

RECOMMENDED BY:

KATHLEEN M. ELLIS COMMISSIONER CATTARAUGUS COUNTY DPW

PREPARED AND RECOMMENDED BY

TIMOTHY E. MAJOR, P.E. N.Y.S.P.E. LICENSE NO. 081051

CONTRACTOR'S NAME: ______

AWARD DATE: _____

COMPLETION DATE: _____

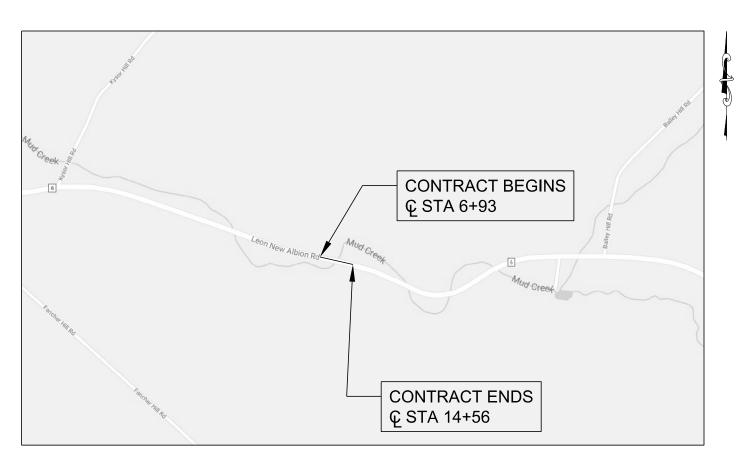
ENGINEER IN CHARGE: _____

CATTARAUGUS COUNTY DEPARTMENT OF PUBLIC WORKS



REPLACEMENT OF LEON BRIDGE #8 LEON-NEW ALBION ROAD (CR 6) OVER MUD CREEK TOWN OF LEON CATTARAUGUS COUNTY PIN 5762.94 & BIN 3322120

40 SHEETS



PROJECT LOCATION

NOT TO SCALE

THE LEON-NEW ALBION ROAD BRIDGE (BIN 3322120) IS LOCATED IN THE TOWN OF LEON IN CATTARAUGUS COUNTY. THE EXISTING BRIDGE CARRIES LEON-NEW ALBION ROAD (CR 6) OVER MUD CREEK.

INDEX ON SHEET NO. 2

TYPE OF CONSTRUCTION

BRIDGE REPLACEMENT WITH CAST IN PLACE CONCRETE CANTILEVER ABUTMENTS FOUNDED ON ROCK, PRESTRESSED CONCRETE BEAM SUPERSTRUCTURE AND APPROACH ROADWAY IMPROVEMENTS.

HIGHWAY STANDARD SHEETS

209-01, 606-04, 608-03, 619-01, 619-02, 619-04, 619-10, 619-11, 619-12, 619-66, 645-01, 646-13, 646-14, 616-15, 685-01

NOTI

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE COVERED BY AND IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S (NYSDOT'S) STANDARD SPECIFICATIONS (ENGLISH UNITS) AND ALL CURRENT ADDITIONS AND MODIFICATIONS EXCEPT AS MODIFIED BY THESE PLANS OR BY CHANGES SET FORTH IN THE CONTRACT PROJECT PROPOSAL.

MAINTENANCE JURISDICTION:

NO CHANGES IN MAINTENANCE JURISDICTION WILL RESULT FROM THIS PROJECT.

WARNING

IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER ANY ITEM IN THESE PLANS IN ANY WAY. IF ALTERATIONS TO THESE PLANS ARE REQUIRED, THE ALTERATIONS SHALL BE MADE IN ACCORDANCE WITH ARTICLE 145 SUBSECTION 7209 OF THE NEW YORK STATE EDUCATION LAW.

STREAM RESTRICTION:
THERE WIL BE NO IN STREAM WORK ALLOWED FROM
SEPTEMBER 15 - MAY 31



95 Perry Street , Suite 300 Buffalo, New York 14203 p: 716.206.5100 f: 716.206.5199

PROJECT NO	•		
	PIN 5762	2.94	
DWG. NO.			
	COVER		
SHEET	OF		
•	1	40	
PROJECT NO			
	19106		
FILE NAME			

STANDARD SYMBOL (PLANS)	ITEM PAYMENT UNIT: SUMMARY OF QUANTITIES SHEET	EQUIVALENT NOMENCLATURE: (SPECS/PROPOSAL)
•	ft	LINEAR FEET
ft²	SF	SQUARE FEET
Ϋ́D	CY	CUBIC YARD
mi	МІ	MILES
AC	AC	ACRES
lb	LB	POUND
TON	TON	TON
GAL	GAL	GALLON

		POIN	IT LE	GEND		
		STOCKADE FENCE		THH	0	TELEPHONE HAND HOLE
МВ		MAIL BOX		TLM	0	TELEPHONE LINE MARKER
	d	DOUBLE SIGN		тмн	0	TELEPHONE MANHOLE
	d	SIGN		TJB		TELEPHONE JUNCTION BOX
	0	OVERHEAD TRAFFIC SIGN		WV	÷	WATER VALVE
GP	Δ	GUARD POSTS			q	HYDRANT
FP	0	FLAG POLE		ws	+	WATER SERVICE
	#	TREE DECIDUOUS		INV	(INVERT ELEVATION
	*	TREE CONIFEROUS		WCR		WHEEL CHAIR RAMP
GAS		GAS METER		CONC		CONCRETE
GLM	0	GAS LINE MARKER		ВС		BOTTOM OF CURB
GV	M	GAS VALVE		TC		TOP OF CURB
GS	M	GAS SERVICE		SW		SIDEWALK
DI		DRAINAGE INLET		EP		EDGE OF PAVEMENT
ST MH	0	STORM MANHOLE		EPS		EDGE OF PAVED SHOULDER
SA MH	0	SANITARY MANHOLE		FA		FIRE ALARM
СО	0	CLEANOUT		СС		CURB ENTRANCE CUT
sv	0	SEWER VENT		ВН#	•	TEST BORE W/ ELEVATION
sco	0	CLEANOUT\SEWER VENT		L.		LIBER
SP	0	SIGNAL SUPPORT POLE		P.		PAGE
ТСВ		TRAFFIC CONTROL BOX		М		MEASURED
	- 	EXISTING LIGHT STANDARD		D		DEED
	淬	PROPOSED LIGHT STANDARD		R		RECORD
EHH	0	ELECTRIC HANDHOLE			PL	PROPERTY LINE
EM		ELECTRIC METER		LD		LOOP DETECTOR
ЕМН	0	ELECTRIC MANHOLE		TCPP	0	TRAFFIC CONTROL PEDESTRIAN POLE
UP	Ø	UTILITY POLE				
UPL	0-1	UTILITY POLE W/ LIGHT				
FLT	<u>d</u> _	FLOOD LIGHT				

LII	NE LEGEND
	HIGHWAY BOUNDARY
	RAIL FENCE
— G — — —	UNDERGROUND GAS LINE
0/H T0/H T	OVERHEAD TELEPHONE/ COMMUNICATION LINE
_ ur	UNDERGROUND TELEPHONE/ COMMUNICATION LINE
0/H E0/H E	OVERHEAD ELECTRIC
UE	UNDERGROUND ELECTRIC
sa	UNDERGROUND SANITARY
sr	UNDERGROUND STORM
w	UNDERGROUND WATER
—LD——LD———	LOOP DETECTORS
	SILT FENCE
-00	TURBIDITY CURTAIN

COVER	COVER
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DRAWING TITLE

DWG. NO.

Leon-New Albion Road over

Mud Creek
PIN 5762.94
BIN 3322120
Town of Leon
Cattaruagus County



ARCHITECTURE & EN G IN E ER IN G 95 Perry Street, Suite 300 91/1610, New York 14203 p: 716.206.5100 f: 716.206.5199



drawing history		
number date	description	

INDEX, SYMBOLS AND **ABBREVIATIONS**

1910
TE
JO
JUNE 20
AS SHOW

	ALIGNMENT
ABBR.	DESCRIPTION
AH	AHEAD
AZ	AZIMUTH
BK	BACK
b	BASELINE
BRG	BEARING
С	CENTERLINE
CS	CURVE TO SPIRAL
е	SUPERELEVATION RATE (CROSS SLOPE)
EQ	EQUALITY
EXT	EXTERNAL
HCL	HORIZONTAL CONTROL LINE
HSD	HEADLIGHT SIGHT DISTANCE
L	LENGTH OF CIRCULAR CURVE
LS	LENGTH OF SPIRAL
LVC	LENGTH OF VERTICAL CURVE
Е	CENTER CORRECTION OF VERTICAL CURVE
f	MAIN LINE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
POL	POINT ON LINE
PSD	PASSING SIGHT DISTANCE
PT	POINT OF TANGENT
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
R	RADIUS
SC	SPIRAL TO CURVE
SSD	STOPPING SIGHT DISTANCE
ST	SPIRAL TO TANGENT
STA	STATION
Т	TANGENT LENGTH
TGL	THEORETICAL GRADE LINE
TS	TANGENT TO SPIRAL
VC	VERTICAL CURVE

	TOPOGRAPHY (DRAINAGE)
ABBR.	DESCRIPTION
BB	BOTTOM OF BANK (STREAM)
ВС	BOTTOM OF CURB
ВО	BOTTOM OF OPENING
CAP	CORRUGATED ALUMINUM PIPE
СВ	CATCH BASIN
CIP	CAST IRON PIPE
c STRM	CENTERLINE OF STREAM
CMP	CORRUGATED METAL PIPE
CP	CONCRETE PIPE
CSP	CORRUGATED STEEL PIPE
CULV	CULVERT
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DS	DRAINAGE STRUCTURE PIPE
D'XING	DITCH CROSSING
EHW	EXTREME HIGH WATER
EL	ELEVATION
ELEV	ELEVATION
ELW	EXTREME LOW WATER
ES	END SECTION
HW	HEADWALL
INV	INVERT
MH	MANHOLE
MHW	MEAN HIGH WATER
OHW	ORDINARY HIGH WATER
OLW	ORDINARY LOW WATER
RCP	REINFORCED CONCRETE PIPE
ТВ	TOP OF BANK (STREAM)
TC	TOP OF CURB
TG	TOP OF GRATE
VCP	VITRIFIED CLAY PIPE
SICPP	SMOOTH INTERIOR CORRUGATED PE

	TOPOGRAPHY (MISCELLANEOUS)
ABBR.	DESCRIPTION
ABUT	ABUTMENT
AOBE	AS ORDERED BY ENGINEER
ASPH	ASPHALT
BDY	BOUNDARY
BLDG	BUILDING
ВМ	BENCH MARK
CC	CENTER TO CENTER
CONC	CONCRETE
CONST	CONSTRUCTION
CR	COUNTY ROAD
D	DEED DISTANCE
DM	DIRECT MEASUREMENT
DWY	DRIVEWAY
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
FEE	FEE ACQUISITION
FEE WO/A	FEE ACQUISITION WITHOUT ACCESS
FP	FENCE POST
FD	FOUNDATION
FL	FENCE LINE
GAR	GARAGE
GR	GRAVEL
НО	HOUSE
HWY	HIGHWAY
IP	IRON PIN OR IRON PIPE
MB	MAILBOX
MON	MONUMENT
N&W	NAIL AND WASHER
OG	ORIGINAL GROUND
O/H	OVERHEAD
P	PARCEL
PAV'T	PAVEMENT
PE	PERMANENT EASEMENT
PED POLE	PEDESTRIAN POLE
р	PROPERTY LINE
POR	PORCH
RR	RAILROAD
RTE	ROUTE RIGHT OF WAY
ROW	
RW	RETAINING WALL
SH SHLDR	STATE HIGHWAY SHOULDER
SPK	SPIKE
ST	STREET
STK	STAKE
STY	STORY
SW	SIDEWALK
TE	TEMPORARY EASEMENT
TO	TEMPORARY OCCUPANCY
U/G	UNDERGROUND
WW	WING WALL
	THIO TIME

	UTILITIES
ABBR.	DESCRIPTION
Е	ELECTRIC
ЕМН	ELECTRIC MANHOLE
G	GAS
GP	GUY POLE
GSB	GAS SERVICE BOX (HOUSE LINE)
GV	GAS VALVE (MAIN LINE)
HYD	HYDRANT
LP	LIGHT POLE
LPG	LOW PRESSURE GAS
PP	POWER POLE
SA	SANITARY SEWER
SMH	SANITARY MANHOLE
ST	STORM SEWER
Т	TELEPHONE
TCB	TRAFFIC CONTROL BOX
TELBOX	TELEPHONE BOX
TEL P	TELEPHONE POLE
ТМН	TELEPHONE MANHOLE
CTV	CABLE TELEVISION
W	WATER
WSB	WATER SERVICE BOX (HOUSE LINE)
WV	WATER VALVE (MAIN LINE)
	SUBSURFACE EXPLORATION
ABBR.	DESCRIPTION
REF	PLACE ABBREVIATION "AB" WITH:
AH	HAND AUGER
CP	CONE PENETROMETER
DA	2/INCHES CASED DRILL HOLE
DM	DRILLING MUD
DN	4 INCHES CASED DRILL HOLE
FH	HOLLOW FLIGHT AUGER
PA	POWER AUGER
PH	PROBE
PT	PERCOLATION TEST HOLE
RP	1 INCH SAMPLER (RETRACTABLE PLUG)
	TO BE DEFINED AT THE TIME OF EXPLORATION
SP	SEISMIC POINT
TP	TEST PIT
ABBRE\	/IATION "C" IN CATAGORIES:
	DN, AND FH WITH:
В В	BRIDGE
С	CUT
D	DAM
F	FILL
K	CULVERT
W W	WALL
X	TO BE USED IF ONE OF THE ABOVE CANNOT
^	BE DEFINED AT THE TIME THE EXPLORATION IS MADE

Leon-New Albion Road over

Mud Creek
PIN 5762.94
BIN 3322120
Town of Leon
Cattaruagus County





signature and seal



number date	description

SYMBOLS AND ABBREVIATIONS

project number:	191
drawn by:	TE
checked by:	J(
date:	JUNE 20
scale:	AS SHOV

	SUMMARY OF QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	AS-BUILT
201.06	CLEARING AND GRUBBING	LS	1	7.10 2 0 12 1
202.120001	REMOVING EXISTING SUPERSTRUCTURES	LS	1	
202.19	REMOVAL OF SUBSTRUCTURES	CY	262	
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	202	
203.03	EMBANKMENT IN PLACE	CY	376	
203.21	SELECT STRUCTURE FILL	CY	103	
206.01	STRUCTURE EXCAVATION	CY	1100	
206.0201	TRENCH AND CULVERT EXCAVATION	CY	10	
207.26	PREFABRICATED COMPOSITE STRUCTURAL DRAIN	SY	100	
09.1003	SEED AND MULCH - TEMPORARY	SY	850	
209.13	SILT FENCE - TEMPORARY	LF	643	
209.1801	ROLLED EROSION CONTROL PRODUCT, CLASS I TYPE A, SHORT TERM	SY	638	
04.15	SUBBASE COURSE OPTIONAL TYPE	CY	200	
02.098303	9.5 F3 TOP COURSE HMA, 80 SERIES COMPACTION	TON	70	
02.198903	19 F9 BINDER COURSE HMA, 80 SERIES COMPACTION	TON	50	
02.378903	37.5 F9 BASE COURSE HMA, 80 SERIES COMPACTION	TON	90	
07.0102	DILUTED TACK COAT	GAL	85	
90.10	PRODUCTION COLD MILLING OF BITUMINOUS CONCRETE	SY	370	
53.030001	TEMPORARY WATERWAY DIVERSION STRUCTURE	EA	1	
55.08	FOOTING CONCRETE, CLASS HP	CY	104	
555.09	CONCRETE FOR STRUCTURES, CLASS HP	CY	145	
555.95000007	CORROSION INHIBITOR FOR STRUCTURAL CONCRETE	GAL	580	
556.0201	UNCOATED BAR REINFORCEMENT FOR CONCRETE STRUCTURES	LB	17800	
57.0503	SUPERSTRUCTURE SLAB WITH INTEGRAL WEARING SURFACE - BOTTOM FORMWORK NOT REQUIRED - TYPE 3 FRICTION	SY	234	
557.2003	STRUCTURAL APPROACH SLAB WITH INTEGRAL WEARING SURFACE TYPE 3 FRICTION	SY	170	
58.02	LONGITUDINAL SAWCUT GROOVING OF STRUCTURAL SLAB SURFACE	SY	356	
559.16960118	PROTECTIVE SEALING OF STRUCTURAL CONCRETE	SF	1000	
559.18960118	PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS	SF	3740	
563.02	PRESTRESSED CONCRETE BOX BEAMS UNITS	SF	1872	
65.1922	TYPE E.L. BEARING (56 TO 111 KIPS)	EA	16	
68.54	STEEL BRIDGE RAILING (THREE RAIL) TELLINGTHER DAYLING	LF LF	144	
68.70	TRANSITION BRIDGE RAILING		128	
86.0201	DRILLING AND GROUTING BOLTS OR REINFORCEMENT BARS	LF	360	
06.10	BOX BEAM GUIDE RAILING	LF	198	
606.100002 606.120101	BOX BEAM GUIDE RAILING (SHOP BENT OR SHOP MITERED) BOX BEAM END PIECE	EA	9	
06.120101	BOX BEAM GUIDE RAILING END ASSEMBLY, TYPE I	EA	3	
06.71	REMOVING AND DISPOSING CORRUGATED BEAM GUIDE RAIL	LF	263	
06.7910	REMOVING AND DISPOSING ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAIL REMOVING AND DISPOSING ANCHORAGE UNITS FOR CORRUGATED BEAM GUIDE RAIL AND MEDIAN BARRIER	EA		
10.1402	REMOVING AND DISPOSITION AND FOR CORROGATED BEAM GUIDE RAIL AND MEDIAN BARRIER TOPSOIL - ROADSIDE	CY	80	
10.1601	TOF SOIL - NOADSIDE TURE ESTABLISHMENT - ROADSIDE	SY	700	
19.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	700	
619.04	BASIC WORK ZUNE INAFITO CONTROL TYPE III CONSTRUCTION BARRICADES	EA	45	
519.1711	TIPE III CONTROL TION DANNICALES TEMPORARY POSITIVE BARRIER CATEGORY 1 (PINNING PROHIBITED)	LF	56	
20.05	TEMPORALL FOSTING BARNIER CATEGORY I (FININING PROFIBILED) STONE FILLING (HEAVY)	CY	160	
20.0801	STONE I TELLING (ILEAVI) BEDDING MATERIAL. TYPE 1	CY	40	
25.01	SURVEY OPERATIONS SURVEY OPERATIONS	LS	1	
37.03	CONCRETE CYLINDER CURING BOX	FA	1	
37.11	ENGINEERS FILED OFFICE, TYPE I	MO	5	
37.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	500	
40.20	WHITE PAINT REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	768	
10.21	YELLOW PAINT REFLECTORIZED PAVEMENT STRIPES - 20 MILS	LF	768	
16.22	DELINEATOR, SNOWPLOWING MARKER, SUPPLEMENTARY SNOWPLOWING MARKER PANELS	EA	6	
46.32	STEEL POST, 2.0 LB/FT	EA	4	
47.61	REM & DISPOSE GROUND MOUNTED TYPE A SIGN SUPPORT(S), FDNS AND ANY ATTACHED SIGNS - SIZE I (UNDER 30 SQFT)	EA	4	
97.03	FIELD CHANGE PAYMENT	DC	43000	
98.04	ASPHALT PRICE ADJUSTMENT	DC	100	
98.05	FUEL PRICE ADJUSTMENT	DC	100	
98.06	STEEL / IRON PRICE ADJUSTMENT	DC	100	
599.040001	MOBILIZATION HOS AUGUSTWENT	LS	1	

Leon-New Albion Road over

Mud Creek
PIN 5762.94
BIN 3322120
Town of Leon
Cattaruagus County





signature and seal



drawing history	
number date	description

SUMMARY OF QUANTITIES

project number:	1910
drawn by:	TEM
checked by:	JC
date:	JUNE 202
scale:	AS SHOWI
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GENERAL NOTES:

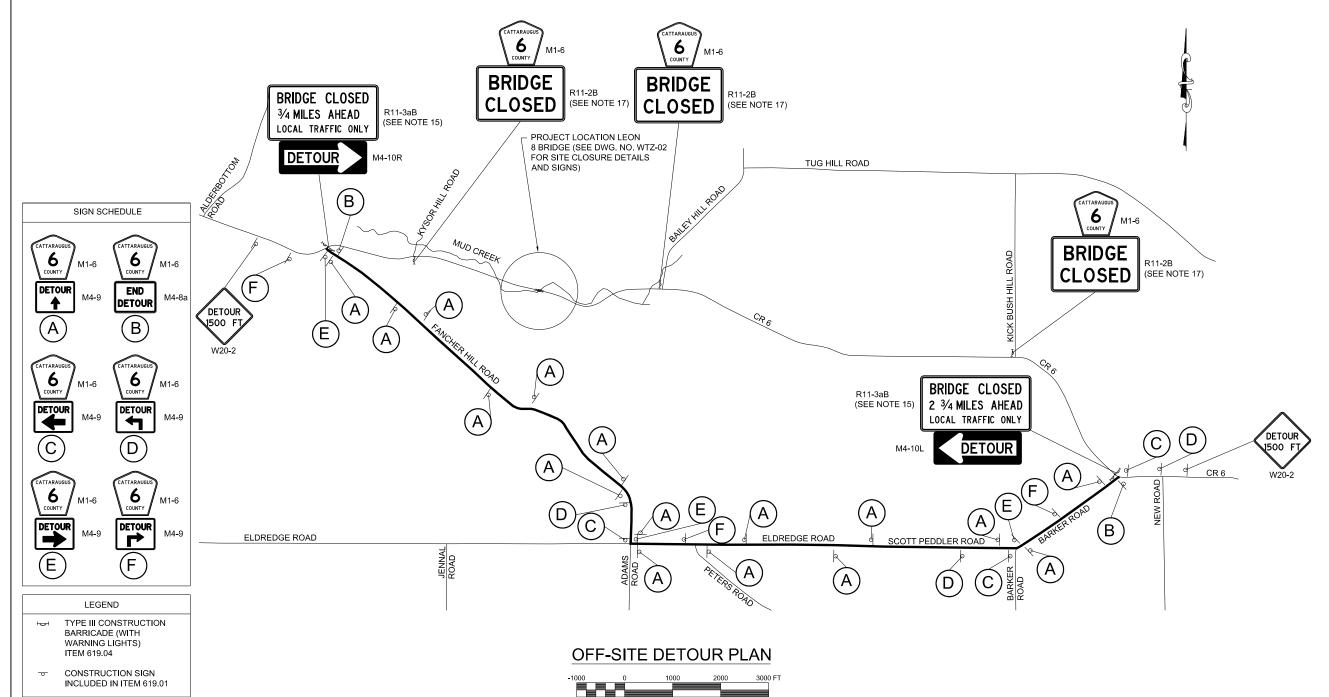
- 1. THE CONTRACTOR SHALL MAINTAIN TRAFFIC THROUGHOUT THE LENGTH OF THE CONTRACT IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 619 OF THE CURRENT NYSDOT STANDARD SPECIFICATIONS AND SUBSEQUENT ADDENDUMS, THE CURRENT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) WITH THE NEW YORK STATE SUPPLEMENT, THE WORK ZONE TRAFFIC CONTROL DETAILS IN THE PLANS, STANDARD SHEETS, AND PROPOSAL OF THIS CONTRACT, AND AS ORDERED BY THE ENGINEER (A.O.B.E.).
- THE WORK ZONE TRAFFIC CONTROL PLANS SHOWN ARE TO BE CONSIDERED MINIMUM REQUIREMENTS ADDITIONAL SIGNS AND/ OR CONTROL DEVICES MAY BE REQUIRED AS DETERMINED BY THE ENGINEER AND MUST BE PROVIDED WHERE REQUIRED UNDER ITEM 619.01.
- THE CONTRACTOR MAY SUBMIT REVISIONS TO THE WORK ZONE TRAFFIC CONTROL PLANS FOR APPROVAL. ANY CHANGES THAT ALTER THE BASIC CONCEPTS OF THE PLANS MUST BE APPROVED BY THE ENGINEER.
- ALL MATERIALS FOR ESTABLISHING CONSTRUCTION WORK ZONES (I.E. SIGNS, BARRIERS, DRUMS, CONES, ETC.) SHALL BE IN PLACE PRIOR TO BEGINNING WORK.
- IF AT ANY TIME THE ENGINEER DETERMINES THAT TRAFFIC IS NOT BEING PROPERLY MAINTAINED WITHIN A WORK ZONE, THE CONTRACTOR SHALL IMMEDIATELY CORRECT THE INDICATED DEFICIENCY AS DIRECTED, TO THE SATISFACTION OF THE ENGINEER.

