1-20-2012 LETTING ITEM 145

TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 63645		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

TR 194 (BURR ROAD)
OVER FERSON CREEK
BRIDGE REMOVAL AND REPLACEMENT
SECTION 08-14117-00-BR
PROJECT BROS-0089(142)
ST. CHARLES TOWNSHIP
KANE COUNTY
JOB NO. C-91-197-09

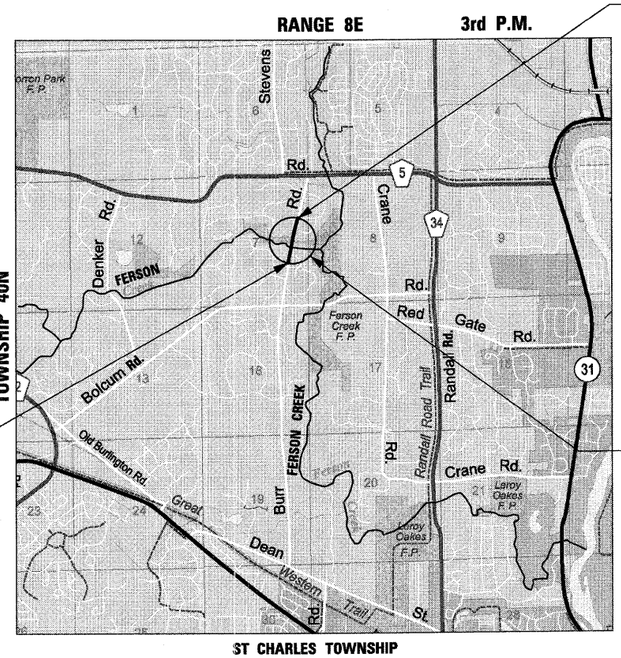
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN ST. CHARLES TOWNSHIP

TRAFFIC DATA

2009 ADT = 5,500
2030 ADT = 10,000
DESIGN SPEED: 45 MPH

DESIGN DESIGNATION:
LOCAL STREET (URBAN)



ST CHARLES TOWNSHIP

PROJECT NET AND GROSS LENGTH = 1,640 FT (0.311 MILE)

PROJECT LOCATED IN:
SECTION 7 IN TOWNSHIP 40N, RANGE 8E, OF THE THIRD PRINCIPAL MERIDIAN,
KANE COUNTY, ILLINOIS

LOCATION OF SECTION INDICATED THUS: –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED October 19, 2011
Ronald C. Johnson
HIGHWAY COMMISSIONER, ST. CHARLES TOWNSHIP

PASSED October 28, 2011
Christopher Hart CHRISTOPHER HART
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW October 28, 2011
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

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

LICENSED PROFESSIONAL ENGINEER
KEVIN M. ANDERSON
062-055652
STATE OF ILLINOIS

OCTOBER 18, 2011
KEVIN M. ANDERSON
ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-055652
EXPIRATION DATE 11-30-2011

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

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CONTRACT NO. 63645

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406 SCHAUMBURG, IL

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENT SET FORTH IN "THE CONSTRUCTION SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM MANUAL TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION; INTERIM SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.

2. BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

3. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES, IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST IN ACCORDANCE WITH SPECIAL PROVISION LR105.

4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

5. ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIALS OR A YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON TOWNSHIP, COUNTY, OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE ENGINEER.

6. MAINTENANCE OF TRAFFIC-GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.

7. TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE MAINTENANCE OF TRAFFIC AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT.

8. BARRICADES: THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED- ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.

9. THE CONTRACTOR SHALL REMOVE ONLY THOSE TREES AND SHRUBS SO DESIGNATED BY THE ENGINEER, OR THOSE, WHICH DIRECTLY INTERFERE WITH THE SAFETY OR QUALITY OF CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHEN WORKING NEAR EXISTING TREES AND SHRUBS TO AVOID DAMAGING THOSE NOT SCHEDULED FOR REMOVAL, AND SHALL REPLACE ANY DAMAGED PLANTS AT HIS OR HER OWN EXPENSE.

DRAINAGE NOTES

1. DURING CONSTRUCTION OPERATIONS ALL LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES AND TEMPORARY DITCHES THAT OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS. ALL DRAINAGE STRUCTURES SHALL BE CLEANED AS NECESSARY TO INSURE THAT THEY ARE FREE FROM ALL DIRT AND DEBRIS PRIOR TO THE FINAL INSPECTION OF THE PROJECT. THIS WORK WILL NOT BE MEASURED SEPERATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF EARTH EXCAVATION.

2. ANY FARM DRAIN, FIELD TILE SYSTEM OR OTHER UNDERGROUND TILE FACILITY ENCOUNTERED IN THE WORK SHALL BE LOCATED AND STAKED AND REPORTED TO THE RESIDENT ENGINEER. ANY DRAINAGE LINES WHICH ARE CUT OR DAMAGED BY GRADING, TRENCHING, EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REPAIRED SO AS TO MAINTAIN ITS ORIGINAL ALIGNMENT. IF THIS CANNOT BE ACCOMPLISHED, THE TILE SHALL BE REPAIRED AND CONNECTED TO THE PROPOSED STORM SEWER SYSTEM IN SUCH A MANNER AS TO RENDER THE LINES USABLE FOR THE PURPOSES INTENDED. THE WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIAL PROVISION "DRAIN TILE REPAIR".

KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT NOTES

1. THE CONTRACTOR AND ENGINEER SHALL MEET WITH THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT TO COORDINATE ALL IN-STREAM WORK ACTIVITIES.

2. THE CONTRACTOR'S IN-STREAM WORK PLAN SHALL BE SUBMITTED TO THE SOIL & WATER CONSERVATION DISTRICT AND KANE COUNTY FOR REVIEW AND APPROVAL PRIOR TO STARTING ANY WORK. THERE WILL NO ADDITIONAL COMPENSATION FOR THIS PROVIDING THE PLAN AND COORDINATION.

3. SEE ERSOION CONTROL PLAN SHEETS FOR ADDITONAL DETAILS, CONDITONS AND NOTES.

EARTHWORK AND ROADWAY

1. EARTHWORK SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING. STOCK PILING OF MATERIALS FOR LATER USE AND REDISTRIBUTION SHALL BE DONE AT THE CONTRACTOR'S EXPENSE. STOCK PILING NECESSARY FOR RESPREADING IN SHOULDERS, CONSTRUCTING EMBANKMENTS, CUT OR BORROW AREAS SHALL BE CONSIDERED INCLUDED IN THE UNIT PRICE OF EARTH EXCAVATION.

2. ALL AGGREGATE AND BITUMINOUS BASE COURSES SHALL BE PRIMED. THIS WORK SHALL CONFORM TO THE APPROPRIATE ARTICLES OF SECTION 406 OF THE STANDARD SPECIFICATIONS. THE PRIME COAT FOR AGGREGATE SURFACES SHALL BE MC-30 APPLIED AT A RATE OF 0.30 GALLONS PER SQUARE YARD AND SS-1 APPLIED AT THE RATE OF 0.10 GALLONS PER SQUARE YARD FOR HMA BASES. WHEN THE PRIMED AREA IS TO BE OPEN TO TRAFFIC, A FINE AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER THE PRIME COAT HAS BEEN APPLIED. THE FINE AGGREGATE SHALL CONFORM TO ARTICLES 406.06 OF THE STANDARD SPECIFICATIONS. THESE ITEMS WILL BE PAID FOR SEPARATELY AS BITUMINOUS MATERIALS (PRIME COAT) AND AGGREGATE (PRIME COAT).

3. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION:
ITEM NO. 2100100 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL ONLY BE UTILIZED IN AREAS THAT HAVE BEEN IDENTIFIED AS SUBGRADE UNDERCUTS AREAS OR WHERE DETERMINED IN THE FIELD BY A GEOTECHNICAL ENGINEER. THE FABRIC WILL BE USED IN COMBINATION WITH PGE SUBGRADE. THE QUANTITY INCLUDED IN THE PLANS IS BASED ON THE SUBSURFACE INVESTIGATION PREPARED BY WANG ENGINEERING, INC. RECOMMENDATIONS FOR UNDERCUT AREAS.

4. ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING OR SODDING SHALL BE CONSTRUCTED TO 6 INCHES BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.

5. PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

6. THE HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NAVD 88.

OWNER OF RECORD

THE ILLINOIS DEPARTMENT OF TRANSPORTATION IS NOT THE OWNER OF RECORD FOR THIS BRIDGE. THOSE SEEKING HISTORIC, AS-BUILT OR OTHER EXISTING DOCUMENTS AND PLANS MUST CONTACT THE OWNER OF RECORD TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION.

INDEX OF SHEETS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
420401-08	BRIDGE APPROACH PAVEMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542101-02	REINFORCED CONCRETE END SECTION FOR PIPE CULVERTS
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-01	METAL END SECTION FOR PIPE CULVERT
601001-04	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
602001-02	CATCH BASIN TYPE A
602301-03	INLET- TYPE A
602401-03	MANHOLE TYPE A
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE 8
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631032-07	TRAFFIC BARRIER TERMINAL, TYPE 6A
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701001-02	OFF-RD OPERATION 2L, 2W, MORE THAN 15' AWAY
701006-03	OFF-RD OPERATION 2L, 2W, 4.5 M 15' TO 24" FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS >= 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-02	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTING DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-03	TYPICAL PAVEMENT MARKINGS
BLR 26-3	STEEL PLATE BEAM GUARDRAIL 27 1/2" HEIGHT

DISTRICT STANDARDS

STANDARD NO.	DESCRIPTION
BD-01	DRIVEWAY DETAILS
BD-32	BUTT JOINTS AND HMA TAPER
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN (DISTRICT 1)

FILE NAME = W:\Projects\2010\1020025 Burr-Personal\Local\Civil\Dgn\Sht\GENDTES_01.dgn

WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
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PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX & STANDARDS

SCALE: | SHEET NO. 2 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	2
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE — ROADWAY 0004 URBAN	80% FEDERAL 20% STATE — BRIDGE 0011 URBAN	80% FEDERAL 20% STATE — TRAINEES 0042 URBAN	NON-PARTICIPATING 100% LOCAL
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	159	159			
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	152	152			
	20101000	TEMPORARY FENCE	FOOT	383	383			
	20101100	TREE TRUNK PROTECTION	EACH	17	17			
	20200100	EARTH EXCAVATION	CU YD	1,210	1210			
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	655	655			
	20300100	CHANNEL EXCAVATION	CU YD	255	255			
	20400800	FURNISHED EXCAVATION	CU YD	50	50			
	20800150	TRENCH BACKFILL	CU YD	55	55			
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	660	660			
*	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	3,670	3670			
	21301052	EXPLORATION TRENCH 52" DEPTH	FOOT	100	100			
*	25000100	SEEDING, CLASS 1	ACRE	0.25	0.25			
*	25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75			
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	69	69			
*	25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	69	69			
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	69	69			
*	25100630	EROSION CONTROL BLANKET	SQ YD	3,338	3338			
*	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	632	632			
*	25100900	TURF REINFORCEMENT MAT	SQ YD	126	126			
*	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	261	261			
	28000305	TEMPORARY DITCH CHECKS	FOOT	480	480			
	28000400	PERIMETER EROSION BARRIER	FOOT	1,833	1833			
	28000500	INLET AND PIPE PROTECTION	EACH	3	3			
	28000510	INLET FILTERS	EACH	1	1			
	28100105	STONE RIPRAP, CLASS A3	SQ YD	4	4			
	28100107	STONE RIPRAP, CLASS A4	SQ YD	360	30	330		
	28200200	FILTER FABRIC	SQ YD	360	30	330		
	31101100	SUBBASE GRANULAR MATERIAL, TYPE B	CU YD	36	36			
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	201	201			
	35501312	HOT-MIX ASPHALT BASE COURSE, 7"	SQ YD	1,751	1751			
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	6	5			1

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PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 3 OF 76 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	3
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE			
					80% FEDERAL 20% STATE			NON-PARTICIPATING 100% LOCAL
					ROADWAY 0004 URBAN	BRIDGE 0011 URBAN	TRAINEES 0042 URBAN	
	40600300	AGGREGATE (PRIME COAT)	TON	12	3			9
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	82				82
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	202				202
	40600990	TEMPORARY RAMP	SQ YD	25				25
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	552	219			333
	42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	54	54			
	44000100	PAVEMENT REMOVAL	SQ YD	1,945	1909			36
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	345				345
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	338	305			33
	44201777	CLASS D PATCHES, TYPE II, 11 INCH	SQ YD	15				15
	44201781	CLASS D PATCHES, TYPE III, 11 INCH	SQ YD	22				22
	48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	301	249			52
	48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	29				29
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	567	567			
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1		
	50105220	PIPE CULVERT REMOVAL	FOOT	143				143
	50200100	STRUCTURE EXCAVATION	CU YD	196		196		
	50300225	CONCRETE STRUCTURES	CU YD	47.7		47.7		
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	164.8		164.8		
	50300260	BRIDGE DECK GROOVING	SQ YD	419		419		
	50300280	CONCRETE ENCASEMENT	CU YD	3.6		3.6		
	50300300	PROTECTIVE COAT	SQ YD	439		439		
	50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1		
	50500505	STUD SHEAR CONNECTORS	EACH	1,020		1020		
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	45,150		45150		
	50800515	BAR SPLICERS	EACH	66		66		
	50901050	STEEL RAILING, TYPE SM	FOOT	176		176		
	51201600	FURNISHING STEEL PILES HP12X53	FOOT	190		190		
	51500100	NAME PLATES	EACH	1		1		
	52100520	ANCHOR BOLTS, 1"	EACH	20		20		
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1	1			
	54215418	CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 18"	EACH	1	1			

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	DRAWN - NDP	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 4 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	4
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE — ROADWAY 0004 URBAN	BRIDGE 0011 URBAN	TRAINEES 0042 URBAN	NON-PARTICIPATING 100% LOCAL
	54215550	METAL END SECTIONS 15"	EACH	2				2
	54247090	GRATING FOR CONCRETE FLARED END SECTION 12"	EACH	1	1			
	542C0220	PIPE CULVERTS, CLASS C, TYPE 1 15"	FOOT	68				68
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	10	10			
	550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	214	214			
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	45		45		
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1	1			
	60107600	PIPE UNDERDRAINS 4"	FOOT	177	177			
	60200805	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	1	1			
	60218300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1			
	60235300	INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID	EACH	1	1			
	60500050	REMOVING CATCH BASINS	EACH	1	1			
•	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	300	300			
•	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4			
•	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4			
	63200310	GUARDRAIL REMOVAL	FOOT	376	376			
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8			
	67100100	MOBILIZATION	L SUM	1	1			
	72000100	SIGN PANEL - TYPE 1	SQ FT	7	7			
	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2			
•	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	5,983	3080			2903
•	78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	72	16			56
•	78200410	GUARDRAIL MARKERS, TYPE A	EACH	11	11			
•	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4			
•	A2000616	TREE, ACER PLATANOIDES (NORWAY MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	3	3			
•	A2002316	TREE, BETULA NIGRA (RIVER BIRCH), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2			
•	A2002716	TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2			
•	A2005116	TREE, JUGLANS NIGRA (BLACK WALNUT), 2" CALIPER, BALLED AND BURLAPPED	EACH	8	8			
•	A2006416	TREE, QUERCUS ALBA (WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2			
•	A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	2	2			
•	A2007816	TREE, TILIA AMERICANA (AMERICAN LINDEN/ BASSWOOD), 2" CALIPER, BALLED AND BURLAPPED	EACH	3	3			
•	A2008466	TREE, ULMUS AMERICANA (AMERICAN ELM), 2" CALIPER, BALLED AND BURLAPPED	EACH	3	3			

FILE NAME = W:\Projects\2010\100025 BurFerson11\cadd\Civil\Dgn\Sht\S003.dgn

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DESIGNED - KMA | DRAWN - NDP | CHECKED - SBP | DATE - 10/24/11

REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 5 OF 76 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	5

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

SUMMARY OF QUANTITIES

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE: 80% FEDERAL 20% STATE — ROADWAY 0004 URBAN	80% FEDERAL 20% STATE — BRIDGE 0011 URBAN	80% FEDERAL 20% STATE — TRAINEES 0042 URBAN	NON-PARTICIPATING 100% LOCAL
•	C2001636	SHRUB, CORNUS SERICEA (REDOSIER DOGWOOD), 3' HEIGHT, BALLED AND BURLAPPED	EACH	4	4			
•	C2012436	SHRUB, VIBURNUM LENTAGO (NANNYBERRY VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	5	5			
•	D2001788	EVERGREEN, PICEA ABIES (NORWAY SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED	EACH	2	2			
•	D2002288	EVERGREEN, PICEA PUNGENS GLAUCA (COLORADO BLUE SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED	EACH	2	2			
	X0323017	TEMPORARY INFORMATIONAL SIGNS	EACH	2	2			
	X0326806	WASHOUT BASIN	L SUM	1	1			
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	89		89		
	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100			
•	X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.1	0.1			
•	X2501820	SEEDING, CLASS 5 (MODIFIED)	ACRE	0.1	0.1			
	X4811700	AGGREGATE SHOULDERS (SPECIAL)	CU YD	15	15			
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1			
	X7010237	CHANGEABLE MESSAGE SIGN, SPECIAL	CAL DA	28	28			
	XX006345	TURBIDITY BARRIER	FOOT	197	197			
	Z0001050	AGGREGATE SUBGRADE 12"	SQ YD	2,399	2399			
	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	200	200			
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1			
	Z0025500	FURNISHING AND INSTALLING PROPERTY MARKERS	EACH	3	3			
	Z0026407	TEMPORARY SHEET PILING	SQ FT	1,474		1474		
	Z0042002	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	100	100			
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	124		124		
	Z0065000	SETTING PILES IN ROCK	EACH	10		10		
	Z0076600	TRAINEES	HOUR	500			500	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 6 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	6
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 63645	

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SCHEDULE OF QUANTITIES

20100110 TREE REMOVAL (6 TO 15 UNITS DIAMETER)

UNIT	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
10	10+60.50	20.6		10"
12	11+15.50		36.3	6", 6"
9	11+19.50		33.5	9"
7	11+20.30		31.3	8"
8	11+56.10		33.2	8"
17	11+56.90		32.8	8", 9"
7	12+03.42		24.7	7"
6	11+82.30	33.9		6"
6	11+96.80	34.1		6"
6	12+12.40	34.6		6"
6	12+30.30	35.0		6"
10	12+36.30		36.6	10"
7	13+03.80		29.3	7"
10	13+30.06	35.3		10"
7	13+44.50		30.2	7"
8	13+47.90		29.1	8"
9	13+68.70		36	9"
14	14+40.30		29.9	14"
159	**TOTAL**			

20100210 TREE REMOVAL (OVER 15 UNITS DIAMETER)

UNIT	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
29.0	8+05.60		21.3	29"
30	10+17.30	28.4	30.0	30"
36	10+56.70	36.9		36"
20	11+49.50		36.4	20
16	13+59.50		31.8	16
21	13+98.30		26.9	21
152	**TOTAL**			

20101100 TREE TRUNK PROTECTION

EACH	LOCATION	O/S (LT.)		REMARKS
1	8+69.70	38.3	LT	
1	10+90.00	37.9	RT	
1	11+42.00	60.6	LT	
1	11+45.00	55.1	LT	
1	11+49.50	36.7	RT	
1	11+84.00	45.1	LT	
1	12+36.30	36.6	RT	
1	13+03.80	29.3	RT	
1	13+30.60	35.3	LT	
1	13+40.30	38.8	LT	
1	13+44.50	30.2	RT	
1	13+47.90	29.1	RT	
1	13+59.50	31.8	RT	
1	13+68.70	36.0	RT	
1	13+98.30	26.9	RT	
1	14+40.30	29.9	RT	
1	15+68.10	31.4	RT	
17	**TOTAL**			

20800150 TRENCH BACKFILL

VOLUME (CU YD)	LOCATION	O/S	LENGTH (FT)	WIDTH (FT)	DEPTH (FT)	REMARKS
8.8	7+67.70	RT	58	2.8	1.5	15" CMP REMOVED
6.3	7+67.70	RT	41	2.8	1.5	15" CMP RELOCATED
39.0	9+62.00	LT	58.5	3.0	6.0	18" STORM
55.0	**TOTAL**					

50105220 PIPE CULVERT REMOVAL

FOOT	LOCATION		O/S	REMARKS
70	7+31.76	8+00.14	RT	CREEKSIDE DR. INTERSECTION
73	9+27.49	9+99.90	LT	DRIVEWAY
143	**TOTAL**			

54213657 PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"

EACH	LOCATION	O/S		REMARKS
1	11+15.38	27.1	RT	
1	**TOTAL**			

54215418 CAST-IN-PLACE REINFORCED CONCRETE END SECTIONS 18"

EACH	LOCATION	O/S		REMARKS
1	11+14.00	25.0	LT	
1	**TOTAL**			

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 7 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	7
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

54215550 METAL END SECTIONS 15"

EACH	LOCATION	O/S		REMARKS
1	7+31.01	32.0	RT	SOUTH SIDE OF CREEK SIDE DR.
1	8+00.99	32.0	RT	NORTH SIDE OF CREEK SIDE DR.
2	**TOTAL**			

54247090 GRATING FOR CONCRETE FLARED END SECTION 12"

EACH	LOCATION	O/S		REMARKS
1	11+15.38	27.1	RT	
1	**TOTAL**			

542C0220 PIPE CULVERTS, CLASS C, TYPE 1 15"

FOOT	LOCATION		O/S	REMARKS
68	7+32.00	8+00.00	RT	
68	**TOTAL**			

550A0050 STORM SEWERS, CLASS A, TYPE 1 12"

FOOT	LOCATION		O/S	REMARKS
10	11+04.32	11+14.38	RT	
10	**TOTAL**			

550A0090 STORM SEWERS, CLASS A, TYPE 1 18"

FOOT	LOCATION		O/S	REMARKS
150	9+00.00	10+50.00	LT	
64	10+50.00	11+06.61	LT	
214	**TOTAL**			

60100060 CONCRETE HEADWALLS FOR PIPE DRAINS

EACH	LOCATION	O/S		REMARKS
1	13+63.00	23.0	RT	
1	**TOTAL**			

60107600 PIPE UNDERDRAINS 4"

FOOT	LOCATION		O/S	REMARKS
38	9+00.00		LT/RT	ACROSS PVMT
43	11+04.49		LT/RT	ACROSS PVMT
48	11+66.51		LT/RT	ACROSS PVMT
13	13+56.06	13+68.89	RT	ALONG EOP
27	13+56.28		LT/RT	ACROSS PVMT
8	13+68.89		RT	
177	**TOTAL**			

60200805 CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 8 GRATE

EACH	LOCATION	O/S		REMARKS
1	9+00.00	23.0	LT	
1	**TOTAL**			

60218300 MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID

EACH	LOCATION	O/S		REMARKS
1	10+50.00	23.0	LT	
1	**TOTAL**			

60235300 INLETS, TYPE A, TYPE 1 FRAME, CLOSED LID

EACH	LOCATION	O/S		REMARKS
1	11+04.32	27.0	RT	
1	**TOTAL**			

60500050 REMOVING CATCH BASINS

EACH	LOCATION	O/S		REMARKS
1	9+27.49	22.6	LT	BY DRIVEWAY
1	**TOTAL**			

72000100 SIGN PANEL - TYPE 1

SQ FT	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
6.25	7+87.30		30.5	STOP SIGN, R1-1 30"x30"
7.00	**TOTAL (Rounded up to next integer)**			

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 8 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	8
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SCHEDULE OF QUANTITIES

72400500 RELOCATE SIGN PANEL ASSEMBLY - TYPE A

UNIT	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
1	10+75.30		19.2	KANE CO. STREAMS SIGN
1	11+95.10	20.5		KANE CO. STREAMS SIGN
2	TOTAL			

Z0025500 FURNISHING AND INSTALLING PROPERTY MARKERS

UNIT	LOCATION	O/S (LT)	O/S (RT)	COMMENTS
1	9+36.76	35.48	LT	
1	13+42.80	33.91	LT	
1	13+41.01	40.87	LT	
3	TOTAL			

EROSION CONTROL SCHEDULE

LOCATION	25100630 EROSION CONTROL BLANKET (SQ YD)	25100635 HEAVY DUTY EROSION CONTROL BLANKET (SQ YD)	25100900 TURF REINFORCEMENT MAT (SQ YD)	28000250 TEMPORARY EROSION CONTROL SEEDING (POUND)	28000305 TEMPORARY DITCH CHECKS (FOOT)	28000400 PERIMETER EROSION BARRIER (FOOT)	28000500 INLET AND PIPE PROTECTION (EACH)	28000510 INLET FILTERS (EACH)	28100105 STONE RIPRAP, CLASS A3 (SQ YD)	28100107 STONE RIPRAP, CLASS A4 (SQ YD)	28200200 FILTER FABRIC (SQ YD)	XX006345 TURBIDITY BARRIER (FOOT)
MAINLINE												
7+00.00 - 8+00.00	266.3			16.5	10	139	1					
8+00.00 - 8+50.00	198.1			12.3	30	104			1.7			
8+50.00 - 9+00.00	211.9			13.1	40	111	1	1				
9+00.00 - 9+50.00	227.0			14.1	40	122						
9+50.00 - 10+00.00	211.3			13.1	40	89						
10+00.00 - 10+50.00	219.7			13.6	80	114						
10+50.00 - 11+06.50	119.0	151.0	125.6	26.1		126						
BRIDGE	51.5	84.0		13.6	10	81				360	360	197
11+64.50 - 12+00.00	105.6	67.8		15.0	20	75						
12+00.00 - 12+50.00	135.2	82.2		18.6	10	100						
12+50.00 - 13+00.00	129.3	75.8		17.4	30	100						
13+00.00 - 13+50.00	123.4	67.3		16.0	10	100						
13+50.00 - 14+00.00	208.4	3.2		13.3	10	105						
14+00.00 - 14+50.00	252.7			15.7	20	100						
14+50.00 - 15+00.00	255.6			15.8	20	100						
15+00.00 - 15+50.00	255.6			15.8	10	100						
15+50.00 - 15+70.00	108.1			6.7		40						
15+70.00 - 16+70.00	58.7			3.6		25			1.7			
MAINTENANCE	200	100			100	100.00	1					
TOTAL	3,338	632	126	261	480	1,833	3	1	4	360	360	197

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 9 OF 76 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	9
		CONTRACT NO. 63645		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

EARTHWORK SCHEDULES

LOCATION	END AREAS			TOPSOIL	EARTH WORK				SUBGRADE IMPROVEMENT		
	TOPSOIL STRIPPING (TSS)	CUT (C)	FILL (F)	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	20200100 EARTH EXCAVATION	EMBANKMENT	BALANCE WASTE (+) or SHORTAGE (-)	20300100 CHANNEL EXCAVATION	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	Z0042002 POROUS GRANULAR EMBANKMENT SUBGRADE	21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
	(SQ FT)	(SQ FT)	(SQ FT)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
8+00.00	12.2	36.5	7.2								
8+50.00	15.0	42.6	4.2	25.19	73.24	10.56	+51.69				
9+00.00	17.9	81.6	1.0	30.46	115.00	4.81	+92.94				
9+50.00	43.6	165.1	1.2	56.94	228.43	2.04	+192.13				
10+00.00	20.1	72.5	0.0	58.98	220.00	1.11	+185.89				
10+50.00	19.0	10.2	8.9	36.20	76.57	8.24	+56.84				
10+76.49	19.4	3.2	58.1	18.84	6.57	32.87	-27.29				
10+90.00	19.3	0.1	74.8	9.68	0.83	33.25	-32.54				
11+00.00	19.0	0.2	77.1	7.09	0.06	28.13	-28.08				
11+06.49	20.1	0.3	89.2	4.70	0.06	19.99	-19.94				174.20
ESTIMATED									50.00	50.00	150.00
SOUTH OF BRIDGE			SUB-TOTAL	248.1	720.8	141.0	471.6		50.0	50.0	324.2
11+64.51	24.6	3.3	111.5								
11+94.51	28.1	3.4	108.6	29.28	3.72	122.28	-119.12				185.30
12+00.00	26.5	3.8	72.6	5.55	0.73	18.42	-17.80				
12+50.00	23.1	14.2	32.4	45.93	16.67	97.22	-83.05				
13+00.00	23.2	26.9	15.7	42.87	38.06	44.54	-12.19				
13+50.00	19.8	32.1	8.2	39.81	54.63	22.13	+24.31				
14+00.00	19.5	37.1	18.9	36.39	64.07	25.09	+29.37				
14+50.00	17.7	49.1	7.3	34.44	79.81	24.26	+43.58				
15+00.00	15.8	55.4	1.1	31.02	96.76	7.78	+74.47				
15+50.00	15.6	49.2	2.8	29.07	96.85	3.61	+78.71				
15+70.00	14.4	45.6	1.8	11.11	35.11	1.70	+28.14				
ESTIMATED									50.00	50.00	150.00
NORTH OF BRIDGE			SUB-TOTAL	305.5	486.4	367.0	46.4		50.0	50.0	335.3
1+00.00		5.4	0.3								
1+10.00		11.6	0.1				+3.09	+3.16			
1+17.00		12.2	1.6				+2.85	+3.08			
1+25.00		114.6	0.8				+18.42	+18.78			
1+42.00		189.7	2.4				+94.81	+95.81			
1+59.00		125.4	22.0				+91.54	+99.22			
1+67.00		28.2	41.1				+13.41	+22.75			
1+76.00		9.7	9.1				-2.06	+6.31			
1+86.00		3.8	0.0				+0.81	+2.50			
BETWEEN ABUTMENTS (CHANNEL)			SUB-TOTAL	0.0	0.0	0.0	222.9	251.6	0.0	0.0	0.0

SHRINKAGE FACTOR 15%

SUMMARY OF EARTHWORK	TOPSOIL	EARTH WORK			SUBGRADE IMPROVEMENT		
	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	20200100 EARTH EXCAVATION	20400800 FURNISHED EXCAVATION	20300100 CHANNEL EXCAVATION	20201200 REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	Z0042002 POROUS GRANULAR EMBANKMENT SUBGRADE	21001000 GEOTECH. FABRIC FOR GROUND STABILIZATION
	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(CU YD)	(SQ YD)
TOTAL	553.6	1,207.2	-46.4	251.6	100.0	100.0	660.0
ADJ. TOTAL	555.0	1,210.0	50.0	255.0	100.0	100.0	660.0

- EXCAVATION BETWEEN ABUTMENTS SHALL BE CHANNEL EXCAVATION.
- CHANNEL EXCAVATION HAS BEEN ASSUMED TO BE UNSUITABLE MATERIAL FOR ROADWAY EMBANKMENT.
- A NOMINAL QUANTITY OF 50 CY YD FOR FURNISHED EXCAVATION HAS BEEN PROVIDED.

EARTHWORK GENERAL NOTES

1. ALL EARTHWORK QUANTITIES ARE CALCULATED BY THE METHOD OF AVERAGE END AREAS USING THE PLAN CROSS SECTIONS.
2. SHRINKAGE FACTOR, ASSUMED TO BE 15% FOR THIS PROJECT IS ESTIMATED FOR THE PURPOSE OF DETERMINING A BALANCE OF EARTHWORK. THE CONTRACTOR SHALL ESTIMATE HIS OWN SHRINKAGE FACTORS IN DETERMINING HIS EARTHWORK. NO PAYMENT WILL BE MADE ON EARTHWORK QUANTITIES DUE TO VARIATION IN THE SHRINKAGE FACTOR SINCE EARTHWORK IS MEASURED IN ITS FINAL POSITION.
3. RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT PREPARED BY WANG ENGINEERING, INC., DATED, OCTOBER 6, 2009 WERE USED IN PREPARATION OF THE ROADWAY PLANS AND RELATED QUANTITY CALCULATIONS.
4. SIX (6) INCHES WAS ASSUMED ON THIS PROJECT FOR THE PURPOSE OF CALCULATING TOPSOIL STRIPPING QUANTITIES.
5. IF UNDERCUTS ARE ENCOUNTERED, UNDERCUTS WILL BE PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. AFTER TOPSOIL STRIPPING AND VEGATATION CLEARING AND PRIOR TO UNDERCUTTING, THE SUBGRADE WILL BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER IN ACORDANCE WITH THE IDOT SUBGRADE STABILITY MANUAL TO DETERMINE REMEDIAL TREATMENT.
6. TESTING OF SUBGRADES AND EMBANKMENTS WILL BE REQUIRED. TESTING REQUIRMENTS WILL BE PER THE APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS AND THE SUBGRADE STABILITY MANUAL. IF PROOF ROLLS ARE REQUIRED BY THE ENGINEER, THE COST SHALL BE CONSIDERED INCLUDED IN THE COST OF EXCAVATION.
7. A NOMINAL 100 CY OF POROUS GRANUALR EMBANKMENT SUBGRADE HAS BEEN ESTIMATED TO ESTABLISH A UNIT PRICE FOR POSSIBLE LOCATIONS WHERE SOILS TEND TO BE UNSTABLE WHEN WET. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE SOILS ENGINEER (BY USE OF A CONE PENETROMETER IN CONJUNCTION WITH THE IDOT SUBGRADE STABILITY MANUAL AND ROLL USING FULL LOAD SEMI), IF UNSUITABLE AND/OR UNSTABLE MATERIALS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE CONTRACTOR.
8. EARTH EXCAVATION SHALL BE PAID FOR ONLY ONCE, REGARDLESS OF STAGING OR SEQUENCING OF CONTRACTORS OPERATIONS THAT REQUIRE STOCKPILING OF MATERIALS FOR LATER USE FOR REDISTRIBUTION AND RESPREADING IN SHOULDERS AND CONSTRUCTING OF EMBANKMENTS.

FILE NAME = W:\Projects\2010\080025 Burr Ferson\Civil\Dgn\Sht\SCHEDULE4.dgn

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USER NAME = $USER$	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - NDP	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 10 OF 76 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	10
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PAVEMENT REMOVAL SCHEDULE

LOCATION	40600982 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (SQ YD)	40600990 TEMPORARY RAMP (SQ YD)	44000100 PAVEMENT REMOVAL (SQ YD)	44000157 HOT-MIX ASPHALT SURFACE REMOVAL, 2" (SQ YD)	44000200 DRIVEWAY PAVEMENT REMOVAL (SQ YD)
MAINLINE					
7+00.00 - 8+00.00	25.00	25.0	36.0	345.0	
8+00.00 - 8+50.00			143.0		
8+50.00 - 9+00.00			128.2		
9+00.00 - 9+50.00			129.1		
9+50.00 - 10+00.00			128.6		
10+00.00 - 10+50.00			129.2		
10+50.00 - 11+06.50			145.4		
BRIDGE					
11+64.50 - 12+00.00			68.3		
12+00.00 12+50.00			90.8		
12+50.00 - 13+00.00			126.4		
13+00.00 - 13+50.00			126.3		
13+50.00 - 14+00.00			127.4		
14+00.00 - 14+50.00			128.7		
14+50.00 - 15+00.00			129.0		
15+00.00 - 15+50.00			128.9		
15+50.00 - 15+70.00			128.4		
15+70.00 - 16+00.00			51.0		7.0
16+00.00 - 16+50.00					
16+50.00 - 17+00.00					
17+00.00 - 17+50.00					
17+50.00 - 18+00.00					26.0
18+00.00 - 18+50.00					
18+50.00 - 19+00.00					
19+00.00 - 19+50.00					
19+50.00 - 20+00.00					
20+00.00 - 20+50.00					
20+50.00 - 21+00.00					
21+00.00 - 21+50.00					
21+50.00 - 22+00.00					
22+00.00 - 22+50.00	27.9				
22+50.00 - 23+00.00	68.8				
23+00.00 - 23+40.00	79.9				
ENTRANCE					
9+62.00					304.6
TOTAL	**202**	**25**	**1,945**	**345**	**338**

STRIPING AND GUARDRAIL SCHEDULE

LOCATION	63000001 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS (FOOT)	63100087 TRAFFIC BARRIER TERMINAL, TYPE 6A (EACH)	63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH)	78008210 POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (FOOT)	78008270 POLYUREA PAVEMENT MARKING TYPE I - LINE 24" (FOOT)	78200410 GUARDRAIL MARKERS, TYPE A (EACH)	78201000 TERMINAL MARKER - DIRECT APPLIED (EACH)
MAINLINE							
6+60.00 - 7+00.00				160	16		
7+00.00 - 8+00.00				155			
8+00.00 - 8+50.00				200			
8+50.00 - 9+00.00				200			1
9+00.00 - 9+50.00			1	200			
9+50.00 - 10+00.00	50.7			200		2	
10+00.00 - 10+50.00	49.3		1	200		1	1
10+50.00 - 11+06.50		2		226		1	
Bridge				232			
11+64.50 - 12+00.00		2		142			
12+00.00 12+50.00	48.2			200		3	
12+50.00 - 13+00.00	106.8			200		3	
13+00.00 - 13+50.00	45.0		1	200		1	2
13+50.00 - 14+00.00			1	200			
14+00.00 - 14+50.00				200			
14+50.00 - 15+00.00				200			
15+00.00 - 15+50.00				200			
15+50.00 - 15+70.00				80			
15+70.00 - 16+00.00				120			
16+00.00 - 16+50.00				200			
16+50.00 - 17+00.00				200			
17+00.00 - 17+50.00				200			
17+50.00 - 18+00.00				200			
18+00.00 - 18+50.00				200			
18+50.00 - 19+00.00				200			
19+00.00 - 19+50.00				200			
19+50.00 - 20+00.00				200			
20+00.00 - 20+50.00				200			
20+50.00 - 21+00.00				200			
21+00.00 - 21+50.00				200			
21+50.00 - 22+00.00				200			
22+00.00 - 22+50.00				68			
22+50.00 - 23+00.00							
23+00.00 - 23+40.00					56.0		
TOTAL	**300**	**4**	**4**	**5,983**	**72**	**11**	**4**

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PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 11 OF 76 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	11
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FILE NAME = w:\projects\2010\10025 burrfersons\cadd\civil\dgn\sht\SCHEDULES.dgn

PAVEMENT SCHEDULE

LOCATION	31101100 SUBBASE GRANULAR MATERIAL, TYPE B (SQ YD)	35501308 HOT-MIX ASPHALT BASE COURSE, 6" (SQ YD)	35501312 HOT-MIX ASPHALT BASE COURSE, 7" (SQ YD)	40600200 BITUMINOUS MATERIALS (PRIME COAT) (TON)	40600300 AGGREGATE (PRIME COAT) (TON)	40600625 LEVELING BINDER (MACHINE METHOD), N50 (TON)	40603335 HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (TON)	42001430 BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) (SQ YD)	48101500 AGGREGATE SHOULDERS, TYPE B 6" (SQ YD)	48102100 AGGREGATE WEDGE SHOULDER, TYPE B (TON)	48203029 HOT-MIX ASPHALT SHOULDERS, 8" (SQ YD)	X4811700 AGGREGATE SHOULDER, SPECIAL (CU YD)	Z0001050 AGGREGATE SUBGRADE 12" (SQ YD)
MAINLINE													
7+00.00 - 8+00.00				0.17	1.31		48.8		51.7	3.7			
8+00.00 - 8+50.00				0.34	0.43		16.2		41.6				150.6
8+50.00 - 9+00.00	0.34		144.99	0.31	0.40		14.9		42.7		12.75		155.3
9+00.00 - 9+50.00	1.33		133.34	0.31	0.40		14.9		6.0		64.05		203.1
9+50.00 - 10+00.00	1.65		133.34	0.31	0.40		14.9				79.01		217.9
10+00.00 - 10+50.00	1.62		133.33	0.31			14.9				77.91		216.8
10+50.00 - 11+06.50	0.81		133.34	0.16			7.9	26.7			38.96	7.4	116.8
BRIDGE			70.64										
11+64.50 - 12+00.00	0.3			0.03			1.6	14.6			12.6	7.4	29.3
12+00.00 12+50.00	1.5		14.64	0.31			14.9	12.0			69.5		208.3
12+50.00 - 13+00.00	1.5		133.34	0.31			14.9				69.5		208.3
13+00.00 - 13+50.00	1.5		133.34	0.31			14.9				73.6		212.5
13+50.00 - 14+00.00	1.4		133.34	0.31			14.9		12.9		66.5		205.6
14+00.00 - 14+50.00	0.0		133.27	0.31			14.9		44.9		2.1		141.0
14+50.00 - 15+00.00			133.34	0.31			14.9		44.4				138.9
15+00.00 - 15+50.00			133.34	0.31			14.9		44.4				138.9
15+50.00 - 15+70.00			133.34	0.12			6.0		11.9				55.6
15+70.00 - 16+00.00			53.34	0.03	0.25	1.90	9.5			0.6			
16+00.00 - 16+50.00				0.05	0.40	4.29	14.9			1.5			
16+50.00 - 17+00.00				0.05	0.40	3.73	14.9			1.6			
17+00.00 - 17+50.00				0.05	0.40	5.04	14.9			1.6			
17+50.00 - 18+00.00				0.05	0.40	5.97	14.9			1.6			
18+00.00 - 18+50.00				0.05	0.40	5.23	14.9			1.6			
18+50.00 - 19+00.00				0.05	0.40	5.41	14.9			1.6			
19+00.00 - 19+50.00				0.05	0.40	4.67	14.9			1.6			
19+50.00 - 20+00.00				0.05	0.40	4.85	14.9			1.6			
20+00.00 - 20+50.00				0.05	0.40	6.16	14.9			1.6			
20+50.00 - 21+00.00				0.05	0.40	6.35	14.9			1.6			
21+00.00 - 21+50.00				0.05	0.40	3.92	14.9			1.6			
21+50.00 - 22+00.00				0.05	0.40	0.75	14.9			1.6			
22+00.00 - 22+50.00				0.09	0.73	6.81	27.2			2.0			
22+50.00 - 23+00.00				0.16	1.28	11.92	47.7			1.7			
23+00.00 - 23+40.00				0.07	0.54	5.00	20.0			1.2			
ENTRANCE													
9+62.00	23.7		201.0	0.47	0.60		22.5						
TOTAL	**36**	**201**	**1751**	**6**	**12**	**82**	**552**	**54**	**301**	**29**	**567**	**15**	**2399**

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 12 OF 76 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	12
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

FILE NAME = w:\projects\2010\100925 burr-ferson\\cadd\civil\dgn\sht\SCHEDULES.dgn

LANDSCAPING SCHEDULE

LANDSCAPING ITEMS	21101625	25000100	25000210	25000400	25000500	2500600	X2501800	X2501820
LOCATION	TOPSOIL FURNISH AND PLACE, 6"	SEEDING, CLASS 1	SEEDING, CLASS 2A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	SEEDING, CLASS 4 (MOD)	SEEDING, CLASS 5 (MOD)
	(SQ YD)	(ACRE)	(ACRE)	(POUND)	(POUND)	(POUND)	(ACRE)	(ACRE)
MAINLINE								
7+00.00 - 8+00.00	266.3		0.055	5.0	5.0	5.0		
8+00.00 - 8+50.00	198.1	0.009	0.041	3.7	3.7	3.7		
8+50.00 - 9+00.00	211.9	0.018	0.035	3.9	3.9	3.9		
9+00.00 - 9+50.00	227.0	0.026	0.029	4.2	4.2	4.2		
9+50.00 - 10+00.00	211.3	0.014	0.018	3.9	3.9	3.9		
10+00.00 - 10+50.00	219.7	0.014	0.031	4.1	4.1	4.1		
10+50.00 - 11+06.50	270.0	0.011	0.010	5.0	5.0	5.0	0.018	0.018
BRIDGE	135.5	0.013		2.5	2.5	2.5	0.011	0.011
11+64.50 - 12+00.00	173.5	0.010	0.009	3.2	3.2	3.2	0.014	0.014
12+00.00 12+50.00	217.5	0.009	0.018	4.0	4.0	4.0	0.017	0.017
12+50.00 - 13+00.00	205.1	0.006	0.018	3.8	3.8	3.8	0.016	0.016
13+00.00 - 13+50.00	190.7		0.019	3.5	3.5	3.5	0.014	0.014
13+50.00 - 14+00.00	211.5		0.043	3.9	3.9	3.9	0.001	0.001
14+00.00 - 14+50.00	252.7		0.052	4.7	4.7	4.7		
14+50.00 - 15+00.00	255.6		0.053	4.8	4.8	4.8		
15+00.00 - 15+50.00	255.6		0.053	4.8	4.8	4.8		
15+50.00 - 15+70.00	108.1		0.022	2.0	2.0	2.0		
15+70.00 - 16+70.00	58.7		0.012	1.1	1.1	1.1		
TOTAL	3,670	0.25	0.75	69	69	69	0.10	0.10

LANDSCAPING ITEMS	A2000616	A2002316	A2002716	A2005116	A2006416	A2006516	A2007816	A2008466	C2001636	C2012436	D2001788	D2002288
LOCATION	TREE, ACER PLATANOIDES (NORWAY MAPLE), 2" CALIPER	TREE, BETULA NIGRA (RIVER BIRCH), 2" CALIPER	TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER	TREE, JUGLANS NIGRA (BLACK WALNUT), 2" CALIPER	TREE, QUERCUS ALBA (WHITE OAK), 2" CALIPER	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER	TREE, TILIA AMERICANA (AMERICAN LINDEN/ BASSWOOD), 2" CALIPER	TREE, ULMUS AMERICANA (AMERICAN ELM), 2" CALIPER	SHRUB, CORNUS SERICEA (REDOSIER DOGWOOD), 3'	SHRUB, VIBURNUM LENTAGO (NANNYBERRY VIBURNUM), 3'	EVERGREEN, PICEA ABIES (NORWAY SPRUCE), 8'	EVERGREEN, PICEA PUNGENS GLAUCA (COLORADO BLUE SPRUCE), 8'
	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)	(EACH)
MAINLINE												
7+00.00 - 8+00.00												
8+00.00 - 8+50.00												
8+50.00 - 9+00.00												
9+00.00 - 9+50.00												
9+50.00 - 10+00.00												
10+00.00 - 10+50.00											2.0	1
10+50.00 - 11+06.50				2	1							1
BRIDGE						1						
11+64.50 - 12+00.00										3		
12+00.00 12+50.00						1			4.0			
12+50.00 - 13+00.00		2								2		
13+00.00 - 13+50.00							1					
13+50.00 - 14+00.00							2	1				
14+00.00 - 14+50.00	2							1				
14+50.00 - 15+00.00				2								
15+00.00 - 15+50.00				2	1			1				
15+50.00 - 15+70.00	1		1	2								
15+70.00 - 16+70.00			1									
TOTAL	3	2	2	8	2	2	3	3	4	5	2	2

FILE NAME = W:\Projects\2010\100825 BurrFersonIT\cadd\Civil\Dgn\Sht\SCHEDULE7.dgn

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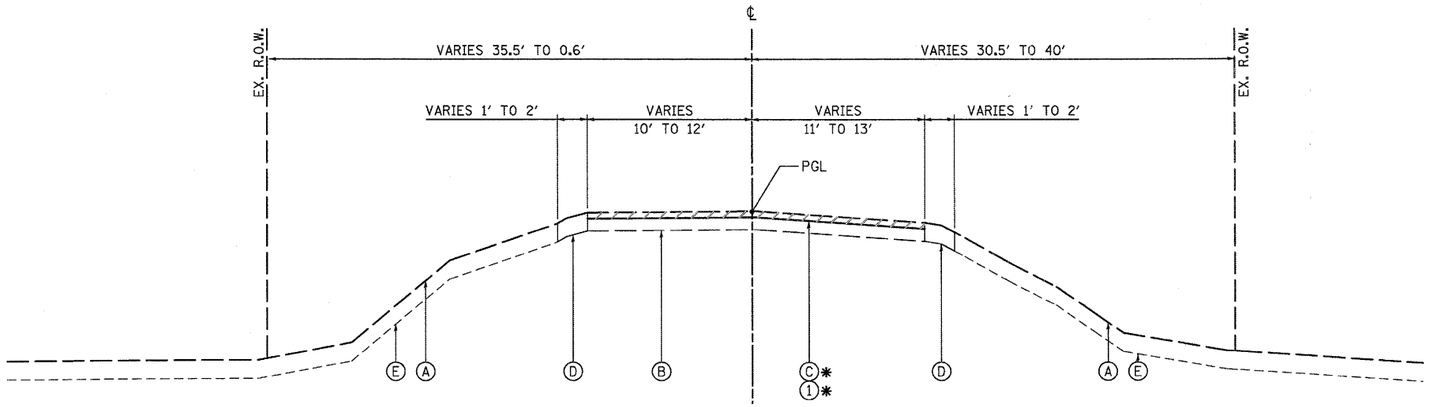
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET NO. 13 OF 76 SHEETS | STA. | TO STA.

