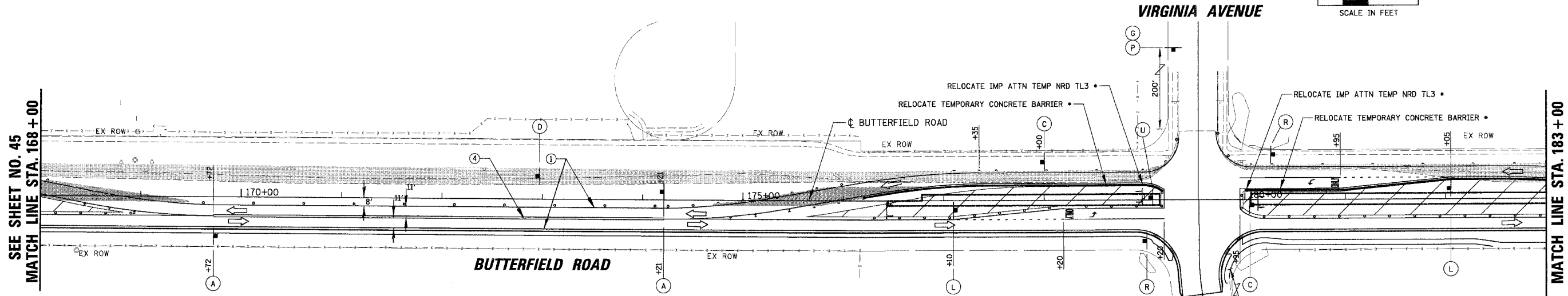
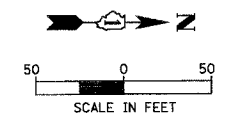
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE 1B
STA. 138+00 TO STA. 168+00

SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

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 12/2/2005

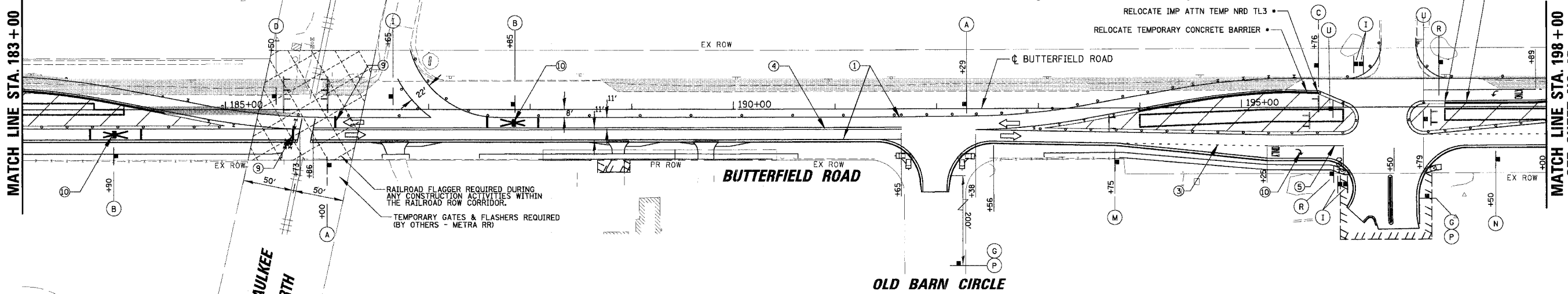
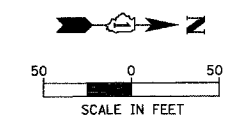
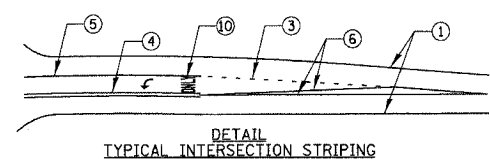
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	46
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE SHEET NO. 45
MATCH LINE STA. 168+00

MATCH LINE STA. 183+00

LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)		WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')		TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')		TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)		TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)		TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)		WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)		TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)		ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)		LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)		TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



MATCH LINE STA. 183+00

MATCH LINE STA. 198+00
SEE SHEET NO. 47

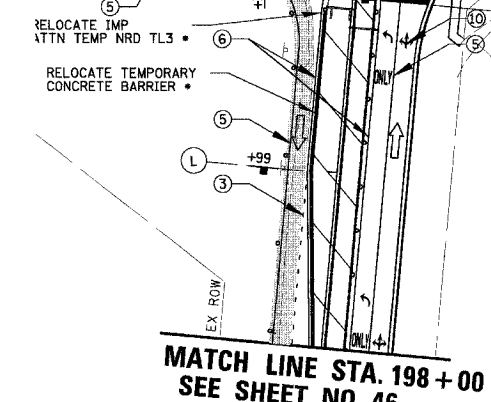
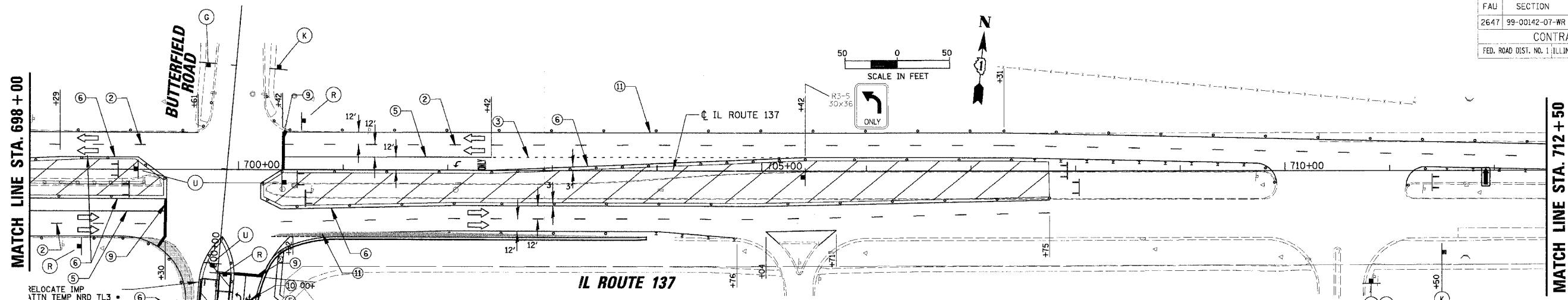
- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 - SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

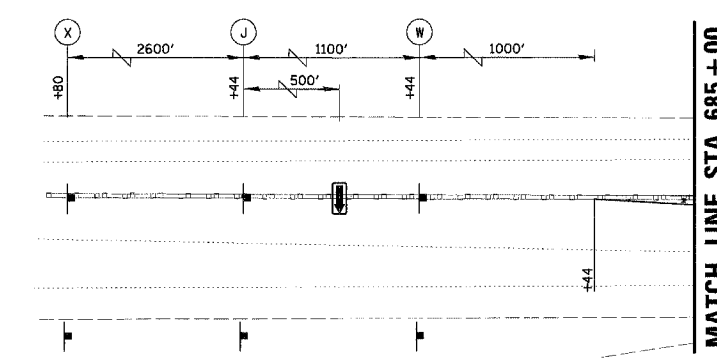
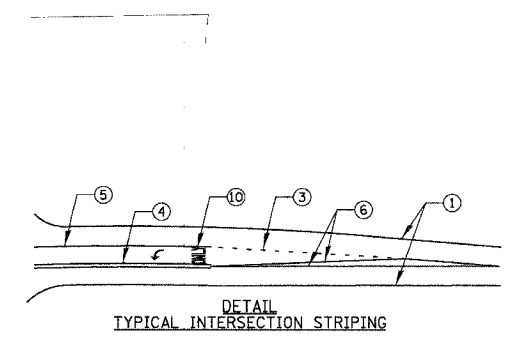
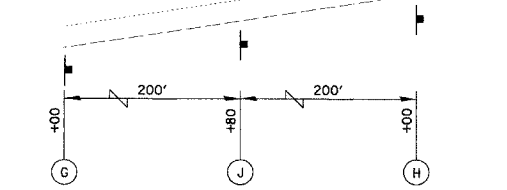
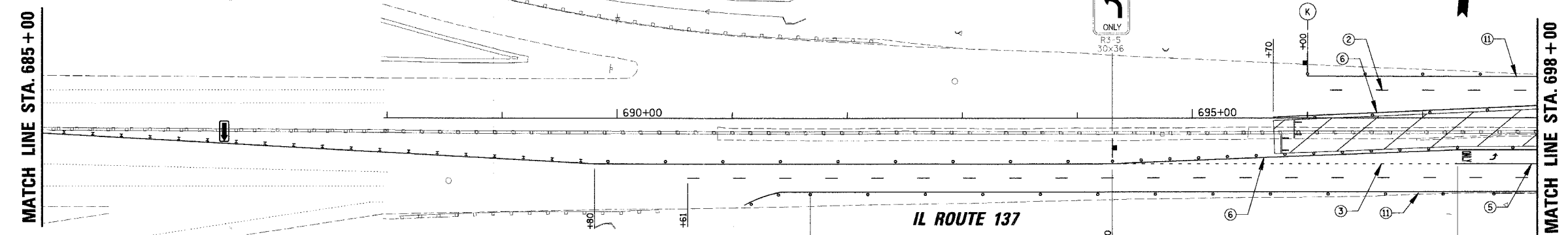
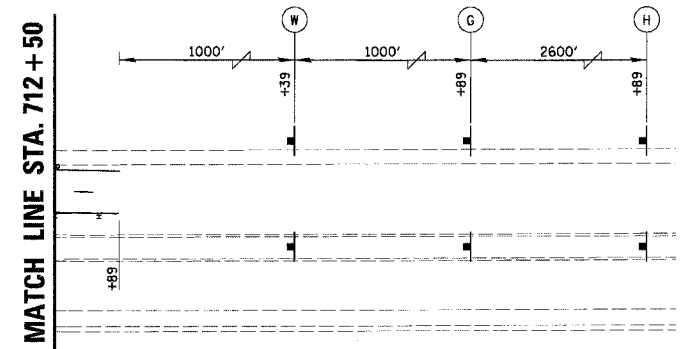
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION AND TRAFFIC CONTROL - STAGE IB
STA. 168+00 TO STA. 198+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	47
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)	[Hatched Box]	WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')	[Dotted Box]	TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')	[Square with 'X']	TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)	[Square with 'X' and Arrow]	TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)	[Square with 'X' and Arrow]	TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)	[Square with Arrow]	WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)	[Square with Arrow]	TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)	[Square with Arrow]	ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)	[Square with Arrow]	LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)	[Wavy Line]	TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.

- SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
- EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.

ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

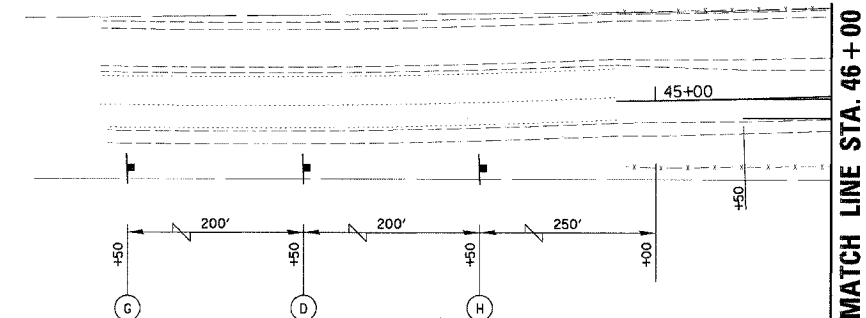
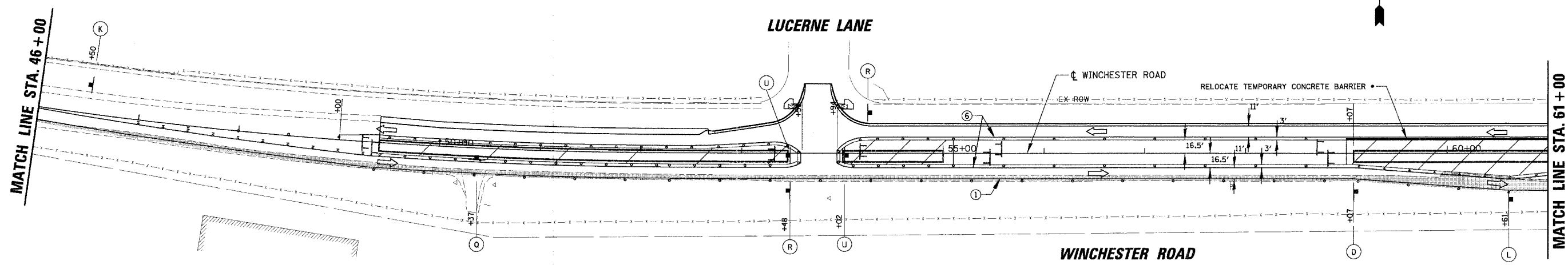
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IB
IL RTE. 137 AND LAKE STREET

SCALE: 1:50
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

150
12/2/2005
N:\LIBERTYVILLE\99-389\CIVIL\99389.TBL
N:\LIBERTYVILLE\99-389\CIVIL\99389IB_05.mct

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	48
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

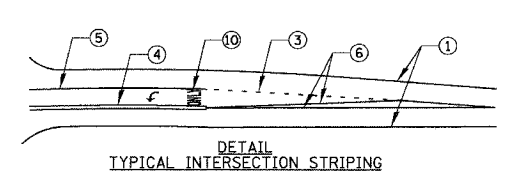
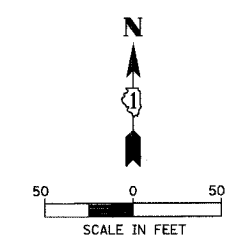
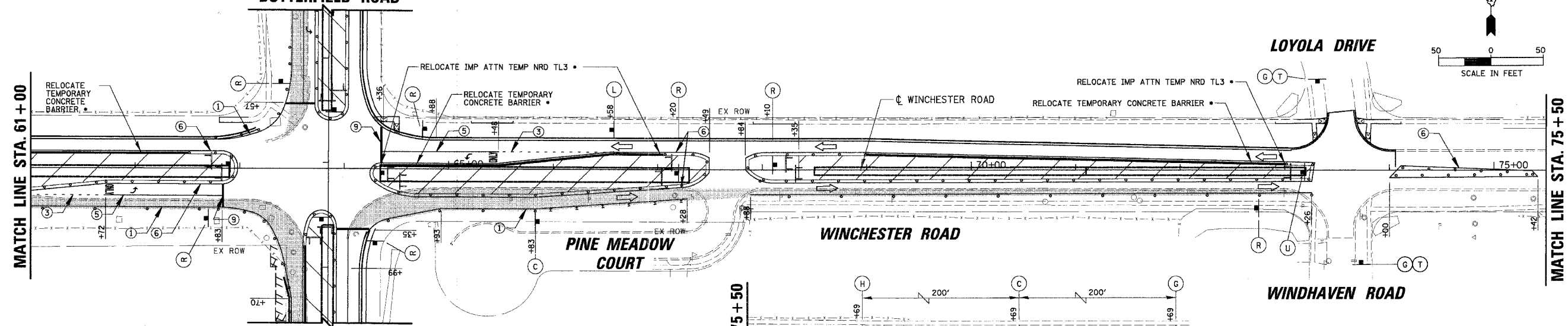


- LEGEND**
- ① TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)
 - ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')
 - ③ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')
 - ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)
 - ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
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 - ⑧ TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)
 - ⑨ TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑩ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑪ TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- WORK ZONE
 - TEMPORARY PAVEMENT
 - TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
 - TYPE II DIRECTIONAL BARRICADE W/ LIGHT
 - TYPE III BARRICADE W/ LIGHTS
 - WORK ZONE SIGN
 - TRAFFIC FLOW
 - ARROW BOARD
 - LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
 - TEMP DITCH FLOW

- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

SEE SHEET NO. 45
BUTTERFIELD ROAD



REVISIONS	
NAME	DATE

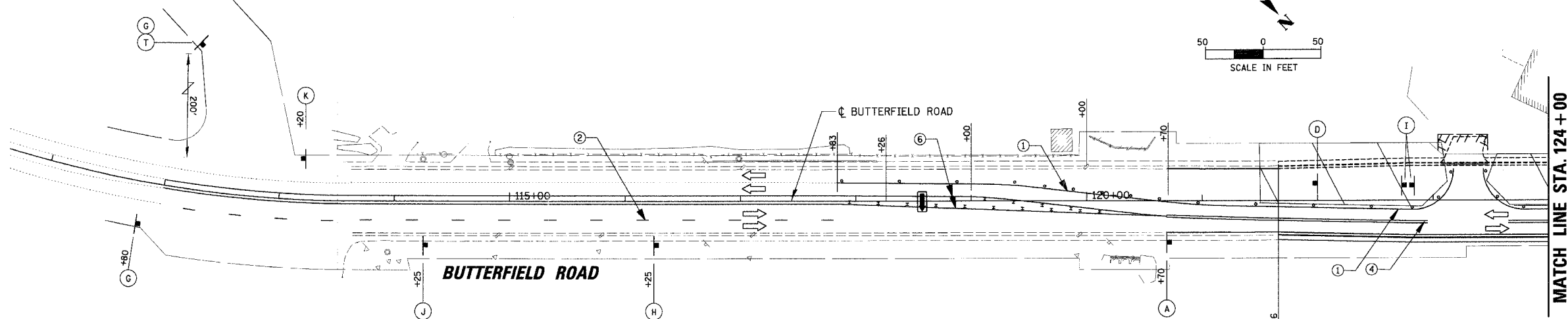
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE IB
STA. 49+40 TO 74+03.75

SCALE: 1/50
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

N:\LIBERTY\199-385\CIVIL\99385.TBL
N:\LIBERTY\199-389\CIVIL\99389IB_04.mcd
1:50
12/2/2005

SIGN LEGEND

HARDING AVENUE



LEGEND

- ① TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)
- ② TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')
- ③ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')
- ④ TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)
- ⑤ TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)
- ⑥ TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)
- ⑦ TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)
- ⑧ TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)
- ⑨ TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)
- ⑩ TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
- ⑪ TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)

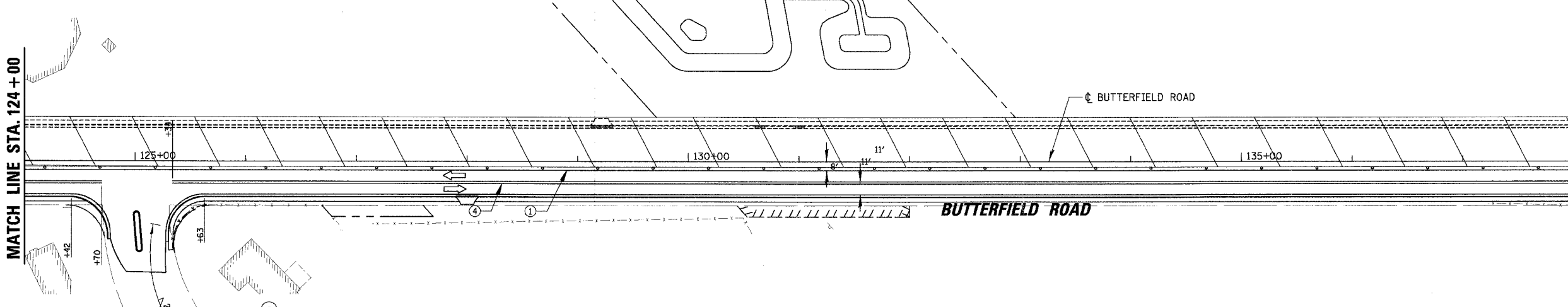
LEGEND

- WORK ZONE
- TEMPORARY PAVEMENT
- TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
- TYPE II DIRECTIONAL BARRICADE W/ LIGHT
- TYPE III BARRICADE W/ LIGHTS
- WORK ZONE SIGN
- TRAFFIC FLOW
- ARROW BOARD
- LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
- TEMP DITCH FLOW

DETECTION POND
SEE SHEET 80.

MATCH LINE STA. 124 + 00

MATCH LINE STA. 138 + 00
SEE SHEET NO. 50



RIDGEWOOD LANE

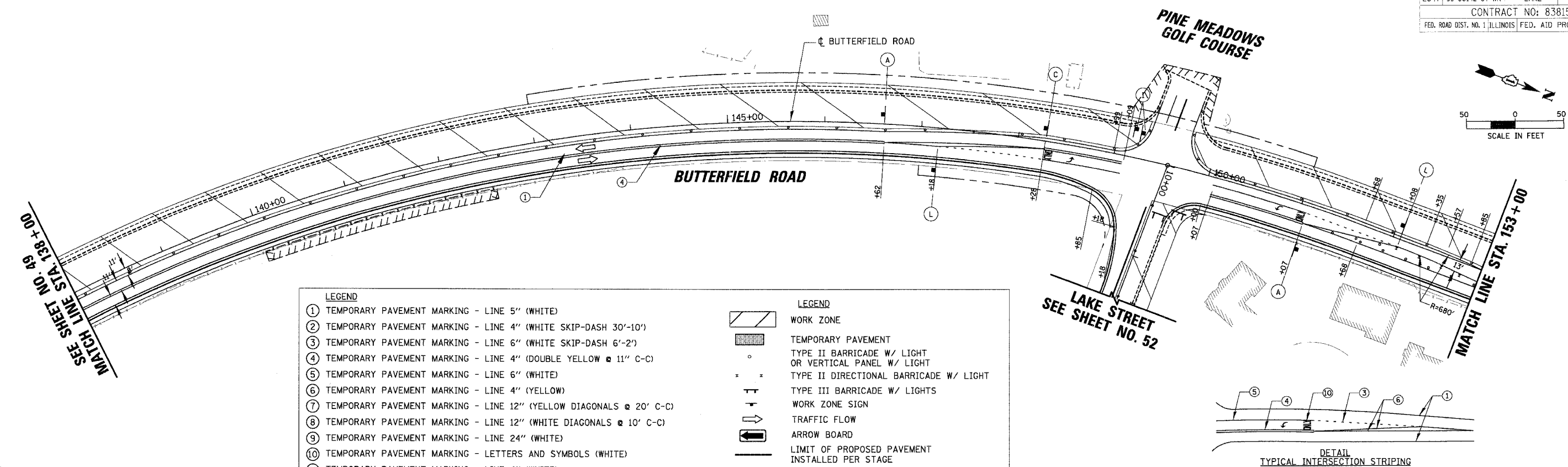
- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2' TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

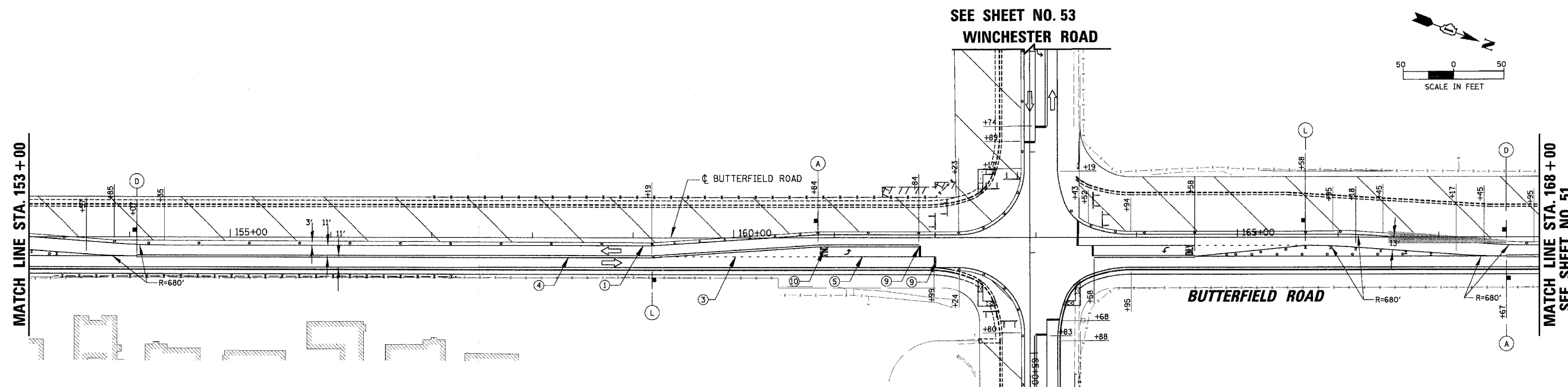
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE II
STA. 121 + 66 TO STA. 138 + 00

SCALE: 1:50
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	50
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)	[Hatched Box]	WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')	[Dotted Box]	TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')	[Circle]	TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)	[X-Mark]	TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)	[T-Mark]	TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)	[Arrow]	WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)	[Arrow Board]	TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)	[Dashed Line]	ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)	[Solid Line]	LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)	[Wavy Line]	TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER.
 - 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

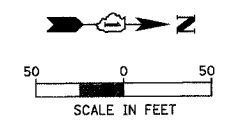
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE II
STA. 138 + 00 TO STA. 168 + 00

SCALE: 1:50
DATE: 12/2/2005
DRAWN BY: PMM
CHECKED BY: BLL

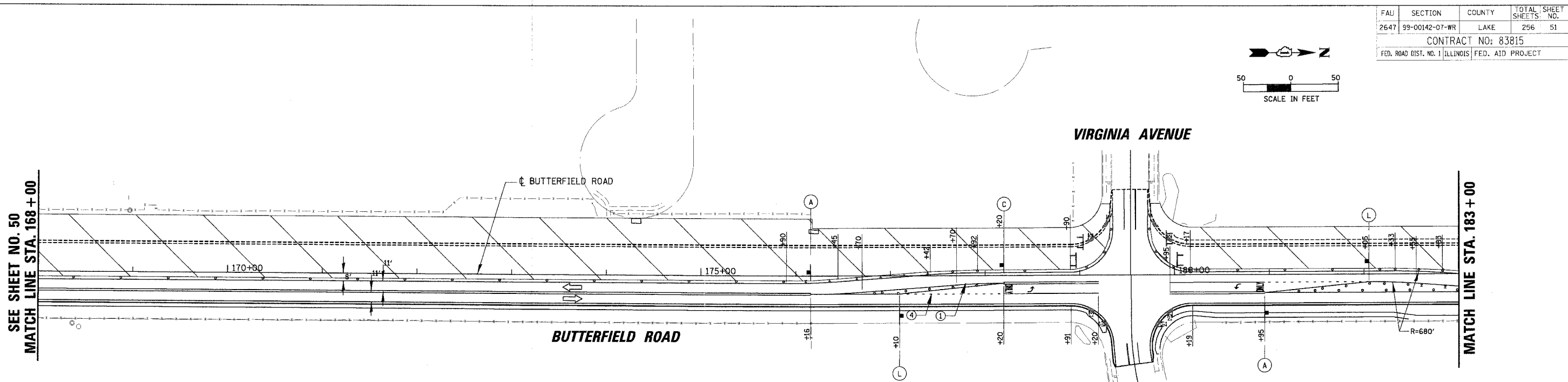
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12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	51
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

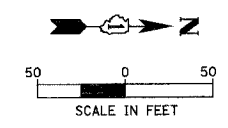
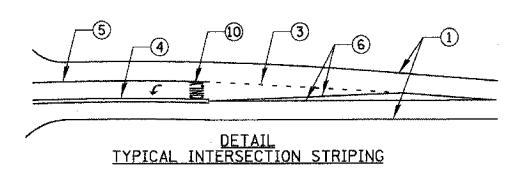


SEE SHEET NO. 50
MATCH LINE STA. 168+00

MATCH LINE STA. 183+00

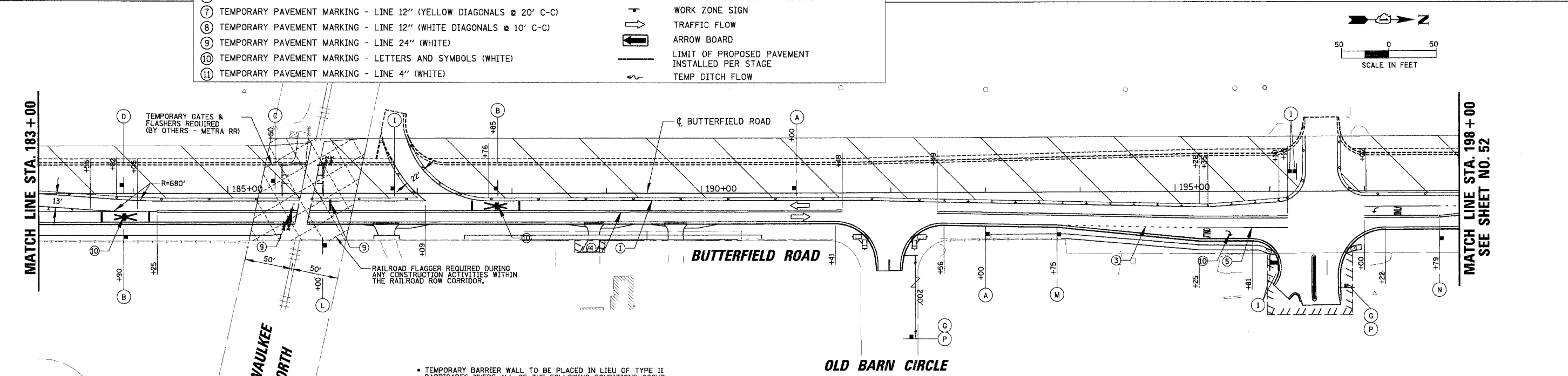


LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)		WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')		TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')		TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)		TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)		TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)		WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)		TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)		ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)		LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)		TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		



MATCH LINE STA. 183+00

MATCH LINE STA. 198+00
SEE SHEET NO. 52



- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

REVISIONS	
NAME	DATE

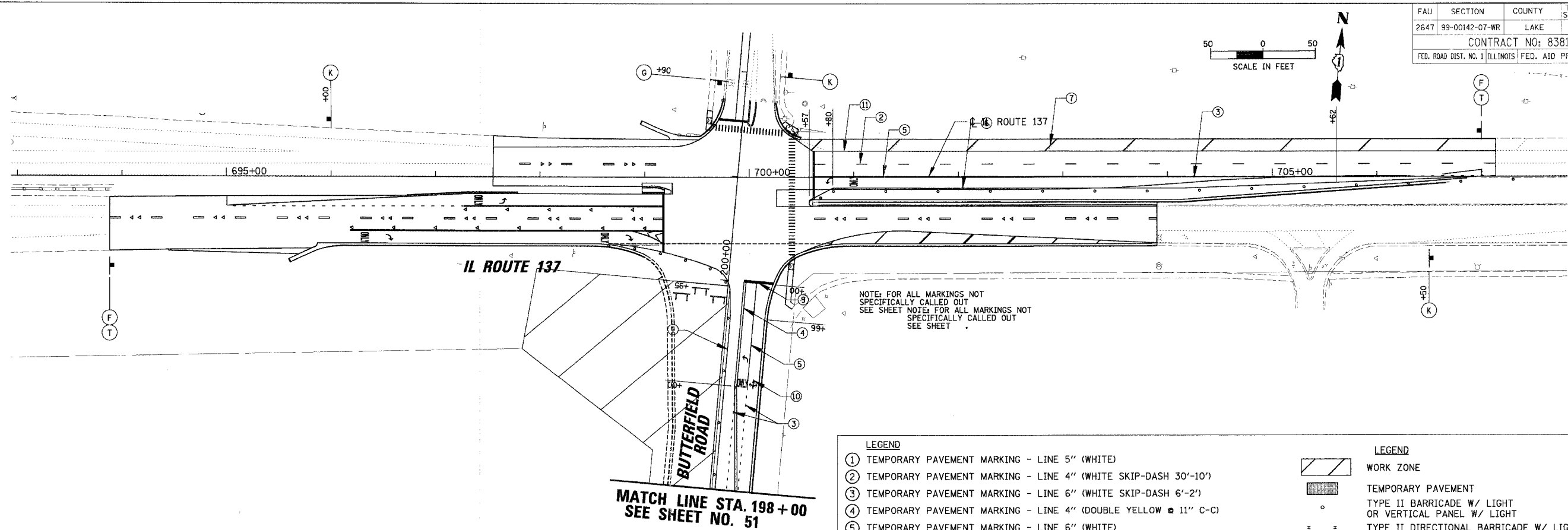
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE II
STA. 168+00 TO STA. 198+00

SCALE: 1:50
 DATE: 12/2/2005

DRAWN BY: PMM
 CHECKED BY: BLL

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 12/2/2005

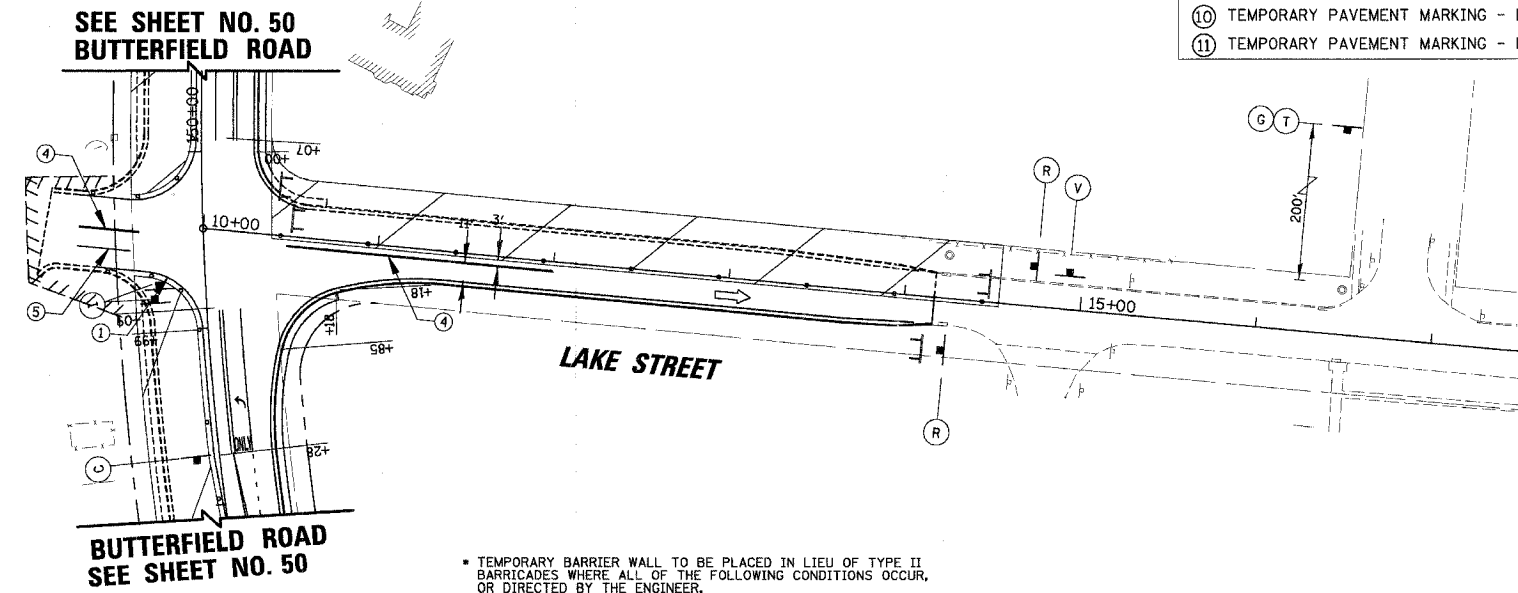
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	52
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**MATCH LINE STA. 198 + 00
SEE SHEET NO. 51**

LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)		WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')		TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')		TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)		TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)		TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)		WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)		TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)		ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)		LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)		TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		

PINE MEADOWS GOLF COURSE



- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 - SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 - EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.

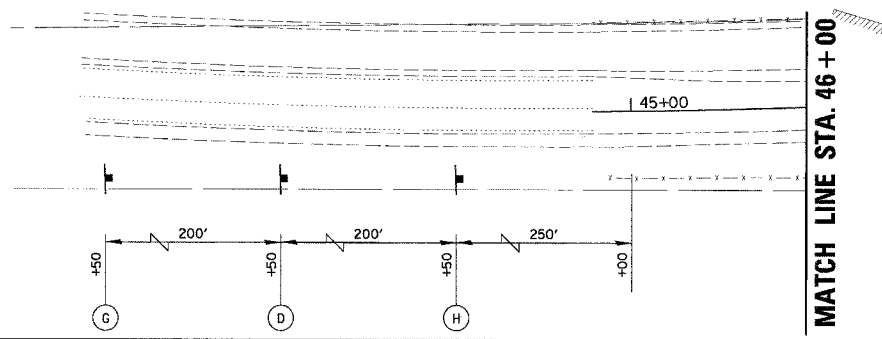
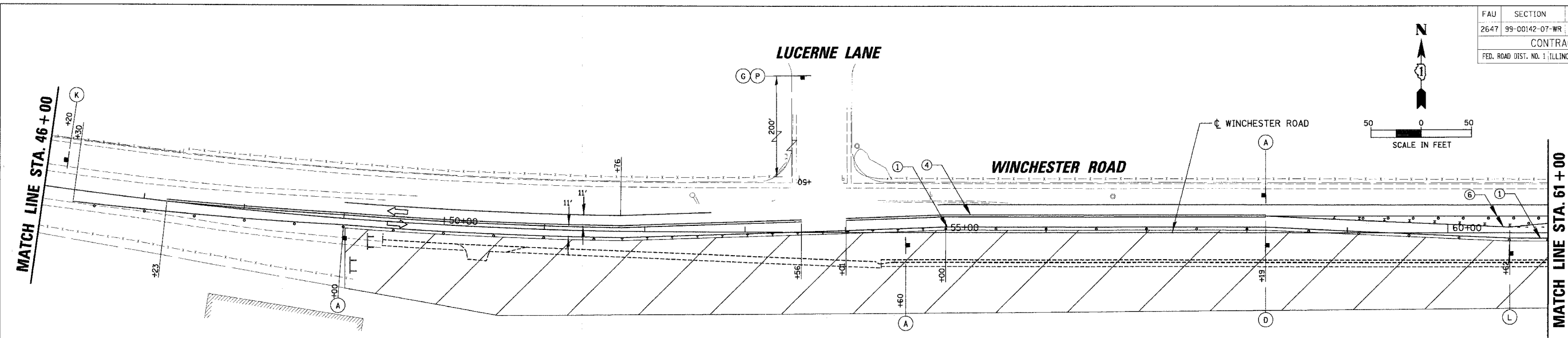
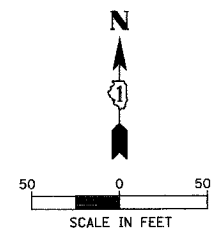
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 SUGGESTED STAGES OF CONSTRUCTION
 AND TRAFFIC CONTROL - STAGE II
 IL RTE. 137 AND LAKE STREET**

SCALE: 1:50
 DATE: 12/2/2005

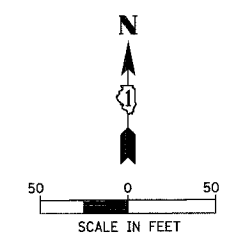
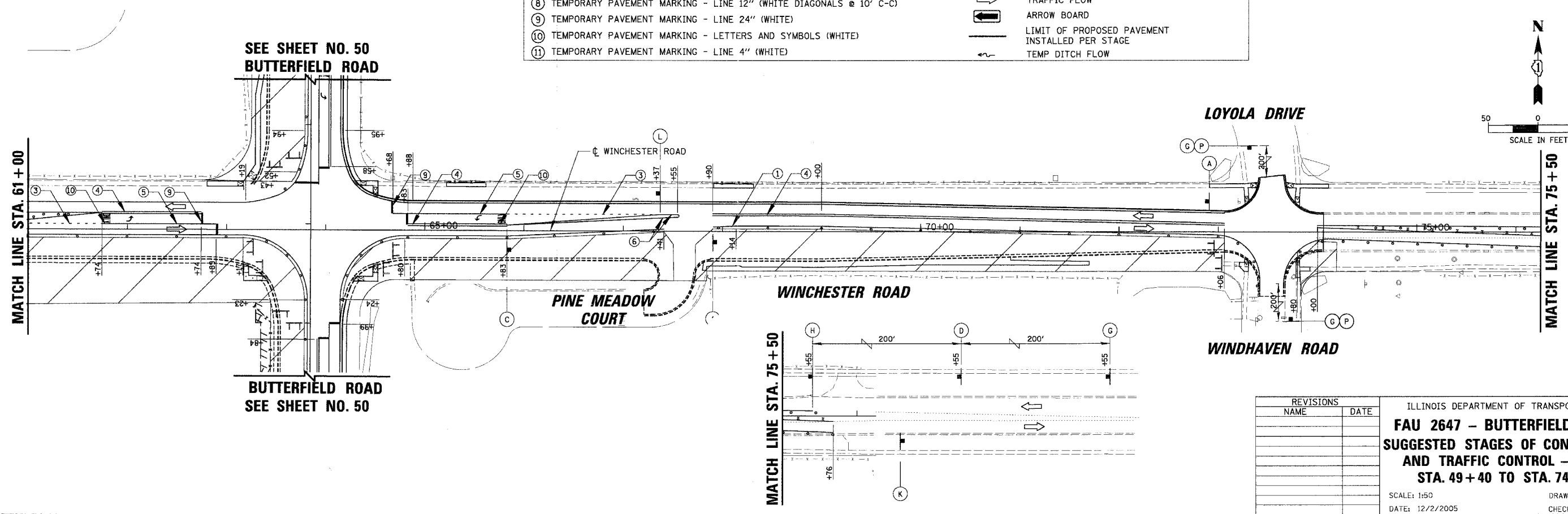
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 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	53
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LEGEND		LEGEND	
①	TEMPORARY PAVEMENT MARKING - LINE 5" (WHITE)		WORK ZONE
②	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE SKIP-DASH 30'-10')		TEMPORARY PAVEMENT
③	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE SKIP-DASH 6'-2')		TYPE II BARRICADE W/ LIGHT OR VERTICAL PANEL W/ LIGHT
④	TEMPORARY PAVEMENT MARKING - LINE 4" (DOUBLE YELLOW @ 11" C-C)		TYPE II DIRECTIONAL BARRICADE W/ LIGHT
⑤	TEMPORARY PAVEMENT MARKING - LINE 6" (WHITE)		TYPE III BARRICADE W/ LIGHTS
⑥	TEMPORARY PAVEMENT MARKING - LINE 4" (YELLOW)		WORK ZONE SIGN
⑦	TEMPORARY PAVEMENT MARKING - LINE 12" (YELLOW DIAGONALS @ 20' C-C)		TRAFFIC FLOW
⑧	TEMPORARY PAVEMENT MARKING - LINE 12" (WHITE DIAGONALS @ 10' C-C)		ARROW BOARD
⑨	TEMPORARY PAVEMENT MARKING - LINE 24" (WHITE)		LIMIT OF PROPOSED PAVEMENT INSTALLED PER STAGE
⑩	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)		TEMP DITCH FLOW
⑪	TEMPORARY PAVEMENT MARKING - LINE 4" (WHITE)		