GENERAL NOTES (CONTINUED):

- THE CONTRACTOR SHALL INSURE THAT PLACEMENT OF CONES, DRUMS, OR BARRICADES WILL NOT INTERFERE WITH SIGHT DISTANCE.
- VEHICLES BELONGING TO THE CONTRACTOR AND THE CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED ON THE PAVEMENT OR SHOULDERS ALONG THE ROADWAY BEING USED BY THE GENERAL PUBLIC (WITHIN THE PROJECT LIMITS)
- VEHICLES BELONGING EITHER TO THE CONTRACTOR AND THE
 CONTRACTOR'S EMPLOYEES SHALL NOT BE PARKED IN A MANNER WHICH
 OBSTRUCTS SIGNS, BARRIERS, BARRICADES, OR OTHER TRAFFIC
 CONTROL DEVICES, NOR IN A MANNER WHICH INTERFERES WITH ACCESS
 TO ABUTTING PROPERTIES.
- THE CONTRACTOR SHALL NOT PARK EQUIPMENT OR STORE MATERIAL WHERE IT IS DEEMED BY THE ENGINEER TO BE A SAFETY HAZARD. THE CONTRACTOR SHALL NOT PARK EQUIPMENT OVERNIGHT WHERE IT IS DEEMED A SAFETY HAZARD TO TRAFFIC.
- 10. DELINEATION DEVICES SHALL CONFORM TO THE M.U.T.C.D. AND NEW YORK STATE SUPPLEMENT.
- 11. THE CONTRACTOR SHALL NOT MIX DELINEATION DEVICES IN A LINEAR CLOSURE OR TAPER (I.E., CONES, VERTICAL PANELS, TUBULAR MARKERS

GENERAL NOTES (CONTINUED):

- OR DRUMS SHALL NOT BE USED IN THE SAME TAPER OR CLOSURE).
 HOWEVER, DIFFERENT DELINEATION DEVICES MAY BE USED IN DIFFERENT
 AREAS OF THE PROJECT.
- 12. THE CONTRACTOR SHALL NOTIFY ALL LOCAL AGENCIES ONE (1) WEEK BEFORE THE DETOUR IS SIGNED AND THE ROAD IS CLOSED (A.O.B.E.).
- 13. THE SIGN LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
- 14. THE MODIFICATION, RELOCATION OR ADJUSTMENT OF EXISTING SIGNS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER, AND SHALL BE INCLUDED IN ITEM 619 01
- FOR BRIDGE CLOSED SIGN (R 11-3aB) PLACE THE SIGN ON TWO BARRICADES WITH WARNING LIGHTS, ITEM 619.04.
- 16. OFFSITE DETOUR SIGNS TO BE PROVIDED BY THE CONTRACTOR ITEM 619.01.
- 17. PLACE SIGN BARRICADE AT SHOULDER WITH WARNING LIGHTS ITEM 619.04.



project

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County



WATTS
ARCHITECTURE &
ENGINEERING
95 Perry Street, Sultle 300

Buffalo, New York 14203 p: 716.206.5100 f: 716.206.5

signature and seal



proprietary notes:

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drawing history

number date description

hoot title

OFF-SITE DETOUR PLAN

 project number:
 19106

 drawn by:
 TEM

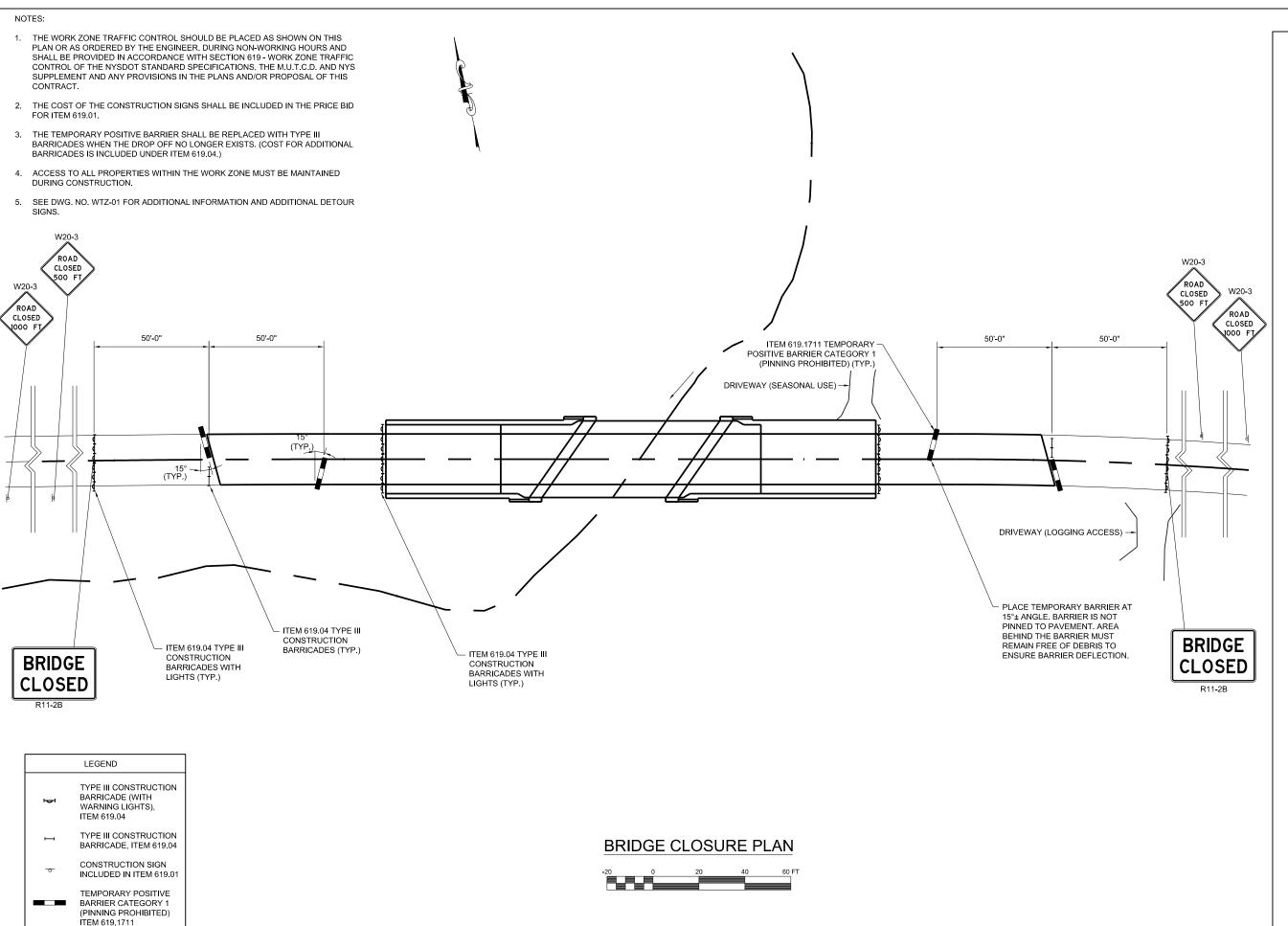
 checked by:
 JCK

 date:
 JUNE 2020

 scale:
 AS SHOWN

sheet number

WTC-01



project:

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County



WATTS ARCHITECTURE & ENGINEERING 05 Para-Street Subs 300

95 Perry Street , Sulte 300 Buffalo, New York 14203 p: 716.206.5100 f: 716.206.519

signature and seal



proprietary notes:

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drawing history	
number date	description

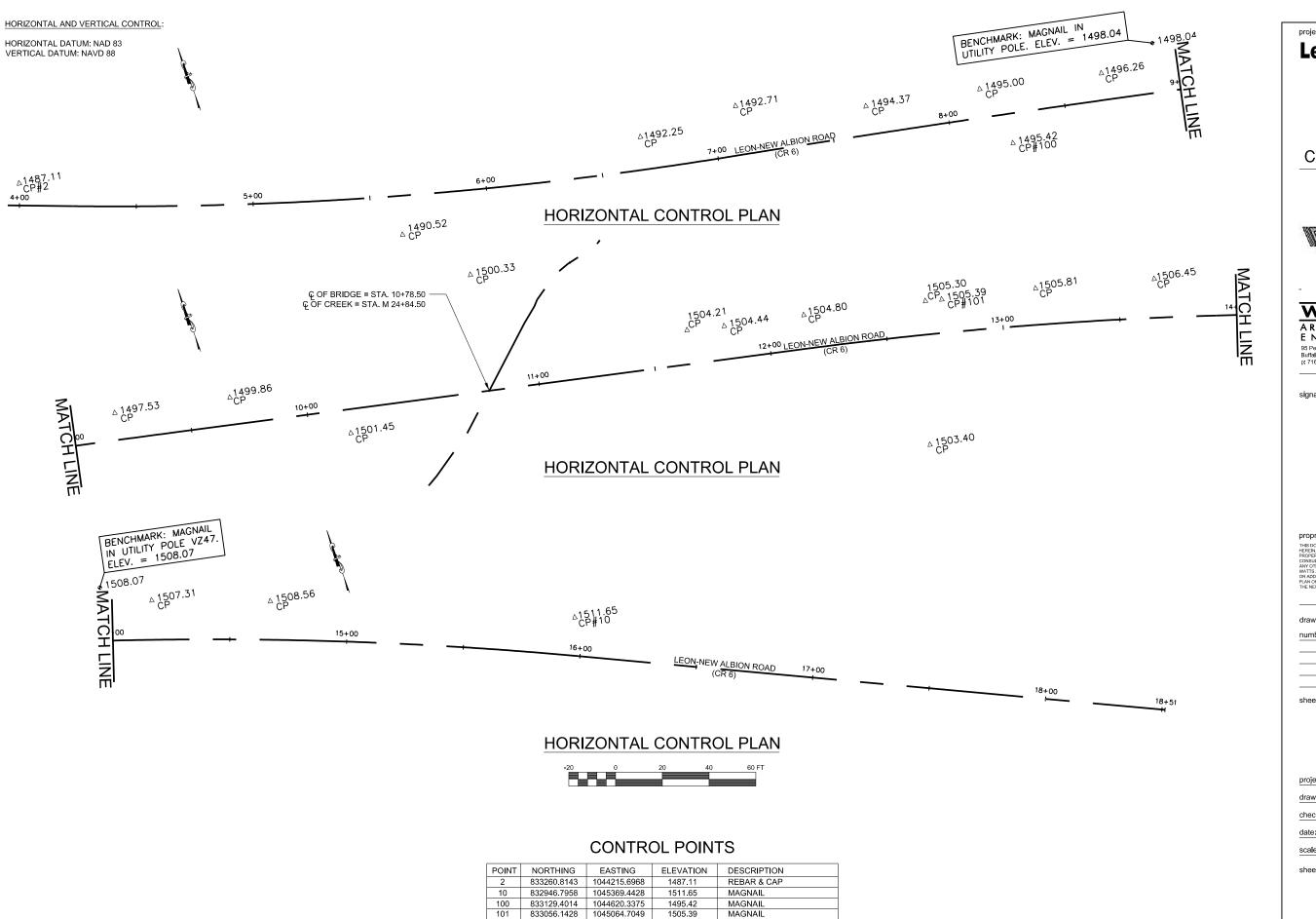
sheet title

BRIDGE CLOSURE

1910
TE
JC
JUNE 202
AS SHOW

sheet number

WTC-02



PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





signature and seal



proprietary notes:

drawing history

number date

SURVEY CONTROL DATA

project number:	1910
drawn by:	TE
checked by:	JC
date:	JUNE 202
scale:	AS SHOW

		SIGN REMO	VAL TABLE							
ITEM NUMBER DESCRIPTION										
647.61	647.61 REM AND DISPOSE GROUND MOUNTED TYPE A SIGN SUPPORT(S), FDNS AND ANY ATTACHED SIGNS - SIZE I (UNDER 30 SQUARE FEET)									
STATION	SIDE	OFFSET	ITEM 647.61 (EA.)	SIGN DESCRIPTION						
10+34	RT	14'	1	TYPE 3 OBJECT MARKER						
10+48	LT	14'	1	TYPE 3 OBJECT MARKER						
10+84	RT	14'	1	TYPE 3 OBJECT MARKER						
11+00	LT	14'	1	TYPE 3 OBJECT MARKER						
		TOTAL:	4							

	SNOWPL	OWING MARK	ER TABLE						
ITEM NUMBER	DESCRIPTION	ESCRIPTION							
646.22		DELINEATOR, SNOWPLOWING MARKER,							
	SUPPLEMEN	ITARY SNOWF	LOWING MARKE	R					
646.32	STEEL POST, 2.0 LB/FT								
STATION	OFFSET	SIDE	ITEM 646.22	ITEM 646.31					
STATION	OFFSEI	SIDE	(EA)	(EA)					
8+33	15'-6"	RT	2	1					
9+82	15'-6"	LT	1	1					
11+31	15'-6"	RT	1	1					
11+45	15'-6"	LT	2	1					
	•	TOTAL:	6	4					

	PAVEMENT MARKING TABLE										
ITEM NUMBER											
640.20	WHITE PAINT REF	LECTORIZE	D PAVEMEN	IT STRIPES	- 20 MILS						
640.21	YELLOW PAINT RE	FLECTORIZ	ZED PAVEME	ENT STRIPE	S - 20 MILS						
STATION TO	STATION	SIDE	LENGTH	FACTOR	ITEM 640.20 (LF)	ITEM 640.21 (LF)					
8+83 TC	12+67	LT	384'			384'					
8+83 TO	12+67	CENTER	384'	2	768'						
8+83 TC	12+67	RT	384'	-		384'					
		768'	768'								

		SILT FEN	CE TABLE		
ITEM NO.	DESCRIPTION				
209.13	SILT FENCE - T	EMPORARY			
ST	ATION	OFF:	SET (LF)	CIDE	209.13 (LF)
BEGIN	END	BEGIN	END	─ SIDE	209.13 (LF)
9+31	10+27	15	22	RT	101
10+33	10+45	29	15	RT	18
10+73	10+76	29	24	RT	6
10+78	11+95	23	28	RT	121
9+17	9+36	27	29	LT	19
9+36	10+53	18	25	LT	119
10+54	10+64	15	29	LT	18
10+61	10+76	15	29	LT	20
11+07	11+09	24	29	LT	6
11+07	11+15	19	29	LT	12
11+12	11+70	19	28	LT	63
10+45	10+66	15	15	LT-RT	37
10+76	11+07	15	15	LT-RT	53
				TOTAL	593

GUIDE RAIL REMOVAL TABLE ITEM NUMBER DESCRIPTION
ITEM 606.71 REMOVING AND DISPOSING CORRUGATED BEAM GUIDE RAILING

GUIDE RAILING AND MEDIAN BARRIER

END STATION

10+34

11+52

10+48

11+58

SIDE

RT

RT LT

LT

LT

REMOVING AND DISPOSING ANCHORAGE UNITS FOR CORRUGATED BEAM

SIDE

RT

RT

LT

ITEM 606.7910 (EA)

ITEM 606.71

(LF)

69.0

68.0

68.0

58.0

263.0

ITEM 606.7910

BEGIN STATION

9+65 9+65

10+84

11+52

9+80 9+80

11+00

11+58

GUIDE RAILING TABLE											
ITEM NUMBER	TEM NUMBER DESCRIPTION										
568.54	STEEL BRIDGE RAILING (THREE RAIL)										
568.70	TRANSITION BRIDGE RAILING										
606.10	BOX BEAM GUIDE	RAILING									
606.100002	BOX BEAM GUIDE	RAILING (S	HOP BENT (OR SHOP MI	TERED)						
606.120101	BOX BEAM END P	IECE									
606.120102	BOX BEAM GUIDE	RAILING E	ND ASSEMBI	Y, TYPE I							
STATION T	SIDE	POST SPACING (LF)	LENGTH (LF)	FACTOR	ITEM 568.54 (LF)	ITEM 568.70 (EA)	ITEM 606.10 (LF)	ITEM 606.100002 (LF)	ITEM 606.100101 (EA)	ITEM 606.100102 (EA)	
7+66	TO 8+33	RT	NA	NA	_						1
8+33	TO 9+95	RT	6'	162	-			162			
9+95 T	O 10+27	RT	NA	NA	-		1				
10+27	TO 10+99	RT	SEE BR-23	72	-	72					
10+99	TO 11+31	RT	NA	NA	_		1				
11+31	TO 11+98	RT	NA	NA	_						1
9+16	TO 9+82	LT	NA	NA	-						1
9+82 T	O 10+18	LT	6'	36	-			36			
10+18	LT	NA	NA	_		1					
10+50 TO 11+22 LT SEE BR-23 7					-	72					
	TO 11+54	LT	NA	NA	**		1				
11+54	TO 11+63	LT	NA	NA	_				9		
11+63	TO 11+69	LT	NA	NA	_					1	
		TOTAL:	144	4	198	9	1	3			

THE TRANSITION RAILING IN THE NE QUADRANT IS MODIFIED WITH A PORTION OF SHOP CURVED RAILING. SEE DWG. NO. BR-24 FOR DETAILS.

Leon-New Albion Road over Mud Creek

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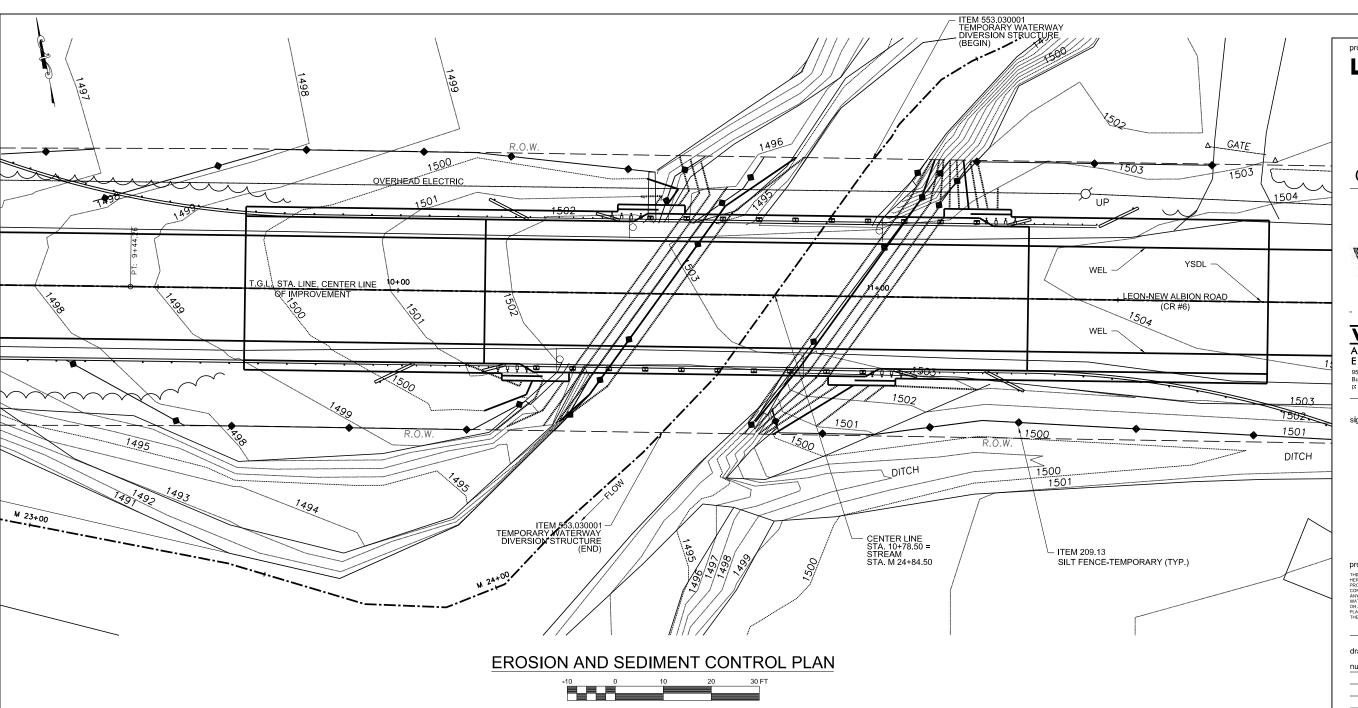
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ROADWAY TABLES

- 1		
	project number:	1910
	drawn by:	TEN
	checked by:	JCI
	date:	JUNE 202
	scale:	AS SHOWN



EROSION & SEDIMENT CONTOL LEGEND DESCRIPTION SILT FENCE

GENERAL NOTES:

1. SEE DWG. NO. RT-01 FOR SILT FENCE TABLE.

EROSION AND SEDIMENT CONTROL NOTES:

- THE CONTRACTOR SHALL COMPLY WITH ALL GENERAL NOTES FOR THE UNITED STATES ARMY CORPS OF ENGINEERS, SECTION 404 NATIONWIDE PERMITS.
- THE CONTRACTOR SHALL COMPLY WITH ALL GENERAL NOTES FOR THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, SECTION 401 WATER QUALITY CERTIFICATION, WHICH ARE INCLUDED IN THE PROPOSAL.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL DEVICES.
- STORM WATER FROM DISTURBED ARES MUST BE PASSED THROUGH A SILTATION FENCE BEFORE DISCHARGE BEYOND DISTURBED AREAS OR INTO INLETS OF OTHER DRAINAGE
- DURING CONSTRUCTION. NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE TO ANY WATERS NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES BE ALLOWED TO ENTER ANY WATERS.
- ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION OF THE PROJECT SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO AN APPROPRIATE UPLAND AREA FOR DISPOSAL.

EROSION AND SEDIMENT CONTROL NOTES (CONTINUED)

- ALL DREDGED AND EXCAVATED MATERIAL SHALL BE DISPOSED OF ON AN UPLAND SITE AND
- BE SUITABLY STABILIZED SO THAT IT CANNOT REASONABLY RE-ENTER ANY WATER BODY. THE COST OF INSTALLING, CLEANING, MAINTAINING, AND REMOVING TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE PAID FOR UNDER THE APPROPRIATE
- THE LOCATIONS OF EROSION AND SEDIMENT CONTROL MEASURES, AS INDICATED IN THE CONTACT DOCUMENTS MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS, AND/OR ACTUAL FIELD CONDITIONS. THE ENGINEER SHALL BE NOTIFIED OF ANY SIGNIFICANT FIELD CHANGES TO THE EROSION
- AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS.

 10. THE CONTRACTOR SHALL NOT USE THE STREAM BED OR BANKS AS A STAGING AREA FOR EQUIPMENT OR MATERIALS. AFTER EACH WORK DAY, ALL MECHANIZED EQUIPMENT SHALL BE REMOVED FROM THE STREAM BED AND BANKS AND STORED IN AN APPROVED UPLAND SITE.
- 11. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE ENGINEER A WRITTEN SCHEDULE AND PROPOSED MEASURES FOR TEMPORARY AND PERMANENT SOIL EROSION AND SEDIMENT CONTROL AS REQUIRED BY SECTION 209 OF THE NYSDOT STANDARD SPECIFICATIONS.

Leon-New Albion Road over Mud Creek

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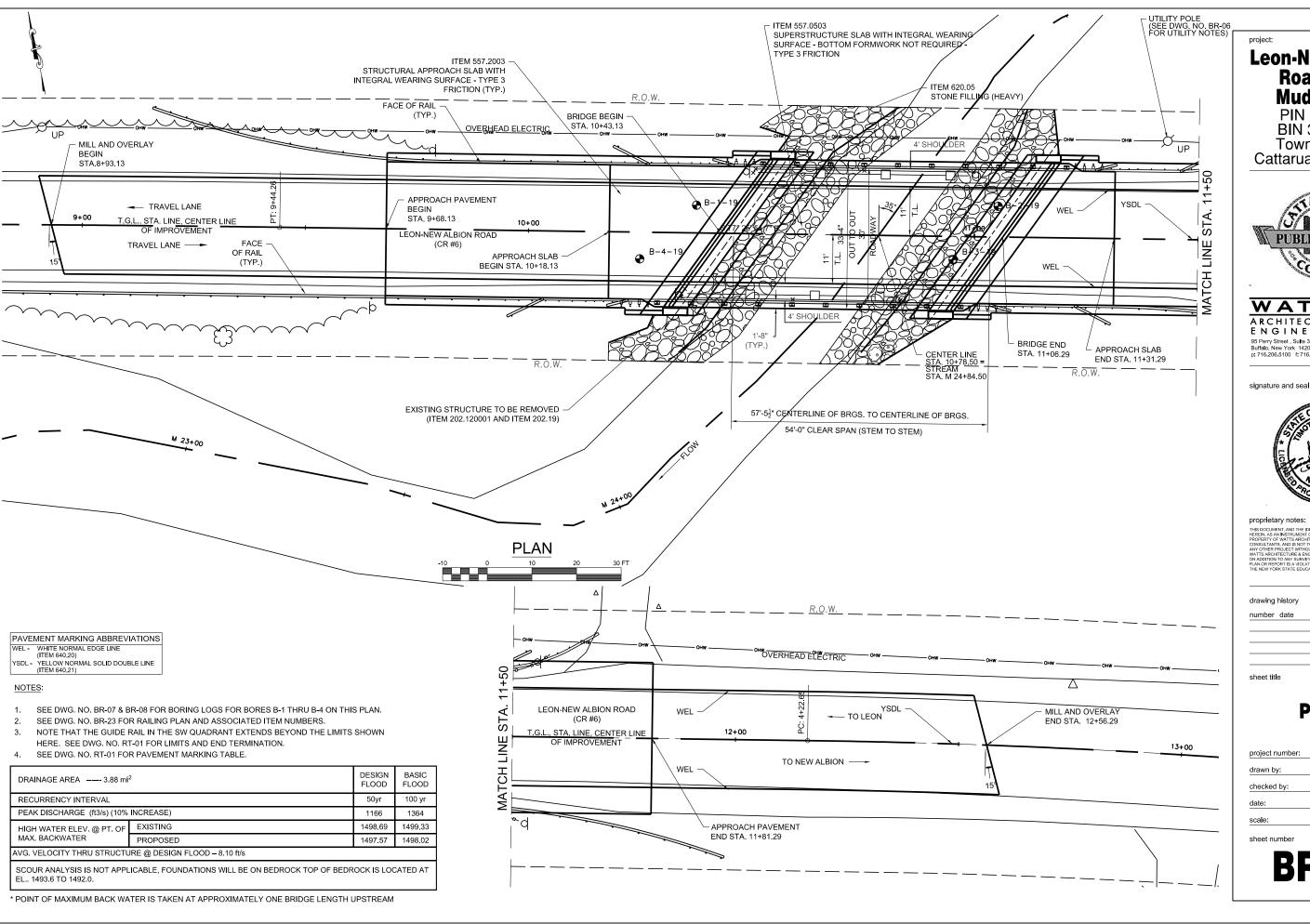
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EROSION AND SEDIMENT CONTROL PLAN

project number JUNE 2020 AS SHOWN



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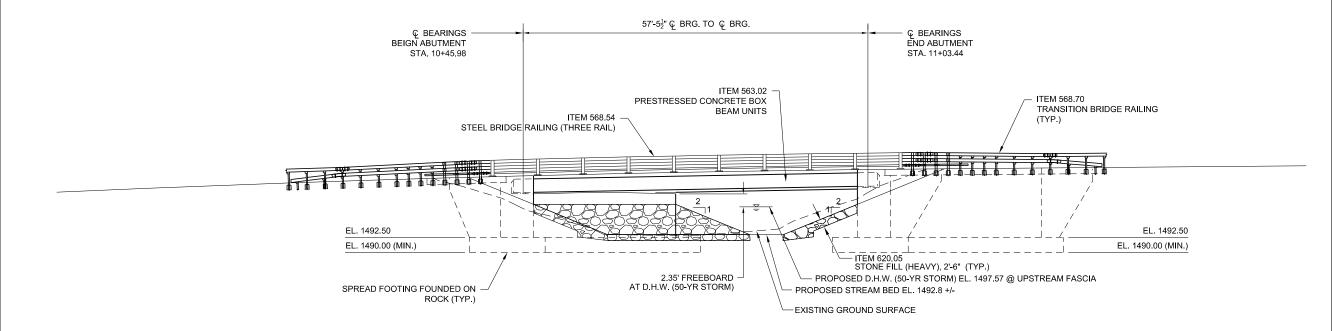


