

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	1
		ILLINOIS	CONTRACT NO. 62B01	

DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

FAP ROUTE 372: IL ROUTE 171 / FIRST AVE.

SECTION: 2015-042B

OVER EQUESTRIAN PATH CULVERT REPLACEMENT

COOK COUNTY

PROJ. ACNHPP-0372 (012)

C-91-368-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

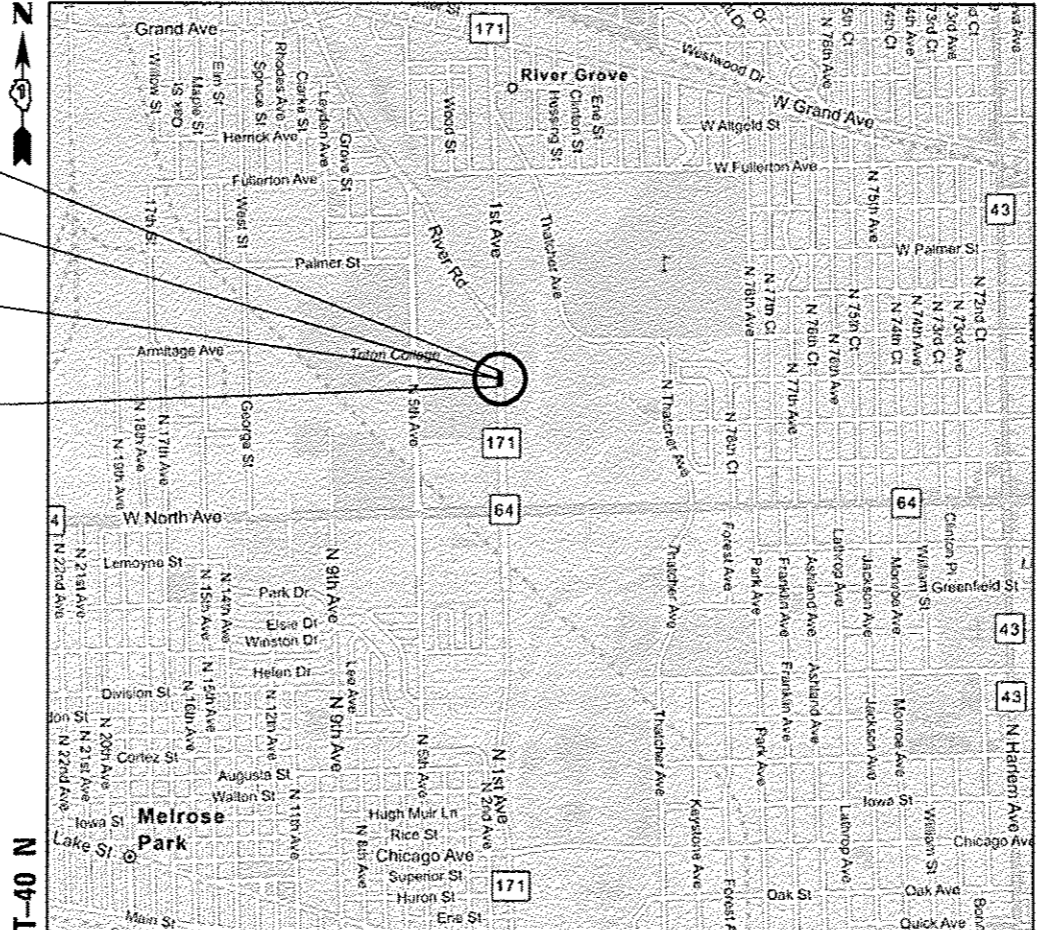
DESIGN DESIGNATION

OTHER PRINCIPAL ARTERIAL
ADT 35400 (2013) IL 171
SPEED LIMIT 40 MPH

IMPROVEMENT LOCATED IN
THE VILLAGE OF RIVER GROVE



LEYDEN TOWNSHIP Range 12E - 3rd. PM

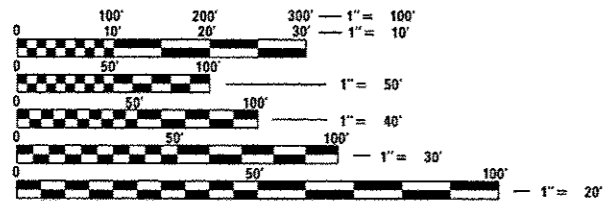


PROJECT ENDS
STA. 373 + 80.86

IL ROUTE 171 OVER EQUESTRIAN PATH
EX. STRUCTURE NO: 016-2150
STA. 373 + 19.94

IL ROUTE 171 OVER EQUESTRIAN PATH
PR. STRUCTURE NO: 016-2283
STA. 373 + 19.94

PROJECT BEGINS
STA. 370 + 60.49



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: MS. RAGHAD ADEIS-DAHMAN, P.E. (847) 705-5183

CONTRACT NO. 62B01

GROSS LENGTH = 320.4 FT. = 0.061 MILE LOCATION MAP NOT TO SCALE
NET LENGTH = 320.4 FT. = 0.061 MILE

5/5/2016

COLLINS ENGINEERS, INC.
EWA MROCEK, P.E., S.E.
NO. 081-006067
EXP.: 11/30/2016

5/5/16

COLLINS ENGINEERS, INC.
RYAN GALL
NO. 062-064397
EXPIRES 11-30-2017

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 9 2016

John F. Adams
REGIONAL ENGINEER

Matthew M. Adams, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT

James A. Adams
DIRECTOR OF PROGRAM DEVELOPMENT

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

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS:

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS AND HIGHWAY STANDARDS
3	GENERAL NOTES
4-11	SUMMARY OF QUANTITIES
12-13	TYPICAL SECTIONS
14	SCHEDULE OF QUANTITIES
15	ALIGNMENT, TIES AND BENCHMARKS
16	REMOVAL PLAN
17	PROPOSED PLAN AND PROFILE
18	MAINTENANCE OF TRAFFIC GENERAL NOTES
19	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
* 20-27	MAINTENANCE OF TRAFFIC PLANS
28	EROSION CONTROL PLAN
29	DRAINAGE PLAN
30	PAVEMENT DETAILS PLAN
31	PAVEMENT JOINTING PLAN
32	GRADING PLAN
33	PAVEMENT MARKING, LANDSCAPING, AND SIGNING PLAN
34-48	STRUCTURE PLANS
49	B034-DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY.1 SPL.
50	B051-BENCHING DETAIL FOR EMBANKMENT WIDENING
51	TC10-TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
52	TC11-TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
53	TC13-DISTRICT ONE TYPICAL PAVEMENT MARKINGS
54	TC16-PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
55	TC22-ARTERIAL ROAD INFORMATION SIGN
56	TC26-DRIVEWAY ENTRANCE SIGNING
57-60	CROSS SECTIONS

* INCLUDES SHEET 25A.

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
420001-08	PAVEMENT JOINTS
420106-05	36' (10.8 m) JOINTED PCC PAVEMENT
420111-05	PCC PAVEMENT ROUNDOUTS
420401-12	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
606001-06	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTER
606201-03	TYPE B GUTTER (INLET, OUTLET & ENTRANCE)
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630106-01	LONG-SPAN GUARDRAIL OVER CULVERT
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631011-09	TRAFFIC BARRIER TERMINAL, TYPE 2
631031-14	TRAFFIC BARRIER TERMINAL, TYPE 6
635001-02	DELINEATORS
643001-02	SAND MODULE IMPACT ATTENUATORS
664001-02	CHAIN LINK FENCE
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 m) AWAY
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701427-04	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS < 40 MPH
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRANVERSABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701901-05	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
725001	OBJECT AND TERMINAL MARKERS
782006	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS	OMP
TEMPORARY PAVEMENT (NON-INTERSTATE)		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N70 (IL 9.5 mm), 2"	4% @ 70 Gyr.	OC/OA
TEMPORARY PAVEMENT (HMA BINDER IL-19 MM), 8"	4% @ 70 Gyr.	OC/OA
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (OC/OA); QUALITY CONTROL FOR PERFORMANCE (OCP); PAY FOR PERFORMANCE (PFP)		

- 1) THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SOYD/IN
- 2) 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) THE CONTRACTOR HAS THE OPTION TO USE PCC TEMPORARY PAVEMENT, PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ART. 1020 OF THE STANDARD SPECIFICATIONS; PAVEMENT THICKNESS SHALL BE 10"; TEMPORARY PCC PAVEMENT DOES NOT REQUIRE DOWEL BARS.
- 5) TEMPORARY PAVEMENT DOES NOT REQUIRE DOWEL BAR.
- 6) QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE

FILE NAME: *.BFILES

COLLINS ENGINEERS

USER NAME : sahani	DESIGNED -	REVISED -
PLOT SCALE : 100,0000 1/1	DRAWN -	REVISED -
PLOT DATE : 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
INDEX OF SHEETS AND HIGHWAY STANDARDS**

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

F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEETS 60	SHEET NO. 2
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B01	

GENERAL NOTES:

- 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).
- 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.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH AFFECTED UTILITY COMPANIES, THE VILLAGE OF RIVER GROVE, FOREST PRESERVE OF COOK COUNTY, AND TRITON COLLEGE.
- 10 FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER 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.
- 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.
- 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.
- 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, AND COMBINATION CURB AND GUTTER, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.
- 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.
- 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.
- THE CONTRACTOR SHALL MAINTAIN ALL ROADWAYS OPEN TO TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS.
- THE CONTRACTOR SHALL CONTACT THE IDOT ARTERIAL TRAFFIC CONTROL SUPERVISOR, AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT MR. JOSEPH ECKERT, AREA TRAFFIC FIELD TECHNICIAN, AT 705-4412 OR JOE.ECKERT@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 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.
- 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.

GENERAL NOTES (CONT.):

- OVERHEAD WIRES ARE NOT INSULATED AND EXTRA CAUTION AND VIGILANCE SHALL BE ADHERED TO WHEN WORKING NEARBY. CONTRACTORS SHALL ALWAYS USE CAUTION WHILE OPERATION 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 THE APPROPRIATE SUPPLEMENTAL PROTECTION. 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.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS (BRIDGE) SHALL BE LOW PROFILE.
- 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.
- THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE PRESERVATION OF EXISTING TREES IS OF UTMOST IMPORTANCE TO THE COOK COUNTY FOREST PRESERVE. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A "TREE PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOB SITE. NO WORK IS TO BE PERFORMED (OTHER THAN ROOT PRUNING), MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE". REMOVE PROTECTION TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
- 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.

EROSION CONTROL GENERAL NOTES (CONT.):

- 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
- STOCKPILES OF SOIL OR ANY OTHER BUILDING MATERIALS SHALL NOT BE LOCATED IN SPECIAL MANAGEMENT AREAS SUCH AS WETLANDS.
- 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.
- HEAVY DUTY EROSION CONTROL BLANKET SHALL BE USED FOR COVERING SLOPES STEEPER THAN 3H:1V.
- 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.
- 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.
- TWO-YEAR PEAK DISCHARGE RATE IS EQUAL TO 86.1 CFS.
- THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A TREE PROTECTION ZONE BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOB SITE. OTHER THEN TREE PRUNING, NO WORK IS TO BE PERFORMED, MATERIALS STORED, OR VEHICLES DRIVEN OR PARKED WITHIN THE TREE PROTECTION ZONE. REMOVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION HAS BEEN COMPLETED.
- THE TREE PROTECTION ZONE IS DEFINED AS THE DRIPLINE OF TREE AND SHRUBS WITHIN THE LIMITS OF CONSTRUCTION DESIGNATED TO REMAIN. THE DRIPLINE IS THE POINT ON THE GROUND WHERE WATER WILL DRIP OFF THE WIDEST REACHING BRANCH.

EROSION CONTROL GENERAL NOTES:

- THE CONTRACTOR SHALL INSTALL PERIMETER EROSION BARRIER PRIOR TO STRIPPING OF VEGETATION.
- DIRECT OR INDIRECT PUMPING OF SEDIMENT -LADEN WATER INTO A STORMWATER FACILITY WITHOUT FILTRATION IS PROHIBITED.
- 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.
- 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.
- THE CONTRACTOR SHALL SURROUND ANY NECESSARY EARTH STOCKPILES WITH PERIMETER EROSION BARRIER.
- 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.

FILE NAME: J. WELLS



USER NAME = jwells	DESIGNED -	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN -	REVISED -
PLOT DATE = 5/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
GENERAL NOTES

SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEETS 60	SHEET NO. 3
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT										

CONTRACT NO. 62801

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	132	132	
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	38	38	
20101000	TEMPORARY FENCE	FOOT	565	565	
20101200	TREE ROOT PRUNING	EACH	4	4	
20101300	TREE PRUNING (1 TO 10 INCH DIAMETER)	EACH	10	10	
20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	2	2	
20101700	SUPPLEMENTAL WATERING	UNIT	1	1	
20200100	EARTH EXCAVATION	CU YD	1674	1674	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	267	267	
* 21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	397	397	
* 21101805	COMPOST FURNISH AND PLACE, 2"	SQ YD	794	794	
* 25000210	SEEDING, CLASS 2A	ACRE	0.25	0.25	
* 25000310	SEEDING, CLASS 4	ACRE	0.25	0.25	
* 25000314	SEEDING, CLASS 4B	ACRE	0.25	0.25	

101

* - DENOTES SPECIALTY ITEM

FILE NAME: 111111



USER NAME: cshahs	DESIGNED: -	REVISED: -
PLOT SCALE: 100.0000' = 1"	DRAWN: -	REVISED: -
PLOT DATE: 5/9/2016	CHECKED: -	REVISED: -
	DATE: -	REVISED: -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	4
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
* 25000322	SEEDING, CLASS 5A	ACRE	0.25	0.25	
* 25000324	SEEDING, CLASS 5B	ACRE	0.25	0.25	
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	23	23	
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	23	23	
* 25000775	SELECTIVE MOWING STAKES	EACH	4	4	
* 25100630	EROSION CONTROL BLANKET	SQ YD	397	397	
* 25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1763	1763	
* 28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	75	75	
28000305	TEMPORARY DITCH CHECKS	FOOT	10	10	
28000400	PERIMETER EROSION BARRIER	FOOT	836	836	
28000500	INLET AND PIPE PROTECTION	EACH	2	2	
28000510	INLET FILTERS	EACH	5	5	
28100105	STONE RIPRAP, CLASS A3	SQ YD	14	14	
28200200	FILTER FABRIC	SQ YD	24	24	

14

* - DENOTES SPECIALTY ITEM

FILE NAME: PFILES



USER NAME: spahs	DESIGNED -	REVISED -
PLOT SCALE: 100,0000 1" = 100'	DRAWN -	REVISED -
PLOT DATE: 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	5
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B01	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1572	1572	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	244	244	
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	161	161	
42000501	PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)	SQ YD	1197	1197	
42001300	PROTECTIVE COAT	SQ YD	2301	1783	518
44000100	PAVEMENT REMOVAL	SQ YD	2003	2003	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	772	772	
48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	195	195	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50102400	CONCRETE REMOVAL	CU YD	4.8		4.8
50200100	STRUCTURE EXCAVATION	CU YD	212		212
50200300	COFFERDAM EXCAVATION	CU YD	29		29
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1

14

* - DENOTES SPECIALTY ITEM

FILE NAME: 3 FILES

COLLINS ENGINEERS

USER NAME = tahahi	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-0428	COOK	60	6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62801	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
50300225	CONCRETE STRUCTURES	CU YD	50.9		50.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	157.7		157.7
50300260	BRIDGE DECK GROOVING	SQ YD	402		402
50500505	STUD SHEAR CONNECTORS	EACH	60		60
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	90590		90590
50800515	BAR SPLICERS	EACH	330		330
51500100	NAME PLATES	EACH	1		1
52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	220		220
52200100	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	231		231
52200150	DRIVING SOLDIER PILES	FOOT	231		231
52200250	UNTREATED TIMBER LAGGING	SQ FT	375		375
54003000	CONCRETE BOX CULVERTS	CU YD	157.2		157.2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	179		179
60250200	CATCH BASINS TO BE ADJUSTED	EACH	1	1	

19

* - DENOTES SPECIALTY ITEM

FILE NAME: 1-RTILES

COLLINS ENGINEERS

USER NAME = tahah	DESIGNED -	REVISED -
PLOT SCALE = 100,0000 / 1 in.	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	7
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62801	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
60255500	MANHOLES TO BE ADJUSTED	EACH	2	2	
60300105	FRAMES AND GRATES TO BE ADJUSTED	EACH	6	6	
60600605	CONCRETE CURB, TYPE B	FOOT	60	60	
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	631	631	
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	350	350	
* 63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	75	75	
* 63000360	LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN SPAN	FOOT	175	175	
* 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1	
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2	
63200310	GUARDRAIL REMOVAL	FOOT	802	802	
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	235	235	
• 66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	1	
• 66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1	

14

* - DENOTES SPECIALTY ITEM

FILE NAME: 1171151



USER NAME : tsahsi	DESIGNED -	REVISED -
PLOT SCALE : 100.0000 1" = 100'	DRAWN -	REVISED -
PLOT DATE : 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH			
SUMMARY OF QUANTITIES			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	6
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62801	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	6	
67100100	MOBILIZATION	LSUM	1	1	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	550	550	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	475	475	
70600240	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2	
70600340	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 2	EACH	2	2	
* 72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2	
* 72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	3	3	
* 78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	219	219	
* 78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	8941	8941	
* 78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	150	150	
* 78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	732	732	
* 78008270	POLYUREA PAVEMENT MARKING TYPE I - LINE 24"	FOOT	54	54	

14

* - DENOTES SPECIALTY ITEM

FILE NAME = 2FILES

COLLINS ENGINEERS

USER NAME = tshahi	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	9
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B01	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	34	34	
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	18	18	
78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	83	83	
* 78100300	REPLACEMENT REFLECTOR	EACH	409	409	
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	37	37	
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	72	72	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	135	135	
X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	10586	10586	
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	108		108
X6640530	CHAIN LINK FENCE, 5' ATTACHED TO STRUCTURE	FOOT	50	50	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1	
X7030025	WET REFLECTIVE TEMPORARY TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	183	183	
X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	20295	20295	
X7030040	WET REFLECTIVE TEMPORARY TAPE TYPE III, 6 INCH	FOOT	50	50	

* - DENOTES SPECIALTY ITEM

FILE NAME: 1 - FILES

COLLINS ENGINEERS

USER NAME : tahohi	DESIGNED -	REVISED -
PLOT SCALE : 100,0000' / 1" =	DRAWN -	REVISED -
PLOT DATE : 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-0428	COOK	60	10
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B01	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FED 20% STATE	
				ROADWAY 0004	BRIDGE 0005 S.N. 016-2283
X7030050	WET REFLECTIVE TEMPORARY TAPE TYPE III, 12 INCH	FOOT	27	27	
X7030055	WET REFLECTIVE TEMPORARY TAPE TYPE III, 24 INCH	FOOT	54	54	
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	42	42	
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1	
Δ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	3	3	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	103	103	
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	221		221
Z0062456	TEMPORARY PAVEMENT	SQ YD	244	244	
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	526	526	
∅ Z0076600	TRAINEES	Hour	500	500	
∅ Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	Hour	500	500	

Δ

∅

∅

Δ - Non-participating
∅ 0042

* - DENOTES SPECIALTY ITEM

FILE NAME: P. WELLS

COLLINS ENGINEERS

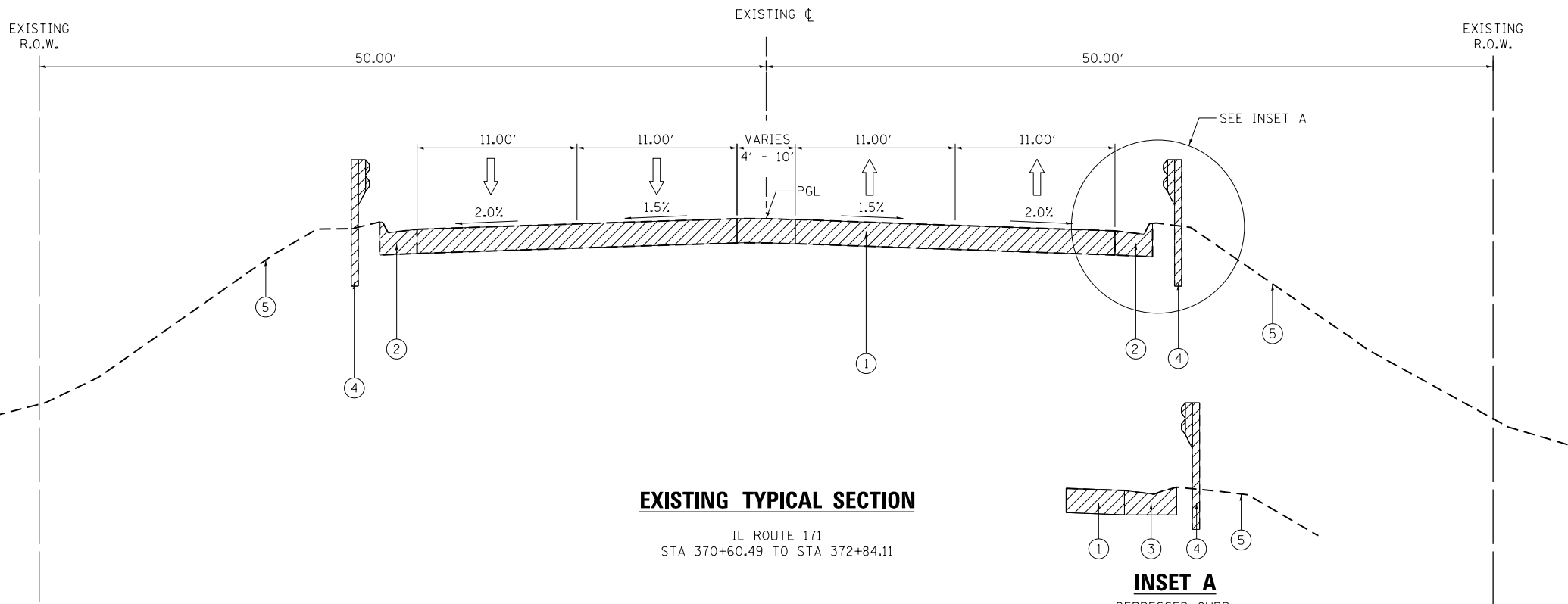
USER NAME : sahani	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' = 1"	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL ROUTE 171 OVER EQUESTRIAN PATH
SUMMARY OF QUANTITIES

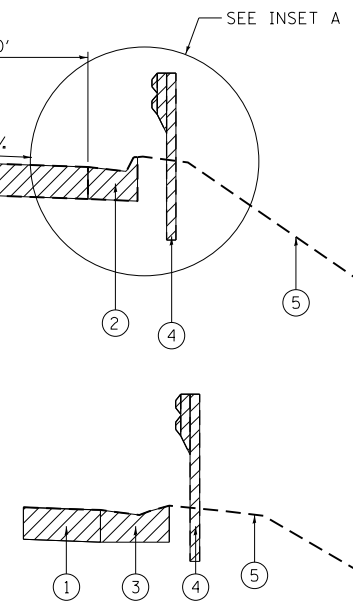
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-0428	COOK	60	11
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



EXISTING TYPICAL SECTION

IL ROUTE 171
STA 370+60.49 TO STA 372+84.11



INSET A

DEPRESSED CURB
IL RTE. 171
FROM STA. 370+61.89 TO STA. 372+84.15

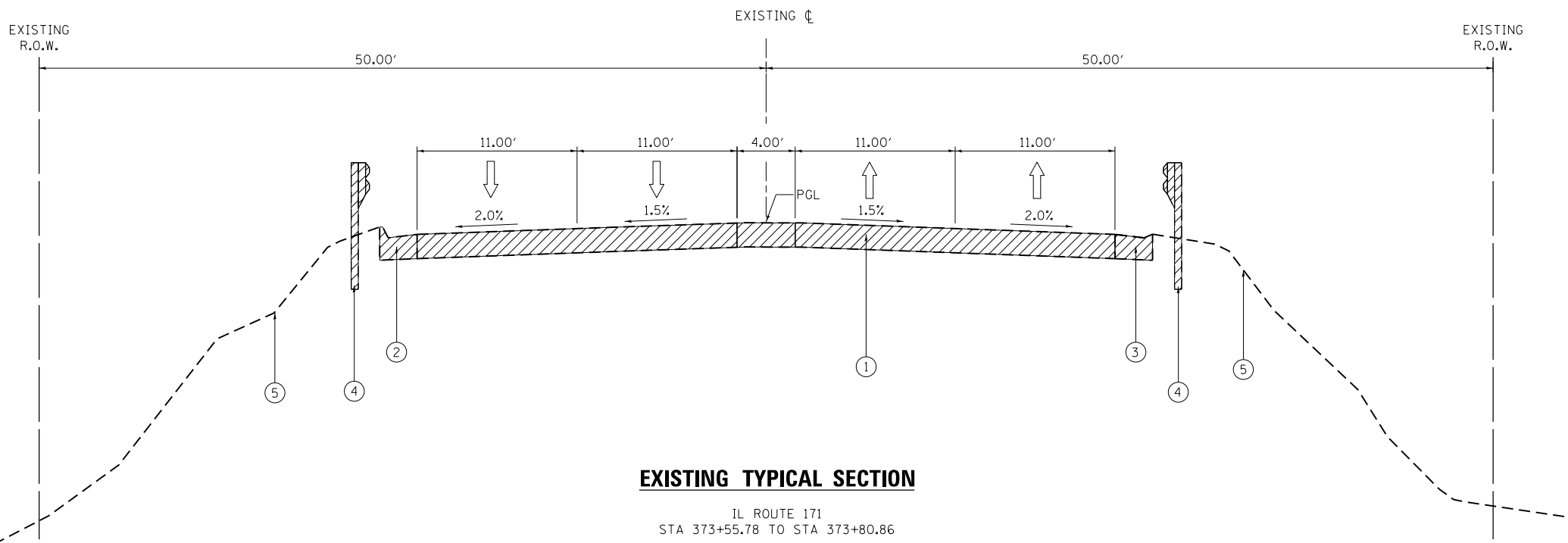
EXISTING LEGEND

- ① EXISTING 10" JOINTED PCC PAVEMENT
- ② EXISTING CONCRETE CURB AND GUTTER, TYPE B-6.24
- ③ EXISTING CONCRETE CURB AND GUTTER (DEPRESSED CURB)
- ④ EXISTING STEEL PLATE BEAM GUARDRAIL
- ⑤ EXISTING GROUND

TO BE REMOVED

NOTES:

1. SEE STRUCTURAL PLANS FOR EXISTING CULVERT SECTION FROM STA 372+84.11 TO STA 373+55.78.
2. EXISTING TOPSOIL TO BE STRIPPED FROM WITHIN PROPOSED CONSTRUCTION LIMITS. QUANTITY BASED ON ASSUMED DEPTH OF 6 INCH.



EXISTING TYPICAL SECTION

IL ROUTE 171
STA 373+55.78 TO STA 373+80.86

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = tsheh
PLOT SCALE = 10.0000' / in.
PLOT DATE = 5/9/2016

DESIGNED -
DRAWN -
CHECKED -
DATE -

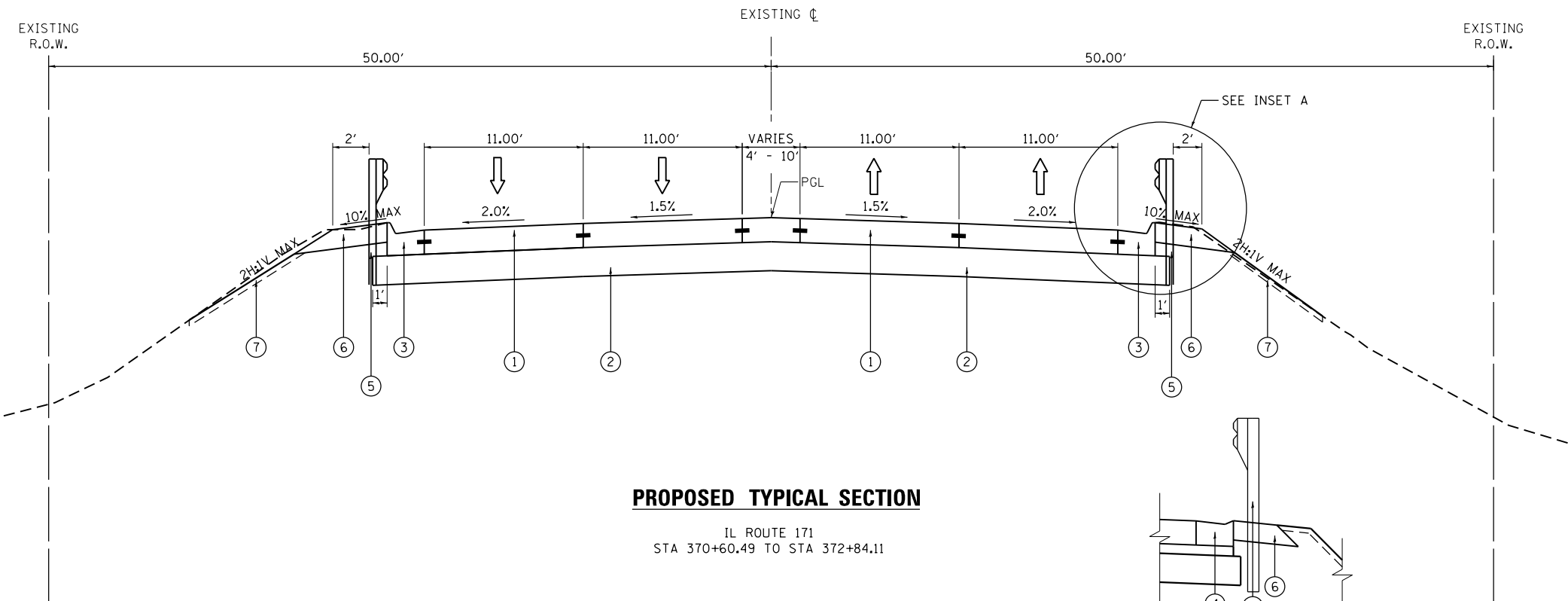
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
EXISTING TYPICAL SECTIONS**

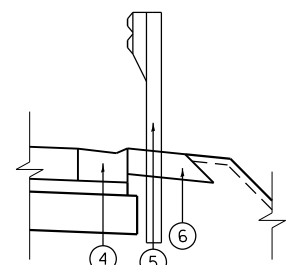
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	12
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



PROPOSED TYPICAL SECTION

IL ROUTE 171
STA 370+60.49 TO STA 372+84.11



INSET A

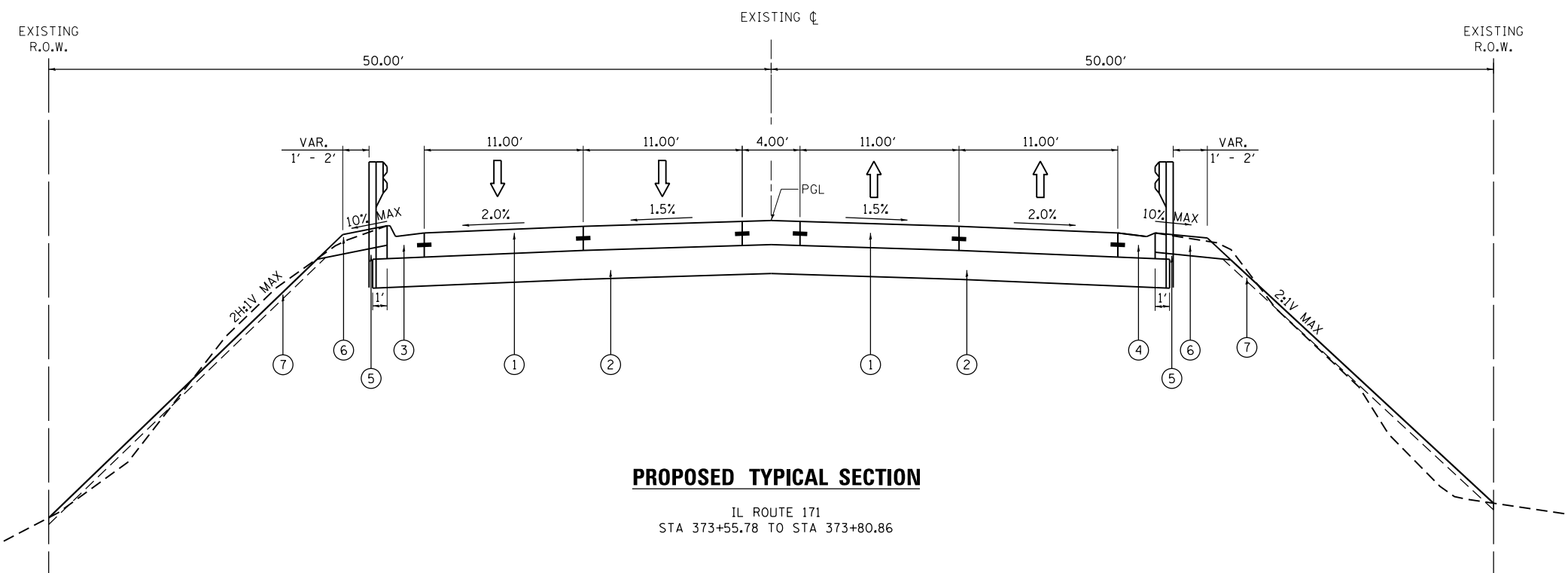
DEPRESSED CURB
IL RTE. 171
FROM STA. 370+61.89 TO STA. 372+84.15

PROPOSED LEGEND

- ① PROPOSED PCC PAVEMENT 10" (JOINTED)
- ② PROPOSED AGGREGATE SUBGRADE IMPROVEMENT 12"
- ③ PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ④ PROPOSED COMBINATION CONCRETE CURB AND GUTTER (DEPRESSED CURB)
- ⑤ PROPOSED STEEL PLATE BEAM GUARDRAIL (SEE DETAIL PLANS FOR TYPE AND LOCATIONS)
- ⑥ PROPOSED AGGREGATE SHOULDERS, TYPE B, 8"
- ⑦ TOPSOIL AND SEEDING (SEE LANDSCAPING PLANS FOR DETAILS AND LOCATIONS)

NOTES:

- 1. PROPOSED CULVERT SECTION FROM STA 372+84.11 TO STA 373+55.78
SEE STRUCTURAL PLANS FOR DETAILS.