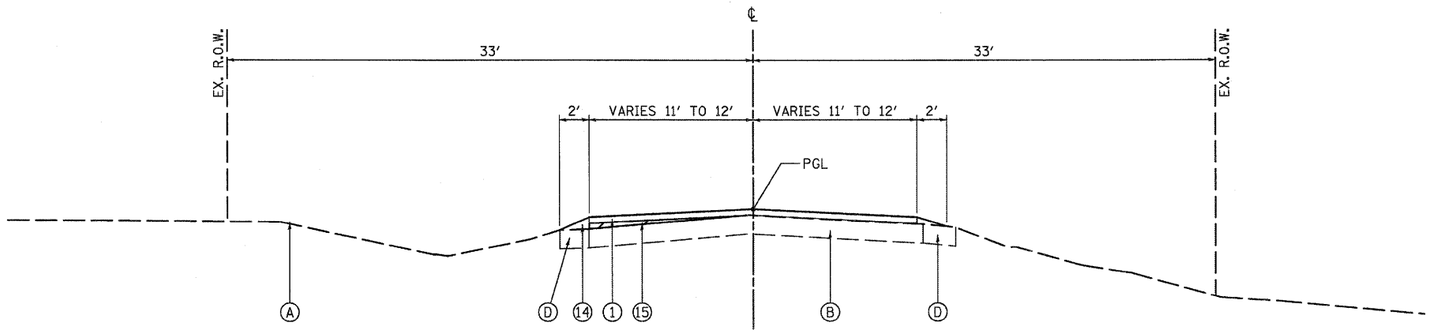
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	13
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION

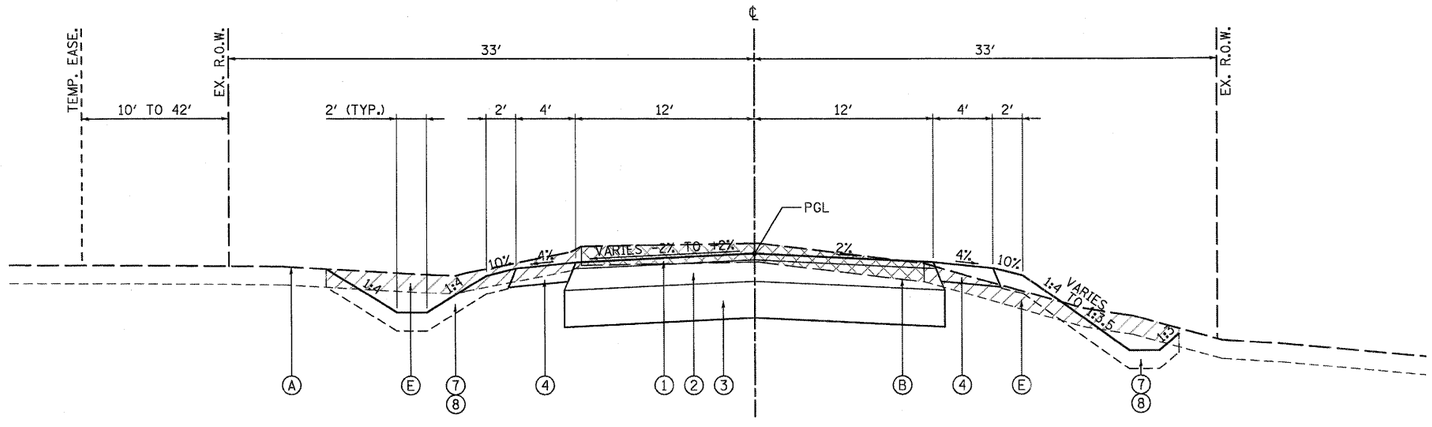
STA. 7+00 TO STA. 23+40, BURR ROAD

• STA. 7+00 TO STA. 8+00, BURR ROAD



PROPOSED TYPICAL SECTION NO. 1

STA. 15+70 TO STA. 23+40, BURR ROAD



PROPOSED TYPICAL SECTION NO. 2

STA. 8+00 TO STA. 9+09 LT / STA. 8+78 RT, BURR ROAD

STA. 14+17 LT / STA. 13+68 TO STA. 15+70, BURR ROAD

LEGEND, EXISTING

- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 5" - 7.5" (NOTE 1)
- (C) EXISTING HOT-MIX ASPHALT PAVEMENT, 2" - SURFACE REMOVAL (44000157)
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING TOPSOIL

EXISTING PAVEMENT NOTES

1. INFORMATION ON PAVEMENT AND BASE COURSE THICKNESS WAS TAKEN FROM INFORMATION DOCUMENTED IN THE "STRUCTURAL GEOTECHNICAL REPORT" PREPARED BY WANG ENGINEERING DATED OCTOBER 6, 2009. SEE ADDITIONAL NOTE BELOW.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE THICKNESS OF THE EXISTING PAVEMENTS TO BE REMOVED AND THE EXTENT TO WHICH IT WAS REINFORCED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF VARIATIONS FROM THE ASSUMED THICKNESS SHOWN ON THE PLANS OR FOR VARIATIONS IN THE AMOUNT OF REINFORCEMENT.

LEGEND, PROPOSED

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 7" HMA BASE COURSE, IL-19.0, 7" (2 LIFTS - 35501312)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (5) HMA SHOULDERS, 8" (48203029)
- (6) SUB BASE GRANULAR MATERIAL, TYPE B (31101100)
- (7) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (8) SEEDING W/EROSION CONTROL BLANKET OR HD EROSION CONTROL BLANKET
- (9) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (10) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001) (STD. BLR 26-2)
- (11) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (12) POROUS GRANULAR EMBANKEMENT, SUBGRADE (20700420)
- (13) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (14) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)
- (15) LEVELING BINDER (MACHINE METHOD), N50 (40600625)

STRUCTURAL PAVEMENT DESIGN

STRUCTURAL DESIGN TRAFFIC: Year 2022
PV = 7680 SU = 240 MU = 80
ROAD/STREET CLASSIFICATION: Class 2
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:
P = 96 S = 3 M = 1
TRAFFIC FACTOR: Actual TF = 0.59 AC Type = PG 64-22
Minimum TF = NA
PG GRADE: Binder = PG 64-22 /58-22 Surface = PG 64-22
SUBGRADE SUPPORT RATING: SSR = (FAIR)

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	AIR VOIDS @ Ndes
BURR ROAD - RECONSTRUCTION	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 7" (2 LIFTS)	4% @ 50 GYR.
BURR ROAD - HMA RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT LEVELING BINDER (MACHINE METHOD), N50 (2" MAX. PER LIFT)	4% @ 50 GYR.
BURR ROAD - APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	4% @ 50 GYR.
HMA SHOULDERS	
HOT-MIX ASPHALT SHOULDER (HMA BINDER IL-19 mm), 8" (2 LIFTS)	2% @ 30 GYR.
DRIVEWAYS- P.E.	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE (HMA BINDER IL-19 mm), 6" (2 LIFTS)	4% @ 50 GYR.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.

THE AC TYPE FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.

FILE NAME = W:\Projects\2010\080025 BurrFerson11\coadd\Civil\Dgn\Sht\Typical1.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
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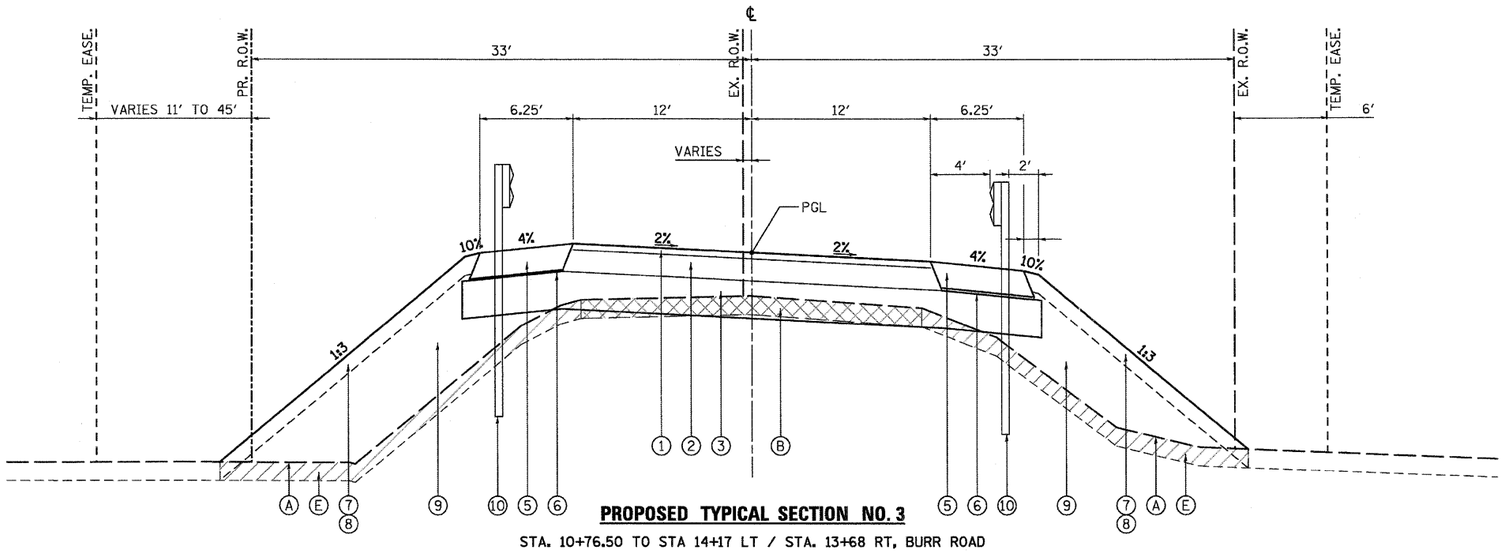
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

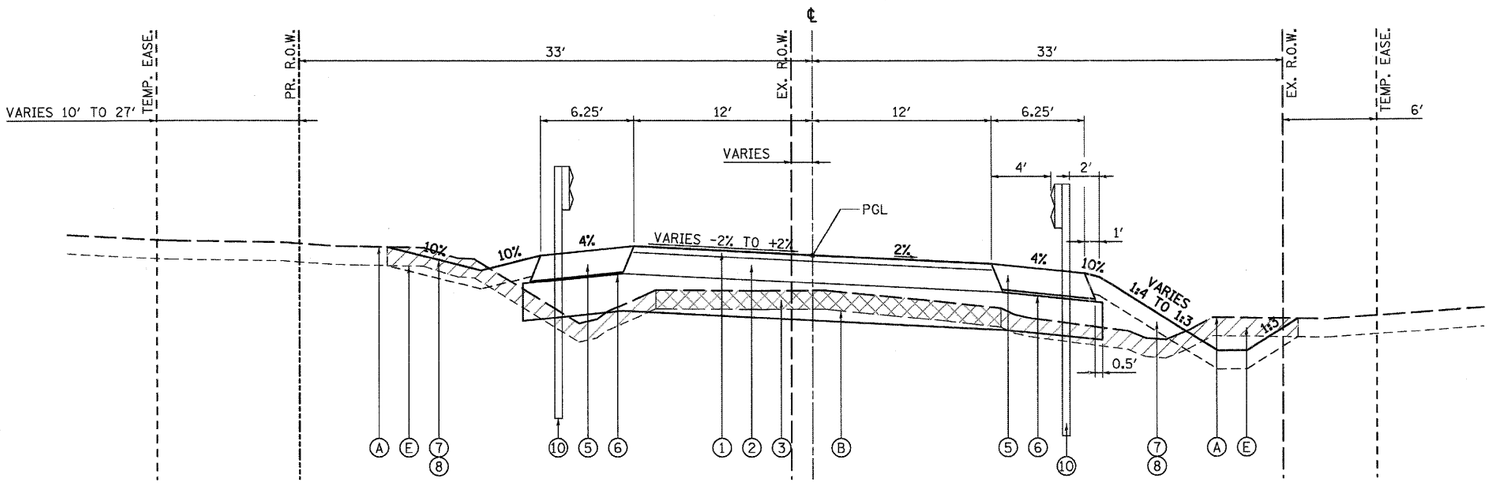
SCALE: | SHEET NO. 14 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	14
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



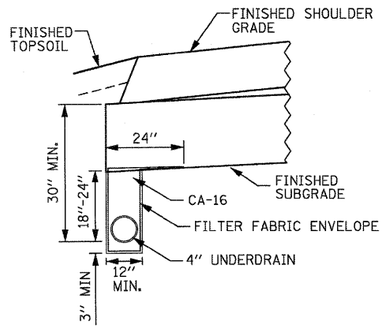
PROPOSED TYPICAL SECTION NO. 3

STA. 10+76.50 TO STA 14+17 LT / STA. 13+68 RT, BURR ROAD



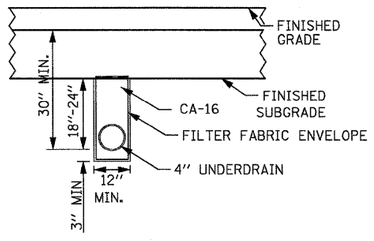
PROPOSED TYPICAL SECTION NO. 4

STA. 9+09 LT / STA. 8+78 RT TO STA. 10+76.50, BURR ROAD



UNDERDRAIN DETAIL - LONGITUDINAL

STA. 13+50.00 TO 13+63.00 RT.



UNDERDRAIN DETAIL - TRANSVERSE

STA. 9+00.00

STA. 13+50.00

LEGEND, EXISTING

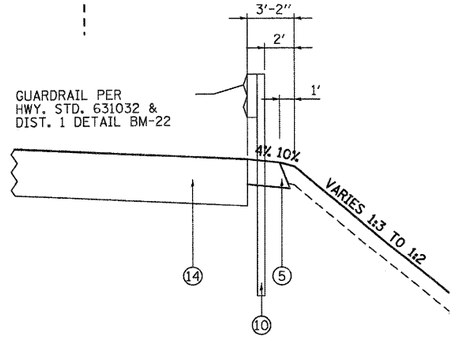
- (A) EXISTING GROUND
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT, 5" - 7.5" •
- (C) EXISTING HOT-MIX ASPHALT PAVEMENT, 2" - SURFACE REMOVAL (44000157)
- (D) EXISTING AGGREGATE SHOULDER
- (E) EXISTING TOPSOIL

EXISTING PAVEMENT NOTES

1. INFORMATION ON PAVEMENT AND BASE COURSE THICKNESS WAS TAKEN FROM INFORMATION DOCUMENTED IN THE "STRUCTURAL GEOTECHNICAL REPORT" PREPARED BY WANG ENGINEERING DATED OCTOBER 6, 2009. SEE ADDITIONAL NOTE BELOW.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE THICKNESS OF THE EXISTING PAVEMENTS TO BE REMOVED AND THE EXTENT TO WHICH IT WAS REINFORCED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED BECAUSE OF VARIATIONS FROM THE ASSUMED THICKNESS SHOWN ON THE PLANS OR FOR VARIATIONS IN THE AMOUNT OF REINFORCEMENT.

LEGEND, PROPOSED

- (1) 2" HMA SURFACE COURSE, MIX "D", N50 (40603335)
- (2) 7" HMA BINDER COURSE, IL-19.0, 7" (2 LIFTS - 35501312)
- (3) AGGREGATE SUBGRADE, 12" (Z0001050)
- (4) AGGREGATE SHOULDERS, TYPE B 6" (48101500)
- (5) HMA SHOULDERS, 8" (48203029)
- (6) SUB BASE GRANULAR MATERIAL, TYPE B (31101100)
- (7) 6" TOPSOIL EXCAVATION AND PLACEMENT (21101505)
- (8) SEEDING W/EROSION CONTROL BLANKET OR HD EROSION CONTROL BLANKET
- (9) STRUCTURAL EMBANKMENT (TO BE PAID AS FURNISHED EXCAVATION - 20400800)
- (10) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001) (STD. BLR 26-2)
- (11) PIPE UNDERDRAIN WITH FILTER FABRIC ENVELOPE, 4" (60107600)
- (12) POROUS GRANULAR EMBANKEMENT, SUBGRADE (20700420)
- (13) GEOTECHNICAL FABRIC FOR GRND. STABILIZATION (21001000)
- (14) AGGREGATE WEDGE SHOULDER, TYPE B (48102100)
- (15) LEVELING BINDER (MACHINE METHOD), N50 (40600625)
- (16) AGGREGATE SHOULDER, SPECIAL (CA1) (X4811700)



PROPOSED BURR ROAD

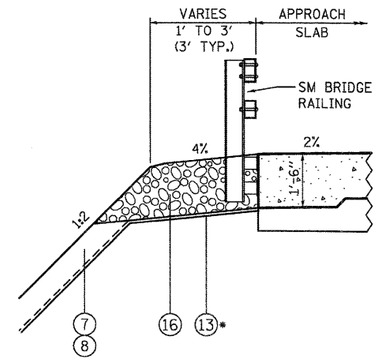
APPROACH SLAB SECTION

STA. 10+76.50 TO STA. 10+86.67 LT

STA. 10.76+50 TO STA. 10+86.31 RT

STA. 11+84.33 TO STA. 11+94.50 LT

STA. 11+84.69 TO STA. 11+94.50 RT



* GEOTECHNICAL FABRIC SHALL BE LAID ON THE ENTIRE 1:2 SLOPE ADJACENT TO AGGREGATE SHOULDER SPECIAL.

TYPICAL SECTION

AGGREGATE SHOULDER, SPECIAL

STA. 10+86.67 TO 11+06.60 LT

STA. 10+86.31 TO 11+06.38 RT

STA. 11+64.38 TO 11+84.33 LT

STA. 11+64.60 TO 11+84.69 RT

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USER NAME = nparris	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS
	DRAWN - NDP	REVISED -		
PLOT SCALE =	CHECKED - SBP	REVISED -		SCALE: / SHEET NO. 15 OF 76 SHEETS / STA. / TO STA.
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -		

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	15
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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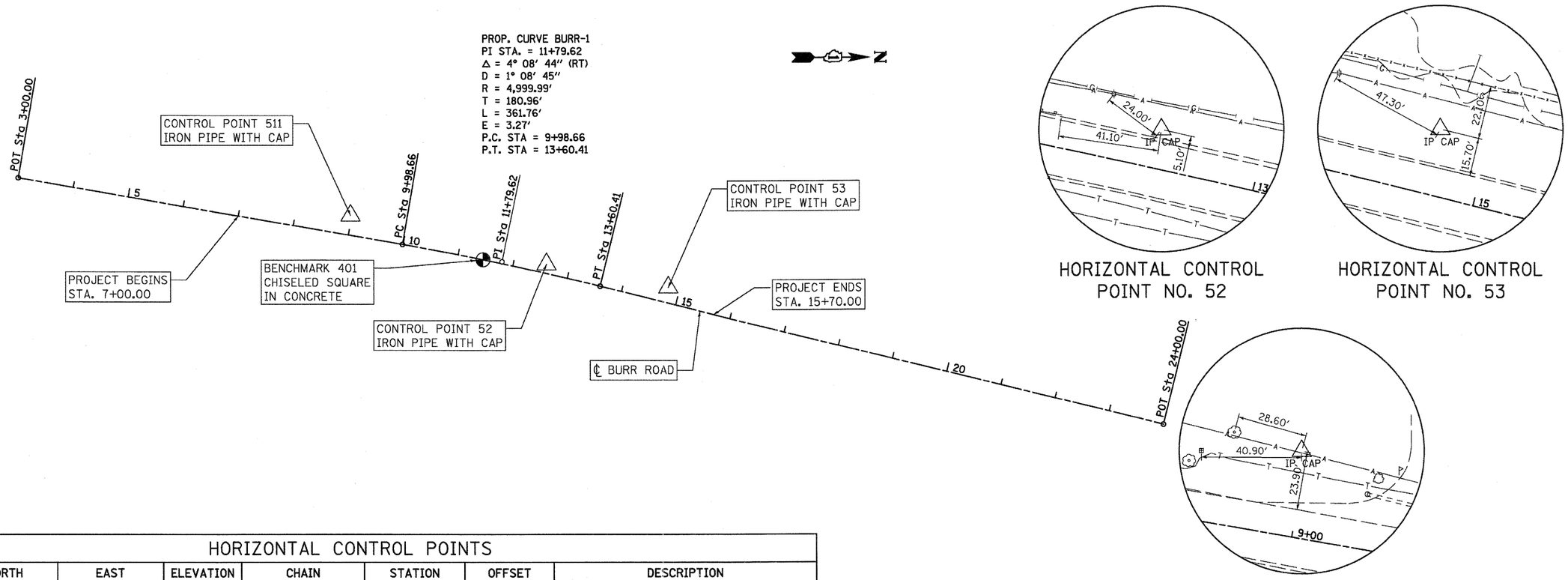

HORIZONTAL CONTROL POINT NO. 52

HORIZONTAL CONTROL POINT NO. 53

HORIZONTAL CONTROL POINT NO. 511

HORIZONTAL CONTROL POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
52	1928978.061	976396.275	761.451	BURR	12+58.15	16.133' LT	IRON PIPE WITH CAP
53	1929196.266	976438.028	763.042	BURR	14+79.66	27.128' LT	IRON PIPE WITH CAP
511	1928626.999	976309.372	769.760	BURR	8+98.14	35.295' LT	IRON PIPE WITH CAP

SURVEY WORK POINTS

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
2148	1928469.552	976349.241	770.161	BURR	7+49.77	30.777' RT	PK NAIL

BENCH MARKS (NAVD 88)

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	1928872.19	976374.91	763.29	BURR	11+50.48	14.74' LT	CHISELED SQUARE

LEGEND

- = BENCH MARK LOCATION
- = HORIZONTAL CONTROL POINT LOCATION

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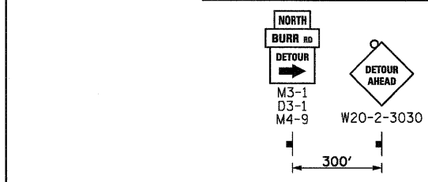
	DRAWN - NDP	REVISED -			
PLOT SCALE =	CHECKED - SBP	REVISED -			
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -		SCALE:	SHEET NO. 16 OF 76 SHEETS STA. TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	16
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TYPICAL DETOUR SIGN SPACING



TEXT FOR TEMPORARY INFORMATION SIGN

SEE STD. TC 22 FOR SIGN DIMENSIONS AND DETAILS

LEGEND

- TIS — TEMPORARY INFORMATION SIGN
- CMS — CHANGEABLE MESSAGE SIGN
- DETOUR ROUTE
- TYPE III BARRICADE WITH TYPE A FLASHER
- TYPE A FLASHER

N.T.S.

GENERAL NOTES:

1. FURNISHING, ERECTING, MAINTAINING AND REMOVING ALL TRAFFIC CONTROL DEVICES FOR THE CONSTRUCTION OF THE PROPOSED ROADWAY AND STRUCTURE IMPROVEMENTS, INCLUDING ALL TRAFFIC CONTROL DEVICES REQUIRED FOR THE TEMPORARY DETOUR ROUTES AS SHOWN IN THE PLANS, WILL BE MEASURED FOR PAYMENT ONE TIME ONLY AND SHALL BE PAID FOR AS TRAFFIC CONTROL AND PROTECTION, (SPECIAL), LUMP SUM.

2. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS TO PRIVATE ENTRANCES AND FIELD ENTRANCES. THE TEMPORARY CLOSURE OF DRIVEWAYS WILL BE LIMITED TO THE DURATION OF THE CONSTRUCTION DIRECTLY IN FRONT OF THE DRIVEWAYS. IN ALL CASES, THE ENTRANCES SHALL BE OPEN AT THE END OF THE WORK DAY. THE CONTRACTOR SHALL COORDINATE CLOSURES WITH THE RESIDENT ENGINEER AND PROPERTY OWNER A MINIMUM OF FORTY EIGHT (48) HOURS IN ADVANCE OF THE CLOSURE.

TEMPORARY DETOUR DURATION

THE CONTRACT DOCUMENTS WILL ALLOW THE ROADWAY CLOSURE AND TEMPORARY DETOUR DETAILED ON THIS SHEET TO REMAIN IN PLACE UNTIL AUGUST 24, 2012. THE CONTRACTOR WILL BE EXPECTED TO COMPLETE ALL THE PROPOSED WORK RELATED TO THE CONSTRUCTION OF THE PROPSED BRIDGE AND ROADWAY DURING THIS CLOSURE. THE ROADWAY MUST HAVE THE HMA SURFACE COURSE PLACED AND THE GUARDRAIL INSTALLED BEFORE THE ROADWAY IS OPENED TO TRAFFIC. IF THE SURFACE COURSE AND GUARD RAIL ARE NOT COMPLETE IN THE ALLOWED TIME, ADDITIONAL TRAFFIC CONTROL DEVICES REQUIRED FOR THE COMPLETION OF REMAINING CONSTRUCTION OPERATIONS WILL BE AT THE CONTRACTOR COSTS.

CHANGEABLE MESSAGE SIGN

THE CONTRACTOR SHALL PLACE ELECTRONIC CHANGEABLE MESSAGE SIGNS ON THE NORTH AND SOUTH SIDES OF THE BRIDGE TO WARN THE PUBLIC OF THE PENDING CLOSURE. THE MESSAGE BOARDS WILL NEED TO BE PLACED AND SET OUT FOR SEVEN (7) DAYS IN ADVANCE OF THE ANTICIPATED FIRST DAY OF CONSTRUCTION. THE SIGNS SHALL REMAIN IN PLACE FOR THE SPECIFIED CONTRACT TIME. THE CONTRACTOR WILL COORDINATE WITH THE RESIDENT ENGINEER ON THE EXACT PLACEMENT OF THE MESSAGE BOARDS AND THE MESSAGE THAT IS TO BE DISPLAYED. THE MESSAGE MAY PERIODICALLY BE CHANGED BY THE TOWNSHIP. THERE WILL BE NO ADDITIONAL COMPENSATION FOR CHANGING OF THE MESSAGE(S). THE MESSAGE BOARDS WILL BE PAID FOR AS CHANGEABLE MESSAGE SIGN, PER CALENDAR DAY FOR EACH MESSAGE SIGN UTILIZED.

TEMPORARY INFORMATION SIGN

THE CONTRACTOR SHALL ERECT TEMPORARY INFORMATION SIGNS ON THE NORTH AND SOUTH SIDE OF THE BRIDGE TO INFORM THE PUBLIC OF THE CONSTRUCTION DURATION. THE CONTRACTOR WILL COORDINATE WITH THE RESIDENT ENGINEER ON THE EXACT PLACEMENT OF THE SIGN. THE SIGN SHALL BE IN PLACE FOR THE ENTIRE DURATION OF THE CONTRACT OR AS DIRECTED BY THE RESIDENT ENGINEER. THE TEMPORARY SIGN WILL BE AS DIMENSIONED ON STD. TC22 EXCEPT THE MESSAGE SHALL BE AS DETAILED ON THE DETOUR PLAN. THE SIGNING, WHICH INCLUDES POST AND MOUNTING, WILL BE PAID AS TEMPORARY INFORMATION SIGNING, PER EACH SIGN ERECTED.

CONTACTS

THE CONTRACTOR SHALL COORDINATE ALL MAINTENANCE OF TRAFFIC OPERATIONS WITH ALL MUNICIPALITIES, TOWNSHIP, AND COUNTY ENTITIES WITHIN THE PROJECT LIMITS. THE FOLLOWING IS THE CONTACT FOR THE ST. CHARLES TOWNSHIP HIGHWAY DEPARTMENT.

DONALD SCHLOMANN, SUPERINENDENT, C.U.S.D. 303, 630-513-3030
CARL SCHOEDEL, DIRECTOR, KANE CO. DIVISION OF TRANSPORTATION, 630-584-1170
DONALD BRYANT, DIRECTOR, KANE CO. OFFICE OF EMERGENCY MANAGEMENT, 630-232-5985
POSTMASTER, ST. CHARLES, 60175, 630-584-2318
PATRICK PEREZ, KANE CO. SHERIFF, 630-232-6840
CHRIS MERRIT, CHIEF OF POLICE, SOUTH ELGIN, 847-741-2151
PATRICK MULLEN, CHIEF, ST. CHARLES FIRE DEPARTMENT, 630-377-4458
GREG BENSON, CHIEF, FOX RIVER AND COUNTRYSIDE FIRE/RESCUE DISTRICT, 630-584-3473
RON JOHNSON, HIGHWAY COMMISIONER, ST. CHARLES TOWNSHIP, 630-584-3496
DAVE BOESCH, KANE COUNTY DEPARTMENT OF TRANSPORTATION, 630-845-7875

LIMITATIONS OF CONSTRUCTION

THE CONTRACTOR SHALL COORDINATE THE ITEMS OF WORK IN ORDER TO KEEP HAZARDS AND TRAFFIC INCONVENIENCES TO A MINIMUM, AS SPECIFIED BELOW:

1. DURING THE CONSTRUCTION WHEN THE ROADWAY IS NOT CLOSED, CONSTRUCTION OPERATIONS WILL BE CONDUCTED SO ONE LANE IN EACH DIRECTION ON BURR ROAD REMAINS OPEN.
2. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL THE NECESSARY SIGNS, BARRICADES, CONES, DRUMS, AND LIGHTS FOR THE WARNING AND PROTECTION OF TRAFFIC, AS REQUIRED BY SECTIONS 107 AND 701 THROUGH 703 OF THE STANDARD SPECIFICATIONS, AND AS MODIFIED.
3. THE CONTRACTOR SHALL FURNISH AND ERECT "ROAD CONSTRUCTION AHEAD" SIGNS (W20-1 (O)-48) AT BOTH ENDS OF THE PROJECT AND AT ALL SIDE ROADS WITHIN THE LIMITS OF THIS SECTION WHEN WORKING IN THE VICINITY OF THE SIDE ROAD INTERSECTION.

OFF-PEAK HOURS

FOR CONSTRUCTION OPERATION OUTSIDE THE DESIGNATED DETOUR PERIOD, THE "OFF-PEAK" HOURS ARE DEFINED AS THE DAYTIME HOURS FROM 9:00 A.M. TO 3:00 P.M. AND NIGHT TIME HOURS FROM 9:00 P.M. TO 6:00 A.M., MONDAY THROUGH FRIDAY.

KEEPING ROADS OPEN TO TRAFFIC

THE CONTRACTOR SHALL SCHEDULE HIS/HER SEQUENCE OF OPERATIONS TO PERMIT THE CONSTRUCTION OF THIS SECTION WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR'S SCHEDULE SHALL REFLECT THE FOLLOWING REQUIREMENTS AND SEQUENCE OF CONSTRUCTION. THESE REQUIREMENTS FOLLOW THE SUGGESTED TRAFFIC CONTROL PLAN INCLUDED IN THE DRAWINGS.

1. BURR ROAD MAY BE COMPLETELY CLOSED TO TRAFFIC FOR THE DURATION SPECIFIED IN THE CONTRACT DOCUMENTS.
2. ACCESS TO FIELD AND PRIVATE ENTRANCES SHALL REMAIN OPEN AT ALL TIMES. ON PROPERTIES THAT HAVE MORE THAN ONE ACCESS, ONE ENTRANCE MAY BE TEMPORARILY CLOSED. HOWEVER, VEHICULAR ACCESS MUST REMAIN OPEN TO TRAFFIC FOR THE OPPOSITE ENTRANCE. WHEN IT IS NECESSARY TO CLOSE AN ENTRANCE, THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER AND THE PROPERTY OWNER FORTY-EIGHT (48) HOURS IN ADVANCE OF THE WORK. IN ALL CASES, THE ENTRANCE SHALL BE OPEN AT THE END OF THE WORKDAY.

TRAILER MOUNTED ARROW BOARD

UNLESS OTHERWISE REQUIRED BY A SPECIFIED TRAFFIC CONTROL STANDARD, THE USE OF A TRAILER MOUNTED ARROW BOARD(S) ARE NOT ANTICIPATED FOR THIS PROJECT.

SEQUENCE OF CONSTRUCTION

IN GENERAL, THE STAGING OF CONSTRUCTION FOR THIS SECTION SHALL BE AS FOLLOWS:
MAJOR WORK ITEMS - STAGE 1 BURR ROAD
- COORDINATE UTILITY RELOCATES.
- SET UP CHANGEABLE MESSAGE BOARD.
- SET UP DETOUR AS DETAILED IN THE PLANS.
- SET UP TEMPORARY EROSION CONTROL MEASURES.
- REMOVE EXISTING VEGETATION, PAVEMENTS, AND BRIDGE STRUCTURE (SEE REMOVAL PLANS SHEETS).
- CONSTRUCT THE PROPOSED BRIDGE, SUBGRADE, AGGREGATE BASE COURSES, PAVEMENTS (TO SURFACE), AND UNDERDRAINS.
- CONSTRUCT GUARDRAILS AND SIGNAGE.

MAJOR WORK ITEMS - STAGE 2 - RESTORATION

THESE ITEMS MAY TAKE PLACE AFTER THE ROADWAY IS OPEN TO TRAFFIC.
- PLACE PERMANENT RESTORATION.
- PLACE PERMANENT PAVEMENT MARKINGS.
- FINALIZE PUNCH LIST AND SITE CLEANUP.

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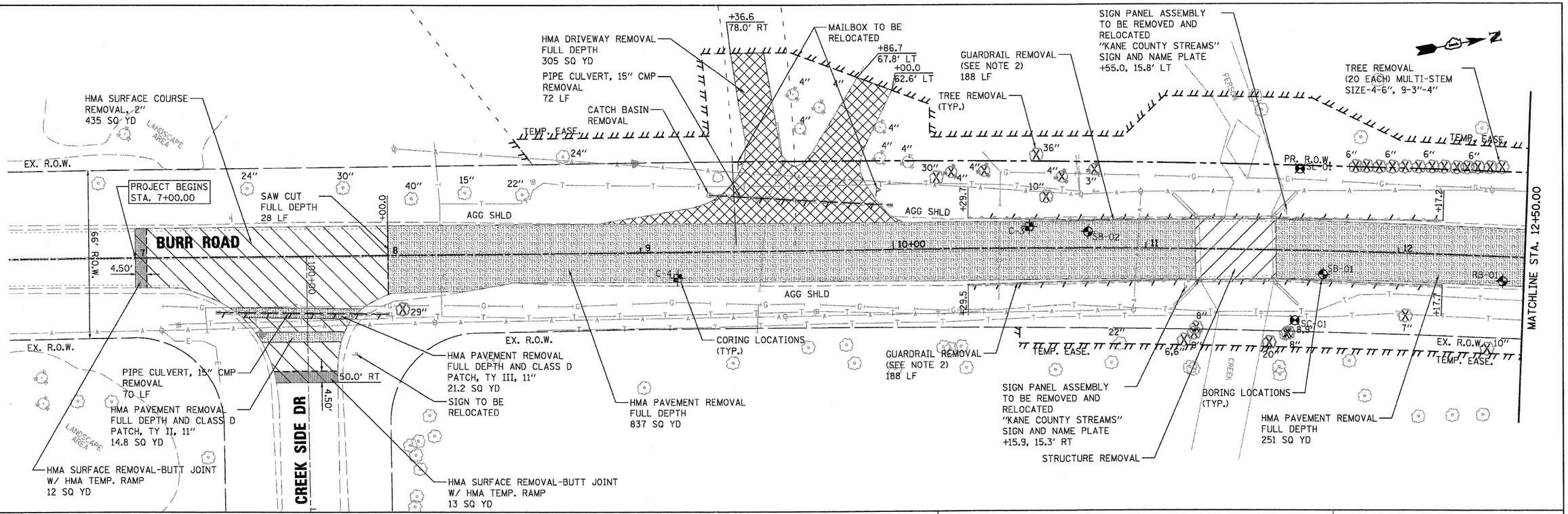
WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174 (630) 443-7755	USER NAME = $USER$	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - NDP	REVISED -	
	PLOT SCALE =	CHECKED - SBP	REVISED -	
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

MAINTENANCE OF TRAFFIC
DETOUR PLAN

SCALE: | SHEET NO. 17 OF 76 SHEETS | STA. | TO STA.

TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	17
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES:

1. ALL REMOVED SIGN PANELS SHALL REMAIN THE PROPERTY OF THE ST. CHARLES TOWNSHIP. ONCE PANELS HAVE BEEN REMOVED THE CONTRACTOR WILL RETURN THEM TO A LOCATION SPECIFIED BY THE TOWNSHIP.
2. ALL GUARDRAIL, POSTS AND TERMINAL SECTIONS SHALL BE REMOVED AND SALVAGED. ALL MATERIALS SHALL BE RETURNED TO A LOCATION SPECIFIED BY ST. CHARLES TOWNSHIP. ANY MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT CONTRACTORS EXPENSE.
3. CLEANING AND GRUBBING PER SEC. 200, SHALL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT SHALL BE INCLUDED IN COST OF EXCAVATION.
4. TREES SMALLER THAN 6" DIAMETER WILL NOT BE MEASURED FOR PAYMENT.

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PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS & REMOVAL PLAN

SCALE: 1"=20' | SHEET NO. 18 OF 76 SHEETS | STA. 7+00 | TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	18
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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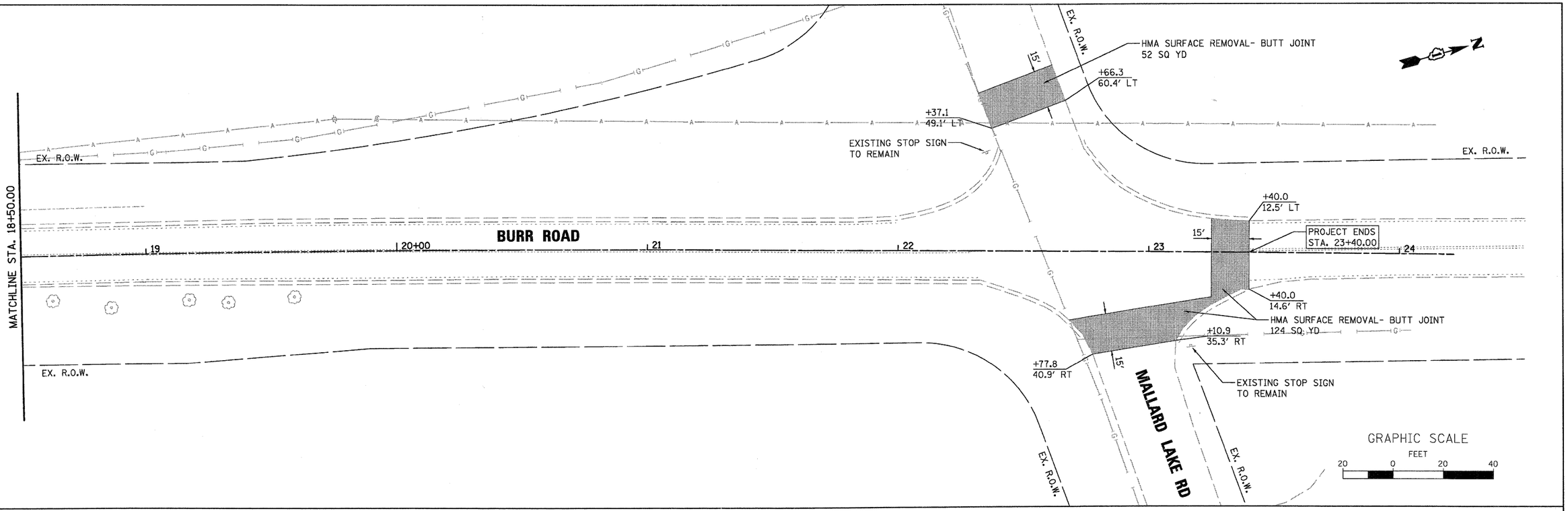

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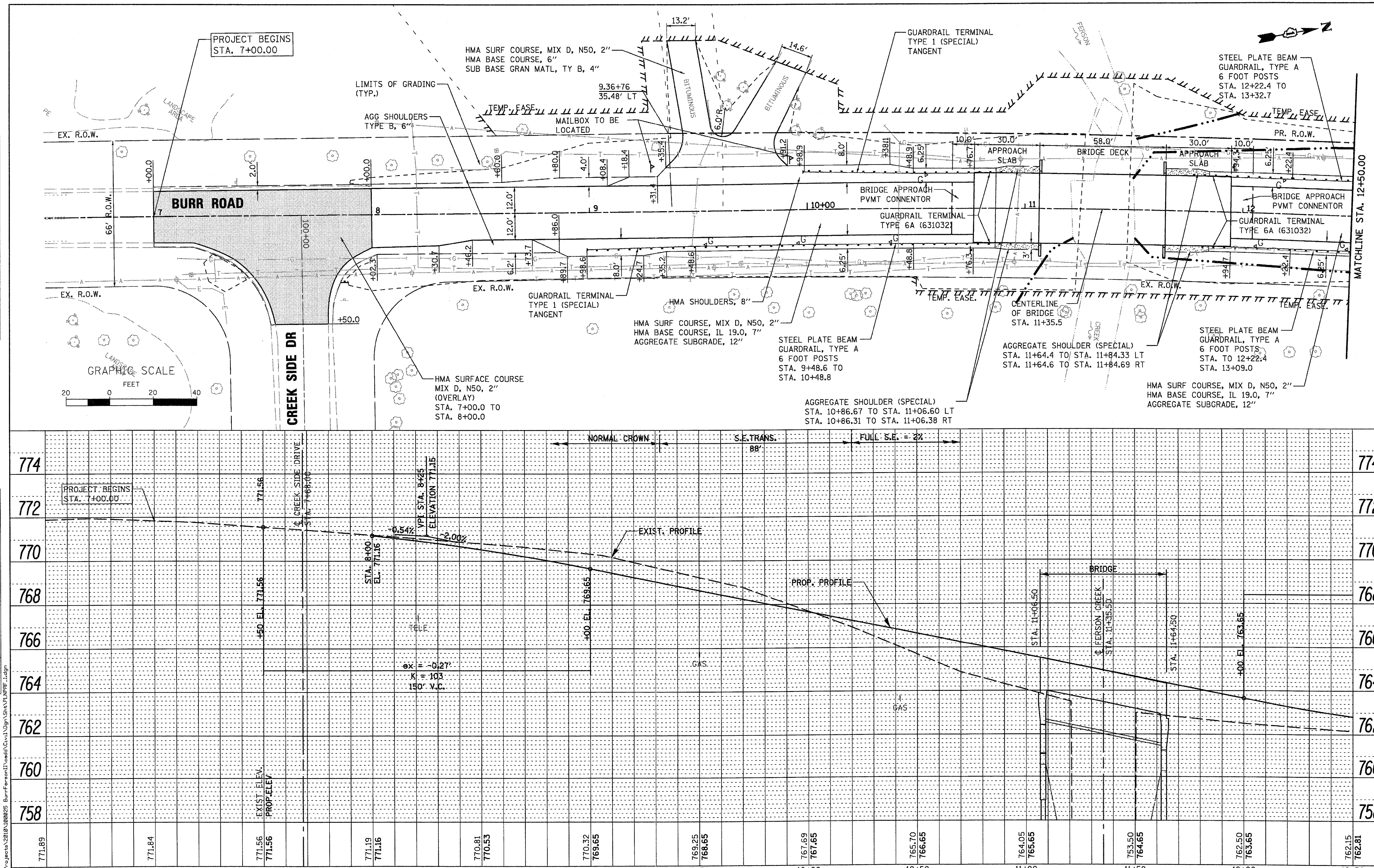
	DRAWN - NDP	REVISED -	
PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING CONDITIONS & REMOVAL PLAN

SCALE: 1"=20' | SHEET NO. 19 OF 76 SHEETS | STA. 18+50 | TO STA. 23+40

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	19
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PROJECT BEGINS
STA. 7+00.00
HMA SURF COURSE, MIX D, N50, 2"
HMA BASE COURSE, 6"
SUB BASE GRAN MATL, TY B, 4"
LIMITS OF GRADING (TYP.)
AGG SHOULDERS TYPE B, 6"
9.36+76
35.48' LT
MAILBOX TO BE LOCATED
TEMP. EASE.
EX. R.O.W.
PR. R.O.W.
13.2'
14.6'
BITUMINOUS
GUARDRAIL TERMINAL TYPE 1 (SPECIAL) TANGENT
STEEL PLATE BEAM GUARDRAIL, TYPE A
6 FOOT POSTS
STA. 12+22.4 TO
STA. 13+32.7
APPROACH SLAB
BRIDGE DECK
BURR ROAD
66' R.O.W.
BRIDGE APPROACH PVMT CONNENTOR
GUARDRAIL TERMINAL TYPE 6A (631032)
MATCHLINE STA. 12+50.00
GUARDRAIL TERMINAL
TYPE 1 (SPECIAL)
TANGENT
HMA SHOULDERS, 8"
HMA SURF COURSE, MIX D, N50, 2"
HMA BASE COURSE, IL 19.0, 7"
AGGREGATE SUBGRADE, 12"
STEEL PLATE BEAM
GUARDRAIL, TYPE A
6 FOOT POSTS
STA. 9+48.6 TO
STA. 10+48.8
CENTERLINE OF BRIDGE
STA. 11+35.5
AGGREGATE SHOULDER (SPECIAL)
STA. 11+64.4 TO STA. 11+84.33 LT
STA. 11+64.6 TO STA. 11+84.69 RT
STEEL PLATE BEAM
GUARDRAIL, TYPE A
6 FOOT POSTS
STA. TO 12+22.4
STA. 13+09.0
HMA SURF COURSE, MIX D, N50, 2"
HMA BASE COURSE, IL 19.0, 7"
AGGREGATE SUBGRADE, 12"
AGGREGATE SHOULDER (SPECIAL)
STA. 10+86.67 TO STA. 11+06.60 LT
STA. 10+86.31 TO STA. 11+06.38 RT
HMA SURFACE COURSE
MIX D, N50, 2"
(OVERLAY)
STA. 7+00.0 TO
STA. 8+00.0
CREEK SIDE DR
GRAPHIC SCALE
FEET
20 0 20 40
NORMAL CROWN
S.E.TRANS.
88'
FULL S.E. = 2%
PROJECT BEGINS
STA. 7+00.00
CREEK SIDE DRIVE STA. 7+68.00
VPI STA. 8+25
ELEVATION 771.15
-0.54%
-2.00%
STA. 8+00
EL. 771.16
EXIST. PROFILE
PROP. PROFILE
+50 EL. 771.56
+00 EL. 769.65
ex = -0.27'
K = 103
150' V.C.
BRIDGE
STA. 11+06.50
FERSON CREEK STA. 11+35.50
STA. 11+64.50
+00 EL. 763.65
TELE
GAS
EXIST.ELEV.
PROP.ELEV.
774 772 770 768 766 764 762 760 758
771.89
771.84
771.56 771.56
771.19 771.16
770.81 770.53
770.32 769.65
769.25 768.65
767.69 767.65
765.70 766.65
764.05 765.65
753.50 764.65
762.50 763.65
762.15 762.81
6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50

WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -	
		DRAWN - NDP	REVISED -	
	PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

SCALE: 1"=20' | SHEET NO. 20 OF 76 SHEETS | STA. 7+00 TO STA. 12+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	20
		CONTRACT NO. 63645		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

FILE NAME = W:\Projects\2010\100025 BurrFerson\cadd\Civil\Dgn\Sht\PLNPRF_1.dgn

STEEL PLATE BEAM GUARDRAIL, TYPE A
6 FOOT POSTS
STA. 12+22.4 TO STA. 13+34.5

13+41.01
40.87' LT

13+42.80
33.91' LT

GUARDRAIL TERMINAL TYPE 1 (SPECIAL) TANGENT

TEMP. EASE.

PR. R.O.W.

EX. R.O.W.

LANDSCAPE AREA

BITUMINOUS

BRICK PAVER

MATCHLINE STA. 12+50.00

HMA SHOULDERS, 8"

AGG SHOULDERS, 6" TYPE B

AGG. WEDGE SHOULDER TYPE B

BURR ROAD

80' R.O.W.

21' TO 23'

2' TYP.

AGG. WEDGE SHOULDER TYPE B

HMA SURF COURSE, MIX D, N50, 2"
W/ HMA LEVELING BINDER COURSE, N50

MATCHLINE STA. 18+50.00

LIMITS OF GRADING (TYP.)

HMA SURF COURSE, MIX D, N50, 2"
HMA BASE COURSE, IL 19.0, 7"
AGGREGATE SUBGRADE, 12"

FULL DEPTH RECONSTRUCTION
HMA RESURFACING

STEEL PLATE BEAM GUARDRAIL, TYPE A
6 FOOT POSTS
STA. TO 12+22.4
STA. 13+10.1

GUARDRAIL TERMINAL TYPE 1 (SPECIAL) TANGENT

GRAPHIC SCALE
FEET
20 0 20 40

PLAN
SURVEYED
ALIGNMENT CHECKED
TOP OF WAY CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
ALIGNMENT
GRADES CHECKED
B.M. NOTED
STRUCTURE NO(S)
NOTE BOOK
NO.
BY
DATE

FULL S.E. = 2%
+58
S.E. TRANS. 88'
+46
NORMAL CROWN

ex = 1.31'
K = 80
350' V.C.

LOW POINT STA. 13+60.65
ELEVATION 762.08

VPI STA. 13+75
ELEVATION 760.15

-2.00%
+2.31%

+50 EL. 764.30

STA. 15+70
EL. 764.77

PROP. PROFILE

EXIST. PROFILE

EXIST. ELEV.
PROP. ELEV.

