9-18-2020 LETTING ITEM 008

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PROJECT LOCATED IN CITY OF WADSWORTH

TRAFFIC DATA US-41
2017 ADT = 25600
POSTED SPEED = 50 MPH

0

0

0

HBM ENGINEERING GROUP, LLC
ROBERT T. BORO, P.E.

*062-043749

DATE: 05/22/2020

SIGNATURE AND SEAL
APPLY TO DRAWINGS:
1-4

EXPIRATION DATE: 11-30-2021

DATE: 05/22/2020

SIGNATURE AND SEAL APPLY TO DRAWINGS:

EXPIRATION DATE: 11-30-2020

PROPOSED HIGHWAY PLANS

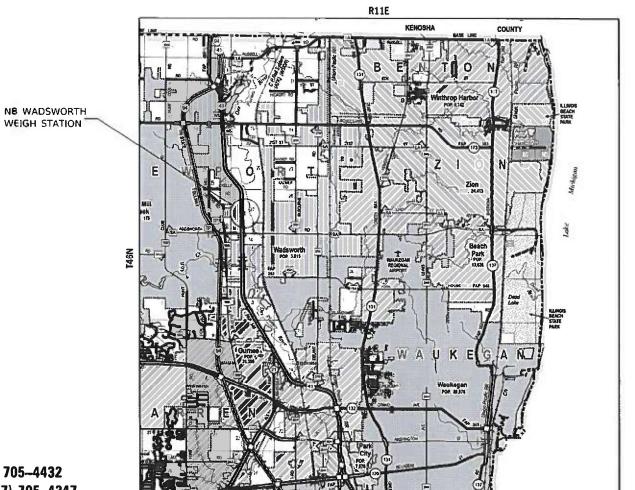
FAP ROUTE 346: US 41 (SKOKIE HWY)
NB WADSWORTH WEIGH STATION

SECTION: 2020-023-I

PROJECT: STP-LXFS(007) WEIGH

STATION REPAIRS LAKE COUNTY

C-91-212-20



LOCATION MAP NOT TO SCALE

GROSS LENGTH = NET LENGTH = 400 FT (0.1 MILES)

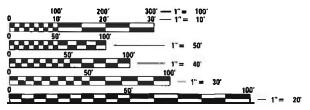
D-91-406-20





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP



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

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

PROJECT ENGINEER VESELIN VELICHKOV, PE (847) 705-4432
PROJECT MANAGER FAWAD AQUEEL, PE, PTOE (847) 705-4247

CONTRACT NO. 62K94

INDEX OF SHEETS

- COVER SHEET
- INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
- SUMMARY OF QUANTITIES
- PROPOSED PLAN
- 5-10 STRUCTURAL PLANS
- CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT (BD-24) 11

LIST OF HIGHWAY STANDARDS

STANDARD NO. **DESCRIPTION**

442101-09 CLASS B PATCHES 701901-08 TRAFFIC CONTROL DEVICES

COMMITMENTS

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES

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

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

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

THE ENGINEER SHALL CONTACT KEITH DONOVAN, WEIGHT ENFORCEMENT ENGINEER, AT KEITH.DONOVAN@ILLINOIS.GOV OR 217-782-8414 A MINIMUM OF TWO (2) WEEKS PRIOR TO BEGINNING CONSTRUCTION.

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.

SCALE:

ANY EXISTING SIGNAGE OR PAVEMENT MARKINGS AFFECTED BY THIS PROJECT SHALL BE RESTORED TO AT LEAST THEIR ORIGINAL CONDITION AND LOCATION.

NONE



USER NAME = ali,issa	DESIGNED -	KJD	REVISED	-
	DRAWN -	AMI	REVISED	-
PLOT SCALE = 2.0000 ' / in.	CHECKED -	RTB	REVISED	-
PLOT DATE = 6/24/2020	DATE -	05/22/2020	REVISED	-

INDEX OF				STAND <i>A</i> H WEIGI		ND GENERAL NOTES ON	
ALE:	SHEET 1	OF	1	SHEETS	STA.	TO STA.	