PROPOSED TYPICAL SECTION

IL ROUTE 171
STA 373+55.78 TO STA 373+80.86

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = tshel	DESIGNED -	REVISED -
PLOT SCALE = 10.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
PROPOSED TYPICAL SECTIONS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	13
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

EARTHWORK SCHEDULE

STAGE I		EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
FROM STA.	TO STA.	[CU YD]	[CU YD]	[CU YD]	[CU YD]	[CU YD]
370+00.00	370+50.00	16.21	12.00	13.78	1.86	11.92
370+50.00	371+00.00	51.56	17.08	43.83	6.30	37.53
371+00.00	371+50.00	78.25	18.08	66.51	9.67	56.84
371+50.00	372+00.00	69.95	15.62	59.46	8.90	50.56
372+00.00	372+50.00	65.94	16.46	56.05	12.98	43.07
372+50.00	373+00.00	168.60	40.12	143.31	160.12	-16.81
373+00.00	373+50.00	289.99	59.94	246.49	311.54	-65.05
373+50.00	374+00.00	215.31	42.04	183.01	240.19	-57.18
374+00.00	374+50.00	63.03	15.58	53.58	82.48	-28.90
TOTAL		1019	237	866	834	32

TREE REMOVAL SCHEDULE

TREE ID	STATION	OFFSET	DIAMETER [IN]	6" -15"	DIA > 15"
1	371+88.28	45.25' RT	10,18	10	18
2	371+92.56	44.75' RT	7	7	0
3	371+94.51	43.16' RT	11	11	0
4	371+97.11	45.42' RT	6	6	0
5	372+03.97	44.96' RT	6	6	0
6	372+14.49	46.29' RT	10	10	0
7	372+28.06	45.09' RT	8	8	0
8	372+54.69	44.36' RT	20	0	20
9	372+57.90	44.06' RT	12	12	0
10	372+65.40	50.00' RT	8	8	0
11	372+67.00	47.17' RT	12	12	0
12	372+71.49	49.17' RT	11	11	0
13	372+93.55	43.37' RT	6	6	0
14	373+03.94	46.28' RT	6,6	12	0
15	373+29.53	48.42' LT	6	6	0
16	373+36.24	46.47' LT	7	7	0

STAGE II		EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
FROM STA.	TO STA.	[CU YD]	[CU YD]	[CU YD]	[CU YD]	[CU YD]
370+00.00	370+50.00	9.29	0.00	7.90	20.48	-12.58
370+50.00	371+00.00	38.63	0.93	32.84	12.22	20.62
371+00.00	371+50.00	65.77	2.01	55.90	3.63	52.27
371+50.00	372+00.00	68.01	6.88	57.81	3.06	54.75
372+00.00	372+50.00	123.17	13.14	104.69	50.82	53.87
372+50.00	373+00.00	167.82	7.36	142.65	51.22	91.43
373+00.00	373+50.00	110.34	0.00	93.79	3.39	90.40
373+50.00	374+00.00	50.63	0.00	43.04	2.60	40.44
374+00.00	374+50.00	21.12	0.00	17.95	0.83	17.12
TOTAL		655	30	557	148	408

SUMMARY	EARTH EXCAVATION	UNSUITABLE OR UNSTABLE MATERIAL	EXCAVATION TO BE USED IN EMBANKMENT (15% SHRINKAGE)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
STAGE	[CU YD]	[CU YD]	[CU YD]	[CU YD]	[CU YD]
STAGE I	1019	237	866	834	32
STAGE II	655	30	557	148	408
GRAND TOTAL	1674	267	1423	982	440

FILE NAME = 8FILES



USER NAME = tsheh
 PLOT SCALE = 100.0000' / 1"
 PLOT DATE = 5/9/2016

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

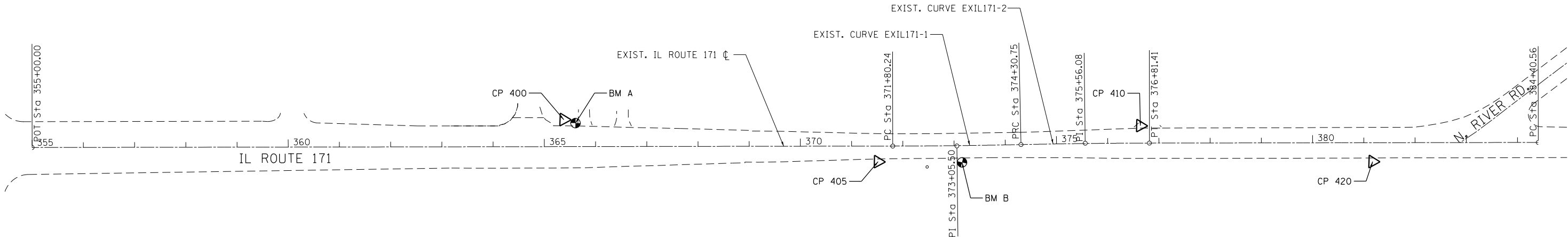
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
 SCHEDULE OF QUANTITIES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	14
CONTRACT NO. 62B01			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	

EXIST. CURVE EXIL171-1 PI STA. = 373+05.50 $\Delta = 1^\circ 08' 36''$ (LT) D = $0^\circ 27' 23''$ R = 12,553.92' T = 125.26' L = 250.50' E = 0.62' e = ----- T.R. = ----- S.E. RUN = ----- P.C. STA. = 371+80.24 P.T. STA. = 374+30.75	EXIST. CURVE EXIL171-2 PI STA. = 375+56.08 $\Delta = 1^\circ 08' 36''$ (RT) D = $0^\circ 27' 22''$ R = 12,561.64' T = 125.33' L = 250.66' E = 0.63' e = ----- T.R. = ----- S.E. RUN = ----- P.C. STA. = 374+30.75 P.T. STA. = 376+81.41
---	---



BENCHMARK A

RR SPIKE IN P.P. ON WEST SIDE OF IL 171, IN FRONT OF THE LOCK UP (1820) SELF STORAGE

STA. 365+60.92, 45.91' LT. (EXIST. IL RTE. 171 ϕ)

N 1910754.0614
E 1119823.1826

ELEV. 629.39

BENCHMARK B

CHISELED SQUARE ON TOP OF WALL FOR PEDESTRIAN TUNNEL ON EAST SIDE OF IL 171, CENTERLINE OF TUNNEL

STA. 373+15.15, 32.81' RT. (EXIST. IL RTE. 171 ϕ)

N 1911510.7666
E 1119876.8525

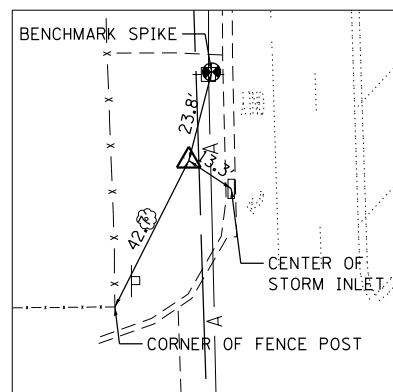
ELEV. 625.97

ALIGNMENT COORDINATES

POINT	STATION	NORTHING	EASTING
EXIST. IL 171 ϕ			
POT	355+00.00	1909695.1718	1119903.2157
POI	371+80.24	1911374.5444	1119849.1353
PC	373+05.50	1911499.7360	1119845.1038
PRC	374+30.75	1911624.8223	1119838.5751
POI	375+56.08	1911749.9854	1119832.0425
POT	376+81.41	1911875.2540	1119828.0085
PC	384+40.56	1912634.0141	1119803.5743

LEGEND

- CONTROL POINT
- BENCHMARK

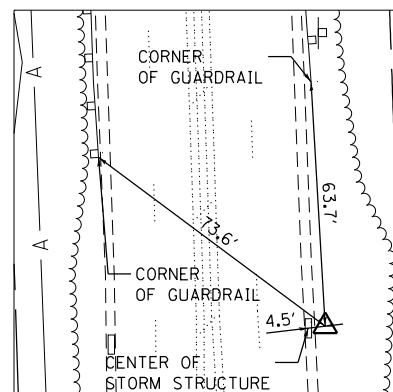


CONTROL POINT #400

SET REBAR BEHIND CURB

STA. 365+38.05, 52.64' LT (EXIST. IL RTE. 171 ϕ)

N 1910730.9850
E 1119817.1960
ELEV. 627.86

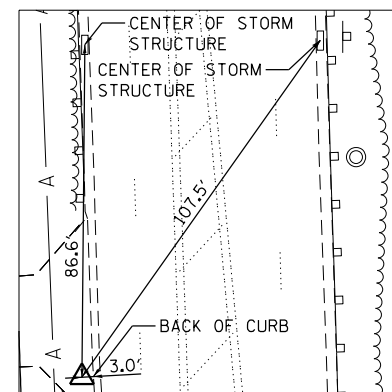


CONTROL POINT #405

SET REBAR BEHIND CURB

STA. 371+51.50, 30.46' RT (EXIST. IL RTE. 171 ϕ)

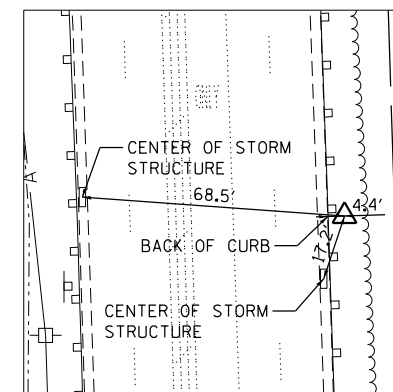
N 1911346.7930
E 1119880.5070
ELEV. 624.63



CONTROL POINT #410

STA. 376+63.80, 33.99' LT (EXIST. IL RTE. 171 ϕ)

N 1911856.5170
E 1119794.6150
ELEV. 622.37



CONTROL POINT #420

STA. 381+17.20, 36.93' RT (EXIST. IL RTE. 171 ϕ)

N 1912312.0100
E 1119850.8910
ELEV. 622.11

FILE NAME = 8FILES



USER NAME = tshel	DESIGNED -	REVISED -
PLOT SCALE = 200.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

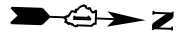
IL ROUTE 171 OVER EQUESTRIAN PATH
ALIGNMENT, TIES, AND BENCHMARKS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	15
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

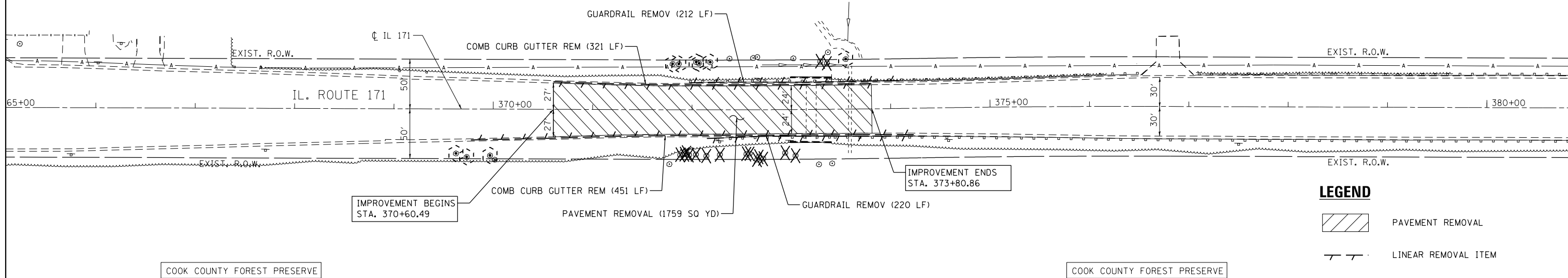
NOTES:

1. SEE STRUCTURE PLANS FOR REMOVAL ITEMS ON STRUCTURE.
2. SEE DRAINAGE AND UTILITY PLANS FOR ADJUSTMENTS AND REMOVAL OF DRAINAGE RELATED ITEMS.
3. SEE PAVEMENT MARKING, LANDSCAPING, AND SIGNING PLAN FOR SIGN REMOVAL.
4. SEE SCHEDULE OF QUANTITIES FOR SIZES OF TREES TO BE REMOVED.



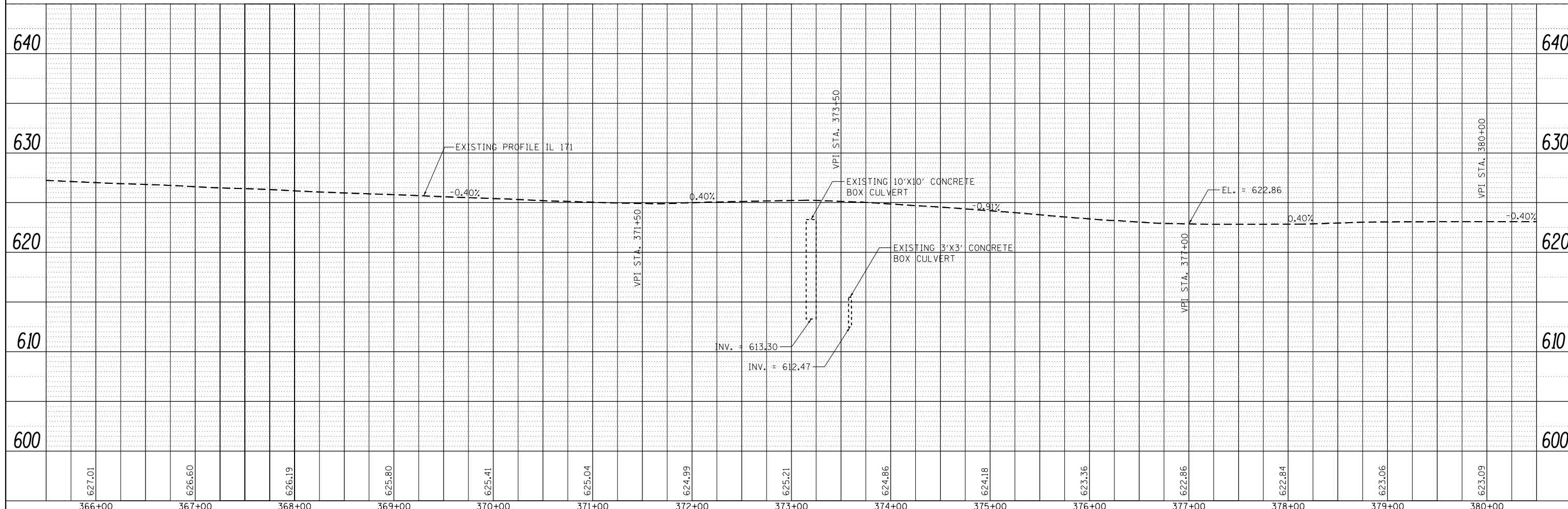
PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	



LEGEND

- PAVEMENT REMOVAL
- LINEAR REMOVAL ITEM
- TREE REMOVAL
- TREE PRUN 1-10 & TREE PRUN OVER 10



FILE NAME = 8FILE5

COLLINS ENGINEERS INC.

USER NAME = tshel
 PLOT SCALE = 100.0000' / 1" =
 PLOT DATE = 5/9/2016

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
 REMOVAL PLAN AND EXISTING PROFILE**

SCALE: SHEET OF SHEETS STA. TO STA.

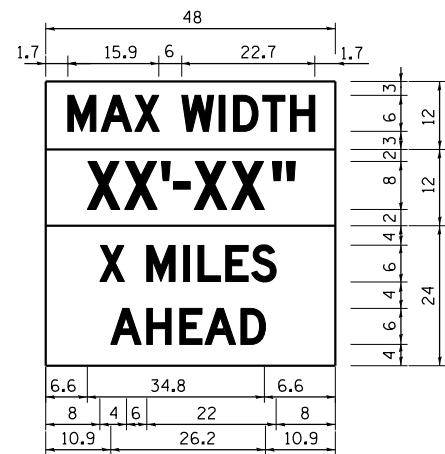
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	16
CONTRACT NO. 62B01			ILLINOIS FED. AID PROJECT	

MAINTENANCE OF TRAFFIC – GENERAL NOTES

1. SEE SPECIAL PROVISIONS TITLED TRAFFIC CONTROL AND PROTECTION ARTERIAL.
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. MONO-DIRECTIONAL PRISMATIC BARRIER REFLECTORS WILL BE PLACED AT 25' CENTERS ON TOP AND SIDE OF TEMPORARY CONCRETE BARRIER FACING TRAFFIC.
6. ALL TEMPORARY PAVEMENT MARKINGS ALONG IL ROUTE 171 DURING STAGED CONSTRUCTION SHALL BE WET REFLECTIVE TAPE, TYPE III OF THE WIDTH AND COLOR SPECIFIED ON THE PLAN SHEETS.
7. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS TO ALL COMMERCIAL AND RESIDENTIAL ENTRANCES FOR THE ENTIRE DURATION OF THE PROJECT UNLESS OTHERWISE SHOWN ON THE PLANS.
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. SHORT-TERM DAILY LANE CLOSURES MAY BE REQUIRED FOR INSTALLATION OF PERMANENT PAVEMENT MARKINGS AND TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH HIGHWAY STANDARD 701427.
10. PLACE MAX WIDTH SIGN (9'-6") FOR STAGE I AND (9'-6") FOR STAGE II AT SOUTHEAST CORNER OF IL ROUTE 171 AND IL ROUTE 64 LOCATED 0.5 MILES SOUTH OF SN 016-2283 ALONG IL ROUTE 171 AND AT NORTHWEST CORNER OF IL ROUTE 171 AND GRAND AVENUE LOCATED 1.0 MILES NORTH OF SN 016-2283 ALONG IL ROUTE 171.

STAGING NOTES

- PRE-STAGE I (IL ROUTE 171)
 CLOSE OUTER 2 NB LANES ALONG IL ROUTE 171 AND ESTABLISH TRAFFIC CONTROL PER STD. 701601 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN.
- CONSTRUCT TEMPORARY PAVEMENT AND INSTALL GUARDRAIL AS DETAILED ON THE PRESTAGE PLANS, AND TYPICAL SECTION, AND AS SHOWN ON THE STAGE I CROSS SECTIONS.
- STAGE I (IL 171)
 ESTABLISH TRAFFIC CONTROL PER STD. 701611 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN SHIFTING TRAFFIC ONTO THE TEMPORARY PAVEMENT.
- CONSTRUCT TWO SOUTH BOUND LANES AND MEDIAN ALONG IL ROUTE 171 AND 36.5' OF SN 016-2283.
- STAGE II (IL 171)
 ESTABLISH TRAFFIC CONTROL PER STD. 701611 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN SHIFTING TRAFFIC ONTO THE TEMPORARY PAVEMENT.
- CONSTRUCT TWO NORTH BOUND LANES AND REMAINDER OF SN 016-2283.
- STAGE III (IL 171)
 CLOSE OUTER MOST LANE ALONG NB AND SB IL ROUTE 171 AND ESTABLISH STAGE TRAFFIC CONTROL PER STD. 701601 AND AS DETAILED IN THE TRAFFIC CONTROL PLAN.
- CONSTRUCT WINGWALLS OF SN 016-2283.



W12-1103 (WIDTH IS 8D)
 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

FILE NAME = 8FILES



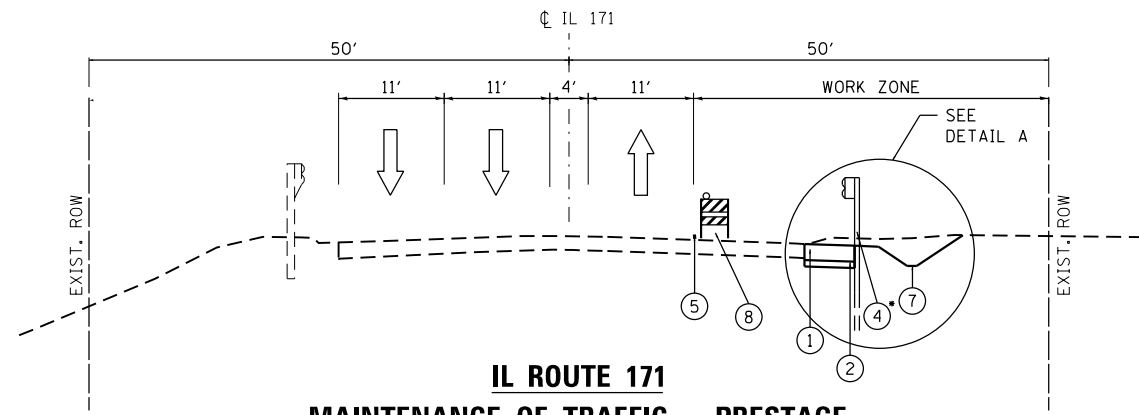
USER NAME = r9e11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
 MAINTENANCE OF TRAFFIC – GENERAL NOTES**

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

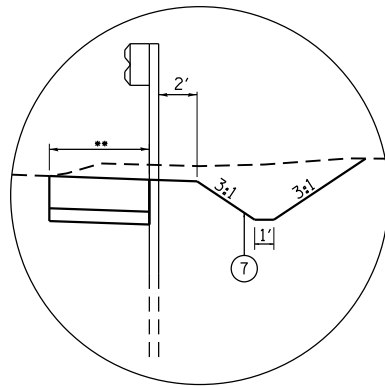
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	18
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



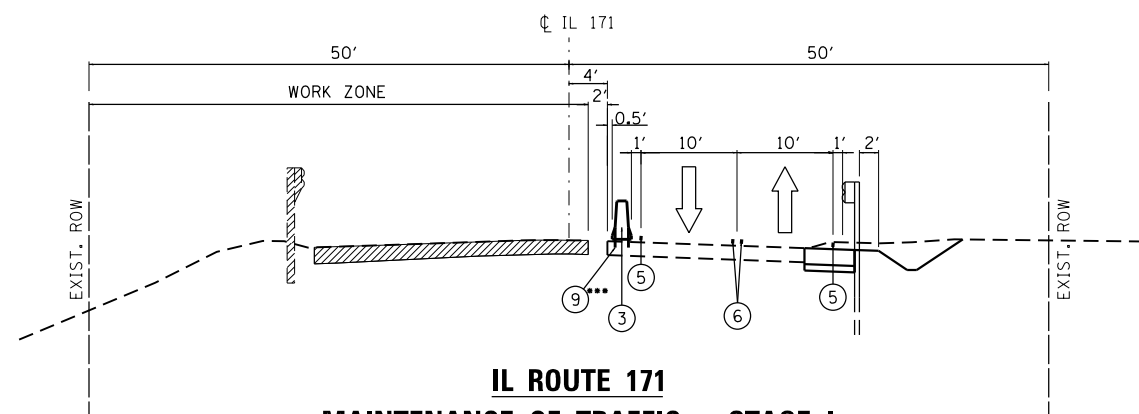
**IL ROUTE 171
MAINTENANCE OF TRAFFIC - PRESTAGE**

STA 370+60.49 TO STA 374+48.68

- * LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN SPAN
FROM STA 372+35.52 TO STA 374+04.27
- ** WIDTH OF TEMPORARY PAVEMENT VARIES FROM 2.3' MIN. TO 6.0' MAX.



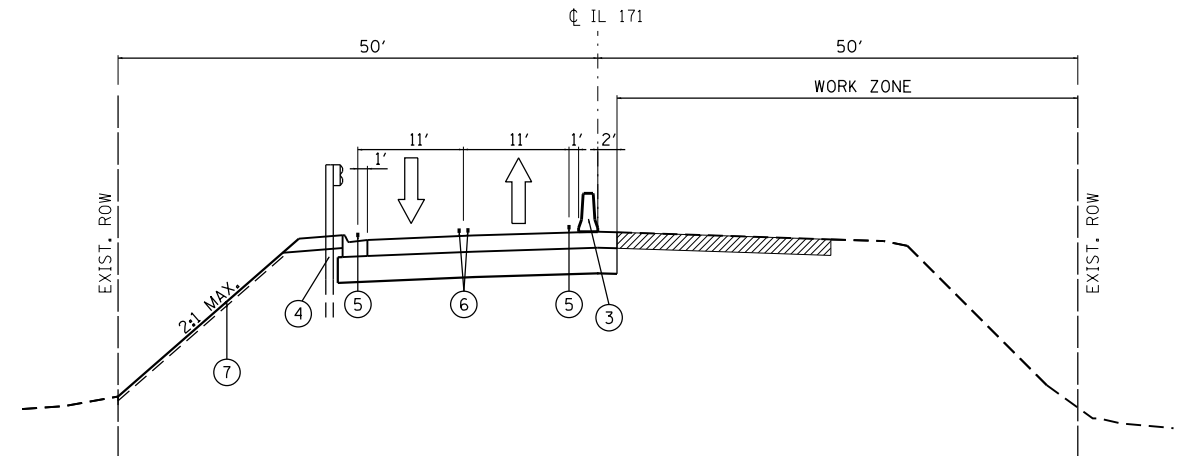
DETAIL A
TEMPORARY DITCH TYPICAL SECTION
FROM STA 370+00.00 TO STA 372+00.00



**IL ROUTE 171
MAINTENANCE OF TRAFFIC - STAGE I**

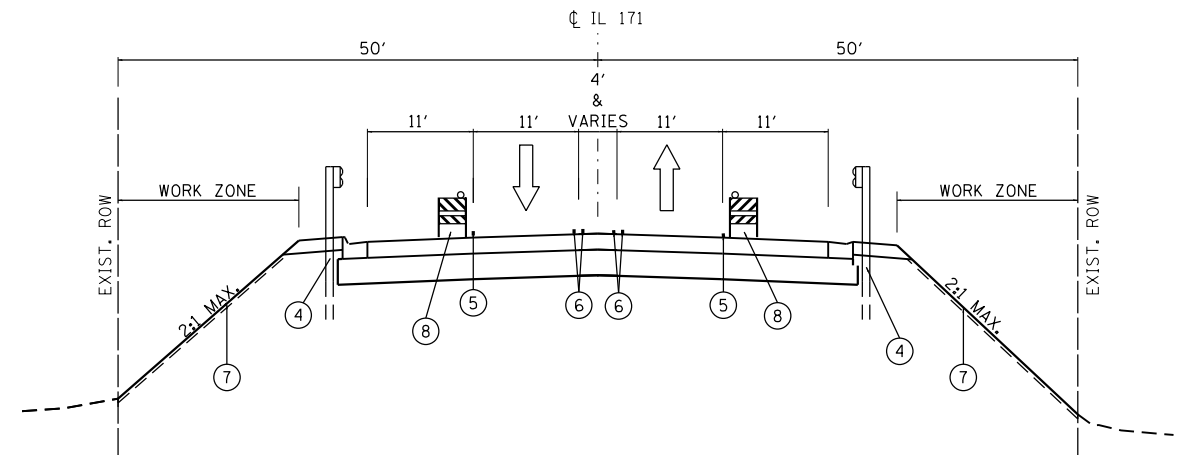
STA 370+60.49 TO STA 374+48.68

- *** PINNING TEMPORARY CONCRETE BARRIER
FROM STA 372+82.50 TO STA 373+57.50



**IL ROUTE 171
MAINTENANCE OF TRAFFIC - STAGE II**

STA 370+76.23 TO STA 375+76.24



**IL ROUTE 171
MAINTENANCE OF TRAFFIC - STAGE III**

STA 370+60.49 TO STA 373+80.86

LEGEND

- ① TEMPORARY PAVEMENT
- ② SUBBASE GRANULAR MATERIAL, TYPE B 4"
- ③ TEMPORARY CONCRETE BARRIER
- ④ STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS
- ⑤ WET REFLECTIVE TEMPORARY TAPE TYPE III, 4" (WHITE)
- ⑥ WET REFLECTIVE TEMPORARY TAPE TYPE III, 4" (YELLOW) WITH TEMPORARY RAISED REFLECTIVE PAVEMENT MARKERS
- ⑦ TEMPORARY EROSION CONTROL SEEDING HEAVY DUTY EROSION CONTROL BLANKET
- ⑧ DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT SPACED 50' C-C
- ⑨ PINNING TEMPORARY CONCRETE BARRIER

NOTES:

1. SEE STRUCTURAL PLANS FOR STAGING TYPICAL SECTION OVER STRUCTURE.
2. TEMPORARY CONCRETE BARRIER WALL AND TEMPORARY IMPACT ATTENUATORS MUST BE SEATED ON BARE, CLEAN PAVEMENT.

FILE NAME = 8FILES

**COLLINS
ENGINEERS**

USER NAME = r9e11
PLOT SCALE = 100.0000' / 1" =
PLOT DATE = 6/16/2016

DESIGNED -
DRAWN -
CHECKED -
DATE -

REVISED -
REVISED -
REVISED -
REVISED -

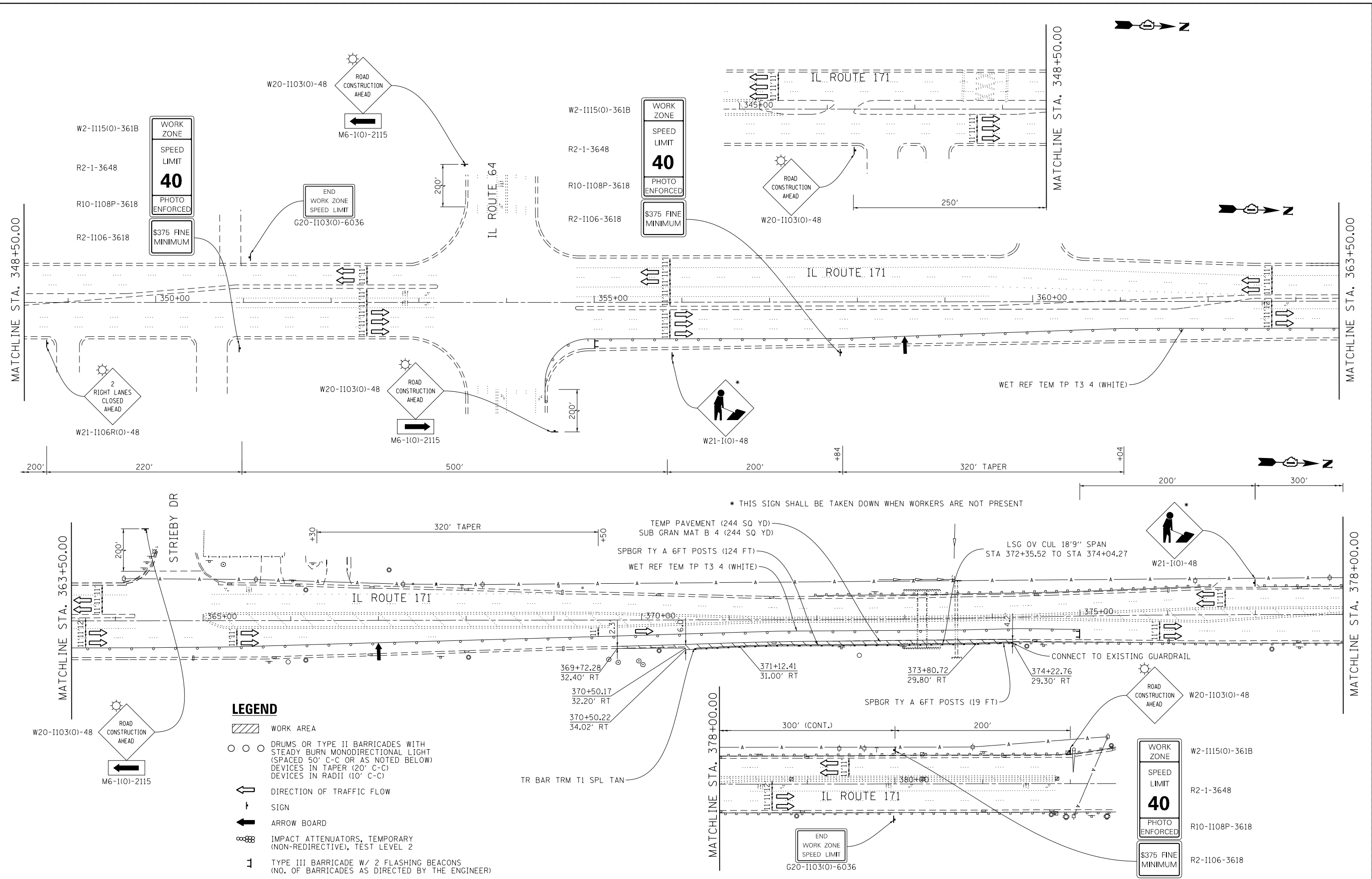
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - TYPICAL SECTIONS**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	19
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B01	

FILE NAME = 8FILES



LEGEND

- WORK AREA
- DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- ARROW BOARD
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
- TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)

COLLINS ENGINEERS

USER NAME = r9e11
 PLOT SCALE = 100.0000' / 1" =
 PLOT DATE = 6/16/2016

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -









**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

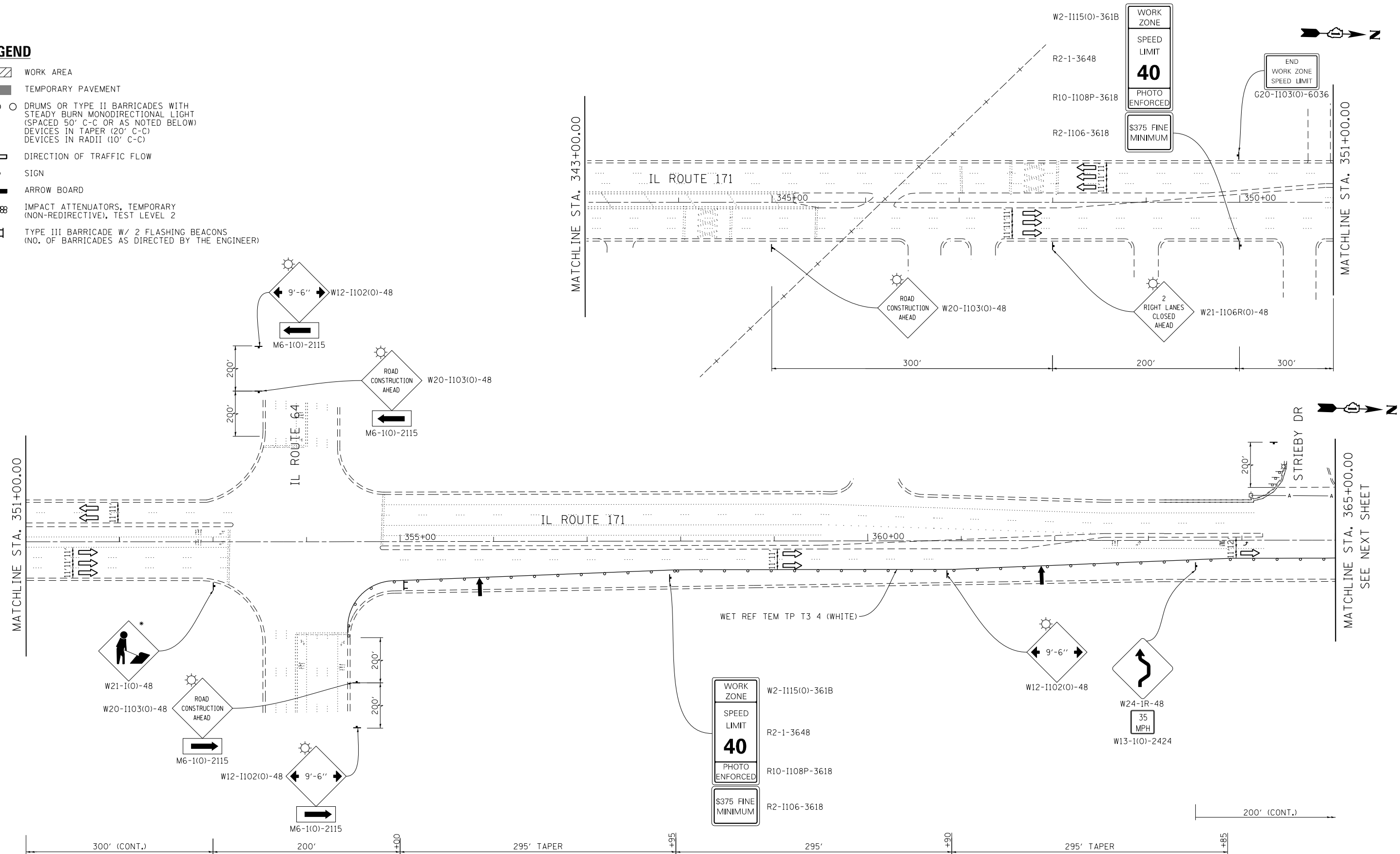
**IL ROUTE 171 OVER EQUESTRIAN PATH
 MAINTENANCE OF TRAFFIC - PRESTAGE**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	20
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND

-  WORK AREA
-  TEMPORARY PAVEMENT
-  DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
-  DIRECTION OF TRAFFIC FLOW
-  SIGN
-  ARROW BOARD
-  IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
-  TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)



* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT

FILE NAME = 8FILES



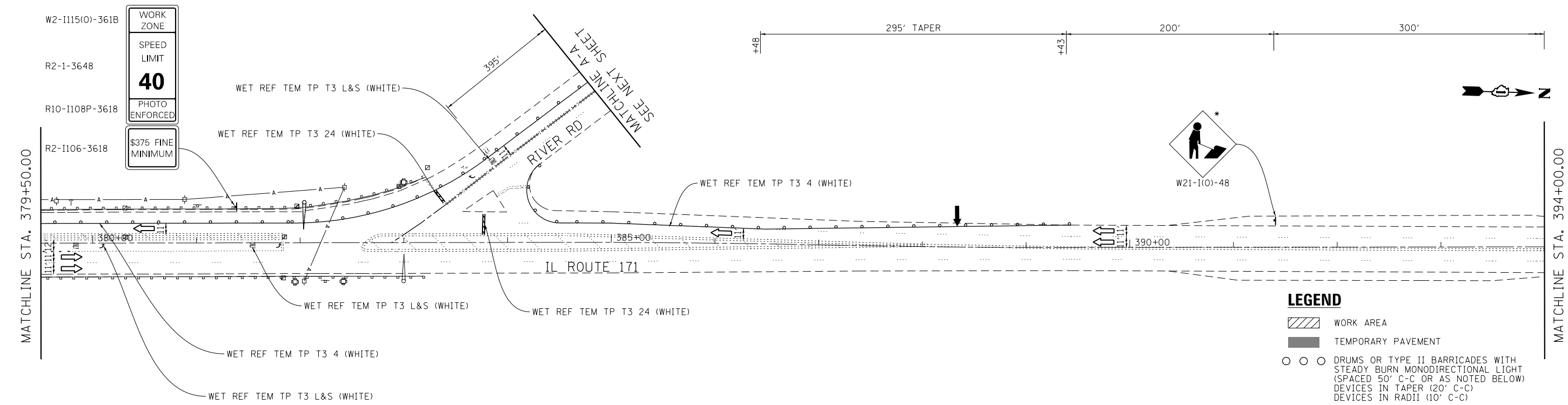
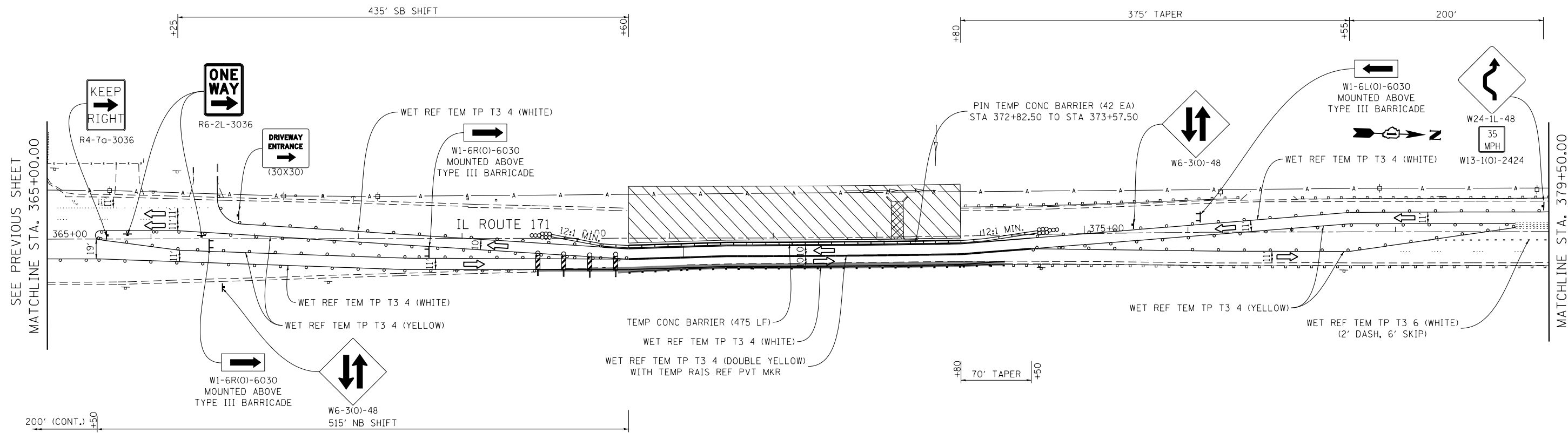
USER NAME = r9e11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - STAGE I**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	21
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- WORK AREA
 - TEMPORARY PAVEMENT
 - DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
 - DIRECTION OF TRAFFIC FLOW
 - SIGN
 - ARROW BOARD
 - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
 - TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)
 - DOUBLE VERTICAL PANELS WITH BI-DIRECTIONAL STEADY BURNING LIGHTS EVERY 25' C-C

NOTES:
 1. SEE TC26 FOR ADDITIONAL DETAILS FOR DRIVEWAY ENTRANCE SIGNING
 * THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = r9e11
 PLOT SCALE = 100.0000' / 1" =
 PLOT DATE = 6/16/2016

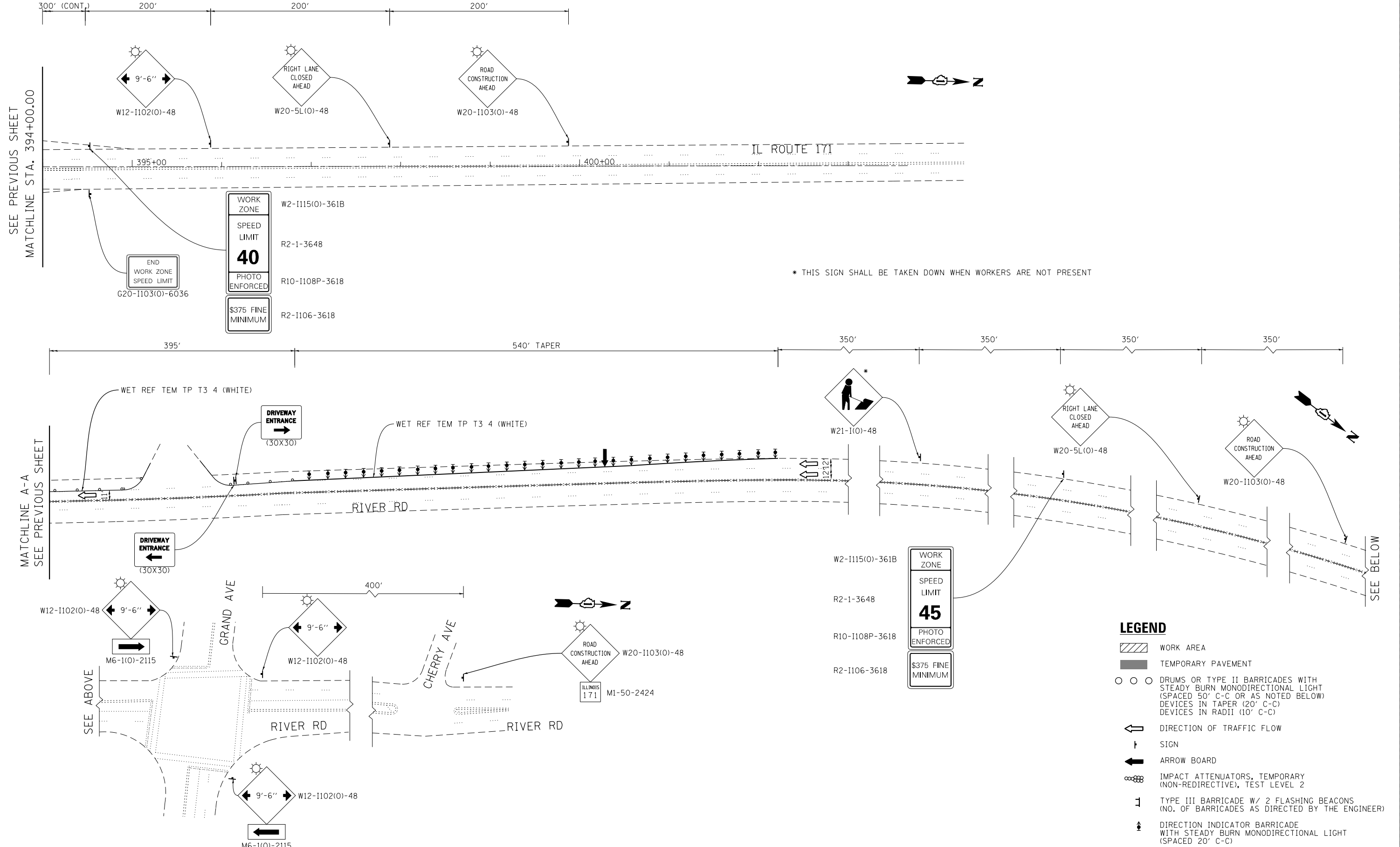
DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
 MAINTENANCE OF TRAFFIC - STAGE I**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	22
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SEE PREVIOUS SHEET
MATCHLINE STA. 394+00.00

MATCHLINE A-A
SEE PREVIOUS SHEET

* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT

SEE BELOW

LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- ARROW BOARD
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
- TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 20' C-C)

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = r9e11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -









