168

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

TRAFFIC DATA

DESIGN DESIGNATION
Willow Road:
6800(30) (OPA) ARTERIAL 23.54 (PCC–30)

POSTED SPEEDS
Willow Road:
55 mph — Wolf Rd. to Sanders Rd.

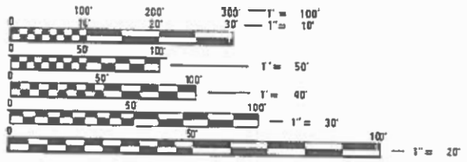
DESIGN SPEEDS
Willow Road:
60 mph — Wolf Rd. to Sanders Rd.
Ramp B — 45 mph
Ramp D — 45 mph

TRAFFIC VOLUME:
Willow Road:
Milwaukee Ave. to I–294 (2040) = 60,000

PROJECT LOCATED IN THE CITY OF PROSPECT HEIGHTS & THE FOREST PRESERVE DISTRICT OF COOK COUNTY

FINAL REVIEW SUBMITTAL
DECEMBER 20, 2019

Wight



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

JACOB N. HOHL 062-064387 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

12/16/19
JACOB N. HOHL P.E. DATE
WIGHT & COMPANY
EXPIRES 11/30/2021
PAGES 1 TO 59
PAGES 128 TO 151

MICHAEL T. HALEY 81-5991 CHATHAM LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

12-16-2019
MICHAEL T. HALEY, S.E. DATE
LIN ENGINEERING, LTD
EXPIRES 11/30/2020
PAGES 60 TO 127

PROJECT ENGINEER: JOSEPH CROSS P.E., P.L.S. (847) 705–4605
PROJECT MANAGER: SERIN KELLER P.E. (847) 705–4269

CONTRACT NO. 60D77

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

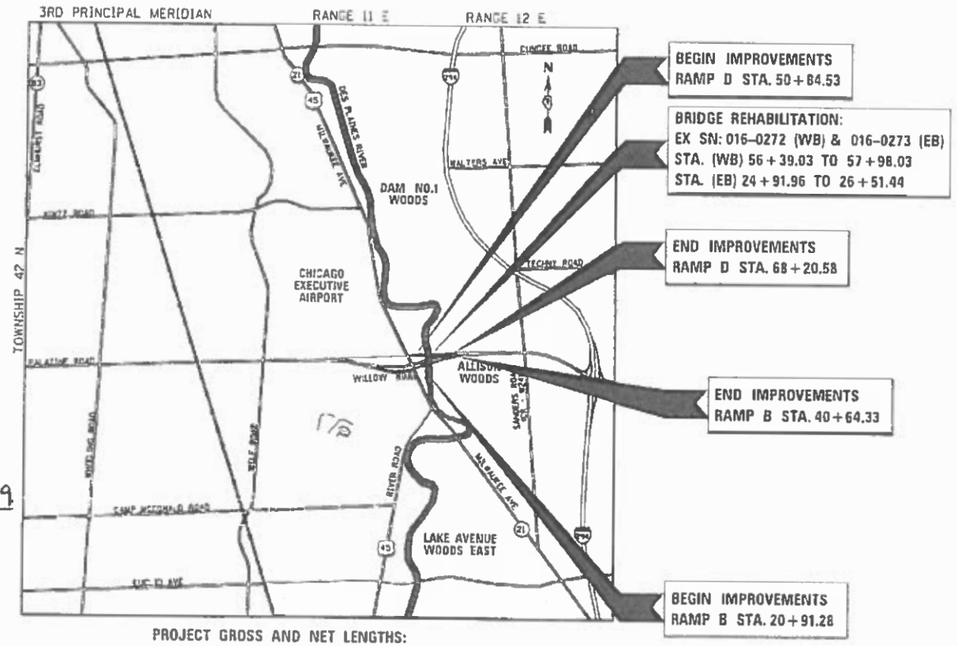
PROPOSED
HIGHWAY PLANS
F.A.P. ROUTE 330 (WILLOW ROAD)
AT DES PLAINES RIVER
ROADWAY RECONSTRUCTION AND RAMP BRIDGE REHABILITATION

SECTION 1516I–1
PROJECT ILU4(941)
COOK COUNTY
C–91–096–08

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	1
	ILLINOIS	CONTRACT NO. 60D77		

D–91–298–99

LOCATION OF SECTION INDICATED THUS. —



PROJECT GROSS AND NET LENGTHS:
RAMP B = 1973 FT. = 0.374 MILE
RAMP D = 1736 FT. = 0.329 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 20 2019
[signature] REGIONAL ENGINEER
March 20 2020
ENGINEER OF DESIGN AND ENVIRONMENT
March 20 2020
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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420101-06	24' JOINTED PCC PAVEMENT
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PLAN — BY | DATE
SURVEYED
PLOTTED
ALIGNMENT CHECKED
PT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.

PROFILE — BY | DATE
SURVEYED
PLOTTED
CROSS CHECKED
BAL. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.

REV-SEP

FILE NAME = 60D77.sht.index.dgn

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	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/25/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
INDEX OF SHEETS & STANDARDS

SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	2
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

GENERAL NOTES

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

2. TEN (10) FOOT TRANSITIONS SHALL BE USED TO MATCH PROPOSED CURB AND GUTTER AND MEDIAN ITEMS OF WORK TO EXISTING CURBS AND GUTTER AND MEDIANS IN THE FIELD, UNLESS OTHERWISE SHOWN. THE TRANSITIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEMS OF WORK SPECIFIED.

3. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING OF MATERIALS AND BEGINNING CONSTRUCTION.

5. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847)705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

6. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT (847) 715-8419 A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.

7. WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED THEIR LOCATION.

8. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

9. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR ACCORDING TO ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION OF ALL EMERGENCY SERVICES, SCHOOL DISTRICTS, I.D.O.T.'S COMMUNICATIONS CENTER, SPRINGFIELD TRUCK PERMIT SECTION AND OTHER AGENCIES AFFECTED BY THE CLOSURE. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR POSTING SIGNS THAT WILL INDICATE THE DATES THE CLOSURE WILL BE IN PLACE.

11. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

12. 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 WLL 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 WITH THE EXCEPTION OF COFFERDAMS WHICH WILL BE PAID FOR AS COFFERDMAN (TYPE 1) (IN-STREAM /WETLAND WORK) WITH A BASIS OF PAYMENT OF EACH .

13. BARRICADES: ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

14. ALL ELEVATIONS IN THIS PLAN SET REFER TO NAVD 88.

PROFILE | SURVEYED | PLOTTED | CROSS SECTIONS CHECKED | BM. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

1. THE CONTRACTOR SHALL ERECT TEMPORARY FENCING TO PREVENT ALL INADVERTENT AND UNINTENTIONAL INTRUSION BY CONSTRUCTION EQUIPMENT AND PERSONNEL INTO WETLANDS, STREAMS, RETENTION PONDS, AND SECTION 4(F) LANDS IN THE PROJECT AREA, AND PLACE "NO INTRUSION" SIGNS ON ERECTED FENCING.

15. 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 CONNECTORS 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 THE SAME. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TEMPORARY OUTLET, AND BE PREPARED AT ALL TIMES TO DISPOSE OF THE WATER RECEIVED FROM THESE TEMPORARY CONNECTIONS UNTIL INSTALLATION IS COMPLETE INCLUDING PAVEMENT. THIS WORK SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCIDENTAL TO THE CONTRACT.

16. REMOVAL OF PIPE END SECTIONS SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED STORM SEWER REMOVAL.

17. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO COMMERCIAL DRIVEWAYS.

18. THE CONTRACTOR AND ALL EMPLOYEES WILL BE MADE AWARE OF THE SENSITIVE RESOURCE IN THE AREA AND THE NEED FOR PROTECTION AND NO KILLING OF ANY SNAKES. THE AREA WILL BE SURVEYED BEFORE CONSTRUCTION BEGINS BY THE ILLINOIS NATURAL HISTORY SURVEY (INHS) AND CONTACTED DURING CONSTRUCTION SHOULD ANY SNAKES BE FOUND. THE INHS WILL BE RESPONSIBLE FOR THE TRANSLOCATION OF ANY SNAKES. THIS SHOULD BE COORDINATED WITH ANDY KUHNS OF THE INHS AT 217-265-6707 OR ARKUHNS@ILLINOIS.EDU. HE SHOULD BE GIVEN 30 DAYS NOTICE BEFORE CONSTRUCTION IN ORDER TO COORDINATE THE SURVEY NEEDED. CONTINUOUS MONITORING FOR SNAKES IN AND ADJACENT TO THE CONSTRUCTION AREA SHALL BE INCLUDED WITHIN THE COST FOR TEMPORARY FENCE (SPECIAL).

19. AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH ASI WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED, AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

20. ALL WORK ASSOCIATED WITH INSTALLATION AND MAINTENANCE OF STABILIZED CONSTRUCTION ENTRANCES AND CONCRETE WASHOUTS IS INCIDENTAL TO THE CONTRACT.

21. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECT BY THE ENGINEER AT CONTRACTOR EXPENSE.

22. PIPE UNDERDRAINS SHALL BE INSTALLED ACCORDING TO SECTION 601 OF THE SSRBC AND STANDARD 601001-05. TOP OF PIPE UNDERDRAINS SHALL BE PLACED MINIMUM 6" BELOW THE AGGREGATE SUBGRADE IMPROVEMENT LAYER. THE COST OF MAKING PIPE UNDERSDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.

23. BACKFILLING STORM SEWER CONSTRUCTED UNDER THE ROADWAY SPECIFIED UNDER ART. 550.07(b, c) OF THE SSRBC WILL NOT BE ALLOWED.

24. QUANTITY FOR CLASS D PATCHING HAS BEEN INCLUDED IN THE CONTRACT IN THE EVENT THAT MAINTENANCE IS REQUIRED ALONG THE DETOUR ROUTE. IF MAINTENANCE WORK IS NOT REQUIRED, THEN THE QUANTITY SHALL BE DEDUCTED, AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

FAA REQUIREMENTS

1. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN FROM THE ENGINEER A COPY OF THE FEDERAL AVIATION ADMINISTRATION'S DETERMINATION OF THE FILING OF FAA FORM 7460-1 NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION AND CONTRUCTION SAFETY PHASING PLAN (CSPP) SUBMITTED FOR THE CONTRACT BY IDOT.

2. DURING ALL CONSTRUCTION ACTIVITIES, FAA FACILITIES SHALL BE FULLY ACCESSIBLE AT ALL TIMES TO FAA MAINTENANCE PERSONNEL.

3. WILDLIFE ATTRACTANTS MUST BE MINIMIZED ON THE PROJECT. THESE ATTRACTANTS INCLUDE TRASH (SPECIFICALLY FOOD SCRAPS) FROM CONSTRUCTION PERSONNEL, STANDING WATER, AND TALL GRASS. IF ACTION IS REQUIRED TO MITIGATE TALL GRASS, DIRECTION WILL BE PROVIDED BY THE ENGINEER.

4. ALL CONSTRUCTION LIGHTING SHALL BE AIMED TOWARDS THE GROUND AT ALL TIMES. IN THE EVENT THAT AIR TRAFFIC NOTIFIES THE ENGINEER THAT CONSTRUCTION LIGHTING IS INTERFERING WITH AIR TRAFFIC, IT MUST IMMEDIATELY BE ADJUSTED OR SHUT OFF TO COMPLY WITH THE DIRECTION RECEIVED.

5. PROACTIVE DUST CONTROL WILL BE REQUIRED TO PREVENT CONSTRUCTION DUST FROM IMPACTING AIRPORT OPERATIONS. THE CONTRACTOR SHALL DEVELOP A DUST CONTROL PLAN IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 107.36 OF THE STANDARD SPECIFICATIONS.

6. THE FAA HAS DETERMINED AN ALLOWABLE WORKING HEIGHT OF 64 FEET ABOVE GROUND LEVEL. EQUIPMENT CAPABLE OF EXCEEDING THIS HEIGHT MAY ONLY BE RAISED OFF THE GROUND WHEN PWK RUNWAY 12/30 IS CLOSED.

7. AIRPORT COORDINATION, INCLUDING RUNWAY CLOSURE REQUESTS, SHALL BE DIRECTED TO ANDREW WOLANIK (EMAIL: AWOLANIK@CHIEXEC.COM, PHONE: 847-537-2580 EXT. 119).

8. ALLOWABLE RUNWAY CLOSURES ARE ANTICIPATED TO BE GRANTED BETWEEN THE HOURS OF 0700 AND 1500, MONDAY THROUGH FRIDAY . RUNWAY CLOSURE REQUESTS MUST BE SUBMITTED IN WRITING A MINIMUM OF 48 HOURS PRIOR TO DESIRED CLOSURE AT OPS@CHIEXEC.COM, AND CONFIRMED WITH AIRPORT OPERATIONS PRIOR TO BEGINNING WORK AT 847-229-6000. WHEN WORK CEASES, AIRPORT OPERATIONS SHALL IMMEDIATELY BE INFORMED THAT HAZARD HAS BEEN REMOVED.

9. CRANE USAGE MUST BE COORDINATED WITH CHICAGO EXECUTIVE AIRPORT. INFORM OPS VIA EMAIL A MINIMUM OF 48 HOURS PRIOR TO ANY CRANE LIFTS. AN EMERGENCY CELL PHONE MUST BE PROVIDED TO THE TOWER WHEN PERFORMING LIFTS IN THE EVENT THAT THE TOWER NEEDS THE CRANE LOWERED IN AN EMERGENCY.

10. CRANES SHALL NOT BE USED DURING INSTRUMENT METEOROLOGICAL CONDITIONS (IMC). IMC IS WHEN THE VISIBILITY IS BELOW 3 MILES AND CLOUDS ARE BELOW 1000 FT ABOVE GROUND LEVEL. THE CONTRACTOR SHALL CALL THE CHICAGO EXECUTIVE AUTOMATED SURFACE OBSERVATION SYSTEM (PWK ASOS) AT 847-465-0291 TO VERIFY IF IMC IS IN EFFECT PRIOR TO CRANE USAGE.

11. DRONE USAGE ASSOCIATED WITH THIS PROJECT IS STRONGLY DISCOURAGED. CHICAGO EXECUTIVE AIRPORT DOES NOT CONSENT TO DRONE FLIGHT WITHIN 5 MILES OF THE AIRPORT. IF THE CONTRACTOR WISHES TO FLY DRONES WITHIN THE PROJECT LIMITS, FAA APPROVAL IS REQUIRED PRIOR TO THE FLIGHT. THE DRONE OPERATOR IS REQUIRED TO FILE A NOTICE TO AIRMEN (NOTAM) FOR THE OPERATION PRIOR TO THE FLIGHT, AND THE FLIGHT WOULD NEED TO BE COORDINATED WITH AIRPORT OPERATIONS FOLLOWING THE PROCEDURE IN NOTE 8. REFER TO THE FAA'S DRONE GUIDANCE WEBSITE AT HTTPS://WWW.FAA.GOV/UAS/ FOR ADDITIONAL INFORMATION

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PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
GENERAL NOTES

SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	3
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

					ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
	CODE NO.	PAY ITEM	UNIT	TOTAL	0004	0013	0013
					80%/20%	80%/20%	80%/20%
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	522	522		
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	145	145		
	20200100	EARTH EXCAVATION	CU YD	5,990	5,990		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1,920	1,920		
	20800150	TRENCH BACKFILL	CU YD	269	269		
	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	1,942	1,942		
Δ	25000210	SEEDING, CLASS 2A	ACRE	1.75	1.75		
Δ	25000312	SEEDING, CLASS 4A	ACRE	1.75	1.75		
Δ	25000314	SEEDING, CLASS 4B	ACRE	0.50	0.50		
Δ	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	330	330		
Δ	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	330	330		
Δ	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	16,998	16,998		
	28000400	PERIMETER EROSION BARRIER	FOOT	6,385	6,385		
	28000500	INLET AND PIPE PROTECTION	EACH	9	9		

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

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

PROFILE: DATE | BY | SURVEYED | PLOTTED | CROSS SECTIONS CHECKED | BM. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO.

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PLOT DATE = 1/25/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 1 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	4
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	CODE NO.	PAY ITEM	UNIT	TOTAL	ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
					0003	0014	0014
					80%/20%	80%/20%	80%/20%
	28000510	INLET FILTERS	EACH	66	66		
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	200	200		
*	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	10,576	10,576		
	35400500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 10"	SQ YD	555	555		
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	195	195		
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	410	410		
	40604060	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	25	25		
	40604062	HOT-MIS ASPHALT SURFACE COURSE, MIX "D", N70	TON	140	140		
	42000060	WELDED WIRE REINFORCEMENT	SQ YD	174	174		
	42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	174	174		
	42000401	PORTLAND CEMENT CONCRETE PAVEMENT 9" (JOINTED)	SQ YD	5,800	5,800		
	42001300	PROTECTIVE COAT	SQ YD	9,538	9,538		
	44000100	PAVEMENT REMOVAL	SQ YD	6,689	6,689		
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	439	439		

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

PLAN: DATE / BY / SURVEYED / PLOTTED / QUANTITY CHECKED / RT. OF WAY CHECKED / NOTE BOOK / NO. / PROJ. FILE NAME

PROFILE: DATE / BY / SURVEYED / PLOTTED / CHANGES CHECKED / BM. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 2 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	5
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	CODE NO.	PAY ITEM	UNIT	URBAN TOTAL	ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
					CONSTRUCTION TYPE CODE		
					0004	0013	0013
					80%/20%	80%/20%	80%/20%
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	226	226		
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	6,188	6,188		
	44004250	PAVED SHOULDER REMOVAL	SQ YD	479	479		
	44201670	CLASS D PATCHES, TYPE I, 2 INCH	SQ YD	200	200		
	44201672	CLASS D PATCHES, TYPE II, 2 INCH	SQ YD	200	200		
	44201674	CLASS D PATCHES, TYPE III, 2 INCH	SQ YD	200	200		
	44201676	CLASS D PATCHES, TYPE IV, 2 INCH	SQ YD	200	200		
	44201761	CLASS D PATCHES, TYPE I, 10 INCH	SQ YD	125	125		
	44201765	CLASS D PATCHES, TYPE II, 10 INCH	SQ YD	125	125		
	44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	125	125		
	44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	125	125		
	48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	419	419		
	48300400	PORTLAND CEMENT CONCRETE SHOULDERS 9"	SQ YD	1,552	1,552		
	50102400	CONCRETE REMOVAL	CU YD	54.4		48.1	6.3

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

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

PROFILE: SURVEYED, PLOTTED, CROSS SECT CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., DATE, BY

FILE NAME = 60D77_sht_soq_03.dgn

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	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 3 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	6
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	CODE NO.	PAY ITEM	UNIT	TOTAL	ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
					0004	0013	0013
					80%/20%	80%/20%	80%/20%
	50104701	REMOVAL OF EXISTING CONCRETE DECK NO. 1	EACH	1		1	
	50104702	REMOVAL OF EXISTING CONCRETE DECK NO. 2	EACH	1			1
	50157300	PROTECTIVE SHIELD	SQ YD	1,316		659	657
	50200300	COFFERDAM EXCAVATION	CU YD	362		362	
	X0900075	COFFERDAM (TYPE 1)(IN-STREAM/WETLAND WORK)	EACH	1		1	
	50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1	
	50300100	FLOOR DRAINS	EACH	24		14	10
	50300225	CONCRETE STRUCTURES	CU YD	105.6		82.2	23.4
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	410.7		198.8	211.9
	50300260	BRIDGE DECK GROOVING	SQ YD	1,281		640	641
	50300265	SEAL COAT CONCRETE	CU YD	56		56	
	50300300	PROTECTIVE COAT	SQ YD	2,218		1,114	1,104
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	209.8		105.0	104.8
	50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	7,470		4,960	2,510

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

PLAN: DATE, BY, SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, NOTE BOOK, NO.

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

FILE NAME = 60D77_sht_soq_04.dgn

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	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 4 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	7
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

	CODE NO.	PAY ITEM	UNIT	URBAN TOTAL	ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
					CONSTRUCTION TYPE CODE		
					0004	0013	0013
					80%/20%	80%/20%	80%/20%
	50500505	STUD SHEAR CONNECTORS	EACH	6,779		4,284	2,495
	50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1		1	
	50606702	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 2	L SUM	1			1
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	204,370		97,820	106,550
	50901720	BICYCLE RAILING	FOOT	443		221	222
	50901750	PARAPET RAILING	FOOT	443		221	222
	51500100	NAME PLATES	EACH	2		1	1
	52000110	PREFORMED JOINT STRIP SEAL	FOOT	150		74	76
	52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	22		12	10
	52100520	ANCHOR BOLTS, 1"	EACH	44		24	20
	54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	5	5		
	550A0040	STORM SEWERS, CLASS 1, TYPE 1, 10"	FOOT	88	88		
	550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	855	855		

* SEE SPECIAL PROVISIONS.

REV-SEP

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

PROFILE: DATE / BY / SURVEYED / PLOTTED / QUANTITIES CHECKED / B.M. NOTED / STRUCTURE NO.TA'NS CHKD / NOTE BOOK / NO.

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	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 5 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	8
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
			URBAN	CONSTRUCTION TYPE CODE		
CODE NO.	PAY ITEM	UNIT	TOTAL	0004	0013	0013
				80%/20%	80%/20%	80%/20%
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	199	199		
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	55	55		
55100400	STORM SEWER REMOVAL 10"	FOOT	375	375		
55100500	STORM SEWER REMOVAL 12"	FOOT	146	146		
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	36		36	
59000200	EPOXY CRACK INJECTION	FOOT	131		81	50
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	27		27	
60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	150	150		
60201340	CATCH BASIN, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	24	24		
60203905	CATCH BASIN, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60205040	CATCH BASIN, TYPE A, 5'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	1	1		
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60224445	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1		

* SEE SPECIAL PROVISIONS.

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

PROFILE: DATE | BY | SURVEYED | PLOTTED | GRADES CHECKED | BM. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO.

FILE NAME = 60D77-sht-soq-06.dgn

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USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 6 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	9
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

					ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
	CODE NO.	PAY ITEM	UNIT	TOTAL	0004 80%/20%	0013 80%/20%	0013 80%/20%
	60224446	MANHOLES, TYPE A, 7'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
	60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1	1		
	60236800	INLETS, TYPE A, TYPE 1 1 FRAME AND GRATE	EACH	5	5		
	60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	8	8		
	60255800	MANHOLES TO BE ADJUSTED, NEW TYPE 1 FRAME, CLOSED LID	EACH	4	4		
	60500040	REMOVING MANHOLES	EACH	5	5		
	60500050	REMOVING CATCH BASINS	EACH	4	4		
	60500060	REMOVING INLETS	EACH	21	21		
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	7,333	7,333		
	60619600	CONCRETE MEDIAN, TYPE SB-6.12	SQ FT	1,164	1,164		
Δ	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	587.5	587.5		
	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	5	5		
	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

PLAN: SURVEYED, PLOTTED, QUANTITY CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO.____, BY, DATE

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

FILE NAME = 60D77_sht_soq_07.dgn

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	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 7 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	10
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

				URBAN	ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
					CONSTRUCTION TYPE CODE		
	CODE NO.	PAY ITEM	UNIT	TOTAL	0004 80%/20%	0013 80%/20%	0013 80%/20%
	63200310	GUARDRAIL REMOVAL	FOOT	1,030	1,030		
	63500105	DELINEATORS	EACH	51	51		
Δ	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	2,745	2,745		
Δ	66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4		
Δ	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1		
Δ	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1		
Δ	66901006	REGULATED SUBSTANCES MONITORING	DAYS	20	20		
	67100100	MOBILIZATION	L SUM	1	1		
	72000100	SIGN PANEL - TYPE 1	SQ FT	5	5		
	72000200	SIGN PANEL - TYPE 2	SQ FT	28	28		
	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2		
	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2		
	72400600	RELOCATE SIGN PANEL ASSEMBLY - TYPE B	EACH	4	4		
	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	5	5		

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

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

PROFILE: NOTE BOOK NO. ___ SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATNS CHKD — BY — DATE

FILE NAME = 60D77_sht_soq_08.dgn

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	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 '/ in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 8 OF 9 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	11

CONTRACT NO. 60D77

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

					ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
	CODE NO.	PAY ITEM	UNIT	TOTAL	0004	0013	0013
					80%/20%	80%/20%	80%/20%
	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	48	48		
Δ	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	416	416		
Δ	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	767	767		
Δ	78008200	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS	SQ FT	193.0	193.0		
Δ	78008210	POLYUREA PAVEMENT MARKING TYPE I - LINE 4"	FOOT	185	185		
Δ	78008230	POLYUREA PAVEMENT MARKING TYPE I - LINE 6"	FOOT	460	460		
Δ	78008250	POLYUREA PAVEMENT MARKING TYPE I - LINE 12"	FOOT	829	829		
	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	20	20		
	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4	4		
Δ *	88600100	DETECTOR LOOP, TYPE I	FOOT	160	160		
*	Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	22		12	10
*	Z0001903	STRUCTURAL STEEL REMOVAL	POUND	6,910		2,670	4,240
*	Z0004552	APPROACH SLAB REMOVAL	SQ YD	335	335		
	Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1			1
	Z0007114	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES	L SUM	1		1	
*	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1,175		1,022	153

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV-SEP

PLAN: DATE / BY / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / NOTE BOOK / NO.

PROFILE: SURVEYED / PLOTTED / CURVES CHECKED / B.M. NOTED / STRUCTURE NOTATNS CHKD / NOTE BOOK / NO.

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	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 9 OF 9 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	12
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

					ROADWAY	WESTBOUND RAMP D REHAB SN 016-0272	EASTBOUND RAMP B REHAB SN 016-0273
				URBAN	CONSTRUCTION TYPE CODE		
					0004	0013	0013
	CODE NO.	PAY ITEM	UNIT	TOTAL	80%/20%	80%/20%	80%/20%
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
*	Z0018002	DRAINAGE SCUPPER, DS-11	EACH	4		2	2
*	Z0018004	DRAINAGE SCUPPER, DS-12	EACH	4		2	2
*	Z0018905	DRILL AND GROUT BARS	EACH	209		129	80
*	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	144	144		
	Z0043900	PREFORMED JOINT FILLER	FOOT	401	401		
	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	4	4		
Δ	A2002714	TREE, CARYA OVATA (SHAGBARK HICKORY), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	8	8		
Δ	A2002916	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 2" CALIPER, BALLED AND BURLAPPED	EACH	6	6		
Δ	A2016818	TREE, QUERCUS SCHUETTI (SWAMP BUR OAK), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	11	11		
*	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1		
*	X6700410	ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)	CAL MO	10	10		
Ø	Z0076600	TRAINEES	HOUR	500	500		
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
Ø	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500	500		

Ø 0042

Δ INDICATES SPECIALTY ITEM.

* SEE SPECIAL PROVISIONS.

REV. - MS

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

PROFILE: DATE, BY, SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO.

FILE NAME = 68077_sht_soq_10.dgn

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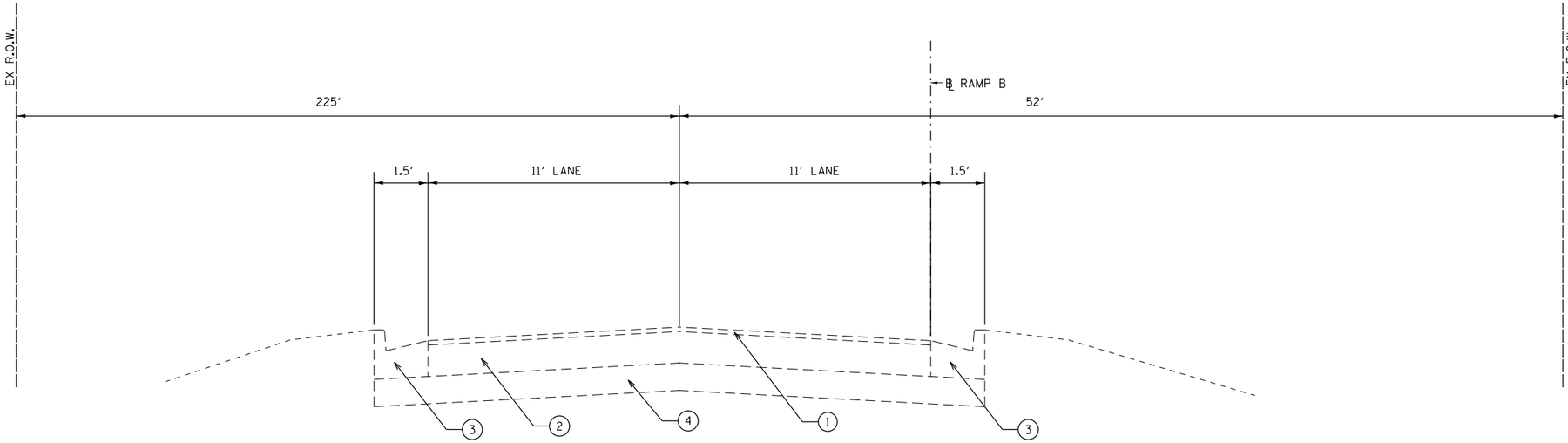
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
SUMMARY OF QUANTITES

SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	13
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

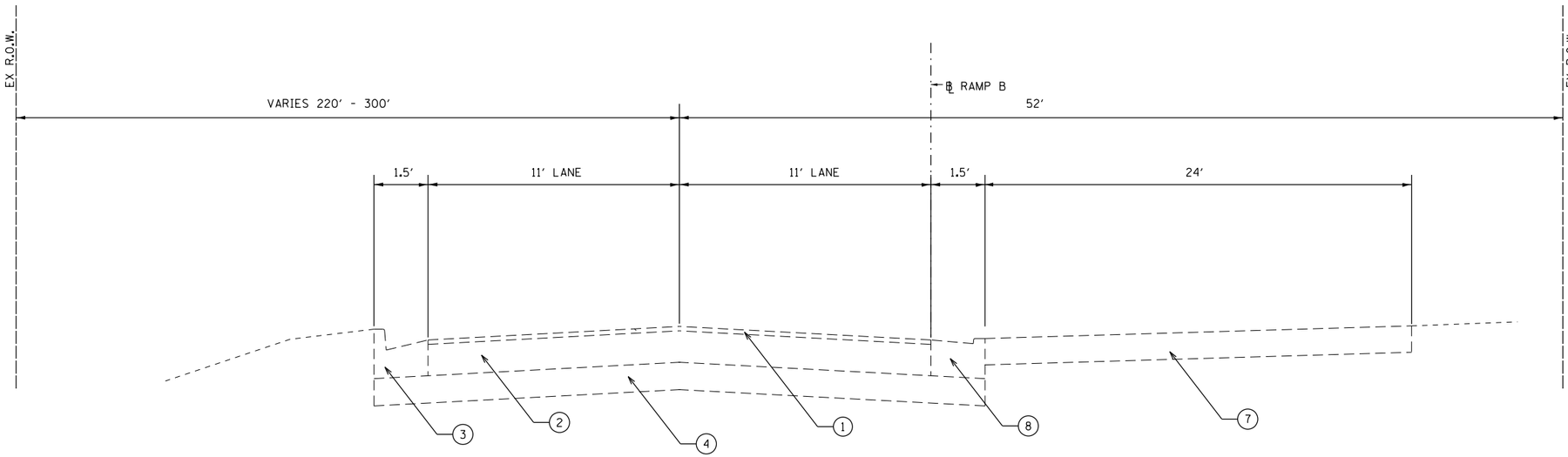


LEGEND

1. EXISTING HMA SURFACE, 2″
2. EXISTING PCC PAVEMENT, 10″
3. EXISTING CURB & GUTTER (TYP.)
4. EXISTING AGGREGATE SUBBASE, 12″
5. EXISTING HMA SHOULDER, 6″
6. EXISTING GUARDRAIL
7. EXISTING HMA DRIVEWAY, 8″
8. EXISTING DEPRESSED CURB & GUTTER
9. EXISTING MEDIAN, SB-6.12

EXISTING RAMP B

STA 20+91.3 TO STA 21+28.8
STA 22+17.6 TO STA 22+64.4
STA 27+17.6 TO STA 32+37.9



EXISTING RAMP B

STA 21+28.8 TO STA 22+17.6

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

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

FILE NAME = 60D77_sht_typ_ex_rampB_01.dgn

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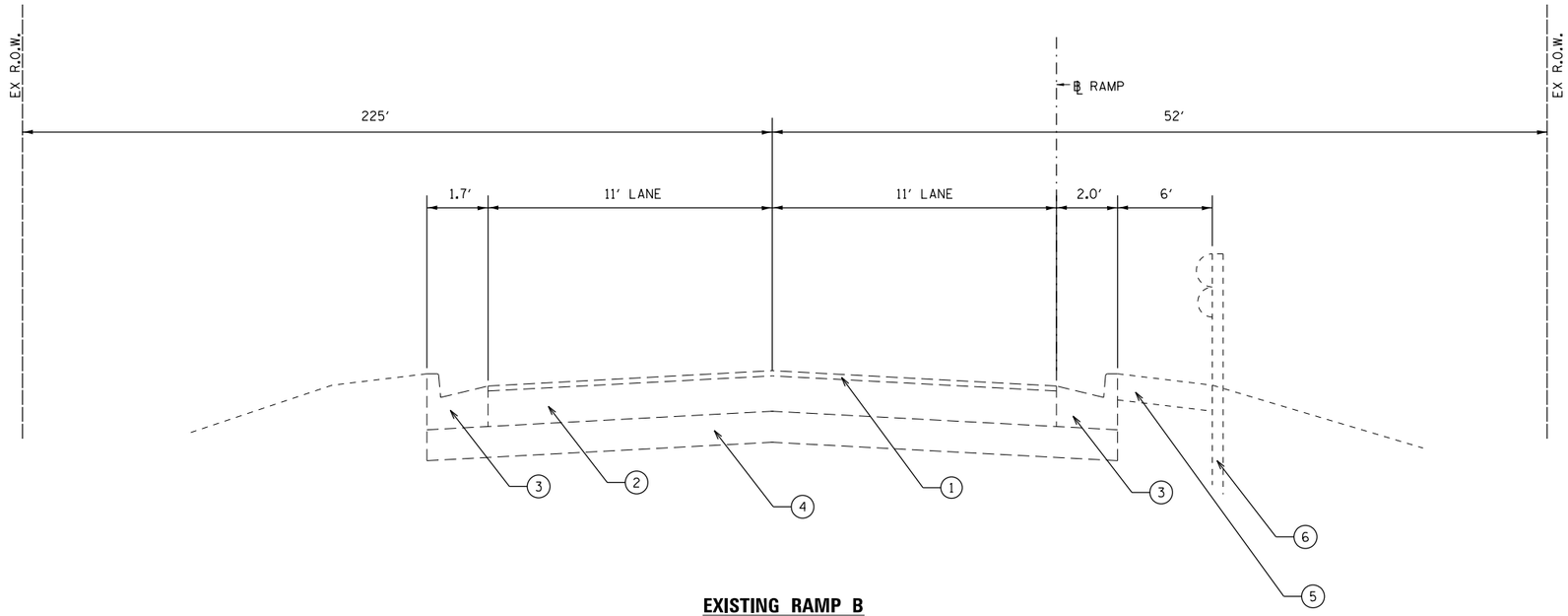
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 ′ / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EXISTING TYPICAL SECTIONS
RAMP B

SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	14
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

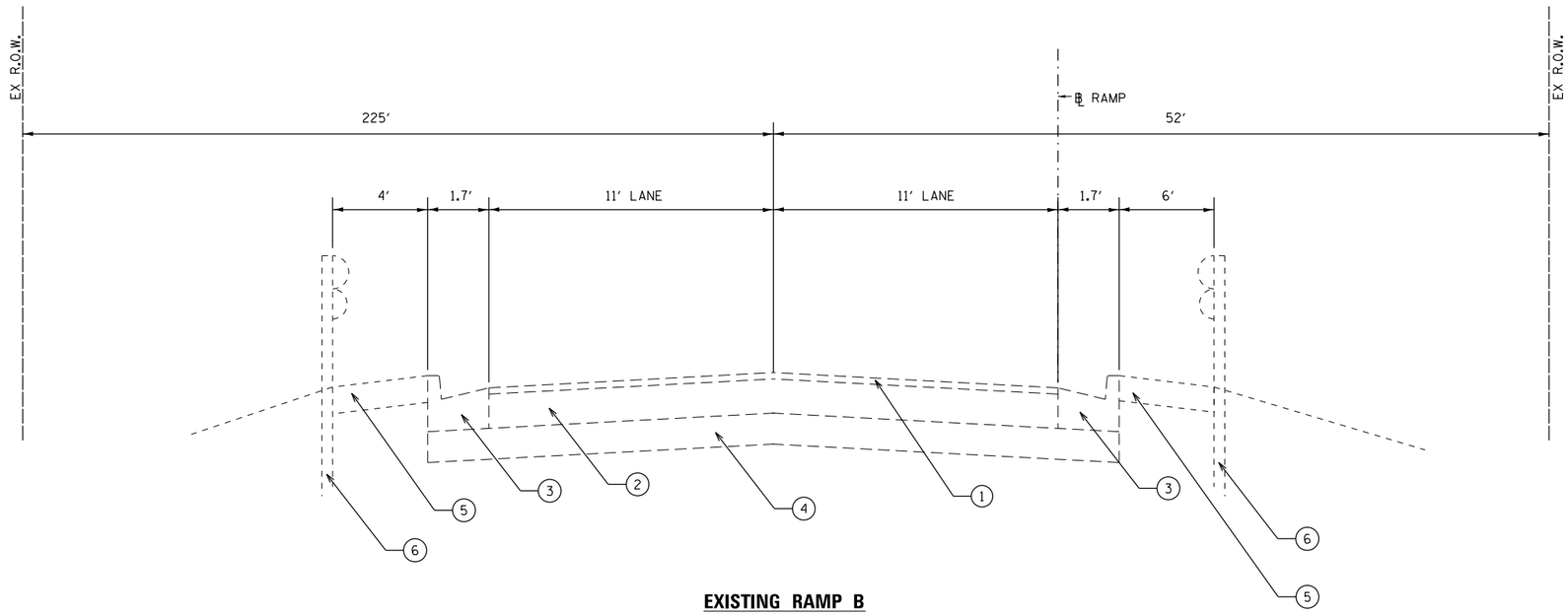


EXISTING RAMP B

STA 22+64.4 TO STA 23+96.9

LEGEND

1. EXISTING HMA SURFACE, 2″
2. EXISTING PCC PAVEMENT, 10″
3. EXISTING CURB & GUTTER (TYP.)
4. EXISTING AGGREGATE SUBBASE, 12″
5. EXISTING HMA SHOULDER, 6″
6. EXISTING GUARDRAIL
7. EXISTING HMA DRIVEWAY, 8″
8. EXISTING DEPRESSED CURB & GUTTER
9. EXISTING MEDIAN, SB-6.12



EXISTING RAMP B

STA 23+96.9 TO STA 24+49.7
(BRIDGE OMISSION FROM STA 24+49.7 TO STA 26+97.6)
STA 26+97.6 TO STA 27+17.6

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

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

FILE NAME = 60D77-sht-typ-ex-ramp8.02.dgn

Wight

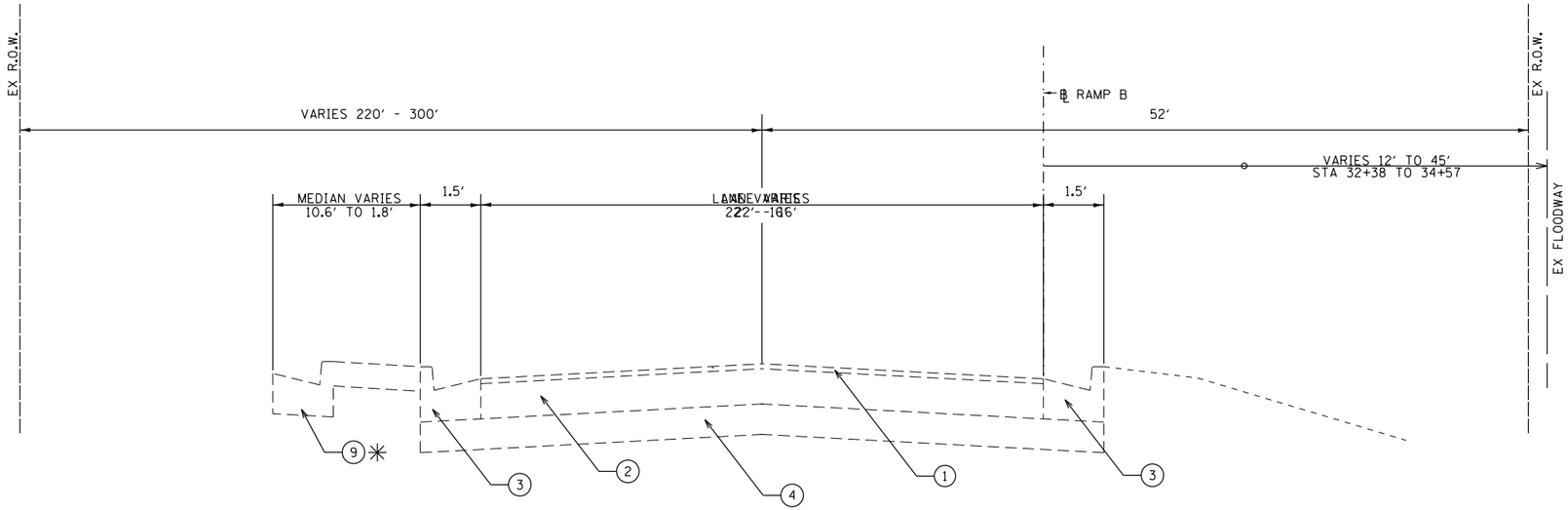
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EXISTING TYPICAL SECTIONS
RAMP B

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	15
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

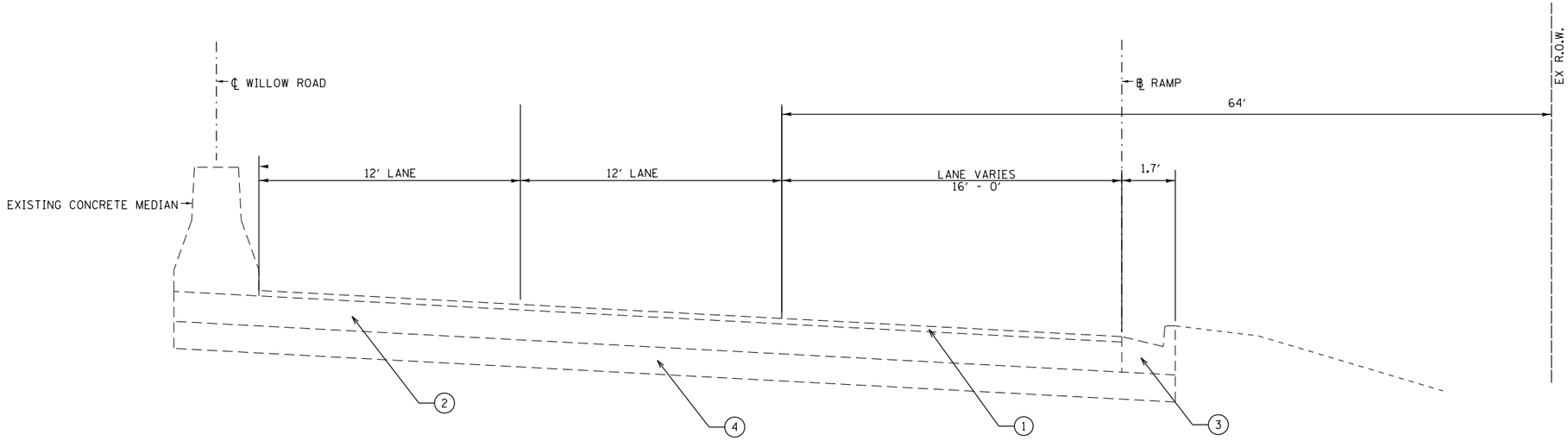


LEGEND

1. EXISTING HMA SURFACE, 2''
2. EXISTING PCC PAVEMENT, 10''
3. EXISTING CURB & GUTTER (TYP.)
4. EXISTING AGGREGATE SUBBASE, 12''
5. EXISTING HMA SHOULDER, 6''
6. EXISTING GUARDRAIL
7. EXISTING HMA DRIVEWAY, 8''
8. EXISTING DEPRESSED CURB & GUTTER
9. EXISTING MEDIAN, SB-6.12

EXISTING RAMP B

STA 32+37.9 TO STA 34+92.8



EXISTING RAMP B

STA 34+92.8 TO STA 40+64.3

MEDIAN LIMITS

✳ STA 34+07.6 TO STA 34+92.8

PLAN — SURVEYED, PLOTTED, CROSS SECTIONS CHECKED, R/T. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO., BY, DATE

PROFILE — SURVEYED, PLOTTED, CROSS SECTIONS CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME = 60D77_sht_typ_ex_rampB_03.dgn

Wight

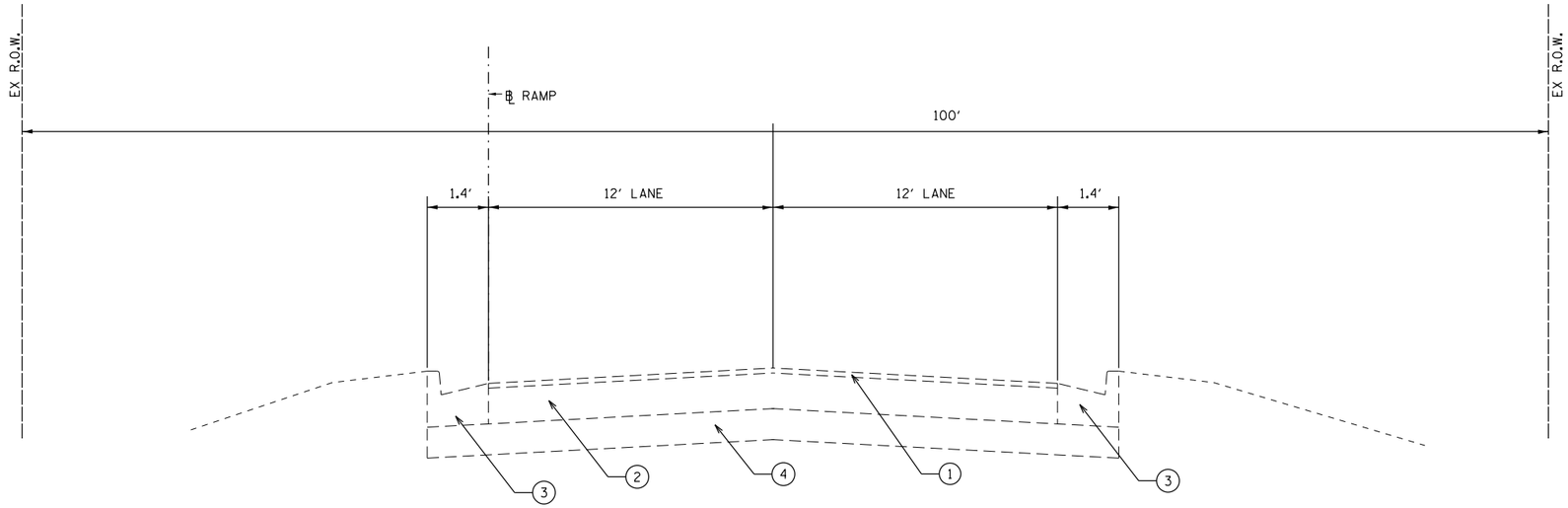
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EXISTING TYPICAL SECTIONS
RAMP B

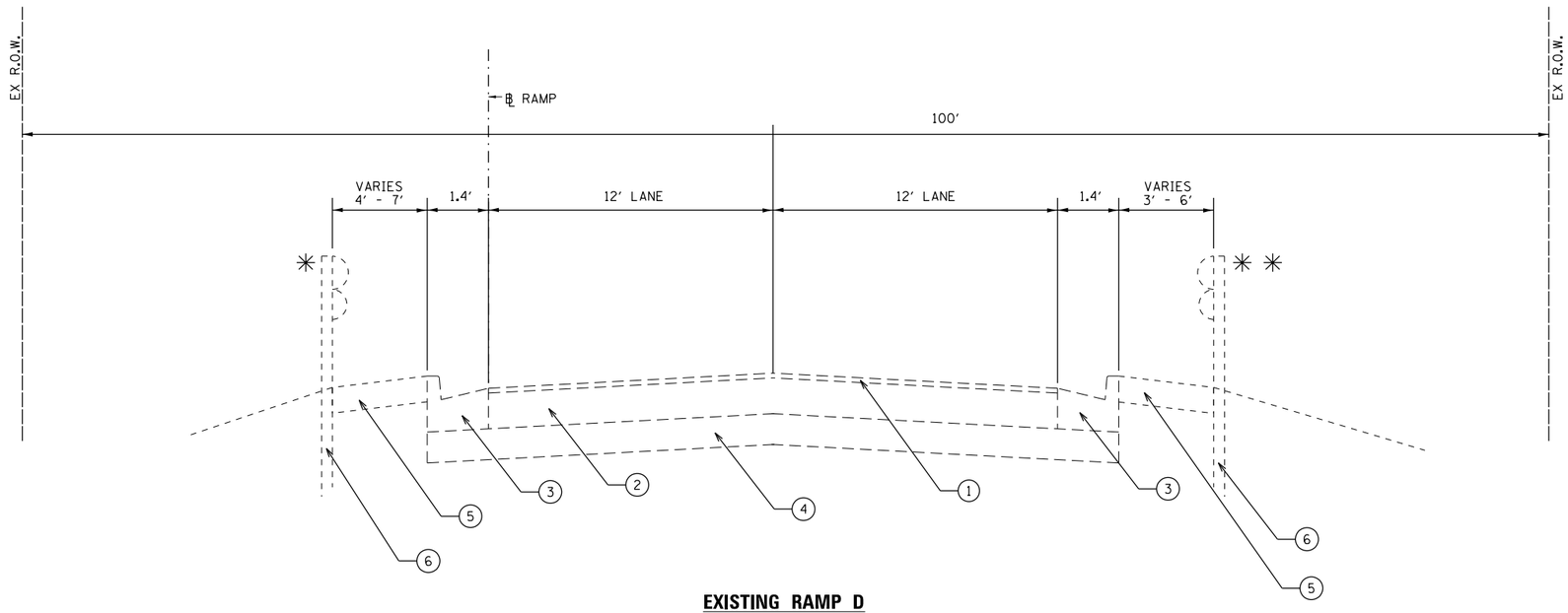
SHEET NO. 3 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	16
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EXISTING RAMP D

STA 50+84.5 TO STA 55+20.0



EXISTING RAMP D

STA 55+20.0 TO STA 56+20.5
(BRIDGE OMISSION FROM STA 56+20.5 TO 58+16.4)

LEGEND

1. EXISTING HMA SURFACE, 2''
2. EXISTING PCC PAVEMENT, 10''
3. EXISTING CURB & GUTTER (TYP.)
4. EXISTING AGGREGATE SUBBASE, 12''
5. EXISTING HMA SHOULDER, 6''
6. EXISTING GUARDRAIL

GUARDRAIL LIMITS

- ✳ STA 55+37.2 TO STA 56+37.5
- ✳ ✳ STA 55+38.3 TO STA 56+38.9

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

PROFILE
SURVEYED
PLOTTED
CROSS CHECKED
BAR. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

FILE NAME = 60D77_sht_typ_ex_ramp0_01.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 '/ in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EXISTING TYPICAL SECTIONS
RAMP D

SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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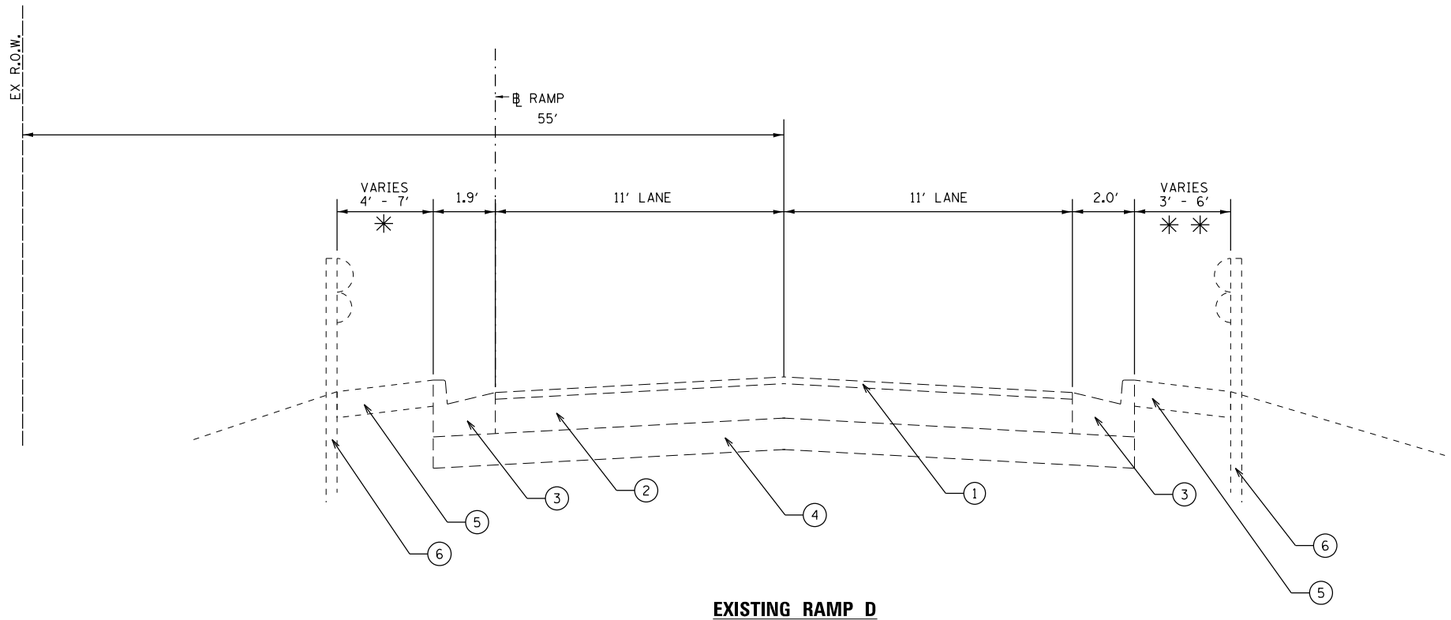
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



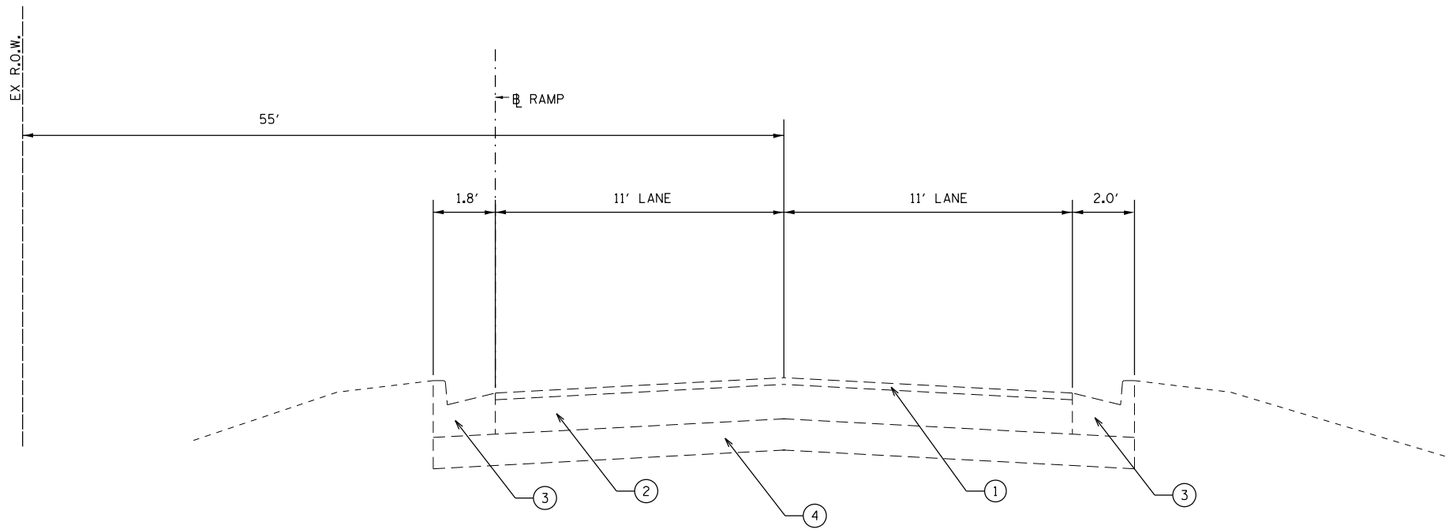
EXISTING RAMP D

STA 58+16.4 TO STA 59+72.7

HMA SHOULDER LIMITS

✳ STA 58+61.4 TO STA 58+84.9

✳ ✳ STA 55+38.3 TO STA 58+83.4



EXISTING RAMP D

STA 59+72.7 to STA 68+20.6

LEGEND

1. EXISTING HMA SURFACE, 2"
2. EXISTING PCC PAVEMENT, 10"
3. EXISTING CURB & GUTTER (TYP.)
4. EXISTING AGGREGATE SUBBASE, 12"
5. EXISTING HMA SHOULDER, 6"
6. EXISTING GUARDRAIL

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

PROFILE: SURVEYED, PLOTTED, CROSS CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME = 60D77_sht_typ_ex_ramp_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EXISTING TYPICAL SECTIONS
RAMP D

SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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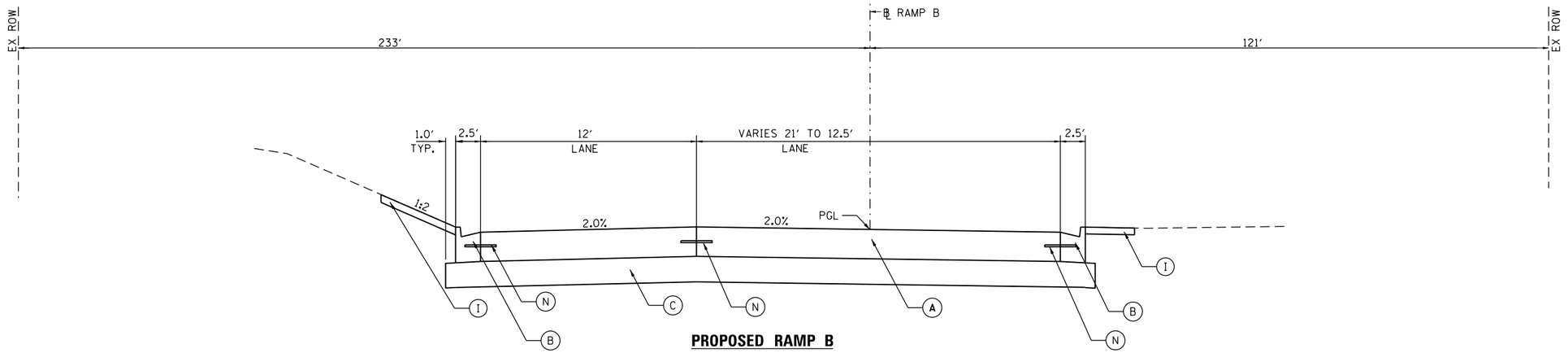
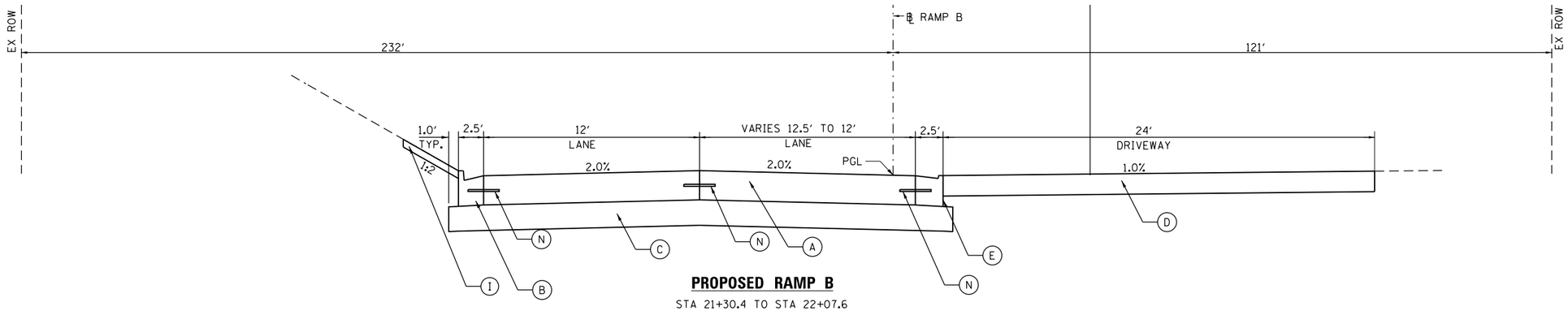
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



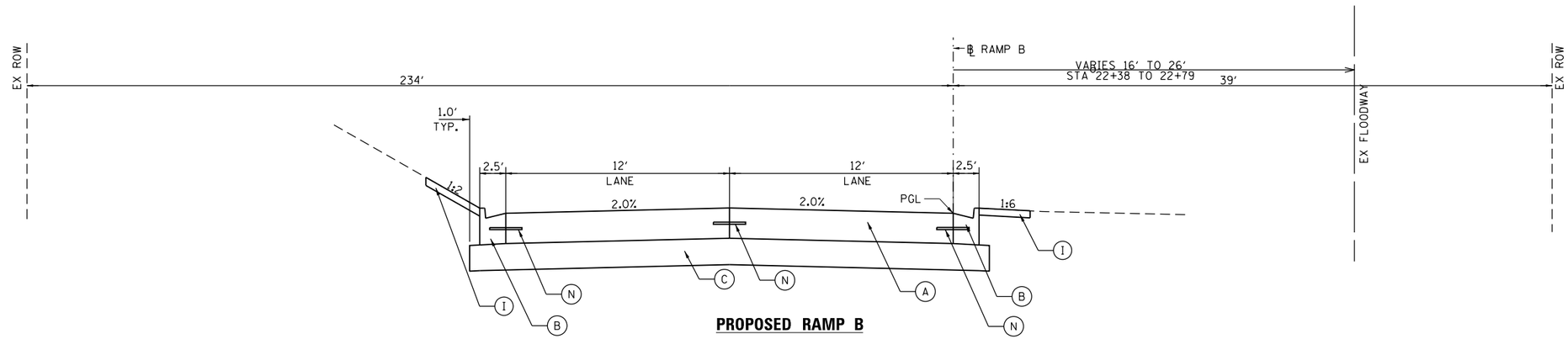
PROPOSED RAMP B

STA 20+91.3 TO STA 21+30.4



PROPOSED RAMP B

STA 21+30.4 TO STA 22+07.6



PROPOSED RAMP B

STA 22+07.6 TO STA 22+79.3

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9″ (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12″ (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8″
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8″
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6′ POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″
- (I) EXCAVATE & PLACE TOPSOIL, 4″ W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9″
- (K) CONCRETE MEDIAN, TYPE SB-6.12
- (L) HOT-MIX ASPHALT SURFACE COURSE MIX ″D″ N50, 2″
- (M) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10″
- (N) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24″ LONG @ 24″ C-C. COST INCIDENTAL TO PCC PAVEMENT
- (O) PREFORMED BOND BREAKER EXPANSION JOINT

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

PROFILE — SURVEYED, PLOTTED, ROADWAY CHECKED, S.M. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO. — BY, DATE

FILE NAME = 60D77_sht_typ_pr_rampB_01.dgn

Wight

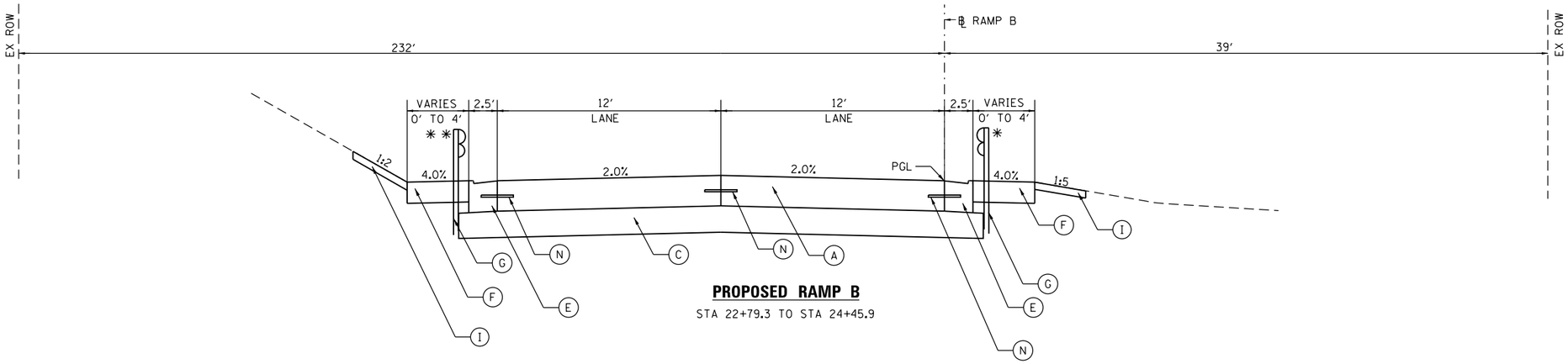
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ′ / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP B

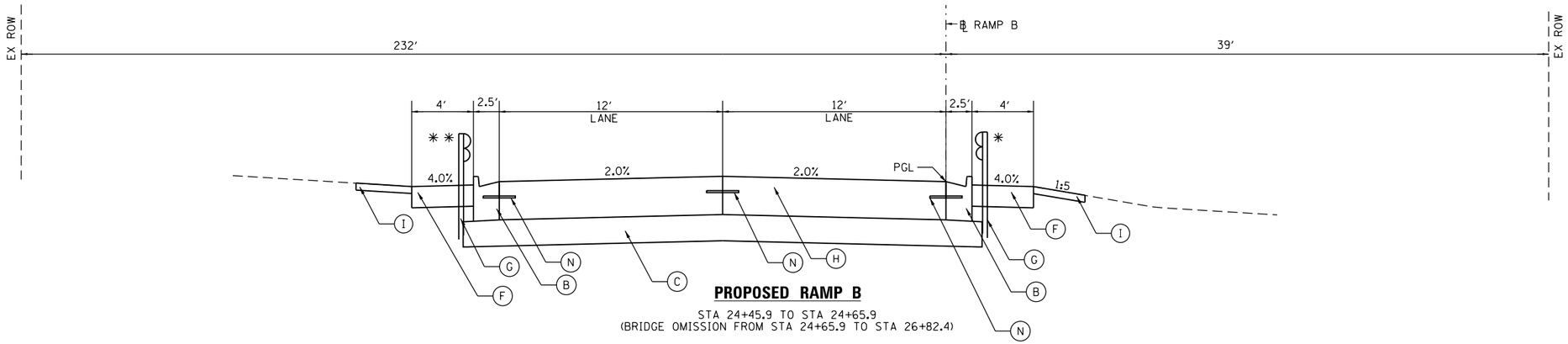
SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	19
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED RAMP B

STA 22+79.3 TO STA 24+45.9



PROPOSED RAMP B

STA 24+45.9 TO STA 24+65.9
(BRIDGE OMISSION FROM STA 24+65.9 TO STA 26+82.4)

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9'' (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12'' (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8''
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8''
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6' POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15''
- (I) EXCAVATE & PLACE TOPSOIL, 4'' W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9''
- (K) CONCRETE MEDIAN, TYPE SB-6.12
- (L) HOT-MIX ASPHALT SURFACE COURSE MIX ''D'' N50, 2''
- (M) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10''
- (N) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24'' LONG @ 24'' C-C. COST INCIDENTAL TO PCC PAVEMENT
- (O) PREFORMED BOND BREAKER EXPANSION JOINT

GUARDRAIL LIMITS

* STA 23+13.17 TO STA 24+60.44

** STA 23+34.41 TO STA 24+81.68

AGGREGATE SHOULDER LIMITS

* STA 22+79.3 TO STA 24+65.9

** STA 23+00.5 TO STA 24+45.9

NOTE

PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15'' (ITEM H) IS REPRESENTED TO BE THICKER THAN PORTLAND CEMENT CONCRETE PAVEMENT 10¼'' (ITEM A). SECTIONS INCLUDING ITEM H SHALL SACRIFICE APPROXIMATELY 3'' OF AGGREGATE SUBGRADE IMPROVEMENT (ITEM C) IN ORDER TO MAINTAIN A TYPICAL ROADWAY SECTION THICKNESS OF 22¼''.

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

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

FILE NAME = 60D77_sht_typ_pr_rampB_02.dgn

Wight

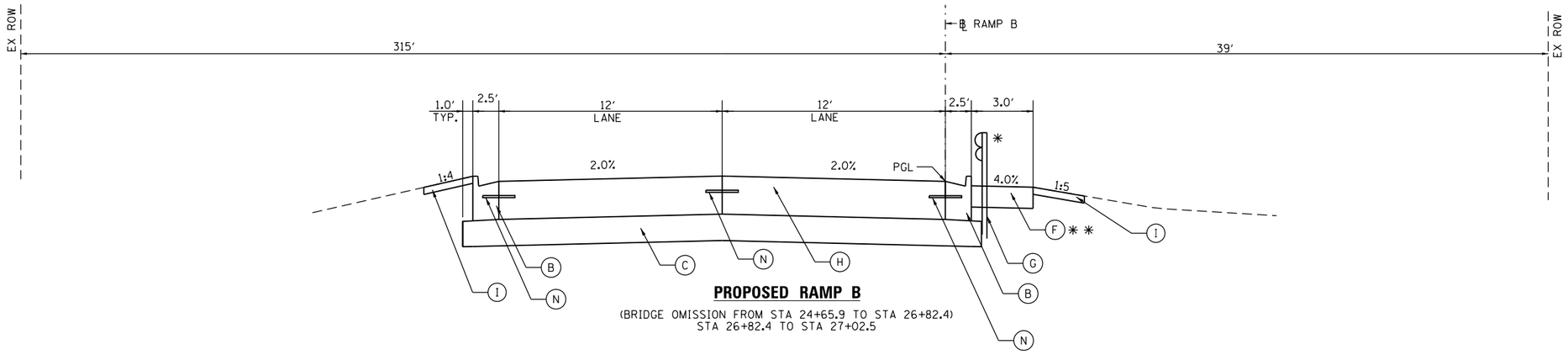
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP B

SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	20
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

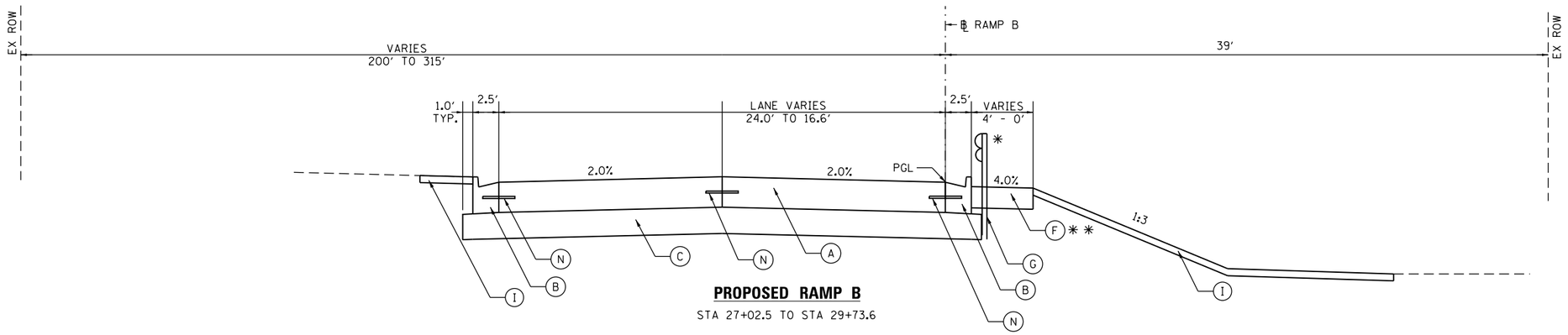


PROPOSED RAMP B

(BRIDGE OMISSION FROM STA 24+65.9 TO STA 26+82.4)
STA 26+82.4 TO STA 27+02.5

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9″ (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12″ (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8″
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8″
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6′ POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″
- (I) EXCAVATE & PLACE TOPSOIL, 4″ W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9″
- (K) CONCRETE MEDIAN, TYPE SB-6.12
- (L) HOT-MIX ASPHALT SURFACE COURSE MIX "D" N50, 2″
- (M) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10″
- (N) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24″ LONG @ 24″ C-C. COST INCIDENTAL TO PCC PAVEMENT
- (O) PREFORMED BOND BREAKER EXPANSION JOINT



PROPOSED RAMP B

STA 27+02.5 TO STA 29+73.6

GUARDRAIL LIMITS

* STA 26+81.8 TO STA 28+77.1

AGGREGATE SHOULDER LIMITS

* * STA 26+81.3 TO STA 29+06.9

NOTE

PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″ (ITEM H) IS REPRESENTED TO BE THICKER THAN PORTLAND CEMENT CONCRETE PAVEMENT 10¼″ (ITEM A). SECTIONS INCLUDING ITEM H SHALL SACRIFICE APPROXIMATELY 3″ OF AGGREGATE SUBGRADE IMPROVEMENT (ITEM C) IN ORDER TO MAINTAIN A TYPICAL ROADWAY SECTION THICKNESS OF 22¼″.

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

PROFILE — SURVEYED — PLOTTED — CROSS CHECKED — B.M. NOTED — STRUCTURE NOTATNS CHKD — NOTE BOOK — NO. — BY — DATE

FILE NAME = 60D77_sht_typ_pr_rampB_03.dgn

Wight

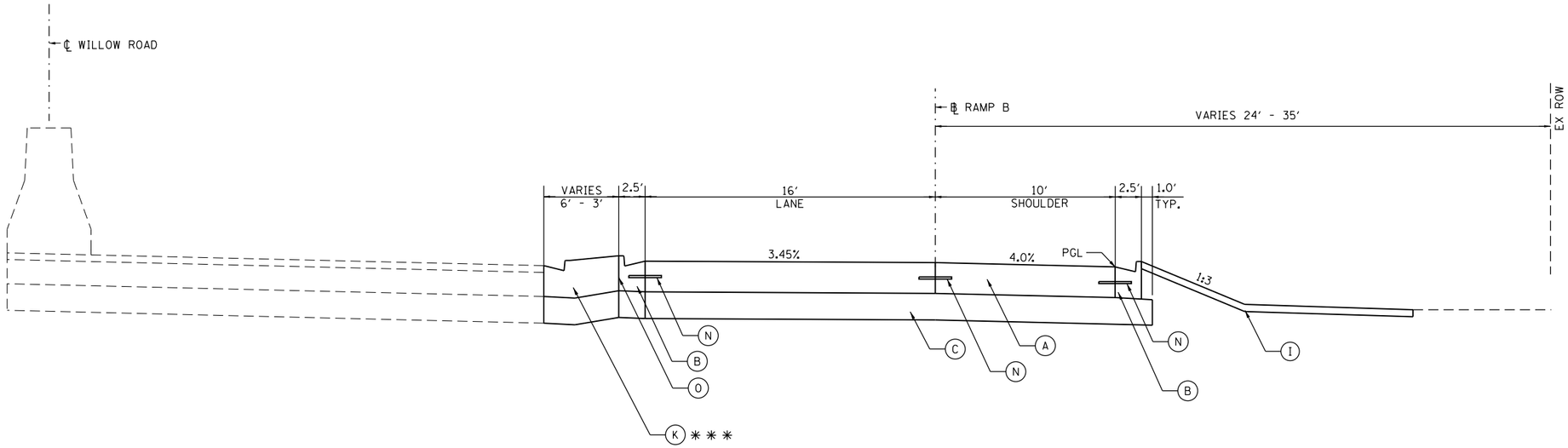
USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 ′ / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP B

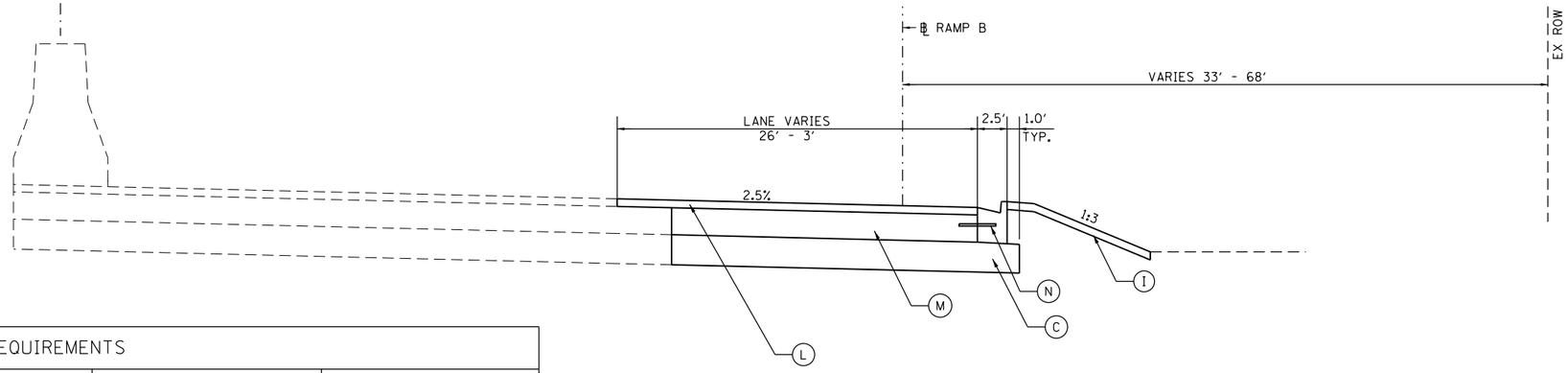
SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	21
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED RAMP B

STA 29+73.6 TO 37+28.8



PROPOSED RAMP B

STA 37+28.8 TO 40+64.3

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE TYPE	AIR VOIDS (%) @ Ndes	QUALITY MANAGEMENT
PAVEMENT RESURFACING (RAMPS B & D)		
HMA SURFACE COURSE, MIX "D", N70, (IL-9.5mm), 2"	4% AT 70 GYR.	QA/QC
DRIVEWAY		
HMA SURFACE COURSE, MIX "D", N50, (IL-9.5mm), 2"	4% AT 50 GYR.	QA/QC
HMA BASE COURSE (HMA BINDER IL-19.0mm), 6"	4% AT 50 GYR.	QA/QC
CLASS D PATCHING		
2" - HMA SURFACE COURSE, MIX "D", N70 (IL-9.5mm)	4% AT 70 GYR.	QA/QC
10" - HMA BINDER IL-19.0mm	4% AT 70 GYR.	QA/QC

NOTE 1: THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURES IS 112 LBS/SQ YD / IN

NOTE 2: THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

NOTE 3: FOR USE OF RECYCLED MATERIALS, SEE SPECIAL PROVISIONS.

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9" (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12" (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8"
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8"
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6' POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15"
- (I) EXCAVATE & PLACE TOPSOIL, 4" W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9"
- (K) CONCRETE MEDIAN, TYPE SB-6.12
- (L) HOT-MIX ASPHALT SURFACE COURSE MIX "D" N50, 2"
- (M) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10"
- (N) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24" LONG @ 24" C-C. COST INCIDENTAL TO PCC PAVEMENT
- (O) PREFORMED BOND BREAKER EXPANSION JOINT

GUARDRAIL LIMITS

✱ STA 26+81.8 TO STA 28+77.1

AGGREGATE SHOULDER LIMITS

✱✱ STA 26+81.3 TO STA 29+06.9

CONCRETE MEDIAN LIMITS

✱✱✱ STA 34+87.7 TO STA 37+80.4

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

PROFILE — SURVEYED; PLOTTED; CHECKED; BAR. NOTED; STRUCTURE NOTATNS CHKD; NOTE BOOK; NO.; BY; DATE

FILE NAME = 60D77_sht_typ_pr_ramp8_04.dgn

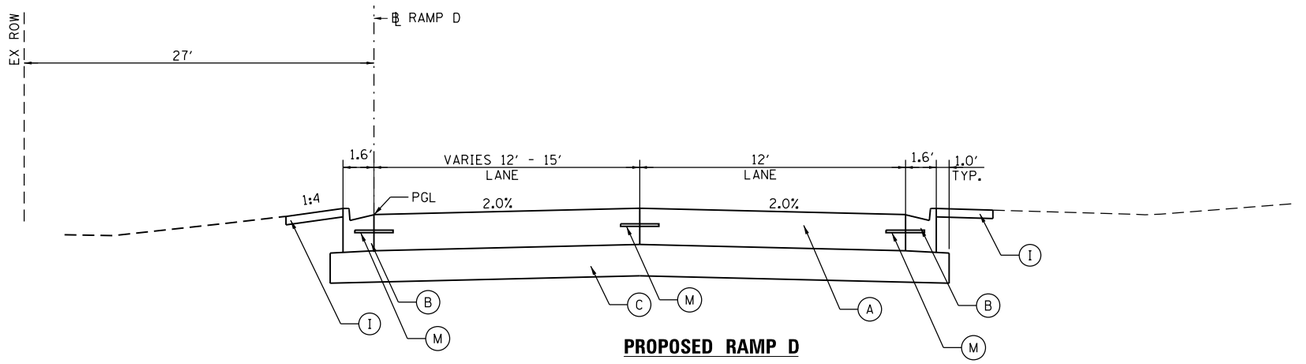
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP B

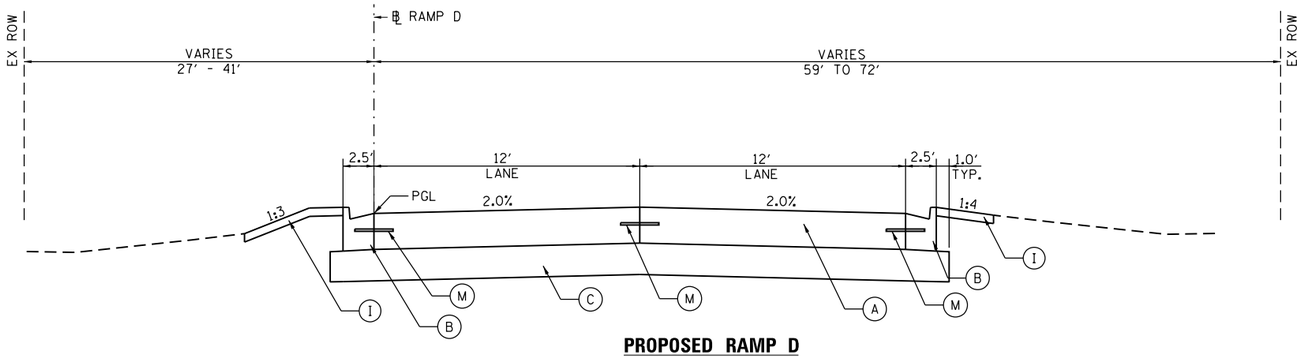
SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	22
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



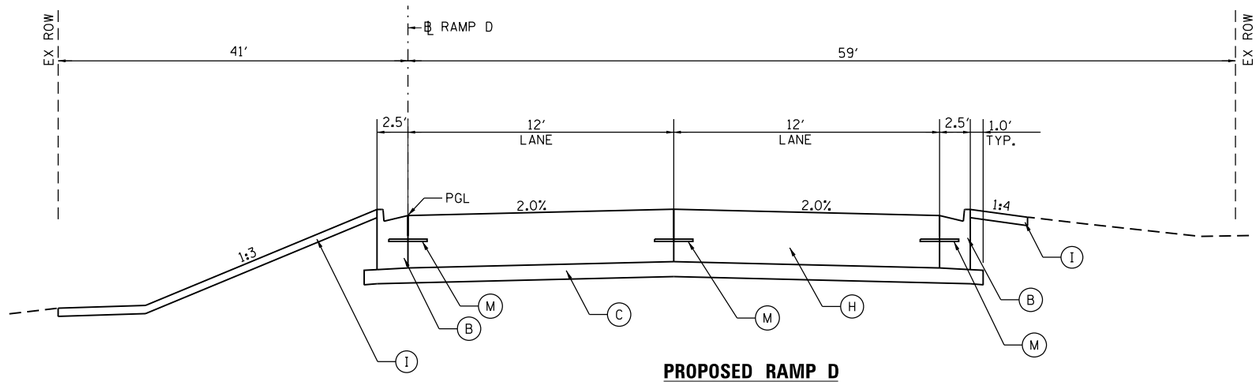
PROPOSED RAMP D

STA 50+84.5 TO STA 50+94.2



PROPOSED RAMP D

STA 50+94.2 TO STA 55+93.0



PROPOSED RAMP D

STA 55+93.0 TO 56+08.0
(BRIDGE OMISSION FROM 56+08.0 TO STA 58+29.0)

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9″ (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12″ (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8″
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8″
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6′ POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″
- (I) EXCAVATE & PLACE TOPSOIL, 4″ W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9″
- (K) HOT-MIX ASPHALT SURFACE COURSE MIX ″D″ N50, 2″
- (L) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10″
- (M) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24″ LONG @ 24″ C-C. COST INCIDENTAL TO PCC PAVEMENT
- (N) PREFORMED BOND BREAKER EXPANSION JOINT

NOTE

PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″ (ITEM H) IS REPRESENTED TO BE THICKER THAN PORTLAND CEMENT CONCRETE PAVEMENT 10¼″ (ITEM A). SECTIONS INCLUDING ITEM H SHALL SACRIFICE APPROXIMATELY 3″ OF AGGREGATE SUBGRADE IMPROVEMENT (ITEM C) IN ORDER TO MAINTAIN A TYPICAL ROADWAY SECTION THICKNESS OF 22¼″.

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

PROFILE: SURVEYED, PLOTTED, QUANTITIES CHECKED, BM. NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO., BY, DATE

FILE NAME = 60D77_sht_typ_pr_ramp0.01.dgn

Wight

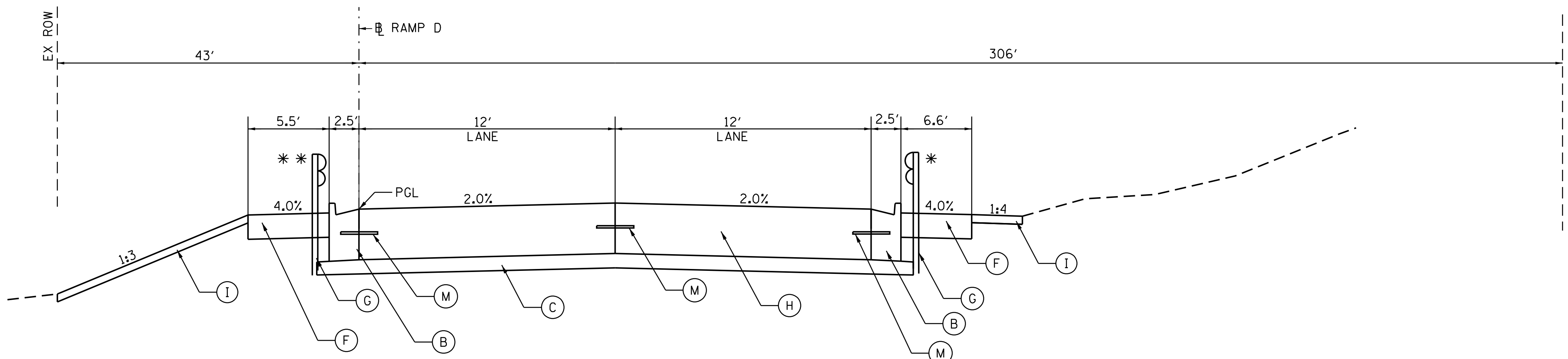
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 20.0000 ′ / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP D

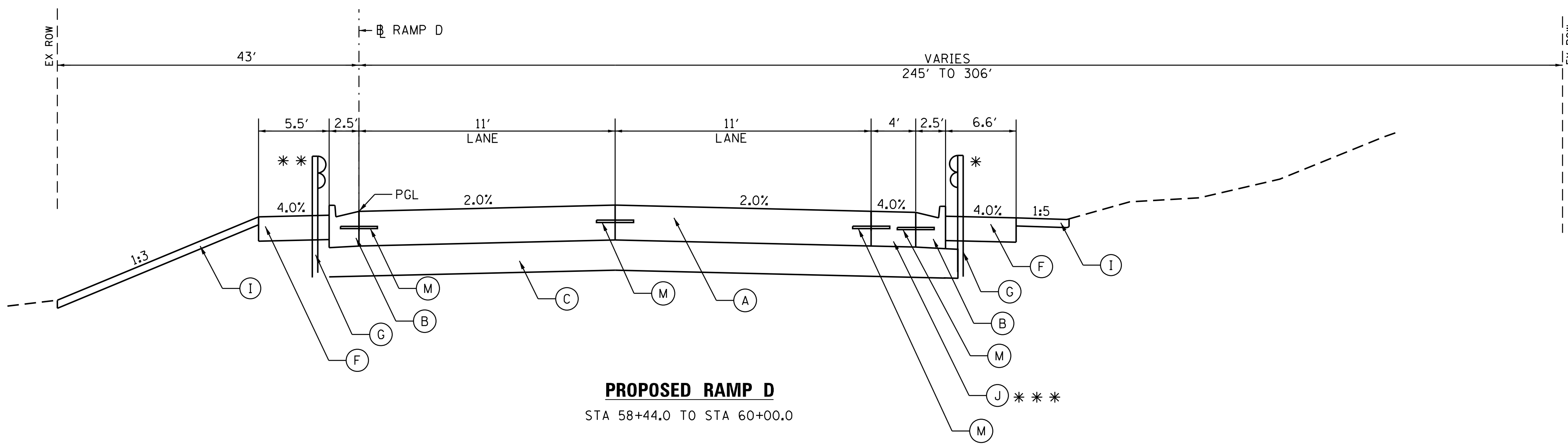
SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	23
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PROPOSED RAMP D

(BRIDGE OMISSION FROM 56+08.0 TO STA 58+29.0)
STA 58+29.0 TO 58+44.0



PROPOSED RAMP D

STA 58+44.0 TO STA 60+00.0

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9″ (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12″ (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8″
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8″
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6′ POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″
- (I) EXCAVATE & PLACE TOPSOIL, 4″ W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9″
- (K) HOT-MIX ASPHALT SURFACE COURSE MIX "D" N50, 2″
- (L) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10″
- (M) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24″ LONG @ 24″ C-C. COST INCIDENTAL TO PCC PAVEMENT
- (N) PREFORMED BOND BREAKER EXPANSION JOINT

GUARDRAIL LIMITS

- * STA 58+14.0 TO STA 60+69.4
- * * STA 58+26.5 TO STA 60+49.7

PCC SHOULDER LIMITS

- * * * STA 58+54.7 TO STA 61+02.0

NOTE

PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15″ (ITEM H) IS REPRESENTED TO BE THICKER THAN PORTLAND CEMENT CONCRETE PAVEMENT $10\frac{1}{4}$″ (ITEM A). SECTIONS INCLUDING ITEM H SHALL SACRIFICE APPROXIMATELY 3″ OF AGGREGATE SUBGRADE IMPROVEMENT (ITEM C) IN ORDER TO MAINTAIN A TYPICAL ROADWAY SECTION THICKNESS OF $22\frac{1}{4}$″.