ARCHITECTURE & ENGINEERING



PLAN

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date:	JUNE 2020
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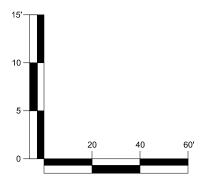
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BR-02

11 % 40

LT EDGE OF PAVEMENT MATCH EXISTING TRANSITION - MATCH EXISTING CROSS SLOPE LEON-NEW ALBION ROAD HCL, TGL AND POR TRANSITION 10+59.37 -2.00% D & RT RT EDGE OF PAVEMENT MILL & OVERLAY FULL DEPTH RECONSTRUCTION AND BRIDGE REPLACEMENT MILL & OVERLAY - ITEM 557.0503 SUPERSTRUCTURE SLAB WITH MATCH EXISTING ROADWAY PROFILE INTEGRAL WEARING SURFACE - ITEM 563.02 BRIDGE BEGIN -PRESTRESSED CONCRETE BOX BEAM UNITS STA. 10+43.13 - BRIDGE END L = 150.00 FT. G1 = 4.56% G2 = 0.83% E= -0.70 FT. STA. 11+06.29 ITEM 557.2003 STRUCTURAL APPROACH APPROACH SLAB -APPROACH PAVEMENT SLAB WITH INTEGRAL MILL AND OVERLAY ENDS SSD = 365.00 FT BEGIN STA. 10+18.13 END STA. 11+81.29 WEARING SURFACE (TYP.) STA. 12+56.29 L = 60.00 FT. G1 = 2.33% G2 = 4.56% E= 0.17 FT. HSD = 564.35 FT. EL. 1503.83 PVT 11+15.05: ELEV 1503.91: 1510 EXISTING ROADWAY 0.83% 1505 1505 PVI 9+08.53 ELEV: 1497.29 PROPOSED TGL APPROACH SLAB END STA. 11+31.29 1500 1500 2.35' FREEBOARD| EXISTING GRADE APPROACH PAVEMENT BEGINS STA. 9+68.13 1495 BRIDGE OPENING EL. 1497.57 50 YR FLOOD 1490 1490 - MILL AND OVERLAY BEGINS EXISTING CHANNEL BOTTOM -STA. 8+93.13 PROPOSED CHANNEL BOTTOM PROPOSED SUBSTRUCTURE EXISTING SUBSTRUCTURE 1485 1480 -11+00 12+00 8+50 9+00 10+00 13+00

CENTERLINE PROFILE



proj

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County



ARCHITECTURE & ENGINEERING

SPerry Street, Sulte 300

Buffalo, New York, 14203

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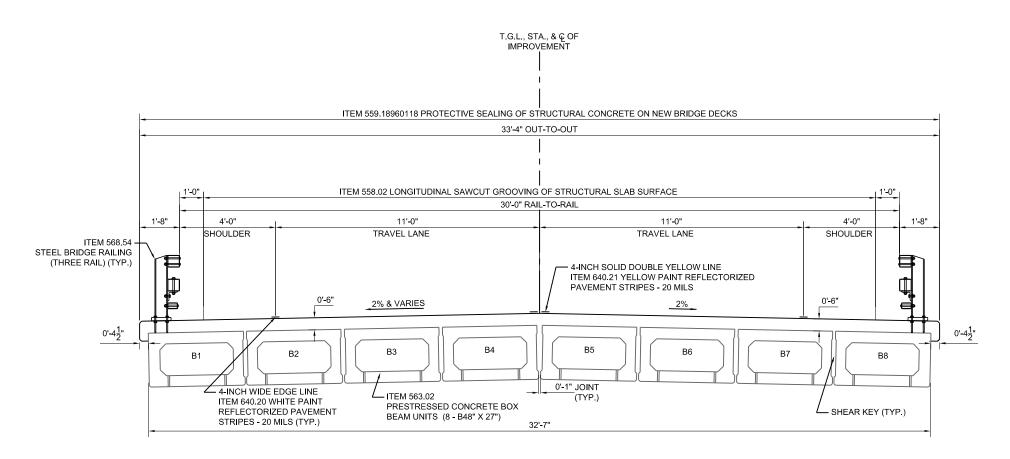
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BR-03

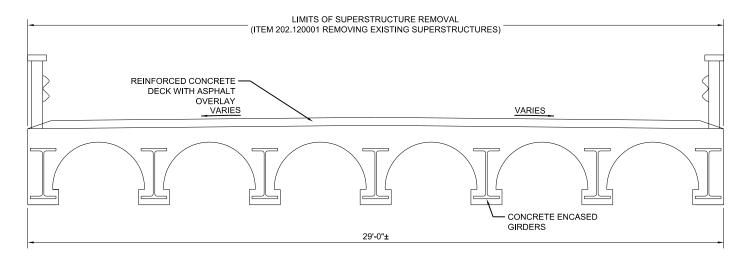
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NOTE:

RECORD PLANS FOR THIS BRIDGE ARE NOT AVAILABLE. THE EXACT SHAPE AND LIMITS OF THE EXISTING SUBSTRUCTURE IS UNKNOWN. ASSUMPTIONS WERE MADE AS TO THE TYPE AND LIMITS OF THE EXISTING ABUTMENT FOR ESTIMATING PURPOSES.



PROPOSED TRANSVERSE BRIDGE SECTION



EXISTING TRANSVERSE BRIDGE SECTION

NOTES:

1. SEE DWG. NO. BR-03 FOR PROFILE, CROSS SLOPE AND SUPERELEVATION INFORMATION.



roject:

Leon-New Albion Road over Mud Creek

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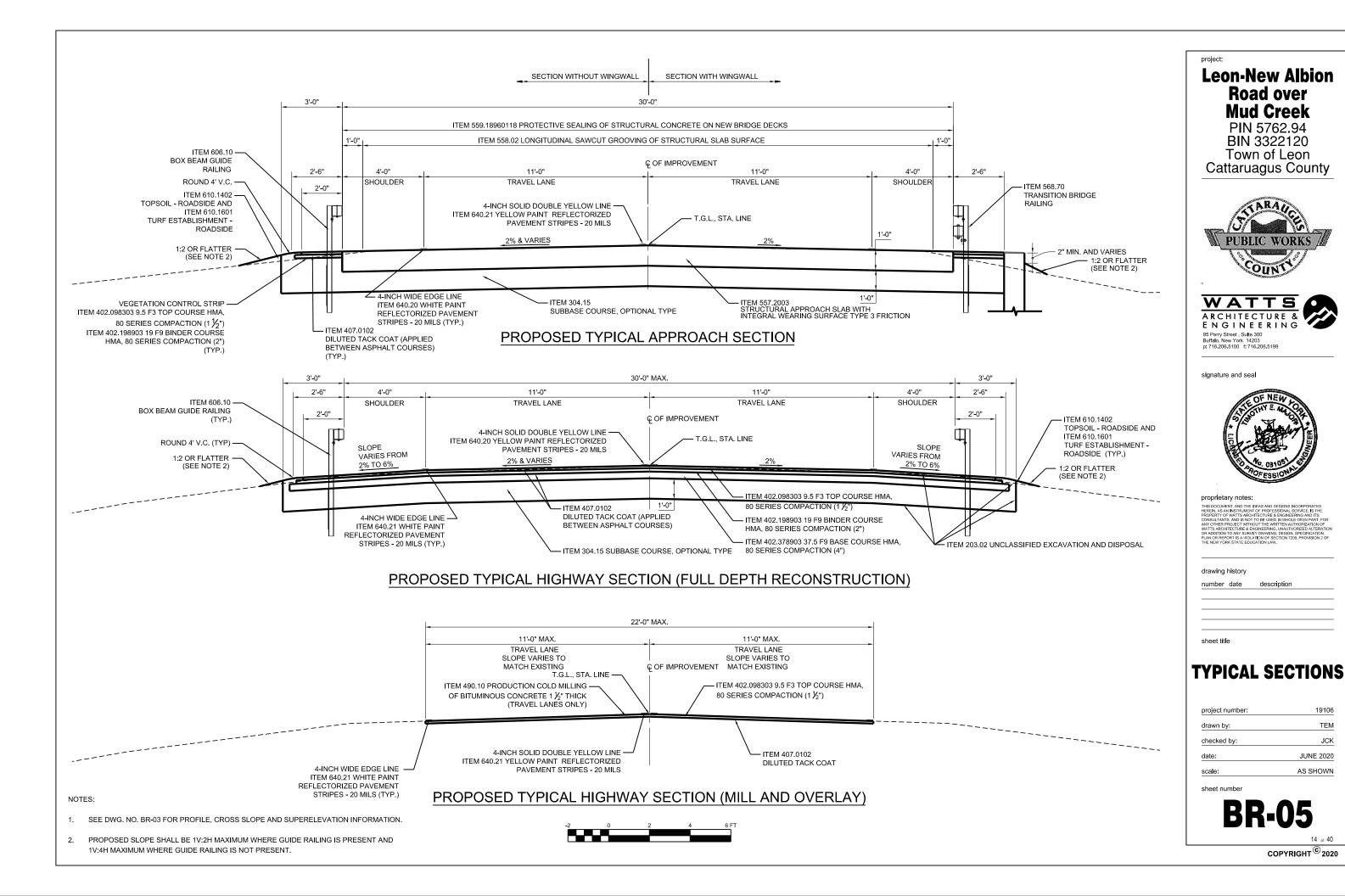
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TYPICAL SECTIONS

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JUNE 202
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sheet number

BR-04



GENERAL NOTES

- DESIGN SPECIFICATIONS: NYSDOT LRFD BRIDGE DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF APRIL 2020. (FOR DESIGN PURPOSES, COMPRESSIVE STRENGTH OF CONCRETE FOR SUBSTRUCTURES AND DECK SLABS AT 28 DAYS: fc = 3000 PSI.)
- LIVE LOAD: AASHTO HL-93 AND NYSDOT DESIGN PERMIT VEHICLE.
- THIS BRIDGE SHALL BE MAINTAINED IN ACCORDANCE WITH THE GUIDELINES CONTAINED IN THE CURRENT EDITION OF THE AASHTO MAINTENANCE MANUAL FOR ROADWAYS AND BRIDGES.
- CONSTRUCTION AND MATERIALS SPECIFICATIONS: STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, OFFICE OF ENGINEERING, ALL CURRENT ADDITIONS AND MODIFICATIONS
- DETAILS ON THE DRAWINGS LABELED AS "NOT TO SCALE" ARE INTENTIONALLY DRAWN NOT TO SCALE FOR VISUAL CLARITY. ALL OTHER DETAILS FOR WHICH NO SCALE IS SHOWN ARE DRAWN PROPORTIONAL AND ARE FULLY
- 6. ALL SHOP DRAWINGS SUBMITTED FOR THIS PROJECT SHALL BE IN U.S. CUSTOMARY UNITS.
- THE COST OF ALL JOINT MATERIAL SHALL BE INCLUDED IN THE UNIT PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 8. THE LOAD RATINGS ARE IN ACCORDANCE WITH THE AASHTO MANUAL FOR BRIDGE EVALUATION.
- 9. THE CONTRACTOR MUST COMPLY WITH ALL PERMITS, INCLUDING N.Y.S.D.E.C. WATER QUALITY CERTIFICATION.
- 10. THE CONTRACTOR SHALL REMOVE, STORE AND RE-ATTACH THE BIN PLATE TO THE BEGIN RIGHT WINGWALL AS DIRECTED BY THE ENGINEER

FOUNDATION NOTES

- 1. THE COST OF WATER USED FOR COMPACTION OF SELECT FILL ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 203.21 - SELECT STRUCTURE FILL.
- HIGHWAY EMBANKMENT MATERIAL AND SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE PLACED SIMULTANEOUSLY, IN CONTACT, ON BOTH SIDES OF THE VERTICAL PAYMENT LINE.

SUBSTRUCTURE NOTES

- TOP OF BACKWALLS SHALL BE TROWEL FINISHED. TWO SHEETS OF SHEET GASKET (TREATED BOTH SIDES), §728-06, SHALL BE PLACED ON THE TOP OF THE BACKWALLS OF FIXED AND EXPANSION ABUTMENTS. THE CONTRACTOR SHALL INCLUDE COSTS FOR THIS WORK IN THE PRICE BID FOR THE APPROACH SLAB ITEM.
- THE CONTRACTOR, WITH THE PERMISSION OF THE DPW, MAY ELECT TO INTRODUCE CONSTRUCTION JOINTS IN THE ABUTMENTS AT LOCATIONS NOT SHOWN ON THE PLANS. THESE CONSTRUCTION JOINTS SHALL BE PROVIDED. WITH SHEAR KEYS AND WATERSTOPS. VERTICAL CONSTRUCTION JOINTS INTRODUCED IN THE BACKWALL SHOULD PREFERABLY BE PLACED MIDWAY BETWEEN THE PEDESTALS.
- THE COST OF ALL MATERIAL AT EACH CONSTRUCTION JOINT, CONTRACTION JOINT AND CONCRETE EXPANSION JOINT SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS OF THE CONTRACT.
- 4. ALL EXPOSED EDGES OF CONCRETE ARE TO BE CHAMFERED 1 INCH UNLESS OTHERWISE NOTED.
- ALL FORMING HARDWARE SUCH AS TIES AND "ALL THREADS" THAT ARE TO REMAIN IN THE CONCRETE SHALL BE ELECTROPLATED OR MADE OF A NONFERROUS MATERIAL TO PREVENT CORROSION.
- 6. ALL PLACEMENTS OF SELECT STRUCTURE FILL, ITEM 203.21, SHALL BE COMPACTED TO 95 PERCENT OF STANDARD PROCTOR MAXIMUM DENSITY.

HYDRAULIC NOTES

- ORDINARY HIGH WATER IS ESTIMATED TO BE 1495 70. THIS IS DEFINED AS THE WATER SURFACE ELEVATION FOR THE MEAN ANNUAL FLOOD, WHICH IS THE FLOOD THAT HAS A RECURRENCE INTERVAL OF 2.33 YEARS.
- ORDINARY WATER IS ESTIMATED TO BE 1493 50. THIS IS DEFINED AS THE HIGHEST SURFACE WATER ELEVATION LIKELY TO BE ENCOUNTERED DURING ONE CONSTRUCTION SEASON (OTHER THAN MAJOR FLOODS). IT IS ALWAYS LESS THAN THE ORDINARY HIGH WATER ELEVATION AND IT IS USUALLY AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.
- LOW WATER IS ESTIMATED TO BE 1492.50. THIS WATER ELEVATION IS THE NORMAL LOW WATER ELEVATION PREVALENT DURING ONE CONSTRUCTION SEASON FOR MORE THAN 25% OF THE TIME. IT IS AN OBSERVED ELEVATION RATHER THAN A COMPUTED ONE.

- TOP SURFACES OF NEW BRIDGE DECKS AND APPROACH SLABS SHALL BE SEALED ACCORDING TO ITEM 559.18960118 - PROTECTIVE SEALING OF STRUCTURAL CONCRETE ON NEW BRIDGE DECKS AND BRIDGE DECK OVERLAYS.
- 2. CORROSION INHIBITOR SHALL BE ADDED TO THE PRESTRESSED CONCRETE BOX UNITS AT A RATE OF 5 GALLONS PER CUBIC YARD IN ACCORDANCE WITH THE NYSDOT PRESTRESSED CONCRETE CONSTRUCTION MANUAL (PCCM). COST TO BE INCLUDED IN THE UNIT PRICE BID IN ACCORDANCE WITH THE NYSDOT PRESTRESSED CONCRETE CONSTRUCTION MANUAL (PCCM) FOR ITEM 563.02. PENETRATING SEALER AS SPECIFIED IN THE PCCM SHALL BE APPLIED TO THE SIDES AND BOTTOM OF ALL PRESTRESSED CONCRETE BOX UNITS. COST TO BE INCLUDED IN THE UNIT PRICE BID FOR ITEM
- 3. FOR BIN 3322120, SHOP DRAWING SUBMITTALS ARE REQUIRED FOR THE FOLLOWING BRIDGE RAIL/TRANSITION ITEMS: 568 54 AND 568 70

PRESTRESSED CONCRETE BEAM NOTE

- THE CONTRACTOR MAY PROPOSE DEBONDING OF PRETENSIONING STRANDS FOR 6 INCHES FROM ENDS OF BEAMS TO REDUCE THE TENDENCY FOR BEAM ENDS TO CRACK, TOTAL NUMBER OF DEBONDED STRANDS (DESIGN BONDING SHOWN ON THE CONTRACT PLANS AND CRACK CONTROL DEBONDING COMBINED) SHALL NOT EXCEED 50% OF THE TOTAL NUMBER OF STRANDS
- 2. FOR BIN 3322120, SHOP DRAWING SUBMITTALS ARE REQUIRED ITEM 563.02 PRESTRESSED CONCRETE BOX BEAMS

REMOVAL NOTES

- 1 EXISTING SUBSTRUCTURE SHALL BE REMOVED WITHIN THE LIMITS SHOWN ON THE PLANS UNDER ITEM 202 19
- EXISTING SUPERSTRUCTURE SHALL BE REMOVED UNDER ITEM 202.120001
- TO THE ENGINEER FIFTEEN (15) DAYS PRIOR TO BEGINNING THE DEMOLITION. THE REQUIREMENT THAT IT BE SIGNED BY A LICENSED AND REGISTERED PROFESSIONAL ENGINEER IS WAIVED.
- 4. RECORD PLANS FOR THIS STRUCTURE ARE NOT AVAILABLE.
- THE ENGINEER DETERMINES THAT ADEQUATE PROTECTIVE DEVICES ARE NOT BEING EMPLOYED. THE WORK SHALL BE SUSPENDED UNTIL ADEQUATE PROTECTION IS PROVIDED.
- LIMITS OF CONSTRUCTION, AND NOT SCHEDULED FOR REMOVAL, ANY DAMAGE CAUSED TO THIS NATURAL GROWTH SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR AS DIRECTED BY THE ENGINEER.
- PERMISSION FROM THE ENGINEER. BACKFILL OF UNAUTHORIZED EXCAVATIONS BEYOND THE PAYMENT LINES WILL BE AT THE CONTRACTOR'S EXPENSE. BACKFILL MATERIAL WILL BE AS DIRECTED BY THE ENGINEER.
- 9. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIALS TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE UNIT PRICES FOR THOSE ITEMS.
- OR OTHER PROTECTIVE DEVICES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE ITEMS OF THE
- 11. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING AND OTHER DEVICES REQUIRED OR DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF THE ADJACENT STRUCTURES. ROADWAY AND UTILITIES.
- DISMANTLING ACTIVITIES. ALL ASPHALT MATERIALS SHALL BE PROPERLY RECYCLED AND/OR DISPOSED OF AT AN APPROVED LANDFILL. (COST INCLUDED UNDER ITEM 202.120001.)

DECK PLACEMENT NOTES

- MAY ORDER THE CONTRACTOR TO STOP PLACEMENT OPERATIONS AT ANY TIME. IF IN THE ENGINEER'S OPINION. CONCRETE PLACED DURING THE PLACEMENT HAS STARTED TO SET, OR IS ABOUT TO SET, AND FURTHER PLACEMENT OF CONCRETE WILL CAUSE DEFLECTION CRACKING.

- THE CONTRACTOR SHALL PLACE WET BURLAP CURING BLANKETS ON THE CONCRETE DECK WITHIN 30 MINUTES OF THE CONCRETE BEING DEPOSITED INTO THE FORMS OR 5 MINUTES AFTER FINISHING, WHICHEVER COMES FIRST, THE PLACEMENT OF THE TURF DRAG TEXTURE SHALL NOT INTERFERE WITH THESE REQUIREMENTS
- 5. IF THE CONTRACTOR'S DECK PLACEMENT OPERATION IS STOPPED PRIOR TO COMPLETION, WHETHER BY THE CONTRACTOR'S DECISION OR BY DIRECTION OF THE ENGINEER, THE CONTRACTOR SHALL PROVIDE A FINISHED DECK GRADE WHICH MATCHES THE PLANNED PROFILE. ANY SUBSEQUENT REVISIONS TO DECK FORMS MADE NECESSARY BY SUCH ACTION SHALL BE AT NO COST TO THE COUNTY
- 6. SINCE THIS STRUCTURE HAS A CROSS SLOPE TRANSITION, IT MAY BE ADVISABLE TO PLACE THE FINISHING MACHINE

ALL STRUCTURAL HP CONCRETE (EXCEPT ABUTMENT FOOTINGS) SHALL CONTAIN CORROSION INHIBITOR (4 GALLONS PER CUBIC YARD). THE COST OF THE CORROSION INHIBITOR SHALL BE PAID FOR UNDER ITEM 555.95000007.

REINFORCEMENT NOTES

- 1. BAR REINFORCEMENT SPACINGS INDICATED ON THESE PLANS ARE MAXIMUM UNLESS OTHERWISE SPECIFIED.
- 2. COVER FOR BAR REINFORCEMENT ON THESE PLANS SHALL BE 3" IN FOOTINGS AND 2" ELSEWHERE UNLESS OTHERWISE SPECIFIED.

STORAGE NOTE

STORE MATERIALS WITHIN THE RIGHT-OF-WAY. THE CONTRACTOR SHALL OBTAIN THE WRITTEN PERMISSION OF PRIVATE PROPERTY OWNERS PRIOR TO UTILIZING ANY AREAS OUT OF THE RIGHT-OF-WAY TO STORE MATERIALS. A COPY OF ANY WRITTEN PERMISSION TO STORE MATERIALS ON PRIVATE PROPERTY, IF OBTAINED, SHALL BE SUBMITTED TO THE ENGINEER AND APPROVED PRIOR TO STORAGE OF ANY MATERIALS AT THE PROPOSED SITE.

ITEM 637 03 - CONCRETE CYLINDER CURING BOX

- ITEM 637.11 ENGINEERS FILED OFFICE, TYPE I

- THE REQUIREMENTS OF §202-3.01 GENERAL AND SAFETY REQUIREMENTS. A REMOVAL PLAN SHALL BE SUBMITTED
- DURING REMOVAL OPERATIONS. THE CONTRACTOR SHALL NOT BE ALLOWED TO DROP WASTE CONCRETE, DEBRIS AND OTHER MATERIALS TO THE AREA BELOW THE BRIDGE, EXCEPT WHERE PLANS SPECIFICALLY PERMIT THE DROPPING OF MATERIAL PLATFORMS NETS SCREENS OR OTHER PROTECTIVE DEVICES SHALL BE USED TO CATCH THE MATERIAL IF
- ALL MATERIAL FALLING ON THE AREA BELOW AND ADJACENT TO THE BRIDGE SHALL BE REMOVED AND DISPOSED OF BY
- CARE SHOULD BE TAKEN TO RETAIN NATURAL GROWTH AND PREVENT DAMAGE TO TREES WITHIN AND OUTSIDE THE
- EXCAVATION BELOW THE PLANNED BOTTOM OF FOOTING ELEVATION WILL NOT BE ALLOWED WITHOUT WRITTEN
- 10. THE COST OF FURNISHINGS, INSTALLING, MAINTAINING, REMOVING AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS
- 12. ASPHALT, TAR OR MACADAM PAVEMENT SHALL BE REMOVED FROM BRIDGE DECKS BEFORE PROCEEDING WITH OTHER

- CONCRETE PLACEMENT AND FINISHING OPERATIONS SHALL BE PERFORMED AS RAPIDLY AS POSSIBLE. THE ENGINEER
- 2. LONGITUDINAL CONSTRUCTION JOINTS WILL NOT BE PERMITTED.
- 3. THE CONTRACTOR SHALL OPERATE FINISHING MACHINE AS CLOSE TO THE SKEW ANGLE AS PRACTICABLE FOR SKEW

- PERPENDICULAR TO THE STATION LINE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMISSION FROM THE COUNTY FOR LOCATIONS TO BE USED TO

ENGINEER'S FIELD OFFICE AND EQUIPMENT

THE CONTRACTOR SHALL SUPPLY THE FOLLOWING

ITEM 637.34 - OFFICE TECHNOLOGY AND SUPPLIES

INVASIVE SPECIES NOTES

- THE FOLLOWING INVASIVE SPECIES WERE OBSERVED TO BE ON SITE IN AUGUST OF 2019: WILD PARSNIP (PASTINACA SATIVA), COMMON REED GRASS (PHRAGMITES AUSTRALIS) AND MUGWORT (ARTEMISIA VULGARIS).
- TO PREVENT THE ACCIDENTAL INTRODUCTION OF INVASIVE SPECIES THAT ARE "HITCHING A RIDE" ON CONSTRUCTION EQUIPMENT, ALL EQUIPMENT THAT IS TO BE PLACED IN MUD CREEK SHALL BE CLEANED. AS APPROPRIATE, E.G. TRACKS BUCKETS FTC TO REMOVE INVASIVE SPECIES AND THEIR SEEDS AND PROPAGULES. THIS REQUIREMENT APPLIES TO EQUIPMENT ARRIVING ON THE PROJECT AND EQUIPMENT THAT IS BEING RELOCATED WITHIN THE PROJECT.
- ALL TRACKED EQUIPMENT INVOLVED IN EARTHWORK SHOULD BE CLEANED TO REMOVE PLANTS, SEEDS AND PROPAGULES THAT MAY BE HITCH HIKING, PRIOR TO ARRIVAL ON-SITE, IF TRACKED EQUIPMENT IS USED IN EARTHWORK ON A PORTION OF A PROJECT WHERE INVASIVE SPECIES ARE KNOWN TO EXIST, THIS PORTION OF THE EARTHWORK SHOULD BE CONDUCTED LAST, OR THE EQUIPMENT SHALL BE CLEANED PRIOR TO USE ON ANY PORTION OF THE SITE THAT IS KNOWN TO BE FREE OF INVASIVE PLANTS.
- ONCE ON-SITE, IF EQUIPMENT INVOLVED IN EARTHWORK IS CONTAMINATED WITH INVASIVE SPECIES. THE EQUIPMENT SHOULD BE CLEANED PRIOR TO MOVING INTO UNCONTAMINATED AREAS. CLEANING SHALL CONSIST OF USING PHYSICAL MEANS AND HAND TOOLS, SUCH AS BRUSHES, BROOMS, RAKES OR SHOVELS, ON ALL TRACK AND BUCKET/BLADE COMPONENTS TO ADEQUATELY REMOVE ALL VISIBLE DIRT AND PLANT DEBRIS. IF WATER IS USED, THE WATER/SLURRY SHALL BE CONTAINED SO AS TO RESTRICT INTRODUCTION OF INVASIVE PLANTS, SEEDS AND PROPAGULES INTO THE PROJECT OR OFF-SITE THROUGH FUTURE SURPLUS MATERIAL DISPOSAL
- 5. NO SEPERATE PAYMENT SHALL BE MADE FOR THIS WORK.

