O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1230 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2375

SOIL BORING LOG

PAGE 1 of 1
DATE November 27, 2013
LOGGED BY TB
OBA JOB No. 13657

ROUTE I-190 DESCRIPTION I-190 Cumberland Flyover Ramp
SECTION xx LOCATION Chicago, IL Township 40N R12E Section 3
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic
STRUCT. NO. NW78.90R, EB-R
Station xx
BORING NO. RW-13
Station 27+88
Offset 8.8' R
Ground Surface Elev. 630.9

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 614.9
Upon Completion 619.9
After n/a Hrs. n/a

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				TOPSOIL FILL
	2			LOAM-brown, gray & black-
	2			loose (FILL)
	3	NP	21	
627.9				
	2			SANDY LOAM-brown-
-5	2	NP	12	loose
624.9				
	7			SAND & GRAVEL-brown-
	10			medium dense
622.4	7	NP	11	
	2		111	
	4			SILT-gray-
-10	6	3.5B	19	dense to very dense
	4		108	CLAY-gray-
	6			very stiff to hard
	9	3.2B	20	
	3		118	
	5			
-15	8	2.8B	16	
	6		127	
	9			
	13	7.4B	12	
	5		126	
	8			
-20	10	4.2B	11	
	6		130	
	8			
	10	6.1B	11	
584.9				
	6		126	SAND & GRAVEL-gray-
	7			dense
-25	11	4.9B	11	
580.9				END OF BORING @ -50.0'
				3.25" Hollow Stem

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	2		116	
	4			CLAY-gray-
	6	2.2B	17	stiff to very stiff
	3		114	
	5			
-30.0	8	1.75P	18	
598.9				
	18			
	29			SILT-gray-
-35.0	34	NP	17	dense to very dense
	18			
	22			
-40.0	22	NP	13	
	19			
	22			
-45.0	21	NP	11	
	7			
	15			
-50.0	18	NP	15	

N-Standard Penetration is the value of the last two blow counts in each sample zone (ASTM D-1586)
NR-No Recovery ST-Shelby Tube
Type Failure B-Bulge Failure S-Shear Failure E-Estimated Value P-Penetrometer
Qu-Unconfined Compressive Strength (tsf) W-Water Content, percent dry weight NP-Non-Plastic
Unit dry weight (pcf) noted in Italics above w% VS-Vane Shear (psf)
D-Disturbed
O'BRIEN & ASSOCIATES, INC.

RW-13
STATION 27+88,
OFFSET 8.8' LT

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1230 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2375

SOIL BORING LOG

PAGE 1 of 1
DATE November 22, 2013
LOGGED BY TB
OBA JOB No. 13657

ROUTE I-190 DESCRIPTION I-190 Cumberland Flyover Ramp
SECTION xx LOCATION Chicago, IL Township 40N R12E Section 3
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic
STRUCT. NO. xx
Station xx
BORING NO. RW-14
Station 28+13
Offset 14.2' L
Ground Surface Elev. 631.5

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 622.5
Upon Completion Dry
After n/a Hrs. n/a

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				TOPSOIL FILL
	4			LOAM-brown-
	4			loose (Possible FILL)
	5	NP	22	
628.0				
	2			SAND-brown-
	4			
-5	4	NP	11	loose
625.5				
	4			SAND-gray-
	4			loose
	5	NP	20	
623.0				
	4			SAND & GRAVEL-gray-
	6			medium dense
-10	7	NP	12	
620.5				
	4		110	
	7			
	10	3.1B	20	CLAY-gray-
	3		110	very stiff to hard
	7			
-15	10	4.3B	20	
	4		113	
	6			
	9	2.3B	18	
589.5				
	6		128	CLAY-gray-
	7			hard
-20	10	4.8B	12	
	6		127	
	8			
	11	5.0B	12	
	6			
sandy	8			
-25	11	D	11	
581.5				END OF BORING @ -50.0'
				3.25" Hollow Stem

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	5		115	
	6			CLAY-gray-
	9	2.0B	17	very stiff to hard
	3		117	
	6			
-30.0	8	2.4B	16	
598.0				
	12			SILT-gray-
	23			dense
-35.0	20	NP	16	
	14			
	15			
-40.0	16	NP	19	
	10		125	
	13	10.0S		
-45.0	19	@13%	11	
	6		117	
	8			
-50.0	13	6.5B	16	

N-Standard Penetration is the value of the last two blow counts in each sample zone (ASTM D-1586)
NR-No Recovery ST-Shelby Tube
Type Failure B-Bulge Failure S-Shear Failure E-Estimated Value P-Penetrometer
Qu-Unconfined Compressive Strength (tsf) W-Water Content, percent dry weight NP-Non-Plastic
Unit dry weight (pcf) noted in Italics above w% VS-Vane Shear (psf)
D-Disturbed
O'BRIEN & ASSOCIATES, INC.

RW-14
STATION 28+13,
OFFSET 14.2' LT

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1230 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2375

SOIL BORING LOG

PAGE 1 of 1
DATE November 26, 2013
LOGGED BY TB
OBA JOB No. 13657

ROUTE I-190 DESCRIPTION I-190 Cumberland Flyover Ramp
SECTION xx LOCATION Chicago, IL Township 40N R12E Section 3
COUNTY Cook DRILLING METHOD Hollow Stem Auger HAMMER TYPE Diedrich Automatic
STRUCT. NO. NW78.90R, EB-R
Station xx
BORING NO. RW-17
Station 29+29
Offset 9.8' R
Ground Surface Elev. 631.0

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter 622.0
Upon Completion 608.5
After n/a Hrs. n/a

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				TOPSOIL FILL
	2			SANDY CLAY LOAM-brown-
	2			loose (Possible FILL)
	4	D	20	
628.0				
	2			SAND-brown-
	2			loose
-5	3	NP	10	
	6			
	8			
624.0	7	NP	12	
				SAND & GRAVEL-gray-
622.0				medium dense
	2			
	5			
-10	9	NP	20	SILT-gray-
620.5				medium dense
	2		117	CLAY-gray-
	3			stiff to very stiff
	4	1.7B	17	
	3		116	
	4			
-15	6	3.2B	20	
	3		110	
	6			
	7	2.7B	19	
587.5				
	3		109	CLAY-gray-
	5			hard
-20	8	2.7B	19	
	4		122	
	6			
	7	3.0P	14	
	4		116	
	5			
-25	5	1.9B	17	
581.0				END OF BORING @ -50.0'
				3.25" Hollow Stem

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	4		117	
	5			CLAY-gray-
	7	2.3B	16	stiff to very stiff
	4		113	
	7			
-30.0	9	5.6B	18	CLAY-gray-
602.5				hard
	12			
	19			
-35.0	24	5.2B	13	
597.5				
	4			
	6			SILT-gray-
-35.0	11	NP	18	medium to very dense
	10			
	10			
-40.0	10	NP	16	
	13		124	
	19			
-45.0	24	5.2B	13	
587.5				
	13		124	CLAY-gray-
	19			hard
-45.0	24	5.2B	13	
	10		119	
	12			
-50.0	15	6.3B	15	
581.0				END OF BORING @ -50.0'
				3.25" Hollow Stem

N-Standard Penetration is the value of the last two blow counts in each sample zone (ASTM D-1586)
NR-No Recovery ST-Shelby Tube
Type Failure B-Bulge Failure S-Shear Failure E-Estimated Value P-Penetrometer
Qu-Unconfined Compressive Strength (tsf) W-Water Content, percent dry weight NP-Non-Plastic
Unit dry weight (pcf) noted in Italics above w% VS-Vane Shear (psf)
D-Disturbed
O'BRIEN & ASSOCIATES, INC.

RW-17
STATION 29+29,
OFFSET 9.8' RT

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - NS	REVISED	
	CHECKED - SK	REVISED	
PLOT SCALE = $SCALE$	DRAWN - RM	REVISED	
PLOT DATE = 3/31/2016	CHECKED - NS	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (3 OF 4)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)
SHEET NO. 17 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	401
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwallsoil-05.dgn

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

SOIL BORING LOG

PAGE 1 of 1
DATE June 12, 2014
LOGGED BY TB
OBA JOB No. 13657

ROUTE I-190 DESCRIPTION I-190 Cumberland Flyover Ramp
SECTION xx LOCATION Chicago, IL Township 40N R12E Section 3
COUNTY Cook DRILLING METHOD Rotary Wash HAMMER TYPE Mobile Automatic
STRUC. NO. NW78.60R, EB-R
Station xx
BORING NO. RW-20
Station 15+25
Offset 12.0' L
Ground Surface Elev. 634.2

Surface Water Elev. n/a
Stream Bed Elev. n/a
Groundwater Elevation:
First Encounter Dry to -10.0'
Upon Completion NA
After n/a Hrs. n/a

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				2.0" TOPSOIL FILL
	7			
	13			
	10	3.5P	12	SILTY LOAM-brown-very stiff (FILL)
	8			
	8			
-5	8	3.5P	10	
	5		95	
	7			
	10	3.2B	20	
625.7				
	3			
	3			SAND & GRAVEL-brown-loose
-10	5	NP	24	
623.2				
	7		110	
	8			
	10	2.4B	19	
				CLAY-gray-stiff to very stiff
	7		D	
	11			
-15	13	1.5P	21	
	7		107	
	9			
	13	2.8B	20	
	7		100	
	10			
-20	14	2.9B	24	
	3		111	
	6			
	8	1.0B	17	CLAY-gray-very stiff
	4		114	END OF BORING @ -50.0'
	6			4.0" Hollow Stem to -10.0'
-25	8	1.5P	17	Rotary Drilling Started at -10.0'

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
	6		114	
	5			
	7	1.2B	18	CLAY-gray-stiff to very stiff
	3		108	
	6			
-30.0	12	2.75P	19	
600.7				
	35			
	50/4"			
-35.0		NP	16	SILT-gray-medium dense to very dense
	23			
	23			
-40.0	22	NP	19	
	14			
	13			
-45.0	16	NP	13	
585.7				
	18		119	
	20			
-50.0	20	3.5B	14	

N=Standard Penetration is the value of the last two blow counts in each sample zone (ASTM D-1586)
NR-No Recovery ST-Shelby Tube
Type Failure
B-Bulge Failure S-Shear Failure
E-Estimated Value P-Penetrometer
Qu-Unconfined Compressive Strength (tsf)
W-Water Content, percent dry weight
NP-Non-Plastic
Unit dry weight (pcf) noted in Italics above w%
VS-Vane Shear (psf)
D-Disturbed

O'BREN & ASSOCIATES, INC.

RW-20
STATION 15+25,
OFFSET 12.0' LT

DELTA ENGINEERING GROUP, LLC	USER NAME = $USER$	DESIGNED - NS	REVISED
		CHECKED - SK	REVISED
	PLOT SCALE = $SCALE$	DRAWN - RM	REVISED
	PLOT DATE = 3/31/2016	CHECKED - NS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS (4 OF 4)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)
SHEET NO. 18 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	402
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwallsoil-06.dgn

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: ____________ DATE PILES DRIVEN ____________ MONTH YEAR
PILE DRIVING EQUIPMENT USED: ____________
ENERGY RATING: ____________
HAMMER USED: TYPE ________ STROKE ________ WEIGHT ________
FORMULA USED TO CALCULATE CAPACITY: ____________
PILE DRIVING CONTRACTOR: ____________ CM: ____________

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: ____________ DATE PILES DRIVEN ____________ MONTH YEAR
PILE DRIVING EQUIPMENT USED: ____________
ENERGY RATING: ____________
HAMMER USED: TYPE ________ STROKE ________ WEIGHT ________
FORMULA USED TO CALCULATE CAPACITY: ____________
PILE DRIVING CONTRACTOR: ____________ CM: ____________

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - NS	REVISED
	CHECKED - SK	REVISED
PLOT SCALE = $SCALE$	DRAWN - DB	REVISED
PLOT DATE = 3/31/2016	CHECKED - NS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DRIVING RECORDS (1 of 13)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)

SHEET NO. 19 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	403

CONTRACT NO. 60X56

ILLINOIS FED. AID PROJECT

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwall-PRCE1.dgn

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: ______________________ DATE PILES DRIVEN ______________ MONTH YEAR
PILE DRIVING EQUIPMENT USED: ______________________
ENERGY RATING: ______________________
HAMMER USED: TYPE ____________ STROKE ____________ WEIGHT ____________
FORMULA USED TO CALCULATE CAPACITY: ______________________
PILE DRIVING CONTRACTOR: ______________________ CM: ______________________

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: ______________________ DATE PILES DRIVEN ______________ MONTH YEAR
PILE DRIVING EQUIPMENT USED: ______________________
ENERGY RATING: ______________________
HAMMER USED: TYPE ____________ STROKE ____________ WEIGHT ____________
FORMULA USED TO CALCULATE CAPACITY: ______________________
PILE DRIVING CONTRACTOR: ______________________ CM: ______________________

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 2	C1												
Wall 2	C2												
Wall 2	C3												
Wall 2	C4												
Wall 2	C5												
Wall 2	C6												
Wall 2	C7												
Wall 2	C8												
Wall 2	C9												
Wall 2	C10												
Wall 2	C11												
Wall 2	C12												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 2	C13												
Wall 2	C14												
Wall 2	D1												
Wall 2	D2												
Wall 2	D3												
Wall 2	D4												
Wall 2	D5												
Wall 2	D6												
Wall 2	D7												
Wall 2	D8												
Wall 2	D9												
Wall 2	D10												
Wall 2	D11												
Wall 2	D12												
Wall 2	D13												
Wall 2	D14												
Wall 2	E1												
Wall 2	E2												
Wall 2	E3												
Wall 2	E4												
Wall 2	E5												
Wall 2	E6												
Wall 2	E7												
Wall 2	E8												
Wall 2	E9												
Wall 2	E10												
Wall 2	E11												
Wall 2	E12												
Wall 2	E13												
Wall 2	E14												
Wall 3	F1												
Wall 3	F2												
Wall 3	F3												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 3	F4												
Wall 3	F5												
Wall 3	F6												
Wall 3	F7												
Wall 3	F8												
Wall 3	F9												
Wall 3	F10												
Wall 3	F11												
Wall 3	F12												
Wall 3	F13												
Wall 3	F14												
Wall 3	F15												
Wall 3	F16												
Wall 3	F17												
Wall 3	F18												
Wall 3	F19												
Wall 3	F20												
Wall 3	F21												
Wall 3	F22												
Wall 3	F23												
Wall 3	F24												
Wall 3	F25												
Wall 3	F26												
Wall 3	F27												
Wall 3	F28												
Wall 3	F29												
Wall 3	F30												
Wall 3	F31												
Wall 3	F32												
Wall 3	F33												
Wall 3	F34												
Wall 3	F35												
Wall 3	F36												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	F37												
Wall 3	F38												
Wall 3	F39												
Wall 3	F40												
Wall 3	F41												
Wall 3	F42												
Wall 3	F43												
Wall 3	F44												
Wall 3	F45												
Wall 3	F46												
Wall 3	F47												
Wall 3	F48												
Wall 3	F49												
Wall 3	F50												
Wall 3	G1												
Wall 3	G2												
Wall 3	G3												
Wall 3	G4												
Wall 3	G5												
Wall 3	G6												
Wall 3	G7												
Wall 3	G8												
Wall 3	G9												
Wall 3	G10												
Wall 3	G11												
Wall 3	G12												
Wall 3	G13												
Wall 3	G14												
Wall 3	G15												
Wall 3	G16												
Wall 3	G17												
Wall 3	G18												
Wall 3	G19												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	G20												
Wall 3	G21												
Wall 3	G22												
Wall 3	G23												
Wall 3	G24												
Wall 3	G25												
Wall 3	G26												
Wall 3	G27												
Wall 3	G28												
Wall 3	G29												
Wall 3	G30												
Wall 3	G31												
Wall 3	G32												
Wall 3	G33												
Wall 3	G34												
Wall 3	G35												
Wall 3	G36												
Wall 3	G37												
Wall 3	G38												
Wall 3	G39												
Wall 3	G40												
Wall 3	G41												
Wall 3	G42												
Wall 3	G43												
Wall 3	G44												
Wall 3	G45												
Wall 3	G46												
Wall 3	G47												
Wall 3	G48												
Wall 3	G49												
Wall 3	G50												
Wall 3	H1												
Wall 3	H2												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	H3												
Wall 3	H4												
Wall 3	H5												
Wall 3	H6												
Wall 3	H7												
Wall 3	H8												
Wall 3	H9												
Wall 3	H10												
Wall 3	H11												
Wall 3	H12												
Wall 3	H13												
Wall 3	H14												
Wall 3	H15												
Wall 3	H16												
Wall 3	H17												
Wall 3	H18												
Wall 3	H19												
Wall 3	H20												
Wall 3	H21												
Wall 3	H22												
Wall 3	H23												
Wall 3	H24												
Wall 3	H25												
Wall 3	H26												
Wall 3	H27												
Wall 3	H28												
Wall 3	H29												
Wall 3	H30												
Wall 3	I1												
Wall 3	I2												
Wall 3	I3												
Wall 3	I4												
Wall 3	I5												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	I6												
Wall 3	I7												
Wall 3	I8												
Wall 3	I9												
Wall 3	I10												
Wall 3	I11												
Wall 3	I12												
Wall 3	I13												
Wall 3	I14												
Wall 3	I15												
Wall 3	I16												
Wall 3	I17												
Wall 3	I18												
Wall 3	I19												
Wall 3	I20												
Wall 3	I21												
Wall 3	I22												
Wall 3	I23												
Wall 3	I24												
Wall 3	I25												
Wall 3	I26												
Wall 3	I27												
Wall 3	I28												
Wall 3	I29												
Wall 3	I30												
Wall 3	J1												
Wall 3	J2												
Wall 3	J3												
Wall 3	J4												
Wall 3	J5												
Wall 3	J6												
Wall 3	J7												
Wall 3	J8												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	J9												
Wall 3	J10												
Wall 3	J11												
Wall 3	J12												
Wall 3	J13												
Wall 3	J14												
Wall 3	J15												
Wall 3	J16												
Wall 3	J17												
Wall 3	J18												
Wall 3	J19												
Wall 3	J20												
Wall 3	J21												
Wall 3	J22												
Wall 3	J23												
Wall 3	J24												
Wall 3	J25												
Wall 3	J26												
Wall 3	J27												
Wall 3	J28												
Wall 3	J29												
Wall 3	J30												
Wall 3	K1												
Wall 3	K2												
Wall 3	K3												
Wall 3	K4												
Wall 3	K5												
Wall 3	K6												
Wall 3	K7												
Wall 3	K8												
Wall 3	K9												
Wall 3	K10												
Wall 3	K11												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	K12												
Wall 3	K13												
Wall 3	K14												
Wall 3	K15												
Wall 3	K16												
Wall 3	K17												
Wall 3	K18												
Wall 3	K19												
Wall 3	K20												
Wall 3	K21												
Wall 3	K22												
Wall 3	K23												
Wall 3	K24												
Wall 3	K25												
Wall 3	K26												
Wall 3	K27												
Wall 3	K28												
Wall 3	K29												
Wall 3	K30												
Wall 3	L1												
Wall 3	L2												
Wall 3	L3												
Wall 3	L4												
Wall 3	L5												
Wall 3	L6												
Wall 3	L7												
Wall 3	L8												
Wall 3	L9												
Wall 3	L10												
Wall 3	L11												
Wall 3	L12												
Wall 3	L13												
Wall 3	L14												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 3	L15												
Wall 3	L16												
Wall 3	L17												
Wall 3	L18												
Wall 3	L19												
Wall 3	L20												
Wall 3	L21												
Wall 3	L22												
Wall 3	L23												
Wall 3	L24												
Wall 3	L25												
Wall 3	L26												
Wall 3	L27												
Wall 3	L28												
Wall 3	L29												
Wall 3	L30												
Wall 4	M1												
Wall 4	M2												
Wall 4	M3												
Wall 4	M4												
Wall 4	M5												
Wall 4	M6												
Wall 4	M7												
Wall 4	M8												
Wall 4	M9												
Wall 4	M10												
Wall 4	M11												
Wall 4	M12												
Wall 4	M13												
Wall 4	M14												
Wall 4	M15												
Wall 4	M16												
Wall 4	M17												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	M18												
Wall 4	M19												
Wall 4	M20												
Wall 4	M21												
Wall 4	M22												
Wall 4	M23												
Wall 4	M24												
Wall 4	M25												
Wall 4	M26												
Wall 4	M27												
Wall 4	M28												
Wall 4	M29												
Wall 4	M30												
Wall 4	M31												
Wall 4	M32												
Wall 4	M33												
Wall 4	M34												
Wall 4	M35												
Wall 4	M36												
Wall 4	M37												
Wall 4	M38												
Wall 4	M39												
Wall 4	M40												
Wall 4	M41												
Wall 4	M42												
Wall 4	M43												
Wall 4	M44												
Wall 4	M45												
Wall 4	M46												
Wall 4	M47												
Wall 4	M48												
Wall 4	M49												
Wall 4	M50												

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - NS	REVISED
	CHECKED - SK	REVISED
PLOT SCALE = $SCALE$	DRAWN - DB	REVISED
PLOT DATE = 3/31/2016	CHECKED - NS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DRIVING RECORDS (7 of 13)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)
SHEET NO. 25 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	409
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwall-PRCE7.dgn

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 4	M51												
Wall 4	M52												
Wall 4	M53												
Wall 4	M54												
Wall 4	M55												
Wall 4	M56												
Wall 4	M57												
Wall 4	M58												
Wall 4	M59												
Wall 4	M60												
Wall 4	N1												
Wall 4	N2												
Wall 4	N3												
Wall 4	N4												
Wall 4	N5												
Wall 4	N6												
Wall 4	N7												
Wall 4	N8												
Wall 4	N9												
Wall 4	N10												
Wall 4	N11												
Wall 4	N12												
Wall 4	N13												
Wall 4	N14												
Wall 4	N15												
Wall 4	N16												
Wall 4	N17												
Wall 4	N18												
Wall 4	N19												
Wall 4	N20												
Wall 4	N21												
Wall 4	N22												
Wall 4	N23												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 4	N24												
Wall 4	N25												
Wall 4	N26												
Wall 4	N27												
Wall 4	N28												
Wall 4	N29												
Wall 4	N30												
Wall 4	N31												
Wall 4	N32												
Wall 4	N33												
Wall 4	N34												
Wall 4	N35												
Wall 4	N36												
Wall 4	N37												
Wall 4	N38												
Wall 4	N39												
Wall 4	N40												
Wall 4	N41												
Wall 4	N42												
Wall 4	N43												
Wall 4	N44												
Wall 4	N45												
Wall 4	N46												
Wall 4	N47												
Wall 4	N48												
Wall 4	N49												
Wall 4	N50												
Wall 4	N51												
Wall 4	N52												
Wall 4	N53												
Wall 4	N54												
Wall 4	N55												
Wall 4	N56												

DELTA ENGINEERING GROUP, LLC

USER NAME = $USER$	DESIGNED - NS	REVISED
	CHECKED - SK	REVISED
PLOT SCALE = $SCALE$	DRAWN - DB	REVISED
PLOT DATE = 3/31/2016	CHECKED - NS	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DRIVING RECORDS (8 of 13)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)
SHEET NO. 26 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	410
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwall-PRCE8.dgn

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	N57												
Wall 4	N58												
Wall 4	N59												
Wall 4	N60												
Wall 4	P1												
Wall 4	P2												
Wall 4	P3												
Wall 4	P4												
Wall 4	P5												
Wall 4	P6												
Wall 4	P7												
Wall 4	P8												
Wall 4	P9												
Wall 4	P10												
Wall 4	P11												
Wall 4	P12												
Wall 4	P13												
Wall 4	P14												
Wall 4	P15												
Wall 4	P16												
Wall 4	P17												
Wall 4	P18												
Wall 4	P19												
Wall 4	P20												
Wall 4	P21												
Wall 4	P22												
Wall 4	P23												
Wall 4	P24												
Wall 4	P25												
Wall 4	P26												
Wall 4	P27												
Wall 4	P28												
Wall 4	P29												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	P30												
Wall 4	P31												
Wall 4	P32												
Wall 4	P33												
Wall 4	P34												
Wall 4	P35												
Wall 4	P36												
Wall 4	P37												
Wall 4	P38												
Wall 4	P39												
Wall 4	P40												
Wall 4	P41												
Wall 4	P42												
Wall 4	P43												
Wall 4	P44												
Wall 4	P45												
Wall 4	P46												
Wall 4	P47												
Wall 4	P48												
Wall 4	P49												
Wall 4	P50												
Wall 4	P51												
Wall 4	P52												
Wall 4	P53												
Wall 4	P54												
Wall 4	P55												
Wall 4	P56												
Wall 4	P57												
Wall 4	P58												
Wall 4	P59												
Wall 4	P60												
Wall 4	01												
Wall 4	02												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	Q3												
Wall 4	Q4												
Wall 4	Q5												
Wall 4	Q6												
Wall 4	Q7												
Wall 4	Q8												
Wall 4	Q9												
Wall 4	Q10												
Wall 4	Q11												
Wall 4	Q12												
Wall 4	Q13												
Wall 4	Q14												
Wall 4	Q15												
Wall 4	Q16												
Wall 4	Q17												
Wall 4	Q18												
Wall 4	Q19												
Wall 4	Q20												
Wall 4	Q21												
Wall 4	Q22												
Wall 4	Q23												
Wall 4	Q24												
Wall 4	Q25												
Wall 4	Q26												
Wall 4	Q27												
Wall 4	Q28												
Wall 4	Q29												
Wall 4	Q30												
Wall 4	R1												
Wall 4	R2												
Wall 4	R3												
Wall 4	R4												
Wall 4	R5												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	R6												
Wall 4	R7												
Wall 4	R8												
Wall 4	R9												
Wall 4	R10												
Wall 4	R11												
Wall 4	R12												
Wall 4	R13												
Wall 4	R14												
Wall 4	R15												
Wall 4	R16												
Wall 4	R17												
Wall 4	R18												
Wall 4	R19												
Wall 4	R20												
Wall 4	R21												
Wall 4	R22												
Wall 4	R23												
Wall 4	R24												
Wall 4	R25												
Wall 4	R26												
Wall 4	R27												
Wall 4	R28												
Wall 4	R29												
Wall 4	R30												
Wall 4	S1												
Wall 4	S2												
Wall 4	S3												
Wall 4	S4												
Wall 4	S5												
Wall 4	S6												
Wall 4	S7												
Wall 4	S8												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 4	S9												
Wall 4	S10												
Wall 4	S11												
Wall 4	S12												
Wall 4	S13												
Wall 4	S14												
Wall 4	S15												
Wall 4	S16												
Wall 4	S17												
Wall 4	S18												
Wall 4	S19												
Wall 4	S20												
Wall 4	S21												
Wall 4	S22												
Wall 4	S23												
Wall 4	S24												
Wall 4	S25												
Wall 4	S26												
Wall 4	S27												
Wall 4	S28												
Wall 4	S29												
Wall 4	S30												
Wall 4	S31												
Wall 4	S32												
Wall 4	S33												
Wall 4	S34												
Wall 4	S35												
Wall 4	S36												
Wall 4	S37												
Wall 4	S38												
Wall 4	S39												
Wall 4	S40												
Wall 4	S41												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS							CAPACITY TONS	REMARKS
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"		
Wall 4	S42												
Wall 4	S43												
Wall 4	S44												
Wall 4	S45												
Wall 4	S46												
Wall 4	S47												
Wall 4	S48												
Wall 4	S49												
Wall 4	S50												
Wall 4	S51												
Wall 4	S52												
Wall 4	S53												
Wall 4	S54												
Wall 4	S55												
Wall 4	S56												
Wall 4	S57												
Wall 4	S58												
Wall 4	S59												
Wall 4	S60												
Wall 4	S61												
Wall 4	S62												
Wall 4	S63												
Wall 4	S64												
Wall 4	S65												
Wall 4	S66												
Wall 4	S67												
Wall 4	S68												
Wall 4	S69												
Wall 4	S70												
Wall 4	S71												
Wall 4	S72												
Wall 4	S73												
Wall 4	S74												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	S75												
Wall 4	S76												
Wall 4	S77												
Wall 4	S78												
Wall 4	S79												
Wall 4	S80												
Wall 4	S81												
Wall 4	S82												
Wall 4	S83												
Wall 4	S84												
Wall 4	S85												
Wall 4	S86												
Wall 4	S87												
Wall 4	S88												
Wall 4	S89												
Wall 4	S90												
Wall 4	T1												
Wall 4	T2												
Wall 4	T3												
Wall 4	T4												
Wall 4	T5												
Wall 4	T6												
Wall 4	T7												
Wall 4	T8												
Wall 4	T9												
Wall 4	T10												
Wall 4	T11												
Wall 4	T12												
Wall 4	T13												
Wall 4	T14												
Wall 4	T15												
Wall 4	T16												
Wall 4	T17												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	T18												
Wall 4	T19												
Wall 4	T20												
Wall 4	T21												
Wall 4	T22												
Wall 4	T23												
Wall 4	T24												
Wall 4	T25												
Wall 4	T26												
Wall 4	T27												
Wall 4	T28												
Wall 4	T29												
Wall 4	T30												
Wall 4	T31												
Wall 4	T32												
Wall 4	T33												
Wall 4	T34												
Wall 4	T35												
Wall 4	T36												
Wall 4	T37												
Wall 4	T38												
Wall 4	T39												
Wall 4	T40												
Wall 4	T41												
Wall 4	T42												
Wall 4	T43												
Wall 4	T44												
Wall 4	T45												
Wall 4	T46												
Wall 4	T47												
Wall 4	T48												
Wall 4	T49												
Wall 4	T50												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	T51												
Wall 4	T52												
Wall 4	T53												
Wall 4	T54												
Wall 4	T55												
Wall 4	T56												
Wall 4	T57												
Wall 4	T58												
Wall 4	T59												
Wall 4	T60												
Wall 4	T61												
Wall 4	T62												
Wall 4	T63												
Wall 4	T64												
Wall 4	T65												
Wall 4	T66												
Wall 4	T67												
Wall 4	T68												
Wall 4	T69												
Wall 4	T70												
Wall 4	T71												
Wall 4	T72												
Wall 4	T73												
Wall 4	T74												
Wall 4	T75												
Wall 4	T76												
Wall 4	T77												
Wall 4	T78												
Wall 4	T79												
Wall 4	T80												
Wall 4	T81												
Wall 4	T82												
Wall 4	T83												

PILE DRIVING RECORD

TYPE & SIZE OF PILE USED: _____ DATE PILES DRIVEN _____ MONTH YEAR

PILE DRIVING EQUIPMENT USED: _____

ENERGY RATING: _____

HAMMER USED: TYPE _____ STROKE _____ WEIGHT _____

FORMULA USED TO CALCULATE CAPACITY: _____

PILE DRIVING CONTRACTOR: _____ CM: _____

PILE LOCATION	PILE NO.	GROUND SURFACE ELEV.	CUT-OFF ELEV.	PENE-TRATED LENGTH (Ft)	DRIVING DATA FOR THE FINAL 5 FEET - BLOWS								
					5' to 4'	4' to 3'	3' to 2'	2' to 1'	1' to 0'	12" to 6"	6" to 0"	CAPACITY TONS	REMARKS
Wall 4	T84												
Wall 4	T85												
Wall 4	T86												
Wall 4	T87												
Wall 4	T88												
Wall 4	T89												
Wall 4	T90												

DELTA ENGINEERING GROUP, LLC

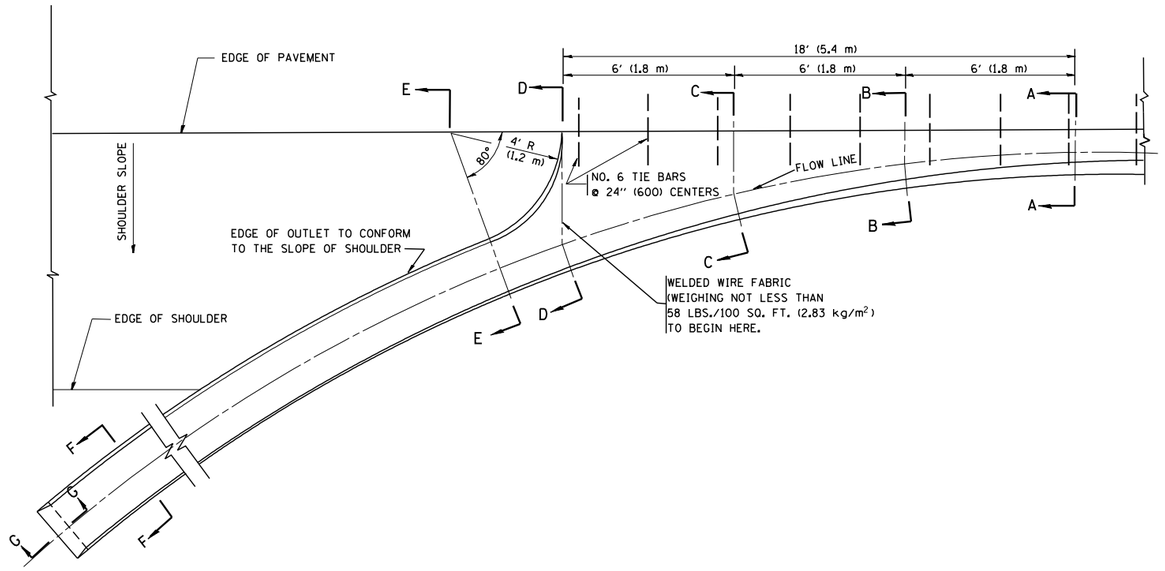
USER NAME = $USER$	DESIGNED - NS	REVISED
	CHECKED - SK	REVISED
PLOT SCALE = $SCALE$	DRAWN - DB	REVISED
PLOT DATE = 3/31/2016	CHECKED - NS	REVISED

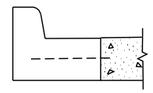
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DRIVING RECORDS (13 of 13)
CUMBERLAND FLYOVER RAMP RETAINING WALLS
NW78.70R EB(R), NW78.80R EB(R) & NW78.90R EB(R)
SHEET NO. 31 OF 31 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	415
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		

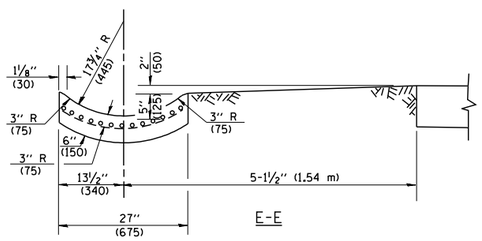
FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-retwall-PRCE13.dgn



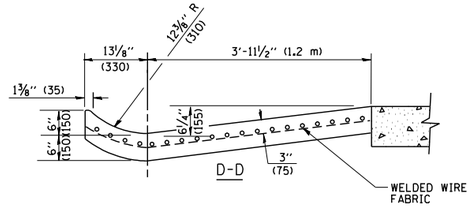


A-A *

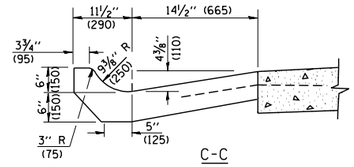
* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001.
FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.



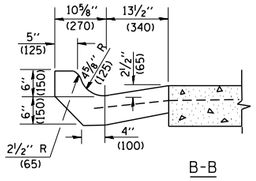
E-E



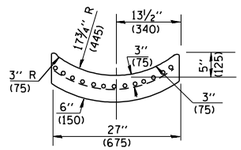
D-D



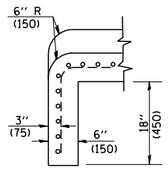
C-C



B-B



F-F



G-G

GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS UNLESS OTHERWISE SHOWN.

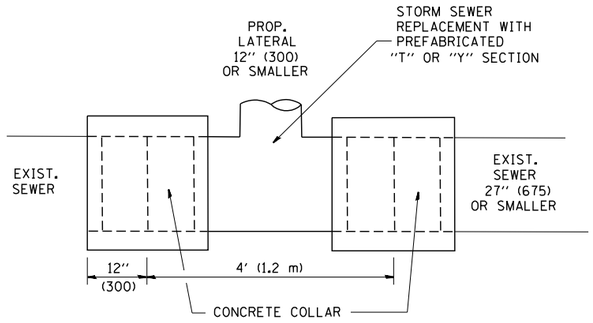
IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAV'T.
1.27 CU. YDS. (0.96 m^3) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAV'T.
FOR SECTION F-F=
0.045 CU. YDS. (0.03 m^3) CLASS SI CONCRETE PER ft. (m).

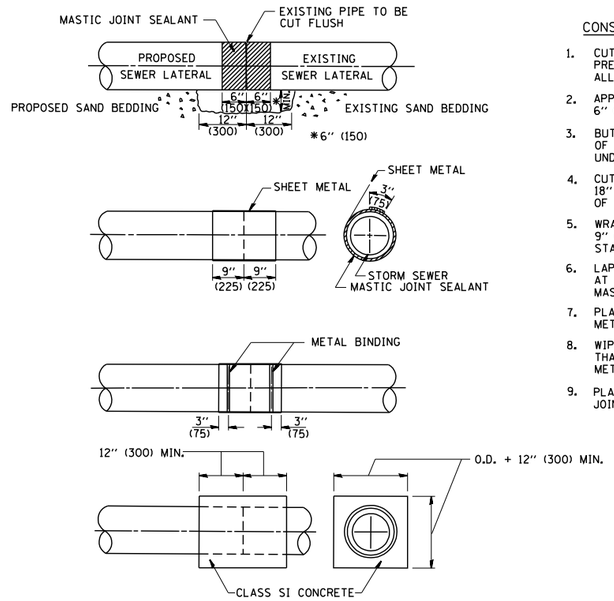
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\bd03.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 09-09-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	OUTLET FOR CONCRETE CURB AND GUTER			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. SHAH 10-25-94								580	416
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - E. GOMEZ 12-21-00					BD600-01	(BD-03)	CONTRACT NO. 60X56		
	PLOT DATE = 1/4/2008	DATE - 08-04-86	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER

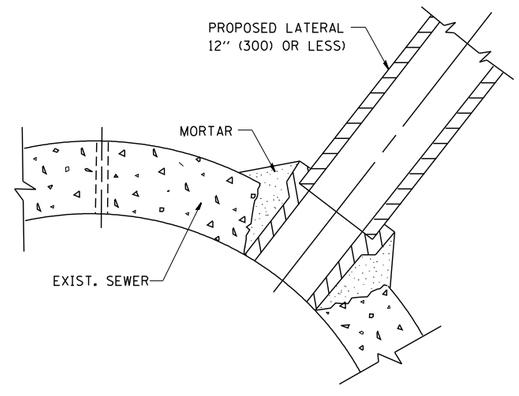


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
5. WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
9. PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.

II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".

B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

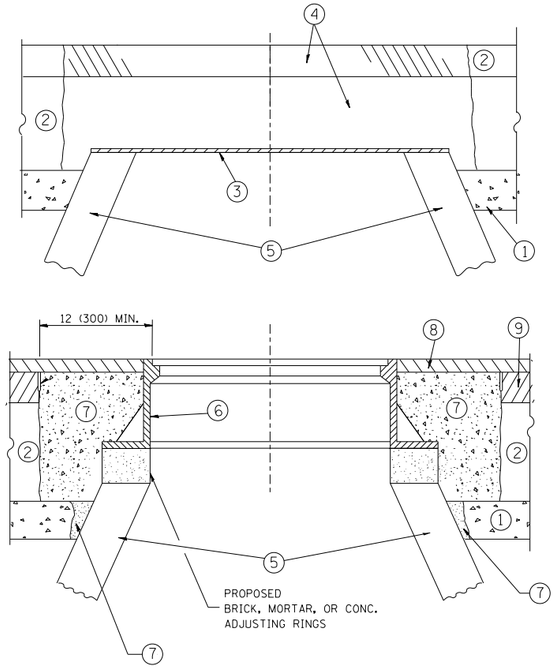
REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

FILE NAME = W:\diststd\22x34\bd07.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - M. DE YONG 05-08-92	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAIL OF STORM SEWER CONNECTION TO EXISTING SEWER			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. SHAH 09-09-94								580	417
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. SHAH 10-25-94						BD500-01 (BD-7)		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE - 07-25-90	REVISED - R. SHAH 06-12-96		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



NOTES:

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

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1½ (40) THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.

*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

LEGEND

(1) SUB-BASE GRANULAR MATERIAL
(2) EXISTING PAVEMENT
(3) 36 (900) DIAMETER METAL PLATE
(4) PROPOSED CRUSHED STONE AND HMA SURFACE MIX
(5) EXISTING STRUCTURE
(6) FRAME AND LID (SEE NOTES)
(7) CLASS PP-1* CONCRETE
(8) PROPOSED HMA SURFACE COURSE
(9) PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = c:\pw_work\pwidot\bauerdl\d0108315\bd08.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1968.5000 ' / m	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS FOR
FRAMES AND LIDS ADJUSTMENT WITH MILLING

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

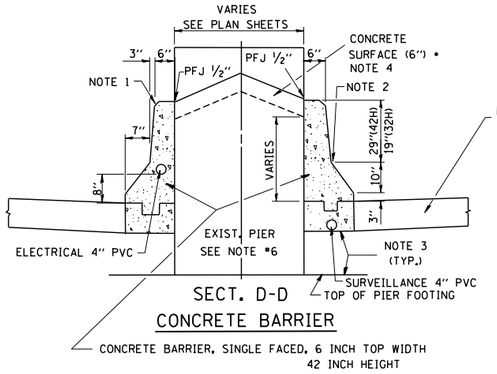
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	418

BD600-03 (BD-8) CONTRACT NO. 60X56

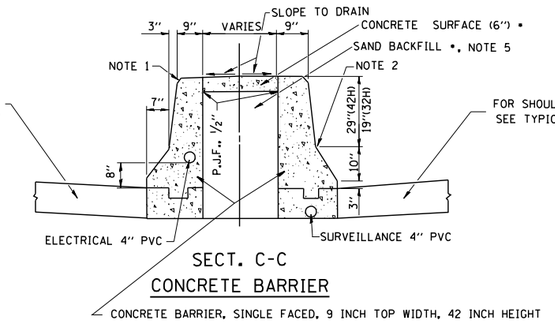
FED. ROAD DIST. NO. 1 | ILLINOIS | FED. AID PROJECT

bd08.dgn 12/6/2011 10:53:13 AM C:\pw\bauerdl

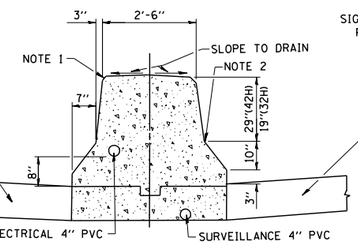
TANGENT CONDITION



SECT. D-D
CONCRETE BARRIER

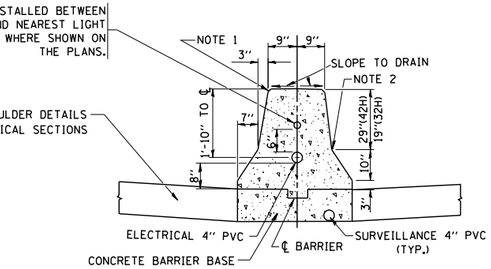


SECT. C-C
CONCRETE BARRIER



SECT. B-B
CONCRETE BARRIER

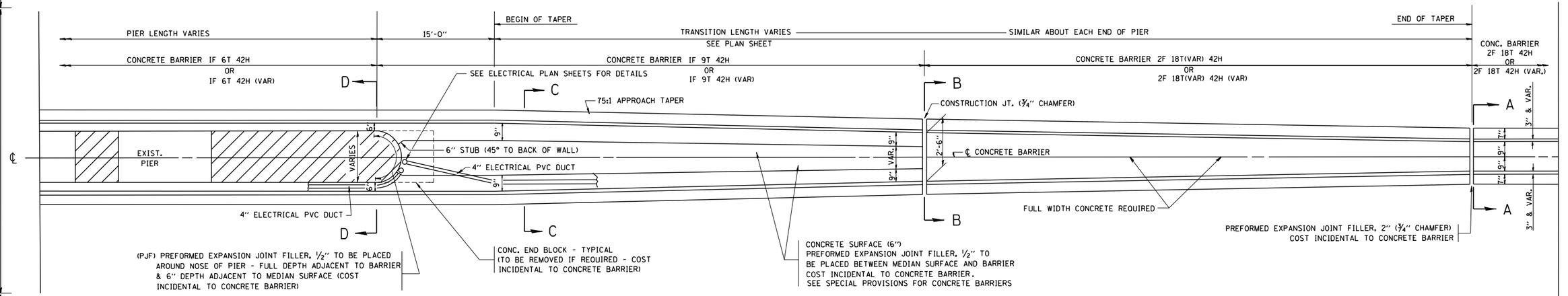
CONCRETE BARRIER, DOUBLE FACED
18 INCH VARIABLE TOP WIDTH
42 INCH HEIGHT



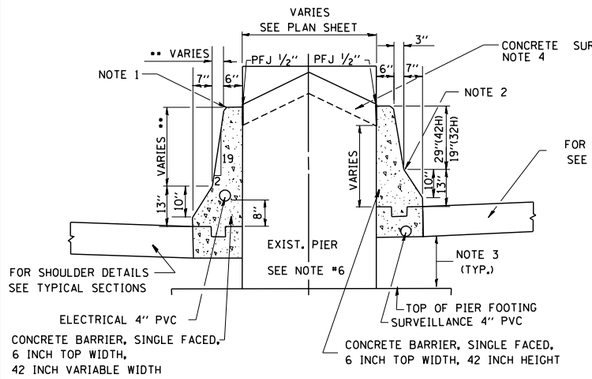
SECT. A-A
CONCRETE BARRIER

CONCRETE BARRIER, DOUBLE FACE,
18 INCH TOP WIDTH,
42 INCH HEIGHT

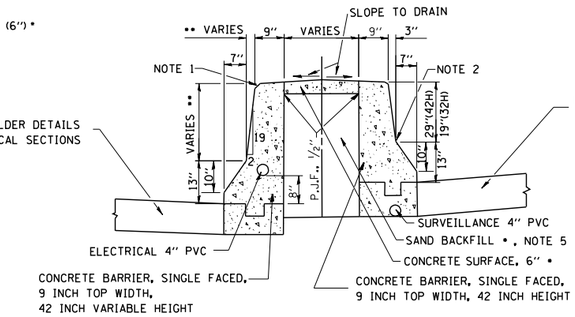
PLAN VIEW OF CONCRETE BARRIER TRANSITION (SUPER ELEVATION CONDITION)



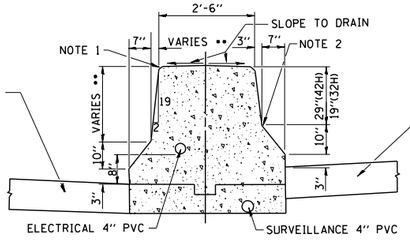
SECT. D-D
CONCRETE BARRIER



SECT.C-C
CONCRETE BARRIER

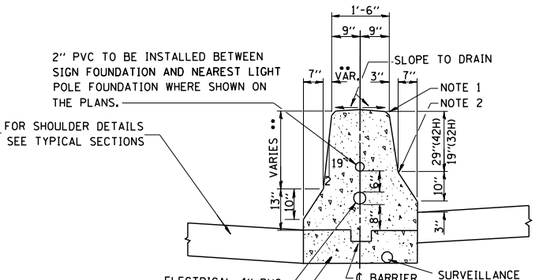


SECT. B-B
CONCRETE BARRIER



CONCRETE BARRIER, DOUBLE FACE,
18 INCH VARIABLE TOP WIDTH,
42 INCH VARIABLE HEIGHT

SECT. A-A
CONCRETE BARRIER



CONCRETE BARRIER, DOUBLE FACE,
18 INCH TOP WIDTH,
42 INCH VARIABLE HEIGHT

GENERAL NOTES - FOR UNDERDRAIN DETAILS SEE TYPICAL SECTIONS

- PREFORMED JOINT FILLER SHALL BE INCIDENTAL TO THE CONCRETE BARRIER OF THE TYPE INVOLVED.
- FOR KEYWAY (F) DIMENSIONS, SEE TYPICAL SECTIONS
- CONCRETE BARRIER BASE PAY ITEM IS TO BE INCLUDED IF THE BARRIER IS CONSTRUCTED MONOLITHIC OR JOINTED TO BASE. IF JOINTED CONTRACTORS WILL HAVE THE OPTION OF USING A KEYWAY OR *__ TIE BARS AT _____O.C.

NOTE 1 - ¾" CHAMFER OR 1" RADIUS (OPTIONAL)

NOTE 2 - 10" RADIUS (OPTIONAL)

NOTE 3 - EXTEND BOTTOM OF BARRIER TO FOOTING ONLY WHEN DEPTH IS 6" OR LESS, OTHERWISE MAINTAIN SAME DEPTH AS BOTTOM OF SHOULDER

NOTE 4 - PIER FILLER MATERIAL TO BE CONCRETE IF MINIMUM 6" THICKNESS WILL BE MAINTAINED. IF 6" THICKNESS CANNOT BE MAINTAINED USE ASPHALT FILLER MATERIAL AS DIRECTED BY THE ENGINEER.

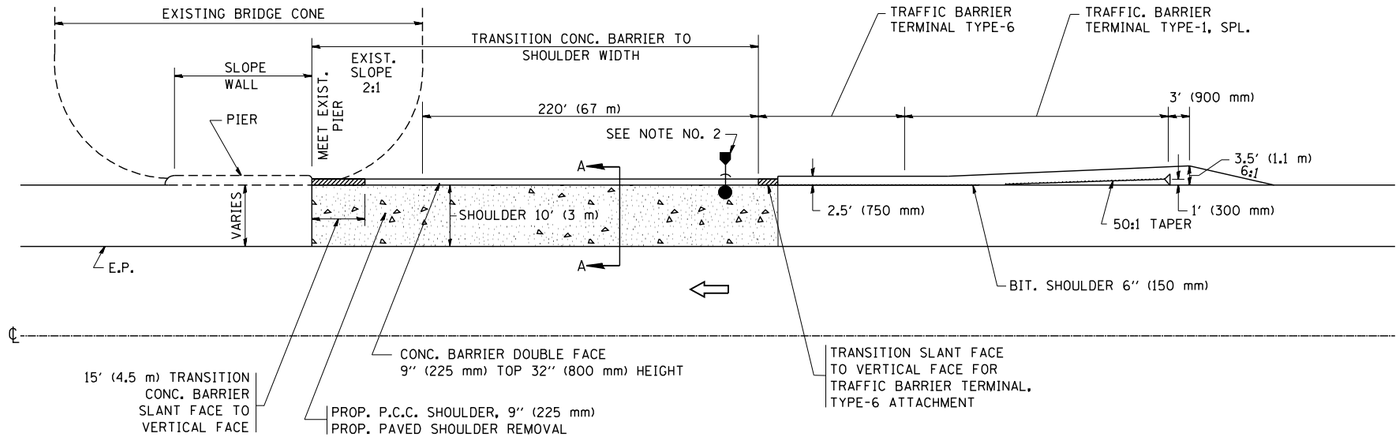
NOTE 5 - SAND BACKFILL AND CONCRETE SURFACE WILL BE REQUIRED. FILLING WITH CONCRETE WILL NOT BE ALLOWED.

NOTE 6 - IF PIER IS NEW CONSTRUCTION BARRIER WALL MAY BE MONOLITHIC

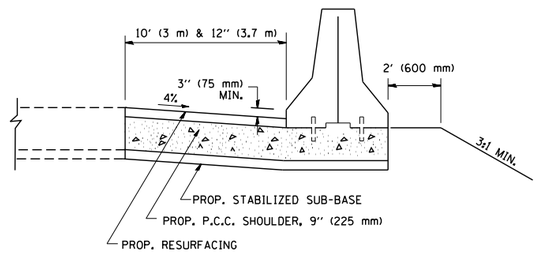
•• MAINTAIN SLOPE OF FACE AS SHOWN ON DETAIL. HEIGHT AND WIDTH OF BARRIER INCREASE WHERE A DIFFERENCE IN MEDIAN EDGE-OF-PAVEMENT GRADE ELEVATION EXISTS.

• COST OF SAND BACKFILL, CONCRETE SURFACE (6"), AND PIER FILLER MATERIAL WILL NOT BE INCIDENTAL.

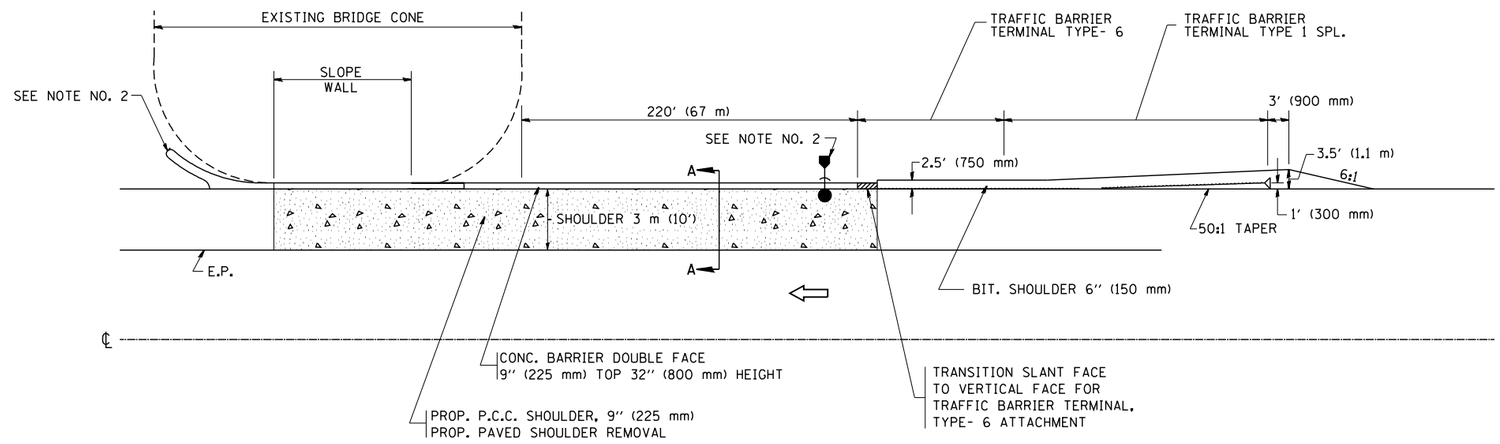
FILE NAME = W:\diststd\22x34\bd27.dgn	USER NAME = gaglianobt	DESIGNED - FORD	REVISED - FORD 12-06-88	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**CONCRETE BARRIER TRANSITION & GENERAL DETAILS, CONCRETE BARRIER BASE**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						580	419
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -				BD-27		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE - 09-09-88	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



CONC. BARRIER ADJACENT
TO SLOPE WALL WITH PIER
(DITCH SECTION)



SECTION A-A



CONC. BARRIER ADJACENT
TO SLOPE WALL WITHOUT PIER
(DITCH SECTION)

NOTE:

1. SEE STATE STANDARD 630201 FOR STABILIZATION FOR GUARDRAIL.
*2. THE GUTTER OUTLET AND CATCH BASIN LOCATION IS DEPENDENT ON DIRECTION OF FLOW.
3. USE CONC. BARRIER SINGLE FACE IF CLEARANCE BETWEEN PIER AND SHOULDER IS LESS THAN 27" (685 mm).
4. SEE STATE STANDARD 637001 FOR CONCRETE BARRIER.

* CATCH BASIN TYPE C, TYPE 24 FRAME AND GRATE
  STORM SEWERS, 12" (300 mm)
  END SECTIONS, 12" (300 mm)

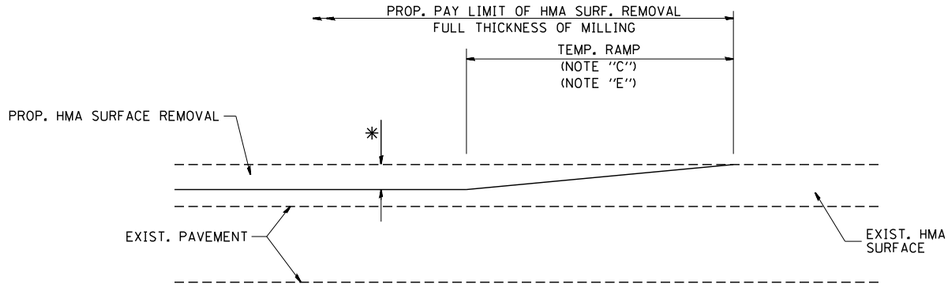
FILE NAME = W:\diststd\22x34\bd29.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE - 10-18-02	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE BARRIER PIER AND SLOPE WALL PROTECTION DETAIL

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

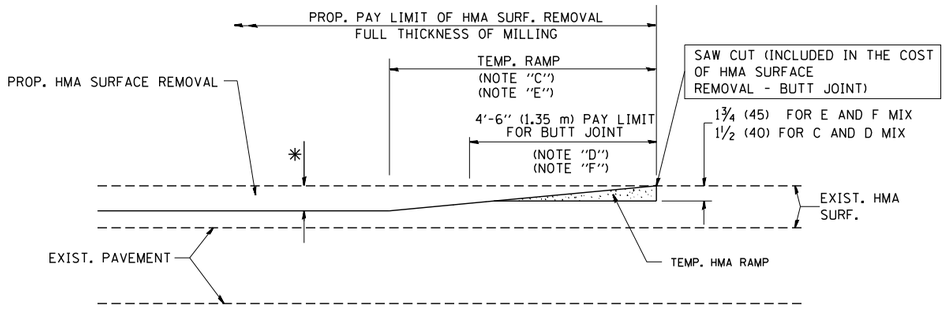
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	420
	BD600-08 (BD29)		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

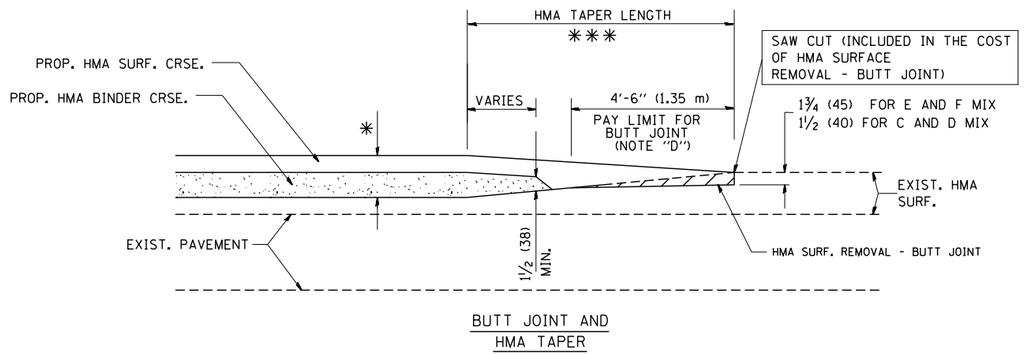


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

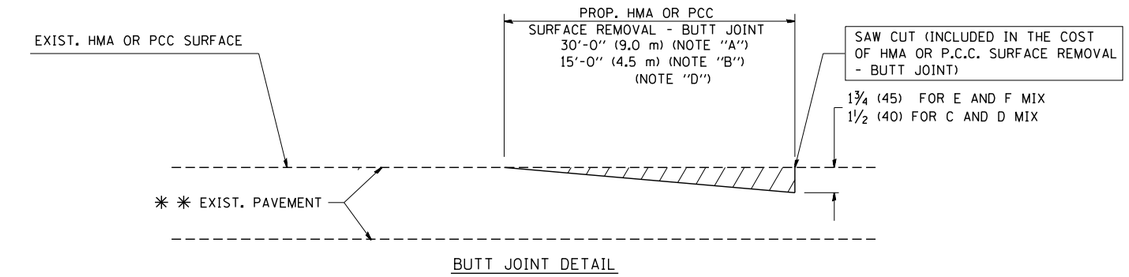
OPTION 2

TYPICAL TEMPORARY RAMP

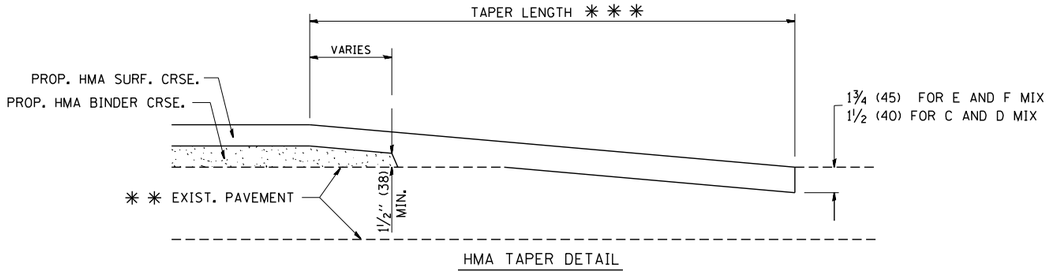


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



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.