				CONSTRUCTION CODE
CODE NO.	ITEM	UNIT	TOTAL QUANT I TY	0044 80% FED 20% STATE WADSWORTH WEIGH STATION
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	226	226
25200110	SODDING, SALT TOLERANT	SQ YD	226	226
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	36	36
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	9	9
44000164	HOT-MIX ASPHALT SURFACE REMOVAL, 3 3/4"	SQ YD	44	44
44200990	CLASS B PATCHES, TYPE I, 12 INCH	SQ YD	8	8
44201027	CLASS B PATCHES, TYPE I, 15 INCH	SQ YD	8	8
44201299	DOWEL BARS 1 1/2"	EACH	28	28
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	1
50102400	CONCRETE REMOVAL	CU YD	10.3	10.3
50300225	CONCRETE STRUCTURES	CU YD	19.8	19.8
50300300	PROTECTIVE COAT	SQ YD	68	68
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	27	27
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1776	1776

				CONSTRUCTION CODE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED 20% STATE WADSWORTH WEIGH STATION
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	12950	12950
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	12	12
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	12	12
66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	4	4
67100100	MOBILIZATION	L SUM	1	1
Z0004552	APPROACH SLAB REMOVAL	SQ YD	66	66
Z0004562	COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	99	99
Z0025710	FURNISHING AND INSTALLING STATIC SCALE COMPONENTS	L SUM	1	1
*SPECIALT	Y ITEM			

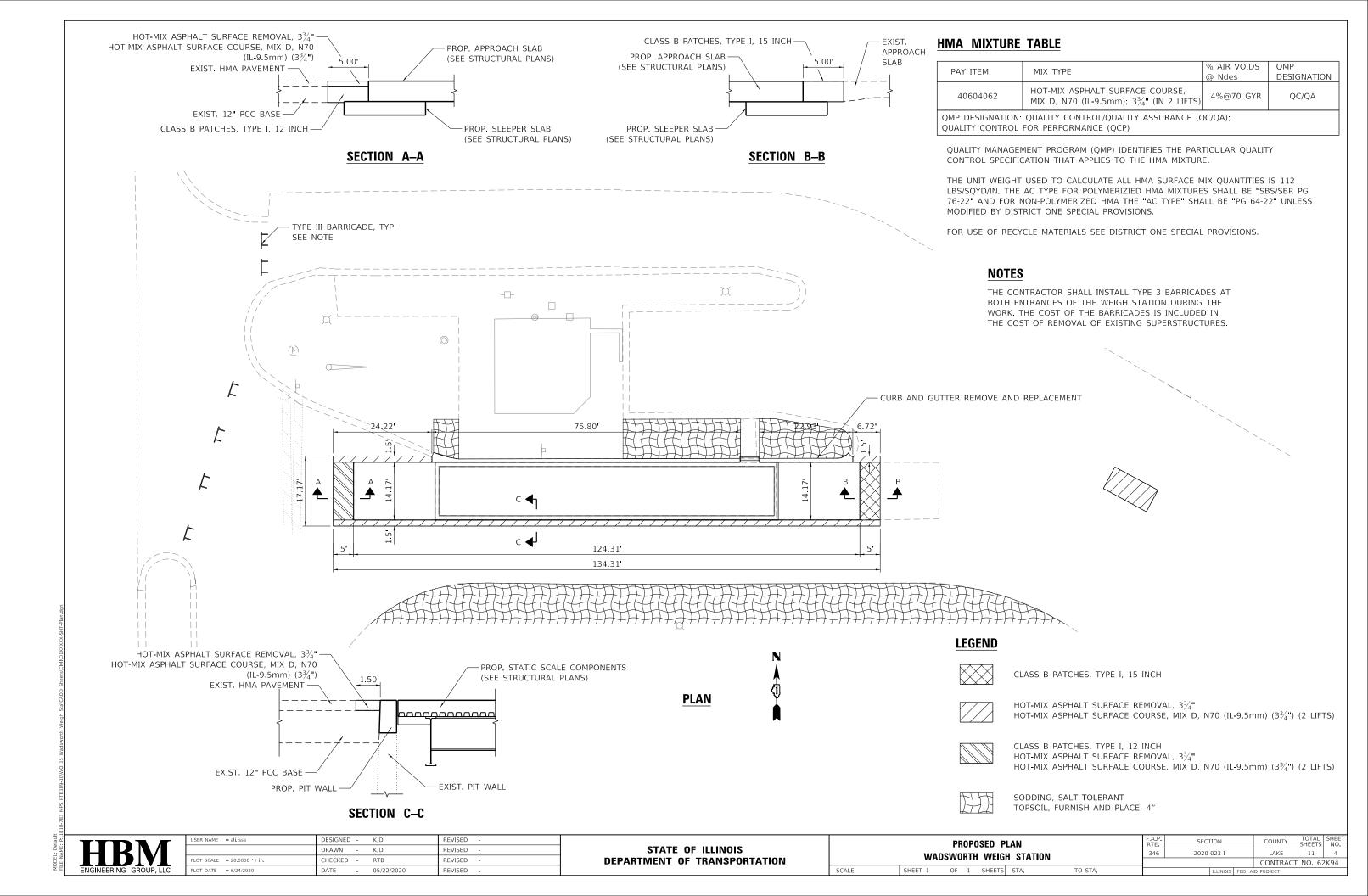
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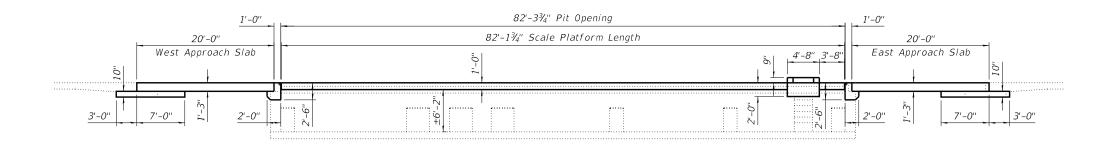