STREAM RESTRICTION NOTE

NO IN-STREAM WORK WILL BE ALLOWED BETWEEN SEPTEMBER 15 AND MAY 31.

STREAM PROTECTION NOTES

- THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO A STREAM ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT CEMENT, OIL, OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM A STREAM, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM REQUIRED TO PROTECT AND MAINTAIN WATER RIGHTS AND TO SUSTAIN FISH LIFE DOWNSTREAM.
- ONE OR MORE CONTAINMENT FACILITIES MEETING THE REQUIREMENTS OF NYSDEC'S NEW YORK STANDARDS FOR EROSIONS AND SEDIMENT CONTROL (AKA THE "BLUE BOOK") IS REQUIRED ON THIS PROJECT TO COLLECT WATER FROM ALL CONCRETE WORK CLEANING AND INVASIVE CLEANING
- THE COST FOR THE CONCRETE WASHOUT FACILITY SHALL BE INCLUDED IN THE PRICE BID FOR ALL THE CONCRETE ITEMS IN THE CONTRACT. IF A FACILITY IS NOT PROVIDED THE CONCRETE TRUCKS WILL BE REQUIRED TO RETURN TO THEIR PLANT WITH THEIR WASH WATER CONTAINED.
- 4. THE CONTRACTOR MUST COMPLY WITH ALL PERMITS, INCLUDING N.Y.S.D.E.C. WATER QUALITY CERTIFICATION.

UTILITY NOTES

- LOCATION OF UTILITIES, PUBLIC AND/OR PRIVATE, INDICATED AS EXISTING AND/OR TO BE CONSTRUCTED AS SHOWN ON THE PLANS, ARE APPROXIMATE ONLY. THEIR EXACT LOCATION SHALL BE DETERMINED IN THE FIELD. ADDITIONAL UTILITY LINES. WHETHER ABANDONED OR IN SERVICE, MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT HIS OPERATIONS AND TAKE THE NECESSARY PRECAUTIONS TO PREVENT INTERFERENCE WITH OR DAMAGE TO THESE OR OTHER FACILITIES DURING THE COURSE OF CONSTRUCTION.
- SPECIAL CARE SHALL BE TAKEN TO AVOID DAMAGING EXISTING UTILITIES. ANY DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE COUNTY
- IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY SERVICE. CAUSING AN INTERRUPTION IN SAID SERVICE. HE/SHE SHALL IMMEDIATELY COMMENCE WORK TO RESTORE SERVICE AND MAY NOT CEASE HIS/HER WORK OPERATION UNTIL SERVICE IS RESTORED.
- TELEPHONE LINES ARE IN PROXIMITY TO THIS BRIDGE. REFER TO SUBSECTION 107-05 OF THE STANDARD SPECIFICATIONS FOR CONTRACTOR SAFETY REQUIREMENTS
- 5. THE EXISTING UTILITY POLE ALONG THE NORTH R.O.W. LINE MAY NEED TO BE RELOCATED BY VERIZON.

SPECIAL NOTE GENERAL RIGHT OF WAY NOTE

- ALL WORK TO BE PERFORMED UNDER THIS CONTRACT WILL BE WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL WORK IS BEING PERFORMED WITHIN THE ROW, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS; STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING; VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND THE INSTALLATION OF TURF; AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER.
- IF CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES. THE CONTRACTOR MUST CONTACT THE ENGINEER IN CHARGE FOR DEFINITIVE BOUNDARY DETERMINATIONS. BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS (STANDARD SPECIFICATIONS SECTIONS 105-10 AND 625).
- IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS, RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY ENHANCEMENT, WILL BE PROVIDED BY THE PROJECT ENGINEER AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WA FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER (STANDARD SPECIFICATIONS
- THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE. ANY SUCH INJURIES OR DAMAGES SHALL BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE (STANDARD SPECIFICATIONS SECTION 107-08'

Leon-New Albion Road over Mud Creek

BIN 3322120 Town of Leon Cattaruagus County





signature and seal



proprietary notes:

sheet title

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATE HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS IT HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS IT CONSULTANTS, AND IS NOT TO BE USED IN WHOLE OR IN PART ANY OTHER PROJECT WITHOUT THE WRITTER AUTHORIZATION WITH A PROJECT WITHOUT THE WRITTER AUTHORIZATION OF ADDITIONAL OF THE ANY OTHER PROJECT WITHOUT THE WRITTER AUTHORIZATION OR ADDITION TO ANY SURVEY DRAWING, DESIGN, SPECIFICATION OF SECTION 2709, PROVISION

drawing history	
number date	description

GENERAL

19106 project numbe TEM drawn by: checked by **JUNE 2020** AS SHOWN scale:

HOLE NO. 6-1-19 PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034020.38 Town of Leon, Cattaraugus County, NY Easting: 846482.53 CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/27/19 COMPLETED 06/27/19 SN 0/ 6/ 12/ 18/ N LITH DESCRIPTION AND CLASSIFICATION WATER TABLE AND REMARKS Dark gray asphalt pavement. Asphalt pavement to 1.4 feet over mostly sand and gravel fill with trace to little silt, trace asphalt remnants and slag to 1.8 1 13 Dry dark gray mostly sand and gravel fill with trace to little silt, trace feet over water sorted and asphalt remnants and slag, compact, massive soil structure, (SM), (GM). deposited sand, gravel, and flat sided stone fragments with little 16 6 to some silt with an occasional 7 channer to 6.0 feet over water Moist to extremely moist brown very gravelly (SILTY-SAND) with 40 to 60% sorted and deposited coarse silt with some gravel and flat sided gravel and flat sided stone fragments, stone fragments, little to some sand, trace clay with an 4 9 occasional channer, little to some silt, compact, stratified, (SM), (GM). Water level at 6.3 feet below grades downward to ground surface at completion. Extremely moist grayish brown very gravelly (SANDY-SILT) with 25 to 50% gravel and flat sided stone fragments, occasional cobble or channer, little to No water in bore hole prior to ____14 occasional cobble or channer to some sand, trace clay, compact, 10.0 feet over apparent shale bedrock to 13.0 feet over shale bedrock with an occasional thin weakly stratified, (ML). 16 Apparent shale bedrock. siltstone bedrock interbed to end of coring. Run Depth Length Rec Rec RGD # (ft) (ft) (ft) % % 13.0 to 17.5 Bluish gray shale bedrock, soft with an occasional thin very soft interbed and an occasional thin gray siltstone 4.5 4.5 100 36 bedrock, moderately soft to soft, 17.5 to 5.5 5.4 98 42 23.0 interbed, core is thinly bedded to Run #1 thickly laminated, intensely to moderately fractured horizontally along bedding planes with occasional thin high angle to near vertical unin nigh angle to hear vertical fractures, core breaks appear fresh with some slight weathering at very soft shale interbeds, core lengths range from (0.05-0.9'). Run #2 N=NUMBER OF BLOWS TO DRIVE 2. SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW SHEET 1 OF 2 LOGGED BY Kyle A. Shearing, Geologist, (cns)
9E19 HOLE NO. B-1-19 SURF. ELEVATION 1502.48 PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034020.38 Easting: 846482.53 Town of Leon, Cattaraugus County, NY CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/27/19 COMPLETED 06/27/19 IN FT SAMPLER. SN 0/ 6/ 12/ 18/ N LITH WATER TABLE AND REMARKS DESCRIPTION AND CLASSIFICATION Run Depth Length Rec Rec RQD Bluish gray shale bedrock, soft with an occasional thin very soft interbed and an occasional thin gray siltstone bedrock, moderately soft to soft, # (ft) (ft) (ft) % % Run #2 5.5 5.4 98 42 interbed, core is thinly bedded to thickly laminated, intensely to moderately fractured horizontally along bedding planes with occasions EDI Bedrock Hardness Classification thin high angle to near vertical Very Soft: Can be scratched with fractures, core breaks appear fresh with some slight weathering at very soft shale interbeds, core lengths range from (0.05-0.9'). produced by light blow of point of geologic pick. Requires power tools for excavation. Coring completed at 23.0 feet. Soft: Hand-held specimen crumbles geologic pick. Moderately Soft: Shallow indentations (0.04 to 0.12 inch (1 to 3 mm)) can be made by firm blows with point of geologic pick. Can be peeled with pocket knife Note: Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with continuous split spoon sampling to 10.0 feet. Augered without split spoon sampling to auger refusal at 13.0 feet. Continued below with a NQ-2 size double tubed wireline core barrel with diamond bit to end of coring at 23.0 feet. Bore hole was backfilled with cuttings and ground surface repaired with an asphalt patch upon

N=NUMBER OF BLOWS TO DRIVE 2 SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW

LOGGED BY Kyle A. Shearing, Geologist, (cns)

SURF. ELEVATION 1502.48

SURF. ELEVATION 1503.63 HOLE NO. B-2-19__ PROJECT Leon Bridge No. 8 over Mud Creek - BIN; 3322120 LOCATION Northing: 1034020,27 Easting: 846550.12 Town of Leon, Cattaraugus County, NY

CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/27/19 COMPLETED 06/27/19

	SN REC	0/ 6	6/ 12	12/ 18	18/ 24	N	LITH	DESCRIPTION AND CLASSIFICATION	WAT	ER TABL	E AND	REMA	RKS	
								Dark gray asphalt pavement.	Aspl	nalt pave	ement to	0.5	feet	
	1	24		_			0000	0.5		sandy :)
	18		25_				0000			e silt and				
				27			100 8 V 1	Dry dark brown gravelly		nalt remr				
	2	27					1070	(SILTY-SAND) fill with 20 to 40% gravel, little to some silt, trace asphalt		over mo				
	10		26			١	0:00:	remnants and slag, dense, massive soil		ith little				
				15		41	0.40	structure, (SM).		asional c				
				15	17	1	0:00:			feet ove				
		_	-		1/	1	1070	1.8		osited co				
	3	19	-		_	1	0:00:	Moist brown mostly sand and gravel fill		to 9.2 1				ice
5-	18	_	15		_	25	1020	with occasional cobble or channer,		olite soi				
				10			0:00:	little to some silt, loose to dense,		ments, t				
					10		1020	massive soil structure, (SM), (GM).		over at				
	4	7					0.00.			rock to				le
	10		4			7	1020			rock to				
				3		1	0:00:			siltstone				
_					5		0.00	grades downward to 8.0		nd of co				
	-	<u> </u>	_	_	-5	1	0 00	Extremely moist to wet grayish brown						
	5	9		-		1	2000	gravelly (SANDY-SILT) with 30 to 50%						
	22	-	11_		-	31	0.00	evenuel little to some eard trace clay						
			_	20			404	compact, weakly stratified, (ML).	Wat	er level	at 9.5 f	eet b	elow	
10-					34		20		grou	and surfa	ace at o	compl	etion.	
10							200	grades downward to 9.2						
						1		Moist gray very gravelly		water in	bore ho	ole pr	ior to	
						1		(CLAYEY-SILT) saprolite soil with 40	cori	ng.				
						1		to 60% mostly shale stone fragments,						
		_	_	-	_	1	=====	some clay, trace sand, hard, massive		e: Driller			nge	
_		-	-	_	-	-	EEEE	soil structure, (CL).	(be	drock) a	t 10.5 f	eet.		
	A	-	-			4		grades downward to 10.5						
	1		_	_		1	=====	\		rolite -				
							=====	Apparent shale bedrock.	bed	rock we	atherec	in pl	ace	
							=====	13.0				0	D-	DOD
		Run	#1]	=====	Gray shale bedrock, soft with	Run	Depth				
15—	\top	1	T"			1		occasional thin very soft interbeds,	#	(ft)	(ft)	(ft)	76	%
	+	-	1		_	1	=====	core is thickly laminated, intensely		13.0				
	\vdash	+-	-	-	+-	1		fractured horizontally along bedding			2.7	2.2	89	0
	¥	_	-	-	-	1		_ planes with some high angle to near	1	to	3.7	3.3	08	U
	1		_			1		vertical fractures throughout core,		16.7				
	\perp					1		some weathering in very soft		16.7				
								interbeds, core lengths range from	2	16.7	6.3	6.3	100	35
	\Box	Run	#2			7		(0.01-0.4').	2	23.0	0.5	0.5	100	
	\vdash	1	1			1		16.7		20.0				
	\vdash	\vdash	$^{+}$	\vdash	\vdash	1		10.11						
	+	+-	+-		_	1		See next sheet						
20	\sqcup		_		_									

N=NUMBER OF BLOWS TO DRIVE 2 SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW но вызодият. tcns) SHEET 1 0 F 2

HOLE NO. 16-2-19 LOGGED BY Kyle A. Shearing, Geologist, (cns) SURF. ELEVATION 1503.63 9F19

PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034020.27 Town of Leon, Cattaraugus County, NY Easting: 846550.12

CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/27/19 COMPLETED 06/27/19

DEPTH BLOWS ON

]	NFT		SAM	PLER				ē.	
	SN	0/ 6	6/ 12	12/ 18	18/ 24	N	LITH	DESCRIPTION AND CLASSIFICATION	WATER TABLE AND REMARKS
25—	V	Run	#2					Bluish gray shale bedrock, soft with an occasional thin gray slitstone bedrock interbed, soft, core is thickly laminated to thinly bedded, intensely to moderately fractured horizontally along bedding planes with occasional thin near vertical fractures, core breaks appear fresh, core lengths range from (0.05–0.8°). 23.0 Coring completed at 23.0 feet.	Run Depth Length Rec Rec ROD # (ft) (ft) (ft) % % 16.7 2 to 6.3 6.3 100 35 23.0 EDI Bedrock Hardness Classification Very Soft: Can be scratched with fingernail. Slight Indentation produced by light blow of point
									of geologic pick. Requires power tools for excavation. Soft: Hand-held specimen crumbles under firm blows with point of geologic pick. Note: Advanced bore hole with 4 1/4" ID x 8" Ob hollow stem auger casing with continuous split
30—									spoon sampling to 10.0 feet. Augered without split spoon sampling to auger refusel at 13.0 feet. Continued below with a NG-2 size double tubed wireline core barrel with diamond bit to end of coring at 23.0 feet. Bore hole was backfilled with cuttings and ground surface repaired with an asphalt patch upon completion.
35_									
40									

NOTE:

A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT AND IS AVAILABLE AT THE CATTARAUGUS COUNTY DPW.

Leon-New Albion Road over **Mud Creek**

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





signature and seal



proprietary notes

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drawing history						
number date	description					

BORING LOGS

19106
TEM
JCK
JUNE 2020
AS SHOWN

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N=NUMBER OF BLOWS TO DRIVE 2_ * SPOON 12 * WITH 140 Ib. WT. FALLING 30. * PER BLOW LOGGED BY Kyle A. Shearing, Geologist, (cns) SHEET 2 OF 2

PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034008.28 Town of Leon, Cattaraugus County, NY Easting: 846540.04 McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/26/19 COMPLETED 06/26/19 SN 0/ 6/ 12/ 18/ N LITH WATER TABLE AND REMARKS DESCRIPTION AND CLASSIFICATION Dark gray asphalt pavement. Asphalt payement to 0.5 feet over mostly sand and gravel fill with trace silt, slag, and asphalt remnants to 1.8 feet over mostly 1 30 fostly sand and gravel fill with trace silt, slag, and asphalt remnants, very dense, massive soil structure, coarse silt and gravel fill with litte to some sand, trace clay, organic matter, asphalt remnant 6 23 (SM), (GM), and wood fiber with an | | | 7 occasional cobble or channer Moist to extremely moist brown very gravelly (SANDY-SILT) fill with 40 to ¥ Water level at 4.5 feet below ground surface at completion. 60% gravel, occasional cobble or channer, little to some sand, trace clay, organic matter, asphalt remnants, and wood fiber, compact to dense, 5 8 coring. massive soil structure, (SM), (GM). to 5.0 feet over water sorted and deposited sand, gravel, and grades downward to 5.0 13 14 Moist to extremely maist gravish brown flat sided stone fragments with very gravelly (SILTY-SAND) with 40 to 60% gravel and flat sided stone fragments, occasional channer, little to little to some silt, trace clay and organic matter with an occasional cobble or channer to 22 13 22 some silt, trace clay and organic 8.0 feet over water sorted and matter, compact, weakly stratified, (SM), (GM). deposited coarse silt with some gravel and flat sided stone fragments, little to some sand with an occasional channer to grades downward to Extremely moist to wet brown very gravelly (SANDY-SILT) with 30 to 50% 9.7 feet over apparent siltstone bedrock to 13.0 feet over apparent shale bedrock with gravel and flat sided stone fragments, occasional channer, little to some sand, compact to dense, weakly some slight weathering to 19.5 feet over shale bedrock with an stratified, (ML) tending toward occasional thin siltstone bedrock (SM), (GM). to end of coring. clear transition to Run Depth Length Rec Rec RGD Mostly gray siltstone stone fragments, moderately soft to soft. # (ft) (ft) (ft) % % 8.2 8.2 100 72 soft to very soft, slightly weathered. N=NUMBER OF BLOWS TO DRIVE 2 SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW HOLE NO. B-3-19 LOGGED BY Kyle A. Shearing, Geologist, (cns) SURF. ELEVATION 1503,31 PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322/20 LOCATION Northing: 1034008.28 Easting: 846540.04 Town of Leon, Cattaraugus County, NY CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/26/19 COMPLETED 06/26/19 DEPTH SN 0/ 6/ 12/ 18/ N LITH WATER TABLE AND REMARKS DESCRIPTION AND CLASSIFICATION Run Depth Length Rec Rec RQD Gray shale bedrock, soft with an occasional thin interbed of light gray siltstone bedrock, moderately soft to 19.5 soft, core is thickly laminated to thinly 8.2 8.2 100 72 bedded, moderately fractured to 27.7 horizontally along bedding planes with occaisonal thin high angle to near vertical fractures, core breaks appear 2.3 2.3 100 74 fresh, core lengths range from (0.1-0.85'). EDI Bedrock Hardness Classificatio Very Soft: Can be scratched with fingernali. Slight indentation produced by light blow of point of geologic pick. Requires power Soft: Hand-held specimen crumbles Run #2 under firm blows with point of 30.0 geologic pick. Coring completed at 30.0 feet. Moderately Soft: Shallow indentations (0.04 to 0.12 inch (1 to 3 mm)) can be made by firm blows with point of geologic pick.
Can be peeled with pocket knife with difficulty. Note: Advanced bore hole with 4 1/4" ID x 8" OD hollow stem auger casing with continuous split spoon sampling to 10.0 feet and 5.0-foot interval sampling to auger refusal at 19.5 feet. Continued below with a NG-2 size double tubed wireline core barrel with diamond bit to end of coring at 30.0 feet. Bore hole was backfilled with cuttings and ground surface repaired with an asphalt patch upon completion.

N=NUMBER OF BLOWS TO DRIVE 2 SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW

SHEET 2 OF 2

LOGGED BY Kyle A. Shearing, Geologist, (cns)

HOLE NO. B-3-19

SURF. ELEVATION 1503.31

HOLE NO. 8-4-19 SURF, ELEVATION 1501,96 PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034008.31

Easting: 846469.82 Town of Leon, Cattaraugus County, NY

CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/26/19 COMPLETED 06/26/19

	SN REC	0/ 6	6/ 12	12/ 18	18/ 24	N	LITH	DESCRIPTION AND CLASSIFICATION		WATE	R TABL	E AND	REMA	RKS	
							2:02:0	Dark gray asphalt pavement.		Asph	alt pave	ment t	0.4	feet	
	1	20					0000	0.4			mostly :				II
- {	12		16				0000				trace to				
ĺ				27			000	Dark grayish brown gravelly			sional c				
1	2	14				1	10000	(SILTY-SAND) fill with 40 to 60%			eet ove				
\neg	10	-14	9			1	0000	gravel, occasional cobble or channer,			sited co				
ŀ	10		9			16	10000	trace to little silt, dense, massive soil		flat :	sided st	one fra	gmen	ts, litt	le.
ł			_	7		1	0000	structure, (SM), (GM).			me sand				
-					_6_	-	5000	grades downward to 4.5			isional c				et
	3	-11					0000	3.000			siltston				
;_	16		9			16	000	Moist, extremely moist below 8.0 feet,			over sh				
Έ.				7		1 10	200	grayish brown gravelly (SANDY-SILT)			isional t				ck
- 1					10	1	000	with 40 to 60% mostly angular gravel		inter	bed to a	end of	coring	д.	
ı					10	1	200	and flat sided stone fragments with an							
	4	-11	_	-	-	1	000	occasional channer, little to some							
- 1	16		_14_			31	2000	sand, trace clay, compact, weakly							
				17			200	stratified, (SM), (GM).	2						
					15		2000								
	5	12				١.	000								
	14	16	13			1	2000		Ž.	Wate	r level a	at 8.8 f	eet b	elow	
	177		-13	E = 10	_	1	000			grou	nd surfa	ce at	compli	etion.	
		-		50/3		1	2000	10.0							
)_						-	Since			No W	ater in	bore ho	ole pri	ior to	
	T_				_	1	1000000	Gray siltstone bedrock, moderately		corin	ng.				
		Run	#1				W25 V25 V25 V	soft to soft, thinly bedded, intensely							
						1		to moderately fractured horizontally		Run	Depth	Length	Rec	Rec	RQD
	V					1	=====	along bedding planes with an		#	(ft)	(ft)	(ft)	%	%
	+	_	_	_	-	1		occasional thin near vertical fracture,							
_	+		_	-	_	1	=====	core breaks appear fresh, core	ľ		10.0				
	V	Run	#2	_		4	=====	lengths range from (0.05-0.2').		1	to	1.8	1.5	83	0
	W					1		11.0	1		11.8				
							=====	Division of the second section is a second section of the section of t							
						1	=====	Bluish gray to gray shale bedrock, soft with an occasional thin very soft			11.8				
						1	=====	interbed and an occasional thin gray		2	to	1.4	1.2	86	0
5—	\vdash		""	-	_	1	=====	siltstone bedrock, core is thickly			13.2				
	+	Run	#3		-	1		laminated to thinly bedded, intensely							
	-		_	-	-	-		fractured horizontally along bedding			13.2				
	\perp					1		planes with multiple high angle to near		3	to	3.6	3.6	100	0 0
	-V							vertical fractures, core lengths range			16.8				
	1							from (0.01–0.3').							
_						1		170111 (0.01-0.3).			16.8				
	\vdash			1	_	1				4	to	3.2	2.0	63	0
	\vdash	Run	#4	-	-	-	=====				20.0				
	$\vdash \vdash$	-		-	-	4									
	\sqcup						=====								
		1		1		1		Coring completed at 20.0 feet. 20.0							

N=NUNBER OF BLOWS TO DRIVE 2_ SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW
 LOGGED BY
 Kyle A. Shearing, Geologist. (cns).
 SHEET 1 0F 2

 9E19
 HOLE NO. 6-4-19.
 SURF. EL
 SURF. ELEVATION 1501.96

PROJECT Leon Bridge No. 8 over Mud Creek - BIN: 3322120 LOCATION Northing: 1034008.31 Town of Leon, Cattaraugus County, NY Easting: 846469.82

CLIENT McMahon & Mann Consulting Engineering & Geology PC DATE STARTED 06/26/19 COMPLETED 06/26/19

DEPTH BLOWS ON

SN	0/ 6	6/ 12	12/ 18	18/ 24	N	LITH	DESCRIPTION AND CLASSIFICATION	WATER TABLE AND REMARKS
	_							EDI Bedrock Hardness Classificatio
								Very Soft: Can be scratched with fingernail. Slight indentation produced by light blow of point of geologic pick. Requires power tools for excavation.
5								Soft: Hand-held specimen crumbles under firm blows with point of geologic pick.
								Moderately Soft: Shallow indentations (0.04 to 0.12 inch (1 to 3 mm)) can be made by firm blows with point of geologic pick. Can be peeled with pocket knife with difficulty.
0								Note: Advanced bore hole with 4 1/4" ID x 8" 0D hollow stem auger casing with continuous split spoon sampling to auger refusal at 10.0 feet. Continued below
								with a NQ-2 size double tubed wireline core barrel with diamond bit to end of coring at 20.0 feet. Bore hole was backfilled with cuttings and ground surface
								repaired with an asphalt patch upon completion.
5								
10	-							

NOTE:

A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT AND IS AVAILABLE AT THE CATTARAUGUS COUNTY DPW.