12+50	13+00	13+50	14+00	14+50	15+00	15+50	16+00	16+50	17+00	17+50	18+00	18+50
762.15 / 762.81	761.95 / 762.27	761.84 / 762.05	762.12 / 762.15	762.61 / 762.55	763.45 / 763.27	764.36 / 764.30	765.45 / 765.62	766.65 / 766.82	767.98 / 768.15	769.62 / 769.79	771.52 / 771.69	773.74 / 773.91

772 770 768 766 764 762 760 758 756

FILE NAME = W:\Projects\2010\100825 BurrFarson11\cadd\Civil\Dgn\Sht\PLNPRF_2.dgn

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St. Charles, Illinois 60174

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	DRAWN - NDP	REVISED -	
PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

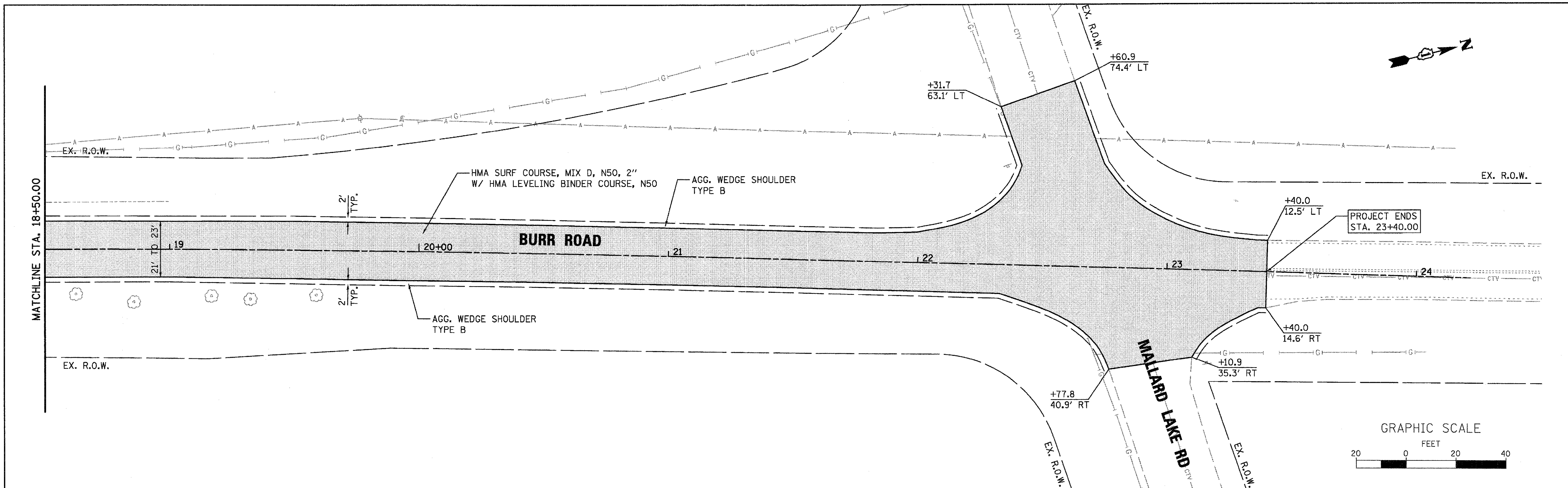
PLAN & PROFILE

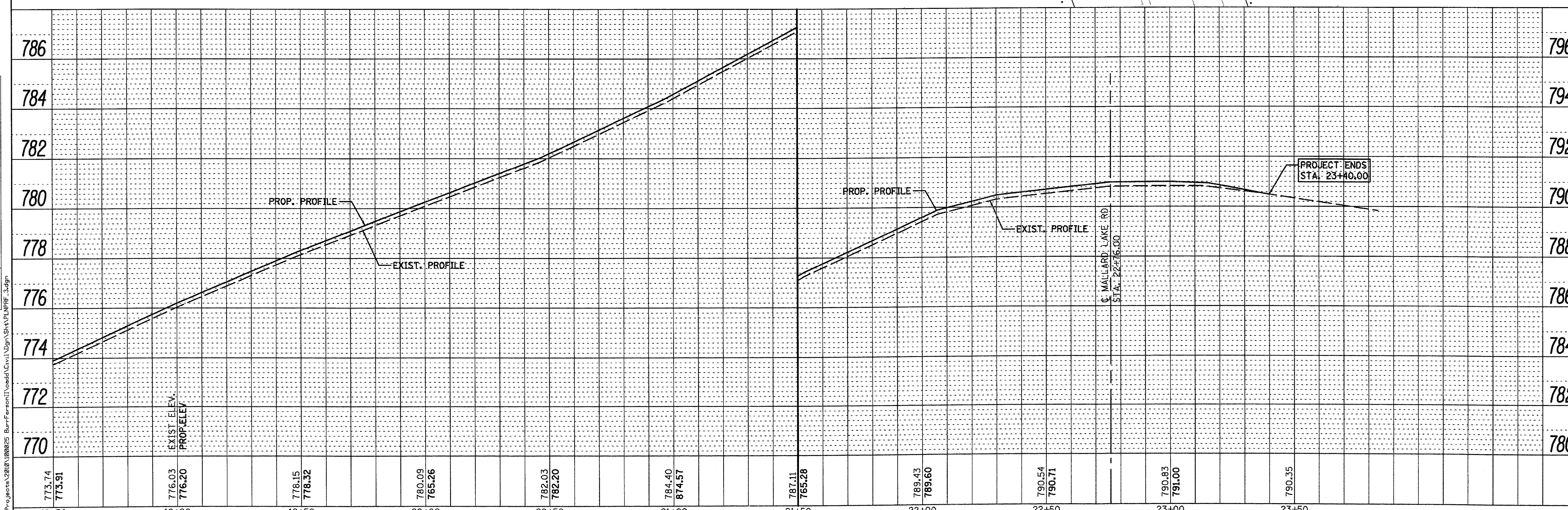
SCALE: 1"=20' | SHEET NO. 21 OF 76 SHEETS | STA. 12+50 | TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	21

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT





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PLAN — NOTE BOOK NO. — SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK NO. — SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTAT'NS CHK'D — BY — DATE

WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nporris	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

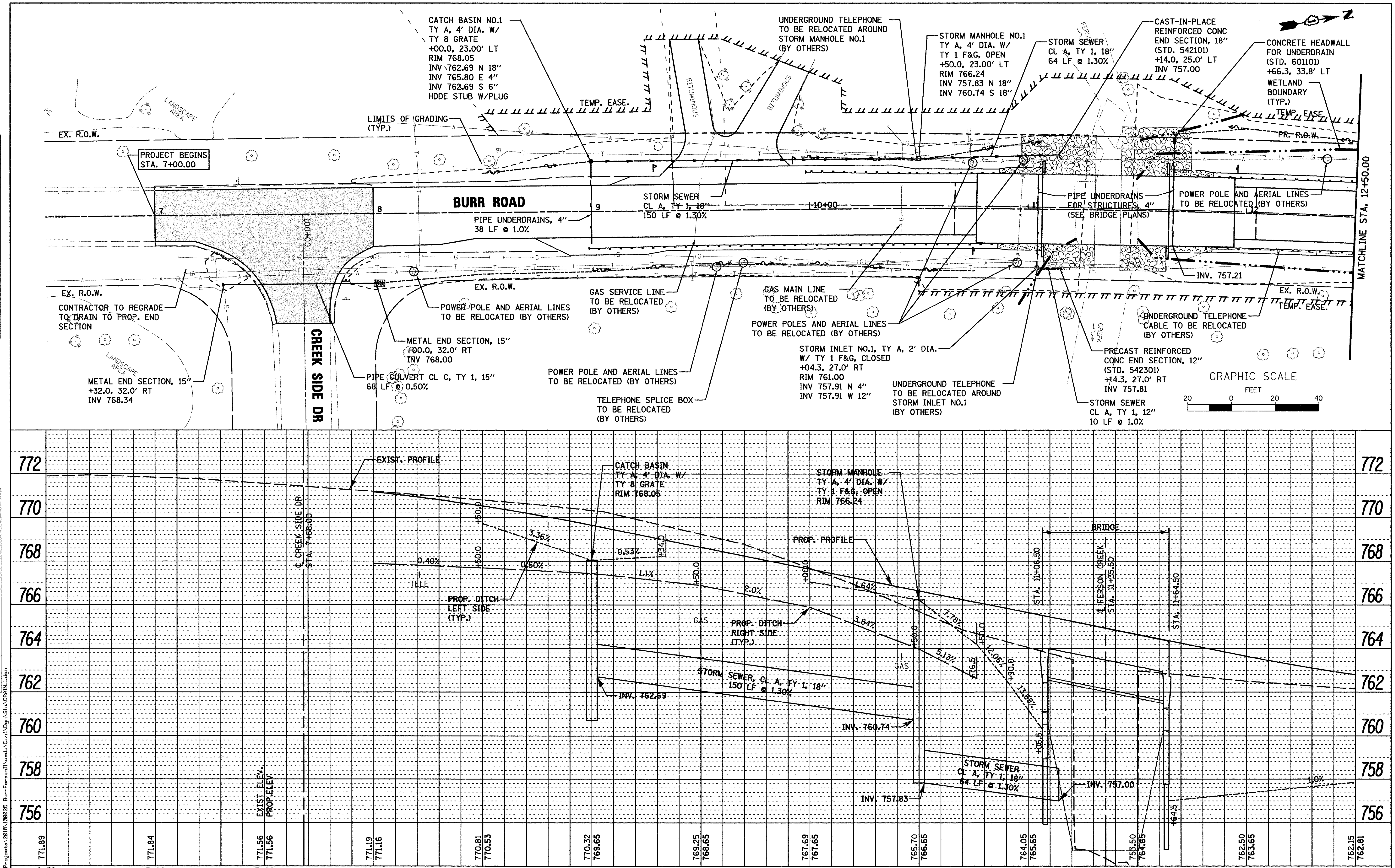
PLAN & PROFILE

SCALE: 1"=20' | SHEET NO. 22 OF 76 SHEETS | STA. 18+50 TO STA. 23+40

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	22

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -
		DRAWN - NDP	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -
	PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -

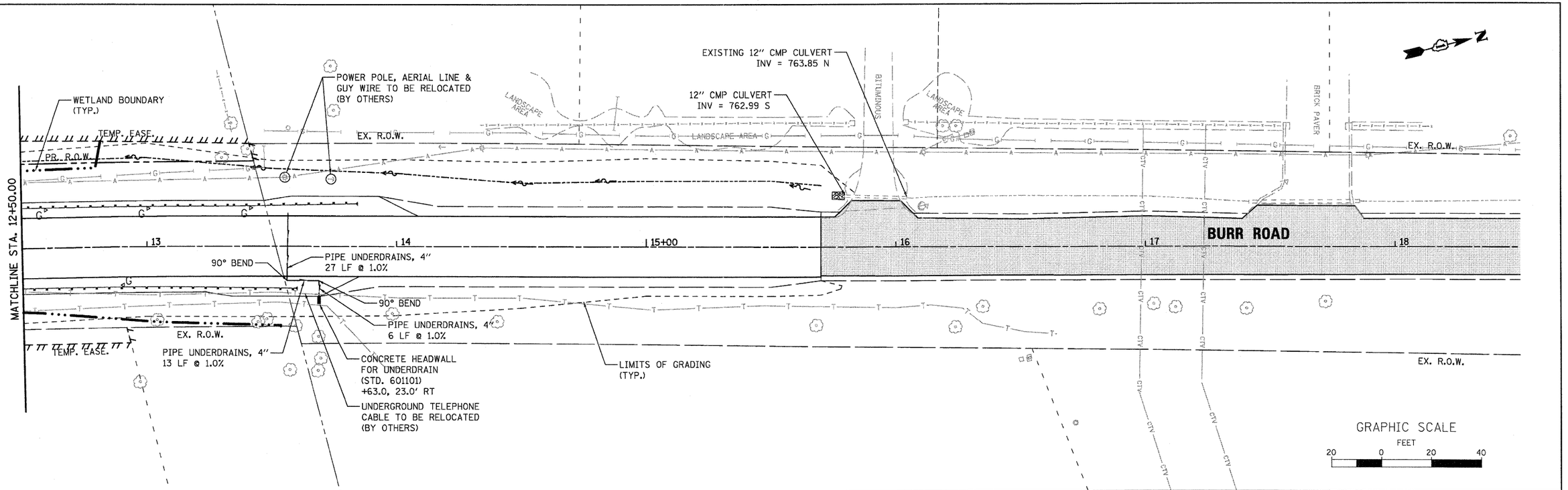
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE & UTILITY PLAN

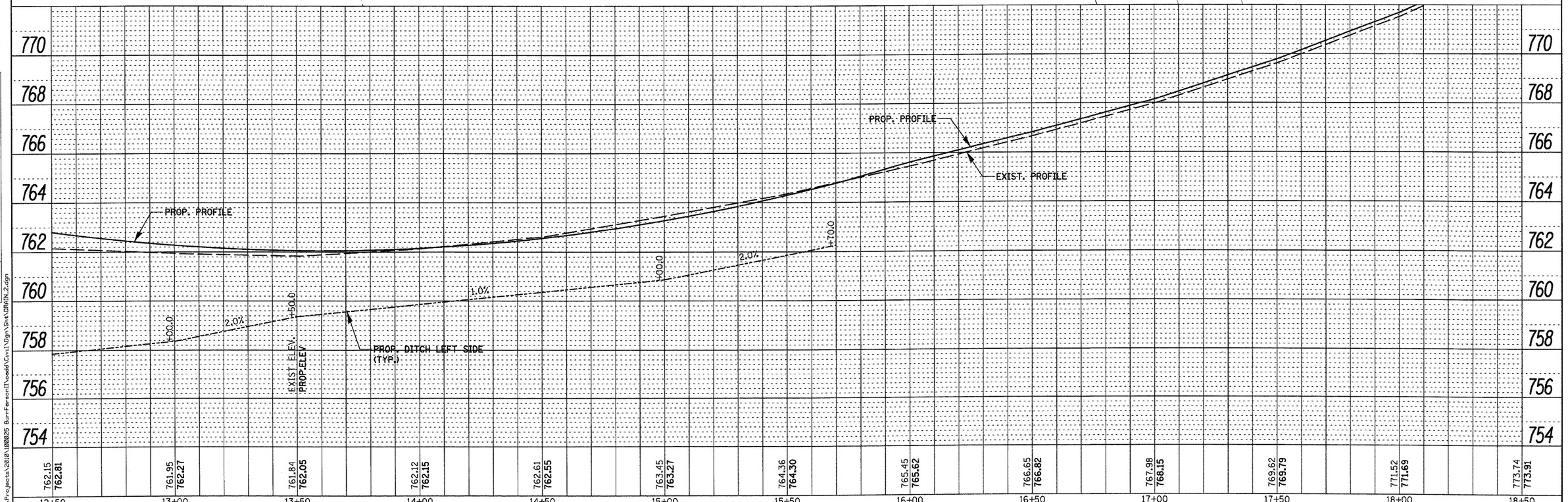
SCALE: 1"=20' | SHEET NO. 23 OF 76 SHEETS | STA. 7+00 TO STA. 12+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	23
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PLAN
SURVEYED
DRAWN
ALIGNMENT CHECKED
GRADES CHECKED
B.M. NOTED
STRUCTURE NO(S).
NOTE BOOK
NO.
BY
DATE



PROFILE
SURVEYED
DRAWN
GRADES CHECKED
B.M. NOTED
STRUCTURE NO(S).
NOTE BOOK
NO.
BY
DATE



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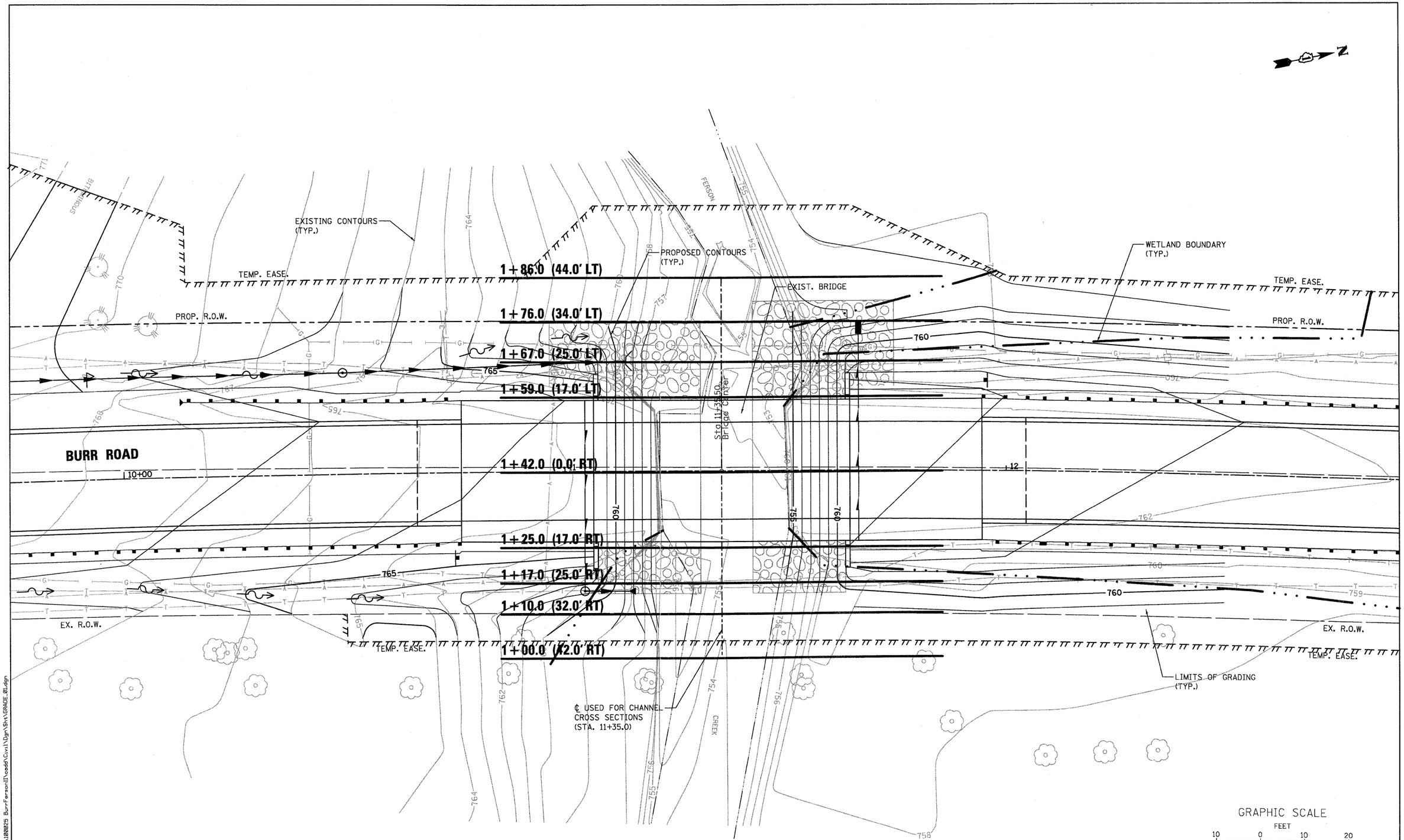
		DRAWN - NDP	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE & UTILITY PLAN

SCALE: 1"=20' | SHEET NO. 24 OF 76 SHEETS | STA. 12+50 | TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	24
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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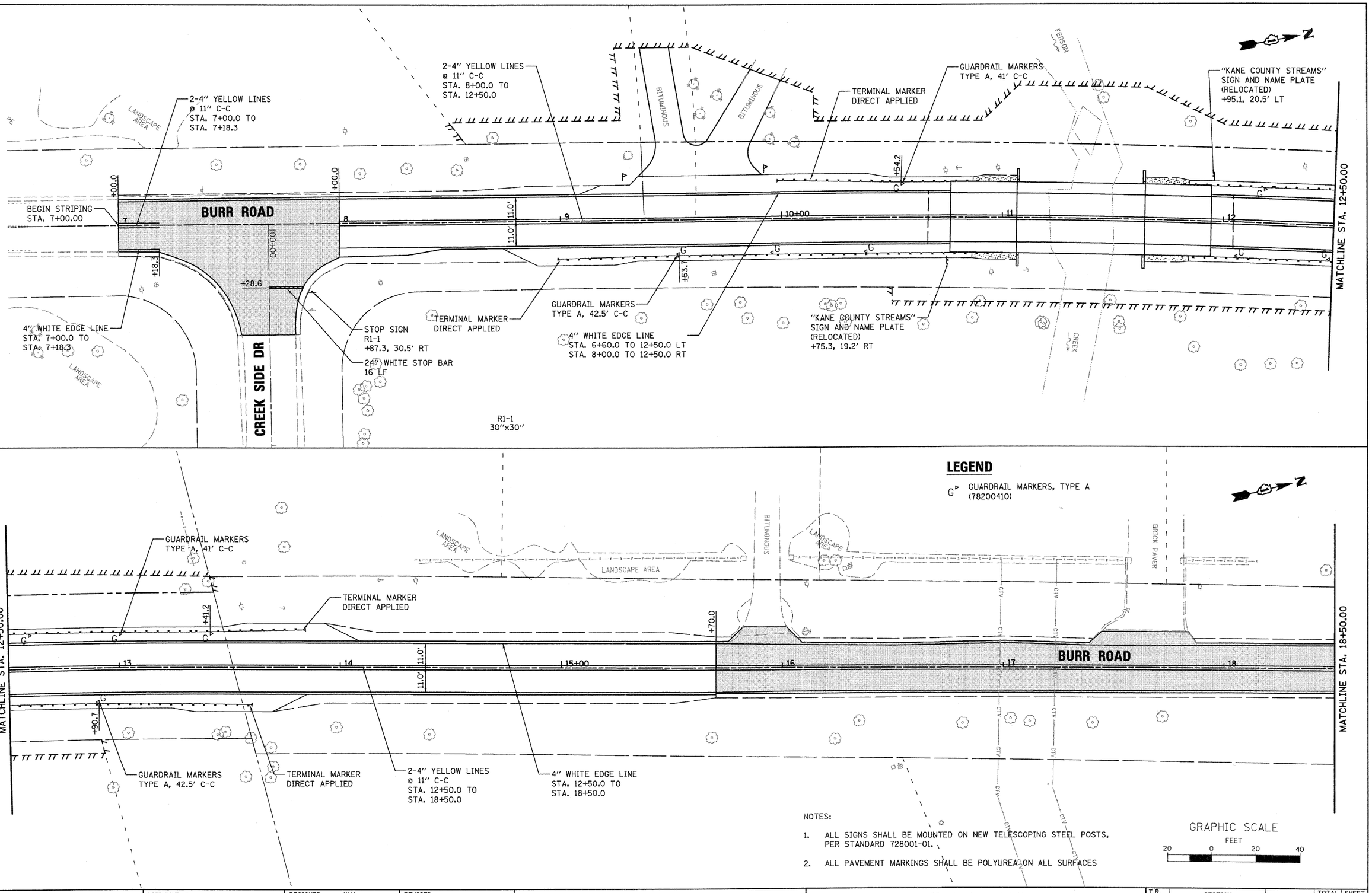
WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nporris	DESIGNED - KMA	REVISED -
		DRAWN - NDP	REVISED -
	PLOT SCALE = 1"=10'	CHECKED - SBP	REVISED -
	PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GRADING PLAN

SCALE: 1"=10' | SHEET NO. 25 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	25
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. ALL SIGNS SHALL BE MOUNTED ON NEW TELESCOPING STEEL POSTS, PER STANDARD 728001-01.
2. ALL PAVEMENT MARKINGS SHALL BE POLYUREA ON ALL SURFACES

GRAPHIC SCALE
FEET
20 0 20 40

FILE NAME = W:\Projects\2810\100825 BurrFersonIT\cadd\Civil\Dgn\Sht\PMK_1.dgn

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116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -
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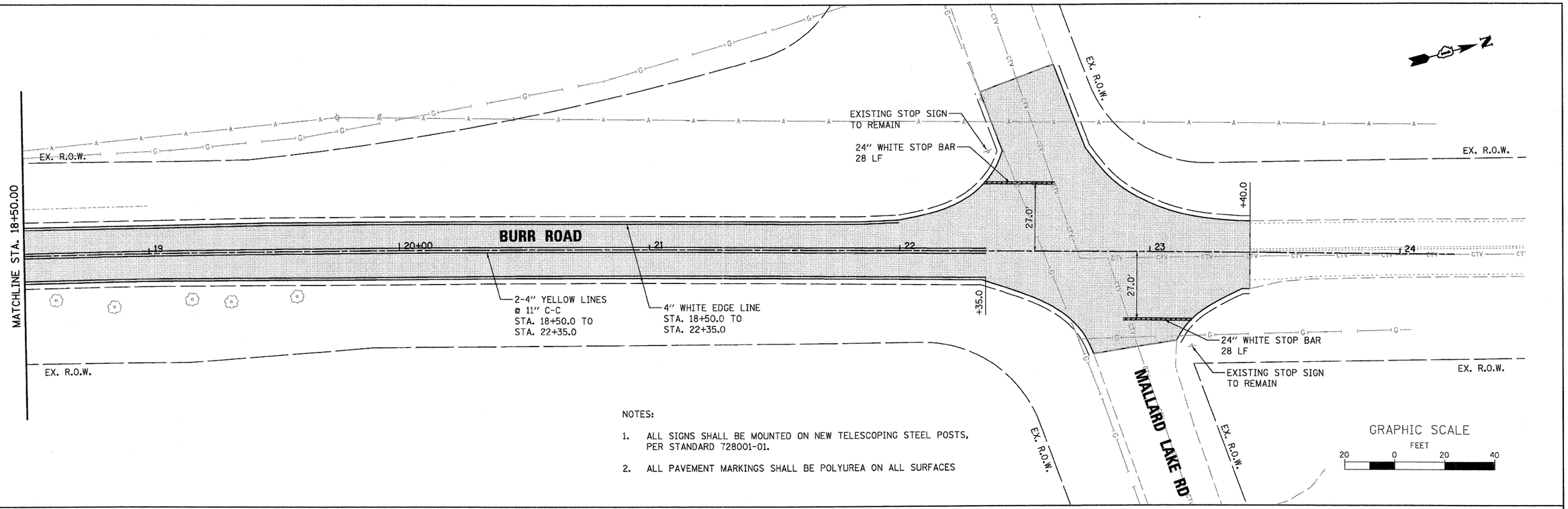
PLOT SCALE = 1'=28'	CHECKED - SBP	REVISED -
PLOT DATE = 12/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING & SIGNING PLAN

SCALE: 1"=20' | SHEET NO. 26 OF 76 SHEETS | STA. 7+00 | TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	26
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. ALL SIGNS SHALL BE MOUNTED ON NEW TELESCOPING STEEL POSTS, PER STANDARD 728001-01.
2. ALL PAVEMENT MARKINGS SHALL BE POLYUREA ON ALL SURFACES

FILE NAME = W:\Projects\2210\100825 BurrFerson1\cadd\Civil\Dgn\Sht\PMK_2.dgn

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116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING & SIGNING PLAN

SCALE: 1"=20' | SHEET NO. 27 OF 76 SHEETS | STA. 18+50 | TO STA. 23+40

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	27
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACTOR SHALL NOT PARK ANY HEAVY EQUIPMENT ADJACENT TO THE TREES FROM STA. 8+00.0 TO 8+80.0

PROJECT BEGINS STA. 7+00.00

SEEDING CL 1 (0.03 AC) AND EROSION CONTROL BLANKET, 129 SQ YD

SEEDING CL 2A (0.08 AC) AND EROSION CONTROL BLANKET, 398 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 38 LF

SEEDING CL 1 (0.02 AC) AND EROSION CONTROL BLANKET, 103 SQ YD

SEEDING CL 4 (MOD) (0.01 AC) SEEDING CL 5 (MOD) (0.01 AC) AND HD EROSION CONTROL BLANKET 54 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 114 LF

SEEDING CL 1 (0.03 AC) AND EROSION CONTROL BLANKET, 150 SQ YD

SEEDING CL 2A (0.03 AC) AND EROSION CONTROL BLANKET, 129 SQ YD

SEEDING CL 1 (0.04 AC) AND EROSION CONTROL BLANKET, 177 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 304 LF

TEMPORARY FENCE, TREE PROTECTION (TYP.)

PERIMETER EROSION BARRIER (TEMPORARY) 148 LF

SEEDING CL 2A (0.03 AC) AND EROSION CONTROL BLANKET, 154 SQ YD

TEMPORARY PIPE AND INLET PROTECTION W/ INLET FILTER

WETLAND BOUNDARY (TYP.)

TEMPORARY PIPE AND INLET PROTECTION

RIPRAP, CL A3 2 SQ YD

SEEDING CL 2A (0.08 AC) AND EROSION CONTROL BLANKET, 393 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 337 LF

TEMPORARY DITCH CHECKS (TYP.)

SEEDING CL 4 (MOD) (0.03 AC) SEEDING CL 5 (MOD) (0.03 AC) AND HD EROSION CONTROL BLANKET 140 SQ YD

TURBIDITY CURTAIN 197 LF

SEEDING CL 4 (MOD) (0.03 AC) SEEDING CL 5 (MOD) (0.03 AC) AND HD EROSION CONTROL BLANKET 162 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 103 LF

SEEDING CL 2A (0.03 AC) AND EROSION CONTROL BLANKET, 126 SQ YD

EROSION CONTROL BLANKET W/ PERMANENT SEEDING BEYOND TURF REINFORCEMENT MAT

DITCH LIMITS

VAR.

EROSION CONTROL BLANKET W/ PERMANENT SEEDING BEYOND TURF REINFORCEMENT MAT

TURF REINFORCEMENT MATS W/ PERMANENT SEEDING (FINAL DITCH SLOPES)

BURR ROAD

CREEK SIDE DR

EX. R.O.W.

66' R.O.W.

80' R.O.W.

TEMP. EASE.

PR. R.O.W.

MATCHLINE STA. 12+50.00

TURF REINFORCEMENT MAT

STA. 10+50.00 TO STA. 11+06.50 RT/LT

SEEDING CL 1 (0.02 AC) AND EROSION CONTROL BLANKET, 75 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 321 LF

SEEDING CL 2A (0.16 AC) AND EROSION CONTROL BLANKET, 776 SQ YD

TEMPORARY DITCH CHECKS (TYP.)

RIPRAP, CL A3 2 SQ YD

WETLAND BOUNDARY (TYP.)

SEEDING CL 4 (MOD) (0.03 AC) SEEDING CL 5 (MOD) (0.03 AC) AND HD EROSION CONTROL BLANKET 146 SQ YD

TEMPORARY TREE TRUNK PROTECTION (TYP.)

SEEDING CL 2A (0.11 AC) AND EROSION CONTROL BLANKET, 541 SQ YD

PERIMETER EROSION BARRIER (TEMPORARY) 333 LF

LEGEND

- SEEDING CL 2A AND EROSION CONTROL BLANKET
- SEEDING CL 4 (MOD) SEEDING CL 5 (MOD) AND HD EROSION CONTROL BLANKET
- SEEDING CL 1 AND EROSION CONTROL BLANKET
- TEMPORARY PIPE & INLET PROTECTION
- TEMPORARY TREE TRUNK PROTECTION
- TEMPORARY DITCH CHECK (ROLLED EXCELSIOR LOGS)
- TEMPORARY FENCE, TREE PROTECTION
- WETLAND BOUNDARY
- PERIMETER EROSION BARRIER (TEMPORARY)
- TURBIDITY CURTAIN

GRAPHIC SCALE
FEET
20 0 20 40

FILE NAME = W:\Projects\2010\100025 BurrFarsonII\coadd\Civil\Dgn\Sht\EROs_01.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE = 1"=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

SCALE: 1"=20' | SHEET NO. 28 OF 76 SHEETS | STA. 7+00 TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	28
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EROSION CONTROL INSPECTION

ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT.

WINTER SHUT DOWN

A WINTER SHUT DOWN IS NOT ANTICIPATED FOR THIS PROJECT. BUT IN THE EVENT THAT UNAVOIDABLE CIRCUMSTANCE REQUIRE A WINTER SHUT DOWN, THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

TEMPORARY DITCH CHECKS

TEMPORARY DITCH CHECKS WILL BE REQUIRED AT THOSE LOCATIONS WHERE THE CONTRACTORS OPERATIONS REQUIRE TEMPORARY OR PERMENTENT DITCHES. THE LOCATION OF TEMPORARY DITCH CHECKS ARE SHOWN ON THE PLANS. THE EXACT LOCATION MAY REQUIRE FIELD ADJUSTMENT AND WILL BE COORDINATED IN THE FIELD WITH THE ENGINEER. THE QUANTITIES INCLUDE A PLAN ALLOWANCE OF EIGHT (8) ADDITIONAL TEMPORARY DITCH CHECKS FOR MAINTENANCE PURPOSES.

PERIMETER EROSION BARRIER (SILT FENCE)

PERIMETER EROSION CONTROL BARRIER (SILT FENCE) SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS. THE PERIMETER EROSION CONTROL BARRIER SHALL BE CONSTRUCTED AS DETAIL ON IDOT STANDARD 280001 AND AS SPECIFIED IN SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

STOCK PILE LOCATIONS AND PROTECTING STOCK PILE AREAS

STOCK PILES SHOULD BE BE PLACED IN OR NEAR CRITICAL AREAS, OR AREAS THAT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS TO STROMWATER FACILTIES.

CONTRACTOR MAY OPT TO STOCK PILES MATERIAL. STAGING OF THE PROJECT IS AT HIS DISCRETION OF THE CONTRACTOR AND COORDINATION OF STOCK PILES WILL BE WITH ST. CHARLES TOWNSHIP AND KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD). STOCKPILES OF SOIL AND OTHER CONSTRUCTION MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES, NOT BEING ACTIVELY WORKED AND TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

STABILIZED CONSTRUCTION AREA

STABILIZATION OF THE CONSTRUCTION AREA SHOULD TAKE PLACE AT THE END OF EACH WORK DAY.

WORK IN FLOWING WATER

NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR THE CRITICAL AREAS SHOULD BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOW. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS

DEWATERING

WHEN DEWATERING THE CONSTRUCTION AREA IS NECESSARY, ALL WATERS SHALL BE FILTERED BY USING FILTER BAGS OR AN ALTERNATIVE MEASURE APPROVED BY THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT. ALL FILTER BAGS MUST HAVE SECONDARY CONTAINMENT DEVICES, AND SHOULD BE PLACED ON LEVEL GROUND. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING ALLOWED TO RETURN TO THE ORIGINAL CREEK. THE DISCHARGE SHALL BE DESIGNED SO THAT RETURNING WATERS DO NOT CAUSE EROSION. THE CONTRACTOR WILL COORDINATE THE METHOD, DESIGN AND LOCATION OF THE DEWATERING PLAN AND FILTER BAG(S) WITH KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT AT THE PRE-CONSTRCUTION MEETING.

KEEPING PAVEMENTS CLEAN

THE CONTRACTOR WILL KEEP ALL PERMANENT PAVEMENT SURFACES CLEAN OF DIRT OR CONSTRUCTION DEBRIS. THE PAVEMENT SHALL BE CLEANED AT THE END OF EACH DAYS OPERATION OR MORE FREQUENTLY AS REQUIRED BY THE ENGINEER IF THE DEBRIS IS DEEMED TO BE A HAZARD TO THE MOTORING PUBLIC.

GENERAL NOTES

A) UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED FEBRUARY 2002.

B) THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

C) A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

D) PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW BY THE KDSWCD.

E) THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.

F) DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING DIRECTLY INTO FIELD TILES, STORMWATER STRUCTURES, OR OTTER CREEK IS PROHIBITED.

G) IT IS THE RESPONSIBILITY OF THE OWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING						*	*	A				
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C									
EROSION CONTROL BLANKET								D				

A. CLASS 1
CLASS 2A
CLASS 4 (MODIFIED)
CLASS 5 (MODIFIED)

B. INCREASE SEEDING RATES BY 25% WHEN DORANT SEEDING (NOT ANTICIPATED)

C. TEMPORARY SEEDING (PERENIAL RYE GRASS, SPRING OATS)

D. EROSION CONTROL BLANKET (EXCELSIOR) AND HEAVY DUTY EROSION CONTROL BLANKET (PERMANENT SEED AREAS ONLY)

* IRRIGATION MAY BE NEEDED DURING JUNE AND JULY

NOTE: SEEDING TO BE COMPLETED PER REQUIREMENTS OF SECTION 250 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES.

STABILIZED CONSTRUCTION ENTRANCE

A STABILIZED CONSTRCUTION ENTRANCE IS NOT ANTICIPATED FOR THIS PROJECT. HOWEVER, IF IT IS DETERMINED BY THE ENGINEER OR THE KANE-DUPAGE SOIL AND WATER CONVERSATION DISTRICT THAT THE CONTRACTOR OPERATIONS REQUIRE A STABILIZED ENTRANCE, UANTITY HAS BEN INCLUDED IN THE PROJECT TO COMPLETE THIS WORK. THERE WILL BE NO ADJUSTMENT TO THE CONTRACT IF THE ENTRANCE IS NOT CONSTRUCTED. THE CONTRACTOR WILL SUBMIT THE LOCATION AND DETAILS TO KDSWCD FOR APPROVAL.

CONSTRUCTION SEQUENCE NOTES

A) TURBIDITY CURTAINS SHOULD BE PLACED IN THE CREEK PRIOR TO ANY DEMOLITION TO THE BRIDGE DECK AND/OR PIERS.

B) CONSTRUCTION OF PIERS, EMBANKMENT AND RIP RAP ARE ANTICIPATED TO REQUIRE WORK WITHIN THE CREEK, WORK MUST BE TIMED TO TAKE PLACE DURING LOW FLOW CONDITIONS.

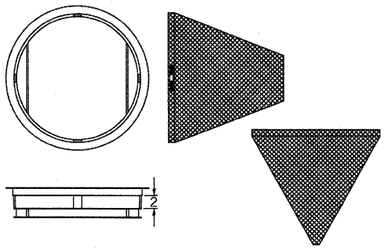
C) BYPASS IS NOT ANTICIPATED FOR THIS PROJECT. HOWEVER, IF BYPASS IS NECESSARY, THE INLET OF THE HOSE SHALL BE PLACED IN A SUMP PIT AND THE OUTLET PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE CREEK FLOW.

D) IF DEWATERING THE CONSTRUCTION AREA IS NECESSARY, ALL WATERS SHALL BE FILTERED BY USING FILTER BAGS OR AN ALTERNATIVE MEASURE. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING ALLOWED TO RETURN TO THE ORIGINAL CREEK.

E) THE SIDE SLOPES MUST BE RESEEDED AND STABILIZED WITH AN APPROPRIATE EROSION CONTROL BLANKET PRIOR TO ACCEPTING FLOWS. THE BOTTOM OF THE SWALE MUST BE BROUGHT BACK TO ITS ORIGINAL GRADE AND STABLE ENOUGH TO ACCEPT FLOWS.

DEWATERING - BASIS OF PAYMENT

DEWATERING FOR ALL CONSTRUCTION OPERATIONS WILL NOT BE MEASURED SEPERATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF CONCRETE STRCUTURES. DEWATERING WILL INCLUDE MEANS, METHODS AND ALL MATERIALS TO DEWATER AND TO PROVIDE FILTRATION OF WATERS BEFORE RE-ENTERING THE CREEK.



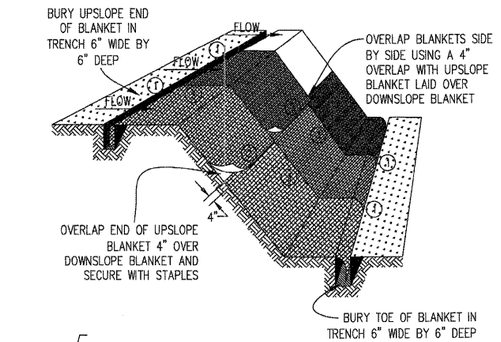
ROUND CATCH ALL

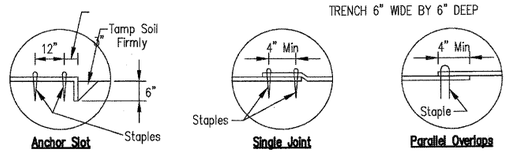
NOTES:

FRAME: TOP FLANGE FABRICATED FROM 1¼"x1¼"x⅛" ANGLE. BASE RIM FABRICATED FROM 1½"x½"x⅛" CHANNEL. HANDELS AND SUSPENSION BRACKETS FABRICATED FROM 1¼"x¼" FLAT STOCK. ALL STEEL CONFORMING TO ASTM-A36.

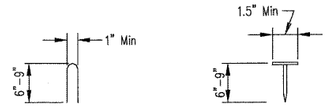
SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SQ.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL BAND AND LOCK.

INLET FILTER DETAIL





DETAIL 1 DETAIL 2 DETAIL 3

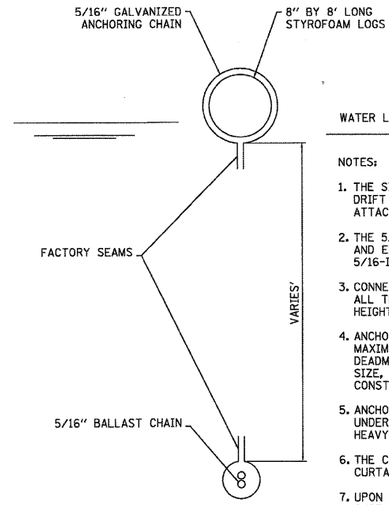


STAPLE DETAIL PUSH PIN DETAIL

NOTES:

1. STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER S.Y. FOR STITCHED BLANKETS. NON-STICHED SHALL USE 4 STAPLES PER S.Y. OF MATERIAL. THIS EQUATES TO 200 STAPLES WITH STITCHED BLANKET AND 400 STAPLES WITH NON-STICHED BLANKET PER 100 S.Y. OF MATERIAL
2. STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS. (MINIMUM STAPLE LENGTH IS 6")
3. EROSION CONTROL MATERIAL SHALL BE PLACED IN CONTACT WITH THE SOIL OVER A PREPARED SEEDBED.
4. ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

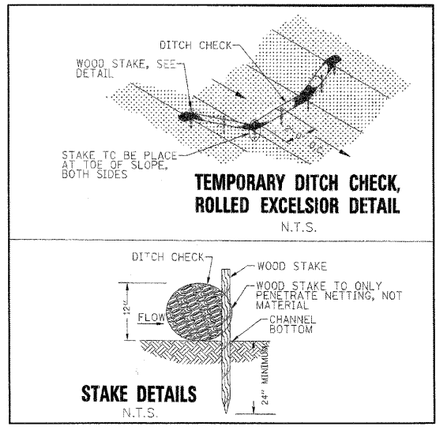
EROSION CONTROL BLANKET INSTALLATION DETAILS



NOTES:

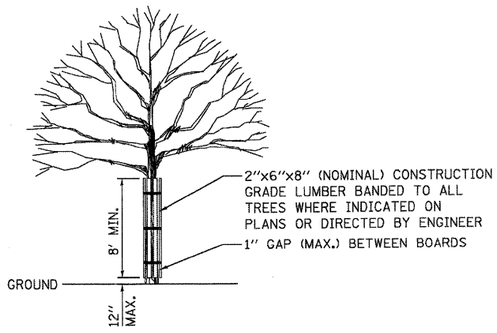
1. THE SILT CURTAIN SHALL BE INSTALLED IN SUCH A MANNER AS TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. THE FLOATATION LOG SHALL BE SECURELY ATTACHED TO THE FABRIC IN BOTH THE HORIZONTAL AND VERTICAL DIRECTION.
2. THE 5/16-INCH CABLE SHALL BE ATTACHED ABOVE THE FLOATATION MEMBERS AND EXTEND THE ENTIRE LENGTH OF EACH SECTION OF SILT CURTAIN. A 5/16-INCH CHAIN SHALL BE SEALED ON THE LOWER HEM FOR BALLAST.
3. CONNECTORS SHALL JOIN THE MAIN LOAD LINE AND BALLAST CHAIN TO CARRY ALL TENSILE PRESSURE. THE FABRIC SHALL BE JOINTED FOR ITS ENTIRE HEIGHT.
4. ANCHORAGE'S SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE TO MAXIMUM STABILITY. SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE, TYPE AN STRENGTH TO STABILIZE THE BARRIER BEYOND THE CONSTRUCTION AREA.
5. ANCHORS SHALL BE BUOYED TO PREVENT THE SILT CURTAIN FROM BEING PULLED UNDER WATER. DANFORTH-TYPE ANCHORS SHALL BE USED IN SANDY BOTTOM AND HEAVY KEDGE TYPE OR MUSHROOM ANCHORS ON MUD BOTTOMS.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE SILT CURTAIN THROUGHOUT CONSTRUCTION OPERATIONS.
7. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL REMOVE THE SILT CURTAIN IN A MANNER THAT WILL PREVENT SILTATION OF THE RIVER/CREEK.
8. THE TURBIDITY CURTAIN/SILT CURTAIN SHOULD BE PLACED IN THE CREEK PRIOR TO ANY DEMOLITION TO THE BRIDGE DECK AND/OR PIERS.

SECTION TURBIDITY BARRIER (FLOATING SILT CURTAIN) N.T.S

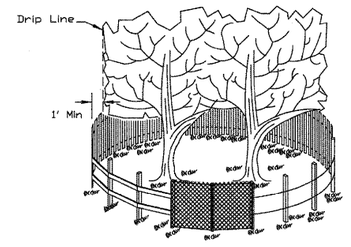


TEMPORARY DITCH CHECK, ROLLED EXCELSIOR DETAIL
N.T.S.

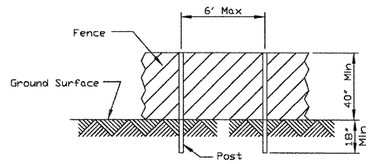
STAKE DETAILS
N.T.S.



TREE TRUNK PROTECTION



SIDE VIEW



POST AND FENCE DETAIL

NOTES:

1. THE FENCE SHALL BE LOCATED A MINIMUM OF 1 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
2. FENCE POSTS SHALL BE EITHER STANDARD STEEL POSTS OR WOOD POSTS WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ. IN.
3. THE FENCE MAY BE EITHER 40" HIGH SNOW FENCE, 40" PLASTIC WEB FENCING OR ANY OTHER MATERIAL AS APPROVED BY THE ENGINEER/INSPECTOR.
4. TO BE PAID FOR AS "TEMPORARY FENCE."

TREE PROTECTION FENCING

FILE NAME = W:\Projects\2010\1800825 Burr Ferson\Used\Civil\Dgn\Sht\EROS_03.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174
(630) 443-7755

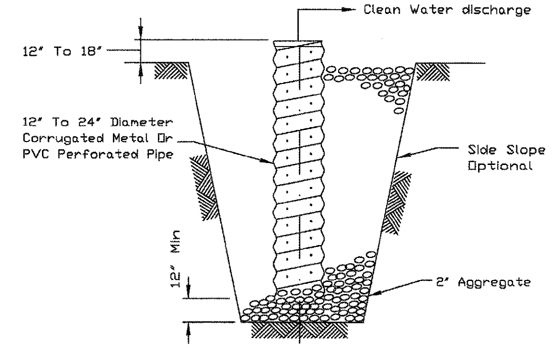
USER NAME = $USER$	DESIGNED - KMA	REVISED -
	DRAWN - NDP	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 12/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL DETAILS

SCALE: | SHEET NO. 30 OF 76 SHEETS | STA. | TO STA.

TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	30
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

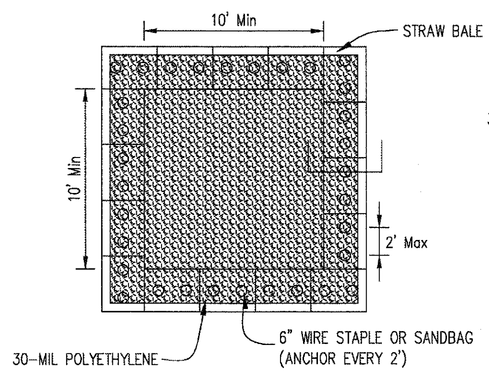


SECTION

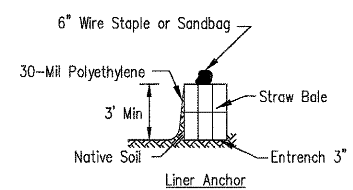
NOTES:

1. PIT DIMENSIONS ARE OPTIONAL.
2. THE STANDPIPE WILL BE CONSTRUCTED BY PERFORATING A 12"-24" DIAMETER CORRUGATED METAL OR PVC PIPE.
3. A BASE OF 2" AGGREGATED WILL BE PLACED IN THE PIT TO A MINIMUM DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE WILL THEN BE BACKFILLED WITH 2" AGGREGATE.
4. THE STANDPIPE WILL EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT.
5. IF DISCHARGE WILL BE PUMPED DIRECTLY TO A STORM DRAINAGE SYSTEM, THE STANDPIPE WILL BE WRAPPED WITH FILTER FABRIC BEFORE INSTALLATION.
6. IF DESIRED, 1/4"-1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTER FABRIC. THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE PIPE.

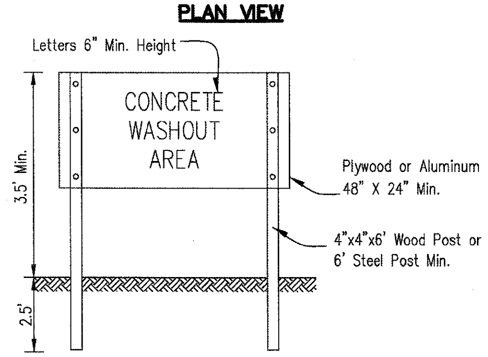
SUMP PIT PLAN



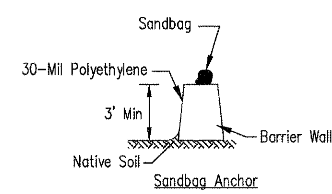
PLAN VIEW



STRAW BALE ANCHOR SECTIONS



SIGN DETAIL

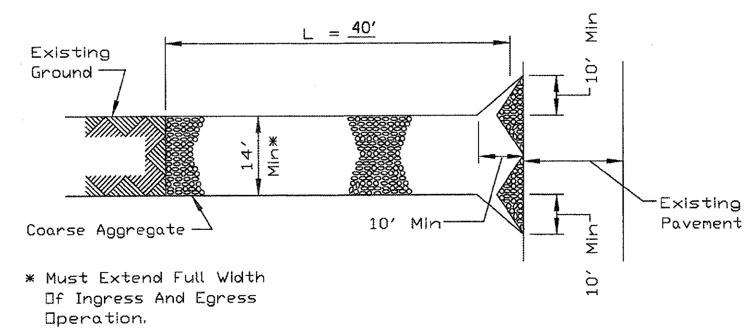


BARRIER WALL ANCHOR SECTION

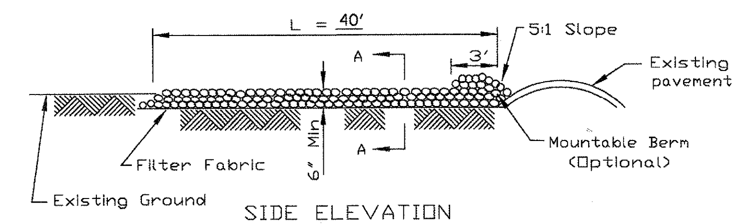
NOTES:

1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
3. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"X2"X4' WOODEN STAKES.