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	DRAWN	-	KJD	REVISED -
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PLOT DATE = 6/24/2020	DATE	-	05/22/2020	REVISED -

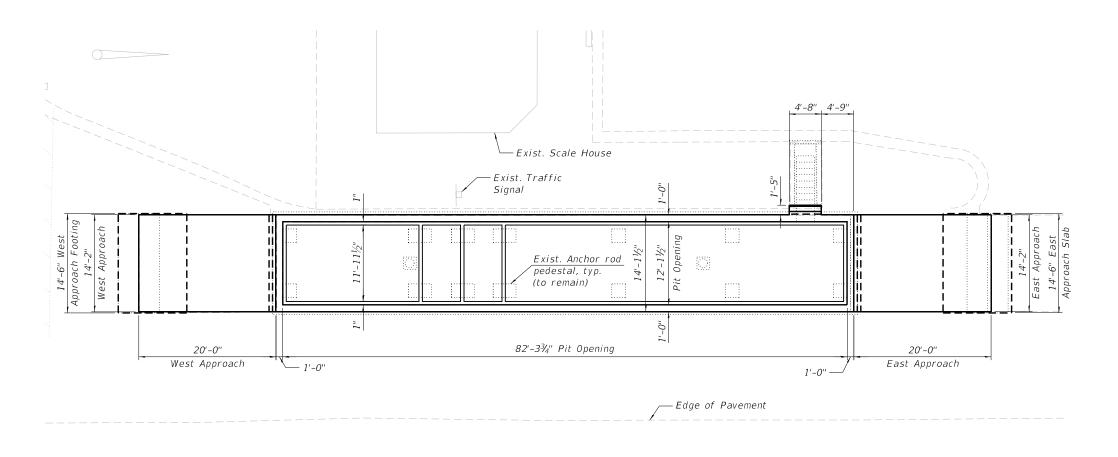
	SUMMARY OF QUANTITIES						F.A.P. SECTION				COUNTY	TOTAL SHEETS	SHEE'
WADSWORTH WEIGH STATION					ON	346	2020-0)23-I		LAKE	11	3	
	***	10344	UIII	II VVLIG	II SIAII	O14					CONTRACT	NO. 62	2K94
	SHEET 1	OF	1	SHEETS	STA.	TO STA.			ILLINOIS	FED. AI	ID PROJECT		

10-783 MPS_PTB189-10\WO 15 Wadsworth Welgh Sta\CADD_Sheets\CIVII\D1XXXX





ELEVATION



PLAN





DR. MOUSSA A. ISSA, S.E. IL. LIC. NO. 081-005738 EXPIRES 11-30-2020

06/24/2020

FOR SHEETS S-1 THRU S-6 (TOTAL OF 6 SHEETS)

LOADING HS20-44

No future wearing surface allowed

DESIGN SPECIFICATIONS

2002 AASHTO w/ all applicable Interims

Illinois Department of Transportation Bridge Manual, January 2012

DESIGN STRESSES

NEW CONSTRUCTION

f'c = 4,000 psi

fy = 50,000 psi (Structural Steel) fy = 60,000 (Reinforcement)

FIELD UNITS

f'c = 4,000 psi (footings and walls)

f'c = 5,000 psi (stairs and slabs)

-Project Location LOCATION SKETCH

GENERAL PLAN AND ELEVATION WADSWORTH WEIGH STATION FAP 346 (US RTE 41) LAKE COUNTY

USER NAME	=	ali.issa	DESIGNED	-	SK, KJD	REVISED -	
			CHECKED	-	MI, MAI	REVISED -	
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PLOT DATE	=	6/24/2020	CHECKED	-	MI, MAI	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** **GENERAL PLAN AND ELEVATION** WADSWORTH WEIGH STATION SHEET S-1 OF S-6 SHEETS

SECTION COUNTY 2020-023-I LAKE 11 5 CONTRACT NO. 62K94

INDEX OF SHEETS

- S-1 General Plan and Elevation
- S-2 General Notes, Index of Sheets and Total BOM
- S-3 Removal Details
- S-4 Repair details (Sheet 1 of 2)
- S-5 Repair details (Sheet 2 of 2)
- S-6 Approach Slab Details

SCOPE OF WORK

- 1. Remove existing concrete deck platform, the steel beam support structure and the weight scales.
- 2. Remove and replace 2'-6"depth of the east and west approach pit backwalls.
- 3. Remove and replace 1'-0" of the North and South pit walls.
- 4. Remove and replace the lintel above the stairs on the North wall.
- 5. Remove and replace the east and west approach slabs and footings.
- 6. Install new concrete deck platform, steel beam support structure and the new scale components.

