

036

11-09-2018 LETTING ITEM 036

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	1
		ILLINOIS	CONTRACT NO. 62B31	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

D-91-426-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF HAMPSHIRE

FAP 525: US ROUTE 20 OVER HARMONY CREEK (AT GETTY RD) & OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST) (1.2 MILES SOUTH OF I-90)
CULVERT REPLACEMENTS
SECTION 2015-063B
PROJECT: NHPP-K4L5(108)
KANE
C-91-426-15

TRAFFIC DATA

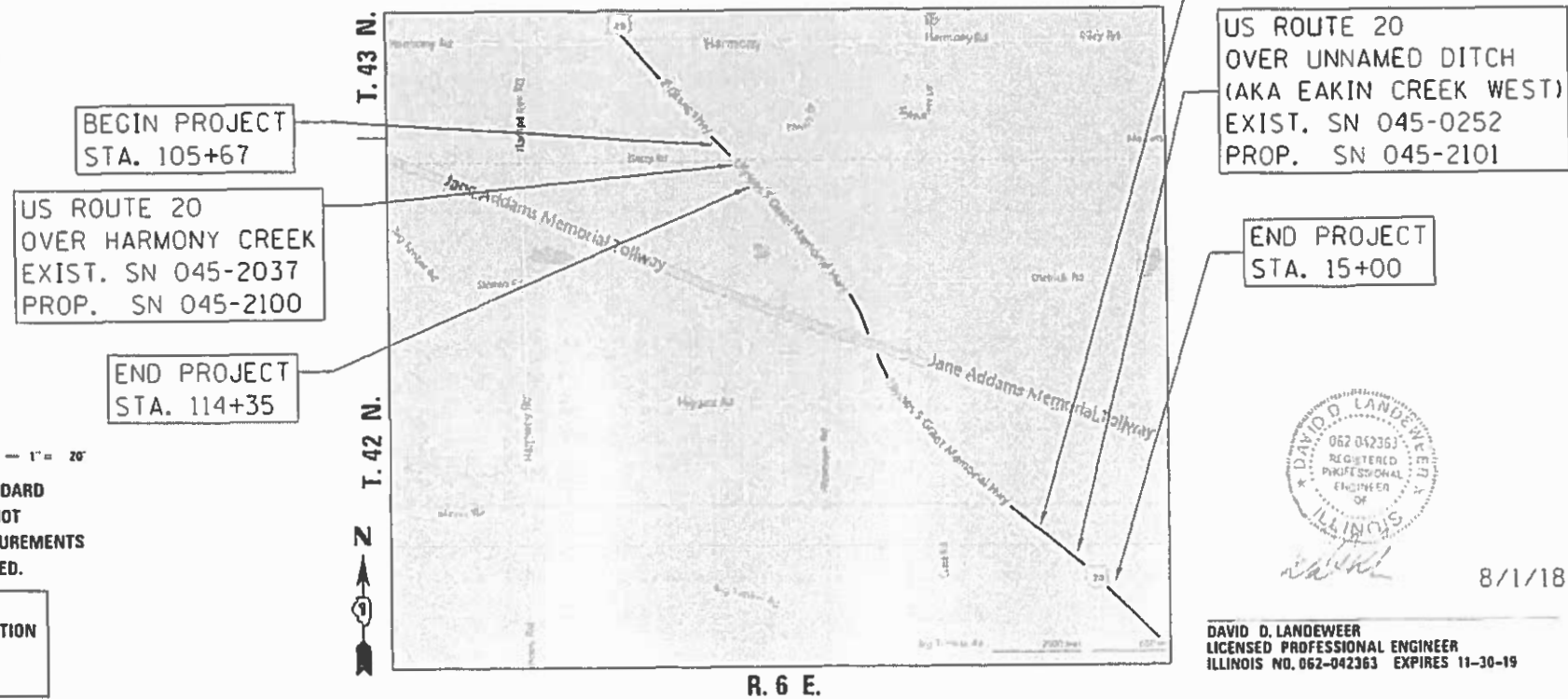
US 20 (GRANT HIGHWAY) OVER HARMONY CREEK:
POSTED SPEED: 45 MPH DESIGN SPEED: 45 MPH
FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL
2017 ADT=9,700; 21,000 (2040)
P.V.=74.7% TRUCKS=25.3%

US 20 (GRANT HIGHWAY) OVER UNNAMED DITCH:
POSTED SPEED: 55 MPH DESIGN SPEED: 55 MPH
FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIAL
2017 ADT=5,050; 6,000 (2040)
P.V.=81.5% TRUCKS=18.5%



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



BEGIN PROJECT STA. 5+00

US ROUTE 20 OVER UNNAMED DITCH (AKA EAKIN CREEK WEST) EXIST. SN 045-0252 PROP. SN 045-2101

END PROJECT STA. 15+00

DAVID O. LANDEWEER
REGISTERED PROFESSIONAL ENGINEER
ILLINOIS
8/1/18

DAVID O. LANDEWEER
LICENSED PROFESSIONAL ENGINEER
ILLINOIS NO. 062-042363 EXPIRES 11-30-19

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 8 2018
Andrew P. [Signature] REGION ONE ENGINEER
Oct 5 2018
[Signature] ENGINEER OF DESIGN AND ENVIRONMENT
Oct 5 2018
David L. [Signature] DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT MANAGER: FAWAD AQUEEL, P.E. (847) 705-4247
PROJECT ENGINEER: RAGHAD ADEIS-DAHMAN, P.E., S.E. (847) 705-4237

CONTRACT NO. 62B31

LOCATION MAP NOT TO SCALE

GROSS & NET PROJECT LENGTH = 1608 LF. = 0.305 MILE



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

1 COVER SHEET
 2 INDEX OF SHEETS, STANDARDS & GENERAL NOTES
 3-11 SUMMARY OF QUANTITIES
 12 EARTHWORK SCHEDULE
 13-16 TYPICAL SECTIONS
 17-18 ALIGNMENT, TIES & BENCHMARKS
 19-20 REMOVAL PLANS
 21-23 PROPOSED PLAN AND PROFILES
 24 GUARDRAIL DETAIL
 25 MAINTENANCE OF TRAFFIC GENERAL NOTES
 26 MAINTENANCE OF TRAFFIC DETOUR PLAN
 27-28 MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
 29-35 MAINTENANCE OF TRAFFIC PLANS
 36-37 RIGHT-OF-WAY SHEETS
 38-39 EROSION & SEDIMENT CONTROL PLANS
 40-41 PAVEMENT MARKING, SIGNING & LANDSCAPING PLANS
 42-45 TEMPORARY TRAFFIC SIGNAL & LIGHTING PLANS
 46-68 STRUCTURAL PLANS
 69 DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5m) (BD-01)
 70 BUTT JOINTS AND HMA TAPER (BD-32)
 71 DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.
 72 BENCHING DETAIL FOR EMBANKMENT WIDENING (BD-51)
 73 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
 74 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11)
 75 DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)
 76 DETOUR SIGNING FOR CLOSING STATE HIGHWAYS (TC-21)
 77 ARTERIAL ROAD INFORMATION SIGN (TC-22)
 78 DRIVEWAY ENTRANCE (TC-26)
 79-81 TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING (BE-805)
 82-87 ROADWAY CROSS SECTIONS

GENERAL NOTES

- SOIL EROSION AND SEDIMENTATION CONTROL PRACTICES AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF IDOT STANDARD SPECIFICATIONS AND ALL REVISIONS THERETO AND IN ACCORDANCE WITH THE DETAILS ON THE PLANS.
- THE RESIDENT ENGINEER SHALL CONTACT THE AREA TRAFFIC FIELD ENGINEER, DON CHIARUGI, AT DON.CHIARUGI@ILLINOIS.GOV A MINIMUM OF TWO WEEKS PRIOR TO PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) 48 HOURS PRIOR TO ANY WORK IN THE RIGHT OF WAY OR EASEMENTS TO LOCATE UTILITIES, AND CONTACT THE OWNER'S REPRESENTATIVE SHOULD PUBLIC UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL TAKE CARE TO PROTECT ALL SIGNS ALONG THE ROUTE OF CONSTRUCTION. SIGNS SHALL BE REMOVED IF THEY ARE IN CONFLICT WITH PROPOSED WORK, AND APPROVED BY ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING DAMAGE TO A SIGN PRIOR TO REMOVAL. THE CONTRACTOR SHALL REPLACE ALL SIGNS AND POSTS DAMAGED DURING REMOVAL. THE COST OF ALL MATERIALS REQUIRED AND ALL LABOR NECESSARY TO COMPLY WITH THE RELOCATION OF SIGNS SHALL BE INCLUDED IN THE CONTRACT WITHOUT ANY EXTRA COMPENSATION ALLOWED TO THE CONTRACTOR ACCORDING TO ART. 107.25. UNLESS MARKED ON PLANS.
- THE THICKNESS OF HMA 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 HMA IS PLACED.
- ALL ELEVATIONS IN THE PLANS ARE BASED UPON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS, AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB & GUTTER AND MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
- WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1 1/2" INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS WITH WRITTEN APPROVAL FROM THE ENGINEER. A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 V:H.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW OR WASTE/USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) and USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR WILL NEED TO SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE. GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION II.G.1 AND 2 of the SWPPP. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION, SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC DAMAGE TO THE REMAINING TREE STRUCTURE. ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE.
- PRUNE TREE LIMBS THAT MIGHT BE DAMAGED BY EQUIPMENT OPERATIONS AT LEAST ONE WEEK PRIOR TO THE START OF CONSTRUCTION BY A CERTIFIED ARBORIST. ANY TREE LIMBS THAT ARE BROKEN BY CONSTRUCTION EQUIPMENT AFTER THE INITIAL PRUNING MUST BE PRUNED CORRECTLY WITHIN 72 HOURS.
- SUPPLEMENTAL WATERING IS SPECIFIED FOR TREES AND SHRUBS THAT WILL BE DISTURBED BY CONSTRUCTION BUT WILL REMAIN. NOTE THAT WATERING SHOULD BEGIN IMMEDIATELY AFTER ROOT PRUNING, TOP PRUNING OR OTHER CONSTRUCTION DISTURBANCE.
- 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 AGGREGATE SUBGRADE IMPROVEMENT (CU YD) WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE AND/OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 (04/01/2016) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE CURRENT 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.
- THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A "TREE PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOBSITE. NO WORK IS TO BE PERFORMED (OTHER THAN ROOT PRUNING), MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE". REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
- ALL TREE PROTECTION, TREE REMOVAL, PRUNING, AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN ANY AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- A COPY OF THE APPROVED NPDES PERMIT AND THE EROSION CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
- ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR SHOWN IN THE PLANS SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.
- THE FINISHED EARTHWORK SHALL HAVE A VEGETATION-SUSTAINING SOIL COVERING THE TOP SIX INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION-SUSTAINING SOIL REQUIRED WILL BE PAID FOR SEPARATELY AS TOPSOIL FURNISH AND PLACE, 6".
- ANY EXISTING PAVEMENT MARKINGS IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND VILLAGE OF HAMPSHIRE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. MEMBERS OF J.U.L.I.E. KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

COMMONWEALTH EDISON CO.
 ATTN: MARK TULACH
 1919 SWIFT ROAD
 OAK BROOK, IL 60523
 630-424-5704

NICOR GAS
 ATTN: CONSTANCE LANE, PE
 1844 FERRY ROAD
 NAPERVILLE, IL 60563
 630-388-3830

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 001001-02 AREAS OF REINFORCEMENT BARS
 001006 DECIMAL OF AN INCH AND OF A FOOT
 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 482001-02 HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
 482011-03 HMA SHLD. STRIPS/SHLDS. WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
 515001-03 NAME PLATE FOR BRIDGES
 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION
 601001-05 PIPE UNDERDRAINS
 601101-02 CONCRETE HEADWALL FOR PIPE UNDERDRAINS
 630001-12 STEEL PLATE BEAM GUARDRAIL
 630011 WEAK POST GUARDRAIL ATTACHED TO CULVERT
 630301-08 SHOULDER WIDENING FOR TYPE I (SPECIAL) GUARDRAIL TERMINALS
 631011-10 TRAFFIC BARRIER TERMINAL, TYPE 2
 631032-09 TRAFFIC BARRIER TERMINAL, TYPE 6A
 642001-02 SHOULDER RUMBLE STRIPS, 16 IN.
 665001-02 WOVEN WIRE FENCE
 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5M) AWAY
 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600MM) FROM PAVEMENT EDGE
 701011-04 OFF-ROAD OPERATIONS, 2L, 2W, DAY ONLY
 701201-04 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45MPH
 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
 701306-04 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
 701321-17 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH
 701901-07 TRAFFIC CONTROL DEVICES
 704001-08 TEMPORARY CONCRETE BARRIER
 720001-01 SIGN PANEL MOUNTING DETAILS
 720006-04 SIGN PANEL ERECTION DETAILS
 720011-01 METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
 725001-01 OBJECT AND TERMINAL MARKERS
 729001-01 APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
 782006 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

- THIS CONTRACT REQUIRES A 404 PERMIT.
- THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXEL TRUCK.
- ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENTS IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT CONTRACTOR EXPENSE.
- 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 UNDERDRAINS CONNECTIONS TO DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE COST OF THE PIPE UNDERDRAINS.
- A FULL DEPTH SAWCUT OF REMOVAL ITEMS AS NOTED ON THE PLANS, SPECIFIED IN THE STANDARD SPECIFICATIONS, OR REQUIRED BY THE RESIDENT ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEM BEING REMOVED.

COMMITMENTS:

- NO INSTREAM WORK IN HARMONY CREEK OR THE UNNAMED INTERMITTENT DITCH (AKA EAKIN CREEK WEST) (1.2 MI SOUTH OF I-90 DURING SPawning SEASON OF THE IOWA DARTER (ETHEOSTOMA EXILE) (APRIL 20-JULY 30).

M:_2012\12-154-009 US 20 Harmony Creek\Design\Transportation\CADD\CADD\Shts\GenNotes_01.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
 OVER HARMONY CREEK & UNNAMED DITCH
 GENERAL NOTES**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	2
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

• SPECIALTY ITEM

URBAN

NHPP FUNDING		
ROADWAY	BRIDGE	BRIDGE
0004	0004	0004
	SN 045-2100	SN 045-2101

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	182	182		
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	330	330		
	20101000	TEMPORARY FENCE	FOOT	97	97		
	20101100	TREE TRUNK PROTECTION	EACH	10	10		
	20101200	TREE ROOT PRUNING	EACH	10	10		
	20101700	SUPPLEMENTAL WATERING	UNIT	1.0	1.0		
	20200100	EARTH EXCAVATION	CU YD	395	395		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	2582	2582		
	20300100	CHANNEL EXCAVATION	CU YD	1760	1760		
	20400800	FURNISHED EXCAVATION	CU YD	3760	3760		
	20800150	TRENCH BACKFILL	CU YD	8	8		
	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	8424	8424		
	25000210	SEEDING, CLASS 2A	ACRE	1.00	1.00		
	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	151	151		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 20 OVER HARMONY CREEK & UNNAMED DITCH SUMMARY OF QUANTITIES			
SCALE:	SHEET 1	OF 9 SHEETS	STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 3
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B31	

• SPECIALTY ITEM

URBAN

NHPP FUNDING		
ROADWAY	BRIDGE	BRIDGE
0004	0004	0004
	SN 045-2100	SN 045-2101

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	151	151		
	25000750	MOWING	ACRE	8.75	8.75		
	25100125	MULCH, METHOD 3	ACRE	1.75	1.75		
	25100630	EROSION CONTROL BLANKET	SQ YD	8119	8119		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	346	346		
	28000305	TEMPORARY DITCH CHECKS	FOOT	384	384		
	28000400	PERIMETER EROSION BARRIER	FOOT	3737	3737		
	28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	3839	3839		
	28100107	STONE RIPRAP, CLASS A4	SQ YD	267		178	89
	28200200	FILTER FABRIC	SQ YD	267		178	89
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	166	166		
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	6076	6076		
	31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	727	727		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn



USER NAME = JuehS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 4
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

• SPECIALTY ITEM

URBAN

NHPP FUNDING		
ROADWAY	BRIDGE	BRIDGE
0004	0004	0004
	SN 045-2100	SN 045-2101

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	31102000	SUBBASE GRANULAR MATERIAL, TYPE C	CU YD	143	143		
	35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	305	305		
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	77	77		
	40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	8	8		
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	15518	15518		
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3171	3171		
	40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	13	13		
	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	47	47		
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	69	69		
	40701911	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 11 1/2"	SQ YD	3043	3043		
	44000100	PAVEMENT REMOVAL	SQ YD	4013	4013		
	44004250	PAVED SHOULDER REMOVAL	SQ YD	295	295		
	48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	807	807		
	48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	3011	3011		

M:\2012\12-15-14-881 US 20 Harmony Creek Design\Transportation\CA00\CA00 Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 5
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B31	

• SPECIALTY ITEM

URBAN

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NHPP FUNDING		
					ROADWAY	BRIDGE	BRIDGE
					0004	0004	0004
					SN 045-2100	SN 045-2101	
					80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	378	378		
	50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1		1	
	50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1			1
	50102400	CONCRETE REMOVAL	CU YD	3.9	3.9		
	50105220	PIPE CULVERT REMOVAL	FOOT	134	78	56	
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	4.8			4.8
	50800105	REINFORCEMENT BARS	POUND	80830		48690	32140
	50800515	BAR SPLICERS	EACH	315		192	123
	50900200	STEEL RAILING, TYPE 2399	FOOT	82		82	
	51500100	NAME PLATES	EACH	2		1	1
	52200010	TEMPORARY SHEET PILING	SQ FT	579			579
	52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	667		667	
	54003000	CONCRETE BOX CULVERTS	CU YD	396.1		267.3	128.8
	54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	3	3		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 6
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

• SPECIALTY ITEM

URBAN

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NHPP FUNDING		
					ROADWAY	BRIDGE	BRIDGE
					0004	0004	0004
					SN 045-2100	SN 045-2101	
					80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2	2		
	542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	56	56		
	542A0241	PIPE CULVERTS, CLASS A, TYPE 1 36"	FOOT	54	54		
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2	2		
	60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	600	600		
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1175.00	1175.00		
*	63000053	WEAK POST GUARDRAIL ATTACHED TO CULVERT CASE IV	FOOT	69			69
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	1	1		
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	4		
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	7	7		
	63200310	GUARDRAIL REMOVAL	FOOT	1222	1222		
	64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	3217	3217		
	64301090	ATTENUATOR BASE	SQ YD	111	111		
	66500105	WOVEN WIRE FENCE, 4'	FOOT	120	120		

M:\2012\12-15-14-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 7
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

• SPECIALTY ITEM

URBAN

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NHPP FUNDING		
					ROADWAY	BRIDGE	BRIDGE
					0004	0004	0004
					SN 045-2100	SN 045-2101	
					80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	66501600	WOVEN WIRE GATES, 4' X 16' DOUBLE	EACH	1	1		
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	1335	1335		
*	66900450	SPECIAL WASTE PLANS AND REPORTS	LSUM	1	1		
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	4	4		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	8		
	67100100	MOBILIZATION	LSUM	1	1		
	70106700	TEMPORARY RUMBLE STRIPS	EACH	12	12		
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	360	360		
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	120	120		
	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	10977	10977		
	70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	48	48		
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1600	1600		
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1875	1875		
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4	4		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CA00\CA00 Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 6 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 8
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B31	

* SPECIALTY ITEM

URBAN

NHPP FUNDING		
ROADWAY	BRIDGE	BRIDGE
0004	0004	0004
	SN 045-2100	SN 045-2101

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	6	6		
*	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	8	8		
*	72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	11	11		
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	7	7		
	72900100	METAL POST - TYPE A	FOOT	72	72		
	72900200	METAL POST - TYPE B	FOOT	12	12		
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	8303	8303		
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	23	23		
*	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	10977	10977		
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	28	28		
	78100200	TEMPORARY RAISED REFLECTIVE PAVEMENT MARKER	EACH	76	76		
*	78100300	REPLACEMENT REFLECTOR	EACH	50	50		
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	24	24		
*	78200006	GUARDRAIL REFLECTORS, TYPE B	EACH	24	24		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
SUMMARY OF QUANTITIES**

SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 9
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B31	

* SPECIALTY ITEM

URBAN

SI	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	NHPP FUNDING		
					ROADWAY	BRIDGE	BRIDGE
					0004	0004	0004
					SN 045-2100	SN 045-2101	
					80% FEDERAL 20% STATE	80% FEDERAL 20% STATE	80% FEDERAL 20% STATE
*	78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	75	75		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	28	28		
	89000050	TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	2	2		
	K0013060	PERENNIAL PLANTS, SEDGE MEADOW TYPE, 2" DIAMETER BY 4" DEEP PLUG	UNIT	5.8	5.8		
	K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	LSUM	1	1		
	X0326276	TEMPORARY LIGHTING FOR SINGLE LANE STAGING	LSUM	1	1		
	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2138	2138		
	X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	3655	3655		
	X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	401		254	147
	X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	1.00	1.00		
	X2501820	SEEDING, CLASS 5 (MODIFIED)	ACRE	1.00	1.00		
	X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	1	1		
	X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1		
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	229	229		

M:\2012\12-15-15-881 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh-1-500.dgn

	USER NAME = JuanS	DESIGNED - _____	REVISED - _____	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 20 OVER HARMONY CREEK & UNNAMED DITCH SUMMARY OF QUANTITIES	F.A. RTE. = 525/345	SECTION = 2015-063B	COUNTY = KANE/MCHENRY	TOTAL SHEETS = 87	SHEET NO. = 10
	PLOT SCALE = _____	CHECKED - _____	REVISED - _____			SCALE: _____	SHEET 8 OF 9 SHEETS	STA. _____ TO STA. _____	ILLINOIS FED. AID PROJECT	
	PLOT DATE = 8/17/2018	DATE - _____	REVISED - _____							

U.S. ROUTE 20 OVER HARMONY CREEK & UNNAMED DITCH EARTHWORK SCHEDULE

SUMMARY OF EARTHWORK QUANTITIES - US-20 (HARMONY CREEK AND UNNAMED DITCH)						
STAGE	EARTH EXCAVATION (CU YD)	EMBANKMENT (CU YD)	UNSUITABLE MATERIAL (CU YD)	EARTH EXCAVATION ADJUST FOR SHRINKAGE (CU YD)	FURNISH EXCAVATION (CU YD)	CHANNEL EXCAVATION (CU YD)
	A	B	C	D=[85%]A	E = D - B	F
TEMP. AIRPORT DRIVE			68			
HARMONY CREEK STAGE 2	287	965	910	244	-721	1418
UNNAMED DITCH	106	3127	1536	90	-3037	339
TOTALS	393	4092	2514	334	-3758	1757

LEGEND

COLUMNS A, B AND C: AREAS FROM CROSS SECTIONS.

COLUMN D: = A X 0.85

EARTH EXCAVATION THAT IS TO BE USED AS FILL MATERIAL IN THE EMBANKMENT.

A SHRINKAGE FACTOR OF 15% IS USED.

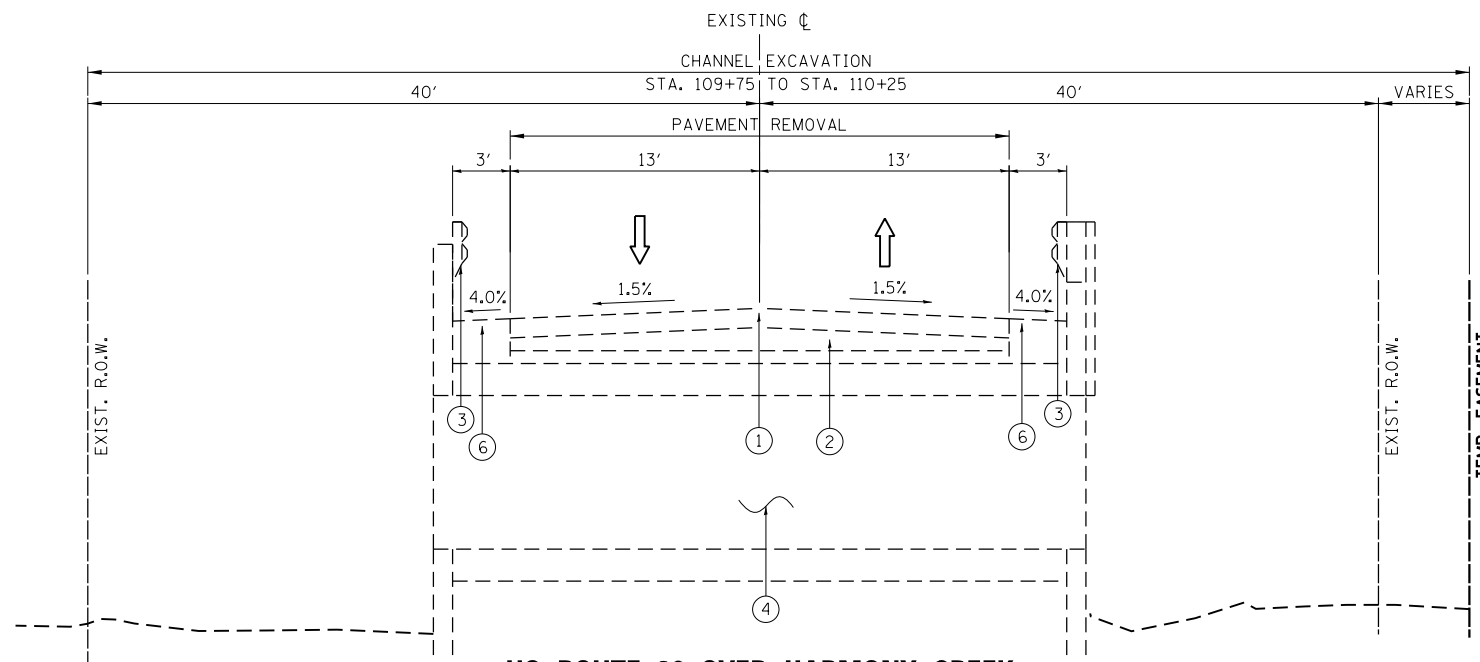
COLUMN E: = D - B

POSITIVE QUANTITY = EXTRA EXCAVATION TO BE WASTED.

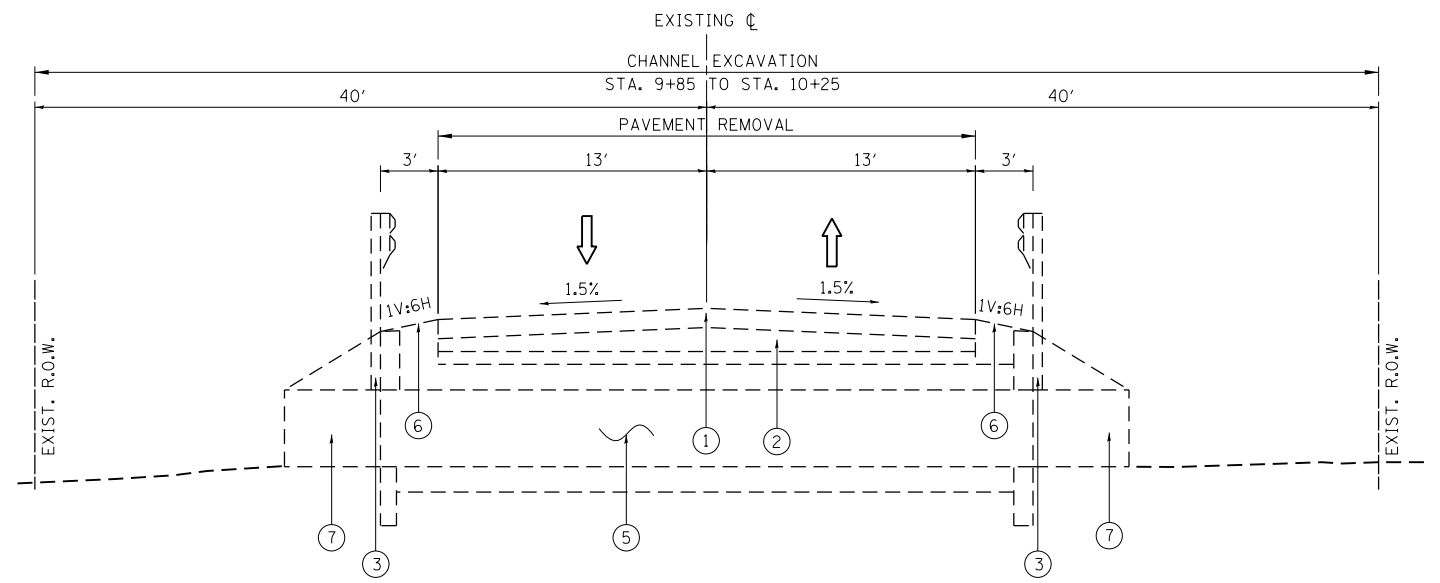
NEGATIVE QUANTITY = FURNISHED EXCAVATION NEEDED.

COLUMN F: AREA FROM CROSS SECTIONS MULTIPLIED BY WIDTH OF CHANNEL.

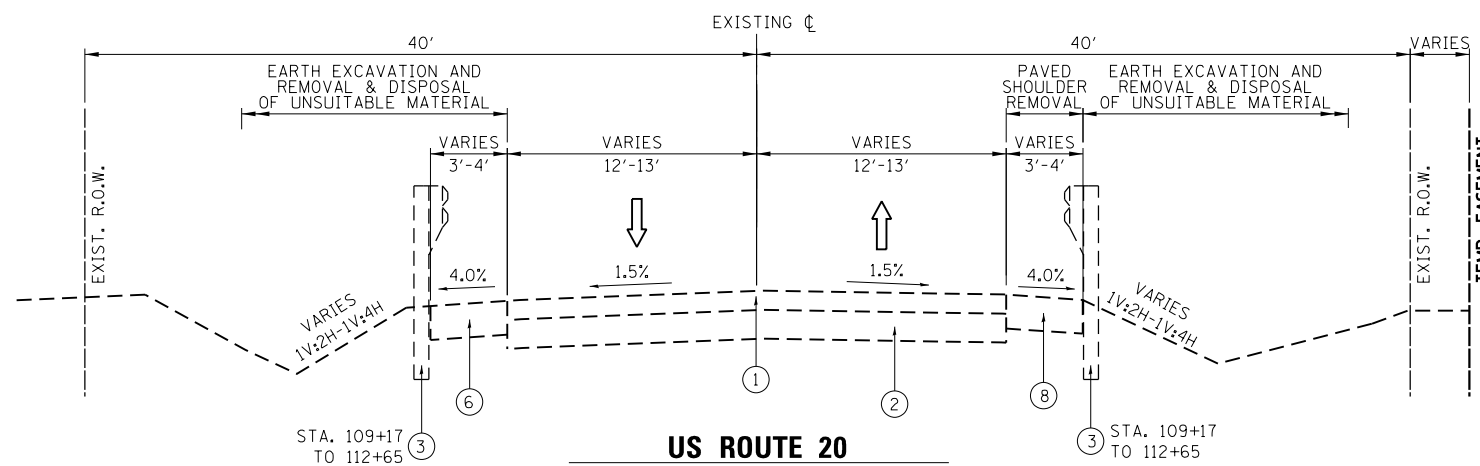
M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31.sht.Earthwork_Schedule-01.dgn



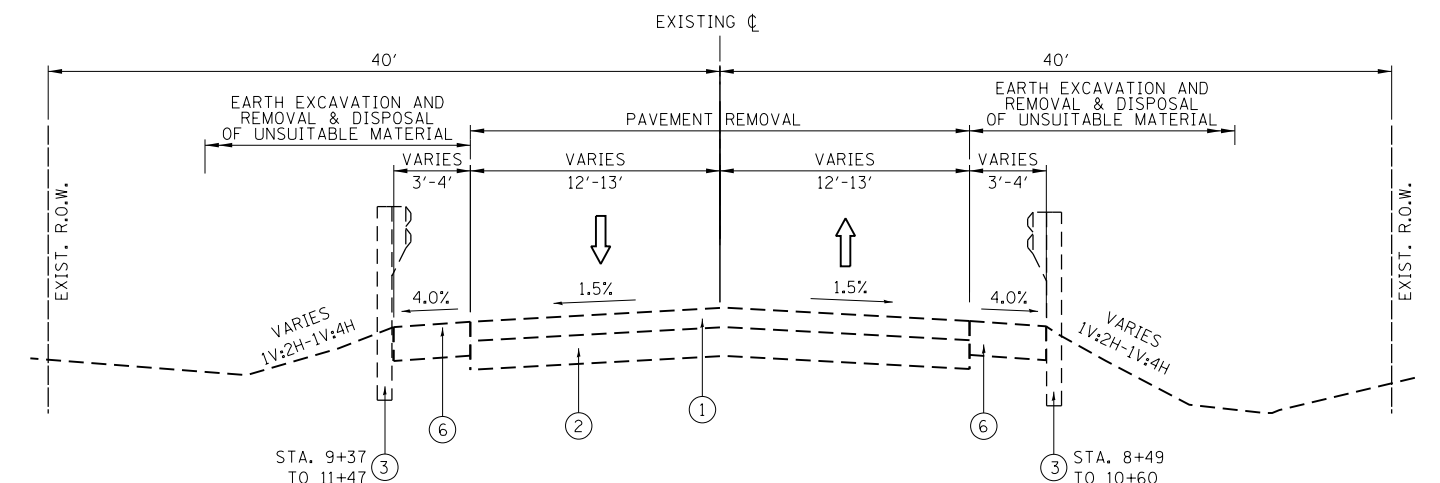
**US ROUTE 20 OVER HARMONY CREEK
EXISTING TYPICAL SECTION
12' x 4' CULVERT (STA. 110+00.00)**



**US ROUTE 20 OVER EAKIN CREEK
EXISTING TYPICAL SECTION
AT 6' x 2' CULVERT (STA. 10+00.00)**



**US ROUTE 20
EXISTING TYPICAL SECTION
STA. 105+67 TO STA. 115+00**



**US ROUTE 20 OVER EAKIN CREEK
EXISTING TYPICAL SECTION
STA. 5+00 TO STA. 15+00**

LEGEND

1. EXISTING HMA PAVEMENT, 6" (+/-)
2. EXISTING PCC BASE COURSE, 8" (+/-)
3. EXISTING GUARDRAIL
4. EXISTING 12'X4' REINFORCED CONCRETE BOX CULVERT
5. EXISTING 6'X2' CONCRETE BOX CULVERT
6. EXISTING AGGREGATE SHOULDER
7. EXISTING ELLIPTICAL CORRUGATED PIPE CULVERT
8. EXISTING PAVED SHOULDER

M:\2012\12-15-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr.txd



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

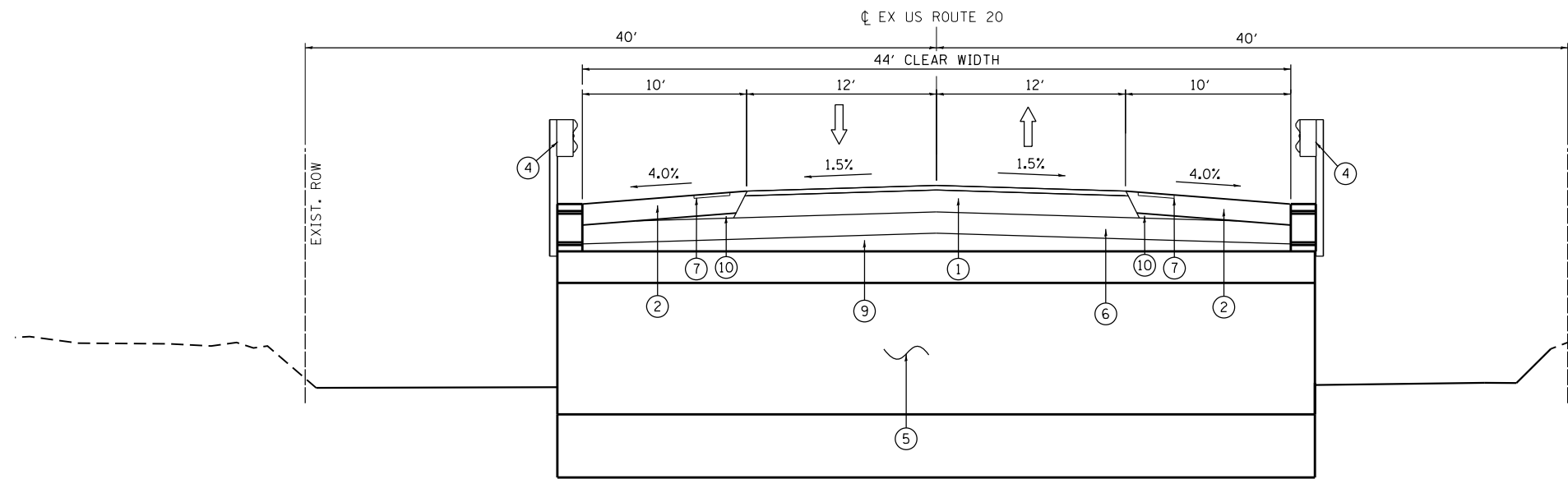
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 20 OVER HARMONY CREEK & UNNAMED DITCH EXISTING TYPICAL SECTIONS			
SCALE:	SHEET 1	OF 4 SHEETS	STA. TO STA.

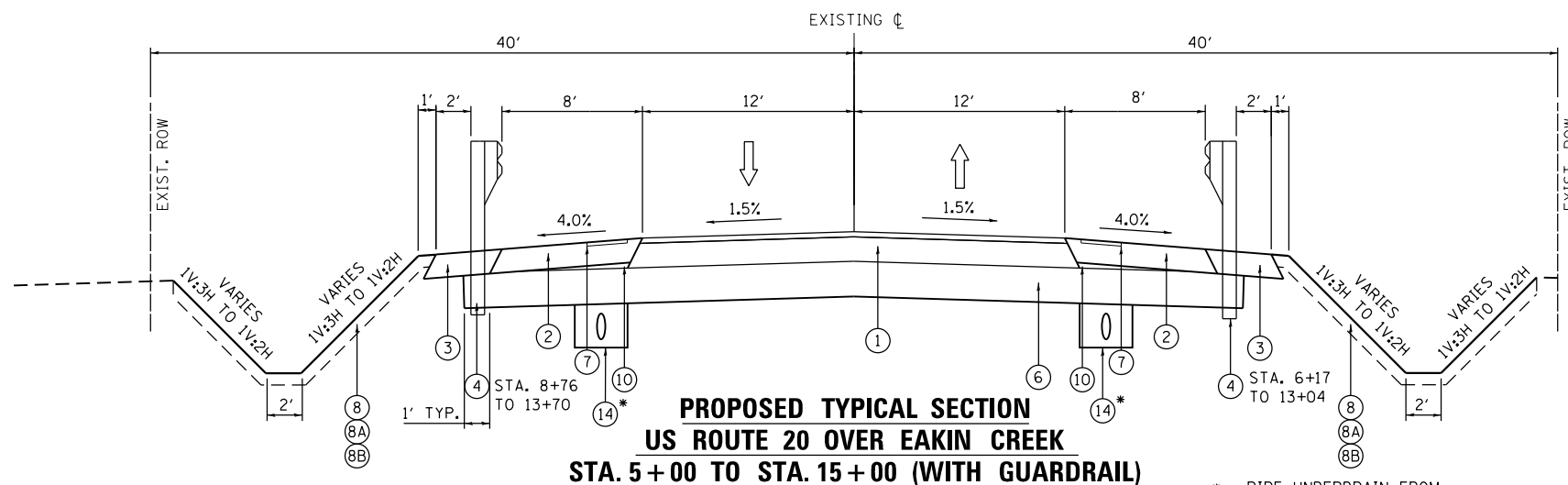
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	13
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

LEGEND

1. HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 11 1/2"
2. HMA SHOULDER, 8"
- 2A. HMA SHOULDER, 10"
3. AGGREGATE SHOULDERS, TYPE B, 10"
4. STEEL PLATE BEAM GUARDRAIL
5. 2 CELL 12'X4' REINFORCED CONCRETE BOX CULVERT
6. 12" AGGREGATE SUBGRADE IMPROVEMENT
7. RUMBLE STRIP, 16"
8. TOPSOIL FURNISH AND PLACE, 6"
- 8A. PROPOSED SEEDING (SEE LANDSCAPING PLAN FOR TYPE & LOCATION)
- 8B. EROSION CONTROL BLANKET
9. AGGREGATE SUBGRADE IMPROVEMENT
10. SUBBASE GRANULAR MATERIAL, TYPE B
11. SAWCUT (INCLUDED IN COST OF HMA SHOULDERS)
12. HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
13. HOT-MIX ASPHALT BASE COURSE, 8"
14. PIPE UNDERDRAINS (SPECIAL), 4"
15. LEVELING BINDER (MM), N70, (IL-9.5mm)
16. TEMPORARY PAVEMENT
17. SUBBASE GRANULAR MATERIAL, TYPE B, 4"
18. 3 CELL 12'X7' REINFORCED CONCRETE BOX CULVERT



**PROPOSED TYPICAL SECTION
US ROUTE 20 OVER EAKIN CREEK
4.2' RISE X 21' SPAN ARCH CULVERT
STA. 10 + 05**



**PROPOSED TYPICAL SECTION
US ROUTE 20 OVER EAKIN CREEK
STA. 5 + 00 TO STA. 15 + 00 (WITH GUARDRAIL)**

AGGREGATE SHOULDER
FROM STA. 8+25.93 TO STA. 9+89.43
FROM STA. 10+20.50 TO STA. 13+89.77

* - PIPE UNDERDRAIN FROM
STA. 10+50 TO STA. 13+50
AGGREGATE SHOULDER
FROM STA. 5+96.86 TO STA. 9+89.25
FROM STA. 10+20.81 TO STA. 13+23.91

NOTE:
TEMPORARY PAVEMENT SHALL CONSIST OF THE FOLLOWING:
OPTION 1: 8" HMA BINDER COURSE, IL-19.0, N70,
2" HMA SURFACE COURSE, MIX "D", N 70
OPTION 2: 8" PCC PAVEMENT

NOTE:
PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF
CLASS PV CONCRETE MEETING THE REQUIREMENTS OF
ART. 1020 OF THE STANDARD SPECIFICATIONS. TEMPORARY
PCC PAVEMENT DOES NOT REQUIRE DOWEL BARS.

ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER 4" SUBBASE GRANULAR MATERIAL

PROPOSED TEMPORARY PAVEMENT TYPICAL SECTION

HOT-MIX ASPHALT REQUIREMENTS

APPLICATION	MIXTURE TYPE	AIR VOIDS @ NDES	OMP
GETTY ROAD RESURFACING	2" HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm)	4% @ 50 GYR	QC/OA
	3/4" LEVELING BINDER (MM), N70 (IL-9.5mm)	4% @ 70 GYR	QC/OA
ACCESS ROAD AND FIELD ENTRANCE	2" HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm)	4% @ 50 GYR	QC/OA
FULL DEPTH PAVEMENT	2" POLYMERIZED HMA SURFACE COURSE, MIX "E", N70 (IL-9.5mm)	4% @ 70 GYR	QC/OA
	2 1/4" POLYMERIZED HMA BINDER COURSE, IL-19.0, N90	4% @ 90 GYR	QC/OA
	7 1/4" HMA BASE COURSE, IL-19.0, N90	4% @ 90 GYR	QCP
TEMPORARY PAVEMENT	2" HMA SURFACE COURSE, MIX "D", N70 (IL 9.5mm)	4% @ 70 GYR	QC/OA
	8" HMA BINDER COURSE, IL-19.0, N70	4% @ 70 GYR	QC/OA
DRIVEWAYS	2" HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm)	4% @ 50 GYR	QC/OA
	8" HMA BASE COURSE (HMA BINDER IL-19mm)	4% @ 50 GYR	QC/OA
HMA SHOULDER, 8"	6" HMA SHOULDER (HMA BINDER IL-19mm)	4% @ 70 GYR	QC/OA
	2" HMA SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR	QC/OA
HMA SHOULDER, 10"	8" HMA SHOULDER (HMA BINDER IL-19mm)	4% @ 70 GYR	QC/OA
	2" HMA SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR	QC/OA

OMP DESIGNATION: QUALITY CONTROL / QUALITY ASSURANCE (QC/OA); QUALITY CONTROL FOR PERFORMANCE (QCP)

HMA NOTES:

1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112LBS/SOYD/IN.
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
3. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS
4. QUALITY MANAGEMENT PROGRAM (OMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE
5. FOR HMA FULL DEPTH "AC TYPE", SEE SPECIAL PROVISIONS.

M:\2012\12-15-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh1_Typ_02.dgn



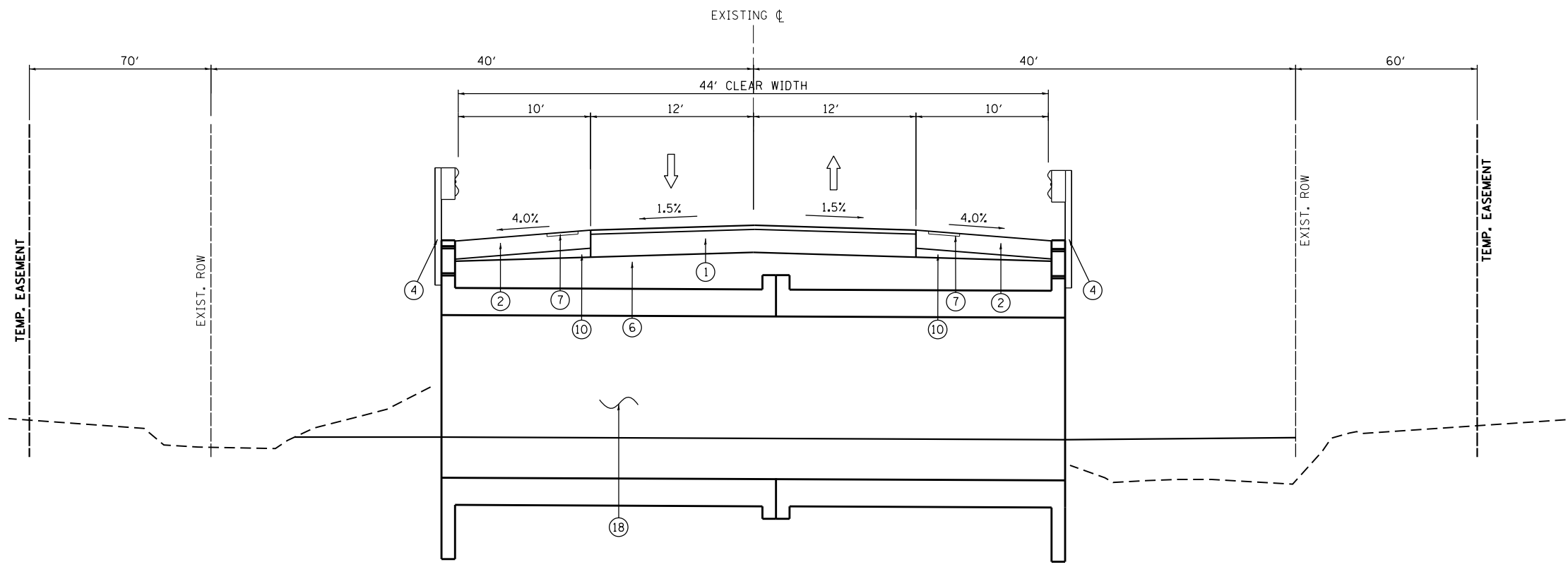
USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
PROPOSED TYPICAL SECTIONS**

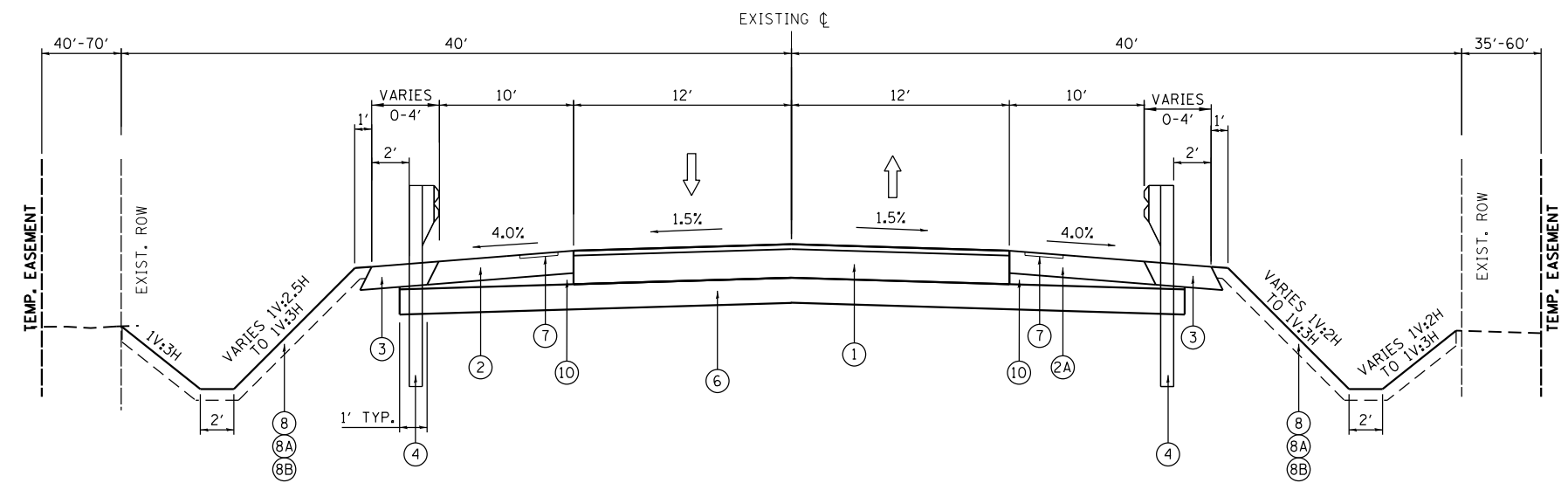
SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 14
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62B31	



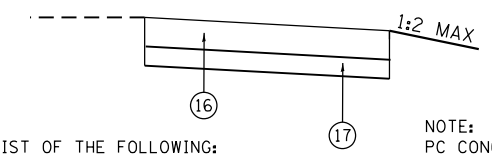
US ROUTE 20 OVER HARMONY CREEK (AT GETTY ROAD)
PROPOSED TYPICAL SECTION
(3) - 12'W X 7'H CULVERTS (STA. 110 + 00.00)

- LEGEND**
1. HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 11 1/2"
 2. HMA SHOULDER, 8"
 - 2A. HMA SHOULDER, 10"
 3. AGGREGATE SHOULDERS, TYPE B, 10"
 4. STEEL PLATE BEAM GUARDRAIL
 5. 2 CELL 12'X4' REINFORCED CONCRETE BOX CULVERT
 6. 12" AGGREGATE SUBGRADE IMPROVEMENT
 7. RUMBLE STRIP, 16"
 8. TOPSOIL FURNISH AND PLACE, 6"
 - 8A. PROPOSED SEEDING (SEE LANDSCAPING PLAN FOR TYPE & LOCATION)
 - 8B. EROSION CONTROL BLANKET
 9. AGGREGATE SUBGRADE IMPROVEMENT
 10. SUBBASE GRANULAR MATERIAL, TYPE B
 11. SAWCUT (INCLUDED IN COST OF HMA SHOULDERS)
 12. HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
 13. HOT-MIX ASPHALT BASE COURSE, 8"
 14. PIPE UNDERDRAINS (SPECIAL), 4"
 15. LEVELING BINDER (MM), N70, (1L-9.5mm)
 16. TEMPORARY PAVEMENT
 17. SUBBASE GRANULAR MATERIAL, TYPE B, 4"
 18. 3 CELL 12'X7' REINFORCED CONCRETE BOX CULVERT



US ROUTE 20 OVER HARMONY CREEK (AT GETTY ROAD)
PROPOSED TYPICAL SECTION
STA. 109 + 64.7 TO STA. 111 + 04

AGGREGATE SHOULDER
 FROM STA. 110+36.60 TO STA. 112+84.90



NOTE:
 TEMPORARY PAVEMENT SHALL CONSIST OF THE FOLLOWING:
 OPTION 1: 8" HMA BINDER COURSE, IL-19.0, N70.
 2" HMA SURFACE COURSE, MIX "D", N 70
 OPTION 2: 8" PCC PAVEMENT

NOTE:
 PC CONCRETE TEMPORARY PAVEMENT SHALL CONSIST OF CLASS PV CONCRETE MEETING THE REQUIREMENTS OF ART. 1020 OF THE STANDARD SPECIFICATIONS. TEMPORARY PCC PAVEMENT DOES NOT REQUIRE DOWEL BARS.