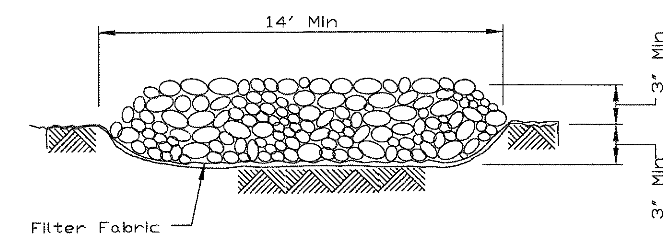
TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE



PLAN VIEW



SIDE ELEVATION

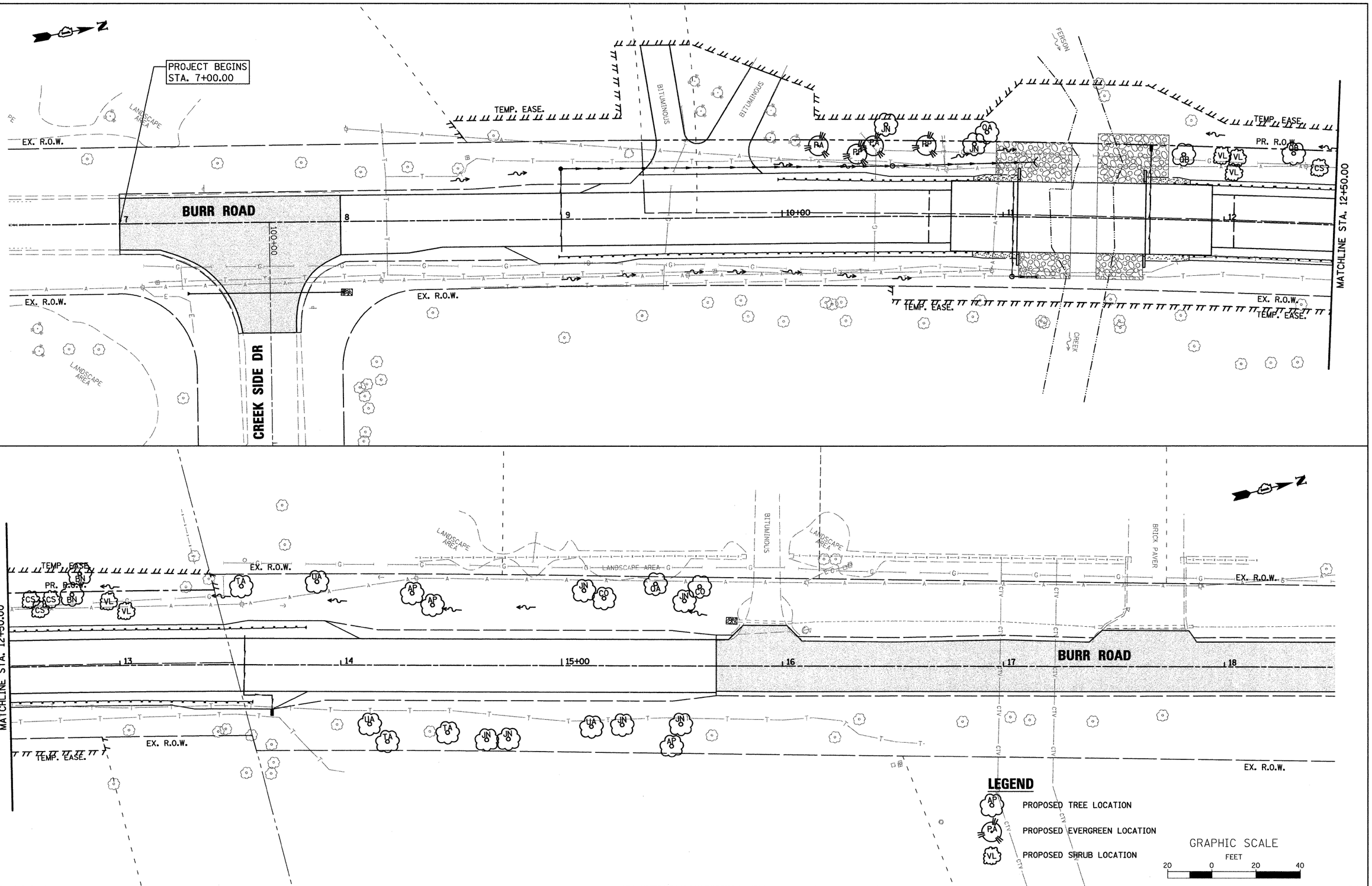


SECTION A-A

NOTES:

1. FILTER FABRIC SHALL MEE THE REQUIREMENTS OF ARTICLE 1080.03 OF THE STANDARD SPECIFICATIONS AND SHALL BE PALCED OVER THE CLEARED SUBGRADE AREA PRIOR TO PLACING THE ROCK.
2. AGGREGATE FILL SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO SPECIAL PROVISION " STABILIZED CONSTRCUTION ENTRANCE.
3. ANY DRAINAGE FACILTIES REQUIRED BECASUE OF WASHING SHALL BE CONSTRCUTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
4. IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

STABILIZED CONSTRUCTION ENTRANCE PLAN



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WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE = 1'=20'	CHECKED - SBP	REVISED -	
PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN

SCALE: 1"=20' | SHEET NO. 32 OF 76 SHEETS | STA. 7+00 | TO STA. 18+50

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	32
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

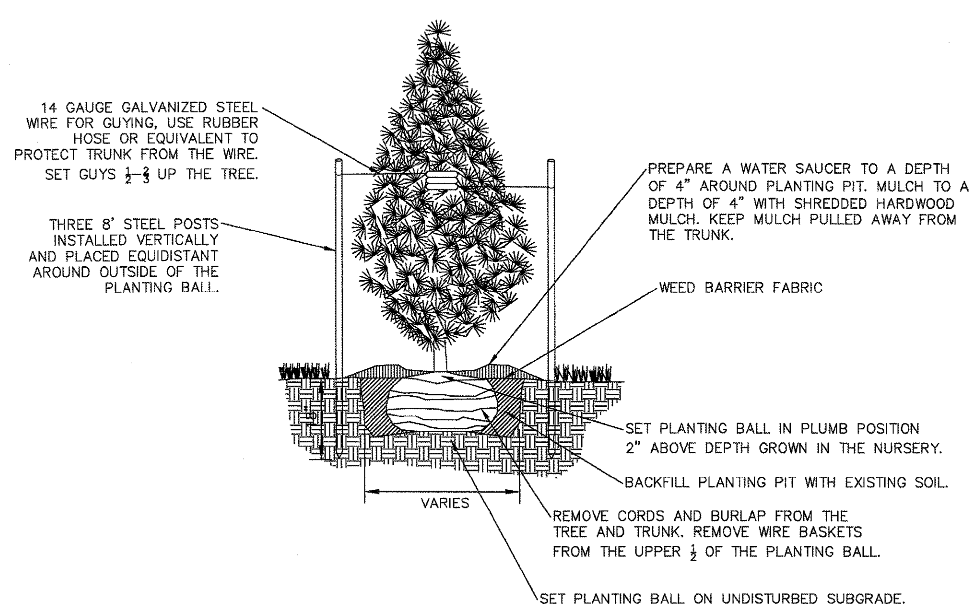
PLANT LIST

PAY ITEM #	DESCRIPTION	UNIT	ABBREVIATION	PLAN ABBREVIATION	QUANTITY
A2000616	TREE, ACER PLATANOIDES (NORWAY MAPLE), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-ACER PLAT 2	AP	3
A2002316	TREE, BETULA NIGRA (RIVER BIRCH), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-BETULA NIGRA 2	BN	2
A2002716	TREE, CARYA OVATA (SHAGBARK HICKORY), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-CARYA OVATA 2	CO	2
A2005116	TREE, JUGLANS NIGRA (BLACK WALNUT), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-JUGLANS NIGRA 2	JN	8
A2006416	TREE, QUERCUS ALBA (WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-QUERCUS ALBA 2	QA	2
A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-QUERCUS BICOL 2	QB	2
A2007816	TREE, TILIA AMERICANA (AMERICAN LINDEN/ BASSWOOD), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-TILIA AMER 2	TA	3
A2008466	TREE, ULMUS AMERICANA (AMERICAN ELM), 2" CALIPER, BALLED AND BURLAPPED	EACH	T-ULMUS AMER 2	UA	3
C2001636	SHRUB, CORNUS SERICEA (REDOSIER DOGWOOD), 3' HEIGHT, BALLED AND BURLAPPED	EACH	S-CORNUS SERICEA 3'	CS	4
C2012436	SHRUB, VIBURNUM LENTAGO (NANNYBERRY VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	S-VIBURN LENT 3'	VL	5
D2001788	EVERGREEN, PICEA ABIES (NORWAY SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED	EACH	E-PICEA ABIES 8'	PA	2
D2002288	EVERGREEN, PICEA PUNGENS GLAUCA (COLORADO BLUE SPRUCE), 8' HEIGHT, BALLED AND BURLAPPED	EACH	E-PICEA PUNG GLAU 8'	PP	2

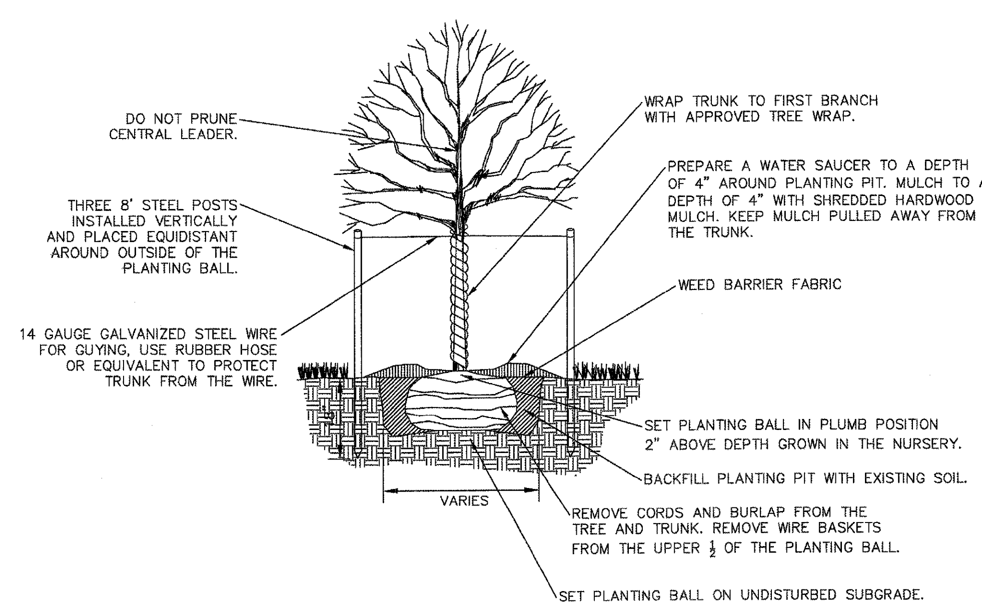
PLANTING NOTES:

PLANT MATERIAL SIZE AND QUALITY SHALL MEET OR EXCEED REQUIREMENTS IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK, A.N.S.I. Z60.1– CURRENT ADDITION, SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN).

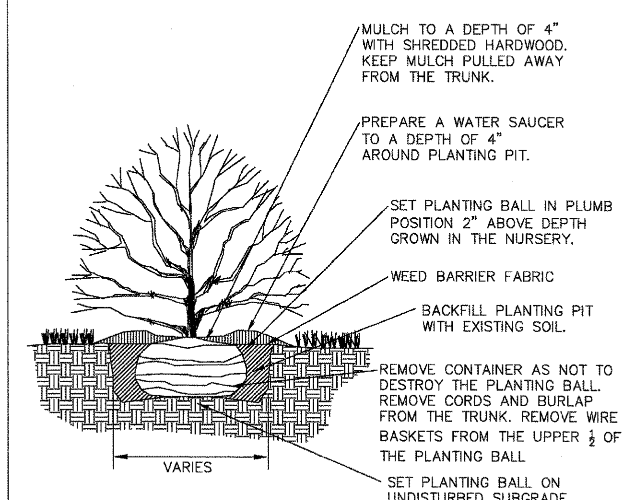
ALL PLANT MATERIAL SHALL BE NURSERY GROWN FROM SOURCES WITHIN THE SAME HARDINESS ZONE AS THE PROJECT LOCATION.



EVERGREEN PLANTING DETAIL
N.T.S.



TREE PLANTING DETAIL
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.

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WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174
(630) 443-7755

USER NAME = $USER$	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LANDSCAPE PLAN
DETAILS

SCALE: | SHEET NO. 33 OF 76 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	33

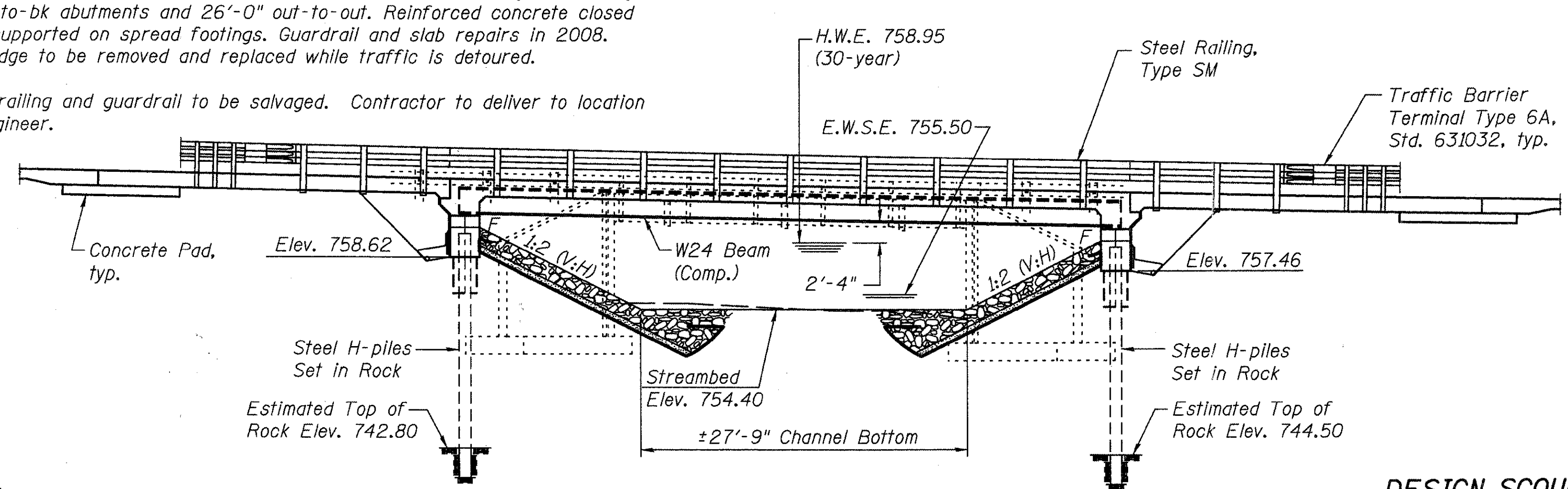
CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

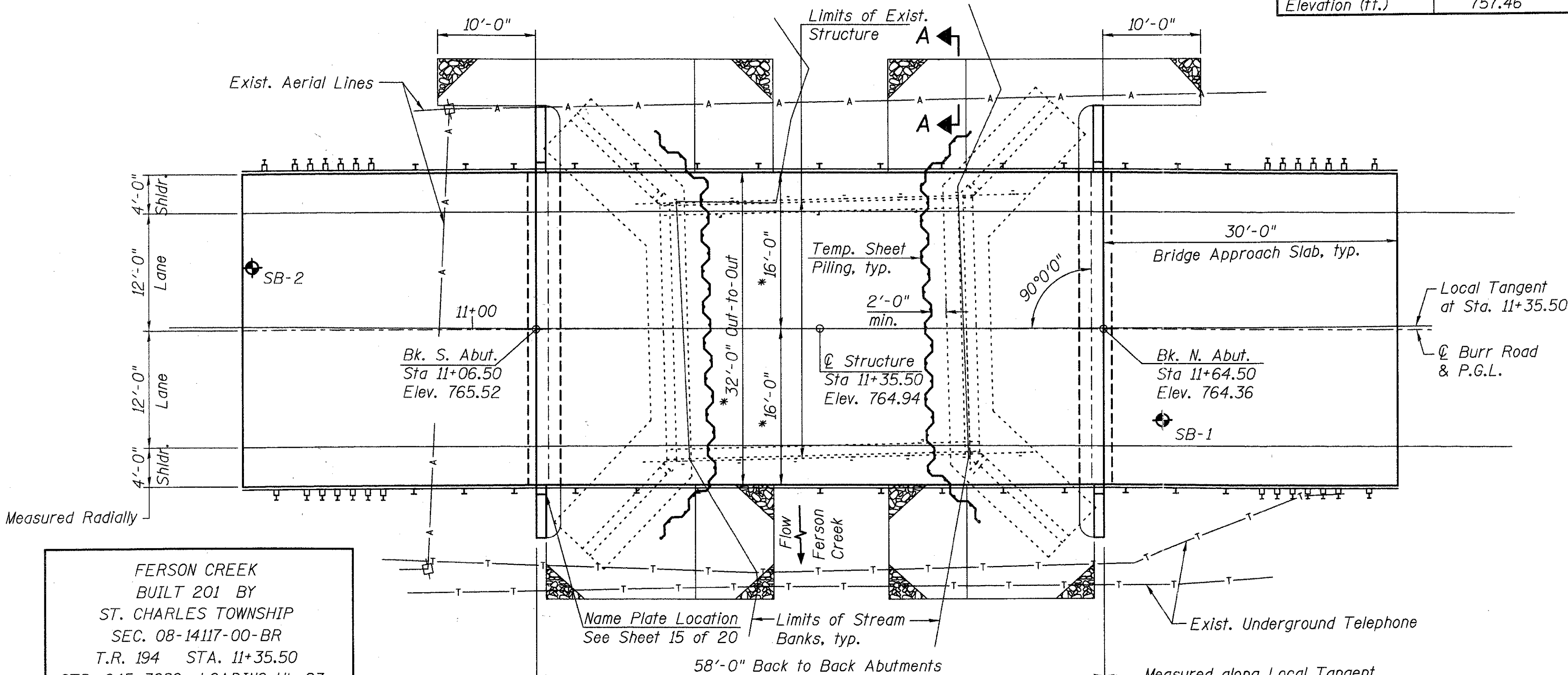
Bench Mark: C.P. #52, I.P. located 123 feet N. of bridge and 16 feet W. of centerline. Elev. 761.45

Existing Structure: S.N. 045-3079, built 1959 by St. Charles Township at Station 11+35.50 as a single span reinforced concrete slab bridge measuring 32'-0" bk.-to-bk abutments and 26'-0" out-to-out. Reinforced concrete closed abutments supported on spread footings. Guardrail and slab repairs in 2008. Existing bridge to be removed and replaced while traffic is detoured.

Existing bridge railing and guardrail to be salvaged. Contractor to deliver to location specified by Engineer.



ELEVATION



PLAN

* Measured Perpendicular to Local Tangent

FERSON CREEK
BUILT 201 BY
ST. CHARLES TOWNSHIP
SEC. 08-14117-00-BR
T.R. 194 STA. 11+35.50
STR. 045-3080 LOADING HL-93

NAME PLATE

See Std. 515001

WATERWAY INFORMATION

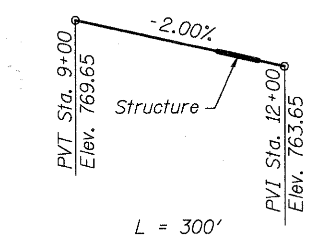
Drainage Area = 11.4 sq. mi.
Exist. Low Grade Elev. 761.80 at Sta. 13+50
Prop. Low Grade Elev. 762.10 at Sta. 13+60

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	342	131	137	758.15	0.06	0.00	758.21	758.03
Design	30	611	158	178	758.95	0.19	0.00	759.14	758.89
Base	100	843	177	207	759.34	0.46	0.12	759.80	759.46
Max. Calc.	500	1639	214	284	760.18	2.01	0.79	762.19	760.97

CURVE DATA

(Burr-1)

Δ = 4° 08' 44" (RT)
D = 1° 08' 45"
T = 180.96'
L = 361.76'
E = 3.27'
R = 5,000.00
S.E. = 0.02 '/'
P.C. = Sta. 9+98.66
P.T. = Sta. 13+60.41
P.I. = Sta. 11+79.62



PROFILE GRADE

(along ℄ roadway)

DESIGN SCOUR ELEVATION TABLE

	North Abut.	South Abut.
Design Scour Elevation (ft.)	757.46	758.62

INDEX OF SHEETS

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications
with 2008 & 2009 Interims

DESIGN STRESSES

FIELD UNITS

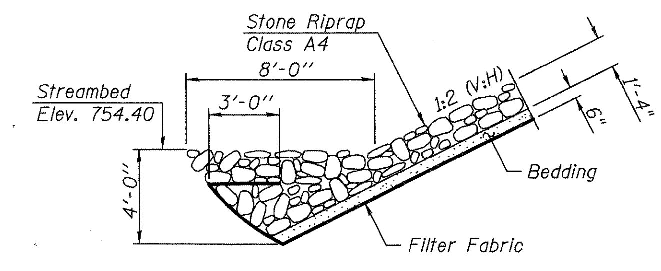
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50W)

LOADING HL-93

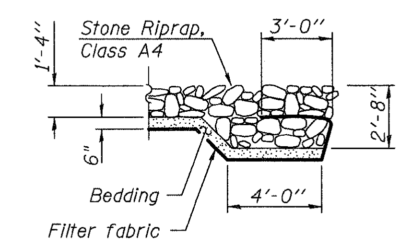
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

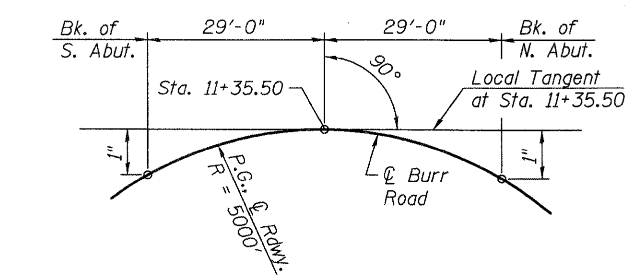
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.086g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.155g
Soil Site Class = D



RIPRAP ANCHOR DETAIL



SECTION A-A

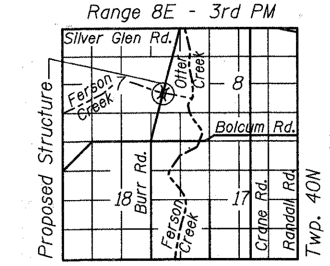


OFFSET SKETCH

I certify that to the best of knowledge information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and compiles with requirements of the current "AASHTO LRFD Bridge Design Specifications".

STATE OF ILLINOIS
ANDREW E. UNDERWAGER
081-006218
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signature: [signature]
Date 10-21-2011
License Expires: 11-30-2012



LOCATION SKETCH

GENERAL PLAN & ELEVATION
BURR ROAD OVER FERSON CREEK
SEC. 08-14117-00-BR
KANE COUNTY
STATION 11+35.50
STRUCTURE NO. 045-3080

WBK WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - HLF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 045-3080	
		CHECKED - AEU	REVISED -			
	PLOT SCALE =	DRAWN - HLF	REVISED -			
	PLOT DATE = 11/17/2011	CHECKED - AEU	REVISED -		SHEET NO. 1 OF 20 SHEETS	

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	34
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = W:\Projects\2010\100025 BurrFersonII\cadd\Structural\Dgn\0453080-001-GP&E.dgn

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 45,380 lbs. (Grade 50W)

All structural steel shall be AASHTO M 270 Grade 50W. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

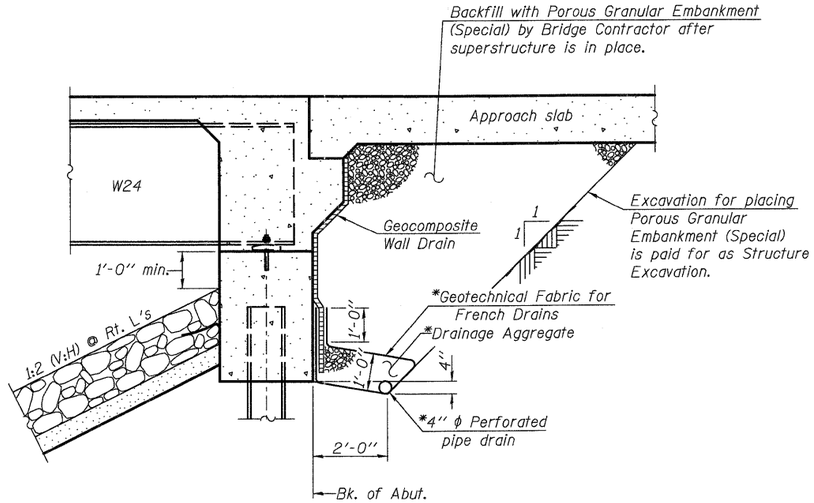
Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3 inches. Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.

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

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

Existing bridge railing to be removed and salvaged. Contractor to deliver to location specified by the Engineer. Cost included in the pay item "Removal of Existing Structures".

Existing bituminous wearing surface to be removed. Cost included in the pay item "Removal of Existing Structures".



SECTION THRU INTEGRAL ABUTMENT

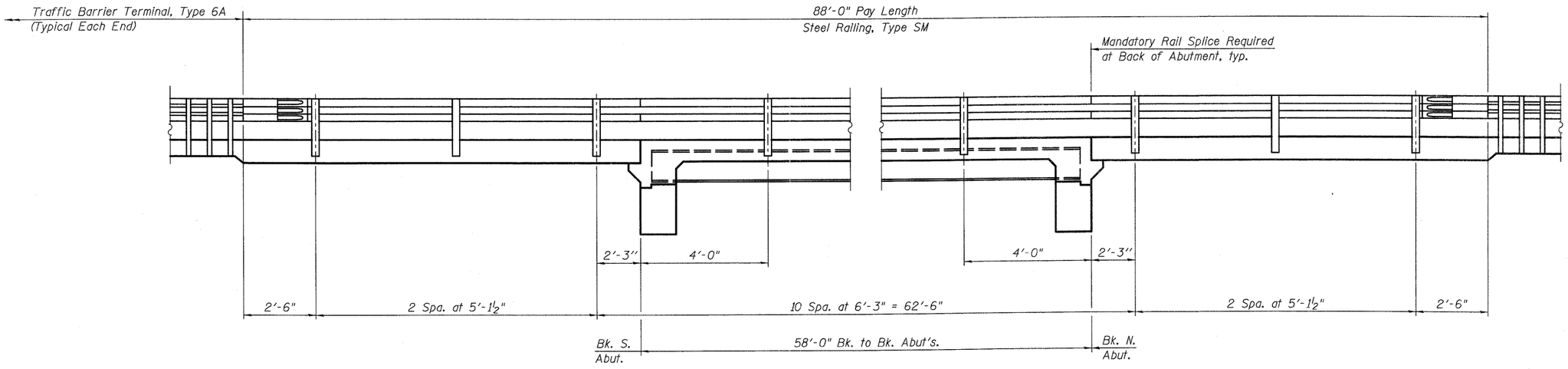
(Horiz. dim. @ Rt. L's)

*Included in the cost of Pipe Underdrains for Structures.

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

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		330	330
Filter Fabric	Sq. Yd.		330	330
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		196	196
Concrete Structures	Cu. Yd.		47.7	47.7
Concrete Superstructure	Cu. Yd.	164.8		164.8
Bridge Deck Grooving	Sq. Yd.	419		419
Concrete Encasement	Cu. Yd.		3.6	3.6
Protective Coat	Sq. Yd.	439		439
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,020		1,020
Reinforcement Bars, Epoxy Coated	Pound	41,010	4,140	45,150
Bar Splicers	Each	66		66
Steel Railing, Type SM	Foot	176		176
Furnishing Steel Piles HP12x53	Foot		190	190
Name Plates	Each		1	1
Anchor Bolt 1"	Each		20	20
Geocomposite Wall Drain	Sq. Yd.		45	45
Porous Granular Embankment (Special)	Cu. Yd.		89	89
Temporary Sheet Piling	Sq. Ft.		1,474	1,474
Pipe Underdrains for Structures, 4"	Foot		124	124
Setting Piles in Rock	Each		10	10



RAIL POST SPACING

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116 West Main Street, Suite 201
St. Charles, Illinois 60174

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PLOT SCALE =	DRAWN - HLF	REVISED -	
PLOT DATE = 11/17/2011	CHECKED - AEU	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 045-3080
SHEET NO. 2 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	35
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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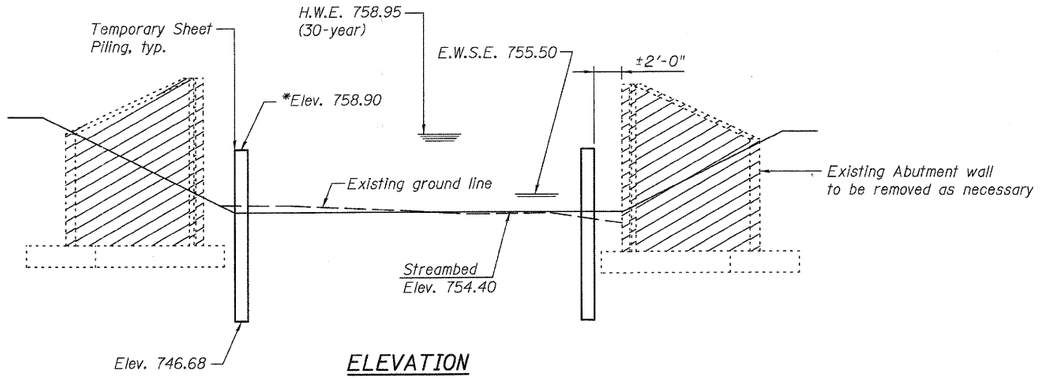
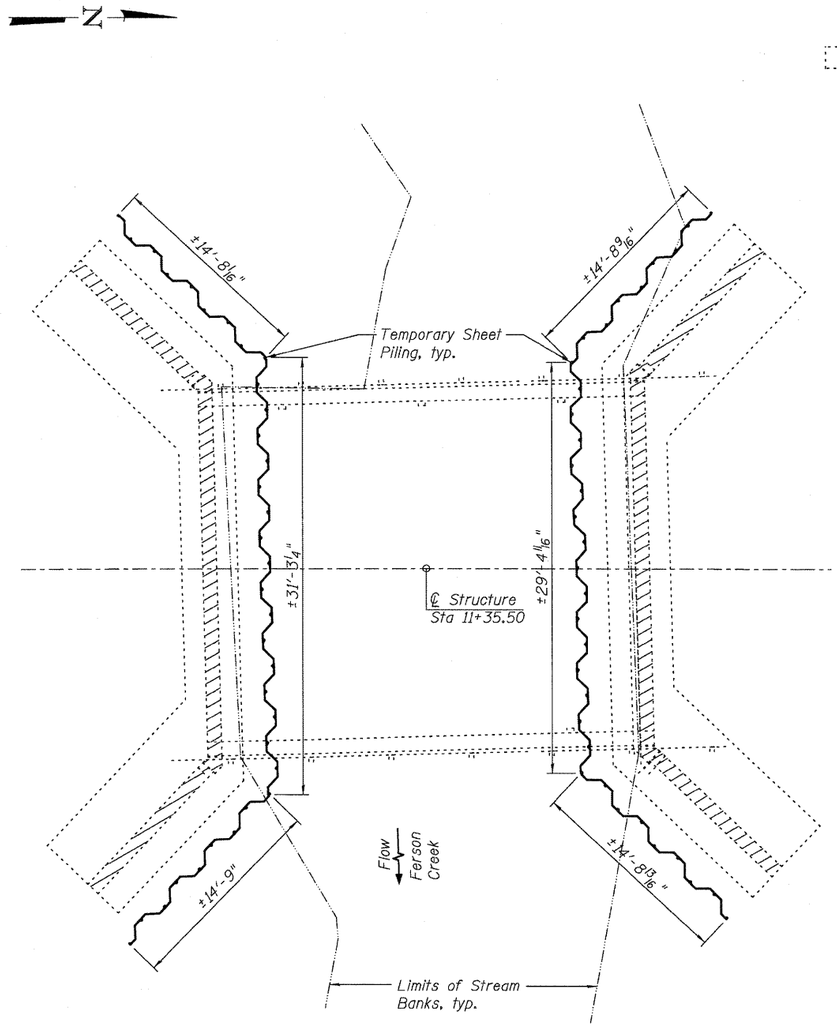


ELEVATION

*See Note 2



PLAN

LEGEND

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Sheet Piling	Sq. Ft.	1,474

Notes:

1. The stream work is expected in the low water level. The cost of dewatering the area behind the temporary sheet piling for existing structure removal is included in the pay item Temporary Sheet Piling.
2. Adjust elevation based on water level in construction.
3. If the bottom of Concrete removal is below the top of the existing footing, remove the entire existing footing.
4. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

FILE NAME = W:\Projects\2010\100225 Burr-Ferson\Loads\Structural\Dgn\08453080-003-SheetPiling.dgn

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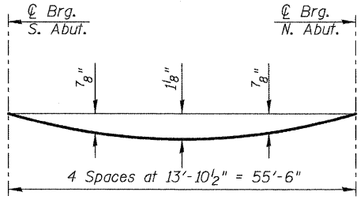
PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SHEET PILING DETAILS
STRUCTURE NO. 045-3080
SHEET NO. 3 OF 20 SHEETS

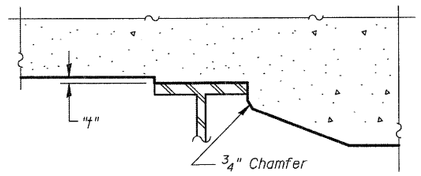
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	36
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



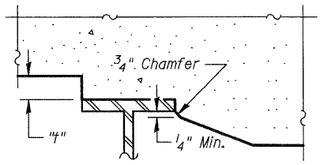
DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheet 5 of 20.



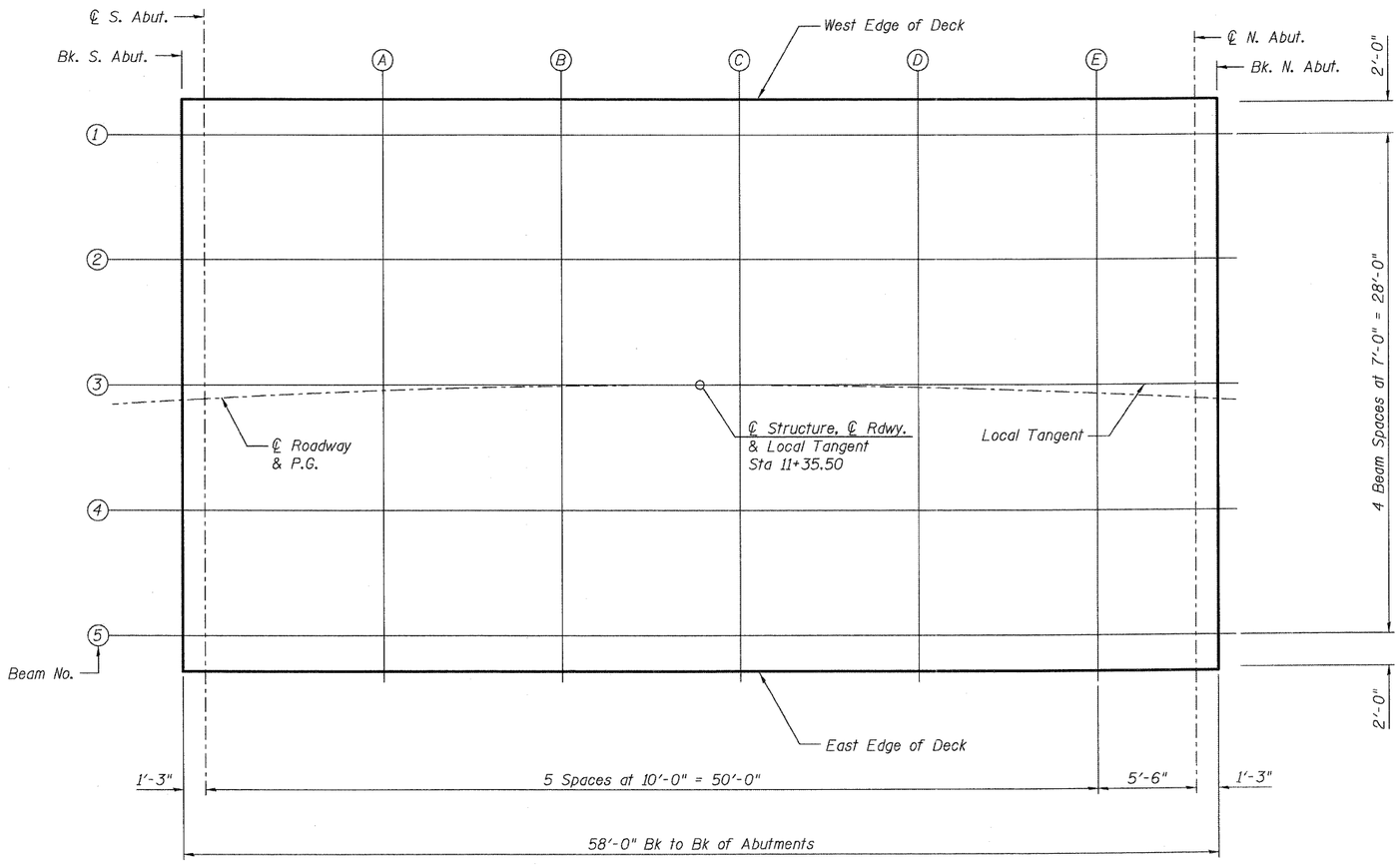
At Minimum Fillet



At Maximum Fillet

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet 5 of 20. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

WILLS BURKE KELSEY ASSOCIATES LTD.
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3080
SHEET NO. 4 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	37
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.58	-14.08	765.80	765.80
CL Brg. S. Abut.	11+07.83	-14.08	765.77	765.77
A	11+17.80	-14.03	765.57	765.63
B	11+27.77	-14.01	765.37	765.46
C	11+37.73	-14.00	765.18	765.27
D	11+47.70	-14.01	764.98	765.05
E	11+57.67	-14.05	764.78	764.81
CL Brg. N. Abut.	11+63.16	-14.08	764.67	764.67
Bk. N. Abut.	11+64.41	-14.08	764.64	764.64

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.54	-7.08	765.66	765.66
CL Brg. S. Abut.	11+07.79	-7.08	765.64	765.64
A	11+17.78	-7.03	765.44	765.49
B	11+27.76	-7.01	765.23	765.32
C	11+37.73	-7.00	765.04	765.13
D	11+47.72	-7.01	764.84	764.91
E	11+57.71	-7.05	764.64	764.67
CL Brg. N. Abut.	11+63.20	-7.08	764.53	764.53
Bk. N. Abut.	11+64.45	-7.08	764.50	764.50

BEAM 3 & LOCAL TANGENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.50	-0.08	765.52	765.52
CL Brg. S. Abut.	11+07.75	-0.08	765.50	765.50
A	11+17.75	-0.03	765.30	765.35
B	11+27.75	-0.01	765.10	765.18
C	11+37.74	-0.00	764.90	764.99
D	11+47.74	-0.01	764.70	764.77
E	11+57.74	-0.05	764.50	764.53
CL Brg. N. Abut.	11+63.24	-0.08	764.39	764.39
Bk. N. Abut.	11+64.49	-0.08	764.36	764.36

℄ AND P.G.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.50	0.00	765.52	765.52
CL Brg. S. Abut.	11+07.75	0.00	765.49	765.49
A	11+17.76	0.00	765.29	765.35
B	11+27.78	0.00	765.09	765.18
C	11+37.78	0.00	764.89	764.99
D	11+47.78	0.00	764.69	764.77
E	11+57.78	0.00	764.49	764.52
CL Brg. N. Abut.	11+63.24	0.00	764.39	764.39
Bk. N. Abut.	11+64.49	0.00	764.36	764.36

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.46	6.92	765.38	765.38
CL Brg. S. Abut.	11+07.71	6.92	765.36	765.36
A	11+17.73	6.97	765.16	765.21
B	11+27.74	6.99	764.96	765.04
C	11+37.74	7.00	764.76	764.85
D	11+47.75	6.99	764.56	764.63
E	11+57.77	6.95	764.36	764.38
CL Brg. N. Abut.	11+63.28	6.92	764.25	764.25
Bk. N. Abut.	11+64.53	6.92	764.22	764.22

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.42	13.92	765.24	765.24
CL Brg. S. Abut.	11+07.67	13.92	765.22	765.22
A	11+17.70	13.97	765.02	765.07
B	11+27.73	13.99	764.82	764.90
C	11+37.74	14.00	764.62	764.71
D	11+47.77	13.99	764.41	764.49
E	11+57.80	13.95	764.22	764.24
CL Brg. N. Abut.	11+63.31	13.92	764.11	764.11
Bk. N. Abut.	11+64.57	13.92	764.08	764.08

WEST EDGE OF DECK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.59	-16.08	765.84	765.84
CL Brg. S. Abut.	11+07.84	-16.08	765.81	765.81
A	11+17.81	-16.03	765.61	765.67
B	11+27.78	-16.01	765.41	765.50
C	11+37.73	-16.00	765.22	765.31
D	11+47.70	-16.01	765.02	765.09
E	11+57.67	-16.05	764.82	764.85
CL Brg. N. Abut.	11+63.15	-16.08	764.71	764.71
Bk. N. Abut.	11+64.39	-16.08	764.68	764.68

EAST EDGE OF DECK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	11+06.41	15.92	765.20	765.20
CL Brg. S. Abut.	11+07.66	15.92	765.18	765.18
A	11+17.69	15.97	764.98	765.03
B	11+27.73	15.99	764.78	764.86
C	11+37.74	16.00	764.58	764.67
D	11+47.78	15.99	764.37	764.45
E	11+57.81	15.95	764.17	764.20
CL Brg. N. Abut.	11+63.33	15.92	764.07	764.07
Bk. N. Abut.	11+64.58	15.92	764.04	764.04

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3080
SHEET NO. 5 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	38
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

WEST EDGE OF SHOULDER

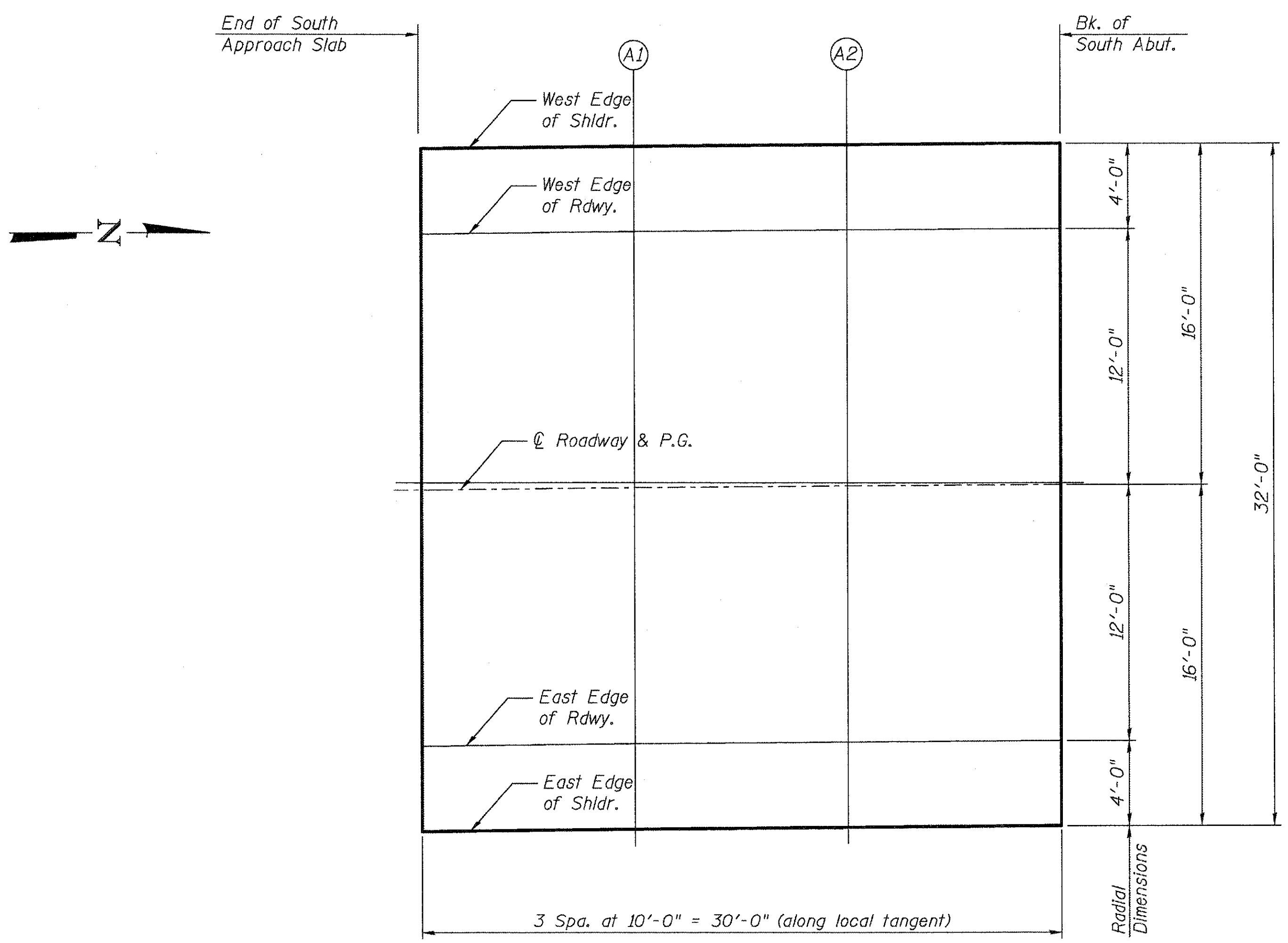
Location	Station	Offset	Theoretical Grade Elevations
End of S. Appr. Slab	10+76.69	-16.00	766.44
A1	10+86.67	-16.00	766.24
A2	10+96.62	-16.00	766.04
Bk. S. Abut.	11+06.59	-16.00	765.84

WEST EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
End of S. Appr. Slab	10+76.64	-12.00	766.36
A1	10+86.59	-12.00	766.16
A2	10+96.59	-12.00	765.96
Bk. S. Abut.	11+06.57	-12.00	765.76

℄ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations
End of S. Appr. Slab	10+76.50	0.00	766.12
A1	10+86.50	0.00	765.92
A2	10+96.50	0.00	765.72
Bk. S. Abut.	11+06.50	0.00	765.52



PLAN

EAST EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
End of S. Appr. Slab	10+76.36	12.00	765.88
A1	10+86.38	12.00	765.68
A2	10+96.41	12.00	765.48
Bk. S. Abut.	11+06.43	12.00	765.28

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
End of S. Appr. Slab	10+76.31	16.00	765.80
A1	10+86.34	16.00	765.60
A2	10+96.38	16.00	765.40
Bk. S. Abut.	11+06.41	16.00	765.20

E-AS 7-1-10

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PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-3080
SHEET NO. 6 OF 20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	39

CONTRACT NO. 63645
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

WEST EDGE OF SHOULDER

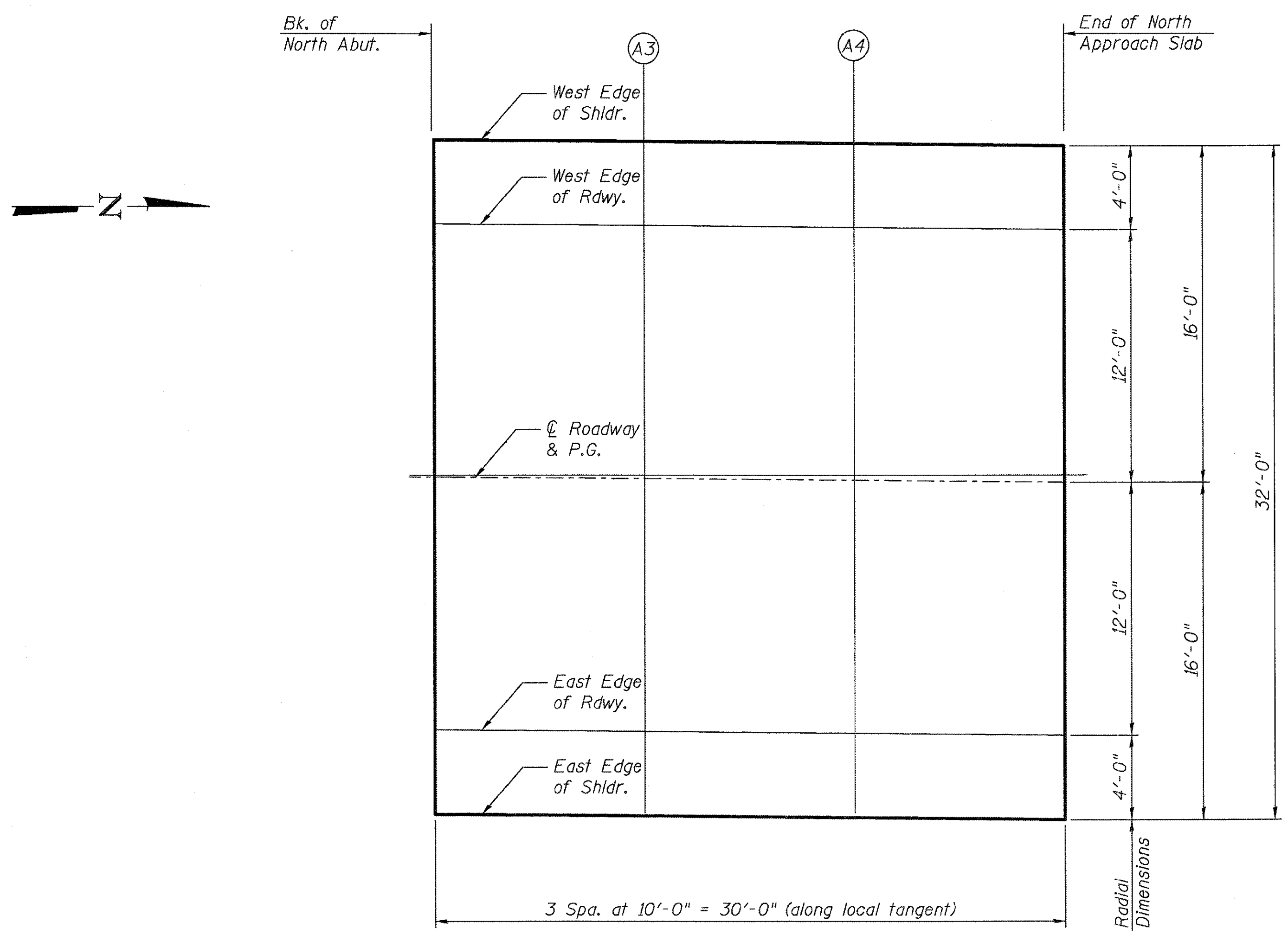
Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	11+64.41	-16.00	764.68
A3	11+74.38	-16.00	764.48
A4	11+84.34	-16.00	764.28
End of N. Appr. Slab	11+94.31	-16.00	764.08

WEST EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	11+64.43	-12.00	764.60
A3	11+74.41	-12.00	764.40
A4	11+84.38	-12.00	764.20
End of N. Appr. Slab	11+94.36	-12.00	764.00

℄ ROADWAY AND P.G.