- TEMPORARY BARRIER WALL TO BE PLACED IN LIEU OF TYPE II BARRICADES WHERE ALL OF THE FOLLOWING CONDITIONS OCCUR, OR DIRECTED BY THE ENGINEER,
 1. SIDESLOPE STEEPER THAN 4:1, OR DROPOFF > 2', TO PROPOSED SUBGRADE/BOTTOM OF UNDERCUT.
 2. EDGE OF TRAVEL LANE CLOSER THAN 4 FEET TO TOP OF SIDESLOPE OR DROPOFF.
- ALL TEMPORARY BARRIER WALL END TREATMENTS WILL HAVE ATTENUATING DEVICES AS SHOWN OR AS DIRECTED BY THE ENGINEER.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
SUGGESTED STAGES OF CONSTRUCTION
AND TRAFFIC CONTROL - STAGE II
STA. 49+40 TO STA. 74+03.75

SCALE: 1:50
 DATE: 12/2/2005

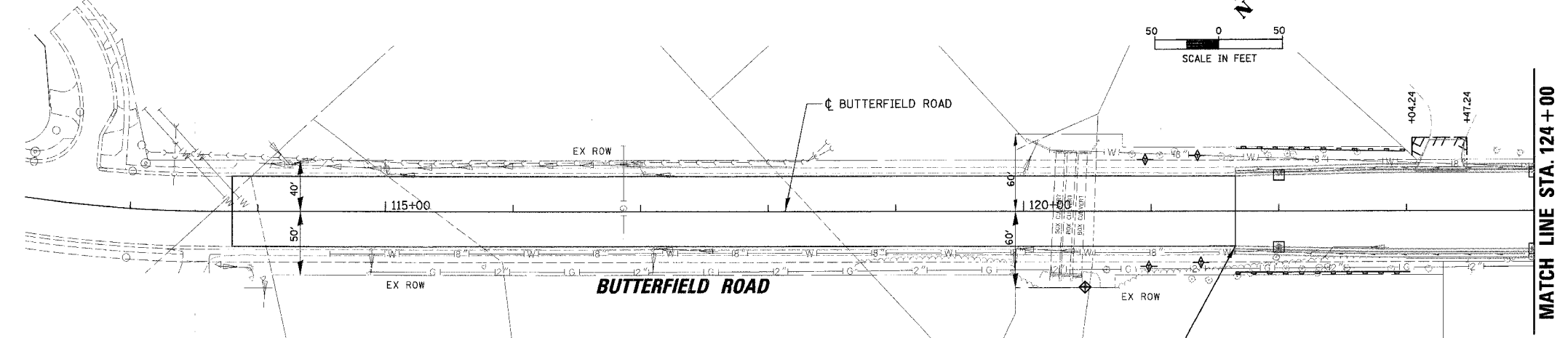
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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	54
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

- EROSION CONTROL:**
- AREAS THAT MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
 - EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS. PERIMETER EROSION BARRIER SHALL SURROUND THE STOCKPILE.
 - AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS AND AT LOCATIONS DIRECTED BY THE ENGINEER.
TEMPORARILY SEED ERODABLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODABLE SURFACE AREA WITHIN THE CONTRACT LIMITS.
BUILD NECESSARY EMBANKMENT AT CULVERT LOCATIONS AND THEN EXCAVATE AND PLACE CULVERT.
CONTINUE BUILDING UP THE EMBANKMENT TO THE PROPOSED GRADE WHILE AT THE SAME TIME, PLACING PERMANENT EROSION CONTROL SUCH AS RIPRAP DITCH LINING AND CONDUCTION FINAL SHAPING TO THE SLOPES.
 - EXCAVATED AREAS AND EMBANKMENT SHALL BE SODDED OR TEMPORARILY SEEDED IMMEDIATELY AFTER FINAL GRADING. ANY BARE EARTH THAT WILL NOT HAVE CONSTRUCTION ACTIVITY FOR 7 DAYS SHALL BE TEMPORARILY SEEDED.
 - SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EARTH EXCAVATION.
 - TEMPORARY DITCH CHECKS SHALL BE LOCATED AT EVERY 1.5 FT. FALL RISE IN DITCH GRADE.
 - TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100 LBS/ACRE.
 - ALL EROSION CONTROL ITEMS SHALL FOLLOW THE STORM WATER POLLUTION PREVENTION PLAN AND BE CONSTRUCTED AS SHOWN IN THE PLANS AND STANDARDS AND AS DESCRIBED IN THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER.
 - 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.
 - AREAS OR EMBANKMENTS HAVING SLOPES GREATER THAN OR EQUAL TO 3H:1V SHALL BE STABILIZED WITH SOIL 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 (INLET AND PIPE PROTECTION).
 - 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. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

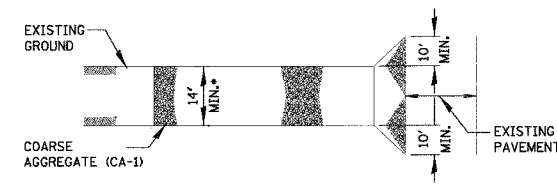
HARDING AVENUE



EROSION CONTROL:

- ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED 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 SCRAPING 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 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. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

NOTE: SEE SUGGESTED STAGES OF CONSTRUCTION STAGE 1A FOR ADDITIONAL LOCATIONS REQUIRING EROSION CONTROL ITEMS.

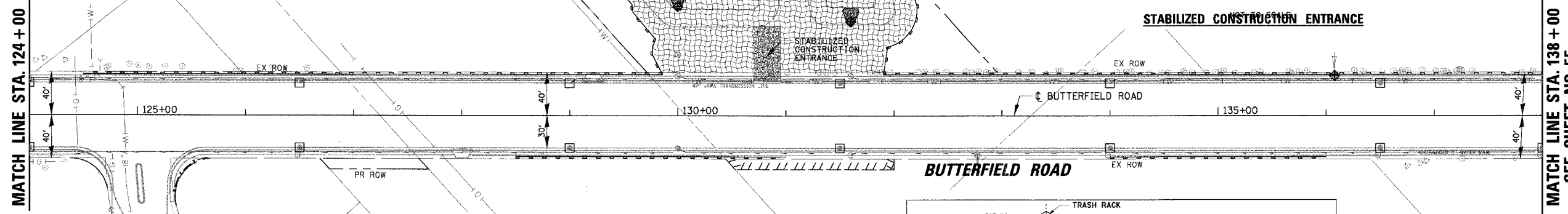
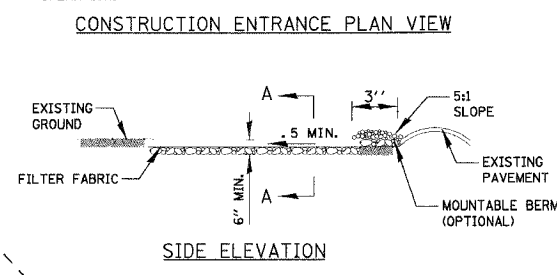
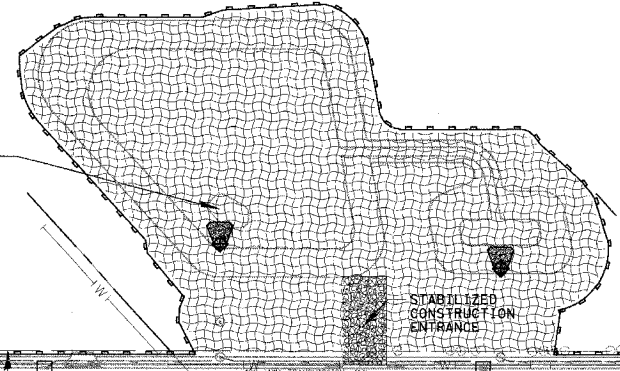


MUST EXTEND FULL WIDTH OF INGRESS AND EGRESS OPERATION.

LEGEND:

- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET FILTER
- EROSION CONTROL BLANKET

NOTE: A TEMPORARY OVER EXCAVATION OF 10 FT DEEP BY 10 FT WIDE BY 25 FT LONG SHALL BE INSTALLED AT THE OUTLET FOR THE DETENTION POND.

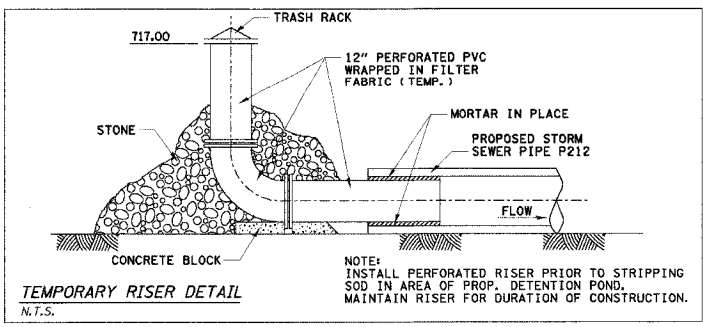


MATCH LINE STA. 124 + 00

**MATCH LINE STA. 138 + 00
SEE SHEET NO. 55**

RIDGEWOOD LANE

END RECONSTRUCTION STA. 125+05.20 OFFSET 100.20'



NOTE: INSTALL PERFORATED RISER PRIOR TO STRIPPING SOD IN AREA OF PROP. DETENTION POND. MAINTAIN RISER FOR DURATION OF CONSTRUCTION.

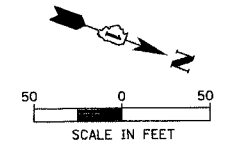
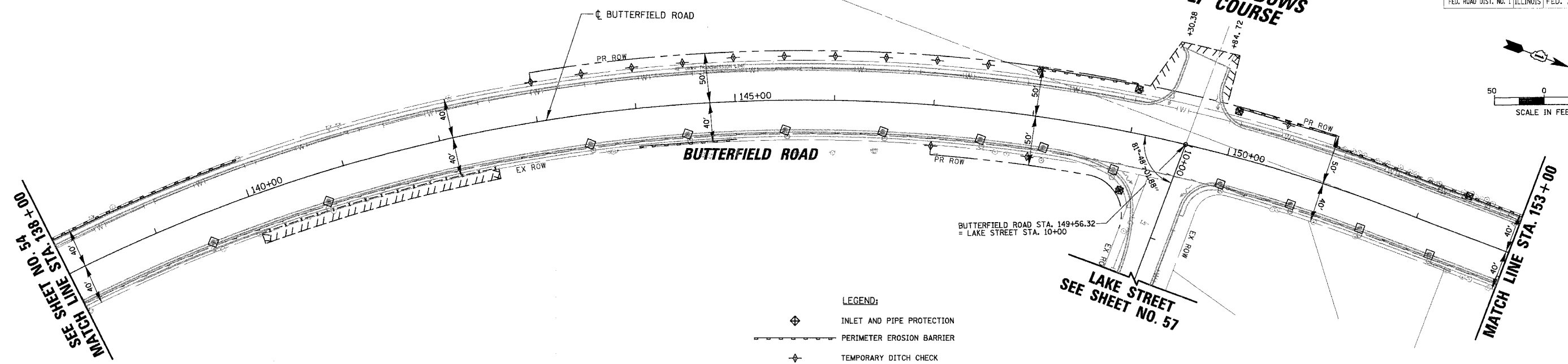
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
EROSION CONTROL PLAN
BUTTERFIELD ROAD
STA. 121 + 66 TO STA. 138 + 00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

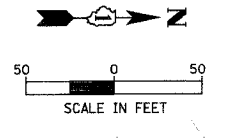
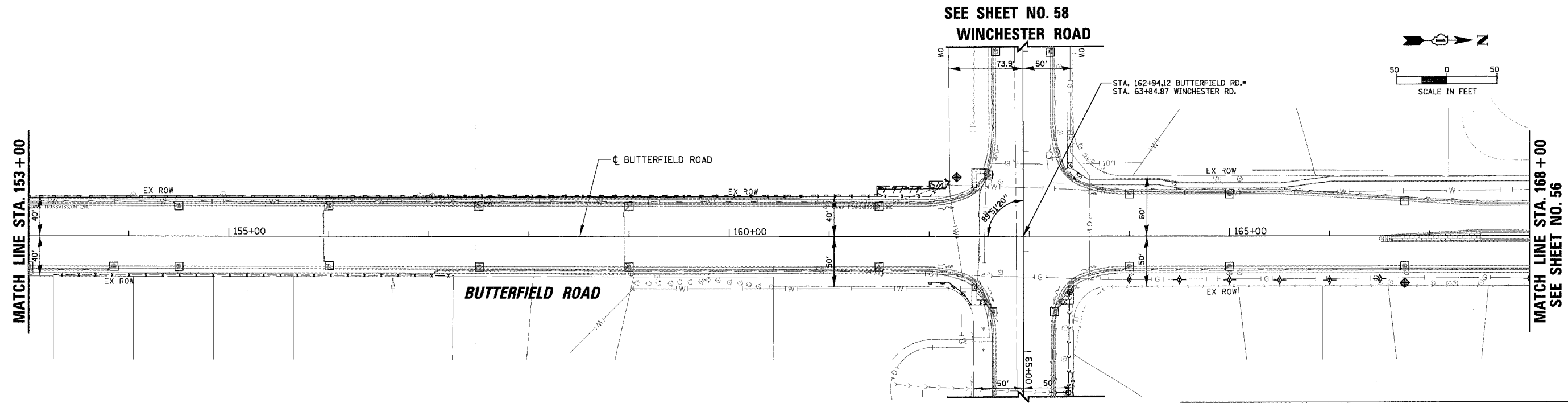
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	55
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PINE MEADOWS GOLF COURSE



- LEGEND:**
- INLET AND PIPE PROTECTION
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECK
 - INLET FILTER
 - EROSION CONTROL BLANKET

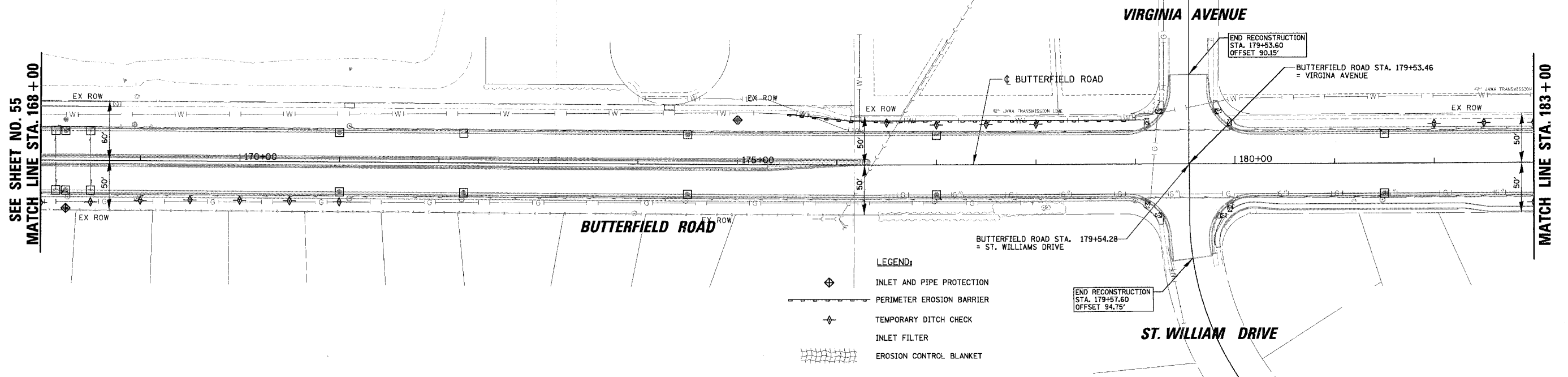
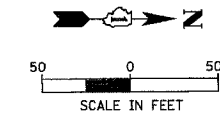


REVISIONS	
NAME	DATE

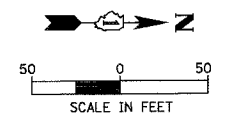
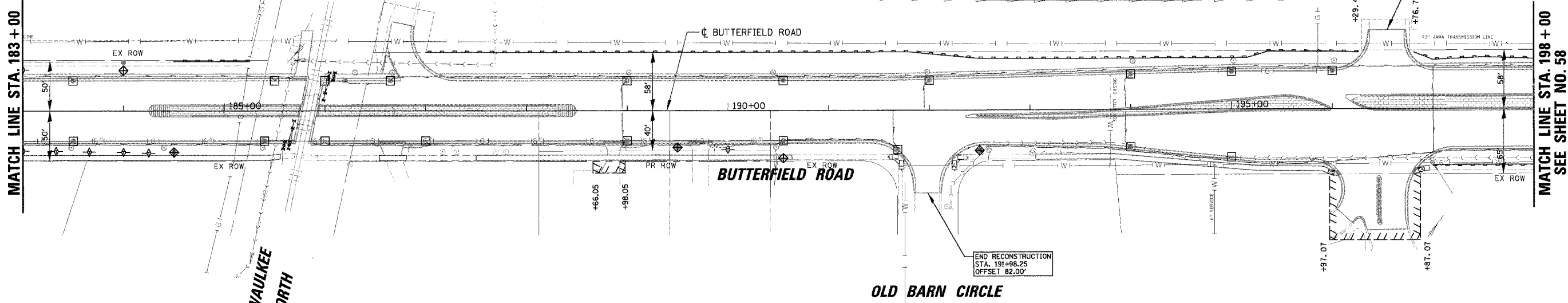
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
EROSION CONTROL PLAN
BUTTERFIELD ROAD
STA. 138 + 00 TO STA. 168 + 00
 SCALE: 1:50 DRAWN BY: PMM
 DATE: 12/2/2005 CHECKED BY: BLL

1:50
 12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEET
2647	99-00142-07-WR	LAKE	256
CONTRACT NO: 83815			SHEETS NO. 56
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



- LEGEND:**
- INLET AND PIPE PROTECTION
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECK
 - INLET FILTER
 - EROSION CONTROL BLANKET



REVISIONS	
NAME	DATE

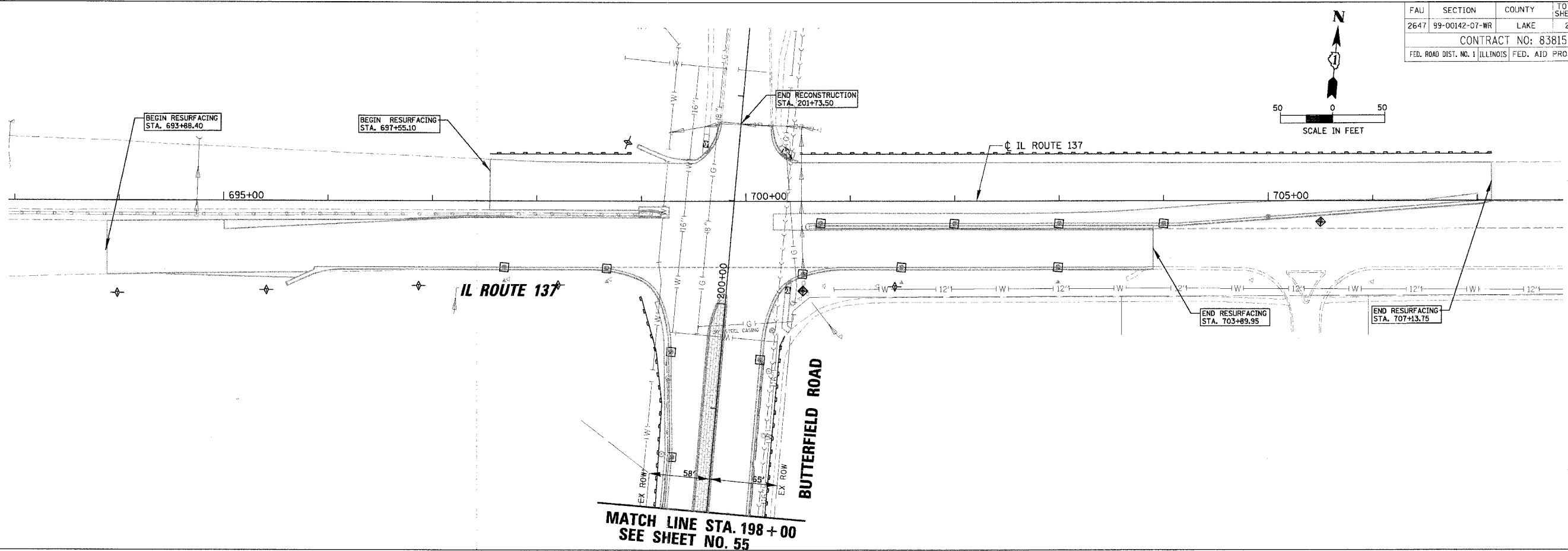
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
EROSION CONTROL PLAN
BUTTERFIELD ROAD
STA. 168 + 00 TO STA. 198 + 00

SCALE: 1:50,000
DATE: 12/2/2005

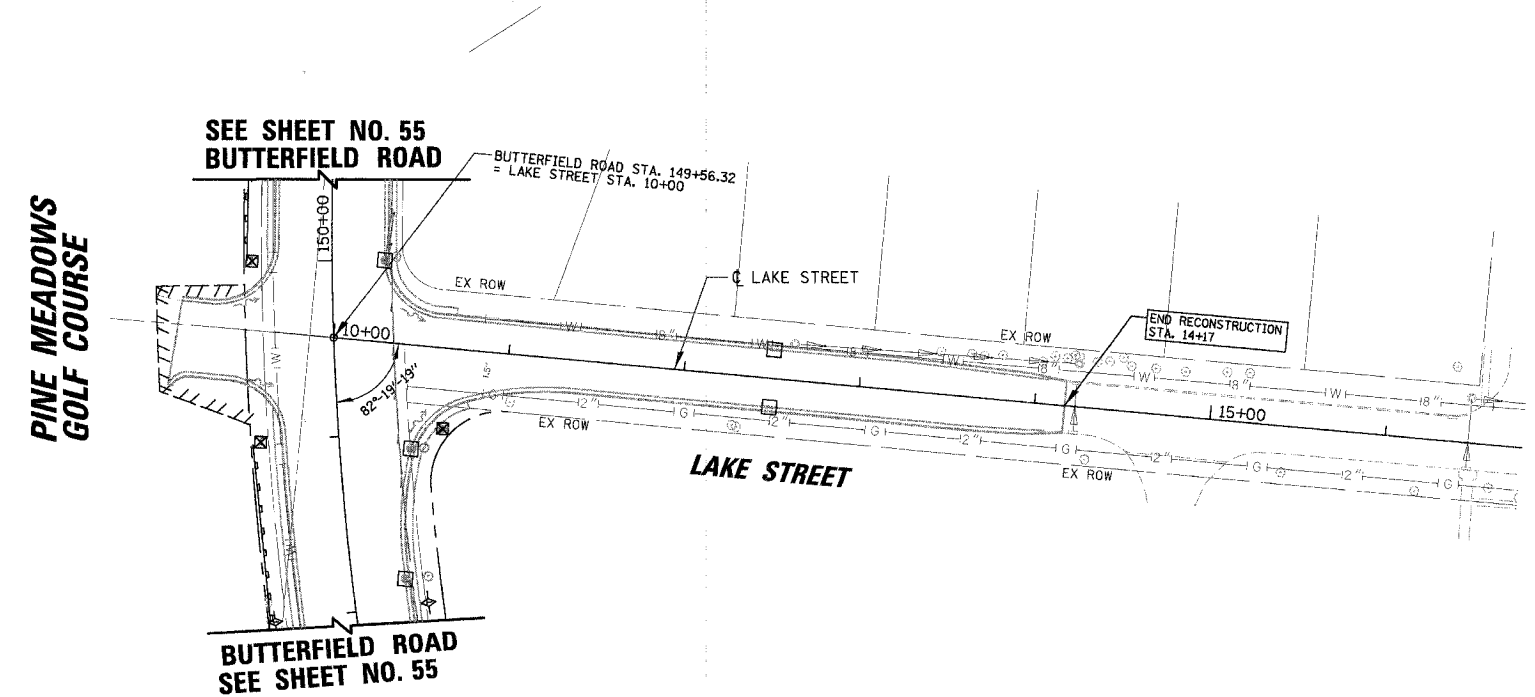
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CHECKED BY: BLL

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12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	57
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



MATCH LINE STA. 198 + 00
SEE SHEET NO. 55



LEGEND:

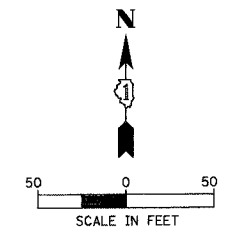
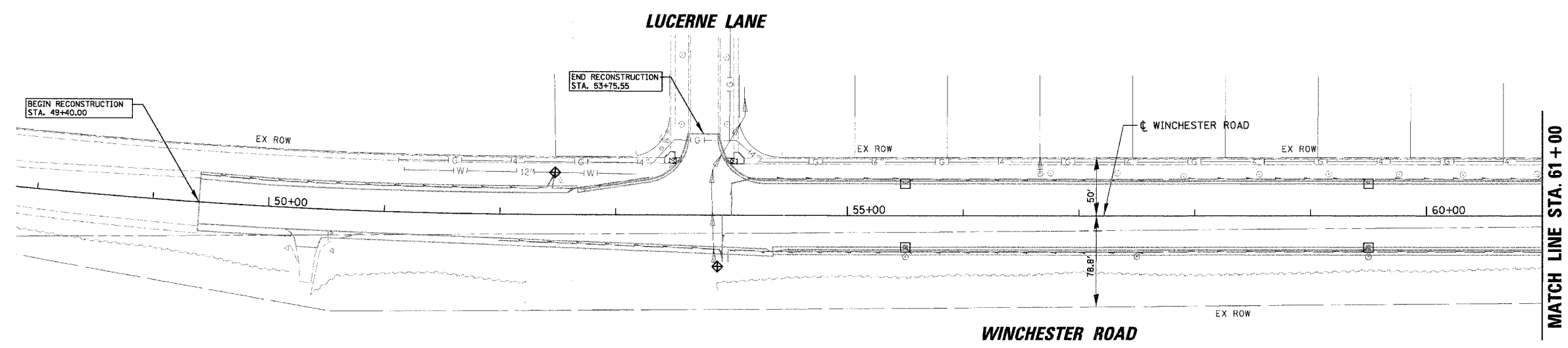
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET FILTER
- EROSION CONTROL BLANKET

REVISIONS	
NAME	DATE

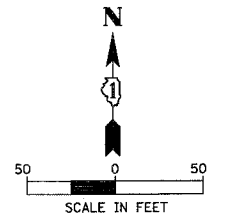
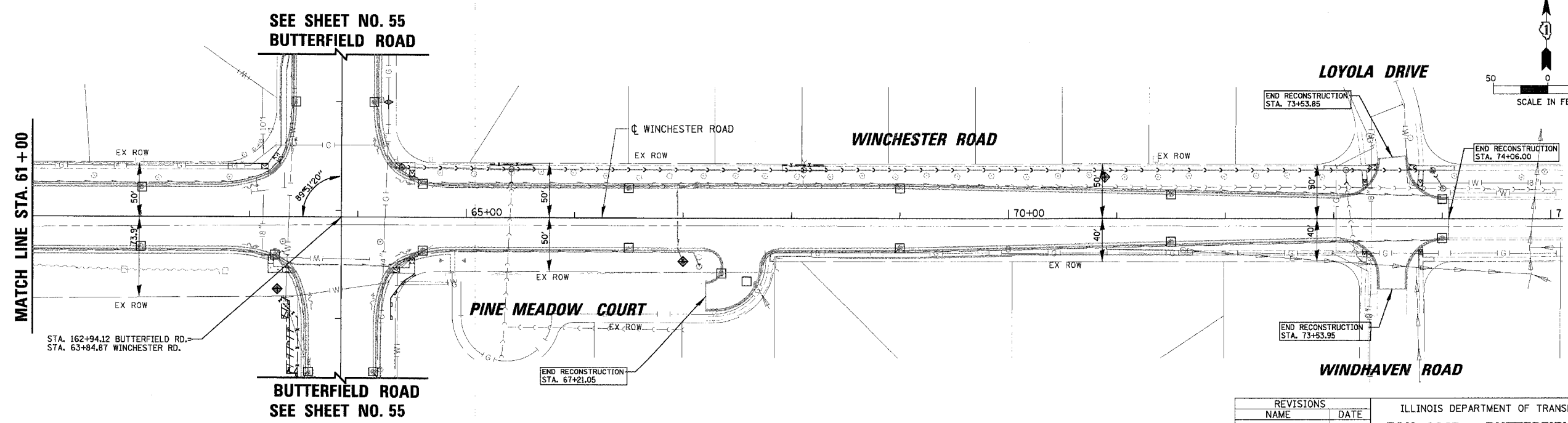
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 – BUTTERFIELD ROAD
EROSION CONTROL PLAN
BUTTERFIELD ROAD,
IL RTE. 137 AND LAKE STREET
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

149
 12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	58
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND:**
- INLET AND PIPE PROTECTION
 - PERIMETER EROSION BARRIER
 - TEMPORARY DITCH CHECK
 - INLET FILTER
 - EROSION CONTROL BLANKET

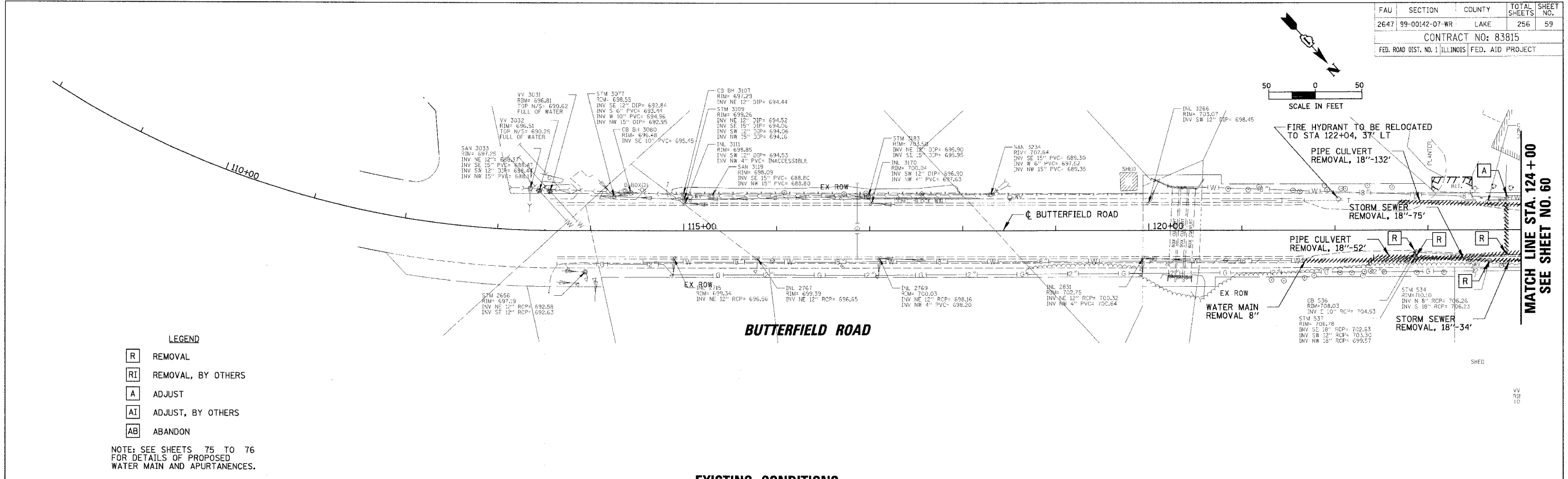
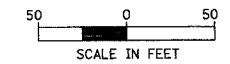


REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 – BUTTERFIELD ROAD
 EROSION CONTROL PLAN
 WINCHESTER ROAD
 STA. 49+40 TO STA. 74+06**

SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

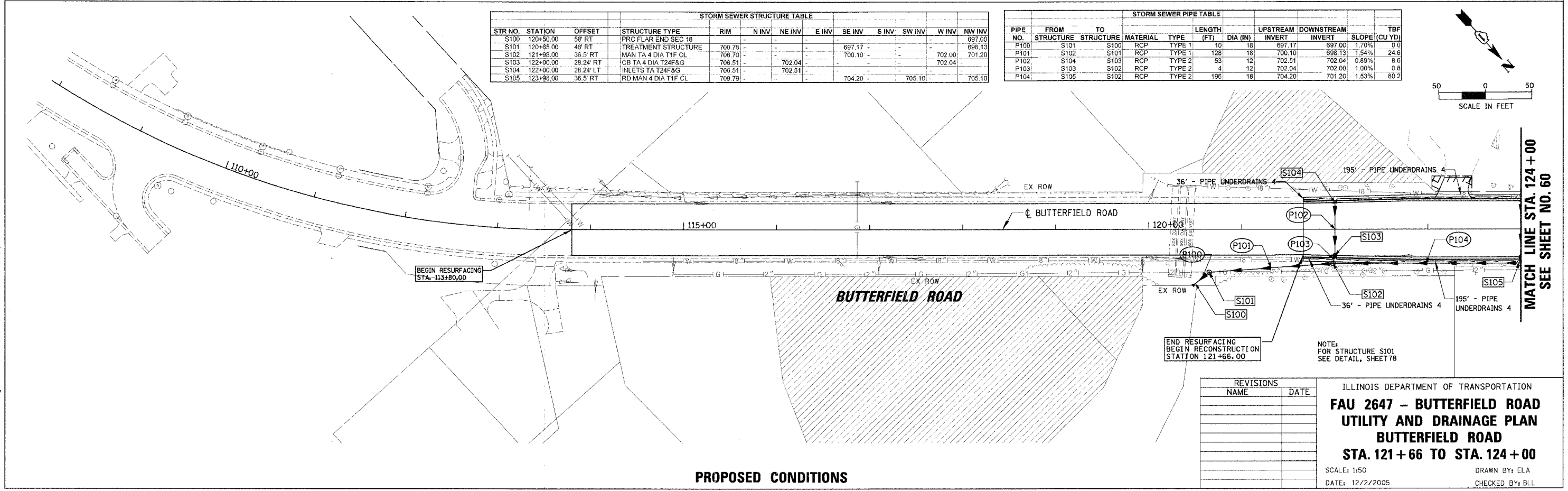
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 140
 12/2/2005



EXISTING CONDITIONS

STORM SEWER STRUCTURE TABLE												
STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S100	120+50.00	58' RT	FRG FLAR END SEC 18									697.00
S101	120+85.00	48' RT	TREATMENT STRUCTURE	700.78				697.17				698.13
S102	121+98.00	36.5' RT	MAN TA 4 DIA T1F CL	706.70				700.10			702.00	701.20
S103	122+00.00	28.24' RT	CB TA 4 DIA T24F&G	706.51		702.04					702.04	
S104	122+00.00	28.24' LT	INLETS TA T24F&G	706.51		702.51						
S105	123+98.00	36.5' RT	RD MAN 4 DIA T1F CL	709.79				704.20		705.10		705.10

STORM SEWER PIPE TABLE										
PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE	TBF (CU YD)
P100	S101	S100	RCP	TYPE 1	10	18	697.17	697.00	1.70%	0.0
P101	S102	S101	RCP	TYPE 1	128	18	700.10	698.13	1.54%	24.6
P102	S104	S103	RCP	TYPE 2	53	12	702.51	702.04	0.89%	8.6
P103	S103	S102	RCP	TYPE 2	4	12	702.04	702.00	1.00%	0.8
P104	S105	S102	RCP	TYPE 2	196	18	704.20	701.20	1.53%	60.2

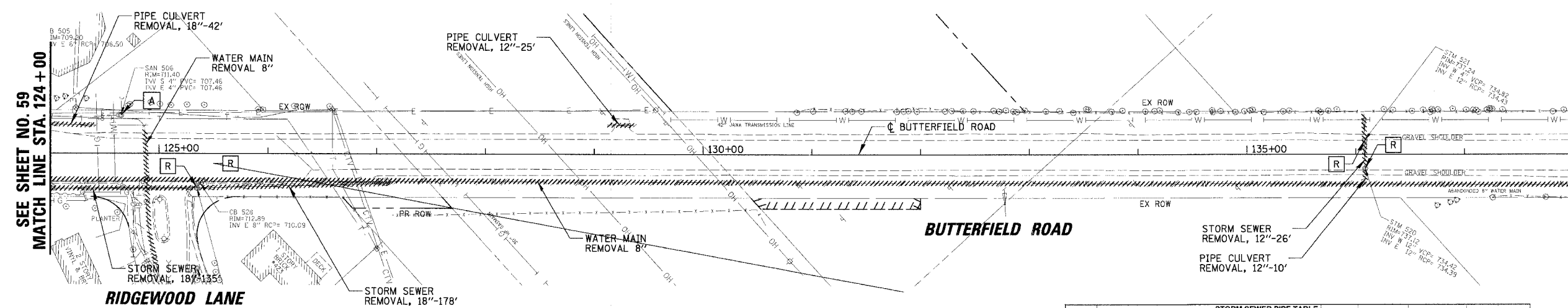
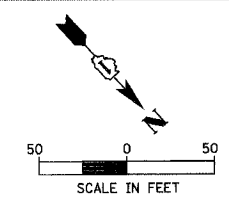


PROPOSED CONDITIONS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 BUTTERFIELD ROAD
 STA. 121+66 TO STA. 124+00**

SCALE: 1"=50' DRAWN BY: ELA
 DATE: 12/2/2005 CHECKED BY: BLL



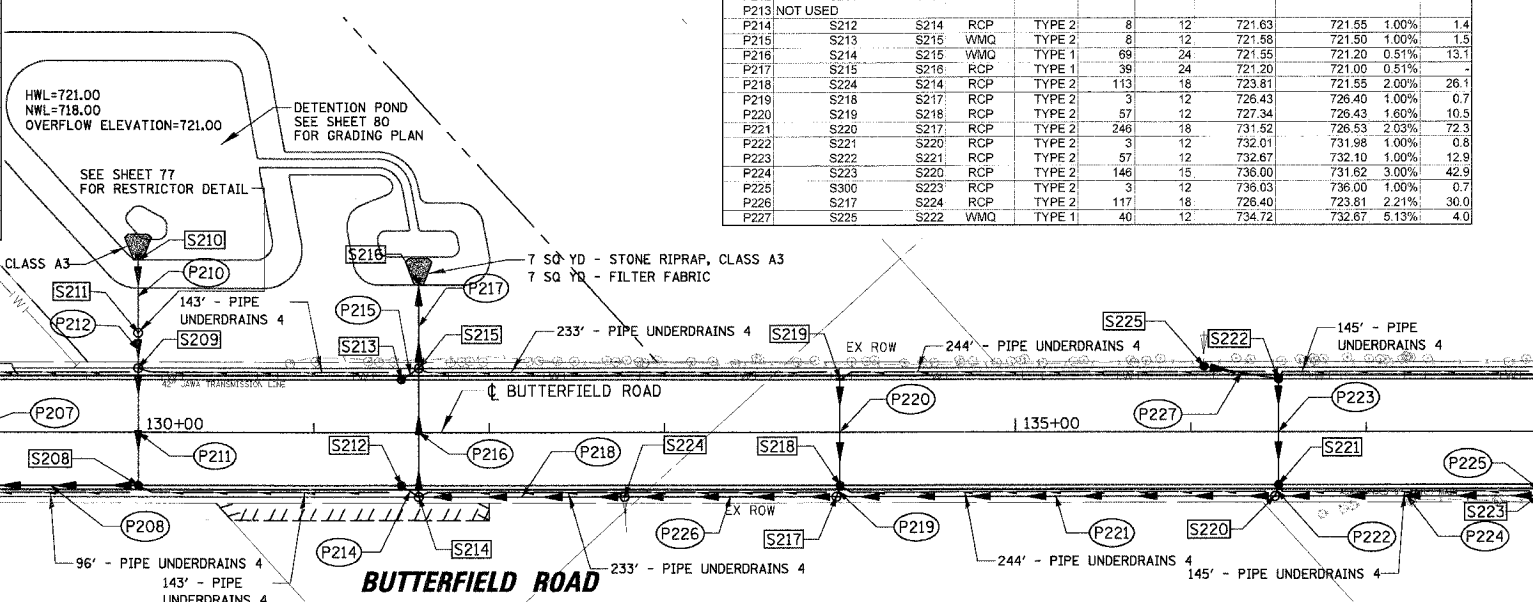
MATCH LINE STA. 138 + 00
SEE SHEET NO. 61

SEE SHEET NO. 59
MATCH LINE STA. 124 + 00

STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S200	124+00.00	30' RT	RD CB 4 DIA T24F&G	709.57	-	705.13	-	-	-	-	705.23	-
S201	124+00.00	30' LT	INLETS TA T24F&G	709.57	-	-	-	-	-	-	-	-
S202	126+48.00	36.5' RT	MAN TA 4 DIA T1F CL	715.02	-	-	710.10	-	-	-	710.20	710.20
S203	126+50.00	30' RT	CB TA 4 DIA T24F&G	714.81	-	-	710.23	-	-	-	710.33	-
S204	126+50.00	30' LT	INLETS TA T24F&G	714.81	-	-	710.90	-	-	-	-	-
S205	NOT USED	-	-	-	-	-	-	-	-	-	-	-
S206	129+00.00	30' RT	RD CB 4 DIA T24F&G	720.26	-	-	715.30	-	-	-	715.53	715.40
S207	129+00.00	30' LT	INLETS TA T24F&G	720.26	-	-	716.26	-	-	-	-	-
S208	130+00.00	30' RT	CB TA 4 DIA T24F&G	722.82	-	-	-	-	-	717.20	-	-
S209	130+00.00	36.5' LT	MAN TA 4 DIA T1F CL	722.89	-	717.60	-	-	-	717.60	-	-
S210	130+00.00	98' LT	PRC FLAR END SEC 12	717.00	-	718.00	-	-	-	-	-	-
S211	130+00.00	56.5' LT	MAN TA 6 DIA T1F CL RES	724.00	-	717.80	-	-	-	717.80	-	-
S212	131+50.00	30' RT	RD CB 4 DIA T24F&G	725.71	721.63	-	-	-	-	-	-	-
S213	131+50.00	30' LT	RD CB 4 DIA T24F&G	725.71	-	-	-	-	721.55	721.55	-	721.98
S214	131+60.00	36.5' RT	RD MAN 5 DIA T1F CL	726.18	-	-	-	-	-	-	-	721.55
S215	131+60.00	36.5' LT	RD MAN 4 DIA T1F CL	726.18	-	721.20	-	721.50	-	721.20	-	-
S216	131+60.00	64' LT	PRC FLAR END SEC 18	722.00	-	721.00	-	-	-	-	-	-
S217	133+98.00	36.5' RT	RD MAN 4 DIA T1F CL	731.55	-	-	-	-	-	726.40	726.53	-
S218	134+00.00	30' RT	CB TC 4 DIA T24F&G	731.34	-	726.43	-	726.40	-	726.43	-	-
S219	134+00.00	30' LT	INLETS TA T24F&G	731.34	-	-	727.34	-	-	-	732.10	-
S220	136+48.00	36.5' RT	RD MAN 4 DIA T1F CL	737.45	-	-	731.52	-	-	731.98	731.82	-
S221	136+50.00	30' RT	CB TA 4 DIA T24F&G	737.25	-	-	732.01	-	-	-	732.10	-
S222	136+50.00	30' LT	RD CB 4 DIA T24F&G	737.25	-	-	732.67	-	732.67	-	-	-
S223	137+98.00	36.5' RT	RD MAN 4 DIA T1F CL	740.59	-	-	736.00	-	-	736.00	736.08	-
S224	132+77.24	36.81' RT	RD MAN 4 DIA T1F CL	729.04	-	-	723.81	-	727.11	-	723.81	-
S225	136+07.55	37.23' LT	CB TC T6G	736.81	734.72	-	-	-	-	-	-	-

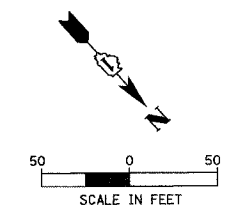
STR NO.	DEPTH	UTILITY
S213	0.5	JAWA

EXISTING CONDITIONS



- LEGEND**
- [R] REMOVAL
 - [RI] REMOVAL, BY OTHERS
 - [A] ADJUST
 - [AI] ADJUST, BY OTHERS
 - [AB] ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APURTANENCES.