**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

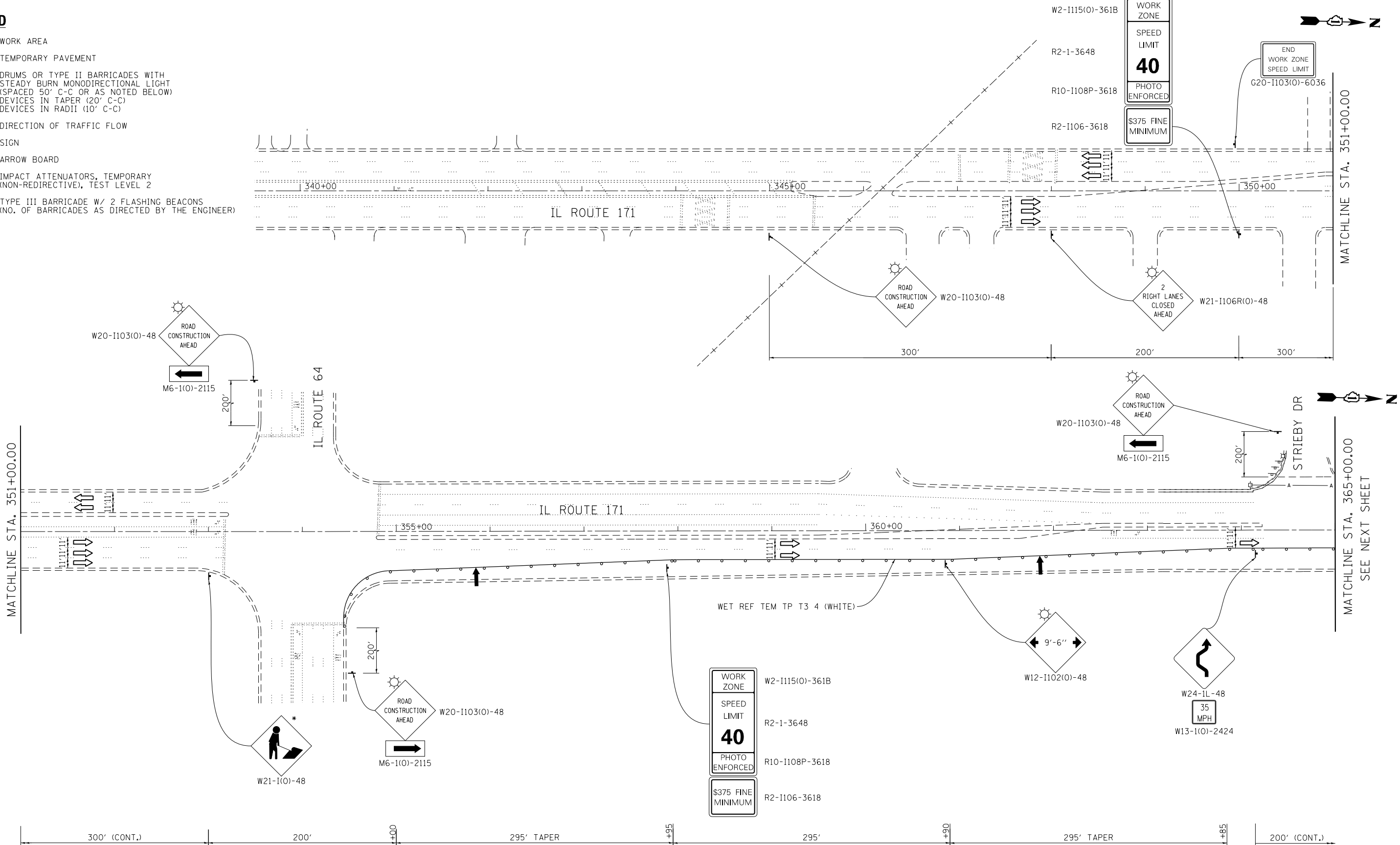
**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - STAGE I**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	23
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LEGEND

-  WORK AREA
-  TEMPORARY PAVEMENT
-  DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
-  DIRECTION OF TRAFFIC FLOW
-  SIGN
-  ARROW BOARD
-  IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
-  TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)



* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT

FILE NAME = 8FILES



USER NAME = r9e11
PLOT SCALE = 100.0000' / 1" =
PLOT DATE = 6/16/2016

DESIGNED -
DRAWN -
CHECKED -
DATE -

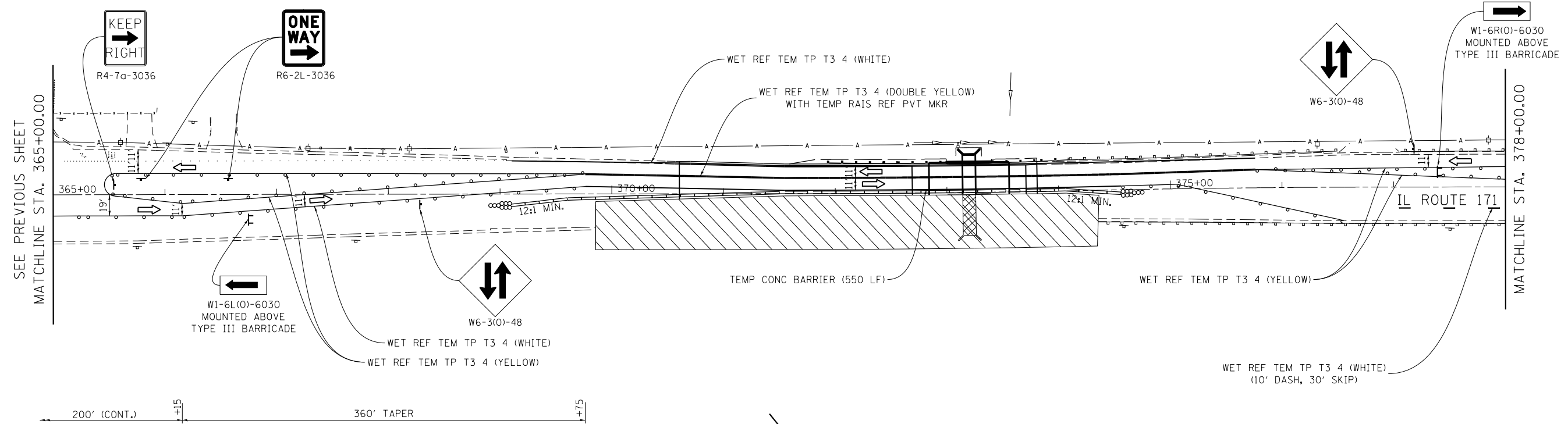
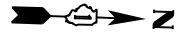
REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

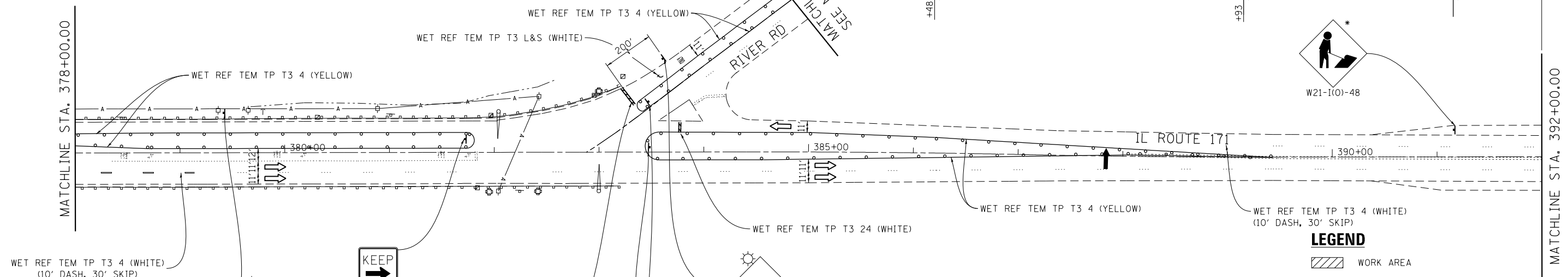
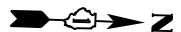
**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - STAGE II**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	24
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT



WET REF TEM TP T3 4 (WHITE)
(10' DASH, 30' SKIP)

- W2-1115(O)-361B
- R2-1-3648
- R10-1108P-3618
- R2-1106-3618

WORK ZONE
SPEED LIMIT
40
PHOTO ENFORCED
\$375 FINE MINIMUM



LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
- DIRECTION OF TRAFFIC FLOW
- SIGN
- ARROW BOARD
- IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
- TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)

FILE NAME = 8FILES

COLLINS ENGINEERS

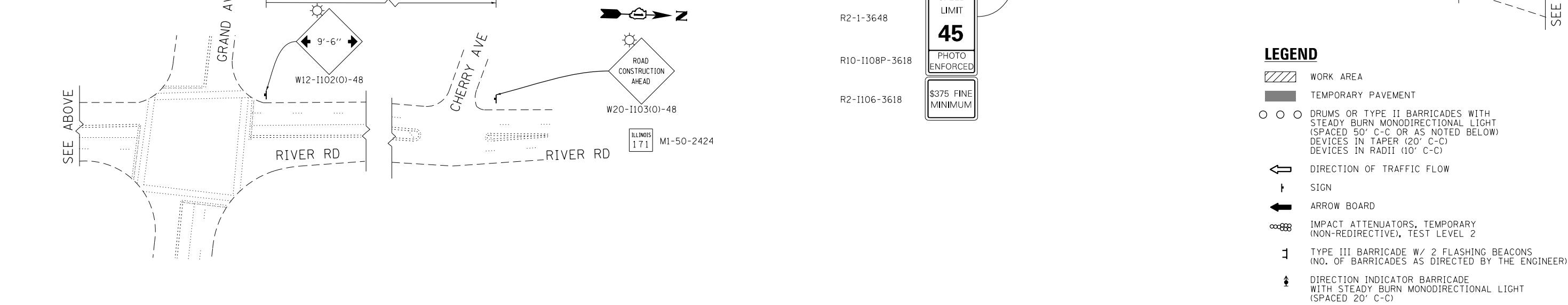
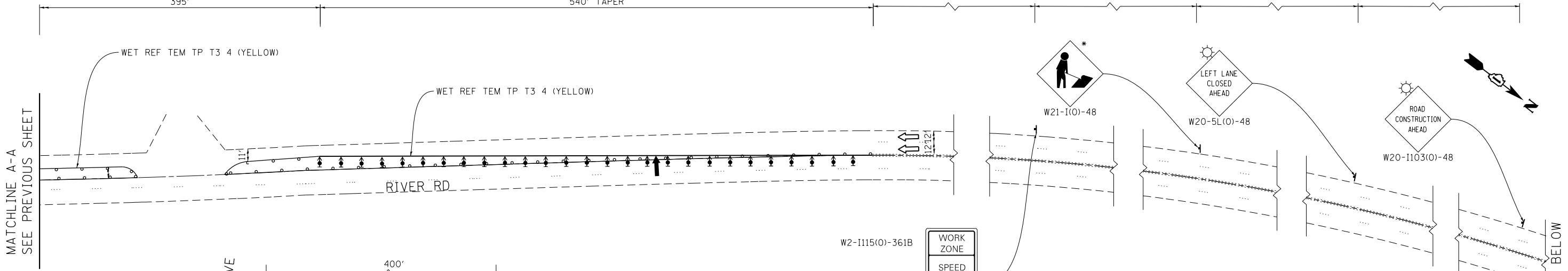
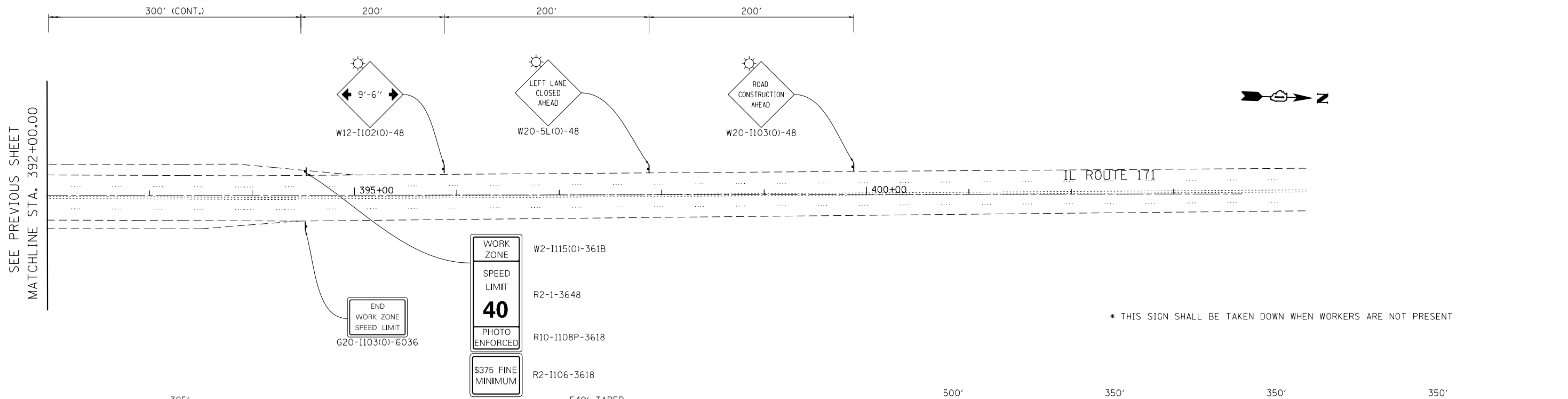
USER NAME = rge11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - STAGE II**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	25
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND**
- WORK AREA
 - TEMPORARY PAVEMENT
 - DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
 - DIRECTION OF TRAFFIC FLOW
 - SIGN
 - ARROW BOARD
 - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
 - TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)
 - DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 20' C-C)

COLLINS ENGINEERS

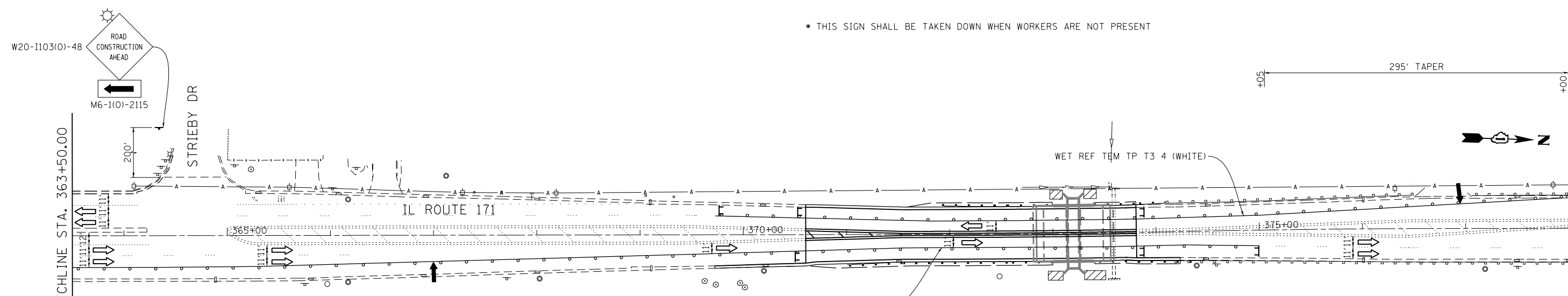
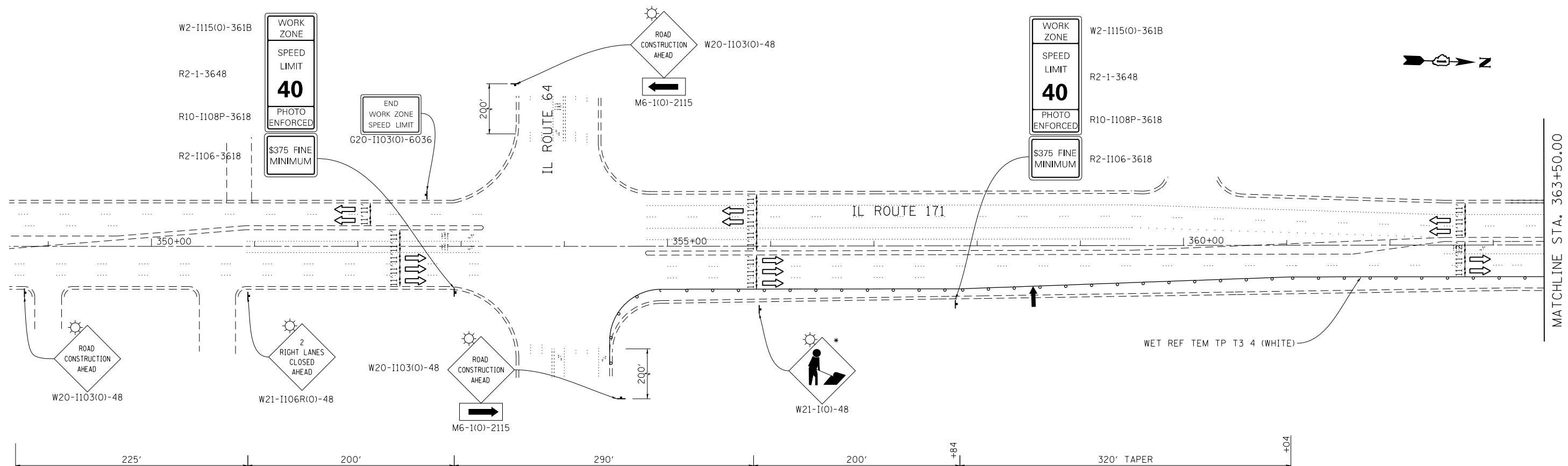
USER NAME = r9e11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
MAINTENANCE OF TRAFFIC - STAGE II**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	25A
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

FILE NAME = 8FILES



* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT

- LEGEND**
- WORK AREA
 - DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
 - DIRECTION OF TRAFFIC FLOW
 - SIGN
 - ARROW BOARD
 - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
 - TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = r9e11
 PLOT SCALE = 100.0000' / 1" =
 PLOT DATE = 6/16/2016

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

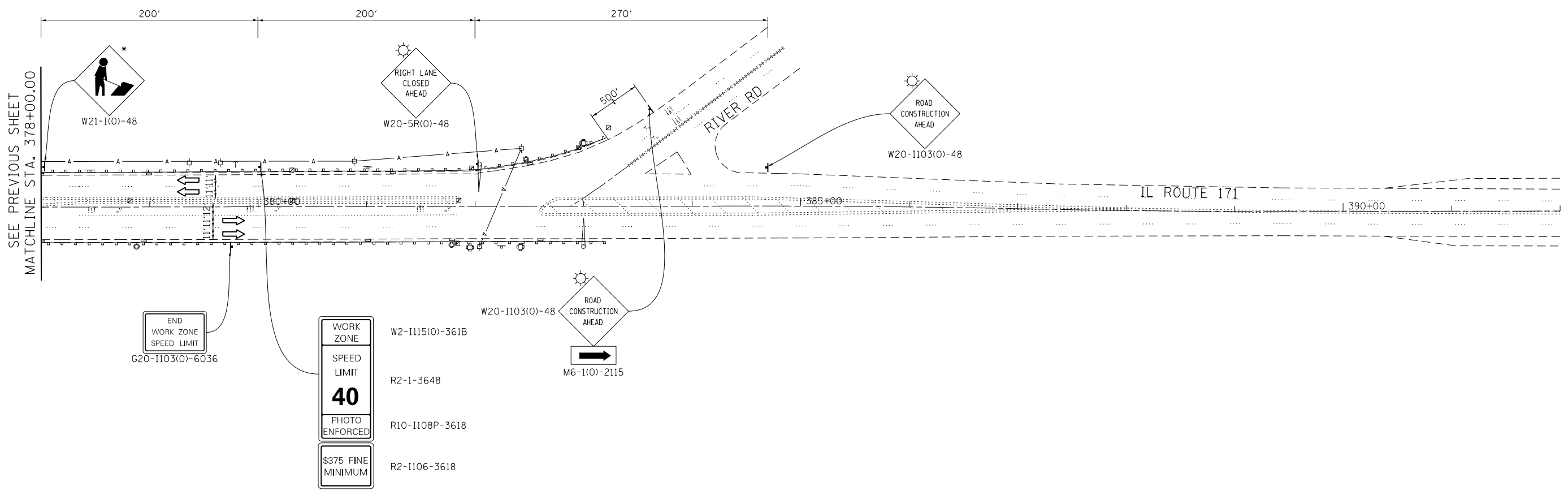
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
 MAINTENANCE OF TRAFFIC - STAGE III**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	26
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

* THIS SIGN SHALL BE TAKEN DOWN WHEN WORKERS ARE NOT PRESENT



SEE PREVIOUS SHEET
MATCHLINE STA. 378+00.00

END
WORK ZONE
SPEED LIMIT
G20-1103(O)-6036

WORK
ZONE
SPEED
LIMIT
40
PHOTO
ENFORCED
\$375 FINE
MINIMUM

W2-1115(O)-361B
R2-1-3648
R10-1108P-3618
R2-1106-3618

W20-1103(O)-48
ROAD
CONSTRUCTION
AHEAD
M6-1(O)-2115

- LEGEND**
- WORK AREA
 - DRUMS OR TYPE II BARRICADES WITH STEADY BURN MONODIRECTIONAL LIGHT (SPACED 50' C-C OR AS NOTED BELOW) DEVICES IN TAPER (20' C-C) DEVICES IN RADII (10' C-C)
 - DIRECTION OF TRAFFIC FLOW
 - SIGN
 - ARROW BOARD
 - IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2
 - TYPE III BARRICADE W/ 2 FLASHING BEACONS (NO. OF BARRICADES AS DIRECTED BY THE ENGINEER)

FILE NAME = 8FILES

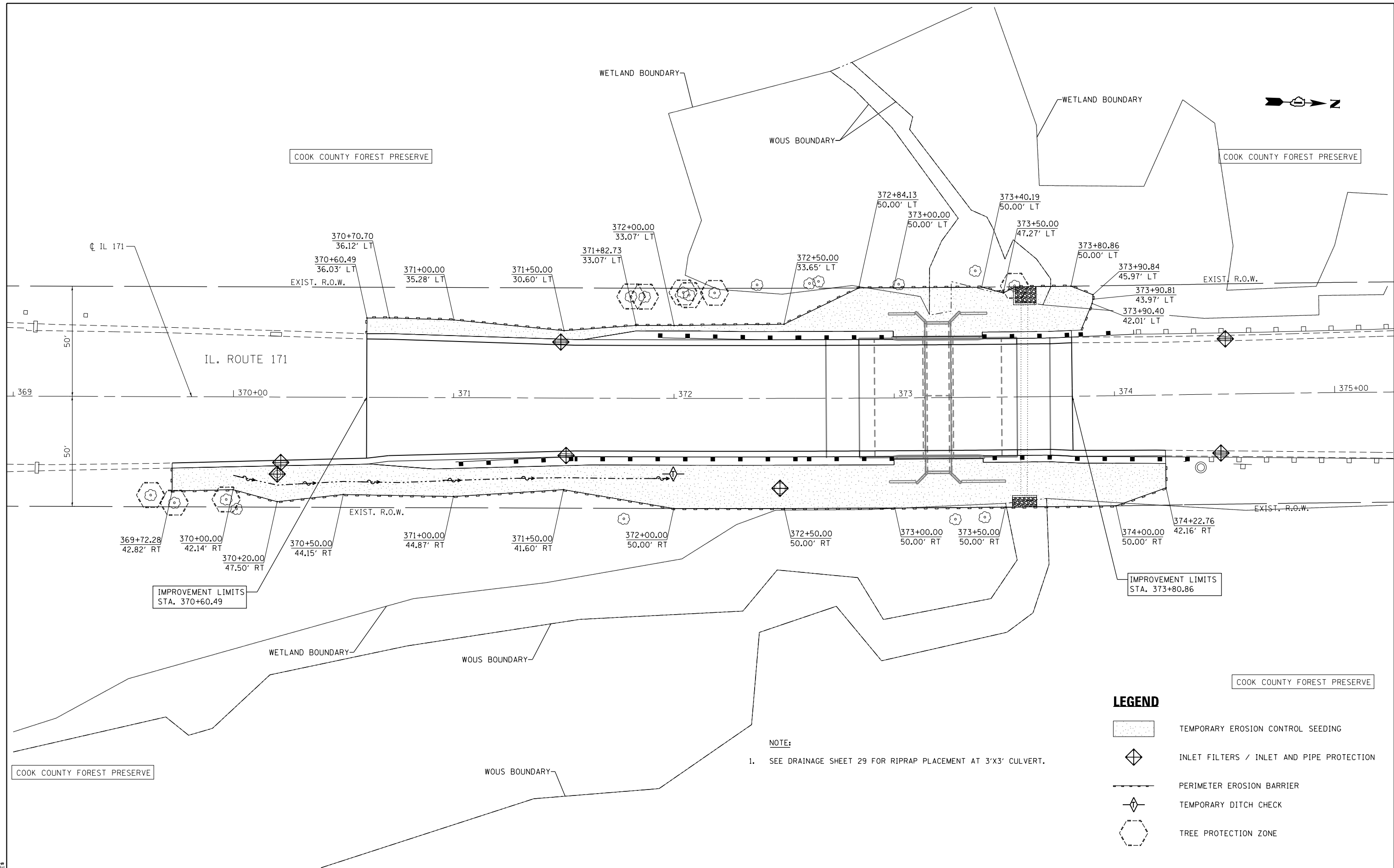
COLLINS ENGINEERS

USER NAME = rge11	DESIGNED -	REVISED -
PLOT SCALE = 100.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 6/16/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

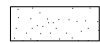




IL ROUTE 171 OVER EQUESTRIAN PATH MAINTENANCE OF TRAFFIC - STAGE III			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	27
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

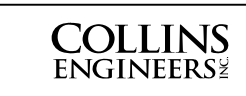


NOTE:
 1. SEE DRAINAGE SHEET 29 FOR RIPRAP PLACEMENT AT 3'X3' CULVERT.

LEGEND

	TEMPORARY EROSION CONTROL SEEDING
	INLET FILTERS / INLET AND PIPE PROTECTION
	PERIMETER EROSION BARRIER
	TEMPORARY DITCH CHECK
	TREE PROTECTION ZONE

FILE NAME = 8FILES

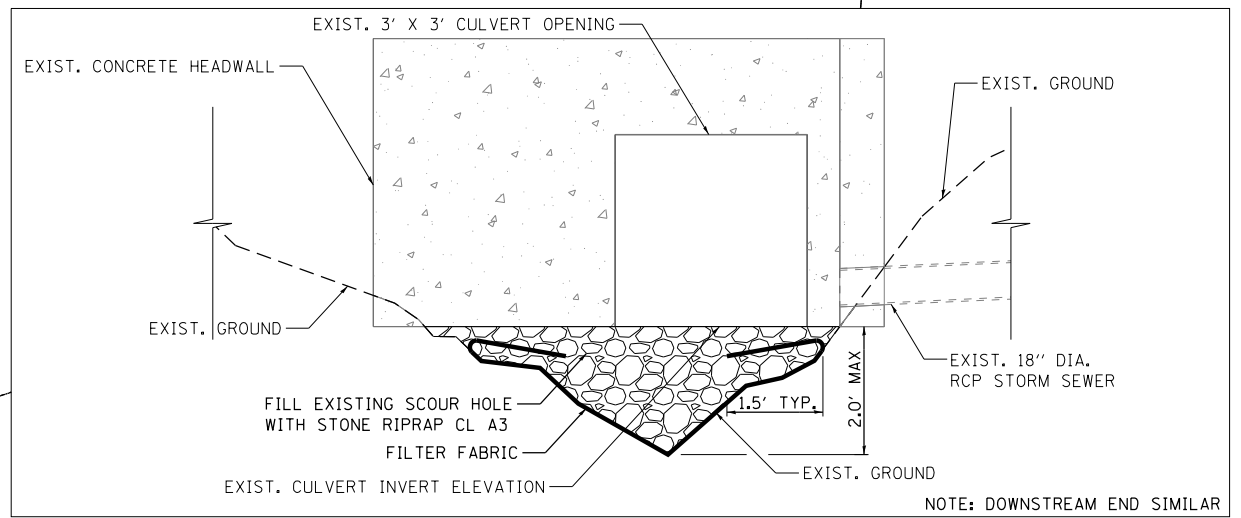
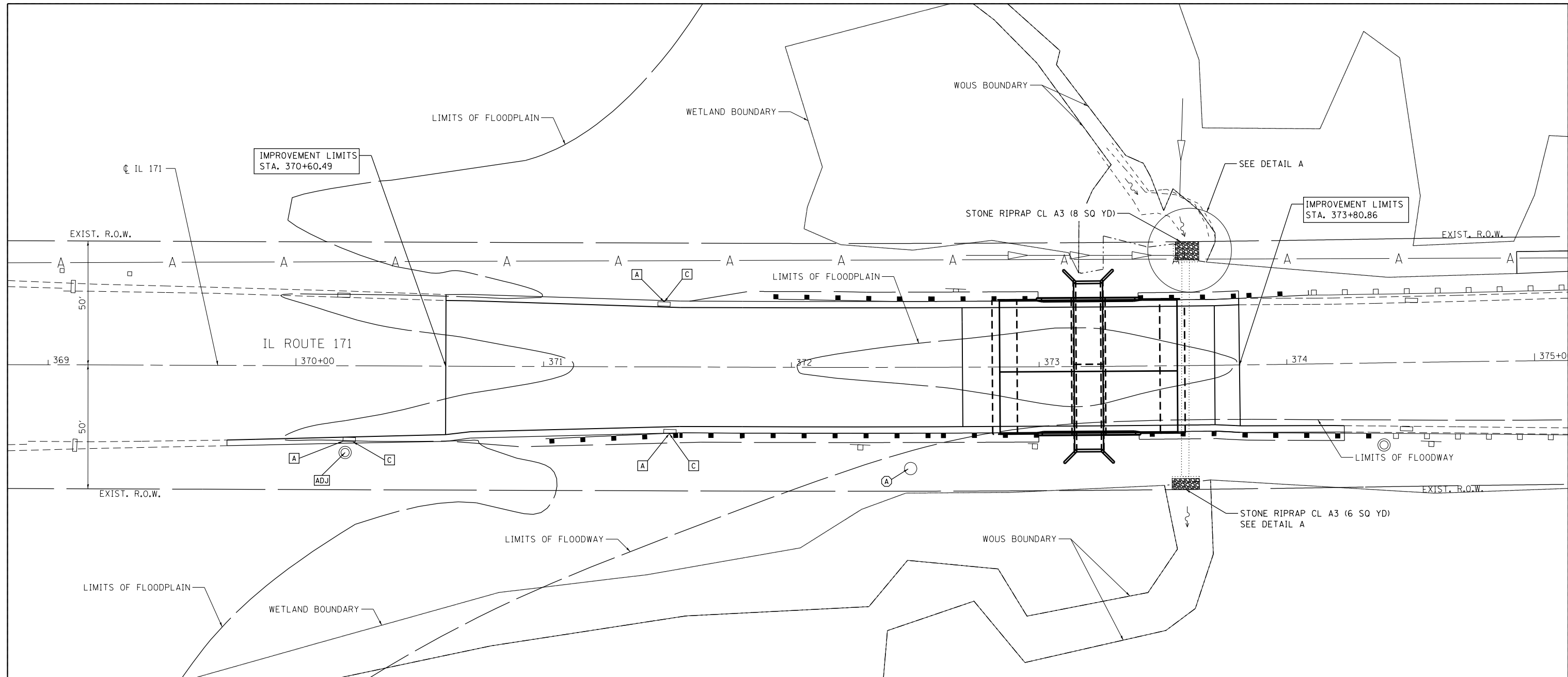


USER NAME = tshel	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

IL ROUTE 171 OVER EQUESTRIAN PATH TEMPORARY EROSION CONTROL PLAN	
SCALE:	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	28
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



DETAIL A - RIPRAP PLACEMENT
LOOKING EAST

LEGEND

- [A] - FRAMES AND GRATES TO BE ADJUSTED
- (A) - CATCH BASINS TO BE ADJUSTED
- [C] - DRAINAGE STRUCTURES TO BE CLEANED
- [ADJ] - MANHOLES TO BE ADJUSTED

FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = tsheli	DESIGNED -	REVISD -
PLOT SCALE = 40.0000' / 1"	DRAWN -	REVISD -
PLOT DATE = 5/9/2016	CHECKED -	REVISD -
	DATE -	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

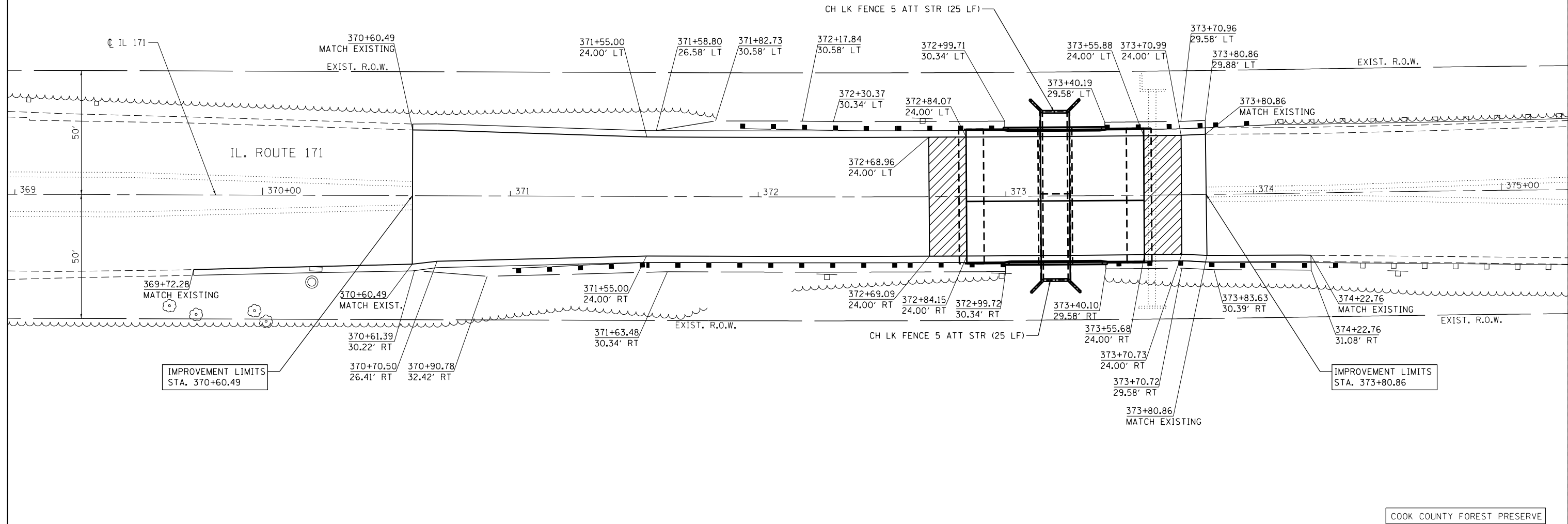
IL ROUTE 171 OVER EQUESTRIAN PATH DRAINAGE PLAN	
SCALE: _____	SHEET NO. ___ OF ___ SHEETS
STA. _____	TO STA. _____

F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEETS 60	SHEET NO. 29
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



COOK COUNTY FOREST PRESERVE


COOK COUNTY FOREST PRESERVE



COOK COUNTY FOREST PRESERVE

COOK COUNTY FOREST PRESERVE

LEGEND

 PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB

FILE NAME = 8FILES

COLLINS ENGINEERS

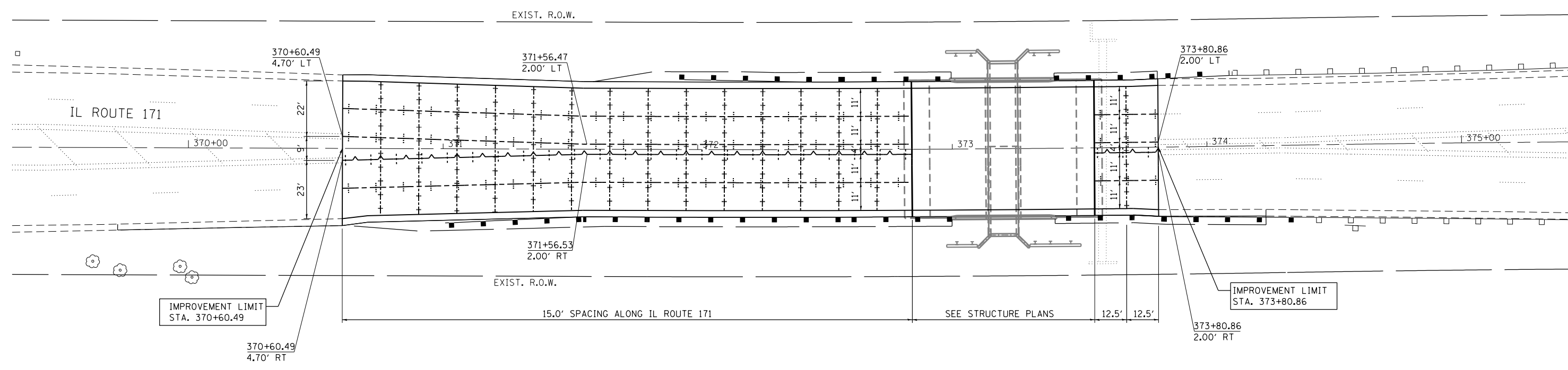
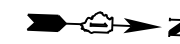
USER NAME = tshelz	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / 1" =	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
PAVEMENT DETAILS PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	30
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTE:

- SEE HIGHWAY STD 420106 FOR PAVEMENT JOINT DETAILS.

PAVEMENT JOINT LEGEND:

- LONGITUDINAL CONSTRUCTION JOINT WITH TIE BARS
- SAWED LONGITUDINAL JOINT
- SAWED TRANSVERSE CONTRACTION JOINT

FILE NAME = 8FILES



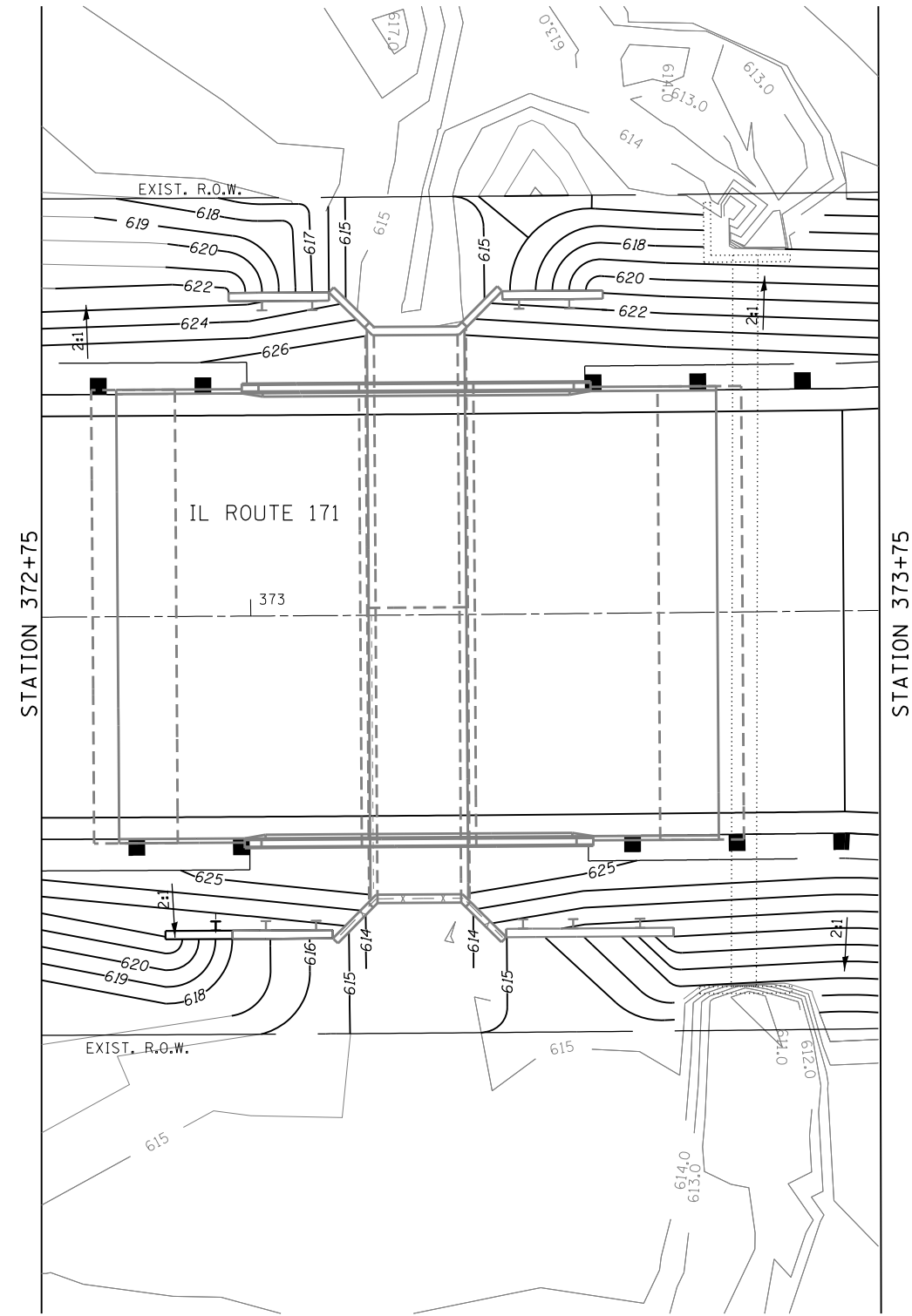
USER NAME = tsheh	DESIGNED -	REVISED -
PLOT SCALE = 40,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
PAVEMENT JOINTING PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	31
				CONTRACT NO. 62B01
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FILE NAME = 8FILES

COLLINS ENGINEERS

USER NAME = tshelz	DESIGNED -	REVISED -
PLOT SCALE = 20.0000' / 1"	DRAWN -	REVISED -
PLOT DATE = 5/9/2016	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 171 OVER EQUESTRIAN PATH
GRADING PLAN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	32
CONTRACT NO. 62B01				

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

Benchmark: Chisled square on top of east wingwall, Sta. 373+15.15, offset 32.81' Rt., Elev. 625.97.