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	11+64.50	0.00	764.36
A3	11+74.50	0.00	764.16
A4	11+84.50	0.00	763.96
End of N. Appr. Slab	11+94.50	0.00	763.76



PLAN

EAST EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	11+64.57	12.00	764.12
A3	11+74.59	12.00	763.92
A4	11+84.62	12.00	763.72
End of N. Appr. Slab	11+94.64	12.00	763.52

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	11+64.59	16.00	764.04
A3	11+74.62	16.00	763.84
A4	11+84.66	16.00	763.64
End of N. Appr. Slab	11+94.69	16.00	763.44

E-AS 7-1-10

FILE NAME = W:\Projects\2010\100025 BurrFerson11\cadd\Structural\Dgn\0453080-007-TopNApprSlabElev.dgn

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St. Charles, Illinois 60174

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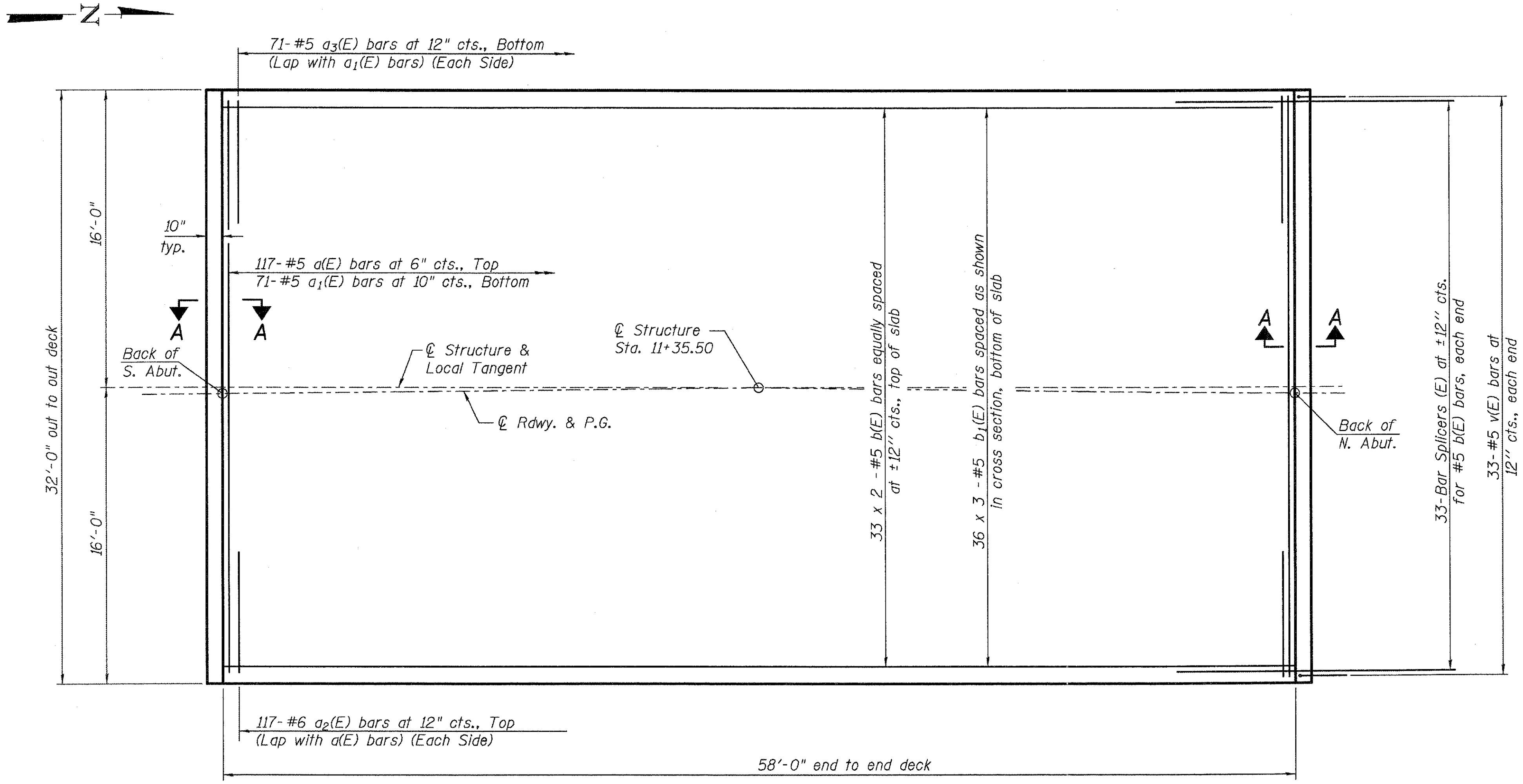
PLOT SCALE =	DRAWN - HLF	REVISED -
PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

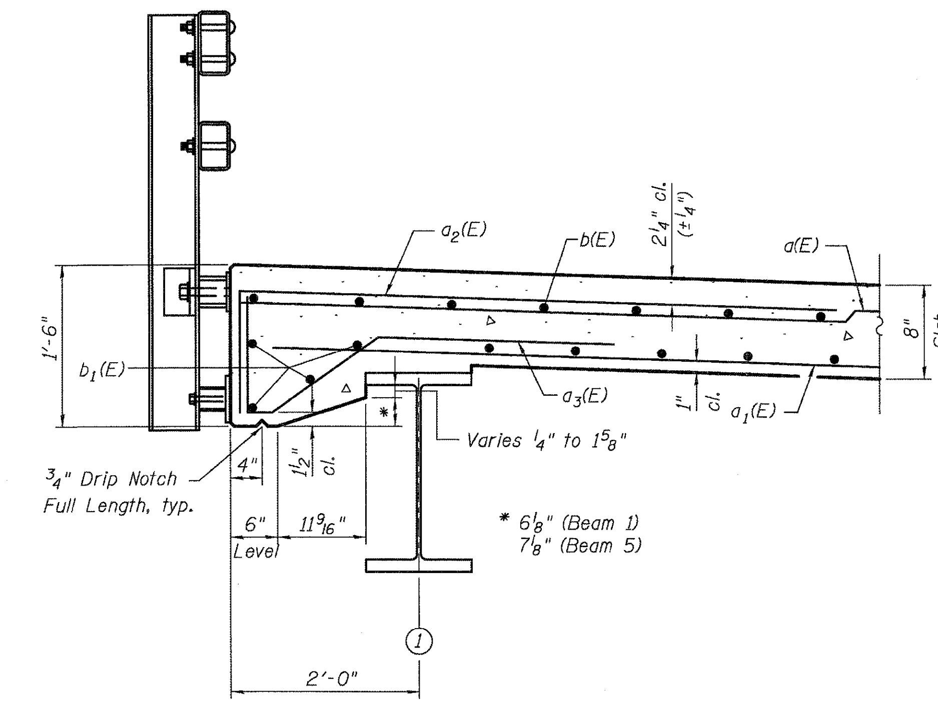
TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-3080
SHEET NO. 7 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	40

CONTRACT NO. 63645
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

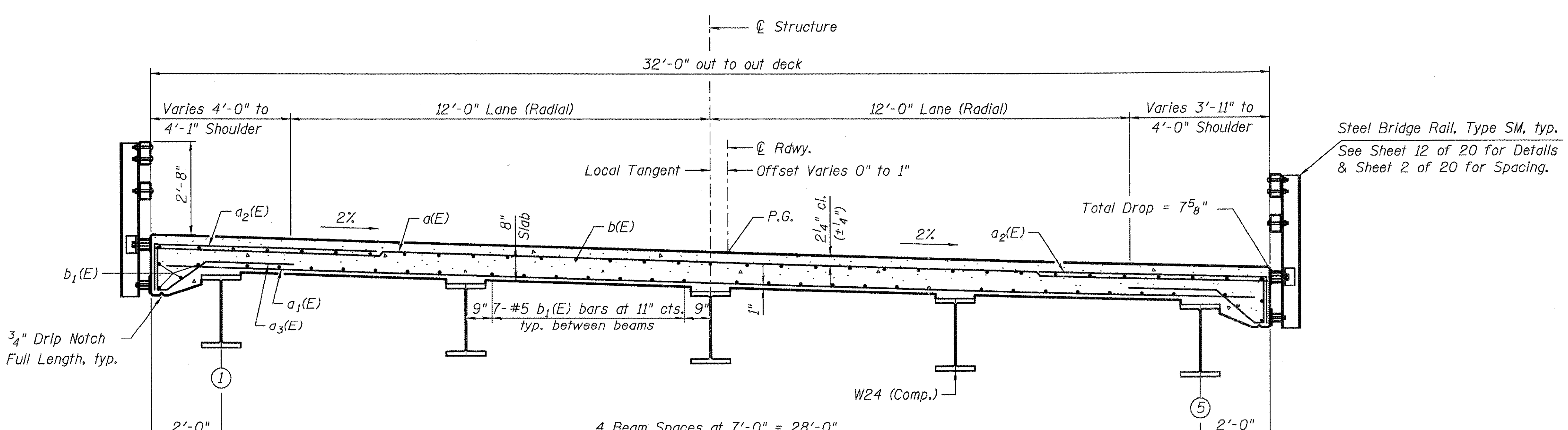


PLAN



SECTION THRU EDGE OF DECK

See Sheet 12 of 20 for Rail Post Anchor Details



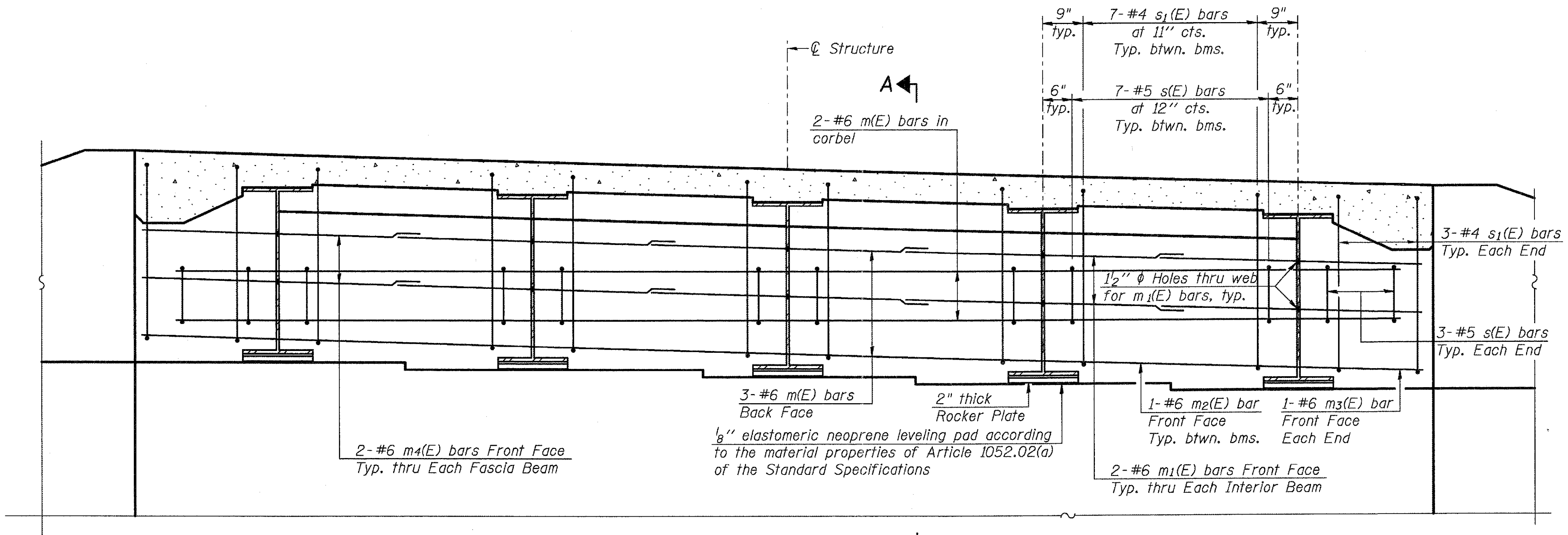
CROSS SECTION

(Looking North)

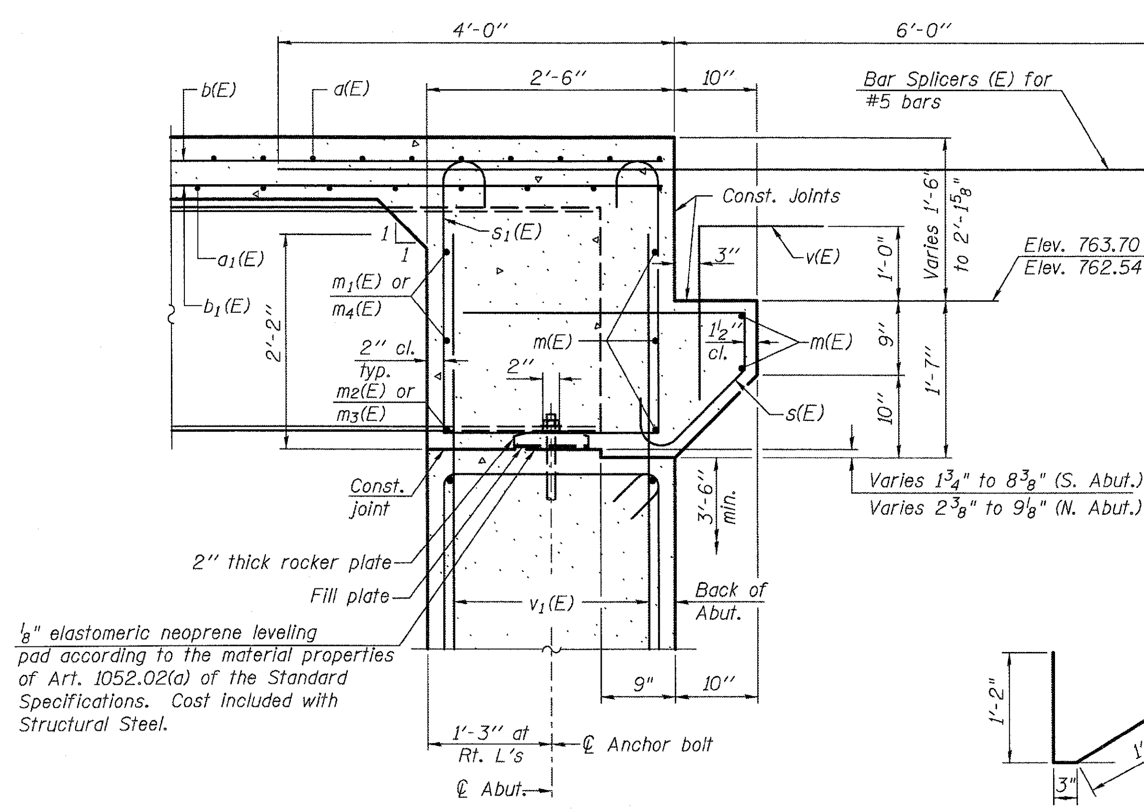
Notes:
See Sheet 9 of 20 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 9 of 20 for Section A-A.
See Sheet 18 of 20 for Bar Splicer Details.
Protective Coat shall also be applied to deck fascias

MIN. BAR LAP

#5 bar = 3'-3"

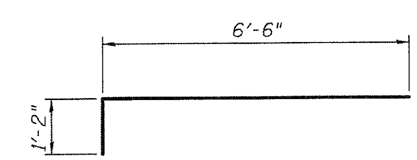


DIAPHRAGM ELEVATION AT ABUTMENT

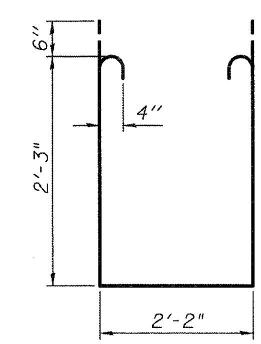


SECTION A-A

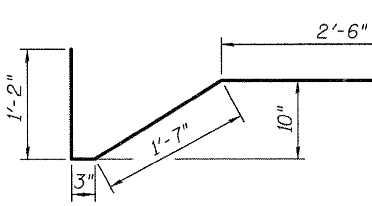
Dimensions at right angles to abutment, except as shown.



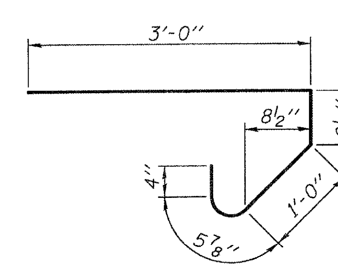
BAR a_2(E)



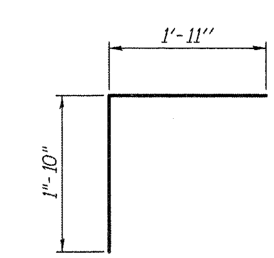
BAR s_1(E)



BAR a_3(E)



BAR s(E)



BAR v(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	117	#5	31'-6"	
a_1(E)	71	#5	31'-0"	
a_2(E)	234	#6	7'-8"	
a_3(E)	142	#5	5'-6"	
b(E)	66	#5	30'-8"	
b_1(E)	108	#5	21'-6"	
m(E)	10	#6	31'-8"	
m_1(E)	12	#6	10'-4"	
m_2(E)	8	#6	6'-8"	
m_3(E)	4	#6	1'-8"	
m_4(E)	8	#6	7'-0"	
s(E)	68	#5	5'-5"	
s_1(E)	68	#4	7'-8"	
v(E)	66	#5	3'-9"	
Reinforcement Bars, Epoxy Coated		Pound	16,010	
Bridge Deck Grooving		Sq. Yd.	206	
Protective Coat		Sq. Yd.	226	
Concrete Superstructure		Cu. Yd.	67.8	

Notes:
Concrete in diaphragm is included with Concrete Superstructure.
The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MIN. BAR LAP

#6 bar = 3'-4"

FILE NAME = W:\Projects\2010\100025 BurrFerson11\cadd\Structural\Dgn\0453080-009-SuperDetails.dgn

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PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -	

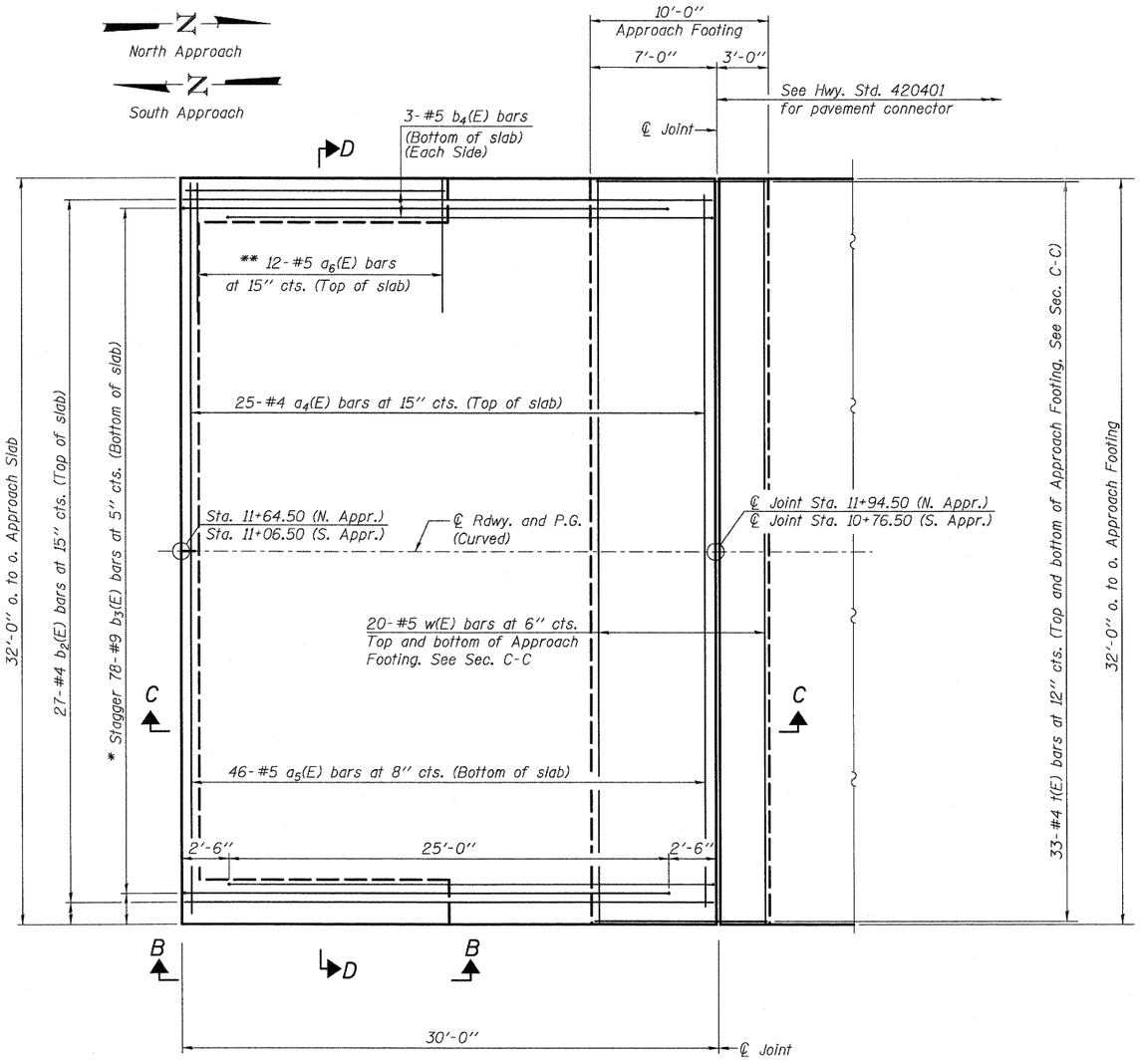
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 045-3080
SHEET NO. 9 OF 20 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	42
		CONTRACT NO. 63645		

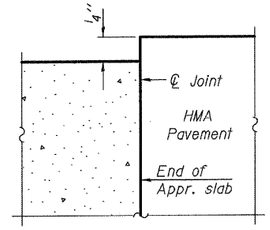
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT

Notes:
See sheet 11 of 20 for Sections C-C and D-D.
$a_4(E)$ and $a_5(E)$ bar spacings measured along ℄ Rdwy.
See sheet 12 of 20 for Railing and Railing Connection Details.



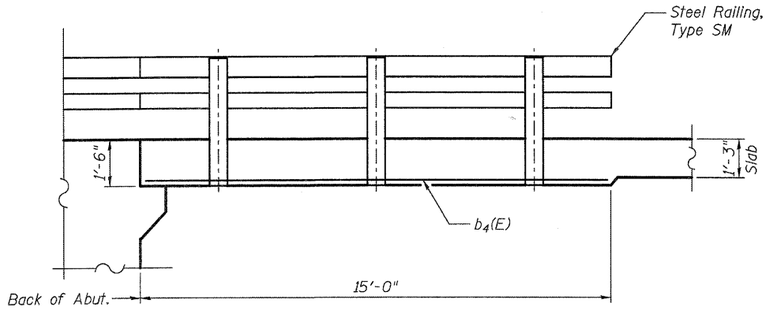
PLAN

* Tilt #9 $b_3(E)$ bars as required to maintain clearance.
** Space between $a_4(E)$ bars, typ. each end in thickened slab.



FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

BA-0 7-1-10

(Sheet 1 of 2)

WILLS BURKE KELSEY ASSOCIATES LTD. 115 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - HLF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - AEU	REVISED -	
	PLOT SCALE =	DRAWN - HLF	REVISED -	
	PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -	

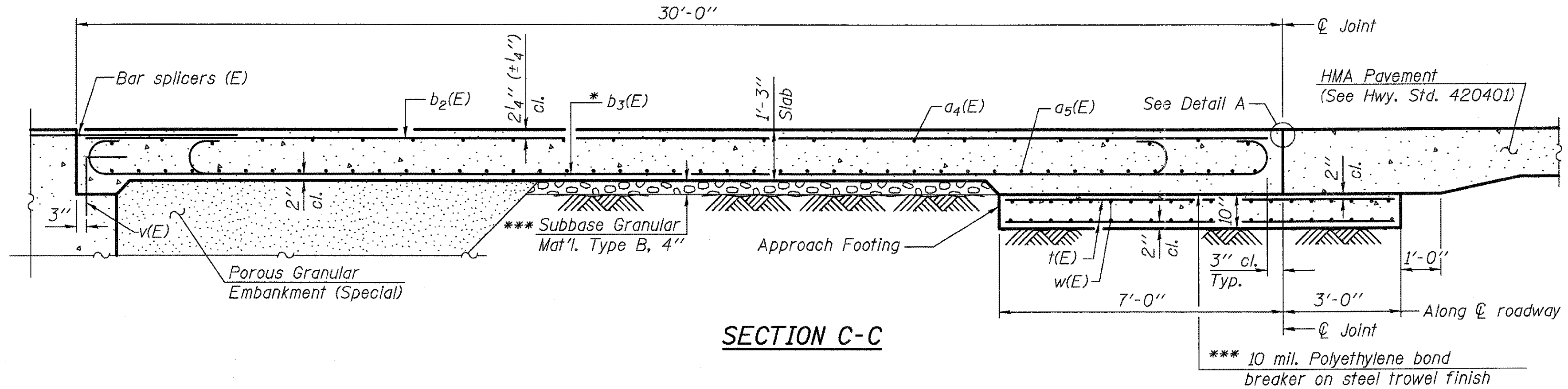
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-3080
SHEET NO. 10 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	43
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

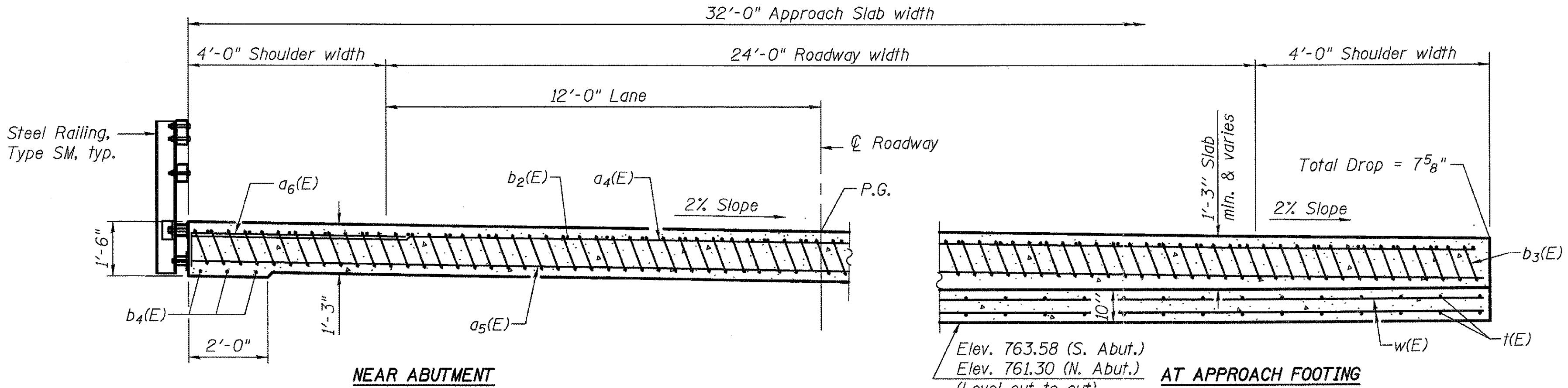
FILE NAME = W:\Projects\2010\100025 Bur-Farson11\odd\Structural\Dgn\04453088-210-ApprSlab1.dgn

Notes:

See sheet 10 of 20 for Detail A.
Approach slab concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 9 of 20.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 18 of 20.
Cost of excavation for approach footing included with Concrete Structures.
For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 20.



SECTION C-C



SECTION D-D

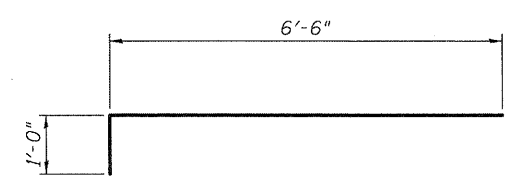
Horizontal Dimensions are Radial
(See Plan for dimensions not shown)

* Tilt #9 b_3(E) bars as required to maintain clearance.

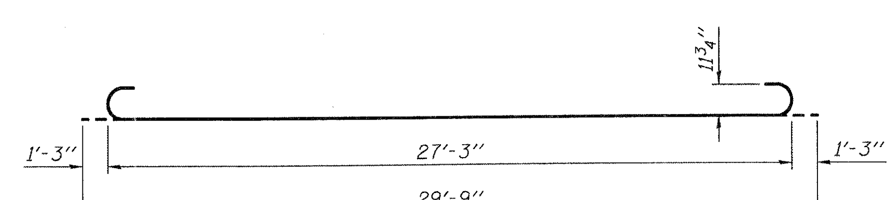
*** Cost included with Concrete Superstructure.

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_4(E)	50	#4	31'-8"	
a_5(E)	92	#5	31'-8"	
a_6(E)	48	#5	7'-6"	
b_2(E)	54	#4	29'-8"	
b_3(E)	156	#9	29'-9"	
b_4(E)	12	#5	14'-8"	
t(E)	132	#4	9'-8"	
w(E)	80	#5	31'-8"	
Concrete Superstructure			Cu. Yd.	97
Concrete Structures			Cu. Yd.	19.8
Bridge Deck Grooving			Sq. Yd.	213
Protective Coat			Sq. Yd.	213
Reinforcement Bars, Epoxy Coated			Pound	25,000



a_6(E) BAR



BAR b_3(E)

BA-0 7-1-10

(Sheet 2 of 2)

FILE NAME = W:\Projects\2010\100026 BurrFerson11\cadd\Structural\Dgn\0453080-011-ApprSlab2.dgn

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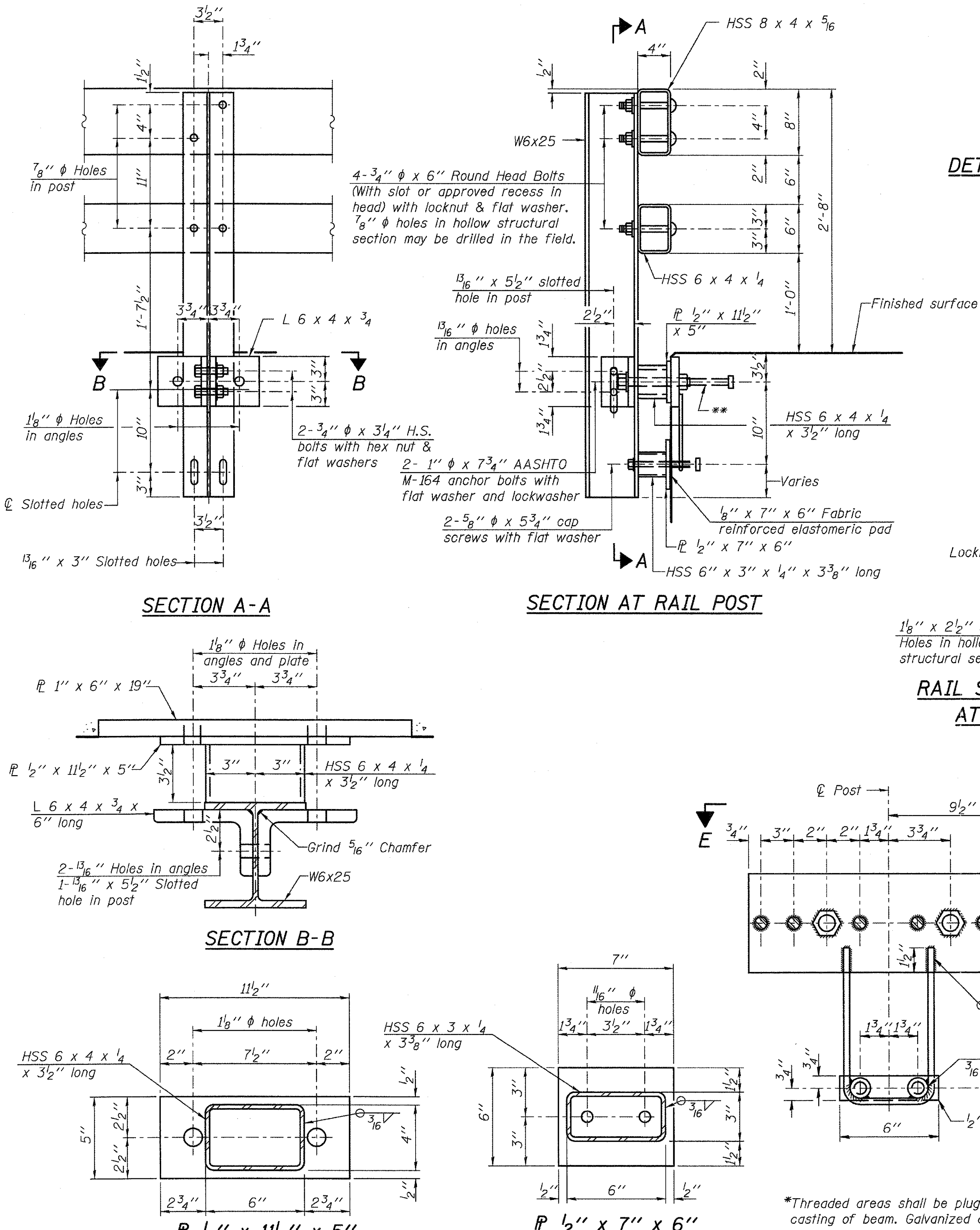
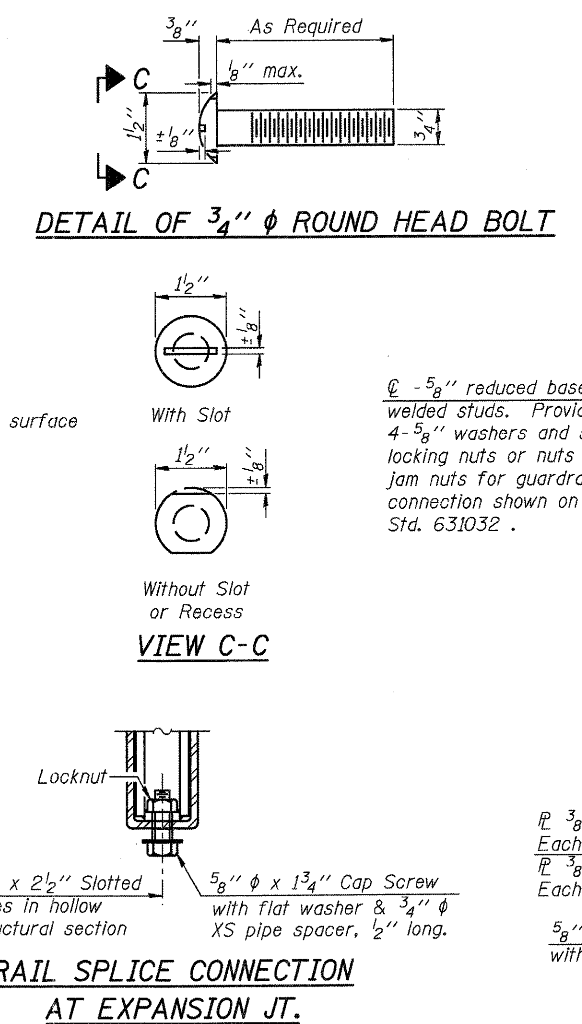
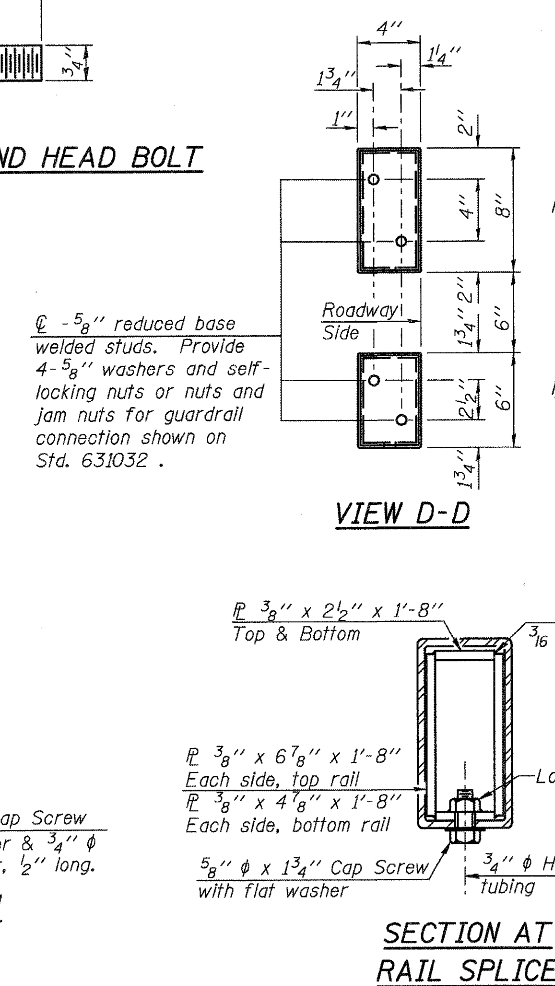
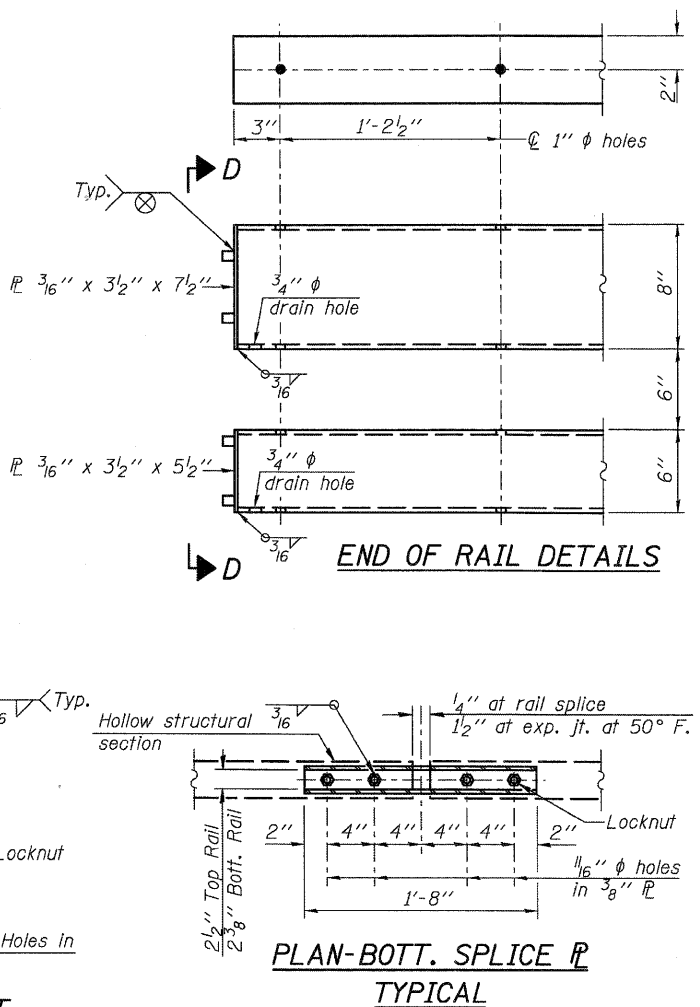
		CHECKED - AEU	REVISED -			0194	08-14117-00-BR	KANE	76	44
	PLOT SCALE =	DRAWN - HLF	REVISED -					CONTRACT NO. 63645		
	PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -		SHEET NO. 11 OF 20 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

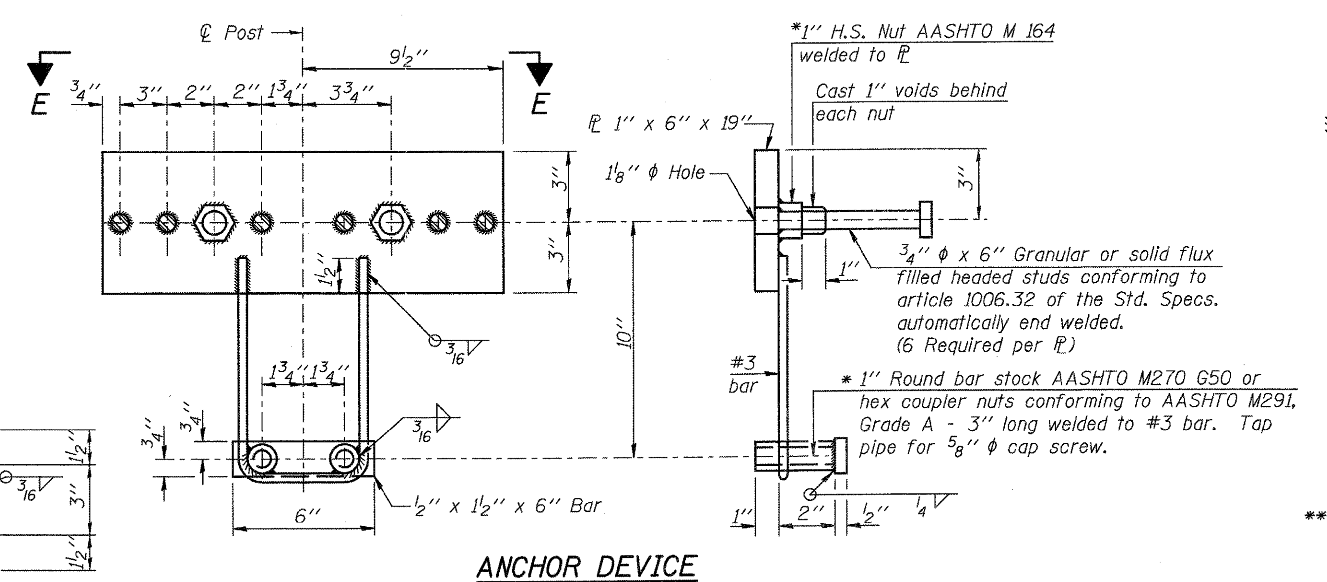


(6'-3" Maximum Post Spacing)

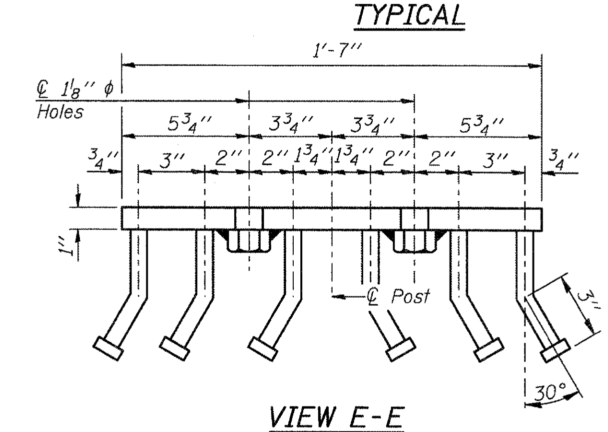








*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



Notes:

All field drilled holes shall be coated with an approved zinc rich paint before erection.

For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.

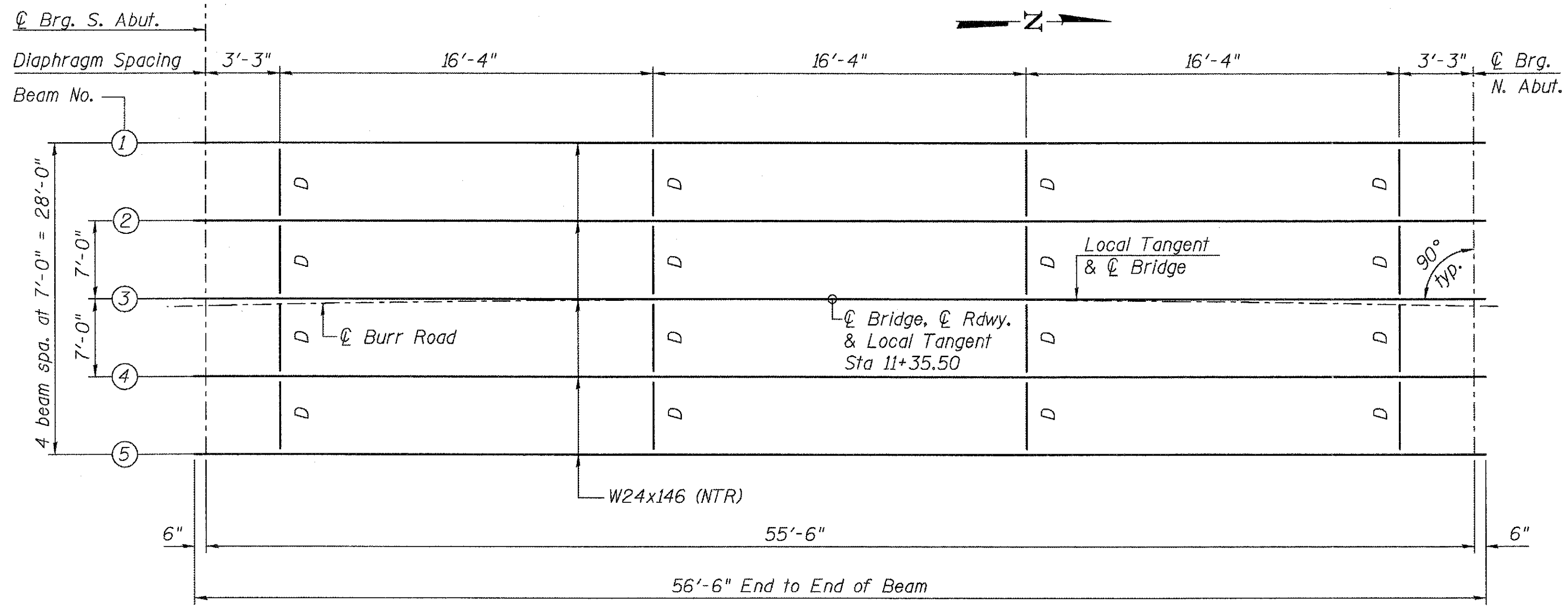
Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

See Sheet 2 of 20 for Post Spacing.

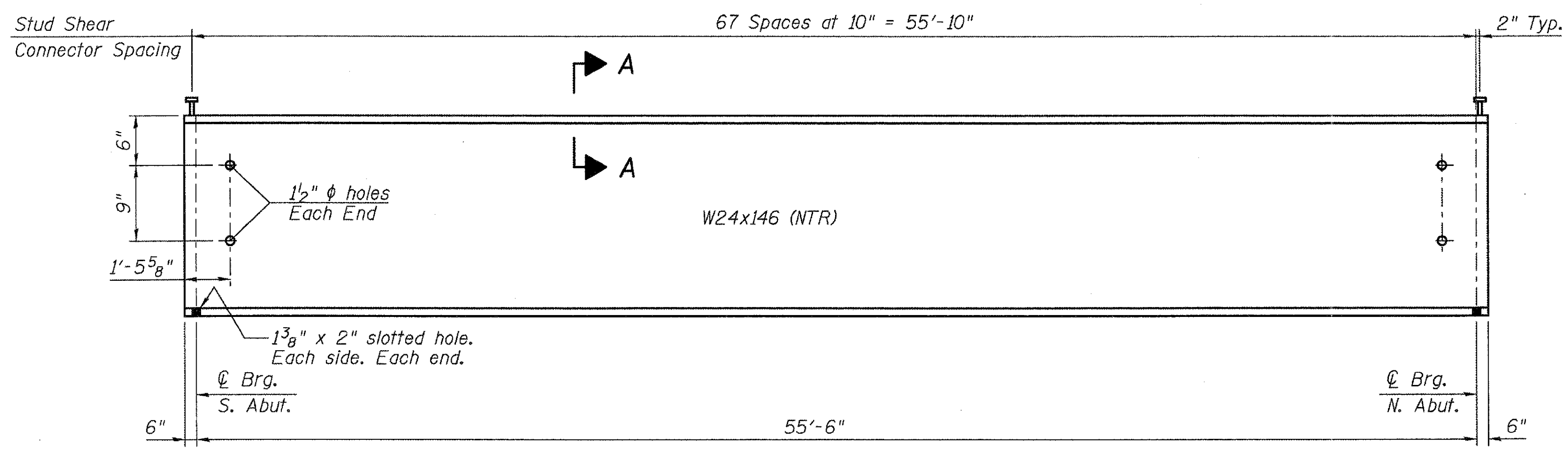
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type SM	Foot	176

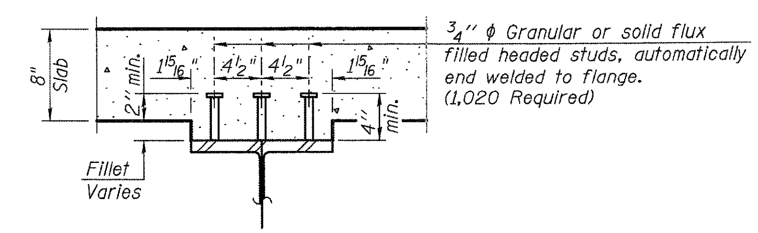


FRAMING PLAN

"D" denotes Interior Diaphragm. See Sheet 13 of 19.



