09-18-2015 LETTING ITEM 001

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	1
	ILLINOIS	CONTRACT NO. 60M81		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAU ROUTE 3887: IL ROUTE 31
SECTION I-B-1
AT FERSON CREEK
BRIDGE REPLACEMENT

FOR INDEX OF SHEETS, SEE SHEET NO. 2

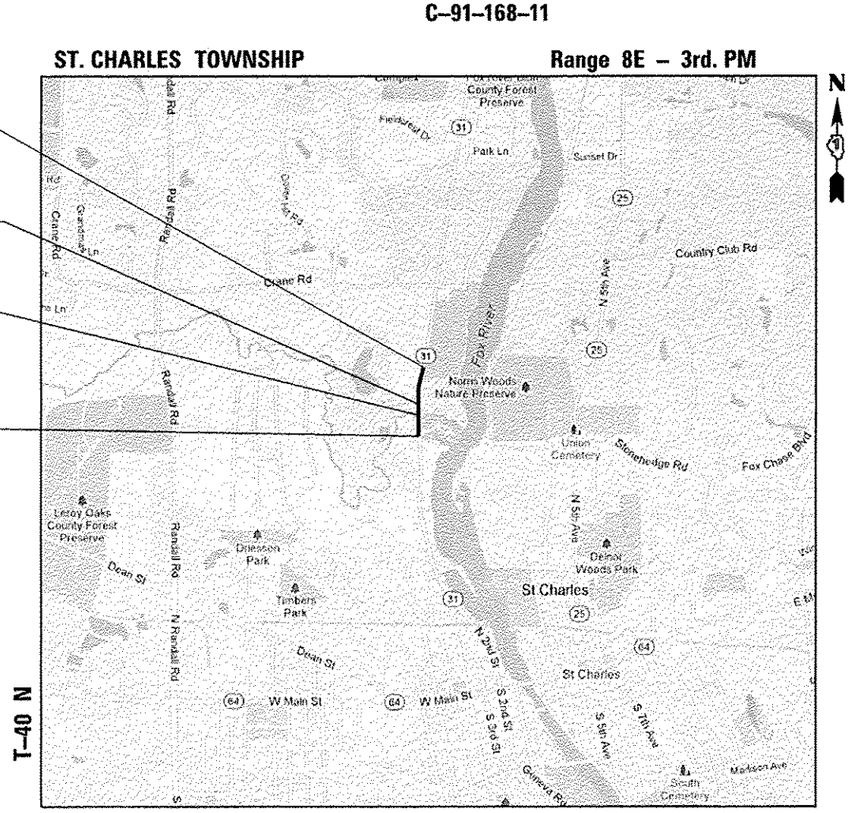
DESIGN DESIGNATION

MINOR ARTERIAL (URBAN)
ADT 12,800 (2013)
SPEED LIMIT 45 MPH

IMPROVEMENT LOCATED IN CITY OF ST CHARLES

KANE COUNTY
C-91-168-11

ST. CHARLES TOWNSHIP — Range 8E – 3rd. PM



GROSS LENGTH = 1925 FT. = 0.36 MILE
NET LENGTH = 1925 FT. = 0.36 MILE

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

PROJECT MANAGER: MR. ISSAM RAYYAN, P.E. (847) 705-4178
PROJECT ENGINEER: MR. ROBERT T. BORO, P.E. (847) 705-4237

CONTRACT NO. 60M81

D-91-168-11

LOCATION OF SECTION INDICATED THUS: -

COLLINS ENGINEERS INC
123 N. WACKER DR., SUITE 900
CHICAGO, IL 60606
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-000993

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 6/11/15 20 15
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Aug 14 20 15
ENGINEER OF DESIGN AND ENVIRONMENT
Aug 14 20 15
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2016

COLLINS ENGINEERS, INC.
MATTHEW G. REMPFER
NO. 062-054553
EXPIRES 11-30-2015

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS:

INDEX OF HIGHWAY STANDARDS:

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
406201-01	MAILBOX TURNOUT
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542311-05	TRAVERSABLE PIPE GRATE
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
602401-03	MANHOLE, TYPE A
602601-03	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS, TYPE 1
604016-03	FRAME AND GRATE, TYPE 4
606001-06	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606006-02	OUTLETS FOR CONCREETE CURB AND GUTTER TYPE B-6.24 (B-15.60)
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-13	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
643001-02	SAND MODULE IMPACT ATTENUATORS
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701321-14	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-04	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
610001-06	SHOULDER INLET WITH CURB
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY

LIST OF DISTRICT ONE DETAILS *

DETAIL	DESCRIPTION
BD01	DRIVEWAY DETAILS, DISTANCE BETWEEN ROW AND CURB OR EDGE (>15 FT)
BD02	DRIVEWAY DETAILS, DISTANCE BETWEEN ROW AND CURB OR EDGE (<15 FT)
BD03	OUTLET FOR CONCRETE CURB AND GUTTER
BD08	FRAMES & LIDS ADJUSTMENT WITH MILLING, FRAMES & LIDS ADJUSTMENT WITHOUT MILLLING
BD32	BUTT JOINTS AND HMA TAPER
BD34	DETAILS FOR DEPRESSED CURB AND GUTTER AND SHLD TREATMENT AT TBT TY 1 SPL
BD51	BENCHING CONSTRUCTION DETAIL
BE805	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING
TC10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC11	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC22	ARTERIAL ROAD INFORMATION SIGN
TC26	DRIVEWAY ENTRANCE SIGN
TS05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS

* INCLUDED AS SHEETS 101 - 113.

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 2.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
INDEX OF SHEETS AND HIGHWAY STANDARDS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	1-B-1	KANE	156	2

CONTRACT NO. 60M81

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

GENERAL NOTES:

1 BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS UTILITIES (48 HOUR NOTICE IS REQUIRED).

2 THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE RIGHT-OF-WAY OR PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

3 THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES AND THE CITY OF ST. CHARLES.

4 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURB AND GUTTER AND MEDIAN ITEMS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED LARGER ITEM OF SPECIFIED WORK.

5 PRIOR TO EMBANKMENT PLACEMENT, ALL VEGETATION, LOOSE MATERIAL, AND UNSTABLE MATERIAL SHOULD BE REMOVED TO DEPTH ENCOUNTERED AND REPLACED WITH SUITABLE EMBANKMENT MATERIAL. ANY EMBANKMENT WIDENING ON EXISTING SLOPES SHOULD BE BENCHED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

6 NOT USED.

7 NIGHT OPERATIONS: WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTION IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AS WELL AS THE ADJOINING RESIDENTIAL AREAS.

8 BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS Of ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.

9 FOR WORK OUTSIDE THE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT. SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

10 BEFORE ORDERING STORM SEWERS, CATCH BASINS, PIPE CULVERTS, PIPE DRAINS, MANHOLES, INLETS, AND SCUPPERS, THE CONTRACTOR SHALL REVIEW THE EXISTING FIELD CONDITIONS AND THE DRAINAGE SCHEDULES FOUND IN THE PLANS FOR THE EXACT LENGTH AND QUANTITY REQUIRED.

11 THE CONTRACTOR SHALL MAINTAIN THE SURFACE DRAINAGE OF ALL ROADWAYS DURING CONSTRUCTION OF THIS PROJECT. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE OR PUBLIC DRAINS, SEWERS, INLETS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO TAKE IN ALL STORM WATER, WHICH WILL BE RECEIVED BY THESE DRAINS AND SEWERS AND DISCHARGE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM ALL THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE, INCLUDING PAVEMENT. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT. COORDINATION WITH ALL AGENCIES INVOLVED IS REQUIRED.

12 DURING CONSTRUCTION OPERATIONS, IF ANY LOOSE MATERIAL IS DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES SUCH THAT THE NATURAL FLOW OF WATER IS OBSTRUCTED, THE MATERIAL SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY, AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL UTILITY STRUCTURES SHALL BE FREE FROM DUST AND DEBRIS. THE WORK SPECIFIED ABOVE WILL NOT BE PAID SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

13 AGGREGATE SUBGRADE IMPROVEMENT HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR THE REMOVAL AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 AND THE IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS ENCOUNTERED, THE SOIL SHALL BE REMOVED AND REPLACED WITH AGGREGATE SUBGRADE IMPROVEMENT OR EMBANKMENT AS DETERMINED BY THE GEOTECHNICAL ENGINEER. IF UNSTABLE AND/OR UNSUITABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

GENERAL NOTES (CONT.):

14 THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.

15 THE CONTRACTOR SHALL CONTACT THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR, AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

16 THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, DON CHIARUGI, AT (847) 741-9857 A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACING THE PERMANENT PAVEMENT MARKINGS.

17 THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATING NEAR ANY AND ALL EXISTING ITEMS THAT WILL NOT BE REMOVED. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S OWN EXPENSE.

18 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.

19 FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.

20 THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR WILL NEED TO SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11.5.A AND B OF THE SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

21 THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

22 THIS PROJECT WILL REQUIRE AUTHORIZATION UNDER NPDES ILR10 (SWPPP PERMIT).

23 COMED COMPANY WIRES ARE NOT INSULATED AND EXTRA CAUTION AND VIGILANCE MUST BE ADHERED TO WHEN WORKING AROUND THEM. CONTRACTORS SHOULD ALWAYS USE CAUTION IN OPERATING CRANES AND OR OTHER EQUIPMENT NEAR OVERHEAD ELECTRICAL FACILITIES. THE OCCUPATIONAL HEALTH AND SAFETY ORGANIZATION (OSHA) RULES REQUIRE THAT WORKERS AND EQUIPMENT SHALL NOT APPROACH WITHIN TEN (10) FEET AWAY OF OVERHEAD ELECTRICAL EQUIPMENT WITHOUT APPROPRIATE SUPPLEMENTAL PROTECTION. PLEASE BE CERTAIN THAT ALL WORKERS ON THIS PROJECT HAVE BEEN FULLY TRAINED AND CONFORM TO OSHA RULES AND OTHER APPLICABLE GUIDELINES REGARDING WORKING SAFELY AROUND ELECTRICAL POWER LINES.

EROSION CONTROL GENERAL NOTES:

1 THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION.

2 DIRECT OR INDIRECT PUMPING OF SEDIMENT -LADEN WATER INTO A STORMWATER FACILITY WITHOUT FILTRATION IS PROHIBITED.

3 RUNOFF FROM EXCAVATED AREAS SHALL LEAVE THE SITE THROUGH SEDIMENT CONTROL DEVICES SHOWN IN IDOT STD. 280001-05, AND/OR NRCS DETAILS FROM THE MOST RECENT VERSION OF THE ILLINOIS URBAN MANUAL.

4 SILT FENCING WILL BE PLACED AT THE TOES OF SLOPE AND UTILIZED AS A PERIMETER EROSION BARRIER FOR THE SITE. PERIMETER ROLLED BARRIERS SHALL BE USED AS MID-SLOPE PROTECTION (IF NEEDED), AND IN AREAS OF CONCENTRATED/CHANNELIZED FLOW.

5 THE CONTRACTOR SHALL SURROUND ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.

6 ALL ESC MEASURES SHOULD BE CHECKED WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED AFTER EACH SNOWMELT.

EROSION CONTROL GENERAL NOTES (CONT.)

7 THE REVISED PERMIT REQUIRES THAT STABILIZATION OF DISTURBED AREAS MUST BE INITIATED WITHIN 1 WORKING DAY OF TEMPORARY OR PERMANENT CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE BUT NO LATER THAN 14 DAYS FROM THE INITIATION OF STABILIZATION OF WORK IN AN AREA

8 STOCKPILES OF SOIL OR ANY OTHER BUILDING MATERIALS SHALL NOT BE LOCATED IN SPECIAL MANAGEMENT AREAS SUCH AS WETLANDS.

9 ALL WASTE GENERATED AS A RESULT OF THE PROJECT INCLUDING DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASHOUT, CHEMICALS, LITTER, SANITARY WASTE, OR ANY OTHER WASTE SHALL BE PROPERLY DISPOSED OF AND BE PREVENTED FROM BEING CARRIED OFF THE SITE BY EITHER WIND OR WATER.

10 HEAVY DUTY EROSION CONTROL BLANKET SHALL BE USED FOR COVERING SLOPES STEEPER THAN 3H:1V. TURF REINFORCEMENT MAT WILL BE USED IN AREAS DOWNSTREAM OF PIPE DRAINS, AS SHOWN ON PLAN. EROSION CONTROL BLANKET WILL BE PREFERRED MULCH METHOD IN ALL OTHER AREAS.

11 ALL EXPOSED IDLE EARTH, INCLUDING EARTH STOCKPILES WILL BE SEEDED WITH TEMPORARY EROSION CONTROL SEEDING. THE APPLICATION RATE FOR TEMPORARY EROSION CONTROL SEEDING IS 100 POUNDS PER ACRE FOR THREE APPLICATIONS.

12 ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF ACHIEVING PERMANENT SOIL STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF, AND THE AREA PERMANENTLY STABILIZED.

13 WETLAND EXCLUSION FENCING AND "WETLAND, NO INTRUSION" SIGNAGE SHALL BE PROVIDED AT THE BOUNDARY OF ALL UN-IMPACTED WETLANDS WITHIN/IMMEDIATELY ADJACENT THE ROW. "WETLAND, NO INTRUSION" SIGNS ARE AVAILABLE FOR THE CONTRACTOR'S USE FROM THE BUREAU OF MAINTENANCE. SIGNS ARE TO BE RETURNED UNDAMAGED TO IDOT AT THE END OF THE CONTRACT.

14 TWO-YEAR PEAK DISCHARGE RATE IS EQUAL TO 1162 CFS.

COMMITMENTS:

1 NATURE AREAS DEFENSE SPECIALIST STEVEN BYERS SHALL BE NOTIFIED TO THE COMMENCEMENT OF PROJECT (815-678-4865) AND SHALL BE NOTIFIED IMMEDIATELY OF ANY CONCERNS REGARDING THE NATURE PRESERVE AS THE PROJECT PROCEEDS. BOTH THE SUPERINTENDENT OF PARKS AND PLANNING AND NATURAL RESOURCE MANAGER OF THE ST. CHARLES PARK DISTRICT (MS. LAURA RUDOW AT LRUDOW@STCPARKS.ORG AND MR. DENIS KANIA AT DKANIA@STCPARKS.ORG) SHOULD BE CONTACTED PRIOR TO START OF THE PROJECT.

2 THE DESIGNER SHALL EXPLAIN THE NATURE PRESERVE SITE TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING.

3 THE CONTRACTOR SHALL BE AWARE OF THE NATURE PRESERVE BOUNDARY AND LEGAL PROTECTIONS IN PLACE. AS SUCH, THE CONTRACTOR SHALL MONITOR CONSTRUCTION ACTIVITIES TO ASSURE NO CHANGE TO THE FERSON CREEK NATURE PRESERVE INCLUDING CHANGE TO HYDRAULIC PROPERTIES. ALL MEASURES OF EROSION CONTROL SHALL BE IMPLEMENTED AND DILIGENTLY MONITORED SUCH THAT NO EROSION OCCURS TO OR FROM THE NATURE PRESERVE AND TO THE EXTENT POSSIBLE, MINIMIZE SEDIMENTATION TO FERSON CREEK. NO EQUIPMENT SHALL BE STAGED AT THE NATURE PRESERVE AND THE CONTRACTOR SHALL POWER WASH EQUIPMENT PRIOR TO THE TRANSPORT TO THE NATURE PRESERVE SITE OR USE ANOTHER ACCEPTABLE MEANS TO PREVENT TRANSFER OF NON-NATIVE OR INVASIVE SPECIES TO THE NATURE PRESERVE SITE.

4 THE PROJECT, INCLUDING ALL CONSTRUCTION PHASES TO ALSO INCLUDE TEMPORARY STORAGE OF EQUIPMENT AND SUPPLIES, SHOULD NOT INFRINGE UPON THE NATURE PRESERVE.

5 THE CONTRACTOR SHALL SAFELY REMOVE THE EXISTING LIMESTONE WALL ALONG THE DRIVEWAY AT STA 116+91.78 (LT). THE CONTRACTOR SHALL EMPLOY CONSTRUCTION METHODS THAT PRESERVE THE EXISTING STONES INTACT. UPON REMOVAL, THE STONES SHALL BE TRANSPORTED TO AN AGREED UPON LOCATION WITH THE ENGINEER AND HOMEOWNER. THE COST OF REMOVAL, TRANSPORT, AND STORAGE OF THE STONES SHALL BE INCLUDED IN THE COST OF DRIVEWAY REMOVAL.

6 CONTRACTOR SHALL COORDINATE WITH THE NATURE PRESERVE PRIOR TO IMPLEMENTING WEED CONTROL.

7 SELECTIVE CLEARING, TREE REMOVAL, AND WEED CONTROL ADJACENT TO THE NATURE PRESERVE SHALL BE CONDUCTED DURING WINTER ON FROZEN GROUND. THE CONTRACTOR SHALL CONTACT MR. DENIS KANIA AT DKANIA@STCPARKS.ORG TO COORDINATE ACCESS NEEDS AND IDENTIFY EXISTING TREES/SHRUBS THAT SHOULD REMAIN.

8 THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR EXCAVATED MATERIAL AT OR NEAR THE ENTRANCE TO THE WILDROSE SPRINGS SUBDIVISION.

FILE NAME = $FILE$

COLLINS ENGINEERS

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 2.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 6/24/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
GENERAL NOTES AND COMMITMENTS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	[-B-1]	KANE	156	3
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 100% STATE		
					ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	1287	1287		
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	764	764		
	20101000	TEMPORARY FENCE	FOOT	2876	2876		
	20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	4	4		
	20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	16	16		
	20200100	EARTH EXCAVATION	CU YD	6231	6231		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2213	2213		
	20300100	CHANNEL EXCAVATION	CU YD	10	10		
	20400800	FURNISHED EXCAVATION	CU YD	5095	5095		
	20800150	TRENCH BACKFILL	CU YD	50	50		
*	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	7032	7032		
*	21101805	COMPOST FURNISH AND PLACE, 2"	SQ YD	280	280		
*	25000210	SEEDING, CLASS 2A	ACRE	0.75	0.75		
*	25000300	SEEDING, CLASS 3	ACRE	0.75	0.75		

14

* - DENOTES SPECIALTY ITEM

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgoll	DESIGNED -	REVISED -
PLOT SCALE = 2.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 6/23/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-8-1	KANE	156	4
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
*	25000310	SEEDING, CLASS 4	ACRE	0.5	0.5		
*	25000322	SEEDING, CLASS 5A	ACRE	0.5	0.5		
*	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	225	225		
*	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	225	225		
*	25100135	MULCH, METHOD 4	ACRE	0.5	0.5		
*	25100630	EROSION CONTROL BLANKET	SQ YD	3691	3691		
*	25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	4567	4567		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	900	900		
	28000305	TEMPORARY DITCH CHECKS	FOOT	160	160		
	28000315	AGGREGATE DITCH CHECKS	TON	7	7		
	28000400	PERIMETER EROSION BARRIER	FOOT	3313	3313		
	28000500	INLET AND PIPE PROTECTION	EACH	5	5		
	28000510	INLET FILTERS	EACH	2	2		
	28100105	STONE RIPRAP, CLASS A3	SQ YD	19	19		

14

* - DENOTES SPECIALTY ITEM

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 2.0000 ' / in.	DRAWN -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-8-1	KANE	156	5
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
28100107	STONE RIPRAP, CLASS A4	SQ YD	938		777	161
28200200	FILTER FABRIC	SQ YD	957	19	777	161
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	46	46		
~~30300104~~	~~AGGREGATE SUBGRADE IMPROVEMENT 4"~~	~~SQ YD~~	~~3247~~	~~3247~~		
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	8327	8327		
31101200	SUBBASE GRANULAR MATERIAL, TYPE B, 4"	SQ YD	3247	3247		
31102000	SUBBASE GRANULAR MATERIAL, TYPE C	CU YD	131	131		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	39672	39672		
40701881	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10"	SQ YD	5825	5825		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	1132	1132		
44000100	PAVEMENT REMOVAL	SQ YD	6971	6971		
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	512	512		
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	532	532		
44004250	PAVED SHOULDER REMOVAL	SQ YD	731	731		
48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	1183	1183		

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* - DENOTES SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	6
		CONTRACT NO. 60M81		

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

CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 100% STATE		
				ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	100	100		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	1183	1183		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	
50105220	PIPE CULVERT REMOVAL	FOOT	172	172		
50200100	STRUCTURE EXCAVATION	CU YD	587		182	405
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	296			296
50300225	CONCRETE STRUCTURES	CU YD	97.0		97.0	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	368.5		368.5	
50300260	BRIDGE DECK GROOVING	SQ YD	846		846	
50300300	PROTECTIVE COAT	SQ YD	982		982	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	STUD SHEAR CONNECTORS	EACH	1632		1632	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	141350		94270	47080
50800515	BAR SPLICERS	EACH	691		556	135

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-8-1	KANE	156	7
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	549		549	
51202305	DRIVING PILES	FOOT	549		549	
51203200	TEST PILE METAL SHELLS	EACH	2		2	
51204650	PILE SHOES	EACH	20		20	
51500100	NAME PLATES	EACH	2		1	1
52100520	ANCHOR BOLTS, 1"	EACH	32		32	
54003000	CONCRETE BOX CULVERTS	CU YD	202			202
542A2740	PIPE CULVERTS, CLASS A, TYPE 4 15"	FOOT	88	88		
542D0220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	53	53		
542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	80	80		
54213450	END SECTIONS 15"	EACH	4	4		
54213453	END SECTIONS 18"	EACH	4	4		
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	2		
54215543	METAL END SECTION 12"	EACH	1	1		
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	60	60		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	8

CONTRACT NO. 60M81

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

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 100% STATE		
					ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
	550A0980	STORM SEWERS, CLASS A, TYPE 4 18"	FOOT	33	33		
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	144		144	
	60100945	PIPE DRAINS 12"	FOOT	19	19		
	60200405	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 4 FRAME AND GRATE	EACH	2	2		
	60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
	60600095	CLASS SI CONCRETE (OUTLET)	CU YD	5	5		
	60600605	CONCRETE CURB, TYPE B	FOOT	63	63		
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	96	96		
	60608562	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12	FOOT	296	296		
	60608572	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.18	FOOT	784	784		
	60900515	CONCRETE THRUST BLOCKS	EACH	1	1		
*	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	2125	2125		
	61000115	TYPE E INLET BOX, STANDARD 610001	EACH	1	1		
*	63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	52			52
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	5	5		
*	63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	1	1		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	1-B-1	KANE	156	9
		CONTRACT NO. 60M81		

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

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE: 100% STATE — ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
	63200310	GUARDRAIL REMOVAL	FOOT	966	966		
	66101150	HOT-MIX ASPHALT SHOULDER CURB	FOOT	9	9		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1800	1800		
*	66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	3	3		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	17	17		
	67100100	MOBILIZATION	L SUM	1	1		
	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6		
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	7618	7618		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1232	1232		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2285	2285		
	70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2		
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLYREDIRECTIVE, NARROW), TEST LEVEL 3	EACH	3	3		
	70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3	3		

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	1-B-1	KANE	156	10
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
*	72000100	SIGN PANEL - TYPE 1	SQ FT	3	3		
*	72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	3	3		
*	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2		
*	72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	1	1		
*	72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	41	41		
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	36	36		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8950	8950		
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	150	150		
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	250	250		
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	34	34		
*	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	870	870		
*	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	25	25		
*	78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	77	77		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	79	79		

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IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	11
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
*	78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	7	7		
	78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	133	133		
*	78100300	REPLACEMENT REFLECTOR	EACH	45	45		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	30	30		
*	78200530	BARRIER WALL MARKERS, TYPE C	EACH	99	99		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	10	10		
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	2003	2003		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	82	82		
	89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1	1		
*	A2007874	TREE, TILIA AMERICANA (AMERICAN LINDEN/ BASSWOOD), 10' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	6	6		
*	B2001866	TREE, CRATAEGUS MOLLIS (DOWNY HAWTHORN), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	43	43		
*	B2003866	TREE, MALUS IOENSIS (PRAIRIE CRABAPPLE), 6' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	10	10		
*	C2002048	SHRUB, CORYLUS AMERICANA (AMERICAN FILBERT), 4' HEIGHT, BALLED AND BURLAPPED	EACH	40	40		
*	C2005348	SHRUB, PRUNUS AMERICANA (AMERICAN PLUM), 4' HEIGHT, BALLED AND BURLAPPED	EACH	60	60		

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IL ROUTE 31 AT FERSON CREEK
SUMMARY OF QUANTITIES

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	12
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
*	C2012460	SHRUB, VIBURNUM LENTAGO (NANNYBERRY VIBURNUM), 5' HEIGHT, BALLED AND BURLAPPED	EACH	125	125		
*	C2012836	SHRUB, VIBURNUM TRILOBUM (AMERICAN CRANBERRY VIBURNUM), 3' HEIGHT, BALLED AND BURLAPPED	EACH	60	60		
*	C2C01424	SHRUB, CORNUS AMOMUM (SILKY DOGWOOD), 2' HEIGHT, CONTAINER	EACH	210	210		
*	C2C06212	SHRUB, RIBES AMERICANUM (WILD BLACK CURRANT), 12" WIDTH, CONTAINER	EACH	15	15		
*	C2C09636	SHRUB, SAMBUCUS CANADENSIS (AMERICAN ELDER), 3' HEIGHT, CONTAINER	EACH	20	20		
*	D2002484	EVERGREEN, PINUS FLEXILIS VANDERWOLF'S PYRAMID (VANDERWOLF'S PYRAMID LIMBER PINE), 7' HEIGHT, BALLED AND BURLAPPED	EACH	20	20		
*	K0013030	PERENNIAL PLANTS, WETLAND TYPE, 2" DIAMETER BY 4" DEEP PLUG	UNIT	4.75	4.75		
*	K0013060	PERENNIAL PLANTS, SEDGE MEADOW TYPE, 2" DIAMETER BY 4" DEEP PLUG	UNIT	20.52	20.52		
*	K0026850	PERENNIAL PLANT CARE	SQ YD	842	842		
*	K0029614	WEED CONTROL, AQUATIC	GALLON	0.5	0.5		
*	K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	35	35		
*	K1002564	INTERSEEDING (SPECIAL)	ACRE	0.5	0.5		
*	K1005465	SELECTIVE MOWING STAKES	EACH	10	10		
	X0324097	COARSE SAND PLACEMENT, 2"	SQ YD	280	280		

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IL ROUTE 31 AT FERSON CREEK
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-8-1	KANE	156	13
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

	CODE NO.	ITEM	UNIT	URBAN TOTAL QUANTITY	CONSTRUCTION CODE 100% STATE ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
*	X0324854	WEED CONTROL, NATIVE GRASS RESTORATION	GALLON	0.1	0.1		
*	X0325222	WEED CONTROL, BASAL TREATMENT	GALLON	1	1		
	X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	L SUM	1	1		
	X2503000	MAINTENANCE MOWING	ACRE	1	1		
*	X2503318	INTERSEEDING, CLASS 4B (MODIFIED)	ACRE	0.5	0.5		
*	X2503323	INTERSEEDING, CLASS 5A (MODIFIED)	ACRE	0.5	0.5		
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	7	7		
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	236		236	
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
	X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	22629	22629		
	X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	75	75		
	X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	1860	1860		
	Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	22		22	
	Z0004530	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 8"	SQ YD	467	467		

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* - DENOTES SPECIALTY ITEM

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY (URBAN)	CONSTRUCTION CODE 100% STATE		
					ROADWAY 0004	BRIDGE 0011 SN 045-0333	BOX CULVERT 0011 SN 045-0334
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
	Z0026407	TEMPORARY SHEET PILING	SQ FT	4634		2500	2134
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	165	165		
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	170		170	
*	Z0054400	ROCK FILL	CU YD	296			296
	Z0056612	STORM SEWER (WATER MAIN REQUIREMENTS) 18 INCH	FOOT	78	78		
	Z0062456	TEMPORARY PAVEMENT	SQ YD	4824	4824		
	Z0064800	SELECTIVE CLEARING	UNIT	45	45		
	Z0073002	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	1752	1752		
ϕ	Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOUR	500	500		
*	C2008912	SHRUB, ROSA SETIGERA (PRAIRIE ROSE), 12" HEIGHT, CONTAINER	EACH	30	30		

ϕ 0042

* - DENOTES SPECIALTY ITEM

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FILE NAME = MFILE8

COLLINS ENGINEERS

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IL ROUTE 31 AT FERSON CREEK
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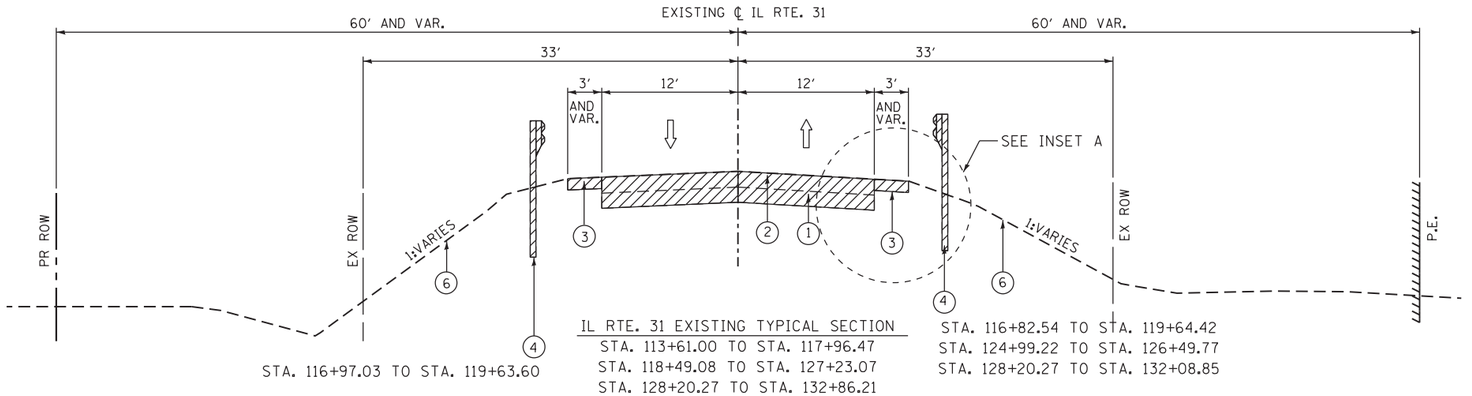
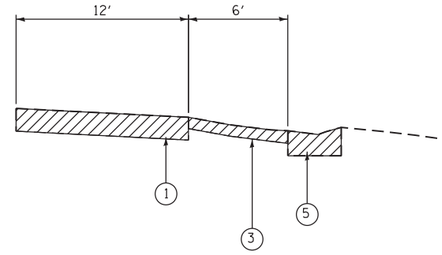
3887	I-B-1	KANE	156	15
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



IL RTE. 31 EXISTING TYPICAL SECTION
STA. 113+61.00 TO STA. 117+96.47
STA. 118+49.08 TO STA. 127+23.07
STA. 128+20.27 TO STA. 132+86.21

STA. 116+97.03 TO STA. 119+63.60

STA. 116+82.54 TO STA. 119+64.42
STA. 124+99.22 TO STA. 126+49.77
STA. 128+20.27 TO STA. 132+08.85

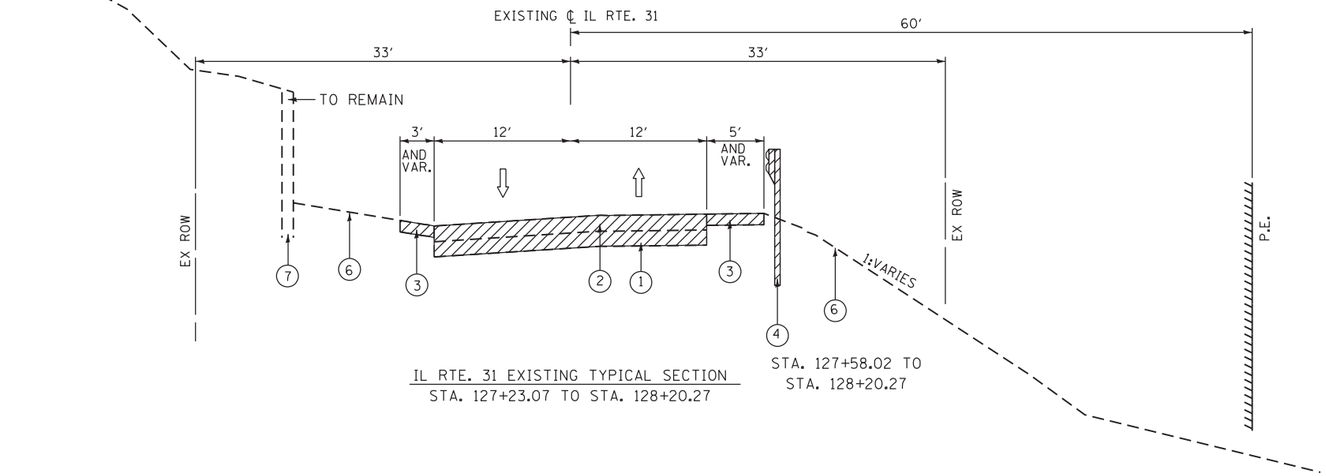


INSET A
STA. 114+26.71 TO STA. 115+17.08

EXISTING LEGEND:

1. EXISTING PCC PAVEMENT, 10″
2. EXISTING HMA OVERLAY, 5″
3. EXISTING HMA SHOULDER
4. EXISTING GUARDRAIL
5. EXISTING CURB AND GUTTER
6. EXISTING TOPSOIL
7. EXISTING RETAINING WALL

REMOVAL ITEMS



IL RTE. 31 EXISTING TYPICAL SECTION
STA. 127+23.07 TO STA. 128+20.27

STA. 127+58.02 TO
STA. 128+20.27

NOTES:

1. EXISTING TOPSOIL TO BE STRIPPED FROM WITHIN PROPOSED CONSTRUCTION LIMITS. QUANTITY BASED ON ASSUMED DEPTH OF 6″.
2. REMOVAL OF EXISTING BRIDGE APPROACH PAVEMENT TO BE PAID FOR AS PAVEMENT REMOVAL.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

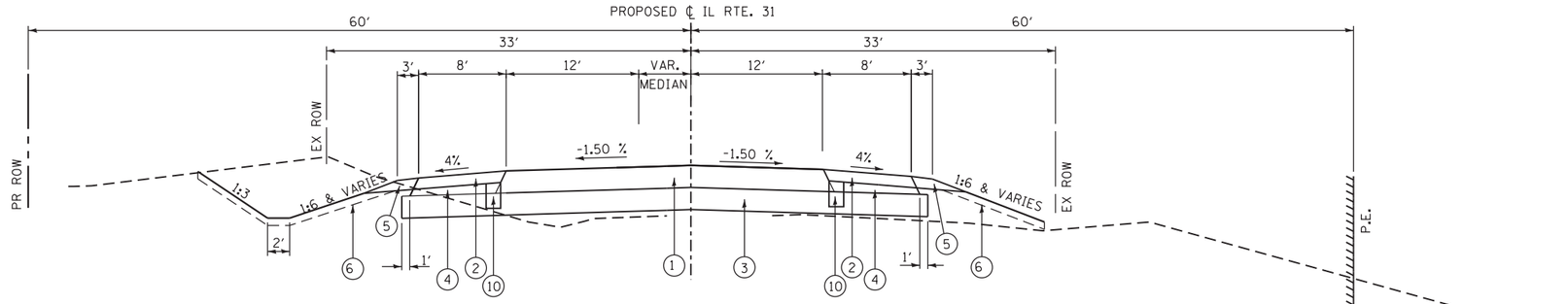
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 20.0000 ′ / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

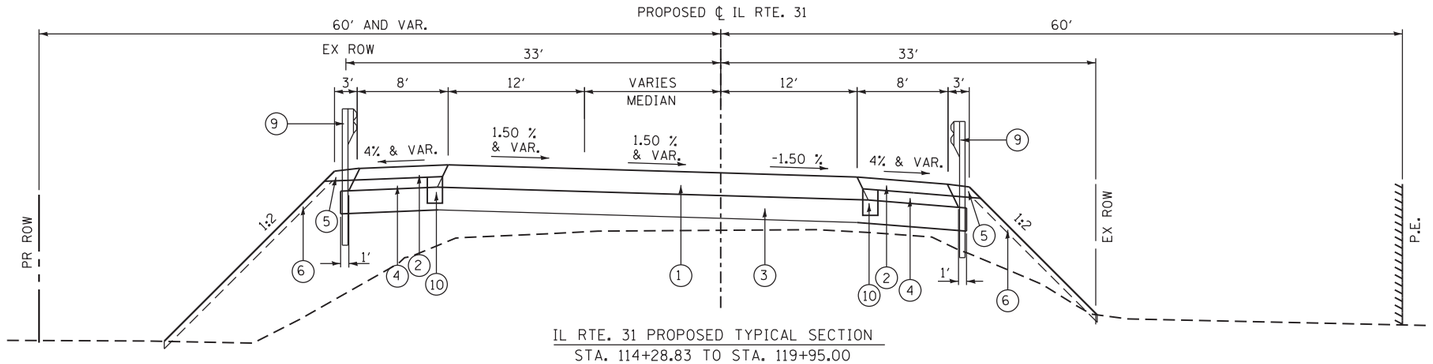
IL ROUTE 31 AT FERSON CREEK
EXISTING TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	16
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



IL RTE. 31 PROPOSED TYPICAL SECTION
STA. 113+61.00 TO STA. 114+28.83



IL RTE. 31 PROPOSED TYPICAL SECTION
STA. 114+28.83 TO STA. 119+95.00
BRIDGE SECTION STA. 117+81.17 TO STA. 118+66.10

PROPOSED LEGEND:

1. HMA PAVEMENT (FULL DEPTH), 10″
   POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2″
   POLYMERIZED HMA BINDER COURSE, IL-19.0, N90, 2-1/4″
   HMA BINDER COURSE, IL-19.0, N90, 5-3/4″
2. HMA SHOULDERS, 8″
3. AGGREGATE SUBGRADE IMPROVEMENT, 12″
4. SUBBASE GRANULAR MATERIAL, TYPE C
5. AGGREGATE SHOULDERS, TYPE B, 8″
6. TOPSOIL AND SEEDING (SEE EROSION CONTROL PLANS AND DETAILS FOR LOCATIONS)
7. CONCRETE CURB, TYPE B
8. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.18
9. STEEL PLATE BEAM GUARDRAIL, TY A, 9FT POSTS
10. PIPE UNDERDRAINS, 4″

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes	QUALITY MANAGEMENT PROGRAM (QMP)
HMA PAVEMENT (FULL DEPTH), 10″		
POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2″	4% @ 90 Gyr.	QC/QA
POLYMERIZED HMA BINDER COURSE, IL-19.0, N90, 2-1/4″	4% @ 90 Gyr.	QC/QA
HMA BINDER COURSE, IL-19.0, N90, 5-3/4″	4% @ 90 Gyr.	QCP
SHOULDER RECONSTRUCTION - HMA SHOULDER 8″		
HMA SURFACE COURSE, MIX "D", N70, (IL 9.5 mm) 2″	4% @ 70 Gyr.	QC/QA
HMA SHOULDER (HMA BINDER, IL-19.0 MM), 6″	4% @ 70 Gyr.	QC/QA
HMA SHOULDER 6″		
HMA SHOULDER (HMA BINDER, IL-19.0 MM), 6″	4% @ 70 Gyr.	QC/QA
TEMPORARY PAVEMENT (NON-INTERSTATE)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N50 (IL 9.5 mm), 2″	4% @ 50 Gyr	QC/QA
TEMPORARY PAVEMENT (HMA BINDER IL-19 MM), 8″	4% @ 50 Gyr	QCP
DRIVEWAYS - HMA DRIVEWAY, 8″		
HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm); 2″	4% @ 50 Gyr	QC/QA
HMA BASE COURSE (HMA BINDER IL-19 mm); PE -6″	4% @ 50 Gyr	QC/QA
QMP DESIGNATION: QUALITY CONTROL / QUALITY ASSURANCE (QC/QA) QUALITY CONTROL FOR PERFORMANCE (QCP)		

1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN
2) THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 70-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
3) FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.
4) QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIUES TO THE HMA MIXTURE
5) THE CONTRACTOR HAS THE OPTION TO USE PC TEMPORARY PAVEMENT. PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ART. 1020 OF THE STANDARD SPECIFICATIONS"; TYPICALLY 10" THICK.
6) TEMPORARY PAVEMENT DOES NOT REQUIRE DOWEL BAR.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

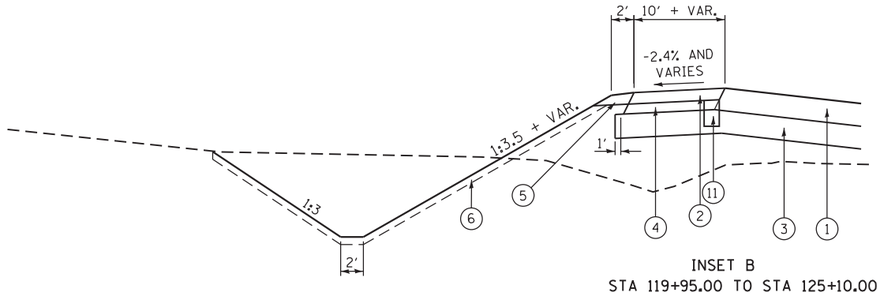
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 20.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

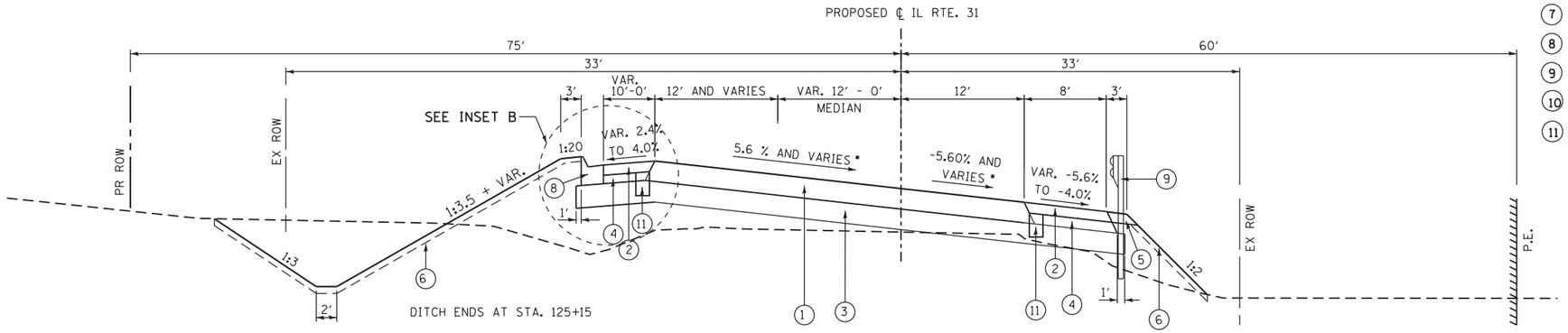
IL ROUTE 31 AT FERSON CREEK
PROPOSED TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	17
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



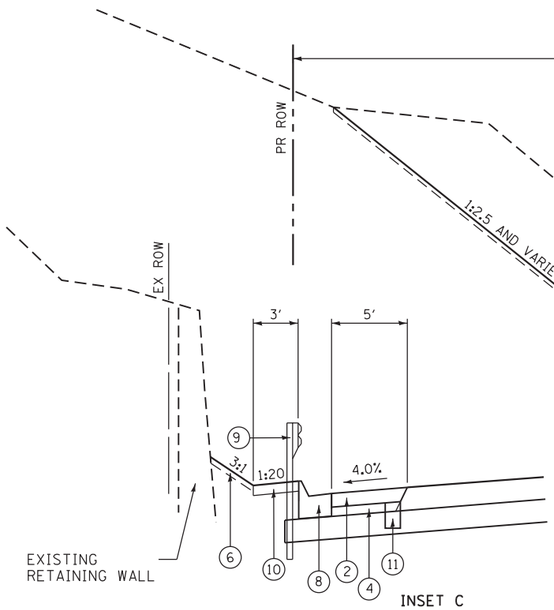
INSET B
STA 119+95.00 TO STA 125+10.00



IL RTE. 31 PROPOSED TYPICAL SECTION
STA. 119+95.00 TO STA. 126+16.00

PROPOSED LEGEND:

1. HMA PAVEMENT (FULL DEPTH), 10"
   POLYMERIZED HMA SURFACE COURSE, MIX "F", N90, (IL 9.5 mm), 2"
   POLYMERIZED HMA BINDER COURSE, IL-19.0, N90, 2-1/4"
   HMA BINDER COURSE, IL-19.0, N90, 5-3/4"
2. HMA SHOULDERS, 8"
3. AGGREGATE SUBGRADE IMPROVEMENT, 12"
4. SUBBASE GRANULAR MATERIAL, TYPE C
5. AGGREGATE SHOULDERS, TYPE B, 8"
6. TOPSOIL AND SEEDING (SEE EROSION CONTROL PLANS AND DETAILS FOR LOCATIONS)
7. CONCRETE CURB, TYPE B
8. COMBINATION CONCRETE CURB AND GUTTER, TYPE M-6.18
9. STEEL PLATE BEAM GUARDRAIL, TY A, 9FT POSTS
10. HMA SHOULDERS, 6"
11. PIPE UNDERDRAIN, 4"



INSET C
STA 126+61.93 TO STA 129+10.00

IL RTE. 31 PROPOSED TYPICAL SECTION
STA. 126+16.00 TO STA. 132+86.21

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
PROPOSED TYPICAL SECTIONS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	18
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LEFT OFFSET TREE REMOVAL SCHEDULE

STATION	OFFSET (FEET)	DIAMETER (IN.)	6-15" DIA	DIA>15"
114+05	30.0	4.0	0.0	0.0
114+25	37.0	8.5	8.5	0.0
114+35	52.0	23.0	0.0	23.0
114+40	25.0	5.5	0.0	0.0
114+40	25.0	4.5	0.0	0.0
114+48	50.0	28.5	0.0	28.5
115+18	20.0	9.0	9.0	0.0
115+25	38.0	17.0	0.0	17.0
115+30	40.0	26.0	0.0	26.0
115+48	45.0	15.0	15.0	0.0
115+60	45.0	4.0	0.0	0.0
115+60	45.0	4.0	0.0	0.0
115+60	45.0	5.5	0.0	0.0
115+63	37.0	22.0	0.0	22.0
115+68	34.0	8.5	8.5	0.0
115+68	34.0	6.0	0.0	0.0
115+80	42.0	3.5	0.0	0.0
115+80	42.0	2.0	0.0	0.0
115+87	32.0	3.5	0.0	0.0
115+87	32.0	3.5	0.0	0.0
115+90	44.0	22.5	0.0	22.5
116 55	35.0	3.0	0.0	0.0
116 55	35.0	3.0	0.0	0.0
116 55	35.0	2.5	0.0	0.0
116 55	35.0	2.0	0.0	0.0
116 55	35.0	1.5	0.0	0.0
116+02	35.0	3.0	0.0	0.0
116+02	35.0	3.0	0.0	0.0
116+02	35.0	1.5	0.0	0.0
116+02	35.0	1.5	0.0	0.0
116+07	22.0	8.5	8.5	0.0
116+07	22.0	6.0	0.0	0.0
116+12	25.0	7.0	7.0	0.0
116+24	25.0	6.0	0.0	0.0
116+35	37.0	25.0	0.0	25.0
116+48	25.0	31.0	0.0	31.0
116+52	28.0	4.0	0.0	0.0
116+52	28.0	4.0	0.0	0.0
116+52	28.0	2.5	0.0	0.0
116+95	30.0	5.0	0.0	0.0
116+95	30.0	4.5	0.0	0.0
116+95	30.0	4.5	0.0	0.0
116+95	30.0	4.0	0.0	0.0
116+96	20.0	3.0	0.0	0.0
116+96	20.0	2.0	0.0	0.0
116+96	20.0	1.5	0.0	0.0
116+96	20.0	1.5	0.0	0.0
116+96	20.0	1.0	0.0	0.0
117+05	22.0	70.0	0.0	70.0

LEFT OFFSET TREE REMOVAL SCHEDULE (CONT.)

STATION	OFFSET (FEET)	DIAMETER (IN.)	6-15" DIA	DIA>15"
117+10	30.0	12.0	12.0	0.0
117+18	34.0	10.0	10.0	0.0
117+23	28.0	7.5	7.5	0.0
117+25	40.0	18.0	0.0	18.0
117+25	32.0	15.5	0.0	15.5
117+27	25.0	16.5	0.0	16.5
117+27	25.0	10.0	10.0	0.0
117+35	35.0	7.5	7.5	0.0
117+40	25.0	8.5	8.5	0.0
117+40	25.0	8.0	8.0	0.0
117+40	25.0	5.5	0.0	0.0
117+40	42.0	7.0	7.0	0.0
117+55	32.0	11.5	11.5	0.0
117+57	27.0	6.0	0.0	0.0
117+57	27.0	5.0	0.0	0.0
117+65	37.0	13.0	13.0	0.0
117+67	28.0	14.5	14.5	0.0
117+70	35.0	13.5	13.5	0.0
117+70	35.0	12.0	12.0	0.0
117+75	25.0	8.0	8.0	0.0
119+17	20.0	11.5	11.5	0.0
119+17	20.0	4.0	0.0	0.0
119+17	20.0	3.5	0.0	0.0
119+30	25.0	10.0	10.0	0.0
119+30	25.0	7.0	7.0	0.0
119+30	25.0	6.0	0.0	0.0
119+35	30.0	14.0	14.0	0.0
119+45	25.0	8.0	8.0	0.0
119+48	42.0	26.0	0.0	26.0
119+55	40.0	10.0	10.0	0.0
119+65	42.0	6.0	0.0	0.0
119+78	47.0	12.0	12.0	0.0
119+80	30.0	7.0	7.0	0.0
119+80	30.0	5.5	0.0	0.0
119+94	25.1	11.0	11.0	0.0
120+15	28.5	8.0	8.0	0.0
120+15	28.5	5.5	0.0	0.0
120+15	28.5	4.0	0.0	0.0
120+16	28.5	10.5	10.5	0.0
120+16	28.5	10.0	10.0	0.0
120+16	28.5	7.5	7.5	0.0
122+92	42.0	12.5	12.5	0.0
124+30	32.9	9.5	9.5	0.0
124+31	35.1	11.5	11.5	0.0
124+34	30.4	18.0	0.0	18.0
124+80	28.0	10.5	10.5	0.0
124+84	42.0	10.0	10.0	0.0
124+87	55.0	8.5	8.5	0.0
124+98	37.0	8.5	8.5	0.0

LEFT OFFSET TREE REMOVAL SCHEDULE (CONT.)

STATION	OFFSET (FEET)	DIAMETER (IN.)	6-15" DIA	DIA>15"
125+06	32.0	6.0	0.0	0.0
125+10	47.0	11.5	11.5	0.0
125+11	23.5	16.0	0.0	16.0
125+24	40.0	8.0	8.0	0.0
125+37	35.0	11.0	11.0	0.0
125+48	45.0	13.0	13.0	0.0
125+67	37.0	7.5	7.5	0.0
125+80	40.0	8.0	8.0	0.0
126+18	32.0	8.0	8.0	0.0
126+30	50.0	15.0	15.0	0.0
126+30	50.0	11.5	11.5	0.0
126+37	50.0	8.5	8.5	0.0
126+45	45.0	12.5	12.5	0.0
126+47	30.0	6.0	0.0	0.0
126+70	40.0	7.5	7.5	0.0
127+14	36.0	14.0	14.0	0.0
127+85	43.0	12.5	12.5	0.0
127+85	43.0	8.0	8.0	0.0
128+00	42.0	13.0	13.0	0.0
128+00	42.0	11.5	11.5	0.0
128+08	58.0	28.5	0.0	28.5
128+10	47.0	7.0	7.0	0.0
128+11	50.0	16.5	0.0	16.5
128+31	42.0	8.0	8.0	0.0
128+36	52.0	8.0	8.0	0.0
128+52	52.0	10.0	10.0	0.0
128+55	60.0	7.0	7.0	0.0
128+68	48.0	10.5	10.5	0.0
128+72	50.0	11.0	11.0	0.0
128+75	32.0	10.5	10.5	0.0
128+88	35.0	11.0	11.0	0.0
128+98	35.0	10.5	10.5	0.0
129+05	42.0	27.0	0.0	27.0
129+21	59.0	11.5	11.5	0.0
129+22	28.0	10.0	10.0	0.0
129+29	46.0	26.0	0.0	26.0
129+32	27.0	9.0	9.0	0.0
129+37	30.0	7.0	7.0	0.0
129+37	30.0	5.0	0.0	0.0
129+80	24.0	11.0	11.0	0.0
129+80	24.0	9.5	9.5	0.0
132+11	46.0	14.0	14.0	0.0
132+18	48.0	17.5	0.0	17.5
132+21	28.0	10.0	10.0	0.0
132+21	28.0	6.5	6.5	0.0
132+21	28.0	6.0	0.0	0.0
132+22	21.0	8.0	8.0	0.0
132+22	35.0	26.5	0.0	26.5
132+23	24.8	11.0	11.0	0.0
		TOTALS:	779.0	517.0

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
TREE REMOVAL SCHEDULE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	19
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

RIGHT OFFSET TREE REMOVAL SCHEDULE (CONT.)

STATION	OFFSET (FEET)	DIAMETER (IN.)	6-15" DIA	DIA>15"
116+93	36.6	14.5	14.5	0.0
116+93	36.6	11.0	11.0	0.0
117+01	32.6	25.0	0.0	25.0
117+01	32.6	10.0	10.0	0.0
117+75	42.0	7.0	7.0	0.0
117+75	42.0	6.0	0.0	0.0
118+74	48.0	19.0	0.0	19.0
119+25	49.0	14.0	14.0	0.0
119+48	37.0	17.0	0.0	17.0
119+52	37.0	6.5	6.5	0.0
119+55	34.0	6.0	0.0	0.0
120+01	44.0	22.0	0.0	22.0
120+10	50.0	12.0	12.0	0.0
120+75	32.0	10.0	10.0	0.0
120+82	35.0	13.5	13.5	0.0
121+20	38.0	9.5	9.5	0.0
121+20	38.0	7.0	7.0	0.0
124+47	42.0	11.5	11.5	0.0
125+20	18.0	6.5	6.5	0.0
125+32	20.0	6.0	0.0	0.0
125+45	25.0	6.5	6.5	0.0
125+52	26.0	6.0	0.0	0.0
125+74	17.5	19.5	0.0	19.5
126+12	20.1	13.0	13.0	0.0
126+24	22.8	19.0	0.0	19.0
126+49	27.4	20.0	0.0	20.0
127+12	48.0	6.5	6.5	0.0
127+22	45.0	13.5	13.5	0.0
127+25	55.0	6.0	0.0	0.0
127+30	52.0	12.0	12.0	0.0
127+45	50.0	6.5	6.5	0.0
127+45	50.0	6.5	6.5	0.0
127+57	40.0	6.0	0.0	0.0
127+75	44.0	6.0	0.0	0.0
127+80	51.0	7.5	7.5	0.0
127+85	42.0	8.0	8.0	0.0
127+85	42.0	6.0	0.0	0.0
128+10	42.0	12.0	12.0	0.0
128+10	42.0	12.0	12.0	0.0

RIGHT OFFSET TREE REMOVAL SCHEDULE (CONT.)