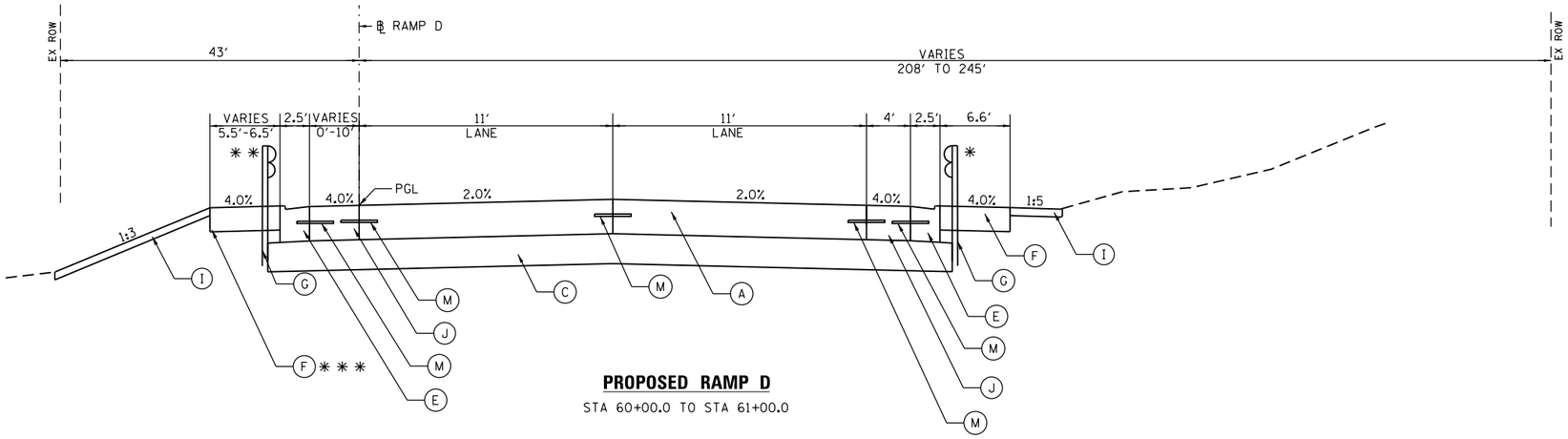
PLAN: SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME / NOTE BOOK / NO. ____ | BY | DATE

PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHK'D / NOTE BOOK / NO. ____ | BY | DATE

FILE NAME = 60D77_sht_typ_pr_rampD_02.dgn

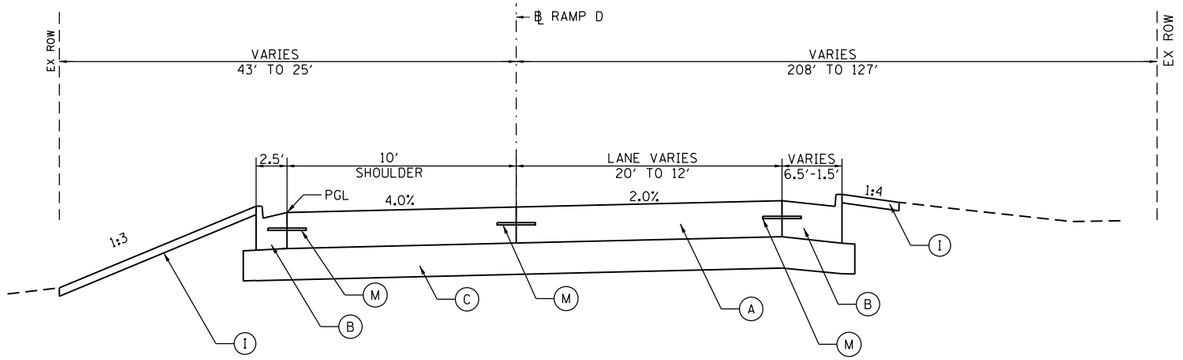
Wight	USER NAME = untitled	DESIGNED KMB	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WILLOW ROAD AT DES PLAINES RIVER PROPOSED TYPICAL SECTIONS RAMP D	
		DRAWN CJF	REVISED			
	PLOT SCALE = 20.0000 ′ / in.	CHECKED JNH	REVISED			
	PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED		SHEET NO. 2 OF 3 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	24
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



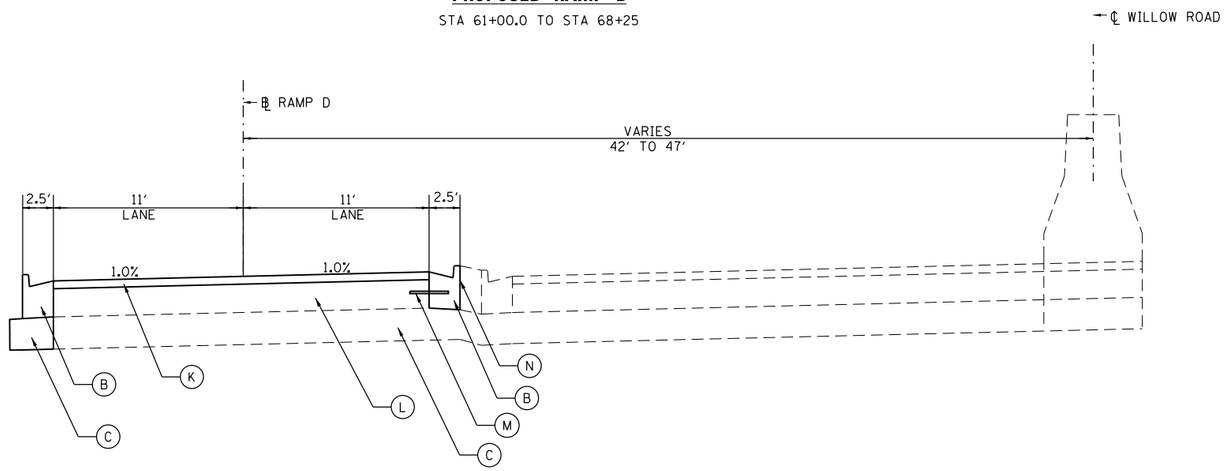
PROPOSED RAMP D

STA 60+00.0 TO STA 61+00.0



PROPOSED RAMP D

STA 61+00.0 TO STA 68+25



PROPOSED RAMP D

STA 68+25 TO STA 68+70

LEGEND

- (A) PORTLAND CEMENT CONCRETE PAVEMENT 9'' (JOINTED)
- (B) COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- (C) AGGREGATE SUBGRADE IMPROVEMENT 12'' (TYP.)
- (D) HMA DRIVEWAY PAVEMENT 8''
- (E) DEPRESSED CURB AND GUTTER
- (F) AGGREGATE SHOULDERS TYPE B 8''
- (G) STEEL PLATE BEAM GUARDRAIL TYPE A 6' POSTS
- (H) PAVEMENT CONNECTOR (PCC) W/ WELDED WIRE REINFORCEMENT 15''
- (I) EXCAVATE & PLACE TOPSOIL, 4'' W/ EROSION CONTROL BLANKET & CLASS 2A SEEDING
- (J) PORTLAND CEMENT CONCRETE SHOULDER 9''
- (K) HOT-MIX ASPHALT SURFACE COURSE MIX ''D'' N50, 2''
- (L) PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10''
- (M) EPOXY COAST, DEFORMED, NO. 6 TIE BARS, 24'' LONG @ 24'' C-C. COST INCIDENTAL TO PCC PAVEMENT
- (N) PREFORMED BOND BREAKER EXPANSION JOINT

GUARDRAIL LIMITS

* STA 58+14.0 TO STA 60+69.4

* * STA 58+26.5 TO STA 60+49.7

AGGREGATE SHOULDER LIMITS

* * * STA 58+29.0 TO STA 60+67.9

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

PROFILE
SURVEYED
PLOTTED
CROSS CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
DATE
BY

FILE NAME = 60D77_sht_typ_pr_ramp0_03.dgn

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/25/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED TYPICAL SECTIONS
RAMP D

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	25
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

PAVEMENT SCHEDULE

LOCATION	AGGREGATE SUBGRADE IMPROVEMENT 12" (SQ YD)	PORTLAND CEMENT CONCRETE PAVEMENT 9" (JOINTED) (SQ YD)	PORTLAND CEMENT CONCRETE SHOULDERS 9" (SQ YD)	PROTECTIVE COAT (SQ YD)	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB (SQ YD)	PAVEMENT REMOVAL (SQ YD)	DRIVEWAY PAVEMENT REMOVAL (SQ YD)	COMBINATION CURB AND GUTTER REMOVAL (FOOT)	PAVED SHOULDER REMOVAL (SQ YD)	AGGREGATE SHOULDERS, TYPE B 8" (TON)
RAMP B										
STA. 20+91.3 TO STA. 24+92.0	1288	960	0	960	47	903	226	803	126	65
BRIDGE OMISSION										
STA. 26+51.4 TO STA. 40+64.0	4255	1961	767	2728	47	2185	0	2255	32	33
RAMP D										
STA. 50+84.5 TO STA. 56+39.0	1811	1358	0	1358	40	1430	0	1111	0	0
BRIDGE OMISSION										
STA. 57+98.0 TO STA. 68+18.7	3223	1521	785	2306	40	2171	0	2022	0	85
TOTAL	10576	5800	1552	7352	174	6689	226	6192	159	183

STATION LIMITS ARE ALONG PGL OF EACH ROADWAY.

FILE NAME = 60D77-sht-sch-02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PAVEMENT SCHEDULE

SHEET NO. 1 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	26
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

LOCATION	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (FOOT)	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6-FOOT POSTS (FOOT)	TRAFFIC BARRIER TERMINAL, TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT (EACH)	GUARDRAIL REMOVAL (FOOT)	DELINEATORS (EACH)	GUARDRAIL REFLECTORS, TYPE B (EACH)	TERMINAL MARKER - DIRECT APPLIED (EACH)	TEMPORARY ACCESS (COMMERCIAL ENTRANCE) (EACH)
RAMP B									
STA. 20+91.3 TO STA. 24+92.0	745	112.5	2	2	323	17	6	2	1
BRIDGE OMISSION									
STA. 26+51.4 TO STA. 40+64.0	2476	37.5	1	1	197	21	4	1	0
RAMP D									
STA. 50+84.5 TO STA. 56+39.0	1048	0	0	0	200	9	0	0	0
BRIDGE OMISSION									
STA. 57+98.0 TO STA. 68+18.7	3065	337.5	2	2	309	14	8	2	0
TOTAL	7333	487.5	5	5	1030	61	18	5	1

STATION LIMITS ARE ALONG PGL OF EACH ROADWAY.

PLAN
SURVEYED
PLOTTED
QUANTS CHECKED
R/T. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

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

FILE NAME = 60D77.sht.sch.03.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PAVEMENT SCHEDULE

SHEET NO. 2 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	27
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DRAINAGE SCHEDULE (STRUCTURES)

STORM STRUCTURE CALLOUT	LOCATION		INLET AND PIPE PROTECTION (EACH)	INLET FILTERS (EACH)	PRECAST REINFORCED 12" (EACH)	GRATING FOR PRECAST 12" (EACH)	CATCH BASIN TYPE A 4'-DIA, TY24 F&G (EACH)	CATCH BASIN TYPE A 4'-DIA, TY 1 F CL LID (EACH)	CATCH BASIN TYPE A 5'-DIA, TY24 F&G (EACH)	MANHOLES, TYPE A 6'-DIA TY 1 F CL LID (EACH)	MANHOLES, TYPE A 7'-DIA TY 1 F OPEN LID (EACH)	MANHOLES, TYPE A 7'-DIA TY 1 F CL LID (EACH)	INLETS, TYPE A TYPE 1 FRAME OPEN LID (EACH)	INLETS, TYPE A TYPE 11 FRAME AND (EACH)	INLETS, TYPE A TYPE 24 FRAME AND (EACH)	MH TO BE ADJ NEW TYPE 1 FRAME, CLOSED (EACH)
	RAMP B															
A1	21+17.74	33.50' LT	1													1
A2	22+88.00	31.50' LT	1													1
A3	35+04	6.5' LT		1												1
A4	37+29	11.6' LT		1												1
B1	20+97.35	8.40' RT		1										1		
B2	21+23.80	1.45' RT		1			1									
B3	20+97.3	22.5' LT		1										1		
B4	21+23.80	22.80' LT		1					1							
B5	22+97.90	0.00' RT		1											1	
B6	22+97.90	24.0' LT		1			1									
B7	28+45	20' LT	1				1									
B7A	400+50	55' RT		1								1				
B8	30+78	10' RT		1											1	
B9	30+53	8.4' RT		1			1									
B10	30+28	6.1' RT		1			1									
B11	29+75	0' RT		1			1									
B11A	401+50	52' RT	1								1					
B12	32+73.27	10.0' RT		1											1	
B13	33+61.77	10.0' RT		1			1									
B14	33+81.45	10.0' RT		1			1									
B15	34+30.58	10.0' RT		1			1									
B15A	36+68.49	10.0' RT		1											1	
B16	33+96.16	10.0' RT		1			1									
B16A	33+96.52	3.1' LT		1						1						
X1	37+80	8.5' RT		1			1									
X2	38+33	6.9' RT		1				1								
X3	39+62.4	3.0' RT		1										1		
X6	39+79	15.8' RT		1									1			
	RAMP D															
D1	51+03.1	0.0' LT		1										1		
D2	51+57.08	0.0' LT		1											1	
D3	51+30.10	0.0' LT		1			1									
D4	51+02.90	23.85' RT		1										1		
D5	51+57.08	24.0' RT		1											1	
D6	51+30.10	24.0' RT		1			1									
D7	54+00.00	24.0' RT		1											1	
D8	54+00.00	0.0' LT		1			1									
D9	54+00.00	22.5' LT	1		1											
D9G	54+00.00	22.5' LT				1										
D10	59+51	26' RT		1			1									
D11	59+36	26' RT		1			1									
D12	59+46	0' LT		1			1									
D12A	59+14	0' LT		1			1									
D13	59+36	0' LT		1			1									
D14	59+41	27.9' LT	1		1											
D14G	59+41	27.9' LT				1										
D15	60+50	25' RT		1			1									
D16	61+15	10' LT		1											1	
D17	60+50	5.1' LT		1			1									
D18	60+50	27.2' LT	1		1											
D18G	60+50	27.2' LT				1										
14	64+13	3.4' LT		1			1									
17	65+50	3.46' LT		1			1									
18	405+86	52' LT		1			1									
X4	64+13	24.0' LT	1		1											
X4G	64+13	24.0' LT				1										
X5	65+50	24.0' LT	1		1											
X5G	65+50	24.0' LT				1										
TOTAL			9	43	5	5	24	1	1	1	1	1	1	5	8	4

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

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

FILE NAME = 60D77_sht_sch_07.dgn

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
DRAINAGE SCHEDULE (STRUCTURES)

SHEET NO. 3 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	28
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DRAINAGE SCHEDULE (PIPES)

STORM SEWER CALLOUT	LOCATION			STORM SEWERS, CLASS A, TYPE 1 10" (FOOT)	STORM SEWERS, CLASS A, TYPE 1 12" (FOOT)	STORM SEWERS, CLASS A, TYPE 2 12" (FOOT)	STORM SEWERS, CLASS A, TYPE 2 18" (FOOT)
	RAMP B						
B1	B1	TO	B2		24		
B2	B2	TO	B4		22		
B3	B3	TO	B2		23		
B4	B4	TO	A1		8		
B5	B5	TO	B6		21		
B6	B6	TO	A2		9		
B7	B7	TO	B7A			21	21
B8	B8	TO	B9		22		
B9	B9	TO	B10		21		
B10	B10	TO	B11		49		
B11	B11	TO	B11A			28	28
B12	B12	TO	B13		85		
B13	B13	TO	B14		16		
B14	B14	TO	B16		11		
B15	B15	TO	B16		33		
B15A	B15A	TO	B15		234		
B16	B16	TO	B16A				
X1	X1	TO	A4	55			
X2	X2	TO	EXIST	15			
X3	X3	TO	EXIST	6			
X6	X6	TO	X1		24		
	RAMP D						
D1	D1	TO	D3		24		
D2	D2	TO	D3		24		
D3	D3	TO	D6		20		
D4	D4	TO	D6		24		
D5	D5	TO	D6		24		
D6	D7	TO	D8		21		
D7	D8	TO	D9		14		
D8	D10	TO	D11			13	
D9	D11	TO	D13			24	
D10	D10	TO	D13			18	
D10A	D12A	TO	D13			18	
D11	D13	TO	D14			20	
D12	D15	TO	D17		26		
D13	D16	TO	D17		62		
D14	D17	TO	D18		14		
13	14	TO	X4			6	
14	PLUG	TO	14			26	
16	17	TO	X5				6
17	18	TO	17	12			
18	PLUG	TO	17			25	
				88	855	199	55

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

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

FILE NAME = 60D77_sht_sch_09.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
DRAINAGE SCHEDULE (PIPES)

SHEET NO. 4 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	29
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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JOINTS CHECKED
R/T. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
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PROFILE
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JOINTS CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

PAVEMENT MARKING SCHEDULE

LOCATION DESCRIPTION	DELINEATORS (EACH)	POLYUREA PAVEMENT MARKING TYPE I - LETTERS AND SYMBOLS (SQ FT)	POLYUREA PAVEMENT MARKING TYPE I - LINE 4" (FOOT)	POLYUREA PAVEMENT MARKING TYPE I - LINE 6" (FOOT)	POLYUREA PAVEMENT MARKING TYPE I - LINE 12" (FOOT)	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL (EACH)
RAMP B						
STA. 20+91.3 TO STA. 29+00.0	12	83	152	0	803	16
RAMP D						
STA. 50+84.5 TO STA. 59+61.8	13	110	35	423	0	0
TOTAL	25	193	187	423	803	16

FILE NAME = 60D77_sht_sch_16.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PAVEMENT MARKING SCHEDULE

SHEET NO. 5 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	30
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

RAMP B

Station	to Station	Cut (CuYd)	Adj. for Shrinkage	Fill (CuYd)	Balance (CuYd)
20+91	21+00	9.9	8.9	0	8.9
21+00	21+30	44.9	40.4	0	40.4
21+30	21+50	39.8	35.8	0	35.8
21+50	22+00	90.3	81.3	0	81.3
22+00	22+09	11.2	10.1	0.3	9.8
22+09	22+50	37.4	33.7	1.1	32.6
22+50	22+79	27.7	24.9	0	24.9
22+79	23+00	20.9	18.8	0	18.8
23+00	23+03	2.8	2.5	0	2.5
23+03	23+24	20	18	0	18
23+24	23+50	27.7	24.9	0	24.9
23+50	24+00	50.2	45.2	0	45.2
24+00	24+46	37.1	33.4	0	33.4
24+46	24+50	2.8	2.5	0	2.5
24+50	24+61	8	7.2	0	7.2
Bridge Omission					
26+82	27+00	23	20.7	0.1	20.6
27+00	27+02	3.3	3	0	3
27+02	27+50	94.2	84.8	0.6	84.2
27+50	28+00	113.9	102.5	0.4	102.1
28+00	28+44	97.9	88.1	0.2	87.9
28+44	28+50	13.3	12	0	12
28+50	28+84	78.3	70.5	0.1	70.4
28+84	29+00	39.6	35.6	0.3	35.3
29+00	29+07	18.8	16.9	0.3	16.6
29+07	29+50	116.3	104.7	1.8	102.9
29+50	29+74	62.1	55.9	1	54.9
29+74	30+00	52.2	47	2.9	44.1
30+00	30+50	51.2	46.1	11.1	35
30+50	30+74	9.7	8.7	7.6	1.1
30+74	31+00	5.4	4.9	12.5	-7.6
31+00	31+50	3.6	3.2	43	-39.8
31+50	32+00	1.8	1.6	63.9	-62.3
32+00	32+50	3.6	3.2	62.4	-59.2
32+50	33+00	7.4	6.7	42.4	-35.7
33+00	33+50	15.2	13.7	21.1	-7.4
33+50	34+00	23.8	21.4	9.9	11.5
34+00	34+50	31.4	28.3	8.6	19.7
34+50	34+88	28.3	25.5	9.6	15.9
34+88	35+00	9.5	8.6	4.5	4.1
35+00	35+50	46.7	42	29.2	12.8
35+50	36+00	45.4	40.9	46.4	-5.5
36+00	36+50	35.1	31.6	51.2	-19.6
36+50	37+00	35.8	32.2	46.2	-14
37+00	37+29	22	19.8	22.1	-2.3
37+29	37+50	18.3	16.5	11.8	4.7
37+50	37+80	35.7	32.1	12.4	19.7
37+80	38+00	26.3	23.7	6.4	17.3
38+00	38+50	59.8	53.8	10.6	43.2
38+50	39+00	58.1	52.3	2.7	49.6
39+00	39+50	52.3	47.1	0	47.1
39+50	40+00	37.5	33.8	0	33.8
40+00	40+50	19.8	17.8	0	17.8
40+50	40+64	1.9	1.7	0	1.7
Totals		1829.2	1646.5	544.7	1101.8

RAMP D

Station	to Station	Cut (CuYd)	Adj. for Shrinkage	Fill (CuYd)	Balance (CuYd)
50+84	51+00	18.1	16.3	0	16.3
51+00	51+50	60.6	54.5	0.1	54.4
51+50	52+00	60.7	54.6	0.2	54.4
52+00	52+50	83.5	75.2	0.4	74.8
52+50	53+00	114	102.6	0.5	102.1
53+00	53+50	136.9	123.2	0.2	123
53+50	54+00	164.3	147.9	0	147.9
54+00	54+50	172.6	155.3	0.6	154.7
54+50	55+00	173.9	156.5	1.1	155.4
55+00	55+50	175.3	157.8	0.5	157.3
55+50	55+93	155.4	139.9	0	139.9
55+93	56+00	27	24.3	0	24.3
56+00	56+08	31.7	28.5	0	28.5
Bridge Omission					
58+29	58+44	38.9	35	0.8	34.2
58+44	58+50	14.4	13	0.3	12.7
58+50	58+56	14.8	13.3	0.3	13
58+56	59+00	103.7	93.3	1.9	91.4
59+00	59+17	38.2	34.4	0.9	33.5
59+17	59+50	76	68.4	1.6	66.8
59+50	60+00	106.4	95.8	2.6	93.2
60+00	60+09	14.6	13.1	0.7	12.4
60+09	60+43	41.7	37.5	4	33.5
60+43	60+50	7.9	7.1	0.9	6.2
60+50	60+68	23.3	21	1.6	19.4
60+68	60+79	14.8	13.3	0.8	12.5
60+79	61+00	23.8	21.4	2.3	19.1
61+00	61+03	2.8	2.5	0.4	2.1
61+03	61+50	54	48.6	3.6	45
61+50	62+00	86.1	77.5	0.4	77.1
62+00	62+50	117	105.3	0	105.3
62+50	63+00	154.8	139.3	0	139.3
63+00	63+50	203.9	183.5	0	183.5
63+50	64+00	241.1	217	0	217
64+00	64+50	239.5	215.6	0	215.6
64+50	65+00	237.6	213.8	0	213.8
65+00	65+50	237.2	213.5	0	213.5
65+50	66+00	208.5	187.7	0	187.7
66+00	66+50	162.5	146.3	0	146.3
66+50	67+00	124.6	112.1	0	112.1
67+00	67+50	115.1	103.6	0	103.6
67+50	68+00	70.4	63.4	0	63.4
68+00	68+20	9.2	8.3	0	8.3
Totals		4156.8	3741.2	26.7	3714.5

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CADD FILE NAME
NOTE BOOK
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PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
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BY
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FILE NAME = 60D77_sht_sch_19.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/25/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EARTHWORK SCHEDULE

SHEET NO. 6 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	31
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLAN
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R/T. OF WAY CHECKED
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NOTE BOOK
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PROFILE
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QUANTITIES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
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TREE REMOVAL SCHEDULE

LOCATION	OFFSET (FT)	OFFSET (RT/LT)	SIZE DIAMETER	TREE REMOVAL (6 TO 15 UNITS DIAMETER) (UNIT)	TREE REMOVAL (OVER 15 UNITS DIAMETER) (UNIT)
RAMP B					
21+31	21.64	RT	4.5,4.5,6.5	6.5	
22+27	38.74	RT	7,7.5,11,12	38	
24+78	34.89	RT	13	13	
24+78	35.02	RT	7	7	
24+93	-25.61	LT	14	14	
26+56	24.38	RT	18		18
26+70	27.09	RT	13	13	
RAMP D					
51+87	64.51	RT	3.5,3.5,4,6.5,7	13.5	
52+04	64.62	RT	11	11	
52+12	66.44	RT	10.5	11	
52+14	17.43	LT	8	8	
52+63	54.67	RT	6.5	6.5	
52+69	53.83	RT	4,5,5.5,6	6	
52+99	51.74	RT	6	6	
53+04	53.42	RT	11.5,17	29	
53+05	26.4	LT	12	12	
53+20	36.07	LT	8,12	20	
53+43	13.11	LT	12	12	
53+50	30.74	LT	7.5	8	
53+63	60.22	RT	15.5		15.5
53+65	7.05	LT	12	12	
53+65	7.99	LT	12	12	
53+73	22.09	LT	10	10	
53+80	17.51	LT	7	7	
53+85	7.56	LT	7	7	
54+00	19.3	LT	16		16
54+22	34.76	LT	10	10	
54+28	33.08	LT	15	15	
54+56	40.9	LT	17,21		38
54+63	40.23	LT	11.5	11.5	
54+63	39.84	LT	17		17
54+96	37.01	LT	7	7	
59+23	42.3	LT	20.5		20.5
59+28	36.55	LT	9	9	
59+43	34.38	LT	11	11	
59+44	38.55	LT	6	6	
59+45	35.78	LT	10,12	22	
59+75	41.23	LT	8	8	
59+77	35.15	LT	13	13	
60+07	41.68	LT	6,12,15	33	
60+11	37.29	LT	6	6	
60+12	38.33	LT	20		20
60+48	37.08	LT	12	12	
60+51	38.12	LT	10.5	10.5	
60+58	39.59	LT	8.5	8.5	
60+59	41.68	LT	15	15	
60+61	37.82	LT	6	6	
60+69	40.13	LT	13	13	
60+81	39.85	LT	7.5	7.5	
60+90	37.08	LT	7	7	
60+96	35.17	LT	10	10	
			TOTAL	522	145

FILE NAME = 60D77_sht_sch_25.dgn

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USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
TREE REMOVAL SCHEDULE

SHEET NO. 7 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	32
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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RT. OF WAY CHECKED
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NOTE BOOK ____
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PLOTTED ____ DATE
CROSS CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK ____
NO. ____

TREE SCHEDULE

DESCRIPTION	LOCATION		UNIT (EACH)
	STATION	OFFSET	
Tree, Carya ovata (Shagbark Hickory), 2" Caliper, Balled and Burlapped	22+50 TO 23+25	RT	3
	26+75 TO 27+75	RT	5
		TOTAL	8
Tree, Celtis occidentalis (Common Hackberry), 2" Caliper, Balled and Burlapped	22+25 to 23+75	LT	6
		TOTAL	6
Tree, Quercus schuetti (Swamp Bur Oak), 1-3/4" Caliper , Balled and Burlapped	23+50 TO 24+50	RT	5
	27+75 TO 29+25	RT	6
		TOTAL	11

FILE NAME = 60D77_sht_sch_26.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
TREE SCHEDULE

SHEET NO. 8 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	33
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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QUANTITIES CHECKED
R/T. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
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BY
DATE

PROFILE
SURVEYED
PLOTTED
QUANTITIES CHECKED
BM. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
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DATE

EROSION CONTROL SCHEDULE

LOCATION	EROSION CONTROL BLANKET (SQ YD)	PERIMETER EROSION BARRIER (FOOT)
RAMP B		
STA. 20+91.3 TO STA. 24+92.0	2680	757
BRIDGE OMISSION		
STA. 26+51.4 TO STA. 29+00.00	1709	505
RAMP D		
STA. 50+84.5 TO STA. 56+39.0	3530	1149
BRIDGE OMISSION		
STA. 57+98.0 TO STA. 59+61.8	2231	635
TOTAL	10151	3047

NOTES:
STATION LIMITS ARE FROM ALONG PGL OF EACH ROADWAY.
REFER TO DRAINAGE SCHEDULE FOR INLET FILTERS.

FILE NAME = 60D77-sht-sch-27.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EROSION CONTROL SCHEDULE

SHEET NO. 9 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	34
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
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LANDSCAPE SCHEDULE

LOCATION	TOPSOIL EXCAVATION AND PLACEMENT (CU YD)	SEEDING, CLASS 2A (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)
RAMP B				
STA. 20+91.3 TO STA. 24+92.0	893.38	0.50	50	50
BRIDGE OMISSION				
STA. 26+51.4 TO STA. 29+00.00	569.78	0.50	32	32
RAMP D				
STA. 50+84.5 TO STA. 56+39.0	1,176.76	0.75	66	66
BRIDGE OMISSION				
STA. 57+98.0 TO STA. 59+61.8	743.68	0.50	42	42
TOTAL	3,384	2.25	190	190

STATION LIMITS ARE ALONG PGL OF EACH ROADWAY.
REFER TO DRAINAGE SCHEDULE FOR INLET FILTERS.
REFER TO TREE SCHEDULE FOR PROPOSED TREES.

FILE NAME = 60D77_sht_sch_28.dgn

Wight

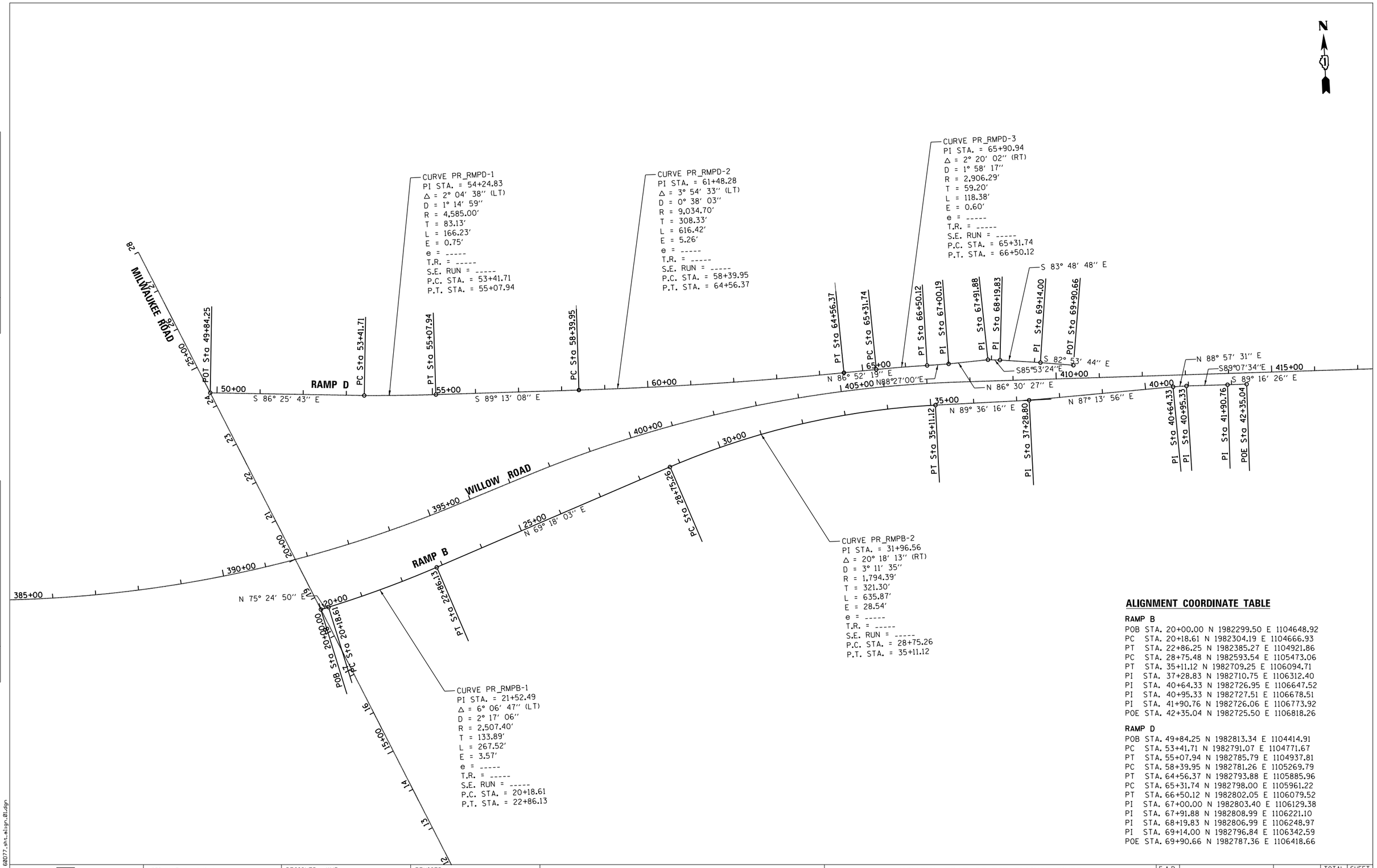
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
LANDSCAPE SCHEDULE

SHEET NO. 10 OF 10 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	35
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



ALIGNMENT COORDINATE TABLE

RAMP B

POB STA. 20+00.00 N 1982299.50 E 1104648.92
PC STA. 20+18.61 N 1982304.19 E 1104666.93
PT STA. 22+86.25 N 1982385.27 E 1104921.86
PC STA. 28+75.48 N 1982593.54 E 1105473.06
PT STA. 35+11.12 N 1982709.25 E 1106094.71
PI STA. 37+28.83 N 1982710.75 E 1106312.40
PI STA. 40+64.33 N 1982726.95 E 1106647.52
PI STA. 40+95.33 N 1982727.51 E 1106678.51
PI STA. 41+90.76 N 1982726.06 E 1106773.92
POE STA. 42+35.04 N 1982725.50 E 1106818.26

RAMP D

POB STA. 49+84.25 N 1982813.34 E 1104414.91
PC STA. 53+41.71 N 1982791.07 E 1104771.67
PT STA. 55+07.94 N 1982785.79 E 1104937.81
PC STA. 58+39.95 N 1982781.26 E 1105269.79
PT STA. 64+56.37 N 1982793.88 E 1105885.96
PC STA. 65+31.74 N 1982798.00 E 1105961.22
PT STA. 66+50.12 N 1982802.05 E 1106079.52
PI STA. 67+00.00 N 1982803.40 E 1106129.38
PI STA. 67+91.88 N 1982808.99 E 1106221.10
PI STA. 68+19.83 N 1982806.99 E 1106248.97
PI STA. 69+14.00 N 1982796.84 E 1106342.59
POE STA. 69+90.66 N 1982787.36 E 1106418.66

PLAN: SURVEYED, PLOTTED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO.
PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NOTATNS CHKD, NOTE BOOK, NO.
BY | DATE

FILE NAME = 60D77_sht_align_01.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 200.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
ALIGNMENT, TIES, AND BENCHMARKS

SCALE: 1" = 100' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	36
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTROL POINTS

CONTROL POINT #2: FOUND REBAR WITH CAP ON S.E. CORNER PALATINE AND MILWAUKEE RD
ELEV. = 640.46

CONTROL POINT #3: SET REBAR WITH CAP W. BOUND PALATINE RD EXIT RAMP
ELEV. =643.06

CONTROL POINT #4: SET REBAR WITH CAP IN MEDIAN DIVIDING W. BOUND PALATINE EXIT AND WILLOW RD
ELEV. = 645.10

CONTROL POINT #7: SET "X" E. SIDE OF MANHOLE RIM N. SIDE W. BOUND WILLOW RD
ELEV. = 646.14

CONTROL POINT #8: SET REBAR WITH CAP N.W. CORNER INTERSECTION SANDERS AND WILLOW RD
ELEV. = 646.24

CONTROL POINT #9: SET REBAR WITH CAP S.E. CORNER SANDERS AND WILLOW ROAD
ELEV. = 646.35

BENCHMARKS

BENCHMARK #1: SET CUT "X" ON WALK N. OF WILLOW & E. OF INTERSECTION OF SANDERS AND WILLOW RD.
ELEV. = 652.86

BENCHMARK #2: SET CUT "X" ON WALK N.W. CORNER OF CULLIGAN AND WILLOW ROAD
ELEV. = 654.62

BENCHMARK #3: FOUND CUT "X" IN CONC. MEDIAN ON SANDERS ROAD
ELEV. = 660.65

ADDITIONAL BENCHMARKS PROVIDED ON STRUCTURAL GP&E SHEETS.

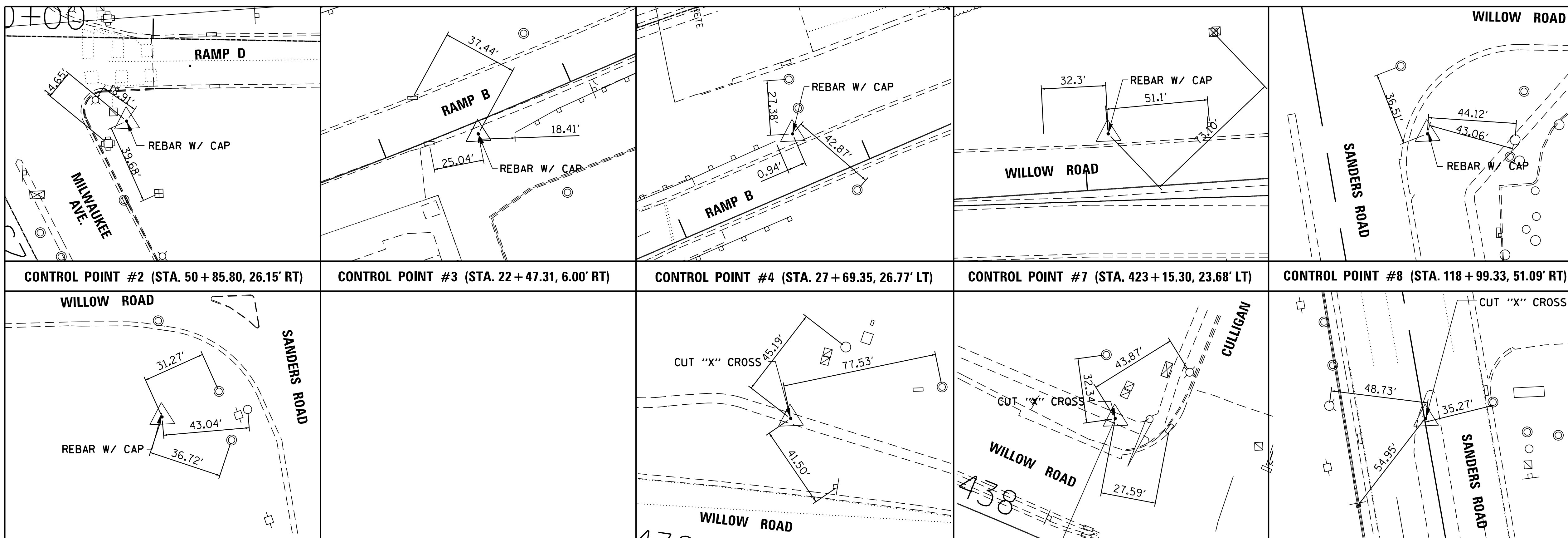
BENCHMARK COORDINATE TABLE

BENCHMARK 01	N	1,982,776.28	E	1,108,667.91
BENCHMARK 02	N	1,982,562.09	E	1,109,237.74
BENCHMARK 03	N	1,983,770.28	E	1,108,067.64

CONTROL POINT COORDINATE TABLE

CONTROL POINT 02	N	1,982,765.40	E	1,104,515.36
CONTROL POINT 03	N	1,982,786.49	E	1,105,319.65
CONTROL POINT 04	N	1,982,769.14	E	1,105,729.39
CONTROL POINT 07	N	1,982,773.89	E	1,107,688.92
CONTROL POINT 08	N	1,982,796.18	E	1,108,121.56
CONTROL POINT 09	N	1,982,641.38	E	1,108,271.43

N



CONTROL POINT #2 (STA. 50+85.80, 26.15' RT)
CONTROL POINT #3 (STA. 22+47.31, 6.00' RT)
CONTROL POINT #4 (STA. 27+69.35, 26.77' LT)
CONTROL POINT #7 (STA. 423+15.30, 23.68' LT)
CONTROL POINT #8 (STA. 118+99.33, 51.09' RT)
CONTROL POINT #9 (STA. 427+45.07, 113.55' RT)
BENCHMARK #1 (STA. 432+77.02, 83.10' LT)
BENCHMARK #2 (STA. 438+68.87, 70.09' LT)
BENCHMARK #3 (STA. 130+45.08, 0.56' RT)

PLAN	
NOTE BOOK NO. ____	SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME

PROFILE	
NOTE BOOK NO. ____	SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHECKED

FILE NAME = 60D77_sht_align_02.dgn

Wight

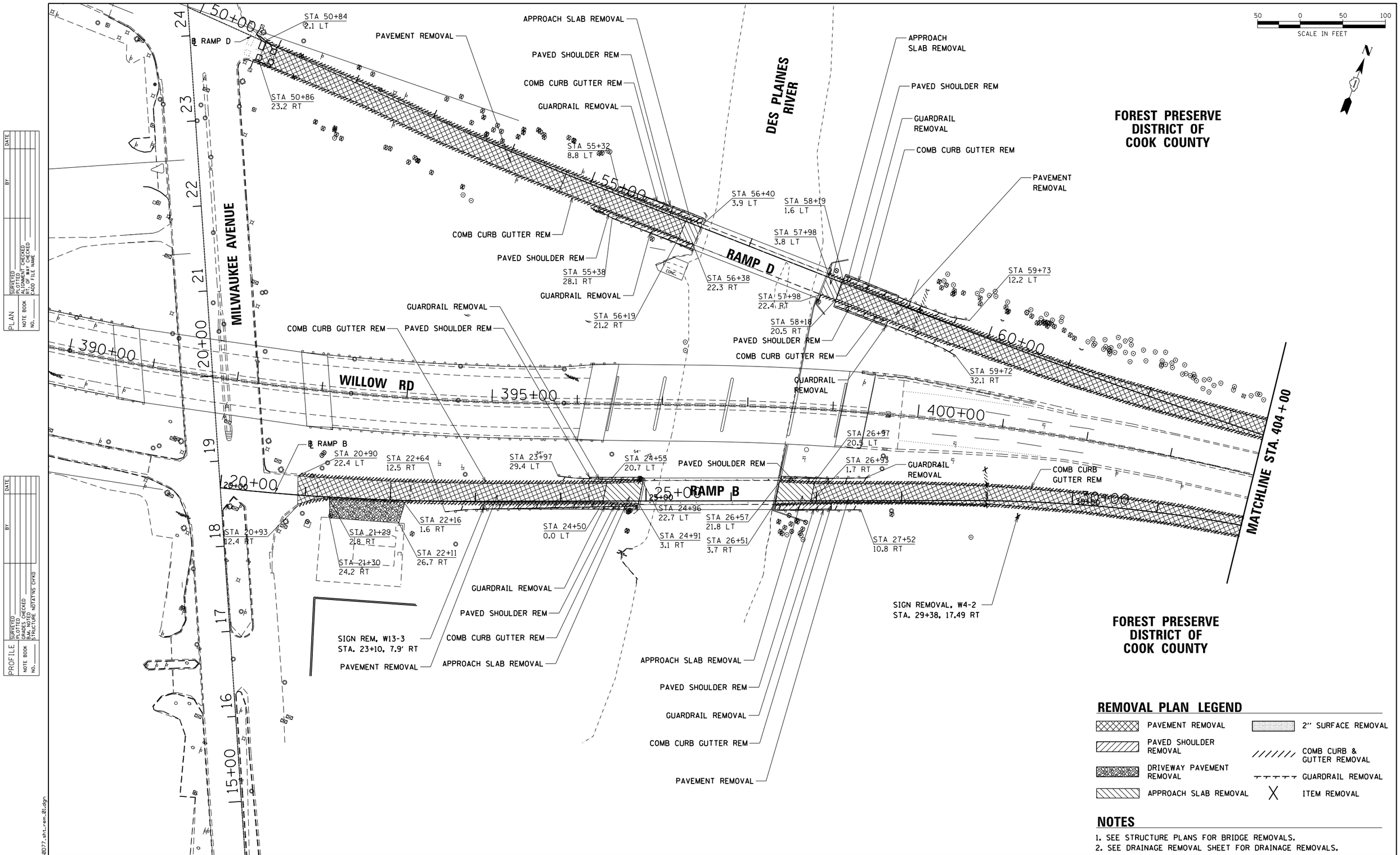
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 600.0000 '/ in.	CHECKED	REVISED
PLOT DATE = 1/24/2020	DATE 3-01-2019	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
ALIGNMENT, TIES, AND BENCHMARKS

SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	37
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



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

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.

REMOVAL PLAN LEGEND

- PAVEMENT REMOVAL
- 2" SURFACE REMOVAL
- PAVED SHOULDER REMOVAL
- COMB CURB & GUTTER REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- GUARDRAIL REMOVAL
- APPROACH SLAB REMOVAL
- ITEM REMOVAL

NOTES

1. SEE STRUCTURE PLANS FOR BRIDGE REMOVALS.
2. SEE DRAINAGE REMOVAL SHEET FOR DRAINAGE REMOVALS.

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

FILE NAME = 60D77_sht_rem_01.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
REMOVAL PLAN – WILLOW ROAD

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 389+75 TO STA. 404+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	38
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

REMOVAL PLAN LEGEND

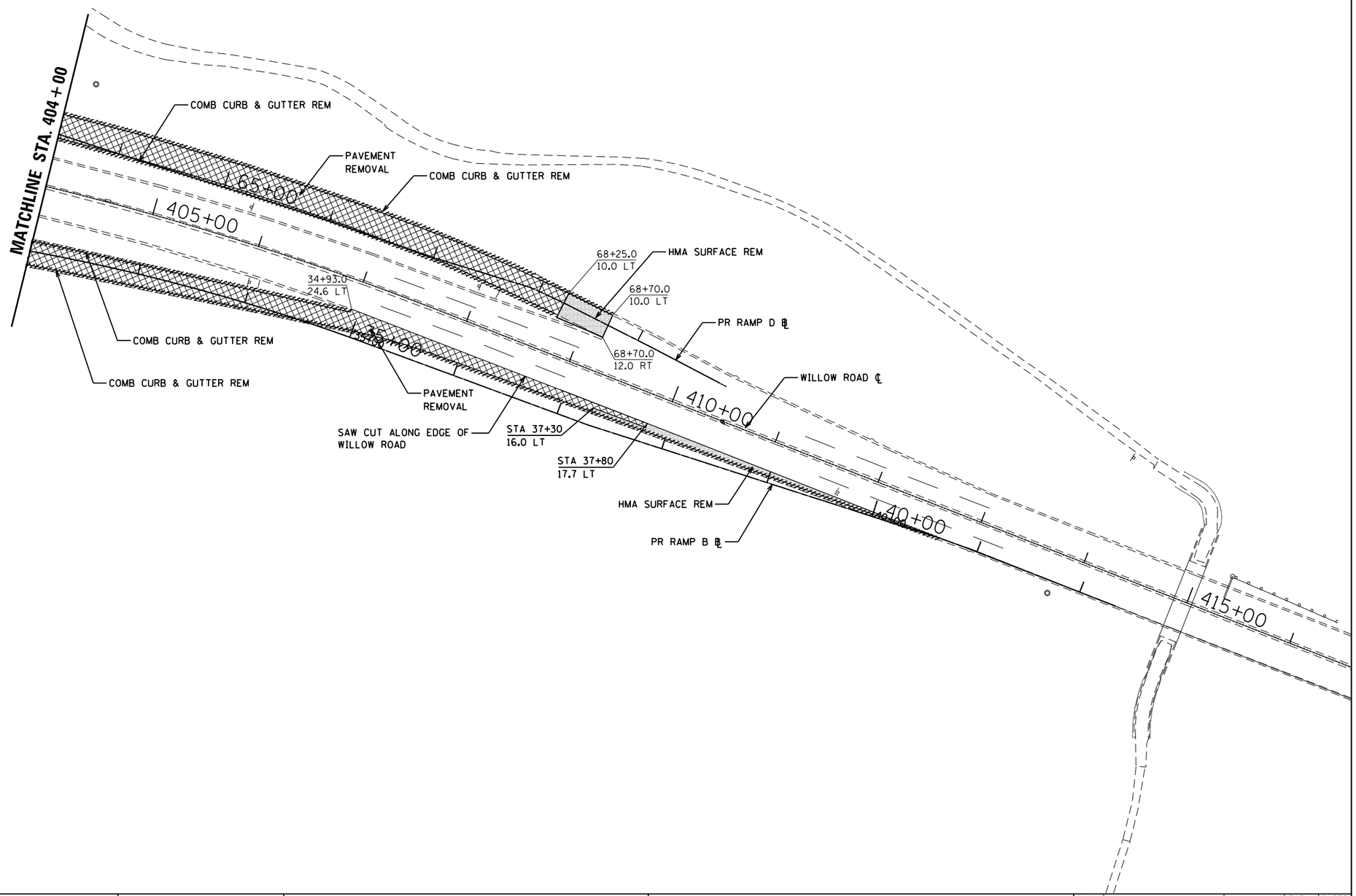
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- APPROACH SLAB REMOVAL
- 2" SURFACE REMOVAL
- COMB CURB & GUTTER REMOVAL
- GUARDRAIL REMOVAL
- ITEM REMOVAL

NOTES

1. SEE STRUCTURE PLANS FOR BRIDGE REMOVALS.
2. SEE DRAINAGE REMOVAL SHEET FOR DRAINAGE REMOVALS.

50 0 50 100
SCALE IN FEET

N



PLAN
SURVEYED
PLOTTED
HORIZ. CHECKED
VERT. CHECKED
R.O.W. CHECKED
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
HORIZ. CHECKED
VERT. CHECKED
R.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

FILE NAME = 60D77_sht_rem_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/25/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
REMOVAL PLAN – WILLOW ROAD

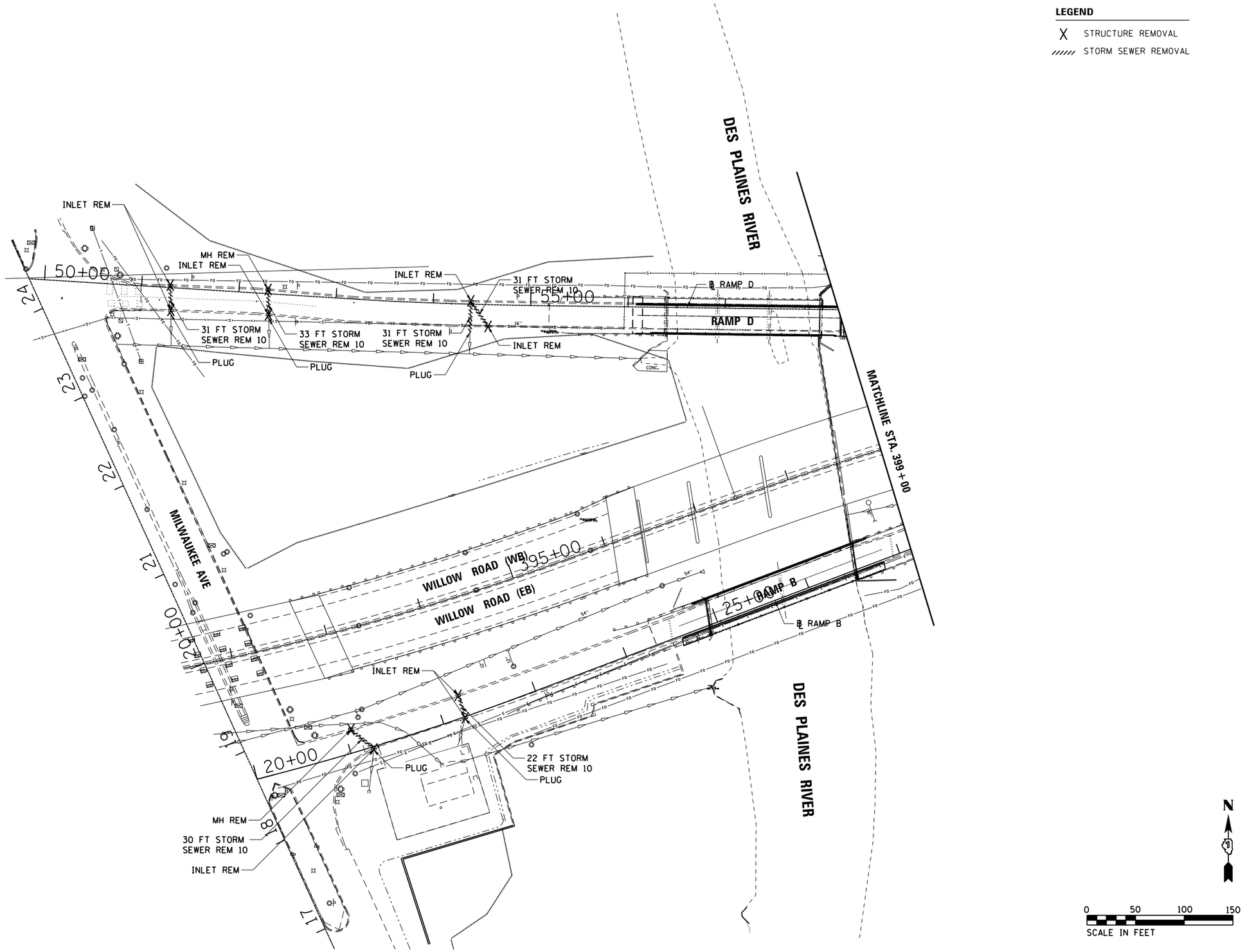
SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 404+00 | TO STA. 416+60

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	39
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

X STRUCTURE REMOVAL

////// STORM SEWER REMOVAL



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

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
DRAWING CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK		
NO.		

FILE NAME = 60D77_sht_rem_drn_01.dgn

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
DRAINAGE REMOVAL PLAN

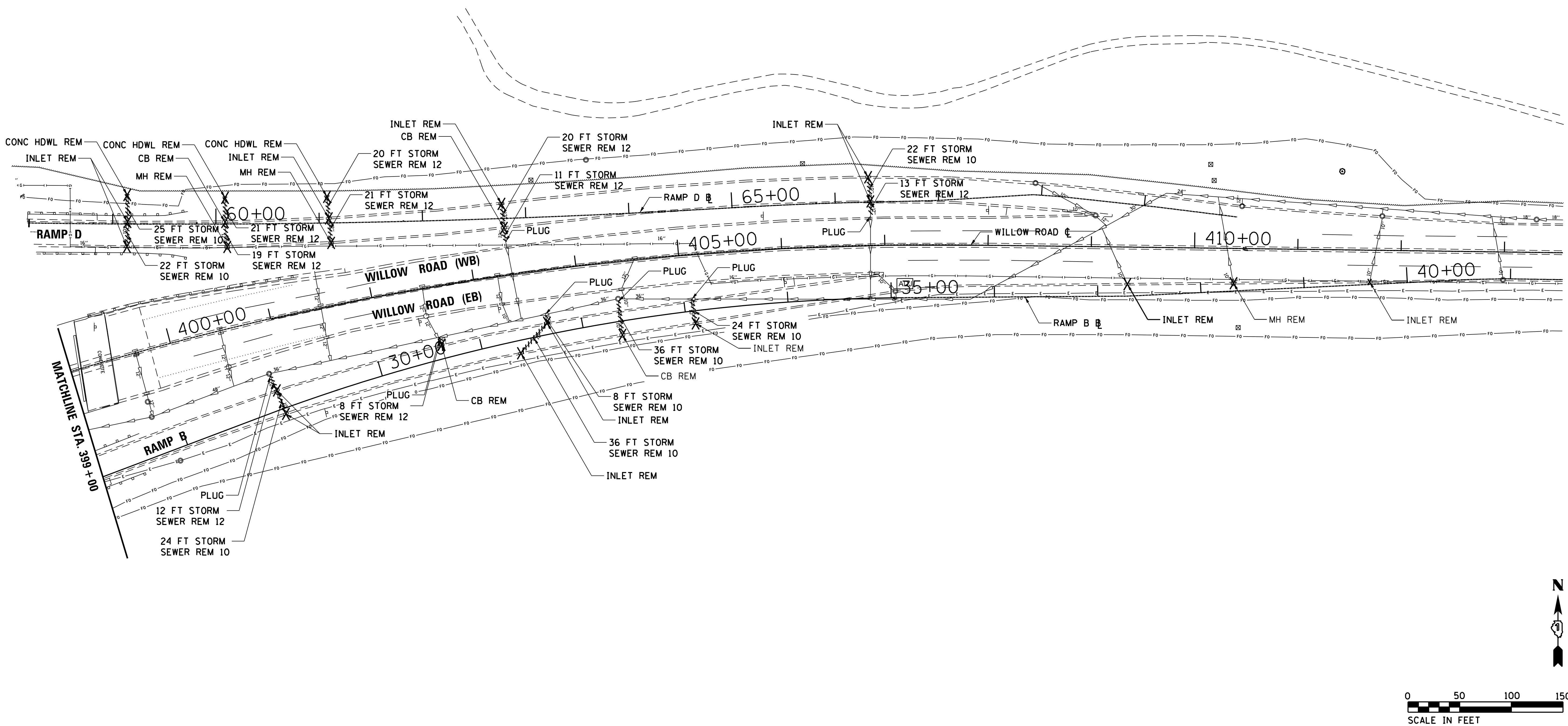
SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 392+00 TO STA. 399+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	40
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

LEGEND

X STRUCTURE REMOVAL

////// STORM SEWER REMOVAL



PLAN	SURVEYED / PLOTTED / ALIGNMENT CHECKED / RT. OF WAY CHECKED / CADD FILE NAME	BY	DATE
NOTE BOOK NO.			
PROFILE	SURVEYED / PLOTTED / GRADES CHECKED / BM. NOTED / STRUCTURE NOTAT'NS CHK'D	BY	DATE
NOTE BOOK NO.			

FILE NAME = 60D77_sht_rem_drn_02.dgn

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		DRAWN CJF	REVISED
	PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
	PLOT DATE = 1/24/2020	DATE 01/24/2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
DRAINAGE REMOVAL PLAN

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 399+00 TO STA. 413+88

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	41
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

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

50 0 50 100
SCALE IN FEET

N

TRAF BAR TRM T1 SPL TAN
STA. 23+31.1, 27.3' L
STA. 23+82.0, 26.5' L
LENGTH OF NEED POINT=
STA. 23+47.6

DEPRESSED CC&G LIMITS
STA. 23+00.5 TO STA. 23+71.9

TRAF BAR TERM T6
STA. 24+44.5, 26.5' L
STA. 24+83.9, 26.5' L

SPBGR TY A 6FT POSTS
STA. 23+82.0, 26.5' L
STA. 24+44.5, 26.5' L

DEPRESSED CC&G LIMITS
STA. 26+81.3 TO STA. 29+06.9

℄ WILLOW ROAD

WILLOW ROAD

DEPRESSED CC&G LIMITS
STA. 21+30.1 TO STA. 22+07.6

21+30.4
0.98' RT

PR PCC PAVEMENT
9" (JOINTED)

AGG SHLDS,
TYPE B 8"

B RAMP B
PGL RAMP B

RAMP B

300' TAPER

20+00
10.9' RT

22+00.0
0.00' LT

21+30.1
24.2' RT

22+07.6
26.5' RT

PR HMA DRIVEWAY
PAVEMENT, 8"

BEGIN IMPROVEMENTS
STA. 20+91.3

MILWAUKEE ROAD

PR PCC PAVEMENT
9" (JOINTED)

PR COMB CC&G
B-6.24

AGG SHLDS,
TYPE B 8"

PR PCC
SHLDS, 9"

MATCHLINE STA. 33+00

TRAF BAR TRM T1 SPL TAN
STA. 23+10.2, 3.1' R
STA. 23+61.1, 2.5' R
LENGTH OF NEED POINT=
STA. 23+26.7

DEPRESSED CC&G LIMITS
STA. 22+79.3 TO STA. 23+51.7

SPBGR TY A 6FT POSTS
STA. 23+61.1, 2.5' R
STA. 24+23.6, 2.5' R

BR APPR PVT CON LIMIT
STA. 24+45.9

TRAF BAR TERM T6
STA. 24+23.6, 2.5' R
STA. 24+63.0, 2.5' R

DES PLAINES
RIVER

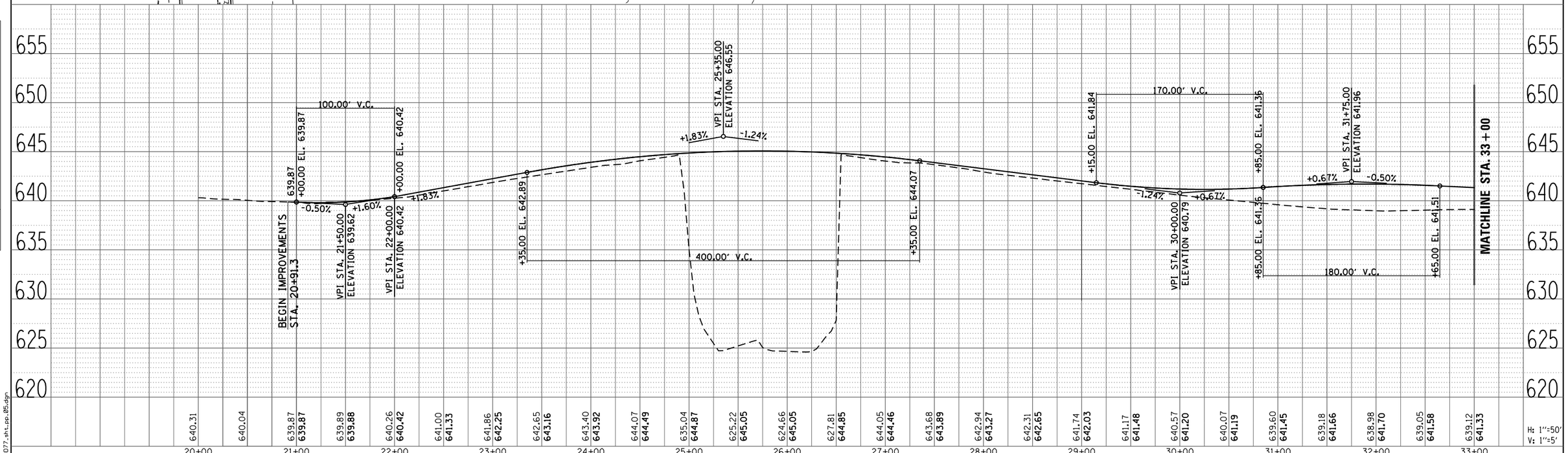
BR APPR PVT CON LIMIT
STA. 27+02.5

TRAF BAR TERM T6
STA. 26+82.0, 3.1' R
STA. 27+18.9, 3.1' R

TRAF BAR TRM T2
STA. 28+68.9, 3.1' R
STA. 28+81.4, 3.1' R

SPBGR TY A 6FT POSTS
STA. 27+18.9, 3.1' R
STA. 28+68.9, 3.1' R

NOTES
1. SEE STRUCTURE PLANS FOR BRIDGE INFORMATION AND LOCATION.



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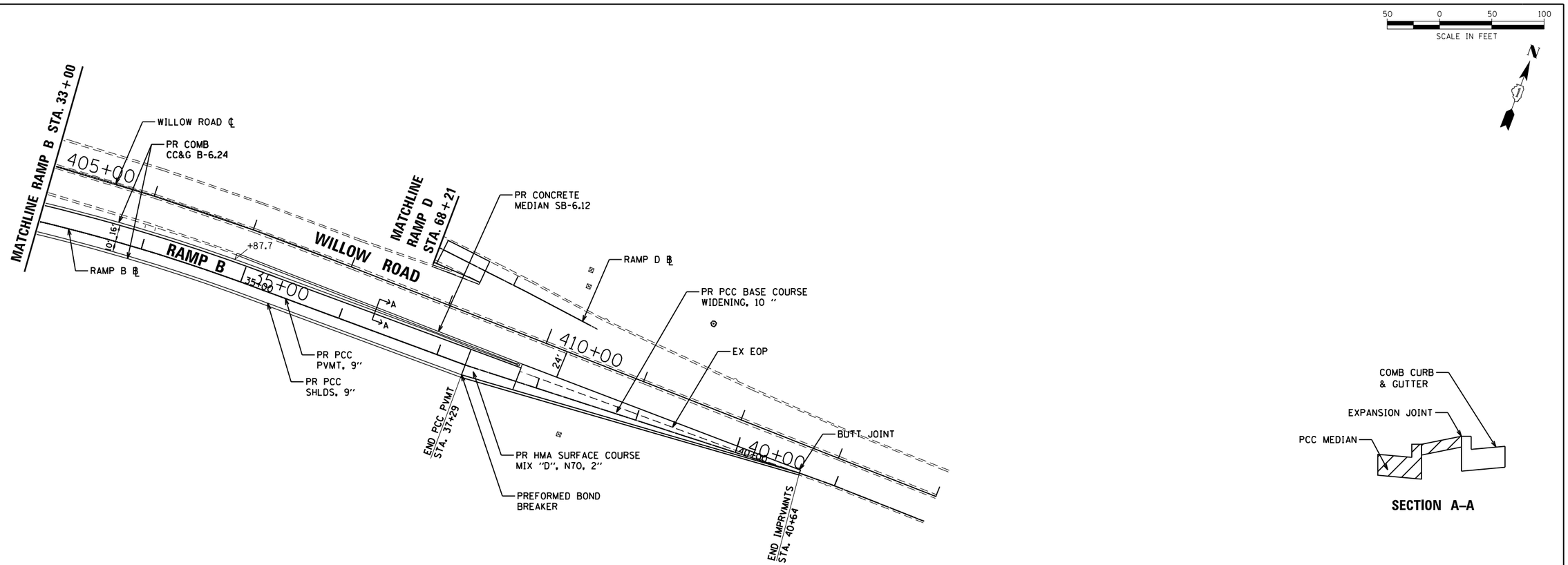
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

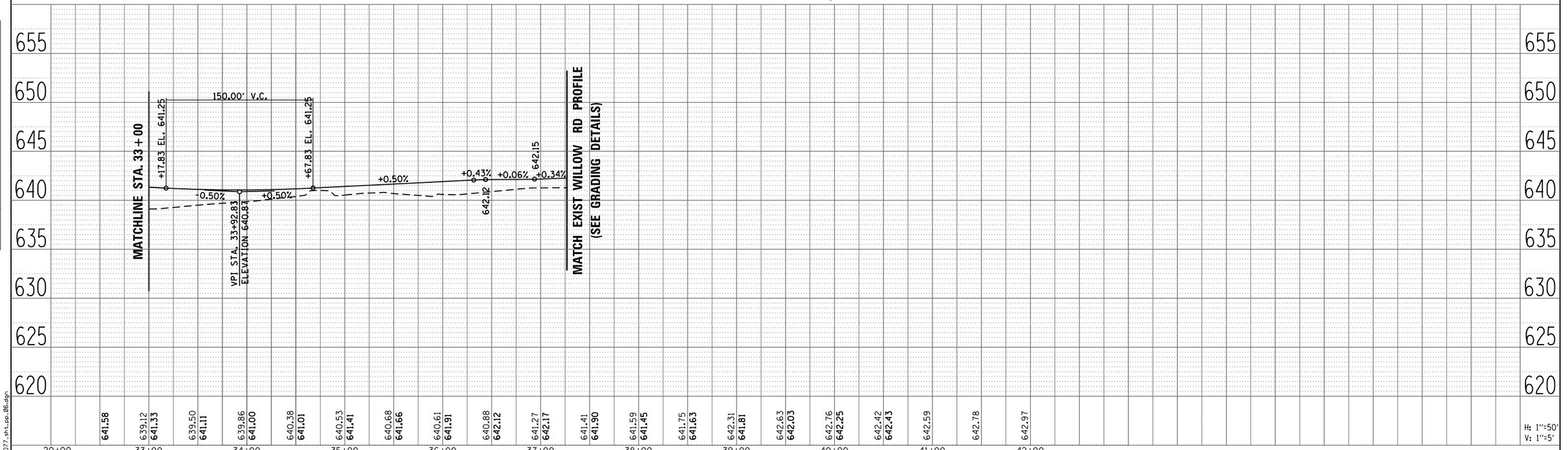
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PLAN & PROFILE
RAMP B

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 20+00 TO STA. 33+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	42
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		





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

PROFILE: SURVEYED | PLOTTED | DRAWN | QUANTITIES CHECKED | BM. NOTED | STRUCTURE NOTATNS CHKD | NOTE BOOK | NO. | BY | DATE

FILE NAME = 60D77_sht_pp_06.dgn

Wight

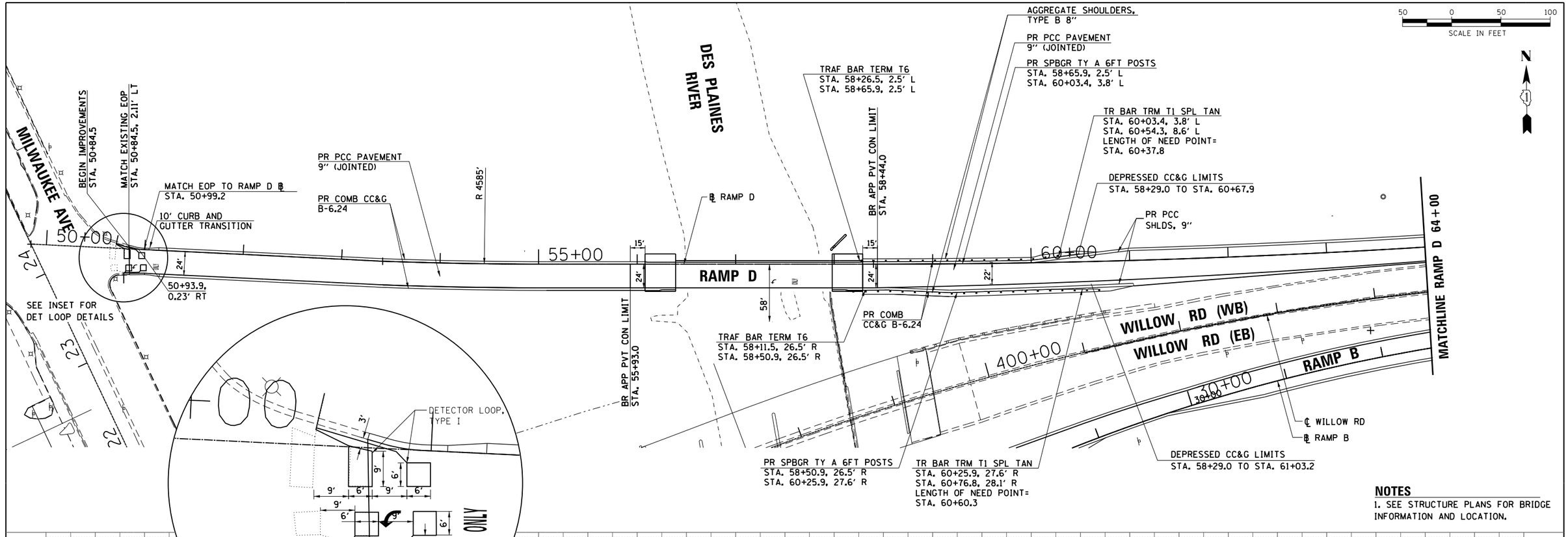
USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 100.0000 '/ in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PLAN & PROFILE
RAMP B

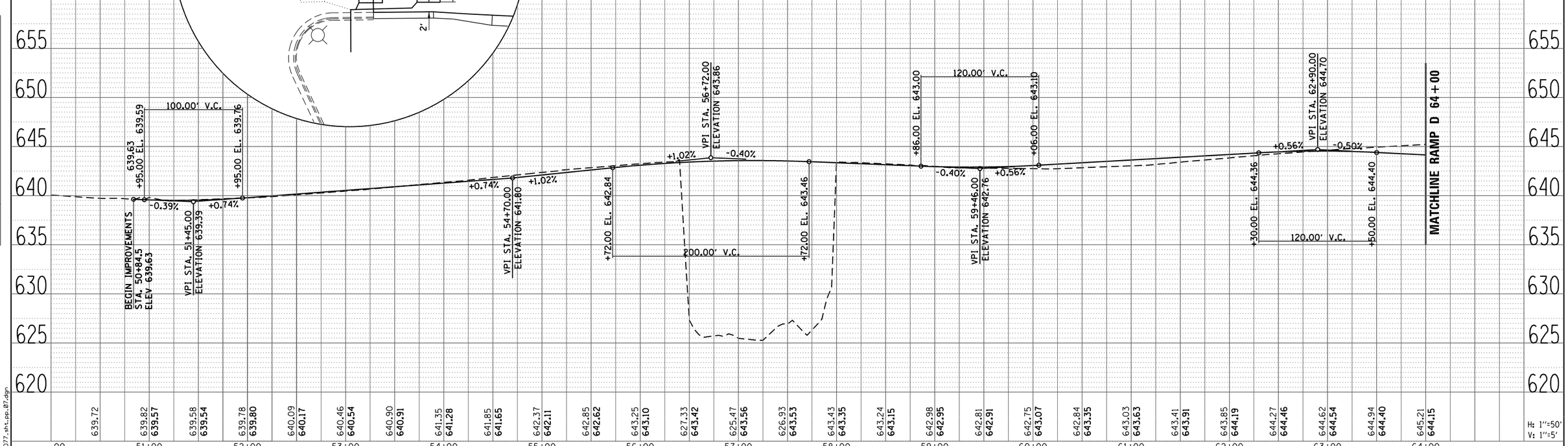
SCALE: 1'' = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 33+00 | TO STA. 42+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	43
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES

1. SEE STRUCTURE PLANS FOR BRIDGE INFORMATION AND LOCATION.



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

PROFILE: SURVEYED; PLOTTED; GRADES CHECKED; BM. NOTED; STRUCTURE NOTATNS CHKD; NOTE BOOK; NO.; BY; DATE

FILE NAME = 60D77-sht-pp-07.dgn

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

Wight

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

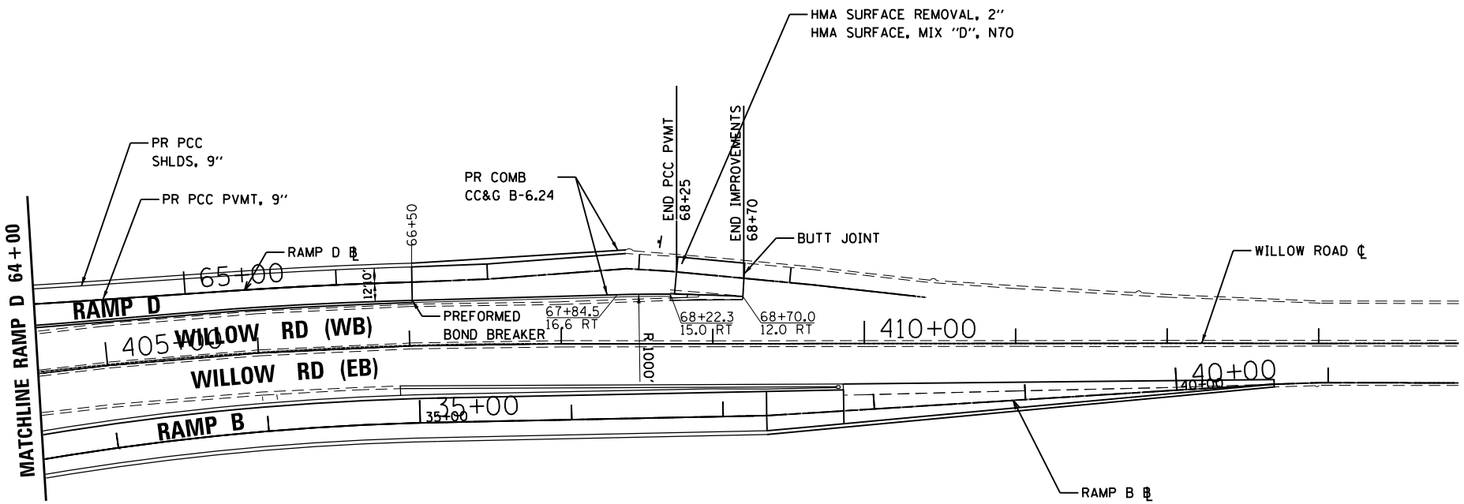
WILLOW ROAD AT DES PLAINES RIVER
PLAN & PROFILE
RAMP D

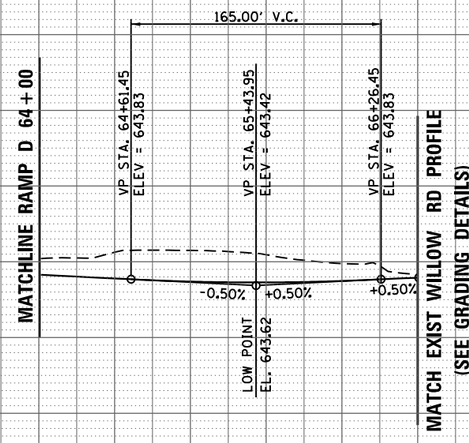
SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 52+06 TO STA. 64+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	44
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

50 0 50 100
SCALE IN FEET

N





660 655 650 645 640 635 630 625

645.21 644.15 | 645.64 | 645.75 643.68 | 645.46 643.62 | 644.88 643.72 | 644.14 643.95 | 643.60 643.70 | 642.98 643.02 | 642.30 642.33 | 641.83 | 641.51 | 641.58

64+00 65+00 66+00 67+00 68+00 69+00

H: 1"=50'
V: 1"=5'

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

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

FILE NAME = 60D77_sht_pp_08.dgn

Wight

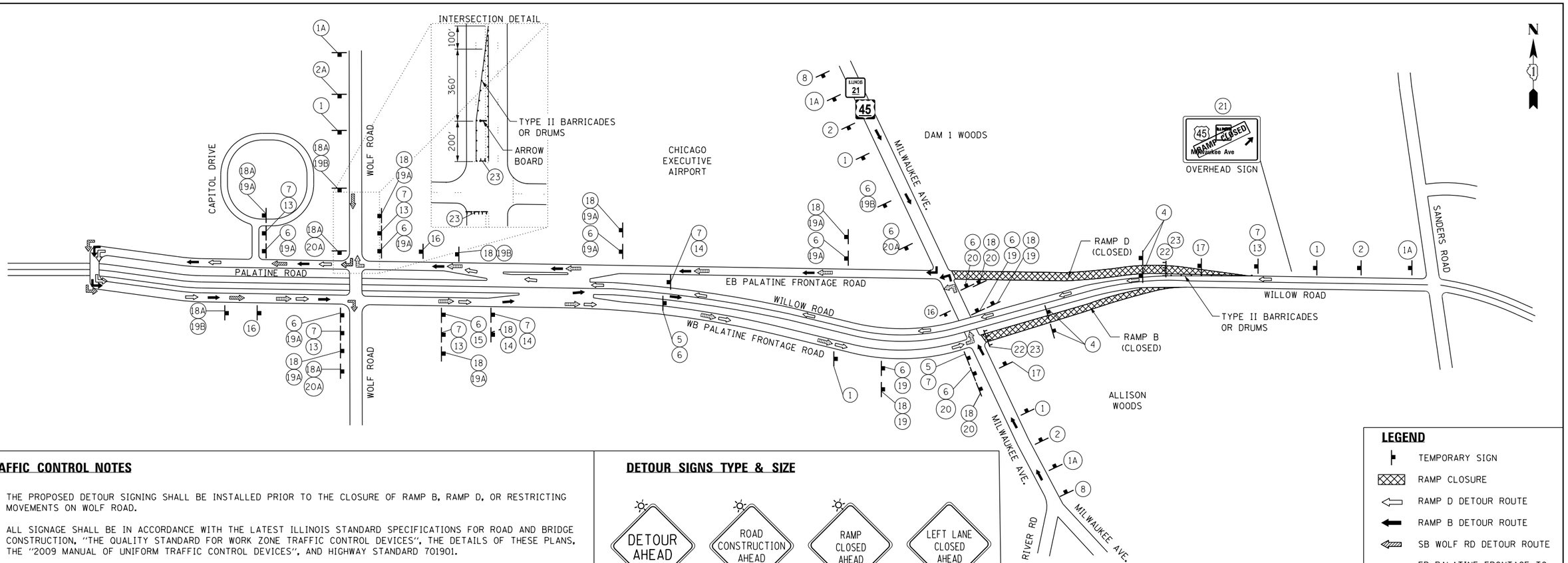
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PLAN & PROFILE
RAMP D

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 64+00 | TO STA. 69+00

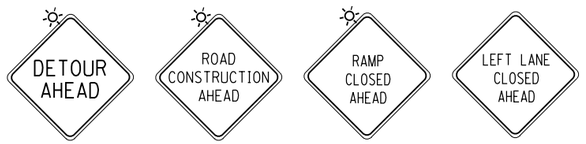
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	45
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



TRAFFIC CONTROL NOTES

1. THE PROPOSED DETOUR SIGNING SHALL BE INSTALLED PRIOR TO THE CLOSURE OF RAMP B, RAMP D, OR RESTRICTING MOVEMENTS ON WOLF ROAD.
2. ALL SIGNAGE SHALL BE IN ACCORDANCE WITH THE LATEST ILLINOIS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, "THE QUALITY STANDARD FOR WORK ZONE TRAFFIC CONTROL DEVICES", THE DETAILS OF THESE PLANS, THE "2009 MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", AND HIGHWAY STANDARD 701901.
3. THE CONTRACTOR MUST BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS AND OTHER DEVICES INSTALLED BY THE CONTRACTOR ARE IN PLACE AND OPERATING 24 HOURS EACH DAY INCLUDING SUNDAYS AND HOLIDAYS DURING THE TIME THIS CONSTRUCTION IS IN EFFECT.
4. AS A MINIMUM, ALL AMBER FLASHING LIGHTS THAT ARE REQUIRED MUST MEET THE REQUIREMENTS FOR TYPE A - LOW INTENSITY FLASHING LIGHTS IN ARTICLE 702.04 OF THE STANDARD SPECIFICATIONS. ALL LIGHTS SHALL OPERATE DURING HOURS OF DARKNESS. ONLY LIGHTS THAT HAVE BEEN APPROVED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION MUST BE USED.
5. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL PRIVATE AND COMMERCIAL DRIVES DURING RECONSTRUCTION.
6. ANY EXISTING SIGNS THAT CONTRADICT THE DETOUR SIGNAGE AS SHOWN ON THE PLANS SHALL BE COVERED PRIOR TO OPENING THE DETOUR ROUTE. THIS WORK SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" AND WILL NOT BE PAID FOR SEPARATELY. THE COVERS SHALL BE REMOVED AT THE TIME THE DETOUR ROUTE SIGNS ARE REMOVED.
7. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS BEFORE BEGINNING WORK.
8. THE CONTRACTOR SHALL FURNISH ANY ADDITIONAL SIGNS AND TRAFFIC CONTROL DEVICES AS REQUIRED BY THE ENGINEER. THE COST SHALL BE INCLUDED IN THE COST FOR "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" PER ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.
9. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OTHER ROAD WORK IN THE AREA.
10. ALL SIGNS SHOWN SHALL BE FURNISHED, ERECTED, AND MAINTAINED BY THE CONTRACTOR, AND SHALL BE POST-MOUNTED IN THE GROUND PER ARTICLE 701.14 OF THE STANDARD SPECIFICATIONS AND STANDARD 701901.
11. ALL DETOUR SIGNS SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE ROAD IS REOPENED TO TRAFFIC.
12. RAMP CLOSURE SHALL FOLLOW THE LATEST VERSION OF THE IDOT HIGHWAY STANDARDS AND DISTRICT 1 STANDARD DETAIL TC-08.
13. REFER TO DISTRICT I STANDARD DETAIL TC-21 FOR TYPICAL SIGN SPACING.
14. 14 DAYS PRIOR TO INSTALLING DETOUR SIGNAGE, CONTRACTOR SHALL INSTALL CHANGEABLE MESSAGE SIGNS ON RAMP B & RAMP D WARNING TRAFFIC OF IMPENDING RAMP CLOSURE. SIGNS SHALL READ, PHASE 1 - "RAMP CLOSURE" PHASE 2 - "BEGINS WEEK OF XX/XX" THIS WORK SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION (SPECIAL)" AND WILL NOT BE PAID FOR SEPARATELY.

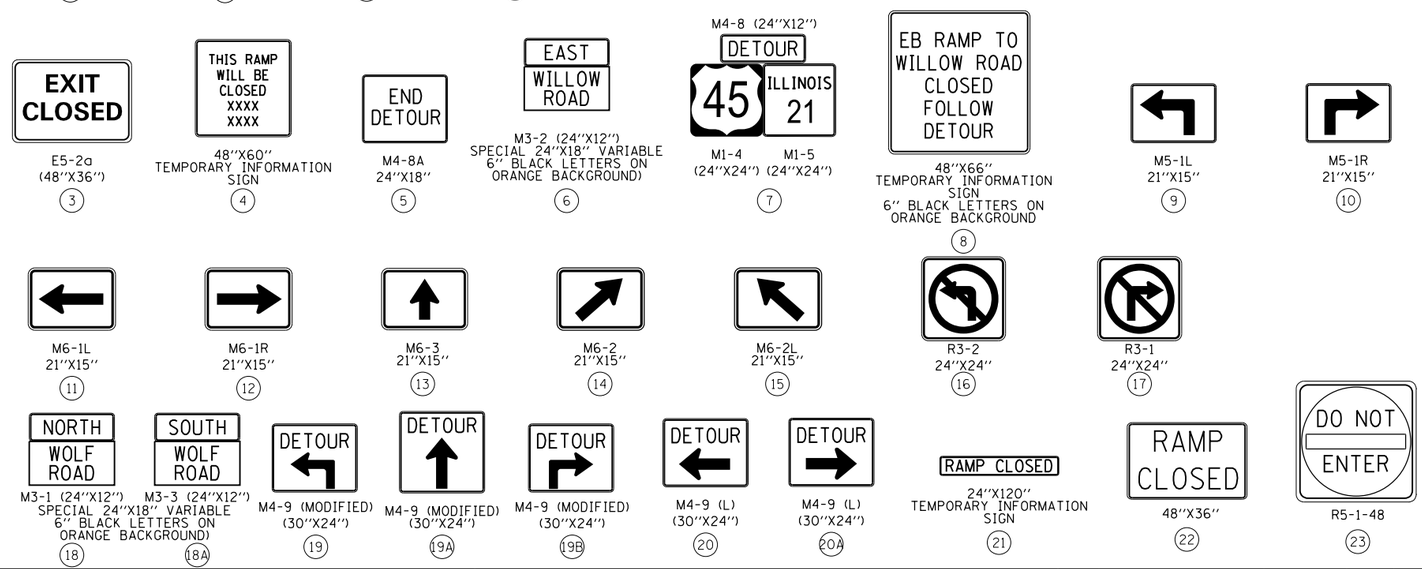
DETOUR SIGNS TYPE & SIZE



W20-2 (48"x48") (1)
W20-IL03(0)-48 (1A)
W20-30-48 (48"X48") (2)
W20-5L(0)-48 (48"X48") (2A)

LEGEND

- TEMPORARY SIGN
- RAMP CLOSURE
- RAMP D DETOUR ROUTE
- RAMP B DETOUR ROUTE
- SB WOLF RD DETOUR ROUTE
- EB PALATINE FRONTAGE TO NB WOLF RD DETOUR ROUTE
- TY III BARRICADE WITH 2 FLASHING LIGHTS



E5-2a (48"X36") (3)
48"X60" TEMPORARY INFORMATION SIGN (4)
M4-8A 24"X18" (5)
M3-2 (24"X12") SPECIAL 24"X18" VARIABLE 6" BLACK LETTERS ON ORANGE BACKGROUND (6)
M1-4 (24"X24") M1-5 (24"X24") (7)
48"X66" TEMPORARY INFORMATION SIGN 6" BLACK LETTERS ON ORANGE BACKGROUND (8)
M5-1L 21"X15" (9)
M5-1R 21"X15" (10)
M6-1L 21"X15" (11)
M6-1R 21"X15" (12)
M6-3 21"X15" (13)
M6-2 21"X15" (14)
M6-2L 21"X15" (15)
R3-2 24"X24" (16)
R3-1 24"X24" (17)
M3-1 (24"X12") SPECIAL 24"X18" VARIABLE 6" BLACK LETTERS ON ORANGE BACKGROUND (18)
M3-3 (24"X12") (18A)
M4-9 (MODIFIED) (30"X24") (19)
M4-9 (MODIFIED) (30"X24") (19A)
M4-9 (MODIFIED) (30"X24") (19B)
M4-9 (L) (30"X24") (20)
M4-9 (L) (30"X24") (20A)
24"X120" TEMPORARY INFORMATION SIGN (21)
48"X36" (22)
R5-1-48 (23)

USER NAME = untitled	DESIGNED KMB		REVISED
	DRAWN CJF		REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH		REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
TRAFFIC CONTROL DETOUR PLAN

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	46
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

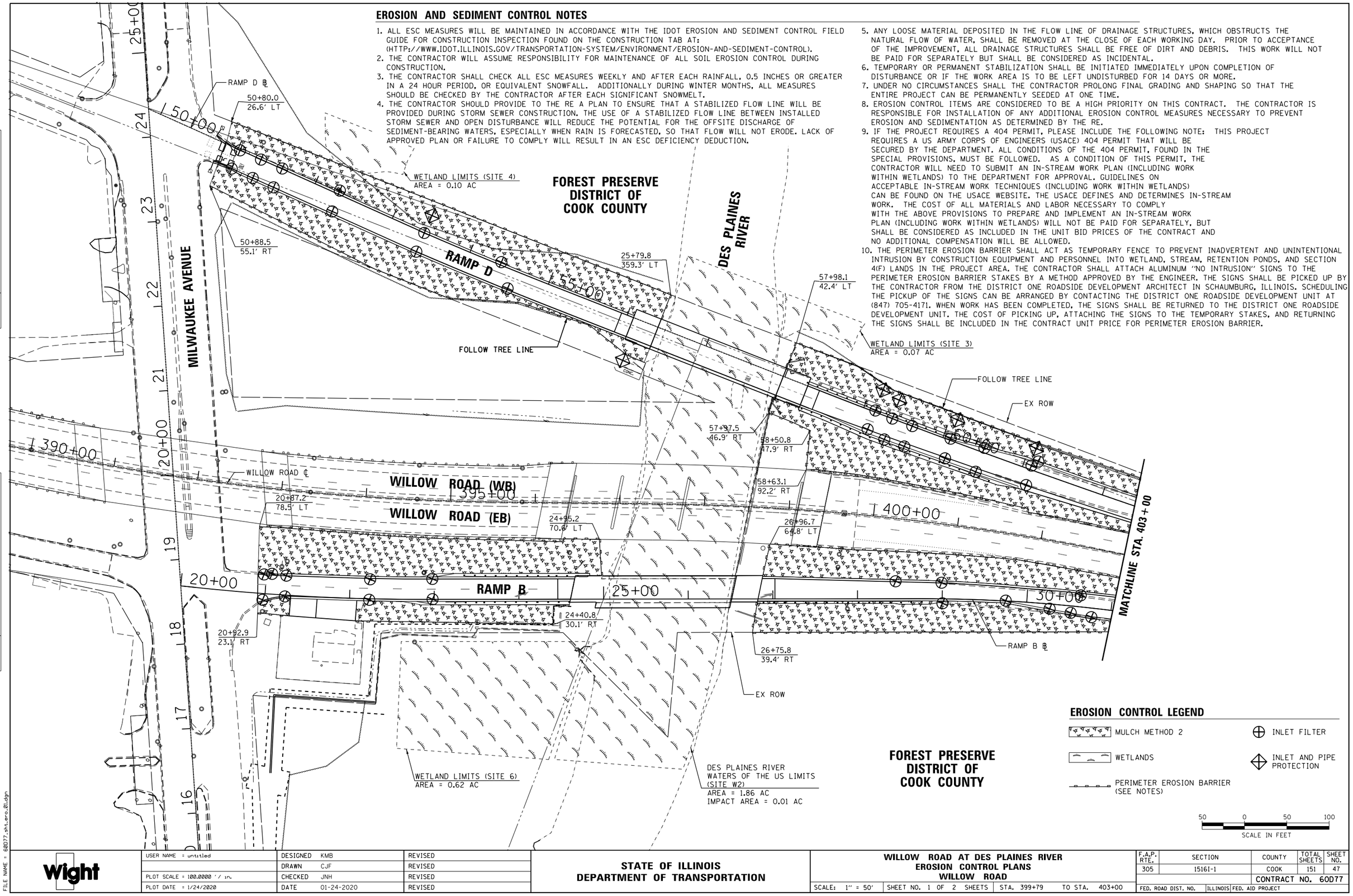
PLAN: SURVEYED, PLOTTED, DESIGNED, CHECKED, QUANTITIES CHECKED, ALIGNMENT CHECKED, RT. OF WAY CHECKED, CADD FILE NAME, NOTE BOOK, NO.; BY, DATE

PROFILE: SURVEYED, PLOTTED, DESIGNED, CHECKED, BENCH MARK NOTED, STRUCTURE NOTATIONS CHKD, NOTE BOOK, NO.; BY, DATE

FILE NAME = 60D77_sht_mo2_gen_03.dgn

EROSION AND SEDIMENT CONTROL NOTES

1. ALL ESC MEASURES WILL BE MAINTAINED IN ACCORDANCE WITH THE IDOT EROSION AND SEDIMENT CONTROL FIELD GUIDE FOR CONSTRUCTION INSPECTION FOUND ON THE CONSTRUCTION TAB AT: (HTTP://WWW.IDOT.ILLINOIS.GOV/TRANSPORTATION-SYSTEM/ENVIRONMENT/EROSION-AND-SEDIMENT-CONTROL).
2. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL CHECK ALL ESC MEASURES WEEKLY AND AFTER EACH RAINFALL, 0.5 INCHES OR GREATER IN A 24 HOUR PERIOD, OR EQUIVALENT SNOWFALL. ADDITIONALLY DURING WINTER MONTHS, ALL MEASURES SHOULD BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT.
4. THE CONTRACTOR SHOULD PROVIDE TO THE RE A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THE USE OF A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE WILL REDUCE THE POTENTIAL FOR THE OFFSITE DISCHARGE OF SEDIMENT-BEARING WATERS, ESPECIALLY WHEN RAIN IS FORECASTED, SO THAT FLOW WILL NOT ERODE. LACK OF APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN ESC DEFICIENCY DEDUCTION.
5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCIDENTAL.
6. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED IMMEDIATELY UPON COMPLETION OF DISTURBANCE OR IF THE WORK AREA IS TO BE LEFT UNDISTURBED FOR 14 DAYS OR MORE.
7. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.
8. EROSION CONTROL ITEMS ARE CONSIDERED TO BE A HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE RE.
9. IF THE PROJECT REQUIRES A 404 PERMIT, PLEASE INCLUDE THE FOLLOWING NOTE: THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. ALL CONDITIONS OF THE 404 PERMIT, FOUND IN THE SPECIAL PROVISIONS, MUST BE FOLLOWED. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN (INCLUDING WORK WITHIN WETLANDS) TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES (INCLUDING WORK WITHIN WETLANDS) 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 (INCLUDING WORK WITHIN WETLANDS) 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.
10. THE PERIMETER EROSION BARRIER SHALL ACT AS TEMPORARY FENCE TO PREVENT INADVERTENT AND UNINTENTIONAL INTRUSION BY CONSTRUCTION EQUIPMENT AND PERSONNEL INTO WETLAND, STREAM, RETENTION PONDS, AND SECTION 4(F) LANDS IN THE PROJECT AREA. THE CONTRACTOR SHALL ATTACH ALUMINUM "NO INTRUSION" SIGNS TO THE PERIMETER EROSION BARRIER STAKES BY A METHOD APPROVED BY THE ENGINEER. THE SIGNS SHALL BE PICKED UP BY THE CONTRACTOR FROM THE DISTRICT ONE ROADSIDE DEVELOPMENT ARCHITECT IN SCHAUMBURG, ILLINOIS. SCHEDULING THE PICKUP OF THE SIGNS CAN BE ARRANGED BY CONTACTING THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171. WHEN WORK HAS BEEN COMPLETED, THE SIGNS SHALL BE RETURNED TO THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT. THE COST OF PICKING UP, ATTACHING THE SIGNS TO THE TEMPORARY STAKES, AND RETURNING THE SIGNS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER.