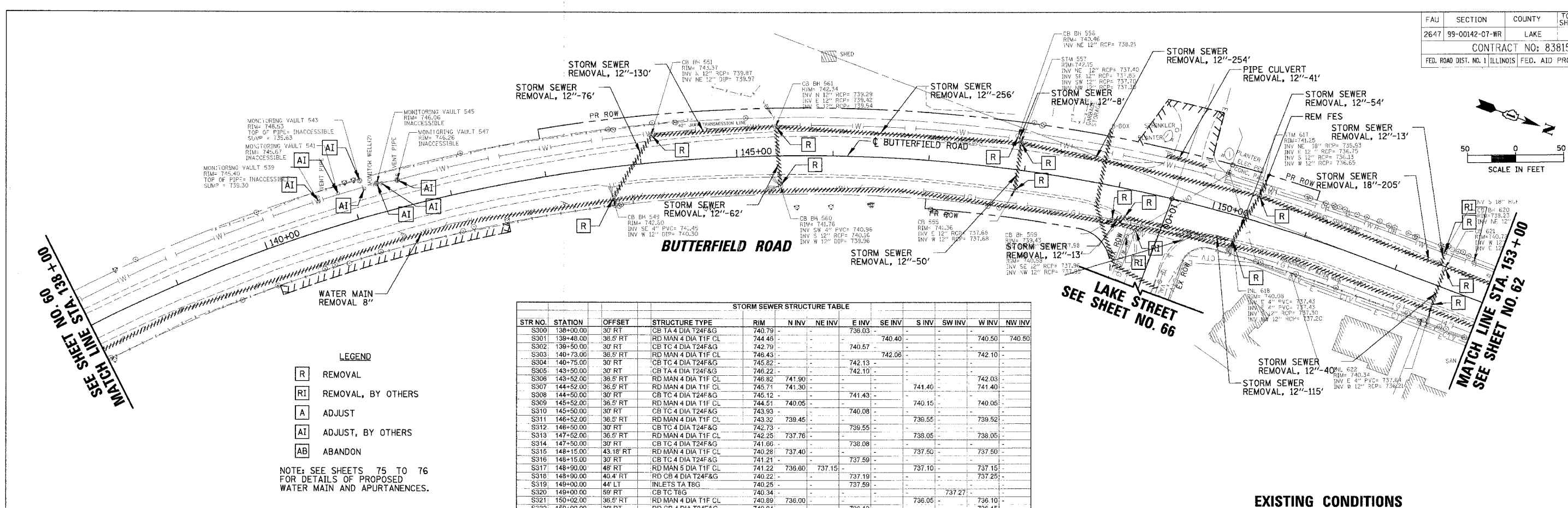
MATCH LINE STA. 138 + 00
SEE SHEET NO. 61

SEE SHEET NO. 59
MATCH LINE STA. 124 + 00

PROPOSED CONDITIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
UTILITY AND DRAINAGE PLAN
BUTTERFIELD ROAD
STA. 124 + 00 TO STA. 138 + 00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA
 CHECKED BY: BLL

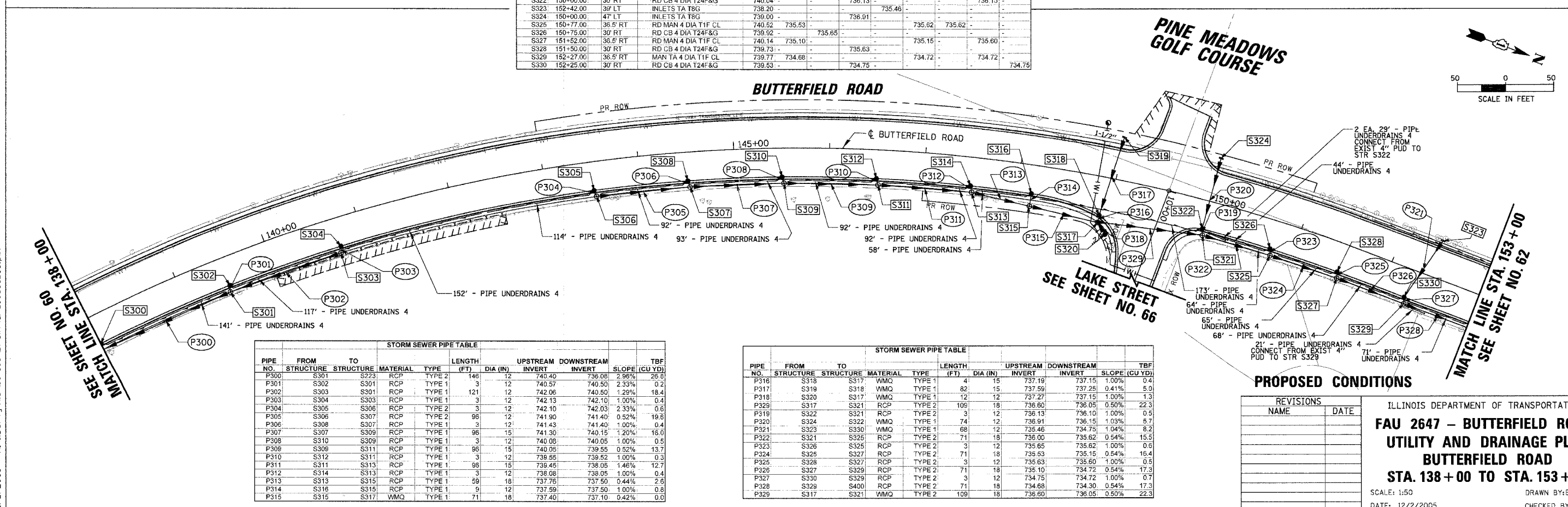


STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S300	138+00.00	30' RT	CB TA 4 DIA T24F&G	740.79	-	-	736.03	-	-	-	740.50	740.80
S301	138+48.00	36.5' RT	RD MAN 4 DIA T1F CL	744.46	-	-	-	740.40	-	-	-	-
S302	139+50.00	30' RT	CB TC 4 DIA T24F&G	742.79	-	-	740.57	-	-	-	-	-
S303	140+73.00	36.5' RT	RD MAN 4 DIA T1F CL	746.43	-	-	-	742.06	-	-	742.10	-
S304	140+75.00	30' RT	CB TC 4 DIA T24F&G	745.82	-	-	742.13	-	-	-	-	-
S305	143+50.00	30' RT	CB TA 4 DIA T24F&G	746.22	-	-	742.10	-	-	-	-	-
S306	143+52.00	36.5' RT	RD MAN 4 DIA T1F CL	746.82	741.90	-	-	-	-	-	742.03	-
S307	144+52.00	36.5' RT	RD MAN 4 DIA T1F CL	745.71	741.30	-	-	-	741.40	-	-	741.40
S308	144+50.00	30' RT	CB TC 4 DIA T24F&G	745.12	-	-	741.43	-	-	-	-	-
S309	145+52.00	36.5' RT	RD MAN 4 DIA T1F CL	744.51	740.05	-	-	-	740.15	-	-	740.05
S310	145+50.00	30' RT	CB TC 4 DIA T24F&G	743.93	-	-	740.08	-	-	-	-	-
S311	146+52.00	36.5' RT	RD MAN 4 DIA T1F CL	743.32	739.45	-	-	-	739.55	-	-	739.52
S312	146+50.00	30' RT	CB TC 4 DIA T24F&G	742.73	-	-	739.55	-	-	-	-	-
S313	147+52.00	36.5' RT	RD MAN 4 DIA T1F CL	742.25	737.76	-	-	-	739.05	-	-	739.05
S314	147+50.00	30' RT	CB TC 4 DIA T24F&G	741.86	-	-	739.08	-	-	-	-	-
S315	148+15.00	43.18' RT	RD MAN 4 DIA T1F CL	740.28	737.40	-	-	-	737.50	-	-	737.50
S316	148+15.00	30' RT	CB TC 4 DIA T24F&G	741.21	-	-	737.59	-	-	-	-	-
S317	148+90.00	48' RT	RD MAN 5 DIA T1F CL	741.22	736.60	737.15	-	-	737.10	-	-	737.15
S318	148+90.00	40.4' RT	RD CB 4 DIA T24F&G	740.22	-	-	737.19	-	-	-	-	737.25
S319	149+00.00	44' LT	INLETS TA T8G	740.25	-	-	737.59	-	-	-	-	-
S320	149+00.00	59' RT	CB TC T8G	740.34	-	-	-	-	-	737.27	-	-
S321	150+02.00	36.5' RT	RD MAN 4 DIA T1F CL	740.89	736.00	-	-	-	736.05	-	-	736.10
S322	150+00.00	30' RT	RD CB 4 DIA T24F&G	740.04	-	-	736.13	-	-	-	-	736.15
S323	152+42.00	39' LT	INLETS TA T8G	738.20	-	-	738.20	735.46	-	-	-	-
S324	150+00.00	47' LT	INLETS TA T8G	739.00	-	-	736.91	-	-	-	-	-
S325	150+77.00	36.5' RT	RD MAN 4 DIA T1F CL	740.52	735.53	-	-	-	735.62	735.62	-	-
S326	150+75.00	30' RT	RD CB 4 DIA T24F&G	739.92	-	735.65	-	-	-	-	-	-
S327	151+52.00	36.5' RT	RD MAN 4 DIA T1F CL	740.14	735.10	-	-	-	735.15	-	-	735.60
S328	151+50.00	30' RT	RD CB 4 DIA T24F&G	739.73	-	-	735.63	-	-	-	-	-
S329	152+27.00	36.5' RT	MAN TA 4 DIA T1F CL	739.77	734.68	-	-	-	734.72	-	-	734.72
S330	152+25.00	30' RT	RD CB 4 DIA T24F&G	739.53	-	-	734.75	-	-	-	-	734.75

LEGEND

- [R] REMOVAL
- [RI] REMOVAL, BY OTHERS
- [A] ADJUST
- [AI] ADJUST, BY OTHERS
- [AB] ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APURTANENCES.



PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P300	S300	S223	RCP	TYPE 2	148	12	740.40	736.08	2.96%	26.9
P301	S302	S301	RCP	TYPE 1	3	12	740.57	740.50	2.33%	0.2
P302	S303	S301	RCP	TYPE 1	121	12	742.06	740.80	2.29%	16.4
P303	S304	S303	RCP	TYPE 1	3	12	742.13	742.10	1.00%	0.4
P304	S305	S306	RCP	TYPE 2	3	12	742.10	742.03	2.33%	0.6
P305	S306	S307	RCP	TYPE 2	96	12	741.90	741.40	0.52%	19.6
P306	S308	S307	RCP	TYPE 1	3	12	741.43	741.40	1.00%	0.4
P307	S307	S309	RCP	TYPE 1	96	15	741.30	740.15	1.20%	16.0
P308	S310	S309	RCP	TYPE 1	3	12	740.08	740.05	1.00%	0.5
P309	S309	S311	RCP	TYPE 1	96	15	740.05	739.55	0.52%	13.7
P310	S312	S311	RCP	TYPE 1	3	12	739.55	739.52	1.00%	0.3
P311	S311	S313	RCP	TYPE 1	96	15	739.48	738.05	1.46%	12.7
P312	S314	S313	RCP	TYPE 1	3	12	738.08	738.05	1.00%	0.4
P313	S313	S315	RCP	TYPE 1	59	18	737.76	737.50	0.44%	2.6
P314	S316	S315	RCP	TYPE 1	9	12	737.59	737.50	1.00%	0.8
P315	S315	S317	VMQ	TYPE 1	71	18	737.40	737.10	0.42%	0.0

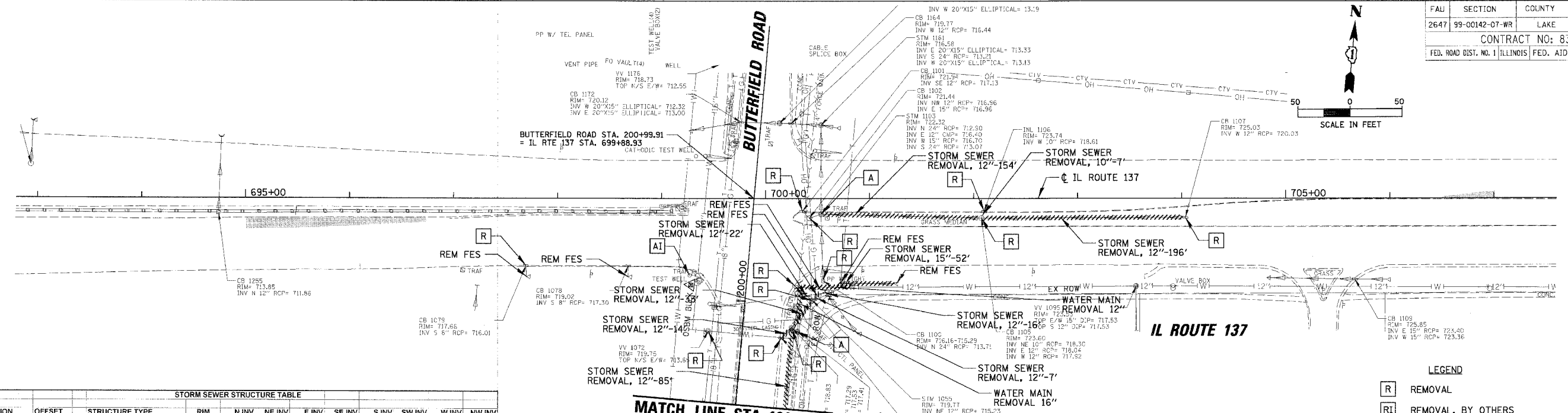
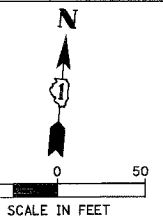
PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P316	S318	S317	VMQ	TYPE 1	4	15	737.19	737.15	1.00%	0.4
P317	S319	S318	VMQ	TYPE 1	82	15	737.59	737.25	0.41%	5.0
P318	S320	S317	VMQ	TYPE 1	12	12	737.27	737.15	1.00%	1.3
P329	S317	S321	RCP	TYPE 2	109	18	736.60	736.05	0.50%	22.3
P319	S322	S321	RCP	TYPE 2	3	12	736.13	736.10	1.00%	0.5
P320	S322	S322	VMQ	TYPE 1	74	12	736.91	736.15	1.03%	9.7
P321	S323	S330	VMQ	TYPE 1	68	12	735.46	734.75	1.04%	8.2
P322	S321	S325	RCP	TYPE 2	71	18	736.00	735.62	0.54%	15.5
P323	S326	S325	RCP	TYPE 2	3	12	735.65	735.62	1.00%	0.6
P324	S325	S327	RCP	TYPE 2	71	18	735.53	735.15	0.54%	16.4
P325	S328	S327	RCP	TYPE 2	3	12	735.63	735.60	1.00%	0.5
P326	S327	S329	RCP	TYPE 2	71	18	735.10	734.72	0.54%	17.3
P327	S330	S329	RCP	TYPE 2	3	12	734.75	734.72	1.00%	0.7
P328	S328	S400	RCP	TYPE 2	71	18	734.68	734.30	0.54%	17.3
P329	S317	S321	VMQ	TYPE 2	109	18	736.60	736.05	0.50%	22.3

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 BUTTERFIELD ROAD
 STA. 138 + 00 TO STA. 153 + 00**

SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	65
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



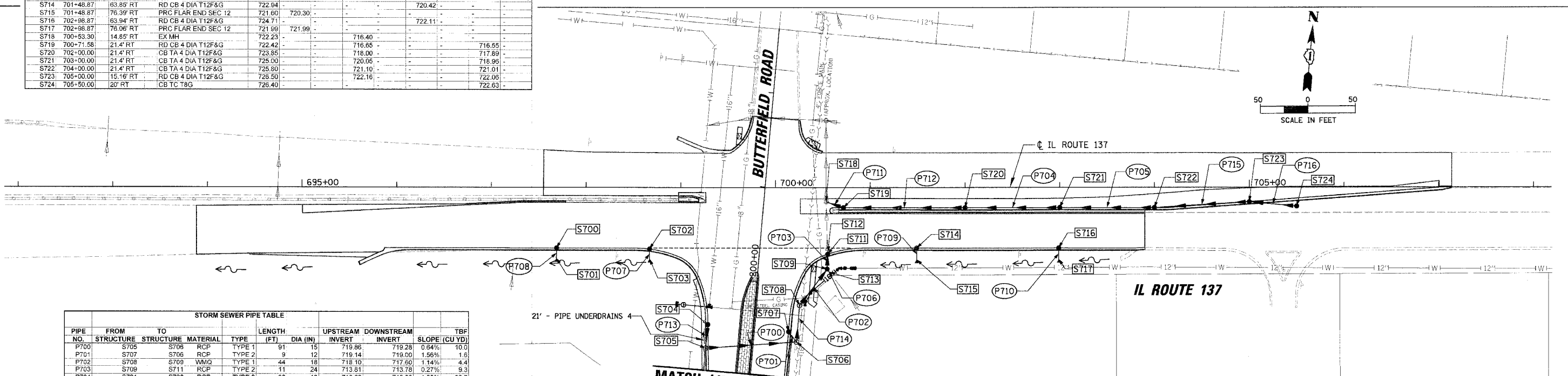
STR. NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S700	697+86.62	63.87 RT	CB TC 4 DIA T24F&G	717.86	-	-	-	-	715.67	-	-	-
S701	697+86.50	75.89 RT	PRC FLAR END SEC 12	715.70	715.57	-	-	-	-	-	-	-
S702	698+66.77	64.89 RT	RD CB 4 DIA T12F&G	719.02	-	-	-	-	716.00	-	-	-
S703	698+66.77	75.69 RT	PRC FLAR END SEC 12	717.44	715.88	-	-	-	-	-	-	-
S704	199+50.00	47.54 LT	RD CB 4 DIA T24F&G	723.19	-	-	-	-	720.11	-	-	-
S705	199+25.00	47.69 LT	RD MAN 5 DIA T1F CL	723.19	719.86	-	-	719.86	-	720.10	-	-
S706	199+40.00	47.37 RT	RD MAN 5 DIA T1F CL	723.40	719.00	-	-	719.28	-	-	-	719.00
S707	199+50.00	38 RT	CB TA 4 DIA T24F&G	723.38	-	-	-	719.14	-	-	-	-
S708	199+78.12	47.12 RT	RD MAN 5 DIA T1F CL	722.50	-	718.10	-	-	718.10	-	-	-
S709	200+19.64	72.72 RT	RD CB 5 DIA T8G	721.00	713.81	-	-	715.99	-	717.60	-	-
S710	NOT USED	-	-	-	-	-	-	-	-	-	-	-
S711	200+35.29	71.91 RT	RD CB 4 DIA T24F&G	721.64	-	-	-	-	713.78	-	-	-
S712	200+40.70	70.15 RT	EX PIPE END	713.70	-	-	-	-	-	-	-	-
S713	199+78.55	110.59 RT	EX FES	719.80	-	-	-	-	-	-	-	716.52
S714	701+48.87	63.89 RT	RD CB 4 DIA T12F&G	722.94	-	-	-	-	720.42	-	-	-
S715	701+48.87	76.39 RT	PRC FLAR END SEC 12	721.60	720.30	-	-	-	-	-	-	-
S716	702+86.87	63.94 RT	RD CB 4 DIA T12F&G	724.71	-	-	-	-	722.11	-	-	-
S717	702+86.87	76.06 RT	PRC FLAR END SEC 12	721.99	721.99	-	-	-	-	-	-	-
S718	700+53.30	14.89 RT	EX MH	722.23	-	716.40	-	-	716.55	-	-	716.55
S719	700+71.58	21.4 RT	RD CB 4 DIA T12F&G	722.42	-	-	-	-	718.00	-	-	717.89
S720	702+00.00	21.4 RT	CB TA 4 DIA T12F&G	723.85	-	-	-	-	720.05	-	-	718.96
S721	703+00.00	21.4 RT	CB TA 4 DIA T12F&G	725.00	-	-	-	-	720.05	-	-	718.96
S722	704+00.00	21.4 RT	CB TA 4 DIA T12F&G	725.80	-	-	721.10	-	-	-	-	721.01
S723	705+00.00	15.16 RT	RD CB 4 DIA T12F&G	726.50	-	-	722.16	-	-	-	-	722.06
S724	705+50.00	20 RT	CB TC T8G	726.40	-	-	-	-	-	-	-	722.63

**MATCH LINE STA. 199+00
SEE SHEET NO. 64**

EXISTING CONDITIONS

- LEGEND**
- [R] REMOVAL
 - [RI] REMOVAL, BY OTHERS
 - [A] ADJUST
 - [AI] ADJUST, BY OTHERS
 - [AB] ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APPURTENANCES.



**MATCH LINE STA. 199+00
SEE SHEET NO. 64**

PROPOSED CONDITIONS

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P700	S705	S706	RCP	TYPE 1	91	15	719.86	719.28	0.64%	10.0
P701	S707	S706	RCP	TYPE 2	9	12	719.14	719.00	1.56%	1.6
P702	S708	S709	VMQ	TYPE 1	44	18	718.10	717.90	1.14%	4.4
P703	S709	S711	RCP	TYPE 2	11	24	713.81	713.78	0.27%	9.3
P704	S721	S720	RCP	TYPE 2	96	12	718.96	718.00	1.00%	32.7
P705	S722	S721	RCP	TYPE 2	96	12	721.01	720.05	1.00%	21.6
P706	S713	S709	VMQ	TYPE 1	7	15	716.52	715.99	7.57%	0.0
P707	S702	S703	RCP	TYPE 1	3	12	716.00	715.88	4.00%	0.0
P708	S700	S701	RCP	TYPE 1	3	12	715.67	715.57	3.33%	0.0
P709	S714	S715	RCP	TYPE 1	4	12	720.42	720.30	3.00%	0.0
P710	S716	S717	RCP	TYPE 1	4	12	722.11	721.99	3.00%	0.0
P711	S719	S718	RCP	TYPE 2	15	12	716.55	716.40	1.00%	5.0
P712	S720	S719	RCP	TYPE 2	124	12	717.89	716.65	1.00%	41.0
P713	S704	S705	RCP	TYPE 1	21	12	720.11	719.86	1.19%	2.0
P714	S706	S708	VMQ	TYPE 1	33	18	718.00	718.10	2.73%	5.1
P715	S723	S722	RCP	TYPE 2	96	12	722.06	721.10	1.00%	18.6
P716	S724	S723	RCP	TYPE 1	47	12	722.63	722.16	1.00%	6.7

NAME	DATE

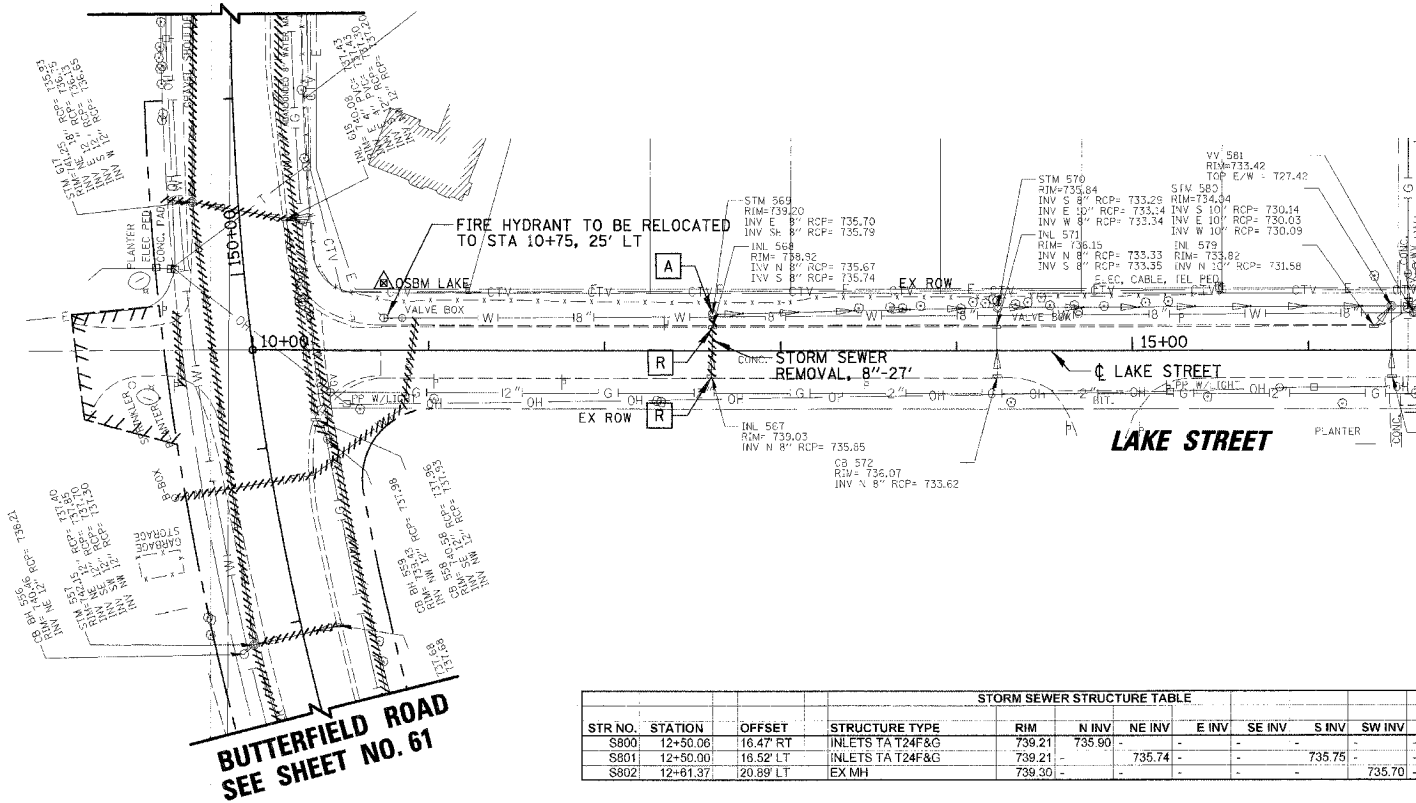
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 BUTTERFIELD ROAD
 AND ILLINOIS ROUTE 137**

SCALE: 1"=50' DRAWN BY: ELA
 DATE: 12/2/2005 CHECKED BY: BILL

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	66
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SEE SHEET NO. 61
BUTTERFIELD ROAD



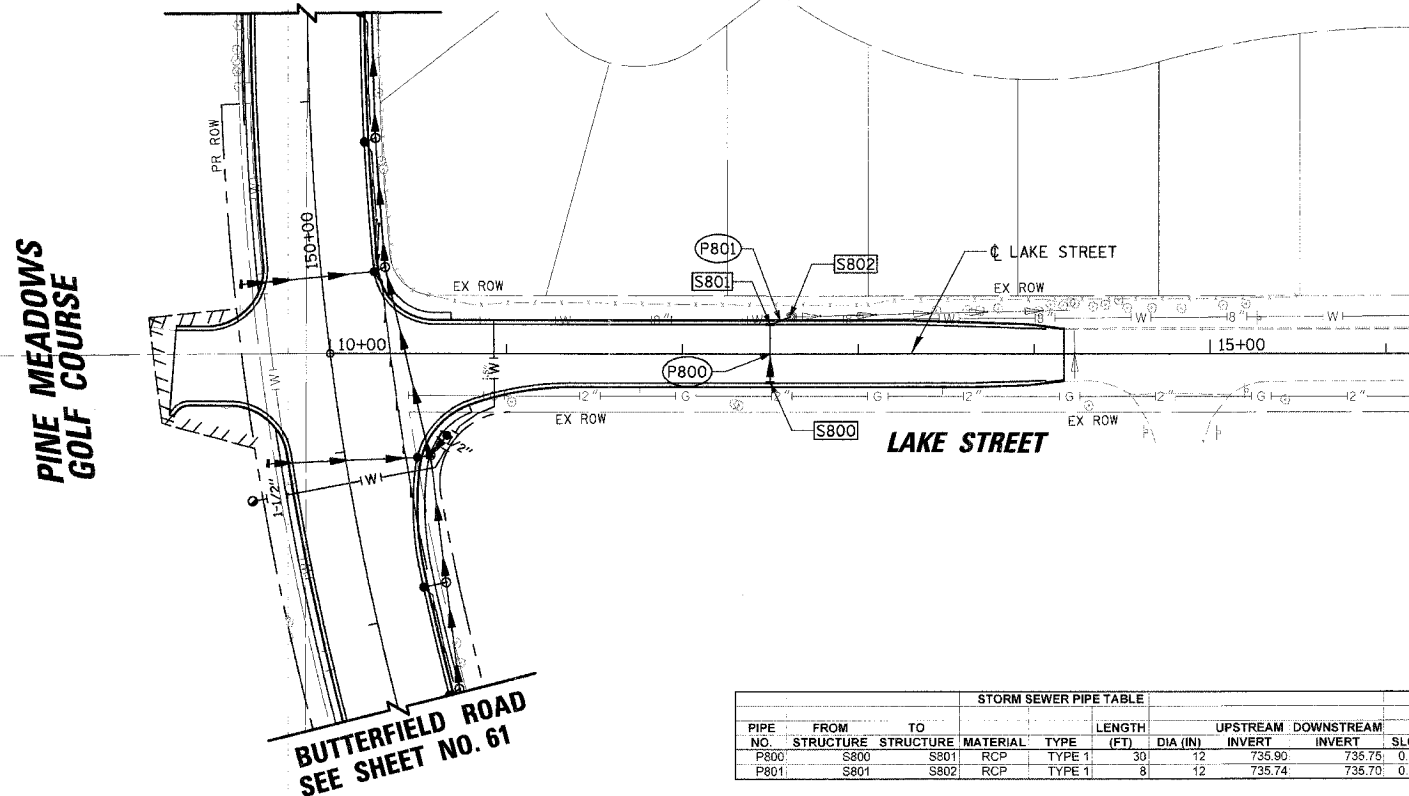
STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S800	12+50.06	16.47 RT	INLETS TA T24F&G	739.21	735.90	-	-	-	-	-	-	-
S801	12+50.00	16.52 LT	INLETS TA T24F&G	739.21	-	735.74	-	-	735.75	-	-	-
S802	12+91.37	20.89 LT	EX MN	739.30	-	-	-	-	-	735.70	-	-

- LEGEND**
- R REMOVAL
 - RI REMOVAL, BY OTHERS
 - A ADJUST
 - AI ADJUST, BY OTHERS
 - AB ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APURTANENCES.

EXISTING CONDITIONS

SEE SHEET NO. 61
BUTTERFIELD ROAD



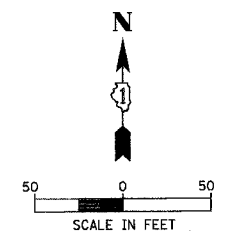
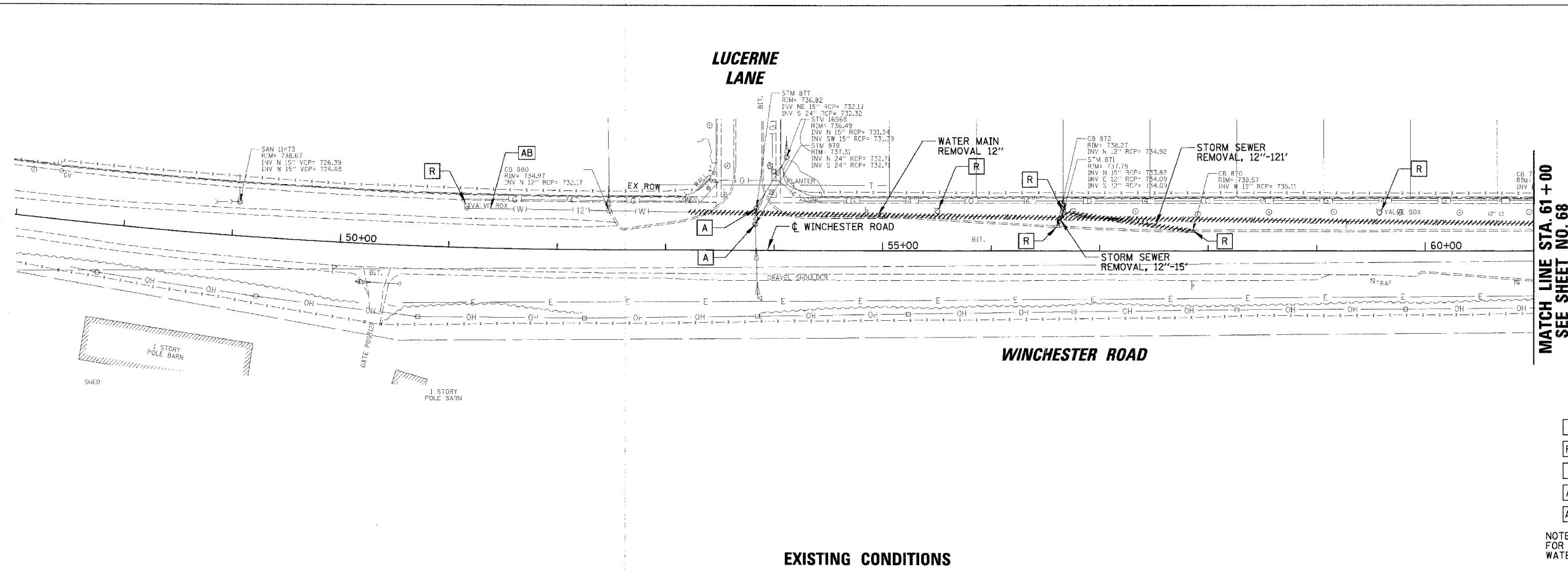
PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P800	S800	S801	RCP	TYPE 1	30	12	735.90	735.75	0.50%	3.0
P801	S801	S802	RCP	TYPE 1	8	12	735.74	735.70	0.50%	0.8

PROPOSED CONDITIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 – BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 LAKE STREET
 STA. 10+00 TO 14+17**
 SCALE: 1:50.0001
 DATE: 12/2/2005
 DRAWN BY: ELA
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	67
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

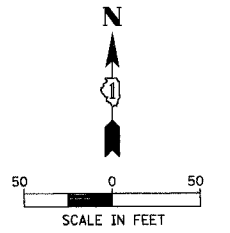
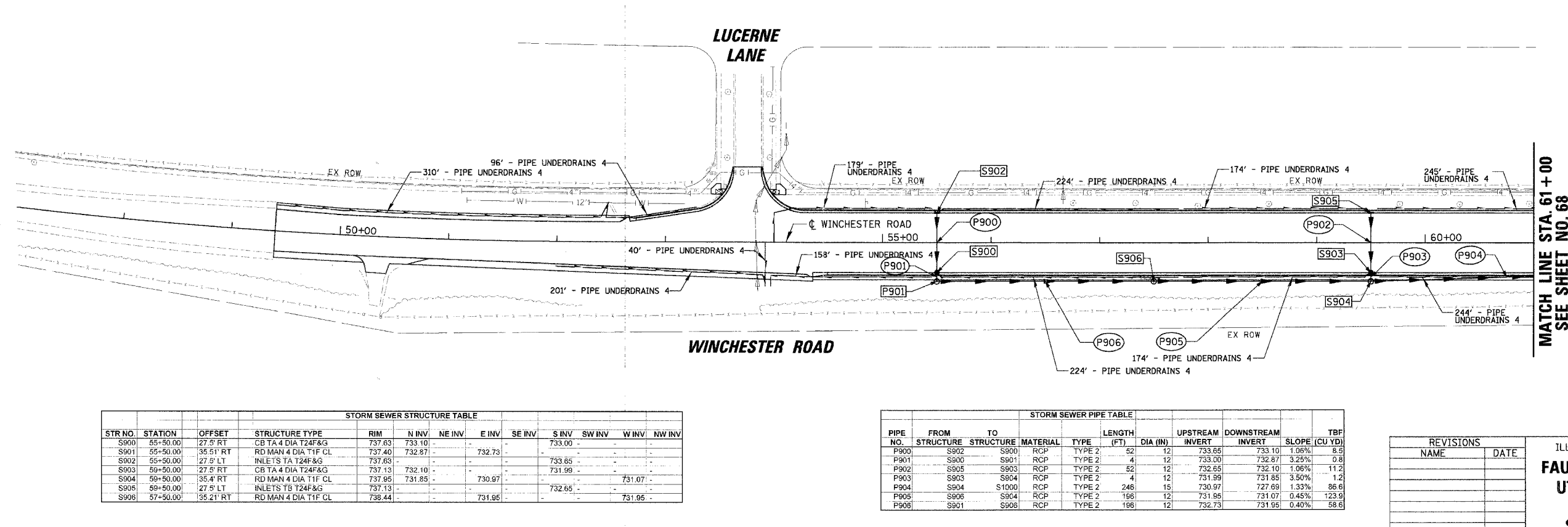


MATCH LINE STA. 61 + 00
SEE SHEET NO. 68

- LEGEND**
- R REMOVAL
 - RI REMOVAL, BY OTHERS
 - A ADJUST
 - AI ADJUST, BY OTHERS
 - AB ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APURTANENCES.