ELEVATION



SECTION A-A

TOP OF BEAM ELEVATIONS

(For Fabrication Only)

Location	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
℄ Brg. S. Abut.	765.06	764.93	764.79	764.65	764.51
℄ Brg. N. Abut.	763.96	763.82	763.68	763.54	763.40

INTERIOR GIRDER MOMENT TABLE		
		0.5 Sp. 1
I_s	(in⁴)	4580
$I_c(n)$	(in⁴)	12,295
$I_c(3n)$	(in⁴)	8,940
$I_c(cr)$	(in⁴)	
S_s	(in³)	371
$S_c(n)$	(in³)	540
$S_c(3n)$	(in³)	486
$S_c(cr)$	(in³)	
DC1	(k/')	0.875
M_{DC1}	('k)	336.9
DC2	(k/')	0.04
M_{DC2}	('k)	15.4
DW	(k/')	0.35
M_{DW}	('k)	134.8
M_{LL+IM}	('k)	765.2
M_u (Strength I)	('k)	1982
$\phi_f M_n$	('k)	2551
f_s DC1	(ksi)	10.90
f_s DC2	(ksi)	0.38
f_s DW	(ksi)	3.33
f_s (LL+IM)	(ksi)	18.89
f_s (Service II)	(ksi)	39.17
$0.95R_hF_{yf}$	(ksi)	47.5
f_s (Total)(Strength I)	(ksi)	
$\phi_f F_n$	(ksi)	
V_f	(k)	22.2

INTERIOR GIRDER REACTION TABLE		
		Abut.
R_{DC1}	(k)	24.3
R_{DC2}	(k)	1.1
R_{DW}	(k)	9.7
R_{LL+IM}	(k)	57.2
R_{Total}	(k)	92.3

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite dead loads (in.⁴ and in.³).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{LL+IM}: Un-factored live load moment plus dynamic load allowance (impact) ((kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (LL+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
$M_{LL+IM} / S_c(3n)$ or $M_{LL+IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(LL+IM)$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

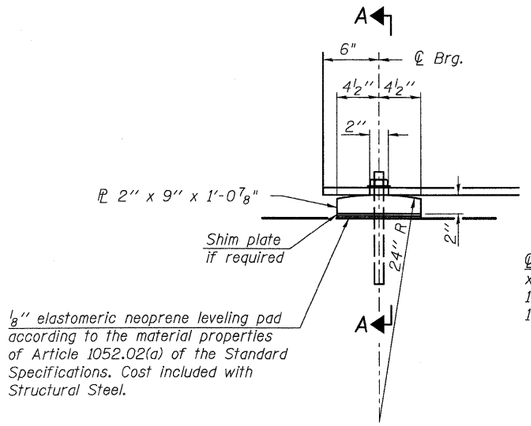
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_{sLL+IM}$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 (ksi).

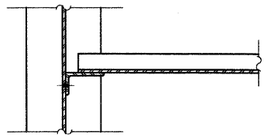
V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

NOTES:

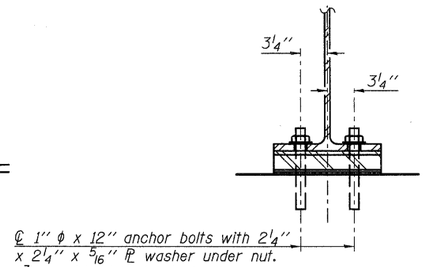
All beams shall be W24x146 AASHTO M270 Grade 50W (NTR). All diaphragms and connecting angles shall be AASHTO M270 Grade 50W. All bearing plates shall be AASHTO M270 Grade 50W.
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted.
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.



ELEVATION AT ABUTMENT



SECTION A-A

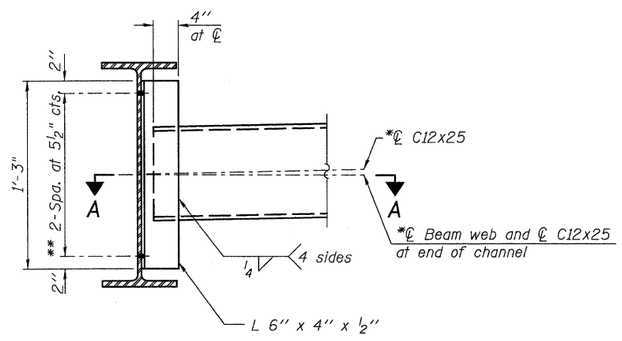


SECTION A-A

FIXED BEARING

(10 Required)

SECTION A-A



INTERIOR DIAPHRAGM, D

(16 Required)

Note:
Two hardened washers required for each set of oversized holes.
*C12x30 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
**¾" ϕ HS bolts, 15/16" ϕ holes

NOTES:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Two 1/8 in. adjusting shims shall be provided for each bearing location in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	20

FILE NAME = W:\Projects\2010\100025 Burr Ferson11\oedd\Structural\Dgn\B4453080-814-Struct_Steel_Details.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

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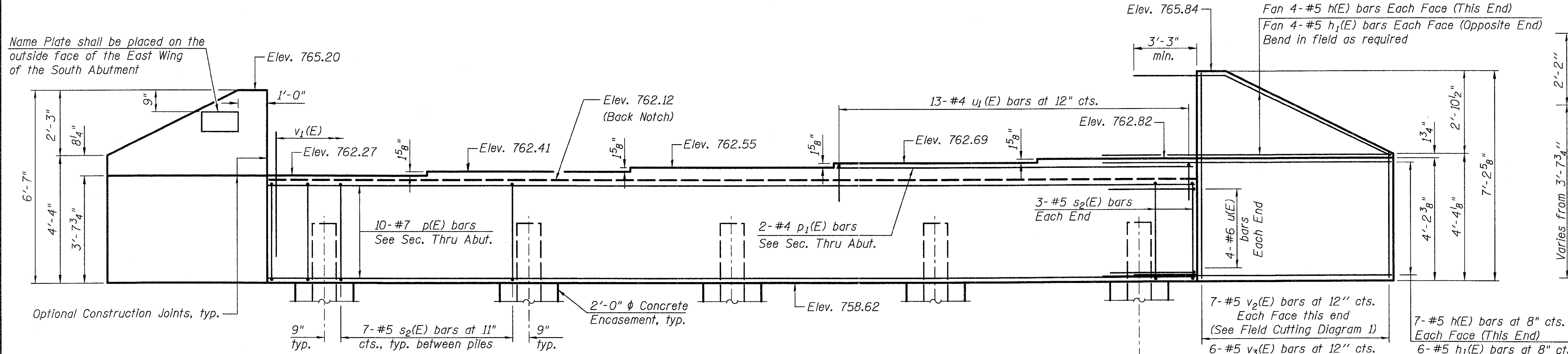
PLOT SCALE =	DRAWN - HLF	REVISED -	
PLOT DATE = 11/17/2011	CHECKED - AEU	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 045-3080
SHEET NO. 14 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	47
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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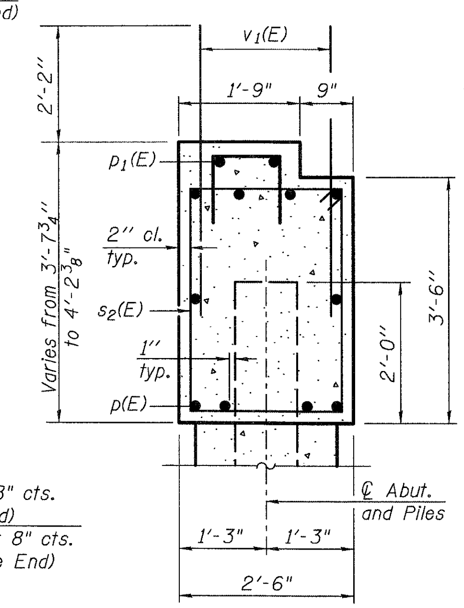
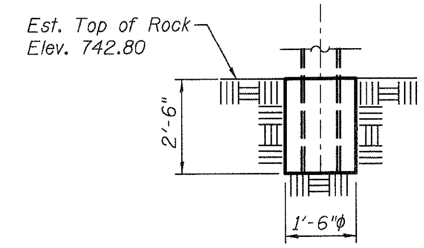
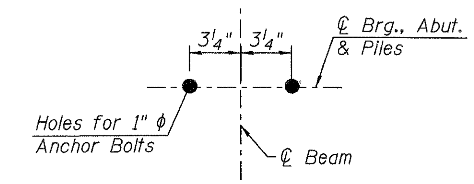
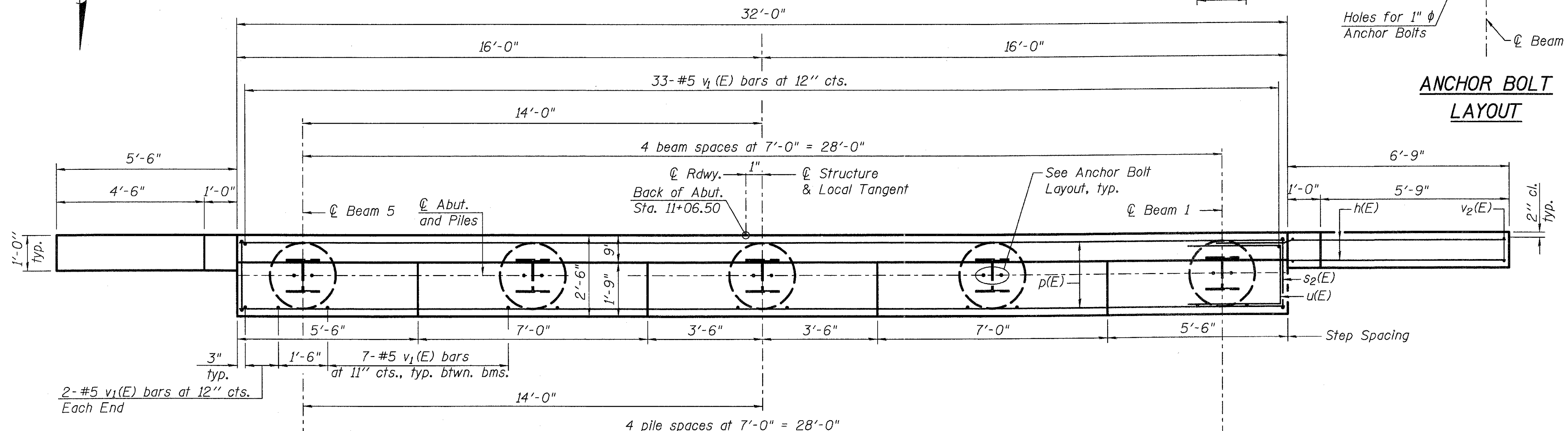


SEC. THRU ABUT.





ANCHOR BOLT LAYOUT



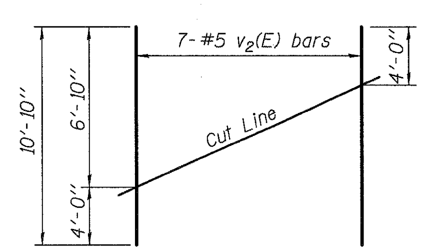
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	22	#5	10'-0"	
h_1(E)	20	#5	8'-9"	
p(E)	10	#7	31'-8"	
p_1(E)	2	#4	12'-2"	
s_2(E)	34	#5	11'-7"	
u(E)	8	#6	10'-1"	
u_1(E)	13	#4	3'-6"	
v_1(E)	65	#5	4'-4"	
v_2(E)	7	#5	10'-10"	
v_3(E)	6	#5	10'-3"	
Structure Excavation		Cu. Yd.	98	
Concrete Structures		Cu. Yd.	13.9	
Concrete Encasement		Cu. Yd.	1.8	
Reinforcement Bars, Epoxy Coated		Pound	2,070	
Furnishing Steel Piles, HP 12x53		Foot	102.5	
Setting Piles in Rock		Each	5	

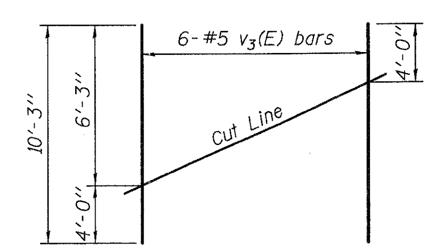
PILE DATA

Type: Steel HP 12x53
Nominal Required Bearing: Set in Rock
Factored Resistance Available: 209.5 kips
Est. Length: 20.50'
No. Production Piles: 5
No. Test Piles: 0
Estimated Top of Rock: 742.80
Rock Socket Depth: 2.5'
Rock Socket Diameter: 1'-6"



FIELD CUTTING DIAGRAM 1

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



FIELD CUTTING DIAGRAM 2

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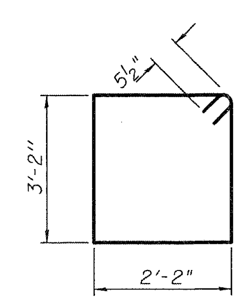
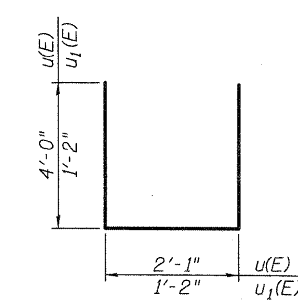


BAR s_2(E)



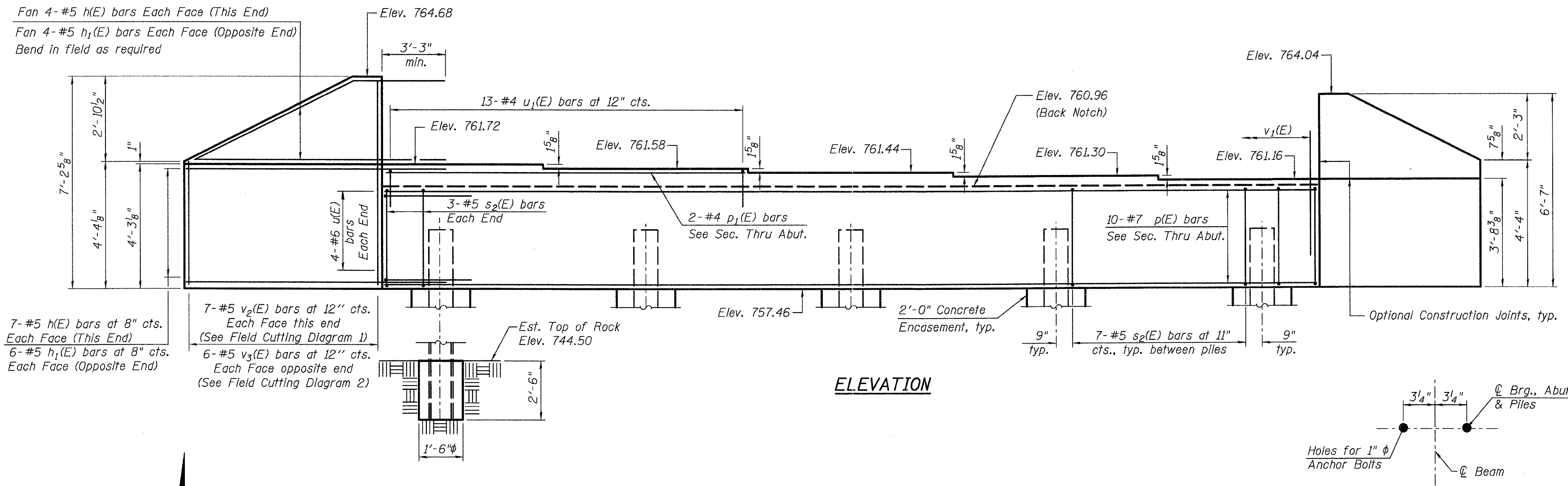
BAR u(E) & u_1(E)

Notes:
Pour steps monolithically with cap.
For details of piles and Concrete Encasement, see sheet 17 of 20.

FILE NAME = W:\Projects\2010\100025 BurrPersonal\cadd\Structural\Dgn\0453080-015-SAbut.dgn

WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - HLF	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH ABUTMENT STRUCTURE NO. 045-3080
		CHECKED - AEU	REVISED -		
	PLOT SCALE =	DRAWN - HLF	REVISED -		
	PLOT DATE = 11/17/2011	CHECKED - AEU	REVISED -		SHEET NO. 15 OF 20 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	48
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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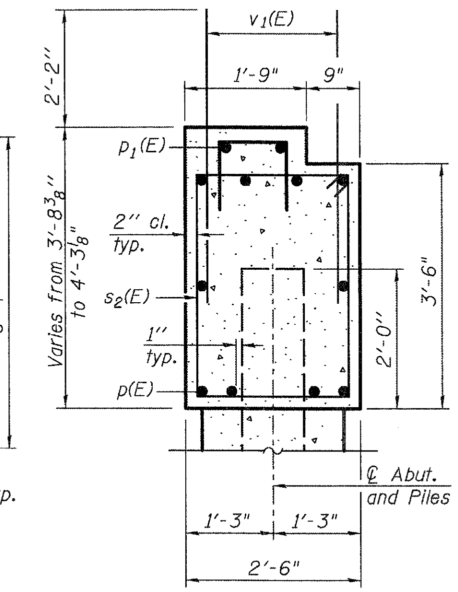
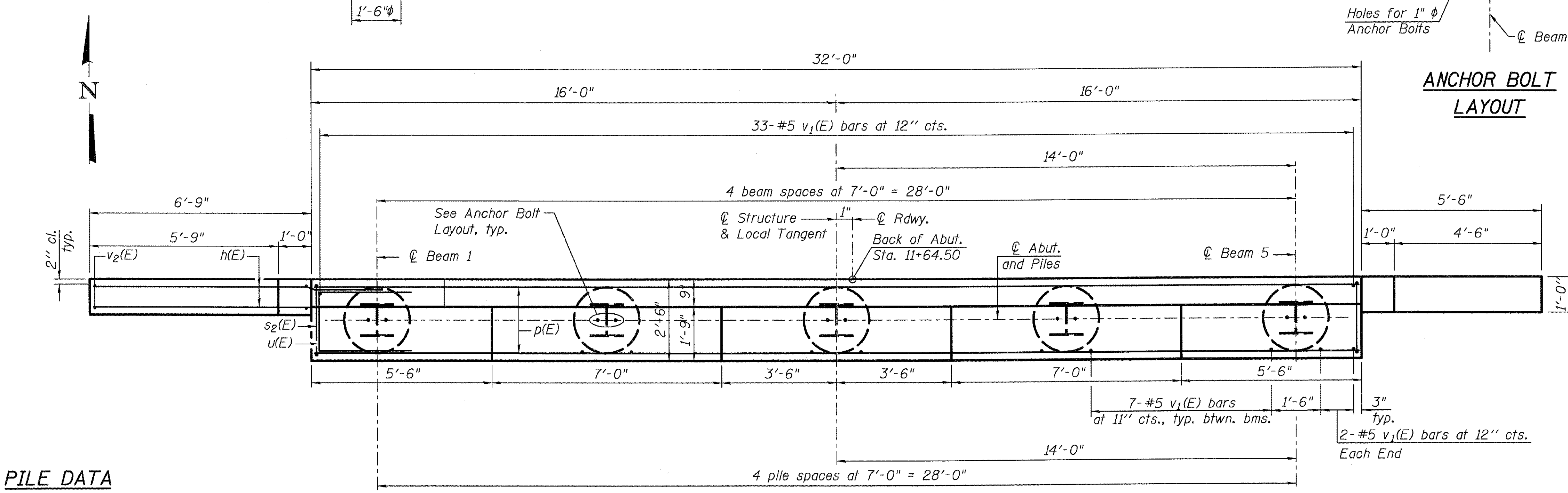


SEC. THRU ABUT.

ANCHOR BOLT LAYOUT



PLAN

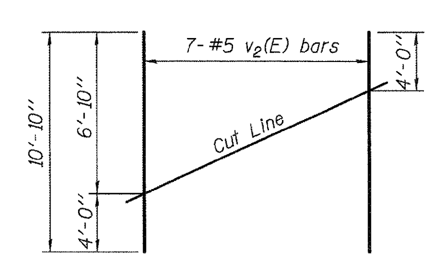
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	22	#5	10'-0"	
h_1(E)	20	#5	8'-9"	
p(E)	10	#7	31'-8"	
p_1(E)	2	#4	12'-2"	
s_2(E)	34	#5	11'-7"	
u(E)	8	#6	10'-1"	
u_1(E)	13	#4	3'-6"	
v_1(E)	65	#5	4'-4"	
v_2(E)	7	#5	10'-10"	
v_3(E)	6	#5	10'-3"	
Structure Excavation	Cu. Yd.		98	
Concrete Structures	Cu. Yd.		14.0	
Concrete Encasement	Cu. Yd.		1.8	
Reinforcement Bars, Epoxy Coated	Pound		2,070	
Furnishing Steel Piles, HP 12x53	Foot		87.5	
Setting Piles in Rock	Each		5	

Notes:
Pour steps monolithically with cap.
For details of piles and Concrete Encasement, see sheet 17 of 20.

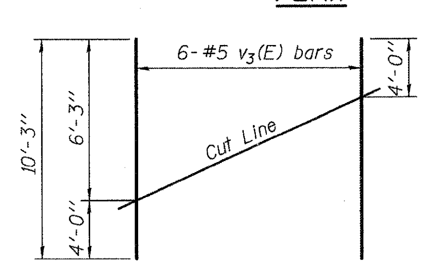
PILE DATA

Type: Steel HP 12x53
Nominal Required Bearing: Set in Rock
Factored Resistance Available: 209.5 kips
Est. Length: 17.50'
No. Production Piles: 5
No. Test Piles: 0
Estimated Top of Rock: 744.50
Rock Socket Depth: 2.5'
Rock Socket Diameter: 1'-6"



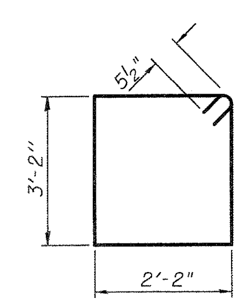
FIELD CUTTING DIAGRAM 1

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

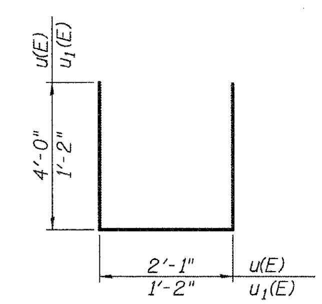


FIELD CUTTING DIAGRAM 2

Order v_3(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s_2(E)



BAR u(E) & u_1(E)

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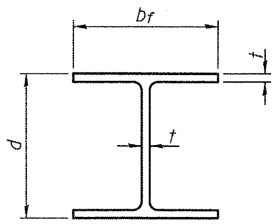
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

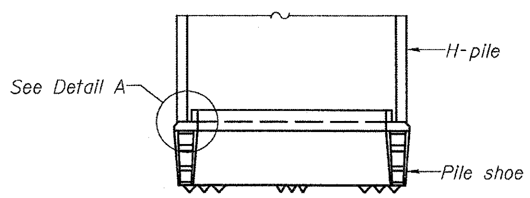
NORTH ABUTMENT
STRUCTURE NO. 045-3080
SHEET NO. 16 OF 19 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	49
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30"
x102	14"	$14\frac{3}{4}''$	$\frac{11}{16}''$	30"
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30"
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30"
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24"
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24"
x63	12"	$12\frac{1}{8}''$	$\frac{1}{2}''$	24"
x53	$11\frac{3}{4}''$	12"	$\frac{7}{16}''$	24"
HP 10x57	10"	$10\frac{1}{4}''$	$\frac{9}{16}''$	24"
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24"
HP 8x36	8"	$8\frac{1}{8}''$	$\frac{7}{16}''$	18"



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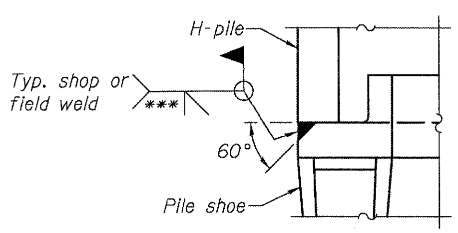
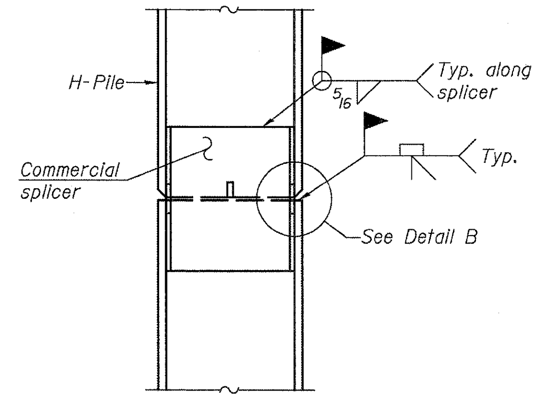


DETAIL A

H-PILE SHOE ATTACHMENT



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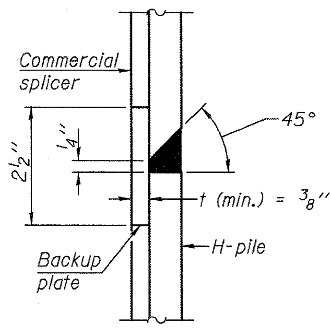
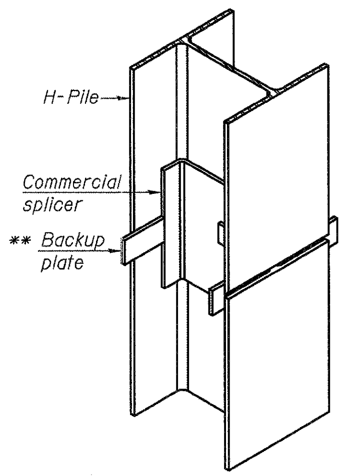
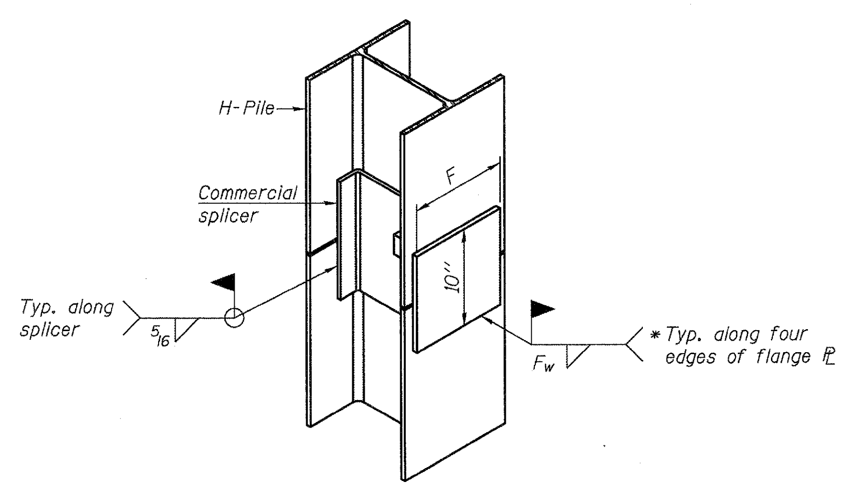


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



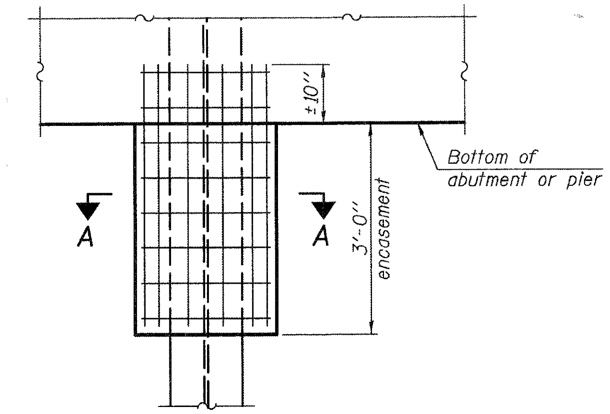
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds $\frac{1}{4}''$ from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}''$ min.).



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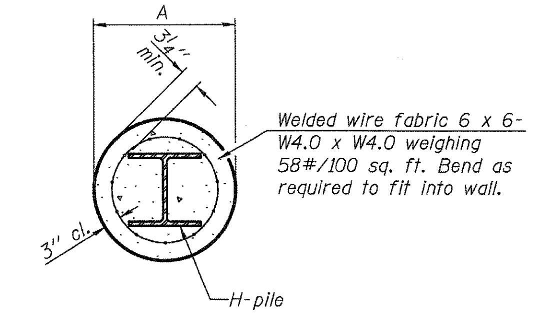
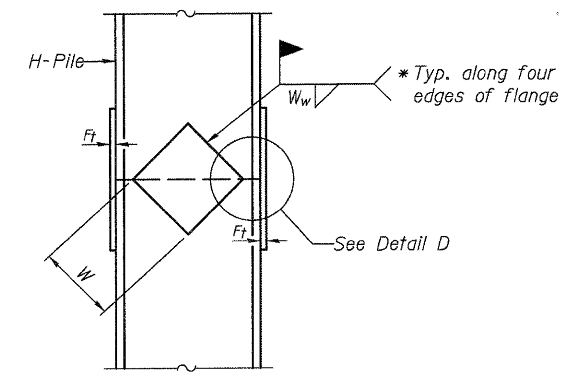


Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT



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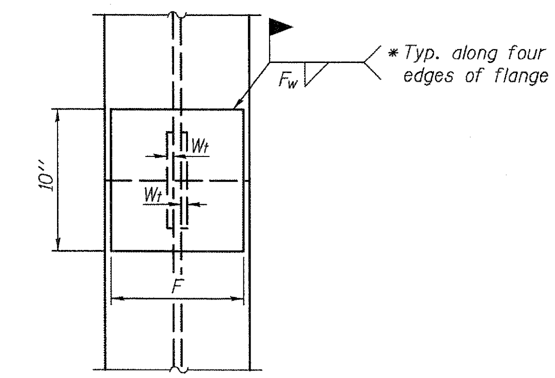
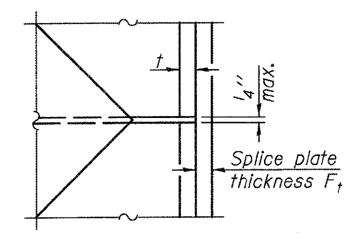


END VIEW



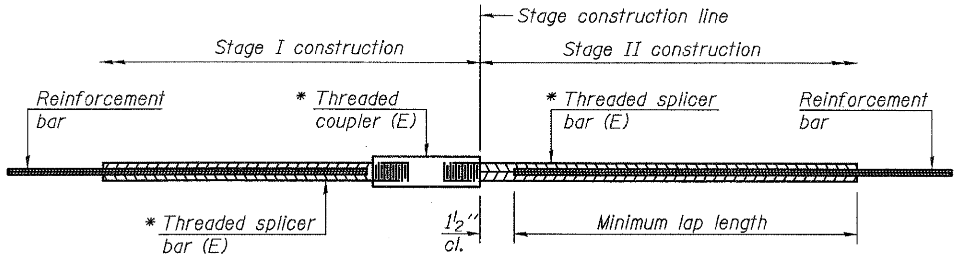
DETAIL D

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

WELDED PLATE FIELD SPLICE

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

F-HP 7-1-10



STANDARD BAR SPLICER ASSEMBLY

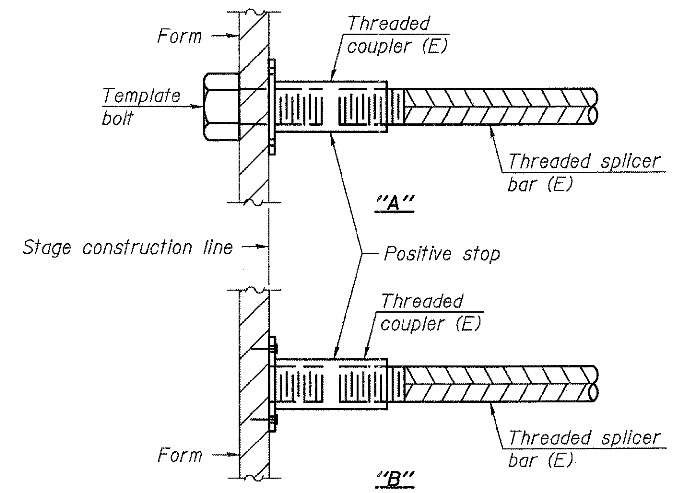
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1½" + thread length

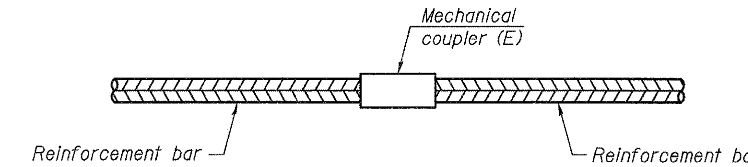
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



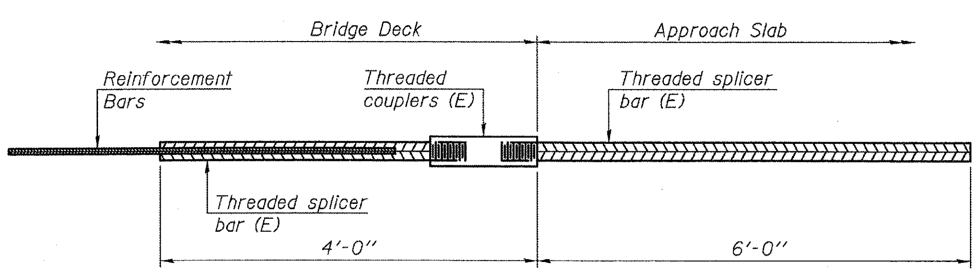
INSTALLATION AND SETTING METHODS

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



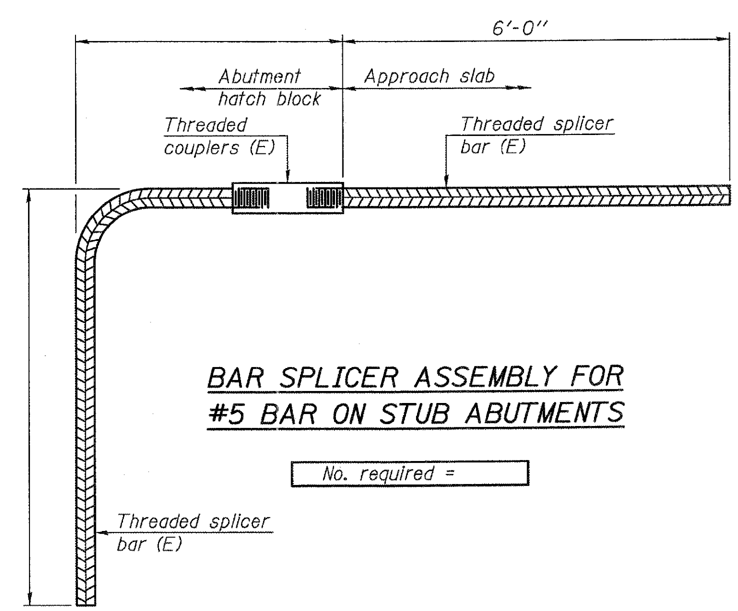
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 66



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

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

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See special provision for Mechanical Splicers.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 7-1-10

FILE NAME = W:\Projects\2010\100825 Burr Fersonll\cadd\Structural\Dgn\0453080-018-Bar Splicer.dgn

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116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - HLF	REVISED -
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PLOT SCALE =	DRAWN - HLF	REVISED -
PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-3080
SHEET NO. 18 OF 20 SHEETS

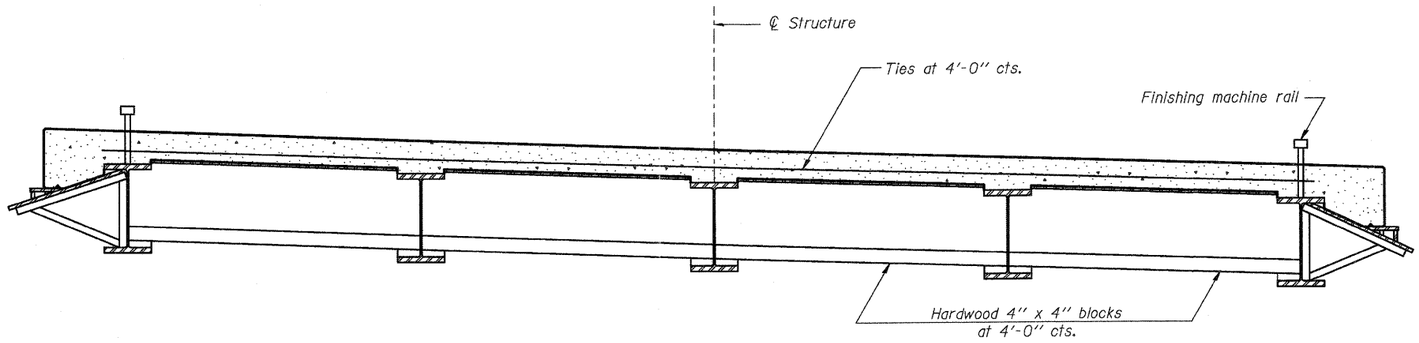
T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	51
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.

The finishing machine rails shall be placed on the top flange of the exterior beams.

The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.

For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



FORM BRACES FOR STANDARD CONSTRUCTION

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - HLF	REVISED -
	CHECKED - AEU	REVISED -
PLOT SCALE =	DRAWN - HLF	REVISED -
PLOT DATE = 10/10/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER FORMING BRACKETS
STRUCTURE NO. 045-3080
SHEET NO. 19 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	52
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = W:\Projects\2010\100025 Burr Ferson IT\cadd\Structural\Dgn\045-3080-819-Cantilever.dgn

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1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG SB-1

WEI Job No.: 412-01-01

Client: Wills Burke Kelsey Associates
Project: Burr Road (TR 194) Bridge over Ferson Creek
Location: St. Charles Township, Kane County, IL

Datum: NAVD 88
Elevation: 762.50 ft
North: 1928888.49 ft
East: 976399.31 ft
Station: 11+67.01
Offset: 4.88 RT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
762.0	6-inch thick ASPHALT --PAVEMENT--						
	Medium dense, brown and gray, gravelly SANDY LOAM --FILL--			1	4 8 5	NP	9
		5		2	0 1 2	NR	
	--L_L = 30, P_L = 17-- --% Gravel = 23.2%-- --% Sand = 42.4%-- --% Silt = 26.3%-- --% Clay = 8.1%--			3	0 5 6	NP	10
753.5	Medium dense, gray SILT	10		4	2 6 5	NP	21
752.0	Dense to very dense, brown SANDY LOAM with some gravel			5	35 33 23	NR	
		15		6	8 23 22	NP	6
				7	23 50/4	NP	6
745.5	WEATHERED BEDROCK						
744.5	Run 1: 18' to 23' Recovery=100% RQD=7% Very poor, strong, light gray and yellowish, highly fractured, somewhat weathered DOLOSTONE with shale partings	20					
739.5	Run 2: 23' to 28' Recovery=100% RQD=8% Very poor, strong, light gray and yellowish, highly fractured, somewhat weathered DOLOSTONE with shale partings	25					
734.5	Run 3: 28' to 33' Recovery=93% RQD=0% Very poor, strong, light gray, highly fractured, unweathered DOLOSTONE with shale partings	30					
729.5	Boring terminated at 33.00 ft	35					
		40					

GENERAL NOTES

Begin Drilling: 05-11-2009 Complete Drilling: 05-11-2009
Drilling Contractor: Wang Testing Services Drill Rig: Mobil B-57 TMR
Driller: J&K Logger: B. Wilson Checked by: N. Davis
Drilling Method: 4.25-inch HSA;140 lb Mobil Automatic Hammer;
backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ DRY
At Completion of Drilling: ▼ Washed
Time After Drilling: NA
Depth to Water: ▽ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 4120101.GPJ WANGENG.GDT 10/6/09

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG SB-2

WEI Job No.: 412-01-01

Client: Wills Burke Kelsey Associates
Project: Burr Road (TR 194) Bridge over Ferson Creek
Location: St. Charles Township, Kane County, IL

Datum: NAVD 88
Elevation: 764.80 ft
North: 1928796.50 ft
East: 976365.24 ft
Station: 10+70.50
Offset: 11.60 LT

Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
764.3	6-inch thick ASPHALT --PAVEMENT--						
	Medium dense, brown LOAM with some gravel --FILL--			1	11 10 8	NP	10
760.3	Loose, brown SANDY LOAM	5		2	2 2 3	NP	14
	--L_L = NP, P_L = NP-- --% Gravel = 0.4%-- --% Sand = 56.8%-- --% Silt = 42.3%-- --% Clay = 0.5%--			3	6 4 5	NP	24
		10		4	4 3 3	NP	21
753.3	Loose to medium dense, gray SILT to SILTY LOAM			5	2 2 2	NP	19
		15		6	3 2 3	NP	18
				7	4 6 5	NP	20
746.8	Stiff, gray CLAY LOAM with little gravel	20		8	2 4 5	1.97 B	11
742.8	Run 1: 22' to 27' Recovery=100% RQD=0% Very poor, strong, light gray and yellowish, highly fractured, somewhat weathered DOLOSTONE with shale partings and little cavities	25					
737.8	Run 2: 27' to 32' Recovery=100% RQD=0% Very poor, strong, light gray and yellowish, highly fractured, somewhat weathered DOLOSTONE with shale partings and little cavities	30					
732.8	Run 3: 32' to 37' Recovery=100% RQD=14% Very poor, strong, light gray, highly fractured, unweathered DOLOSTONE with shale partings and little cavities	35					
727.8	Boring terminated at 37.00 ft	40					

GENERAL NOTES

Begin Drilling: 05-11-2009 Complete Drilling: 05-11-2009
Drilling Contractor: Wang Testing Services Drill Rig: Mobil B-57 TMR
Driller: J&K Logger: B. Wilson Checked by: N. Davis
Drilling Method: 4.25-inch HSA;140 lb Mobil Automatic Hammer;
backfilled upon completion

WATER LEVEL DATA

While Drilling: ▽ 6.75 ft
At Completion of Drilling: ▼ Washed
Time After Drilling: NA
Depth to Water: ▽ NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 4120101.GPJ WANGENG.GDT 10/6/09

FILE NAME = W:\Projects\2010\100025 BurrFerson11\cadd\Structural\Dgn\04503888-228-SoilBoring.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - HLF	REVISED -
	CHECKED - AEU	REVISED -
PLOT SCALE =	DRAWN - HLF	REVISED -
PLOT DATE = 10/18/2011	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 045-3080
SHEET NO. 20 OF 20 SHEETS

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0194	08-14117-00-BR	KANE	76	53
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG HA-01

WEI Job No.: 412-01-01

Client: Wills Burke Kelsey Associates
Project: Burr Road (TR 194) Bridge over Ferson Creek
Location: Ferson Creek, Kane County, IL

Datum: NGVD
Elevation: ft
North: 1928853.40 ft
East: 976408.87 ft
Station:
Offset:

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		Brown SANDY LOAM (Easy Penetration)			1	PUSH	NP	65
		Gray LOAM (Medium Penetration)						
		--L_L = NP, P_L = NP--						
		--% Gravel = 0.0%--			2	PUSH	NP	21
		--% Sand = 69.8%--						
		--% Silt and Clay = 30.2%--						
		D_{50} = 0.131 mm	5		3	PUSH	NP	18
		Gray SANDY LOAM (Medium to Hard Penetration)			4	PUSH	NP	19
		Brown SANDY LOAM, trace gravel (Medium Penetration)			5	PUSH	NP	15
		Brown SAND and GRAVEL (Hard Penetration)	10					
		SAMPLER REFUSAL AT 10' 4"			6	PUSH	NP	12
		Boring terminated at 10.33 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling: 06-05-2009 Complete Drilling: 06-05-2009
Drilling Contractor: GBE Drill Rig: Hand Auger
Driller: G&F Logger: F. Borzga Checked by: N. Davis
Drilling Method: Jack Hammer Driven Geoprobe; Continuous Sampling

WATER LEVEL DATA

While Drilling: Stream Bed
At Completion of Drilling: Stream Bed
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 4120101.GPJ WANGENG.GDT 8/27/09

Wang Engineering, Inc.
Consulting Geotechnical and Environmental Engineers
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
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BORING LOG RB-01

WEI Job No.: 412-01-01

Client: Wills Burke Kelsey Associates
Project: Burr Road (TR 194) Bridge over Ferson Creek
Location: Ferson Creek, Kane County, IL

Datum: NGVD
Elevation: ft
North: 1928955.55 ft
East: 976414.62 ft
Station:
Offset:

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
		6-inch thick ASPHALT			1	4 5 5 5	1.50 P	20
		--PAVEMENT--						
		Stiff, gray CLAY LOAM --FILL--			2	2 3 4 3	NP	13
		Loose, gray LOAM --FILL--						
		Very loose, black LOAM, with organic mattter	5		3	1 2 1 2	NP	113
		--POSSIBLE BURIED TOPSOIL--						
		Soft, black CLAY LOAM, little gravel			4	4 8 12 20	0.25 P	15
		Medium dense, brown SAND	10		5	5 9 10 7	NP	10
		Boring terminated at 10.00 ft						
			15					
			20					

GENERAL NOTES

Begin Drilling: 05-11-2009 Complete Drilling: 05-11-2009
Drilling Contractor: WTS Drill Rig: Mobil B-57 TMR
Driller: J&K Logger: B. Wilson Checked by: N. Davis
Drilling Method: 4.25-inch HSA;140 lb Mobil Automatic Hammer; backfilled upon completion

WATER LEVEL DATA

While Drilling: DRY
At Completion of Drilling: DRY
Time After Drilling: NA
Depth to Water: NA

The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.

WANGENGINC 4120101.GPJ WANGENG.GDT 8/27/09

FILE NAME = N:\Projects\2010\100025 Burr Ferson\Civil\Cadd\Civil\Dgn\Sht\BLOG_01.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174
(630) 443-7755

USER NAME = *USER*	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

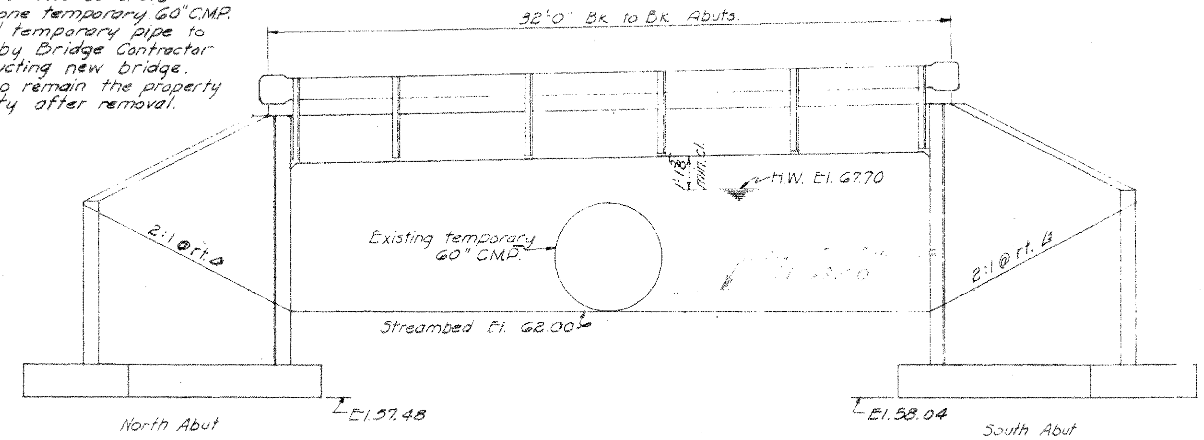
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY BORING LOG

SCALE: | SHEET NO. 54 OF 76 SHEETS | STA. | TO STA.

TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	54
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

B.M. Spike in North Root 24" Oak
60' Left of Sta. 11+83. El. 68.29
Existing Structure: Two concrete abutments & one temporary 60" C.M.P.
Abutments and temporary pipe to be removed by Bridge Contractor before constructing new bridge.
Existing CMP to remain the property of Kane County after removal.