EROSION CONTROL LEGEND

- MULCH METHOD 2
- WETLANDS
- PERIMETER EROSION BARRIER (SEE NOTES)
- INLET FILTER
- INLET AND PIPE PROTECTION

50 0 50 100
SCALE IN FEET

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

PROFILE: SURVEYED, PLOTTED, GRADES CHECKED, B.M. NOTED, STRUCTURE NO'S/ITMS CHK'D, NOTE BOOK, NO., BY, DATE

FILE NAME = 60D77_sht_ero_01.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EROSION CONTROL PLANS
WILLOW ROAD

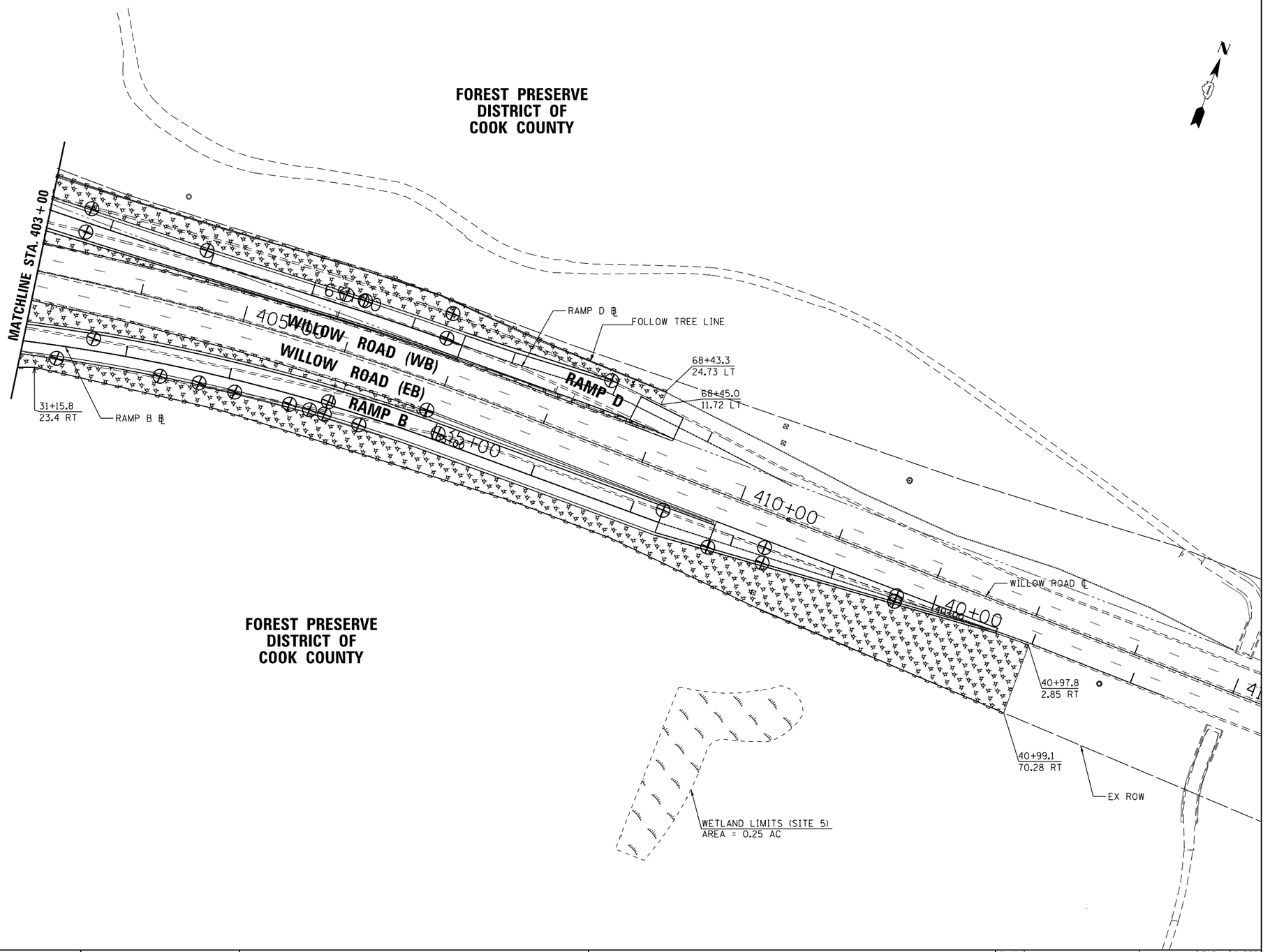
SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 399+79 TO STA. 403+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	47
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

EROSION CONTROL LEGEND

- MULCH METHOD 2
- WETLANDS
- PERIMETER EROSION BARRIER (SEE NOTES)
- INLET FILTER
- INLET AND PIPE PROTECTION

50 0 50 100
SCALE IN FEET



PLAN — SURVEYED; PLOTTED; QUANTITIES CHECKED; ALIGNMENT, R/T. OF WAY CHECKED; CADD FILE NAME; NOTE BOOK; NO. ____; BY; DATE

PROFILE — SURVEYED; PLOTTED; QUANTITIES CHECKED; B.M. NOTED; STRUCTURE NOTATNS CHKD; NOTE BOOK; NO. ____; BY; DATE

FILE NAME = 60D77_sht_ero_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
EROSION CONTROL PLANS
WILLOW ROAD

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 403+00 TO STA. 415+29

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	48
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STA. 51+30.1, 0.0' LT
D3 CB TA 4 DIA T 24F&G
RIM = 639.52
INV (S) = 635.05
INV (E,W) = 635.25

24 LF STORM SEW
D1 CL A 1 12 @0.50%

STA. 51+03.1, 0.0' LT
D1 INLET TA T11F&G
RIM = 639.56
INV = 635.37

D2 24 LF STORM SEW
CL A 1 12 @0.50%

D2 STA. 51+57.08, 0.0' LT
INLET TA T24F&G
RIM = 639.56
INV = 635.37

STA. 51+02.9, 23.85' RT
D4 INLET TA T11F&G
RIM = 639.56
INV = 635.17

24 LF STORM SEW
D4 CL A 1 12 @0.50%

STA. 51+30.1, 24.0' RT
D6 SEE NOTE *2
CB TA 4 DIA T24F&G
RIM = 639.52
INV (S) = 634.55+/- M.E., V.I.F.
INV (N) = 634.85
INV (E,W) = 635.05

D5 STA. 51+57.08, 24.0' RT
INLET TA T24F&G
RIM = 639.56
INV = 635.17

D5 24 LF STORM SEW
CL A 1 12 @0.50%

D3 20 LF STORM SEW
CL A 1 12 @1.0%

D9G STA. 54+00.0, 22.5' LT
GRATING-C FL END S 12

D9 STA. 54+00.00, 22.5' LT
PRC REINF E SECT 12
INV = 636.57

D7 14 LF STORM SEW
CL A 1 12 @1.0%

D8 STA. 54+00.0, 0.0' LT
CB TA 4 DIA T24F&G
RIM = 641.04
INV (N) = 636.71
INV (S) = 636.91

D6 21 LF STORM SEW
CL A 1 12 @0.50%

D7 STA. 54+00.0, 24.0' RT
INLET TA T24F&G
RIM = 641.04
INV (N) = 637.02

B4 STA. 21+23.80, 22.80' LT
CB TA 5 DIA T24F&G
RIM = 639.57
INV (N) = 635.78
INV (W) = 636.08
INV (S) = 635.88

B2 22 LF STORM SEW
CL A 1 12 @1.00%

DES PLAINES RIVER

RAMP D

℄ RAMP B

CONC.

MATCHLINE STA. 399+00

A1 EXISTING STRUCTURE (BURIED)
ADJUST TO GRADE.
REPLACE TYPE 1 F&CL
EX. INVERT = 635.3+/-

8 LF STORM SEW
B4 CL A 1 12 @1.0% MIN.
CONNECT TO EXISTING STRUCTURE @ INV=635.7+/-

WILLOW ROAD (WB)

395+00

WILLOW ROAD (EB)

25+00 RAMP B

℄ RAMP B

B3 23 LF STORM SEW
CL A 1 12 @1.00%

B3 STA. 20+97.3, 22.5' LT
INLET TA T11F&G
RIM = 639.64
INV (E) = 636.31

B5 STA. 22+97.90, 0' RT
INLET TA T24F&G
RIM = 641.97
INV (N) = 638.55

B5 21 LF STORM SEW
CL A 1 12 @1.00%

B6 STA. 22+97.90, 24' LT
CB TA 4 DIA T24F&G
RIM = 641.97
INV (N) = 638.24
INV (S) = 638.34

B1 STA. 20+97.35, 8.40' RT
INLET TA T11F&G
RIM = 639.64
INV (E) = 636.54

B1 24 LF STORM SEW
CL A 1 12 @1.00%

B6 9 LF STORM SEW
CL A 1 12 @1.0% MIN.
CONNECT TO EXISTING
STRUCTURE @INV=638.15+/-

B2 STA. 21+23.80, 1.45' RT
CB TA 4 DIA T24F&G
RIM = 639.57
INV (N) = 636.10
INV (W) = 636.30

A2 EXISTING STRUCTURE (BURIED)
ADJUST TO GRADE.
REPLACE TYPE 1 F&CL
EX. INVERT = 638.0+/-

DES PLAINES RIVER

N

0 50 100 150
SCALE IN FEET

NOTES

*1 SEE DRAINAGE REMOVAL SHEET FOR DRAINAGE REMOVAL DETAILS.

*2 INSTALL STRUCTURE D6 OVER EXISTING 12'' STORM SEWER. CONTRACTOR TO VERIFY IN FIELD 12'' INVERT AT LOCATION PRIOR TO SETTING STRUCTURE. NOTIFY ENGINEER OF ANY DISCREPANCY.

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

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

FILE NAME = 60D77_sht_drn_01.dgn

Wight

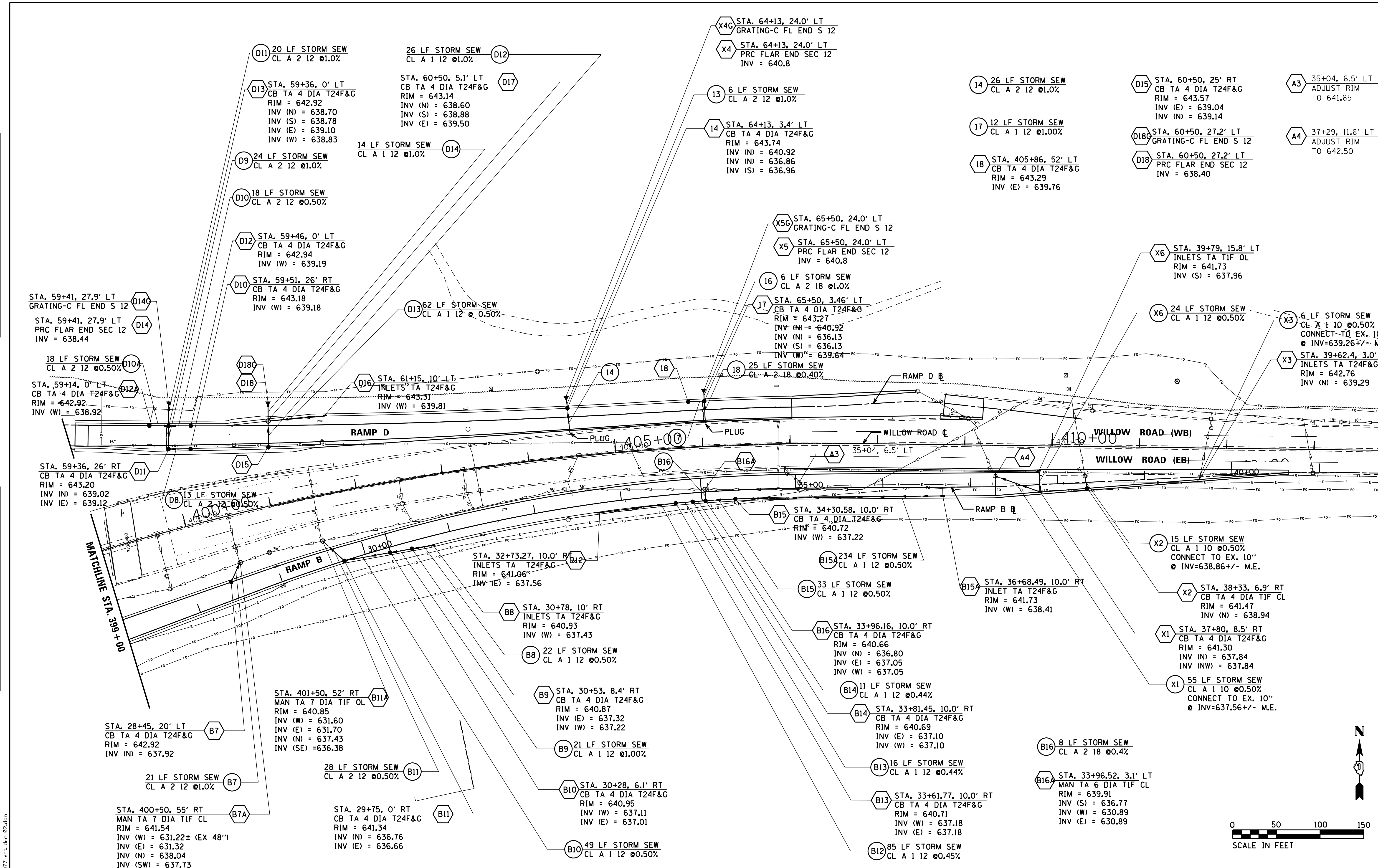
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PROPOSED DRAINAGE PLAN

SCALE: 1'' = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 392+00 TO STA. 399+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	49
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



PLAN: SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME / NOTE BOOK / NO. — BY — DATE

PROFILE: SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHECKED / NOTE BOOK / NO. — BY — DATE

FILE NAME = 60D77_sht_drn_02.dgn

Wight	USER NAME = untitled	DESIGNED KMB	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN CJF	REVISED	
	PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED	
	PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

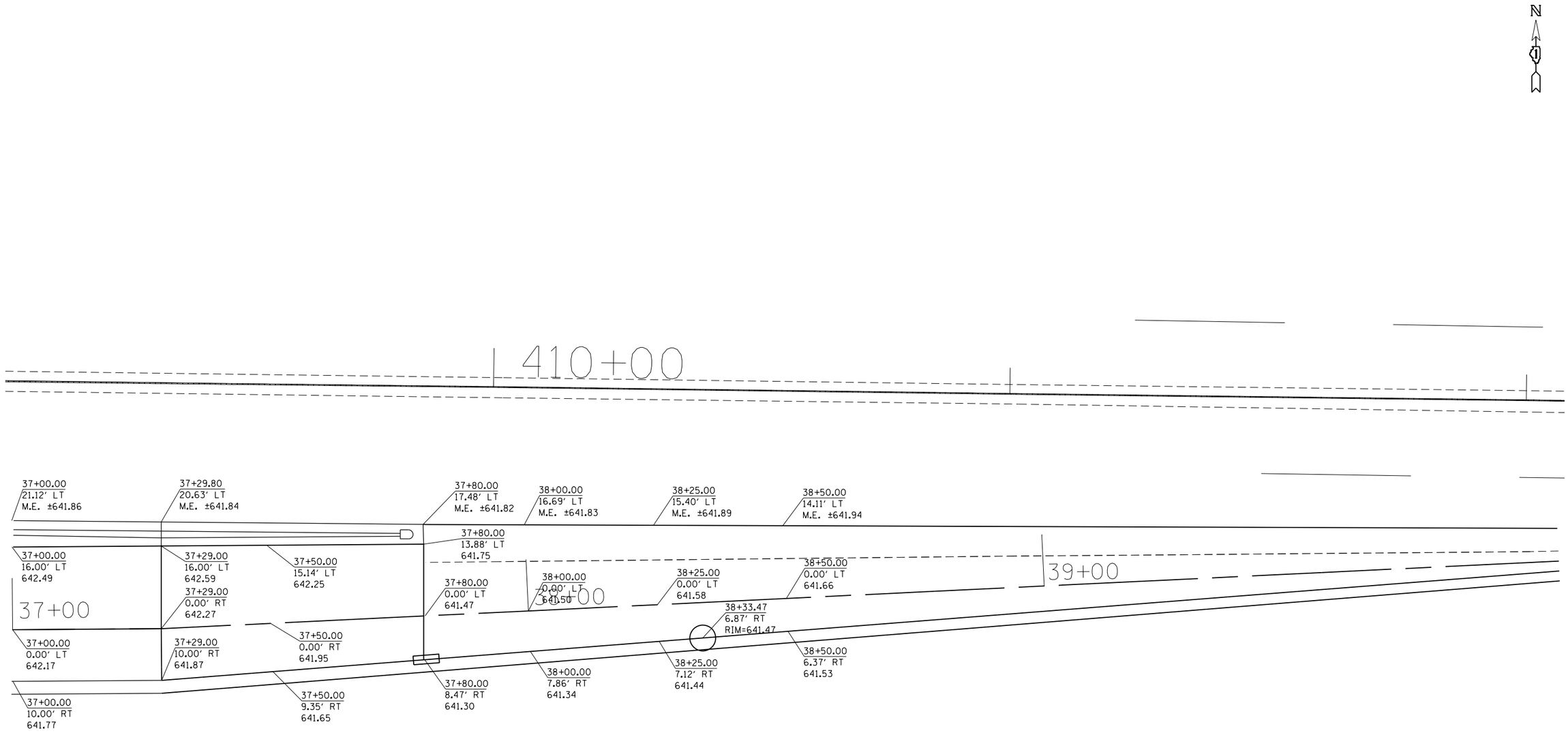
WILLOW ROAD AT DES PLAINES RIVER
PROPOSED DRAINAGE PLAN

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 399+00 TO STA. 413+88

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	50
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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

PROFILE
SURVEYED
PLOTTED
CROSS SECTIONS CHECKED
BM. NOTED
STRUCTURE NOTATIONS CHKD
NOTE BOOK
NO.
BY
DATE



USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

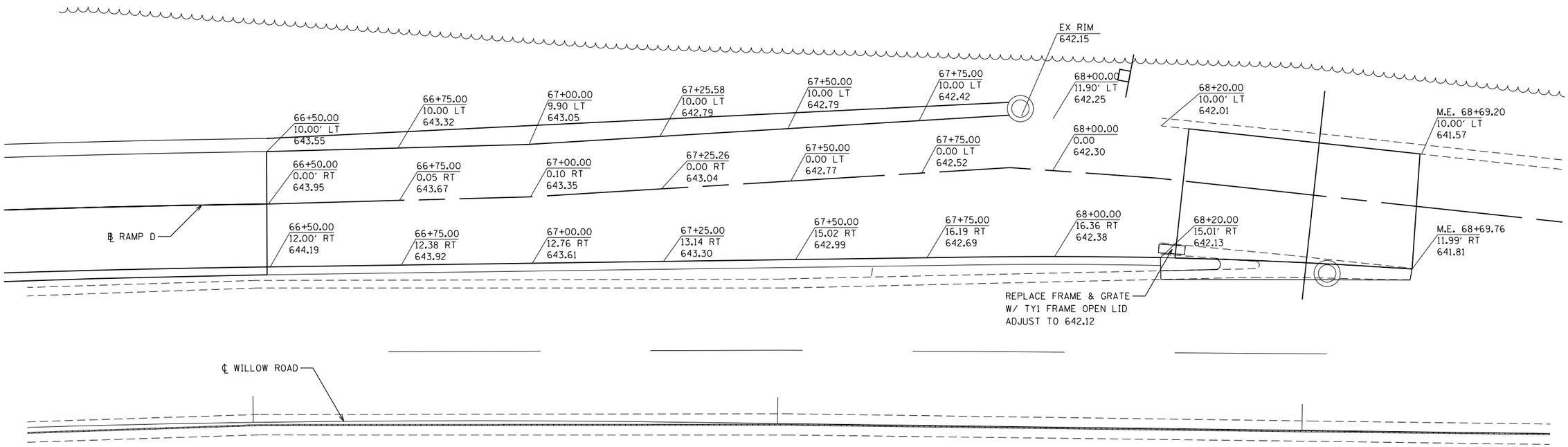
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
RAMP B ELEVATION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	51
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

FILE NAME = 60D77_sht_gorBdet.dgn



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

PROFILE
SURVEYED
PLOTTED
CROSS CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

FILE NAME = 60D77_sht_geo60de1.dgn

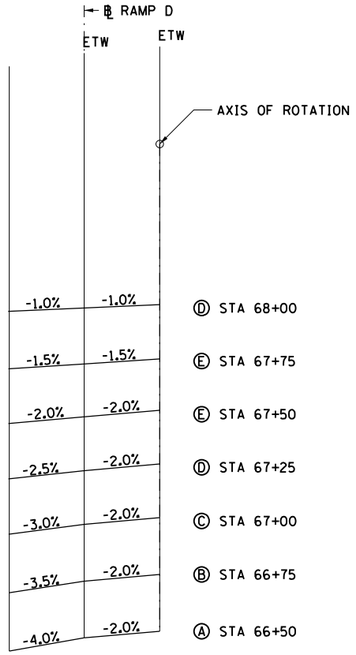
USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 20.0000 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
RAMP D ELEVATION DETAILS

SHEET NO. OF SHEETS STA. TO STA.

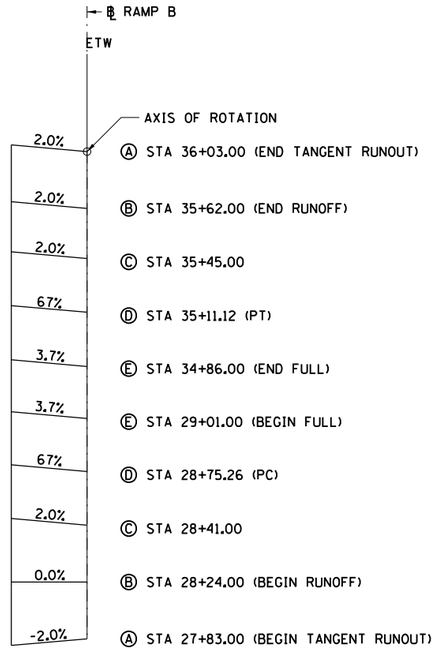
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	52
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



SUPERELEVATION RAMP D

STA. 66+50 TO 68+00

FACILITY TYPE = RAMPS
DESIGN SPEED 40



SUPERELEVATION RAMP B CURVE #2

STA. 28+75.26 TO 35+11.12

FACILITY TYPE = RAMPS
DESIGN SPEED 40

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

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

FILE NAME = 68077-sht-super.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 2.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER

SUPER ELEVATION TRANSITION DIAGRAM

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	53
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

50 0 50 100
SCALE IN FEET

N

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

PROFILE	BY	DATE
SURVEYED		
PLOTTED		
DESIGN CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK		
NO.		

MILWAUKEE AVENUE

BEGIN IMPROVEMENTS
RAMP D STA. 50+84.5

12'-15'

14' (MAX.)

DES PLAINES RIVER

SEE STRUCTURE PLANS FOR BRIDGE
INFORMATION AND LOCATION

RAMP D

℄ RAMP D

14' (MAX.)

℄ WILLOW ROAD

WILLOW ROAD (WB)

WILLOW ROAD (EB)

14' (MAX.)

10'

10'

℄ RAMP B

RAMP B

10'

10'

14' (MAX.)

MATCHLINE 403 + 00

BEGIN IMPROVEMENTS
RAMP B STA. 21+91.3

SEE STRUCTURE PLANS FOR BRIDGE
INFORMATION AND LOCATION

DES PLAINES RIVER

NOTES

1. ALL PAVEMENT JOINT SPACING SHALL FOLLOW STD. 420101-06 TO WHICH IT APPLIES.
2. TRANSVERSE JOINT SPACING SHALL BE 15 FEET UNLESS OTHERWISE SPECIFIED.

LEGEND

TRANSVERSE PAVEMENT JOINT

LONGITUDINAL PAVEMENT JOINT

FILE NAME = 60D77_sht_jnt_01.dgn

Wight

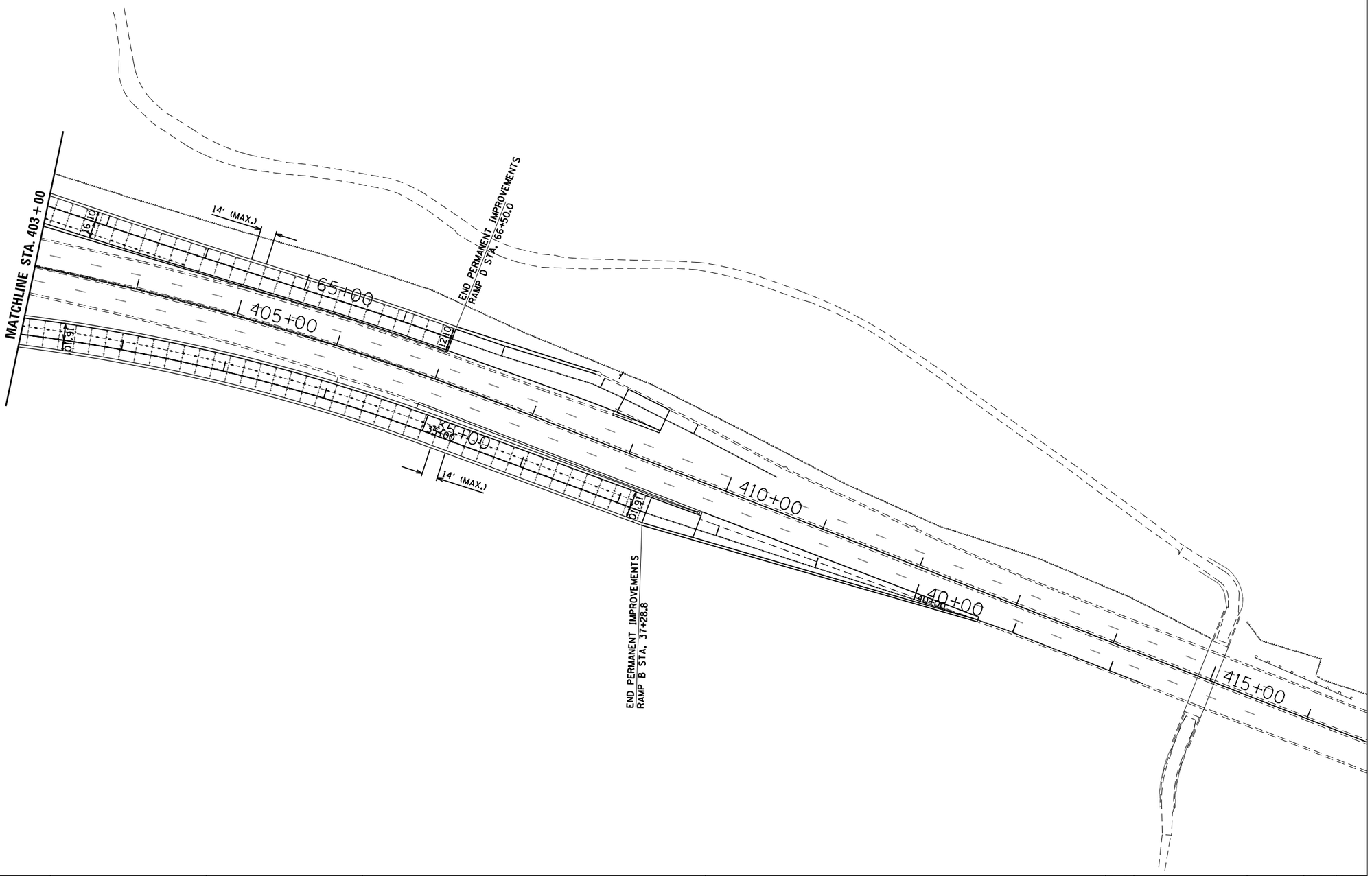
USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
JOINT SPACING DETAILS

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 389+80 TO STA. 403+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	54
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



NOTES

1. ALL PAVEMENT JOINT SPACING SHALL FOLLOW STD. 420101-06 TO WHICH IT APPLIES.
2. TRANSVERSE JOINT SPACING SHALL BE 15 FEET UNLESS OTHERWISE SPECIFIED.

LEGEND

TRANSVERSE PAVEMENT JOINT

LONGITUDINAL PAVEMENT JOINT

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

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

FILE NAME = 60D77-sht_jnt_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
JOINT SPACING DETAILS

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 403+00 | TO STA. 416+62

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	55
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

50 0 50 100
SCALE IN FEET

N

TURN ARROW, WHITE
STA. 50+90
15.6 SF

"ONLY" LETTER, WHITE
STA. 51+16
20.8 SF

6" SOLID, WHITE

24" SOLID WHITE

ONLY

(BACK OF ASSEMBLY)
WRONG WAY

RELOCATE SIGN PANEL ASSEMBLY
R3-8 (SPECIAL)
R5-1A (BACK OF ASSEMBLY)
STA. 52+59

45
ILLINOIS
21
Milwaukee Ave

RELOCATE SIGN PANEL ASSEMBLY
M1-4, "45"
M1-5 "ILLINOIS 21"
D3-2 "MILWAUKEE AVE"
M6-4
STA. 54+74

TURN ARROW, WHITE
STA. 57+38
15.6 SF

"ONLY" LETTER, WHITE
STA. 57+60
20.8 SF

LEFT LANE MUST TURN LEFT

RELOCATE SIGN PANEL ASSEMBLY R3-7
STA. 58+35

WRONG WAY

RELOCATE R5-1A
STA. 60+11 &
STA. 60+27

SOUTH 45 ILLINOIS 21
NORTH 45 ILLINOIS 21

RELOCATE SIGN PANEL ASSEMBLY
M3-1, M3-3
M1-4 "45" (TWO SIGNS)
M1-5 "ILLINOIS 21" (TWO SIGNS)
M5-1L, M5-1R
STA. 60+27

DELINEATORS, 100' SPACING

TURN ARROW, WHITE
STA. 54+15
15.6 SF

"ONLY" LETTER,
STA. 54+36
WHITE 20.8 SF

6" SKIP DASH, WHITE
3' DASH - 9' SKIP

℄ RAMP D

Des Plaines River
I-3
VARIES X 18
STA. 58+25
TEL STL POST, 16'

4" SKIP DASH, WHITE
10' DASH - 30' SKIP (TYP.)

BEGIN 12" SOLID
60+00

DELINEATORS, 100' SPACING

12" DIAGONALS, WHITE
45° @ 75' SPACING

MATCHLINE STA 404+00

MILWAUKEE AVENUE

DES PLAINES RIVER

RAMP D

WILLOW ROAD (WB)

WILLOW ROAD (EB)

WILLOW ROAD ℄

LANE REDUCTION ARROW
WHITE, 41.5 SQ FT
STA. 24+10

℄ RAMP B

RAMP B

DELINEATORS, 100' SPACING

RAMP
40
MPH

RELOCATE SIGN PANEL ASSEMBLY, W13-3-40
36X48
STA. 24+00

W4-2
48X48
STA. 23+00
TEL STL POST, 16'

LANE REDUCTION ARROW
WHITE, 41.5 SQ FT
STA. 26+90

BEGIN 12" SOLID
29+75

12" DIAGONALS, WHITE
45° @ 75' SPACING

DELINEATORS, 100' SPACING

NOTE
ALL PAVEMENT MARKING SHALL BE POLYUREA TYPE 1.

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

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

FILE NAME = 60D77_sht_pmk_01.dgn

Wight	USER NAME = untitled	DESIGNED KMB	REVISED
		DRAWN CJF	REVISED
	PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
	PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PAVEMENT MARKING & SIGNING PLAN

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 391+15 TO STA. 404+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	56
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

0 20 40 60
SCALE IN FEET

N

RAMP
40
MPH
W13-3-40
36X48
STA. 68+11
TEL STL POST, 16'

MATCHLINE STA 404+00

DELINEATORS,
100' SPACING

12" SOLID DIAGONAL
45° @ 75' SPACING

65+34
0.0 LT

67+36
3.6 LT

PMK RADIUS 1000'
67+36 TO 68+77

68+77
6.3 LT

409+20

12" SOLID WHITE

69+85
10.0 LT

RAMP D B

69+46
9.5 RT

RAMP D

8" SOLID WHITE

37+80
18.2 LT

38+74
12.9 LT

RAMP B

EX 4" SKIP-DASH, WHITE
10' DASH - 30' SKIP

PR 4" EDGE
LINE, WHITE

EX 4" EDGE
LINE, WHITE

413+01

WILLOW ROAD (WB)

WILLOW ROAD (EB)

WILLOW ROAD ℄

PR 8" SOLID WHITE

40+64
0.5 LT

RAMP B ℄

EX 4" EDGE
LINE, YELLOW

405+00 410+00 415+00
135+00 140+00

DELINEATORS,
100' SPACING

12" SOLID WHITE

12" SOLID DIAGONAL
45° @ 75' SPACING

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

PROFILE
SURVEYED
PLOTTED
CROSS CHECKED
B.M. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
DATE
BY

NOTE
ALL PAVEMENT MARKING SHALL BE POLYUREA TYPE 1.

FILE NAME = 60D77_sht_pmk_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0000 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
PAVEMENT MARKING & SIGNING PLAN

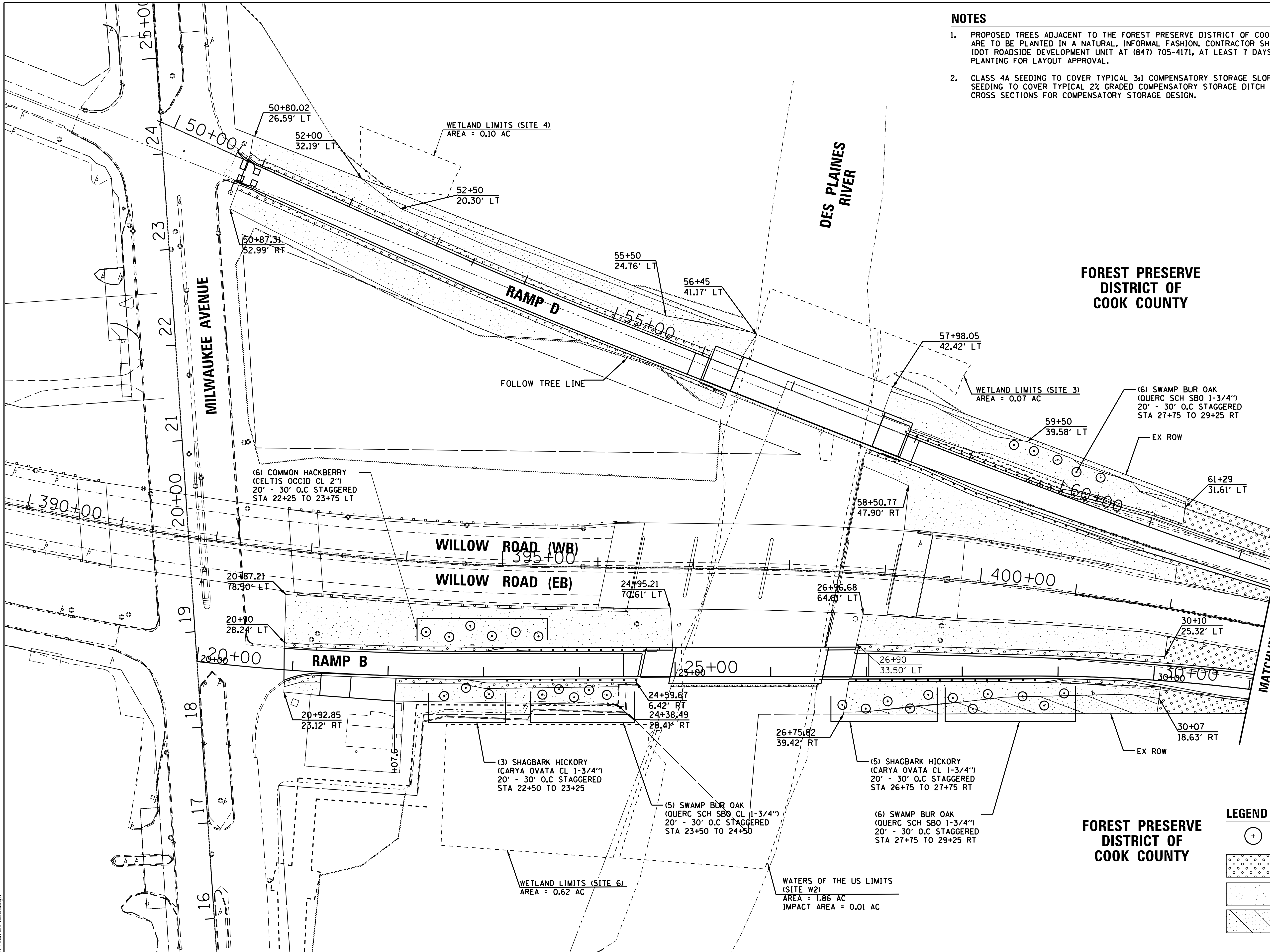
SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 404+00 TO STA. 415+82

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	57
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

NOTES

1. PROPOSED TREES ADJACENT TO THE FOREST PRESERVE DISTRICT OF COOK COUNTY ARE TO BE PLANTED IN A NATURAL, INFORMAL FASHION. CONTRACTOR SHALL CALL THE IDOT ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT APPROVAL.
2. CLASS 4A SEEDING TO COVER TYPICAL 3:1 COMPENSATORY STORAGE SLOPE. CLASS 4B SEEDING TO COVER TYPICAL 2% GRADED COMPENSATORY STORAGE DITCH BOTTOM. SEE CROSS SECTIONS FOR COMPENSATORY STORAGE DESIGN.

50 0 50 100
SCALE IN FEET



LEGEND

- PR SHADE TREE (SEE NOTES)
- CLASS 2A SEED WITH EROSION CONTROL BLANKET (WILDLIFE FRIENDLY)
- CLASS 4A SEED WITH EROSION CONTROL BLANKET (WILDLIFE FRIENDLY)
- CLASS 4B SEED WITH EROSION CONTROL BLANKET (WILDLIFE FRIENDLY)

USER NAME = untitled	DESIGNED KMB	REVISED	
	DRAWN CJF	REVISED	
PLOT SCALE = 100.0002 ' / in.	CHECKED JNH	REVISED	
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED	

Wight

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
LANDSCAPE PLANS
WILLOW ROAD

SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. 399+79 TO STA. 403+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	58

CONTRACT NO. 60D77

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

PLAN: NOTE BOOK NO. ___ SURVEYED / PLOTTED / ALIGNMENT CHECKED / R/T OF WAY CHECKED / CADD FILE NAME — BY — DATE

PROFILE: NOTE BOOK NO. ___ SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTAT'NS CHKD — BY — DATE

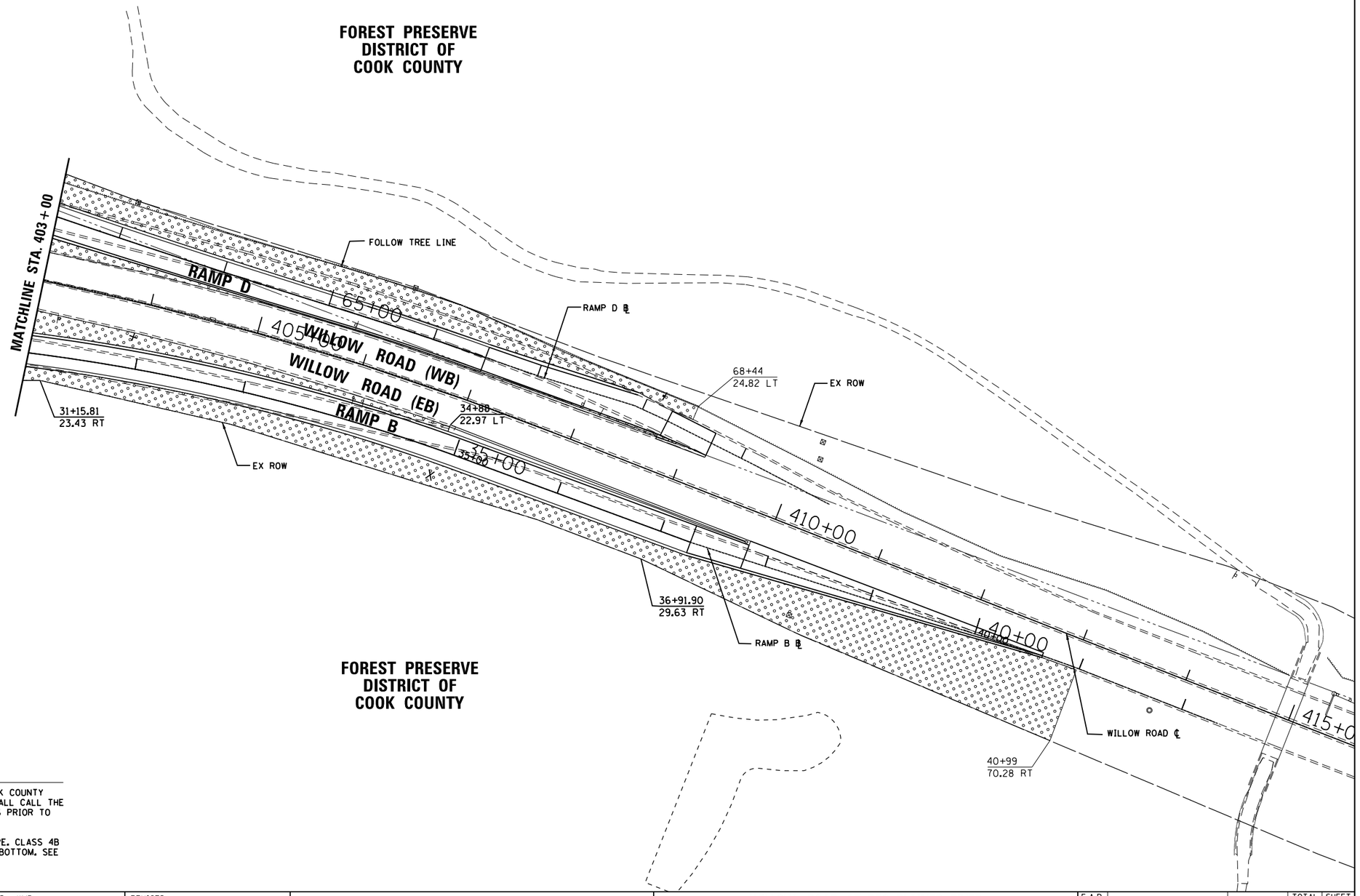
FILE NAME = 60D77_sht_lnd_01.dgn

LEGEND

- PR SHADE TREE (SEE NOTES)
- CLASS 2A SEED WITH EROSION CONTROL BLANKET
- CLASS 4A SEED WITH EROSION CONTROL BLANKET
- CLASS 4B SEED WITH EROSION CONTROL BLANKET

50 0 50 100
SCALE IN FEET

N



NOTES

1. PROPOSED TREES ADJACENT TO THE FOREST PRESERVE DISTRICT OF COOK COUNTY ARE TO BE PLANTED IN A NATURAL, INFORMAL FASHION. CONTRACTOR SHALL CALL THE IDOT ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171, AT LEAST 7 DAYS PRIOR TO PLANTING FOR LAYOUT APPROVAL.
2. CLASS 4A SEEDING TO COVER TYPICAL 3:1 COMPENSATORY STORAGE SLOPE. CLASS 4B SEEDING TO COVER TYPICAL 2% GRADED COMPENSATORY STORAGE DITCH BOTTOM. SEE CROSS SECTIONS FOR COMPENSATORY STORAGE DESIGN.

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

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

FILE NAME = 60D77-sht_lnd_02.dgn

Wight

USER NAME = untitled	DESIGNED KMB	REVISED
	DRAWN CJF	REVISED
PLOT SCALE = 100.0002 ' / in.	CHECKED JNH	REVISED
PLOT DATE = 1/24/2020	DATE 01-24-2020	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WILLOW ROAD AT DES PLAINES RIVER
LANDSCAPE PLANS
WILLOW ROAD

SCALE: 1" = 50' | SHEET NO. 2 OF 2 SHEETS | STA. 403+00 TO STA. 415+65

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	59
		CONTRACT NO. 60D77		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

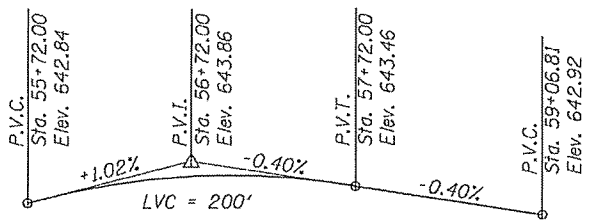
Bench Mark: "[]" on top of NE corner of East Abutment. Elev. 644.14
"[]" on top of SE corner of E. Abutment. Elev. 644.25

Existing Structure: S.N. 016-0272, originally built in 1925 and reconstructed in 1979, is a three-span bridge spanning 159'-0" bk. to bk. of abutments. The superstructure consists of an 8" concrete slab atop 30" deep rolled steel beams. The 38'-0" o. to o. concrete deck consists of a 26'-0" roadway, two 5'-0" sidewalks, and two 1'-0" parapets. There is a longitudinal expansion joint measuring 1" down the median of the entire bridge. The substructure consists of two solid wall concrete piers and closed concrete abutments. The bridge shall be closed during construction.

No Salvage.

SCOPE OF WORK:

1. Remove and replace existing bridge deck and approach slabs.
2. Remove and replace expansion joints at both abutments.
3. Rehabilitate existing piers and abutments with "Structural Repair of Concrete" and "Epoxy Crack Injection."
4. Replace all abutment bearings with elastomeric bearings and steel extensions.
5. Install shear studs to create a composite deck.
6. Replace steel end diaphragms at abutments and perform steel repair to beam ends.
7. Add new steel diaphragms between two center beams.
8. Clean and paint existing structural steel adjacent to expansion joint.
9. Remove and replace North Wingwall on East Abutment.



RAMP PROFILE
(along PGL Ramp D)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

DESIGN STRESSES

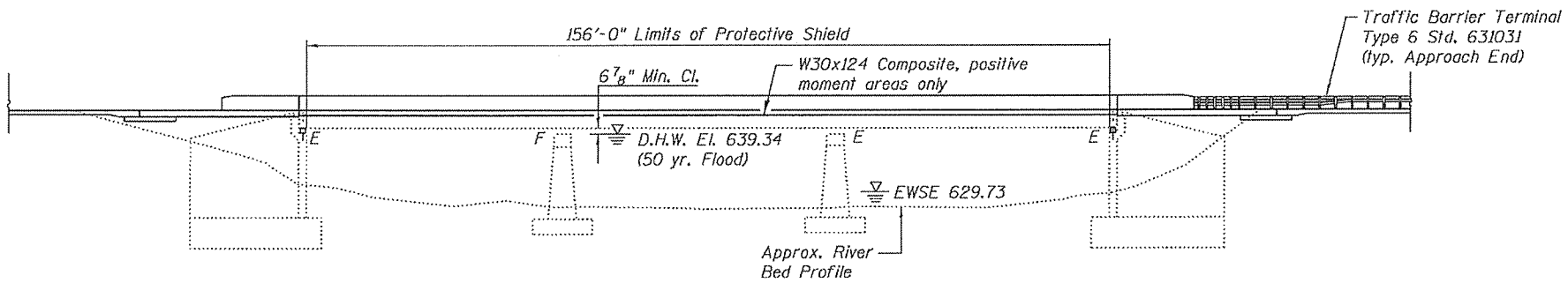
EXISTING CONSTRUCTION
fc = 1,200 psi
fs = 20,000 psi (reinf.)
fs = 27,000 psi (Struct. steel AASHTO M222, Weathering Steel)
NEW CONSTRUCTION
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 36,000 psi (Struct. steel M270 Grade 36, new bearings & diaphragms)

DESIGN SPECIFICATIONS

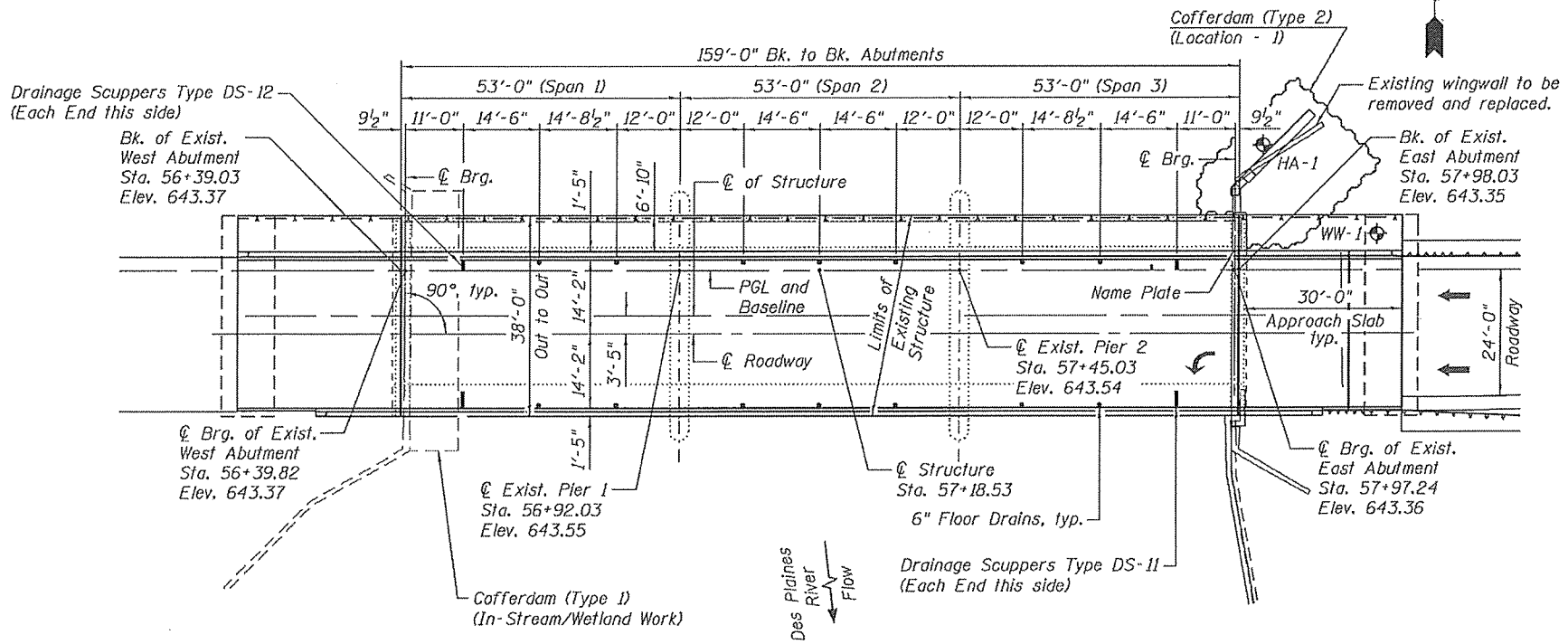
2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS 20-44

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



ELEVATION



PLAN

WATERWAY INFORMATION

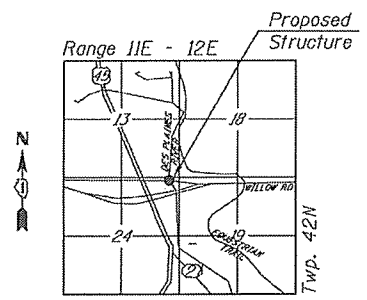
Drainage Area = 351 Sq Mi Low Grade Elev. 639.8 ft at Sta. 51+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	2	2,980	1,479	1,479	636.46	0.00	0.00	636.46	636.46
	10	4,226	1,703	1,703	637.84	0.01	0.01	637.85	637.85
Design	50	5,577	1,946	1,946	639.34	0.00	0.00	639.34	639.34
Base	100	6,161	2,032	2,032	639.90	0.08	0.08	639.98	639.98
Overtopping	>500								
Max. Calc.	500	7,395	2,069	2,069	641.29	0.32	0.32	641.61	641.61

STATION 57+18.53
REBUILT 20__ BY
STATE OF ILLINOIS
F.A.P. 305 SECTION 15161-1
LOADING HS20
STR. NO. 016-0272

NAME PLATE

See Std. 515001
Existing Name Plates shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.



LOCATION SKETCH

LICENSED STRUCTURAL ENGINEER
MICHAEL T. HALEY
81-5991
CHATHAM
STATE OF ILLINOIS

Michael J Haley 3-19-20
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2020

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN AND ELEVATION
WILLOW ROAD OVER DES PLAINES RIVER - WESTBOUND RAMP D
FAP RTE 305 SEC 15161-1
COOK COUNTY
STATION 57+18.53 (RAMP D)
STRUCTURE NO. 016-0272

ORIGINAL: Wight UPDATED: CBI ENGINEERING LTD Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - BJM	MTH	REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	60
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts for end diaphragms and ASTM A325 Type 3 for interior diaphragms. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

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

3. Reinforcement bars designated (E) shall be epoxy coated.

4. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

   As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $^{1}/_{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

5. 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.

6. Cleaning and field painting of existing structural steel shall be done under a separate painting contract, except where otherwise noted.

7. The existing structural steel coating on joint angles contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

8. Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams and other structural steel within 5 ft (measured along beam) of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10.

   The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No 2.5YR 3/4.

9. All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

10. Seal coat thickness design is based on the Estimated Water Surface Elevation (EWSE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design.

11. Slipforming of the concrete parapets is not allowed.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	48.1	48.1
Removal of Existing Concrete Deck No. 1	Each	1	-	1
Protective Shield	Sq. Yd.	659	-	659
Cofferdam Excavation	Cu. Yd.	-	362	362
Cofferdam (Type 1)(In-Stream/Wetland Work)	Each	-	1	1
Cofferdam (Type 2) (Location - 1)	Each	-	1	1
Floor Drains	Each	14	-	14
Concrete Superstructure (Approach Slab)	Cu. Yd.	105.0	-	105.0
Concrete Structures	Cu. Yd.	-	82.2	82.2
Concrete Superstructure	Cu. Yd.	198.8	-	198.8
Bridge Deck Grooving	Sq. Yd.	640	-	640
Seal Coat Concrete	Cu. Yd.	-	56.0	56.0
Protective Coat	Sq. Yd.	1,114	-	1,114
Furnishing and Erecting Structural Steel	Pound	4960	-	4960
Stud Shear Connectors	Each	4284	-	4284
Cleaning and Painting Structural Steel, Location 1	L. Sum	1	-	1
Containment and Disposal of Non-Lead Paint Cleaning Residue	L. Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	92,200	5,620	97,820
Bicycle Railing	Foot	221	-	221
Parapet Railing	Foot	221	-	221
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	74	-	74
Elastomeric Bearing Assembly, Type I	Each	-	12	12
Anchor Bolts, 1"	Each	-	24	24
Epoxy Crack Injection	Foot	-	81	81
Geocomposite Wall Drain	Sq. Yd.	-	27	27
Jack and Remove Existing Bearings	Each	-	12	12
Structural Steel Removal	Pound	2,670	-	2,670
Structural Repair of Concrete (Depth equal to or less than 5 inches)	Sq. Ft.	-	1,022	1,022
Drainage Scuppers, DS-11	Each	2	-	2
Drainage Scuppers, DS-12	Each	2	-	2
Drill and Grout Bars	Each	-	129	129
Granular Backfill for Structures	Cu. Yd.	-	36	36

ORIGINAL: wight

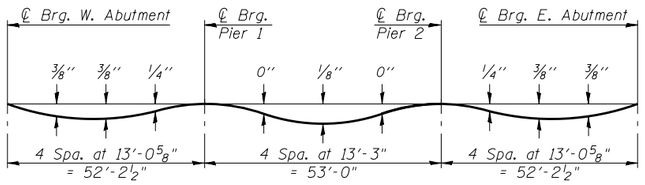
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - BJM MTH		REVISED
	DRAWN - MAS		REVISED
PLOT DATE = 3/20/2020	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 016-0272
SHEET NO. 2 OF 35 SHEETS

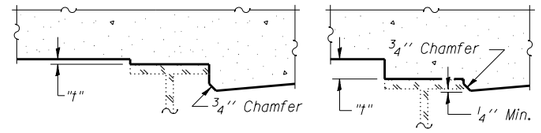
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	61
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



DEAD LOAD DEFLECTION DIAGRAM

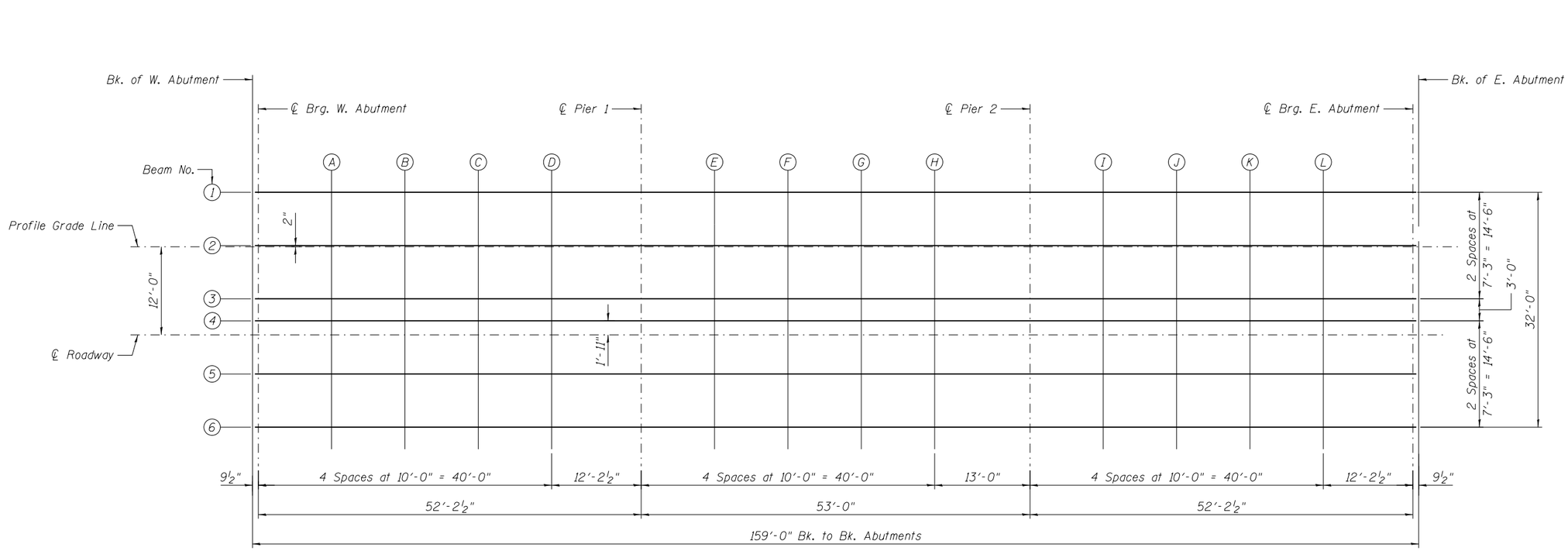
(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 4 and 5 of 35.



To determine "t": Elevations of the top of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 4 and 5 of 35, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS



PLAN

ORIGINAL:	UPDATED:				
Wight	LIN ENGINEERING, LTD. Consulting Engineers		DESIGNED - MAS		REVISED
			CHECKED - MWS	MTH	REVISED
			DRAWN - MWS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0272
SHEET NO. 3 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	62
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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BEAM 1

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	-7.42	643.22	643.22
℄ Brg. W. Abutment	56+39.82	-7.42	643.22	643.22
A	56+49.82	-7.42	643.27	643.29
B	56+59.82	-7.42	643.32	643.35
C	56+69.82	-7.42	643.35	643.38
D	56+79.82	-7.42	643.38	643.40
℄ Pier 1	56+92.03	-7.42	643.41	643.41
E	57+02.03	-7.42	643.42	643.42
F	57+12.03	-7.42	643.42	643.43
G	57+22.03	-7.42	643.42	643.43
H	57+32.03	-7.42	643.41	643.42
℄ Pier 2	57+45.03	-7.42	643.39	643.39
I	57+55.03	-7.42	643.37	643.38
J	57+65.03	-7.42	643.34	643.37
K	57+75.03	-7.42	643.30	643.33
L	57+85.03	-7.42	643.26	643.28
℄ Brg. E. Abutment	57+97.24	-7.42	643.21	643.21
Bk. of E. Abutment	57+98.03	-7.42	643.21	643.21

BEAM 2

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	-0.17	643.36	643.36
℄ Brg. W. Abutment	56+39.82	-0.17	643.37	643.37
A	56+49.82	-0.17	643.42	643.44
B	56+59.82	-0.17	643.46	643.49
C	56+69.82	-0.17	643.50	643.53
D	56+79.82	-0.17	643.52	643.54
℄ Pier 1	56+92.03	-0.17	643.55	643.55
E	57+02.03	-0.17	643.56	643.56
F	57+12.03	-0.17	643.57	643.57
G	57+22.03	-0.17	643.57	643.57
H	57+32.03	-0.17	643.56	643.56
℄ Pier 2	57+45.03	-0.17	643.54	643.54
I	57+55.03	-0.17	643.51	643.53
J	57+65.03	-0.17	643.48	643.51
K	57+75.03	-0.17	643.44	643.48
L	57+85.03	-0.17	643.40	643.43
℄ Brg. E. Abutment	57+97.24	-0.17	643.35	643.35
Bk. of E. Abutment	57+98.03	-0.17	643.35	643.35

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	0.00	643.37	643.37
℄ Brg. W. Abutment	56+39.82	0.00	643.37	643.37
A	56+49.82	0.00	643.42	643.44
B	56+59.82	0.00	643.46	643.50
C	56+69.82	0.00	643.50	643.53
D	56+79.82	0.00	643.53	643.55
℄ Pier 1	56+92.03	0.00	643.55	643.55
E	57+02.03	0.00	643.57	643.57
F	57+12.03	0.00	643.57	643.58
G	57+22.03	0.00	643.57	643.58
H	57+32.03	0.00	643.56	643.56
℄ Pier 2	57+45.03	0.00	643.54	643.54
I	57+55.03	0.00	643.52	643.53
J	57+65.03	0.00	643.49	643.52
K	57+75.03	0.00	643.45	643.48
L	57+85.03	0.00	643.41	643.43
℄ Brg. E. Abutment	57+97.24	0.00	643.36	643.36
Bk. of E. Abutment	57+98.03	0.00	643.35	643.35

BEAM 3

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	7.08	643.51	643.51
℄ Brg. W. Abutment	56+39.82	7.08	643.51	643.51
A	56+49.82	7.08	643.56	643.58
B	56+59.82	7.08	643.61	643.64
C	56+69.82	7.08	643.64	643.67
D	56+79.82	7.08	643.67	643.69
℄ Pier 1	56+92.03	7.08	643.70	643.70
E	57+02.03	7.08	643.71	643.71
F	57+12.03	7.08	643.71	643.72
G	57+22.03	7.08	643.71	643.72
H	57+32.03	7.08	643.70	643.71
℄ Pier 2	57+45.03	7.08	643.68	643.68
I	57+55.03	7.08	643.66	643.67
J	57+65.03	7.08	643.63	643.66
K	57+75.03	7.08	643.59	643.62
L	57+85.03	7.08	643.55	643.57
℄ Brg. E. Abutment	57+97.24	7.08	643.50	643.50
Bk. of E. Abutment	57+98.03	7.08	643.50	643.50

Note:
Offsets are measured from PGL.

ORIGINAL: wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MWS	REVISED
	CHECKED - MAS MTH	REVISED
	DRAWN - MWS	REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0272
SHEET NO. 4 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	63
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

BEAM 4

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	10.08	643.57	643.57
℄ Brg. W. Abutment	56+39.82	10.08	643.57	643.57
A	56+49.82	10.08	643.62	643.64
B	56+59.82	10.08	643.67	643.70
C	56+69.82	10.08	643.70	643.73
D	56+79.82	10.08	643.73	643.75
℄ Pier 1	56+92.03	10.08	643.76	643.76
E	57+02.03	10.08	643.77	643.77
F	57+12.03	10.08	643.78	643.78
G	57+22.03	10.08	643.77	643.78
H	57+32.03	10.08	643.77	643.77
℄ Pier 2	57+45.03	10.08	643.75	643.75
I	57+55.03	10.08	643.72	643.74
J	57+65.03	10.08	643.69	643.72
K	57+75.03	10.08	643.65	643.68
L	57+85.03	10.08	643.61	643.63
℄ Brg. E. Abutment	57+97.24	10.08	643.56	643.56
Bk. of E. Abutment	57+98.03	10.08	643.56	643.56

℄ ROADWAY

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	12.00	643.61	643.61
℄ Brg. W. Abutment	56+39.82	12.00	643.61	643.61
A	56+49.82	12.00	643.66	643.69
B	56+59.82	12.00	643.71	643.74
C	56+69.82	12.00	643.74	643.77
D	56+79.82	12.00	643.77	643.79
℄ Pier 1	56+92.03	12.00	643.80	643.80
E	57+02.03	12.00	643.81	643.81
F	57+12.03	12.00	643.82	643.82
G	57+22.03	12.00	643.81	643.82
H	57+32.03	12.00	643.81	643.81
℄ Pier 2	57+45.03	12.00	643.79	643.79
I	57+55.03	12.00	643.76	643.78
J	57+65.03	12.00	643.73	643.76
K	57+75.03	12.00	643.69	643.72
L	57+85.03	12.00	643.65	643.67
℄ Brg. E. Abutment	57+97.24	12.00	643.60	643.60
Bk. of E. Abutment	57+98.03	12.00	643.60	643.60

BEAM 5

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	17.33	643.50	643.50
℄ Brg. W. Abutment	56+39.82	17.33	643.50	643.50
A	56+49.82	17.33	643.55	643.58
B	56+59.82	17.33	643.60	643.63
C	56+69.82	17.33	643.63	643.66
D	56+79.82	17.33	643.66	643.68
℄ Pier 1	56+92.03	17.33	643.69	643.69
E	57+02.03	17.33	643.70	643.70
F	57+12.03	17.33	643.71	643.71
G	57+22.03	17.33	643.70	643.71
H	57+32.03	17.33	643.70	643.70
℄ Pier 2	57+45.03	17.33	643.67	643.67
I	57+55.03	17.33	643.65	643.66
J	57+65.03	17.33	643.62	643.65
K	57+75.03	17.33	643.58	643.62
L	57+85.03	17.33	643.54	643.57
℄ Brg. E. Abutment	57+97.24	17.33	643.49	643.49
Bk. of E. Abutment	57+98.03	17.33	643.49	643.49

BEAM 6

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. of W. Abutment	56+39.03	24.58	643.35	643.35
℄ Brg. W. Abutment	56+39.82	24.58	643.36	643.36
A	56+49.82	24.58	643.41	643.43
B	56+59.82	24.58	643.45	643.49
C	56+69.82	24.58	643.49	643.52
D	56+79.82	24.58	643.52	643.53
℄ Pier 1	56+92.03	24.58	643.54	643.54
E	57+02.03	24.58	643.55	643.55
F	57+12.03	24.58	643.56	643.56
G	57+22.03	24.58	643.56	643.56
H	57+32.03	24.58	643.55	643.55
℄ Pier 2	57+45.03	24.58	643.53	643.53
I	57+55.03	24.58	643.51	643.52
J	57+65.03	24.58	643.47	643.50
K	57+75.03	24.58	643.44	643.47
L	57+85.03	24.58	643.40	643.42
℄ Brg. E. Abutment	57+97.24	24.58	643.35	643.35
Bk. of E. Abutment	57+98.03	24.58	643.34	643.34

Note:
Offsets are measured from PGL.

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MWS	REVISED
	CHECKED - MAS MTH	REVISED
	DRAWN - MWS	REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0272
SHEET NO. 5 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	64
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF SIDEWALK

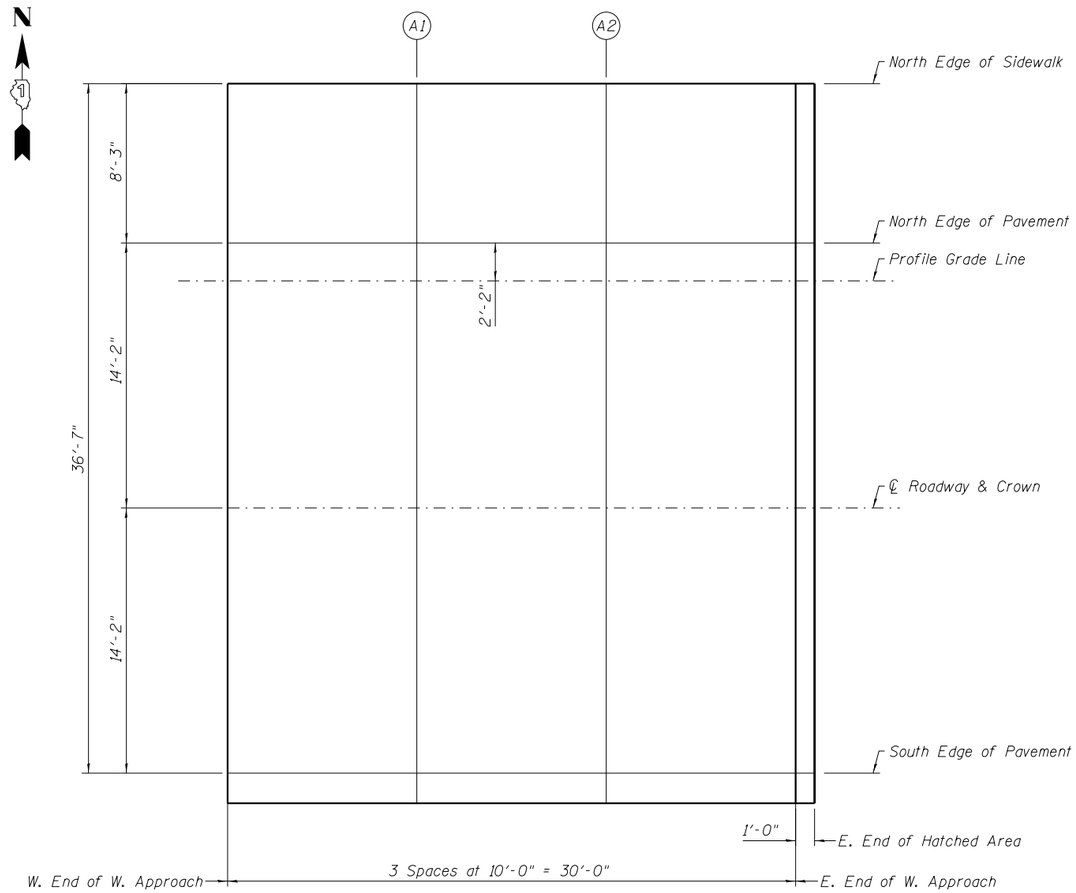
Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	56+08.03	-10.42	642.95
A1	56+18.03	-10.42	643.02
A2	56+28.03	-10.42	643.09
E. End of W. Approach	56+38.03	-10.42	643.15
E. End of Hatched Area	56+39.03	-10.42	643.15

NORTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	56+08.03	-2.17	643.12
A1	56+18.03	-2.17	643.19
A2	56+28.03	-2.17	643.26
E. End of W. Approach	56+38.03	-2.17	643.32
E. End of Hatched Area	56+39.03	-2.17	643.32

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	56+08.03	0.00	643.17
A1	56+18.03	0.00	643.24
A2	56+28.03	0.00	643.30
E. End of W. Approach	56+38.03	0.00	643.36
E. End of Hatched Area	56+39.03	0.00	643.37



WEST APPROACH PLAN

℄ ROADWAY & CROWN

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	56+08.03	12.00	643.42
A1	56+18.03	12.00	643.49
A2	56+28.03	12.00	643.55
E. End of W. Approach	56+38.03	12.00	643.61
E. End of Hatched Area	56+39.03	12.00	643.62

SOUTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	56+08.03	26.17	643.12
A1	56+18.03	26.17	643.19
A2	56+28.03	26.17	643.26
E. End of W. Approach	56+38.03	26.17	643.32
E. End of Hatched Area	56+39.03	26.17	643.32

Note:
Offsets are measured from PGL.

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MWS		REVISED
	CHECKED - MAS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-0272
SHEET NO. 6 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	65
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF SIDEWALK

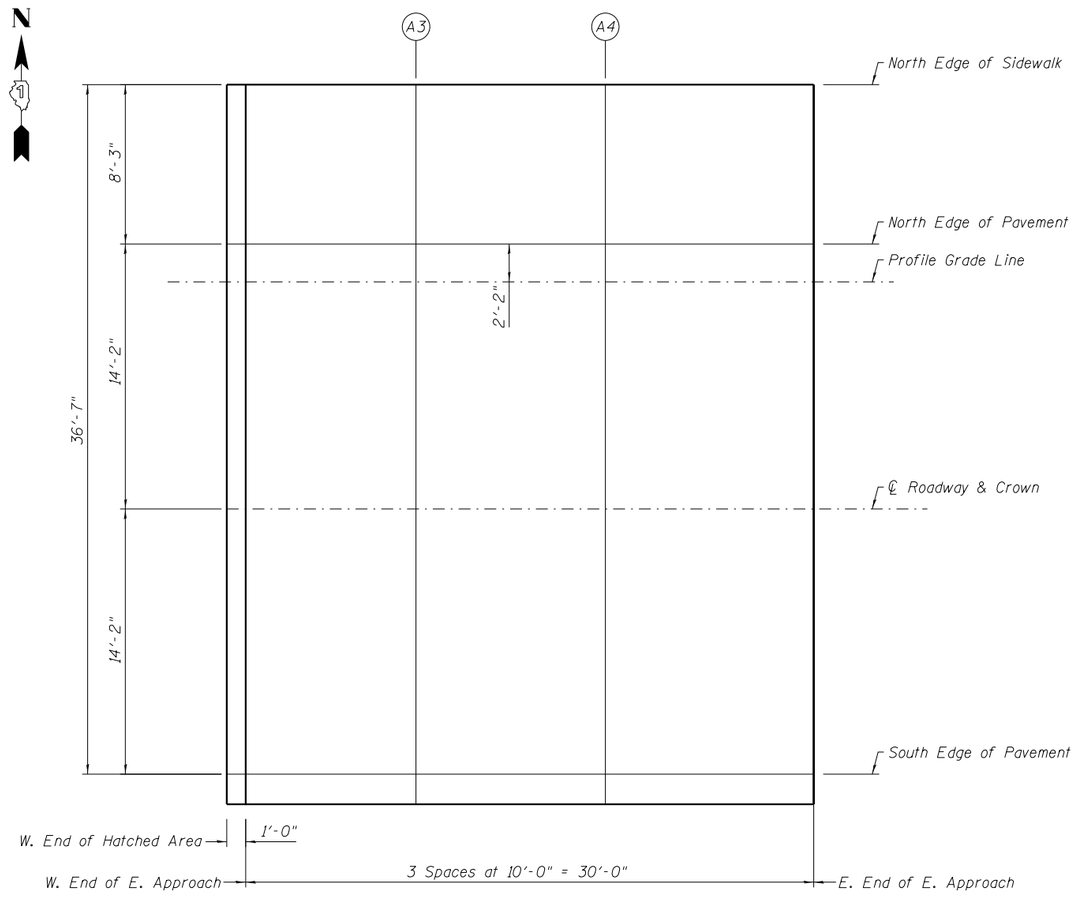
Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	57+98.03	-10.42	643.14
W. End of E. Approach	57+99.03	-10.42	643.13
A3	58+09.03	-10.42	643.09
A4	58+19.03	-10.42	643.05
E. End of E. Approach	58+29.03	-10.42	643.01

NORTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	57+98.03	-2.17	643.31
W. End of E. Approach	57+99.03	-2.17	643.31
A3	58+09.03	-2.17	643.27
A4	58+19.03	-2.17	643.23
E. End of E. Approach	58+29.03	-2.17	643.19

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	57+98.03	0.00	643.36
W. End of E. Approach	57+99.03	0.00	643.35
A3	58+09.03	0.00	643.31
A4	58+19.03	0.00	643.27
E. End of E. Approach	58+29.03	0.00	643.23



EAST APPROACH PLAN

℄ ROADWAY & CROWN

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	57+98.03	12.00	643.61
W. End of E. Approach	57+99.03	12.00	643.60
A3	58+09.03	12.00	643.56
A4	58+19.03	12.00	643.52
E. End of E. Approach	58+29.03	12.00	643.48

SOUTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	57+98.03	26.17	643.31
W. End of E. Approach	57+99.03	26.17	643.31
A3	58+09.03	26.17	643.27
A4	58+19.03	26.17	643.23
E. End of E. Approach	58+29.03	26.17	643.19

Note:
Offsets are measured from PGL.

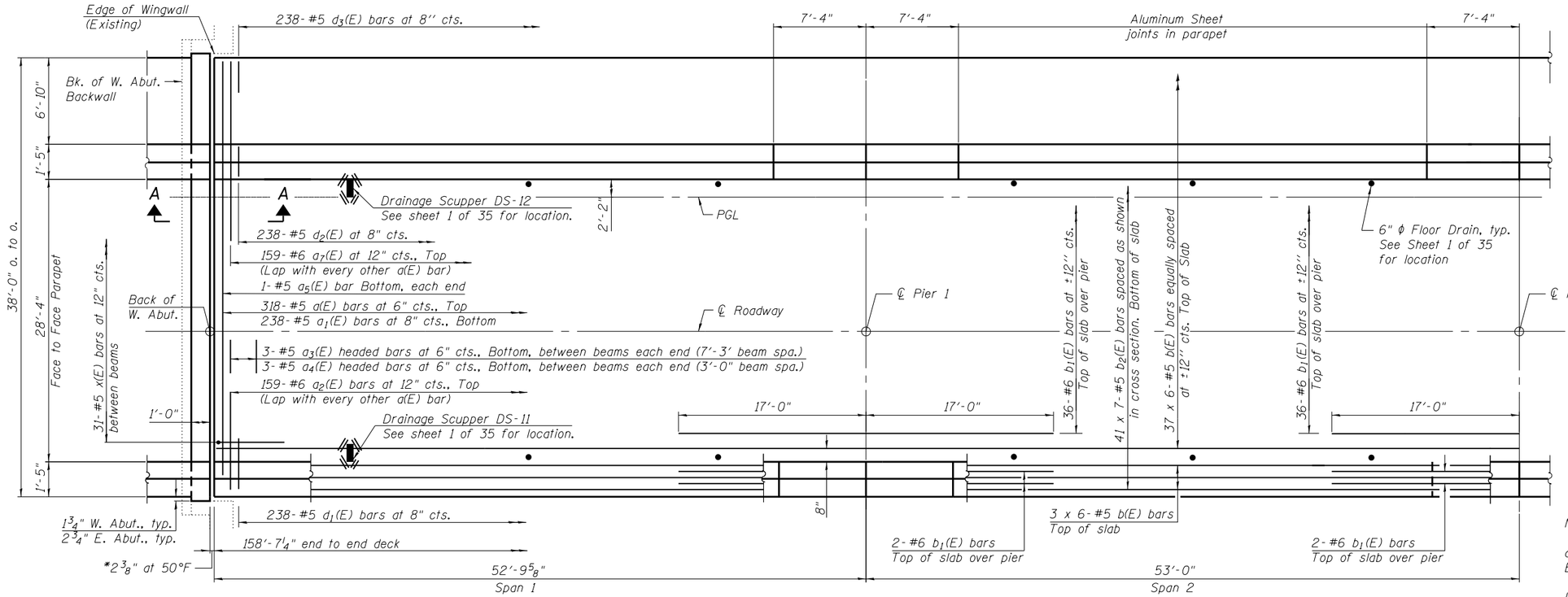
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MWS		REVISED
	CHECKED - MAS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

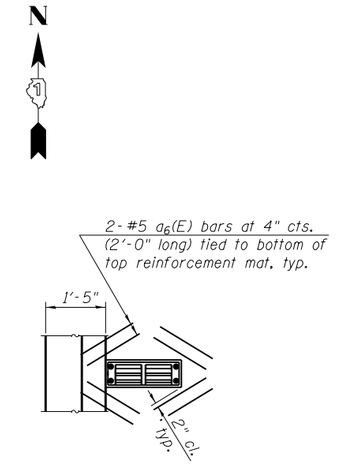
TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-0272
SHEET NO. 7 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	66
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



* Dimension showing concrete opening.
For joint opening see sheet 16 of 35.

PARTIAL PLAN



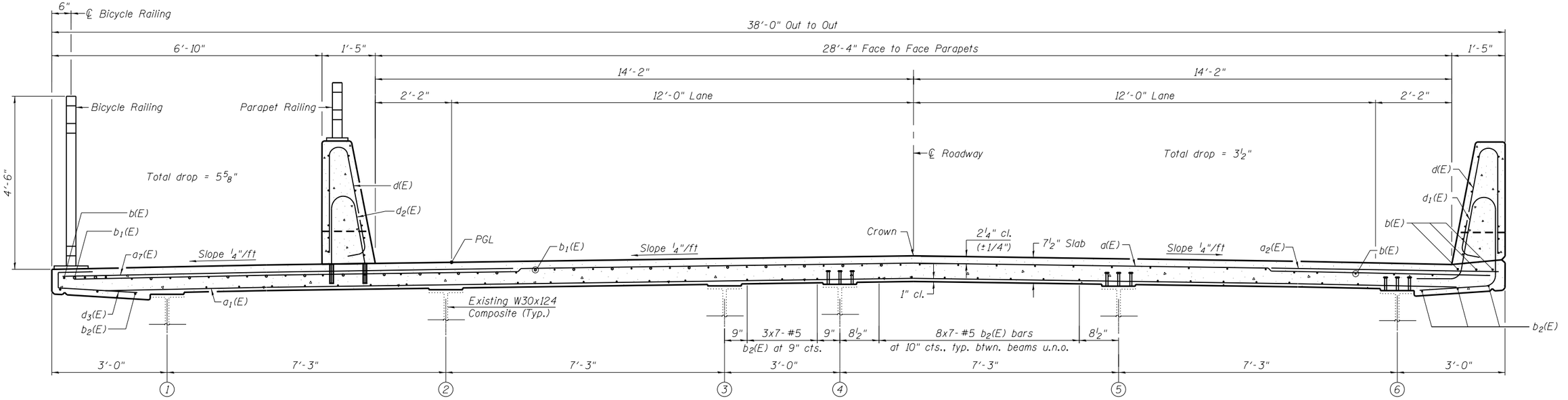
PLAN AT SCUPPER

Reinforcement adjacent to Scupper (Type DS-12 shown, DS-11 Similar)
Cut longitudinal reinforcement to clear drainage scuppers.

MINIMUM BAR LAP

#5 Bars 3'-9"

Notes:
See Sheets 9 & 10 of 35 for superstructure details, Section A-A, parapet reinforcement, and Bill of Material.
Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.
Span 3 is identical to Span 1 except as noted.
All drains shall be located clear of all diaphragms.



NEAR PIER

CROSS SECTION

(Looking East)
(Scuppers and drains not shown for clarity)

NEAR MIDSPAN

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - MAS	REVISED
		CHECKED - MWS MTH	REVISED
		DRAWN - MAS/MWS	REVISED
PLOT DATE = 11/11/2019		CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 016-0272
SHEET NO. 8 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	67
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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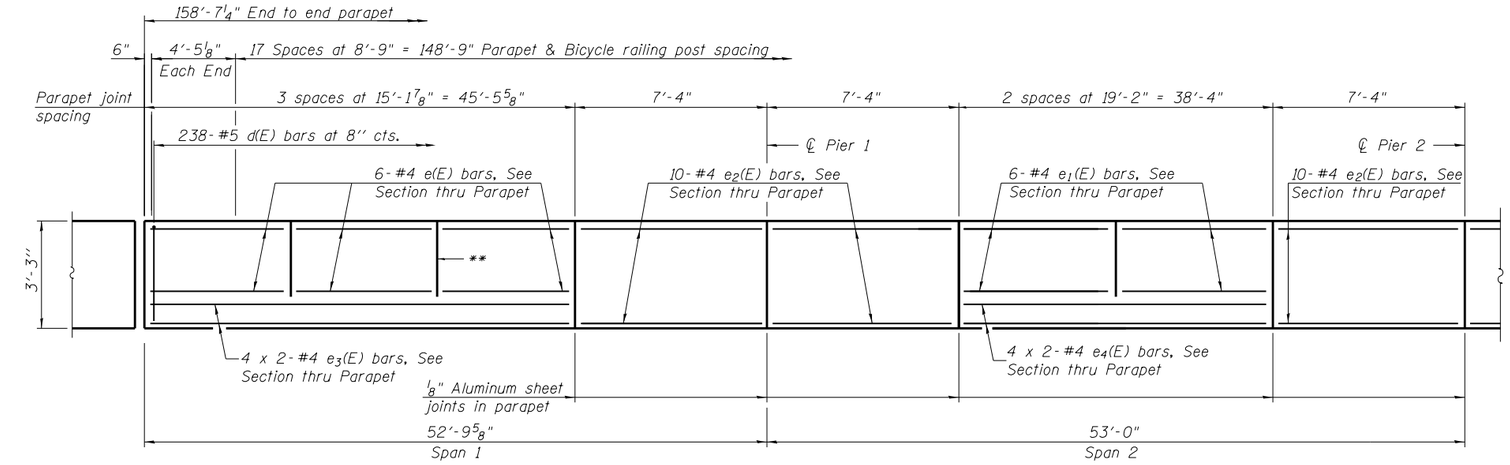
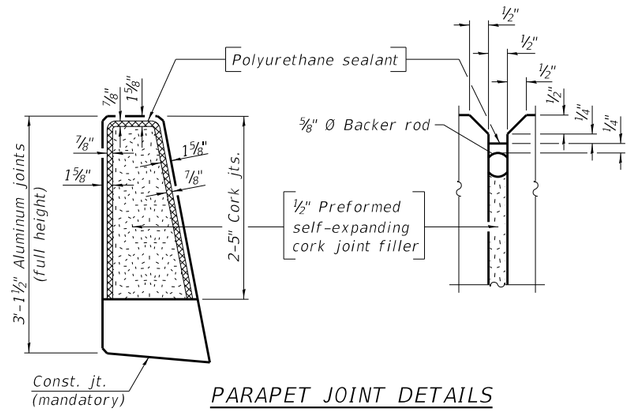


Notes:
Span 3 is identical to Span 1 except as noted.

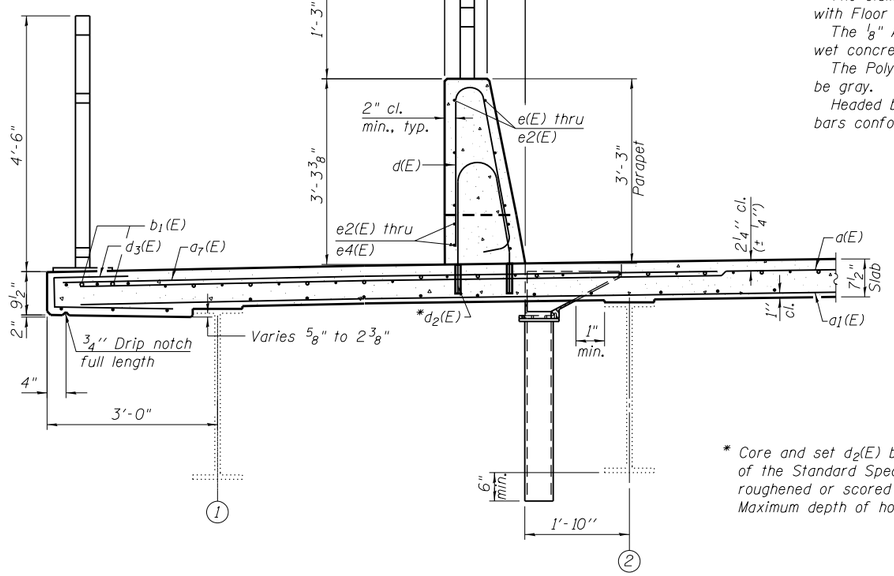
INSIDE ELEVATION OF PARAPET

** Cork joint (typ. between panels except at aluminum joints)



PARAPET JOINT DETAILS

Notes:
Drains and downspouts shall be located clear of all diaphragms.
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.
The ⅛" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



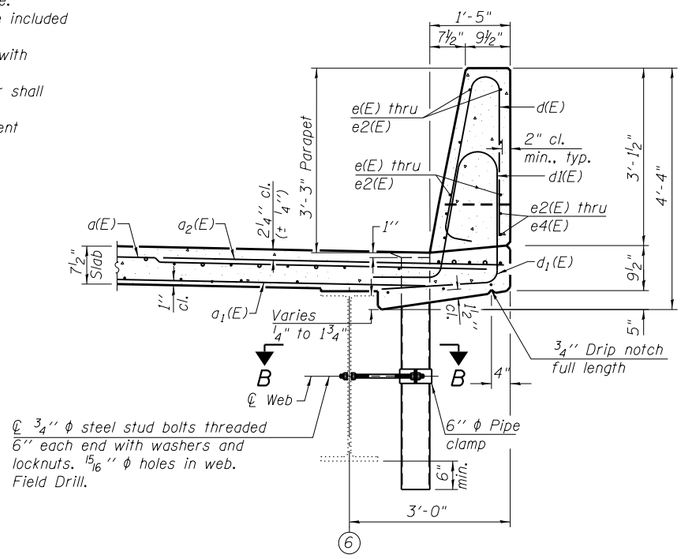
NORTH SIDE SECTION THRU PARAPET

Showing Typical Drainage Scupper
(Looking East)

* Core and set $d_2(E)$ bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

MINIMUM BAR LAP

(Parapet)
#4 Bars 2'-7"



Note:
See Sheet 10 of 35 for Section B-B and floor drain details.

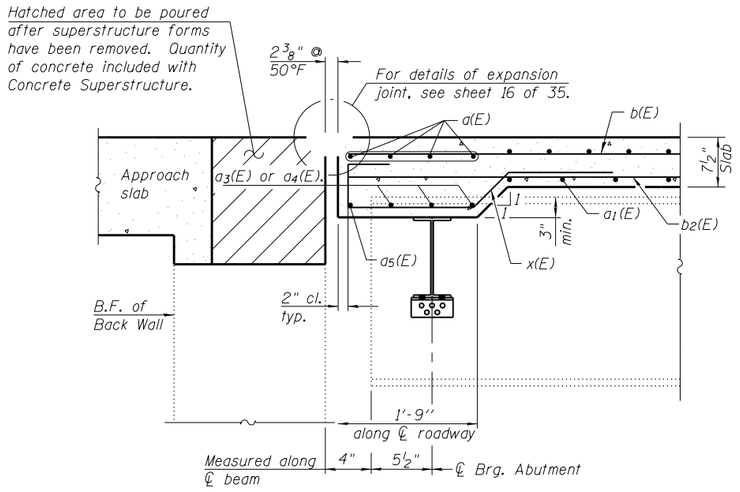
SOUTH SIDE SECTION THRU PARAPET

Showing 6" ϕ Floor Drain
(Looking East)

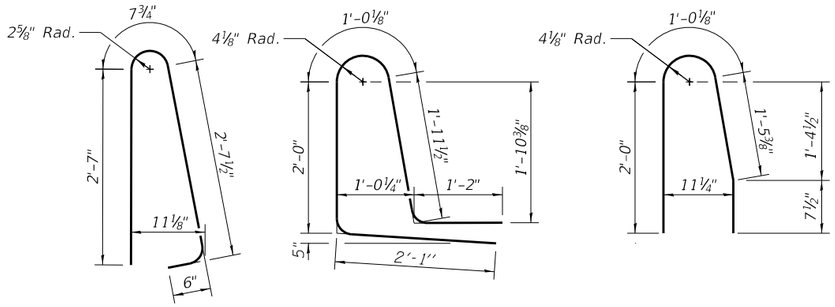
ORIGINAL: Wight	UPDATED: LJN ENGINEERING, LTD. Consulting Engineers				
		DESIGNED - MAS		REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - MWS	MTH	REVISED	
		DRAWN - MWS		REVISED	
	PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED	

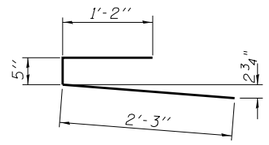
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 9 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	68
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

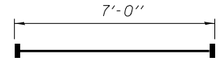


SECTION A-A



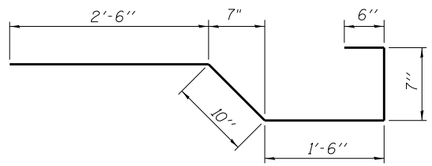


BAR d3(E)



BAR a3(E)
(Headed)

BAR a4(E)
(Headed)

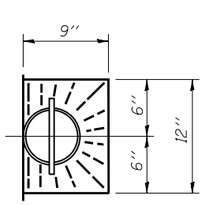


BAR x(E)

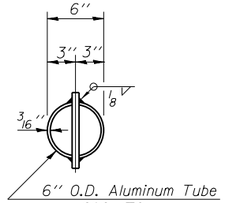
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	318	#5	37'-6"	——
a1(E)	238	#5	36'-2"	——
a2(E)	159	#6	6'-6"	——
a3(E)	24	#5	7'-0"	——
a4(E)	6	#5	2'-9"	——
a5(E)	2	#5	32'-7"	——
a6(E)	32	#5	2'-0"	——
a7(E)	159	#6	13'-4"	——
b(E)	240	#5	29'-6"	——
b1(E)	76	#6	34'-0"	——
b2(E)	287	#5	25'-10"	——
d(E)	476	#5	6'-5"	
d1(E)	238	#5	8'-3"	
d2(E)	238	#5	5'-1"	
d3(E)	238	#5	3'-10"	
e(E)	72	#4	14'-10"	——
e1(E)	24	#4	18'-10"	——
e2(E)	120	#4	7'-0"	——
e3(E)	32	#4	24'-0"	——
e4(E)	16	#4	20'-5"	——
x(E)	62	#5	5'-11"	
Concrete Superstructure			Cu. Yd.	182.2
Reinforcement Bars, Epoxy Coated			Pound	54,650

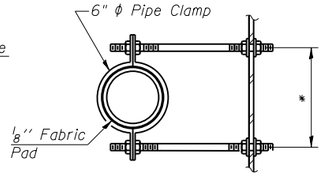
Bars indicated thus 1 x 2- #8 etc. indicates 1 line of bars with 2 lengths per line.