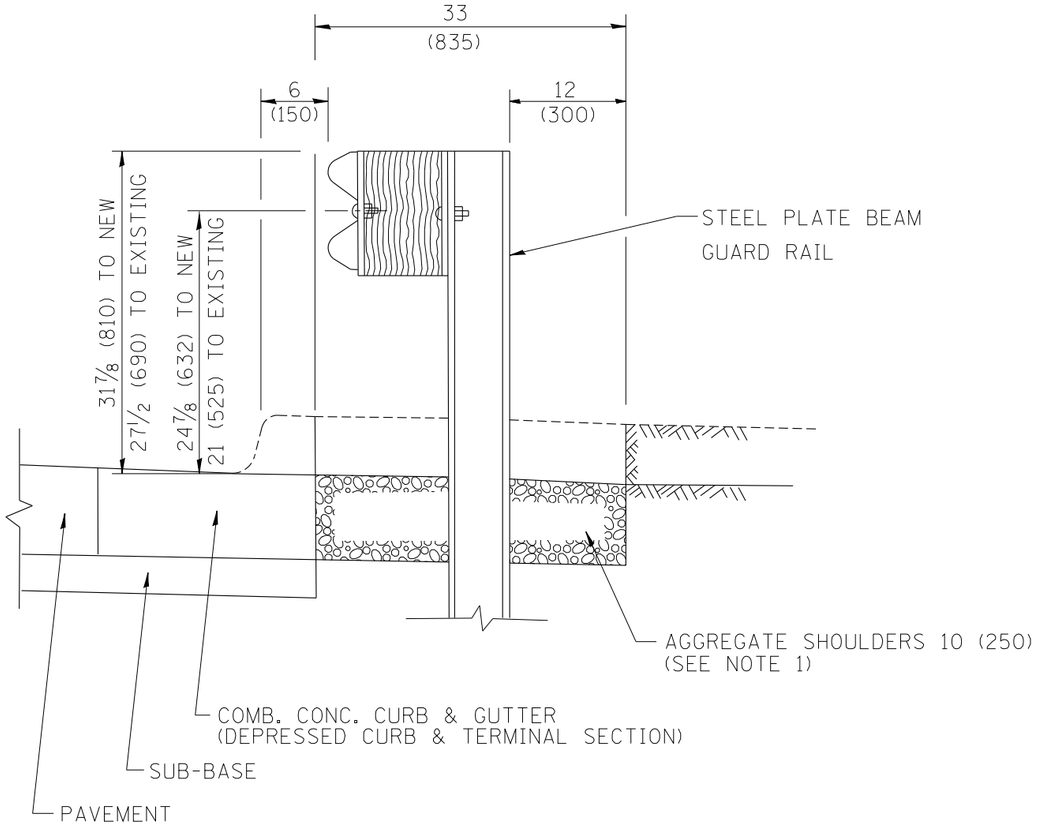
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	421
	BD400-05 BD32		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

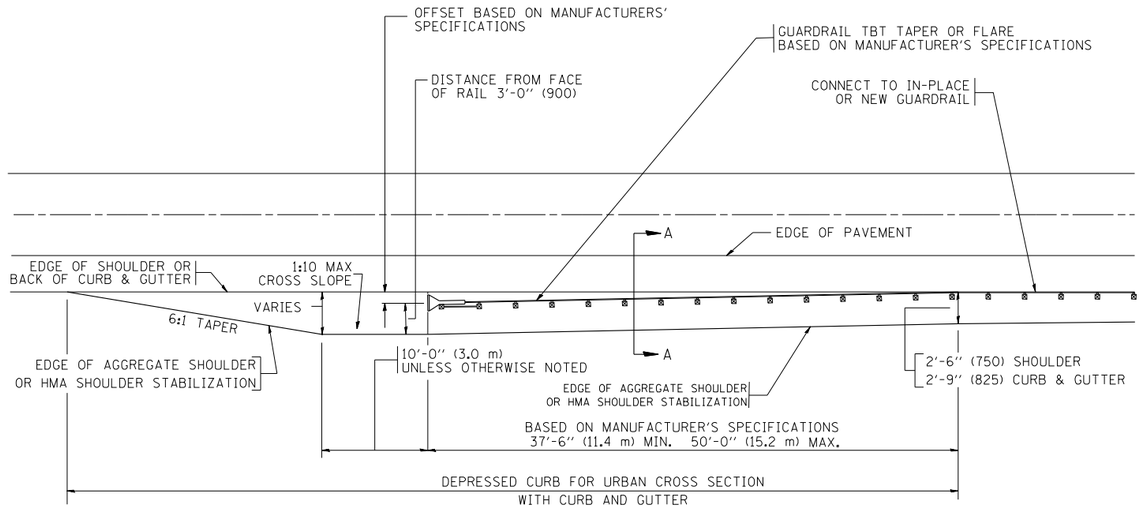


SECTION A-A

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

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



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

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

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

TBT = TRAFFIC BARRIER TERMINAL

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

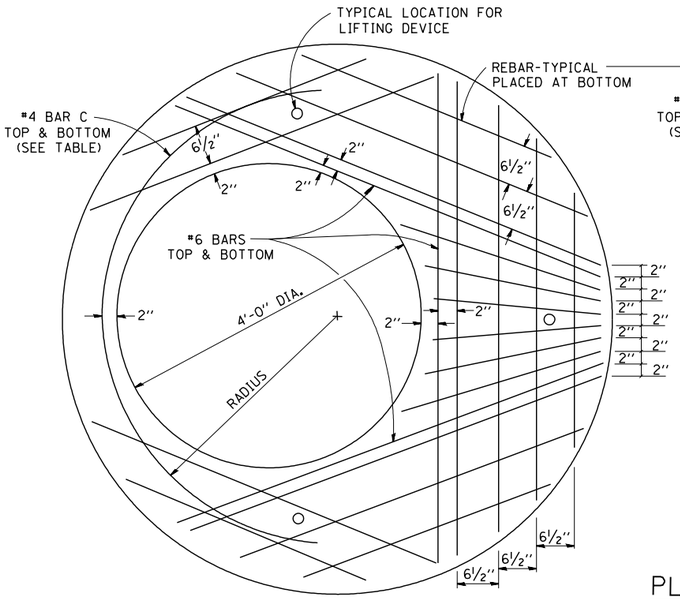
FILE NAME = c:\pw_work\PWIDOT\DRIVAKOSGN\d0108315\bd34.dgn	USER NAME = drivakosgn	DESIGNED - M. DE YONG	REVISED - E. GOMEZ 08-28-00
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 49.9999 ' / IN.	CHECKED -	REVISED - R. BORO 12-08-2008
	PLOT DATE = 9/21/2009	DATE - 09-22-90	REVISED - R. BORO 09-14-2009

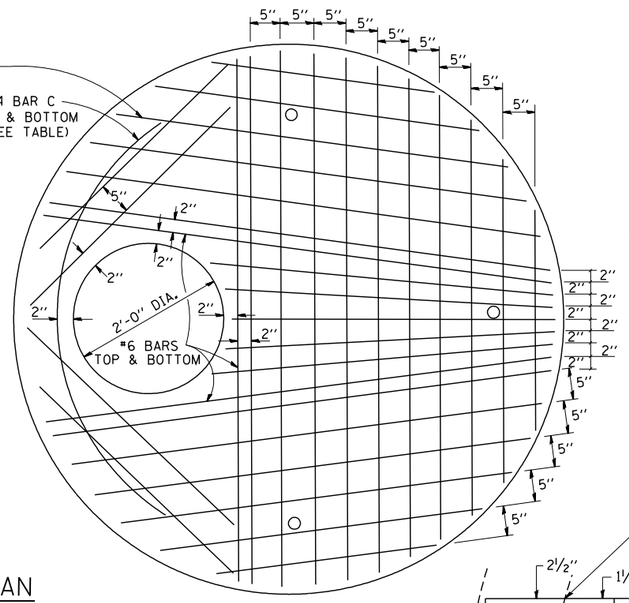
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

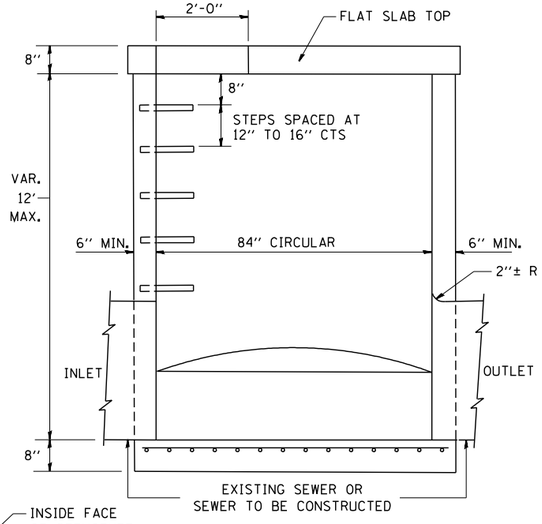
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	422
	BD600-10 (BD 34)	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





PLAN

SHOWING REBAR REINFORCEMENT



ELEVATION

GENERAL NOTES

ALTERNATE MATERIAL FOR THE WALLS MAY BE CONCRETE MASONRY UNITS, PRECAST REINFORCED CONCRETE SECTIONS OR CAST-IN-PLACE CONCRETE. THE CAST IRON STEPS AS DETAILED HEREON ARE TYPICAL. STEPS OF OTHER DESIGN AND MATERIAL THAT CONFORM TO THE MINIMUM REQUIREMENTS OF THE STEPS SHOWN MAY BE USED WHEN APPROVED BY THE ENGINEER.

CAST IRON STEPS SHALL BE GRAY IRON CONFORMING TO THE REQUIREMENTS OF ARTICLE 1006.14 OF THE STANDARD SPECIFICATIONS.

STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF THREE (3) INCHES. STEPS SHALL NOT BE EXTENDED ON THE OUTSIDE.

STEPS SHALL BE OMITTED FOR WORK IN COOK COUNTY WHEN THE DEPTH OF THE MANHOLE IS TEN (10') OR LESS.

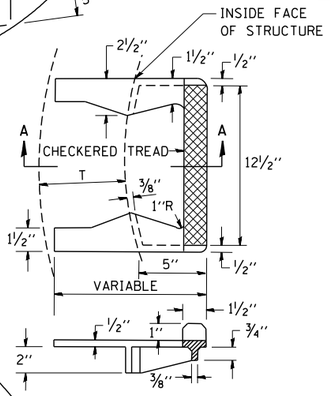
IN ADDITION TO THE REQUIREMENTS OF ARTICLE 612.13 OF THE STANDARD SPECIFICATIONS, THE CONTRACT UNIT PRICE FOR MANHOLES, TYPE A, 7'-DIAMETER SHALL INCLUDE THE SAND CUSHION WHEN REQUIRED, FURNISHING AND INSTALLING STEPS WHEN REQUIRED, FURNISHING AND COMPACTING THE SPECIFIED BACKFILL MATERIAL, AND FURNISHING AND INSTALLING FLAT SLAB TOP.

PRECAST FLAT SLAB TOP SHALL CONFORM TO ARTICLES 505.01 THRU 505.05 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE CONCRETE STRENGTH SHALL BE 4,000 PSI AFTER 28 DAYS. REINFORCEMENT BARS AND WELDED WIRE FABRIC SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1006.10. ONLY GRADE 60 REINFORCEMENT BARS WILL BE PERMITTED.

BOTTOM SLAB SHALL BE REINFORCED BY EITHER REINFORCEMENT BARS OR WELDED WIRE FABRIC. THE MINIMUM REINFORCEMENT SHALL BE 0.46 SQUARE INCH PER LINEAR FOOT IN BOTH DIRECTIONS.

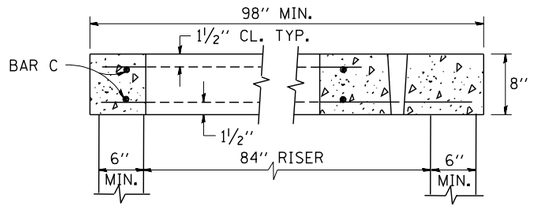
JOINT CONFIGURATION AND DIMENSIONS OF FLAT SLAB TOP SHALL MATCH AND FIT THE RISER JOINT DETAIL.

LIFTING DEVICES SHALL BE APPROVED BY THE ENGINEER.

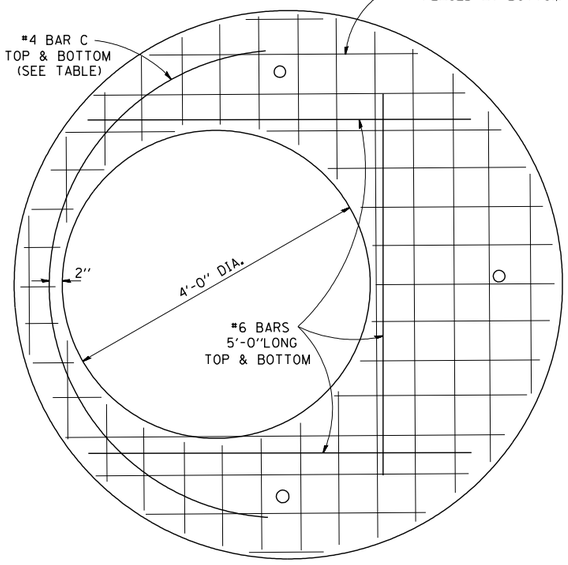


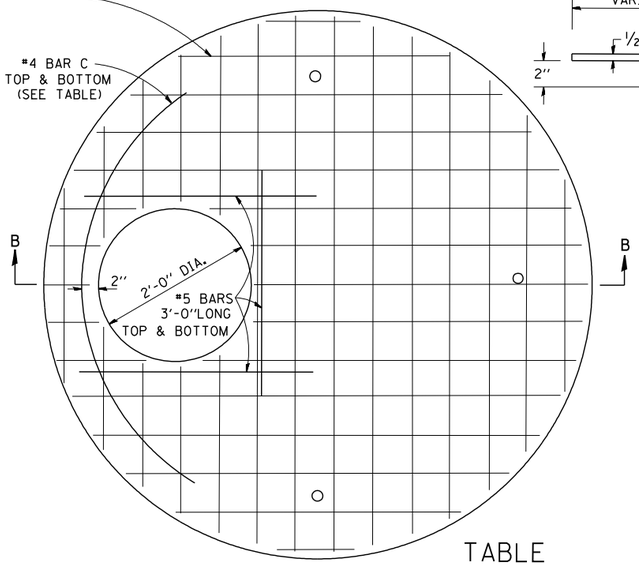
SEC. A-A

CAST IRON STEPS



SECTION B-B





PLAN

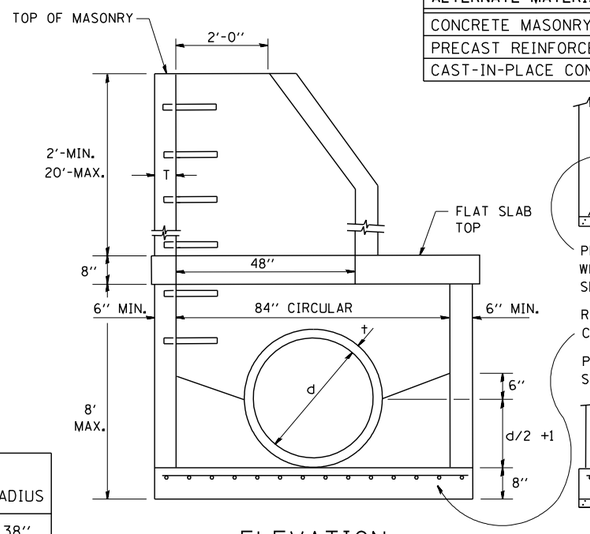
SHOWING WELDED WIRE FABRIC REINFORCEMENT

NOTE: THIS STRUCTURE SHOULD BE USED WITH PIPES SIZE 54" DIA. OR SMALLER.

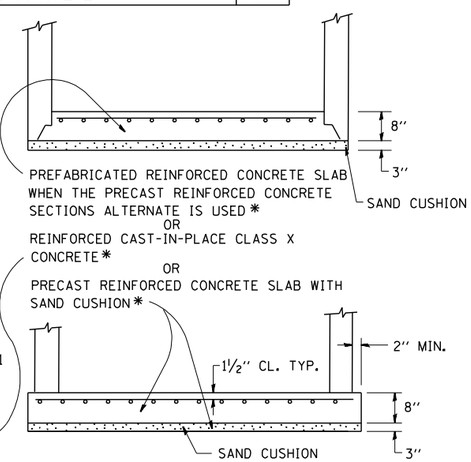
TABLE

DIAMETER OF OPENING	REINFORCEMENT "As" WWF OR EACH DIRECTION	BAR SIZE	BAR C SIZE	BAR C LENGTH	BAR C RADIUS
2'-0"	1.06 SQ.IN./LIN.FT.	#6	#4	6'-0"	38"
4'-0"	0.82 SQ.IN./LIN.FT.	#6	#4	9'-0"	38"

ALTERNATE MATERIALS FOR RISERS	T (MIN.)
CONCRETE MASONRY UNITS	5"
PRECAST REINFORCED CONCRETE SECTIONS	4"
CAST-IN-PLACE CONCRETE	6"



ELEVATION



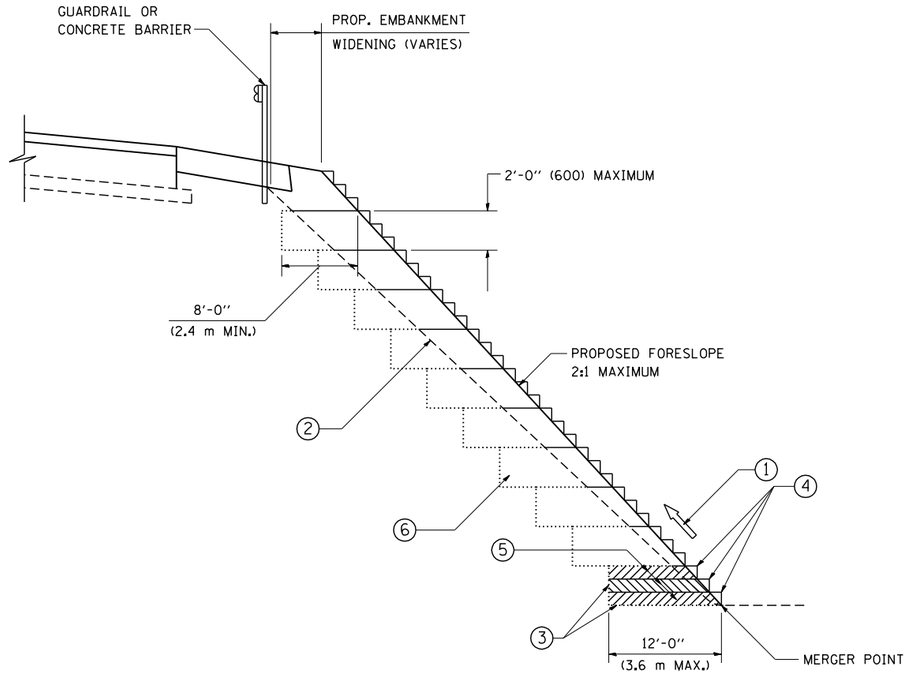
FILE NAME = W:\diststd\22x34\bd37.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE - 10-18-02	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MANHOLE TYPE A
7 FOOT DIAMETER

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	423
	BD600-11 (BD-37)	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

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

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

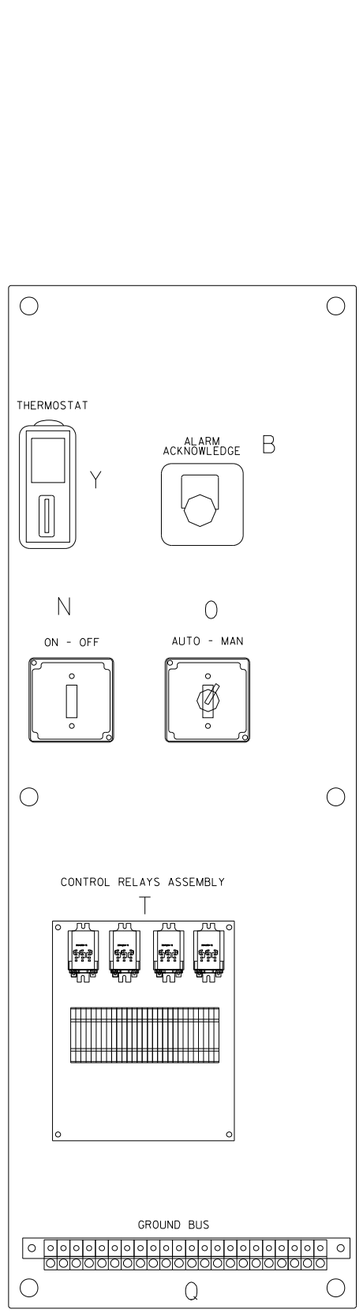
FILE NAME = W:\diststd\22x34\bd51.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -
		DRAWN - CADD	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - S.E.B.	REVISED -
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

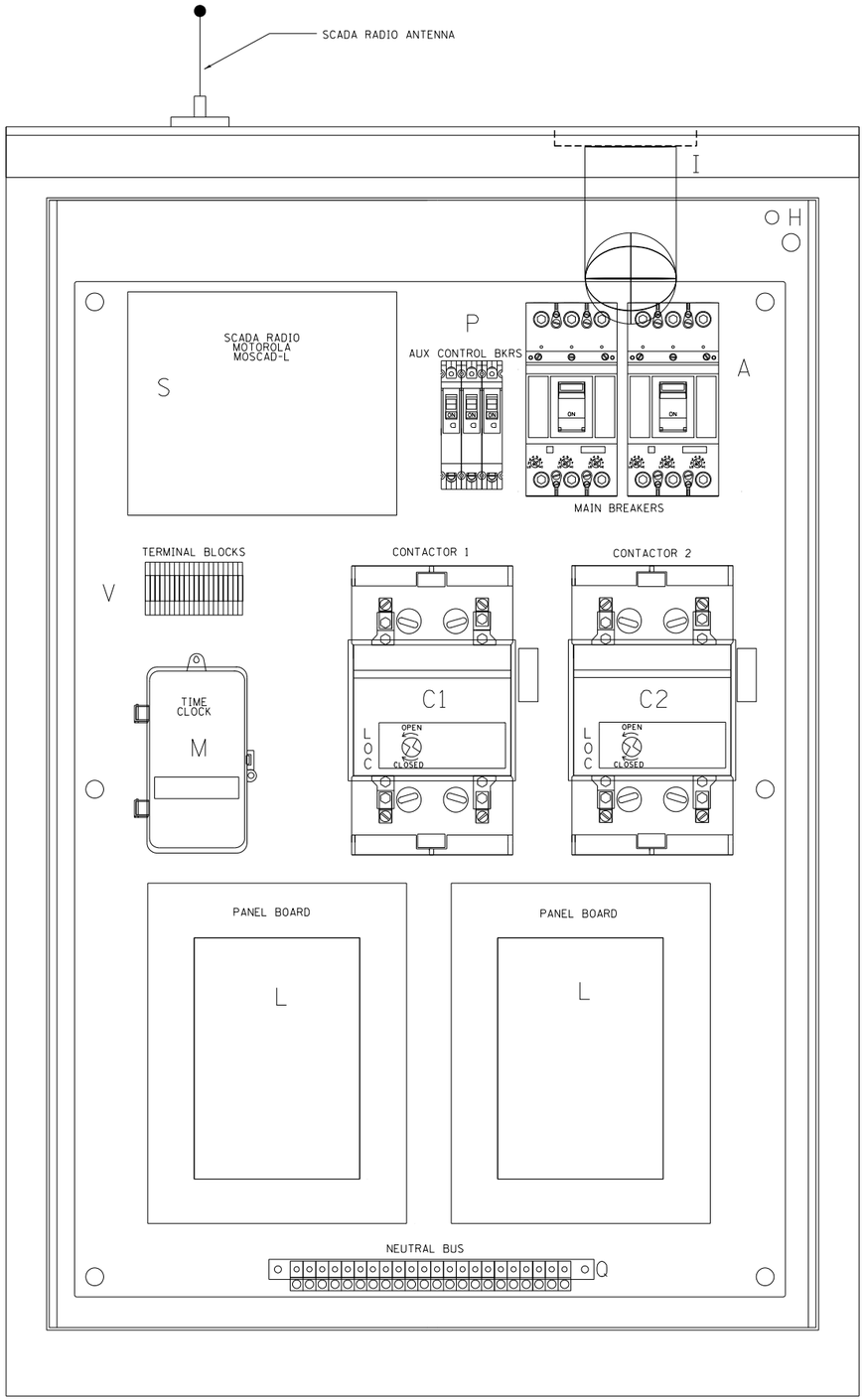
BENCHING DETAIL
FOR EMBANKMENT WIDENING

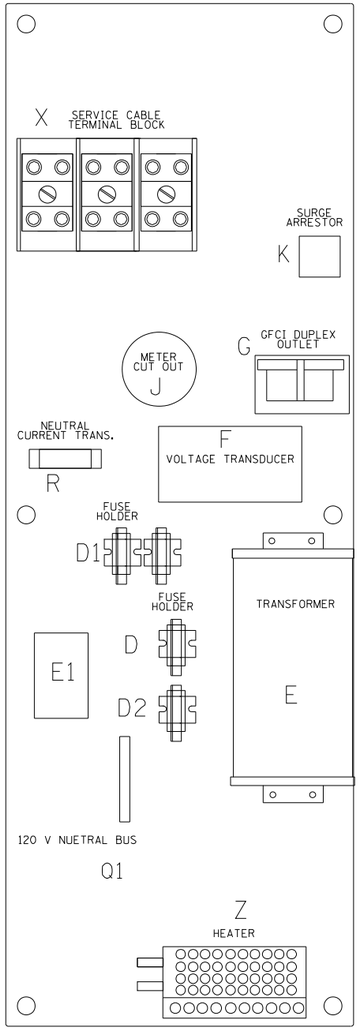
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	424
	BD-51	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



LEFT SIDE PANEL





RIGHT SIDE PANEL

BILL OF MATERIALS

ITEM	QTY	DESCRIPTION
A	2	MAIN CIRCUIT BREAKERS 2 POLE 200 AMP WITH AUX CONTACT
B	1	ACKNOWLEDGE SWITCH, PUSH BUTTON WITH YELLOW INSERT
C1, C2 *	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	FINGERSAFE FUSE HOLDER WITH KTK-20 FUSE
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-½ FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK-2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120 - 24 VAC TRANSFORMER
F	1	VOLTAGE TRANSDUCER WITH COVERED TERMINALS
G	1	20 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 9001KS11BH13, 2 POSITION SWITCH IN 9001KY1 ENCLOSURE OR APPROVED EQUAL
P	2	BREAKER 1P 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 x 16 x 1/4
Q1	1	COPPER NEUTRAL BUS WITH 1 #6 AND 8 #12 CONDUCTOR POINTS
R	1	CURRENT TRANSDUCER
S	1	MOTOROLA MOSCAD-L RADIO, 240 V
T *	1	CONTROL RELAY ASSEMBLEY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4). QTY 32 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X *	1	620 AMP SLPICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

* TERMINALS SHALL BE COVERED WITH CLEAR PLEXIGLASS SHEET

FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\be205.dgn	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04
		DRAWN -	REVISED - R. TOMSONS 05-11-09
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - R. TOMSONS 03-10-10
	PLOT DATE = 3/29/2012	DATE -	REVISED - R. TOMSONS 03-29-12

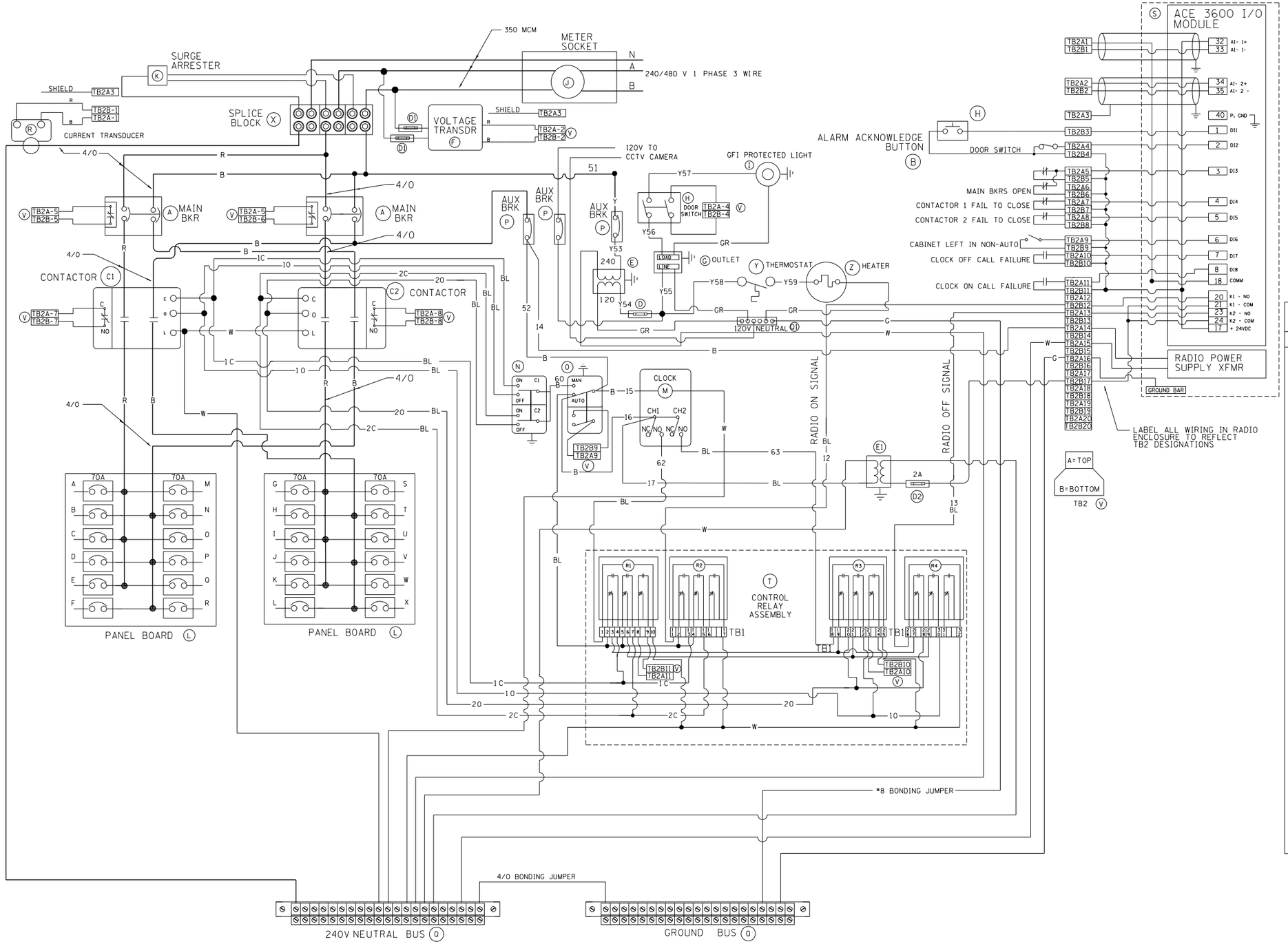
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA

SCALE: NONE | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	425
	BE-205		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

be205.dgn 3/29/2012 11:14:45 AM User:drivakosgn



BILL OF MATERIALS

ITEM *	QTY	DESCRIPTION
A	2	MAIN CIRCUIT BREAKERS 2 POLE 200 AMP WITH AUX CONTACT
B	1	ACKNOWLEDGE SWITCH, PUSH BUTTON WITH YELLOW INSERT
C1, C2	2	CONTACTOR 2 POLE 200 AMP 240V COIL WITH AUX CONTACTS
D	1	FINGERSAFE FUSE HOLDER WITH KTK-20A FUSE
D1	2	FINGERSAFE FUSE HOLDER WITH KTK-½ FUSE
D2	1	FINGERSAFE FUSE HOLDER WITH KTK- 2A FUSE
E	1	2.0 KVA 277V-240/120 TRANSFORMER
E1	1	0.25 KVA 240/120-24 VAC TRANSFORMER
F	1	VOLTAGE TRANSDUCER
G	1	15 AMP GFCI DUPLEX OUTLET W/COVER
H	2	DOOR SWITCH A-20GQ-B7-K
I	1	LIGHT FIXTURE
J	1	METER FITTING 1 PHASE 3 WIRE 200 AMP
K	1	SURGE ARRESTER
L	2	PANEL BOARD 480/240V 1 PHASE, 250 AMP COPPER BUS
M	1	2 CHANNEL DIGITAL TIME CLOCK
N	1	MOMENTARY SWITCH ON - OFF
O	1	SQUARE D, 9001KS11BH13, 2 POSITION SWITCH IN 9001KY1 ENCLOSURE
P	2	BREAKER 1P 15A
Q	2	COPPER GROUND AND NEUTRAL BUS 1 x 16 x 1/4
Q1	1	COPPER NEUTRAL BUS WITH 1 1/0 AND #6 CONDUCTOR POINTS
R	1	CURRENT TRANSDUCER
S	1	MOTOROLA ACE 3600
T	1	CONTROL RELAY ASSEMBLEY 240V COILS WITH 4 3 PDT 25A RELAYS (W389ACX-15) (R1, R2, R3, R4) . QTY 32 TERMINAL BLOCKS
V	20	TERMINAL BLOCKS
X	1	620 AMP SLPICE BLOCK
Y	1	40-80 DEG THERMOSTAT
Z	1	375 WATT HEATER

*

FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\be205.dgn	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04
		DRAWN -	REVISED - R. TOMSONS 05-11-09
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - R. TOMSONS 03-10-10
	PLOT DATE = 3/29/2012	DATE -	REVISED - R. TOMSONS 03-29-12

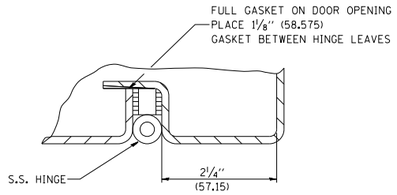
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA

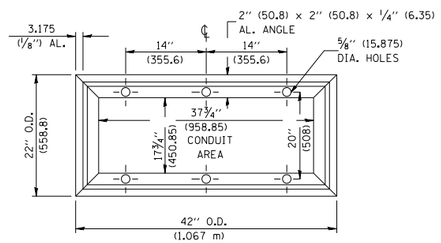
SCALE: NONE | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	426
	BE-205		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

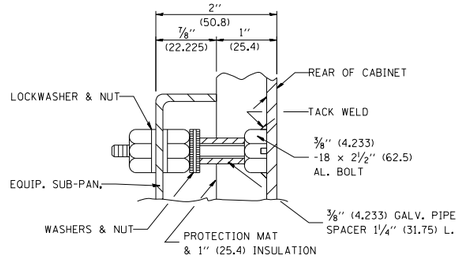
be09.dgn 3/29/2012 11:15:24 AM Users\drivakosgn



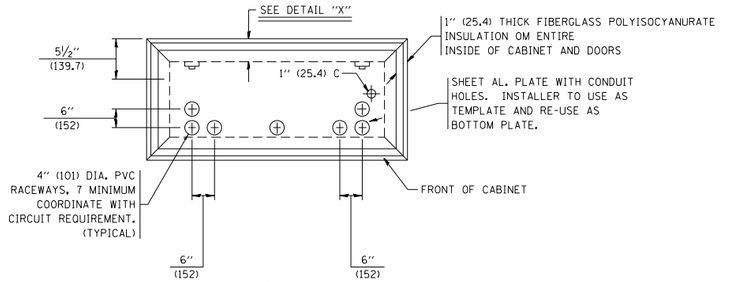
DETAIL "Y"



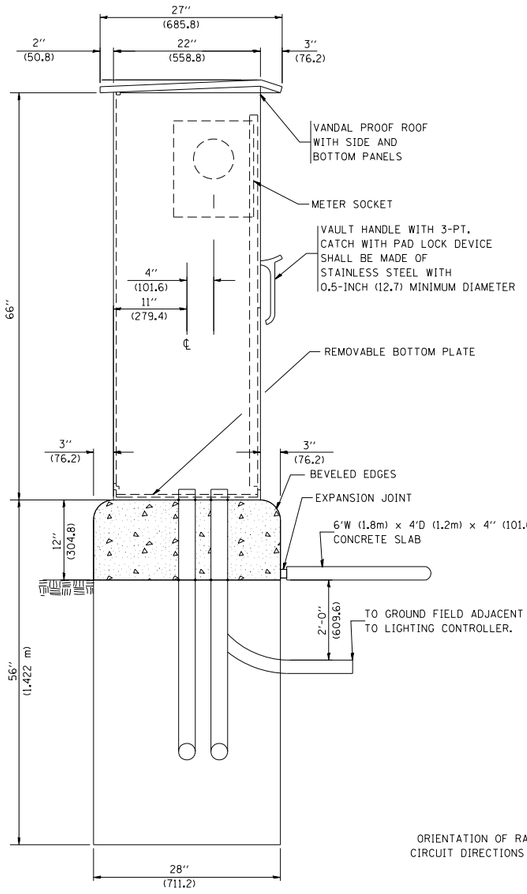
BASE MTG. DETAIL



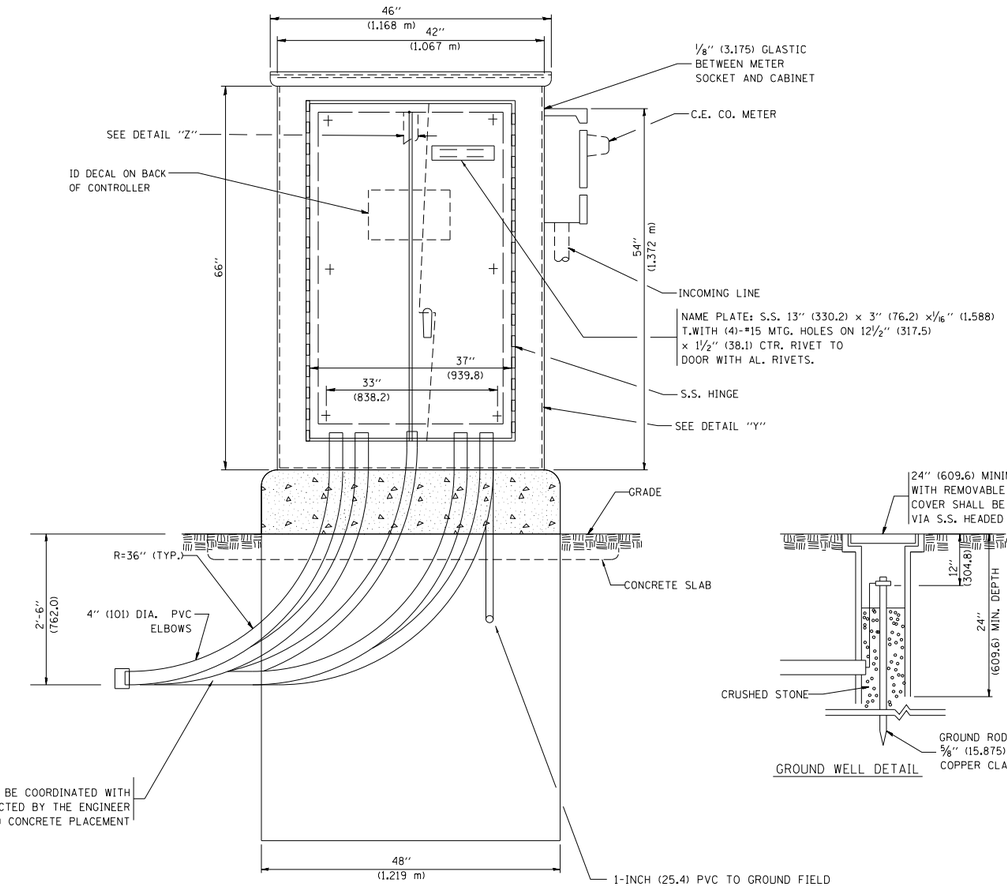
DETAIL "X"



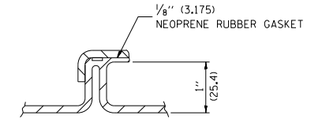
SECTION "A-A"



LEFT SIDE ELEVATION

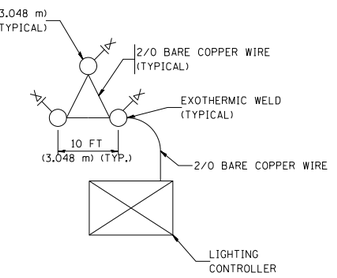


FRONT ELEVATION



DETAIL "Z"

GROUND WELL DETAIL



GROUND FIELD DETAIL
(N.T.S.)

THE CONTRACTOR SHALL
VERIFY EXACT LOCATION
WITH THE ENGINEER

FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\be205.dgn	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04
		DRAWN -	REVISED - R. TOMSONS 05-11-09
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - R. TOMSONS 03-10-10
	PLOT DATE = 3/29/2012	DATE -	REVISED - R. TOMSONS 03-29-12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA

SCALE: NONE | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	427
	BE-205		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

NOTES

1. CABINET SHALL BE FABRICATED FROM 0.125-INCH (3.175) SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED.
2. ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL, UNLESS OTHERWISE NOTED.
3. NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH (19.05) HIGH LETTERS FILLED IN BLACK: "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
4. ONE INCH THICK POLYISOCYANURATE INSULATION SHALL BE INSTALL AND PERMANENTLY CEMENTED ON ALL SIDES OF THE CABINET AND DOORS.
5. CABINET SHALL BE PRIMED AND PAINTED AS SPECIFIED.
6. ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
7. THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508.
8. METAL MOUNTING PANEL SHALL BE FABRICATED FROM THE SAME MATERIAL AS THE CABINET AND SHALL BE FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
9. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH (3.175) THICK GLASTIC INSULATION BACK PANEL.
10. ALL DEVICES SHALL BE FRONT REMOVABLE.
11. TIME CLOCK CHANNEL 1 N.O. CONTACT IS CLOSED NIGHT AND OPEN DAY (LIGHTS ON).
12. SET LATITUDE TO 42 DEGREES. SET CH.1 TO 23 MINUTES AFTER ASTRONOMICAL SUNSET, 50 MINUTES BEFORE ASTRONOMICAL SUNRISE. SET CH.2 TO 60 MINUTES AFTER ASTRONOMICAL SUNSET (WITH A SIGNAL LENGTH OF 1 SECOND), +28 MINUTES AFTER ASTRONOMICAL SUNRISE (WITH A SIGNAL LENGTH OF 7 SECONDS.)
13. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. 240V NEUTRAL BUS SHALL BE PAINTED WHITE, GROUND BUS SHALL BE PAINTED GREEN, AND THE 120V NEUTRAL BUS SHALL BE PAINTED GREY.
14. ALL LUGS SHALL BE OF COPPER SCREWS AND CONNECTORS, SPRING HELD.
15. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
16. ALL CONTROL WIRING SHALL BE 600V #12 TYPE MTW, SCADA WIRING SHALL BE #18.
17. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
18. ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED:

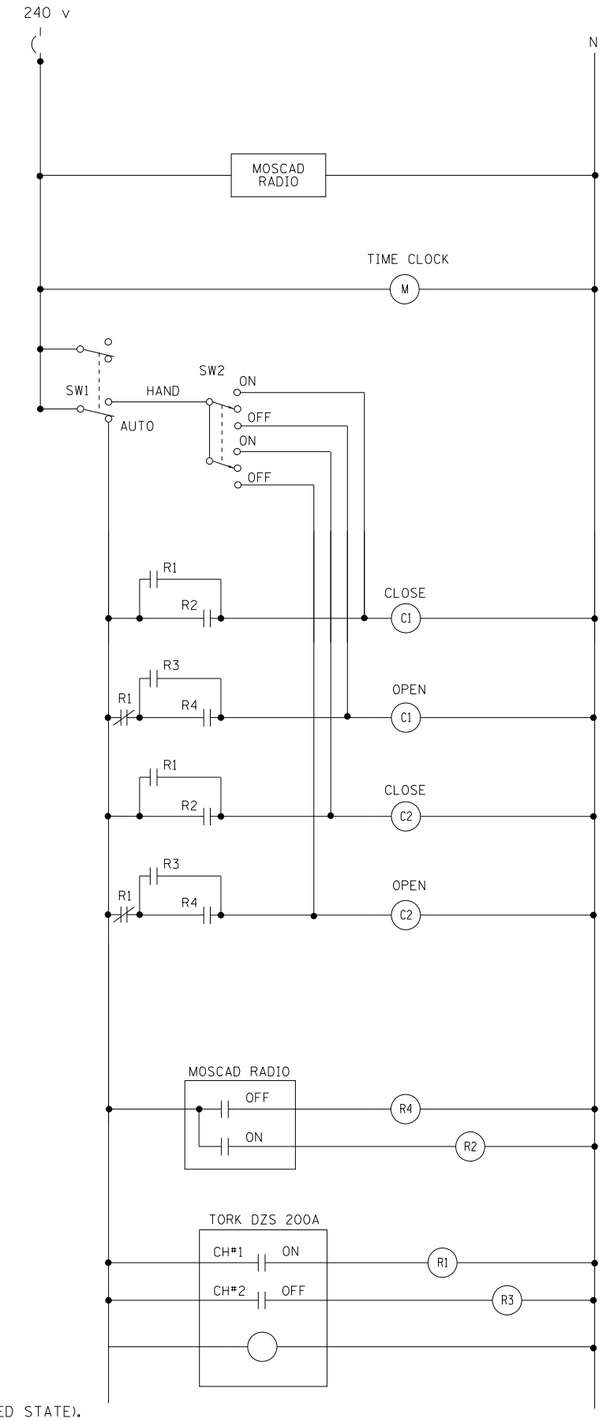
    R - RED Y - YELLOW
    B - BLACK W - WHITE
    BL- BLUE G - GREEN
    G - GREY

19. MOSCAD I/O WIRING SHALL BE:

    DIGITAL INPUT (DI) WIRING SHALL BE #18 MTW PURPLE.

    ANALOG INPUT (AI) WIRING SHALL BE #18, 2/C SHIELDED.

    AI AND DI WIRING MAY BE BUNDLED TOGETHER, BUT SHALL NOT BE BUNDLED WITH OTHER WIRING.
20. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
21. SCHEMATIC SHOWN WITH BREAKER OPEN, CONTACTOR OPEN, CABINET DOOR CLOSED, CLOCK NOT ACTIVE (DE-ENERGIZED STATE).
22. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC AND SCADA I/O DIAGRAM (NO SMALLER THAN 11"x17" EACH) SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER WITH STAINLESS STEEL SCREWS.



CONTROL CIRCUIT LADDER LOGIC DIAGRAM

MOSCAD I/O ASSIGNMENTS		
TERM	MOSCAD DESTINATION	DESCRIPTION OF INPUT
1	DIGITAL INPUT 1	ALARM KNOWLEDGE
2	DIGITAL INPUT 2	DOOR OPEN
3	DIGITAL INPUT 3	MAIN(S) BREAKER OPEN
4	DIGITAL INPUT 4	CONTACTOR 1 OPEN
5	DIGITAL INPUT 5	CONTACTOR 2 OPEN
6	DIGITAL INPUT 6	CABINET IN NON-AUTO
7	DIGITAL INPUT 7	BACK-UP CLOCK OFF CALL
8	DIGITAL INPUT 8	BACK-UP CLOCK ON CALL
17	24 V+	24+VDC
18	DI COMMON	COMMON
21	K1 C	K1 COMMON
22	K1 NO	LIGHTS ON CALL
24	K2 C	K2 COMMON
25	K2 NO	LIGHTS OFF CALL
32	ANALOG INPUT 1 (+)	CABINET NEUTRAL CURRENT
33	ANALOG INPUT 1 (-)	CABINET NEUTRAL CURRENT
34	ANALOG INPUT 2 (+)	CABINET SERVICE VOLTAGE
35	ANALOG INPUT 2 (-)	CABINET SERVICE VOLTAGE
40	P. GROUND	GROUND

ALL ANALOG INPUTS WILL BE 4-20 MA ONLY. DIGITAL OUTPUT RELAYS WILL BE ELECTRICALLY ENERGIZED AND MOMENTARILY HELD

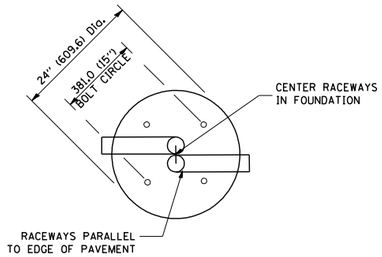
MIXED I/O MODULE MODEL NUMBER V436

FILE NAME =	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 08-19-04	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 200AMP (DUAL) RADIO SCADA	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwidot\drivakosgn\d0108315\be205.dgn		DRAWN -	REVISED - R. TOMSONS 05-11-09						580	428
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - R. TOMSONS 03-10-10				BE-205		CONTRACT NO. 60X56	
	PLOT DATE = 3/29/2012	DATE -	REVISED - R. TOMSONS 03-29-12		SCALE: NONE SHEET NO. 4 OF 4 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

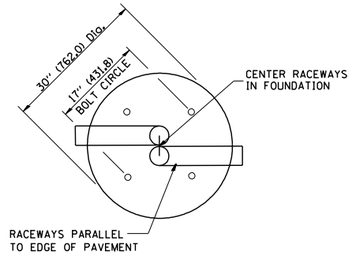
be205.dgn 3/29/2012 11:17:23 AM U:\pwidot\drivakosgn

LIGHT POLE FOUNDATION DEPTH TABLE
40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

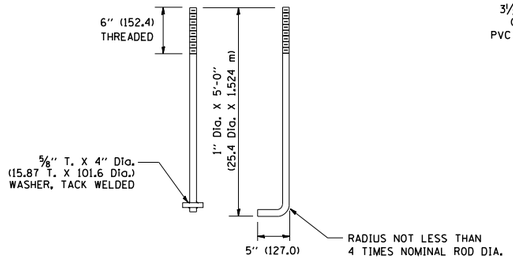
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	13'-0" (3.96 m)	15'-0" (4.57 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-6" (2.09 m)	10'-9" (3.23 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-0" (2.13 m)	8'-0" (2.44 m)
LOOSE SAND Ø = 34°	9'-0" (2.74 m)	10'-0" (3.05 m)
MEDIUM SAND Ø = 37.5°	8'-3" (2.52 m)	9'-0" (2.74 m)
DENSE SAND Ø = 40°	7'-9" (2.36 m)	9'-0" (2.74 m)



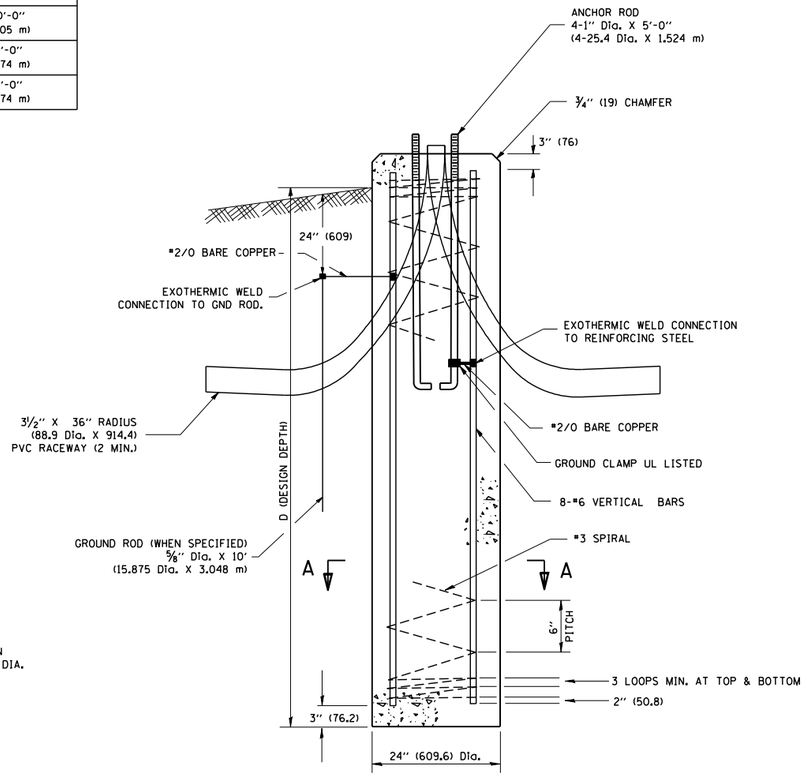
TOP VIEW



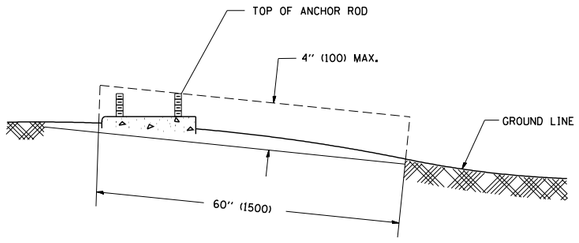
TOP VIEW



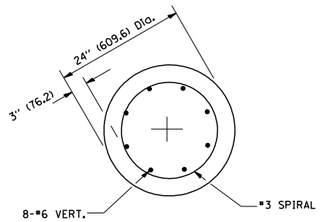
ANCHOR ROD DETAIL



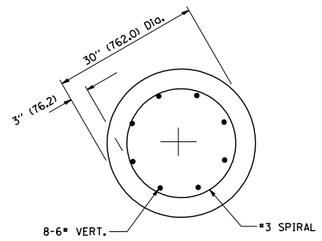
FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED 3/4-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2 3/4" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

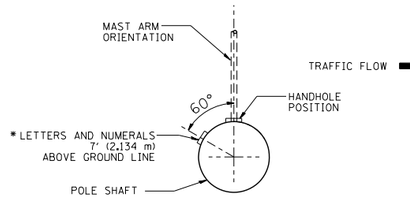
FILE NAME = W:\diststd\22x34\be301.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 04-22-02
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

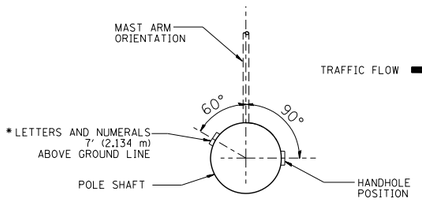
LIGHT POLE FOUNDATION
40' (12.192 m) TO 47 1/2' (14.478 m) M.H. 15" (381 mm) BOLT CIRCLE

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

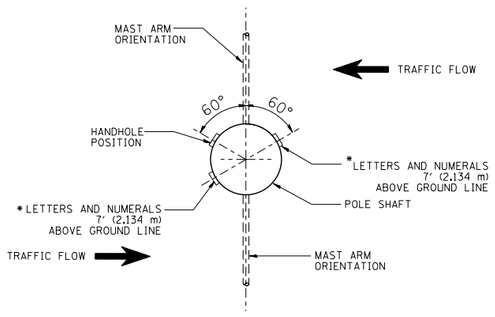
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	429
	BE-301		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



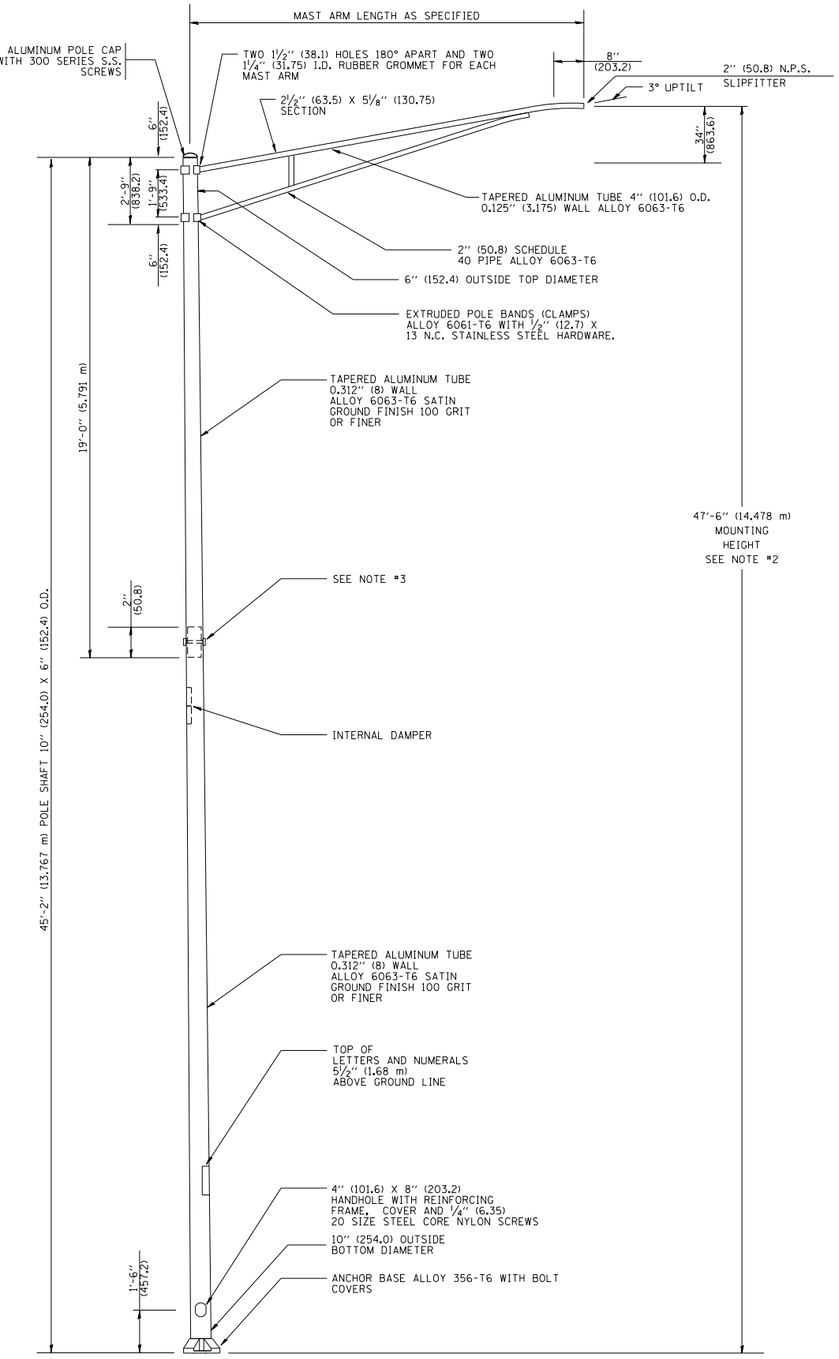
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL

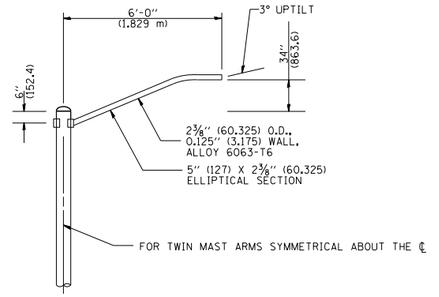


POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



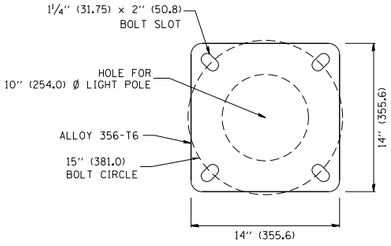


6' (1.8 m) SINGLE MEMBER MAST ARM

(N.T.S.)