Existing Structure: S.N. 016-2150 built in 1933. Section 031-0606.3-150 as a single barrel concrete box culvert with 10'x10' opening having and total length of 64'-0". Another concrete box 3'x3' is located north of the 10'x10' culvert. The 3'x3' culvert drains the area before water enters the 10'x10' culvert. The Existing structure will be removed and replaced.

Traffic shall be maintained utilizing stage construction.

No Salvage.

Precast alternate is not allowed.

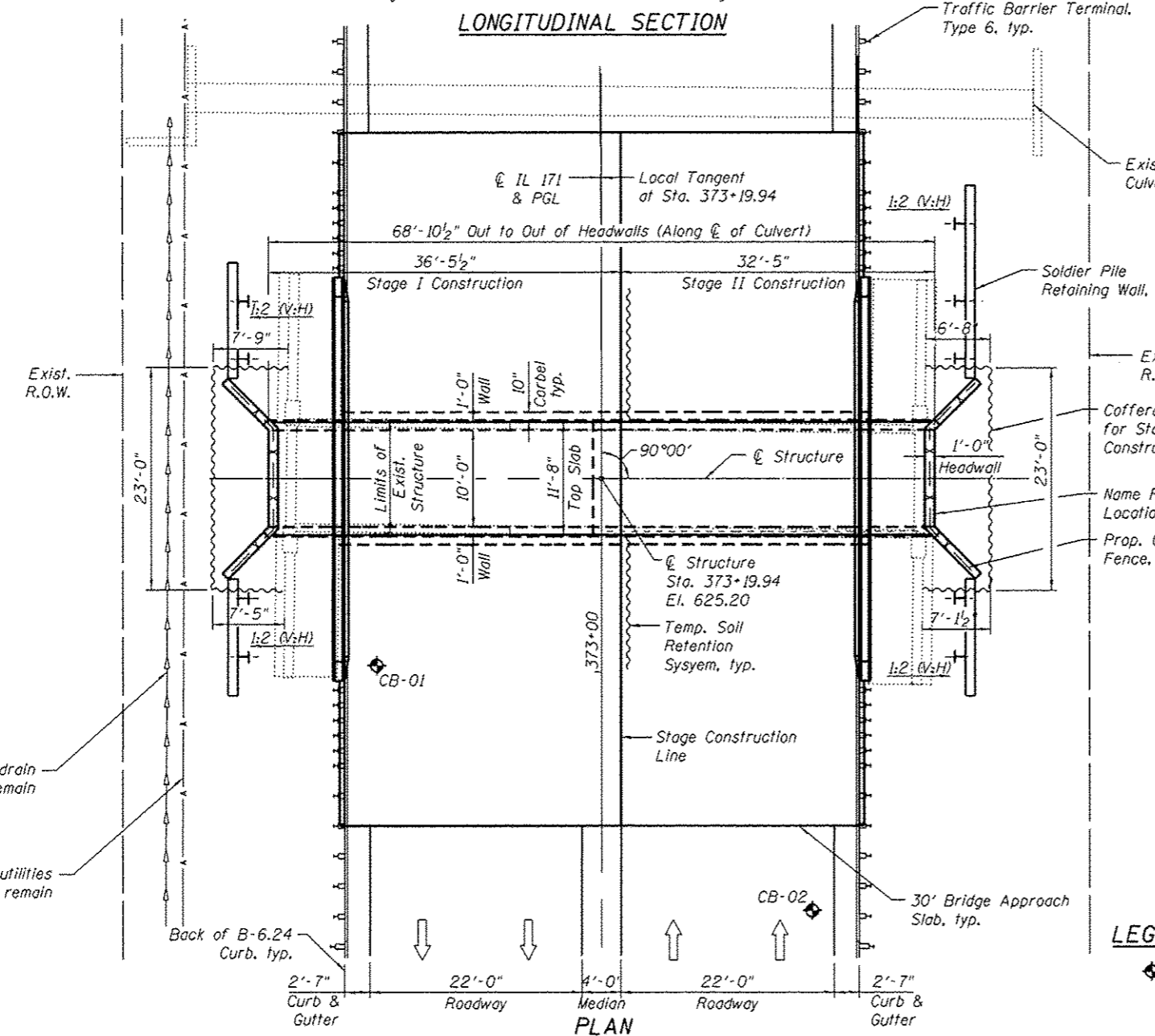
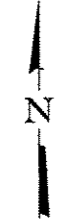
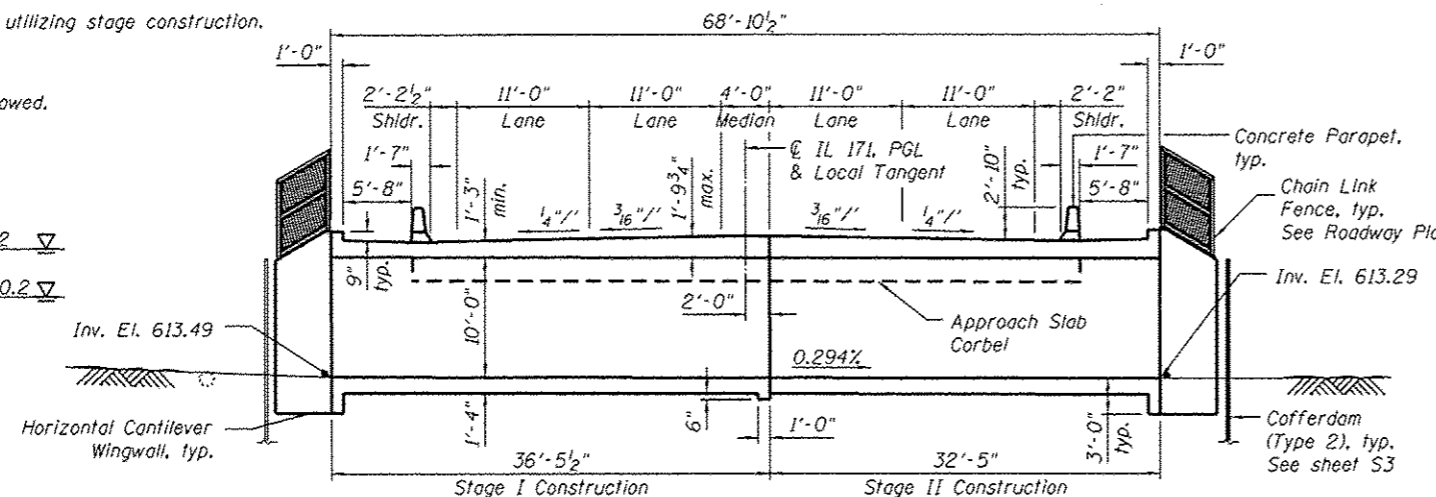
WATERWAY INFORMATION

(Accounting for Backwater From Des Plaines River)

Flood Event/ Freq. Yr.	Discharge (cfs)		Waterway Opening (Sq. Ft.)		Nat. H.W.E.	Head - Ft.		Headwater El.	
	Prop.	Existing	Existing	Proposed		Exist.	Prop.	Exist.	Prop.
Main Channel		9	9	9	622.3	0.0	0.0	622.3	622.3
	Relief Structure	89	89	89					
	Total	135	98	98					
Main Channel		9	9	9	624.2	0.0	0.0	624.2	624.2
	Relief Structure	100	100	100					
	Total	204	109	109					
Main Channel		9	9	9	625.1	0.0	0.0	625.1	625.1
	Relief Structure	100	100	100					
	Total	242	109	109					
Main Channel		9	9	9	623.5	0.0	0.0	623.5	623.5
	Relief Structure	100	100	100					
	Total	292	109	109					
Main Channel		9	9	9	626.4	0.0	0.0	626.4	626.4
	Relief Structure	100	100	100					
	Total	292	109	109					

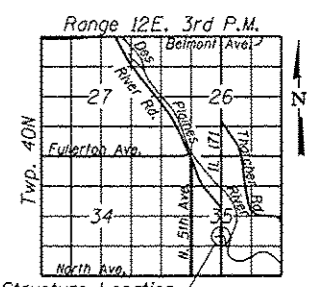
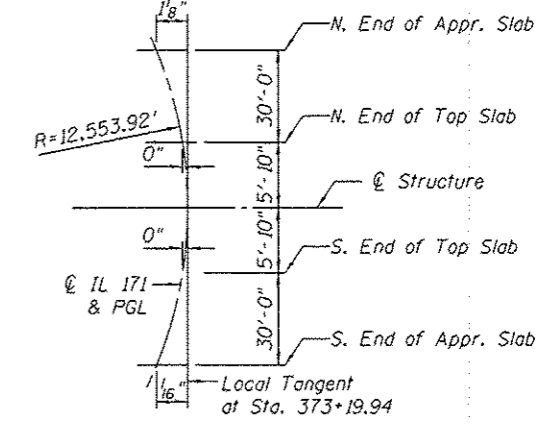
10-Year Velocity through Existing Structure = 1.5 fps
10-Year Velocity through Proposed Structure = 1.6 fps

2-year peak flow = 86.1 cfs
2-year peak elevation = 620.2
2-year bypass waterway opening = 77 sf total
9 sf Main Channel
68 sf Relief Structure



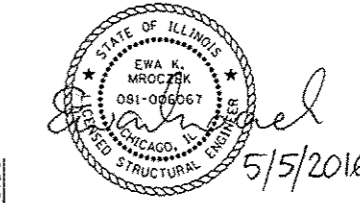
CURVE DATA

(Existing IL Rte. 171)
P.I. Sta. = 373+05.50
 $\Delta = 1^{\circ}08'36''$ (L1)
 $D = 0^{\circ}27'23''$
 $R = 12,553.92'$
 $T = 125.26'$
 $L = 250.50'$
 $E = 0.62'$
P.C. Sta. = 371+80.24
P.T. Sta. = 374+30.75



OFFSET SKETCH

LOCATION SKETCH



COLLINS ENGINEERS, INC.
EWA MROCZEK, P.E., S.E.
NO. 081-006067
EXP.: 11/30/2016

DESIGN STRESSES

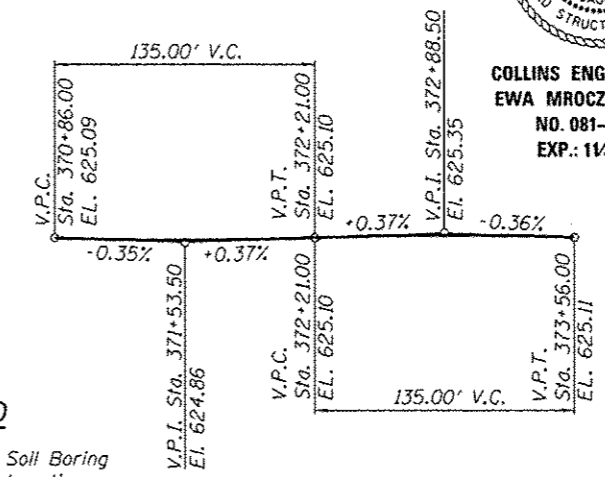
FIELD UNITS
f'c = 3,500 psi
f'c = 4,000 psi (Culvert top slab and Bridge Approach slabs)
fy = 60,000 psi (Reinforcement)

DESIGN SPECIFICATIONS

2014 AASHTO Bridge Design Specifications, 7th Edition with 2015 Interims

LOADING HL-93

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



LEGEND

◆ Soil Boring Location

PROFILE GRADE

(Along IL Rte. 171 @ PGL)

GENERAL PLAN & ELEVATION
IL ROUTE 171 / FIRST AVE.
OVER EQUESTRIAN PATH
FAP 372 - SECTION 2015-042B
COOK COUNTY
STATION 373+19.94
STRUCTURE NO. 016-2283

COLLINS ENGINEERS, INC.
1333 N. 22nd St.
Chicago, IL 60640
Tel: (312) 504-8300
Fax: (312) 504-8300
www.collinsengr.com

USER NAME	DESIGNED	REVISIONS
LY	LY	1 - LY
EKM	EKM	2 - EKM
PRH	PRH	3 - PRH
EKM	EKM	4 - EKM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-2283
SHEET NO. 51 OF 515 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	33

CONTRACT NO. 62B01
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT

Benchmark: Chisled square on top of east wingwall, Sta. 373+15.15, offset 32.81' Rtl., Elev. 625.97.

Existing Structure: S.N. 016-2150 built in 1933. Section 031-0606.3-15D as a single barrel concrete box culvert with 10'x10' opening having and total length of 64'-0". Another concrete box 3'x3' is located north of the 10'x10' culvert. The 3'x3' culvert drains the area before water enters the 10'x10' culvert. The Existing structure will be removed and replaced.

Traffic shall be maintained utilizing stage construction.

No Salvage.

Precast alternate is not allowed.

WATERWAY INFORMATION

(Accounting for Backwater From Des Plaines River)

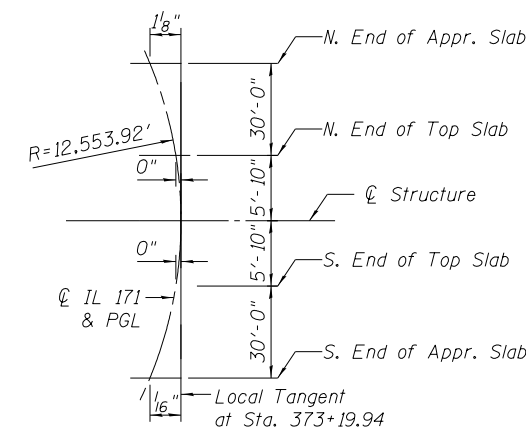
Flood Event/ Freq. Yr.		Discharge (cfs) Prop.	Waterway Opening (Sq. Ft.) Existing	Proposed	Nat. H.W.E.	Head - Ft. Exist. Prop.	Headwater El. Exist. Prop.
Main Channel	10		9	9	622.3	0.0	622.3
Relief Structure			89	89			
Total		135	98	98			
Main Channel	50		9	9	624.2	0.0	624.2
Relief Structure			100	100			
Total		204	109	109			
Main Channel	100		9	9	625.1	0.0	625.1
Relief Structure			100	100			
Total		242	109	109			
Main Channel	500		9	9	626.4	0.0	626.4
Relief Structure			100	100			
Total		292	109	109			

10-Year Velocity through Existing Structure = 1.5 fps
10-Year Velocity through Proposed Structure = 1.6 fps

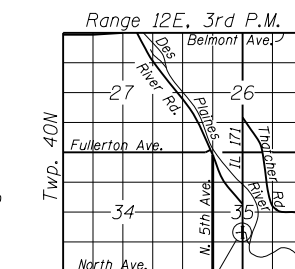
2-year peak flow = 86.1 cfs
2-year peak elevation = 620.2
2-year bypass waterway opening = 77 sf total
9 sf Main Channel
68 sf Relief Structure

CURVE DATA

(Existing IL Rte. 171)
P.I. Sta. = 373+05.50
 $\Delta = 1^{\circ}08'36''$ (Lt)
 $D = 0^{\circ}27'23''$
 $R = 12,553.92'$
 $T = 125.26'$
 $L = 250.50'$
 $E = 0.62'$
P.C. Sta. = 371+80.24
P.T. Sta. = 374+30.75



OFFSET SKETCH



LOCATION SKETCH

DESIGN STRESSES
FIELD UNITS

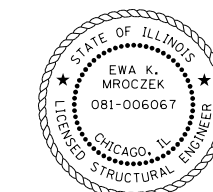
$f'_c = 3,500$ psi
 $f'_c = 4,000$ psi (Culvert top slab and Bridge Approach slabs)
 $f_y = 60,000$ psi (Reinforcement)

DESIGN SPECIFICATIONS

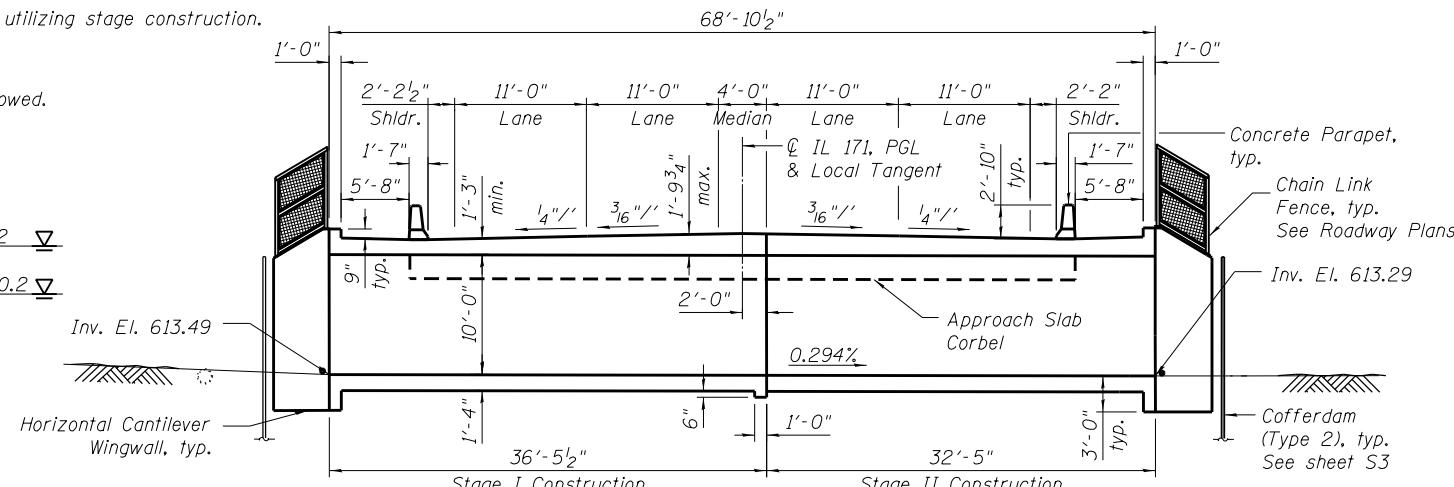
2014 AASHTO Bridge Design Specifications, 7th Edition with 2015 Interims

LOADING HL - 93

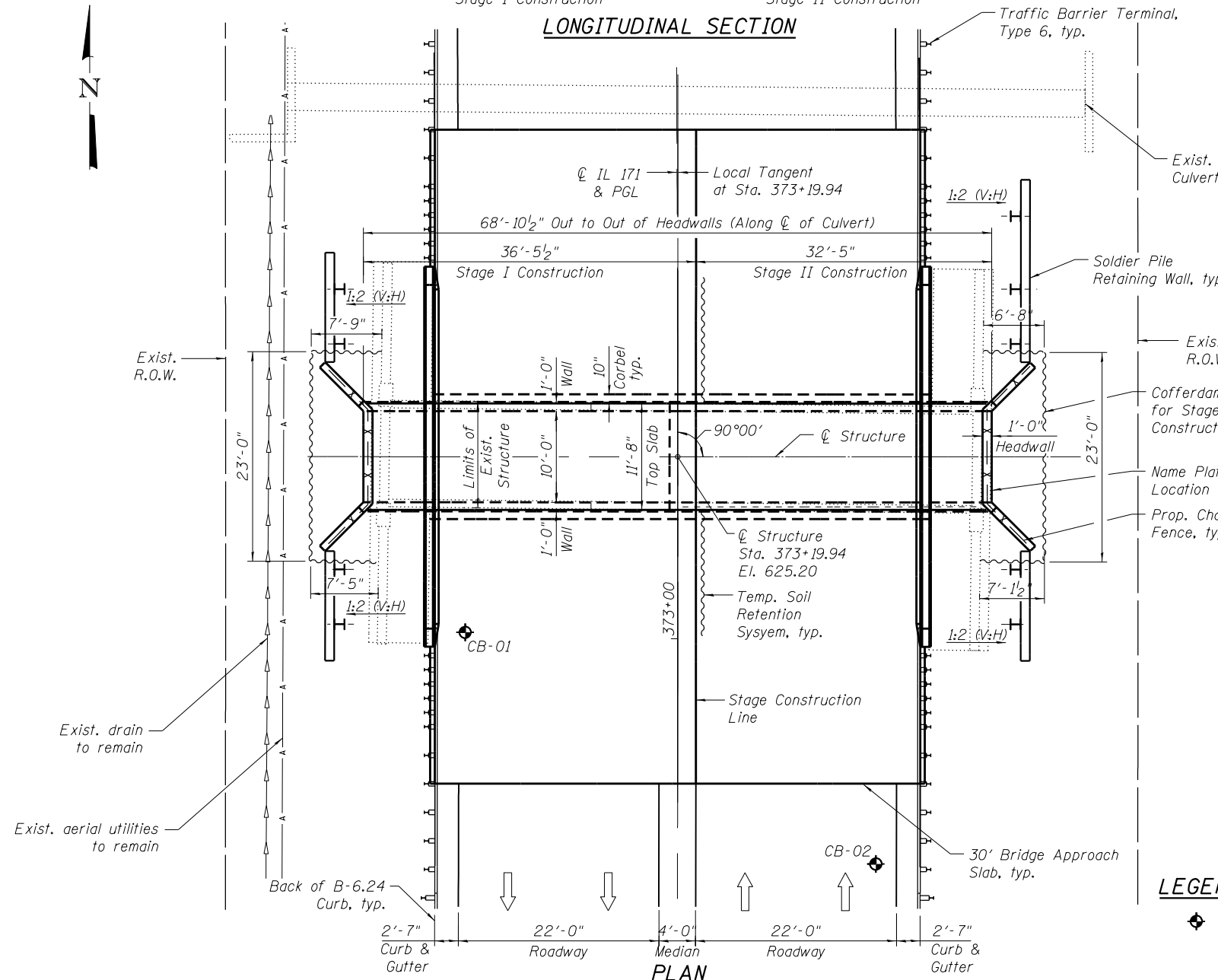
Allow 50#/sq. ft. for future wearing surface.



COLLINS ENGINEERS, INC.
EWA MROCEK, P.E., S.E.
NO. 081-006067
EXP.: 11/30/2016



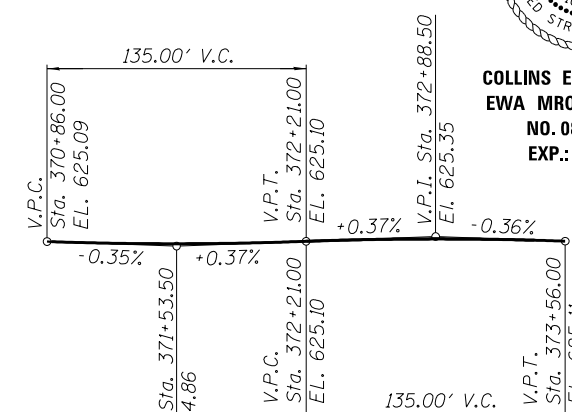
LONGITUDINAL SECTION



PLAN

LEGEND

Soil Boring Location



PROFILE GRADE

(Along IL Rte. 171 @ PGL)

FILE NAME = 8FILES

COLLINS ENGINEERS
133 N. Wacker Dr.
Suite 900
Chicago, IL 60606
Tel: (312) 704-9300
Fax: (312) 704-9320
www.collinsengr.com

USER NAME =	DESIGNED - LY	REVISIONS -
CHECKED - EKM <td></td> <td>REVISIONS -</td>		REVISIONS -
PLOT SCALE =	DRAWN - PRH	REVISIONS -
PLOT DATE =	CHECKED - EKM	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 016-2283
SHEET NO. S1 OF S15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	34

CONTRACT NO. 62B01
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

INDEX OF SHEETS

S1	General Plan & Elevation
S2	General Notes, Index of Sheets, Total Bill of Materials and Temporary Soil Retention System
S3	Stage Construction Details
S4	Temporary Concrete Barrier for Stage Construction
S5	Top of South Approach Slab Elevations
S6	Top of North Approach Slab Elevations
S7	Culvert Details 1
S8	Culvert Details 2
S9	Soldier Pile Retaining Walls
S10	Approach Slab Details - 1
S11	Approach Slab Details - 2
S12	Bar Splicer Assembly and Mechanical Assembly Details
S13	HP Pile Details
S14	Soil Boring Logs
S15	Existing Structure Details

GENERAL NOTES:

Reinforcement bars designated (E) shall be epoxy coated.

Precast alternate is not allowed.

The Contractor is advised that the existing culvert is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition of the culvert when developing construction procedures for removal and replacement of the structure.

Current Ratings on File for Existing Structure
Inventory: HS 12.0
Operating HS 20.0
Live Load Restrictions: No

Inventory and Operating Ratings and Live Load Restrictions are provided for information only. Inventory and Operating Ratings are based on HS loading and configuration. Live load Restrictions are based on Illinois legal loads and configurations. The Ratings and Live Load Restrictions are not necessarily representative of capacities to support the Contractor's equipment.

The Contractor is responsible for the stability and safety of the existing structure during all phases of construction. Refer to sheet S3 for temporary culvert bracing information.

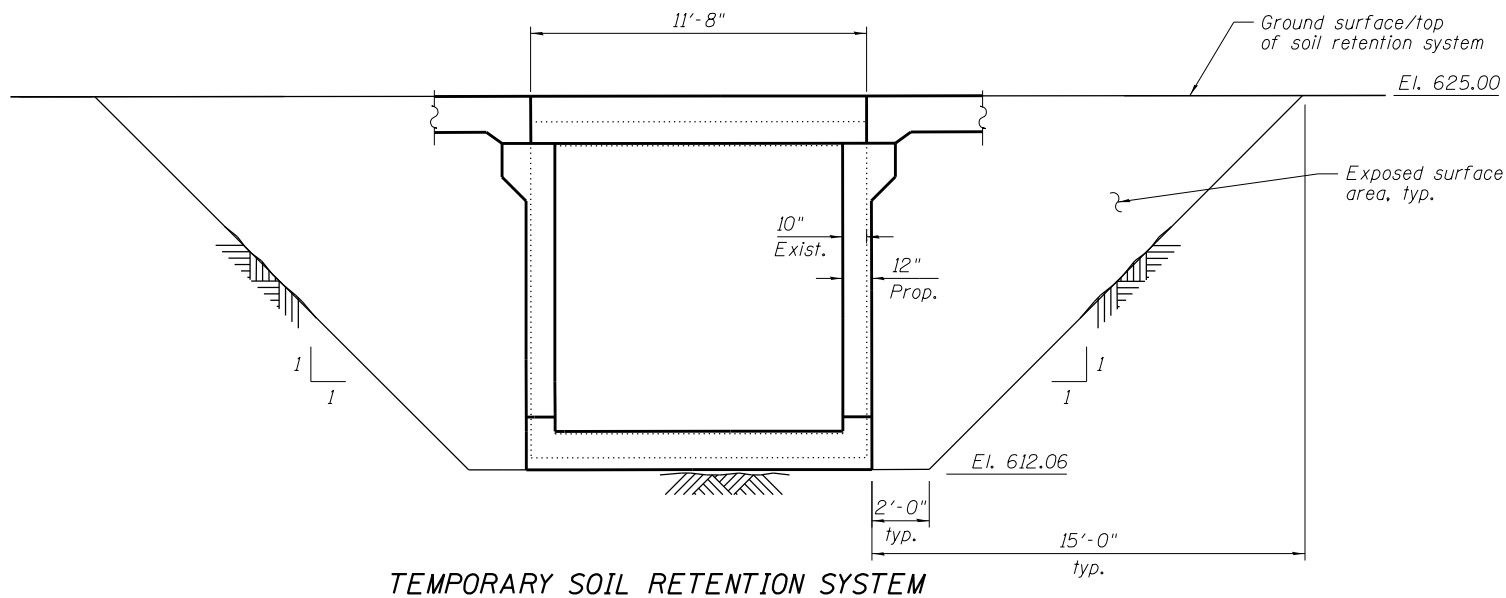
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

The Contractor is advised that an electrical overhead line is located on the west side of the culvert.

STATION
BUILT 201 BY
STATE OF ILLINOIS
F.A.P. 372
SEC 2015-042B
LOADING HL-93
STRUCTURE NO. 016-2283

NAME PLATE
See Std. 515001



TEMPORARY SOIL RETENTION SYSTEM

Looking East

COLLINS ENGINEERS
133 N. Booker Dr.
Suite 900
Chicago, IL 60606
Tel: (312) 704-9300
Fax: (312) 704-9320
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 084-000993

USER NAME =	DESIGNED - LY	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE =	DRAWN - PRH	REVISED -
	CHECKED - EKM	REVISED -

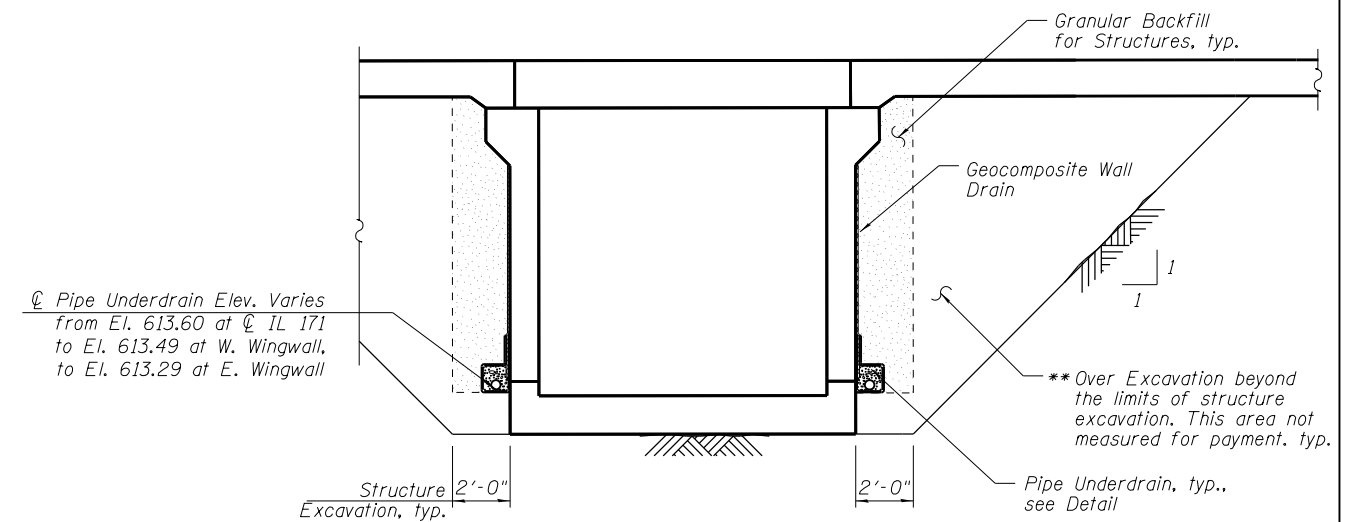
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS, TOTAL BILL OF MATERIALS AND
TEMPORARY SOIL RETENTION SYSTEM
STRUCTURE NO. 016-2283**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	35
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

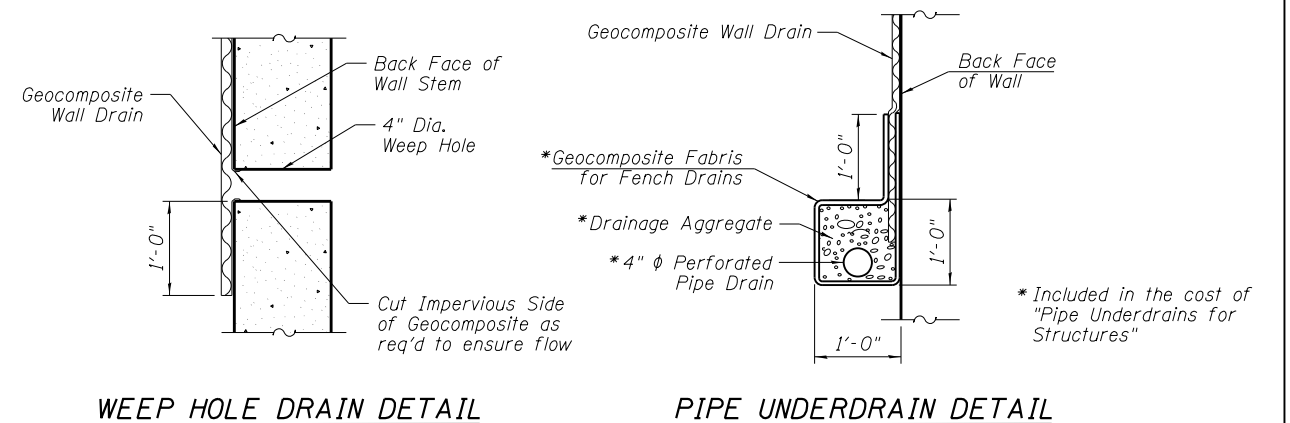
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH	1
CONCRETE REMOVAL	CU YD	4.8
STRUCTURE EXCAVATION	CU YD	212
COFFERDAM EXCAVATION	CU YD	29
COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1
COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1
CONCRETE STRUCTURES	CU YD	50.9
CONCRETE SUPERSTRUCTURE	CU YD	157.7
BRIDGE DECK GROOVING	SQ YD	402
PROTECTIVE COAT	SQ YD	518
STUD SHEAR CONNECTORS	EACH	60
REINFORCEMENT BARS, EPOXY COATED	POUND	90,590
BAR SPLICERS	EACH	330
NAME PLATES	EACH	1
TEMPORARY SOIL RETENTION SYSTEM	SQ FT	220
FURNISHING SOLDIER PILES (HP SECTION)	FOOT	231
DRIVING SOLDIER PILES	FOOT	231
UNTREATED TIMBER LAGGING	SQ FT	375
CONCRETE BOX CULVERTS	CU YD	157.2
GEOCOMPOSITE WALL DRAIN	SQ YD	179
GRANULAR BACKFILL FOR STRUCTURES	CU YD	108
PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	221



CULVERT DRAINAGE DETAILS

** Backfill remainder of structure excavation and over excavation with same material specified for roadway embankment according to Section 205 of the Standard Specifications.

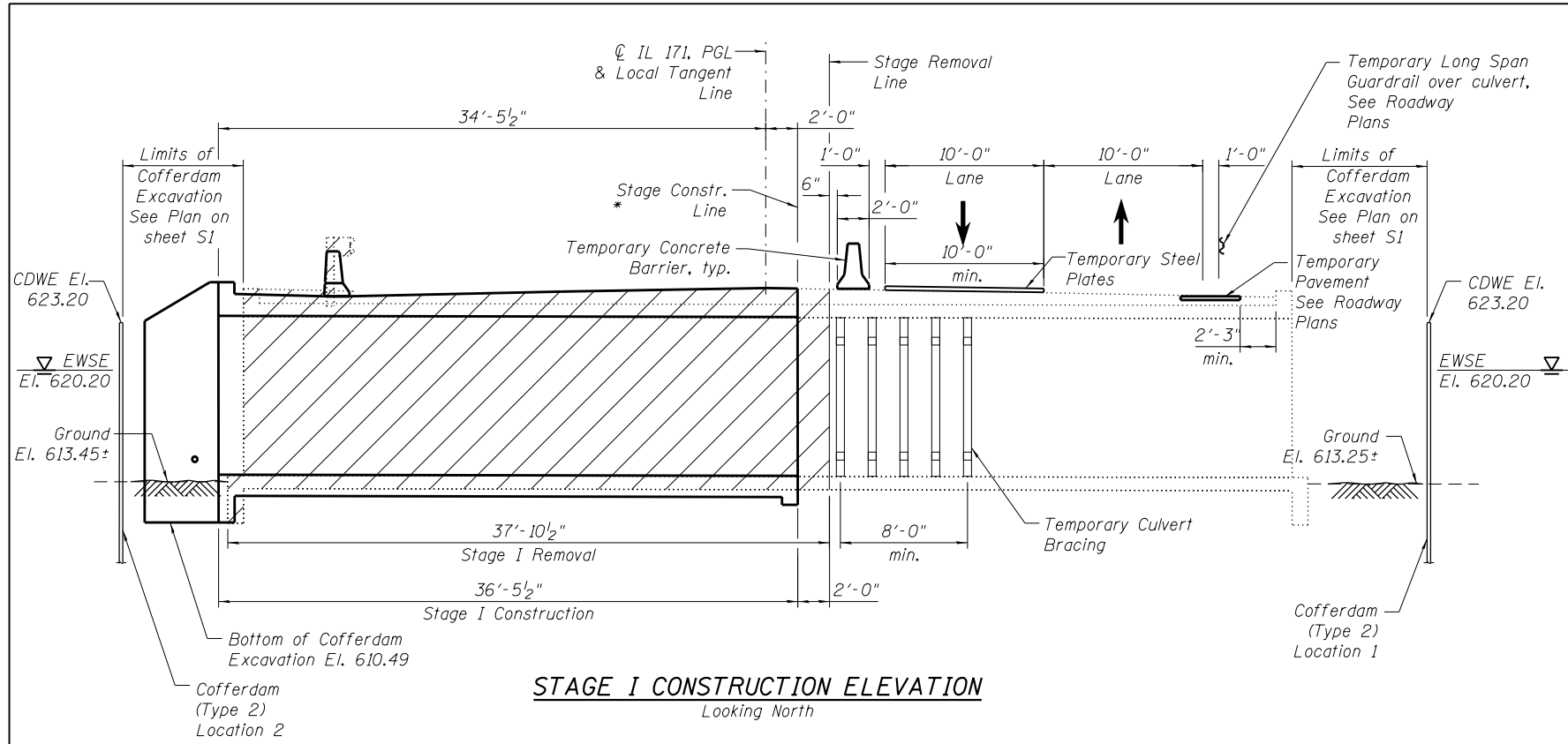


WEEP HOLE DRAIN DETAIL

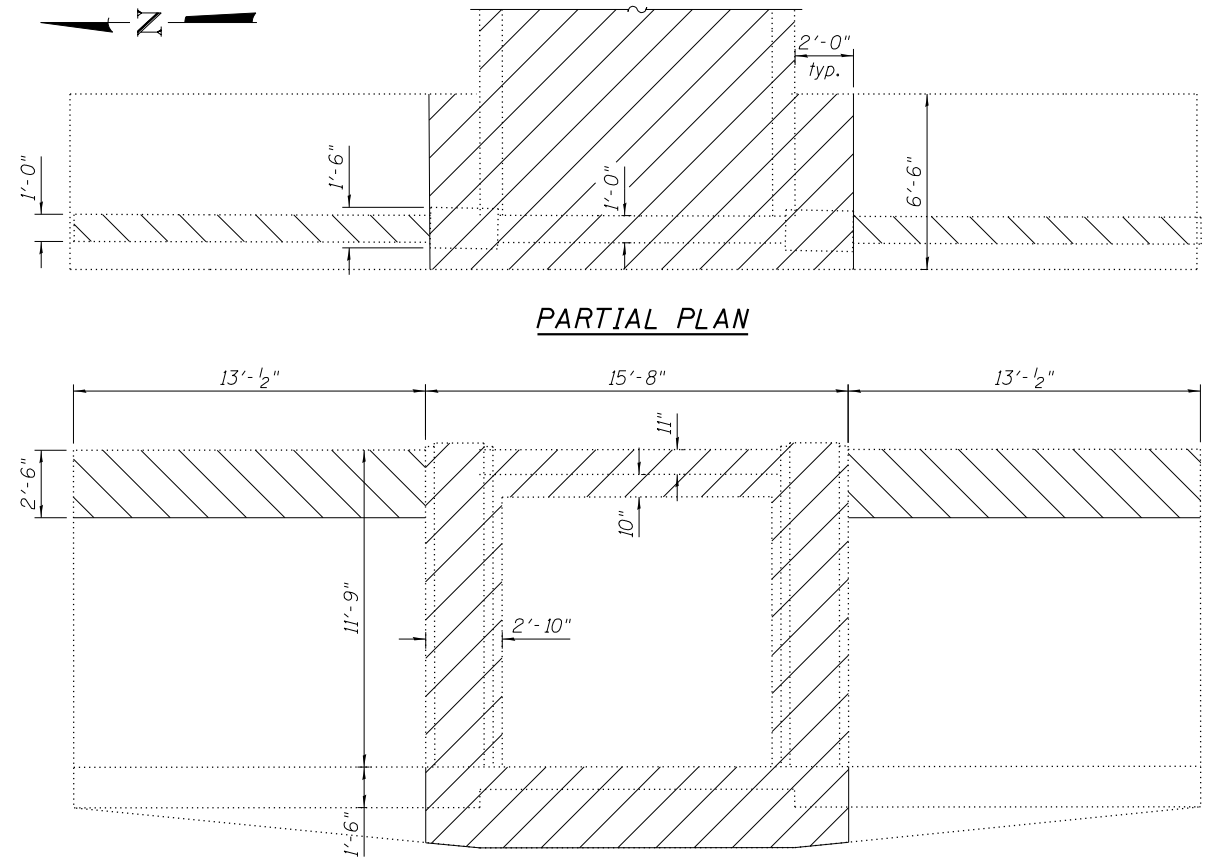
PIPE UNDERDRAIN DETAIL

Note:
All drainage system components shall extend up to end of each wingwall and pipe drain shall outlet through a weep hole at the front face of the wingwall as shown on sheet S7.