TOP PLAN

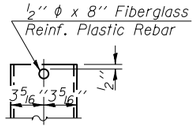


TOP PLAN
(Showing Aluminum Tube)

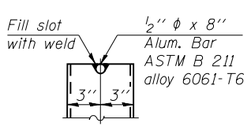


SECTION B-B

* Dimension as required by Pipe Clamp



FIBERGLASS PIPE



ALUMINUM TUBE

6" ϕ FLOOR DRAIN DETAILS

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers		
		DESIGNED - MAS	REVISED
		CHECKED - MWS MTH	REVISED
		DRAWN - MWS	REVISED
PLOT DATE = 11/11/2019		CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 10 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	69
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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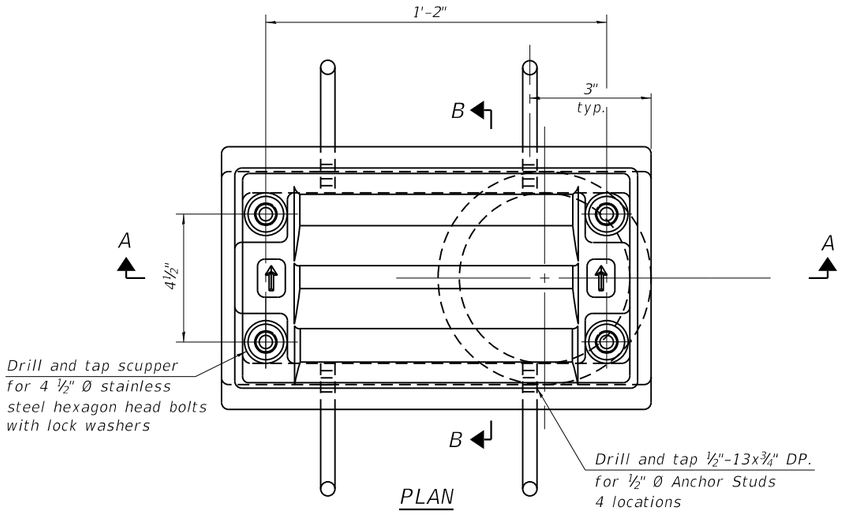
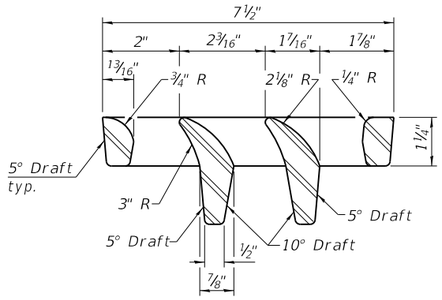
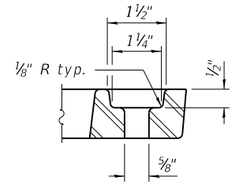


PLAN



VANE GRATE DETAIL



BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

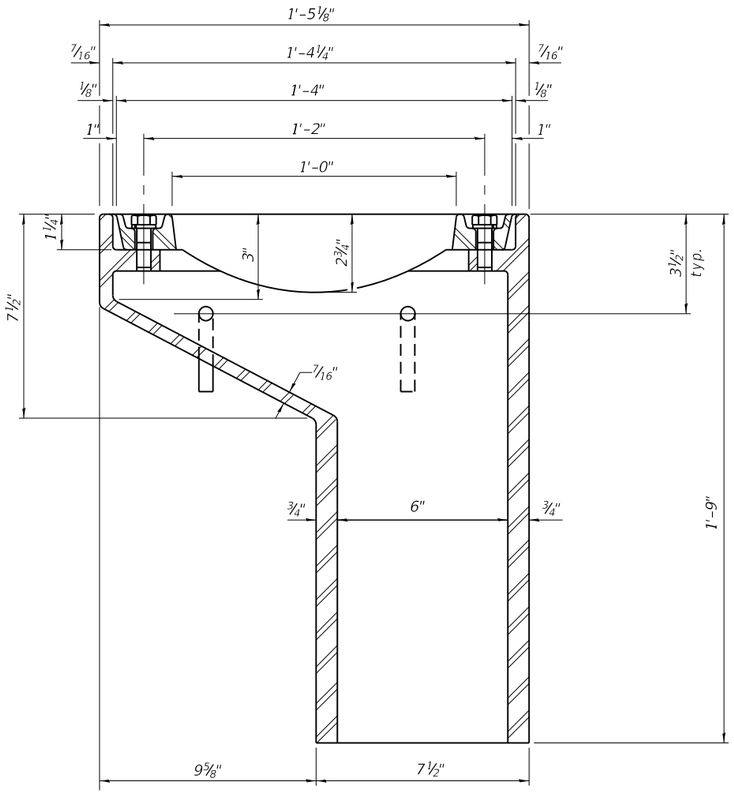
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

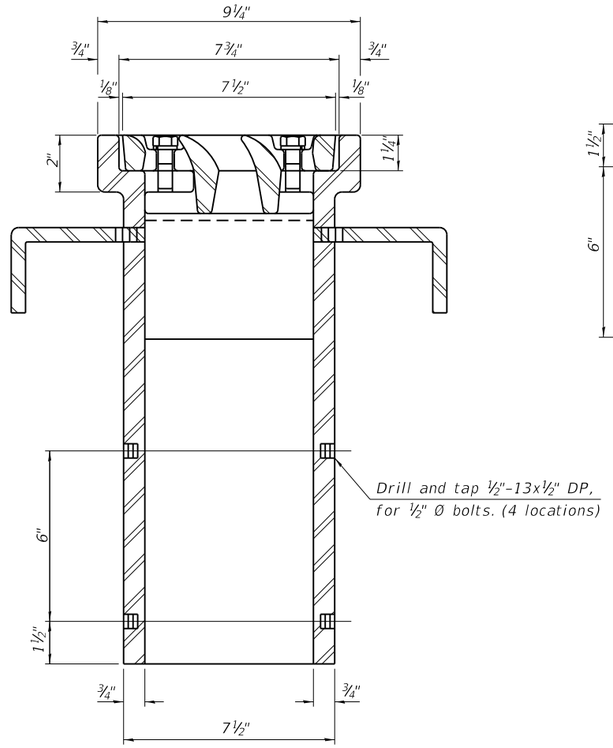
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

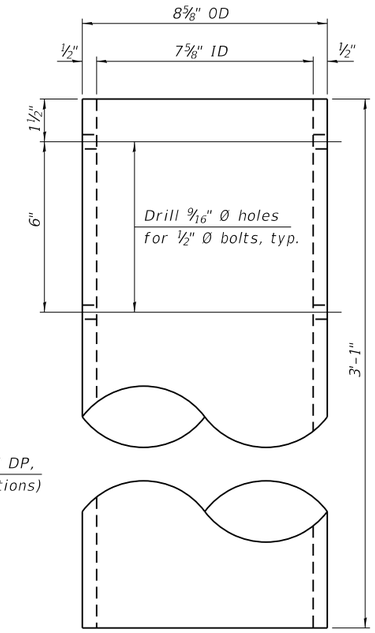


SECTION A-A

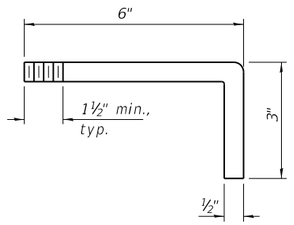
See sheet 9 of 35 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

DS-11

2-17-2017

ORIGINAL:	UPDATED:			
Wight	LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - MAS		REVISED
		CHECKED - MWS	MTH	REVISED
		DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019		CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 016-0272
SHEET NO. 11 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	70
		CONTRACT NO. 60D77		
		ILLINOIS	FED. AID PROJECT	

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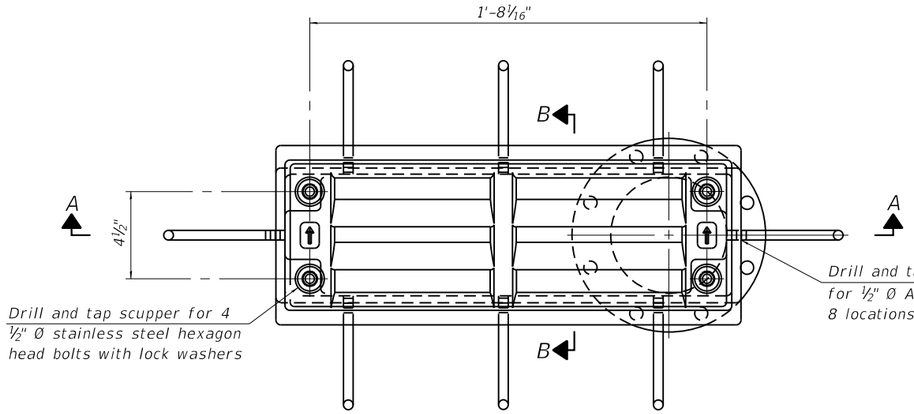
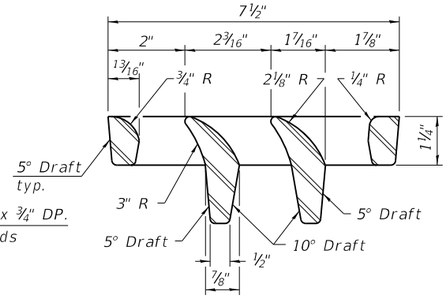
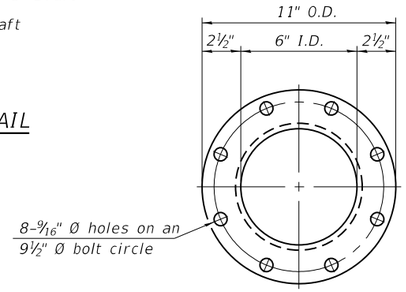


PLAN



VANE GRATE DETAIL



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

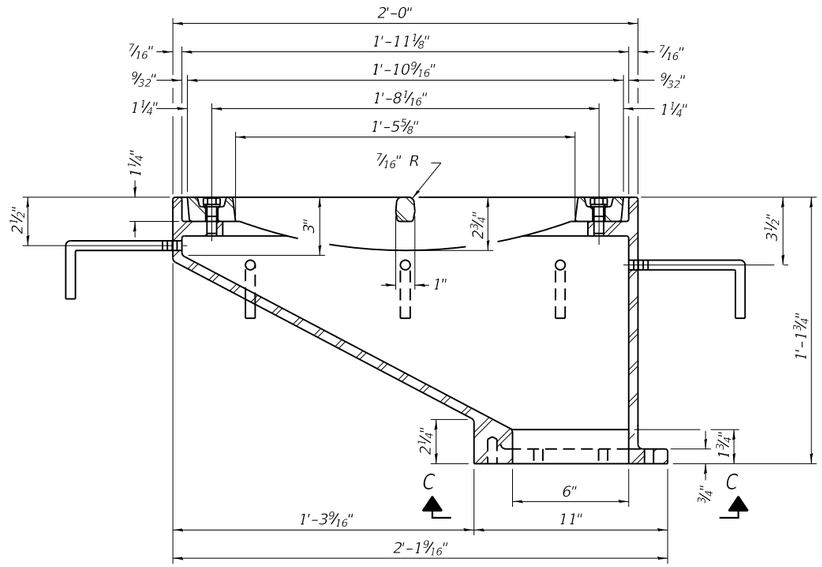
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

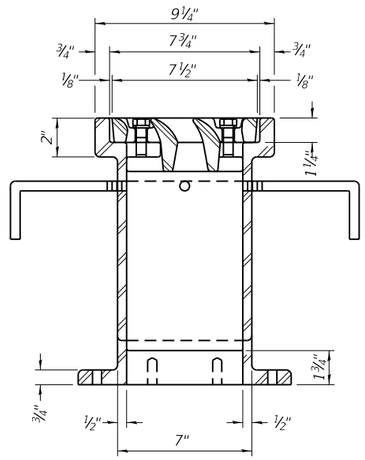
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

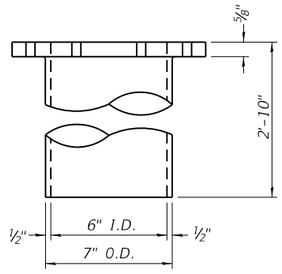


SECTION A-A

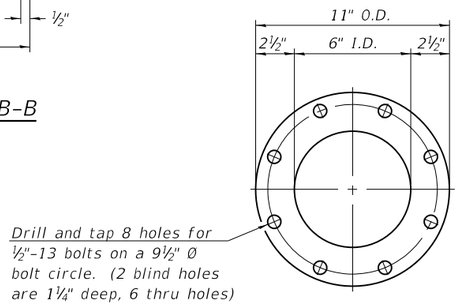
See sheet 9 of 35 for scupper location relative to parapet.



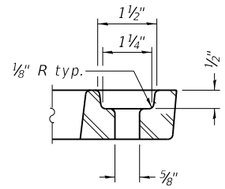
SECTION B-B



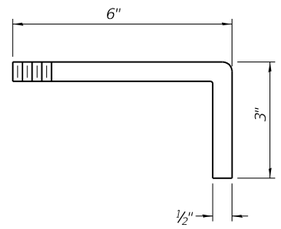
DOWNSPOUT



VIEW C-C



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	2

DS-12

2-17-2017

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - MAS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

ORIGINAL: Wight

UPDATED: LBN ENGINEERING LTD. Consulting Engineers

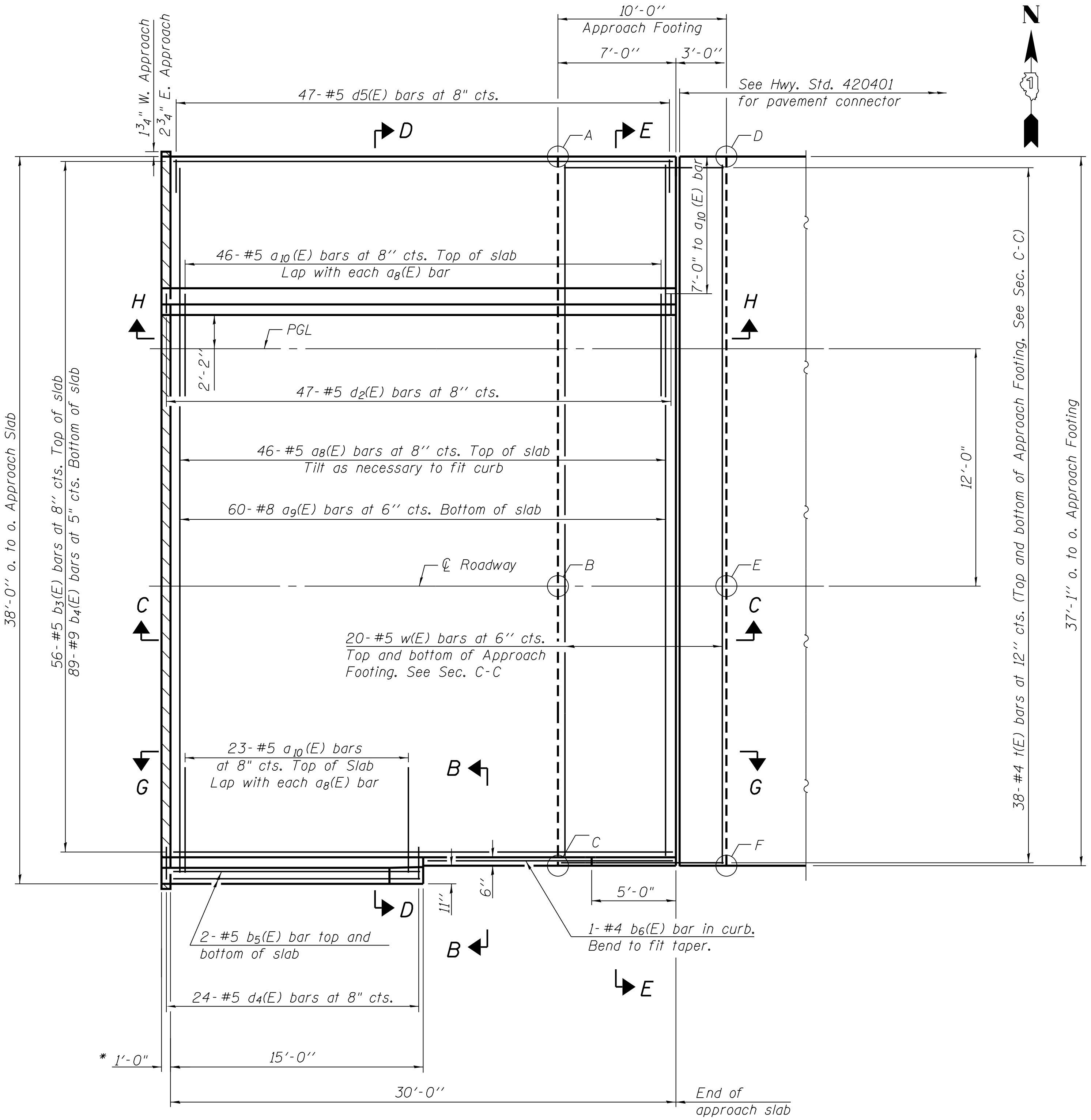
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-0272
SHEET NO. 12 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	71
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

11/11/2019 3:07:51 PM E:\1035\Structl\SN 016-0272\Design Plans\CADD Sheets\016O272-60L75 SHT-012_DRN02.dgn

Note:
See sheet 14 of 35 for Sections and Views.

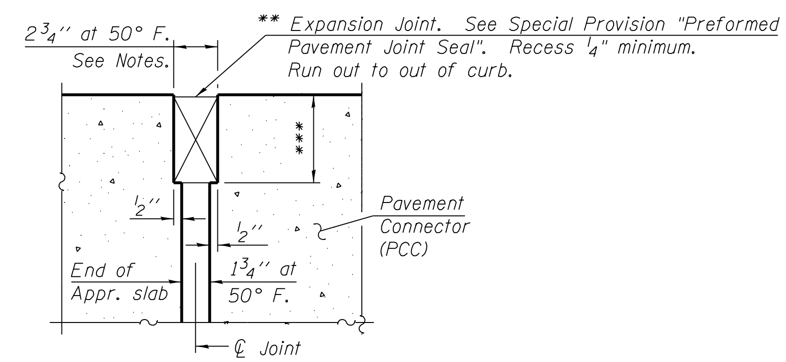


PLAN

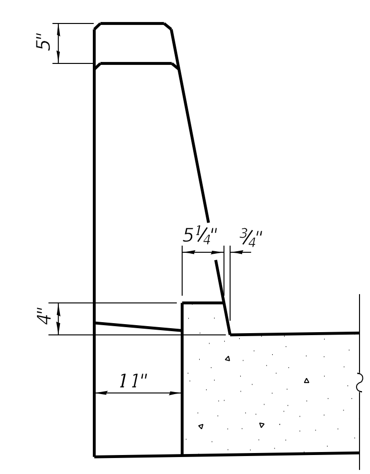
(East Approach Shown. West Approach opposite hand)

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	641.75	640.92	641.79	640.96
B	642.22	641.38	642.26	641.43
C	641.89	641.06	641.94	641.10
D	641.67	640.84	641.75	640.92
E	642.14	641.31	642.22	641.39
F	641.82	640.98	641.90	641.06



DETAIL A



VIEW B-B

* Hatched area to be poured after superstructure forms have been removed.
Quantity of concrete included with Concrete Superstructure. See Abutment sheets for details.
** Cost included with Concrete Superstructure (Approach Slab).
*** Per manufacturer recommendations.

(Sheet 1 of 2)

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - MWS	REVISED
		CHECKED - TAY MTH	REVISED
		DRAWN - MWS	REVISED
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 016-0272

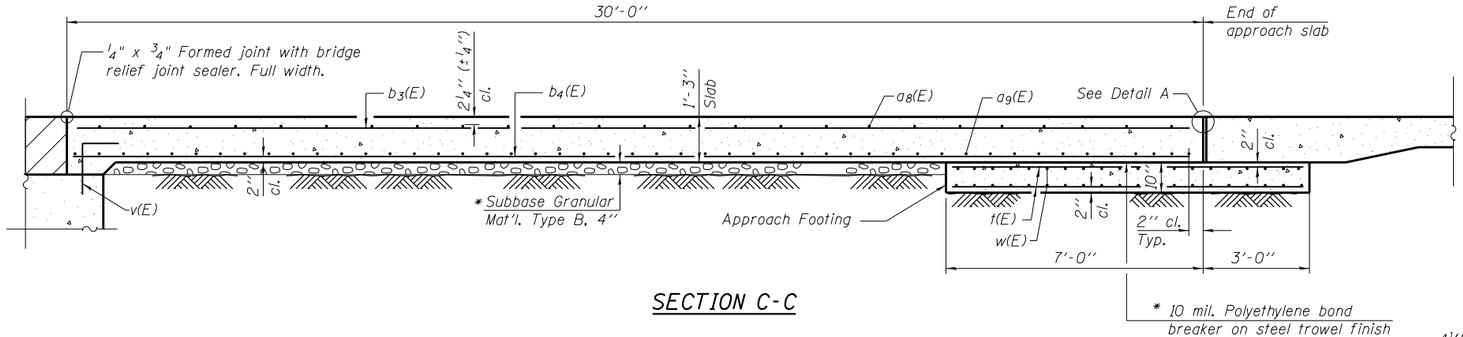
SHEET NO. 13 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	72

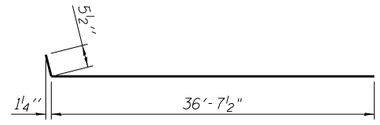
CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

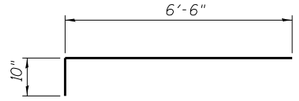
Notes:
See sheet 13 of 35 for Detail A and View B-B.
Parapet concrete shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For additional parapet details, see sheet 9 of 35.



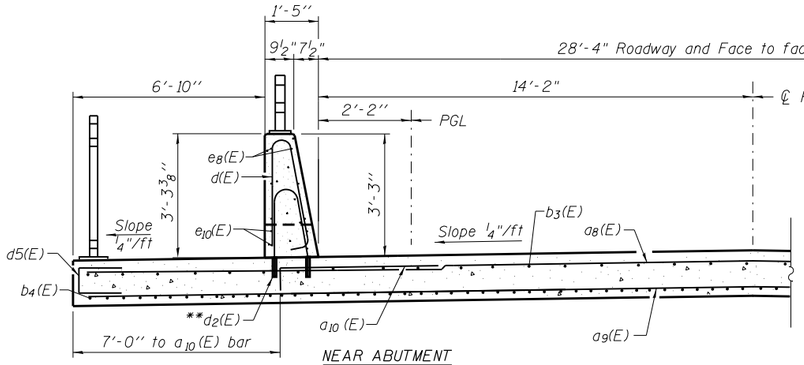
SECTION C-C

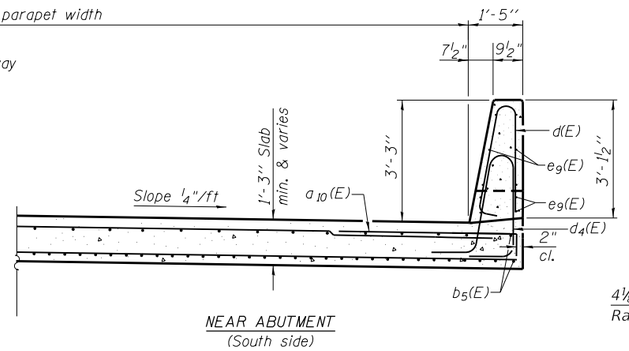


BAR a8(E)

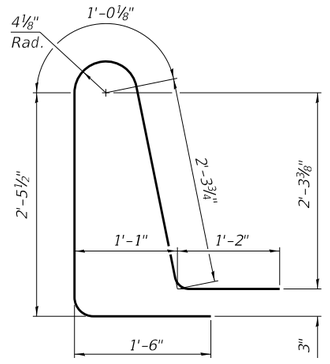


BAR a10(E)

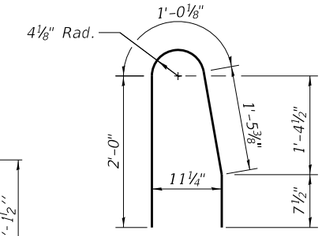




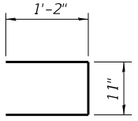
SECTION D-D
(See Plan for dimensions not shown)



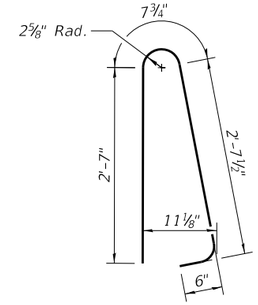
BAR d4(E)



BAR d2(E)

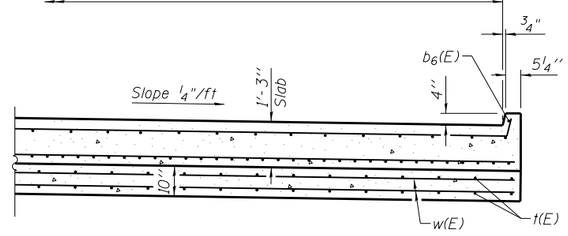


BAR d5(E)



BAR d(E)

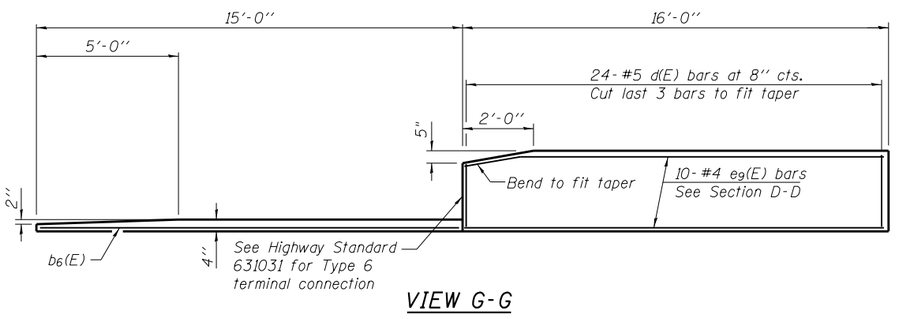
AT APPROACH FOOTING (North side)



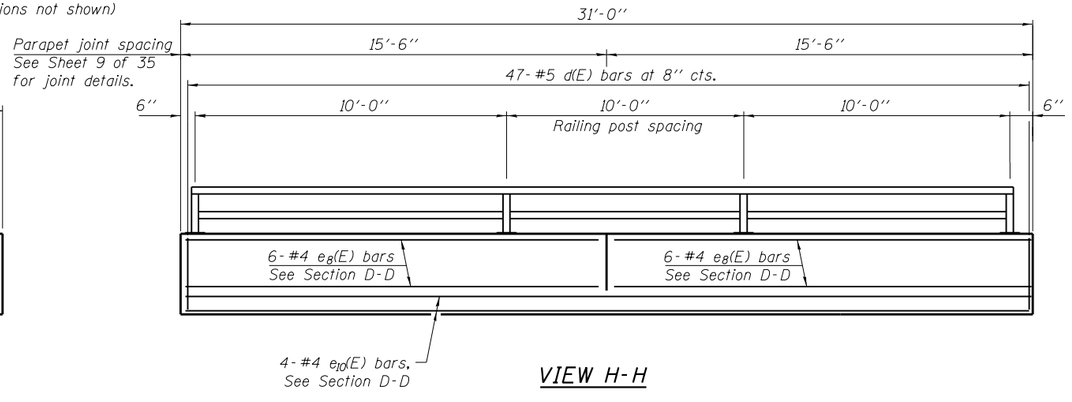
AT APPROACH FOOTING (South side)

SECTION E-E
(See Plan and Section D-D for dimensions not shown)

** Core and set d2(E) bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".



VIEW G-G



VIEW H-H

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a8(E)	92	#5	37'-1"	
a9(E)	120	#8	36'-9"	
a10(E)	138	#5	7'-4"	
b3(E)	112	#5	29'-8"	
b4(E)	178	#9	29'-8"	
b5(E)	8	#5	14'-8"	
b6(E)	2	#4	14'-8"	
d(E)	142	#5	6'-5"	
d2(E)	94	#5	5'-1"	
d4(E)	48	#5	8'-6"	
d5(E)	94	#5	3'-3"	
e8(E)	24	#4	15'-2"	
e9(E)	20	#4	15'-8"	
e10(E)	8	#4	30'-8"	
t(E)	152	#4	9'-8"	
w(E)	80	#5	36'-9"	
Concrete Structures		Cu. Yd.	22.9	
Concrete Superstructure		Cu. Yd.	12.2	
Concrete Superstructure (Approach Slab)		Cu. Yd.	105.0	
Reinforcement Bars, Epoxy Coated		Pound	37,550	

* Cost included with Concrete Superstructure (Approach Slab).

ORIGINAL: Wight
UPDATED: LBN ENGINEERING LTD. Consulting Engineers

	DESIGNED - MWS		REVISED
	CHECKED - MAS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 14 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	73
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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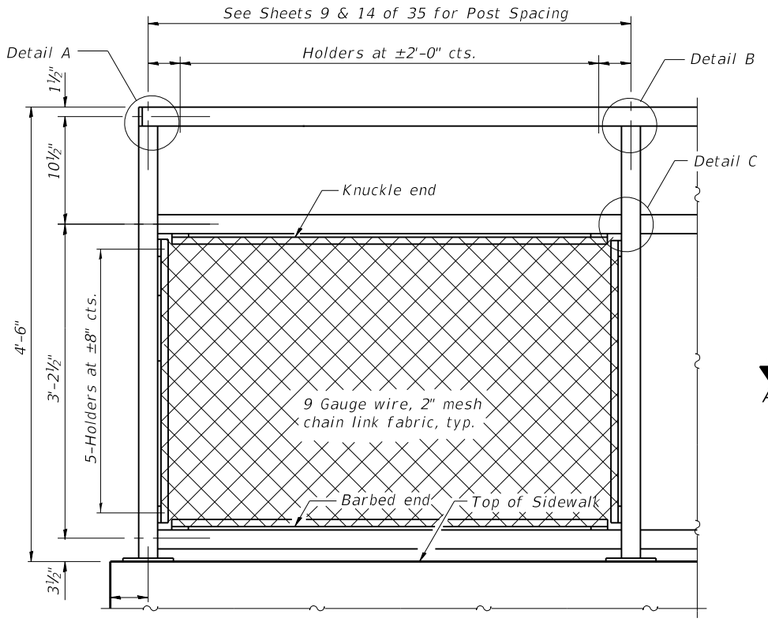
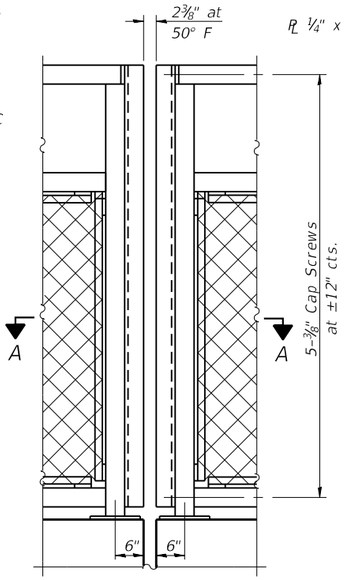
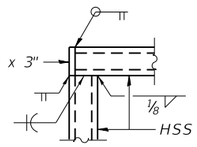


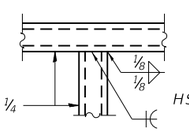
BICYCLE RAILING



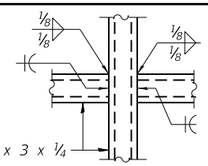
BICYCLE RAILING



DETAIL A

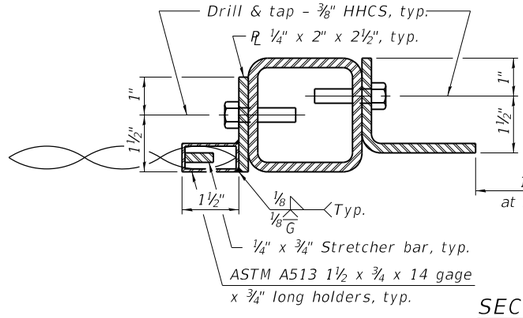


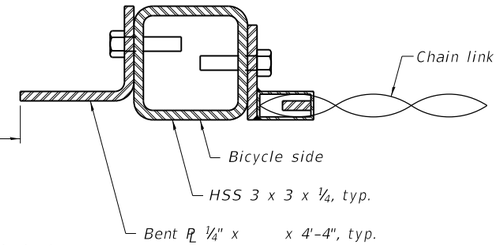
DETAIL B



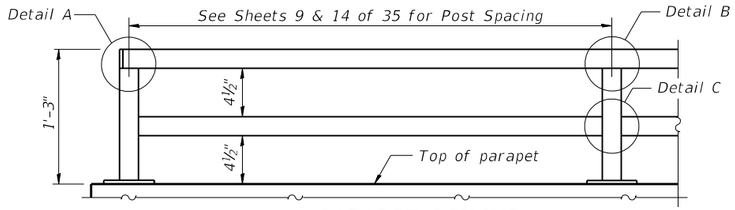
DETAIL C

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

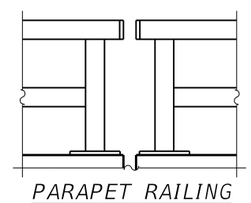




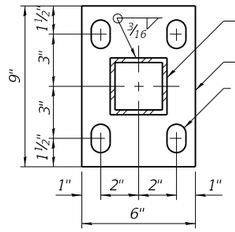
SECTION A-A



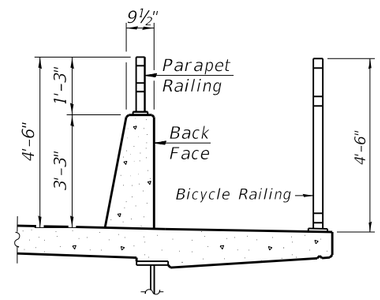
PARAPET RAILING
ELEVATION
(Inside Face of Two Element Rail)



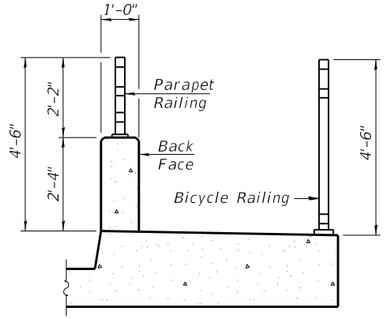
PARAPET RAILING
ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)



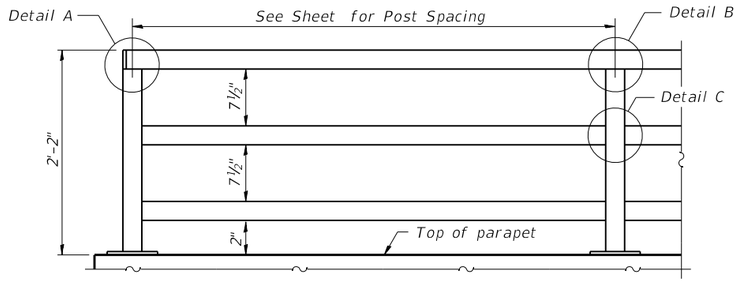
BASE ℄



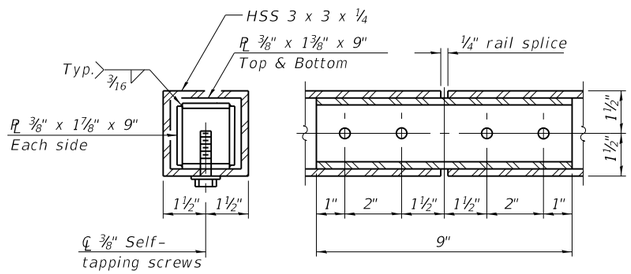
SECTION THRU DECK



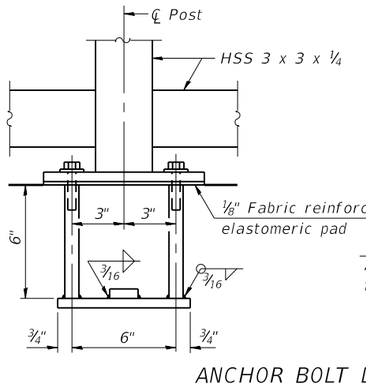
SECTION THRU SIDEWALK

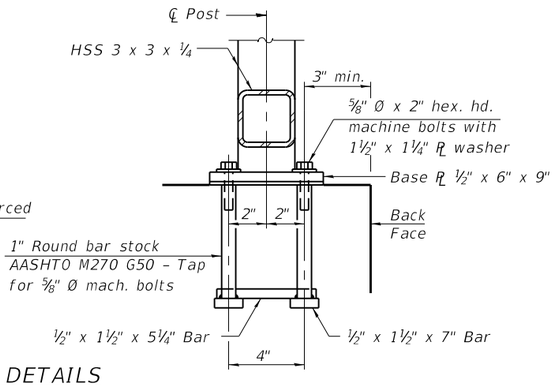


PARAPET RAILING
ELEVATION
(Inside Face of Three Element Rail)



RAIL SPLICE





ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
CVN testing may be omitted for the Bicycle Railing.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing	Foot	221
Parapet Railing	Foot	221

R-29

1-14-2019 (10'-0" Maximum Post Spacing)

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE AND PARAPET RAILING
STRUCTURE NO. 016-0272
SHEET NO. 15 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	74
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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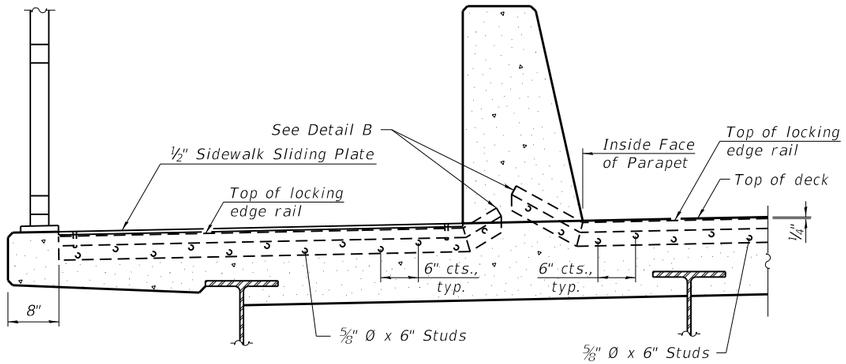
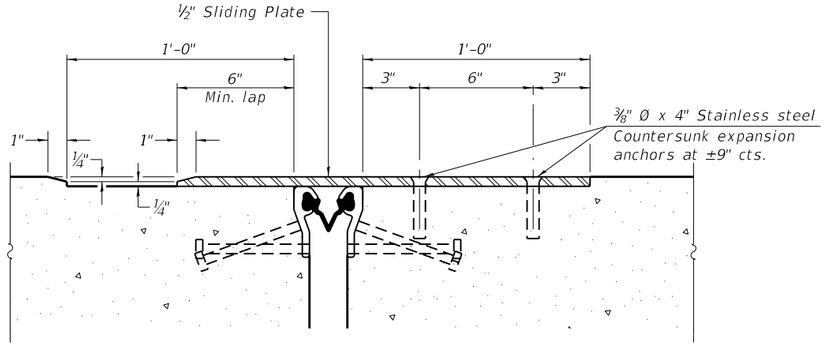
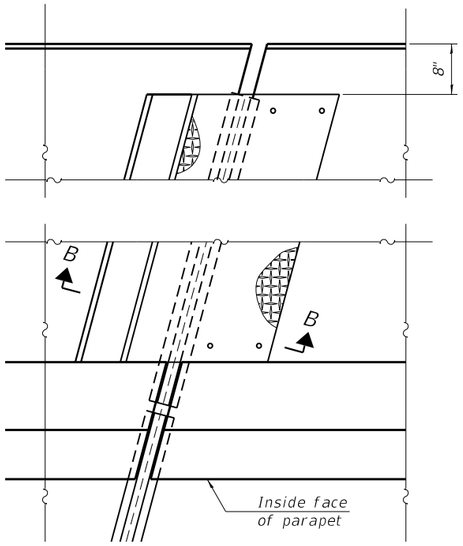


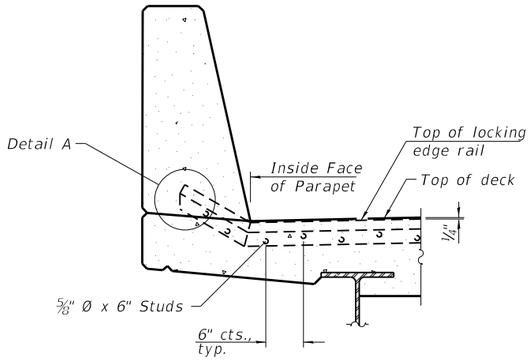
ELEVATION AT DECK LEVEL SIDEWALK



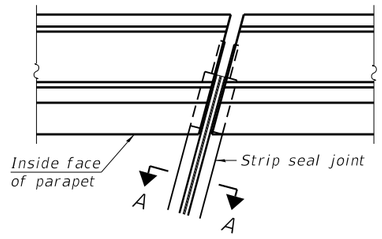
SECTION B-B



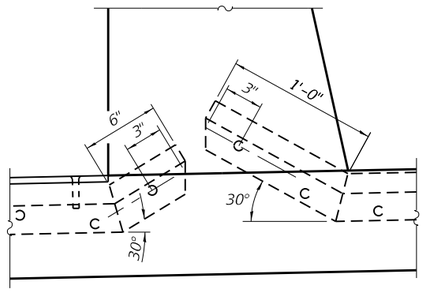
PLAN AT DECK LEVEL SIDEWALK



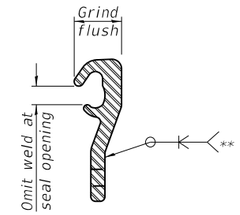
ELEVATION AT PARAPET



PLAN AT PARAPET

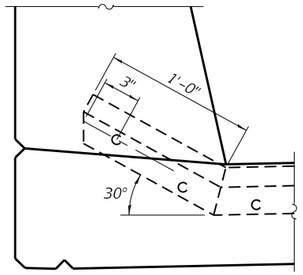


DETAIL B

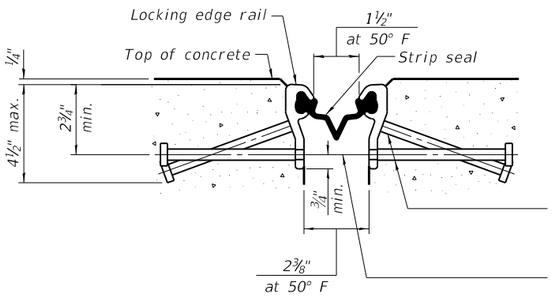


LOCKING EDGE RAIL SPLICE

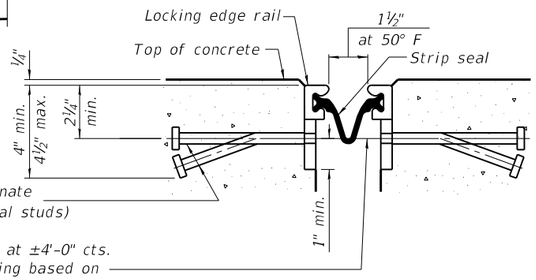
The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.



DETAIL A



SHOWING ROLLED RAIL JOINT



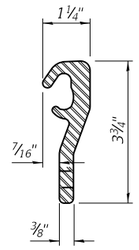
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

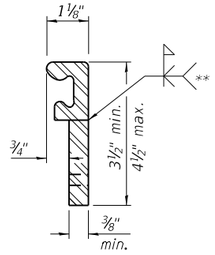
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of sidewalk sliding plates and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	74

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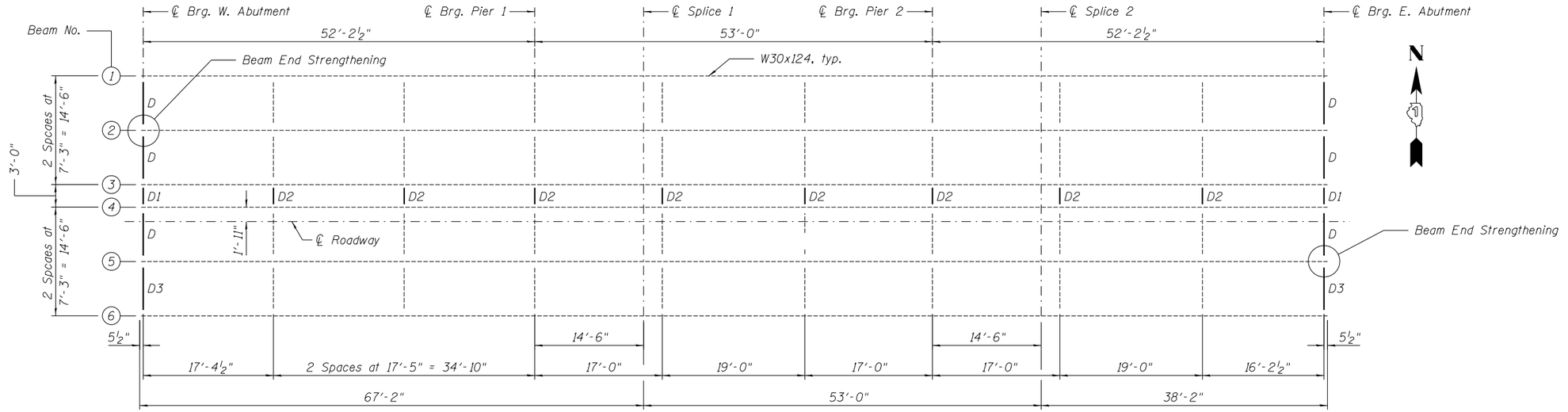
ORIGINAL: Wight & Company — UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

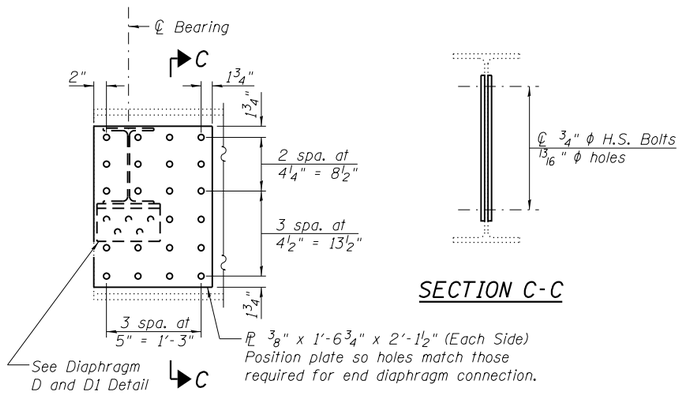
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0272
SHEET NO. 16 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	75
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN



SECTION C-C

BEAM STRENGTHENING AT ABUTMENT BEARINGS

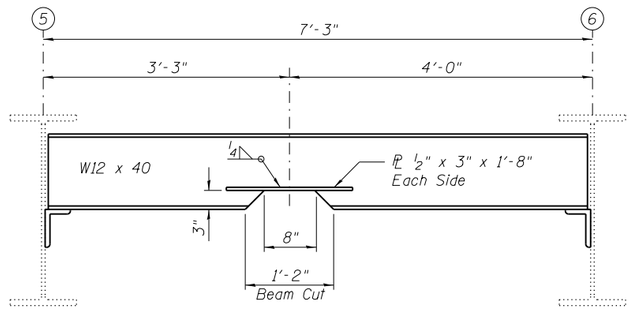
(2 Locations)

Notes:

Strengthening required at west end of Beam 2 and east end of Beam 5. Cost included with Furnishing and Erecting Structural Steel.

Contractor shall field verify that proposed bolt locations do not conflict with existing holes from end diaphragm connection.

Holes in the strengthening plates at the diaphragm seat angle connection shall be field drilled using the diaphragm seat angle as a template. Holes in the web shall be drilled using the strengthening plate as a template.

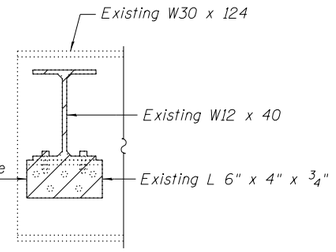


DIAPHRAGM D3

Showing cutout for existing conduit

LEGEND

Structural Steel Removal



REMOVAL OF EXISTING END DIAPHRAGM

Notes:

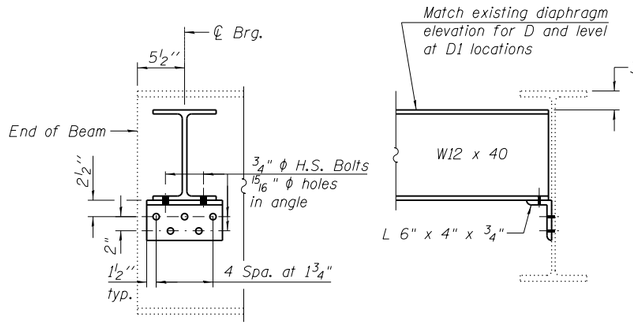
Existing end diaphragms at abutments shall be removed and replaced.

New diaphragms shall be added between Beams 3 and 4.

Adjust bolt hole locations in diaphragm connection angles to align with existing bolt holes in web.

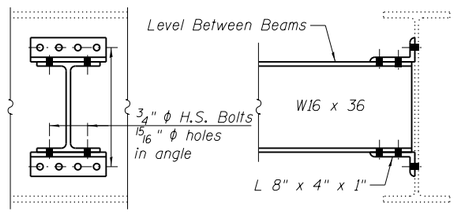
Contractor to field verify all dimensions prior to ordering material.

Install diaphragms after deck removal and prior to deck replacement.



DIAPHRAGMS D, D1 AND D3

Two hardened washers required for each set of oversized holes.



DIAPHRAGM D2

Bolts connecting diaphragm on opposite side of web will need to be removed prior to installation.

BILL OF MATERIAL

Item	Unit	Quantity
Furnishing and Erecting Structural Steel	Pound	4,960
Structural Steel Removal	Pound	2,670

ORIGINAL:	UPDATED:				
Wight	LBN ENGINEERING LTD. Consulting Engineers		DESIGNED - MAS		REVISED
			CHECKED - MWS MTH		REVISED
			DRAWN - MWS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 016-0272
SHEET NO. 17 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	76
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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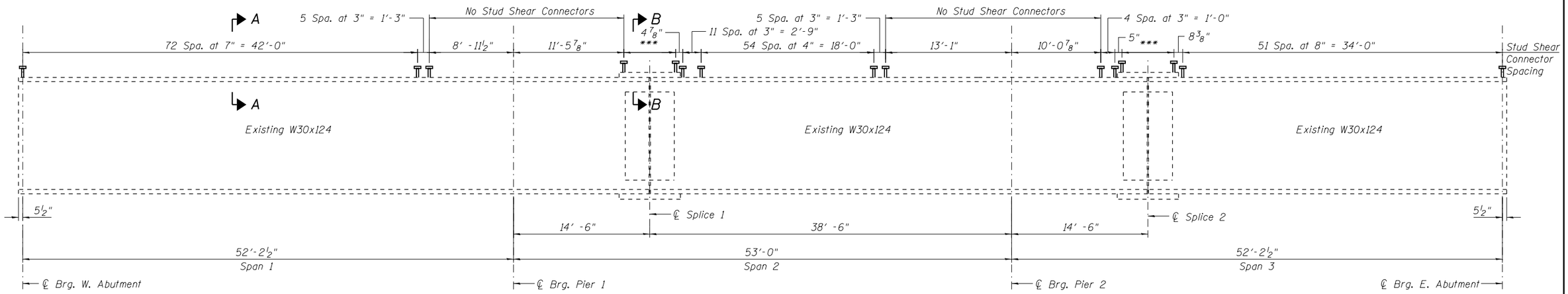


EXISTING BEAM ELEVATION

*** See Splice Detail for Stud Spacing on Splice Plates

EXISTING INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1 or 0.6 Sp. 3	Pier 1 or 2	0.5 Sp. 2
I_s	(in^4)	5360	5360	5360
$I_c(n)$	(in^4)	14390	-	14390
$I_c(3n)$	(in^4)	10678	-	10678
S_s	(in^3)	355	355	355
$S_c(n)$	(in^3)	520	-	520
$S_c(3n)$	(in^3)	472	-	472
$\mathcal{D}$	(k/')	0.887	1.425	0.887
$M\mathcal{D}$	('k)	192	371	66
$s\mathcal{D}$	(k/')	0.538	-	0.538
$M_s\mathcal{D}$	('k)	126	-	64
M_L	('k)	375	183	317
M_I	('k)	106	52	89
$\frac{5}{3}[M_L + I]$	('k)	802	392	677
M_a	('k)	1456	992	1050
* M_u	('k)	2208	-	2625
f_s $\mathcal{D}$ non-comp	(ksi)	6.49	12.54	2.23
f_s $\mathcal{D}$ (comp)	(ksi)	3.20	-	1.63
f_s $\frac{5}{3}[M_L + M_I]$	(ksi)	18.51	13.25	15.62
f_s (Overload)	(ksi)	28.20	25.79	19.48
** f_s (Total)	(ksi)	-	33.53	-
VR	(k)	59.0	-	41.0

EXISTING INTERIOR BEAM REACTION TABLE			
		Abut.	Pier
$R\mathcal{D}$	(k)	30.7	81.5
R_L	(k)	39.6	44.4
R_I	(k)	11.2	9.6
R_{Total}	(k)	81.5	135.5

* Compact section

** Braced non-compact and partially braced section

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

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

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

$\mathcal{D}$: Un-factored non-composite dead load (kips/ft.).

$M\mathcal{D}$: Un-factored moment due to non-composite dead load (kip-ft.).

$s\mathcal{D}$: Un-factored long-term composite (superimposed) dead load (kips/ft.)

$M_s\mathcal{D}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_L: Un-factored live load moment (kip-ft.).

M_I: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.).
$1.3\ [M\mathcal{D} + M_s\mathcal{D} + \frac{5}{3}(M_L + M_I)]$

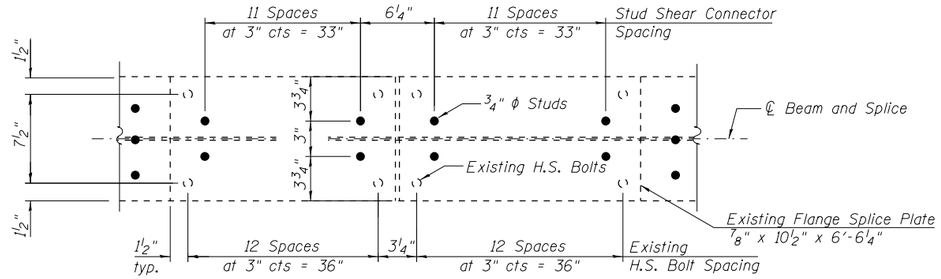
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M\mathcal{D} + M_s\mathcal{D} + \frac{5}{3}(M_L + M_I)$

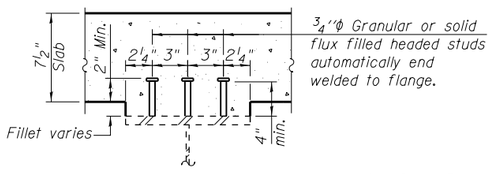
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M\mathcal{D} + M_s\mathcal{D} + \frac{5}{3}(M_L + M_I)]$

VR: Maximum L + impact shear range within the composite portion of the span for stud shear connector design (kips).

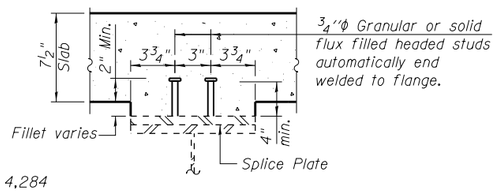
Note:
Contractor shall restore the beams to existing elevations after the bearing replacement is complete.



SPLICE DETAIL



SECTION A-A



No. Studs Req'd. = 4,284

SECTION B-B

Only over Splice Plates

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers
PLOT DATE = 11/11/2019

DESIGNED - MAS			REVISED
CHECKED - MWS	MTH		REVISED
DRAWN - MWS			REVISED
CHECKED - BJM	MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 18 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	77
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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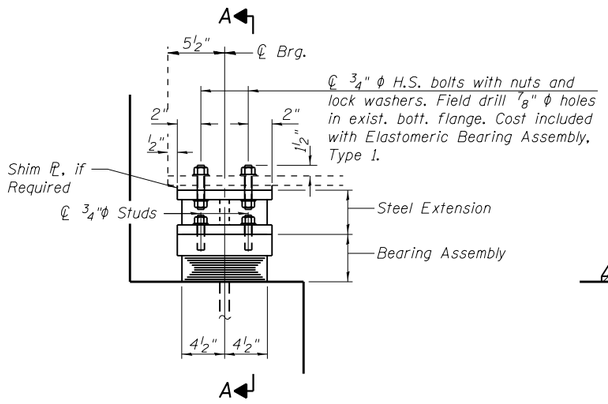
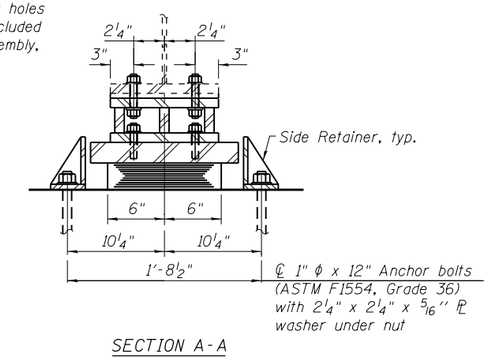
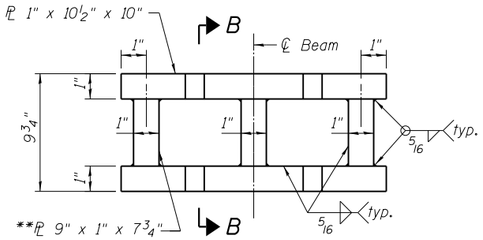


ELEVATION AT ABUT.

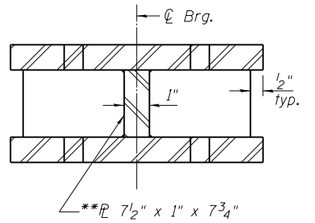


SECTION A-A

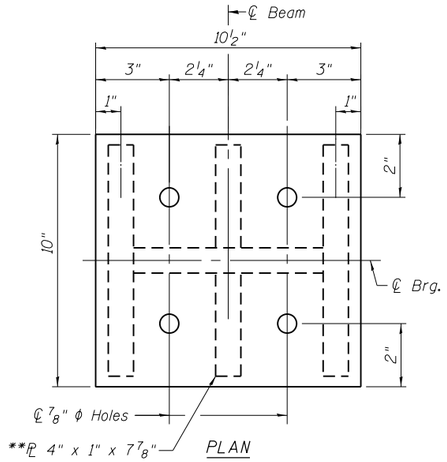
TYPE I ELASTOMERIC EXP. BRG.



ELEVATION



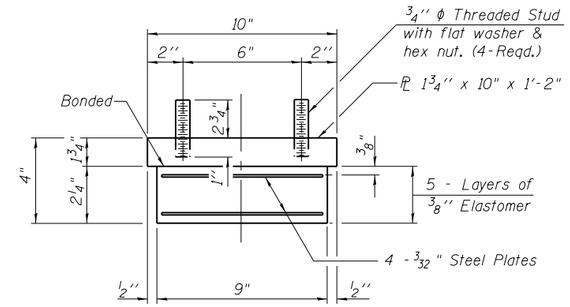
SECTION B-B



PLAN

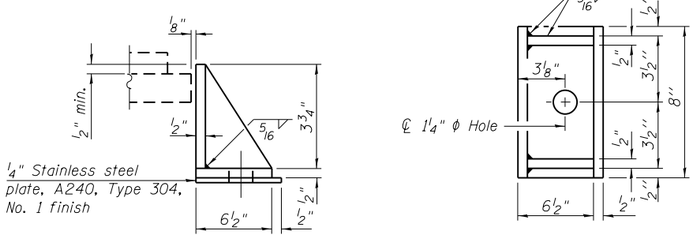
STEEL EXTENSION

** To adjust steel extension height, revise plate heights accordingly if measurements from field deem necessary.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

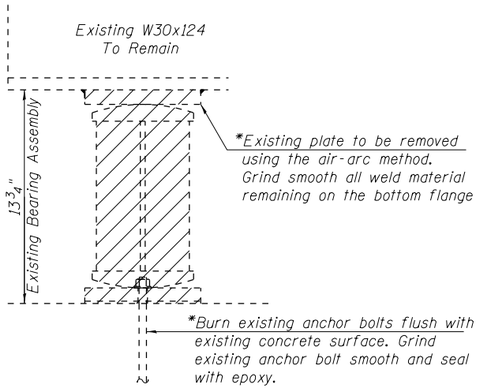
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

REQUIRED JACK CAPACITY

(Per Bearing)

		W. Abut.	E. Abut.
*** Dead Load	(k)	3.3	3.3
Min. Jack Capacity	(Tons)	2.5	2.5

*** Superstructure steel only



EXISTING STEEL BEARING REMOVAL

(At East & West Abutments)
* Cost is included with Jack and Remove Existing Bearings.

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

The existing concrete deck shall be removed prior to jacking and removing the existing bearings. The bearings shall be in place and the jacks lowered prior to pouring the new deck.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side Retainers, Steel Extensions, and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and steel extension dimensions.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts.

Hardwood timbers shall be installed tightly between top and bottom flanges directly over the jack location to prevent rotation.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	12
Anchor Bolts, 1"	Each	24
Jack and Remove Existing Bearings	Each	12

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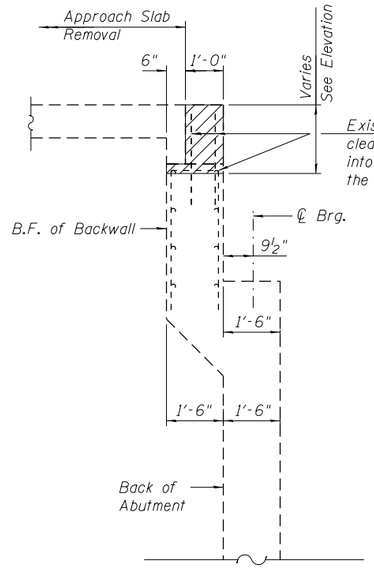
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - MAS/MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

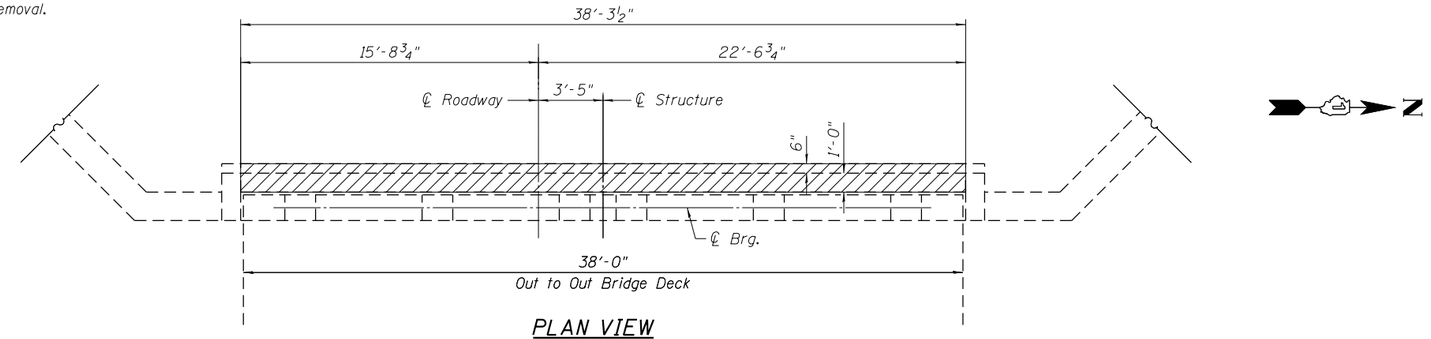
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 19 OF 35 SHEETS

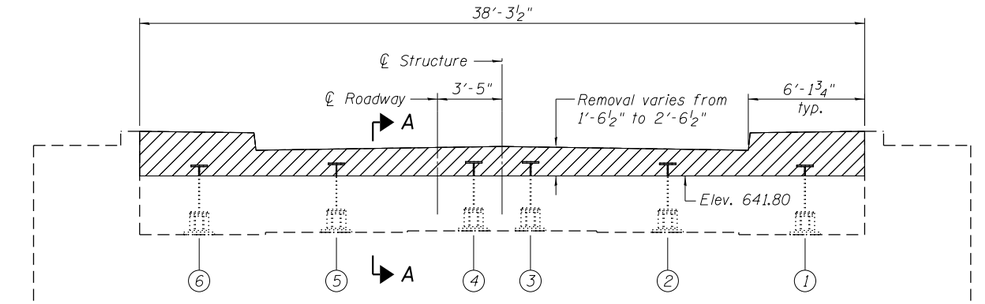
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	78
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

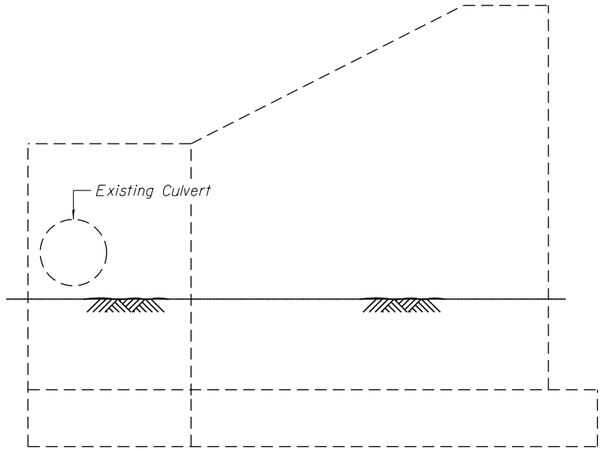


SECTION A-A

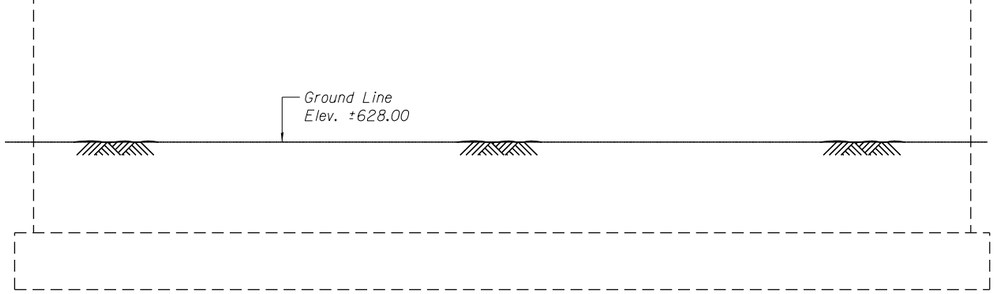


PLAN VIEW

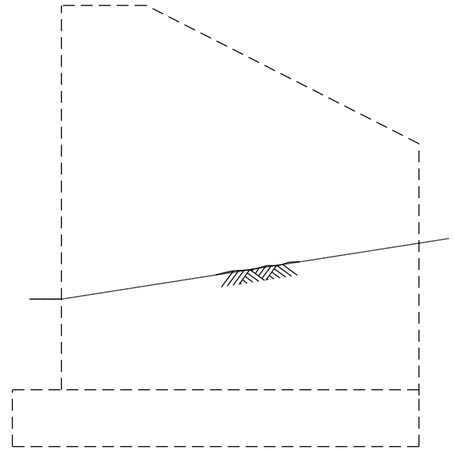




SOUTH WINGWALL



WEST ABUTMENT ELEVATION
(Looking West)



NORTH WINGWALL

LEGEND

(6) Beam Line Designation

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	2.9

ORIGINAL:	UPDATED:				
Wight	LIN ENGINEERING, LTD. Consulting Engineers		DESIGNED - MAS		REVISED
			CHECKED - MWS	MTH	REVISED
			DRAWN - MAS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 20 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	79
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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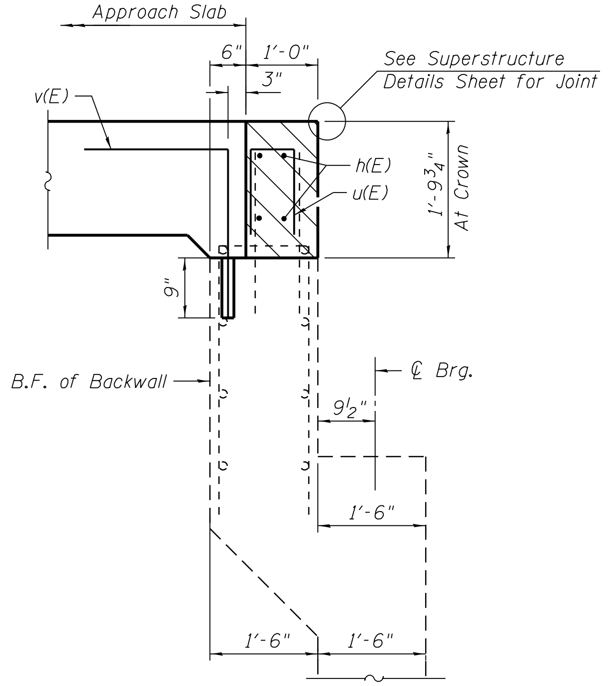
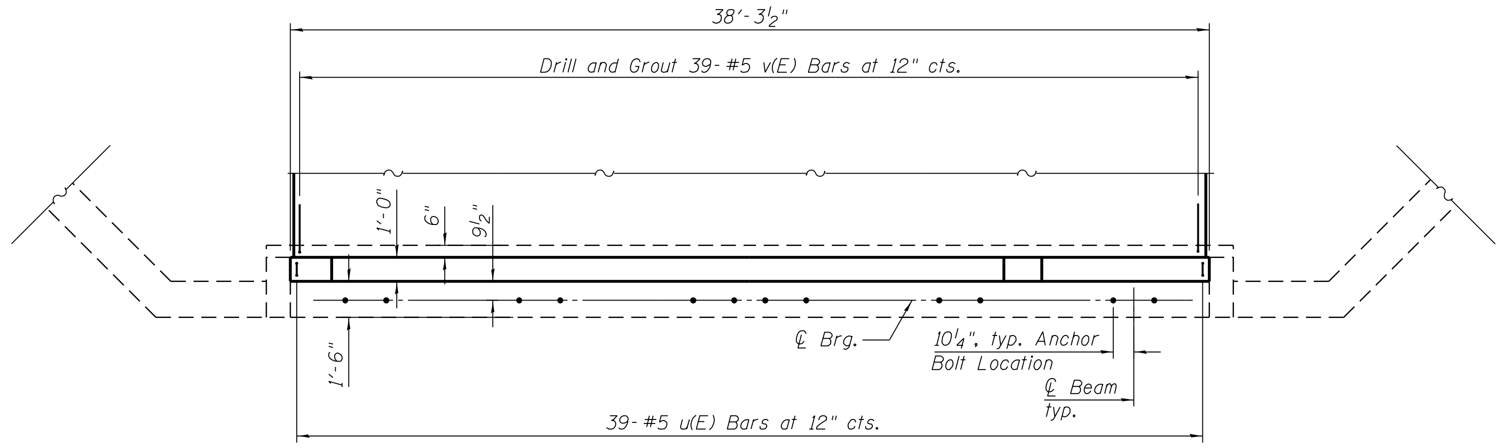
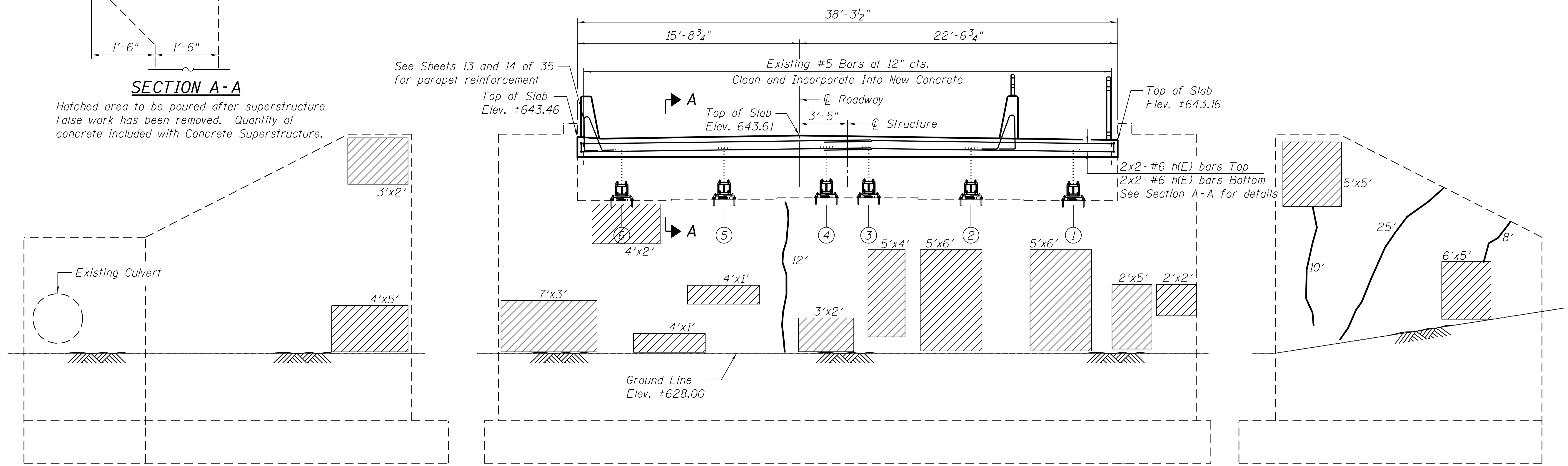


SECTION A-A

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.



PLAN VIEW



SOUTH WINGWALL

WEST ABUTMENT ELEVATION

(Looking West)

NORTH WINGWALL

MIN BAR LAP

#6 Bars = 3'-10"

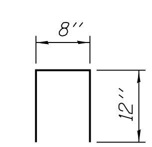
LEGEND

(6) Beam Line Designation

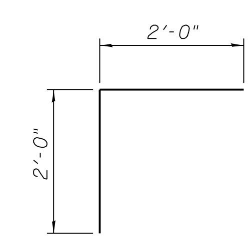
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)

Epoxy Crack Injection

Repair of the existing abutment shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.



BAR u(E)



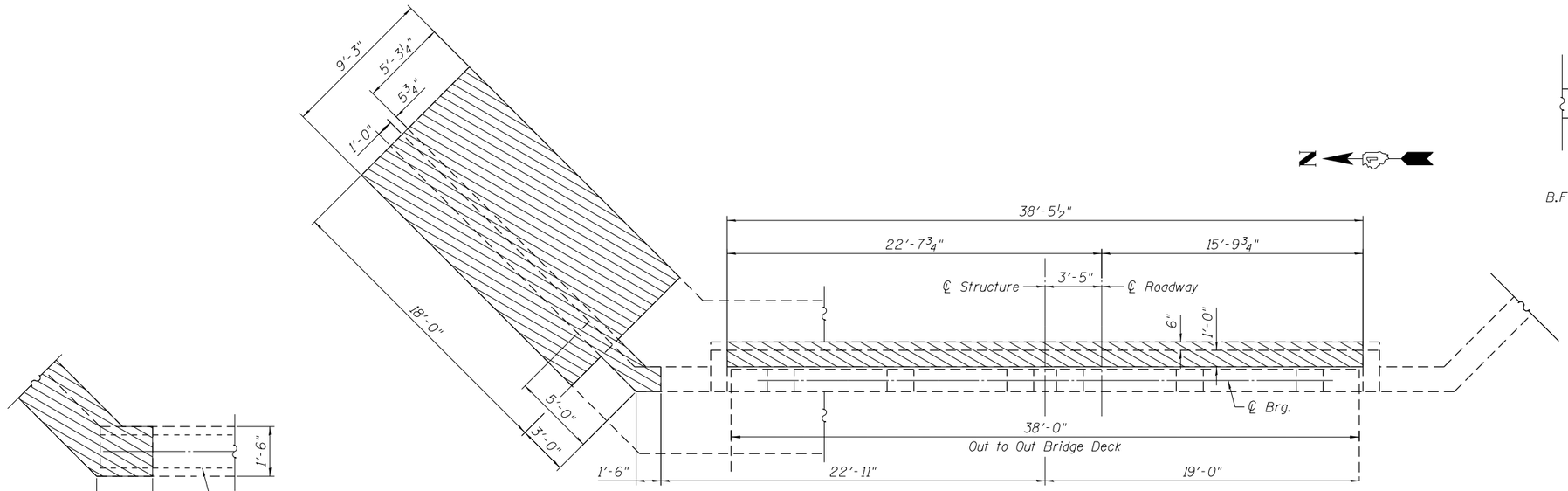
BAR v(E)

BILL OF MATERIAL

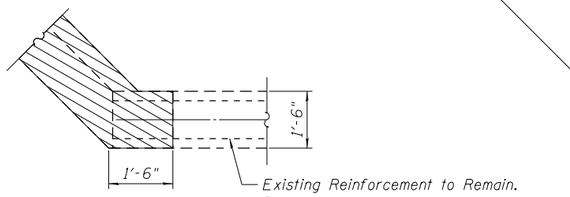
Bar	No.	Size	Length	Shape
h(E)	8	#6	21'-0"	—
u(E)	39	#5	2'-8"	⊓
v(E)	39	#5	4'-0"	⏋

Item	Unit	Quantity
Concrete Superstructure	Cu. Yd.	2.4
Reinforcement Bars, Epoxy Coated	Pound	530
Epoxy Crack Injection	Foot	55
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	218
Drill and Grout Bars	Each	39

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

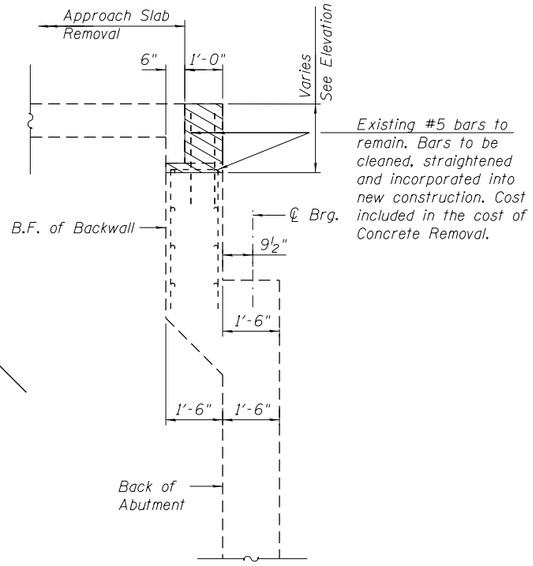


PLAN VIEW

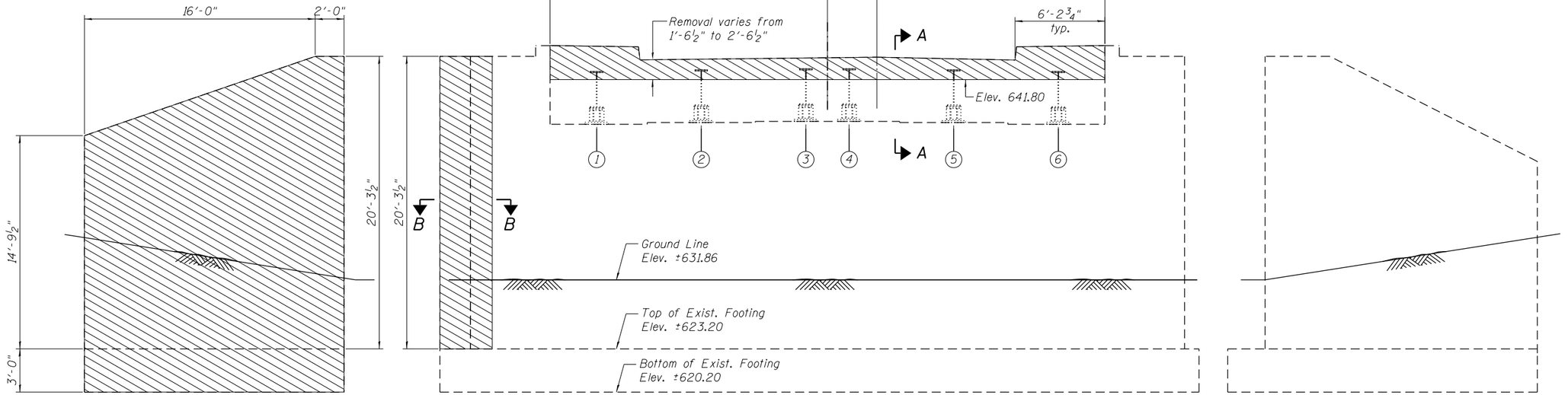


Existing Reinforcement to Remain. Bars to be cleaned, straightened and incorporated into new construction. Cost included in the cost of Concrete Removal.

SECTION B-B



SECTION A-A



NORTH WINGWALL

EAST ABUTMENT ELEVATION

(Looking East)

SOUTH WINGWALL

LEGEND

(6) Beam Line Designation

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	45.2

ORIGINAL: Wight

UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - MAS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0272

SHEET NO. 22 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	81
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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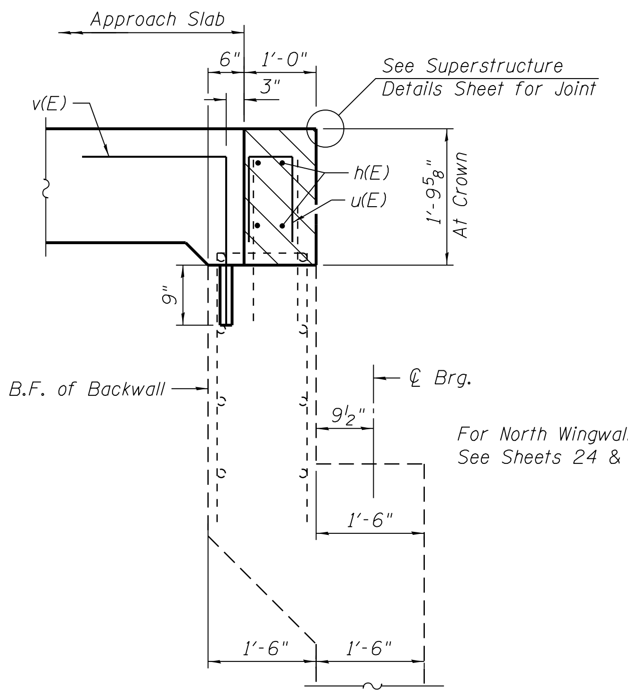
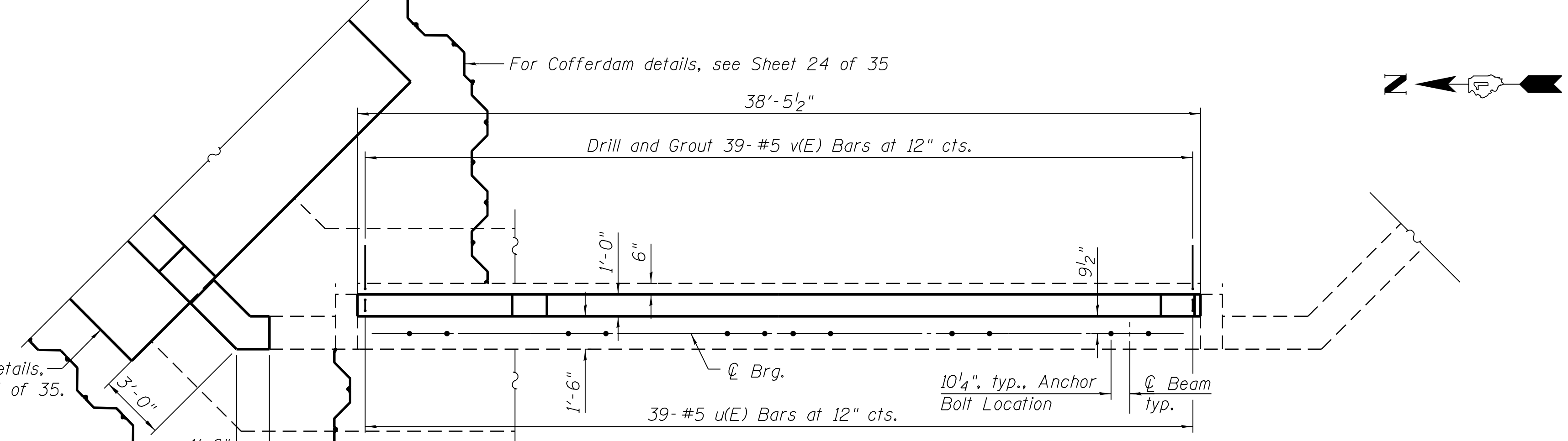
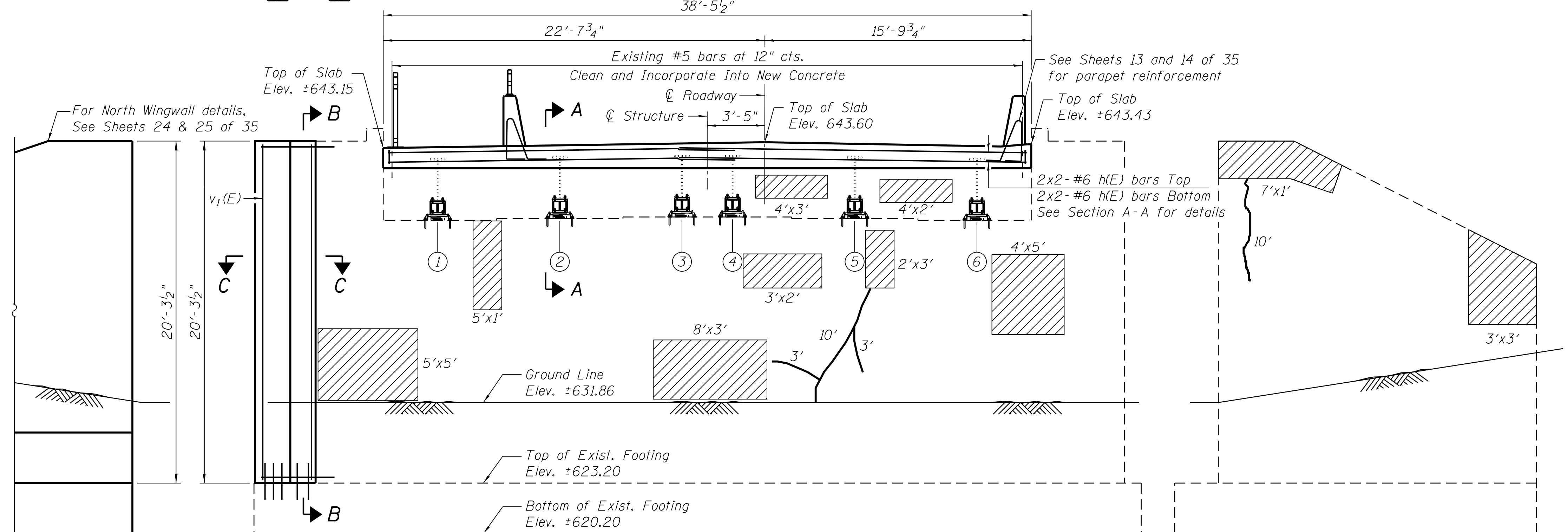


SECTION A-A

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.



PLAN VIEW

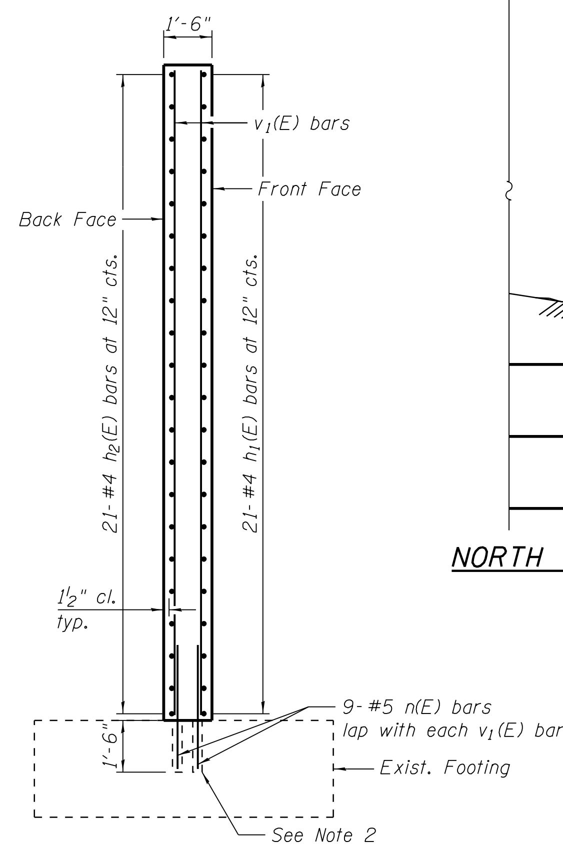


NORTH WINGWALL

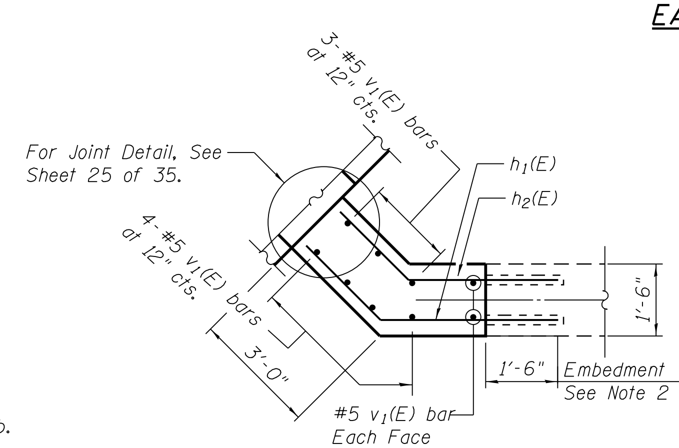
SOUTH WINGWALL

EAST ABUTMENT ELEVATION

(Looking East)



SECTION B-B



SECTION C-C

Notes:

1. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with concrete removal.
2. Drill holes and epoxy grout bars into existing concrete according to Article 584 of Standard Specifications.
3. The barrier and parapet are constructed with the bridge approach slab.

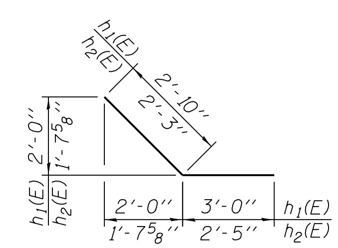
LEGEND

(6) Beam Line Designation

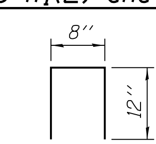
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)

Epoxy Crack Injection

Repair of the existing abutment shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.