STATION	OFFSET (FEET)	DIAMETER (IN.)	6-15" DIA	DIA>15"
128+10	42.0	10.0	10.0	0.0
128+30	45.0	17.0	0.0	17.0
128+70	38.0	12.5	12.5	0.0
128+80	38.0	22.5	0.0	22.5
128+80	38.0	22.0	0.0	22.0
128+80	38.0	8.0	8.0	0.0
128+80	38.0	7.0	7.0	0.0
129+00	40.0	10.0	10.0	0.0
129+00	40.0	10.0	10.0	0.0
129+12	40.0	13.0	13.0	0.0
129+12	40.0	6.0	0.0	0.0
129+12	40.0	4.5	0.0	0.0
129+18	22.0	7.5	7.5	0.0
129+20	28.0	17.0	0.0	17.0
129+27	38.0	9.5	9.5	0.0
129+30	36.0	8.5	8.5	0.0
129+35	38.0	13.5	13.5	0.0
129+37	31.0	6.5	6.5	0.0
129+52	42.0	7.5	7.5	0.0
129+80	25.0	7.0	7.0	0.0
129+82	42.0	10.0	10.0	0.0
129+82	42.0	10.0	10.0	0.0
129+82	42.0	9.5	9.5	0.0
129+82	42.0	8.0	8.0	0.0
130+05	27.0	6.5	6.5	0.0
130+30	48.0	12.0	12.0	0.0
130+30	48.0	11.5	11.5	0.0
130+33	58.0	10.5	10.5	0.0
130+48	29.0	8.5	8.5	0.0
130+62	35.0	26.5	0.0	26.5
130+79	21.0	13.5	13.5	0.0
130+85	30.0	7.0	7.0	0.0
131+45	38.0	8.0	8.0	0.0
131+45	38.0	5.5	0.0	0.0
131+62	23.0	8.5	8.5	0.0
131+73	20.0	6.5	6.5	0.0
132+04	32.0	10.5	10.5	0.0
		TOTALS:	271.0	105.0

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
TREE REMOVAL SCHEDULE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	20
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

STAGE 1		EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STA. FROM	TO STA.					
		CU YD	CU YD	CU YD	CU YD	CU YD
112+50.00	113+00.00	5.25	5.17	4.46	0.93	3.53
113+00.00	113+50.00	12.04	10.44	10.24	1.67	8.56
113+50.00	114+00.00	14.07	9.96	11.96	1.88	10.07
114+00.00	114+50.00	10.71	7.86	9.10	3.02	6.08
114+50.00	115+00.00	8.83	5.98	7.51	3.26	4.24
115+00.00	115+50.00	54.77	26.08	46.56	3.29	43.27
115+50.00	116+00.00	123.75	45.17	105.19	2.90	102.29
116+00.00	116+50.00	115.69	43.71	98.34	9.47	88.87
116+50.00	117+00.00	42.77	27.58	36.35	46.17	-9.82
117+00.00	117+50.00	57.23	25.69	48.65	186.35	-137.71
117+50.00	118+00.00	55.78	19.92	47.42	148.66	-101.25
118+00.00	118+50.00	0.00	0.00	0.00	0.00	0.00
118+50.00	119+00.00	0.86	19.03	0.73	215.07	-214.34
119+00.00	119+50.00	1.28	39.17	1.09	428.24	-427.15
119+50.00	120+00.00	0.71	39.70	0.60	381.63	-381.03
120+00.00	120+50.00	0.29	26.74	0.24	241.37	-241.12
120+50.00	121+00.00	0.00	8.32	0.00	93.21	-93.21
121+00.00	121+50.00	3.14	1.14	2.67	20.83	-18.17
121+50.00	122+00.00	6.06	0.00	5.16	2.74	2.42
122+00.00	122+50.00	5.54	0.00	4.71	3.34	1.37
122+50.00	123+00.00	5.55	2.33	4.71	3.15	1.57
123+00.00	123+50.00	4.19	12.03	3.57	19.02	-15.45
123+50.00	124+00.00	3.81	21.74	3.24	36.57	-33.33
124+00.00	124+50.00	4.74	26.81	4.03	65.74	-61.71
124+50.00	125+00.00	5.30	31.52	4.50	92.86	-88.36
125+00.00	125+50.00	4.72	36.34	4.01	144.31	-140.30
125+50.00	126+00.00	2.61	42.20	2.22	254.18	-251.96
126+00.00	126+50.00	2.86	45.70	2.43	286.98	-284.55
126+50.00	127+00.00	13.80	43.46	11.73	226.33	-214.60
127+00.00	127+50.00	19.70	39.32	16.74	183.76	-167.02
127+50.00	128+00.00	19.60	40.32	16.66	194.32	-177.66
128+00.00	128+50.00	17.35	44.21	14.75	242.17	-227.42
128+50.00	129+00.00	13.00	45.19	11.05	277.61	-266.55
129+00.00	129+50.00	17.24	44.78	14.65	279.66	-265.01
129+50.00	130+00.00	20.98	43.06	17.83	253.32	-235.49
130+00.00	130+50.00	14.30	42.08	12.15	254.79	-242.64
130+50.00	131+00.00	5.34	41.67	4.54	259.67	-255.13
131+00.00	131+50.00	4.93	39.57	4.19	221.46	-217.27
131+50.00	132+00.00	35.11	38.22	29.84	196.28	-166.43
132+00.00	132+50.00	47.25	32.61	40.17	160.45	-120.28
132+50.00	133+00.00	14.81	13.73	12.59	65.19	-52.60
	TOTAL	796	1089	677	5512	-4835

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
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PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EARTHWORK SCHEDULE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	21
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

STAGE 2		EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STA. FROM	TO STA.					
		CU YD	CU YD	CU YD	CU YD	CU YD
112+50.00	113+00.00	4.39	4.26	3.73	1.82	1.91
113+00.00	113+50.00	13.93	12.45	11.84	2.94	8.90
113+50.00	114+00.00	61.84	19.53	52.56	1.61	50.95
114+00.00	114+50.00	113.48	24.64	96.46	0.94	95.51
114+50.00	115+00.00	153.13	30.39	130.16	1.29	128.87
115+00.00	115+50.00	163.86	17.09	139.28	3.92	135.35
115+50.00	116+00.00	136.22	0.00	115.78	11.38	104.40
116+00.00	116+50.00	83.57	0.00	71.03	44.96	26.07
116+50.00	117+00.00	46.68	8.63	39.67	115.94	-76.26
117+00.00	117+50.00	27.42	15.86	23.30	248.80	-225.50
117+50.00	118+00.00	0.00	7.23	0.00	169.53	-169.53
118+00.00	118+50.00	0.00	0.00	0.00	0.00	0.00
118+50.00	119+00.00	8.25	19.88	7.01	250.48	-243.46
119+00.00	119+50.00	24.25	36.96	20.61	474.03	-453.42
119+50.00	120+00.00	21.10	30.98	17.94	425.07	-407.13
120+00.00	120+50.00	21.29	33.56	18.09	375.67	-357.58
120+50.00	121+00.00	16.19	29.05	13.76	285.89	-272.13
121+00.00	121+50.00	0.00	9.39	0.00	111.73	-111.73
121+50.00	122+00.00	19.56	22.69	16.63	117.47	-100.84
122+00.00	122+50.00	59.75	46.14	50.79	238.59	-187.80
122+50.00	123+00.00	81.54	48.77	69.31	230.03	-160.73
123+00.00	123+50.00	58.29	44.62	49.55	215.16	-165.61
123+50.00	124+00.00	16.94	19.30	14.40	106.25	-91.84
124+00.00	124+50.00	0.00	0.00	0.00	0.00	0.00
124+50.00	125+00.00	7.44	6.88	6.32	0.00	6.32
125+00.00	125+50.00	56.44	22.77	47.97	8.29	39.68
125+50.00	126+00.00	140.60	36.39	119.51	11.43	108.08
126+00.00	126+50.00	212.91	44.88	180.98	4.57	176.41
126+50.00	127+00.00	220.00	48.40	187.00	3.64	183.36
127+00.00	127+50.00	113.37	28.19	96.36	4.05	92.32
127+50.00	128+00.00	34.18	9.64	29.05	3.68	25.37
128+00.00	128+50.00	79.66	25.00	67.71	4.18	63.52
128+50.00	129+00.00	110.77	40.80	94.15	5.14	89.01
129+00.00	129+50.00	61.85	30.68	52.57	6.25	46.33
129+50.00	130+00.00	74.62	28.90	63.43	7.87	55.55
130+00.00	130+50.00	189.73	44.44	161.27	9.09	152.18
130+50.00	131+00.00	283.12	50.50	240.65	6.94	233.71
131+00.00	131+50.00	299.94	49.16	254.94	4.09	250.86
131+50.00	132+00.00	317.36	48.22	269.75	2.59	267.16
132+00.00	132+50.00	174.20	24.60	148.07	0.80	147.27
132+50.00	133+00.00	125.27	0.00	106.48	0.35	106.13
133+00.00	133+50.00	125.27	0.00	106.48	0.35	106.13
	TOTAL	3758	1021	3195	3517	-322

FILE NAME = sFILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EARTHWORK SCHEDULE

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	22
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

STAGE 3		EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STA. FROM	TO STA.					
		CU YD	CU YD	CU YD	CU YD	CU YD
113+50.00	114+00.00	18.83	3.43	16.00	3.37	12.63
114+00.00	114+50.00	33.27	3.43	28.28	6.23	22.05
114+50.00	115+00.00	26.09	0.00	22.18	7.10	15.08
115+00.00	115+50.00	31.97	11.75	27.17	7.38	19.79
115+50.00	116+00.00	34.36	23.02	29.20	6.50	22.70
116+00.00	116+50.00	18.22	13.73	15.49	6.99	8.50
116+50.00	117+00.00	21.74	2.98	18.48	4.79	13.69
117+00.00	117+50.00	34.63	2.04	29.44	9.82	19.62
117+50.00	118+00.00	17.08	1.52	14.52	8.66	5.86
118+00.00	118+50.00	0.00	0.00	0.00	0.00	0.00
118+50.00	119+00.00	19.50	0.40	16.58	2.13	14.45
119+00.00	119+50.00	36.80	0.87	31.28	5.60	25.68
119+50.00	120+00.00	24.34	1.44	20.69	13.68	7.00
120+00.00	120+50.00	8.62	2.82	7.33	45.24	-37.91
120+50.00	121+00.00	19.98	7.53	16.98	107.65	-90.67
121+00.00	121+50.00	18.40	5.68	15.64	72.63	-56.99
121+50.00	122+00.00	1.61	3.67	1.37	38.15	-36.78
122+00.00	122+50.00	3.25	6.54	2.76	76.48	-73.72
122+50.00	123+00.00	3.28	6.44	2.79	93.01	-90.22
123+00.00	123+50.00	3.30	4.01	2.81	106.66	-103.86
123+50.00	124+00.00	1.66	1.46	1.41	112.47	-111.06
124+00.00	124+50.00	0.23	1.02	0.19	107.57	-107.37
124+50.00	125+00.00	0.67	0.00	0.57	101.47	-100.90
125+00.00	125+50.00	11.05	0.00	9.39	82.36	-72.97
125+50.00	126+00.00	49.02	0.00	41.67	38.76	2.91
126+00.00	126+50.00	94.78	0.00	80.57	14.79	65.77
126+50.00	127+00.00	124.78	0.00	106.07	4.00	102.06
127+00.00	127+50.00	125.94	0.00	107.04	0.75	106.30
127+50.00	128+00.00	126.05	0.00	107.14	2.21	104.93
128+00.00	128+50.00	131.94	0.00	112.14	10.14	102.00
128+50.00	129+00.00	119.39	0.00	101.48	20.08	81.40
129+00.00	129+50.00	93.58	0.00	79.55	43.38	36.17
129+50.00	130+00.00	65.19	0.00	55.41	64.75	-9.34
130+00.00	130+50.00	66.84	0.00	56.82	58.83	-2.01
130+50.00	131+00.00	67.63	0.00	57.49	41.71	15.78
131+00.00	131+50.00	69.60	0.00	59.16	23.37	35.79
131+50.00	132+00.00	97.18	0.00	82.60	10.98	71.62
132+00.00	132+50.00	55.95	0.00	47.56	3.26	44.30
	TOTAL	1677	104	1425	1363	62

STA. FROM	TO STA.	EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
		CU YD	CU YD	CU YD	CU YD	CU YD
STAGE 1		796	1089	677	5512	-4835
STAGE 2		3758	1021	3195	3517	-322
STAGE 3		1677	104	1425	1363	62
GRAND TOTAL		**6231**	**2213**	**5296**	**10392**	**-5095**

FILE NAME = sFILE8

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EARTHWORK SCHEDULE

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

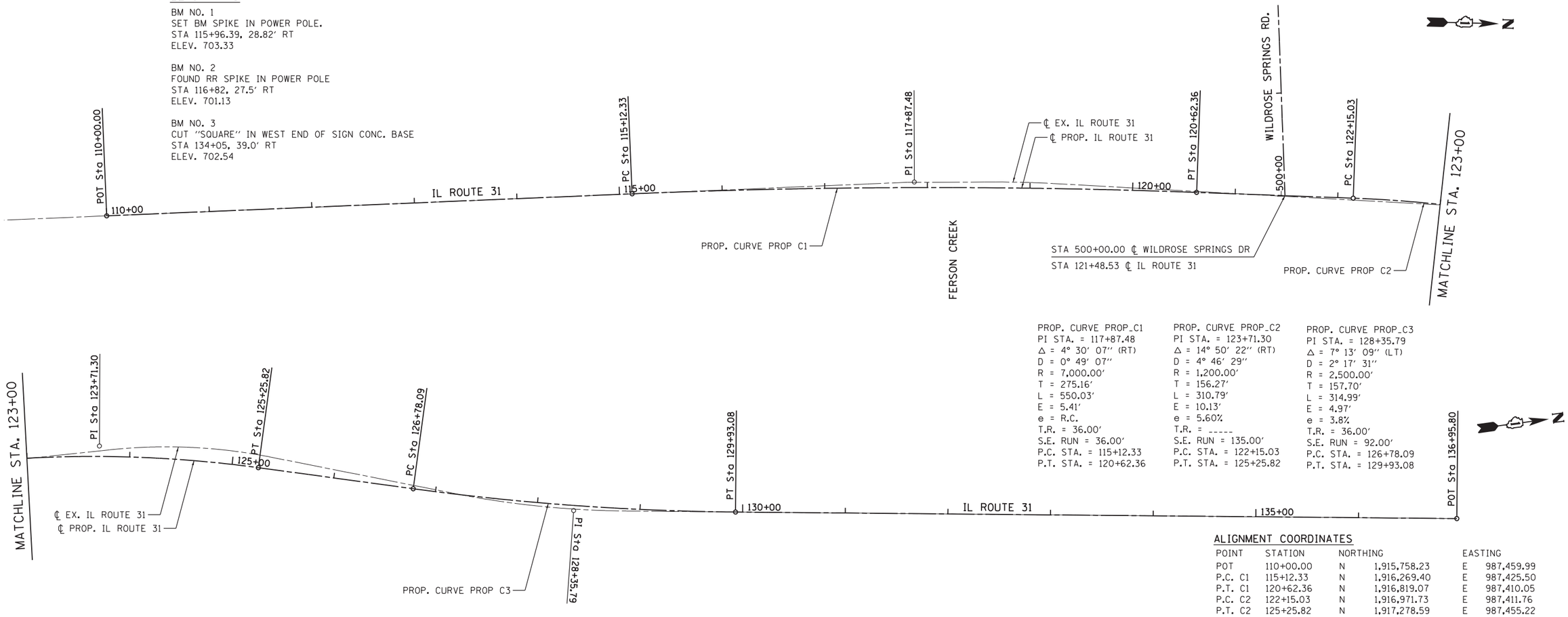
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	23
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

BENCHMARKS

BM NO. 1
SET BM SPIKE IN POWER POLE.
STA 115+96.39, 28.82' RT
ELEV. 703.33

BM NO. 2
FOUND RR SPIKE IN POWER POLE
STA 116+82, 27.5' RT
ELEV. 701.13

BM NO. 3
CUT "SQUARE" IN WEST END OF SIGN CONC. BASE
STA 134+05, 39.0' RT
ELEV. 702.54



PROP. CURVE PROP_C1
PI STA. = 117+87.48
Δ = 4° 30' 07" (RT)
D = 0° 49' 07"
R = 7,000.00'
T = 275.16'
L = 550.03'
E = 5.41'
e = R.C.
T.R. = 36.00'
S.E. RUN = 36.00'
P.C. STA. = 115+12.33
P.T. STA. = 120+62.36

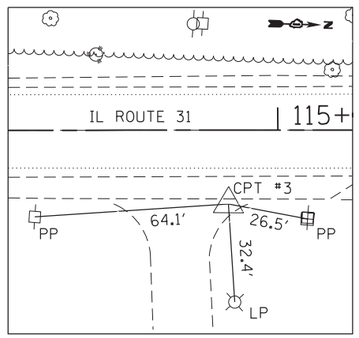
PROP. CURVE PROP_C2
PI STA. = 123+71.30
Δ = 14° 50' 22" (RT)
D = 4° 46' 29"
R = 1,200.00'
T = 156.27'
L = 310.79'
E = 10.13'
e = 5.60%
T.R. = -----
S.E. RUN = 135.00'
P.C. STA. = 122+15.03
P.T. STA. = 125+25.82

PROP. CURVE PROP_C3
PI STA. = 128+35.79
Δ = 7° 13' 09" (LT)
D = 2° 17' 31"
R = 2,500.00'
T = 157.70'
L = 314.99'
E = 4.97'
e = 3.8%
T.R. = 36.00'
S.E. RUN = 92.00'
P.C. STA. = 126+78.09
P.T. STA. = 129+93.08

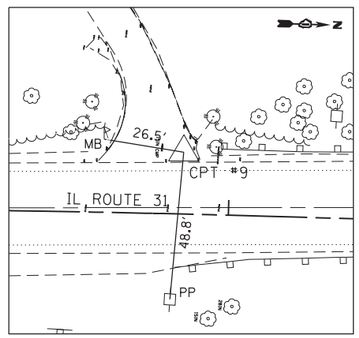
ALIGNMENT COORDINATES

POINT	STATION	NORTHING		EASTING	
POT	110+00.00	N	1,915,758.23	E	987,459.99
P.C. C1	115+12.33	N	1,916,269.40	E	987,425.50
P.T. C1	120+62.36	N	1,916,819.07	E	987,410.05
P.C. C2	122+15.03	N	1,916,971.73	E	987,411.76
P.T. C2	125+25.82	N	1,917,278.59	E	987,455.22
P.C. C3	126+78.09	N	1,917,425.34	E	987,495.86
P.T. C3	129+93.08	N	1,917,733.39	E	987,560.62
POT	136+95.80	N	1,918,428.82	E	987,661.60

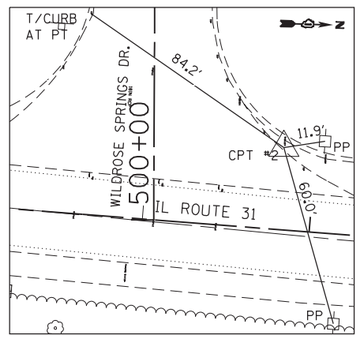
CONTROL POINT #3
SET MAG NAIL
STA 114+83.71, 24.38' RT
N 1916242.49
E 987451.74
ELEV. 704.86



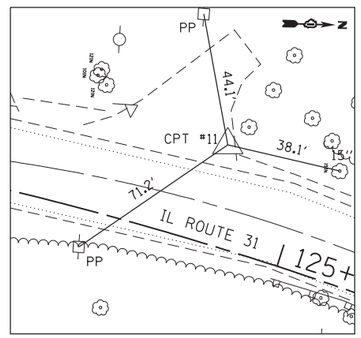
CONTROL POINT #9
SET MAG NAIL
STA 116+84.79, 20.40' LT
N 1916440.72
E 987395.62
ELEV. 699.78



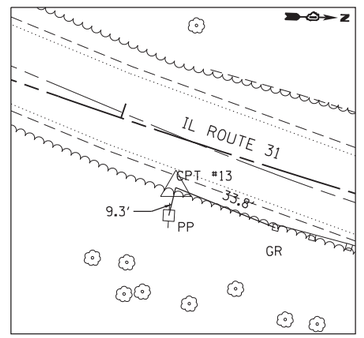
CONTROL POINT #2
SET MAG NAIL
STA 121+89.50, 27.15' LT
N 1916946.51
E 987384.33
ELEV. 691.47



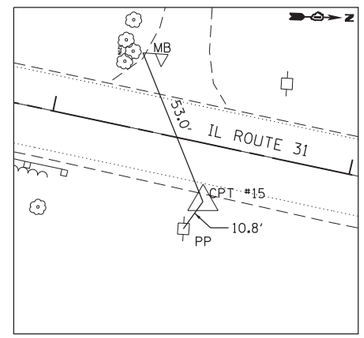
CONTROL POINT #11
SET MAG NAIL
STA 124+72.90, 33.34' LT
N 1917234.77
E 987409.73
ELEV. 696.91



CONTROL POINT #13
SET IRON ROD
STA 127+24.38, 16.07' RT
N 1917466.06
E 987523.37
ELEV. 704.34



CONTROL POINT #15
SET IRON ROD
STA 132+54.67, 18.97' RT
N 1917989.54
E 987616.99
ELEV. 707.98



FILE NAME = $FILES

COLLINS ENGINEERS INC.

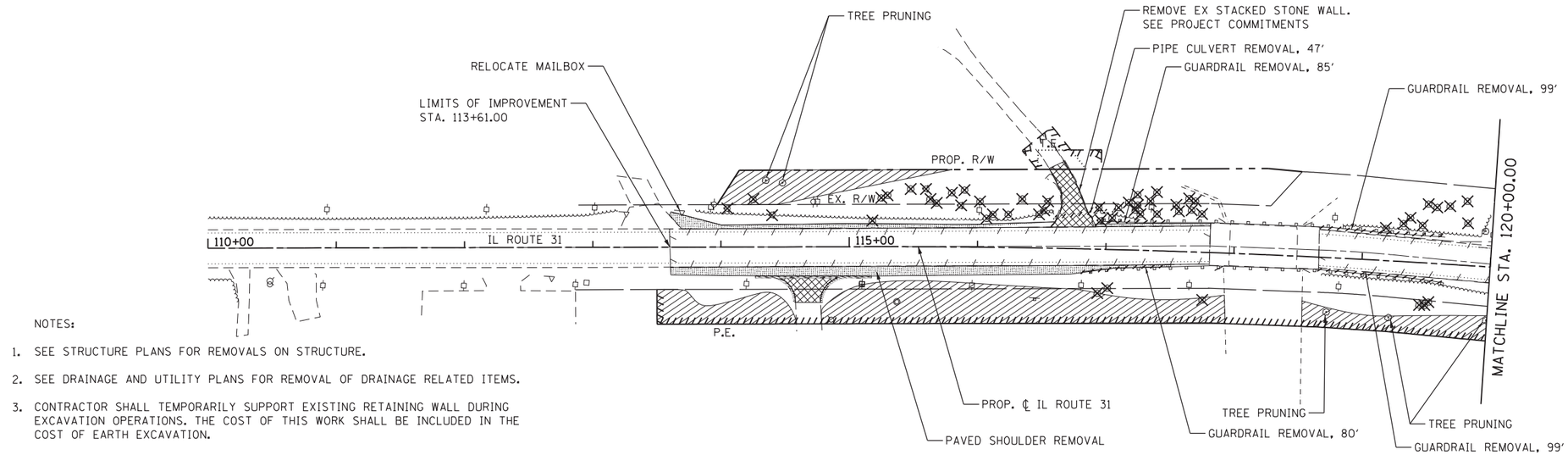
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
ALIGNMENT, TIES, AND BENCHMARKS

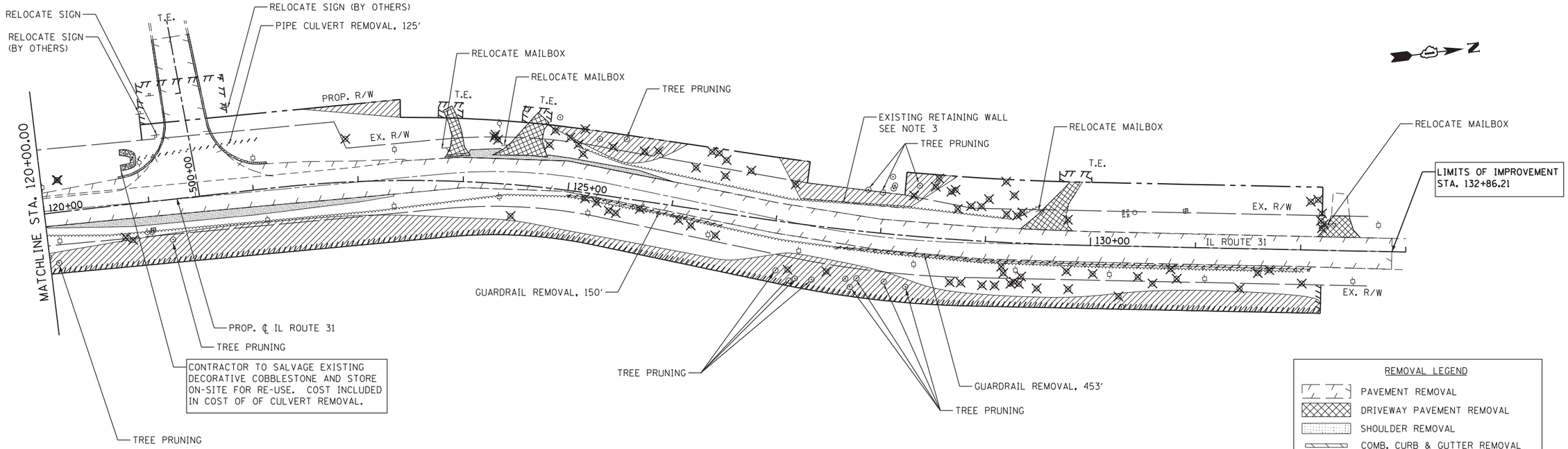
SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	24
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. SEE STRUCTURE PLANS FOR REMOVALS ON STRUCTURE.
2. SEE DRAINAGE AND UTILITY PLANS FOR REMOVAL OF DRAINAGE RELATED ITEMS.
3. CONTRACTOR SHALL TEMPORARILY SUPPORT EXISTING RETAINING WALL DURING EXCAVATION OPERATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
4. SEE SCHEDULE OF QUANTITIES FOR SIZES OF TREES TO BE REMOVED.
5. SEE PAVEMENT MARKING AND SIGNING PLAN FOR SIGN REMOVALS.
6. REMOVAL OF THE EXISTING APPROACH PAVEMENT SHALL BE PAID FOR AS PAVEMENT REMOVAL.



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COLLINS ENGINEERS INC

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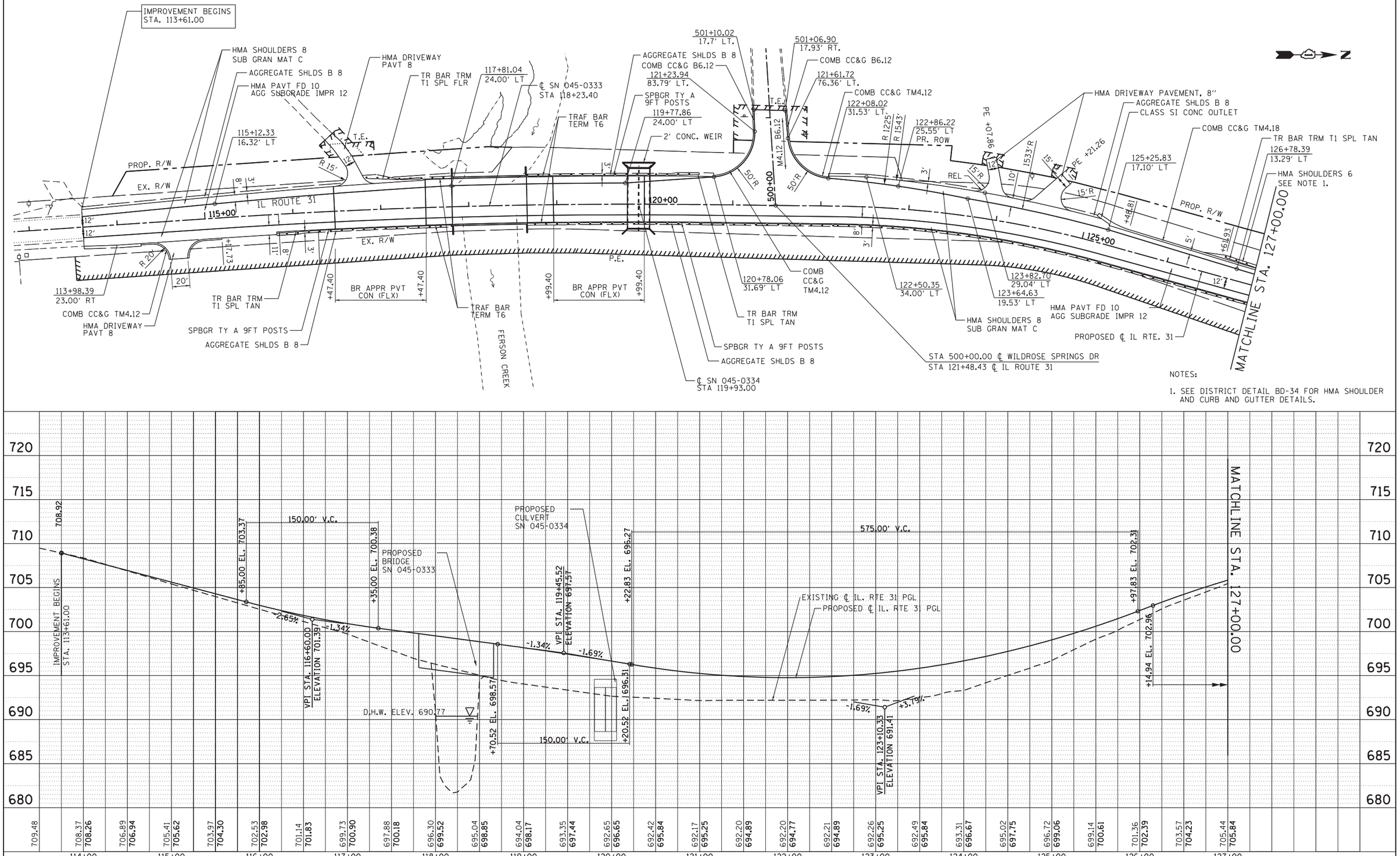
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
REMOVAL PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	25
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

PROFILE — SURVEYED, PLOTTED, PROFILE CHECKED, BM. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

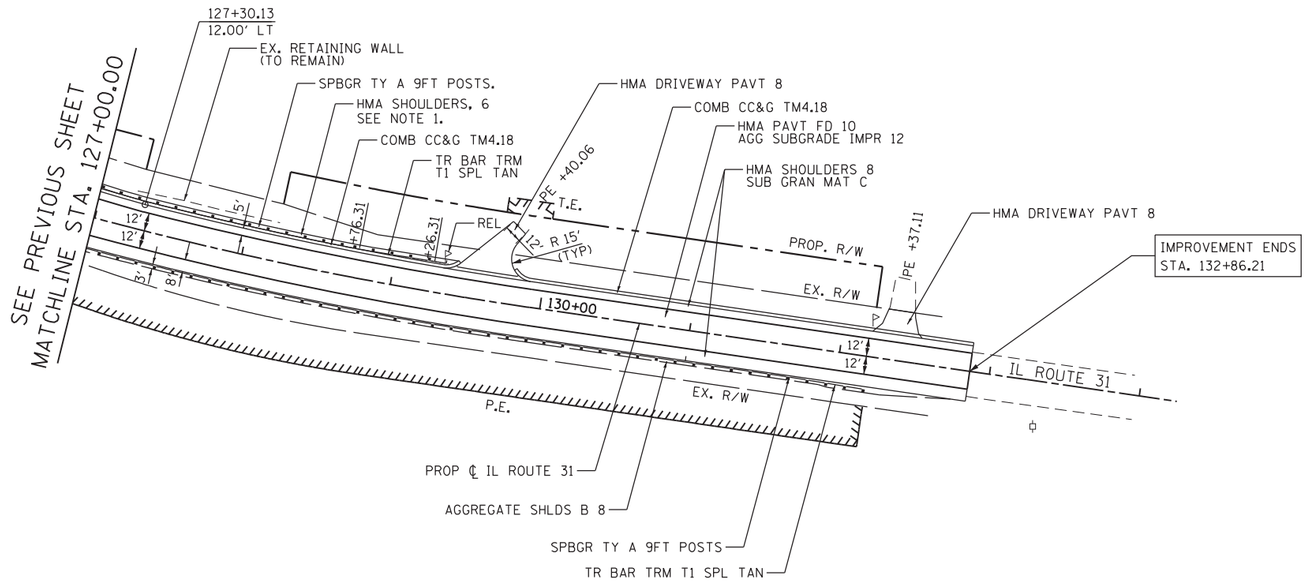
USER NAME = rgall	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/1/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
PLAN AND PROFILE

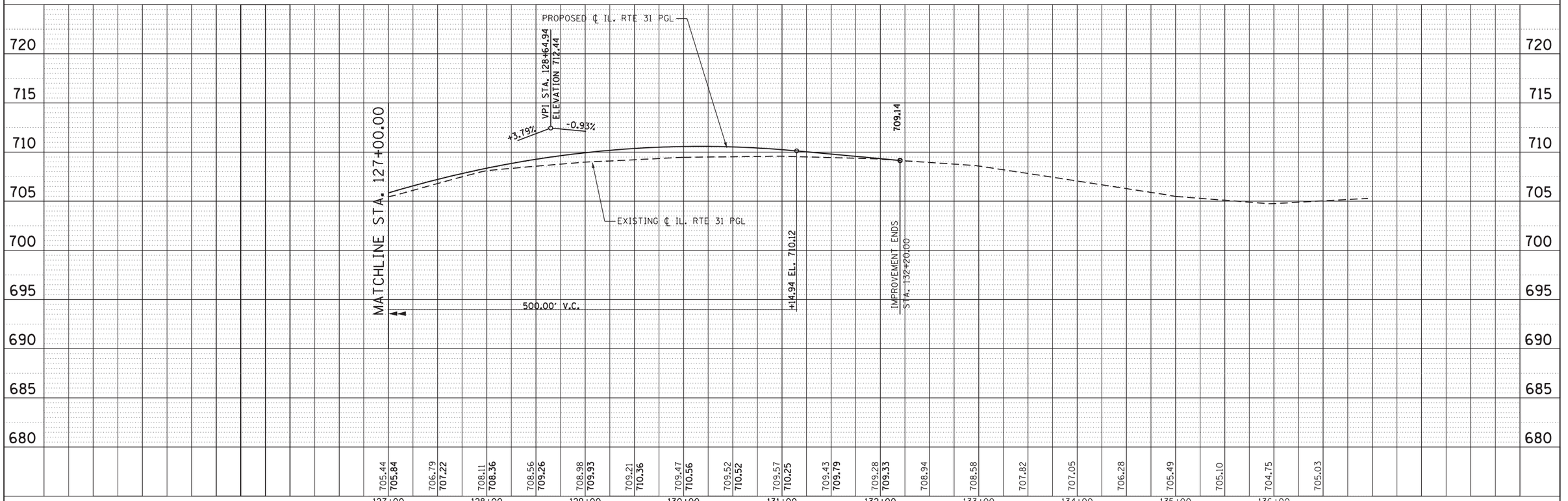
SCALE: | SHEET OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	26
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. SEE DISTRICT DETAIL BD-34 FOR HMA SHOULDER AND CURB AND GUTTER DETAILS.



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PROFILE: SURVEYED, PLOTTED, PROFILES CHECKED, BAR. NOTED STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

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COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 12/1/2014	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

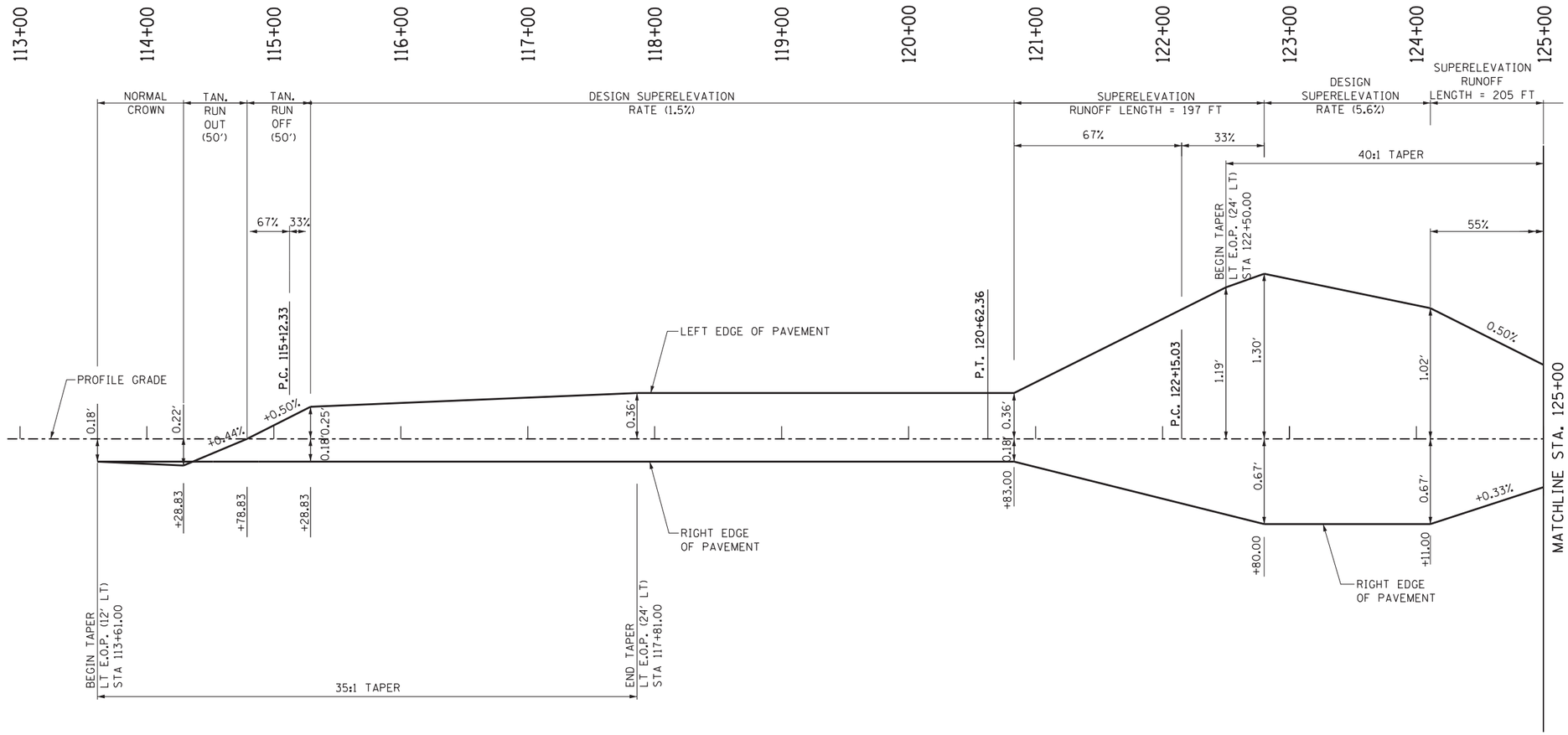
IL ROUTE 31 AT FERSON CREEK
PLAN AND PROFILE

SCALE: | SHEET OF SHEETS | STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	27

CONTRACT NO. 60M81

ILLINOIS FED. AID PROJECT



SUPERELEVATION DIAGRAM

P.I. STA. 117+87.48 IL ROUTE 31

DESIGN SPEED = 50 mph
R = 7000.00'
SE = R.C.

SUPERELEVATION DIAGRAM

P.I. STA. 123+71.30 IL ROUTE 31

DESIGN SPEED =50 mph
R = 1200.00'
SE = 5.60%

FILE NAME = sFILE8

COLLINS ENGINEERS INC

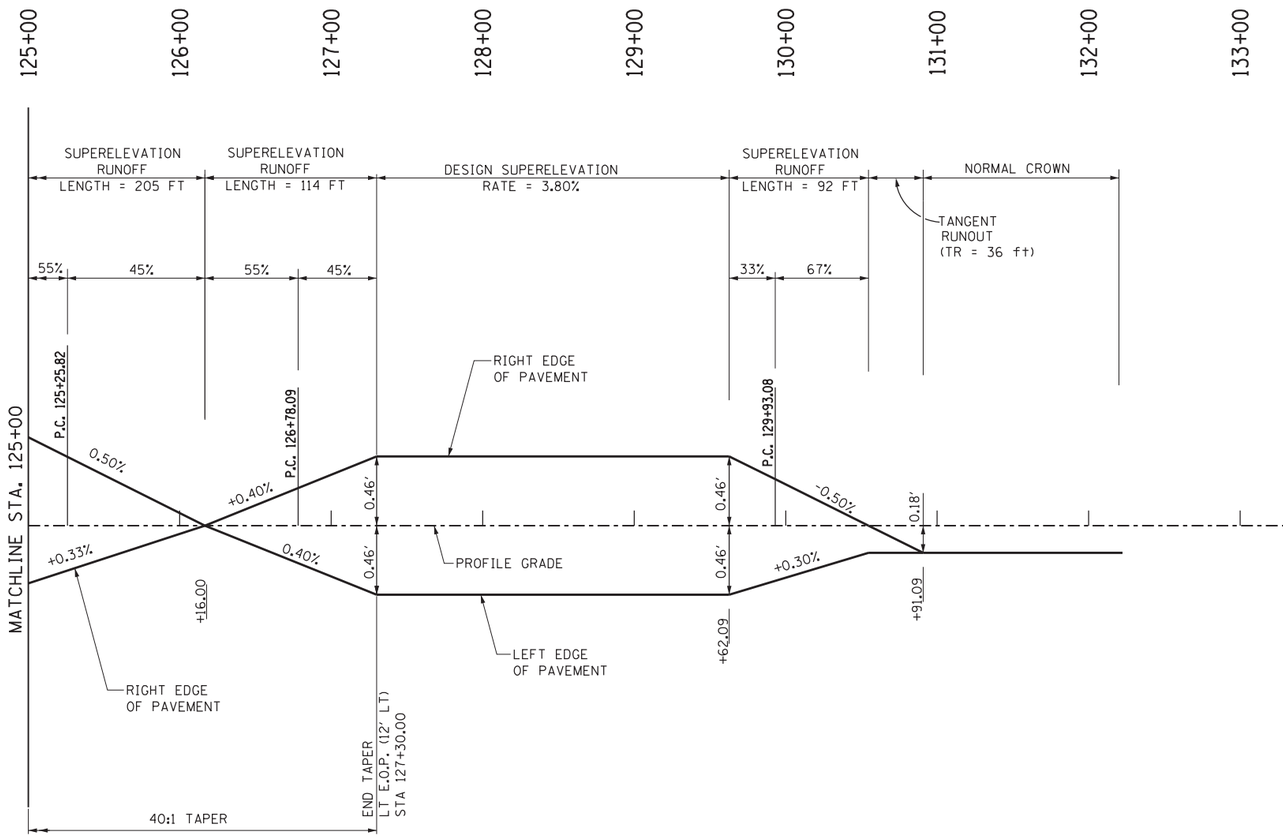
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 10.0000 '/ in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUPERELEVATION DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	28
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



SUPERELEVATION DIAGRAM

P.I. STA. 128+35.79 IL ROUTE 31

DESIGN SPEED = 50 mph
R = 2500.00'
SE = 3.80%

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 10.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
SUPERELEVATION DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	29
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

MAINTENANCE OF TRAFFIC - GENERAL NOTES

1. SEE SPECIAL PROVISIONS TITLED TRAFFIC CONTROL AND PROTECTION (SPECIAL).

2. THE CONTRACTOR SHALL REMOVE AND SAFELY STORE (FREE FROM THEFT OR DAMAGE) OR COVER ALL CONFLICTING EXISTING SIGNS FOR THE DURATION OF THE CONSTRUCTION. ALL SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF CONSTRUCTION.

3. THE FOLLOWING APPLY TO CONSTRUCTION SIGNS:

   A) THE CONTRACTOR SHALL FURNISH ALL SIGNS.

   B) THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND REPLACE ANY SIGNS THAT ARE SUPPLIED BY OTHERS AND DAMAGED BY THE CONTRACTOR'S WORK FORCE OR SUBCONTRACTORS DURING RELOCATION OR CONSTRUCTION OPERATIONS.

   C) ALL SIGNS AND ASSEMBLIES SHALL BE CERTIFIED BY THE CONTRACTOR AS MEETING THE APPLICABLE REQUIREMENTS OF NCHRP REPORT 350. TEST LEVEL 3.

   D) ALL SIGNS SHALL BE CONSIDERED INCLUDED IN THE COST OF THE TRAFFIC CONTROL AND PROTECTION (SPECIAL) PAY ITEM, EXCEPT FOR TEMPORARY INFORMATIONAL SIGNING AS NOTED ON THE PLANS.

4. ANY RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH THE TEMPORARY TRAFFIC LANES MUST HAVE THE REFLECTIVE LENSES REMOVED AS DIRECTED BY THE ENGINEER.

5. ALL TEMPORARY PAVEMENT MARKINGS ALONG IL ROUTE 31 DURING STAGED CONSTRUCTION SHALL BE WET REFLECTIVE TAPE, TYPE III OF THE WIDTH AND COLOR SPECIFIED ON THE PLAN SHEETS.

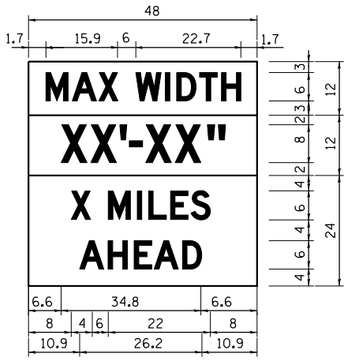
6. THE CONTRACTOR SHALL MAINTAIN DRAINAGE AND EROSION CONTROL DURING CONSTRUCTION FOR THE DURATION OF THE CONTRACT.

7. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL COMMERCIAL AND RESIDENTIAL ENTRANCES FOR THE ENTIRE DURATION OF THE PROJECT.

8. SIDE ROAD, INTERSECTIONS, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE TYPICAL ENTRANCE SIGNING DETAIL, DISTRICT DETAILS TC-10 AND TC-26, AND AS SHOWN ON THE PLANS.

9. TEMPORARY PAVEMENT ALONG IL ROUTE 31 SHALL BE ACCORDING TO THE PAVEMENT STRUCTURE DETAILS AND MIX DESIGN REQUIREMENTS ON THE TYPICAL SECTIONS SHEETS.

10. PLACE MAX WIDTH SIGN (10'-6") FOR STAGE I AND (9'-6") FOR STAGE II AND III AT NORTHEAST CORNER OF IL ROUTE 31 AND IL ROUTE 64 LOCATED 1 MILE SOUTH OF SN 045-0333 ALONG IL ROUTE 31



W12-1103 (WIDTH IS BD)
NO BORDER, BLACK ON WHITE
[MAX WIDTH] D:

NO BORDER, BLACK ON ORANGE
[XX'-XX"] D:

NO BORDER, BLACK ON WHITE
[X MILES] D; [AHEAD] D:

ALL SIGN DIMENSIONS IN INCHES

IL ROUTE 31, STAGING NOTES: PRE-STAGE I

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING TEMPORARY PAVEMENT ALONG THE NORTHBOUND AND SOUTHBOUND DIRECTIONS OF IL ROUTE 31, AND CONSTRUCTING TEMPORARY ACCESS DRIVEWAY CONNECTING EXISTING DRIVEWAY AT STA 116+92 TO THE EXISTING DRIVEWAY AT STA 114+68, AS SHOWN ON THE PLANS.

MAINTAIN TRAFFIC IN ACCORDANCE WITH STD. 701326.

INSTALL SIGNAGE AND TEMPORARY SIGNALS/LIGHTING PER STD. 701321 AND AS SHOWN ON THE PLANS.

IL ROUTE 31, STAGING NOTES: STAGE I

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING THE EAST HALF OF SN 045-0333, THE EAST HALF OF SN 045-0334, AND THE TEMPORARY RAMPS CONNECTING EXISTING PAVEMENT TO THE PROPOSED APPROACH SLABS.

INSTALL STAGE I TEMPORARY SIGNAGE INCLUDING INSTALLATION OF TRAFFIC BARRIER AND TEMPORARY ATTENUATORS ADJACENT TO THE WORK ZONE.

ENERGIZE TEMPORARY TRAFFIC SIGNALS.

SHIFT IL ROUTE 31 INTO 1-LANE, 1-WAY OPERATION AS SHOWN ON THE PLANS TRAFFIC SHALL BE MAINTAINED IN A SINGLE TRAVEL LANE AS SHOWN ON THE PLANS.

IL ROUTE 31, STAGING NOTES: STAGE II

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING THE WEST HALF OF SN 045-0333, THE WEST HALF OF SN 045-0334, AND A PORTION OF THE SOUTHBOUND TRAVEL LANES, AS SHOWN ON THE PLANS AND TYPICAL SECTIONS.

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING TEMPORARY PAVEMENT ALONG THE SOUTHBOUND LANES ADJACENT TO THE PROPOSED HMA SHOULDER, AS SHOWN ON THE PLANS AND TYPICAL SECTIONS.

INSTALL STAGE II TEMPORARY SIGNAGE AND REMOVE TEMPORARY TRAFFIC SIGNALS.

SHIFT IL ROUTE 31 INTO STAGE II CONFIGURATION. TRAFFIC SHALL BE MAINTAINED IN 2-10' WIDE TRAVEL LANES AS SHOWN ON THE PLANS.

TRAFFIC ON WILDROSE SPRINGS DRIVE WILL BE STAGED AND WILL USE THE NORTH HALF OF THE EXISTING ENTRANCE WHILE THE SOUTH HALF IS CONSTRUCTED.

IL ROUTE 31, STAGING NOTES: SUBSTAGE IIA

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING PERMANENT PAVEMENT ON THE NORTH HALF OF WILDROSE SPRINGS DRIVE.

TRAFFIC ON WILDROSE SPRINGS DRIVE WILL BE DIVERTED ONTO THE NEWLY CONSTRUCTED EASTBOUND LANE OF WILDROSE SPRINGS DRIVE. TRAFFIC WILL ACCESS IL ROUTE BY USING THE NEWLY CONSTRUCTED IL ROUTE 31 SOUTHBOUND LANES TO AN ACCESS POINT AT STA 113+60.

DURING CONSTRUCTION OPERATIONS ONE LANE OF TRAFFIC WILL REMAIN OPEN, CONTROLLED BY FLAGGERS IN ACCORDANCE WITH HIGHWAY STANDARD 701501. WHEN THERE IS NO CONSTRUCTION ACTIVITY ON WILDROSE SPRINGS DR. AND FLAGGERS ARE NOT PRESENT TWO-WAY TRAFFIC WILL BE PERMITTED ON THE EASTBOUND LANE. IF THE DROP OFF FROM THE EASTBOUND LANE OF TO THE COMPLETED WESTBOUND LANE OF WILDROSE SPRING DRIVE REMAINS GREATER THAN 2 FT, TEMPORARY AGGREGATE SHALL BE PLACED TO BRING THE DROPOFF TO A DEPTH OF LESS THAN 2 FT. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF TEMPORARY ACCESS (PRIVATE ENTRANCE).

IL ROUTE 31, STAGING NOTES: STAGE III

WORK IN THIS STAGE CONSISTS OF REMOVAL OF THE TEMPORARY RAMPS AND TEMPORARY PAVEMENT CONSTRUCTED DURING STAGE I ALONG THE NORTHBOUND TRAVEL LANES.

WORK IN THIS STAGE CONSISTS OF CONSTRUCTING THE SOUTHBOUND TRAVEL LANES AS SHOWN ON THE PLANS AND TYPICAL SECTIONS.

TRAFFIC ON WILDROSE SPRINGS DRIVE WILL BE STAGED AND WILL USE THE NEWLY CONSTRUCTED SOUTH HALF OF THE ENTRANCE WHILE THE NORTH HALF IS CONSTRUCTED.

INSTALL STAGE III TEMPORARY SIGNAGE.

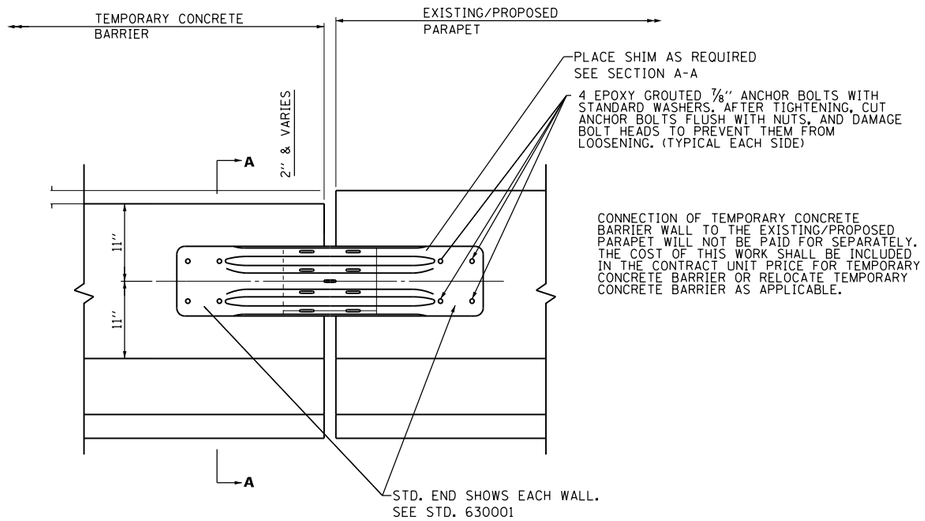
SHIFT IL ROUTE 31 INTO STAGE III CONFIGURATION. TRAFFIC SHALL BE MAINTAINED IN 2-10' WIDE TRAVEL LANE AS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO TRAFFIC CONTROL ADJACENT TO THE EXISTING RETAINING WALL BETWEEN STA 127+00 TO STA 128+50. SEE SHEET 35 FOR ADDITIONAL INFORMATION.

IL ROUTE 31, STAGING NOTES: STAGE IV

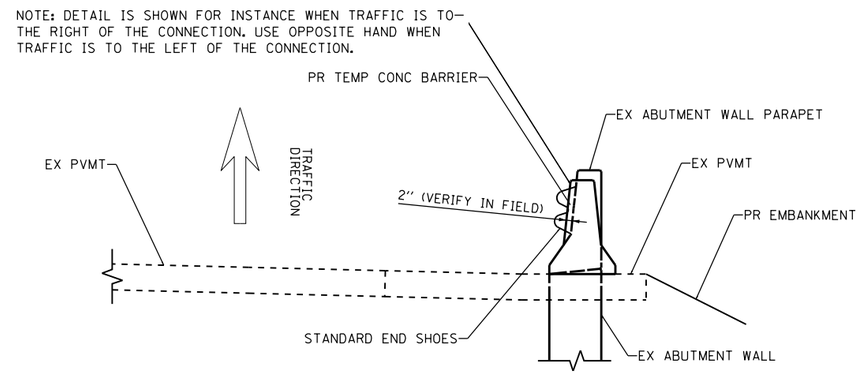
WORK IN THIS STAGE CONSISTS OF REMOVING THE TEMPORARY PAVEMENT ADJACENT TO THE PROPOSED SOUTHBOUND SHOULDER AND FINAL GRADING.

TRAFFIC SHALL BE MAINTAINED IN THE ULTIMATE LANE CONFIGURATION WITH TRAFFIC MAINTAINED PER STD. 701326.



CONNECTION BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING ABUTMENT WALL PARAPET

NOTE: DETAIL IS SHOWN FOR INSTANCE WHEN TRAFFIC IS TO THE RIGHT OF THE CONNECTION. USE OPPOSITE HAND WHEN TRAFFIC IS TO THE LEFT OF THE CONNECTION.



SECTION A–A

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COLLINS ENGINEERS INC

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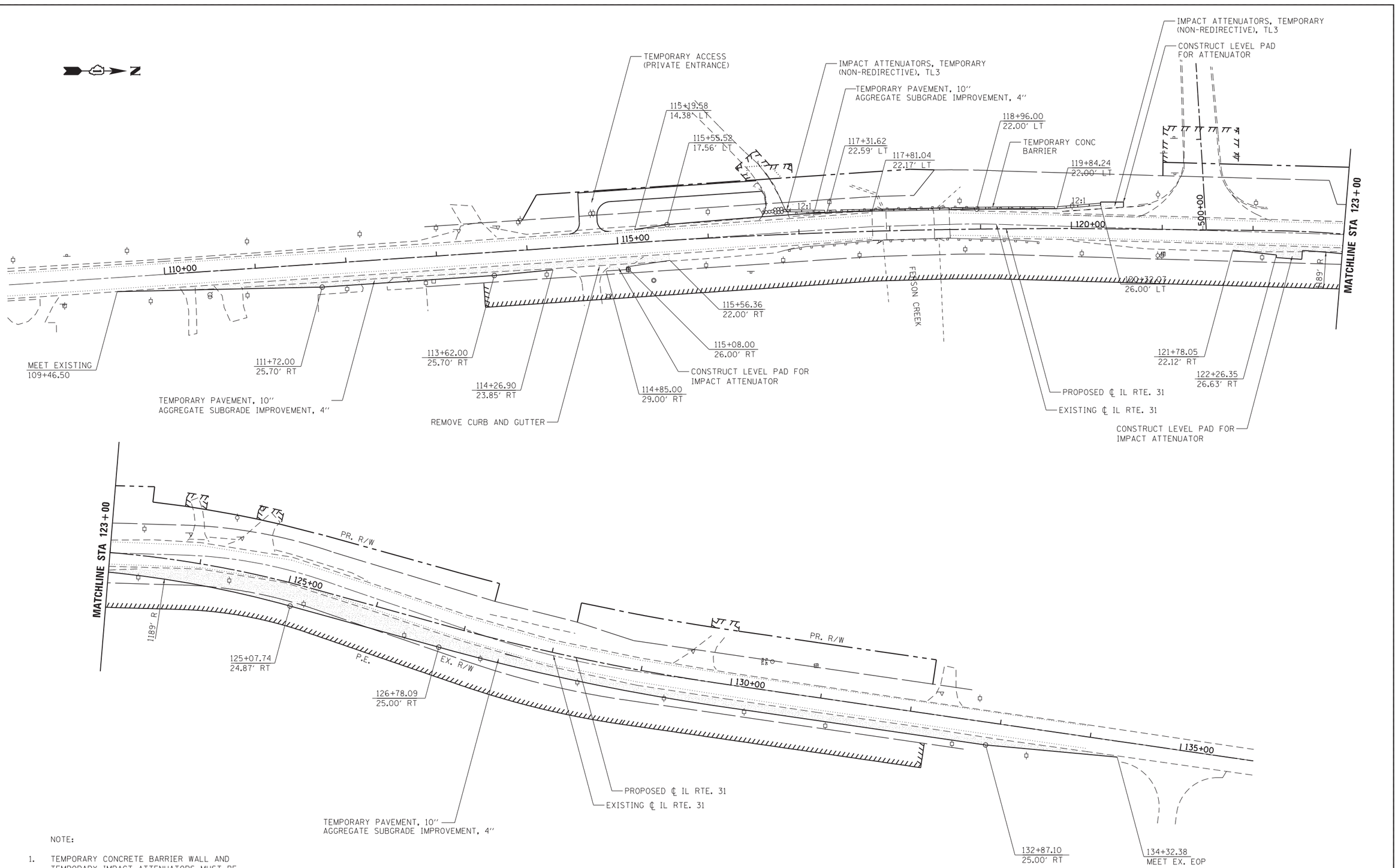
PLOT SCALE = 200.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGING AND TRAFFIC CONTROL
STAGING NOTES AND DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	30
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTE:

1. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

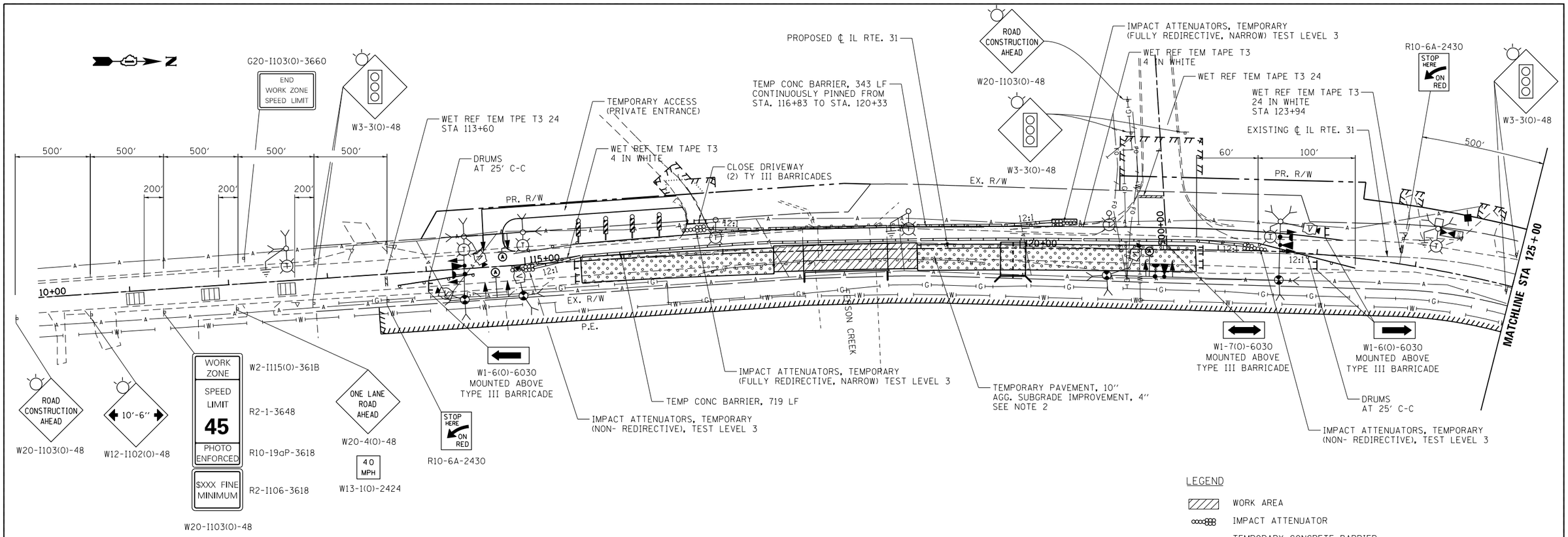
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

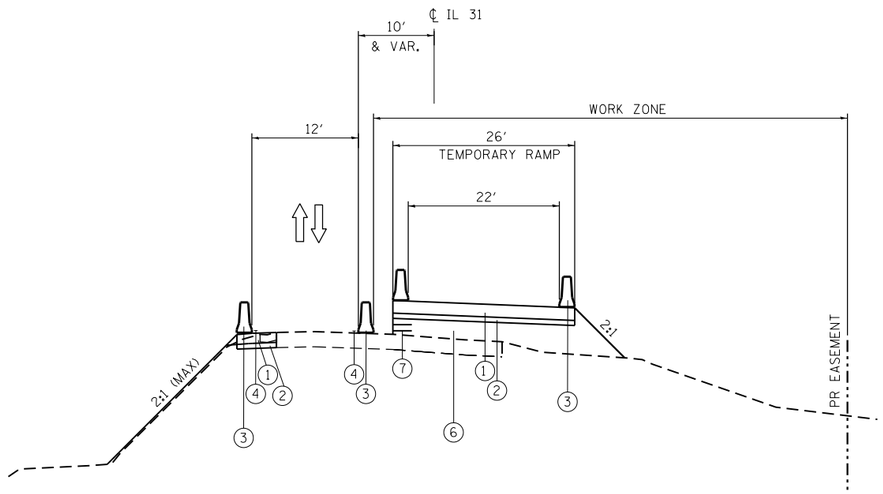
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – PRESTAGE

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

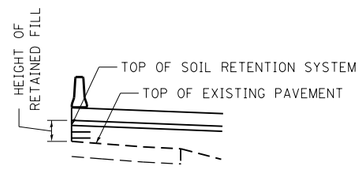
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	31
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





IL ROUTE 31 – STAGE I

STA 113+61.00 TO STA 115+56.39



STATION	HEIGHT OF RETAINED FILL (FT)
117+00.00	0.28
117+25.00	0.89
117+50.00	1.47
117+75.00	2.06
118+75.00	3.23
119+00.00	3.31
119+25.00	3.27
119+50.00	3.14
119+75.00	2.91
120+00.00	2.57
120+25.00	1.88
120+50.00	1.13
120+75.00	0.49
121+00.00	0.01

TEMPORARY SOIL RETENTION SYSTEM DETAIL

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25' C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25' C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD. 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RAMP
- TEMPORARY RUMBLE STRIP

NOTES:

1. SEE MOT NOTES AND DETAIL SHEET FOR CONNECTION DETAIL BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING / PROPOSED PARAPET.
2. SEE SHEET 34 FOR TEMPORARY PAVEMENT PROFILE. SEE CROSS SECTIONS FOR STAGE 1 CROSS SECTIONS.
3. TEMPORARY RUMBLE STRIPS TO BE INSTALLED PER STD. 701321
4. FOR ADDITIONAL DETAILS, SEE STD. 701321
5. SEE SHEET 61-67 FOR TEMPORARY SIGNAL AND LIGHTING LAYOUT.
6. SEE TEMPORARY SIGNAL PLANS FOR THE LOCATIONS AND DETAILS OF THE TEMPORARY SIGNALS.
7. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.