EXISTING CONDITIONS



MATCH LINE STA. 61 + 00
SEE SHEET NO. 68

PROPOSED CONDITIONS

STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S900	55+50.00	27.5' RT	CB TA 4 DIA T24F&G	737.63	733.10	-	-	-	733.00	-	-	-
S901	55+50.00	35.51' RT	RD MAN 4 DIA T1F CL	737.40	732.87	-	732.73	-	-	-	-	-
S902	55+50.00	27.5' LT	INLETS TA T24F&G	737.63	-	-	-	-	733.65	-	-	-
S903	59+50.00	27.5' RT	CB TA 4 DIA T24F&G	737.13	732.10	-	-	-	731.99	-	-	-
S904	59+50.00	35.4' RT	RD MAN 4 DIA T1F CL	737.95	731.85	-	730.97	-	-	-	731.07	-
S905	59+50.00	27.5' LT	INLETS TB T24F&G	737.13	-	-	-	-	732.65	-	-	-
S906	57+50.00	35.21' RT	RD MAN 4 DIA T1F CL	738.44	-	-	731.95	-	-	-	731.95	-

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P900	S902	S900	RCP	TYPE 2	52	12	733.65	733.10	1.06%	8.5
P901	S900	S901	RCP	TYPE 2	4	12	733.00	732.87	3.26%	0.8
P902	S905	S903	RCP	TYPE 2	52	12	732.65	732.10	1.06%	11.2
P903	S903	S904	RCP	TYPE 2	4	12	731.99	731.85	3.50%	1.2
P904	S904	S1000	RCP	TYPE 2	246	15	730.97	727.69	1.33%	86.6
P905	S905	S904	RCP	TYPE 2	196	12	731.95	731.07	0.45%	123.9
P906	S901	S906	RCP	TYPE 2	196	12	732.73	731.95	0.40%	58.6

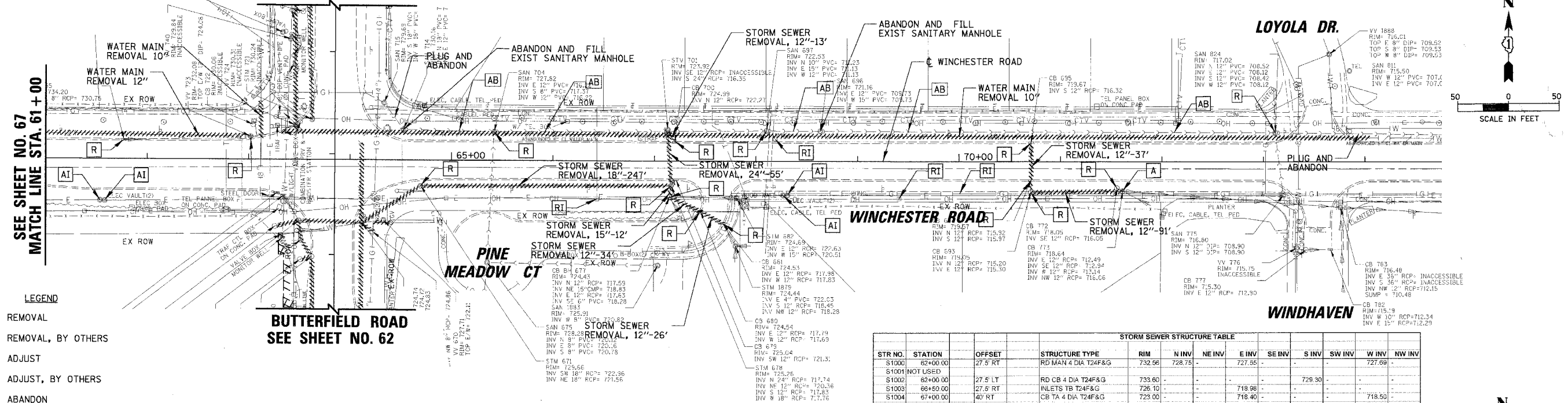
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 WINCHESTER ROAD
 STA. 49 + 40 TO STA. 61 + 00**
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: ELA
 CHECKED BY: BLL

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 1:50
 12/2/2005

SEE SHEET NO. 67
MATCH LINE STA. 61+00

SEE SHEET NO. 62
BUTTERFIELD ROAD



- LEGEND**
- R** REMOVAL
 - RI** REMOVAL, BY OTHERS
 - A** ADJUST
 - AI** ADJUST, BY OTHERS
 - AB** ABANDON

NOTE: SEE SHEETS 75 TO 76 FOR DETAILS OF PROPOSED WATER MAIN AND APPURTANANCES.

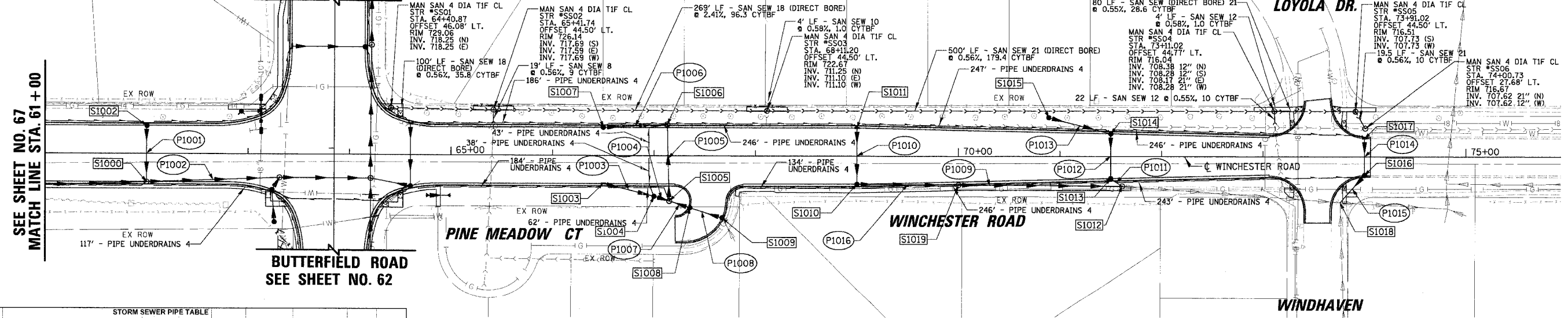
EXISTING CONDITIONS

STORM SEWER STRUCTURE TABLE

STR NO.	STATION	OFFSET	STRUCTURE TYPE	RIM	N INV	NE INV	E INV	SE INV	S INV	SW INV	W INV	NW INV
S1000	62+00.00	27.5' RT	RD MAN 4 DIA T24F&G	732.56	728.75	-	727.55	-	-	-	-	727.69
S1001	NOT USED	-	-	-	-	-	-	-	-	-	-	-
S1002	62+00.00	27.5' LT	RD CB 4 DIA T24F&G	733.60	-	-	-	-	728.30	-	-	-
S1003	66+50.00	27.5' RT	RD CB 4 DIA T24F&G	726.10	-	-	718.98	-	-	-	-	718.50
S1004	67+00.00	40' RT	RD CB 4 DIA T24F&G	723.00	-	-	716.40	-	-	-	-	718.28
S1005	67+15.00	44.5' RT	MAN TA 4 DIA TIF CL	724.58	717.61	-	717.61	-	-	-	-	720.45
S1006	67+13.04	30.77' LT	RD MAN 4 DIA TIF CL	724.89	-	-	-	-	716.35	-	-	-
S1007	66+50.00	27.5' LT	RD CB 4 DIA T24F&G	728.10	-	-	721.04	-	-	-	-	717.78
S1008	67+35.40	51.02' RT	RD CB 4 DIA T24F&G	723.70	-	-	717.78	-	-	-	-	717.98
S1009	67+67.13	60.9' RT	RD CB 4 DIA T24F&G	723.58	-	-	717.98	-	-	-	-	717.98
S1010	66+00.00	27.5' RT	RD CB 4 DIA T24F&G	721.58	717.00	-	716.90	-	-	-	-	-
S1011	66+00.00	27.5' LT	INLETS TB T24F&G	721.55	-	-	-	-	717.55	-	-	-
S1012	71+61.32	26.35' RT	RD MAN 4 DIA TIF CL	718.27	-	-	713.20	-	-	-	714.29	713.00
S1013	71+50.00	21.59' RT	RD MAN 4 DIA TIF CL	718.52	-	-	713.14	-	-	-	713.70	-
S1014	71+50.00	22.07' LT	RD CB 4 DIA T24F&G	718.51	-	-	-	-	713.64	-	-	713.70
S1015	70+88.96	38' LT	RD CB 4 DIA T24F&G	717.00	-	-	714.33	-	-	-	-	712.47
S1016	74+00.00	18.17' RT	RD CB 4 DIA T24F&G	716.38	712.50	-	-	-	-	-	-	-
S1017	74+00.00	17.83' LT	INLETS TA T24F&G	716.39	-	-	-	-	712.67	-	-	-
S1018	73+75.99	45.19' RT	EX MH	716.48	-	-	712.15	-	-	-	-	-
S1019	70+00.00	28.2' RT	MAN TA 4 DIA TIF CL	720.37	-	-	715.90	-	-	-	-	715.90

SEE SHEET NO. 67
MATCH LINE STA. 61+00

SEE SHEET NO. 62
BUTTERFIELD ROAD



STORM SEWER PIPE TABLE

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P1000	NOT USED	-	-	-	-	-	-	-	-	-
P1001	S1002	S1000	RCP	TYPE 1	52	12	728.30	728.75	1.06%	7.4
P1002	S1000	S418	VMQ	TYPE 2	130	15	727.55	728.68	0.87%	33.7
P1003	S1003	S1004	RCP	TYPE 2	48	12	718.40	718.50	1.00%	15.9
P1004	S1004	S1005	RCP	TYPE 2	12	12	718.40	718.28	1.00%	3.5
P1005	S1005	S1006	RCP	TYPE 2	71	12	717.61	716.35	1.77%	58.5
P1006	S1007	S1006	RCP	TYPE 2	59	12	721.04	720.45	1.00%	12.7
P1007	S1008	S1005	RCP	TYPE 2	17	12	717.78	717.61	1.00%	8.8
P1008	S1009	S1008	RCP	TYPE 2	30	12	717.98	717.78	0.67%	9.6
P1009	S1010	S1012	RCP	TYPE 2	157	12	715.90	714.29	1.03%	25.5
P1010	S1011	S1010	RCP	TYPE 2	52	12	717.55	717.00	1.06%	8.5

PROPOSED CONDITIONS

STORM SEWER PIPE TABLE

PIPE NO.	FROM STRUCTURE	TO STRUCTURE	MATERIAL	TYPE	LENGTH (FT)	DIA (IN)	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE (CU YD)	TBF
P1011	S1013	S1012	RCP	TYPE 2	10	12	713.14	713.00	1.40%	2.8
P1012	S1014	S1013	RCP	TYPE 2	40	12	713.84	713.20	1.10%	9.9
P1013	S1015	S1014	RCP	TYPE 1	59	12	714.33	713.70	1.07%	1.8
P1014	S1017	S1016	RCP	TYPE 1	33	12	712.67	712.50	0.52%	4.0
P1015	S1016	S1018	RCP	TYPE 1	32	12	712.47	712.15	1.00%	3.6
P1016	S1010	S1019	RCP	TYPE 2	96	12	716.90	715.90	1.04%	14.0

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 WINCHESTER ROAD
 STA. 61+00 TO STA. 74+06**
 SCALE: 1:50
 DATE: 7/19/2006
 DRAWN BY: ELA
 CHECKED BY: BLL

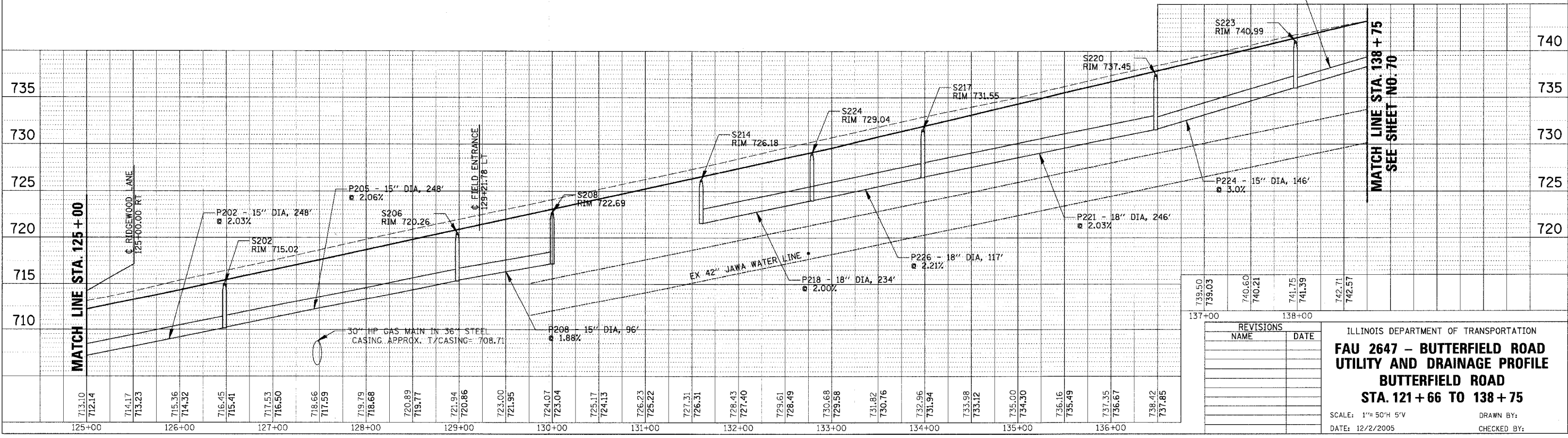
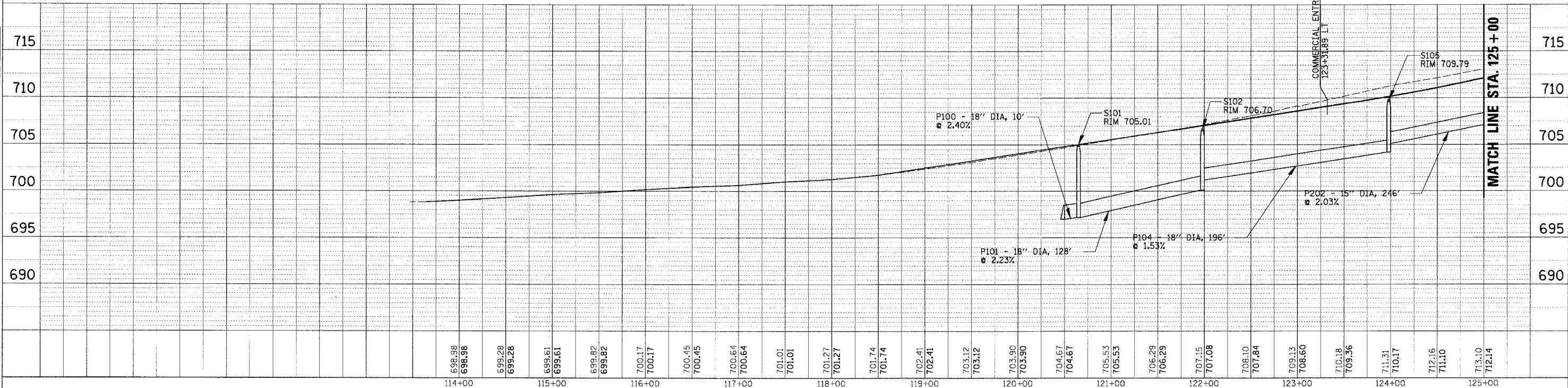
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	69
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 42" JAWA TRANSMISSION LINE PROFILE IS BASED OFF THE CAMP DRESSER & MCKEE INC. 1990 CONTRACT 90-05 PLAN SET. CONTRACTOR TO COORDINATE ALL ACTIVITIES NEAR THE UTILITY WITH THE JAWA REPRESENTATIVE AND PRIOR TO ANY EXCAVATION IN THE AREA OF THE UTILITY.

PLAN	SUPPLIER	DATE
NOTE BOOK	ALIGNED CHECKED	
NO.	DATE	

PROFILE	DATE
NOTE BOOK	
NO.	

150.0004
2/2/2005
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739.50	740.60	741.75	742.71
739.03	740.21	741.39	742.57

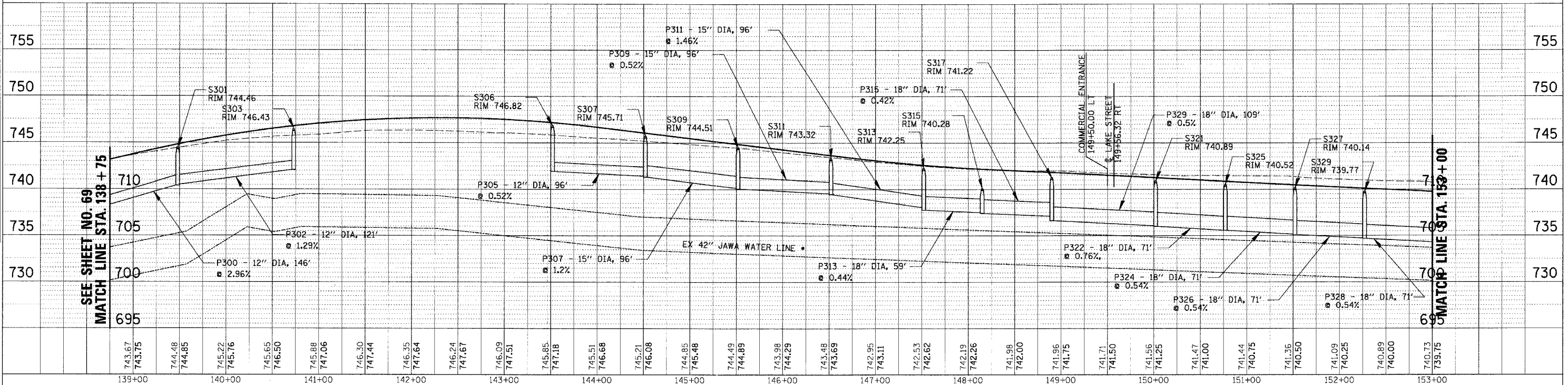
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PROFILE
 BUTTERFIELD ROAD
 STA. 121+66 TO 138+75**
 SCALE: 1"= 50' H 5' V
 DATE: 12/2/2005
 DRAWN BY:
 CHECKED BY:

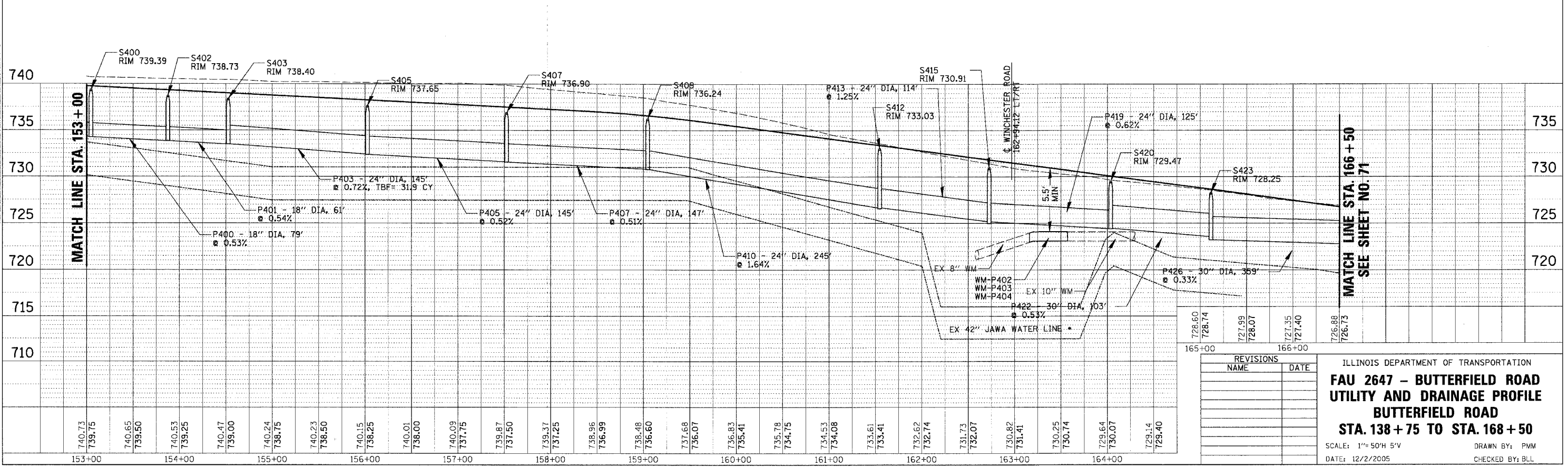
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	70
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* 42" JAWA TRANSMISSION LINE PROFILE IS BASED OFF THE CAMP DRESSER & MCKEE INC. 1990 CONTRACT 90-05 PLAN SET. CONTRACTOR TO COORDINATE ALL ACTIVITIES NEAR THE UTILITY WITH THE JAWA REPRESENTATIVE AND PRIOR TO ANY EXCAVATION IN THE AREA OF THE UTILITY.

DATE	BY



DATE	BY



150
12/2/2005
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728.60	727.99	727.35	726.88
728.74	728.07	727.40	726.73
165+00	166+00		

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
UTILITY AND DRAINAGE PROFILE
BUTTERFIELD ROAD
STA. 138 + 75 TO STA. 168 + 50
 SCALE: 1"=50'H 5"V
 DATE: 12/2/2005
 DRAWN BY: PVM
 CHECKED BY: BLL

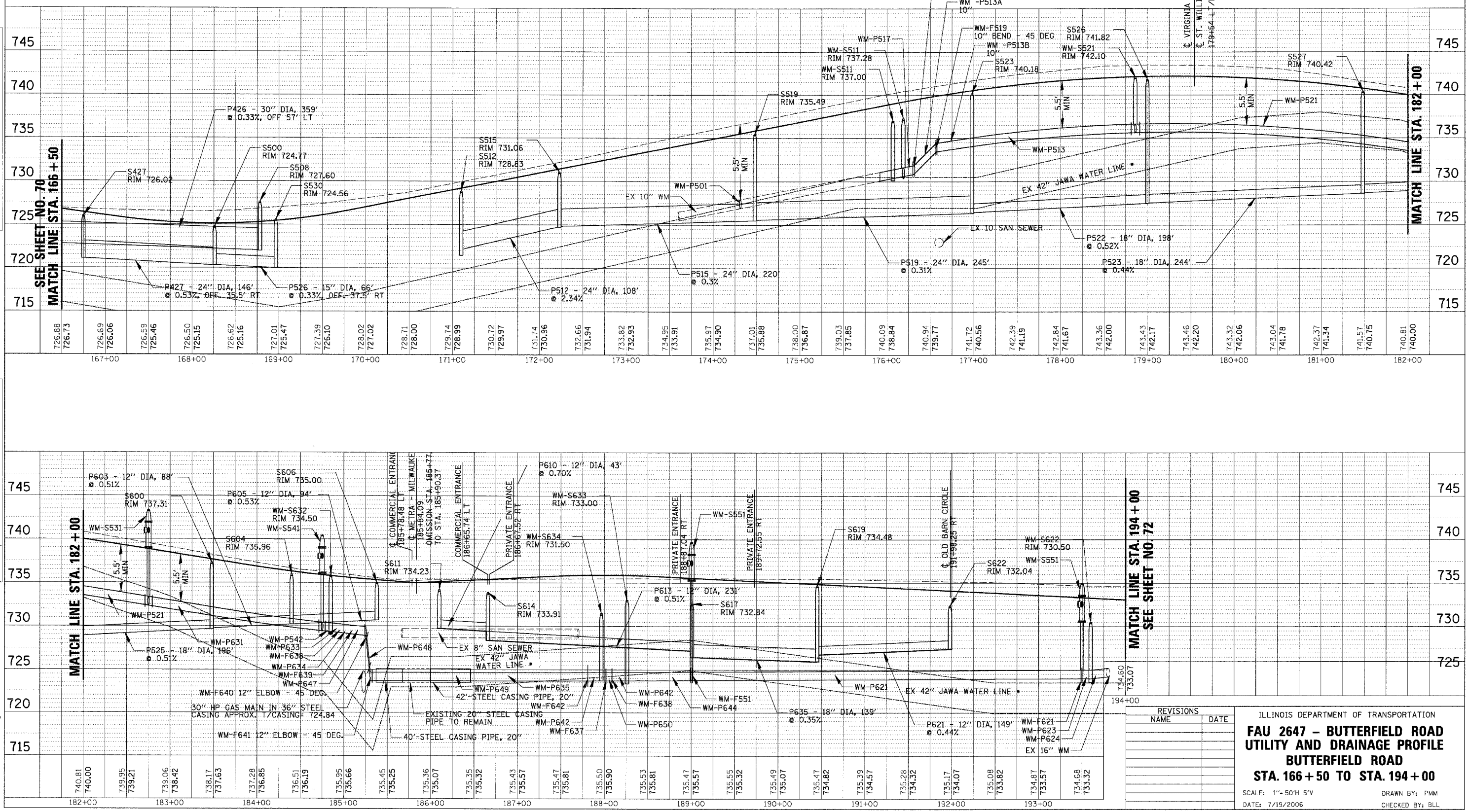
FAU	SECTION	COUNTY	TOTAL SHEET NO.
2647	99-00142-07-WR	LAKE	256 71
CONTRACT NO: 83815			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

* 42" JAWA TRANSMISSION LINE PROFILE IS BASED OFF THE CAMP DRESSER & MCKEE INC. 1990 CONTRACT 90-05 PLAN SET. CONTRACTOR TO COORDINATE ALL ACTIVITIES NEAR THE UTILITY WITH THE JAWA REPRESENTATIVE AND PRIOR TO ANY EXCAVATION IN THE AREA OF THE UTILITY.

PLAN	DATE
BY	
CHECKED	
DATE	

DETAIL	DATE
BY	
CHECKED	
DATE	

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 7/19/2006



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PROFILE
 BUTTERFIELD ROAD
 STA. 166 + 50 TO STA. 194 + 00**
 SCALE: 1" = 50'H 5"V
 DATE: 7/19/2006
 DRAWN BY: PMM
 CHECKED BY: BLL

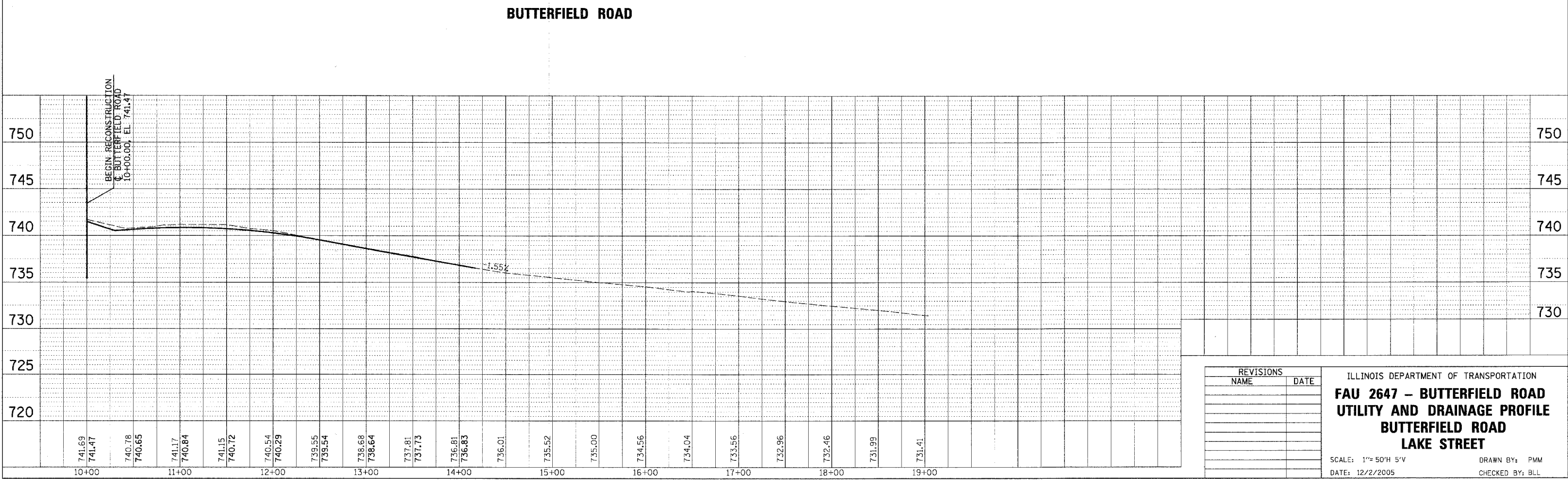
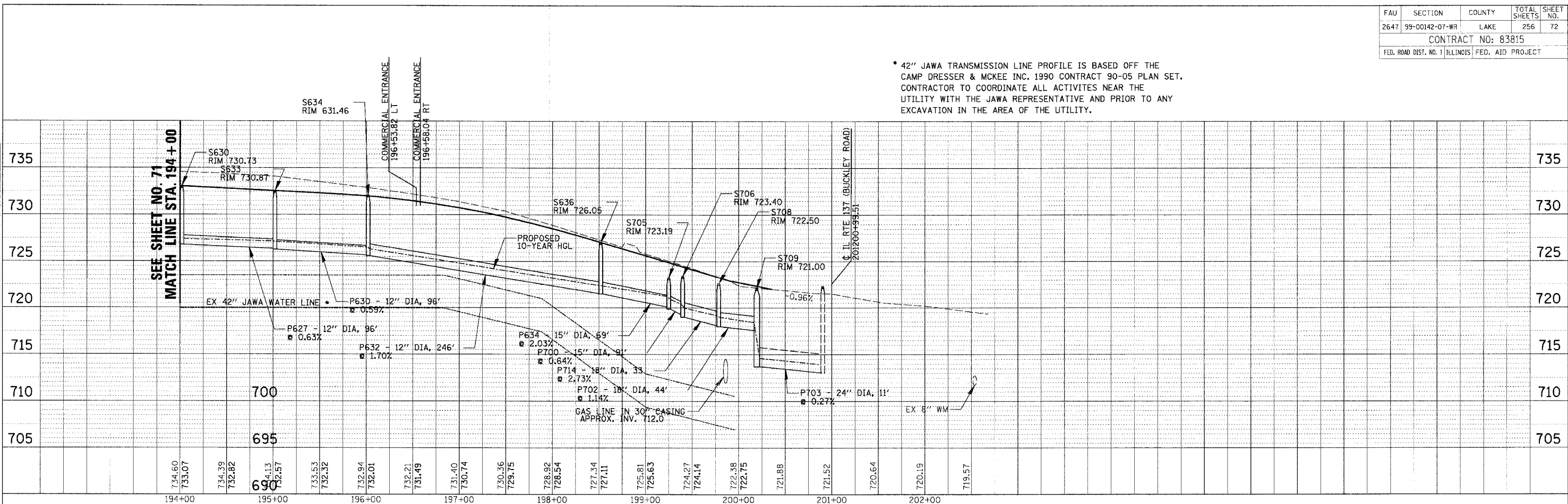
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	72
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

• 42" JAWA TRANSMISSION LINE PROFILE IS BASED OFF THE CAMP DRESSER & MCKEE INC. 1990 CONTRACT 90-05 PLAN SET. CONTRACTOR TO COORDINATE ALL ACTIVITIES NEAR THE UTILITY WITH THE JAWA REPRESENTATIVE AND PRIOR TO ANY EXCAVATION IN THE AREA OF THE UTILITY.

PLAN	DATE
BY: _____	DATE: _____
NO. _____	DATE: _____

PROFILE	DATE
BY: _____	DATE: _____
NO. _____	DATE: _____

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 12/2/2005

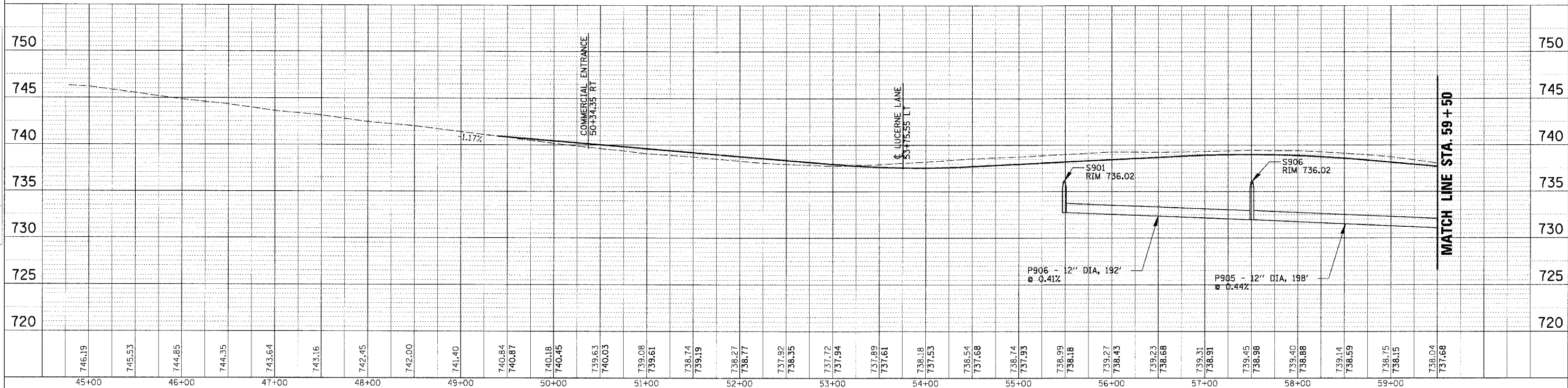


REVISIONS	
NAME	DATE

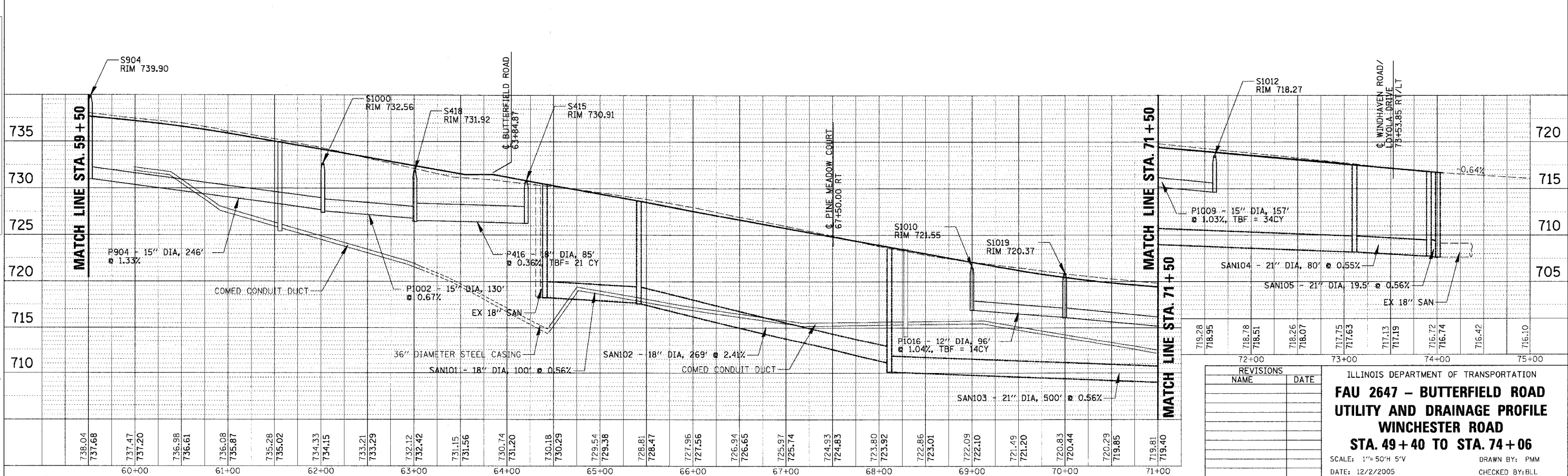
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PROFILE
 BUTTERFIELD ROAD
 LAKE STREET**
 SCALE: 1"= 50'H 5'V
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	73
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	REVISIONS	DATE
NO.	BY	



PROFILE	REVISIONS	DATE
NO.	BY	



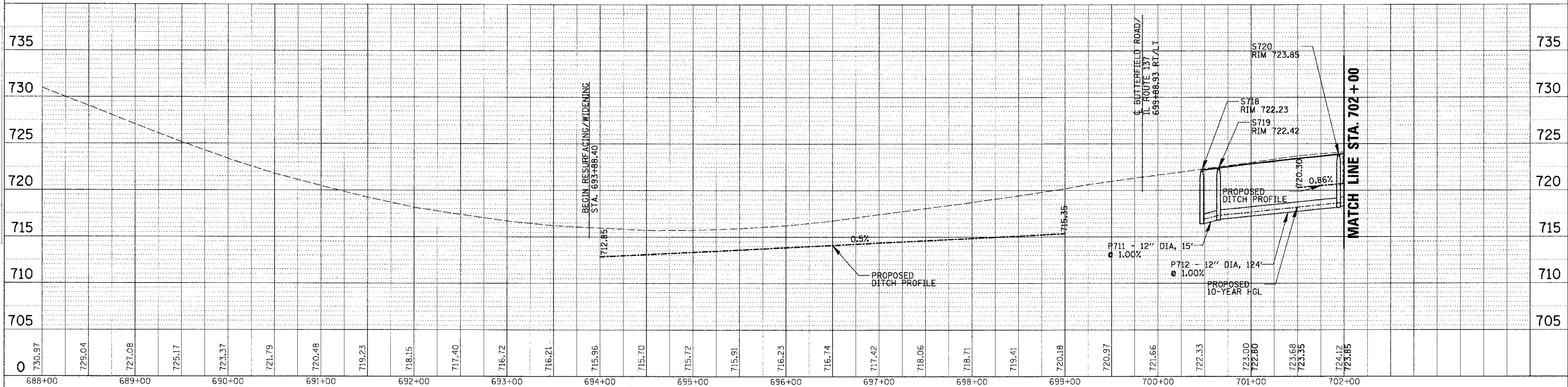
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12/2/2005
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NO.	DATE	REVISIONS
NAME	DATE	

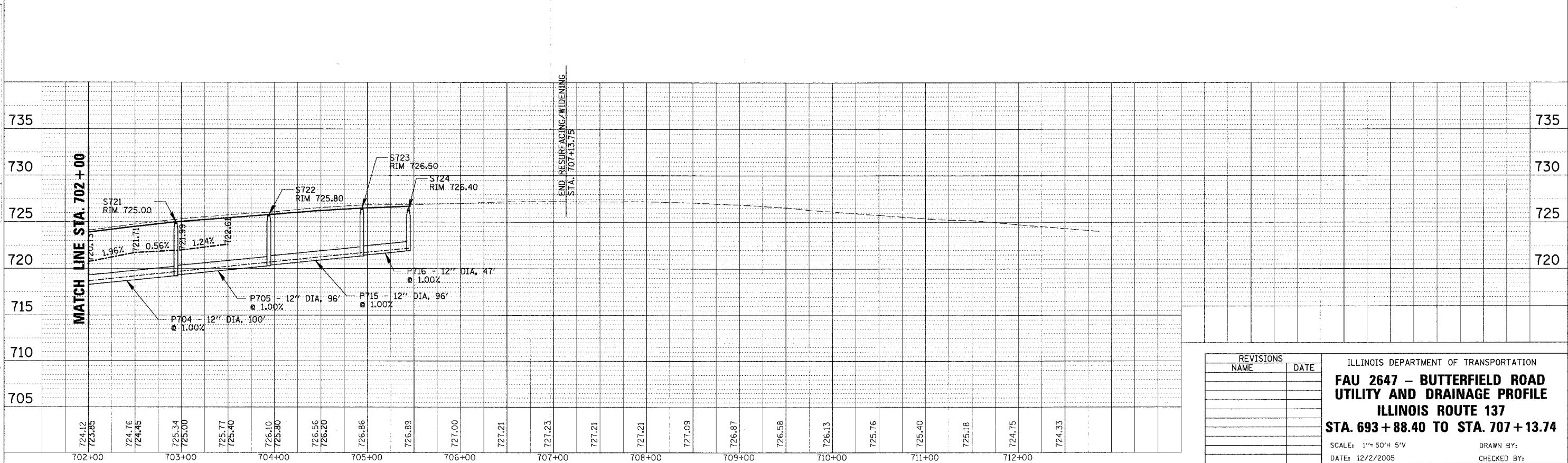
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PROFILE
 WINCHESTER ROAD
 STA. 49+40 TO STA. 74+06**
 SCALE: 1"=50'H 5'V
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	74
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PLAN	SUBMITTED	DATE
NO.	BY	
NOTE BOOK	PLANNED	
NO.	BY	
	BY	
	BY	