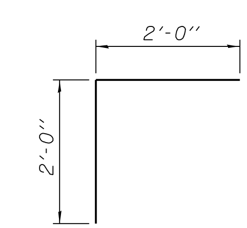
BARS $h_1(E)$ and $h_2(E)$



BAR u(E)

MIN BAR LAP

#5 Bars = 3'-2"
#6 Bars = 3'-10"



BAR v(E)

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	21'-0"	
$h_1(E)$	21	#4	5'-10"	
$h_2(E)$	21	#4	4'-8"	
n(E)	9	#5	4'-11"	
u(E)	39	#5	2'-8"	
v(E)	39	#5	4'-0"	
$v_1(E)$	9	#5	20'-0"	

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	3.5
Concrete Superstructure	Cu. Yd.	2.0
Reinforcement Bars, Epoxy Coated	Pound	910
Epoxy Crack Injection	Foot	26
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	122
Drill and Grout Bars	Each	90

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ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers		DESIGNED - MAS	REVISED
			CHECKED - MWS MTH	REVISED
			DRAWN - MAS/MWS	REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

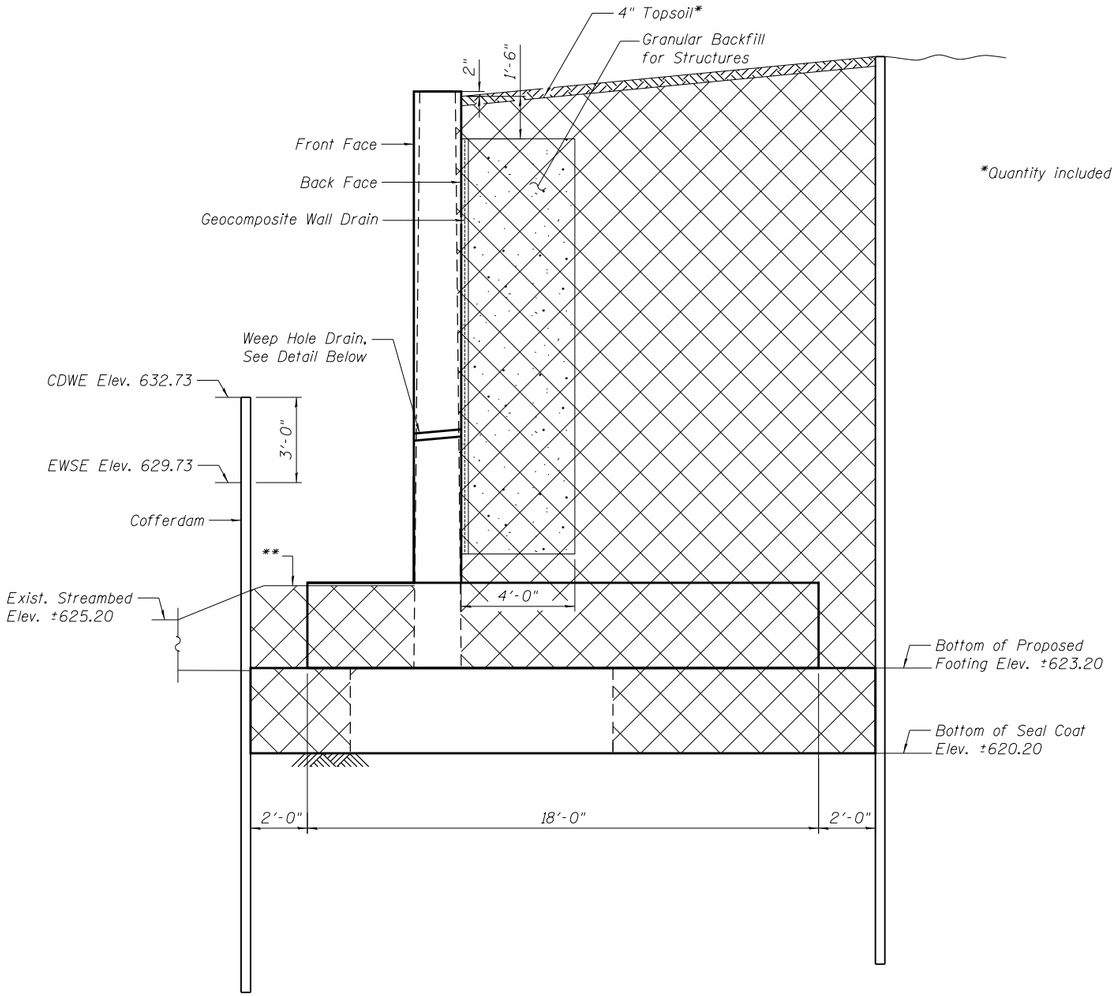
EAST ABUTMENT DETAILS
STRUCTURE NO. 016-0272

SHEET NO. 23 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	82

CONTRACT NO. 60D77

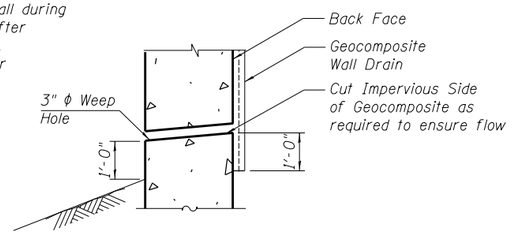
ILLINOIS FED. AID PROJECT



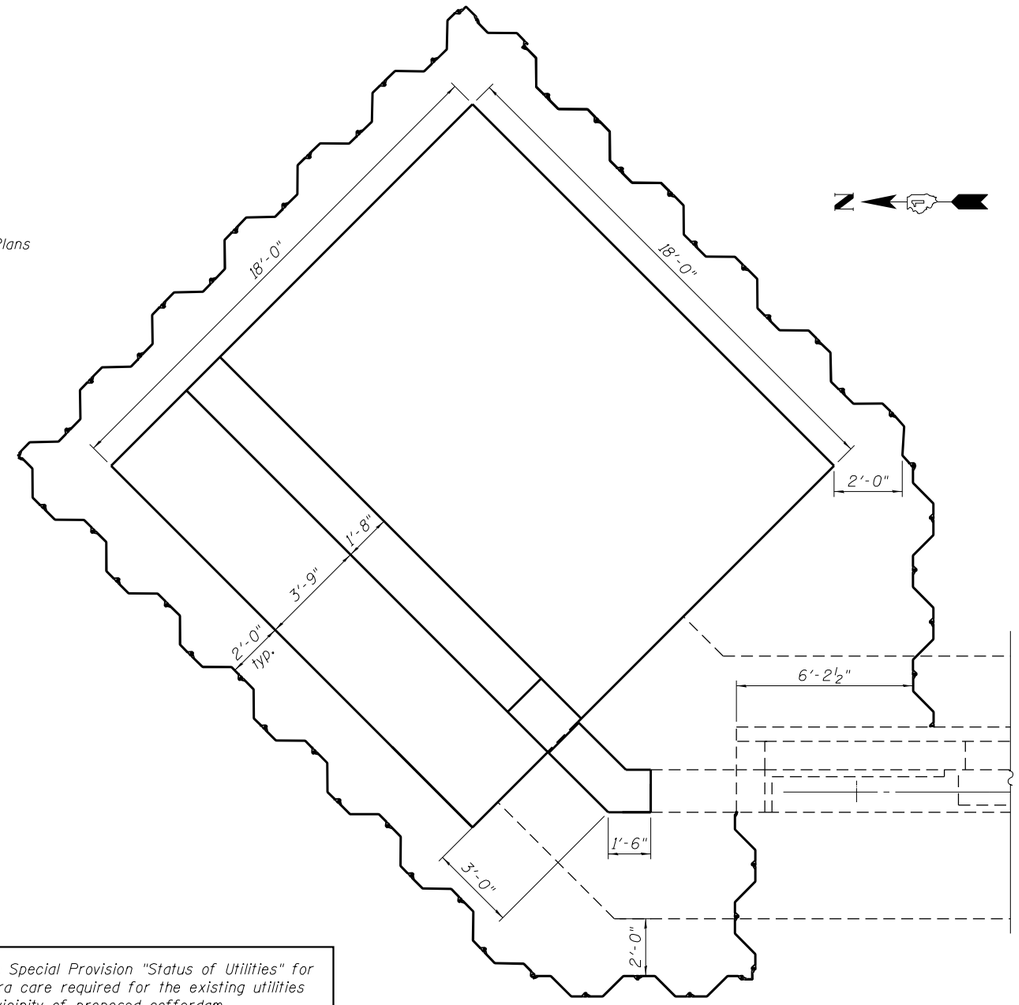
*Quantity included with Roadway Plans

WINGWALL SECTION

** Remove existing riprap in front of wingwall during Cofferdam Excavation. Reinstate riprap after wingwall has been built and cover footing. Additional riprap may be required to cover proposed wingwall footing.



WEEP HOLE DRAIN DETAIL



See Special Provision "Status of Utilities" for extra care required for the existing utilities in vicinity of proposed cofferdam.

COFFERDAM PLAN

LEGEND

- Cofferdam Excavation
- Existing Structure
- New Structure

Notes:
Hard driving may be encountered during sheet piling installation. The Contractor shall provide the appropriate driving equipment for the soil conditions indicated on the boring log.
See Sheet 22 of 35 for limits and quantity of Concrete Removal.

BILL OF MATERIAL

Item	Unit	Quantity
Cofferdam Excavation	Cu. Yd.	361.3
Geocomposite Wall Drain	Sq. Yd.	27
Granular Backfill for Structures	Cu. Yd.	35.2
Cofferdam (Type 2) (Location - 1)	Each	1

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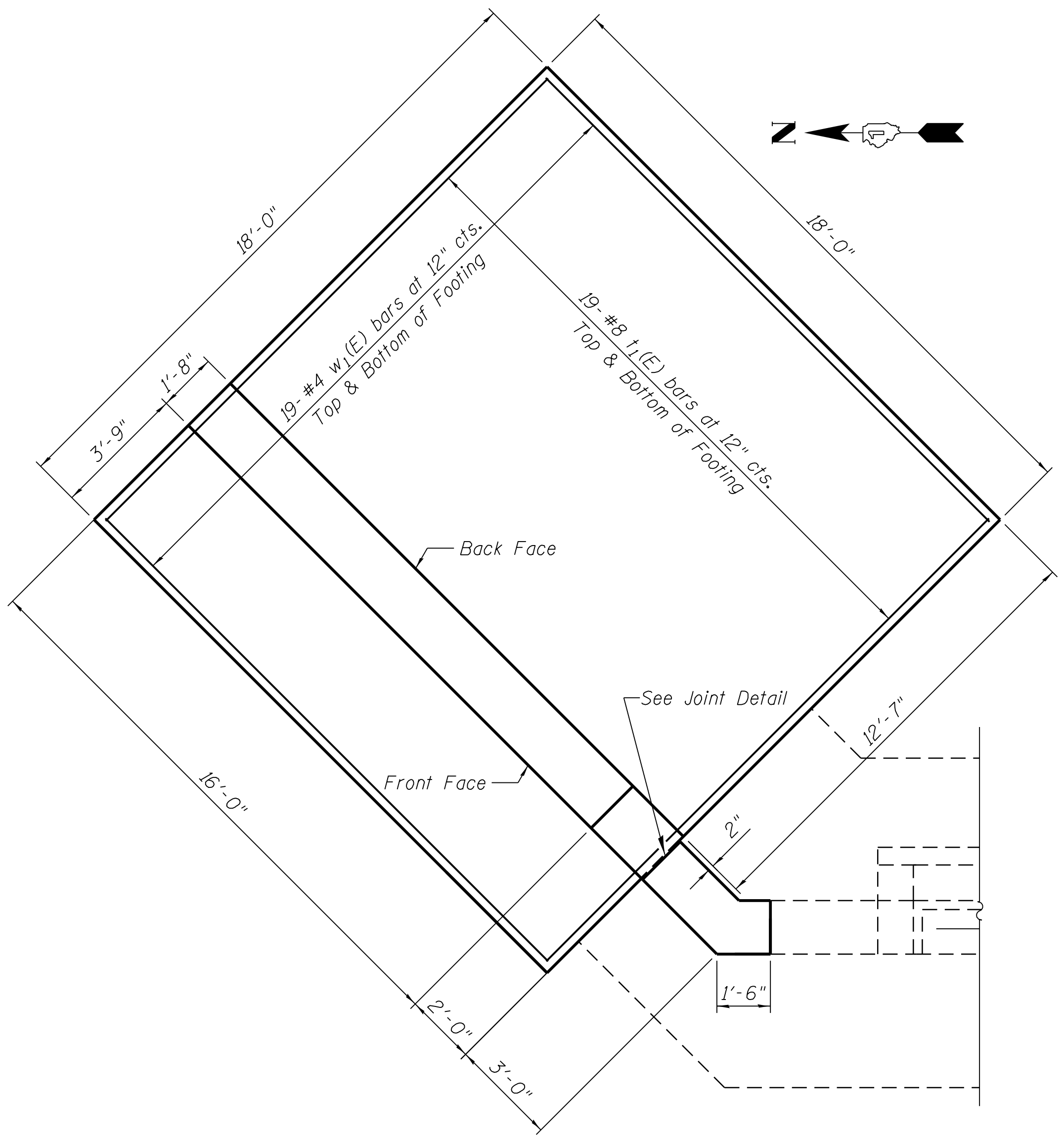
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS	REVISED
	CHECKED - MWS MTH	REVISED
	DRAWN - MAS/MWS	REVISED
PLOT DATE = 1/23/2020	CHECKED - BJM MTH	REVISED

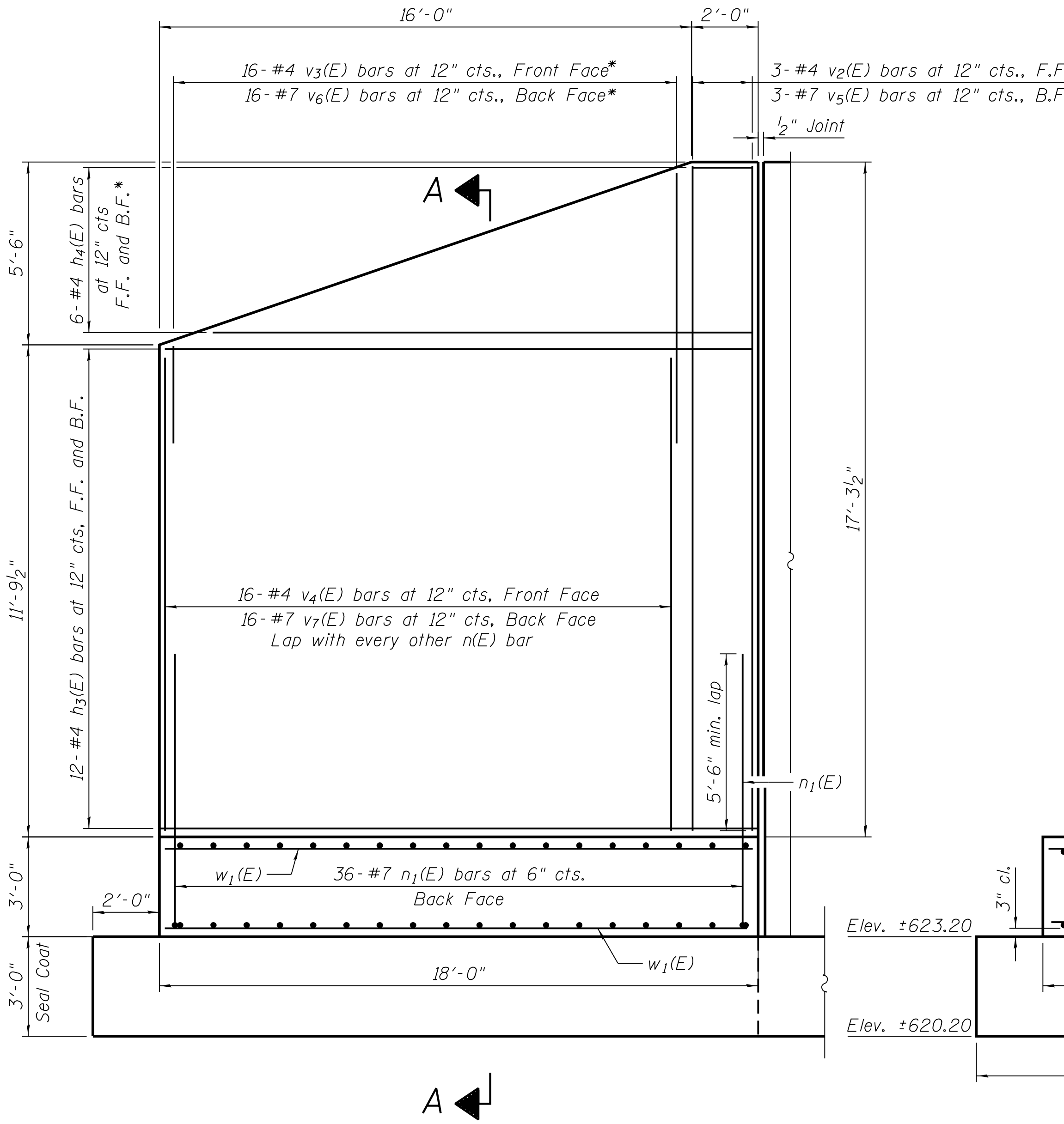
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT NORTH WINGWALL DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 24 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	83
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

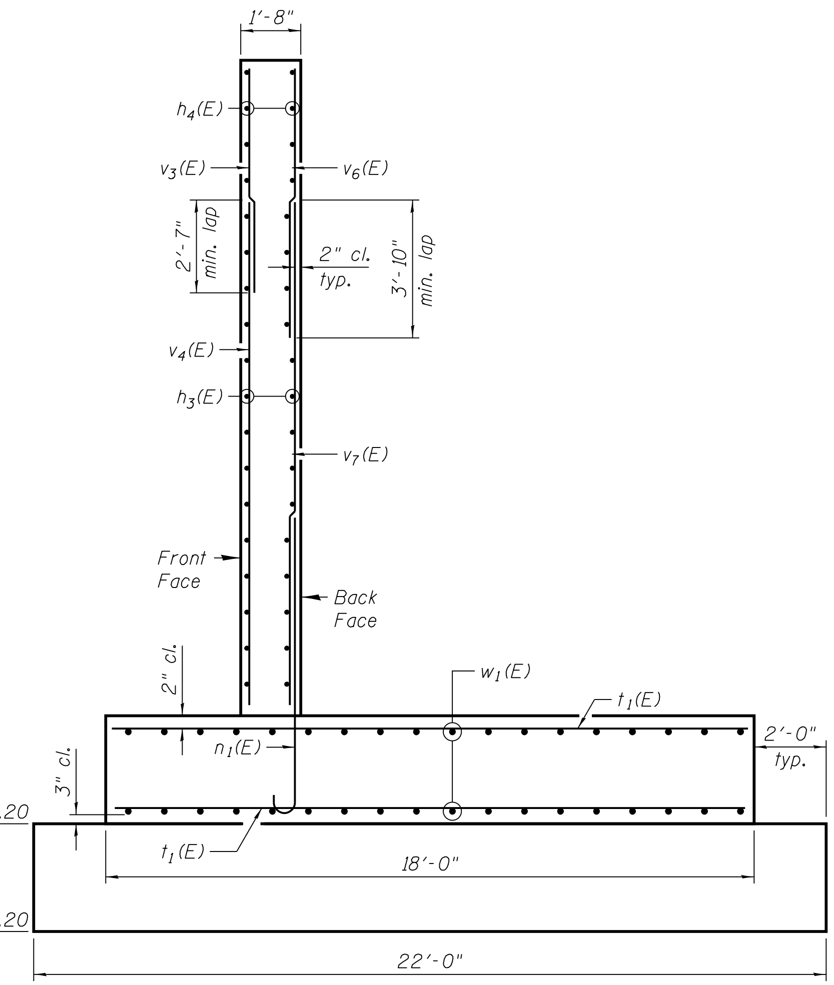


FOOTING PLAN



ELEVATION

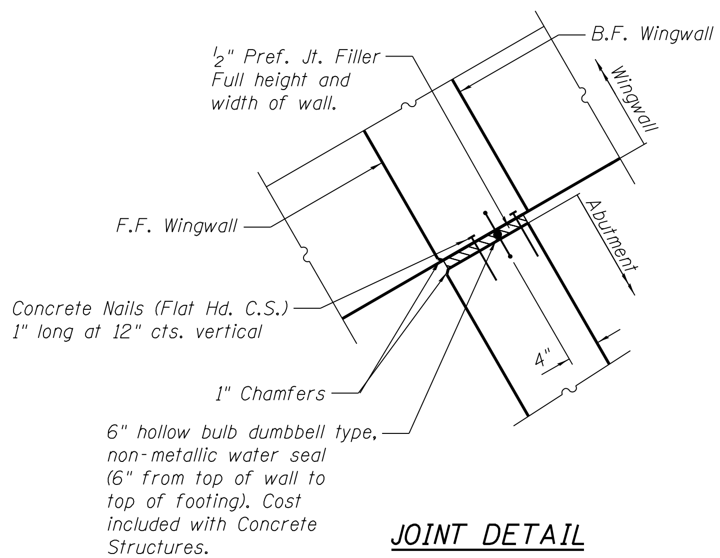
*See Field Cutting Diagram



SECTION A-A

BILL OF MATERIAL

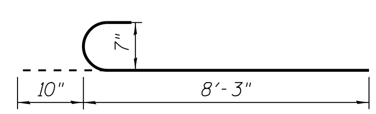
Bar	No.	Size	Length	Shape
$h_3(E)$	24	#4	17'-8"	
$h_4(E)$	6	#4	17'-8"	
$n_1(E)$	36	#7	9'-1"	
$v_2(E)$	3	#4	17'-0"	
$v_3(E)$	8	#4	10'-6"	
$v_4(E)$	16	#4	11'-8"	
$v_5(E)$	3	#7	17'-0"	
$v_6(E)$	8	#7	13'-2"	
$v_7(E)$	16	#7	11'-8"	
$t_1(E)$	38	#8	17'-8"	
$w_1(E)$	38	#4	17'-8"	
Concrete Structures		Cu. Yd.	55.8	
Seal Coat Concrete		Cu. Yd.	56.0	
Reinforcement Bars, Epoxy Coated		Pound	4,180	



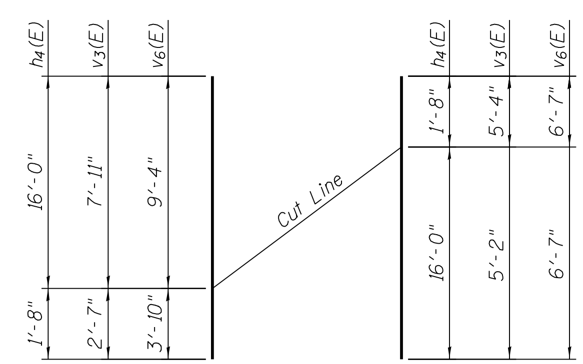
JOINT DETAIL

NOTES:

1. The excavation shall be cleaned of loose material and the concrete poured against undisturbed in-place soils.
2. Existing footing bars may be incorporated into the proposed seal coat, provided they do not conflict with the footing construction.
3. Wingwall footing maximum applied service bearing pressure (Qmax) = 3.0 ksf.



BAR n1(E)



FIELD CUTTING DIAGRAM

Order $h_4(E)$, $v_3(E)$, and $v_6(E)$ bars full length. Cut as shown.

(Sheet 2 of 2)

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers		
	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT NORTH WINGWALL DETAILS
STRUCTURE NO. 016-0272

SHEET NO. 25 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	84

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

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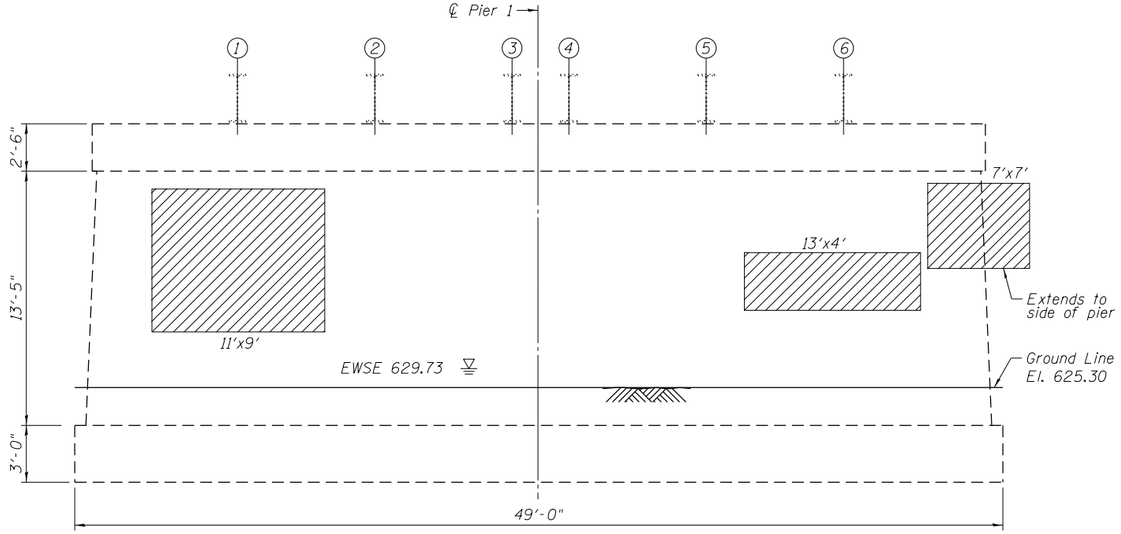
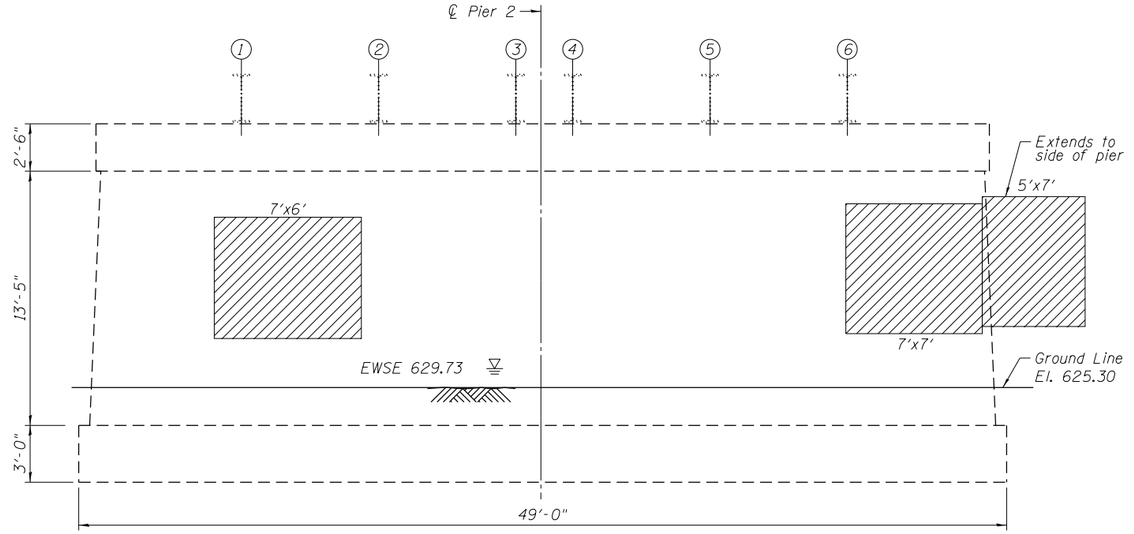
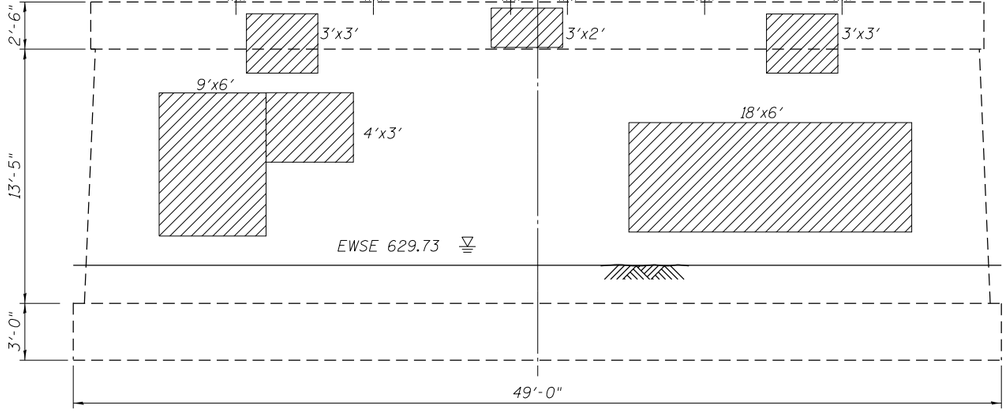


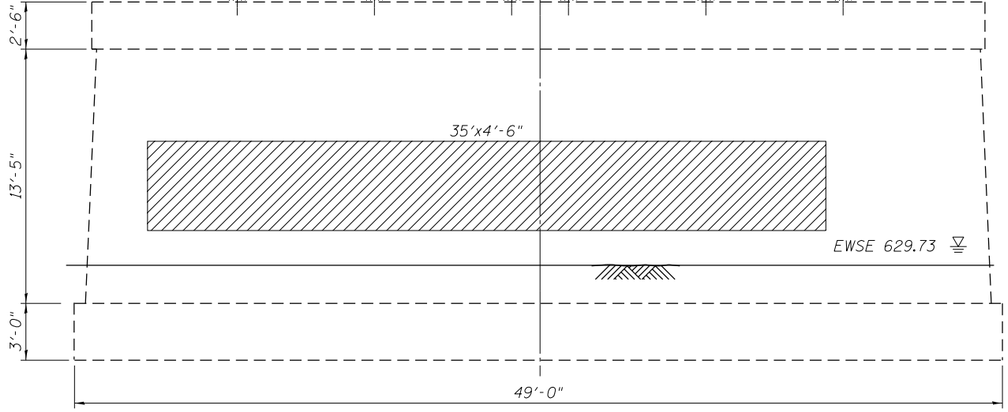
PIER 1
(West Face)



PIER 2
(West Face)



PIER 1
(East Face)



PIER 2
(East Face)

Note:
Repairs to be made above normal water level only.

LEGEND

▨ Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)

(6) Beam Line Designation

Repair of the existing piers shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

BILL OF MATERIAL

PIER 1		
ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	398
PIER 2		
ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	284

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS	REVISED
	CHECKED - MWS MTH	REVISED
	DRAWN - MAS/MWS	REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REPAIR DETAILS
STRUCTURE NO. 016-0272
SHEET NO. 26 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	85
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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

BORING LOG WW-1

WEI Job No.: 485-33-01

Client: **Wight & Company**
Project: **Willow Road Ramp D Wingwall**
Location: **SW 1/4 Sec 18, T 42N, R 12E**

Datum: NGVD
Elevation: 644.12 ft
North: 1982807.24 ft
East: 12011105252.47 ft
Station: 28+23
Offset: 16.00 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	643.9	3-inch thick CONCRETE --PAVEMENT--						
		Brown SAND and GRAVEL --AGGREGATE BASE--						
	642.1	Very stiff, brown SILTY CLAY --FILL--			1	4 7 6	3.50 P	17
			5		2	2 5 6	2.10 B	23
	636.1							
	635.6	Gray SILTY LOAM			3	2 3 3	NP	28
		Stiff to very stiff, gray SILTY CLAY w/trace fine sand	10		4	2 2 3	1.70 S	29
					5	2 2 4	2.50 B	23
	629.6							
		Medium stiff, gray CLAY LOAM	15		6	2 2 4	0.50 B	33
	626.1							
		Very loose to medium dense, gray, fine SAND			7	1 1 2	0.80 B	32
			20					
		--gravel--			8	3 5 8	NP	18
	622.1	Medium dense, gray SILT						
					9	4 5 8	0.80 B	21
	620.4	Stiff to hard, gray SILTY CLAY w/trace gravel	25		10	3 4 7	1.10 B	15
					11	4 6 10	3.00 B	16
			30		12	5 10 14	6.10 B	15
			35		13	5 9 11	7.50 B	13
			40					

GENERAL NOTES

Begin Drilling: 02-22-2008 Complete Drilling: 02-22-2008
Drilling Contractor: IDOT Drill Rig:
Driller: Logger: C. Goddard Checked by:
Drilling Method:

WATER LEVEL DATA

While Drilling: ▽ 18.00 ft
At Completion of Drilling: ▼ 16.30 ft
Time After Drilling: NA
Depth to Water: ▼ NA

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

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

BORING LOG WW-1

WEI Job No.: 485-33-01

Client: **Wight & Company**
Project: **Willow Road Ramp D Wingwall**
Location: **SW 1/4 Sec 18, T 42N, R 12E**

Datum: NGVD
Elevation: 644.12 ft
North: 1982807.24 ft
East: 12011105252.47 ft
Station: 28+23
Offset: 16.00 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	602.9	Dense, gray SILT			14	9 18 21	12.40 S	12
	600.9	Hard, gray SILTY CLAY	45		15	8 12 20	12.20 B	15
	597.6	Boring terminated at 46.50 ft						
			50					
			55					
			60					

GENERAL NOTES

Begin Drilling: 02-22-2008 Complete Drilling: 02-22-2008
Drilling Contractor: IDOT Drill Rig:
Driller: Logger: C. Goddard Checked by:
Drilling Method:

WATER LEVEL DATA

While Drilling: ▽ 18.00 ft
At Completion of Drilling: ▼ 16.30 ft
Time After Drilling: NA
Depth to Water: ▼ NA

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

Notes:
Stations and offsets shown on boring logs are based upon an outdated project baseline and are no longer applicable.
To adjust the boring log stations to the current project baseline, add 3.000 ft to boring Station.
To adjust the boring log offsets to the current project baseline, subtract 12 ft from offest if original offset is LT and add 12 ft to offset if original offset is RT.
Example: Boring Log WW-1
Information shown in log: Sta. 28+23 Offset: 16.00 LT
Adjusted information: Sta. 58+23 Offset: 4.00 LT

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ORIGINAL: Wight
UPDATED: LIN ENGINEERING LTD. Consulting Engineers

	DESIGNED -		REVISED
	CHECKED -	MTH	REVISED
	DRAWN -	MWS	REVISED
PLOT DATE = 11/11/2019	CHECKED -	BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 016-0272
SHEET NO. 27 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	86
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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

BORING LOG HA-1

WEI Job No.: 485-33-01

Client: **Wight & Company**
Project: **Willow Road Ramp D Wingwall**
Location: **SW 1/4 Sec 18, T 42N, R 12E**

Datum: NGVD
Elevation: 633.00 ft
North: 1982818.45 ft
East: 12011105235.31 ft
Station: 28+05
Offset: 42 LT

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)
	632.5	6-inch thick, black SILTY CLAY LOAM --TOPSOIL--			1	5 7 6 3	> 4.50 P	17
	631.0	Hard, brown SILTY CLAY w/plant material and trace gravel --FILL--			2	7 11 11 12	2.13 B	34
		Medium stiff to very stiff, brown CLAY	5		3	5 7 8 10	0.82 B	33
	627.0	Loose, gray, fine SAND --WET--			4	2 4 5 7	NP	19
	624.0	Very stiff, gray SILTY CLAY to SILTY CLAY LOAM	10		5	2 7 10 12	3.53 B	18
					6	10 11 20 22	3.94 S	18
	620.5	Dense, gray GRAVELLY SAND			7	10 11 22 18	NP	10
	619.0	Boring terminated at 14.00 ft	15					
			20					

Profile	Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample Type / recovery	Sample No.	SPT Values (blw/6 in)	Qu (tsf)	Moisture Content (%)

GENERAL NOTES

Begin Drilling: **10-18-2011** Complete Drilling: **10-18-2011**
Drilling Contractor: **Wang Testing Service** Drill Rig: **Hand Auger**
Driller: **R & K** Logger: **F. Bozga** Checked by: **M. Snider**
Drilling Method: **Tripod-mounted Hand Auger**

WATER LEVEL DATA

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

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

Notes:
Stations and offsets shown on boring logs are based upon an outdated project baseline and are no longer applicable.
To adjust the boring log stations to the current project baseline, add 3,000 ft to boring Station.
To adjust the boring log offsets to the current project baseline, subtract 12 ft from offest if original offset is LT and add 12 ft to offset if original offset is RT.
Example: Boring Log WW-1
Information shown in log: Sta. 28+23 Offset: 16.00 LT
Adjusted information: Sta. 58+23 Offset: 4.00 LT

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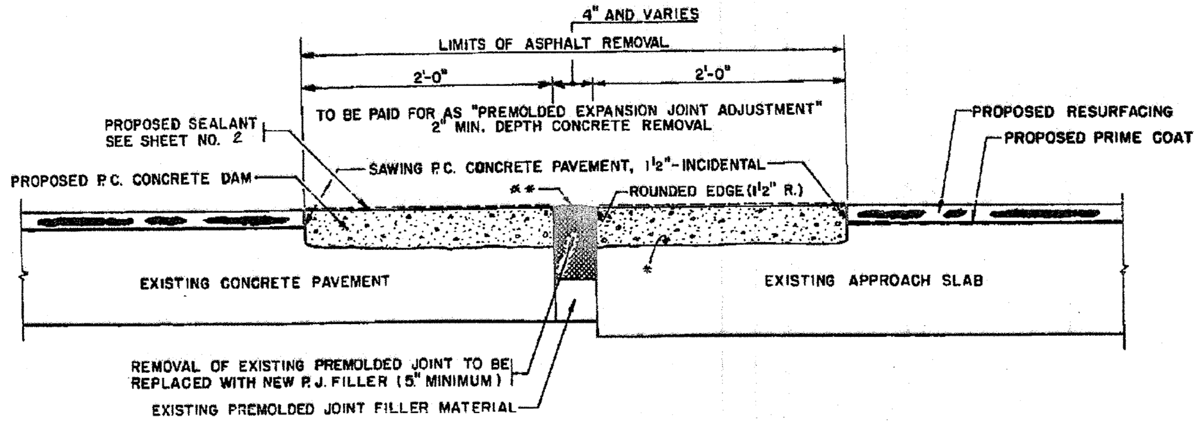
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED -		REVISED
	CHECKED -	MTH	REVISED
	DRAWN -	MWS	REVISED
PLOT DATE = 11/11/2019	CHECKED -	BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 016-0272
SHEET NO. 28 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	87
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



NOTES:

ALL EXISTING REINFORCEMENT BARS SHALL REMAIN IN PLACE.

* EXISTING SURFACE TO BE PAINTED WITH BONDING AGENT - INCIDENTAL.

** SEAL JOINT WITH RUBBERIZED ASPHALT

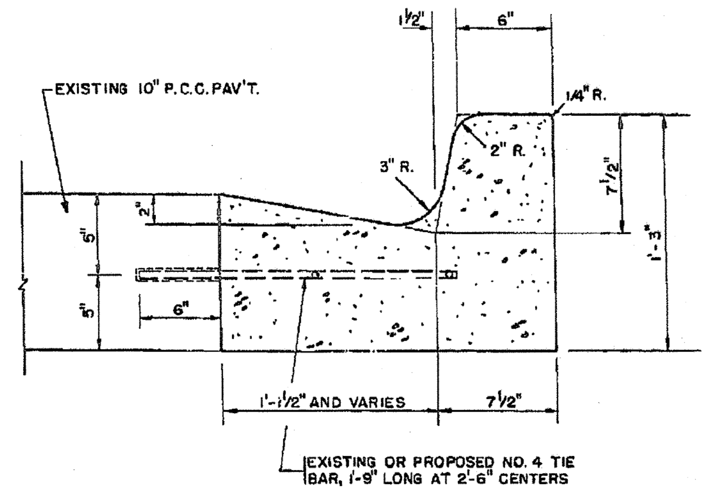
BASIS OF PAYMENT:

THE SAWING AND REMOVAL OF ASPHALT AND CONCRETE, THE PROPOSED CONCRETE DAM AND FILLER MATERIAL WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR "PREMOLDED EXPANSION JOINT ADJUSTMENT."

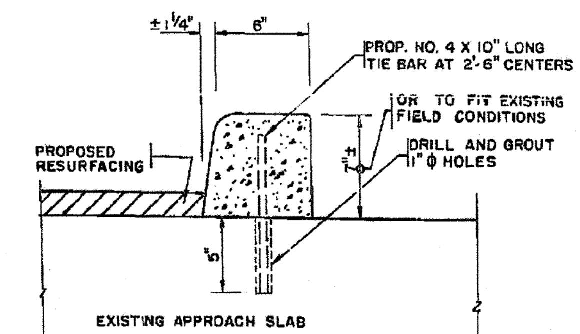
SEQUENCE OF CONSTRUCTION:

1. RESURFACE OVER EXISTING JOINT.
2. SAW ASPHALT AT LIMITS OF ASPHALT REMOVAL.
3. REMOVE ASPHALT AND CONCRETE (2" MIN.) WITHIN "LIMITS".
4. CONSTRUCT DAM AS SHOWN ABOVE.

DETAIL OF PREMOLDED EXPANSION JOINT ADJUSTMENT

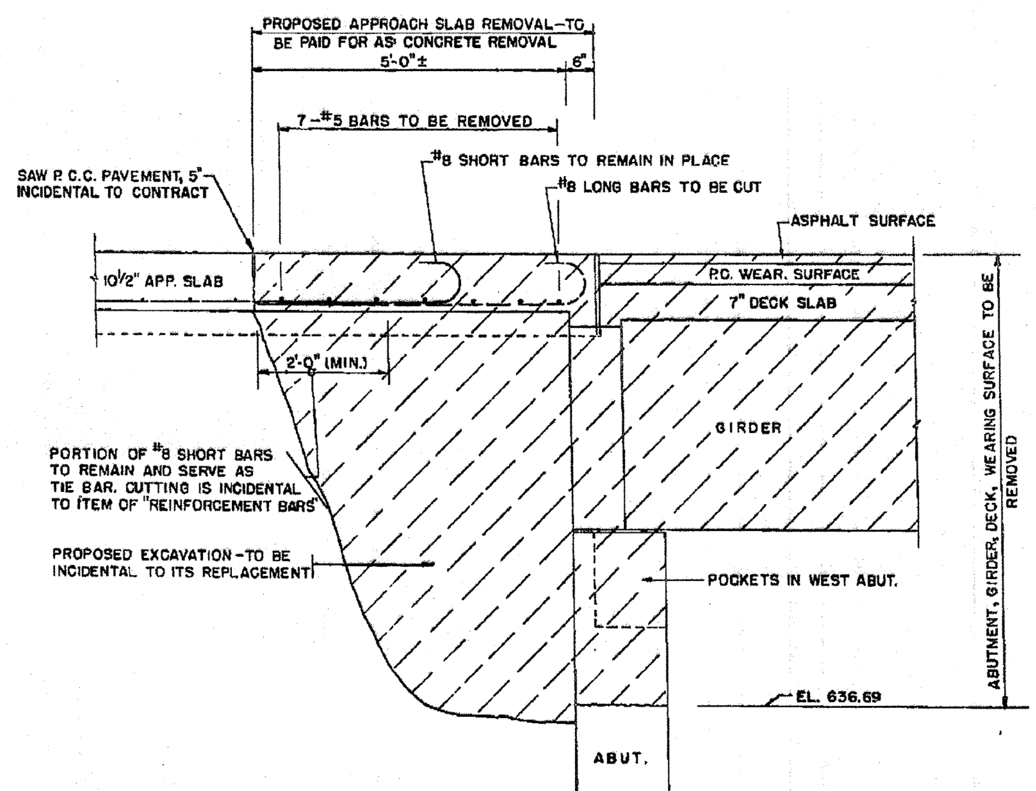


PROPOSED CURB AND GUTTER

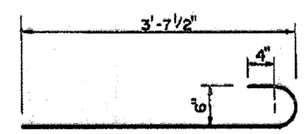


PROPOSED CURB

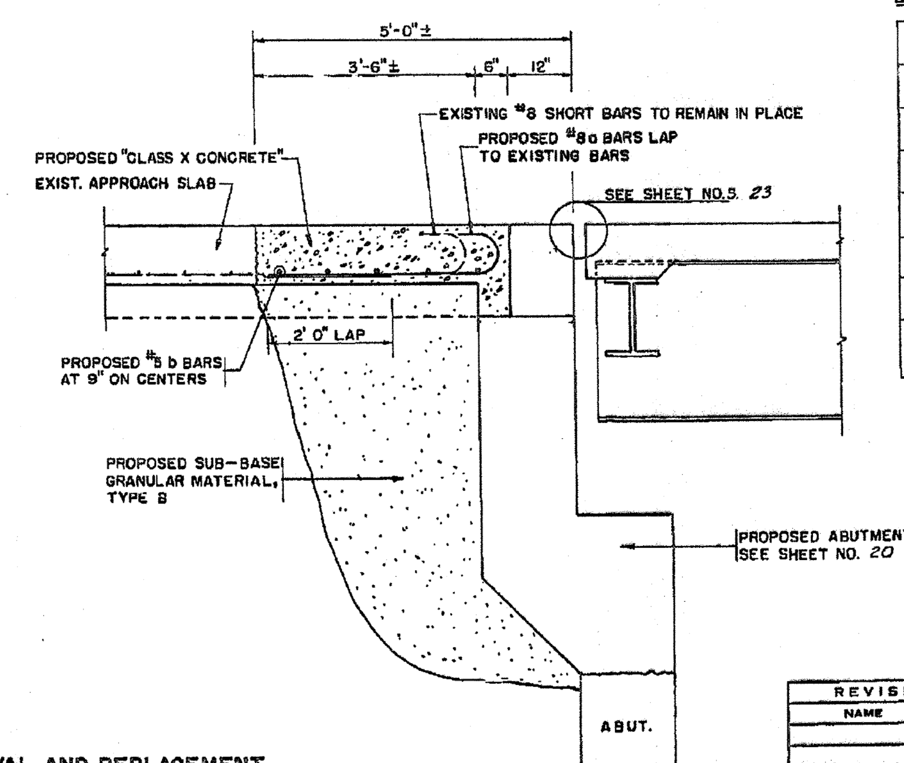
BASIS OF PAYMENT—PER LINEAL FOOT FOR "COMBINATION CONCRETE CURB AND GUTTER, TYPE B6.12 (SPECIAL)" AND "CONCRETE CURB" WHICH PRICES SHALL INCLUDE DRILLING, GROUTING AND TIE BAR.



EXISTING CROSS SECTION



BAR a



PROPOSED CROSS SECTION

APPROACH SLAB REMOVAL AND REPLACEMENT

BILL OF MATERIAL:

BAR	NO.	SIZE	LENGTH	SHAPE
a	68	8	4' 8"	
b	20	5	13' 2"	

REINFORCEMENT BAR	POUND	1,125
CONCRETE REMOVAL	CU YD	1.5
CLASS X CONCRETE	CU YD	8.5
SUB-BASE GRANULAR MATERIAL, TYPE B	TON	120

REVISIONS

NAME	DATE

WESTBOUND RAMP
PREMOLDED EXPANSION JOINT
CURB; CURB AND GUTTER
APPROACH SLAB REMOVAL AND REPLACEMENT

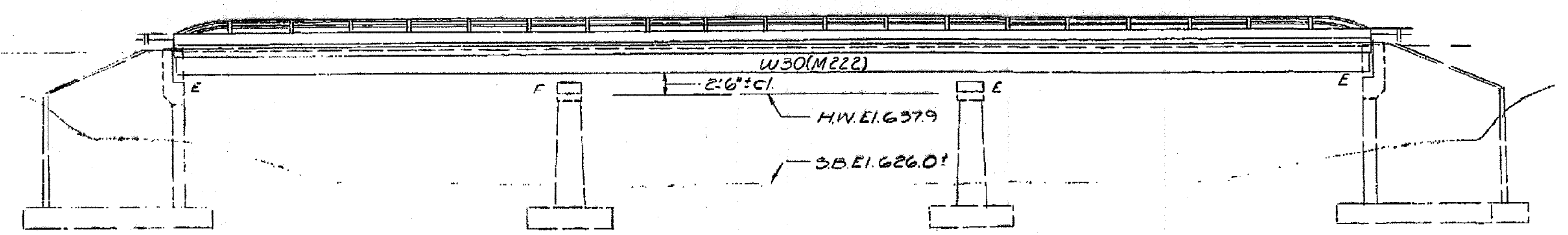
SCALE: HORIZ. VERT.
DATE
DRAWN BY R. U. R.
CHECKED BY W. W. L.

BM: Two nails in Northwest wingwall El. 643.813
Exist. Structure - Built 1925, S.A.R. 11F, Sec 1143-13 D Sta. 1+54.5
Superstructure - RC Deck Girder, Substructure - RC Closed Abuts
RC Piers. Superstructure to be removed by Contractor.
Piers and Abuts. to remain in place.
Stage Construction to be utilized

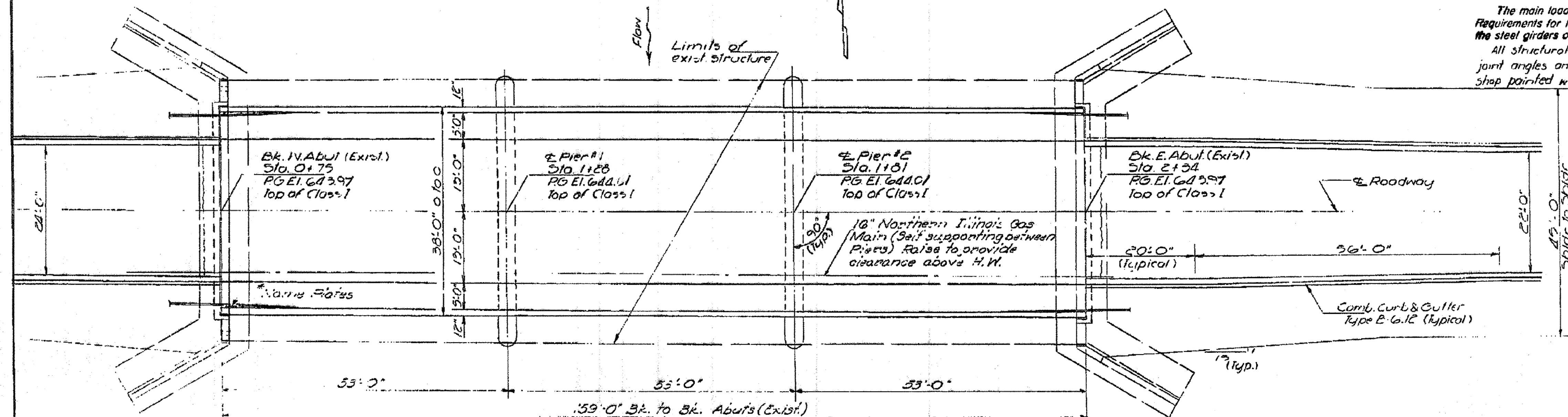
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.U. 1285	1973-34-BR	COOK	23	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
11 SHEETS



ELEVATION



PLAN

GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts 7/8"ϕ; open holes 15/16"ϕ, unless otherwise noted.

Calculated weight of Structural Steel. = 147,650 Lbs.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms over supports.

The concrete rail section above the construction joint at the top of the sidewalk shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Expansion bolts shall consist of self drilling expansion anchors and 3/4"ϕ x 12" hooked bolts.

It shall be the responsibility of the Contractor to verify all dimensions and conditions existing in the field prior to construction and ordering of materials.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ± 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims.

The main load carrying member components subject to the Supplemental Requirements for Notch Toughness are the flanges, webs, and splice plates of the steel girders or wide flange beams.

All structural steel shall be AASHTO M222 unpainted except expansion joint angles and attached bars which shall be AASHTO M183 and shop painted with two coats of basic lead silico chromate paint.

STATION 1+54.50
DES PLAINES RIVER
REBUILT 19
F.A.U. RT. 1285 SEC. 1143-13D-ACS
PROJ. IX-5003(342) LOADING HS20
STR. NO. 016-0272

NAME PLATE
See Std. E.15

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
** Bituminous Conc. Surf. Course Cl. I	Tons	40		40
Removal Exist. Superstructures	Each	1		1
Concrete Removal	Cu. Yds.		27.6	27.6
Expansion Bolts 3/4"ϕ	Each		166	166
Protective Coat	Sq. Yds	283		283
Class X Concrete	Cu. Yds	244.8	52.1	296.9
Structural Steel	L.S.	1		1
Aluminum Railing Type L	Lin. Ft.	317		317
Reinforcement Bars	Lbs	45,930	4700	50,630
Name Plates	Each	1		1
Bridge Handrail Removal	Lin. Ft.	318		318
~~Temporary Guardrail~~	~~Lin. Ft.~~	~~159~~		~~159~~
Waterproofing Membrane System	Sq. Yds	450		450
Preformed Joint Sealer (2 1/2)	Lin. Ft.	41		41
* Neoprene Expansion Jt. (Longitudinal)	Lin. Ft.	158		158
Repair Concrete Structures	Sq. Ft.		200	200
Preformed Joint Sealer (4")	Lin. Ft.	41		41

** Bituminous Concrete Surfacing is back to back of Existing Abutments. * See Special Provisions.

DESIGNED	D. H. Ryan
CHECKED	T. J. Hauk
DRAWN	J. Schneller / JAS
CHECKED	T. J. Hauk

September 3 1972
EXAMINED — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — DIRECTOR OF HIGHWAYS

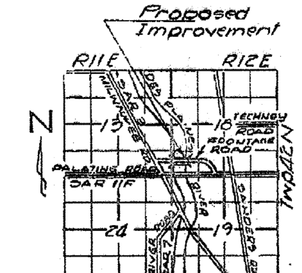
DESIGN STRESSES
f'c = 1200 psi — Deck Slab
f'c = 1400 psi — Curb, Parapet, Sub.
fs = 20,000 psi — Reinf.
fs = 27,000 psi — Struct. Grade M222 (All steel unpainted)
n = 10

Allow 25#/□' for Future W.S.

Design Specifications
1969 AASHTO as applicable

LOADING HS20-44

WATERWAY INFORMATION
Drainage Area — 3037 Acres
Character — Level & Wooded
Present Opening — 1649 Sq. Ft.
Recommended Opening — 1649 Sq. Ft.
Q(30) = 5240 cfs



LOCATION SKETCH

BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STATION 1+54.50

Rev. 8.15.78

K&E CO. 10-1255

ORIGINAL:	UPDATED:		DESIGNED - MAS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0272
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - BJM MTH	REVISED		
			DRAWN - MWS	REVISED		
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED		SHEET NO. 30 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	89
CONTRACT NO. 60D77				
	ILLINOIS FED. AID PROJECT			

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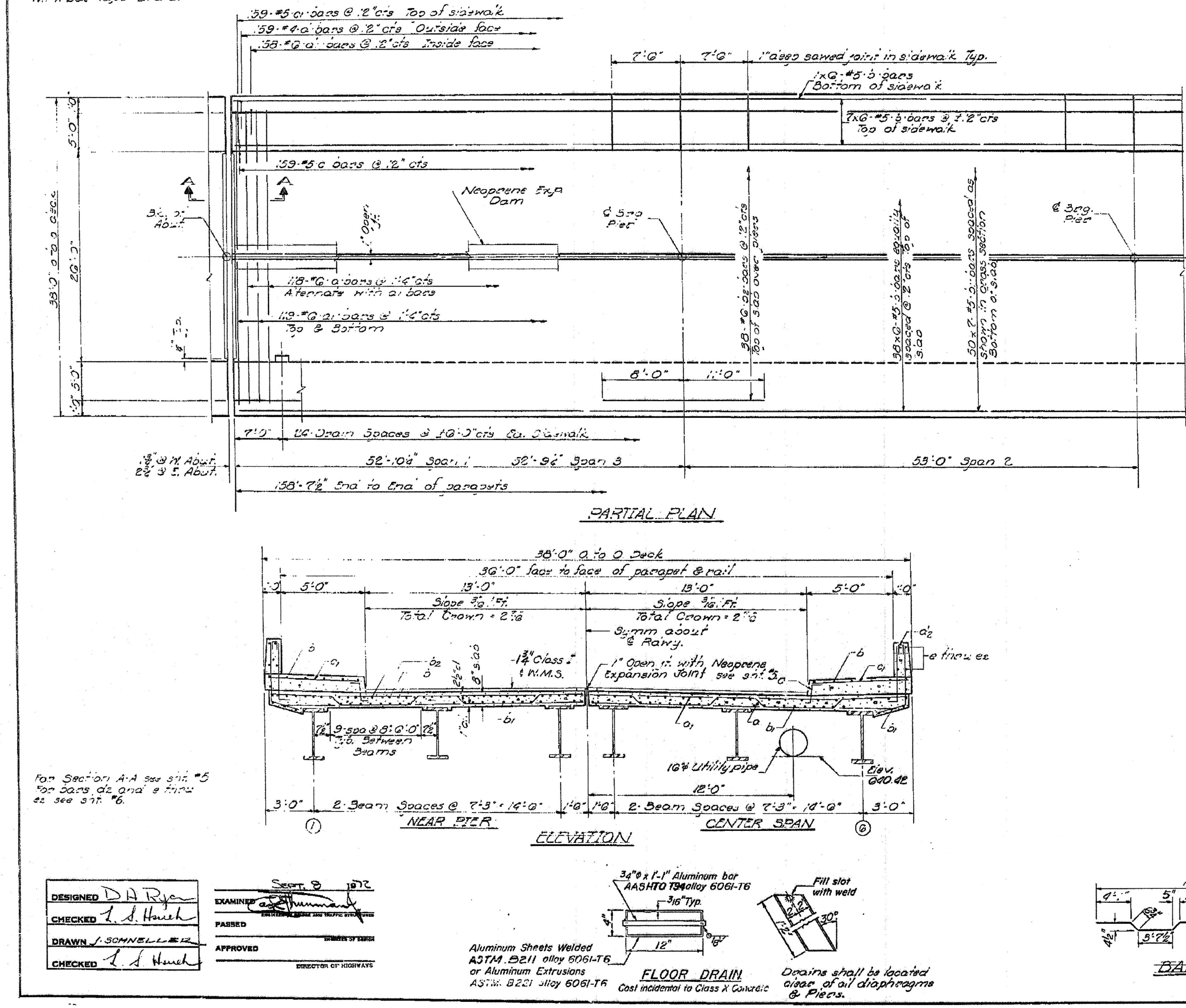
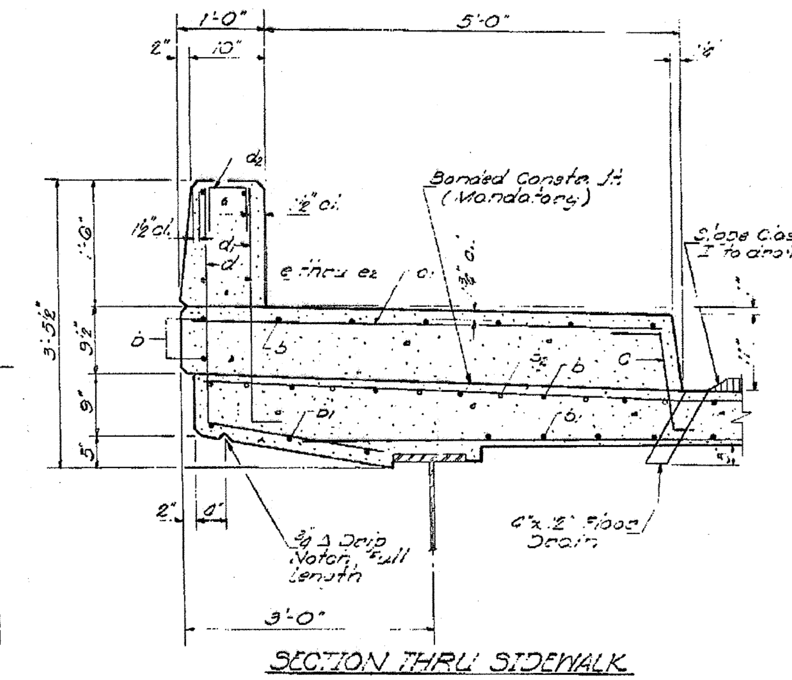
Note:
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Min. bar laps = 24 dia.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U. 1285	1973-34-BR	COOK	23	14

SHEET NO. 4 / 11 SHEETS





BILL OF MATERIAL

bar	No	Size	Length	Shape
a	236	#6	19'-1"	
a1	476	#6	17'-0"	
b	324	#5	27'-6"	
b1	350	#5	23'-9"	
b2	76	#6	19'-0"	
c	318	#5	2'-7"	
c1	318	#5	5'-9"	
d	318	#4	4'-8"	L
d1	316	#6	3'-7"	L
Class X Concrete			Cu. Yds.	228.6
Reinforcement Bars			Lbs.	44,540

SUPERSTRUCTURE
BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STA. 1+54.50

DESIGNED D.A. Ryan
CHECKED L. S. Hersh
DRAWN J. SCHNELLER
CHECKED L. S. Hersh

EXAMINED Sept. 8 1972
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

DIETZGEN

ORIGINAL:	UPDATED:		DESIGNED - MAS	REVISED
Wight	LIN ENGINEERING, LTD.		CHECKED - BJM MTH	REVISED
			DRAWN - MWS	REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0272
SHEET NO. 31 OF 35 SHEETS

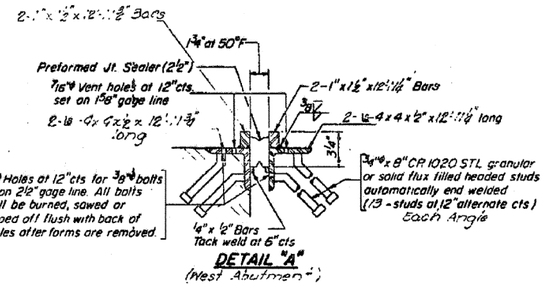
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-I	COOK	151	90

CONTRACT NO. 60D77
ILLINOIS FED. AID PROJECT

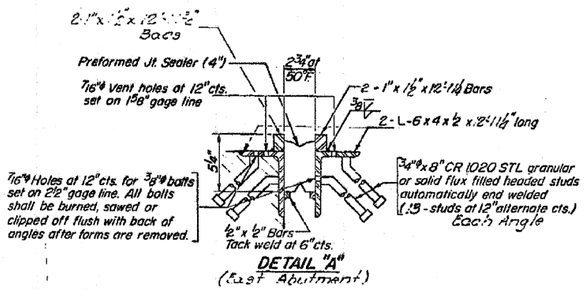
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.U.	1973-34-BR	COOK	23	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5 OF SHEETS

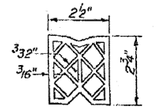


DETAIL "A"
(West Abutment)

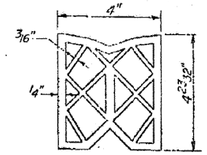


DETAIL "A"
(East Abutment)

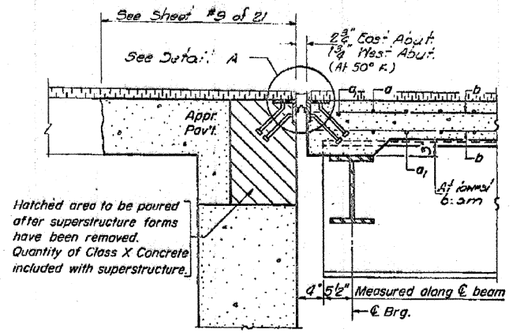
* Incidental to Neoprene Exp. Jt. (Long.)



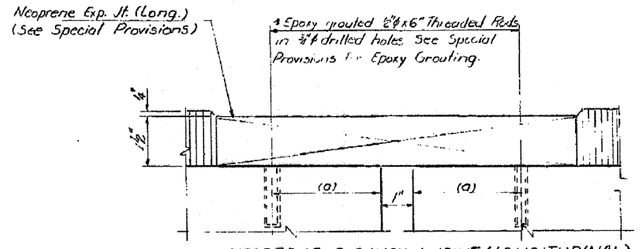
PREFORMED JOINT SEALER (2½")



PREFORMED JOINT SEALER (4")

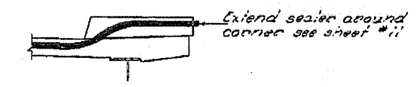


SECTION A-A



NEOPRENE EXPANSION JOINT (LONGITUDINAL)

ALTERNATE NEOPRENE EXPANSION JTS. (LONG.)
Tel-Pro Building Products, Inc.-Tel-Span Model T-30 (a=3¼")
Watson Bowman Assoc., Inc.-Wabo Elastodam Type 300 (a=3⅛")
Structural Accessories, Inc.-Low Profile Unflex 25 (a=2⅝")
Bolt channel shall be filled with approved epoxy grout.



END OF SEALER TREATMENT

SUPERSTRUCTURE DETAILS
BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STA. 1752.30

DESIGNED	D.A. Ryan
CHECKED	T.J. Hauch
DRAWN	J. SCHNELLER
CHECKED	T.J. Hauch

EXAMINED Sept. 8 2012
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

DIETZGEN

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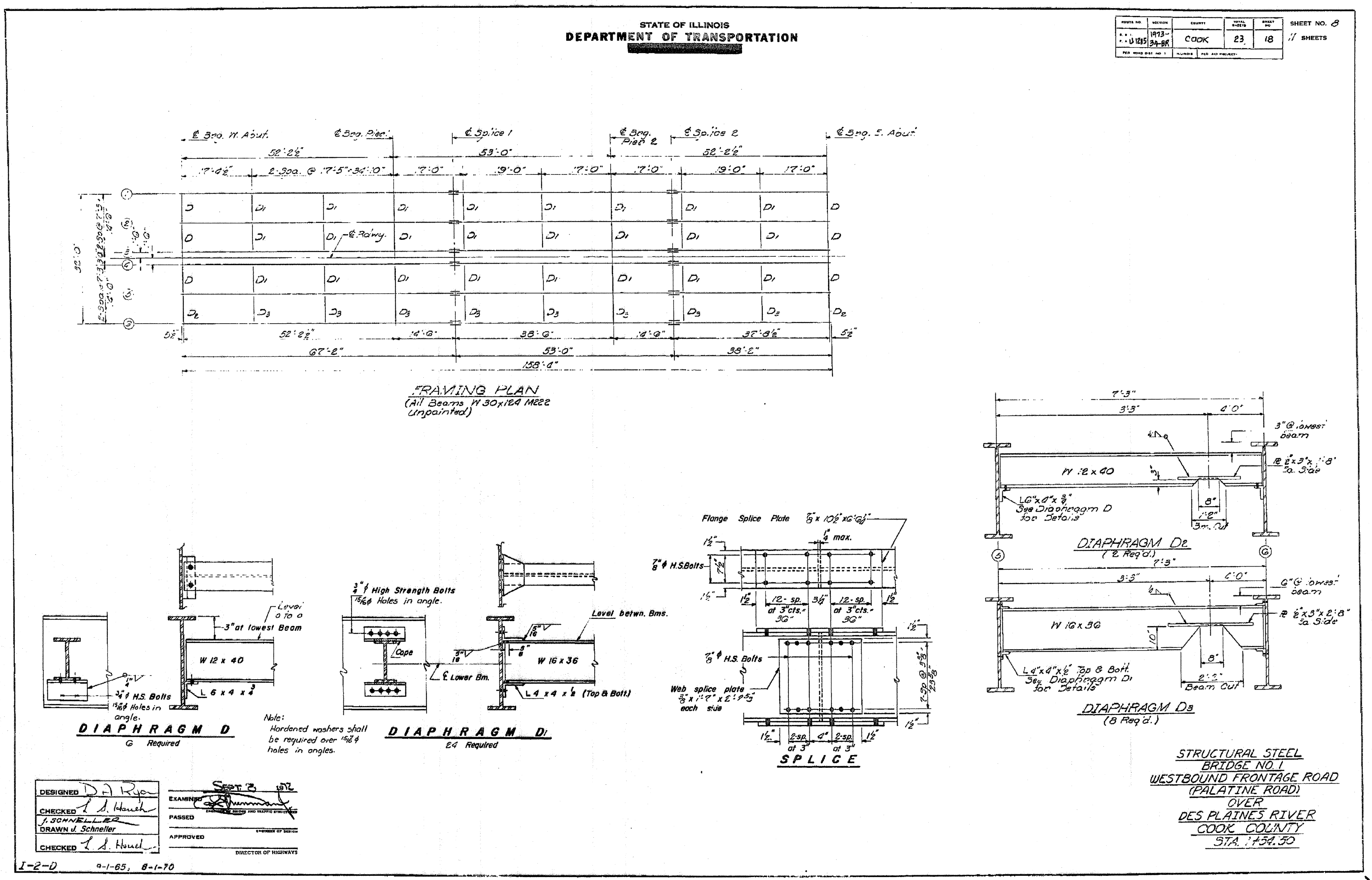
ORIGINAL:	UPDATED:				
Wight	LIN ENGINEERING, LTD. Consulting Engineers				
		DESIGNED - MAS			REVISED
		CHECKED - BJM	MTH		REVISED
		DRAWN - MWS			REVISED
	PLOT DATE = 11/11/2019	CHECKED - BJM	MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0272
SHEET NO. 32 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	91
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SHEET NO. 8
11 SHEETS
COOK 23 18
1973-34-BR
FRAMING PLAN
(All Beams W 30x124 M222 Unpainted)
DIAPHRAGM D
6 Required
DIAPHRAGM D1
24 Required
Note: Hardened washers shall be required over 15/16 ϕ holes in angles.
SPLICE
Flange Splice Plate
Web splice plate
DIAPHRAGM D2
(2 Req'd.)
DIAPHRAGM D3
(8 Req'd.)
STRUCTURAL STEEL
BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STA. 1+54.50
DESIGNED
CHECKED
DRAWN J. Schneller
CHECKED
EXAMINED
Sept 8 1972
PASSED
APPROVED
DIRECTOR OF HIGHWAYS
I-2-D 9-1-65, 8-1-70

ORIGINAL:	UPDATED:		DESIGNED - MAS		REVISED
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - BJM	MTH	REVISED
			DRAWN - MWS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0272

SHEET NO. 33 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	92
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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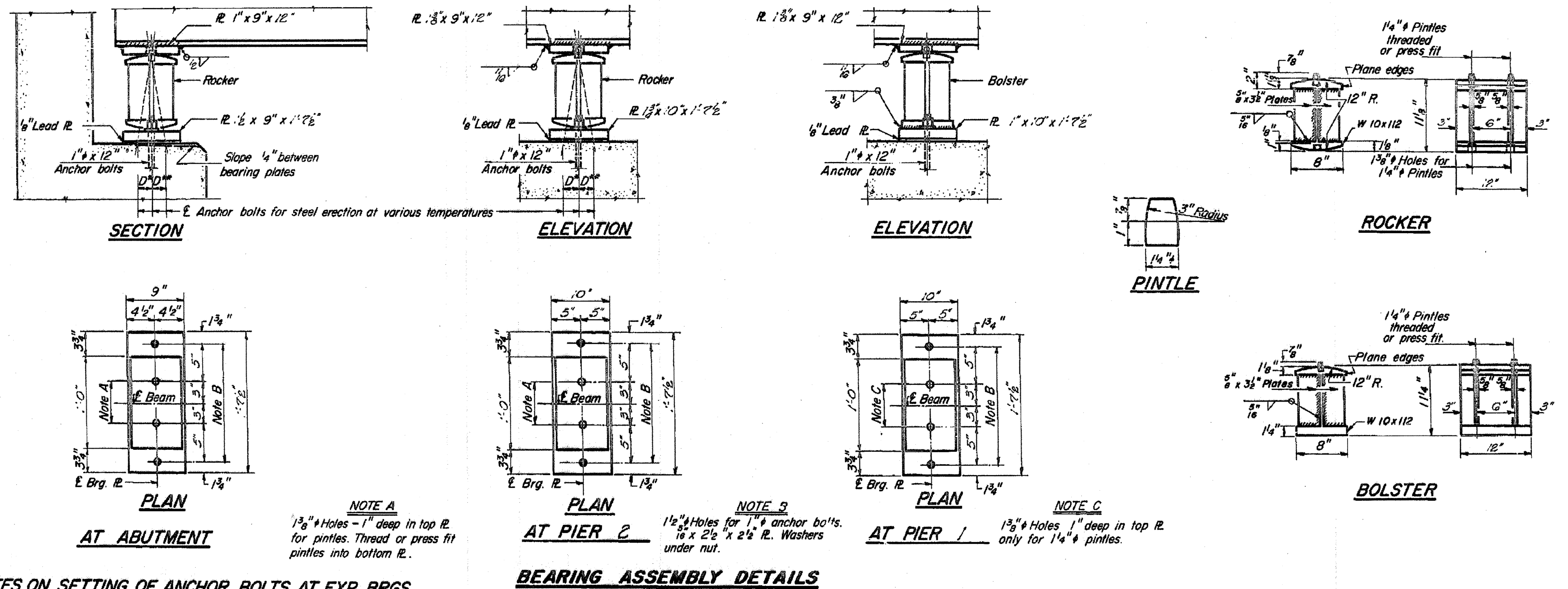
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 1-2-B	1973-34-BR	COOK	23	19

SHEET NO. 9 / 11 SHEETS



BEARING ASSEMBLY DETAILS

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

a) D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

INTERIOR BM REACTION TABLE		
	Abut	Pier
RⲈ (k)	29.9	83.3
Rℓ (k)	37.1	45.2
Imp. (k)	10.3	12.6
RTOTAL (k)	77.3	141.1

INTERIOR BEAM MOMENT TABLE			
	0.4 Sp. 1 or 3	Pier 1 or 2	0.5 Sp. 2
I (in⁴)	5360	5360	5360
Ⲉ (k/')	1.490	1.490	1.490
MⲈ ('k)	323	412	111
Mℓ ('k)	347	250	285
Imp. ('k)	97	70	80
MTOTAL ('k)	767	732	476
fs (ksi)	25.9	24.7	16.1

TOP OF BEAM ELEVATIONS

Location	Elevations
Beam 1	642.85
Beam 2	642.96
Beam 3	643.08
Beam 4	643.08
Beam 5	642.96
Beam 6	642.85

(For Fabrication Only)

Note:
All Steel M222 Unpainted.

BEARING DETAILS
BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STA. 134.50

DESIGNED D. J. Rya
CHECKED L. S. Hurch
J. SCHNELLER
DRAWN P.G. Barnett
CHECKED L. S. Hurch
EXAMINED Sept. 8 1972
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

I-2-B 9-1-65, 8-1-70

ORIGINAL:	UPDATED:	DESIGNED - MAS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0272
Wight	LIN ENGINEERING, LTD. Consulting Engineers	CHECKED - BJM MTH	REVISED		
		DRAWN - MWS	REVISED		
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED		SHEET NO. 34 OF 35 SHEETS

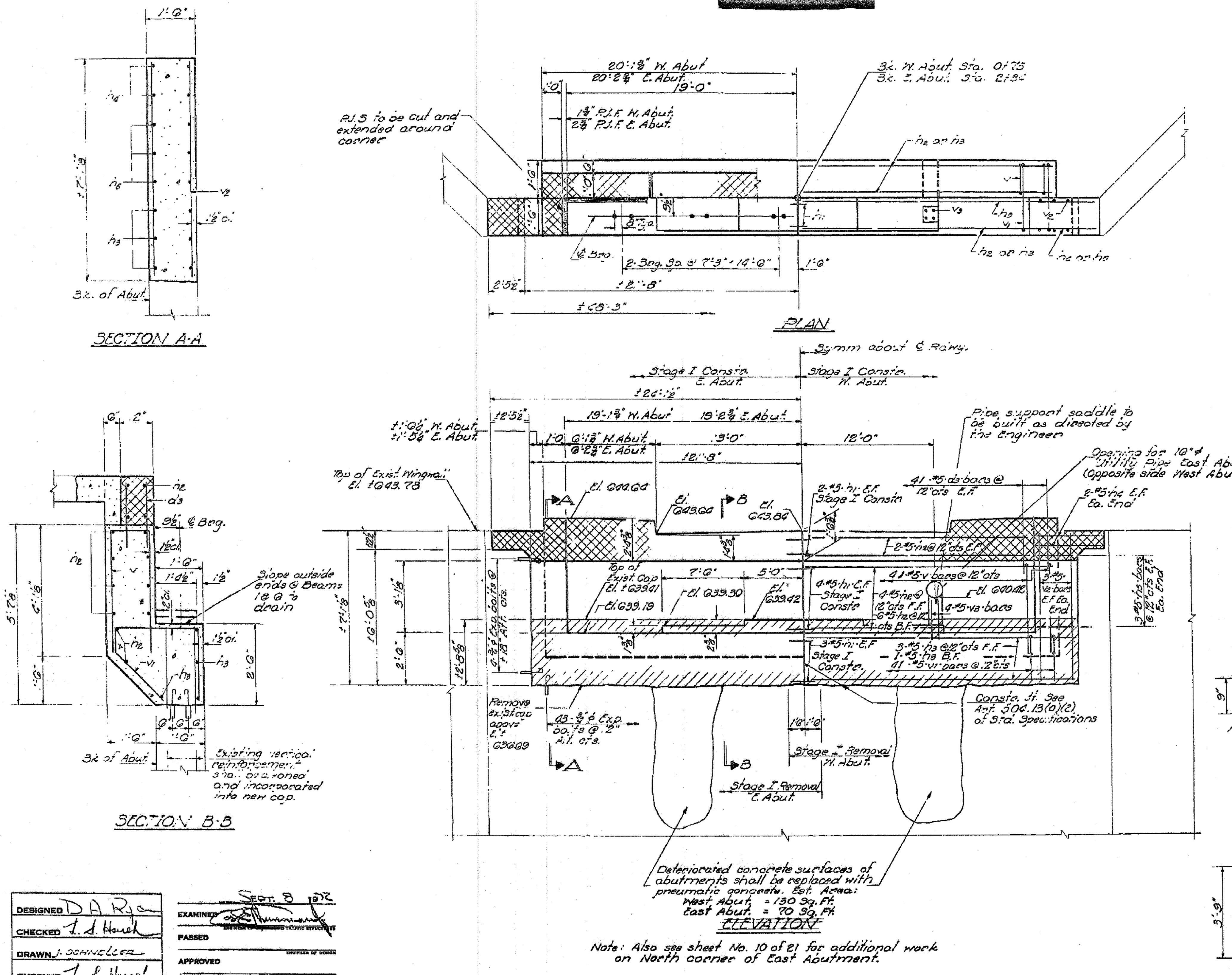
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	93

CONTRACT NO. 60D77
ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. U Y285	1973-34-BR	COOK	23	21
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
11 SHEETS

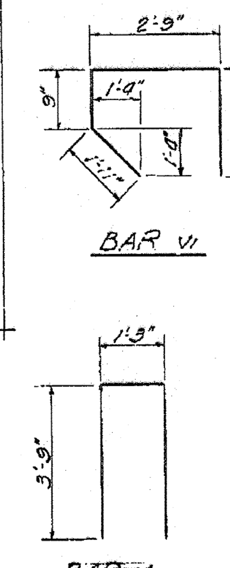


Note: Also see sheet No. 10 of 21 for additional work on North corner of East Abutment.

Notes:
Cross hatched area to be poured after deck is in place. Quantity of Class X Concrete is included with Superstructure.
Hatched area indicates Concrete Removal.
Space reinforcement to miss anchor bolts.
All edges shall have standard ¾" chamfer except as noted.
Pour steps monolithically with cap.
Expansion bolts shall be anchored in sound concrete.
Min. bar laps = 24 dia.

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No	Size	Length	Shape
d3	164	#5	3'-0"	—
h1	36	#5	2'-9"	—
h2	56	#5	20'-0"	—
h3	16	#5	21'-5"	—
h4	16	#5	4'-10"	—
h5	24	#5	2'-5"	—
v	82	#5	8'-9"	⊓
v1	82	#5	7'-7"	⊓
v2	24	#5	6'-9"	—
v3	8	#5	2'-0"	—
Class X Concrete			Cu. Yds	37.1
Reinforcement Bars			Lbs.	3870
Concrete Removal			Cu. Yds	12
Expansion Bolts ¾"ϕ			Each	102
Repair Conc. Struct.			Sq. Ft.	200



ABUTMENTS
BRIDGE NO. 1
WESTBOUND FRONTAGE ROAD
(PALATINE ROAD)
OVER
DES PLAINES RIVER
COOK COUNTY
STA. 1154.50

DESIGNED	D A Ry
CHECKED	L. S. Hauch
DRAWN	J. Schneller
CHECKED	L. S. Hauch

EXAMINED Sept. 8 1972 — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED — ENGINEER OF DESIGN
APPROVED — DIRECTOR OF HIGHWAYS

DIETZGEN

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11/11/2019

ORIGINAL:	UPDATED:		DESIGNED - MAS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0272
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - BJM MTH	REVISED		
			DRAWN - MWS	REVISED		
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED		SHEET NO. 35 OF 35 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	94
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

Bench Mark: "[]" at SE corner of East Abutment. Elev. 645.25
"[]" at NE corner of East Abutment. Elev. 645.21

Existing Structure: S.N. 016-0273, originally built in 1965, is a two-span bridge spanning 157'-5⅛" ℄ to ℄ of bearings. The superstructure consists of a 7" concrete slab atop 36" rolled steel beams. The 38'-0" out to out concrete deck consists of a 28'-0" roadway, a 5'-6" sidewalk, 2'-6" safety walk, and two 1'-0" parapets. The skew angle is 11°-45'-26" left hand forward. The substructure consists of one solid wall concrete pier and closed concrete abutments. The structure carries four utility pipes across the river. These pipes are suspended in the southernmost bay. The bridge shall be closed during construction.

No Salvage.

STATION 25+71.70
REBUILT 20__ BY
STATE OF ILLINOIS
F.A.P. 305 SECTION 1516I-1
LOADING HS20
STR. NO. 016-0273

NAME PLATE

See Std. 515001
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

SCOPE OF WORK:

1. Remove and replace existing bridge deck and approach slabs.
2. Remove and replace expansion joints at both abutments.
3. Rehabilitate existing piers and abutments with "Structural Repair of Concrete" and "Epoxy Crack Injection."
4. Replace all abutment bearings with elastomeric bearings and steel extensions.
5. Replace steel end diaphragms at abutments and perform steel repairs to beam ends.
6. Clean and paint existing structural steel adjacent to expansion joints.
7. Install shear studs to create a composite deck.

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

DESIGN STRESSES

EXISTING CONSTRUCTION
f'c = 3,500 psi
fy = 40,000 psi (reinf.)
fy = 36,000 psi (Struct. steel Gr. 36)

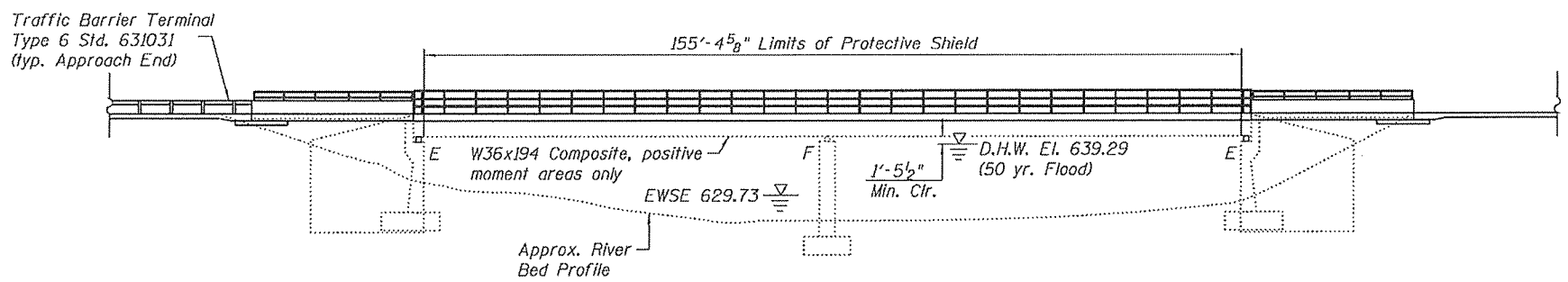
NEW CONSTRUCTION
f'c = 3,500 psi
fy = 60,000 psi (reinf.)
fy = 36,000 psi (Struct. steel M270 Grade 36, new bearings & diaphragms)

DESIGN SPECIFICATIONS

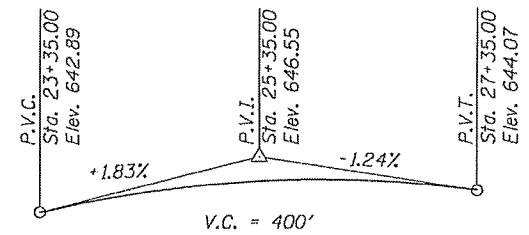
2002 AASHTO Standard Specifications for Highway Bridges.

LOADING HS 20-44

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



ELEVATION

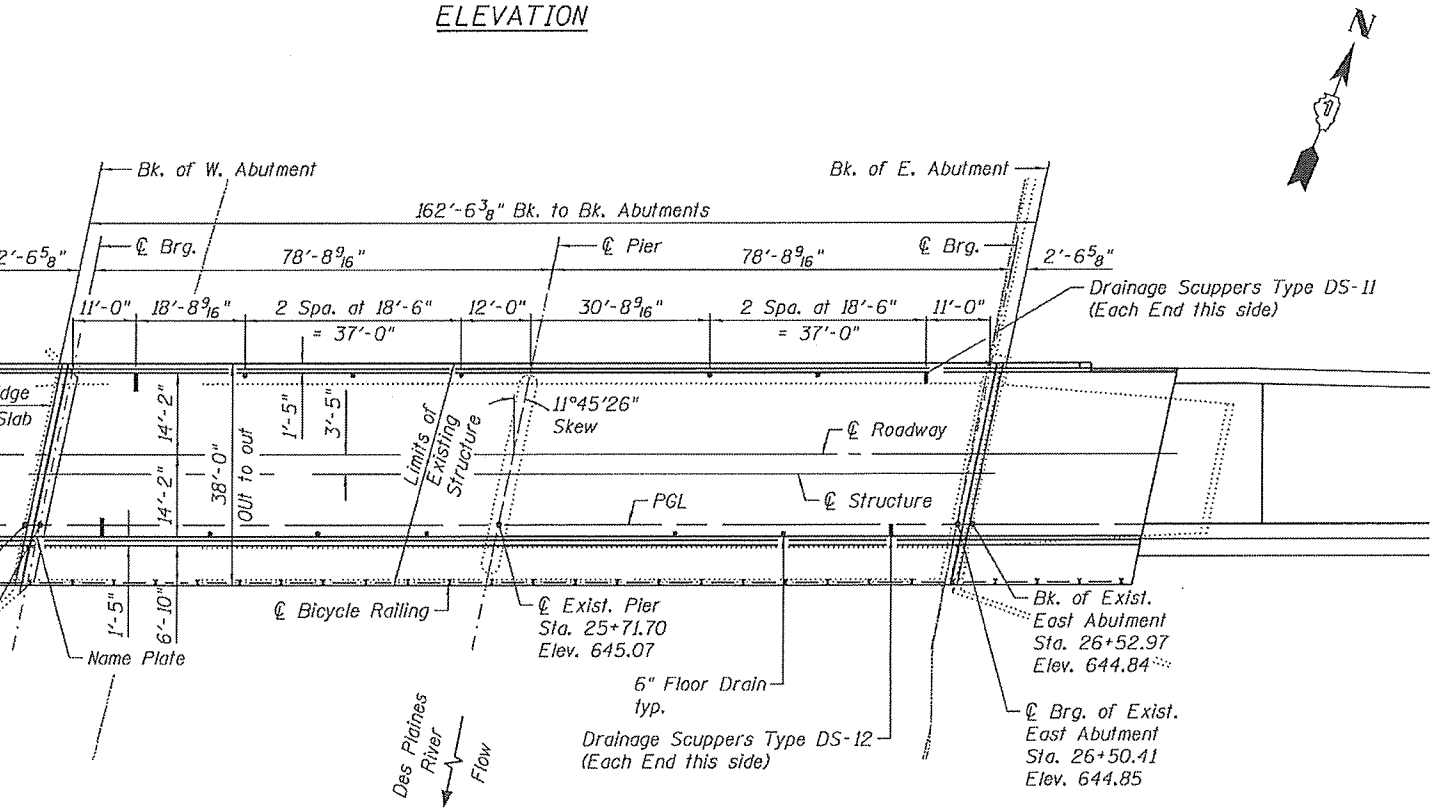


RAMP PROFILE
(along PGL Ramp B)

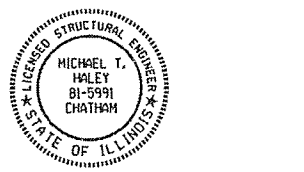
WATERWAY INFORMATION

Drainage Area = 351 sq. mi. Low Grade Elev. 640.0 ft. at Sta. 21+20

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	2	2,980	1,491	1,491	636.45	0.00	0.00	636.45	636.45
	10	4,226	1,667	1,667	637.81	0.00	0.00	637.80	637.80
Design	50	5,577	1,858	1,858	639.29	0.00	0.00	639.28	639.28
Base	100	6,161	1,942	1,942	639.84	0.00	0.00	639.84	639.84
Overtopping	>500								
Max. Calc.	500	7,395	2,045	2,045	641.23	0.07	0.07	641.30	641.30

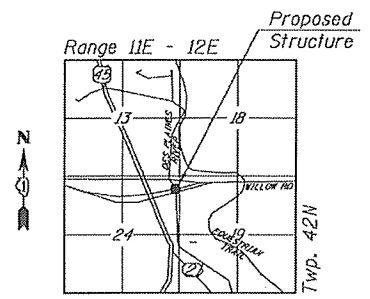


PLAN



Michael J. Haley 3-19-20
Michael T. Haley Date
Licensed Structural Engineer
State of Illinois No. 81-5991
Expires 11/30/2020

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
WILLOW ROAD OVER DES PLAINES RIVER - EASTBOUND RAMP B
FAP RTE 305 SEC 1516I-1
COOK COUNTY
STATION 25+71.70 (RAMP B)
STRUCTURE NO. 016-0273

ORIGINAL: Wight
UPDATED: E LIN ENGINEERING LTD

	DESIGNED - MAS		REVISED
	CHECKED - BJM MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	95
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $^{7}/_{8}$ in. ϕ, holes $^{15}/_{16}$ in. ϕ, unless otherwise noted.

2. The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications.

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

4. Reinforcement bars designated (E) shall be epoxy coated.

5. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

   As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $^{1}/_{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

6. 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.

7. Cleaning and field painting of existing structural steel shall be done under a separate painting contract, except where otherwise noted.

8. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

9. Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All beams and other structural steel within 5 ft (measured along beam) of deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10.

   The designated areas cleaned per Near White Blast Cleaning shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No 2.5YR 3/4.

10. All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

11. Slipforming of the concrete parapets is not allowed.

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	-	6.3	6.3
Removal of Existing Concrete Deck No. 2	Each	1	-	1
Protective Shield	Sq. Yd.	657	-	657
Floor Drains	Each	10	-	10
Concrete Superstructure (Approach Slab)	Cu. Yd.	104.8	-	104.8
Concrete Structures	Cu. Yd.	-	23.4	23.4
Concrete Superstructure	Cu. Yd.	211.9	-	211.9
Bridge Deck Grooving	Sq. Yd.	641	-	641
Protective Coat	Sq. Yd.	1,104	-	1,104
Furnishing and Erecting Structural Steel	Pound	2,510	-	2,510
Stud Shear Connectors	Each	2,495	-	2,495
Cleaning and Painting Structural Steel, Location 2	L. Sum	1	-	1
Containment and Disposal of Lead Paint Cleaning Residue	L. Sum	1	-	1
Reinforcement Bars, Epoxy Coated	Pound	101,260	5,290	106,550
Bicycle Railing	Foot	222	-	222
Parapet Railing	Foot	222	-	222
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	76	-	76
Elastomeric Bearing Assembly, Type I	Each	-	10	10
Anchor Bolts, 1"	Each	-	20	20
Epoxy Crack Injection	Foot	-	50	50
Jack and Remove Existing Bearings	Each	-	10	10
Structural Steel Removal	Pound	4,240	-	4,240
Structural Repair of Concrete (Depth equal to or less than 5 Inches)	Sq. Ft.	-	153	153
Drainage Scuppers, DS-11	Each	2	-	2
Drainage Scuppers, DS-12	Each	2	-	2
Drill and Grout Bars	Each	-	80	80

ORIGINAL: Wight

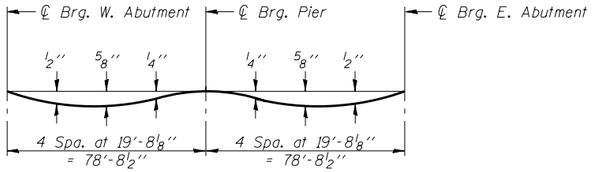
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - BJM MTH		REVISED
	DRAWN - MAS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 016-0273
SHEET NO. 2 OF 33 SHEETS

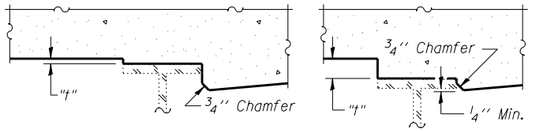
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	96
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



DEAD LOAD DEFLECTION DIAGRAM

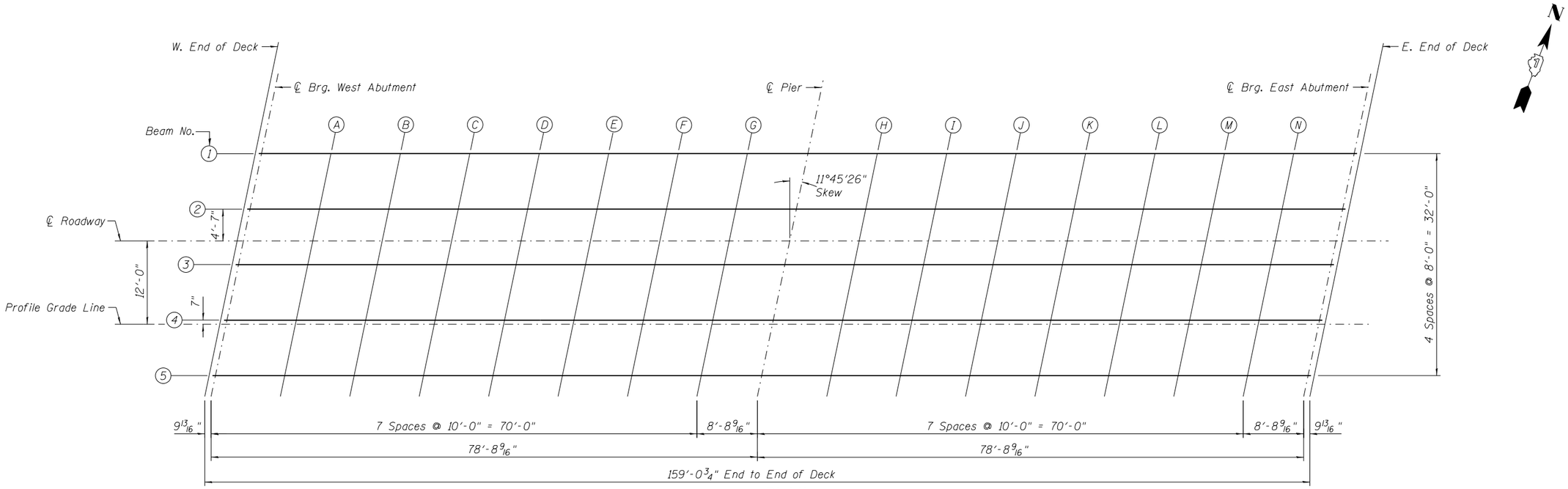
(Includes weight of concrete only.)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets 4 and 5 of 33.



