047

F.A.I. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
82	(195 2) RS 1	WHITESIDE	36	1
	ILLINOIS	CONTRACT NO. 64M94		

36 + 1 = 37 TOTAL SHEETS 1

D-92-039-18

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-07 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02 AREA OF REINFORCEMENT BARS
001006 DECIMAL OF AN INCH AND OF A FOOT
420001-09 PAVEMENT JOINTS
420701-03 PAVEMENT WELDED WIRE REINFORCEMENT
442001-04 CLASS A PATCHES
442101-09 CLASS B PATCHES
601101-02 CONCRETE HEADWALL FOR PIPE DRAIN
630001-12 STEEL PLATE BEAM GUARDRAIL
630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-15 TRAFFIC BARRIER TERMINAL, TYPE 6
631046-04 TRAFFIC BARRIER TERMINAL, TYPE 10
635001-02 DELINEATORS
642001-02 SHOULDER RUMBLE STRIPS, 16IN
643001-02 SAND MODULE IMPACT ATTENUATORS
701101-05 OFF ROAD CLOSURE OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02 OFF ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-09 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-12 LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-12 LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATION ONLY
701411-09 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45MPH
701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≥ 45MPH
701901-08 TRAFFIC CONTROL DEVICES
720011-01 METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS
725001-01 OBJECT AND TERMINAL MARKERS
780001-05 TYPICAL PAVEMENT MARKINGS
781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
782006 GUARDRAIL & BARRIER WALL REFLECTOR MOUNTING DETAILS

PROPOSED HIGHWAY PLANS

FAI ROUTE 88 (I-88)
SECTION (195-2) RS-1
PROJECT NHPP-EQ47 (513)
ULTRA-THIN BONDED WEARING COURSE
WHITESIDE COUNTY

C-92-033-19

LOCATION OF SECTION INDICATED THUS:-

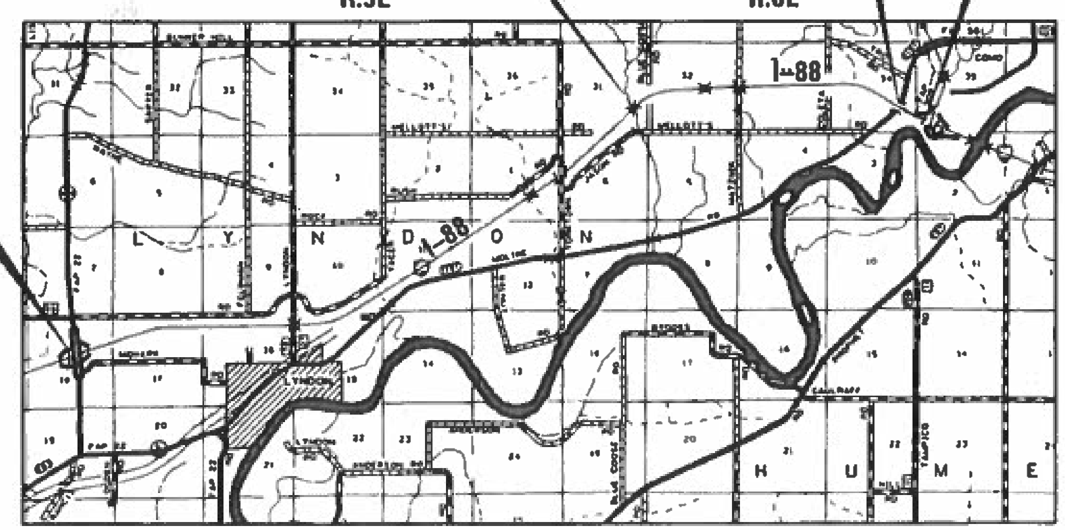
BRIDGE GAP
STA 1727+85 TO
STA 1731+65

BRIDGE GAP
STA 1892+50 TO
STA 1895+66

IMPROVEMENT/
PROJECT ENDS
STA 1906+90

LYNDON — HOPKINS

R.5E R.6E



T.21N HOPKINS
T.20N HUME

N

LYNDON — HUME

IMPROVEMENT/
PROJECT BEGINS
STA 1326+40

ADT (EB): 6,200 (2017)

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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

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

GROSS LENGTH = 58,050 FT. = 10.99 MILE
NET LENGTH = 57,354 FT. = 10.86 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED 12-17 20 18
REGIONAL ENGINEER

Feb 1 20 19
ENGINEER OF DESIGN AND ENVIRONMENT

Feb 20 19
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER = FAITH DUNCAN
PROJECT MANAGER = DENNISSE OTERO-LOPEZ (815)284-5924
TOWNSHIP(S): LYNDON (1, 6, 10, 11, 12, 14-18) AND HOPKINS (31-35)

CONTRACT NO. 64M94

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

1 REV. 2/22/19 REV 1/10/19

GENERAL NOTES

All Borrow/Waste/Use sites must be approved by the Department prior to removing any material from the project or initiating any earthmoving activities, including temporary stockpiling outside the limits of construction.