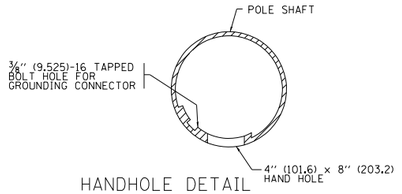
NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23, T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



LIGHT POLE BASE PLATE DETAIL

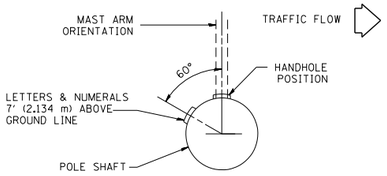
15 INCH (381.0) BOLT CIRCLE



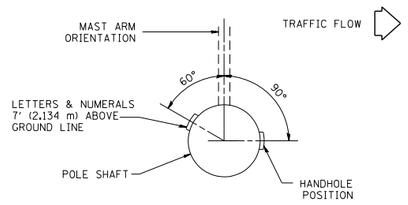
HANDHOLE DETAIL

(N.T.S.)

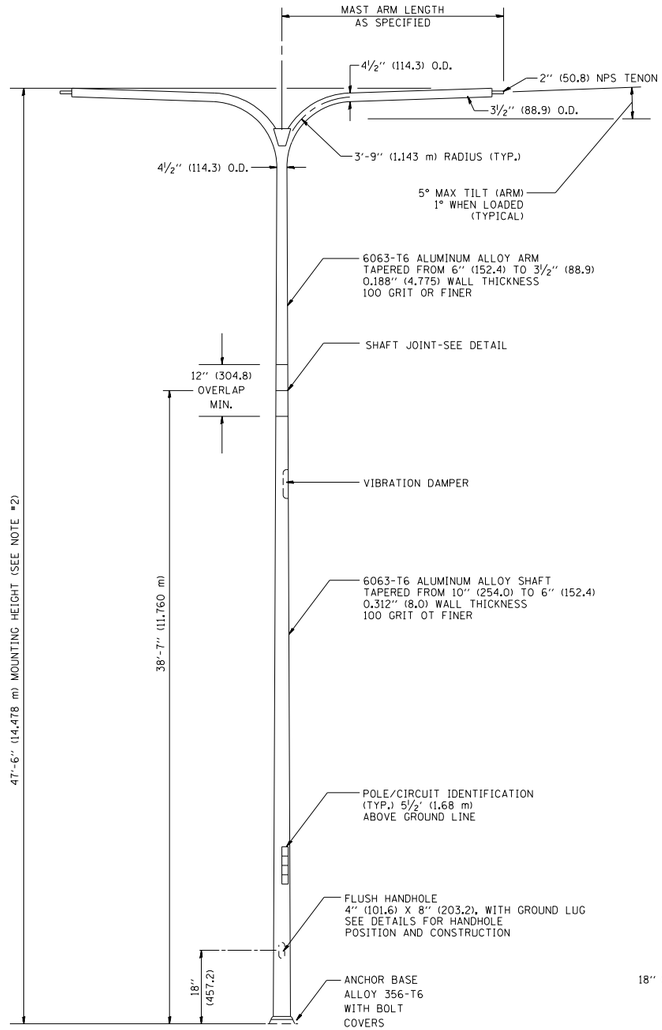
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\be400.dgn	USER NAME = drivakosgn	DESIGNED -	REVISED - R. TOMSONS 09-06-00	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ALUMINUM LIGHT POLE 47'-6" (14.478 m) MOUNTING HEIGHT	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000 ' / in.	DRAWN -	REVISED - R. TOMSONS 09-03-03						580	430
	PLOT DATE = 2/27/2013	CHECKED -	REVISED - R. TOMSONS 01-18-13				BE-400		CONTRACT NO. 60X56	
		DATE -	REVISED -		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



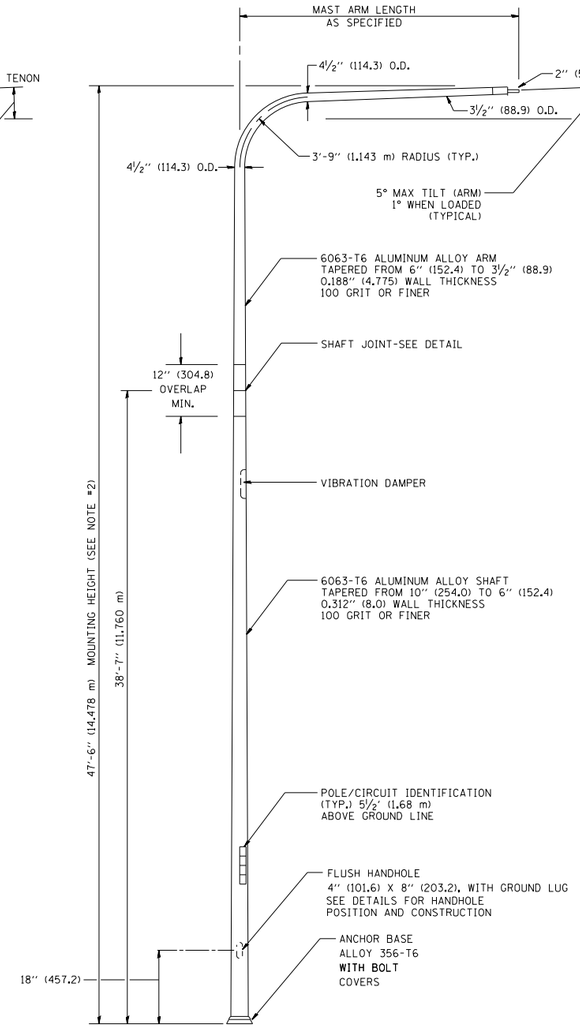
POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES MOUNTED ON BRIDGE PARAPET OR BARRIER WALL



POSITION OF HANDHOLE AND POLE NUMBER FOR SINGLE MAST ARM POLES



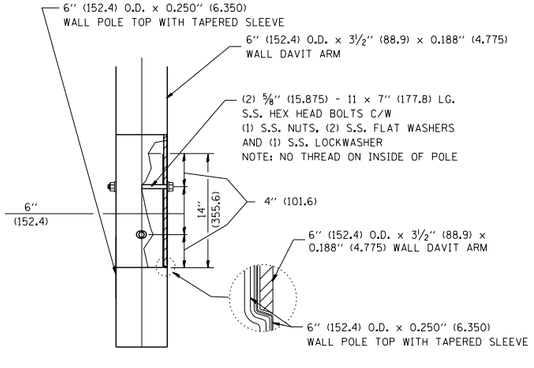
TWIN ARM POLE



SINGLE ARM POLE

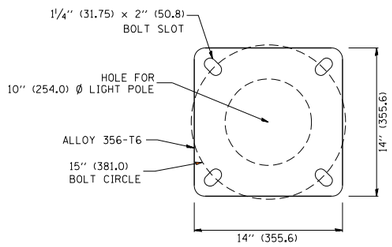
NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM THE CENTERLINE OF THE TENON TO THE BOTTOM OF THE ANCHOR BASE.
3. TWO PIECE SHAFT WILL BE MATCHED MARKED AND INTERCHANGEABLE BETWEEN DIFFERENT UNITS. FIELD DRILLING OF THE HOLES WILL NOT BE ALLOWED.
4. THE LIGHT POLE WILL MEET AASHTO DESIGN CRITERIA AS SPECIFIED.
5. THE INSTALLING CONTRACTOR WILL PROVIDE A UL LISTED GROUNDING CONNECTOR. BURNDY K2C23. T&B SP4DL OR APPROVED EQUAL.
6. LIGHT POLES WILL NOT BE INSTALLED WITHOUT MAST ARMS AND LUMINAIRES.
7. LIGHT POLES WILL BE SET PLUMB ON THE FOUNDATION WITHOUT THE USE OF LEVELING NUTS, WASHERS OR SHIMS.
8. LIGHTING UNIT IDENTIFICATION NUMBERS SHALL BE INSTALLED BEFORE THE LIGHTING UNIT IS ENERGIZED.



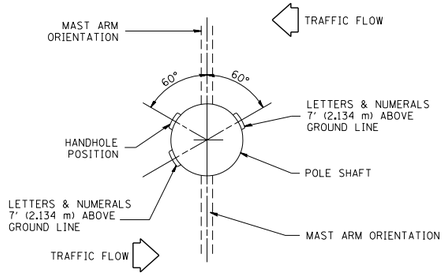
DAVIT ARM CONNECTION

[14" (355.6) OVERLAP SHOWN]

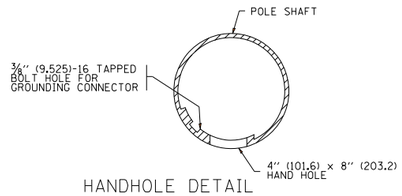


LIGHT POLE BASE PLATE DETAIL

(FOR POLE MOUNTED ON 15 INCH (381.0) BOLT CIRCLE FOUNDATION)



POSITION OF HANDHOLE AND POLE NUMBER FOR TWIN MAST ARM POLES



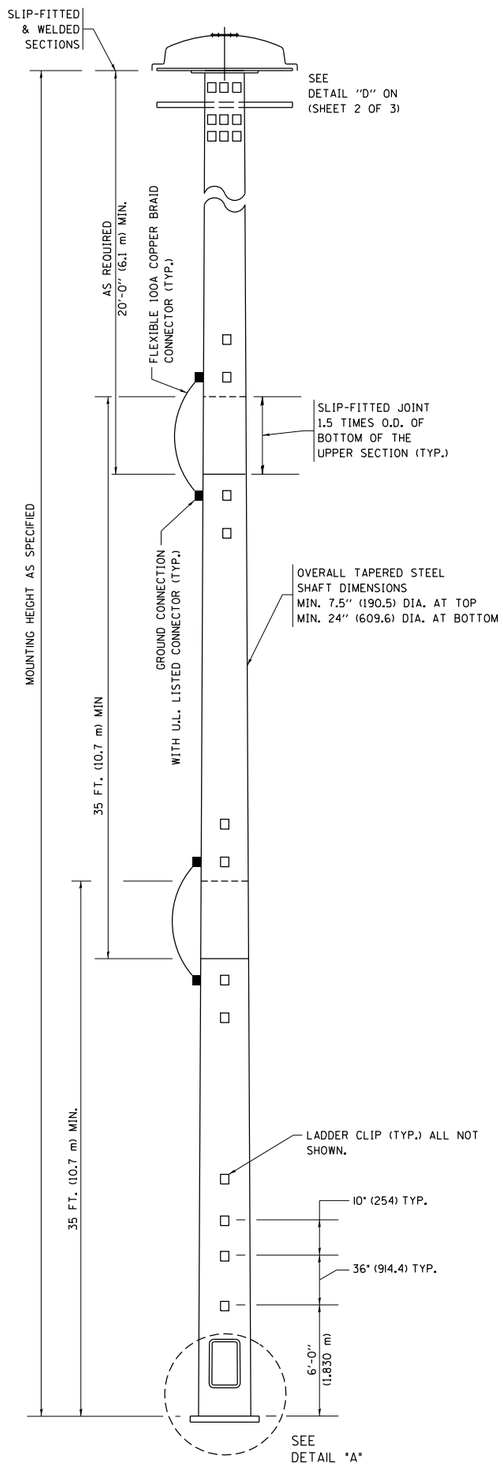
HANDHOLE DETAIL

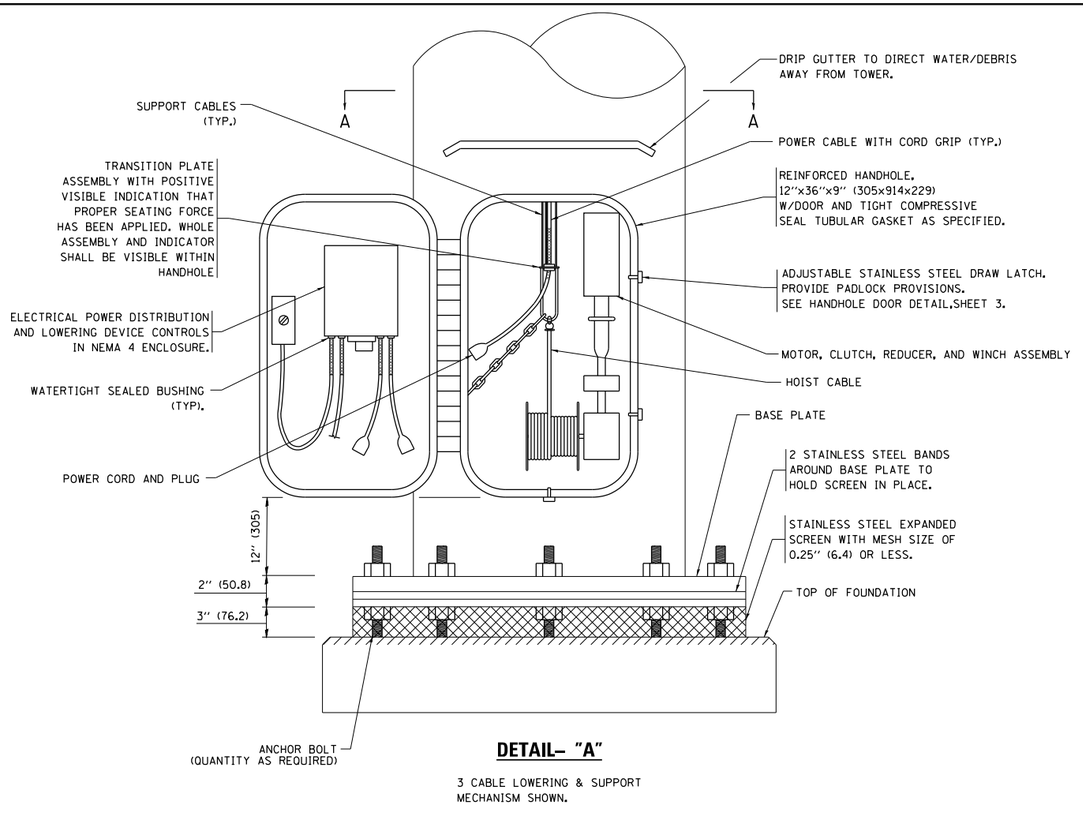
(N.T.S.)

FILE NAME = c:\pw_work\pwidot\leysa\d0108315\be410.dgn	USER NAME = leysa	DESIGNED -	REVISED - D. DREW 05-07-92	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**DAVIT LIGHT POLE 47'-6" (14.478 m) MOUNTING HEIGHT**	F.A. RTE.	SECTION:
		DRAWN - LEY	REVISED - R. TOMSONS 09-06-00				
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. TOMSONS 09-02-03				BE-410
	PLOT DATE = 4/4/2013	DATE -	REVISED - R. TOMSONS 01-18-13		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1 / ILLINOIS / FED. AID PROJECT	

COUNTY	TOTAL SHEETS	SHEET NO.
	580	431
CONTRACT NO. 60X56		

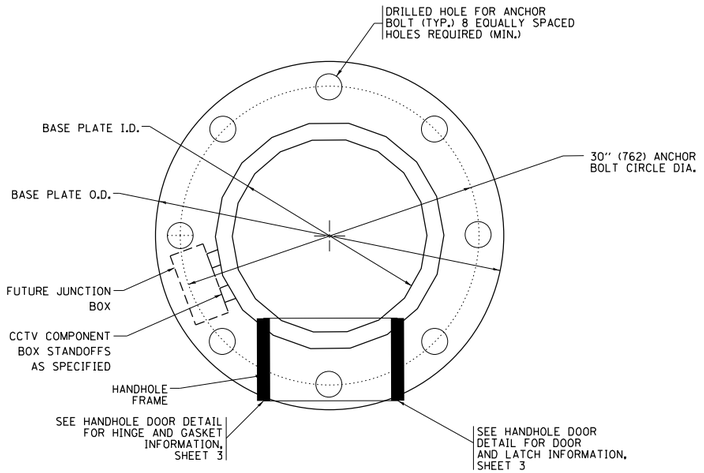
be410.dgn 4/4/2013 4:45:36 PM User=leysa





DETAIL– "A"

3 CABLE LOWERING & SUPPORT MECHANISM SHOWN.



SECTION – A–A

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE DESIGN SHALL BE BASED UPON AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS, HOWEVER THE WIDTH OF REINFORCED OPENING REQUIREMENT IN CHAPTER 5, SECTION 5.6.6.1 SHALL NOT APPLY. LIGHT TOWERS SHALL BE DESIGNED FOR ADT > 10,000, RISK CATEGORY TYPICAL, AND FATIGUE IMPORTANCE CATEGORY I.

   A MINIMUM TOTAL COMBINED LUMINAIRE WEIGHT OF 600 LB (272 KG) SHALL BE USED PLUS A COMBINED HOOD AREA AND LOWERING RING WEIGHT OF 400 LB (181 KG). THE ASSOCIATED TOTAL PROJECTED AREA SHALL BE 24 SQ FT (2.23 SQ M) AND 10 SQ FT (0.93 SQ.) RESPECTIVELY.
3. ALL TOWER SHAFT COMPONENTS, INCLUDING, BUT NOT LIMITED TO THE SHAFT SECTIONS, BASE PLATE, LADDER CLIPS, HANDHOLE DOOR, HANDHOLE REINFORCING, RAIN GUTTER, AND BASE PLATE, SHALL BE FABRICATED FROM HIGH-STRENGTH, LOW ALLOY, STEEL WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI (345 K PA) ACCORDING TO AASHTO M 270 (ASTM A 572 GR50)
4. THE ELECTRIC MOTOR, MOTOR GEAR REDUCER, WINCH DRUM ASSEMBLY AND AUTOMATIC SHUTOFF SWITCH OF THE LOWERING DEVICE SHALL BE ACCESSIBLE FROM THE FRONT OF THE TOWER FOR EASY REMOVAL AND MAINTENANCE. ALL COMPONENTS SHALL BE REMOVABLE THROUGH THE HANDHOLE.
5. THE LIGHT TOWER SHAFT SHALL HAVE LADDER CLIPS. CLIPS SHALL BEGIN 6 FT. (1.8 m) ABOVE THE BASE PLATE WITH ALTERNATE 36 INCH) (900) AND 10 INCH (250) SPACING THEREAFTER, FOR THE ENTIRE LENGTH. THE TOP 10 FT. (3 m) OF THE POLE SHAFT SHALL HAVE 3 SETS OF CLIPS. EACH SET OF CLIPS SHALL BE 120 DEGREES APART. CLIPS SHALL BE 0.25 X 2 INCHES (6 X 50) WELDED TO THE SHAFT TO PRODUCE A SLOT 0.625 INCHES (15.9) DEEP AND 1.625 INCHES (41.3) LONG. THE TOP INSIDE EDGE SHALL BE CHAMFERED.
6. A COPPER BONDING JUMPER SHALL BOND SLIP-FIT POLE SECTIONS TOGETHER WITH A FLAT COPPER MESH AND STAINLESS STEEL GROUND LUGS.
7. ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
8. THE ENTIRE TOWER INCLUDING THE SHAFT, HANDHOLE, HANDHOLE DOOR, BASE PLATE AND ALL OTHER ELEMENTS WELDED TO THE SHAFT SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 (ASTM A 123). THE LUMINAIRE RING SHALL BE PRIMED AND PAINTED AS SPECIFIED OR BE STAINLESS STEEL
9. ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.
10. THE LIGHT TOWER SHALL BE STRAIGHT AND CENTERED ON ITS LONGITUDINAL AXIS, UNDER NO-WIND CONDITIONS, SO WHEN EXAMINED WITH A TRANSIT FROM ANY DIRECTION, THE DEVIATION FROM THE NORMAL SHALL NOT EXCEED $\frac{1}{8}$ IN. IN 3 FT (2 mm IN 1 m) WITHIN ANY 5 FT (1.5 m) OF HEIGHT, WITH TOTAL DEVIATION NOT TO EXCEED 3 IN. (75) FROM THE VERTICAL AXIS THROUGH THE CENTER OF THE POLE BASE.
11. PVC CONDUIT WILL NOT BE ALLOWED FOR ANY LIGHT TOWER COMPONENT.
12. COUNTER WEIGHTS TO BE INCLUDED AS A PART OF THE LIGHT TOWER PAY ITEM.

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\DRAWN\CADData\CADsheets\be505.dgn	USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 05-11-09
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. TOMSONS 09-02-10
Default	PLOT DATE = 4/29/2016	DATE -	REVISED - R. TOMSONS 02-27-13
			REVISED - R. TOMSONS 04-29-16

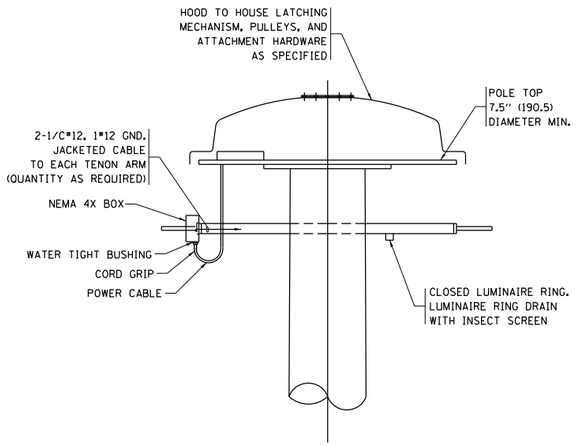
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
90 FT TO 110 FT (27 m TO 34 m)

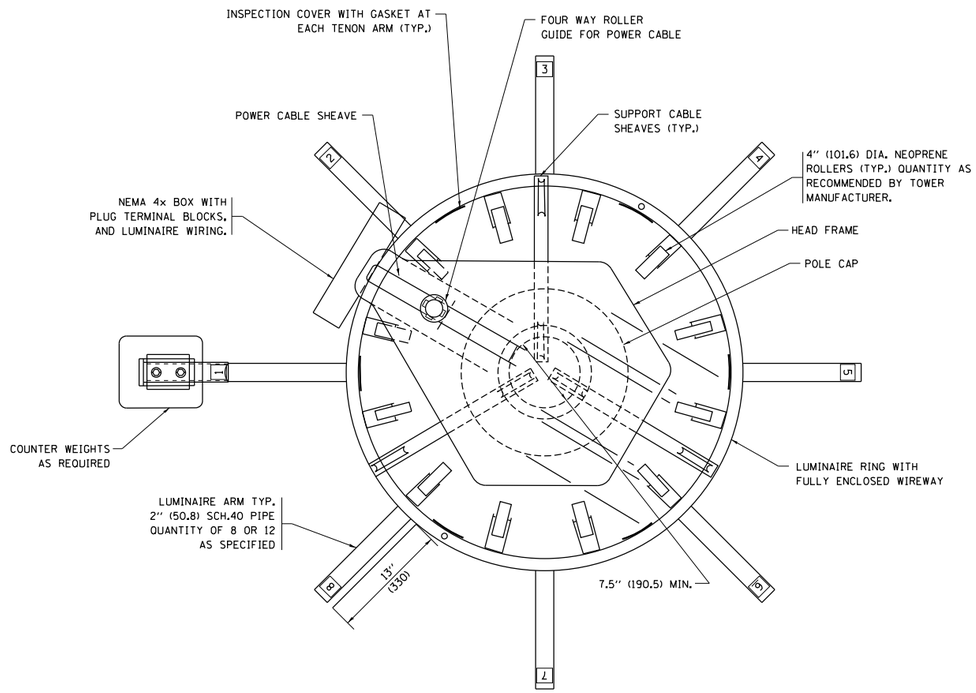
SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

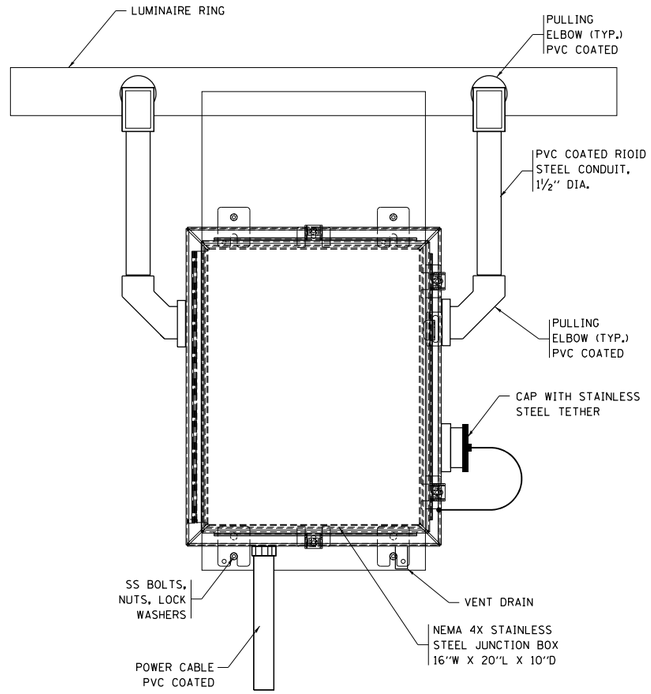
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	431A
	BE–505	CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

be505.dgn 4/29/2016 8:42:49 AM Users\footemj

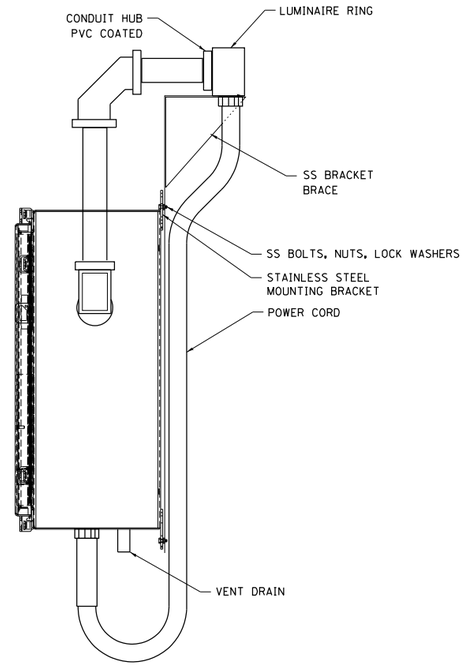


DETAIL-"D"





FRONT VIEW
N.T.S.



SIDE VIEW
N.T.S.

LUMINAIRE RING TERMINAL BOX

NOTES:

1. LUMINAIRE WIRES SHALL EXTEND 24 INCHES (609mm) LONGER THAN THE RESPECTIVE TENON ARM AND SHALL BE TRAINED BACK INTO THE ARM WHICH SHALL THEN BE CLOSED WITH A CAP AS SPECIFIED ALL WIRES SHALL BE CAPPED WITH HEAT SHRINK INSULATING BOOTS, CRIMP CAPS ARE UNACCEPTABLE. ALL RING WIRES SHALL BE TAGGED WITH WIRE MARKERS AT BOTH ENDS THE TENON ARMS SHALL ALSO BE TAGGED CORRESPONDING TO THE WIRING CONTAINED WITHIN.
2. SPLICING WILL NOT BE ALLOWED WITHIN THE LUMINAIRE RING.
3. ALL TOWER SHAFT HARDWARE, SUCH AS GROUND LUGS, JUNCTION BOXES, HARDWARE FOR THE HANDHOLE DOOR, INCLUDING THE HANDLE/LATCH MECHANISM, HINGE AND DOOR STOP, SHALL BE STAINLESS STEEL. ALL CONDUIT AND CONDUIT FITTINGS SHALL BE PVC COATED GALVANIZED STEEL.
4. ALL MULTI-CONDUCTOR CABLES SHALL BE FITTED WITH A HEAT-SHRINK MULTI-LEG BOOT. THE BOOT SHALL MEET MILITARY SPECIFICATION MIL-I-81765/1.

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\Drawn\CADData\CADsheets\be505.dgn	USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 05-11-09
		DRAWN -	REVISED - R. TOMSONS 09-02-10
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. TOMSONS 02-27-13
Default	PLOT DATE = 4/29/2016	DATE -	REVISED - R. TOMSONS 04-29-16

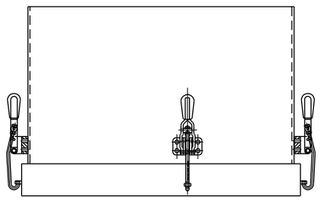
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
90 FT TO 110 FT (27 m TO 34 m)

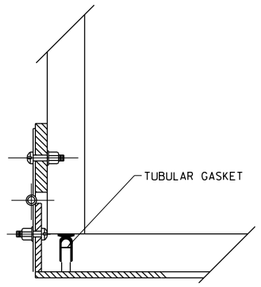
SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	431B
	BE-505		CONTRACT NO. 60X56	
	ILLINOIS	FED. AID PROJECT		

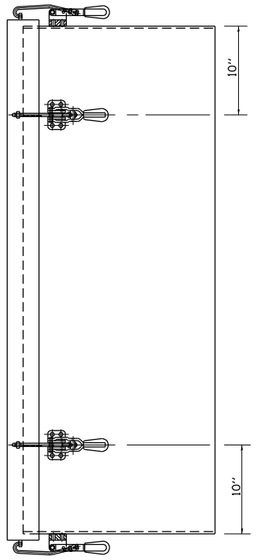
be505.dgn 4/29/2016 8:43:13 AM Users\footemj



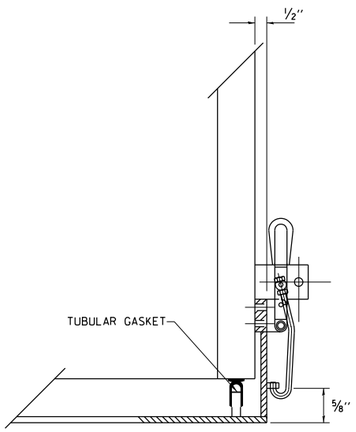
TOP VIEW



HINGE DETAIL

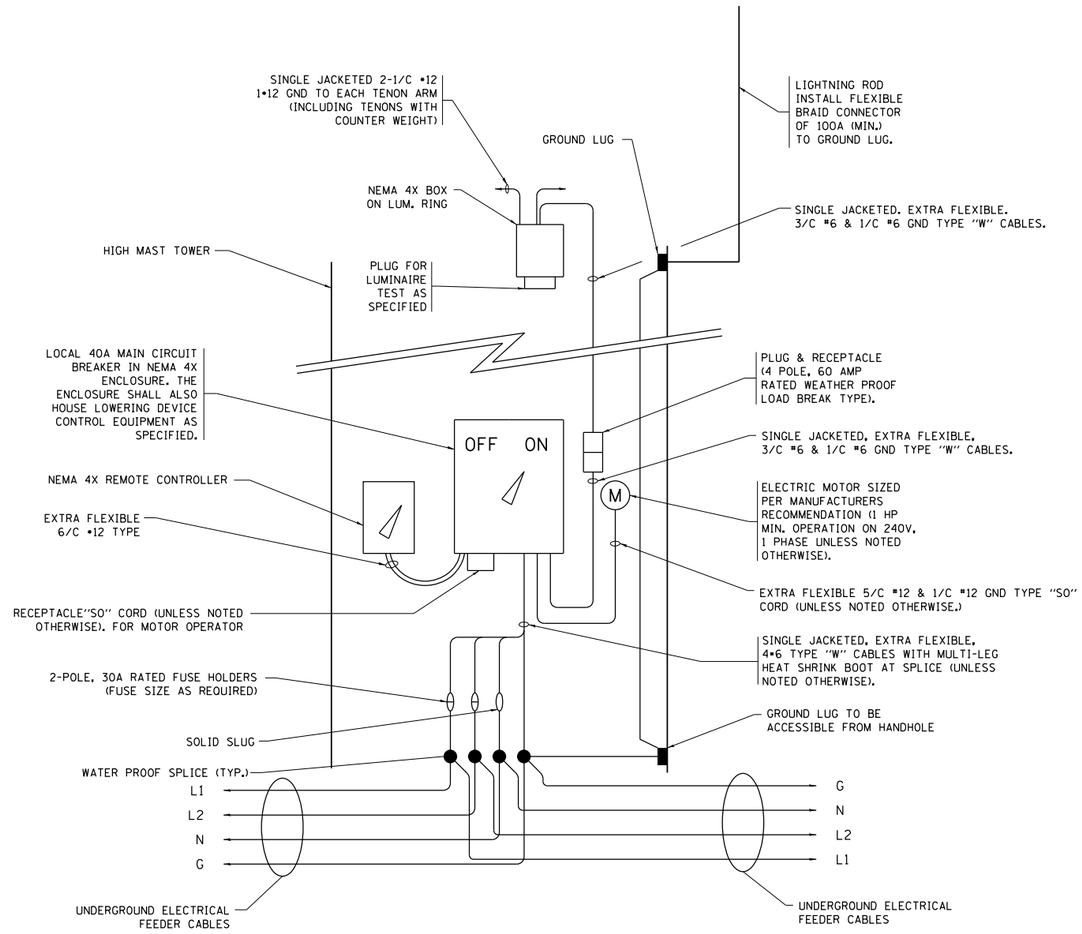


SIDE VIEW



LATCH DETAIL

HANDHOLE DOOR DETAILS



HIGH MAST POLE WIRING DIAGRAM

LIGHT TOWER NUMBERING DETAIL

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\DistStandards\CADData\CADsheets\be505.dgn	USER NAME = footemj	DESIGNED -	REVISED - 03-22-10
		DRAWN -	REVISED - 09-02-10
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - 02-27-13
Default	PLOT DATE = 4/29/2016	DATE -	REVISED - R. TOMSONS 04-29-16

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

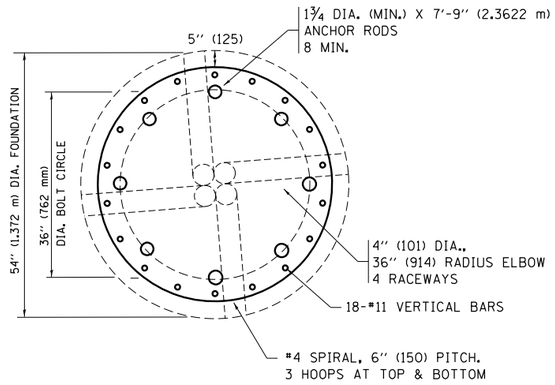
HIGH MAST LIGHT TOWER
120 FT TO 140 FT (36 m TO 43 m)

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

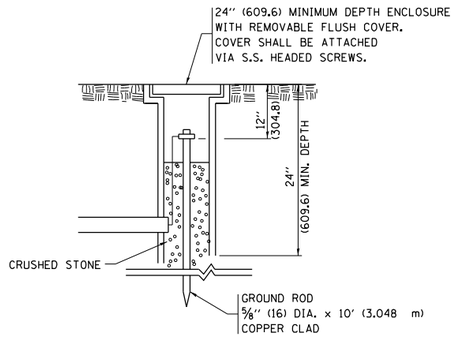
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	431C
BE-505		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

be505.dgn 4/29/2016 8:43:45 AM User:footemj

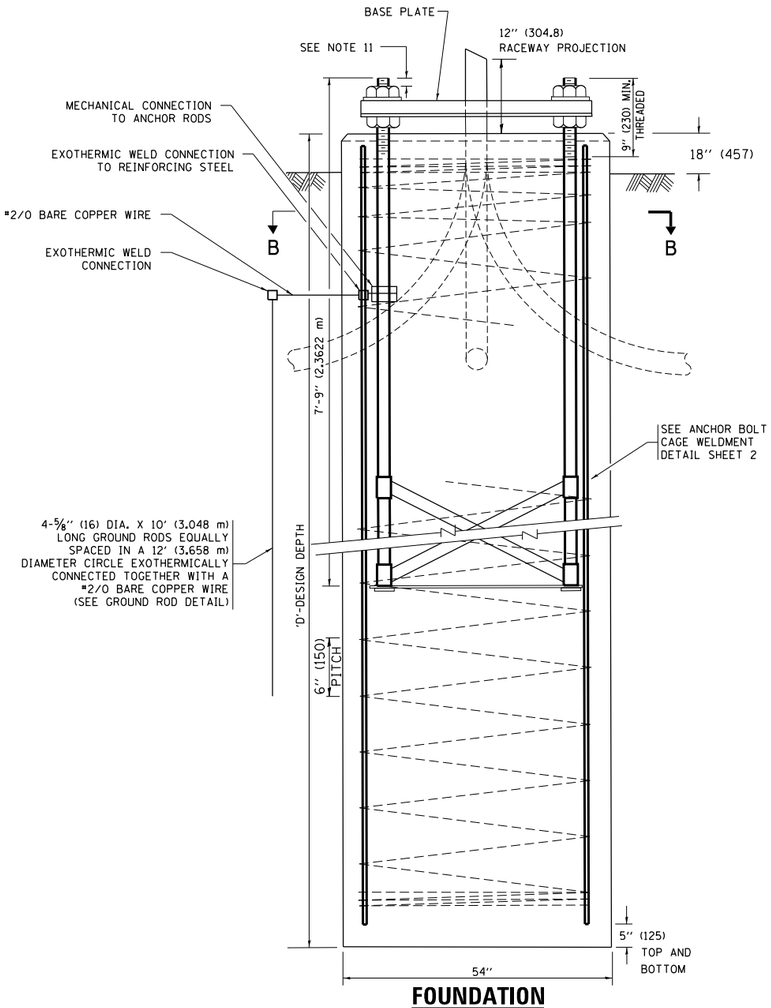
SHAFT LENGTH (D) TABLE					
SOIL CONSISTENCY		AVERAGE STRENGTH	LIGHT TOWER MOUNTING HEIGHT		
		Qu In tsf (Qu In kPa)	120 FT. (37 m)	130 FT. (40 m)	140 FT. (43 m)
	SOFT	<0.5 (<50)	25'-0" (7.6 m)	26'-6" (8.0 m)	27'-6" (8.3 m)
	MEDIUM	0.5 TO 1 (50 to 100)	20'-6" (6.2 m)	21'-6" (6.4 m)	22'-0" (6.7 m)
COHESIVE	STIFF	1 TO 2 (100 TO 200)	17'-6" (5.2 m)	18'-0" (5.4 m)	18'-6" (5.5 m)
	VERY STIFF	2 TO 4 (200 TO 400)	15'-0" (4,5 m)	15'-6" (4.6 m)	16'-0" (4.7 m)
	HARD	>4 (>400)	13'-6" (4.0 m)	13'-6" (4.1 m)	14'-0" (4.2 m)
		N In BLOWS/FT. (N In BLOWS/0.3m)			
	VERY LOOSE	<5 (<5)	19'-0" (6.3 m)	20'-0" (6.0 m)	20'-6" (6.2 m)
	LOOSE	5 TO 10 (5 TO 10)	17'-6" (5.7 m)	18'-0" (5.5 m)	18'-6" (5.6 m)
GRANULAR	MEDIUM	10 TO 25 (10 TO 25)	16'-6" (5.5 m)	17'-0" (5.2 m)	17'-6" (5.3 m)
	DENSE	25 TO 50 (25 TO 50)	15'-6" (5.2 m)	16'-6" (4.9 m)	16'-6" (5.0 m)
	VERY DENSE	>50 (>50)	15'-0" (4.5 m)	15'-6" (4.7 m)	16'-0" (4.8 m)



SECTION–B–B



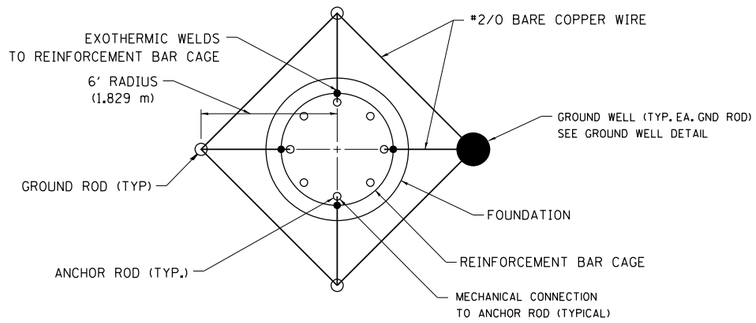
GROUND WELL DETAIL



FOUNDATION ELEVATION

DESIGN NOTES

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. THE ANCHOR RODS SHALL BE VERTICAL NO ADJUSTMENT SHALL BE ALLOWED AFTER THE FOUNDATION IS PLACED.
3. THE GAP BETWEEN THE FOUNDATION AND THE BASE PLATE SHALL BE ENCLOSED WITH A STAINLESS STEEL SCREEN FASTENED WITH A STAINLESS STEEL BAND.
4. THE TOP OF THE FOUNDATION TO 18" (450) BELOW GRADE SHALL BE FORMED.
5. SURFACE WATER WILL NOT BE PERMITTED TO ENTER THE HOLE AND ALL WATER WHICH MAY HAVE INFILTRATED INTO THE HOLE SHALL BE REMOVED BEFORE PLACING CONCRETE.
6. THE LIGHT TOWER SHALL NOT BE ERECTED UNTIL AFTER THE CONCRETE HAS BEEN CURED ACCORDING TO ARTICLE 1020.13.
7. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.9.
8. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED FOR APPROVAL WITH TOWER MANUFACTURER REQUIREMENTS.
9. REINFORCEMENT BARS SHALL BE ACCORDING TO ARTICLE 1006.10
10. TWO ANCHOR RODS OPPOSITE EACH OTHER SHALL HAVE THE ANCHOR ROD THREADS PEENED AFTER NUTS ARE INSTALLED.
11. A MINIMUM OF THREE FULL THREADS SHALL REMAIN EXPOSED AFTER LIGHT TOWER IN INSTALLED.
12. ALL GROUNDING INDICATED IN THE PLANS SHALL BE INCLUDED IN THE COST OF THE LIGHT TOWER FOUNDATION AND SHALL NOT BE PAID FOR SEPARATELY.
13. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
14. ANCHOR ROD QUANTITY, DIAMETER, AND LENGTH SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.
15. COORDINATE THE ROD CIRCLE DIAMETER OF THE TOWER WITH THE DIAMETER OF THE ANCHOR ROD CAGE.
16. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.

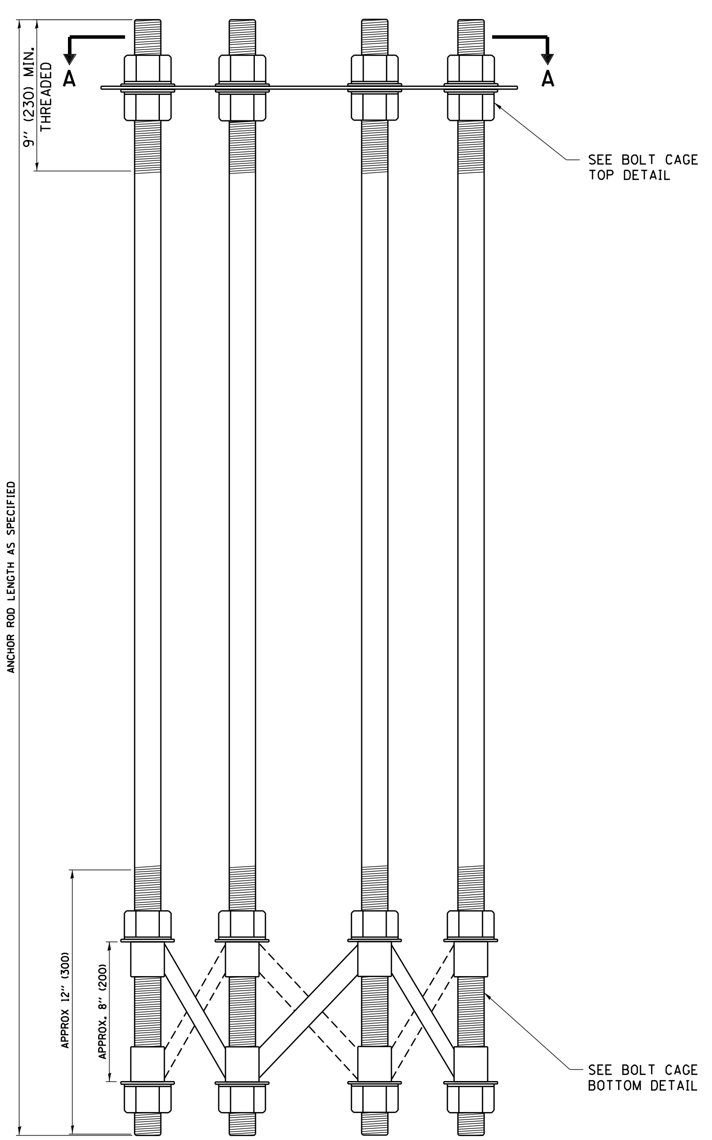


GROUND ROD DETAIL

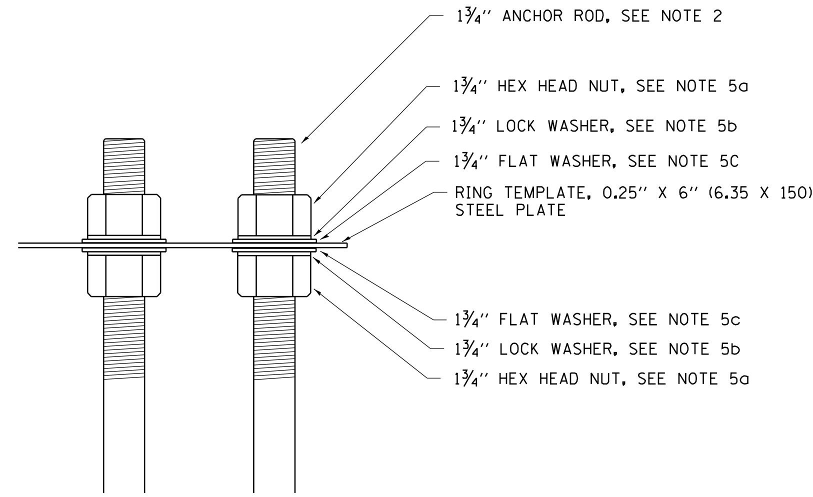
FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist\Default	USER NAME = footemj	DESIGNED -	REVISED - R. TOMSONS 09-02-10	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HIGH MAST LIGHT TOWER 120 FT TO 140 FT FOUNDATION DETAIL
	PLOT SCALE = 50.000 ' / in.	DRAWN - CADData\CADSheets\be506.dgn	REVISED - R. TOMSONS 02-27-13		
	PLOT DATE = 4/29/2016	CHECKED -	REVISED - R. TOMSONS 04-29-16		
		DATE - 03-12-10	REVISED -		SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	432
	BE–506	CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

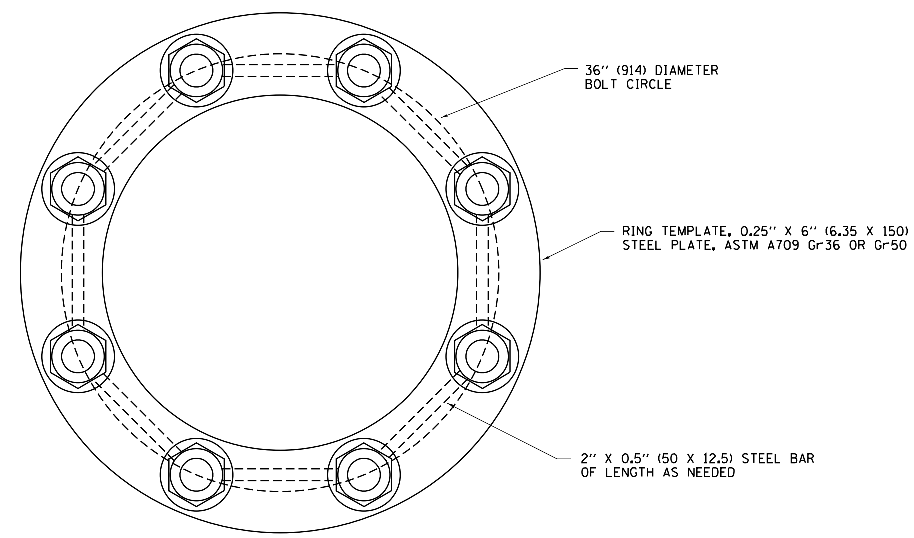
be506.dgn 4/29/2016 8:26:29 AM Users\footemj



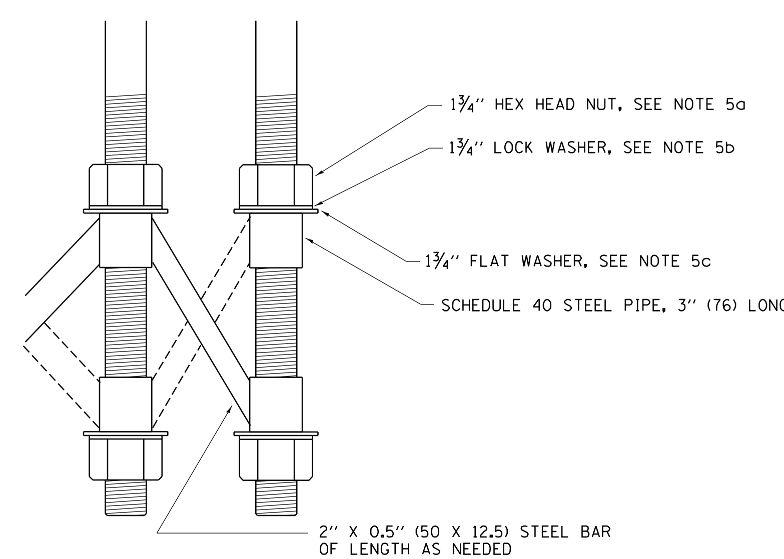
ANCHOR BOLT CAGE



BOLT CAGE TOP



SECTION A–A



BOLT CAGE BOTTOM

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ANCHOR RODS SHALL BE STRAIGHT AND SHALL BE ACCORDING TO ASTM F1554, GRADE 725 (GRADE 105) AND GALVANIZED ACCORDING TO ARTICLE 1006.09.
3. ANCHOR ROD INFORMATION SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE FULLY COORDINATED WITH TOWER MANUFACTURERS REQUIREMENTS
4. CUT NUTS, OR JAM NUTS, ARE NOT ALLOWED
5. ANCHOR ROD CAGE HARDWARE SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

   a) 1.5 (38) HEX HEAD NUTS
      AASHTO M291, GRADE C, C3, D ,DH OR DH3
      HOT DIPPED GALVANIZED AASHTO M 232

   b) 1.5 (38) HELICAL LOCK WASHERS
      ANSI/ASME B18.21.1
      I.D. 1.504 - 1.524
      O.D. 2.159 MAX.
      WIDTH 0.292 MIN.
      THICKNESS 0.375 MIN.
      HARDNESS 26-45 ROCKWELL C
      HOT DIPED GALVANIZED AASHTO M232

   c) 1.5 (38) FLAT WASHERS
      AASHTO M293
      O.D. 2.75
      I.D. 1.56
      THICKNESS 0.16 - 0.25
      HARDNESS 26-45 ROCKWELL C.
      HOT DIPED GALVANIZED AASHTO M232

6. THE SHAFT LENGTHS SHALL BE BASED ON SOIL BORINGS IN THE PLANS AND OR A DETERMINATION OF SOIL CONDITIONS BY THE ENGINEER.
7. ALL FOUNDATION REINFORCEMENT STEEL SHALL BE EPOXY COATED.
8. THE FOUNDATION SHALL BE POURED MONOLITHICALLY AND SHALL HAVE NO CONSTRUCTION JOINTS.
9. ANCHOR RODS AND ALL ASSOCIATED HARDWARE ARE SHOWN AS MINIMUMS. SIZING SHALL BE DETERMINED BY THE TOWER MANUFACTURER AND APPROVED BY THE ENGINEER. EACH FOUNDATION SHALL HAVE A MINIMUM OF 8 ANCHOR RODS.

FILE NAME =	USER NAME = footemj	DESIGNED - R. TOMSONS 09-02-10	REVISED - R. TOMSONS 02-27-13
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 1\Projects\Dist... \CADData\CADsheets\be506.dgn		DRAWN -	REVISED - R. TOMSONS 04-29-16
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -
Default	PLOT DATE = 4/29/2016	DATE -	REVISED -

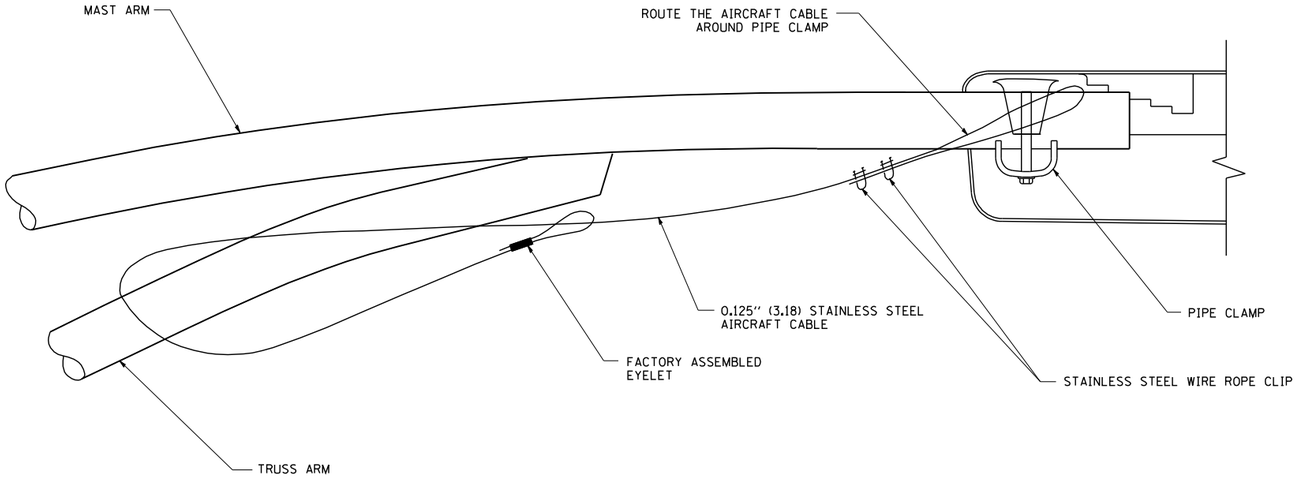
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HIGH MAST LIGHT TOWER
120 FT TO 140 FT FOUNDATION DETAIL

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

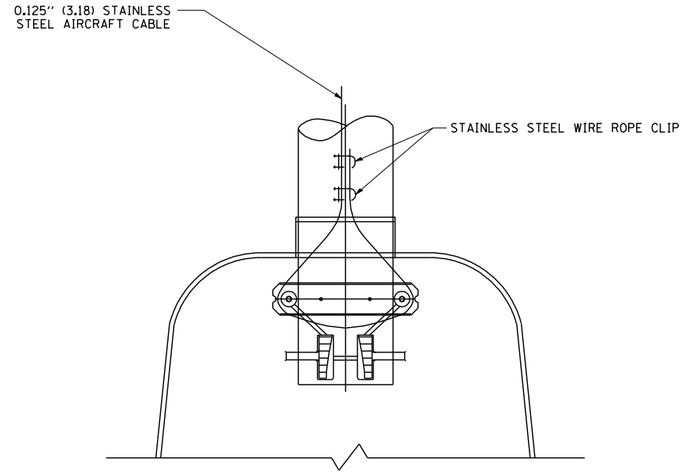
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	433
	BE-506	CONTRACT NO. 60X56		

ILLINOIS | FED. AID PROJECT



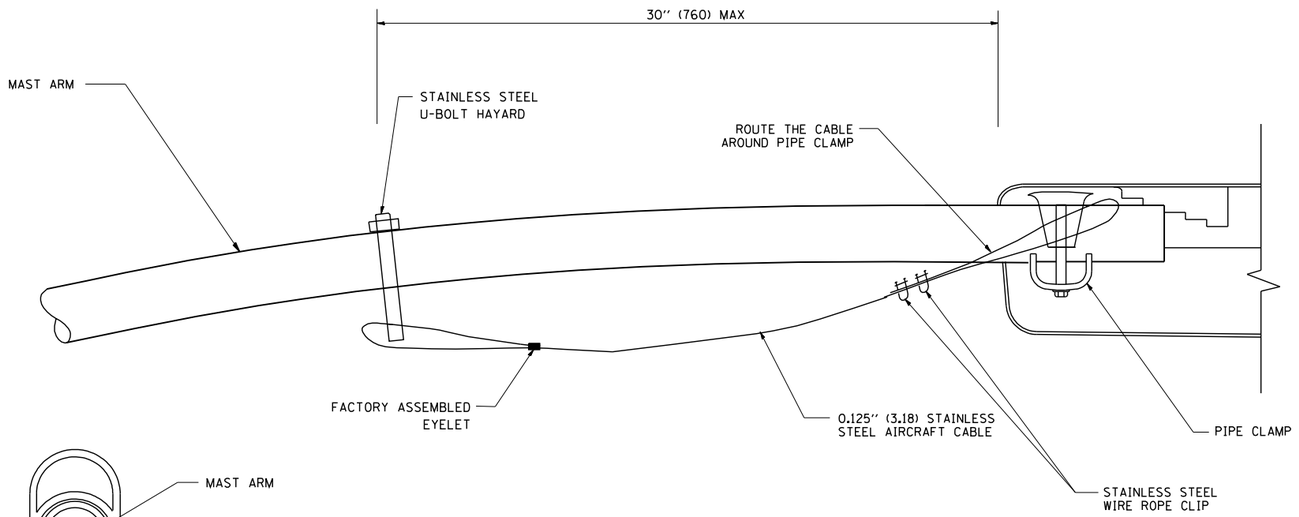
SIDE VIEW (TRUSS ARM)

N.T.S.