ALL TEMPORARY PAVEMENT SHALL BE PROVIDED OVER 4" SUBBASE GRANULAR MATERIAL

PROPOSED TEMPORARY PAVEMENT TYPICAL SECTION

M:\2012\12-15-15-4-009 US 20 Harmony Creek\Design\Transportation\CA600\CA00\Shts\Typ_03.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

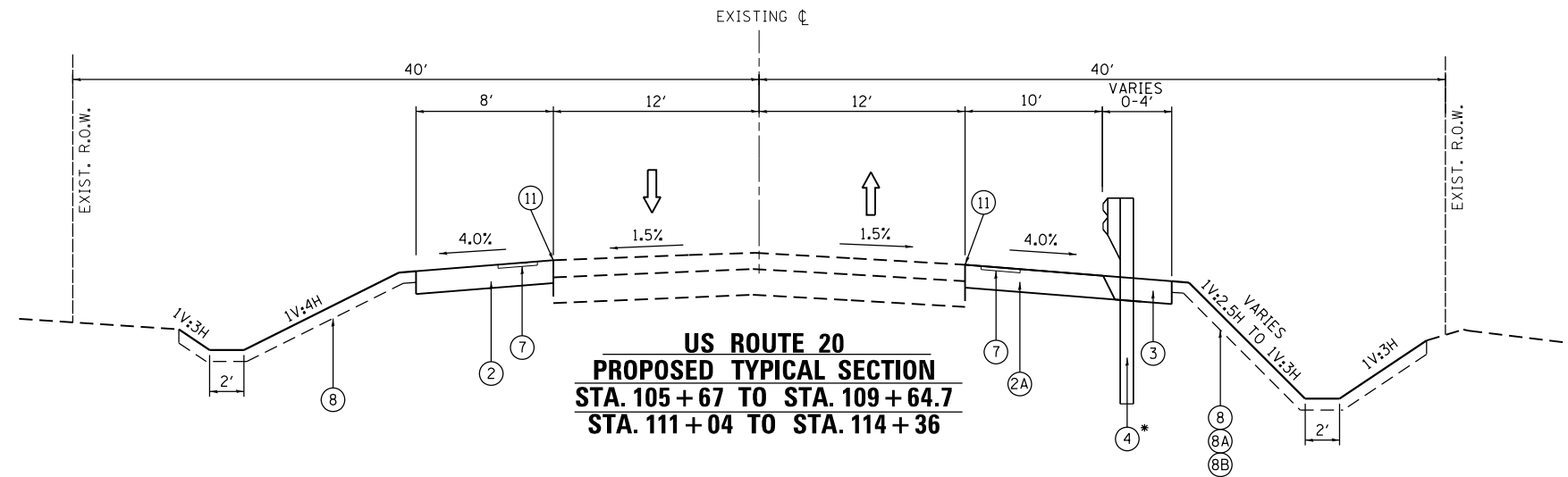
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 20			
OVER HARMONY CREEK (AT GETTY ROAD)			
PROPOSED TYPICAL SECTIONS			
SCALE:	SHEET 3	OF 4 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	15
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

LEGEND

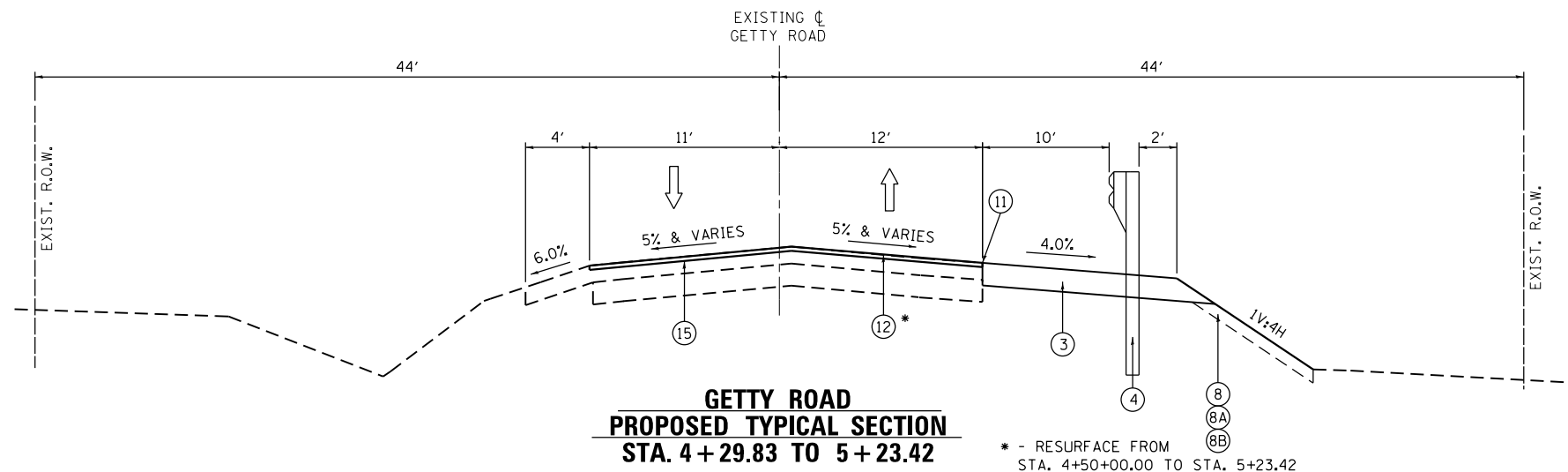
1. HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 11 1/2"
2. HMA SHOULDER, 8"
- 2A. HMA SHOULDER, 10"
3. AGGREGATE SHOULDERS, TYPE B, 10"
4. STEEL PLATE BEAM GUARDRAIL
5. 2 CELL 12'X4' REINFORCED CONCRETE BOX CULVERT
6. 12" AGGREGATE SUBGRADE IMPROVEMENT
7. RUMBLE STRIP, 16"
8. TOPSOIL FURNISH AND PLACE, 6"
- 8A. PROPOSED SEEDING (SEE LANDSCAPING PLAN FOR TYPE & LOCATION)
- 8B. EROSION CONTROL BLANKET
9. AGGREGATE SUBGRADE IMPROVEMENT
10. SUBBASE GRANULAR MATERIAL, TYPE B
11. SAWCUT (INCLUDED IN COST OF HMA SHOULDERS)
12. HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2"
13. HOT-MIX ASPHALT BASE COURSE, 8"
14. PIPE UNDERDRAINS (SPECIAL), 4"
15. LEVELING BINDER (MM), N70, (IL-9.5mm)
16. TEMPORARY PAVEMENT
17. SUBBASE GRANULAR MATERIAL, TYPE B, 4"
18. 3 CELL 12'X7' REINFORCED CONCRETE BOX CULVERT



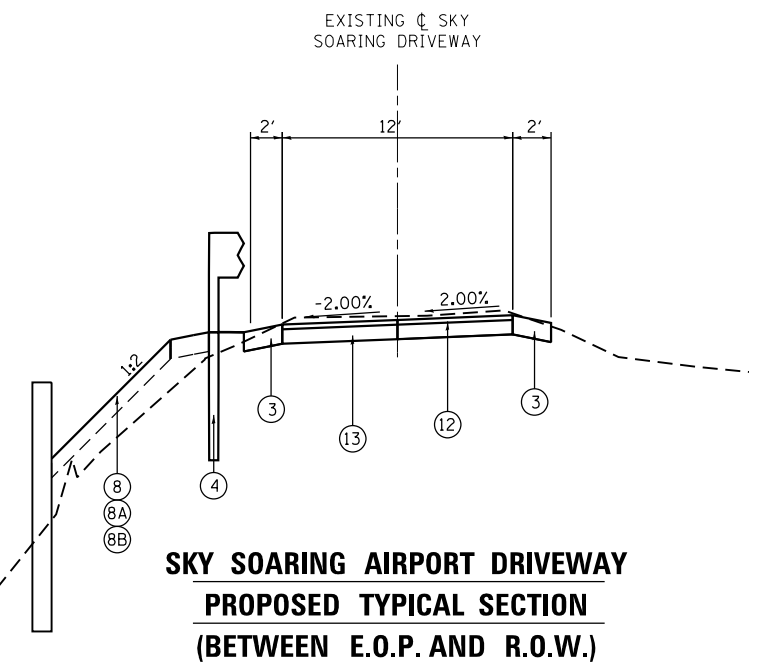
AGGREGATE SHOULDER FOR GUARDRAIL
FROM STA. 108+86 TO STA. 109+64

AGGREGATE SHOULDER GUARDRAIL
FROM STA. 110+36.60 TO STA. 112+84.90

* - GUARDRAIL TERMINATES AT STA. 112+64.90



* - RESURFACE FROM
STA. 4+50+00.00 TO STA. 5+23.42



M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31.sht, Typ_04.dgn



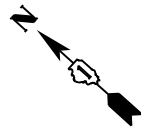
USER NAME = JuanS	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
PLOT SCALE =	CHECKED -	REVISOR -
PLOT DATE = 8/17/2018	DATE -	REVISOR -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

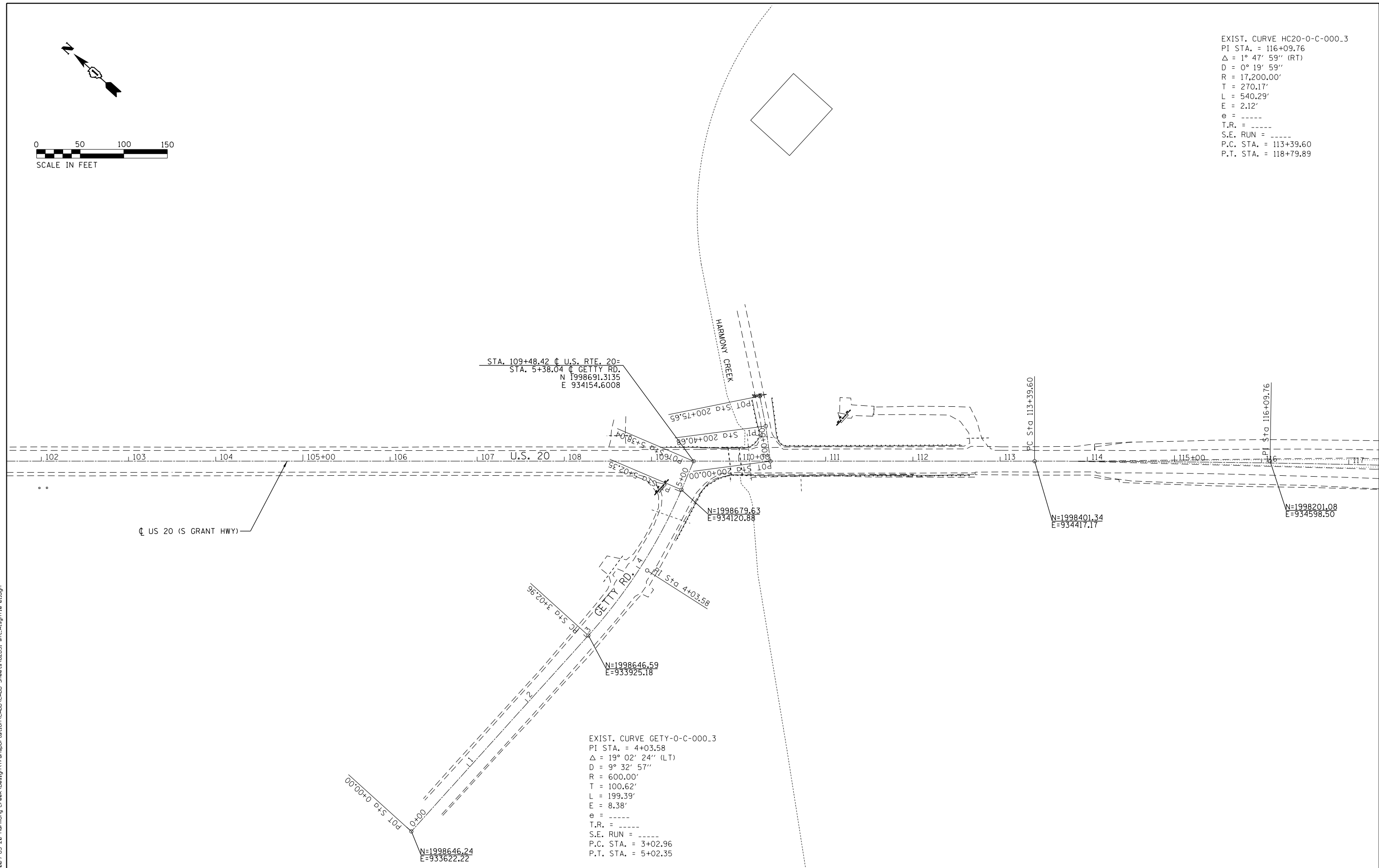
**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
PROPOSED TYPICAL SECTIONS**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 16
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	



EXIST. CURVE HC20-0-C-000.3
 PI STA. = 116+09.76
 Δ = 1° 47' 59" (RT)
 D = 0° 19' 59"
 R = 17,200.00'
 T = 270.17'
 L = 540.29'
 E = 2.12'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 113+39.60
 P.T. STA. = 118+79.89



EXIST. CURVE GETY-0-C-000.3
 PI STA. = 4+03.58
 Δ = 19° 02' 24" (LT)
 D = 9° 32' 57"
 R = 600.00'
 T = 100.62'
 L = 199.39'
 E = 8.38'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 3+02.96
 P.T. STA. = 5+02.35

M:\2012\12-15-15-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr-AlignTie-01.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

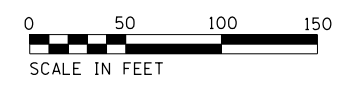
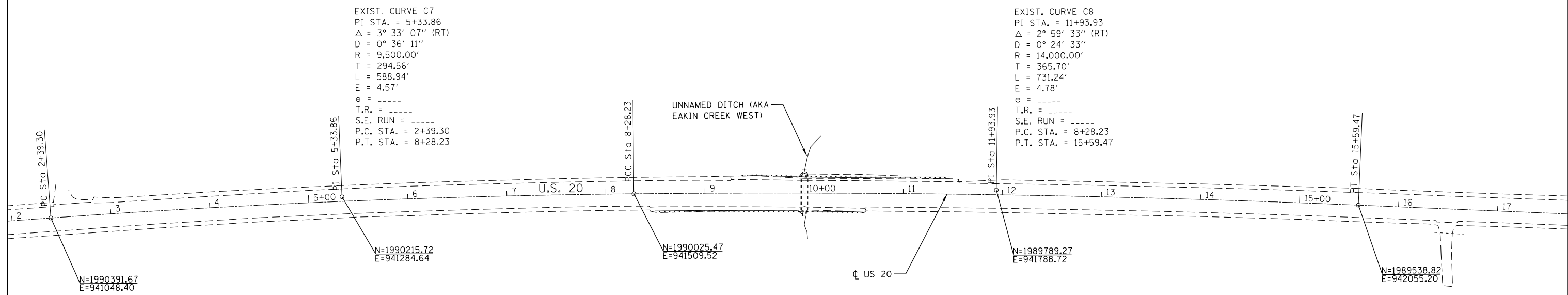
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
 OVER HARMONY CREEK (AT GETTY ROAD)
 ALIGNMENT BENCHMARKS & TIE SHEET**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	17
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr-AlignTie-02.dgn



	USER NAME = JuanS	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE = 8/17/2018	DATE -	REVISED -




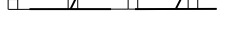
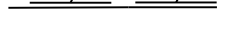



**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

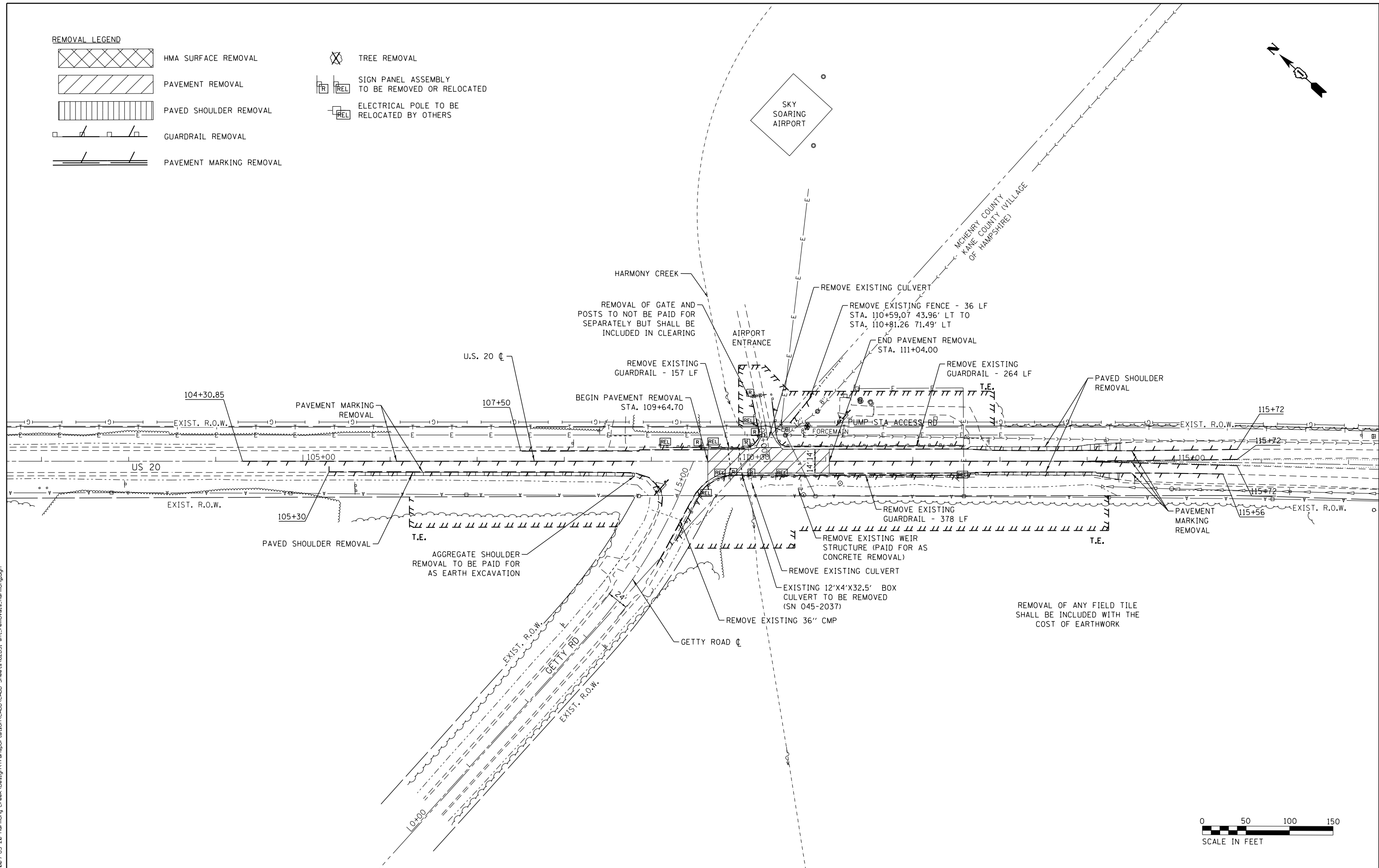
**US ROUTE 20
 OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
 ALIGNMENT BENCHMARKS & TIE SHEET**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

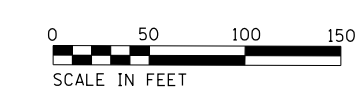
F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 18
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

REMOVAL LEGEND


-  HMA SURFACE REMOVAL
-  PAVEMENT REMOVAL
-  PAVED SHOULDER REMOVAL
-  GUARDRAIL REMOVAL
-  PAVEMENT MARKING REMOVAL
-  TREE REMOVAL
-  SIGN PANEL ASSEMBLY TO BE REMOVED OR RELOCATED
-  ELECTRICAL POLE TO BE RELOCATED BY OTHERS

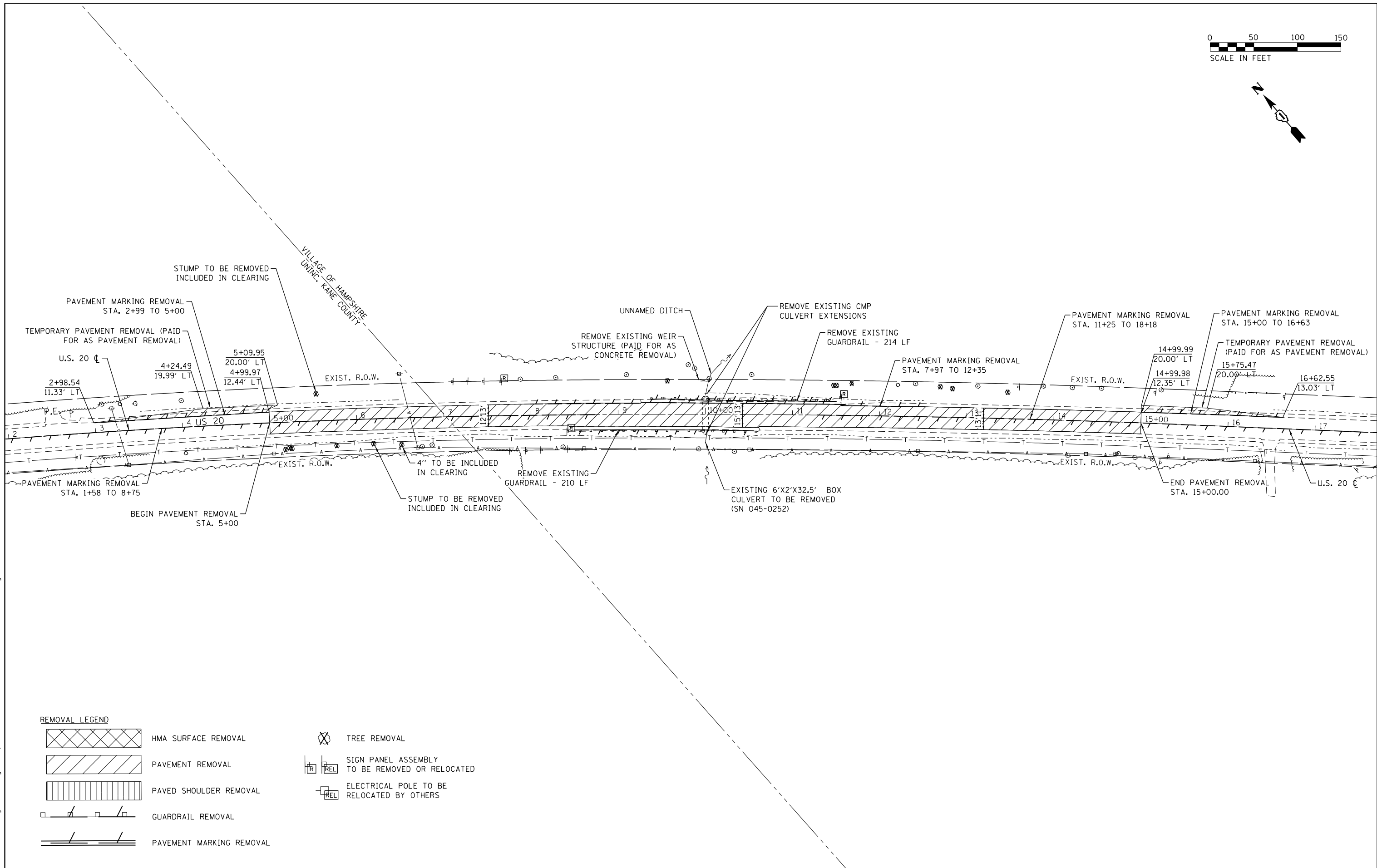
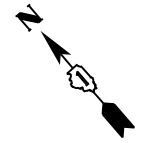
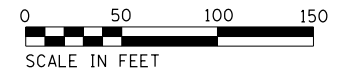


REMOVAL OF ANY FIELD TILE SHALL BE INCLUDED WITH THE COST OF EARTHWORK



M:\2012\12-15-15-0091 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31-sht_removal-harmony.dgn

	USER NAME = JuanS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 20 OVER HARMONY CREEK (AT GETTY ROAD) REMOVAL PLAN	F.A. RTE. = 525/345	SECTION = 2015-063B	COUNTY = KANE/MCHENRY	TOTAL SHEETS = 87	SHEET NO. = 19
	PLOT SCALE =	CHECKED -	REVISIED -			REVISIED -	SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.	CONTRACT NO. 62B31		
	PLOT DATE = 8/17/2018	DATE -	REVISIED -			ILLINOIS FED. AID PROJECT				



REMOVAL LEGEND

- HMA SURFACE REMOVAL
- PAVEMENT REMOVAL
- PAVED SHOULDER REMOVAL
- GUARDRAIL REMOVAL
- PAVEMENT MARKING REMOVAL
- TREE REMOVAL
- SIGN PANEL ASSEMBLY TO BE REMOVED OR RELOCATED
- ELECTRICAL POLE TO BE RELOCATED BY OTHERS

M:\2012\12-15-15-09 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sht-removals.ditch.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

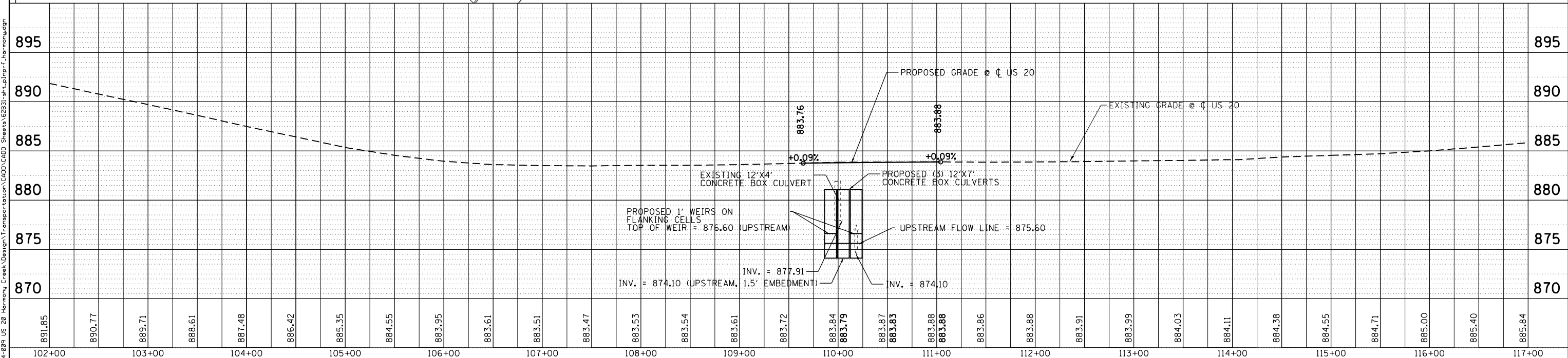
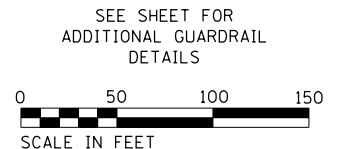
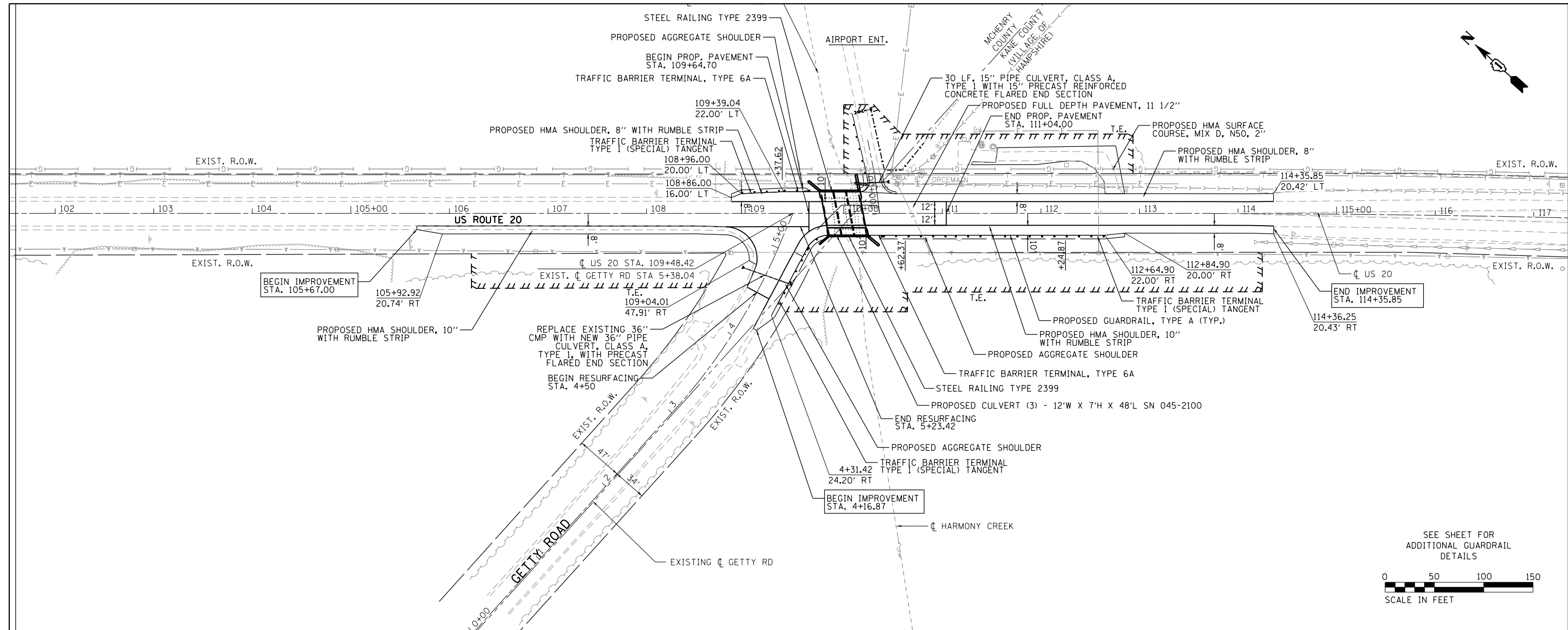
**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
REMOVAL PLAN**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

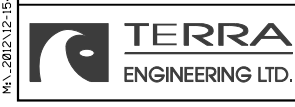
F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 20
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
NOTE BOOK	
NO.	
CHECKED	
FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
NO.	
STRUCTURE	
NOTATIS	
CHKD	



891.85	890.77	889.71	888.61	887.48	886.42	885.35	884.55	883.95	883.61	883.51	883.47	883.53	883.54	883.61	883.72	883.84	883.79	883.87	883.83	883.88	883.88	883.86	883.88	883.91	883.99	884.03	884.11	884.38	884.55	884.71	885.00	885.40	885.84		
102+00	103+00	104+00	105+00	106+00	107+00	108+00	109+00	110+00	111+00	112+00	113+00	114+00	115+00	116+00	117+00																				



USER NAME = juons	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

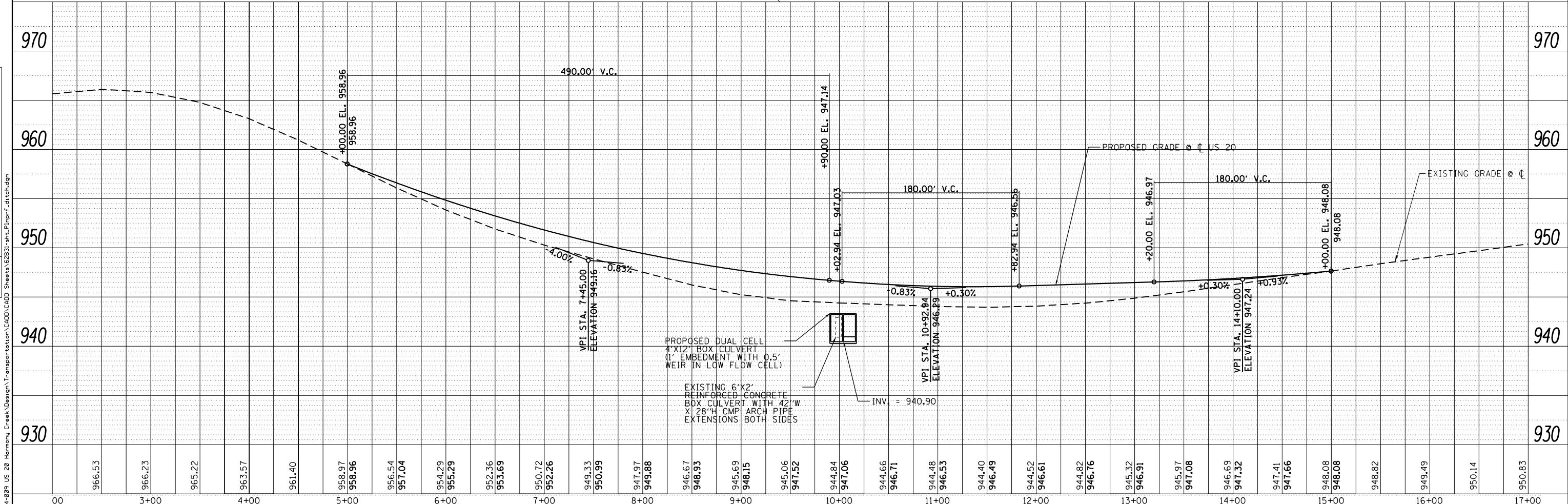
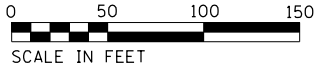
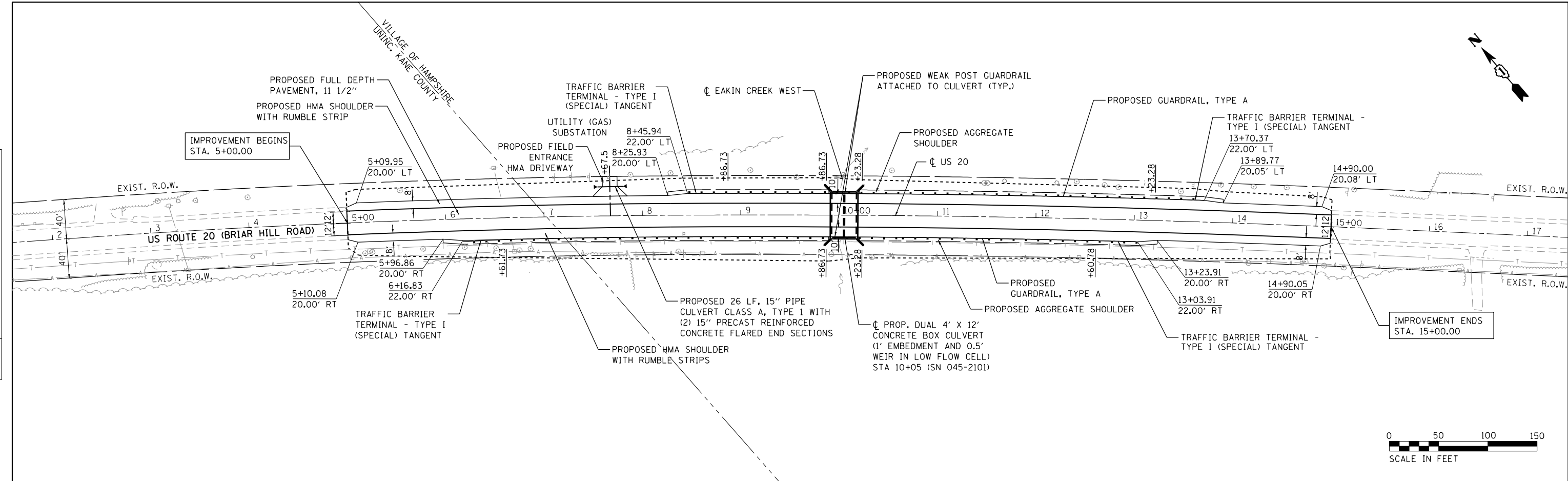
**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
PLAN & PROFILE SHEETS**

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A. RT. = 525/345	SECTION = 2015-063B	COUNTY = KANE/MCHENRY	TOTAL SHEETS = 87	SHEET NO. = 21
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

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



USER NAME =	JuanS
DESIGNED -	REVISD -
DRAWN -	REVISD -
CHECKED -	REVISD -
DATE -	REVISD -

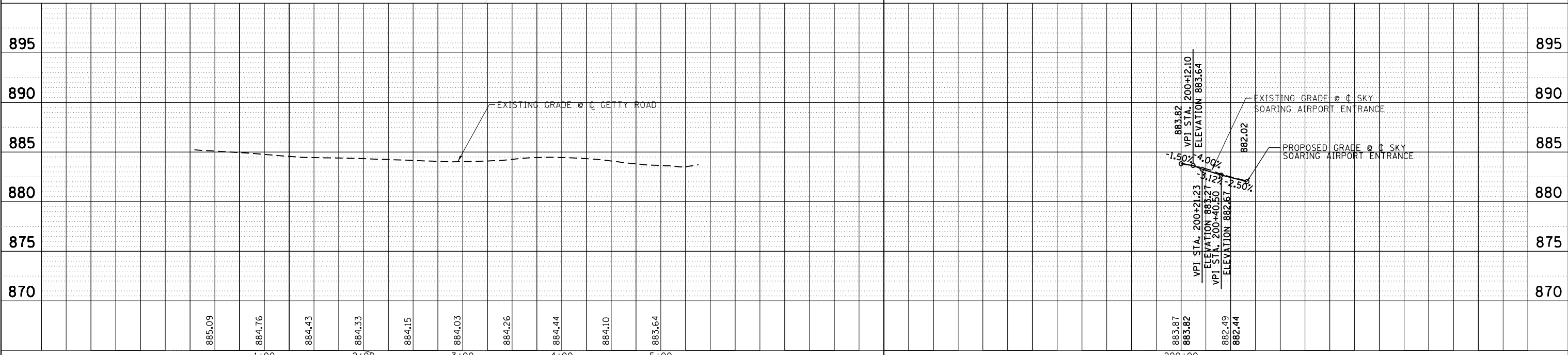
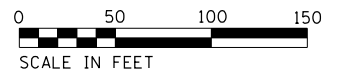
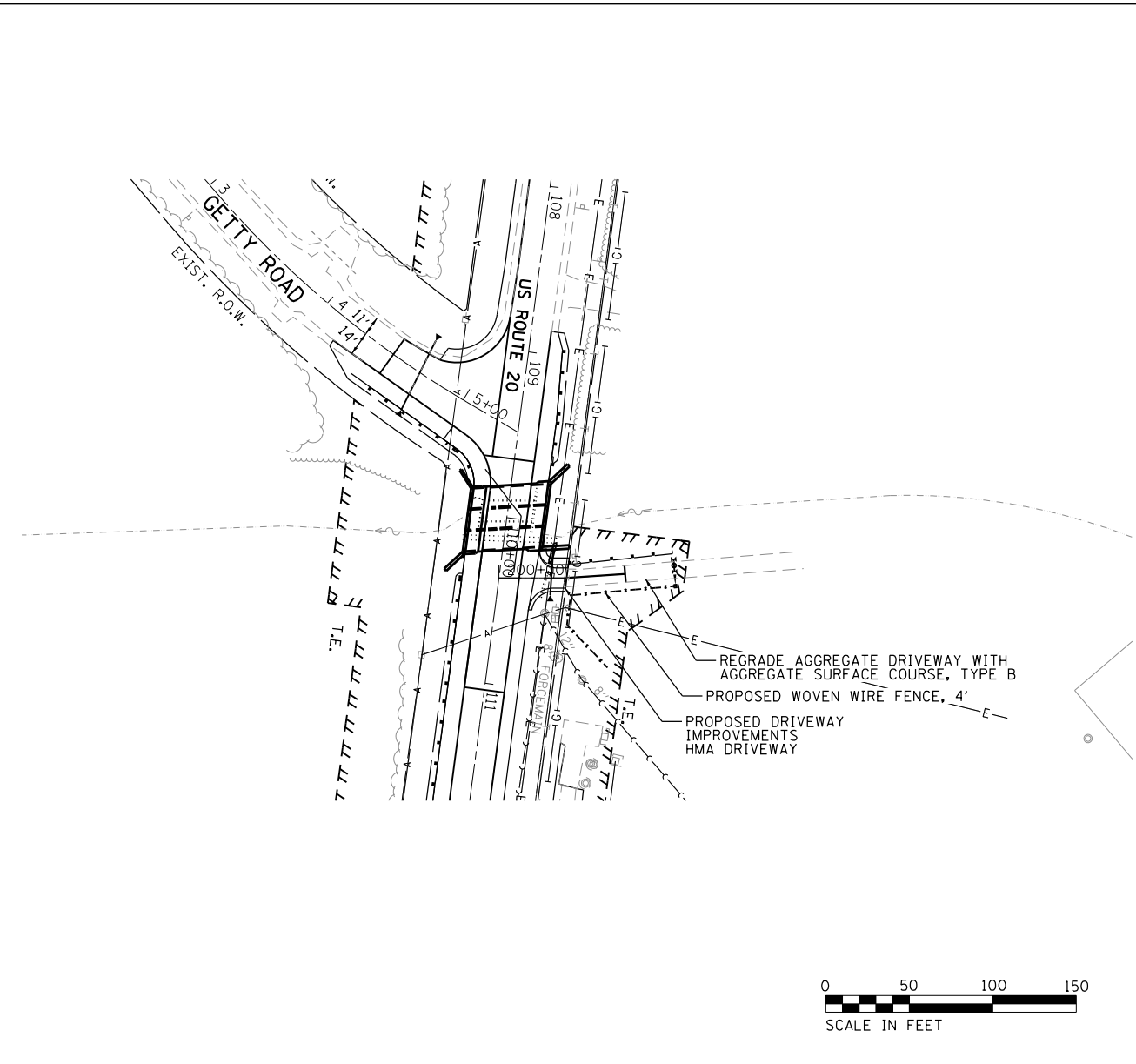
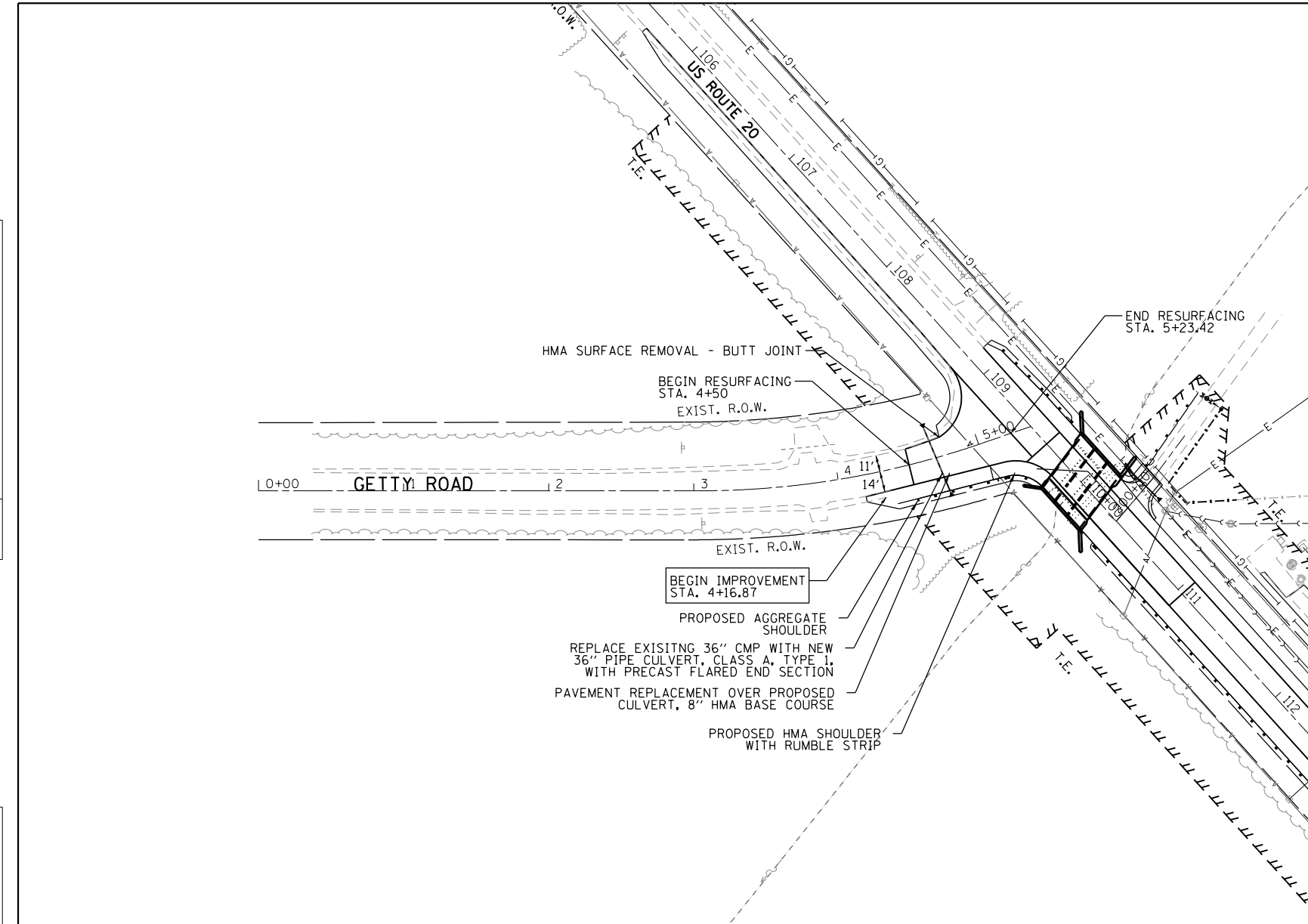
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
PLAN & PROFILE SHEETS**

F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
625/345	2015-063B	KANE/MCHENRY	87	22
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	
	NO.	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATIONS	
	CHKD	
	NO.	
	NO.	
	NO.	



MA:\2012\12-154-089 US 20 Harmony Creek Design\Transportation\CADD\Sheet\62B31-INT.P1.rvt
 P:\p1.rvt
 SHEET NO. 23 OF 87
 CONTRACT NO. 62B31

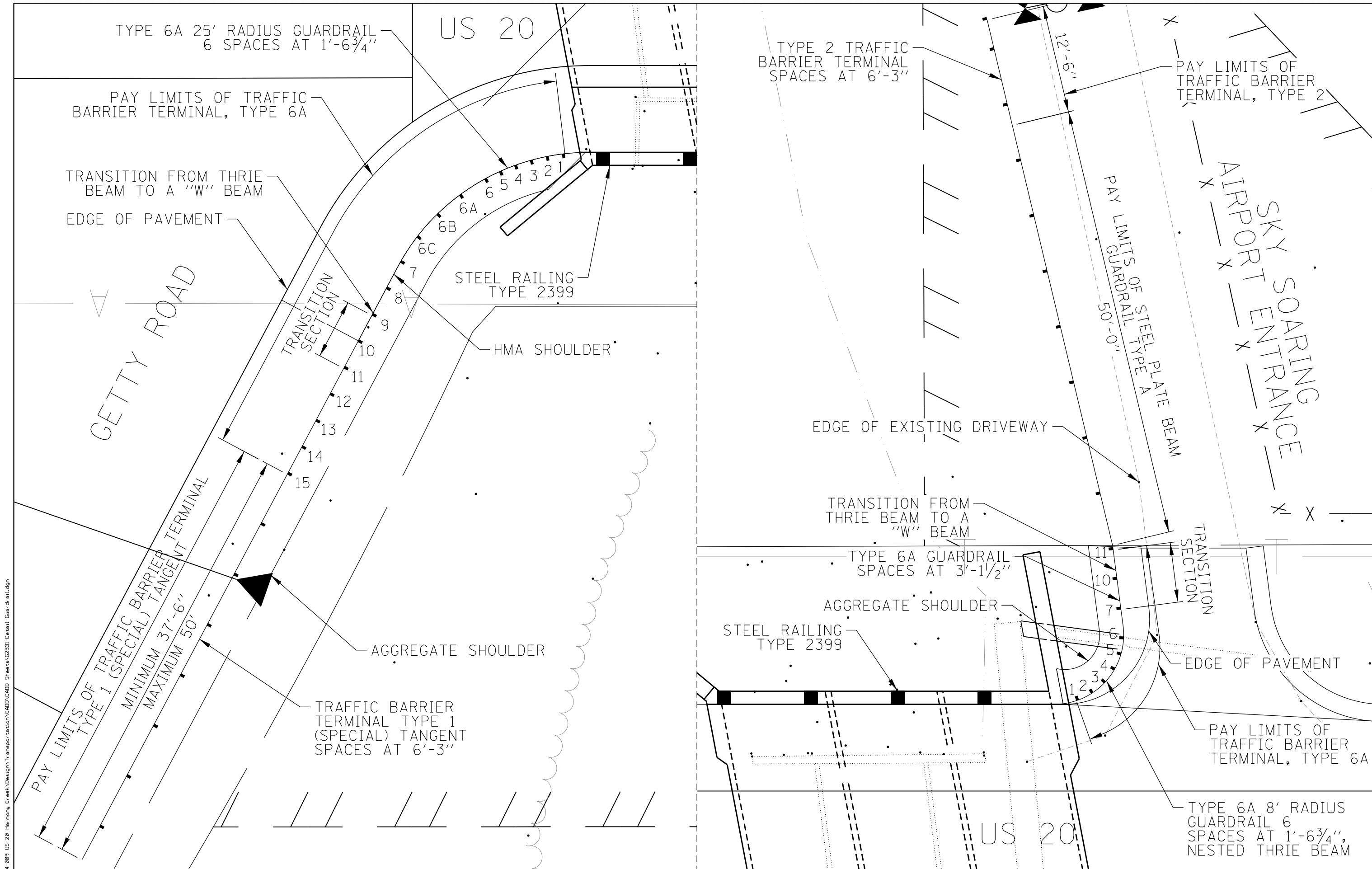


USER NAME = juanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

US ROUTE 20			
GETTY ROAD & SKY SOARING DRIVEWAY			
PLAN & PROFILE SHEETS			
SCALE:	SHEET 3	OF 3	SHEETS
STA.		TO STA.	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	23
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



M:\2012\12-15-14-009 US 20 Harmony Creek\Design\Transportation\CADD\Sheets\62B31-Detail-Guardrail.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
GUARDRAIL TREATMENT DETAIL**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 24
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

MAINTENANCE OF TRAFFIC - CONSTRUCTION AND TRAFFIC CONTROL NOTES

US-20 AT HARMONY CREEK

PRESTAGE

INSTALL TEMPORARY PAVEMENT AND TEMPORARY DRIVEWAY AS SHOWN ON THE PLANS.

THE GATE AND TEMPORARY FENCING MUST BE INSTALLED PRIOR TO REMOVAL OF THE EXISTING GATE AND FENCE AT SKY SOARING AIRPORT.

STAGE I

USING LANE REDUCTION AND WIDTH REDUCTION, THE PROPOSED WORK WILL BE COMPLETED IN TWO STAGES. TRAFFIC WILL FOLLOW IDOT STANDARD 701321: LANE CLOSURE TWO-LANE, TWO-WAY BRIDGE REPAIR WITH BARRIER AND IDOT DISTRICT ONE STANDARD BE-805 TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING. TRAFFIC WILL BE SHIFTED ONTO THE WESTBOUND SHOULDER AS SHOWN ON THE PLANS WHILE THE EASTBOUND LANE AND SOUTH HALF OF THE CULVERT ARE CONSTRUCTED. TRAFFIC WILL BE SIGNALIZED USING TEMPORARY SIGNALS AND LIMITED TO ONE 12' LANE WITH 1' SHOULDERS. EXISTING DRIVEWAY ACCESS IS LOCATED AT STA. 112+75 LT AND REQUIRES A TEMPORARY SIGNAL FOR ACCESS. THE U.S. ROUTE 20 STOP BAR WILL BE LOCATED 115' WEST OF THE DRIVEWAY. ADDITIONALLY, THERE IS ONE FIELD ENTRANCE (STA. 108+65 LT) THAT WILL BE CLOSED DURING CONSTRUCTION.

STAGE II

TRAFFIC WILL BE SHIFTED ONTO THE NEWLY CONSTRUCTED EASTBOUND LANE AND SHOULDER WHILE THE WESTBOUND LANE AND NORTH HALF OF THE CULVERT ARE CONSTRUCTED. TRAFFIC WILL BE SIGNALIZED AND LIMITED TO ONE 12' LANE WITH 1' SHOULDERS AND STOP BARS TO THE EAST AND WEST OF THE PROJECT LIMITS SIMILAR TO STAGE I. ADDITIONALLY, THE FIELD ENTRANCE AT STA. 112+75 WILL REMAIN CLOSED DURING CONSTRUCTION.

US-20 AT UNNAMED DITCH

PRESTAGE

TRAFFIC WILL BE SHIFTED ONTO THE WESTBOUND LANES WHILE A STRUCTURAL SLAB IS PLACED OVER THE EXISTING CULVERT ON THE EASTBOUND LANE. TRAFFIC WILL BE SIGNALIZED AND LIMITED TO ONE 11' LANE WITH 1' SHOULDERS AND STOP BARS TO THE EAST AND WEST OF THE PROJECT LIMITS.

STAGE I

USING LANE REDUCTION AND WIDTH REDUCTION, THE PROPOSED WORK WILL BE COMPLETED IN TWO STAGES. DUE TO ROADWAY WIDTH AND RIGHT OF WAY RESTRICTIONS, IT IS NOT POSSIBLE TO MAINTAIN ONE LANE OF TRAFFIC IN BOTH DIRECTIONS THROUGHOUT CONSTRUCTION. AS A RESULT, TRAFFIC WILL FOLLOW IDOT STANDARD 701321: LANE CLOSURE TWO-LANE, TWO-WAY BRIDGE REPAIR WITH BARRIER AND IDOT DISTRICT ONE STANDARD BE-805 TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING. TRAFFIC WILL BE SIGNALIZED USING TEMPORARY SIGNALS AND LIMITED TO ONE 12' LANE WITH 1' SHOULDERS IN THE EASTBOUND LANE OF U.S. ROUTE 20. AN EXISTING DRIVEWAY IS LOCATED 250' WEST OF THE PROJECT AND REQUIRES A TEMPORARY SIGNAL FOR ACCESS. THE U.S. ROUTE 20 STOP BAR WILL BE LOCATED WEST OF THE DRIVEWAY. ADDITIONALLY, THERE IS ONE FIELD ENTRANCE (STA. 16+50 RT) THAT WILL BE CLOSED DURING CONSTRUCTION. STAGE I WILL CONSIST OF CONSTRUCTING THE NORTH PORTION OF THE PROPOSED CULVERT AND WESTBOUND LANE OF U.S. ROUTE 20.

STAGE II

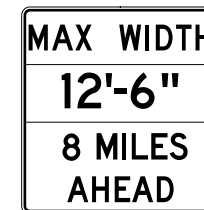
TRAFFIC WILL BE SHIFTED ONTO THE NEWLY CONSTRUCTED WESTBOUND LANES WHILE THE EASTBOUND LANE AND SOUTH HALF OF THE CULVERT ARE CONSTRUCTED. TRAFFIC WILL BE SIGNALIZED AND LIMITED TO ONE 12' LANE WITH 1' SHOULDERS AND STOP BARS TO THE EAST AND WEST OF THE PROJECT LIMITS SIMILAR TO STAGE I. ADDITIONALLY, THE FIELD ENTRANCE AT STA. 16+50 RT WILL REMAIN CLOSED DURING CONSTRUCTION.

MOT GENERAL NOTES

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

IDOT WIDTH RESTRICTION POLICY MUST BE FOLLOWED AT BOTH LOCATIONS. SIGNS WILL NEED TO BE POSTED ON I-90 A MINIMUM OF 500' IN ADVANCE OF THE EXIT RAMP TO US 20.

MAX WIDTH SIGNS (W12-I103-4848) SHALL BE PLACED AT THE INTERSECTIONS OF US 20 AND IL 23 AND AT US 20 AND IL 47 AS SHOWN BELOW.



ADVANCED SIGNING AT US 20 AND IL 23



ADVANCED SIGNING AT US 20 AND IL 47

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr.MOT-GenNotes.dgn



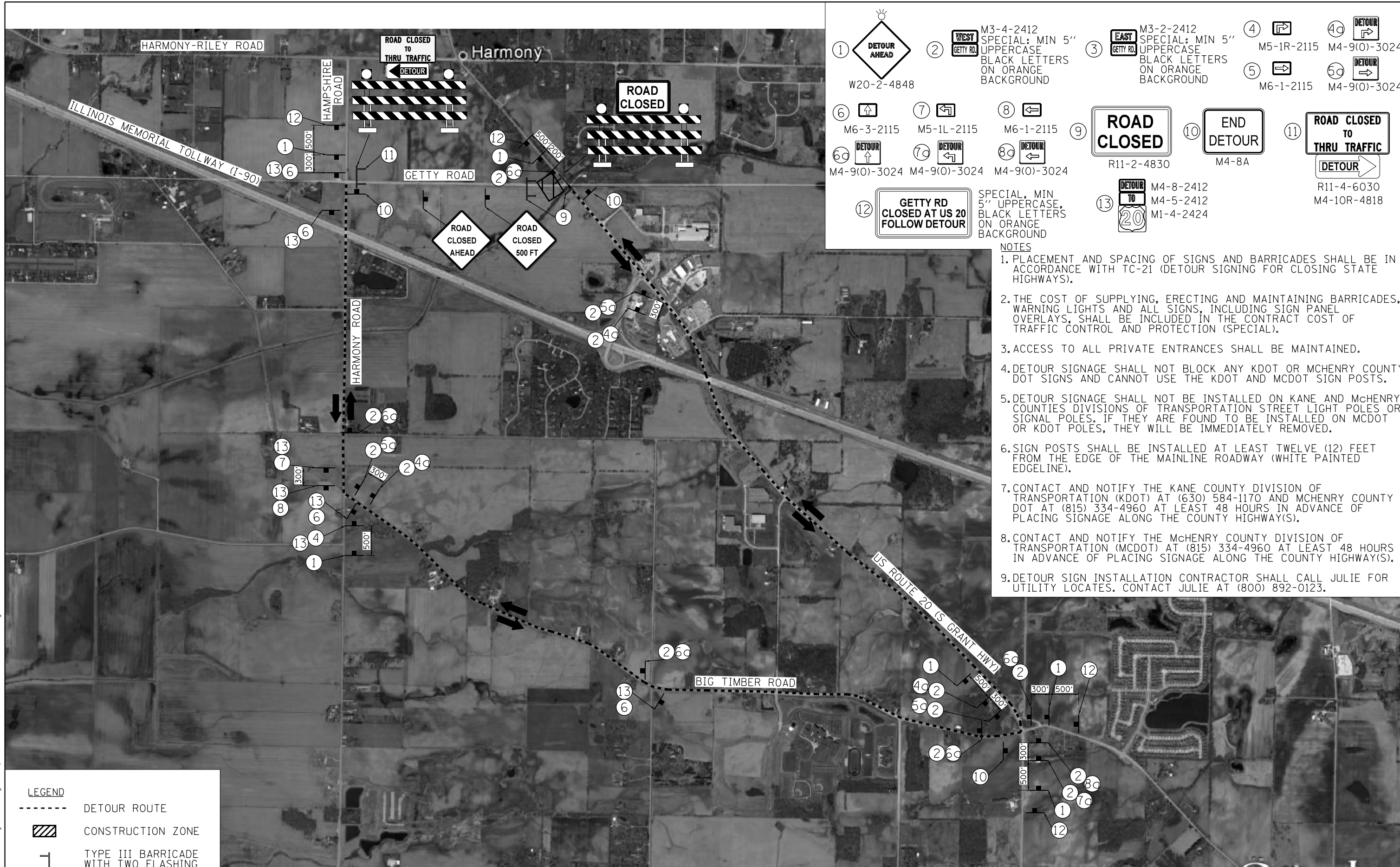
USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK & UNNAMED DITCH
MAINTENANCE OF TRAFFIC - GENERAL NOTES**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	25
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



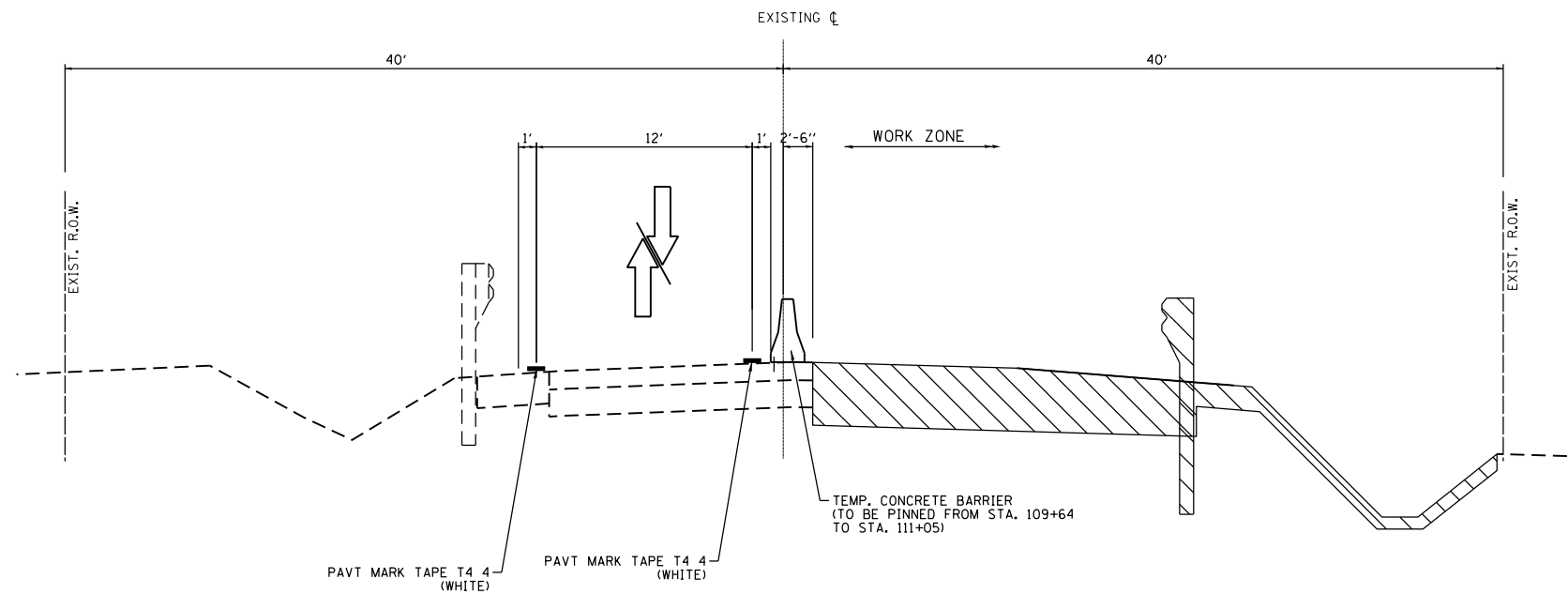
① W20-2-4848	② M3-4-2412 SPECIAL: MIN 5" UPPERCASE BLACK LETTERS ON ORANGE BACKGROUND	③ M3-2-2412 SPECIAL: MIN 5" UPPERCASE BLACK LETTERS ON ORANGE BACKGROUND	④ M5-1R-2115	④a M4-9(0)-3024
⑥ M6-3-2115	⑦ M5-1L-2115	⑧ M6-1-2115	⑨ R11-2-4830	⑩ M4-8A
⑥a M4-9(0)-3024	⑦a M4-9(0)-3024	⑧a M4-9(0)-3024	⑪ R11-4-6030	⑪a M4-10R-4818
⑫ SPECIAL, MIN 5" UPPERCASE, BLACK LETTERS ON ORANGE BACKGROUND	⑬ M4-8-2412 M4-5-2412 M1-4-2424			

- NOTES**
1. PLACEMENT AND SPACING OF SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH TC-21 (DETOUR SIGNING FOR CLOSING STATE HIGHWAYS).
 2. THE COST OF SUPPLYING, ERECTING AND MAINTAINING BARRICADES, WARNING LIGHTS AND ALL SIGNS, INCLUDING SIGN PANEL OVERLAYS, SHALL BE INCLUDED IN THE CONTRACT COST OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).
 3. ACCESS TO ALL PRIVATE ENTRANCES SHALL BE MAINTAINED.
 4. DETOUR SIGNAGE SHALL NOT BLOCK ANY KDOT OR MCHENRY COUNTY DOT SIGNS AND CANNOT USE THE KDOT AND MCDOT SIGN POSTS.
 5. DETOUR SIGNAGE SHALL NOT BE INSTALLED ON KANE AND MCHENRY COUNTIES DIVISIONS OF TRANSPORTATION STREET LIGHT POLES OR SIGNAL POLES. IF THEY ARE FOUND TO BE INSTALLED ON MCDOT OR KDOT POLES, THEY WILL BE IMMEDIATELY REMOVED.
 6. SIGN POSTS SHALL BE INSTALLED AT LEAST TWELVE (12) FEET FROM THE EDGE OF THE MAINLINE ROADWAY (WHITE PAINTED EDGELINE).
 7. CONTACT AND NOTIFY THE KANE COUNTY DIVISION OF TRANSPORTATION (KDOT) AT (630) 584-1170 AND MCHENRY COUNTY DOT AT (815) 334-4960 AT LEAST 48 HOURS IN ADVANCE OF PLACING SIGNAGE ALONG THE COUNTY HIGHWAY(S).
 8. CONTACT AND NOTIFY THE MCHENRY COUNTY DIVISION OF TRANSPORTATION (MCDOT) AT (815) 334-4960 AT LEAST 48 HOURS IN ADVANCE OF PLACING SIGNAGE ALONG THE COUNTY HIGHWAY(S).
 9. DETOUR SIGN INSTALLATION CONTRACTOR SHALL CALL JULIE FOR UTILITY LOCATES. CONTACT JULIE AT (800) 892-0123.