PROFILE	SUBMITTED	DATE
NO.	BY	
NOTE BOOK	PLANNED	
NO.	BY	
	BY	
	BY	

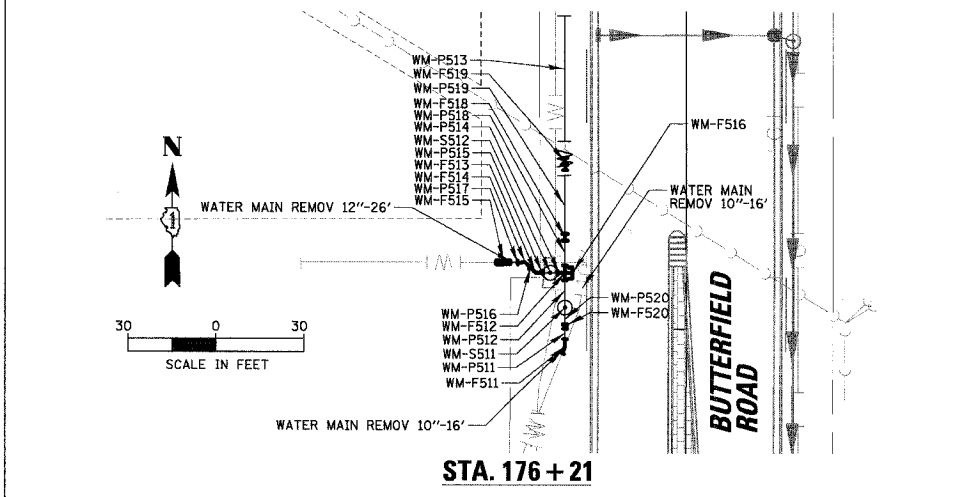
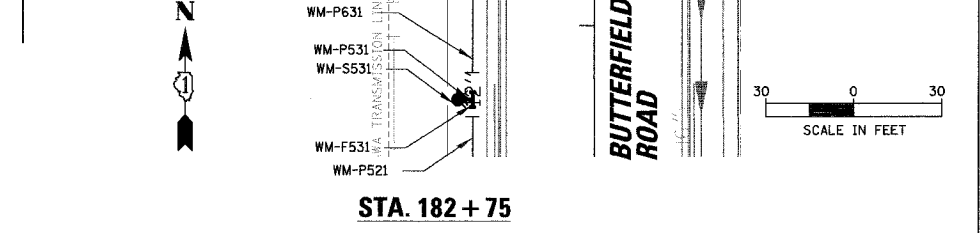
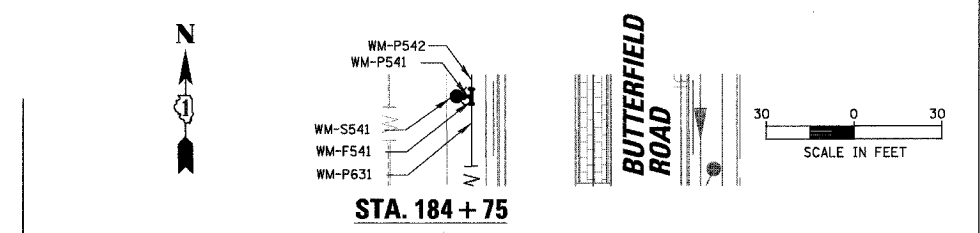
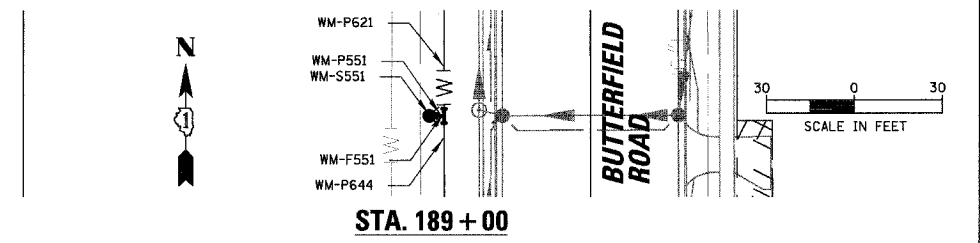
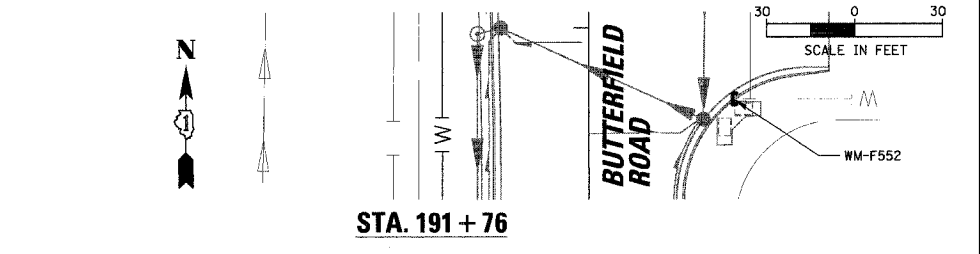
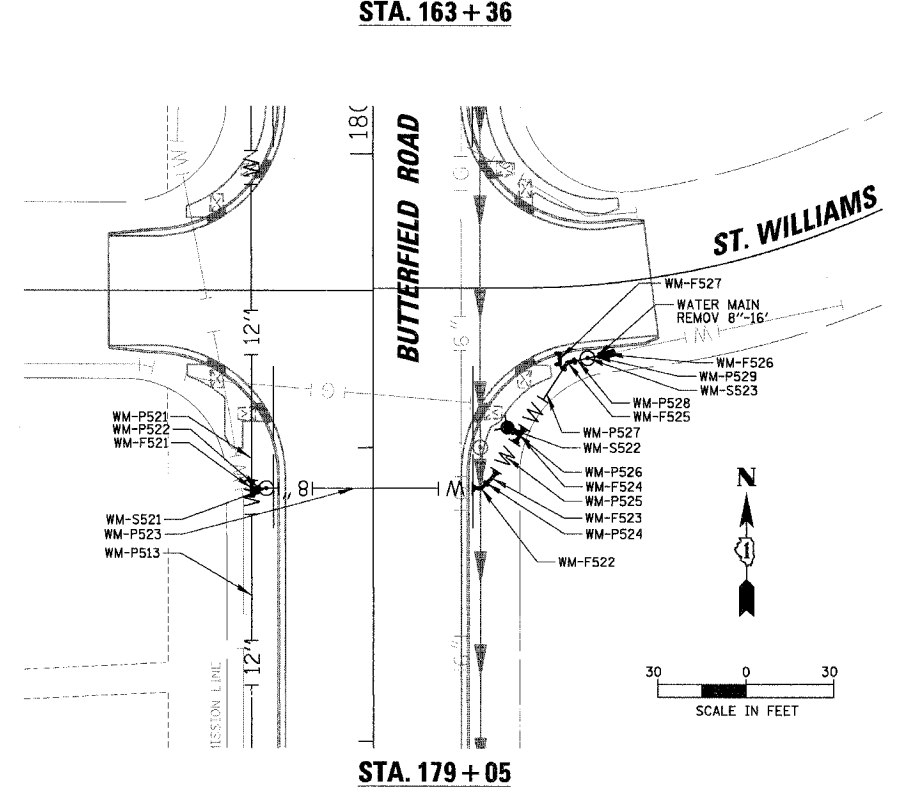
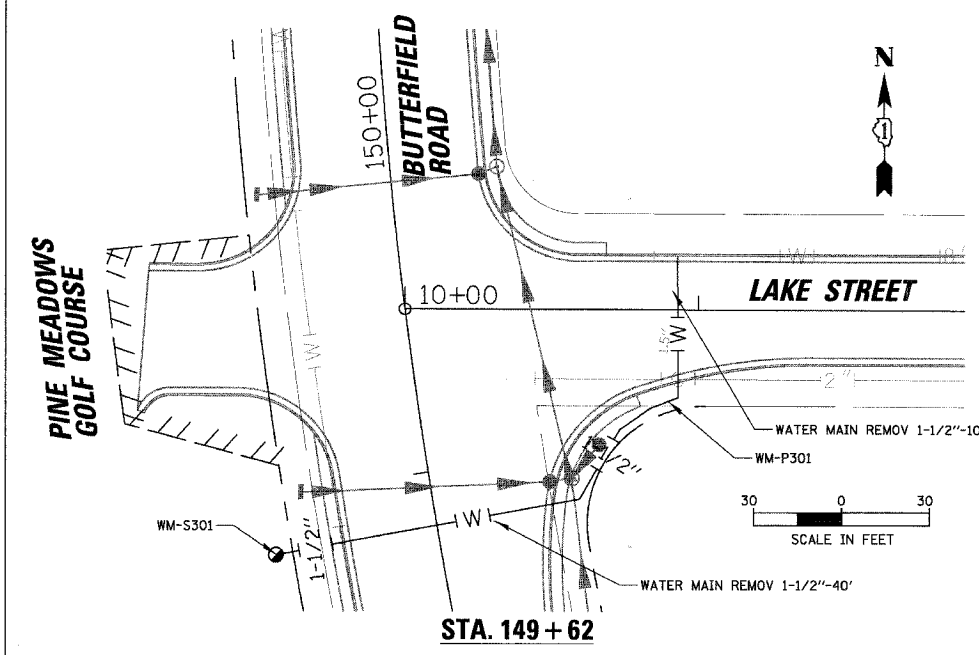
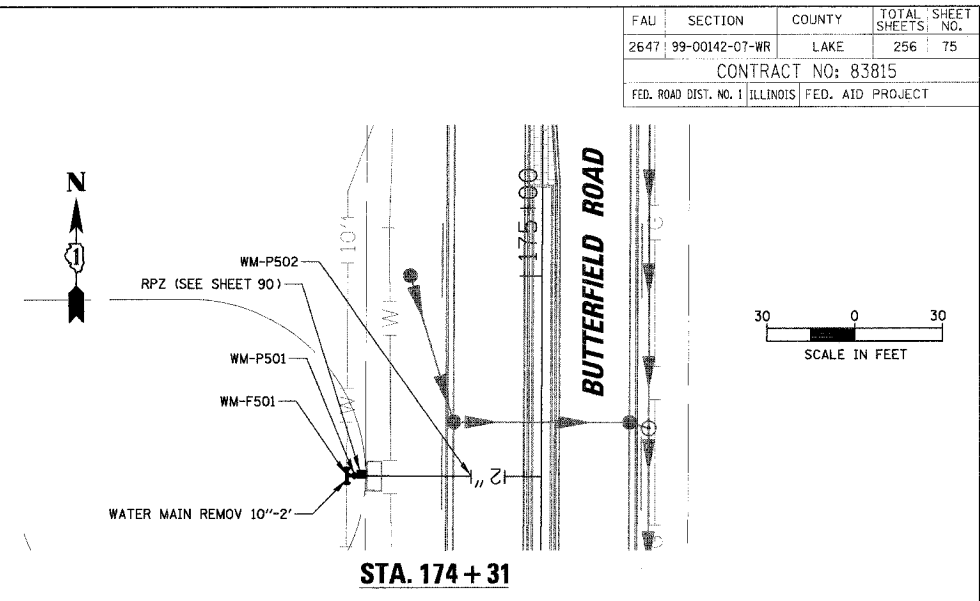
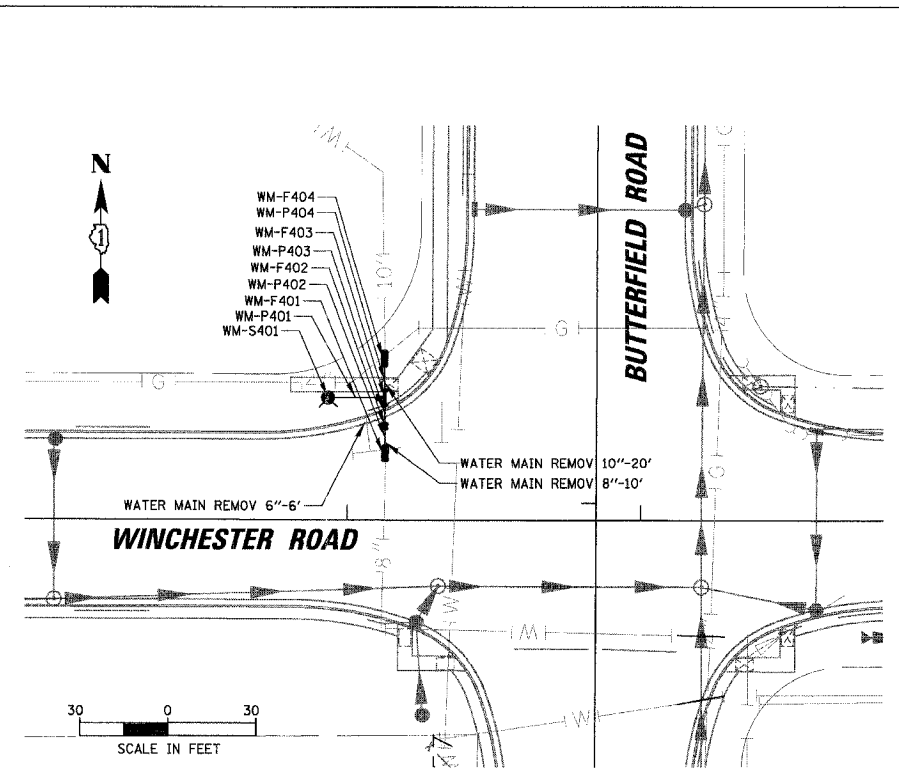
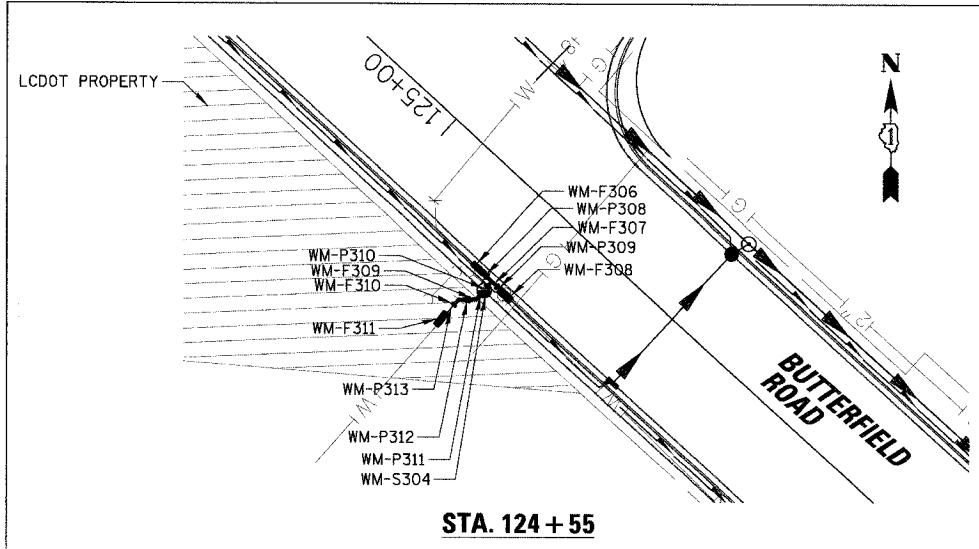


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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PROFILE**
ILLINOIS ROUTE 137
STA. 693 + 88.40 TO STA. 707 + 13.74
 SCALE: 1"=50'H 5"V
 DATE: 12/2/2005
 DRAWN BY:
 CHECKED BY:

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	75
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



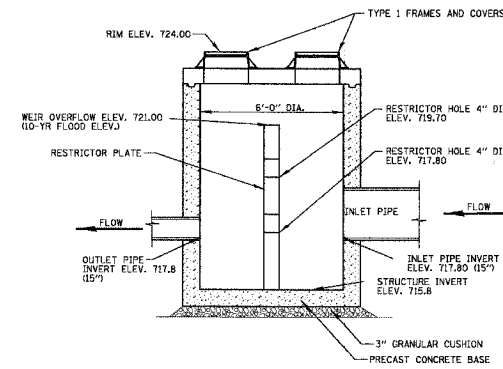
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 130.0001
 7/19/2006

WATER MAIN REMOVALS SHOWN IN ABOVE DETAILS.
 SEE ROADWAY UTILITY AND DRAINAGE PLAN FOR
 OTHER REMOVAL ITEMS.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
WATERMAIN DETAILS
AT INTERSECTIONS
 SCALE: 1:30.0001
 DATE: 7/19/2006
 DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEET
2647	99-00142-07-WR	LAKE	256
CONTRACT NO: 83815			77
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



SECTION

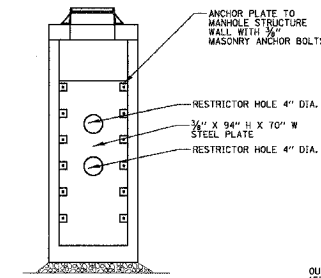
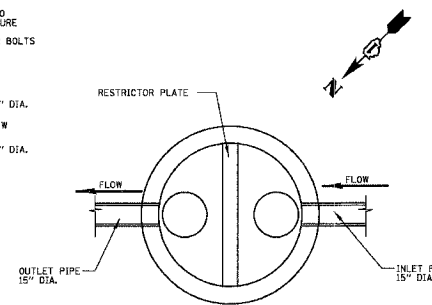
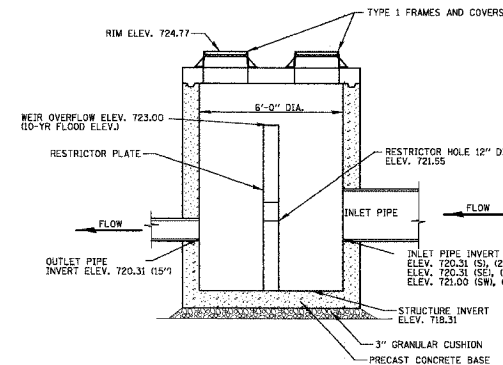


PLATE ELEVATION VIEW



PLAN VIEW
(SHOWING PIPE AND RESTRICTOR ORIENTATION)

PLATE RESTRICTOR DETAIL
STRUCTURE S211 - STA. 130+00 56.5 LT.



SECTION

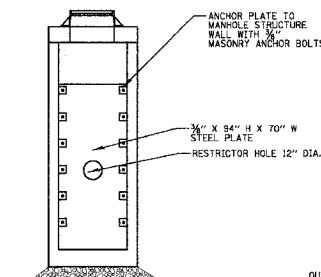
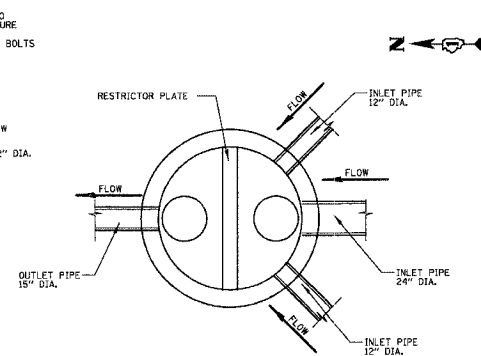
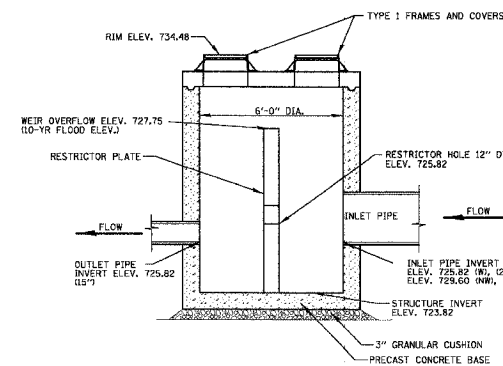


PLATE ELEVATION VIEW



PLAN VIEW
(SHOWING PIPE AND RESTRICTOR ORIENTATION)

PLATE RESTRICTOR DETAIL
STRUCTURE S500 - STA. 168+27 36.5 RT.



SECTION

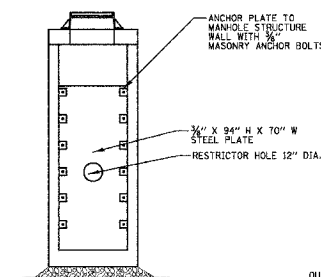
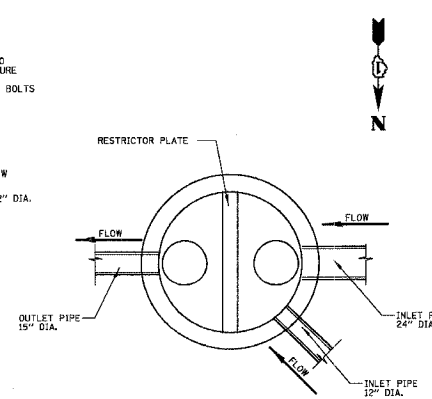


PLATE ELEVATION VIEW



PLAN VIEW
(SHOWING PIPE AND RESTRICTOR ORIENTATION)

PLATE RESTRICTOR DETAIL
STRUCTURE S619 - STA. 190+48 36.5 RT.

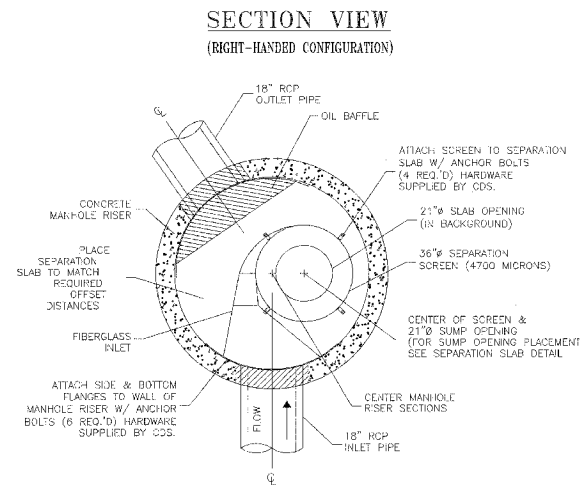
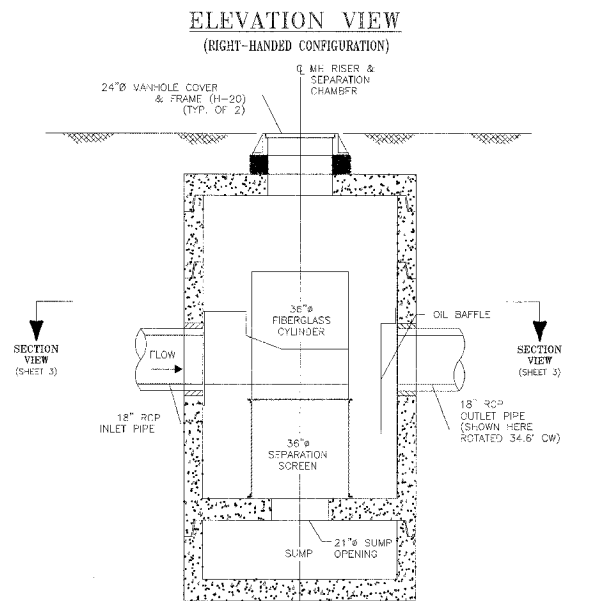
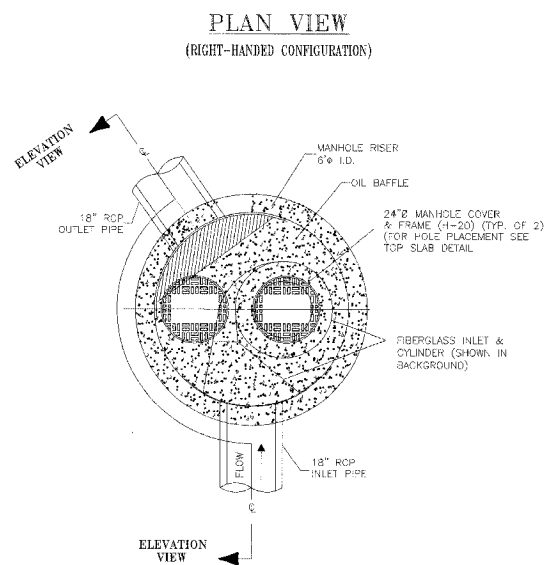
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE PLAN
 BUTTERFIELD ROAD
 AND ILLINOIS ROUTE 137**

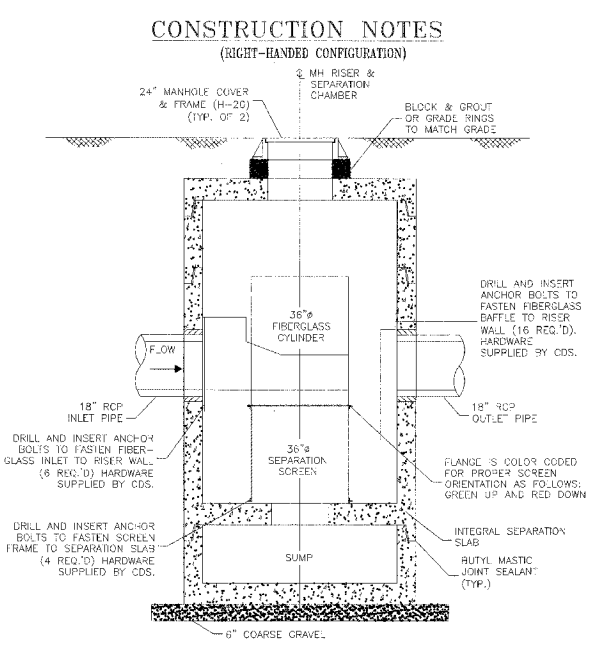
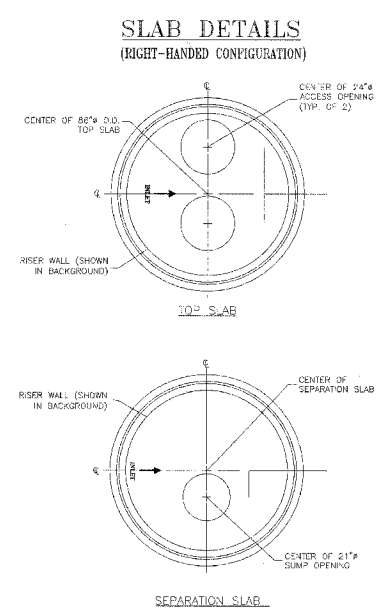
SCALE: NONE DRAWN BY: PMM
 DATE: 12/2/2005 CHECKED BY: MJP

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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	78
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- NOTES:
1. ALL CONCRETE COMPONENTS SHALL BE CONSTRUCTED PER ASTM C-478.
 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.



REVISIONS	
NAME	DATE

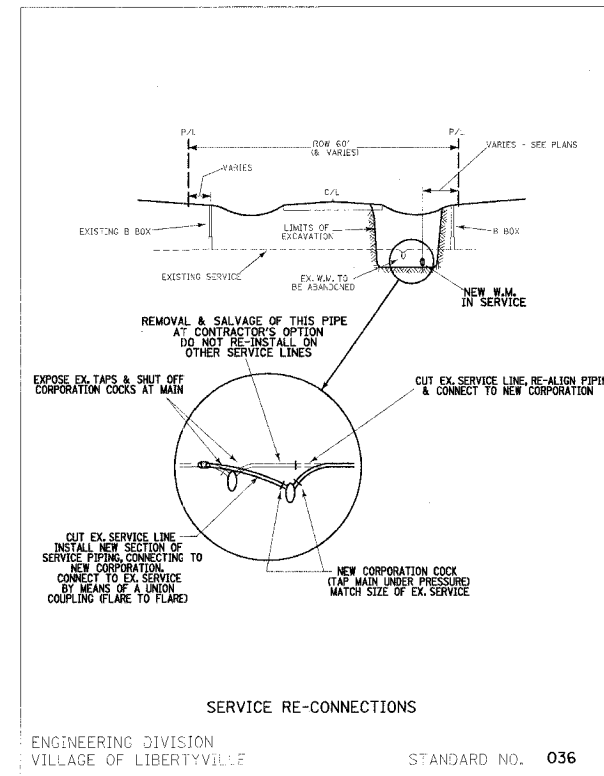
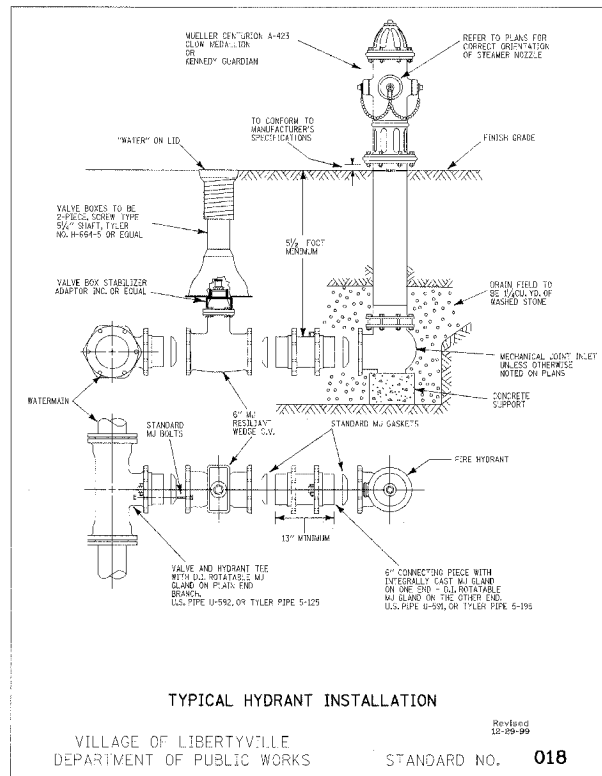
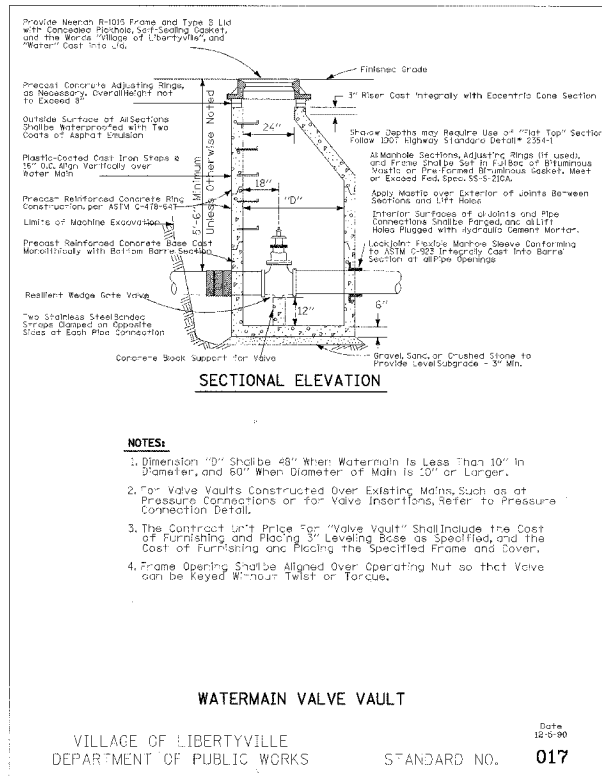
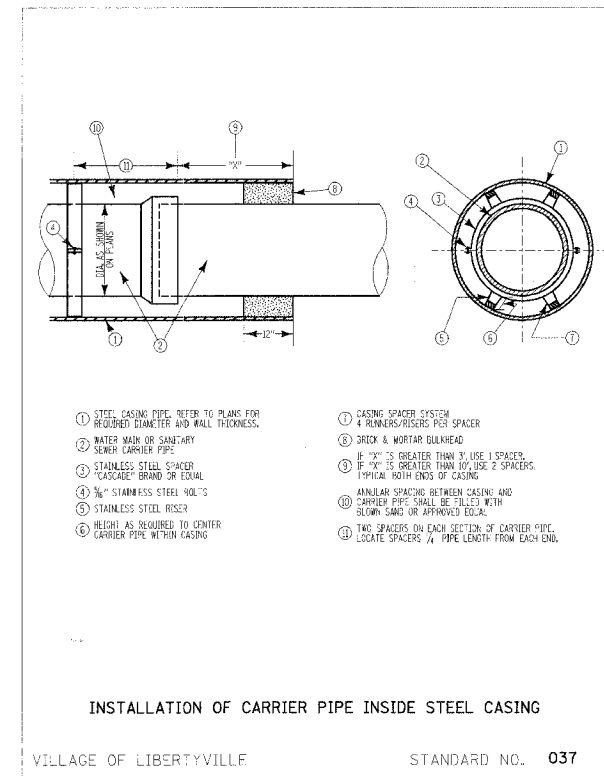
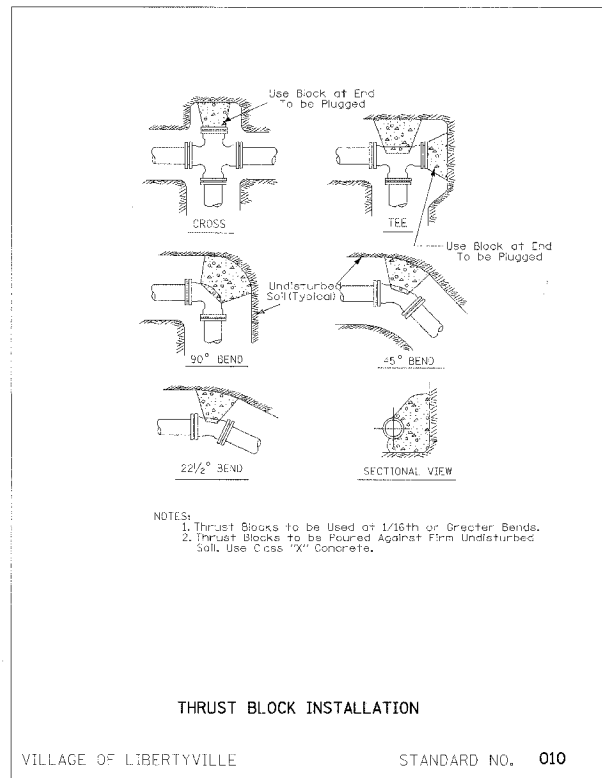
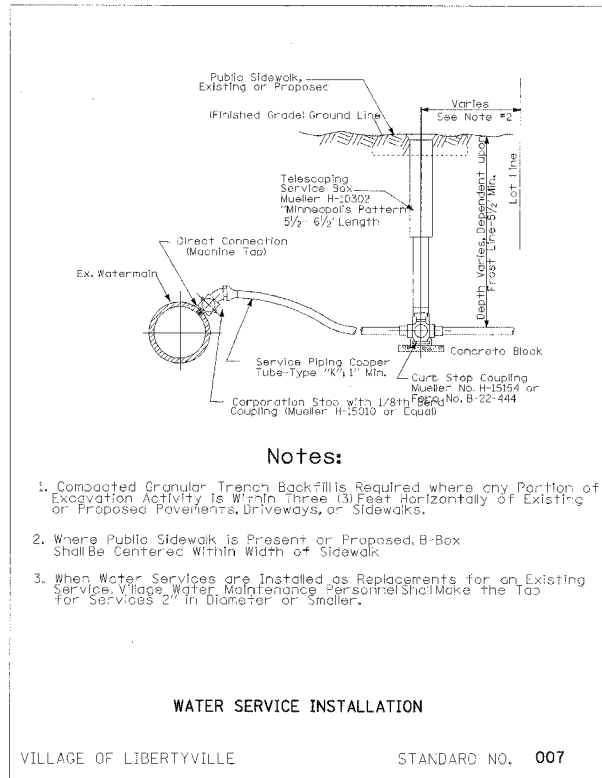
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 UTILITY AND DRAINAGE DETAILS
 STORMWATER TREATMENT STRUCTURE
 STA. 120+65 46' RT**

SCALE: NONE
 DATE: 12/22/2005

DRAWN BY: ELA
 CHECKED BY: MJP

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 12/22/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	79
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FIRE HYDRANT TO BE RELOCATED

SEQUENCE OF CONSTRUCTION:

1. CLOSE EXISTING VALVE
2. REMOVE EXISTING HYDRANT
3. INSTALL HYDRANT EXTENSION AND NEW VALVE
4. RELOCATE EXISTING HYDRANT
5. OPEN EXISTING VALVE, REMOVE BOX
6. BACKFILL
7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

REVISIONS	
NAME	DATE

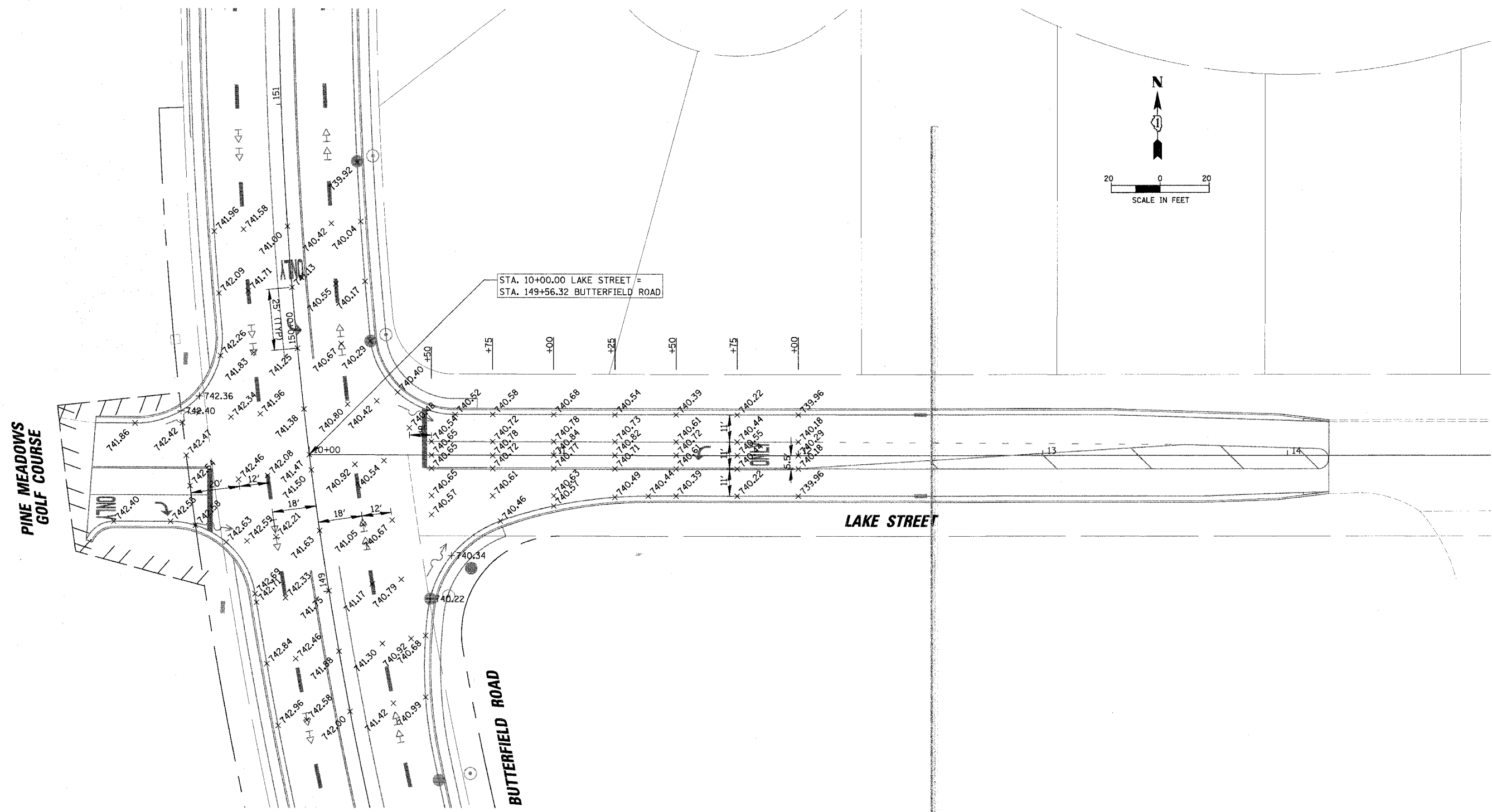
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
VILLAGE OF LIBERTYVILLE
WATER MAIN DETAILS

SCALE: NONE
DATE: 12/2/2005

DRAWN BY: ELA
CHECKED BY: MJP

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12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	81
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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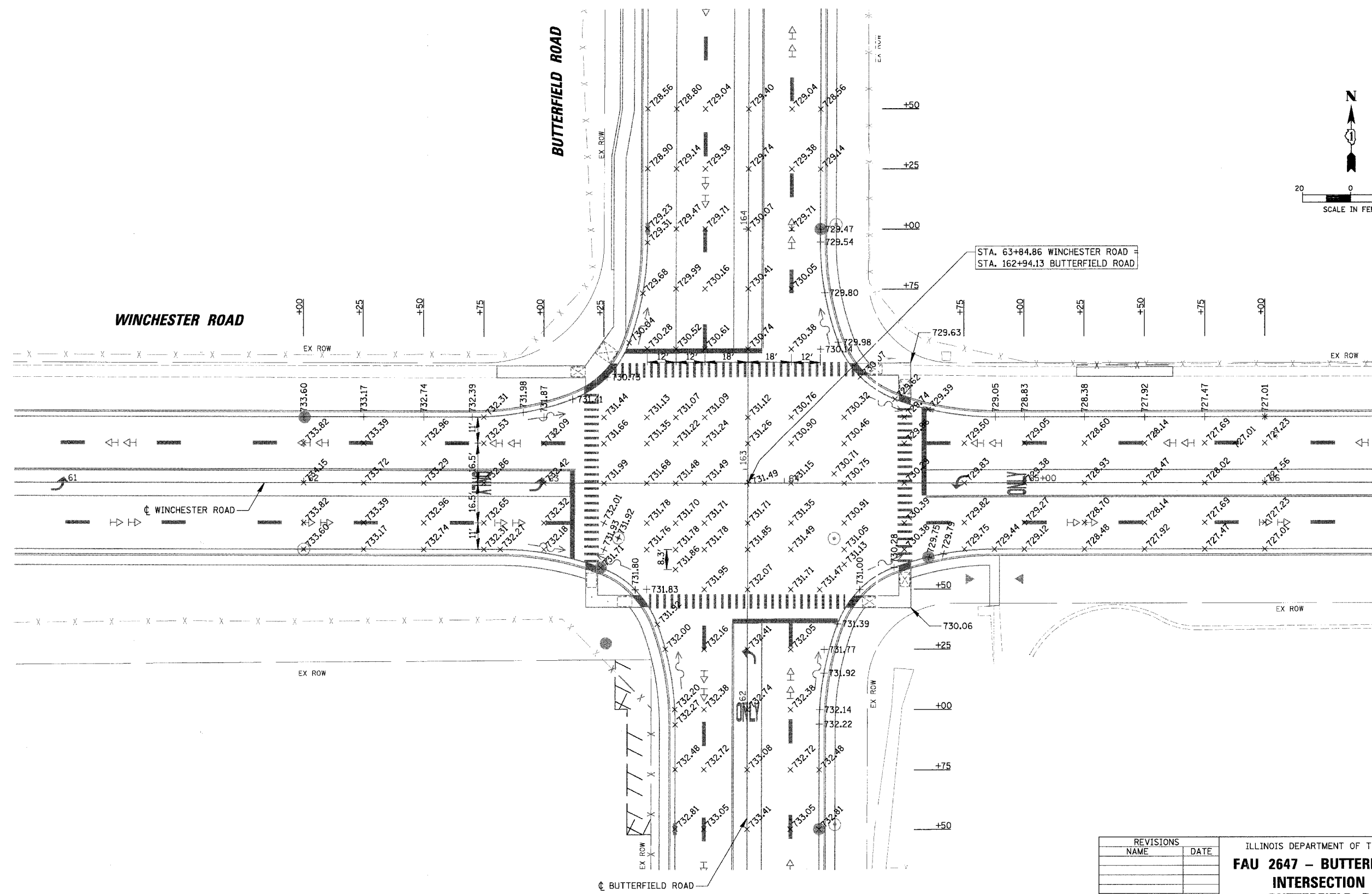
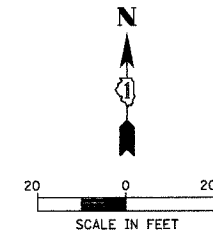
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
INTERSECTION DETAIL
BUTTERFIELD ROAD AT
LAKE STREET

SCALE: 1:20
 DATE: 12/2/2005

DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	82
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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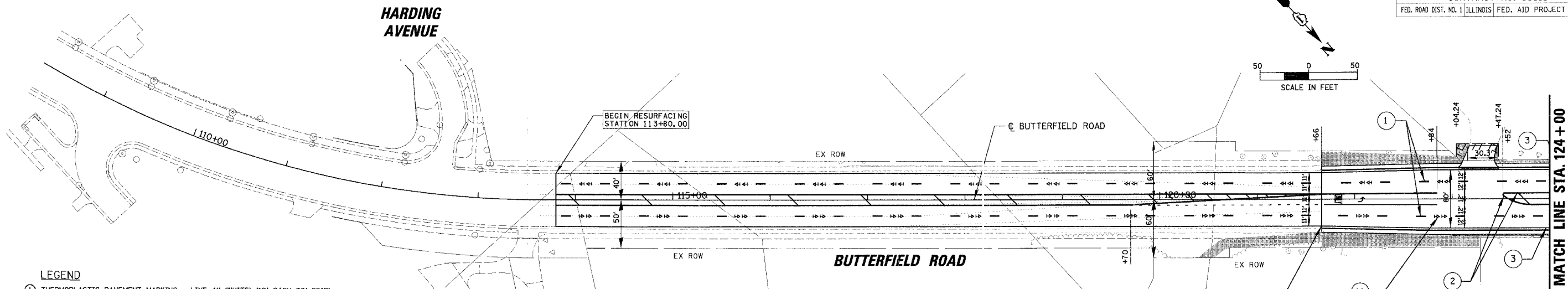
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 – BUTTERFIELD ROAD
INTERSECTION DETAIL
BUTTERFIELD ROAD AT
WINCHESTER ROAD

SCALE: 1:20
 DATE: 12/2/2005

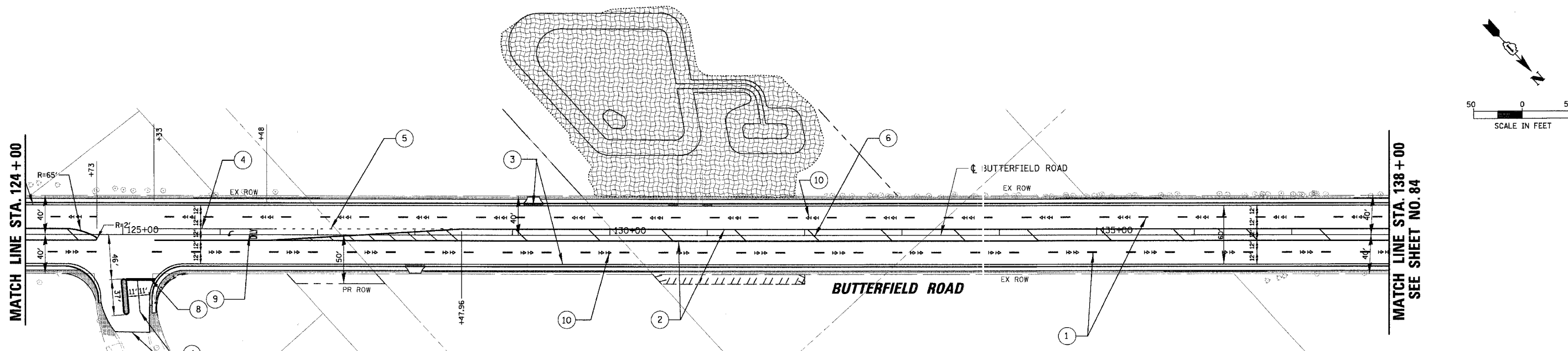
DRAWN BY: PMM
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	83
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH 30'-SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW) (2' ■ 11" C-C)
 - ③ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE)
 - ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH 6'-SKIP)
 - ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW) (45° DIAGONAL ■ 20' C-C)
 - ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
 - ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑨ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑩ RPM (PER LCDOT STANDARD. SEE ROADWAY CONSTRUCTION DETAILS, SHEET 153)
 - ⑪ RPM (PER IDOT DISTRICT 1 STANDARD TC11. SEE SHEET 132)
 - ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE) (45° DIAGONALS ■ 20' C-C)
 - ⑭ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- SODDING, NITROGEN FERTILIZER NUTRIENT, PHOSPHOROUS FERTILIZER NUTRIENT*, POTASSIUM FERTILIZER NUTRIENT, TOPSOIL FURNISH AND PLACE, 4"
 - PROPOSED SIGN BASE (SIGN TO BE INSTALLED BY OTHERS-LCDOT)
 - SEE DETENTION POND GRADING PLAN SEE SHEET 80
 - * STA. 200+00 TO STA. 201+73.50
STA. 693+88.40 TO STA. 707+13.75
 - * FOR PARKWAY AND MEDIAN PLANTER TREE LIST SEE SHEET 89.