GENERAL NOTES

- 1. All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
- 2. Plan dimensions and details relative to existing plans are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.
- 3. Reinforcement bars designated (E) shall be epoxy coated.
- 4. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- 5. The cost of any structure excavation shall be included with Concrete Removal.
- 6. No field welding is permitted except as specified in the contract documents.

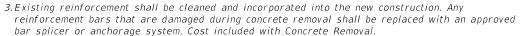
TOTAL BILL OF MATERIAL

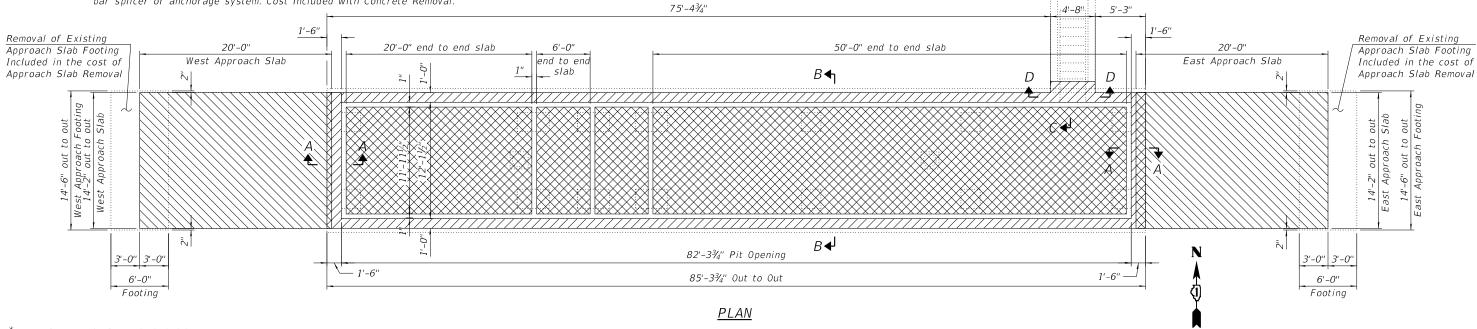
ITEM	UNIT	TOTAL
Removal of Existing	EACH	1
Superstructures		
Concrete Removal	CU YD	10.3
Concrete Structures	CU YD	19.8
Protective Coat	SQ YD	68
Concrete Superstructure	CU YD	27
(Approach Slab)		
Furnishing and Erecting	POUND	1776
Structural Steel		
Reinforcement Bars,	POUND	12950
Epoxy Coated		
Granular Backfill for Structures	CU YD	12
Approach Slab Removal	SQ YD	66
Furnishing and Installing Static	L SUM	1
Scale Components		

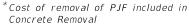
E: P:\1810-783 MPS_PTB189-10\WO 15 Wadsworth Weigh Sta\CADD_Sheets\D1XXXXX-SH

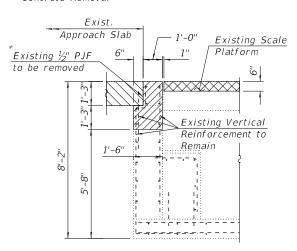
NOTES:

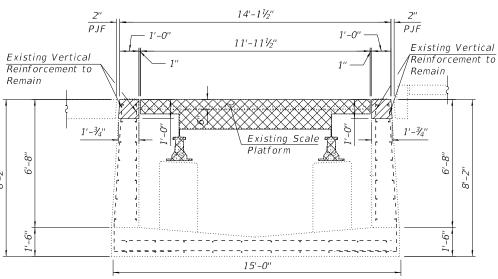
- 1. Dimensions shown have been taken from historical design drawings, field measurements, and survey data and may not represent "as built" conditions. The Contractor must verify all dimensions in the field. Variations in the field dimensions shall not be cause for additional compensation for change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2.The Contractor shall field verify exact location of all existing utilities prior to construction and take precautions not to damage existing utilities during excavations, construction or other underground work. Any such damage shall be repaired by the Contractor at no additional cost.