BOTTOM VIEW

N.T.S.



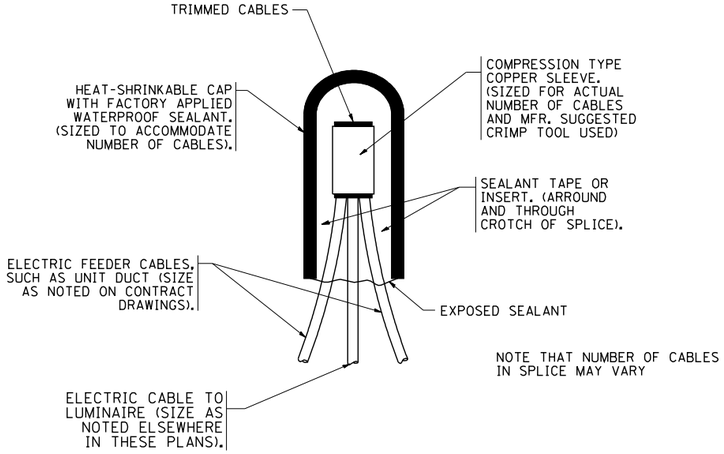
SIDE VIEW (SINGLE MEMBER OR DAVIT ARM)

N.T.S.

NOTES:

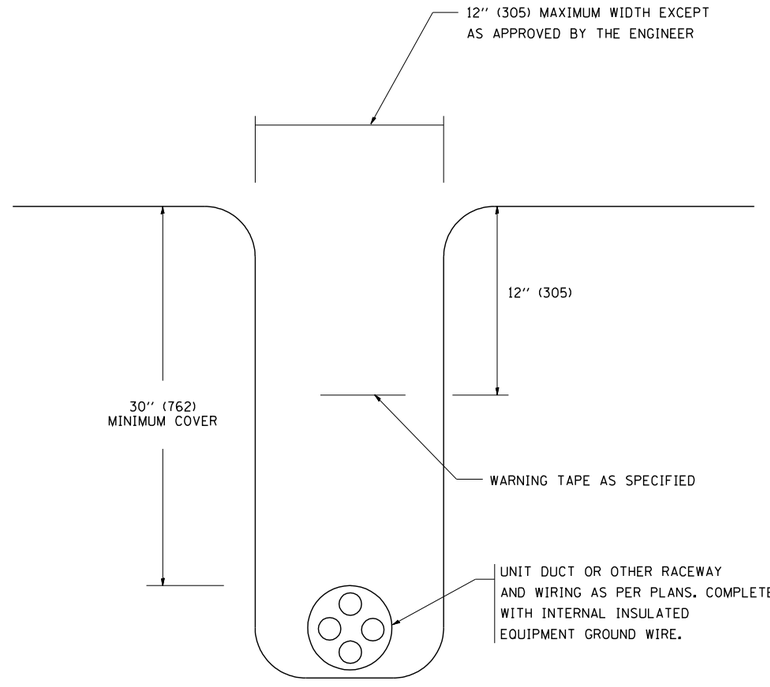
1. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.
2. CONTRACTOR SHALL ADJUST THE WIRE CLIP TO ELIMINATE ANY SLACK FROM THE WIRE ROPE.
3. THE 0.125" (3.18) STAINLESS STEEL AIRCRAFT CABLE SHALL REMAIN VISIBLE FROM THE GROUND LEVEL.
4. THE BREAKING STRENGTH OF THE CABLE SHALL BE 1700 LBS. MIN.

FILE NAME = W:\diststd\22x34\be701.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LUMINAIRE SAFETY CABLE ASSEMBLY	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						580	434
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -				BE-701		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	



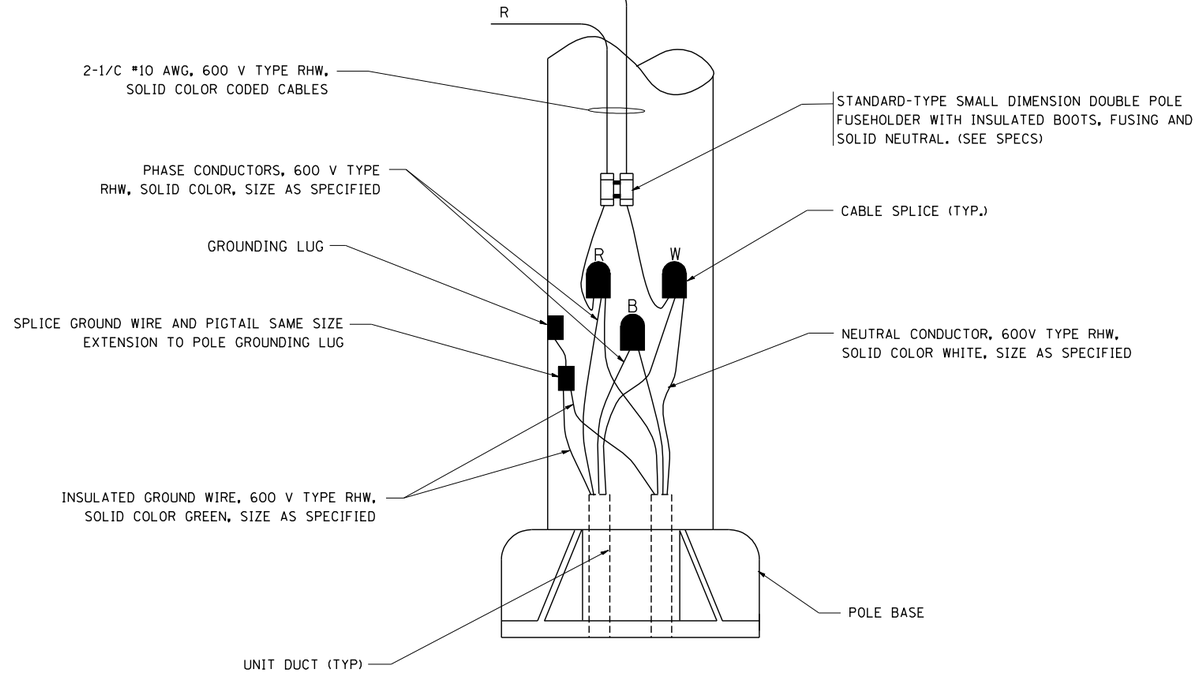
TYPICAL SPLICE DETAIL

N.T.S.



TYPICAL WIRING IN TRENCH DETAIL

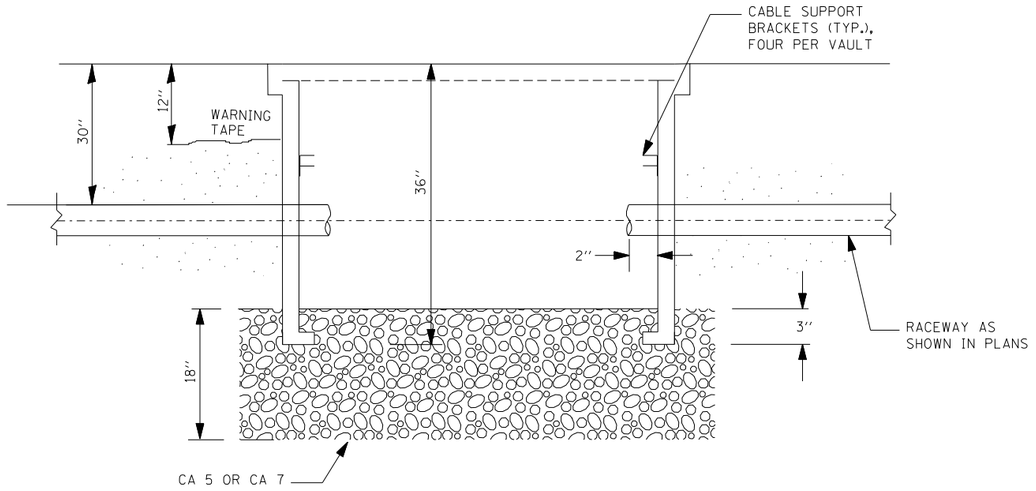
N.T.S.



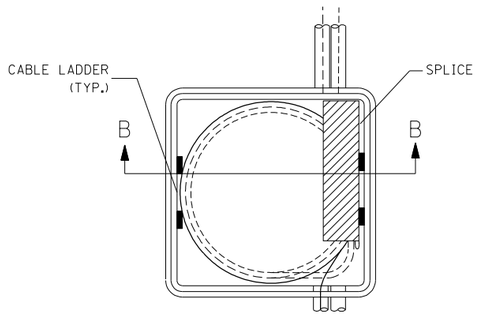
POLE WIRING DETAIL

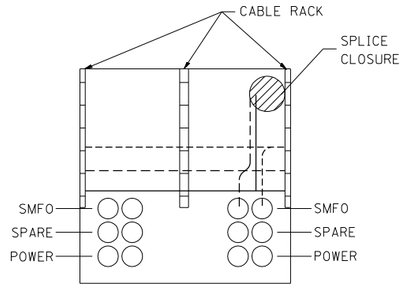
N.T.S.

FILE NAME = W:\diststd\22x34\be702.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**MISC. ELECTRICAL DETAILS SHEET A**			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -								580	435
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -						BE-702		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

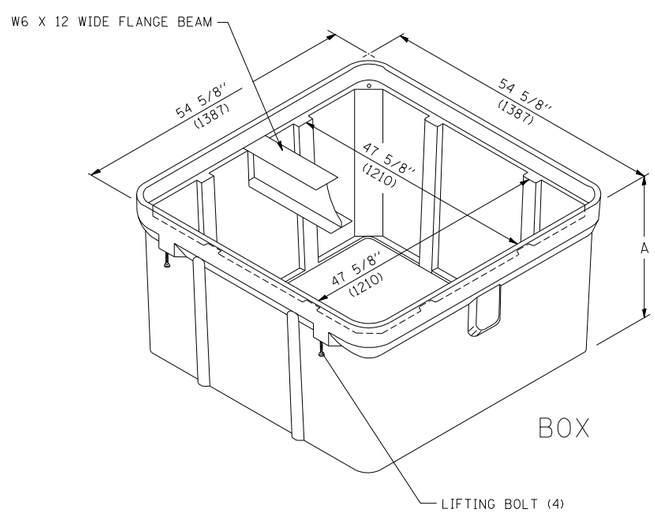


SECTION A-A



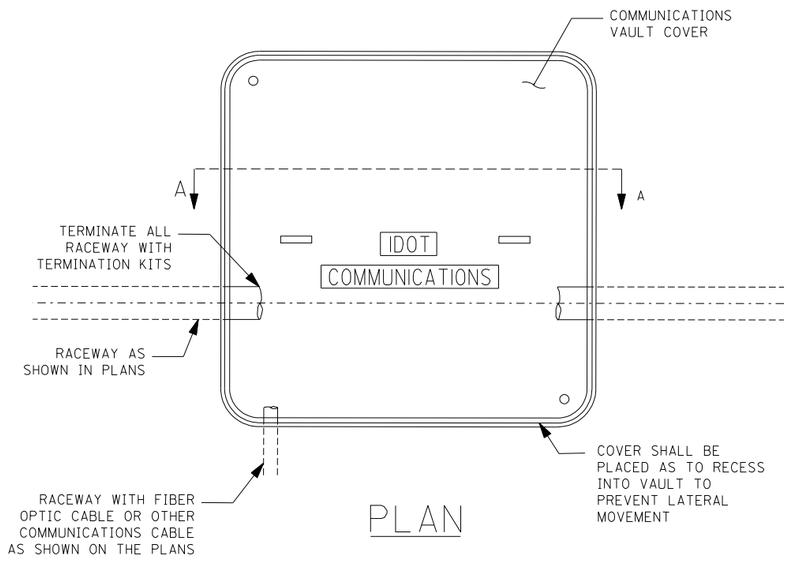


SECTION B-B



ISOMETRIC

BOX



PLAN

NOTES:

1. BOX SHALL HAVE AN OPEN BASE.
2. COVER SHALL WITHSTAND A 22,500/33,750 DESIGN/TEST LOADING AND SHALL LOCK.
3. ALL OPENINGS IN STRUCTURE MUST BE MACHINED AT TIME OF FABRICATION OR PUNCH DRIVEN AT TIME OF PLACEMENT. IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
4. FIELD PLACEMENT OF COMMUNICATIONS VAULT SHALL BE AS DIRECTED BY THE ENGINEER.
5. ALL DIMENSIONS ARE MINIMUM AND A LARGER SIZE HANDHOLE MAY BE USED, WITH THE APPROVAL OF THE ENGINEER, TO FACILITATE USING A MANUFACTURER'S STANDARD PRODUCT.

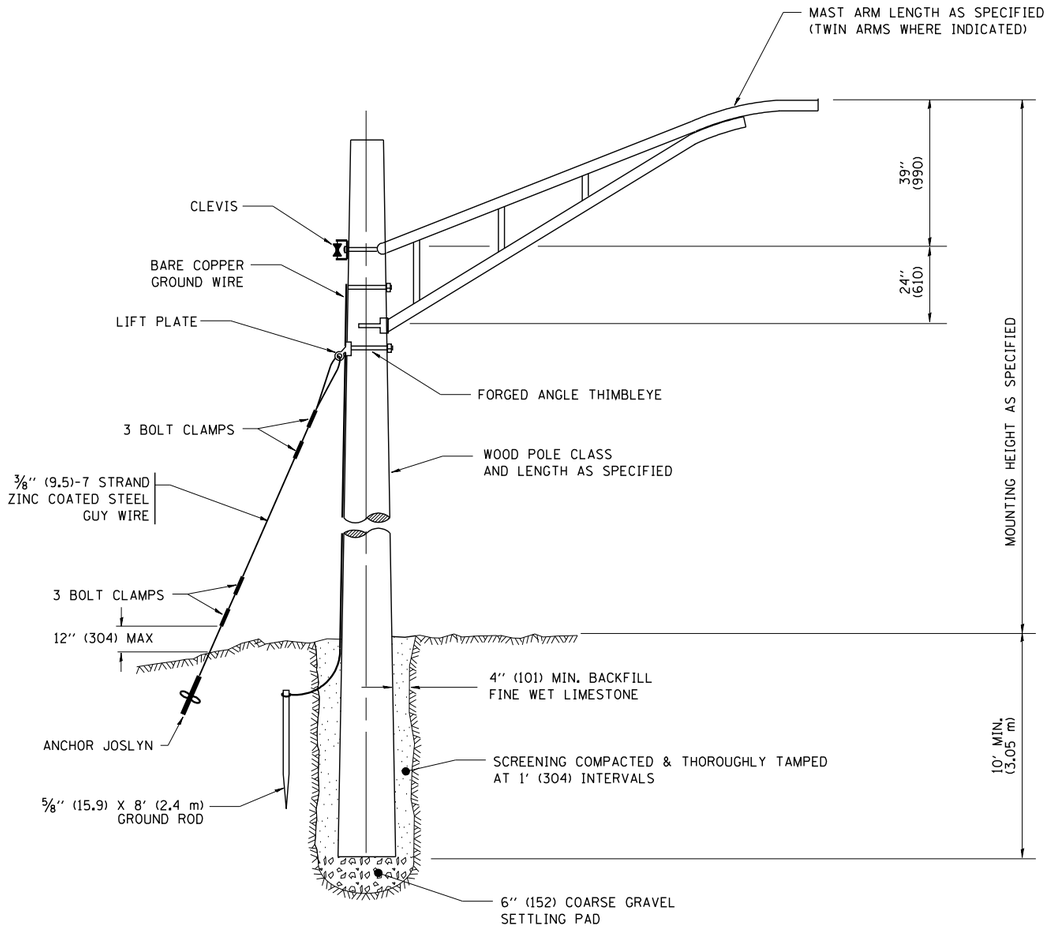
FILE NAME = c:\pw_work\PWIDOT\LEYSA\d0108315\be705.dgn	USER NAME = leysa	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 3/29/2010	DATE - 03-22-10	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

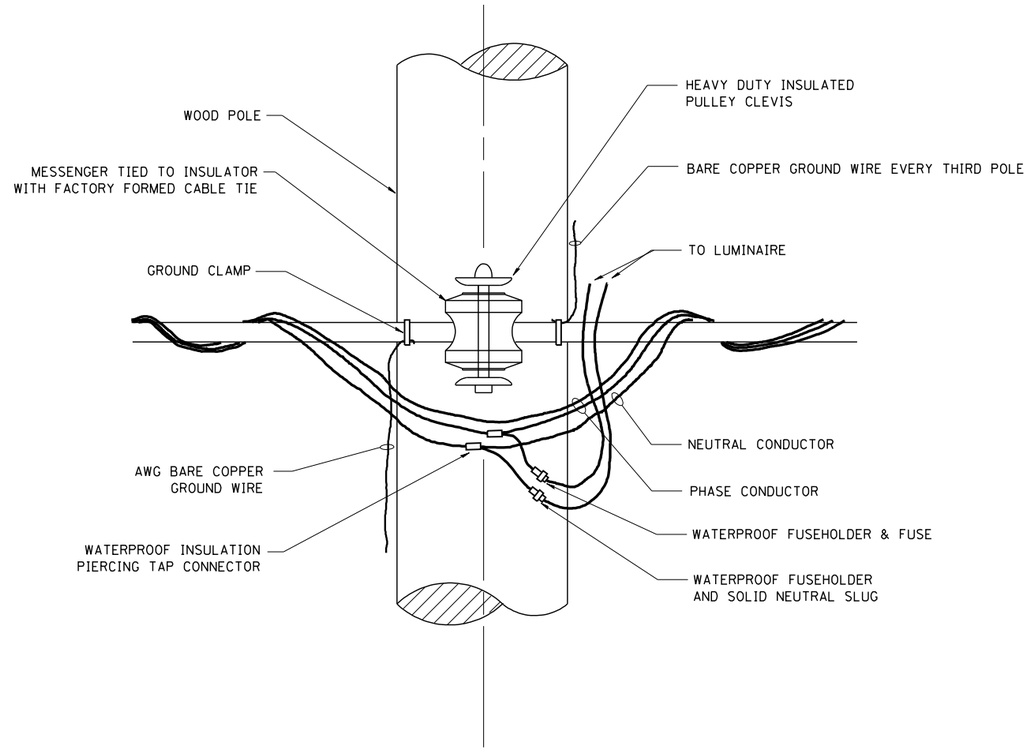
COMMUNICATIONS VAULT, COMPOSITE CONCRETE

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		*	580	436
	BE-705	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



TEMPORARY LIGHT POLE DETAIL

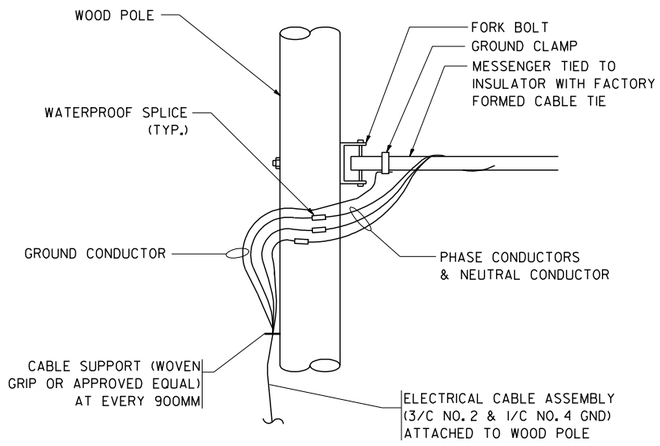


TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

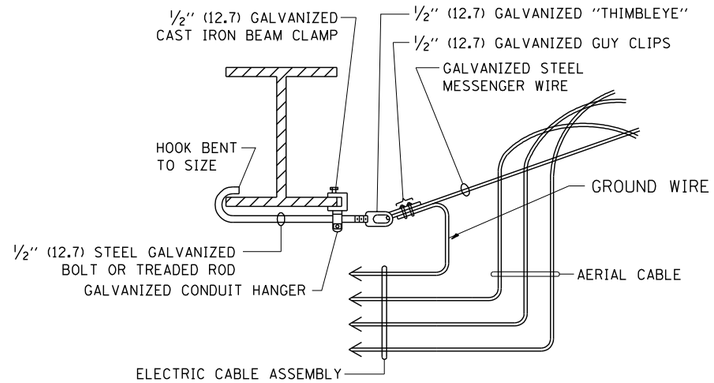
1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

FILE NAME = W:\diststd\22x34\be800.dgn	USER NAME = geglianobt	DESIGNED -	REVISED - 08-08-03	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TEMPORARY LIGHT POLE DETAILS**			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -								580	437
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -						BE-800		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



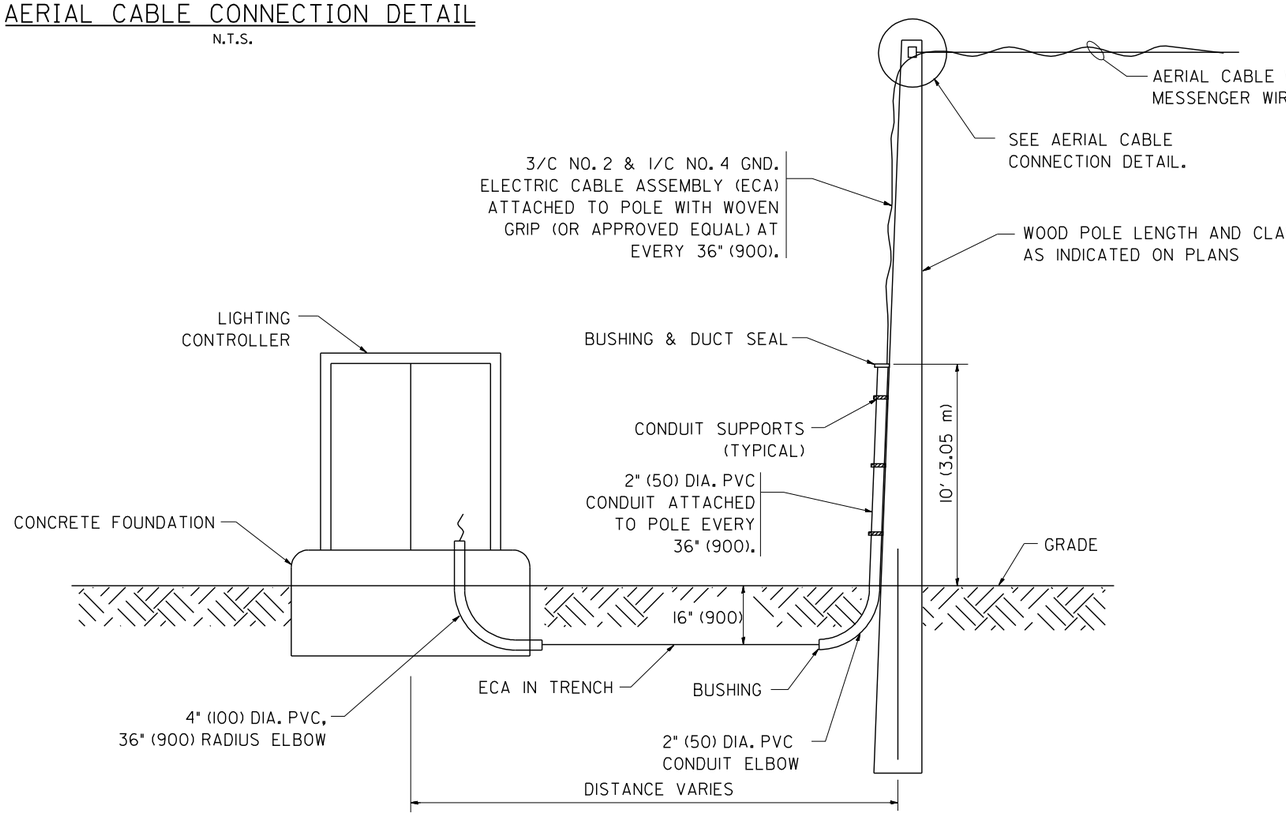
AERIAL CABLE CONNECTION DETAIL

N.T.S.



AERIAL CABLE ATTACHED TO STRUCTURE

NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

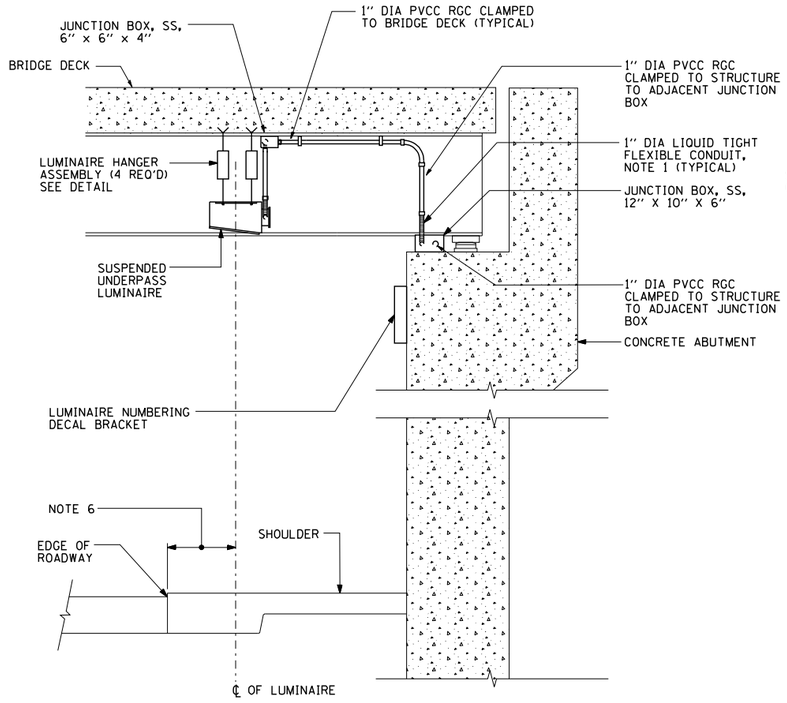
N.T.S.

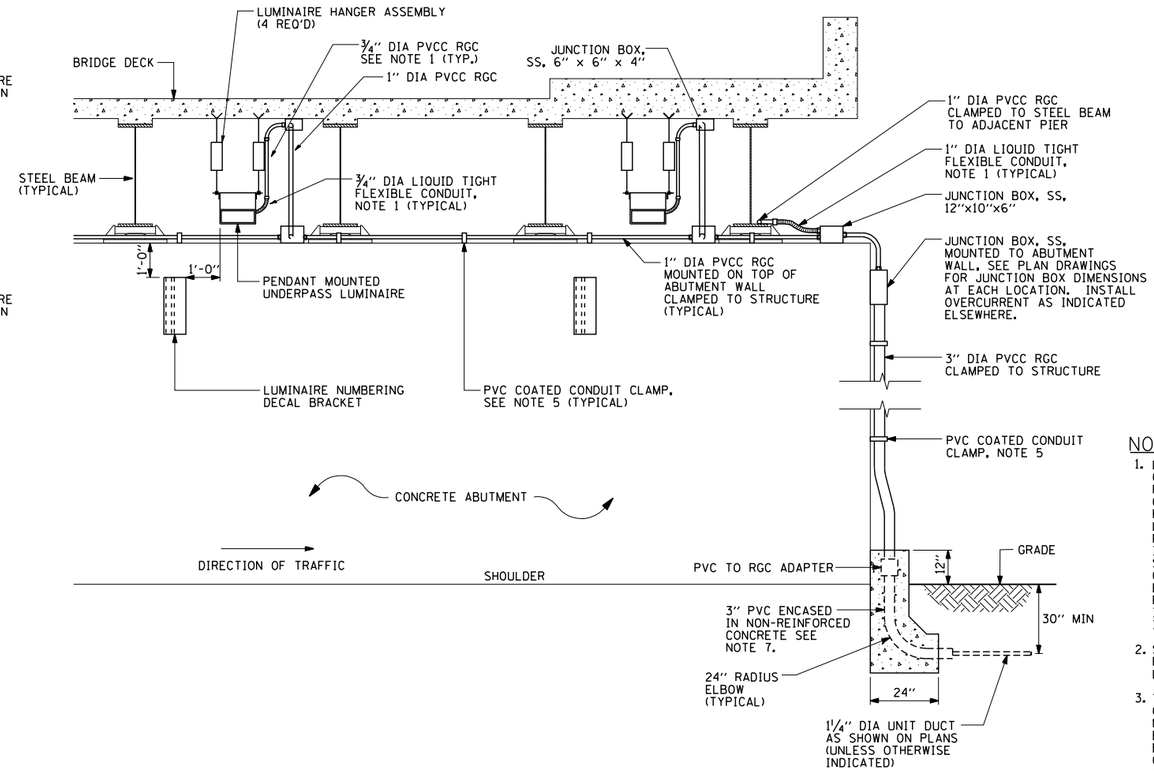
NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

FILE NAME = W:\diststd\22x34\be801.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**TEMPORARY AERIAL CABLE INSTALLATION**
		DRAWN -	REVISED -		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.
	PLOT DATE = 1/4/2008	DATE -	REVISED -		

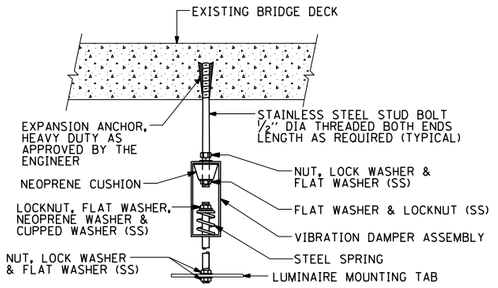
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	438
	BE-801		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



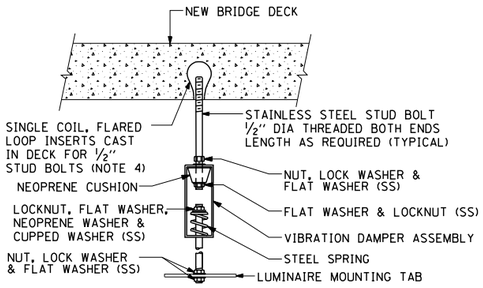


NOTES:

1. LIQUID TIGHT FLEXIBLE METAL CONDUIT, MAXIMUM LENGTH 6'-0", TYPICAL FOR EACH INSTANCE AS SHOWN. PROVIDE PVC COATED RIGID GALVANIZED STEEL CONDUIT AS REQUIRED NOT TO EXCEED 6'-0" OF FLEXIBLE LIQUID TIGHT METAL CONDUIT. LIQUID TIGHT FLEXIBLE METAL CONDUIT WILL BE INCLUDED IN THE COST OF THE CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED PAY ITEM EXCEPT THAT ¾" DIA. CONDUIT AND ¾" DIA. FLEXIBLE CONDUIT SHALL BE INCLUDED IN THE COST OF UNDERPASS LUMINAIRE INSTALLATION.
2. SEE UNDERPASS LIGHTING PLANS FOR INSTALLATION LOCATION OF UNDERPASS LIGHTING LUMINAIRES.
3. THE CONTRACTOR SHALL USE APPROVED SINGLE COIL FLARED LOOP INSERTS WHEN SUSPENDED MOUNTING AN UNDERPASS LUMINAIRE TO A NEW BRIDGE DECK. THE FLARED LOOP INSERTS MUST BE CAST INTO THE CONCRETE DECK. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND COORDINATING THE INSERT LOCATIONS FOR MOUNTING THE UNDERPASS LIGHTING SYSTEM AS SHOWN ON THE PLANS WITH THE BRIDGE DECK CONTRACTOR. SEE DETAIL.
4. THE UNDERPASS LUMINAIRE HANGER ASSEMBLY COMPLETE WITH HEAVY DUTY ANCHORS/INSERTS AND ALL APPLICABLE HARDWARE SHALL BE INCLUDED IN THE COST OF THE UNDERPASS LUMINAIRE PAY ITEM.
5. SECURE THE CONDUIT WITH PVC COATED CONDUIT CLAMPS OR CONDUIT BEAM CLAMPS AS SHOWN AT 5'-0" INTERVALS FOR LATERALS AND WITHIN 2'-0" MAXIMUM FROM ANY JUNCTION BOX, FLEXIBLE CONDUIT, OR CHANGE IN DIRECTION. ALL PVC COATED CONDUIT CLAMPS OR BEAM CLAMPS SHALL BE INCLUDED WITH THE COST OF THE "CONDUIT ATTACHED TO STRUCTURE, OF THE CORRESPONDING DIA., GALVANIZED STEEL, PVC COATED" PAY ITEM.
6. ALL UNDERPASS LUMINAIRES MUST BE CENTERED IN THE BEAM SPACE AS INDICATED ON THE PLANS UNLESS OTHERWISE DIRECTED BY THE ENGR. LUMINAIRE SETBACK SHALL BE AS INDICATED IN PLANS FOR EACH SPECIFIC UNDERPASS
7. THE CONCRETE ENCASED CONDUIT TRANSITION SHALL BE INCLUDED IN THE COST OF THE GALVANIZED RIGID STEEL CONDUIT PAY ITEMS.
8. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE PVC COATED RIGID STEEL CONDUIT (PVCC RGC) TYPICAL.

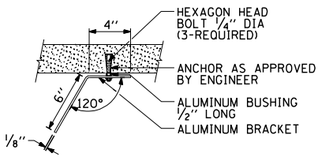


EXISTING BRIDGE DECK INSTALLATION



NEW BRIDGE DECK INSTALLATION

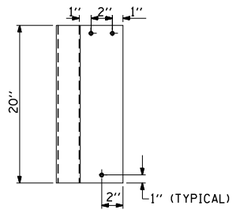
TYPICAL LUMINAIRE HANGER ASSEMBLY DETAILS



TOP VIEW

LUMINAIRE NUMBERING DECAL BRACKET

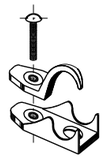
NOT TO SCALE



ELEVATION

PVC COATED CONDUIT BEAM CLAMP

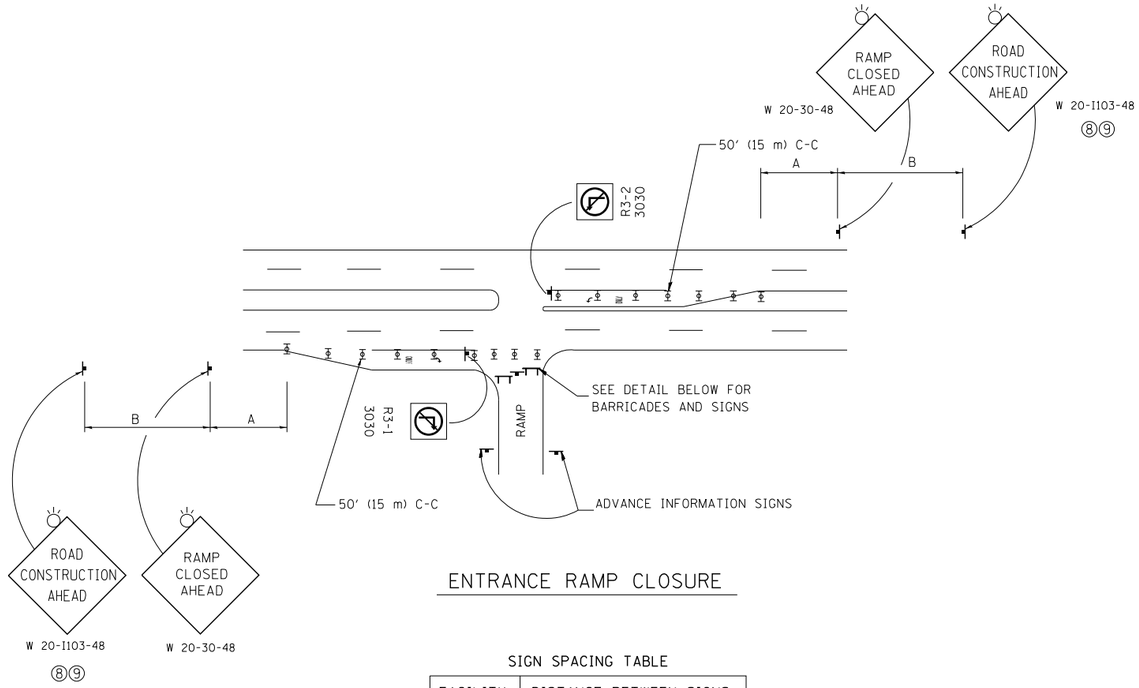
NOT TO SCALE



PVC COATED CONDUIT CLAMP

NOT TO SCALE

FILE NAME = W:\diststd\22x34\be900.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 12-12-05	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SUSPENDED MOUNT UNDERPASS LUMINAIRE INSTALLATION DETAILS**	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						580	439
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -				BE-900		CONTRACT NO. 60X56	
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

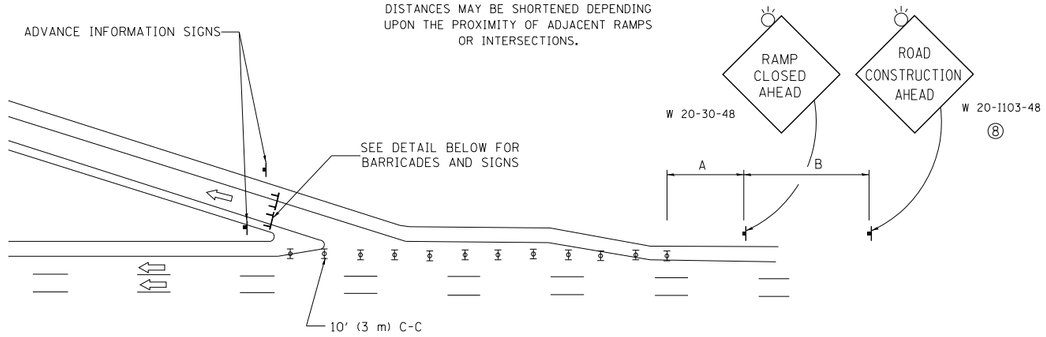


ENTRANCE RAMP CLOSURE

SIGN SPACING TABLE

FACILITY	DISTANCE BETWEEN SIGNS	
	A	B
EXPRESSWAY >24 HOURS	1000' (300 m)	1500' (450 m)
EXPRESSWAY ≤24 HOURS	500' (150 m)	500' (150 m)
ARTERIAL 55 MPH	500' (150 m)	500' (150 m)
ARTERIAL 50-45 MPH	350' (100 m)	350' (100 m)
ARTERIAL <45 MPH	200' (60 m)	200' (60 m)

DISTANCES MAY BE SHORTENED DEPENDING UPON THE PROXIMITY OF ADJACENT RAMPS OR INTERSECTIONS.

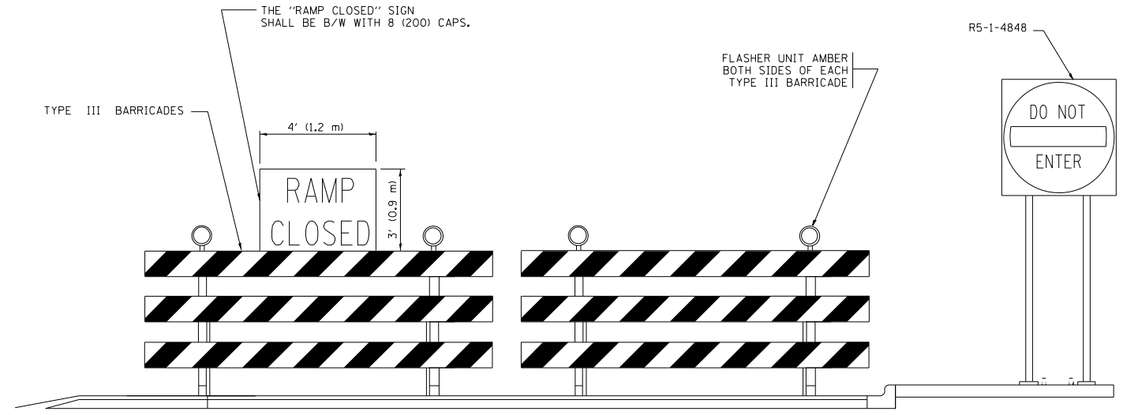


EXIT RAMP CLOSURE

SYMBOLS

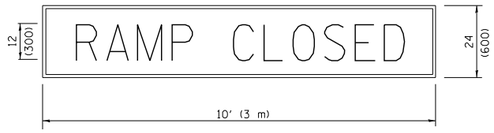
TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT

TYPE III BARRICADE WITH 2 FLASHING LIGHTS



DETAIL FOR REQUIRED BARRICADES & SIGNS

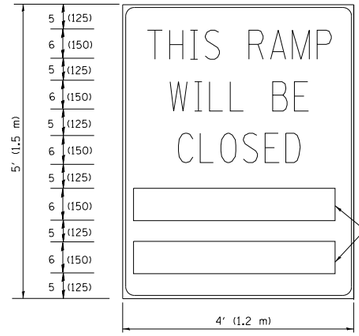
RAMP CLOSURE ADVANCE WARNING SIGN



BLACK LEGEND ON ORANGE BACKGROUND MOUNTED DIAGONALLY
E MOD FONT
1 (25) BORDER

THESE SIGNS ARE REQUIRED ON ALL THE EXIT GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.

RAMP CLOSURE ADVANCE INFORMATION SIGN



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

GENERAL NOTES:

1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
8. ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
9. ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc08.dgn	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

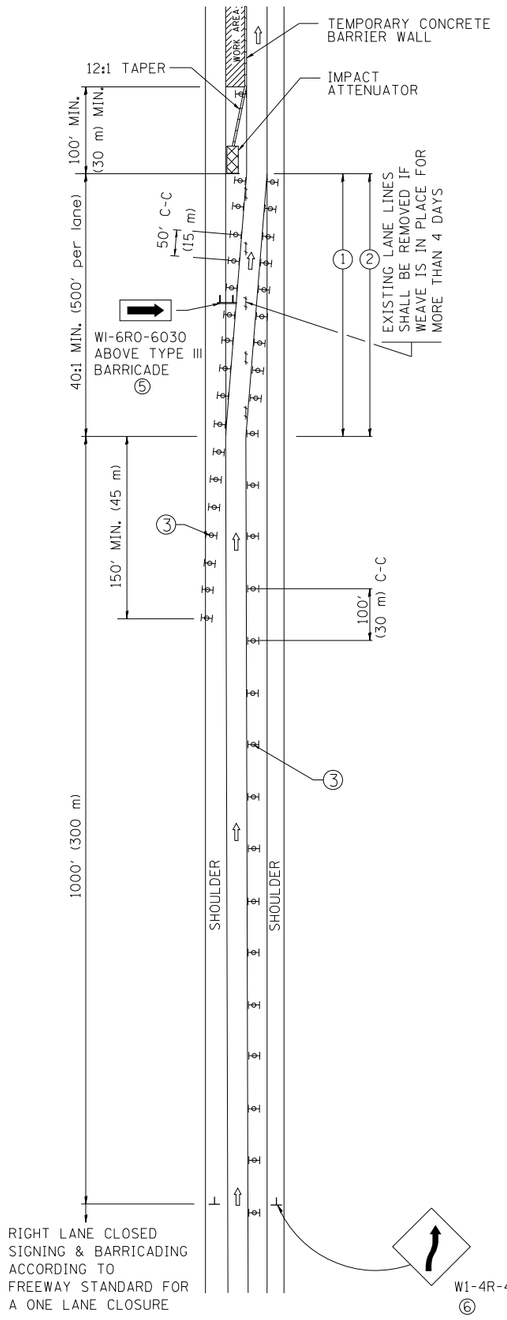
ENTRANCE AND EXIT RAMP CLOSURE DETAILS

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

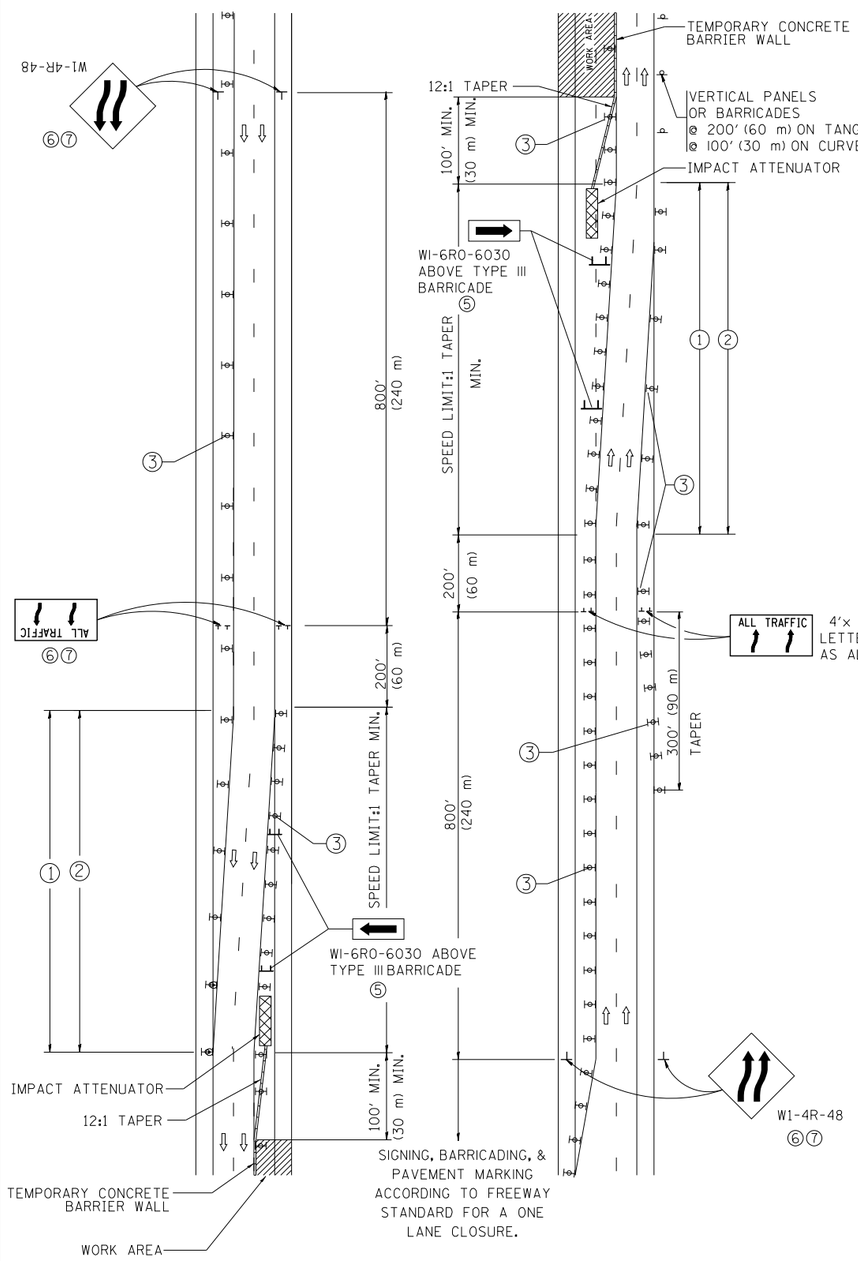
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	440
	TC-08		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

tc08.dgn 7/8/2013 7:18:03 AM User:footemj

SINGLE LANE WEAVE



MULTI-LANE WEAVE



ALL TRAFFIC 4'x 8' (1.2 m x 2.4 m); 1 (25) BORDER; 10 (250) CAPITAL LETTERS BACKGROUND SHEETING SHALL BE THE SAME AS ALL DIAMOND SHAPED CONSTRUCTION SIGNS.

GENERAL NOTES

① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED. PAVEMENT MARKING REMOVAL SHALL NOT BE REQUIRED FOR SINGLE LANE WEAVES UNDER 4 DAYS IN DURATION.

② CONTINOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS. THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVES LANE LINES SHALL BE 5 INCH, 10'-30' (3 m-9 m) SKIP DASH, WHITE.

③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.

④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.

⑤ TYPE III BARRICADES MAY BE OMMITTED FOR SINGLE-LANE WEAVES UNDER 24-HOURS IN DURATION. W1-6 SIGNS WILL STILL BE REQUIRED. IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

⑥ WHEN THE LENGTH OF THE SHIFTED SEGMENT (DISTANCE BETWEEN WEAVE POINTS) IS LESS THAN 1500', DOUBLE REVERSE CURVE SIGNS (W24-1) SHOULD BE USED INSTEAD OF THE REVERSE CURVE (W1-4) SIGNS. ARROWS ON THE 4'X8' "ALL TRAFFIC" SIGNS SHALL BE THE SAME SHAPE.

⑦ THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC.

SYMBOLS

- DIRECTION OF TRAFFIC
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TYPE II BARRICADE OR DRUM WITH MONO-DIRECTIONAL STEADY BURNING LIGHT
- TEMPORARY CONCRETE BARRIER WALL
- IMPACT ATTENUATOR

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc09.dgn	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06
		DRAWN -	REVISED - SPB 01-07
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - SPB 12-09
	PLOT DATE = 7/1/2013	DATE - 02-87	REVISED - MD 06-13

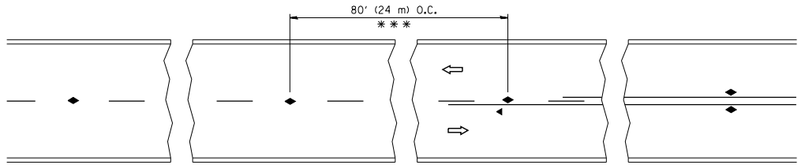
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

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

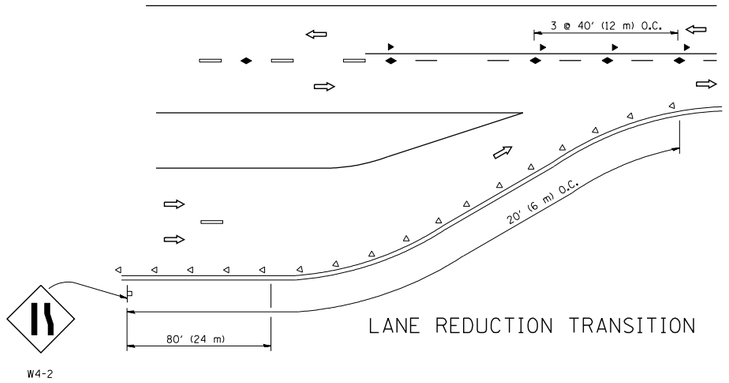
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	441
	TC-09		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

tc09.dgn 7/1/2013 2:01:53 PM User=footemj

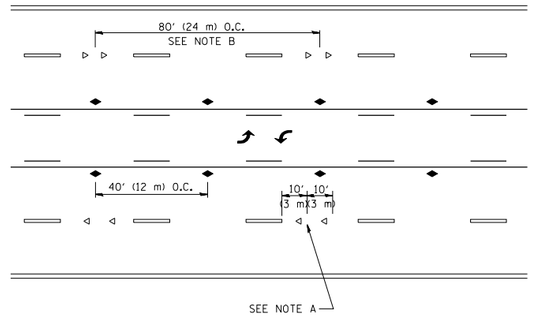


* * * REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

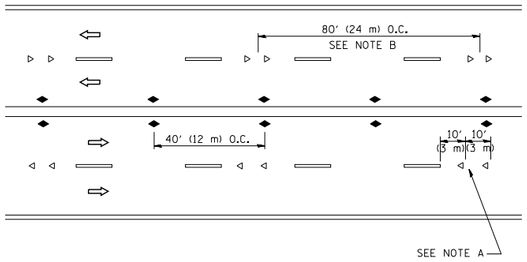
TWO-LANE/TWO-WAY



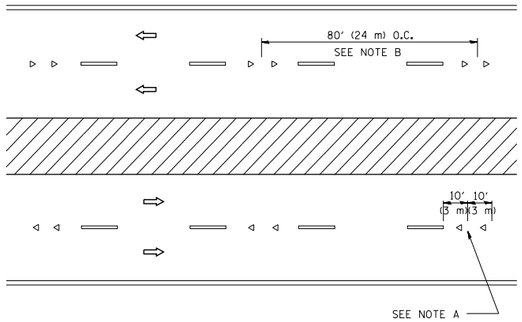
LANE REDUCTION TRANSITION



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

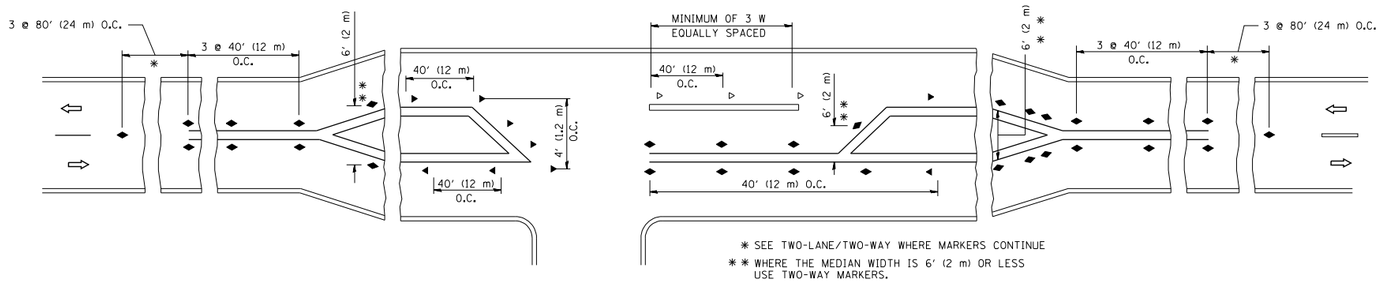
LANE MARKER NOTES

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.



* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE

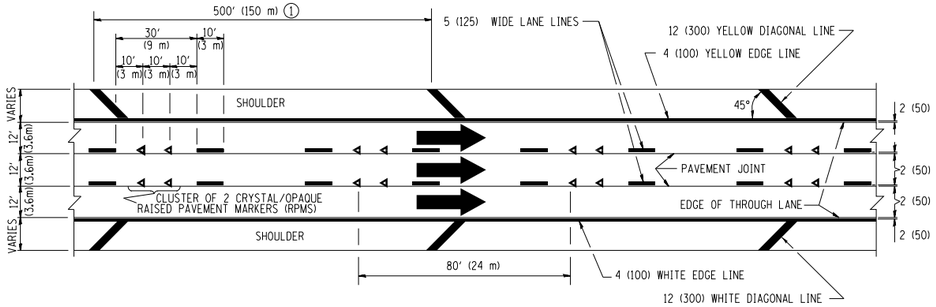
** WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

LEFT TURN

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

FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc11.dgn	USER NAME = leysa	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)
		DRAWN -	REVISED - T. RAMMACHER 03-12-99		
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 01-06-00		
	PLOT DATE = 3/2/2011	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

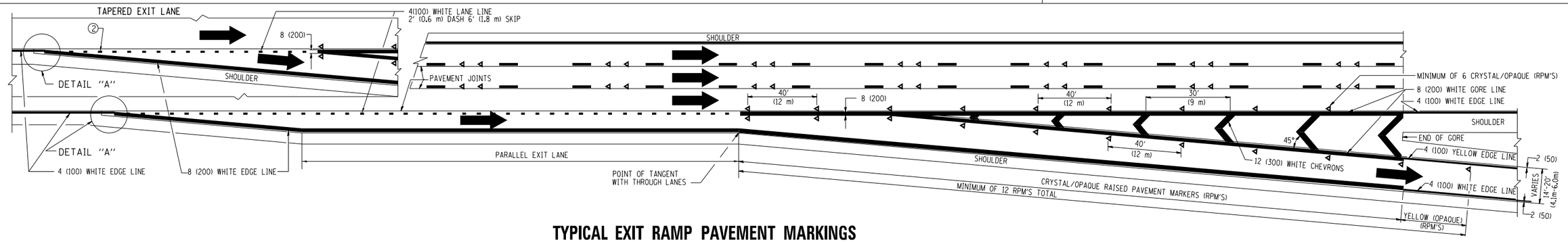
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	442
	TC-11	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



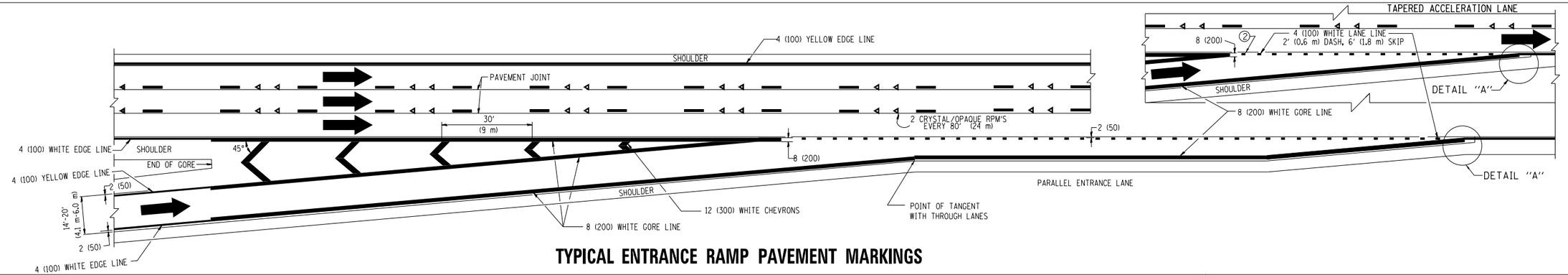
TYPICAL EDGE LINES & LANE LINES

PAVEMENT MARKING MATERIALS

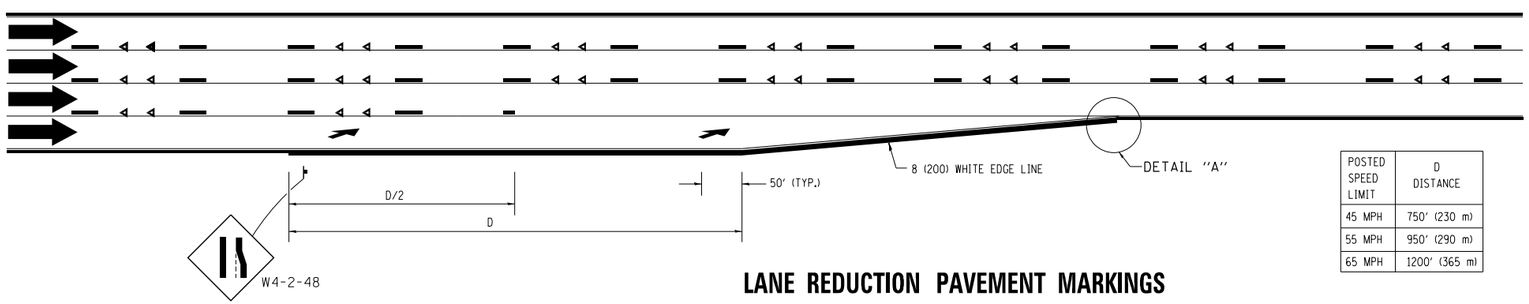
1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE; INLAID OR GROOVED IN SHALL BE USED FOR ALL LANE LINES ON HMA PAVEMENT PROJECTS.
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC PROJECTS.