The final top 4 inches of soil in any right-of-way area disturbed by the Contractor must be capable of supporting vegetation. The soil must be from the A horizon (zero to 2' deep) of soil profiles of local soils. The cost of this work shall be included in the unit prices bid and no additional compensation will be allowed.

It is estimated that 540 cubic yards of earth will be hauled to the job from outside the project limits. A shrinkage factor of 15% has been used.

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use Seeding, Class 1A. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. The work will be included in the contract unit price per cubic yard for EARTH EXCAVATION.

Fertilizer shall be applied to all disturbed areas and incorporated into the seedbed prior to seeding or placement of sod at the rate specified in Sections 250 and 252 of the Standard Specifications. This work shall be included in the cost of EARTH EXCAVATION.

When laying out for patching, the minimum distance between new patches (saw cut to saw cut) shall be 15 feet. When patch spacing is less than 15 feet, the pavement between patches shall also be removed and replaced.

All mandatory joint sealing for Class A, Class B, and Class B (Hinge Jointed) patches as shown on the plans will not be measured for payment. Optional sawing of the joint for the sealant reservoir will not be measured for payment.

For all concrete patching that will not be resurfaced, the concrete shall be struck off flush with the existing pavement surface at each end of the patch.

The Engineer reserves the right to check all patches for smoothness by the use of a 10' rolling straight edge set to a 3/16" tolerance in the wheel paths. Any patch areas higher than 3/16" must be ground smooth with an approved grinding device consisting of multiple saws. The use of bushhammer or other impact devices will not be permitted. Any patch with depressions greater than 3/16" shall be repaired in a manner approved by the Engineer.

The mandatory saw cuts for pavement patching are:

Class A Patch: Cut two transverse saw cuts at each end of the patch; one full depth and one partial depth. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

Class B Patch: Cut two transverse saw cuts outlining the patch and one transverse pressure relief saw cut. The longitudinal edges of the patch shall be cut full depth. When the patch is adjacent to a pcc shoulder, two saw cuts along the shoulder will be required.

The mandatory saw cuts will be paid for at the contract unit price per Foot for SAW CUTS.

The Contractor will be required to furnish 5 1/2" high brass stencils as approved by the Engineer and install stationing at 250' intervals. Stationing shall be placed on both lanes of 2-lane highways and on the outside lanes in both directions on 4-lane highways. The stations shall be placed 6" inside the pavement marking edge so they can be read from the shoulder. This work will be included in the cost of the final pavement surface.

Embankment quantities for the construction of the Traffic Barrier Terminals as shown in the plans are included in quantities for Furnished Excavation.

The Contractor shall supply the Resident Engineer with the manufacturer's installation requirements for the type of Steel Plate Beam Guardrail Terminal Type 1 Special (Tangent) or Steel Plate Beam Guardrail Terminal Type I Special (Flared).

One 16d galvanized nail shall be used to toe nail the wood block out to the wood post on all Traffic Barrier Terminal Type I Specials.

Delineators shall be installed as shown in Standard 635001, except that the post shall be rotated 180° and only metal-backed delineators shall be permitted. Delineators shall be placed at the ends of approach guardrail terminal sections, and at each headwall or end section of AR Culverts. This work will be paid for at the contract unit price each for DELINEATORS.

Pavement Marking shall be done according to Standard 780001, except as follows:

1. All words, such as ONLY, shall be 8 feet high.
2. All non-freeway arrows shall be the large size.
3. The distance between yellow no-passing lines shall be 8 inches, not 7 inches, as shown in the detail of Typical Lane and Edge Lines.
4. Centerline Skip Dash Pavement Marking on multi-lane divided, multi-lane undivided, and one-way roadway shall be according to District Standard 41.1.

CADD data will be available to Contractors and Consultants working on this project. This information will be provided upon request as MicroStation CADD files and Geopak coordinate geometry files ONLY. If data is required in other formats it will be your responsibility to make these conversions. If any discrepancy or inconsistency arises between the electronic data and the information on the hard copy, the information on the hard copy should be used. Contact the District's Project Engineer to request these files.