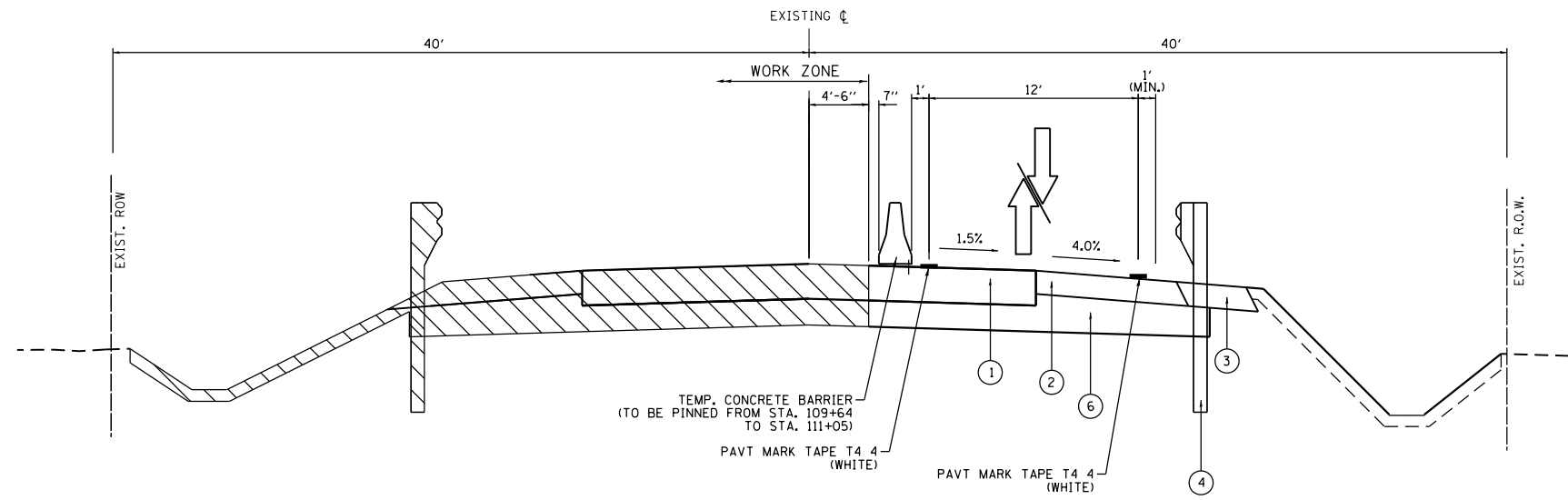
LEGEND

- DETOUR ROUTE
- CONSTRUCTION ZONE
- TYPE III BARRICADE WITH TWO FLASHING LIGHTS

M:\2012\12-154-009 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31_sht.Detour.dgn



**US ROUTE 20 OVER HARMONY CREEK
MAINTENANCE OF TRAFFIC STAGE I
STA. 109 + 64.72 TO STA. 111 + 04.73**



**US ROUTE 20 OVER HARMONY CREEK
MAINTENANCE OF TRAFFIC STAGE II
STA. 109 + 64.72 TO STA. 111 + 04.73**

LEGEND

- 1. PROPOSED PAVEMENT
- 2. PROPOSED PAVED SHOULDER
- 3. PROPOSED AGGREGATE SHOULDER
- 4. PROPOSED STEEL PLATE BEAM GUARDRAIL
- 5. PROPOSED CONCRETE BOX CULVERT
- 6. PROPOSED SUBGRADE
- 7. PROPOSED RUMBLE STRIP

M:\2012\12-15-15-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31.sht.MOT_Harmony_Typodgn

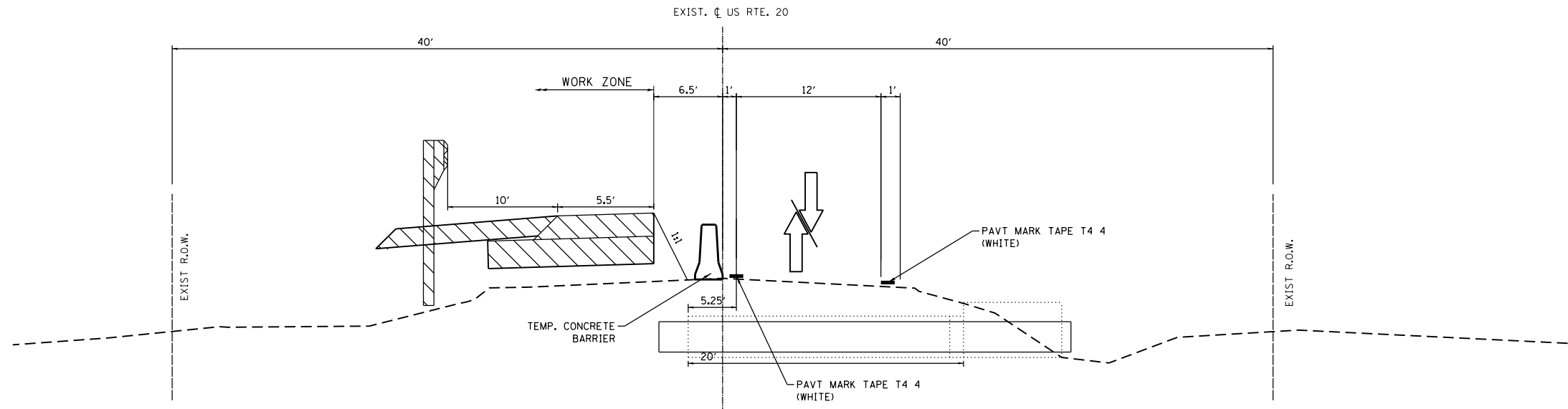


USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

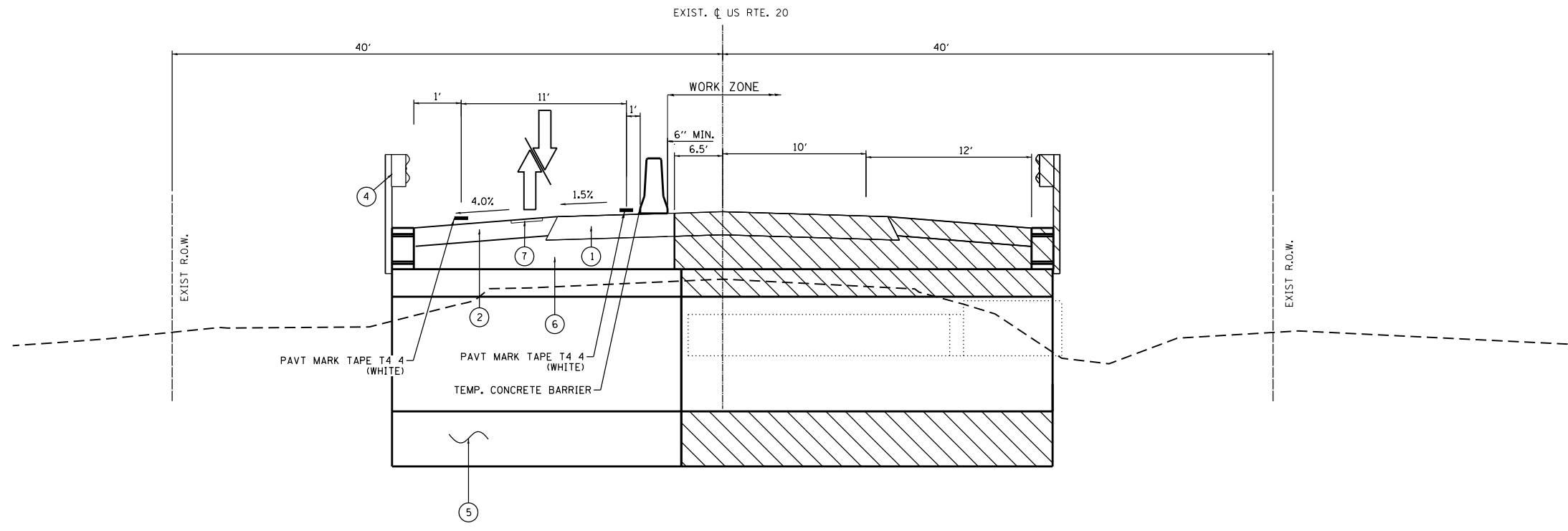
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 20 OVER HARMONY CREEK (AT GETTY ROAD) MAINTENANCE OF TRAFFIC SHEETS			
SCALE:	SHEET 1	OF 2 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	27
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	



**US RTE 20 AT UNNAMED DITCH
MAINTENANCE OF TRAFFIC STAGE I
STA. 5 + 00.00 TO STA. 15 + 00.00**



**US RTE 20 AT UNNAMED DITCH
MAINTENANCE OF TRAFFIC STAGE II
STA. 5 + 00.00 TO STA. 15 + 00.00**

LEGEND

- 1. PROPOSED PAVEMENT
- 2. PROPOSED PAVED SHOULDER
- 3. PROPOSED AGGREGATE SHOULDER
- 4. PROPOSED STEEL PLATE BEAM GUARDRAIL
- 5. PROPOSED CONCRETE BOX CULVERT
- 6. PROPOSED SUBGRADE
- 7. PROPOSED RUMBLE STRIP

M:\2012\12-15-15-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr_MOT_ditch_Typ.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -


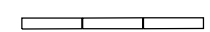


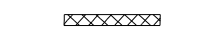






**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

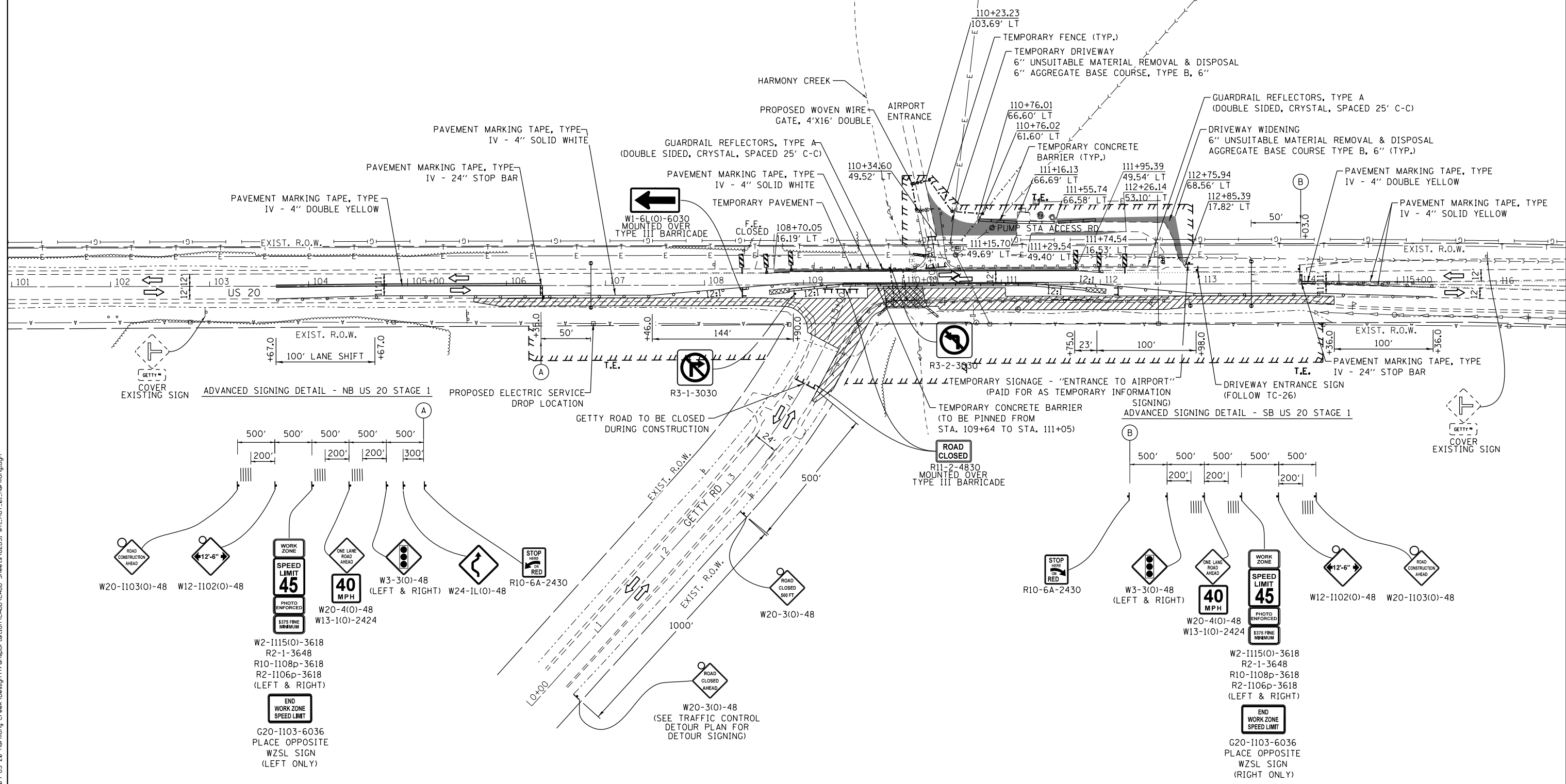
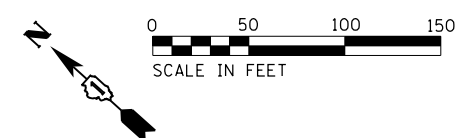
**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
MAINTENANCE OF TRAFFIC SHEETS**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 28
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

TRAFFIC CONTROL LEGEND




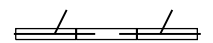
-  TYPE II BARRICADES OR DRUMS @ 50' C-C W/ STEADY BURN MONO-DIRECTIONAL LIGHT (10' C-C ON RADII AND CURVES, AND 20' C-C ON TAPERS)
-  TEMPORARY CONCRETE BARRIER
-  WORK ZONE
-  TEMPORARY PAVEMENT CONSTRUCTION
-  TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE), NARROW, TEST LEVEL 3
-  DIRECTION OF TRAVEL
-  SIGN ON PERMANENT OR PORTABLE SUPPORT
-  TYPE III BARRICADE
-  DOUBLE VERTICAL PANELS @ 50' CENTERS
-  TEMPORARY TRAFFIC SIGNAL
-  TEMPORARY RUMBLE STRIPS

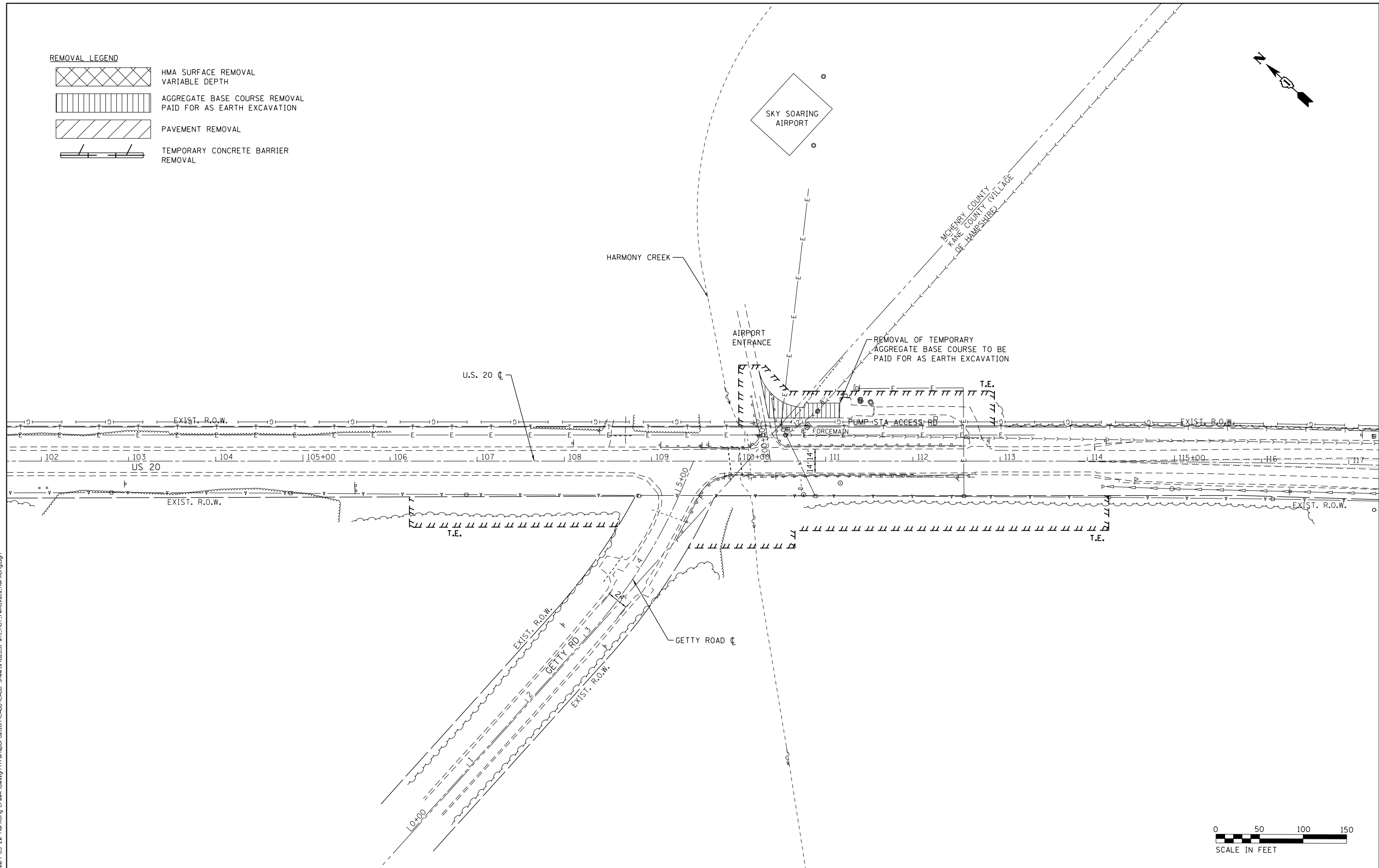
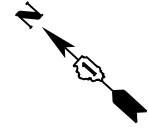


M:\2012\12-15-14-0091 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31.sht_MOT_01_harmony.dgn

	USER NAME = JuanS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	US ROUTE 20 OVER HARMONY CREEK (AT GETTY ROAD) MAINTENANCE OF TRAFFIC - STAGE I	F.A. RTE. = 525/345	SECTION = 2015-063B	COUNTY = KANE/MCHENRY	TOTAL SHEETS = 87	SHEET NO. = 29
	PLOT SCALE =	CHECKED -	REVISIED -			SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.	CONTRACT NO. 62B31			
	PLOT DATE = 8/17/2018	DATE -	REVISIED -	ILLINOIS FED. AID PROJECT						

REMOVAL LEGEND

-  HMA SURFACE REMOVAL
VARIABLE DEPTH
-  AGGREGATE BASE COURSE REMOVAL
PAID FOR AS EARTH EXCAVATION
-  PAVEMENT REMOVAL
-  TEMPORARY CONCRETE BARRIER
REMOVAL



M:\2012\12-15-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr.MOT_removals_harmony.dgn



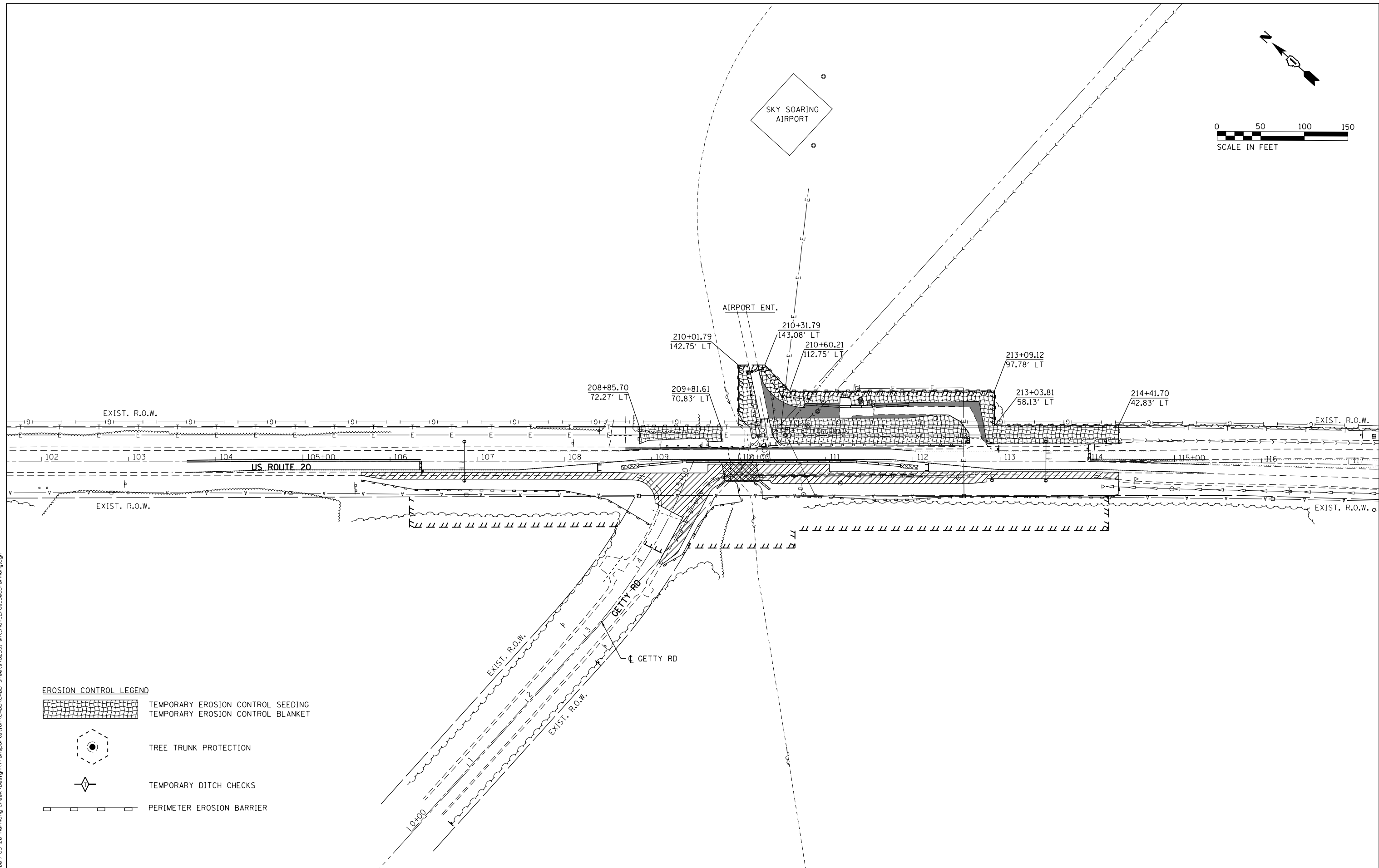
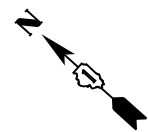
USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**






**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
MAINTENANCE OF TRAFFIC - REMOVALS**

SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 30
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



EROSION CONTROL LEGEND

-  TEMPORARY EROSION CONTROL SEEDING
-  TEMPORARY EROSION CONTROL BLANKET
-  TREE TRUNK PROTECTION
-  TEMPORARY DITCH CHECKS
-  PERIMETER EROSION BARRIER

M:\2012\12-15-15-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr.MOT.Eros.Sed.Harmony.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

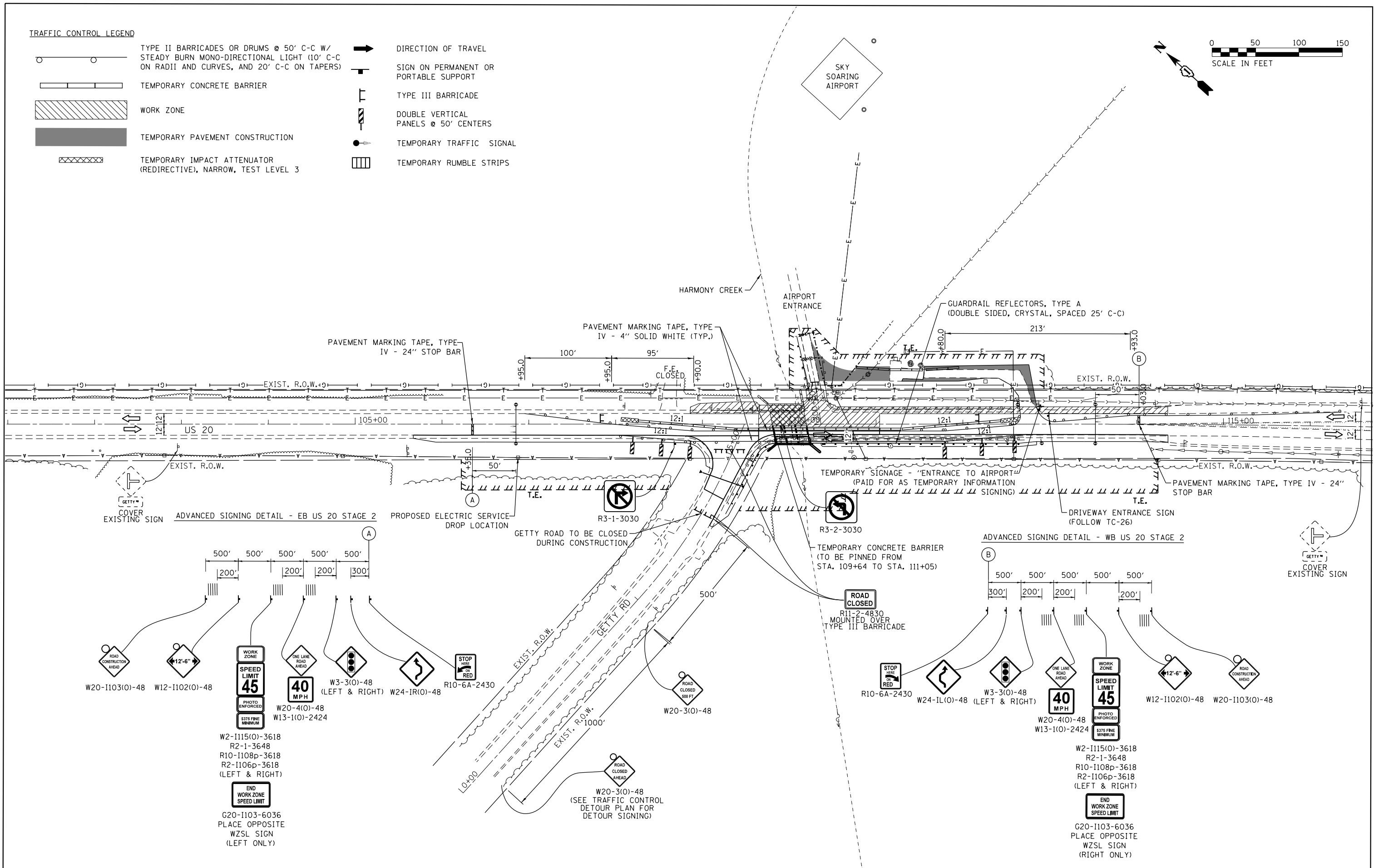
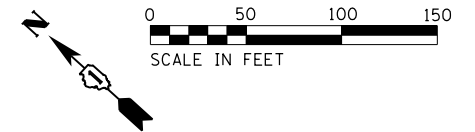
**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
MAINTENANCE OF TRAFFIC - EROSION & SEDIMENT CONTROL**

SCALE: SHEET 3 OF 6 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	31
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

TRAFFIC CONTROL LEGEND

- TYPE II BARRICADES OR DRUMS @ 50' C-C W/ STEADY BURN MONO-DIRECTIONAL LIGHT (10' C-C ON RADII AND CURVES, AND 20' C-C ON TAPERS)
- TEMPORARY CONCRETE BARRIER
- WORK ZONE
- TEMPORARY PAVEMENT CONSTRUCTION
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE), NARROW, TEST LEVEL 3
- DIRECTION OF TRAVEL
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- TYPE III BARRICADE
- DOUBLE VERTICAL PANELS @ 50' CENTERS
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY RUMBLE STRIPS



M:\2012\12\15-14-2013 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31-sh-101-02-harmony.dgn



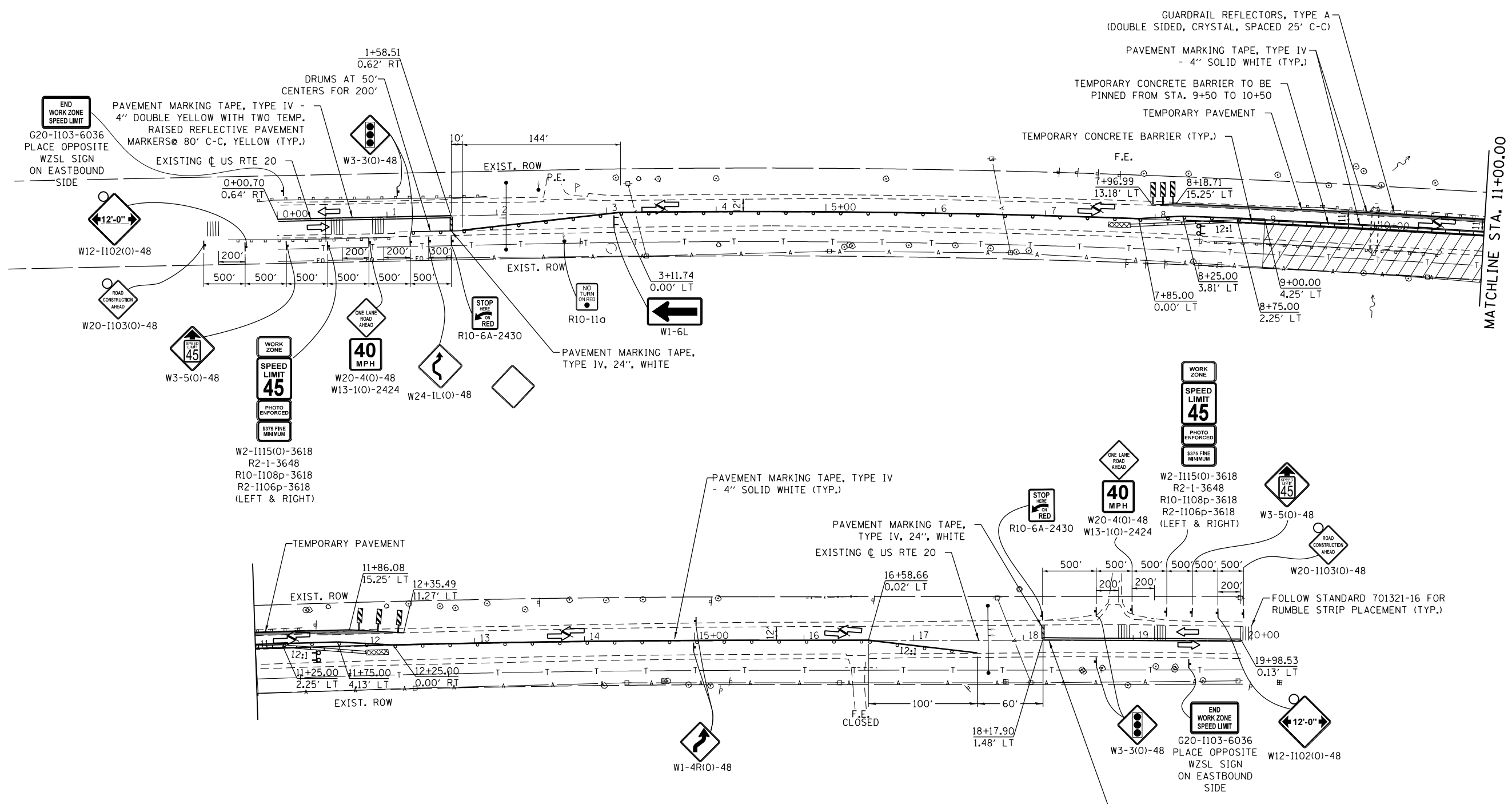
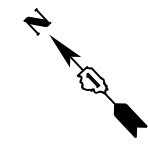
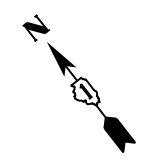
USER NAME = JuanS	DESIGNED -	REVISED -
DRAWN -	REVISED -	
CHECKED -	REVISED -	
DATE -	REVISED -	
PLOT SCALE =		
PLOT DATE = 8/17/2018		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
MAINTENANCE OF TRAFFIC - STAGE II**

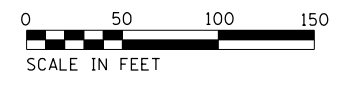
SCALE: SHEET 4 OF 6 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 32
CONTRACT NO. 62B31				ILLINOIS FED. AID PROJECT



TRAFFIC CONTROL LEGEND

	TYPE II BARRICADES OR DRUMS @ 50' C-C W/ STEADY BURN MONO-DIRECTIONAL LIGHT (10' C-C ON RADII AND CURVES, AND 20' C-C ON TAPERS)		DIRECTION OF TRAVEL
	TEMPORARY CONCRETE BARRIER		SIGN ON PERMANENT OR PORTABLE SUPPORT
	WORK ZONE		TYPE III BARRICADE
	TEMPORARY PAVEMENT CONSTRUCTION		DOUBLE VERTICAL PANELS @ 50' CENTERS
	TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE), NARROW, TEST LEVEL 3		TEMPORARY TRAFFIC SIGNAL
			TEMPORARY RUMBLE STRIPS



M:\2012\12-15-14-0091 US 20 Harmony Creek Design\Transportation\CADD\CADD_Sheets\62B31-shr_MOT_Pre.dwg



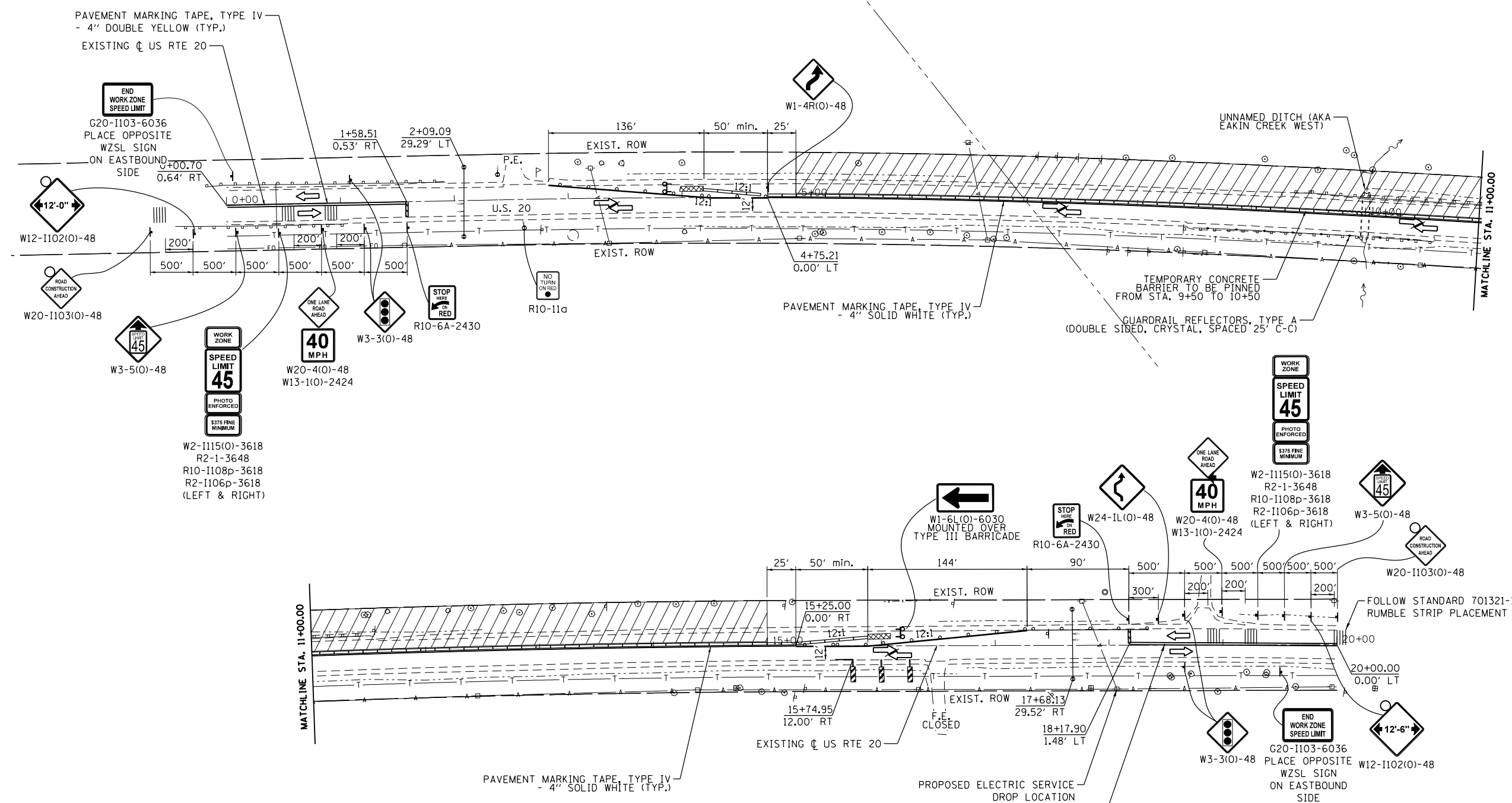
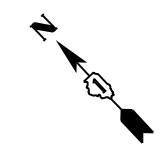
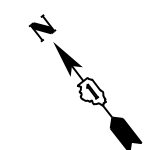
USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
MAINTENANCE OF TRAFFIC - PRE-STAGE**

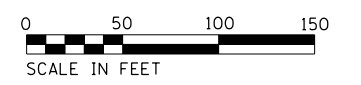
SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 33
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	



TRAFFIC CONTROL LEGEND

- TYPE II BARRICADES OR DRUMS @ 50' C-C W/ STEADY BURN MONO-DIRECTIONAL LIGHT (10' C-C ON RADII AND CURVES, AND 20' C-C ON TAPERS)
- TEMPORARY CONCRETE BARRIER WITH BARR WALL REF TYPE C (DOUBLE SIDED, CRYSTAL, 25' C-C)
- WORK ZONE
- TEMPORARY PAVEMENT CONSTRUCTION
- TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE), NARROW, TEST LEVEL 3
- DIRECTION OF TRAVEL
- SIGN ON PERMANENT OR PORTABLE SUPPORT
- TYPE III BARRICADE
- DOUBLE VERTICAL PANELS @ 50' CENTERS
- TEMPORARY TRAFFIC SIGNAL
- TEMPORARY RUMBLE STRIPS



M:\2012\12-15-15-0909 US 20 Harmony Creek Design\Transportation\CAADD\Sheet\62B31.sht_MOT_01.dwg



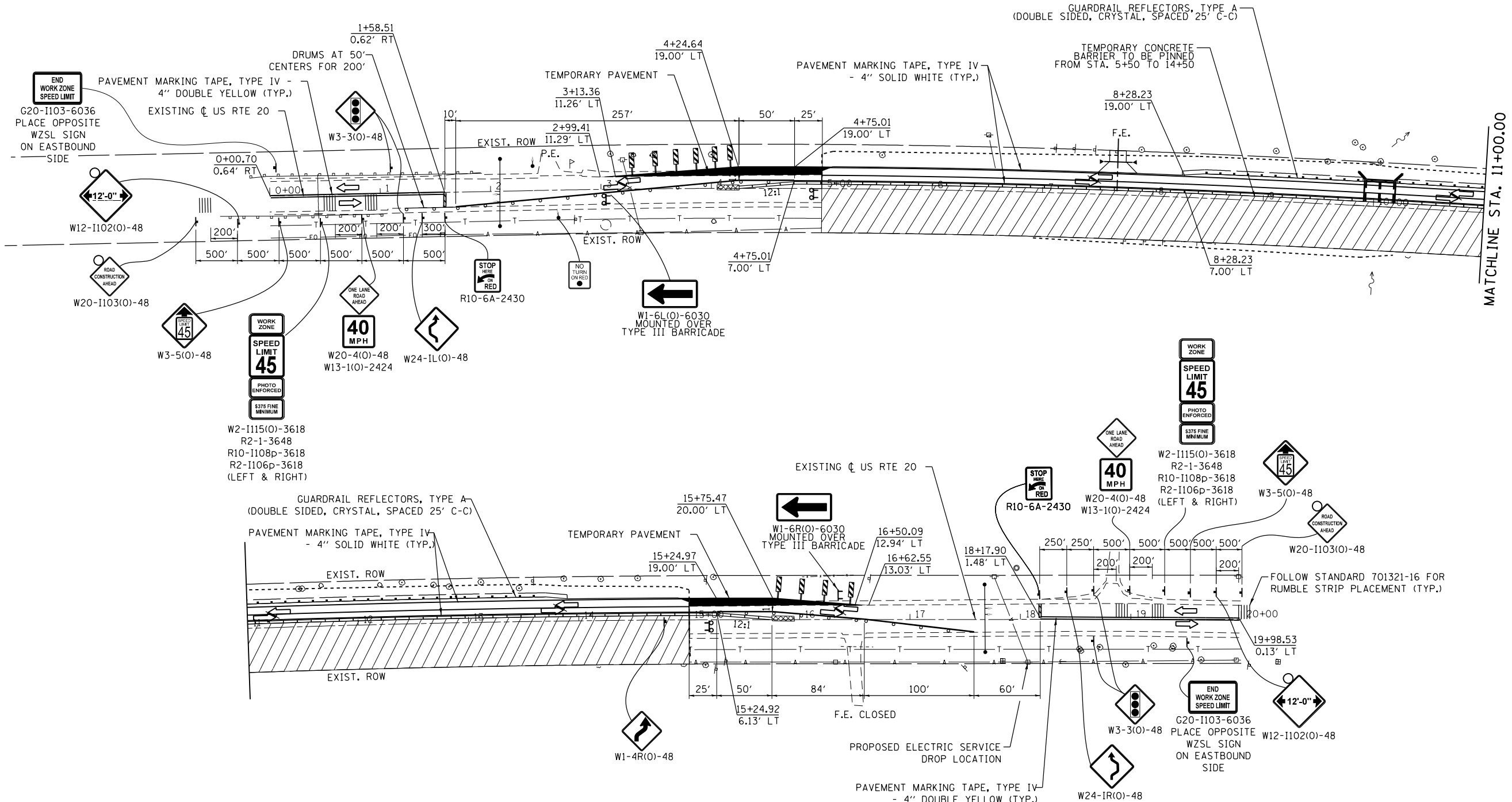
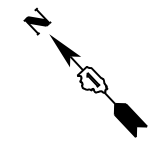
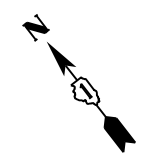
USER NAME = DavidL	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/20/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
MAINTENANCE OF TRAFFIC - STAGE I**

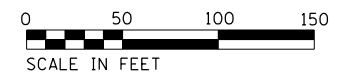
SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 34
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	



TRAFFIC CONTROL LEGEND

	TYPE II BARRICADES OR DRUMS @ 50' C-C W/ STEADY BURN MONO-DIRECTIONAL LIGHT (10' C-C ON RADII AND CURVES, AND 20' C-C ON TAPERS)		DIRECTION OF TRAVEL
	TEMPORARY CONCRETE BARRIER WITH BARR WALL REF TYPE C (DOUBLE SIDED, CRYSTAL, 25' C-C)		SIGN ON PERMANENT OR PORTABLE SUPPORT
	WORK ZONE		TYPE III BARRICADE
	TEMPORARY PAVEMENT CONSTRUCTION		DOUBLE VERTICAL PANELS @ 50' CENTERS
	TEMPORARY IMPACT ATTENUATOR (REDIRECTIVE), NARROW, TEST LEVEL 3		TEMPORARY TRAFFIC SIGNAL
			TEMPORARY RUMBLE STRIPS



M:\2012\12-15-09\US 20 Harmony Creek Design\Transportation\CADD\Sheet\62B31-sh1_MOT_02.dwg



USER NAME = DavidL	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/20/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
MAINTENANCE OF TRAFFIC - STAGE II**

SCALE: SHEET 6 OF 6 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 35
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

PART OF SECTION 34, TWP. 43 N., R. 6 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.
AND PART OF SECTION 3, TWP. 42N., R. 6E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.

LEGEND

SECTION / QUARTER SECTION LINE
 PLATTED LOT LINES
 PROPERTY (DEED) LINE
 APPARENT PROPERTY LINE
 EXISTING CENTERLINE
 PROPOSED CENTERLINE
 EXISTING RIGHT OF WAY LINE
 PROPOSED RIGHT OF WAY LINE
 EXISTING EASEMENT
 PROPOSED EASEMENT
 EXISTING ACCESS CONTROL LINE
 PROPOSED ACCESS CONTROL LINE
 MEASURED DIMENSION
 COMPUTED DIMENSION
 RECORDED DIMENSION
 EXISTING BUILDING

SECTION CORNER
 QUARTER SECTION CORNER

GRAPHIC SCALE
 FEET
 SCALE: 1" = 50'

- BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.
- IRON PIPE OR ROD FOUND
 - ⊕ *MAG* NAIL SET
 - + CUT CROSS FOUND OR SET
 - 5/8" REBAR SET
 - STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
 - M STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
 - ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
 - RIGHT OF WAY STAKING PROPOSED TO BE SET

- NOTES:
- BEARINGS AND DISTANCES SHOWN HEREON ARE ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".
 - ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES BY THE COMBINATION FACTOR OF 0.99993908.
 - AREAS SHOWN ON THIS PLAT ARE GROUND.
 - SEE SHEET 5 OF 5 FOR ADDITIONAL PROPOSED CENTERLINE ALIGNMENT AND TOTAL HOLDING INFORMATION.

STATE OF ILLINOIS)
) SS
 COUNTY OF COOK)

THIS IS TO CERTIFY THAT WE, MACKIE CONSULTANTS, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-002694, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 34, TOWNSHIP 43 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, McHENRY COUNTY, AND IN SECTION 3, TOWNSHIP 42 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

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

RUSSELL W. OLSEN
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-002718
 LICENSE EXPIRES: NOVEMBER 30, 2018
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Mackie Consultants, LLC
 9575 W. Higgins Road, Suite 500
 Rosemont, IL 60018
 (847)696-1400
 www.mackieconsult.com

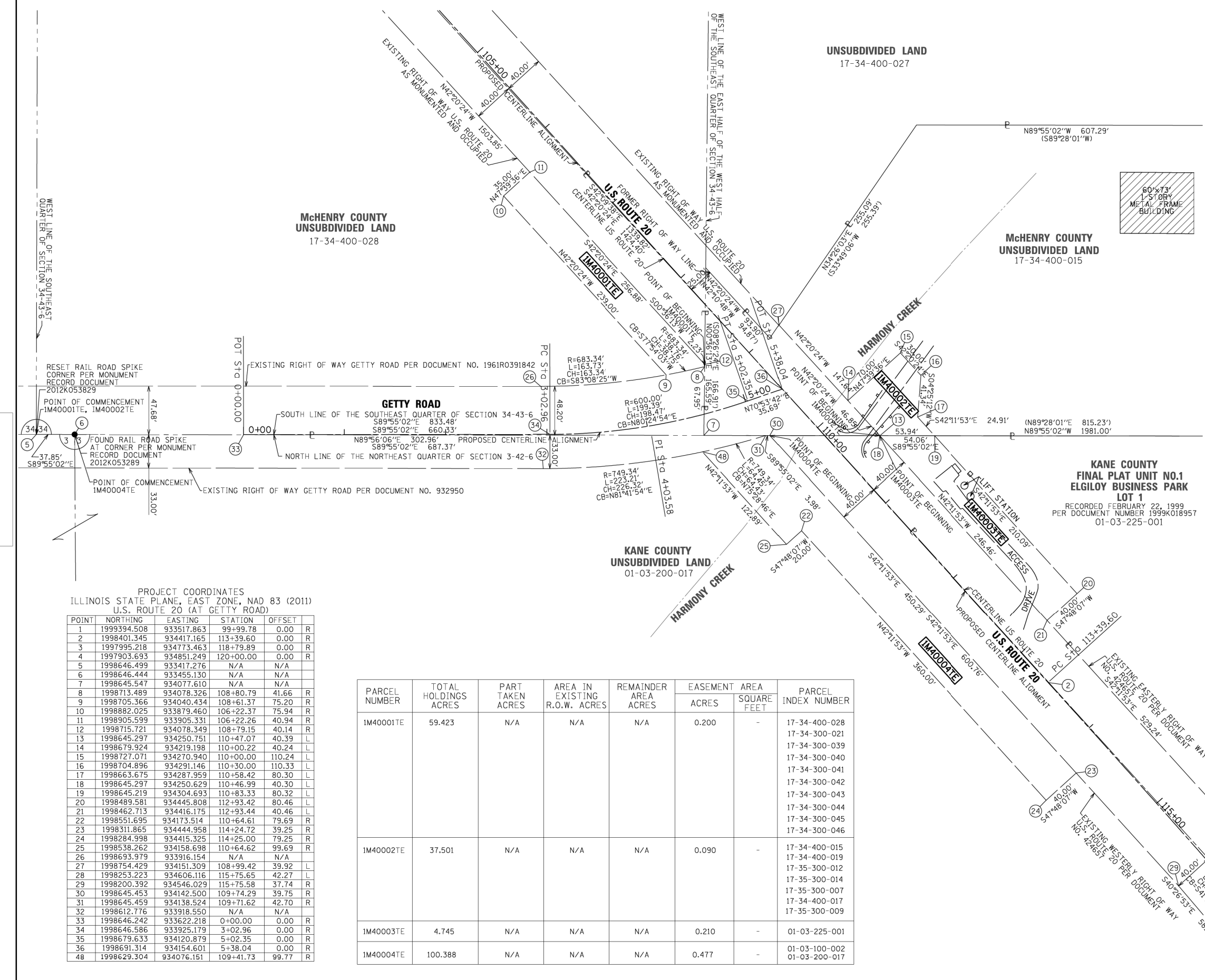
PLAT OF HIGHWAYS
 STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 U.S. ROUTE 20

LIMITS: U.S. ROUTE 20 (AT GETTY ROAD) COUNTY: KANE & McHENRY
 SECTION: STA. 099+99.78 TO STA. 120+00.00 JOB NO.: R-91-022-16
 SCALE: 1" = 50' SHEET 2 OF 4 SHEETS

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

IDOT USE ONLY

RECEIVED
 DEC 05 2016
 PLATS & LEGALS



BY	SMC	RWO	RWO
DATE	10-07-16	10-07-16	11-30-16
DRAWN	APPROVED	REVISOR	

PROJECT COORDINATES
 ILLINOIS STATE PLANE, EAST ZONE, NAD 83 (2011)
 U.S. ROUTE 20 (AT GETTY ROAD)

POINT	NORTHING	EASTING	STATION	OFFSET	R
1	1999394.508	933517.863	99+99.78	0.00	R
2	1998401.345	934417.165	113+39.60	0.00	R
3	1997995.218	934773.463	118+79.89	0.00	R
4	1997903.693	934851.249	120+00.00	0.00	R
5	1998646.499	933417.276	N/A	N/A	
6	1998646.444	933455.130	N/A	N/A	
7	1998645.547	934077.610	N/A	N/A	
8	1998713.489	934078.326	108+80.79	41.66	R
9	1998705.366	934040.434	108+61.37	75.20	R
10	1998882.025	933879.460	106+22.37	75.94	R
11	1998905.599	933905.331	106+22.26	40.94	R
12	1998715.721	934078.349	108+79.15	40.14	R
13	1998645.297	934250.751	110+47.07	40.39	L
14	1998679.924	934219.198	110+00.22	40.24	L
15	1998727.071	934270.940	110+00.00	110.24	L
16	1998704.896	934291.146	110+30.00	110.33	L
17	1998663.675	934287.959	110+58.42	80.30	L
18	1998645.297	934250.629	110+46.99	40.30	L
19	1998645.219	934304.693	110+83.33	80.32	L
20	1998489.581	934445.808	112+93.42	80.46	L
21	1998462.713	934416.175	112+93.44	40.46	L
22	1998551.695	934173.514	110+64.61	79.69	R
23	1998311.865	934444.958	114+24.72	39.25	R
24	1998284.998	934415.325	114+25.00	79.25	R
25	1998538.262	934158.698	110+64.62	99.69	R
26	1998693.979	933916.154	N/A	N/A	
27	1998754.429	934151.309	108+99.42	39.92	L
28	1998253.223	934606.116	115+75.65	42.27	L
29	1998200.392	934546.029	115+75.58	37.74	R
30	1998645.453	934142.500	109+74.29	39.75	R
31	1998645.459	934138.524	109+71.62	42.70	R
32	1998612.776	933918.550	N/A	N/A	
33	1998646.242	933622.218	0+00.00	0.00	R
34	1998646.586	933925.179	3+02.96	0.00	R
35	1998679.633	934120.879	5+02.35	0.00	R
36	1998691.314	934154.601	5+38.04	0.00	R
48	1998629.304	934076.151	109+41.73	99.77	R

PARCEL NUMBER	TOTAL HOLDINGS ACRES	PART TAKEN ACRES	AREA IN EXISTING R.O.W. ACRES	REMAINDER AREA ACRES	EASEMENT AREA		PARCEL INDEX NUMBER
					ACRES	SQUARE FEET	
1M40001TE	59.423	N/A	N/A	N/A	0.200	-	17-34-400-028 17-34-300-021 17-34-300-039 17-34-300-040 17-34-300-041 17-34-300-042 17-34-300-043 17-34-300-044 17-34-300-045 17-34-300-046
1M40002TE	37.501	N/A	N/A	N/A	0.090	-	17-34-400-015 17-34-400-019 17-35-300-012 17-35-300-014 17-35-300-007 17-34-400-017 17-35-300-009
1M40003TE	4.745	N/A	N/A	N/A	0.210	-	01-03-225-001
1M40004TE	100.388	N/A	N/A	N/A	0.477	-	01-03-100-002 01-03-200-017

REVISION DATE: ___/___/___ REVISION MADE BY: _____

12/15/2016 10:29:23 AM
 N:\3042\Survey\Existing\3042-Plat of Highways-02.plt

PART OF SECTION 34, TWP. 43 N., R. 6 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.
AND PART OF SECTION 3, TWP. 42N., R. 6E. OF THE 3RD. P.M., IN KANE COUNTY, ILLINOIS.

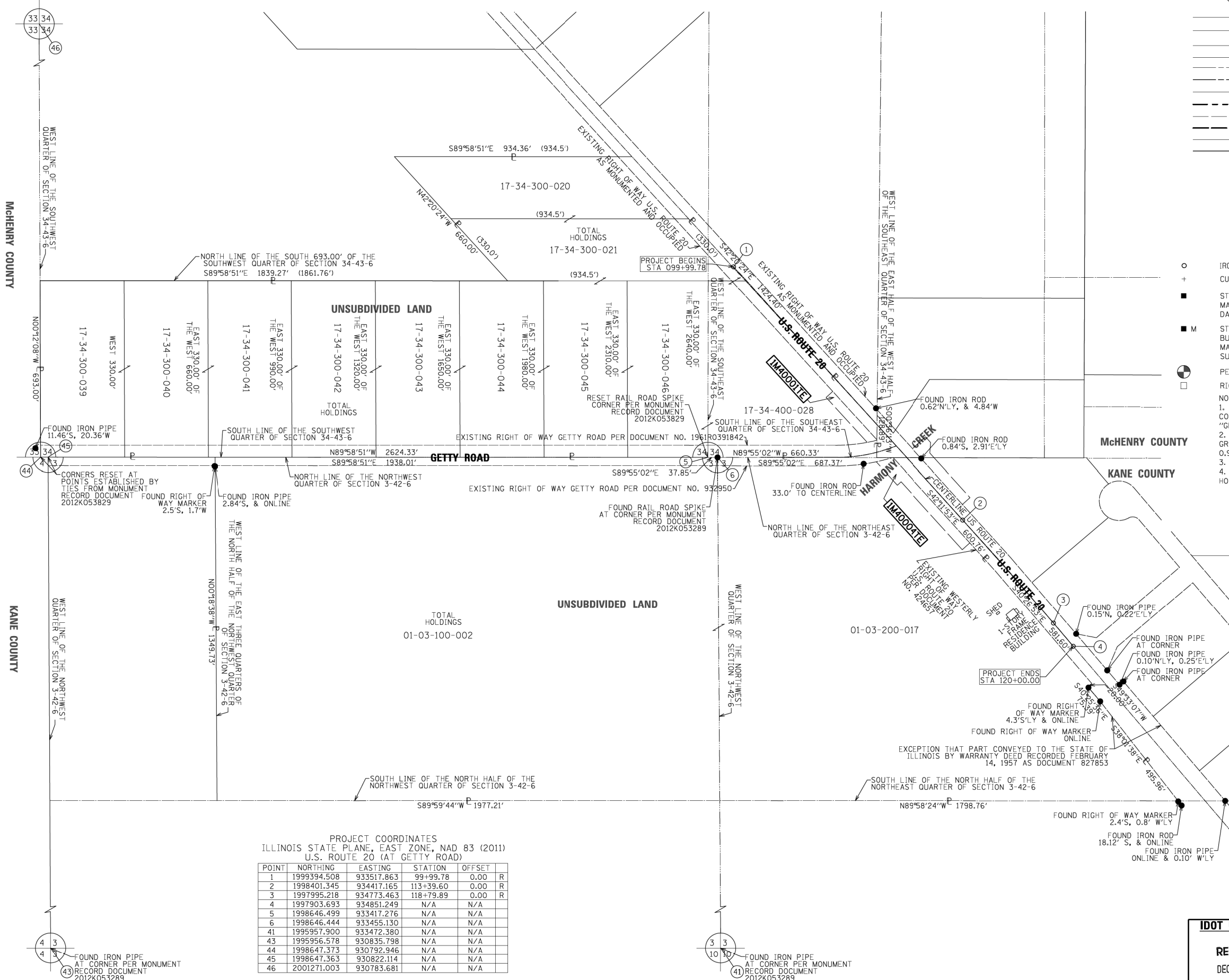
LEGEND

- SECTION / QUARTER SECTION LINE
- PLATTED LOT LINES
- PROPERTY (DEED) LINE
- APPL APPARENT PROPERTY LINE
- EXISTING CENTERLINE
- PROPOSED CENTERLINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING ACCESS CONTROL LINE
- PROPOSED ACCESS CONTROL LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORDED DIMENSION
- EXISTING BUILDING

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, NAD83 (2011 ADJUSTMENT), EAST ZONE.

- IRON PIPE OR ROD FOUND
- ⊕ MAG' NAIL SET
- + CUT CROSS FOUND OR SET
- 5/8" REBAR SET
- M STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.
- STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS. BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET

NOTES:
1. BEARINGS AND DISTANCES SHOWN HEREON ARE ON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (2011 ADJUSTMENT) "GRID".
2. ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND". TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES BY THE COMBINATION FACTOR OF 0.99993908.
3. AREAS SHOWN ON THIS PLAN ARE GROUND.
4. SEE SHEET 5 OF 5 FOR ADDITIONAL PROPOSED CENTERLINE ALIGNMENT AND TOTAL HOLDING INFORMATION.



BY	RWO	19-10-11
	RWO	16-11-01
	SMC	10-07-16
DATE	DRAWN	
	APPROVED	
	REVISED	

PROJECT COORDINATES
ILLINOIS STATE PLANE, EAST ZONE, NAD 83 (2011)
U.S. ROUTE 20 (AT GETTY ROAD)

POINT	NORTHING	EASTING	STATION	OFFSET	
1	1999394.508	933517.863	99+99.78	0.00	R
2	1998401.345	934417.165	113+39.60	0.00	R
3	1997995.218	934773.463	118+79.89	0.00	R
4	1997903.693	934851.249	N/A	N/A	
5	1998646.499	933417.276	N/A	N/A	
6	1998646.444	933455.130	N/A	N/A	
41	1995957.900	933472.380	N/A	N/A	
43	1995956.578	930835.798	N/A	N/A	
44	1998647.373	930792.946	N/A	N/A	
45	1998647.363	930822.114	N/A	N/A	
46	2001271.003	930783.681	N/A	N/A	

STATE OF ILLINOIS)
COUNTY OF COOK)

THIS IS TO CERTIFY THAT WE, MACKIE CONSULTANTS, LLC, AN ILLINOIS PROFESSIONAL DESIGN FIRM NO. 184-002694, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 34, TOWNSHIP 43 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, McHENRY COUNTY, AND IN SECTION 3, TOWNSHIP 42 NORTH, RANGE 6 EAST OF THE THIRD PRINCIPAL MERIDIAN, KANE COUNTY THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

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

RUSSELL W. OLSEN
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 035-002718
LICENSE EXPIRES: NOVEMBER 30, 2018
THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

Mackie Consultants, LLC
9575 W. Higgins Road, Suite 500
Rosemont, IL 60018
(847)696-1400
www.mackieconsult.com

PLAT OF HIGHWAYS
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
U.S. ROUTE 20

LIMITS: U.S. ROUTE 20 (AT GETTY ROAD) COUNTY: KANE & McHENRY
SECTION: STA. 099+99.78 TO STA. 120+00.00 JOB NO.: R-91-022-16
SHEET 3 OF 4 SHEETS

RECEIVED
DEC 05 2016
PLATS & LEGALS

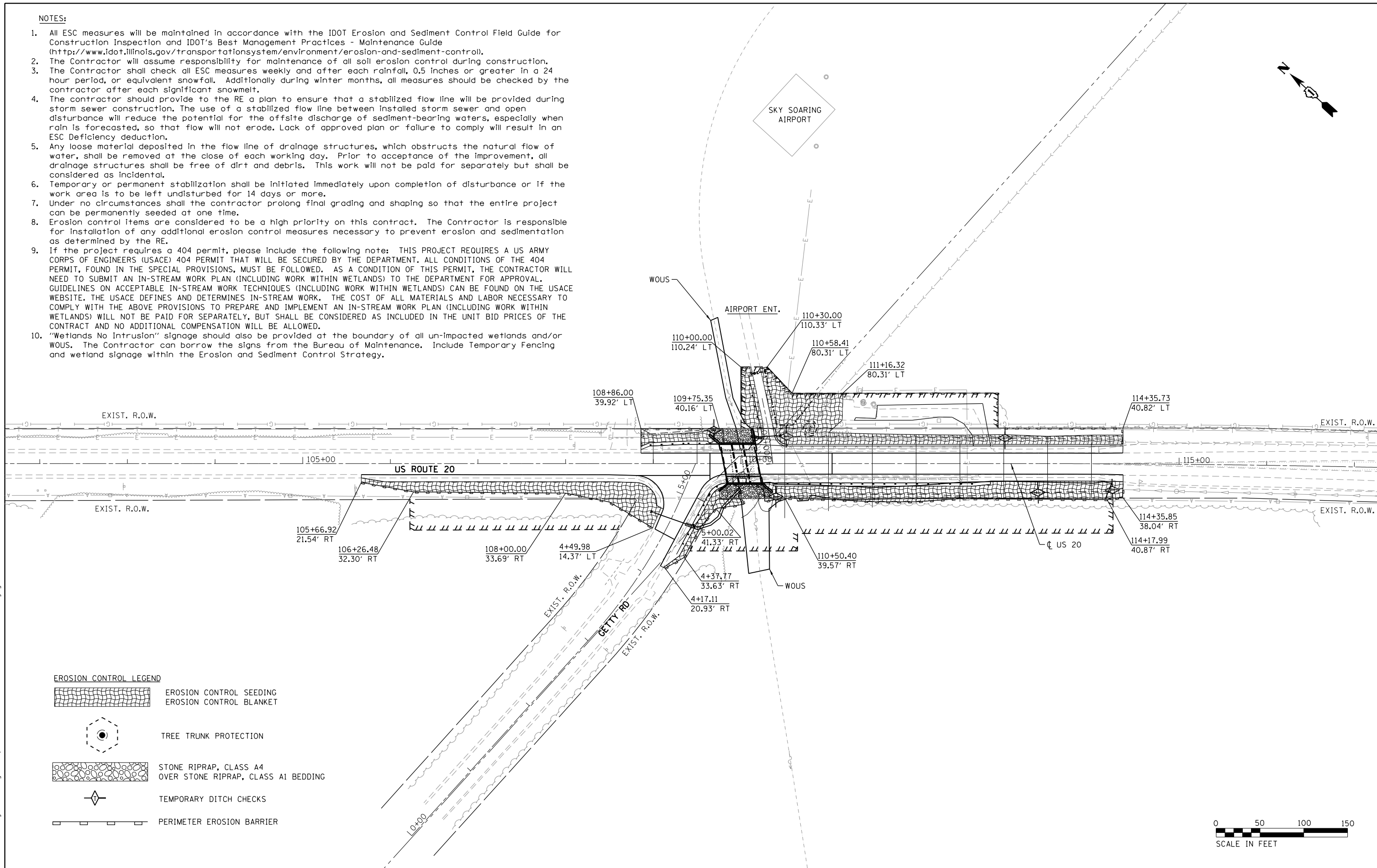
BUREAU OF LAND ACQUISITION
201 WEST CENTER COURT
SCHAMBURG, ILLINOIS 60196

REVISION DATE: ____/____/____ REVISION MADE BY: _____


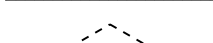

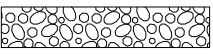

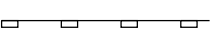
12/5/2016 10:26:46 AM
N:\3042\Survey\Existing\3042-Plat of Highways-03.dwg

NOTES:

- All ESC measures will be maintained in accordance with the IDOT Erosion and Sediment Control Field Guide for Construction Inspection and IDOT's Best Management Practices - Maintenance Guide (<http://www.idot.illinois.gov/transportationsystem/environment/erosion-and-sediment-control>).
- The Contractor will assume responsibility for maintenance of all soil erosion control during construction.
- 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.
- 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.
- 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.
- 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.
- Under no circumstances shall the contractor prolong final grading and shaping so that the entire project can be permanently seeded at one time.
- 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.
- 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.
- "Wetlands No Intrusion" signage should also be provided at the boundary of all un-impacted wetlands and/or WOUS. The Contractor can borrow the signs from the Bureau of Maintenance. Include Temporary Fencing and wetland signage within the Erosion and Sediment Control Strategy.