TYPICAL EXIT RAMP PAVEMENT MARKINGS

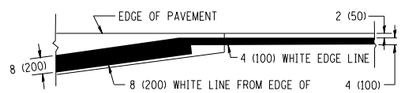


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS



POSTED SPEED LIMIT	D DISTANCE
45 MPH	750' (230 m)
55 MPH	950' (290 m)
65 MPH	1200' (365 m)

LANE REDUCTION PAVEMENT MARKINGS



DETAIL "A"

NOTES:

① THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH. THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH.

② 4" (2' DASH, 6' SKIP) MARKING ON TAPERED ENTRANCE AND EXIT RAMP SHALL BE OMITTED ON TANGENT SECTIONS.

FILE NAME = ct\pw_work\pwidot\footemj\d0108315\tc12.dgn	USER NAME = footemj	DESIGNED - D.W.S.	REVISED - J.A.F. 02-06
		DRAWN -	REVISED - S.P.B. 01-07
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - S.P.B. 01-10
	PLOT DATE = 7/8/2013	DATE - 01-90	REVISED - M.D. 05-13

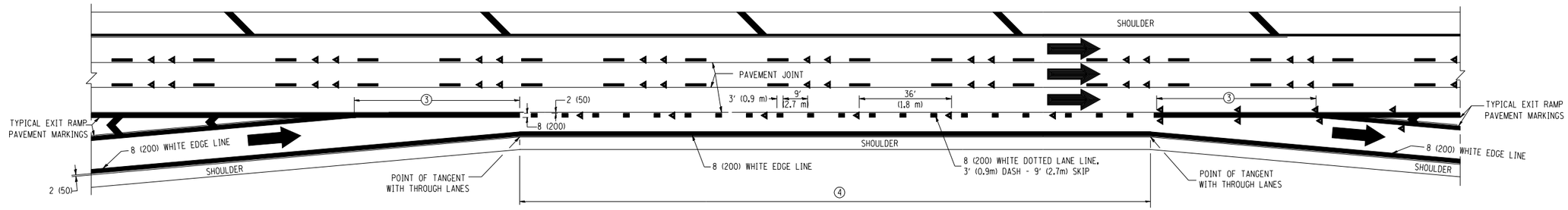
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

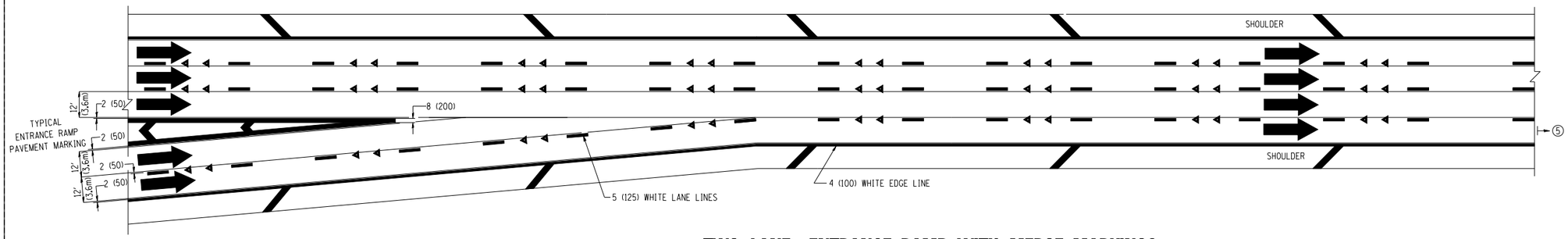
SCALE: NONE | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	443
	TC-12		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

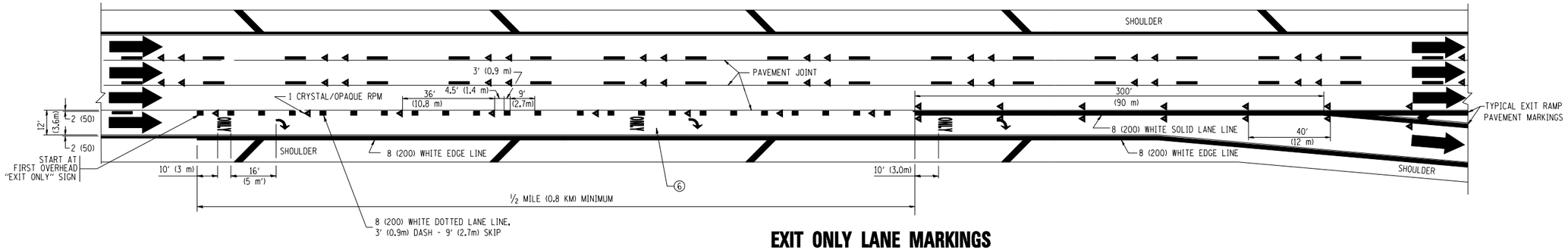
tc12.dgn 7/8/2013 8:14:39 AM User:footemj



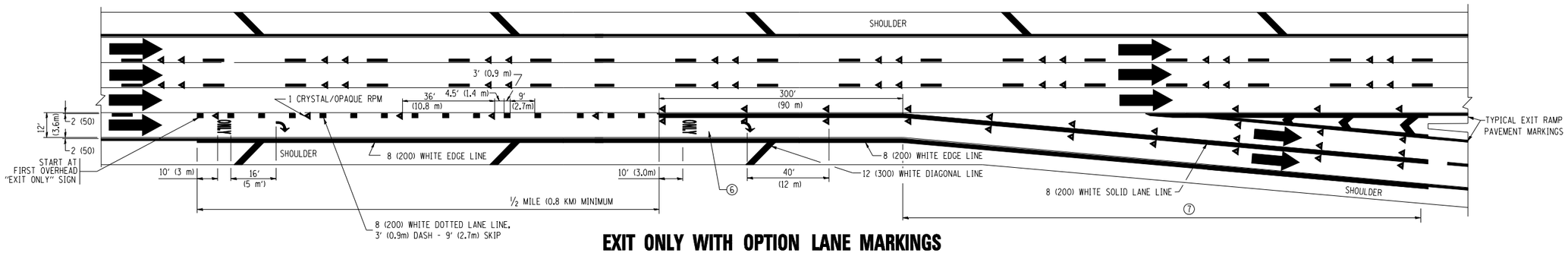
AUXILIARY LANE MARKINGS



TWO LANE ENTRANCE RAMP WITH MERGE MARKINGS



EXIT ONLY LANE MARKINGS



EXIT ONLY WITH OPTION LANE MARKINGS

NOTES

③ OMIT WHEN LENGTH OF AUXILIARY LANE IS LESS THAN 500' (150 m).

④ 8-INCH WIDE DOTTED LANE LINE MARKINGS SHALL BE USED WHEN THE LENGTH OF THE AUXILIARY LANE IS 2 MILES OR LESS.

⑤ FOR TWO-LANE ENTRANCE RAMP, IF RIGHT LANE ENDS, USE TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS.

⑥ ONLY AND ARROWS EQUALLY SPACED, 500' (150 m) MAXIMUM SPACING. FULL SIZE LETTERS AND ARROW SHALL BE USED.

⑦ CONTINUE 8" SOLID LANE LINE THROUGH EXIT TO END OF PAVED GORE.

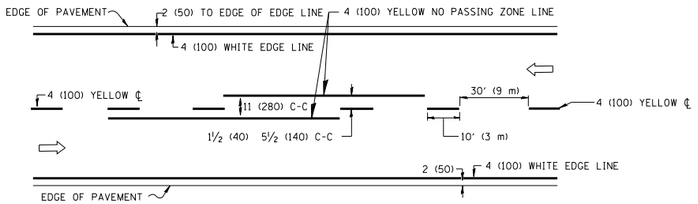
FILE NAME = c:\pw_work\PWIDOT\LEYSA\d0108315\tc12.dgn	USER NAME = leysa	DESIGNED - D.W.S.	REVISED - D.W.S. 07-96
		DRAWN -	REVISED - J.A.F. 02-06
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - S.P.B. 01-07
	PLOT DATE = 1/22/2010	DATE - 01-90	REVISED - S.P.B. 01-10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

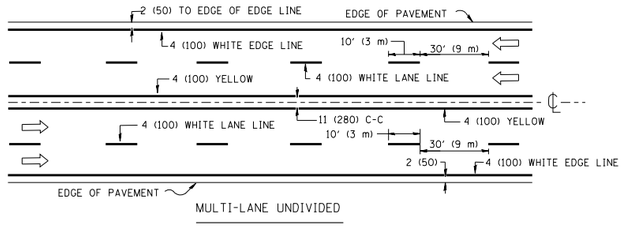
MULTI-LANE FREEWAY
PAVEMENT MARKING DETAILS

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

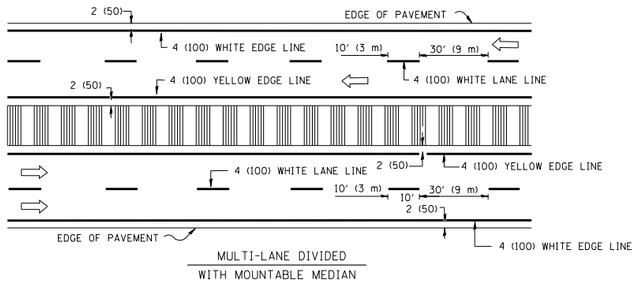
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	444
	TC-12	CONTRACT NO. 60X56		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



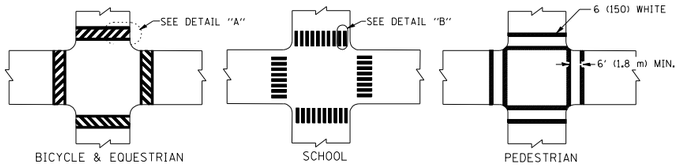
MULTI-LANE UNDIVIDED

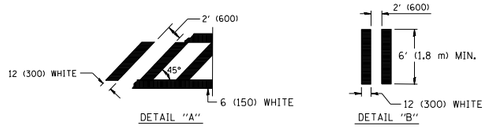


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

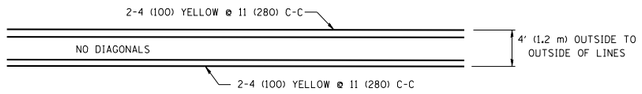
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

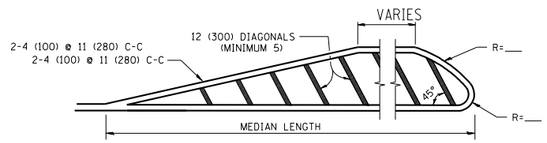




TYPICAL CROSSWALK MARKING



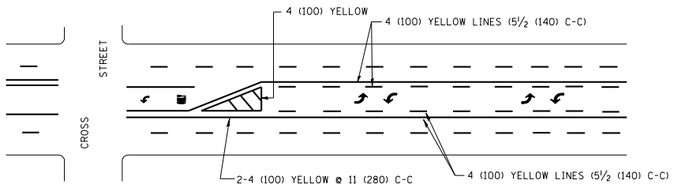
4' (1.2 m) WIDE MEDIANS ONLY



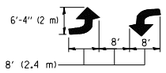
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

MEDIANS OVER 4' (1.2 m) WIDE

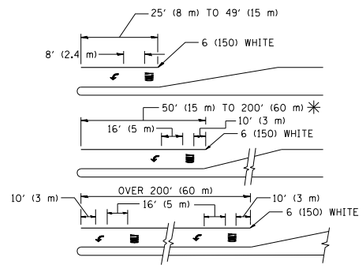


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

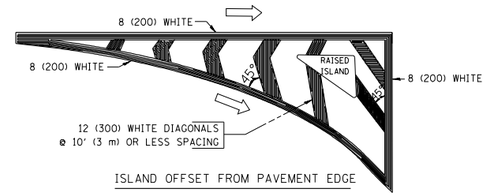


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

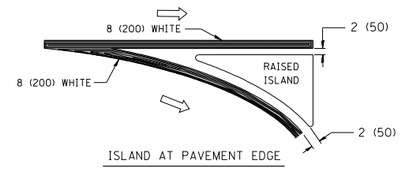
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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 ø 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ø 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE 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 ø 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 ø 6 (150) 12 (300) ø 45° 12 (300) ø 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 ø 4 (100) WITH 12 (300) DIAGONALS ø 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 ø 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
SHOULDER DIAGONALS	12 (300) ø 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.

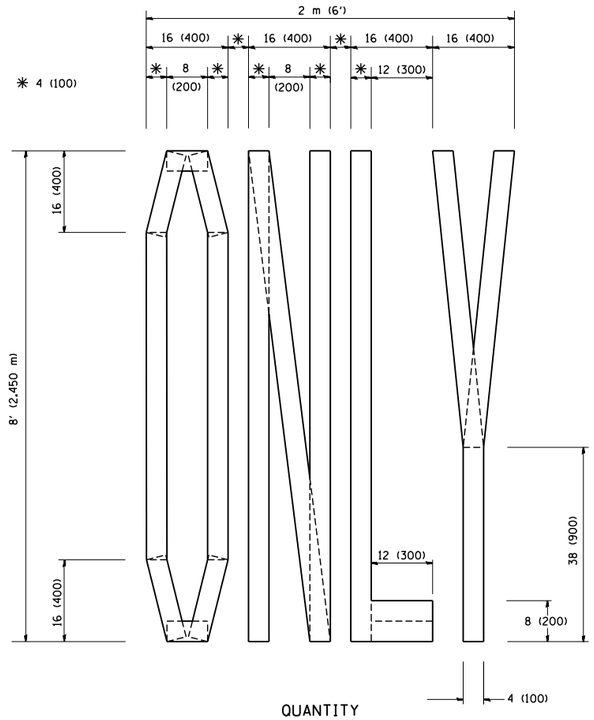
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

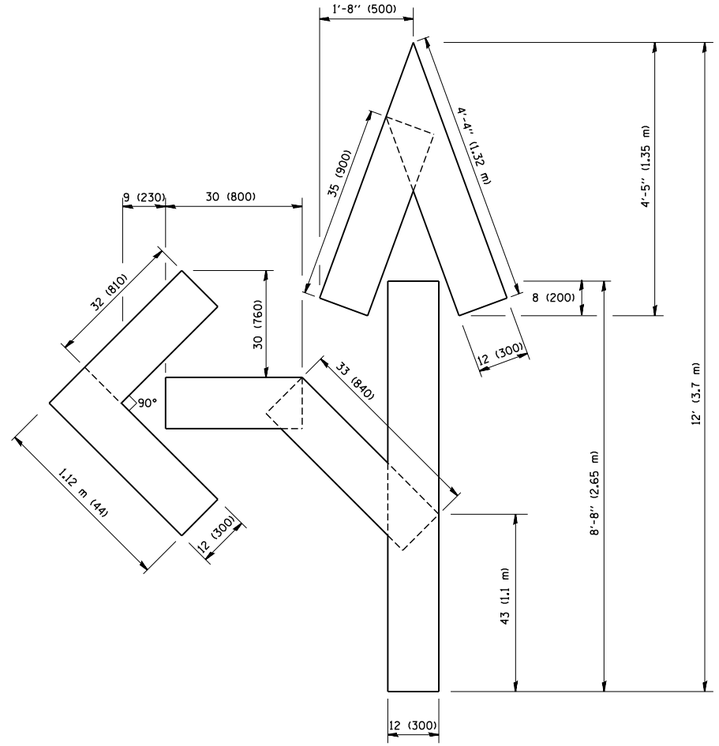
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

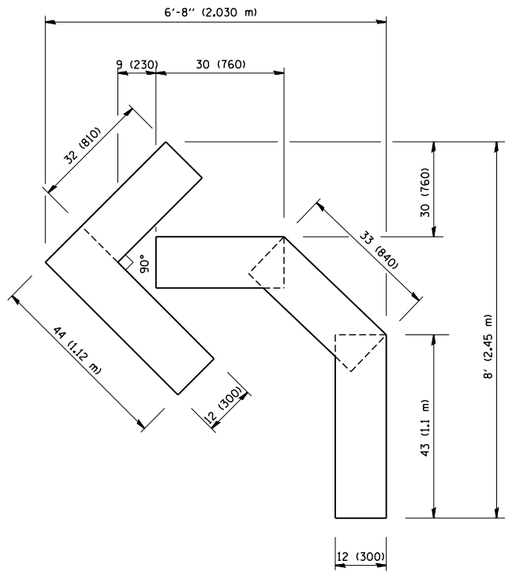
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	445
	TC-13		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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



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



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

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

FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

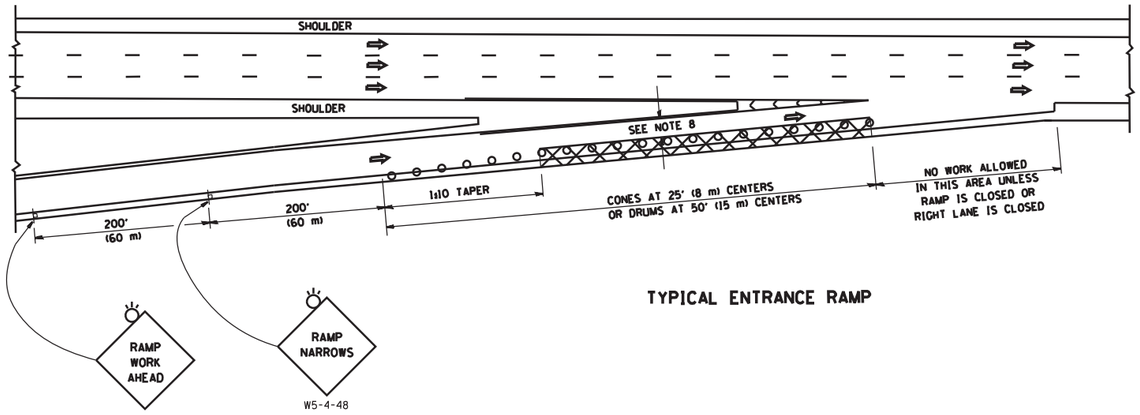
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

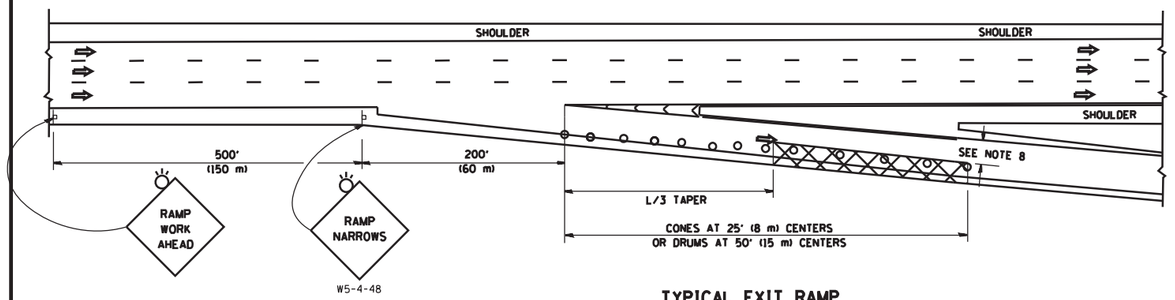
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	446
	TC-16		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

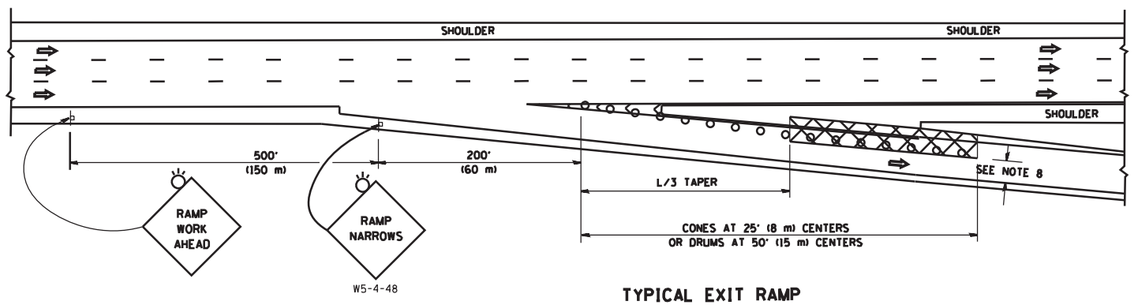
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP

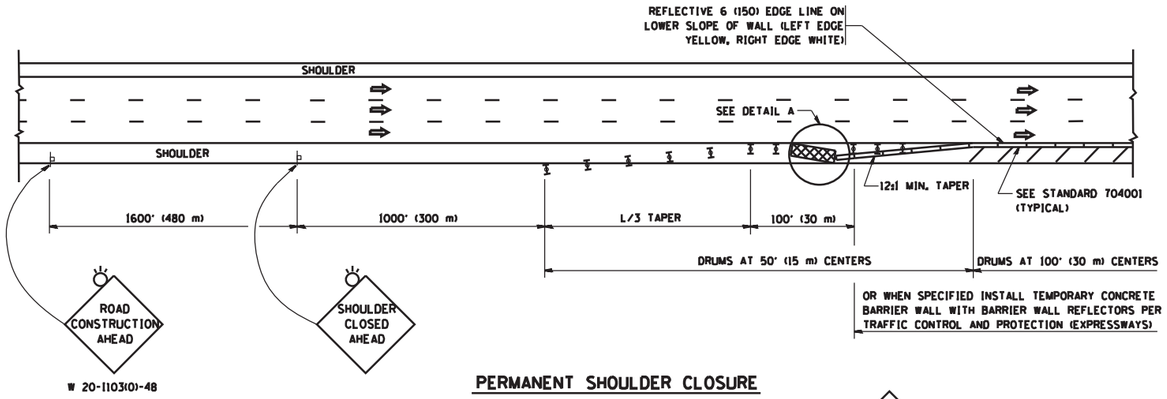


TYPICAL EXIT RAMP

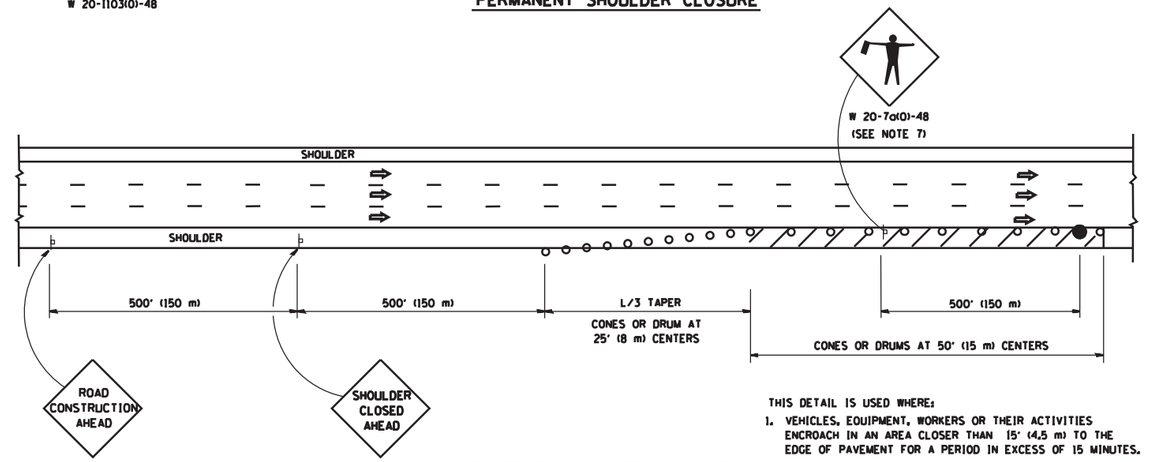


TYPICAL EXIT RAMP

SHOULDER CLOSURE DETAILS



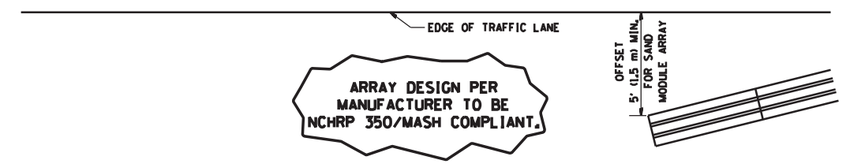
PERMANENT SHOULDER CLOSURE



THIS DETAIL IS USED WHERE:

1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.

DAYTIME SHOULDER CLOSURE



DETAIL "A"
IMPACT ATTENTUATOR, TEMPORARY
(SEE NOTE 5)

SYMBOLS

- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE OR DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE
- IMPACT ATTENUATOR OF TYPE AND TEST LEVEL SPECIFIED

GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS	
	METRIC	ENGLISH
45 mph (80 km/h) OR GREATER:	L=0.65(WXS)	L=(WXS)

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)

2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.
5. THE IMPACT ATTENTUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350/MASH.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
   a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
   b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.

   THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.
8. 12' MIN. WIDTH TANGENT SECTION
   16' MIN. WIDTH CURVE SECTION.

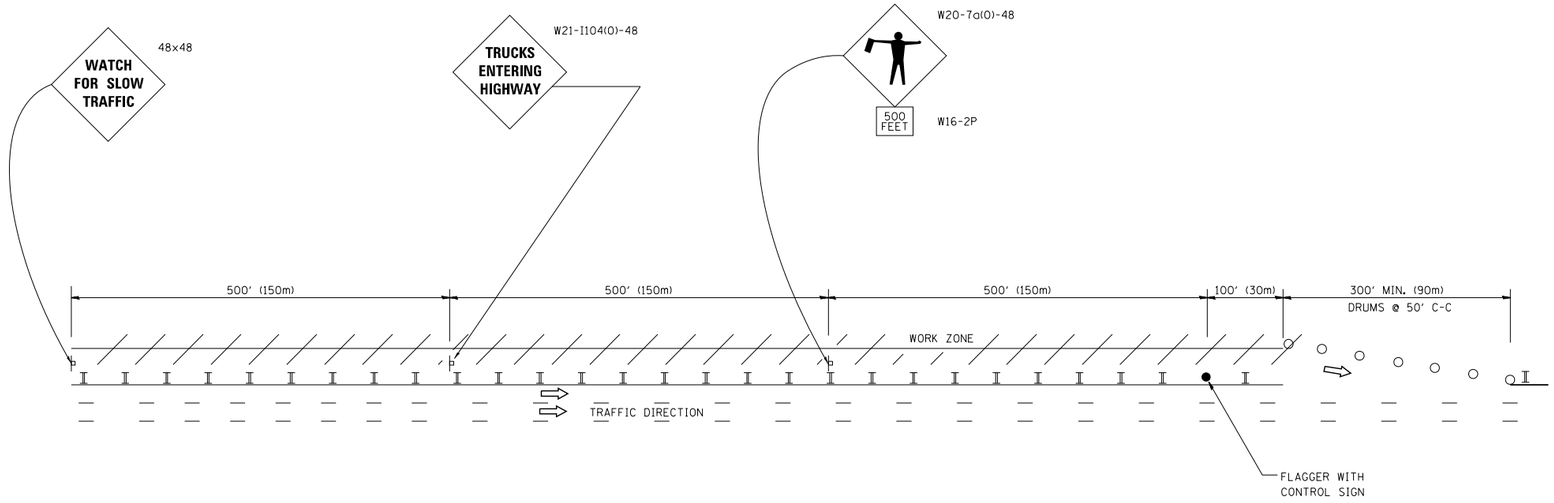
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\pw_work\pwidot\leysa\d0108315\tc17.dgn	USER NAME = leysa	DESIGNED -	REVISED - J.A.F. 12-06	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
		DRAWN - D.W.S.	REVISED - S.P.B. 01-07		
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09		
	PLOT DATE = 4/17/2014	DATE - 11-96	REVISED - M.D. 06-13		SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

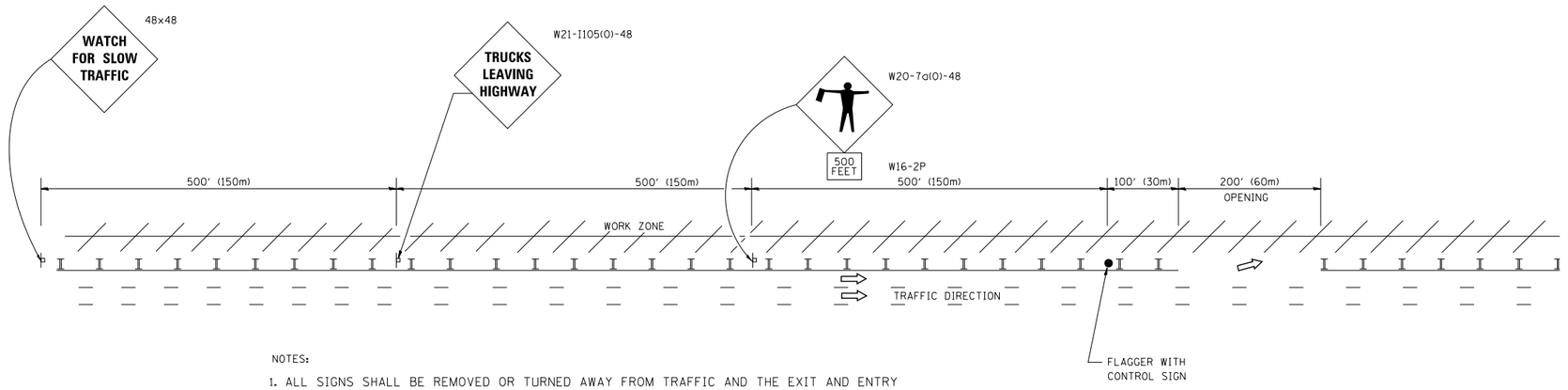
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	447
	TC-17		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



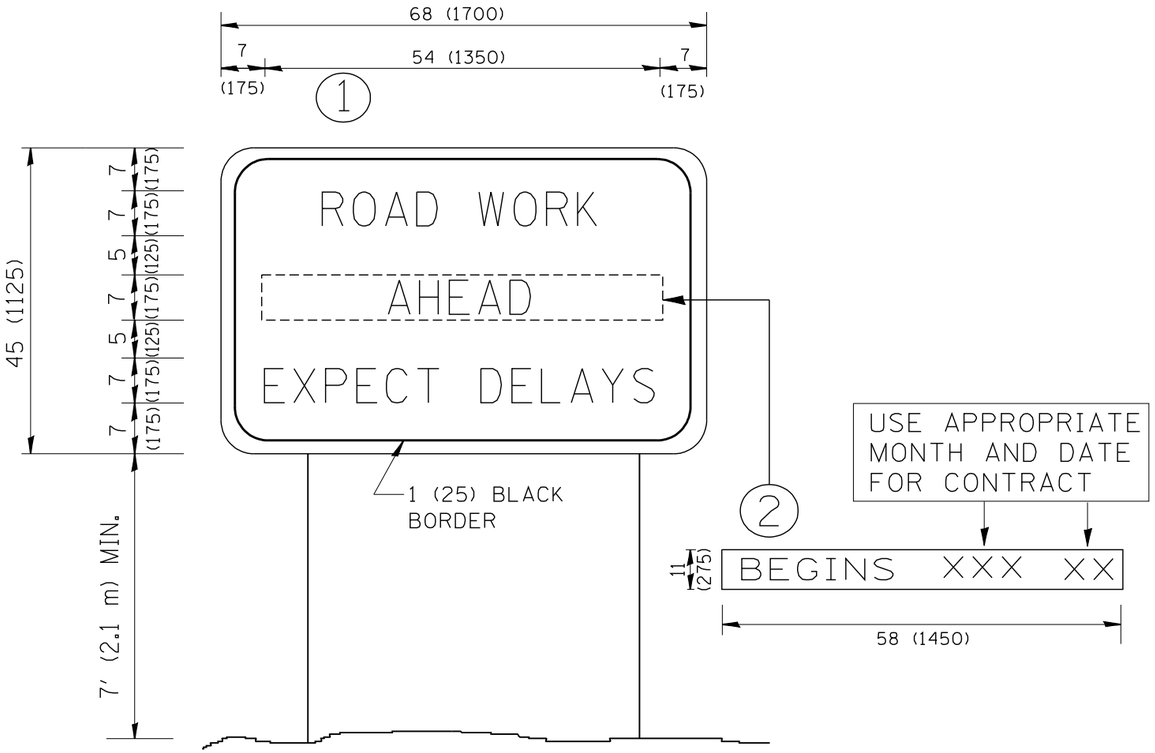
NOTES:

1. ALL SIGNS SHALL BE REMOVED OR TURNED AWAY FROM TRAFFIC AND THE EXIT AND ENTRY OPENINGS SHALL BE CLOSED WHEN THE FLAGGING OPERATION CEASES. NON OPERATING EQUIPMENT SHALL COMPLY WITH ARTICLE 701.11
2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\tc18.dgn	USER NAME = footemj	DESIGNED -	REVISED - J.A.F. 02-06	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**FREEWAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS**	F.A. RTE.	SECTION / COUNTY / TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED - S.P.B. 01-07				580 / 448
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED - S.P.B. 12-09				TC-18 / CONTRACT NO. 60X56
	PLOT DATE = 7/8/2013	DATE -	REVISED - M.D. 06-13		SCALE: NONE / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.		FED. ROAD DIST. NO. 1 / ILLINOIS / FED. AID PROJECT

tc18.dgn 7/8/2013 7:27:10 AM User:footemj



NOTES:

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

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

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

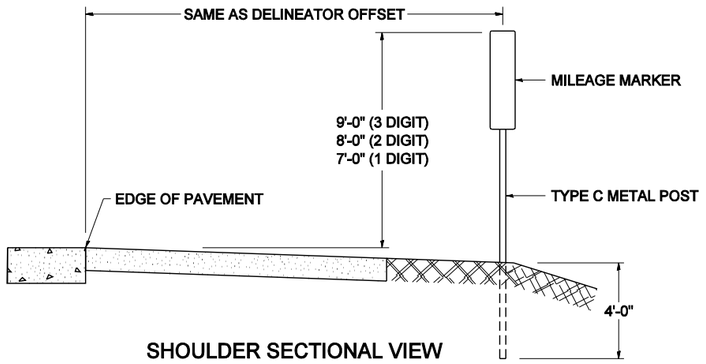
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ARTERIAL ROAD INFORMATION SIGN

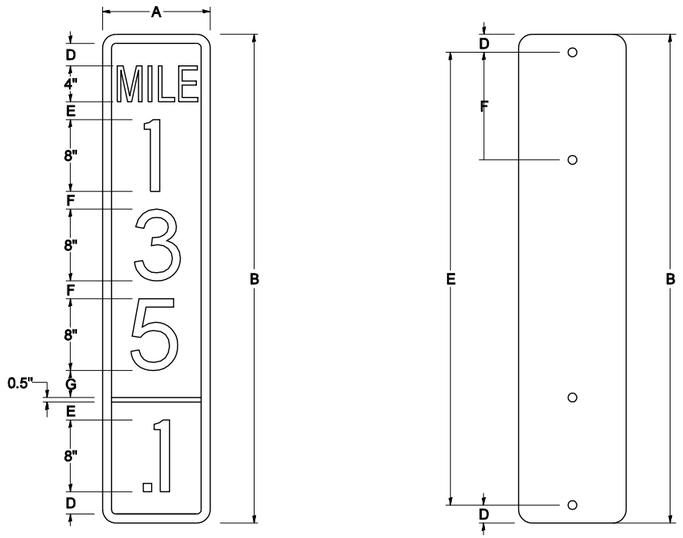
SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	449
	TC-22		CONTRACT NO. 60X56	
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

STANDARD DESIGN FOR MILE POST



SHOULDER SECTIONAL VIEW

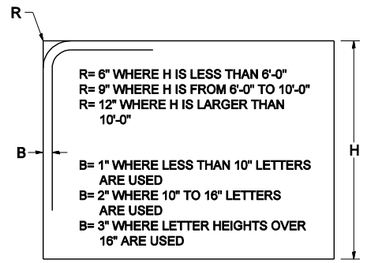


SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	DIGIT
12 x 24	12.0	24.0	1.5	1.5	1.5	N/A	1.5	1
12 x 36	12.0	36.0	1.5	2.0	2.0	2.0	1.5	2
12 x 48	12.0	48.0	1.5	2.5	2.0	2.0	2.5	3

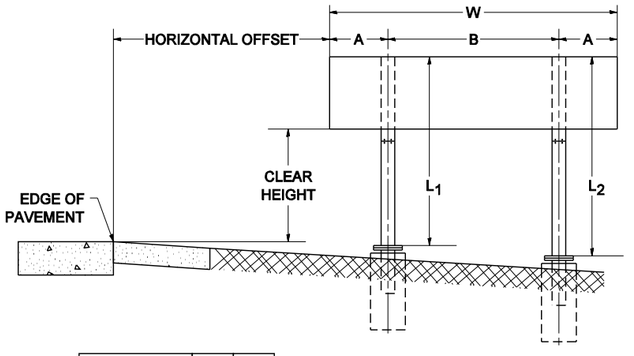
BLANK	A	B	C	D	E	F
B9-1224	12.0	24.0	1.5	2.0	20.0	N/A
B9-1236	12.0	36.0	1.5	2.0	32.0	12.0
B9-1248	12.0	48.0	1.5	2.0	44.0	12.0

SIGN SIZE	SERIES					BORDER	BLANK STD.
	LINES						
	1	2	3	4	5		
12 x 24	4C	8D	4C	N/A	N/A	0.5	B9-1224
12 x 36	4C	8D	8D	4C	N/A	0.5	B9-1236
12 x 48	4C	8D	8D	8D	4C	0.5	B9-1248

BORDER AND RADIUS LAYOUT



MAJOR GUIDE SIGN LAYOUT

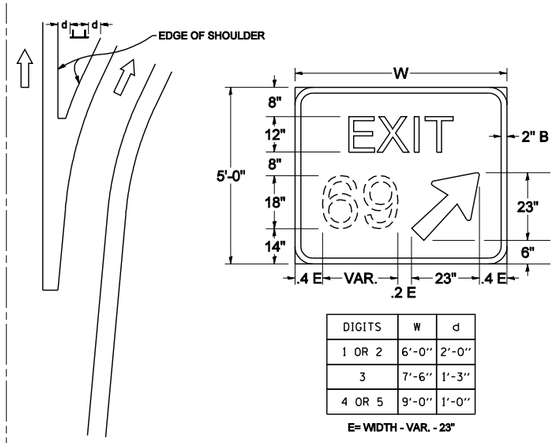


NUMBER OF STEEL SUPPORTS	A	B
2	.2 W	.6 W
3	.15 W	.35 W
4	.125 W	.25 W
5	.1 W	.2 W

"L_1 IS THE LENGTH OF SUPPORT, NOT INCLUDING THE STUB PROJECTION, CLOSEST TO THE EDGE OF THE PAVEMENT.

"A" IS THE DISTANCE FROM THE SIGN EDGE TO THE CENTERLINE OF THE NEAREST SUPPORT. "B" IS THE DISTANCE BETWEEN CENTERLINES OF SUPPORTS.

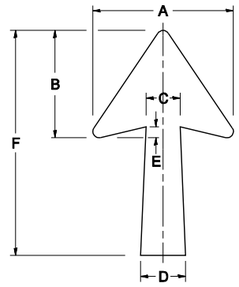
GORE SIGNS



DIGITS	W	d
1 OR 2	6'-0"	2'-0"
3	7'-6"	1'-3"
4 OR 5	9'-0"	1'-0"

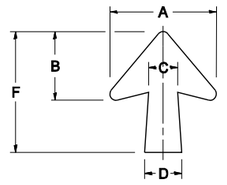
E= WIDTH - VAR. - 23"

STANDARD ARROWS FOR INTERSTATE GUIDE SIGNS



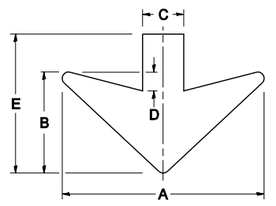
ARROW SYMBOL	A	B	C	D	E	F	R
24¼ x 15⅛	15⅛	11⅜	3¾	5	1⅝	24¼	⅜
29¼ x 18¼	18¼	14	4½	6	1½	29¼	¾
35⅝ x 22¼	22¼	17	5⅜	7⅛	1¾	35⅝	1
18¼ x 11¼	11¼	8¾	3⅛	3⅞		18¼	

NOTE: D & F ARE RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS



ARROW SYMBOL	A	B	C	D	E	F	R
17¼ x 14¼	14¼	9⅝	3⅜	4½	⅝	17¼	¾
20¼ x 17¼	17¼	11¾	4⅜	5⅝	1½	20¼	
25 x 21⅞	21⅞	14¼	5	6¾	1¾	25	1
9⅜ x 8⅞	8⅞	5⅞	2⅝	2⅝		9⅜	½

DOWN ARROWS



ARROW SYMBOL	A	B	C	D	E	R
16½ x 24	24	12	5	1½	16½	¾
22 x 32	32	16	6½	3	22	1

FILE NAME = tc27.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - 02-04-2009
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 2/4/2009	DATE - 03-08-1984	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MILE POST MARKERS – GORE SIGNS
MAJOR GUIDE SIGN LAYOUT – ARROWS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			580	450
	TC-27 (TS-2341-1)		CONTRACT NO. 60X56	
	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	

N

WB I-190

WB I-90

EB I-90

EXISTING ℄ I-90

℄TA BLUE LINE

EB I-190

PROPOSED ℄ EB I-190

PROPOSED ℄ FLYOVER

PROPOSED ℄ EB I-190 CD ROAD

PROPOSED ℄ EB CD ROAD

MATCH LINE
EBCD STA. 504+00
XS-KEY-02

0 100' 200'

XS-KEY-01

FILE NAME = p:\hntbw356.hntb.org\PWGreatLakes\Documents\Chicago Projects\38120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-KEY-01.dgn

HNTB

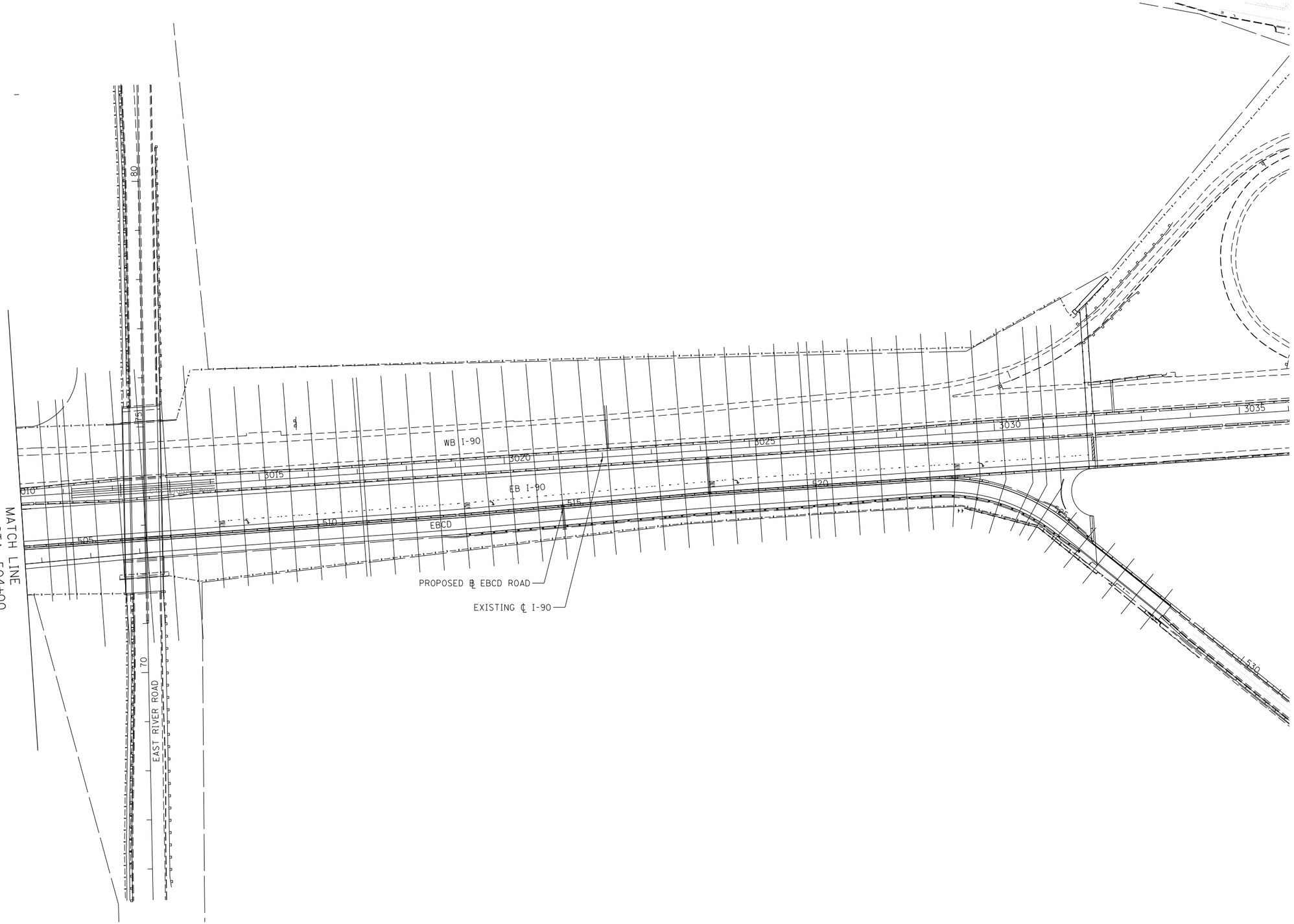
USER NAME = mkosir	DESIGNED -	REVISED -
	DRAWN - MP	REVISED -
PLOT SCALE = 1.0000 '/ in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS-SECTIONS
KEY MAP

SCALE: 1" = 100' | SHEET 1 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	451
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



XS-KEY-02

HNTB	USER NAME = mkosir	DESIGNED -	REVISED -
		DRAWN - MP	REVISED -
	PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
	PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS-SECTIONS
KEY MAP

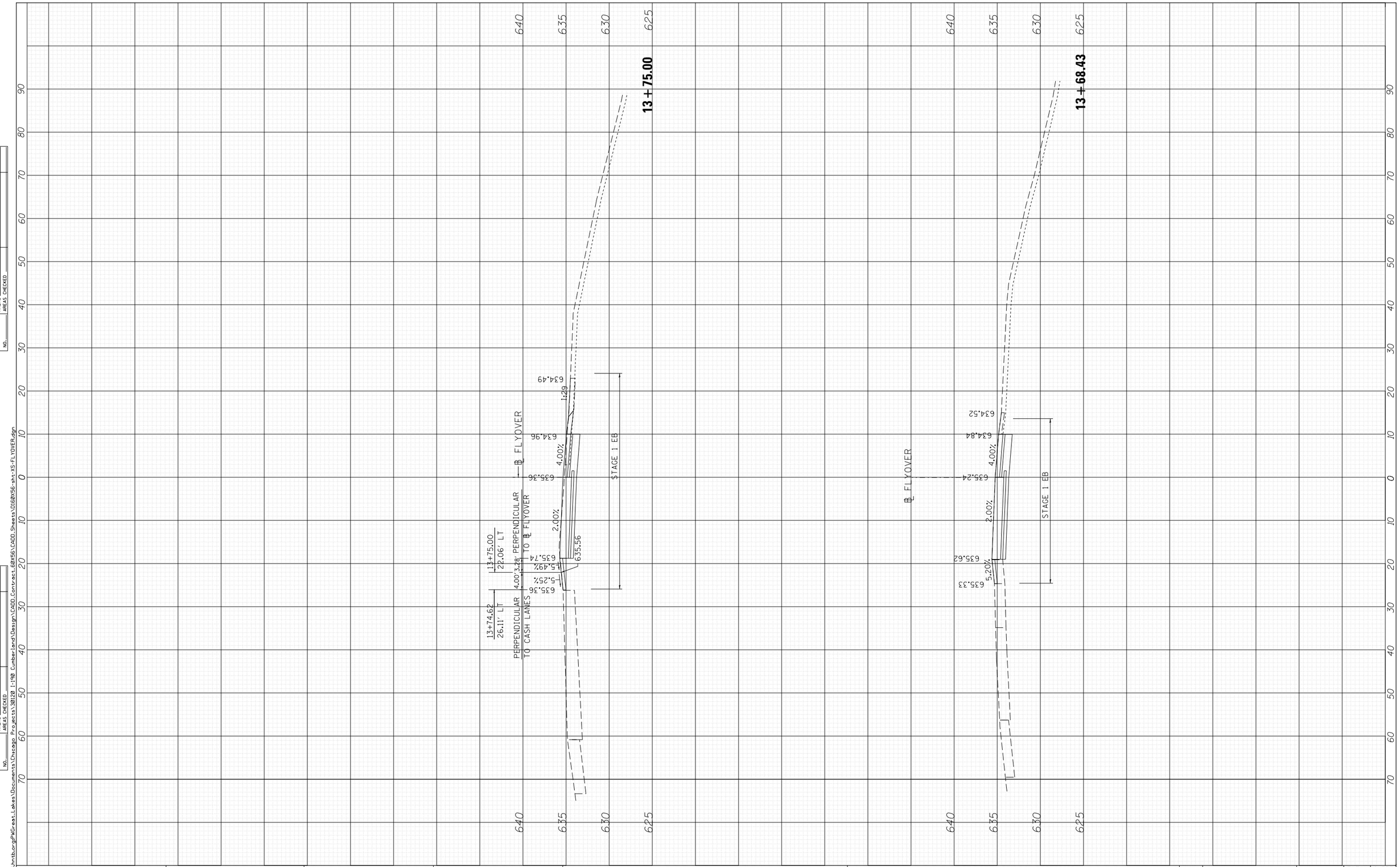
SCALE: 1" = 100' | SHEET 2 OF 2 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	452
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

FILE NAME = p:\Vntb\ne256.hntb.org\PwGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-ant-XS-KEY-02.dgn

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = pw:\\hntb-pw-256.hntb.org:PWGreatLakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract 60X56\CADD Sheets\D160X56-sht-XS-FLYOVER.dgn

HNTB

USER NAME = mkosir	DESIGNED - LLS/MML	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 7/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

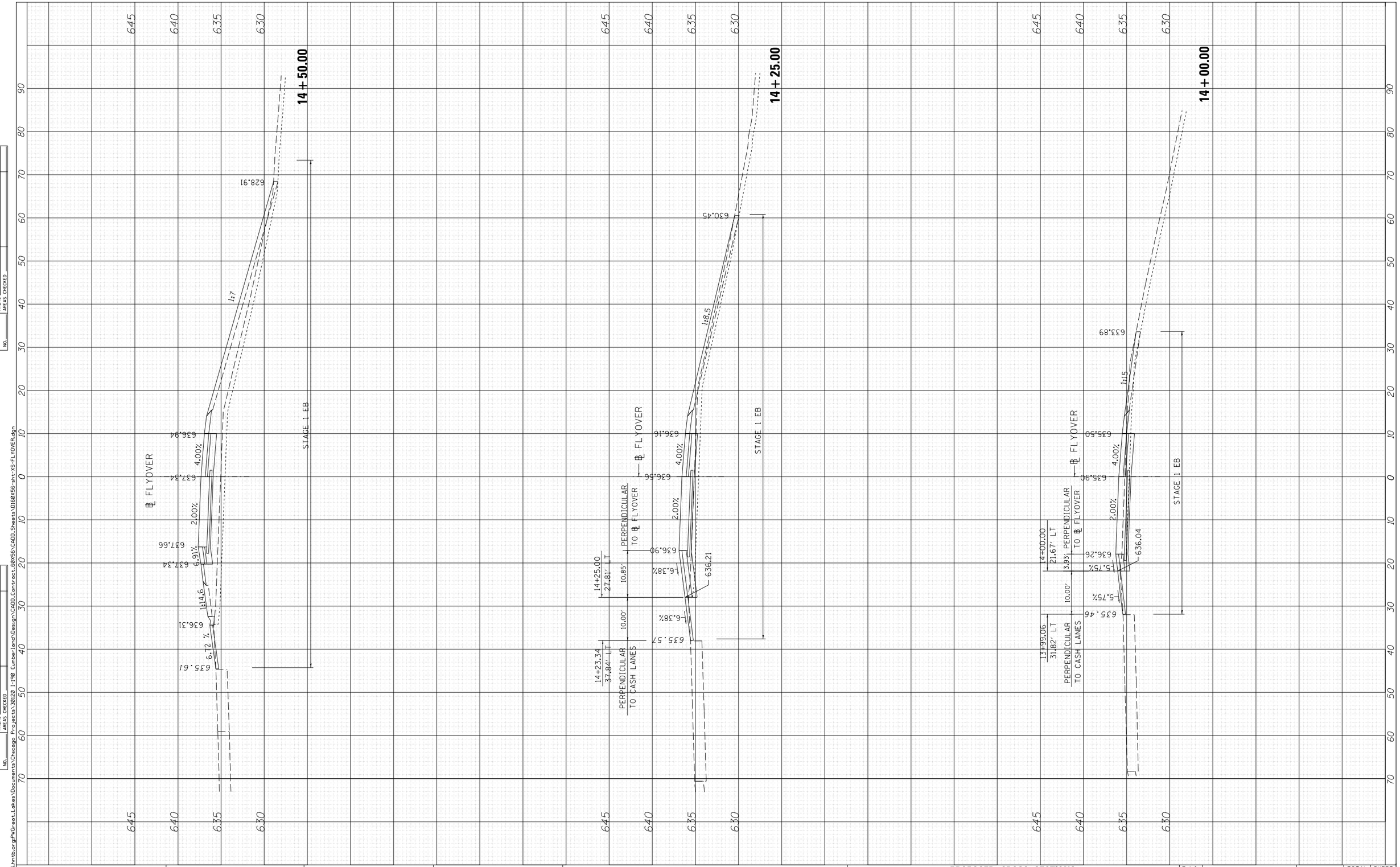
PROPOSED CROSS SECTIONS
CUMBERLAND FLYOVER

SCALE: 1" = 10' | SHEET 1 OF 5 SHEETS | STA. 13+25.00 | TO STA. 13+75.00

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	453
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = p:\\hntb-356.hntb.org\PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-FLYOVER.dgn

HNTB

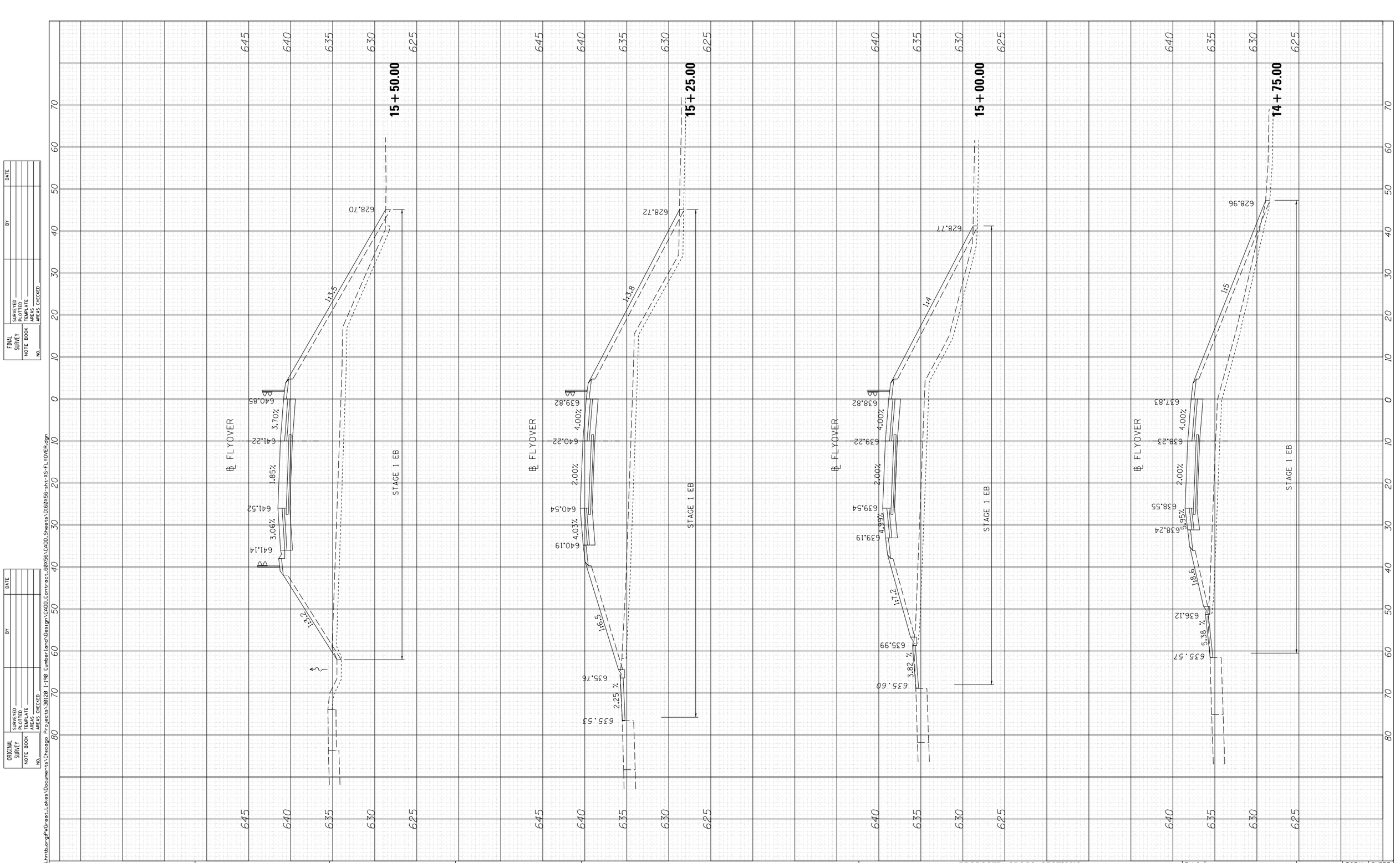
USER NAME = mkosir	DESIGNED - LLS/MML	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 7/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
CUMBERLAND FLYOVER