A quantity of 540 Cubic Yards of Furnish Excavation has been included to further build up the shoulders. The Engineer has determined that the excavated materials from the job are insufficient to bring the shoulders to the proper slope.

PERMANENT SURVEY MARKERS, TYPE II, shall be set at intervals of 1 mile or as directed by the Engineer. Bridge or culvert projects shall have one survey marker placed near the structure. Estimated: 5 Each.

Permanent Survey Markers, Type II placed in urban areas should be placed in sidewalk areas. The marker shall be placed as shown on District Standard 66.2. The sidewalk shall be placed around the marker and flush with the top.

Permanent Survey Markers, Type II shall be cast-in-place as shown on District Standard 66.2, or another option would be to install a vaulted style, monumented as described by NGS as a 3D monument (Top Security Sleeve Rod Monument), with installation instructions provided by the District Chief of Surveys. If poured in place, the bottom of the marker shall be 5'-0" below the ground surface.

The Permanent Survey Markers, if possible, shall be installed at the beginning of the job and protected throughout.

The Contractor shall submit to the Engineer a description of location, elevation, and coordinates for each permanent survey marker. The horizontal coordinates must be derived by GPS and the elevation derived using an electronic level. The meta data, such as the Geoid used, (NGS adjustment ie: 97 HARN, 03, 07), and the base point(s) name or number shall be submitted along with a complete collection log. If collected using RTK method, it will require either 3 collections (averaged) from 2 different bases, or a minimum of 3 collections (averaged), at least 2 hours apart, from the same base. If using a CORS type network, the collection procedure shall include localizing with check shots on at least 2 different HARN monuments both before and after collection. The level circuit shall be run from furnished mark to furnished mark and then adjusted. The error of closure shall be submitted with the electronic level notes in a recognized format approved by the Engineer and/or the Chief of Surveys. The Engineer shall submit this information to the District Chief of Surveys.

FILE NAME = 64M94.GN.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES				ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -						FAI 88 (I-88)	(195-2)RS-1	Whiteside	36	2
	PLOT SCALE =	CHECKED -	REVISED -								CONTRACT NO. #64M94		
	PLOT DATE = 12/14/2018 7:12 PM	DATE - 10/26/2018 10:30 AM	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

1 REV. 2/21/19

GENERAL NOTES

The Contractor shall place contraction joint in prolongation with joints in the existing pavement. The joint shall be a sawed contraction joint with dowel bar assembly as shown on Highway Standard 420001. The cost for this work shall be included in the contract unit price for the CLASS A PATCHES, TYPE II, 13 INCH and CLASS A PATCHES, TYPE IV, 13 INCHES.

Hot-Mix Asphalt shall meet the Ultra-Thin Bonded Wearing Course Special Provision of Type C.

Hot-Mix Asphalt shall meet Friction Aggregate “D”.

All “Aggregate Subgrade Improvement” (Section 303), shall be completed in accordance with Articles 311.04, 311.05, 311.05(a), 311.06 and 311.07. All aggregate subgrade thicknesses equal to or less than 12 inches shall be constructed of aggregate of CA02 gradation. All aggregate subgrade thicknesses greater than 12 inches shall be constructed of CS02.

Install rumble strips in all shoulders in accordance with State Standard 642001 Rumble Strips shall be placed on shoulders on both sides of the pavement.

△1

Tack coat for HMA patching of removed raised reflective pavement markers shall not be paid for separately but shall be included in the unit cost of LEVELING BINDER (HAND METHOD), IL-9.5FG, N90.

The following Mixture Requirements are applicable for this project:

Location(s):	VARIOUS		
Mixture Use(s):	PATCHING		
PG:	SBS PG 70-22		
Design Air Voids:	4.0% @ N90		
Mixture Composition (Mixture Gradation):	IL-9.5 or IL-9.5 FG		
Friction Aggregate:			
Mixture Weight:	N/A		
Quality Management Program:	QC/QA		
Sublot Size:			
Number of Roller Passes[1)]:			

1) When a number of roller passes is specified, the Contractor may opt to use intelligent compaction in lieu of density testing under the Quality Control for Performance (QCP) program.