(1) TEMPORARY PAVEMENT, 10"
(2) SUBBASE GRANULAR MATERIAL, TYPE B 4"
(3) TEMPORARY CONCRETE BARRIER
(4) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE
(5) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" YELLOW
(6) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24" WHITE
(7) TEMPORARY SOIL RETENTION SYSTEM
  1) STA 116+80.28 TO STA 117+80.94
  2) STA 118+65.94 TO 121+00.61
(8) TEMPORARY EROSION CONTROL SEEDING

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

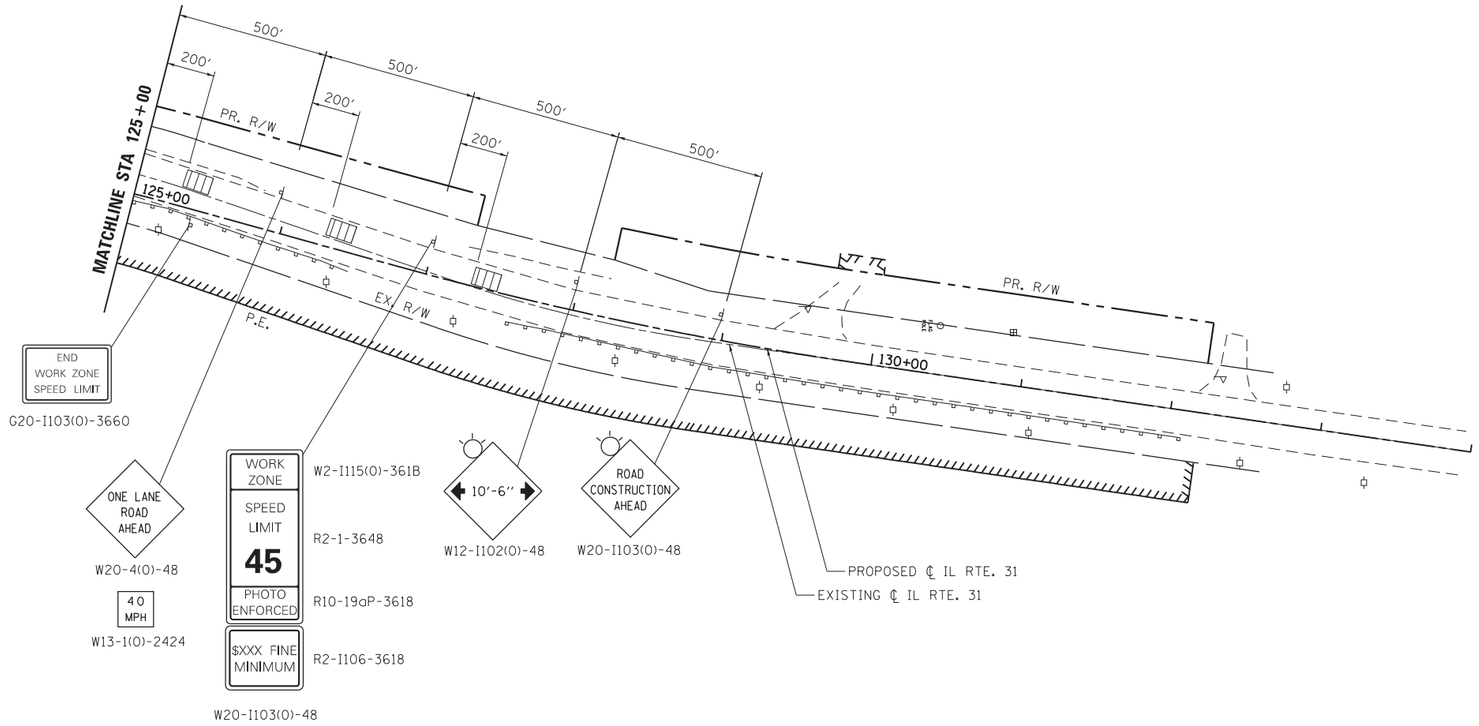
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE I

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	32
		CONTRACT NO. 60M81		

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



LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25′ C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25′ C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD. 704001 FOR SPACING.
- TEMPORARY PAVEMENT
- TEMPORARY RAMP
- TEMPORARY RUMBLE STRIP

NOTES:

1. SEE MOT NOTES AND DETAIL SHEET FOR CONNECTION DETAIL BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING / PROPOSED PARAPET.
2. SEE SHEET 34 FOR TEMPORARY PAVEMENT PROFILE.
3. TEMPORARY RUMBLE STRIPS TO BE INSTALLED PER STD. 701321
4. FOR ADDITIONAL DETAILS, SEE STD. 701321

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ′ / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

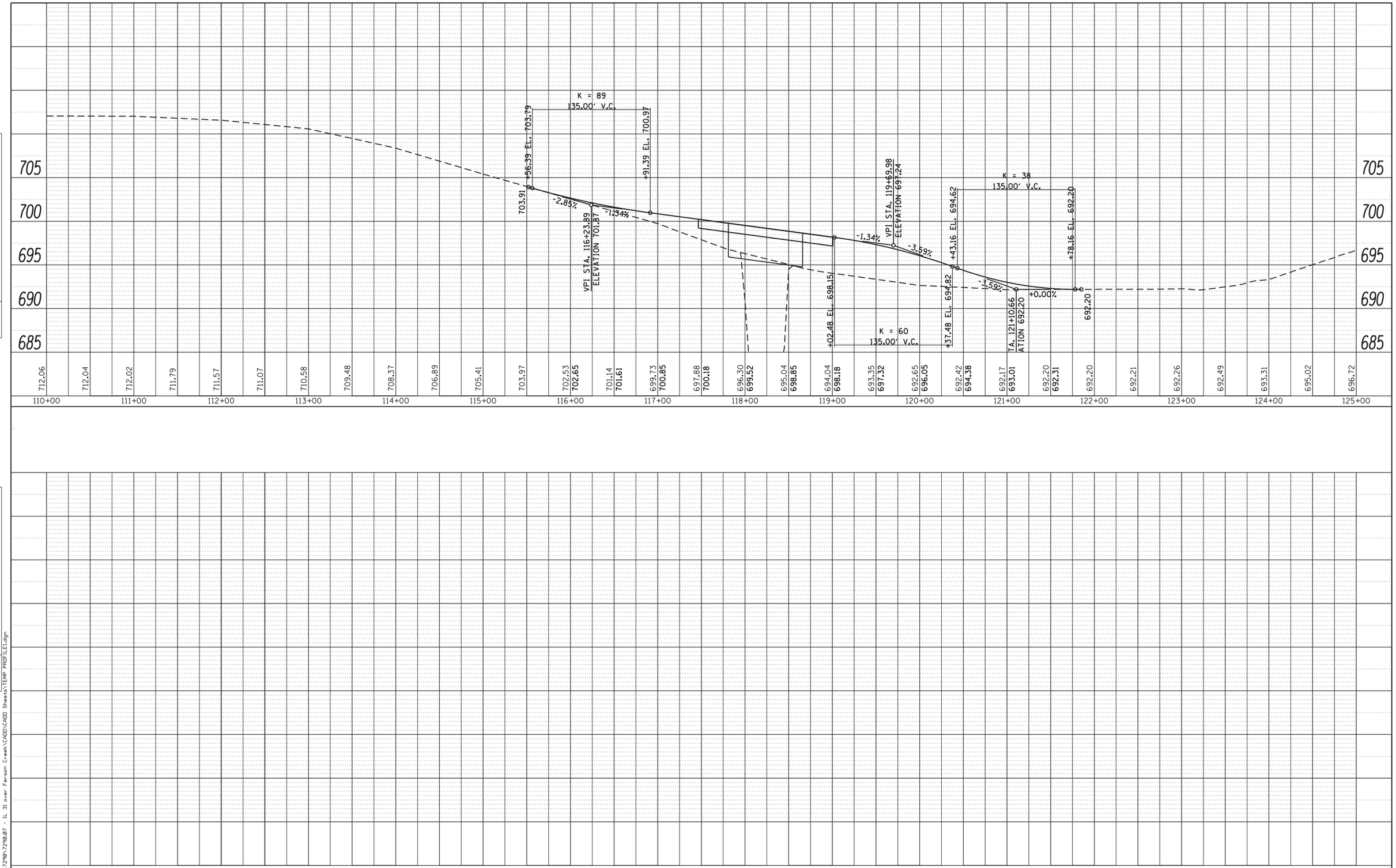
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE I

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	33
		CONTRACT NO. 60M81		

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



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

PROFILE
SURVEYED BY
PLOTTED DATE
GRADES CHECKED
BLM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.

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COLLINS ENGINEERS INC

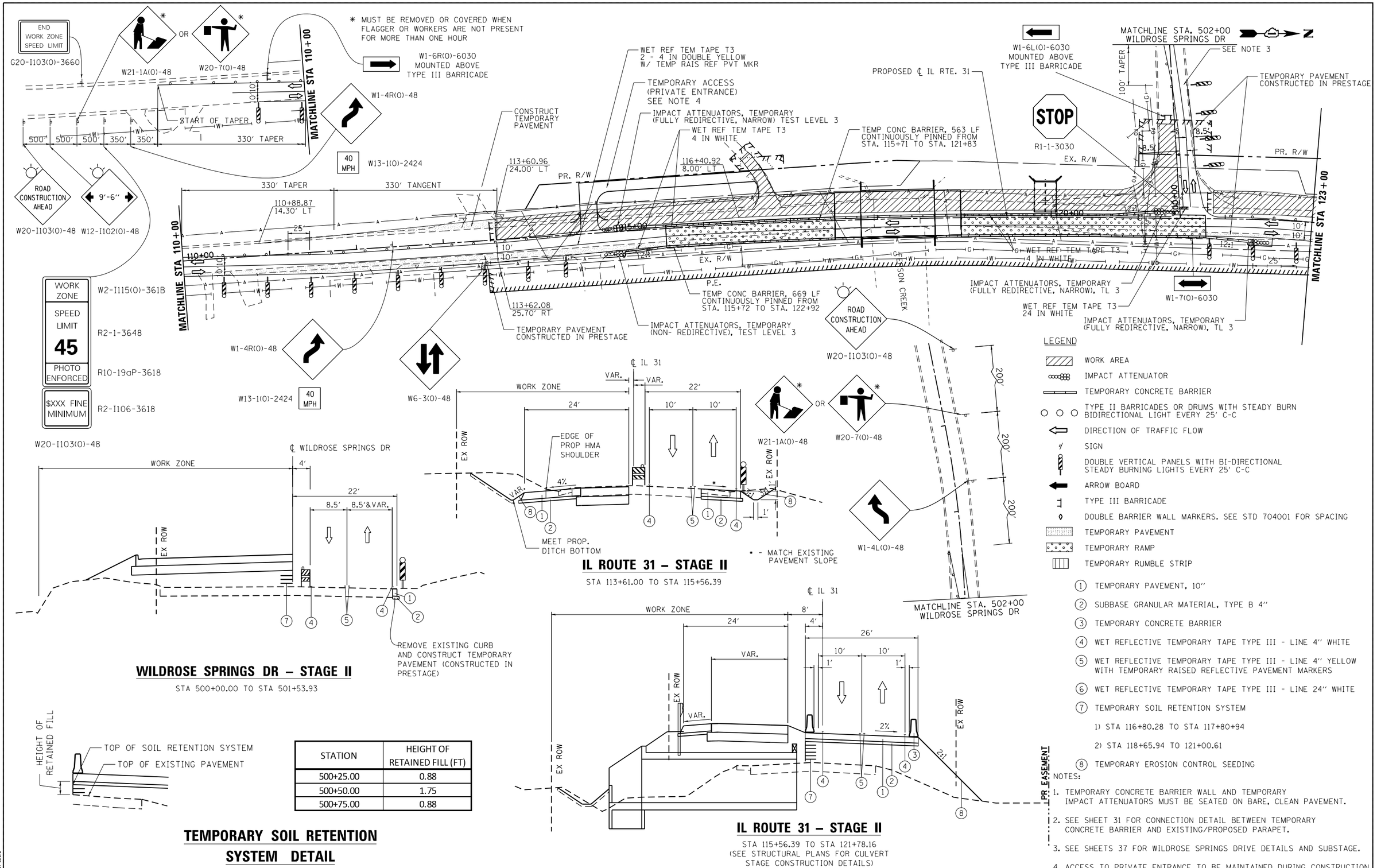
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/2/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 31 AT OVER FERSON CREEK
TEMPORARY RAMP PROFILE – STAGE I

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	34
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



WILDROSE SPRINGS DR – STAGE II

STA 500+00.00 TO STA 501+53.93

IL ROUTE 31 – STAGE II

STA 113+61.00 TO STA 115+56.39

IL ROUTE 31 – STAGE II

STA 115+56.39 TO STA 121+78.16
(SEE STRUCTURAL PLANS FOR CULVERT STAGE CONSTRUCTION DETAILS)

STATION	HEIGHT OF RETAINED FILL (FT)
500+25.00	0.88
500+50.00	1.75
500+75.00	0.88

TEMPORARY SOIL RETENTION SYSTEM DETAIL

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25′ C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25′ C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RAMP
- TEMPORARY RUMBLE STRIP

(1) TEMPORARY PAVEMENT, 10″

(2) SUBBASE GRANULAR MATERIAL, TYPE B 4″

(3) TEMPORARY CONCRETE BARRIER

(4) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4″ WHITE

(5) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4″ YELLOW WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS

(6) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24″ WHITE

(7) TEMPORARY SOIL RETENTION SYSTEM

1) STA 116+80.28 TO STA 117+80+94

2) STA 118+65.94 TO 121+00.61

(8) TEMPORARY EROSION CONTROL SEEDING

NOTES:

1. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.
2. SEE SHEET 31 FOR CONNECTION DETAIL BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING/PROPOSED PARAPET.
3. SEE SHEETS 37 FOR WILDROSE SPRINGS DRIVE DETAILS AND SUBSTAGE.
4. ACCESS TO PRIVATE ENTRANCE TO BE MAINTAINED DURING CONSTRUCTION.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ′ / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE II

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

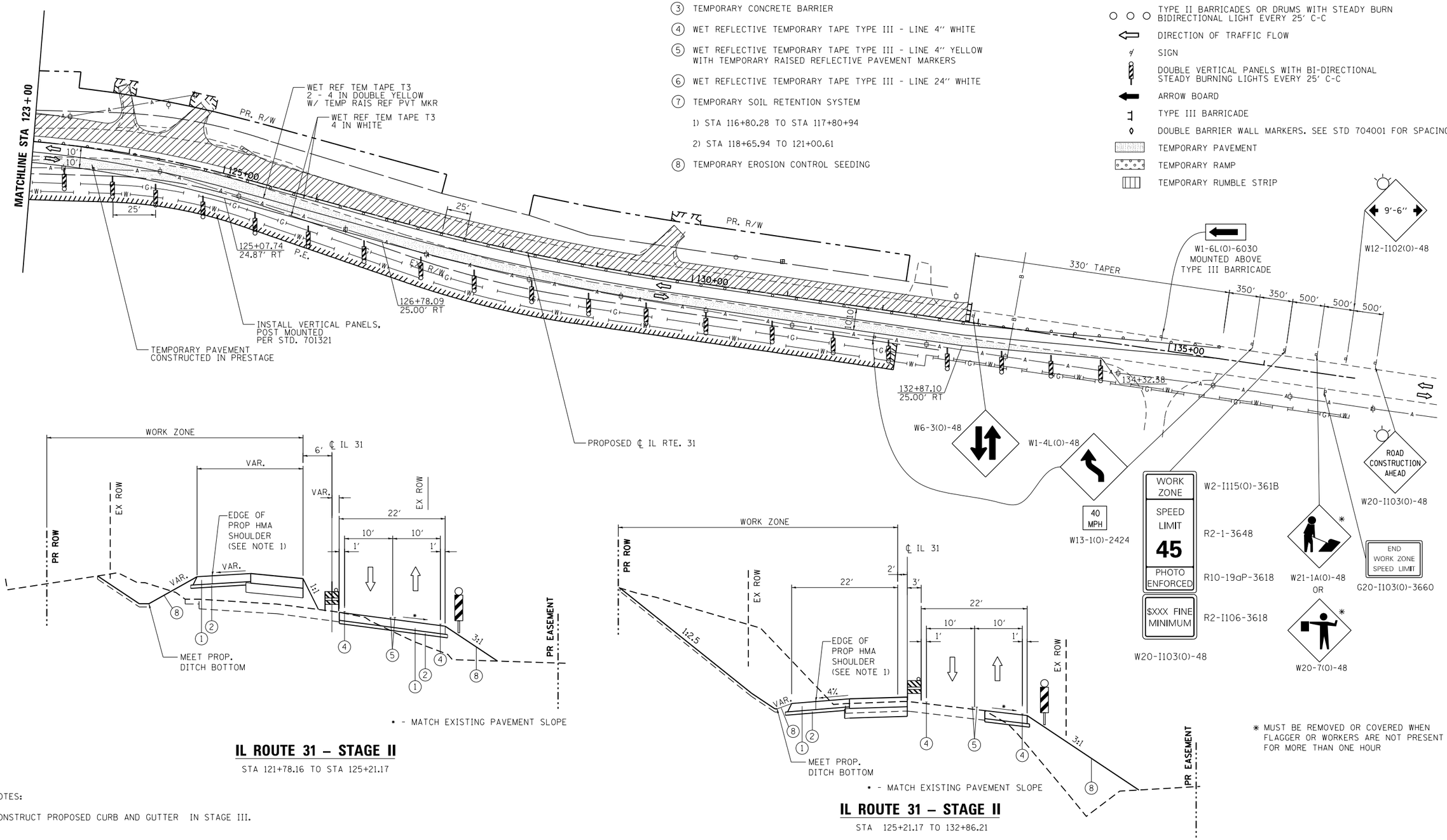
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	35
		CONTRACT NO. 60M81		

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

1. TEMPORARY PAVEMENT, 10''
2. SUBBASE GRANULAR MATERIAL, TYPE B 4''
3. TEMPORARY CONCRETE BARRIER
4. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4'' WHITE
5. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4'' YELLOW WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS
6. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24'' WHITE
7. TEMPORARY SOIL RETENTION SYSTEM
   1) STA 116+80.28 TO STA 117+80+94
   2) STA 118+65.94 TO 121+00.61
8. TEMPORARY EROSION CONTROL SEEDING

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25' C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25' C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RAMP
- TEMPORARY RUMBLE STRIP



IL ROUTE 31 – STAGE II

STA 121+78.16 TO STA 125+21.17

IL ROUTE 31 – STAGE II

STA 125+21.17 TO STA 132+86.21

✳ MUST BE REMOVED OR COVERED WHEN FLAGGER OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

NOTES:

1. CONSTRUCT PROPOSED CURB AND GUTTER IN STAGE III.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

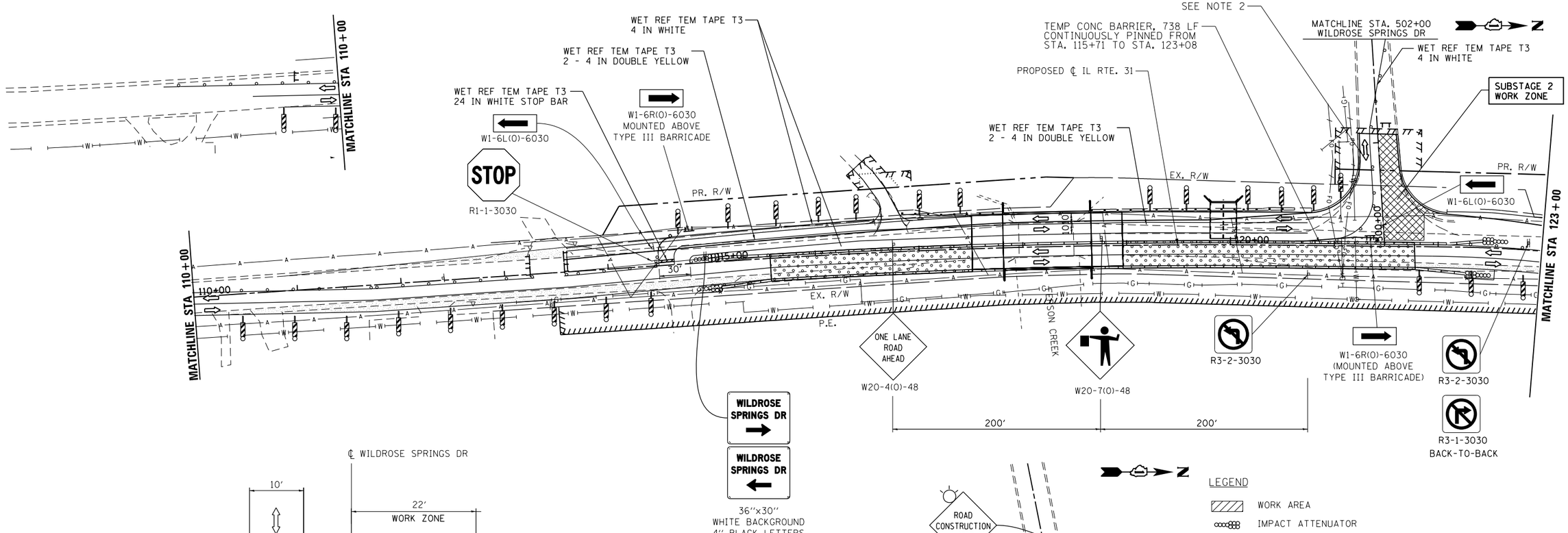
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

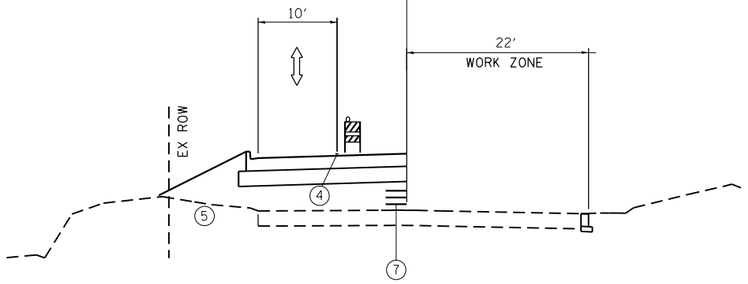
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE II

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

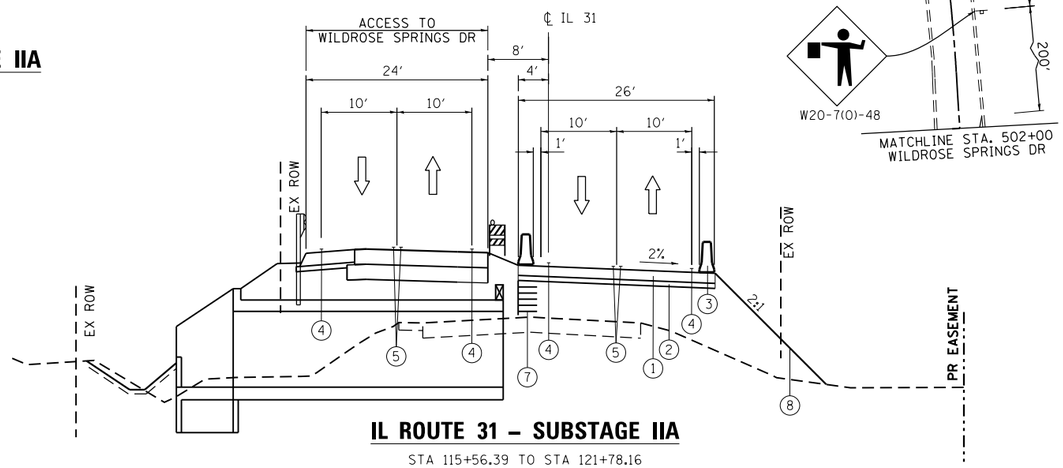
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	36
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





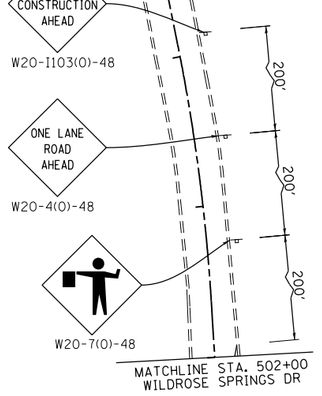
WILDROSE SPRINGS DR – SUBSTAGE IIA

STA 500+00.00 TO STA 501+53.93



IL ROUTE 31 – SUBSTAGE IIA

STA 115+56.39 TO STA 121+78.16



NOTES:

1. STAGE II SIGNAGE AND TRAFFIC PATTERNS SHALL REMAIN IN EFFECT FOR IL ROUTE 31 TRAFFIC
2. THIS CONDITION MUST BE FLAGGER CONTROLLED AT ALL TIMES. WHEN FLAGGERS ARE NOT PRESENT, WILDROSE SPRINGS DR. MUST BE SAFELY REOPENED TO TWO-WAY TRAFFIC.

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25′ C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25′ C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD. 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RAMP
- TEMPORARY RUMBLE STRIP

(1) TEMPORARY PAVEMENT, 10″

(2) SUBBASE GRANULAR MATERIAL, TYPE B 4″

(3) TEMPORARY CONCRETE BARRIER

(4) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4″ WHITE

(5) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4″ YELLOW WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS

(6) WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24″ WHITE

(7) TEMPORARY SOIL RETENTION SYSTEM

1) STA 116+80.28 TO STA 117+80+94

2) STA 118+65.94 TO 121+00.61

(8) TEMPORARY EROSION CONTROL SEEDING

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

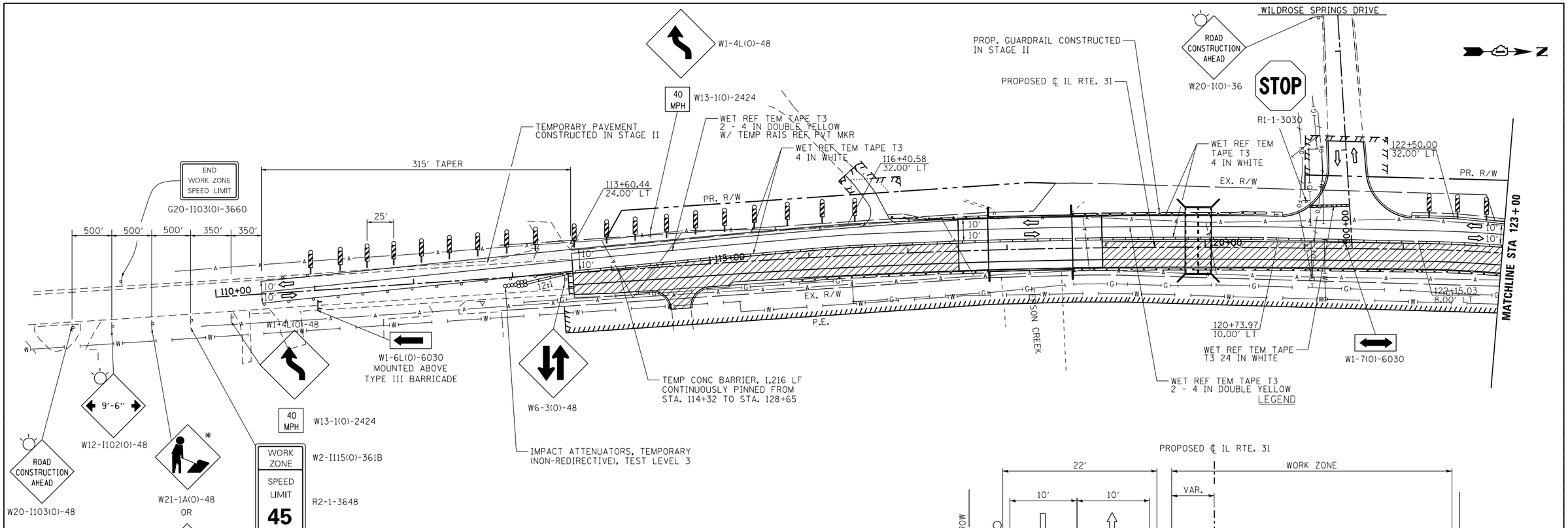
USER NAME = rgall	DESIGNED -	REVISED -	
PLOT SCALE = 100.0000 ′ / in.	DRAWN -	REVISED -	
PLOT DATE = 8/5/2015	CHECKED -	REVISED -	
	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – SUBSTAGE IIA

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	37
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



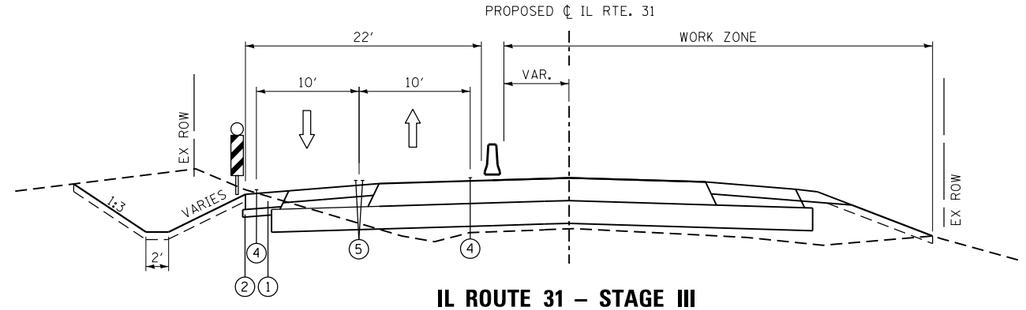
* MUST BE REMOVED OR COVERED WHEN FLAGGER OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

NOTES:

1. SEE SHEET 30 FOR CONNECTION DETAIL BETWEEN TEMPORARY CONCRETE BARRIER AND EXISTING / PROPOSED PARAPET.
2. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.

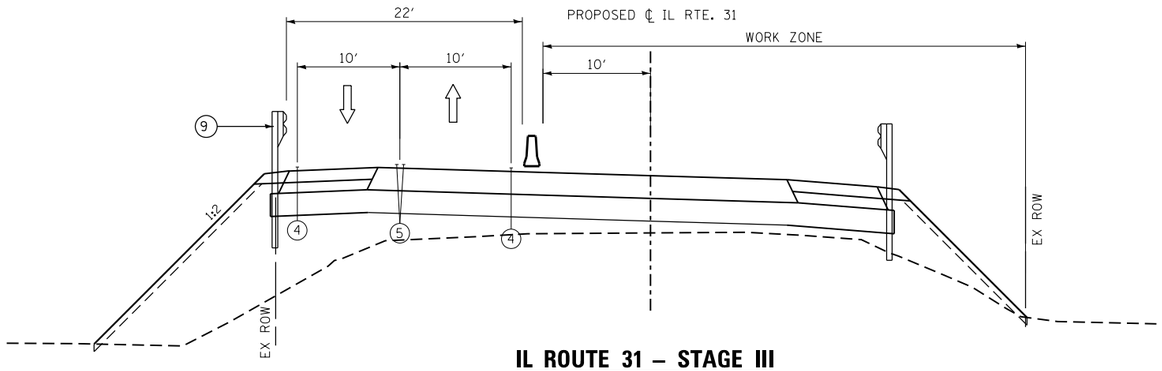
- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25' C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25' C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RUMBLE STRIP

1. TEMPORARY PAVEMENT, 10"
2. SUBBASE GRANULAR MATERIAL, TYPE B 4"
3. TEMPORARY CONCRETE BARRIER
4. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE
5. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" YELLOW WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS
6. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24" WHITE
7. TEMPORARY EROSION CONTROL SEEDING



IL ROUTE 31 – STAGE III

STA. 113+61.00 TO STA. 114+28.83



IL ROUTE 31 – STAGE III

STA. 114+28.83 TO STA. 119+95.00

(SEE STRUCTURAL PLANS FOR STAGE CONSTRUCTION DETAILS FOR BRIDGE SECTION STA. 117+81.17 TO STA. 118+66.10 AND CULVERT SECTION STA. 119+93.00)

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE III

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

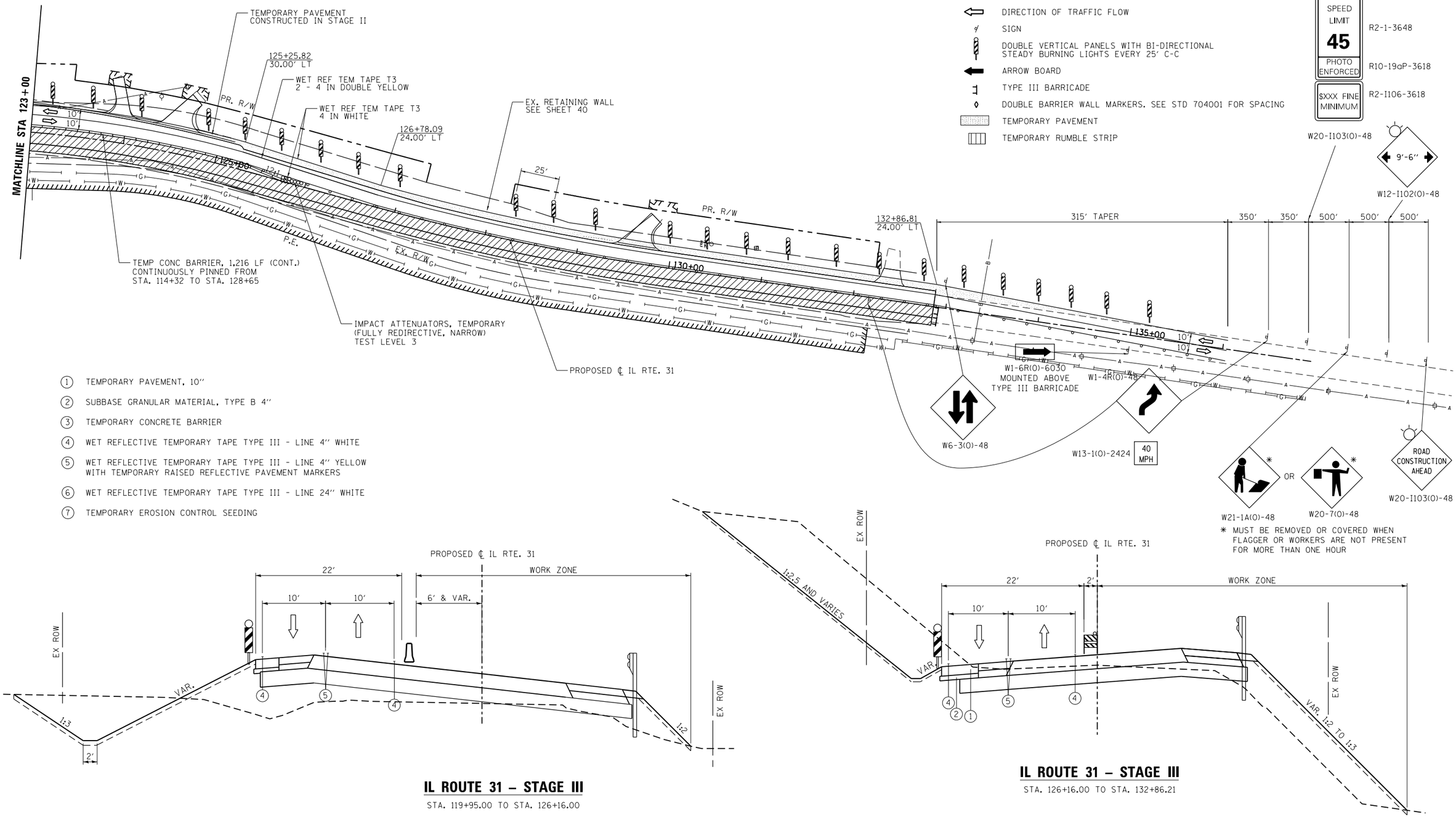
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	38
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTE:

1. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.

LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN BIDIRECTIONAL LIGHT EVERY 25' C-C
- DIRECTION OF TRAFFIC FLOW
- SIGN
- DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25' C-C
- ARROW BOARD
- TYPE III BARRICADE
- DOUBLE BARRIER WALL MARKERS. SEE STD 704001 FOR SPACING
- TEMPORARY PAVEMENT
- TEMPORARY RUMBLE STRIP



* MUST BE REMOVED OR COVERED WHEN FLAGGER OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR

1. TEMPORARY PAVEMENT, 10"
2. SUBBASE GRANULAR MATERIAL, TYPE B 4"
3. TEMPORARY CONCRETE BARRIER
4. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" WHITE
5. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 4" YELLOW WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS
6. WET REFLECTIVE TEMPORARY TAPE TYPE III - LINE 24" WHITE
7. TEMPORARY EROSION CONTROL SEEDING

IL ROUTE 31 – STAGE III

STA. 119+95.00 TO STA. 126+16.00

IL ROUTE 31 – STAGE III

STA. 126+16.00 TO STA. 132+86.21

FILE NAME = $FILE$

COLLINS ENGINEERS INC

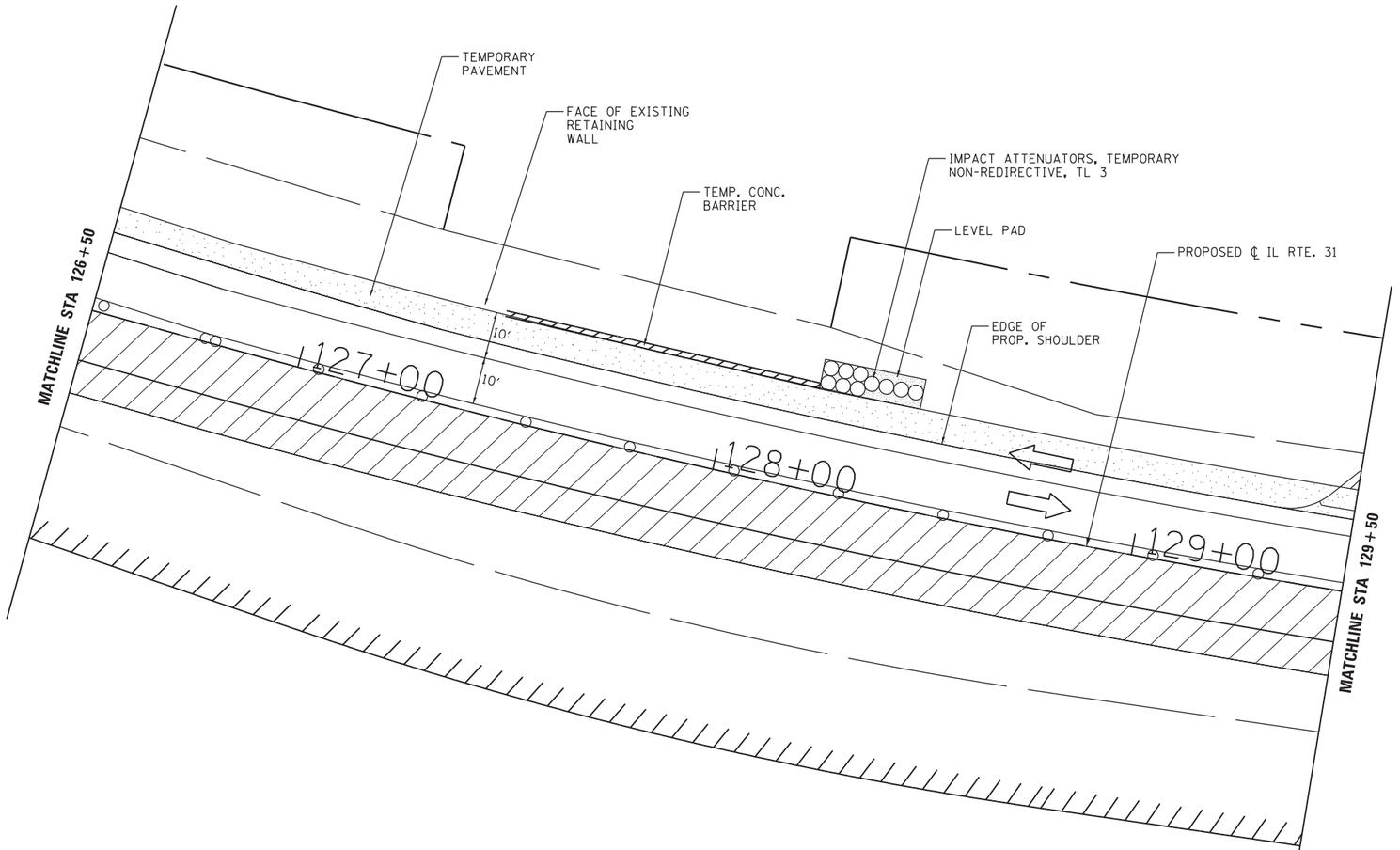
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 8/5/2015	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – STAGE III

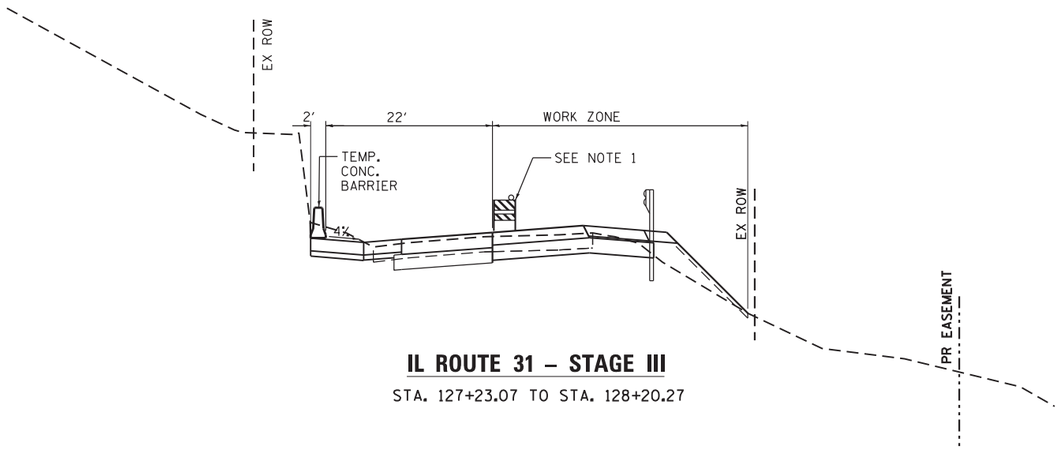
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	39
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND

- WORK AREA
- IMPACT ATTENUATOR
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADES OR DRUMS WITH STEADY BURN MONODIRECTIONAL LIGHT (AT SPECIFIED SPACING)
- DIRECTION OF TRAFFIC FLOW
- BARRIER WALL MARKERS (AT SPECIFIED SPACING)
- TEMPORARY PAVEMENT



IL ROUTE 31 – STAGE III

STA. 127+23.07 TO STA. 128+20.27

NOTES:

1. DURING PAVEMENT REMOVAL, AND PAVING OPERATIONS, THE BARRICADE SHALL BE PLACED ON THE NEWLY CONSTRUCTED IL 31 PAVEMENT AND THE TRAVEL LANES MAY BE TEMPORARILY REDUCED TO 9.5' LANES WITH 6" SHOULDER DISTANCE TO THE BARRICADE/BARRIER WALL.
2. AT THE CONCLUSION OF THE OPERATION, LANE CONFIGURATION SHALL BE RETURNED TO THAT SHOWN IN THE PLANS.
3. BARRICADES WHICH MUST BE PLACED IN EXCAVATION AREAS SHALL HAVE LEG EXTENSIONS INSTALLED SUCH THAT THE TOPS OF THE BARRICADES ARE IN COMPLIANCE WITH THE HEIGHT REQUIREMENTS OF STD. 702001.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

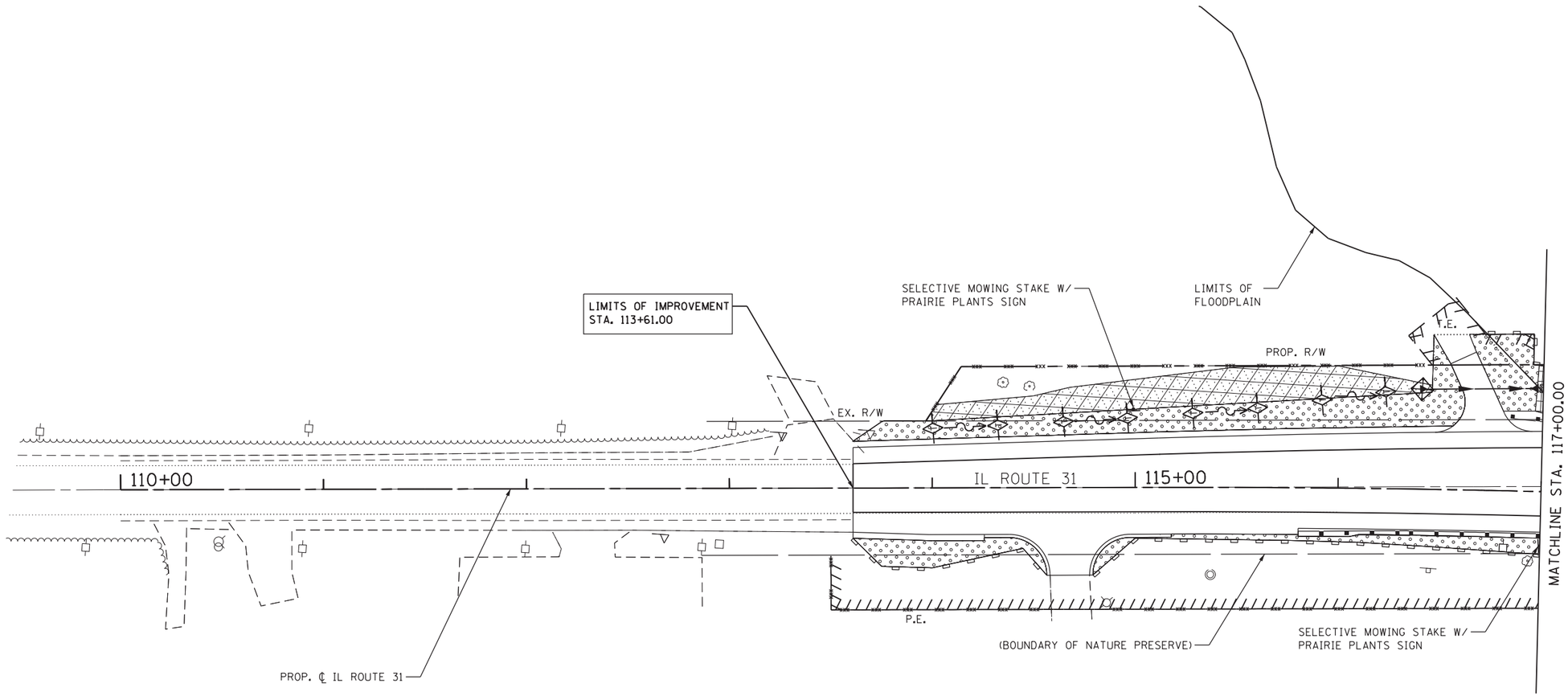
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
MAINTENANCE OF TRAFFIC – DETAIL

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	40
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND:

- SELECTIVE MOWING STAKE W/SIGN
- PERIMETER EROSION BARRIER
- TEMPORARY FENCE
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION/INLET FILTER
- SEEDING CLASS 2A, EROSION CONTROL BLANKET
- INTER-SEEDING, (SPECIAL)
- SEEDING, CLASS 3
  HEAVY DUTY EROSION CONTROL BLANKET
- INTER-SEEDING, CLASS 4B (MODIFIED) & 5B (MODIFIED)
- SEEDING, CLASS 4
  SEEDING, CLASS 5A
  MULCH METHOD 4

NOTE: SEE SHEET 124 FOR TEMPORARY DITCH CHECK DETAILS.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

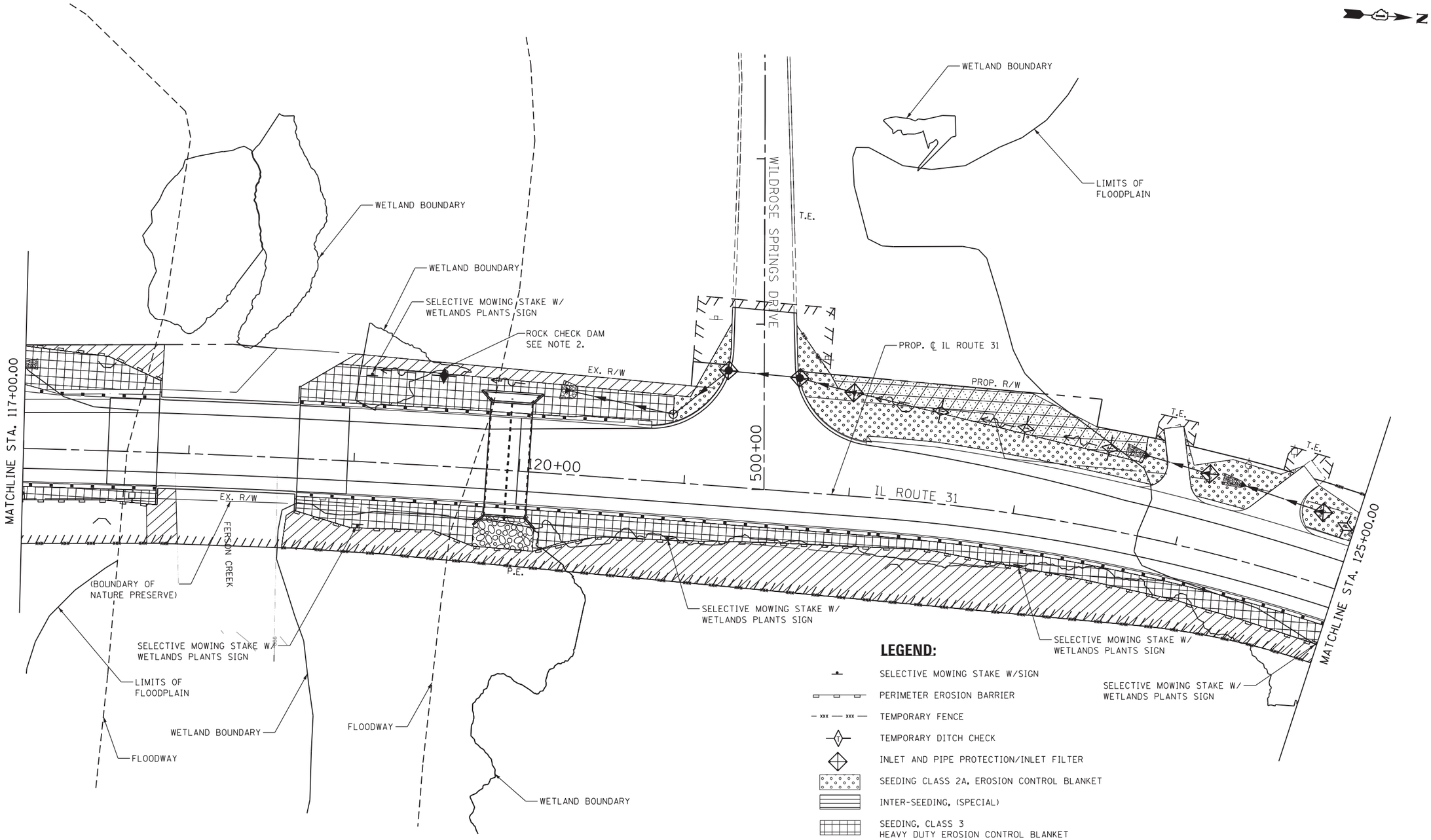
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EROSION CONTROL AND SEEDING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	41
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND:

- SELECTIVE MOWING STAKE W/SIGN
- PERIMETER EROSION BARRIER
- xxx — xxx — TEMPORARY FENCE
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION/INLET FILTER
- SEEDING CLASS 2A, EROSION CONTROL BLANKET
- INTER-SEEDING, (SPECIAL)
- SEEDING, CLASS 3
  HEAVY DUTY EROSION CONTROL BLANKET
- INTER-SEEDING, CLASS 4B (MODIFIED) & 5B (MODIFIED)
- SEEDING, CLASS 4
  SEEDING, CLASS 5A
  MULCH METHOD 4

NOTE:

1. SEE SHEET 124 FOR DITCH CHECK DETAILS.
2. CONSTRUCT PERMANENT DITCH CHECK IN ACCORDANCE WITH ROCK CHECK DAM DETAIL (IL-605R)

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EROSION CONTROL AND SEEDING PLAN

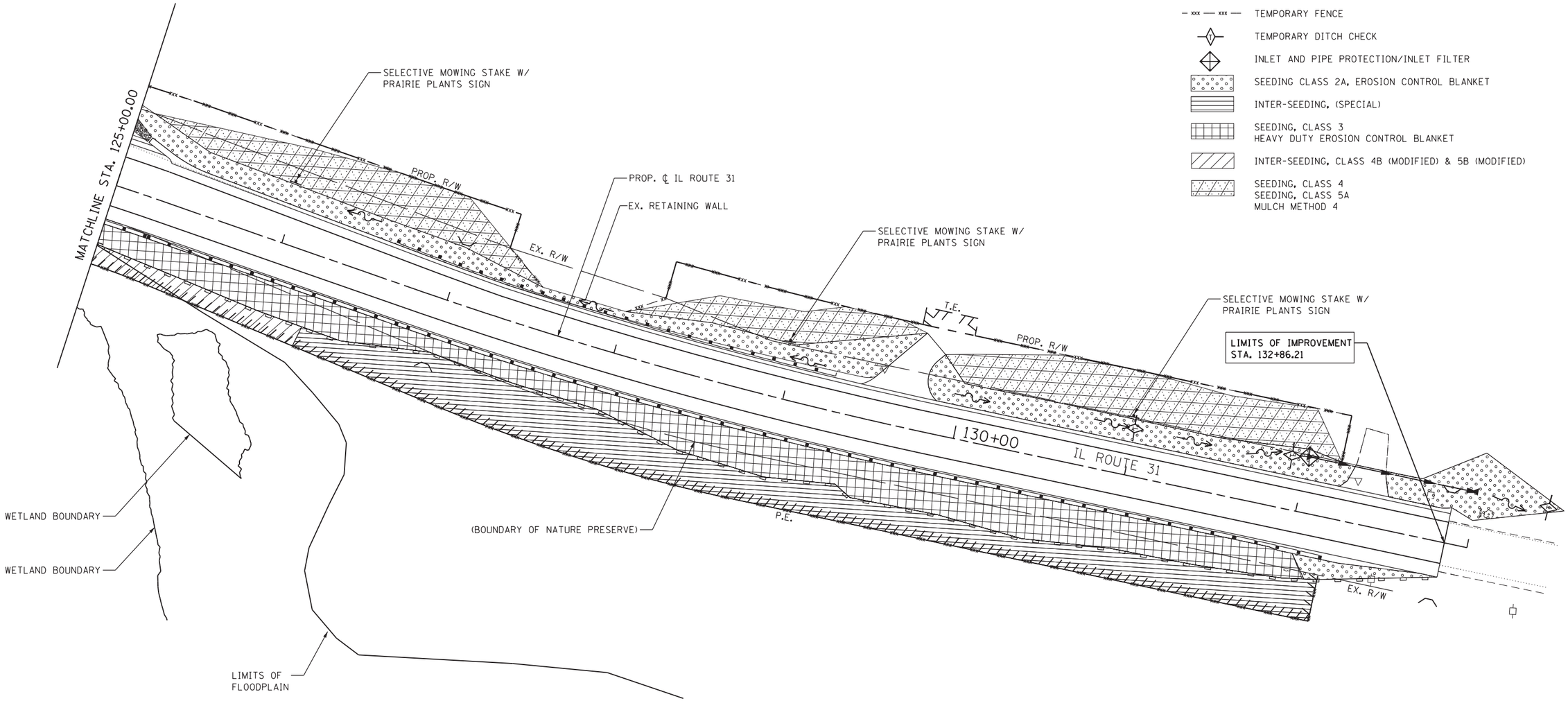
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	42
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

N

LEGEND:

- SELECTIVE MOWING STAKE W/SIGN
- PERIMETER EROSION BARRIER
- xxx — xxx — TEMPORARY FENCE
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION/INLET FILTER
- SEEDING CLASS 2A, EROSION CONTROL BLANKET
- INTER-SEEDING, (SPECIAL)
- SEEDING, CLASS 3
  HEAVY DUTY EROSION CONTROL BLANKET
- INTER-SEEDING, CLASS 4B (MODIFIED) & 5B (MODIFIED)
- SEEDING, CLASS 4
  SEEDING, CLASS 5A
  MULCH METHOD 4



NOTE: SEE SHEET 124 FOR TEMPORARY DITCH CHECK DETAILS.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

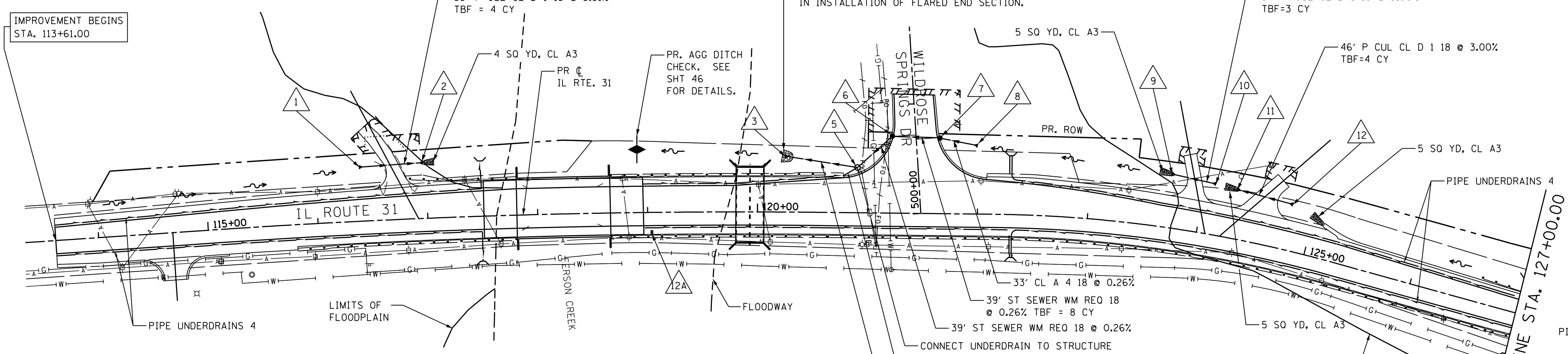
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
EROSION CONTROL AND SEEDING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	43
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



PIPE UNDERDRAINS 4 (SPECIAL)
CONC HDWL FOR P DRAIN
STA 117+45 LT/RT
STA 122+30 LT/RT (SAG)

1 — STA 116+40.00, 49.0' LT
END SECTIONS 15
INV = 697.00

2 — STA 116+96.50, 49.0' LT
END SECTIONS 15
INV = 694.00

3 — STA 120+30.96, 50.03' LT
PRC FLAR END SEC 18
INV = 687.98

5 — STA 120+90.40, 41.18' LT
MH TA 4' DIA T1CL
RIM = 696.15
NW INV = 688.13
S INV = 688.13

6 — STA 121+21.84, 70.17' LT
CB TA 4' DIA T4F&G
RIM = 694.35
N INV = 688.23
SE INV = 688.23

7 — STA 121+65.06, 68.95' LT
CB TA 4' DIA T4F&G
RIM = 694.39
N INV = 688.41
S INV = 688.33

8 — STA 122+00.00, 62.0' LT
PRC FLAR END SEC 18
INV = 688.50

9 — STA 123+70.88, 48.90' LT
END SECTIONS 18
INV = 692.13

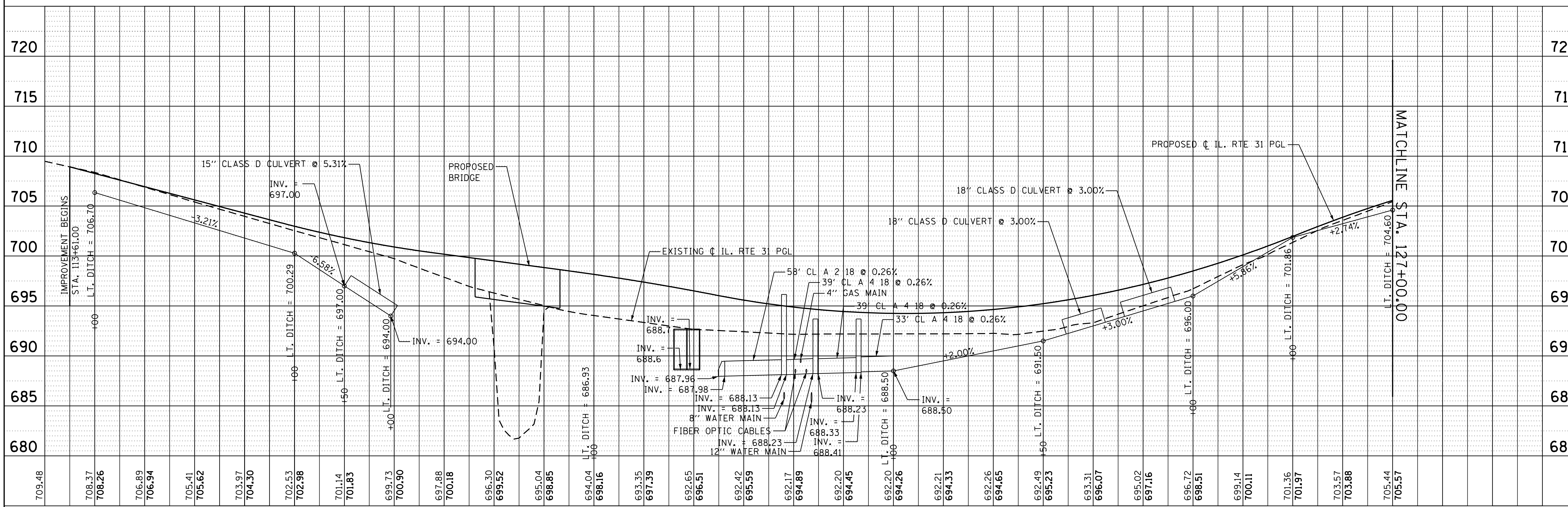
10 — STA 124+10.08, 46.30' LT
END SECTIONS 18
INV = 693.30

11 — STA 124+29.44, 44.90' LT
END SECTIONS 18
INV = 693.88

12 — STA 124+79.81, 42.10' LT
END SECTIONS 18
INV = 695.39

12A — STA 119+03.69, 19.75' RT
RIM = 697.63

TY E INLET BOX 610001	1 EA
PIPE DRAINS 12	19 LF
MET END SEC 12	1 EA
CONC THRUST BLOCKS	1 EA
HMA SHLD CURB	9 LF



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 CH'KD — BY / DATE

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/5/2015	DATE -	REVISED -

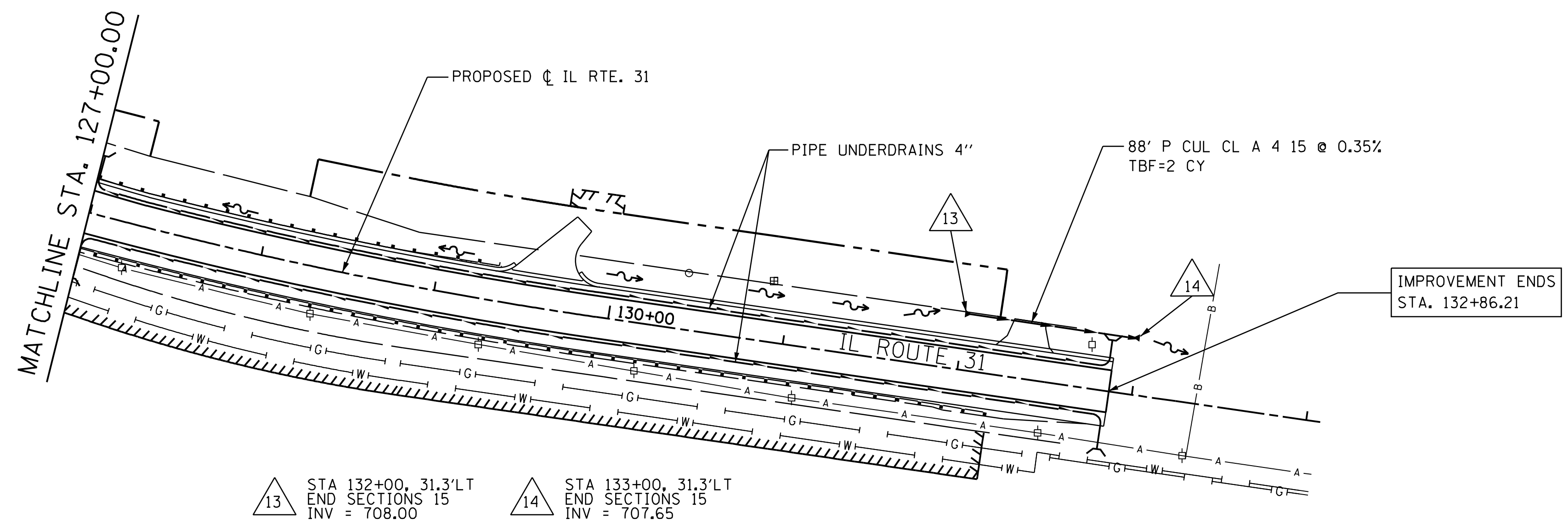
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
PROPOSED DRAINAGE AND UTILITY PLAN

SCALE: | SHEET OF SHEETS | STA. TO STA.