SCALE: 1'' = 10' | SHEET 2 OF 5 SHEETS | STA. 14+00.00 TO STA. 14+50.00

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	454
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

FILE NAME = p:\hntb256.hntb.org\PWGroot.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-FLYOVER.dgn

HNTB

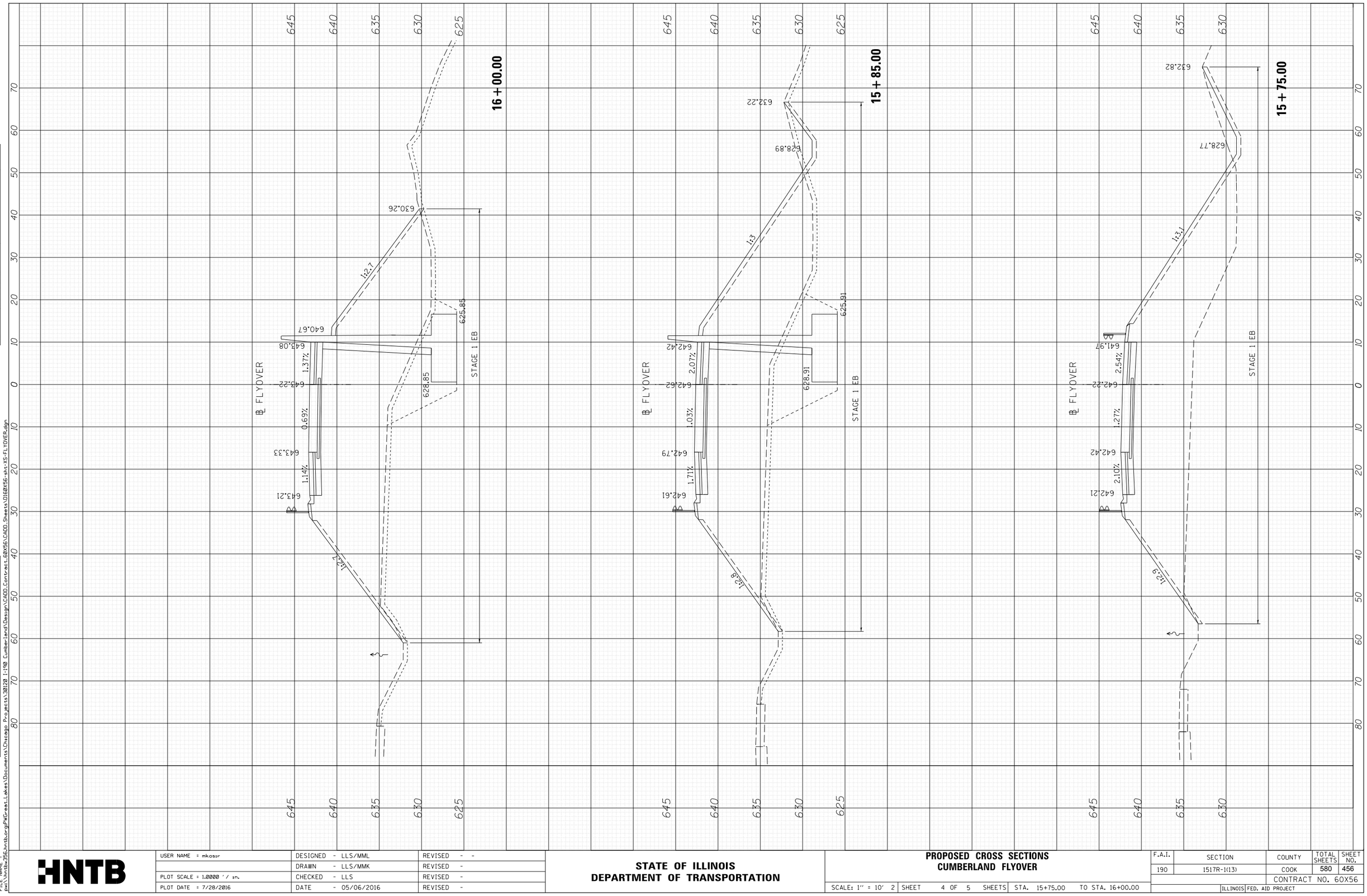
USER NAME = mkosir	DESIGNED - LLS/MML	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 7/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
CUMBERLAND FLYOVER

SCALE: 1'' = 10' | SHEET 3 OF 5 SHEETS | STA. 14+75.00 | TO STA. 15+50.00

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	455
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = p:\\hntbw356.hntb.org\PWGreat_Lakes\Documents\Chicago Projects\38120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-FLYOVER.dgn

HNTB

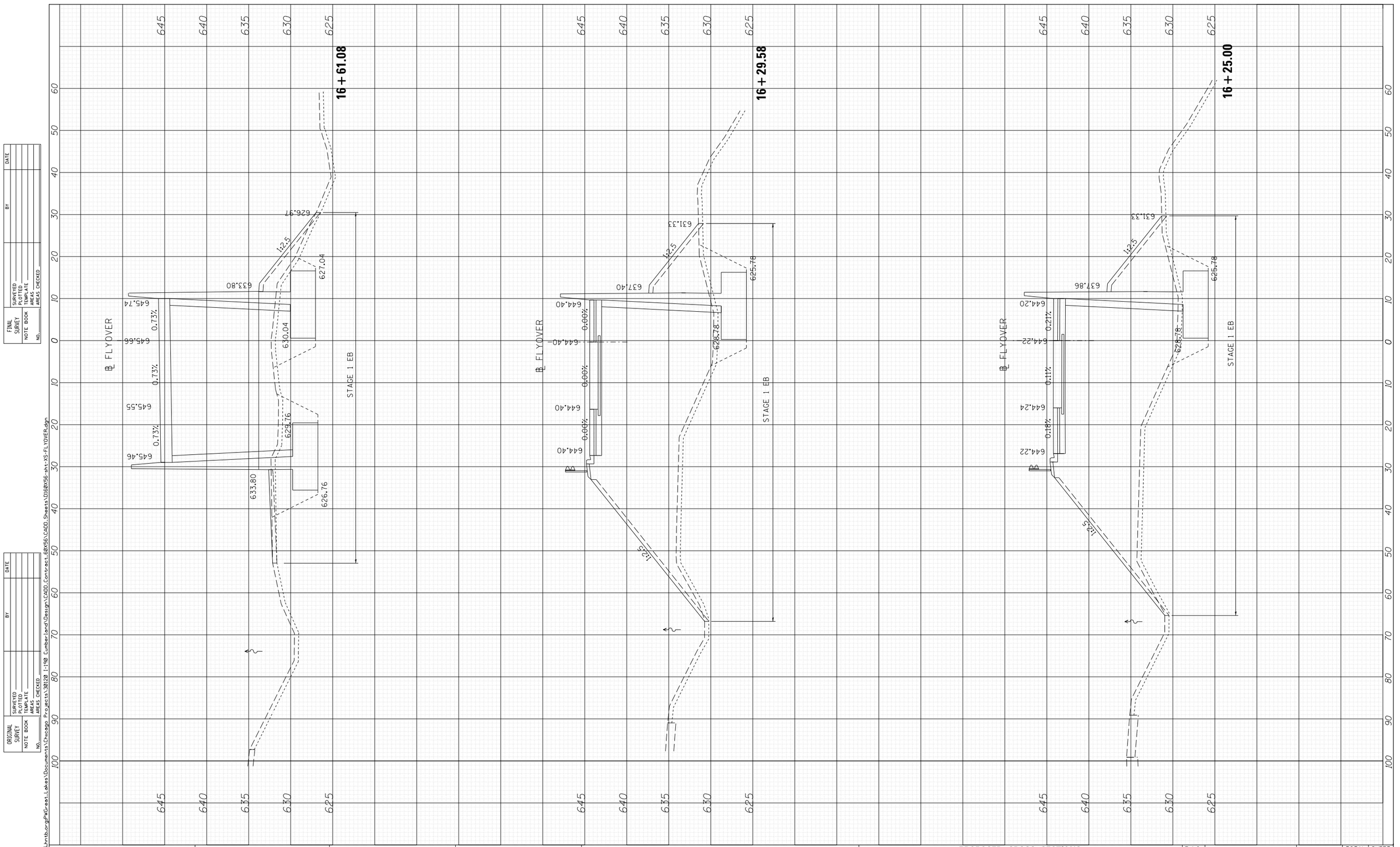
USER NAME = mkosir	DESIGNED - LLS/MML	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 7/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
CUMBERLAND FLYOVER

SCALE: 1" = 10' 2 | SHEET 4 OF 5 SHEETS | STA. 15+75.00 TO STA. 16+00.00

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	456
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

FILE NAME = p:\hntb256.hntb.org\PWGroot.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD\Sheets\D160X56-sht-XS-FLYOVER.dgn

HNTB

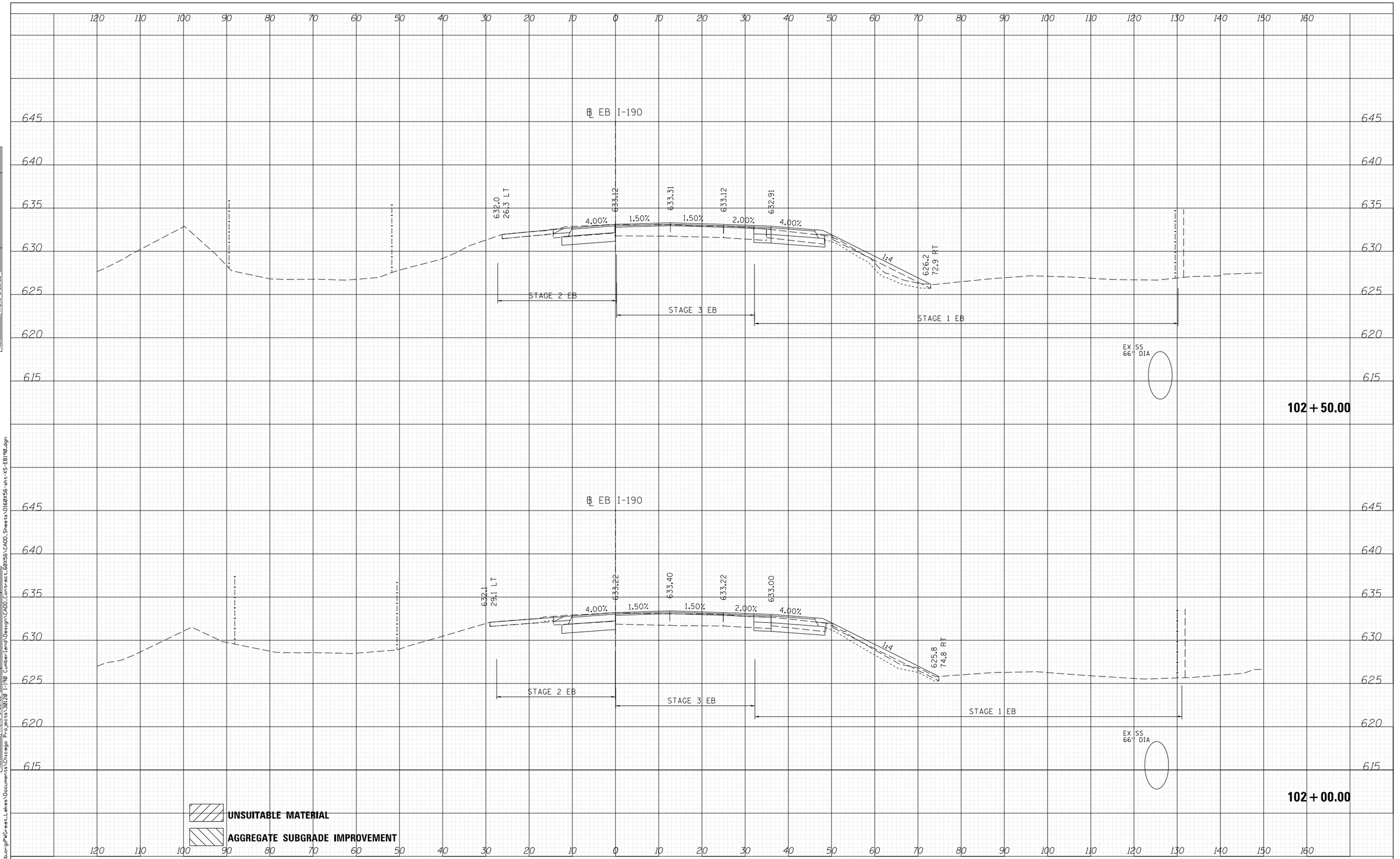
USER NAME = mkosir	DESIGNED - LLS/MML	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 7/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
CUMBERLAND FLYOVER

SCALE: 1'' = 10' | SHEET 5 OF 5 SHEETS | STA. 16+25.00 | TO STA. 16+29.58

F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	457
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

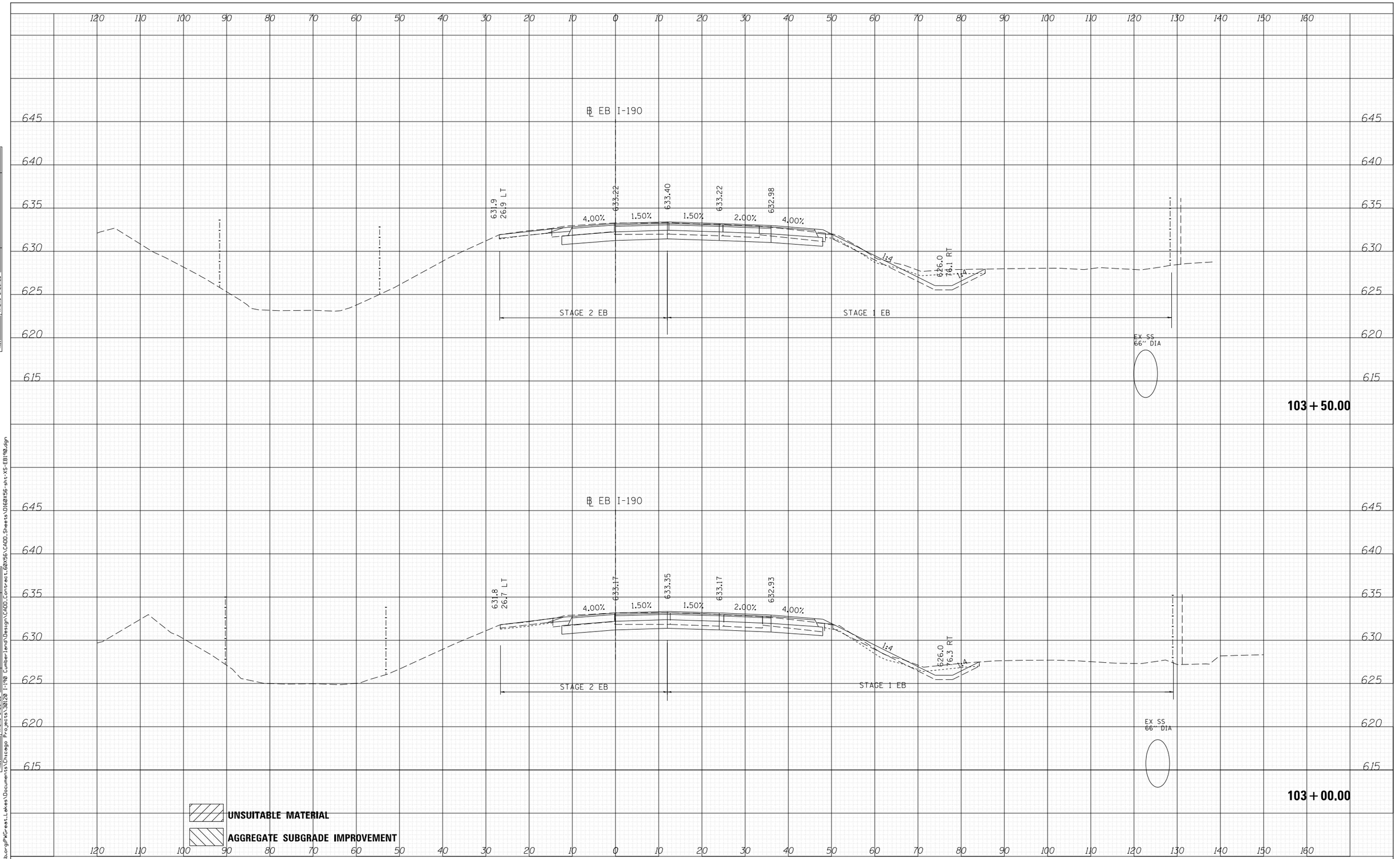
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 1 OF 22 SHEETS | STA. 102+00.00 | TO STA.102+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	458
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

FILE NAME = pw:\\hntbw356.hntbcorp\PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

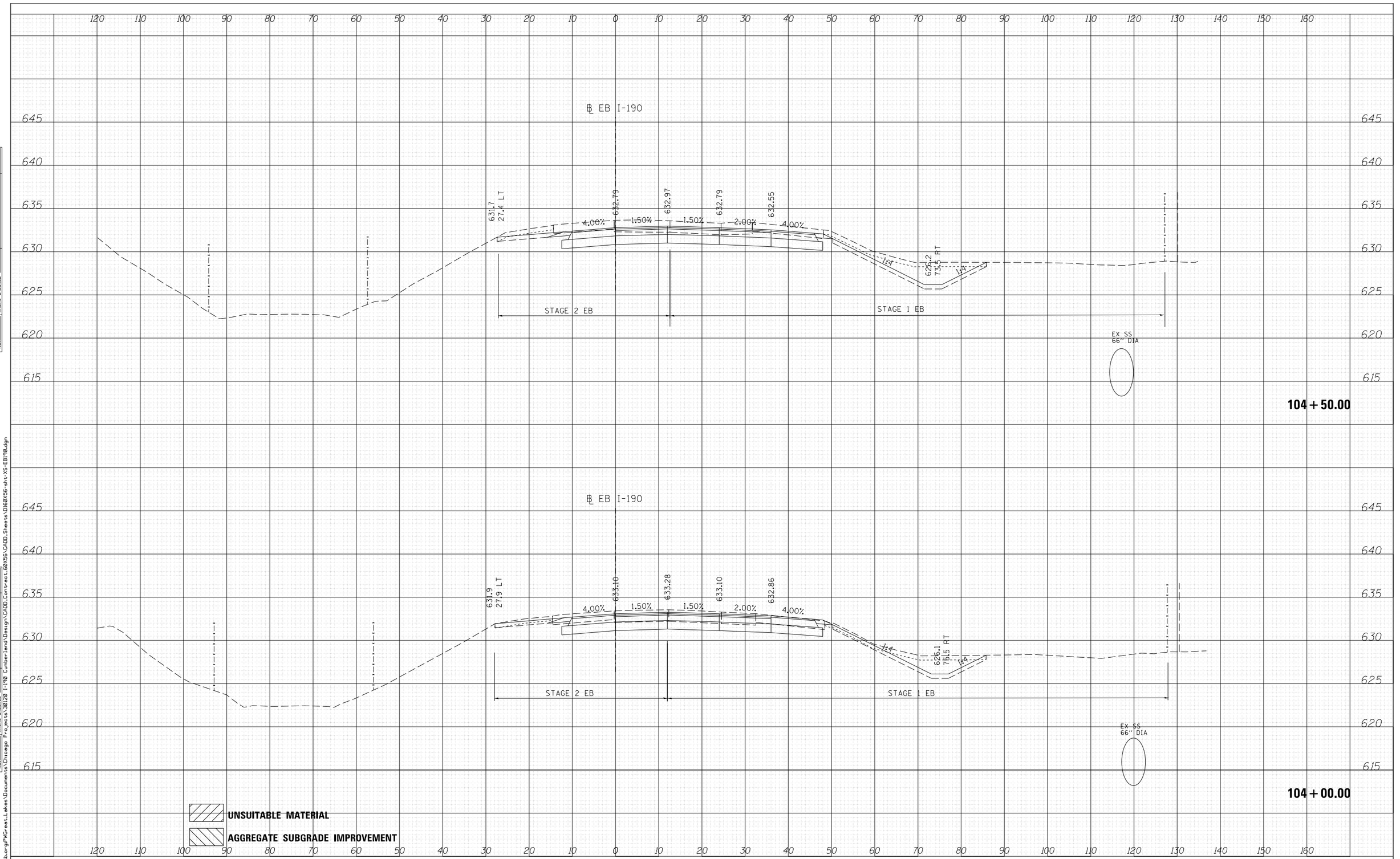
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 2 OF 22 SHEETS | STA. 103+00.00 TO STA.103+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	459
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntborgpw:Great.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

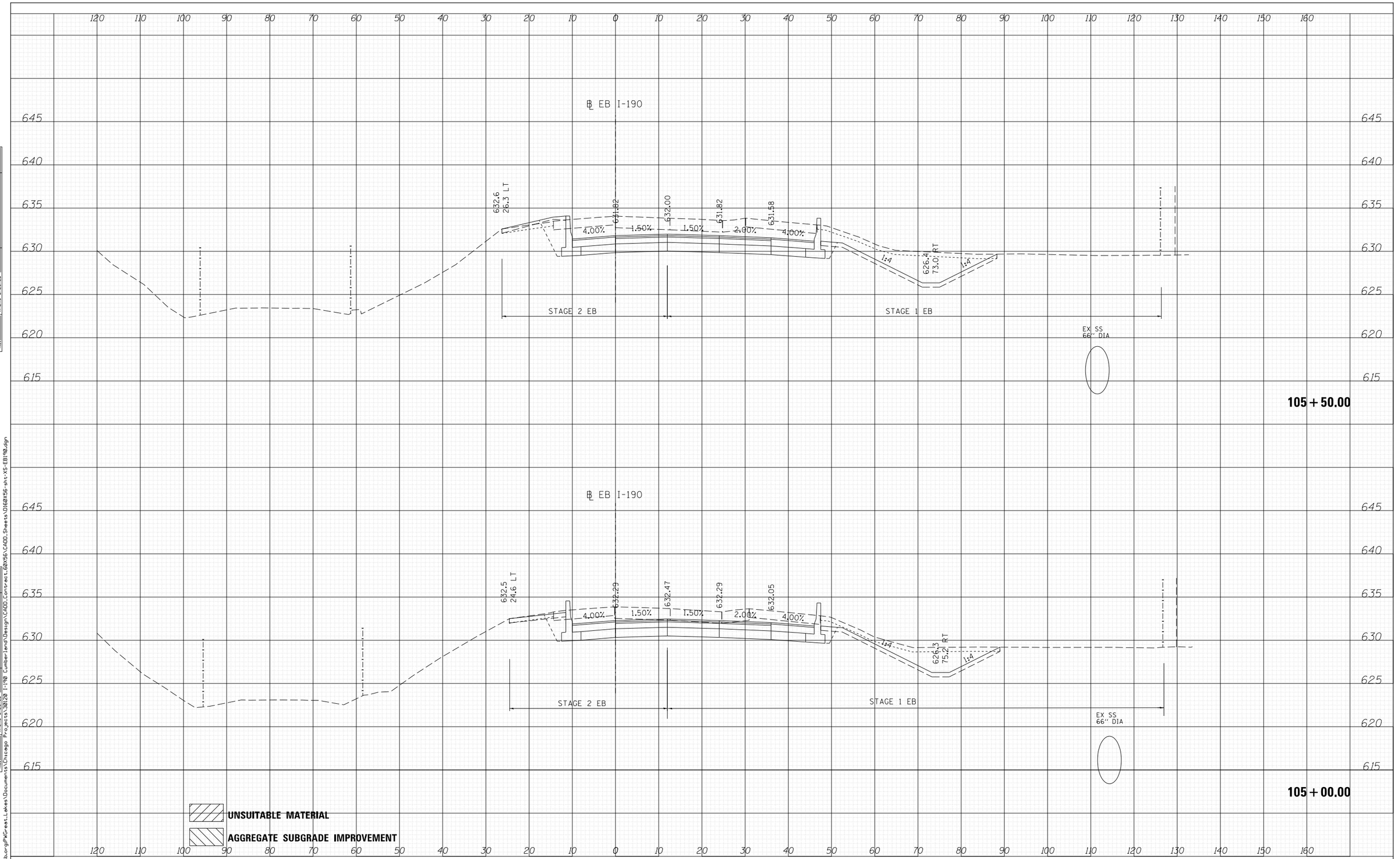
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 3 OF 22 SHEETS | STA. 104+00.00 TO STA.104+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	460
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.

DATE	BY	
		SURVEYED
		PLOTTED
		TEMPLATE
		AREAS
		AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO.

DATE	BY	
		SURVEYED
		PLOTTED
		TEMPLATE
		AREAS
		AREAS CHECKED

FILE NAME = pw:\\hntb-356.hntbcorp\Great.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

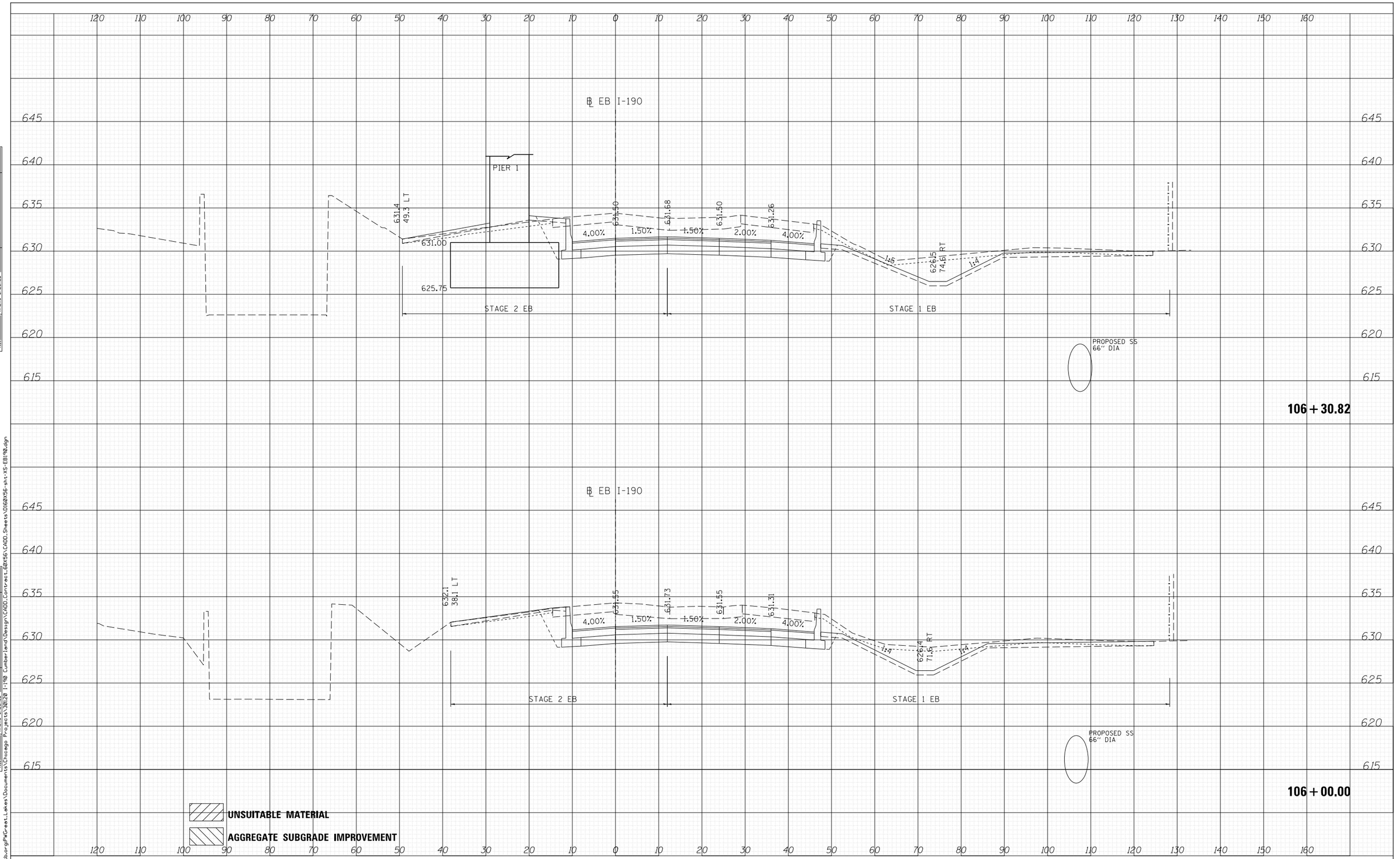
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 4 OF 22 SHEETS | STA. 105+00.00 TO STA.105+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	461
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntbcorp\Great_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

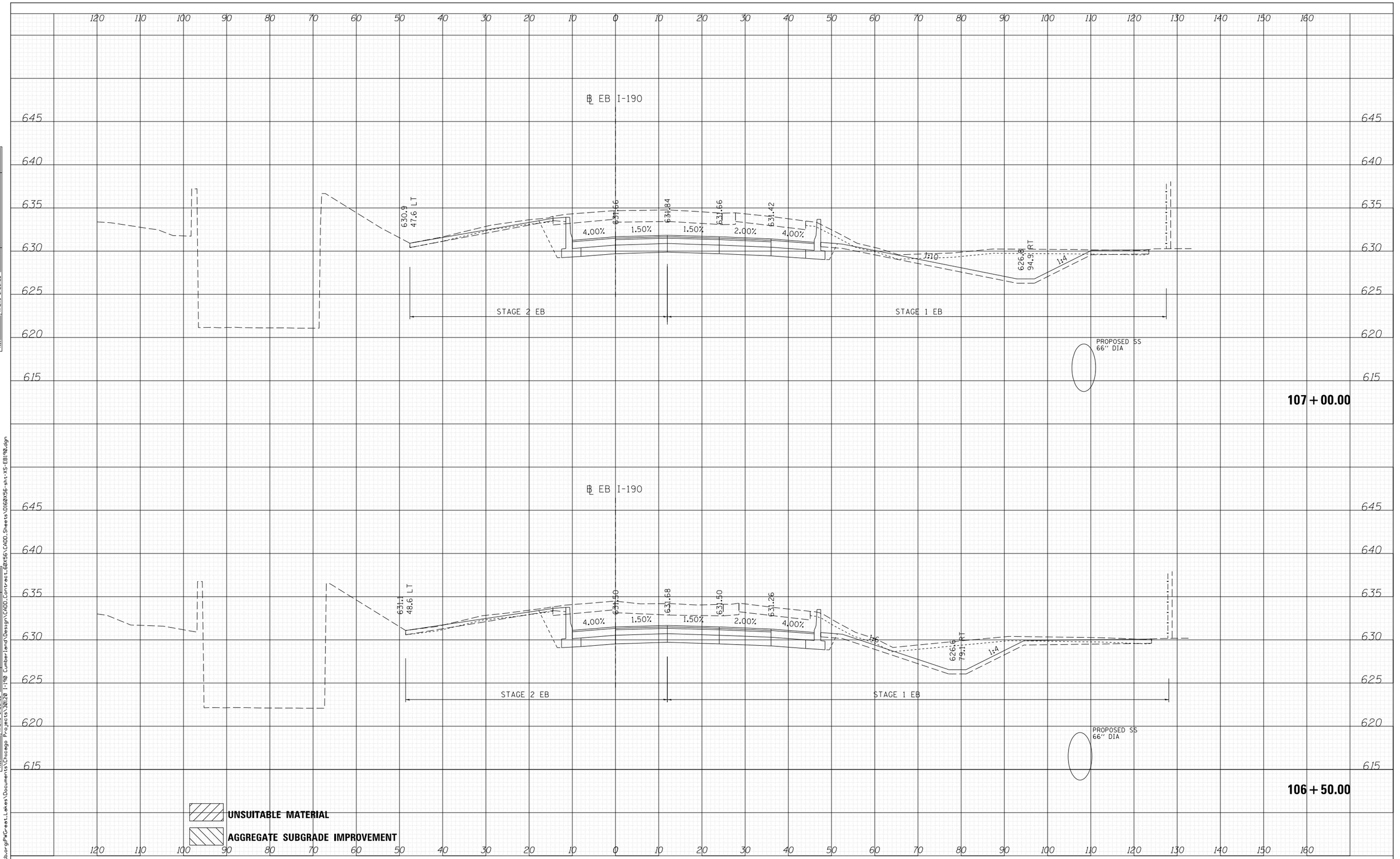
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 5 OF 22 SHEETS | STA. 106+00.00 TO STA.106+30.82

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	462
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntbcorp\PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

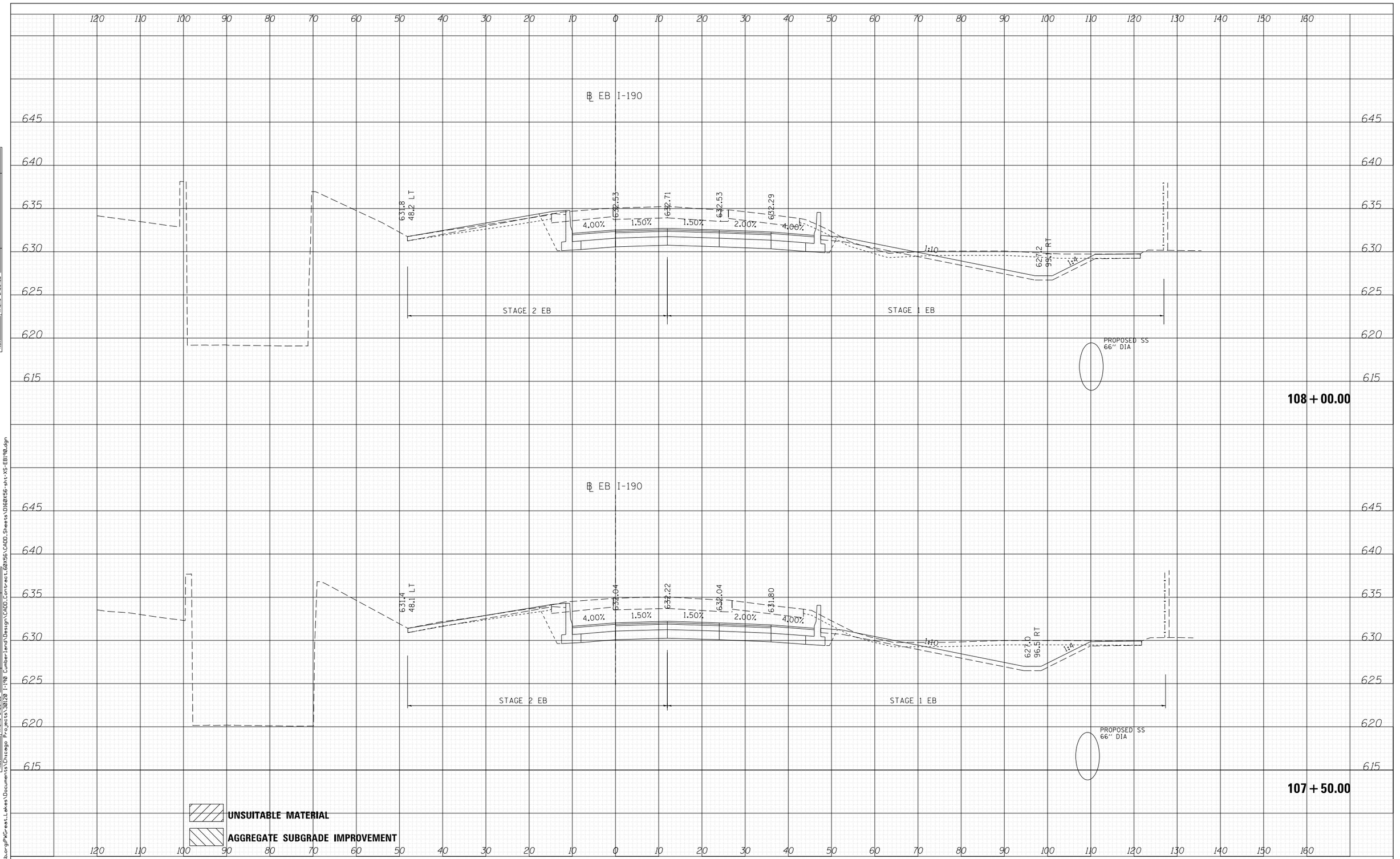
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 6 OF 22 SHEETS | STA. 106+50.00 TO STA.107+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	463
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

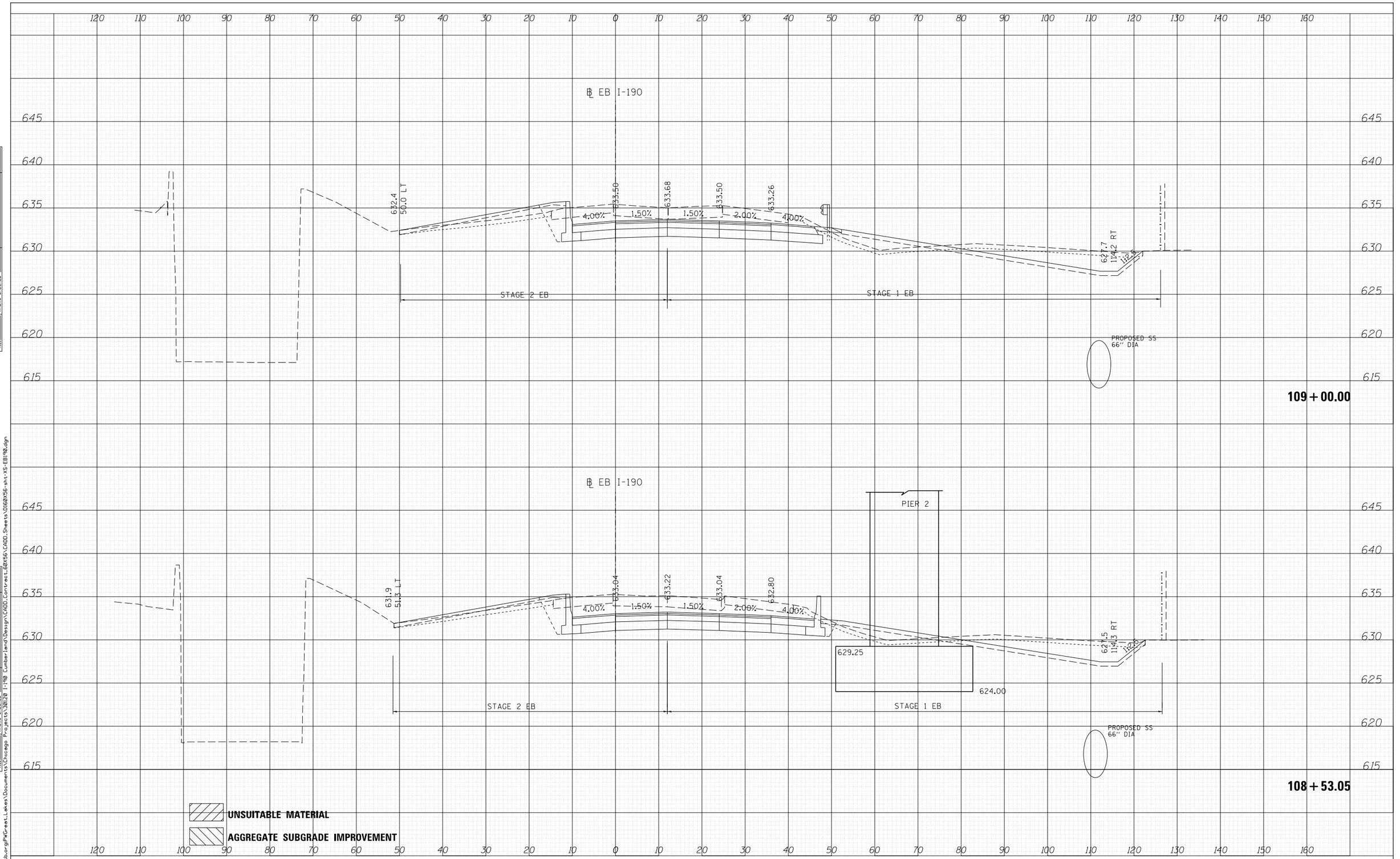
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 7 OF 22 SHEETS | STA. 107+50.00 TO STA.108+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	464
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

FILE NAME = pw:\\hntbw356.hntb.corp:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 8 OF 22 SHEETS | STA. 108+53.05 TO STA.109+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	465
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		

℄ EB I-190

645 640 635 630 625 620 615

633.7
50.0 LT

634.47 634.65 634.47 634.23

4.00% 1.50% 1.50% 2.00% 4.00%

628.1
113.7 RT

STAGE 2 EB

STAGE 1 EB

PROPOSED SS
66" DIA

110 + 00.00

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

℄ EB I-190

645 640 635 630 625 620 615

633.3
50.0 LT

633.98 634.16 633.98 633.74

4.00% 1.50% 1.50% 2.00% 4.00%

627.9
113.9 RT

STAGE 2 EB

STAGE 1 EB

PROPOSED SS
66" DIA

109 + 50.00

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FILE NAME = pw:\\hntbw356.hntb.corp:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

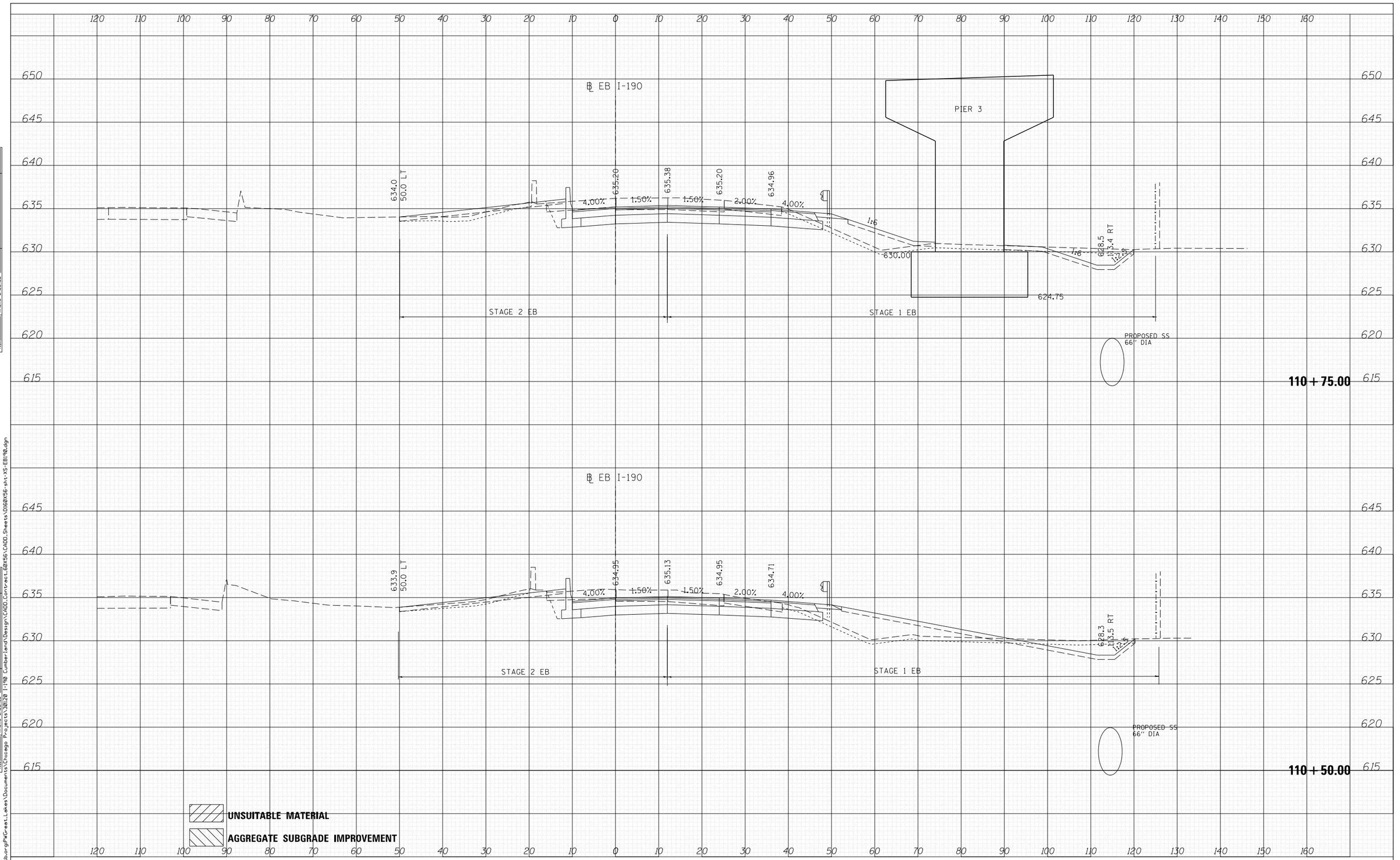
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I-190

SCALE: 1" = 10' | SHEET 9 OF 22 SHEETS | STA. 109+50.00 TO STA. 110+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	466
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY NOTE BOOK NO.
SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED
BY DATE

ORIGINAL SURVEY NOTE BOOK NO.
SURVEYED PLOTTED TEMPLATE AREAS AREAS CHECKED
BY DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

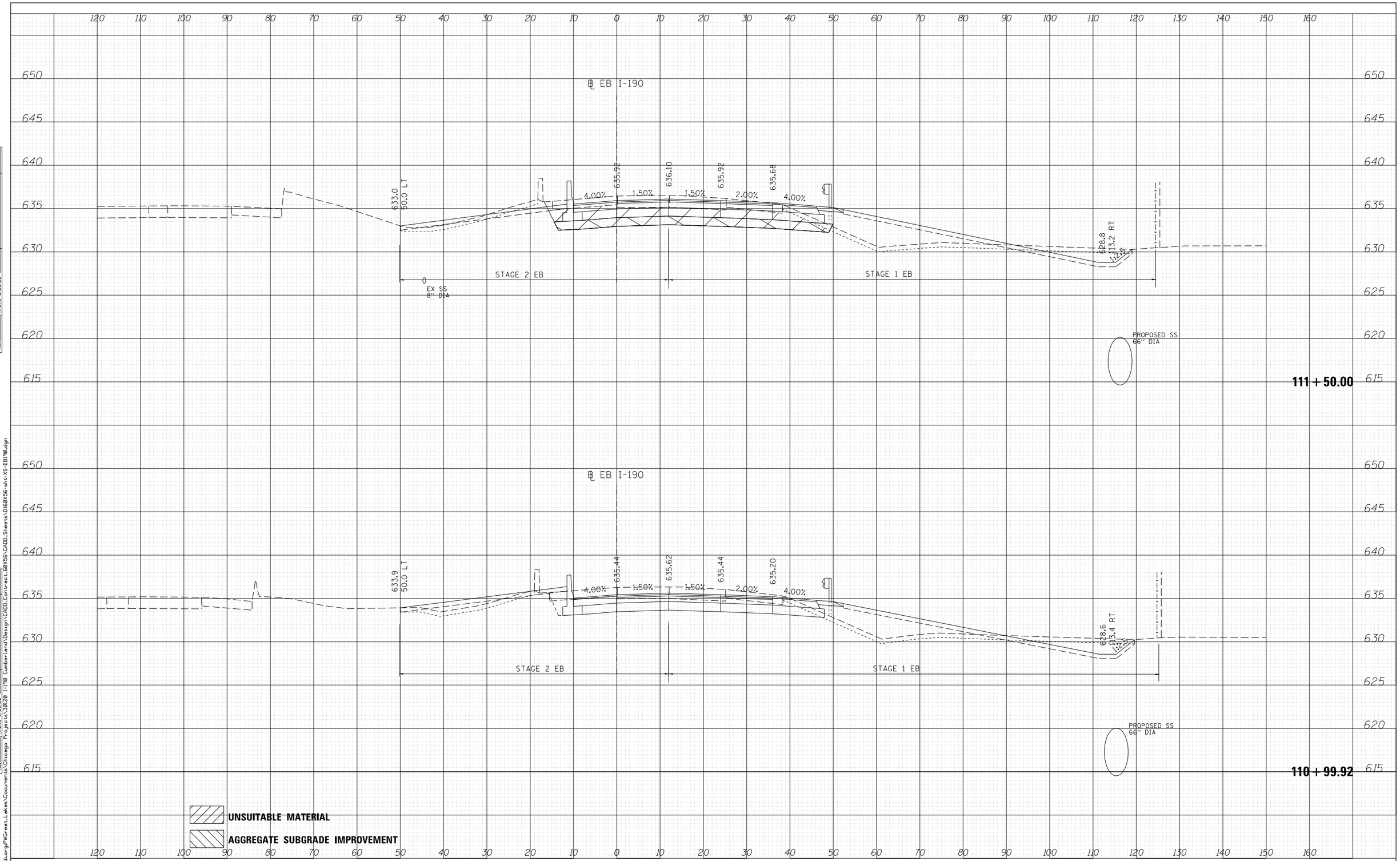
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 10 OF 22 SHEETS | STA. 110+50.00 TO STA.110+75.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	467
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

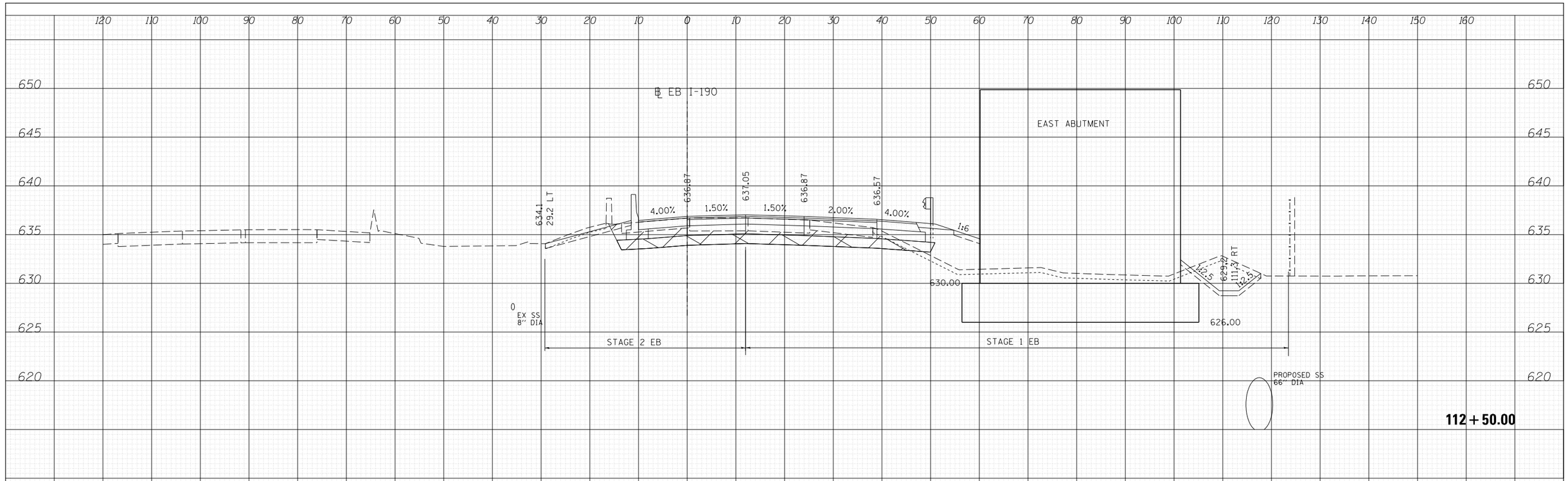
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

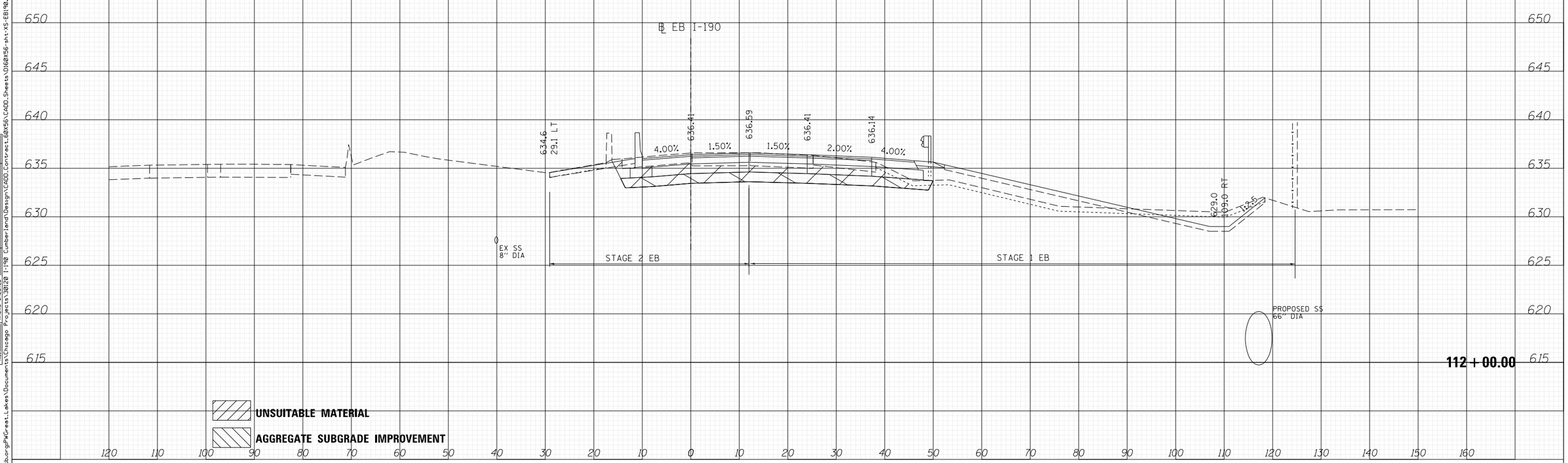
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 11 OF 22 SHEETS | STA. 110+99.92 | TO STA. 111+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	468
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	





UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

HNTB

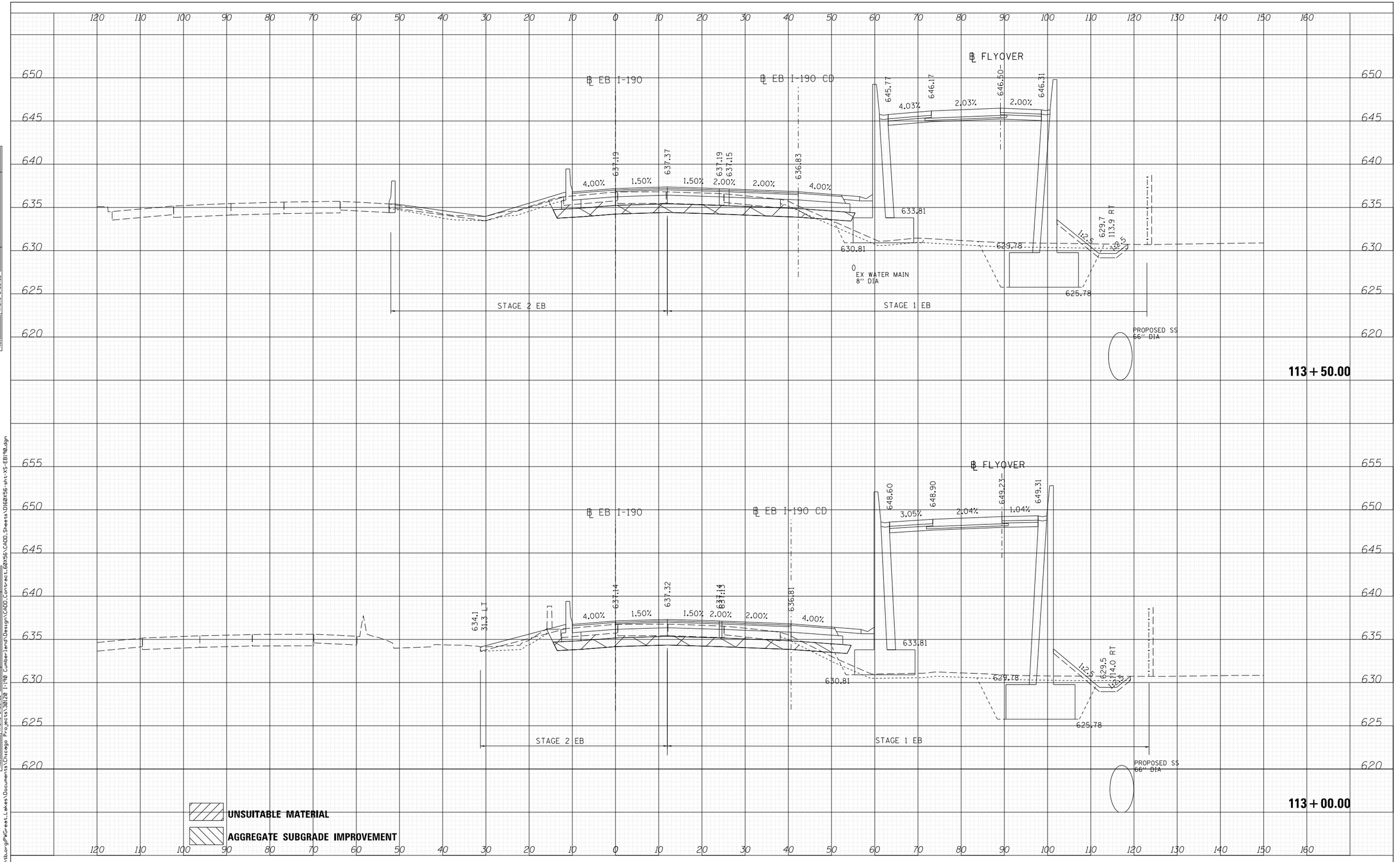
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 12 OF 22 SHEETS | STA. 112+00.00 TO STA. 112+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	469
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