EROSION CONTROL LEGEND

-  EROSION CONTROL SEEDING
-  EROSION CONTROL BLANKET
-  TREE TRUNK PROTECTION
-  STONE RIPRAP, CLASS A4
OVER STONE RIPRAP, CLASS A1 BEDDING
-  TEMPORARY DITCH CHECKS
-  PERIMETER EROSION BARRIER



**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

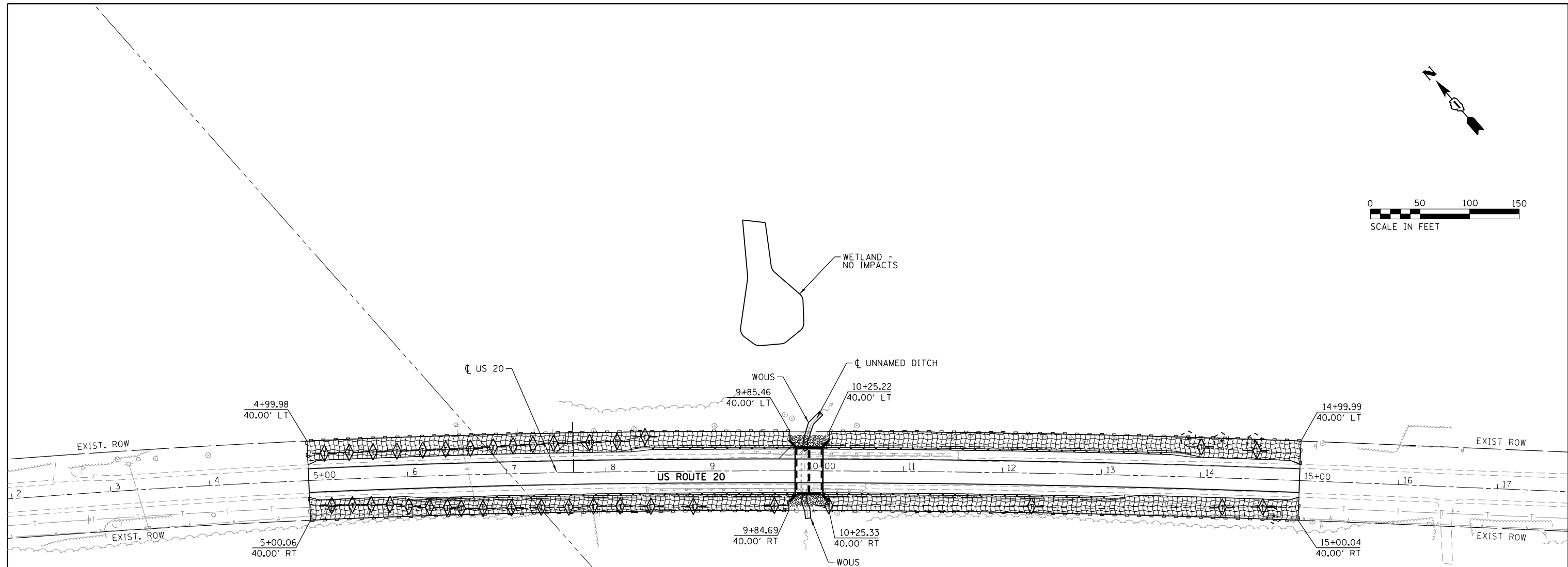
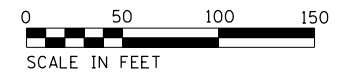
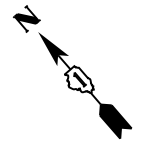
**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
EROSION & SEDIMENT CONTROL PLAN**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	38
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.







M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31.sht.Eros_harmony.dgn



NOTES:

1. All ESC measures will be maintained in accordance with the IDOT Erosion and Sediment Control Field Guide for Construction Inspection and IDOT's Best Management Practices - Maintenance Guide (<http://www.idot.illinois.gov/transportationsystem/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. "Wetlands No Intrusion" signage should also be provided at the boundary of all un-impacted wetlands and/or WOUS. The Contractor can borrow the signs from the Bureau of Maintenance. Include Temporary Fencing and wetland signage within the Erosion and Sediment Control Strategy.

EROSION CONTROL LEGEND

-  EROSION CONTROL SEEDING
-  EROSION CONTROL BLANKET
-  TREE TRUNK PROTECTION
-  STONE RIPRAP, CLASS A4
OVER STONE RIPRAP, CLASS A1 BEDDING
-  TEMPORARY DITCH CHECKS
-  PERIMETER EROSION BARRIER

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh.t.Eros.dtcch.dgn



USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

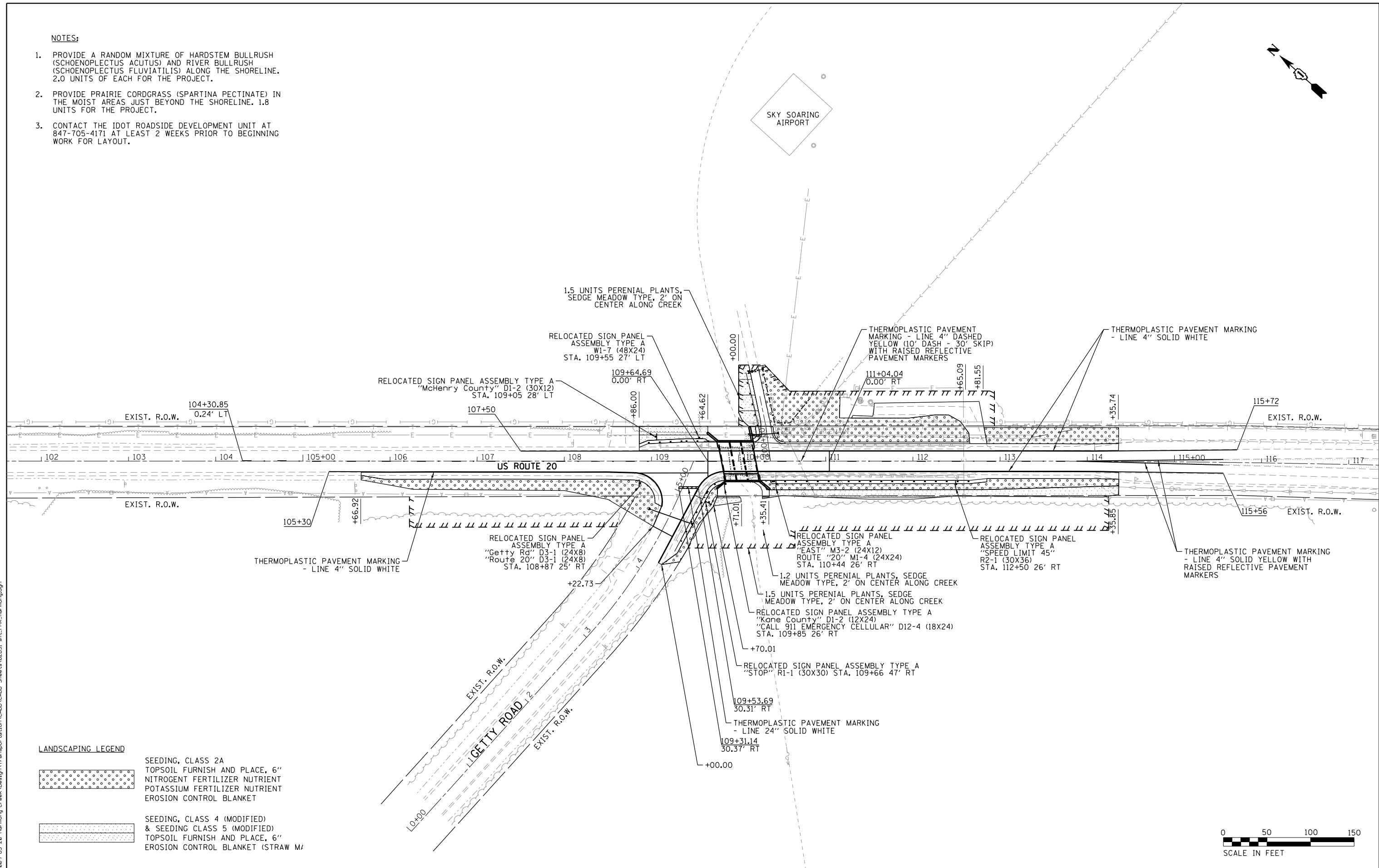
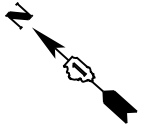
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
EROSION & SEDIMENT CONTROL PLAN**

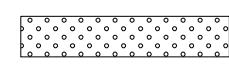
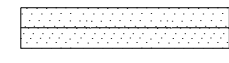
F.A. RTE. = 525/345	SECTION = 2015-063B	COUNTY = KANE/MCHENRY	TOTAL SHEETS = 87	SHEET NO. = 39
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 62B31	
ILLINOIS FED. AID PROJECT				

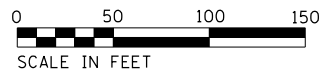
NOTES:

1. PROVIDE A RANDOM MIXTURE OF HARDSTEM BULLRUSH (SCHOENOPECTUS ACUTUS) AND RIVER BULLRUSH (SCHOENOPECTUS FLUVIATILIS) ALONG THE SHORELINE. 2.0 UNITS OF EACH FOR THE PROJECT.
2. PROVIDE PRAIRIE CORDGRASS (SPARTINA PECTINATE) IN THE MOIST AREAS JUST BEYOND THE SHORELINE. 1.8 UNITS FOR THE PROJECT.
3. CONTACT THE IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING WORK FOR LAYOUT.



LANDSCAPING LEGEND

-  SEEDING, CLASS 2A
TOPSOIL FURNISH AND PLACE, 6"
NITROGEN FERTILIZER NUTRIENT
POTASSIUM FERTILIZER NUTRIENT
EROSION CONTROL BLANKET
-  SEEDING, CLASS 4 (MODIFIED)
& SEEDING CLASS 5 (MODIFIED)
TOPSOIL FURNISH AND PLACE, 6"
EROSION CONTROL BLANKET (STRAW M/



M:_2012\12-15-14-0091 US 20 Harmony Creek Design\Transportation\CADD\CADD\Sheets\62B31.sht.PMK_harmony.dgn

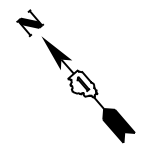
USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
OVER HARMONY CREEK (AT GETTY ROAD)
PAVEMENT MARKING, SIGNING & LANDSCAPING PLAN**

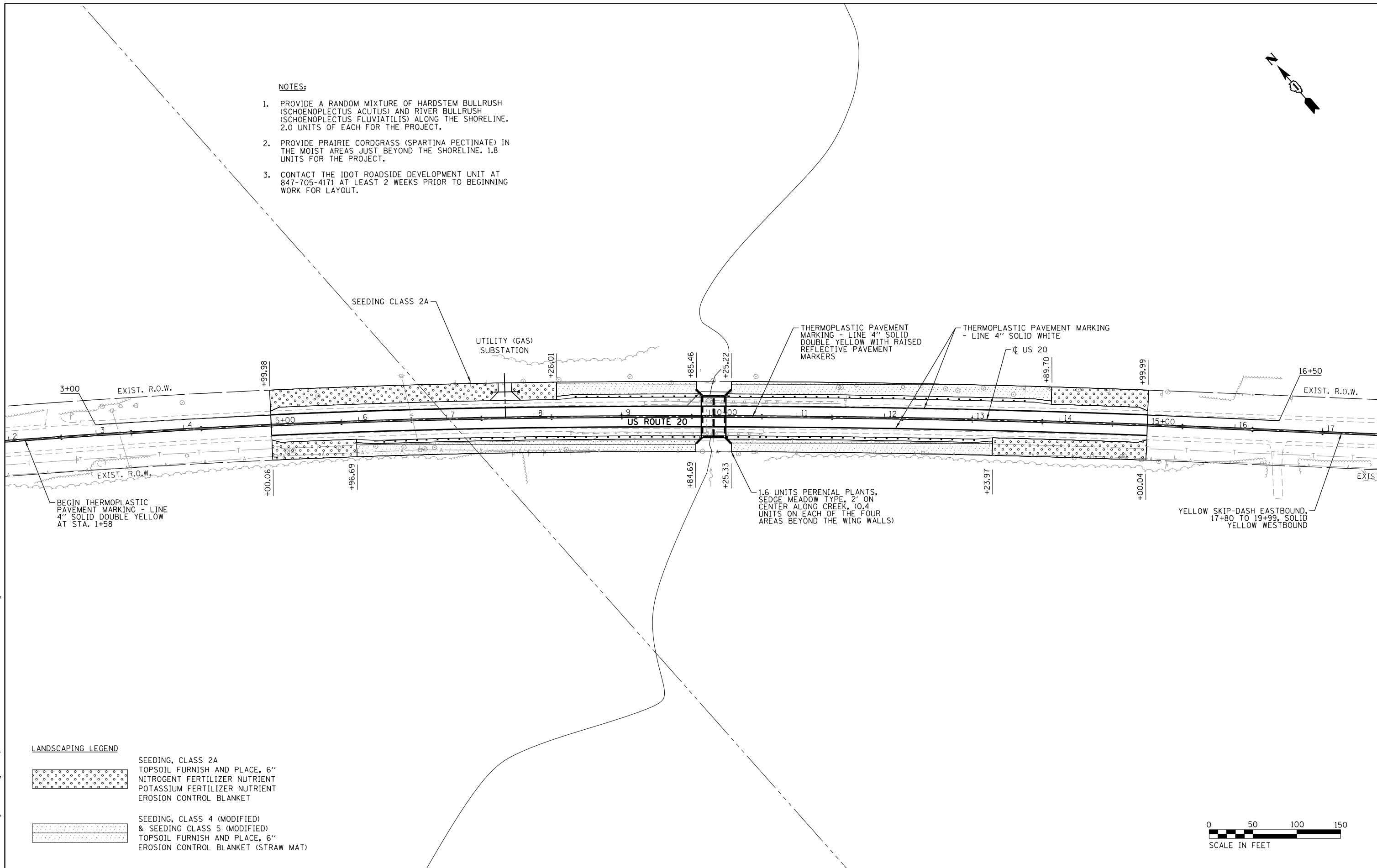
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 40
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

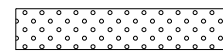


NOTES:

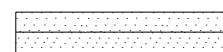
1. PROVIDE A RANDOM MIXTURE OF HARDSTEM BULLRUSH (SCHOENOPLECTUS ACUTUS) AND RIVER BULLRUSH (SCHOENOPLECTUS FLUVIATILIS) ALONG THE SHORELINE. 2.0 UNITS OF EACH FOR THE PROJECT.
2. PROVIDE PRAIRIE CORDGRASS (SPARTINA PECTINATE) IN THE MOIST AREAS JUST BEYOND THE SHORELINE. 1.8 UNITS FOR THE PROJECT.
3. CONTACT THE IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 AT LEAST 2 WEEKS PRIOR TO BEGINNING WORK FOR LAYOUT.



LANDSCAPING LEGEND



SEEDING, CLASS 2A
 TOPSOIL FURNISH AND PLACE, 6"
 NITROGEN FERTILIZER NUTRIENT
 POTASSIUM FERTILIZER NUTRIENT
 EROSION CONTROL BLANKET



SEEDING, CLASS 4 (MODIFIED)
 & SEEDING CLASS 5 (MODIFIED)
 TOPSOIL FURNISH AND PLACE, 6"
 EROSION CONTROL BLANKET (STRAW MAT)



SCALE IN FEET

M:\2012\12-15-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh1-PMK-ditch.dgn



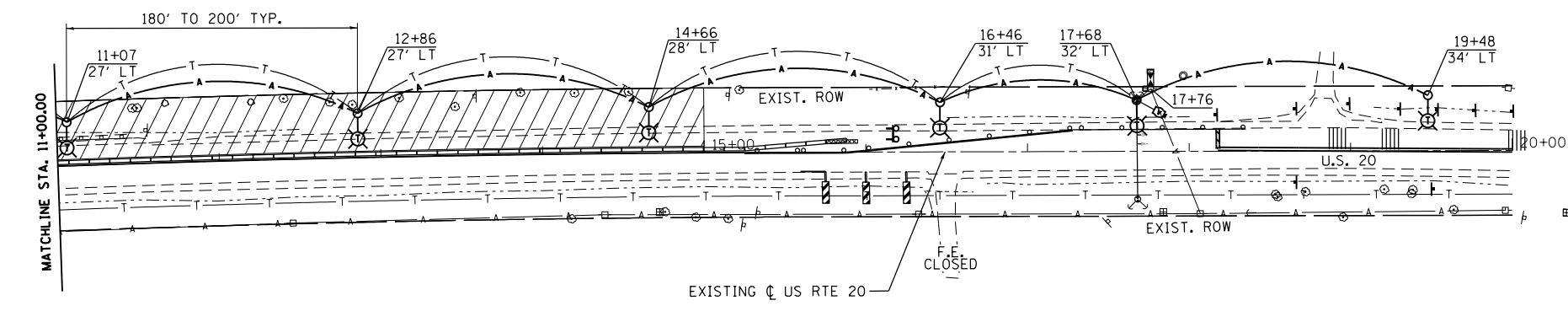
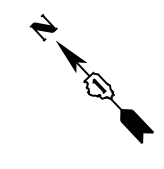
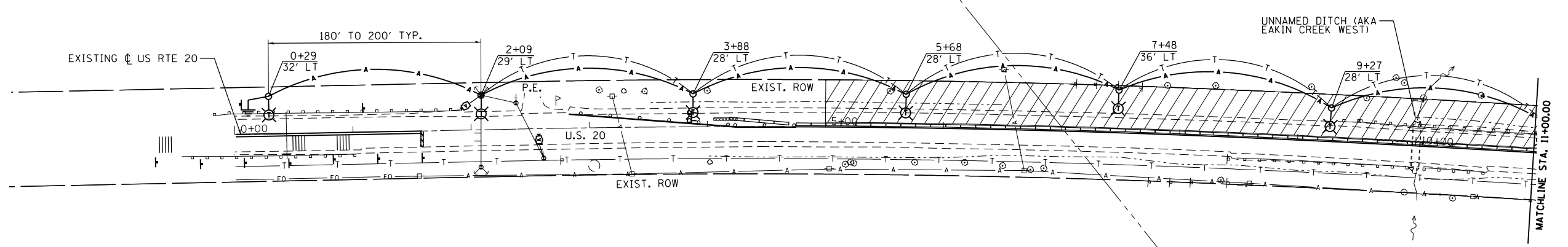
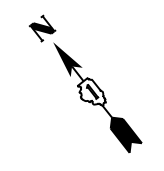
USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**US ROUTE 20
 OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
 PAVEMENT MARKING, SIGNING & LANDSCAPING PLAN**

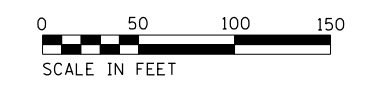
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	41
			CONTRACT NO. 62B31	
ILLINOIS FED. AID PROJECT				



TEMPORARY TRAFFIC SIGNAL LEGEND

- | | | | |
|--|---|--|--|
| | 400W, 120V, MCIII HPS. WITH PHOTO CELL 15' MA. 50' MH ON WOOD POLE, CLASS 4 | | TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4 |
| | 3-1/2\"/> | | TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED |
| | TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A | | TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE |
| | GROUND ROD 5/8\"/> | | TEMPORARY VIDEO DETECTOR |
| | COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX | | TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED. |



M:\2012\12-15-15-099 US 20 Harmony Creek Design\Transportation\CADD\Sheet\62B31-shr.txd

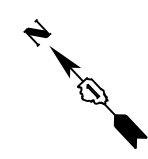
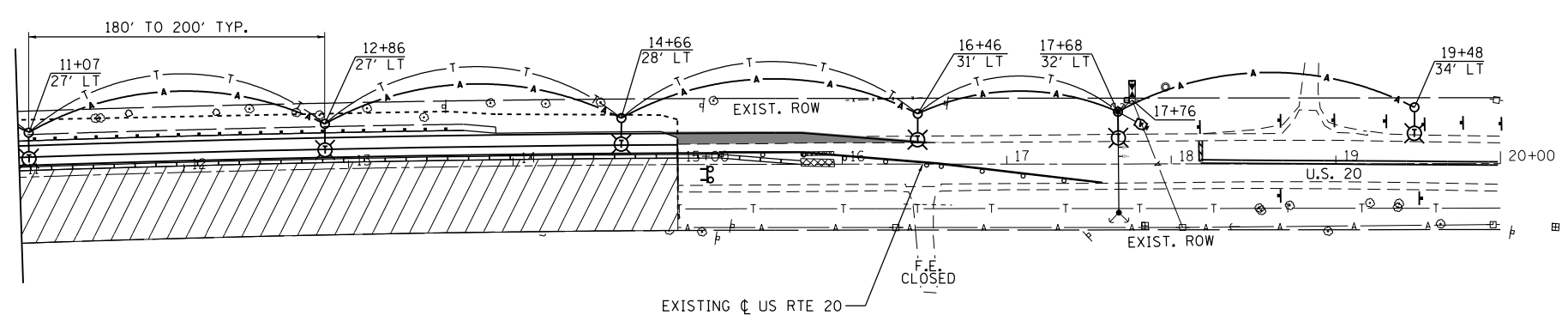
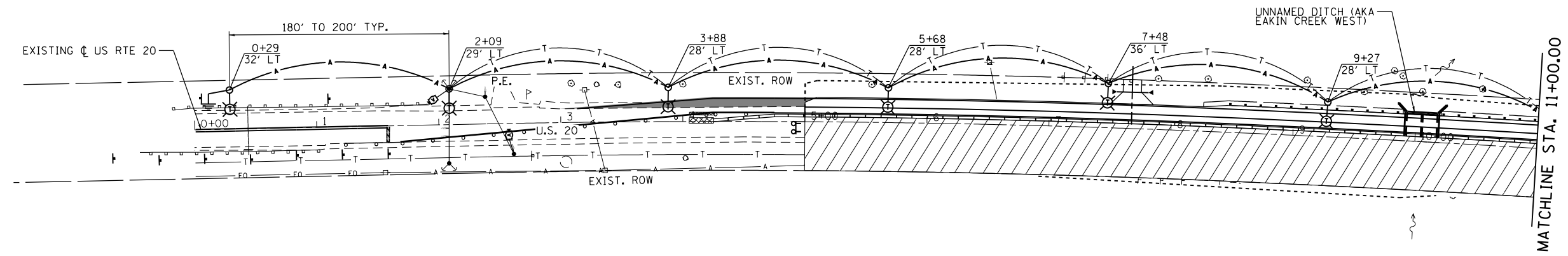
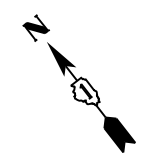


USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

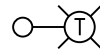

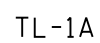







**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

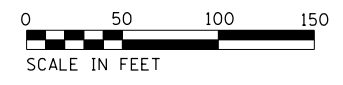
US ROUTE 20 OVER AN UNNAMED DITCH STAGE 1 TEMPORARY TRAFFIC SIGNAL & LIGHTING PLANS			
SCALE:	SHEET 1	OF 4 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	42
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



TEMPORARY TRAFFIC SIGNAL LEGEND

-  400W, 120V, MCIII HPS. WITH PHOTO CELL
15' MA, 50' MH ON WOOD POLE, CLASS 4
-  3-1/C*2, AERIAL CABLE WITH MESSENGER
WIRE UNLESS OTHERWISE NOTED
-  TL-1A TEMPORARY LIGHTING UNIT NUMBER - ONE
CIRCUIT A
-  GROUND ROD 5/8" DIA. X 10'
-  COMBINATION LIGHTING AND TRAFFIC
POLE MOUNTED ELECTRICAL SERVICE BOX
-  TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
-  TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER
OF SECTION AND DISPLAY AS REQUIRED
-  TEMPORARY TRAFFIC CONTROLLER WITH UPS AND
BOTTOM PLATE MOUNTED TO WOOD POLE
-  TEMPORARY VIDEO DETECTOR
-  TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER
OF CONDUCTORS AS REQUIRED.



M:\2012\12-15-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-shr.TemporarySignal_02.dwg



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

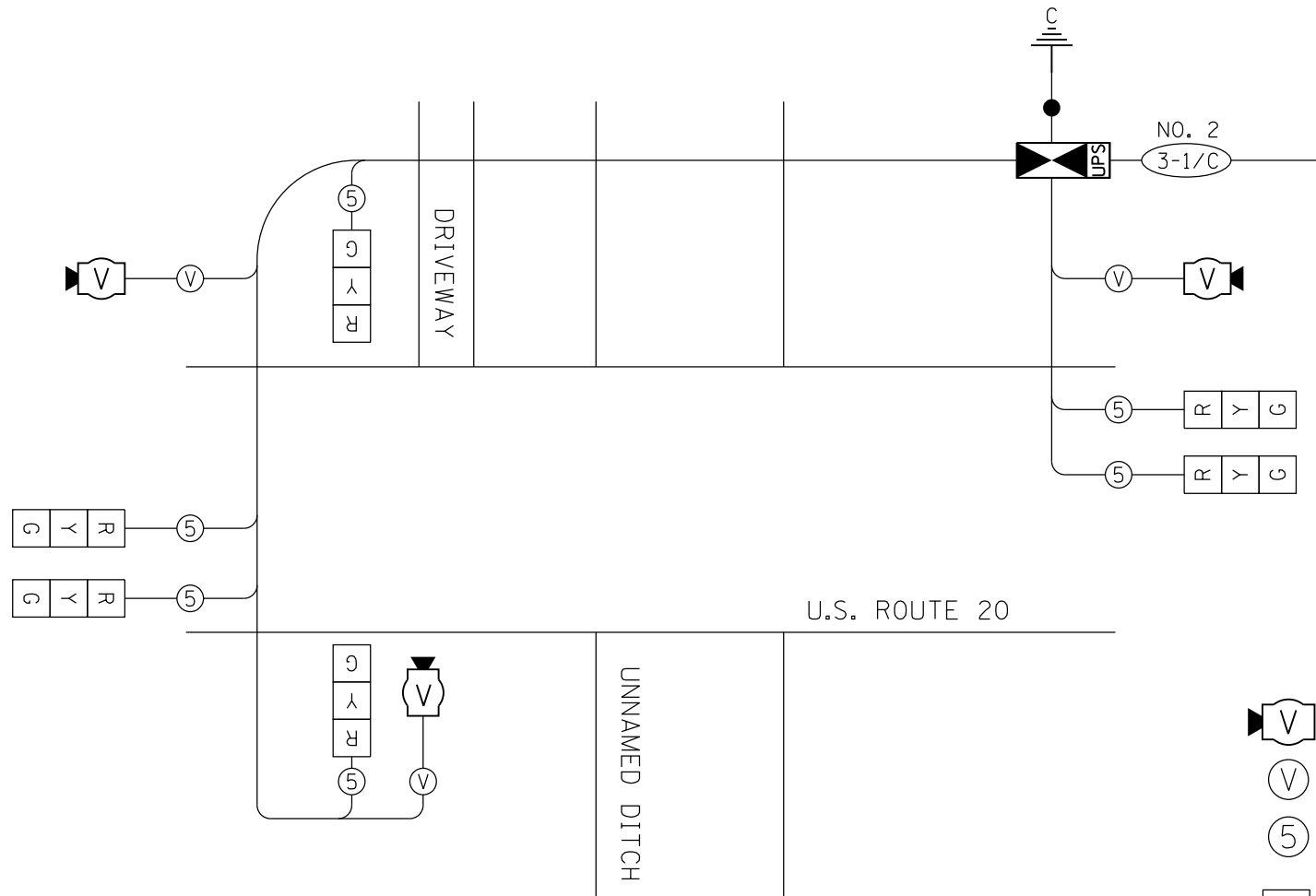
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

US ROUTE 20 OVER AN UNNAMED DITCH STAGE 2 TEMPORARY TRAFFIC SIGNAL & LIGHTING PLANS			
SCALE:	SHEET 2	OF 4 SHEETS	STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 43
CONTRACT NO. 62B31				ILLINOIS FED. AID PROJECT

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300MM) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATED HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
5. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.

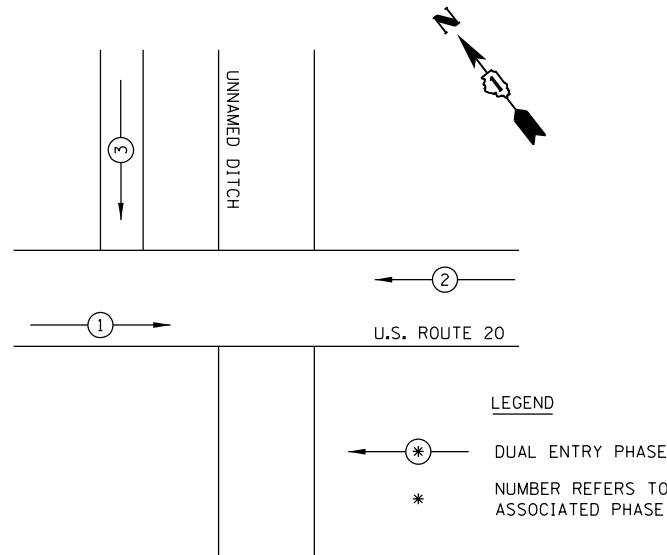


TEMPORARY CABLE PLAN – STAGES I & II

NOT TO SCALE

LEGEND

- TEMPORARY VIDEO DETECTOR
- VENDOR CABLE FOR CAMERA
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS SHALL BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED
- TEMPORARY TRAFFIC SIGNAL SECTION, 12"



PHASE DESIGNATION DIAGRAM

- LEGEND
- DUAL ENTRY PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND LED	% OPERATION		
SIGNAL (RED)	6	17	0.50	51.00	
(YELLOW)	6	25	0.25	37.50	
(GREEN)	6	15	0.25	22.50	
ARROW	-	12	0.10	0.00	
PED. SIGNAL	-	25	1.00	0.00	
CONTROLLER	1	100	1.00	100.00	
VIDEO SYSTEM	1	150	1.00	150.00	
FLASHER		25	0.50		
ENERGY COSTS TO:				TOTAL =	361.00
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 CENTER COURT SCHAUMBURG, ILLINOIS 60195					
ENERGY SUPPLY CONTACT: _____ PHONE: _____ COMPANY: COMMONWEALTH EDISON					

M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-sh1-TempSignal_Wire.dwg



USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

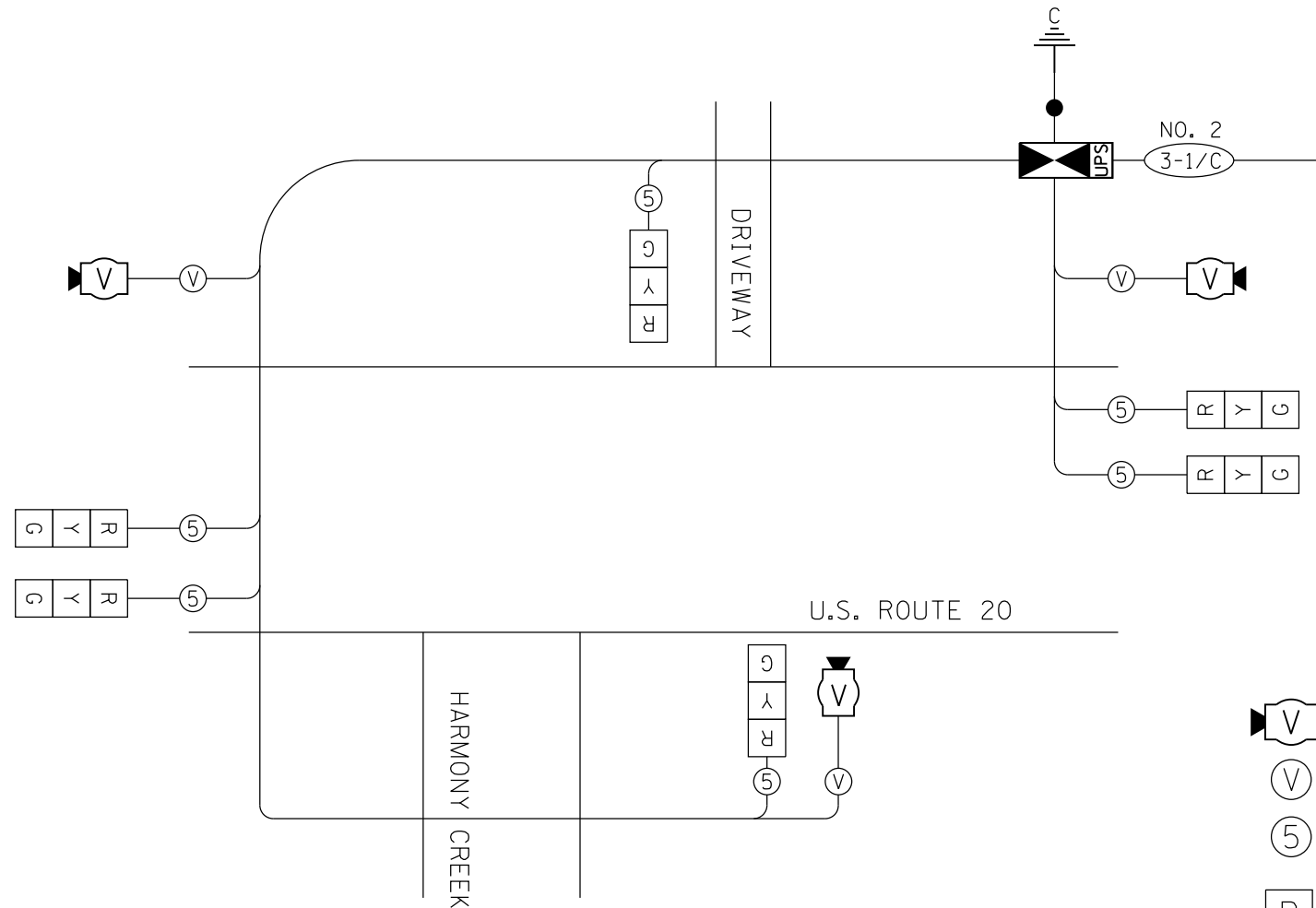
US ROUTE 20
TEMPORARY CABLE PLAN AND PHASE
DESIGNATION DIAGRAM US 20

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	44
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE LED AND 12" (300MM) DIAMETER. HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. PEDESTRIAN SIGNALS SHALL INCLUDE SOLID INTERNATIONAL SYMBOLS. PEDESTRIAN SIGNALS WITH COUNTDOWN TIMERS SHALL BE USED WHEN THE EXISTING INSTALLATION UTILIZES COUNTDOWN TYPE OR AS DIRECTED BY THE ENGINEER. COUNTDOWN TYPE PEDESTRIAN SIGNALS ARE NOT TO BE INSTALLED AT A RAILROAD INTERSECTION. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATED HEADSTO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON TH PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEMS SHALL BE INSTALLED AND MADE OPERATIONAL AT TEMPORARY TRAFFIC SIGNAL INSTALLATIONS WHERE UPS IS INSTALLED AT THE EXISTING TRAFFIC SIGNAL, TEMPORARY TRAFFIC SIGNALS AT RAILROAD INTERSECTIONS, AND TEMPORARY TRAFFIC SIGNALS AT INTERSECTIONS WITH FIRE STATION ACTUATED EMERGENCY VEHICLE PRE-EMPTION, OR WHEN INDICATED ON THE PLANS.
5. DETECTION AT TEMPORARY TRAFFIC SIGNALS SHALL BE INCLUDED FOR ALL APPROACHES OF THE INTERSECTION UNLESS INDICATED OTHERWISE ON THE PLANS. THE DETECTION SYSTEM MUST MEET THE SPECIFICATIONS OF DISTRICT 1 AND THE CONTRACTOR SHALL PLACE THE DETECTORS INTO OPERATION TO THE SATISFACTION OF THE ENGINEER.



LEGEND

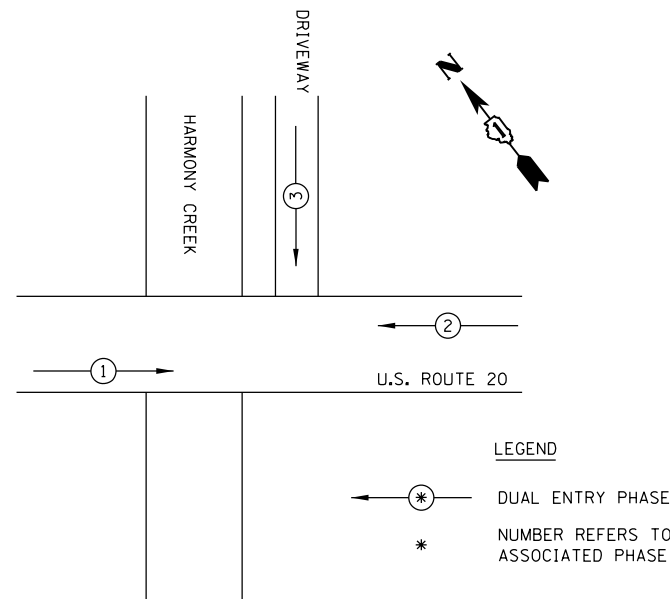
- TEMPORARY VIDEO DETECTOR
- VENDOR CABLE FOR CAMERA
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS SHALL BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED
- TEMPORARY TRAFFIC SIGNAL SECTION, 12"

TEMPORARY CABLE PLAN - STAGES I & II

NOT TO SCALE

NOTES:

1. REFER TO DISTRICT STANDARD BE-805 FOR TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS AND GENERAL NOTES.



- LEGEND
- DUAL ENTRY PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
TEMPORARY BRIDGE TRAFFIC SIGNAL INSTALLATION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND LED	% OPERATION		
SIGNAL (RED)	6	17	0.50	51.00	
(YELLOW)	6	25	0.25	37.50	
(GREEN)	6	15	0.25	22.50	
ARROW	-	12	0.10	0.00	
PED. SIGNAL	-	25	1.00	0.00	
CONTROLLER	1	100	1.00	100.00	
VIDEO SYSTEM	1	150	1.00	150.00	
FLASHER		25	0.50		
ENERGY COSTS TO:				TOTAL =	361.00
ILLINOIS DEPARTMENT OF TRANSPORTATION 201 CENTER COURT SCHAUMBURG, ILLINOIS 60195					
ENERGY SUPPLY CONTACT: _____ PHONE: _____ COMPANY: COMMONWEALTH EDISON					

M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD_Sheets\62B31-sh.t. TempSignal_Wire_harmony.dgn

	USER NAME = JuanS	DESIGNED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 8/17/2018	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN AND PHASE
DESIGNATION DIAGRAM US 20
SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	45
CONTRACT NO. 62B31				ILLINOIS FED. AID PROJECT

Benchmark B Bench tie on PP @ NW corner of Getty Road and US 20, Elev. 882.67
 Existing Structure No. 045-2037 built in the 1920's as a cast in place 12Wx4'Hx32'L box culvert.
 Stage construction with both directions of traffic utilizing one lane controlled by a temporary traffic signal during construction.
 No salvage.
 Precast alternate is not allowed.

WATERWAY INFORMATION

Drainage Area = 3.5 sq. mi. Low Grade Elev. 883.5 @ Sta 113+00

Flood	Freq. Yr.	Q C.F.S.	Opening Ft ²		Nat. H.W.E.	Head - Ft		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	352	37.2	166.8	880.7	2.2	0.3	882.9	881.0
Base	50	622	48.6	174.0	881.7	2.3	0.3	884.0	882.0
Overtopping	100	787	54.2	174.0	882.2			884.1	882.5
Max. Calc.	500	1005	55.1	174.0	882.7	1.5	0.4	884.2	883.1

10-Year velocity (Exist.) = 2.1 ft/sec
 10-Year velocity (Proposed) = 1.8 ft/sec
 2-Year peak flow rate (Q) = 178.0 cfs peak

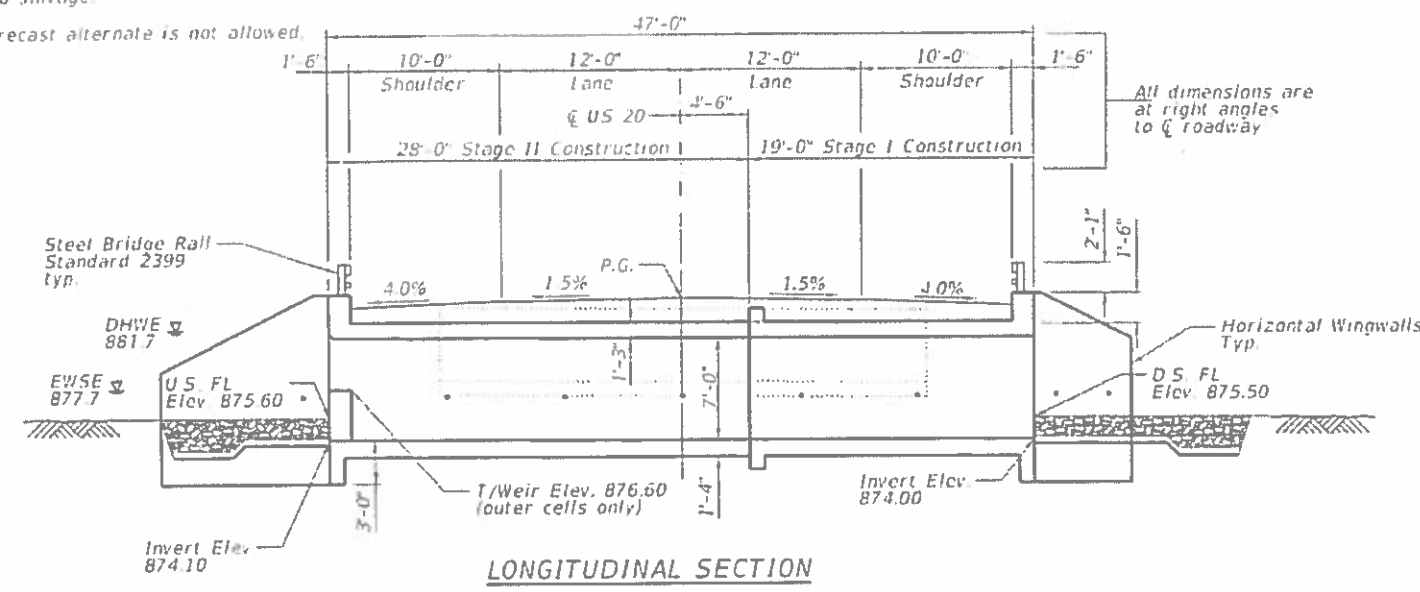
NOTES:

- For General Notes, Index of Sheets and Total Bill of Materials, see sheet SA 2 of SA 12
- Low flow weirs are located at the upstream (Northeast end) outer cells end elevation only.

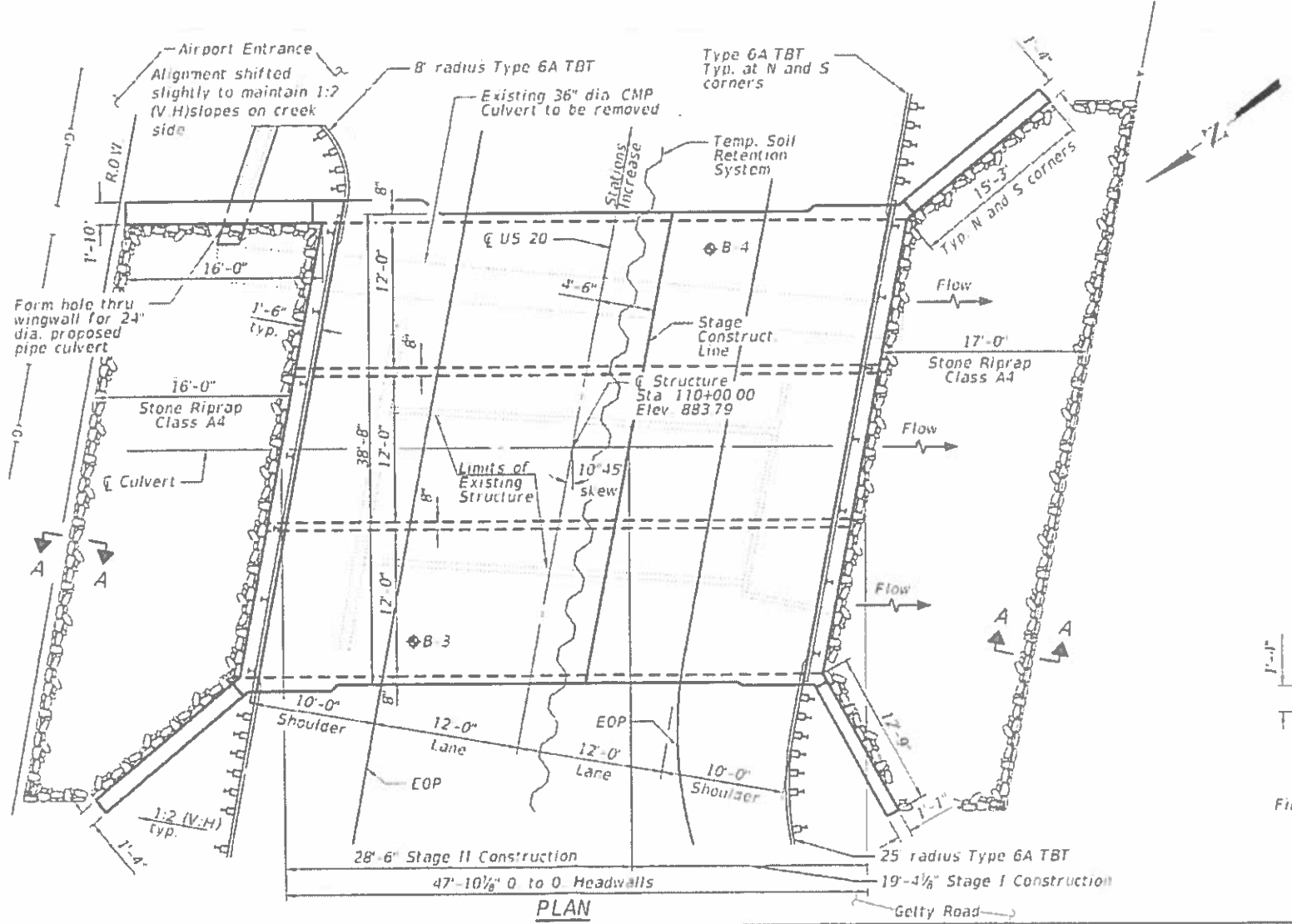
APPROVED
 For Structural Adequacy Only
D. Carl Perry
 Engineer of Bridges & Structures



Patrick M. Hannemann
 PATRICK M. HANNEMANN, S.E.
 LICENSE NO.: 081-007568
 EXPIRES: NOVEMBER 30, 2015
 DATE: 8/10/16

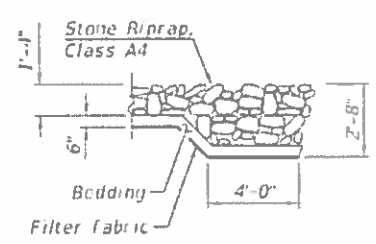


LONGITUDINAL SECTION



PLAN

- LEGEND**
- ▲— Aerial Cable to Remain
 - G— Underground Gas to Remain
 - ◆ Soil Boring



SECTION A-A

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition with 2015 & 2016 Interims

LOADING HL-93

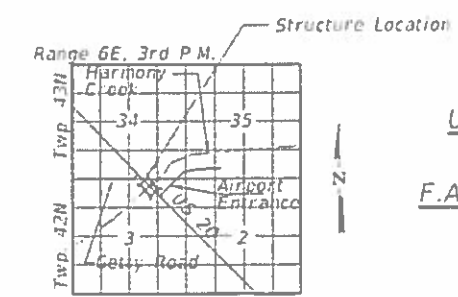
Allow 50# / sq. ft. for future wearing surface

DESIGN STRESSES

FIELD UNITS
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

PROFILE GRADE

(Along \bar{C} Roadway)
 +0.09%



LOCATION SKETCH

GENERAL PLAN
 US 20 (GRANT HIGHWAY) OVER
 HARMONY CREEK
 F.A.P. 525 & 345 SEC. 2015-063B
 KANE COUNTY
 STATION 110+00.00
 STRUCTURE NO. 045-2100

M:\E-2012\12-154-009 US 20 Harmony Creek\Design\Structure\0452100-62831-001-GPE.dgn

p:\projects\11-DCPW01.terra.local\pw_main\documents\projects\17-129-015 - EFK Moen US 20 Harmony Creek Design\Structural\CADD\CADD\CADD Drawings\0452100-62B31-002-GenNotes.dgn

GENERAL NOTES

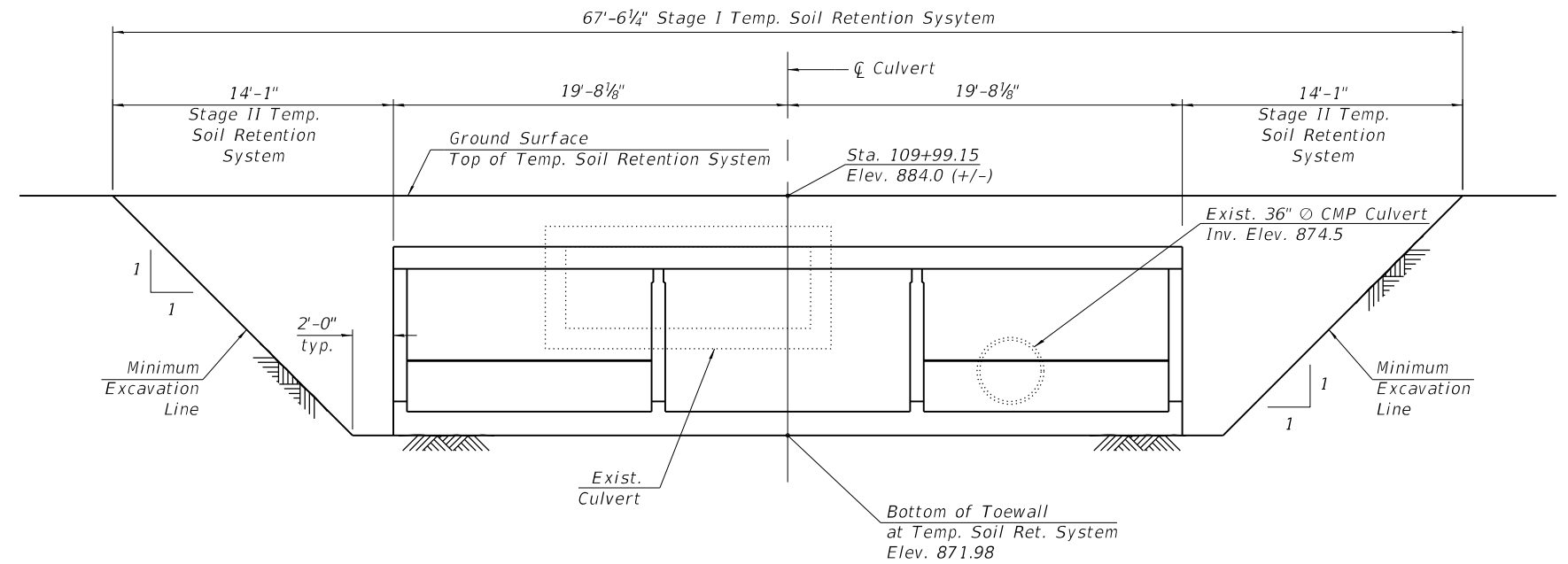
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
3. It will be the responsibility of the Contractor to direct the stream flow during construction in order to keep the construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of the Concrete Box Culverts.
4. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
5. Modify existing channel to match culvert at each end as directed by the Engineer. Cost included in the cost of the Concrete Box Culverts.
6. Precast culvert alternate is not allowed.

INDEX OF SHEETS

- SA-1 General Plan & Elevation
- SA-2 General Notes, Index of Sheets and Total Bill of Material
- SA-3 Stage Removal and Construction
- SA-4 Culvert Plan Bottom Slab Details
- SA-5 Culvert Plan Top Slab Details
- SA-6 Culvert Sections and Details (Sheet 1 of 3)
- SA-7 Culvert Sections and Details (Sheet 2 of 3)
- SA-8 Culvert Sections and Details (Sheet 3 of 3)
- SA-9 Steel Railing, Type 2399
- SA-10 Bar Splicer Assembly and Mechanical Splicer Details
- SA-11 Boring Logs I
- SA-12 Boring Logs II

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	178
Filter Fabric	Sq. Yd.	178
Removal of Existing Structures No. 1	Each	1
Pipe Culvert Removal	Foot	56
Reinforcement Bars	Pound	48,690
Bar Splicers	Each	192
Steel Railing, Type 2399	Foot	82
Name Plates	Each	1
Temporary Soil Retention System	Sq. Ft.	667
Concrete Box Culverts	Cu. Yd.	267.3
Membrane Waterproofing System for Buried Structures	Sq. Yd.	254

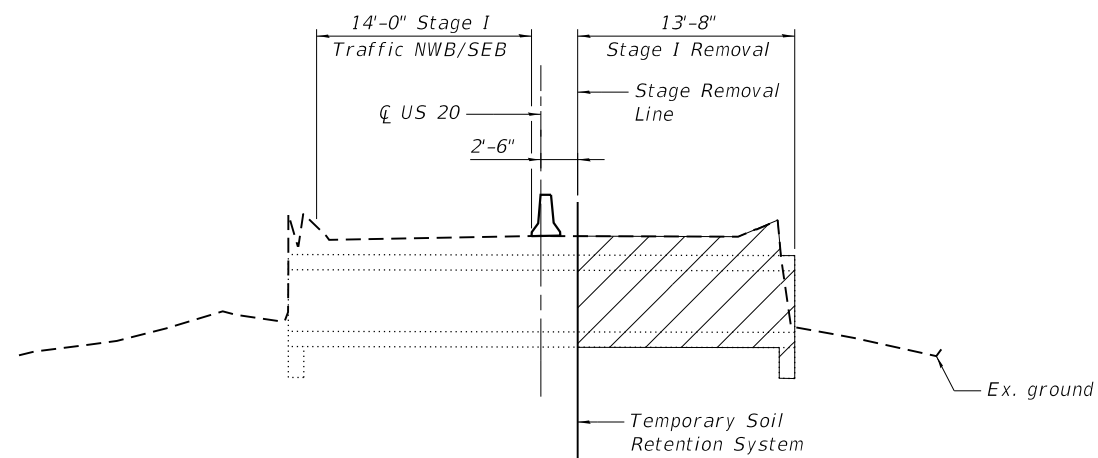


TEMPORARY SOIL RETENTION SYSTEM
 (Looking West)
 (All dimensions are along the face of Temp. Soil Retention System)

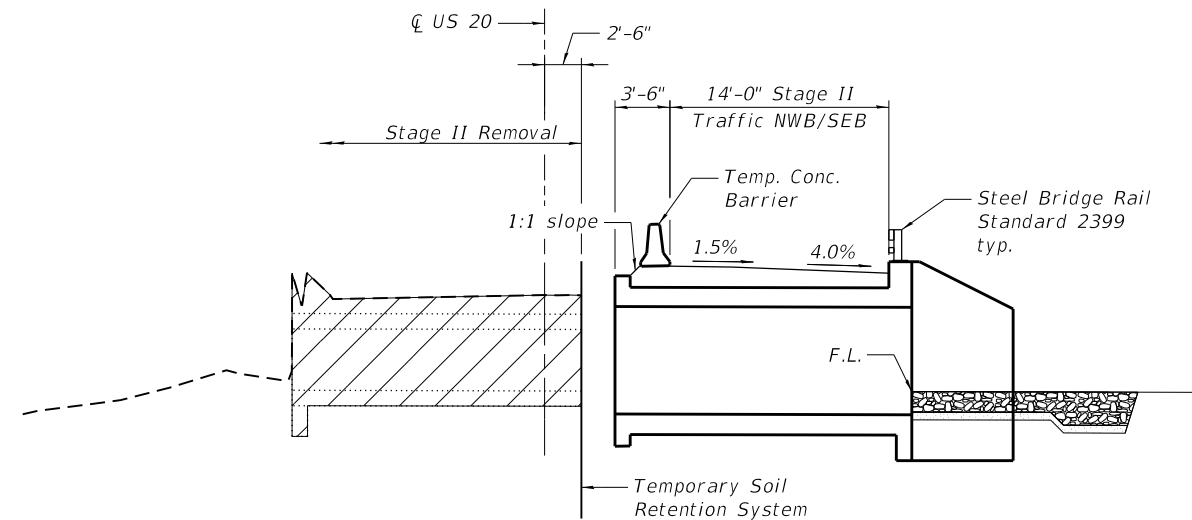
STATION 110+00.00
 BUILT 201_ BY
 STATE OF ILLINOIS
 F.A.P. 525 & 345
 SEC. 2015-063B
 LOADING HL-93
 STRUCTURE NO. 045-2100

NAME PLATE
 See Std. 515001

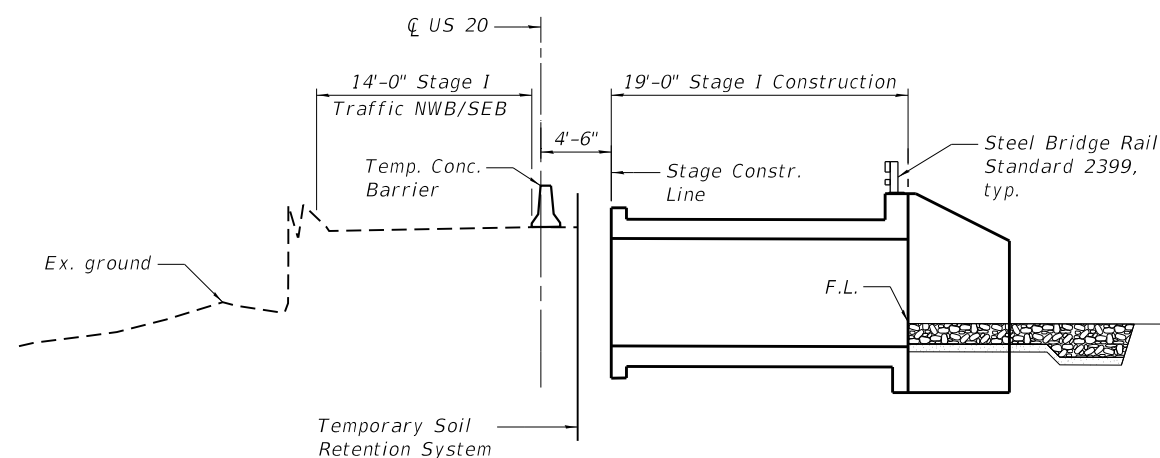
M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\CADD Drawings\0452100-62B31-003-Stage.dgn



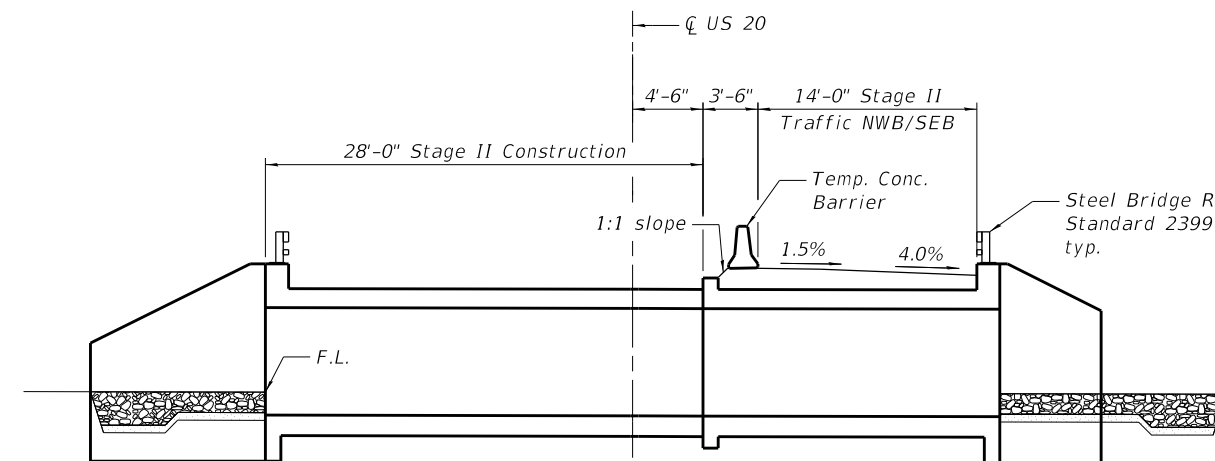
STAGE I REMOVAL
(Looking Southeast)



STAGE II REMOVAL
(Looking Southeast)



STAGE I CONSTRUCTION
(Looking Southeast)



STAGE II CONSTRUCTION
(Looking Southeast)

LEGEND

Removal of Existing Structures



USER NAME = JUAN S	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PMH	REVISED -
PLOT DATE = 8/10/2018	DRAWN - JPS	REVISED -
	CHECKED - NS	REVISED -

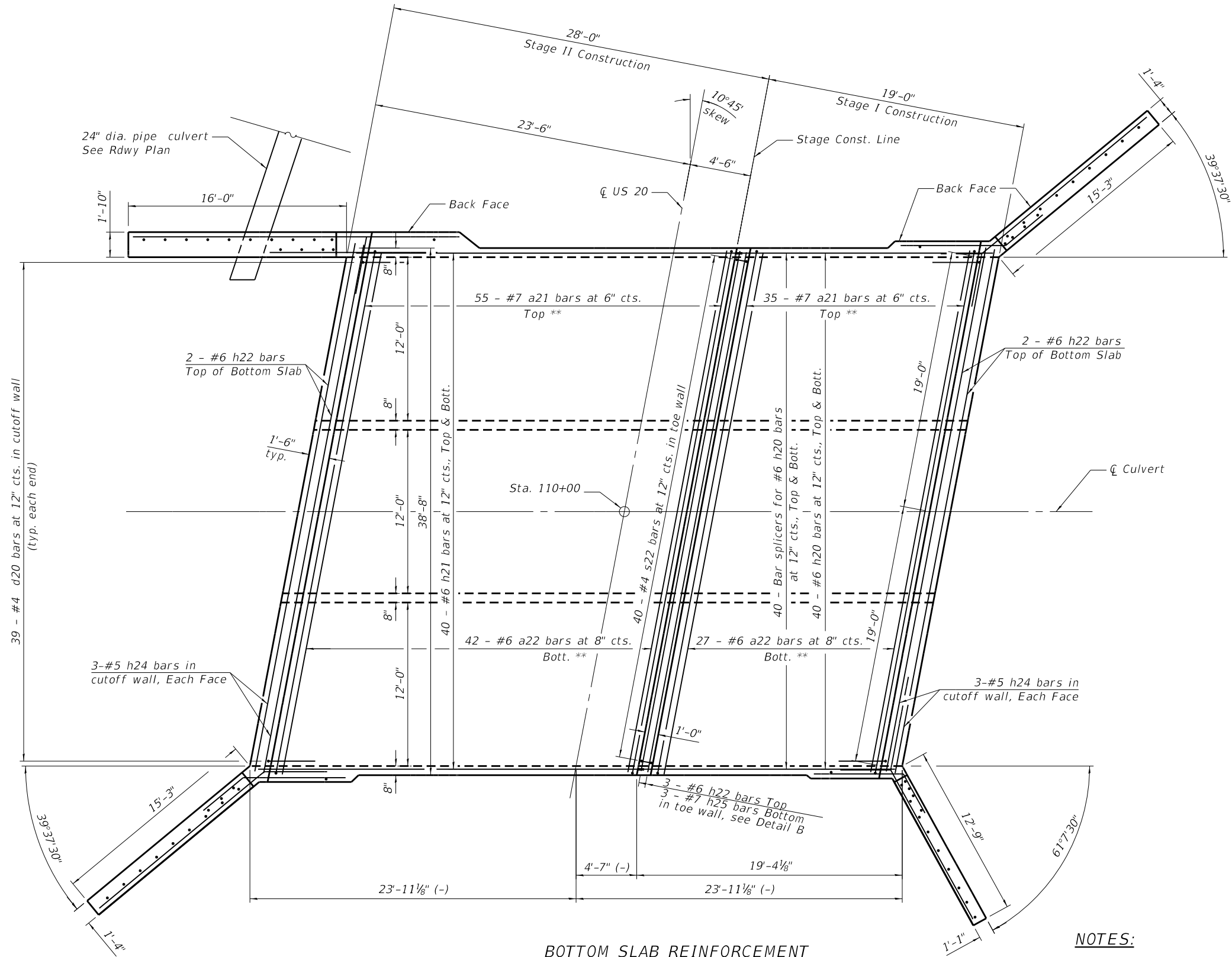
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE REMOVAL AND CONSTRUCTION
STRUCTURE NO. 045-2100**

SHEET NO. SA-3 OF SA-12 SHEETS

F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 48
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

M:\2012\12-154-009 US 20 Harmony Creek\Structural\CADD\CADD\0452100-62B31-004-Bottom Slab.dgn



** Spacing of bars along ϕ Culvert

BOTTOM SLAB REINFORCEMENT

- NOTES:**
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
 2. For Bill of Material and bar bend diagrams, see sheet SA-8 of SA-12.
 3. For top slab reinforcement, see sheet SA-5 of SA-12.
 4. For culvert sections, see sheet SA-6 of SA-12.
 5. Wingwall reinforcement not shown for clarity. For wingwall reinforcement, see sheet SA-7 of SA-12.
 6. For Detail B see sheet SA-8 of SA-12.