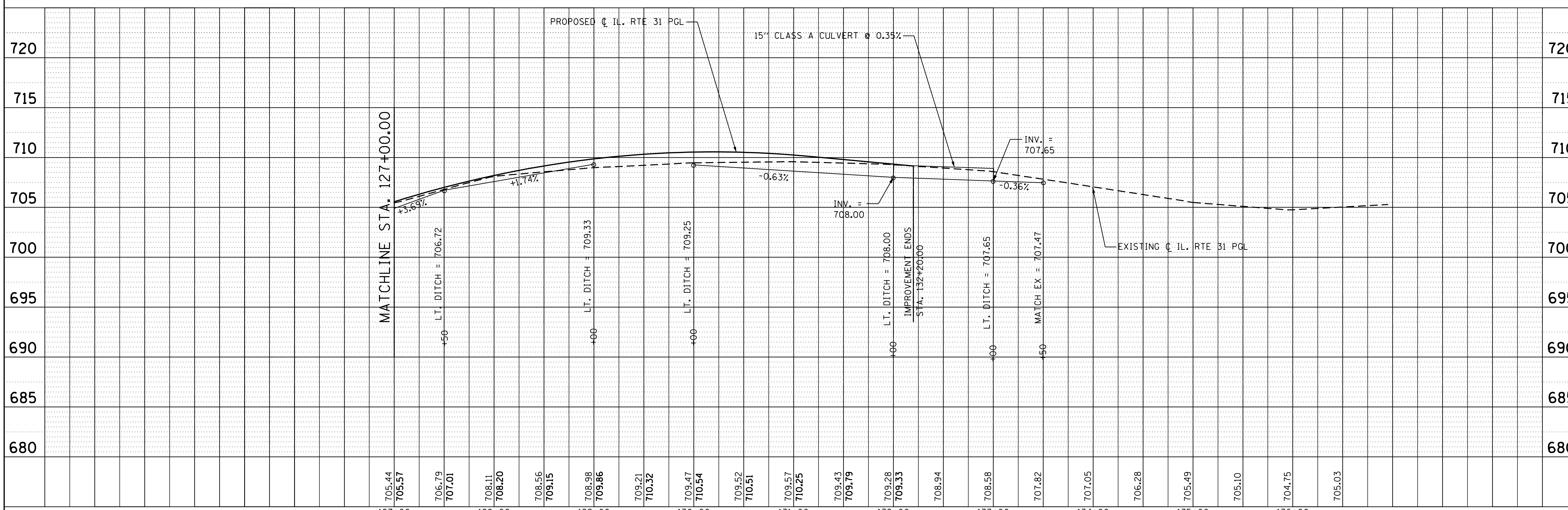
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	44

CONTRACT NO. 60M81
ILLINOIS FED. AID PROJECT



PIPE UNDERDRAINS 4 (SPECIAL)
CONC HDWL FOR P DRAIN

STA 127+00 LT/RT
STA 132+85 LT/RT



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

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
BM. NOTED		
STRUCTURE NOTATN'S CHK'D		
NOTE BOOK NO.		

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 8/5/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

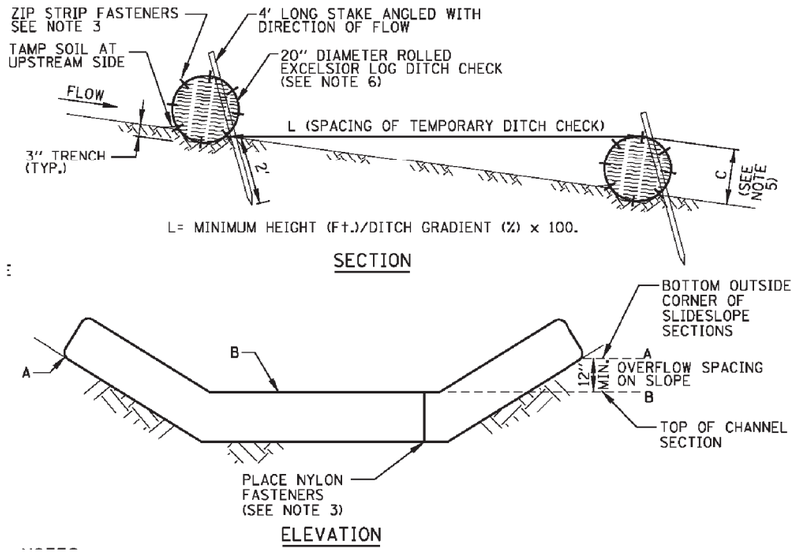
IL ROUTE 31 OVER FERSON CREEK
DRAINAGE AND UTILITY PLAN

SCALE:	SHEET OF SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	45

CONTRACT NO. 60M81

ILLINOIS FED. AID PROJECT



NOTES:

1. ROLLED EXCELSIOR LOG SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3" AND SOIL SHALL BE TAMPED AGAINST THE UPSTREAM SIDE TO ASSURE THAT STORM WATER IS FORCED THROUGH THE LOG, RATHER THAN UNDER IT.

2. STAKES SHALL BE 4' LONG, DRIVEN AT A SPACING OF 2' ON CENTER, 2' INTO THE GROUND. STAKES SHALL BE ENTWINED WITH THE MESH COVERING OF THE ROLL ON THE DOWNSTREAM SIDE AND ANGLED WITH THE DIRECTION OF FLOW. WOOD STAKES TO BE A MINIMUM OF 1" SQUARE. METAL STAKES SHALL BE A MINIMUM OF 1" DIAMETER.

3. WHEN MORE THAN ONE LOG IS REQUIRED TO SPAN THE DITCH, BUTT LOGS TIGHTLY TOGETHER END TO END AND FASTEN TOGETHER WITH A MINIMUM OF EIGHT EQUALLY SPACED ZIP STRIP NYLON FASTENERS.

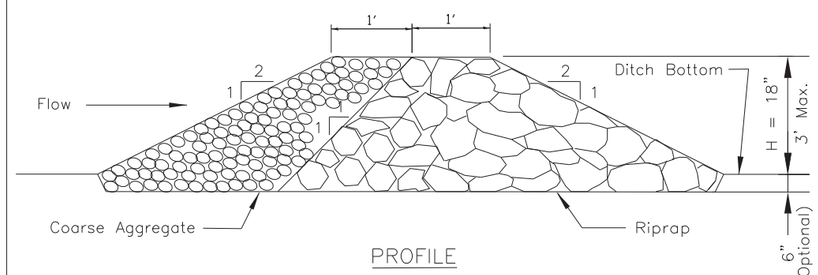
4. ROLLED EXCELSIOR LOG DITCH CHECKS ARE SUPPLIED IN STANDARD 10 FOOT LENGTHS AND SHOULD NOT BE CUT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF ROLL HEIGHT. WHEN EXCELSIOR LOG HEIGHT BECOMES LESS THAN 10", IT SHALL BE REPLACED.

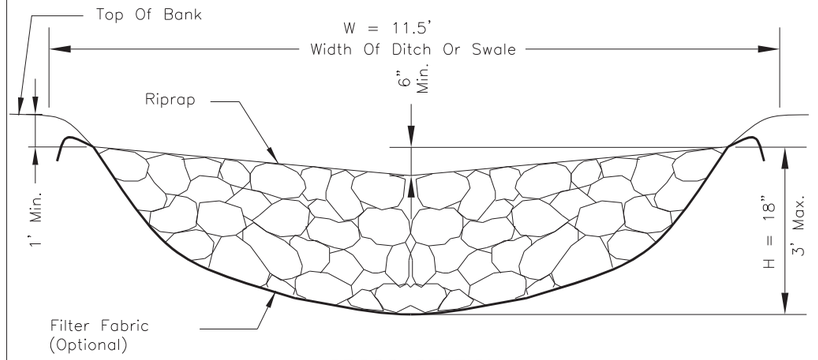
6. TEMPORARY DITCH CHECK TO BE USED TO CONTROL FLOW IN DITCHES. THE DITCH CHECK IS NOT A SUBSTITUTE FOR SEDIMENT TRAPS OR BASINS. PLACE UPSTREAM OF TRAPS OR BASINS AND MAINTAIN IN PLACE UNTIL SEEDING IS ESTABLISHED.

TEMPORARY DITCH CHECK DETAIL

ROCK CHECK DAM - RIPRAP



PROFILE



CROSS SECTION
CENTERLINE LOOKING DOWNSTREAM

NOTES;
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II, or IV and shall be placed over the cleared area prior to the placing of rock.
2. Coarse aggregate shall meet one of the following IDOT gradations, CA-1, CA-2, CA-3, or CA-4.
3. Riprap shall meet IDOT gradation RR-3 or RR-4 and meet Quality Designation A.
4. Coarse aggregate and riprap shall be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
5. For added stability, the base of the dam may be keyed 6 inches into the soil.
6. See plans for spacing of dams and H dimensions.
7. Maximum drainage area to each dam is 10 acres.
8. ROCK CHECK DAM-COARSE AGGREGATE IL-605CA may be used for drainage areas under 2 acres.

REFERENCE Project Designed ____ Date ____ Checked ____ Date ____ Approved ____ Date ____	NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-605R SHEET 1 OF 1 DATE 1-29-99

ROCK CHECK DAM - PERMANENT DITCH CHECK DETAIL
IL ROUTE 31
STA 119+50 LT.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 2.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

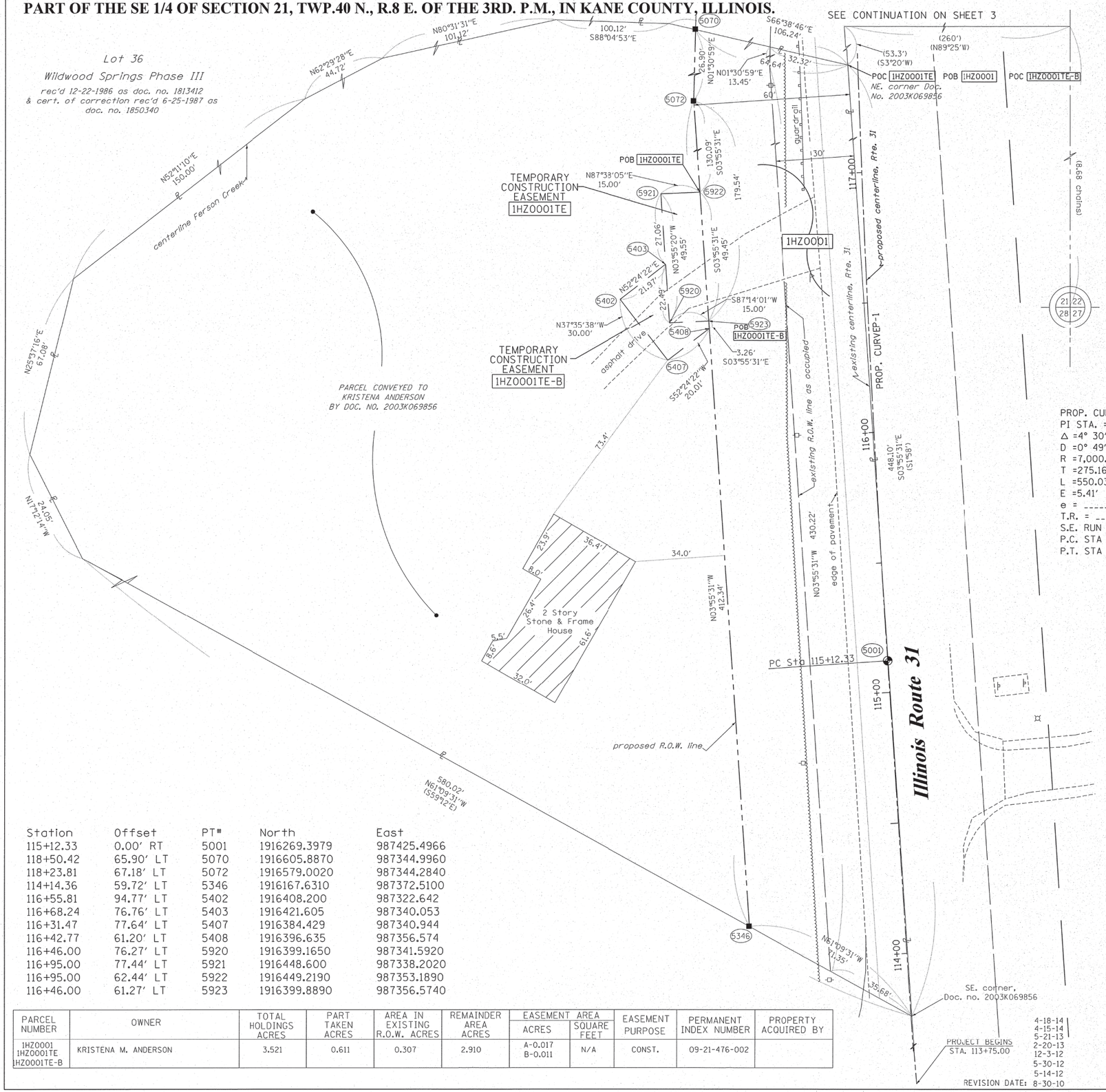
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
DITCH CHECK DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	46
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PART OF THE SE 1/4 OF SECTION 21, TWP.40 N., R.8 E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.



PROP. CURVEP-1
PI STA. =117+87.48
Δ =4° 30′ 07″ (RT)
D =0° 49′ 07″
R =7,000.00′
T =275.16′
L =550.03′
E =5.41′
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA =115+12.33
P.T. STA =120+62.36

LEGEND

- SECTION CORNER (9 10 16 15)
- QUARTER SECTION CORNER (16 — 15)
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- PROPOSED CENTERLINE
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE FEET
0 50,100 20,40 30,60
SCALE: 1" = 20'

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- ○ IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- \+ CUT CROSS FOUND OR SET
- ● 5 / 8" REBAR SET
- ● T1 T2 T3 — THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ● BT1 BT2 BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M — STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◔ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET

Station	Offset	PT#	North	East
115+12.33	0.00′ RT	5001	1916269.3979	987425.4966
118+50.42	65.90′ LT	5070	1916605.8870	987344.9960
118+23.81	67.18′ LT	5072	1916579.0020	987344.2840
114+14.36	59.72′ LT	5346	1916167.6310	987372.5100
116+55.81	94.77′ LT	5402	1916408.200	987322.642
116+68.24	76.76′ LT	5403	1916421.605	987340.053
116+31.47	77.64′ LT	5407	1916384.429	987340.944
116+42.77	61.20′ LT	5408	1916396.635	987356.574
116+46.00	76.27′ LT	5920	1916399.1650	987341.5920
116+95.00	77.44′ LT	5921	1916448.600	987338.2020
116+95.00	62.44′ LT	5922	1916449.2190	987353.1890
116+46.00	61.27′ LT	5923	1916399.8890	987356.5740

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
1HZ0001 1HZ0001TE 1HZ0001TE-B	KRISTENA M. ANDERSON	3.521	0.611	0.307	2.910	A-0.017 B-0.011	N/A	CONST.	09-21-476-002	

4-18-14
4-15-14
5-21-13
2-20-13
12-3-12
5-30-12
5-14-12
REVISION DATE: 8-30-10

REVISE 0001TE-B PER IDOT	TLW
ADD 0001TE-B PER IDOT	TLW
REVISED EX ROW LINE PARCEL 1	TLW
ADDED E/P, TREELINE & POWER POLES	TLW
REVISION 0001TE	RH
MISCEL. TYPO	TLW
ADDED 0001TAKE & REVISED 1TE	TLW
REVISION PER IDOT REVIEW	MADE BY TLW

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, KENNETH J. PESAVENTO, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 89,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 21, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT _____, ILLINOIS THIS _____ DAY OF _____ 20____ A.D.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3425
LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

GS
RECEIVED
APR 18 2014
PLATS & LEGALS

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101

PLAT OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL ROUTE 31

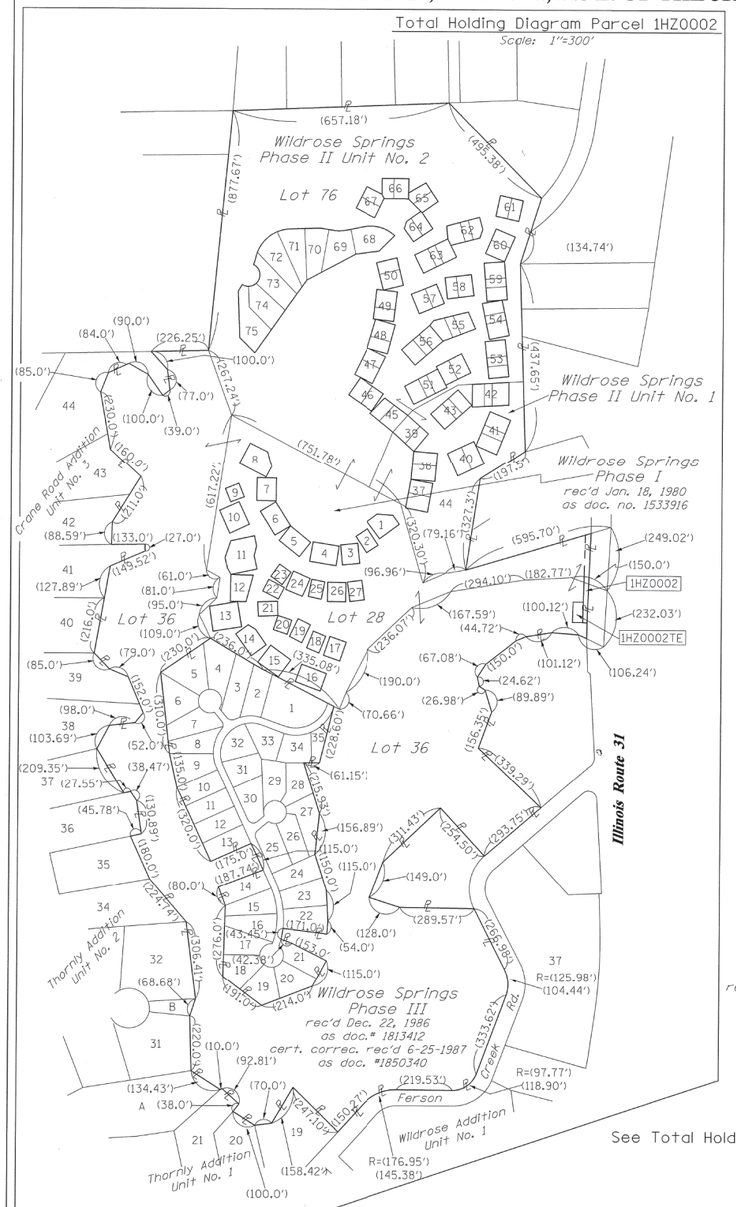
LIMITS: OVER FERSON CREEK COUNTY: KANE
PROJECT JOB NO.: R91-002-11
STATION 113+50 TO STATION 117+50
SCALE: 1"=20' SHEET 2 OF 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

ROUTE NAME: ROUTE 31 SECTION: OVER FERSON CREEK KANE COUNTY JOB NO.: R91-002-11 RECORDING: RECORDED ON

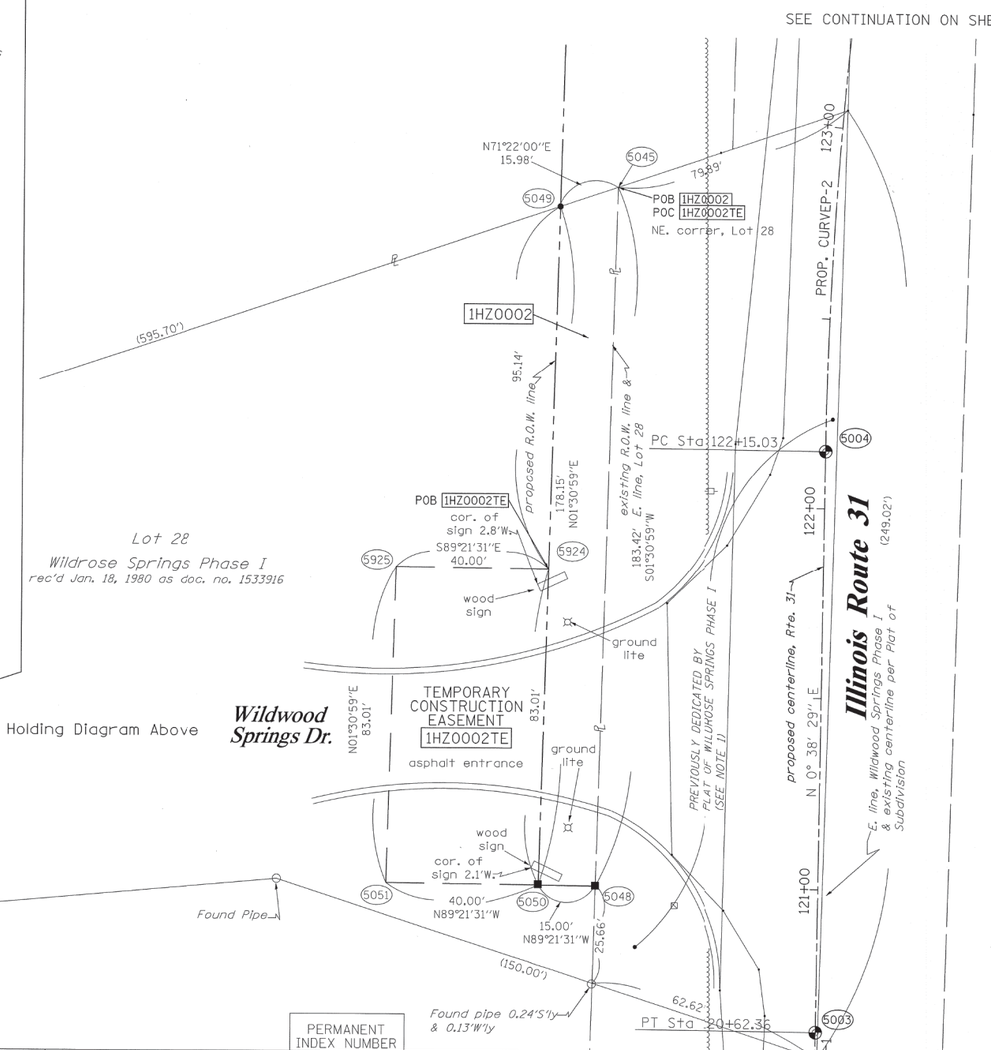
SHEET 1 OF -- IS A COVER SHEET AND IS NOT RECORDED
RT&A 2010-0759

PART OF THE SE 1/4 OF SECTION 21, TWP.40 N., R.8 E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.



Station	Offset	PT#	North	East
120+62.36	0.00' RT	5003	1916819.0721	987410.0511
122+15.03	0.00' RT	5004	1916971.7297	987411.7603
122+80.29	57.88' LT	5045	1917040.7250	987356.5080
121+00.00	58.82' LT	5048	1916857.3690	987351.6539
122+74.55	72.67' LT	5049	1917035.6202	987341.3677
121+00.00	73.82' LT	5050	1916857.5369	987336.6531
121+00.00	113.83' LT	5051	1916857.9848	987296.6565
121+83.00	72.56' LT	5924	1916940.5175	987338.8500
121+83.00	112.56' LT	5925	1916940.9654	987298.8525

PROP. CURVEP-2
PI STA. =123+71.30
Δ =14° 50' 22" (RT)
D =4° 46' 29"
R =1,200.00'
T =156.27'
L =310.79'
E =10.13'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA =122+15.03
P.T. STA =125+25.82



See Total Holding Diagram Above

SEE CONTINUATION ON SHEET 2

PROP. CURVEP-1
PI STA. =117+87.48
Δ =4° 30' 07" (RT)
D =0° 49' 07"
R =7,000.00'
T =275.16'
L =550.03'
E =5.41'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA =115+12.33
P.T. STA =120+62.36

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE
1HZ0002 1HZ0002TE	WILDROSE SPRINGS HOMEOWNERS ASSOC.	90.734	0.062	N/A	90.672	0.076	N/A	CONST.

PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
09-21-476-011	
09-21-452-085	
09-21-426-033	
09-21-452-043	
09-21-452-051	
09-21-476-023	
09-28-203-019	
09-21-452-046	

REVISION DATE: 12-3-12, 8-30-10
5-23-13 REMOVE ROW NOTE & DIMENSION
2-20-13 ADDED E/P, TREELINE & POWER POLES
9-10-10 REVISED 1HZ0002 TOTAL HOLDING AREA
0002TE REVISION PER IDOT REVIEW

LEGEND

SECTION CORNER (9 10 / 16 15) — QUARTER SECTION CORNER (16 — 15)

- SEC ION LINE
- QUAR ER SEC ION LINE
- QUAR ER, QUAR ER SEC ION LINE
- PLA ED LO LINES
- PROPER Y (DEED) LINE (℄)
- APPAREN PROPER Y LINE (APL)
- PROPOSED CEN ERLINE
- EXIS ING CEN ERLINE
- EXIS ING RIGH OF WAY LINE
- PROPOSED RIGH OF WAY LINE
- PROPOSED EASEMEN
- 129.32' MEASURED DIMENSION
- 129.32' (COMP) COMPU ED DIMENSION
- (129.32') RECORDED DIMENSION
- EXIS ING BUILDING

N

GRAPHIC SCALE FEET
0 50,100 20,40 30,60
SCALE: 1" =

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- ○ IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SE
- + CU CROSS FOUND OR SE
- ● 5/8" REBAR SE
- ● TI / T2 / T3 HESE S AKES REFERENCE FOUND OR SE MONUMEN A ION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- • BTI / BT2 / BT3 HESE S AKES, IN CUL IVA ED AREAS, REFERENCE FOUND OR SE MONUMEN A ION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ S AKING OF PROPOSED RIGH OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M S AKING OF PROPOSED RIGH OF WAY IN CUL IVA ED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◔ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
)SS
COUNTY OF)

THIS IS TO CERTIFY THAT I, RONALD F. HODGEN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 89,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 21, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT_____, ILLINOIS THIS_____DAY OF_____20____A.D.

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2630
LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

SS
RECEIVED
MAY 24 2013
PLATS & LEGALS

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101

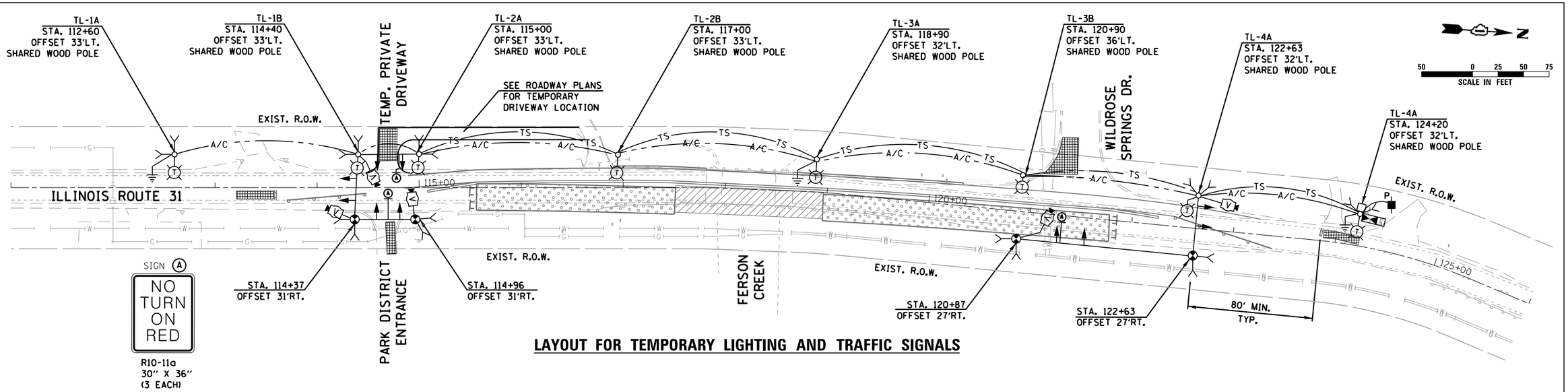
PLAT OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL ROUTE 31

LIMITS: OVER FERSON CREEK COUNTY: KANE
PROJECT JOB NO.: R91-002-11
STATION 120+50 TO STATION 123+50
SCALE: 1"=20' SHEET 3 OF 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

RM
MADE BY TLW



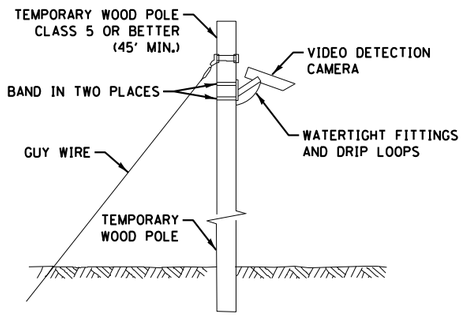
LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300MM) DIAMETER, HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR HALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATION OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS
11. TEMPORARY TRAFFIC SIGNALS SHALL BE USED ONLY DURING CONSTRUCTION STAGE 1.

NOTES FOR TEMPORARY LIGHTING

1. CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
2. THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
3. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
4. EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
5. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
6. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

SYMBOL LEGEND

○—(T)	400 W. 120V. MCII HPS. WITH PHOTO CELL 15' M.A. 50' MH ON WOOD POLE CLASS 4
——A/C——	3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
TL-1A	TEMPORARY LIGHTING UNIT NUMBER-ONE CIRCUIT A
—⊣⊢	GROUND ROD 5/8" DIA. X 10'
□	COMBINATION LIGHTING TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
——TS——	TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT D1 STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

J:\310\DGN\CADD Sheets\Pi60M81-sht-ts-01.dgn
03-AUG-2015 15:00

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

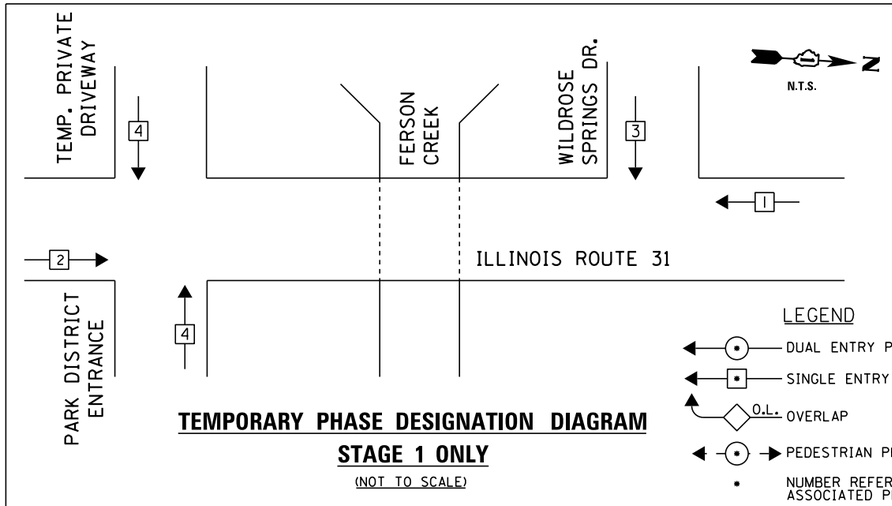
USER NAME = kprajapati	DESIGNED - MG	REVISED -	
	DRAWN - MG	REVISED -	
PLOT SCALE = 100.000000:1.000000	CHECKED - KGP	REVISED -	
PLOT DATE = 03-AUG-2015 15:00	DATE - 10/21/2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

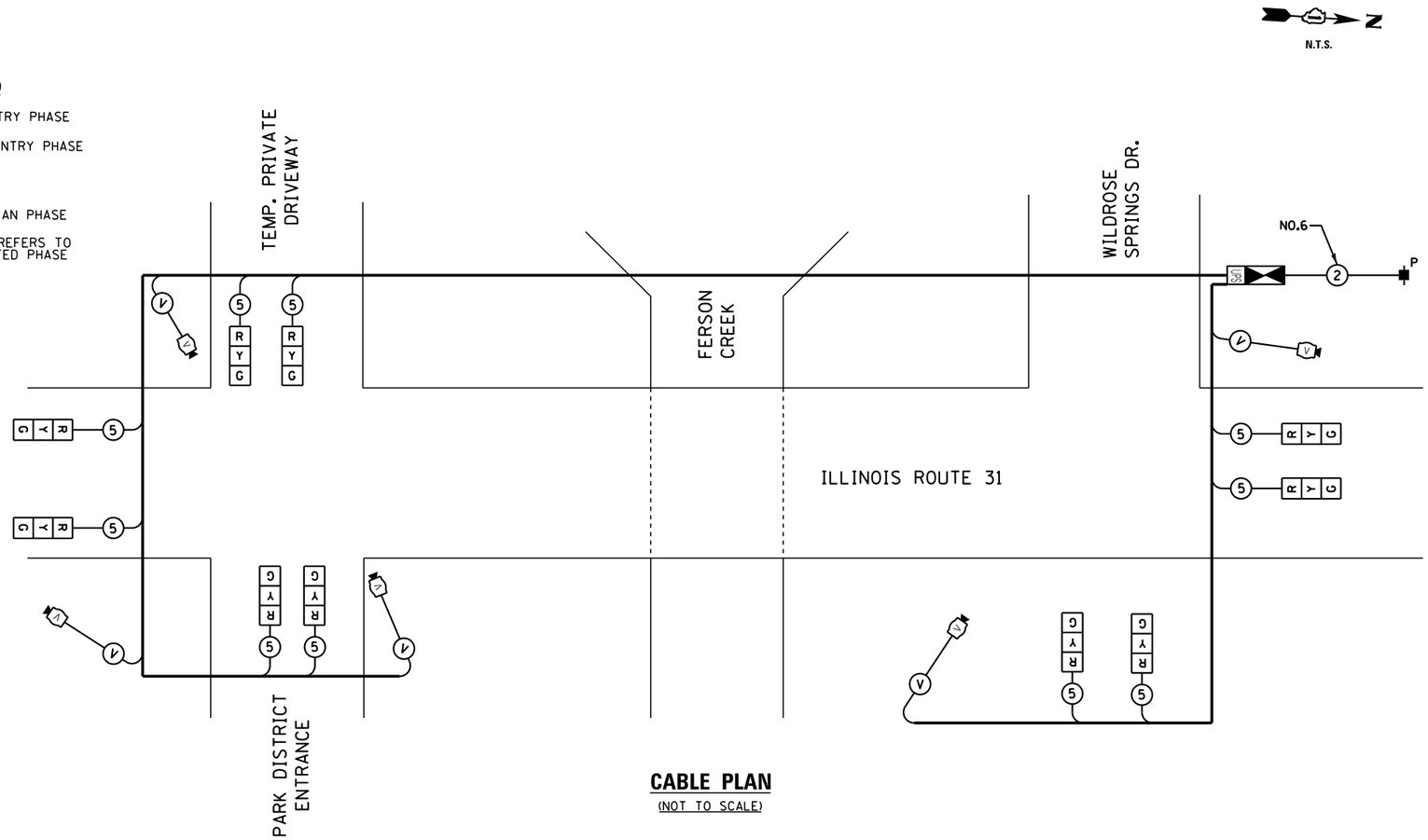
TEMPORARY LIGHTING AND SIGNAL PLANS
ILLINOIS ROUTE 31 OVER FERSON CREEK

SCALE: AS NOTED | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	2004-0011	KANE	128	49
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TEMPORARY PHASE DESIGNATION DIAGRAM
STAGE 1 ONLY
(NOT TO SCALE)



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES FOR TEMPORARY LIGHTING

QUANTITY	UNIT	ITEM
1215	FOOT	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE
8	EACH	REMOVAL OF TEMPORARY LIGHTING UNITS
1	EACH	REMOVAL OF ELECTRIC SERVICE INSTALLATION
1	EACH	TEMPORARY ELECTRIC SERVICE CONNECTION
1	EACH	TEMPORARY ELECTRIC SERVICE INSTALLATION
7	EACH	TEMPORARY WOOD POLE, 60 FT. CLASS 4, 15 FT. MAST ARM
1	EACH	COMBINATION POLE MOUNTED ELECTRIC SERVICE BOX
7	EACH	TEMPORARY LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 W. TYPE II DISTRIBUTION
8	EACH	GROUND ROD, 5/8" DIA. X 10 FEET

NOTE:
THESE QUANTITIES ARE FOR ESTIMATING PURPOSE ONLY.THESE ITEMS WILL BE PAID UNDER "TEMPORARY LIGHTING FOR SINGLE LANE STAGING". THE TEMPORARY TRAFFIC SIGNAL ITEMS NOT INCLUDED IN THE PAY IEM "TEMPORARY LIGHTING FOR SINGLE LANE STAGING" SHALL BE PART OF PAY ITEM "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION".

SCHEDULE OF QUANTITIES FOR TEMPORARY TRAFFIC SIGNALS

QUANTITY	UNIT	ITEM
1	EACH	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT DI STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

J:\310\DGN\CADD Sheets\PI60M81-sht-ts-02.dgn
03-AUG-2015 15:00

SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

USER NAME = kprajapati	DESIGNED - MG	REVISED -
	DRAWN - MG	REVISED -
PLOT SCALE = 40.000000:1.000000	CHECKED - KGP	REVISED -
PLOT DATE = 03-AUG-2015 15:00	DATE - 10/21/2014	REVISED -

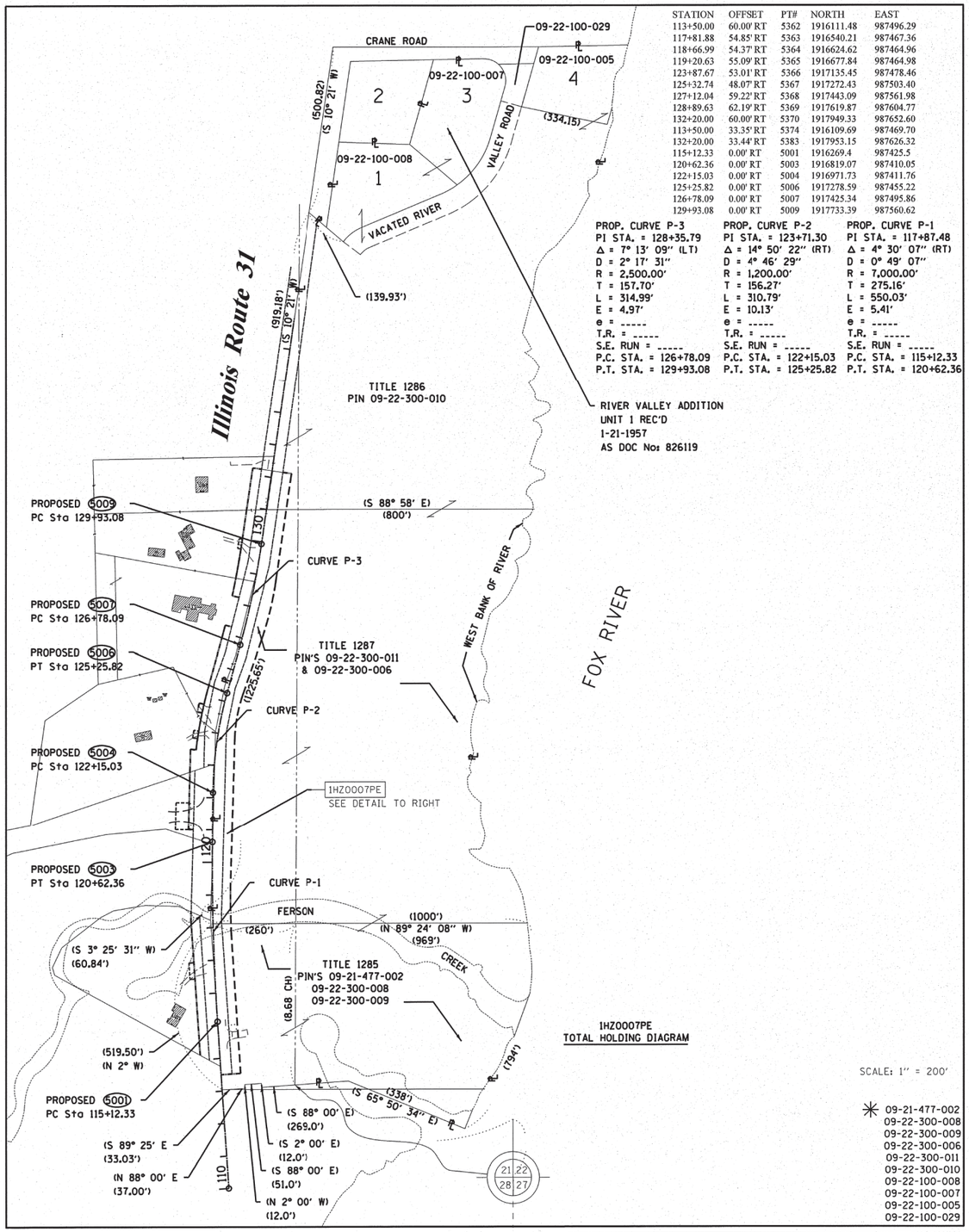
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, TEMPORARY EMERGENCY VEHICLE PREEPMPTION SEQUENCE OF OPERATION, AND SCHEDULE OF QUANTITIES–ILLINOIS ROUTE 31 OVER FERSON CREEK

SCALE: AS NOTED | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	2004-0011	KANE	128	50
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

PART OF THE SE 1/4 OF SECTION 21, TWP.40 N., R.8 E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.



STATION	OFFSET	PT#	NORTH	EAST
113+50.00	60.00' RT	5362	1916111.48	987496.29
117+81.88	54.85' RT	5363	1916540.21	987467.36
118+66.99	54.37' RT	5364	1916624.62	987464.96
119+20.63	55.09' RT	5365	1916677.84	987464.98
123+87.67	53.01' RT	5366	1917135.45	987478.46
125+32.74	48.07' RT	5367	1917272.43	987503.40
127+12.04	59.22' RT	5368	1917443.09	987561.98
128+89.63	62.19' RT	5369	1917619.87	987604.77
132+20.00	60.00' RT	5370	1917949.33	987652.60
113+50.00	33.35' RT	5374	1916109.69	987469.70
132+20.00	33.44' RT	5383	1917953.15	987626.32
115+12.33	0.00' RT	5001	1916269.4	987425.5
120+62.36	0.00' RT	5003	1916819.07	987410.05
122+15.03	0.00' RT	5004	1916971.73	987411.76
125+25.82	0.00' RT	5006	1917278.59	987455.22
126+78.09	0.00' RT	5007	1917425.34	987495.86
129+93.08	0.00' RT	5009	1917733.39	987560.62

PROP. CURVE P-3
PI STA. = 128+35.79
Δ = 7° 13' 09" (LT)
D = 2° 17' 31"
R = 2,500.00'
T = 157.70'
L = 314.99'
E = 4.97'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 126+78.09
P.T. STA. = 129+93.08

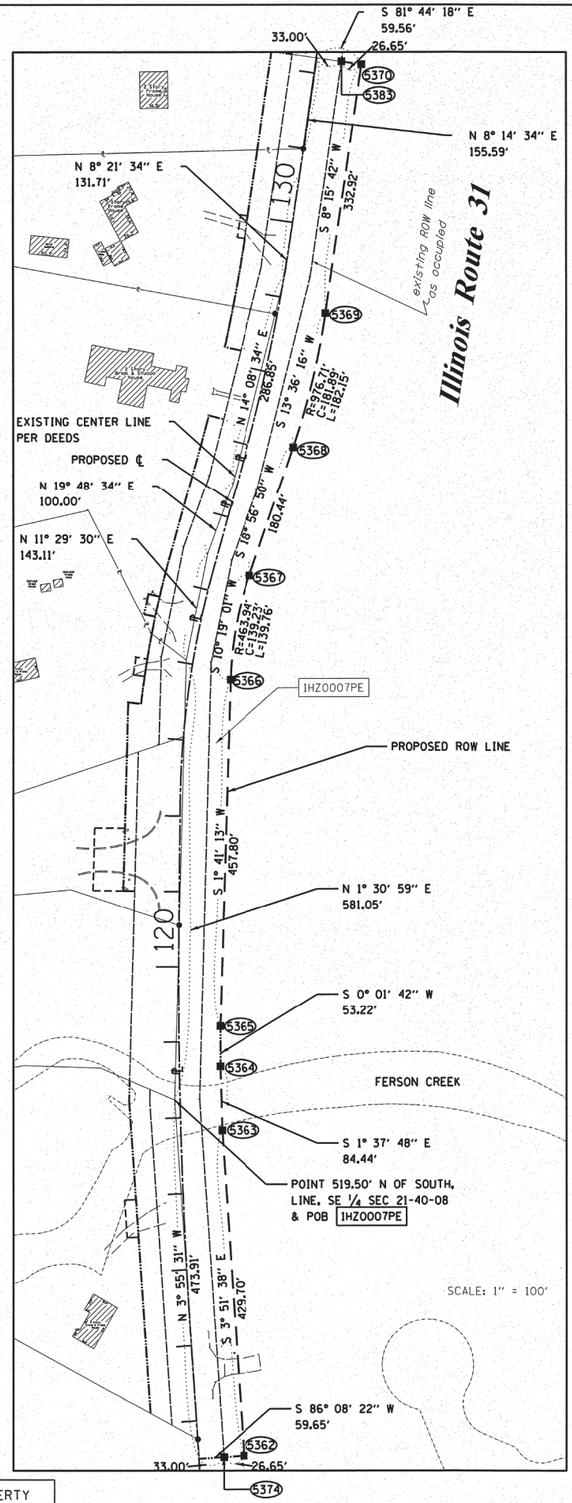
PROP. CURVE P-2
PI STA. = 123+71.30
Δ = 14° 50' 22" (RT)
D = 4° 46' 29"
R = 1,200.00'
T = 156.27'
L = 310.79'
E = 10.13'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 122+15.03
P.T. STA. = 125+25.82

PROP. CURVE P-1
PI STA. = 117+87.48
Δ = 4° 30' 07" (RT)
D = 0° 49' 07"
R = 7,000.00'
T = 275.16'
L = 550.03'
E = 5.41'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA. = 115+12.33
P.T. STA. = 120+62.36

1HZ0007PE
TOTAL HOLDING DIAGRAM

SCALE: 1" = 200'

✳ 09-21-477-002
09-22-300-008
09-22-300-009
09-22-300-006
09-22-300-011
09-22-300-010
09-22-100-008
09-22-100-007
09-22-100-005
09-22-100-029



SCALE: 1" = 100'

LEGEND

SECTION CORNER (9 10 / 16 15)
QUARTER SECTION CORNER (16 — 15)

- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- PROPOSED CENTERLINE
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE
FEET
0 50,100 20,40 30,60
SCALE: 1" = 100'

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- ○ IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- \+ CUT CROSS FOUND OR SET
- ● 5/8" REBAR SET
- ● T1 T2 T3 — THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- • BT1 BT2 BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M — STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ◔ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
)SS
COUNTY OF)

THIS IS TO CERTIFY THAT I, RONALD F. HODGEN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 89,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 21, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT _____, ILLINOIS THIS DAY OF 20 A.D. _____

_____
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2630
LICENSE EXPIRATION DATE: 11-30-2012

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

SS
RECEIVED
DEC 04 2012
PLATS & LEGALS

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
1HZ0007PE	ST CHARLES PARK DISTRICT	58.67	N/A	1.416	58.67	2.586	N/A	PERMANENT ROW	✳	

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL ROUTE 31

LIMITS: OVER FERSON CREEK COUNTY: KANE
PROJECT JOB NO.: R91-002-11
STATION 113+00 TO STATION 132+00
SCALE: 1"=200' SHEET 6 OF 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

REVISION DATE: 12-4-12, 8-30-10
REVISION: ADD SCALE IN VIEWS AND PARCEL No: PER IDOT REVIEW
MADE BY: RKM TLW

ROUTE NAME: ROUTE 31 | SECTION: OVER FERSON CREEK | KANE COUNTY | JOB NO.: R91-002-11 | RECORDING: RECORDED ON

SHEET 1 OF -- IS A COVER SHEET AND IS NOT RECORDED
RT&A 2010-0759

PART OF THE SE 1/4 OF SECTION 21, TWP.40 N., R.8 E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.

Station	Offset	PT#	North	East
125+25.82	60.00' LT	5360	1917294.61	987397.40
126+78.09	60.00' LT	5361	1917441.35	987538.52
128+76.21	60.00' LT	5371	1917629.55	987482.22
128+23.40	21.17' LT	5395	1917570.88	987509.87
127+18.28	22.60' LT	5396	1917469.84	987484.41
128+23.40	60.00' LT	5397	1917579.05	987471.90
127+18.28	60.00' LT	5398	1917479.24	987448.21
124+29.08	60.00' LT	5843	1917195.73	987374.26
124+51.00	75.00' LT	5850	1917221.39	987364.12
124+77.00	74.99' LT	5851	1917248.35	987370.12
124+77.00	60.00' LT	5852	1917244.94	987384.72
124+51.00	60.00' LT	5853	1917218.29	987378.80
125+25.82	0.00' RT	5006	1917278.59	987455.22
126+78.09	0.00' RT	5007	1917425.34	987495.86
129+93.08	0.00' RT	5009	1917733.39	987560.62

PROP. CURVEP-2	PROP. CURVEP-3
PI STA. =123+71.30	PI STA. =128+35.79
Δ =14° 50' 22" (RT)	Δ =7° 13' 09" (LT)
D =4° 46' 29"	D =2° 17' 31"
R =1,200.00'	R =2,500.00'
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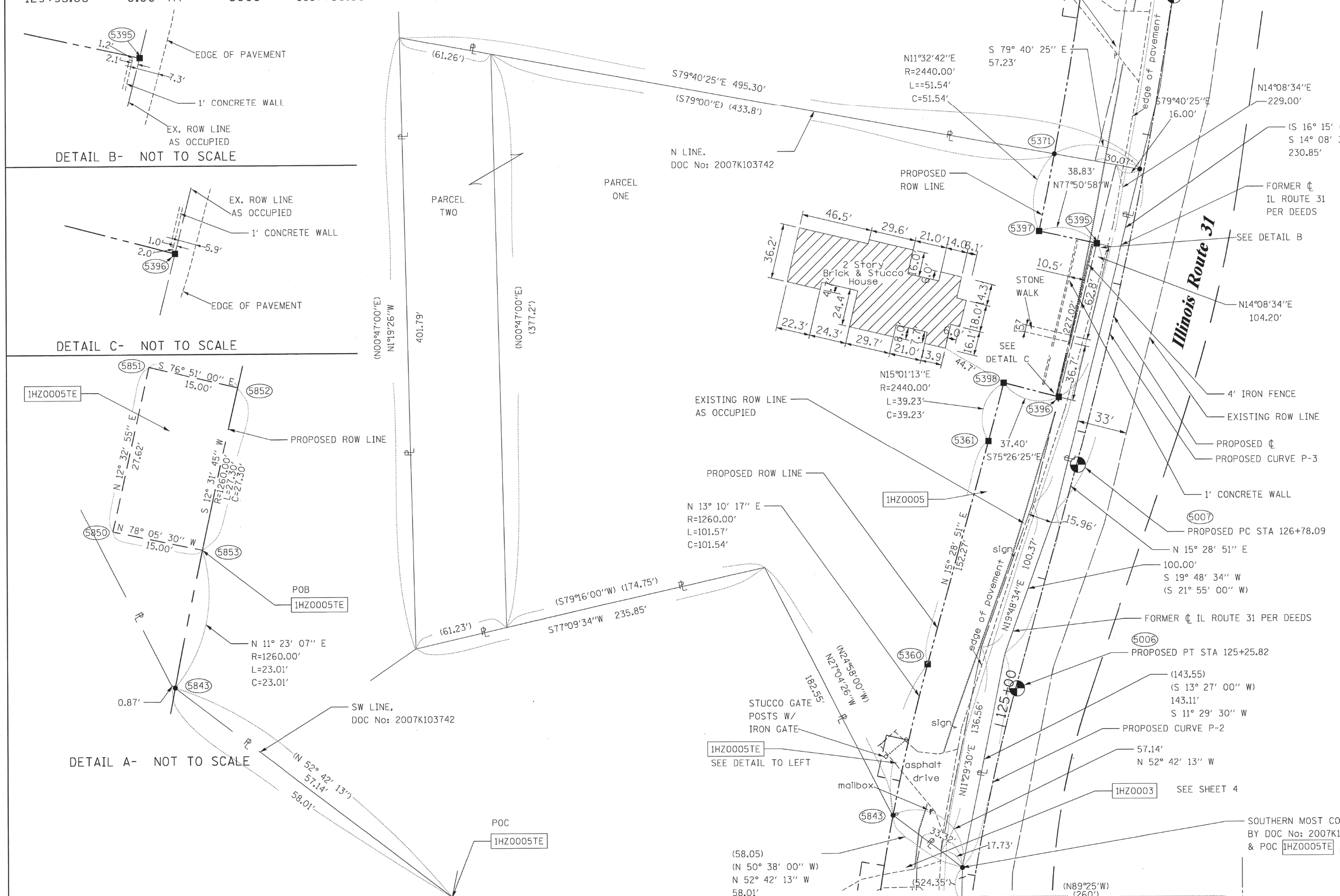
L =310.79'	L =314.99'
E =10.13'	E =4.97'
e = _____	e = _____
T.R. = _____	T.R. = _____
S.E. RUN = _____	S.E. RUN = _____
P.C. STA =122+15.03	P.C. STA =126+78.09
P.T. STA =125+25.82	P.T. STA =129+93.08



LEGEND

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- PROPOSED CENTERLINE
- EXISTING CENTERLINE
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- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE FEET 0 50,100 20,40 30,60 SCALE: 1" = 40'

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- ○ IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET
- ● 5/8" REBAR SET
- T1 T2 T3 THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 BT2 BT3 THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, RONALD F. HODGEN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 89,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 21, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT______, ILLINOIS THIS ___DAY OF _____ 20____A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2630
LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

SS
RECEIVED
MAY 29 2013
PLATS & LEGALS

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101

PLAT OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL ROUTE 31

LIMITS:OVER FERSON CREEK	COUNTY: KANE
PROJECT	JOB NO.: R91-002-11
STATION 124+00	TO STATION 130+00
SCALE: 1"=40'	SHEET 7 OF 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA ACRES	EASEMENT AREA SQUARE FEET	EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
1HZ0005 1HZ0005TE	TED A. MEYERS AND TANYA L. MEYERS, HUSBAND AND WIFE, AS TENANTS BY THE ENTIRETY	3.762	0.464	0.172	3.298	0.009	410	CONST.	09-21-427-007	

REVISION DATE	REVISION	MADE BY
5-29-13	MAKE DETAILS OF WALL AT EX ROW LINE	TLW
5-21-13	REVISED PARCEL 5 EXISTING ROW & TAKE LINE	TLW
2-20-13	ADDED E/P, TREELINE & POWER POLES	TLW
01-23-13	PER IDOT REVIEW	TLW
01-14-13	PER IDOT REVIEW	RKM
12-4-12	PER IDOT REVIEW	RKM
8-30-10	PER IDOT REVIEW	RKM

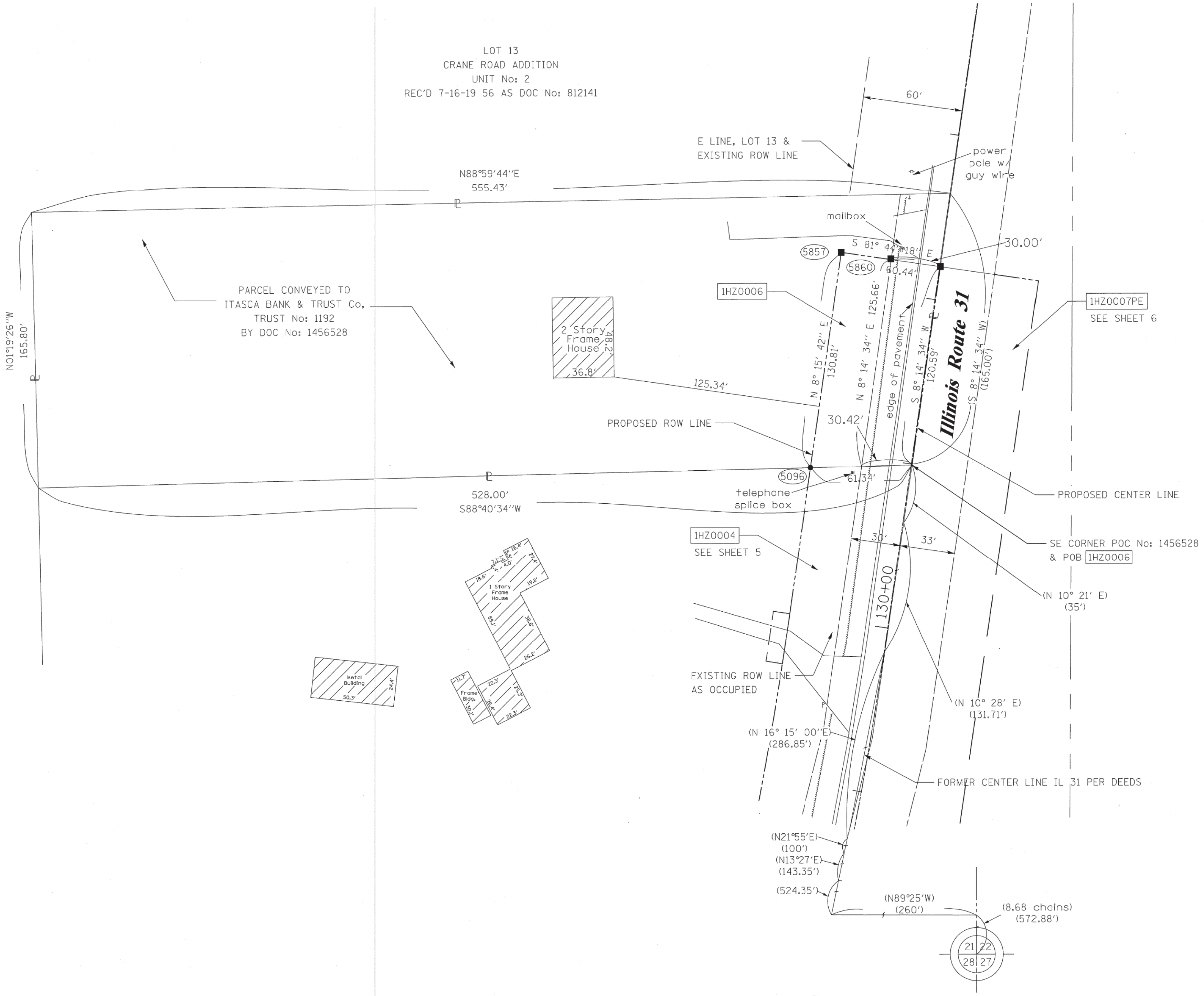
SHEET 1 OF -- IS A COVER SHEET AND IS NOT RECORDED

ROUTE NAME: ROUTE 31 SECTION: OVER FERSON CREEK KANE COUNTY JOB NO.: R91-002-11 RECORDING: RECORDED ON

SCANNED

PART OF THE SE 1/4 OF SECTION 21, TWP.40 N., R.8 E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.

Station	Offset	PT#	North	East
132+20.00	60.00' LT	5857	1917966.57	987533.85
132+20.00	32.56' LT	5860	1917962.63	987561.01
130+89.19	60.00' LT	5096	1917837.13	987515.05



LEGEND

- SECTION CORNER (9 10 / 16 15)
- QUARTER SECTION CORNER (16 — 15)
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APL — APPARENT PROPERTY LINE
- PROPOSED CENTERLINE
- EXISTING CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- PROPOSED EASEMENT
- 129.32' — MEASURED DIMENSION
- 129.32' (COMP) — COMPUTED DIMENSION
- (129.32') — RECORDED DIMENSION
- EXISTING BUILDING

N

GRAPHIC SCALE
FEET
0 50,100
20,40
30,60
SCALE: 1" = 40'

Bearings are referenced to the Illinois Coordinate System, NAD83, East Zone, as provided by the Illinois Department of Transportation.