To determine "t": Elevations of the top of beams shall be taken at the intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on Sheets 4 and 5 of 33, minus slab thickness, equals the fillet heights "t" above top flange or cover plate of beams.

FILLET HEIGHTS



PLAN

ORIGINAL:	UPDATED:				
Wight	LBN ENGINEERING LTD. Consulting Engineers		DESIGNED - MAS		REVISED
			CHECKED - MWS	MTH	REVISED
			DRAWN - TAY		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0273
SHEET NO. 3 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	97
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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BEAM 1

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+97.29	-24.58	644.84	644.84
℄ Brg. W. Abutment	24+98.11	-24.58	644.84	644.84
A	25+08.11	-24.58	644.90	644.92
B	25+18.11	-24.58	644.94	644.98
C	25+28.11	-24.58	644.98	645.03
D	25+38.11	-24.58	645.01	645.05
E	25+48.11	-24.58	645.04	645.07
F	25+58.11	-24.58	645.05	645.07
G	25+68.11	-24.58	645.06	645.06
℄ Pier	25+76.82	-24.58	645.06	645.06
H	25+86.82	-24.58	645.05	645.06
I	25+96.82	-24.58	645.04	645.06
J	26+06.82	-24.58	645.02	645.06
K	26+16.82	-24.58	644.99	645.04
L	26+26.82	-24.58	644.95	645.00
M	26+36.82	-24.58	644.91	644.95
N	26+46.82	-24.58	644.86	644.88
℄ Brg. E. Abutment	26+55.52	-24.58	644.80	644.80
E. End of Deck	26+56.34	-24.58	644.80	644.80

BEAM 2

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+95.62	-16.58	644.99	644.99
℄ Brg. W. Abutment	24+96.44	-16.58	644.99	644.99
A	25+06.44	-16.58	645.05	645.08
B	25+16.44	-16.58	645.09	645.14
C	25+26.44	-16.58	645.13	645.19
D	25+36.44	-16.58	645.17	645.21
E	25+46.44	-16.58	645.19	645.24
F	25+56.44	-16.58	645.21	645.24
G	25+66.44	-16.58	645.22	645.23
℄ Pier	25+75.15	-16.58	645.22	645.22
H	25+85.15	-16.58	645.22	645.23
I	25+95.15	-16.58	645.20	645.23
J	26+05.15	-16.58	645.18	645.23
K	26+15.15	-16.58	645.15	645.21
L	26+25.15	-16.58	645.12	645.17
M	26+35.15	-16.58	645.08	645.12
N	26+45.15	-16.58	645.02	645.05
℄ Brg. E. Abutment	26+53.86	-16.58	644.97	644.97
E. End of Deck	26+54.68	-16.58	644.97	644.97

℄ ROADWAY

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+94.67	-12.00	645.08	645.08
℄ Brg. W. Abutment	24+95.49	-12.00	645.08	645.08
A	25+05.49	-12.00	645.13	645.17
B	25+15.49	-12.00	645.18	645.24
C	25+25.49	-12.00	645.22	645.29
D	25+35.49	-12.00	645.26	645.31
E	25+45.49	-12.00	645.28	645.33
F	25+55.49	-12.00	645.30	645.33
G	25+65.49	-12.00	645.31	645.32
℄ Pier	25+74.20	-12.00	645.31	645.31
H	25+84.20	-12.00	645.31	645.32
I	25+94.20	-12.00	645.30	645.33
J	26+04.20	-12.00	645.28	645.32
K	26+14.20	-12.00	645.25	645.31
L	26+24.20	-12.00	645.21	645.27
M	26+34.20	-12.00	645.17	645.22
N	26+44.20	-12.00	645.12	645.15
℄ Brg. E. Abutment	26+52.91	-12.00	645.07	645.07
E. End of Deck	26+53.72	-12.00	645.07	645.07

BEAM 3

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+93.96	-8.58	645.00	645.00
℄ Brg. W. Abutment	24+94.78	-8.58	645.00	645.00
A	25+04.78	-8.58	645.06	645.09
B	25+14.78	-8.58	645.11	645.16
C	25+24.78	-8.58	645.15	645.21
D	25+34.78	-8.58	645.19	645.23
E	25+44.78	-8.58	645.21	645.26
F	25+54.78	-8.58	645.23	645.26
G	25+64.78	-8.58	645.24	645.25
℄ Pier	25+73.49	-8.58	645.24	645.24
H	25+83.49	-8.58	645.24	645.25
I	25+93.49	-8.58	645.23	645.26
J	26+03.49	-8.58	645.21	645.26
K	26+13.49	-8.58	645.18	645.24
L	26+23.49	-8.58	645.15	645.21
M	26+33.49	-8.58	645.11	645.15
N	26+43.49	-8.58	645.06	645.08
℄ Brg. E. Abutment	26+52.19	-8.58	645.01	645.01
E. End of Deck	26+53.01	-8.58	645.01	645.01

Note:
Offsets are measured from PGL.

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0273
SHEET NO. 4 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	98
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

BEAM 4

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+92.29	-0.58	644.83	644.83
℄ Brg. W. Abutment	24+93.11	-0.58	644.83	644.83
A	25+03.11	-0.58	644.89	644.92
B	25+13.11	-0.58	644.94	644.99
C	25+23.11	-0.58	644.99	645.04
D	25+33.11	-0.58	645.02	645.06
E	25+43.11	-0.58	645.05	645.09
F	25+53.11	-0.58	645.07	645.09
G	25+63.11	-0.58	645.08	645.09
℄ Pier	25+71.82	-0.58	645.08	645.08
H	25+81.82	-0.58	645.08	645.09
I	25+91.82	-0.58	645.07	645.09
J	26+01.82	-0.58	645.05	645.09
K	26+11.82	-0.58	645.03	645.08
L	26+21.82	-0.58	644.99	645.04
M	26+31.82	-0.58	644.95	644.99
N	26+41.82	-0.58	644.91	644.93
℄ Brg. E. Abutment	26+50.53	-0.58	644.86	644.86
E. End of Deck	26+51.35	-0.58	644.85	644.85

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+92.17	0.00	644.82	644.82
℄ Brg. W. Abutment	24+92.99	0.00	644.82	644.82
A	25+02.99	0.00	644.88	644.91
B	25+12.99	0.00	644.93	644.97
C	25+22.99	0.00	644.97	645.03
D	25+32.99	0.00	645.01	645.05
E	25+42.99	0.00	645.04	645.07
F	25+52.99	0.00	645.06	645.08
G	25+62.99	0.00	645.07	645.07
℄ Pier	25+71.70	0.00	645.07	645.07
H	25+81.70	0.00	645.07	645.08
I	25+91.70	0.00	645.06	645.08
J	26+01.70	0.00	645.04	645.08
K	26+11.70	0.00	645.02	645.07
L	26+21.70	0.00	644.98	645.03
M	26+31.70	0.00	644.94	644.98
N	26+41.70	0.00	644.89	644.91
℄ Brg. E. Abutment	26+50.41	0.00	644.85	644.85
E. End of Deck	26+51.23	0.00	644.84	644.84

BEAM 5

Location	Station	Offset (ft.)	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Deck	24+90.63	7.42	644.66	644.66
℄ Brg. W. Abutment	24+91.45	7.42	644.66	644.66
A	25+01.45	7.42	644.72	644.74
B	25+11.45	7.42	644.78	644.81
C	25+21.45	7.42	644.82	644.87
D	25+31.45	7.42	644.86	644.89
E	25+41.45	7.42	644.88	644.92
F	25+51.45	7.42	644.90	644.92
G	25+61.45	7.42	644.92	644.92
℄ Pier	25+70.16	7.42	644.92	644.92
H	25+80.16	7.42	644.92	644.92
I	25+90.16	7.42	644.91	644.93
J	26+00.16	7.42	644.90	644.93
K	26+10.16	7.42	644.87	644.92
L	26+20.16	7.42	644.84	644.88
M	26+30.16	7.42	644.80	644.83
N	26+40.16	7.42	644.75	644.77
℄ Brg. E. Abutment	26+48.86	7.42	644.71	644.71
E. End of Deck	26+49.68	7.42	644.70	644.70

Note:
Offsets are measured from PGL.

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 016-0273
SHEET NO. 5 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	99
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF PAVEMENT

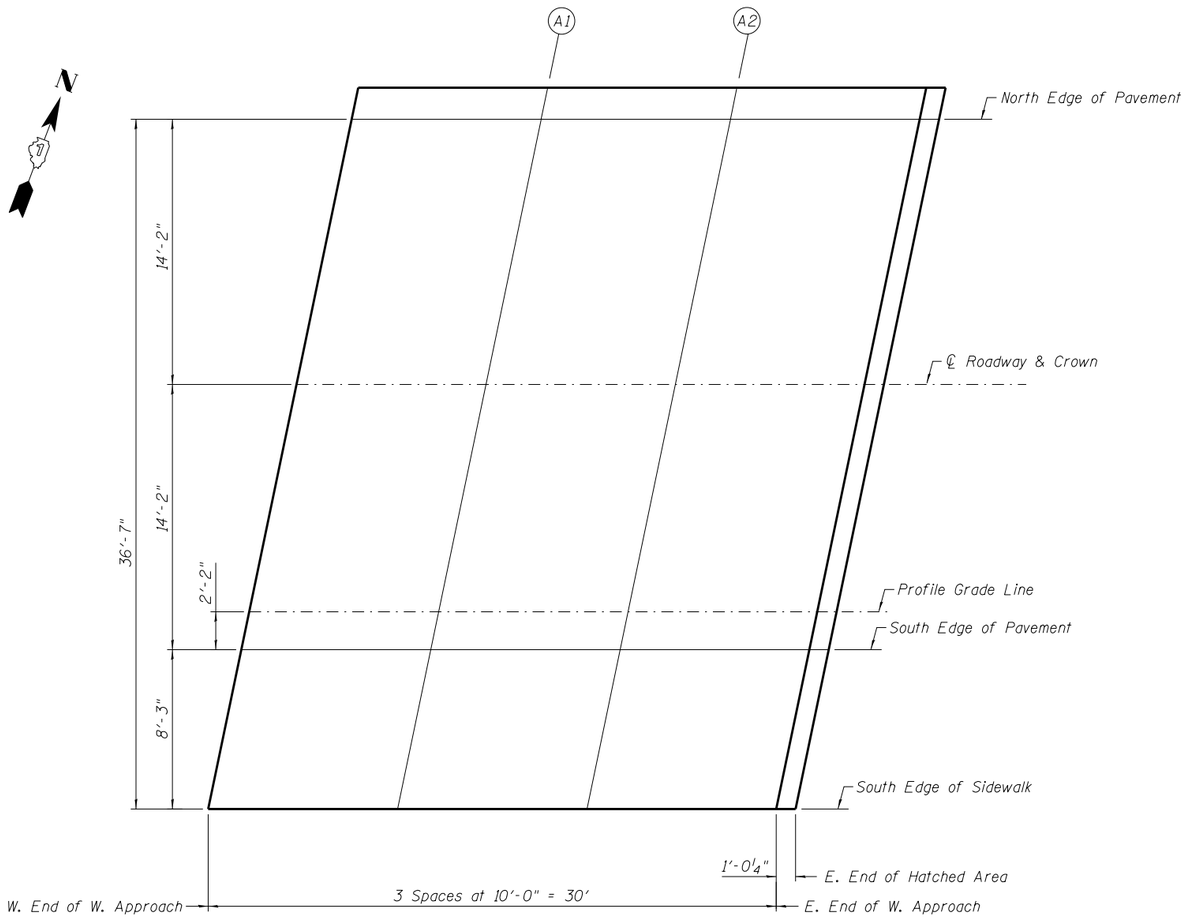
Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	24+66.40	-26.17	644.59
A1	24+76.40	-26.17	644.67
A2	24+86.40	-26.17	644.74
E. End of W. Approach	24+96.40	-26.17	644.80
E. End of Hatched Area	24+97.42	-26.17	644.80

℄ ROADWAY & CROWN

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	24+63.45	-12.00	644.86
A1	24+73.45	-12.00	644.94
A2	24+83.45	-12.00	645.01
E. End of W. Approach	24+93.45	-12.00	645.08
E. End of Hatched Area	24+94.47	-12.00	645.08

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	24+60.95	0.00	644.59
A1	24+70.95	0.00	644.67
A2	24+80.95	0.00	644.74
E. End of W. Approach	24+90.95	0.00	644.81
E. End of Hatched Area	24+91.97	0.00	644.82



WEST APPROACH PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	24+60.50	2.17	644.54
A1	24+70.50	2.17	644.62
A2	24+80.50	2.17	644.70
E. End of W. Approach	24+90.50	2.17	644.76
E. End of Hatched Area	24+91.52	2.17	644.77

SOUTH EDGE OF SIDEWALK

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of W. Approach	24+58.78	10.42	644.36
A1	24+68.78	10.42	644.43
A2	24+78.78	10.42	644.51
E. End of W. Approach	24+88.78	10.42	644.58
E. End of Hatched Area	24+89.80	10.42	644.59

Note:
Offsets are measured from PGL.

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ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-0273
SHEET NO. 6 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	100
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

NORTH EDGE OF PAVEMENT

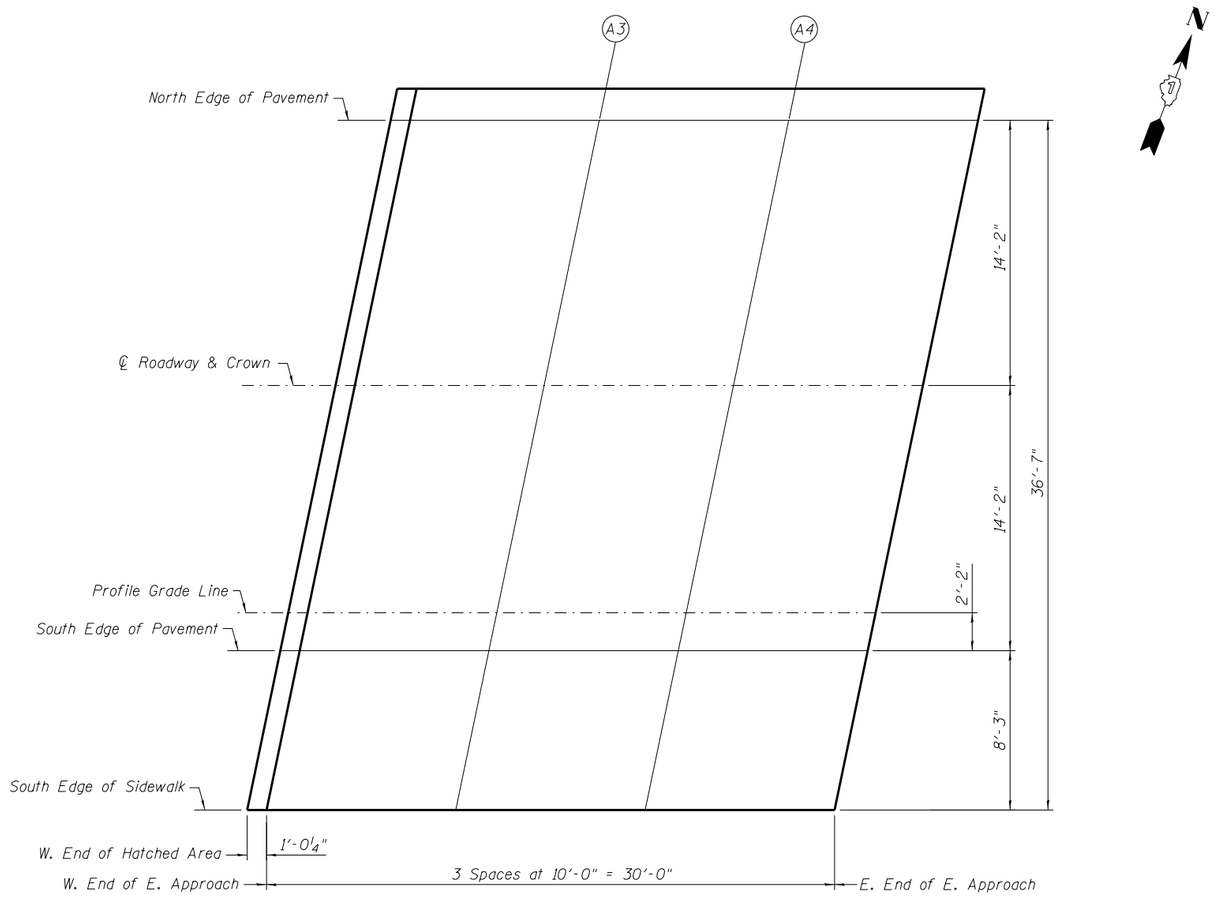
Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	26+56.89	-26.17	644.76
W. End of E. Approach	26+57.91	-26.17	644.75
A3	26+67.91	-26.17	644.68
A4	26+77.91	-26.17	644.61
E. End of E. Approach	26+87.91	-26.17	644.52

℄ ROADWAY & CROWN

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	26+53.94	-12.00	645.07
W. End of E. Approach	26+54.96	-12.00	645.07
A3	26+64.96	-12.00	645.00
A4	26+74.96	-12.00	644.93
E. End of E. Approach	26+84.96	-12.00	644.84

PROFILE GRADE LINE

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	26+51.44	0.00	644.84
W. End of E. Approach	26+52.46	0.00	644.83
A3	26+62.46	0.00	644.77
A4	26+72.46	0.00	644.70
E. End of E. Approach	26+82.46	0.00	644.62



EAST APPROACH PLAN

SOUTH EDGE OF PAVEMENT

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	26+50.99	2.17	644.80
W. End of E. Approach	26+52.01	2.17	644.79
A3	26+62.01	2.17	644.73
A4	26+72.01	2.17	644.65
E. End of E. Approach	26+82.01	2.17	644.57

SOUTH EDGE OF SIDEWALK

Location	Station	Offset (ft.)	Theoretical Grade Elevations
W. End of Hatched Area	26+49.27	10.42	644.63
W. End of E. Approach	26+50.29	10.42	644.63
A3	26+60.29	10.42	644.57
A4	26+70.29	10.42	644.49
E. End of E. Approach	26+80.29	10.42	644.42

Note:
Offsets are measured from PGL.

11/11/2019 5:14:19 PM E:\10395\Structl\SN 016-0273\Design Plans\CADD Sheets\0160273-60L75-SHT-007-AELV02.dgn

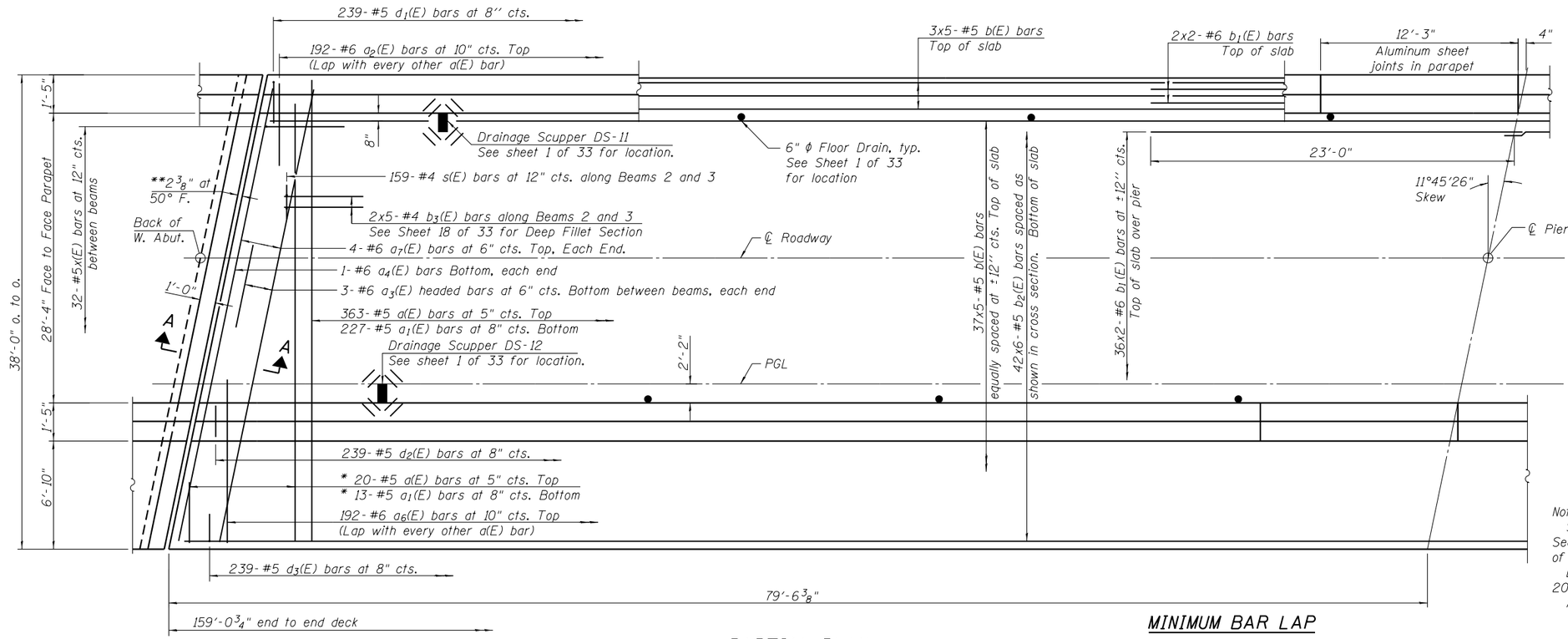
ORIGINAL: Wight
UPDATED: LJN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-0273
SHEET NO. 7 OF 33 SHEETS

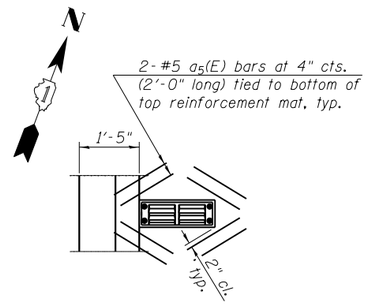
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	101
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



*Order d(E) & a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

** Dimension showing concrete opening. For joint opening see sheet 16 of 33.

PARTIAL PLAN



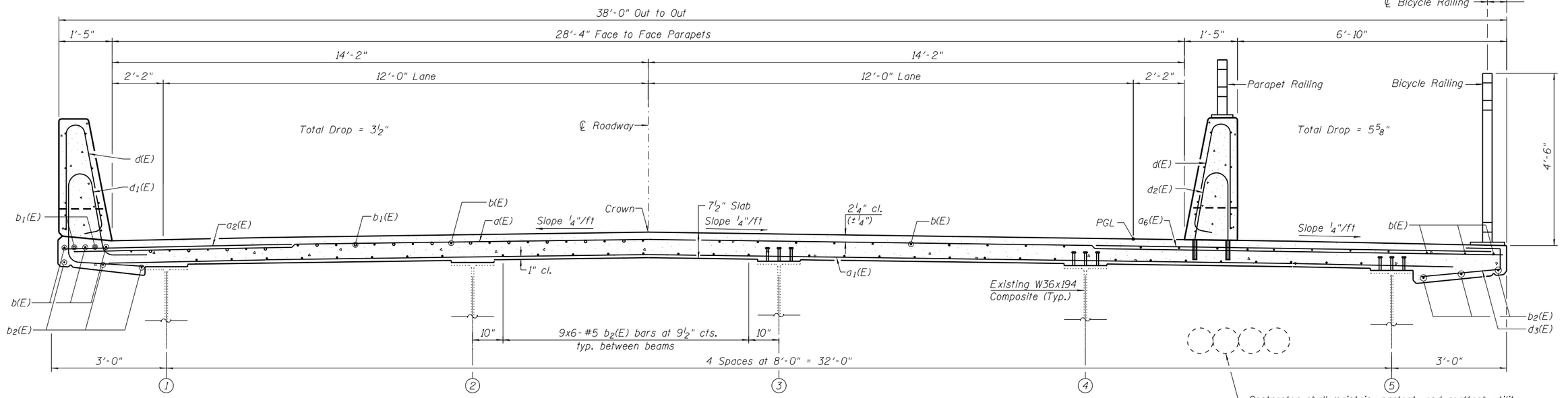
PLAN AT SCUPPER

Reinforcement adjacent to Scupper (Type DS-12 shown, DS-11 Similar)
Cut longitudinal reinforcement to clear drainage scuppers.

Notes:
See Sheets 9 & 10 of 33 for superstructure details, Section A-A, parapet reinforcement, and Bill of Material.
Bars indicated thus 20 x 3- #5 etc. indicates 20 lines of bars with 3 lengths per line.
All drains shall be located clear of all diaphragms.

MINIMUM BAR LAP

#4 Bars 2'-7"
#5 Bars 3'-9"
#6 Bars 3'-10"



NEAR PIER

CROSS SECTION

(Looking East)
(Scuppers and drains not shown for clarity)

NEAR MIDSPAN

Contractor shall maintain, protect, and reattach utility conduits to new deck. Reattachment shall be by reusing existing hangers. New inserts shall be provided as needed. This work shall not be paid for separately and is included with Concrete Superstructure.

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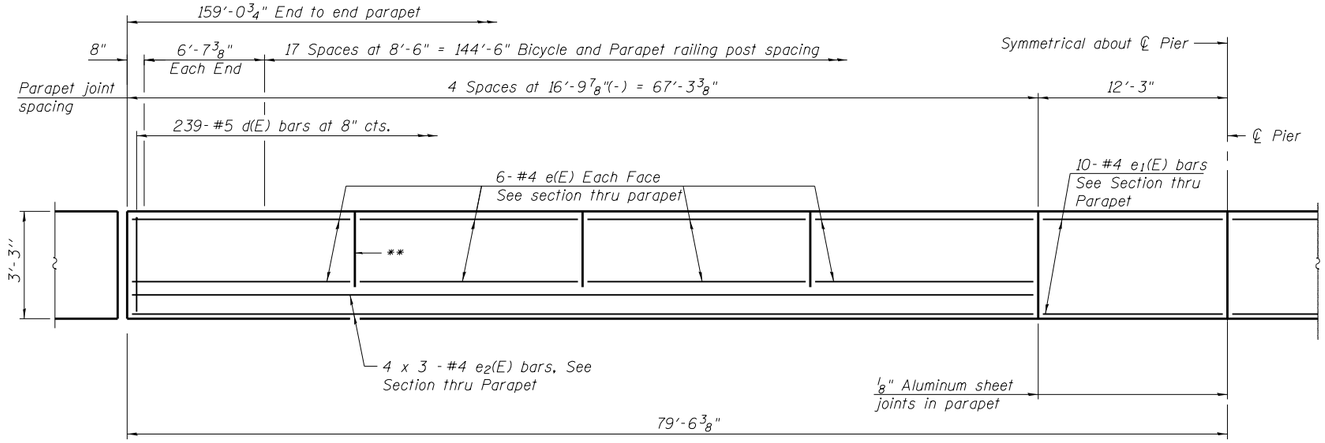
ORIGINAL: Wight
UPDATED: LBN ENGINEERING LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 016-0273
SHEET NO. 8 OF 33 SHEETS

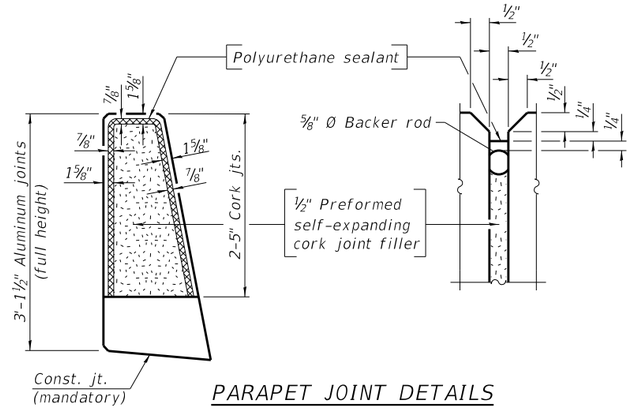
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	102
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



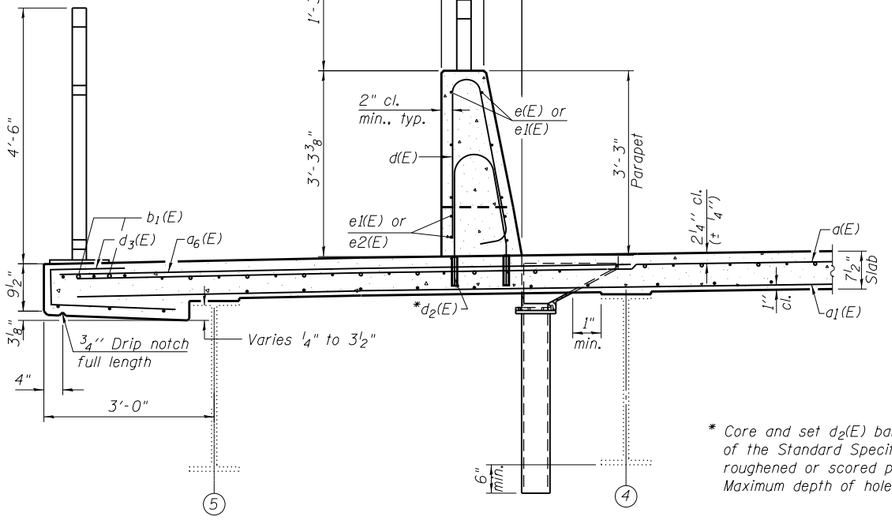
** Cork joint (typ. between panels except at aluminum joints)

INSIDE ELEVATION OF PARAPET

(measured along inside face of parapet)



PARAPET JOINT DETAILS



* Core and set $d_2(E)$ bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

SOUTH SIDE SECTION THRU PARAPET

Showing Typical Drainage Scupper
(Looking West)

Notes:

Drains and downspouts shall be located clear of all diaphragms.

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.

The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

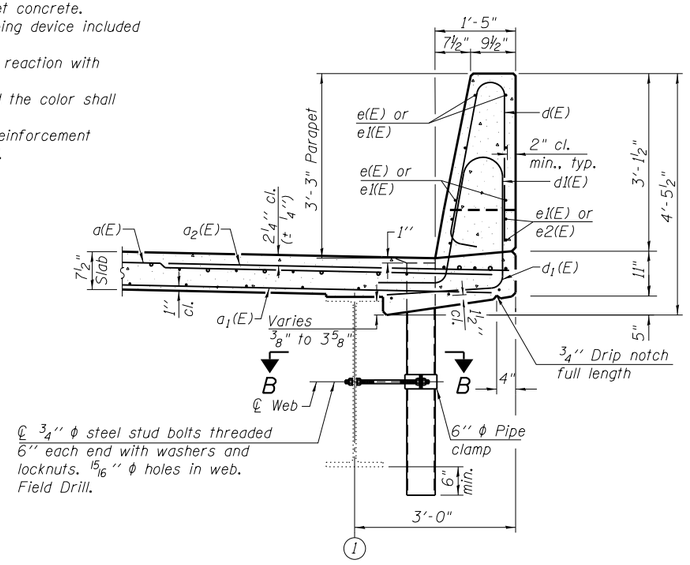
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

Headed bars shall conform to ASTM A970 with threaded attachment: Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

MINIMUM BAR LAP

(Parapet)
#4 Bars 2'-7"



Note:
See Sheet 10 of 33 for Section B-B and floor drain details.

NORTH SIDE SECTION THRU PARAPET

Showing 6" ϕ Floor Drain
(Looking West)

ORIGINAL:	UPDATED:				
Wight	LIN ENGINEERING, LTD. Consulting Engineers		DESIGNED - TAY		REVISED
			CHECKED - MWS	MTH	REVISED
			DRAWN - MWS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 9 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	103
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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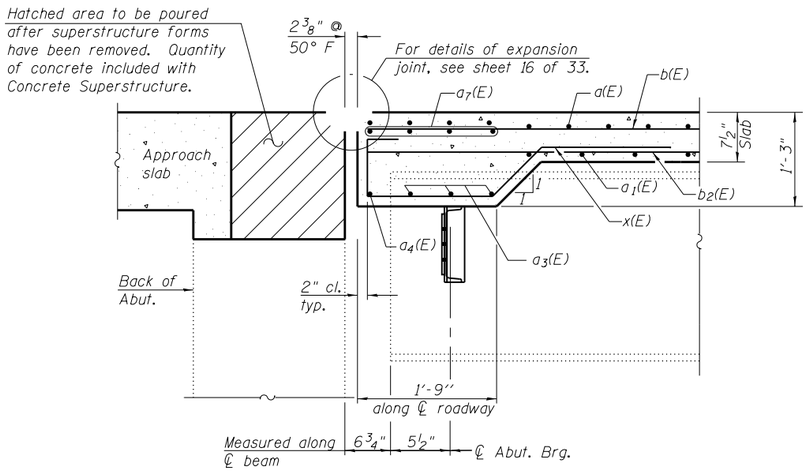
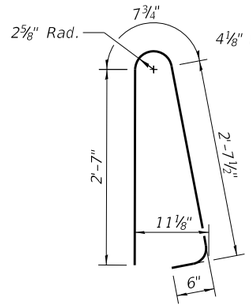
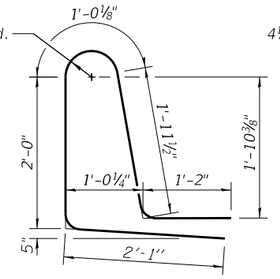


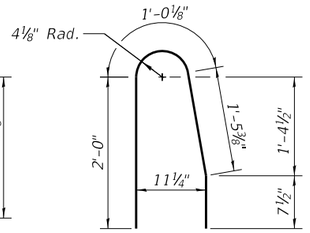
SECTION A-A
(at Rt. L's)



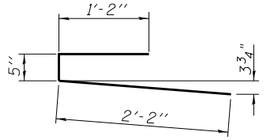
BAR d(E)



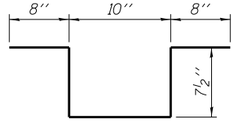
BAR d1(E)



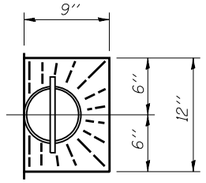
BAR d2(E)



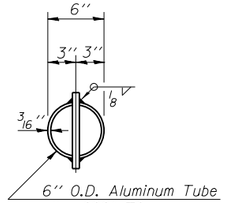
BAR d3(E)



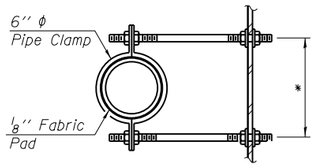
BAR s(E)
See sheet 18 of 33 for Deep Fillet Detail



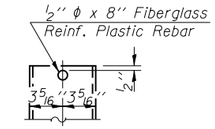
TOP PLAN



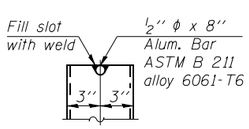
TOP PLAN
(Showing Aluminum Tube)



SECTION B-B
* Dimension as required by Pipe Clamp

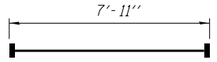


FIBERGLASS PIPE

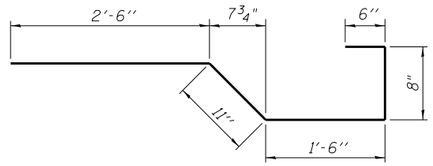


ALUMINUM TUBE

6" ϕ FLOOR DRAIN DETAILS



BAR a3(E)
(Headed)



BAR x(E)

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	383	#5	37'-6"	———
a1(E)	240	#5	36'-2"	———
a2(E)	192	#6	6'-6"	———
a3(E)	24	#6	7'-11"	———
a4(E)	2	#6	33'-7"	———
a5(E)	32	#5	2'-0"	———
a6(E)	192	#6	13'-4"	———
a7(E)	8	#6	33'-7"	———
b(E)	200	#5	34'-9"	———
b1(E)	76	#6	24'-11"	———
b2(E)	252	#5	29'-8"	———
b3(E)	20	#4	33'-9"	———
d(E)	478	#5	6'-5"	
d1(E)	239	#5	8'-3"	
d2(E)	239	#5	5'-1"	
d3(E)	239	#5	3'-9"	
e(E)	96	#4	16'-6"	———
e1(E)	40	#4	11'-11"	———
e2(E)	48	#4	24'-2"	———
s(E)	318	#4	3'-5"	
x(E)	64	#5	6'-1"	
Concrete Superstructure			Cu. Yd.	194.7
Reinforcement Bars, Epoxy Coated			Pound	59,700

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

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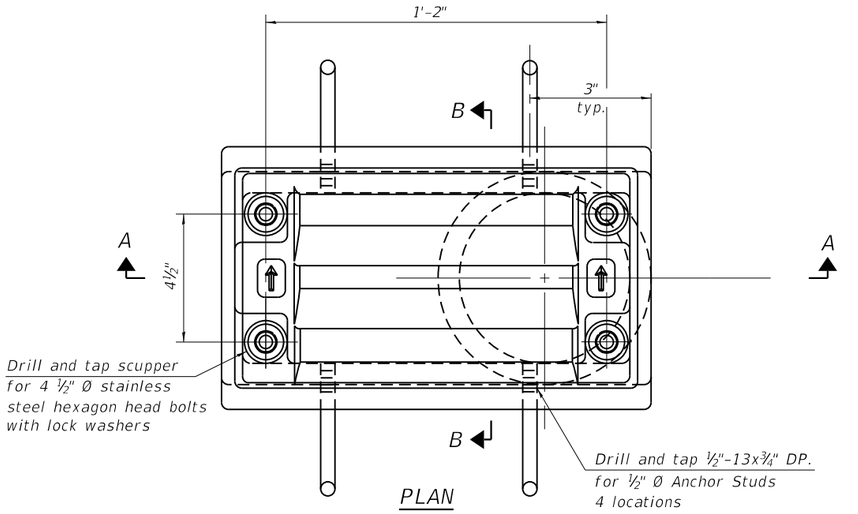
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

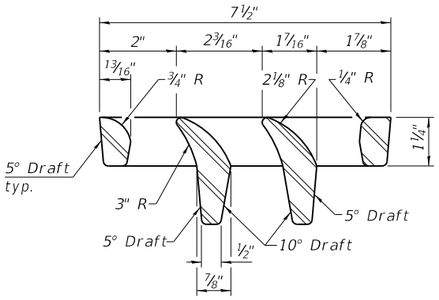
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 10 OF 33 SHEETS

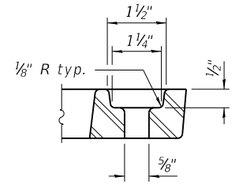
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	104
		CONTRACT NO. 60D77		
		ILLINOIS	FED. AID PROJECT	



PLAN



VANE GRATE DETAIL



BOLT HOLE DETAIL

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

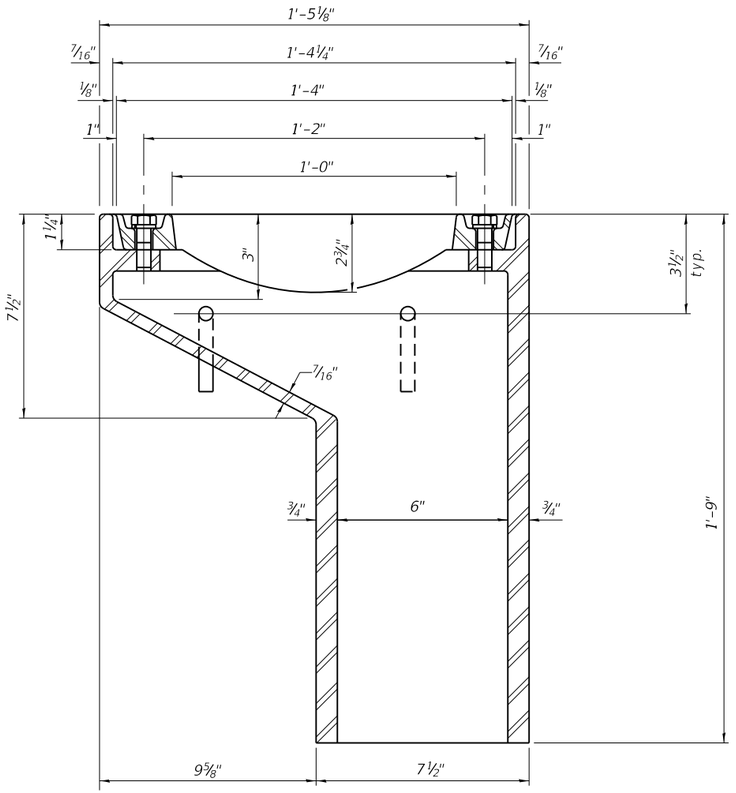
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

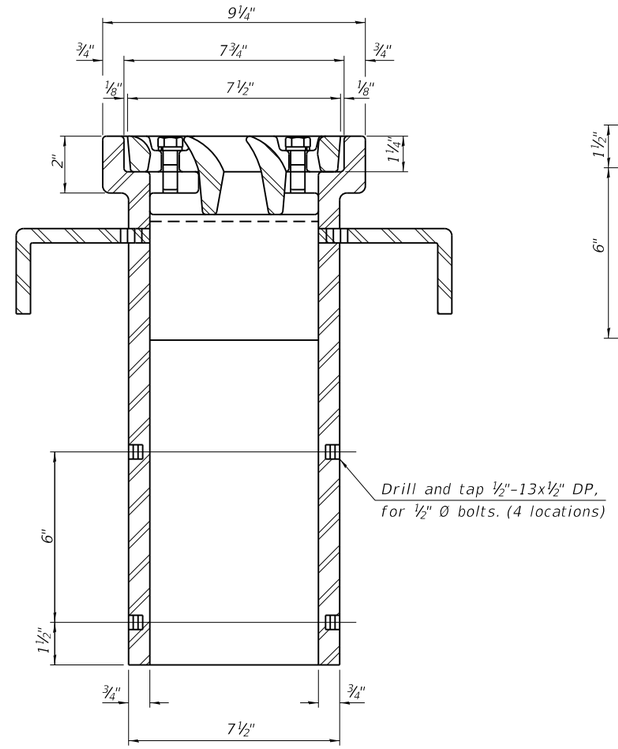
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

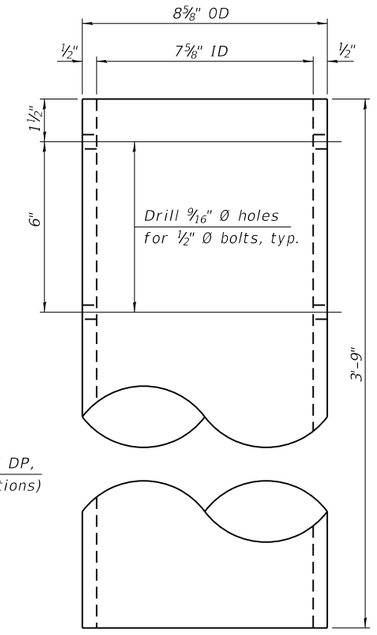


SECTION A-A

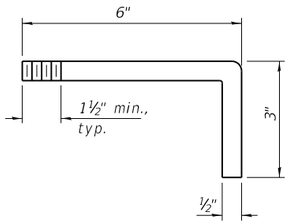
See sheet 9 of 33 for scupper location relative to parapet.



SECTION B-B



DOWNSPOUT



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

DS-11

2-17-2017

ORIGINAL: Wight

UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 016-0273
SHEET NO. 11 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	105
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

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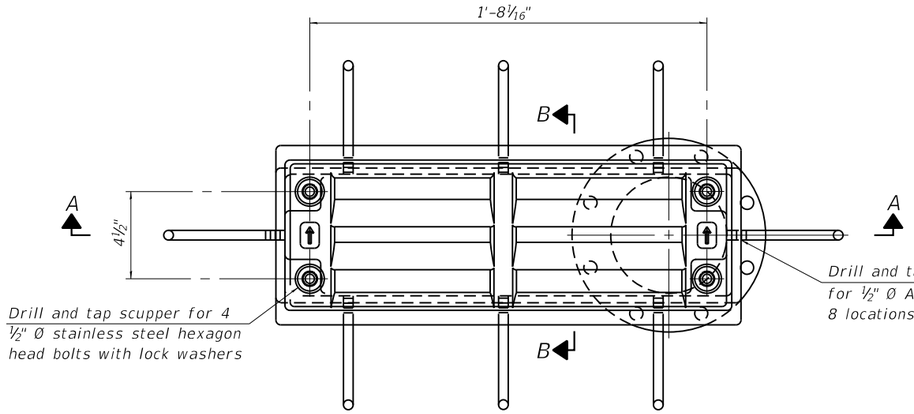
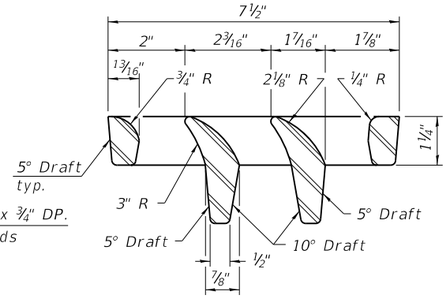
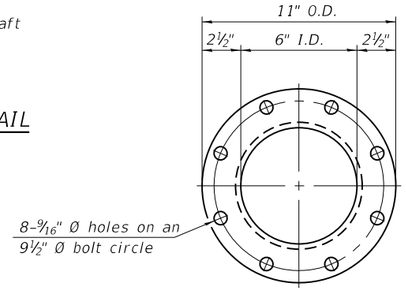


PLAN



VANE GRATE DETAIL



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

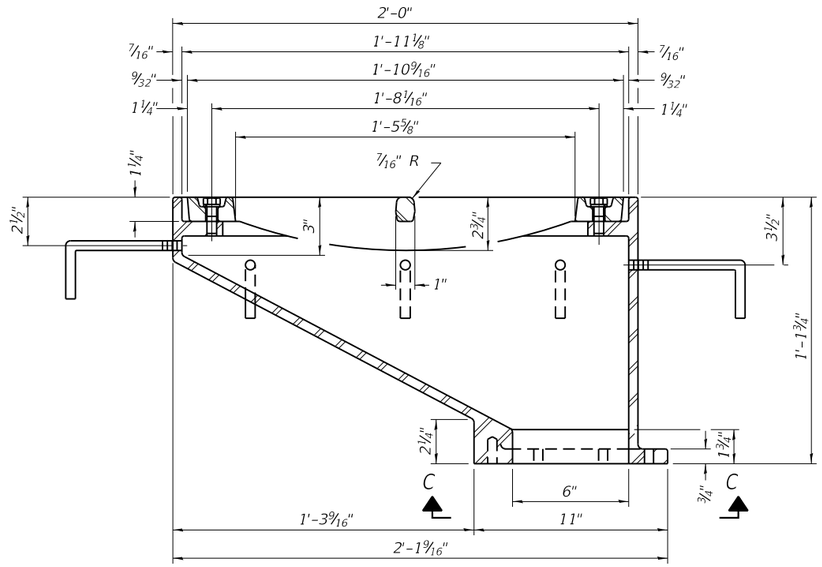
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

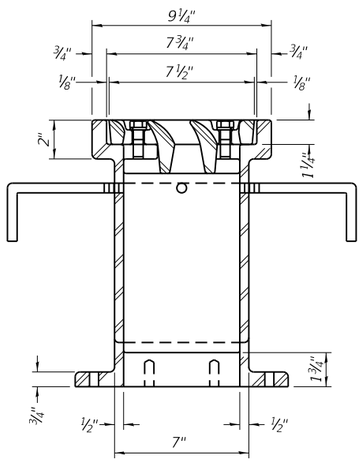
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-12.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

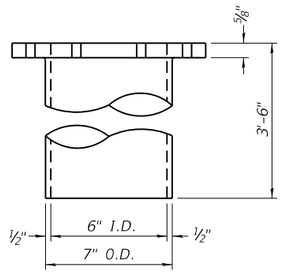


SECTION A-A

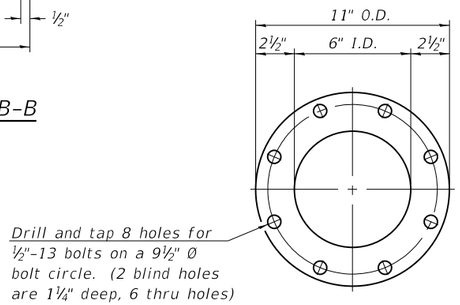
See sheet 9 of 33 for scupper location relative to parapet.



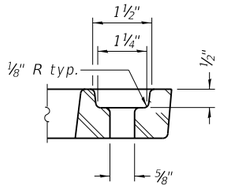
SECTION B-B



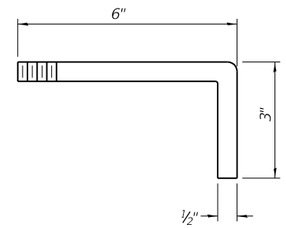
DOWNSPOUT



VIEW C-C



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	2

DS-12

2-17-2017

ORIGINAL: Wight

UPDATED: LBN ENGINEERING LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

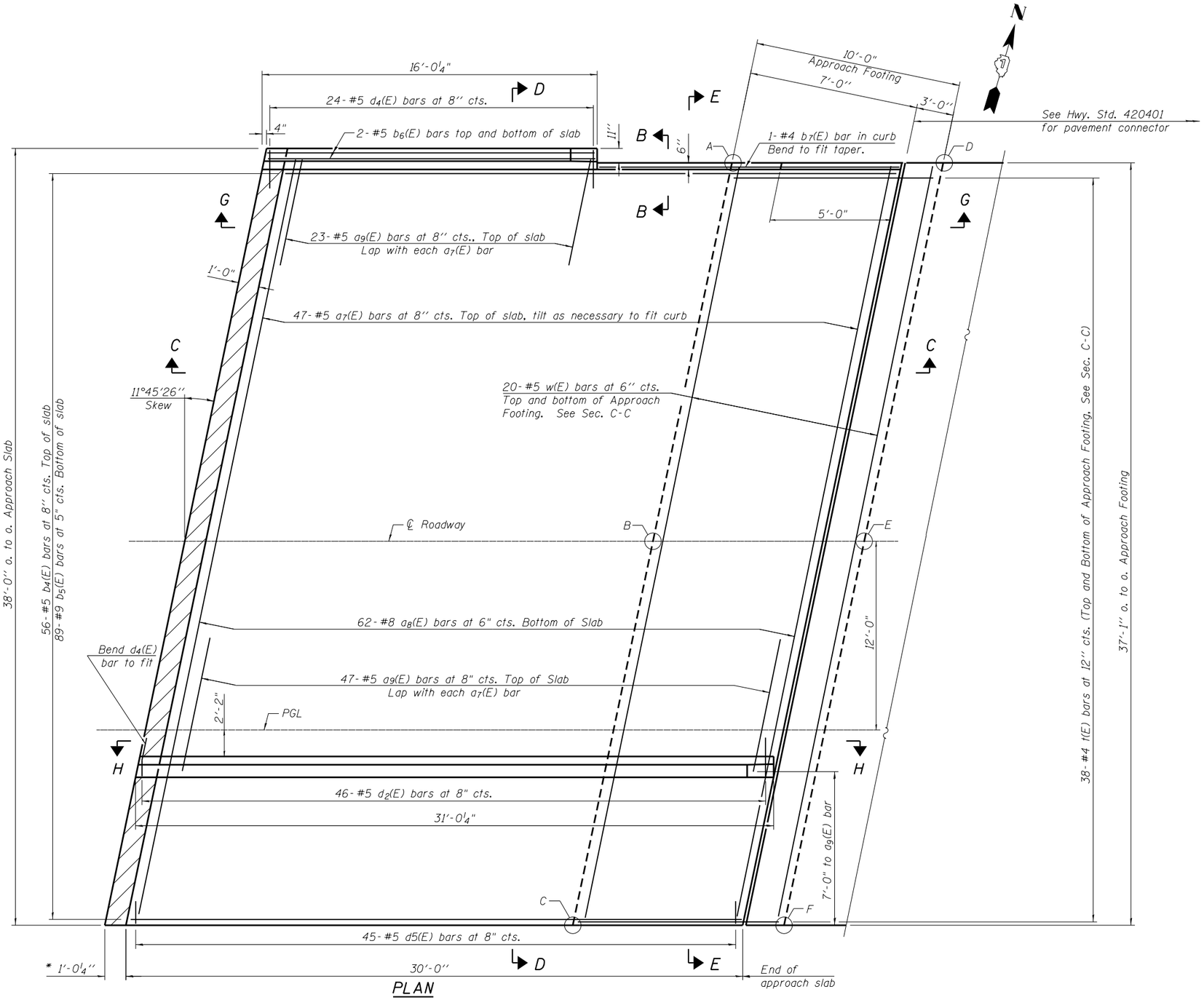
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 016-0273
SHEET NO. 12 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	106
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

11/11/2019 5:14:36 PM E:\1035\Structs\SN 016-0273\Design Plans\CADD Sheets\0160273-60D-75-SHT-012_DRN02.dgn

Note:
See sheet 14 of 33 for additional Sections and Views.



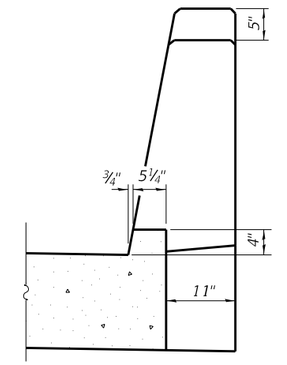
PLAN

(East Approach Slab shown)
(West Approach Slab opposite Hand)

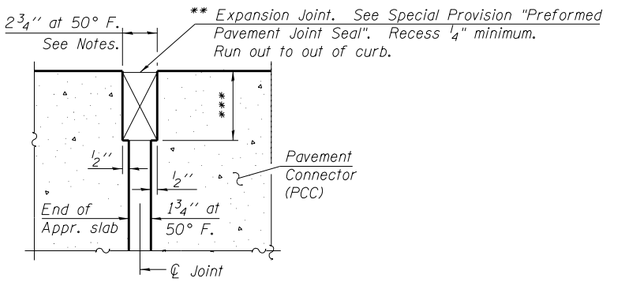
* Hatched area to be poured after superstructure forms have been removed.
Quantity of concrete included with Concrete Superstructure. See Abutment sheets for details.
** Cost included with Concrete Superstructure (Approach Slab).
*** Per manufacturer recommendations.

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	643.37	642.53	643.30	642.47
B	643.67	642.83	643.65	642.82
C	643.16	642.33	643.22	642.39
D	643.28	642.45	643.21	642.38
E	643.58	642.75	643.57	642.73
F	643.07	642.24	643.14	642.31



VIEW B-B



DETAIL A
(@ Rt. L's)

(Sheet 1 of 2)

ORIGINAL: Wight
UPDATED: LPA ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 13 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	107
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

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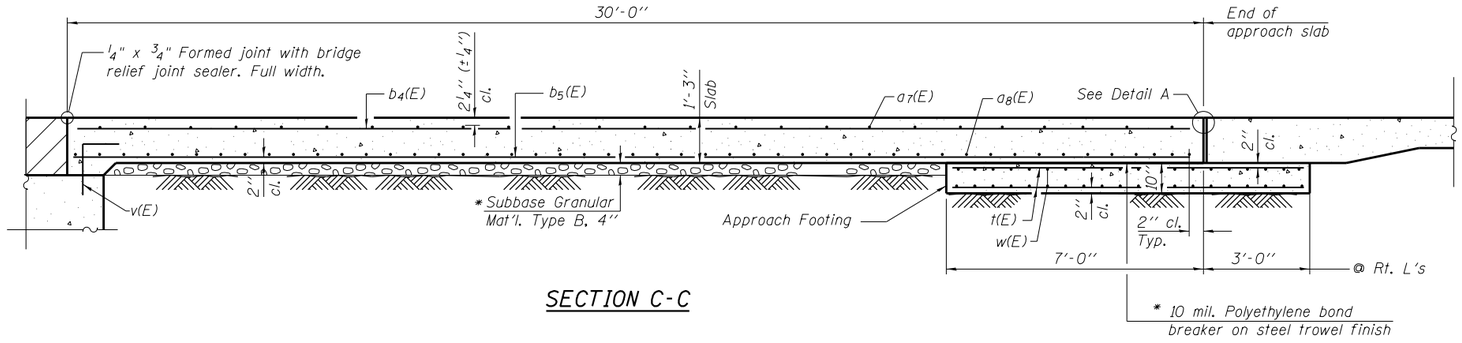
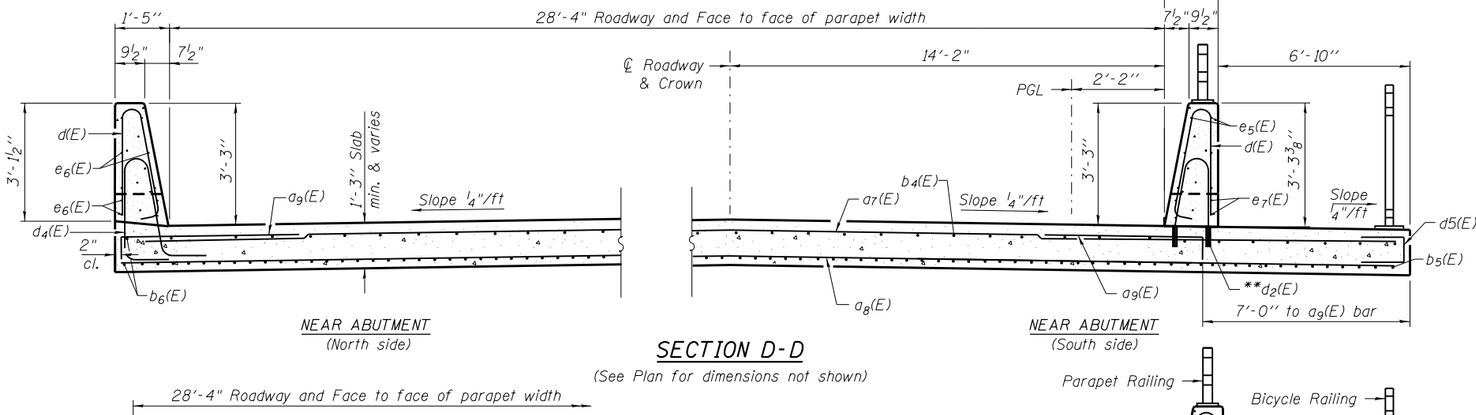


SECTION C-C

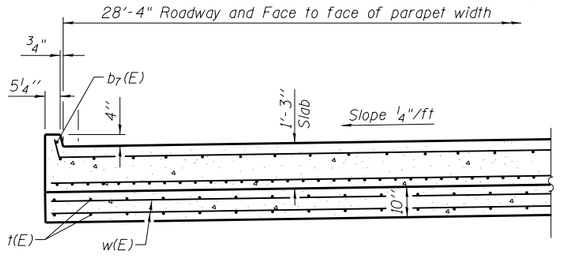


NEAR ABUTMENT (North side)

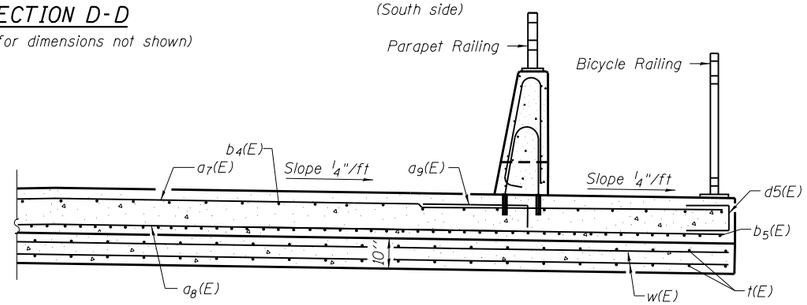
SECTION D-D

(See Plan for dimensions not shown)

NEAR ABUTMENT (South side)



AT APPROACH FOOTING (North side)

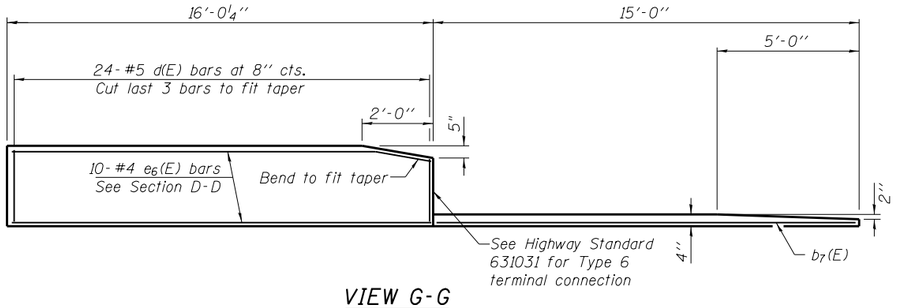


AT APPROACH FOOTING (South side)

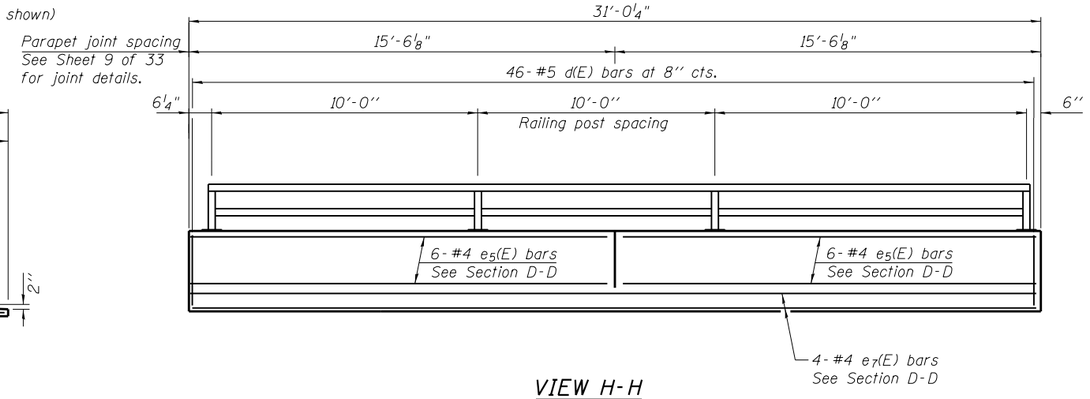
SECTION E-E

(See Plan and Section D-D for dimensions not shown)

** Core and set d_2(E) bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

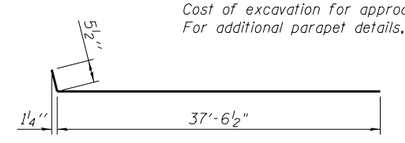


VIEW G-G

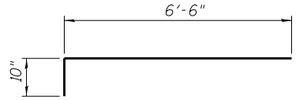


VIEW H-H

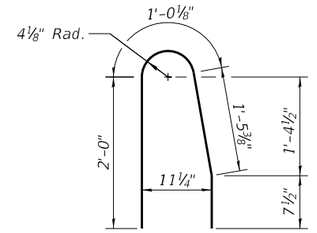
Notes:
See sheet 13 of 33 for Detail A and View B-B.
Parapet concrete shall be paid for as Concrete Superstructure.
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
Approach footing concrete shall be paid for as Concrete Structures.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For additional parapet details, see sheet 9 of 33.



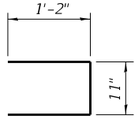
BAR a7(E)



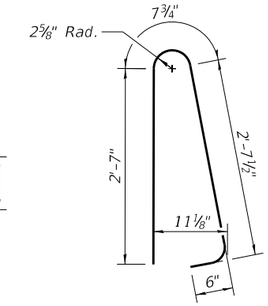
BAR a9(E)



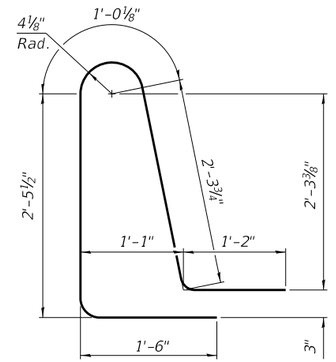
BAR d2(E)



BAR d5(E)



BAR d(E)



BAR d4(E)

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a7(E)	94	#5	38'-0"	
a8(E)	124	#8	37'-6"	
a9(E)	140	#5	7'-4"	
b4(E)	112	#5	29'-8"	
b5(E)	178	#9	29'-8"	
b6(E)	8	#5	15'-8"	
b7(E)	2	#4	14'-8"	
d(E)	140	#5	6'-5"	
d2(E)	92	#5	5'-1"	
d4(E)	48	#5	8'-6"	
d5(E)	90	#5	3'-3"	
e5(E)	24	#4	15'-2"	
e6(E)	20	#4	15'-8"	
e7(E)	8	#4	30'-8"	
t(E)	152	#4	9'-10"	
w(E)	80	#5	37'-6"	
Concrete Superstructure		Cu. Yd.	12.2	
Concrete Structures		Cu. Yd.	23.4	
Concrete Superstructure (Approach Slab)		Cu. Yd.	104.8	
Reinforcement Bars, Epoxy Coated		Pound	45,690	

* Cost included with Concrete Superstructure (Approach Slab).

(Sheet 2 of 2)

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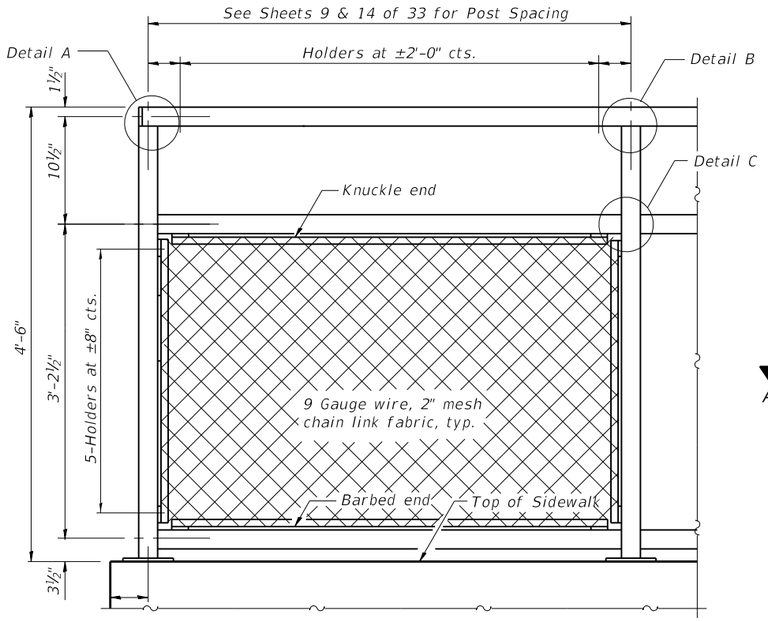
ORIGINAL: Wight
UPDATED: LIN ENGINEERING LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

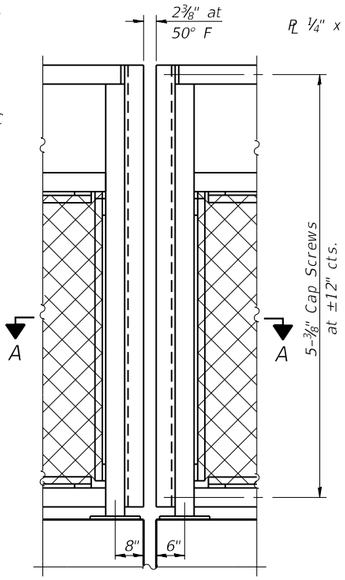
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 14 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	108
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



BICYCLE RAILING



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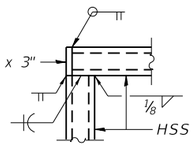
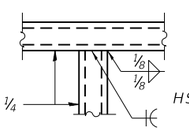
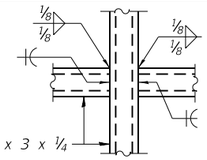


DETAIL A



DETAIL B



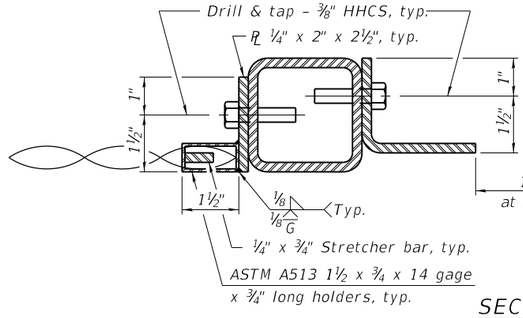
DETAIL C

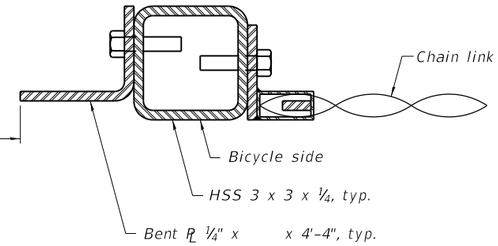
The designer should add the appropriate note as applicable.

A. When railing is galvanized:
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

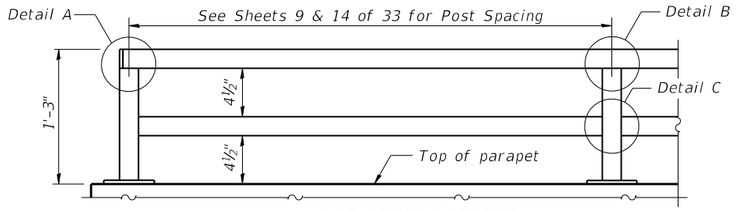
B. When railing is painted:
All post, railing, splices, anchor devices, and plates shall be painted using the (List the appropriate paint system for Structural Steel).

Only one of the above notes would appear on Contract Plans.

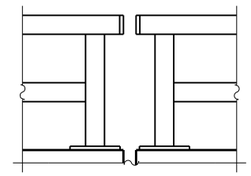




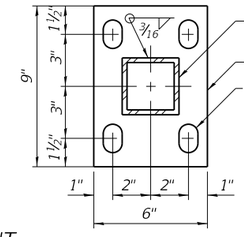
SECTION A-A



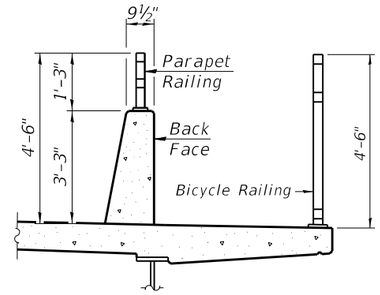
PARAPET RAILING
ELEVATION
(Inside Face of Two Element Rail)



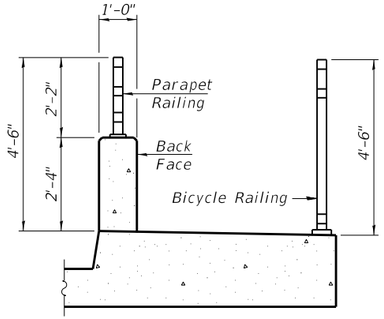
PARAPET RAILING
ELEVATION AT EXPANSION JOINT
(Two Element Rail Shown - Three Element Rail Similar)



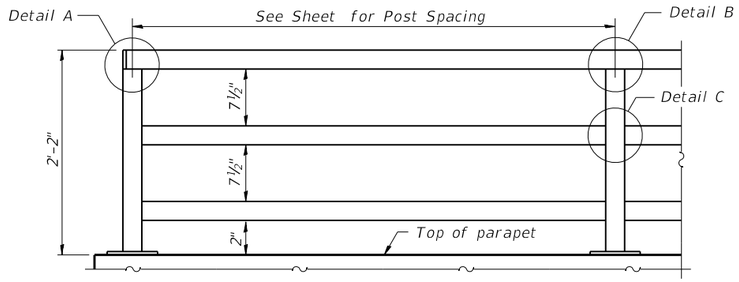
BASE ℄



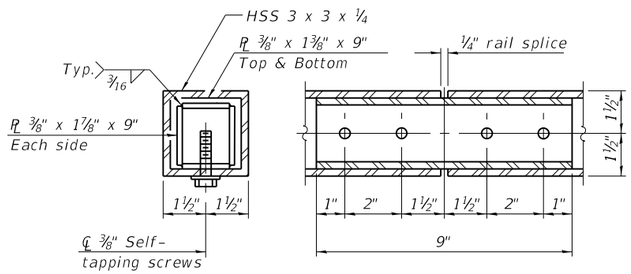
SECTION THRU DECK



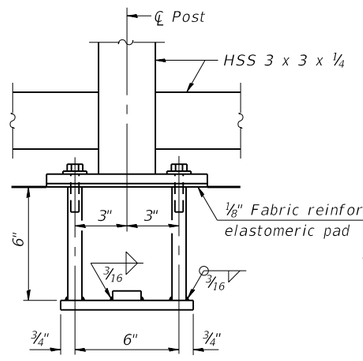
SECTION THRU SIDEWALK

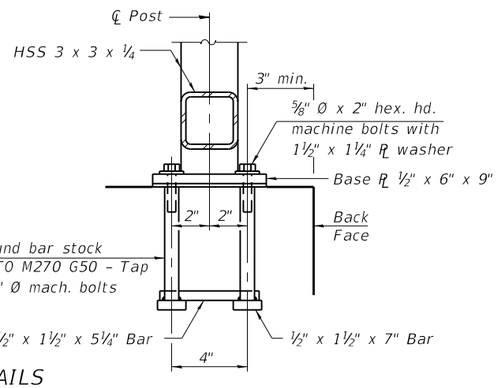


PARAPET RAILING
ELEVATION
(Inside Face of Three Element Rail)



RAIL SPLICE





ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing	Foot	222
Parapet Railing	Foot	222

Notes:
All structural steel tubing, post and railing, for parapet railing shall be CVN tested according to 1006.34(b) of the Standard Specifications.
CVN testing may be omitted for the Bicycle Railing.

R-29

1-14-2019 (10'-0" Maximum Post Spacing)

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - TAY		REVISED
	CHECKED - MWS MTH		REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BICYCLE AND PARAPET RAILING
STRUCTURE NO. 016-0273
SHEET NO. 15 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	109
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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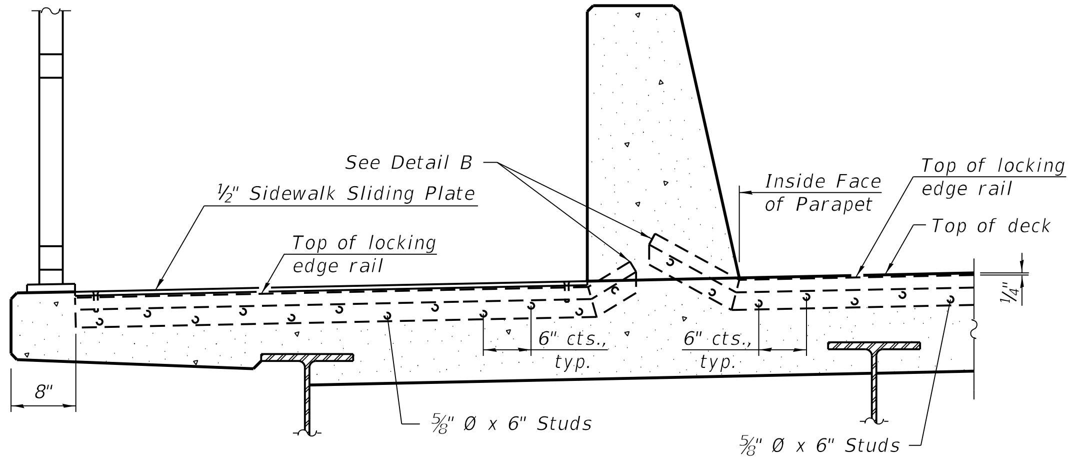
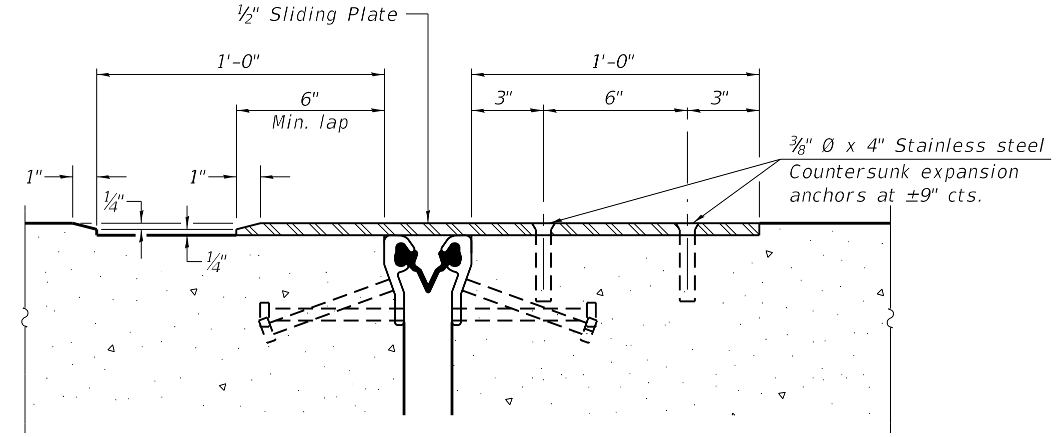
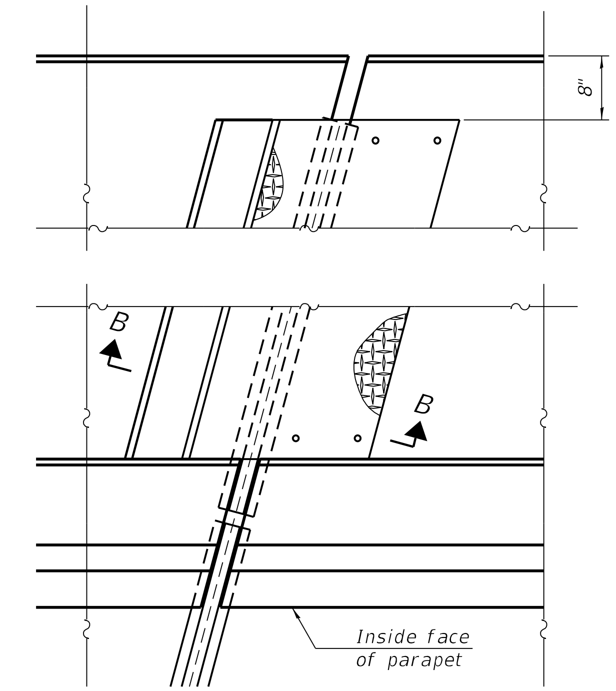


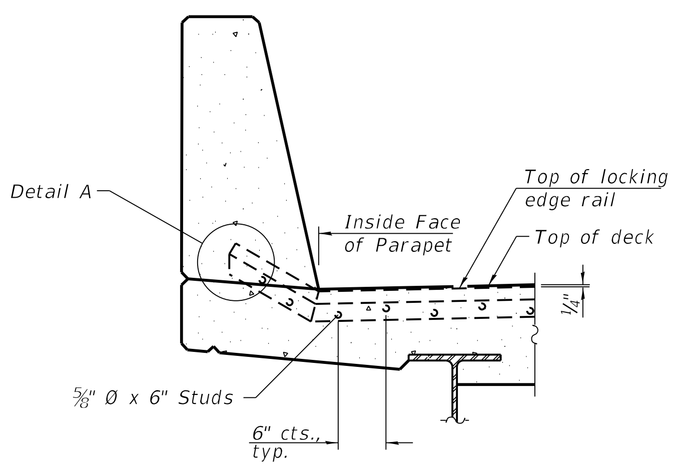
ELEVATION AT DECK LEVEL SIDEWALK



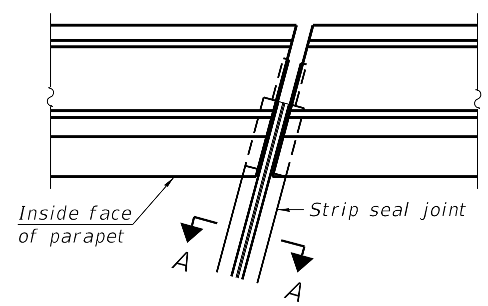
SECTION B-B



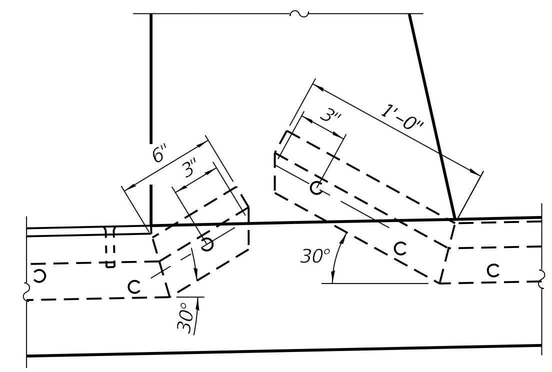
PLAN AT DECK LEVEL SIDEWALK



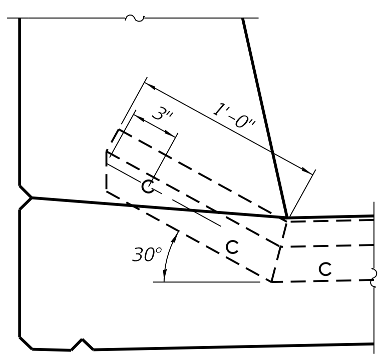
ELEVATION AT PARAPET



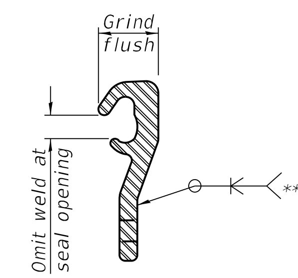
PLAN AT PARAPET



DETAIL B

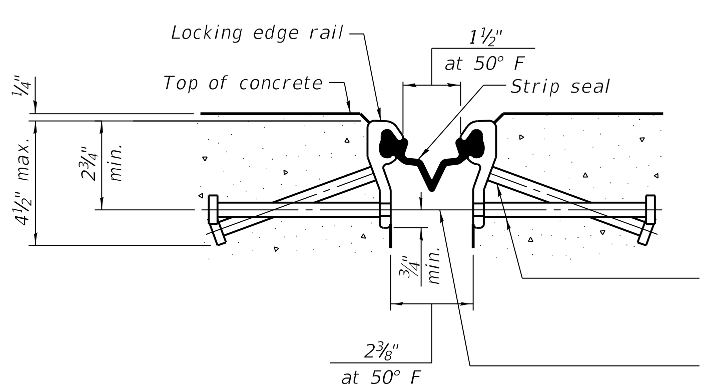


DETAIL A

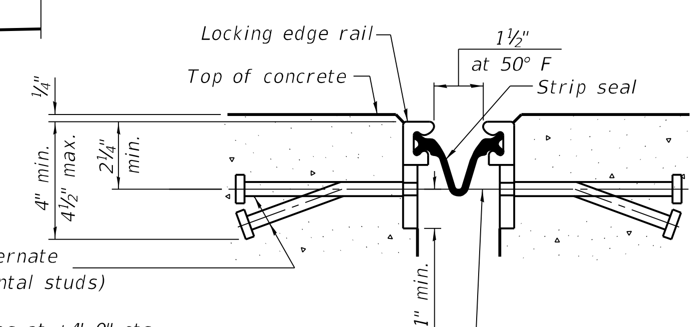


LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.



SHOWING ROLLED RAIL JOINT



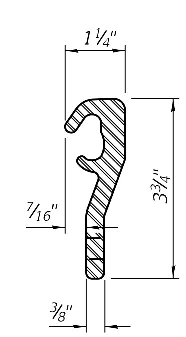
SHOWING WELDED RAIL JOINT

* ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

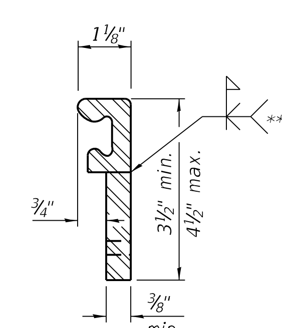
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of sidewalk sliding plates and anchorage studs included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	76

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ORIGINAL:	UPDATED:		DESIGNED - MAS	REVISED
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - TAY MTH	REVISED
			DRAWN - TAY	REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

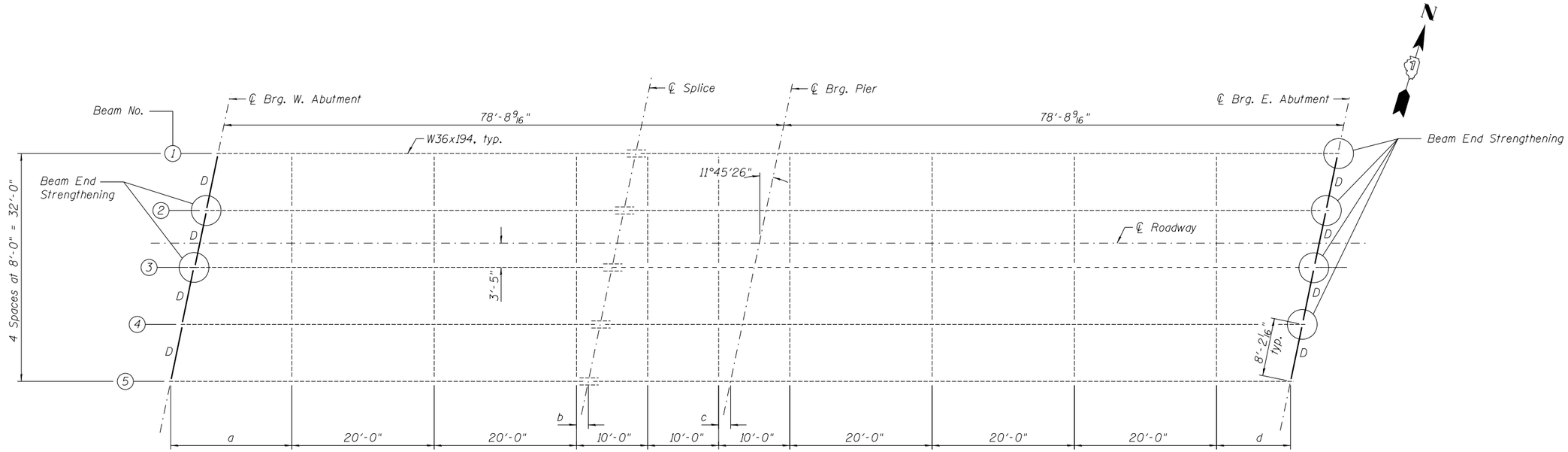
PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-0273

SHEET NO. 16 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	110

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

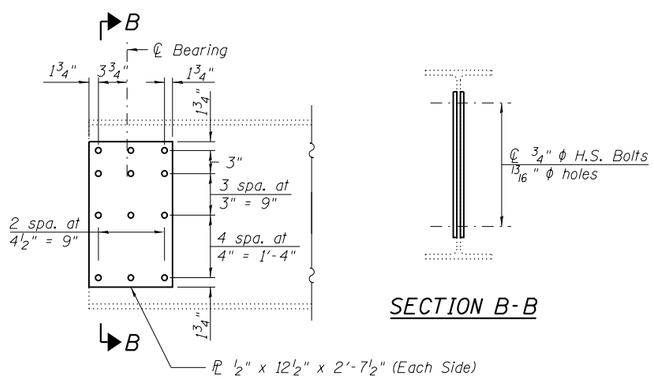


FRAMING PLAN

BEAM DIMENSIONS

Long. Dimensions along ℄ Beam

	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5
a	10′-4 9/16″	12′-0 9/16″	13′-8 1/2″	15′-4 1/2″	17′-0 1/2″
b	8′-4″	6′-8″	5′-0 1/16″	3′-4 1/16″	1′-8 1/16″
c	8′-4″	6′-8″	5′-0 1/16″	3′-4 1/16″	1′-8 1/16″
d	17′-0 9/16″	15′-4 9/16″	13′-8 5/8″	12′-0 5/8″	10′-4 5/8″



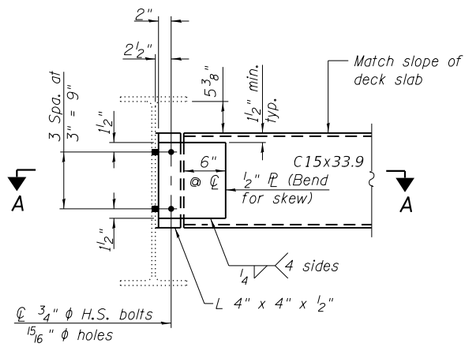
℄ 1/2″ x 12 1/2″ x 2′-7 1/2″ (Each Side)
Position plate so holes match those required for end diaphragm connection. Holes used for end diaphragm connection may be field drilled using the shop drilled angle as a template.

SECTION B-B

BEAM STRENGTHENING AT ABUTMENT BEARINGS

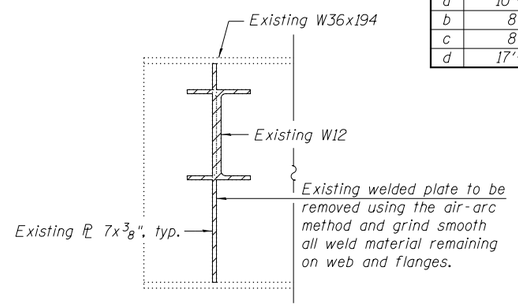
(6 Locations)

Strengthening required at west end of Beams 2 and 3 and east end of Beams 1 thru 4. Cost included with Furnishing and Erecting Structural Steel.

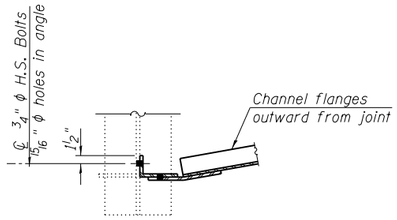


END DIAPHRAGM D

Note:
Two hardened washers required for each set of oversized holes.



REMOVAL OF EXISTING END DIAPHRAGM



SECTION A-A

LEGEND

Structural Steel Removal

BILL OF MATERIAL

Item	Unit	Quantity
Furnishing and Erecting Structural Steel	Pound	2,510
Structural Steel Removal	Pound	4,240

Notes:
Existing end diaphragms at abutments shall be removed and replaced. Contractor to field verify all dimensions prior to ordering material. Install diaphragms after deck removal and prior to deck replacement. All new fasteners shall be high strength bolts. Contractor shall field verify that proposed bolt locations do not conflict with existing holes from end diaphragm connection.

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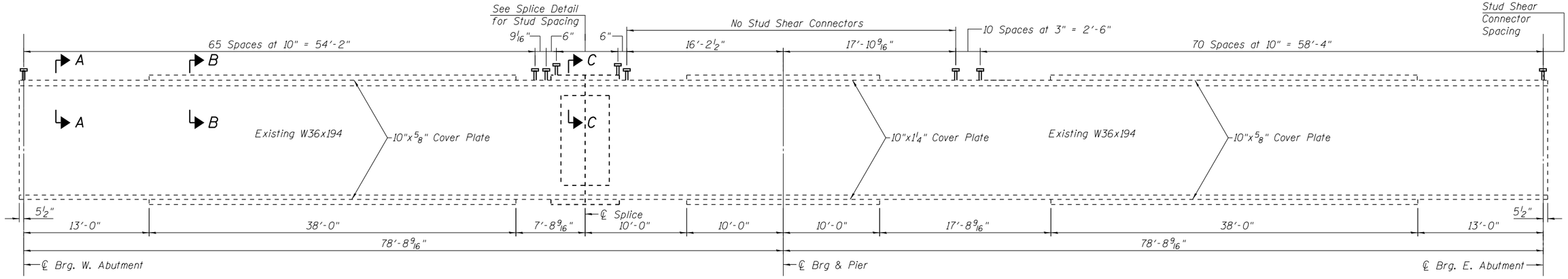
ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 016-0273
SHEET NO. 17 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	111
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			



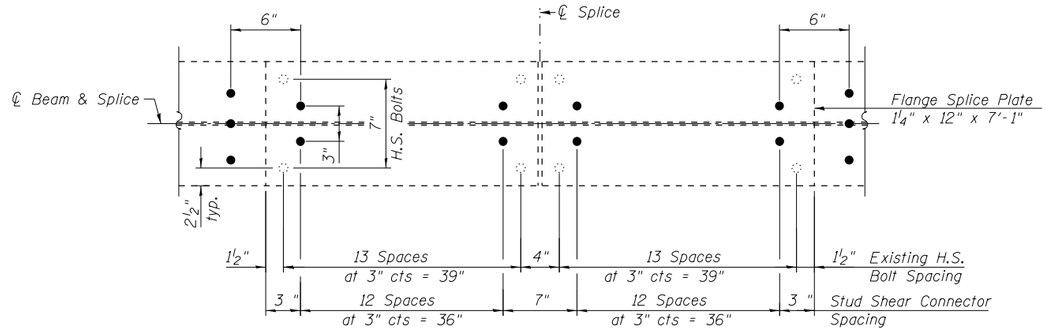
EXISTING BEAM ELEVATION

EXISTING INTERIOR BEAM MOMENT TABLE			
		0.4 Sp. 1 or 0.6 Sp. 2	Pier
I_s	(in^4)	16407	21010
$I_c(n)$	(in^4)	35841	-
$I_c(3n)$	(in^4)	26251	-
S_s	(in^3)	869	1077
$S_c(n)$	(in^3)	1163	-
$S_c(3n)$	(in^3)	1052	-
M_{DL}	(′k)	441	1296
M_{SDL}	(′k)	277	-
M_{LL}	(′k)	683	518
M_{IM}	(′k)	168	127
$\frac{5}{3}[M_{LL}+I]$	(′k)	1418	1075
M_a	(′k)	2777	3082
* M_u	(′k)	3220	3232
f_s DL non-comp	(ksi)	6.09	14.44
f_s DL (comp)	(ksi)	3.16	-
$f_s \frac{5}{3}[M_{LL}+M_I]$	(ksi)	14.63	11.98
f_s (Overload)	(ksi)	23.88	26.42
** f_s (Total)	(ksi)	-	-
VR	(k)	68	-

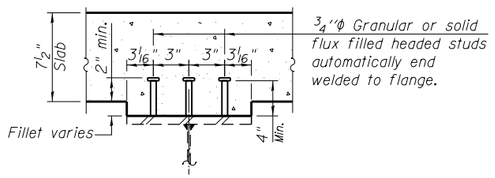
EXISTING INTERIOR BEAM REACTION TABLE			
		Abut.	Pier
R_{DL}	(k)	53	174
R_{LL}	(k)	49	63
R_I	(k)	12	16
R_{Total}	(k)	114	253

* Compact section
** Braced non-compact and partially braced section

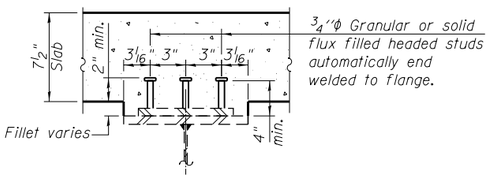
I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads (in.^{4} and in.^{3}).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total and Overload) due to short-term composite live loads (in.^{4} and in.^{3}).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s(Total and Overload) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).
M_{DL}: Un-factored non-composite dead load (kips/ft.).
M_{SDL}: Un-factored moment due to non-composite dead load (kip-ft.).
s_{DL}: Un-factored long-term composite (superimposed) dead load (kips/ft.)
M_{SDL}: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_{LL}: Un-factored live load moment (kip-ft.).
M_I: Un-factored moment due to impact (kip-ft.).
M_a: Factored design moment (kip-ft.).
$1.3\ [M_{DL} + M_{SDL} + \frac{5}{3}(M_{LL} + M_I)]$
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M_{DL} + M_{SDL} + \frac{5}{3}(M_{LL} + M_I)$
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_{DL} + M_{SDL} + \frac{5}{3}(M_{LL} + M_I)]$
VR: Maximum M_{LL} + impact shear range within the composite portion of the span for stud shear connector design (kips).