USER NAME = JUAN S	DESIGNED - NS	REVISED -
	CHECKED - PMH	REVISED -
PLOT SCALE =	DRAWN - JPS	REVISED -
PLOT DATE = 8/10/2018	CHECKED - NS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

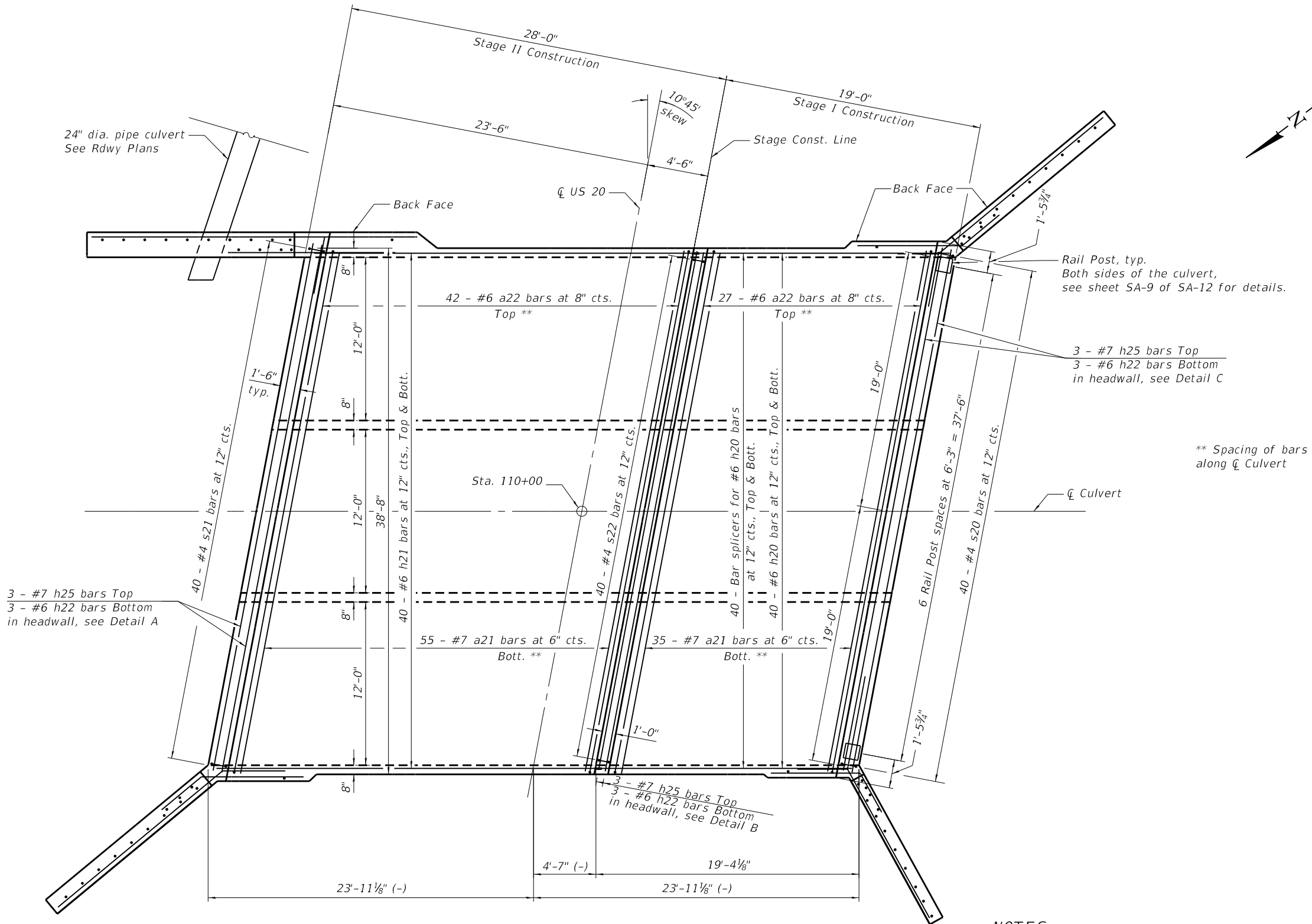
**CULVERT PLAN BOTTOM SLAB DETAILS
STRUCTURE NO. 045-2100**

SHEET NO. SA-4 OF SA-12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE	87	49
CONTRACT NO. 62B31				

ILLINOIS FED. AID PROJECT

M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\CADD\0452100-62B31-005-Top Slab.dgn



TOP SLAB REINFORCEMENT

NOTES:

1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. For Bill of Material and bar bend diagrams, see sheet SA-8 of SA-12.
3. For bottom slab reinforcement, see sheet SA-4 of SA-12.
4. For culvert sections, see sheet SA-6 of SA-12.
5. Wingwall reinforcement not shown for clarity. For wingwall reinforcement, see sheet SA-7 of SA-12.
6. For details A, B, & C see sheet SA-8 of SA-12.



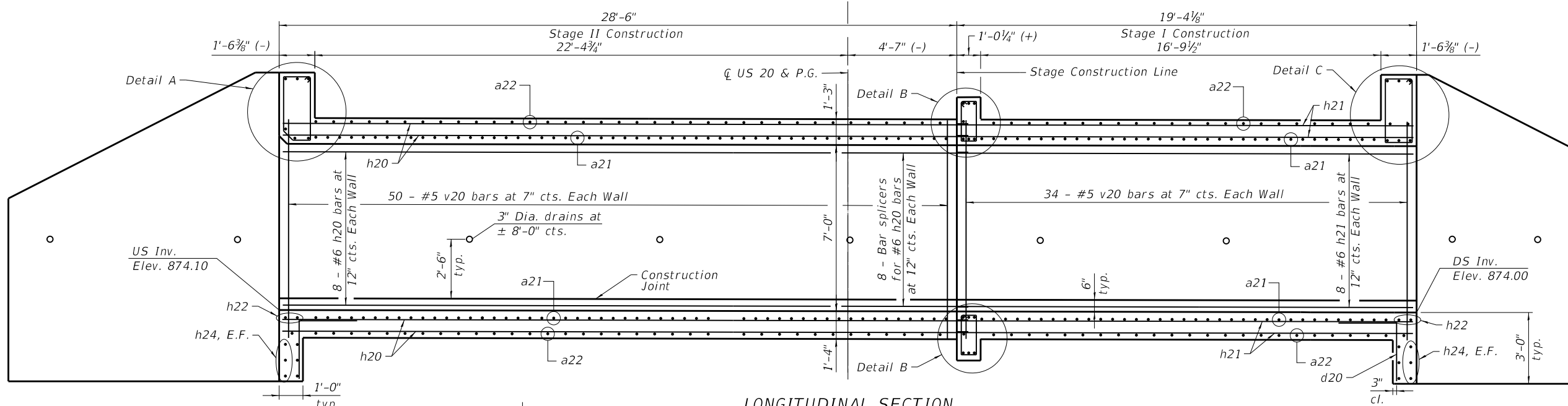
USER NAME = JUAN S	DESIGNED - NS	REVISED -
	CHECKED - PMH	REVISED -
PLOT SCALE =	DRAWN - JPS	REVISED -
PLOT DATE = 8/10/2018	CHECKED - NS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

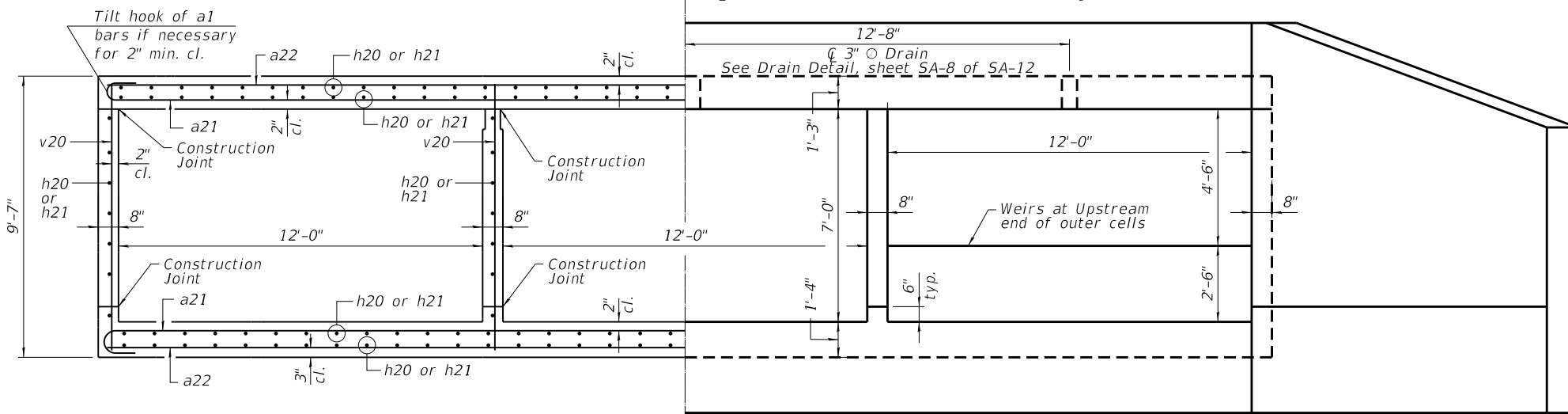
**CULVERT PLAN TOP SLAB DETAILS
STRUCTURE NO. 045-2100**

SHEET NO. SA-5 OF SA-12 SHEETS

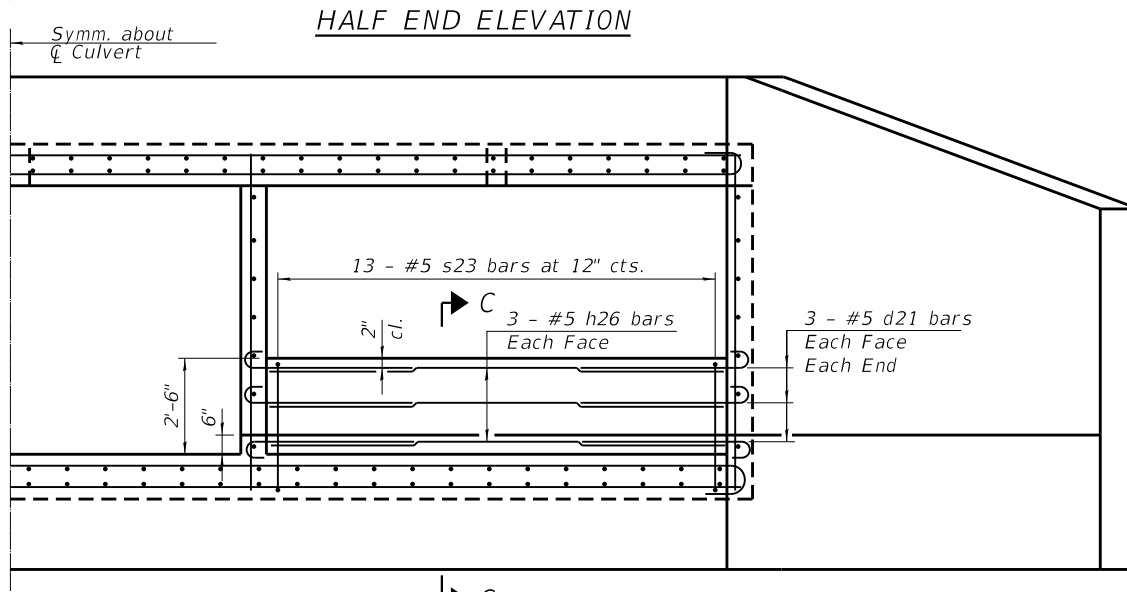
F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 50
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



LONGITUDINAL SECTION
(Looking Southeast)

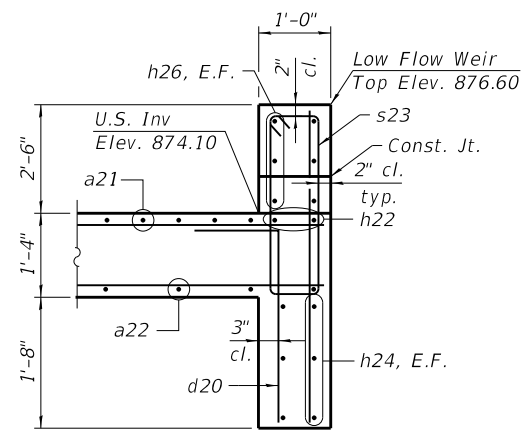


HALF SECTION THRU BARREL



HALF SECTION THRU BARREL AT LOW FLOW WEIR
(2 locations, only Low Flow Weir reinforcement is called out for clarity)

- NOTES:**
1. For wingwall reinforcement, see sheet SA-7 of SA-12.
 2. For Details A, B, & C see sheet SA-8 of SA-12.
 3. All horizontal dimensions measured along \bar{C} culvert.



SECTION C-C

M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\Drawings\0452100-62B31-006-DTL.S.dgn



USER NAME = juonS	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PMH	REVISED -
PLOT DATE = 8/10/2018	DRAWN - JPS	REVISED -
	CHECKED - NS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

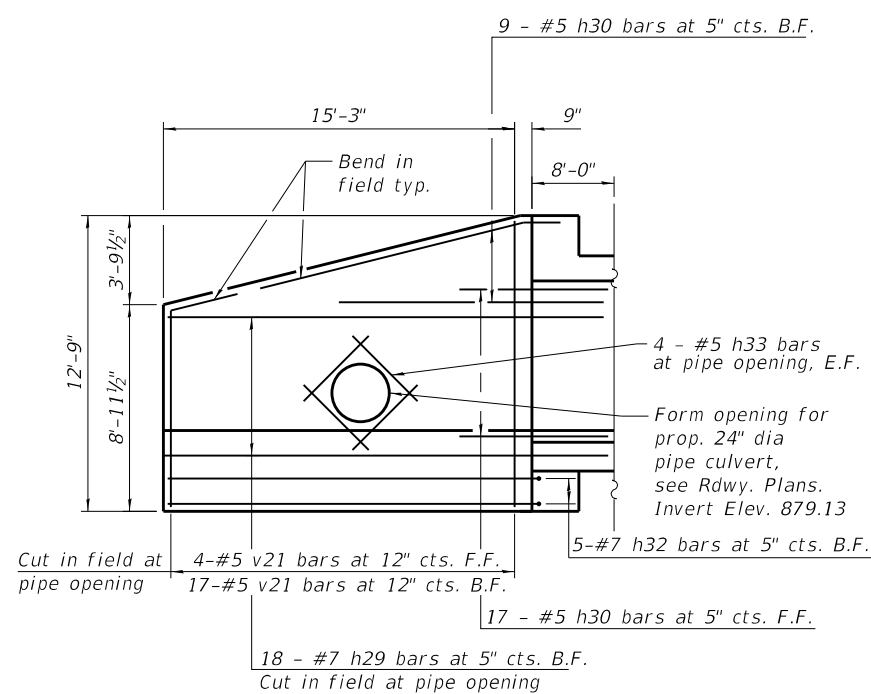
CULVERT SECTIONS AND DETAILS (SHEET 1 OF 3)
STRUCTURE NO. 045-2100

SHEET NO. SA-6 OF SA-12 SHEETS

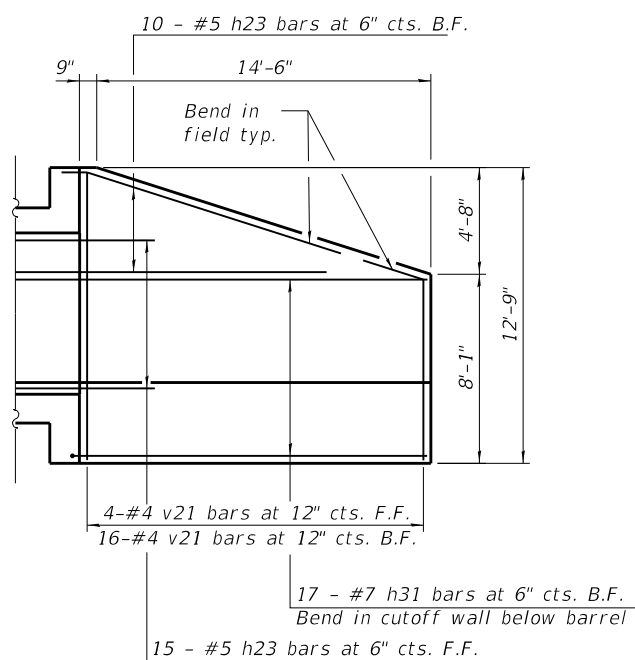
F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 51
CONTRACT NO. 62B31				

ILLINOIS FED. AID PROJECT

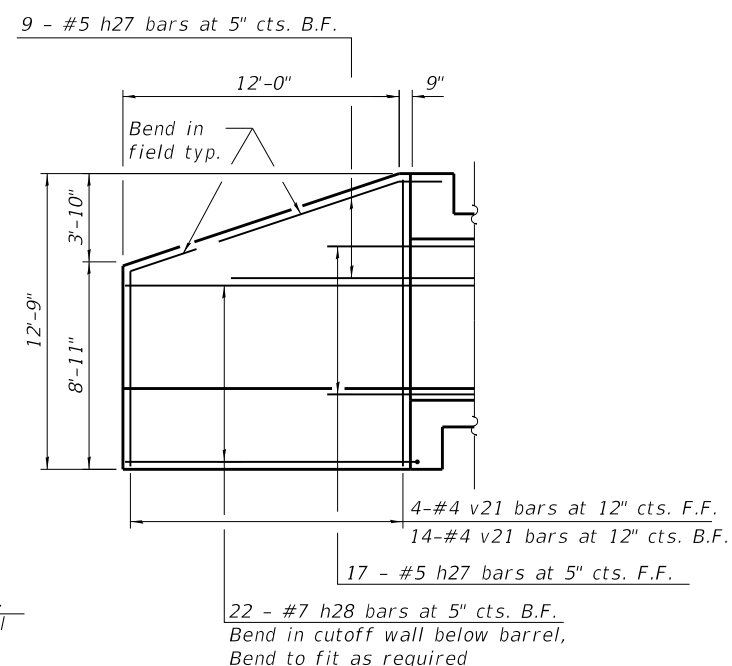
M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\Drawings\0452100-62B31-007-DTL.S.dgn



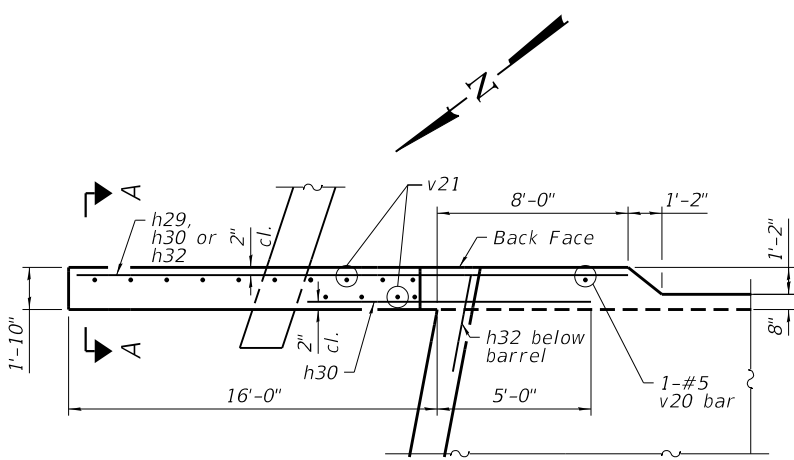
ELEVATION



ELEVATION

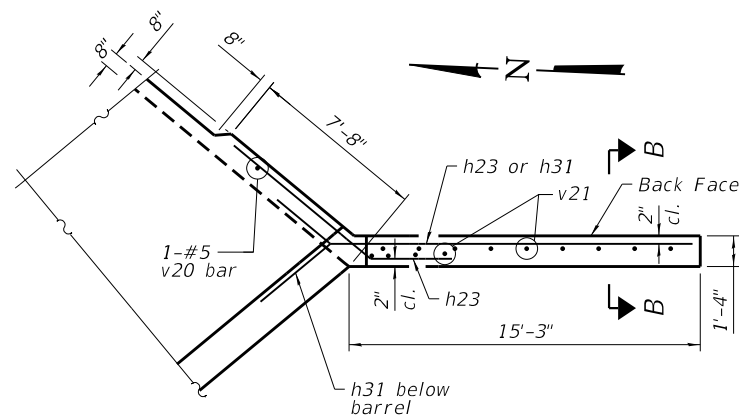


ELEVATION



PARTIAL PLAN

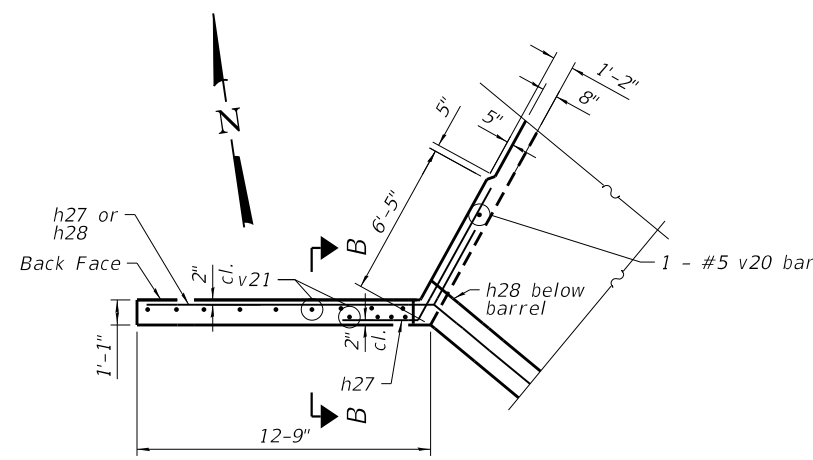
EAST WINGWALL



PARTIAL PLAN

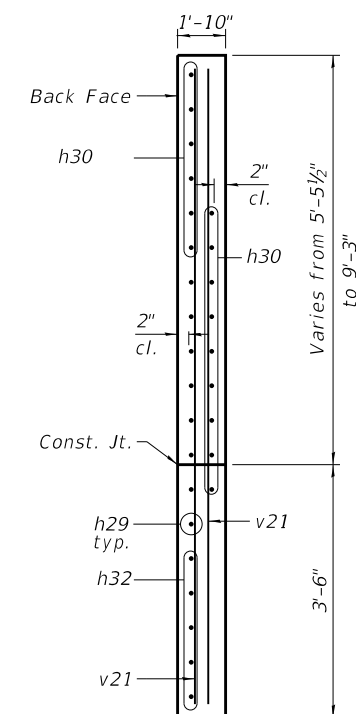
SOUTH WINGWALL

(North Wingwall similar)

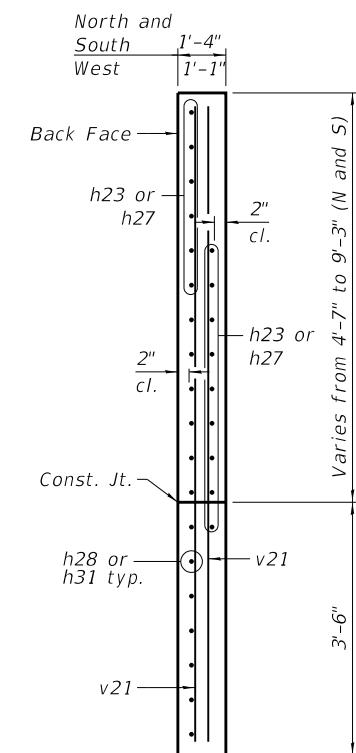


PARTIAL PLAN

WEST WINGWALL



SECTION A-A



SECTION B-B

NOTES:

- For slab reinforcement, see sheets SA-4 and SA-5 of SA-12.
- For Bill of Material and bar bend diagrams, see sheet SA-8 of SA-12.



USER NAME = juons	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PMH	REVISED -
PLOT DATE = 8/10/2018	DRAWN - JPS	REVISED -
	CHECKED - NS	REVISED -

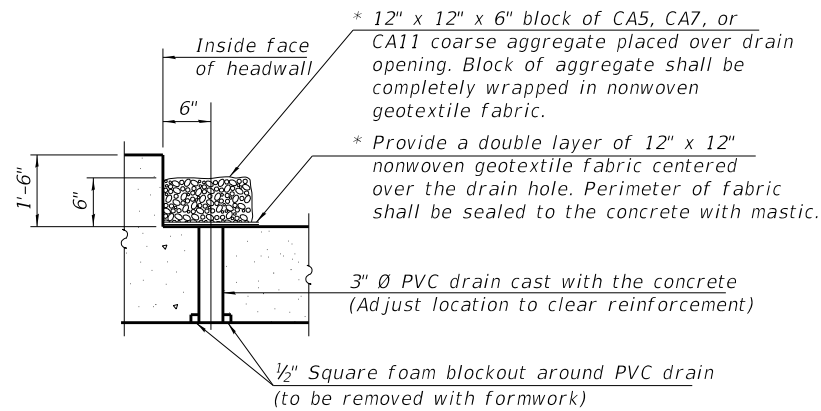
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT SECTIONS AND DETAILS (SHEET 2 OF 3)
STRUCTURE NO. 045-2100

SHEET NO. SA-7 OF SA-12 SHEETS

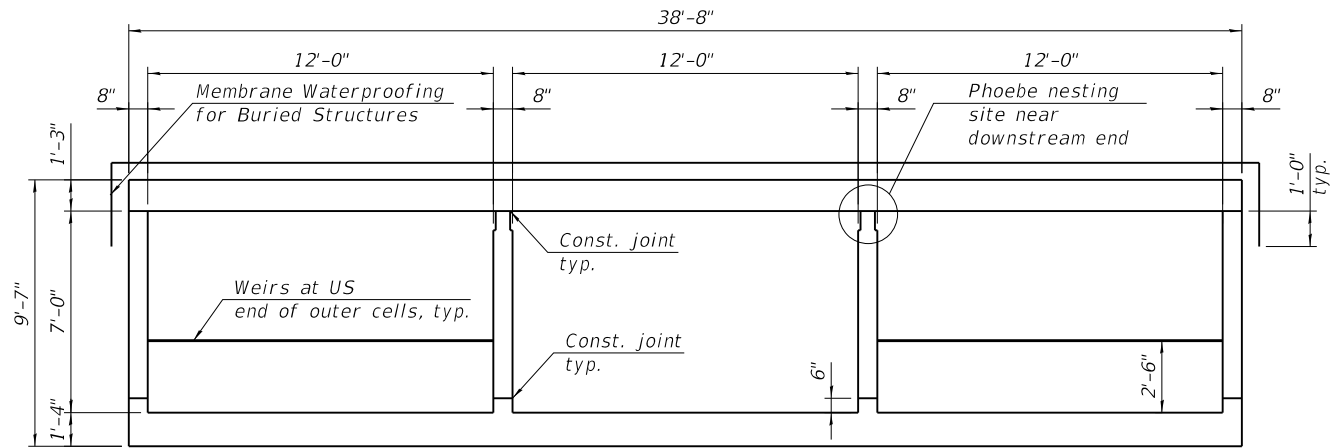
F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 52
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

* Nonwoven geotextile fabric shall conform to the requirements of Article 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.



DRAIN DETAIL

(All costs associated with furnishing and constructing the above drain detail will not be measured for payment but shall be included in the contract unit price for the associated work.)

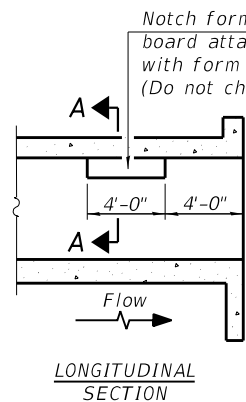


SECTION THRU BARREL

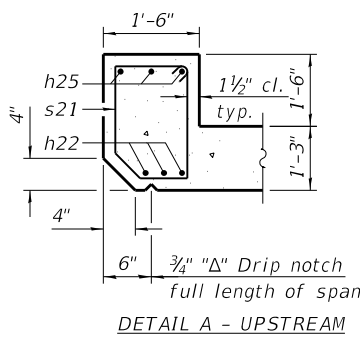
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a21	180	#7	40'-8"	U
a22	138	#6	39'-0"	U
d20	78	#4	4'-5"	L
d21	24	#5	4'-6"	U
h20	192	#6	28'-2"	—
h21	192	#6	19'-0"	—
h22	16	#6	39'-0"	—
h23	50	#5	8'-0"	—
h24	12	#5	39'-0"	—
h25	12	#7	39'-0"	—
h26	12	#5	11'-8"	—
h27	26	#5	8'-0"	—
h28	22	#7	15'-5"	—
h29	18	#7	23'-8"	—
h30	26	#5	8'-0"	—
h31	34	#7	17'-9"	—
h32	5	#7	23'-8"	—
h33	8	#5	5'-3"	—
s20	40	#4	8'-3"	□
s21	40	#4	8'-1"	□
s22	80	#4	5'-9"	□
s23	26	#5	9'-3"	□
v20	340	#5	9'-1"	—
v21	79	#5	12'-4"	—
Concrete Box Culverts			Cu. Yd.	267.3
Reinforcement Bars			Pound	48,690

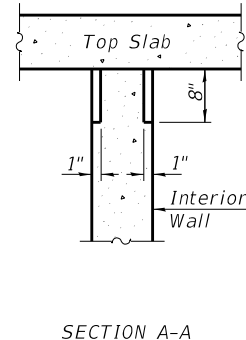
M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\CADD Drawings\0452100-62B31-008-DTL.S.dgn



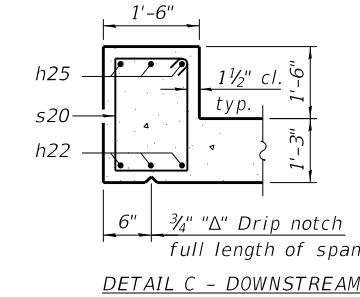
LONGITUDINAL SECTION



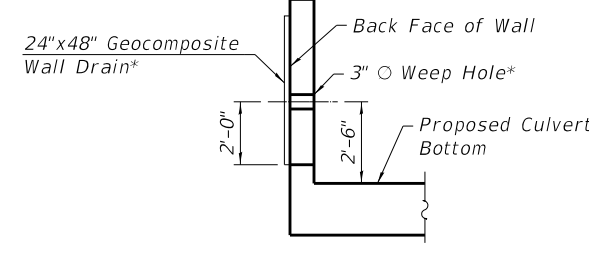
DETAIL A - UPSTREAM



PHOEBE NESTING SITE DETAILS (Downstream End Only)

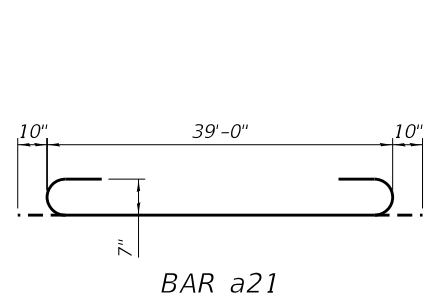


SECTION THRU HEADWALL

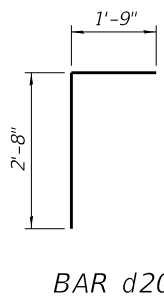


WEEP HOLE DRAIN DETAIL

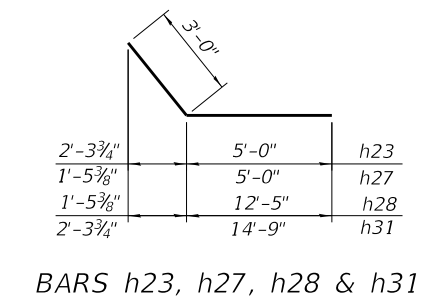
* Cost included in Concrete Box Culvert



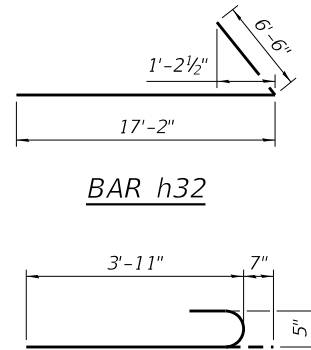
BAR a21



BAR d20

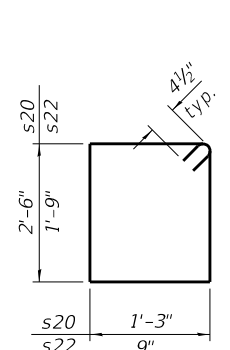


BARS h23, h27, h28 & h31

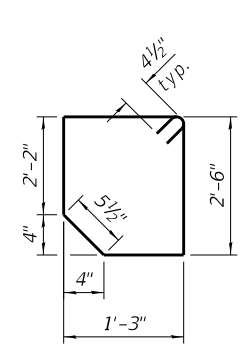


BAR h32

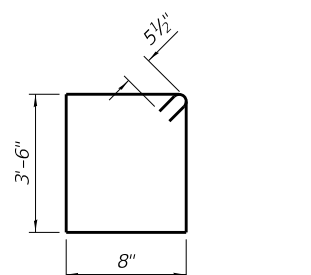
BAR d21



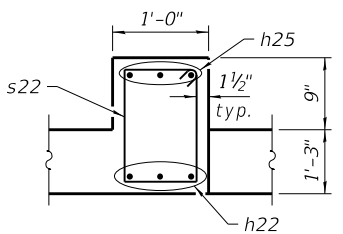
BARS s20 & s22



BAR s21



BAR s23



DETAIL B

Headwall shown, Toewall similar



USER NAME = juonS
 PLOT SCALE =
 PLOT DATE = 8/10/2018

DESIGNED - NS
 CHECKED - PMH
 DRAWN - JPS
 CHECKED - NS

REVISED -
 REVISED -
 REVISED -
 REVISED -

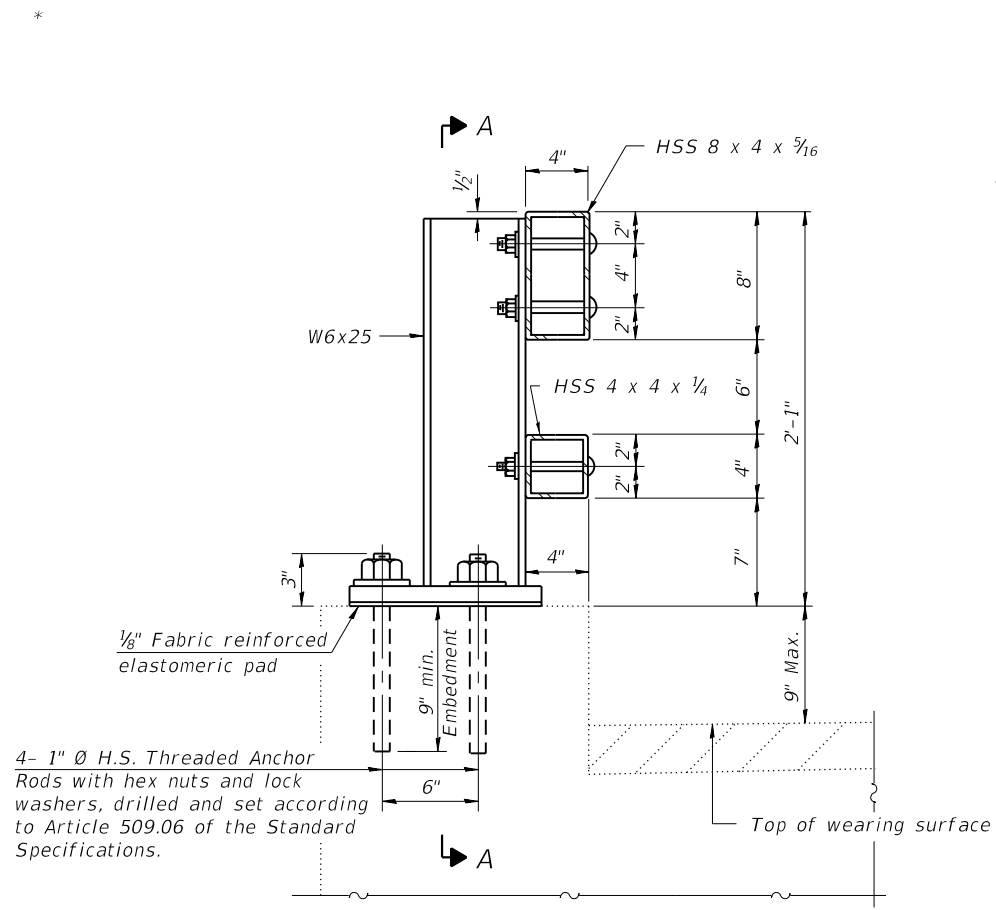
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CULVERT SECTIONS AND DETAILS (SHEET 3 OF 3)
 STRUCTURE NO. 045-2100**

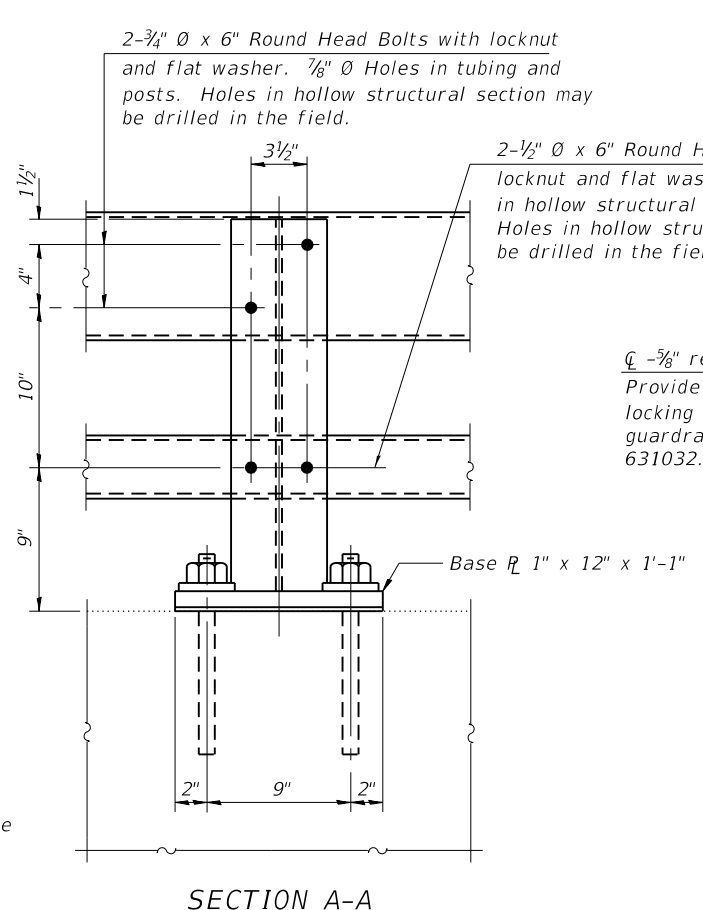
SHEET NO. SA-8 OF SA-12 SHEETS

F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 53
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\Drawings\0452100-62B31-009-ST1 Railing.dgn

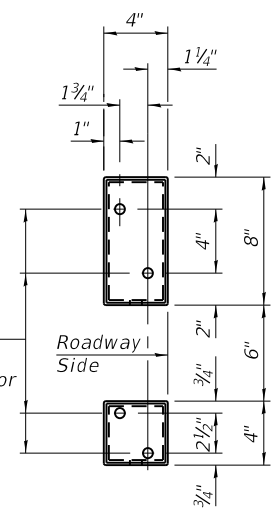


SECTION AT RAIL POST

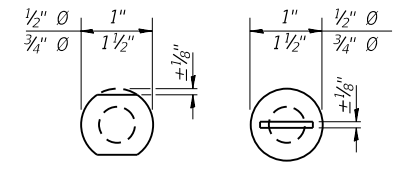


SECTION A-A

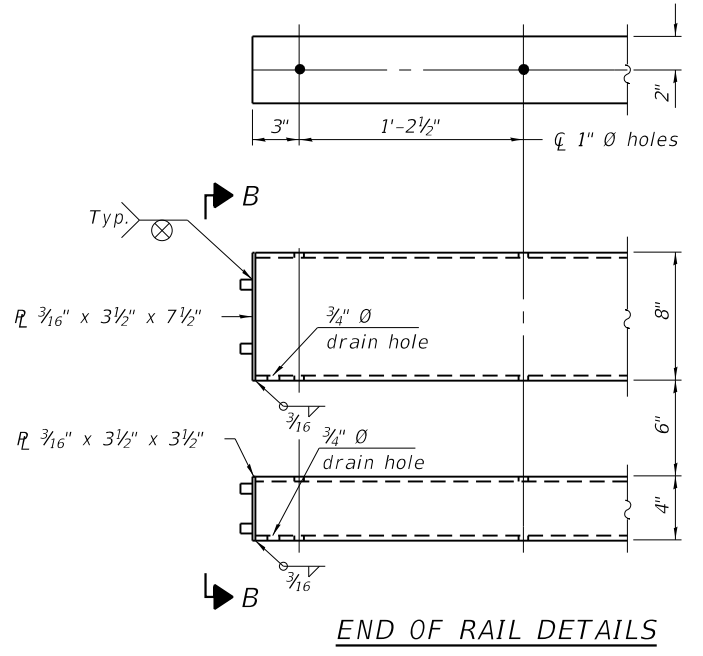
ϕ - 5/8" reduced base welded studs.
 Provide 4 - 5/8" washers and self-locking nuts or nuts and jam nuts for guardrail connection shown on Std. 631032.



VIEW B-B

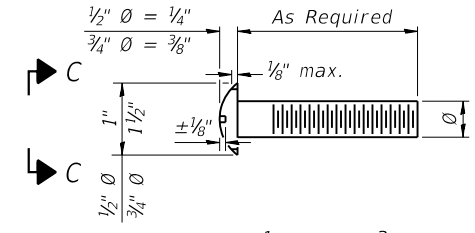


VIEW C-C



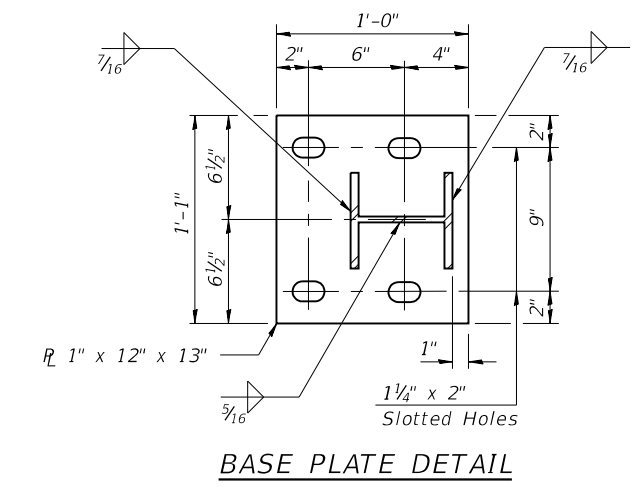
END OF RAIL DETAILS

4- 1" ϕ H.S. Threaded Anchor Rods with hex nuts and lock washers, drilled and set according to Article 509.06 of the Standard Specifications.

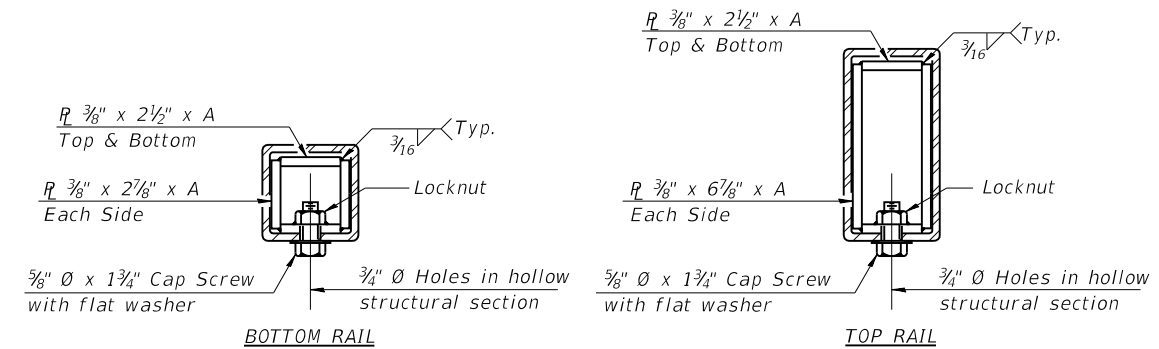


DETAIL OF 1/2" ϕ & 3/4" ϕ ROUND HEAD BOLTS

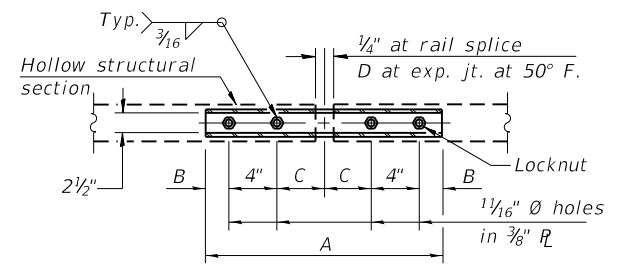
Notes:
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



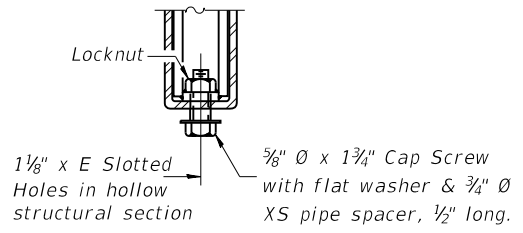
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE R TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

SPLICE DIMENSIONS

T	D	A	B	C	E
$\leq 4"$	2 1/2"	1'-8"	2"	4"	2 1/2"
$> 4" \leq 6 1/2"$	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
$> 6 1/2" \leq 9"$	5"	2'-4"	3 1/2"	6 1/2"	9"
$> 9" \leq 13"$	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/2"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	82

R-31 2-17-2017 (6'-3" Maximum Post Spacing)



USER NAME = juonS	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PMH	REVISED -
PLOT DATE = 8/10/2018	DRAWN - JPS	REVISED -
	CHECKED - NS	REVISED -

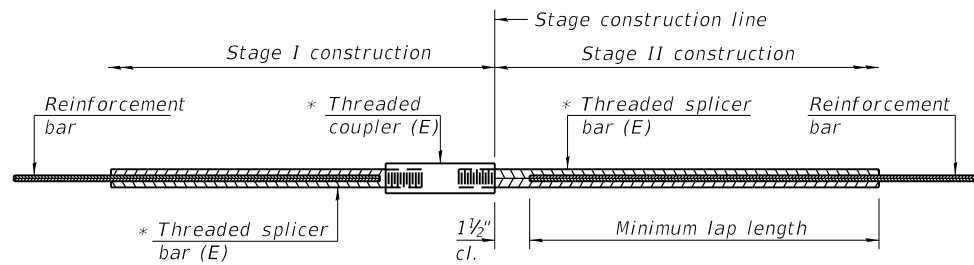
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399
STRUCTURE NO. 045-2100

SHEET NO. SA-9 OF SA-12 SHEETS

F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 54
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\CADD Drawings\0452100-62B31-010-Bar Splicers.dgn

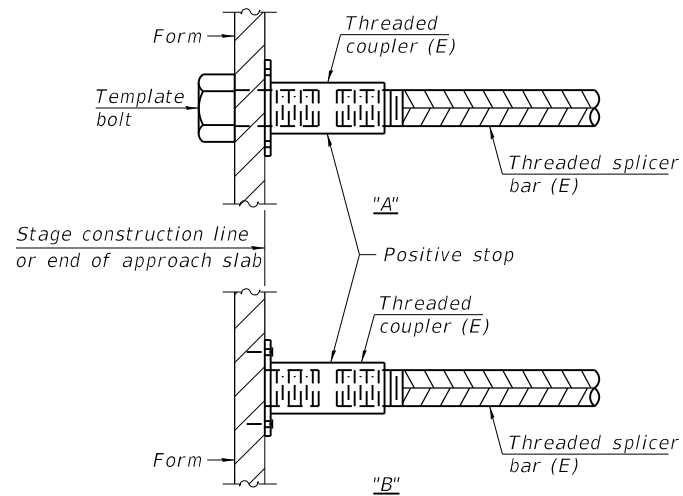


STANDARD BAR SPLICER ASSEMBLY

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Top of Top Slab	#6	40	2'-7"
Bottom of Top Slab	#6	40	2'-7"
Top of Bottom Slab	#6	40	3'-4"
Bottom of Bottom Slab	#6	40	2'-7"
North Outside Wall	#6	8	3'-4"
North Inside Wall	#6	8	3'-4"
South Inside Wall	#6	8	3'-4"
South Outside Wall	#6	8	3'-4"

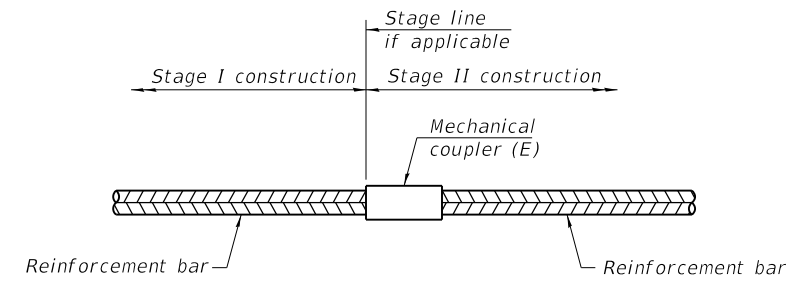


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

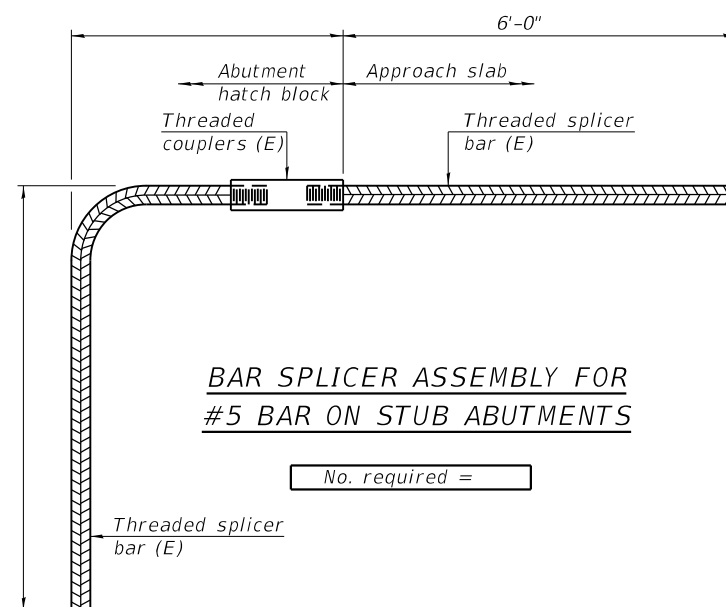
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

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

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

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

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

BSD-1

2-17-2017



USER NAME = JuanS	DESIGNED - NS	REVISED -
PLOT SCALE =	CHECKED - PMH	REVISED -
PLOT DATE = 8/10/2018	DRAWN - JPS	REVISED -
	CHECKED - NS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-2100

SHEET NO. SA-10 OF SA-12 SHEETS

F.A.P. RTE. 525/345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 55
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



Division of Highways
SAM Consultants, Inc.
U.S. #20 (Grant Highway)
/ FAP 525

SOIL BORING LOG

Date 9/29/16

ROUTE _____ DESCRIPTION _____ S.A.M Job #16017GT LOGGED BY Danish

SECTION 2009-089 LOCATION On U.S. #20 Pavement - 10' East of C/L, SEC. , TWP. , RNG.

COUNTY Kane DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 045-2037(Exist.)
045-2100(Prop.)
Station 110+00.00

BORING NO. B-3
Station 109+82.00
Offset 10.00ft East
Ground Surface Elev. 883.41 ft

DEPTH (ft)	BLOW COUNT	UCS (tsf)	MOISTURE (%)	DESCRIPTION	DEPTH (ft)	BLOW COUNT	UCS (tsf)	MOISTURE (%)	DESCRIPTION
0				Asphalt Pavement - 12"	0				LEAN CLAY with trace of Coarse Gravel
10	10	1.0	13.1	4" Sand & Gravel Base	10	3			Gravel
13.1	3	P		FILL - made with Lean Clay with trace Sand & Gravel	13.1	4	1.0	12.0	Stiff to Medium Stiff CL
16.1	3			Dark Brown	16.1	5	S		
19.1	3				19.1	3			
22.1	3	1.3	24.1		22.1	3	0.6	11.8	
25.1	3	P		SANDY LOAM	25.1	5	B		SILTY CLAY - trace of Sand & Gravel
28.1	3			Gray	28.1	3			Gravel
31.1	4			Medium Dense SM	31.1	4	0.4	12.7	Soft to Medium Stiff CL - ML
34.1	7				34.1	4	B		
37.1	2				37.1	2			
40.1	8		11.3		40.1	3	0.4	12.1	
43.1	12				43.1	3	B		SANDY LOAM
46.1	10			LEAN CLAY with trace of Coarse Gravel	46.1				Gray
49.1	4			Gray	49.1				Medium Dense SM
52.1	5	2.1	12.2	Very Stiff to Stiff CL	52.1				
55.1	5	S			55.1				
58.1	4				58.1	6			
61.1	5	2.9	9.3		61.1	11		5.0	
64.1	7	S			64.1	16			
67.1	3				67.1				
70.1	4	1.7	10.1		70.1				
73.1	6	S			73.1				
76.1	2				76.1	8			
79.1	3	1.3	11.6		79.1	9		7.4	
82.1	5	S			82.1	17			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)



Division of Highways
SAM Consultants, Inc.
U.S. #20 (Grant Highway)
/ FAP 525

SOIL BORING LOG

Date 9/29/16

ROUTE _____ DESCRIPTION _____ S.A.M Job #16017GT LOGGED BY Danish

SECTION 2009-089 LOCATION On U.S. #20 Pavement - 10' East of C/L, SEC. , TWP. , RNG.

COUNTY Kane DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. 045-2037(Exist.)
045-2100(Prop.)
Station 110+00.00

BORING NO. B-3
Station 109+82.00
Offset 10.00ft East
Ground Surface Elev. 883.41 ft

DEPTH (ft)	BLOW COUNT	UCS (tsf)	MOISTURE (%)	DESCRIPTION
0				SANDY LOAM
0				Gray
0				Medium Dense SM (continued)
3	3			
5	5		14.2	
8	5			
11				
14				
17				
20				
23				
26				
29				
32				
35				
38				
41				
44				
47				
50				
53				
56				
59				
62				
65				
68				
71				
74				
77				
80				
83				
86				
89				
92				
95				
98				
101				
104				
107				
110				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
BBS, from 137 (Rev. 8-99)

M:\2012\12-154-009 US 20 Harmony Creek\Design\Structural\CADD\CADD\0452100-62B31-011-BLOG.dgn



USER NAME = JuanS	DESIGNED - NS	REVISED -
CHECKED - PMH	REVISOR -	
PLOT SCALE =	DRAWN - JPS	REVISED -
PLOT DATE = 8/10/2018	CHECKED - NS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS I
STRUCTURE NO. 045-2100

SHEET NO. SA-11 OF SA-12 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE	87	56
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

Bench Mark: Bench tie spike in 1st PP north of culvert on west side of US 20 Sta 8+60.28 28.29'LT, Elevation 945.81

Existing Structure: SN 045-0252 originally constructed in 1920 as a single cast-in-place box culvert 6' wide and 2' high and 32'-5" long. The culvert was lengthened approximately by 6' on the east side and approximately 4' on the west side with 44"x28" elliptical corrugated metal pipe. A Temporary structure to be constructed during pre-stage. Both bounds of traffic shall utilize one lane during each stage construction controlled by temporary traffic signal.