- ○ IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- \+ CUT CROSS FOUND OR SET
- ● 5 / 8" REBAR SET
- T1 T2 T3 — THESE STAKES REFERENCE FOUND OR SET MONUMENTATION. SET 5/8 INCH IRON ROD FLUSH WITH GROUND TO TIE FOUND IRON STAKE IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- BT1 BT2 BT3 — THESE STAKES, IN CULTIVATED AREAS, REFERENCE FOUND OR SET MONUMENTATION. BURIED 5/8 INCH IRON ROD 20 INCHES BELOW GROUND TO TIE FOUND IRON STAKE. IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ■ STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN. IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- ■ M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- □ RIGHT OF WAY STAKING PROPOSED TO BE SET

STATE OF ILLINOIS)
)SS
COUNTY OF WILL)

THIS IS TO CERTIFY THAT I, RONALD F. HODGEN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, (WE, RUETTIGER, TONELLI & ASSOCIATES, AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 89,) HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 21, TOWNSHIP 40 NORTH, RANGE 8 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT________, ILLINOIS THIS________DAY OF____________20____A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2630
LICENSE EXPIRATION DATE: 11-30-2014

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners/Landscape Architects/G.I.S. Consultants
2174 ONEIDA STREET
JOLIET, ILLINOIS 60435
PH. (815) 744-6600 FAX (815) 744-0101

PARCEL NUMBER	OWNER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		EASEMENT PURPOSE	PERMANENT INDEX NUMBER	PROPERTY ACQUIRED BY
						ACRES	SQUARE FEET			
1HZ0006	ITASCA BANK & TRUST CO., AS TRUSTEE UNDER TRUST AGREEMENT DATED THE 24TH DAY OF FEBRUARY, 1978 AND KNOWN AS TRUST NUMBER 1192	2.043	0.174	0.085	1.869	N/A	N/A	N/A	09-21-427-004	

REVISION DATE	REVISION	MADE BY
5-22-13	REVISED EX ROW ON PARCEL 6	TLW
2-20-2013	ADDED E/P, TREELINE & POWER POLES	TLW
12-04-2012	REVISION PER IDOT REVIEW	RKM

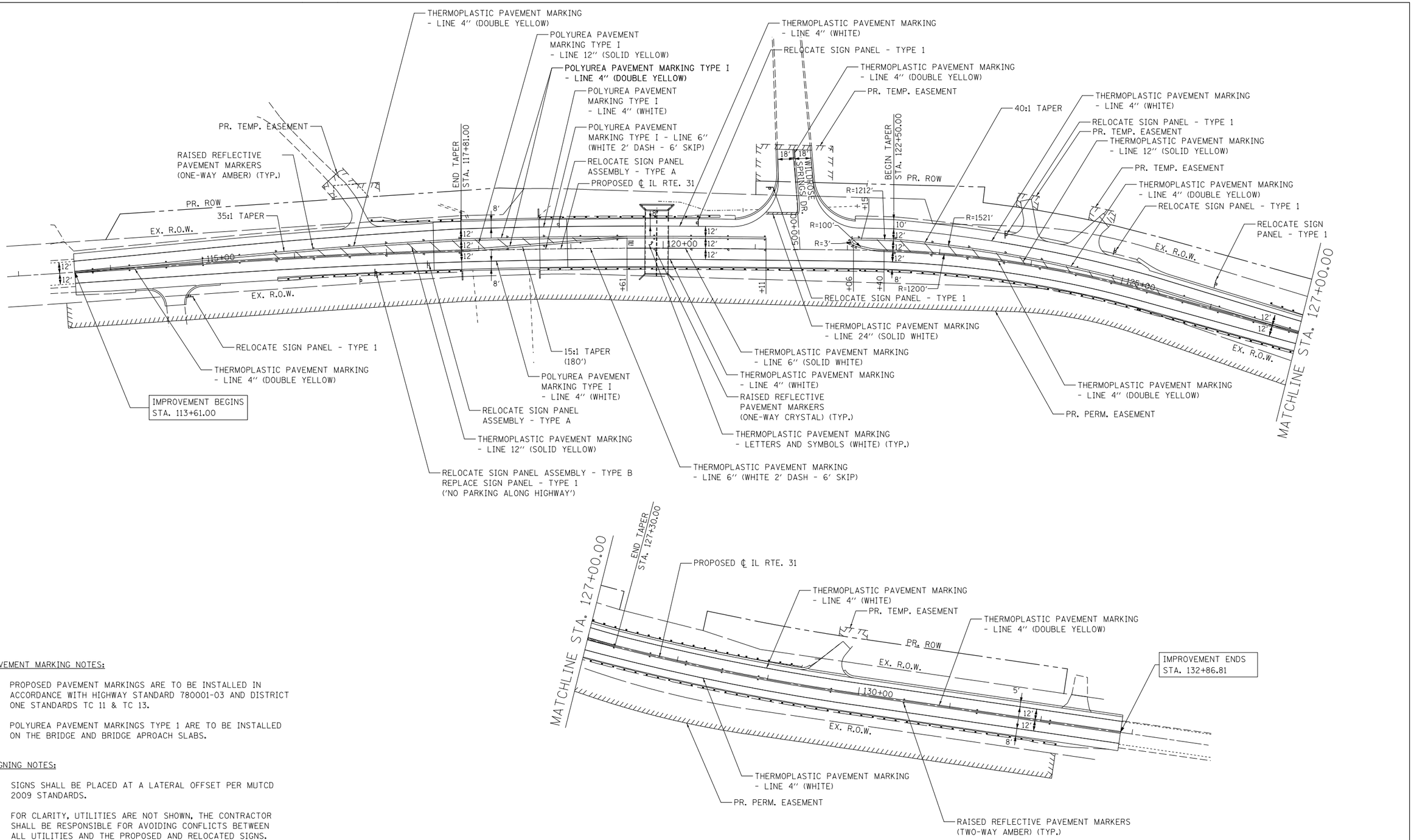
PLAT OF HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
ILL ROUTE 31

LIMITS:OVER FERSON CREEK COUNTY: KANE
PROJECT JOB NO.: R91-002-11
STATION 130+00 TO STATION 132+20
SCALE: 1"=40' SHEET 8 OF 8

BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAUMBURG, ILLINOIS 60196

SHEET 1 OF -- IS A COVER SHEET AND IS NOT RECORDED



PAVEMENT MARKING NOTES:

1. PROPOSED PAVEMENT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH HIGHWAY STANDARD 780001-03 AND DISTRICT ONE STANDARDS TC 11 & TC 13.
2. POLYUREA PAVEMENT MARKINGS TYPE 1 ARE TO BE INSTALLED ON THE BRIDGE AND BRIDGE APROACH SLABS.

SIGNING NOTES:

1. SIGNS SHALL BE PLACED AT A LATERAL OFFSET PER MUTCD 2009 STANDARDS.
2. FOR CLARITY, UTILITIES ARE NOT SHOWN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR AVOIDING CONFLICTS BETWEEN ALL UTILITIES AND THE PROPOSED AND RELOCATED SIGNS.
3. EXACT LOCATION FOR EACH SIGN IS PROVIDED IN THE SCHEDULE OF QUANTITIES.

- RAISED REFLECTIVE PAVEMENT MARKERS (TWO-WAY AMBER)
- RAISED REFLECTIVE PAVEMENT MARKERS (ONE-WAY AMBER)

LIN ENGINEERING, LTD.
Consulting Engineers
Westmont, Illinois

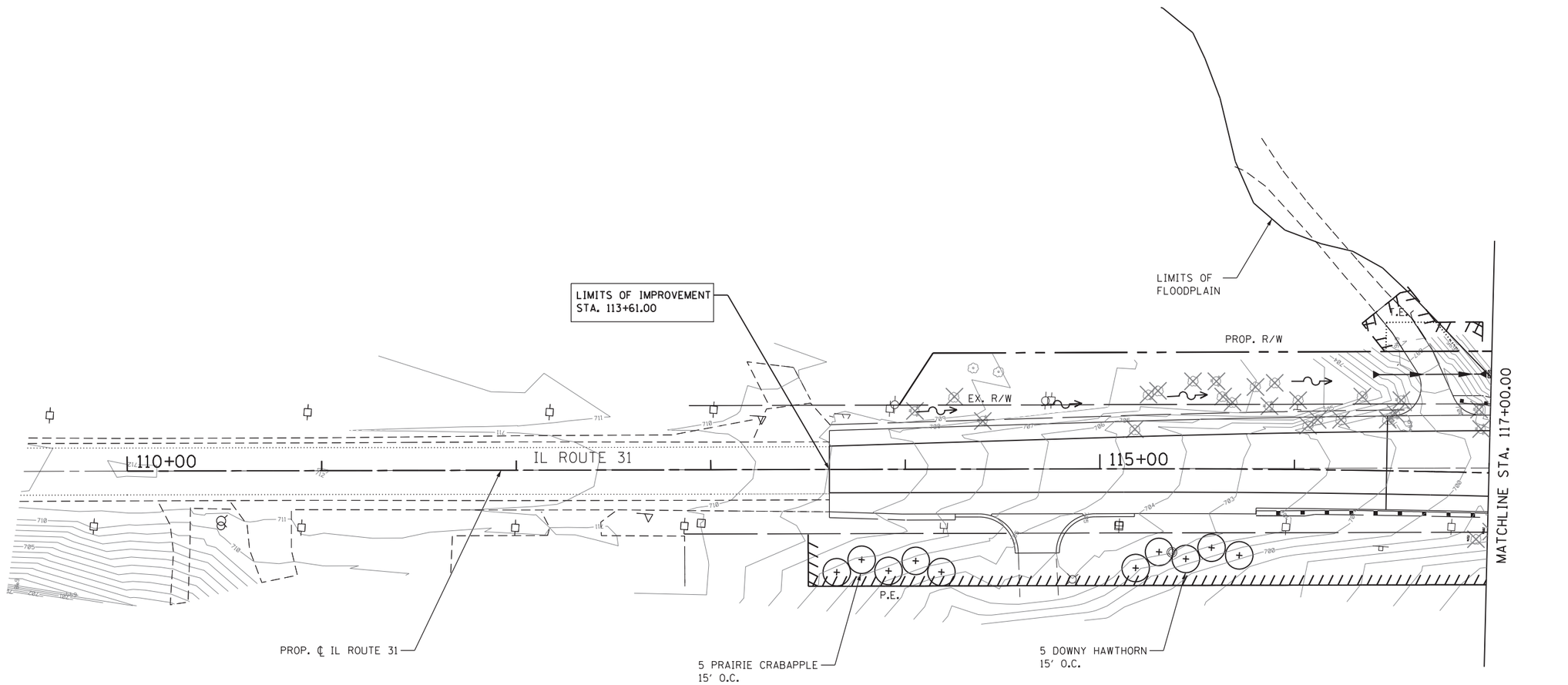
USER NAME = $USER$	DESIGNED - GRE	REVISED -	
	DRAWN - GRE	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - ST	REVISED -	
PLOT DATE = $DATE$	DATE - 09/2013	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 OVER FERSON CREEK
PAVEMENT MARKING PLAN

SCALE: 1"=50' | SHEET NO. 1 OF 1 SHEETS | STA. 113+61 TO STA. 132+20

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	54
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND:

- PR SHADE TREE
- PR EVERGREEN TREE
- SHRUBS
- PR PERENNIAL PLANT

NOTES:

1. SEE EROSION CONTROL AND SEEDING PLAN FOR SEEDING LOCATIONS.

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
LANDSCAPING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	55
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

N

WETLAND BOUNDARY

15 BLACK CURRANT
3' O.C. - MULCH BED

70 SILKY DOGWOOD
5' O.C.

LIMITS OF
FLOODPLAIN

30 ILLINOIS ROSE
5' O.C. - MULCH BED

30 NANNYBERRY HAWTHORN
5' O.C. - MULCH BED

5 DOWNY HAWTHORN
15' O.C.

35 NANNYBERRY VIBURNUM
5' O.C. - MULCH BED

2 LIMBER PINE
15' O.C.

T.E.

WILDROSE SPRINGS DRIVE

EX. R/W

PROP. R/W

MATCHLINE STA. 117+00.00

IL ROUTE 31

120+00

500+00

FERSON CREEK

P.E.

MATCHLINE STA. 125+00.00

20 SILKY DOGWOOD
5' O.C. - STAGGERED
MULCH BED

LIMITS OF
FLOODPLAIN

WETLAND BOUNDARY

FLOODWAY

PERENNIAL PLANTS, WETLAND TYPE
4.56 UNITS
5' WIDE BED, 12" O.C. (TYP.)
(SEE SPECIAL PROVISION FOR VARIETIES)

60 SILKY DOGWOOD
5' O.C.

FLOODWAY

WETLAND BOUNDARY

30 NANNYBERRY VIBURNUM
5' O.C.

11 DOWNY HAWTHORN
15' O.C.

30 AMERICAN CRANBERRY VIBURNUM
5' O.C.

30 SILKY DOGWOOD
5' O.C.

PERENNIAL PLANTS, SEDGE MEADOW TYPE - 20.52 UNITS
5' WIDE BED, 12" O.C. (TYP.)
(SEE SPECIAL PROVISION FOR VARIETIES)

30 AMERICAN CRANBERRY VIBURNUM
5' O.C.

4 DOWNY HAWTHORN
15' O.C.

LEGEND:

- PR SHADE TREE
- PR EVERGREEN TREE
- SHRUBS
- PR PERENNIAL PLANT

NOTES:

1. SEE EROSION CONTROL AND SEEDING PLAN FOR SEEDING LOCATIONS.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

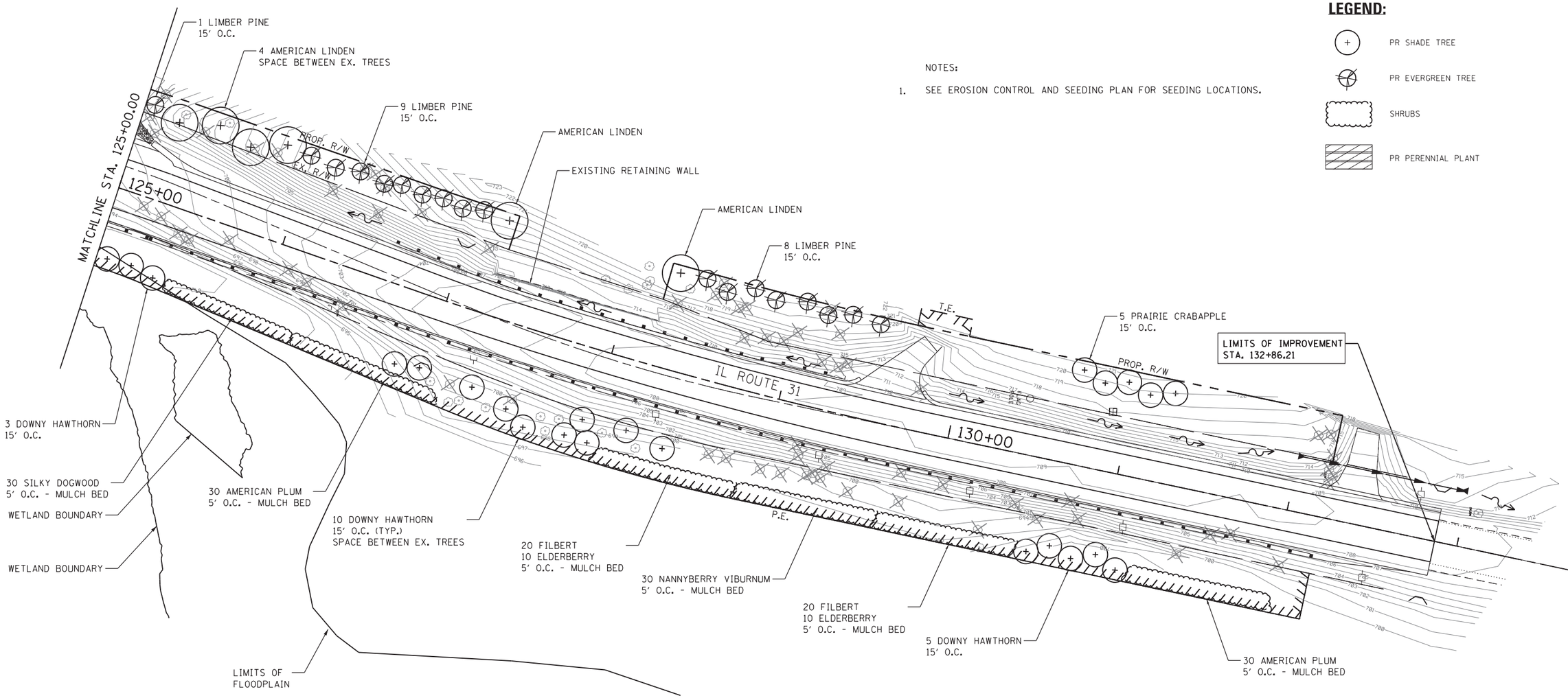
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
LANDSCAPING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	56
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



N

NOTES:

1. SEE EROSION CONTROL AND SEEDING PLAN FOR SEEDING LOCATIONS.

LEGEND:

- PR SHADE TREE
- PR EVERGREEN TREE
- SHRUBS
- PR PERENNIAL PLANT

FILE NAME = $FILE$

COLLINS ENGINEERS INC

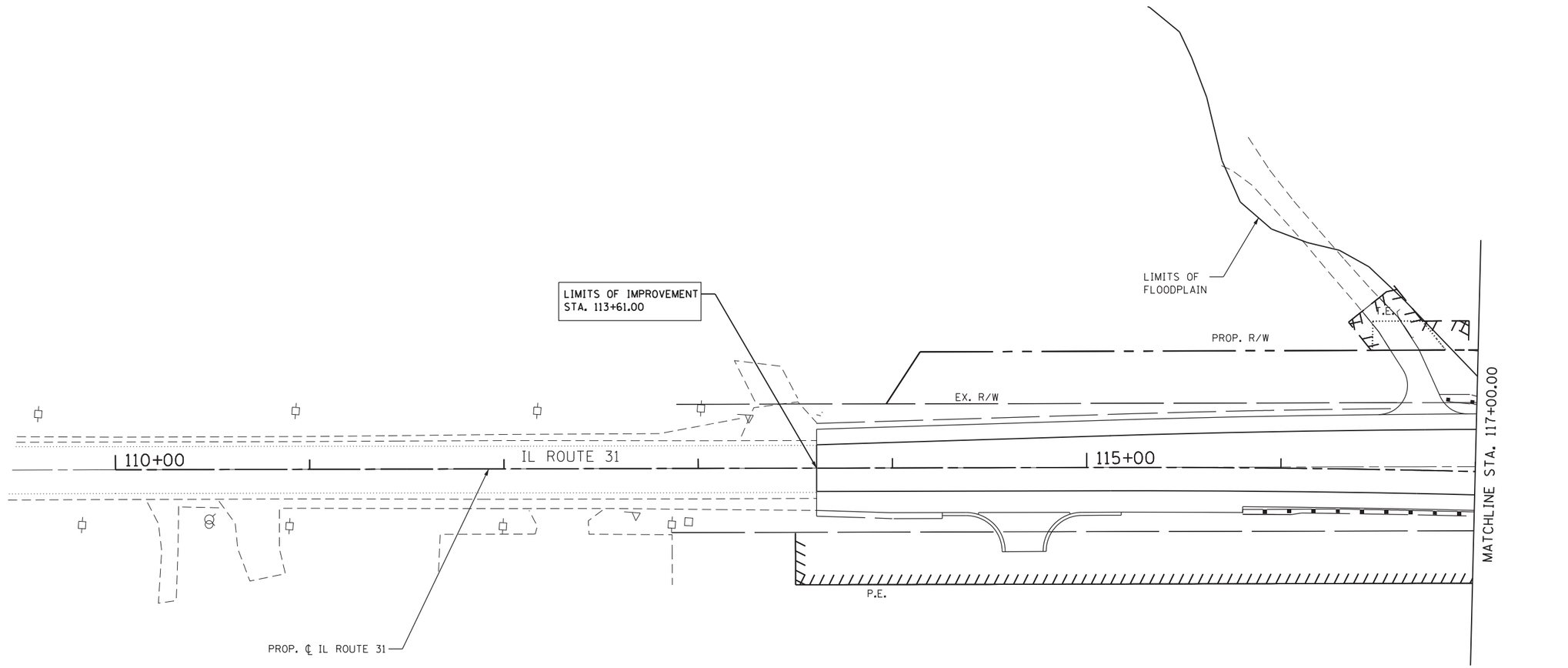
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
LANDSCAPING PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	57
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND:

- PERENNIAL PLANT CARE
- W.C. AQUATIC
- W.C. NATIVE GRASS RESTORATION

NOTES:

1. WORK THIS SHEET WITH THE LANDSCAPING PLAN AND THE EROSION CONTROL AND SEEDING PLAN.

FILE NAME = $FILE$

COLLINS ENGINEERS INC

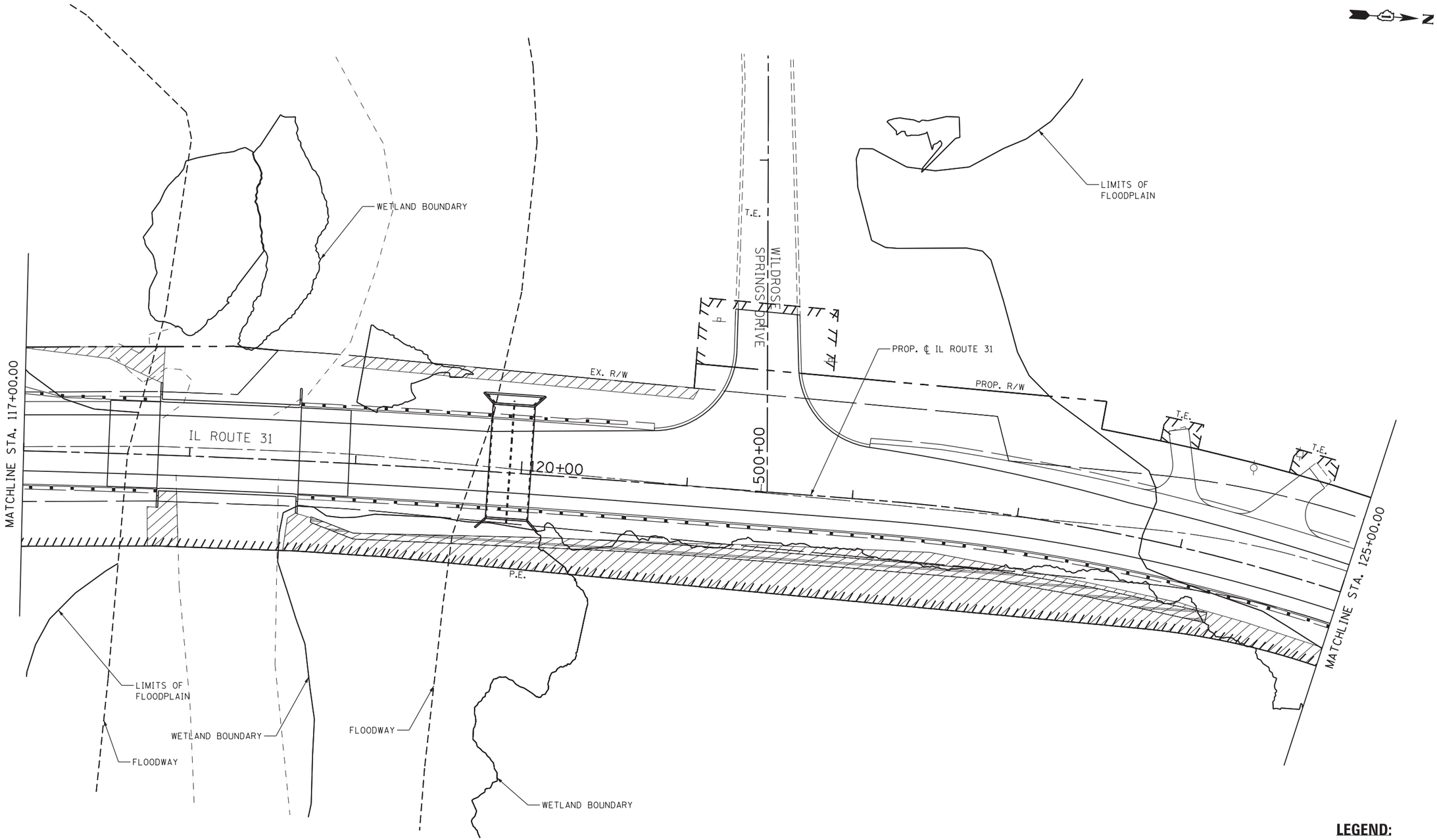
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
VEGETATION MANAGEMENT PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	58
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEGEND:

- PERENNIAL PLANT CARE
- W.C. AQUATIC
- W.C. NATIVE GRASS RESTORATION

NOTES:

1. WORK THIS SHEET WITH THE LANDSCAPING PLAN AND THE EROSION CONTROL AND SEEDING PLAN.

FILE NAME = $FILE$

COLLINS ENGINEERS INC.

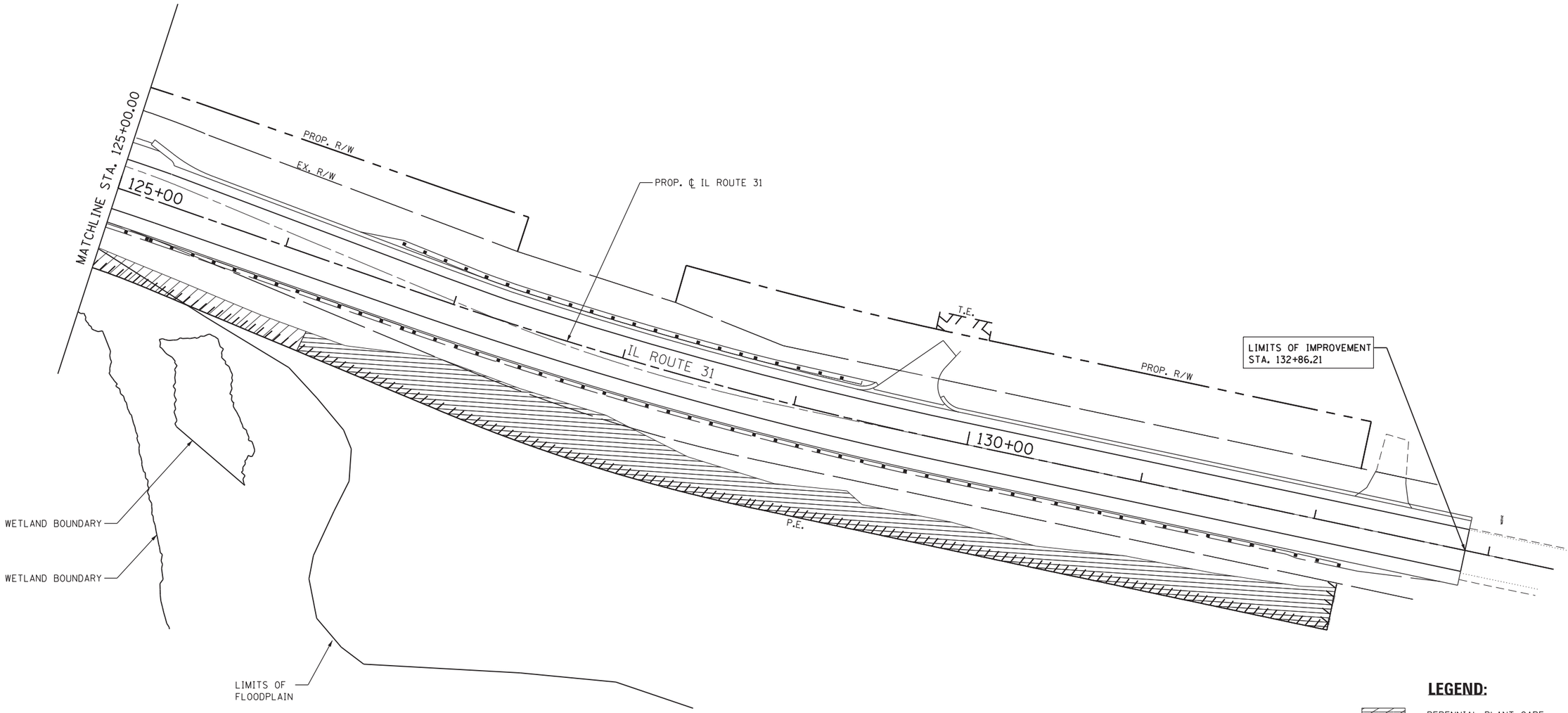
USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
VEGETATION MANAGEMENT PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	59
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

1. WORK THIS SHEET WITH THE LANDSCAPING PLAN AND THE EROSION CONTROL AND SEEDING PLAN.

LEGEND:

- PERENNIAL PLANT CARE
- W.C. AQUATIC
- W.C. NATIVE GRASS RESTORATION

FILE NAME = $FILE$

COLLINS ENGINEERS INC

USER NAME = rgall	DESIGNED -	REVISED -
PLOT SCALE = 60.0000 ' / in.	DRAWN -	REVISED -
PLOT DATE = 12/1/2014	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 31 AT FERSON CREEK
VEGETATION MANAGEMENT PLAN

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	60
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET	R		
RAILROAD CONTROL CABINET		RXR	RXR
COMMUNICATIONS CABINET	R CC	ECC	CC
MASTER CONTROLLER		EMC	MC
MASTER MASTER CONTROLLER		EMMC	MMC
UNINTERRUPTIBLE POWER SUPPLY	R UPS	EUPS	UPS
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT	R	P	P
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT	R T	P T	P T
STEEL MAST ARM ASSEMBLY AND POLE	R		
ALUMINUM MAST ARM ASSEMBLY AND POLE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	R		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA	R PTZ	PTZ	PTZ
SIGNAL POST	R		
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM	R		
GUY WIRE	R		
SIGNAL HEAD	R		
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)			2
SIGNAL HEAD WITH BACKPLATE	R		
SIGNAL HEAD OPTICALLY PROGRAMMED	R "P"	"P"	"P"
FLASHER INSTALLATION (S DENOTES SOLAR POWER)	R "F"	"F"	"F"
PEDESTRIAN SIGNAL HEAD	R		
PEDESTRIAN PUSHBUTTON DETECTOR	R		
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR	R APS	APS	APS
ILLUMINATED SIGN "NO LEFT TURN"	R		
ILLUMINATED SIGN "NO RIGHT TURN"	R		
DETECTOR LOOP, TYPE I			
PREFORMED DETECTOR LOOP		P	P
MICROWAVE VEHICLE SENSOR	R M	M	M
VIDEO DETECTION CAMERA	R V	V	V
VIDEO DETECTION ZONE			
PAN, TILT, ZOOM CAMERA	R PTZ	PTZ	PTZ
WIRELESS DETECTOR SENSOR	R W	W	W
WIRELESS ACCESS POINT	R		

ITEM	REMOVAL	EXISTING	PROPOSED
EMERGENCY VEHICLE LIGHT DETECTOR	R		
CONFIRMATION BEACON	R		
HANDHOLE	R		
HEAVY DUTY HANDHOLE	R H	H	H
DOUBLE HANDHOLE	R		
JUNCTION BOX	R		
GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)			
TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE	R		
COMMON TRENCH			CT
COILABLE NONMETALLIC CONDUIT (EMPTY)			CNC
SYSTEM ITEM		S	S
INTERSECTION ITEM		I	IP
REMOVE ITEM	R		
RELOCATE ITEM	RL		
ABANDON ITEM	A		
12" (300mm) TRAFFIC SIGNAL SECTION		R	R
12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE		R Y G	
SIGNAL FACE		R Y G Y G	R Y G Y G
SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD		R Y G Y G "P"	R Y G Y G "P"
12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL		DW W	
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED			
12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID			
PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER		C D	C D
RADIO INTERCONNECT	R		
RADIO REPEATER	R ERR	ERR	RR
DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED		5	5
GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)		1	1

ITEM	REMOVAL	EXISTING	PROPOSED
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE		I	I
COAXIAL CABLE		C	C
VENDOR CABLE FOR CAMERA		V	V
COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED		6	6
FIBER OPTIC CABLE NO. 62.5/125, MM12F		12F	
FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F		24F	24F
FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE		C	C
CONTROLLER CABINET AND FOUNDATION TO BE REMOVED	RCF		
STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED	RMF		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED	RMF		
SIGNAL POST AND FOUNDATION TO BE REMOVED	RMF		
INTERSECTION & SAMPLING (SYSTEM) DETECTOR		IS	IS
SAMPLING (SYSTEM) DETECTOR		S	S
EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		P	
EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PP	
PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR		PIS	PIS
PREFORMED SAMPLING (SYSTEM) DETECTOR		PS	PS

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET	RXR	RXR
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		

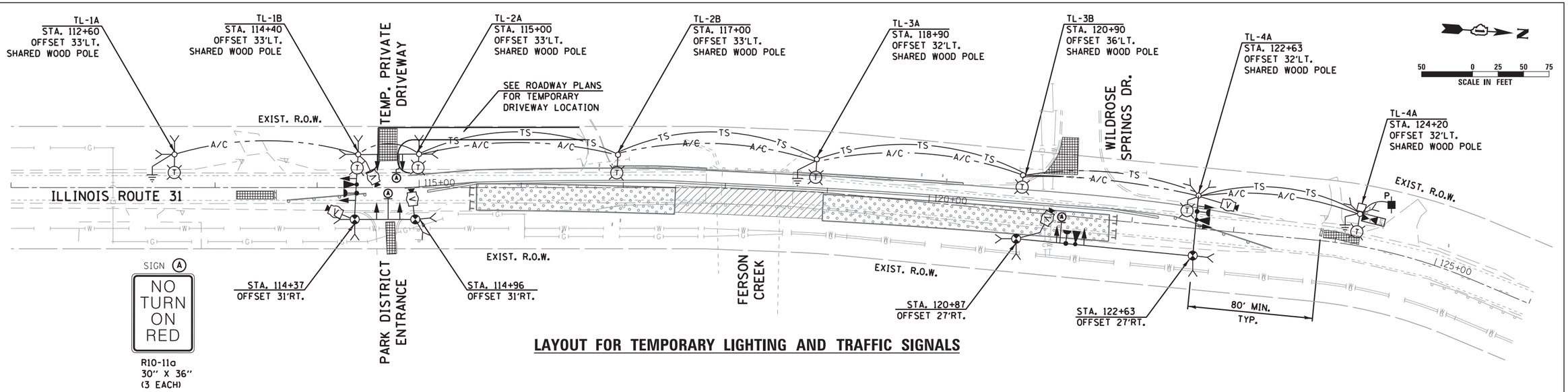
FILE NAME = c:\pw_work\PWIDOT\BAUERDL\d0108315\ts05.dgn	USER NAME = bauerdl	DESIGNED - DAG/BCK	REVISED -	
		DRAWN - BCK	REVISED -	
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - DAD	REVISED -	
	PLOT DATE = 11/4/2009	DATE - 10-28-09	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	61
	TS-05	CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



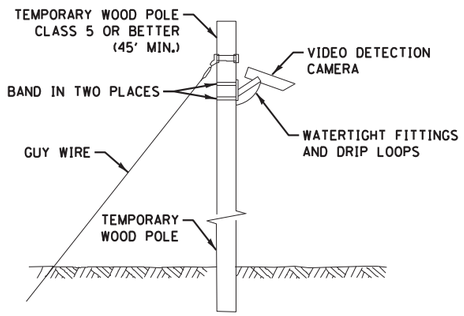
LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300MM) DIAMETER, HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL. TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
8. TRAFFIC SIGNAL MANAGEMENT SYSTEMS SHALL BE MAINTAINED IN OPERATION AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. REQUIRED EQUIPMENT SHALL BE AS SHOWN ON THE PLANS AND THE CONTRACTOR HALL PLACE THE EQUIPMENT IN OPERATION TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE TRAFFIC SIGNAL MANAGEMENT SYSTEM.
9. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATION OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.
10. WHEN PAN, TILT, ZOOM CAMERAS ARE INSTALLED AT THE EXISTING INTERSECTION OR ARE CALLED FOR IN THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING THE CAMERAS TO THE SATISFACTION OF THE ENGINEER AND THE AGENCY RESPONSIBLE FOR THE CAMERAS
11. TEMPORARY TRAFFIC SIGNALS SHALL BE USED ONLY DURING CONSTRUCTION STAGE 1.

NOTES FOR TEMPORARY LIGHTING

1. CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
2. THE ELECTRIC SERVICE SHALL BE 240/120V, WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
3. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
4. EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
5. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
6. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.



TEMPORARY VIDEO DETECTION MOUNTING DETAIL

(NOT TO SCALE)

SYMBOL LEGEND

○—(T)	400 W. 120V, MCII HPS, WITH PHOTO CELL 15' M.A. 50' MH ON WOOD POLE CLASS 4
—— A/C ——	3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
TL-1A	TEMPORARY LIGHTING UNIT NUMBER-ONE CIRCUIT A
—⊣⊢	GROUND ROD 5/8" DIA. X 10'
□	COMBINATION LIGHTING TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
—— TS ——	TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT D1 STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

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SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

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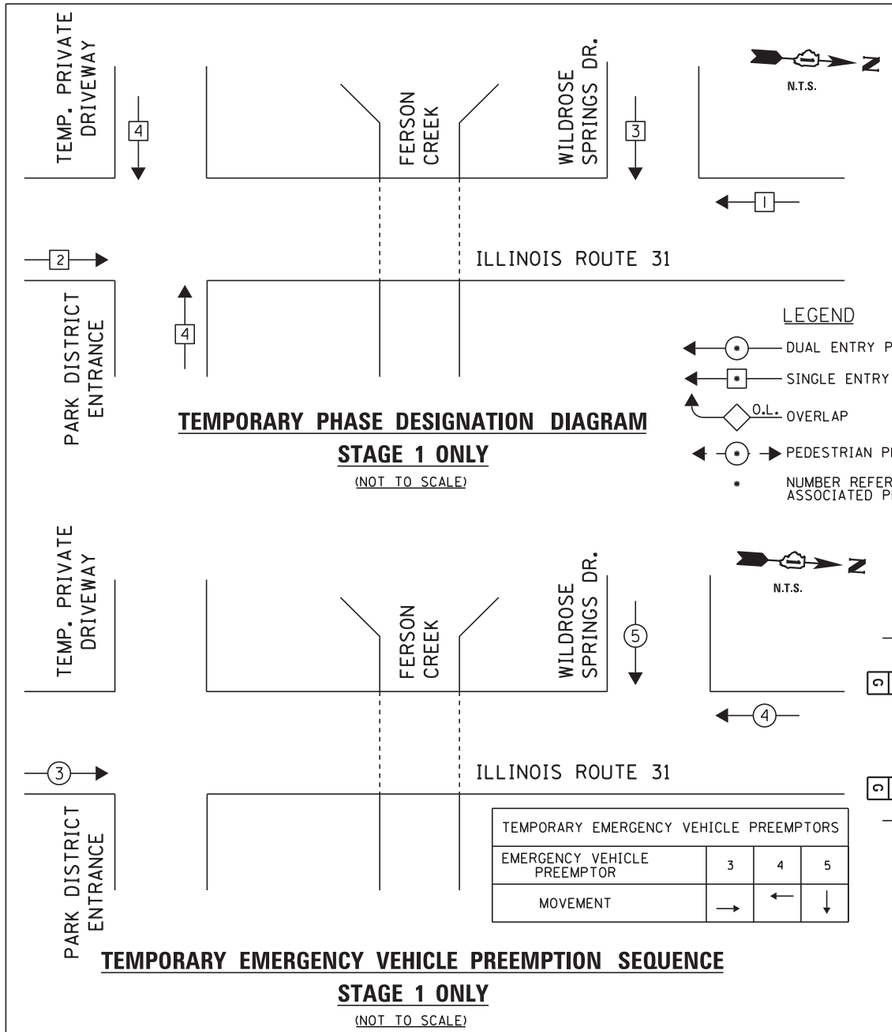
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND SIGNAL PLANS
ILLINOIS ROUTE 31 OVER FERSON CREEK

SCALE: AS NOTED | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

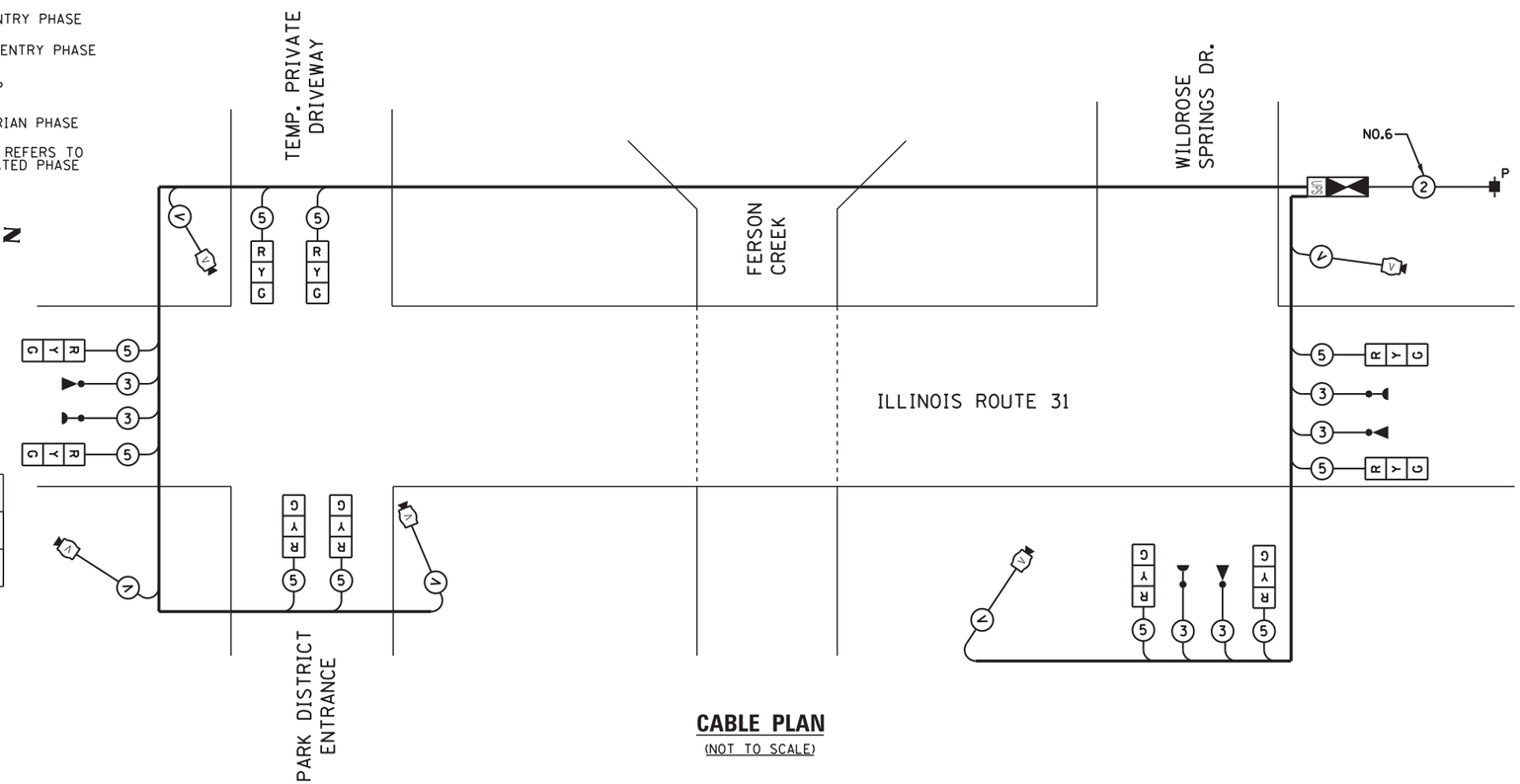
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	1-B-1	KANE	156	62
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TEMPORARY PHASE DESIGNATION DIAGRAM
STAGE 1 ONLY
(NOT TO SCALE)

TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	←	↓

TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
STAGE 1 ONLY
(NOT TO SCALE)



CABLE PLAN
(NOT TO SCALE)

SCHEDULE OF QUANTITIES FOR TEMPORARY LIGHTING

QUANTITY	UNIT	ITEM
1215	FOOT	AERIAL CABLE, 3-1/C NO. 2 WITH MESSENGER WIRE
8	EACH	REMOVAL OF TEMPORARY LIGHTING UNITS
1	EACH	REMOVAL OF ELECTRIC SERVICE INSTALLATION
1	EACH	TEMPORARY ELECTRIC SERVICE CONNECTION
1	EACH	TEMPORARY ELECTRIC SERVICE INSTALLATION
7	EACH	TEMPORARY WOOD POLE, 60 FT. CLASS 4, 15 FT. MAST ARM
1	EACH	COMBINATION POLE MOUNTED ELECTRIC SERVICE BOX
7	EACH	TEMPORARY LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 W. TYPE II DISTRIBUTION
8	EACH	GROUND ROD, 5/8" DIA. X 10 FEET

NOTE:
THESE QUANTITIES ARE FOR ESTIMATING PURPOSE ONLY.THESE ITEMS WILL BE PAID UNDER "TEMPORARY LIGHTING FOR SINGLE LANE STAGING". THE TEMPORARY TRAFFIC SIGNAL ITEMS NOT INCLUDED IN THE PAY IEM "TEMPORARY LIGHTING FOR SINGLE LANE STAGING" SHALL BE PART OF PAY ITEM "TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION".

SCHEDULE OF QUANTITIES FOR TEMPORARY TRAFFIC SIGNALS

QUANTITY	UNIT	ITEM
1	EACH	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION

ELECTRIC UTILITY CHARGES FOR THE OPERATION OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION AND TEMPORARY LIGHTING SHALL BE PAID FOR BY THE CONTRACTOR.

SEE IDOT D1 STANDARD DETAILS BE-805 FOR MORE INFORMATION ON TEMPORARY LIGHTING AND SIGNAL INSTALLATION.

THE CONTRACTOR SHALL VERIFY THE POWER LOCATION WITH COMED PRIOR TO COMMENCEMENT OF THE WORK.

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SINGH + ASSOCIATES, INC. CONSULTING ENGINEERS

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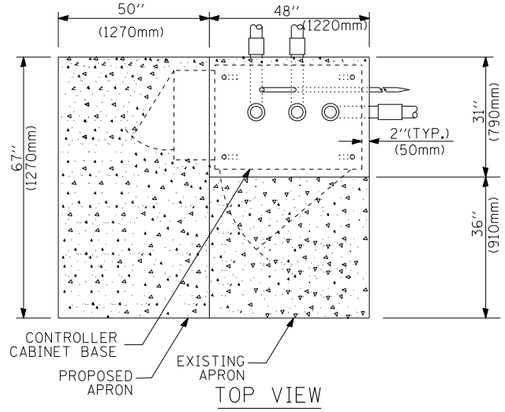
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

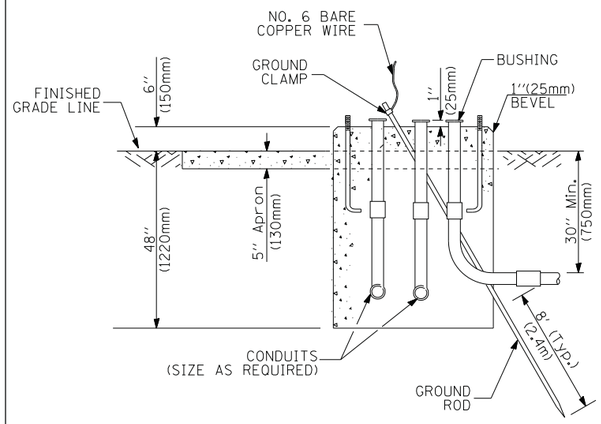
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM, TEMPORARY EMERGENCY VEHICLE PREEPMPTION SEQUENCE OF OPERATION, AND SCHEDULE OF QUANTITIES–ILLINOIS ROUTE 31 OVER FERSON CREEK

SCALE: AS NOTED | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

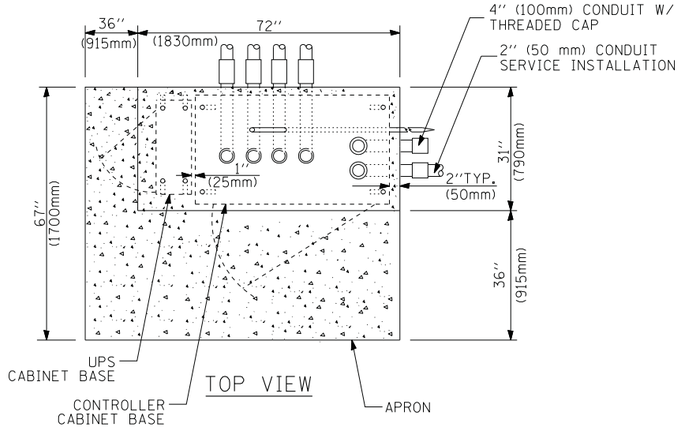
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	63
		CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



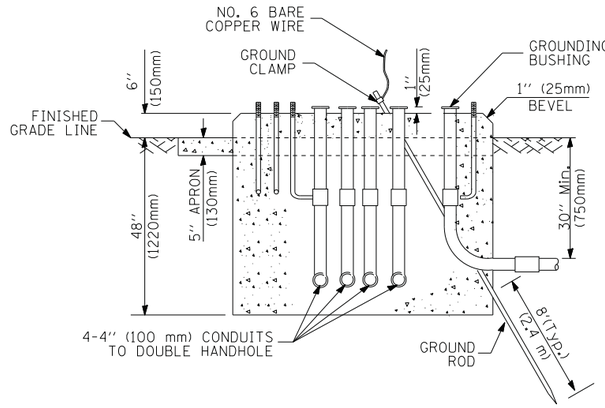
TOP VIEW



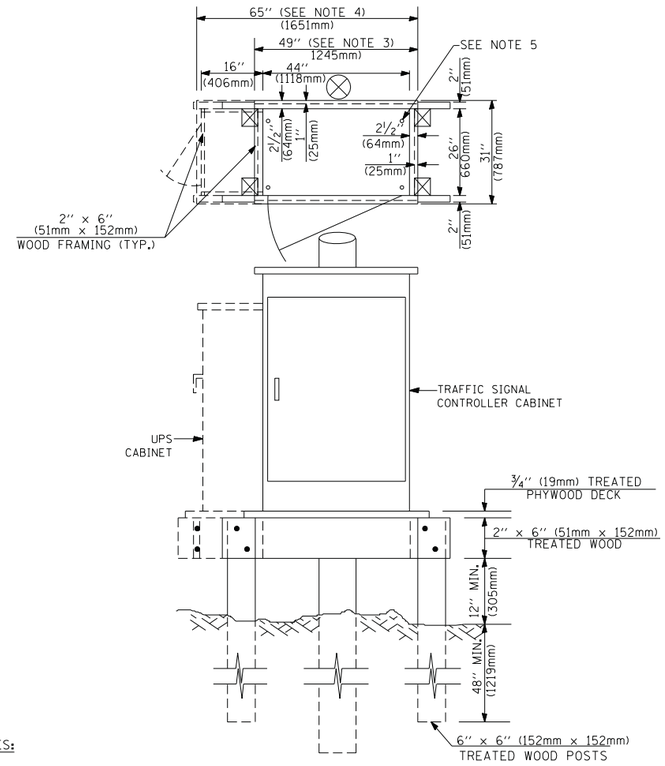
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26'' x 44'' (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16'' x 25'' (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0'' (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0'' (1.2m)
TYPE D - CONTROLLER	4'-0'' (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0'' (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0'' (3.0 m)	30'' (750mm)	24'' (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6'' (4.1 m)	30'' (750mm)	24'' (600mm)	8	6(19)
	11'-0'' (3.4 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4.0 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30'' (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6.4 m)	42'' (1060mm)	36'' (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0'' (7.6 m)	42'' (1060mm)	36'' (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36'' (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42'' (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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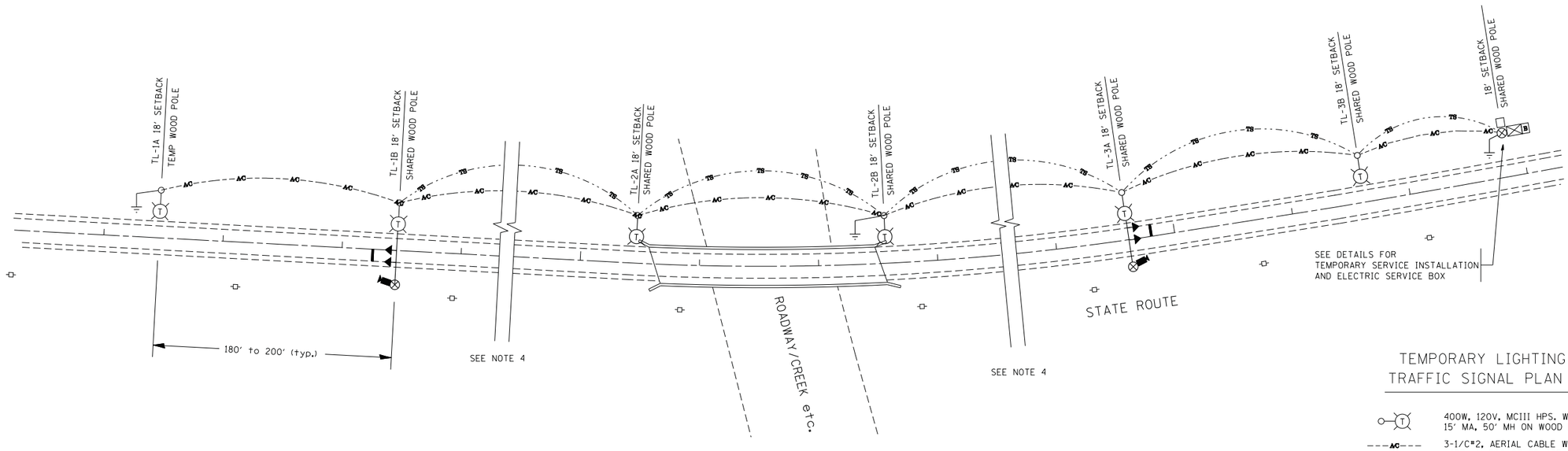
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	64
	TS-05	CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS
NOT TO SCALE

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

T	400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
AC	3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
TL-1A	TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A
	GROUND ROD 5/8" DIA. x 10'
	COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
	TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
	TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
TS	TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
B	TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
	TEMPORARY VIDEO DETECTOR

GENERAL NOTES:

1. CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENSE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.

2. UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.

3. THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED

4. THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE. DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED

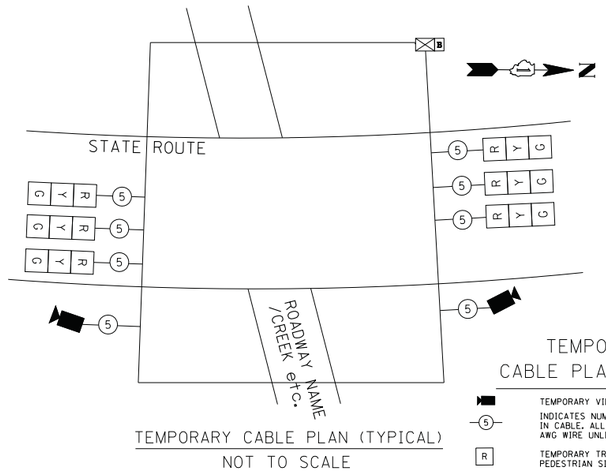
5. THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.

6. THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.

7. EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.

8. THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALENT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.

9. ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.



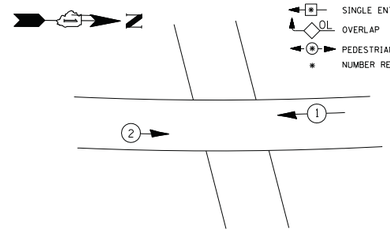
TEMPORARY CABLE PLAN (TYPICAL)
NOT TO SCALE

TEMPORARY CABLE PLAN LEGEND

	TEMPORARY VIDEO DETECTOR
5	INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
R	TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION, 12" (300 mm)

TEMPORARY PHASE DESIGNATION DIAGRAM LEGEND

	DUAL ENTRY PHASE
	SINGLE ENTRY PHASE
OL	OVERLAP
	PEDESTRIAN PHASE
*	NUMBER REFERS TO ASSOCIATED PHASE



TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)
NOT TO SCALE

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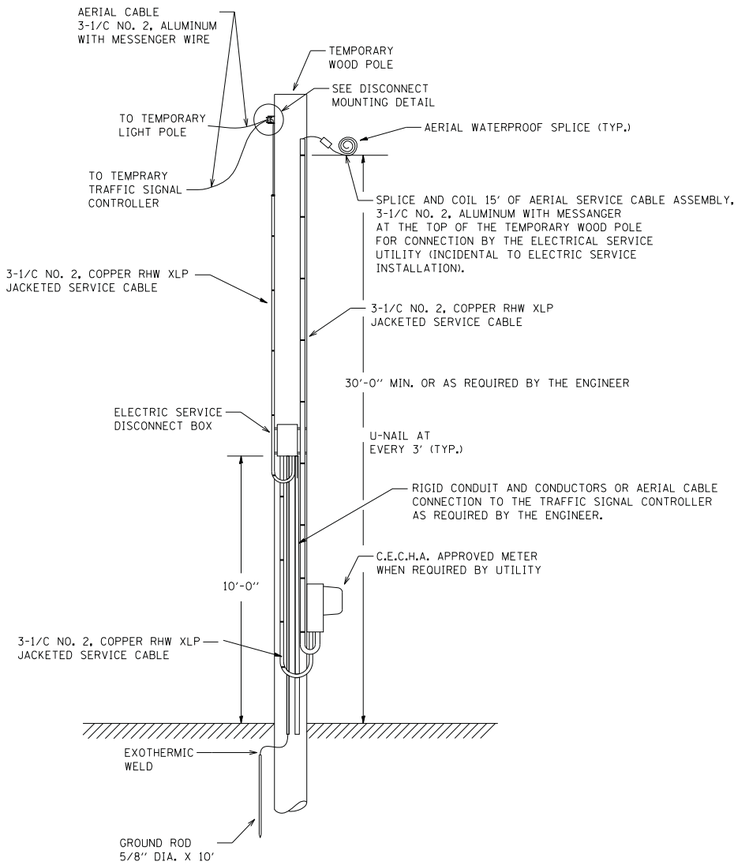
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING

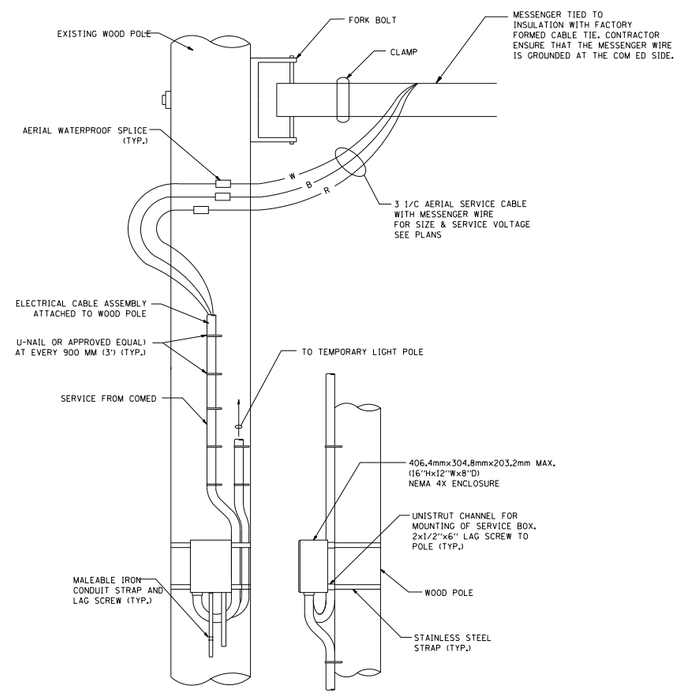
SCALE: NONE | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	1-B-1	KANE	156	65
	BE-805	CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



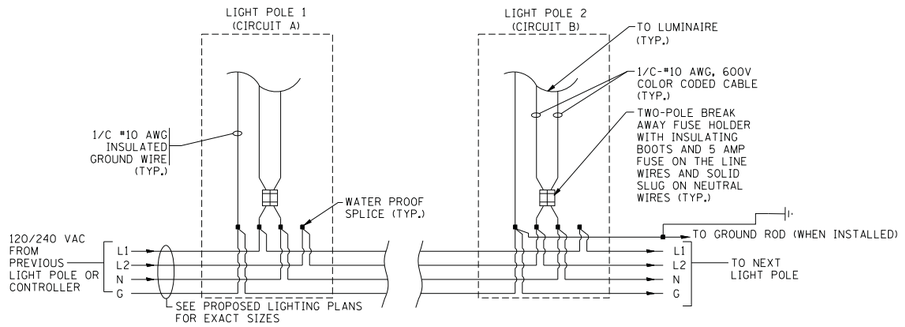
TEMPORARY SERVICE INSTALLATION DETAIL

NOT TO SCALE



DISCONNET MOUNTING DETAIL

NOT TO SCALE



LIGHT POLE WIRING DETAIL

NOT TO SCALE

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		DRAWN -	REVISED -
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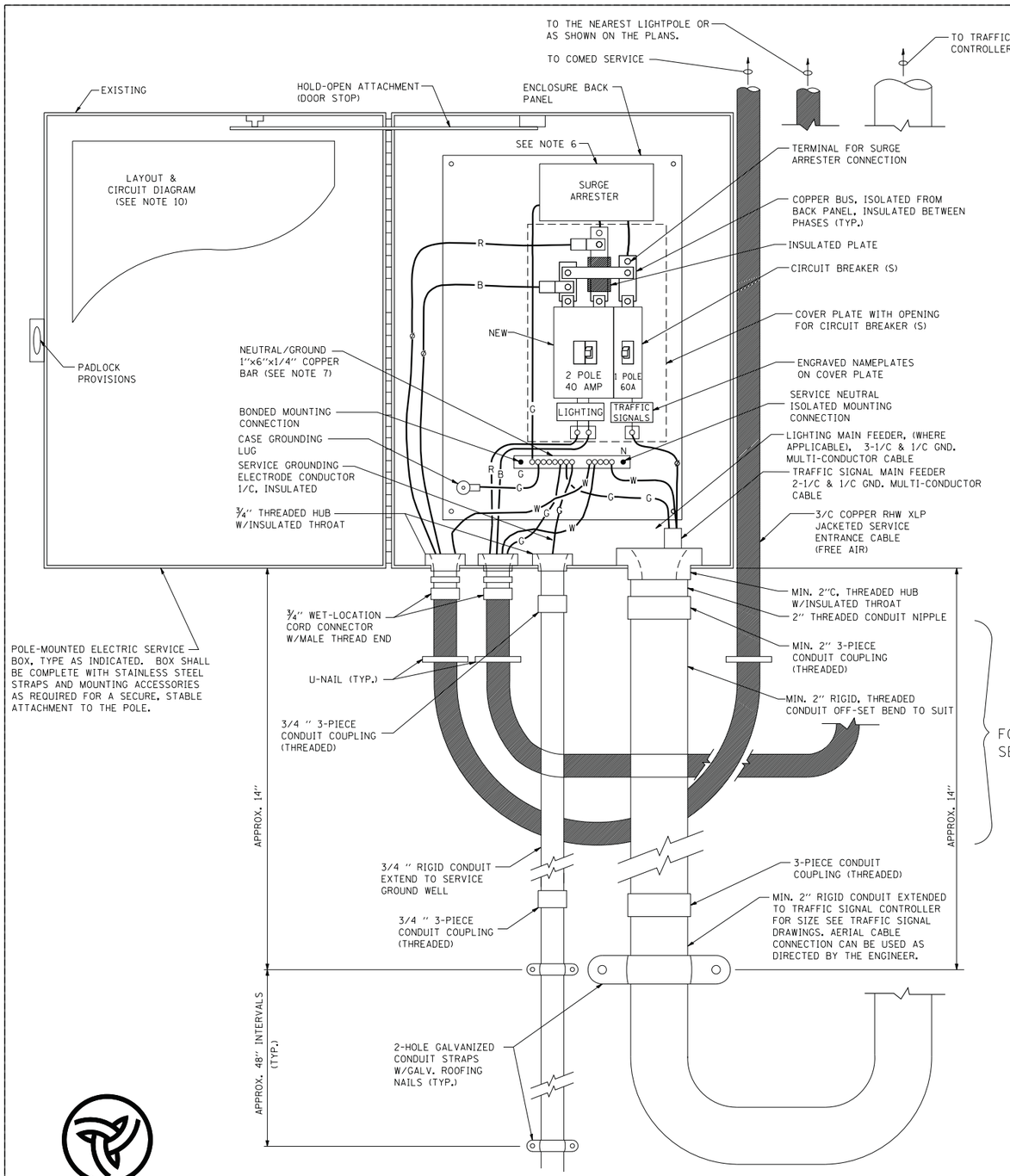
	PLOT DATE = 1/14/2010	DATE - 01/14/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING

SCALE: NONE | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	66
	BE-805	CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

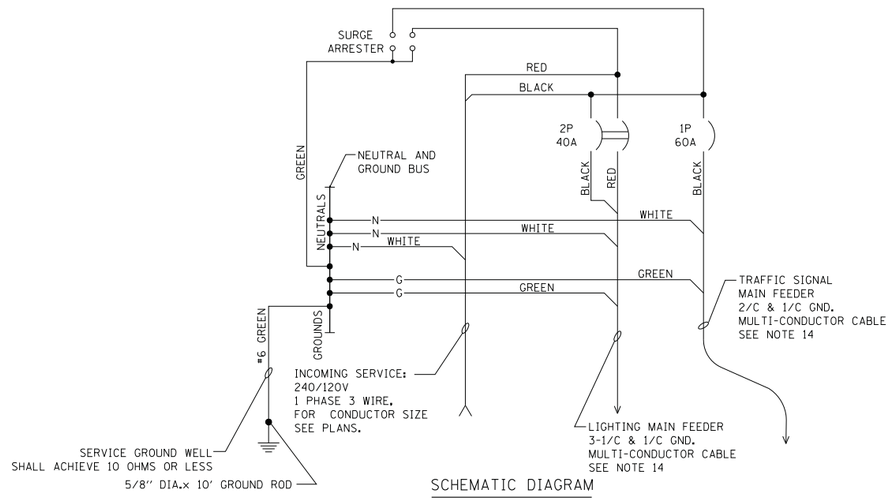


6" DECAL ON FRONT COVER

POLE-MOUNTED ELECTRIC SERVICE ENTRANCE
GENERAL LAYOUT DIAGRAM
NOT TO SCALE

NOTES:

1. ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
2. THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
5. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/ TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
6. THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
9. THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
11. A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
12. LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



SCHEMATIC DIAGRAM

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		DRAWN -	REVISED -
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	PLOT DATE = 1/14/2010	DATE - 01/14/10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING

SCALE: NONE | SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	67
	BE-805	CONTRACT NO. 60M81		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

Bench Mark: Railroad spike in private property on east side of IL 31 north of Ferson Creek Park entrance. Elev. 701.13

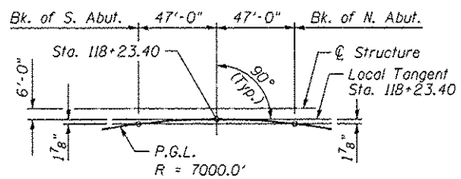
Existing Structure: S.N. 045-0019 was originally constructed in 1916 under State Aid Plan Number 45-12&1-H as a single span reinforced concrete deck girder superstructure on reinforced concrete closed abutments. The original structure was 53'-0" back-to-back abutments and 27'-0" out-to-out of deck. In 1971, the superstructure was replaced with PPC deck beams and a bituminous wearing surface, and the structure was widened to 33'-0" out-to-out of deck. The existing structure is to be removed and replaced with a single span steel plate girder superstructure on integral abutments.