FILE NAME = 64M94.GN.DOCX	USER NAME =	DESIGNED - Engineering Systems	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE =	CHECKED -	REVISED -
	PLOT DATE = 2/7/2019 3:25 PM	DATE - 10/26/2018 10:30 AM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

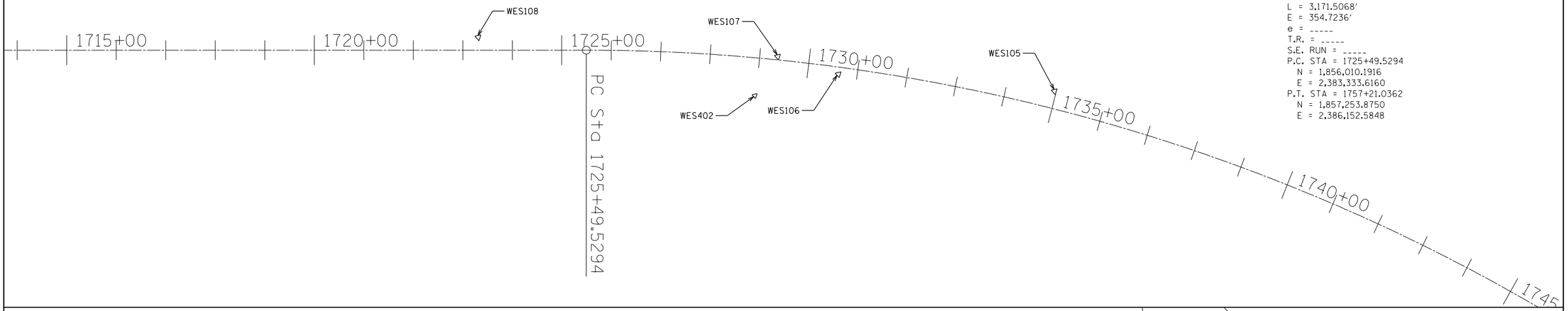
GENERAL NOTES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

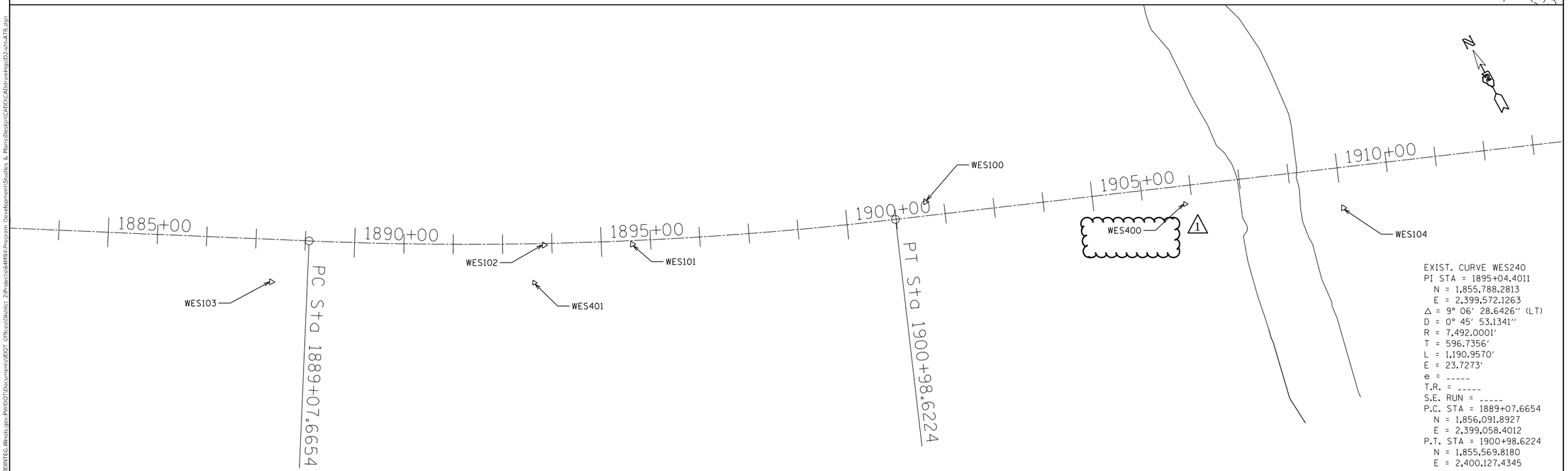
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 88 (I-88)	(195-2)RS-1	Whiteside	36	3
		CONTRACT NO. **#64M94**		
	ILLINOIS	FED. AID PROJECT		