Precast Alternative is not allowed

WATERWAY INFORMATION

Drainage Area = 358 acres				Existing Overlapping Elev. = 944.5 at Sta. 9+00				Proposed Overlapping Elev. = 946.5 at Sta. 9+00	
Flood	Freq. Yr.	Discharge C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	136	6.4	51.6	943.3	1.7	0.3	945.0	943.6
Base	50	269	6.4	66.0	944.0	1.3	0.6	945.3	944.6
Overlap Existing	100	351	6.4	66.0	944.4	1.0	0.9	945.4	945.3
Overlap Proposed		42	6.4					944.5	
Max. Calc.		483	6.4	66.0				946.5	946.5
	500	461	6.4	66.0	944.8	0.7	1.5	945.5	946.3

10-year velocity through the existing culvert = 7.4 fps.
 10-year velocity through the proposed culvert = 2.6 fps.
 2 Year Peak Flow (Q) = 60.70 cfs
 Estimated Water Surface Elevation = 942.7 ft

NOTES:

- For General Notes, Index of Sheets and Total Bill of Materials, see Sheet S-02.
- Low Flow weir is located at the Upstream (Southeast end) Southeast cell end elevation only.

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, 7th Edition, with 2015 and 2016 Interims

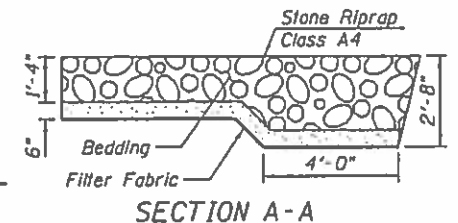
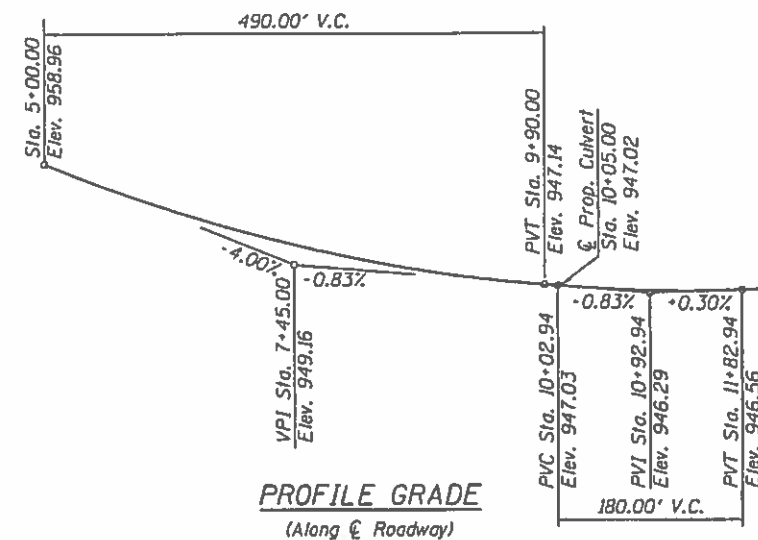
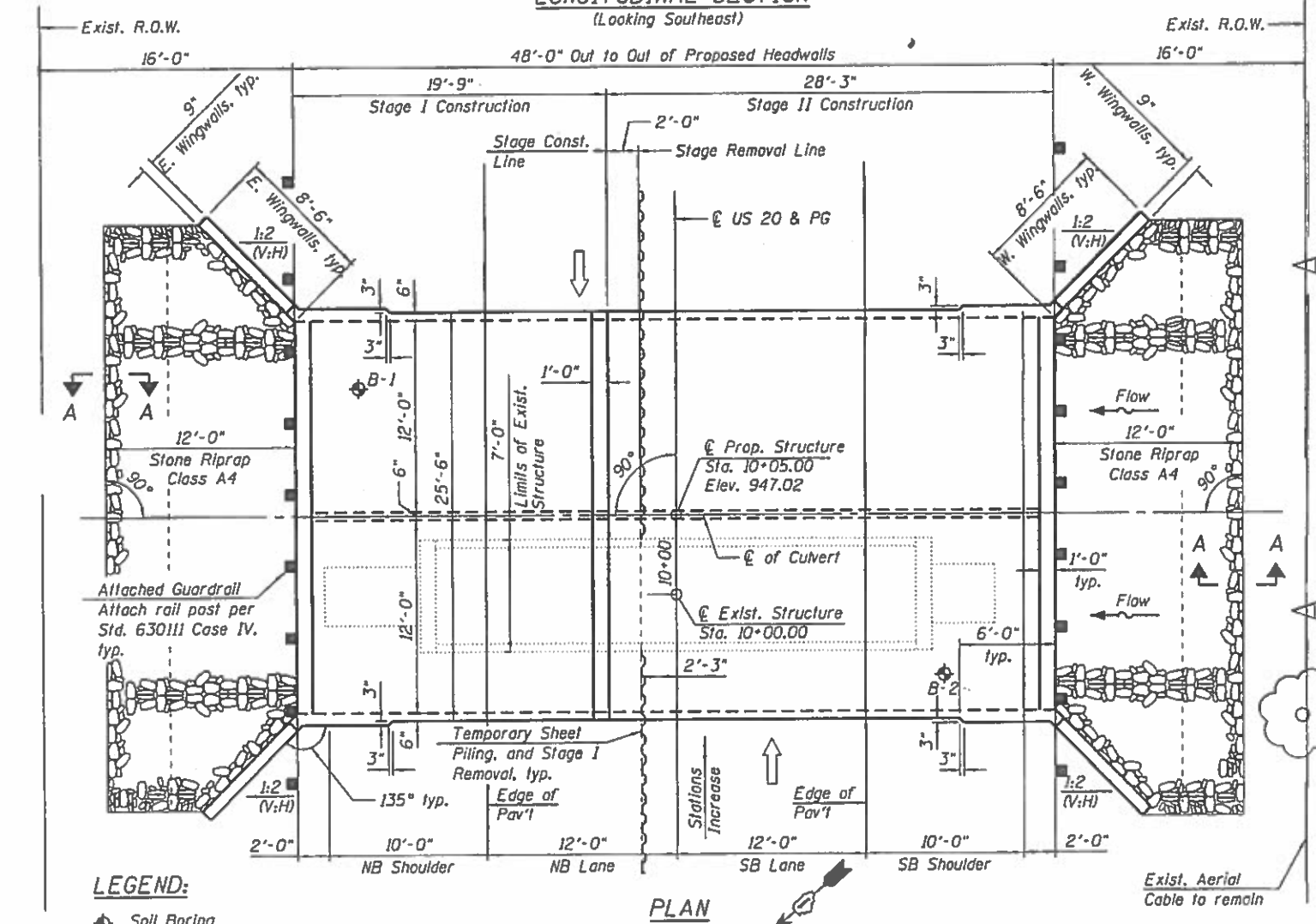
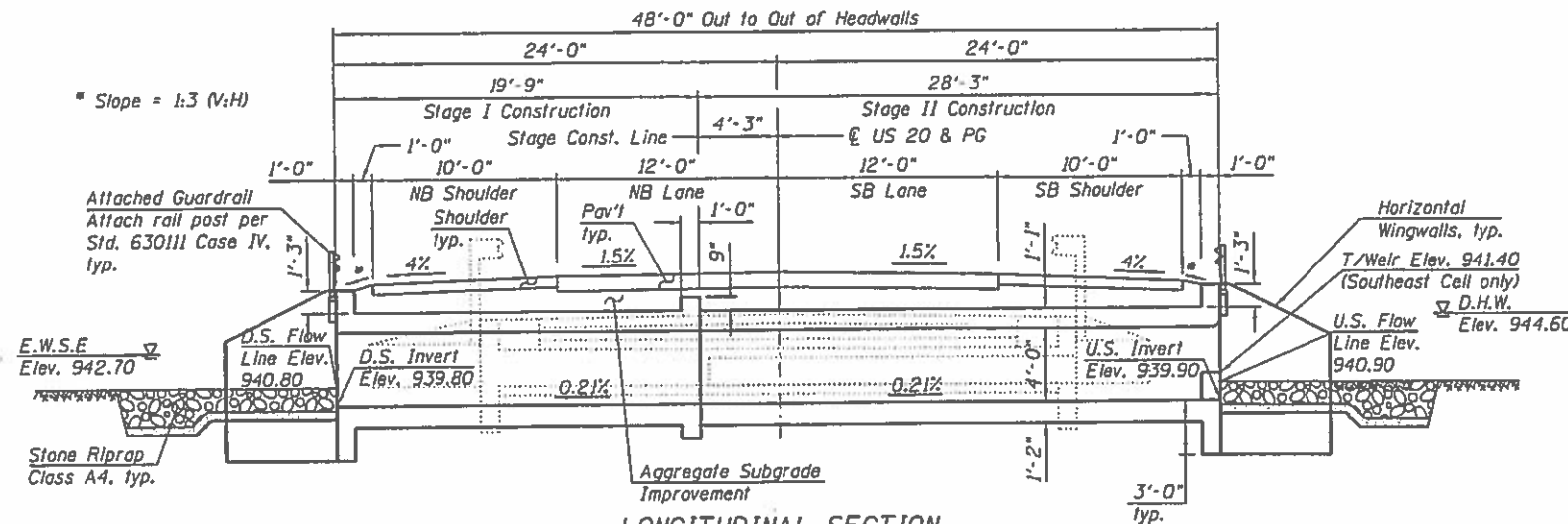
LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)



APPROVED

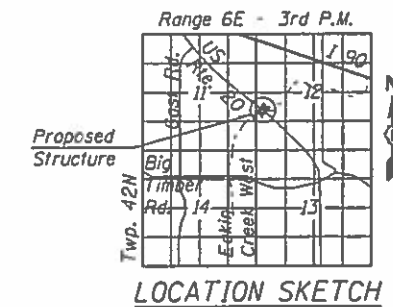
For Structural Adequacy Only

D. Carl Purjes, Jr.
 Engineer of Bridges & Structures



Signed *Moussa A. Issa*
 Moussa A. Issa, HBM II, Lic. No. 081-005738
 Expires 11-30-2018

Date *01/22/2018* For Sheets S-1 Thru S-11 (Total of 11 Sheets)



GENERAL PLAN AND ELEVATION

U.S. RTE. 20 OVER
 UNNAMED DITCH
 (1.2 MI SOUTH OF I-90)
 F.A.P. 345 (US 20/ GRANT HWY)
 SEC. 2015-063B
 KANE COUNTY
 STATION 10+05.00
 STRUCTURE NO. 045-2101



SBI-CPL.dgn	DESIGNED - MI, SK	REVISED -
USER NAME = Issa.buntn	DRAWN - SK	REVISED -
PLOT SCALE = 1/8" = 1' / in.	CHECKED - MI, LAB	REVISED -
PLOT DATE = 1/22/2018	DATE = 1/22/2018	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 045-2101
 SCALE: SHEET S-01 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	58
CONTRACT NO. 62H31				

GENERAL NOTES:

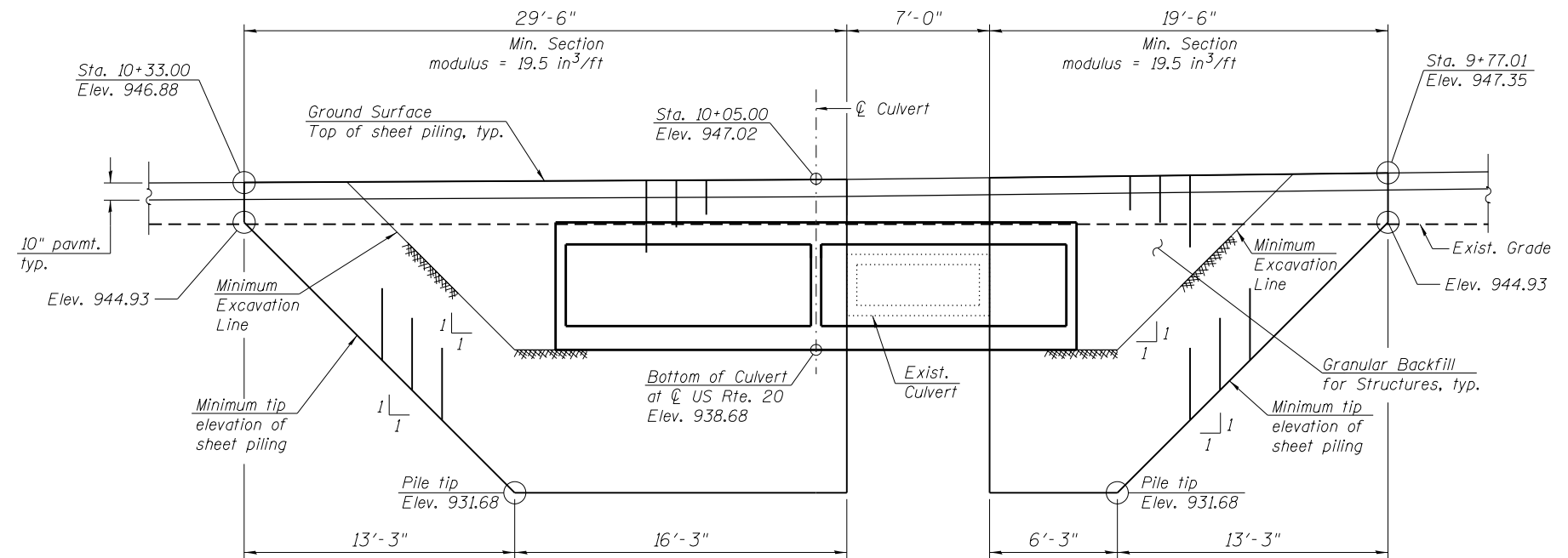
1. A distance of half the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. It will be the responsibility of the Contractor to direct the stream flow during construction in order to keep the Construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of the Concrete Box Culverts.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. Precast culvert alternate is not allowed.

INDEX OF SHEETS

- S-01 General Plan and Elevation
- S-02 General Notes, Index of Sheets and Total Bill of Material
- S-03 Stage Removal and Construction
- S-04 Culvert Plan Bottom Slab Details
- S-05 Culvert Plan Top Slab Details
- S-06 Culvert Sections and Details (Sheet 1 of 2)
- S-07 Culvert Sections and Details (Sheet 2 of 2)
- S-08 Structural Slab Details
- S-09 Bar Splicer Assembly and Mechanical Splicer Details
- S-10 Soil Boring Logs I
- S-11 Soil Boring Logs II

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	89
Filter Fabric	Sq. Yd.	89
Removal of Existing Structures No. 2	Each	1
Concrete Superstructure	Cu. Yd.	4.8
Reinforcement Bars	Pound	32,140
Bar Splicers	Each	123
Name Plates	Each	1
Temporary Sheet Piling	Sq. Ft.	579
Concrete Box Culverts	Cu. Yd.	128.8
Weak Post Guardrail Attached to Culvert Case IV	Foot	69
Membrane Waterproofing System For Buried Structures	Sq. Yd.	147



TEMPORARY SHEET PILING DESIGN

(All dimensions are along the front face of existing culvert)

STATION 10+05.00
 BUILT 201_ BY
 STATE OF ILLINOIS
 F.A.P. RTE 345
 (US 20/GRANT HWY)
 SECTION 2015-063B
 LOADING HL-93
 STRUCTURE NO. 045-2101

NAME PLATE
 See Std. 515001

FILE PATH = P:\1605-677\1001-PTB163\Item 9 - FerroWork\Order #5 - U528 Over-Unnamed Ditch\Sheet Files\Structural\S02-GenNotesBOMSec.dgn



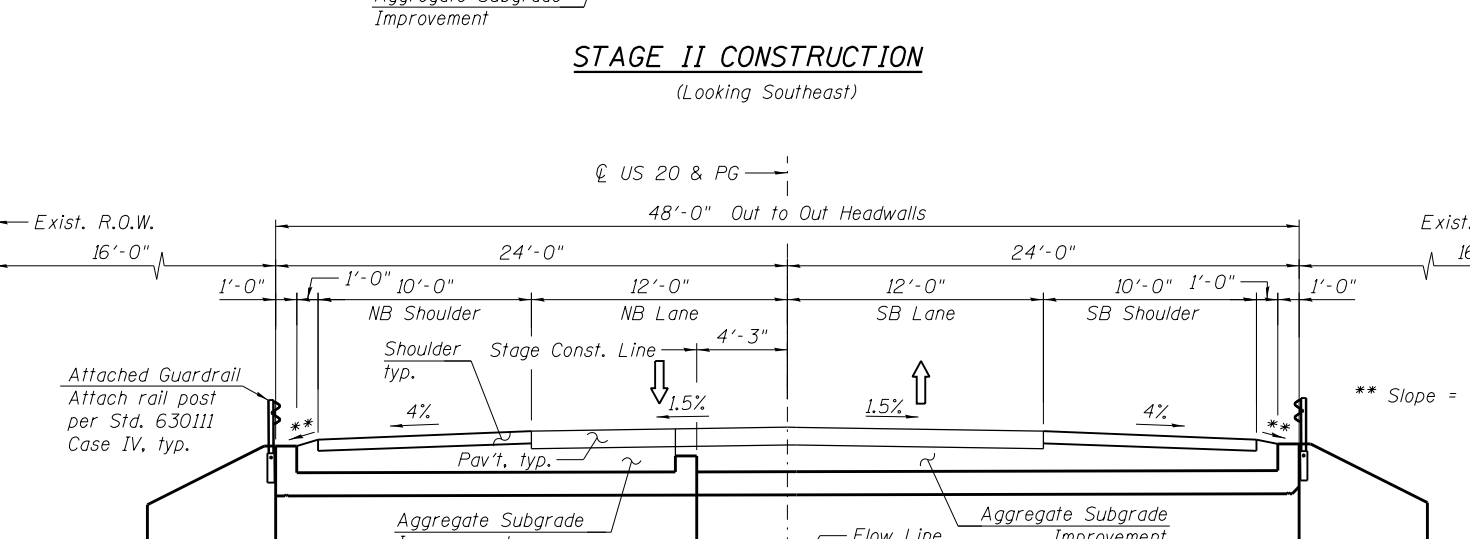
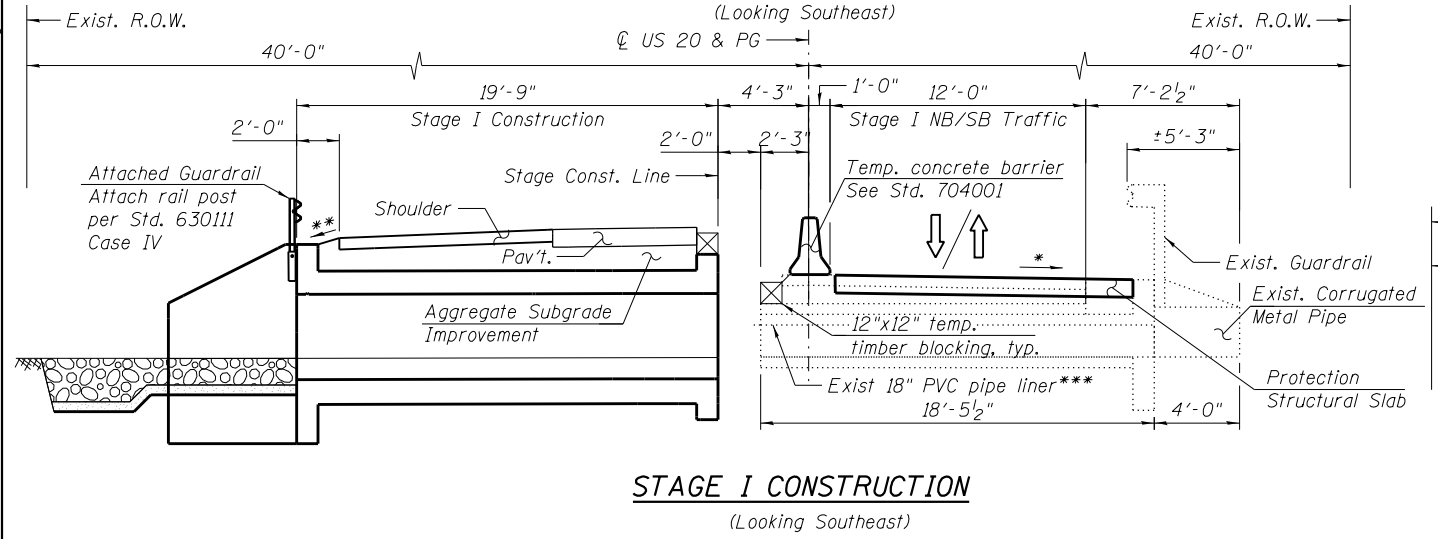
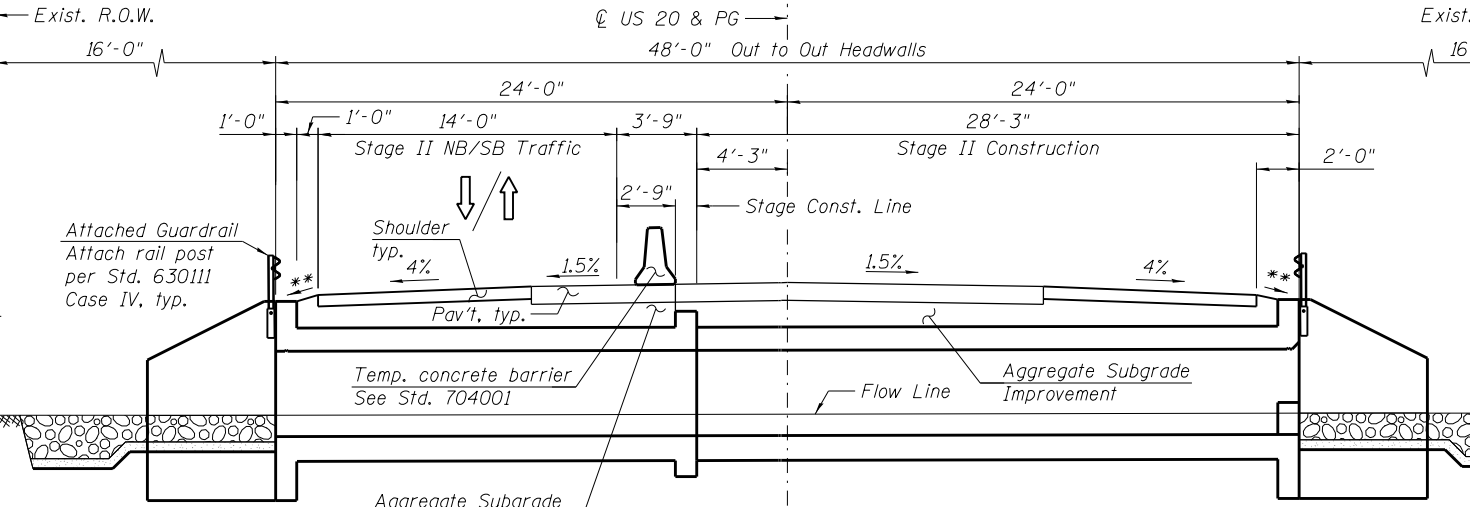
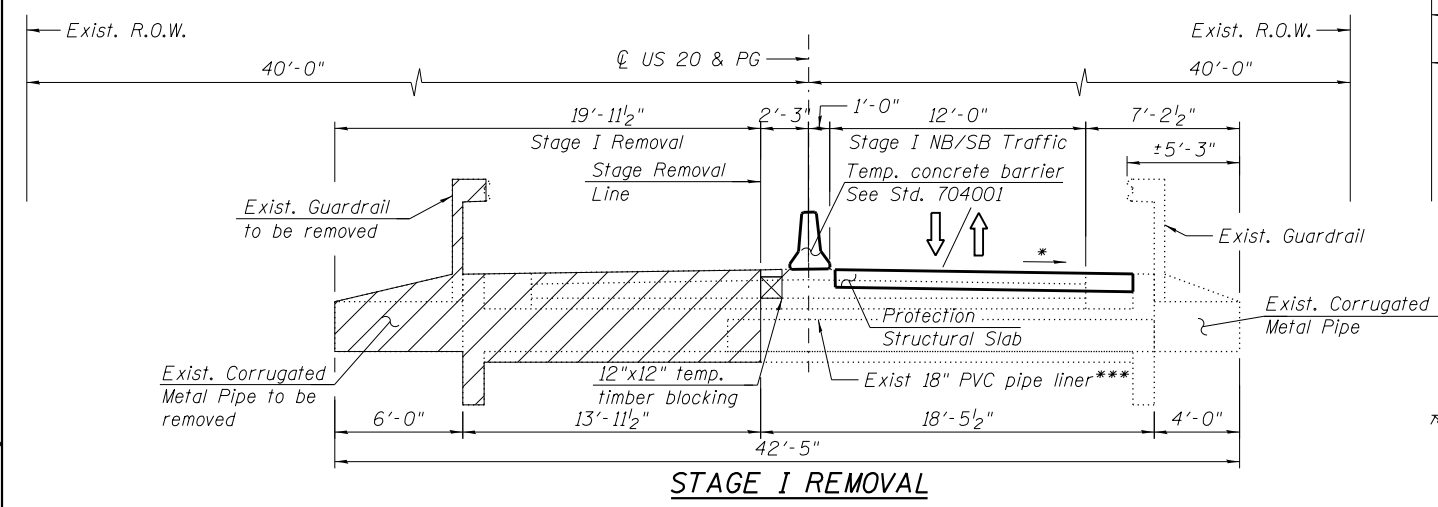
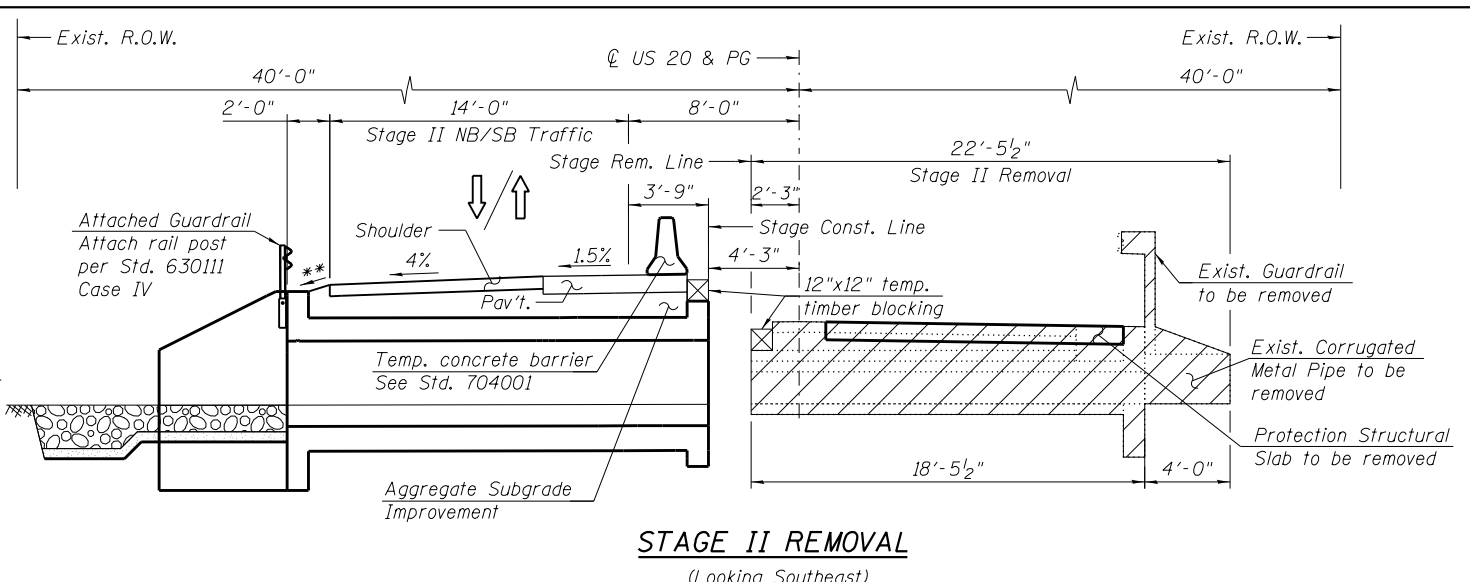
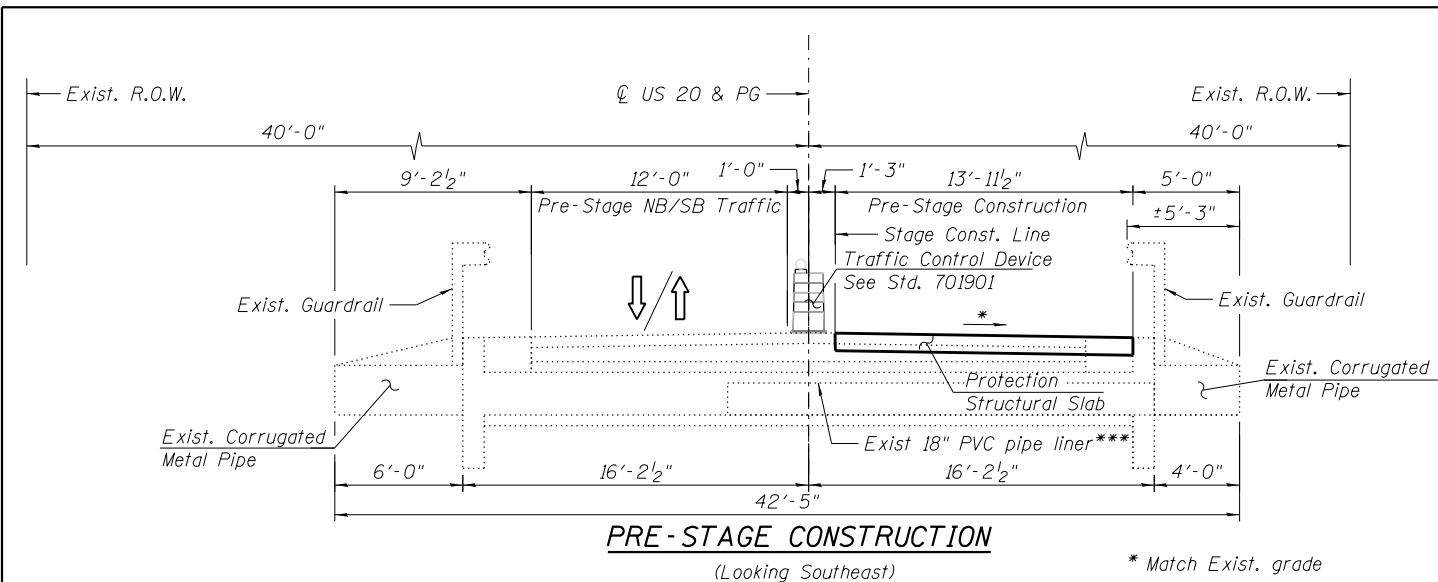
S02-GenNotesBOMSec.dgn	DESIGNED - MI, SK	REVISED -
USER NAME = Stoyanka.Kotorokova	DRAWN - MAA	REVISED -
PLOT SCALE = 8:0.0000 '1' / in.	CHECKED - MI, LAB	REVISED -
PLOT DATE = 10/5/2018	DATE - 10/5/2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES, INDEX OF SHEETS AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 045-2101

SCALE: SHEET S-02 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	59
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



*** The existing 18" PVC pipe liner is approximately 20 feet long and encased in approximately 3 cu yds of concrete. The cost of removal of the existing pipe liner and concrete encasement shall be included in the cost of Removal of Existing Structures No. 2.

LEGEND:
 [Hatched Box] Removal of existing structure

FILE PATH = P:\1605-677\1001\PTB163\Item 9 - Terra\Work Order - 0528 Over-Unnamed\Drawn Sheet\Files\Structural\SB3-StageRem&Const.dgn



S03-StageRem&Const.dgn
 USER NAME = lisa.buntin
 PLOT SCALE = 9/8.0000 1' = 1/8"
 PLOT DATE = 1/22/2018

DESIGNED - MI, SK
 DRAWN - SK
 CHECKED - MI, LAB
 DATE - 1/22/2018

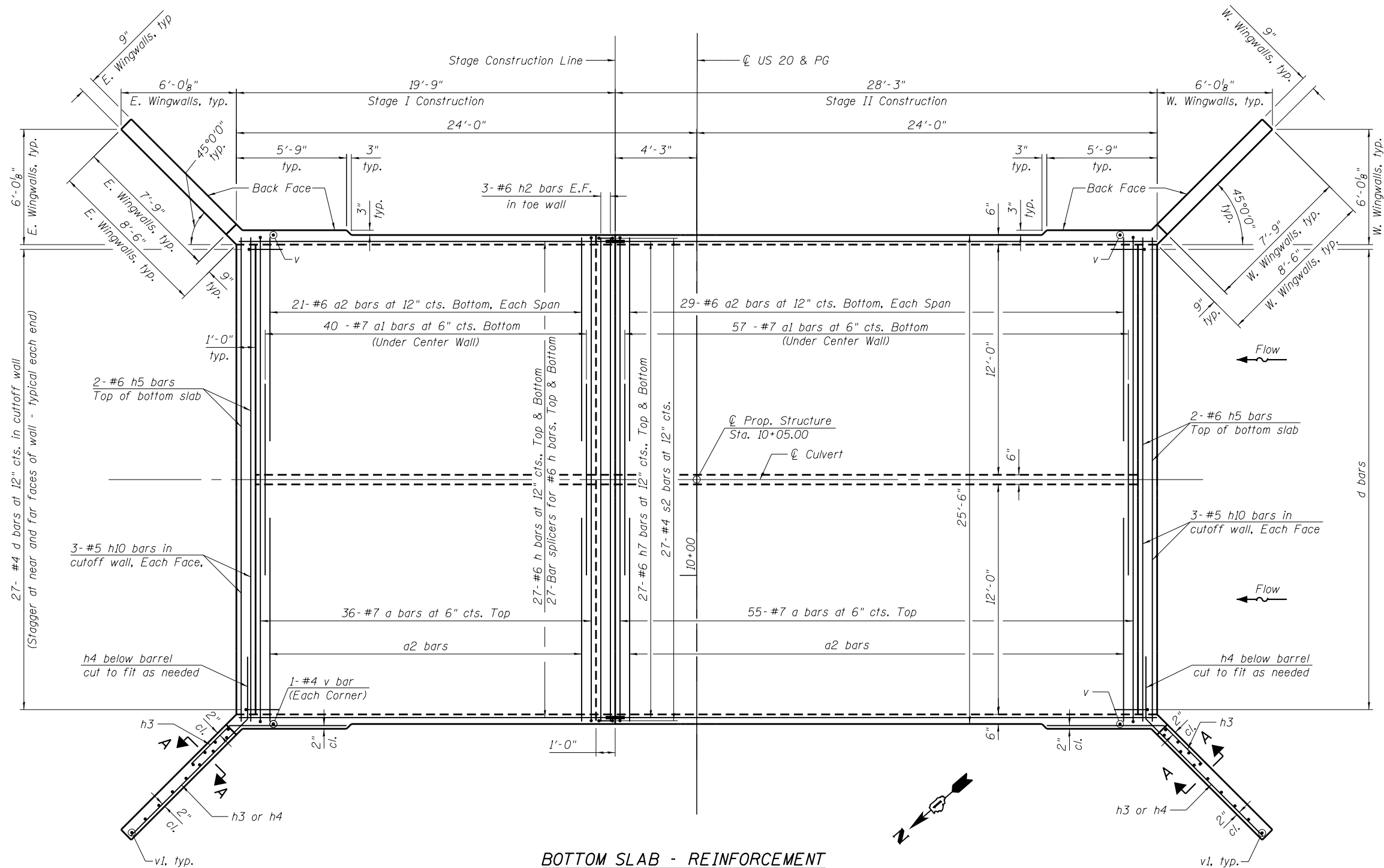
REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

STAGE REMOVAL AND CONSTRUCTION
 STRUCTURE NO. 045-2101

SCALE: SHEET S-03 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	60
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



BOTTOM SLAB - REINFORCEMENT

NOTES:

1. A distance of half of the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. For Bill of Material and bar diagrams, see Sheet S-07.
3. For top slab reinforcement, see Sheet S-05.
4. For wingwall reinforcement and Section A-A, see Sheet S-06.
5. For culvert sections and details, see Sheets S-06 and S-07.

FILE PATH = P:\1605-677\1001_P16163\Item 9 - Ferro\Work Order #9 - US28 Over-Unnamed\Drawn Sheet Files\Structural\S04-BottSlabDet.dgn



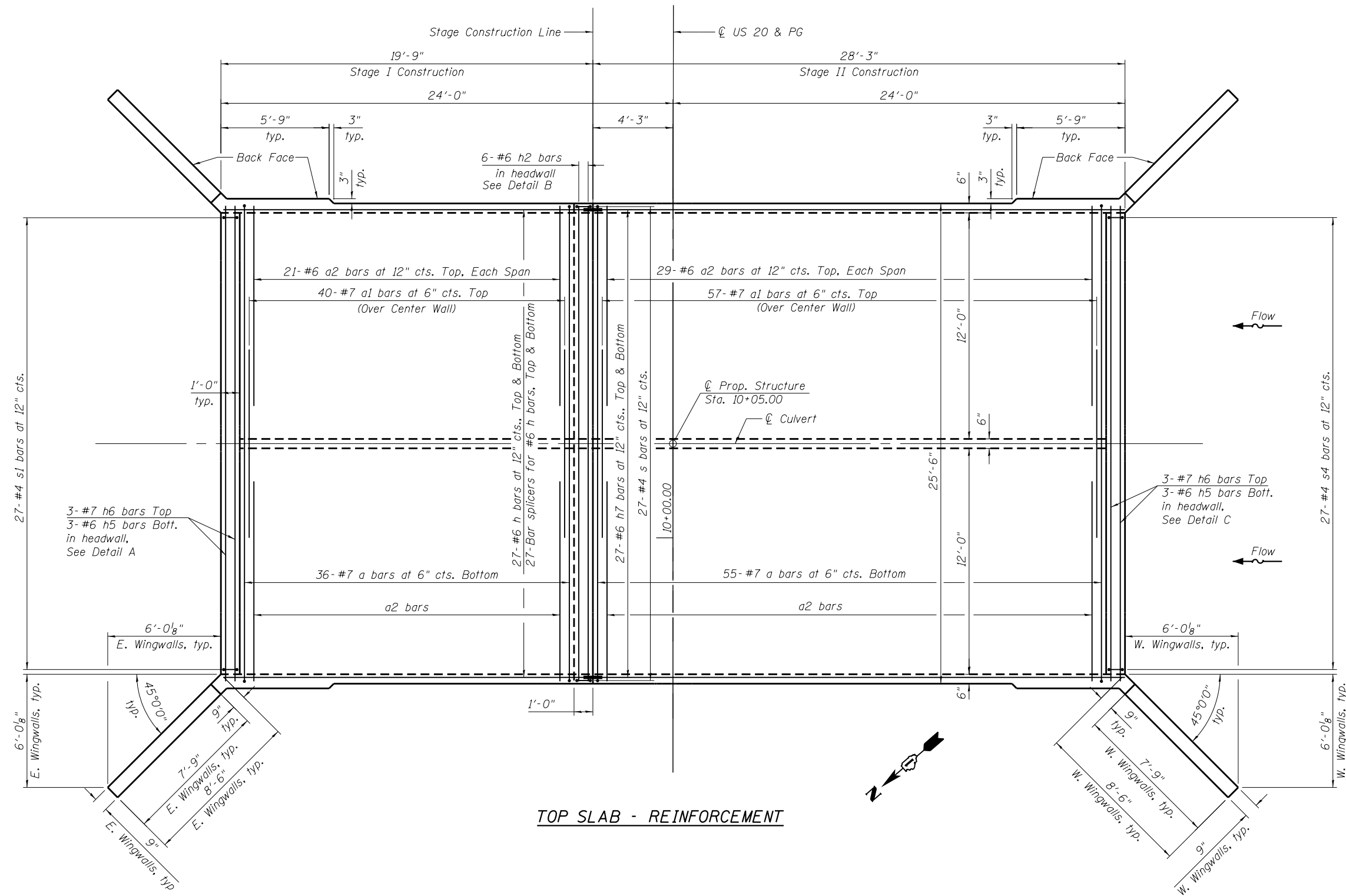
S04-BottSlabDet.dgn	DESIGNED - SK, LAB	REVISED -
USER NAME = isa.buntin	DRAWN - SK	REVISED -
PLOT SCALE = 6:0.0000 '1' / in.	CHECKED - MI, LAB	REVISED -
PLOT DATE = 1/22/2018	DATE - 1/22/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CULVERT PLAN BOTTOM SLAB DETAILS
STRUCTURE NO. 045-2101**

SCALE: SHEET S-04 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	61
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



TOP SLAB - REINFORCEMENT

NOTES:

1. A distance of half of the length of the wingwall but not less than six feet of the barrel shall be poured monolithically with the wingwalls.
2. For Bill of Material and bar diagrams, see Sheet S-07.
3. For bottom slab reinforcement, see Sheet S-04.
4. For wingwall reinforcement and Details A thru C, see Sheet S-06.
5. For culvert sections and details, see Sheets S-06 and S-07.

FILE PATH = P:\1605-677\1001\PIB163\Item 9 - Ferro\Work Order #9 - U528 Over Unnamed Ditch\Sheet Files\Structural\S05-TopSlabDet.dgn



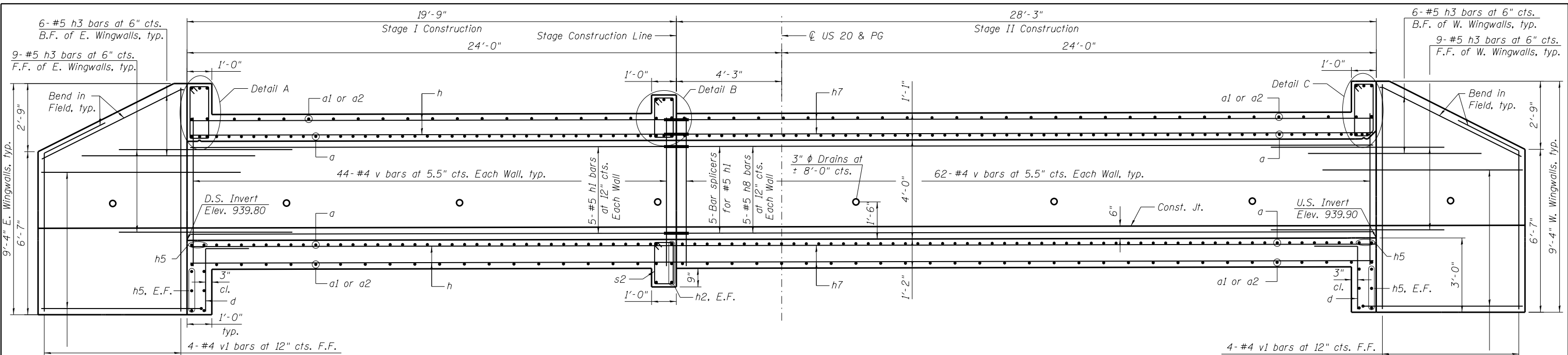
S05-TopSlabDet.dgn	DESIGNED - SK, LAB	REVISED -
USER NAME = lisa.buntin	DRAWN - SK	REVISED -
PLOT SCALE = 6:0.0000 1' = 1/8"	CHECKED - MI, LAB	REVISED -
PLOT DATE = 1/22/2018	DATE - 1/22/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

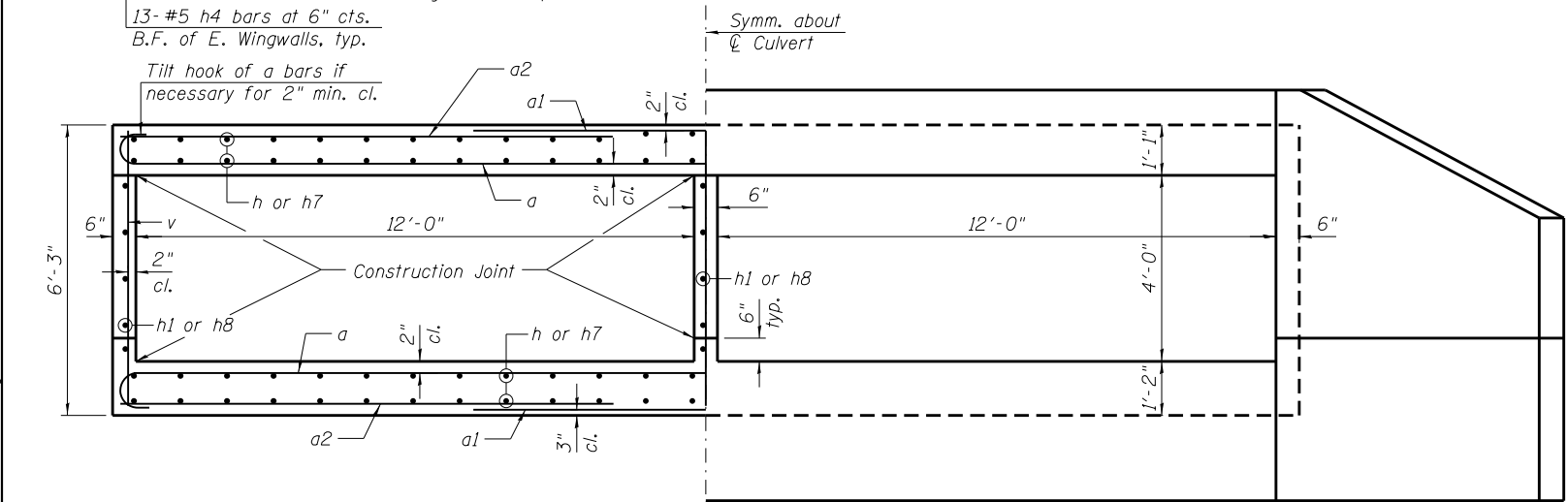
**CULVERT PLAN TOP SLAB DETAILS
STRUCTURE NO. 045-2101**

SCALE: SHEET S-05 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	62
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

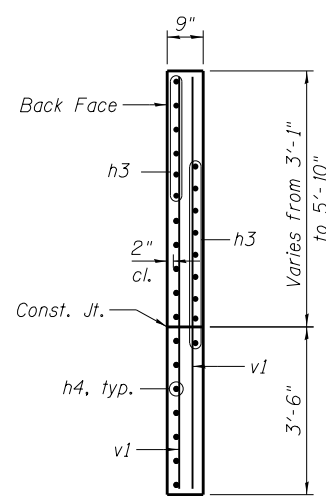


LONGITUDINAL SECTION

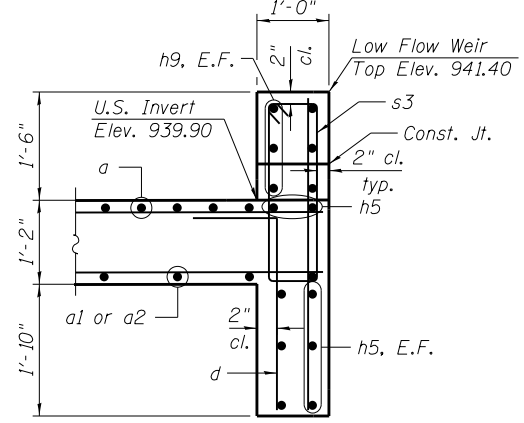


HALF SECTION THRU BARREL

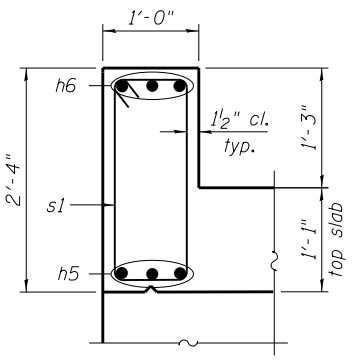
HALF END ELEVATION



SECTION A-A

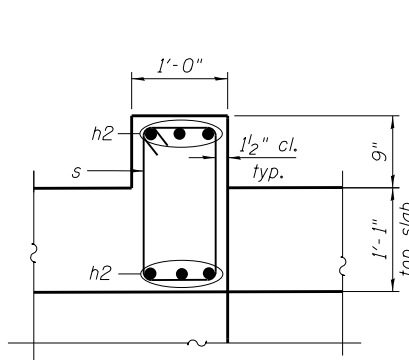


SECTION C-C



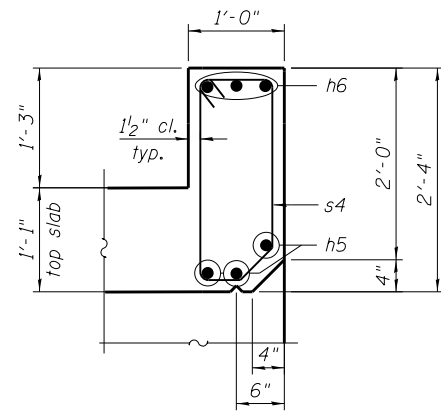
DETAIL A

(Reinforcement in top slab omitted for clarity)



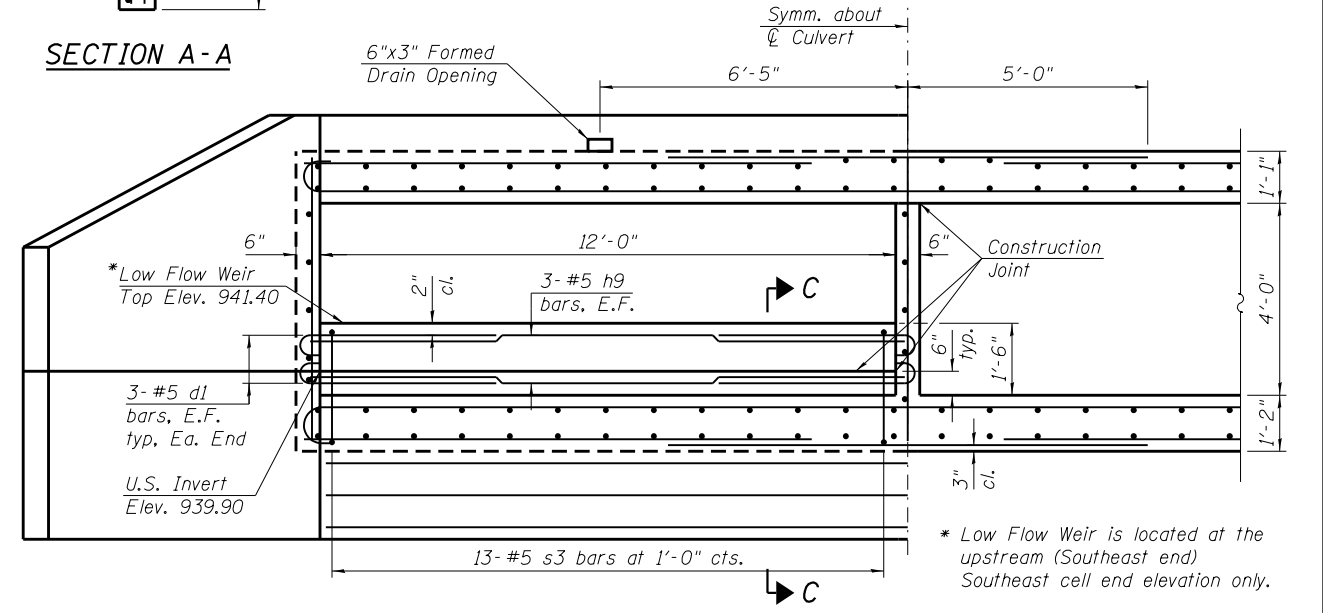
DETAIL B

(Reinforcement in top slab omitted for clarity)



DETAIL C

(Reinforcement in top slab omitted for clarity)



HALF SECTION THRU BARREL AT LOW FLOW WEIR

(Only Low Flow Weir reinforcement is called out for clarity)



S06-SecDet1.dgn
 USER NAME = lisa.buntin
 PLOT SCALE = 4:8.0000 1' = 1/4"
 PLOT DATE = 1/22/2018

DESIGNED - SK
 DRAWN - SK, LAB
 CHECKED - MI, LAB
 DATE - 1/22/2018

REVISED -
 REVISED -
 REVISED -
 REVISED -

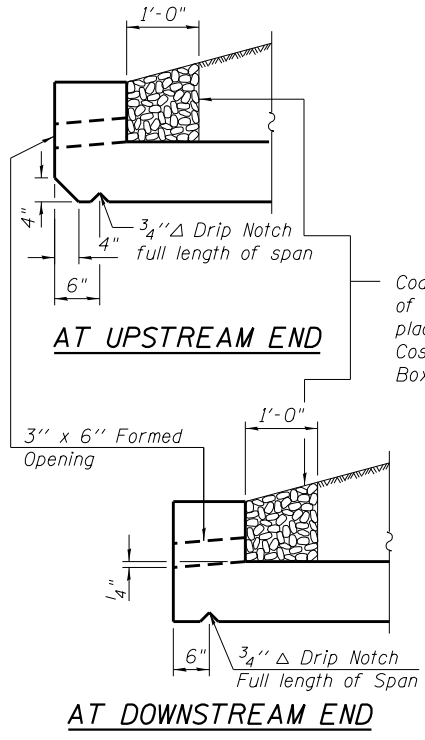
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CULVERT SECTIONS AND DETAILS (SHEET 1 OF 2)
 STRUCTURE NO. 045-2101

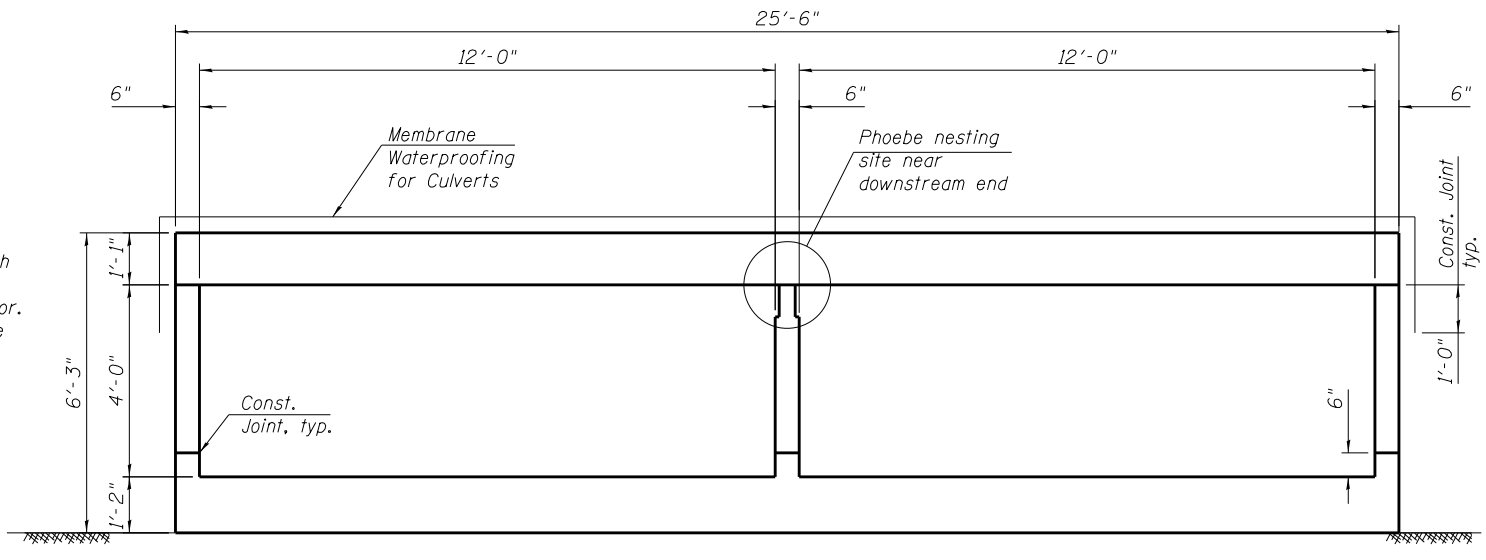
SCALE: SHEET S-06 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE. 345	SECTION 2015-063B	COUNTY KANE	TOTAL SHEETS 87	SHEET NO. 63
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

FILE PATH = P:\1605-677\DDT_P16163\Item 9 - FerroWork\Order #5 - US28 Over-Unnamed\Drawn\Sheet Files\Structural\S06-SecDet1.dgn

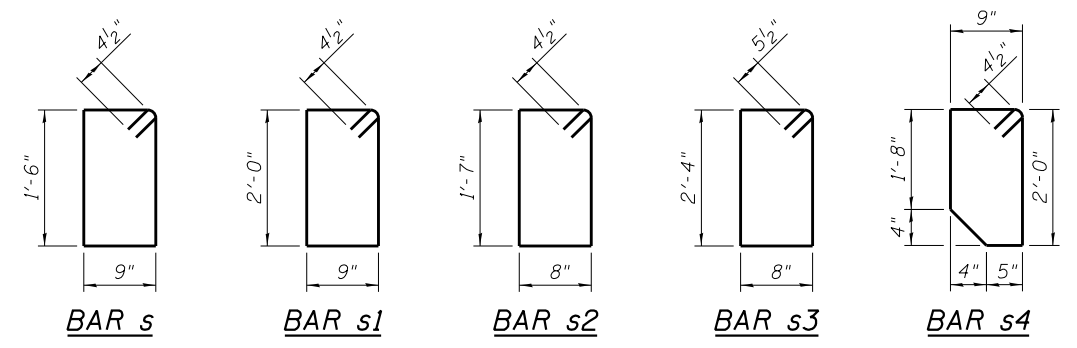
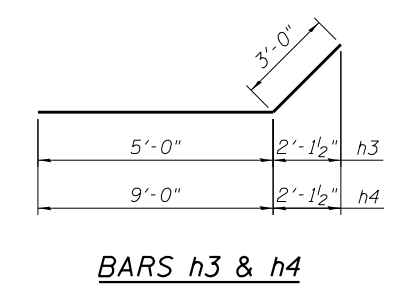
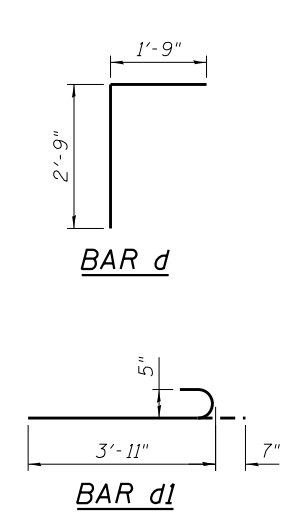
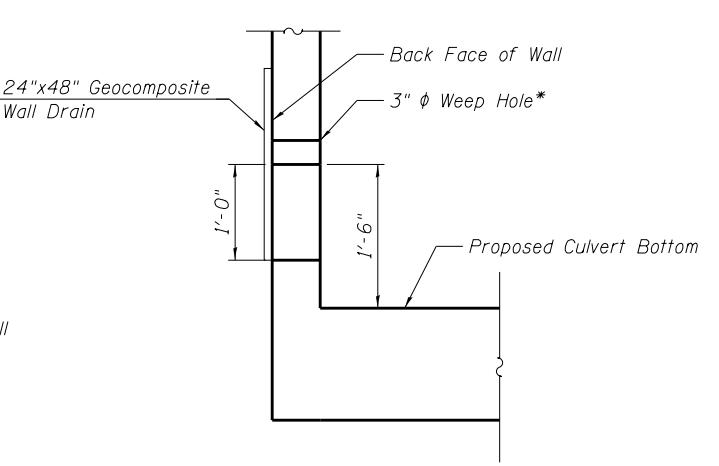
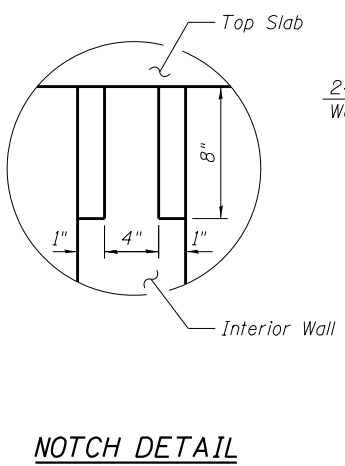
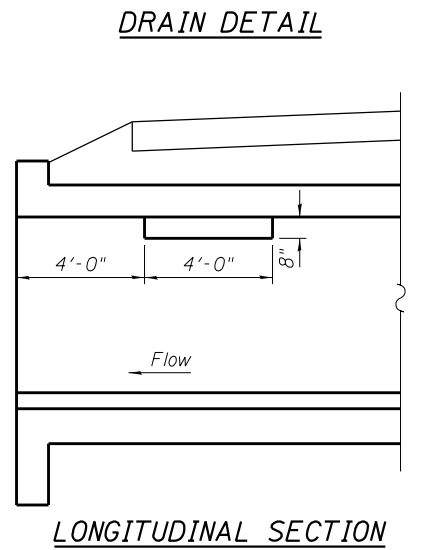


Coarse aggregate full length of both headwalls. To be placed by Grading Contractor. Cost included with Concrete Box Culverts.