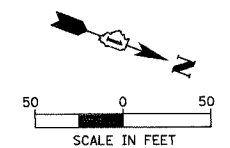
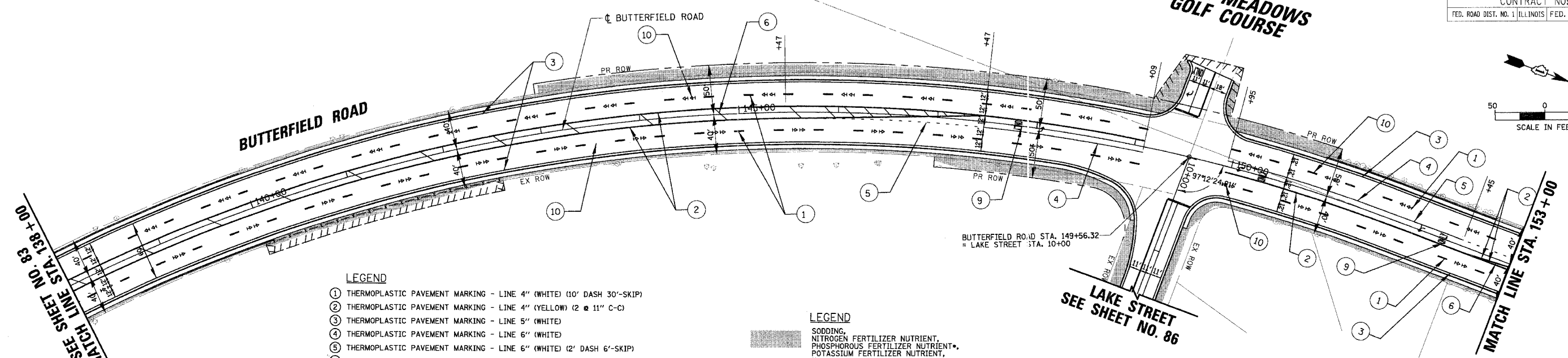
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
PAVEMENT MARKING AND
LANDSCAPING - BUTTERFIELD ROAD
STA. 121+66 TO STA. 138+00
 SCALE: 1:50
 DATE: 12/2/2005
 DRAWN BY: PMM,ELA
 CHECKED BY: BLL

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 12/2/2005

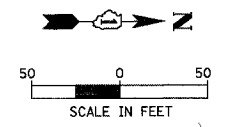
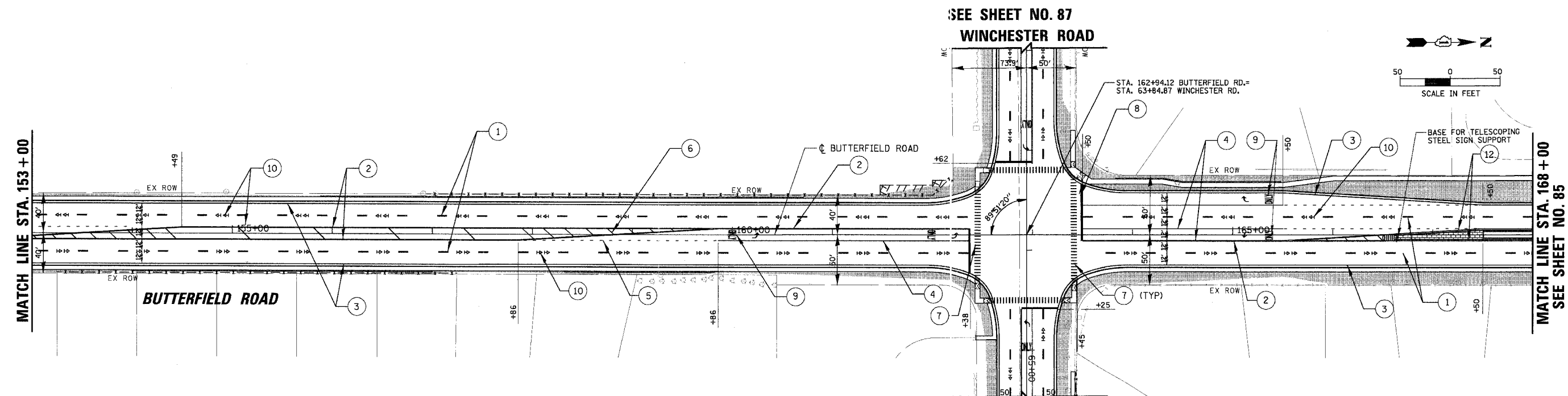
FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	84
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

PINE MEADOWS GOLF COURSE



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH 30'-SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW) (2 @ 11" C-C)
 - ③ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE)
 - ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH 6'-SKIP)
 - ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW) (45° DIAGONAL @ 20' C-C)
 - ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
 - ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑨ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑩ RPM (PER LCDOT STANDARD. SEE ROADWAY CONSTRUCTION DETAILS, SHEET 153)
 - ⑪ RPM (PER IDOT DISTRICT 1 STANDARD TC11. SEE SHEET 132)
 - ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE) (45° DIAGONALS @ 20' C-C)
 - ⑭ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)

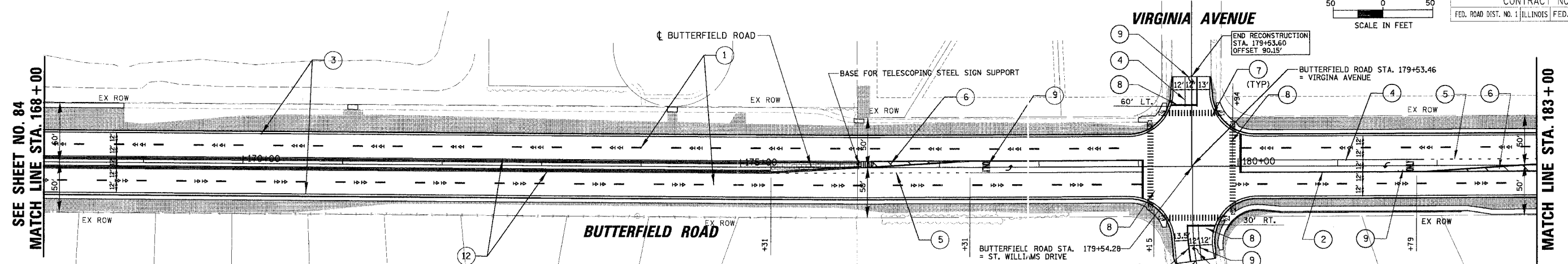
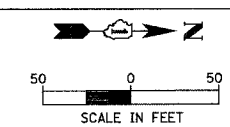
- LEGEND**
- SOODING, NITROGEN FERTILIZER NUTRIENT, PHOSPHOROUS FERTILIZER NUTRIENT*, POTASSIUM FERTILIZER NUTRIENT, TOPSOIL FURNISH AND PLACE, 4"
 - PROPOSED SIGN BASE (SIGN TO BE INSTALLED BY OTHERS-LCDOT)
 - SEE DETENTION POND GRADING PLAN SEE SHEET 80
 - * STA. 200+00 TO STA. 201+73.50
STA. 693+88.40 TO STA. 707+13.75
 - * FOR PARKWAY AND MEDIAN PLANTER TREE LIST SEE SHEET 89.



REVISIONS	
NAME	DATE

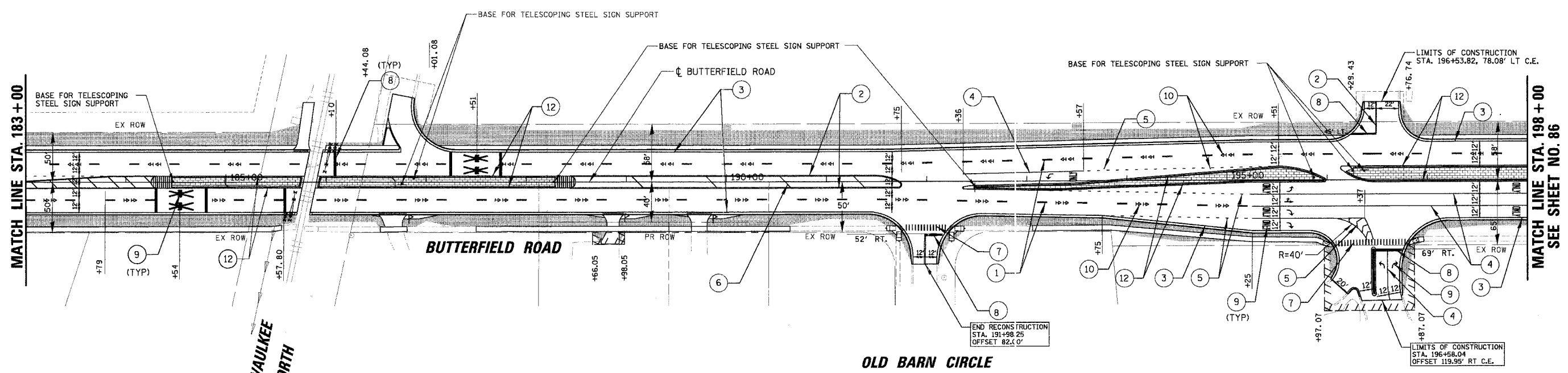
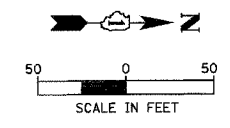
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 PAVEMENT MARKING AND
 LANDSCAPING - BUTTERFIELD ROAD
 STA. 138+00 TO STA. 168+00**
 SCALE: 1:50
 DATE: 7/19/2006
 DRAWN BY: PMM,ELA
 CHECKED BY: BLL

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	85
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH 30'-SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW) (2 @ 11" C-C)
 - ③ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE)
 - ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH 6'-SKIP)
 - ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW) (45° DIAGONAL @ 20' C-C)
 - ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
 - ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑨ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑩ RPM (PER LCDOT STANDARD. SEE ROADWAY CONSTRUCTION DETAILS, SHEET 153)
 - ⑪ RPM (PER IDOT DISTRICT 1 STANDARD TC11. SEE SHEET 132)
 - ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE) (45° DIAGONALS @ 20' C-C)
 - ⑭ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- ▨ SODDING, NITROGEN FERTILIZER NUTRIENT, PHOSPHOROUS FERTILIZER NUTRIENT, POTASSIUM FERTILIZER NUTRIENT, TOPSOIL FURNISH AND PLACE, 4"
 - ▩ PROPOSED SIGN BASE (SIGN TO BE INSTALLED BY OTHERS-LCDOT)
 - ▧ SEE DETENTION POND GRADING PLAN SEE SHEET 80
- STA. 200+00 TO STA. 201+73.50
 - STA. 693+88.40 TO STA. 707+13.75
 - FOR PARKWAY AND MEDIAN PLANTER TREE LIST SEE SHEET 85.



METRA-MILWAUKEE
 DISTRICT NORTH

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

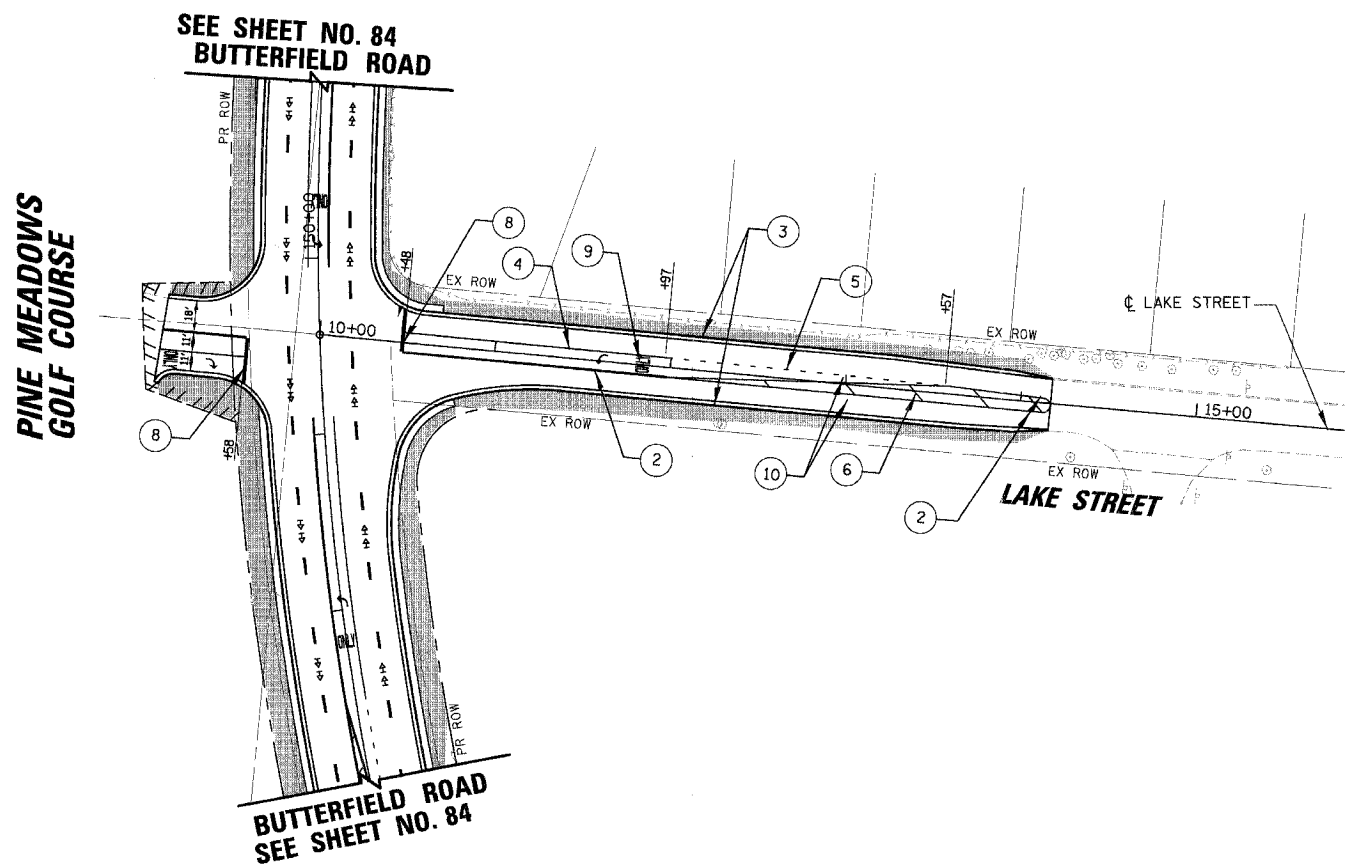
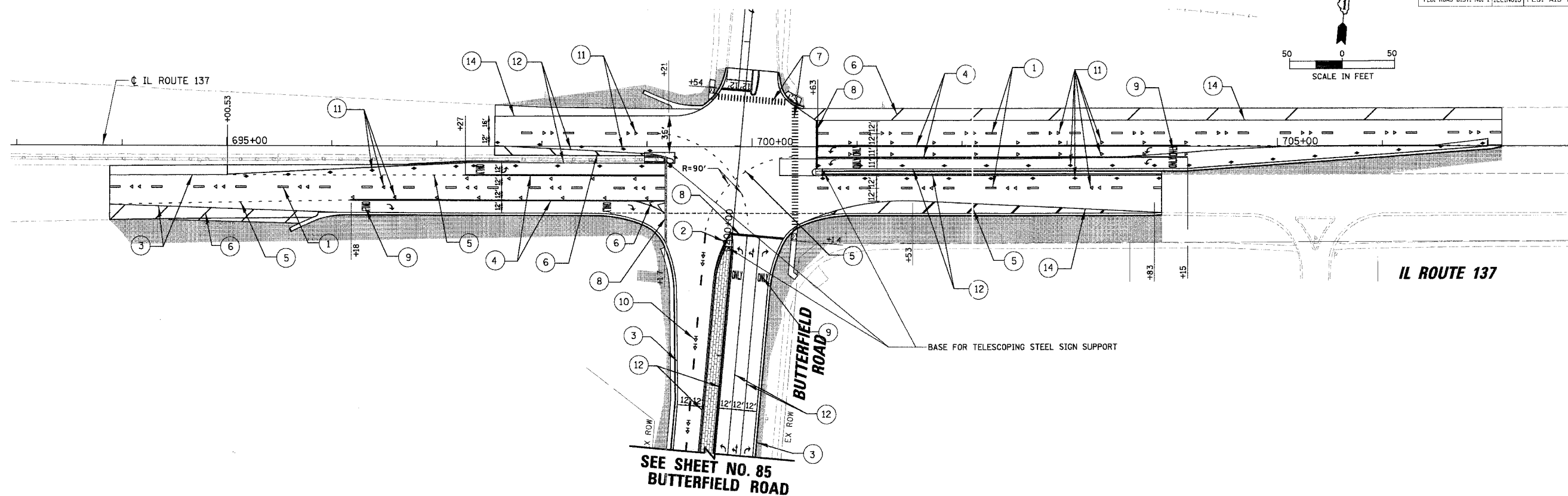
**FAU 2647 - BUTTERFIELD ROAD
PAVEMENT MARKING AND
LANDSCAPING - BUTTERFIELD ROAD
STA. 168+00 TO STA. 198+00**

SCALE: 1:50
DATE: 12/2/2005

DRAWN BY: PMM,ELA
CHECKED BY: BLL

1:50
 12/2/2005
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	86
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH 30'-SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW) (2 @ 11" C-C)
 - ③ THERMOPLASTIC PAVEMENT MARKING - LINE 5" (WHITE)
 - ④ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE)
 - ⑤ THERMOPLASTIC PAVEMENT MARKING - LINE 6" (WHITE) (2' DASH 6'-SKIP)
 - ⑥ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (YELLOW) (45° DIAGONAL @ 20' C-C)
 - ⑦ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE)
 - ⑧ THERMOPLASTIC PAVEMENT MARKING - LINE 24" (WHITE)
 - ⑨ THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS (WHITE)
 - ⑩ RPM (PER LCDDOT STANDARD. SEE ROADWAY CONSTRUCTION DETAILS, SHEET 153)
 - ⑪ RPM (PER IDOT DISTRICT 1 STANDARD TC11. SEE SHEET 132)
 - ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE) (45° DIAGONALS @ 20' C-C)
 - ⑭ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- SODDING, NITROGEN FERTILIZER NUTRIENT, PHOSPHOROUS FERTILIZER NUTRIENT*, POTASSIUM FERTILIZER NUTRIENT, TOPSOIL FURNISH AND PLACE, 4"
 - PROPOSED SIGN BASE (SIGN TO BE INSTALLED BY OTHERS-LCDOT)
 - SEE DETENTION POND GRADING PLAN SEE SHEET 80
 - * STA. 200+00 TO STA. 201+73.50
STA. 693+88.40 TO STA. 707+13.75
 - * FOR PARKWAY AND MEDIAN PLANTER TREE LIST SEE SHEET 89.

REVISIONS	
NAME	DATE

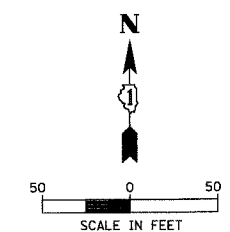
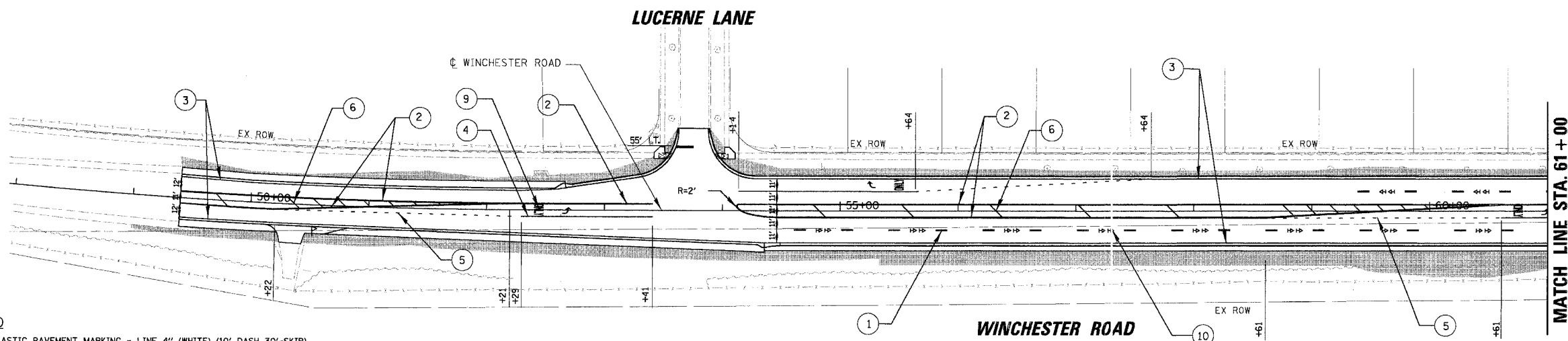
ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 PAVEMENT MARKING AND
 LANDSCAPING - BUTTERFIELD ROAD,
 IL RTE. 137 AND LAKE STREET**

SCALE: 1:50
 DATE: 12/2/2005

DRAWN BY: PMM,ELA
 CHECKED BY: BLL

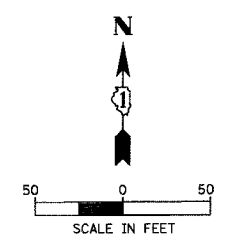
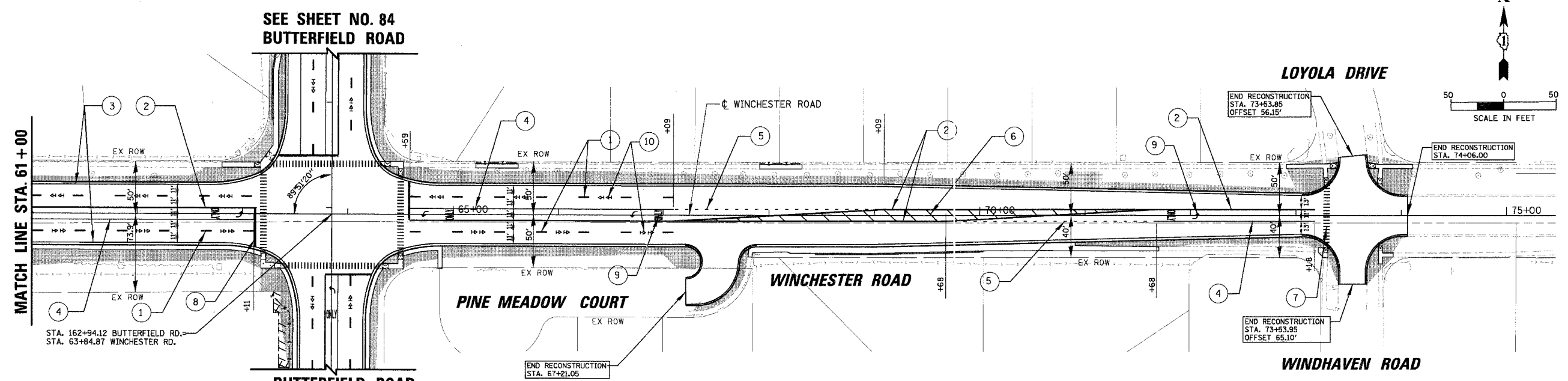
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 12/2/2005

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	87
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- ① THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE) (10' DASH 30'-SKIP)
 - ② THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW) (2 @ 11" C-C)
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 - ⑩ RPM (PER LCDOT STANDARD. SEE ROADWAY CONSTRUCTION DETAILS, SHEET 153)
 - ⑪ RPM (PER IDOT DISTRICT 1 STANDARD TC11. SEE SHEET 132)
 - ⑫ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (YELLOW)
 - ⑬ THERMOPLASTIC PAVEMENT MARKING - LINE 12" (WHITE) (45° DIAGONALS @ 20' C-C)
 - ⑭ THERMOPLASTIC PAVEMENT MARKING - LINE 4" (WHITE)

- LEGEND**
- SODDING, NITROGEN FERTILIZER NUTRIENT, PHOSPHOROUS FERTILIZER NUTRIENT, POTASSIUM FERTILIZER NUTRIENT, TOPSOIL FURNISH AND PLACE, 4"
 - PROPOSED SIGN BASE (SIGN TO BE INSTALLED BY OTHERS-LCDOT)
 - SEE DETENTION POND GRADING PLAN SEE SHEET 80
- STA. 200+00 TO STA. 201+73.50
 - STA. 693+88.40 TO STA. 707+13.75
 - FOR PARKWAY AND MEDIAN PLANTER TREE LIST SEE SHEET 88.



MATCH LINE STA. 61+00

STA. 162+94.12 BUTTERFIELD RD.
STA. 63+84.87 WINCHESTER RD.

REVISIONS	
NAME	DATE

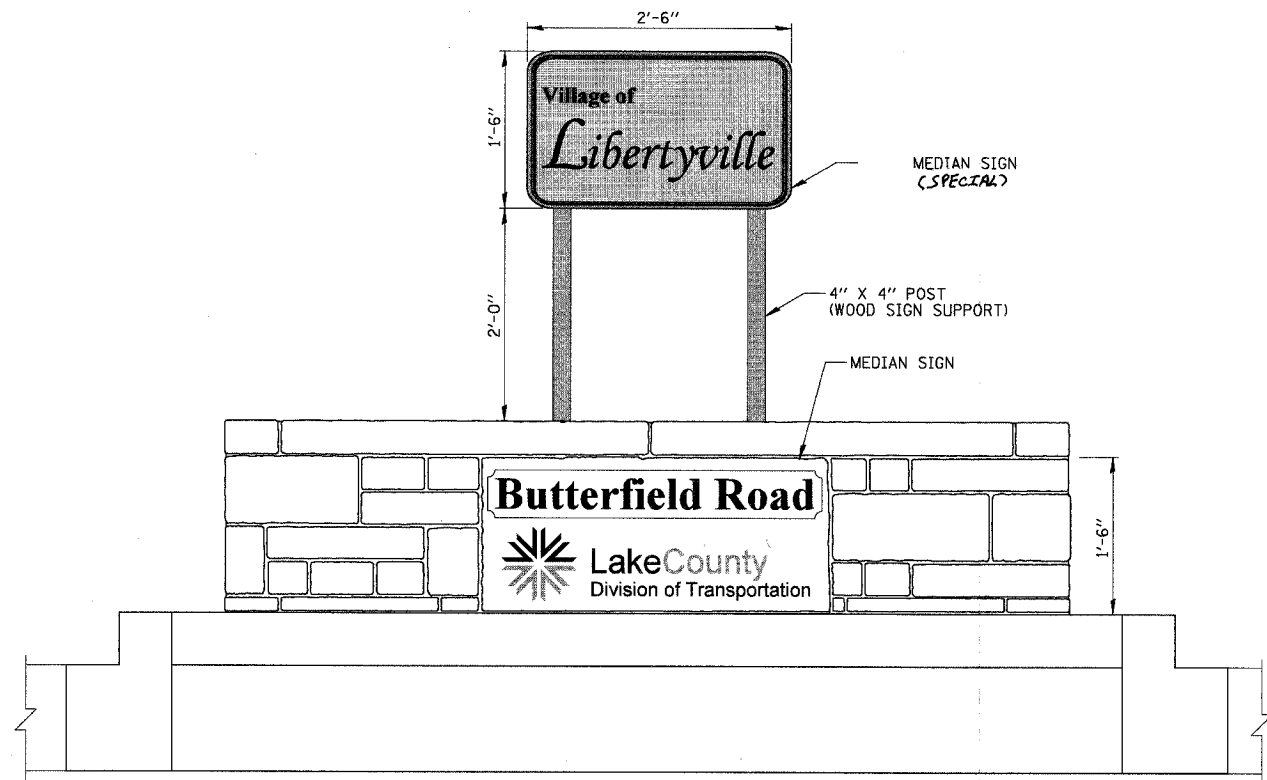
ILLINOIS DEPARTMENT OF TRANSPORTATION

**FAU 2647 - BUTTERFIELD ROAD
PAVEMENT MARKING AND
LANDSCAPING - WINCHESTER ROAD
STA. 49+00 TO STA. 74+06**

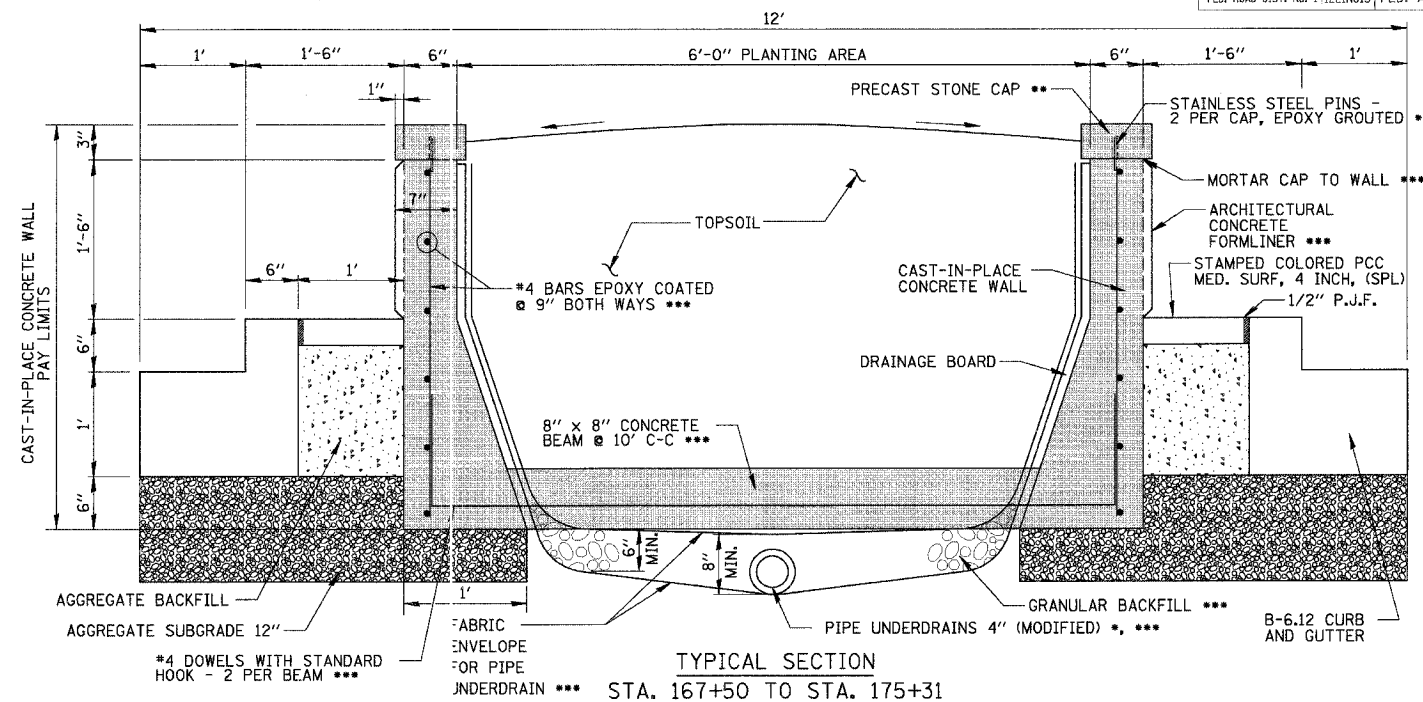
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DATE: 12/2/2005

DRAWN BY: PMM,ELA
CHECKED BY: BLL

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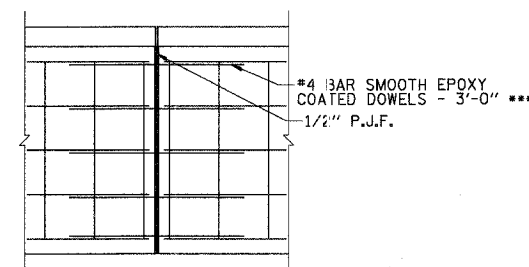
MEDIAN SIGN AT STATION STA. 167+50 AND STA. 175+31



TYPICAL SECTION

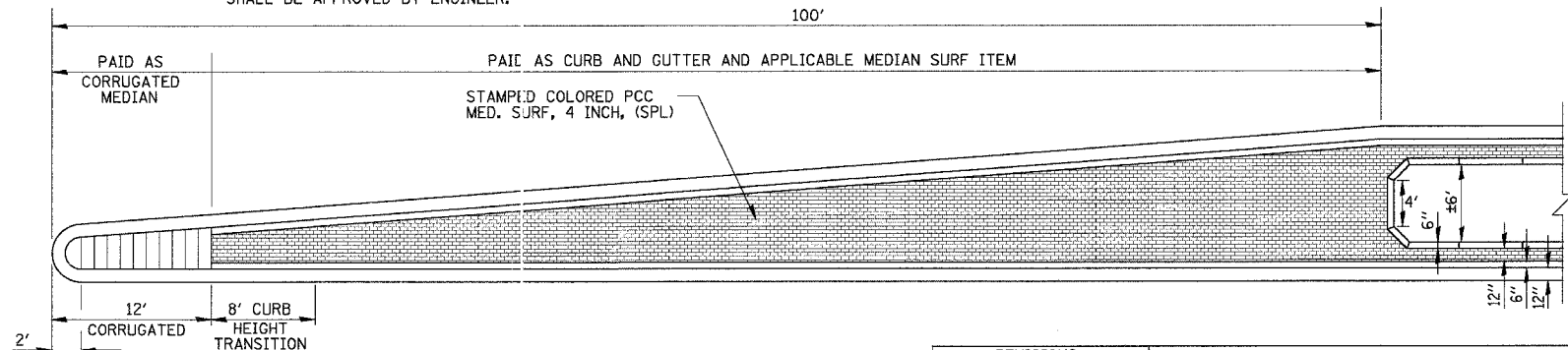
STA. 167+50 TO STA. 175+31

- TIE PIPE UNDERDRAINS 4" (MODIFIED) INTO STORM SEWER LATERALS (INCIDENTAL TO PIPE UNDERDRAINS 4" (MODIFIED))
- PRECAST STONE CAP MAY BE FORMED AND POURED MONOLITHICALLY WITH WALL. REINFORCEMENT MUST BE EXTENDED INTO CAP.
- INCLUDED IN UNIT PRICE FOR CAST-IN-PLACE CONCRETE WALL



CONSTRUCTION JOINT DETAIL

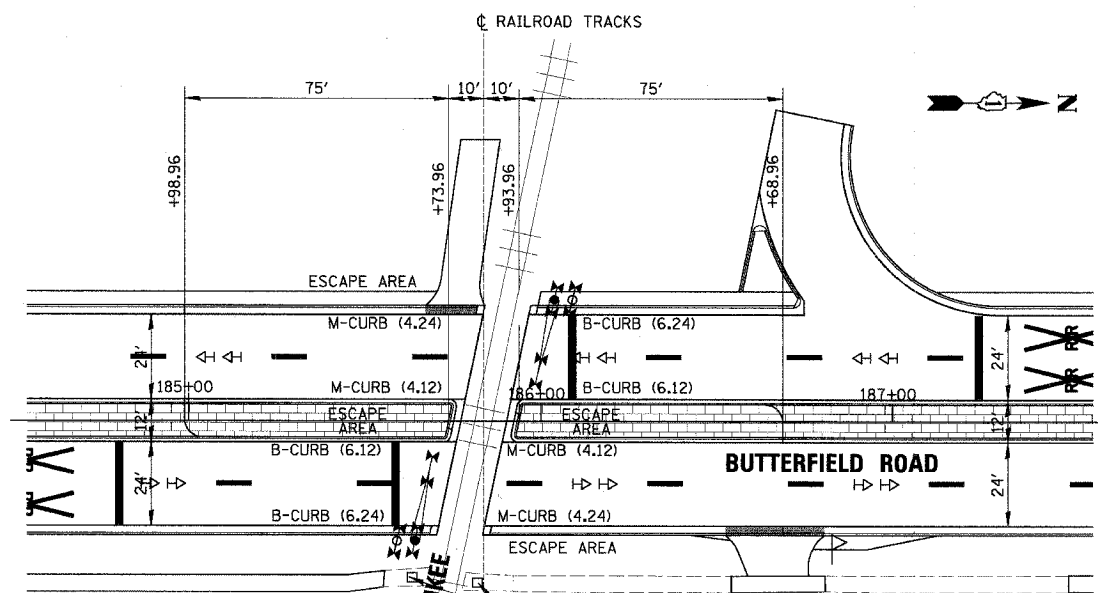
NOTE: CONSTRUCTION JOINTS @ ± 60' CEN'TERS. ADJUSTMENTS TO SPACING/LOCATION SHALL BE APPROVED BY ENGINEER.