FILE NAME = 8FILES

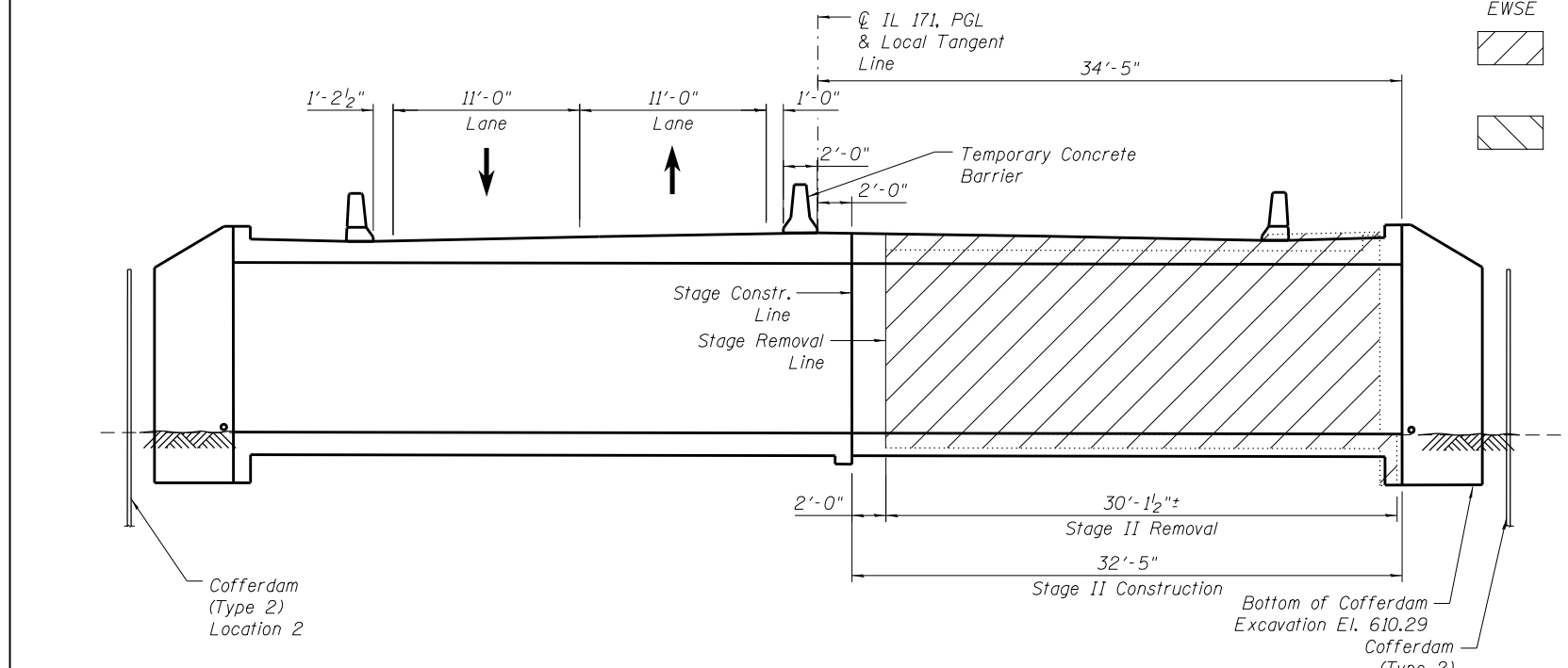


STAGE I CONSTRUCTION ELEVATION
Looking North



PARTIAL PLAN

ELEVATION

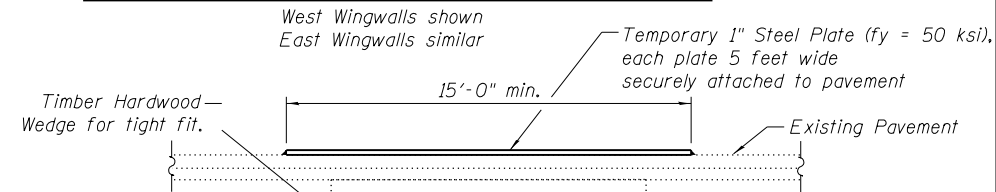


STAGE II CONSTRUCTION ELEVATION
Looking North

LEGEND

- CDWE Cofferdam Design Water Elevation
- EWSE Estimated Water Surface Elevation
- Stage I or Stage II Removal Cost included in Removal of Existing Structures
- Stage III Removal Cost included in Concrete Removal See sheet S9.

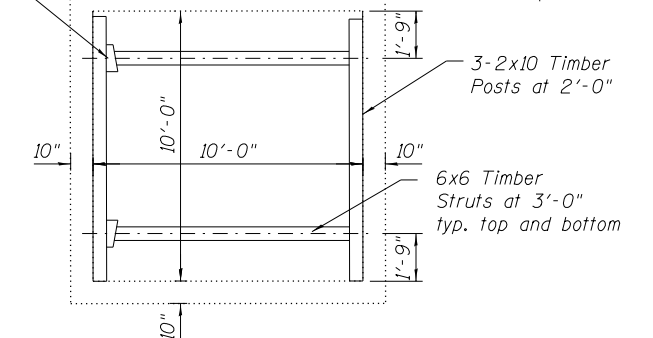
EXISTING CULVERT AND WINGWALL REMOVAL



TEMPORARY CULVERT BRACING NOTES

1. See General Notes on sheet S2 for information about the existing structure condition.
2. Place bracing assembly and steel plates prior to Stage I culvert removal.
3. The temporary bracing shown is a suggested minimum for bidding purposes. It does not accommodate surcharge loading due to construction equipment. The Contractor may need to increase the limits of the temporary bracing or steel plates based on the condition of the culvert during construction. The Contractor is responsible for maintaining and protecting the portions of the culvert to remain during Stage I Construction. Alternate bracing methods may be proposed to the Engineer provided the alternate bracing design submittal is sealed by an IL Licensed Structural Engineer. If alternate bracing is to be used, the Contractor shall submit bracing design including details and calculations for review and acceptance by the Engineer.
4. Timber members shall be southern pine or douglas fir No. 2 or better.
5. Furnishing, installing and removing the temporary bracing and roadway plates will not be paid for separately, but will be included in the unit price bid for "Concrete Box Culverts".

TEMPORARY CULVERT BRACING



FILE NAME = 8FILES

COLLINS ENGINEERS
133 N. Booker Dr.
Suite 900
Chicago, IL 60646
Tel: (312) 704-9300
Fax: (312) 704-9320
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

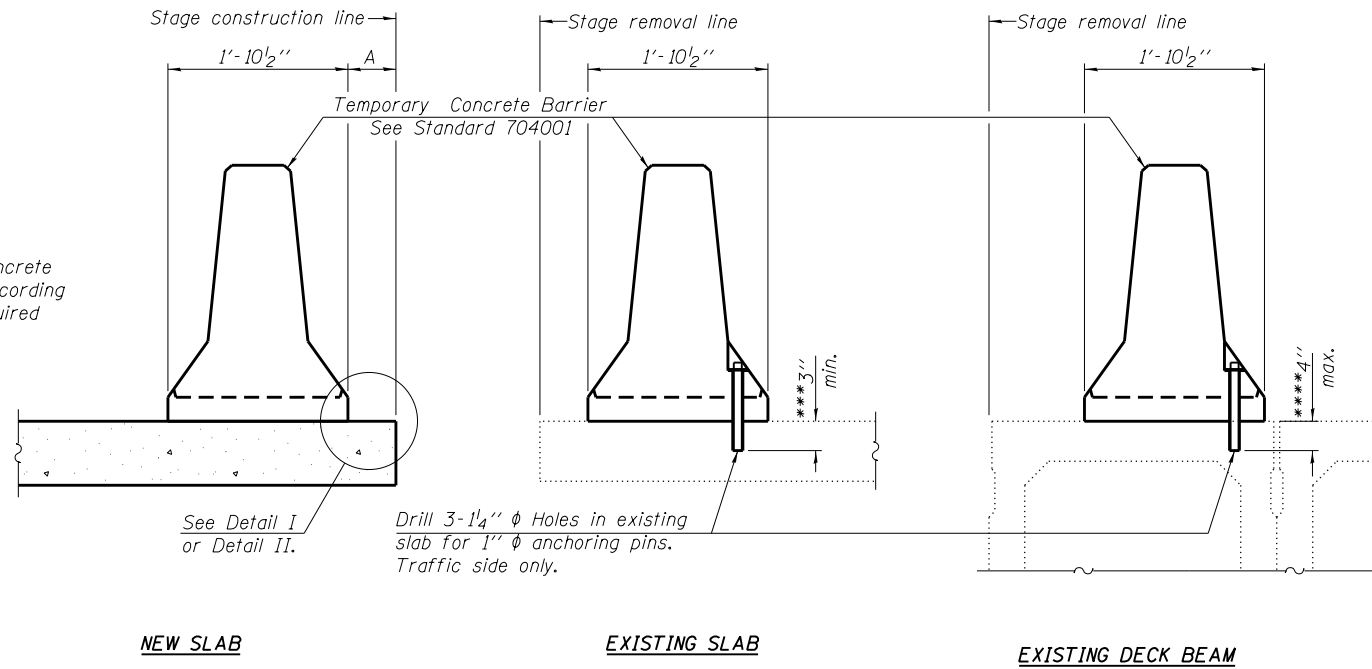
USER NAME =	DESIGNED - LY	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE =	DRAWN - PRH	REVISED -
	CHECKED - EKM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 016-2283
SHEET NO. S3 OF S15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	36
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

When "A" is 3'-1" 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'-1".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

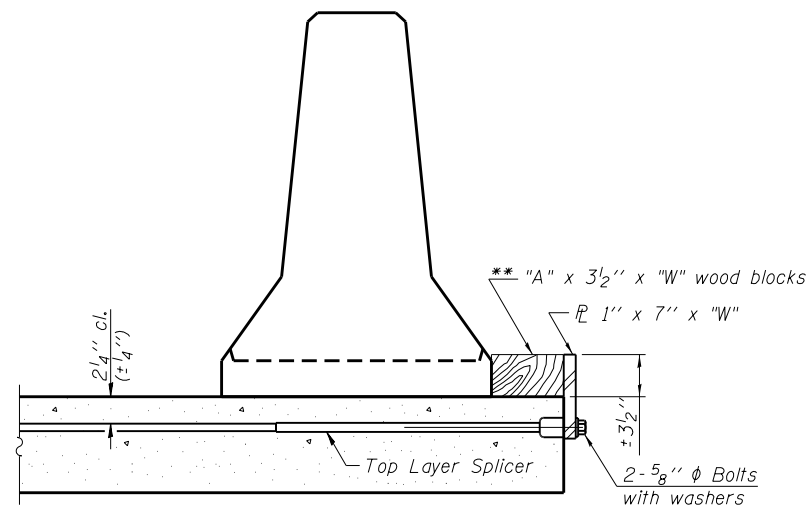
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL to the concrete slab or concrete wearing surface with 2-5/8" φ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate C of each barrier panel.

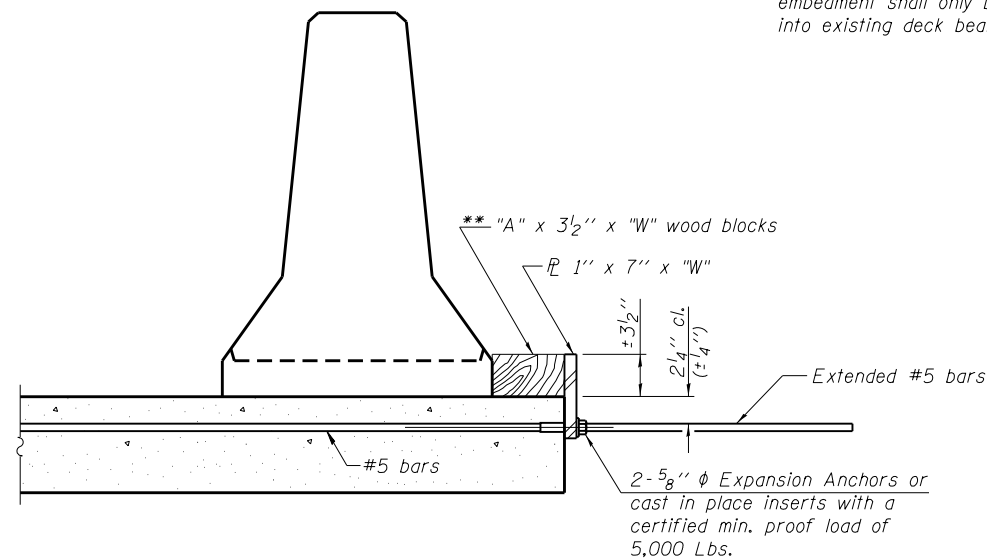
Cost of retainer assembly is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.

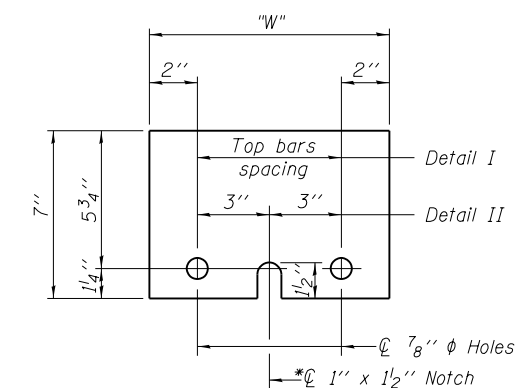
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

RETAINER ASSEMBLY

** 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.

R-27 1-12-15

COLLINS ENGINEERS
133 N. Rocker Dr.
Suite 900
Chicago, IL 60646
Tel: (312) 704-9300
Fax: (312) 704-9320
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	REVISED -
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-2283**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	37
CONTRACT NO. 62B01				

SHEET NO. S4 OF S15 SHEETS

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

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	-26.21	624.75
A1	372+94.11	-26.21	624.75
A2	373+04.11	-26.21	624.74
N. End of S. Appr. Slab	373+14.11	-26.21	624.73

WEST EDGE OF PAVEMENT

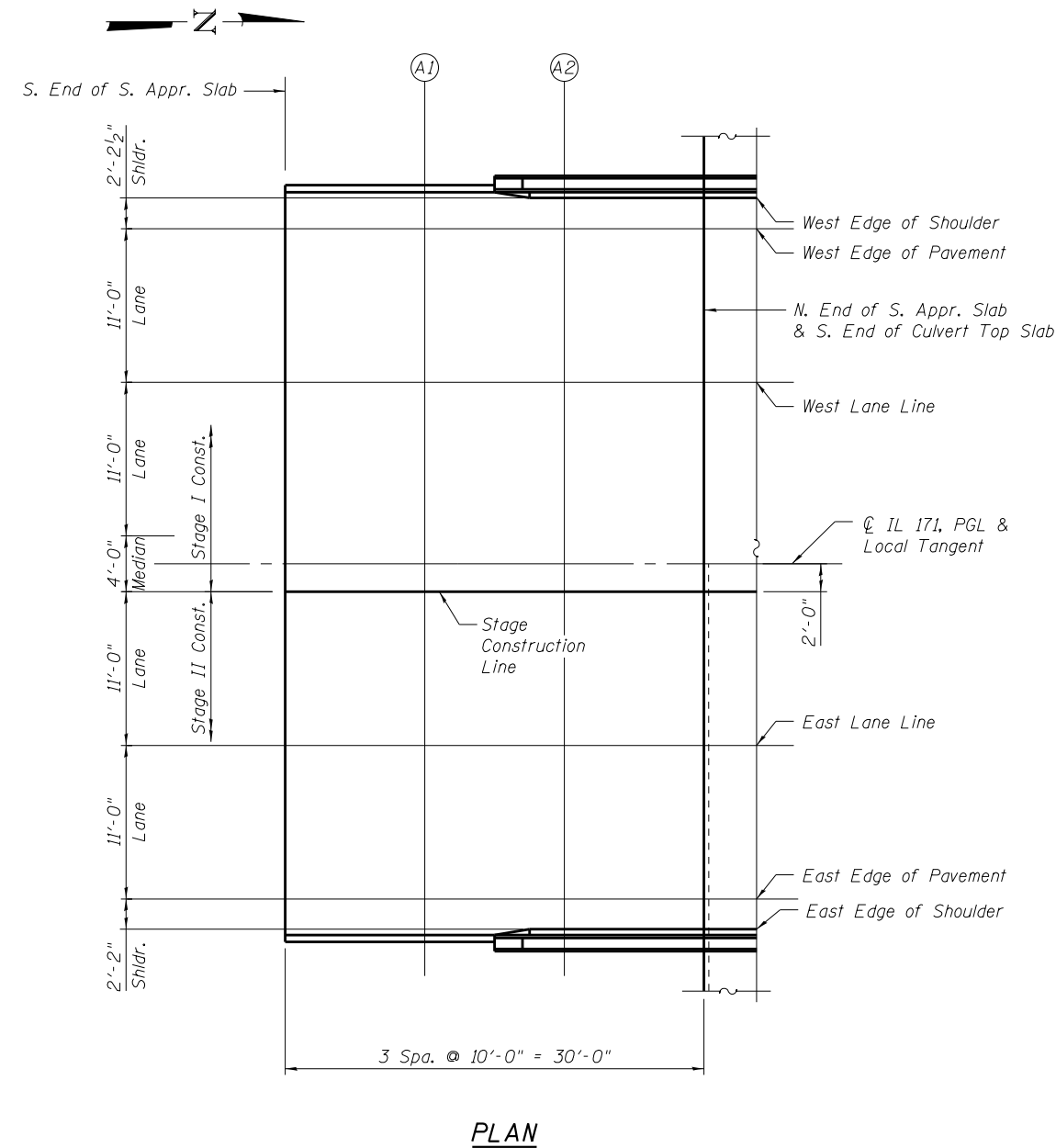
Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	-24.00	624.79
A1	372+94.11	-24.00	624.79
A2	373+04.11	-24.00	624.79
N. End of S. Appr. Slab	373+14.11	-24.00	624.78

WEST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	-13.00	625.02
A1	372+94.11	-13.00	625.02
A2	373+04.11	-13.00	625.02
N. End of S. Appr. Slab	373+14.11	-13.00	625.01

CENTERLINE IL 171 & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	0.00	625.23
A1	372+94.11	0.00	625.23
A2	373+04.11	0.00	625.22
N. End of S. Appr. Slab	373+14.11	0.00	625.21



PLAN

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	2.00	625.20
A1	372+94.11	2.00	625.20
A2	373+04.11	2.00	625.19
N. End of S. Appr. Slab	373+14.11	2.00	625.18

EAST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	13.00	625.02
A1	372+94.11	13.00	625.02
A2	373+04.11	13.00	625.02
N. End of S. Appr. Slab	373+14.11	13.00	625.01

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	24.00	624.79
A1	372+94.11	24.00	624.79
A2	373+04.11	24.00	624.79
N. End of S. Appr. Slab	373+14.11	24.00	624.78

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	372+84.11	26.21	624.75
A1	372+94.11	26.21	624.75
A2	373+04.11	26.21	624.74
N. End of S. Appr. Slab	373+14.11	26.21	624.73

FILE NAME = 8FILES

COLLINS ENGINEERS
 133 N. Rocker Dr.
 Suite 800
 Chicago, IL 60646
 Tel: (312) 704-3300
 Fax: (312) 704-9320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF SOUTH APPROACH SLAB ELEVATIONS
 STRUCTURE NO. 016-2283**

SHEET NO. 55 OF 515 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	38
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	-26.21	624.71
A3	373+35.78	-26.18	624.69
A4	373+45.78	-26.15	624.67
N. End of N. Appr. Slab	373+55.78	-26.11	624.63

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	-24.00	624.76
A3	373+35.78	-23.97	624.74
A4	373+45.78	-23.94	624.71
N. End of N. Appr. Slab	373+55.78	-23.90	624.68

WEST LANE LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	373+25.78	-13.00	624.99
A1	373+35.78	-12.97	624.97
A2	373+45.78	-12.94	624.94
N. End of S. Appr. Slab	373+55.78	-12.90	624.91

CENTERLINE IL 171 & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	0.00	625.19
A3	373+35.78	0.00	625.17
A4	373+45.78	0.00	625.14
N. End of N. Appr. Slab	373+55.78	0.00	625.11

STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	2.00	625.16
A3	373+35.78	2.03	625.14
A4	373+45.78	2.06	625.11
N. End of N. Appr. Slab	373+55.78	2.10	625.08

EAST LANE LINE

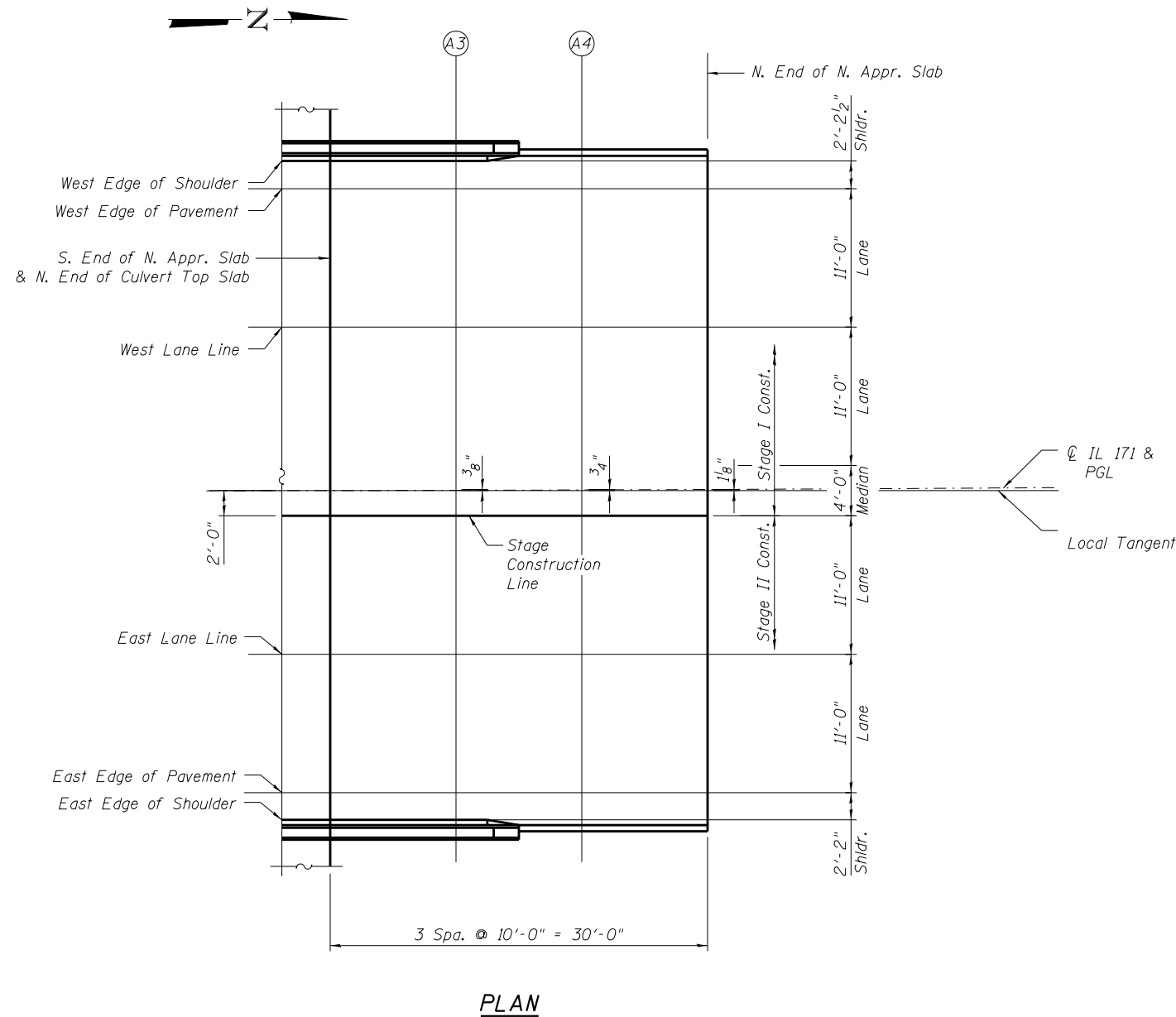
Location	Station	Offset	Theoretical Grade Elevations
S. End of S. Appr. Slab	373+25.78	13.00	624.99
A1	373+35.78	13.03	624.97
A2	373+45.78	13.06	624.94
N. End of S. Appr. Slab	373+55.78	13.10	624.91

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	24.00	624.76
A3	373+35.78	24.03	624.74
A4	373+45.78	24.06	624.71
N. End of N. Appr. Slab	373+55.78	24.10	624.68

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End of N. Appr. Slab	373+25.78	26.21	624.71
A3	373+35.78	26.24	624.69
A4	373+45.78	26.27	624.67
N. End of N. Appr. Slab	373+55.78	26.30	624.63



PLAN

FILE NAME = 8FILES

COLLINS ENGINEERS
 133 N. Rocker Dr.
 Suite 900
 Chicago, IL 60606
 Tel: (312) 704-9300
 Fax: (312) 704-9320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

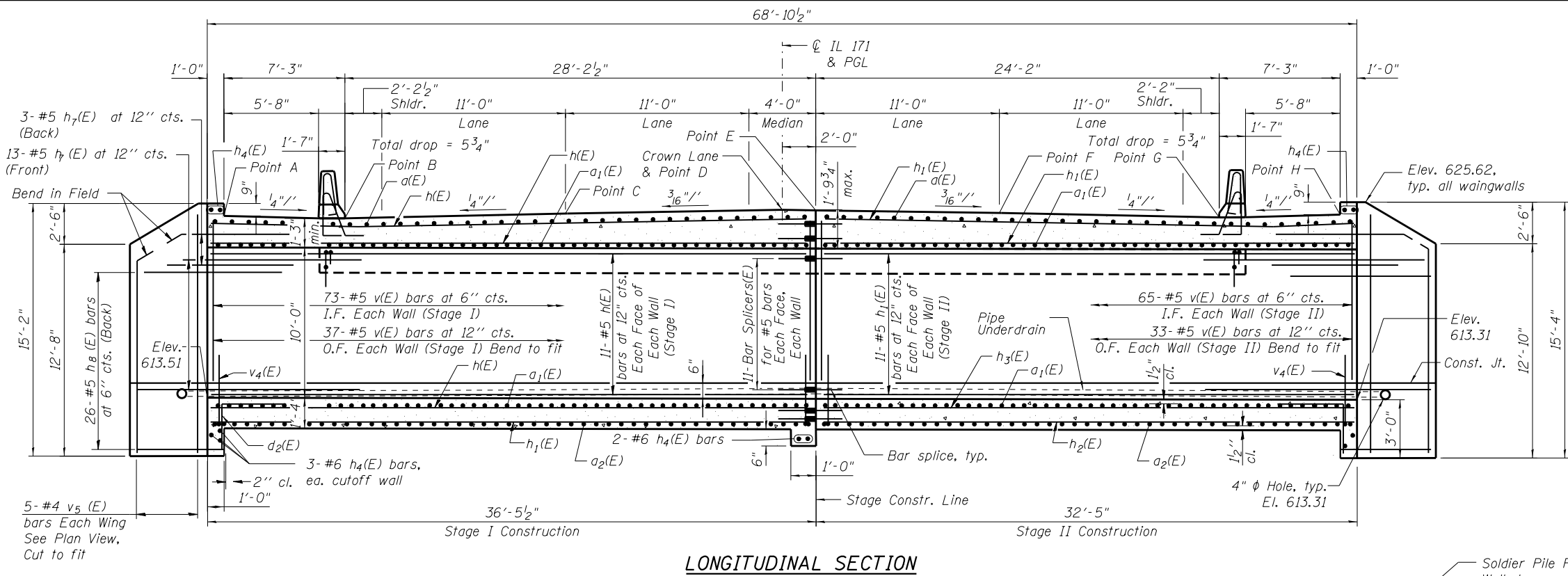
USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

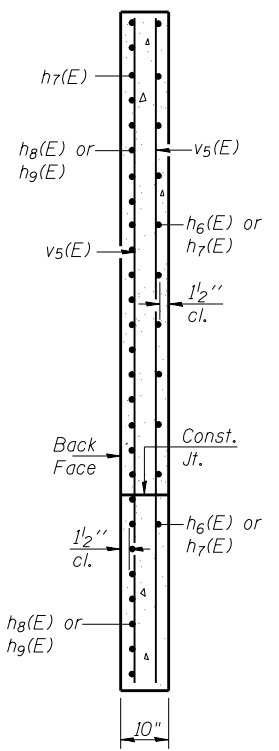
**TOP OF NORTH APPROACH SLAB ELEVATIONS
 STRUCTURE NO. 016-2283**

SHEET NO. 56 OF 515 SHEETS

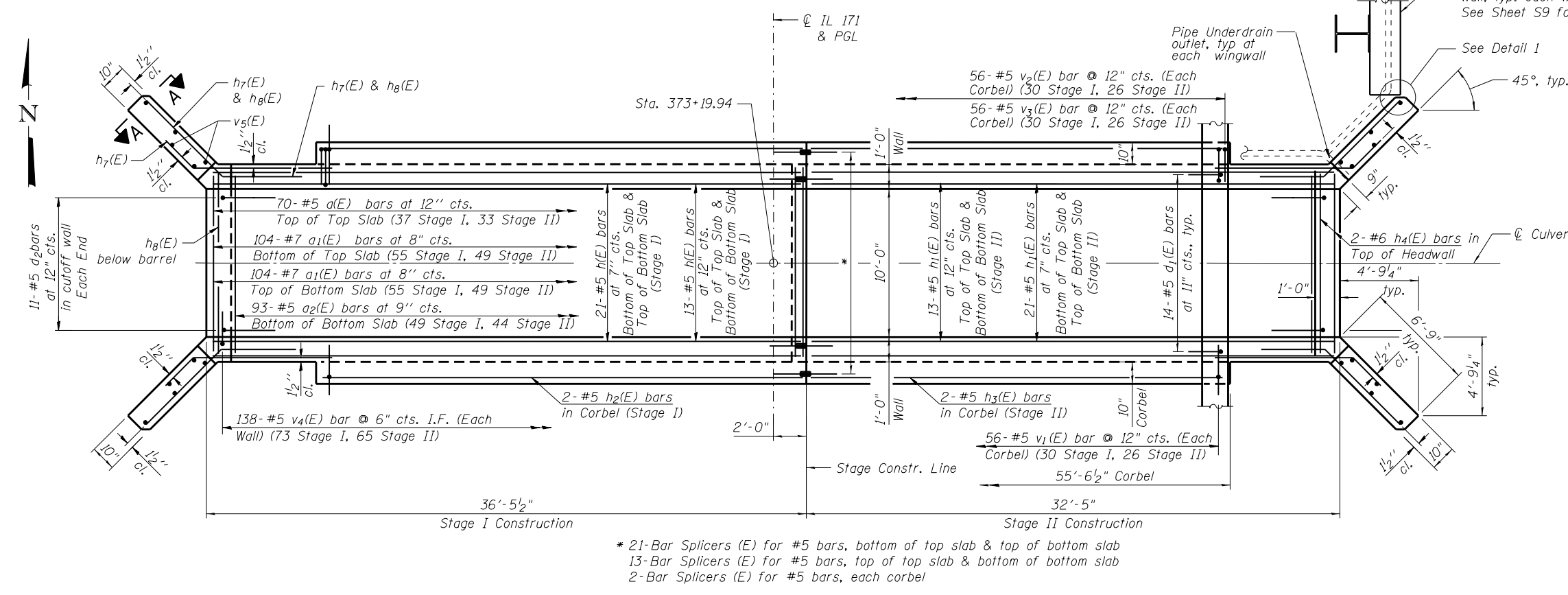
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	39
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



LONGITUDINAL SECTION



SECTION A-A



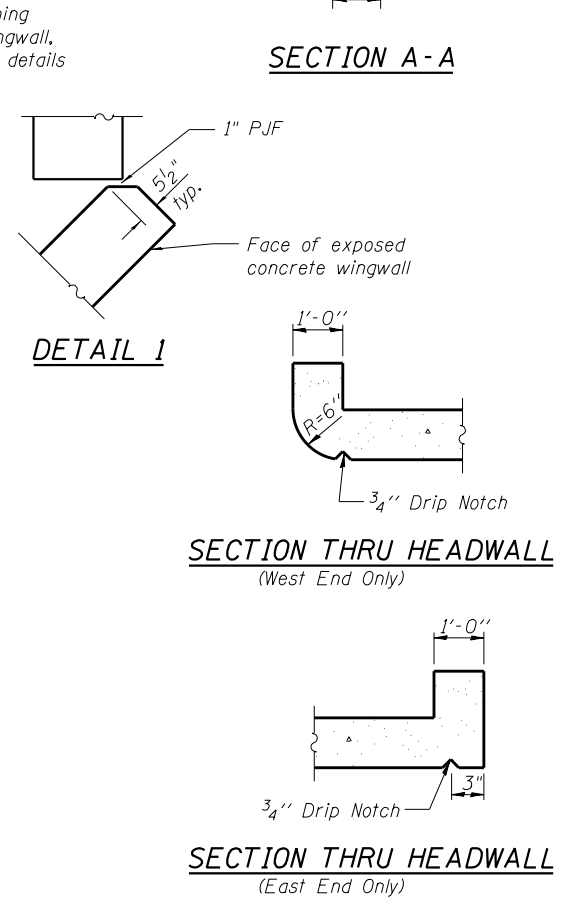
PLAN

TOP OF SLAB ELEVATIONS

Point	A	B	C	D	E	F	G	H
N. End	625.04	624.92	624.99	625.19	625.16	624.99	624.72	624.83
∅ Culvert	625.05	624.93	625.00	625.20	625.17	625.00	624.73	624.84
S. End	625.05	624.94	625.01	625.21	625.18	625.01	624.73	624.85

* 21-Bar Splicers (E) for #5 bars, bottom of top slab & top of bottom slab
 13-Bar Splicers (E) for #5 bars, top of top slab & bottom of bottom slab
 2-Bar Splicers (E) for #5 bars, each corbel

Parapet not shown for clarity



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.
 For Parapet details, Corbel details, Bill of Materials and bar details, see sheet S8.
 For Bar Splicer details, see sheet S12.