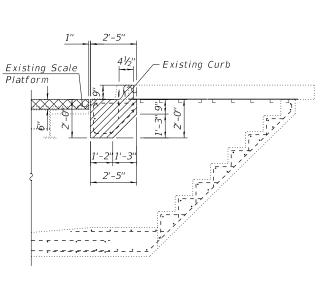




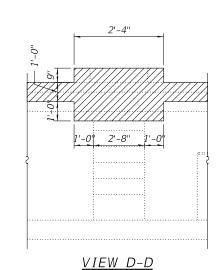








C**◆**1



SECTION A-A

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Removal of Exist. Superstructures	Each	1
Concrete Removal	Cu Yd	10.3
Approach Slab Removal	Sq Yd	66

SECTION B-B SECTION C-C

<u>LEGEND</u>

Removal of Exist. Superstructures

Concrete Removal

Approach Slab Removal

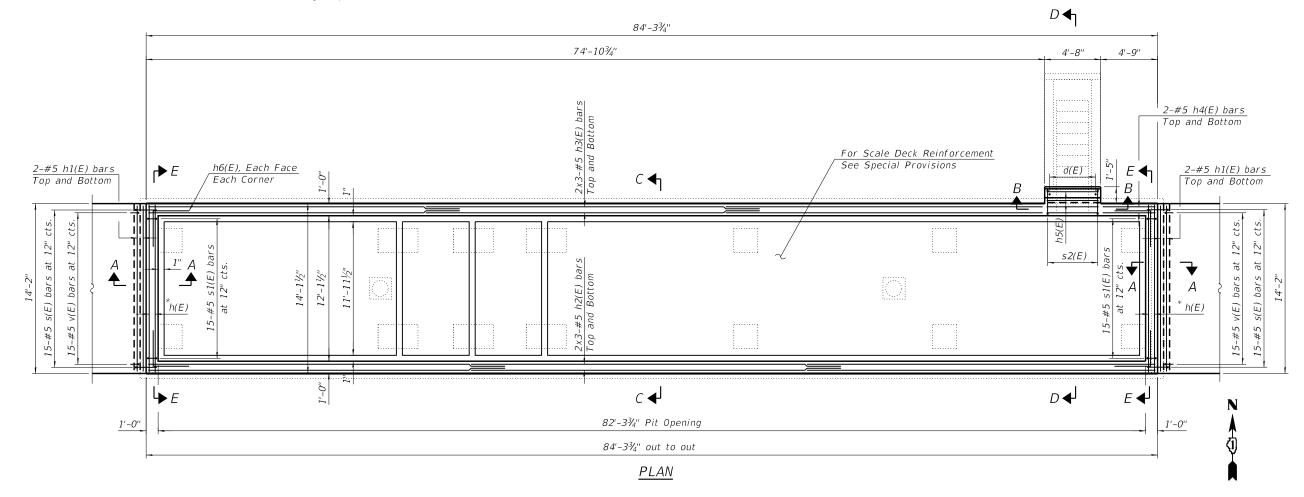


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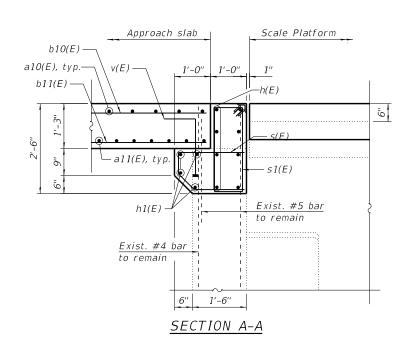
REMOVAL DETAILS	F.A.P. RTE	SEC-	TION		COUNTY	TOT
WADSWORTH WEIGH STATION	346	2020-	023 -I		LAKE	1
WADSWORTH WEIGHT STATION					CONTRA	CT N
SHEET S-3 OF S-6 SHEETS			ILLINOIS	FED AL	D PROJECT	

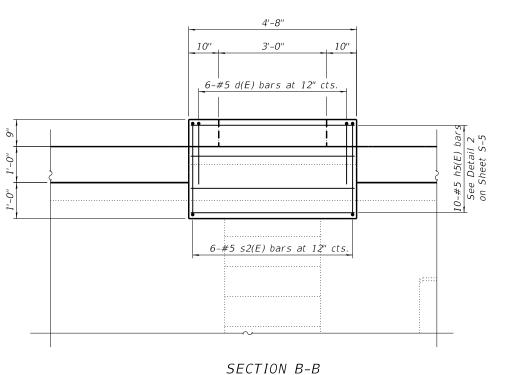
NOTES:

- 1. For Sections C-C, D-D and E-E, bar diagrams, minimum bar laps, and Bill of Material, see Sheet S-5.
- 2. Bars indicated thus 2x3-#5 etc. indicates 2 lines of bars with 3 lengths per line.