Leon-New Albion Road over **Mud Creek**

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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proprietary notes

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number date	description							

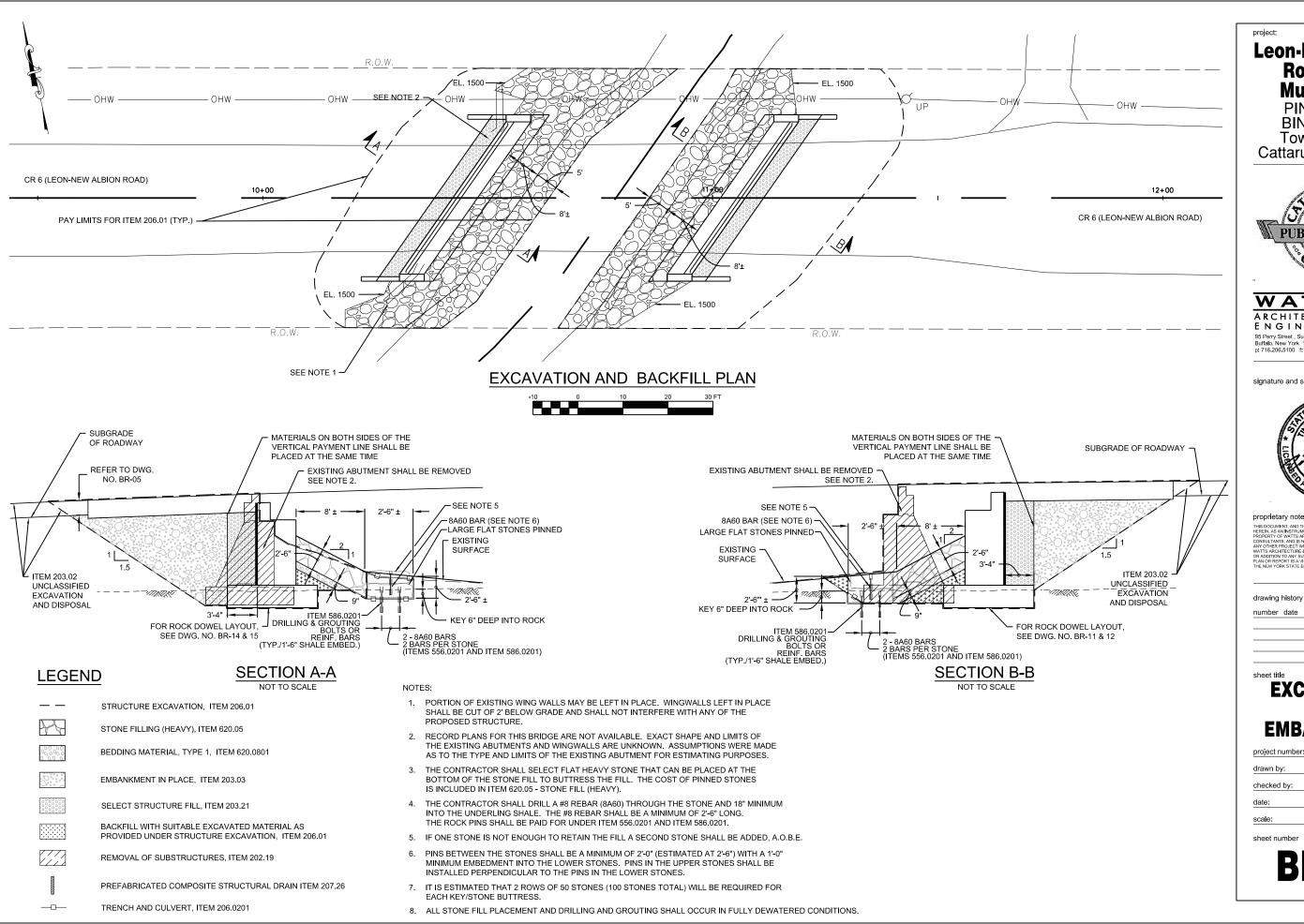
BORING LOGS

project number:	1910
drawn by:	TEN
checked by:	JCI
date:	JUNE 202
scale:	AS SHOWN

BR-08

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N=NUNBER OF BLOWS TO DRIVE 2 SPOON 12 WITH 140 Ib. WT. FALLING 30 PER BLOW LOGGED BY Kyle A. Shearing, Geologist, (cns) SHEET 2 OF 2



PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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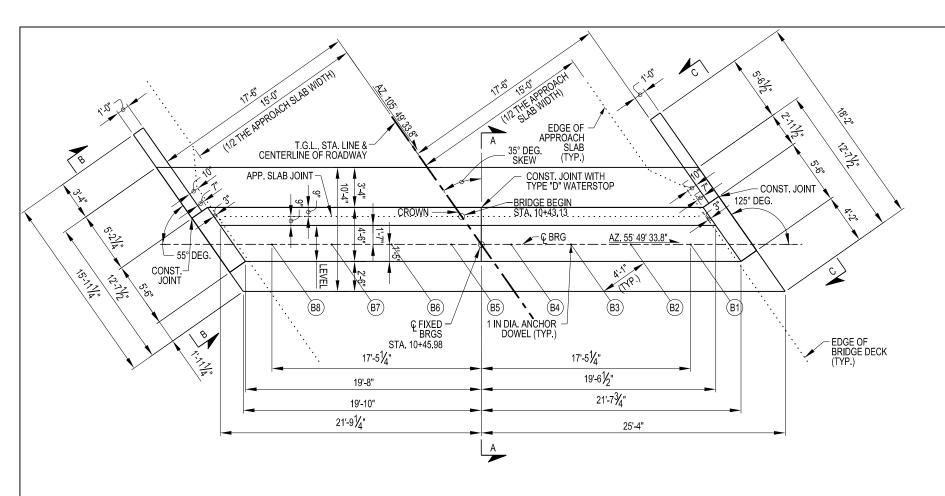
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EXCAVATION EMBANKMENT

project number JCK JUNE 2020 AS SHOWN

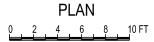




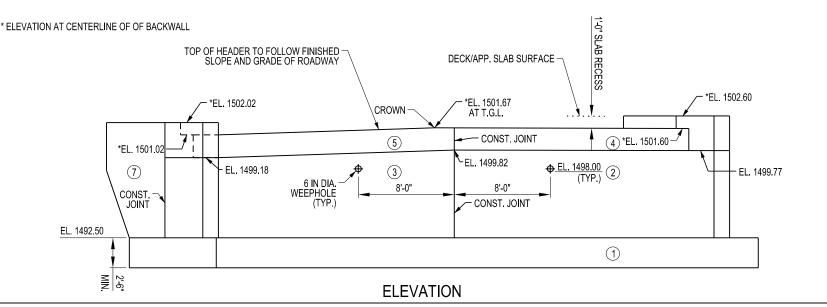
<u>NOTES</u>

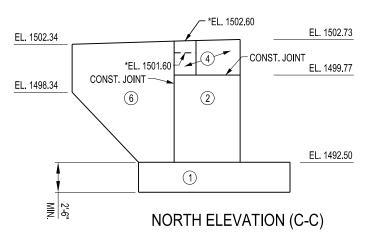
- 1. TOP OF BACKWALL TO CONFORM TO FINISHED SLOPE AND GRADE OF ROADWAY.
- 2. INSTALL TYPE 'D' WATERSTOP AT CONSTRUCTION JOINTS.
- 3. SEE DWG. NO. BR-12 FOR REINFORCEMENT SECTION A-A AND ELEVATION B-B & C-C.
- 4. FOR KEYWAY DETAILS, SEE DWG, NO. BR-12.
- FOR CHAMFER DETAILS, SEE DWG. NO. BR-12.
- 6. FOR TYPE D WATERSTOP DETAILS, SEE DWG. NO. BR-15.
- 7. THE BEDROCK BEARING GRADE SHALL BE OBSERVED AND EVALUATED BY THE ENGINEER PRIOR TO THE PLACEMENT OF THE FOUNDATION. ANY LOOSE, DISTURBED OR OTHERWISE DELETERIOUS SOIL OR BEDROCK MATERIAL BENEATH THE PROPOSED FOUNDATION BEARING GRADES SHALL BE REMOVED.
- 8. ITEM 559.16960118 PROTECTIVE SEALING OF STRUCTURAL CONCRETE SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE SUBSTRUCTURE, A.O.B.E.
- 9. CONCRETE (EXCEPT FOR POUR 1) SHALL CONTAIN CORROSION INHIBITOR ITEM 555.95000007 (4 GALLONS PER CUBIC YARD).

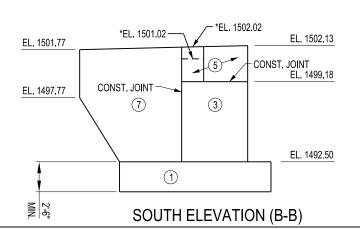
CONCRETE TABLE (CY)								
POUR	QUANTITY	ITEM NO.						
\odot	43.3	555.08						
(3)	26.8	555.09						
(3)	27.1	555.09						
4	3.0	555.09						
(5)	3.3	555.09						
6	2.6	555.09						
(7)	2.7	555,09						











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Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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drawing history

number date description

sheet title

WEST ABUTMENT PLAN AND ELEVATION

 project number:
 19106

 drawn by:
 TEM

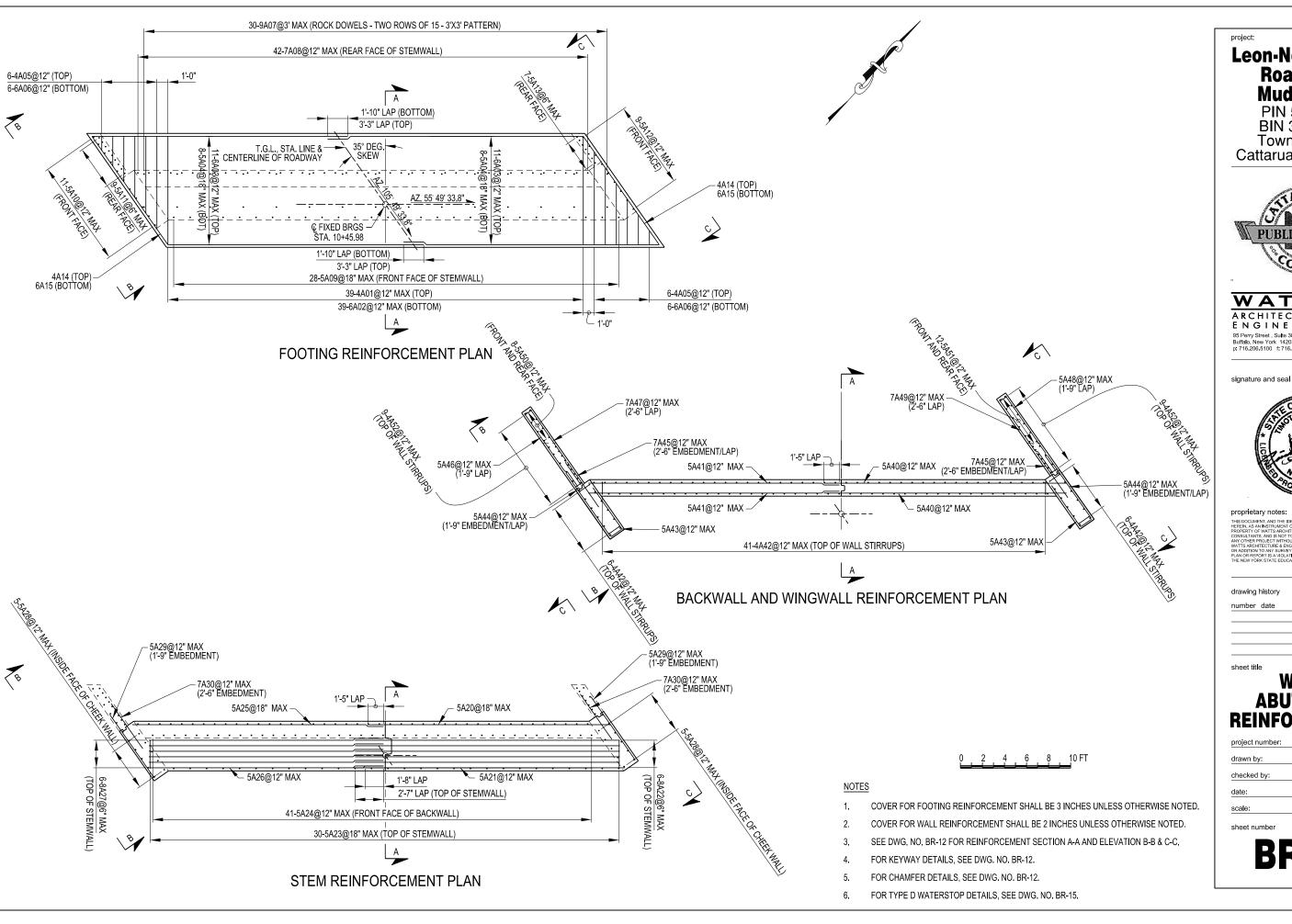
 checked by:
 JCK

 date:
 JUNE 2020

 scale:
 AS SHOWN

sheet number

BR-10



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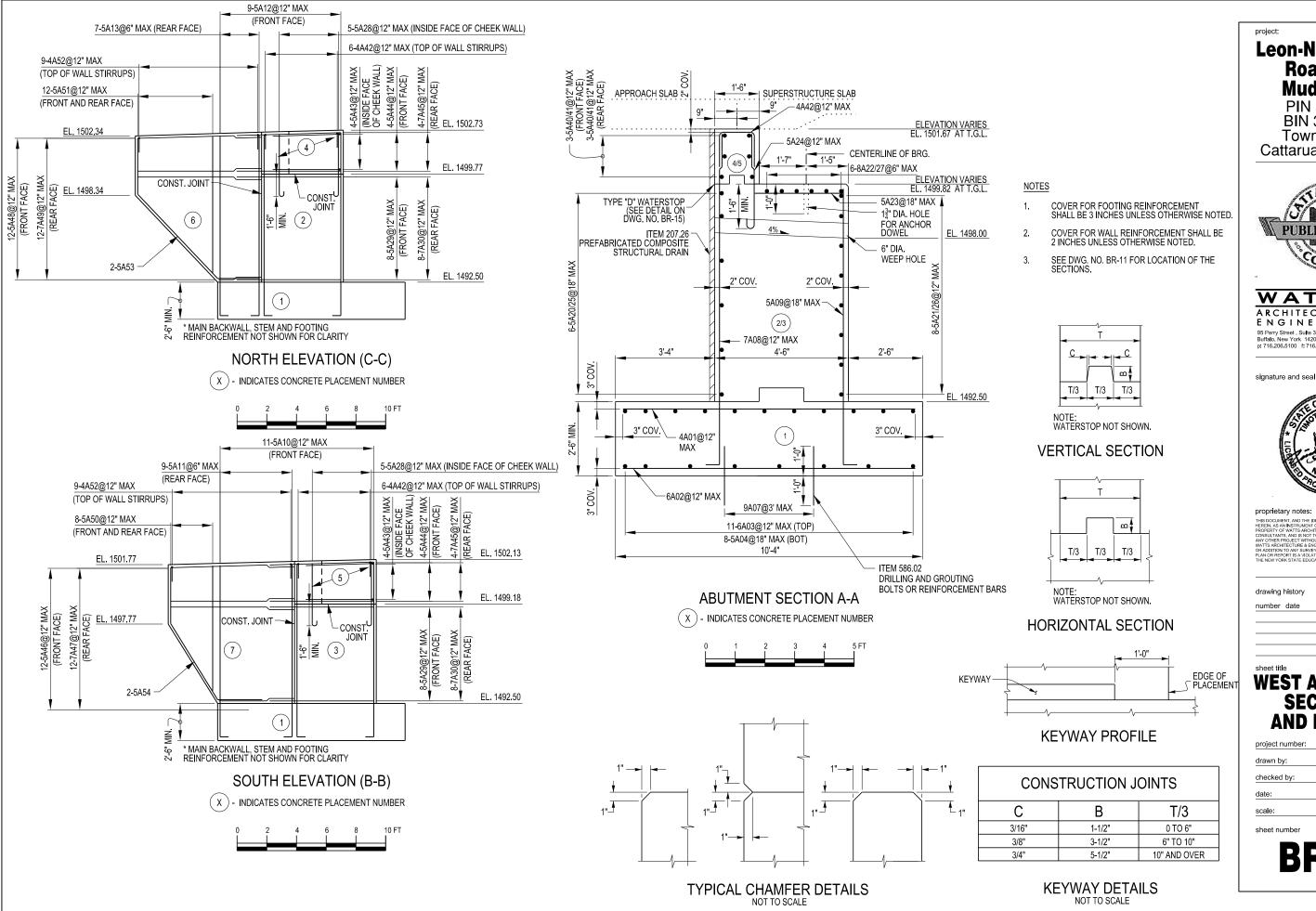


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WEST ABUTMENT REINFORCEMENT

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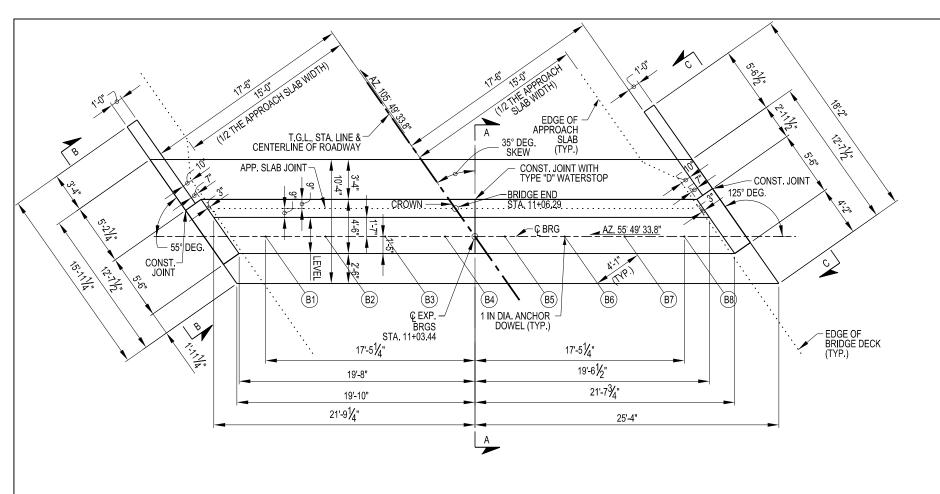
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number date

WEST ABUTMENT SECTIONS AND DETAILS

project number:	191
drawn by:	TE
checked by:	J(
date:	JUNE 20
scale:	AS SHOV

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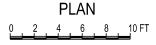




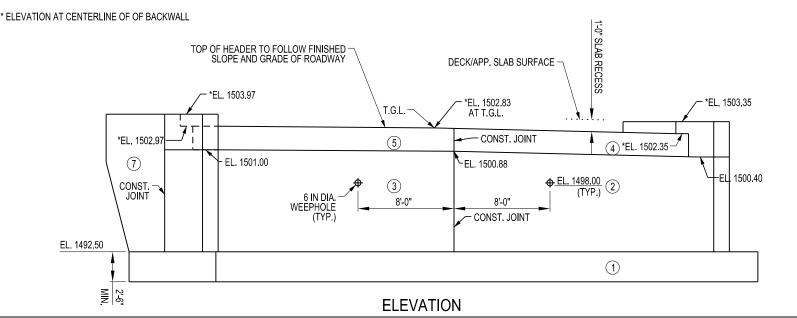
NOTES

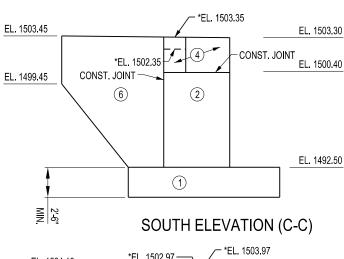
- 1. TOP OF BACKWALL TO CONFORM TO FINISHED SLOPE AND GRADE OF ROADWAY.
- 2. INSTALL TYPE 'D' WATERSTOP AT CONSTRUCTION JOINTS.
- 3. SEE DWG. NO. BR-15 FOR REINFORCEMENT SECTION A-A AND ELEVATION B-B & C-C.
- 4. FOR KEYWAY DETAILS, SEE DWG, NO. BR-12.
- FOR CHAMFER DETAILS, SEE DWG. NO. BR-12.
- 6. FOR TYPE D WATERSTOP DETAILS, SEE DWG. NO. BR-15.
- 7. THE BEDROCK BEARING GRADE SHALL BE OBSERVED AND EVALUATED BY THE ENGINEER PRIOR TO THE PLACEMENT OF THE FOUNDATION. ANY LOOSE, DISTURBED OR OTHERWISE DELETERIOUS SOIL OR BEDROCK MATERIAL BENEATH THE PROPOSED FOUNDATION BEARING GRADES SHALL BE REMOVED.
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- 9. CONCRETE (EXCEPT FOR POUR 1) SHALL CONTAIN CORROSION INHIBITOR ITEM 555.95000007 (4 GALLONS PER CUBIC YARD).

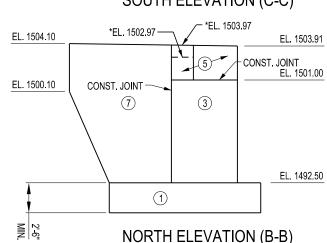












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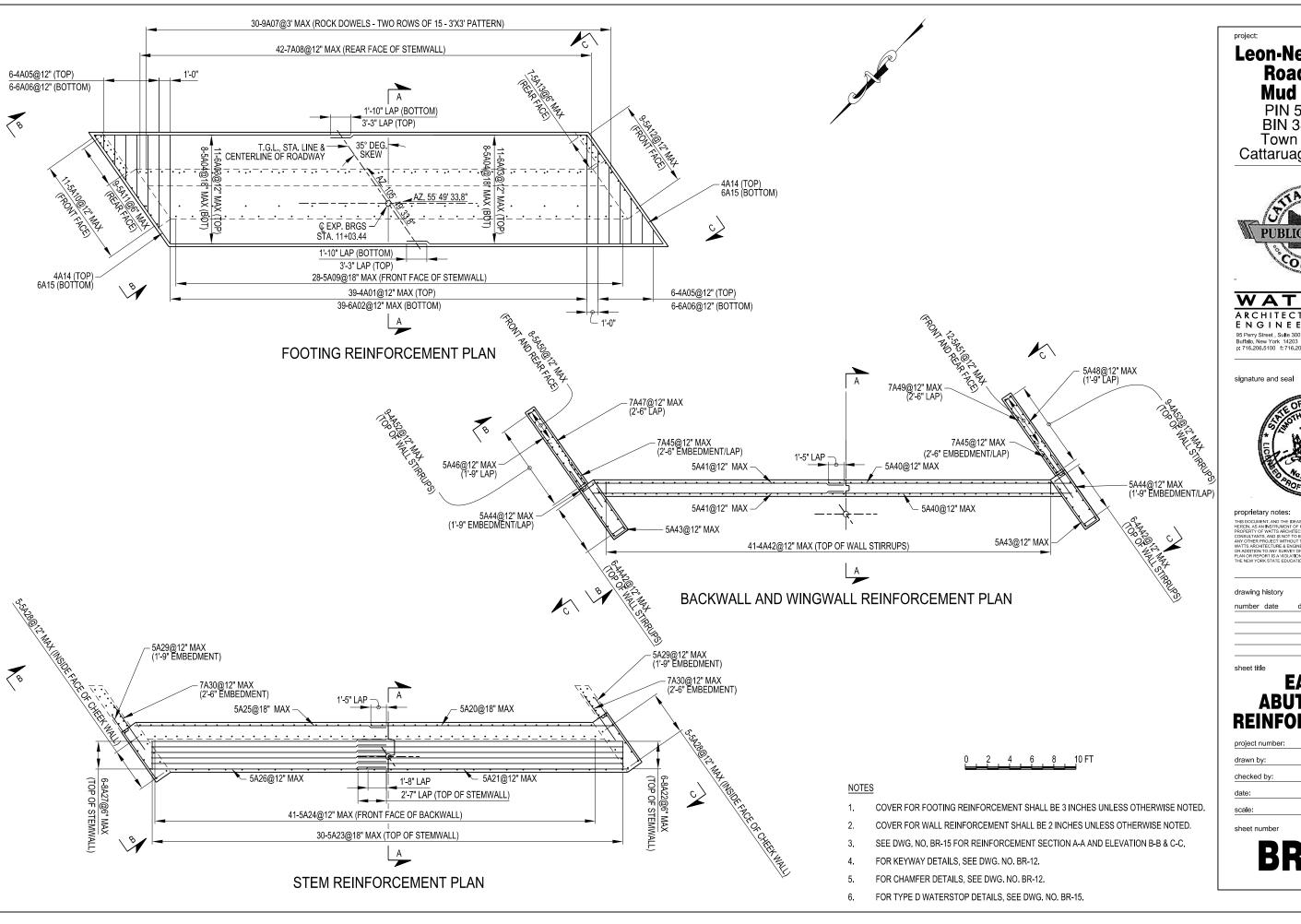
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EAST ABUTMENT PLAN AND ELEVATION

project number: 19106
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checked by: JCK
date: JUNE 2020
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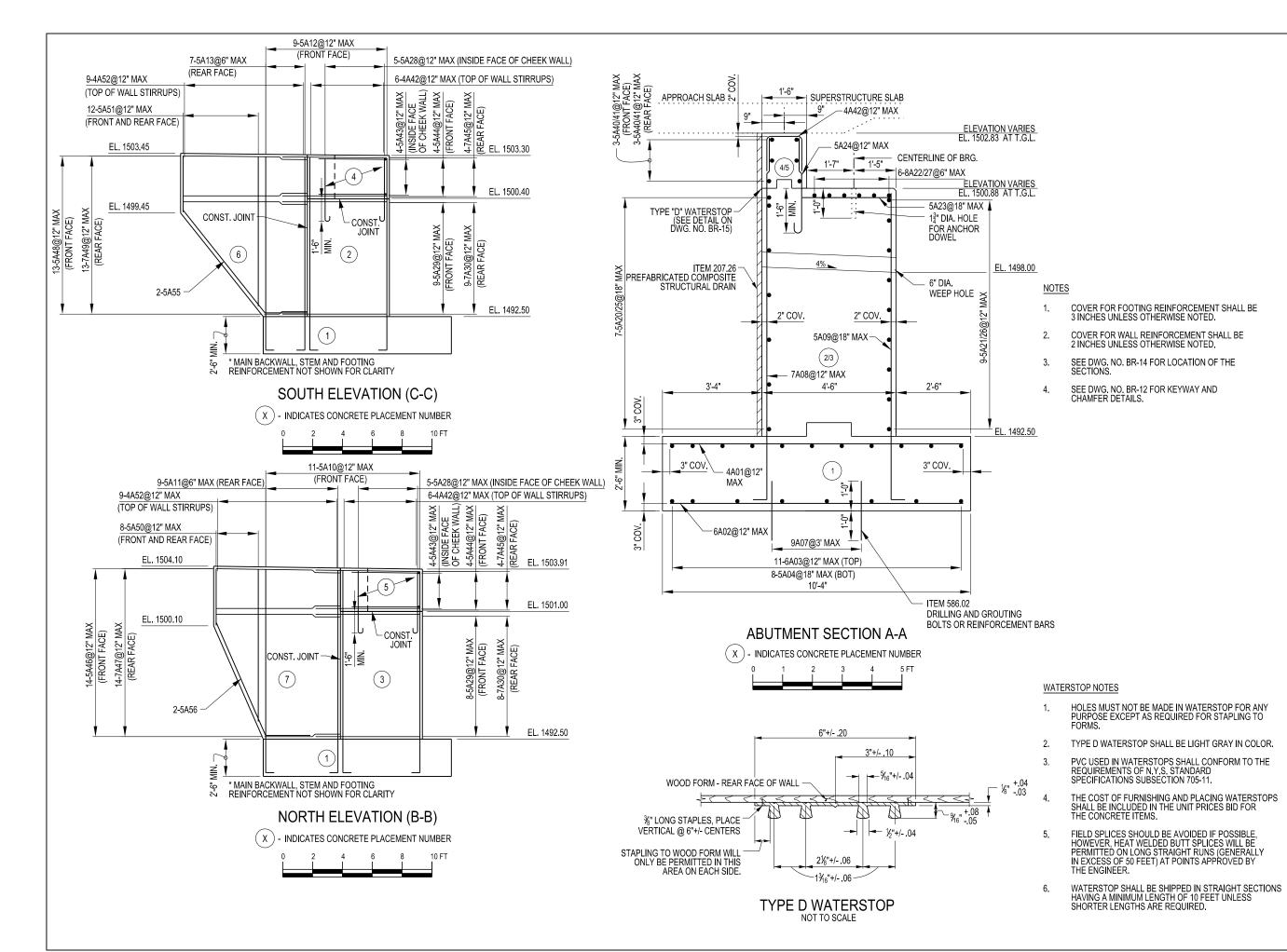