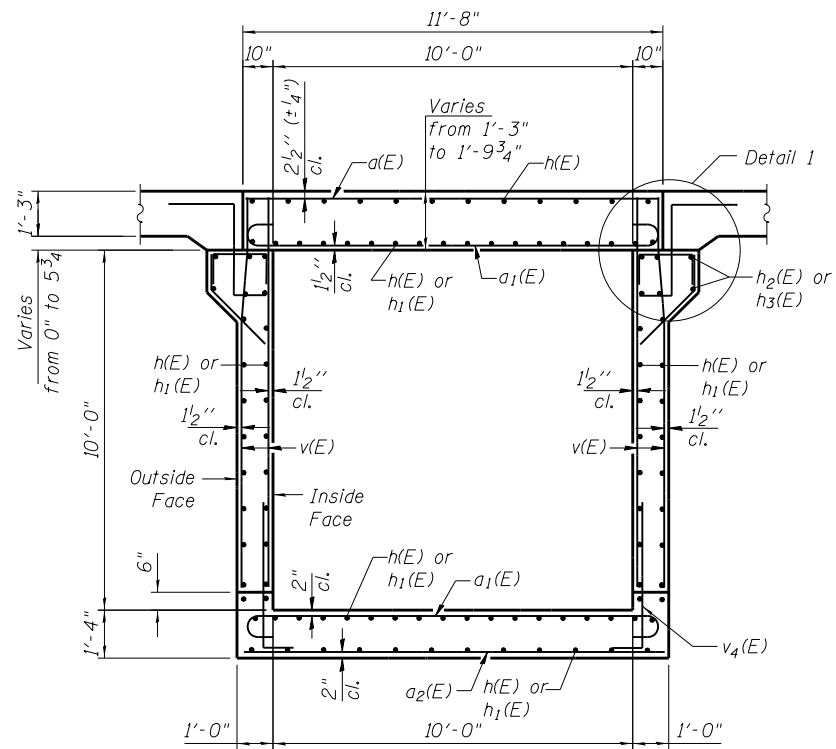
FILE NAME = 8FILES

USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

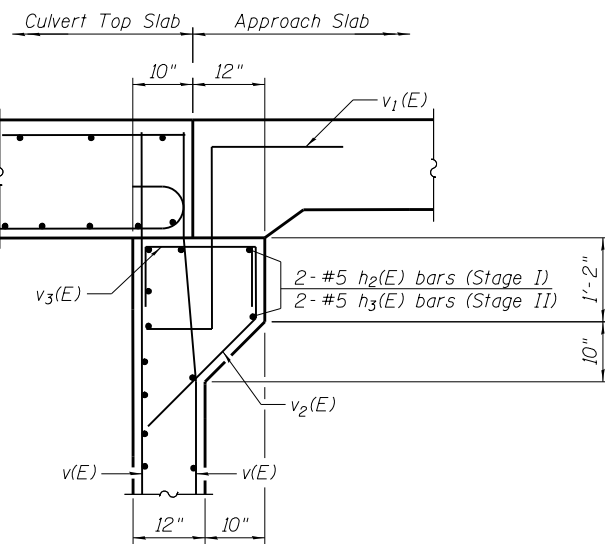
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CULVERT DETAILS 1
 STRUCTURE NO. 016-2283**
 SHEET NO. S7 OF S15 SHEETS

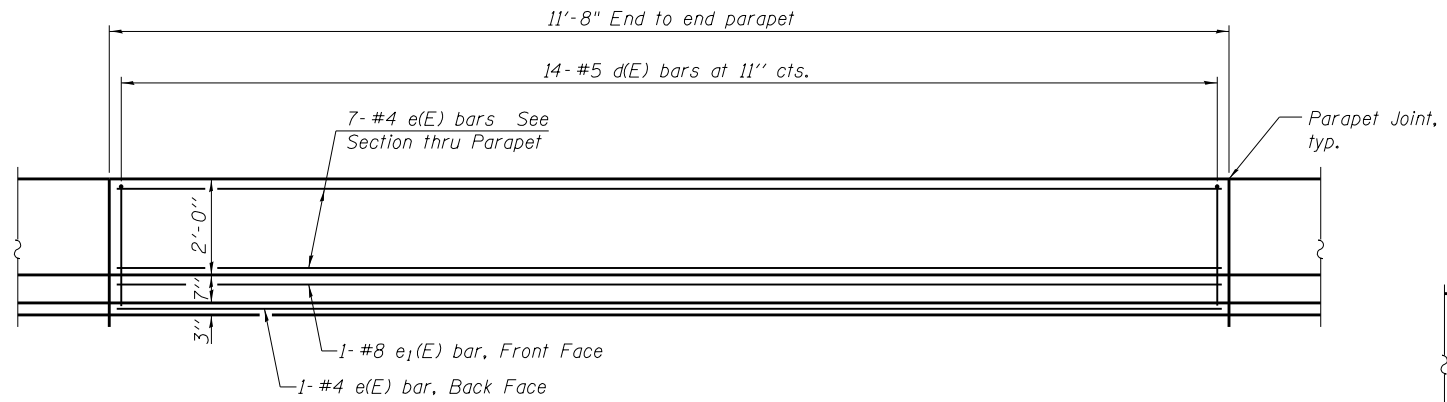
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	40
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



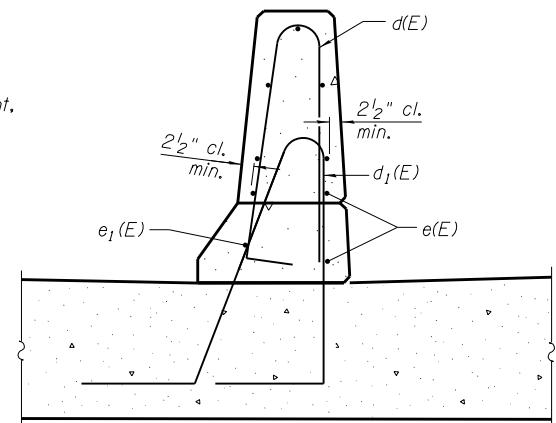
SECTION THRU BARREL



DETAIL 1



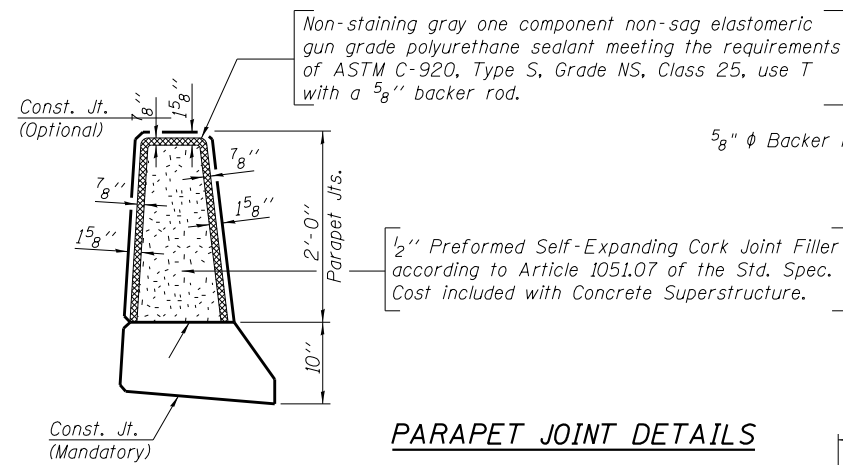
INSIDE ELEVATION OF PARAPET



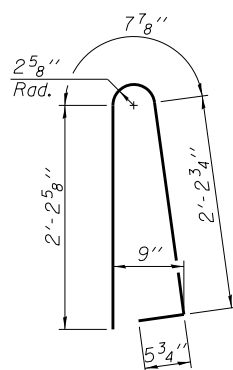
PARAPET REINFORCEMENT

BILL OF MATERIAL

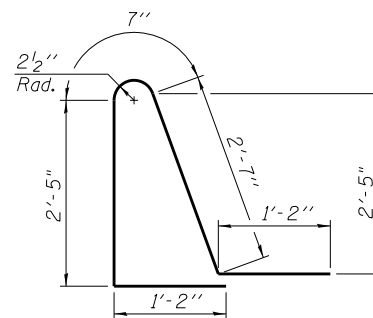
Bar	No.	Size	Length	Shape
a(E)	70	#5	11'-4"	—
a1(E)	208	#7	13'-0"	U
a2(E)	93	#5	11'-8"	—
d(E)	28	#5	5'-7"	⌋
d1(E)	28	#5	7'-11"	⌋
d2(E)	22	#5	4'-6"	⌋
e(E)	16	#4	11'-4"	—
e1(E)	2	#8	11'-4"	—
h(E)	112	#5	36'-2"	—
h1(E)	112	#5	32'-1"	—
h2(E)	4	#5	29'-6"	—
h3(E)	4	#5	25'-5"	—
h4(E)	12	#6	11'-4"	—
h7(E)	60	#5	8'-6"	—
h8(E)	104	#5	10'-1"	—
v(E)	416	#5	10'-9"	—
v1(E)	112	#5	4'-9"	—
v2(E)	112	#5	3'-2"	—
v3(E)	112	#5	3'-3"	—
v4(E)	276	#5	4'-11"	—
v5(E)	20	#5	14'-10"	—
Structure Excavation		Cu. Yd.	132	
Cofferdam Excavation		Cu. Yd.	29	
Concrete Superstructure		Cu. Yd.	2.6	
Bridge Deck Grooving		Sq. Yd.	66	
Protective Coat		Sq. Yd.	107	
Reinforcing Bars, Epoxy Coated		Pound	25,900	
Concrete Box Culverts		Cu. Yd.	157.2	
Geocomposite Wall Drain		Sq. Yd.	134	
Granular Backfill for Structures		Cu. Yd.	108	
Pipe Underdrains for Structures 4"		Foot	165	



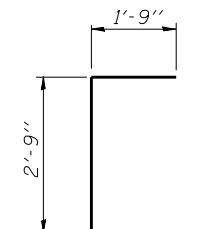
PARAPET JOINT DETAILS



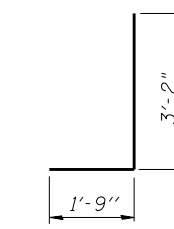
BAR d(E)



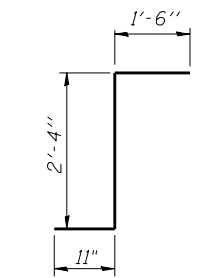
BAR d1(E)



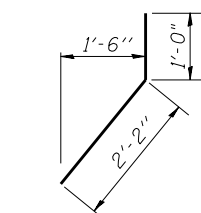
BAR d2(E)



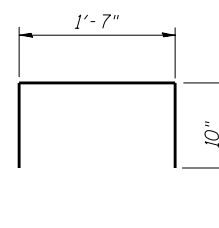
BAR v4(E)



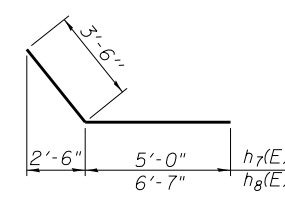
BAR v1(E)



BAR v2(E)

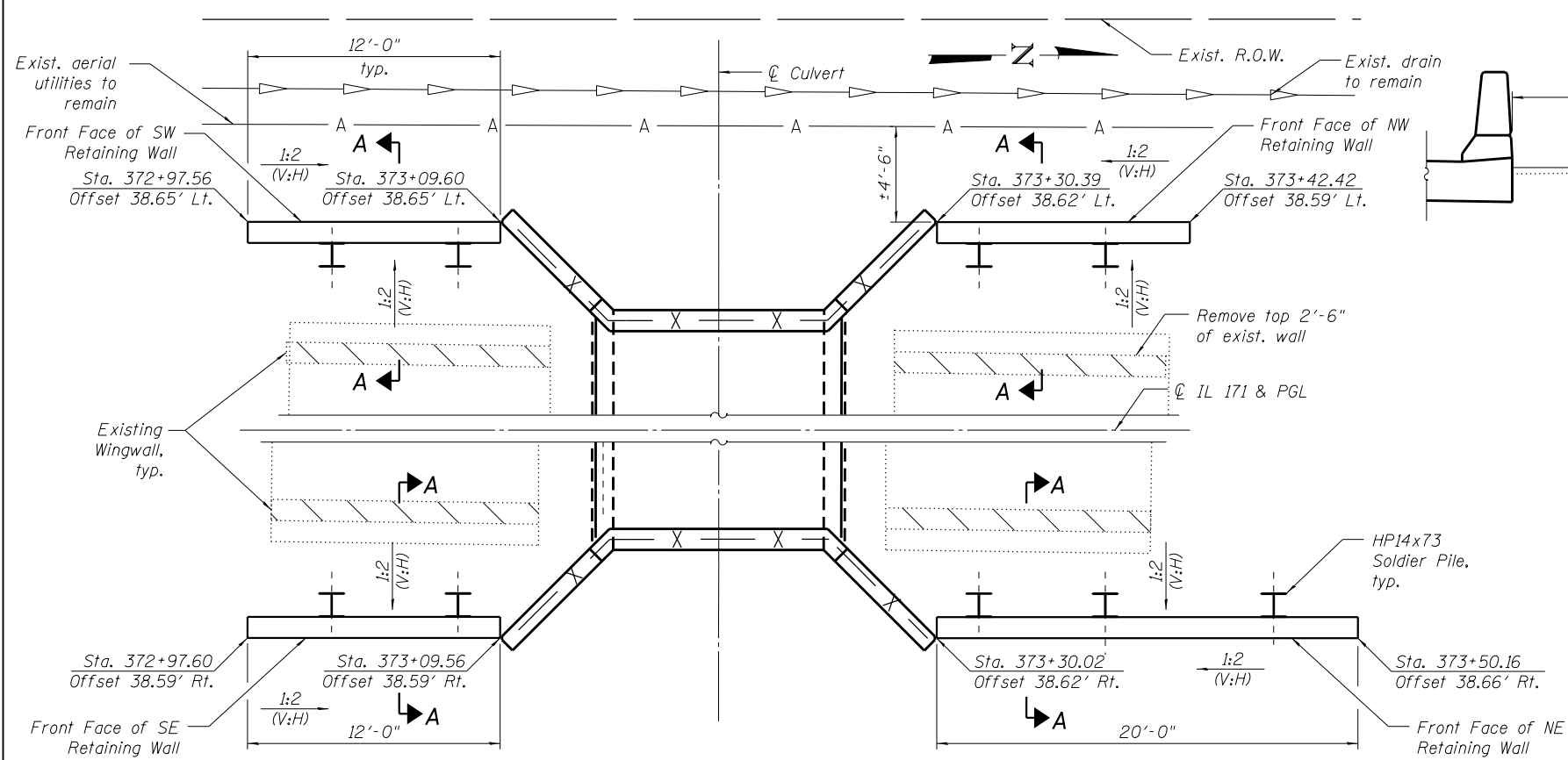


BAR v3(E)

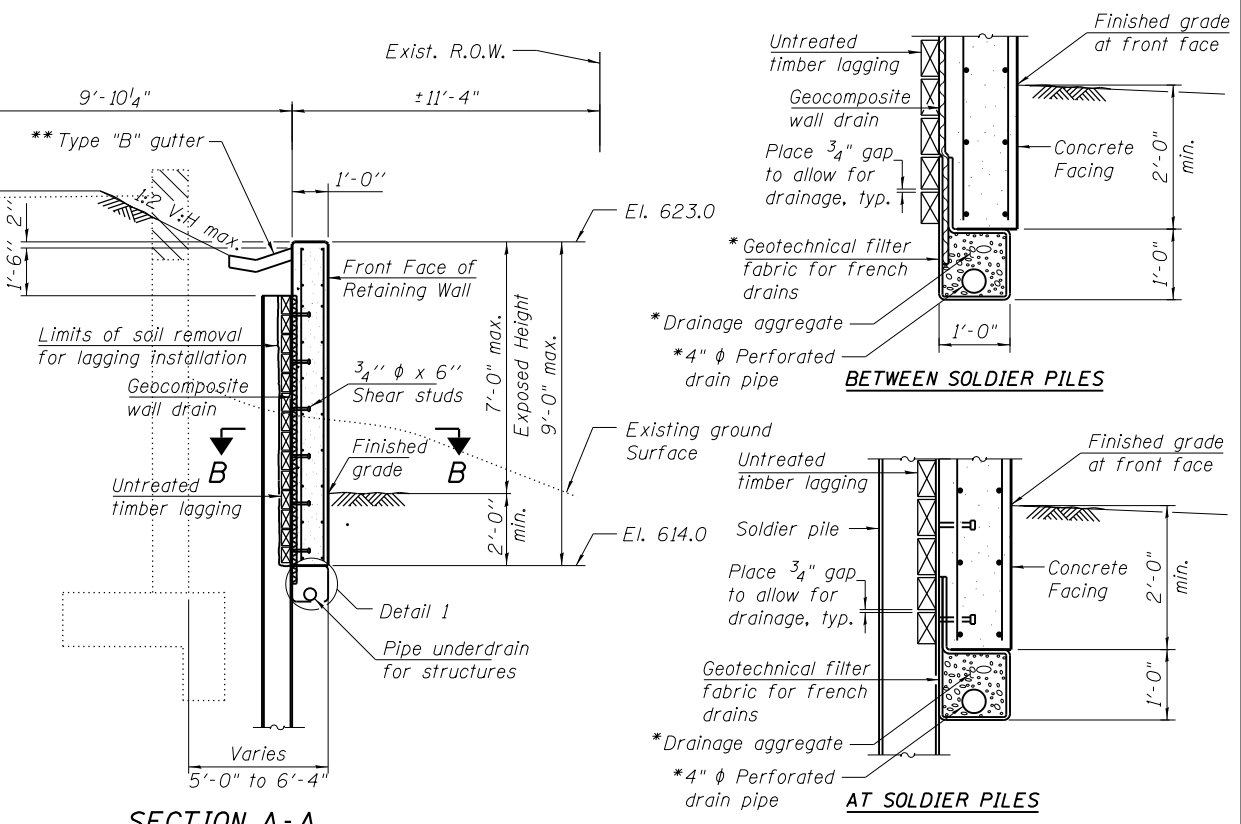


BARS h7(E) & h8(E)

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 S12 for bar splicer details.
 Quality of concrete for parapets is included with Concrete Superstructure.
 Cofferdam Excavation is for wingwalls only, all other excavation required to construct culvert and Retaining Walls is considered Structural Excavation.



RETAINING WALLS - PLAN

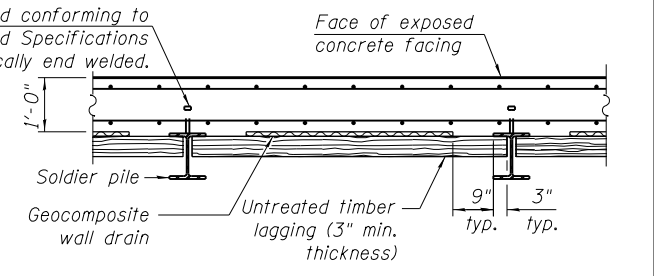


SECTION A-A

DETAIL 1

*Include in the cost of pipe Underdrains for Structures

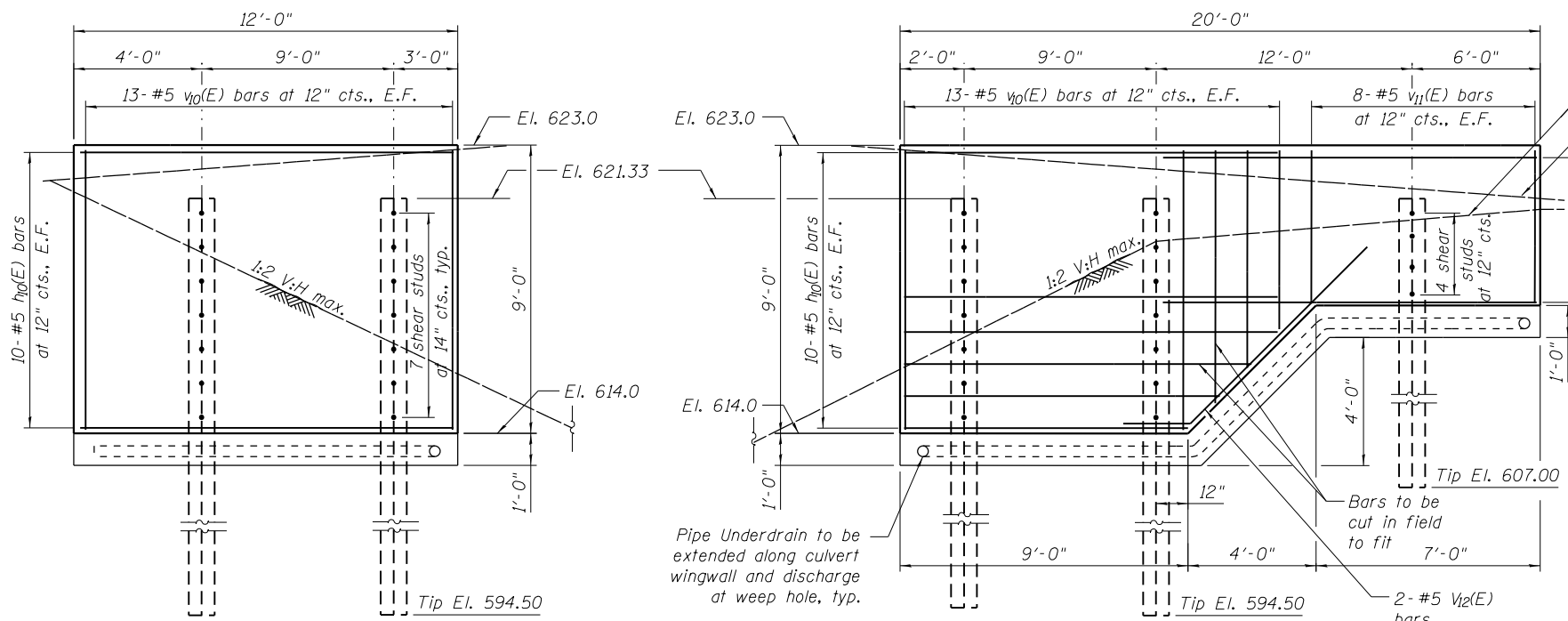
** See Standard 606201. Include in the cost of Concrete Structures.



SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{10}(E)$	80	#5	11'-8"	—
$h_{11}(E)$	12	#5	11'-7"	—
$v_{10}(E)$	104	#5	8'-8"	—
$v_{11}(E)$	16	#5	4'-8"	—
$v_{12}(E)$	2	#5	10'-7"	—
Concrete Removal			Cu. Yd.	4.8
Structure Excavation			Cu. Yd.	80
Concrete Structures			Cu. Yd.	17.4
Stud Shear Connectors			Each	60
Reinforcing Bars, Epoxy Coated			Pound	2,160
Furnishing Soldier Piles (HP Section)			Foot	231
Driving Soldiers Piles			Foot	231
Untreated Timber Lagging			Sq. Ft.	375
Geocomposite Wall Drain			Sq. Yd.	45
Pipe Underdrains for Structures 4"			Foot	56



SE WALL ELEVATION

NE WALL ELEVATION

LEGEND

- E.F. Each Face
- Stage III Concrete Removal

Notes:
 1. Soldier pile walls and final grading to be constructed during Stage III. For details see Roadway Plans.
 2. The Contractor is responsible for the design and performance of the lagging using no less than a 3 inch nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.

FILE NAME = 8FILES

COLLINS ENGINEERS
 133 N. Booker Dr.
 Suite 900
 Chicago, IL 60606
 Tel: (312) 704-9300
 Fax: (312) 704-9320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

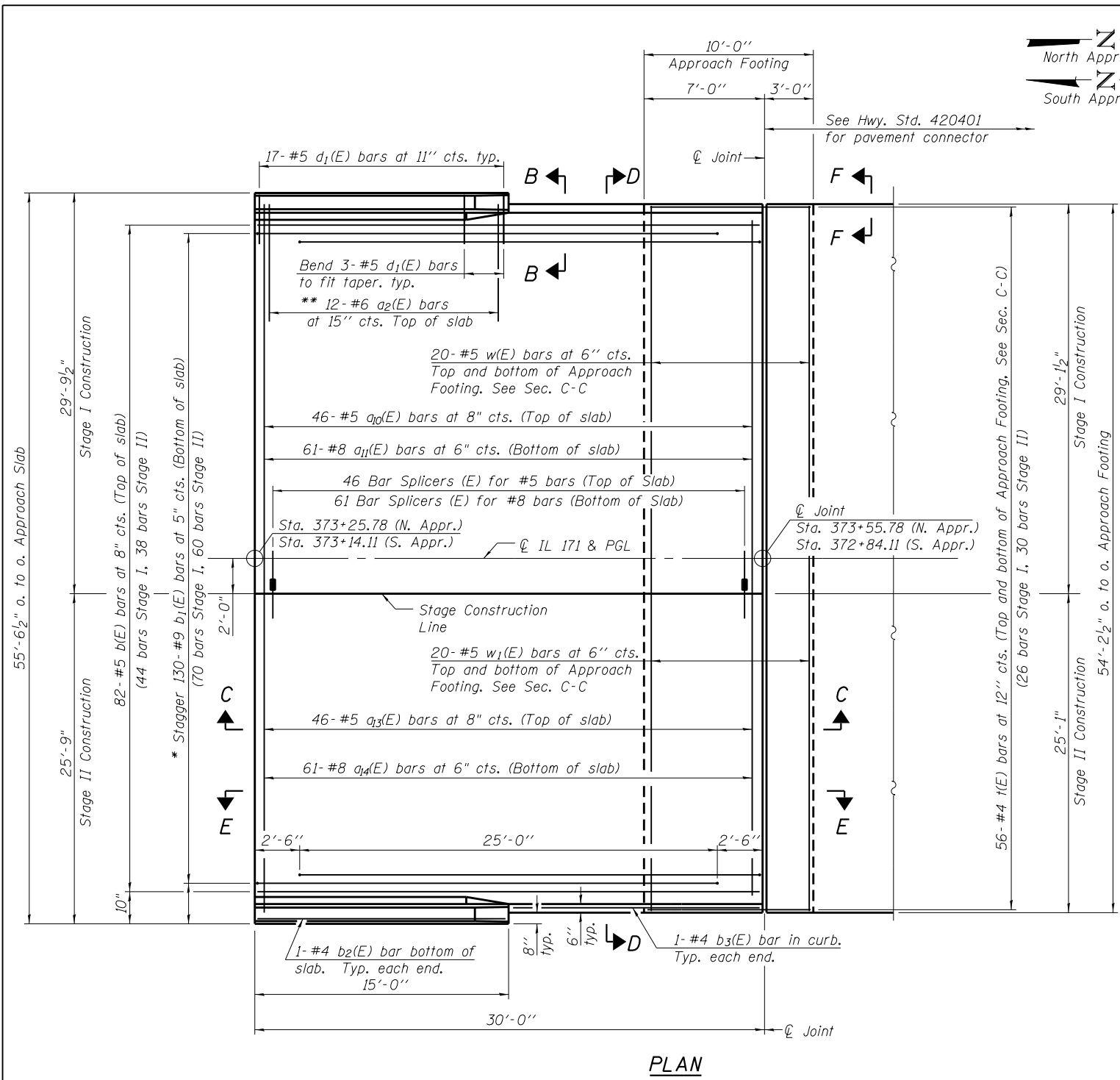
USER NAME =	DESIGNED - LY	REVISIONS -
PLOT SCALE =	CHECKED - EKM	REVISIONS -
PLOT DATE =	DRAWN - PRH	REVISIONS -
	CHECKED - EKM	REVISIONS -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SOLDIER PILE RETAINING WALLS
 STRUCTURE NO. 016-2283

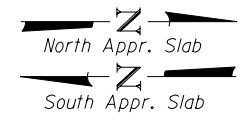
SHEET NO. S9 OF S15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	42
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



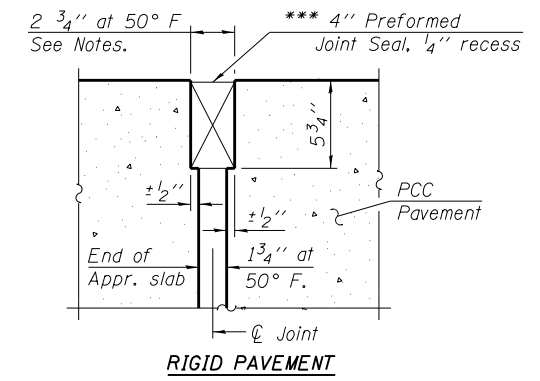
PLAN

* Tilt #9 b₁(E) bars as required to maintain clearance.
 ** Space between a₁₀(E) & a₁₃(E) bars, typ. ea. parapet.

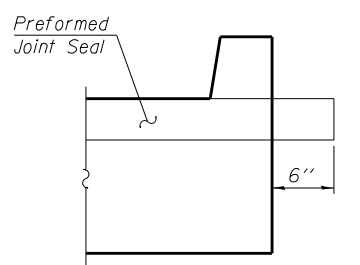
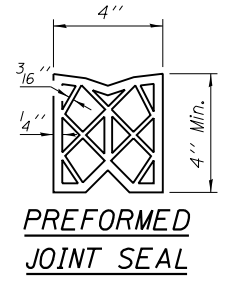


Notes:
 See sheet S11 for Sections C-C & D-D and View E-E.
 a₁₀(E) and a₁₁(E) bar spacings measured along \bar{C} Rdwy.
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the structure length plus the approach slab length. The minimum dimension shall be 1 1/2' for installation purposes.

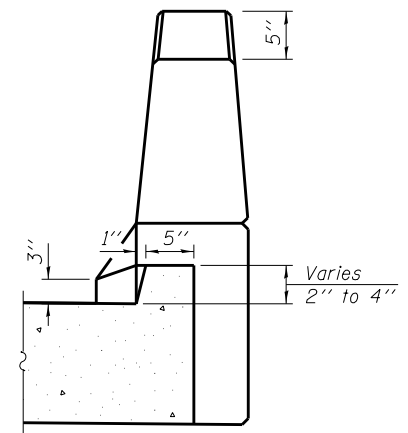
*** Cost included with Concrete Superstructure.



DETAIL A



VIEW F-F



VIEW B-B

FILE NAME = 8FILES

COLLINS ENGINEERS
 133 N. Booker Dr.
 Suite 900
 Chicago, IL 60646
 Tel: (312) 704-9300
 Fax: (312) 704-9320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - LY	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE =	DRAWN - PRH	REVISED -
	CHECKED - EKM	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

(Sheet 1 of 2)

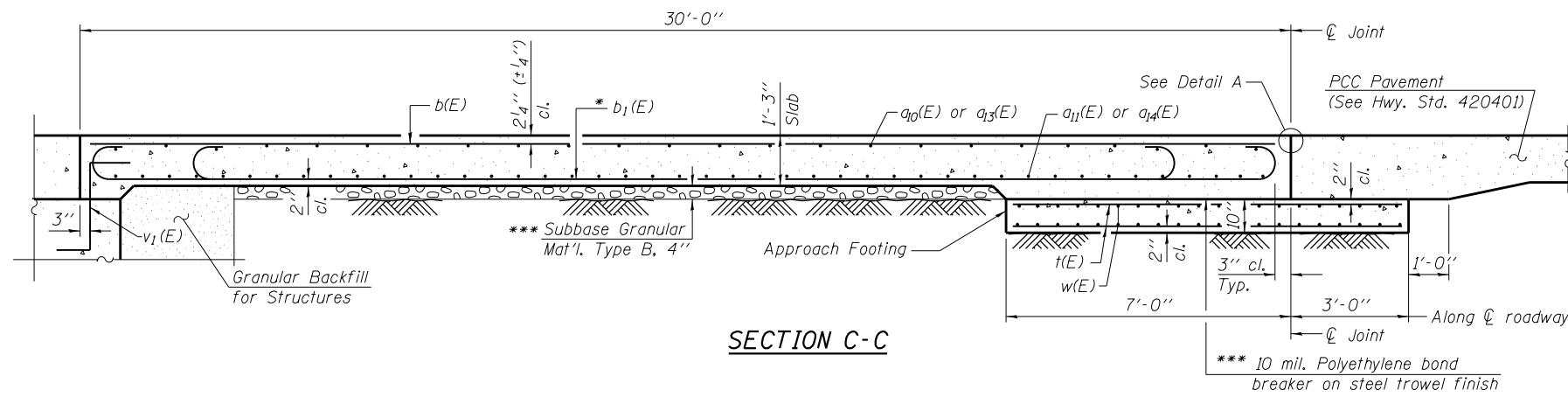
**APPROACH SLAB DETAILS
 STRUCTURE NO. 016-2283**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	43
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

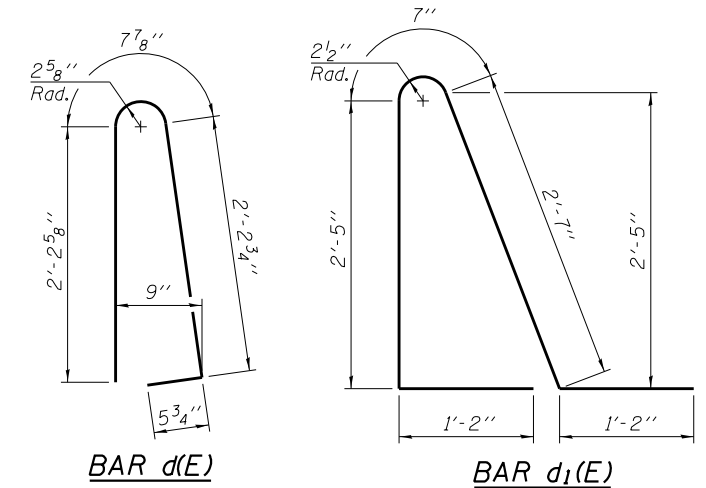
SHEET NO. S10 OF S15 SHEETS

Notes:

See sheet S10 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 $v_1(E)$ bar details, see sheets S7 & S8.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet S12.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures, see sheet S2.



SECTION C-C



BAR d(E)

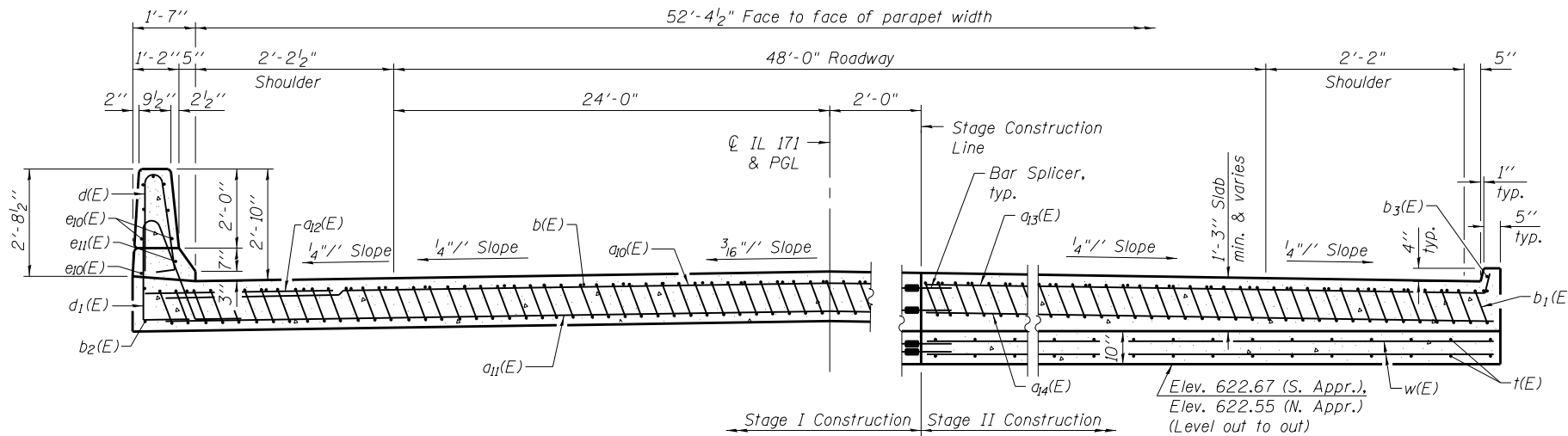
BAR d1(E)

* Tilt #9 $b_1(E)$ bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

TWO APPROACHES
 BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$a_{10}(E)$	92	#5	29'-2"	—
$a_{11}(E)$	122	#8	28'-10"	—
$a_{12}(E)$	48	#6	6'-6"	—
$a_{13}(E)$	92	#5	25'-2"	—
$a_{14}(E)$	122	#8	24'-9"	—
$b(E)$	164	#5	29'-8"	—
$b_1(E)$	260	#9	29'-9"	—
$b_2(E)$	4	#4	14'-8"	—
$b_3(E)$	4	#4	14'-8"	—
$d(E)$	68	#5	5'-7"	U
$d_1(E)$	68	#5	7'-11"	U
$e_{10}(E)$	32	#4	14'-8"	—
$e_{11}(E)$	4	#8	14'-8"	—
$t(E)$	224	#4	9'-8"	—
$w(E)$	80	#5	28'-10"	—
$w_1(E)$	80	#5	24'-9"	—
Concrete Superstructure		Cu. Yd.	155.1	
Concrete Structures		Cu. Yd.	33.5	
Reinforcement Bars, Epoxy Coated		Pound	62,530	
Bridge Deck Grooving		Sq. Yd.	336	
Protective Coat		Sq. Yd.	411	

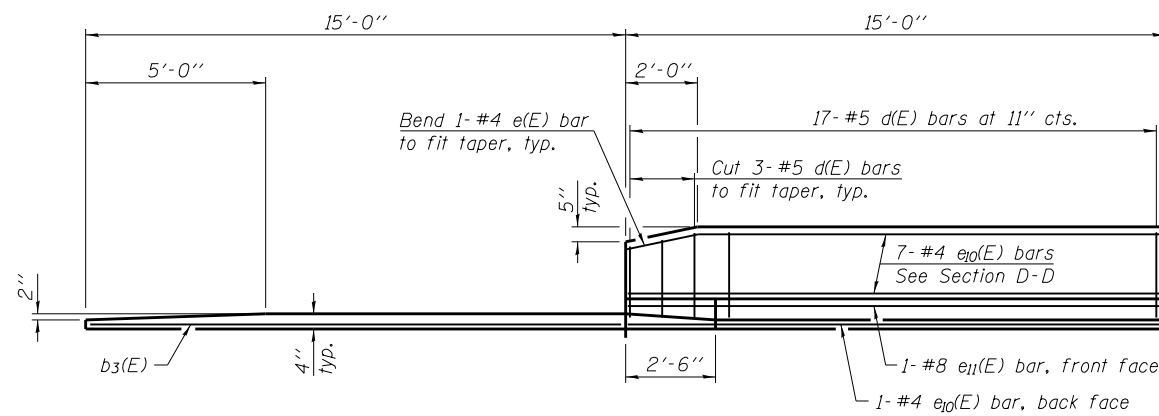


SECTION D-D

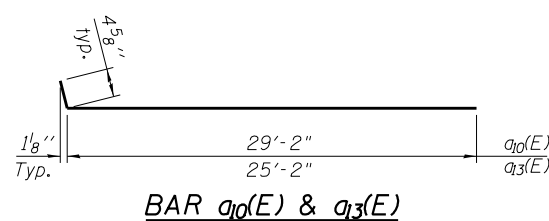
NEAR ABUTMENT

AT APPROACH FOOTING

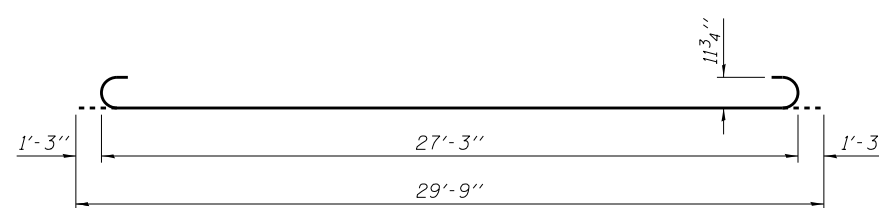
(See Plan for dimensions not shown)



VIEW E-E



BAR $a_{10}(E)$ & $a_{13}(E)$

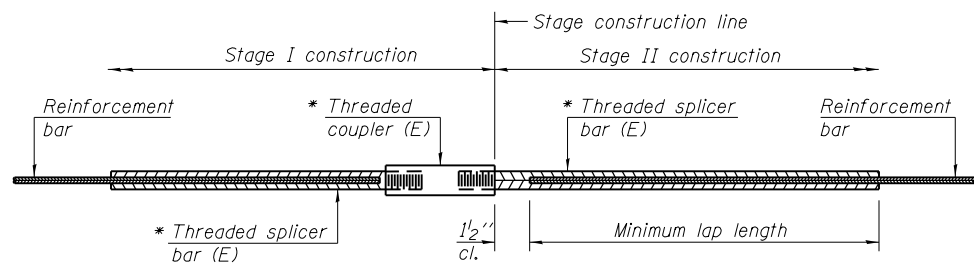


BAR $b_1(E)$

(Sheet 2 of 2)

USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	44
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

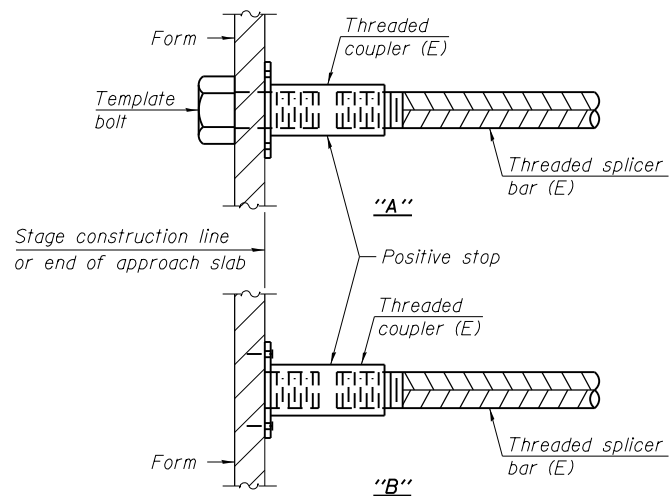


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1/2" + thread length

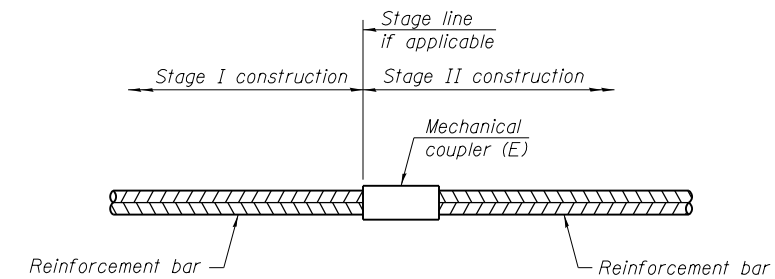
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top of Slab	#5	13	3'-7"
Bottom of Top Slab	#5	21	3'-2"
Top of Bottom Slab	#5	13	3'-7"
Bottom of Bottom Slab	#5	21	3'-2"
Walls	#5	44	3'-7"
Corbel	#5	4	3'-7"
Top of Approach Slab	#5	92	3'-7"
Bottom of Approach Slab	#8	122	5'-1"



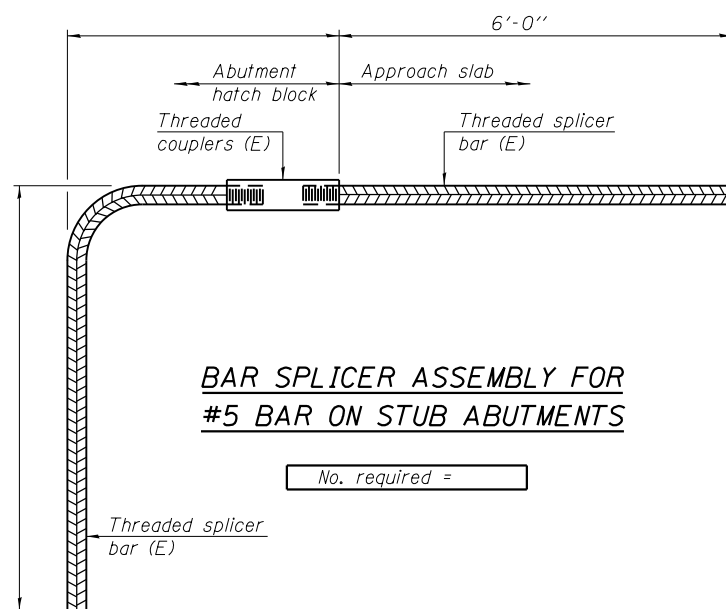
INSTALLATION AND SETTING METHODS

"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 6-8-15

COLLINS ENGINEERS
 133 N. Wacker Dr.
 Suite 800
 Chicago, IL 60606
 Tel: (312) 704-9300
 Fax: (312) 704-9320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