SPLICE DETAIL



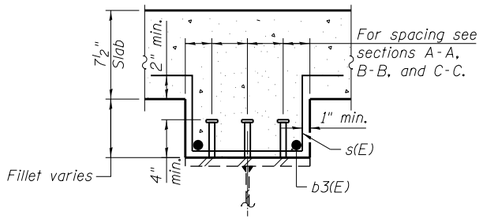
SECTION A-A



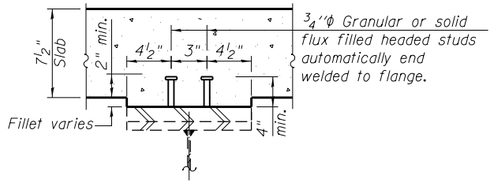
SECTION B-B

Only over Cover Plates

No. Studs Req'd. = 2,495

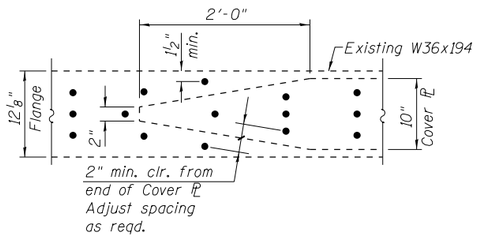


DEEP FILLET SECTION



SECTION C-C

Only over Splice Plates



EXISTING COVER PLATE DETAIL

(Shear studs not located on cover plate at pier)

Note:
Contractor shall restore the beams to existing elevations after the bearing replacement is complete.

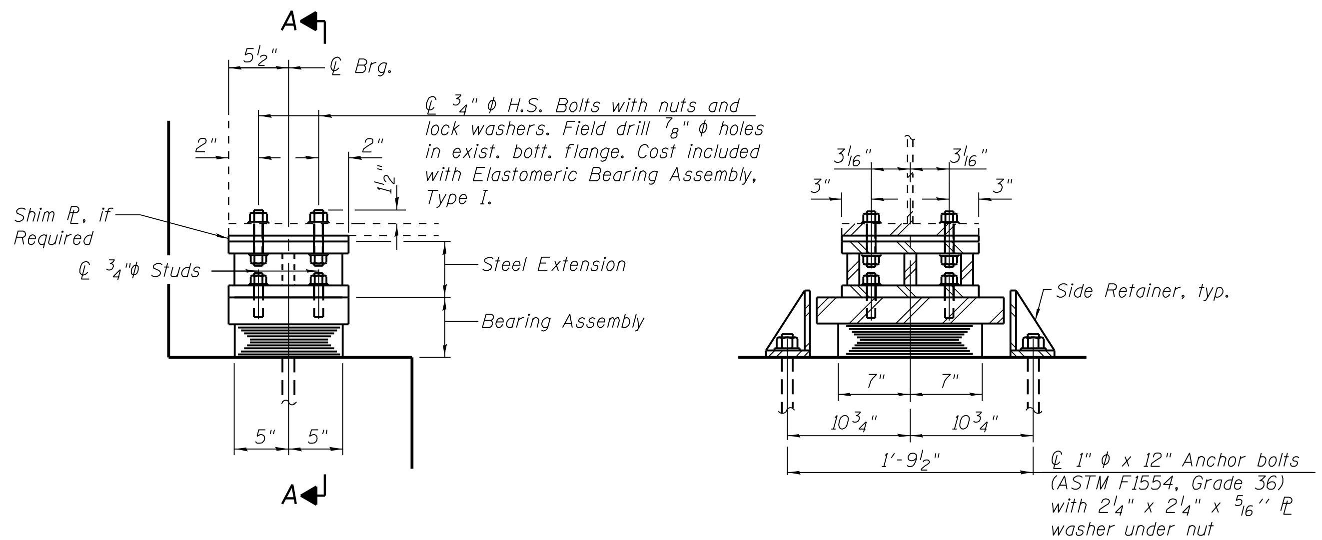
ORIGINAL: Wight
UPDATED: LBN ENGINEERING LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - MWS	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 18 OF 33 SHEETS

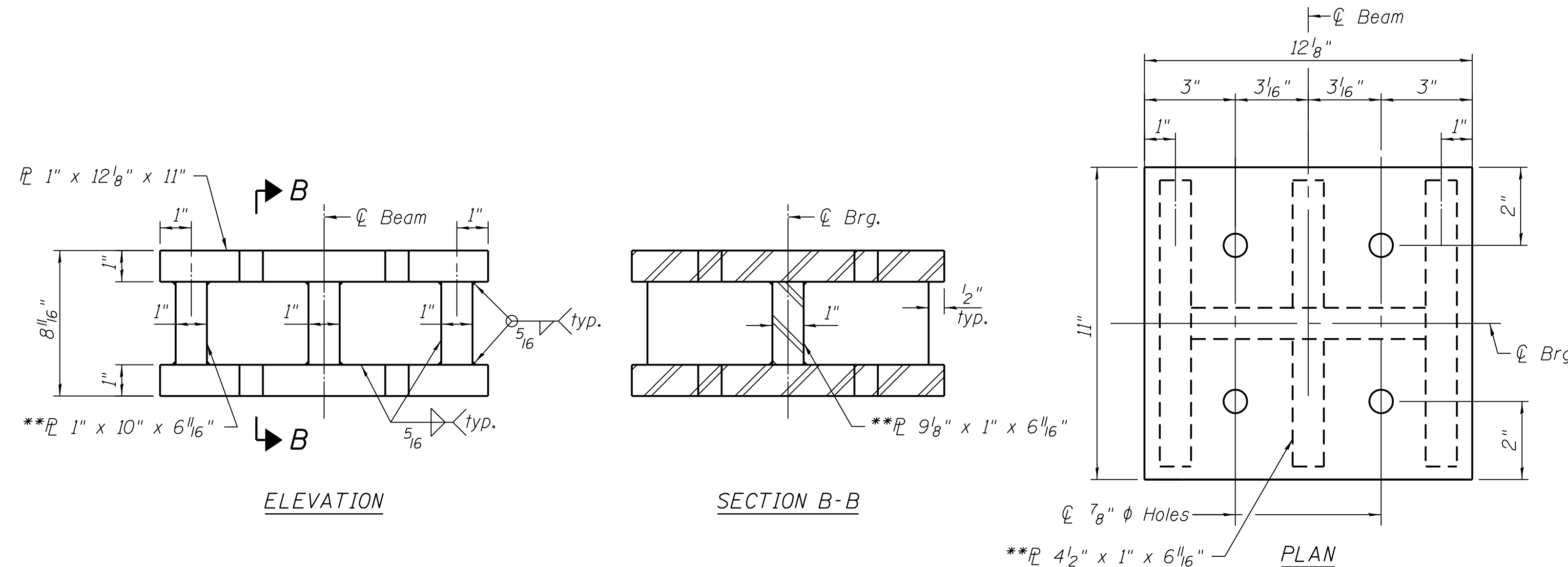
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	112
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



ELEVATION AT ABUT.

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



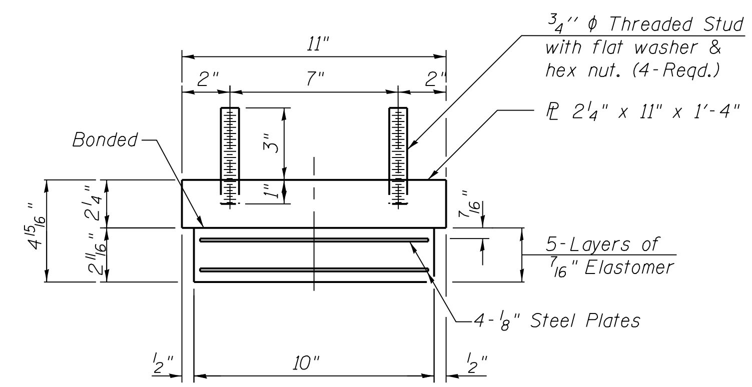
ELEVATION

SECTION B-B

PLAN

** To adjust steel extension height, revise plate heights accordingly if measurements from field deem necessary.

STEEL EXTENSION



Note:
Shim plates shall not be placed under Bearing Assembly.

BEARING ASSEMBLY

REQUIRED JACK CAPACITY

(Per Bearing)

		W. Abut.	E. Abut.
*** Dead Load	(k)	10.5	10.5
Min. Jack Capacity	(Tons)	8.0	8.0

*** Superstructure steel only

Notes:

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

The existing concrete deck shall be removed prior to jacking and removing the existing bearings. The bearings shall be in place and the jacks lowered prior to pouring the new deck.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

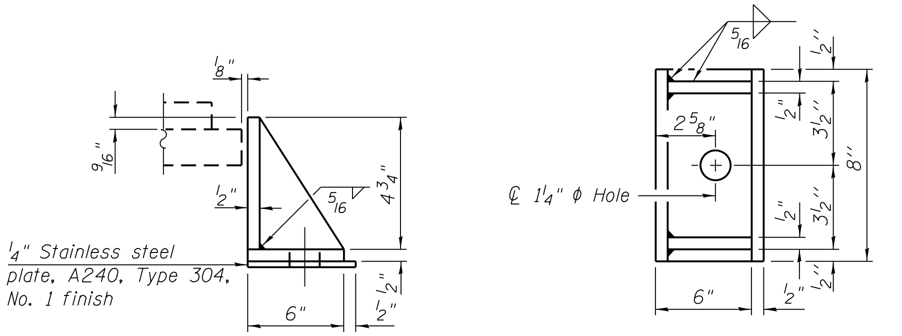
Side Retainers, Steel Extensions, and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and steel extension dimensions.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

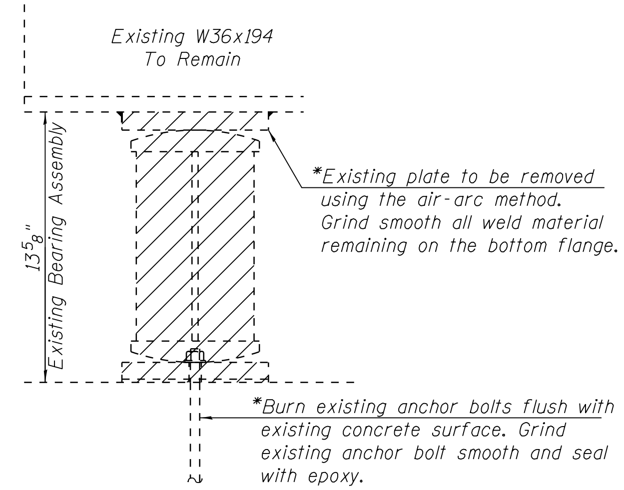
Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts.

Hardwood timbers shall be installed tightly between top and bottom flanges directly over the jack location to prevent rotation.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



EXISTING STEEL BEARING REMOVAL

(At East & West Abutments)

* Cost is included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	10
Anchor Bolts, 1"	Each	20
Jack and Remove Existing Bearings	Each	10

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers			
		DESIGNED - MAS		REVISED
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		DRAWN - TAY		REVISED
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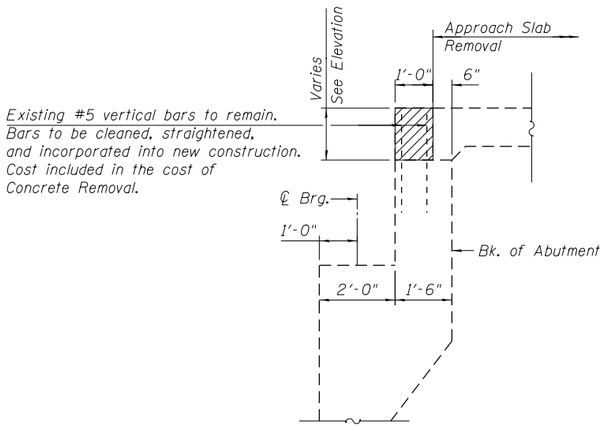
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

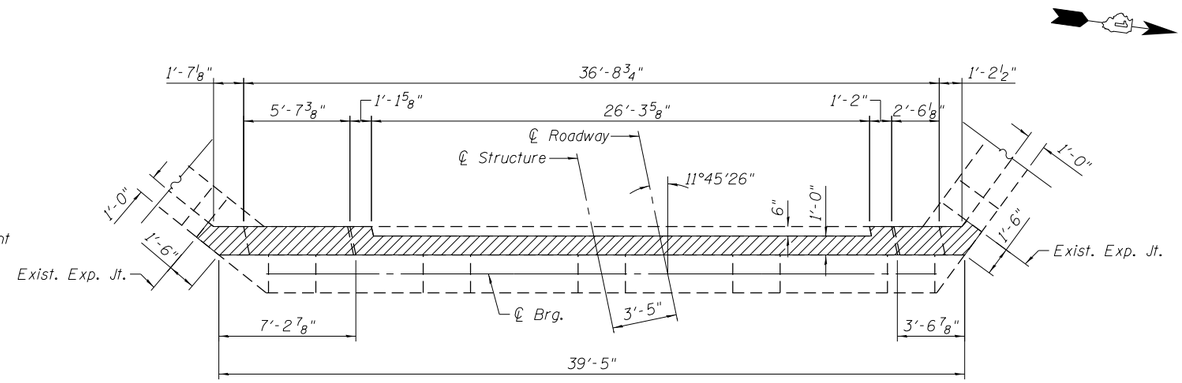
BEARING DETAILS
STRUCTURE NO. 016-0273

SHEET NO. 19 OF 33 SHEETS

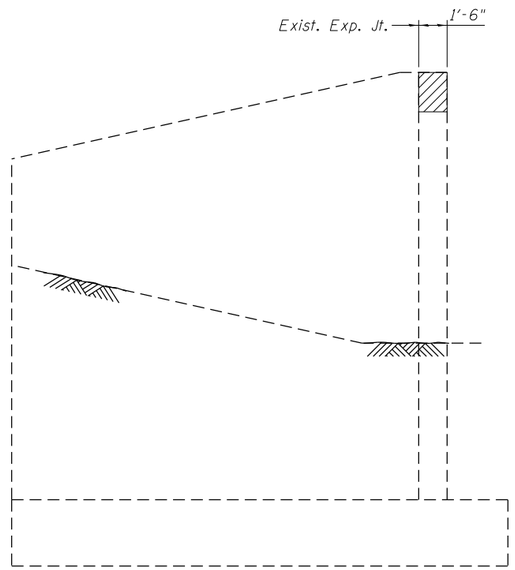
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	113
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



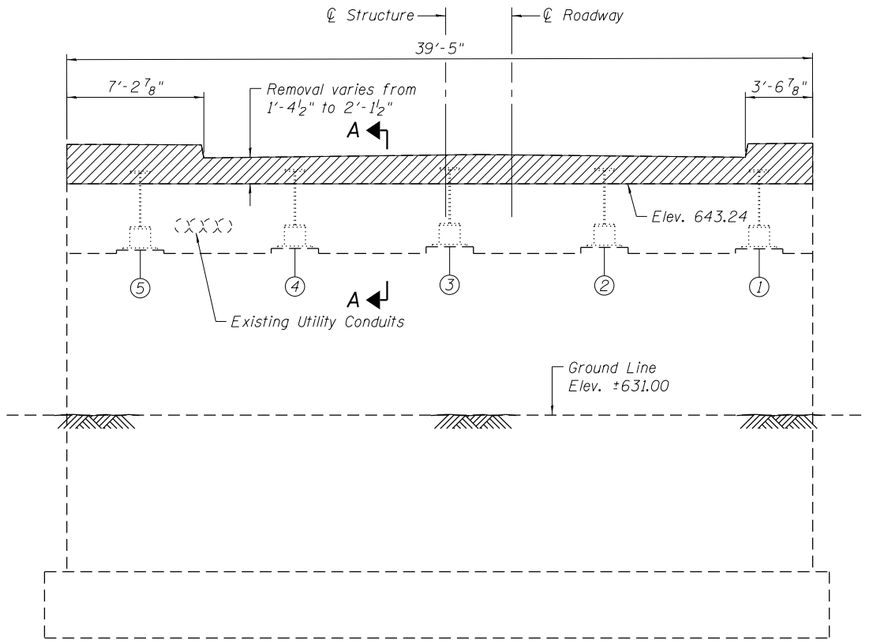
SECTION A-A



PLAN VIEW

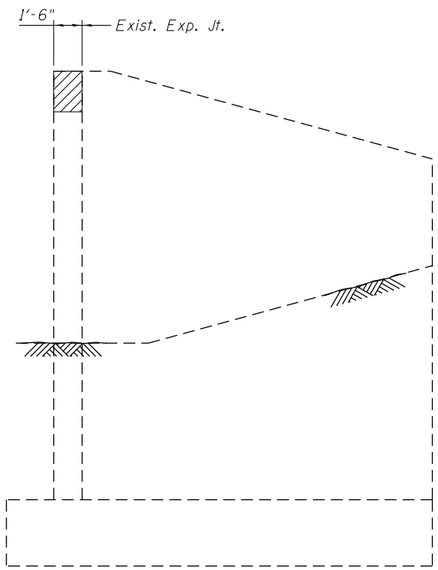


SOUTH WINGWALL



WEST ABUTMENT ELEVATION

(Looking West)



NORTH WINGWALL

LEGEND

(1) Beam Line Designation

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	3.2

ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - TAY	REVISED
		CHECKED - MAS MTH	REVISED
		DRAWN - TAY	REVISED
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
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WEST ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 20 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	114
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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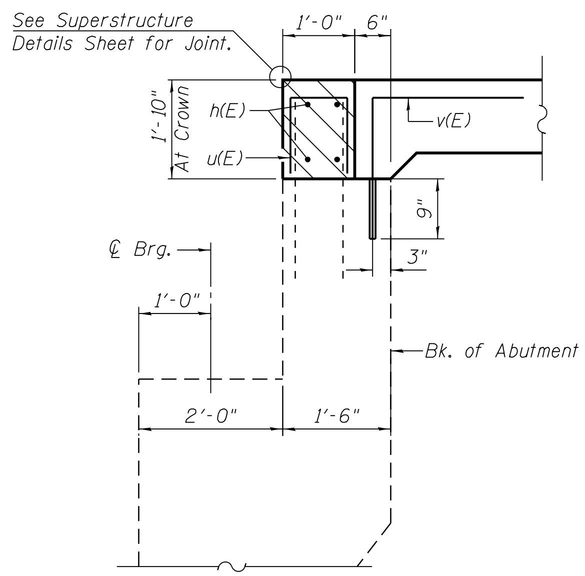
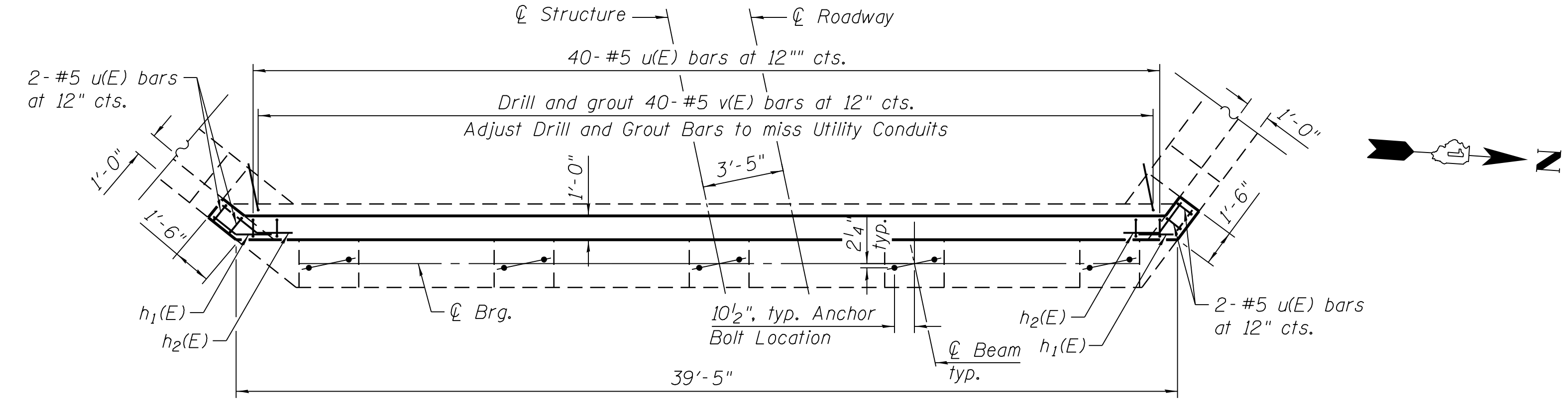


SECTION A-A

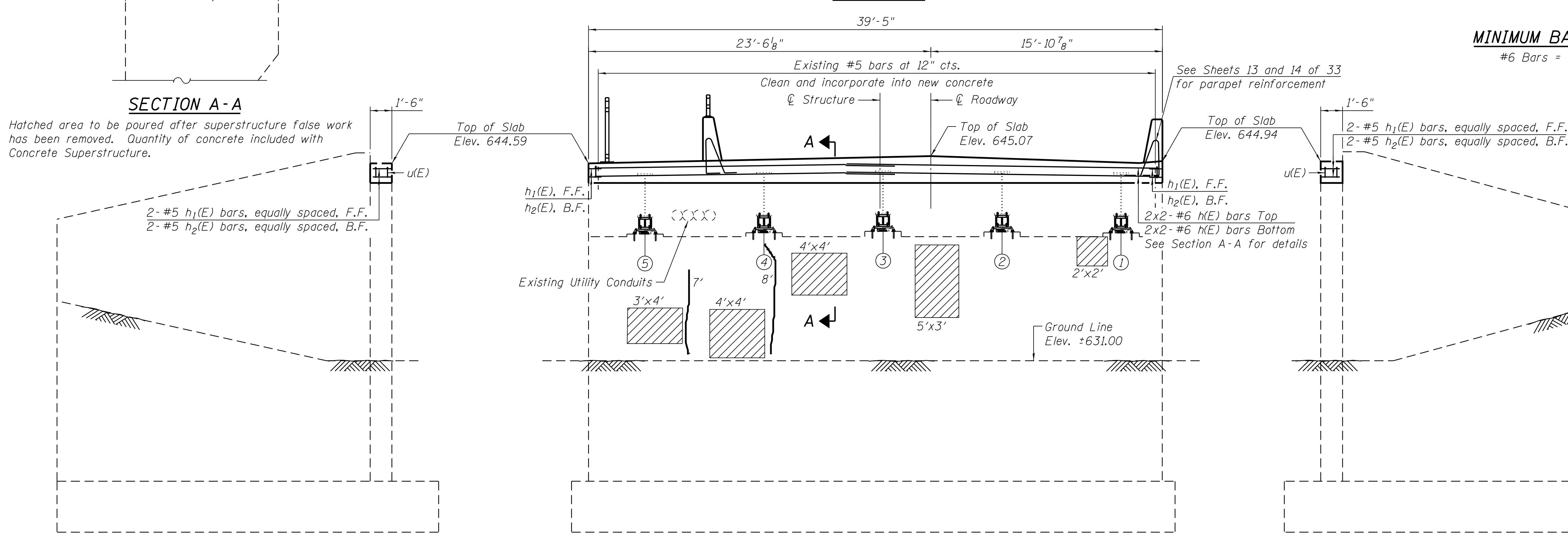
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.



PLAN VIEW

MINIMUM BAR LAP

#6 Bars = 3'-10"



SOUTH WINGWALL

WEST ABUTMENT ELEVATION

(Looking West)

NORTH WINGWALL

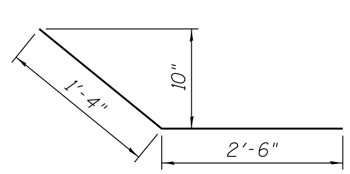
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	22'-3"	
h1(E)	4	#5	3'-10"	
h2(E)	4	#5	4'-3"	
u(E)	44	#5	2'-8"	
v(E)	40	#5	4'-0"	
Concrete Superstructure		Cu. Yd.	2.2	
Reinforcement Bars, Epoxy Coated		Pound	600	
Epoxy Crack Injection		Foot	15	
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)		Sq. Ft.	63	
Drill and Grout Bars		Each	40	

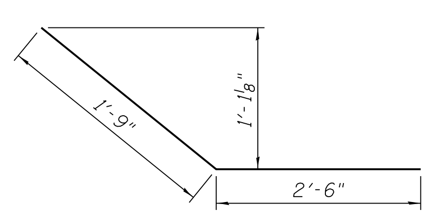
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.

NOTES:

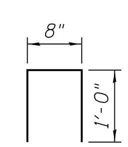
1. All existing bars that are to remain shall be cleaned, straightened and incorporated into the new construction.



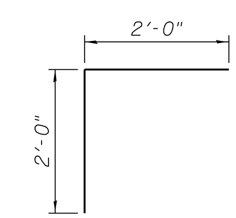
BAR h1(E)



BAR h2(E)



BAR u(E)



BAR v(E)

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)
- (1) Beam Line Designation
- Epoxy Crack Injection

Repair of the existing abutment shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

ORIGINAL: Wight | UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

PLOT DATE = 11/11/2019

DESIGNED - TAY		REVISED	
CHECKED - MAS	MTH	REVISED	
DRAWN - TAY		REVISED	
CHECKED - BJM	MTH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

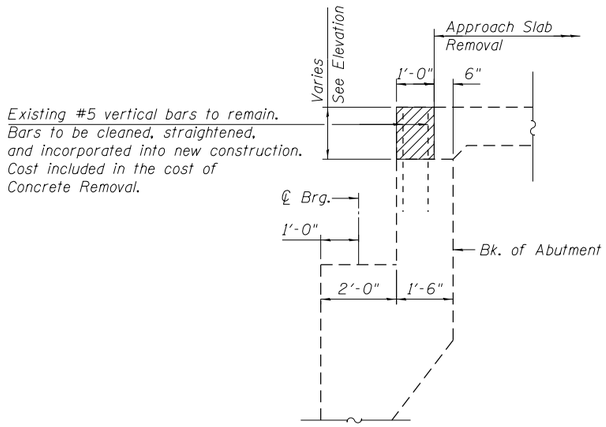
WEST ABUTMENT DETAILS
STRUCTURE NO. 016-0273

SHEET NO. 21 OF 33 SHEETS

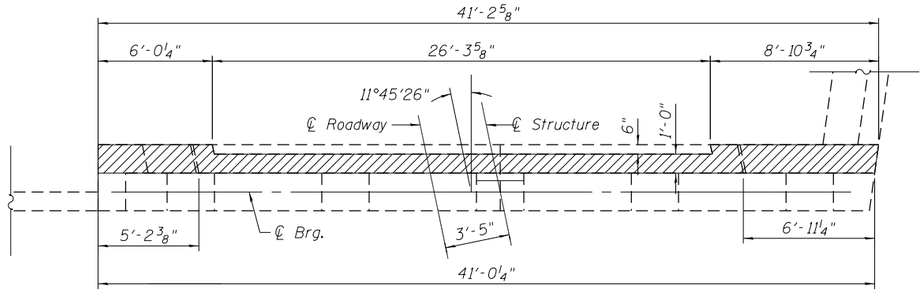
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	115

CONTRACT NO. 60D77

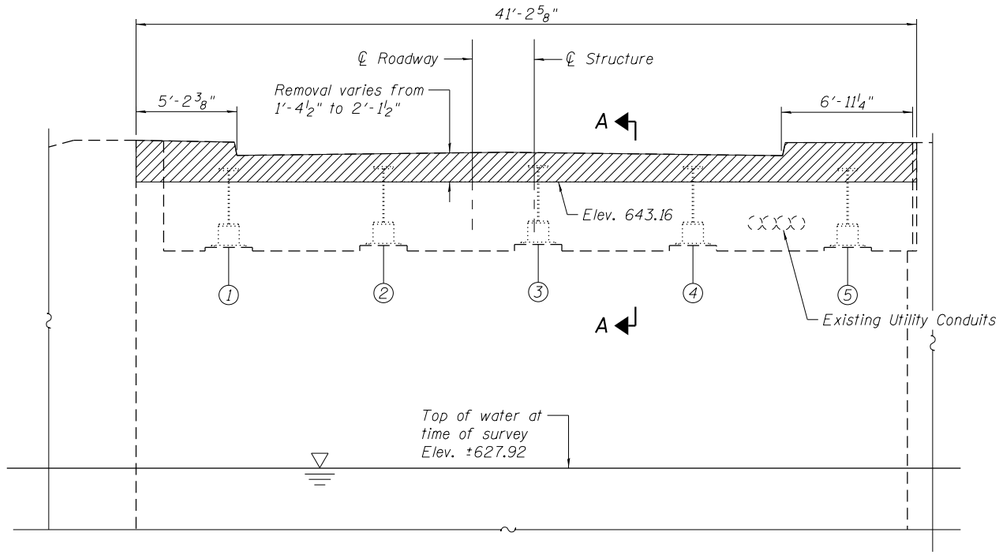
ILLINOIS FED. AID PROJECT



SECTION A-A

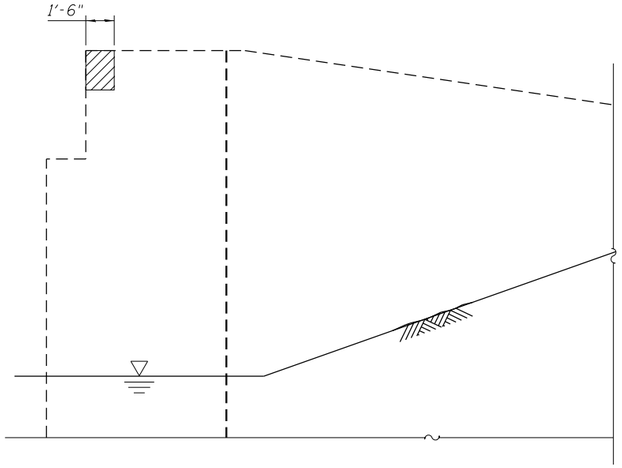


PLAN VIEW



EAST ABUTMENT ELEVATION

(Looking East)



SOUTH WINGWALL

LEGEND

① Beam Line Designation

Concrete Removal

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	3.1

ORIGINAL: Wight

UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - TAY	MTH	REVISED
	DRAWN - MAS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT REMOVAL DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 22 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	116
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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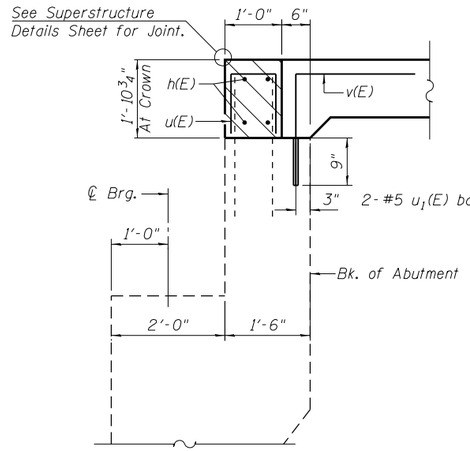
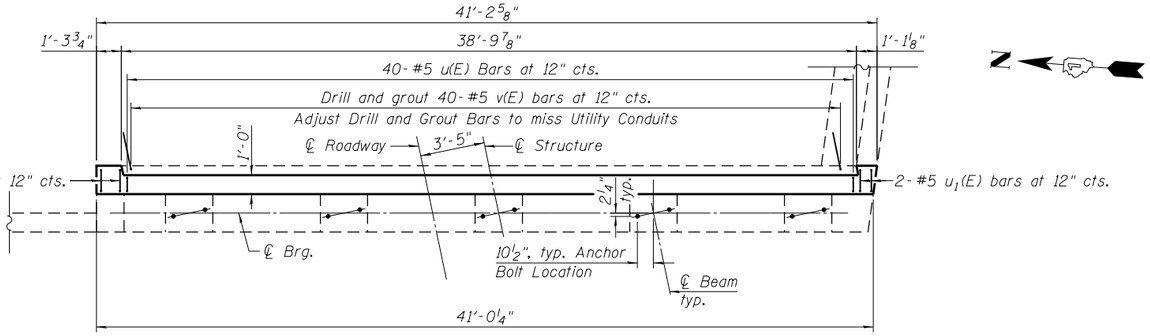
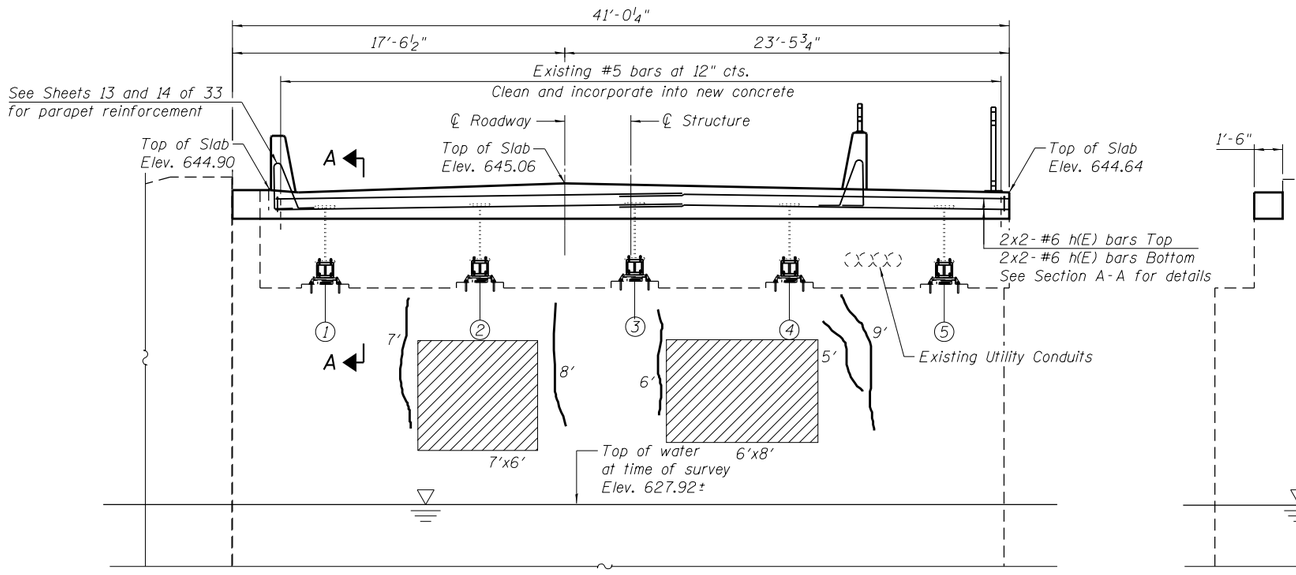


SECTION A-A

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.



PLAN VIEW

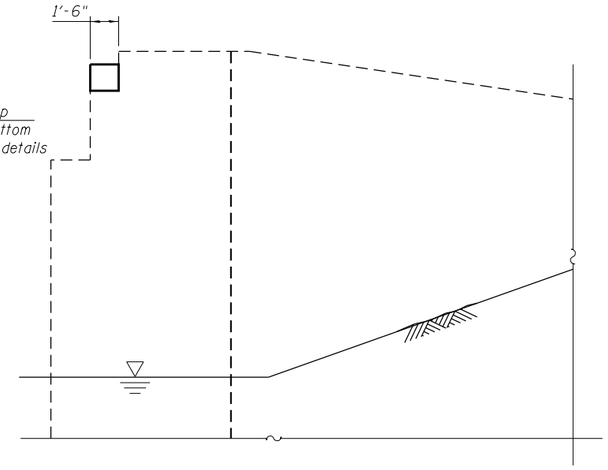


EAST ABUTMENT ELEVATION

(Looking East)

MINIMUM BAR LAP

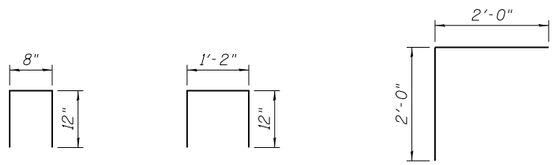
#6 Bars = 3'-10"



SOUTH WINGWALL

Notes:

1. There is no wingwall at the north end of the East Abutment. There is a retaining wall (not shown on drawings), which is to remain and does not need repair.
2. All existing bars that are to remain shall be cleaned, straightened and incorporated into the new construction.
3. Approximate water elevation at time of inspection= 627.92±. Estimated water surface elevation = 629.73±



BAR u(E) BAR u_1(E) BAR v(E)

LEGEND

- Structural Repair of Concrete (Depth Equal to or Less Than 5")
- (1) Beam Line Designation
- Epoxy Crack Injection

Repair of the existing abutment shall include but may not be limited to the areas shown. The actual area to be repaired will be determined by the Engineer at the time of construction.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	22'-3"	———
u(E)	40	#5	2'-8"	⊓
u_1(E)	4	#5	3'-2"	⊓
v(E)	40	#5	4'-0"	⌝
Concrete Superstructure		Cu. Yd.	2.8	
Reinforcement Bars, Epoxy Coated		Pound	560	
Epoxy Crack Injection		Foot	35	
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)		Sq. Ft.	90	
Drill and Grout Bars		Each	40	

Bars indicated thus 1 x 2'-#8 etc. indicates 1 line of bars with 2 lengths per line.

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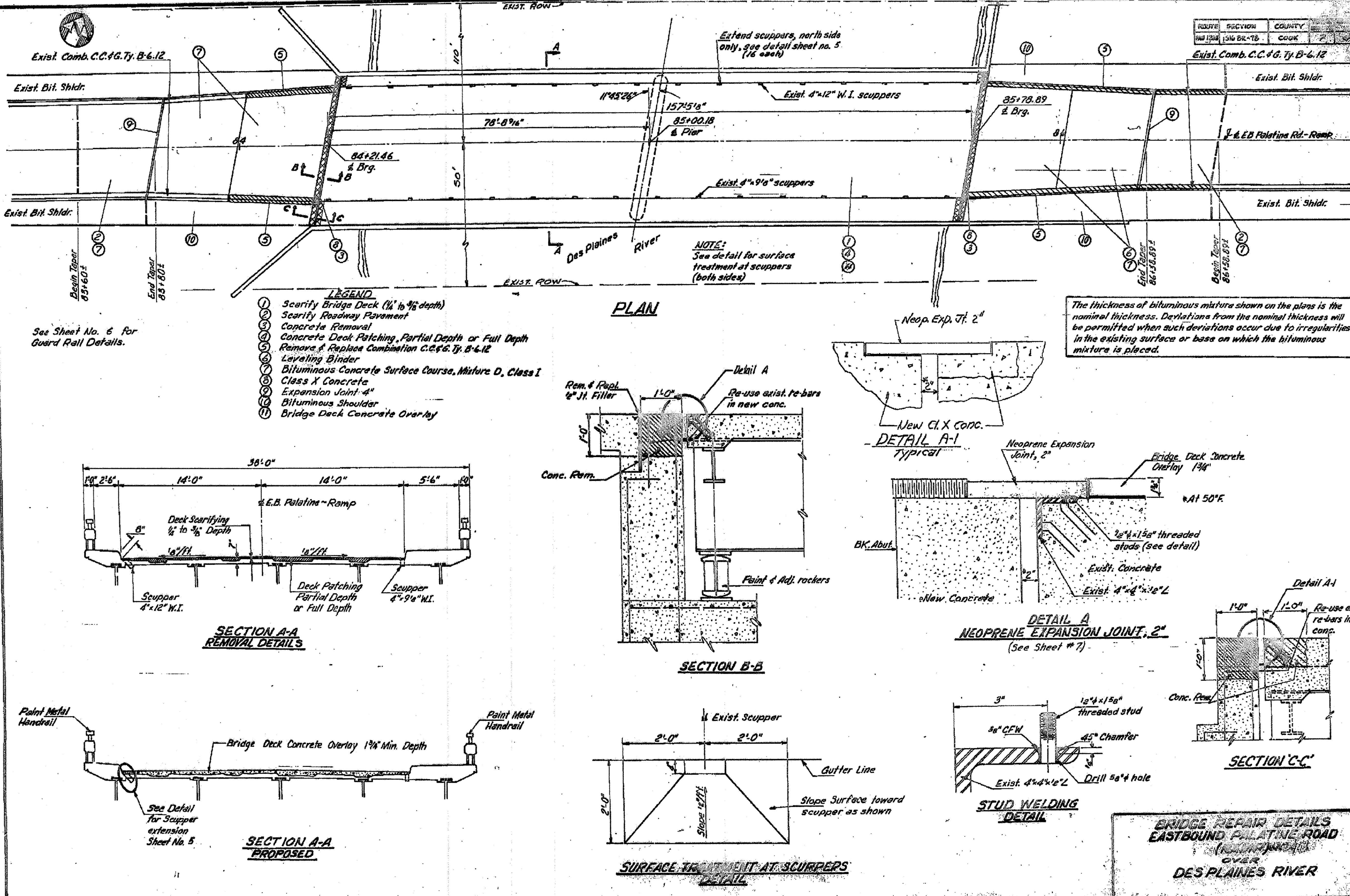
ORIGINAL: Wight UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - TAY	MTH	REVISED
	DRAWN - TAY		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NO. 016-0273
SHEET NO. 23 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	117
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			


EXIST. ROW
Exist. Comb. C.C.&G. Ty. B-6.12
Exist. Bit. Shldr.
Extend scuppers, north side only, see detail sheet no. 5 (16 each)
Exist. 4"x12" W.I. scuppers
85+78.89 ℄ Brg.
85+00.18 ℄ Pier
84+21.46 ℄ Brg.
Exist. 4"x9⅛" scuppers
℄ EB Palatine Rd.-Ramp
Des Plaines River
NOTE: See detail for surface treatment at scuppers (both sides)
Begin Taper
End Taper
PLAN
LEGEND
1 Scarify Bridge Deck (¼" to ⅜" depth)
2 Scarify Roadway Pavement
3 Concrete Removal
4 Concrete Deck Patching, Partial Depth or Full Depth
5 Remove & Replace Combination C.C.&G. Ty. B-6.12
6 Leveling Binder
7 Bituminous Concrete Surface Course, Mixture D, Class I
8 Class X Concrete
9 Expansion Joint 4"
10 Bituminous Shoulder
11 Bridge Deck Concrete Overlay
See Sheet No. 6 for Guard Rail Details.
The thickness of bituminous mixture shown on the plans is the nominal thickness. Deviations from the nominal thickness will be permitted when such deviations occur due to irregularities in the existing surface or base on which the bituminous mixture is placed.
SECTION A-A REMOVAL DETAILS
SECTION A-A PROPOSED
Bridge Deck Concrete Overlay 1¾" Min. Depth
Paint Metal Handrail
See Detail for Scupper extension Sheet No. 5
SECTION B-B
DETAIL A-1 Typical
DETAIL A NEOPRENE EXPANSION JOINT, 2" (See Sheet #7)
STUD WELDING DETAIL
SECTION "C-C"
SURFACE TREATMENT AT SCUPPERS DETAIL
BRIDGE REPAIR DETAILS EASTBOUND PALATINE ROAD OVER DES PLAINES RIVER

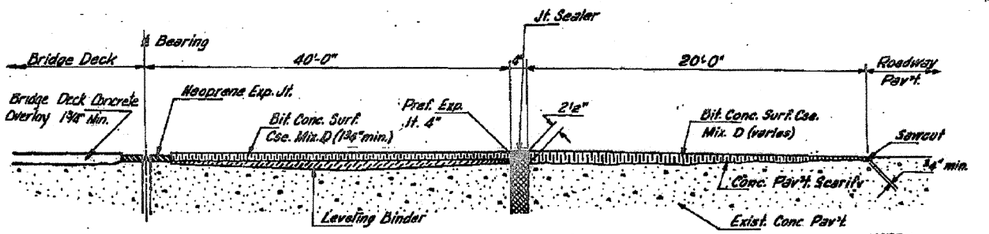
ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - MAS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0273
		CHECKED - BJM MTH	REVISED		
		DRAWN - MWS	REVISED		
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED		SHEET NO. 24 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	118

CONTRACT NO. 60D77

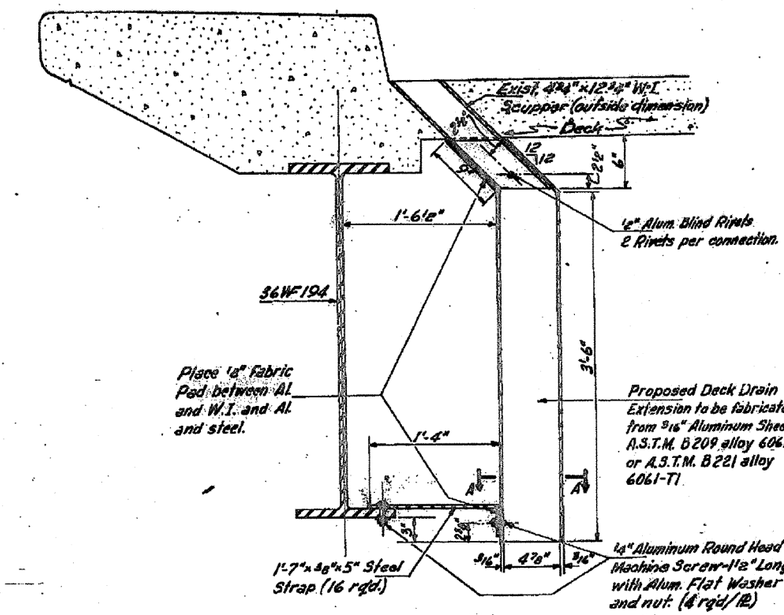
ILLINOIS FED. AID PROJECT

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1288	1516I-1D	COOK	7	5



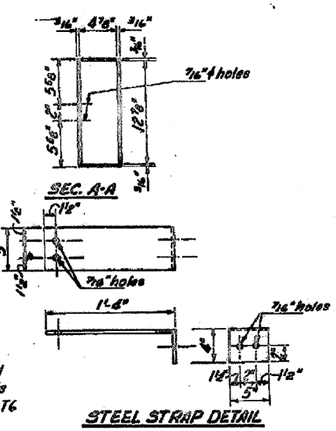
TYPICAL SECTION
BUTT JOINT DETAIL

NOTE:
Saw cutting of existing pavement at locations shown on the plans shall be considered incidental to the contract.



DETAIL OF DECK DRAIN EXTENSION

Basis of payment: Lump Sum for "Deck Drain Extensions", which price shall include the fabrication and installation of the 1'-7"x 5" Steel Strap.



STEEL STRAP DETAIL

BRIDGE REPAIR DETAILS EASTBOUND PALATINE ROAD OVER DES PLAINES RIVER

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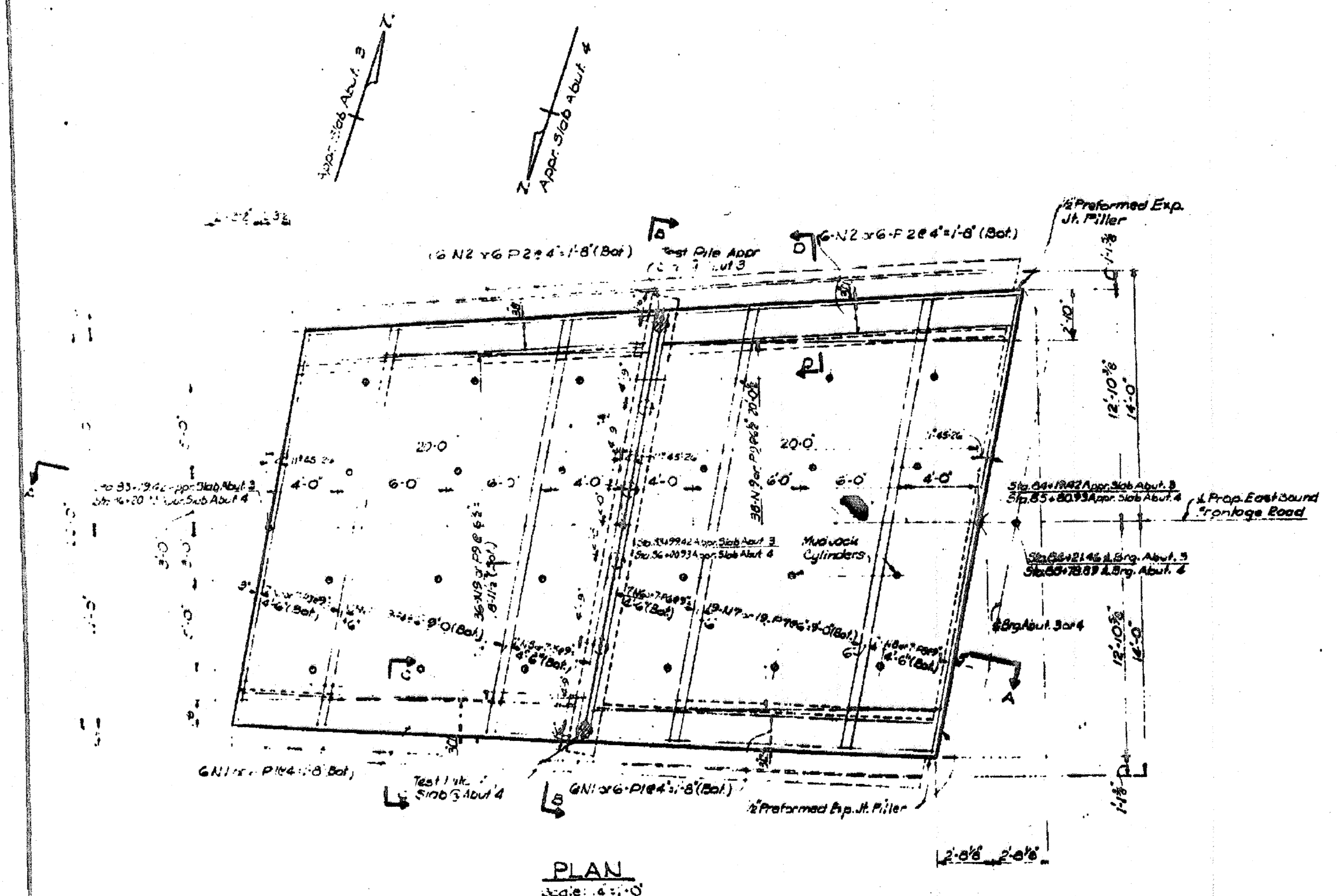
ORIGINAL: Wight
UPDATED: LJN ENGINEERING LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - BJM MTH		REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM MTH		REVISED

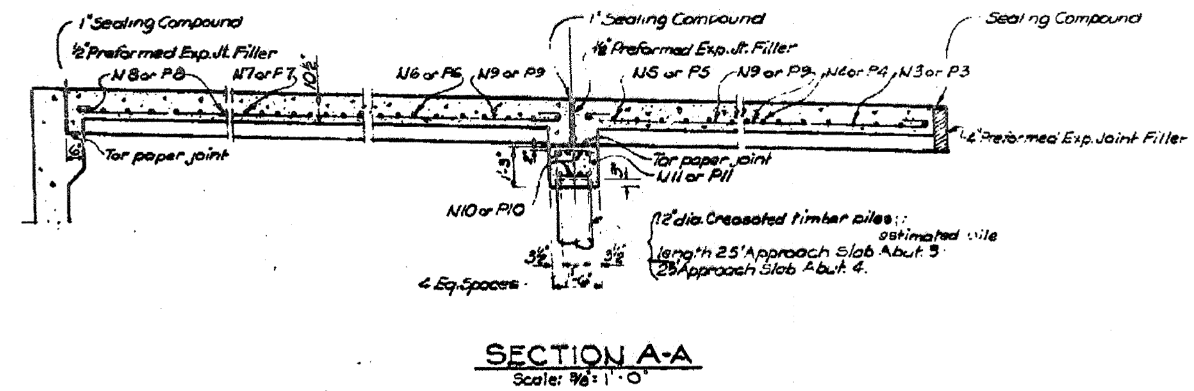
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0273
SHEET NO. 25 OF 33 SHEETS

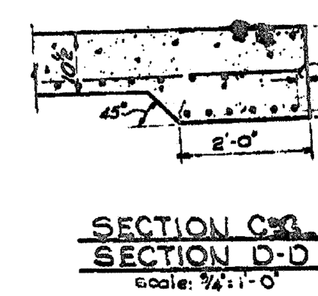
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	119
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		



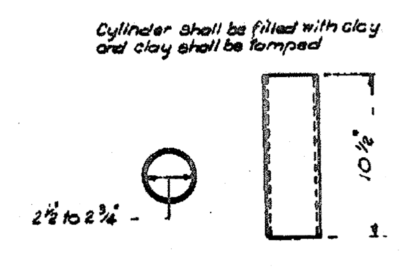
PLAN
Scale: ¼" = 1'-0"



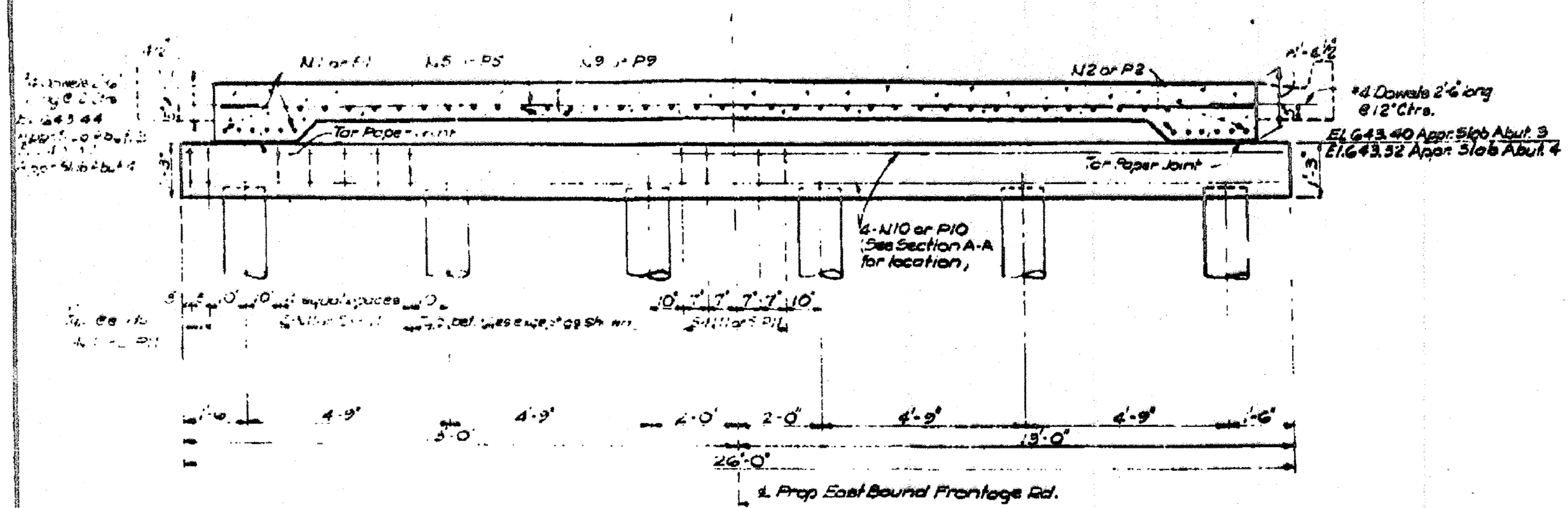
SECTION A-A
Scale: ⅜" = 1'-0"



SECTION C-C
SECTION D-D
Scale: ¾" = 1'-0"



DETAIL OF MUD JACK CYLINDER
Cylinder shall be Standard Weight Black Steel Pipe



SECTION B-B
Scale: ⅛" = 1'-0"

NOTES

1. The slabs shall be paid for at the Contract unit price for Portland Cement Concrete Pavement (16½"-10½"-16½")
2. The concrete cap shall be paid for at the contract unit price for Class X concrete.
3. The cost of furnishing and placing the preformed expansion joint filler and mud jack cylinders shall be included in the unit price for the P.C. Concrete Pavement (16½"-10½"-16½")
4. The preformed expansion joint filler shall be as specified in Article 129 of the Standard Specifications for Road and Bridge Construction.
5. All reinforcement bars except tie bars for curb and gutter shall be paid for at the contract unit price for Reinforcement Bars.
6. The Approach Slab pavement cross slope is ⅛"/ft left & right of ℄ measured normal to ℄ Roadway.
7. Sections C-C & D-D are taken normal to outside edge of the approach slab.
8. Bars designated N apply to Approach Slab 3 and bars designated P apply to Approach Slab 4.
9. The transition for curb and gutter shall be made in 40' and shall be be paid for as Combination Curb and Gutter, type 32.
10. One Test Pile to be driven for each Approach Slab
11. For Reinforcement Bar List, See Sh. 91

BILL OF MATERIAL - APPR. SLABS @ ABUTS. 3 & 4	
Reinforcement Bars	16,696 lbs
P.C. Concrete Pavement (16½"-10½"-16½")	212 Sq. yds
Furnishing Creosoted Piles (20.1'-38')	250 Lin. Ft.
Driving Timber Piles	250 Lin. Ft.
Class X Concrete	3.5 Cu. Yds.
Test Piles (Timber)	2 Each

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

SEYMOUR SIMON — President Board of Commissioners
ANDREW V. PLUMMER — Superintendent of Highways

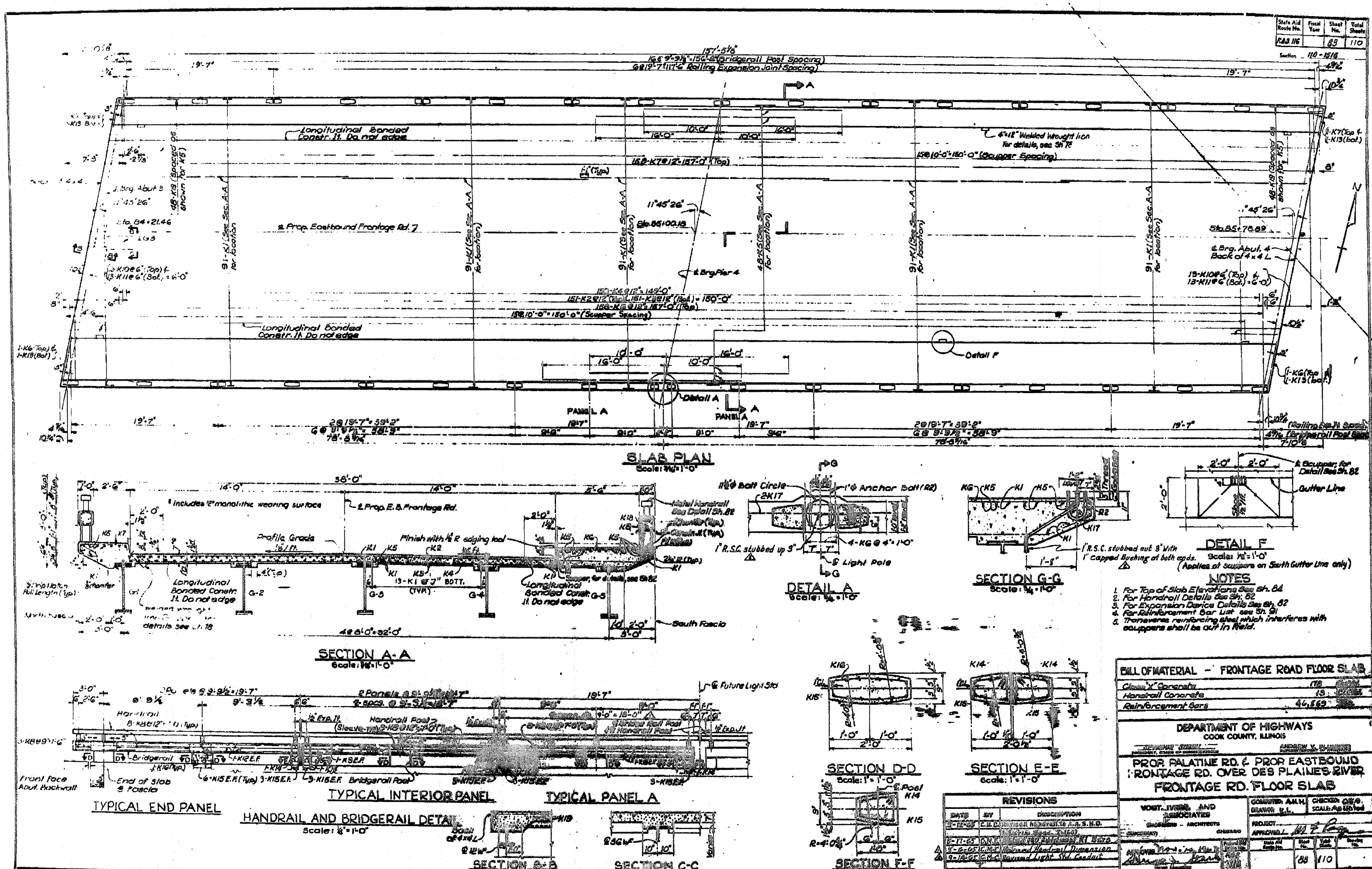
PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
APPROACH SLABS @ AT ABUTMENTS 3 & 4

VOGT, IVERS & ASSOCIATES
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

COMPUTED: R.K.S. CHECKED: N.D.J.
DRAWN: R.K.S. SCALE: As Shown
PROJECT APPROVED

REVISIONS		
DATE	BY	DESCRIPTION

APPROVED (Chief Engineer)	Federal Aid Route No.	State Aid Route No.	Sheet No.	Total Sheets	Drawing No.
	FAS 116		87	110	



F.A.S. 116 | 89 | 110
Section 110-1516
157'-5⅝"
16 @ 9'-9½" = 156'-8" (Bridgerail Post Spacing)
8 @ 19'-7" = 117'-6" Railing Expansion Joint Spacing
Longitudinal Bonded Constr. Jt. Do not edge
4"×12" Welded Wrought Iron For details, see Sh. 72
15 @ 10'-0" = 150'-0" (Scupper Spacing)
158-K7 @ 12" = 157'-0" (Top)
11°45'26"
Sta. 84+21.46
Sta. 85+00.18
Sta. 85+76.89
℄ Prop. Eastbound Frontage Rd.
℄ Brg. Pier 4
℄ Brg. Abut. 4 Back of 4×4 L
13-K10 @ 6" (Top) & 13-K11 @ 6" (Bot.) = 6'-0"
15 @ 10'-0" = 150'-0" (Scupper Spacing)
Detail F
Detail A
PANEL A
SLAB PLAN
Scale: 3/32" = 1'-0"
SECTION A-A
Scale: 3/8" = 1'-0"
38'-0"
14'-0"
℄ Prop. E.B. Frontage Rd.
Profile Grade
Longitudinal Bonded Constr. Jt. Do not edge
South Fascia
4 @ 8'-0" = 32'-0"
1¾" Bolt Circle
1"⌀ Anchor Bolt (R2)
4-K6 @ 4" = 1'-0"
℄ Light Pole
DETAIL A
Scale: ¾" = 1'-0"
SECTION G-G
Scale: ¾" = 1'-0"
℄ Scupper for Detail See Sh. 82
Gutter Line
DETAIL F
Scale: ½" = 1'-0"
(Applies at scuppers on South Gutter Line only)
NOTES
1. For Top of Slab Elevations See Sh. 84
2. For Handrail Details See Sh. 82
3. For Expansion Device Details See Sh. 82
4. For Reinforcement Bar List see Sh. 91
5. Transverse reinforcing steel which interferes with scuppers shall be cut in field.
SECTION D-D
Scale: 1" = 1'-0"
SECTION E-E
Scale: 1" = 1'-0"
SECTION F-F
TYPICAL END PANEL
TYPICAL INTERIOR PANEL
TYPICAL PANEL A
HANDRAIL AND BRIDGERAIL DETAIL
Scale: ¼" = 1'-0"
SECTION B-B
SECTION C-C
BILL OF MATERIAL - FRONTAGE ROAD FLOOR SLAB
Class "X" Concrete
Handrail Concrete
Reinforcement Bars
46,669
DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
FRONTAGE RD. FLOOR SLAB
REVISIONS
VOGT, IVERS AND ASSOCIATES
ENGINEERS - ARCHITECTS
CHICAGO

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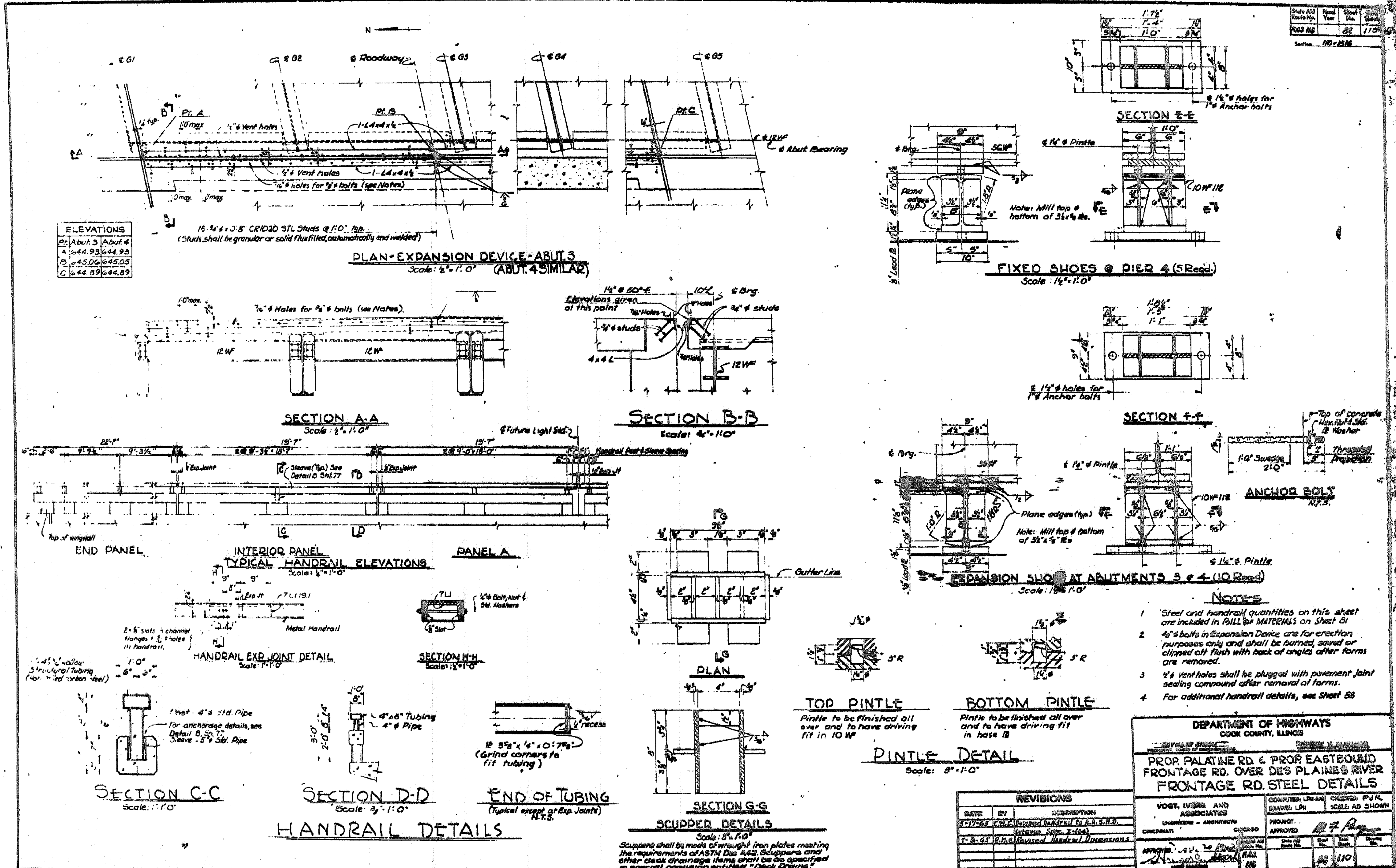
ORIGINAL:	UPDATED:	DESIGNED - MAS	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0273
Wight	LIN ENGINEERING, LTD. Consulting Engineers	CHECKED - BJM MTH	REVISED		
		DRAWN - MWS	REVISED		
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED		SHEET NO. 27 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	121
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		



ELEVATIONS		
Pt.	Abut. 3	Abut. 4
A	644.93	644.93
B	645.06	645.05
C	644.89	644.89

Scuppers shall be made of wrought iron plates meeting the requirements of ASTM Des. A42. Scuppers and other deck drainage items shall be as specified in special provision entitled "Deck Drains".

NOTES

1. Steel and handrail quantities on this sheet are included in BILL of MATERIALS on Sheet 81.
2. ⅝" ø bolts in Expansion Device are for erection purposes only and shall be burned, sawed or clipped off flush with back of angles after forms are removed.
3. ½" ø Vent holes shall be plugged with pavement joint sealing compound after removal of forms.
4. For additional handrail details, see Sheet 88.

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
FRONTAGE RD. STEEL DETAILS

VOGT, IVERS AND ASSOCIATES
ENGINEERS - ARCHITECTS
CINCINNATI — CHICAGO

REVISIONS		
DATE	BY	DESCRIPTION
5-17-65	C.M.C.	Revised handrail to A.A.S.H.O. Interim Spec. I-(64)
5-6-65	R.M.O.	Revised Handrail Dimensions

State Aid Route No.	Fiscal Year	Sheet No.	Total Sheets
RAS 116		82	110

Section 110-1516

ORIGINAL:	UPDATED:		
Wight	LIN ENGINEERING, LTD. Consulting Engineers	PLOT DATE = 11/11/2019	

DESIGNED - MAS			REVISED
CHECKED - BJM	MTH		REVISED
DRAWN - MWS			REVISED
CHECKED - BJM	MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0273
SHEET NO. 28 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	122

CONTRACT NO. 60D77
ILLINOIS FED. AID PROJECT

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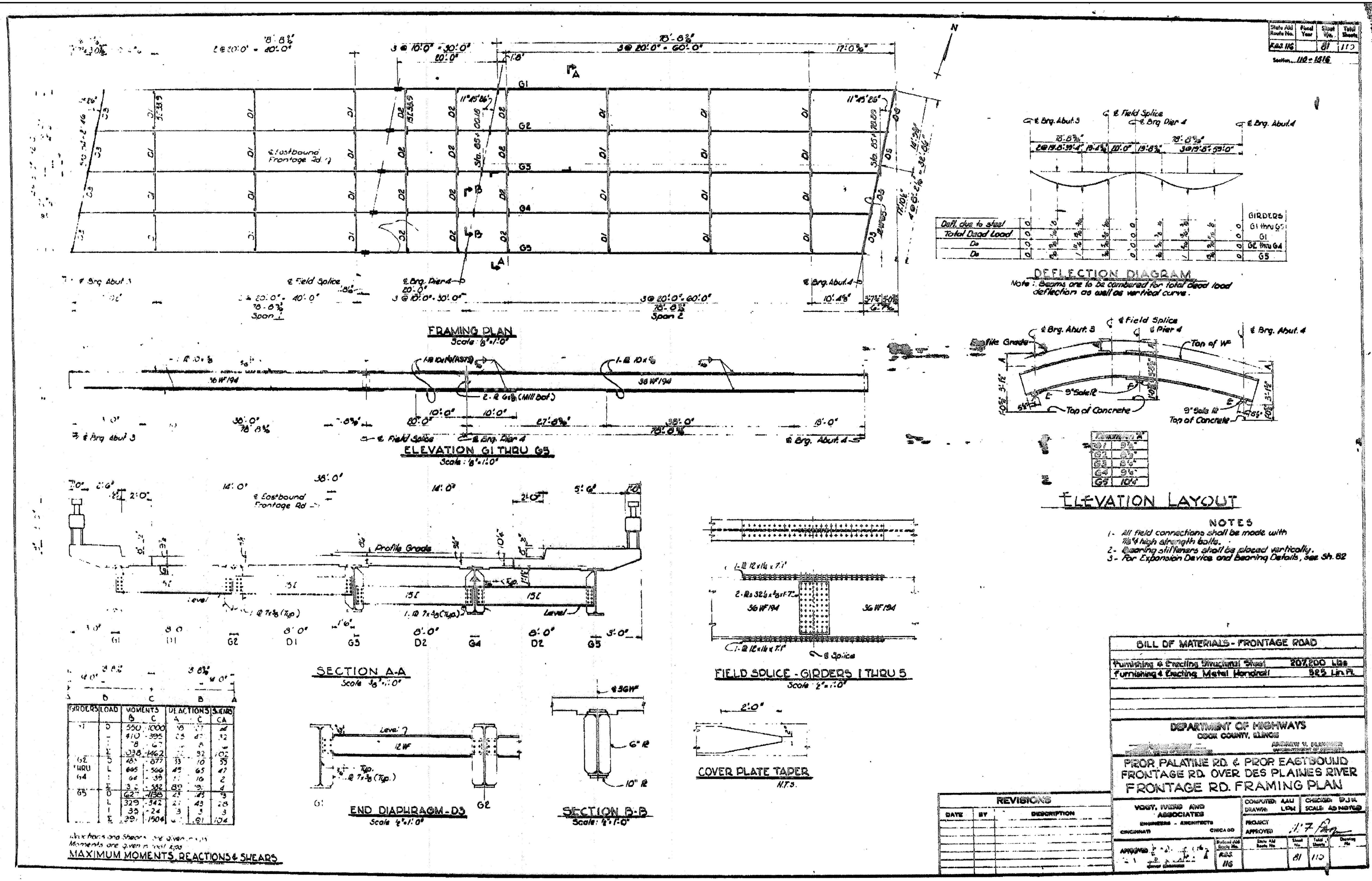


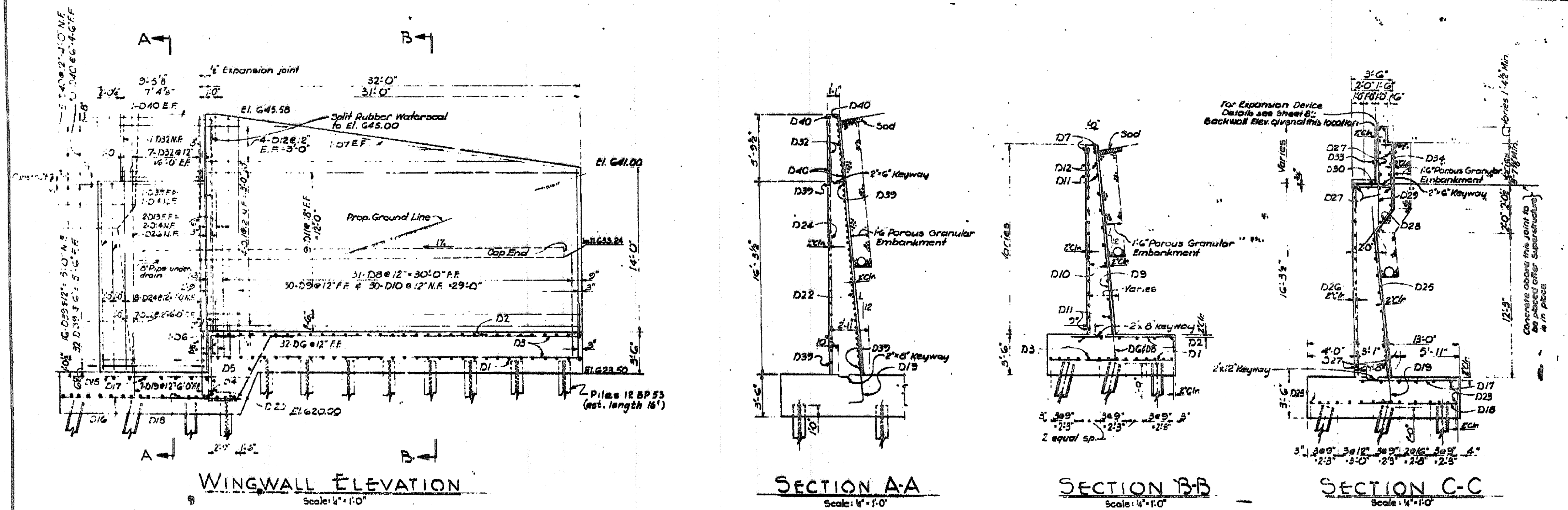
ORIGINAL:	UPDATED:		DESIGNED - MAS		REVISED
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - BJM	MTH	REVISED
			DRAWN - MWS		REVISED
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0273

SHEET NO. 29 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	123
		CONTRACT NO. 60D77		
		ILLINOIS FED. AID PROJECT		

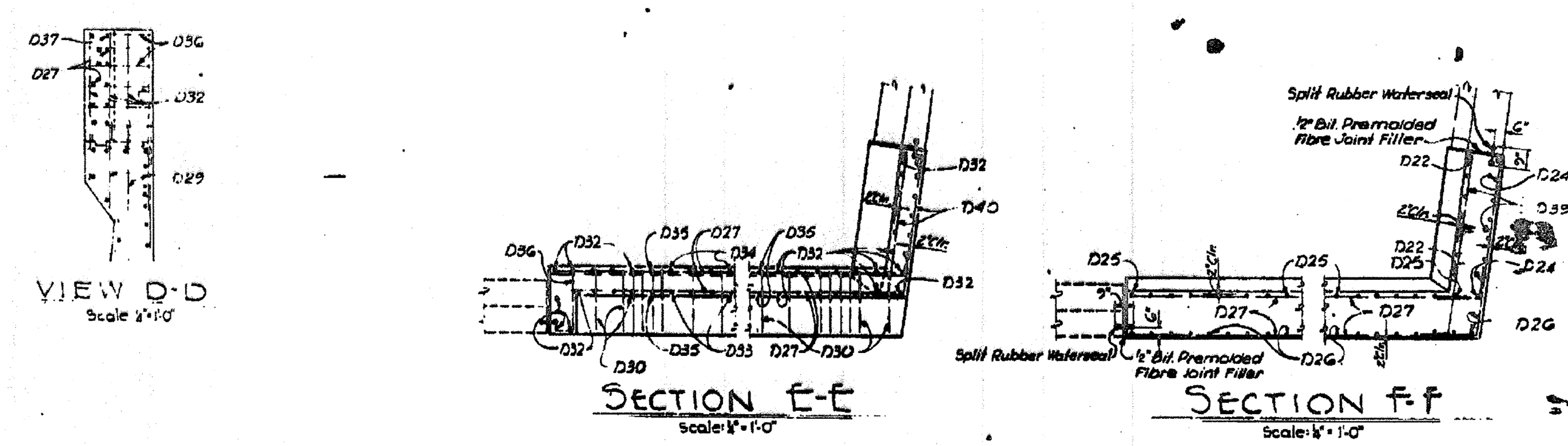


WINGWALL ELEVATION
Scale: 1/4" = 1'-0"

SECTION A-A
Scale: 1/4" = 1'-0"

SECTION B-B
Scale: 1/4" = 1'-0"

SECTION C-C
Scale: 1/4" = 1'-0"



VIEW D-D
Scale 1/4" = 1'-0"

SECTION E-E
Scale: 1/4" = 1'-0"

SECTION F-F
Scale: 1/4" = 1'-0"

NOTES:

1. The raised portion of the beam seat shall be constructed to an elevation higher than that shown and subsequently ground to the elevation shown.
2. The cost of furnishing and placing Split Rubber Waterseal and Bit. Premoulded Fibre Joint Filler shall be included in the unit price per cu. yard for class "X" conc.
3. Designations used: N.F. = Near Face; F.F. = Far Face; E.F. = Each Face
4. For classification of Structure Excavation, see Sheet 60.
5. For Reinforcement Bar List see Sh. 97

BILL OF MATERIALS - ABUT. 4	
Class "B" excavation for structures	[illegible] Cu. Yds.
Class "X" concrete	[illegible]
Reinforcement Bars	[illegible]
Furnishing [illegible] (12 BP 53)	976 [illegible]
Driving Steel Piles [illegible]	976 [illegible]
Test Pile (12 BP 53)	[illegible]
Porous Granular Embankment	[illegible] Cu. Yds.
Pipe Underdrain (6 in.)	[illegible]

REVISIONS		
DATE	BY	DESCRIPTION
1-27-65	C.M.C.	CHANGED FROM [illegible] PILES TO STEEL PILES (12 BP 53)

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER

ABUTMENT 4 DETAILS

VOGT, IVERS AND ASSOCIATES
ENGINEERS – ARCHITECTS
CINCINNATI CHICAGO

COMPUTED: CWS CHECKED: [illegible]
DRAWN: TCC SCALE: As Shown

State Aid Route No.	Fiscal Year	Sheet No.	Total Sheets
F.A.S. 116		72	110

Section 118-1516

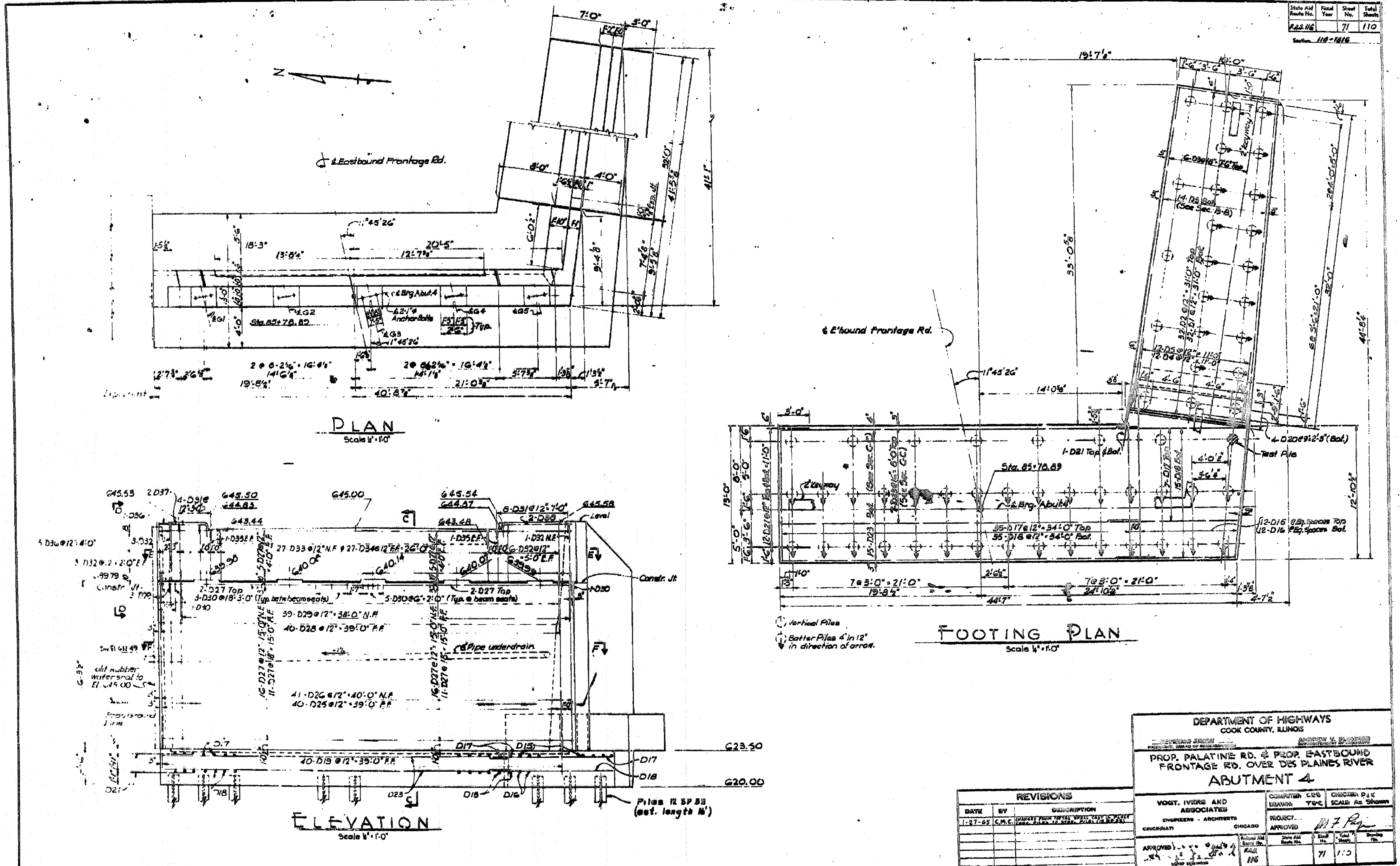
ORIGINAL: Wight	UPDATED: LIN ENGINEERING, LTD. Consulting Engineers	DESIGNED - MAS	REVISED
		CHECKED - BJM MTH	REVISED
		DRAWN - MWS	REVISED
	PLOT DATE = 11/11/2019	CHECKED - BJM MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016–0273

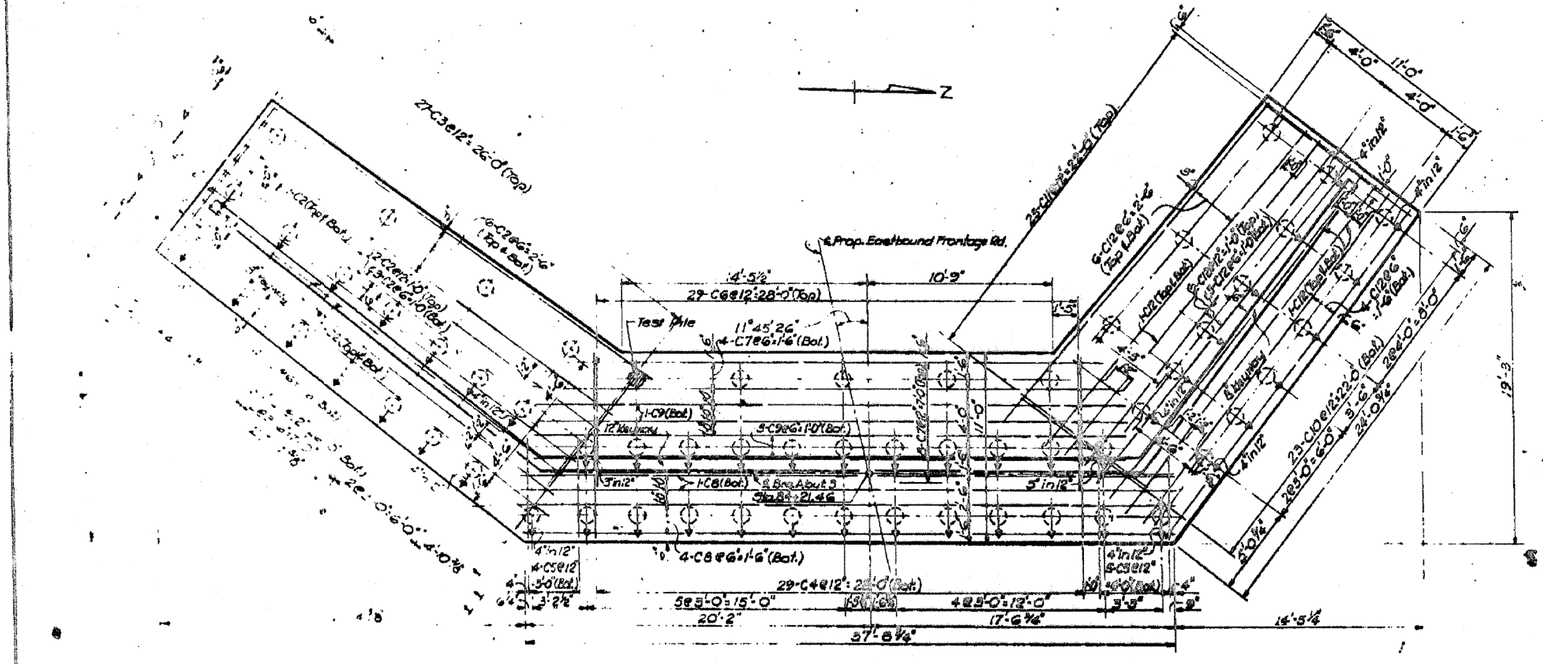
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	124

CONTRACT NO. 60D77
ILLINOIS FED. AID PROJECT



PLAN
Scale 1/8" = 1'-0"
℄ Eastbound Frontage Rd.
Sta. 85+78.89
℄ Brg. Abut. 4
2-1" ⌀ Anchor Bolts
ELEVATION
Scale 1/8" = 1'-0"
27-D33 @ 12" N.F. & 27-D34 @ 12" F.F. - 26'-0"
39-D29 @ 12" - 38'-0" N.F.
40-D28 @ 12" - 39'-0" F.F.
41-D26 @ 12" - 40'-0" N.F.
40-D25 @ 12" - 39'-0" F.F.
40-D19 @ 12" - 39'-0" F.F.
℄ 6" Pipe underdrain
Constr. Jt.
Piles 12 BP 53 (est. length 16')
FOOTING PLAN
Scale 1/8" = 1'-0"
℄ E'bound Frontage Rd.
Sta. 85+78.89
℄ Brg. Abut.
Test Pile
Vertical Piles
Batter Piles 4" in 12" in direction of arrow.
35-D17 @ 12" - 34'-0" Top
35-D18 @ 12" - 34'-0" Bot.
REVISIONS
DATE | BY | DESCRIPTION
1-27-65 | C.M.C.
DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS
PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
ABUTMENT 4
VOGT, IVERS AND ASSOCIATES
ENGINEERS - ARCHITECTS
CINCINNATI CHICAGO
F.A.S. 116
71
110
Section 110-1616

ORIGINAL:	UPDATED:		DESIGNED - MAS		REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY) STRUCTURE NO. 016-0273	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Wight	LIN ENGINEERING, LTD. Consulting Engineers		CHECKED - BJM	MTH	REVISED			305	15161-1	COOK	151	125
			DRAWN - MWS		REVISED			CONTRACT NO. 60D77				
		PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED		SHEET NO. 31 OF 33 SHEETS	ILLINOIS FED. AID PROJECT				



DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

SEYMOUR SIMON
PRESIDENT BOARD OF COMMISSIONERS

ANDREW V. PLUMMER
SUPERINTENDENT OF HIGHWAYS

PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
ABUTMENT 3 DETAILS

VOGT, IVERS and ASSOCIATES
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

COMPUTED: CES
DRAWN: CES
CHECKED MDJ
SCALE As Shown
PROJECT
APPROVED

APPROVED
CHIEF ENGINEER

Federal Aid Route No.	State Aid Route No.	Sheet No.	Total Sheets	Drawing No.
FAS 116		76	110	

REVISIONS

DATE	BY	DESCRIPTION
1 27 65	CMC	CHANGED FROM METAL SHELL CAST IN PLACE CONC. PILES TO STEEL PILES (12 BP 53)

ORIGINAL:
Wight

UPDATED:
LIN ENGINEERING, LTD.
Consulting Engineers

PLOT DATE = 11/11/2019

DESIGNED - MAS			REVISED
CHECKED - BJM	MTH		REVISED
DRAWN - MWS			REVISED
CHECKED - BJM	MTH		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016–0273