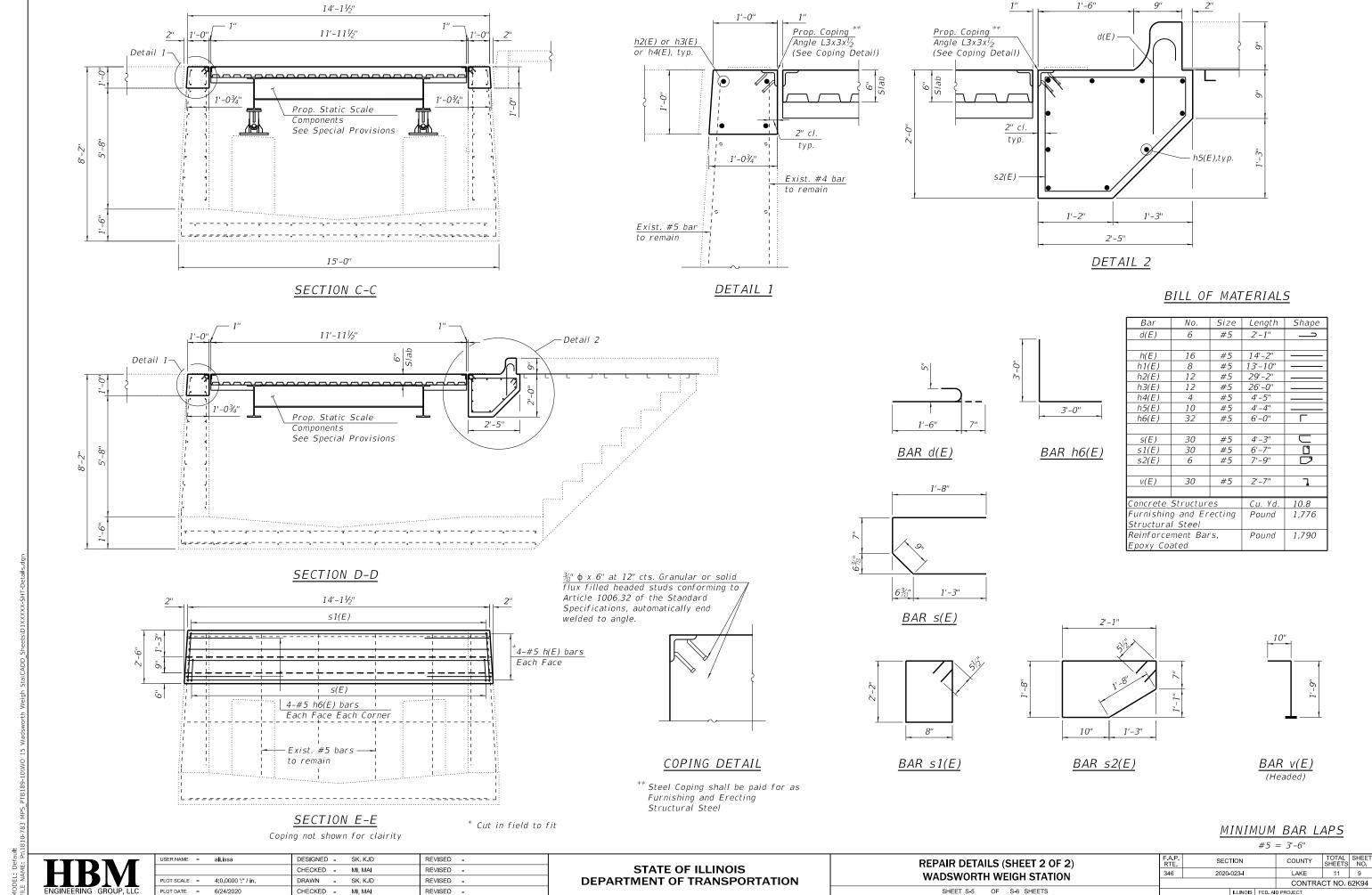


HBM
ENGINEERING GROUP, LLC

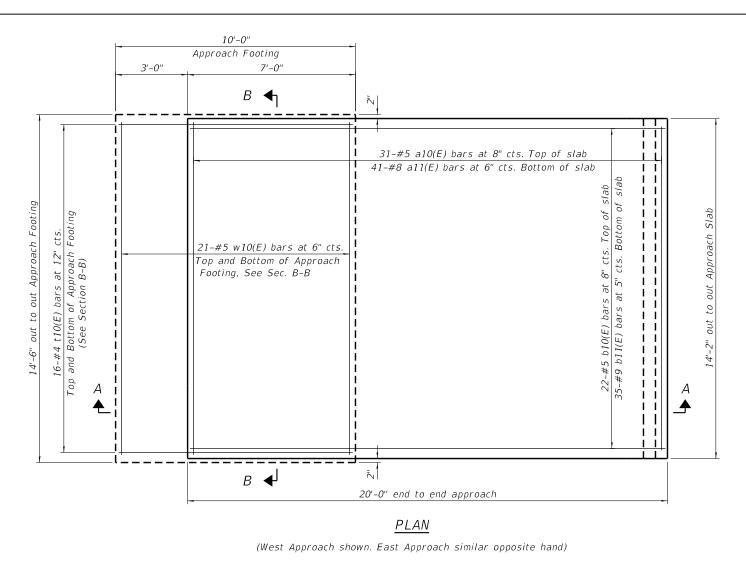
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PLOT DATE =	6/24/2020	CHECKED -	MI, MAI	REVISED -	
					_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR DETAILS (SHEET 1 OF 2)	F.A.P. RTE	SE
WADSWORTH WEIGH STATION	346	202
WADSWORTH WEIGH STATION		
SHEET S-4 OF S-6 SHEETS		



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NOTES:

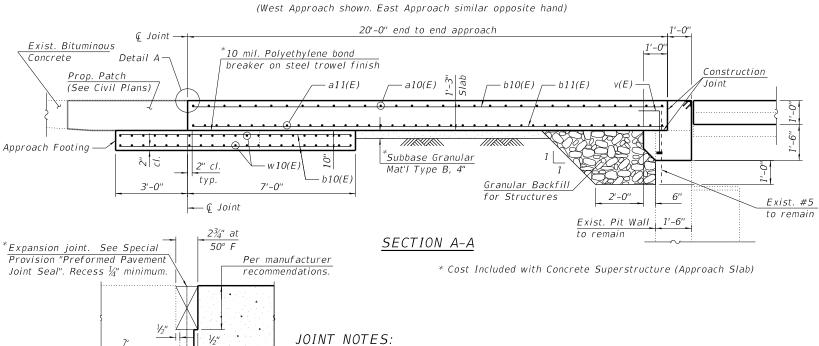
- 1. Approach Slab Concrete shall be paid for as Concrete Superstructure (Approach Slab).
- 2. Approach footing concrete shall be paid for as Concrete Structures.
- 3. For v(E) bar, see Sheet S-4.
- 4. The approach footing maximum applied bearing pressure (Qmax)=2.0 ksf.
- 5. Cost of excavation for approach footing included with Concrete Structures.
- 6. Cost of excavation for subbase and Granular Backfill is included with Concrete Superstructure (Approach Slab).

<u>WEST APPROACH</u> BILL OF MATERIAL