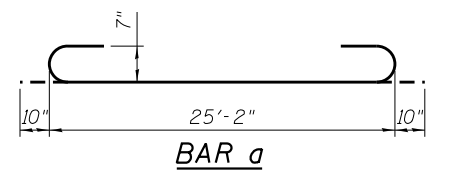
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	182	#7	26'-10"	
a1	194	#7	10'-0"	
a2	200	#6	12'-0"	
d	54	#4	4'-6"	
d1	12	#5	4'-6"	
h	108	#6	19'-6"	
h1	15	#5	19'-6"	
h2	12	#6	25'-2"	
h3	60	#5	8'-0"	
h4	52	#5	12'-0"	
h5	10	#6	25'-8"	
h6	6	#7	25'-8"	
h7	108	#6	28'-0"	
h8	15	#5	28'-0"	
h9	6	#5	12'-8"	
h10	12	#5	25'-8"	
s	27	#4	5'-3"	
s1	27	#4	6'-3"	
s2	27	#4	5'-3"	
s3	13	#5	6'-11"	
s4	27	#4	6'-1"	
v	322	#4	5'-10"	
v1	56	#4	8'-11"	
Reinforcement Bars			Pound	31,020
Concrete Box Culverts			Cu. Yd.	128.8
Weak Post Guardrail Attached to Culvert			Foot	68.8
Membrane Waterproofing System for Buried Structures			Sq Yd.	147



Minimum Bar Laps

Bar	Lap
#4	2'-7"
#5	3'-4"
#6	4'-9"
#7	5'-6"



FILE PATH = P:\1605-677\1001_P1B163\Item 9 - FerroWork Order.es - U528 Over Unnamed Ditch\Sheet Files\Structural\S07-SecDet2.dgn



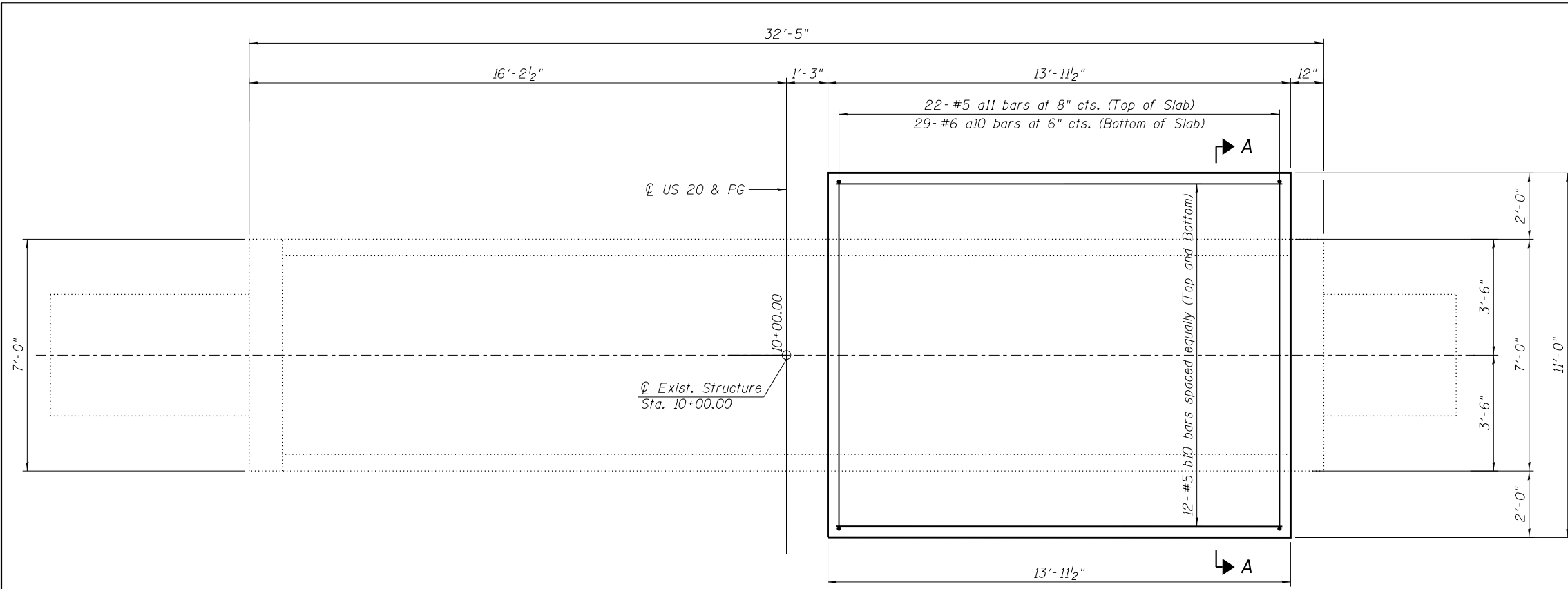
S07-SecDet2.dgn	DESIGNED - SK	REVISED -
USER NAME = isa.buntin	DRAWN - SK	REVISED -
PLOT SCALE = 4:8.0000 '1' / in.	CHECKED - MI, LAB	REVISED -
PLOT DATE = 1/22/2018	DATE - 1/22/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

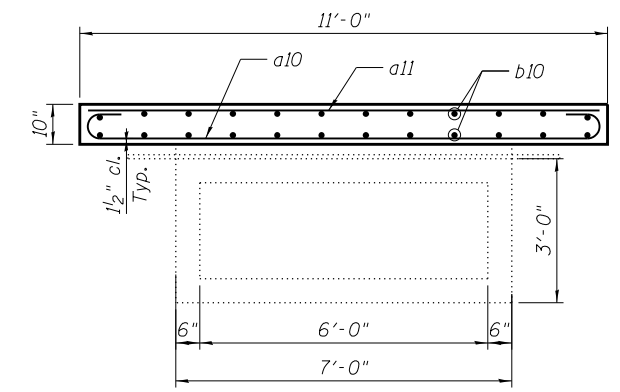
**CULVERT SECTIONS AND DETAILS (SHEET 2 OF 2)
STRUCTURE NO. 045-2101**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	64
CONTRACT NO. 62B31			ILLINOIS FED. AID PROJECT	

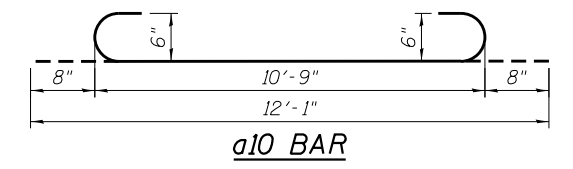
SCALE: SHEET S-07 OF S-11 SHEETS STA. TO STA.



PLAN



SECTION A-A



a10 BAR

BILL OF MATERIALS

Bar	No.	Size	Length	Shape
a10	29	#6	12'-1"	
a11	22	#5	10'-9"	
b10	24	#5	13'-8"	
Concrete Superstructure			Cu. Yd.	4.8
Reinforcement Bars			Pound	1120

FILE PATH = P:\1605-677\1001_P16163\Item 9 - Ferro\Work Order #9 - US28 Over Unnamed Ditch\Sheet Files\Structural\S08-StructSlabDet.dgn



S08-StructSlabDet.dgn
 USER NAME = lisa.buntin
 PLOT SCALE = 4:0 '1' / in.
 PLOT DATE = 1/22/2018

DESIGNED - SK
 DRAWN - SK
 CHECKED - MI, LAB
 DATE - 1/22/2018

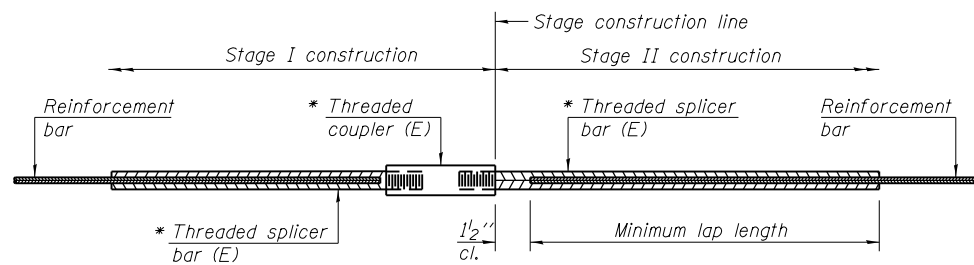
REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL SLAB DETAILS
 STRUCTURE NO. 045-2101**

SCALE: SHEET S-08 OF S-11 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	65
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				

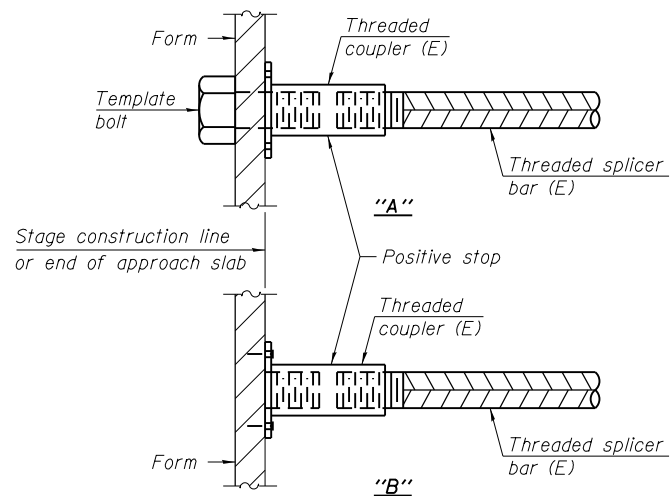


STANDARD BAR SPLICER ASSEMBLY

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

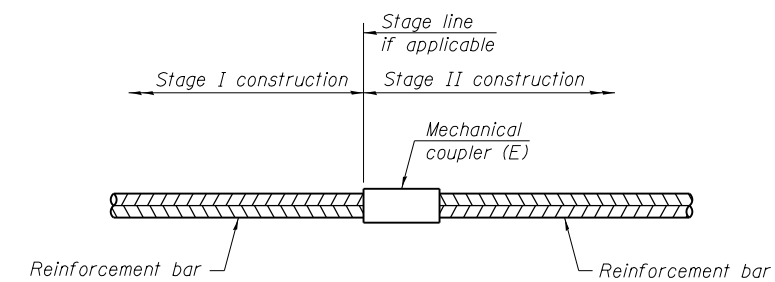
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Top of bottom slab	#6	27	3'-10"
Bottom of bottom slab	#6	27	3'-10"
Top of top slab	#6	27	3'-10"
Bottom of top slab	#6	27	3'-10"
North Wall	#5	5	3'-2"
South Wall	#5	5	3'-2"
Center Wall	#5	5	3'-2"



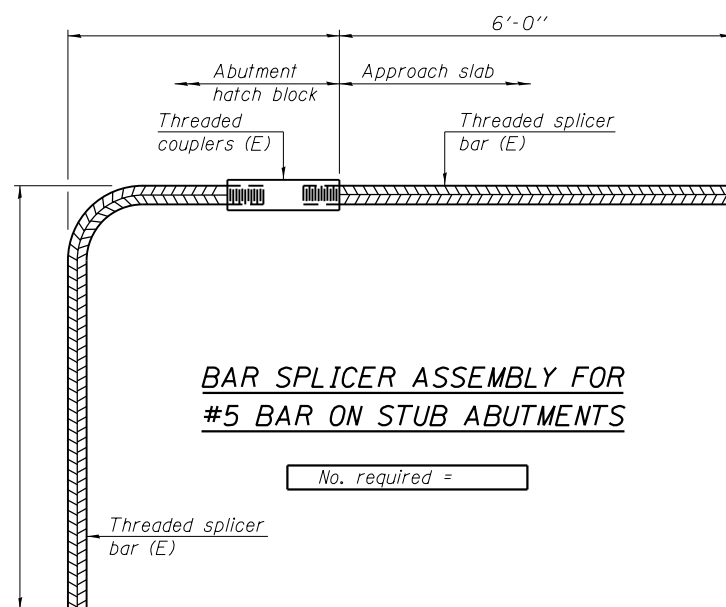
INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

FILE PATH = P:\1605-677\1001\PTB163\Item 9 - Ferro\Work Order #9 - U528 Over Unnamed Ditch\Sheet Files\Structural\509-Bar Splicer-Det.dgn

BSD-1

2-17-2017



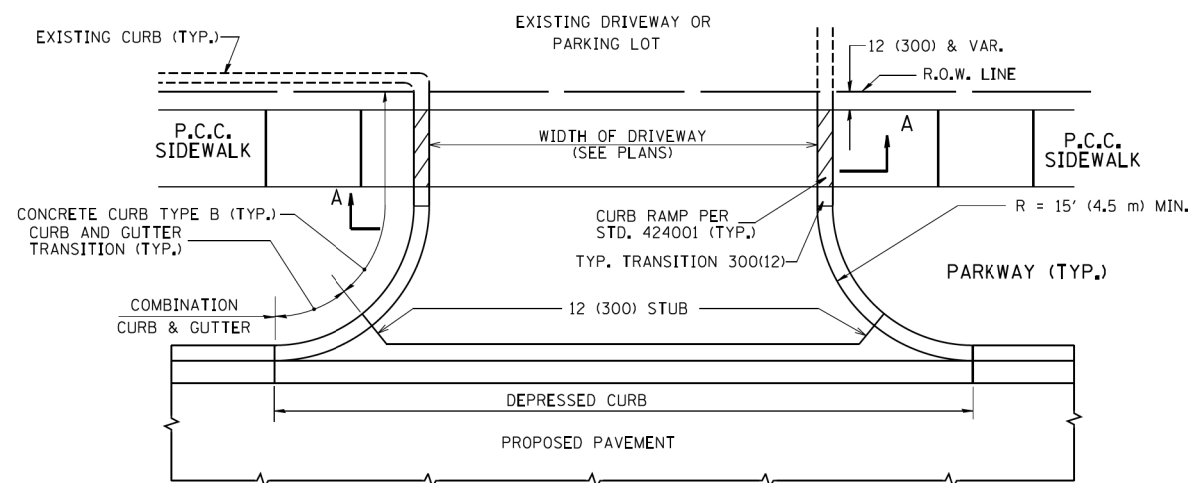
S09-BarSplicerDet.dgn	DESIGNED - SK	REVISED -
USER NAME = isa.buntin	DRAWN - SK	REVISED -
PLOT SCALE = 0:2.0000 '1' / in.	CHECKED - MI, LAB	REVISED -
PLOT DATE = 1/22/2018	DATE - 1/22/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

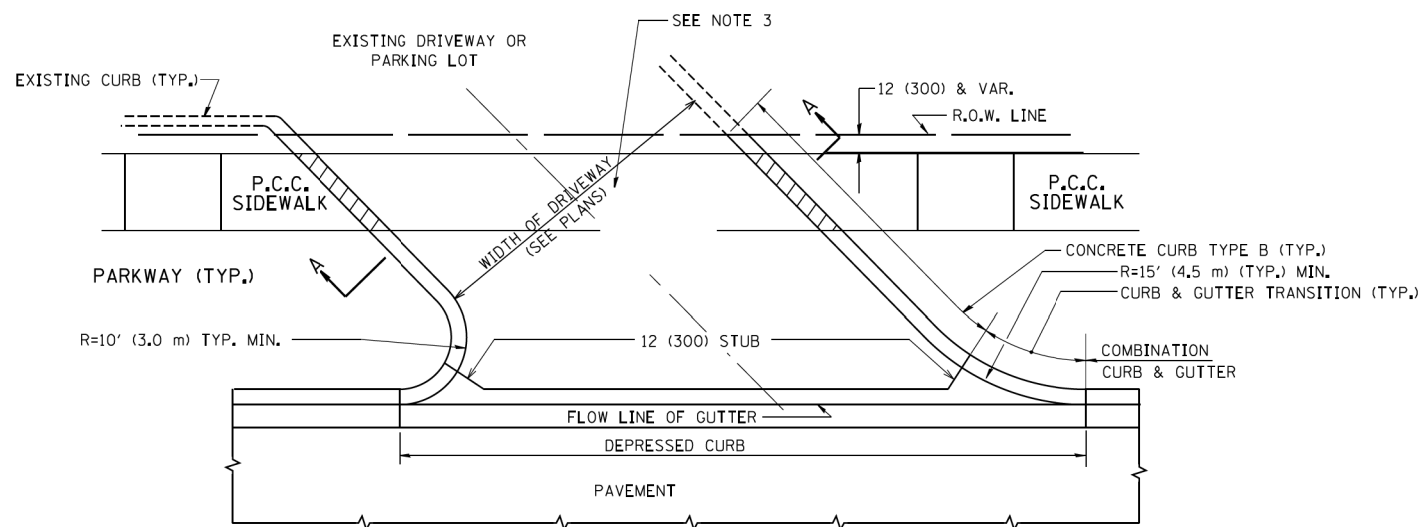
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-2101

SCALE: SHEET S-09 OF S-11 SHEETS STA. TO STA.

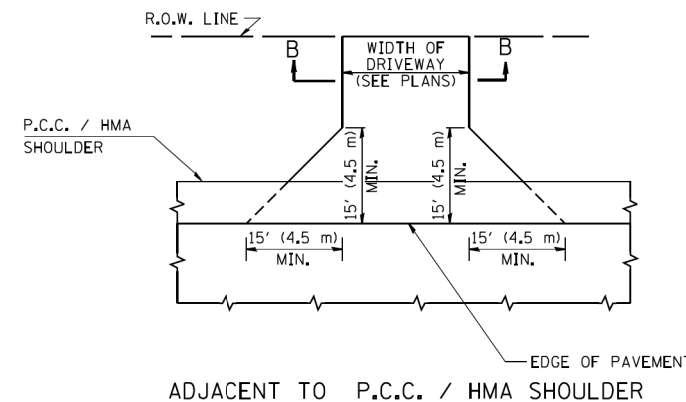
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
345	2015-063B	KANE	87	66
CONTRACT NO. 62B31				
ILLINOIS FED. AID PROJECT				



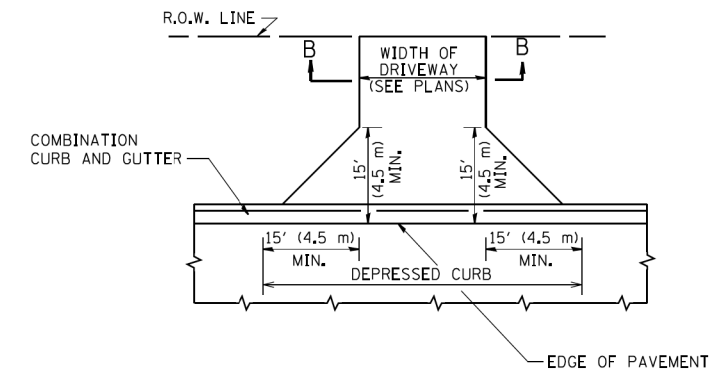
WITH CONCRETE CURB, TYPE B



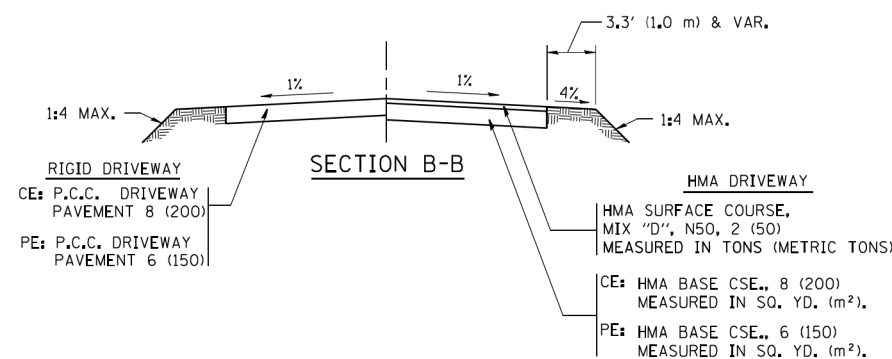
WITH CONCRETE CURB, TYPE B



ADJACENT TO P.C.C. / HMA SHOULDER



ADJACENT TO CURB AND GUTTER



RURAL FIELD ENTRANCE (FE)

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

AGGREGATE BASE CSE., TYPE B, 8 (200)
MEASURED IN SQ. YD. (m²).

GENERAL NOTES:

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

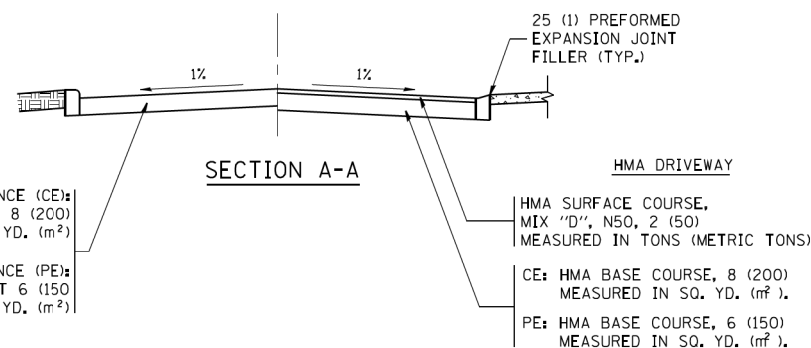
COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

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

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

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

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



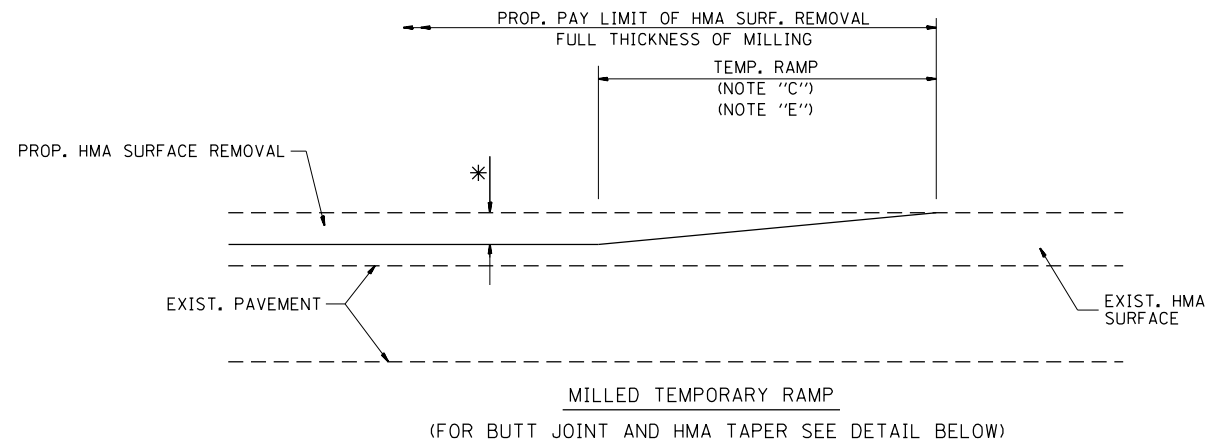
FILE NAME =	USER NAME = lcyss	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
ca:\pwork\pwork\lcyss\0108315\bd01.dgn		DRAWN -	REVISED - R. BORO 01-01-07
		CHECKED -	REVISED - R. BORO 06-11-08
		DATE - 11-04-95	REVISED - R. BORO 09-06-11

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

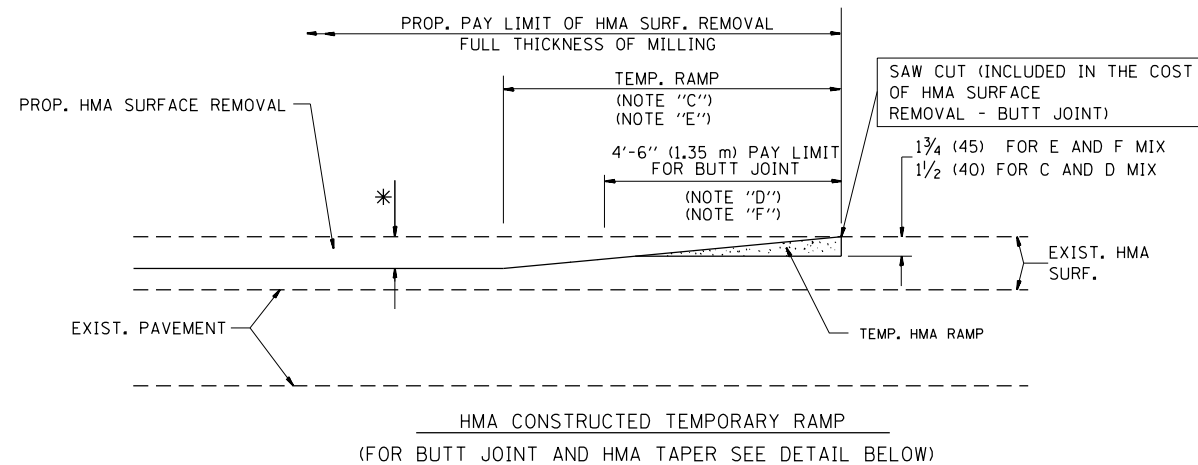
**DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W.
AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 m)**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	69
BD0156-07 (BD-01)			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

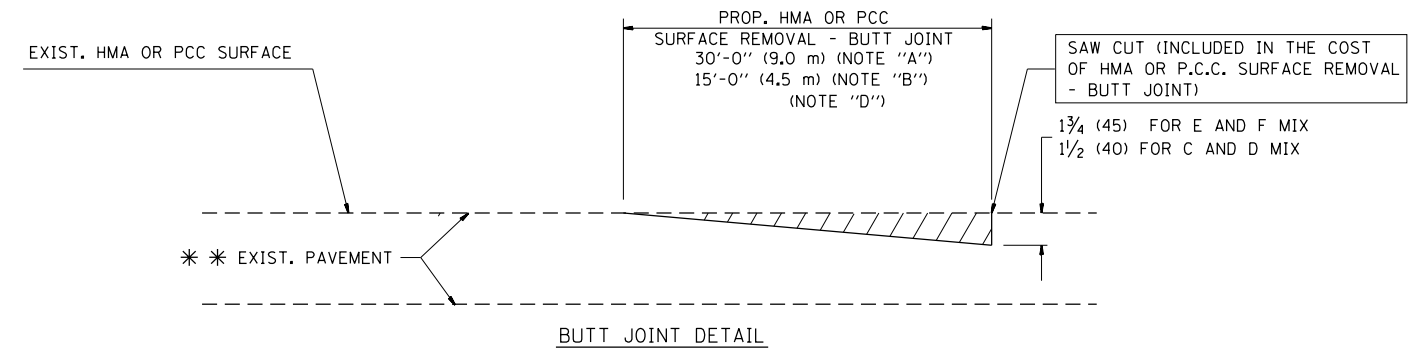


OPTION 1

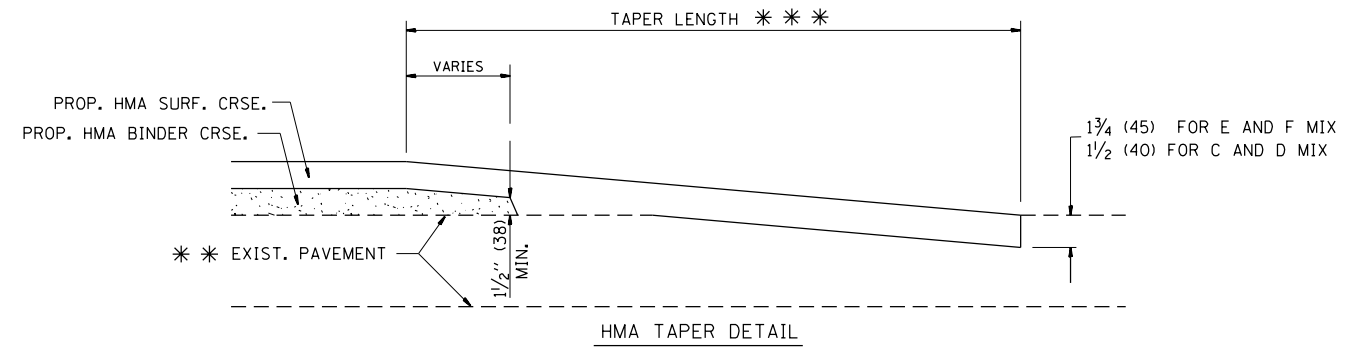


OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

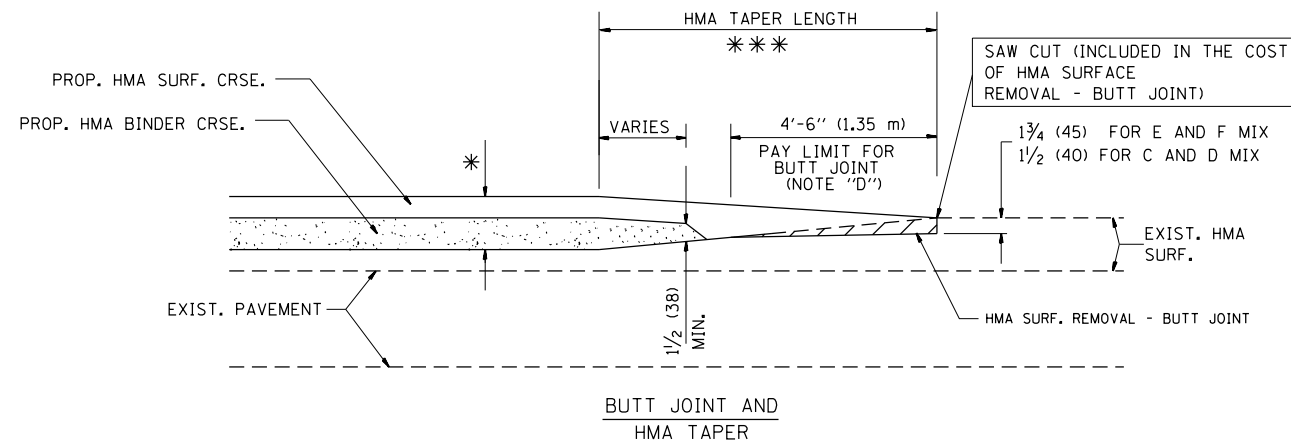
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-Detail-bd32.dgn



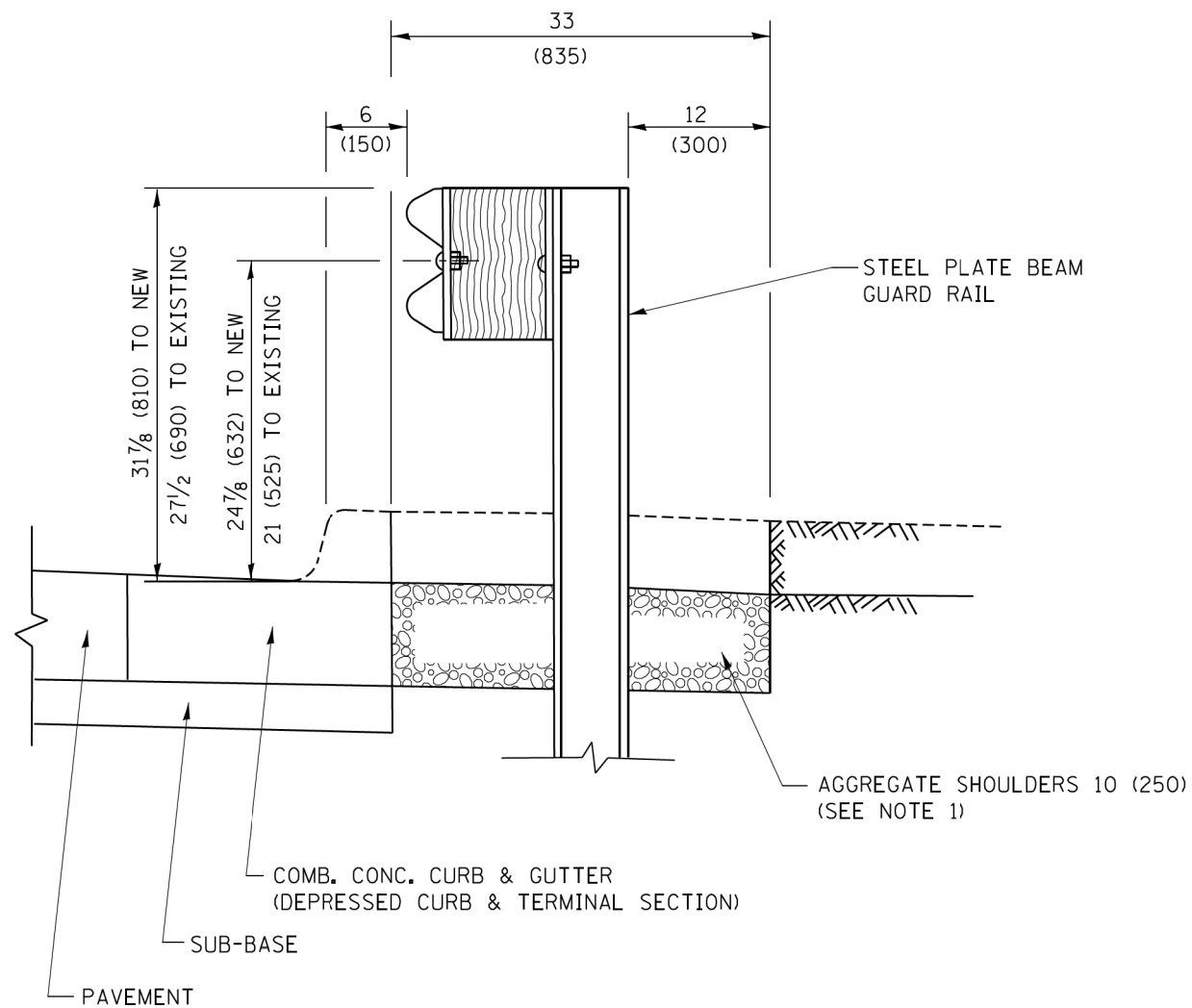
USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINTS AND
HMA TAPER**

SCALE: SHEET OF SHEETS STA. TO STA.

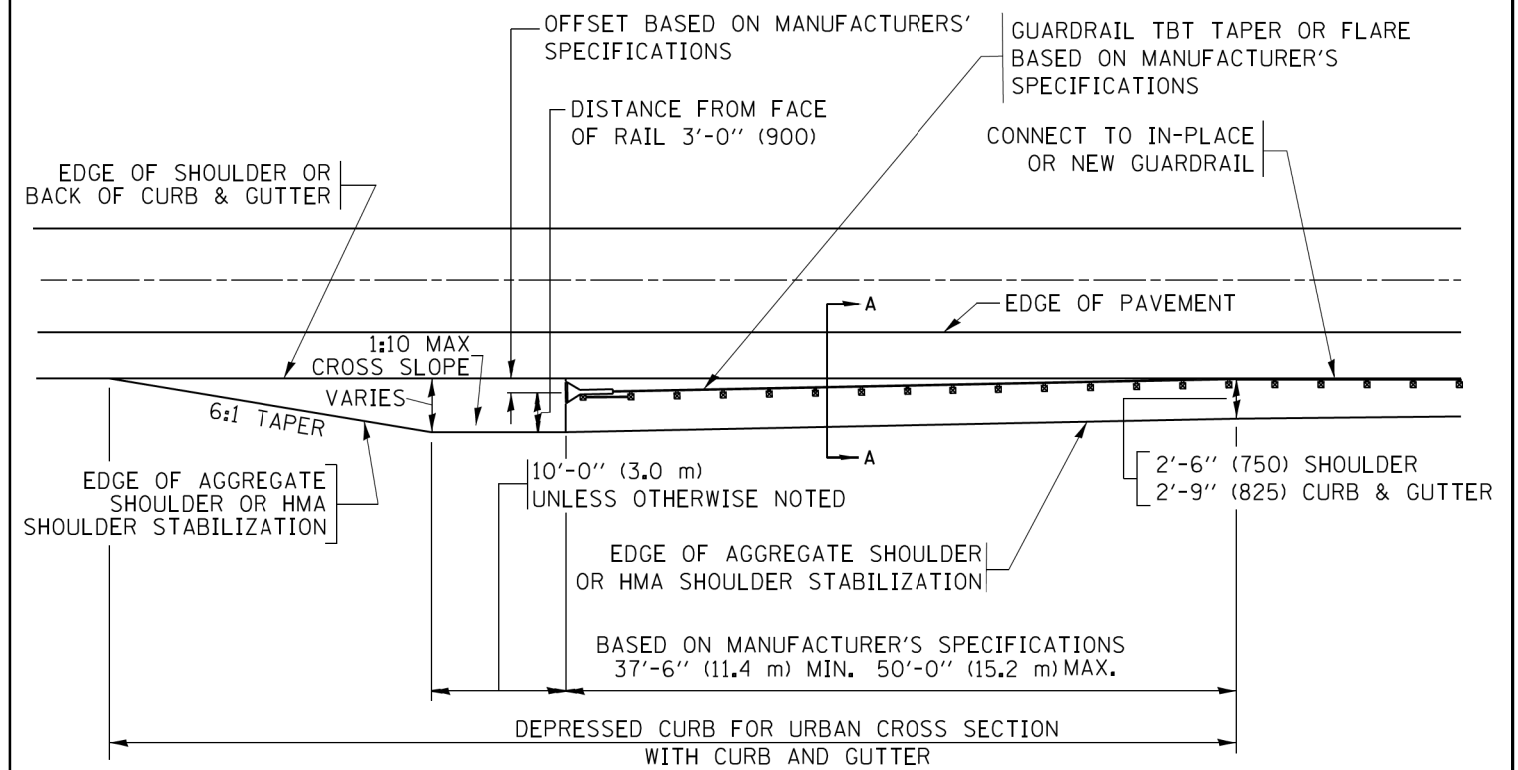
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	70
BD400-05 BD32		CONTRACT NO. 62B31		
ILLINOIS FED. AID PROJECT				



SECTION A-A

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

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



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

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

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

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

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

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CA60\CA00 Sheets\62B31-Detail-bd34.dgn



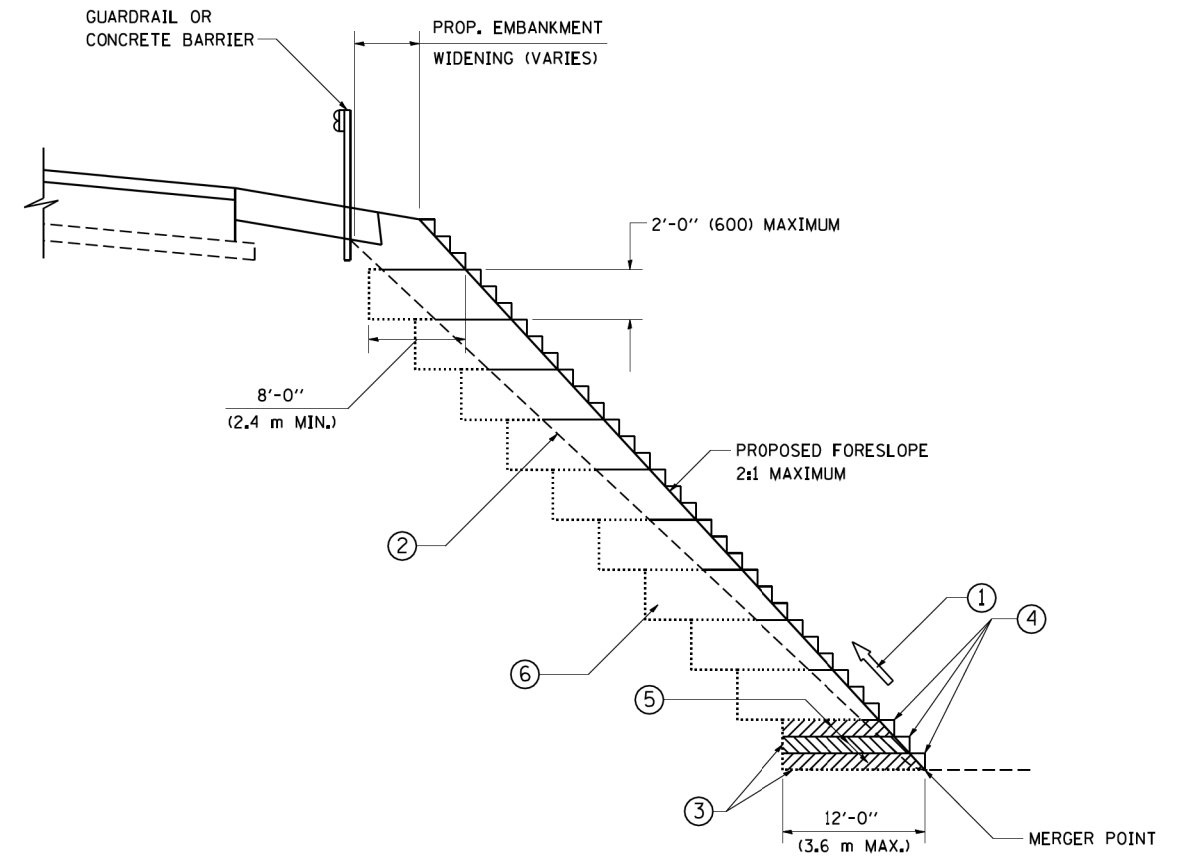
USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 71
BD400-05 BD32		CONTRACT NO. 62B31		
ILLINOIS FED. AID PROJECT				



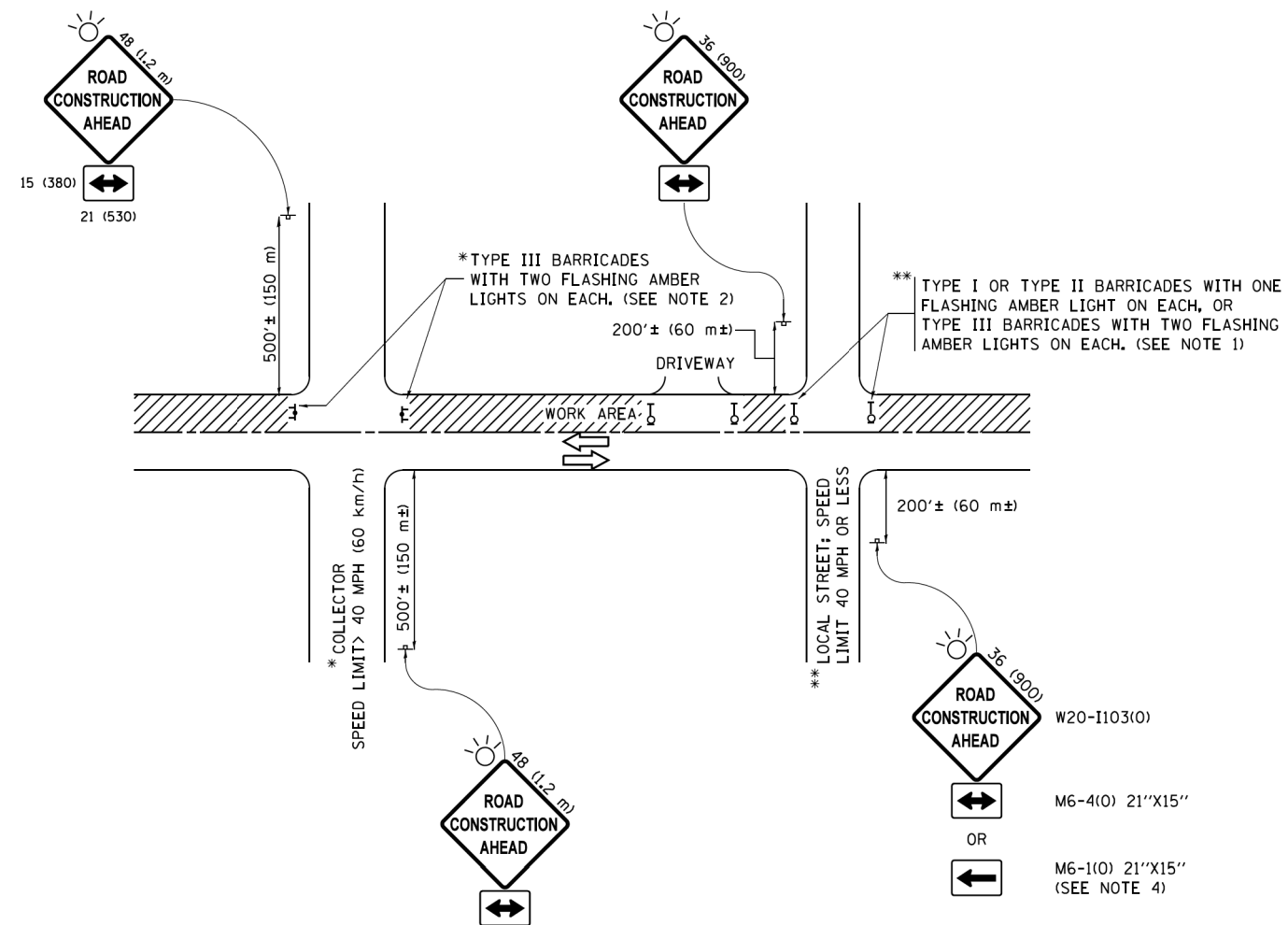
**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

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

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

FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gegl1enobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BENCHING DETAIL FOR EMBANKMENT WIDENING			F.A. - RTE. -	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50.0000' / IN.	DRAWN - CADD	REVISED -		SCALE: NONE	SHEET NO. 1	OF 1	SHEETS	525/345	2015-063B	KANE/MCHENRY	87	72
	PLOT DATE = 1/4/2008	CHECKED - S.E.B.	REVISED -		STA.	TO STA.		BD-51		CONTRACT NO.			
		DATE - 06-16-04	REVISED -		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT								



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-Detail-1.tbl.dgn

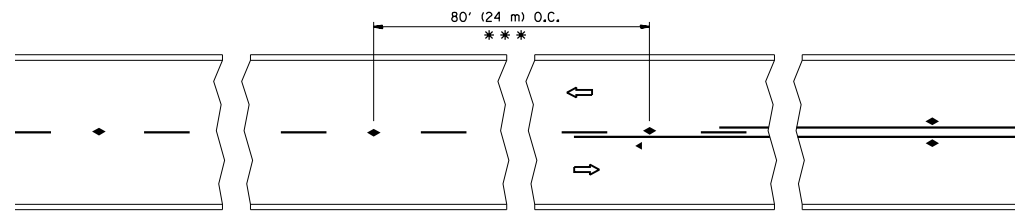


USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

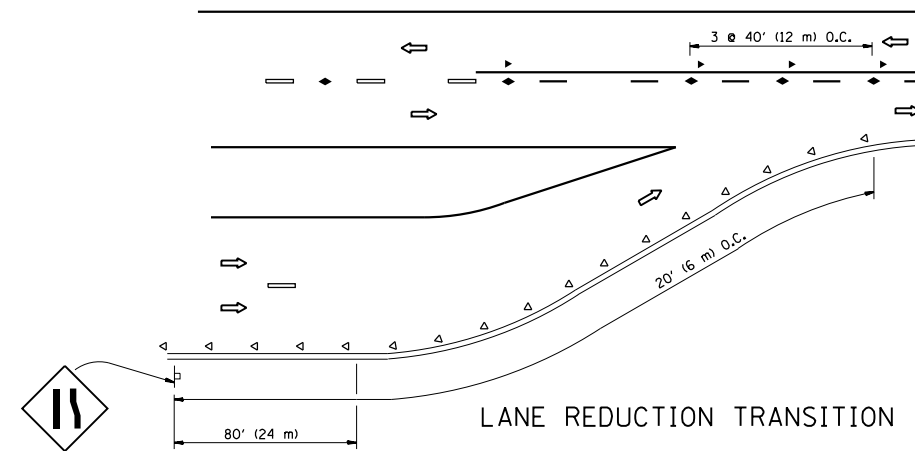
SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	73
TC-10			CONTRACT NO. 62B31	
ILLINOIS FED. AID PROJECT				

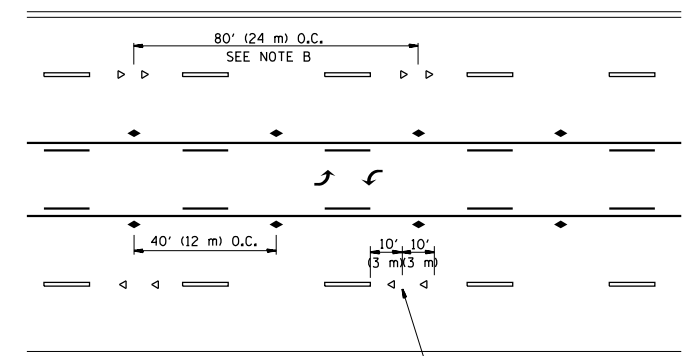


*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

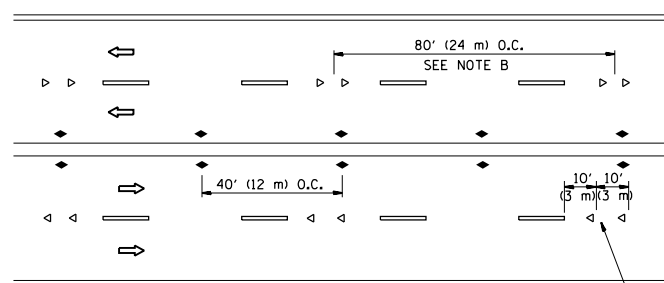
TWO-LANE/TWO-WAY



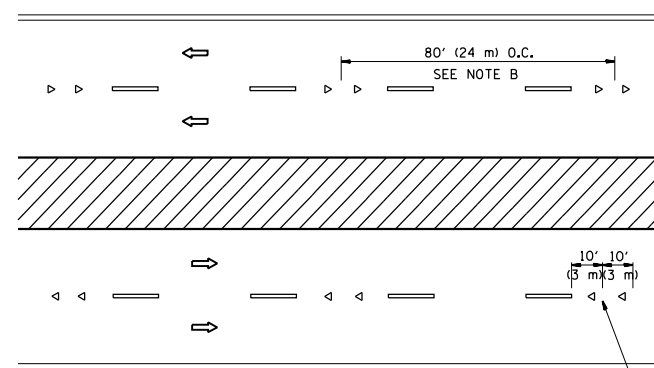
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

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

SYMBOLS

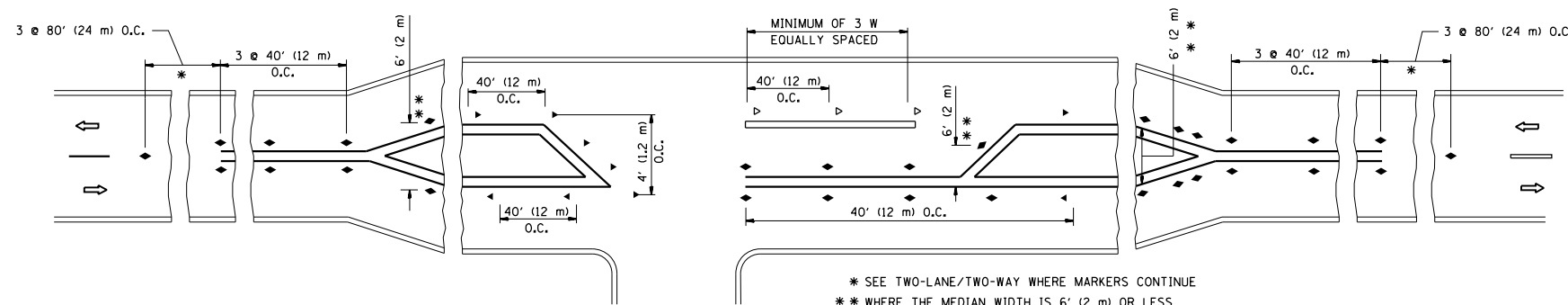
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

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

DESIGN NOTES

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



LEFT TURN

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

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

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-Detail-1.tcl.dgn



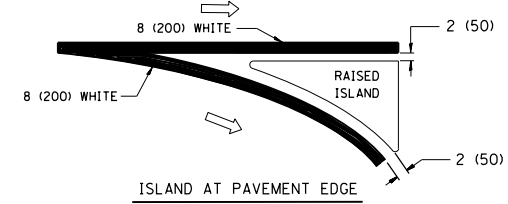
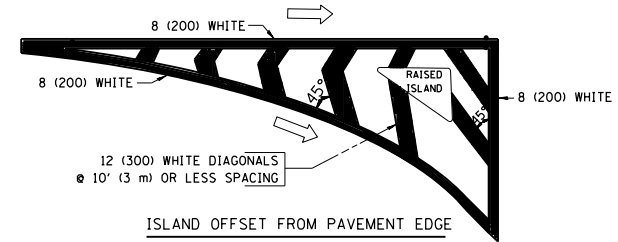
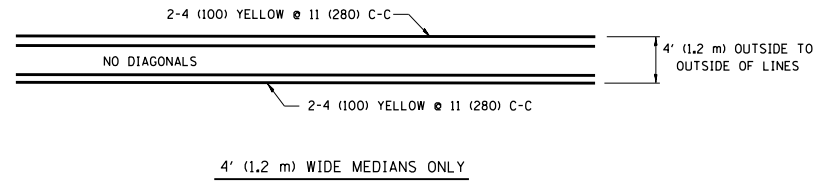
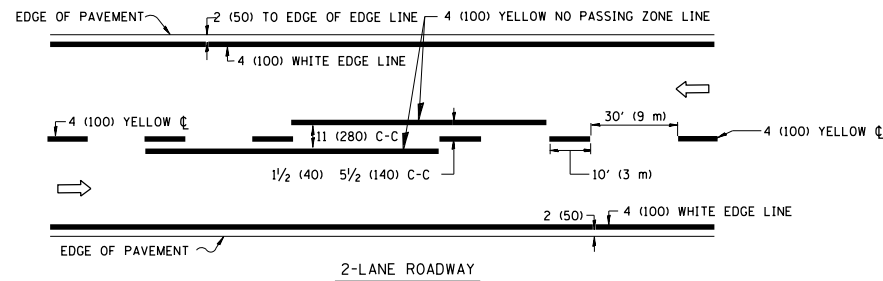
USER NAME = JuanS	DESIGNED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/17/2018	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

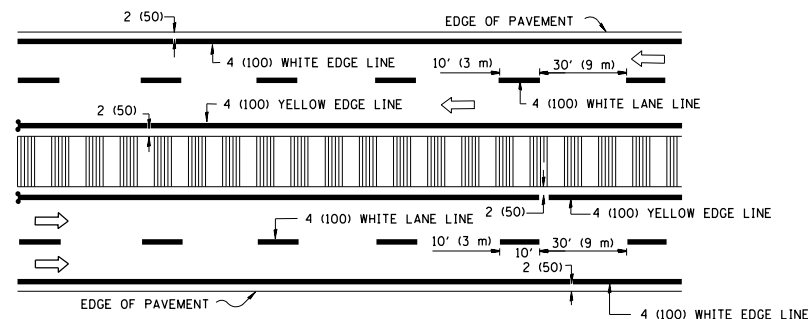
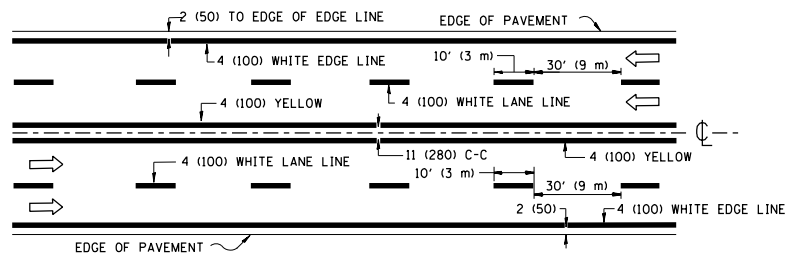
RAISED REFLECTIVE PAVEMENT MARKERS
(SNOW PLOW RESISTANT)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	74
TC-11		CONTRACT NO. 62B31		
ILLINOIS FED. AID PROJECT				

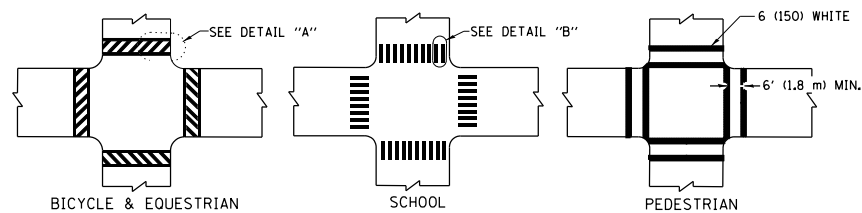


TYPICAL ISLAND MARKING

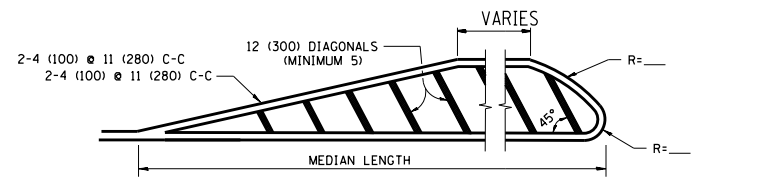


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

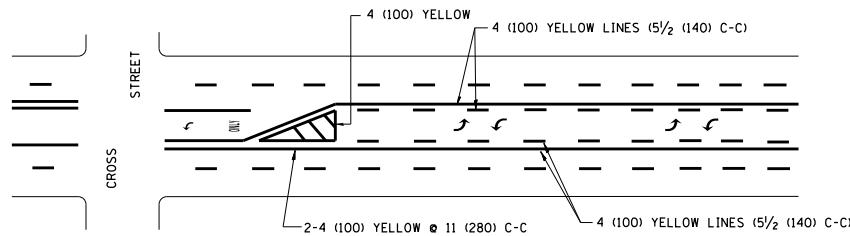


TYPICAL CROSSWALK MARKING

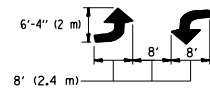


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

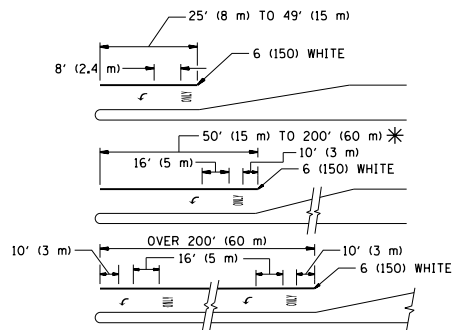


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



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 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING


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


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


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

M:_2012\12-15-4-009 US 20 Harmony Creek Design\Transportation\CADD\CADD_Sheets\62B31-Detour-1-1c21.dgn