END TREATMENTS

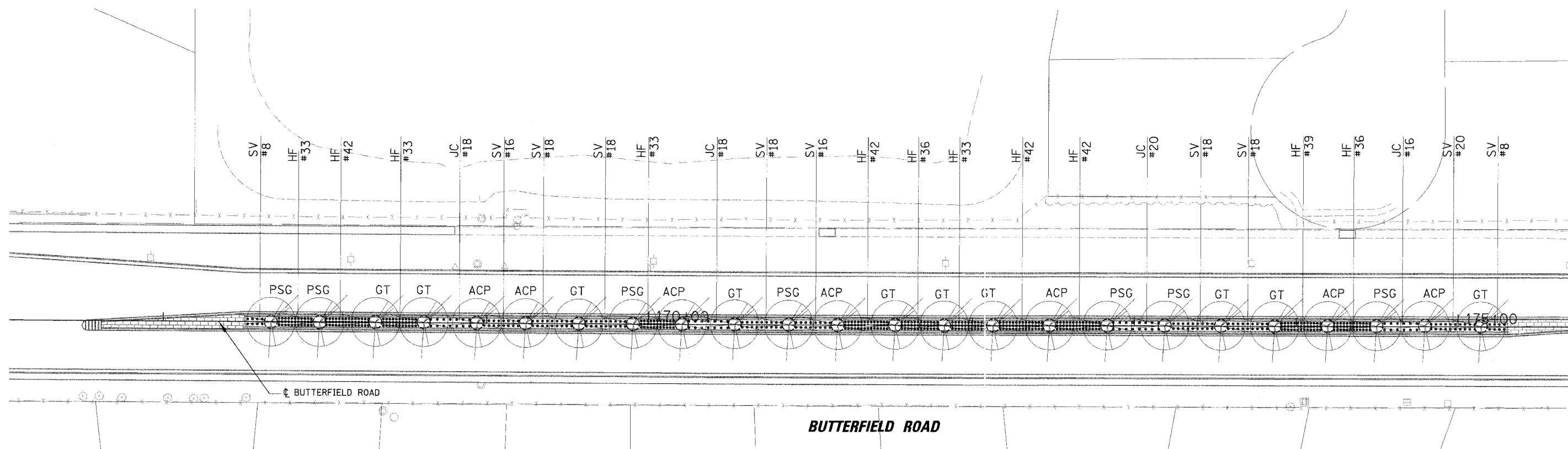
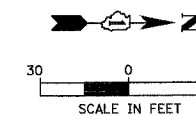
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 MEDIAN, LANDSCAPING
 PLANTER DETAILS AND
 MEDIAN TREATMENTS AT RR**
 SCALE: NONE
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL



MEDIAN AND CURB TREATMENTS AT HIGHWAY-RAIL INTERSECTIONS

FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	89
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



MEDIAN PLANTINGS

SHRUBS		
CODE	QUANTITY	SPECIES (COMMON NAME)
JC	72 EACH	EVERGREEN, JUNIPERUS CHINENSIS VAR. SARGENTII VIVIDIS (GREEN SARGENT JUNIPER), 2' WIDTH, BALLED AND BURLAPPED
SV	158 EACH	SHRUB, SYRINGA VULGARIS (COMMON LILAC), 2' HEIGHT, BALLED AND BURLAPPED

PERENNIAL		
CODE	QUANTITY	SPECIES (COMMON NAME)
HF	411 EACH	HEMEROCALLIS 'CHICAGO APACHE' DAYLILY; 1 GAL. #1 RED

TREE		
CODE	QUANTITY	SPECIES (COMMON NAME)
PSG	7 EACH	TREE, GINKGO BILOBA (GINKGO), 2" CALIPER, BALLED AND BURLAPPED
ACP	7 EACH	TREE, PYRUS CALLERYANA ARISTOCRAT (ARISTOCRAT CALLERY PEAR), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED
GT	10 EACH	TREE, GLEDITSIA TRIACANTHOS INERMIS SKYLINE (SKYLINE THORNLESS COMMON HONEYLOCUST), 2" CALIPER BALLED AND BURLAPPED

PARKWAY PLANTINGS

CONTRACTOR WILL ORDER AND PLANT TREES AT LOCATIONS IN THE PARKWAYS AS DESIGNATED BY THE ENGINEER. ONLY TREES PLANTED AND APPROVED BY ENGINEER WILL BE INCLUDED FOR PAYMENT. THE LIST BELOW CONTAINS APPROXIMATE QUANTITIES.

TREE		
CODE	QUANTITY	SPECIES (COMMON NAME)
PSG	11 EACH	TREE, GINKGO BILOBA (GINKGO), 2" CALIPER, BALLED AND BURLAPPED
ACP	11 EACH	TREE, PYRUS CALLERYANA ARISTOCRAT (ARISTOCRAT CALLERY PEAR), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED
GT	11 EACH	TREE, GLEDITSIA TRIACANTHOS INERMIS SKYLINE (SKYLINE THORNLESS COMMON HONEYLOCUST), 2" CALIPER BALLED AND BURLAPPED

REVISIONS	
NAME	DATE

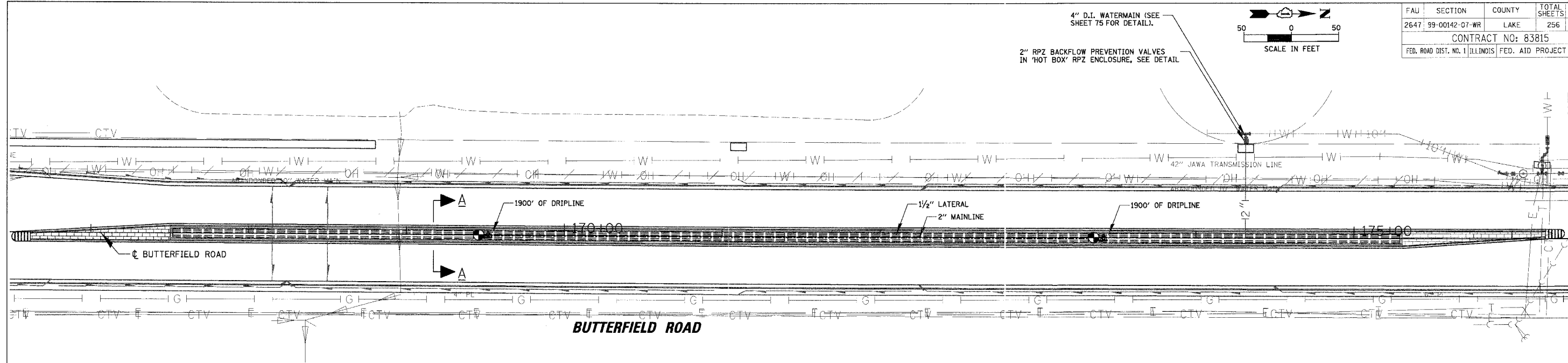
ILLINOIS DEPARTMENT OF TRANSPORTATION
FAU 2647 - BUTTERFIELD ROAD
MEDIAN AND MEDIAN
PLANTER DETAILS -
LANDSCAPING PLAN

SCALE: 1:30
DATE: 12/2/2005

DRAWN BY: PMM
CHECKED BY: BLL

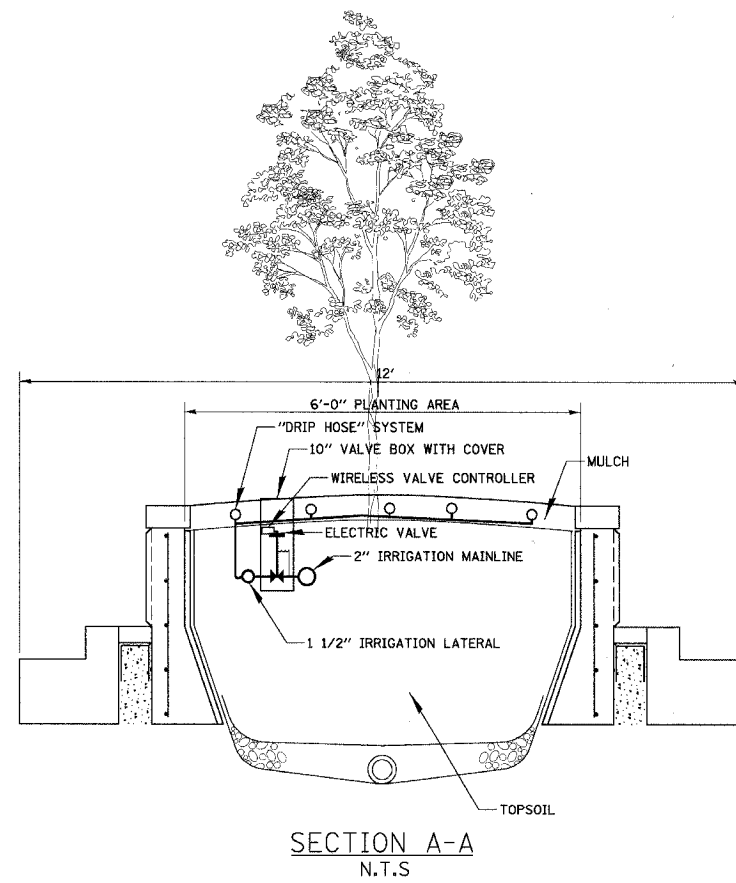
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FAU	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	90
CONTRACT NO: 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

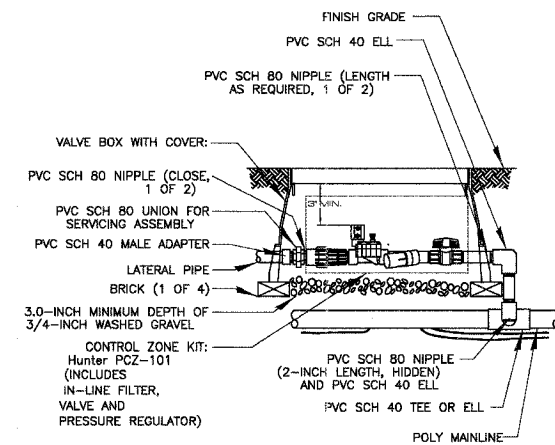


IRRIGATION LEGEND

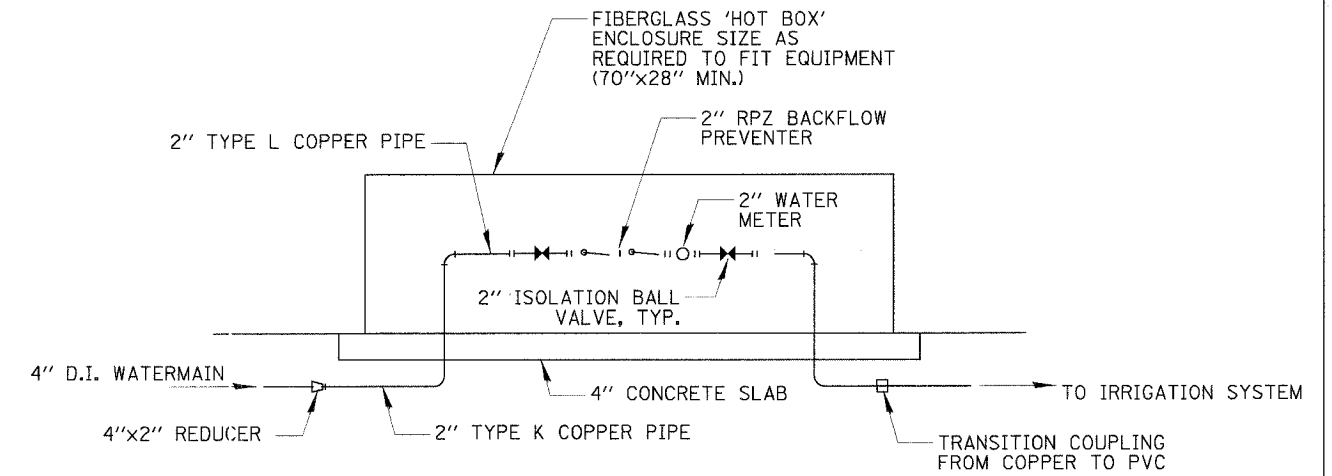
Quantity	Symbol	Description
2	●	Hunter PCZ-101
2	▲	Hunter SVC-100 Contoller for Valve
493.7 (ft)	---	Poly 100 1 1/4"
3895.68 (ft)	---	LD-09-12



SECTION A-A
N.T.S



CONTROL ZONE KIT
N.T.S



RPZ ENCLOSURE DETAIL
N.T.S

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**FAU 2647 - BUTTERFIELD ROAD
 MEDIAN AND MEDIAN
 PLANTER DETAILS -
 IRRIGATION PLAN**
 SCALE: 1:30
 DATE: 12/2/2005
 DRAWN BY: PMM
 CHECKED BY: BLL

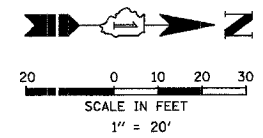
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 12/2/2005

TEMPORARY TRAFFIC SIGNAL LEGEND

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊙ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- ⊠ TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊙ MACHINE VISION PROCESSOR
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊙ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊙ CONFIRMATION BEACON
- ⊙ VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- CT COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOME CAMERA
- APPROXIMATE DETECTOR ZONE

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" ▲ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" ⊙ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" □ EXISTING HANDHOLE TO BE REMOVED
- "E" ⊙ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" ⊙ EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" ⊙ CONFIRMATION BEACON TO BE REMOVED
- "E" ■ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" ⊙ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

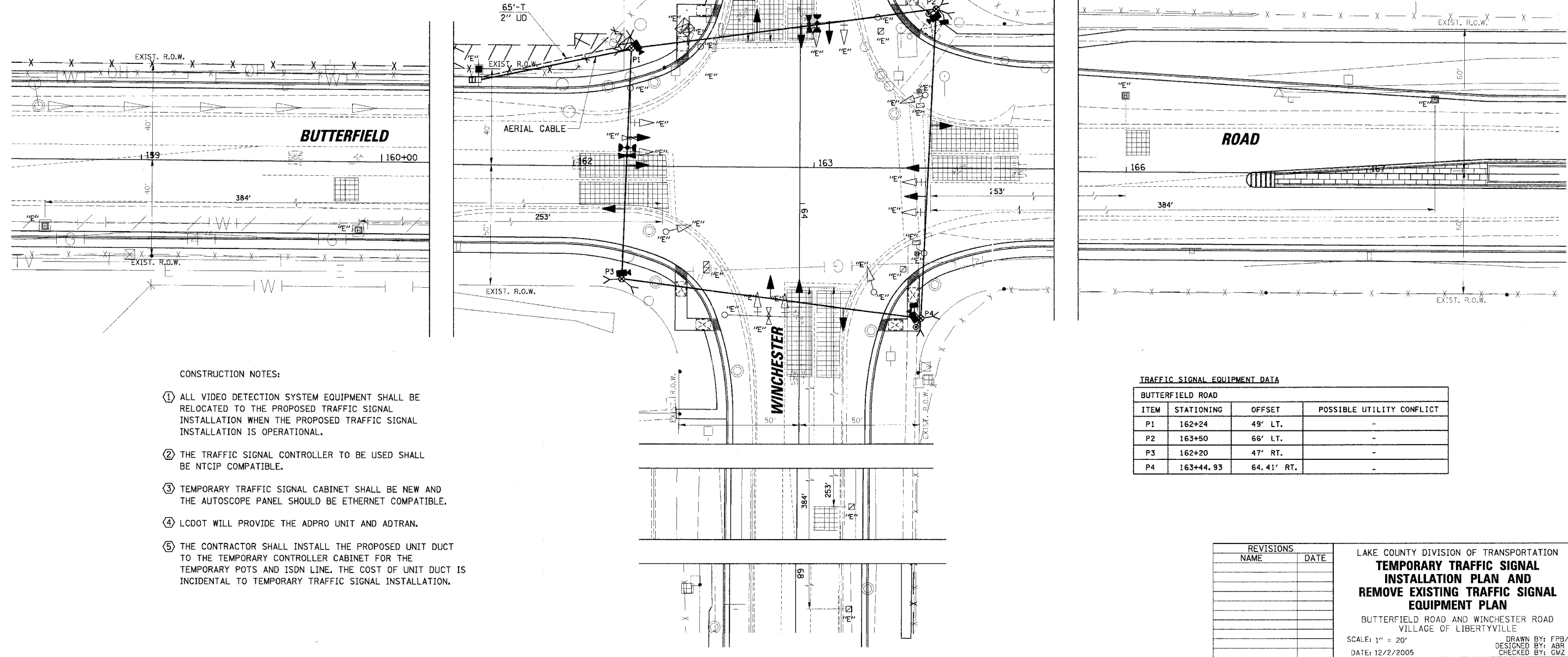


THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE COUNTY AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY YARD AS PER TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CABINET
- 1 EACH CONTROLLER
- 1 EACH INTERSECTION MONITOR UNIT
- 2 EACH LIGHT DETECTOR
- 1 EACH LIGHT DETECTOR AMPLIFIER

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 8 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSHBUTTON
- 4 EACH STEEL MAST ARM
- 4 EACH SIGNAL POST



CONSTRUCTION NOTES:

- ① ALL VIDEO DETECTION SYSTEM EQUIPMENT SHALL BE RELOCATED TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION WHEN THE PROPOSED TRAFFIC SIGNAL INSTALLATION IS OPERATIONAL.
- ② THE TRAFFIC SIGNAL CONTROLLER TO BE USED SHALL BE NTCIP COMPATIBLE.
- ③ TEMPORARY TRAFFIC SIGNAL CABINET SHALL BE NEW AND THE AUTOSCOPE PANEL SHOULD BE ETHERNET COMPATIBLE.
- ④ LCDOT WILL PROVIDE THE ADPRO UNIT AND ADTRAN.
- ⑤ THE CONTRACTOR SHALL INSTALL THE PROPOSED UNIT DUCT TO THE TEMPORARY CONTROLLER CABINET FOR THE TEMPORARY POTS AND ISDN LINE. THE COST OF UNIT DUCT IS INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL INSTALLATION.

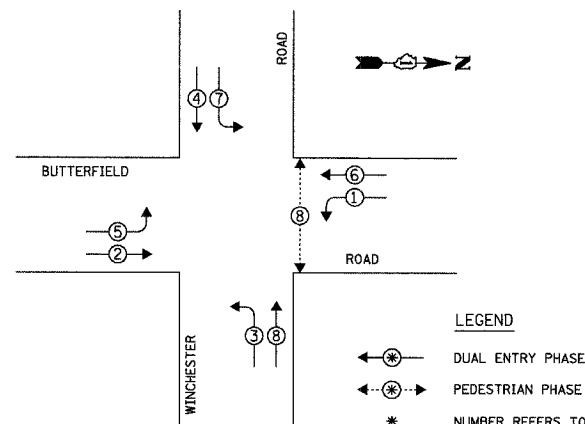
TRAFFIC SIGNAL EQUIPMENT DATA

BUTTERFIELD ROAD			
ITEM	STATIONING	OFFSET	POSSIBLE UTILITY CONFLICT
P1	162+24	49' LT.	-
P2	163+50	66' LT.	-
P3	162+20	47' RT.	-
P4	163+44.93	64.41' RT.	-

REVISIONS	
NAME	DATE

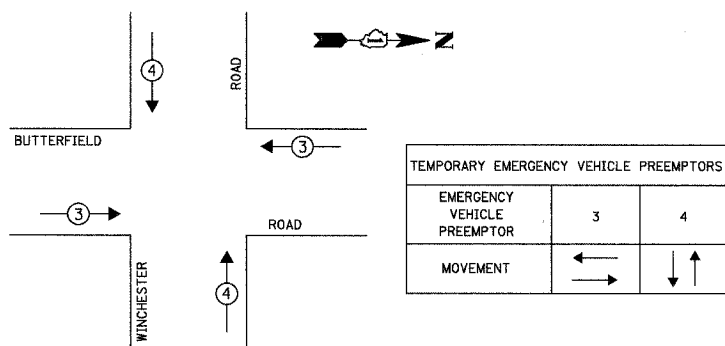
LAKE COUNTY DIVISION OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION PLAN AND
 REMOVE EXISTING TRAFFIC SIGNAL
 EQUIPMENT PLAN**
 BUTTERFIELD ROAD AND WINCHESTER ROAD
 VILLAGE OF LIBERTYVILLE
 SCALE: 1" = 20'
 DATE: 12/2/2005
 DRAWN BY: FPB/FCP
 DESIGNED BY: ABR
 CHECKED BY: GWZ

TEMPORARY CONTROLLER SEQUENCE



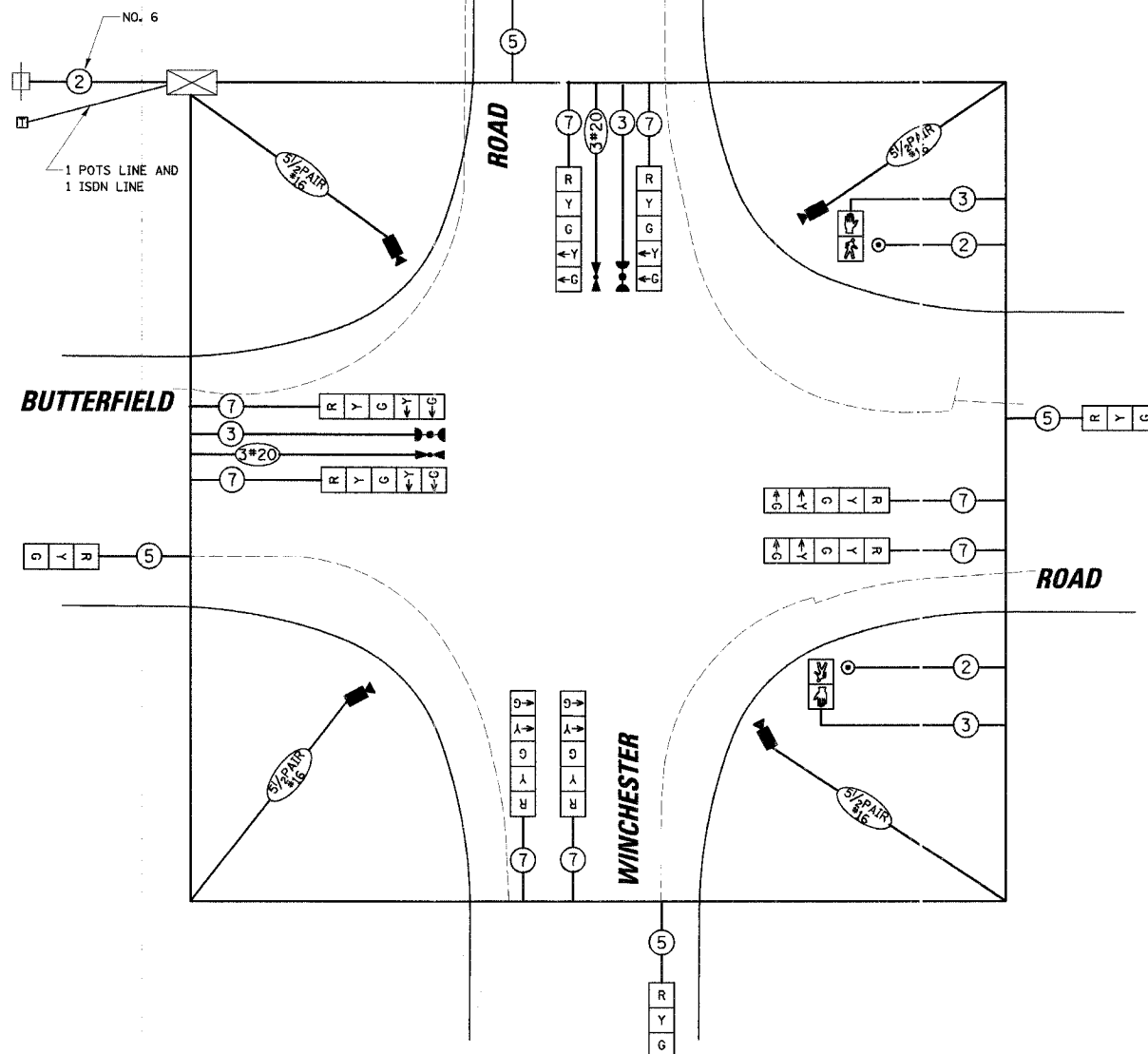
TEMPORARY PHASE DESIGNATION DIAGRAM

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

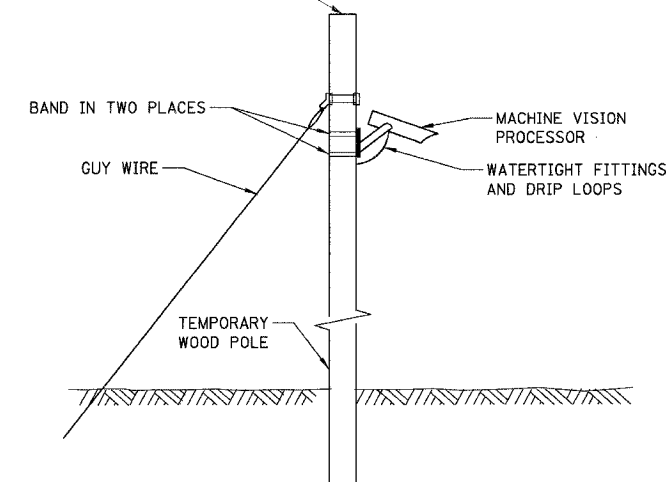


TEMPORARY CABLE DIAGRAM LEGEND

- ⊠ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- ⊠ TEMPORARY CONTROLLER CABINET
- ⊠ TEMPORARY SERVICE INSTALLATION
- ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ⚡ EMERGENCY VEHICLE LIGHT DETECTOR
- ⚡ CONFIRMATION BEACON
- ⊠ VEHICLE DETECTOR, INDUCTION LOOP
- ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊠ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- ⚡ MACHINE VISION PROCESSOR
- ⊠ DOME CAMERA



TEMPORARY WOOD POLE CLASS 4 OR BETTER (45 MIN.)



TEMPORARY AUTOSCOPE MOUNTING DETAIL (NOT TO SCALE)

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	12	135	0.50	810.00	
(YELLOW)	12	135	0.25	405.00	
(GREEN)	12	135	0.25	405.00	
ARROW	16	135	0.10	216.00	
PED. SIGNAL	2	90	1.00	180.00	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	252	0.05	-	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	2116.00

LAKE COUNTY DIVISION OF TRANSPORTATION
 600 WEST WINCHESTER ROAD
 LIBERTYVILLE, ILLINOIS 60048-1381
 ENERGY SUPPLY: CONTACT: MIKE TYSON
 PHONE: (847) 816-5500
 COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' ± L-2=
E - M. ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	(6m ± L-0.6m)	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

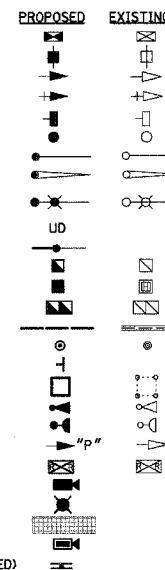
LAKE COUNTY DIVISION OF TRANSPORTATION
TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM
 BUTTERFIELD ROAD AND WINCHESTER ROAD
 VILLAGE OF LIBERTYVILLE
 SCALE: 1" = 20'
 DATE: 12/2/2005
 DRAWN BY: FPB/FCP
 DESIGNED BY: ABR
 CHECKED BY: GMZ

12/2/2005 No. LIBERTYVILLE\99-389\T-Office\TCB.winchester.dgn

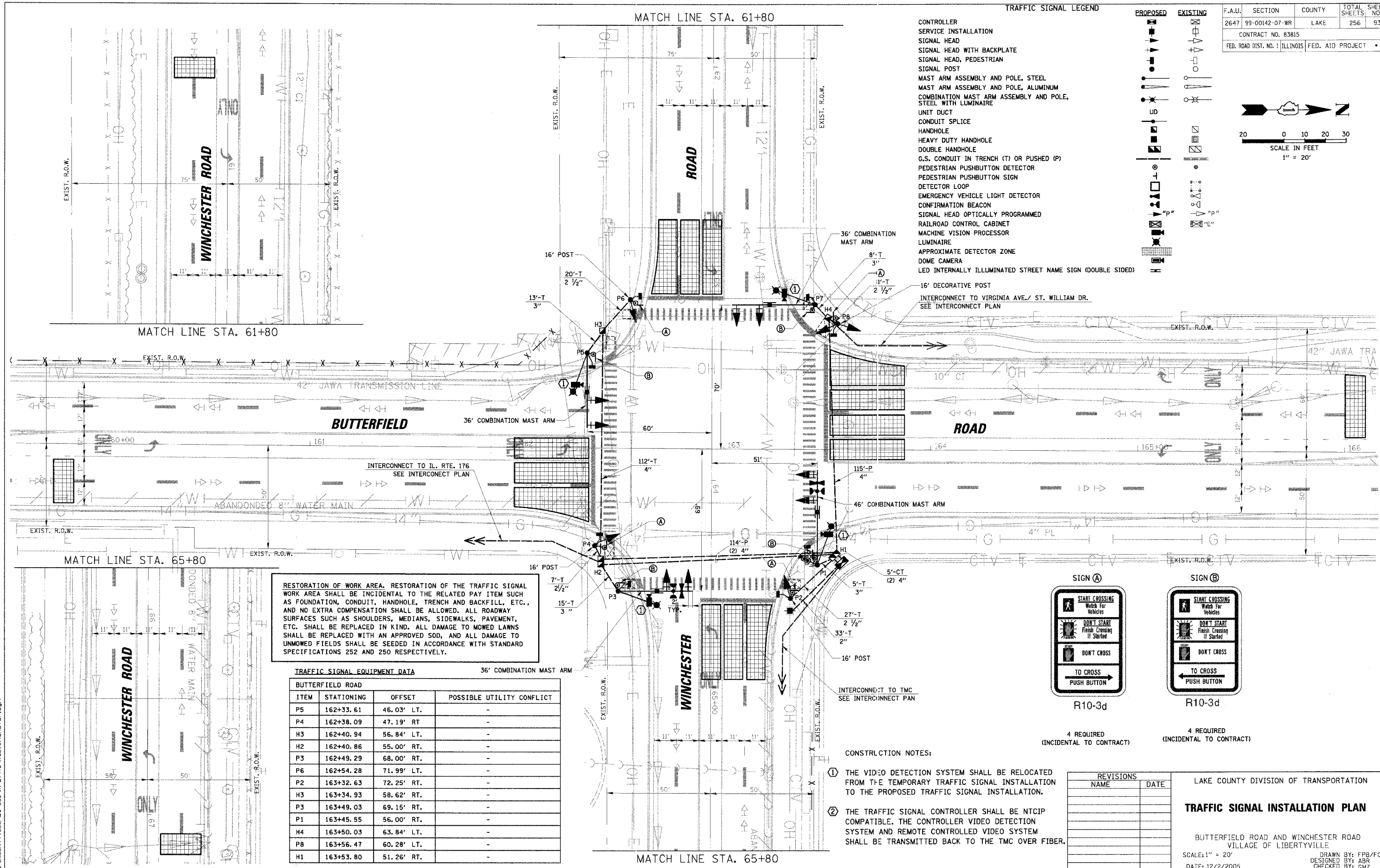
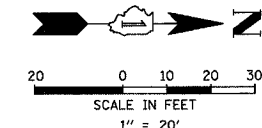
MATCH LINE STA. 61+80

TRAFFIC SIGNAL LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT
- CONDUIT SPLICE
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- PEDESTRIAN PUSHBUTTON SIGN
- DETECTOR LOOP
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- RAILROAD CONTROL CABINET
- MACHINE VISION PROCESSOR
- LUMINAIRE
- APPROXIMATE DETECTOR ZONE
- DOVE CAMERA
- LED INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE SIDED)



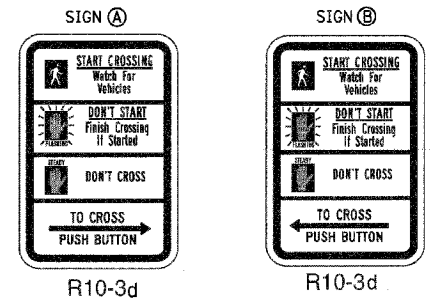
F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	93
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOG, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TRAFFIC SIGNAL EQUIPMENT DATA

ITEM	STATIONING	OFFSET	POSSIBLE UTILITY CONFLICT
BUTTERFIELD ROAD			
P5	162+33.61	46.03' LT.	-
P4	162+38.09	47.19' RT.	-
H3	162+40.94	56.84' LT.	-
H2	162+40.86	55.00' RT.	-
P3	162+49.29	68.00' RT.	-
P6	162+54.28	71.99' LT.	-
P2	163+32.63	72.25' RT.	-
H3	163+34.93	58.62' RT.	-
P3	163+49.03	69.15' RT.	-
P1	163+45.55	56.00' RT.	-
H4	163+50.03	63.84' LT.	-
P8	163+56.47	60.28' LT.	-
H1	163+53.80	51.26' RT.	-



4 REQUIRED (INCIDENTAL TO CONTRACT)

- CONSTRUCTION NOTES:
- THE VIDEO DETECTION SYSTEM SHALL BE RELOCATED FROM THE TEMPORARY TRAFFIC SIGNAL INSTALLATION TO THE PROPOSED TRAFFIC SIGNAL INSTALLATION.
 - THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE. THE CONTROLLER VIDEO DETECTION SYSTEM AND REMOTE CONTROLLED VIDEO SYSTEM SHALL BE TRANSMITTED BACK TO THE TMC OVER FIBER.

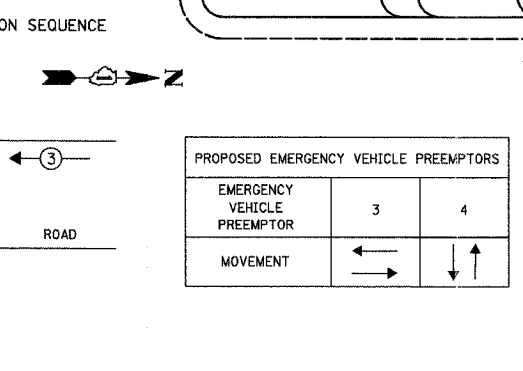
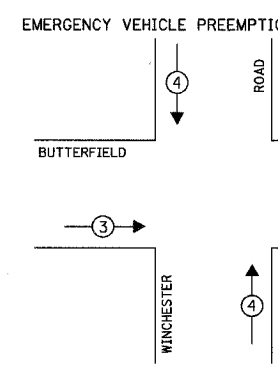
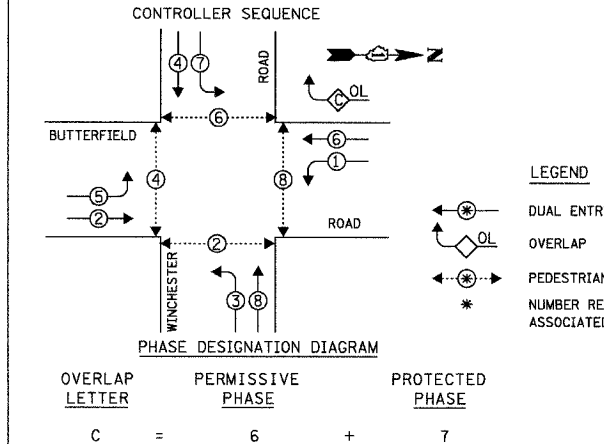
REVISIONS	
NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC SIGNAL INSTALLATION PLAN
 BUTTERFIELD ROAD AND WINCHESTER ROAD
 VILLAGE OF LIBERTYVILLE
 SCALE: 1" = 20'
 DATE: 12/2/2005
 DRAWN BY: FPB/FCP
 DESIGNED BY: ABR
 CHECKED BY: GMZ

12/2/2005 N:\LIBERTYVILLE\99-389\Tran\file\TSD_winchester.dgn

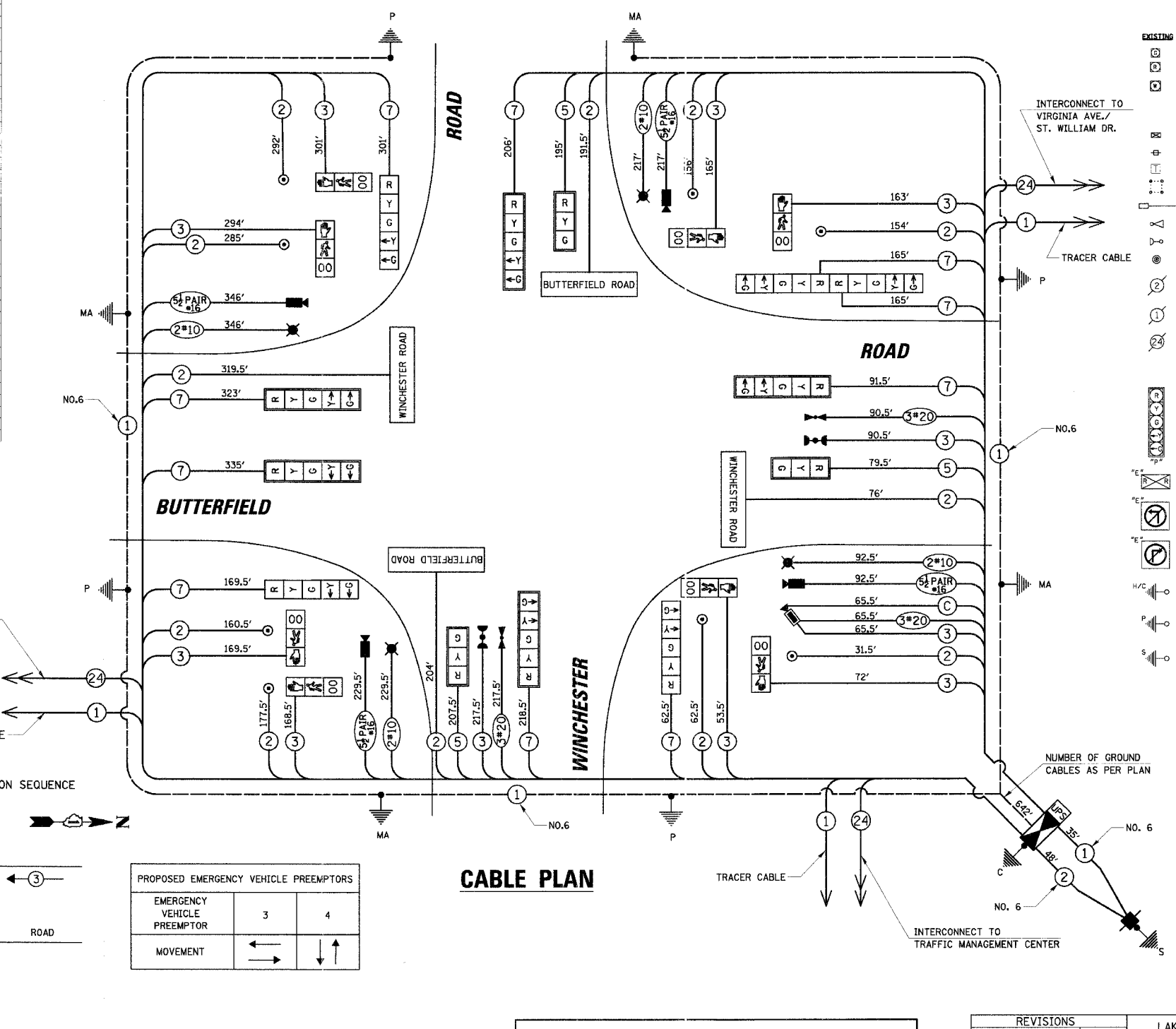
SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	33
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	60
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	41
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	455
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	146
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/C NO. 10	FOOT	885
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2092
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1747
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	482
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2037
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	48
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	642
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	374
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	14
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	66
VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	L SUM	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR	FOOT	885
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, L.E.D., 2-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. (SPECIAL)	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT. (SPECIAL)	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 46 FT. (SPECIAL)	EACH	1
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	8
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
RELOCATE EXISTING VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	EACH	1

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	94
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FOUNDATION (DEPTH)	FT.	(m)	CABLE SLACK	FT.	(m)	VERTICAL	FT.	(m)
TYPE A - POST	4	(1.2)	HANDHOLE	6.5	(2.0)	ALL FOUNDATIONS	3.5	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'	H-2=
E - M. ARM POLE			SIGNAL POST	2	(1.0)		(6m H - 0.6m) =	
24" (600mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	4	(1.2)
36" (900mm)	15	(4.6)	ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.1)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
						POST MOUNTED	6	(1.8)

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER'S, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 210 RESPECTIVELY.



CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊖	⊖	8" (200mm) TRAFFIC SIGNAL SECTION
⊖	⊖	12" (300mm) TRAFFIC SIGNAL SECTION
⊖	⊖	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊖	⊖	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
⊖	⊖	CONTROLLER CABINET
⊖	⊖	SERVICE INSTALLATION
⊖	⊖	TELEPHONE INSTALLATION
⊖	⊖	VEHICLE DETECTOR, INDUCTION LOOP
⊖	⊖	MAGNETIC DETECTOR
⊖	⊖	EMERGENCY VEHICLE LIGHT DETECTOR
⊖	⊖	CONFIRMATION BEACON
⊖	⊖	PUSHBUTTON DETECTOR
⊖	⊖	⊖ DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
⊖	⊖	⊖ GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
⊖	⊖	⊖ FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
⊖	⊖	⊖ FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM24F SM12F
⊖	⊖	⊖ SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
⊖	⊖	⊖ RAILROAD CONTROL CABINET
⊖	⊖	⊖ ILLUMINATED SIGN "NO LEFT TURN"
⊖	⊖	⊖ ILLUMINATED SIGN "NO RIGHT TURN"
⊖	⊖	⊖ GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
⊖	⊖	⊖ GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
⊖	⊖	⊖ GROUND ROD AT ELECTRIC SERVICE INSTALLATION
⊖	⊖	⊖ LUMINAIRE
⊖	⊖	⊖ MACHINE VISION PROCESSOR
⊖	⊖	⊖ DOME CAMERA
⊖	⊖	⊖ UNINTERRUPTIBLE POWER SUPPLY

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L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS x INCAND.	WATTAGE LED x % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13	10 0.50	65.00
(YELLOW)	13	19 0.25	61.75
(GREEN)	13	11 0.25	35.75
ARROW	20	9 0.10	18.00
PED. SIGNAL	8	9 1.00	72.00
CONTROLLER	1	100 1.00	100.00
ILLUM. ST. NAME SIGN	4	60 0.50	120.00
VIDEO SYSTEM	1	150 1.00	150.00
LUMINAIRE	4	250 0.50	500.00
FLASHER	-	- 0.50	-
BATTERY BACK UP SYSTEM	1	25 1.00	25.00

ENERGY COSTS TO: TOTAL = 1147.50

LAKE COUNTY DIVISION OF TRANSPORTATION
600 WEST WINCHESTER ROAD
LIBERTYVILLE, ILLINOIS 60048-1381

ENERGY SUPPLY: CONTACT: MIKE TYSON
PHONE: (847) 816-5500
COMPANY: COMED

REVISIONS	
NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM

BUTTERFIELD ROAD AND WINCHESTER ROAD
VILLAGE OF LIBERTYVILLE

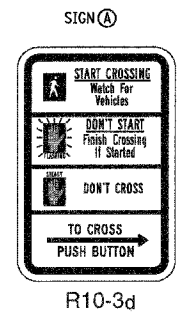
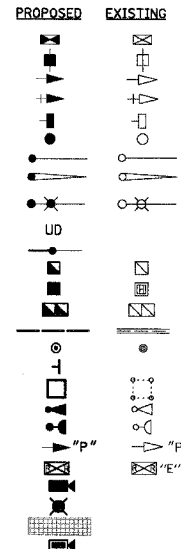
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DRAWN BY: FBP/FCP
DESIGNED BY: ABR
CHECKED BY: GMZ

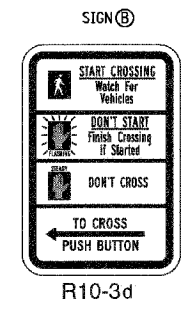
F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	95
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

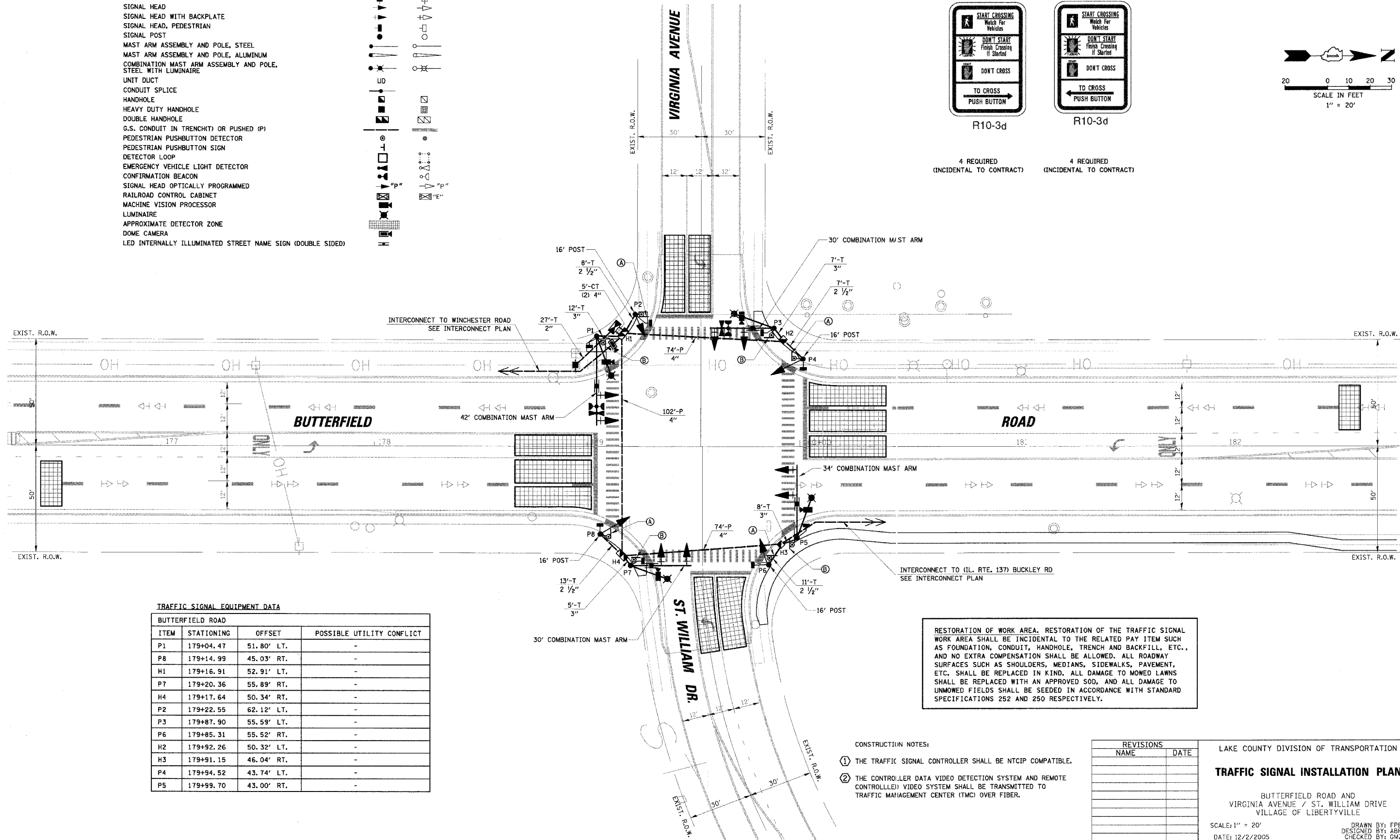
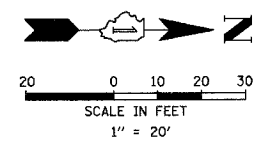
- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
- UNIT DUCT
- CONDUIT SPLICE
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN TRENCH(T) OR PUSHED (P)
- PEDESTRIAN PUSHBUTTON DETECTOR
- PEDESTRIAN PUSHBUTTON SIGN
- DETECTOR LOOP
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- RAILROAD CONTROL CABINET
- MACHINE VISION PROCESSOR
- LUMINAIRE
- APPROXIMATE DETECTOR ZONE
- DOVE CAMERA
- LED INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE SIDED)



4 REQUIRED (INCIDENTAL TO CONTRACT)



4 REQUIRED (INCIDENTAL TO CONTRACT)



TRAFFIC SIGNAL EQUIPMENT DATA

BUTTERFIELD ROAD			
ITEM	STATIONING	OFFSET	POSSIBLE UTILITY CONFLICT
P1	179+04.47	51.80' LT.	-
P8	179+14.99	45.03' RT.	-
H1	179+16.91	52.91' LT.	-
P7	179+20.36	55.89' RT.	-
H4	179+17.64	50.34' RT.	-
P2	179+22.55	62.12' LT.	-
P3	179+87.90	55.59' LT.	-
P6	179+85.31	55.52' RT.	-
H2	179+92.26	50.32' LT.	-
H3	179+91.15	46.04' RT.	-
P4	179+94.52	43.74' LT.	-
P5	179+99.70	43.00' RT.	-

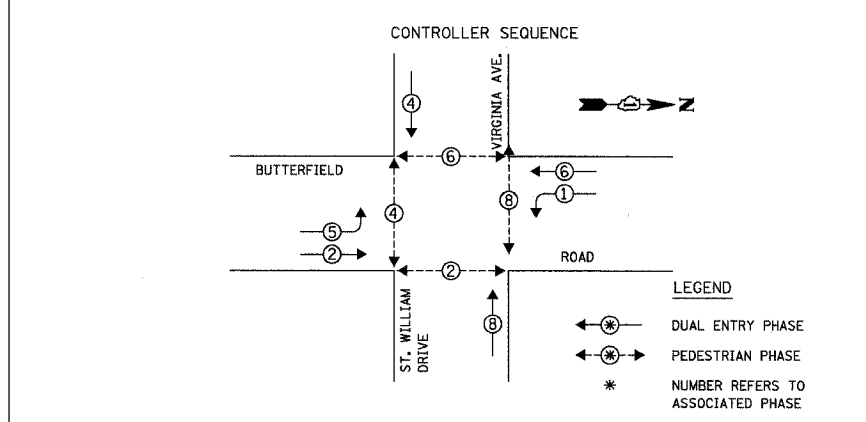
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

- CONSTRUCTION NOTES:
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - THE CONTROLLER DATA VIDEO DETECTION SYSTEM AND REMOTE CONTROLLED VIDEO SYSTEM SHALL BE TRANSMITTED TO TRAFFIC MANAGEMENT CENTER (TMC) OVER FIBER.

REVISIONS	
NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC SIGNAL INSTALLATION PLAN
 BUTTERFIELD ROAD AND VIRGINIA AVENUE / ST. WILLIAM DRIVE VILLAGE OF LIBERTYVILLE
 SCALE: 1" = 20'
 DATE: 12/2/2005
 DRAWN BY: FPB/FCP
 DESIGNED BY: ABR
 CHECKED BY: GMZ

SCHEDULE OF QUANTITIES	UNIT	TOTAL
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	27
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	31
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	31
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	10
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	250
HANDHOLE	EACH	2
DOUBLE HANDHOLE	EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	99
ELECTRIC CABLE IN CONDUIT, 600V (EPR-TYPE RHW) 2-1/2 NO. 10	FOOT	772
LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, PHOTO-CELL CONTROL, 250 WATT	EACH	4
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	2054
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1450
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	670
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1284
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 2C	FOOT	42
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	473
ELECTRIC CABLE IN CONDUIT NO. 20 3C, TWISTED, SHIELDED	FOOT	323
CONCRETE FOUNDATION, TYPE A	FOOT	16
CONCRETE FOUNDATION, TYPE D	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	73
VIDEO DETECTION SYSTEM (COMPLETE INTERSECTION)	L SUM	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16, 5 1/2 PAIR	FOOT	772
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	2
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1
SERVICE INSTALLATION, POLE MOUNT	EACH	4
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT. (SPECIAL)	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT. (SPECIAL)	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 42 FT. (SPECIAL)	EACH	1
L.E.D. INTERNALLY ILLUMINATED STREET NAME SIGN	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	8
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1

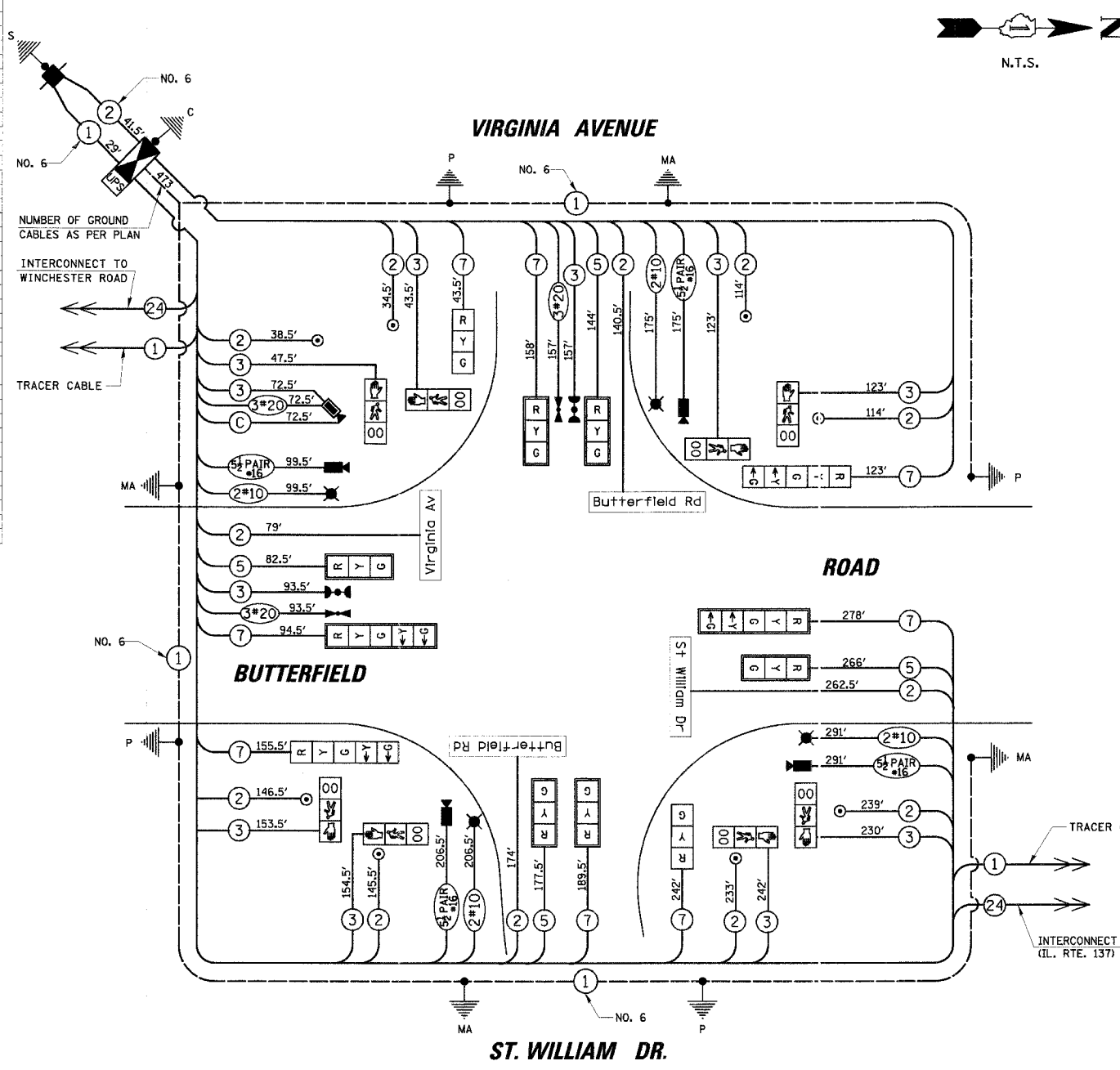


L. C. D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	X % OPERATION	
SIGNAL (RED)	12		10	0.50	60.00
(YELLOW)	12		19	0.25	57.00
(GREEN)	12		11	0.25	33.00
ARROW	8		9	0.10	7.20
PED. SIGNAL	8		9	1.00	72.00
CONTROLLER	1	100		1.00	100.00
ILLUM. ST. NAME SIGN	4		60	0.50	120.00
VIDEO SYSTEM	1	150		1.00	150.00
LUMINAIRE	4	250		0.50	500.00
BATTERY BACK UP SYSTEM	1	25		1.00	25.00
FLASHER				0.50	
ENERGY COSTS TO:					TOTAL = 1124.20

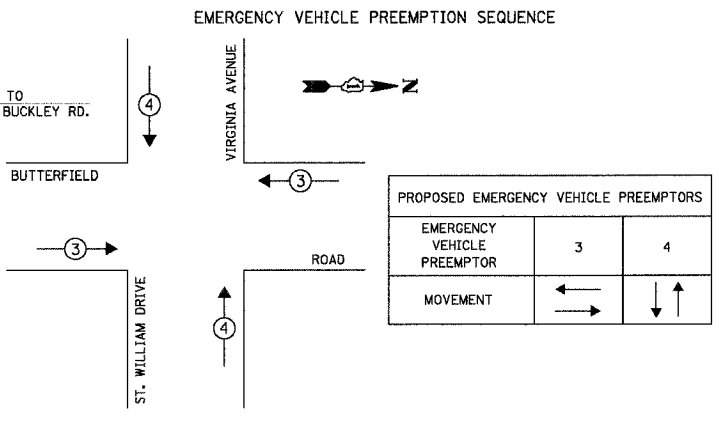
LAKE COUNTY DIVISION OF TRANSPORTATION
 600 WEST WINCHESTER ROAD
 LIBERTYVILLE, ILLINOIS 60048-1381
 ENERGY SUPPLY: CONTACT: MIKE TYSON
 PHONE: (847) 816-5500
 COMPANY: COMED

FOUNDATION (DEPTH)	FT.	(m)	CABLE SLACK	FT.	(m)	VERTICAL	FT.	(m)
TYPE A - POST	4	(1.2)	HANDHOLE	6.5	(2.0)	ALL FOUNDATIONS	3.5	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'-H-2=	
E - M. ARM POLE			SIGNAL POST	2	(1.0)	(6m+L-0.6m)=		
24" (600mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	4	(1.2)
36" (900mm)	15	(4.6)	ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.1)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
						POST MOUNTED	6	(1.8)

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 210 RESPECTIVELY.



- CABLE PLAN LEGEND**
- EXISTING PROPOSED
- 8" (200mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) TRAFFIC SIGNAL SECTION
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
 - 12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
 - CONTROLLER CABINET
 - SERVICE INSTALLATION
 - TELEPHONE INSTALLATION
 - VEHICLE DETECTOR, INDUCTION LOOP
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM24F SM12F
 - SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD.
 - RAILROAD CONTROL CABINET
 - ILLUMINATED SIGN "NO LEFT TURN"
 - ILLUMINATED SIGN "NO RIGHT TURN"
 - GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
 - GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
 - GROUND ROD AT ELECTRIC SERVICE INSTALLATION
 - LUMINAIRE
 - MACHINE VISION PROCESSOR
 - DOMA CAMERA
 - UNINTERRUPTIBLE POWER SUPPLY



REVISIONS	
NAME	DATE

LAKE COUNTY DIVISION OF TRANSPORTATION
SCHEDULE OF QUANTITIES, CABLE PLAN AND PHASE DESIGNATION DIAGRAM
 BUTTERFIELD ROAD AND VIRGINIA AVENUE / ST. WILLIAM DRIVE VILLAGE OF LIBERTYVILLE
 SCALE: N.T.S.
 DATE: 12/2/2005
 DRAWN BY: FFB/FCP
 DESIGNED BY: ABR
 CHECKED BY: GMZ

12/2/2005 N:\LIBERTYVILLE\99-389\Traflic CAB. VIF-glm.dgn

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	97
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET (COMPLETE)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: VILLAGE OF LIBERTYVILLE

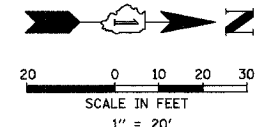
3 EACH EMERGENCY VEHICLE LIGHT DETECTOR
1 EACH LIGHT DETECTOR AMPLIFIER

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

12 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
3 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
3 EACH PEDESTRIAN PUSHBUTTON
4 EACH STEEL MAST ARM AND POLE
3 EACH SIGNAL POST

MATCH LINE STA. 698+00

(IL. RTE. 137)



- TEMPORARY TRAFFIC SIGNAL LEGEND**
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
 - ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
 - ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
 - ⊠ TEMPORARY CONTROLLER CABINET
 - TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
 - ⊞ TEMPORARY SERVICE INSTALLATION
 - TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
 - ⊙ MICROWAVE VEHICLE SENSOR
 - ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
 - ⊙ EMERGENCY VEHICLE LIGHT DETECTOR
 - ⊙ CONFIRMATION BEACON
 - VEHICLE DETECTOR, INDUCTION LOOP
 - UD UNIT DUCT
 - CT COMMON TRENCH
 - G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
 - HANDHOLE
 - ⊞ HEAVY DUTY HANDHOLE



R10-5
24" x 30"
2-REQUIRED
(INCIDENTAL TO TEMPORARY TRAFFIC SIGNAL INSTALLATION)

EXISTING EQUIPMENT TO BE REMOVED LEGEND

- "E" ▲ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ⊗ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" ⊞ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" ⊠ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" ■ EXISTING HANDHOLE TO BE REMOVED
- "E" □ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" ⊙ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" ⊙ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" ⊙ EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" ⊞ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" ⊞ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON. IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

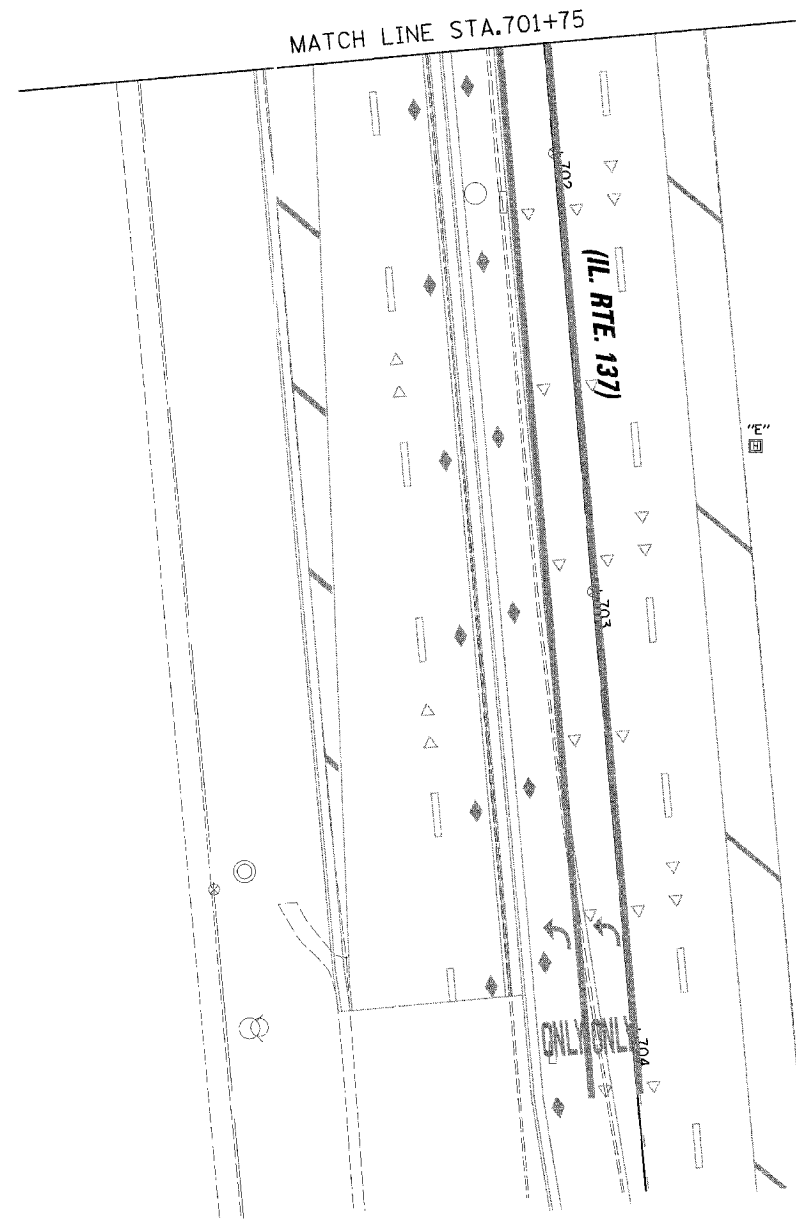
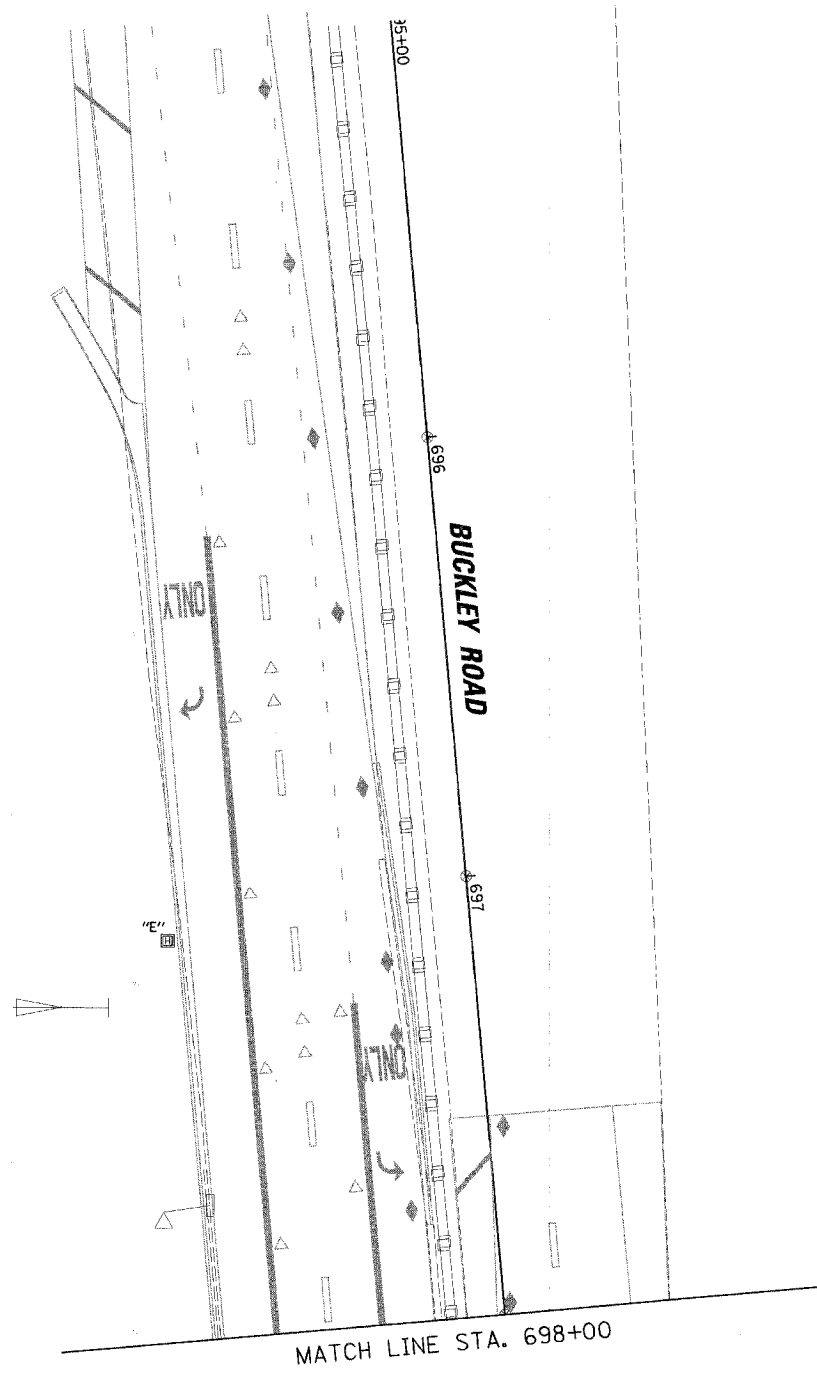
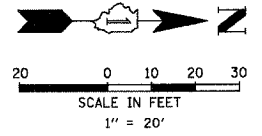
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
INSTALLATION PLAN AND
REMOVE EXISTING TRAFFIC SIGNAL
EQUIPMENT PLAN**
BUTTERFIELD ROAD AND (IL. RTE. 137) BUCKLEY ROAD
VILLAGE OF LIBERTYVILLE
SCALE: 1" = 20'
DATE: 12/2/2005
DRAWN BY: FPB/FCP
DESIGNED BY:
CHECKED BY: ABR

MATCH LINE STA. 701+75

12/2/2005 N:\LIBERTYVILLE\99-389\Trf\Fig\TMPL\Buckley.dgn

F.A.U.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2647	99-00142-07-WR	LAKE	256	98
CONTRACT NO. 83815				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



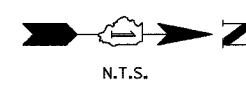
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION PLAN AND
 REMOVE EXISTING TRAFFIC SIGNAL
 EQUIPMENT PLAN**
 BUTTERFIELD ROAD AND BUCKLEY ROAD
 VILLAGE OF LIBERTYVILLE
 SCALE: 1" = 20'
 DATE: 12/2/2005

DRAWN BY: FPB/FCP
 DESIGNED BY:
 CHECKED BY: ABR

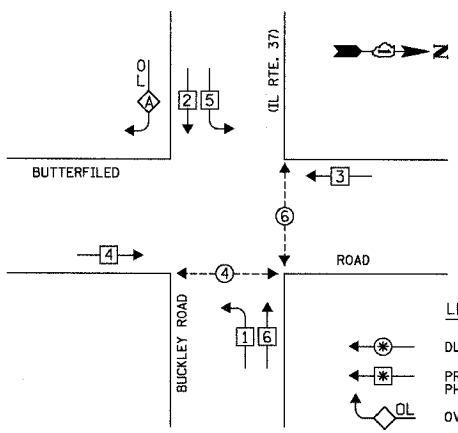
F.A.U.	SECTION	COUNTY	TOTAL SHEET NO.
2647	99-00142-07-WR	LAKE	256 99
CONTRACT NO. 83815			
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



TEMPORARY CABLE DIAGRAM LEGEND

- R TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
- X TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- 5 INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- ▶ EMERGENCY VEHICLE LIGHT DETECTOR
- ▶ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- PEDESTRIAN PUSHBUTTON DETECTOR
- ⏏ 12" (300mm) PEDESTRIAN SIGNAL SECTION
- MICROWAVE VEHICLE SENSOR

TEMPORARY CONTROLLER SEQUENCE

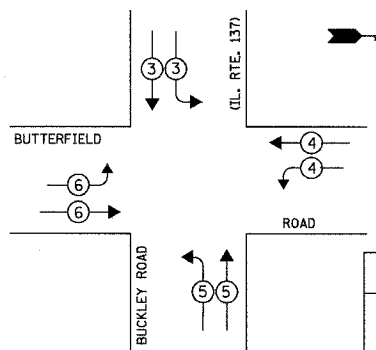


- LEGEND**
- ⊕ DUAL ENTRY PHASE
 - ⊖ PROTECTED LEFT TURN PHASE
 - ⊕ OVERLAP
 - ⊖ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

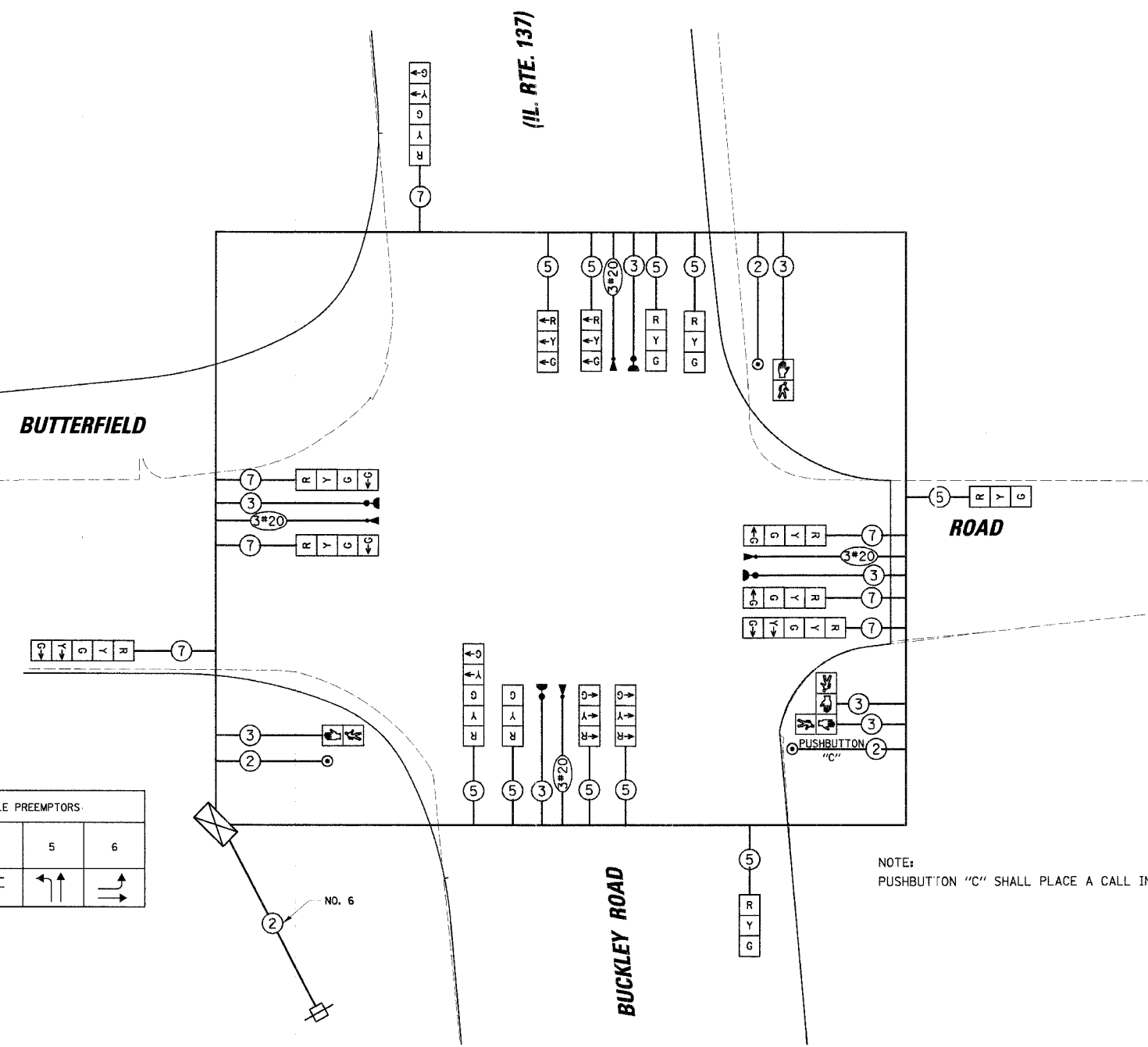
TEMPORARY PHASE DESIGNATION DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↘	↙	↗	↖



NOTE: PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 4 AND 6.

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	17	135		0.50	1147.50
(YELLOW)	13	135		0.25	438.75
(GREEN)	17	135		0.25	573.75
ARROW	16	135		0.10	216.00
PED. SIGNAL	4	90		1.00	360.00
CONTROLLER	1	100		1.00	100.00
ILLUM. SIGN	-	252		0.05	-
FLASHER	-			0.50	

ENERGY COSTS TO: TOTAL = 2836.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MIKE TYSON
 PHONE: (847) 816-5500
 COMPANY: COMED

FOUNDATION (DEPTH)	FT.	(m)	CABLE SLACK	FT.	(m)	VERTICAL	FT.	(m)
TYPE A - POST	4	(1.2)	HANDHOLE	6.5	(2.0)	ALL FOUNDATIONS	3.5	(1.0)
D - CONTROLLER	4	(1.2)	DOUBLE HANDHOLE	13	(4.0)	MAST ARM (L) POLE	20'	±L-2=
E - M. ARM POLE			SIGNAL POST	2	(1.0)	(6m ± 0.6m)		
24" (600mm)	10	(3.0)	CONTROLLER CAB.	1	(0.5)	BRACKET MOUNTED	13	(4.0)
30" (750mm)	15	(4.6)	FIBER OPTIC	13	(4.0)	PED. PUSHBUTTON	4	(1.2)
36" (900mm)	15	(4.6)	ELECTRIC SERVICE	1	(0.5)	ELECTRIC SERVICE	13.5	(4.1)
			GROUND CABLE	1	(0.5)	SERVICE TO GROUND	13.5	(4.1)
						POST MOUNTED	6	(1.8)

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND TEMPORARY PHASE DESIGNATION DIAGRAM

BUTTERFIELD ROAD AND (IL. RT. 137) BUCKLEY ROAD
 VILLAGE OF LIBERTYVILLE

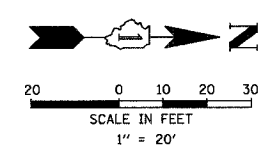
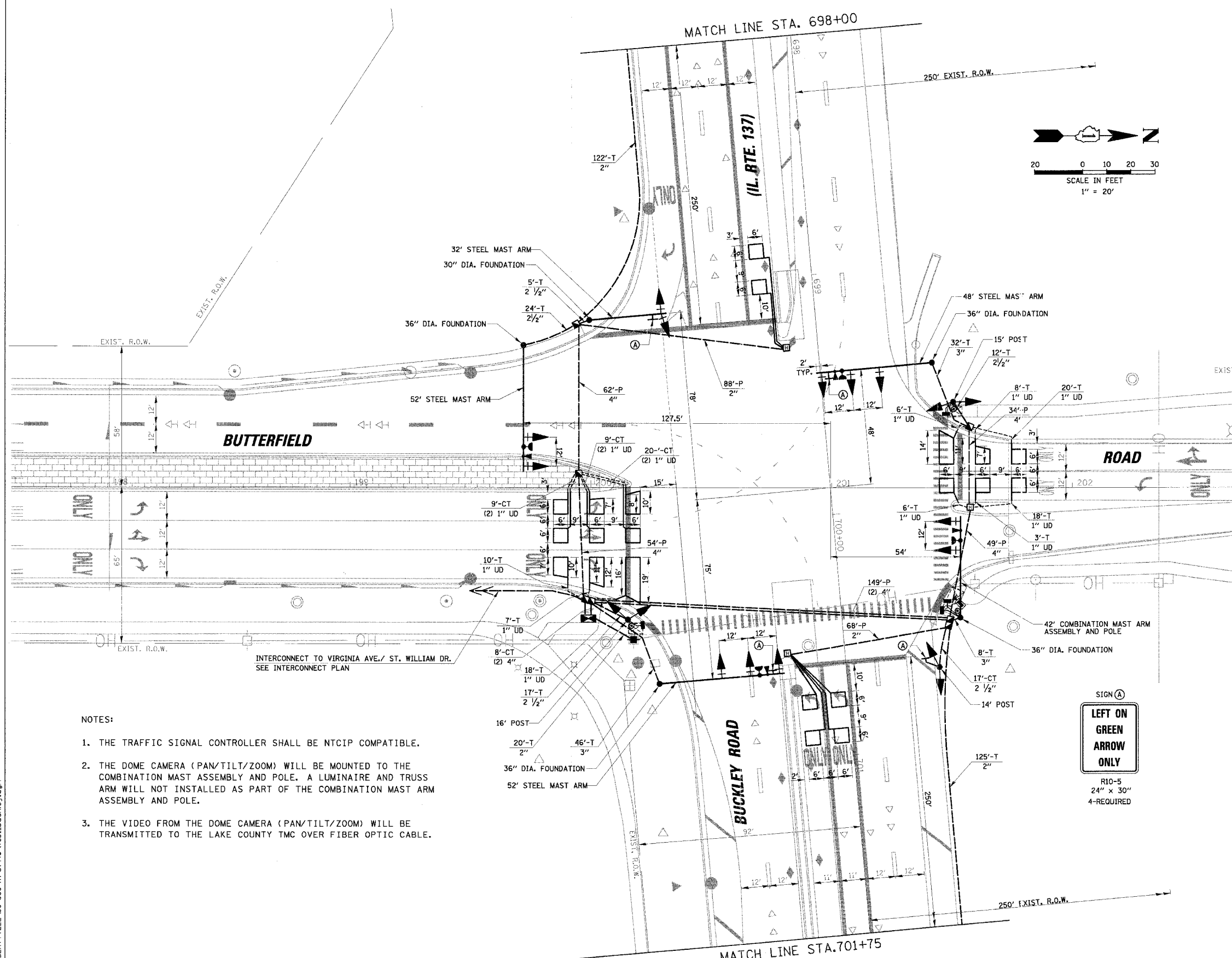
SCALE: 1" = 20'
 DATE: 12/2/2005

DRAWN BY: FPB/FCP
 DESIGNED BY:
 CHECKED BY: ABR

12/2/2005 No. LIBERTYVILLE 99-3889 T: office T: CB: buckley.dgn

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING
CONTROLLER		
SERVICE INSTALLATION		
SIGNAL HEAD		
SIGNAL HEAD WITH BACKPLATE		
SIGNAL HEAD, PEDESTRIAN		
SIGNAL POST		
MAST ARM ASSEMBLY AND POLE, STEEL		
MAST ARM ASSEMBLY AND POLE, ALUMINUM		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE		
UNIT DUCT		
COMMON TRENCH		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
PEDESTRIAN PUSHBUTTON DETECTOR		
DETECTOR LOOP		
CAST IRON JUNCTION BOX		
EMERGENCY VEHICLE LIGHT DETECTOR		
CONFIRMATION BEACON		
SIGNAL HEAD OPTICALLY PROGRAMMED		
CONDUIT SPLICE		
WOOD POLE		
RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
RAILROAD CONTROL CABINET		
TELEPHONE CONNECTION		
ILLUMINATED SIGN "NO LEFT TURN"		
ILLUMINATED SIGN "NO RIGHT TURN"		
DOMA CAMERA (PAN/TILT/ZOOM)		



NOTES:

1. THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
2. THE DOME CAMERA (PAN/TILT/ZOOM) WILL BE MOUNTED TO THE COMBINATION MAST ASSEMBLY AND POLE. A LUMINAIRE AND TRUSS ARM WILL NOT BE INSTALLED AS PART OF THE COMBINATION MAST ASSEMBLY AND POLE.
3. THE VIDEO FROM THE DOME CAMERA (PAN/TILT/ZOOM) WILL BE TRANSMITTED TO THE LAKE COUNTY TMC OVER FIBER OPTIC CABLE.

SIGN (A)



R10-5
24" x 30"
4-REQUIRED

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL INSTALLATION PLAN

BUTTERFIELD ROAD AND BUCKLEY ROAD
VILLAGE OF LIBERTYVILLE
SCALE: 1" = 20'
DATE: 12/2/2005
DRAWN BY: FPB/FCP
DESIGNED BY: ABR
CHECKED BY: GMZ