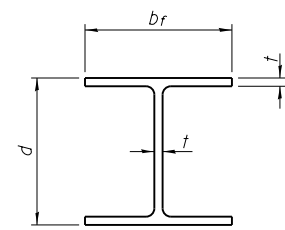
USER NAME =	DESIGNED - LY	REVISED -
CHECKED - EKM	REVISOR -	
PLOT SCALE =	DRAWN - PRH	REVISED -
PLOT DATE =	CHECKED - EKM	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 016-2283**

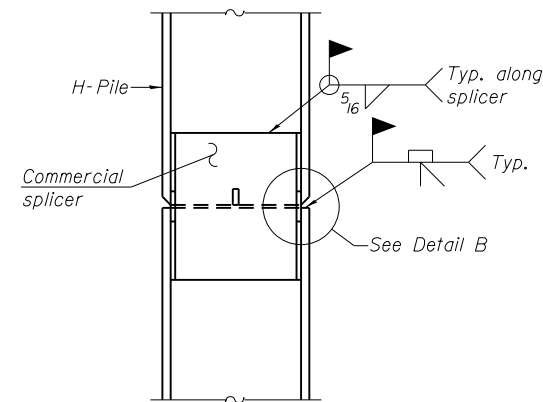
SHEET NO. S12 OF S15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	45
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

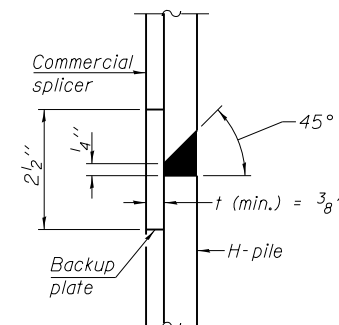


STEEL PILE TABLE

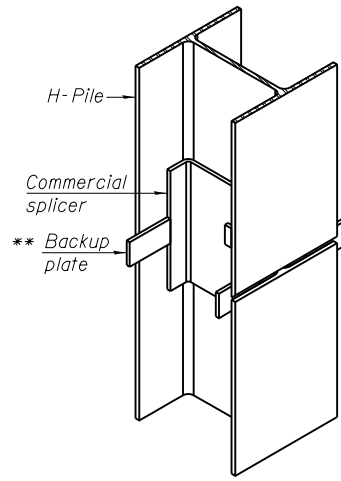
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11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



ELEVATION

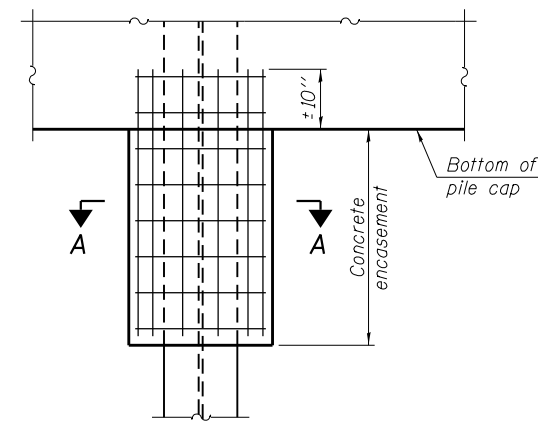


DETAIL "B"



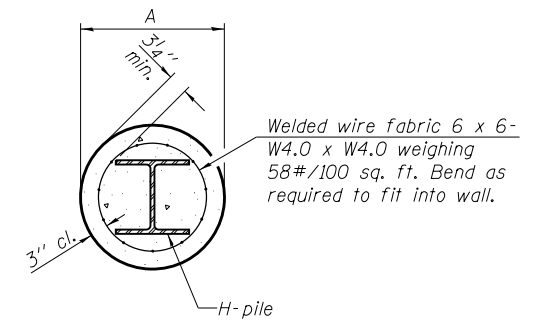
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



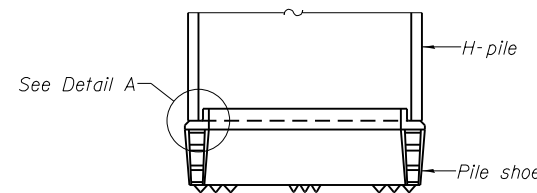
ELEVATION

PILE ENCASEMENT

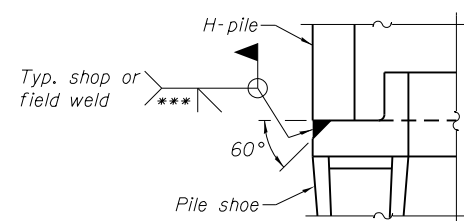


SECTION A-A

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

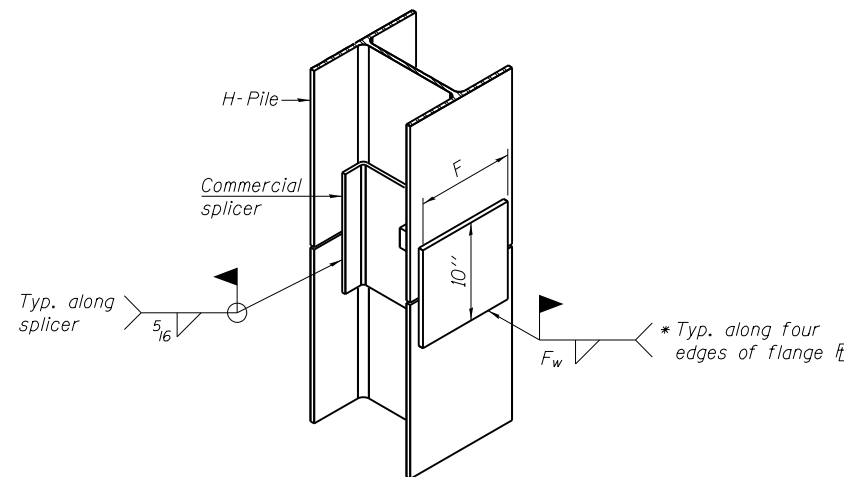


ELEVATION



DETAIL A

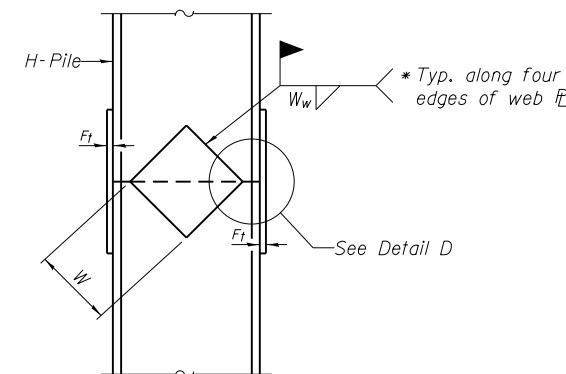
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



ELEVATION

DETAIL D

WELDED PLATE FIELD SPLICE

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

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

FILE NAME = 8FILES

COLLINS ENGINEERS
133 N. Booker Dr.
Suite 800
Chicago, IL 60606
Tel: (312) 704-9300
Fax: (312) 704-9320
www.collinsengr.com
ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

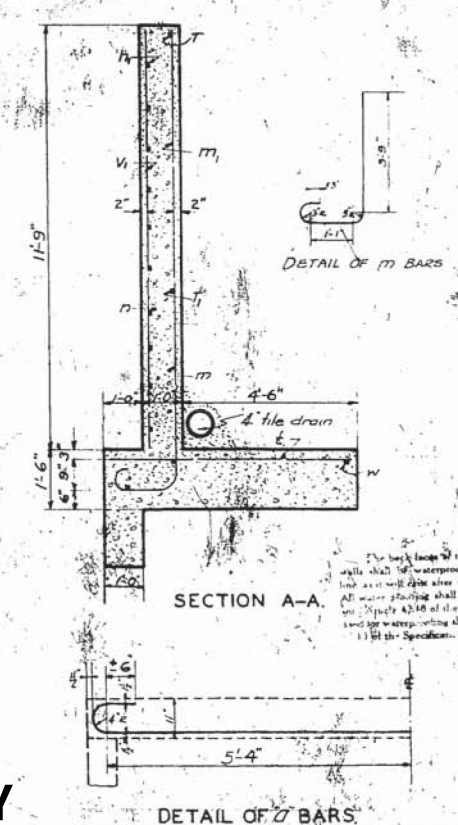
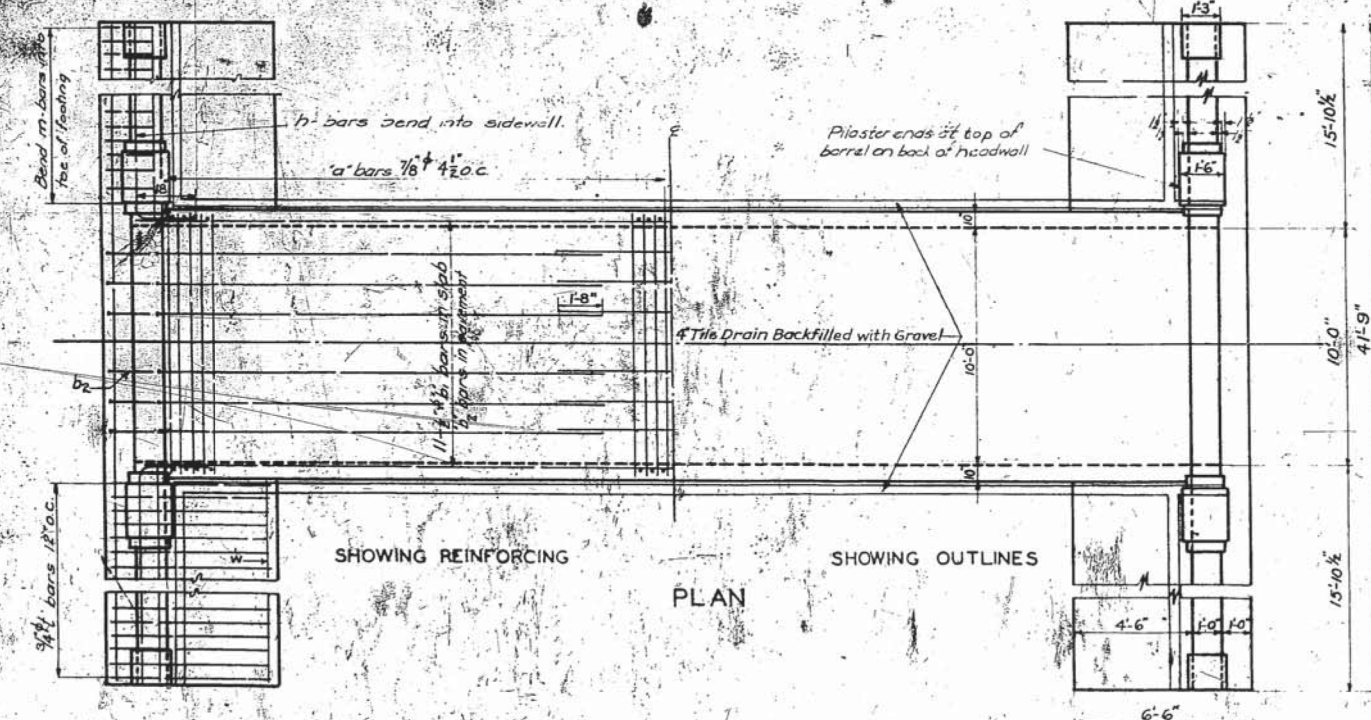
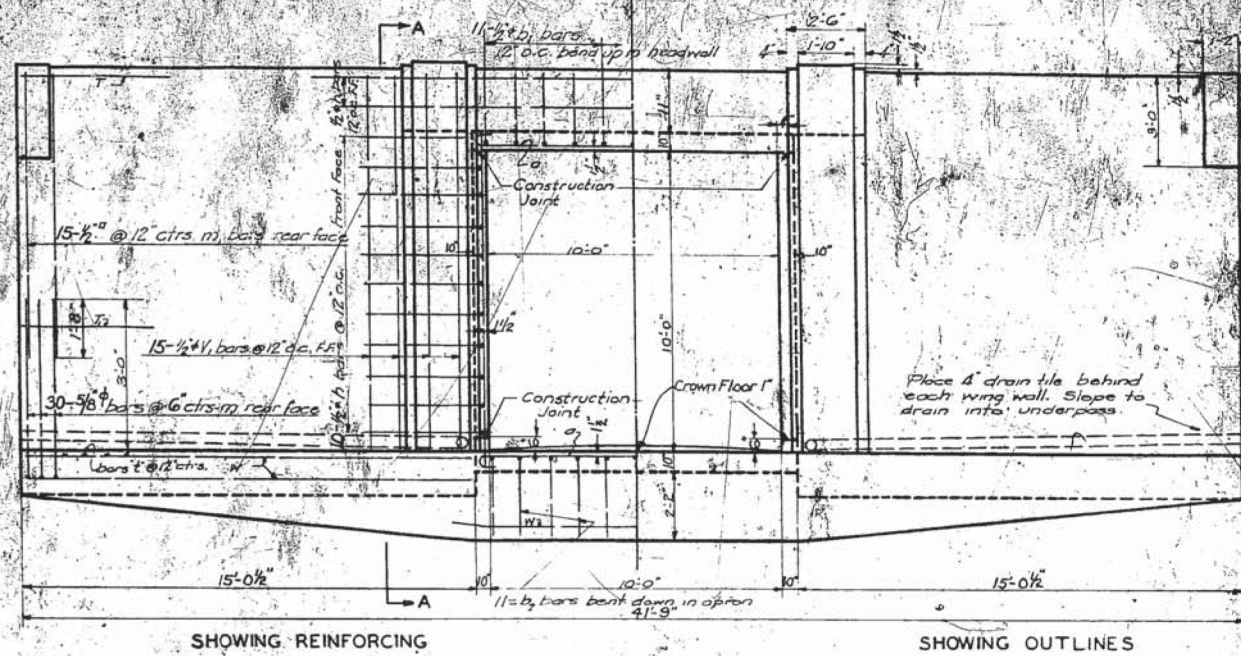
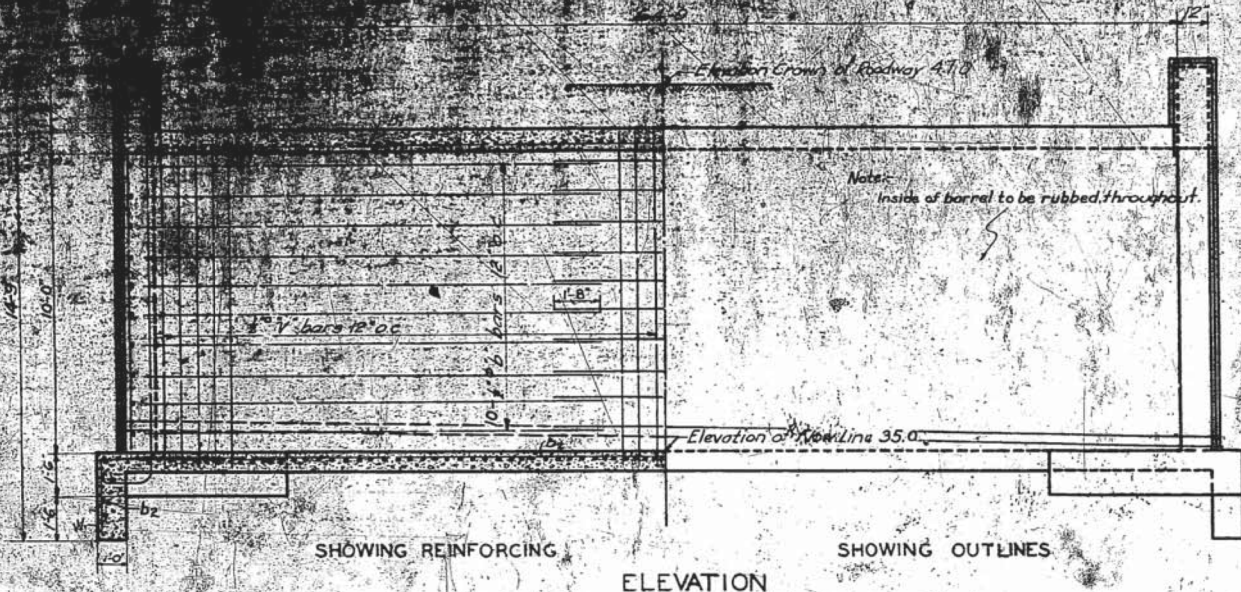
F-HP
1-27-12
USER NAME =
DESIGNED - LY
CHECKED - EKM
PLOT SCALE =
DRAWN - PRH
PLOT DATE =
DESIGNED - LY
CHECKED - EKM
REVISIONS:
REVISIONS:
REVISIONS:
REVISIONS:

DESIGNED - LY
CHECKED - EKM
DRAWN - PRH
CHECKED - EKM
REVISIONS:
REVISIONS:
REVISIONS:
REVISIONS:

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HP PILE DETAILS
STRUCTURE NO. 016-2283**
SHEET NO. S13 OF S15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	46
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTE
 The exposed faces of masonry and all open joints in barrel, walls, girders, etc., shall be finished by use of 1/4-inch triangular masonry. For all other exposed faces, as finish masonry, use 1/2-inch triangular masonry.
 All reinforcing bars shall be standard hot-rolled steel in all sizes conforming to the requirements of Section 70 of the Standard Specifications for Road and Bridge Construction, Illinois Department of Highways. All bars shall be obtained in full lengths indicated in the Bill of Material.
 All reinforcing steel shall be securely wired in position before concrete is placed.
 Class "A" Concrete to be used throughout.
 The necessity of driving piles will be determined by the Engineer at the time the excavation for the footing is made. If piles are deemed necessary, Engineer will furnish detailed drawings showing spacing and number required.
 Height of headwall to be sufficient to extend 6" above the intersection of headwall and earth.
 If 30" of headwall is required, its height to grade line of 18" shall be determined.
 The back face of the abutment walls shall be waterproofed up to the ground line and will pipe after the back fill is in place. All water piping shall be done in accordance with District 4218 of the Specifications. Applicable to water piping shall conform with Article 11 of the Specifications.

Bars	N/R	SIZE	LENGTH
O	352	3/8"	13'-5"
B	60	1/2"	23'-5"
D	33	1/2"	28'-0"
D ₂	33	1/2"	25'-9"
H	40	1/2"	16'-6"
N	8	3/4"	21'-6"
M	120	3/8"	16'-3"
M ₂	60	1/2"	10'-6"
T	4	1/2"	21'-6"
T ₂	4	1/2"	17'-6"
L	60	3/4"	6'-0"
V	128	1/2"	11'-6"
V ₂	60	1/2"	11'-0"
W	14	1/2"	14'-9"

Reinforcing Steel Libs 16280
 Concrete M27

DEPARTMENT OF HIGHWAYS
 COOK COUNTY, ILLINOIS

1ST AVE.
 EQUESTRIAN UNDERPASS.
 STATION 73+20

031-06063-180

APR 15 1933

FOR INFORMATION ONLY

FILE NAME = 8FILES

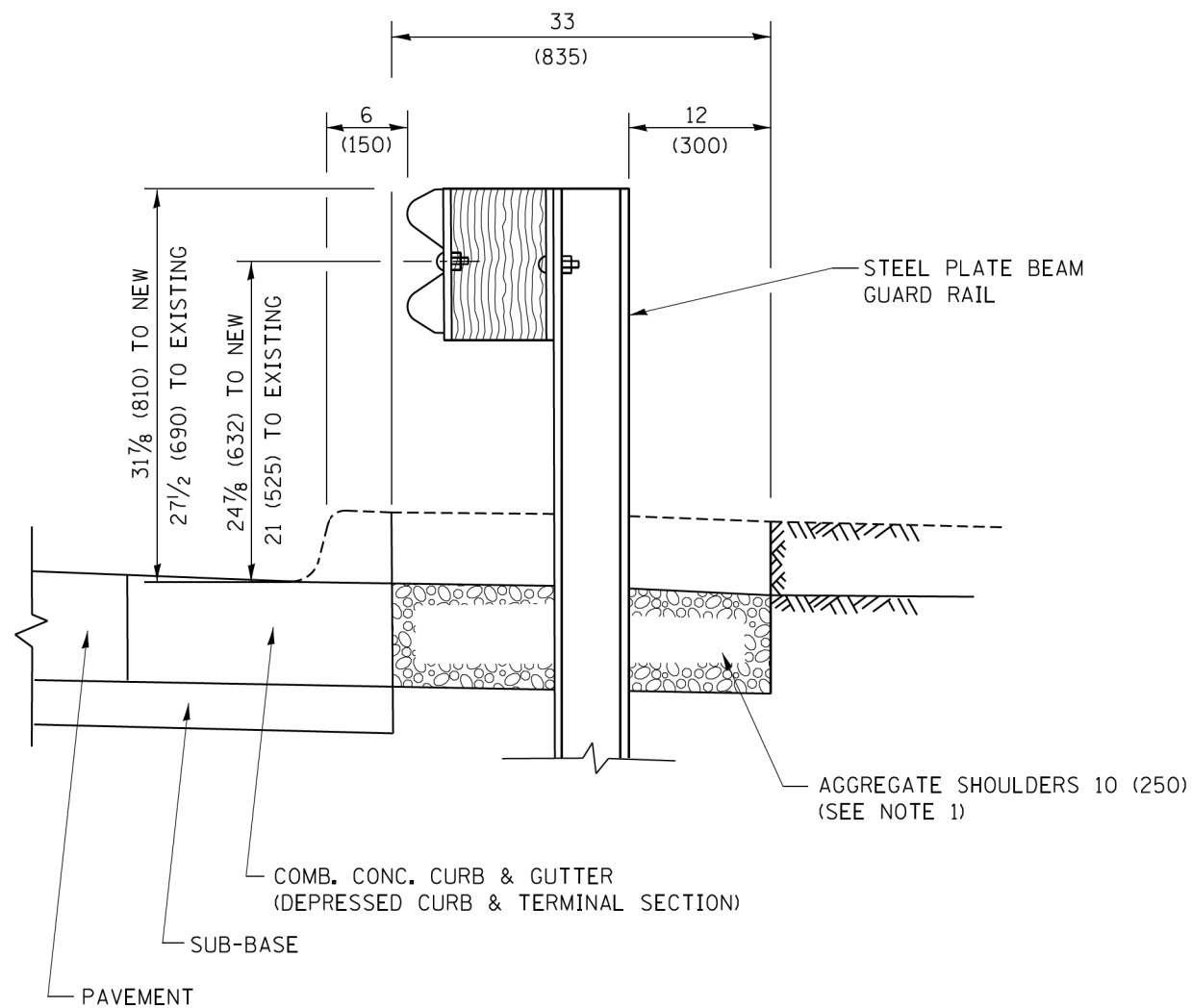
COLLINS ENGINEERS
 133 N. Wacker Dr.
 Suite 900
 Chicago, Ill. 60606
 Tel. (312) 704-3300
 Fax (312) 704-3320
 www.collinsengr.com
 ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000993

USER NAME =	DESIGNED - LY	REVISED -
PLOT SCALE =	CHECKED - EKM	REVISED -
PLOT DATE =	DRAWN - PRH	REVISED -
	CHECKED - EKM	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE DETAILS
 STRUCTURE NO. 016-2283
 SHEET NO. S15 OF S15 SHEETS

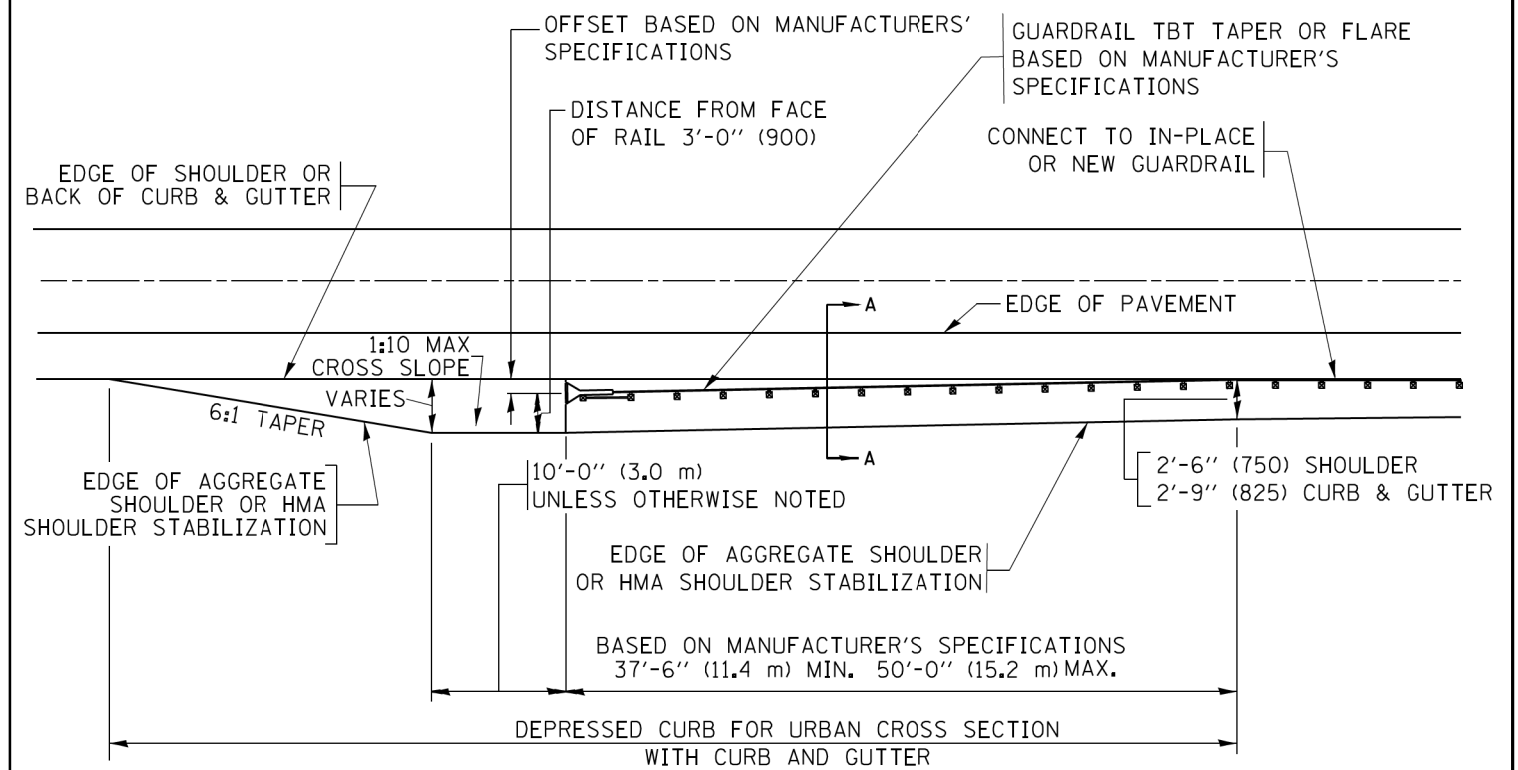
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	48
CONTRACT NO. 62B01				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



SECTION A-A

- NOTES:
1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM
GUARD RAIL ADJACENT TO CURB AND GUTTER
[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



**DEPRESSED CURB AND GUTTER AND
SHOULDER TREATMENT AT TBT TY. 1 SPL.**

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.

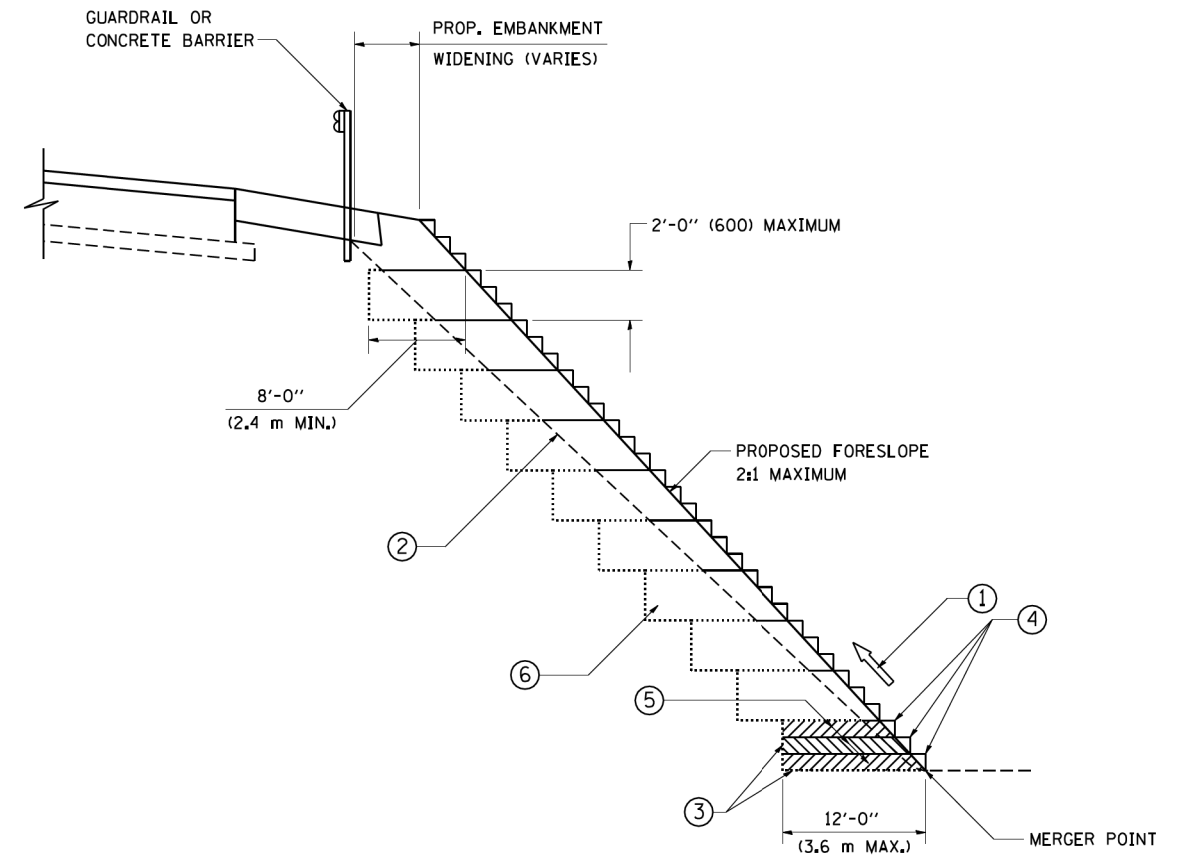
FILE NAME =	USER NAME = drivekosgn	DESIGNED - M. DE YONG	REVISED - R. BORO 12-08-2008
pw\1\084EBID\INTEG\illinois.gov\FWIDOT\Documents\DOT Offices\District 1\Projects\Dist 1\Projects\CADD\cadd\CAD\sheet\bd34.dgn		DRAWN -	REVISED - R. BORO 09-14-2009
	PLOT SCALE = 50,0000 / 1 in.	CHECKED -	REVISED - R. BORO 08-06-2012
Default	PLOT DATE = 12/21/2015	DATE - 09-22-90	REVISED - R. BORO 05-08-2015

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND
SHOULDER TREATMENT AT TBT TY.1 SPL.

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	49
BD600-10 (BD 34)		CONTRACT NO. 62B01		
ILLINOIS FED. AID PROJECT				



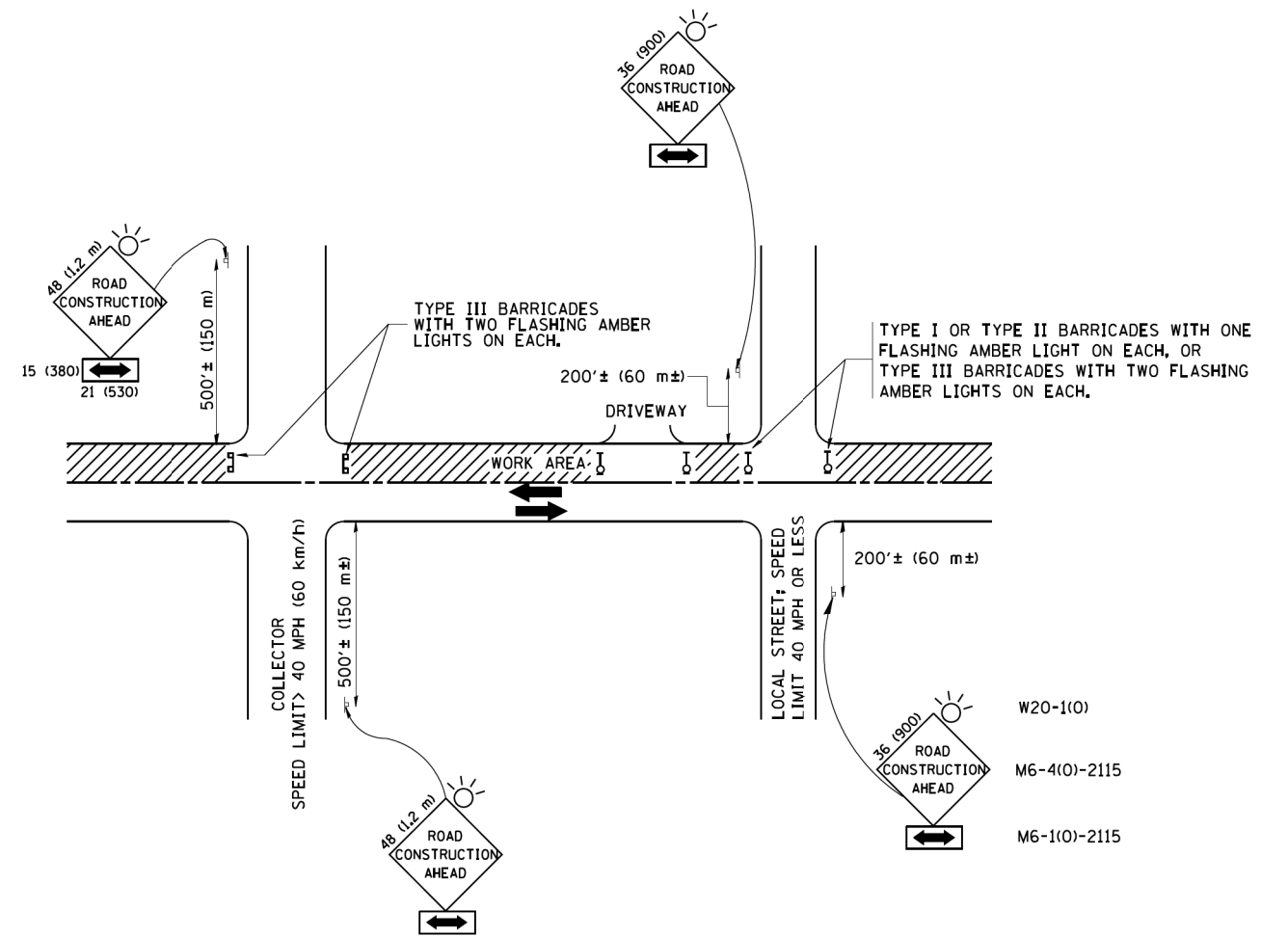
**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

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

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

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BENCHING DETAIL FOR EMBANKMENT WIDENING		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.0000' / IN.	CHECKED - S.E.B.	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	372	2015-042B	COOK
PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -	REVISED -					BD-51		CONTRACT NO. 62B01	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT											



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

NOTES:

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

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

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

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

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

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

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

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

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

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

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

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

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

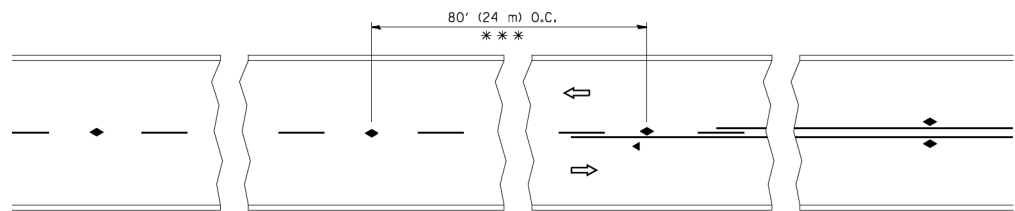
FILE NAME = W:\diststd\22x34\td10.dgn	USER NAME = gegl1enobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED - T. RAMMACH 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

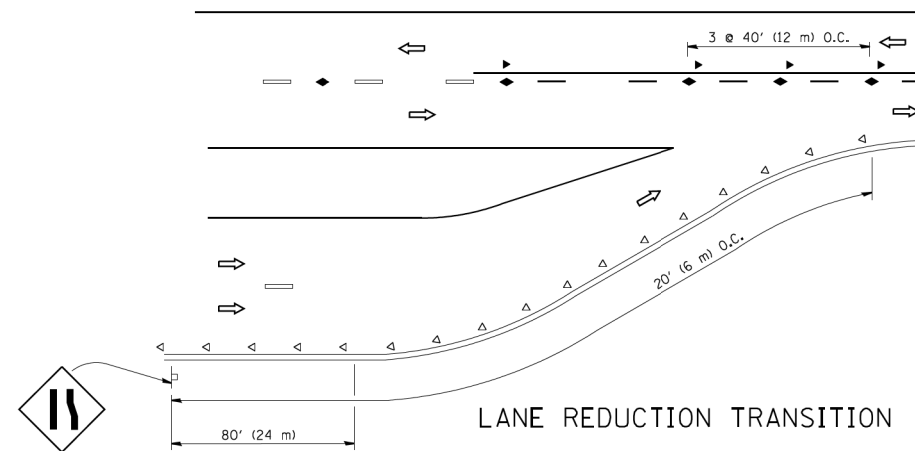
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	51
TC-10			CONTRACT NO. 62B01	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

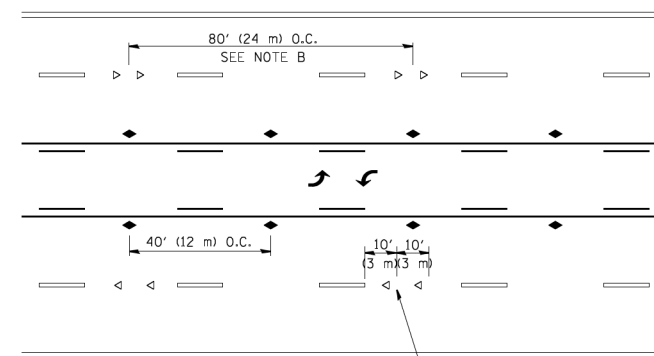


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

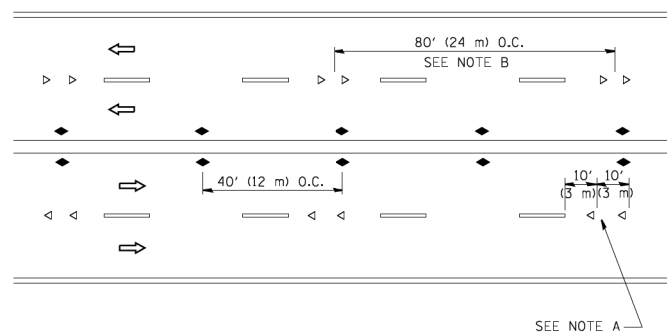
TWO-LANE/TWO-WAY



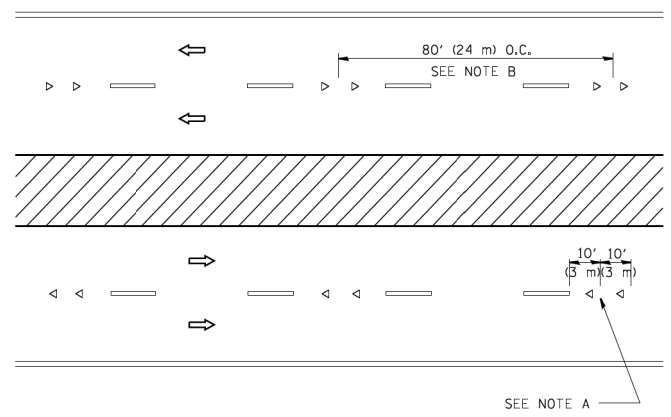
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

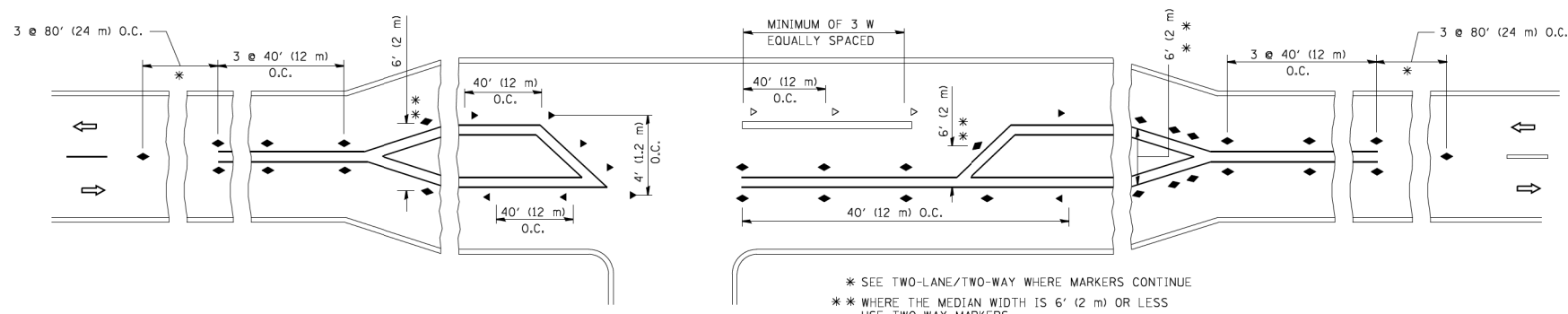
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



LEFT TURN

* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE
 ** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

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

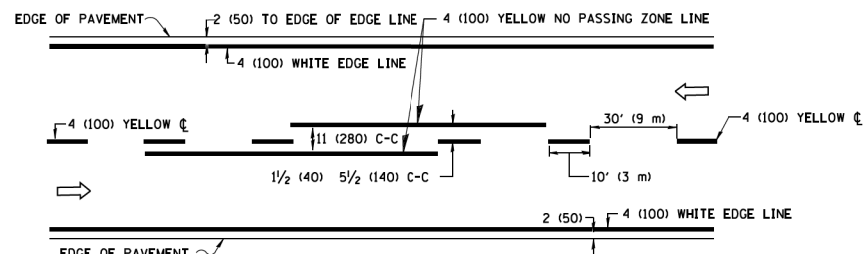
FILE NAME =	USER NAME = lveysa	DESIGNED -	REVISED - T. RAMMACHER 09-19-94
c:\pki\work\pki\dot\veysa\d0108315\tcl1.dgn		DRAWN -	REVISED - T. RAMMACHER 03-12-99
	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

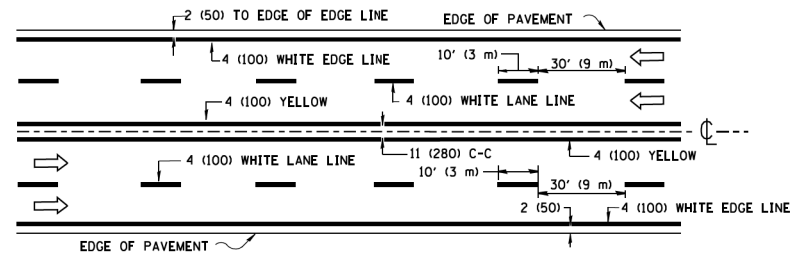
TYPICAL APPLICATIONS
 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	52
TC-11		CONTRACT NO. 62B01		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

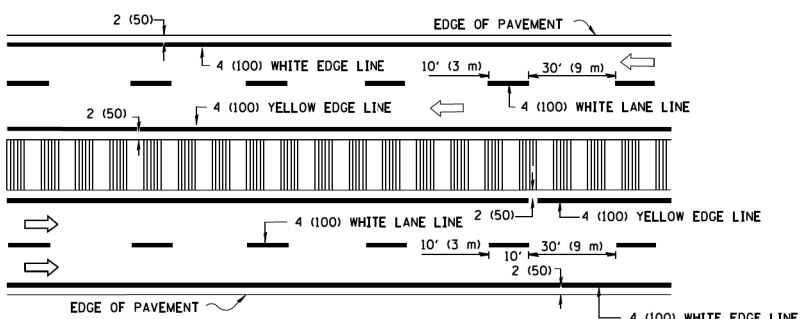
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.