Traffic to be maintained utilizing staged construction.

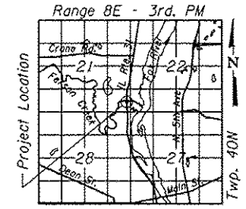
No Salvage.

CURVE DATA

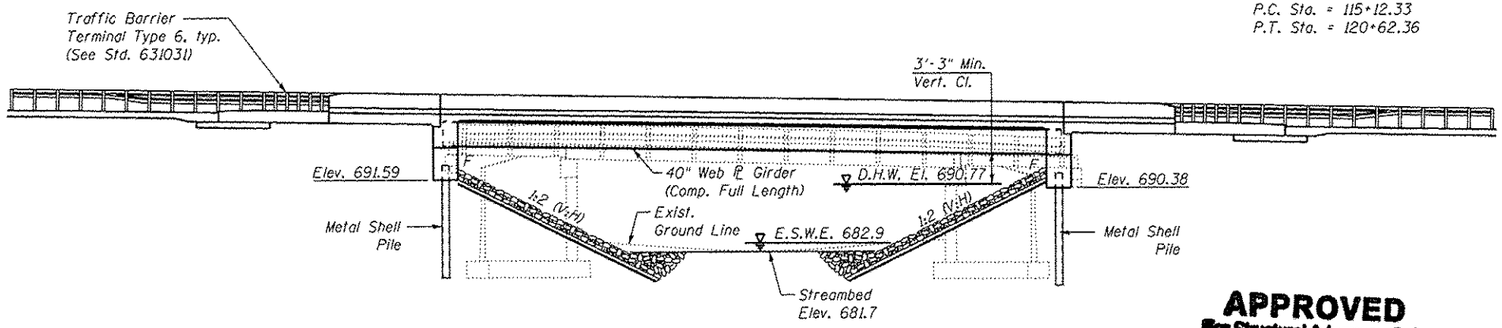
P.I. Sta. = 117+87.48
Δ = 4° 30' 07" (RT)
D = 0° 49' 07"
R = 7,000.00'
L = 550.03'
T = 275.16'
E = 5.41'
S.E. = 0.015'/'
P.C. Sta. = 115+12.33
P.T. Sta. = 120+62.36



OFFSET SKETCH

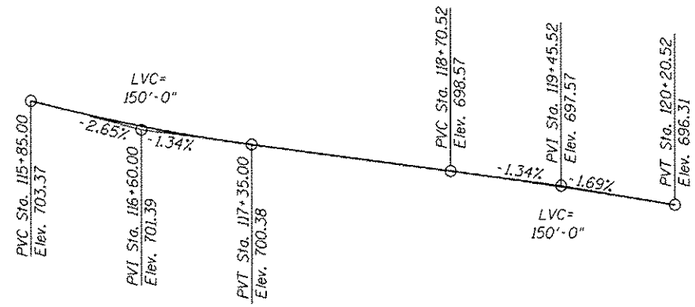


LOCATION SKETCH



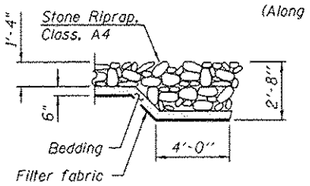
ELEVATION

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

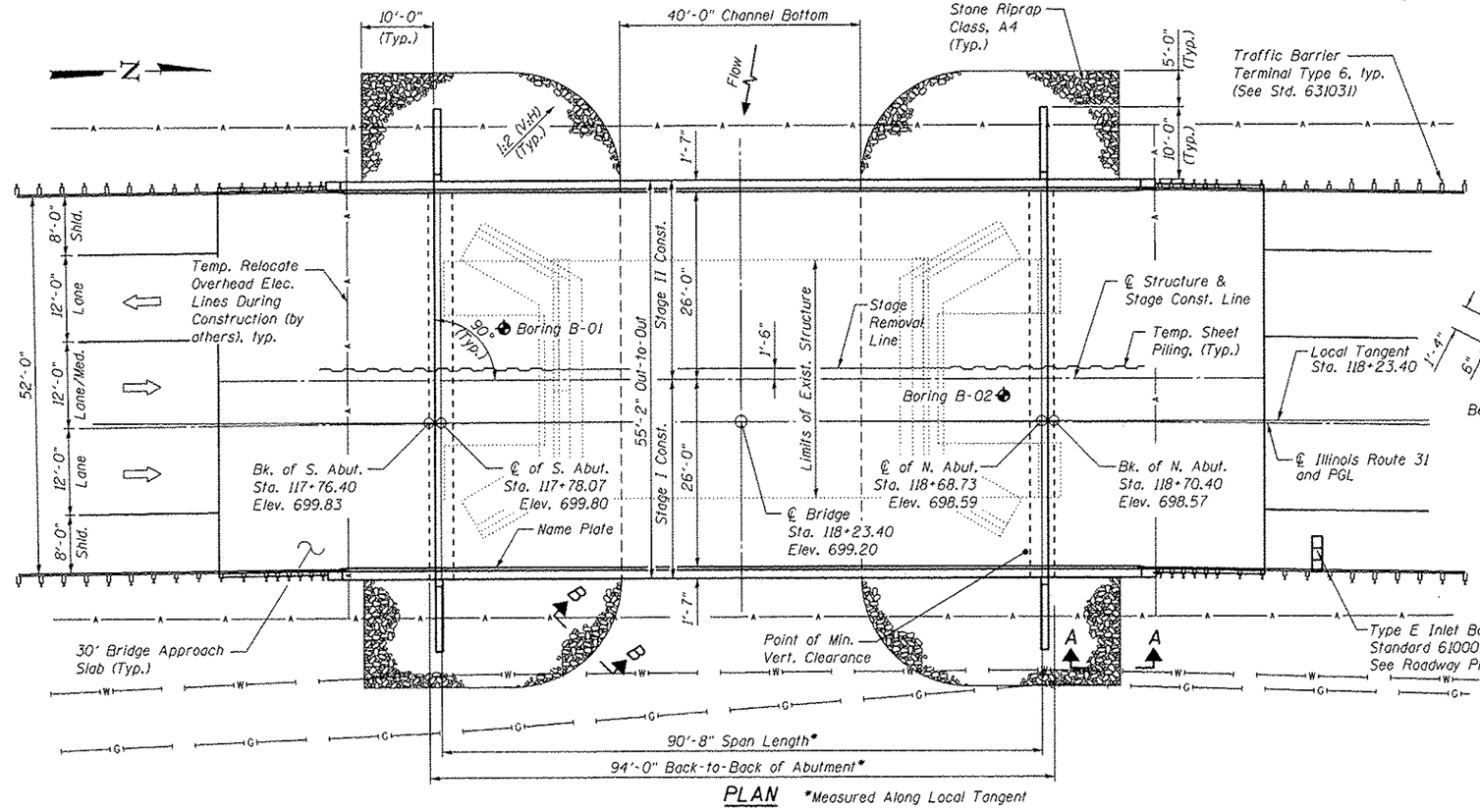


PROFILE GRADE

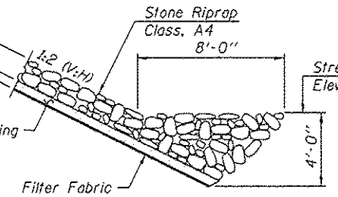
(Along P.G.L. IL Rte. 31)



SECTION B-B



PLAN *Measured Along Local Tangent



SECTION B-B

STATE OF ILLINOIS
JAMES M. HAMELKA
081-006116
LICENSED STRUCTURAL ENGINEER

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2016

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.087g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.157g
Soil Site Class = D

GENERAL PLAN & ELEVATION
IL RTE. 31 OVER FERSON CREEK
F.A.U. RT. 3887 - SEC. I-B-1
KANE COUNTY
STATION 118+23.40
STRUCTURE NO. 045-0333

COLLINS ENGINEERS 123 N. Wacker Dr. Suite 500 Chicago, IL 60606 Tele: (312) 704-9300 Fax: (312) 704-9310 www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000963

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 045-0333
SHEET NO. S1 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	68
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

INDEX OF DRAWINGS

GENERAL NOTES:

Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $^{3}/_{4}$-in. ϕ, holes $^{13}/_{16}$-in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 130,650 pounds (Grade 50).
= 15,430 pounds (Grade 36).

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

Reinforcement bars designated (E) shall be epoxy coated.

The Organic Zinc Rich Primer/ Epoxy/ Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be reddish brown, Munsell No. 2.5YR 3/4.

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

Channel Excavation shall include the excavation required from the existing ground line to the top of the proposed Riprap between the front faces of the Existing Abutments. A nominal quantity for Channel Excavtion has been included. Contractor shall be paid for the actual quantity of Channel Excavation required to install the Riprap. See Roadway Plans for quantity.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		777	777
Filter Fabric	Sq. Yd.		777	777
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		182	182
Concrete Structures	Cu. Yd.		97.0	97.0
Concrete Superstructure	Cu. Yd.	368.5		368.5
Bridge Deck Grooving	Sq. Yd.	846		846
Protective Coat	Sq. Yd.	982		982
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1,632		1,632
Reinforcement Bars, Epoxy Coated	Pound	75,890	18,380	94,270
Bar Splicers	Each	456	100	556
Furnishing Metal Shell Piles 14" x 0.25"	Foot		549	549
Driving Piles	Foot		549	549
Test Pile Metal Shells	Each		2	2
Pile Shoes	Each		20	20
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	32		32
Geocomposite Wall Drain	Sq. Yd.		144	144
Asbestos Bearing Pad Removal	Each	22		22
Temporary Sheet Piling	Sq. Ft.		2,500	2,500
Pipe Underdrains for Structures 4"	Foot		170	170
Granular Backfill for Structures	Cu. Yd.		236	236

WATERWAY INFORMATION

Drainage Area = 54.5 Sq. Mi. Proposed Low Grade Elev. 694.99 Ft. @ Sta. 121+50

Freq. Yr.	Flood	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	Main Channel	1880	394	439	689.42	1.42	0.38	690.84	689.80
	Overflow Structure	79		17					
	Total	1959	394	456					
50	Main Channel	3227	464	543	690.77	1.24	0.49	692.01	691.26
	Overflow Structure	259		50					
	Total	3486	464	593					
100	Main Channel	3697	485	576	691.19	1.10	0.26	692.29	691.45
	Overflow Structure	323		60					
	Total	4020	485	636					
200	Overtop	5020	519		691.81	0.97		692.78	
500	Main Channel	5631	567	712	692.68	1.44	0.76	694.12	693.44
	Overflow Structure	799		96					
	Total	6430	567	808					

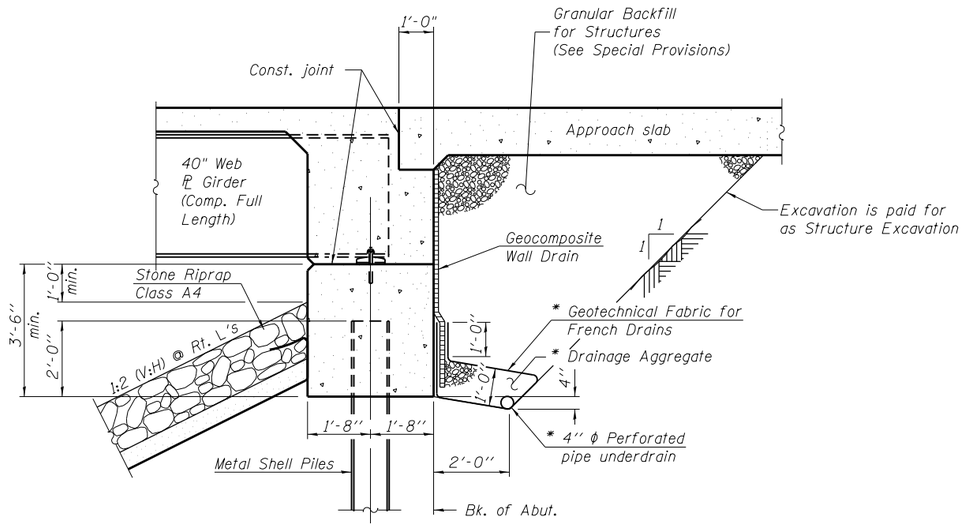
10-Year Velocity through Proposed Bridge = 2.2 fps.
2-Year Peak Discharge Rate = 1120 cfs.
2-Year Peak Elevation = 686.88
2-Year Bypass Opening = 125.35 ft.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	S. Abut.	N. Abut.
Q100	691.59	690.38
Q500	691.59	690.38

Station 118+23.40
Built 201_ by
State of Illinois
F.A.U. Rt. 3887 Sec. I-B-1
Loading HL-93
Structure No. 045-0333

NAME PLATE
(See Std. 515001)



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures 4". (See Special Provisions)

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).

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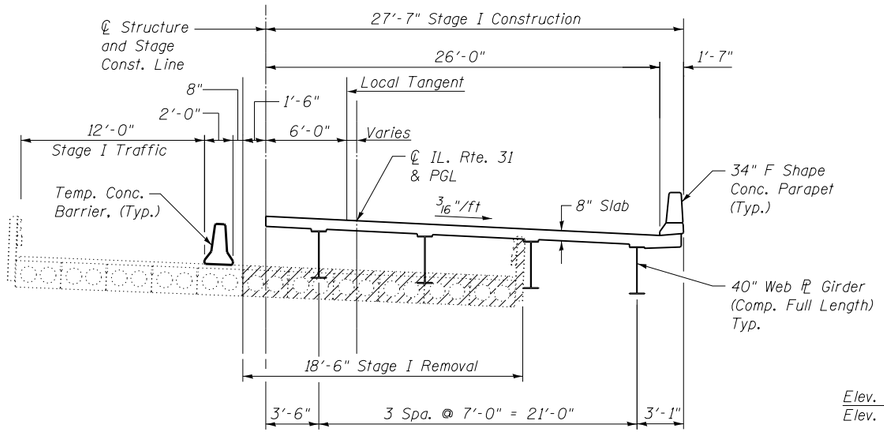
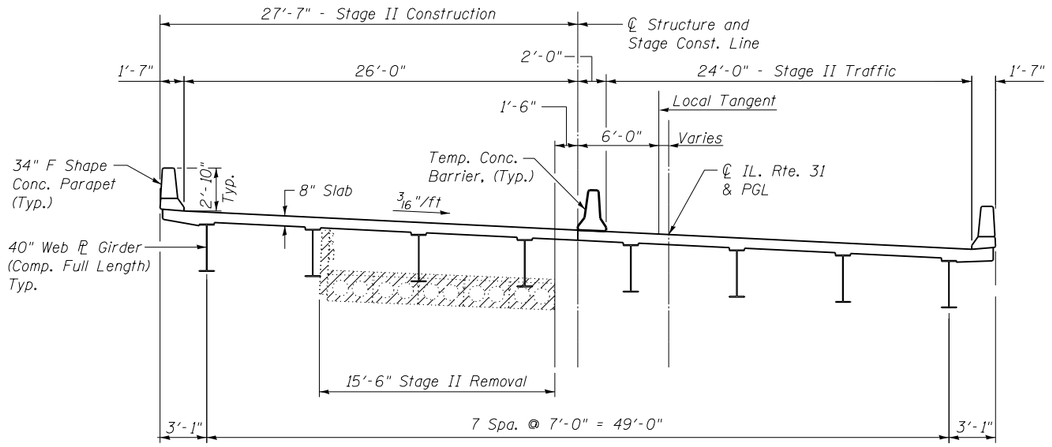
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIALS
STRUCTURE NO. 045-0333
SHEET NO. S2 OF S22 SHEETS

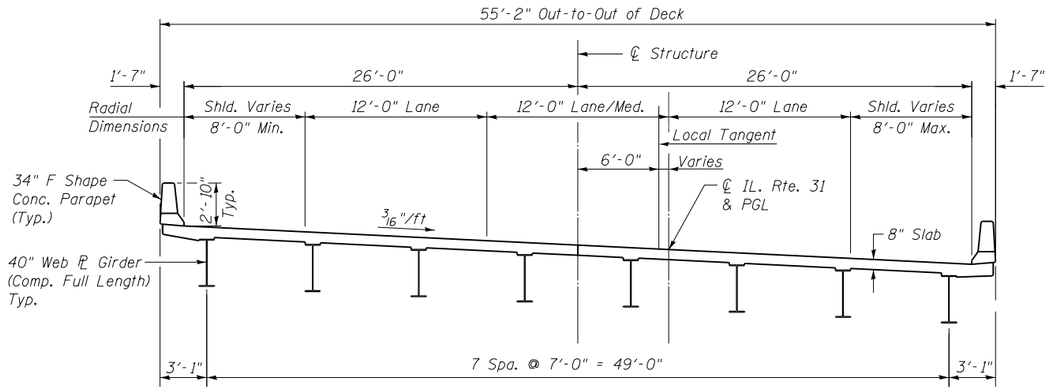
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	69
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



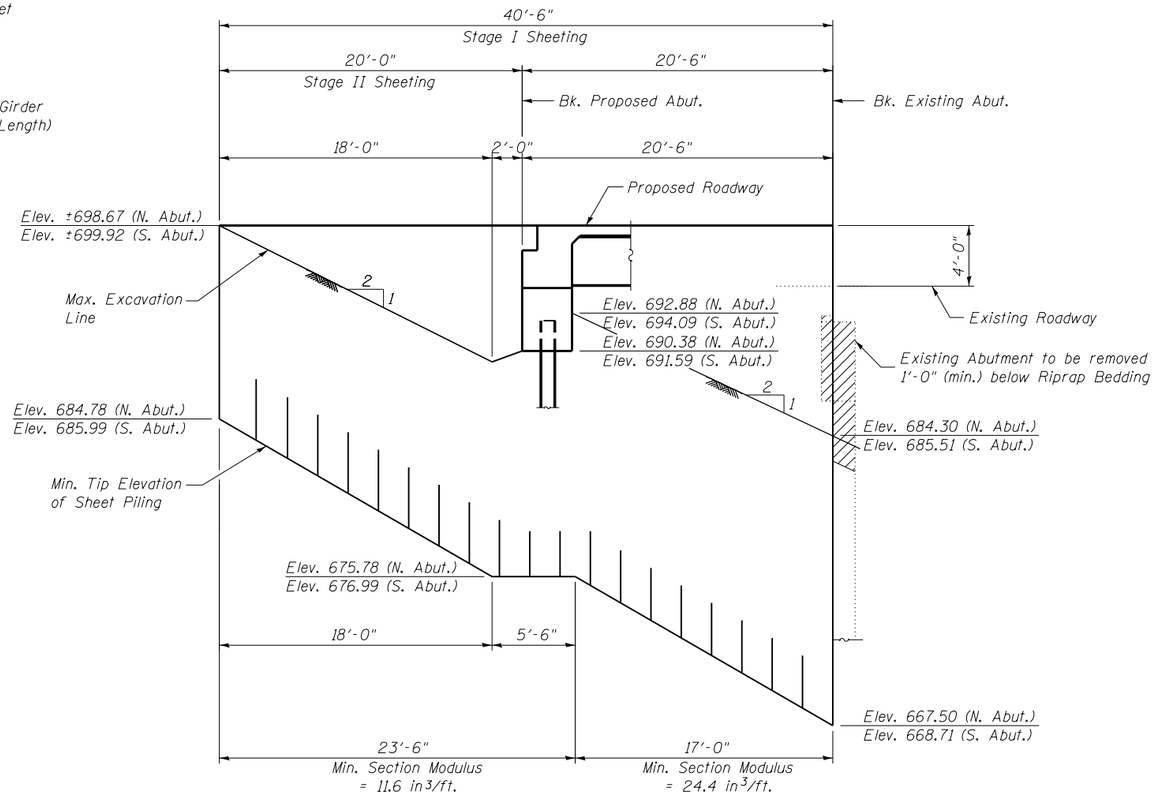
STAGE I



STAGE II



CROSS SECTION



TEMPORARY SHEET PILING AT ABUTMENTS

Notes:

All sections are looking north.

Hatched areas indicate Removal of Existing Structures.

See Sheet S2 of S22 for excavation limits paid for as Structure Excavation.

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.

The cost of removal and disposal of existing bridge railing, existing wearing surface, and existing expansive materials are included in Removal of Existing Structures.

See Recurring Special Provision Check Sheet #6 for asbestos bearing pad removal.

For quantity of Temporary Concrete Barrier, see Roadway Plans.

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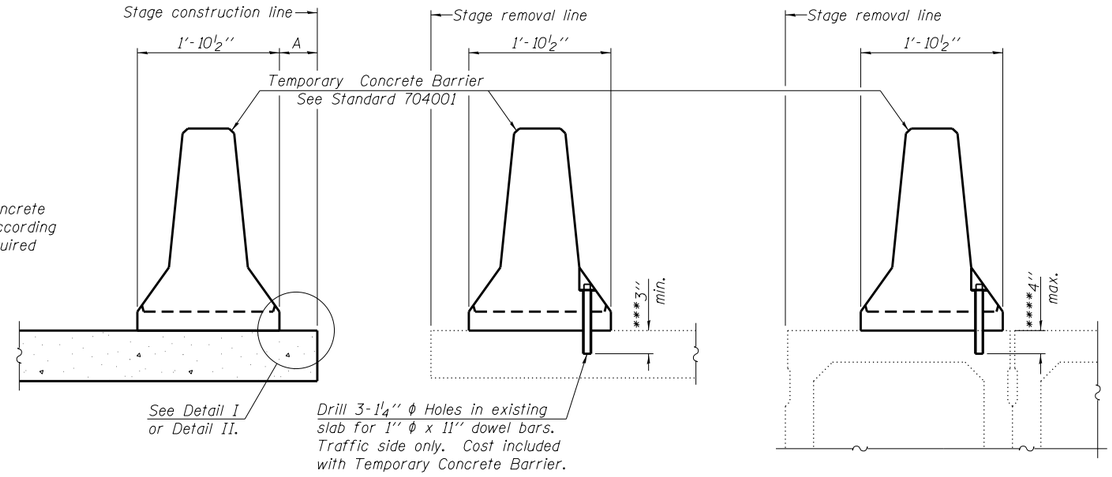
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S3 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	70
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB | EXISTING SLAB | EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7' 'x "W" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

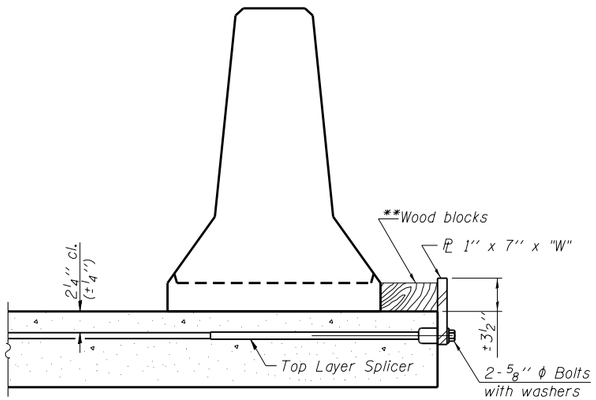
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

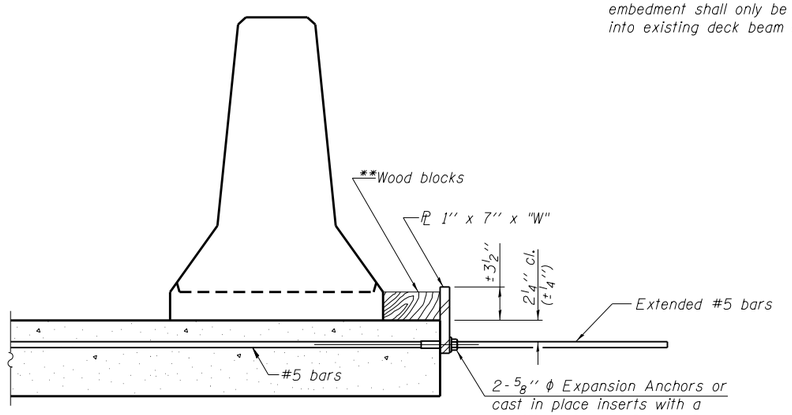
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



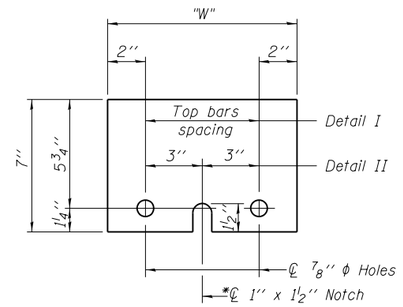
DETAIL I



DETAIL II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"



STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

R-27 7-1-10

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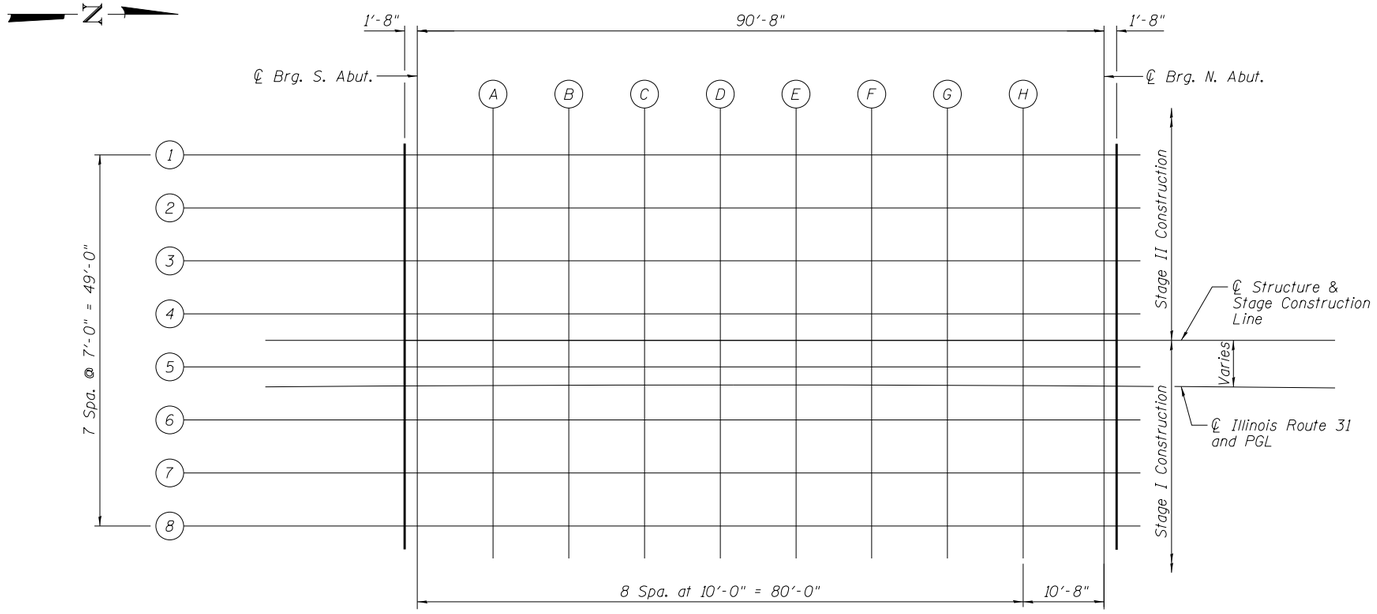
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 045-0333
SHEET NO. S4 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	71
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



PLAN

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.60	-30.66	700.30	700.30
℄ BRG. S. ABUT.	117+78.26	-30.65	700.28	700.28
A	117+88.22	-30.59	700.15	700.21
B	117+98.18	-30.55	700.01	700.14
C	118+08.13	-30.52	699.88	700.04
D	118+18.09	-30.50	699.75	699.93
E	118+28.05	-30.50	699.61	699.80
F	118+38.00	-30.52	699.48	699.65
G	118+47.96	-30.54	699.35	699.47
H	118+57.92	-30.59	699.22	699.29
℄ BRG. N. ABUT.	118+68.54	-30.65	699.08	699.08
BK. N. ABUT.	118+70.20	-30.66	699.05	699.05

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.56	-23.66	700.19	700.19
℄ BRG. S. ABUT.	117+78.22	-23.65	700.17	700.17
A	117+88.19	-23.59	700.04	700.11
B	117+98.15	-23.55	699.90	700.03
C	118+08.12	-23.52	699.77	699.94
D	118+18.08	-23.50	699.64	699.83
E	118+28.05	-23.50	699.50	699.70
F	118+38.02	-23.52	699.37	699.54
G	118+47.98	-23.54	699.24	699.37
H	118+57.95	-23.59	699.11	699.18
℄ BRG. N. ABUT.	118+68.58	-23.65	698.97	698.97
BK. N. ABUT.	118+70.24	-23.66	698.94	698.94

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.51	-16.66	700.09	700.09
℄ BRG. S. ABUT.	117+78.17	-16.65	700.06	700.06
A	117+88.15	-16.59	699.93	700.00
B	117+98.13	-16.55	699.80	699.92
C	118+08.10	-16.52	699.66	699.83
D	118+18.08	-16.50	699.53	699.72
E	118+28.06	-16.50	699.39	699.59
F	118+38.03	-16.52	699.26	699.44
G	118+48.01	-16.54	699.13	699.26
H	118+57.98	-16.59	699.00	699.07
℄ BRG. N. ABUT.	118+68.63	-16.65	698.86	698.86
BK. N. ABUT.	118+70.29	-16.66	698.83	698.83

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.46	-9.66	699.98	699.98
℄ BRG. S. ABUT.	117+78.13	-9.65	699.95	699.95
A	117+88.11	-9.59	699.82	699.89
B	117+98.10	-9.55	699.69	699.81
C	118+08.09	-9.52	699.55	699.72
D	118+18.07	-9.50	699.42	699.61
E	118+28.06	-9.50	699.29	699.48
F	118+38.05	-9.52	699.15	699.33
G	118+48.03	-9.54	699.02	699.15
H	118+58.02	-9.59	698.89	698.96
℄ BRG. N. ABUT.	118+68.67	-9.65	698.75	698.75
BK. N. ABUT.	118+70.34	-9.66	698.72	698.72

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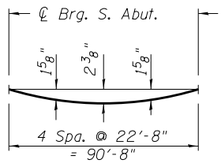
PLOT DATE =	CHECKED - AMS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS I
STRUCTURE NO. 045-0333
SHEET NO. S5 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	72
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

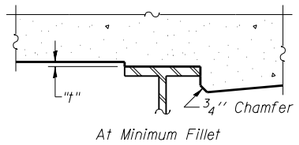


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Notes:

The above deflections are not to be used in the field if the engineer is working from the theoretical grade elevations adjusted for dead load deflections as shown below and on sheet S5 of S22.



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 S5 of S22. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below and on sheet S5 of S22, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

℄ STRUCTURE AND STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.44	-6.16	699.92	699.92
℄ BRG. S. ABUT.	117+78.11	-6.15	699.90	699.90
A	117+88.10	-6.09	699.77	699.83
B	117+98.09	-6.05	699.63	699.76
C	118+08.08	-6.02	699.50	699.67
D	118+18.07	-6.00	699.36	699.56
E	118+28.06	-6.00	699.23	699.43
F	118+38.05	-6.02	699.10	699.27
G	118+48.05	-6.04	698.96	699.09
H	118+58.04	-6.09	698.83	698.90
℄ BRG. N. ABUT.	118+68.69	-6.15	698.69	698.69
BK. N. ABUT.	118+70.36	-6.16	698.67	698.67

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.42	-2.66	699.87	699.87
℄ BRG. S. ABUT.	117+78.08	-2.65	699.85	699.85
A	117+88.08	-2.59	699.71	699.78
B	117+98.08	-2.55	699.58	699.70
C	118+08.07	-2.52	699.44	699.61
D	118+18.07	-2.50	699.31	699.50
E	118+28.06	-2.50	699.18	699.37
F	118+38.06	-2.52	699.04	699.22
G	118+48.06	-2.54	698.91	699.04
H	118+58.05	-2.59	698.78	698.85
℄ BRG. N. ABUT.	118+68.72	-2.65	698.64	698.64
BK. N. ABUT.	118+70.38	-2.66	698.61	698.61

℄ ILLINOIS ROUTE 31 & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.40	0.00	699.83	699.83
℄ BRG. S. ABUT.	117+78.07	0.00	699.80	699.80
A	117+88.07	0.00	699.67	699.74
B	117+98.07	0.00	699.54	699.66
C	118+08.07	0.00	699.40	699.57
D	118+18.07	0.00	699.27	699.46
E	118+28.07	0.00	699.14	699.33
F	118+38.07	0.00	699.00	699.18
G	118+48.07	0.00	698.87	699.00
H	118+58.07	0.00	698.74	698.81
℄ BRG. N. ABUT.	118+68.73	0.00	698.59	698.59
BK. N. ABUT.	118+70.40	0.00	698.57	698.57

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.37	4.34	699.76	699.76
℄ BRG. S. ABUT.	117+78.04	4.35	699.74	699.74
A	117+88.04	4.41	699.60	699.67
B	117+98.05	4.45	699.47	699.60
C	118+08.06	4.48	699.33	699.50
D	118+18.06	4.50	699.20	699.39
E	118+28.07	4.50	699.07	699.26
F	118+38.08	4.48	698.93	699.11
G	118+48.08	4.46	698.80	698.93
H	118+58.09	4.41	698.67	698.74
℄ BRG. N. ABUT.	118+68.76	4.35	698.53	698.53
BK. N. ABUT.	118+70.43	4.34	698.50	698.50

GIRDER 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.32	11.34	699.65	699.65
℄ BRG. S. ABUT.	117+77.99	11.35	699.63	699.63
A	117+88.01	11.41	699.49	699.56
B	117+98.03	11.45	699.36	699.49
C	118+08.04	11.48	699.23	699.40
D	118+18.06	11.50	699.09	699.29
E	118+28.07	11.50	698.96	699.15
F	118+38.09	11.48	698.82	699.00
G	118+48.11	11.46	698.69	698.82
H	118+58.12	11.41	698.56	698.63
℄ BRG. N. ABUT.	118+68.81	11.35	698.42	698.42
BK. N. ABUT.	118+70.48	11.34	698.39	698.39

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. S. ABUT.	117+76.38	18.34	699.54	699.54
℄ BRG. S. ABUT.	117+77.95	18.35	699.52	699.52
A	117+87.97	18.41	699.38	699.45
B	117+98.00	18.45	699.25	699.37
C	118+08.08	18.48	699.12	699.28
D	118+18.05	18.50	698.98	699.17
E	118+28.08	18.50	698.85	699.03
F	118+38.11	18.48	698.71	698.88
G	118+48.13	18.46	698.58	698.71
H	118+58.16	18.41	698.45	698.52
℄ BRG. N. ABUT.	118+68.85	18.35	698.31	698.31
BK. N. ABUT.	118+70.52	18.34	698.28	698.28

E-S

7-1-10

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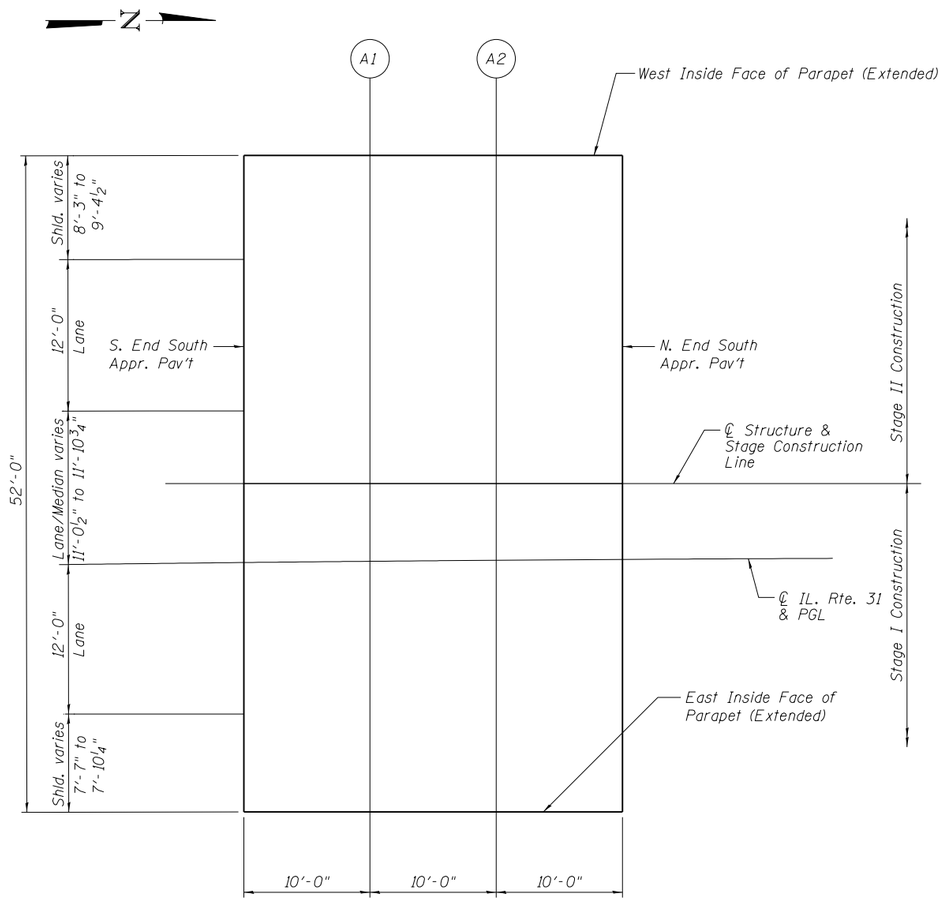
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS II
STRUCTURE NO. 045-0333
SHEET NO. S6 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	73
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		



PLAN

WEST INSIDE FACE OF PARAPPET (EXTENDED)

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	117+47.75	-32.41	700.72
A1	117+57.70	-32.31	700.58
A2	117+67.66	-32.22	700.45
N. End South Appr. Pav't	117+77.61	-32.15	700.31

℄ STRUCTURE & STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	117+47.47	-6.41	700.31
A1	117+57.46	-6.31	700.18
A2	117+67.45	-6.22	700.04
N. End South Appr. Pav't	117+77.44	-6.15	699.91

℄ ILLINOIS ROUTE 31 & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	117+47.40	0.00	700.21
A1	117+57.40	0.00	700.08
A2	117+67.40	0.00	699.95
N. End South Appr. Pav't	117+77.40	0.00	699.81

EAST INSIDE FACE OF PARAPPET (EXTENDED)

Location	Station	Offset	Theoretical Grade Elevations
S. End South Appr. Pav't	117+47.19	19.59	699.91
A1	117+57.21	19.69	699.78
A2	117+67.24	19.78	699.64
N. End South Appr. Pav't	117+77.27	19.85	699.51

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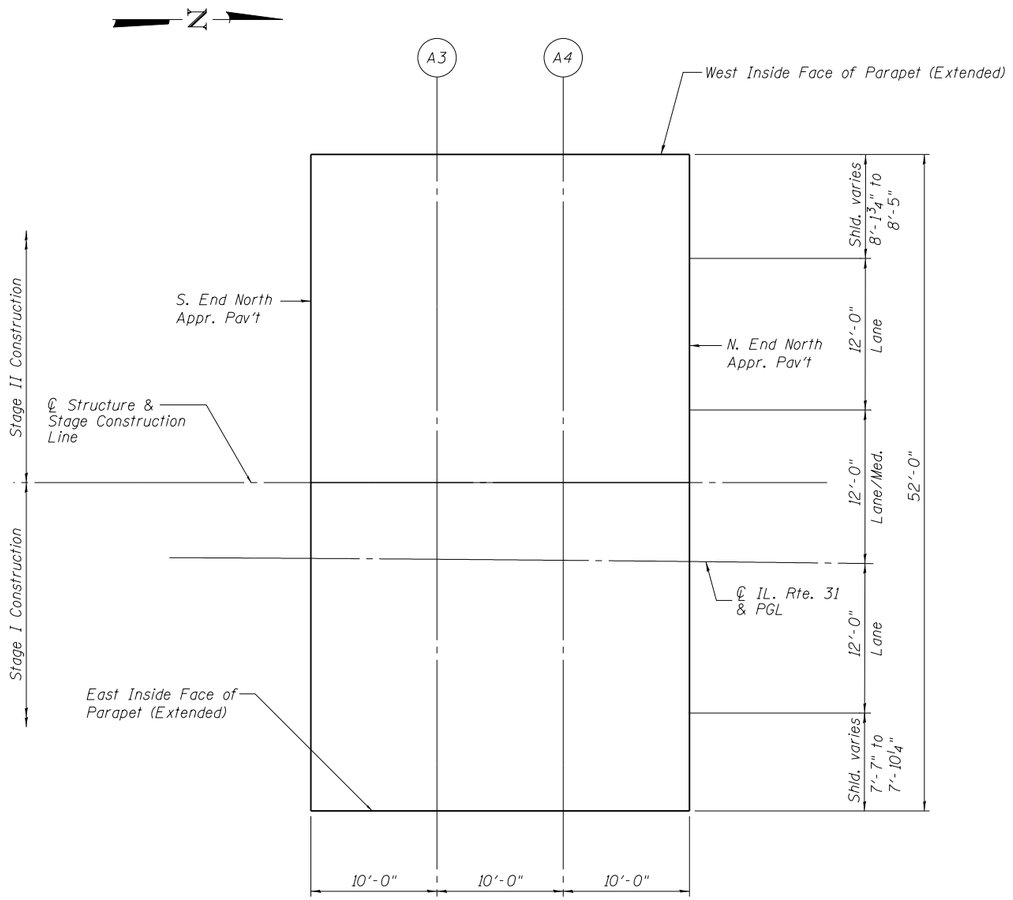
PLOT DATE =	CHECKED - AMS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-0333
SHEET NO. S7 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	74
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



PLAN

WEST INSIDE FACE OF PARAPPET (EXTENDED)

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	118+69.19	-32.15	699.09
A3	118+79.14	-32.22	698.96
A4	118+89.10	-32.31	698.82
N. End North Appr. Pav't	118+99.05	-32.41	698.69

℄ STRUCTURE & STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	118+69.36	-6.15	698.68
A3	118+79.35	-6.22	698.55
A4	118+89.34	-6.31	698.41
N. End North Appr. Pav't	118+99.33	-6.41	698.28

℄ ILLINOIS ROUTE 31 & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	118+69.40	0.00	698.58
A3	118+79.40	0.00	698.45
A4	118+89.40	0.00	698.31
N. End North Appr. Pav't	118+99.40	0.00	698.18

EAST INSIDE FACE OF PARAPPET (EXTENDED)

Location	Station	Offset	Theoretical Grade Elevations
S. End North Appr. Pav't	118+69.40	19.85	698.27
A3	118+79.56	19.78	698.14
A4	118+89.59	19.69	698.00
N. End North Appr. Pav't	118+99.61	19.59	697.87

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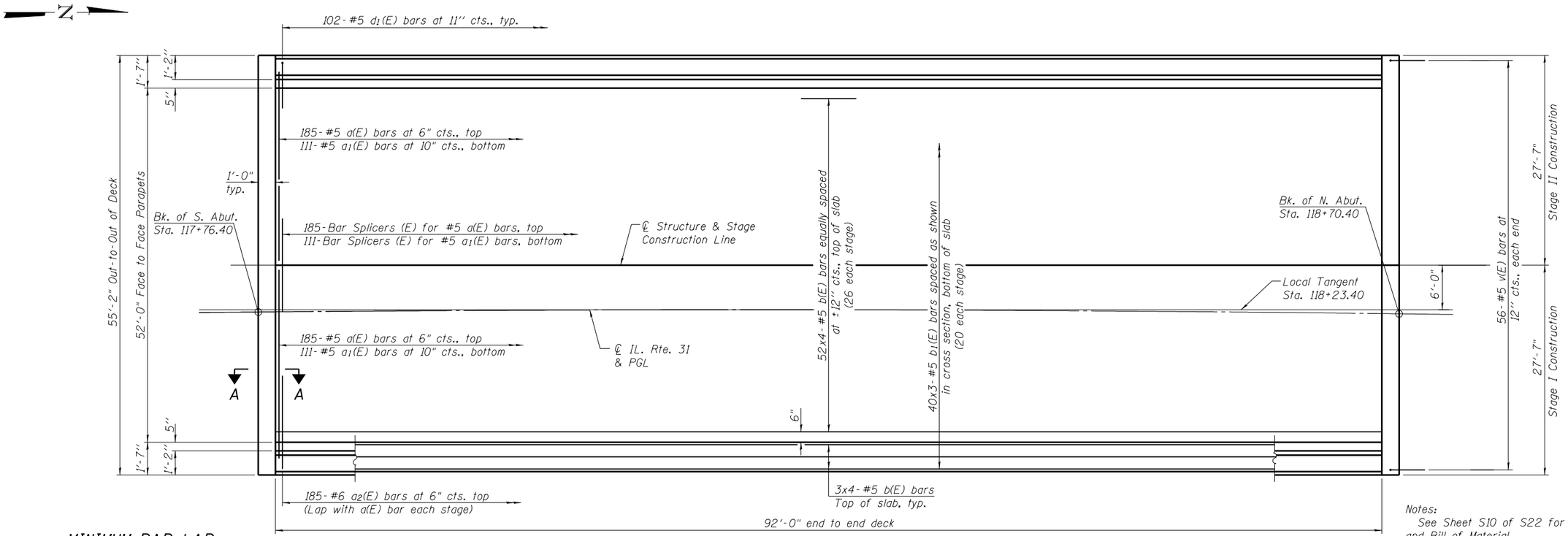
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-0333
SHEET NO. S8 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	75
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		

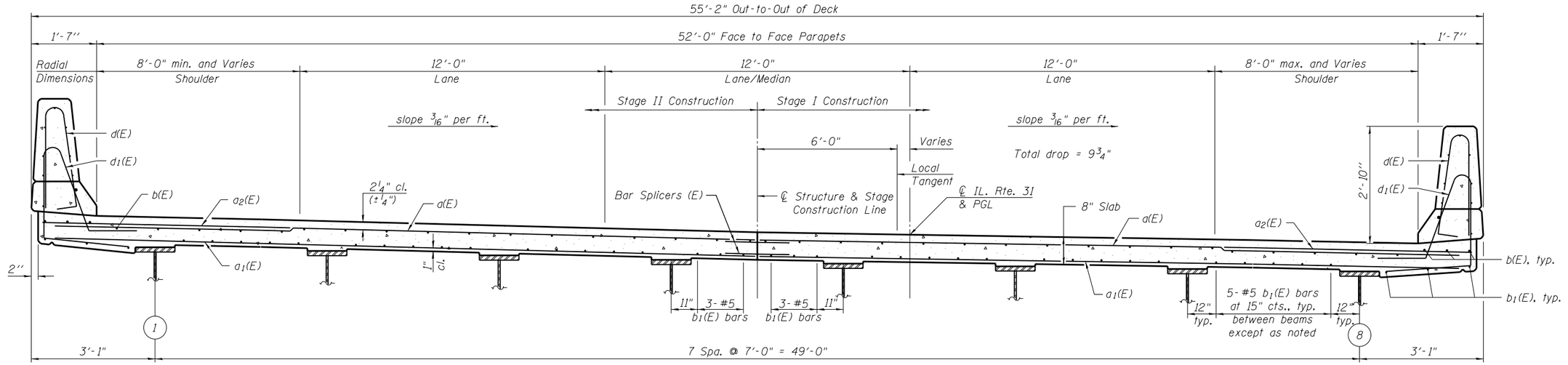


MINIMUM BAR LAP

#5 bar = 2'-7"

PLAN

Notes:
See Sheet S10 of S22 for superstructure details and Bill of Material.
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet S10 of S22 for parapet reinforcement.
See Sheet S20 of S22 for bar splicer details.



CROSS SECTION

(Looking North)

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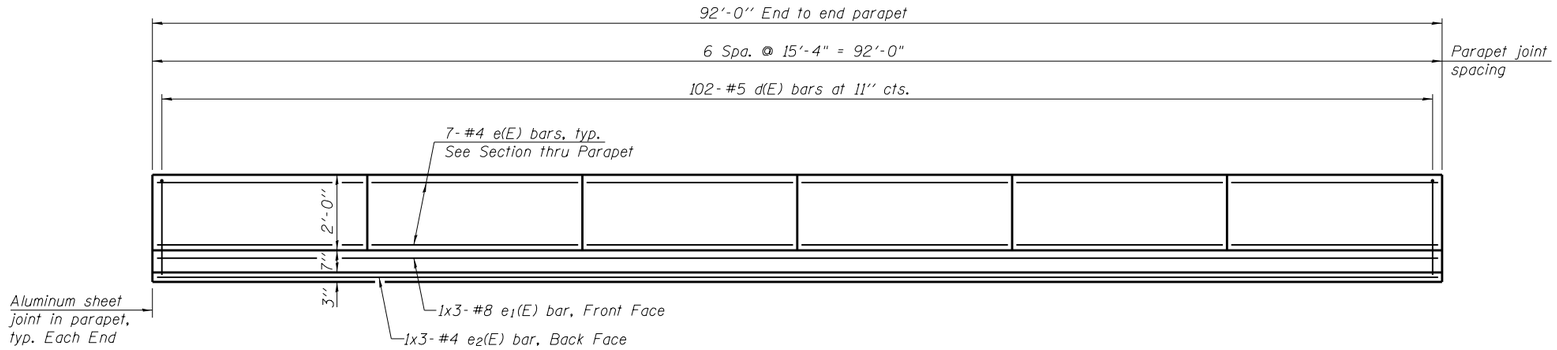
SUPERSTRUCTURE
STRUCTURE NO. 045-0333
SHEET NO. S9 OF S22 SHEETS

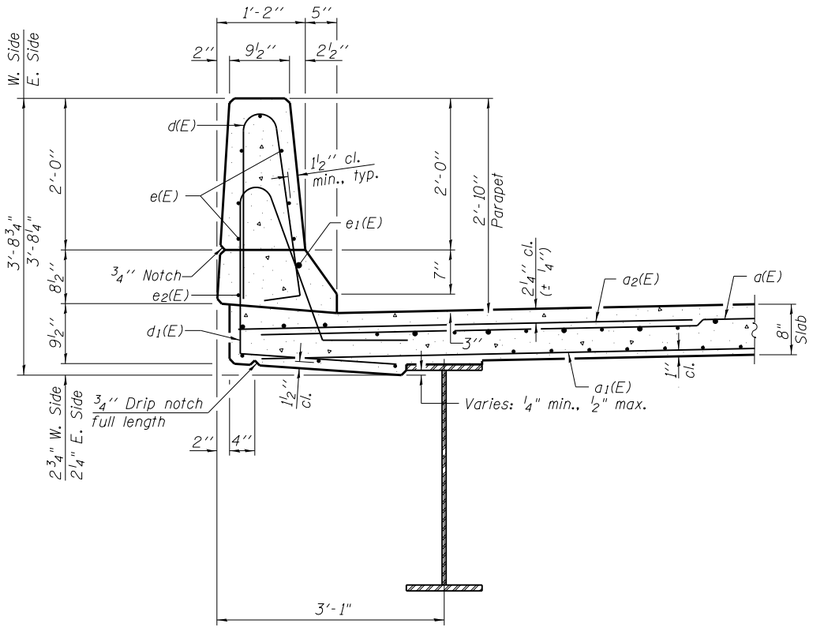
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	76
		CONTRACT NO. 60M81		
		ILLINOIS FED. AID PROJECT		



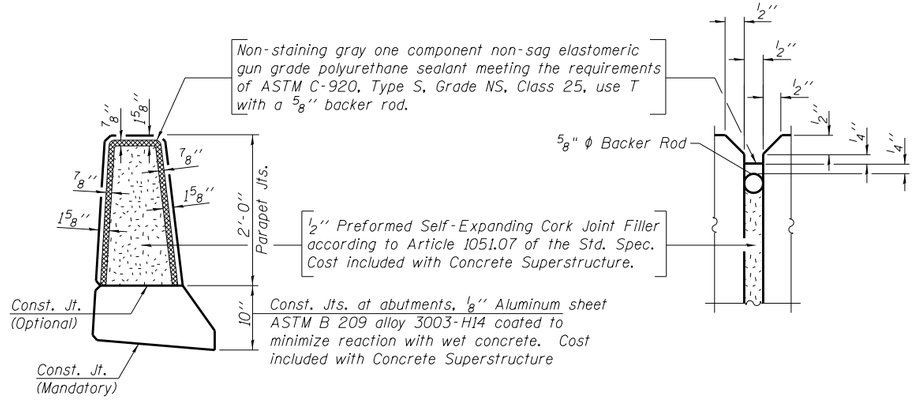
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



SECTION THRU PARAPET



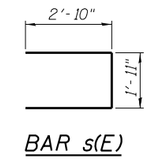
PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

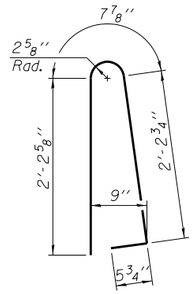
Bar	No.	Size	Length	Shape
d(E)	370	#5	26'-11"	——
d_1(E)	222	#5	26'-9"	——
d_2(E)	370	#6	6'-6"	——
b(E)	232	#5	25'-0"	——
b_1(E)	126	#5	32'-5"	——
d(E)	204	#5	5'-7"	⌊
d_1(E)	204	#5	7'-9"	L
e(E)	84	#4	15'-0"	——
e_1(E)	6	#8	34'-2"	——
e_2(E)	6	#4	32'-1"	——
m(E)	20	#6	27'-4"	——
m_1(E)	48	#6	6'-9"	——
m_2(E)	16	#6	2'-10"	——
m_3(E)	64	#5	4'-0"	——
m_4(E)	16	#6	3'-3"	——
s(E)	112	#5	7'-7"	⊐
s_1(E)	96	#5	11'-0"	⊔
v(E)	112	#5	3'-1"	⌐

Reinforcement Bars, Epoxy Coated	Pound	38,950
Concrete Superstructure	Cu. Yd.	196.1
Bridge Deck Grooving	Sq. Yd.	512
Protective Coat	Sq. Yd.	610

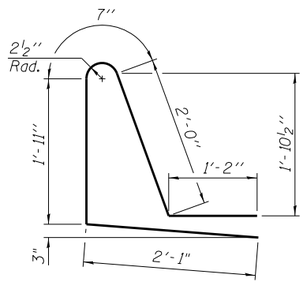
Bars indicated thus 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.



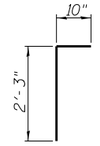
BAR s(E)



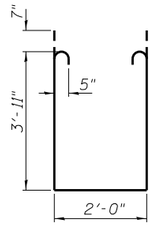
BAR d(E)



BAR d_1(E)



BAR v(E)



BAR s_1(E)

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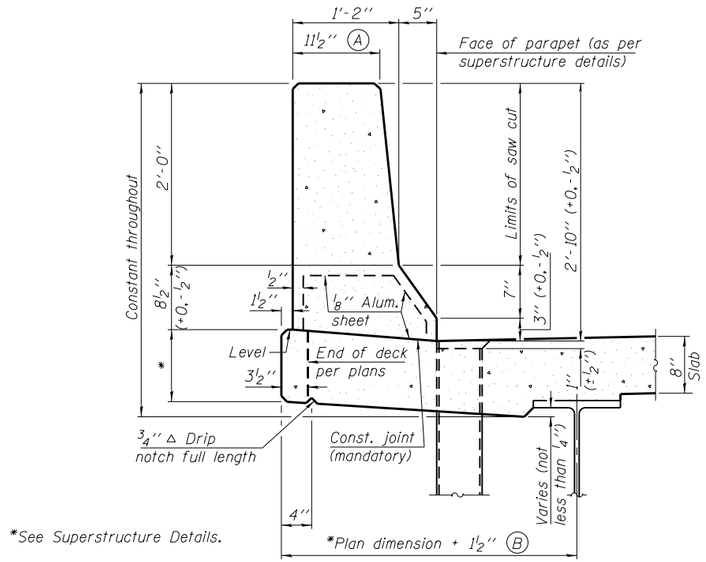
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

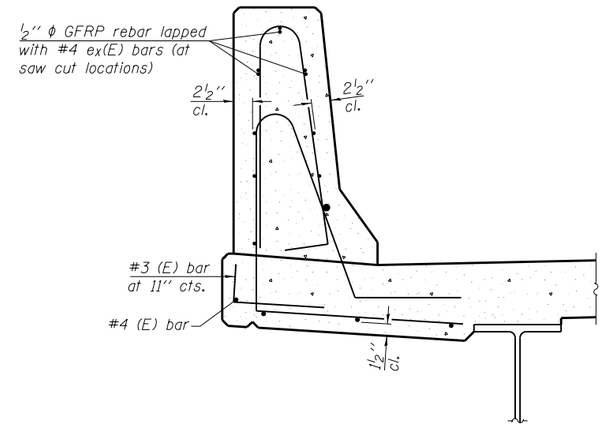
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S10 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	77
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



34" F SHAPE PARAPET SECTION

(Showing dimensions)



SECTION

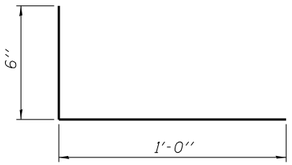
(34" parapet shown - 42" parapet similar)
(Showing reinforcement clearances for slip forming and additional reinforcement bars)

GENERAL NOTES

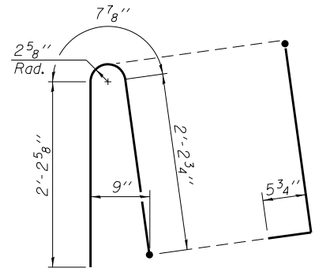
All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B = 0.0165 cu. yds./ft. for 34" parapet or = 0.0223 cu. yds./ft. for 42" parapet.

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

Steel superstructure shown. Other superstructure types similar.