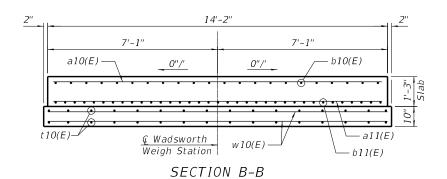
				-
Bar	No.	Size	Length	Shape
a10(E)	31	#5	13'-10"	
a11(E)	41	#8	13'-10"	
b10(E)	22	#5	19'-8"	
b11(E)	35	#9	19'-8"	
t10(E)	32	#4	9'-8"	
w10(E)	42	#5	14'-2"	
Concrete	Structur	e <i>s</i>	Cu. Yd.	4.5
Protective	e Coat		Sq. Yd.	34
Concrete	Superstr	ucture	Sq. Yd.	13.5
(Approach	Slab)			
Reinforce	ment Bar	Pound	5,580	
Ероху Со	ated			
Granular	Backfill	Cu. Yd.	6	
Structure	5			

EAST APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a10(E)	31	#5	13'-10"	
a11(E)	41	#8	13'-10"	
b10(E)	22	#5	19'-8"	
b11(E)	35	#9	19'-8"	
t10(E)	32	#4	9'-8"	
w10(E)	42	#5	14'-2"	
Concrete	Structure	25	Cu. Yd.	4.5
Protective	Coat		Sq. Yd.	34
Concrete	Superstr	ucture	Sq. Yd.	13.5
(Approach	Slab)		·	
Reinforce	ment Bar	5,	Pound	5,580
Ероху Со	ated			
Granular	Backfill	Cu. Yd.	6	
Structure	5			



The joint opening shall be adjusted for temperature per Article 520.04 of the



DETAIL A

End of

Appr. slab

1¾" at

50° F

€ Joint —-

HBM ENGINEERING GROUP I.C.