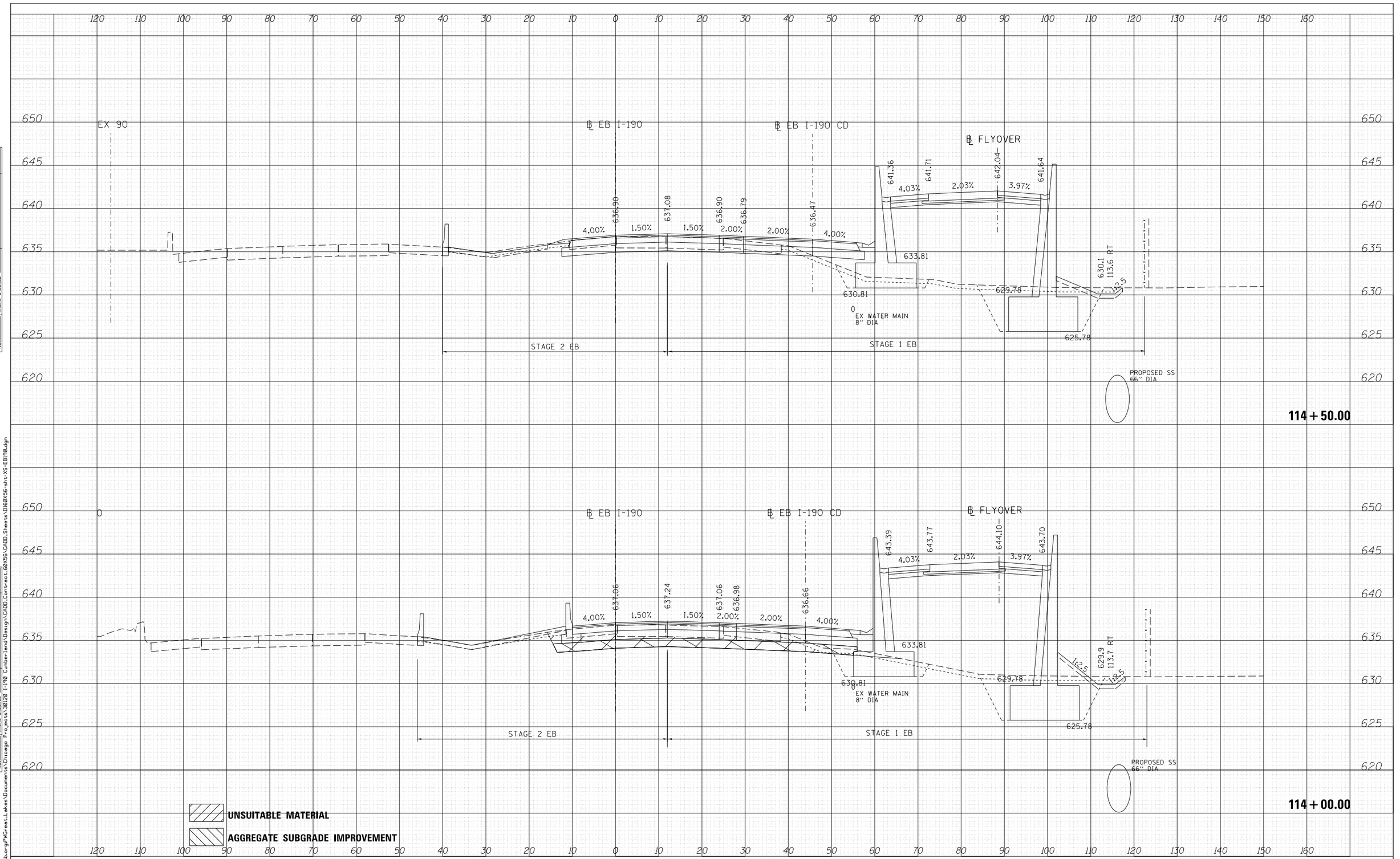
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 13 OF 22 SHEETS | STA. 113+00.00 TO STA. 113+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	470
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntb-w356.hntbcorp\PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

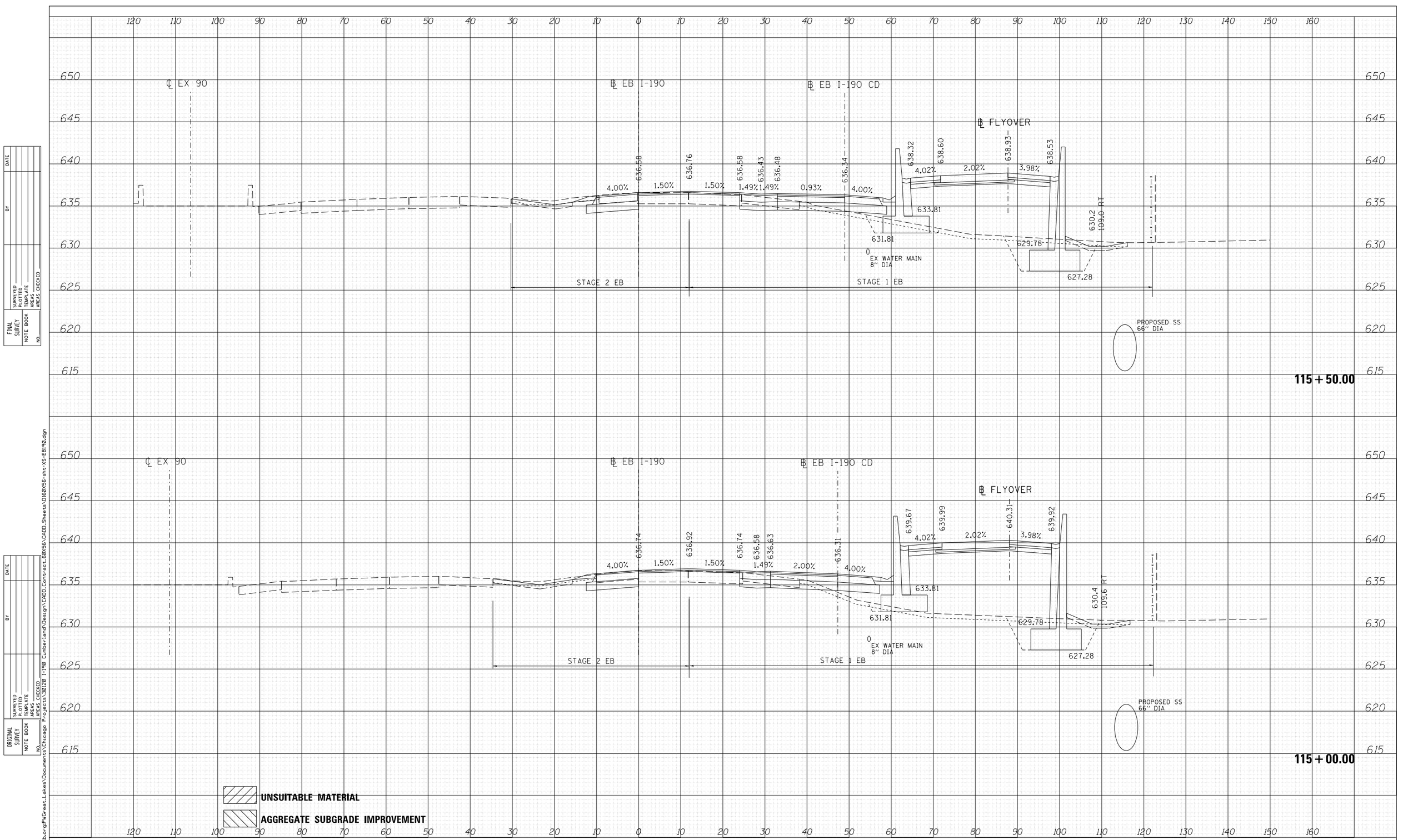
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 14 OF 22 SHEETS | STA. 114+00.00 | TO STA.114+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	471
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pwGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

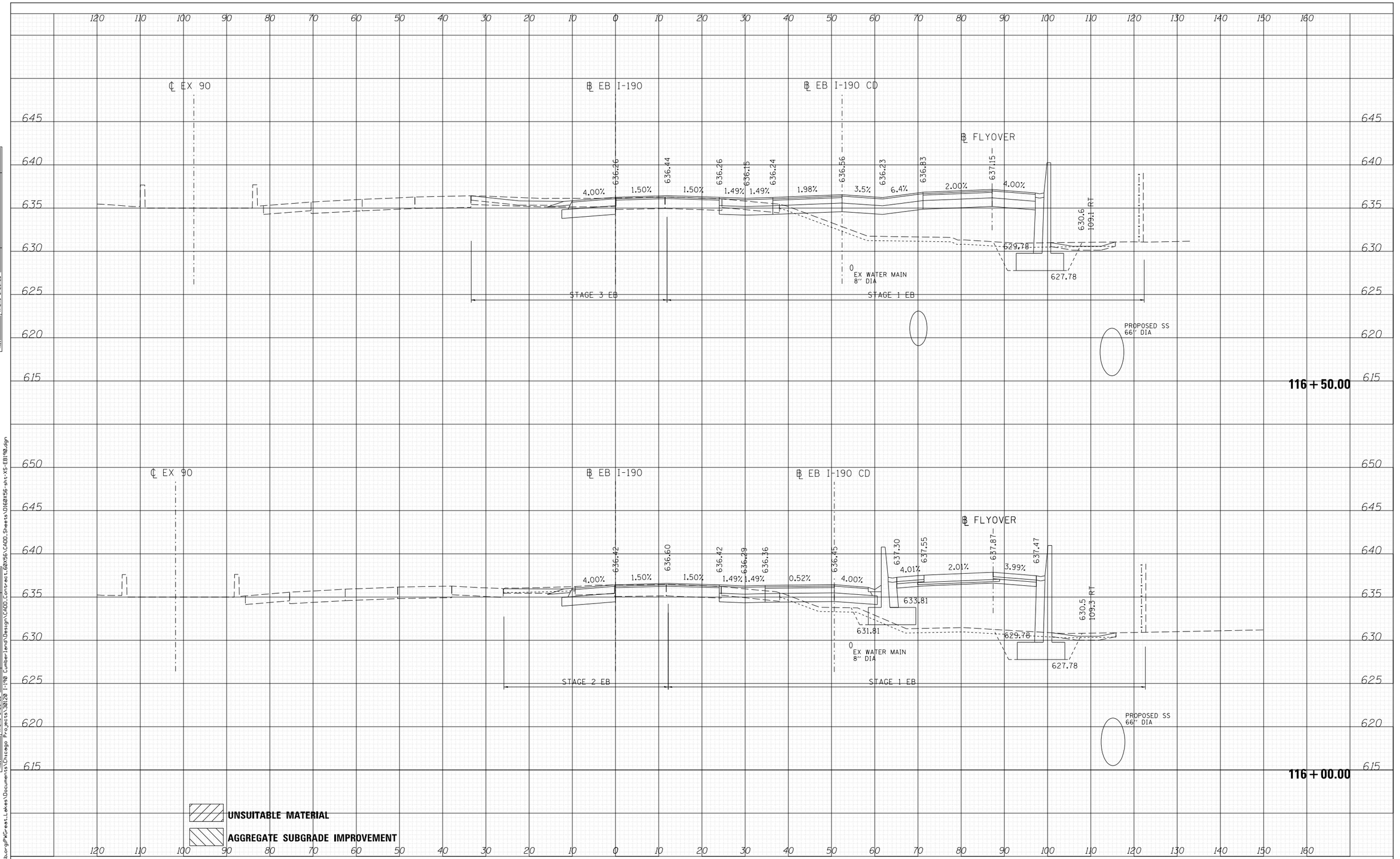
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 15 OF 22 SHEETS | STA. 115+00.00 | TO STA. 115+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	472
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pwGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

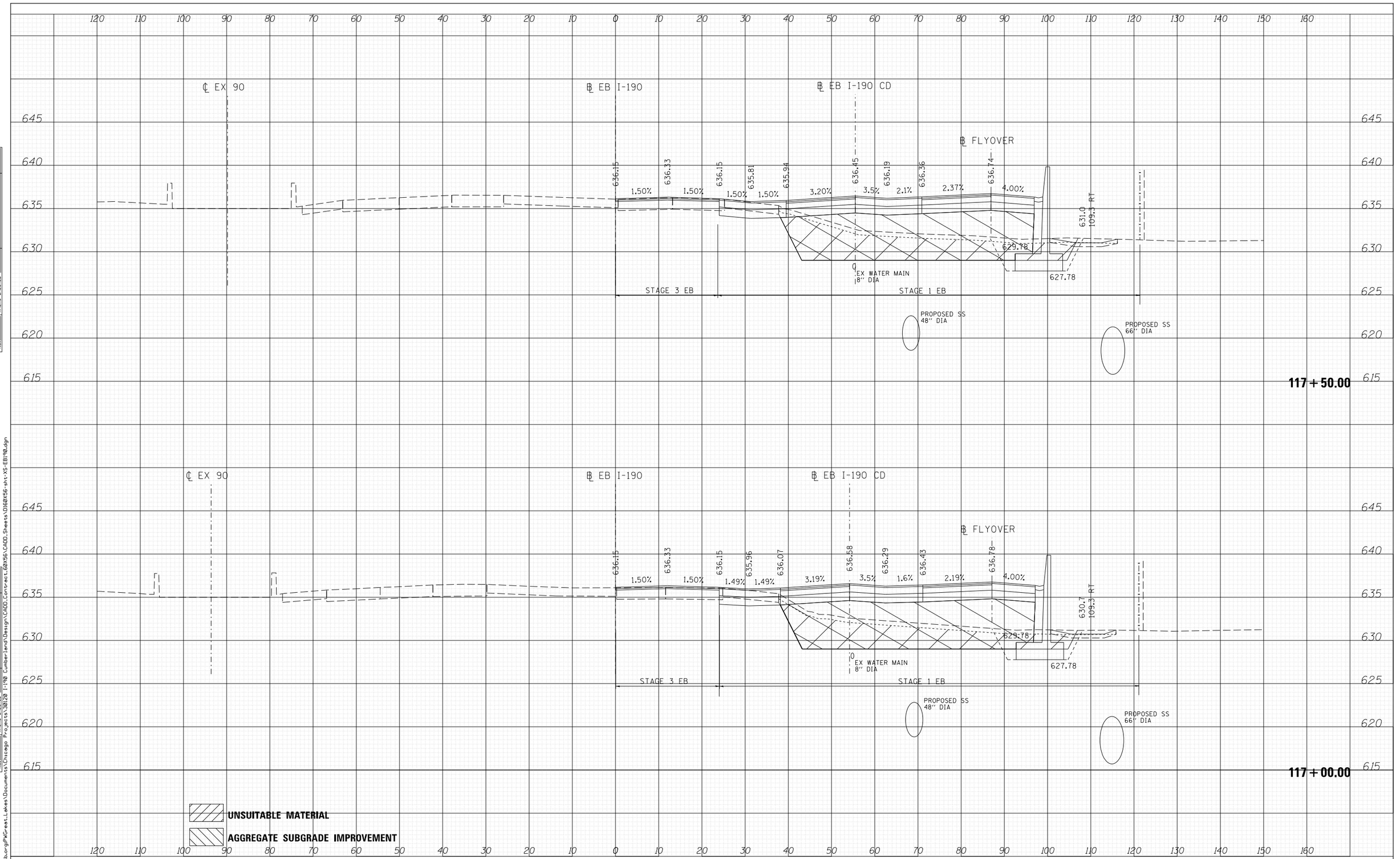
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 16 OF 22 SHEETS | STA. 116+00.00 | TO STA. 116+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	473
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

FILE NAME = pw:\\hntb-w356.hntb.corp:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

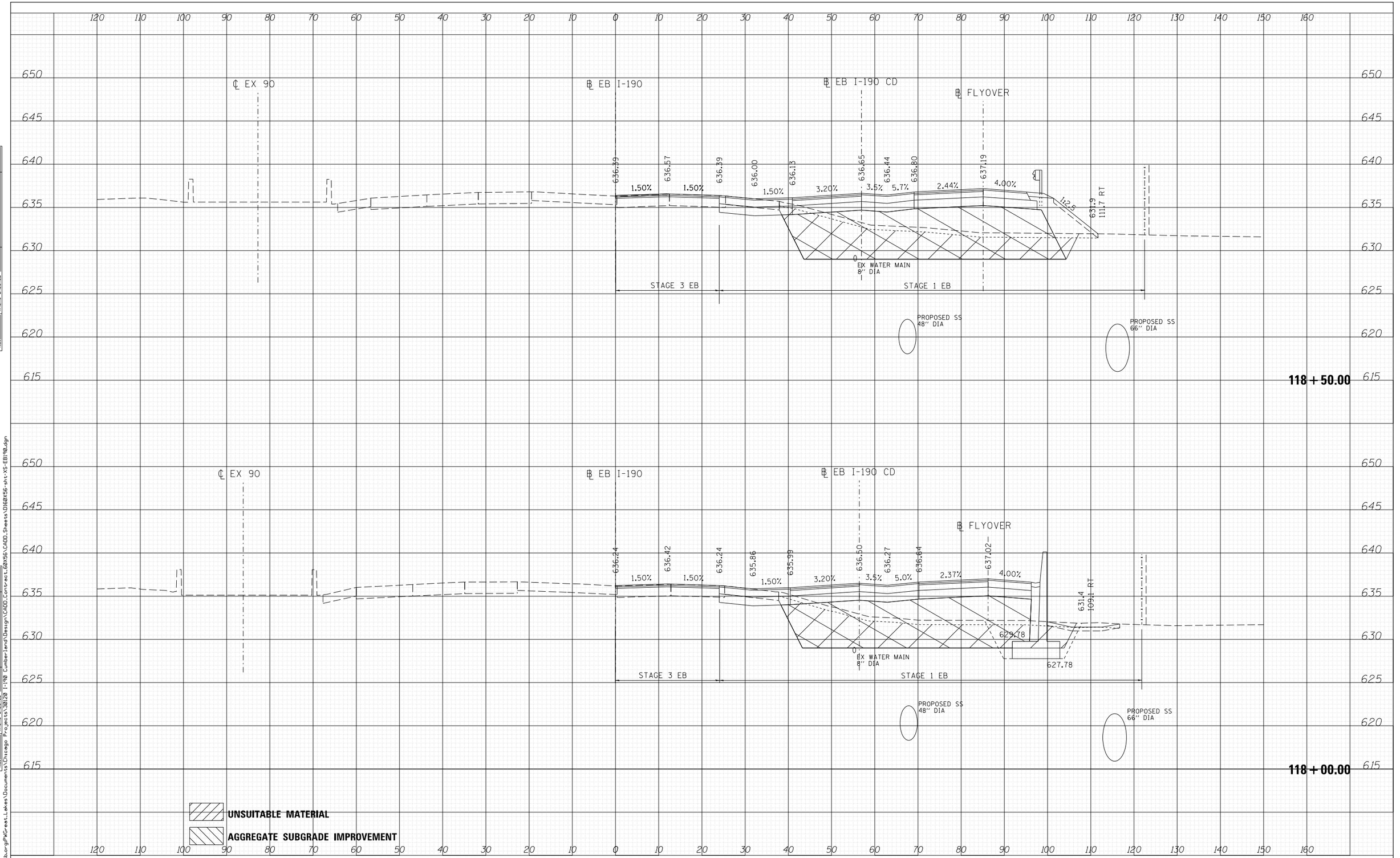
HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 17 OF 22 SHEETS | STA. 117+00.00 | TO STA.117+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	474
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

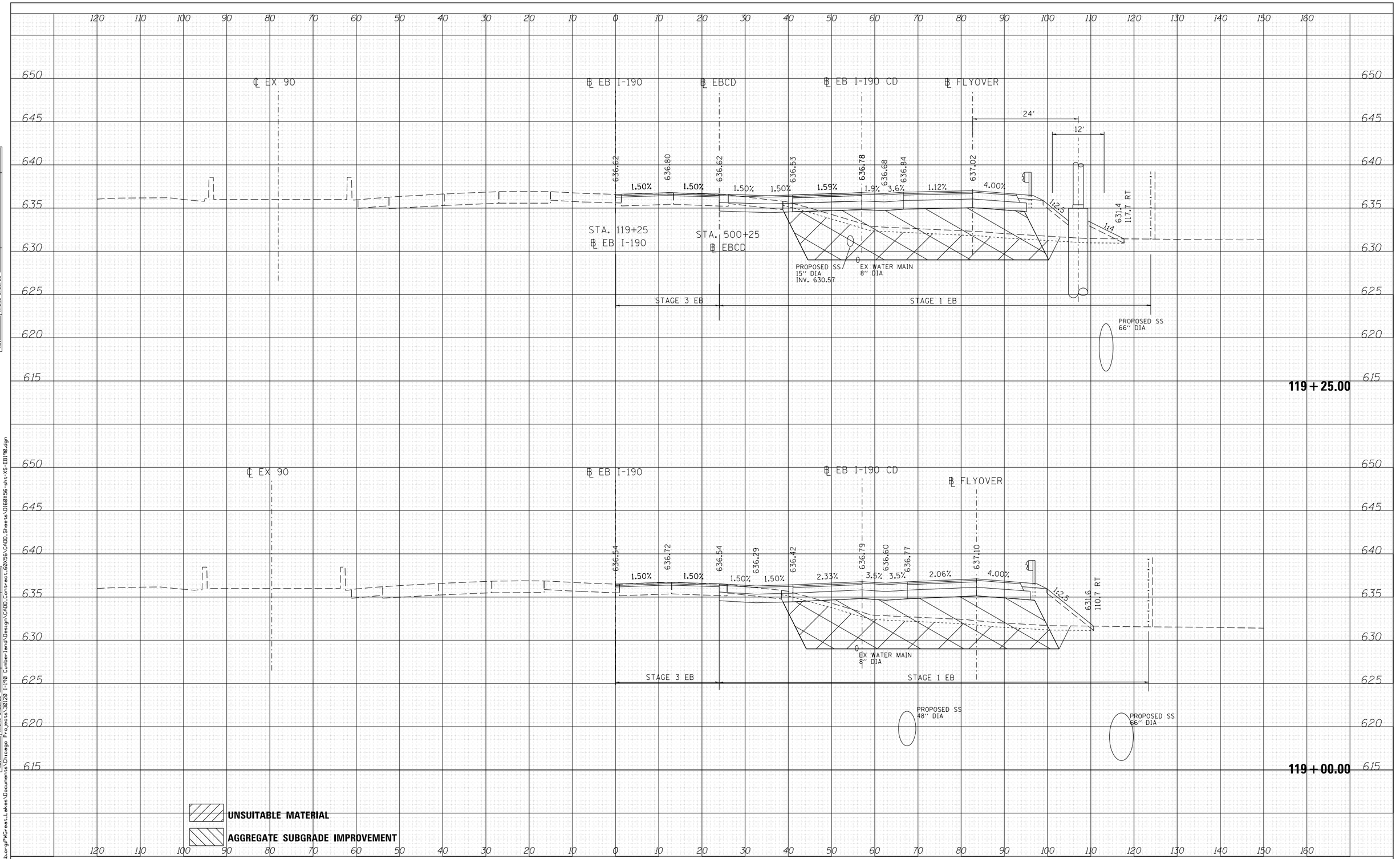
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 18 OF 22 SHEETS | STA. 118+00.00 | TO STA. 118+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	475
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EB190.dgn

HNTB

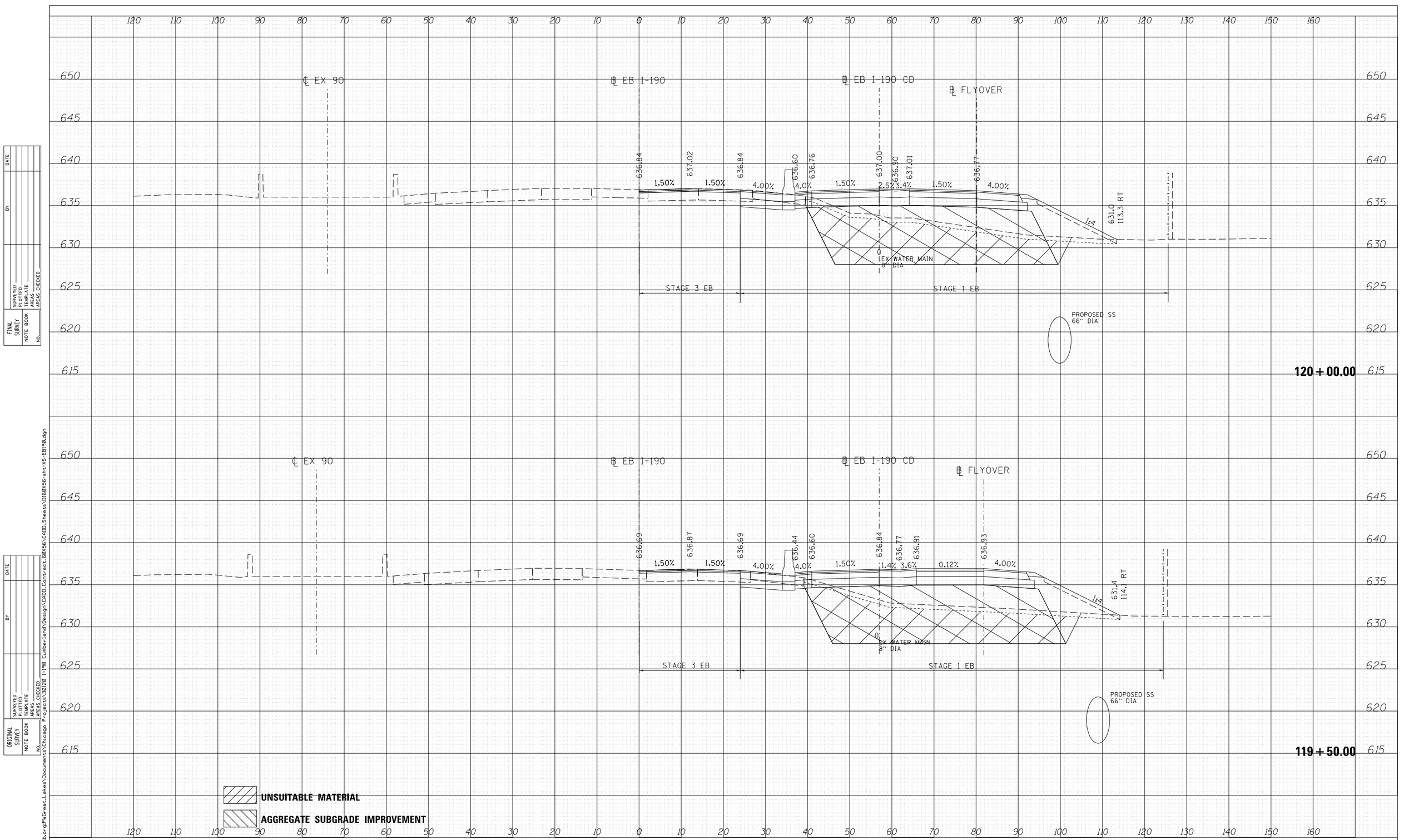
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 19 OF 22 SHEETS | STA. 119+00.00 TO STA. 119+25.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	476
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD\Sheets\D160X56-sht-XS-EB190.dgn

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

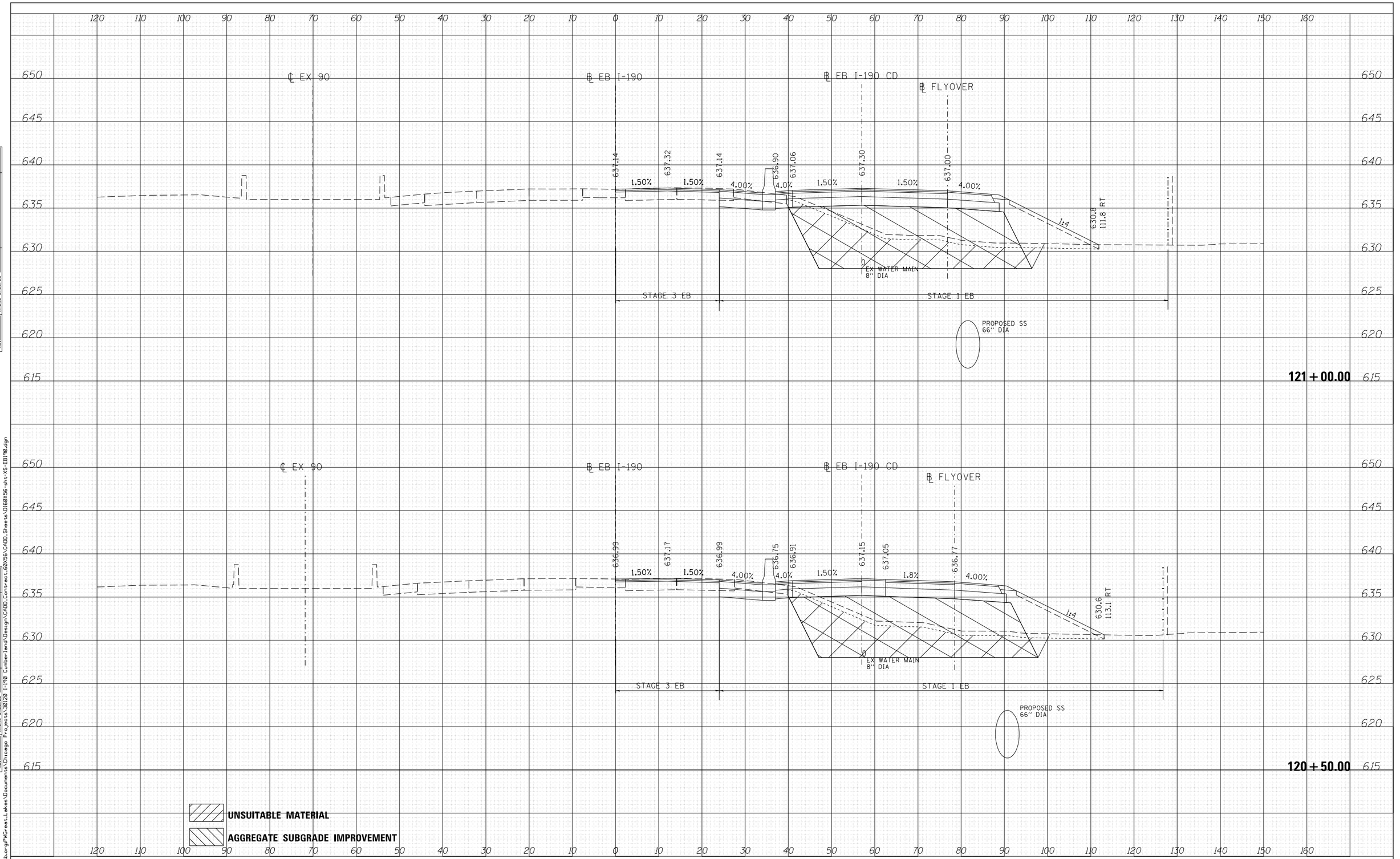
HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 20 OF 22 SHEETS | STA. 119+50.00 TO STA.120+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	477
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FILE NAME = pw:\\hntbw356.hntb.org:pwGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

HNTB

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

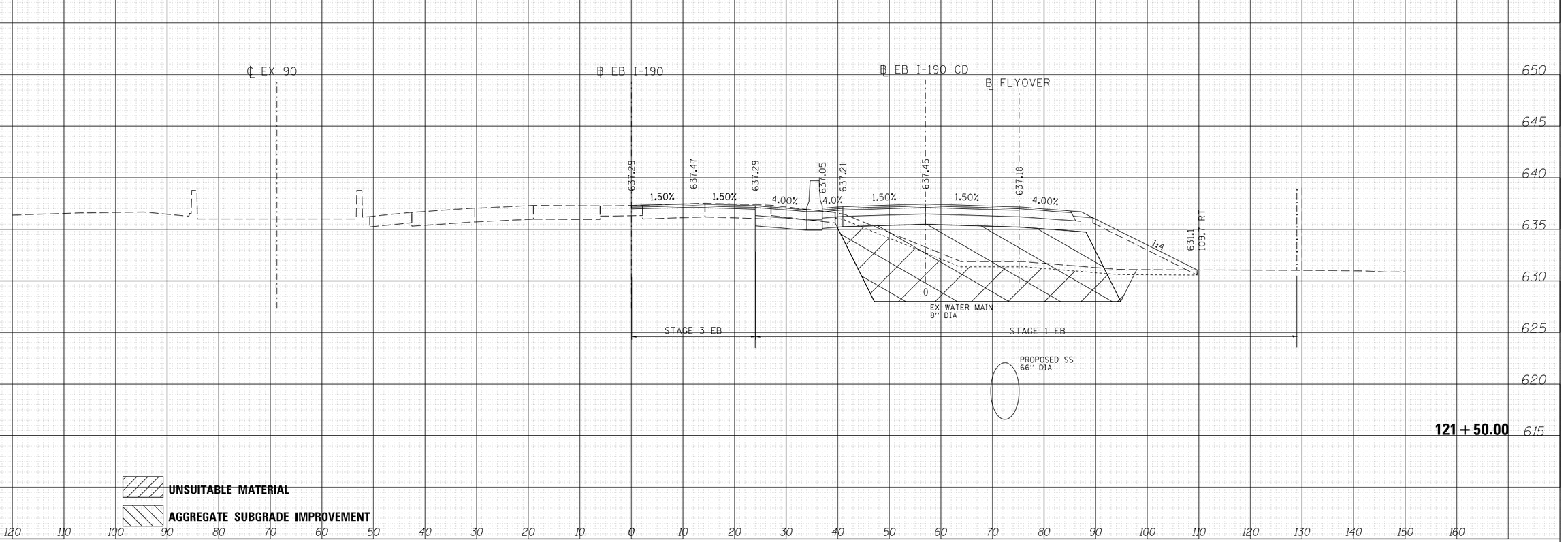
PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 21 OF 22 SHEETS | STA. 120+50.00 | TO STA. 121+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	478
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
	TEMPLATE		
NOTE BOOK	AREAS		
NO.	AREAS CHECKED		



UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FILE NAME = pw:\\hntbw356.hntb.org:pwGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EB190.dgn

HNTB

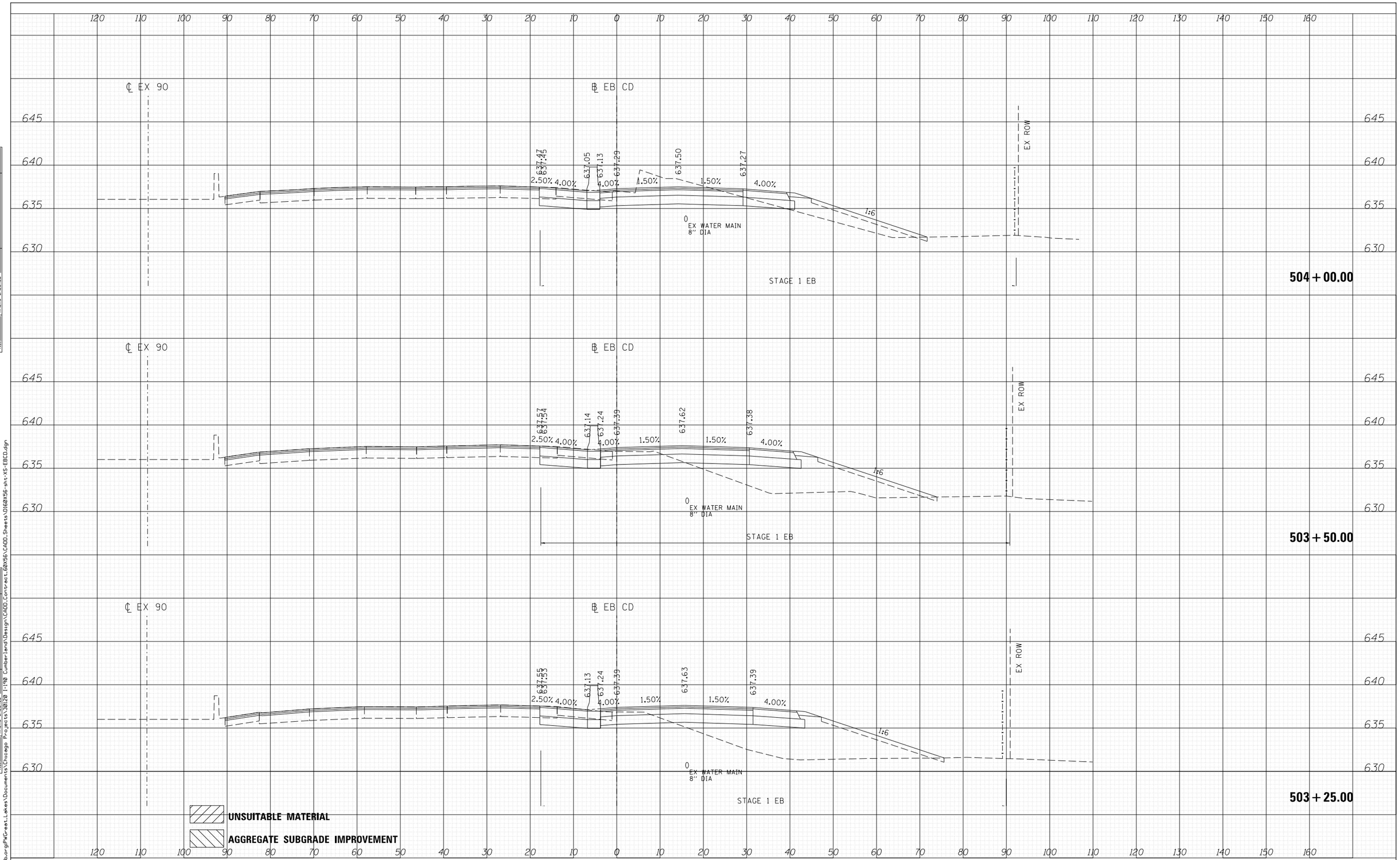
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EB I–190

SCALE: 1" = 10' | SHEET 22 OF 22 SHEETS | STA. 121+50.00 TO STA. 121+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	479
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

FILE NAME = pw:\hntb-256.hntb.org#PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD\Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 1 OF 19 SHEETS | STA. 503+25.00 TO STA.504+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	480
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

℄ EX 90

℄ EB CD

637.08
637.05
636.65
636.68
636.84
637.04
636.84

2.50% 4.00% 4.00% 1.50% 1.50% 4.00%

1:6

0
EX WATER MAIN
8" DIA

PRE-STAGE EB

505 + 00.00

℄ EX 90

℄ EB CD

EX SS
66" DIA
INV. 617.27

637.16
637.13
636.73
636.75
636.91
637.11
636.90

40'
12'

2.50% 4.00% 4.00% 1.50% 1.50% 4.00%

1:6

1.5% 1.5% 1:6

0
EX WATER MAIN
8" DIA

504 + 85.20

PRE-STAGE EB

℄ EX 90

℄ EB CD

EX SS
66" DIA
INV. 617.21

637.35
637.32
636.92
636.91
637.07
637.28
637.06

2.50% 4.00% 4.00% 1.50% 1.50% 4.00%

1:6

EX WATER MAIN
8" DIA

0
COMED
CONCRETE
ENCASED

504 + 50.00

STAGE 1 EB

UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160

650 645 640 635 630

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FILE NAME = pw:\\hntbw356.hntb.corp\PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

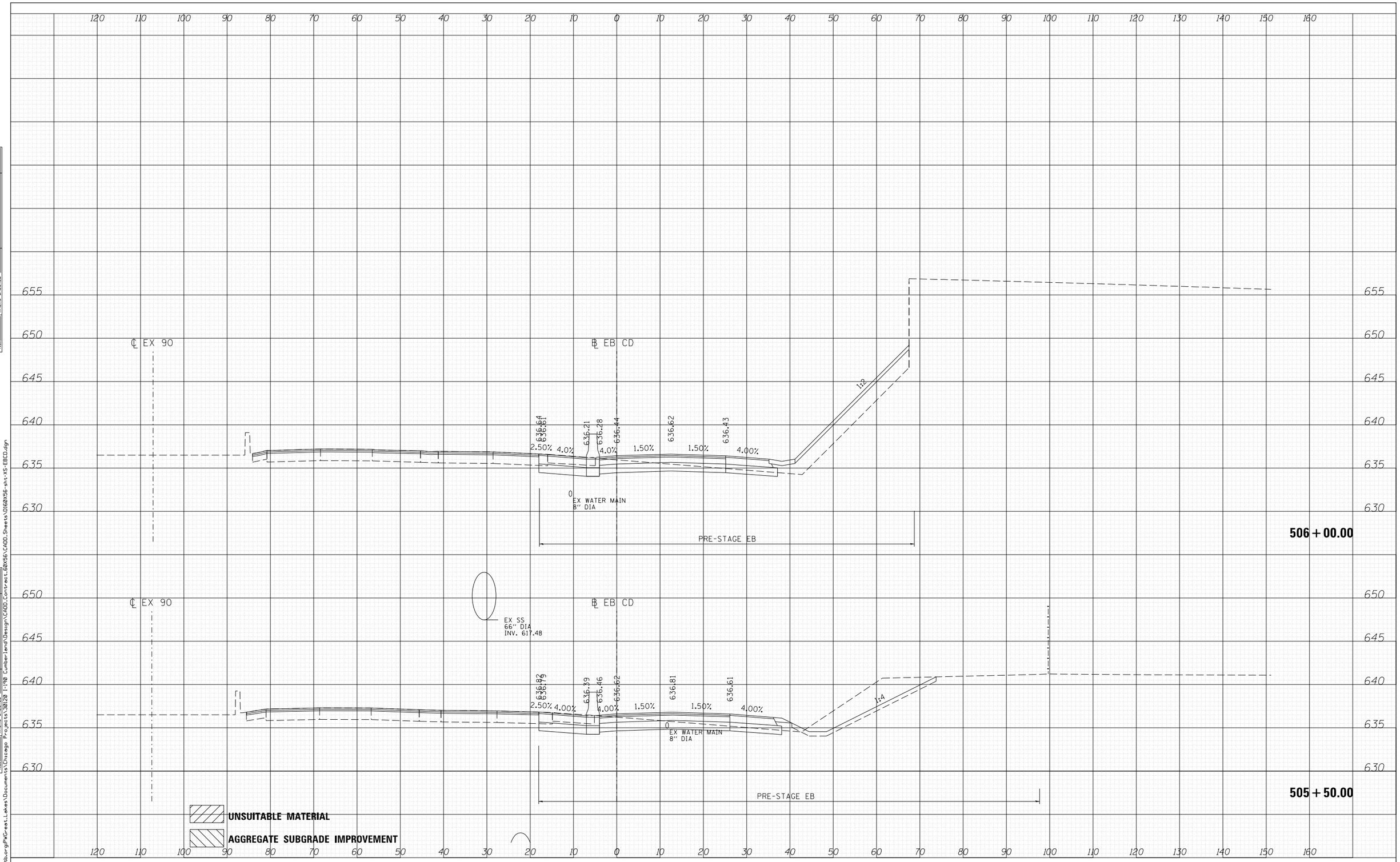
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 2 OF 19 SHEETS | STA. 504+50.00 TO STA. 505+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	481
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
DATE — BY

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
DATE — BY

FILE NAME = pw:\\hntb-w356.hntb.corp:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

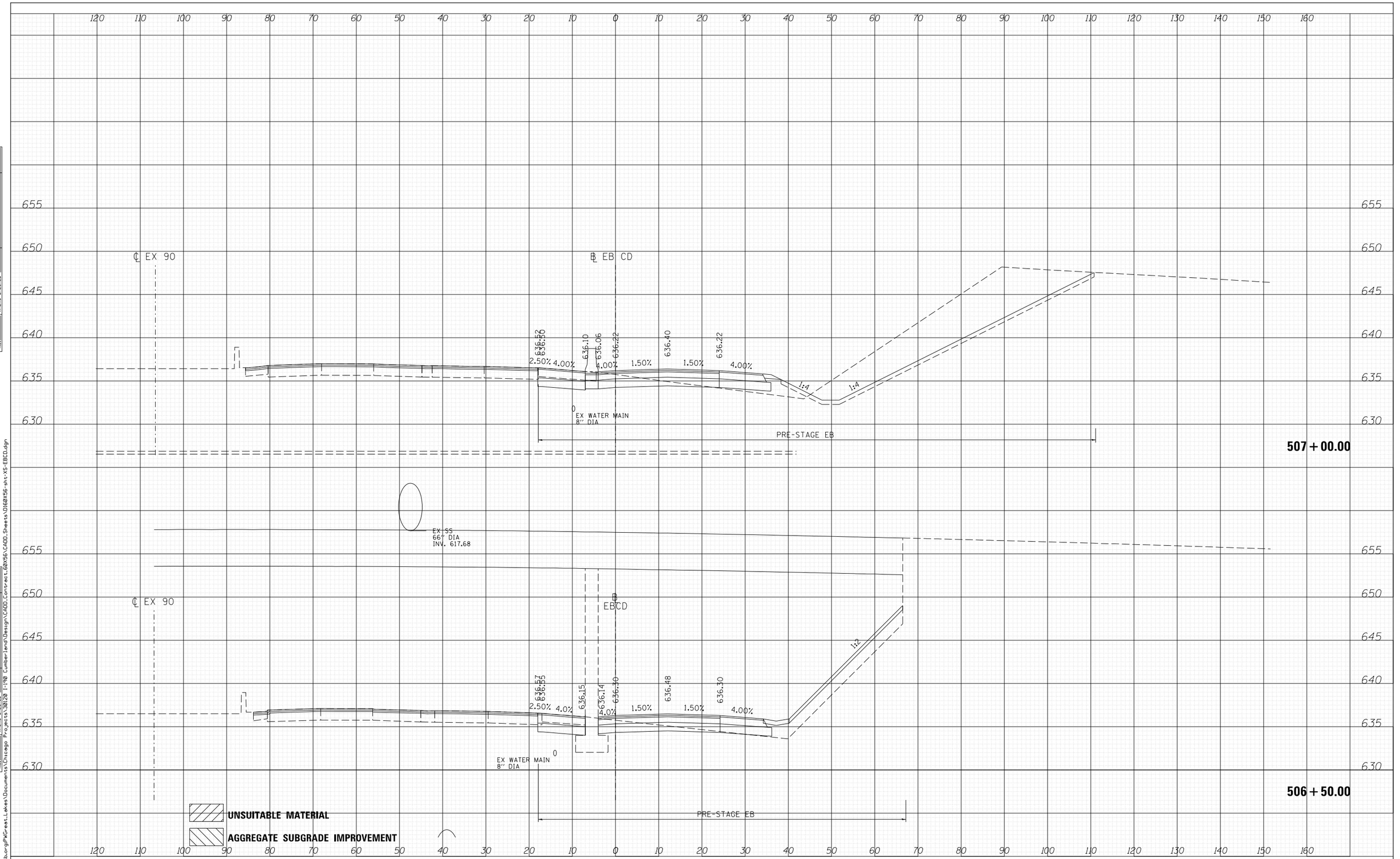
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 3 OF 19 SHEETS | STA. 505+50.00 TO STA. 506+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	482
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

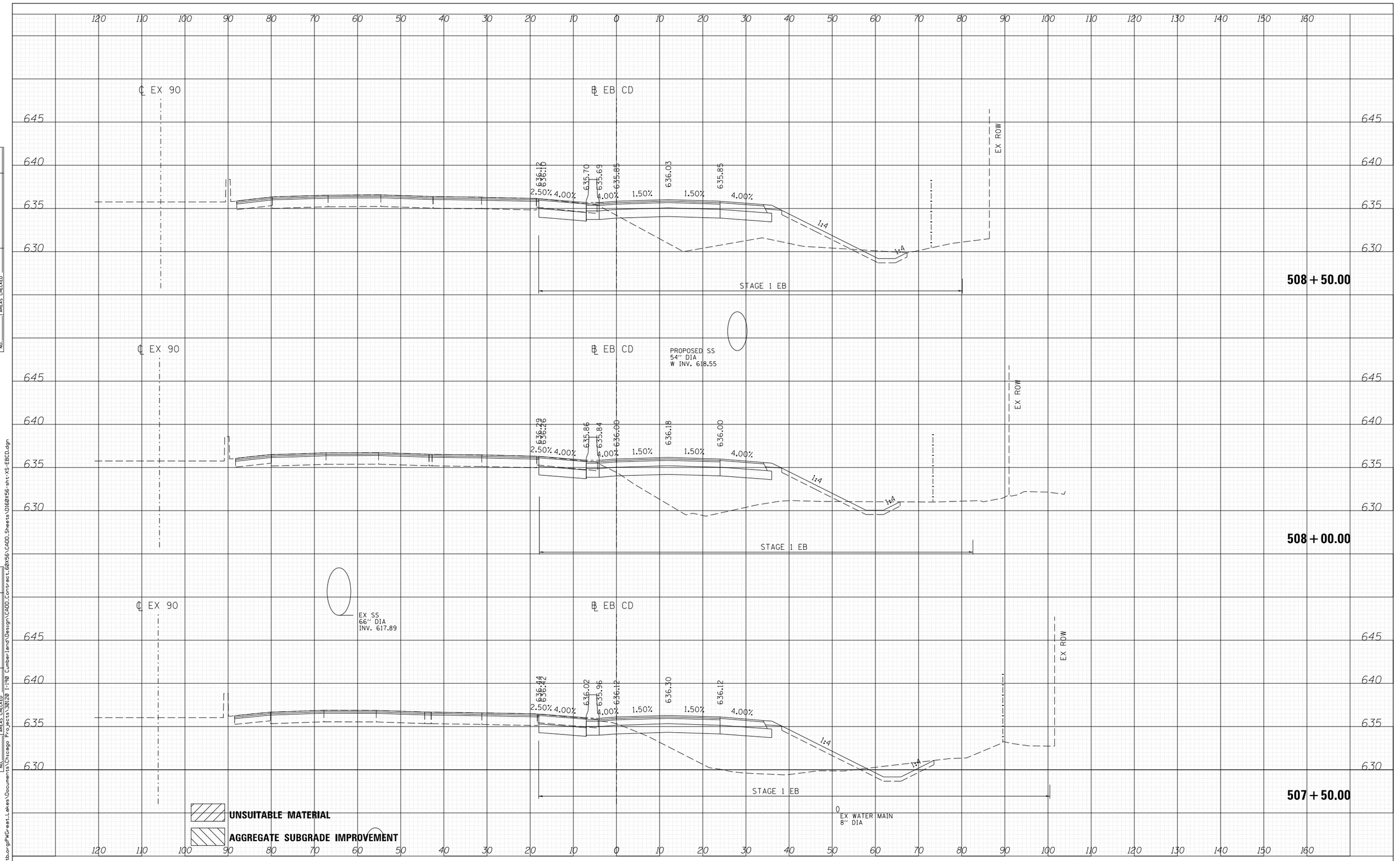
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 4 OF 19 SHEETS | STA. 506+50.00 TO STA. 507+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	483
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

ORIGINAL SURVEY	NOTE BOOK	NO.
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

BY	DATE

FILE NAME = p:\hntbv256.hntb.org\Great_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

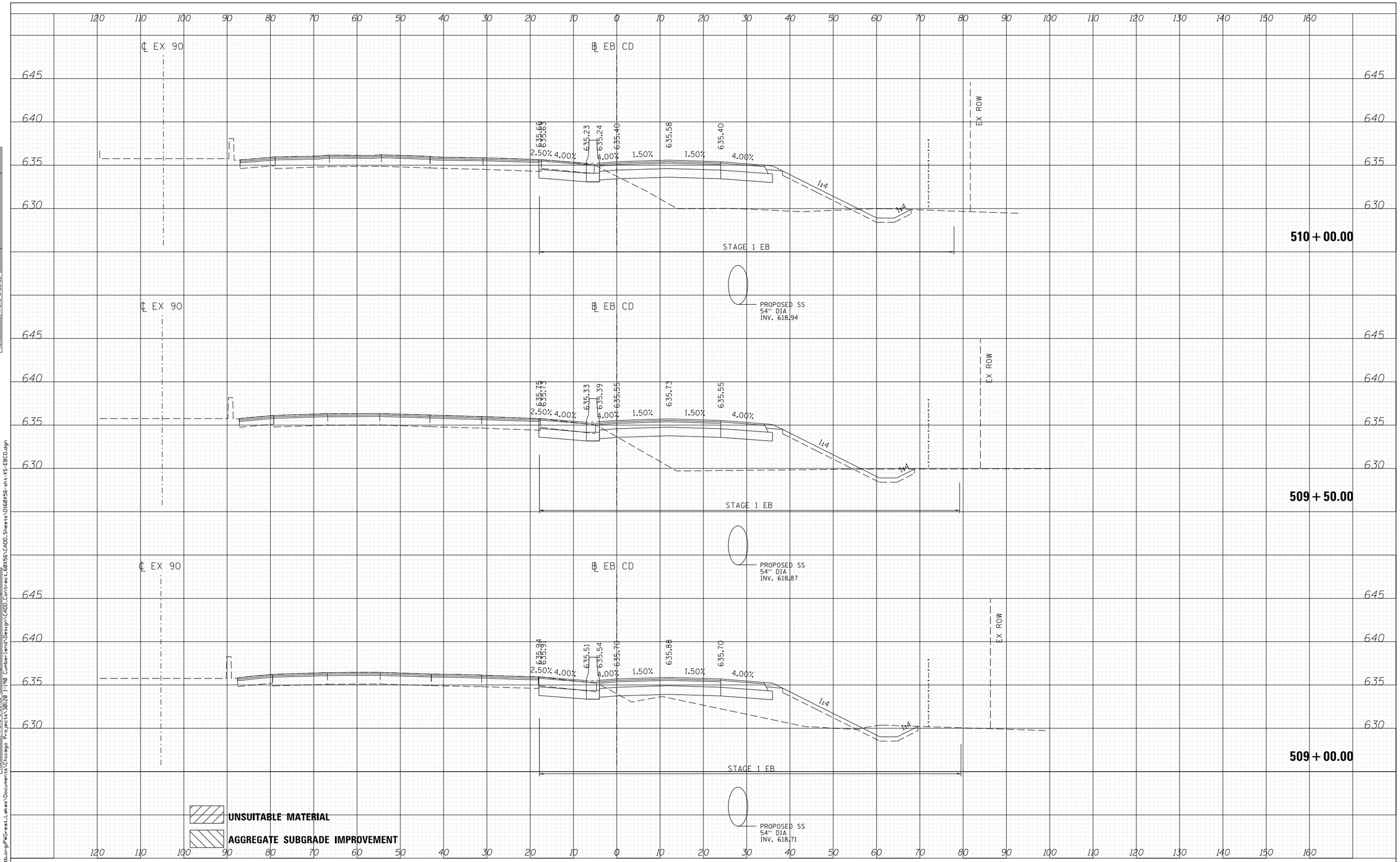
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 5 OF 19 SHEETS | STA. 507+50.00 TO STA. 508+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	484
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = p:\hntbv256.hntb.org\Great_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	
	DRAWN - LLS/MMK	REVISED -	
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -	
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -	

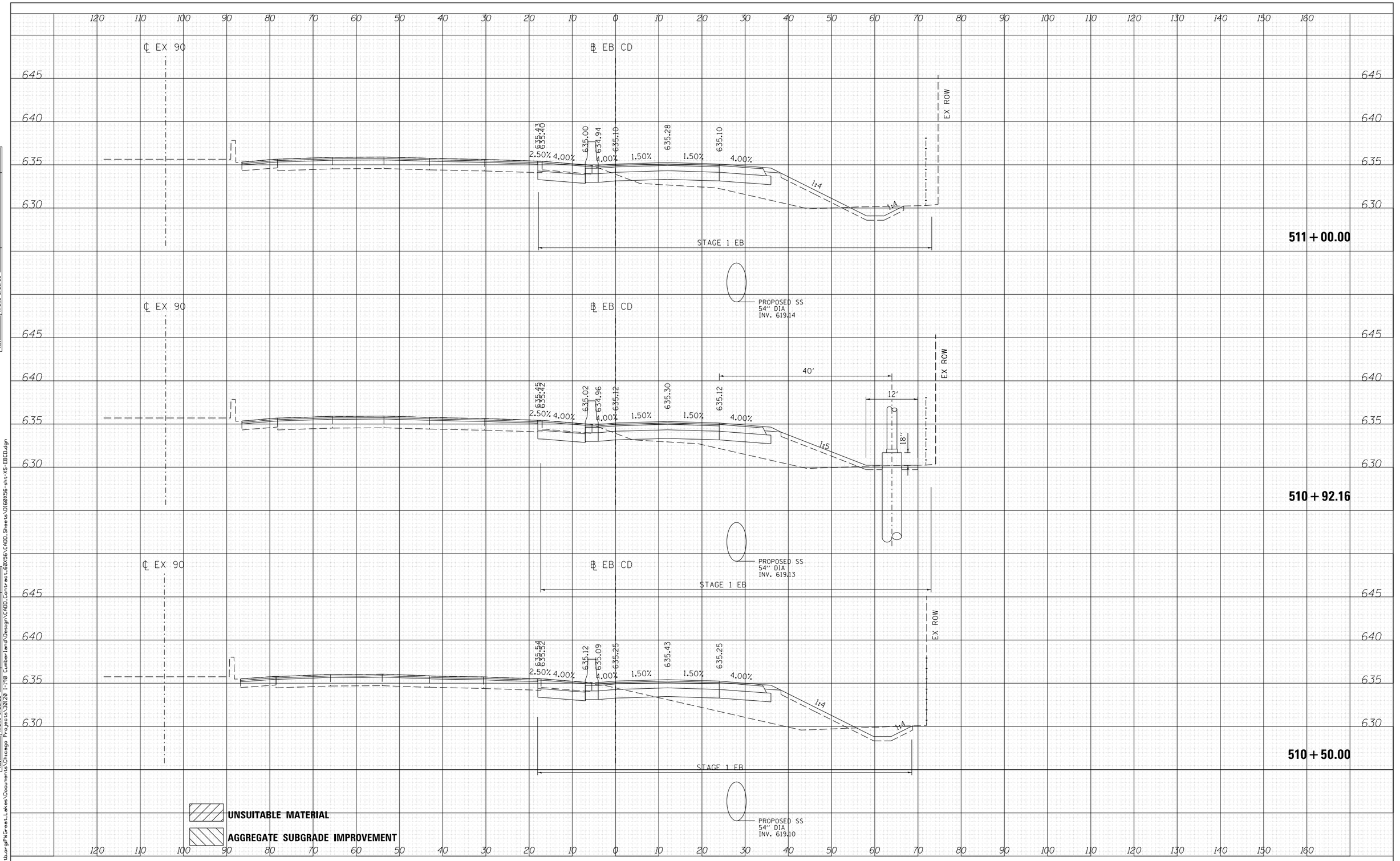
HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 6 OF 19 SHEETS | STA. 509+00.00 TO STA.510+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	485
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = p:\hntbx256.hntb.org\PwGroot.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract.60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