SHEET NO. 32 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	126

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

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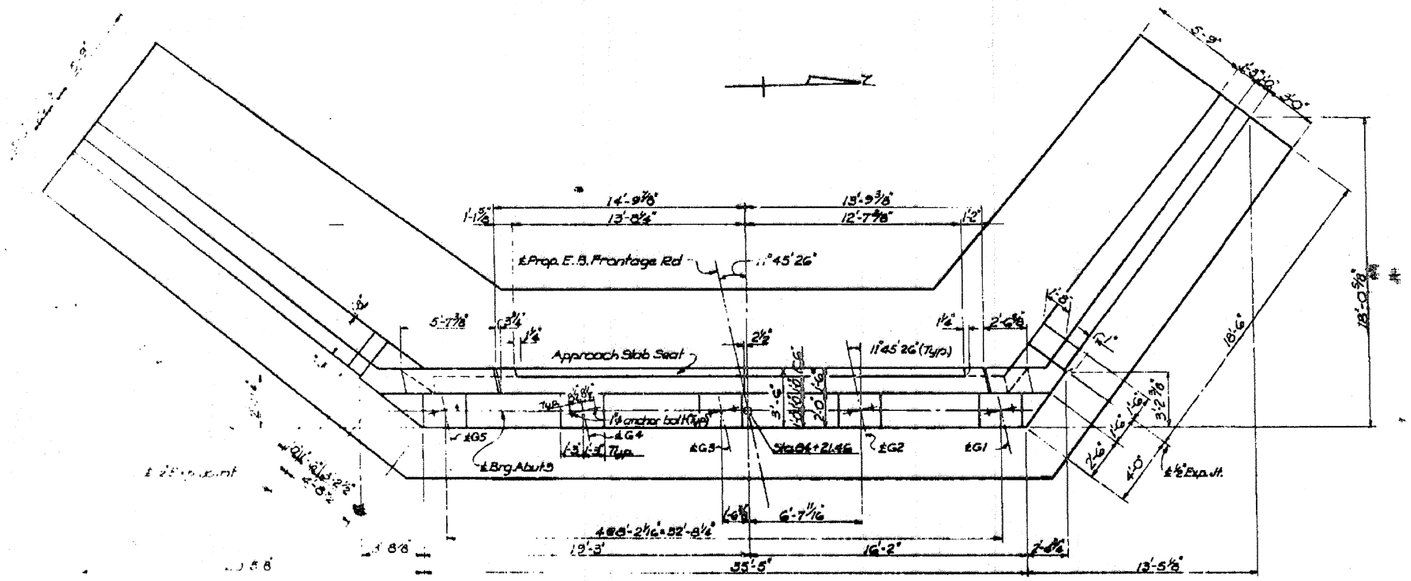
State Aid Route No.	Fiscal Year	Sheet No.	Total Sheets
FAS 116		69	110

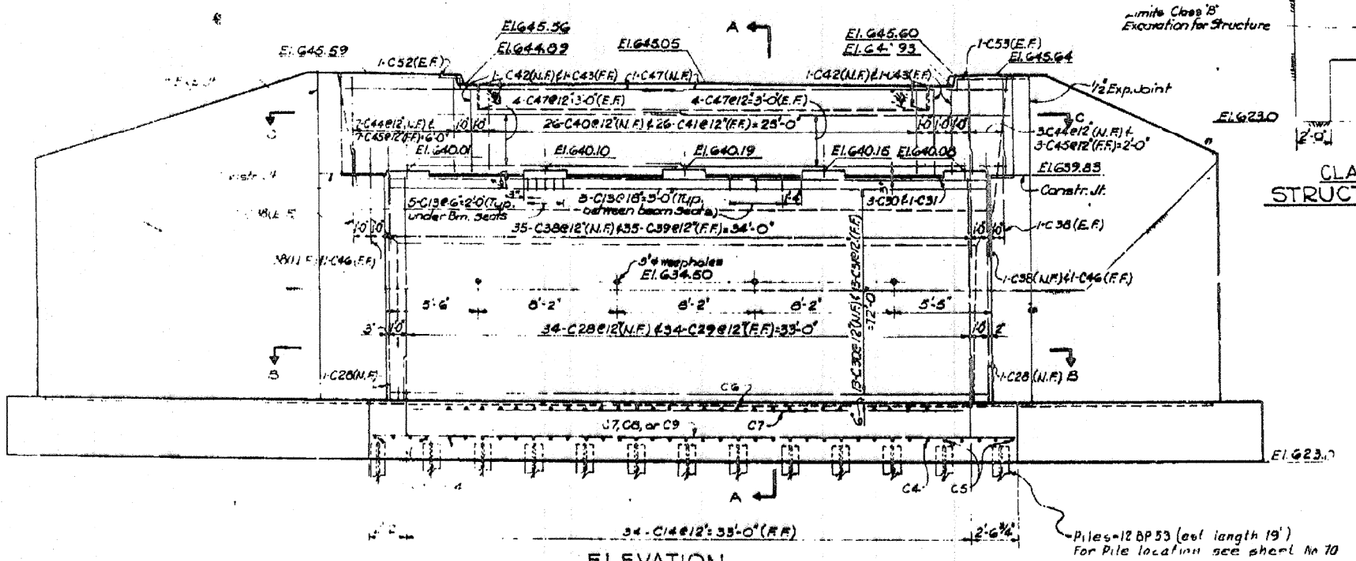
Section 110-1516



PLAN

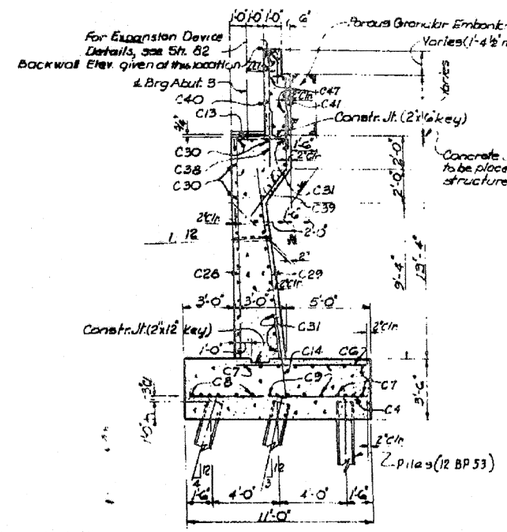
Scale: ⅛" = 1'-0"

For pile locations, footing dimensions and footing reinforcement See Sheet No. 70



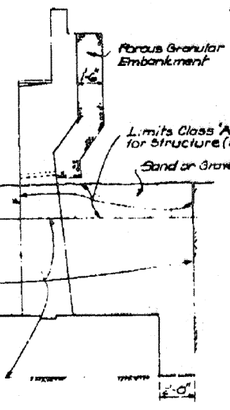
ELEVATION

Scale: ⅛" = 1'-0"



SECTION A-A

Scale: ½" = 1'-0"



CLASSIFICATION OF STRUCTURE EXCAVATION

Scale: ½" = 1'-0"

NOTES

1. The raised portion of the beam seat shall be constructed to an elevation higher than that shown on the plans and subsequently ground to the elevation shown.
2. Designations "used" N.F. = near face; F.F. = far face; E.F. = each face.
3. For Reinforcement Bar List, see Sheet No. 90
4. The cost of furnishing and placing Split Rubber Waterseal and Bituminous Premoulded Fibre Joint Filler shall be included in the unit price per cubic yard for Class 'A' Concrete

BILL OF MATERIALS - ABUT. 3

Class 'A' Concrete	224 Cu. Yds.
Reinforcement Bars	19,879 lbs.
Class 'A' Excavation for Structures	34 Cu. Yds.
Class 'A' Excavation for Structures (Modified)	53 Cu. Yds.
Class 'B' Excavation for Structures	420 Cu. Yds.
Porous Granular Embankment	36 Cu. Yds.
Sand or Gravel Embankment	3 Tons
Furnishing Steel Piles (12 BP 53)	1159 Lin. Ft.
Driving Steel Piles	1159 Lin. Ft.
Test Pile (12 BP 53)	1 Each
Pile Test Loading	1 Each

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

32 VINCENT SIMON, PRESIDENT, BOARD OF COMMISSIONERS
ANDREW V. PLUMMER, SUPERINTENDENT OF HIGHWAYS

PROP. PALATINE RD. & PROP. EASTBOUND FRONTAGE RD. OVER DES PLAINES RIVER
ABUTMENT 3

REVISIONS

DATE	BY	DESCRIPTION

VOGT, IVERS ASSOCIATES
ENGINEERS ARCHITECTS
CINCINNATI CHICAGO

COMPUTED: C.E.S. DRAWN: C.E.S. CHECKED: M.D.J. SCALE: As Shown
PROJECT APPROVED

APPROVED

Federal Aid Route No.	State Aid Route No.	Sheet No.	Total Sheets	Drawing No.
FAS 116		69	110	

ORIGINAL: Wight
UPDATED: LIN ENGINEERING, LTD. Consulting Engineers

	DESIGNED - MAS		REVISED
	CHECKED - BJM	MTH	REVISED
	DRAWN - MWS		REVISED
PLOT DATE = 11/11/2019	CHECKED - BJM	MTH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS (FOR INFORMATION ONLY)
STRUCTURE NO. 016-0273
SHEET NO. 33 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	127
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

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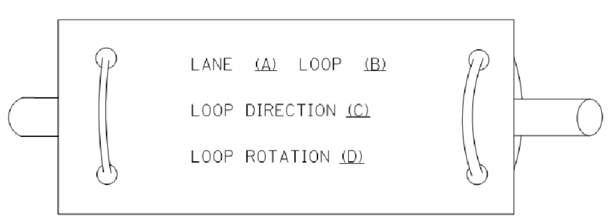
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

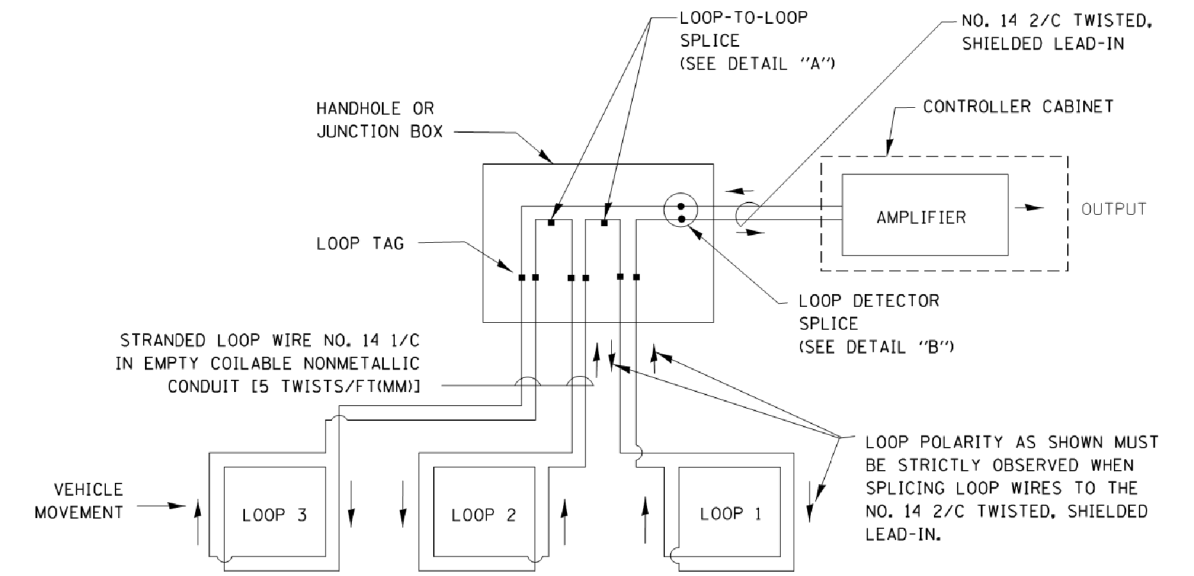


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

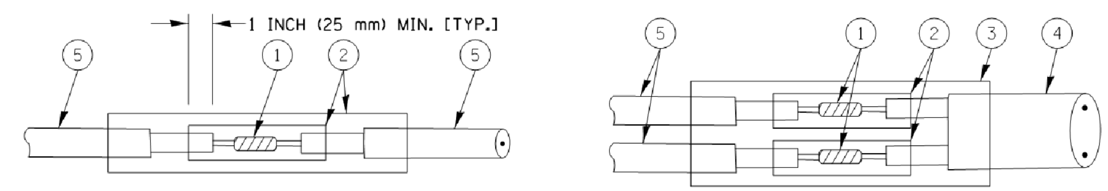
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

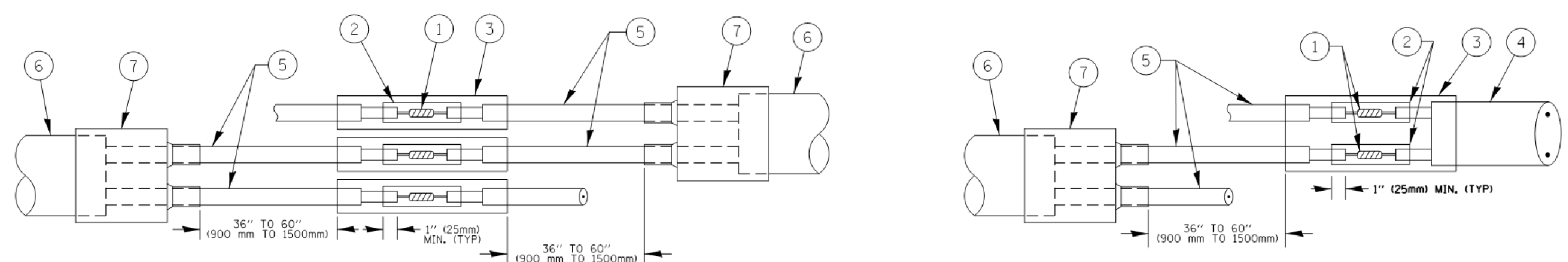
- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm), IF IN CONCRETE. THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



DETAIL "A"
LOOP-TO-LOOP SPLICE

DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP

DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

1. WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
2. WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
3. WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.
4. NO. 14 2/C TWISTED, SHIELDED CABLE.
5. LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
6. PRE-FORMED LOOP
7. XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\ts05.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - BCK	REVISED -			305	1516I-1	COOK	151	128
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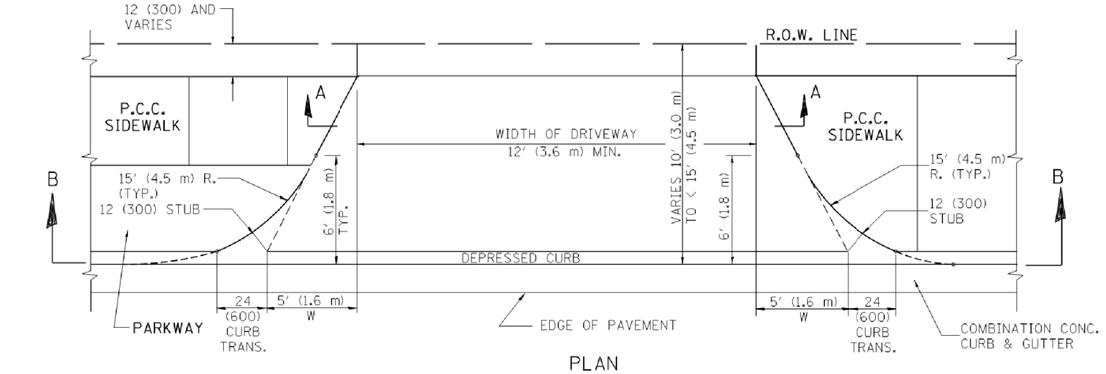
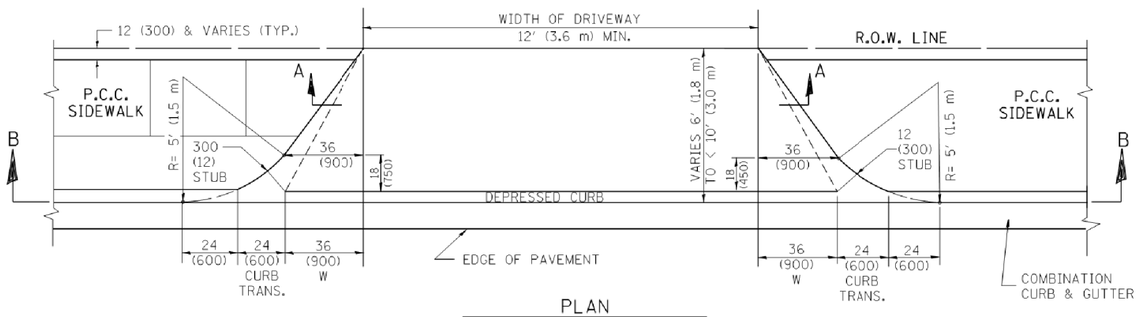
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



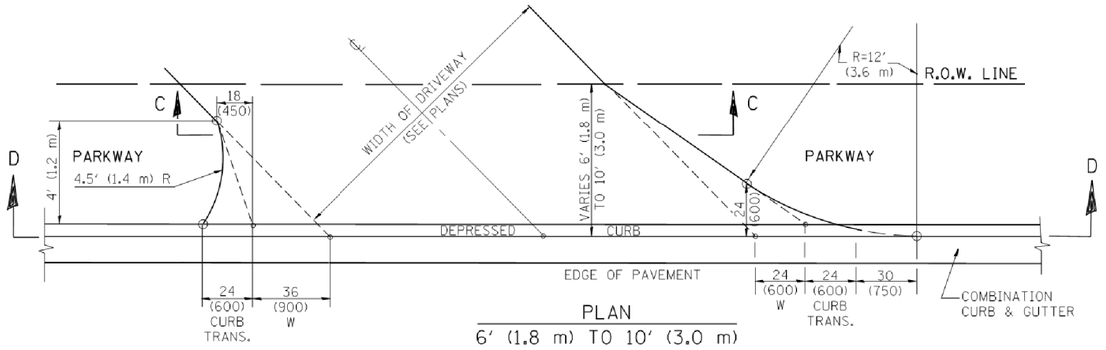
PLAN

10' (3.0 m) TO < 15' (4.5 m)



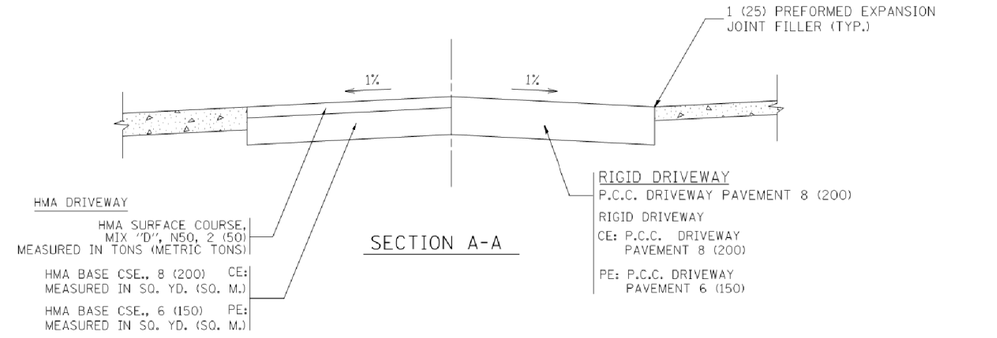
PLAN

6' (1.8 m) TO < 10' (3.0 m)

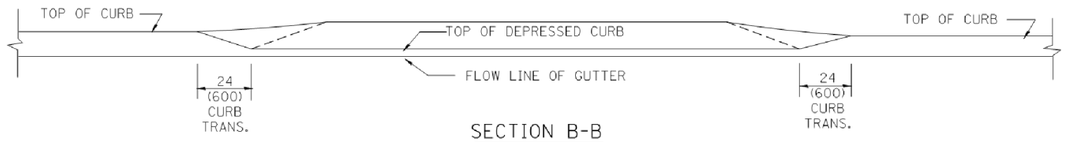


PLAN

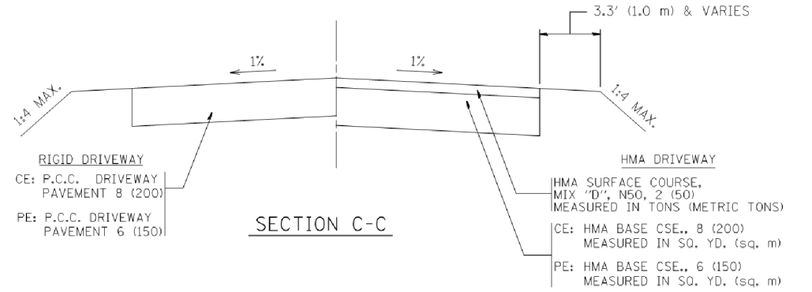
6' (1.8 m) TO 10' (3.0 m)



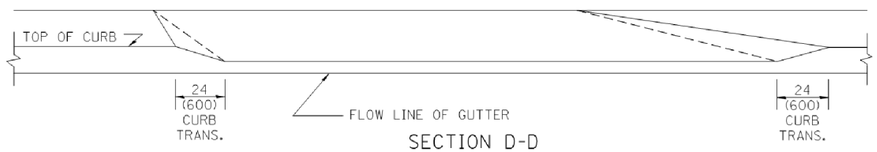
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

GENERAL NOTES

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATION 10 IN THE PERMIT HANDBOOK. WHERE SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED WITH RIGID PAVEMENT. WHERE NO SIDEWALKS EXIST, DRIVEWAYS SHALL BE REPLACED IN KIND. SIDEWALK CROSS SLOPE THRU DRIVEWAY AREA TO BE A MAXIMUM OF 1:50.

WHEN THE DISTANCE BETWEEN R.O.W. AND THE BACK OF CURB IS EQUAL TO OR LESS THAN 8' (2.4 m), THE P.C.C. SIDEWALK SHALL EXTEND TO THE BACK OF CURB.

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

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

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

"W" VARIES FROM 36 (900) TO 5' (1.5 m) PROPORTIONAL TO THE LENGTH (L), FROM 6' (1.8 m) TO 10' (3 m).

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

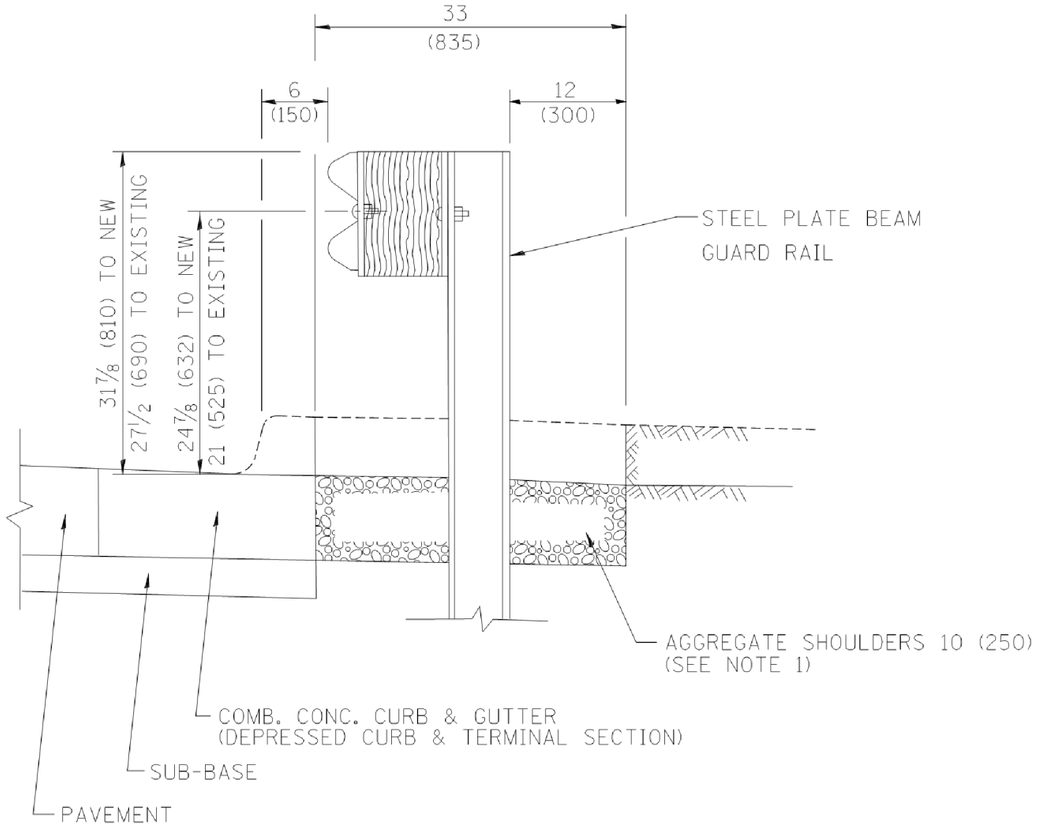
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\bd02.dgn	USER NAME = leysa	DESIGNED - R. SHAH	REVISED - M. GOMEZ 04-06-01
		DRAWN -	REVISED - P. LaFLEUR 04-15-03
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 01-01-07
	PLOT DATE = 9/6/2011	DATE - 11-06-95	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY DETAILS
DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 m)

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	129
	BD400-02 (BD-02)		CONTRACT NO.	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

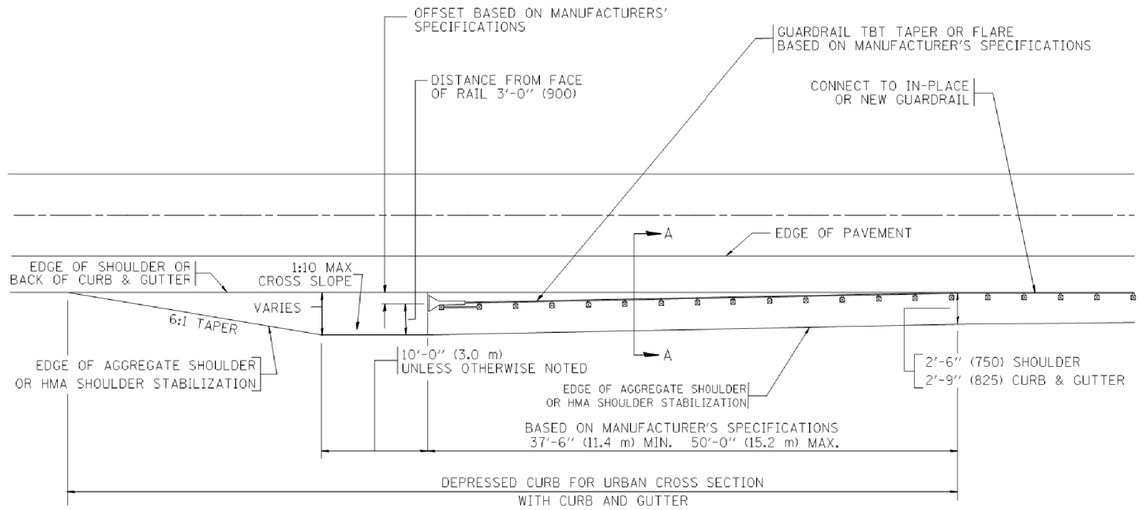


SECTION A-A

NOTES:
1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (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.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

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.

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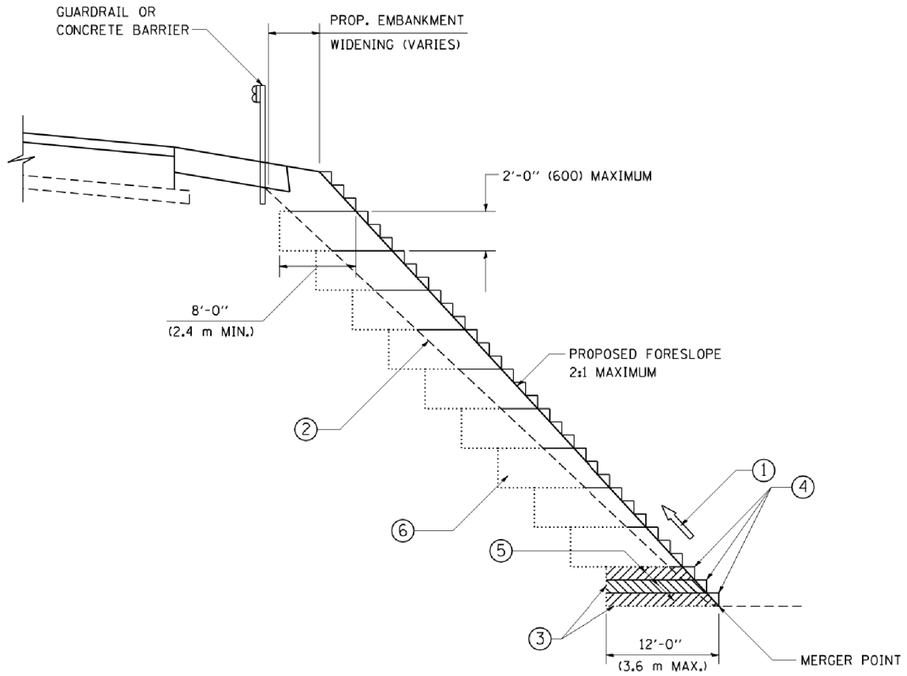
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 49.9999 '/ IN.	CHECKED -	REVISED - R. BORO 12-08-2008
	PLOT DATE = 9/21/2009	DATE - 09-22-90	REVISED - R. BORO 09-14-2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	130
	BD600-10 (BD 34)	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

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

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

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
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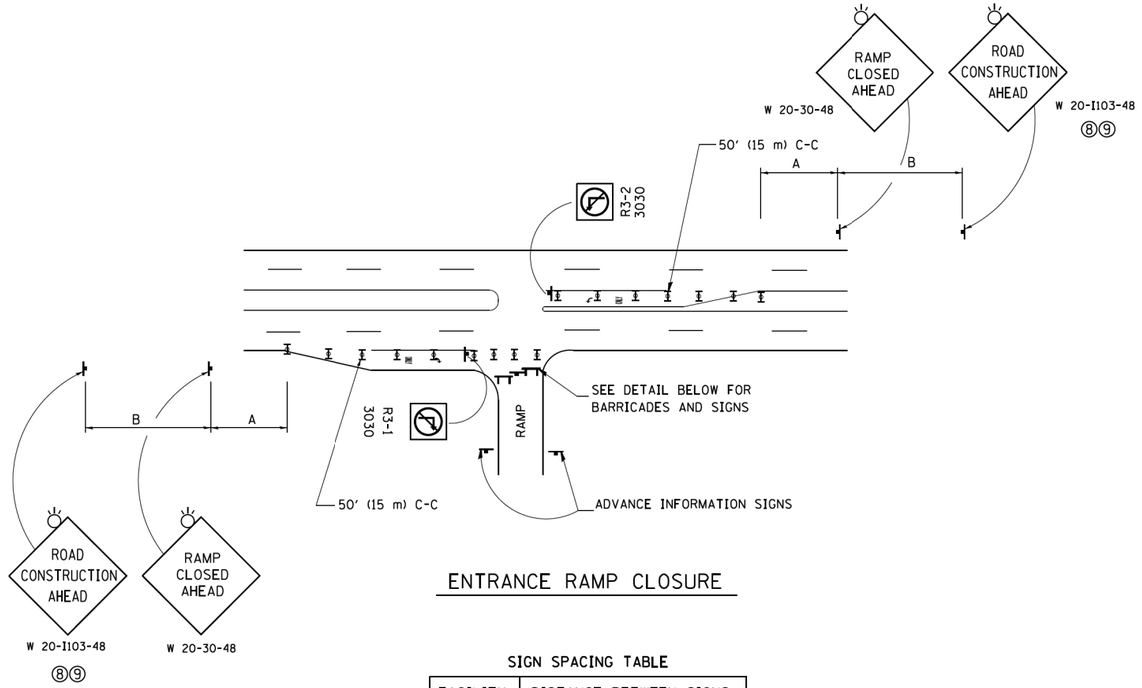
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BENCHING DETAIL
FOR EMBANKMENT WIDENING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	131
	BD-51	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

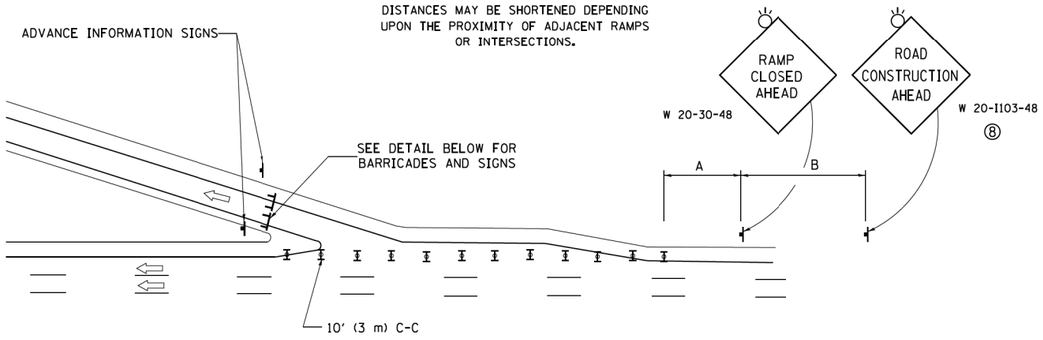


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS A	DISTANCE BETWEEN SIGNS B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

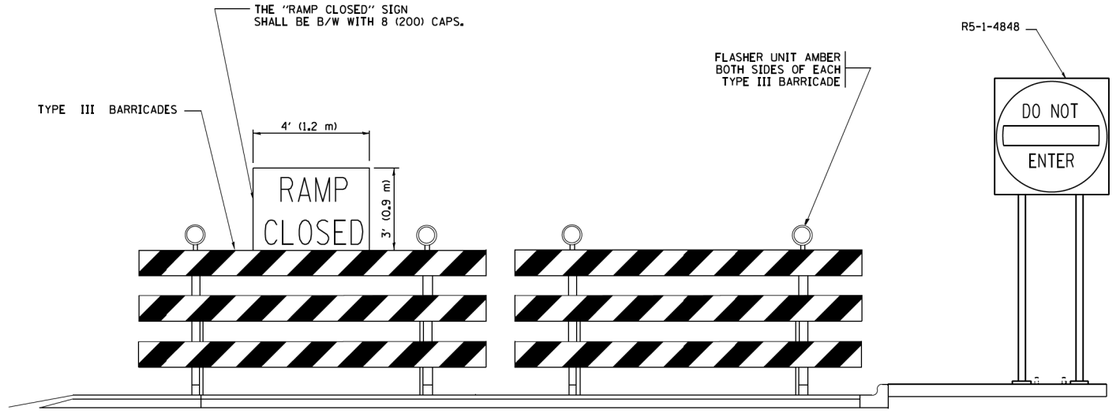


EXIT RAMP CLOSURE

SYMBOLS

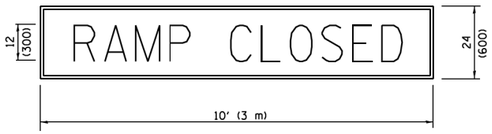
TYPE II BARRICADE OR DRUM

TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

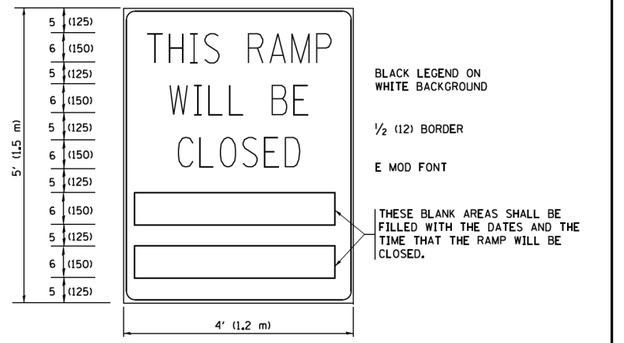
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
E MOD FONT
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. VERTICAL BARRICADES SHALL NOT BE USED FOR RAMP CLOSURES.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
8. ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
9. ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\DRAWN\CADData\CADsheets\tc08.dgn	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - S.P.B. 01-07
Default	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09
	PLOT DATE = 11/27/2017	DATE - 02-83	REVISED - M.D. 06-13
			REVISED - M.D. 01-18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

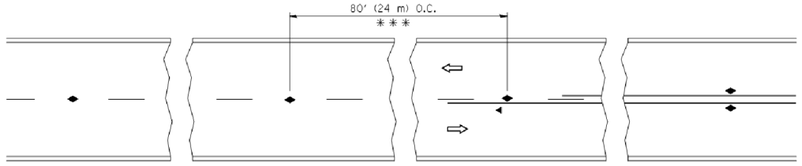
ENTRANCE AND EXIT RAMP CLOSURE DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	132

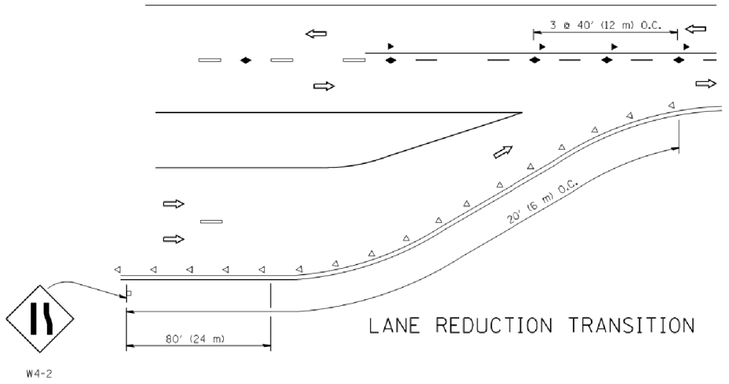
TC-08 CONTRACT NO.

ILLINOIS FED. AID PROJECT

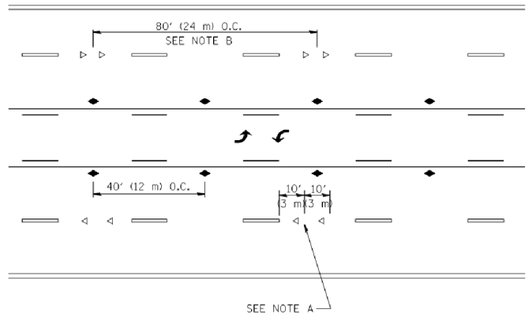


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

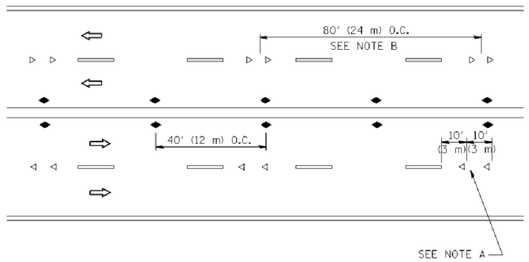
TWO-LANE/TWO-WAY



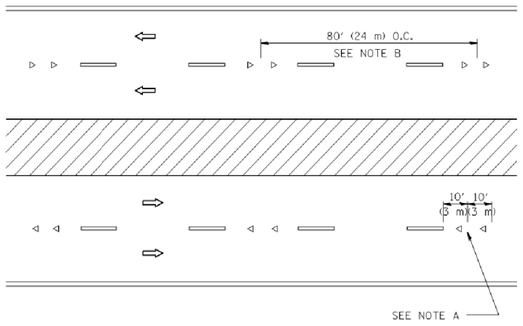
LANE REDUCTION TRANSITION



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.

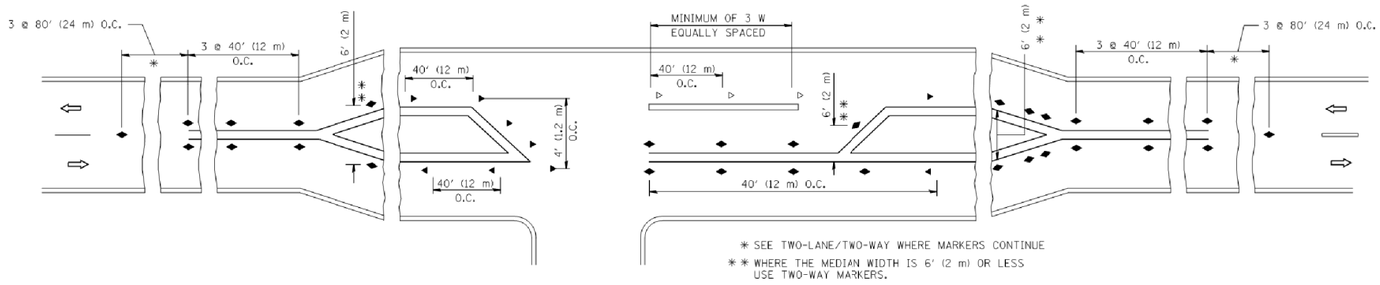
SYMBOLS

- 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.



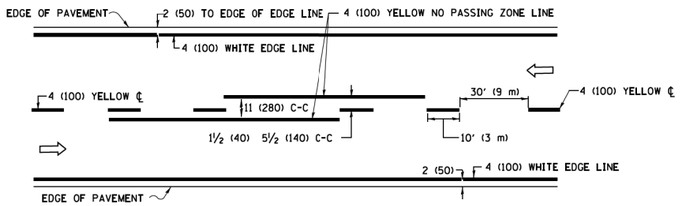
* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

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

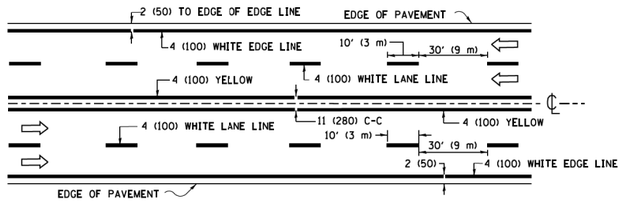
LEFT TURN

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

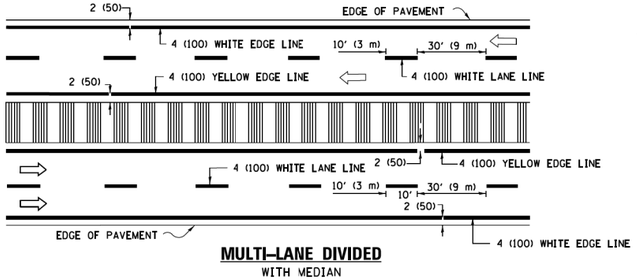
FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc11.dgn	USER NAME = leysa	DESIGNED -	REVISED -T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)	F.A. RTE.	SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED -T. RAMMACHER 03-12-99				151 / 133
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 01-06-00			TC-11	CONTRACT NO.
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS / FED. AID PROJECT



2–LANE ROADWAY

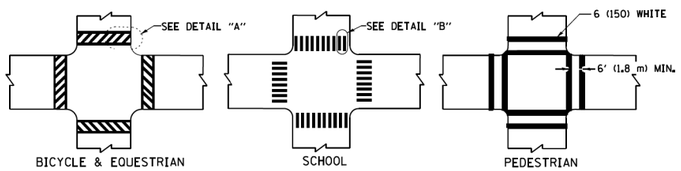


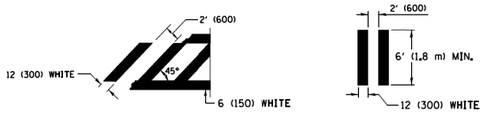
MULTI–LANE UNDIVIDED



MULTI–LANE DIVIDED
WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

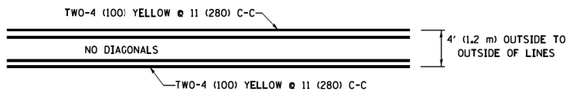




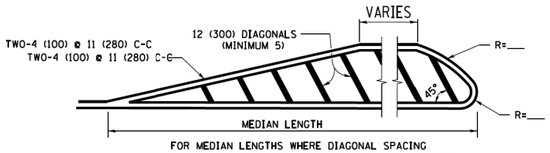
DETAIL "A" **DETAIL "B"**

TYPICAL CROSSWALK MARKING

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



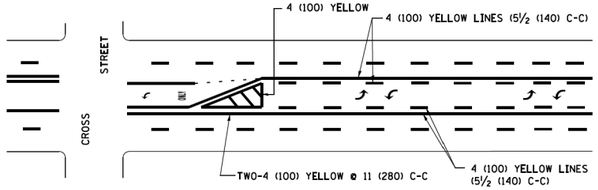
4' (1.2 m) WIDE MEDIANS ONLY



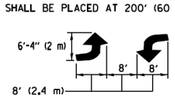
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

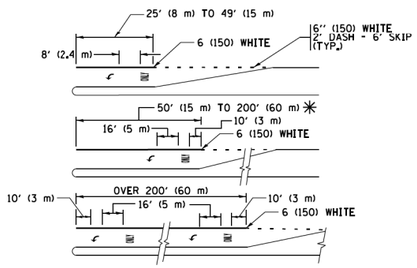


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO–WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

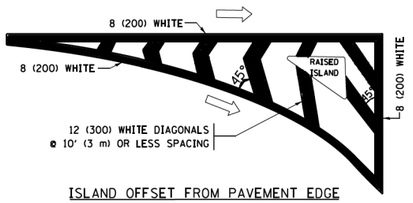


FULL SIZE LETTERS 8' (2,4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1,5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1,9 m^2)

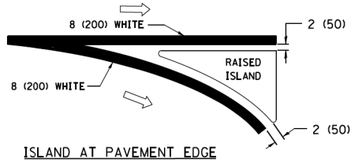
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

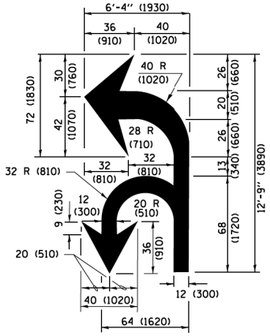


ISLAND OFFSET FROM PAVEMENT EDGE

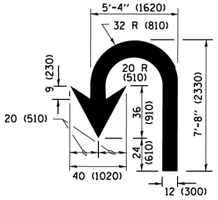


ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

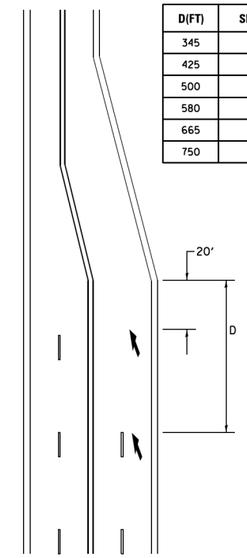


COMBINATION LEFT AND U–TURN



U–TURN

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



LANE REDUCTION TRANSITION

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 ⊄ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ⊄ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1,8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE 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; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ⊄ 6 (150) 12 (300) ⊄ 45° 12 (300) ⊄ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1,8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1,2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ⊄ 4 (100) WITH 12 (300) DIAGONALS ⊄ 45° NO DIAGONALS USED FOR 4' (1,2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ⊄ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3,6 SQ. FT. (0,33 m^2) EACH "X"=54,0 SQ. FT. (5,0 m^2)
SHOULDER DIAGONALS (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 = W:\diststd\22x34\tcl3.dgn	USER NAME = leysa	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
		DRAWN -	REVISED - C. JUCIUS 07-01-13
Default	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
	PLOT DATE = 6/23/2017	DATE - 03-19-90	REVISED - C. JUCIUS 04-12-16

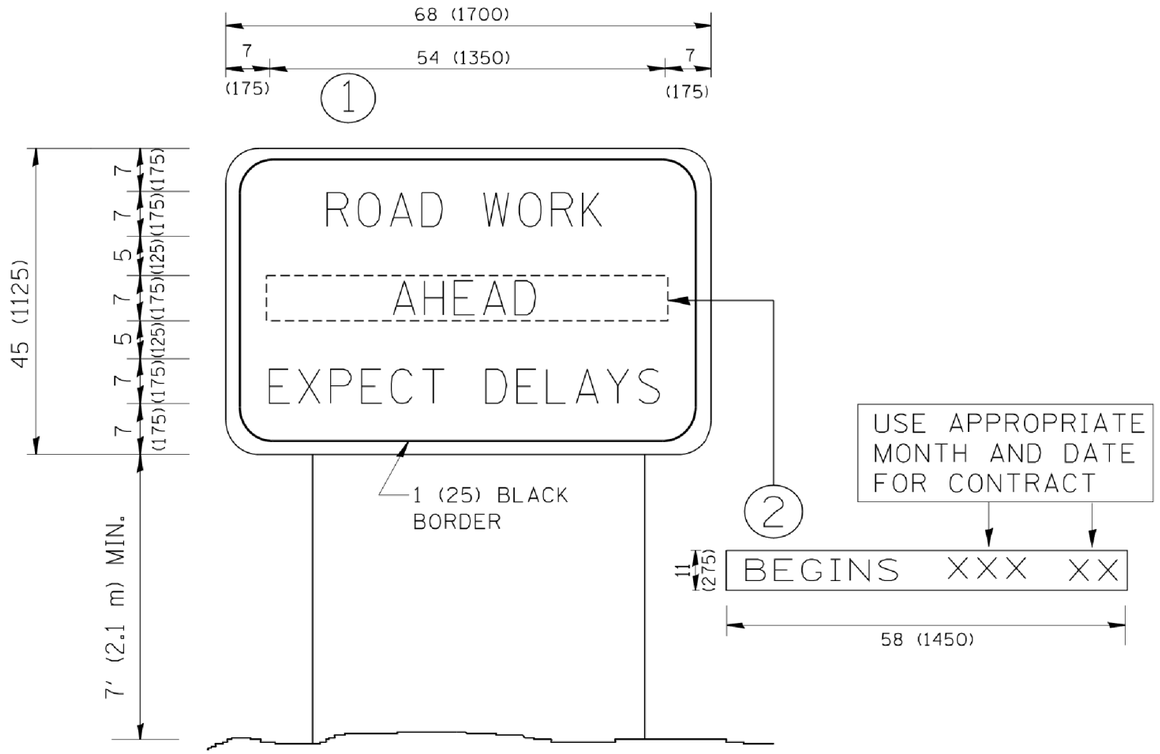
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	134
	TC-13	CONTRACT NO.		
	ILLINOIS FED. AID PROJECT			

tcl3.dgn 6/23/2017 9:41:34 AM Lleysa



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.

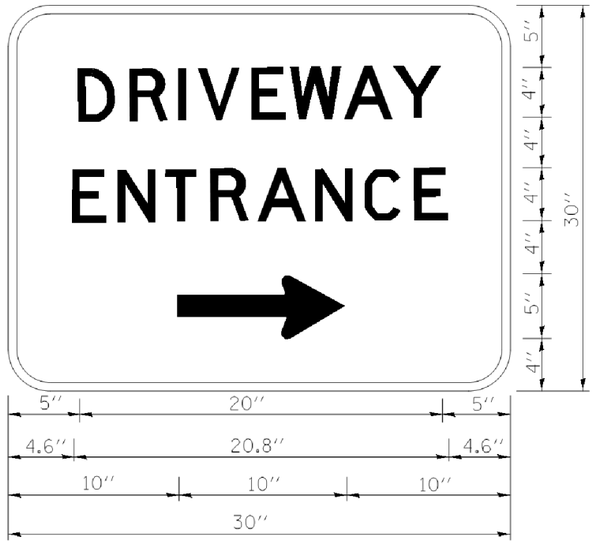
FILE NAME = W:\diststd\22x34\tc22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	135
	TC-22	CONTRACT NO.		
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 = c:\pw_work\pwidot\gaglianobt\d0108315\tc26.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - C. JUCIUS 02-15-07
		DRAWN -	REVISED -
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 12/13/2012	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRIVEWAY ENTRANCE SIGNING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			151	136
	TC-26	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp B.dgn

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PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 1/24/2020

DESIGNED - DJA
DRAWN - DJA
CHECKED - JWM
DATE - 01/24/2020

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V SHEET ___ OF 9___ SHEETS STA. 20+50 TO STA. 21+49

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	137

CONTRACT NO. 60D77

ILLINOIS | FED. AID PROJECT

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

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

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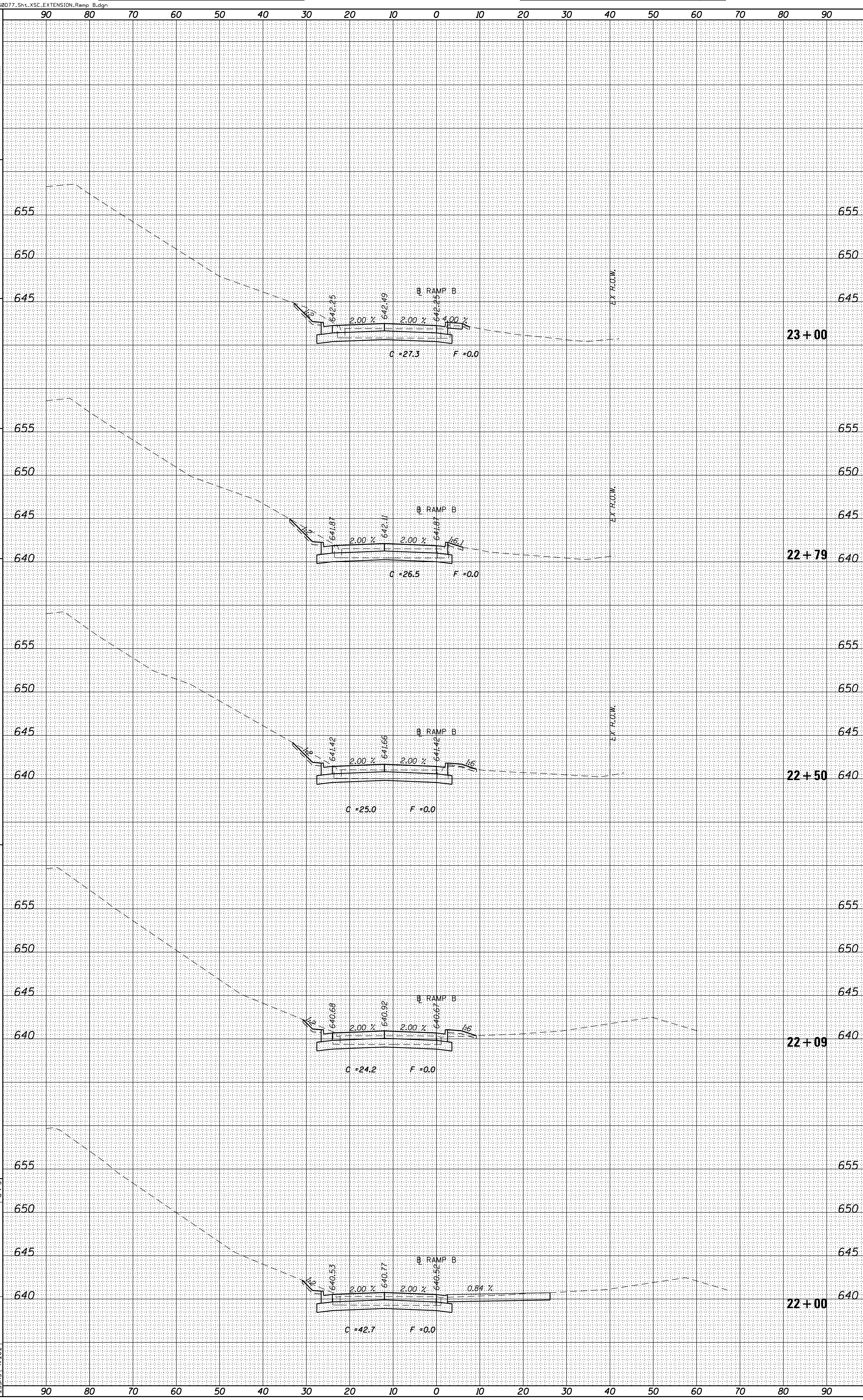

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PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 1/24/2020

DESIGNED - QWA
DRAWN - QWA
CHECKED - JMM
DATE - 01/24/2020

REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V SHEET 2 OF 9 SHEETS STA. 22+00 TO STA. 23+00

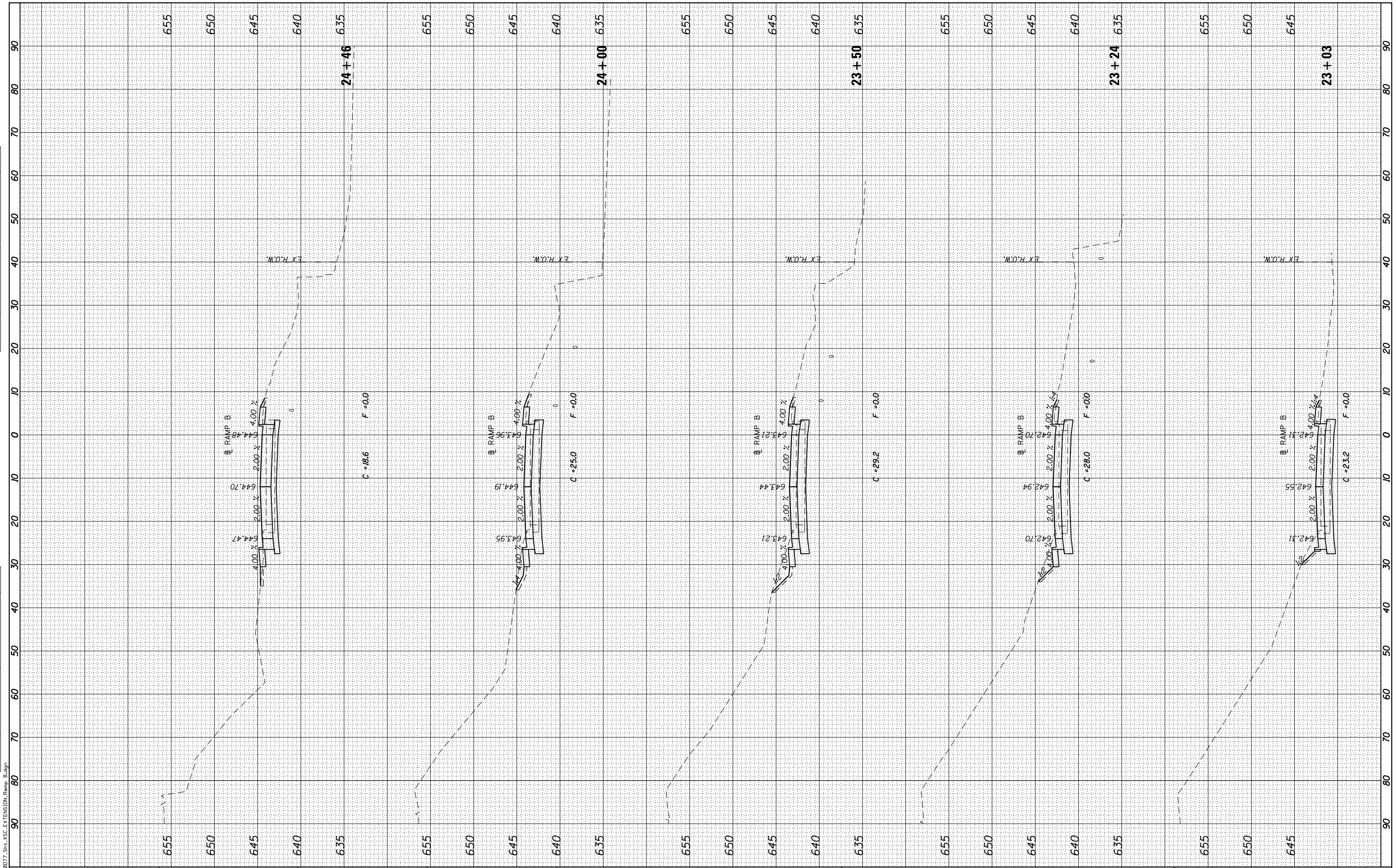
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	138

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

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

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



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PLOT SCALE = 20.0000 ' / in.	CHECKED - JNH	REVISED -
PLOT DATE = 1/24/2020	DATE - 01/24/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 3 OF 9 SHEETS | STA. 23+03 | TO STA. 24+46

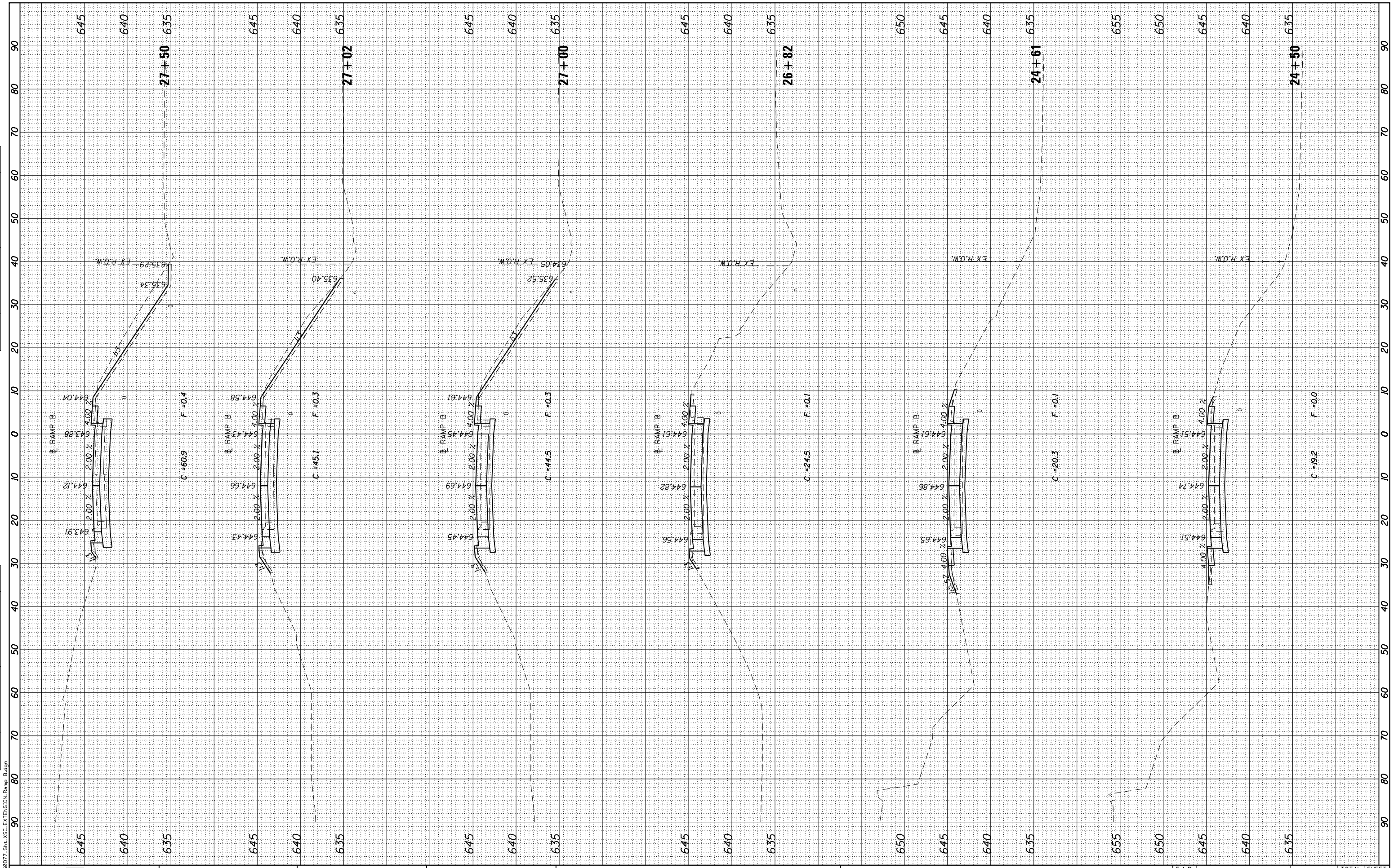
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	139

CONTRACT NO. 60D77

ILLINOIS | FED. AID PROJECT

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

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



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PLOT DATE = 1/24/2020	DATE - 01/24/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

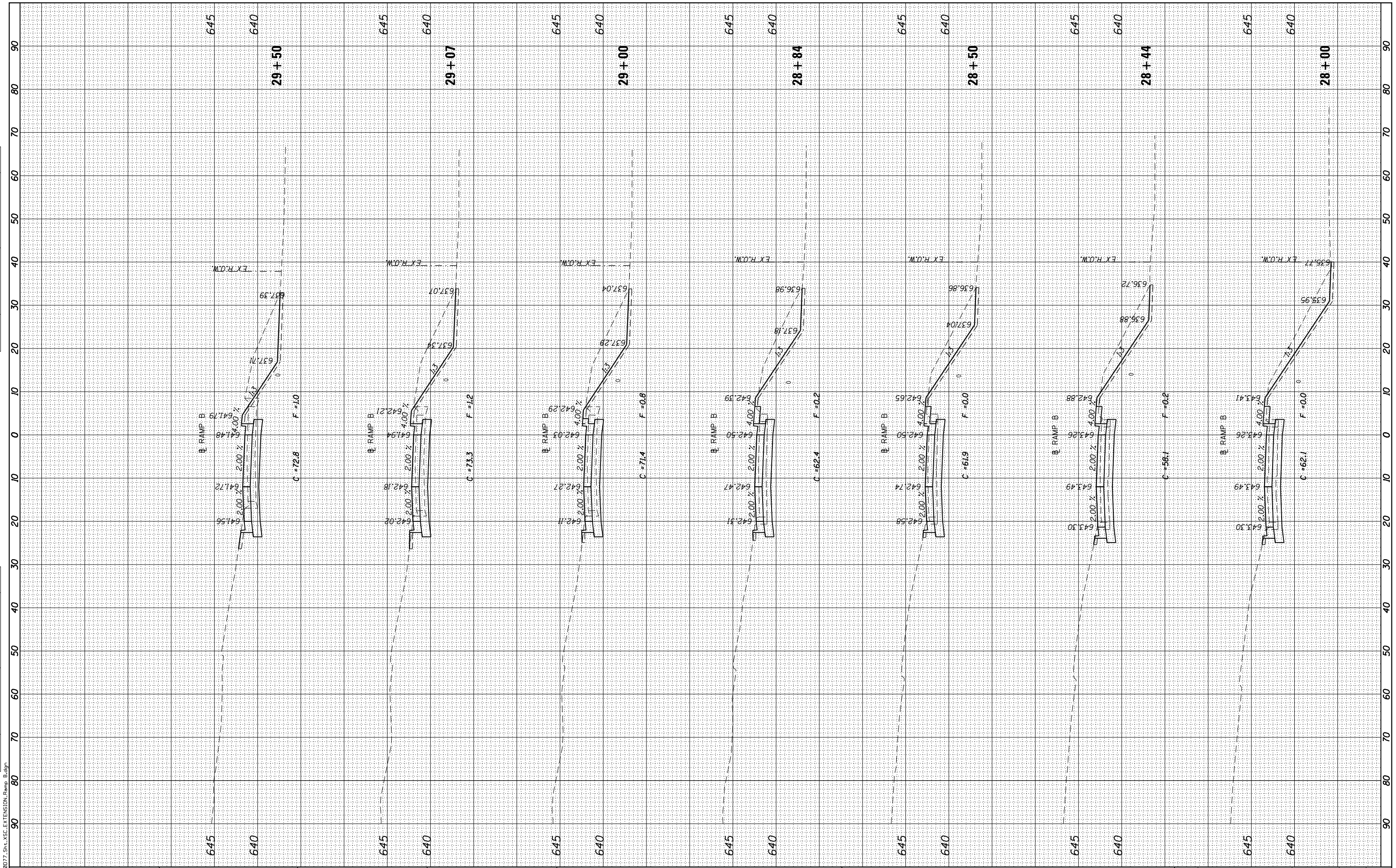
SCALE: 1"=10'H 1"=5'V | SHEET 4 OF 9 SHEETS | STA. 24+50 | TO STA. 27+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	140
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp B.dgn

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

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



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	DRAWN - CNA	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JWH	REVISED -
PLOT DATE = 1/24/2020	DATE - 01/24/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 5 OF 9 SHEETS | STA. 28+00 | TO STA. 29+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	141
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

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

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

33+50 | 33+00 | 32+50 | 32+00 | 31+50 | 31+00 | 30+74 | 30+50 | 30+00 | 29+74

C =11.1 F =5.9 | C =5.3 F =16.9 | C =2.7 F =28.9 | C =1.2 F =38.5 | C =0.7 F =30.5 | C =3.2 F =15.9 | C =8.0 F =10.0 | C =13.9 F =7.2 | C =41.4 F =4.8 | C =67.0 F =1.3

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp B.dgn

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PLOT DATE = 1/24/2020	DATE - 01/24/2020		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

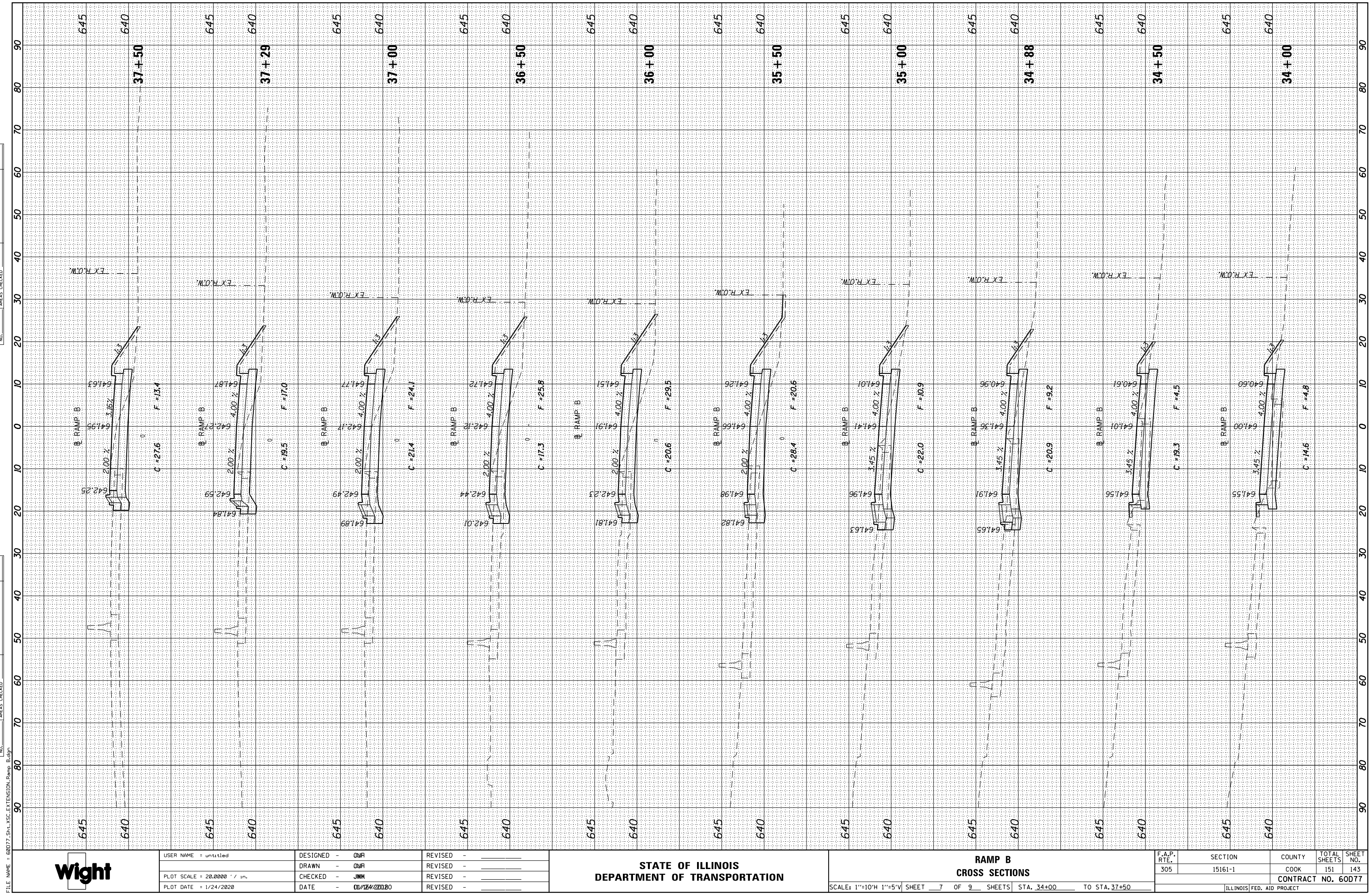
RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 6 OF 9 SHEETS | STA. 29+74 | TO STA. 33+49

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	142
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

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

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



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	DRAWN - CNR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JWH	REVISED -
PLOT DATE = 1/24/2020	DATE - 01/24/2020	REVISED -

Wight

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

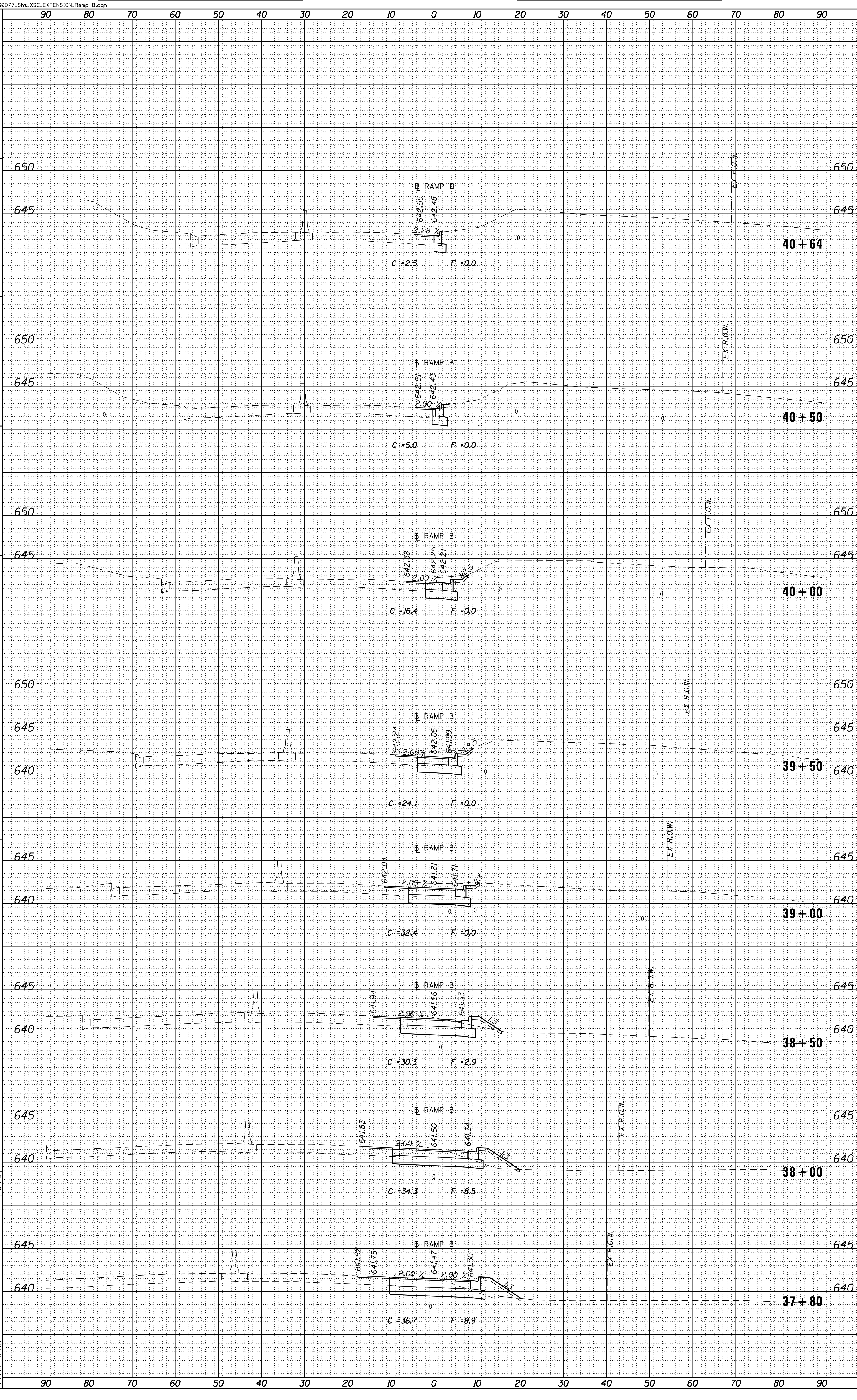
SCALE: 1"=10'H 1"=5'V | SHEET 7 OF 9 SHEETS | STA. 34+00 | TO STA. 37+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	143
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp B.dgn



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PLOT DATE = 1/24/2020

DESIGNED	-	QQA
DRAWN	-	QQA
CHECKED	-	JMM
DATE	-	01/24/2020
REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V SHEET 8 OF 9 SHEETS STA. 37+80 TO STA. 40+64

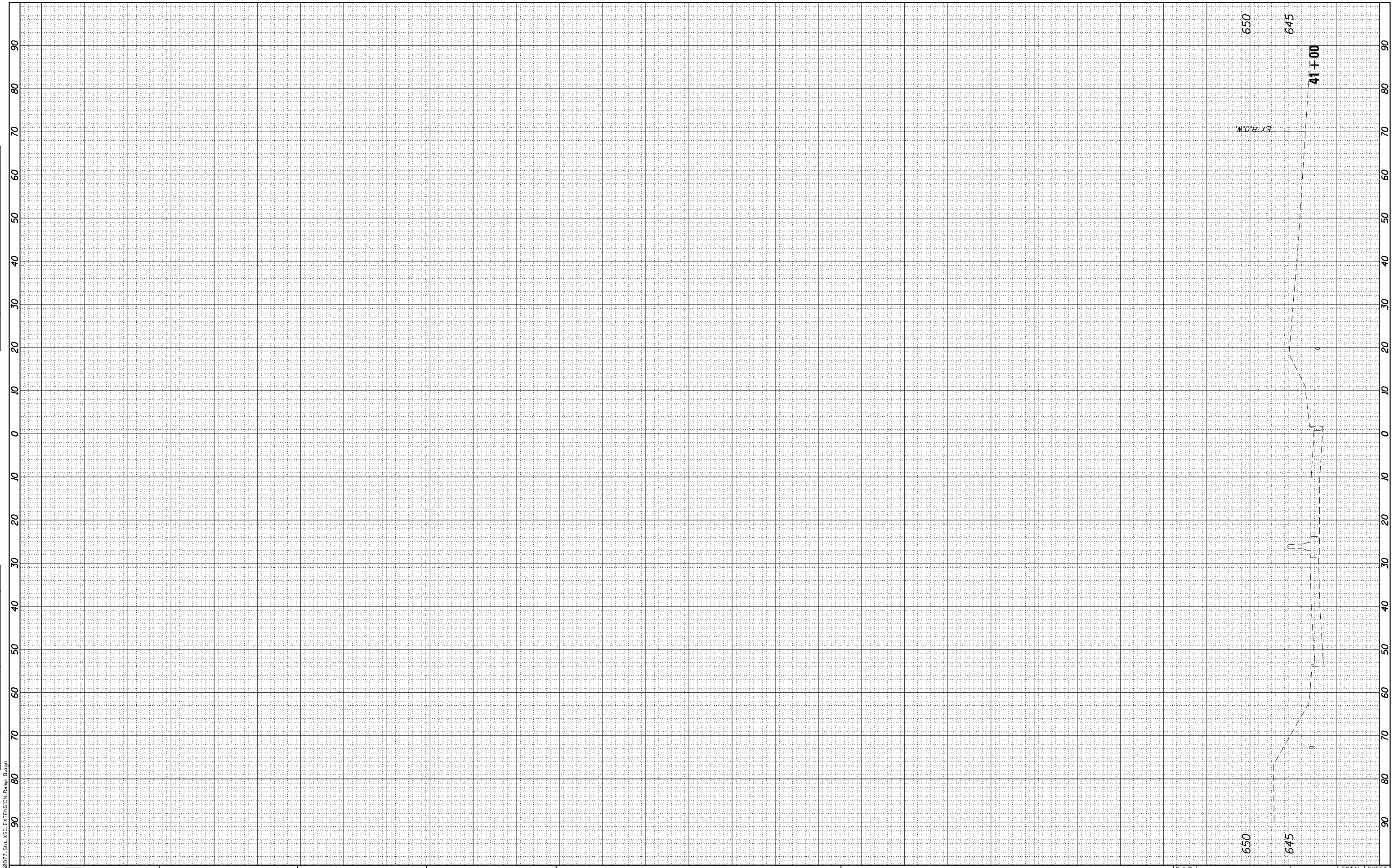
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	144

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

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

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



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	DRAWN - GNR	REVISED -
PLOT SCALE = 20.0000 ' / in.	CHECKED - JWH	REVISED -
PLOT DATE = 1/24/2020	DATE - 01/24/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP B
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 9 OF 9 SHEETS | STA. 41+00 | TO STA. 40+99

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	145
		CONTRACT NO. 60D77		
	ILLINOIS FED. AID PROJECT			

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp D.dgn

Wight

USER NAME = untitled
PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 1/24/2020

DESIGNED - CJF
DRAWN - CJF
CHECKED - JNH
DATE - 01/24/20

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP D
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V SHEET 1 OF 6 SHEETS STA. 50+50 TO STA. 52+99

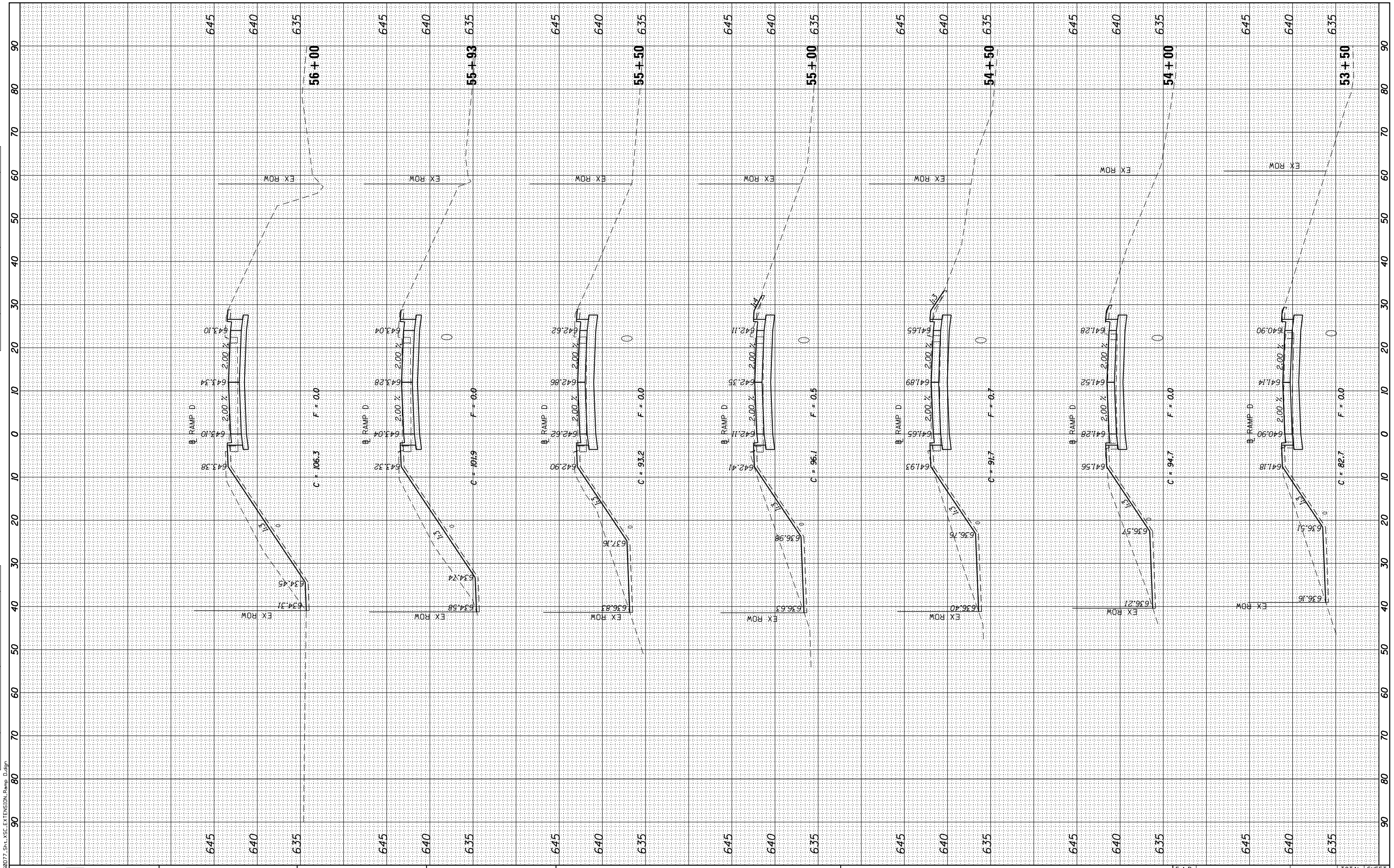
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	146

CONTRACT NO. 60D77

ILLINOIS FED. AID PROJECT

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

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



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PLOT SCALE = 20.0000 ' / in.	CHECKED - JWH	REVISED -	
PLOT DATE = 1/24/2020	DATE - 01/24/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

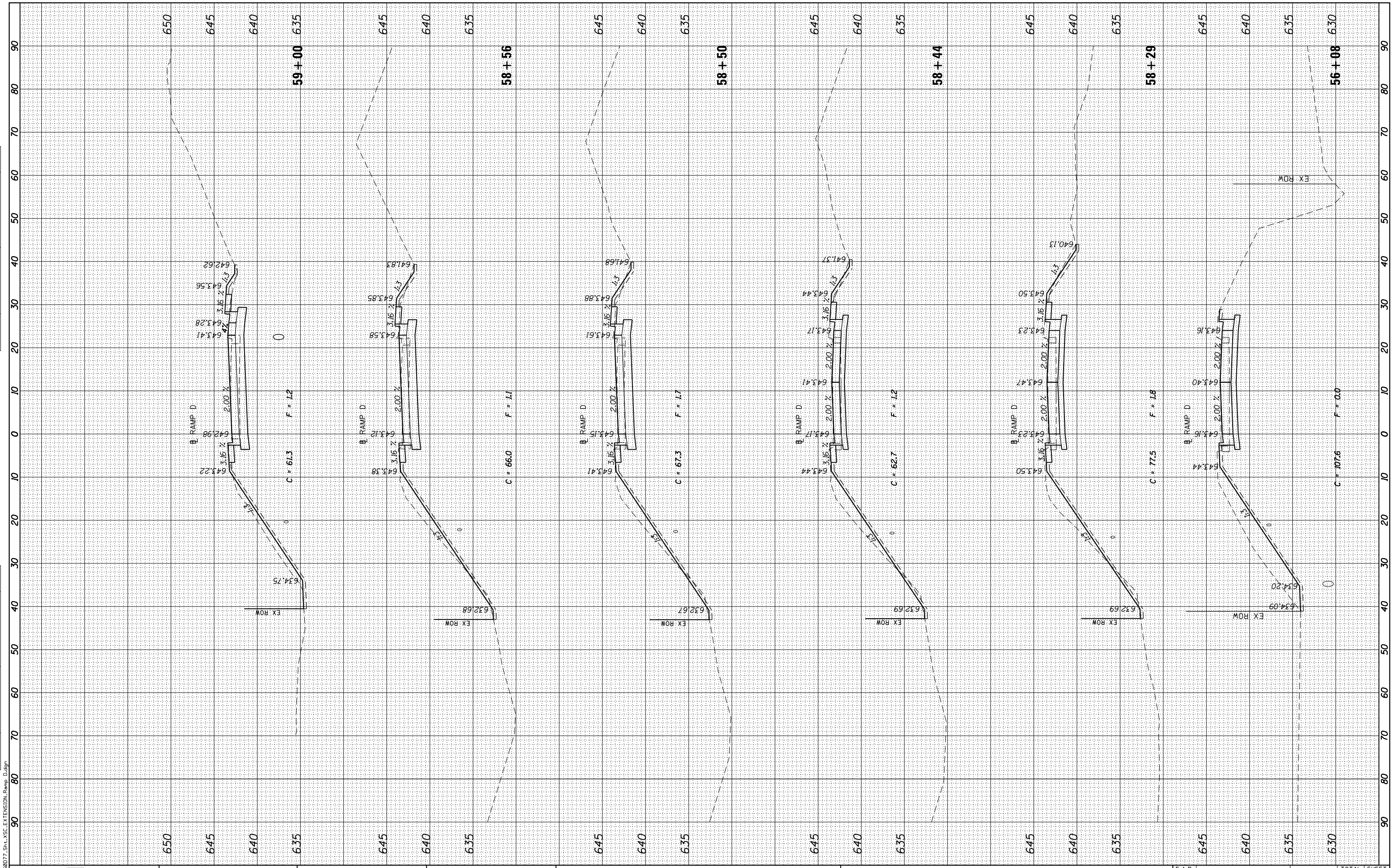
RAMP D
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 2 OF 6 SHEETS | STA. 53+50 | TO STA. 56+00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	147
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

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

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



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PLOT DATE = 1/24/2020	DATE - 01/24/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP D
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V | SHEET 3 OF 6 SHEETS | STA. 56+08 | TO STA. 58+99

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	148
		CONTRACT NO. 60D77		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp D.dgn

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp D.dgn

Wight

USER NAME = untitled
PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 1/24/2020

DESIGNED - QWA
DRAWN - QWA
CHECKED - JWM
DATE - 01/24/2018

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10'H 1"=5'V SHEET 4 OF 6 SHEETS STA. 59+17 TO STA. 60+99

RAMP D
CROSS SECTIONS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	149
		CONTRACT NO. 60D77		
ILLINOIS	FED. AID PROJECT			

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp D.dgn

Wight

USER NAME = untitled

PLOT SCALE = 20.0000 ' / in.

PLOT DATE = 1/24/2020

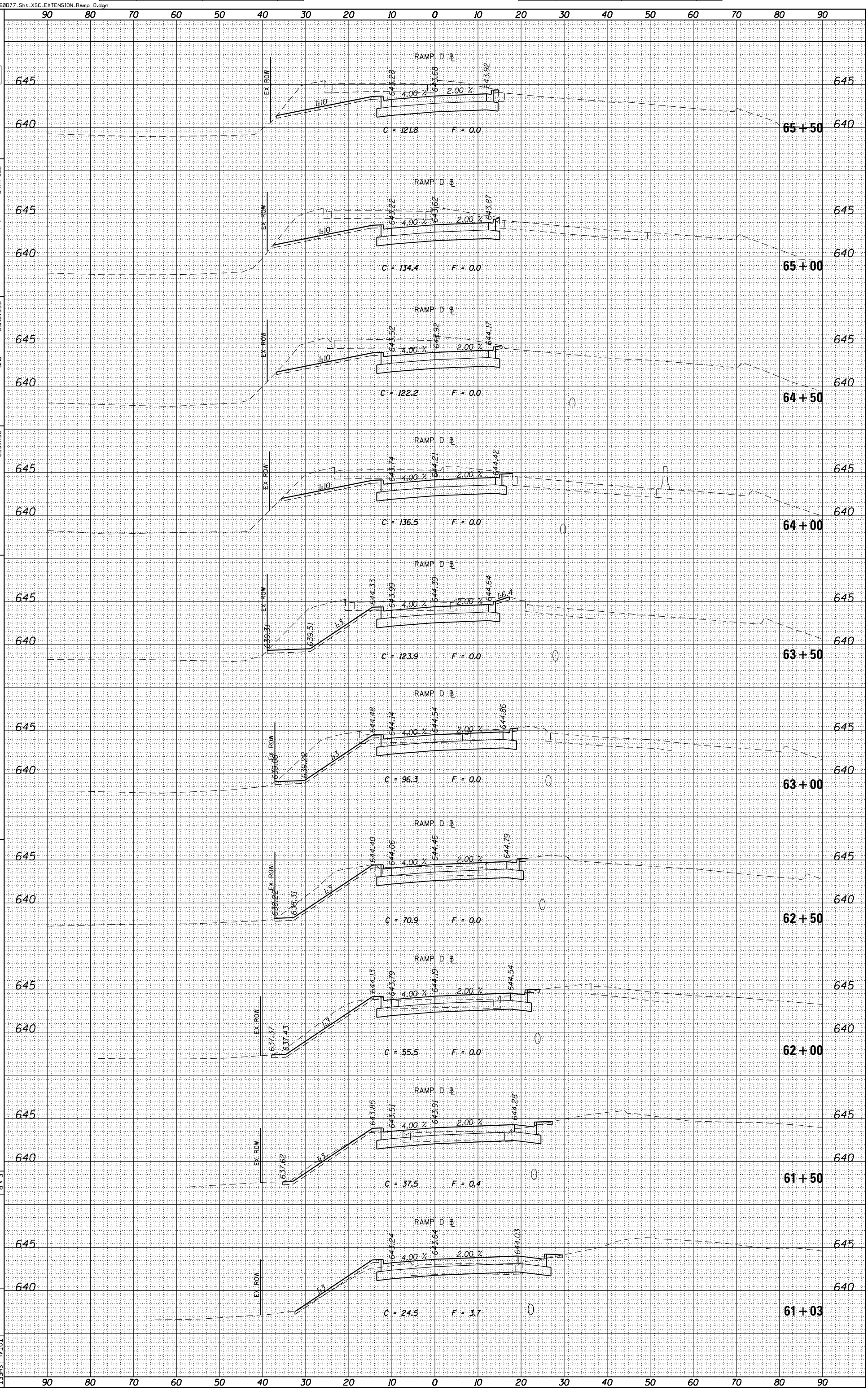
DESIGNED	-	QNR
DRAWN	-	QNR
CHECKED	-	JWH
DATE	-	01/24/2020

REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP D
CROSS SECTIONS

SCALE: 1"=10'H, 1"=5'V | SHEET 5 OF 6 SHEETS | STA. 61+03 | TO STA. 65+50



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	15161-1	COOK	151	150

ILLINOIS FED. AID PROJECT

CONTRACT NO. 60D77

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

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

FILE NAME = 60D77_Sht_XSC_EXTENSION_Ramp D.dgn

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PLOT SCALE = 20.0000 ' / in.
PLOT DATE = 1/24/2020

DESIGNED - QWA
DRAWN - QWA
CHECKED - JMM
DATE - 01/24/2018

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP D
CROSS SECTIONS

SCALE: 1"=10'H 1"=5'V SHEET 6 OF 6 SHEETS STA. 66+00 TO STA. 68+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1516I-1	COOK	151	151
			CONTRACT NO. 60D77	

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