2-LANE ROADWAY

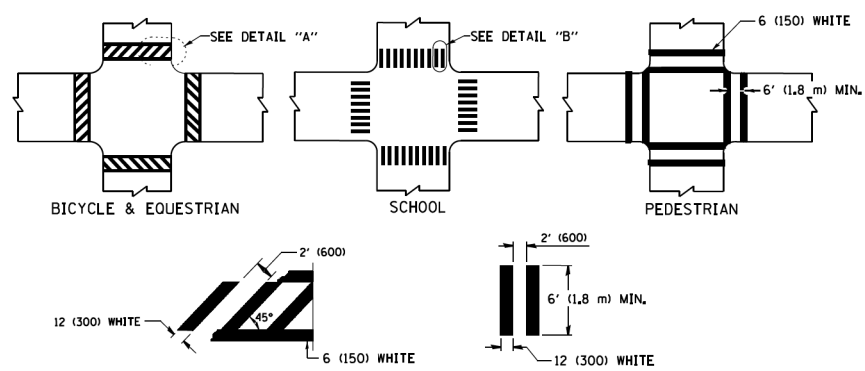


MULTI-LANE UNDIVIDED



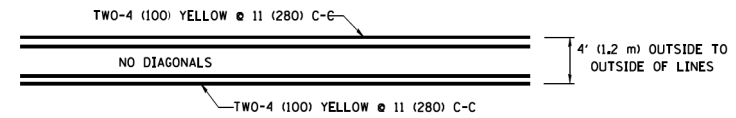
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

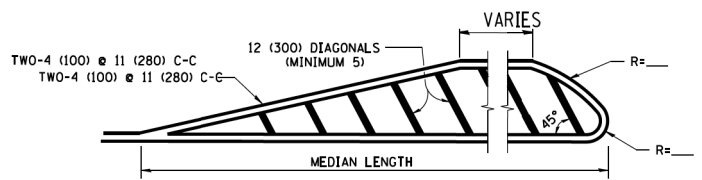


TYPICAL CROSSWALK MARKING

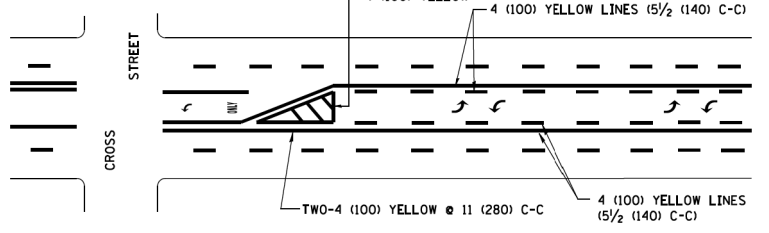
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



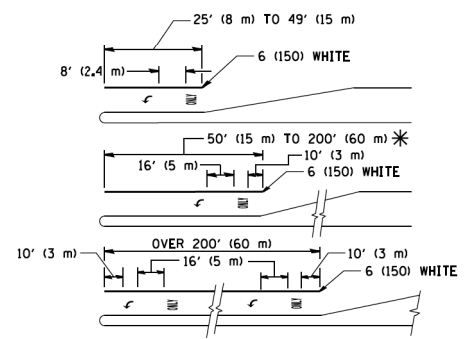
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE



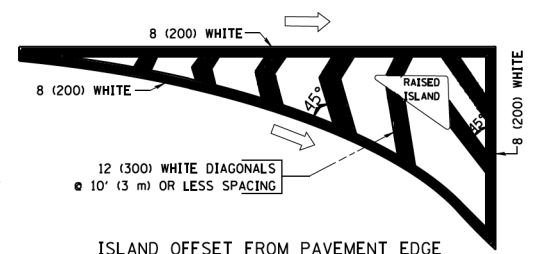
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



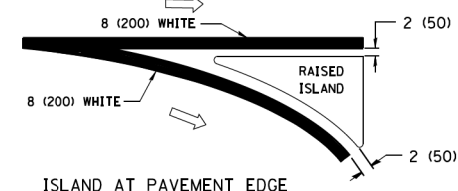
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

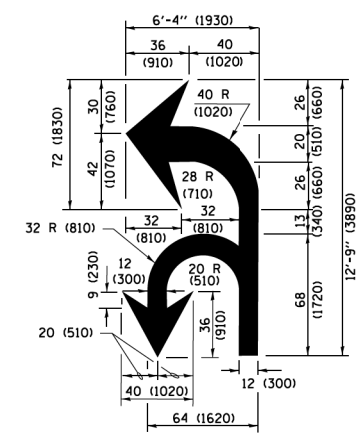
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



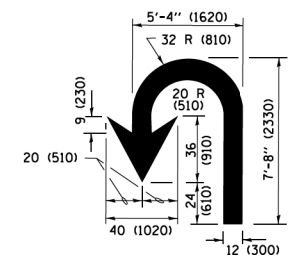
ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING



COMBINATION LEFT AND U-TURN



U-TURN

LANE REDUCTION TRANSITION

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
CORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

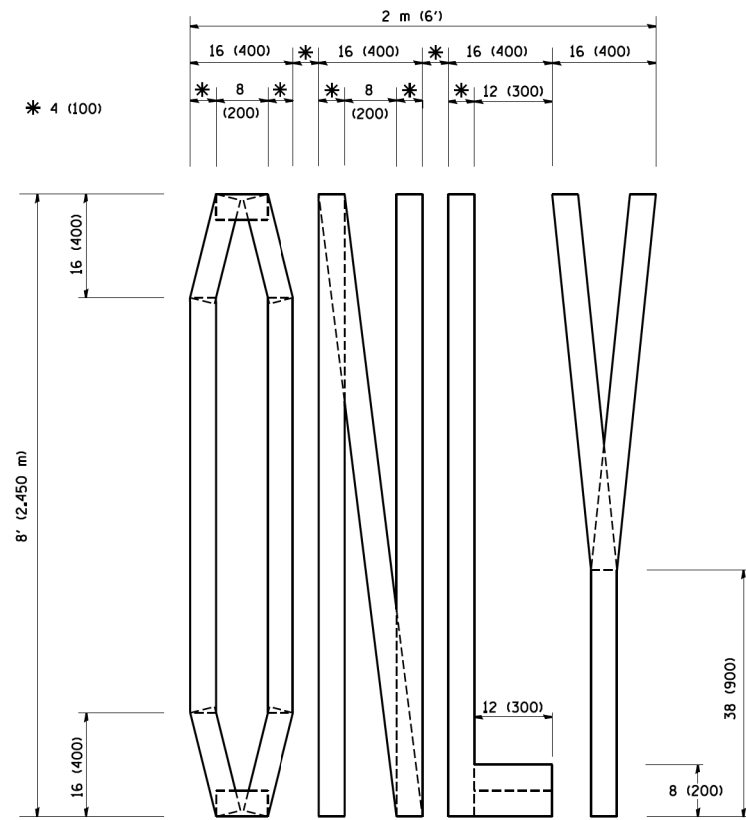
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = l1szekrf	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
pw\1\084EBID\INTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 1\Projects\Dist1\DRAWN\CADData\CADsheets\tc13.dgn		CHECKED -	REVISED - C. JUCIUS 09-09-09
Default	PLOT SCALE = 50,000' / in.	DATE - 03-19-90	REVISED - C. JUCIUS 07-01-13
	PLOT DATE = 12/21/2015		REVISED - C. JUCIUS 12-21-15

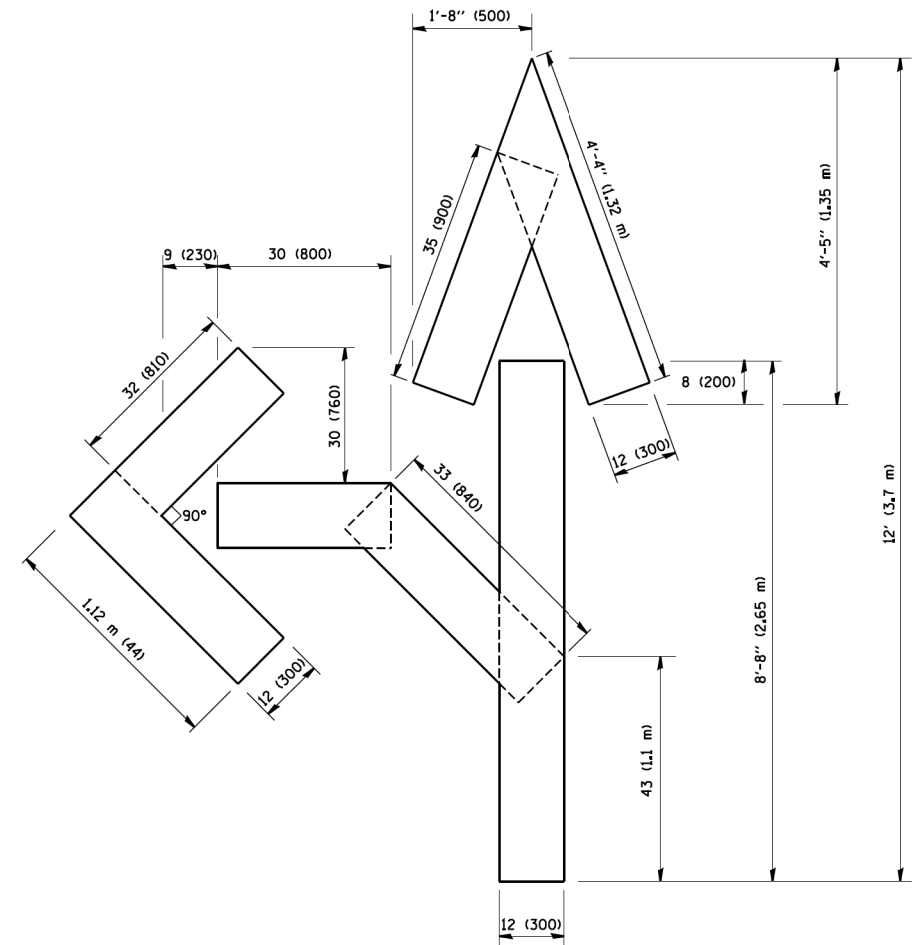
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE			
TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET 1	OF 1 SHEETS	STA. TO STA.

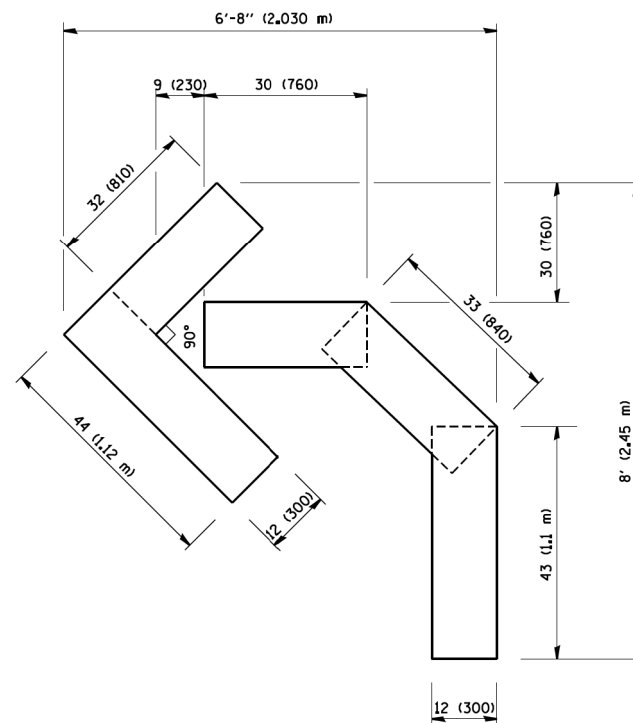
F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEETS 60	SHEET NO. 53
TC-13		CONTRACT NO. 62B01	ILLINOIS FED. AID PROJECT	



QUANTITY
 4 (100) LINE = 64.1 ft. (19.7 m)
 21.1 sq. ft. (1.97 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.3 m)
 27.5 sq. ft. (2.53 sq. m)



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.39 sq. m)

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

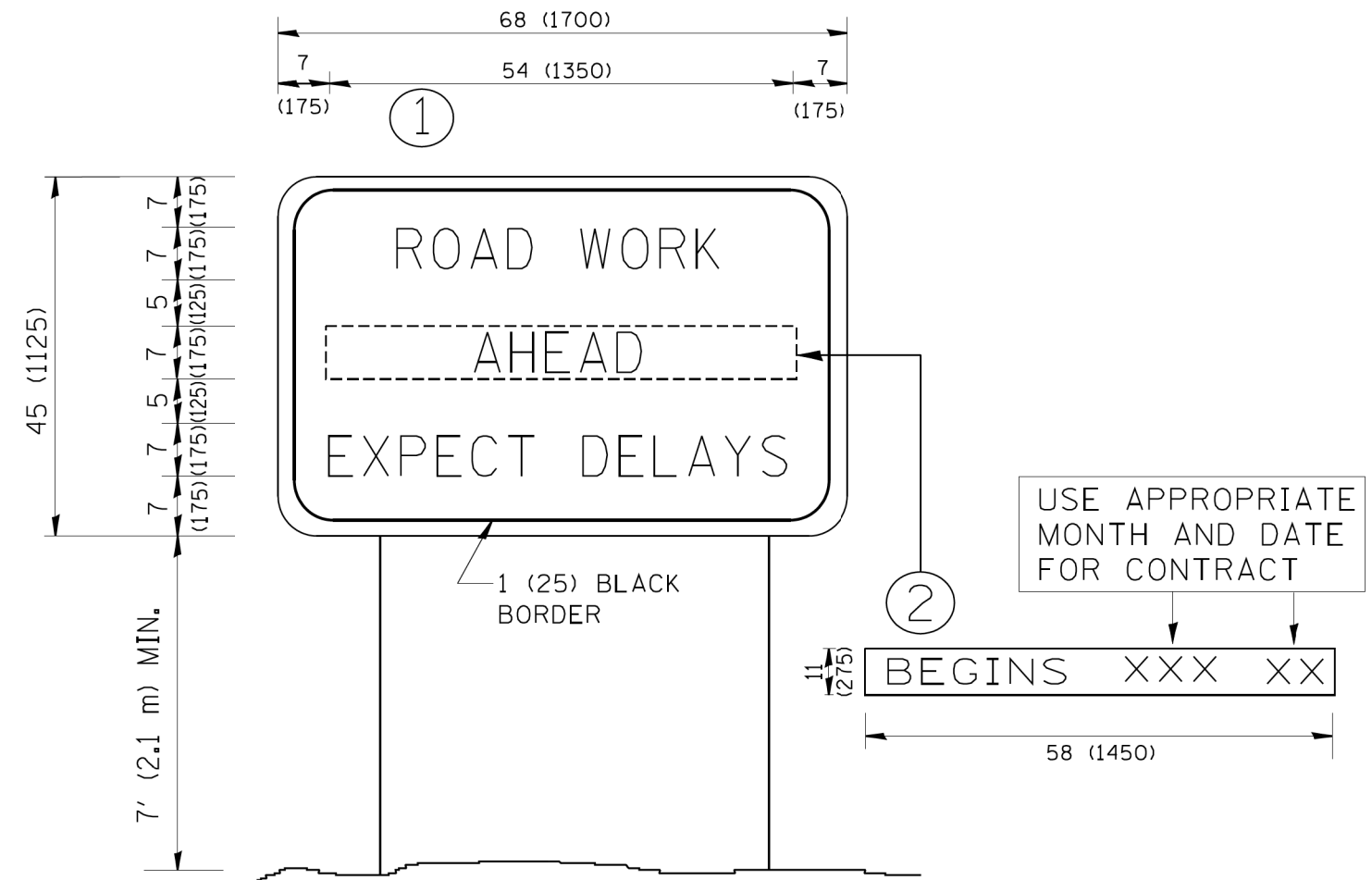
FILE NAME = W:\distata\22x34\ta16.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS
 FOR TRAFFIC STAGING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	54
TC-16		CONTRACT NO. 62B01		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

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

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

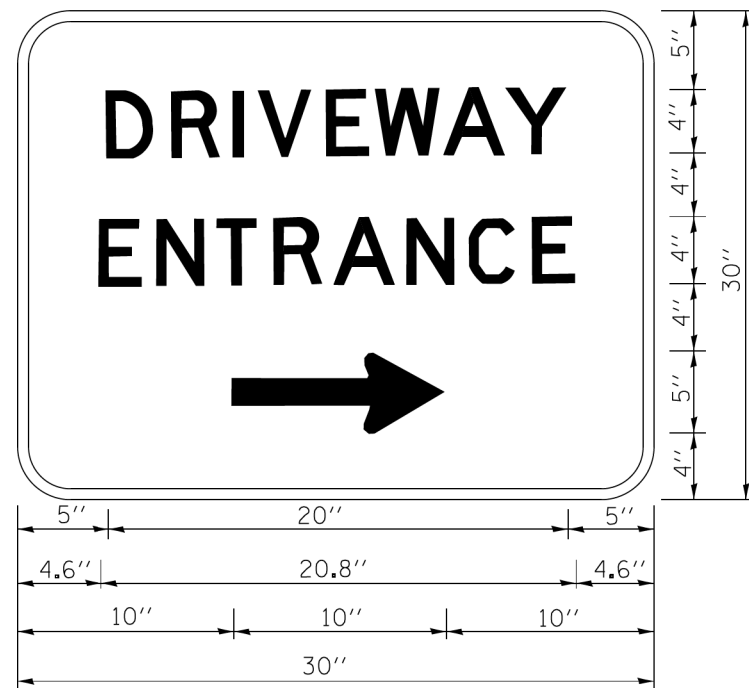
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gegl1enobt	DESIGNED - DRAWN -	REVISED - R. MIRS 09-15-97 REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	55
TC-22		CONTRACT NO. 62B01		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK; ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = gaglianob	DESIGNED -	REVISED - C. JUCIUS 02-15-07
ca\pwork\pwork\gaglianob\d0108315\tp6.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DRIVEWAY ENTRANCE SIGNING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2015-042B	COOK	60	56
TC-26			CONTRACT NO. 62B01	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

COLLINS ENGINEERS

USER NAME = rgs11
 PLOT SCALE = 28,000 / in.
 PLOT DATE = 6/16/2016

DESIGNED -
 DRAWN -
 CHECKED -
 DATE -

REVISED -
 REVISED -
 REVISED -
 REVISED -

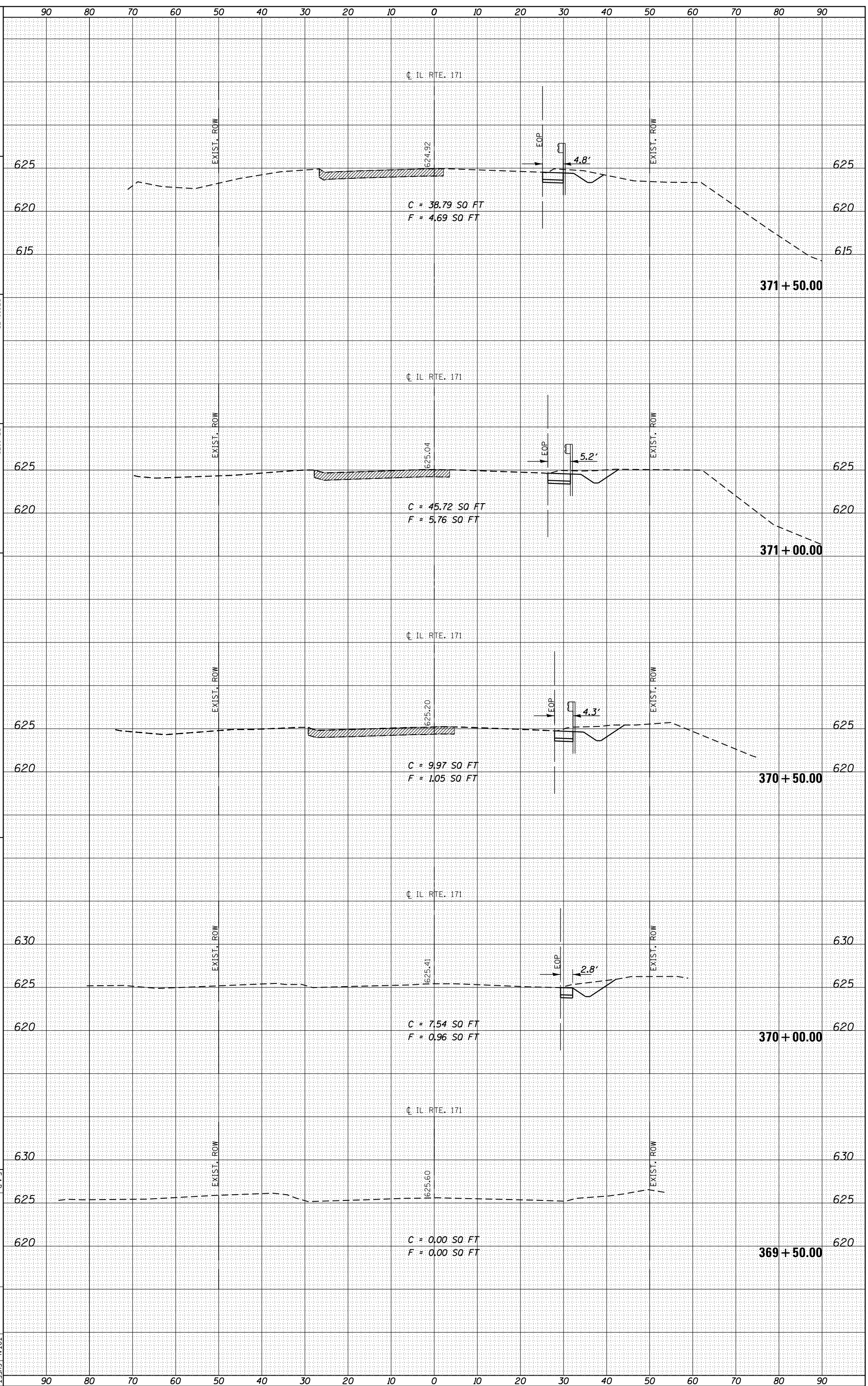
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

IL ROUTE 171 OVER EQUESTRIAN PATH
MOT STAGE I - CROSS SECTIONS

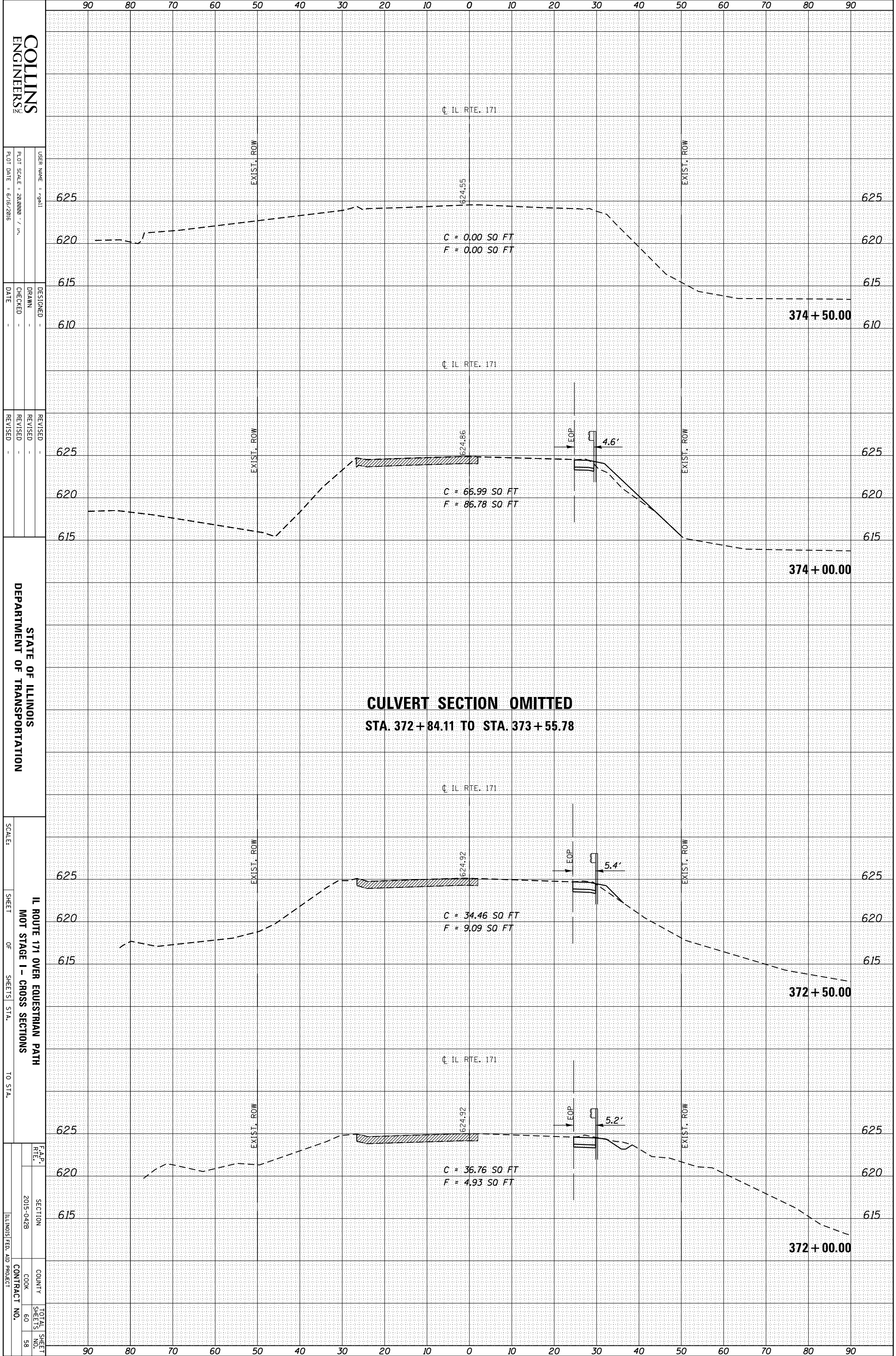
SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. SECTION COUNTY TOTAL SHEET NO. SHEETS NO.
 2015-042B COOK 60 57
 ILLINOIS FED. AID PROJECT CONTRACT NO.



ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



COLLINS ENGINEERS

USER NAME: rgs11
 PLOT SCALE: 28,000 / in.
 PLOT DATE: 6/16/2015

DESIGNED: -
 DRAWN: -
 CHECKED: -
 DATE: -

REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -

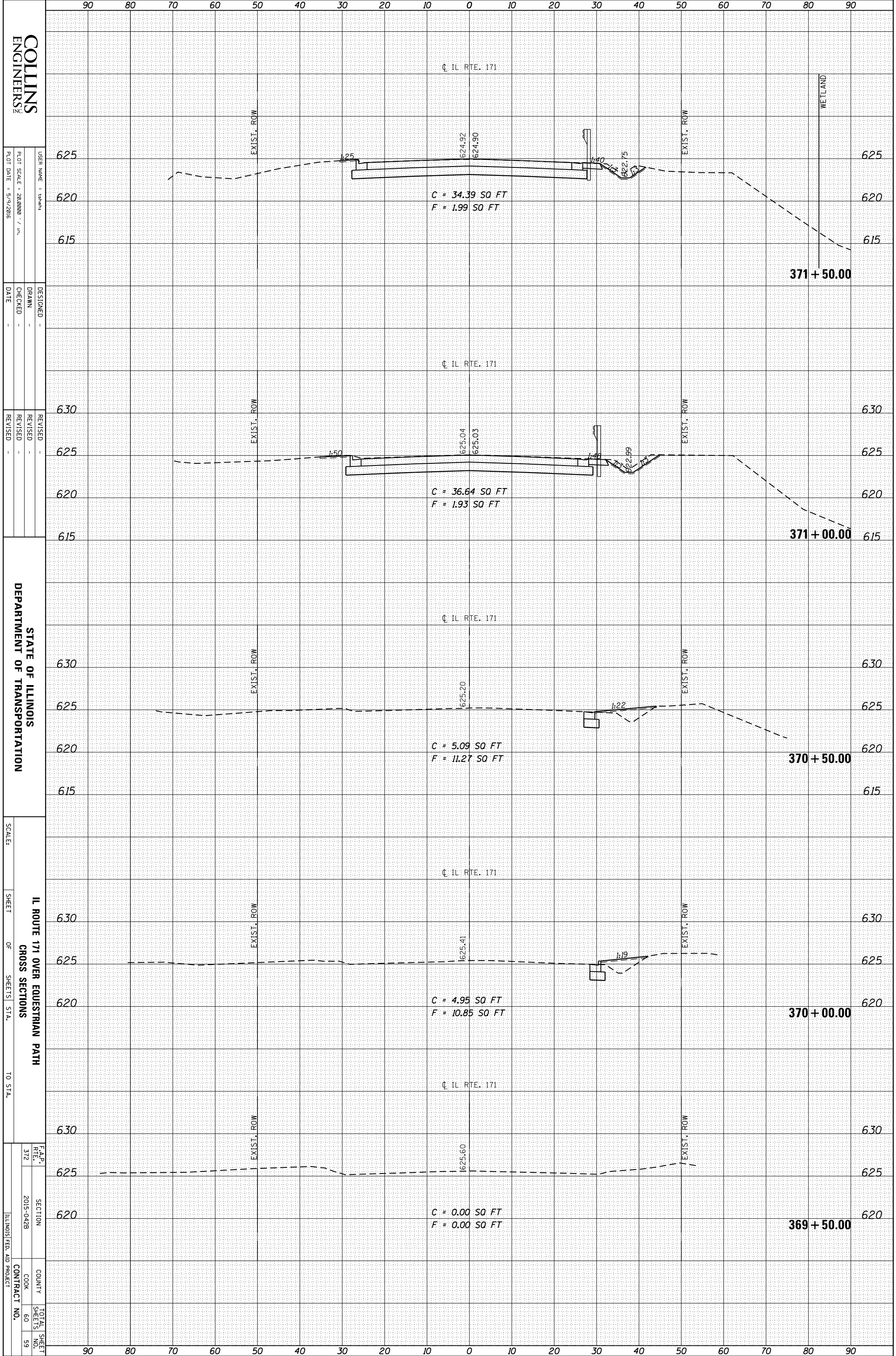
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE: -
 SHEET OF SHEETS STA. TO STA.
 IL ROUTE 171 OVER EQUESTRIAN PATH
 MOT STAGE I - CROSS SECTIONS

F.A.P. RTE. SECTION COUNTY TOTAL SHEET NO.
 2015-042B COOK 60
 ILLINOIS FED. AID PROJECT CONTRACT NO. 58

ORIGINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		



COLLINS ENGINEERS

USER NAME: tshah
 PLOT SCALE: 28,000 / in.
 PLOT DATE: 5/9/2016

DESIGNED: -
 DRAWN: -
 CHECKED: -
 DATE: -

REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

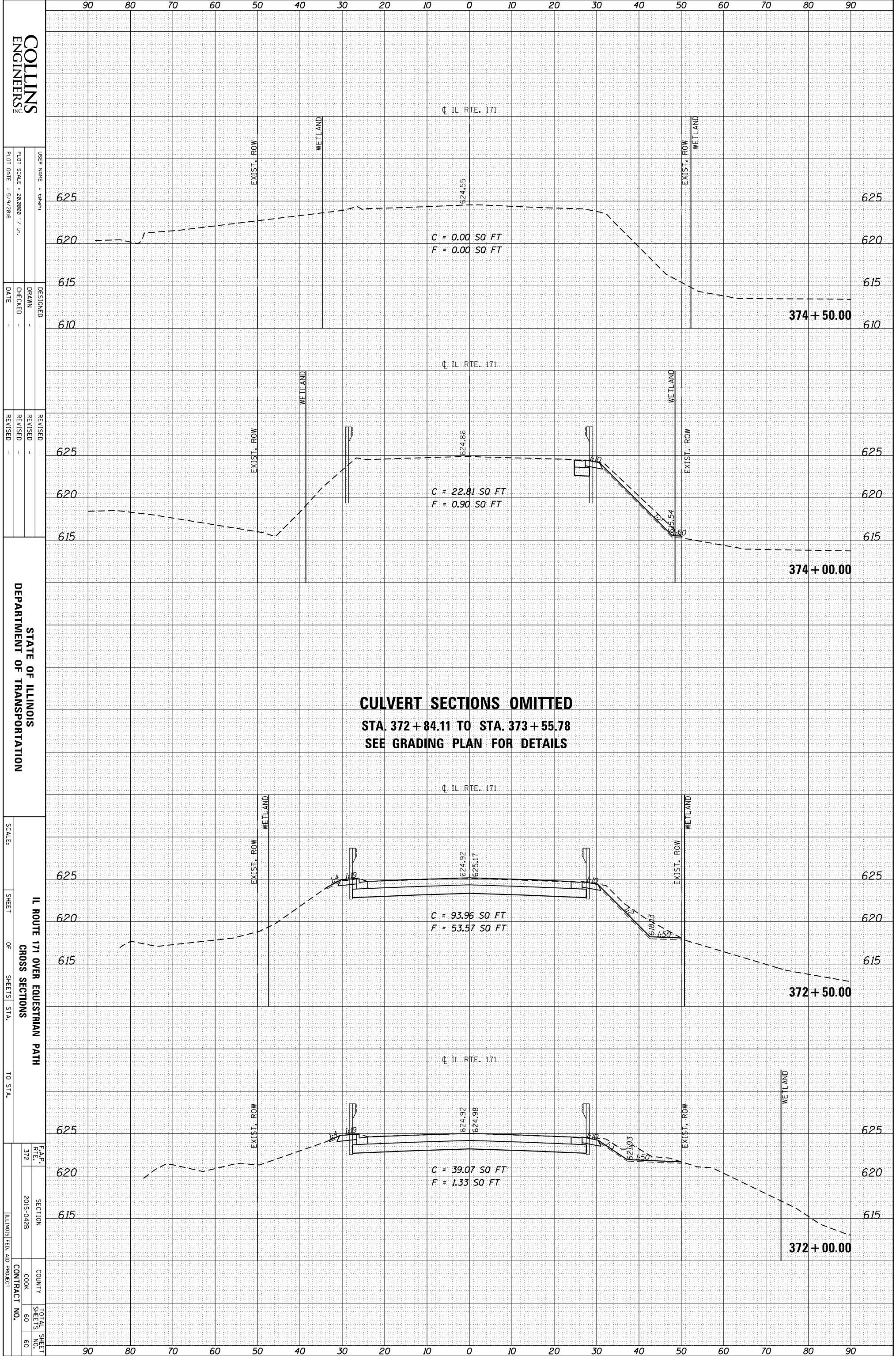
SCALE:

IL ROUTE 171 OVER EQUESTRIAN PATH
 SHEET OF SHEETS STA. TO STA.

F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEET NO. 60
		CONTRACT NO.	59
ILLINOIS FED. AID PROJECT			

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



COLLINS ENGINEERS

USER NAME: cshah
 PLOT SCALE: 28,000 / in.
 PLOT DATE: 5/9/2016

DESIGNED: -
 DRAWN: -
 CHECKED: -
 DATE: -

REVISED: -
 REVISED: -
 REVISED: -
 REVISED: -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE: SHEET OF SHEETS STA. TO STA.

IL ROUTE 171 OVER EQUESTRIAN PATH CROSS SECTIONS

F.A.P. RTE. 372	SECTION 2015-042B	COUNTY COOK	TOTAL SHEETS 60
		CONTRACT NO.	60

ILLINOIS FED. AID PROJECT

**CULVERT SECTIONS OMITTED
 STA. 372+84.11 TO STA. 373+55.78
 SEE GRADING PLAN FOR DETAILS**