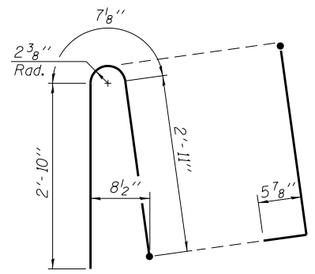


#3 (E) BAR



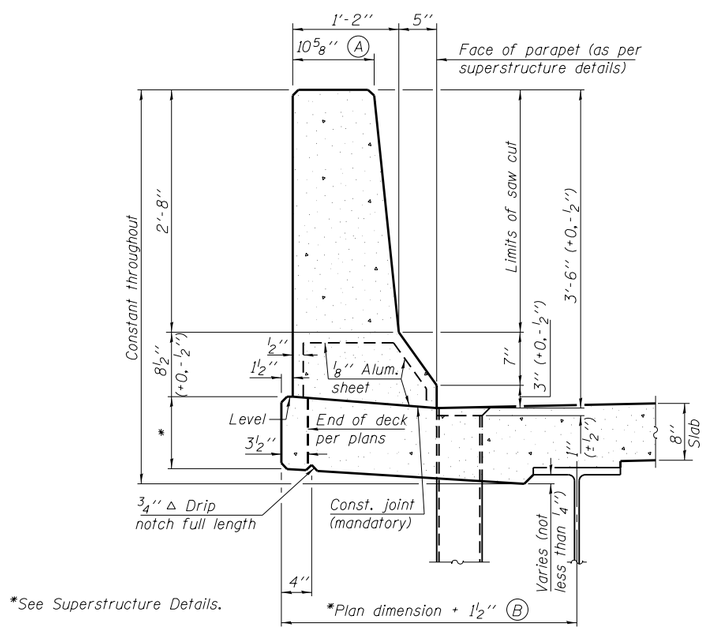
ALTERNATE BAR d(E)

(For 34" parapet when conduit is present)



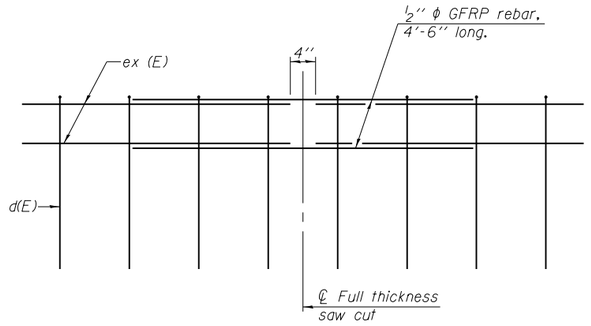
ALTERNATE BAR d(E)

(For 42" parapet when conduit is present)



42" F SHAPE PARAPET SECTION

(Showing dimensions)



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)

SFP 34-42

8-16-12

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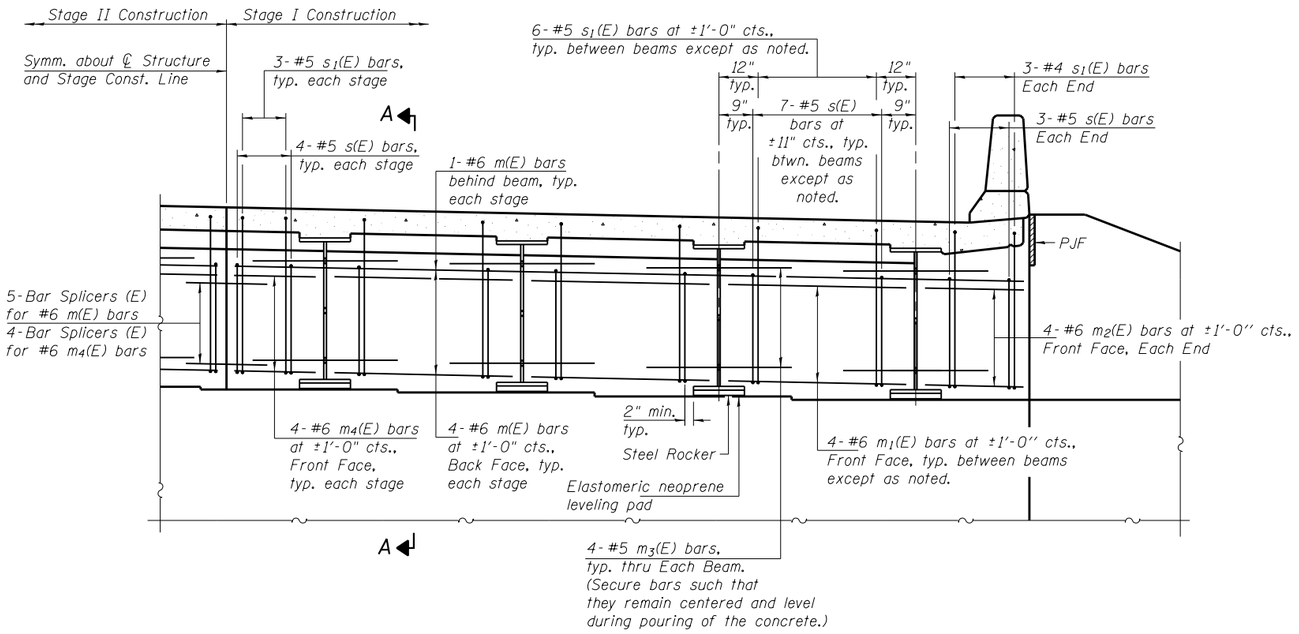
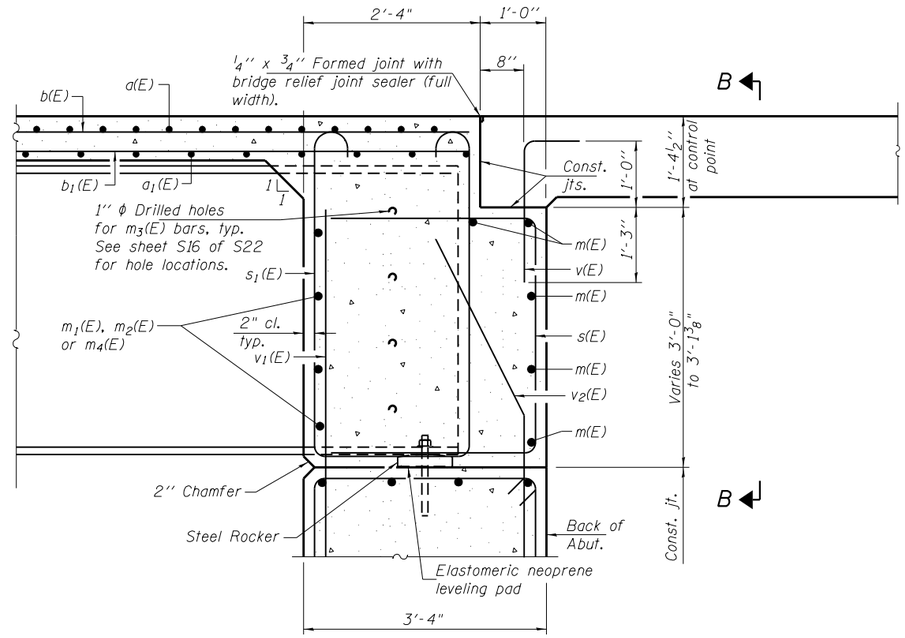
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 045-0333
SHEET NO. S11 OF S22 SHEETS

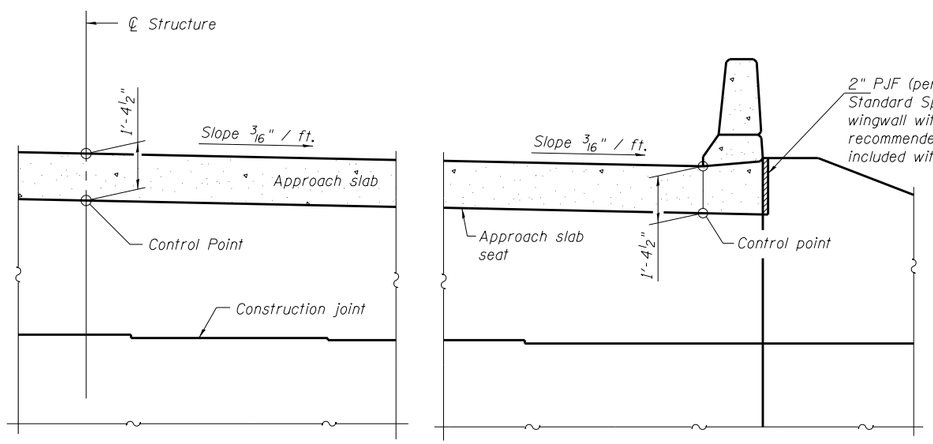
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	78
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



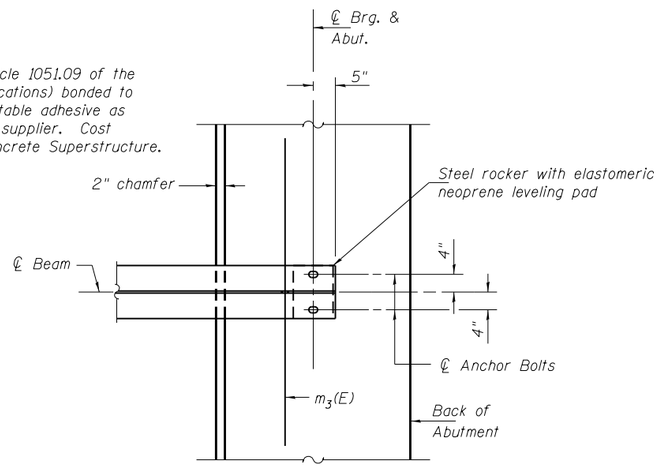
DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A



SECTION B-B



PARTIAL PLAN AT ABUTMENT
(Showing bottom flange of beam)

Notes:

Reinforcement bars in diaphragm are included in the Superstructure Bill of Material on sheet S10 of S22.

Concrete in diaphragm is included with Concrete Superstructure on sheet S10 of S22.

For details of bars s(E), s1(E) and v(E) see sheet S10 of S22.

The approach slab seat shall have a constant slope determined from the control points shown.

For bearing details see sheet S16 of S22.

For bar splicer details see sheet S20 of S22.

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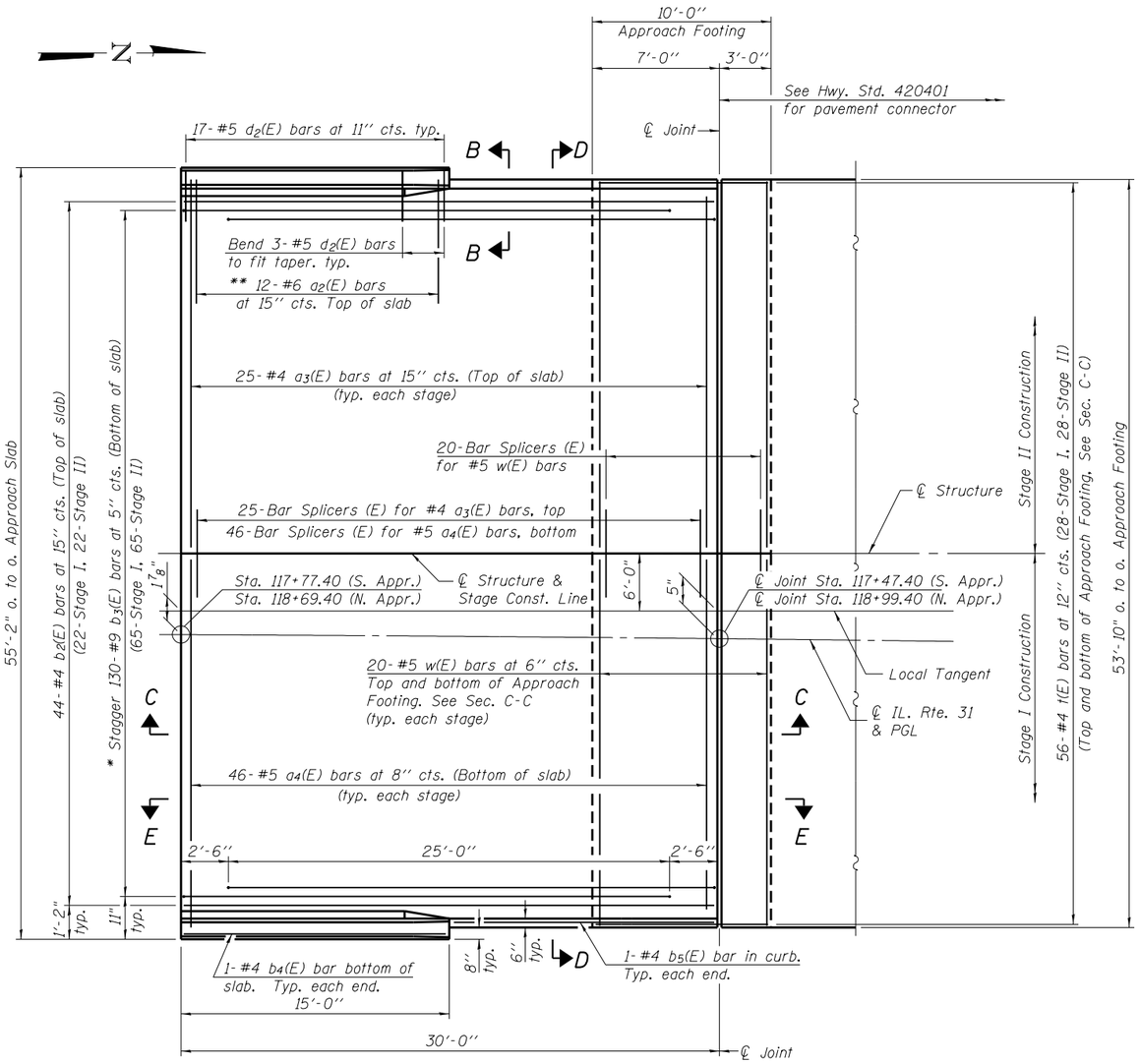
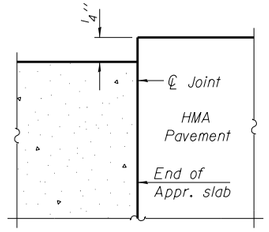
DIAPHRAGM DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S12 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	79
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

Notes:
See sheet S14 of S22 for Sections C-C & D-D and View E-E.
a_3(E) and a_4(E) bar spacings measured along Local Tangent.
North Approach shown, South Approach opposite hand.

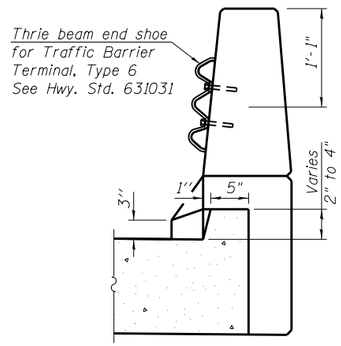


PLAN



FLEXIBLE PAVEMENT

DETAIL A



VIEW B-B

* Tilt #9 b_3(E) bars as required to maintain clearance.
** Space between a_3(E) bars, typ. ea. parapet.

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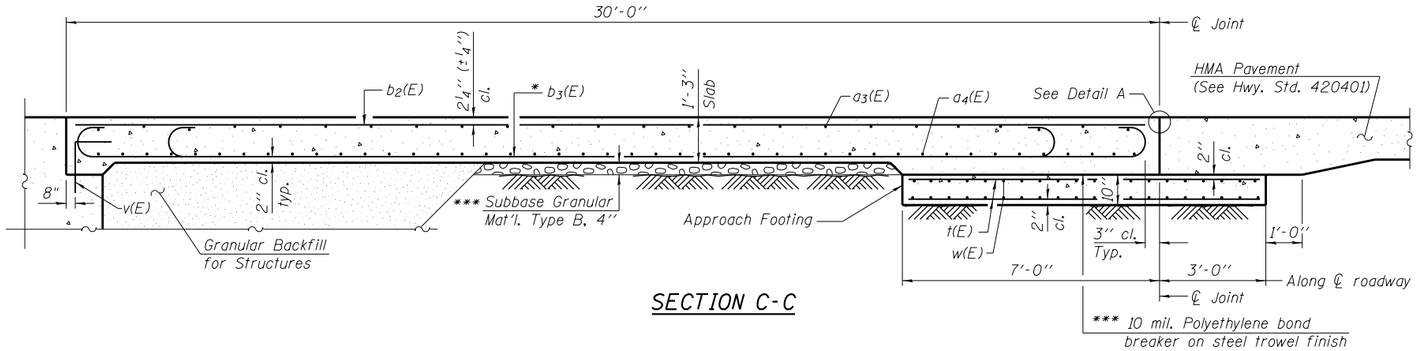
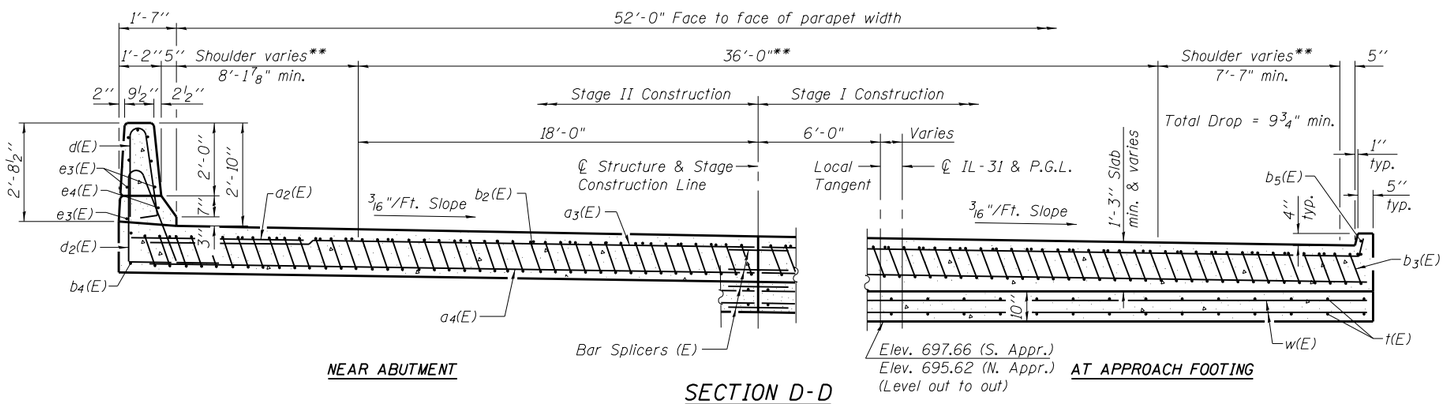
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S13 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	80
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		



SECTION C-C

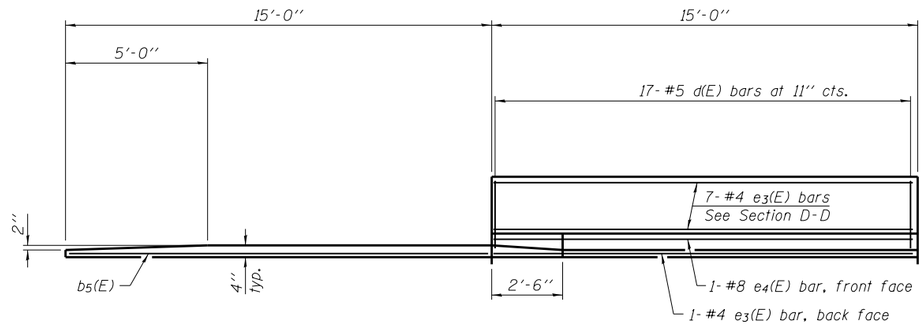


NEAR ABUTMENT

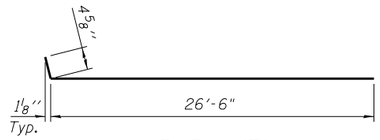
AT APPROACH FOOTING

SECTION D-D

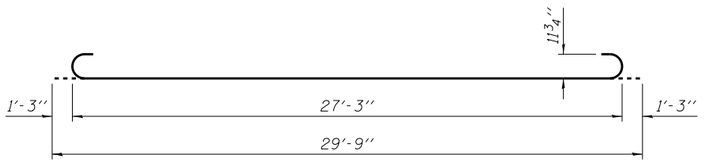
(See Plan for dimensions not shown)
(Looking North)



VIEW E-E



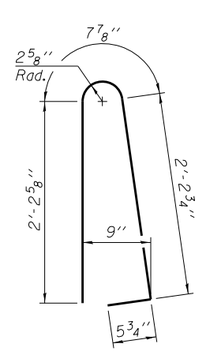
BAR a3(E)



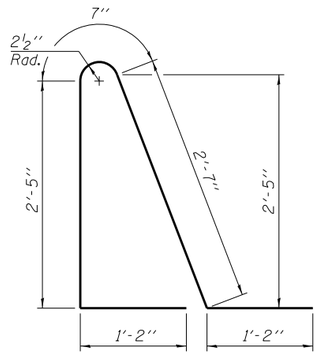
BAR b3(E)

Notes:

See sheet S13 of S22 for Detail A and View B-B.
Approach slab and parapet 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 S10 of S22.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet S20 of S22.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet S2 of S22.
For additional parapet details, see sheet S10 of S22.



BAR d(E)



BAR d2(E)

* Tilt #9 b3(E) bars as required to maintain clearance.

** Measured Radially.

*** Cost included with Concrete Superstructure.

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-6"	
a3(E)	100	#4	26'-11"	
a4(E)	184	#5	26'-7"	
b2(E)	88	#4	29'-8"	
b3(E)	260	#9	29'-9"	
b4(E)	4	#4	14'-8"	
b5(E)	4	#4	14'-4"	
d(E)	68	#5	5'-7"	
d2(E)	68	#5	7'-11"	
e3(E)	32	#4	14'-8"	
e4(E)	4	#8	14'-8"	
t(E)	224	#4	9'-8"	
w(E)	160	#5	26'-7"	
Concrete Superstructure			Cu. Yd.	172.4
Concrete Structures			Cu. Yd.	34.2
Reinforcement Bars, Epoxy Coated			Pound	42,840
Protective Coat			Sq. Yd.	372
Bridge Deck Grooving			Sq. Yd.	334

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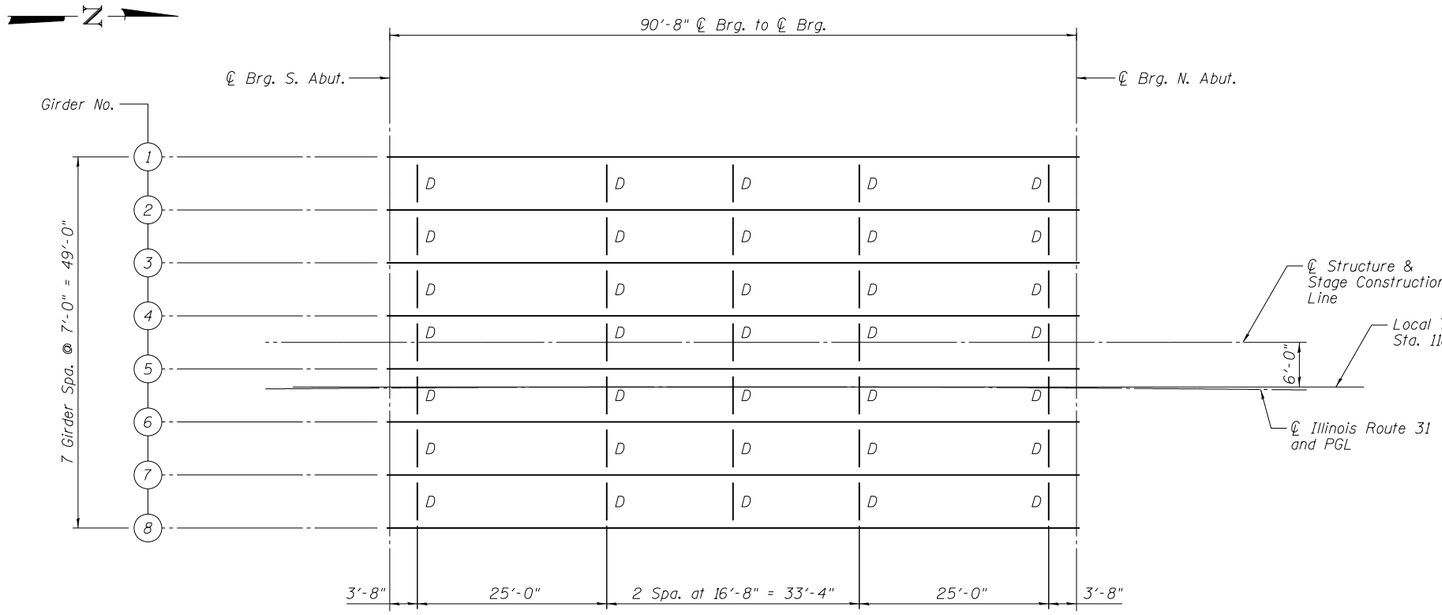
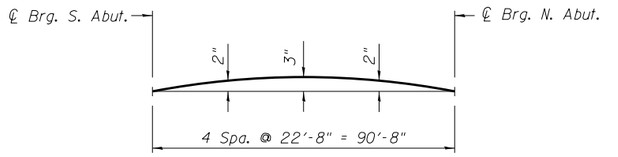
BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S14 OF S22 SHEETS

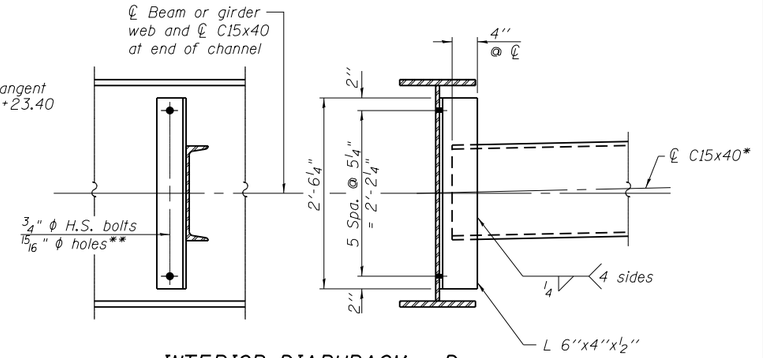
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	81
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN



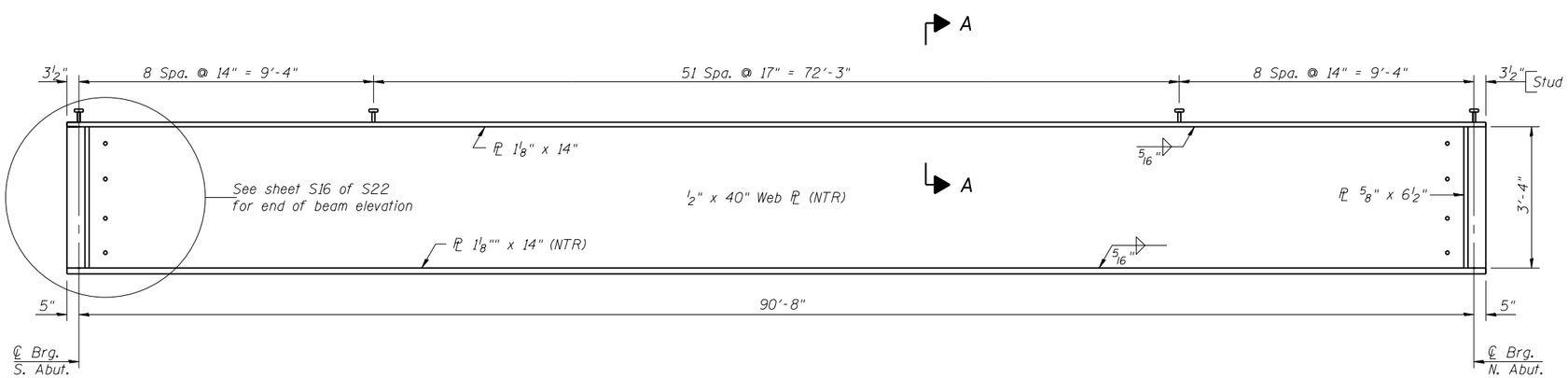
CAMBER DIAGRAM



INTERIOR DIAPHRAGM - D

* Alternate channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40 sections. The alternate, if utilized, shall be provided at no extra cost to the Department.

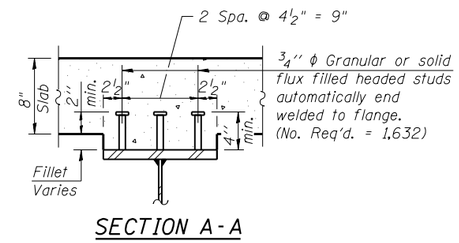
** Slotted holes required for interior diaphragm connection angles on Girders 4 & 5 to accommodate the differential deflection between Stage I and Stage II deck pours. Bolts in slots shall be finger tight until the Stage II pour is complete, and position slots so bolts start at one end with no concrete load and finish near the opposite end under deck load.



GIRDER ELEVATION

"NTR" denotes plates to which notch toughness requirements are applicable.

Note:
Two hardened washers required for each set of oversized holes.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
Girder web and flange plates shall be AASHTO M270 Gr. 50.



SECTION A-A

TOP OF WEB ELEVATIONS

(For Fabrication Only)

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8
℄ Brg. S. Abut.	699.45	699.34	699.23	699.12	699.01	698.91	698.80	698.69
℄ Brg. N. Abut.	698.24	698.13	698.02	697.91	697.80	697.69	697.58	697.47

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STRUCTURAL STEEL DETAILS I
STRUCTURE NO. 045-0333
SHEET NO. S15 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	82
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

INTERIOR GIRDER MOMENT TABLE		
		0.5 Span
I_s	(in^4)	15,989
$I_{c(n)}$	(in^4)	34,676
$I_{c(3n)}$	(in^4)	26,034
S_s	(in^3)	757
$S_{c(n)}$	(in^3)	978
$S_{c(3n)}$	(in^3)	901
DC1	(k/')	0.92
M_{DC1}	('k)	953
DC2	(k/')	0.12
M_{DC2}	('k)	123
DW	(k/')	0.35
M_{DW}	('k)	359
M_{L+IM}	('k)	1,307
M_u (Strength I)	('k)	4,171
$\phi_f M_n$	('k)	4,898
f_s DC1	(ksi)	15.1
f_s DC2	(ksi)	1.6
f_s DW	(ksi)	4.8
f_s (L+IM)	(ksi)	16.0
f_s (Service II)	(ksi)	42.4
$0.95R_hF_{yf}$	(ksi)	47.5
f_s (Total)(Strength I)	(ksi)	
$\phi_f F_n$	(ksi)	
V_r	(k)	19.5

INTERIOR GIRDER REACTION TABLE		
		Abutment
R_{DC1}	(k)	43.2
R_{DC2}	(k)	5.4
R_{DW}	(k)	15.9
R_{L+IM}	(k)	84.4
R_{Total}	(k)	148.9

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) 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) due to long-term composite (superimposed) 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_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

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

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (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).
$M_{DC2} / S_{c(3n)}$

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).
$M_{DW} / S_{c(3n)}$

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

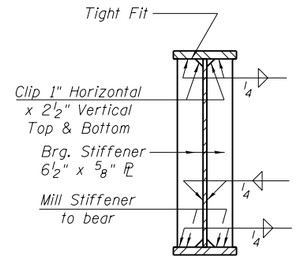
f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_{sL+IM}$

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

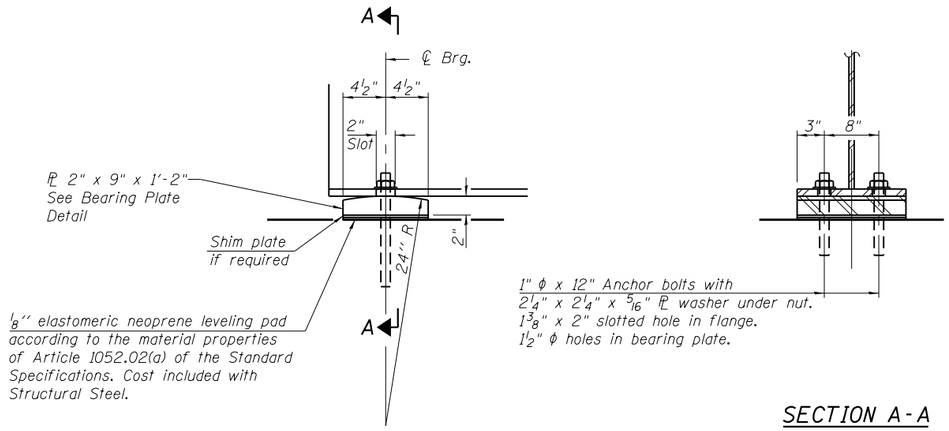
f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_{sL+IM}$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_r: Maximum factored shear range in span computed according to Article 6.10.10.

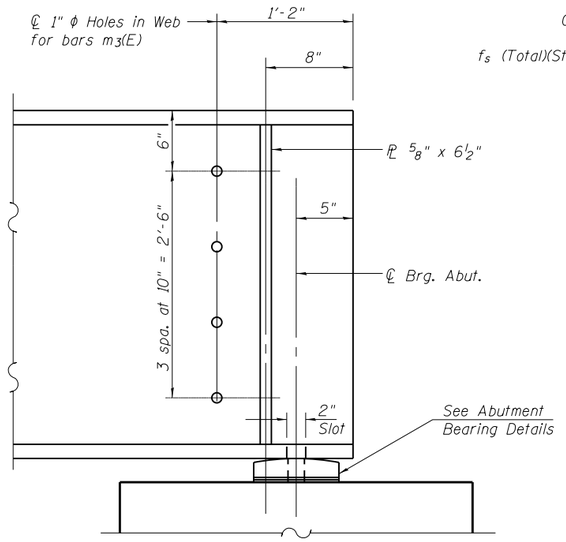


SECTION AT ABUTMENT

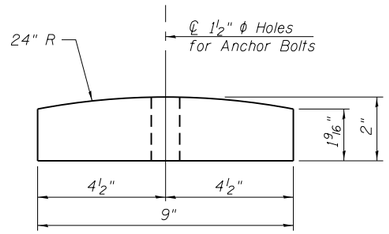


SECTION A-A

ELEVATION AT ABUTMENT



GIRDER END ELEVATION



BEARING PLATE DETAIL

FIXED BEARING

(16 Required)
Weight included with Structural Steel

Notes:
Anchor bolts shall be ASTM F1554 Grade 36, all-thread (or an Engineer-approved alternate material) of the diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Anchor bolts 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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Anchor Bolts, 1"	Each	32

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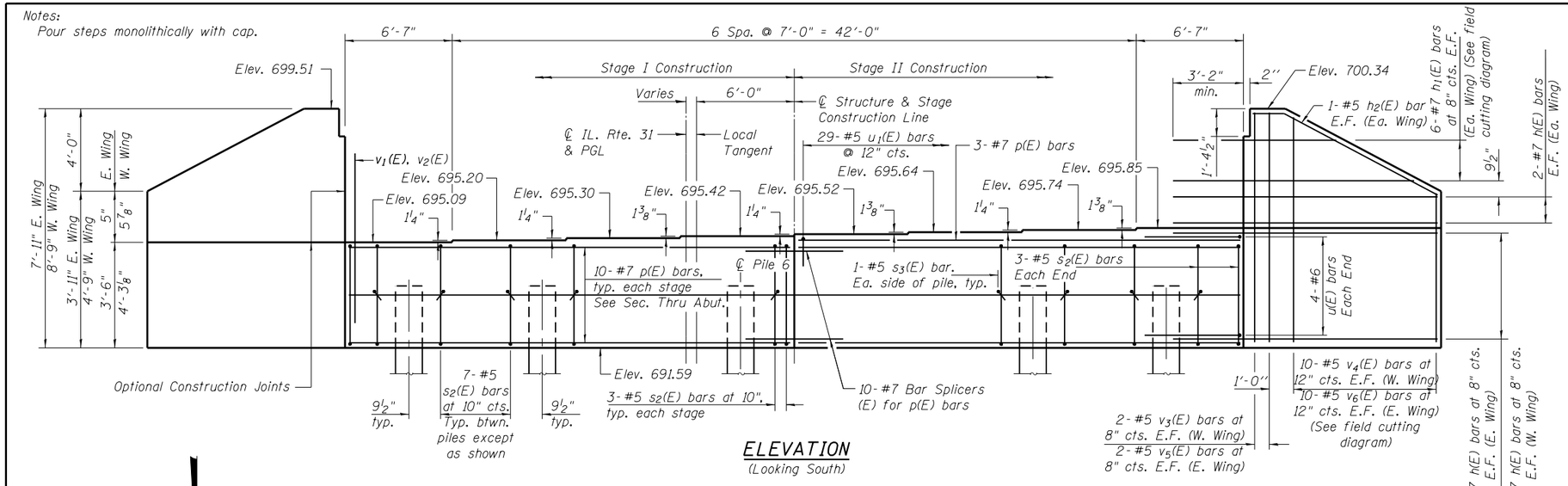
DEPARTMENT OF TRANSPORTATION

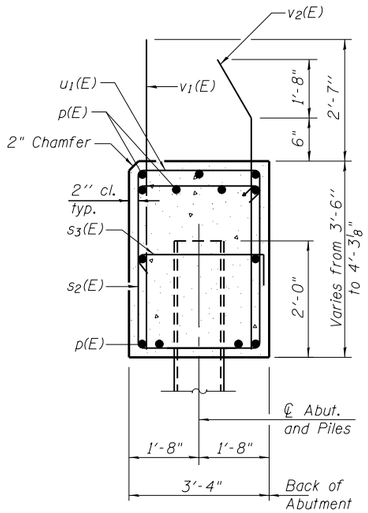
STRUCTURAL STEEL DETAILS II
STRUCTURE NO. 045-0333
SHEET NO. S16 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	83
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

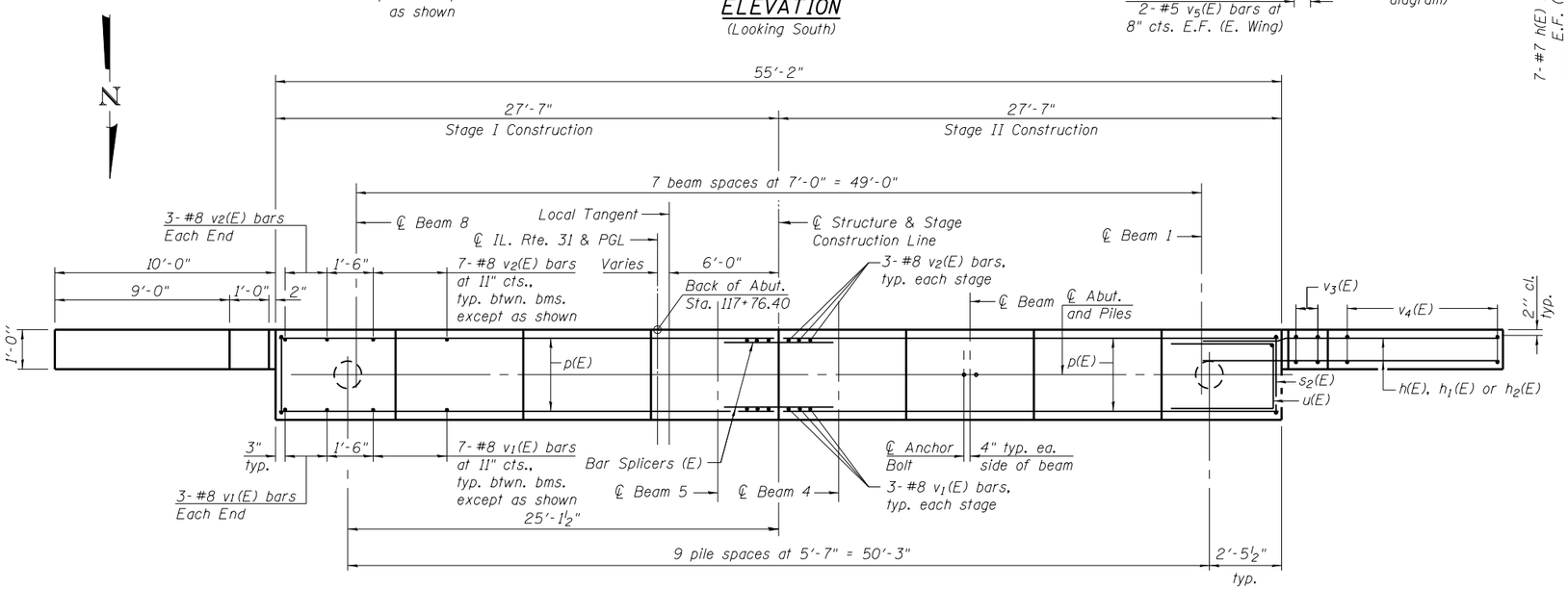
Notes:
Pour steps monolithically with cap.



ELEVATION
(Looking South)



SEC. THRU ABUT.



PLAN

BILL OF MATERIAL

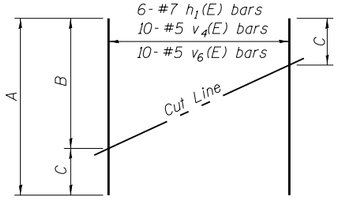
Bar	No.	Size	Length	Shape
h(E)	38	#7	13'-2"	
h_1(E)	12	#7	18'-4"	
h_2(E)	4	#5	8'-5"	
p(E)	23	#7	27'-3"	
s_2(E)	68	#5	13'-3"	
s_3(E)	20	#5	3'-11"	
u(E)	8	#6	10'-7"	
u_1(E)	29	#5	5'-3"	
v_1(E)	54	#8	6'-1"	
v_2(E)	54	#8	6'-2"	
v_3(E)	4	#5	8'-6"	
v_4(E)	10	#5	12'-10"	
v_5(E)	4	#5	7'-8"	
v_6(E)	10	#5	11'-2"	
Structure Excavation		Cu. Yd.	91	
Concrete Structures		Cu. Yd.	31.4	
Reinforcement Bars, Epoxy Coated		Pound	6,240	
Furnishing Metal Shell Piles 14" x 0.250"		Foot	297	
Driving Piles		Foot	297	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	10	

For Structure Excavation and drainage treatment details, see sheet S2 of S22.
For details of piles and pile shoes, see sheet S19 of S22.
For bar splicer details, see sheet S20 of S22.

PILE DATA

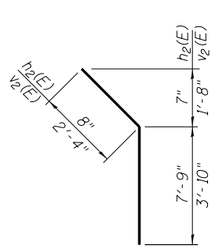
Type: Metal Shell - 14" ϕ x 0.250" with pile shoes
Nominal Required Bearing: 364 kips
Factored Resistance Available: 200 kips
Est. Length: 33 Ft.
No. Production Piles: 9
No. Test Piles: 1

Bar	A	B	C
h_1(E)	18'-4"	13'-2"	5'-2"
v_4(E)	12'-10"	8'-4"	4'-6"
v_6(E)	11'-2"	7'-6"	3'-8"

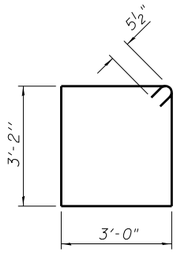


FIELD CUTTING DIAGRAM

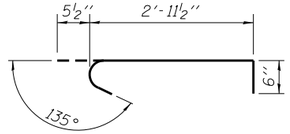
Order h_1(E), v_4(E) and v_6(E) full length. Cut as shown and use remainder of bars in opposite face.



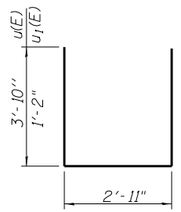
BAR h_2(E) & v_2(E)



BAR s_2(E)



BAR s_3(E)



BAR u(E) & u_1(E)

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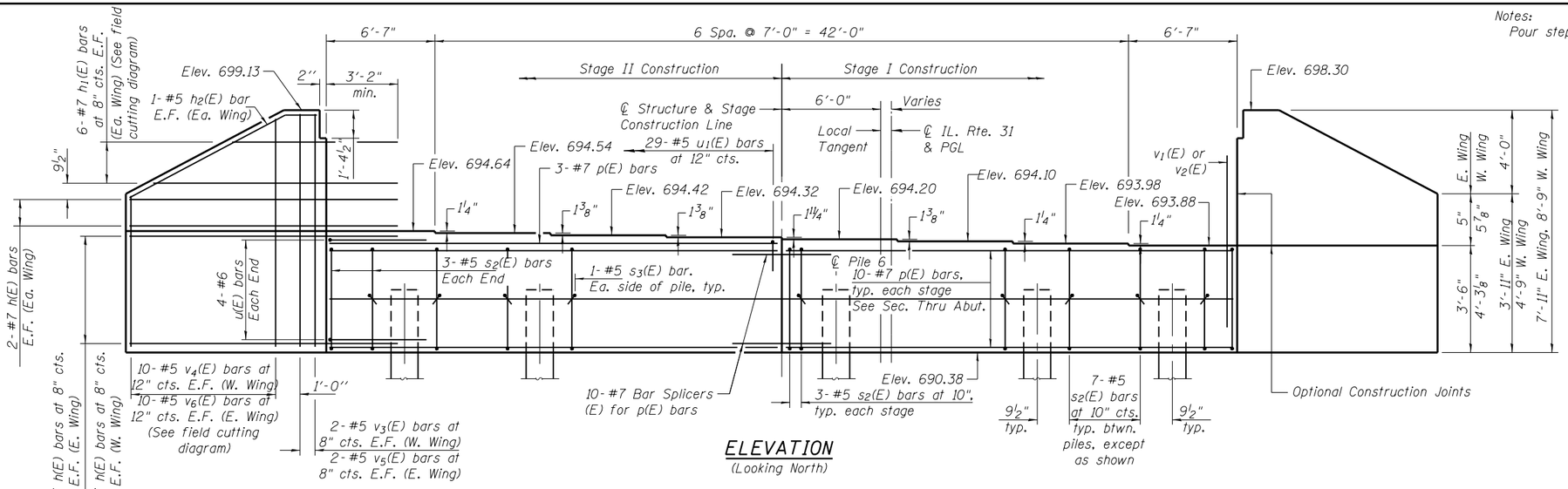
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

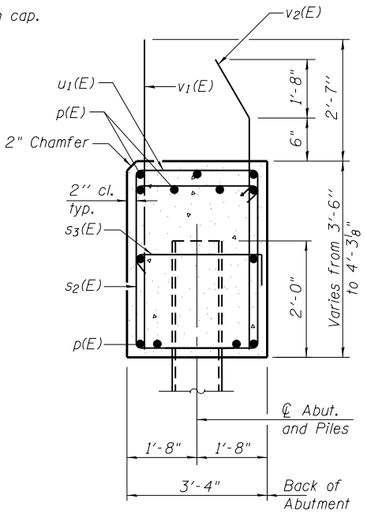
SOUTH ABUTMENT
STRUCTURE NO. 045-0333
SHEET NO. S17 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	84
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

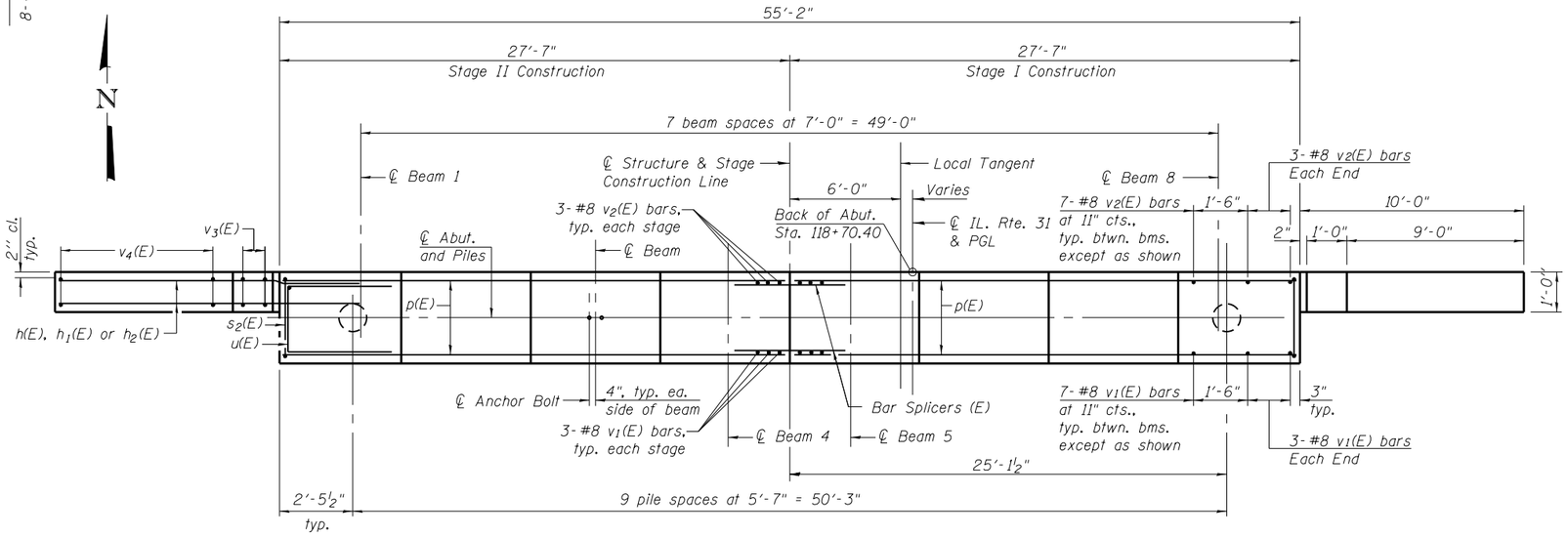


ELEVATION
(Looking North)

Notes:
Pour steps monolithically with cap.



SEC. THRU ABUT.



PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	38	#7	13'-2"	
h_1(E)	12	#7	18'-4"	
h_2(E)	4	#5	8'-5"	
p(E)	23	#7	27'-3"	
s_2(E)	68	#5	13'-3"	
s_3(E)	20	#5	3'-11"	
u(E)	8	#6	10'-7"	
u_1(E)	29	#5	5'-3"	
v_1(E)	54	#8	6'-1"	
v_2(E)	54	#8	6'-2"	
v_3(E)	4	#5	8'-6"	
v_4(E)	10	#5	12'-10"	
v_5(E)	4	#5	7'-8"	
v_6(E)	10	#5	11'-2"	
Structure Excavation		Cu. Yd.	91	
Concrete Structures		Cu. Yd.	31.4	
Reinforcement Bars, Epoxy Coated		Pound	6,240	
Furnishing Metal Shell Piles 14" x 0.250"		Foot	252	
Driving Piles		Foot	252	
Test Pile Metal Shells		Each	1	
Pile Shoes		Each	10	

For Structure Excavation and drainage treatment details, see sheet S2 of S22.

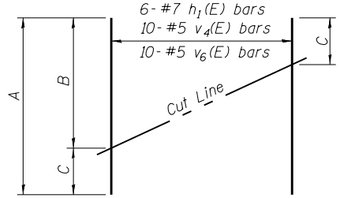
For details of piles and pile shoes, see sheet S19 of S22.

For bar splicer details, see sheet S20 of S22.

PILE DATA

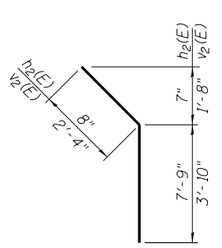
Type: Metal Shell - 14" ϕ x 0.250" with pile shoes
Nominal Required Bearing: 364 kips
Factored Resistance Available: 200 kips
Est. Length: 28 Ft.
No. Production Piles: 9
No. Test Piles: 1

Bar	A	B	C
h_1(E)	18'-4"	13'-2"	5'-2"
v_4(E)	12'-10"	8'-4"	4'-6"
v_6(E)	11'-2"	7'-6"	3'-8"

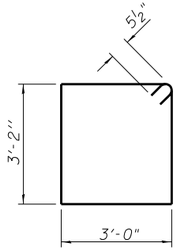


FIELD CUTTING DIAGRAM

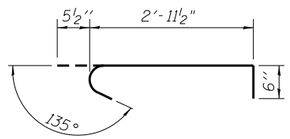
Order h_1(E), v_4(E) and v_6(E) full length. Cut as shown and use remainder of bars in opposite face.



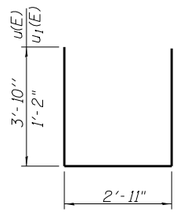
BAR h_2(E) & v_2(E)



BAR s_2(E)



BAR s_3(E)



BAR u(E) & u_1(E)

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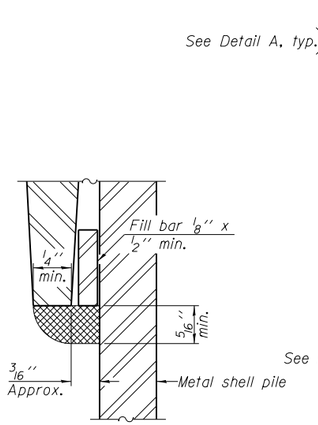
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT
STRUCTURE NO. 045-0333
SHEET NO. S18 OF S22 SHEETS

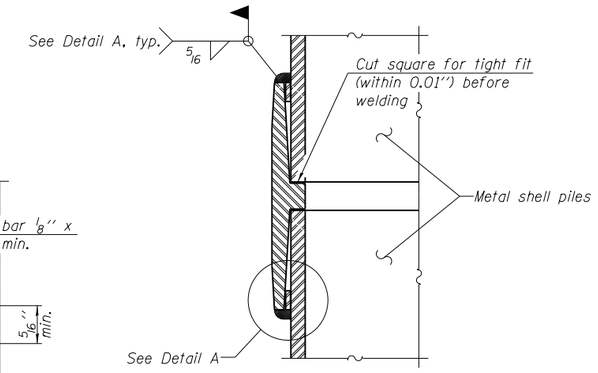
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	85
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume ($yd.^3$ /ft.)
PP12	0.179''	22.60	0.0274
PP12	0.250''	31.37	0.0267
PP14	0.250''	36.71	0.0368
PP14	0.312''	45.61	0.0361

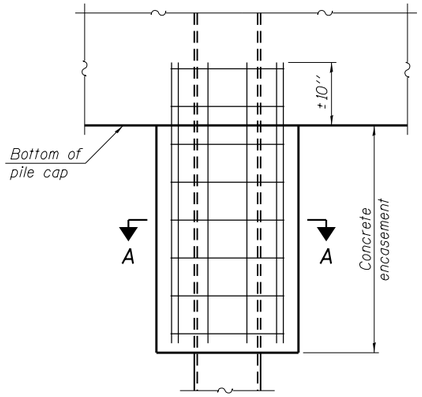


DETAIL A

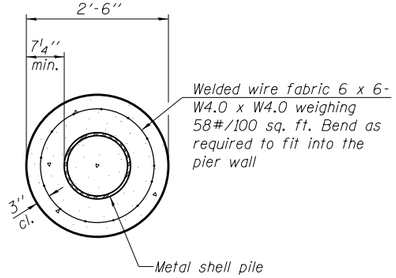


Notes:
The 1/8'' x 1/2'' min. fill bar may be constructed of 2 bars with a 1/8'' max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



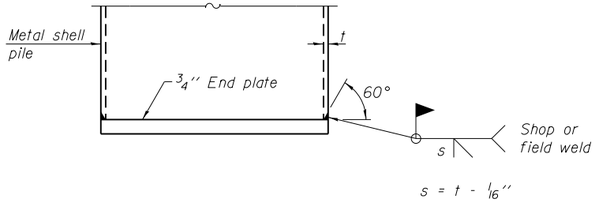
ELEVATION



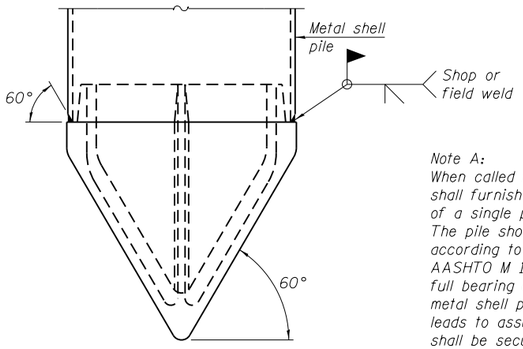
SECTION A-A

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

CONCRETE ENCASEMENT AT PIERS

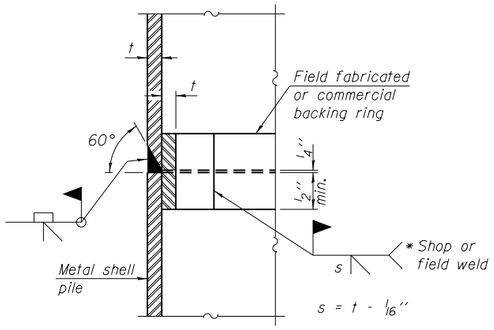


END PLATE ATTACHMENT



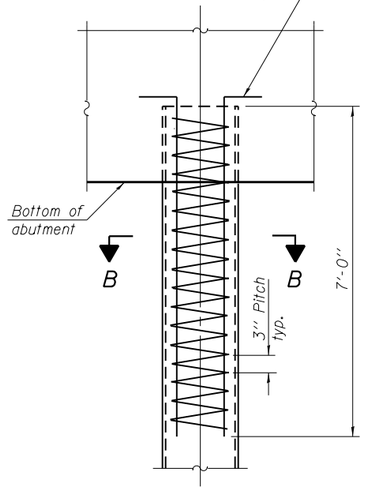
Note A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

METAL SHELL PILE SHOE ATTACHMENT
(See Note A)

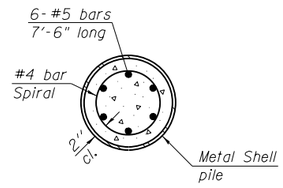


COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION



SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS 1-27-12

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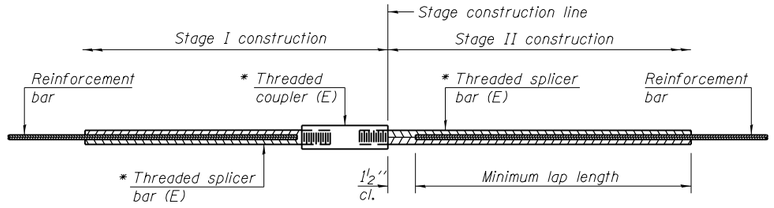
METAL SHELL PILE DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S19 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	86
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

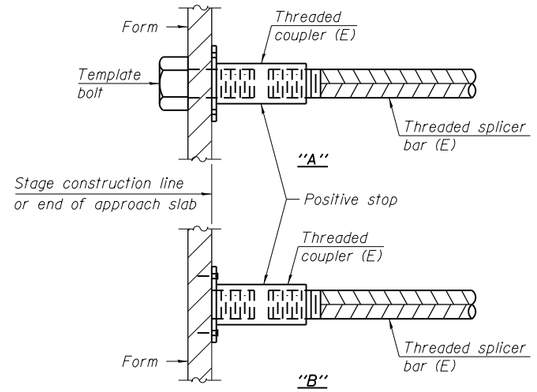
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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, Class C
Table 6: Epoxy bar, Top bar top, Class C

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

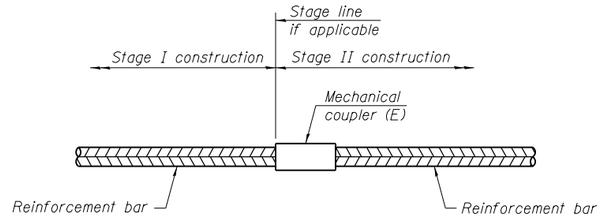
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Deck	#5	296	Table 3
Diaphragms	#6	18	Table 4
Approach	#4	50	Table 4
Approach	#5	92	Table 3
Approach Footing	#5	80	Table 3
Abutments	#7	20	Table 4



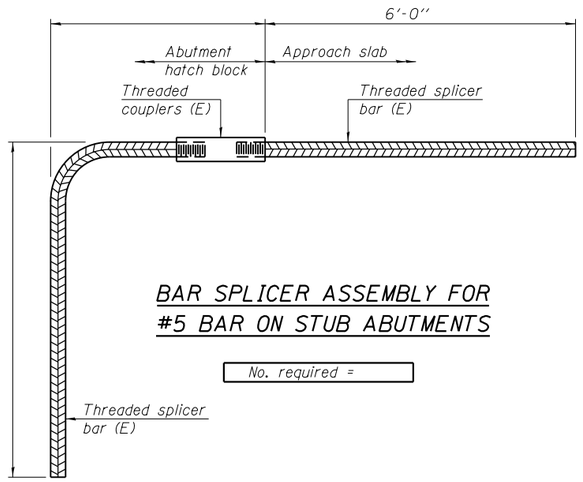
INSTALLATION AND SETTING METHODS

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

BSD-1 8-31-12

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ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-0333
SHEET NO. S20 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	87
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG BSB-01

WEI Job No.: 486-13-01

Client: **COLLINS ENGINEERS, INC.**
Project: **FAU 3887 (IL Route 31) over Ferson Creek**
Location: **Kane County, Illinois**

Datum: NGVD
Elevation: 697.77 ft
North: 1916544.12 ft
East: 987400.27 ft
Station: 117+87.9
Offset: 7.0 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	697.5	3-inch thick ASPHALT --PAVEMENT--						
	696.7	10-inch thick CONCRETE						
	696.5	2-inch thick CRUSHED STONE --BASE COURSE--						
		Loose to medium dense, brown GRAVELLY SAND to GRAVELLY SANDY LOAM --FILL--			1	4 6 6	NP	6
			5		2	5 5 4	NP	8
		--HARD DRILLING--			3	4 5 4	NP	5
			10		4	7 7 9	NP	7
		--HARD DRILLING--			5	4 3 4	NP	17
	684.8	Medium dense to very dense, brown GRAVELLY SANDY LOAM	15		6	7 7 5	NP	14
					7	10 35 50/3	NP	10
		--%Gravel=63.2-- --%Sand=27.9-- --%Silt=8.0--20 --%Clay=1.0--			8	16 11 8	NP	15
	675.8	Medium dense to very dense, gray GRAVELLY SAND			9	19 16 13	NP	10
			25		10	7 8 10	NP	10
		--%Gravel=49.7-- --%Sand=46.4-- --%Silt=3.8-- --%Clay=0.1--			11	7 7 6	NP	15
			30		12	9 9 9	NP	14
			35		13	7 5 6	NP	12
			40		14	9 12 11	NP	20
			45		15	30 35 21	NP	10
			50		16	5 6 10	NP	10

GENERAL NOTES

Begin Drilling: **06-06-2012** Complete Drilling: **06-06-2012**
Drilling Contractor: **WTS** Drill Rig: **D-50 TMR**
Driller: **R&J** Logger: **C.Marin** Checked by: **A. Kurnia**
Drilling Method: **3.25 IDA HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **11.00 ft**
At Completion of Drilling: **5.50 ft**
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 486130I.GPJ WANGENG.GDT 11/21/12

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BORING LOG BSB-01

WEI Job No.: 486-13-01

Client: **COLLINS ENGINEERS, INC.**
Project: **FAU 3887 (IL Route 31) over Ferson Creek**
Location: **Kane County, Illinois**

Datum: NGVD
Elevation: 697.77 ft
North: 1916544.12 ft
East: 987400.27 ft
Station: 117+87.9
Offset: 7.0 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	642.8	Boring terminated at 55.00 ft	55		17	5 8 13	NP	16
			60					
			65					
			70					
			75					

GENERAL NOTES

Begin Drilling: **06-06-2012** Complete Drilling: **06-06-2012**
Drilling Contractor: **WTS** Drill Rig: **D-50 TMR**
Driller: **R&J** Logger: **C.Marin** Checked by: **A. Kurnia**
Drilling Method: **3.25 IDA HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **11.00 ft**
At Completion of Drilling: **5.50 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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

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PLOT SCALE =	DRAWN - DR	REVISED	
PLOT DATE =	CHECKED - AMS	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS I
STRUCTURE NO. 045-0333
SHEET NO. S21 OF S22 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	88
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		

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Lombard, IL 60148
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BORING LOG BSB-02

WEI Job No.: 486-13-01

Client: **COLLINS ENGINEERS, INC.**
Project: **FAU 3887 (IL Route 31) over Ferson Creek**
Location: **Kane County, Illinois**

Datum: NGVD
Elevation: 695.64 ft
North: 1916617.25 ft
East: 987411.22 ft
Station: 118+60.6
Offset: 6.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	695.2	5-inch thick ASPHALT --PAVEMENT--						
	694.5	9-inch thick CONCRETE						
	694.3	2-inch thick CRUSHED STONE --BASE COURSE--			1	10 11 7	NP	7
	692.6	Medium dense, brown SANDY LOAM, some gravel --FILL--			2	6 4 4	NP	3
		Loose, brown GRAVELLY SAND --FILL--	5		3	5 4 3	NP	3
	687.6	Loose, brown and black, GRAVELLY SANDY LOAM --L_L(%)=25, P_L(%)=16-- --%Gravel=28.0-- --%Sand=45.3-- --%Silt=21.5-- --%Clay=5.2--	10		4	2 1 3	NP	24
					5	4 4 4	NP	20
	681.6	Medium dense, brown SAND, some gravel --HARD DRILLING--	15		6	5 8 8	NP	14
					7	3 5 9	NP	18
	678.1	Medium dense to dense, brown and gray GRAVELLY SAND --%Gravel=66.1-- --%Sand=31.5-- --%Silt and Clay=2.4--	20		8	7 11 12	NP	10
					9	13 9 8	NP	6
			25		10	5 7 15	NP	8
		--MUD ROTARY--	30		11	7 12 17	NP	10
					12	12 21 20	NP	6
			35		13	9 11 9	NP	14
			40		14	9 11 15	NP	8
			45		15	5 12 12	NP	17
			50		16	13 16 30	NP	13

GENERAL NOTES

Begin Drilling: **06-07-2012** Complete Drilling: **06-07-2012**
Drilling Contractor: **WTS** Drill Rig: **D-50 TMR**
Driller: **R&J** Logger: **J. Lundin** Checked by: **A. Kurnia**
Drilling Method: **3.25 IDA HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **9.50 ft**
At Completion of Drilling: **6.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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

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BORING LOG BSB-02

WEI Job No.: 486-13-01

Client: **COLLINS ENGINEERS, INC.**
Project: **FAU 3887 (IL Route 31) over Ferson Creek**
Location: **Kane County, Illinois**

Datum: NGVD
Elevation: 695.64 ft
North: 1916617.25 ft
East: 987411.22 ft
Station: 118+60.6
Offset: 6.0 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	638.6	Dense, gray SAND, some gravel	55		17	13 24 23	NP	11
			60		18	15 16 18	NP	10
			65		19	17 18 18	NP	8
	625.6	Boring terminated at 70.00 ft	70		20	19 18 22	NP	11
			75					

GENERAL NOTES

Begin Drilling: **06-07-2012** Complete Drilling: **06-07-2012**
Drilling Contractor: **WTS** Drill Rig: **D-50 TMR**
Driller: **R&J** Logger: **J. Lundin** Checked by: **A. Kurnia**
Drilling Method: **3.25 IDA HSA; Boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **9.50 ft**
At Completion of Drilling: **6.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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

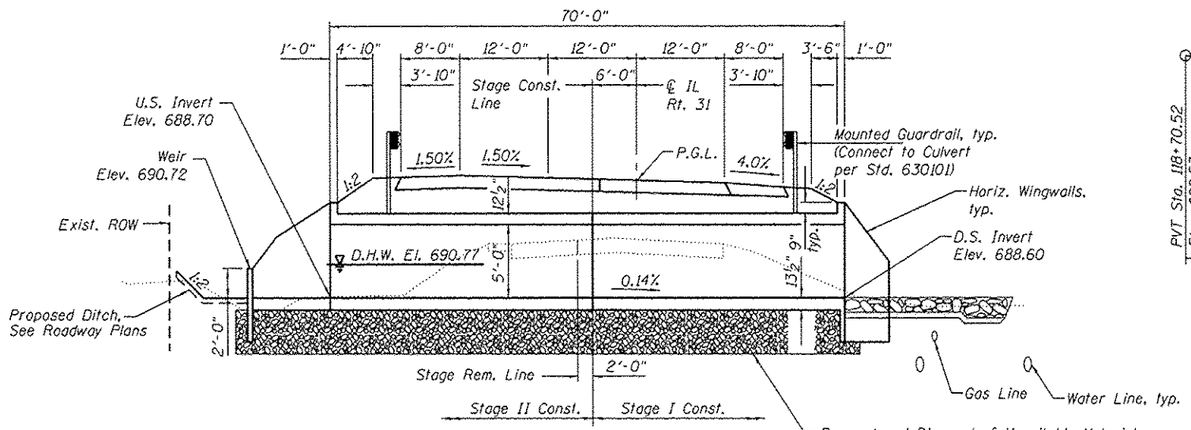
WANGENGINC 4861301.GPJ WANGENG.GDT 11/21/12

Bench Mark: Railroad spike in private property on east side of IL 31 north of Ferson Creek Park entrance. Elev. 701.13.