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EAST ABUTMENT REINFORCEMENT

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number date	description

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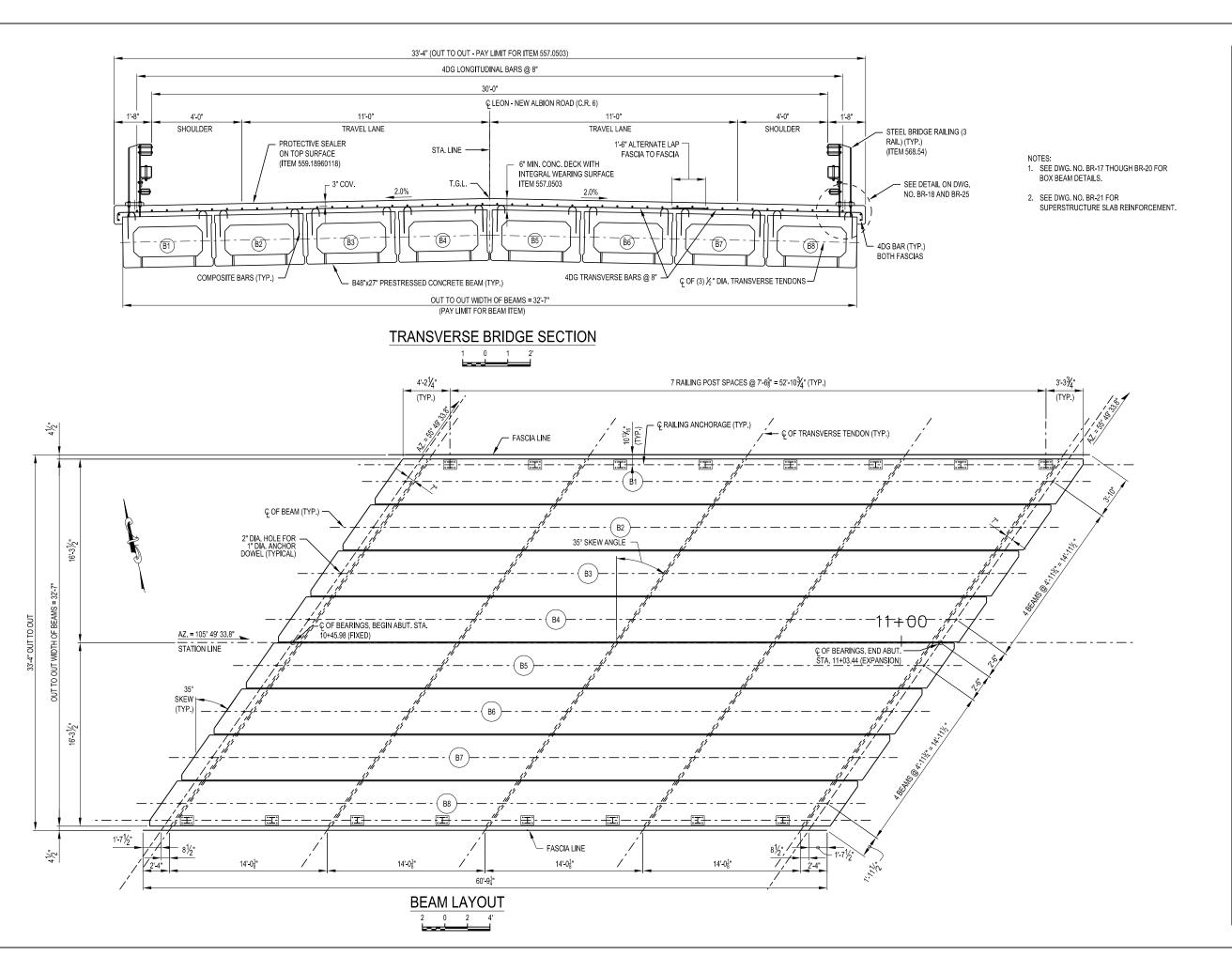
EAST ABUTMENT SECTIONS AND DETAILS

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sheet title

SUPERSTRUCTURE PLAN & TYPICAL SECTION

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 19106

 drawn by:
 TEM

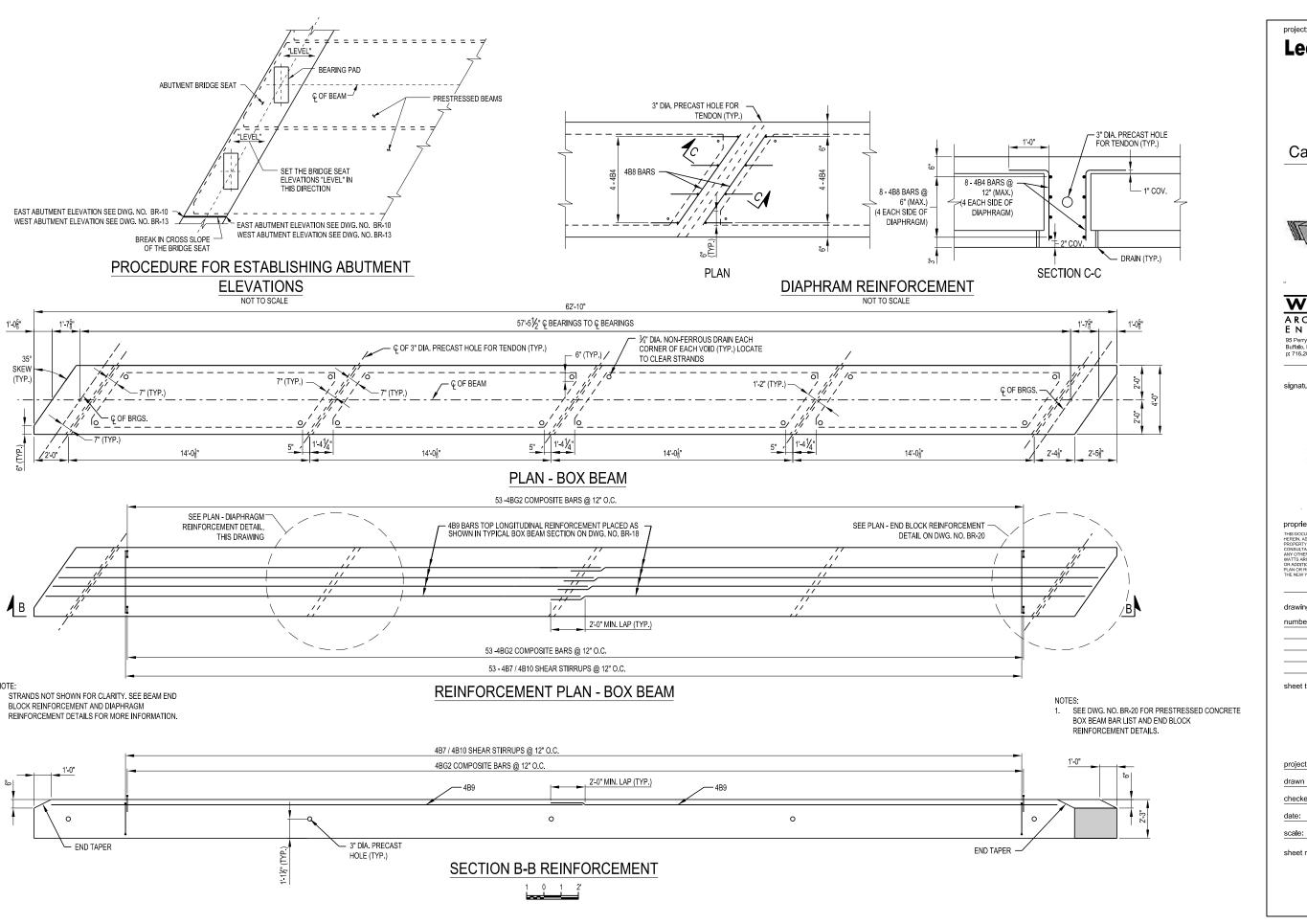
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 JUNE 2020

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BR-16



PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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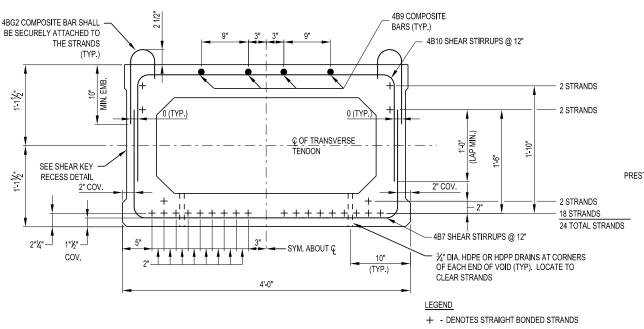
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number date description

BOX BEAM DETAILS

19106 TEM JCK JUNE 2020 AS SHOWN



3" (TYP.)

(TYP.)

TYPICAL BOX BEAM REINFORCING SECTION

4'-0"

TYPICAL BOX BEAM SECTION (B48"x27")

REINFORCED CONCRETE SLAB, REINFORCEMENT NOT SHOWN. - FASCIA LINE CHAMFER PRESTRESSED BEAM SLOPE BOTTOM OF SLAB TO DRAIN TOWARDS FASCIA

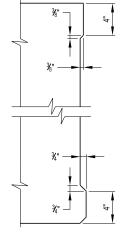
DRIP GROOVE DETAIL

4DG LONGITUDINAL BARS @ 8" 2" COV. - 3" COV. ΑΙ " CHAMFER (TYP.) 4" (MIN.) 4DG TRANSVERSE BARS @ 8 2" COV. 2-4DG BARS SPACE AS SHOWN SLOPE BOTTOM OF SLAB TO DRAIN TOWARDS FASCIA

STEEL RAILING NOT SHOWN FOR CLARITY

SEE DECK SLAB DRAWING FOR REINFORCEMENT CALL-OUTS, ETC.

STEEL RAILING FASCIA DETAIL



NOTE:

SEE SHEAR KEY RECESS DETAIL

C OF TRANSVERSE

¾" DIA. HDPE OR HDPP DRAINS AT CORNERS OF EACH END OF VOID (TYP). LOCATE TO

BEAM BEAM B1 & B8 B2 - B7

1.42"

0.53"

0.74"

1.42"

0.56"

0.74"

TENDON

OMIT SHEAR KEY FROM OUTSIDE OF FASCIA BEAMS

SHEAR KEY RECESS DETAIL

%" ————————————————————————————————————
¾" —
34"

NOT TO SCALE

DESI	GN LOAD TAI	BLE	CAMBER TABLE
UNIT	REACTION AT MAX. MOM. MIDSPAN ABUTMENT (kips) (kip-ft.)		
BEAM	20.6	296.2	CAMBER DUE TO PRESTRESSED FORCE AND
DIAPHRAM	1.9	26.9	BEAM D.L. (WITHOUT GROWTH) @ TRANSFER (IN.)
SLAB	9.5	136.2	DEFLECTION DUE TO SLAB DEAD LOAD (IN.)
RAILINGS	1.6	17.3	DEFLECTION DUE TO SLAB DEAD LOAD (IN.)
FUTURE W.S.	JRE W.S. 2.5 33.1		DEFLECTION DUE TO CUDEDIMPOCED D.L. (IN.)
HL-93	91.2	524.8	DEFLECTION DUE TO SUPERIMPOSED D.L. (IN.)

2'-0"

51/2"

TOP OF SLAB ELEVATIONS										
UNIT	£ BRGS.	1/4 PT.	MIDSPAN	3/4 PT.	£ BRGS.					
1	1502.70	1503.06	1503.39	1503.67	1503.90					
2	1502.71	1503.06	1503.38	1503.64	1503.86					
3	1502.73	1503.06	1503.37	1503.62	1503.83					
4	1502.74	1503.07	1503.37	1503.61	1503.80					
5	1502.66	1503.01	1503.30	1503.55	1503.74					
6	1502.51	1502.86	1503.17	1503.42	1503.62					
7	1502.35	1502.71	1503.03	1503.29	1503.50					
8	1502.19	1502.56	1502.89	1503.16	1503.39					

TOP OF BRIDGE DECK TOP OF PRESTRESSED BEAM DRIP GROOVE RUNS PERPENDICULAR FROM THE FASCIA BEAM TO THE FASCIA. 3'-0" TO FRONT FACE DRIP GROOVE STOPS 3'-0" FROM FACES OF

FASCIA THAT INTERSECTS THE CHAMFER. **ELEVATION A-A** (SHOWING DRIP GROOVE DETAIL)

ABUTMENTS WITH A 90 DEG. TURN TOWARD

NOTES:

OF BRIDGE SEAT

- THE PRESTRESSING STRANDS SHALL BE 0.6" DIA. LOW RELAXATION STEEL STRAND WITH A GUARANTEED ULTIMATE STRENGTH OF 270 ksj. JACKING FORCE = 43.9 kips PER STRAND
 REQUIRED MINIMUM CONCRETE STRENGTH AT TRANSFER = 7 ksi. REQUIRED MINIMUM CONCRETE STRENGTH AT 56 DAYS = 10 ksi.
 THE ALLOWABLE TENSION IN THE PRESTRESSED CONCRETE UNITS: AT TRANSFER = 0.20 ksi. AT SERVICE LIMIT STATE = 0.44 ksi.
- 2. ALL EXPOSED CORNERS, EXCEPT THE TOP, SHALL BE CHAMFERED $\frac{3}{4}$ in.
- 3. ALL TEMPORARY INSERTS SHALL BE APPROVED BY THE ENGINEER AND DETAILED ON THE
- 4. PRESTRESSING STRANDS CUT FLUSH WITH THE END OF THE BEAM OR EXTENDED FOR INTEGERAL ABUTMENT APPLICATIONS SHALL BE PROTECTED AGAINST CORROSION BY THE APPLICATION OF ZINC PAINT IN ACCORDANCE WITH THE "REPAIR" PORTION OF THE NYS STANDARD SPECIFICATION SECTION 719.01. THE COST OF COATING THE STRANDS SHALL BE INCLUDED IN THE PRICE BID FOR THE BEAM ITEM.
- 5. BAR REINFORCEMENT SHALL BE ASTM A615, GRADE 60.
- 6. THE TOPS OF PRESTRESSED UNITS SHALL RECEIVE A TRANSVERSE ROUGHENED FINISH WITH AN AMPLITUDE OF 1/4 in.
- 7. SEE DWG. NO. BR-20 FOR PRESTRESSED CONCRETE BOX BEAM BAR LIST.
- 8. SEE DWG. NO. BR-21 FOR SUPERSTRUCTURE SLAB REINFORCEMENT.

Leon-New Albion Road over **Mud Creek**

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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proprietary notes:

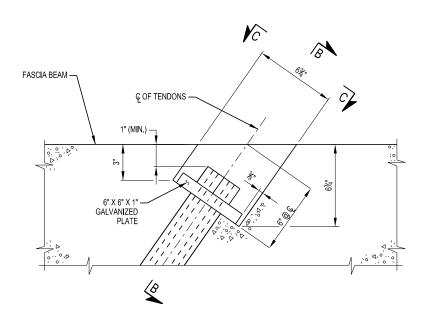
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number date	description	

BOX BEAM DETAILS

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JUNE 20
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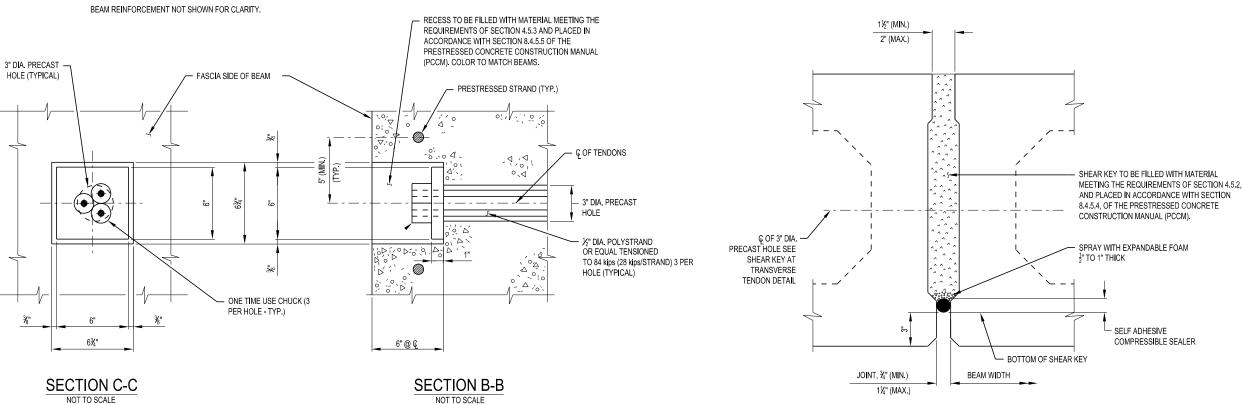


€ OF 3" DIA. -PRECAST HOLE 3" DIA. PRECAST HOLE GROUT MATERIAL SELF ADHESIVE COMPRESSIBLE SEALER TO BE PLACED PRIOR TO ERECTION OF THE BEAMS SELF ADHESIVE COMPRESSIBLE SEALER **SECTION A-A** NOT TO SCALE GROUT MATERIAL

TRANSVERSE TENDON RECESS DETAIL PLAN

6" X 6" X 1" PLATES SHALL BE PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE TENDON IN ALL PLANES AND SHALL HAVE THREE HOLES TO ACCOMMODATE STRANDS.

NO SEALER APPLIED TO THE NOTCH-OUT FOR TRANSVERSE **TENDONS**



SHEAR KEY AT TRANSVERSE TENDON DETAIL PLAN

BOX BEAM SHEAR KEY DETAIL

NOT TO SCALE

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County







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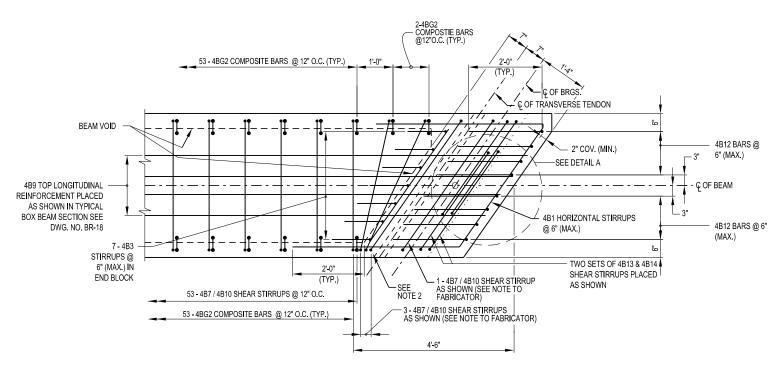
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BOX BEAM DETAILS

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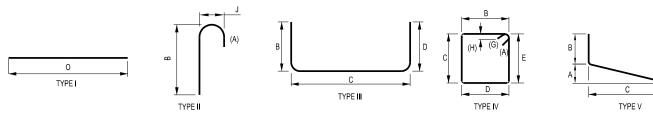
PLAN - END BLOCK REINFORCEMENT

NOTES TO THE FABRICATOR:

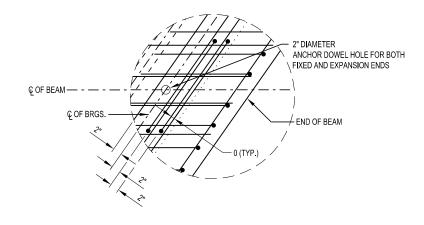
0.5 0 0.5

- BAR SPACING MAY BE SLIGHTLY
 ADJUSTED TO AVOID INTERFERENCE
 WITH THE TRANSVERSE TENDON TUBE.
- 2. MAINTAIN A MINIMUM OF 3^{1}_{2} " IN THIS

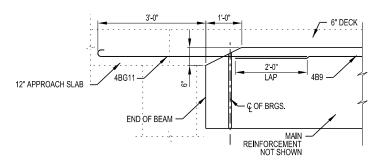
	PRESTRESSED CONCRETE BOX BEAM REINFORCEMENT																
MARK	#/BEAM	LENGTH (FT)	TYPE	WEIGHT (LB)	А	В	С	D	Е	F	G	Н	J	К	0	R	REMARKS
4B1	8	13-7	٧	73	2-5	4-8	3-6										END BLOCK HORIZONTAL STIRRUP
4BG2	110	1-7	I	117	0-6	1-1							0-4				GALVANIZED COMPOSITE BARS
4B3	14	2-9	111	26		1-0	1-9	0-0									END BLOCK
4B4	24	2-9	III	44		1-0	1-9	0-0									DIAPHRAGM
4B5																	NOT USED
4B6																	NOT USED
4B7	61	7-6	111	306		1-11	3-8	1-11									BOTTOM STIRRUPS
4B8	12	3-10		31											3-10		DIAPHRAGM
4B9	8	30-2		162											30-2		TOP
4B10	61	6-2	111	252		1-3	3-8	1-3									TOP STIRRUPS
4BG11	8	6-4	I	34	0-6	5-10							0-4				GALVANIZED END BLOCK/APPROACH SLAB
4B12	16	3-5	111	37		2-0	1-5	0-0									END BLOCK
4B13	4	8-6	IV	23	0-5	2-4	1-6	2-4	1-6		0-5	0-4					END BLOCK
4B14	4	8-6	IV	23	0-5	2-4	1-6	2-4	1-6		0-5	0-4					END BLOCK
OTAL BARS	PER BEAM			1128	LBS PER	BEAM											
OTAL BARS				9024	LBS												



ALL DIMENSIONS ARE OUT-TO-OUT DIMENSIONS COST OF BAR REINFORCEMENT TO BE INCLUDED IN PRESTRESSED BEAM ITEM

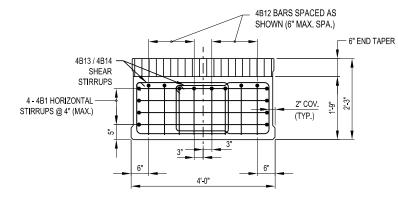


DETAIL 'A' NOT TO SCALE



ELEVATION - END BLOCK REINFORCEMENT

0.5 0 0.5 1'



SECTION - END BLOCK REINFORCEMENT

0.5 0 0.5 1'

project:

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





p: 716.206.5100 f: 716.206.519

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number date	description

sheet title

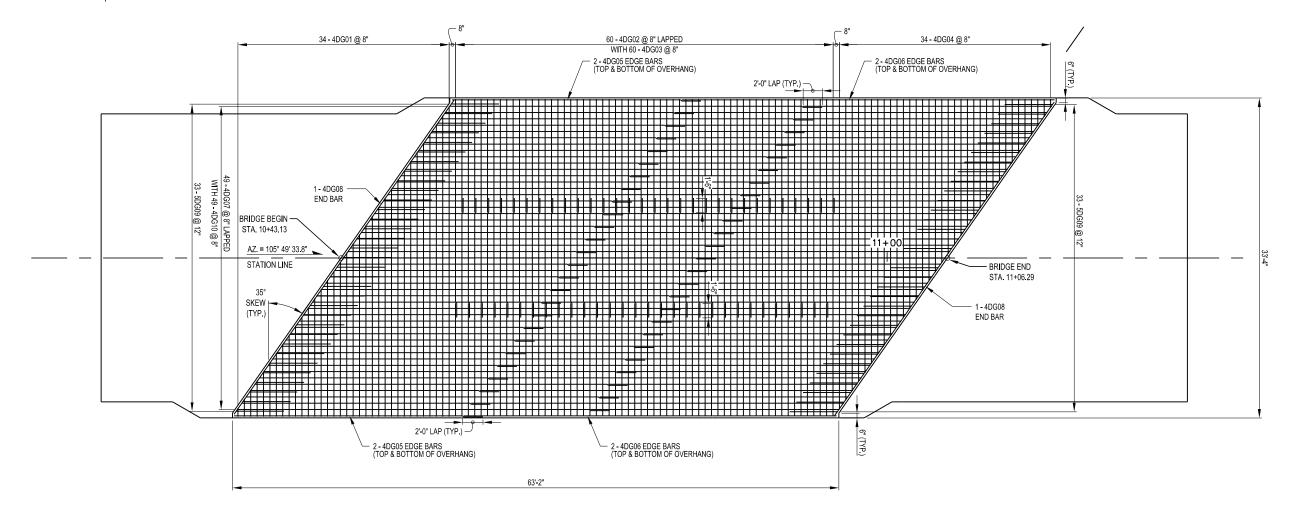
BOX BEAM DETAILS

project number:	1910
drawn by:	TEN
checked by:	JCł
date:	JUNE 2020
scale:	AS SHOWN

sheet number

BR-20





DECK PLAN

NOTES:

- 1. SEE DWG. NO. BR-16 FOR BRIDGE RAIL SUPPORT POST LOCATIONS.
- 2. SEE DWG. NO. BR-22 FOR APPROACH SLAB PLAN AND DETAILS.
- 3. SEE DWG. NO. BR-06 FOR ADDITIONAL DECK PLACEMENT NOTES.