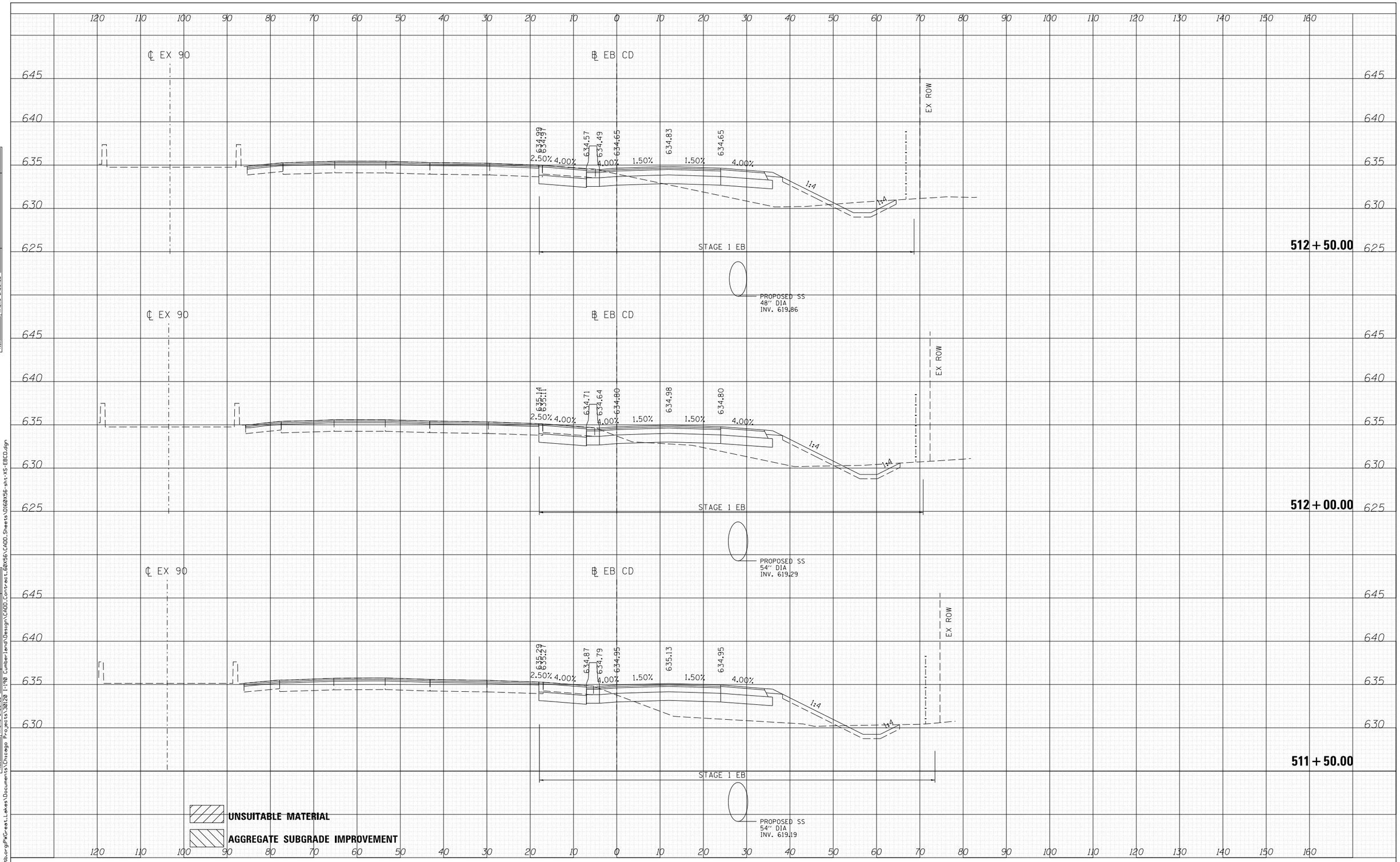
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 7 OF 19 SHEETS | STA. 510+50.00 | TO STA. 511+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	486
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

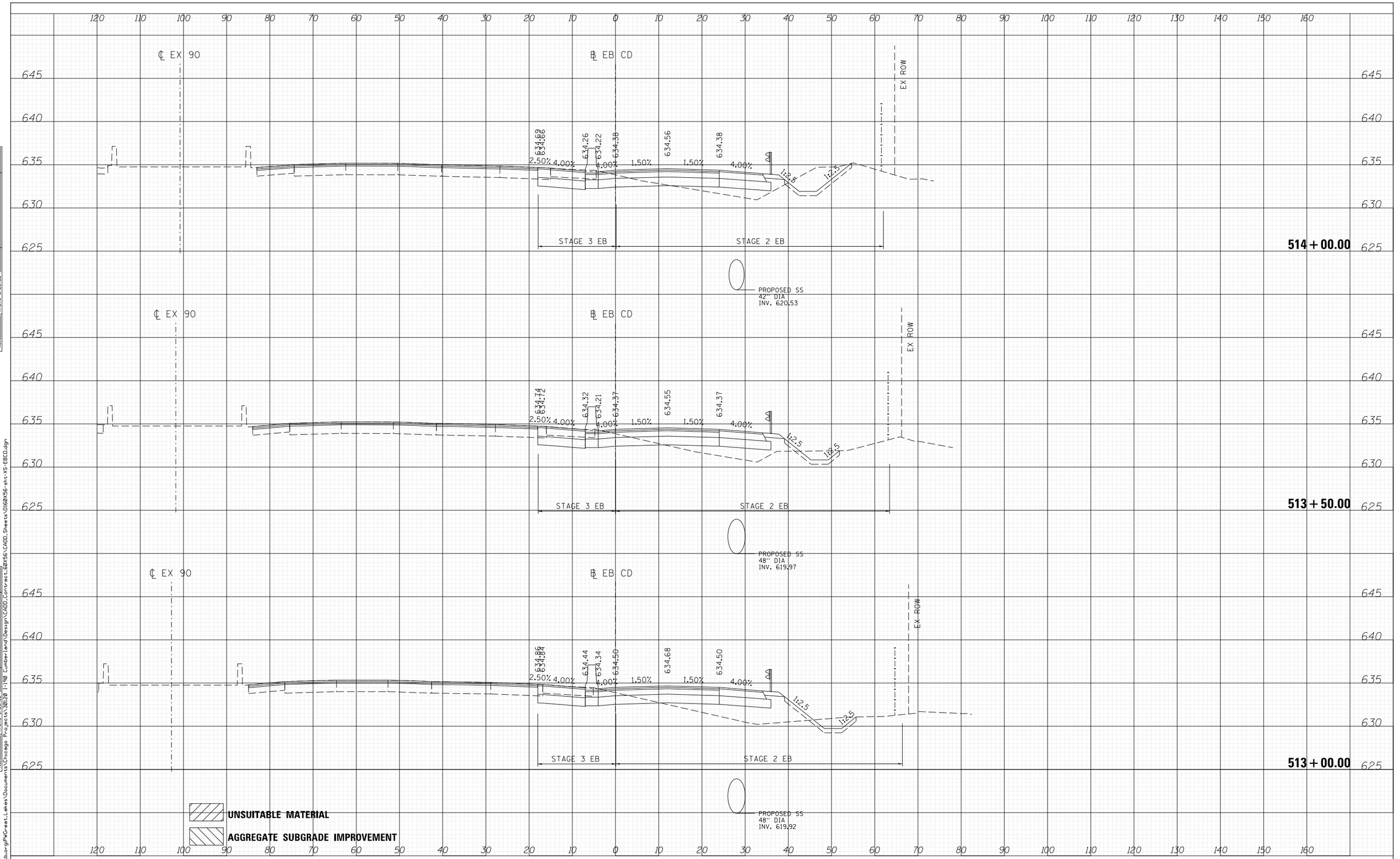
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 8 OF 19 SHEETS | STA. 511+50.00 TO STA. 512+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	487
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\hntb-w356.hntb.org:PWGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD\Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

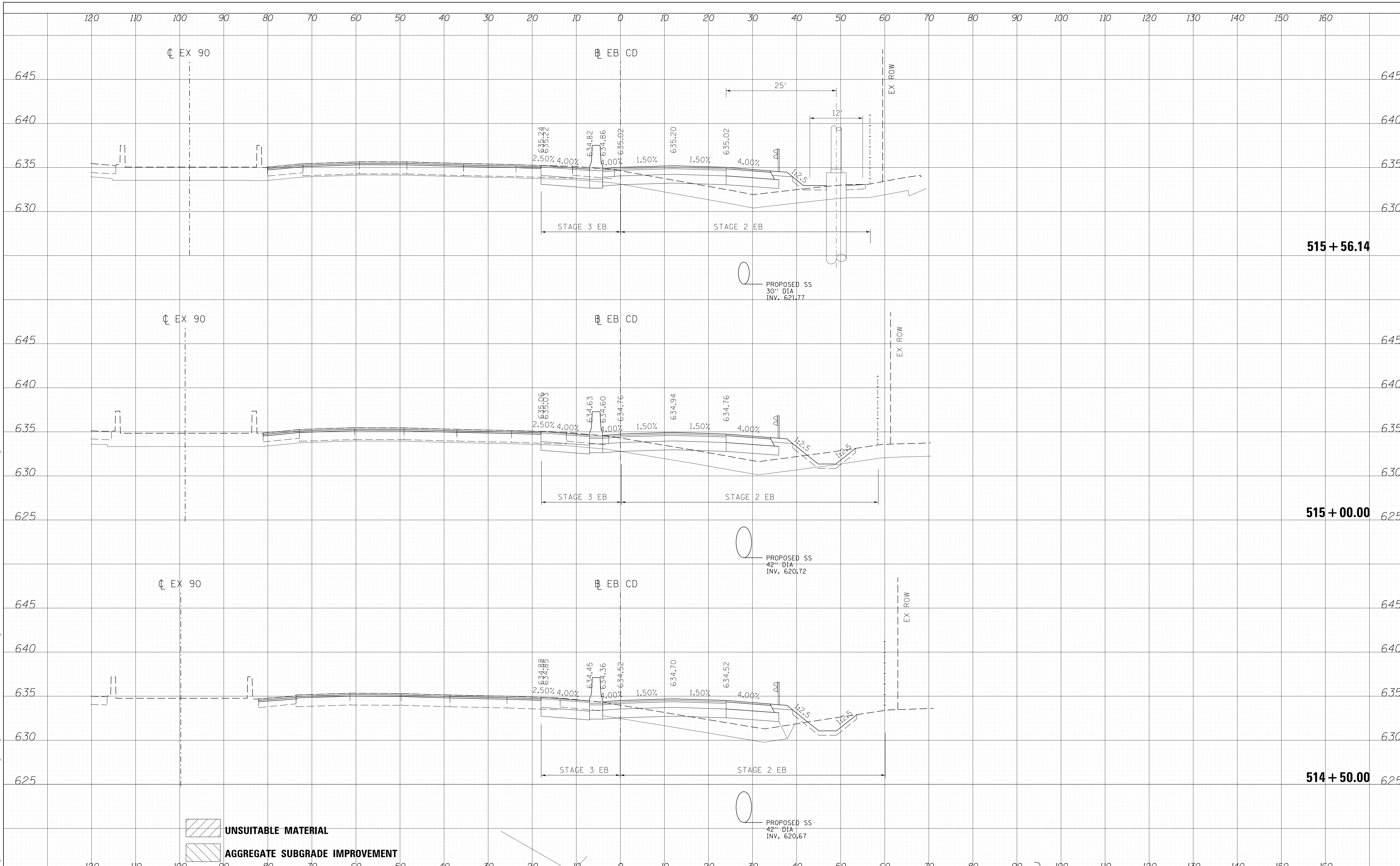
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

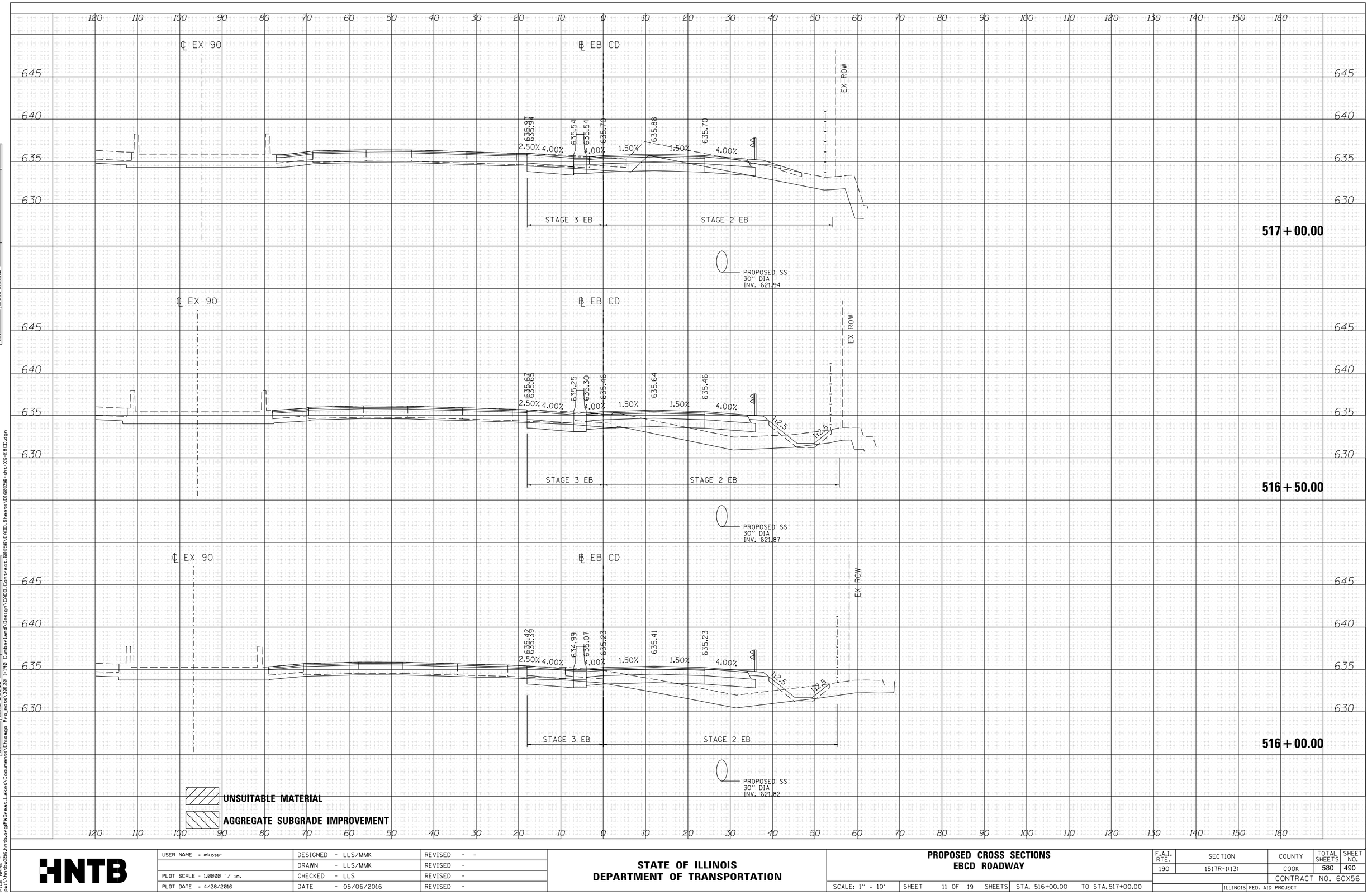
PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 9 OF 19 SHEETS | STA. 513+00.00 TO STA.514+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	488
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



HNTB	USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PROPOSED CROSS SECTIONS EBCD ROADWAY	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - LLS/MMK	REVISED -			190	1517R-1(13)	COOK	580	489
	PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -					CONTRACT NO. 60X56		
	PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -		SCALE: 1" = 10' SHEET 10 OF 19 SHEETS STA. 514+50.00 TO STA. 515+56.14			ILLINOIS FED. AID PROJECT		



FINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

FILE NAME = pw:\hntb-w256.hntb.org:PwGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract_60X56\CADD\Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

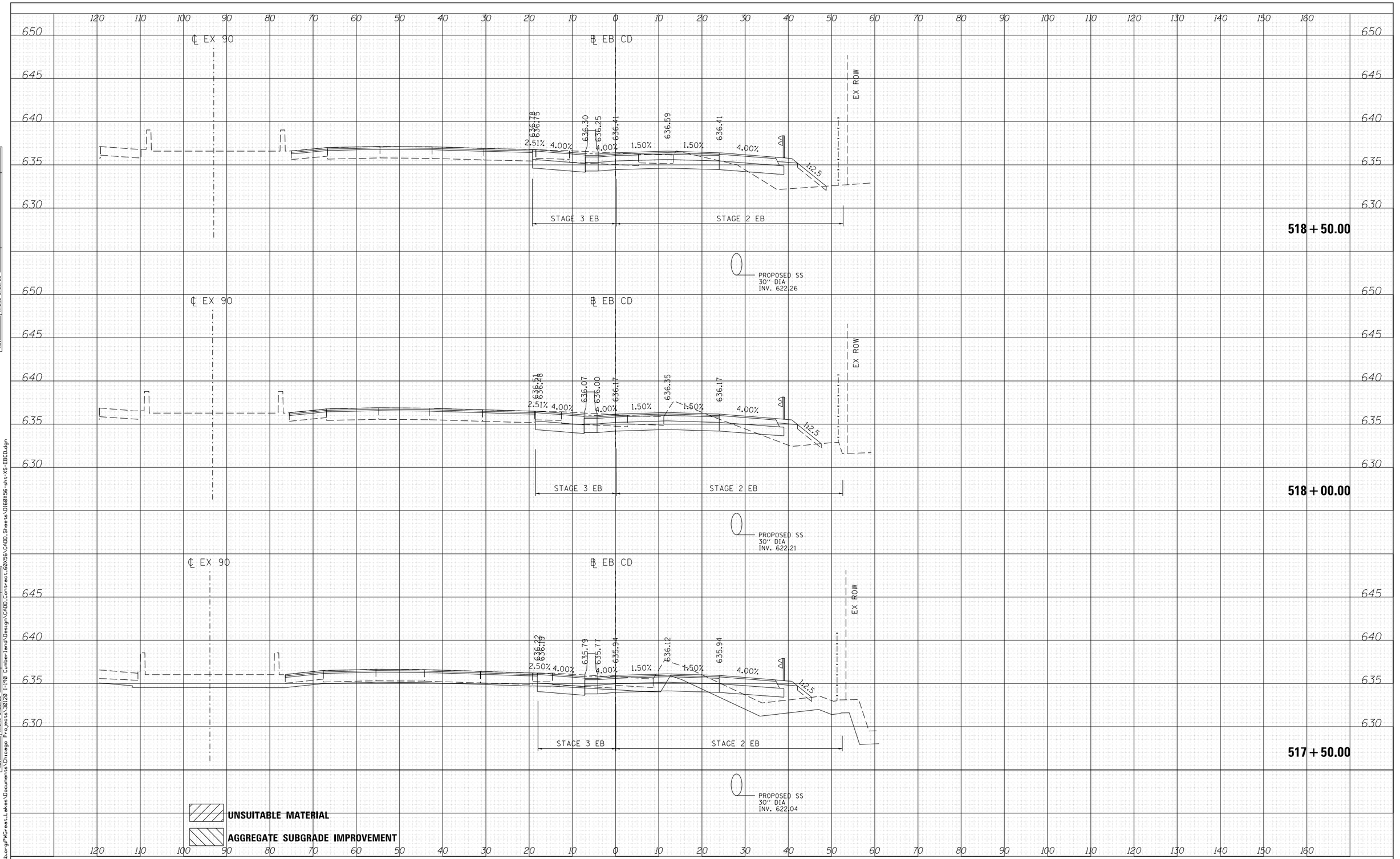
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 11 OF 19 SHEETS | STA. 516+00.00 TO STA.517+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	490
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = p:\hntbw256.hntb.org\PwGreat.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD\Contract.60X56\CADD\Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

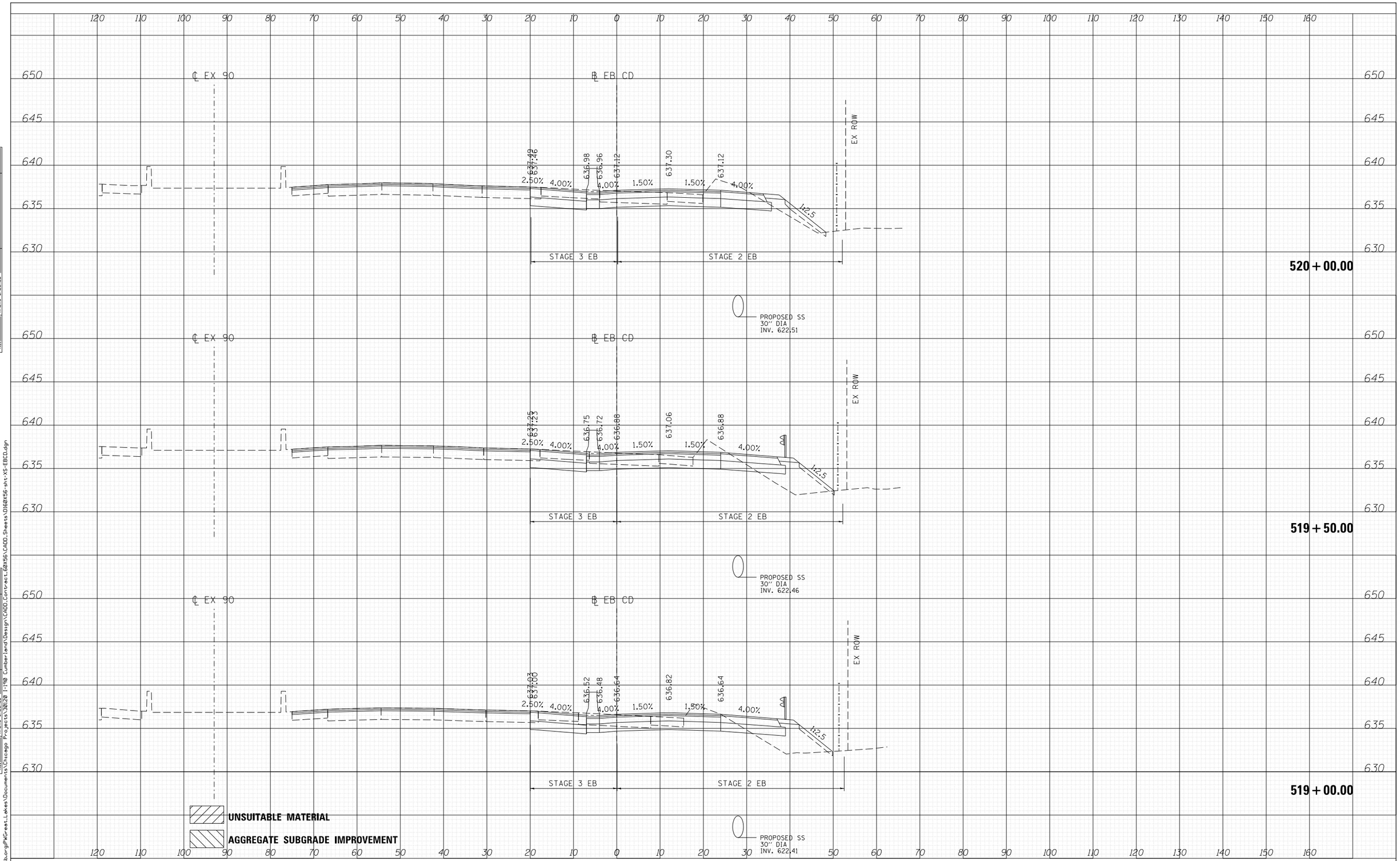
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 12 OF 19 SHEETS | STA. 517+50.00 TO STA. 518+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	491
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

ORIGINAL SURVEY	NOTE BOOK	NO.	BY	DATE
SURVEYED				
PLOTTED				
TEMPLATE				
AREAS				
AREAS CHECKED				

FILE NAME = pw:\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

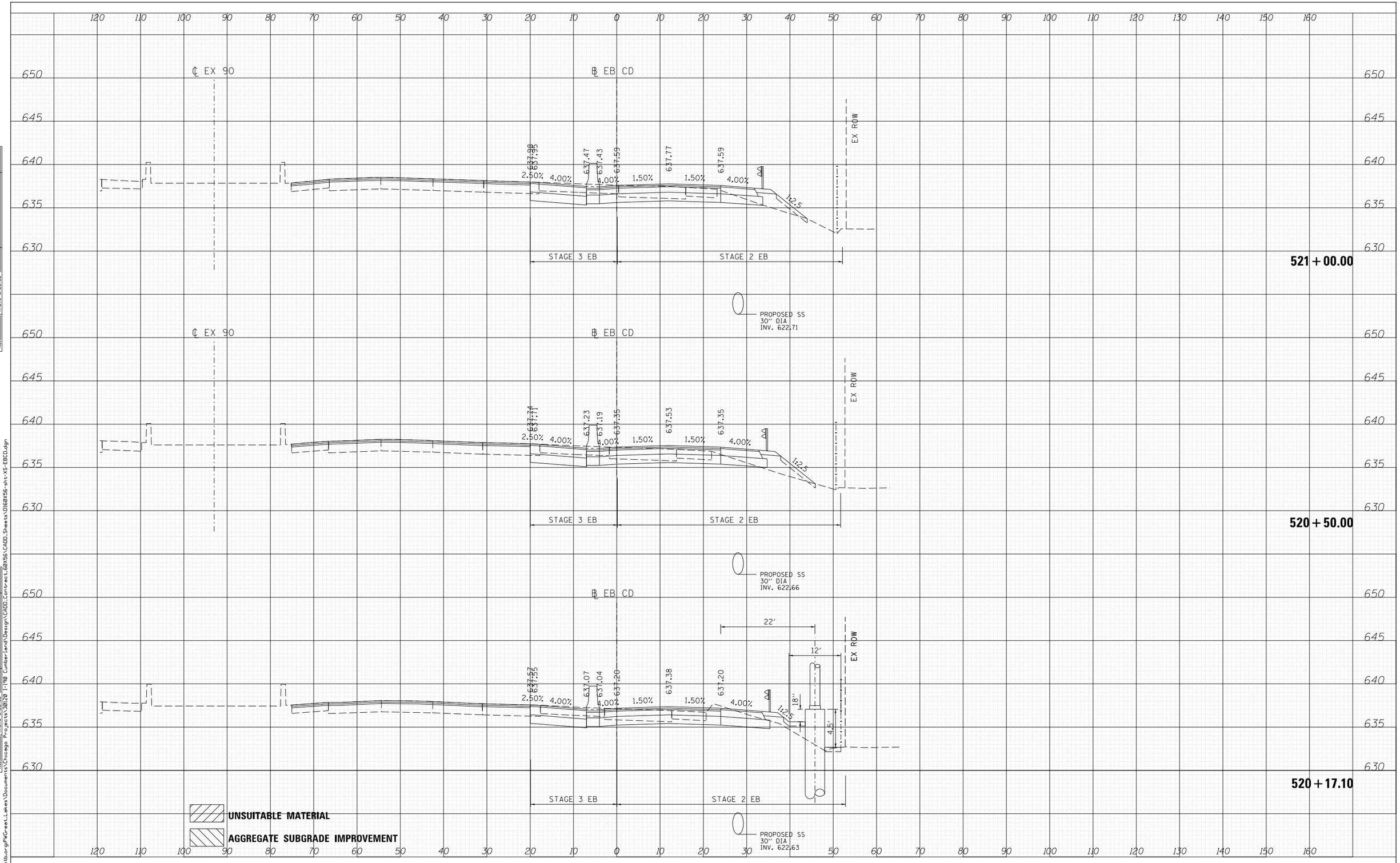
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 13 OF 19 SHEETS | STA. 519+00.00 TO STA. 520+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	492
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

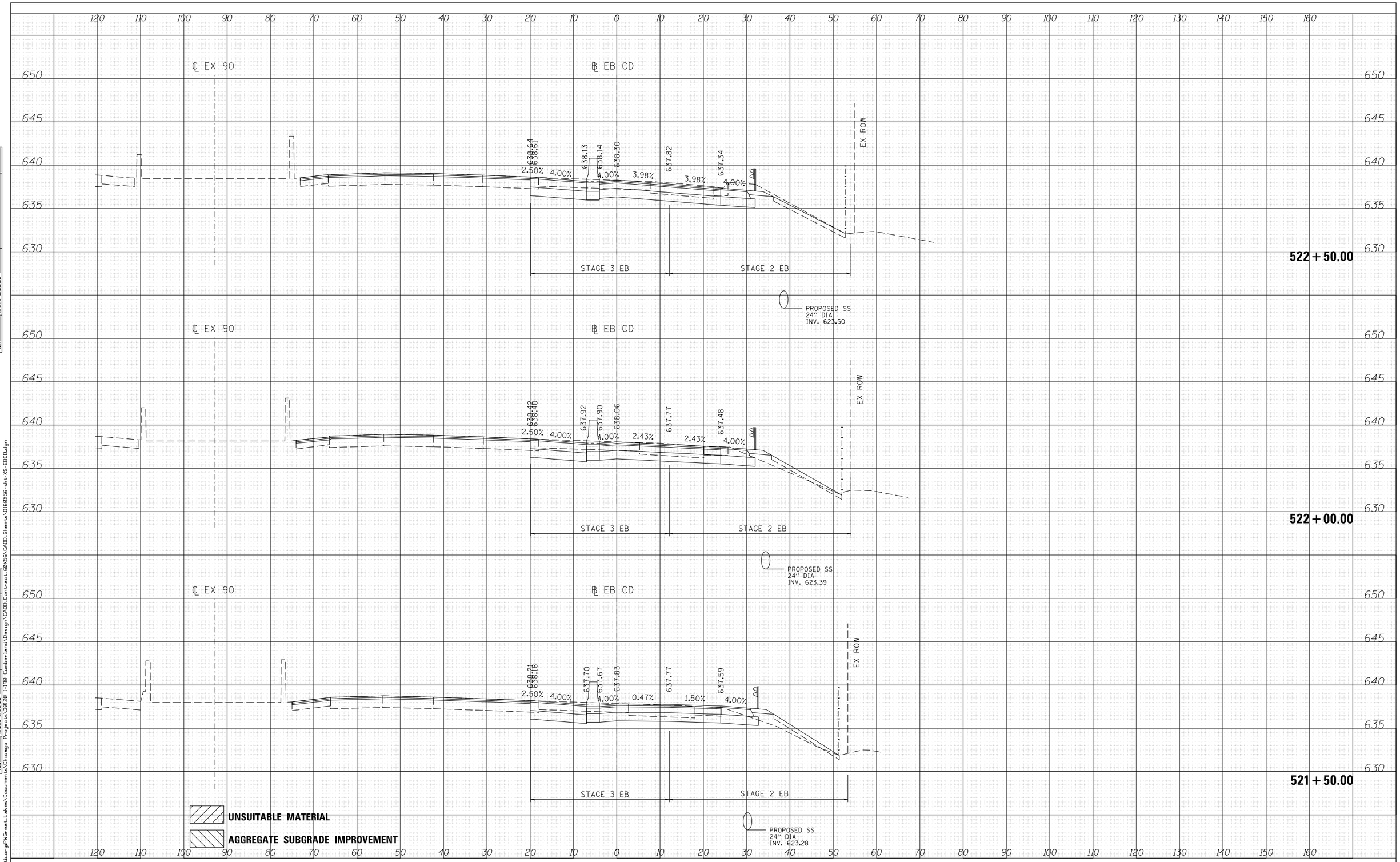
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 14 OF 19 SHEETS | STA. 520+17.10 TO STA. 521+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	493
		CONTRACT NO. 60X56		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

FILE NAME = pw:\hntbw356.hntb.org:PWGreat_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD Contract 60X56\CADD Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 15 OF 19 SHEETS | STA. 521+50.00 TO STA. 522+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	494
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			

℄ EX 90

℄ EB CD

EX ROW

639.06
4.00%
638.20
6.00%
637.48
6.00%
636.76
6%

INV. 624.627

PROPOSED SS
24" DIA
INV. 623.87

STAGE 3 EB

STAGE 2 EB

524 + 00.00

638.99
638.97
638.49
2.50%
4.00%
638.45
6.00%
637.73
6.00%
6%

STAGE 3 EB

STAGE 2 EB

PROPOSED SS
24" DIA
INV. 623.69

523 + 50.00

638.84
638.82
638.34
2.50%
4.00%
638.38
2.47%
638.48
5.53%
637.82
5.53%
637.15
5.53%

STAGE 3 EB

STAGE 2 EB

PROPOSED SS
24" DIA
INV. 623.60

523 + 00.00

UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FILE NAME = pw:\\hntbw356.hntb.org:pWGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

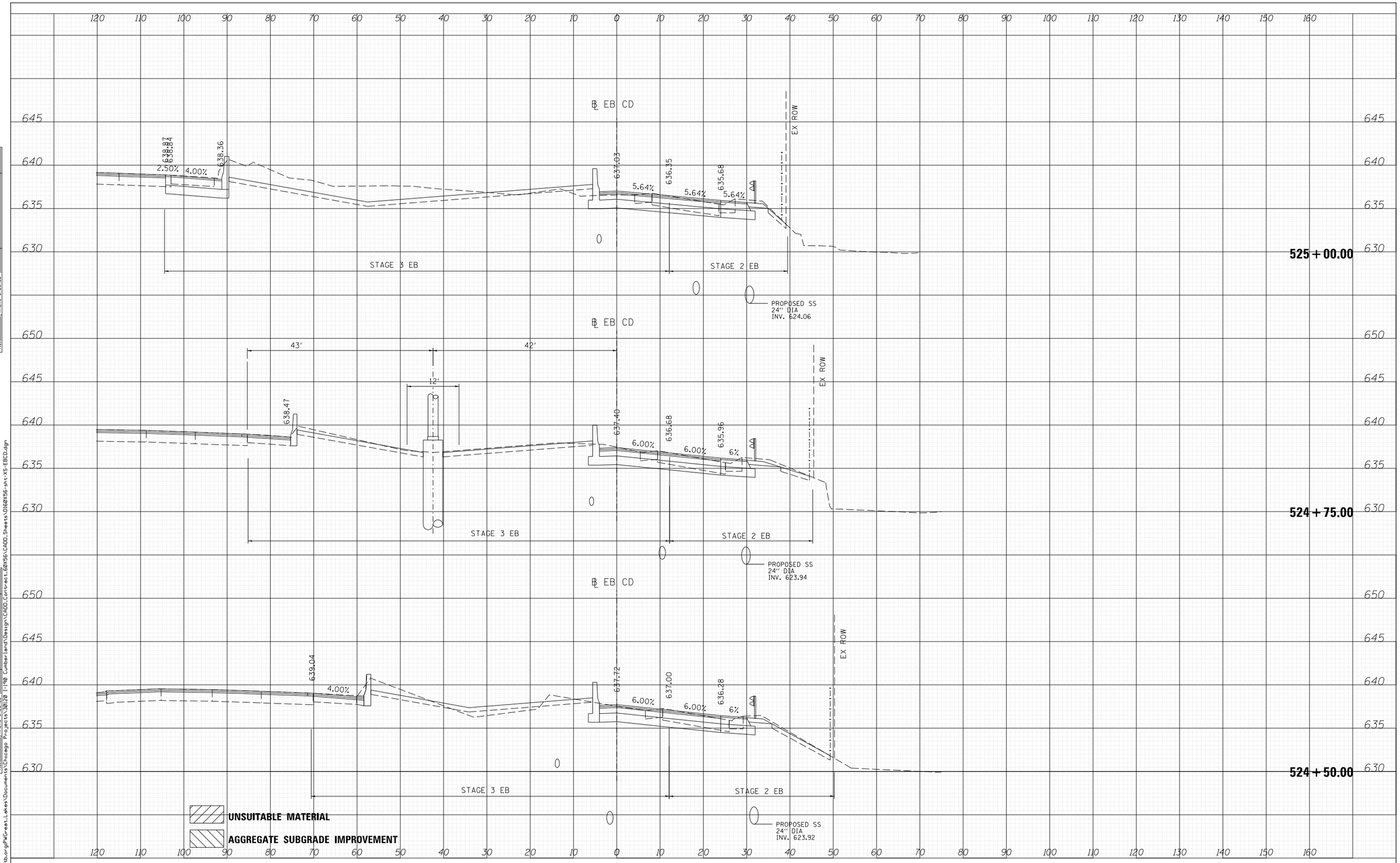
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 16 OF 19 SHEETS | STA. 523+00.00 TO STA. 524+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	495
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
NOTE BOOK		
NO.		
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

FILE NAME = p:\hntbw256,hntb.orgPW\Great_Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

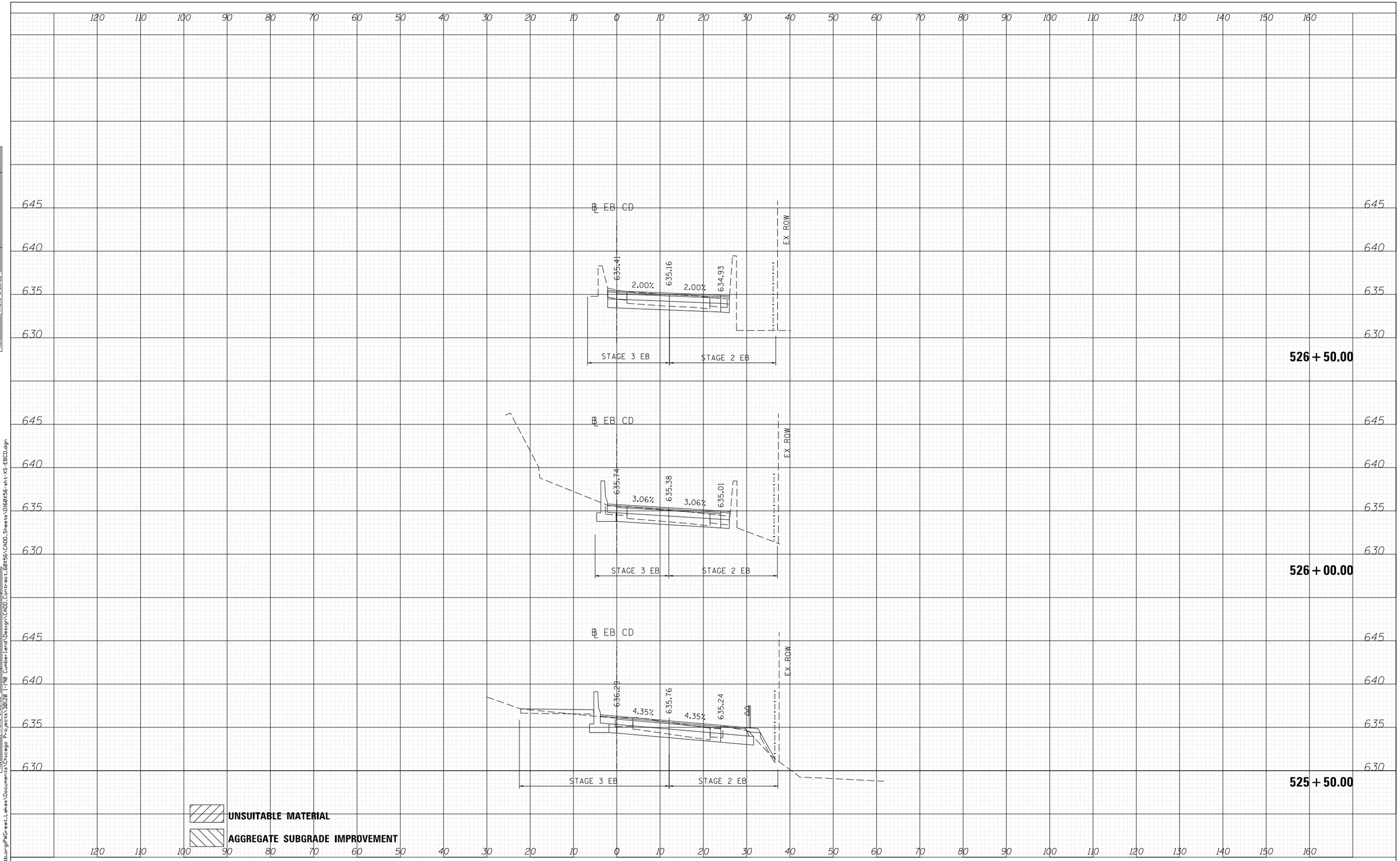
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 17 OF 19 SHEETS | STA. 524+50.00 TO STA.525+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	496
		CONTRACT NO. 60X56		
	ILLINOIS	FED. AID PROJECT		



UNSUITABLE MATERIAL

AGGREGATE SUBGRADE IMPROVEMENT

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
AREAS CHECKED		
NO.		

FILE NAME = pw:\\hntbw356.hntb.org:pwGreat_Lakes\Documents\Chicago Projects\30128 I-190 Cumberland\Design\CADD\Contract_60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

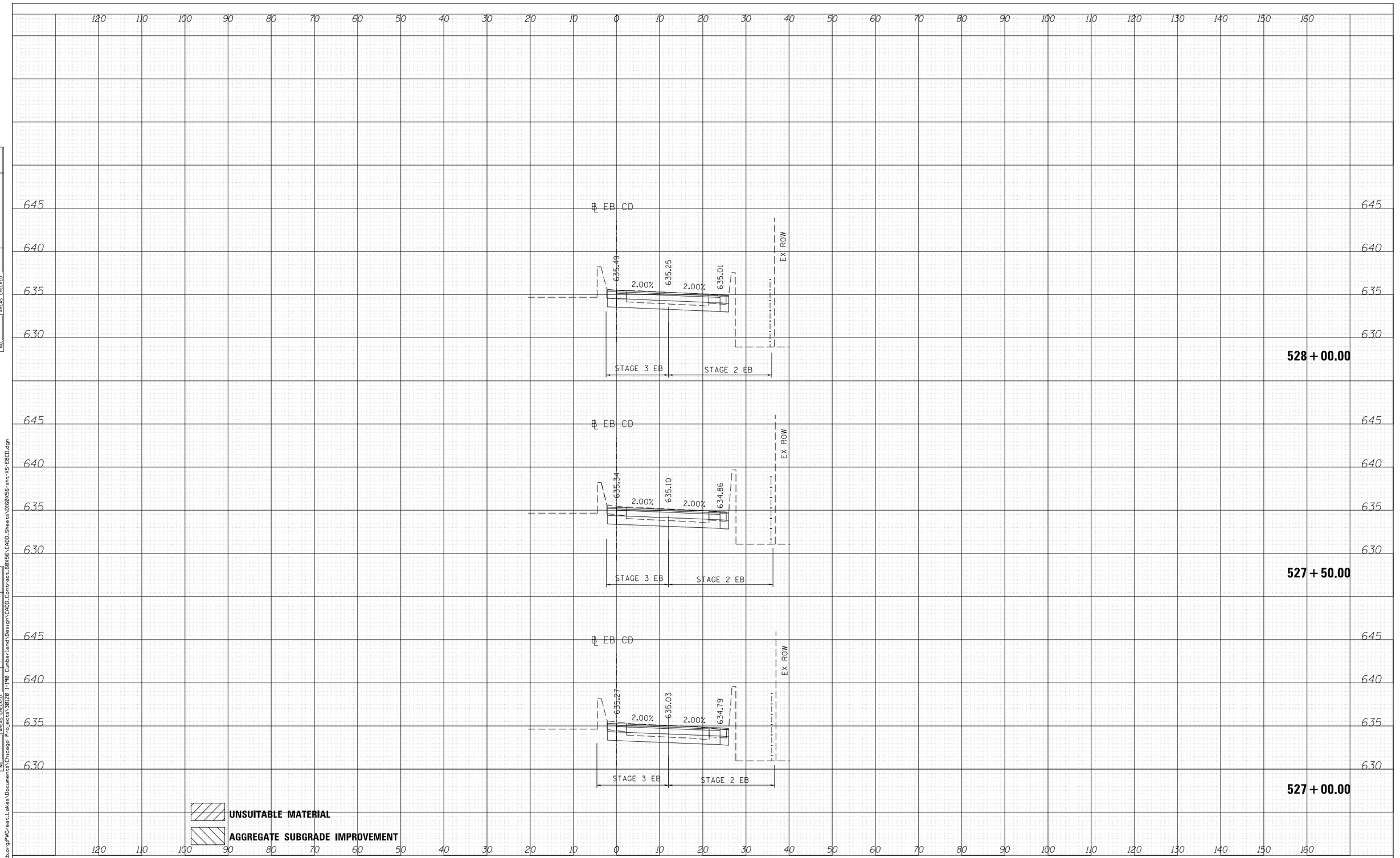
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

SCALE: 1" = 10' | SHEET 18 OF 19 SHEETS | STA. 525+50.00 TO STA. 526+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	497
		CONTRACT NO. 60X56		
		ILLINOIS FED. AID PROJECT		



FINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO.
SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED
BY — DATE

FILE NAME = p:\hntbw256.hntb.org\PwGroot.Lakes\Documents\Chicago Projects\30120 I-190 Cumberland\Design\CADD_Contract.60X56\CADD_Sheets\D160X56-sht-XS-EBCD.dgn

HNTB

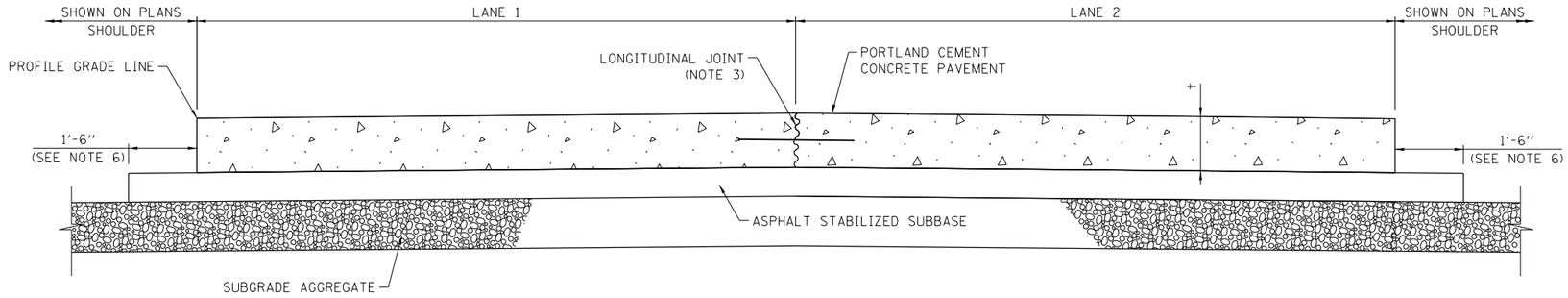
USER NAME = mkosir	DESIGNED - LLS/MMK	REVISED - -
	DRAWN - LLS/MMK	REVISED -
PLOT SCALE = 1.0000 ' / in.	CHECKED - LLS	REVISED -
PLOT DATE = 4/28/2016	DATE - 05/06/2016	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED CROSS SECTIONS
EBCD ROADWAY

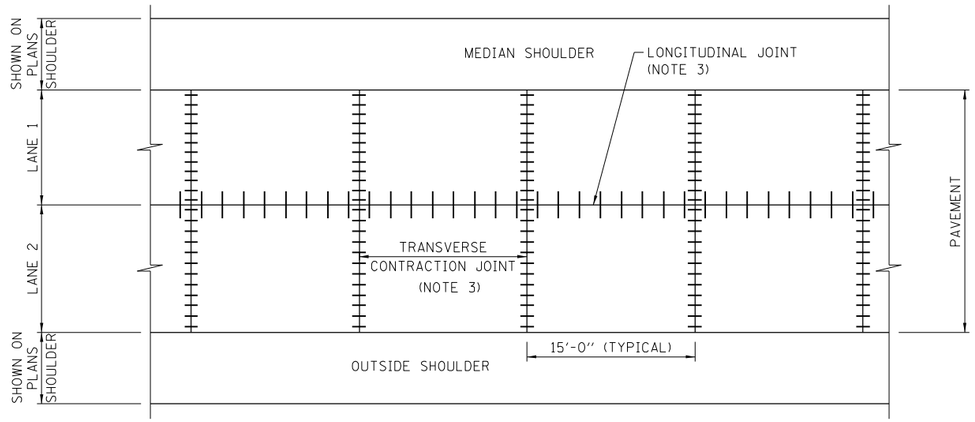
SCALE: 1" = 10' | SHEET 19 OF 19 SHEETS | STA. 527+00.00 | TO STA.528+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
190	1517R-1(13)	COOK	580	498
		CONTRACT NO. 60X56		
	ILLINOIS FED. AID PROJECT			



PAVEMENT CROSS - SECTION (2 LANES)

t= CONCRETE PAVEMENT THICKNESS



PAVEMENT PLAN
2 - LANE SECTION

GENERAL NOTES:

1. DOWEL BASKET ASSEMBLIES, WHERE USED, SHALL BE SUPPORTED AND ANCHORED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
2. MATERIALS ARE PROJECT SPECIFIC. REFER TO PROJECT PLANS AND CONTRACT DOCUMENTS FOR DETAILS.
3. SEE ILLINOIS TOLLWAY STANDARD DRAWING A7 (PAVEMENT JOINTS) AND IDOT HIGHWAY STANDARD 420001 (PAVEMENT JOINTS) FOR DETAILS OF JOINTS AND TIE BARS NOT SHOWN.
4. PAVEMENT DESIGNS ARE PROJECT SPECIFIC, OTHER MATERIALS MAY BE SUBSTITUTED FOR ASPHALT STABILIZED SUBBASE AND SUBGRADE AGGREGATE. REFER TO PROJECTS PLANS FOR DETAILS AND MATERIAL THICKNESS.
5. THE TIE BAR FOR THE LONGITUDINAL SAWED JOINT SHALL BE 15" FROM THE TRANSVERSE CONTRACTION JOINT.
6. THE 1'-6" WIDE ASPHALT STABILIZED SUBBASE MAY BE REDUCED TO 1'-0" WHEN PAVING EQUIPMENT UTILIZED FOR CONSTRUCTION OF THE PCC PAVEMENT WILL ALLOW.

Illinois Tollway

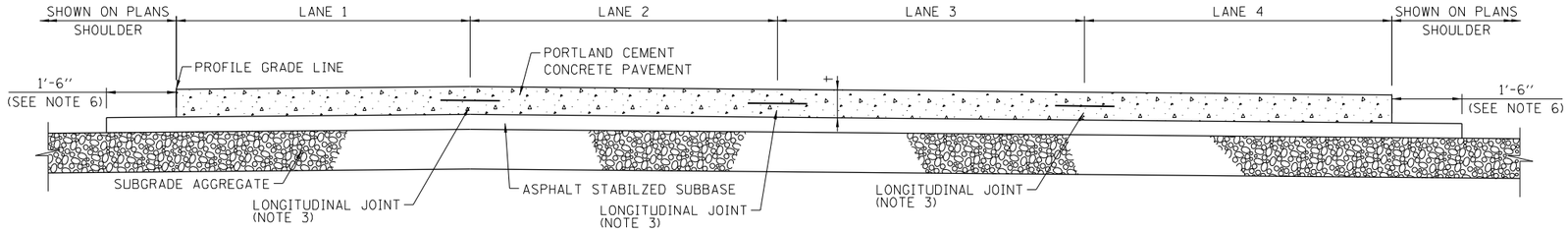
DATE	REVISIONS
05-01-09	DELETED BLOCK-OUTS
	DETAIL, REMOVED
	SHOULDER DIMENSIONS
3-11-2015	REVISED NOTES
3-31-2016	SHOW SUBBASE WIDENED

J.P.C. PAVEMENT
12" OR LESS

580 499

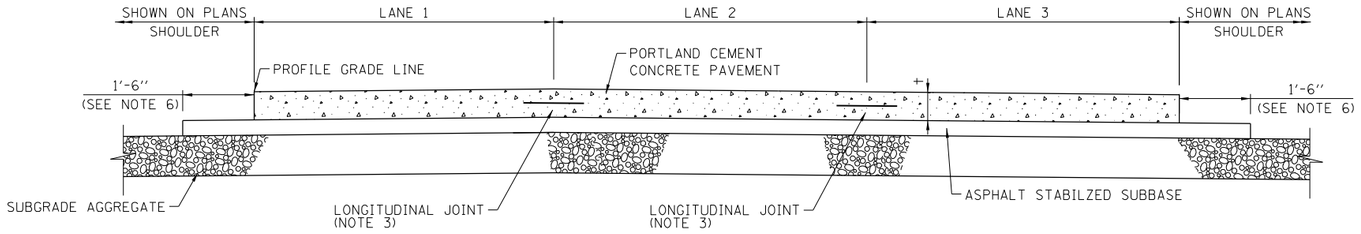
STANDARD A5-03

Paul Kovacs
APPROVED ..... DATE 5-1-2009
CHIEF ENGINEER

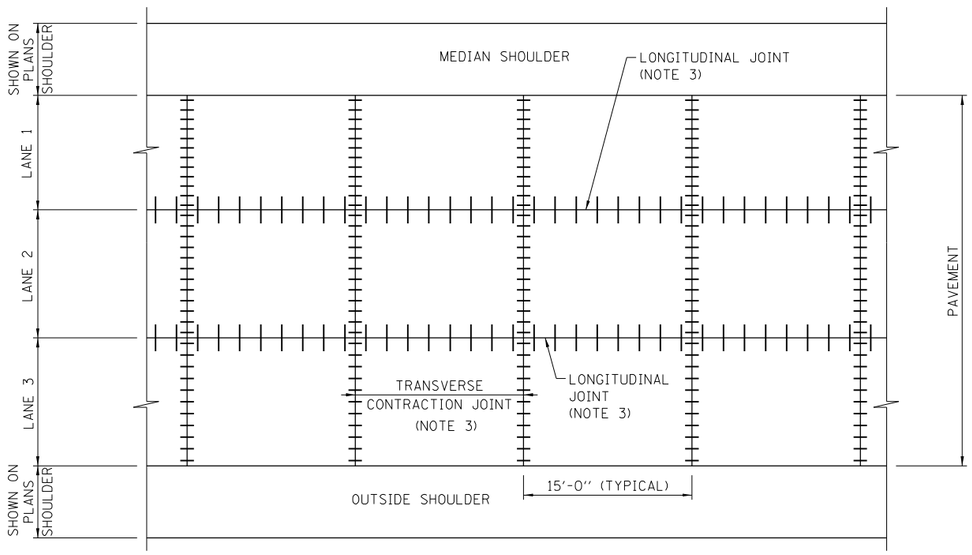


PAVEMENT CROSS - SECTION (4 LANES)

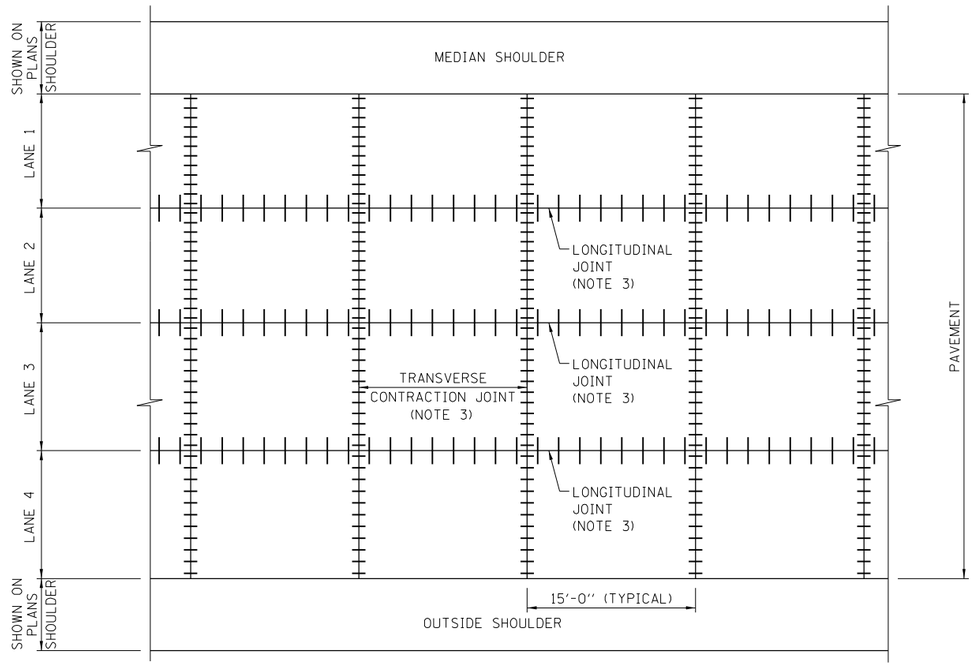
†=CONCRETE PAVEMENT THICKNESS



PAVEMENT CROSS - SECTION (3 LANES)



PAVEMENT PLAN
3 - LANE SECTION



PAVEMENT PLAN
4 - LANE SECTION

SEE SHEET 1 IN THIS SERIES FOR GENERAL NOTES.

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 5-1-2009

Illinois Tollway

J.P.C. PAVEMENT
12" OR LESS
580 500

STANDARD A5-03