△1 REV. 2/22/19

HORIZONTAL AND VERTICAL CONTROL



EXIST. CURVE WES220
PI STA = 1742+33.2084
N = 1,857,253.5306
E = 2,384,468.9058
Δ = 47° 35' 20.9576" (RT)
D = 1° 30' 01.8790"
R = 3,818.3900'
T = 1,683.6790'
L = 3,171.5068'
E = 354.7236'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA = 1725+49.5294
N = 1,856,010.1916
E = 2,383,333.6160
P.T. STA = 1757+21.0362
N = 1,857,253.8750
E = 2,386,152.5848



EXIST. CURVE WES240
PI STA = 1895+04.4011
N = 1,855,788.2813
E = 2,399,572.1263
Δ = 9° 06' 28.6426" (LT)
D = 0° 45' 53.1341"
R = 7,492.0001'
T = 596.7356'
L = 1,190.9570'
E = 23.7273'
e = -----
T.R. = -----
S.E. RUN = -----
P.C. STA = 1889+07.6654
N = 1,856,091.8927
E = 2,399,058.4012
P.T. STA = 1900+98.6224
N = 1,855,569.8180
E = 2,400,127.4345

USER NAME = bartonrw	DESIGNED - _____	REVISED - _____	
	DRAWN - _____	REVISED - _____	
PLOT SCALE = 200.0000 ' / in.	CHECKED - _____	REVISED - _____	
PLOT DATE = Feb-08-2019 10:45:07 AM	DATE - _____	REVISED - _____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL & VERTICAL CONTROL

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-2)RS-1	WHITESIDE	36	23
		CONTRACT NO. 64M94		
	ILLINOIS	FED. AID PROJECT		

1 REV. 2/22/19

MODEL: Default
FILE NAME: pw:\\IL084EBIDNTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 2\Projects\64M94\Program Development\Studies & Plans\Design\CADD\CADdrawings\D2-sht-ATB.dgn

HORIZONTAL AND VERTICAL CONTROL

HORIZONTAL CONTROL POINTS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
WES100	1855571.940	2400199.137	642.262	I-88	1901+64.57	22.2248' LT	PIN & CAP
WES101	1855776.451	2399634.341	651.060	I-88	1895+64.18	7.3050' RT	PIN & CAP
WES102	1855859.215	2399475.693	651.549	I-88	1893+85.41	3.2314' RT	PIN & CAP
WES103	1856054.149	2398952.732	646.965	I-88	1888+35.90	86.2564' RT	PIN & CAP
WES104	1855161.673	2400940.503	626.336	I-88	1910+04.67	82.1480' RT	PIN & CAP
WES105	1856651.963	2384033.582	641.805	I-88	1734+96.83	33.7800' LT	PIN & CAP
WES106	1856354.737	2383712.735	643.416	I-88	1730+62.93	13.3000' RT	PIN & CAP
WES107	1856286.513	2383604.874	643.530	I-88	1729+36.58	5.6354' LT	PIN & CAP
WES108	1855867.691	2383167.251	638.366	I-88	1723+32.12	26.7679' LT	PIN & CAP

BENCH MARKS							
POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
WES 400	1855319.761	2400661.000	636.291	I-88	1906+86.69	37.3587' RT	CHIS SQ TOP OF WALL
WES 401	1855801.368	2399422.013	656.135	I-88	1893+63.97	79.1465' RT	DISK TOP OF WALL
WES 402	1856199.331	2383631.914	645.510	I-88	1728+97.86	77.1906' RT	CHIS SQ TOP OF WALL

USER NAME = bartonrw	DESIGNED - _____	REVISED - _____	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN - _____	REVISED - _____	
PLOT SCALE = 200.0000 ' / in.	CHECKED - _____	REVISED - _____	
PLOT DATE = Feb-08-2019 10:27:07 AM	DATE - _____	REVISED - _____	

HORIZONTAL & VERTICAL CONTROL

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	(195-2)RS-1	WHITESIDE	36	24A
		CONTRACT NO. 64M94		
	ILLINOIS	FED. AID PROJECT		

1 REVISED SHEET 2/22/19

Curve Data

Curve WES230

P.I. Station	1866+56.9391	N 1,857,256.1114	E 2,397,088.4875
Delta =	30° 35' 41.2729" (RT)		
Degree =	1° 59' 44.4238"		
Tangent =	785.2766		
Length =	1,533.0565		
Radius =	2,871.0000		
External =	105.4577		
Long Chord =	1,514.9076		
Mid. Ord. =	101.7213		
P.C. Station	1858+71.6625	N 1,857,255.9508	E 2,396,303.2108
P.T. Station	1874+04.7189	N 1,856,856.5727	E 2,397,764.5261
C.C.		N 1,854,384.9509	E 2,396,303.7980
Back =	89° 59' 17.8176"		
Ahead =	120° 34' 59.0905"		
Chord Bear =	105° 17' 08.4540"		