ELEVATION
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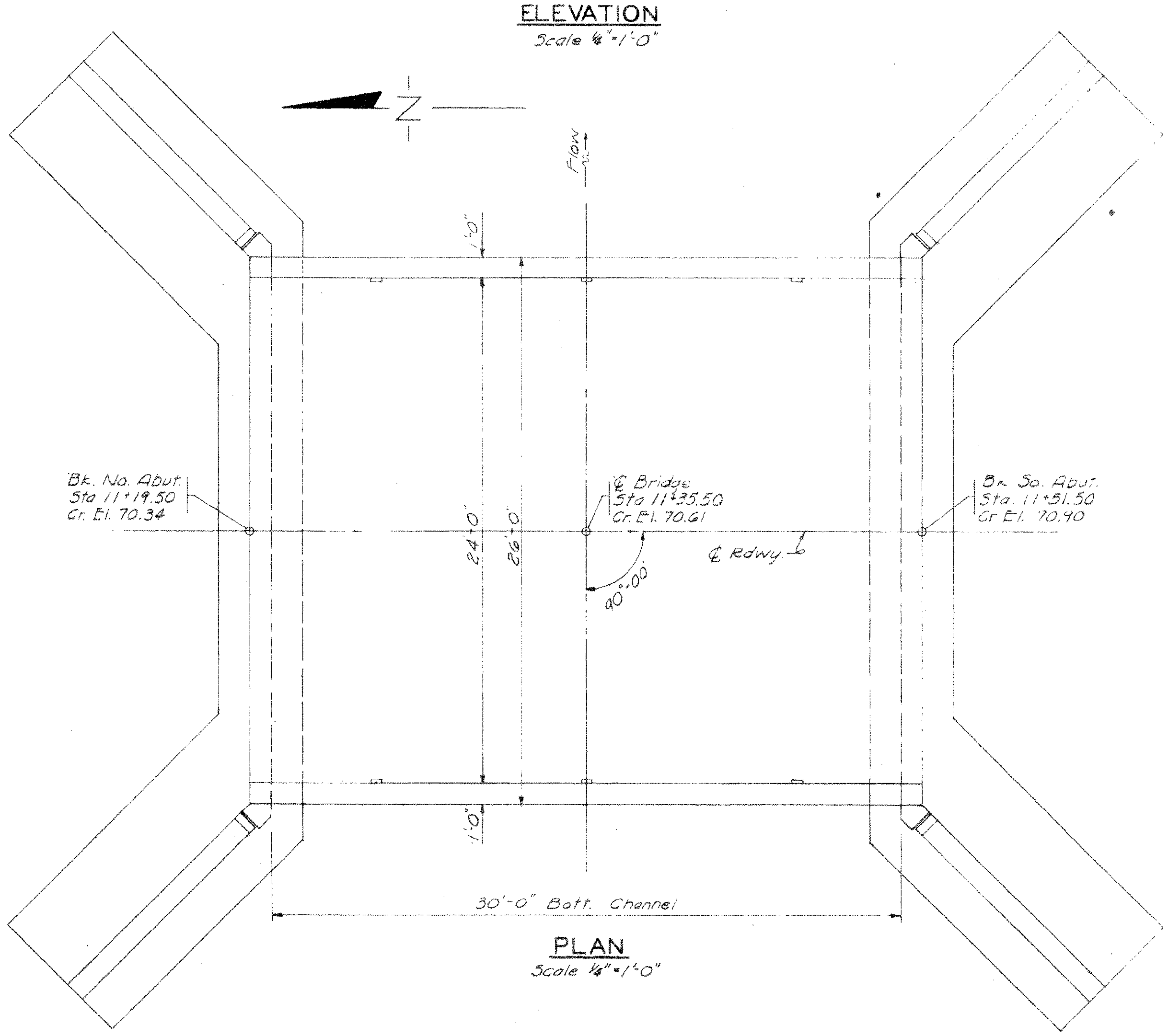

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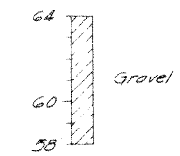
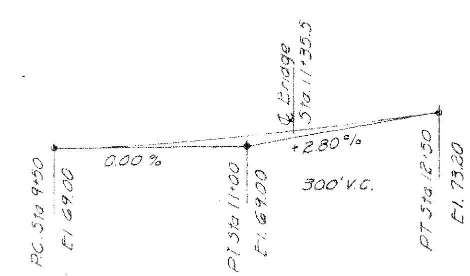


BORING DATA

STATION 11+35.50
FERSON CREEK
BURR BRIDGE BUILT 195
ST. CHARLES TWP.
KANE COUNTY
LOADING H15-S12

LETTERING FOR NAME PLATE
See Std. 2113



CURVE DATA

GENERAL NOTES

Class X Concrete shall be used throughout.

The concrete floor slab shall be finished in accordance with art. 51.19 of the Std. Spec's.

The curbs shall be poured monolithically with the slab.

All metal handrail & posts shall receive one shop coat of red lead paint and two field coats of aluminum paint.

Each handrail shall have a curved metal section at each end.

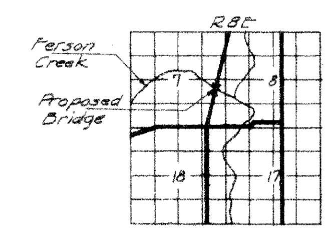
A cubical deposit of gravel or crushed stone shall be placed behind each drain hole in the abutments and wing walls in accordance with art. 50.10 of the Std. Spec's.

The backs of the abutments & wing walls shall be water-proofed. See art. 51.21 of the Std. Spec's.

For backfill behind abutments held at the top by superstructure, see art. 50.10 of the Std. Spec's.

Excavation for abutment footings shall be in accordance with art 50.8 of the Std. Spec's.

For item Channel Excavation see Road Plans.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

Item		Super	Sub	Total
Class X, Concrete	Cu Yds	43.8	70.2	114.0
Reinforcement Bars	Lbs	10220	5520	15740
Metal Plate Bridge Rail	Lin. Ft.	58	——	58
Name Plates	Ea.	1	——	1
Removal of Existing Structures	Ea.	——	——	1
Class A Excavation	Cu Yds	——	150	150
Class B Excavation	Cu. Yds.	——	200	200

WATERWAY DATA

Drainage Area	7905 Acres
Opening Req'd	170 Sq. Ft.
Present Opening	20 Sq. Ft.
Proposed Opening	171 Sq. Ft.

DESIGN STESSES

fs = 20,000 psi
fc = 1,400 psi super
fc = 1,000 psi sub
n = 10

Loading H15-S12-44

GENERAL PLAN & ELEVATION
BURR BRIDGE

STA. 11+35.50
ST. CHARLES TOWNSHIP
KANE COUNTY

HANSON, COLLINS & RICE
CONSULTING ENGINEERS

DESIGNED AEE CHECKED V.F.S.
DRAWN AEE DATE 2-24-59 NO. B-58-44

SHEET 1 OF 3 3079

FILE NAME = W:\Projects\2010\100825 BurrFerson\cadd\Civil\dgn\Sht\EXSTRU_01.dgn

WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174 (630) 443-7755	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

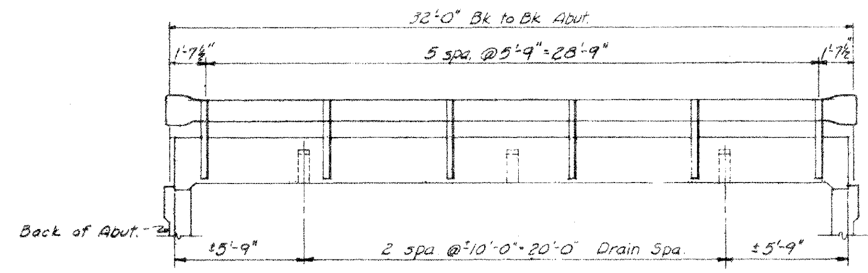
EXISTING STRUCTURE PLANS
FOR REFERENCE ONLY

SCALE: | SHEET NO. 55 OF 76 SHEETS | STA. | TO STA.

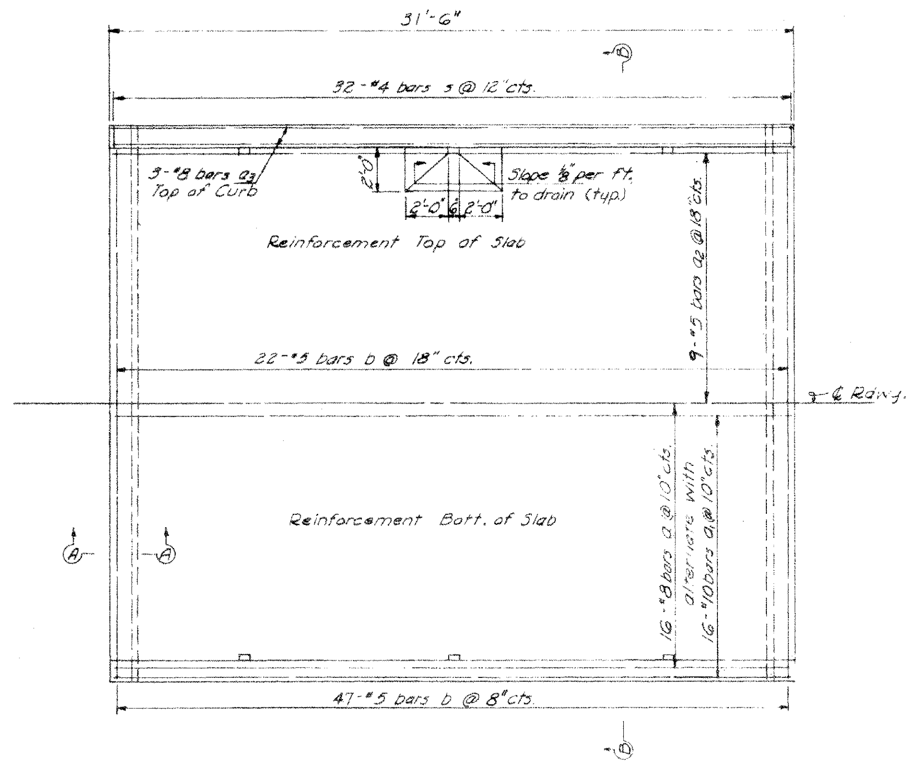
TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	55

CONTRACT NO. 63645

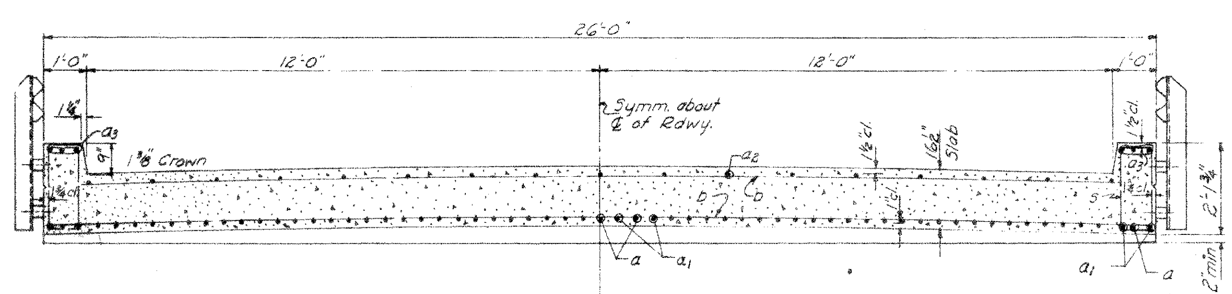
FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT



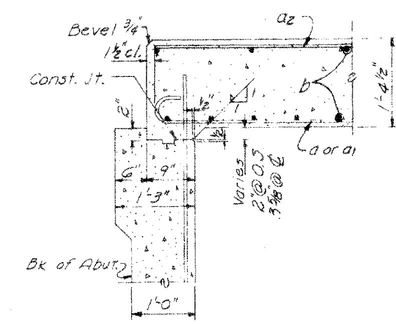
ELEVATION



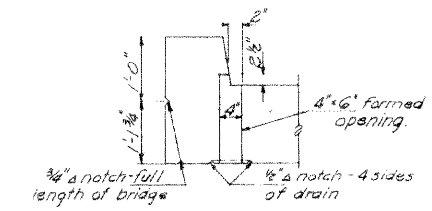
PLAN



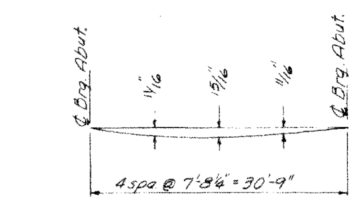
SECTION B-B



SECTION A-A

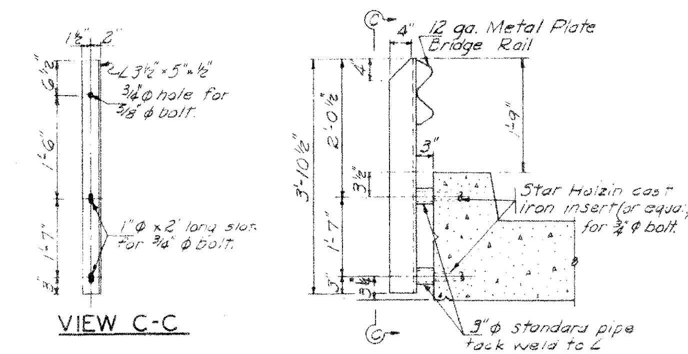


DRAIN DETAILS



DL. DEFLECTION DIAGRAM

In addition to D.L. Deflection the Contractor shall make allowance for shrinkage & settlement of falsework.

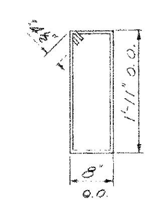


HANDRAIL DETAILS

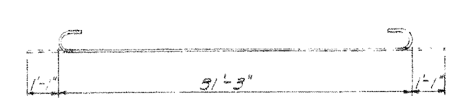
BILL OF MATERIAL

SUPERSTRUCTURE

Bar	No	Size	Length	Shape
a	31	#8	33'-5"	
a1	32	#10	31'-3"	
a2	17	#5	31'-3"	
a3	6	#8	31'-3"	
b	69	#5	25'-8"	
s	64	#4	5'-11"	
Class X Concrete Cu. Yds.				43.8
Reinforcement Bars Lbs.				10,220
Metal Plate Bridge Rail Lin. Ft.				58



BAR S



BAR a

SLAB
BURR BRIDGE

STA. 11+35.50
ST. CHARLES TOWNSHIP
KANE COUNTY

HANSON, COLLINS & RICE
CONSULTING ENGINEERS

DESIGNED AEE — CHECKED R.D.C.
DRAWN AEE — DATE 2-24-59 — NO. B-58-44

SHEET 2 OF 3

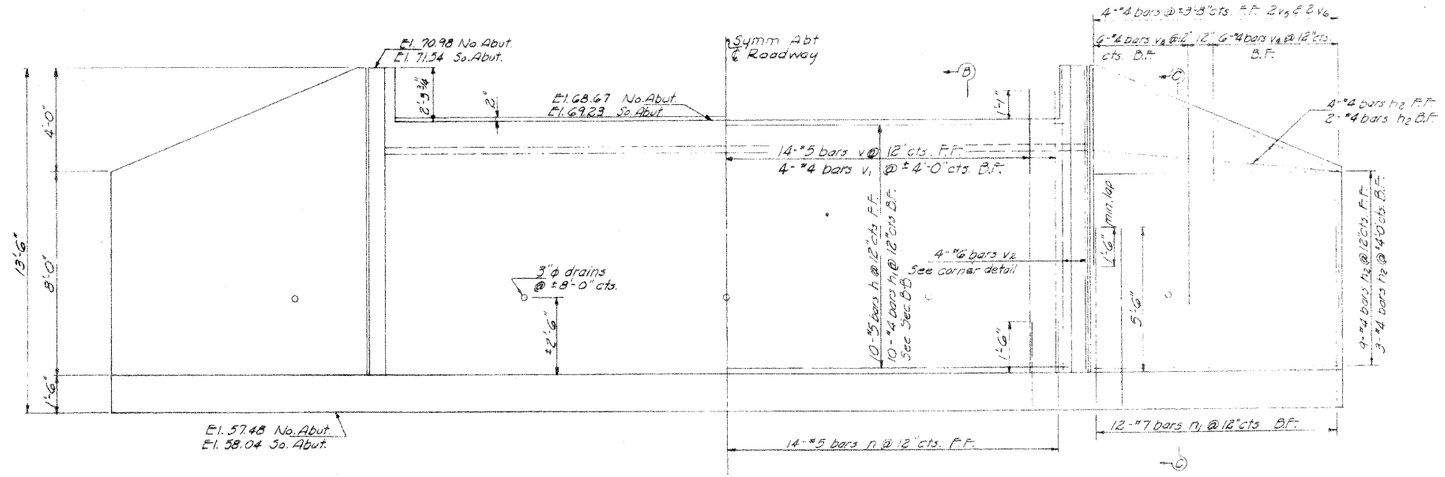
WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174 (630) 443-7755	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
FOR REFERENCE ONLY

SCALE: | SHEET NO. 56 OF 76 SHEETS | STA. | TO STA.

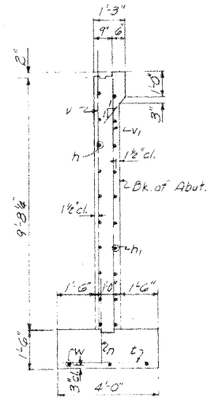
TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	56
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



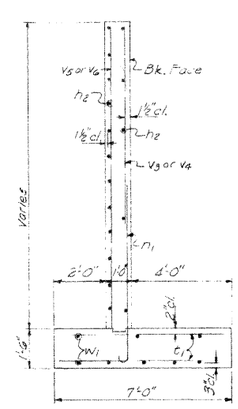
VIEW A-A

Show Rebar F.F.

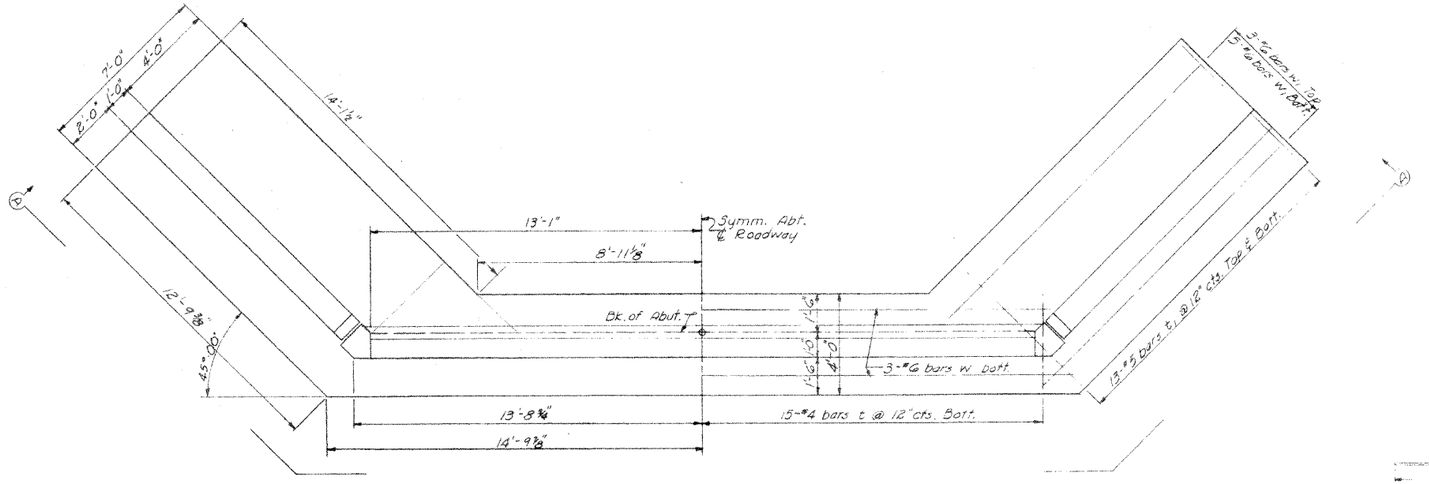
Show Rebar B.F.



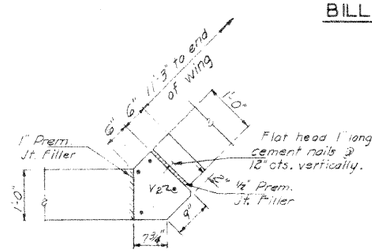
SECTION B-B



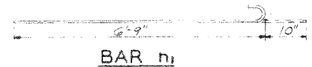
SECTION C-C



PLAN



CORNER DETAIL



BAR n1

BILL OF MATERIAL - ABUTMENTS

Bar	No.	Size	Length	Shape
h	20	#5	27'-0"	
h1	24 20	#4	27'-0"	
h2	72	#4	11'-6"	
n	54	#5	2'-9"	
n1	48	#7	7'-7"	
t	58	#4	3'-8"	
t1	104	#5	6'-8"	
v	54	#5	10'-9"	
v1	14	#4	9'-6"	
v2	16	#6	11'-10"	
v3	24	#4	7'-10"	
v4	24	#4	5'-10"	
v5	8	#4	10'-4"	
v6	8	#4	7'-9"	
w	6	#6	29'-6"	
w1	32	#6	13'-6"	
Class X Concrete			Cu.Yd.	70.2
Reinforcement Bars			Lbs.	5520
Class A Excavation			Cu.Yds.	150
Class B Excavation			Cu.Yds.	200

ABUTMENTS
BURR BRIDGE

STA. 11+35.50
ST. CHARLES TOWNSHIP
KANE COUNTY

HANSON, COLLINS & RICE
CONSULTING ENGINEERS

DESIGNED ALT. CHECKED VFS.
DRAWN AEE DATE 2-24-89 NO 2-58-4.1

FILE NAME = N:\Projects\2010\100825 BurrFerson\Todd\Civil\Dgn\Sht\EXSTRU_03.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174
(630) 443-7755

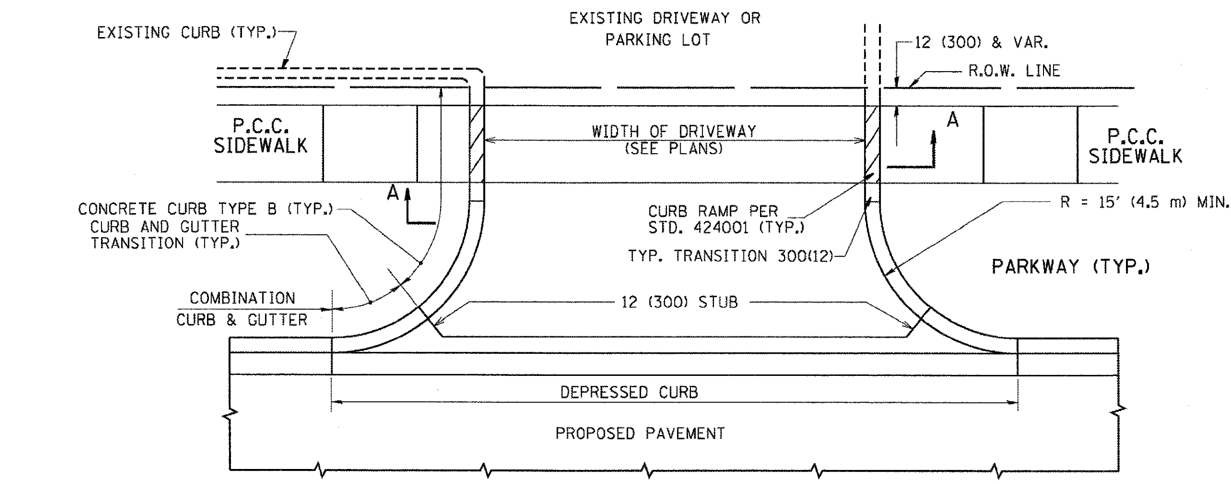
USER NAME = $USER$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

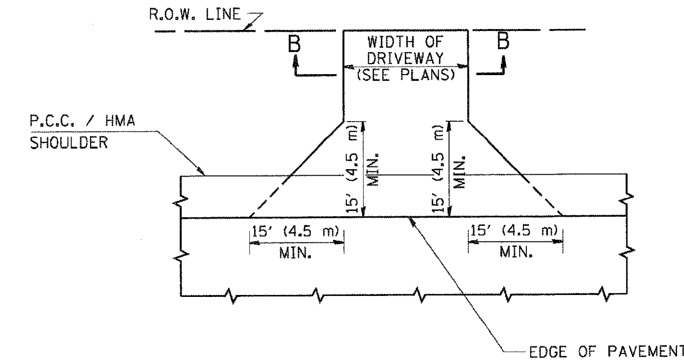
EXISTING STRUCTURE PLANS
FOR REFERENCE ONLY

SCALE: | SHEET NO. 57 OF 76 SHEETS | STA. | TO STA.

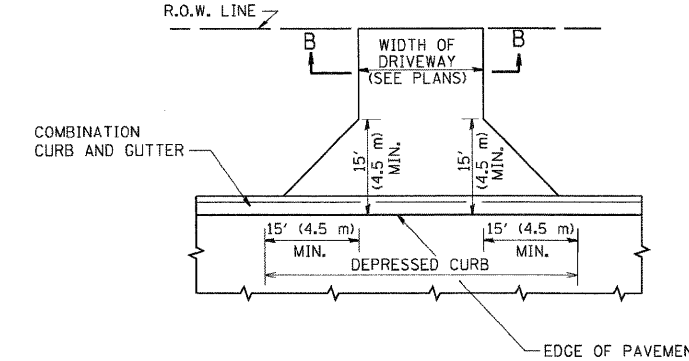
TWNSHP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	57
		CONTRACT NO. 63645		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



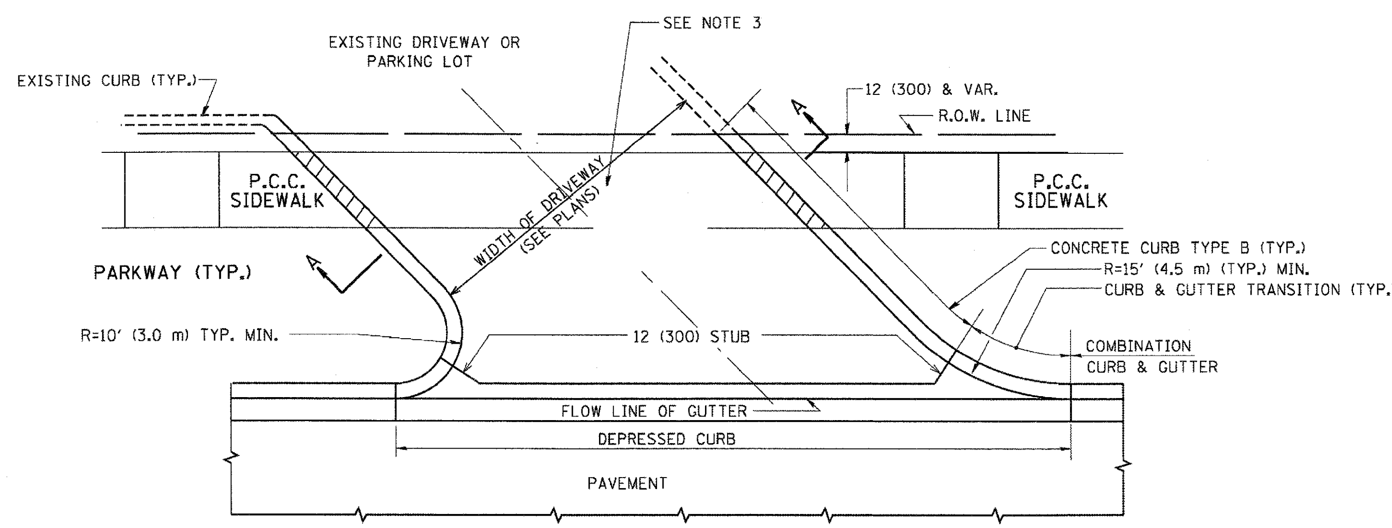
WITH CONCRETE CURB, TYPE B



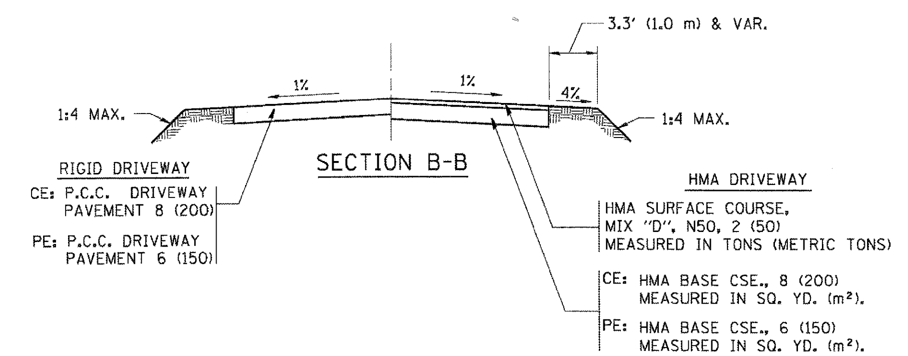
ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



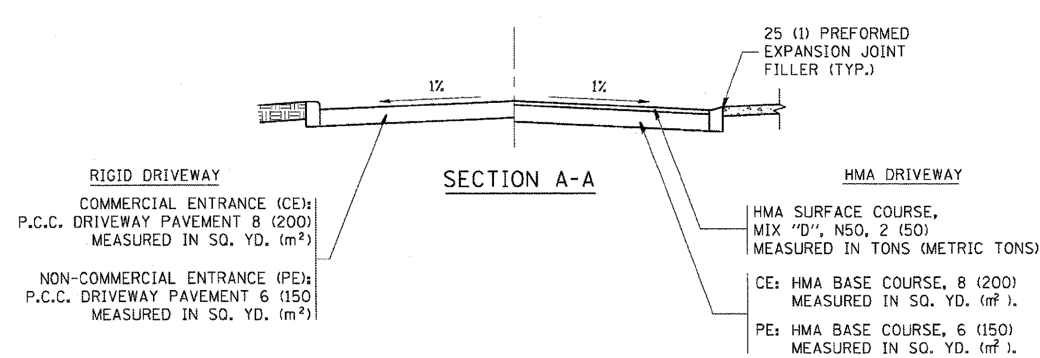
WITH CONCRETE CURB, TYPE B



RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE,
MIX "D", N50, 2 (50)
MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200)
MEASURED IN SQ. YD. (m^2).



GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY QUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

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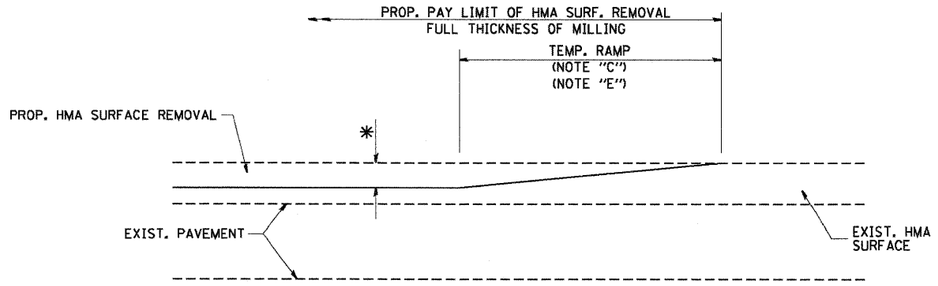
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\bd01.dgn	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 10/4/2011	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS – DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)

SCALE: NONE | SHEET NO. 58 OF 176 SHEETS | STA. | TO STA.

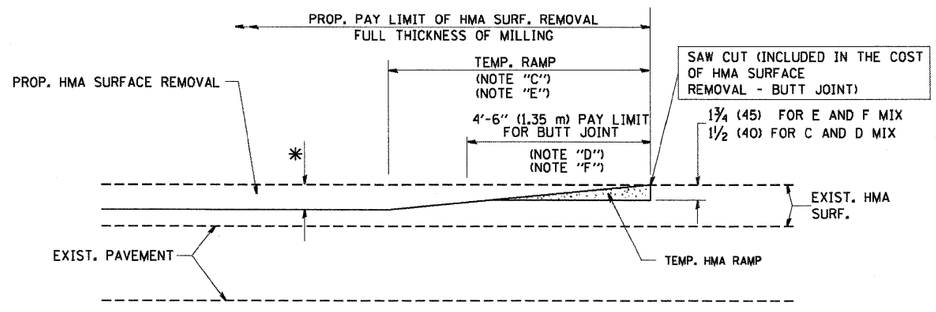
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	58
	BD0156-07 (BD-01)	CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

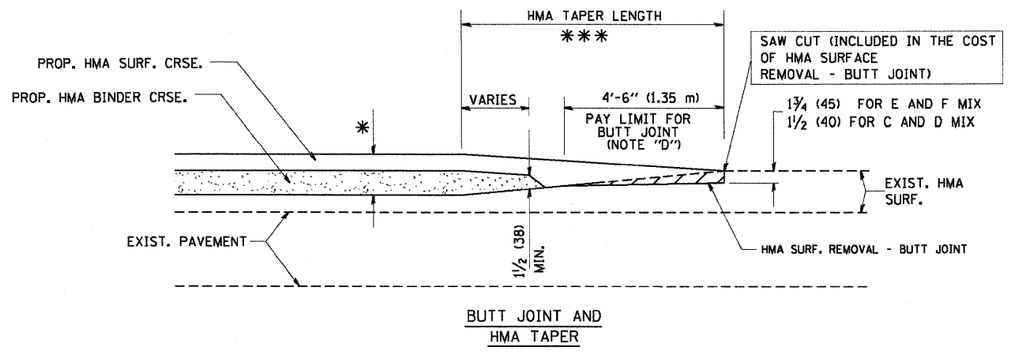


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

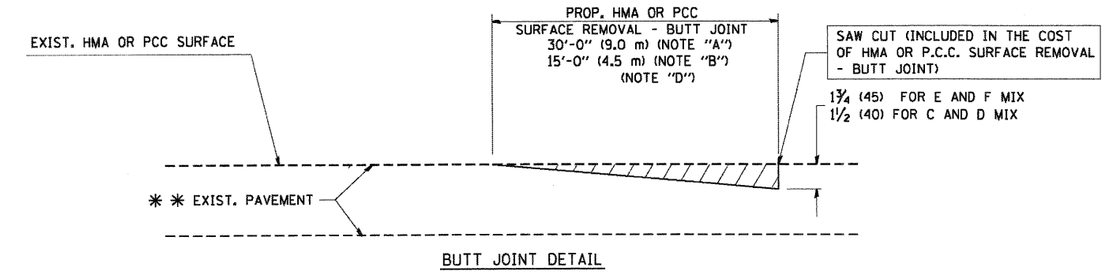
OPTION 2

TYPICAL TEMPORARY RAMP

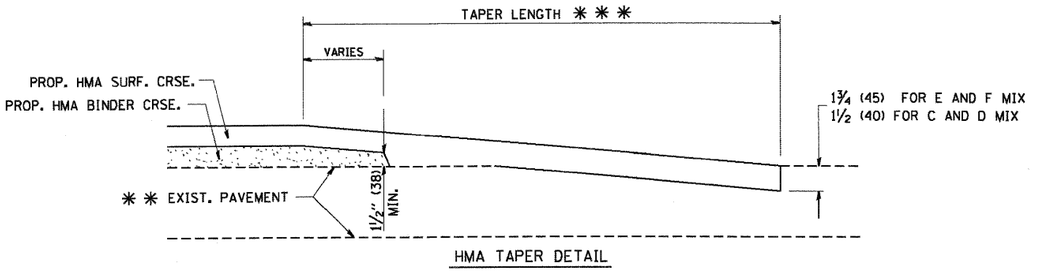


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

* * * 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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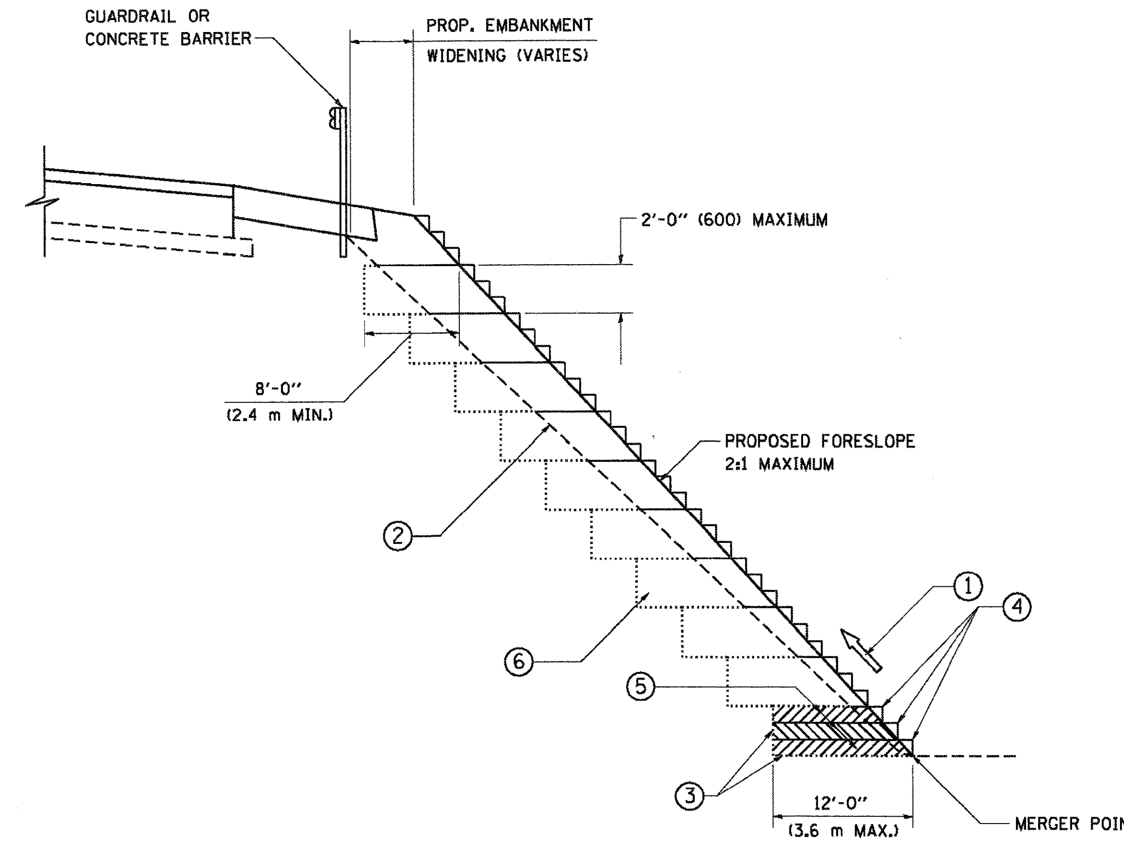
		DRAWN -	REVISED - A. ABBAS 03-21-97	
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01	
	PLOT DATE = 10/19/2011	DATE - 06-13-90	REVISED - R. BORO 01-01-07	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

SCALE: NONE | SHEET NO. 59 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	59
	BD400-05 BD32	CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
4. TRIM TO FINAL SLOPE.
5. EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
6. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
7. SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 10/19/2011	DATE - 06-16-04	REVISED -

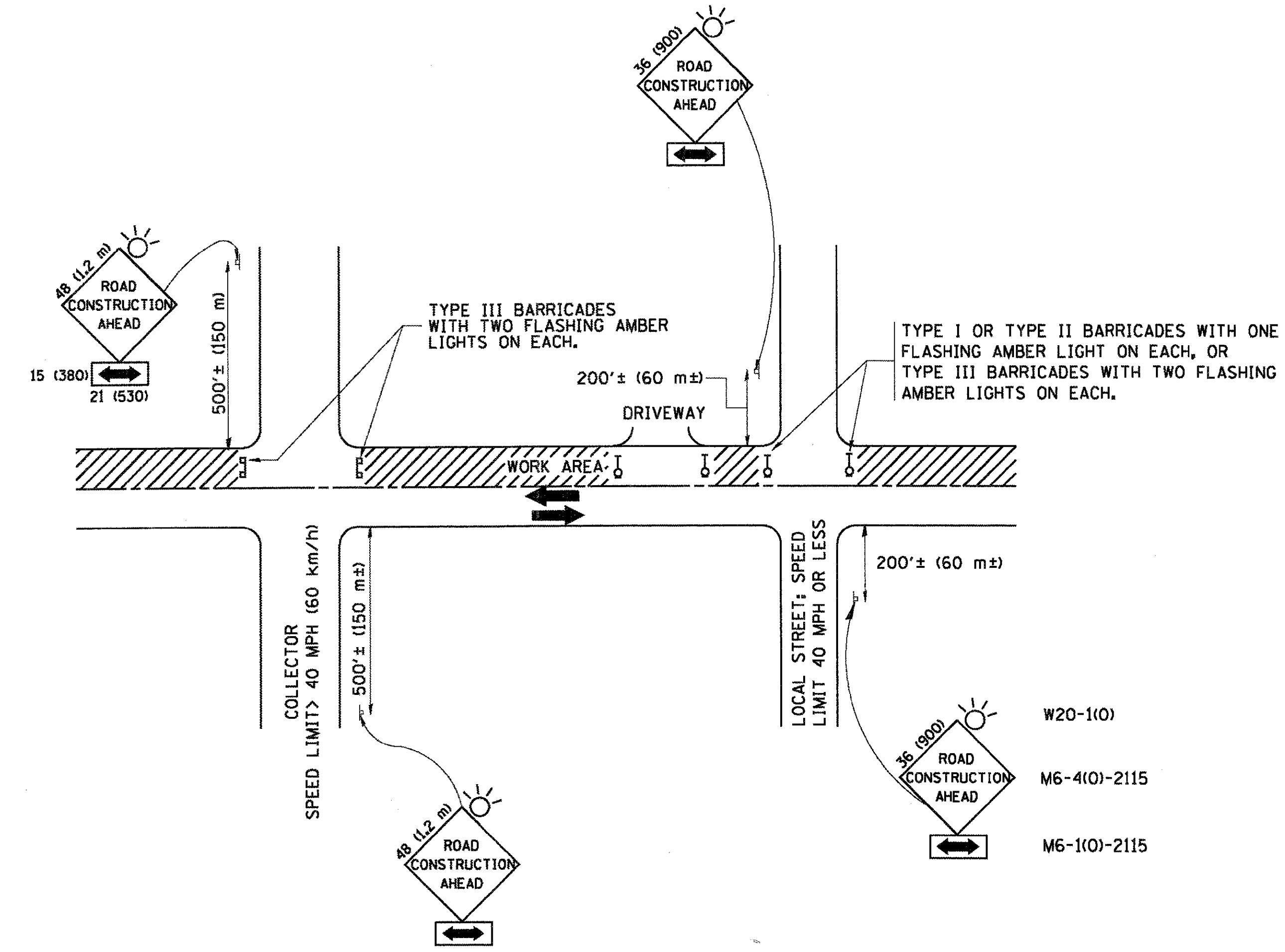
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL FOR EMBANKMENT WIDENING

SCALE: NONE | SHEET NO. 60 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	60
	BD-51	CONTRACT NO. 63645		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.

2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:

   a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.

   b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.

3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

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FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
		DRAWN -	REVISED - A. HOUSEH 03-06-96		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96		
	PLOT DATE = 10/19/2011	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00		SCALE: NONE / SHEET NO. 61 OF 76 SHEETS / STA. / TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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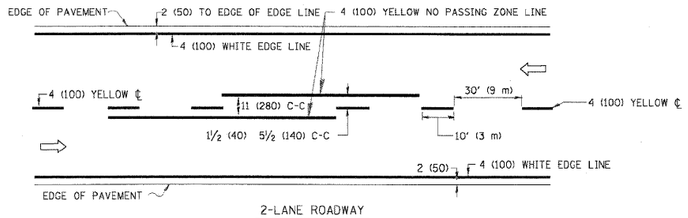
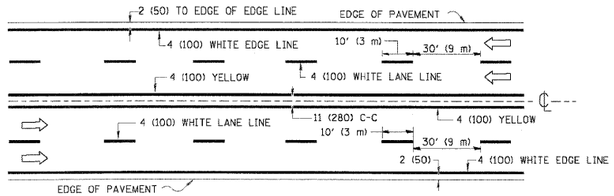
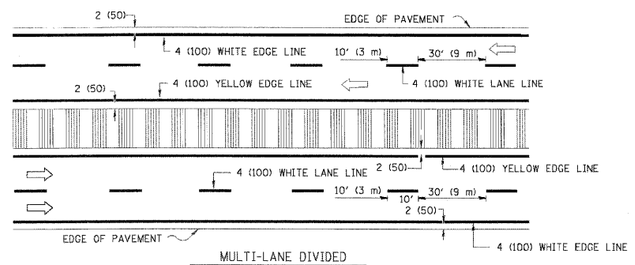
	TC-10	CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



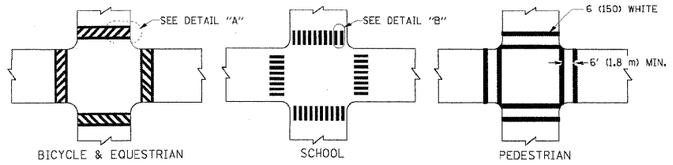
MULTI-LANE UNDIVIDED

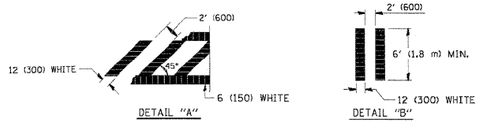


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

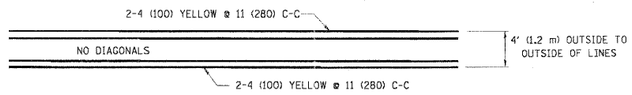
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

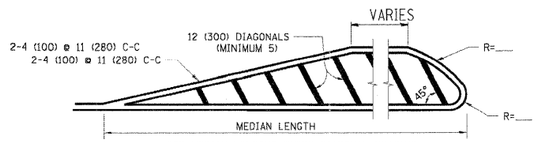




TYPICAL CROSSWALK MARKING



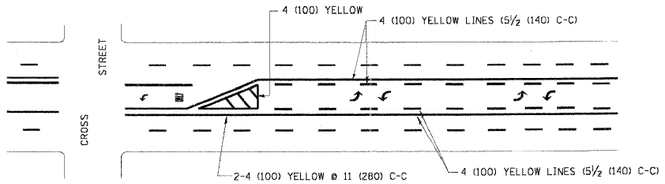
4' (1.2 m) WIDE MEDIANS ONLY



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

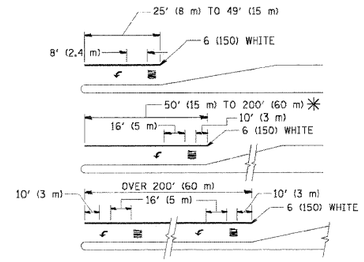
MEDIANS OVER 4' (1.2 m) WIDE



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.

MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

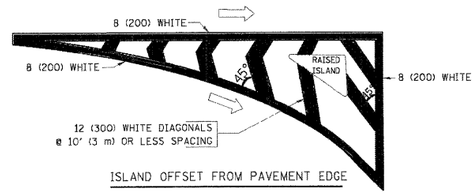


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) ONLY AREA = 20.8 SQ. FT. (1.9 m^2)

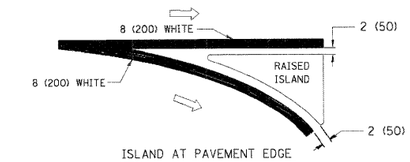
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME = W:\Projects\2010\100825 Burr Ferren\Roads\Civil\Dgn\Sht\DT_01-TC13.dgn

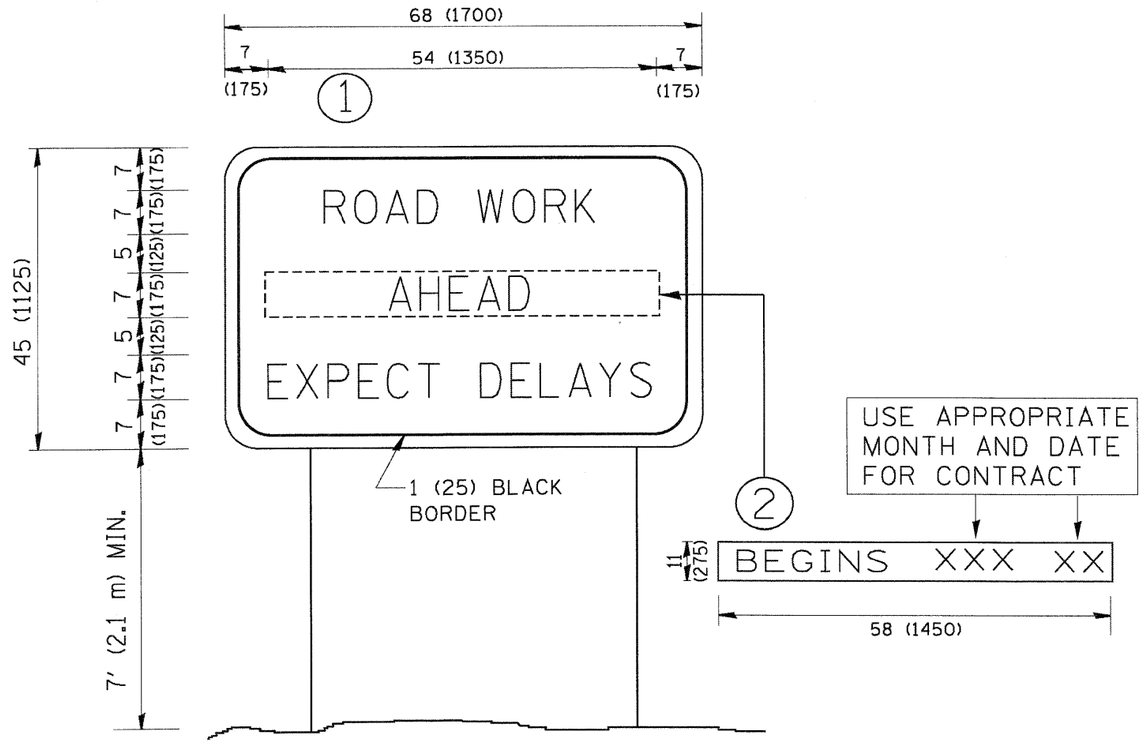
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0100315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 10/19/2011	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

SCALE: NONE | SHEET NO. 62 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	62
	TC-13	CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\Projects\2810\V00025 BurrFersonIl\oded\Civil\Dgn\Sht\DT_01-TC22.dgn

FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 10/19/2011	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

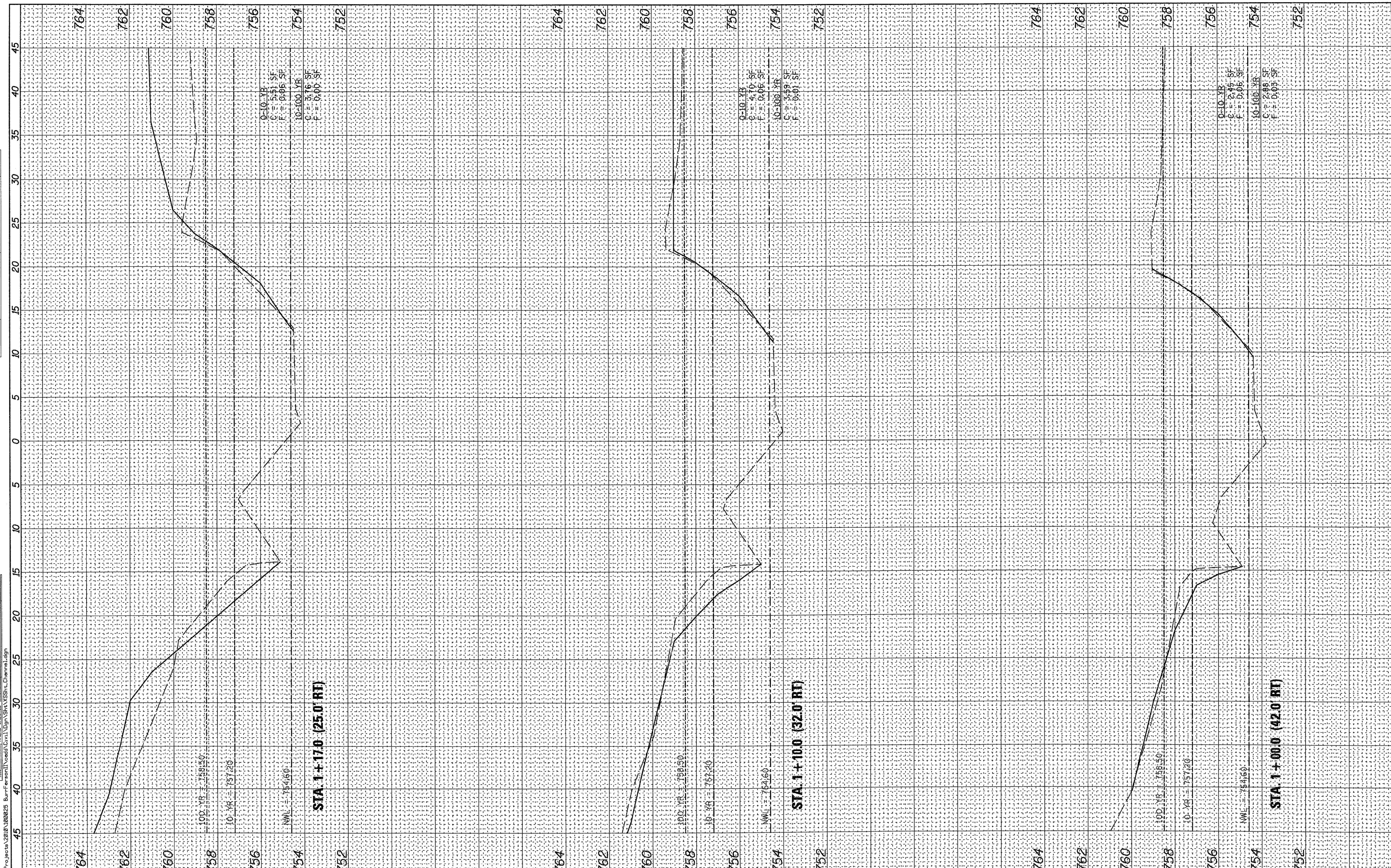
ARTERIAL ROAD INFORMATION SIGN

SCALE: NONE | SHEET NO. 63 OF 76 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	63
	TC-22	CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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



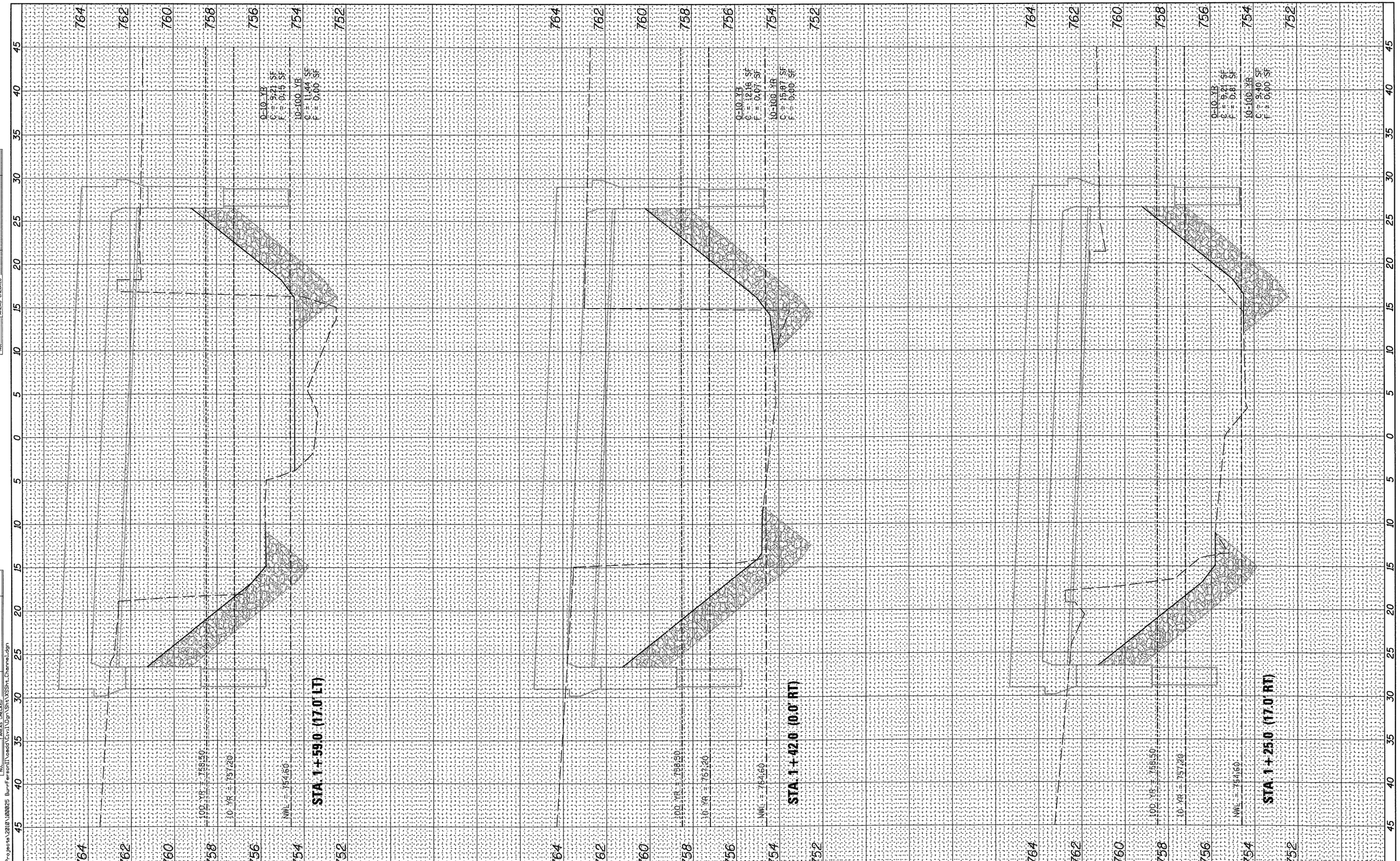
FILE NAME = W:\Projects\2010\100025 BurrFerson\Road\Civil\Dgn\Sht\XSSht-Channel.dgn

WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS CHANNEL
		DRAWN - NDP	REVISED -		
	PLOT SCALE =	CHECKED - SBP	REVISED -		
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -		SCALE: SHEET NO. 1 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	64
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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



FILE NAME = W:\Projects\2010\100025 Burr-Ferson II\Cadd\Civil\Dgn\Sht\XSSht_Channel.dgn

WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA / REVISED -
	PLOT SCALE =	DRAWN - NDP / REVISED -
	PLOT DATE = 10/19/2011	CHECKED - SBP / REVISED -
		DATE - 10/24/11 / REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

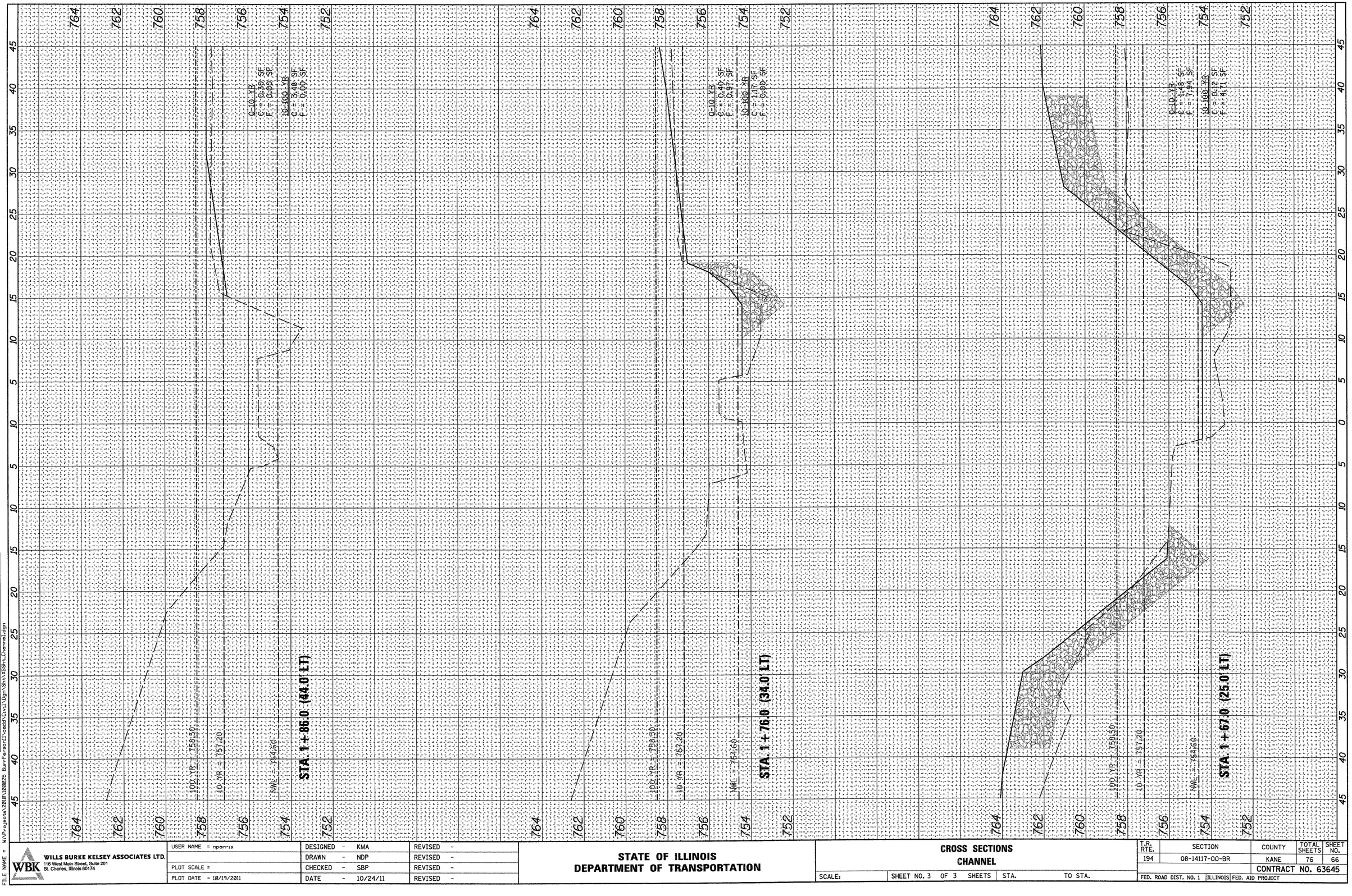
CROSS SECTIONS
CHANNEL

SCALE: | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	65
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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



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USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - NDP	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

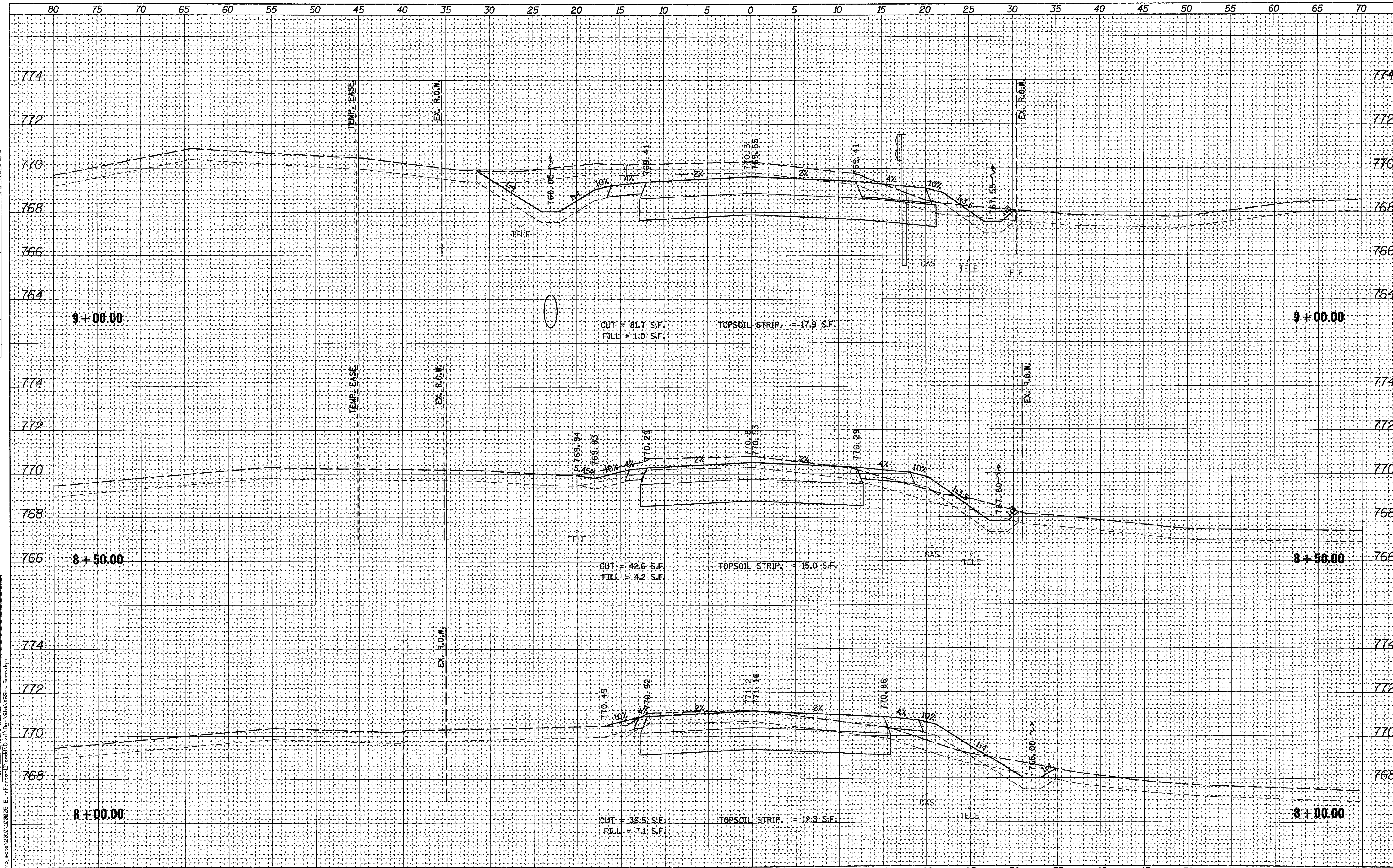
WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
CHANNEL

SCALE: | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	66
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

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

WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

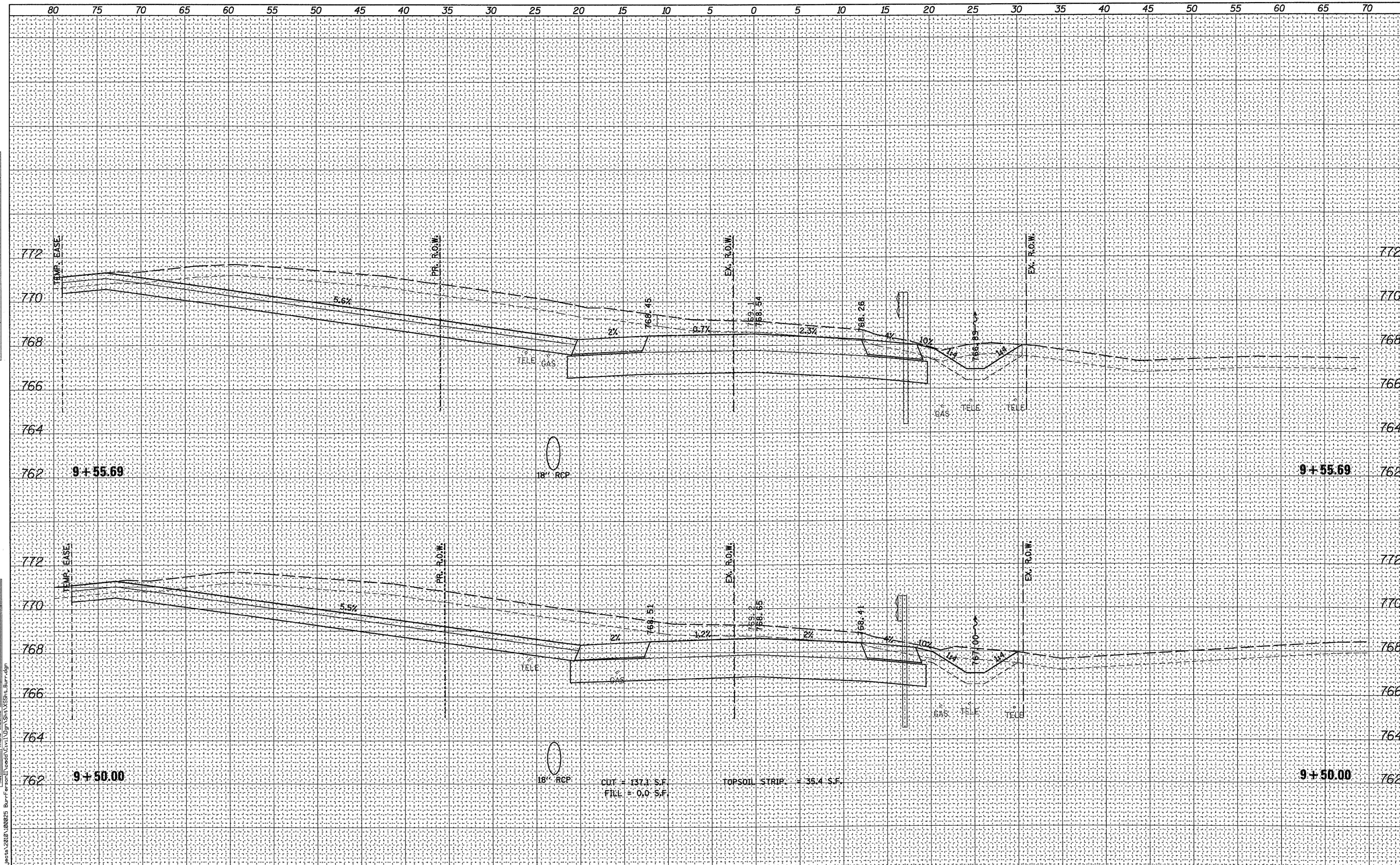
USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - KMA	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 8+00.00 TO STA. 9+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	67
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

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

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WBK WILLS BURKE KELSEY ASSOCIATES LTD.
118 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -	
	DRAWN - KMA	REVISED -	
PLOT SCALE =	CHECKED - SBP	REVISED -	
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -	

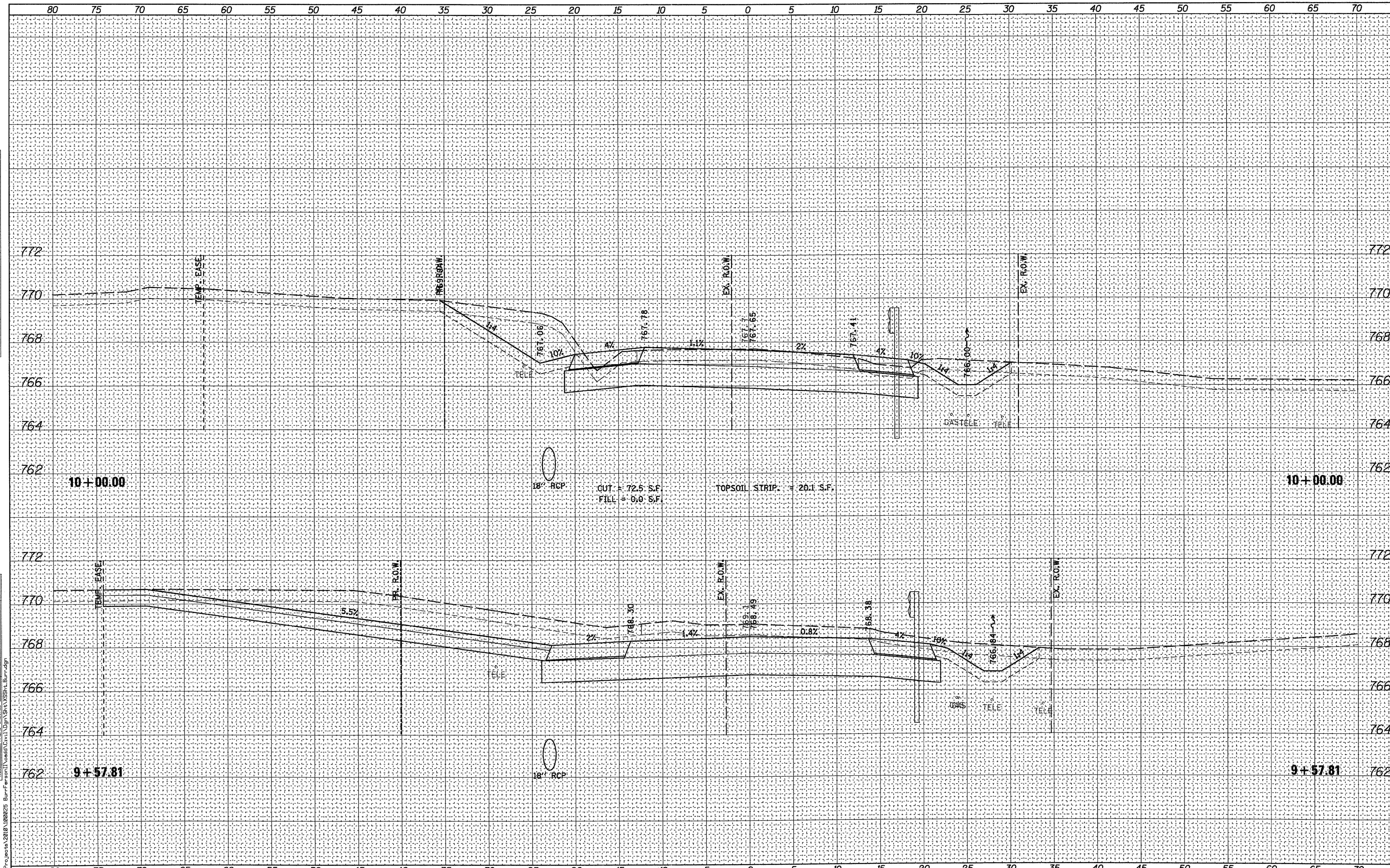
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 9+50.00 TO STA. 9+55.69

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	68
		CONTRACT NO. 63645		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -
		DRAWN - KMA	REVISED -
	PLOT SCALE =	CHECKED - SBP	REVISED -
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

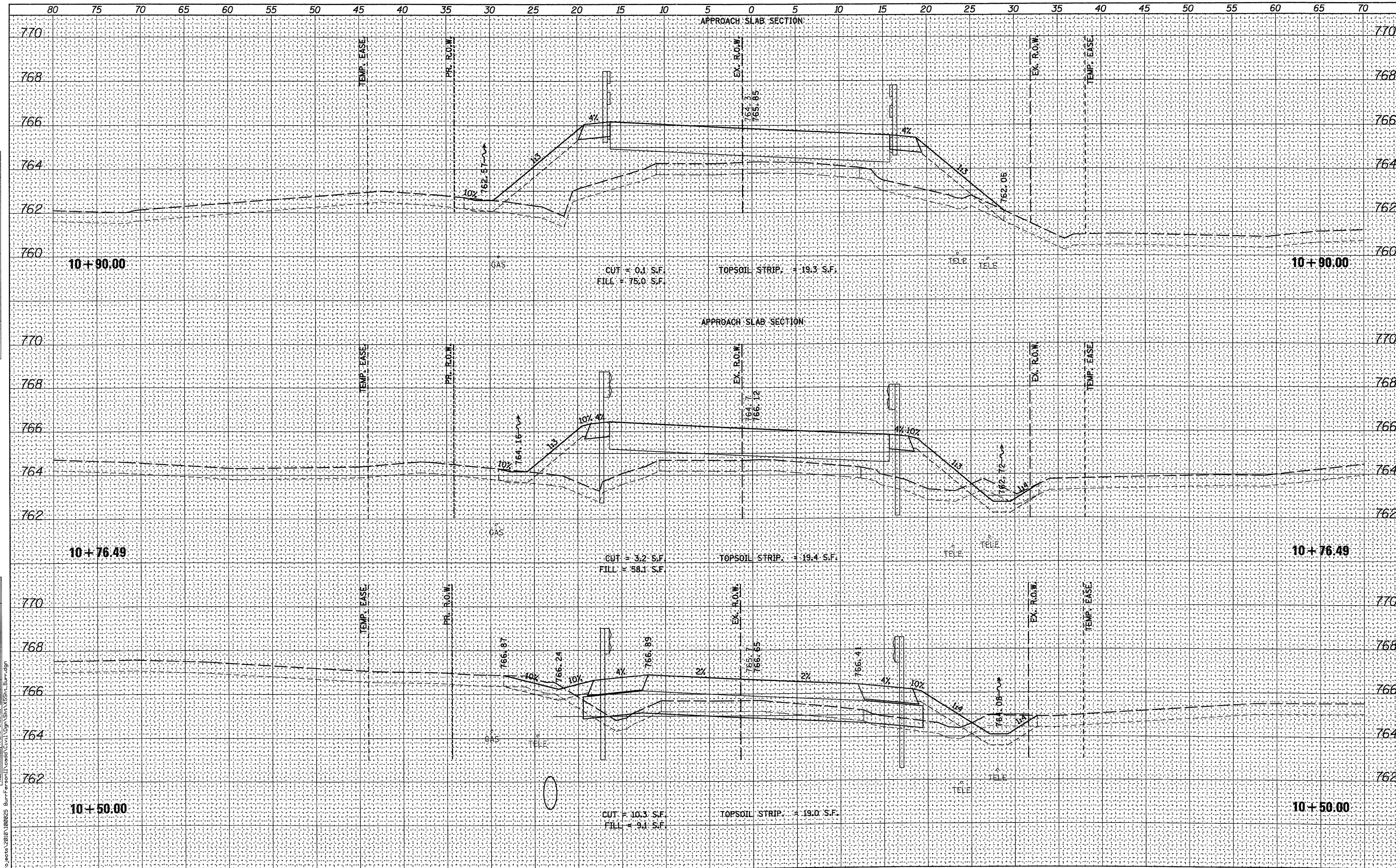
SCALE: | SHEET NO. OF 76 SHEETS | STA. 9+57.81 TO STA. 10+00.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	69

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

FILE NAME = W:\Projects\2010\100025 BurrFerson\Caadd\Civil\Dgn\Sht\XSSht_Burr.dgn



WBK WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -
		DRAWN - KMA	REVISED -
	PLOT SCALE =	CHECKED - SBP	REVISED -
	PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 10+50.00 TO STA. 10+90.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	70

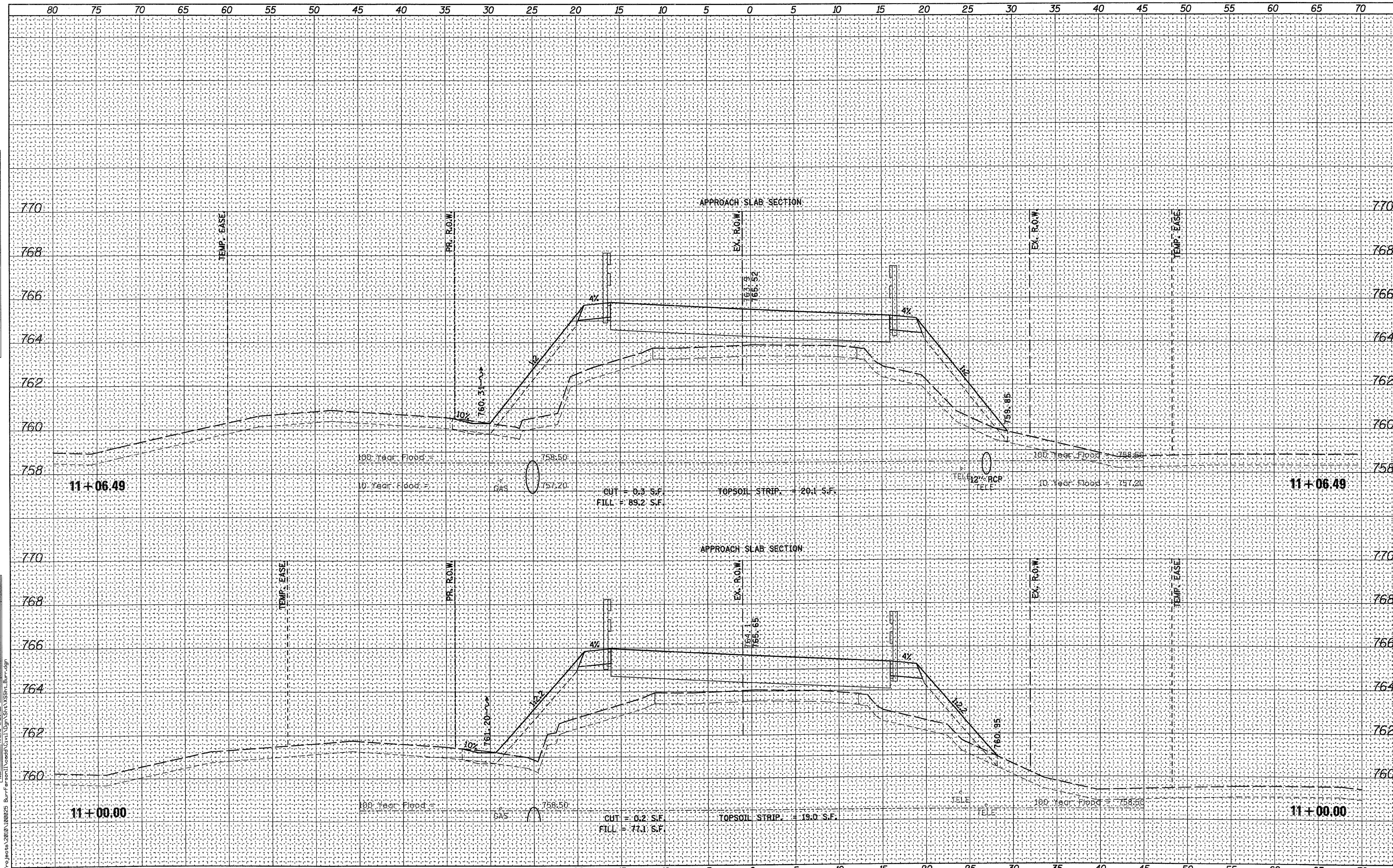
CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

FILE NAME = W:\Projects\2010\100025 BurrFerson\Ilcadd\Civil\Dgn\Sht\XSSht_Burr.dgn

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

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



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

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

FILE NAME = W:\Projects\2010\100825 BurrFerson\Roadd\Civil\Dgn\Sht\XSSht_Burr.dgn

WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -
	DRAWN - KMA	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 11/17/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

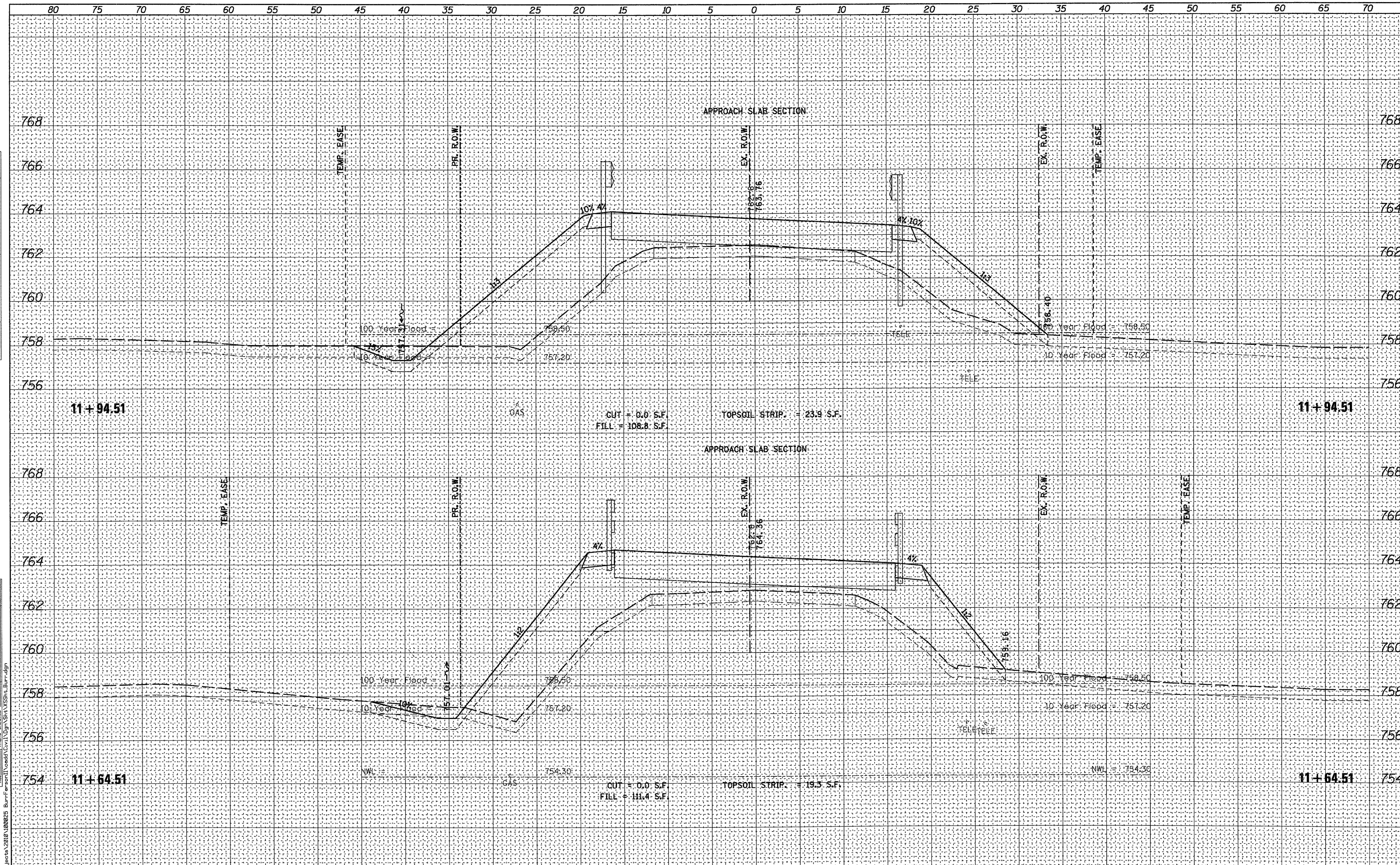
CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 11+00.00 TO STA. 11+06.49

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	71

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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

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

WBK WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nporris	DESIGNED - KMA	REVISED -
	DRAWN - KMA	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

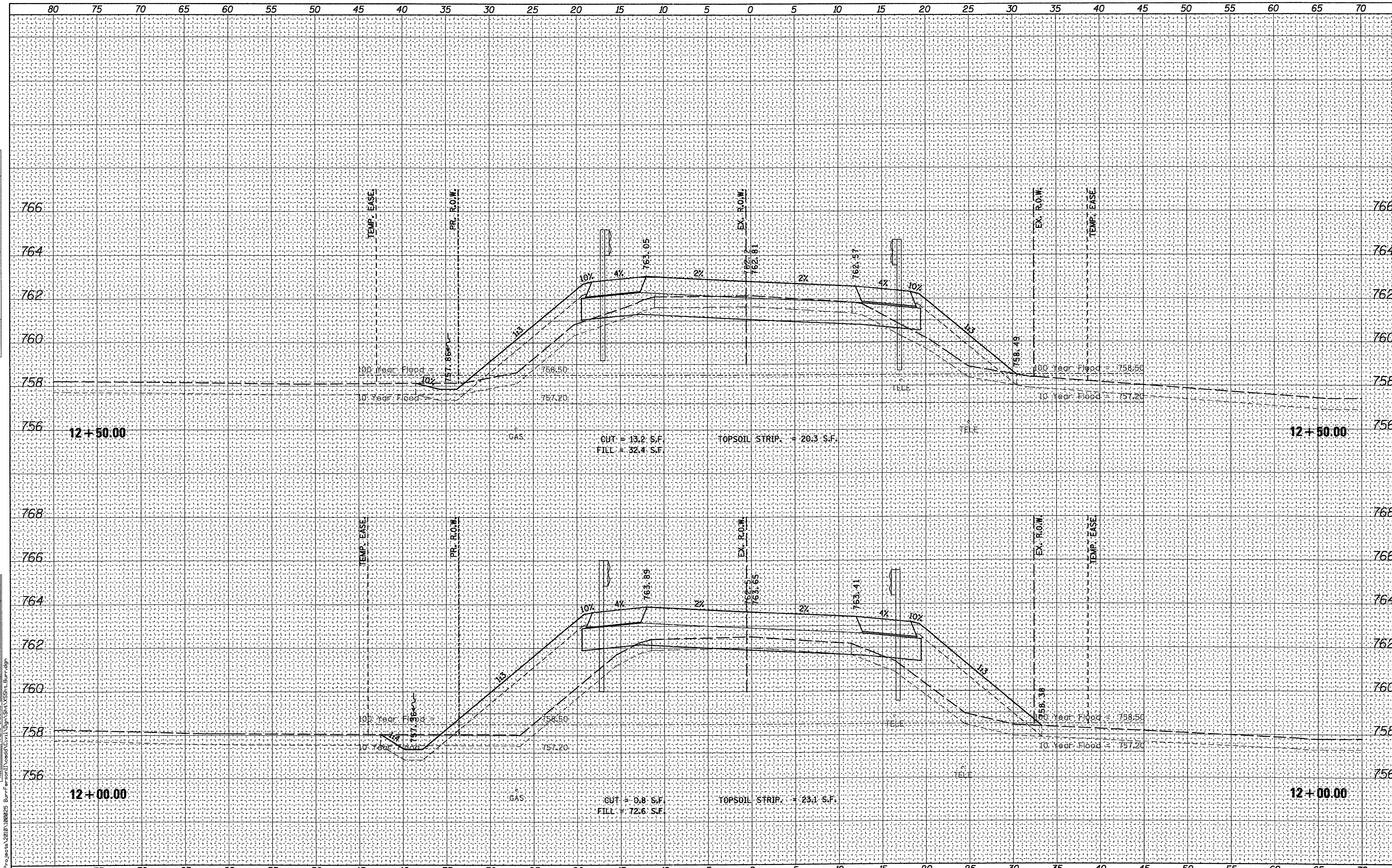
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 11+64.51 TO STA. 11+94.51

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	72
		CONTRACT NO. 63645		

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -
	DRAWN - KMA	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

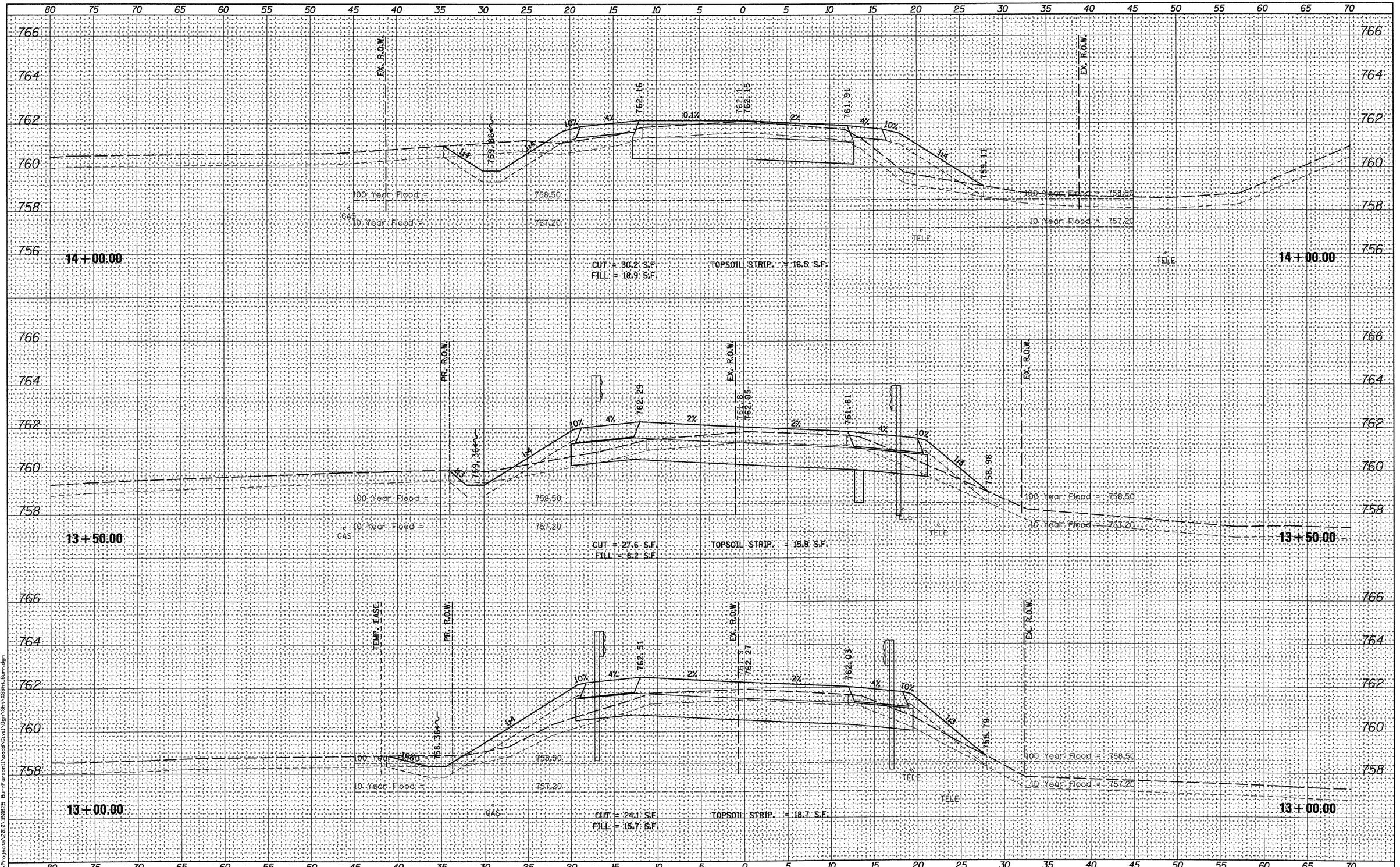
CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 12+00.00 TO STA. 12+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	73

CONTRACT NO. 63645

FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT



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

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

FILE NAME = W:\Projects\2010\10025 BurrFerron1\roads\Civil\Dgn\Sht\SSht_Burr.dgn

WILLS BURKE KELSEY ASSOCIATES LTD.
116 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -
	DRAWN - KMA	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 13+00.00 TO STA. 14+00.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	74
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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

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80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

768 766 764 762 760 758

15+50.00

EX. R.O.W. — GAS — EX. R.O.W. — TELE — EX. R.O.W.

761.86 — 764.06 — 764.4 — 764.30 — 764.06 — 763.52

1:4 — 1:4 — 10% — 4% — 2% — 2% — 4% — 10%

CUT = 37.5 S.F.
FILL = 2.7 S.F.

TOPSOIL STRIP. = 12.9 S.F.

15+50.00

15+00.00

EX. R.O.W. — GAS — EX. R.O.W. — TELE — EX. R.O.W.

760.86 — 763.03 — 763.4 — 763.27 — 763.03 — 762.50

1:4 — 1:4 — 10% — 4% — 2% — 2% — 4% — 10%

CUT = 42.7 S.F.
FILL = 1.0 S.F.

TOPSOIL STRIP. = 13.0 S.F.

15+00.00

14+50.00

EX. R.O.W. — GAS — EX. R.O.W. — TELE — EX. R.O.W.

760.36 — 762.31 — 762.6 — 762.55 — 762.31 — 760.31

1:4 — 1:4 — 10% — 4% — 2% — 2% — 4% — 10%

100 Year Flood = 758.50 — 100 Year Flood = 758.50

CUT = 40.3 S.F.
FILL = 7.1 S.F.

TOPSOIL STRIP. = 15.5 S.F.

14+50.00

80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70

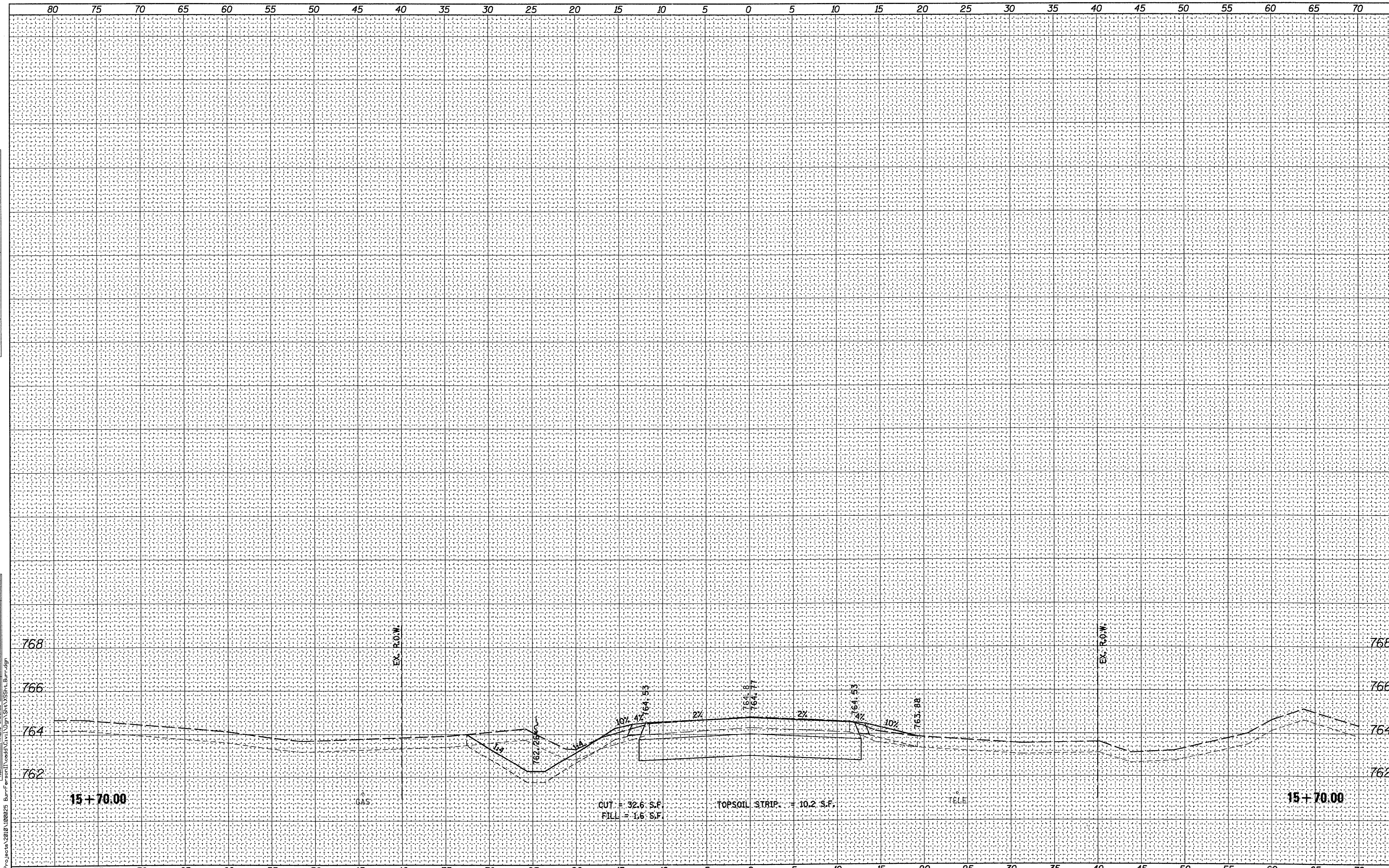
WILLS BURKE KELSEY ASSOCIATES LTD. 116 West Main Street, Suite 201 St. Charles, Illinois 60174	USER NAME = nparris	DESIGNED - KMA	REVISED -
		DRAWN - KMA	REVISED -
	PLOT SCALE =	CHECKED - SBP	REVISED -
	PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE: | SHEET NO. OF 76 SHEETS | STA. 14+50.00 | TO STA. 15+50.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	75
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

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

WBK **WILLS BURKE KELSEY ASSOCIATES LTD.**
118 West Main Street, Suite 201
St. Charles, Illinois 60174

USER NAME = nparris	DESIGNED - KMA	REVISED -
	DRAWN - KMA	REVISED -
PLOT SCALE =	CHECKED - SBP	REVISED -
PLOT DATE = 10/19/2011	DATE - 10/24/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
BURR ROAD

SCALE:	SHEET NO. OF 76 SHEETS	STA. 15+70.00	TO STA. 15+70.00

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
194	08-14117-00-BR	KANE	76	76
		CONTRACT NO. 63645		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		