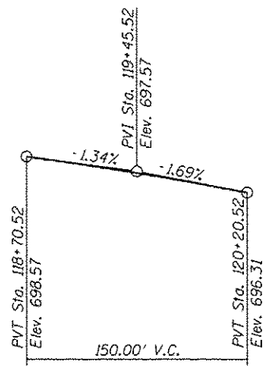
Existing Structure: None.

Traffic to be maintained utilizing stage construction.

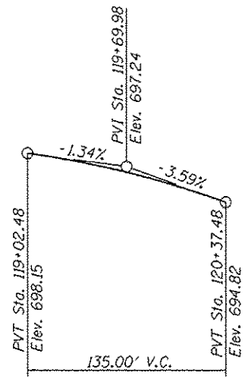
Note: This is the overflow structure to the adjacent bridge (SN. 045-0333).



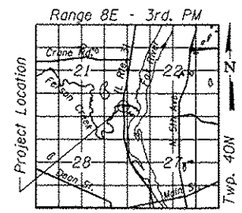
LONGITUDINAL SECTION



PROFILE GRADE
(Along PGL IL Rte. 31)



TEMPORARY RAMP PROFILE GRADE
(Along PGL IL Rte. 31)



LOCATION SKETCH

Station 119+93.00
Built 201_ by
State of Illinois
F.A.U. Rt. 3887 Sec. I-B-1
Loading HL-93
Structure No. 045-0334

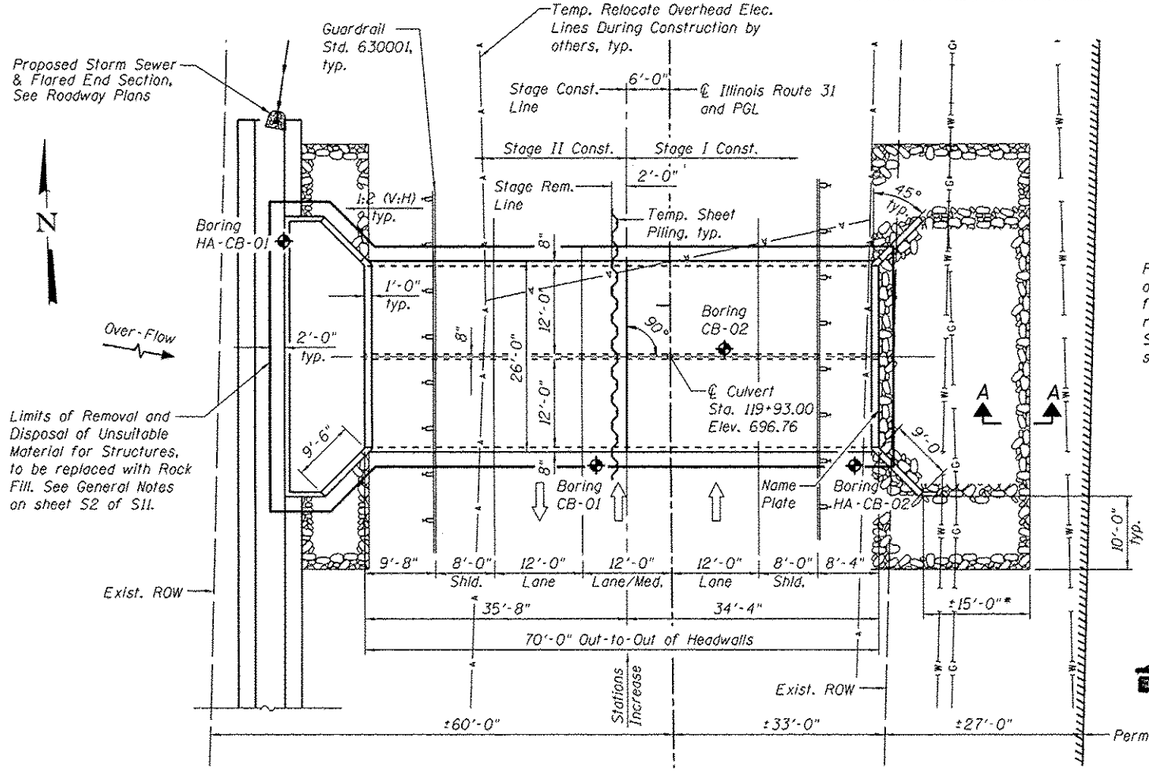
NAME PLATE
(See Std. 515001)

DESIGN SPECIFICATIONS
2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 Interims

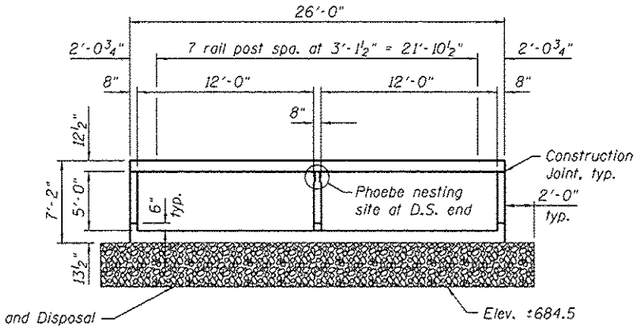
LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

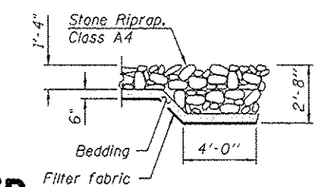
SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.087g
Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.157g
Soil Site Class = D



PLAN



SECTION THRU BARREL



SECTION A-A

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2016

CURVE DATA
P.I. Sta. = 117+87.48
Δ = 4° 30' 07" (RT)
D = 0° 49' 07"
R = 7,000.00'
L = 550.03'
T = 275.16'
E = 5.41'
S.E. = 0.015'/'
P.C. Sta. = 115+12.33
P.T. Sta. = 120+62.36

GENERAL PLAN & ELEVATION
IL RTE. 31 OVER FERSON CREEK OVERFLOW
F.A.U. RT. 3887 - SEC. I-B-1
KANE COUNTY
STATION 119+93.00
STRUCTURE NO. 045-0334

* Riprap shall extend 10'-0" past the existing gas line.

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		CHECKED - JMS	REVISED
	PLOT SCALE =	DRAWN - DR	REVISED
	PLOT DATE =	CHECKED - AMS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 045-0334
SHEET NO. S1 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	90
		CONTRACT NO. 60M81		
		ILLINOIS FED. AID PROJECT		

INDEX OF DRAWINGS

GENERAL NOTES:

Reinforcement bars designated (E) shall be epoxy coated.

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

The Rock Fill shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for Rock Fill.

The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	161
Filter Fabric	Sq. Yd.	161
Structure Excavation	Cu. Yd.	405
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	296
Reinforcement Bars, Epoxy Coated	Pound	47,080
Bar Splicers	Each	135
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	201.6
Steel Plate Beam Guardrail, Attached to Structures	Foot	52
Temporary Sheet Piling	Sq. Ft.	2,134
Rock Fill	Cu. Yd.	296

WATERWAY INFORMATION

Drainage Area = 54.5 Sq. Mi. Proposed Low Grade Elev. 694.99 Ft. @ Sta. 121+50

Freq. Yr.	Flood	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	Main Channel	1880	394	439	689.42	1.42	0.38	690.84	689.80
	Overflow Structure	79		17					
	Total	1959	394	456					
50	Main Channel	3227	464	543	690.77	1.24	0.49	692.01	691.26
	Overflow Structure	259		50					
	Total	3486	464	593					
100	Main Channel	3697	485	576	691.19	1.10	0.26	692.29	691.45
	Overflow Structure	323		60					
	Total	4020	485	636					
200	Overtop	5020	519		691.81	0.97		692.78	
500	Main Channel	5631	567	712	692.68	1.44	0.76	694.12	693.44
	Overflow Structure	799		96					
	Total	6430	567	808					

10-Year Velocity through Proposed Bridge = 2.2 fps.
2-Year Peak Discharge Rate = 1120 cfs.
2-Year Peak Elevation = 686.88
2 Year Bypass Water Opening = 125.35 ft.

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	D.S. Invert	U.S. Invert
	685.60	685.70

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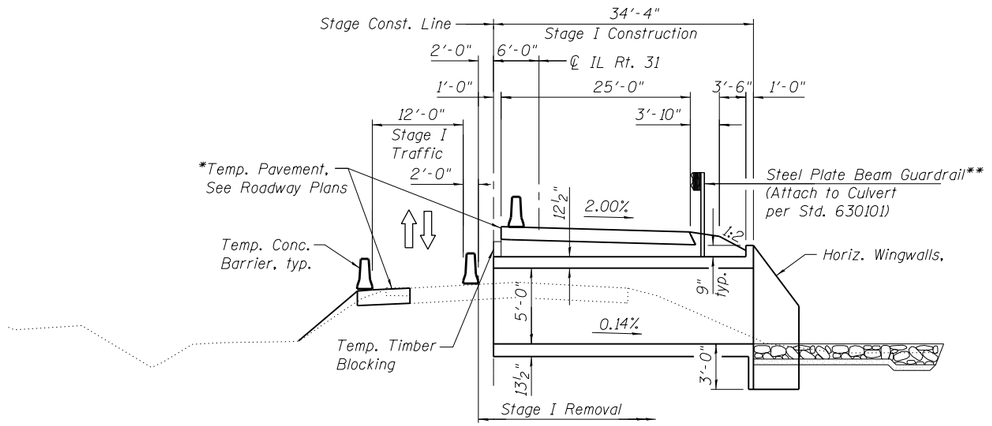
PLOT SCALE =	DRAWN - DR	REVISED	
PLOT DATE =	CHECKED - AMS	REVISED	

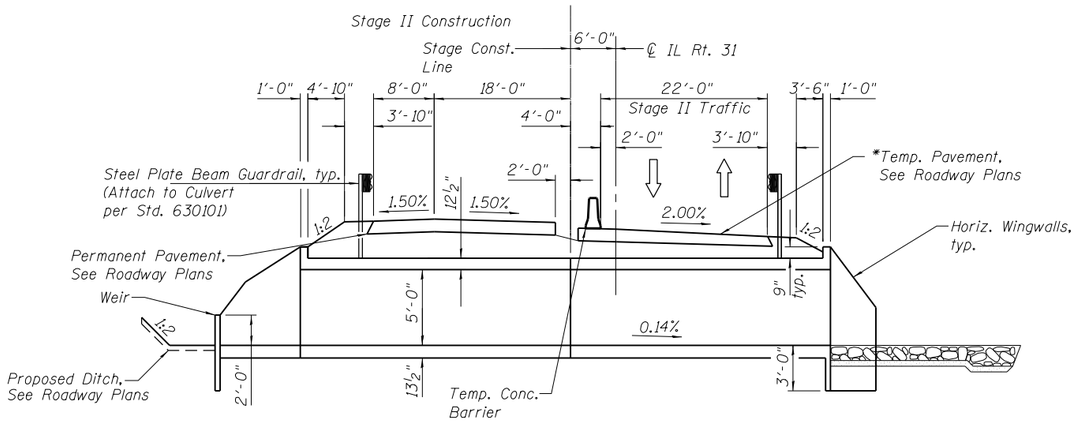
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIALS
STRUCTURE NO. 045-0334
SHEET NO. S2 OF S11 SHEETS

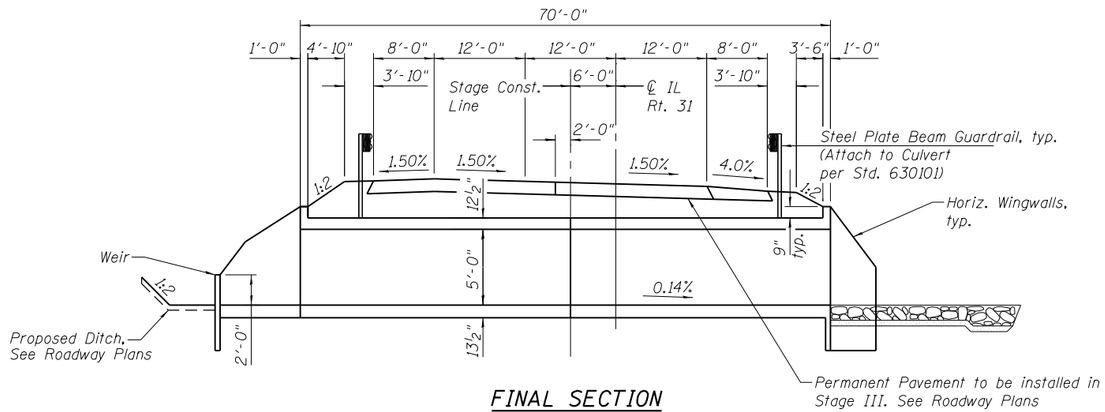
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	91
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



STAGE I



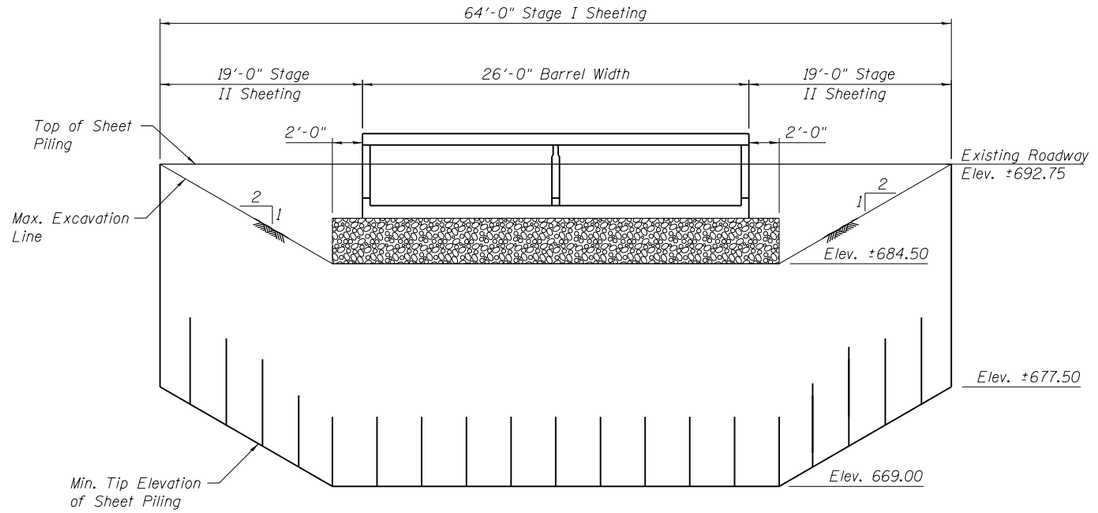
STAGE II



FINAL SECTION

* For Temporary Pavement cross slope and PGL, See Roadway Plans.
** For Guardrail mounted in Stage I, height to be set for Permanent Pavement. See Roadway Plans.

Notes:
All sections looking north.
For quantity of Temporary Concrete Barrier, see Roadway Plans.
See Roadway Plans for additional stages and more details.



TEMPORARY SHEET PILING

Notes:
See Sheet S8 of S11 for excavation limits paid for as Structure Excavation.
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
Minimum section modulus of temporary sheet piling shall be 10.1 in^3/ft.

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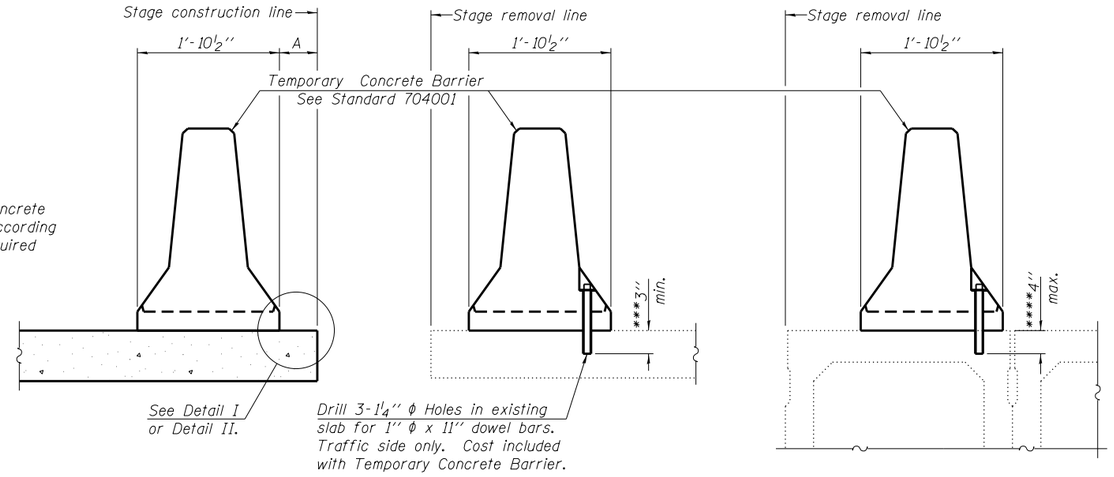
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 045-0334
SHEET NO. S3 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	92
		CONTRACT NO. 60M81		
		ILLINOIS	FED. AID PROJECT	

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7' 'x ''W'' steel ℙ to the top layer of couplers with 2-⅝'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel ℙ to the concrete slab or concrete wearing surface with 2-⅝'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

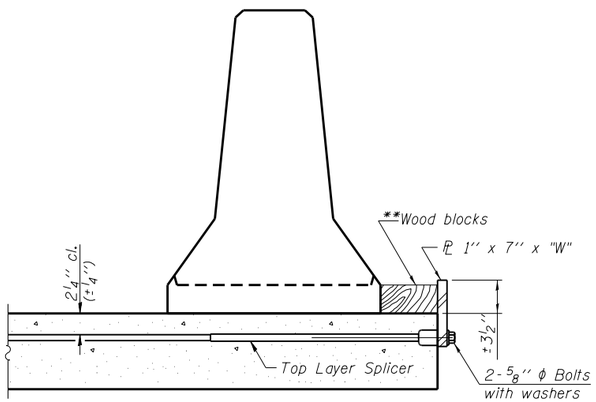
Cost of anchorage is included with Temporary Concrete Barrier.

The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

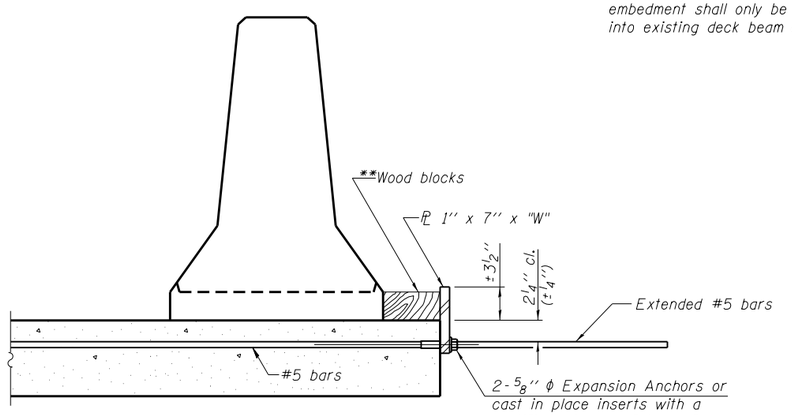
SECTIONS THRU SLAB OR DECK BEAM

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

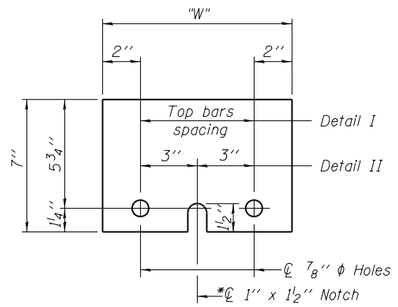
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1'' x 7'' x ''W''

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4''

R-27

7-1-10

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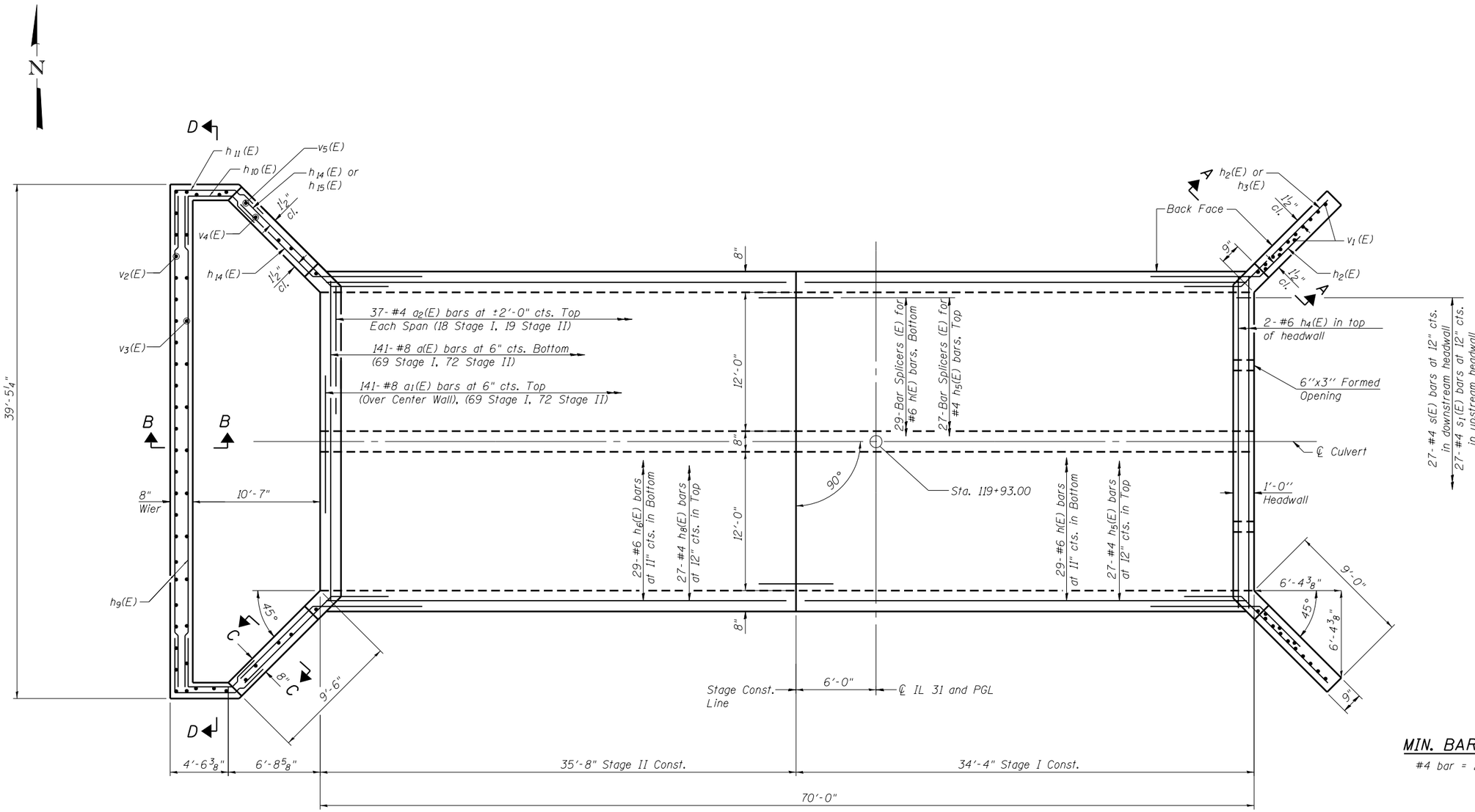
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 045-0334
SHEET NO. S4 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	93
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



PLAN - TOP SLAB

MIN. BAR LAP

#4 bar = 2'-1"

Notes:

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

See sheet S7 of S11 for Section A-A, Section B-B and Section C-C.

See sheet S8 of S11 for Section D-D, Bar Details and Bill of Material.

See sheet S9 of S11 for Bar Splicer Details.

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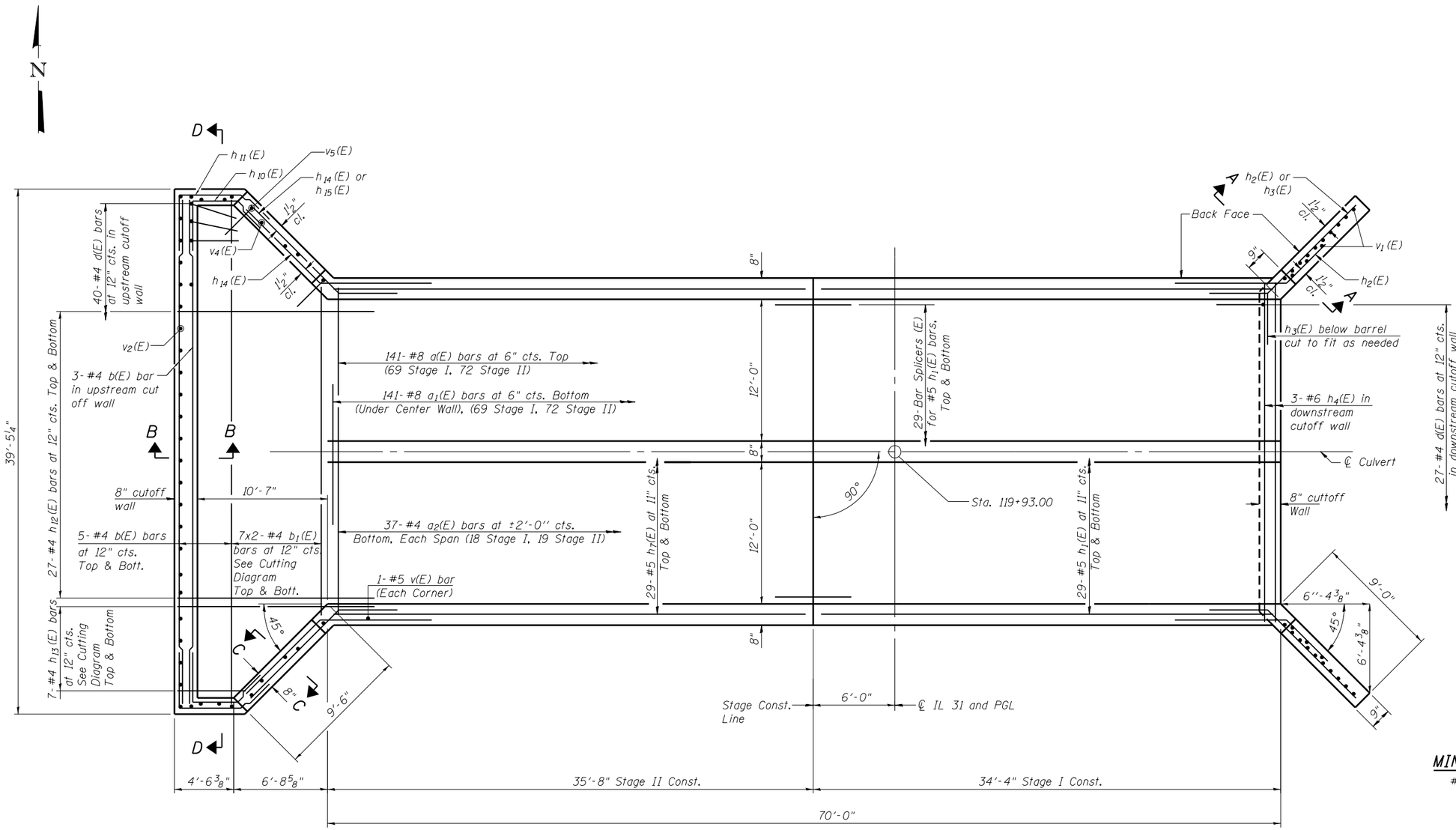
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS I
STRUCTURE NO. 045-0334
SHEET NO. S5 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	94
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



PLAN - BOTTOM SLAB

MIN. BAR LAP

#4 bar = 2'-1"

Notes:

A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.

Bars indicated thus 7x2 - #4 etc. indicates 7 lines of bars with 2 lengths per line.

See sheet S7 of S11 for Section A-A, Section B-B and Section C-C.

See sheet S8 of S11 for Section D-D, Bar Details and Bill of Material.

See sheet S9 of S11 for Bar Splicer Details.

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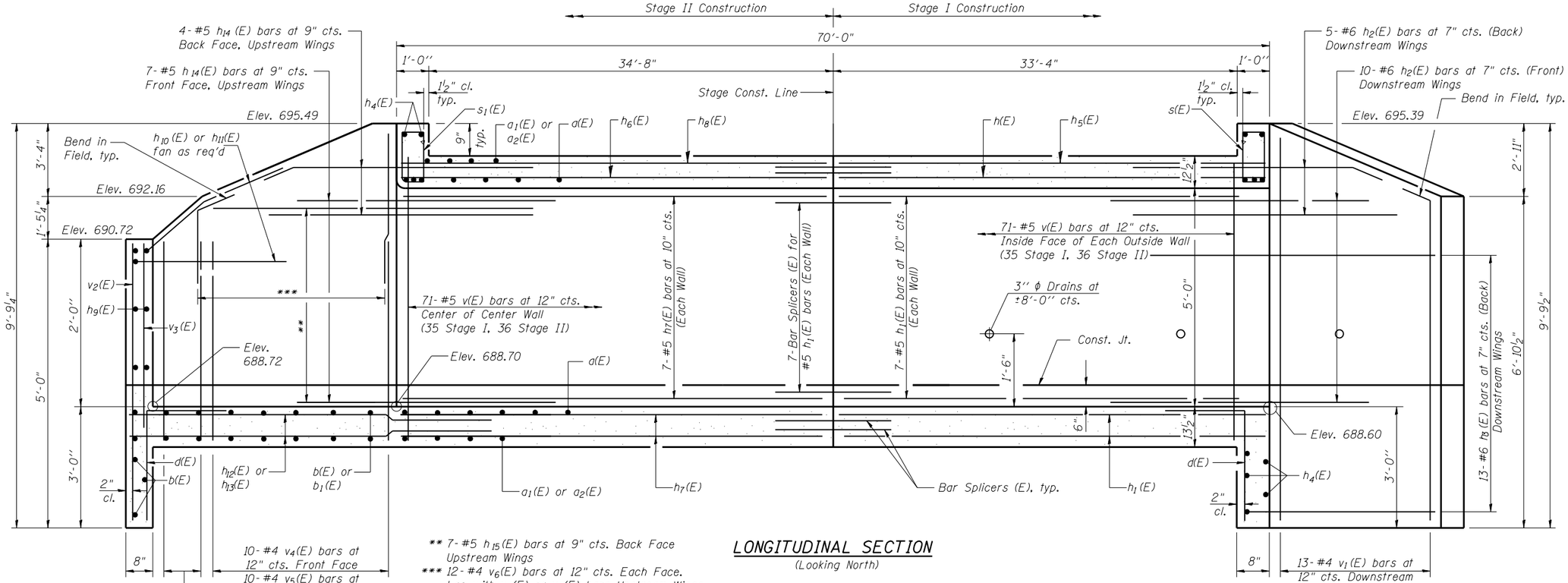
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS II
STRUCTURE NO. 045-0334
SHEET NO. S6 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	95
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

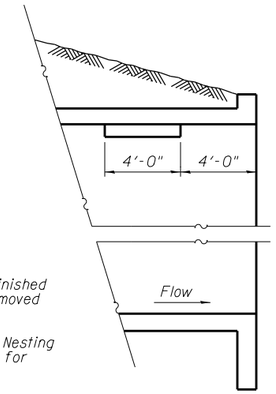


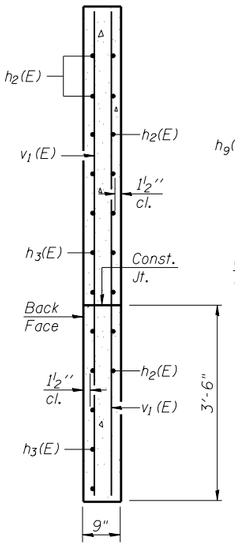
** 7-#5 h_{15}(E) bars at 9" cts. Back Face Upstream Wings
*** 12-#4 v_6(E) bars at 12" cts. Each Face. Lap with v_4(E) or v_5(E) bars Upstream Wings

LONGITUDINAL SECTION
(Looking North)

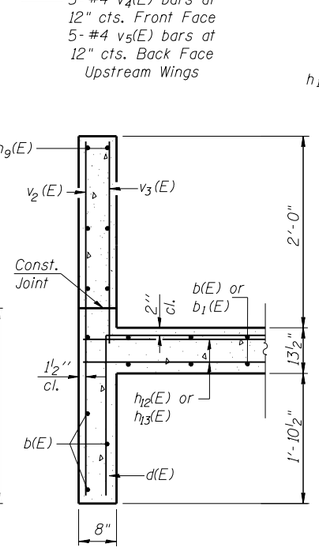
MIN. BAR LAP
#4 bar = 2'-1" (Upstream Wings)

Notes:
A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
See sheet S8 of S11 for bar details and Bill of Material.
See sheet S9 of S11 for bar splicer details.

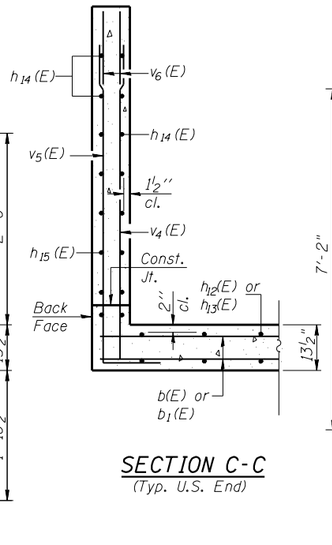




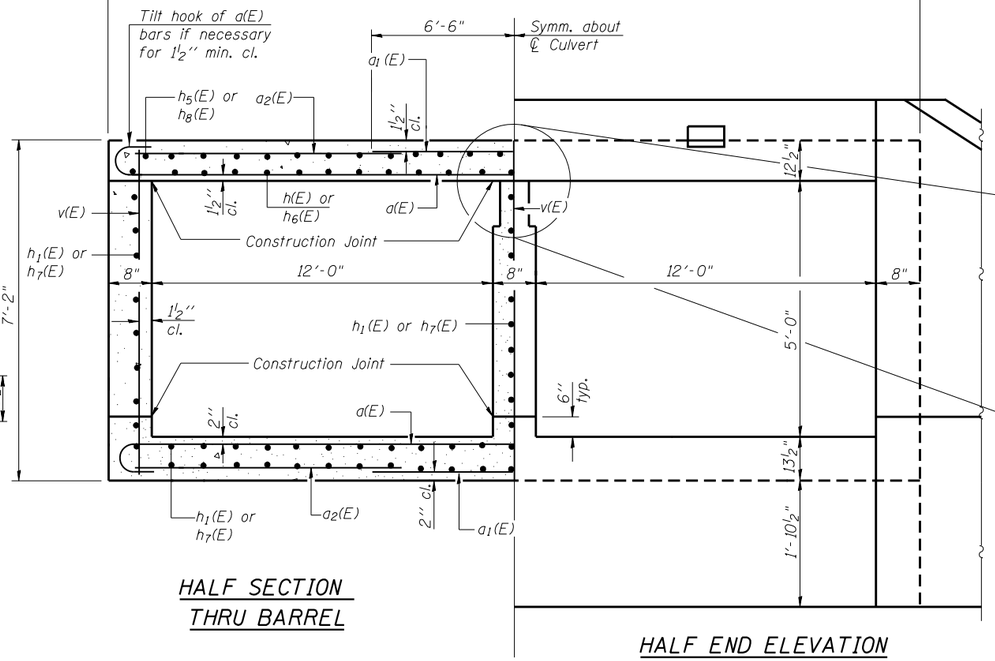
SECTION A-A
(Typ. D.S. End)



SECTION B-B



SECTION C-C
(Typ. U.S. End)



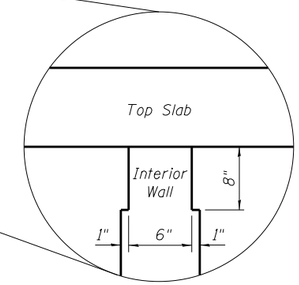
HALF SECTION THRU BARREL

HALF END ELEVATION

Phoebe Nesting Site Notes:

1. Notch formed by rough-finished board attached to and removed with formwork.
2. Cost of providing Phoebe Nesting area included in pay item for Concrete Box Culverts.

LONGITUDINAL SECTION
(N.T.S.)



NOTCH DETAIL
(N.T.S.)

PHOEBE NESTING SITE ON BOX CULVERT

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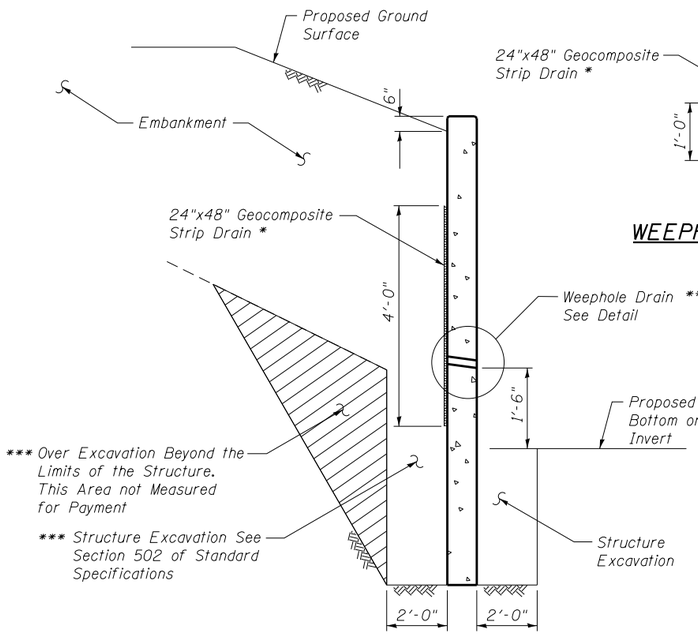
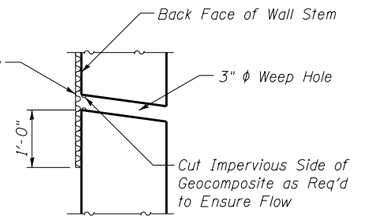
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS III
STRUCTURE NO. 045-0334
SHEET NO. S7 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	96
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



WEEPHOLE DRAIN



WEEPHOLE DRAIN DETAIL

* Cost included with Concrete Box Culverts.

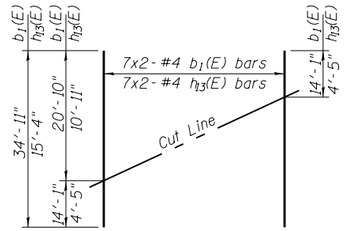
** Weephole Spacing Shall be at ±8'-0" Horizontally.

*** Backfill Remainder of Structure Excavation and Over Excavation Material From Structural Excavation.

Note:
Weephole at wingwalls shown. Similar weephole to be provided along culvert at locations shown on plans.

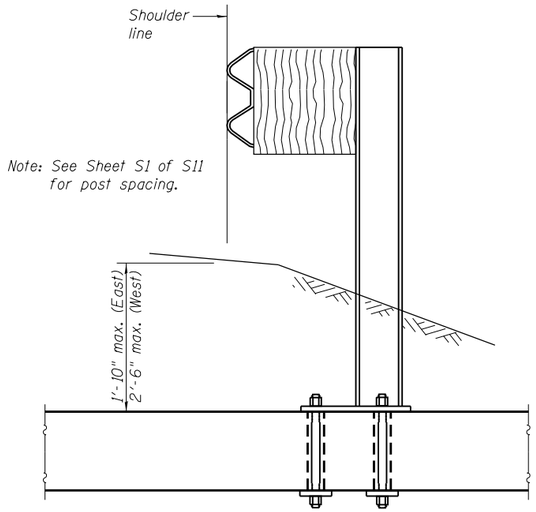
MIN. BAR LAP

#4 bar = 2'-1" (Upstream Wings)



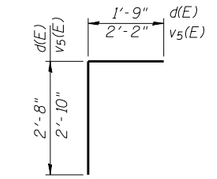
FIELD CUTTING DIAGRAM

Order $b_1(E)$ and $h_{13}(E)$ full length. Cut as shown and use remainder of bars in opposite face.

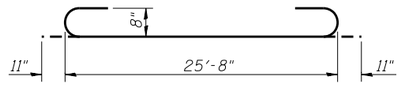


GUARDRAIL MOUNTED ON EXISTING CULVERTS CASE IV MOUNTED ON SLAB

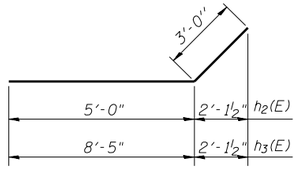
(See Standard 630101)



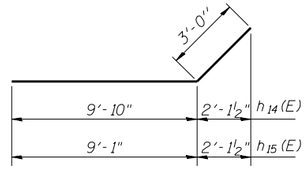
BAR d(E) & v5(E)



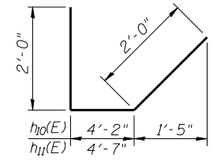
BAR d(E)



BARS $h_2(E)$ & $h_3(E)$

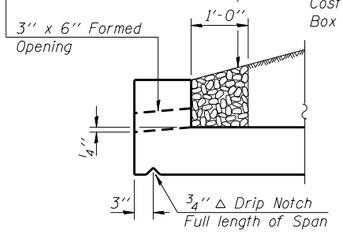


BARS $h_{14}(E)$ & $h_{15}(E)$



AT UPSTREAM END

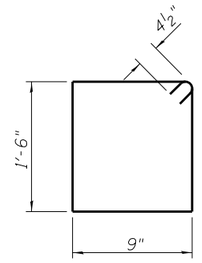
Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.



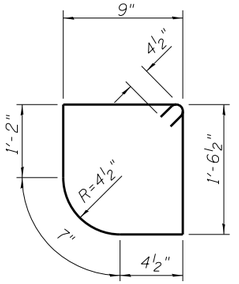
AT DOWNSTREAM END

DRAIN DETAIL

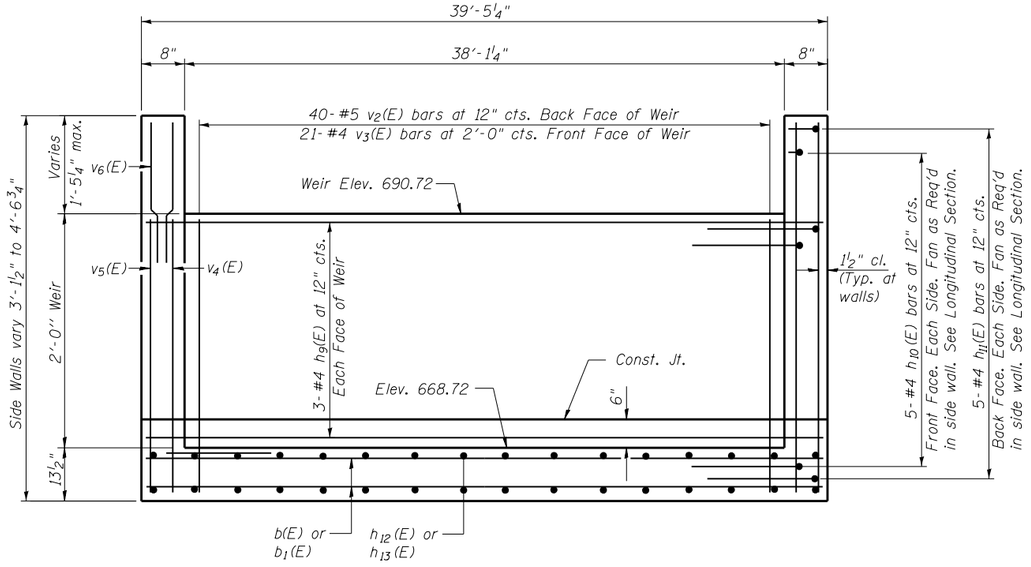
BARs $h_{10}(E)$ & $h_{11}(E)$



BAR $s_1(E)$



BAR s(E)



SECTION D-D

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	282	#8	27'-6"	
$a_1(E)$	282	#8	13'-0"	
$a_2(E)$	148	#4	8'-6"	
b(E)	13	#4	39'-1"	
$b_1(E)$	14	#4	34'-11"	
d(E)	67	#4	4'-5"	
h(E)	29	#6	34'-0"	
$h_1(E)$	79	#5	34'-0"	
$h_2(E)$	30	#6	8'-0"	
$h_3(E)$	26	#6	11'-5"	
$h_4(E)$	7	#6	25'-8"	
$h_5(E)$	27	#4	34'-0"	
$h_6(E)$	32	#6	35'-4"	
$h_7(E)$	76	#5	35'-4"	
$h_8(E)$	27	#4	35'-4"	
$h_9(E)$	6	#4	38'-11"	
$h_{10}(E)$	10	#4	8'-2"	
$h_{11}(E)$	10	#4	8'-7"	
$h_{12}(E)$	54	#4	13'-4"	
$h_{13}(E)$	14	#4	15'-4"	
$h_{14}(E)$	22	#5	12'-10"	
$h_{15}(E)$	14	#5	12'-1"	
s(E)	27	#4	5'-2"	
$s_1(E)$	27	#4	5'-3"	
v(E)	217	#5	6'-10"	
$v_1(E)$	26	#4	9'-5"	
$v_2(E)$	40	#5	4'-8"	
$v_3(E)$	21	#4	2'-6"	
$v_4(E)$	30	#4	2'-10"	
$v_5(E)$	30	#4	5'-0"	
$v_6(E)$	48	#4	5'-5"	
Concrete Box Culverts		Cu. Yd.	201.6	
Reinforcement Bars, Epoxy Coated		Pound	47,080	

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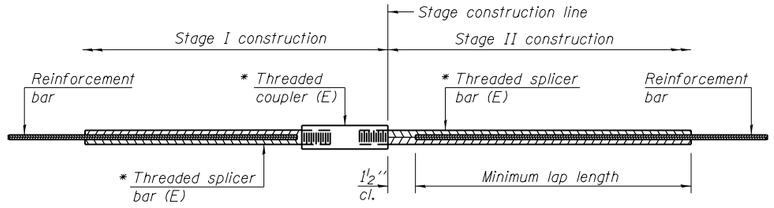
DEPARTMENT OF TRANSPORTATION

CULVERT DETAILS IV
STRUCTURE NO. 045-0334
SHEET NO. S8 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	97
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			



STANDARD BAR SPLICER ASSEMBLY

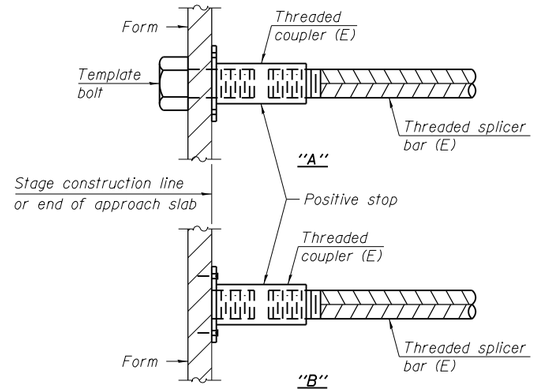
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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, Class C
Table 6: Epoxy bar, Top bar top, Class C

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

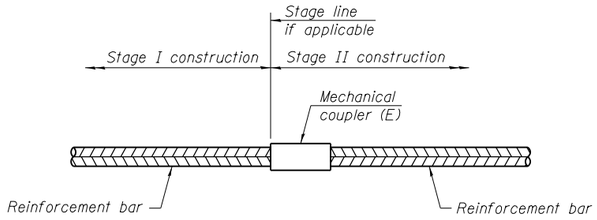
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Top Slab	#6	29	Table 3
Top Slab	#4	27	Table 3
Bottom Slab	#5	58	Table 3
Walls	#5	21	Table 4



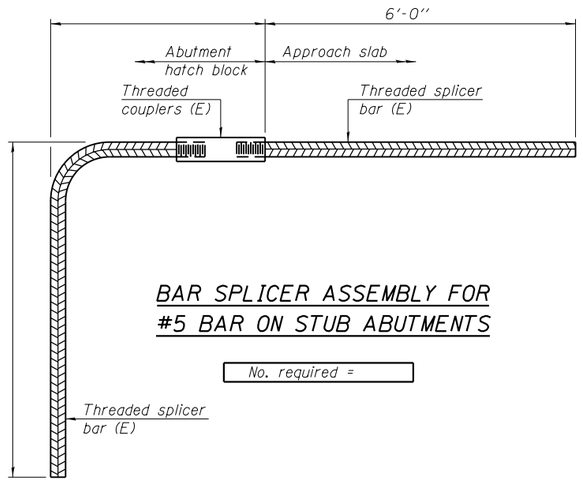
INSTALLATION AND SETTING METHODS

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

BSD-1 8-31-12

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DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-0334
SHEET NO. S9 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	98
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG CB-01

WEI Job No.: 486-17-01

Client: **Collins Engineers**
Project: **IL 31 over Ferson Creek**
Location: **St. Charles, Illinois**

Datum: NGVD
Elevation: 691.12 ft
North: 1916730.36 ft
East: 987395.27 ft
Station: 119+73.63
Offset: 11.23 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	690.2	10.5-inch thick ASPHALT --PAVEMENT--						
	690.1	2-inch thick dense, brown SANDY GRAVEL --BASE COURSE--			1	12 17 13	NP	19
		Dense, brown SANDY LOAM, little gravel --FILL--						
	688.1	Loose, gray LOAM to SANDY LOAM, trace to little gravel				4		
		--L_L(%)=23, P_L(%)=15-- --%Gravel=13.8-- --%Sand=41.3-- --%Silt=36.9-- --%Clay=8.0-- --A-4 (1)--	5		2	3 2	NP	17
		--L_L(%)=33, P_L(%)=19-- --%Gravel=3.7-- --%Sand=51.8-- --%Silt=37.3-- --%Clay=7.2-- --A-6 (3)--			3	2 2 3	NP	35
	684.1	Medium dense to dense, brown SANDY GRAVEL						
			10		4	4 4 6	NP	20
					5	4 14 17	NP	29
					6	7 16 12	NP	14
	676.1	Medium dense, brown, medium to coarse SAND, trace to some gravel	15					
						11 14 10	NP	12
	668.1	Dense, brown GRAVEL						
			25		10	5 16 16	NP	10
	665.6	Medium dense, brown GRAVELLY SAND						
					11	19 9 9	NP	11
					12	30 11 12	NP	12
	661.1	Boring terminated at 30.00 ft	30					

GENERAL NOTES

Begin Drilling: **01-20-2014** Complete Drilling: **01-20-2014**
Drilling Contractor: **Wang Testing Services** Drill Rig: **B-57 TMR**
Driller: **P&K** Logger: **D. Kolpacki** Checked by: **N. Boddy**
Drilling Method: **2.25-inch SSA, auto hammer, backfilled upon completion**

WATER LEVEL DATA

While Drilling: **7.00 ft**
At Completion of Drilling: **7.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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

Wang Engineering
wangeng@wangeng.com
1145 N Main Street
Lombard, IL 60148
Telephone: 630 953-9928
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BORING LOG CB-02

WEI Job No.: 486-17-01

Client: **Collins Engineers**
Project: **IL 31 over Ferson Creek**
Location: **St. Charles, Illinois**

Datum: NGVD
Elevation: 692.15 ft
North: 1916748.66 ft
East: 987416.56 ft
Station: 119+95.55
Offset: 9.52 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	691.3	10.5-inch thick ASPHALT --PAVEMENT--						
		Dense, brown SANDY GRAVEL --FILL--			1	22 23 21	NP	10
	689.1	Medium dense, brown SANDY GRAVEL						
			5		2	10 7 5	NP	4
	686.6	Medium dense, dark gray SANDY LOAM, trace gravel						
		--L_L(%)=NP, P_L(%)=NP-- --%Gravel=1.5-- --%Sand=72.9-- --%Silt=21.5-- --%Clay=4.2-- --A-2-4 (0)--			3	2 2 9	NP	37
	684.1	Medium dense, brown SANDY GRAVEL						
			10		4	7 9 12	NP	12
					5	8 13 12	NP	10
			15		6	13 15 18	NP	9
	676.6	Medium dense, brown to gray, medium to coarse SAND, trace to some gravel						
			20		7	18 10 13	NP	10
					8	13 12 14	NP	11
					9	5 10 18	NP	18
	669.1	Very dense, brown GRAVEL						
			25		10	12 25 30	NP	13
	666.6	Medium dense to dense, gray GRAVELLY SAND						
					11	14 13 16	NP	14
					12	5 8 15	NP	17
	662.1	Boring terminated at 30.00 ft	30					

GENERAL NOTES

Begin Drilling: **01-17-2014** Complete Drilling: **01-17-2014**
Drilling Contractor: **Wang Testing Services** Drill Rig: **D-25 MR**
Driller: **P&K** Logger: **F. Bozga** Checked by: **N. Boddy**
Drilling Method: **3.25-inch IDA HSA, manual hammer, boring backfilled upon completion**

WATER LEVEL DATA

While Drilling: **8.00 ft**
At Completion of Drilling: **7.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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WANGENGINC 4861701.GPJ WANGENG.GDT 3/12/14

COLLINS ENGINEERS
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ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - AMS	REVISED	
	CHECKED - JMS	REVISED	
PLOT SCALE =	DRAWN - DR	REVISED	
PLOT DATE =	CHECKED - AMS	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS I
STRUCTURE NO. 045-0334
SHEET NO. S10 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	99
		CONTRACT NO. 60M81		
	ILLINOIS FED. AID PROJECT			

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Lombard, IL 60148
Telephone: 630 953-9928
Fax: 630 953-9938

BORING LOG HA-CB-01

WEI Job No.: 486-17-01

Client: **Collins Engineers**
Project: **IL 31 over Ferson Creek**
Location: **St. Charles, Illinois**

Datum: NGVD
Elevation: 687.94 ft
North: 1916762.71 ft
East: 987364.46 ft
Station: 120+05.06
Offset: 42.97 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	687.4	6-inch thick, dark brown SILTY LOAM, trace roots --TOPSOIL--			1	PUSH	NP	58
		Dark brown SILTY LOAM, trace roots						
	685.7	Dark brown SANDY LOAM, little gravel --L_L(%)=NP, P_L(%)=NP-- --%Gravel=14.8-- --%Sand=63.7-- --%Silt=18.7-- --%Clay=2.8-- --A-2-4 (0)--			2	PUSH	NP	30
	683.8	Gray SANDY GRAVEL	5		3	PUSH	NP	31
					4	PUSH	NP	12
	680.4	Brown, medium to coarse SAND, little gravel			5	PUSH	NP	28
			10					
	677.4	Brown SANDY GRAVEL			6	PUSH	NP	21
	676.2	Brown, medium SAND, trace gravel						
	675.4	Brown SANDY GRAVEL			7	PUSH	NP	7
	673.9	Boring terminated at 14.00 ft	15					

GENERAL NOTES

Begin Drilling: **01-16-2014** Complete Drilling: **01-16-2014**
Drilling Contractor: **Wang Testing Services** Drill Rig: **GEOPROBE**
Driller: **C&F** Logger: **A. Happel** Checked by:
Drilling Method: **Continous**

WATER LEVEL DATA

While Drilling: **3.00 ft**
At Completion of Drilling: **2.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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WANGENGINC 4861701.GPJ WANGENG.GDT 3/12/14

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BORING LOG HA-CB-02

WEI Job No.: 486-17-01

Client: **Collins Engineers**
Project: **IL 31 over Ferson Creek**
Location: **St. Charles, Illinois**

Datum: NGVD
Elevation: 688.00 ft
North: 1916732.67 ft
East: 987447.41 ft
Station: 119+77.43
Offset: 40.65 RT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	687.5	6-inch thick, black and dark brown SILTY LOAM						
	687.0	--TOPSOIL--			1	PUSH	NP	24
	686.7	6-inch thick, brown SILTY LOAM, trace gravel						
		4-inch thick, brown, medium SAND, trace gravel			2	PUSH	NP	37
		Dark brown to gray GRAVELLY SANDY LOAM to SANDY LOAM, trace gravel and shells --L_L(%)=NP, P_L(%)=NP-- --%Gravel=28.8-- --%Sand=43.1-- --%Silt=22.1-- --%Clay=6.1-- --A-2-4 (0)--	5		3	PUSH	NP	41
	682.8	--L_L(%)=NP, P_L(%)=NP-- --%Gravel=8.8-- --%Sand=67.0-- --%Silt=18.2-- --%Clay=6.0-- --A-2-4 (0)--			4	PUSH	NP	17
	680.5	Gray SANDY GRAVEL						
		Brown, medium to coarse SAND, little gravel			5	PUSH	NP	18
			10					
					6	PUSH	NP	14
					7	PUSH	NP	14
	674.0	Boring terminated at 14.00 ft	15					

GENERAL NOTES

Begin Drilling: **01-16-2014** Complete Drilling: **01-16-2014**
Drilling Contractor: **Wang Testing Services** Drill Rig: **GEOPROBE**
Driller: **C&F** Logger: **A. Happel** Checked by:
Drilling Method: **Continous**

WATER LEVEL DATA

While Drilling: **3.00 ft**
At Completion of Drilling: **2.00 ft**
Time After Drilling: **NA**
Depth to Water: **NA**

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

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	CHECKED - JMS	REVISED	
PLOT SCALE =	DRAWN - DR	REVISED	
PLOT DATE =	CHECKED - AMS	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS II
STRUCTURE NO. 045-0334
SHEET NO. S11 OF S11 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3887	I-B-1	KANE	156	100
		CONTRACT NO. 60M81		
	ILLINOIS	FED. AID PROJECT		