Curve Data

Curve WES210

P.I. Station	1679+76.5052	N 1,852,622.9714	E 2,380,240.7535
Delta =	13° 57' 21.8658" (LT)		
Degree =	0° 30' 09.3404"		
Tangent =	1,395.3084		
Length =	2,776.8056		
Radius =	11,400.0000		
External =	85.0723		
Long Chord =	2,769.9461		
Mid. Ord. =	84.4421		
P.C. Station	1665+81.1968	N 1,851,849.9111	E 2,379,079.1756
P.T. Station	1693+58.0024	N 1,853,653.3587	E 2,381,181.5976
C.C.		N 1,861,340.2777	E 2,372,763.0897
Back =	56° 21' 18.7258"		
Ahead =	42° 23' 56.8600"		
Chord Bear =	49° 22' 37.7929"		

Curve Data

Curve WES200

P.I. Station	1518+89.7234	N 1,843,668.4671	E 2,366,785.9763
Delta =	32° 57' 20.5784" (LT)		
Degree =	1° 14' 50.1475"		
Tangent =	1,358.7911		
Length =	2,642.2423		
Radius =	4,593.7200		
External =	196.7473		
Long Chord =	2,605.9695		
Mid. Ord. =	188.6667		
P.C. Station	1505+30.9323	N 1,843,652.1257	E 2,365,427.2835
P.T. Station	1531+73.1746	N 1,844,421.2953	E 2,367,917.1540
C.C.		N 1,848,245.5135	E 2,365,372.0373
Back =	89° 18' 39.3042"		
Ahead =	56° 21' 18.7258"		
Chord Bear =	72° 49' 59.0150"		

Curve Data

Curve 084031320

P.I. Station	15+74.5638	N 1,774,056.0123	E 2,250,169.7769
Delta =	33° 35' 53.2924" (RT)		
Degree =	2° 00' 00.9819"		
Tangent =	864.7620		
Length =	1,679.6778		
Radius =	2,864.3983		
External =	127.6898		
Long Chord =	1,655.7152		
Mid. Ord. =	122.2405		
P.C. Station	7+09.8018	N 1,773,748.5184	E 2,249,361.5314
P.T. Station	23+89.4795	N 1,773,864.8817	E 2,251,013.1525
C.C.		N 1,771,071.3227	E 2,250,380.0601
Back =	69° 10' 15.1551"		
Ahead =	102° 46' 08.4475"		
Chord Bear =	85° 58' 11.8013"		

Curve Data

Curve WES240

P.I. Station	1895+04.4011	N 1,855,788.2813	E 2,399,572.1263
Delta =	9° 06' 28.6426" (LT)		
Degree =	0° 45' 53.1341"		
Tangent =	596.7356		
Length =	1,190.9570		
Radius =	7,492.0001		
External =	23.7273		
Long Chord =	1,189.7034		
Mid. Ord. =	23.6524		
P.C. Station	1889+07.6654	N 1,856,091.8927	E 2,399,058.4012
P.T. Station	1900+98.6224	N 1,855,569.8180	E 2,400,127.4345
C.C.		N 1,862,541.6979	E 2,402,870.2351
Back =	120° 34' 59.0905"		
Ahead =	111° 28' 30.4479"		
Chord Bear =	116° 01' 44.7692"		

Curve Data

Curve WES220

P.I. Station	1742+33.2084	N 1,857,253.5306	E 2,384,468.9058
Delta =	47° 35' 20.9576" (RT)		
Degree =	1° 30' 01.8790"		
Tangent =	1,683.6790		
Length =	3,171.5068		
Radius =	3,818.3900		
External =	354.7236		
Long Chord =	3,081.1253		
Mid. Ord. =	324.5713		
P.C. Station	1725+49.5294	N 1,856,010.1916	E 2,383,333.6160
P.T. Station	1757+21.0362	N 1,857,253.8750	E 2,386,152.5848
C.C.		N 1,853,435.4850	E 2,386,153.3657
Back =	42° 23' 56.8600"		
Ahead =	89° 59' 17.8176"		
Chord Bear =	66° 11' 37.3388"		