ROUTE MARKERS


 FOR U.S. ROUTES
M1-40-2424


 FOR ILLINOIS ROUTES
M1-50-2424


 R.R. UNMARKED ROUTES
SPECIAL 24" x 18" VARIABLE
4" BLACK LETTERS ON WHITE
REFLECTIVE BACKGROUND


ARROWS SIGNS

 M5-1L-2115


 M5-1R-2115


 M6-1-2115


 M6-1-2115


 M6-3-2115


CARDINAL DIRECTION & DETOUR SIGNS

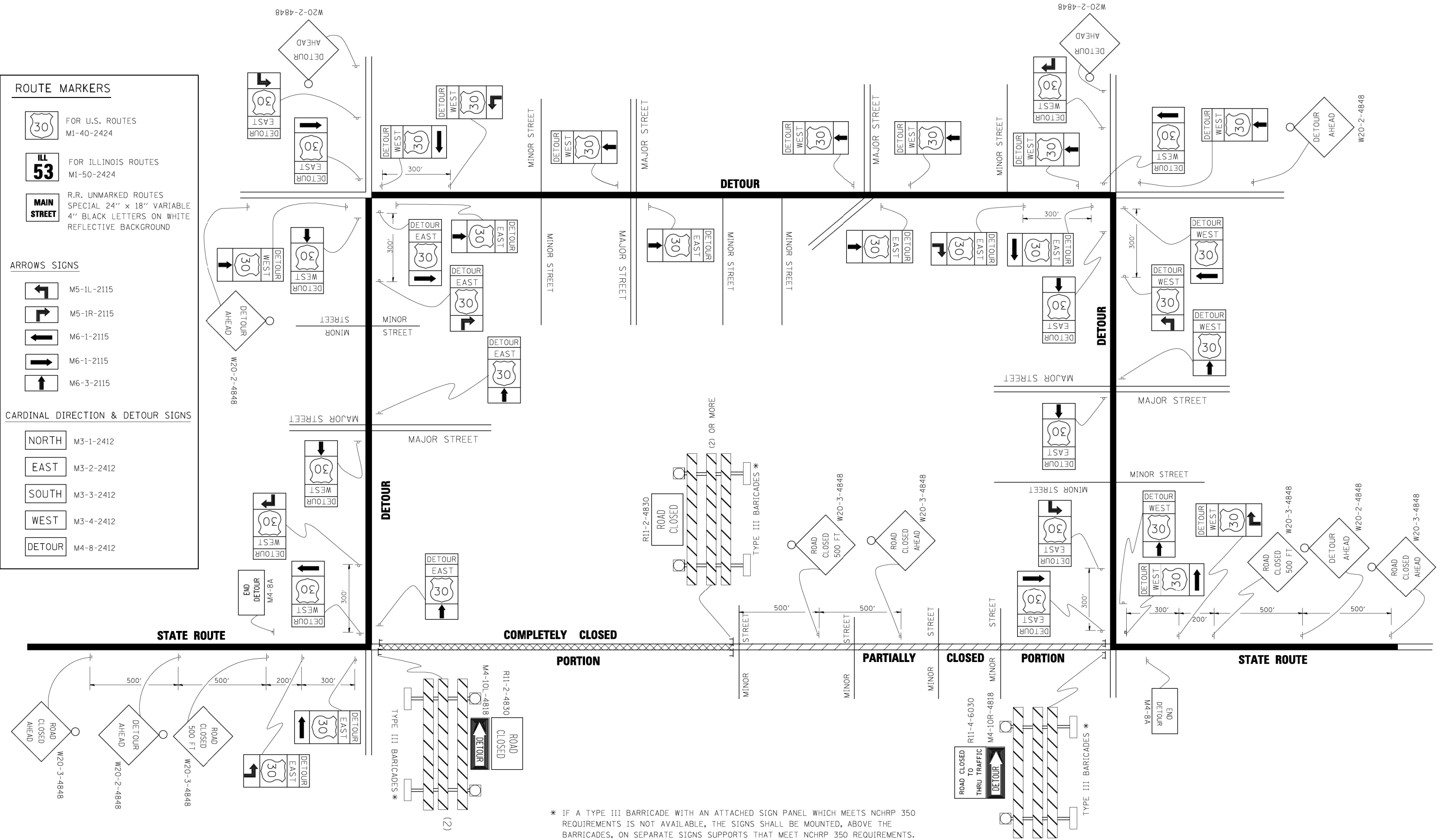
 NORTH M3-1-2412

 EAST M3-2-2412

 SOUTH M3-3-2412

 WEST M3-4-2412

 DETOUR M4-8-2412



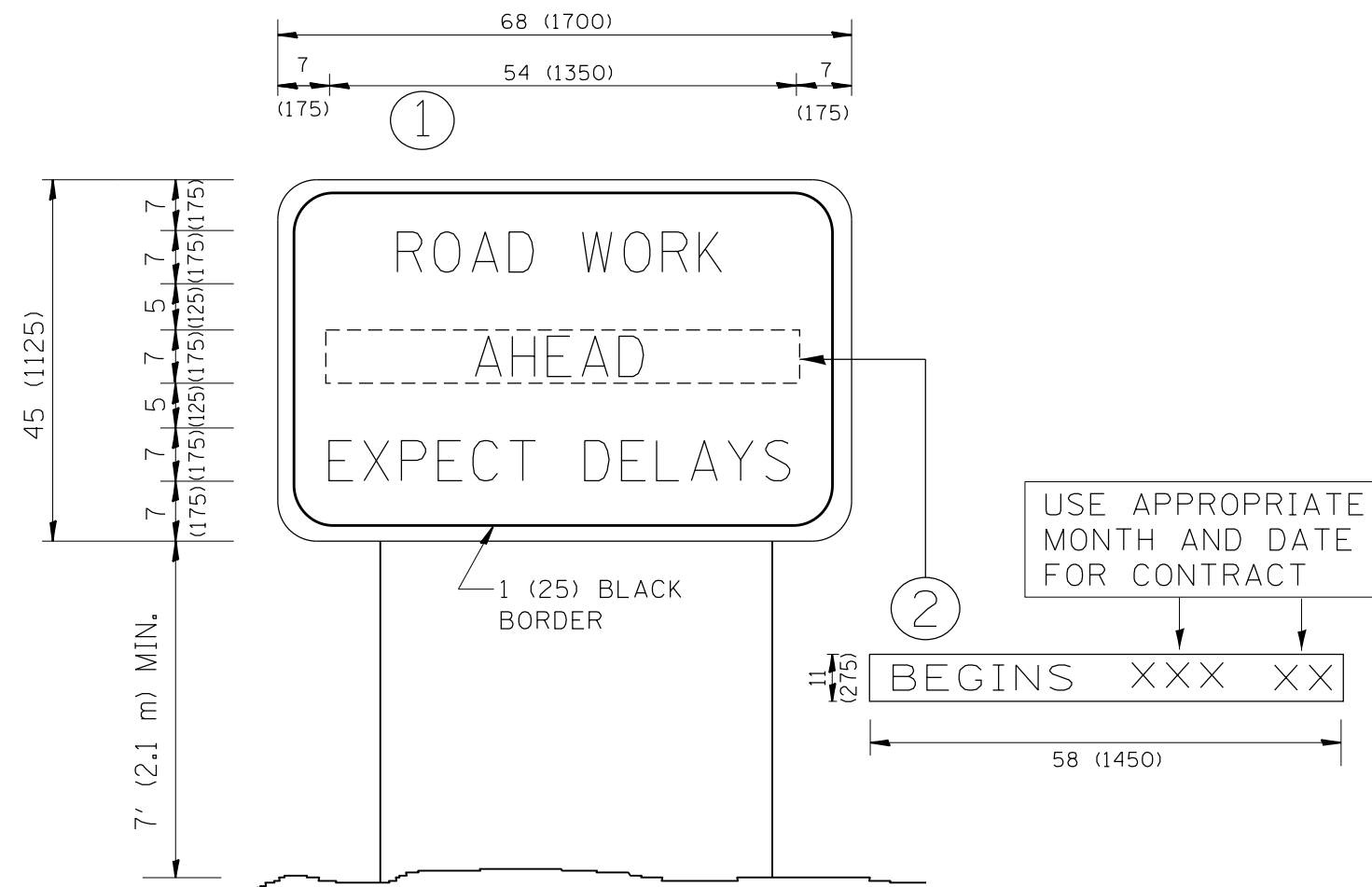
* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

FILE NAME =	USER NAME = d-ivakosgn	DESIGNED -	REVISED - 10-18-02
ca:\pk_work\PIWIDT\DRIVAKOSGN\d0108315\1c21.dgn		DRAWN -	REVISED - R. BORO 09-14-09
		PLOT SCALE = 49.9999 / IN.	REVISIED -
		CHECKED -	REVISIED -
		DATE - 9/14/2009	REVISIED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DETOUR SIGNING FOR CLOSING STATE HIGHWAYS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	76
TC-21		CONTRACT NO. 62B31		
ILLINOIS FED. AID PROJECT				



NOTES:

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

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

M:\2012\12-15-14-009 US 20 Harmony Creek Design\Transportation\CADD\Sheet\62B31-Detail-1-22.dgn



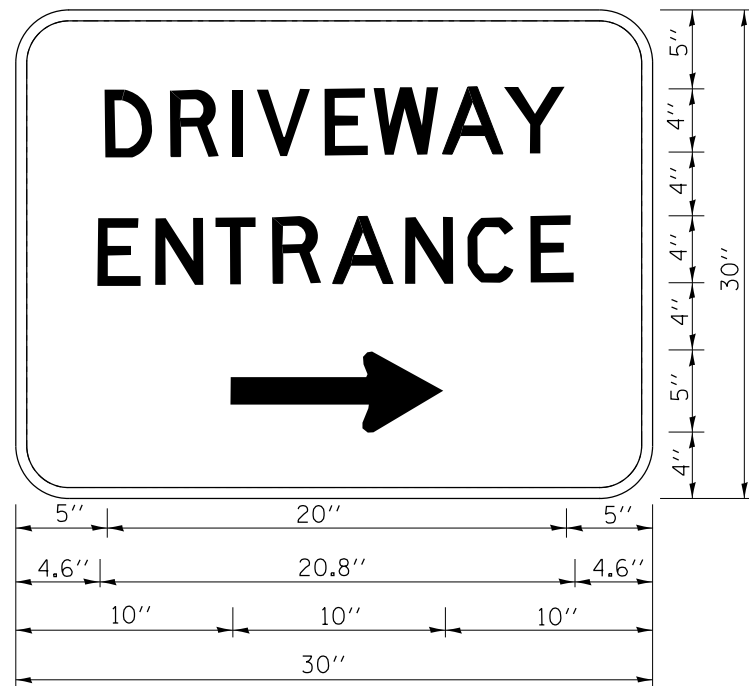
USER NAME = JuanS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE =	CHECKED -	REVISED -
PLOT DATE = 8/17/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE. 525/345	SECTION 2015-063B	COUNTY KANE/MCHENRY	TOTAL SHEETS 87	SHEET NO. 77
TC-22			CONTRACT NO. 62B31	
ILLINOIS FED. AID PROJECT				



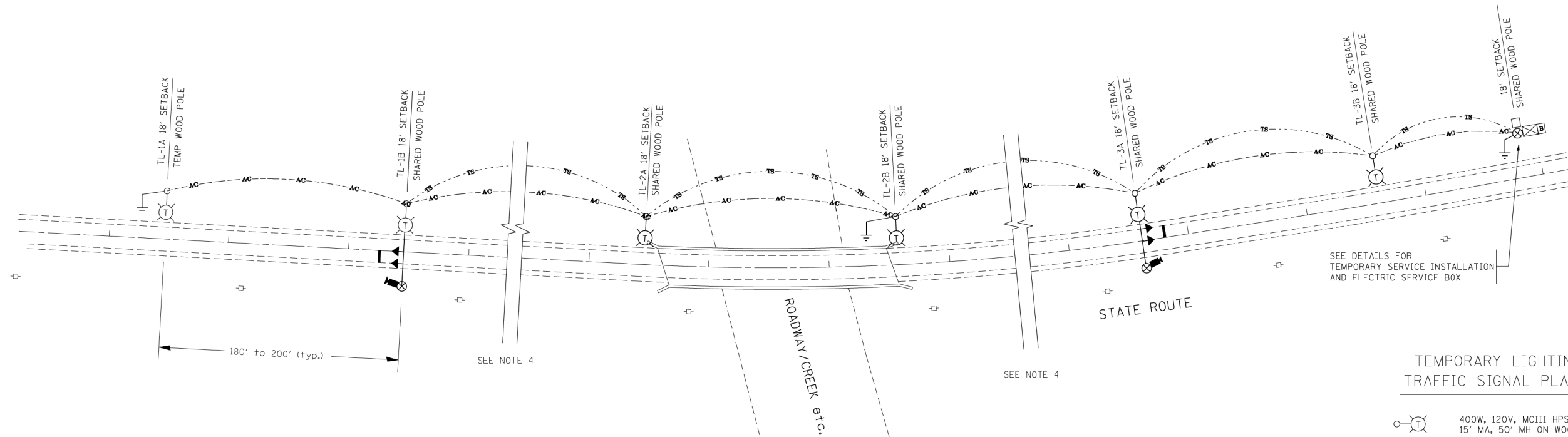
3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED
 "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

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".

M:\2012\12-154-009 US 20 Harmony Creek Design\Transportation\CADD\CADD Sheets\62B31-Detail-1c26.dgn

	USER NAME = JuanS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRIVEWAY ENTRANCE SIGNING			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE =	DRAWN -	REVISED -					525/345	2015-063B	KANE/MCHENRY	87	78	
PLOT DATE = 8/17/2018	CHECKED -	REVISED -	SCALE:		SHEET	OF	SHEETS	STA.	TO	STA.	ILLINOIS FED. AID PROJECT		
	DATE -	REVISED -				TC-26			CONTRACT NO. 62B31				



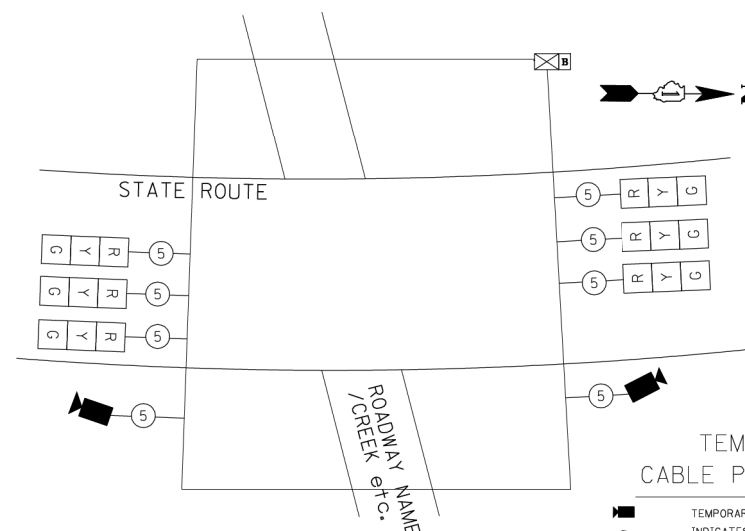
TYPICAL LAYOUT FOR TEMPORARY LIGHTING AND TRAFFIC SIGNALS
NOT TO SCALE

GENERAL NOTES:

- CONTACT TO THE ELECTRIC UTILITY SHALL BE INITIATED BEFORE THE PRECONSTRUCTION MEETING, AND DOCUMENTATION OF CONTACT SHALL BE PRESENTED AT THAT MEETING. NO PLACEMENT OF POLES WILL BE ALLOWED WITHOUT EVIDENCE OF A SIGNED AGREEMENT WITH THE ELECTRIC UTILITY, FURNISHED TO THE ENGINEER.
- UNLESS OTHERWISE INDICATED, AND EXCEPT AS OTHERWISE NOTED, THIS STANDARDIZED LAYOUT SHALL APPLY FOR BRIDGES NOT EXCEEDING A 250-FOOT SPAN. FOR BRIDGE SPANS IN EXCESS OF 250 FEET, THE POLES IMMEDIATELY ADJACENT TO THE BRIDGE SHALL BE 100-FOOT POLES (90-FOOT MOUNTING HEIGHT), WITH 750-WATT TYPE III HIGH PRESSURE SODIUM HIGH-MAST LUMINAIRES AS APPROVED BY THE ENGINEER.
- THE LAYOUT OF THE TEMPORARY EQUIPMENT WILL VARY BASED ON FIELD CONDITIONS, STAGING, UTILITY IMPACTS, AND THE ELECTRIC SERVICE LOCATION AS COORDINATED WITH THE ELECTRIC UTILITY. THE CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE SETTING OF POLES, TRAFFIC SIGNALS, AND COMBINED SERVICE. THIS PLAN MUST BE APPROVED BY THE ENGINEER BEFORE ANY POLES ARE PLACED
- THE ELECTRIC SERVICE SHALL BE 240/120V. WHERE 240V SERVICE IS NOT AVAILABLE, THE CONTRACTOR MAY SUBMIT A PROPOSAL FOR 120V SERVICE, DROP CABLE, MAIN BREAKER, AND ALL OTHER SERVICE APPURTENANCES SHALL BE APPROPRIATELY RATED AND INCLUDED REGARDLESS OF THE SERVICE VOLTAGE APPLIED
- THE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATION SHALL SHARE ANY COMMON ELEMENTS SUCH AS WOOD POLES, ELECTRICAL SERVICE, ELECTRIC SERVICE BOX, CABLE, ETC. THE CONTRACTOR SHALL COORDINATE TEMPORARY LIGHTING AND TRAFFIC SIGNAL INSTALLATIONS.
- THE LIGHT POLE SETBACK FROM THE EDGE OF TRAVEL PAVEMENT SHALL BE 18 FT. UNLESS THE LIGHT POLE IS BEHIND GUARDRAIL. THE LIGHT POLES INSTALLED BEHIND THE GUARDRAIL OR BARRIER WALL SHOULD HAVE AT LEAST 8 FT. SETBACK FROM THE BACK OF THE SHOULDER AND OR AS DIRECTED BY THE ENGINEER.
- EACH LIGHTING UNIT SHALL BE CONTROLLED BY A PHOTO CELL MOUNTED ON EACH LUMINAIRE WITH THE LIGHTING CIRCUIT FED FROM THE TEMPORARY SERVICE DISCONNECT BOX. OTHER MEANS OF LUMINAIRE CONTROL CAN BE CONSIDERED IF APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL SPLICE AERIAL CABLE AT THE LIGHT POLE USING HEAT SHRINKABLE CAPS WITH THE FACTORY APPLIED WATERPROOF SEALANT OR AN APPROVED UL LISTED AERIAL TAP DEVICE.
- ALL AREAS DISTURBED UNDER THIS CONTRACT SHALL BE RESTORED TO THE ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE ENGINEER.

TEMPORARY LIGHTING AND TRAFFIC SIGNAL PLAN LEGEND

- 400W, 120V, MCII HPS. WITH PHOTO CELL 15' MA, 50' MH ON WOOD POLE, CLASS 4
- 3-1/C#2, AERIAL CABLE WITH MESSENGER WIRE UNLESS OTHERWISE NOTED
- TL-1A TEMPORARY LIGHTING UNIT NUMBER - ONE CIRCUIT A
- GROUND ROD 5/8" DIA. x 10'
- COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRICAL SERVICE BOX
- TEMPORARY WOOD POLE - NOMINAL 60 FT., CLASS 4
- TEMPORARY LED TRAFFIC SIGNAL HEAD, NUMBER OF SECTION AND DISPLAY AS REQUIRED.
- TEMPORARY TRAFFIC SIGNAL SPAN WIRE, NUMBER OF CONDUCTORS AS REQUIRED.
- TEMPORARY TRAFFIC CONTROLLER WITH UPS AND BOTTOM PLATE MOUNTED TO WOOD POLE
- TEMPORARY VIDEO DETECTOR



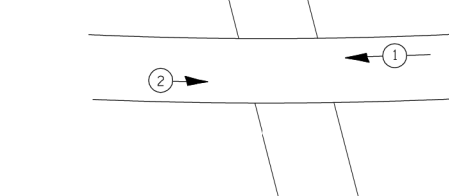
TEMPORARY CABLE PLAN (TYPICAL)
NOT TO SCALE

TEMPORARY CABLE PLAN LEGEND

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

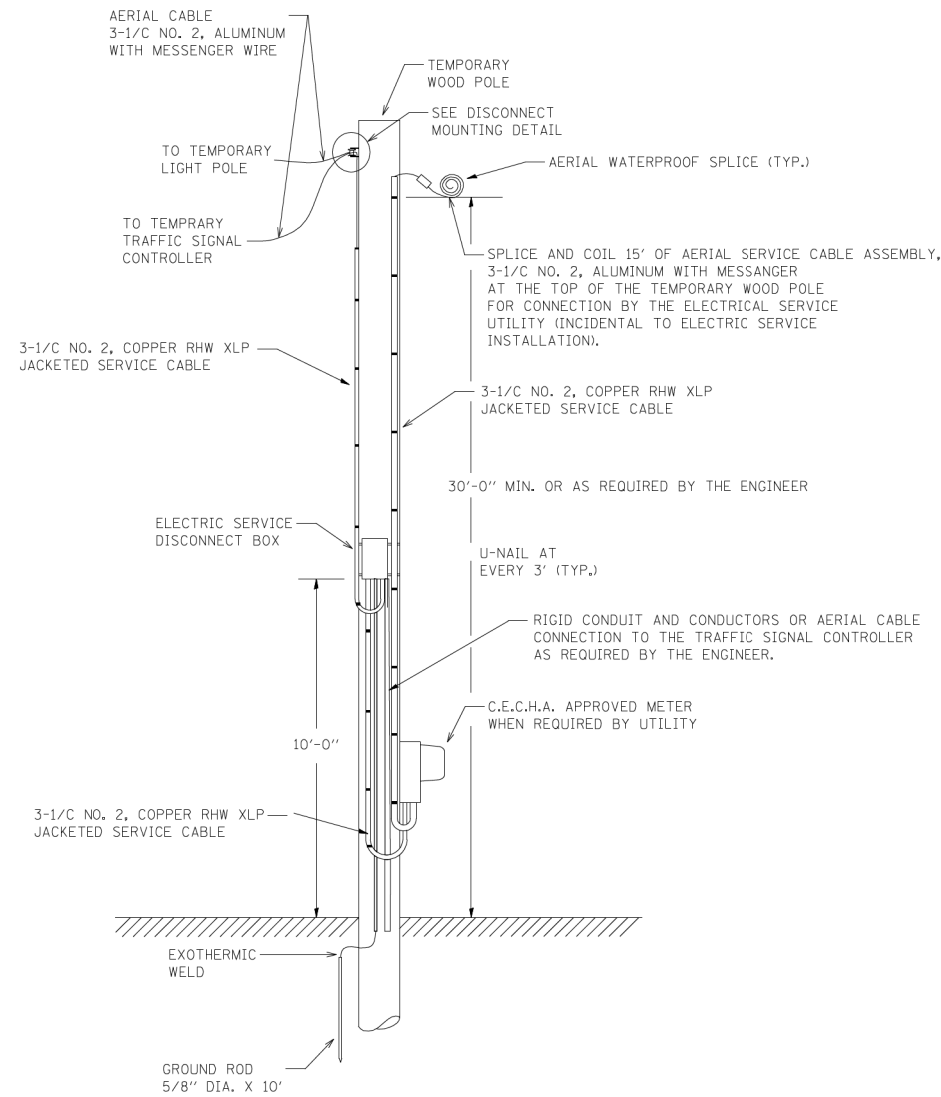
TEMPORARY PHASE DESIGNATION DIAGRAM LEGEND

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

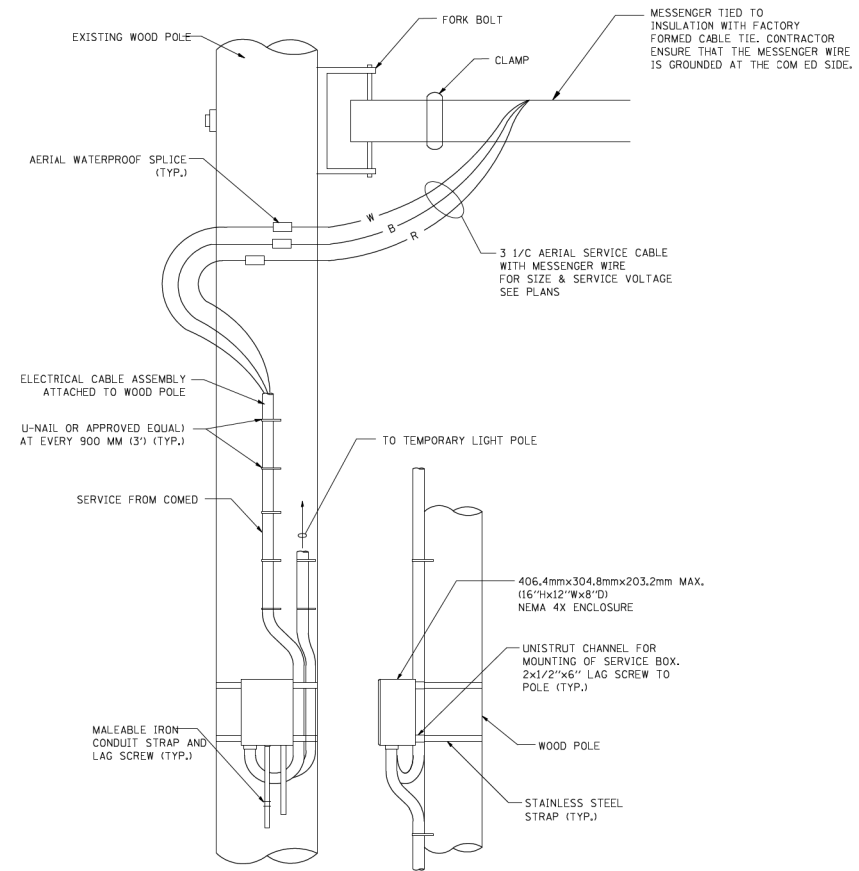


TEMPORARY PHASE DESIGNATION DIAGRAM (TYPICAL)
NOT TO SCALE

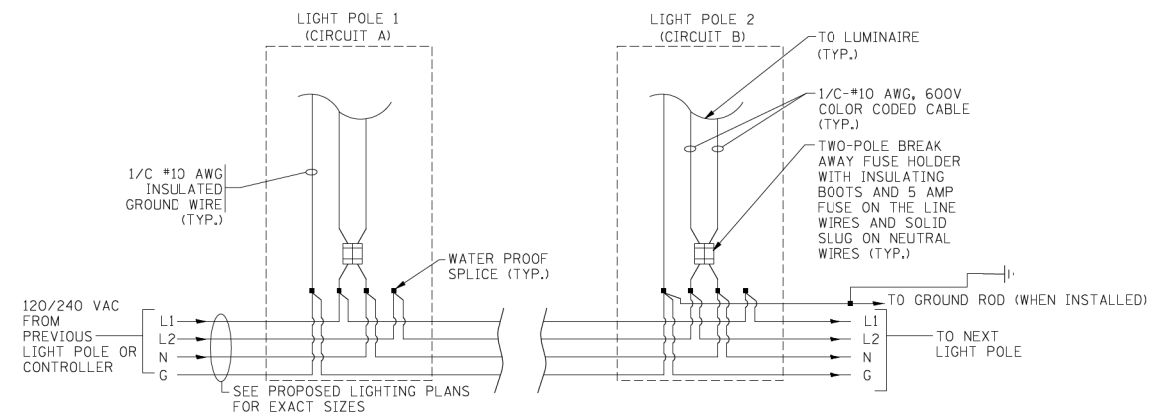
FILE NAME =	USER NAME = bauerdl	DESIGNED - MP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY LIGHTING AND TRAFFIC SIGNALS FOR SINGLE LANE STAGING			F.A. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca:\p\work\PWIDOT\BAUERDL\dl0108315\be06.dgn		DRAWN -	REVISED -		525/345	2015-063B	KANE/MCHENRY	87	79			
		CHECKED -	REVISED -		BE-805			CONTRACT NO.				
		DATE - 01/14/10	REVISED -		SCALE: NONE	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS/FED. AID PROJECT			



TEMPORARY SERVICE INSTALLATION DETAIL
NOT TO SCALE



DISCONNECT MOUNTING DETAIL
NOT TO SCALE



LIGHT POLE WIRING DETAIL
NOT TO SCALE

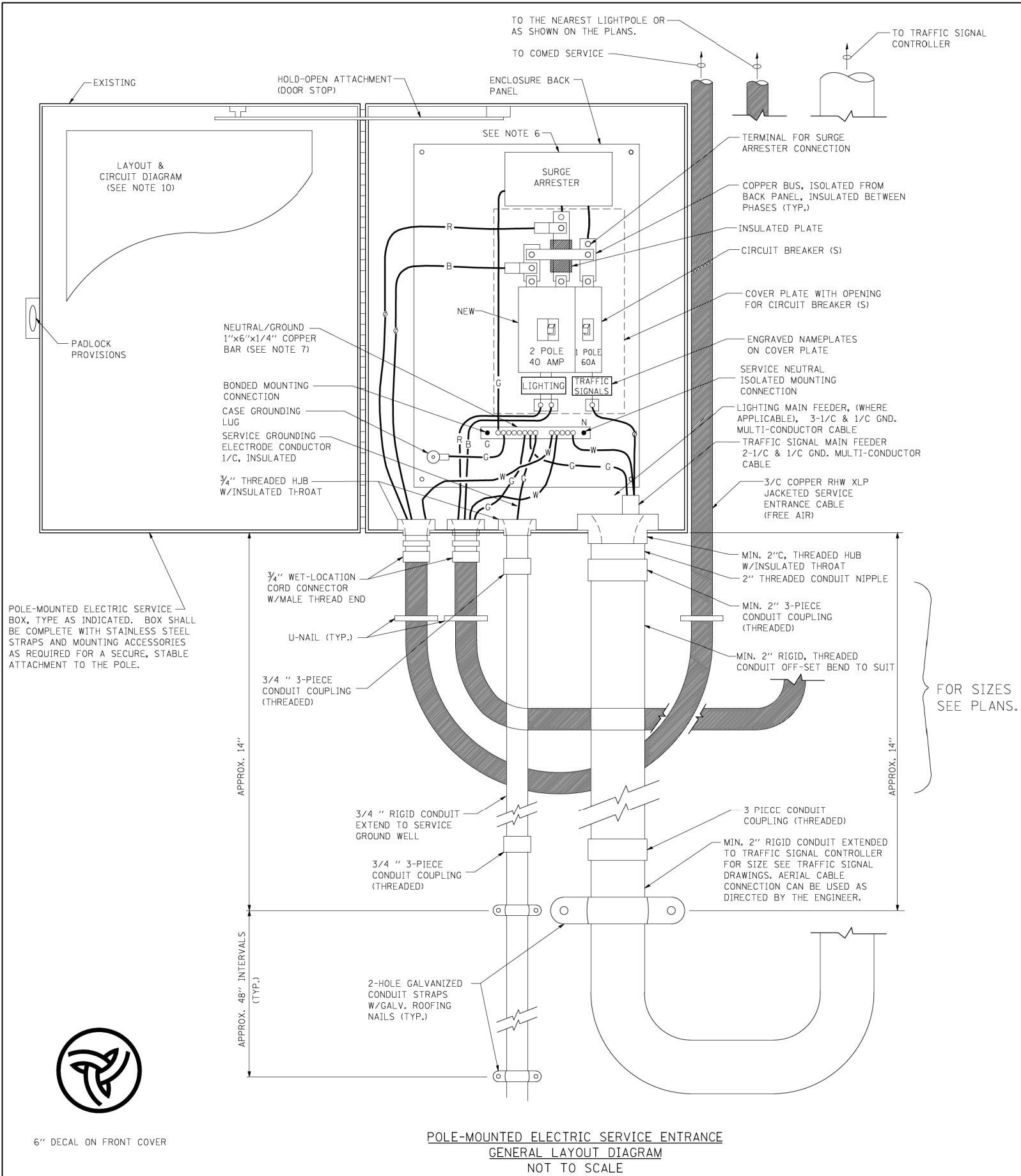
FILE NAME =	USER NAME = bauerdl	DESIGNED - MP	REVISED -
ca:\p\work\PWIDOT\BAUERDL\d0108315\be06.dgn		DRAWN -	REVISED -
		CHECKED -	REVISED -
		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND TRAFFIC SIGNALS
FOR SINGLE LANE STAGING**

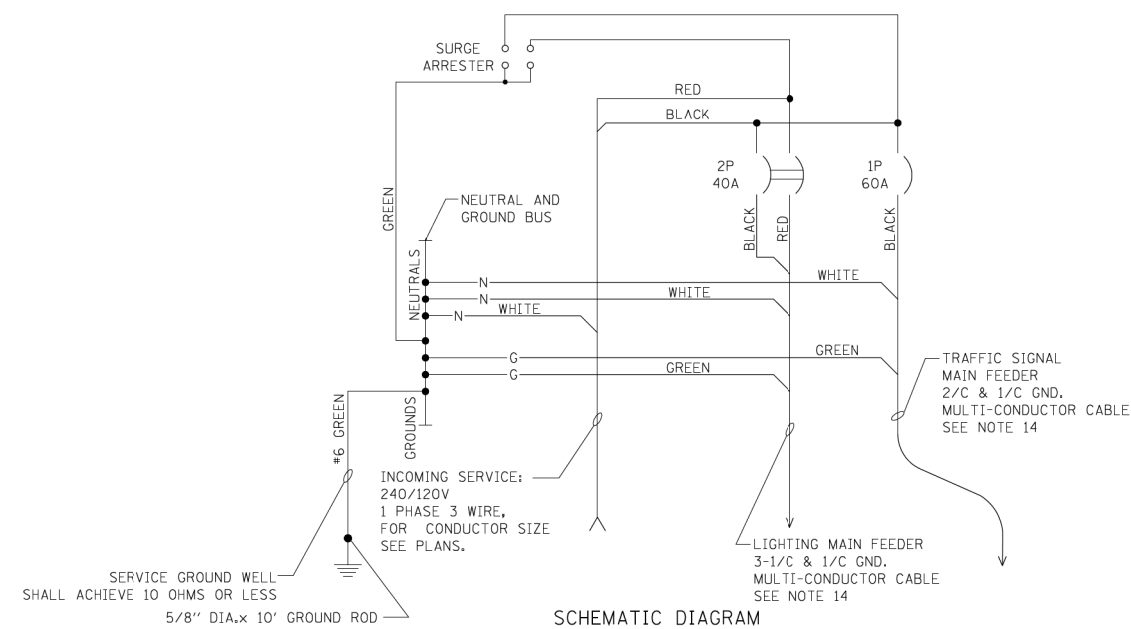
SCALE: NONE SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	80
BE-805			CONTRACT NO.	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



NOTES:

- ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY. SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SUITABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- THE POLE-MOUNTED ELECTRIC SERVICE BOX SHALL BE CONFIGURED AND FULLY EQUIPPED FOR 240/120V 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER AND TRAFFIC SIGNALS MAIN BREAKER AS REQUIRED.
- THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS AND DOOR STOP, HOFFMAN CATALOG NO. A-16H1208SS6LP/A-16 P12/A-DSTOP/C-PMK12, OR APPROVED EQUAL.
- CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- THE SURGE PROTECTOR SHALL BE SUITABLE FOR THE SERVICE VOLTAGE SINGLE PHASE 60HZ AC, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICRO-SECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE UL LISTED PER UL 1449, CUTLER-HAMMER CM0V230L065XST OR APPROVED EQUAL.
- BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRL2A OR APPROVED EQUAL.
- THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE PAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- LUGS AND CONNECTORS SHALL BE RATED FOR 75 C CONDUCTOR.
- THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID OBSTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.



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

SCHEMATIC DIAGRAM

FILE NAME =	USER NAME = bauerdl	DESIGNED - MP	REVISED -
ca:\pwork\PWIDOT\BAUERDL\d0108315\be06.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.000' / IN.		CHECKED -	REVISED -
PLOT DATE = 1/14/2010		DATE - 01/14/10	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TEMPORARY LIGHTING AND TRAFFIC SIGNALS
FOR SINGLE LANE STAGING**

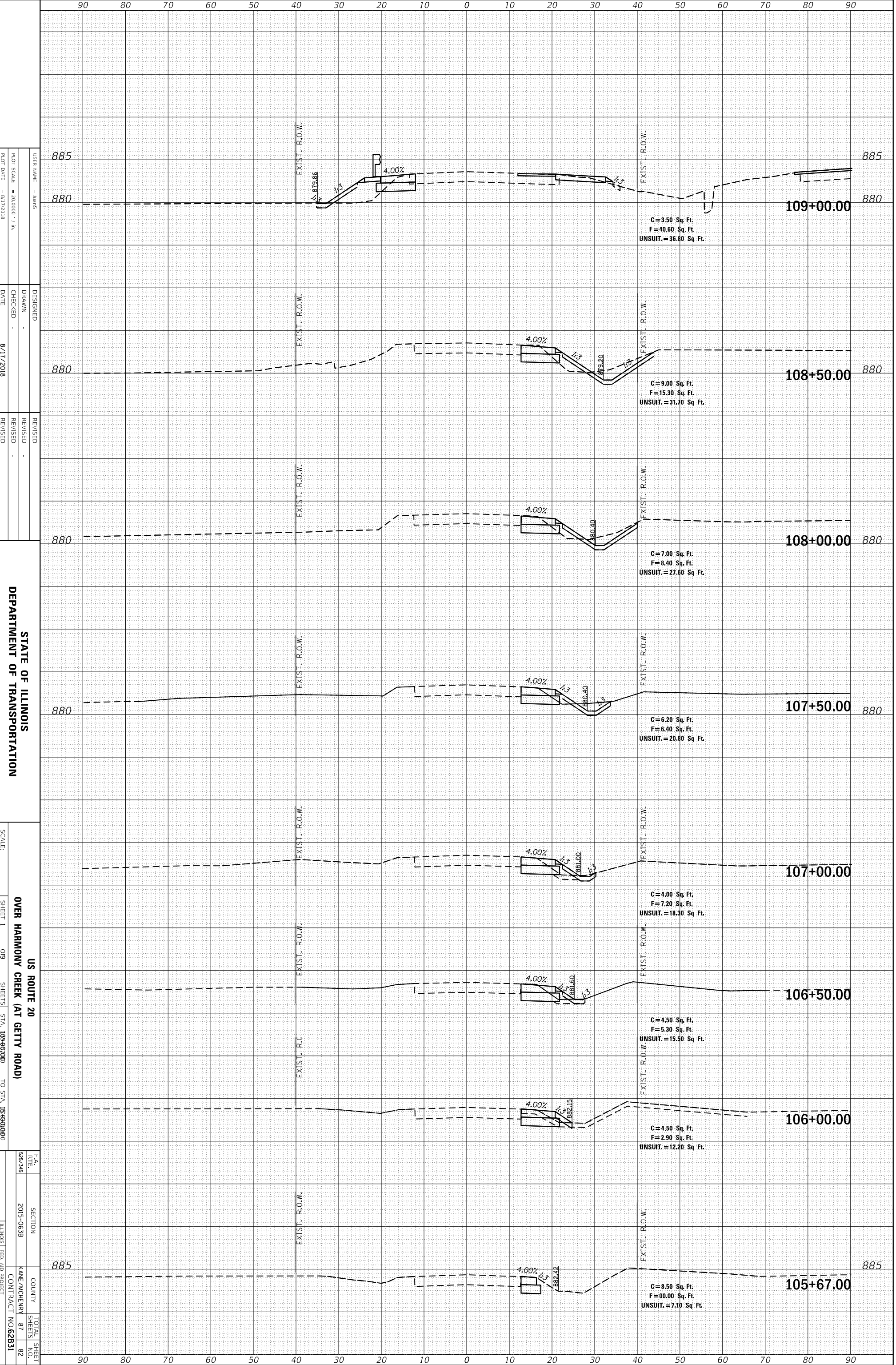
SCALE: NONE SHEET NO. 3 OF 3 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
525/345	2015-063B	KANE/MCHENRY	87	81
BE-805		CONTRACT NO.		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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

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

MODEL: X5_SHEET_temporary_model_name_1
 FILE NAME: M:\2012\12-154-009 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31-sht_xsht_US20_harmony.dgn



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

US ROUTE 20
 OVER HARMONY CREEK (AT GETTY ROAD)
 SCALE: _____
 SHEET 1 OF 9 SHEETS STA. 105+60.00 TO STA. 106+00.00

F.A. RITE SECTION COUNTY TOTAL SHEET SHEETS NO.
 528.245 2015-0638 KANE/MCHENRY 87 82
 ILLINOIS FED. AID PROJECT CONTRACT NO. 62B31

DESIGNED -
 DRAWN -
 CHECKED -
 DATE 8/17/2018

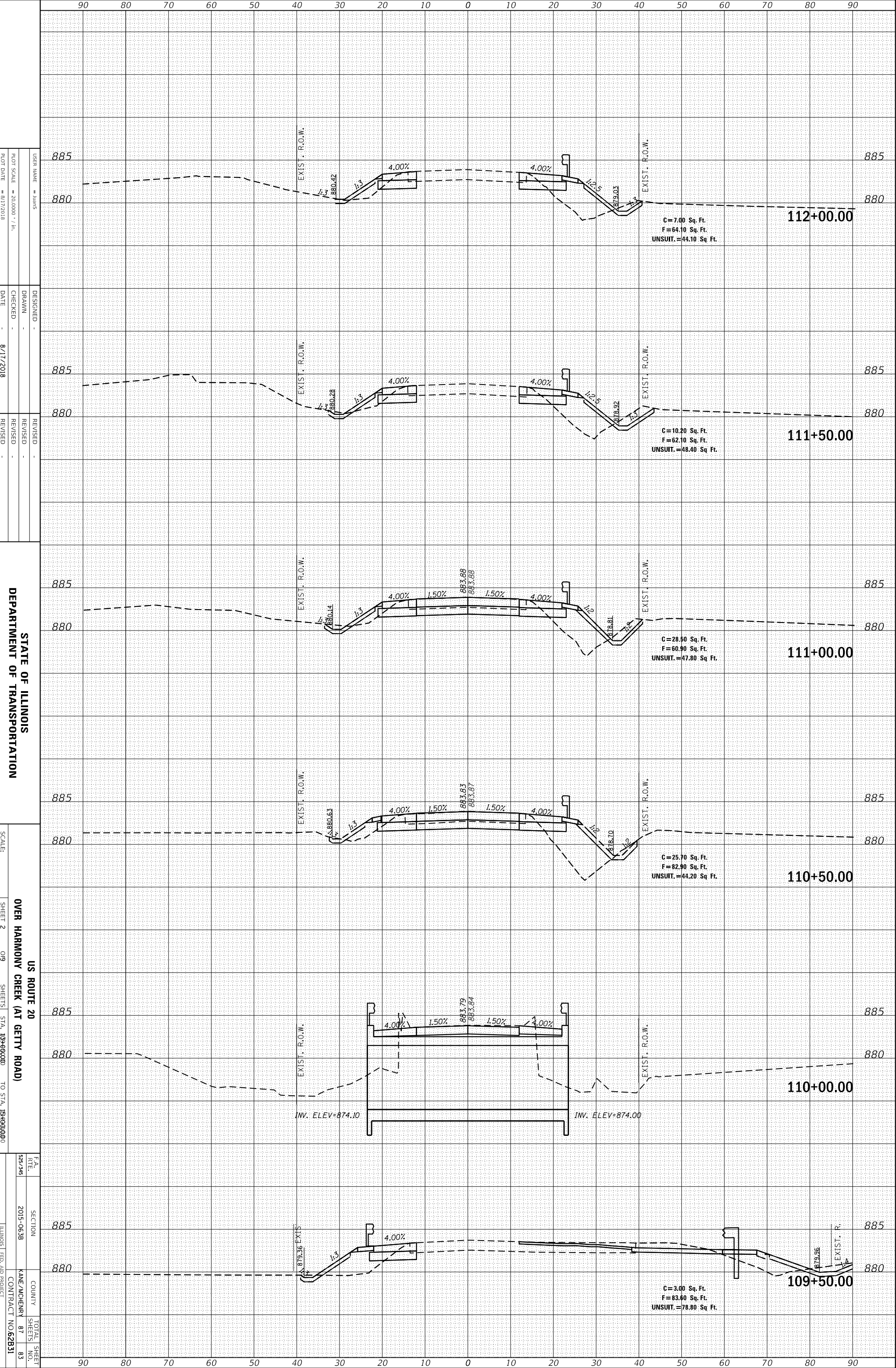
REVISIONS
 REVISED -
 REVISED -
 REVISED -

USER NAME = jhms
 PLOT SCALE = 20.0000' = 1" IN.
 PLOT DATE = 8/17/2018

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

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

MODEL: X5_SHEET_temporary_model_name_2
 FILE NAME: M:\2012\12-154-009 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31-sht_xssht_US20_harmony.dgn



DESIGNED -
 DRAWN -
 CHECKED -
 DATE - 8/17/2018

REVISIONS
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCALE:
 SHEET 2 OF 9
 SHEETS STA. 109+90.00 TO STA. 109+00.00

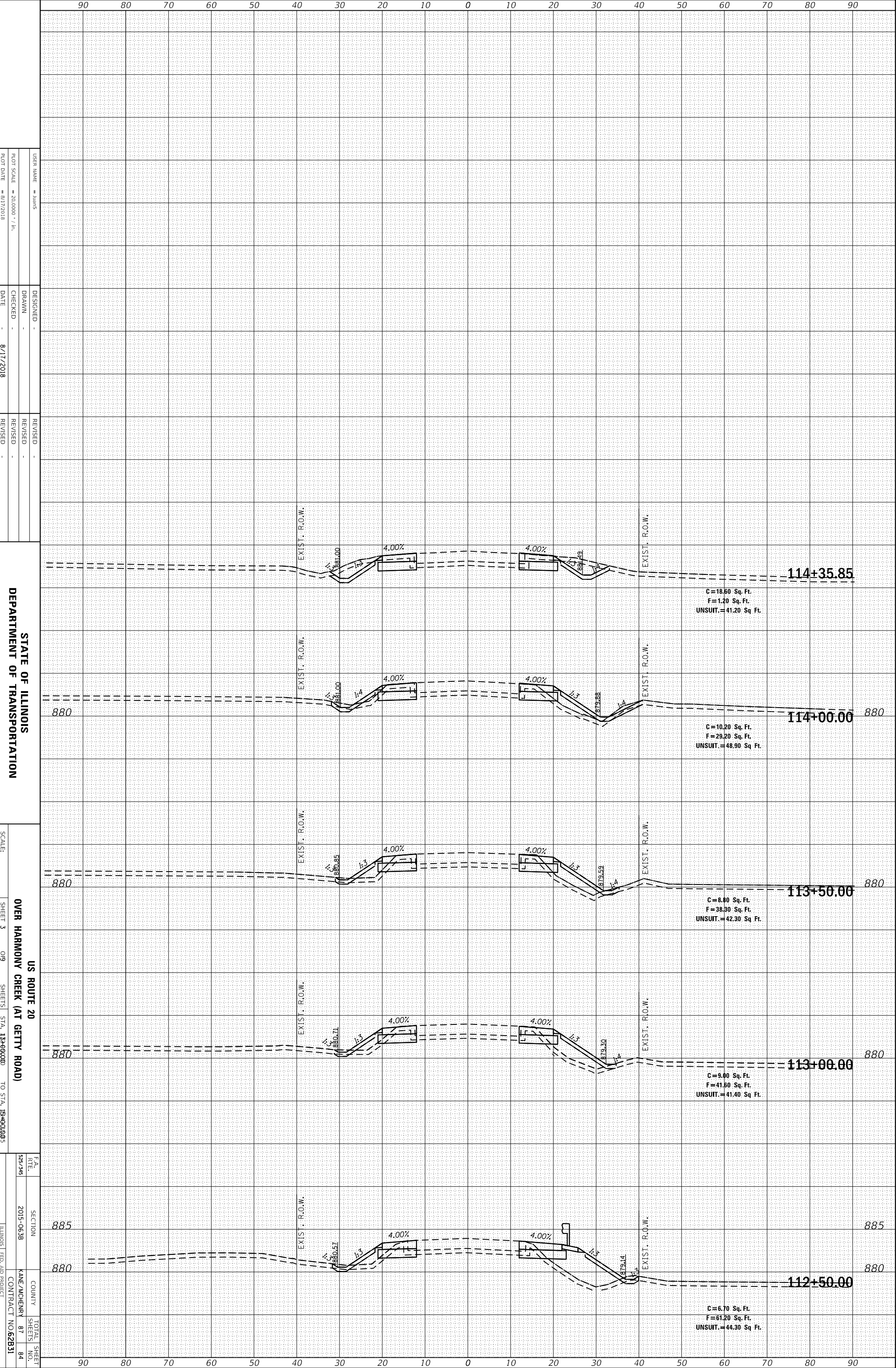
US ROUTE 20
 OVER HARMONY CREEK (AT GETTY ROAD)
 COUNTY: ILLINOIS
 SECTION: 2015-063B
 CONTRACT NO. 62B31

TOTAL SHEET NO. 83

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

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

MODEL: X5_SHEET_temporary_model_name_3
 FILE NAME: M:\2012\12-154-009 US 20 Harmony Creek\Design\Transportation\CADD\CADD Sheets\62B31-sht_xsht_US20_harmony.dgn



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

US ROUTE 20
 OVER HARMONY CREEK (AT GETTY ROAD)
 SCALE: SHEET 3 OF 9 SHEETS STA. 12+90.00 TO STA. 15+00.00

F.A. RITE SECTION COUNTY TOTAL SHEET
 528.246 2015-0638 KANE/MCHENRY 87 84
 ILLINOIS FED. AID PROJECT CONTRACT NO. 62B31

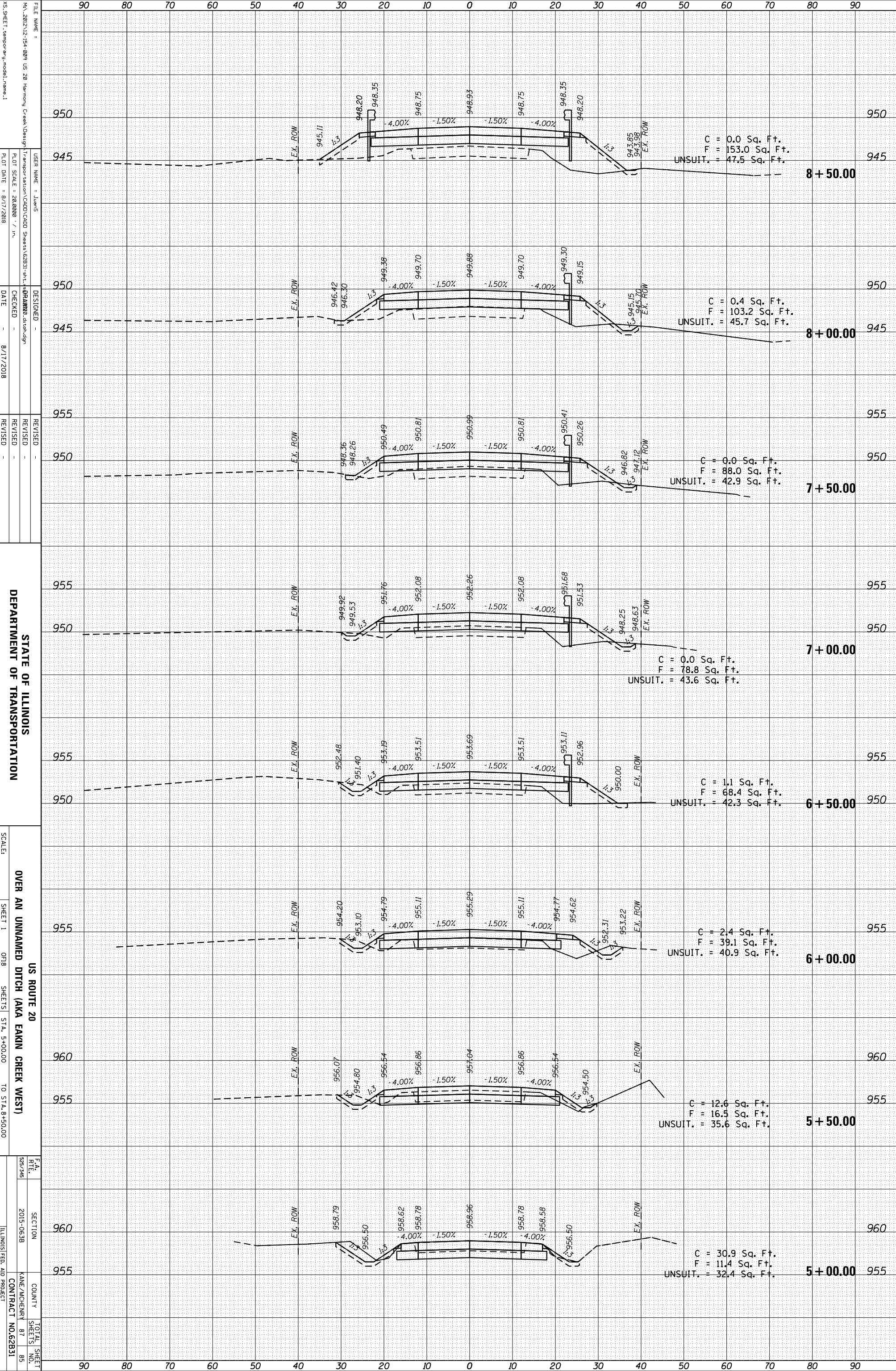
DESIGNED -
 DRAWN -
 CHECKED -
 DATE - 8/17/2018

REVISOR
 REVISION
 REVISION
 REVISION

USER NAME = jhms
 PLOT SCALE = 20.0000" = 1 in.
 PLOT DATE = 8/17/2018

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
	CHECKED		



FILE NAME = M:\2012\12-15-14-09 US 20 Harmony Creek\Design\17-tempor-station\CADD\CADD Sheets\62831-1-1.dwg
 USER NAME = JUAN S
 PLOT SCALE = 28.0000 / in.
 PLOT DATE = 8/17/2018
 DESIGNED -
 CHECKED -
 DATE = 8/17/2018
 REVISION -
 REVISION -
 REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

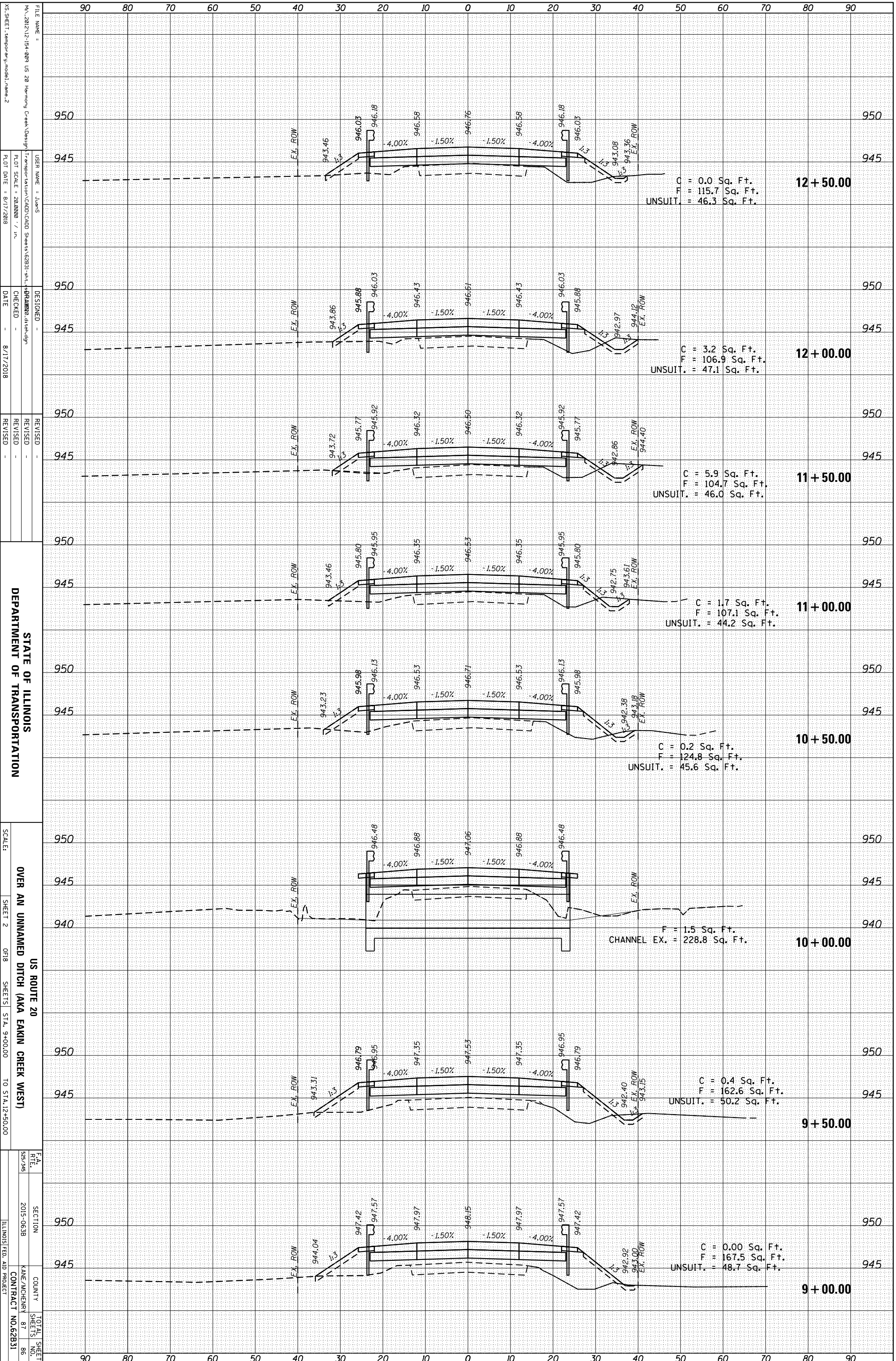
US ROUTE 20
 OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)

SCALE: SHEET 1 OF 18 SHEETS STA. 5+00.00 TO STA. 8+50.00

FA RTE.	SECTION	COUNTY	TOTAL SHEET NO.
528.245	2015-063B	KANE/MCHENRY	87
		CONTRACT NO. 62831	95
		ILLINOIS FED. AID PROJECT	

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

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



FILE NAME: N:\2012\12-15-14-09 US 20 Harmony Creek Design
 USER NAME: JUAN S
 DESIGNER: JUAN S
 CHECKED: 8/17/2018
 REVISIONS:
 REVISION 1: 8/17/2018
 REVISION 2:
 REVISION 3:
 REVISION 4:
 REVISION 5:
 REVISION 6:
 REVISION 7:
 REVISION 8:
 REVISION 9:
 REVISION 10:
 DEPARTMENT OF TRANSPORTATION
 US ROUTE 20
 OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
 SCALE: SHEET 2 OF 8 SHEETS STA. 9+00.00 TO STA. 12+50.00
 TOTAL SHEET NO. 86
 COUNTY: KANE/CHEMUNY
 CONTRACT NO. 62B31
 ILLINOIS FED. AID PROJECT

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

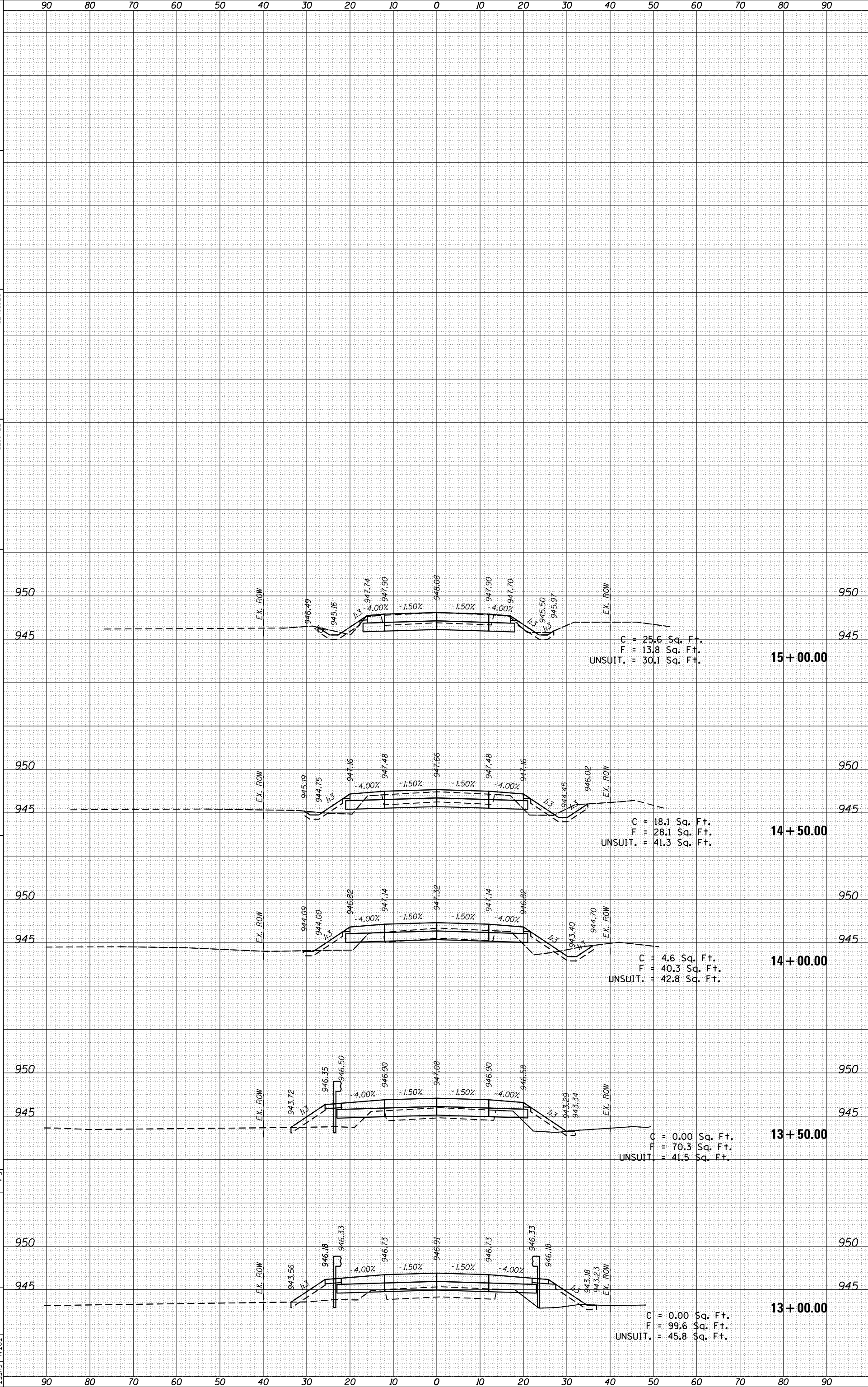
FINAL SURVEY	SURVEYED _____	BY _____	DATE _____
NOTE BOOK	PLOTTED _____		
	TEMPLATE _____		
	AREAS _____		
	AREAS CHECKED _____		

FILE NAME = M:\2012\12-154-009 US 20 Harmony Creek\Design\17\transportation\CADD\CADD Sheets\62831-01.dwg
 USER NAME = JUAN S
 PLOT SCALE = 28.0000 / in.
 PLOT DATE = 8/17/2018

DESIGNED -
 CHECKED -
 DATE - 8/17/2018

REVISOR -
 REVISION -
 REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 US ROUTE 20
 OVER AN UNNAMED DITCH (AKA EAKIN CREEK WEST)
 SCALE: SHEET 3 OF 8 SHEETS STA. 13+00.00 TO STA. 15+00.00



C = 25.6 Sq. Ft.
 F = 13.8 Sq. Ft.
 UNSUIT. = 30.1 Sq. Ft.

15 + 00.00

C = 18.1 Sq. Ft.
 F = 28.1 Sq. Ft.
 UNSUIT. = 41.3 Sq. Ft.

14 + 50.00

C = 4.6 Sq. Ft.
 F = 40.3 Sq. Ft.
 UNSUIT. = 42.8 Sq. Ft.

14 + 00.00

C = 0.00 Sq. Ft.
 F = 70.3 Sq. Ft.
 UNSUIT. = 41.5 Sq. Ft.

13 + 50.00

C = 0.00 Sq. Ft.
 F = 99.6 Sq. Ft.
 UNSUIT. = 45.8 Sq. Ft.

13 + 00.00

90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90