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





signature and seal



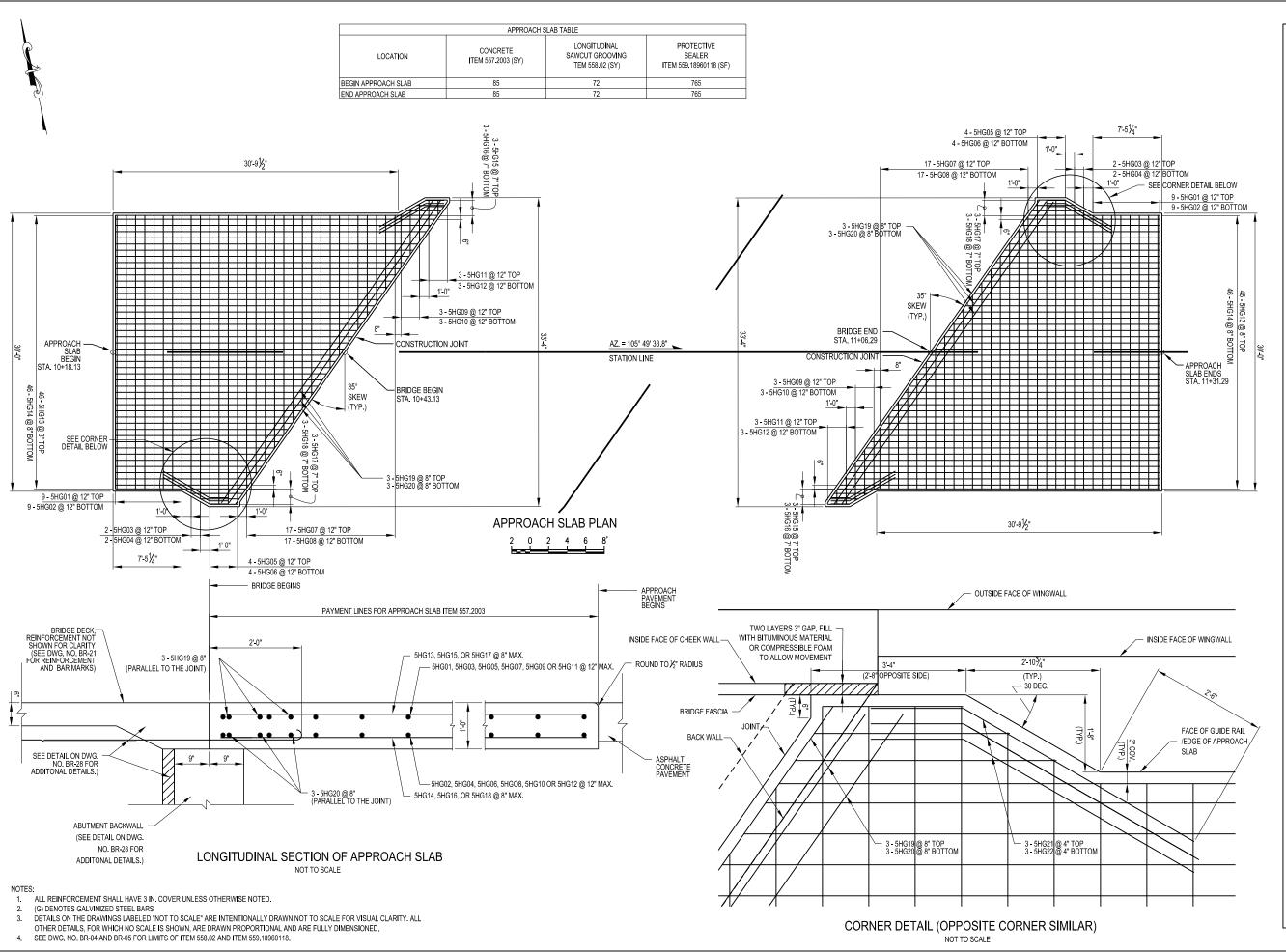
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number	date

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DECK PLAN

19106
TEM
JCK
JUNE 2020
AS SHOWN

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Leon-New Albion Road over Mud Creek

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APPROACH SLAB PLAN & DETAILS

 project number:
 19106

 drawn by:
 TEM

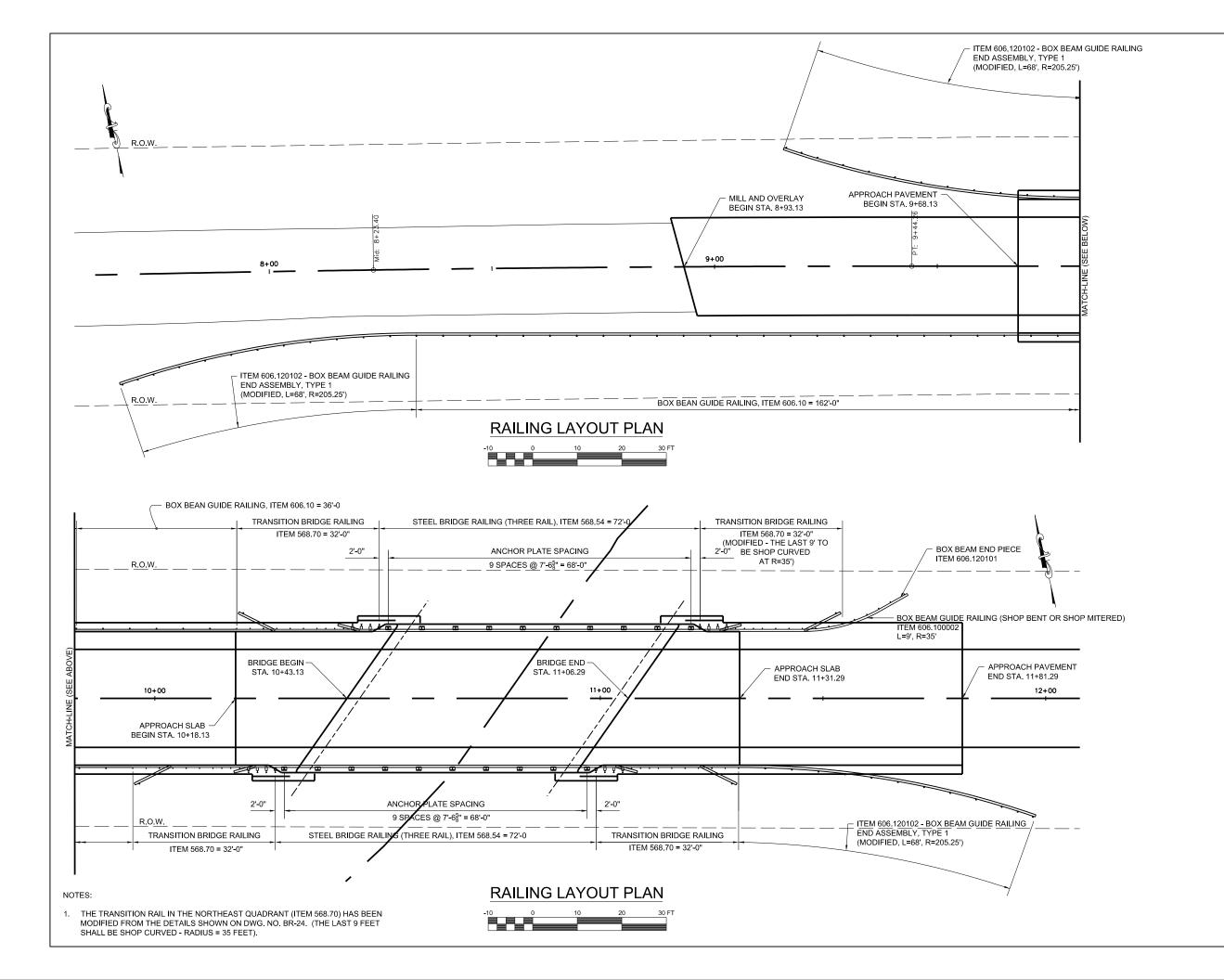
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 JCK

 date:
 JUNE 2020

 scale:
 AS SHOWN

sheet number

BR-22



proj

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County



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Purfish, New York 41/202

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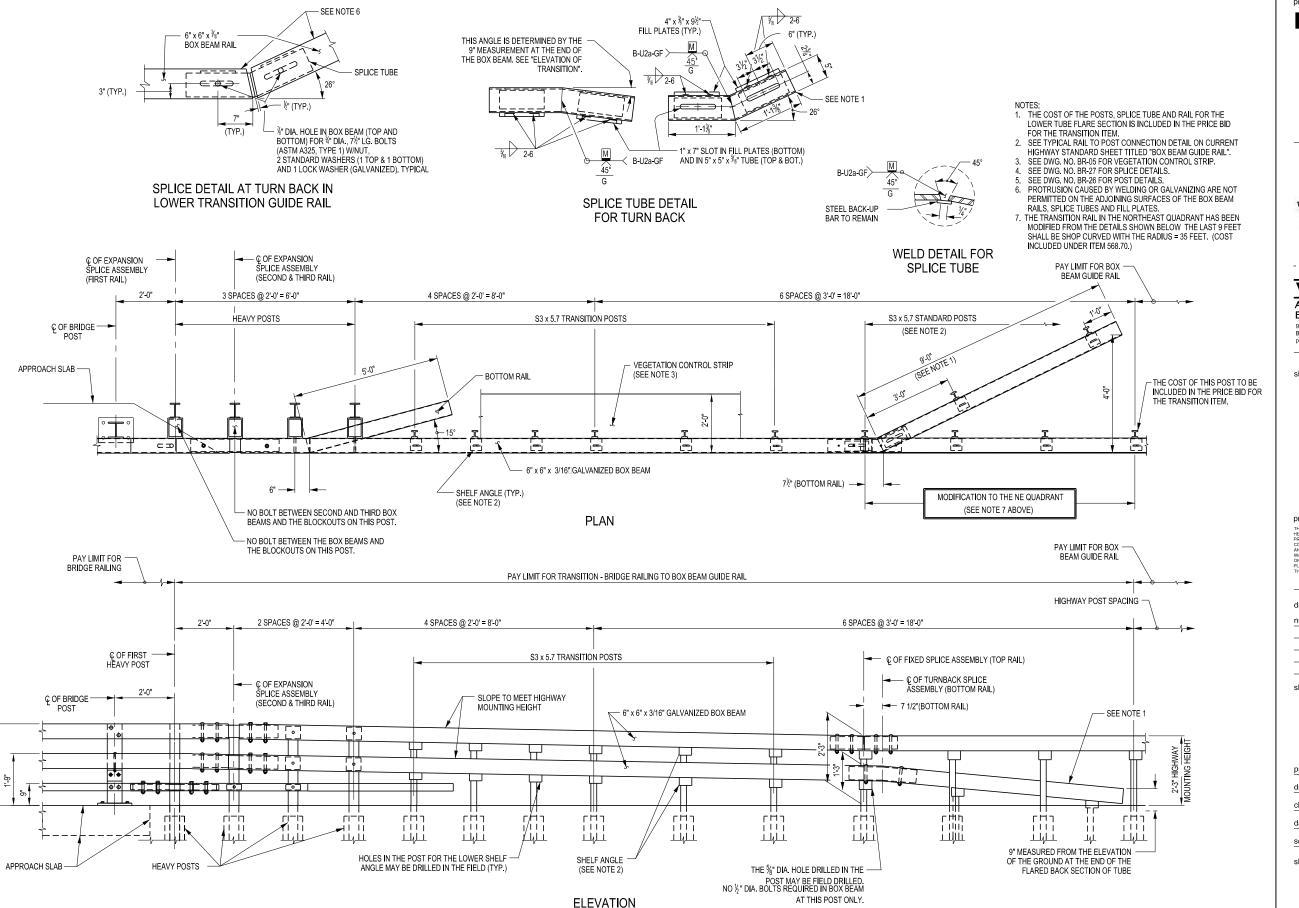
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RAILING LAYOUT PLAN

19106
TEM
JCK
JUNE 2020
AS SHOWN

sheet number

BR-23



project

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





Buffalo, New York 14203 p. 716.206.5100 f. 716.206.519

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number date	description

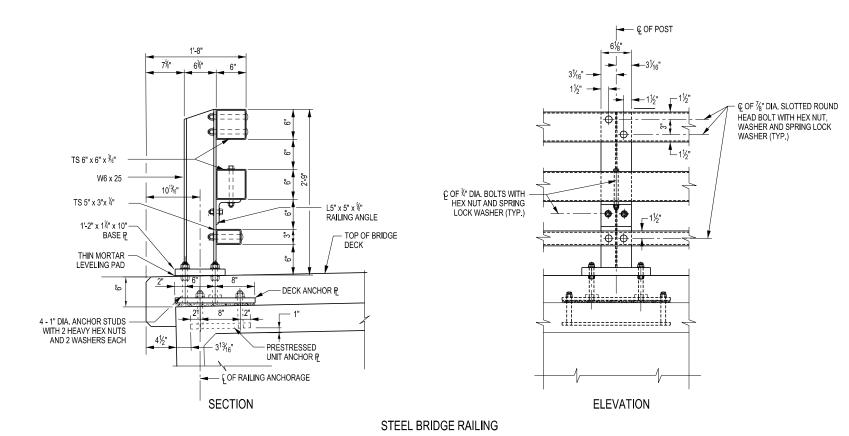
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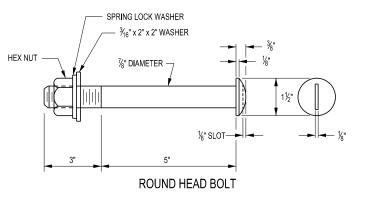
RAILING DETAILS

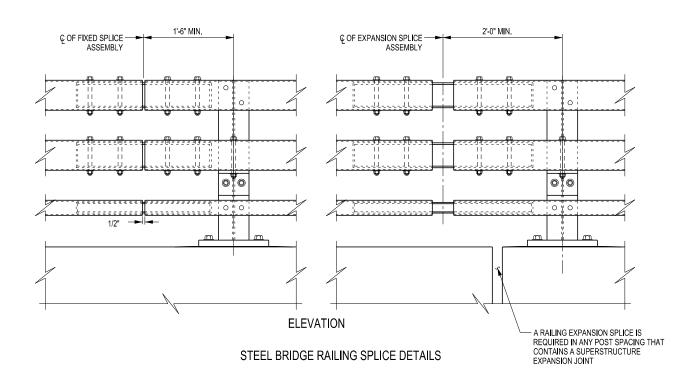
project number:	1910
drawn by:	TE
checked by:	JC
date:	JUNE 202
scale:	AS SHOW

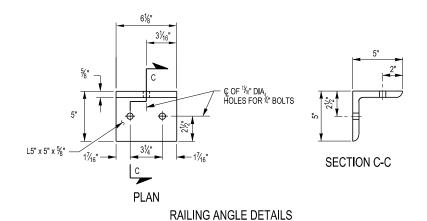
sheet numb

BR-24









NOTES:

- 1. ALL RAILING IS TO BE FABRICATED AND ERECTED ACCORDING TO
- 2. PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/6".

 2. PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/6".
- BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB.).

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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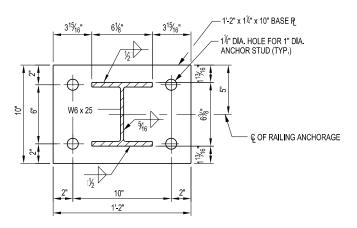
proprietary notes:

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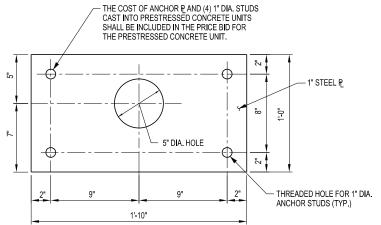
RAILING DETAILS

project number:	19106
drawn by:	TEM
checked by:	JCK
date:	JUNE 2020
scale:	AS SHOWN

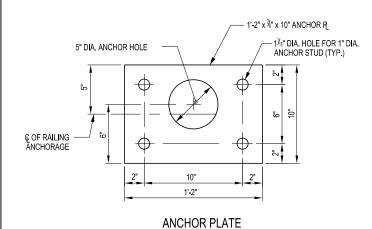
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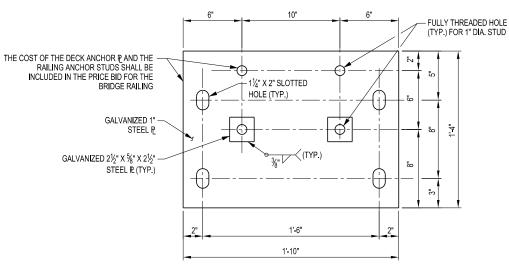


BASE PLATE

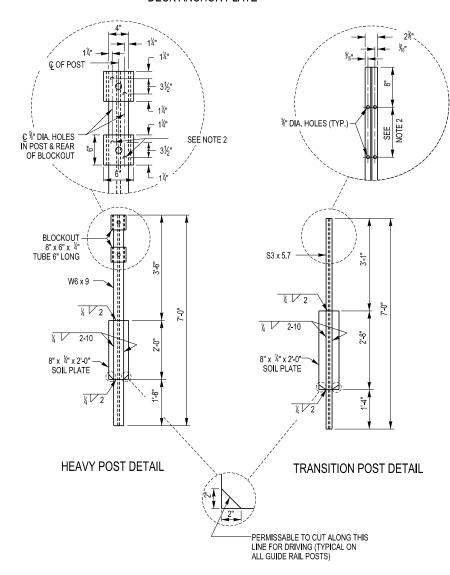


PRESTRESSED UNIT ANCHOR PLATE





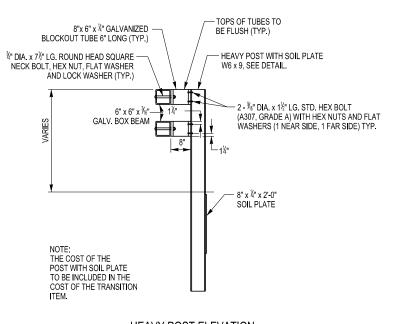
DECK ANCHOR PLATE



NOTES:

- 1. PROTRUSIONS CAUSED BY WELDING OR GALVANIZING ARE NOT PERMITTED ON THE ADJOINING SURFACES OF THE BOX BEAM RAILS,
- SPLICE TUBES AND FILL PLATES.
 HOLES IN THE POST FOR THE LOWER RAIL MAYBE LOCATED AND DRILLED IN THE FIELD. IF SO, THE GALVANIZING SHALL BE REPAIRED IN ACCORDANCE WITH SUBSECTION 716-01.

 3. SEE DWG. NO. BR-24 FOR RAILING TRANSITIONS.



HEAVY POST ELEVATION

Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County





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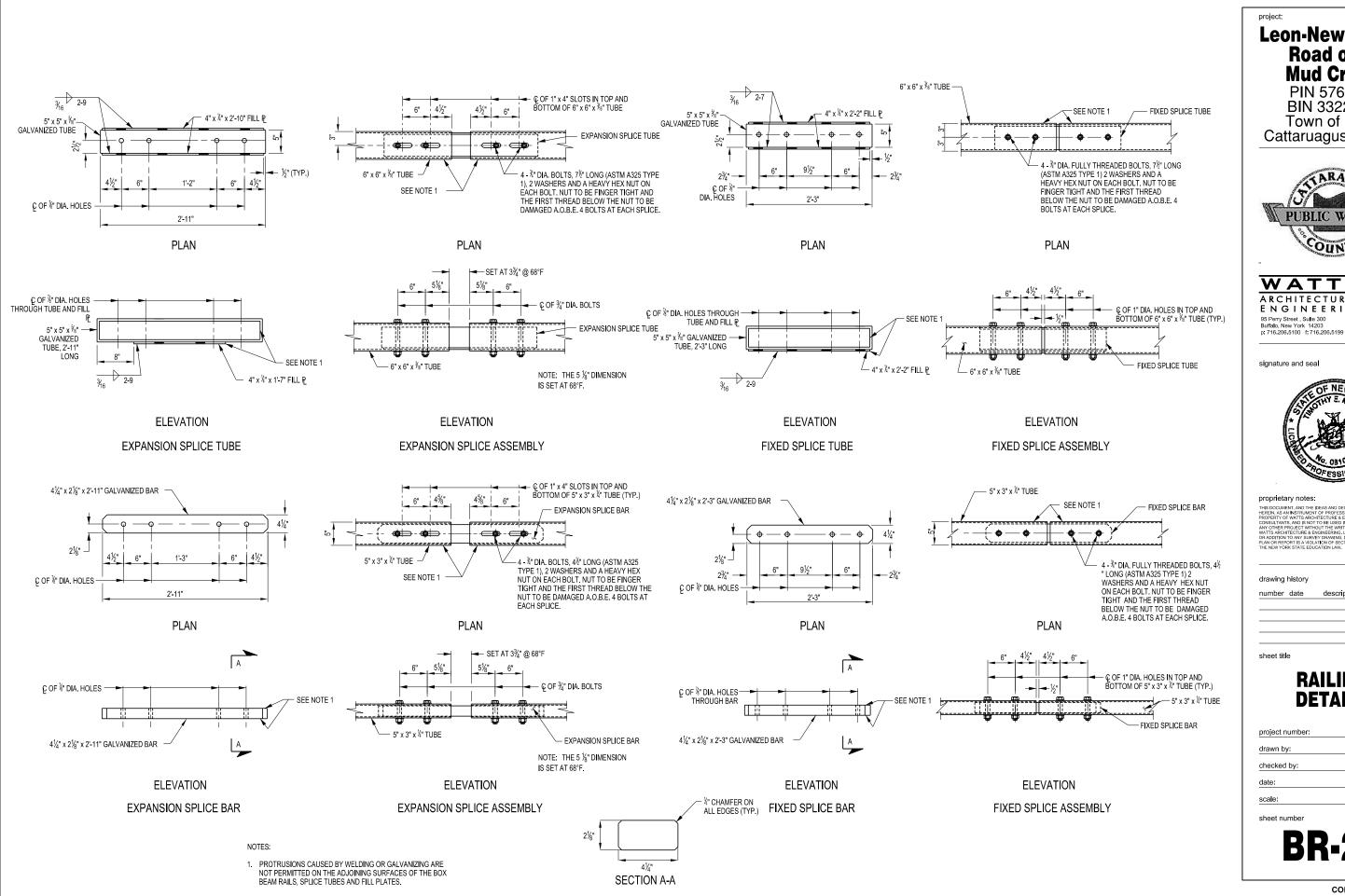
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RAILING DETIALS

project number:	1910
drawn by:	TE
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date:	JUNE 202
scale:	AS SHOW



PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County







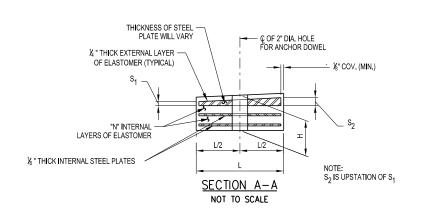
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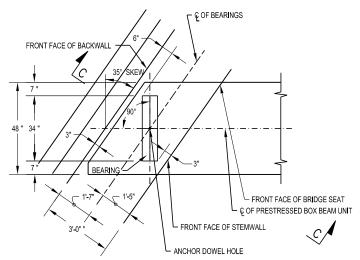
RAILING DETAILS

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TE
JC
JUNE 202
AS SHOW



└── C OF 2" DIA. HOLE

THICKNESS OF TOP



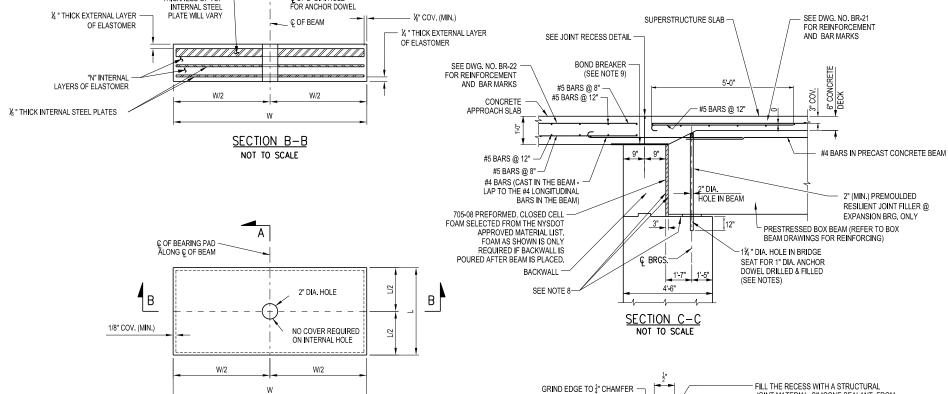
PARTIAL PLAN - BEARING/BACK WALL/BRIDGE SEAT NOT TO SCALE

5 RECESS

등" SEALANT

JOINT RECESS DETAIL

NOT TO SCALE



STEEL LAMINATED ELASTOMERIC BEARING (TYPE E.L.)

NOT TO SCALE

FILL THE RECESS WITH A STRUCTURAL JOINT MATERIAL, SILICONE SEALANT, FROM THE DEPARTMENT'S APPROVED LIST FOR ITEM 567 51-16 IF THE RECESS IS SAW CUT WATER BLAST IMMEDIATELY FOLLOWING CUTTING TO REMOVE ANY RESIDUAL SLURRY BEFORE IT DRIES. CLEAN THE VERTICAL FACES OF THE RECESS BY ABRASIVE BLAST, AND AIR BLOW THE RESIDUE FROM THE RECESS. PRIME THE VERTICAL FACES WITH THE MANUFACTURER'S RECOMMENDED PRIMER, AND ALLOW TO DRY. PLACE A †" DIA. SOFT CLOSED CELL BACKER ROD IN THE BOTTOM OF THE RECESS. POUR THE SILICONE SEALANT TO A DEPTH OF APPROX. 器". PAYMENT TO BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROACH SLAB.