Exist. Bituminous

Concrete

USER NAME =	ali.issa	DESIGNED -	AMI	REVISED -
		CHECKED -	MI, MAI	REVISED -
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PLOT DATE =	6/24/2020	CHECKED -	MI, MAI	REVISED -

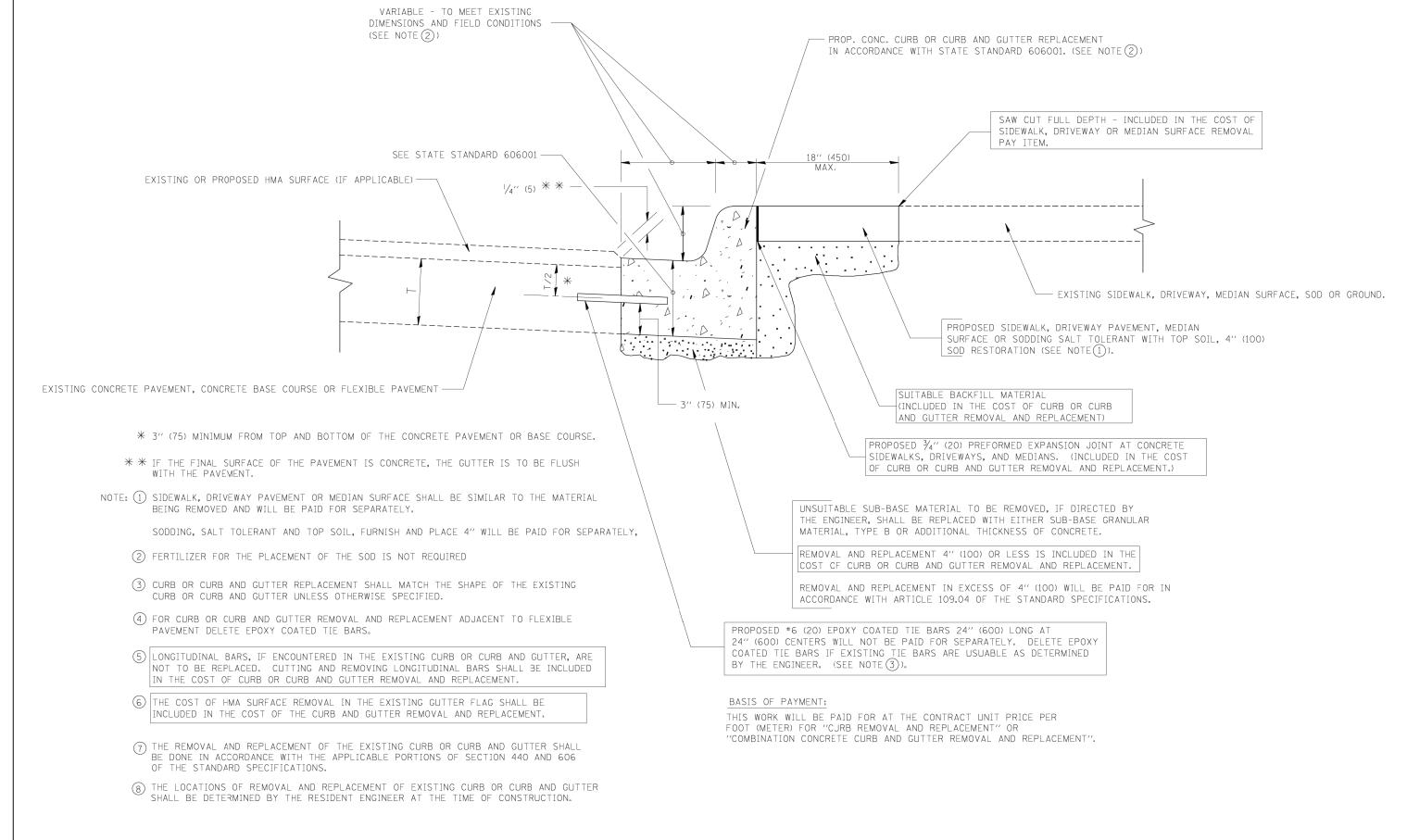
Standard Specifications.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS WADSWORTH WEIGH STATION						
SHEET S-6	OF	S-6 SHEETS				

F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
346	2020-023-I		LAKE	11	10
		CONTRA	CT NO.	52K94	
	ILLINOIS	FED. A	D PROJECT		

Default ME: P.\1810-783 MPS PTB189-10\WO 15 v



CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	F.A. U. SECTION	COUNTY SHEET NO.
c:\pw_work\pwidot\drivakosgn\d01	08315\bd24.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS		346 2020-023-I	LAKE 11 11
	PLOT SCALE = 50.000 '/ [N.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION	REMOVAL AND REPLACEMENT	BD600-06 (BD-24)	CONTRACT NO. 62K94
	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED	D. AID PROJECT