NOTES:

- STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.
- FULL DEAD LOAD SHALL NOT EXCEED $\%_8$ in. THIS VARIATION SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CENTERLINE OF THE HIGHEST ELASTOMER
- CONCRETE SURFACES UNDER THE BEARINGS SHALL CONFORM TO SUBSECTION 565-3.02 "CONCRETE BEARING SURFACE PREPARATION" OF THE N.Y.S. STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS.
- ALL EXTERNAL ELASTOMER LAYERS ARE ONE-HALF THE THICKNESS OF THE INTERNAL
- PREMOULDED RESILIENT JOINT FILLER SHALL MEET THE REQUIREMENTS OF 705-07 AND BE PAID FOR UNDER THE BEARING ITEM.
- THE ENDS OF BEAM AND ANCHOR DOWEL HOLES SHALL BE MADE VERTICAL: 1/2". UNDER D.L. AND GRADE. ANCHOR DOWELS TO BE PAID FOR UNDER BEARING ITEM. DOWEL HOLE FILL MATERIAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ELASTOMERIC BEARING ITEM AND SHALL MEET MATERIAL REQUIREMENTS AS FOLLOWS:

EXPANSION END MATERIAL OPTION:

N.Y.S. MAT. SPEC. 702-0700 - ASPHALT FILLER FED. MAT. SPEC. SS-S-200E - ELASTOMERIC POLYMER TYPE, TWO COMPONENT JET FUEL

FIXED END MATERIAL OPTION:

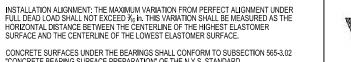
**N.Y.S. MAT. SPEC. 721-03 - EPOXY POLYSULFIDE GROUT WITH SAND
**N.Y.S. MAT. SPEC. 721-01 - EPOXY RESIN SYSTEM WITH SAND
N.Y.S. MAT. SPEC. 701-05 - CONCRETE GROUTING MATERIAL N.Y.S. MAT. SPEC. 701-06 - CEMENT BASED GROUT MATERIALS FOR SHEAR KEYS

- ** MOISTURE FREE, SANDBLAST SAND SHALL BE ADDED IN THE RATIO OF (1) PART EPOXY AND (2) PARTS SAND
- ITEM 559.16960118 SHALL BE APPLIED TO THE BRIDGE SEAT, FRONT FACE OF THE BACK WALL AND THE PRECAST BOX ENDS, (ONLY THE COATING TYPE PROTECTIVE SEALER (717-04) WILL BE ALLOWED AT THESE LOCATIONS.) (THE SEALER WILL NOT BE APPLIED TO THE FACE OF THE BACKWALL IF THE BACKWALL IS POURED AFTER THE BOX BEAMS
- TOP OF BACK WALL SHALL BE TROWEL FINISHED, SHEET GASKET (TREATED BOTH SIDES) MATERIAL SPECIFICATION 728-06, SHALL BE PLACED ON THE TOP OF BACKWALLS. TWO 1#16" THICK SHEETS SHAL BE USED, AND PAYMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROACH SLAB ITEM

SEQUENCE OF CONSTRUCTION - ADJACENT BOX BEAMS:

- 1. PLACE BEARINGS AS SHOWN ON THE CONTRACT PLANS
- 2. PLACE THE BOX BEAMS ON THE BEARINGS
- 3. DRILL AND CLEAN DOWEL HOLES IN THE BRIDGE SEAT
- 4. INSTALL ANCHOR DOWELS
- WASH SHEAR KEYS THOROUGHLY TO REMOVE ANY FOREIGN MATERIAL. INSTALL BACKER RODS IN THE SHEAR KEYS
- GROUT AND CURE THE SHEAR KEYS WITH AN APPROVED GROUT MATERIAL FOLLOWING THE MANUFACTURER'S INSTRUCTIONS. ALL SHEAR KEYS SHALL BE COMPLETELY FILLED
- TENSION THE TRANSVERSE TENDONS TO 28 KIP/STRAND NO SOONER THAN 24 HOURS AFTER BUT WITHIN 21 DAYS AFTER PLACEMENT OF GROUT IN THE LAST SHEAR KEY
- CLEAN AND PRE-WET THE TOP SURFACES OF THE BEAMS PRIOR TO PLACING CONCRETE FOR DECK POUR, CURE THE SLAB USING APPROPRIATE APPROVED METHODS

- 1. THE BEARINGS SHALL MEET THE REQUIREMENTS OF N.Y.S.
- 2. ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE A SCALE.





Leon-New Albion

Road over

Mud Creek PIN 5762.94 BIN 3322120 Town of Leon

Cattaruagus County

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BEARING DETAILS

<u> </u>	oroject number:	1910
	drawn by:	TEN
	checked by:	JCI
	date:	JUNE 202
	scale:	AS SHOWN
1		

	STEEL LAMINATED ELASTOMERIC BEARING (TYPE E.L.) TABLE																	
LOCATION	FIX/		QUANTITY	D.L. + S.D.L.	L.L. WITHOUT	TOTAL DESIGN	SHAPE	ELASTOMER LAYER					001111 . / 11 (12/1	SHEAR AREA	BEVELED LAYER		BRG.	ANCHOR DOW
LOCATION	EXP.	II EWI NO.	REQUIRED	(kips)	IMPACT (kips)	REACTION (kips)	FACTOR	THK/LAYER	NO. LAYERS	L	W	hrt	(SQ.In.)	(SQ. In.)	s ₁	s ₂	Н	DIAMETER
E. ABUT	EXP	565.1922	8	50.8	57.3	108.1	5.96	1/2	2	8	34	1 1/2	258.42	268.86	3/16	5/16	2	1
W. ABUT	FIX	565.1922	8	50.8	57.3	108.1	5.96	1/2	2	8	34	1 1/2	258.42	268.86	3/16	5/16	2	1

TABLE DIMIENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

S2 IS UPSTATION OF S1

H IS TAKEN AT THE CENTERLINE OF THE BEARING.

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING No. 16 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," AASHTO M31 (ASTM A615-S1). ALL BARS SHALL BE GRADE 60, UNILESS

(N17)

N18

8

- 2. FOR TYPICAL BENDING DETAILS, RECOMMENDED P.I.N. DIAMETER "D" OF BENDS HOOK AND OTHER STANDARD PRACTICES, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE (C.R.S.I.) "MANUAL OF STANDARD PRACTICES" (M.S.P.).
- 3. ALL DIMENSIONS ARE OUT-TO-OUT OF BAR, EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.

N15

() - DENOTES COMPUTER GENERATED DIMENSION

4. DIMENSIONS "A", "G" AND "J" ARE STANDARD BENDING DIMENSIONS PER SIZE OF BAR. REFER TO C.R.S.I. - M.S.P. FOR DETAILS.

BAR MARK DESIGNATION IS AS FOLLOWS:

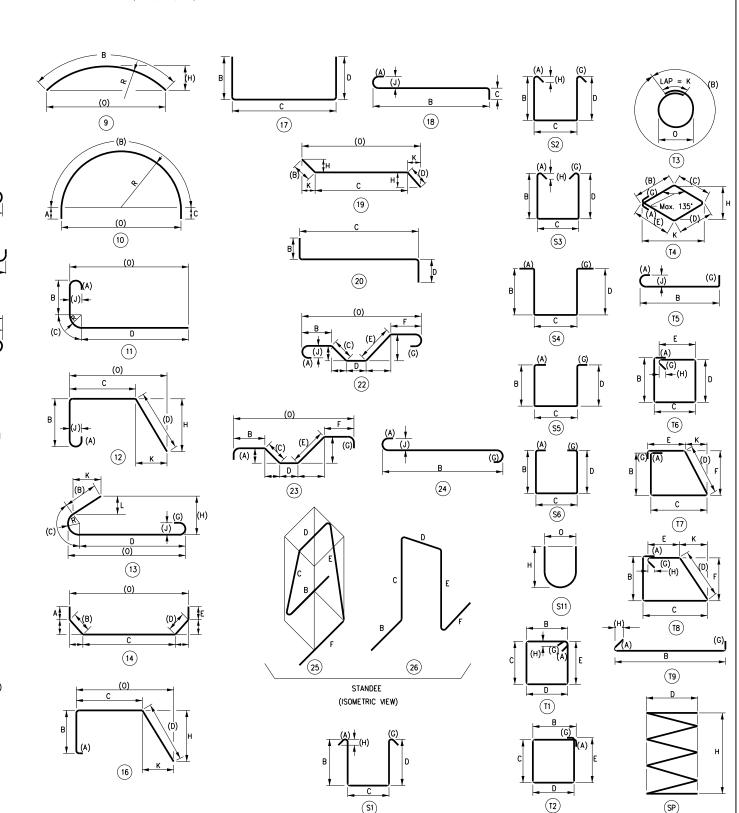
SEQUENTIAL BAR NUMBER

- INDICATES BAR COATING/TYPE (I.E. E=EPOXY, G=GALVANIZED, BLANK=BLACK, S=STAINLESS STEEL) INDICATES STRUCTURE TYPE (I.E. A =ABUTMENT, D=DECK, ETC.) INDICATES BAR SIZE (I.E. #5, #6, #7, ETC.)

STRUCTURAL UNIT

A - ABUTMENT

- B BOXBEAM
- D DECK
- H HIGHWAY APPROACH SLAB



Leon-New Albion Road over Mud Creek

PIN 5762.94 BIN 3322120 Town of Leon Cattaruagus County



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BAR BENDING **DIAGRAMS**

19106
TEM
JCK
JUNE 2020
AS SHOWN

	T		T./DE	W510U7	Ι.				Γ.	_		Н		Ι.	К		Ι.		
MARK	NO.	LENGTH	TYPE	WEIGHT	A	В	С	D	E	F	G	H1	H2	J	K1	K2	L	0	R
WEST ABUTME	ENTREINFO	JRCEMENT																	
POUR 1 - FOO																			
4A01 6A02	39 39	9-10 9-10	N1 N1	257 576														9-10 9-10	
6A03	22	23-10	N1	788														23-10	
5A04	16	23-2	N1	387														23-2	
4A05	12	5-7	N1	45							N, 9'-10" M							5-7	
6A06	12	5-7 2-0	N1	101 204						O = 1'-3" M	N, 9'-10" M	AX, 5'-7" A\	ľΕ					5-7 2-0	
9A07 7A08	30 42	12-1	N1 2	1038	1-2	10-11					0-0		B = 10'-7" I	MN 11'-3" I	MAX, 10'-11	AVF		2-0	
5A09	28	9-7	2	280	0-6	9-1					0-0			N, 9'-4" MA		7.1.2			
5A10	11	12-1	2	139	0-6	11-7					0-0				IAX, 11'-7"				
5A11 5A12	9	12-0 12-8	2 2	113 119	0-6 0-6	11-6 12-2					0-0				MAX, 11' 6" MAX, 12' 2"				
5A13	7	12-7	2	92	0.6	12-1					0-0				MAX, 12-2				
4A14	2	12-0	N1	16										,				12-0	
6A15	2	12-0	N1	36														12-0	
SUBTOTAL PL	AIN CTEEL	DADO		4191	LB THIS F	OLID													
SUBTUTAL PL	ANN STEEL	BARS		4191	LD INIO F	OUR													
POUR 2 - STEM	WALL																		
5A20	6	22-0	N1	138														22-0	
5A21	8	23-6	N1 N1	196 385														23-6	
8A22 5A23	6 15	24-0 2-7	N1 N1	385 41														24-0 2-7	
5A24	19	3-9	1	75	0-7	3-2					0-0			0-5					
5A28	5	4-10	1	26	0-7	4-3					0-0			0-5					
5A29	8	7-0	N1	59														7-0	
7A30	8	5-0	N1	82										-	-			5-0	
SUBTOTAL PL	AIN STEEL	BARS		1002	LB THIS F	OUR													
POUR 3 - STEM					ļ													0.7	
5A23 5A24	15 22	2-7 3-9	N1 1	41 86	0-7	3-2					0-0			0-5				2-7	
5A24 5A25	6	22-9	N1	143	10-7	3-2					0-0			0-0				22-9	
5A26	8	21-3	N1	178														21-3	
8A27	6	21-3	N1	341														21-3	
5A28	5	4-10	1 N4	26	0-7	4-3					0-0			0-5				7.0	
5A29 7A30	8	7-0 5-0	N1 N1	59 82														7-0 5-0	
7730	"	0-0	181	02														0-0	
SUBTOTAL PL	AIN STEEL	BARS		956	LB THIS F	OUR													
DOUB 4 BAG																			
POUR 4 - BACH 5A40	WALL 6	22-0	N1	138														22-0	
4A42	25	3-8	17	62		1-3	1-2	1-3										22-0	
5A43	4	5-8	17	24		4-6	1-2	0-0											
5A44	4	7-0	N1	30	<u> </u>													7-0	
7A45	4	5-0	N1	41														5-0	
SUBTOTAL PLA	IN STEEL I	ARS		295	LB THIS P	DUR													
POUR 5 - BACK	_																	***	
5A41 4A42	28	22-9 3-8	N1 17	143 69		1-3	1-2	1-3										22-9	
5A43	4	5-8	17	24		4-6	1-2	0.0											
5A44	4	7-0	N1	30														7-0	
7A45	4	5-0	N1	41														5-0	
SUBTOTAL PLA	IN STEEL I	ARS		307	LB THIS P	DUR			-										
PODIOTAL PLA	NIN OTCEL	P/ 11/10		301	I IIIO P	POIL													
POUR 6 - NORT	H WINGW	LL																	
5A48	12	5-5	N1	68							N, 8'-2" MA							5-5	
7A49	12	5-5	N1	133							N, 8'-2" MA							5-5	
5A51 4A52	12	6-6 3-2	N1 17	82 19		1-3	0-8	1-3	1	U = 3'-9" M	N, 9'-3" MA	x, 6'-6" AV	-					6-6	
5A53	2	10-7	N12	32		2-10	7-9	0-0				5-4			5-8				
SUBTOTAL PLA	IN STEEL I	ARS		334	LB THIS P	DUR													
POUR 7 - SOUT	H MNGW/	<u> </u>																	
5A46	12	6-6	N1	82						0 = 4'-10" !	ИIN, 8'-2" М	AX. 6'-6" A\	VE.					6-6	
7A47	12	6-6	N1	160						0 = 4'-10" [ИIN. 8'-2" М	AX. 6'-6" AV	ľΕ					6-6	
5A50	8	6-1	N1	51						O = 3'-9" M	N, 8'-5" MA	X, 6'-1" AV						6-1	
4A52 5A54	9 2	3-2 8-10	17 N12	19 27		1-3 2-10	0-8 6-0	1-3 0-0	-			2.0		-	E O				
UAD4	 '	0-10	N1Z	21		Z-10	0-0	U-U				3-2		 	5-2				
SUBTOTAL PLA	IN STEEL I	ARS		339	LB THIS P	DUR													
ROCK PINS - W		20	N14	1002	LB													2.0	
8A60	150	2-6	N1	1002	LD													2-6	
WEST ABUTME	NT REINF	RCEMENT TO	AL	8426	LB (ITEM	556.0201)													

	NO.	LENGTH	TYPE	WEIGHT	А	В	С	D	E	F	G	Н	H2	J	K	K2	L	0	R
MARK EAST ABUTM			1112	WEIGHT	 ^				-	<u>'</u>		H1	112	Ť	K1	1.2	-		<u> </u>
<u>POUR 1 - FOO</u> 4A01	OTING 39	9-10	N1	257														9-10	
6A02	39	9-10	N1	576														9-10	
6A03	22	23-10	N1	788														23-10	<u> </u>
5A04 4A05	16 12	23-2 5-7	N1 N1	387 45						O = 1'-3" M	N 9'-10" N	AX, 5'-7" A'	/F					23-2 5-7	—
6A06	12	5-7	N1	101						0 = 1'-3" M								5-7	
9A07	30	2-0	N1	204														2-0	
7A08 5A09	42 28	13-4 10-8	2 2	1145 312	1-2 0-6	12-2 10-2					0-0 0-0		B = 11'-11"	MIN, 12'-6"	MAX, 12'-2 MAX, 10'-2"	AVE			
5A10	11	14-0	2	161	0-6	13-6					0-0				MAX, 10-2				
5A11	9	14-0	2	132	0-6	13-6					0-0		B = 13'-5" N	MN, 13'-8" I	MAX, 13'-6"	AVE			
5A12	9 7	13-4	2 2	126	0-6	12-10					0-0				MAX, 12'-				
5A13 4A14	2	13-4 12-0	N1	98 16	0-6	12-10					0-0		B = 12-10"	MIN, 12'-11	MAX, 12'-	IU" AVE		12-0	
6A15	2	12-0	N1	36														12-0	
OUDTOTAL D	N AN OTES	1.00		4004	LD TUIO F	OUD													<u> </u>
SUBTOTAL PI	<u>LAIN STEELT</u>	BARS		4384	LB THIS F	OUR													
POUR 2 - STE	EMWALL																		
5A20	7	22-0	N1	161														22-0	
5A21	9	23-6	N1 N1	221														23-6	
8A22 5A23	6 15	24-0 2-7	N1 N1	385 41														24-0 2-7	
5A24	19	3-9	1	75	0-7	3-2					0-0			0-5					
5A28	5	4-10	1	26	0-7	4-3					0-0			0-5					
5A29	8	7-0	N1 N1	59														7-0 5-0	
7A30	T °	5-0	NI	82														J-U	
SUBTOTAL PI	LAIN STEEL	BARS		1050	LB THIS F	OUR													
DOUB A OTE	TA DATA L																		
POUR 3 - STE 5A23	EMWALL 15	2-7	N1	41														2-7	
5A24	22	3-9	1	86	0-7	3-2					0-0			0-5				21	
5A25	7	22-9	N1	166														22-9	
5A26	9	21-3	N1	200														21-3	<u> </u>
8A27 5A28	5	21-3 4-10	N1 1	341 26	0-7	4-3					0-0			0-5				21-3	
5A29	8	7-0	N1	59	- "	10												7-0	
7A30	8	5-0	N1	82														5-0	
SUBTOTAL PI	OLAIN STEEL	RADS		1001	LB THIS F	OUR													
JUDIOIALII	LAIN STEEL	DAING		1001	LD IIIIOI	OUIX													
POUR 4 - BAC																			
5A40	6	22-0	N1	138		40	4.0	4.0										22-0	<u> </u>
4A42 5A43	25 4	3-8 5-8	17 17	62 24		1-3 4-6	1-2 1-2	1-3 0-0											
5A44	4	7-0	N1	30		70	- 12	- 00										7-0	
7A45	4	5-0	N1	41														5-0	
SUBTOTAL PL	I MINI STEEL E	ADS		295	LB THIS P	NIR													-
JOBIOIALIL	LANGILLLI	ININO		200	LD IIIIO1	DOIN													
POUR 5 - BAC	CKWALL																		
5A41	6	22-9	N1	143		4.0	4.0	4.0										22-9	
4A42 5A43	28	3-8 5-8	17 17	69 24		1-3 4-6	1-2 1-2	1-3 0-0											—
5A44	4	7-0	N1	30		770	1-2	0-0										7-0	
7A45	4	5-0	N1	41														5-0	
SUBTOTAL PL	I MINI OTEEL E	ADO		307	LB THIS P	hiid													—
OUDIVIAL PL	LAIN STEEL I	ARS		301	LD IIIIO F	DUN													
POUR 6 - NOR	RTH WINGWA	LL																	
5A48	13	5-5	N1	74						O = 2'-8" M								5-5	
7A49	13	5-5	N1	144								X, 5'-5" AV						5-5	<u> </u>
5A51 4A52	12 9	6-10 3-2	N1 17	86 19		1-3	0-8	1-3		O = 3'-9" M	N, 10'-0" N	AX, 6'-10" /	VE					6-10	
5A56	2	11-1	N12	34		2-10	8-3	0-0				3-4			7-6				
					1.0.7110.0	nun.													
SUBTOTAL PL	LAIN STEEL E	ARS		357	LB THIS P	DUR													<u> </u>
POUR 7 - SOU	JTH WINGWA	LL																	
5A46	14	6-6	N1	95								AX, 6'-6" A						6-6	
7A47	14	6-6	N1	186					-	0 = 4'-10" [MN, 8'-2" N	AX, 6'-6" A	VE.		-			6-6	-
5A50 4A52	8 9	7-0 3-2	N1 17	59 19		1-3	0-8	1-3		U = 3'-9" M	IN, TU-2" N	AX, 7'-0" A'	(E		<u> </u>		<u> </u>	7-0	
5A55	2	11-7	N12	35		2-10	8-9	0-0				5-6			6-10				
	I MINI OTEFE E	ARS		394	LB THIS P	DUR									-				—
SUBTOTAL PL	LAIN STEEL I							i	1			1	1						
SUBTOTAL PL																			
		2-6	N1	1002	LB													2-6	
SUBTOTAL PL ROCK PINS - 1 8A60	EAST SIDE 150	2-6 RCEMENT TOT.		1002	LB (ITEM	550.000												2-6	

Leon-New Albion Road over

Mud Creek
PIN 5762.94
BIN 3322120
Town of Leon
Cattaruagus County



ARCHITECTURE & ENGINE SUBSTITUTE OF THE SUBSTITU

signature and seal



drawing history	
number date	description

sheet title

BAR LIST

<u> </u>	project number:	1910
9	drawn by:	TEN
	checked by:	JCI
	date:	JUNE 202
	scale:	AS SHOWN
- 1		

		I			1	I	ı			1	1	Н	1	1	K	1	1		
MARK	NO.	LENGTH	TYPE	WEIGHT	A	В	С	D	E	F	G	H1	H2	J	K1	K2	L	0	R
DECK REINFOR	RCEMENT																		
POUR 1																			-
4DG01	34	17-0	17	387		0-0	16-7	0-5		C = 10" MI	N, 32'-3" M <i>A</i>	X, 16'-7" A'	ľΕ						
4DG02	60	12-4	17 17	495		0-0	11-9	0-5											
4DG03 4DG04	60 68	23-4 17-0	17	936 773		0-0	22-9 16-7	0-5 0-5		C = 10" MI	N, 32'-3" M <i>A</i>	X 16'-7" A'	/F						
4DG05	4	25-11	N1	70			.,,,			10 111	N, 02 0 NN	7, 10 7 7						25-11	
4DG06	4	38-10	N1	104														38-10	
4DG07 4DG08	49 2	38-10 39-11	N1 N1	1271 54														38-10 39-11	-
5DG09	66	5-7	1	385	0-7	5-0												33 11	
4DG10	49	25-11	N1	849														25-11	
SUBTOTAL GA	VANIZED	DADO		5324	I D TUIC D	NUD /INCLI	IDED UND	DITEMES	7.0503\										
SUBTUTAL GA	LVANIZEU	BAKS		3324	LB IRIS P	UUR (INCLI	וטבט טאטנ	KIIEW 33	r.0503)										
APPROACH SL	AB REINFO	RCEMENT																	
DOUB 4 WES	ADDDC										_					_		\sqcup	
POUR 1 - WES' 5HG01	APPROAC 9	H SLAB 29-6	N1	277	 						 		 	29-6	\dashv				
5HG02	9	29-6	N1	277														29-6	=
5HG03	2	30-4	N1	64							MIN, 30'-7"							30-4	
5HG04	2	30-4	N1	64						0 = 30'-0"	MIN, 30'-7"	MAX, 30'-4"	AVE					30-4	
5HG05 5HG06	4	31-2 31-2	N1 N1	130 130														31-2 31-2	
5HG07	17	13-5	N1	238						O = 6'-6" N	N, 20'-5" N	AX, 13'-5" /	VE					13-5	
5HG08	17	13-5	N1	238						O = 6'-6" N	N, 20'-5" N	AX, 13'-5" /						13-5	
5HG09	3	4-10	N1	16							N, 5'-9" MA		VE.					4-10	
5HG10 5HG11	3	4-10 1-8	N1 N1	16 6							IN, 5'-9" MA IN. 3'-0" MA							4-10 1-8	
5HG12	3	1-8	N1	6							IN, 3' 0" MA							1-8	
5HG13	46	24-5	N1	1172						0 = 14'-2"	MIN, 34'-9"	лАХ, 24'-5"	AVE					24-5	
5HG14	46	24-5	N1	1172							MN, 34'-9"		AVE					24-5	
5HG15 5HG16	3	3-0 3-0	N1 N1	10 10							IN, 3'-8" MA IN, 3'-8" MA		<u> </u>					3-0 3-0	
5HG17	3	4-4	N1	14							IN, 5'-8" MA		<u> </u>					4-4	
5HG18	3	4-4	N1	14							N, 5'-8" MA							4-4	
5HG19	3	39-10	N1	125														39-10	
5HG20 5HG21	3 12	39-10 7-9	N1 N12	125 97		0-0	5-9	2-0				5-0			2-10			39-10	-
5HG22	12	7-9	N12	97		0-0	5-9	2-0				5-0			2-10				
SUBTOTAL GA	.VAN I ZED	BARS		4298	LB THIS P	DUR (INCLI	IDED UND	R ITEM 55	7.2003)										
POUR 2 - EAST	APPROAC	HSIAR																	
5HG01	9	29-6	N1	277														29-6	
5HG02	9	29-6	N1	277														29-6	
5HG03	2	30-4	N1 N1	64	-						MIN, 30'-7"			-	-	-	-	30-4 30-4	-
5HG04 5HG05	2 4	30-4 31-2	N1 N1	64 130						0 - 30 -0"	MIN, 30'-7"	γιΑΛ, 3U - 4"	MVE					31-2	\dashv
5HG06	4	31-2	N1	130														31-2	
5HG07	17	13-5	N1	238							N, 20'-5" N							13-5	
5HG08 5HG09	17 3	13-5 4-10	N1 N1	238 16							N, 20'-5" N N. 5'-9" MA							13-5 4-10	
5HG10	3	4-10	N1	16							IN, 5' 9" MA							4-10	\dashv
5HG11	3	1-8	N1	6						O = 0'-3" N	N, 3'-0" MA	X, 1'-8" AV	ŧ					1-8	
5HG12	3	1-8	N1	6							N, 3'-0" MA							1-8	
5HG13 5HG14	46 46	24-5 24-5	N1 N1	1172 1172							MIN, 34'-9" MIN, 34'-9"							24-5 24-5	-+
5HG15	3	3-0	N1	10							MN, 34-9 MN, 3'-8" MA							3-0	-+
5HG16	3	3-0	N1	10						O = 2'-4" N	N, 3'-8" MA	X, 3'-0" AV	ŧ					3-0	
5HG17	3	4-4	N1	14							N, 5'-8" MA							4-4	
5HG18	3	4-4 39-10	N1 N1	14 125						O = 3'-0" N	N, 5'-8" MA	X, 4'-4" AV	<u> </u>					4-4 39-10	
5HG19 5HG20	3	39-10	N1	125														39-10	$\overline{}$
5HG21	12	7-9	N12	97		0-0	5-9	2-0				5-0			2-10				
5HG22	12	7-9	N12	97		0-0	5-9	2-0				5-0			2-10				
SUBTOTAL GA	VANIZED	DADO		4298	I D TLIIC D	NID /INCL	DED UND	DITEMES	7 20021			-							
OUDIVIAL GA	LYMNIKEU	PULO		7430	ובט ו חוט צי	yun (INULI	POLO UNDI	FIVEL DO	.2003)										

project

Leon-New Albion Road over Mud Creek

Mud Creek
PIN 5762.94
BIN 3322120
Town of Leon
Cattaruagus County



ARCHITECTURE & ENGINE S00
95 Perry Street, Sulte 300
91716, New York 14203
p: 716.206.5100 f: 716.206.5199

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number date	description

BAR List

project number:	1910
drawn by:	TEN
checked by:	JC
date:	JUNE 202
scale:	AS SHOWI

sheet num

BR-3⁻